ConocoPhillips
Pipe Line Company

SPILL PREVENTION, CONTROL & COUNTERMEASURE (SPCC) PLAN

Portland Terminal

5528 NW Doane Avenue, Portland, Oregon 97210

September 2009

Portland Terminal

(Facility Name)

5528 NW Doane Avenue, Portland, Oregon 97210 (Multnomah County)

(Facility Location)

122° 13'15" W / 45° 34' 20" N

(Facility Longitude/Latitude))

ConocoPhillips Company

(Operator Name)

600 N. Dairy Ashford Road

(Address)

Houston, Texas 77079

(City, State, Zip)

ConocoPhillips Company

(Owner Name)

600 N. Dairy Ashford Road

(Address)

Houston, Texas 77079

(City, State, Zip)

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LOG OF PLAN REVIEW AND AMENDMENTS

NON TECHNICAL AMENDMENTS

- Non-technical amendments are not certified by a Professional Engineer.
- Examples of changes include, but are not limited to, phone numbers, name changes, or any non-technical text change(s).

TECHNICAL AMENDMENTS

- Technical amendments are certified by a Professional Engineer (§112.5(c)).
- Examples of changes include, but are not limited to, the following if they substantially affect containment or discharge: commissioning or decommissioning containers; replacement, reconstruction, or movement of containers; reconstruction, replacements, or installation of piping systems; construction or demolition that might alter secondary containment structures; changes of product or service; or addition/deletion of standard operation or maintenance procedures related to discharge prevention measures. It is the responsibility of the facility to determine, and confirm with the regulatory authority as necessary, what constitutes a technical amendment. The preamble of the rule states that an amendment is required only "when there is a change that materially affects the facility's potential to discharge oil" (67 **FR** 47091).
- An amendment made under this section will be prepared within six (6) months of the change and implemented as soon as possible but not later than six (6) months following preparation of the amendment.
- Technical Amendments affecting various pages within the plan can be P.E. certified on those pages, certifying those amendments only, and will be documented on the log form below.

MANAGEMENT REVIEW

- Management will review this SPCC Plan at least each five (5) years and document the review on the form below (§112.5(b)).

Review/ Amend Date	Signature* (Specify)	Amend Plan (will/will not)	Description of Review Amendment	Affected Page(s)	P.E. Certification (Y/N)
2/18/03			New SPCC format	All	(Y)
2/6/07			Remove 2 tanks	All	(Y)
4/08	Tom Lyons	Will	Updated phone #'s, tank info, text, and P&ID's	All	(N)
4/2009	Tom Lyons	Will	Review and revise plan as necessary	All	(Y)

* Typically signed by Manager, Professional Engineer or plan reviewer.

☐ ONSHORE FACILITY - REGULATORY CROSS-REFERENCE

Citation	Description	Section
§112.3(d)(1)	Professional Engineer Certification	1.2
§112.5(b)	Management of Five Year Review	Foreword
§112.7	General requirements for SPCC Plans for all facilities and all oil types	-----
§112.7(a)	General requirements: discussion of facility's conformance with rule requirements; deviations from Plan requirements; facility characteristics that must be described in the Plan; spill reporting information in the Plan; emergency procedures	1, 2, App. A-D
§112.7(b)	Fault analysis	2A.1
§112.7(c)	Secondary containment	2A.1, 2A.3.1
§112.7(d)	Contingency planning	App. D
§112.7(e)	Inspections, tests, and records	2A.5.3, 2A.7, App. B
§112.7(f)	Employee training and discharge prevention procedures	1.6, App. A, App. B
§112.7(g)	Security (excluding oil production facilities)	2A.4.2, 2A.6
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§112.7(i)	Brittle fracture evaluation requirements	2A.7
§112.7(j)	Conformance with State requirements	1.11
§112.8	Requirements for onshore facilities (excluding production facilities)	-----
§112.8(a)	General and specific requirements	2A.1 - 2A.4, 2A.7
§112.8(b)	Facility drainage	2A.3
§112.8(c)	Bulk storage containers	2A.1, 2A.2, 2A.7
§112.8(d)	Facility transfer operations, pumping, and facility process	2A.4, 2.A.7
§112.9	Requirements for onshore production facilities	N/A
§112.9(a)	General and specific requirements	N/A
§112.9(b)	Oil production facility drainage	N/A
§112.9(c)	Oil production facility bulk storage containers	N/A
§112.9(d)	Facility transfer operations, oil production facility	N/A
§112.10)	Requirements for onshore oil drilling and workover facilities	N/A
§112.10(a)	General and specific requirements	N/A
§112.10(b)	Mobile facilities	N/A
§112.10(c)	Secondary containment - catchment basins or diversion structures	N/A
§112.10(d)	Blowout prevention (BOP)	N/A
§112.11	Requirements for offshore oil drilling, production, or workover facilities	N/A
§112.11(a)	General and specific procedures	N/A
§112.11(b)	Facility drainage	N/A
§112.11(c)	Sump systems	N/A
§112.11(d)	Discharge prevention systems for separators and treaters	N/A
§112.11(e)	Atmospheric storage or surge containers; alarms	N/A
§112.11(f)	Pressure containers; alarm systems	N/A
§112.11(g)	Corrosion protection	N/A
§112.11(h)	Pollution prevention system procedures	N/A
§112.11(i)	Pollution prevention systems; testing and inspection	N/A
§112.1(j)	Surface and subsurface well shut-in valves and devices	N/A
§112.11(k)	Blowout prevention	N/A
§112.11(l)	Manifolds	N/A
§112.11(m)	Flowlines, pressure sensing devices	N/A
§112.11(n)	Piping; corrosion protection	N/A
§112.11(o)	Sub-marine piping; environmental stresses	N/A
§112.11(p)	Inspections of sub-marine piping	N/A

☐ ONSHORE OIL PRODUCTION FACILITY - REGULATORY CROSS-REFERENCE		
Citation	**Description**	**Section**
§112.3(d)(1)	Professional Engineer Certification	1.2
§112.5(b)	Management of Five Year Review	Foreword
§112.7	General requirements for SPCC Plans for all facilities and all oil types	-----
§112.7(a)	General requirements: discussion of facility's conformance with rule requirements; deviations from Plan requirements; facility characteristics that must be described in the Plan; spill reporting information in the Plan; emergency procedures	1, 2, App. A-D
§112.7(b)	Fault analysis	2B.1
§112.7(c)	Secondary containment	2B.1, 2B.3
§112.7(d)	Contingency planning	App. D
§112.7(e)	Inspections, tests, and records	2B.6
§112.7(f)	Employee training and discharge prevention procedures	1.6, App. A, App. B
§112.7(g)	Security (excluding oil production facilities)	N/A
§112.7(h)	Loading/unloading (excluding offshore facilities)	2B.5
§112.7(i)	Brittle fracture evaluation requirements	2B.6
§112.7(j)	Conformance with State requirements	1.11
§112.8	Requirements for onshore facilities (excluding production facilities)	N/A
§112.8(a)	General and specific requirements	N/A
§112.8(b)	Facility drainage	N/A
§112.8(c)	Bulk storage containers	N/A
§112.8(d)	Facility transfer operations, pumping, and facility process	N/A
§112.9	Requirements for onshore production facilities	-----
§112.9(a)	General and specific requirements	2B.1 - 2B.4, 2B.6
§112.9(b)	Oil production facility drainage	2B.3
§112.9(c)	Oil production facility bulk storage containers	2B.1, 2B.2
§112.9(d)	Facility transfer operations, oil production facility	2B.4
§112.10)	Requirements for onshore oil drilling and workover facilities	N/A
§112.10(a)	General and specific requirements	N/A
§112.10(b)	Mobile facilities	N/A
§112.10(c)	Secondary containment - catchment basins or diversion structures	N/A
§112.10(d)	Blowout prevention (BOP)	N/A
§112.11	Requirements for offshore oil drilling, production, or workover facilities	N/A
§112.11(a)	General and specific procedures	N/A
§112.11(b)	Facility drainage	N/A
§112.11(c)	Sump systems	N/A
§112.11(d)	Discharge prevention systems for separators and treaters	N/A
§112.11(e)	Atmospheric storage or surge containers; alarms	N/A
§112.11(f)	Pressure containers; alarm systems	N/A
§112.11(g)	Corrosion protection	N/A
§112.11(h)	Pollution prevention system procedures	N/A
§112.11(i)	Pollution prevention systems; testing and inspection	N/A
§112.1(j)	Surface and subsurface well shut-in valves and devices	N/A
§112.11(k)	Blowout prevention	N/A
§112.11(l)	Manifolds	N/A
§112.11(m)	Flowlines, pressure sensing devices	N/A
§112.11(n)	Piping; corrosion protection	N/A
§112.11(o)	Sub-marine piping; environmental stresses	N/A
§112.11(p)	Inspections of sub-marine piping	N/A

☐ ONSHORE OIL DRILLING AND WORKOVER FACILITY - REGULATORY CROSS-REFERENCE

Citation	Description	Section
§112.3(d)(1)	Professional Engineer Certification	1.2
§112.5(b)	Management of Five Year Review	Foreword
§112.7	General requirements for SPCC Plans for all facilities and all oil types	-----
§112.7(a)	General requirements: discussion of facility's conformance with rule requirements; deviations from Plan requirements; facility characteristics that must be described in the Plan; spill reporting information in the Plan; emergency procedures	1, 2, App. A-D
§112.7(b)	Fault analysis	2C.1
§112.7(c)	Secondary containment	2C.1, 2C.3
§112.7(d)	Contingency planning	App. D
§112.7(e)	Inspections, tests, and records	2C.5
§112.7(f)	Employee training and discharge prevention procedures	1.6, App. A, App. B
§112.7(g)	Security (excluding oil production facilities)	N/A
§112.7(h)	Loading/unloading (excluding offshore facilities)	2C.5
§112.7(i)	Brittle fracture evaluation requirements	2C.6
§112.7(j)	Conformance with State requirements	1.11
§112.8	Requirements for onshore facilities (excluding production facilities)	N/A
§112.8(a)	General and specific requirements	N/A
§112.8(b)	Facility drainage	N/A
§112.8(c)	Bulk storage containers	N/A
§112.8(d)	Facility transfer operations, pumping, and facility process	N/A
§112.9	Requirements for onshore production facilities	N/A
§112.9(a)	General and specific requirements	N/A
§112.9(b)	Oil production facility drainage	N/A
§112.9(c)	Oil production facility bulk storage containers	N/A
§112.9(d)	Facility transfer operations, oil production facility	N/A
§112.10)	Requirements for onshore oil drilling and workover facilities	-----
§112.10(a)	General and specific requirements	2C.1 - 2C.4, 2C.6
§112.10(b)	Mobile facilities	2C.2
§112.10(c)	Secondary containment - catchment basins or diversion structures	2C.3
§112.10(d)	Blowout prevention (BOP)	2C.4
§112.11	Requirements for offshore oil drilling, production, or workover facilities	N/A
§112.11(a)	General and specific procedures	N/A
§112.11(b)	Facility drainage	N/A
§112.11(c)	Sump systems	N/A
§112.11(d)	Discharge prevention systems for separators and treaters	N/A
§112.11(e)	Atmospheric storage or surge containers; alarms	N/A
§112.11(f)	Pressure containers; alarm systems	N/A
§112.11(g)	Corrosion protection	N/A
§112.11(h)	Pollution prevention system procedures	N/A
§112.11(i)	Pollution prevention systems; testing and inspection	N/A
§112.1(j)	Surface and subsurface well shut-in valves and devices	N/A
§112.11(k)	Blowout prevention	N/A
§112.11(l)	Manifolds	N/A
§112.11(m)	Flowlines, pressure sensing devices	N/A
§112.11(n)	Piping; corrosion protection	N/A
§112.11(o)	Sub-marine piping; environmental stresses	N/A
§112.11(p)	Inspections of sub-marine piping	N/A

☐ OFFSHORE OIL DRILLING, PRODUCTION, OR WORKOVER FACILITY – REGULATORY CROSS-REFERENCE

Citation	Description	Section
§112.3(d)(1)	Professional Engineer Certification	1.2
§112.5(b)	Management of Five Year Review	Foreword
§112.7	General requirements for SPCC Plans for all facilities and all oil types	-----
§112.7(a)	General requirements: discussion of facility's conformance with rule requirements; deviations from Plan requirements; facility characteristics that must be described in the Plan; spill reporting information in the Plan; emergency procedures	1, 2, App. A-D
§112.7(b)	Fault analysis	2D.1
§112.7(c)	Secondary containment	2D.1
§112.7(d)	Contingency planning	App. D
§112.7(e)	Inspections, tests, and records	2D.4
§112.7(f)	Employee training and discharge prevention procedures	1.6 App. A, App. B
§112.7(g)	Security (excluding oil production facilities)	N/A
§112.7(h)	Loading/unloading (excluding offshore facilities)	N/A
§112.7(i)	Brittle fracture evaluation requirements	2D.4
§112.7(j)	Conformance with State requirements	1.11
§112.8	Requirements for onshore facilities (excluding production facilities)	N/A
§112.8(a)	General and specific requirements	N/A
§112.8(b)	Facility drainage	N/A
§112.8(c)	Bulk storage containers	N/A
§112.8(d)	Facility transfer operations, pumping, and facility process	N/A
§112.9	Requirements for onshore production facilities	N/A
§112.9(a)	General and specific requirements	N/A
§112.9(b)	Oil production facility drainage	N/A
§112.9(c)	Oil production facility bulk storage containers	N/A
§112.9(d)	Facility transfer operations, oil production facility	N/A
§112.10)	Requirements for onshore oil drilling and workover facilities	N/A
§112.10(a)	General and specific requirements	N/A
§112.10(b)	Mobile facilities	N/A
§112.10(c)	Secondary containment - catchment basins or diversion structures	N/A
§112.10(d)	Blowout prevention (BOP)	N/A
§112.11	Requirements for offshore oil drilling, production, or workover facilities	-----
§112.11(a)	General and specific procedures	2D.1 - 2D.4
§112.11(b)	Facility drainage	2D.3.1
§112.11(c)	Sump systems	2D.3.2
§112.11(d)	Discharge prevention systems for separators and treaters	2D.2.1
§112.11(e)	Atmospheric storage or surge containers; alarms	2D.2.2
§112.11(f)	Pressure containers; alarm systems	2D.2.2
§112.11(g)	Corrosion protection	2D.2.2
§112.11(h)	Pollution prevention system procedures	2D.3.2
§112.11(i)	Pollution prevention systems; testing and inspection	2D.4
§112.1(j)	Surface and subsurface well shut-in valves and devices	2D.2.7
§112.11(k)	Blowout prevention	2D.2.8
§112.11(l)	Manifolds	2D.2.3
§112.11(m)	Flowlines, pressure sensing devices	2D.2.4
§112.11(n)	Piping; corrosion protection	2D.2.5
§112.11(o)	Sub-marine piping; environmental stresses	2D.2.6
§112.11(p)	Inspections of sub-marine piping	2D.4

Section 1
General Information

1.0 General Information

1.1 Management Approval and Review

Management Approval

Owner/Operator responsible for Facility: ConocoPhillips Company

- Facility Name and Location: Portland Terminal
  5528 NW Doane Avenue, Portland, Oregon 97210
  (Multnomah County)

- This SPCC Plan will be implemented as herein described.

Signature: _____

Name: Tom Lyons

Date: _____

Title: Terminal Supervisor

Designated person accountable for oil spill prevention at the facility:

Name: Tom Lyons

Title: Terminal Supervisor

- This SPCC Plan will be implemented as herein described.

Signature: _____

Name: Gary LeFebvre

Date: _____

Title: Lubricants Plant Manager

Designated person accountable for oil spill prevention at the facility:

Name: Gary LeFebvre

Title: Lubricants Plant Manager

1.2 Professional Engineer Certification

Professional Engineer Certification

By means of this Professional Engineer Certification, I hereby attest to the following:

- I am familiar with the requirements of 40 CFR Part 112 and have verified that this Plan has been prepared in accordance with the requirements of this Part.
- I or my agent have visited and examined the facility(s).
- I have verified that this Plan has been prepared in accordance with good engineering practice, including consideration of applicable industry standards.
- I have verified, to my best understanding and knowledge, that the required inspection and testing procedures have been established as described in Section 2.
- I have verified that the Plan, to my best understanding and knowledge, is adequate for the facility.

John P. Deppa

Printed Name of Registered Professional Engineer

(Seal)

Signature of Registered Professional Engineer

Date: _____

Registration No.: 15471 State: Oregon

1.3 Substantial Harm Certification (excerpt from 40 CFR Part 112 - Attachment CII)

CERTIFICATION OF THE APPLICABILITY OF THE SUBSTANTIAL HARM CRITERIA

FACILITY NAME: Portland Terminal
FACILITY ADDRESS: 5528 NW Doane Avenue
Portland, Oregon 97210 (Multnomah County)

1. Does the facility transfer oil over water to or from vessels ***and*** does the facility have a total oil storage capacity greater than or equal to 42,000 gallons?
   ☒ YES ☐ NO

2. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons ***and*** does the facility lack secondary containment that is sufficiently large to contain the capacity of the largest aboveground oil storage tank plus sufficient freeboard to allow for precipitation within any aboveground oil storage tank area?
   ☐ YES ☒ NO

3. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons ***and*** is the facility located at a distance (as calculated using the appropriate formula in Attachment C-III to this appendix or a comparable formula[1]) such that a discharge from the facility could cause injury to fish and wildlife and sensitive environments? For further description of fish and wildlife and sensitive environments, see Appendices I, II, and III to DOC/NOAA's "Guidance for Facility and Vessel Response Plans: Fish and Wildlife and Sensitive Environments" (59 FR 14713, March 29, 1994) and the applicable Area Contingency Plan.
   ☒ YES ☐ NO

4. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons ***and*** is the facility located at a distance (as calculated using the appropriate formula in Attachment C-III to this appendix or a comparable formula[1]) such that a discharge from the facility would shut down a public drinking water intake[2]?
   ☐ YES ☒ NO

5. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons ***and*** has the facility experienced a reportable oil spill in an amount greater than or equal to 10,000 gallons within the last 5 years?
   ☐ YES ☒ NO

CERTIFICATION
I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals responsible for obtaining this information, I believe that the submitted information is true, accurate, and complete.

Signature	Terminal Supervisor Title
Tom Lyons Name (please type or print)	Date
Signature	Lubricants Plant Manager Title
Gary LeFebvre Name (please type or print)	Date

1 If a comparable formula is used, documentation of the reliability and analytical soundness of the comparable formula must be attached to this form.

2 For the purposes of 40 CFR part 112, public drinking water intakes are analogous to public water systems as described at 40 CFR 143.2(c).

1.4 Contact List and Phone Numbers

The contact list and phone number reference for the facility is provided as follows (check as appropriate):

☒ Contact List and Phone Number reference is provided in Appendix A.
☒ Emergency Notification Phone List is provided in the Facility Response Plan (FRP): _____

1.5 Notification Data Sheet

A Notification Data Sheet is provided as follows (check as appropriate):

☒ Notification Data Sheet and Sample Qualified Event Sheet are provided in Appendix A.
☒ Notification Data Sheet Form provided in the Facility Response Plan (as described in Section 1.4).

1.6 Personnel, Training, and Discharge Prevention Procedures

Training

- The Facility provides the following minimum training to oil-handling personnel prior to assignment of job responsibilities:

- Operation and maintenance of equipment to prevent oil discharges;
- Oil discharge procedure protocols;
- Applicable oil spill prevention (State & Federal) laws, rules, and regulations;
- General facility operations; and,
- The contents of the facility SPCC Plan and applicable pollution control laws, rules, and regulations.

The training program is further described as follows: _____

Annual spill response exercises as recommended by the national Preparedness Response Exercise Program (PREP) and Incident Command System training on an as needed basis.

See facility training logs and OPA 90 Exercise documentation.

1.6 Personnel, Training, and Discharge Prevention Procedures (cont'd)

Briefings

- The facility conducts prevention briefings for oil-handling personnel at least once a year to assure adequate understanding of the SPCC Plan for the facility. These briefings include discussion of potential discharges or component failures and precautionary measures. The briefing program is further described as follows:

  SPCC training may be conducted at any of the monthly safety meetings, during the annual spill exercise, or information may be derived from posted materials.

Documentation

- Documentation of these Personnel, Training, and Discharge Prevention Briefing programs is maintained for a minimum period of three (3) years. Log forms are provided as follows:

  All training records are maintained in a database system, which may be accessed via the Regional office or through Corporate Headquarters in Houston.

- Discharge Prevention Briefing Logs are provided in ☒ Appendix B and ☒ Other (describe):

  Discharge Prevention Briefings are incorporated into the annual OPA 90 Exercise Documentation package. This documentation is found in the OPA 90 facility files.

- *Reference supporting documentation maintained separately, as appropriate:*

[*Additional pages may be attached as necessary.*]

1.7 Facility Layout and Diagram

1.7.1 Facility Layout

- The physical layout of the facility is described as follows: See Appendix "C"

- Further details are provided in Section 2 - Container and Potential Spills Table.

1.7.2 A Facility diagram ☒ is attached (Appendix C) with the following detail and location information (as applicable):

- Containers and their contents.
- Transfer stations and connecting lines.
- Completely buried and bunkered tanks (including USTs covered under 40 CFR Part 280 or 281).
- Drum and portable container storage areas.
- Sumps.

1.8 Prevention, Response and Cleanup

Prevention

- The facility discharge prevention measures, including procedures for routine handling of products (loading, unloading, facility transfers, etc.), are described as follows:

  ☒ Facility Response Plan ☐ Other Document (Describe) and

  ☒ as described below:

Discharge Detection by Personnel

The detection of any discharge is most likely by visual observation since the facility is continually manned.

Automated Discharge Detection Systems

The bulk storage tanks are equipped with high-level alarms that would be activated if an uncontrolled overfill of product were to occur. Additionally, the Fuels Manager inventory system will also alert terminal personnel to potential overfill conditions.

Facility Inspections

Observations of all storage and transfer areas are conducted seven days per week during a terminal security and integrity tour. The employee conducting the walk around observation looks for:

A. Evidence of leaks from tanks, trucks, piping, meters, valves, hoses and appurtenances.

B. Evidence that the integrity of the secondary containment has been breached.

C. Evidence of unauthorized entry and/or tampering with the facility.

Evidence of leaks or breaches in secondary containment shall be reported to the appropriate personnel identified in the FRP Emergency Phone List. If response actions are required, then the FRP should be followed.

Secondary Containment Inspections

Secondary containment observations are conducted visually on a daily basis during security tours. Secondary containment observations are conducted as per the Facility Response Plan.

Response Equipment Inspections

Onsite response equipment inspection is conducted on a regular basis, as per PREP Guidance.

1.8 Prevention (cont'd)

Control Room

The Facility has a control room.

Testing

External, Internal, Hydrostatic and Thickness Testing on Appurtenances

Knowledgeable employees and contractors conduct periodic inspections in accordance with Company policies and practices and recognized industry standards.

Calibration Program

A. Tank Gauging

Tank gauging is conducted on a regular basis to determine the level of product in the tank. This level is compared to sales, deliveries and receipts to verify product levels.

B. Prover Operations

A prover is a device used to identify variances in meter readings. The prover measures by volume the amounts of product passing through a meter, allowing the terminal staff to compare the results with the meter reading. This benefits the terminal by providing more accurate sales records. It also benefits the terminal by assisting in leak detection in lines or tanks. All meters used in the sale of product are proved on a regular basis.

Automated Discharge Detection

Alarm Systems

Refined and Fuel Oil Atmospheric Storage Tanks

All atmospheric storage tanks in refined (gasoline or distillate) service or fuel oil service are equipped with level safety-high (LSH) and level safety high-high (LSHH) safety devices. If the level of product reaches the LSH or LSHH safety devices, a warning alarm is activated alerting the terminal operators of a potential tank overfill. Operators are required to take immediate responsive actions if a LSH or LSHH alarm is activated. This LSHH alarm is triggered approximately 20 minutes before maximum fill levels are reached at a maximum fill rate.

The Olympic pipeline receiving manifold is located inside of containment berm at tank farm #2. It's equipped with a pressure relief system to protect terminal piping from overpressure; including alarms and valves that automatically close in event of excessive pipeline pressures.

Exceptions: Two small tanks including Dock Red Dye Tank, Load Rack Red Dye Tank are not equipped with overfill protection. Personnel continuously monitor these three small tanks during transfer operations.

Lube Oil Atmospheric Storage Tanks

All lube base oil storage tanks receiving product from marine or rail are equipped with LSH alarm systems indicating safe fill levels. This alarm is triggered approximately 20 minutes before maximum fill levels are reached at a maximum fill rate. Additionally, tanks are constantly monitored by personnel during the filling process.

1.8 Prevention (cont'd)

If the level of product exceeds LSH safety levels the activated alarm alerts terminal personnel of a potential tank overfill and immediate responsive actions are implemented.

After Hours Operation

The truck drivers are provided training that requires them to notify the Terminal Operator if they discover a leak or spill during after hours loading.

Self Inspection

See the FRP for additional detailed information regarding Self Inspection as well as various inspection forms.

Countermeasures

- The facility discharge discovery, response and cleanup capabilities are described in the:
  ☒ Facility Response Plan ☐ Other Document (Describe) and
  ☒ as described below:
  - Ensure the Safety of Citizens and Response Personnel
  - Control the Source of the Spill
  - Manage a Coordinated Response Effort
  - Maximize Protection of Environmentally Sensitive Areas
  - Contain and Recover Spilled Material
  - Recover and Rehabilitate Injured Wildlife
  - Remove Oil from Impacted Areas
  - Minimize Economic Impacts
  - Keep Stakeholders and Public Informed of Response Activities

- The resources available to the facility for discharge cleanup are provided in the
  ☐ Contact List (provided in Appendix A) or the ☒ Facility Response Plan

Disposal

- The facility has established the following methods of disposal for recovered materials in accordance with applicable legal requirements (check all that apply):

  ☒ Facility Response Plan ☐ Other Document (Describe) or ☐ Details below:

1.9 Impracticability (as applicable)

The containment and/or diversionary structures or equipment to prevent a discharge ☐ **are** ☒ **are not** practicable.

If not, the following provides a description of the impracticability:

1. Piping and Associated Appurtenances

The vast majority of the piping falls within secondary containment. For that limited amount of piping that falls outside of secondary containment, prevention and containment is provided by the measures outlined in the Deviations to Rule section.

2. Lube Oil and Gasoline Additive Unloading Areas

These loading/unloading areas are not equipped with secondary containment. These areas are used on an infrequent basis and pose a minimum risk as a spill source.

3. Lube Oil Warehouse Loading Dock

This area is not equipped with secondary containment. Any potential spills from ruptured drum(s) could enter catch basins near face of load dock and enter storm drain which eventually leads to river. (See Deviations to Rule section).

4. Boiler Diesel Tank

Existing secondary containment curbing is only adequate if tank is partially filled (See Deviations to Rule section).

- **If not** practicable, ☐ an oil spill contingency plan is attached (provided in Appendix D) or ☒ is addressed by the Facility Response Plan.
- A written commitment of manpower, equipment and materials required to expeditiously control and remove any quantity of oil discharged is provided in ☐ Appendix D or in the ☒ Facility Response Plan.
- If containment and/or diversionary structures are impracticable for bulk storage containers, then periodic integrity testing of the container(s) and integrity and leak testing of the valves and piping is required.

1.10 Deviations to Rule

☐ The facility has no deviations to the rule.

☒ The facility has identified various deviations from the rule and the equivalent environmental protection to support the deviations. The deviations, and the reasons for the deviations, are summarized ☒ below or ☐ in the appropriate sections of this plan.

1. Piping and associated appurtenances

The piping at terminals is designed, operated and maintained in accordance with ASME B31.4 industry code. Product temperatures are between atmospheric and 200 degrees F. Operating pressure cycles are below the allowable design pressure of the pipe. Inspections for the terminal and station piping include:

Above ground piping is periodically inspected by knowledgeable personnel.

Below ground piping is inspected by knowledgeable personnel whenever it is uncovered. To minimize the likelihood of damage during excavations, procedures are in place to ensure that excavation and emergency plans are adequate prior to excavation.

Knowledgeable personnel internally inspect the piping whenever it is open for maintenance or modification.

Pressure relief devices are used to protect piping and equipment from over pressure. Pressure relief devices are vented to storage tanks, sumps or other containment to prevent the release of hydrocarbons to the environment. Pressure relief valve maintenance includes performing a pop test at installation and during major repairs of the equipment or pipe being protected, or a new pressure relief device is installed. Knowledgeable personnel perform a visual inspection of all pressure relief devices annually.

Pressure relieve devices such as relief valves are used to prevent pressure buildup due to process excursions and surges in tanks, vessels, piping and pipelines. Relief valves and rupture disks are included in this category. Industry guidelines such as API 576 provide the basis for the company's maintenance program.

Pressure relief valves on piping and pipelines are pop tested and inspected by knowledgeable personnel periodically.

In addition to the inspections and pressure relief and control devices, the facility has an agency approved facility response plan. The plan provides for a facility response team, contracted oil spill response organizations, written internal and external notification procedures, response procedures and a documented training and exercise program.

2. Lube Oil and Gasoline Additive Unloading Areas

The Lube Oil Additive Unloading Area is paved and slopes to a storm water catch basin, which drains to the municipal storm drain system without passing through an oil/water separator. Consequently, the drain is covered during additive transfer such that potential spills will flow past the storm water catch basin and continue down gradient to the nearby process water catch basin. Spill response materials are also positioned near the unloading area to allow for quick response in the event of a spill.

The Gasoline Additive Unloading Station drains to both a nearby storm water catch basin connected to the oil/water separator in Tank Farm 1 and to a second catch basin which drains to the municipal storm drain system without passing through an oil/water separator. Consequently, the second catch basin is covered during additive transfers to contain spills in the facility storm water system. Spill response materials are also positioned near the unloading area to allow for quick response in the event of a spill.

Unloading at the Lube Oil and Gasoline Additive Unloading Stations is performed on a scheduled basis. The truck drivers must be trained in operation of unloading equipment prior to conducting unloading operations. This operation is a supervised activity. In addition to the training and supervision, the facility has an agency approved facility response plan. The plan provides the following: a facility response team, contracted oil spill response organizations, written internal and external notification procedures, response procedures and a documented training and exercise program.

3. Lube Oil Warehouse Loading Dock

Any potential spills from ruptured drum(s) could enter catch basins near face of load dock and enter storm drain which eventually leads to river. Operators are trained to take immediate responsive actions if a spill occurs by immediately closing the post indicator valve at manhole in Doane Street. Spill response materials are also positioned near the unloading area to allow for quick response in the event of a spill.

4. Boiler Diesel Tank

Existing secondary containment curbing provides 2945 gallon containment capacity; and is considered adequate if tank is only partially filled to 2426 gallons maximum (instead of 9399 gallons "full"). As such, existing containment curbing will provide adequate containment (see secondary containment calculations appendix E). Signage shall be installed to limit tank filling to 2426 gallons maximum; otherwise containment volume would need to be increased.

1.11 Conformance with other Requirements

Describe conformance with other applicable requirements and effective discharge prevention and containment procedures in-place at the facility. Include a description of compliance with more stringent State rules, regulations, and guidelines, if any:

1. This plan is in conformance with the requirements of the Oil Pollution Act (OPA). Established under the authority of section 311(j) (1) (c) of the Clean Water Act, the Federal Oil Pollution Prevention Program is designed to prevent the discharge of oil to navigable waters and to contain such discharges when they occur.

2. The requirements for an Emergency Contingency Plan under the U.S. Coast Guard Regulations 33 CFR 154.

3. The requirements of an emergency contingency plan under the Resource Conservation and Recovery Act (RCRA) 40 CFR Parts 265, Subparts C and D.

4. The emergency procedures required by the Department of Transportation (DOT) as identified in 49 CFR 192.615, 195.402 and similar regulations issued by the state agencies.

5. The Occupational Safety and Health Act requirements for an employee emergency plan and fire prevention plan as described in 29 CFR 1910.38 and the emergency planning and response requirements according to 29 CFR 1910.119(n) and 29 CFR 1910.120.

Section 2A
Onshore Facility Information

2A.1 Container and Potential Spills Table

- The potential spills sources at the facility are summarized in the following table:

[See attached Container and Potential Spills table]

Oil Source	Associated Substance (Contents) *(Oil)*	Source Capacity *(Bbls)*	Potential Failure	Rate of Flow *(Bbls/hr)*	Direction of Flow	Containment System(s)*
Aboveground Fixed Containers						
See attached						
Completely and Partially Buried Tanks						
See attached						
Mobile and Portable Containers						
See attached						
Operational Equipment (Transformers, Manufacturing Equipment, Process Vessels, etc.)						
See attached						
Truck or Rail Loading/Unloading Rack						
See attached						
Other Potential Spill Sources (Piping, Surface Impoundments, etc.)						
See attached						

- The material and construction of bulk storage containers ☒ **are** compatible with the material stored and conditions of storage such as pressure and temperature.

- All bulk storage container installations ☒ **are** ☐ **are not** constructed so that a means of secondary containment is provided for the entire capacity of the largest single container and sufficient freeboard to contain precipitation. **If not**, describe the "impracticability" under Section 1.9.

- Diked areas ☒ **are** sufficiently impervious to contain discharged oil from reaching navigable waters in harmful quantities.

- Visible discharges, which result in a loss of product from containers will be promptly corrected and any accumulations of oil in the diked area(s) will be promptly removed.

* See Sec. 2A.3.1 for further details.

Source	Container Identification	Substance Stored/Transferred	Potential Failure	Volume or Rate of Flow (Tank Vol. Based on Shell Ht.)	Direction of Flow	Containment Systems
Tank Farm 1						
Storage tank	36	Lube Oil	Rupture or overfill	21,933 gallons	See attached drainage plan	Tank farm dike; Total containment capacity of Tank Farm 1 (total area inside tank farm dike minus the total areas of all the tanks except the largest) equals 4,150,608 gallons.
Storage tank	1471	Lube Oil	Rupture or overfill	19,491 gallons		
Storage tank	2561	Lube Oil	Rupture or overfill	1,665,039 gallons		
Storage tank	2579	Lube Oil	Rupture or overfill	20,142 gallons		
Storage tank	2669	Diesel	Rupture or overfill	477,144 gallons		
Storage tank	2713	Lube Oil	Rupture or overfill	118,440 gallons		
Storage tank	2714	Lube Oil	Rupture or overfill	118,440 gallons		
Storage tank	2783	Lube Oil	Rupture or overfill	985,230 gallons		
Storage tank	2784	Lube Oil	Rupture or overfill	1,459,514 gallons		
Storage tank	2917	Lube Oil	Rupture or overfill	649,728 gallons		
Storage tank	3623	Gasoline Additive	Rupture or overfill	20,368 gallons		
Storage tank	3639	Lube Oil	Rupture or overfill	132,188 gallons		
Storage tank	4369	Lube Oil	Rupture or overfill	20,368 gallons		
Storage tank	4441	Diesel Lubricity Additive	Rupture or overfill	20,368 gallons		

Source	Container Identification	Substance Stored/Transferred	Potential Failure	Volume or Rate of Flow (Tank Vol. Based on Shell Ht.)	Direction of Flow	Containment Systems
Tank Farm 2						
Storage tank	2915	Gasoline	Rupture or overfill	3,553,200 gallons	See attached drainage plan	Tank farm dike; Total containment capacity of Tank Farm 2 (total area inside tank farm dike minus the total areas of all the tanks except the largest) equals 4,575,564 gallons.
Storage tank	2916	Diesel	Rupture or overfill	1,715,688 gallons		
Storage tank	2982	Diesel	Rupture or overfill	487,296 gallons		
Storage tank	2983	Lube Oil	Rupture or overfill	319,788 gallons		
Storage tank	3407	Gasoline	Rupture or overfill	3,384,000 gallons		
Storage tank	3408	Gasoline	Rupture or overfill	1,903,500 gallons		
Storage tank	3409	Gasoline	Rupture or overfill	1,151,500 gallons		
Storage tank	3410	Ethanol	Rupture or overfill	302,269 gallons		
Storage tank	3411	Gasoline	Rupture or overfill	302,269 gallons		
Storage tank	3412	Ethanol	Rupture or overfill	302,269 gallons		
Storage tank	3413	Gasoline	Rupture or overfill	302,269 gallons		
Storage tank	4223	Out of Service	Rupture or overfill	20,368 gallons		
Storage tank	4259	Transmix	Rupture or overfill	230,300 gallons		
Storage tank	4327	Out of Service	Rupture or overfill	10,187 gallons		

Source	Container Identification	Substance Stored/Transferred	Potential Failure	Volume or Rate of Flow (Tank Vol. Based on Shell Ht.)	Direction of Flow	Containment Systems
Tank Farm 3						
Storage tank	3414	Lube Oil	Rupture or overfill	222,075 gallons	See attached drainage plan	Tank farm dike; Total containment capacity of Tank Farm 3 (total area inside tank farm dike minus the total areas of all the tanks except the largest) equals 4,296,390 gallons.
Storage tank	3415	Lube Oil	Rupture or overfill	222,075 gallons		
Storage tank	3416	Lube Oil	Rupture or overfill	222,075 gallons		
Storage tank	3417	Lube Oil	Rupture or overfill	222,075 gallons		
Storage tank	3579	Fuel Oil	Rupture or overfill	3,384,000 gallons		
Storage tank	3739	Lube Oil	Rupture or overfill	222,075 gallons		
Storage tank	3740	Lube Oil	Rupture or overfill	302,269 gallons		
Storage tank	3761	Diesel	Rupture or overfill	3,384,000 gallons		
Storage tank	4244	Lube Oil	Rupture or overfill	20,368 gallons		
Storage tank	4245	Lube Oil	Rupture or overfill	20,368 gallons		
Storage tank	4252	Fuel Oil	Rupture or overfill	470,000 gallons		
Storage tank	4253	Fuel Oil	Rupture or overfill	470,000 gallons		
Storage tank	4254	Lube Oil	Rupture or overfill	470,000 gallons		
Storage tank	4255	Biodiesel	Rupture or overfill	470,000 gallons		
Storage tank	4256	Out of Service	Rupture or overfill	230,300 gallons		
Storage tank	4257	Out of Service	Rupture or overfill	58,750 gallons		
Storage tank	4258	Lube Oil	Rupture or overfill	20,368 gallons		
Storage tank	4266	Lube Oil	Rupture or overfill	20,368 gallons		
Storage tank	4302	Lube Oil	Rupture or overfill	20,368 gallons		

Source	Container Identification	Substance Stored/Transferred	Potential Failure	Volume or Rate of Flow (Tank Vol. Based on Shell Ht.)	Direction of Flow	Containment Systems
Tank Farm 3 (cont'd.)						
Storage tank	4303	Lube Oil	Rupture or overfill	20,368 gallons		
Storage tank	4305	Out of Service	Rupture or overfill	10,187 gallons		
Storage tank	4306	Lube Oil	Rupture or overfill	223,175 gallons		
Storage tank	4318	Diesel	Rupture or overfill	1,626,200 gallons		
Storage tank	4320	Lube Oil	Rupture or overfill	42,575 gallons		
Storage tank	4321	Lube Oil	Rupture or overfill	42,575 gallons		
Storage tank	4322	Lube Oil	Rupture or overfill	42,575 gallons		
Storage tank	4323	Lube Oil	Rupture or overfill	42,575 gallons		
Storage tank	F103	Lube Oil	Rupture or overfill	29,375 gallons		
Storage tank	F104	Lube Oil	Rupture or overfill	21,726 gallons		
F Tank Farm						
Storage tank	4335	Lube Oil	Rupture or overfill	20,368 gallons	See attached drainage plan	Tank farm dike; Total containment capacity of F Tank Farm (total area inside tank farm dike minus the total areas of all the tanks except the largest) equals 16,338 gallons; The F Tank Farm is equipped with an open catch basin connected the process water system, which significantly increases the effective containment capacity of the F Tank Farm.
Storage tank	4336	Lube Oil	Rupture or overfill	20,368 gallons		
Storage tank	4337	Lube Oil	Rupture or overfill	20,368 gallons		
Storage tank	4436	Lube Oil	Rupture or overfill	20,368 gallons		
Storage tank	4437	Lube Oil	Rupture or overfill	20,368 gallons		
Storage tank	F10	Lube Oil	Rupture or overfill	6,789 gallons		
Storage tank	F11	Lube Oil	Rupture or overfill	6,789 gallons		
Storage tank	F12	Lube Oil	Rupture or overfill	6,789 gallons		

Source	Container Identification	Substance Stored/Transferred	Potential Failure	Volume or Rate of Flow (Tank Vol. Based on Shell Ht.)	Direction of Flow	Containment Systems
Boiler Building (Boiler Fuel Tank)						
Storage tank	N/A	Diesel	Rupture or overfill	2,600 gallons (partial fill)		Limit fill to 2600 gallons (matches available containment curbing).
Upper Lube Cell						
Storage tank	3741	Lube Oil	Rupture or overfill	20,368 gallons	See attached drainage plan	Tank farm dike; Total containment capacity of the Upper Lube Cell (total area inside tank farm dike minus the total areas of all the tanks except the largest) equals 42,378 gallons; Additionally, the Upper Lube Cell is equipped with an open catch basin connected the process water system, which significantly increases the effective containment capacity of the Upper Lube Cell.
Storage tank	3742	Lube Oil	Rupture or overfill	20,368 gallons		
Storage tank	3743	Lube Oil	Rupture or overfill	20,368 gallons		
Storage tank	3744	Lube Oil	Rupture or overfill	20,368 gallons		
Storage tank	3745	Lube Oil	Rupture or overfill	20,368 gallons		
Storage tank	3746	Lube Oil	Rupture or overfill	20,368 gallons		
Storage tank	3747	Lube Oil	Rupture or overfill	20,368 gallons		
Storage tank	3757	Lube Oil	Rupture or overfill	20,368 gallons		
Storage tank	3760	Lube Oil	Rupture or overfill	20,368 gallons		
Storage tank	4191	Lube Oil	Rupture or overfill	20,368 gallons		
Storage tank	4192	Lube Oil	Rupture or overfill	20,368 gallons		
Storage tank	4241	Lube Oil	Rupture or overfill	20,368 gallons		
Storage tank	4242	Lube Oil	Rupture or overfill	20,368 gallons		
Storage tank	4243	Lube Oil	Rupture or overfill	20,368 gallons		
Storage tank	4281	Lube Oil	Rupture or overfill	20,368 gallons		
Storage tank	4332	Lube Oil	Rupture or overfill	20,368 gallons		
Storage tank	4333	Lube Oil	Rupture or overfill	20,368 gallons		
Storage tank	4334	Lube Oil	Rupture or overfill	20,368 gallons		

Source	Container Identification	Substance Stored/Transferred	Potential Failure	Volume or Rate of Flow (Tank Vol. Based on Shell Ht.)	Direction of Flow	Containment Systems
Lower Lube Cell						
Storage tank	4300	Lube Oil	Rupture or overfill	29,375 gallons	See attached drainage plan	Tank farm dike; Total containment capacity of the Lower Lube Cell (total area inside tank farm dike minus the total areas of all the tanks except the largest) equals 47,334 gallons; Additionally, the Lower Lube Cell is equipped with an open catch basin connected to the process water system, which significantly increases the effective containment capacity of the Lower Lube Cell.
Storage tank	4331	Lube Oil	Rupture or overfill	29,375 gallons		
Storage tank	4388	Lube Oil	Rupture or overfill	12,154 gallons		
Storage tank	4389	Lube Oil	Rupture or overfill	12,154 gallons		
Storage tank	4390	Lube Oil	Rupture or overfill	12,154 gallons		
Storage tank	4391	Lube Oil	Rupture or overfill	12,154 gallons		
Storage tank	4392	Lube Oil	Rupture or overfill	12,154 gallons		
Storage tank	4393	Lube Oil	Rupture or overfill	12,154 gallons		
Storage tank	4394	Lube Oil	Rupture or overfill	12,154 gallons		
Storage tank	4395	Lube Oil	Rupture or overfill	12,154 gallons		
Storage tank	4397	Lube Oil	Rupture or overfill	12,154 gallons		
Storage tank	4398	Lube Oil	Rupture or overfill	12,154 gallons		
Storage tank	4399	Lube Oil	Rupture or overfill	12,154 gallons		
Storage tank	4400	Lube Oil	Rupture or overfill	12,154 gallons		
Storage tank	4401	Lube Oil	Rupture or overfill	12,154 gallons		
Storage tank	4402	Lube Oil	Rupture or overfill	12,154 gallons		
Storage tank	4403	Lube Oil	Rupture or overfill	12,154 gallons		
Storage tank	4404	Lube Oil	Rupture or overfill	12,154 gallons		
Storage tank	4405	Lube Oil	Rupture or overfill	12,154 gallons		

Source	Container Identification	Substance Stored/Transferred	Potential Failure	Volume or Rate of Flow (Tank Vol. Based on Shell Ht.)	Direction of Flow	Containment Systems
Lower Lube Cell (cont'd.)						
Storage tank	4406	Lube Oil	Rupture or overfill	12,154 gallons		
Storage tank	4407	Lube Oil	Rupture or overfill	12,154 gallons		
Storage tank	4408	Lube Oil	Rupture or overfill	12,154 gallons		
Lube Blending Warehouse						
Blend tank	T-100	Lube Oil	Rupture or overfill	6,599 gallons	See attached drainage plan	The warehouse is equipped with two means of secondary containment. The Blending and Container Filling Areas are equipped with concrete floors sloped to catch basins that drain to two 5,000-gallon underground spill containment tanks located at the south end of the warehouse. The Package Storage Area is equipped with a concrete floor and curbing along the north side and northeast corner of the warehouse to prevent potential spills from packages products along that side, or additive tanks in the northeast corner, from migrating from the building.
Storage tank	4338	Lube Oil	Rupture or overfill	1,008 gallons		
Storage tank	4339	Lube Oil	Rupture or overfill	1,008 gallons		
Storage tank	4340	Lube Oil	Rupture or overfill	1,008 gallons		
Storage tank	4341	Lube Oil	Rupture or overfill	1,008 gallons		
Storage tank	4342	Lube Oil	Rupture or overfill	1,008 gallons		
Storage tank	4343	Lube Oil	Rupture or overfill	1,008 gallons		
Storage tank	4344	Lube Oil	Rupture or overfill	1,008 gallons		
Storage tank	4345	Lube Oil	Rupture or overfill	1,008 gallons		
Storage tank	4346	Lube Oil	Rupture or overfill	1,008 gallons		
Storage tank	4347	Lube Oil	Rupture or overfill	1,008 gallons		

Source	Container Identification	Substance Stored/Transferred	Potential Failure	Volume or Rate of Flow (Tank Vol. Based on Shell Ht.)	Direction of Flow	Containment Systems
Storage tank	F-8	Lube Oil	Rupture or overfill	977 gallons		
Storage tank	F-9	Lube Oil	Rupture or overfill	2,591 gallons		
Storage tank	F-13	Lube Oil	Rupture or overfill	4,858 gallons		
Storage tank	F-14	Lube Oil	Rupture or overfill	4,858 gallons		
Truck and Railcar Loading/Unloading Areas						
Refined Products Truck Loading Rack	NA	Gasoline, diesel, kerosene, ethanol and transmix	Truck/trailer overfill	600 gpm (maximum)	See attached drainage plans	The Refined Products Loading Rack utilizes vapor recovery and overfill protection/brake interlock systems. Trucks are equipped with high-level sensors. The drivers are responsible for presetting loading volumes and are in attendance at all times. The rack is surrounded by a sloped concrete slab. Runoff from the slab is into strip drains that lead to a 10,000 gallon spill containment tank. The secondary containment at the rack and containment tank is sufficient to contain the maximum anticipated spill.
			Compartment rupture	6,200 gallons (maximum)		
			Valve failure	100-200 gpm		
Gasoline Additive Truck Unloading Area	NA	Gasoline additives	Compartment rupture	6,000 gallons (maximum)	See attached drainage plans	The area is graded such that spills will flow towards the Refined Products Loading Rack containment area. Spills in this area could also flow to a storm water catch basin that drains to a storm water separator in Tank Farm 1. Therefore, terminal procedures require operators to seal off the catch basin with a magnetic cover during additive transfers such that the spills will pond in the area to facilitate recovery.
			Valve failure	100-200 gpm		
Transmix Unloading Area	NA	Transmix	Compartment rupture	6,000 gallons (maximum)	See attached drainage plans	A spill will flow to catch basins located in the center of the concrete containment pad and then into the process water system. The secondary containment can contain a spill of the maximum size anticipated. During the transfer of ethanol, the catch basin lift pump is shutdown to prevent an ethanol spill from entering the process system and dissolving into water.
			Valve failure	100-200 gpm		

Source	Container Identification	Substance Stored/Transferred	Potential Failure	Volume or Rate of Flow (Tank Vol. Based on Shell Ht.)	Direction of Flow	Containment Systems
Truck and Railcar Loading/Unloading Areas (cont'd.)						
Ethanol Unloading Area	NA	Ethanol	Compartment rupture	6,000 gallons (maximum)	See attached drainage plans	The Ethanol Unloading Area is paved and equipped with asphalt and concrete berms. Several catch basins drain the area to the process water system. A driver has to be present at all times during unloading. The area is designed to contain the largest foreseeable spill of 6,000 gallons which is the largest compartment of a typical tank truck or trailer.
			Valve failure	100-200 gpm		
Biodiesel Unloading Area	NA	Biodiesel	Compartment rupture	6,000 gallons (maximum)	See attached drainage plans	The Biodiesel Unloading Area is paved and equipped with asphalt and concrete berms. Several catch basins drain the area to the process water system. A driver has to be present at all times during loading. The area is designed to contain the largest foreseeable spill of 6,000 gallons which is the largest compartment of a typical tank truck or trailer.
			Valve failure	100-200 gpm		
Diesel/Black Oil Pump Off Area	NA	Diesel and black oils	Compartment rupture	4,000 gallons (maximum)	See attached drainage plans	A spill will be contained by perimeter curbing and catch basins that drain to the process water system.
			Valve failure	100-200 gpm		
Lube Oil Truck Loading Rack	NA	Lube oils	Truck/trailer overfill	600 gpm (maximum)	See attached drainage plans	The Lube Oil Truck Loading Rack area is paved and equipped with asphalt and concrete berms. Several catch basins drain the area to the process water system. The rack is equipped with a deadman switch that requires constant pressure from the operator to continue loading operations. Therefore, an operator has to be present at all times during loading of lube oils. The area is designed to contain the largest foreseeable spill of 7,800 gallons which is the largest compartment of a typical tank truck or trailer.
			Compartment rupture	7,800 gallons (maximum)		
			Valve failure	100-200 gpm		

Source	Container Identification	Substance Stored/Transferred	Potential Failure	Volume or Rate of Flow (Tank Vol. Based on Shell Ht.)	Direction of Flow	Containment Systems
Black Oil/RFO Truck Loading/Unloading Rack	NA	Black oils and re-refined oils	Truck/trailer overfill	600 gpm (maximum)	See attached drainage plans	The Black Oil/RFO Truck Loading Rack area is paved and equipped with asphalt and concrete berms. Several catch basins drain the area to the process water system. The rack is equipped with a deadman switch that requires constant pressure from the operator to continue loading operations. Therefore, an operator has to be present at all times during loading. The area is designed to contain the largest foreseeable spill of 4,000 gallons which is the largest compartment of a typical tank truck or trailer.
			Compartment rupture	4,000 gallons (maximum)		
			Valve failure	100-200 gpm		
Lube Oil Truck Unloading Area	NA	Lube oils	Compartment rupture	4,000 gallons (maximum)	See attached drainage plans	A spill will be contained by perimeter curbing and catch basins that drain to the process water system.
			Valve failure	100-200 gpm		
Lube Additive Truck Unloading Area	NA	Lube oil additives	Compartment rupture	5,000 gallons (maximum)	See attached drainage plans	The area is paved but not equipped with a dedicated containment system. As a result, operators place a cover over the nearby storm water catch basin during additive transfers. This prevents spills from entering the storm water system and causes the spill to continue down gradient into the a process water system catch basin.
			Valve failure	100-200 gpm		
Railcar Loading/Unloading Area	NA	Lube base stocks, additives, finished lube oils; black oil	Railcar overfill	400 gpm (maximum)	See attached drainage plans	The Rail Car Loading/Unloading area is surrounded by a sloped gravel area and asphalt containment berm along the northwest perimeter of the area. Smaller sloped concrete slabs are located under each of the four transfer stations for the rack, and are equipped with catch basins that drain to the process water system. The combination of the concrete slabs, catch basins, and asphalt berms provide containment area for at least 30,000 gallons. Railcars are also loaded and unloaded under the supervision of terminal personnel. Operators are required to check the railcars and transfer equipment every 20 minutes and be present during the loading of the last 2,000 gallons. Operators are required to be present if offloading hazardous materials.
			Railcar rupture	30,000 gallons (maximum)		
			Valve failure	100 - 400 gpm		

Source	Container Identification	Substance Stored/Transferred	Potential Failure	Volume or Rate of Flow (Tank Vol. Based on Shell Ht.)	Direction of Flow	Containment Systems
Marine Dock						
Marine Transfers	NA	Gasoline, diesel, kerosene, black oil, and lube oil	Cargo hose failure	5600 gallons containment volume required < 8500 gallon total capacity (assumes 1 minute detection and shutdown-per 33 CFR Part 154.550 Regulations) 5,600 gpm (offloading); 2,100 gpm (loading)	See attached drainage plans	The marine dock manifold/riser area is surrounded by sloped concrete and bermed around the perimeter (approx. 6500 gallon capacity). Containment area drains to a 2,000 gallon spill containment tank beneath the dock, which is equipped with level-control activated pumps that pump any spilled product to the process water system. Transfer operations at the marine dock are conducted under the continual supervision of terminal & vessel personnel and in accordance with U.S. Coast Guard regulations. If the unlikely event of a spill at the marine dock or tug refueling area, terminal personnel will deploy a floating spill containment boom to encircle and contain the spill if it is safe to do so. Containment of gasoline spills is rarely, if ever, recommended due to the associated fire & explosion hazard.
Tug Fueling			Hose failure	300 gallon containment volume req'd-300 gpm max(loading)	See attached drainage plans	The tug refueling area at the dock is equipped with a similar containment system, which also drains to the holding tank.

Source	Container Identification	Substance Stored/Transferred	Potential Failure	Volume or Rate of Flow (Tank Vol. Based on Shell Ht.)	Direction of Flow	Containment Systems
Transfer Pipelines						
Pipeline leak or rupture	NA	Gasoline, diesel, kerosene, black oil, and lube oil	Pipeline leak	4,500 gpm (maximum, assuming 12-inch pipe)	See attached drainage plans	Most product piping is aboveground, except between tank farms or where pipelines cross under streets. Pipelines are not equipped with secondary containment except where located inside tank farm dikes. Aboveground piping is protected from corrosion by periodic painting, and underground piping is protected from corrosion by a coating or wrapping. Aboveground pipelines are protected from vehicular damage by being located out of the driving pattern, on overhead racks or protected guardrails. Pipe supports are designed to minimize abrasion and corrosion and to allow for expansion and contraction. Pipelines rest on supports fabricated from steel pipe. Pipe end connections are capped or blind-flanged and maked if the line is not in service or is idle for extended periods. Piping is visually inspected on a periodic basis. Pipelines and hoses under U.S. Coast Guard jurisdiction are pressure tested annually, and all pipelines are tested after repairs that may affect structural integrity.
			Pipeline rupture	27,900 gallons (assuming 5 minute detection and shutdown, largest transfer pipeline operating at maximum rate, and complete drainage following shutdown)		
Lube Oil Warehouse						
Blending and Container Filling Areas	NA	Lube oils, lube oil additives, base stocks	Equipment failure; Feedstock tank rupture	1,000 gallons (size of largest feedstock tank)	See attached drainage plans	The Blending and Container Filling Areas are equipped with concrete floors sloped to catch basins that drain to two 5,000-gallon underground spill containment tanks located at the south end of the warehouse.
Package Storage Area	NA	Lube oils, lube oil additives, base stocks	Drum or tote failure; Additive tank rupture	1,060 gallons (size of largest lube oil additive tank)	See attached drainage plans	The Package Storage Area is equipped with a concrete floor and curbing along the north side and northeast corner of the warehouse to prevent potential spills from packages products along that side, or additive tanks in the northeast corner, from migrating from the building.
Solubilizer tank	NA	Lube oil additives	Rupture or overfill	8,733 gallons (size of tank)	See attached drainage plans	The area under the solubilizer is equipped with concrete floors sloped to catch basins that drain to two 5,000-gallon underground spill containment tanks located at the south end of the warehouse.

Source	Container Identification	Substance Stored/Transferred	Potential Failure	Volume or Rate of Flow (Tank Vol. Based on Shell Ht.)	Direction of Flow	Containment Systems
Waste Storage Area						
Waste Storage Area	NA	Hazardous and non-hazardous wastes	Drum failure or puncture	55 gallons	See attached drainage plans	The waste storage area consists of a sloped concrete pad surrounded by a 6-inch berm with a centralized catch basin. The catch basin drains to the process water system.
Hot Boxes						
Hot Boxes	NA	Lube oil and lube oil additives	Drum failure or puncture	55 gallons	See attached drainage plans	The sheet-metal hot boxes are on top of a concrete pad surrounded by a 9-inch concrete berm. The maximum spill would be contained by the bermed concrete pad.
Drum Storage Area						
Drum Storage	NA	Lube oil and lube oil additives	Drum failure or puncture	55 gallons	See attached drainage plans	The drum storage area is paved and sloped to catch basins that lead to the process water system.

2A.2 Bulk Storage Containers

2A.2.1 Completely and Partially Buried Tanks

- The facility ☒ **does** ☐ **does not** have completely buried metallic storage tanks that were installed on or after January 10, 1974.
  - **If yes**, corrosion protection is provided by ☒ protective coatings and ☒ cathodic protection (compatible with local soil conditions) or ☒ other: automatic leak detection.
  - Completely buried tanks ☒ **are** regularly leak tested.
- The facility ☐ **does** ☒ **does not** have partially buried or bunkered metallic tanks.
  - **If yes**, corrosion protection is provided by ☐ protective coatings and/or ☐ cathodic protection (compatible with local soil conditions) or ☐ other: _____.

2A.2.2 Mobile or Portable Oil Storage Containers

- Mobile or portable oil storage containers ☒ **are** ☐ **are not** located at the facility (Note: 55-gallon drums and totes are examples of mobile or portable containers).

  The designated drum storage area is noted on the facility drawing in Appendix C.
  - **If yes**, secondary containment ☒ **is** ☐ **is not** provided which is adequately sized to contain the largest container plus sufficient freeboard for precipitation. See calculations in Appendix E.

2A.2.3 Internal Heating Coils

- The facility ☒ **does** ☐ **does not** utilize internal heating coils. **If so**, internal heating coil leakage is controlled by (check method that applies):

  ☐ Monitoring of steam return and exhaust lines for contamination, or passing the steam return or exhaust lines pass through a settling tank or other separation system.

  ☐ Steam return or exhaust lines do not discharge into an open water course.

  ☒ Equivalent environmental protection described as follows: _____

  The terminal uses steam to heat black oil tanks, some lube oil tanks and associated piping. Steam is also used to heat railcars in the Railcar Loading/Unloading Area. No hot oil coils are used. Much of the condensate generated through use of the steam is returned to the boiler. Boiler blow down water is diverted to a catch basin located beneath the boiler that leads to the process water system.

2A.2.4 Fail Safe Precautions

- Container installation(s) are engineered with at least one of the following devices (check all that apply):

☒ High liquid level alarm with an audible or visual signal at a constantly attended operation or surveillance station. In smaller facilities an audible air vent may suffice. Describe the operation, method and frequency of testing and or inspection of these devices and where records are maintained.

The high level alarms are tested regularly in accordance with API RP 2350. The facility maintains these records on site for a minimum of three years.

☐ High liquid level pump cutoff devices set to stop flow at a predetermined container content level.

☐ Direct audible or code signal communication between the container gauger and the pumping station.

☐ Fast response system for determining the liquid level of each bulk storage container (i.e. digital computer, telepulse, direct vision gauge). Note: If this alternative is used, a person must be present to monitor gauges and the bulk container.

2A.3 Facility Containment, Drainage and Water Treatment

2A.3.1 Secondary Containment Systems

See attached Facility Containment, Drainage and Water Treatment table

Containment ID	Drainage Method	Type of Containment and Material of Construction

- Drainage from diked storage area(s) is restrained by manually operated valves, manually and/or automatically operated pumps and other: oil/water separators.
  (Note: Flapper-type valves may not be used.)

- Reference supporting documentation maintained separately, as appropriate:
  Refer to Appendix E, calculations.

Containment ID	Drainage Method	Type of Containment and Material of Construction
Tank Farm 1	Gravity and lift station; Storm water is diverted to Separator 002; Process water is diverted to Separator 003.	Tank Farm 1 containment is of concrete wall and earthen floor construction; Containment for process water system components within Tank Farm 1 is of concrete pad and curb construction.
Tank Farm 2	Gravity and lift station; Storm water is diverted to Separator 004; Process water is diverted to Separator 003.	Tank Farm 2 containment is of concrete wall and earthen floor construction; Containment for process water system components within Tank Farm 2 is of concrete pad and curb construction.
Tank Farm 3	Gravity and lift station; Storm water is diverted to Separator 001; Process water is diverted to Separator 003.	Tank Farm 3 containment is of concrete wall and earthen floor construction; Containment for process water system components within Tank Farm 3 is of concrete pad and curb construction.
F Tank Farm	Gravity and lift station; F Tank Farm process water is diverted to Separator 003.	F Tank Farm containment is of concrete pad and curb construction. The F Tank Farm is equipped with an open catch basin connected to the process water system, which significantly increases the effective containment capacity of the F Tank Farm.
Upper Lube Cell	Gravity and lift station; Upper Lube Cell process water is diverted to Separator 003.	Upper Lube Cell containment is of concrete pad and curb construction. The Upper Lube Cell is equipped with an open catch basin connected to the process water system, which significantly increases the effective containment capacity of the Upper Lube Cell.
Lower Lube Cell	Gravity and lift station; Lower Lube Cell process water is diverted to Separator 003.	Lower Lube Cell containment is of concrete pad and curb construction. The Lower Lube Cell is equipped with an open catch basin connected to the process water system, which significantly increases the effective containment capacity of the Lower Lube Cell.
Lube Blending Warehouse	Gravity	Containment in the Blending and Container Filling Areas and for the solubilizer is of concrete construction sloped to catch basins that drain to two 5,000-gallon underground spill containment tanks located at the south end of the warehouse. Containment in the Package Storage Area is of concrete pad and curb construction.
Truck and Railcar Loading/Unloading Areas		
Refined Products Truck Loading Rack	Gravity, spill containment tank and lift station; Process water from the Refined Products Truck Loading Rack is diverted to Separator 003.	Refined Products Truck Loading Rack containment is of sloped concrete pad and strip drain construction. The strip drains lead to a 10,000-gallon underground spill containment tank and then pumped to the process water system.
Gasoline Additive Truck Unloading Area	Gravity and lift station; Water from the Gasoline Additive Truck Unloading Area is diverted in part to the Refined Product Truck Unloading Area and to the storm water system.	Concrete pavement graded such that spills will flow in part towards the Refined Products Loading Rack containment area and partly to the storm water system. Catch basins to the municipal storm water system are covered so as to divert drainage to the storm water system.
Transmix Unloading Areas	Gravity and lift station; Process water from the Refined Products Truck Unloading Areas is diverted to Separator 003.	Containment in the Transmix Unloading Area is of concrete pad and berm construction.
Ethanol Unloading Area	Gravity and lift station; Process water from the Ethanol Unloading Area is diverted to Separator 003.	Containment in the Ethanol Unloading Area is of concrete pad and berm construction.
Biodiesel Unloading Area	Gravity and lift station; Process water from the Biodiesel Unloading Area is diverted to Separator 003.	Containment in the Biodiesel Unloading Area is of concrete pad and berm construction.

Containment ID	Drainage Method	Type of Containment and Material of Construction
Diesel/Black Oil Pump Off Area	Gravity and lift station; Process water from the Diesel/Black Oil Pump Off Area is diverted to Separator 003.	Containment in the Diesel/Black Oil Pump Off Area is of asphalt curb construction with catch basins that drain the area to the process water system.
Lube Oil Truck Loading Rack	Gravity and lift station; Process water from the Lube Oil Truck Loading Rack is diverted to Separator 003.	Containment in the Lube Oil Truck Loading Rack area is of asphalt pavement and concrete berm construction with catch basins that drain the area to the process water system.
Black Oil/RFO Truck Loading/Unloading Rack	Gravity and lift station; Process water from the Black Oil/RFO Truck Loading/Unloading Rack is diverted to Separator 003.	Containment in the Black Oil/RFO Truck Loading/Unloading Rack is of asphalt pavement and concrete berm construction. Several catch basins drain the area to the process water system.
Lube Oil Truck Unloading Area	Gravity and lift station; Process water from the Lube Oil Truck Unloading Area is diverted to Separator 003.	Containment in the Lube Oil Truck Unloading Area is of asphalt pavement and concrete berm construction. Several catch basins drain the area to the process water system.
Lube Additive Truck Unloading Area	Gravity and lift station; Process water from the Lube Additive Truck Unloading Area is diverted to Separator 003.	The area is paved but not equipped with a dedicated containment system. As a result, operators place a cover over the nearby storm water catch basin during additive transfers. This prevents spills from entering the storm water system and causes the spill to continue down gradient into the a process water system catch basin.
Railcar Loading/Unloading Area	Gravity and lift station; Process water from the Railcar Loading/Unloading Area is diverted to Separator 003.	Containment in the Railcar Loading/Unloading Area is of sloped gravel area and asphalt containment berm construction along the northwest perimeter of the area. Smaller sloped concrete slabs are positioned under each of the four transfer stations for the rack, and are equipped with catch basins that drain to the process water system.
Marine Dock Manifold/Riser Area	Gravity, spill containment tank and lift pump; Process water from the Marine Dock Manifold/Riser Area is diverted to Separator 003.	Containment in the Marine Dock Manifold/Riser Area is of sloped concrete construction with drains leading to a 2,000-gallon spill containment tank. Contents of the spill containment tank are pumped to the process water
Remediation System Area	Drainage from curbed Remeidation System Area pumped to Separator 003	Containment in the Remediation System Area is a curbed concrete slab and sump. Contents are pumped to Separator 003.
Lube Oil Warehouse		
Blending and Container Filling Areas	Gravity and spill containment tanks	Containment in the Blending and Container Filling Areas are equipped with concrete floors sloped to catch basins that drain to two 5,000-gallon underground spill containment tanks located at the south end of the warehouse.
Package Storage Area	Gravity	Containment in the Package Storage Area is of concrete floor and curb construction along the north side and northeast corner of the warehouse.
Waste Storage Area	Gravity and lift station; Process water from the Waste Storage Area is diverted to Separator 003.	Sloped concrete pad and curb construction
Hot Boxes	Gravity	Concrete pad and curb construction
Lube Drum Storage Area	Gravity and lift station; Process water from the Lube Drum Storage Area is diverted to Separator 003.	Sloped asphalt pad construction

2A.3.2 Facility Drainage to Surface Waters without Facility Treatment System

- Manually operated valves ☒ **are** ☐ **are not** ☐ **N/A, no valves** normally kept closed and ☐ **are** ☒ **are not** resealed following drainage.
- Manually activated pumps ☐ **are** ☐ **are not** ☒ **N/A, no pumps** normally kept off and ☐ **are** ☐ **are not** placed in operation following drainage. (This is a gravity feed.)

- Describe valve operation or equivalent environmental protection: Except during periods of heavy rainfall, discharge valves at the storm water separators are generally kept closed and operated manually to batch discharge accumulated storm water. The water is visually inspected and periodically tested prior to discharge. All other tank farm drain lines are controlled by manually operated valves, which are kept closed and locked. Surface runoff from the non-storage/transfer portions of the terminal generally flows to catch basins connected directly to the municipal storm water system or will sheet flow off site and not pass through an oil/water separator.

2A.3.3 Water Treatment System

- Drainage waters ☒ **are** ☐ **are not** treated in more than one (1) treatment unit.
  - **If yes**, and treatment is continuous, two lift stations ☒ **are** ☐ **are not** provided with at least one permanently installed.

Except during periods of heavy rainfall, discharge valves at the separators are kept closed and opened manually as required to batch discharge accumulated storm water. Prior to discharge, the accumulated storm water is inspected for the presence of hydrocarbons, sheen and floating solids. If hydrocarbons, sheen or floating solids are observed, discharge to the Willamette River is not allowed and the contents of the separator would be removed. Storm water is tested per NPDES permit requirements to evaluate stormwater relative to the permitted benchmarks. Additional information regarding the water treatment system is contained in the terminal's combined Storm Water Pollution Control/Accidental Spill Prevention Plan.

2A.3.4 Effluent Treatment Facilities

The facility ☒ **does** ☐ **does not** treat water prior to discharge off site. **If yes**, the measures in-place to ensure that system upsets are detected are described as follows:

Process water (i.e., water from areas in contact with petroleum hydrocarbons) is treated using an oil/water separator and dissolved-air floatation-type hydrocleaner. Post indicator type valves can be closed to prevent spills or out-of-compliance process water from reaching the municipal sewer system. Process water is tested per waste water discharge permit requirements.

2A.3.4 Effluent Treatment Facilities (cont'd.)

Additional information regarding the water treatment system is contained in the terminal's combined Storm Water Pollution Control/Accidental Spill Prevention plan.

2A.3.5 Facility Undiked Drainage to Surface Waters

- The facility ☒ **does** ☐ **does not** have the potential to discharge into undiked areas.
  - **If yes**, The facility undiked areas ☒ **do** ☐ **do not** flow to ☐ ponds ☐ lagoons ☒ catchment basins ☒ other: Oil / water separators
  - **If not**, describe equivalent environmental protection:

Undiked drainage is diverted to a series of catch basins that flow to either storm water oil/water separators or a process water oil/water separator. In areas with potential for drainage directly to the municipal storm sewer (e.g., the Gasoline and Lube Additive Truck Unloading Areas), nearby storm water catch basins are sealed during transfer operations. Some areas of the facility where transfer/storage operations are not conducted, such as vehicle drives, parking areas and storage areas (see attached drainage figures), drain directly to the municipal storm water system or surface flows off site. These areas are visually inspected. Additionally, all of the terminal's storm, process, and sanitary sewer systems are color coded. The color coding enables personnel to quickly identify the ultimate destination of liquids entering drains and take appropriate action to close valves to isolate the affected portion of the system.

2A.4 Facility Transfer Operations, Pumping and Facility Process

2A.4.1 Facility Piping

- The facility ☒ **does** ☐ **does not** have buried piping. Corrosion protection for all new and replaced buried piping is provided as follows (check all that apply):
  - ☒ Wrapping and Coating
  - ☐ **If wrapping/coating is not provided,** describe equivalent environmental protection:

_____

  - ☒ Cathodic Protection or satisfy the corrosion protection standards in 40 CFR Part 280 or 281
  - ☐ **If cathodic protection is not provided,** describe equivalent environmental protection:

- When a pipe section is exposed, it is examined and corrective action taken as necessary.
- Describe the facility piping systems (aboveground and buried): The terminal has both above ground and buried piping. It is the Terminal's general policy that all new piping installments be aboveground, if possible. Any new underground piping shall be protected by either wrapping and coating, or cathodic protection, as applicable.

2A.4.2 Out of Service Piping

Out of service piping terminal connections ☒ **are** ☐ **are not** capped or blank-flanged and marked when the piping is not in service or in standby service for extended periods.

An ongoing maintenance project has been implemented to identify and remove out of service piping.

2A.4.3 Pipe Supports

Pipe supports ☒ **are** ☐ **are not** designed to minimize abrasion and corrosion and allow for expansion and contraction.

An ongoing maintenance project has been implemented to identify and replace improperly designed pipe supports.

2A.4.4 Vehicle Warnings

- Vehicles ☒ **are** ☐ **are not** warned ☒ orally, by ☒ signs, with ☒ bumper guards, or ☒ other methods to be sure that no vehicle will endanger aboveground piping or other oil transfer operations. Describe vehicle warning systems/procedures or describe equivalent environmental protection.

Signs are posted, employees and contractors are advised of where they can or cannot drive.

Gates, chains and other barriers are used to control access to restricted areas.

2A.5. Facility Rail Car & Tank Truck Loading/Unloading Rack

- Tank truck loading/unloading ☒ **does** ☐ **does not** occur at the facility.
- Tank car (rail) loading/unloading ☒ **does** ☐ **does not** occur at the facility.

If yes to either, proceed with the following sections.

2A.5.1 Rail Car & Tank Truck Containment Systems for Loading/Unloading Rack

- Loading/unloading area drainage ☒ **does** ☐ **does not** flow into a catchment basin, treatment facility, or a quick drainage system designed to handle discharges.
- The containment system ☒ **does** ☐ **does not** hold the maximum capacity of any single compartment of a tank car or tank truck loaded or unloaded at the facility. Describe containment system design, construction materials, and volume (if the containment system does not hold the maximum capacity, then document the impracticability in Section 1.9):

2A.5.1 Rail Car & Tank Truck Containment Systems for Loading/Unloading Rack (cont'd)

The Rail Car Loading/Unloading Area is surrounded by a sloped gravel area and asphalt containment berm along the northwest perimeter of the area. Smaller sloped concrete slabs are located under each of the four transfer stations for the rack, and are equipped with catch basins that drain to the process water system. The combination of the concrete slabs, catch basins, and asphalt berms provide containment for the largest railcar loaded/unloaded at the terminal (i.e., 30,000 gallons). The truck rack containment areas are bermed and/or sloped to either strip drains that lead to a spill containment tank and then to the process water system, or directly to catch basins that are connected to the process water system. The containment systems for the truck racks are sufficient to contain ruptures from the largest truck/trailer compartments loaded at the terminal (i.e., 5,000 gallons). Refer to the Container and Potential Spills Table in Section 2A.1 for additional details.

2A.5.2 Prevention of Premature Vehicular Departure

- The methods, procedures, and/or equipment used to prevent premature vehicular departure include (Check all that apply):

☐	***Interlocked warning lights,***	☐	***Physical barrier systems,***
☒	***Warning signs,***	☐	***Wheel chocks,***
☒	***Vehicle brake interlock systems,***	☐	***Company personnel supervising***
☒	***Driver training***		***loading/unloading operation***

Describe these and other premature vehicular departure prevention measures (for each area):
All drivers are required to attend training prior to loading at the facility. The training includes prevention of premature vehicle departure. The Refined Products Loading Rack utilizes a vapor recovery and overfill protection/brake interlock system. Trucks are equipped with high-level sensors. The drivers are responsible for presetting loading volumes and are in attendance at all times. The loading computer system will not allow an untrained driver to load. The Lube Oil and Black Oil/RFO Loading Racks are equipped with a deadman switch that requires constant pressure from the operator to continue loading operations. At all loading racks, drivers are required to be in attendance at all times during loading operations.

2A.5.3 Drain And Outlet Inspection

- Drains and outlets on tank trucks and tank cars ☒ **are** ☐ **are not** checked for leakage before loading/unloading or departure and, if necessary, are tightened, adjusted or replaced. The driver

conducts a visual inspection prior to departure. **If not**, describe equivalent environmental protection: _____

_____

[*Additional pages may be attached as necessary for multiple truck or rail loading/unloading rack operations.*]

2A.6 Security

- The facility ☒ **is** ☐ **is not** fully enclosed. Describe the fence or, **if not** fenced, describe equivalent environmental protection: _____

  8-foot fence with barb and/or razor wire or 12-foot concrete walls.

- Entrance gates ☒ **are** ☐ **are not** (☐ **N/A**) locked and/or guarded when the facility is unattended or not in production. Describe the gate security or, **if not** locked or guarded, describe equivalent environmental protection: _____

  The gate security is a gate with either a lock or a pass code required for entry.

- Any valves which permit direct outward flow of a container's contents ☐ **have** ☒ **do not have** (☐ **N/A**) adequate security measures so that they remain closed when in non-operating or standby status. Describe valve security or **if not** secure, describe equivalent environmental protection: _____

  All valves are located in secured areas. Valves are observed for leaks, drips or other potential problems. Valves are also observed on a random basis by facility personnel during the normal course of business.

  _____

- Starter controls on all product pumps in non-operating or standby status ☐ **are** ☒ **are not** (☐ **N/A**) locked in the off position and located at sites accessible only to authorized personnel. Describe pump starter control security or **if not** locked, describe equivalent environmental protection: _____

  Both manual and automated pumps are in operation at the facility. The access to these pumps is limited to facility personnel or approved contractors.

  _____

- When facility piping is not in service or in standby service for an extended time, the loading/unloading connections ☒ **are** ☐ **are not** (☐ **N/A**) securely capped or blank flanged. This applies to piping that is emptied of its liquid content either by draining or by inert gas pressure. **If not** secure, describe equivalent environmental protection: _____

  When piping is permanently taken out of service, the pipe is drained. The pipe will be blank flanged. The pipe then may be left empty, filled with water, filled with inert gas or otherwise plugged or otherwise sealed.

2A.6 Security (cont'd.)

- Facility lighting ☒ **is** ☐ **is not** (☐ **N/A**) commensurate with the operation and the type and location of the facility to assist in the discovery of discharges and to prevent discharges occurring through acts of vandalism. Describe facility lighting or, **if** lighting is **not** commensurate, describe equivalent environmental protection: _____

  Lighting at the facility is adequate to discover any leaks that might occur. The facility is manned full time and security cameras are installed at various locations which are monitored by terminal personnel.

2A.7 Inspections, Tests and Records

Container Testing and Inspections

- Describe the facility aboveground bulk storage container integrity testing and inspection program. Include inspection frequency, records of inspections and any equivalent environmental protection:

  The Company has a detailed risk-based above-ground container inspection program that conforms with applicable rules and regulations. Containers subject to the API 650 program are tested and maintained according to API 653. Other containers are observed on a regular basis at no greater than one year intervals. If the container is simply being changed from one type of product to another and no problems have been detected and further inspection may not be performed, the Terminal Supervisor will make the decision as to the appropriateness of additional inspections.

- In the event that a field-constructed aboveground container undergoes a repair, alteration, reconstruction, or a change in service, the container ☒ **will** be evaluated for the risk of discharge or failure due to brittle fracture or other catastrophe.

- Describe the facility leak testing program for completely buried tanks. Include frequency, records of inspections and any equivalent environmental protection: _____

  Automatic leak detection systems.

  Annual leak detection testing is performed on UST's by third party contractor.

  UST's are equipped with auto gauges and audible overfill protection alarms.

- Describe the frequency and method to test liquid level sensing devices: ☒ High liquid level alarm ☐ High liquid level pump cutoff device ☐ Direct audible or code signal communication ☐ Fast response system ☐ Other: _____

2A.7 Inspections, Tests and Records (Cont'd)

High liquid level alarms are tested at least quarterly.

Buried Piping Integrity and Leak Testing

- Buried piping ☒ **is** ☐ **is not** present.
- Integrity and leak testing of buried piping is performed at the time of ☒ installation, ☒ modification, ☒ construction, ☒relocation, or ☒ replacement.

Aboveground Piping Examination

- All aboveground valves and piping (including flange joints, valve glands and bodies, catch pans, pipe supports, locking of valves, and metal surfaces) are regularly examined.

  Describe the facility piping inspection program (and integrity and leak testing, as appropriate). Include inspection frequency, records of inspection and any equivalent environmental protection:

  See Deviation Discussion on Piping Inspections.
  Terminal operators perform at least two visual inspections of the tank farms per day and a monthly inspection of the entire terminal including tanks, containment systems, pipelines and process and storm water collection systems. Any problems or potential problems are noted and rectified as soon as practical. Pipelines and hoses under U.S. Coast Guard jurisdiction are pressure tested annually, and all pipelines are tested after repairs that may affect structural integrity. All underground piping will be integrity and leak tested at the time of installation, modification, construction, relocation, or replacement. Records of inspection and repair are maintained at the facility.

Dike Integrity and Drainage Inspections

- Describe the dike integrity inspection program:
  All surface water contained within the tank dikes is inspected for visible traces of hydrocarbons before the drain valves are opened. If visible traces of hydrocarbons are not observed, the manual valves are opened to allow water to discharge. After draining, the manual valves are closed.

2A.7 Inspections, Tests and Records (Cont'd)

- Describe inspections for oil discharges within diked areas:
  See above

- Describe the procedure for supervising the drainage of rainwater from secondary containment into a storm drain or an open watercourse. Include description of (a) inspection for pollutants and (b) method of valving security:

  Except during periods of heavy rainfall, discharge valves at the separators are kept closed and opened manually as required to batch discharge accumulated storm water. Prior to discharge, the accumulated storm water is inspected for the presence of hydrocarbons, sheen and floating solids. If hydrocarbons, sheen or floating solids are observed, discharge to the Willamette River is not allowed and the contents of the separator would be removed. Storm water is tested per NPDES permit requirements to evaluate stormwater relative to the permitted benchmarks. Additional information regarding the water treatment system is contained in the terminal's combined Storm Water Pollution Control/Accidental Spill Prevention Plan.

  Valves used to drain separators are in a secure restricted area.

Other Applicable Inspections

- Describe other applicable facility inspections, including effluent discharge inspections and inspections of effluent bypassing systems, if applicable:

Documentation:

- Sample inspection and test records are provided in Appendix B. These and/or substantially equivalent forms are used by terminal personnel to document inspections.

- *Reference supporting documentation maintained separately, as appropriate:*
  Refer to facility files.

  Records of the inspections and tests (including those maintained under usual and customary business practices), signed by the appropriate supervisor or inspector are retained on file for a minimum period of three (3) years.

Appendix A
Notification

- Sample Contact List and Phone Numbers
- Sample Notification Data Sheet
- Sample Submittal of Information to Regional Administrator for Qualified Discharge(s)

Sample - Contact List and Phone Numbers

The following is a contact list and phone number reference for the Facility:

Contact	Primary	Alternate
Designated Person Accountable For Oil Spill Prevention and/or Facility Response Coordinator ***Name/Title: Tom Lyons*** ***Name/Title: Terminal Supervisor***	Tom Lyons Terminal Supervisor 503-248-1572 503-849-9604	Gary LeFebvre Alternate 503-248-1533 503-641-9152
National Response Center	(800) 424-8802	(202) 267-2675
State Agency for Oil Spill Response		
Cleanup Contractors (as necessary):		
See Facility Response Plan		
Other Federal, State and local agencies (as necessary):		
See Facility Response Plan		
Other contact references:		
See Facility Response Plan		

[*Additional pages may be attached as necessary.*]

Sample - Notification Data Sheet

The Facility will utilize this form or a substantially similar form to relate information in the event of a discharge:

Date: _____ *Time:* _____

INCIDENT DESCRIPTION

Reporter's Full Name: _____ *Position:* _____
Day Phone Number: _____ *Evening Phone Number:* _____
Company: _____ *Organization Type:* _____
Facility Address: _____ *Owner's Address:* _____
_____ _____
_____ _____
_____

Facility Latitude: _____ *Facility Longitude:* _____
Spill Location: _____
(if not at Facility) _____
Responsible Party's Name: _____ *Phone Number:* _____
Responsible Party's Address: _____
Source and/or cause of discharge: _____
_____
_____
Nearest City: _____
County: _____ *State:* _____ *Zip code:* _____
Section: _____ *Township:* _____ *Range:* _____ *County:* _____
Distance from City: _____ *Direction from City:* _____
Container Type: _____ *Container Storage Capacity:* _____
Facility Oil Storage Capacity: _____
Material:

Total Quantity Released	Water Impact (*YES or NO*)	Quantity into Water

RESPONSE ACTION(S)

Action(s) taken to Correct, Control, or Mitigate Incident: _____
_____
_____
Number of Injuries: _____ *Number of Deaths:* _____
Evacuation(s): _____ *Number Evacuated:* _____
Damage Estimate: _____
More information about impacted medium: _____
_____

CALLER NOTIFICATIONS

National Response Center (NRC): 1-800-424-8802
Additional Notifications (Circle all applicable): *State* *Other*

ADDITIONAL INFORMATION

Any information about the incident not recorded elsewhere in this report: _____
_____
_____

NOTE: DO NOT DELAY NOTIFICATION PENDING COLLECTION OF ALL INFORMATION.

Sample - Submittal of Information to Regional Administrator for Qualified Discharge(s)

In the event of a qualified discharge or discharges, this page can be utilized to provide official notification to the Regional Administrator. If the Facility has had a discharge or discharges which meet one of the following two criteria, then this report must be submitted to the Regional Administrator within 60 days. (Check as appropriate)

☐ This Facility has experienced a reportable spill as referenced in 40 CFR Part 112.1(b) of 1,000 gallons or more.

☐ This Facility has experienced two (2) reportable spills (as referenced in 40 CFR Part 112.1(b) of greater than 42 gallons each within a 12-month period.

Facility Name and Location: _____

Facility Contact Person (Name, address/phone number): _____

Facility maximum storage or handling capacity: _____

Facility normal daily throughput: _____

Describe the corrective action and countermeasures taken (include description of equipment repairs and replacements): _____

Describe the Facility (maps, flow diagrams and topographical maps attached as necessary): _____

Describe the cause of discharge (as referenced in 40 CFR Part 112.1(b)) including failure analysis of the system is: _____

Describe the preventative measures taken or contemplated to be taken to minimize the possibility of recurrence: _____

Other pertinent information: _____

- A copy of this report is also to be sent to the appropriate state agency in charge of oil pollution control activities.

Appendix B
Logs

APPENDIX B – LOGS

Inspection Log Checklist

This or a substantially similar form will be used.

Frequency of Inspection: _____

Date of Inspection: _____ Inspector: _____

Onshore Facility – Component	Adequate (Y/N)	Comments
Visible discharges, which result in a loss of product from containers, will be promptly corrected and any accumulations of oil in the diked area(s) will be promptly removed.		
Container Surface (Walls, Roof)	☐ Yes ☐ No	
Container (Foundation/Supports/Cradles)	☐ Yes ☐ No	
Aboveground Piping:		
Metal Surfaces	☐ Yes ☐ No	
Flange Joints	☐ Yes ☐ No	
Valve Glands and Bodies	☐ Yes ☐ No	
Catch Pans	☐ Yes ☐ No	
Pipeline Supports	☐ Yes ☐ No	
Secondary Containment (Walls, Floor)	☐ Yes ☐ No	
Bulk Storage Container Integrity Test	☐ Yes ☐ No	
Buried Piping – Integrity & Leak Testing	☐ Yes ☐ No	

APPENDIX B – LOGS

Personnel Training/Discharge Prevention Briefing Log
This or a substantially similar form will be used.

Topic(s): _____
(**Note:** Required topics must include SPCC Plan)

Sign In Sheet

Name	Company /Position	Telephone
1.		
2		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		

Instructor:_____ Date: _____

Subject/Issue Identified	**Required Action**
	Implementation Date:_____

APPENDIX B – LOGS

Container/Containment Inspection Log / Drainage Event Log

This or a substantially similar form will be used.

Inspector: _____ Date: _____

Inspection Frequency: _____(Retain record three (3) years.)

Container/ Containment	Comments	Drainage Event (Vol.)

Check containers for:

- Leaks, drip marks and discoloration
- Puddles containing spilled or leaked material
- Corrosion
- Cracks
- Localized dead vegetation

Check foundation for:

- Cracks
- Discoloration
- Puddles containing spilled or leaked material
- Settling
- Gaps between tank and foundation
- Damage caused by vegetation roots

Check piping for:

- Droplets of stored material
- Discoloration
- Corrosion
- Bowing of pipe between supports
- Evidence of stored material seepage from valves or seals
- Localized dead vegetation

Check containment for:

- Cracks
- Discoloration
- Presence of spilled material
- Corrosion (if applicable)
- Erosion (if applicable)
- Valve conditions (if applicable)

Record drainage event

- Appearance of storm water discharged
- Volume of water and volume of oil, if any, removed discharged
- Other details (i.e. testing)

APPENDIX B – LOGS
This or a substantially similar form will be used.

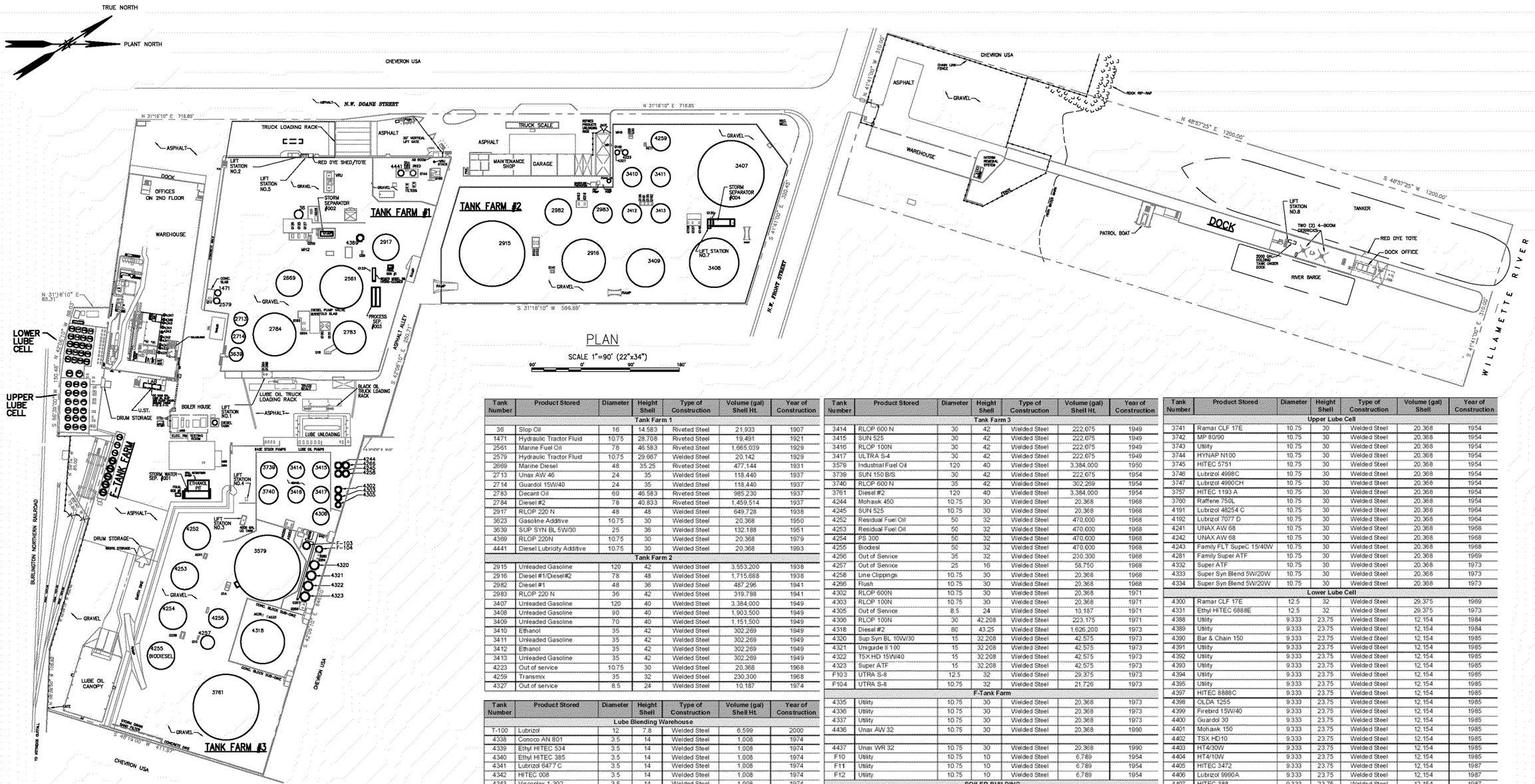
Pollution Prevention Equipment and Systems Log

Pollution Prevention Equipment:

Inspection/ Test Date	Condition	Action Taken	Supervisor or Inspector's Signature

Appendix C
Facility Diagrams

Portland Terminal Site Plan – Dwg. 0608-C-1000, Rev. F
Portland Terminal Site Location Map – Dwg. 0608-C-7006, Rev. 1
Portland Terminal Dock Facilities Site Drainage Plan – Dwg. 0608-C-7020, Rev. F
Portland Terminal Tank Farm #2 Site Drainage Plan – Dwg. 0608-C-7021, Rev. H
Portland Terminal Tank Farm #1 Site Drainage Plan – Dwg. 0608-C-7022, Rev. H
Portland Terminal Tank Farm #3 Site Drainage Plan – Dwg. 0608-C-7023, Rev. G
Portland Terminal Site Plan Pipeline System Isolation Locations – Dwg. 0608-C-1200, Rev. 4
Portland Terminal Site Plan Transfer Locations – Dwg. 0608-C-1201, Rev. 5
P&ID Storm Water System Tank Farm #1– Dwg. POR-PI-401, Rev. 2
P&ID Storm Water System Tank Farm #2 & 3– Dwg. POR-PI-402, Rev. 1
P&ID Process Drain System Tank Farm #1– Dwg. POR-PI-403, Rev. 3
P&ID Process Drain System Tank Farm #2– Dwg. POR-PI-404, Rev. 2
P&ID Process Drain System Tank Farm #3– Dwg. POR-PI-405, Rev. 1
P&ID Process Water System Dock Area– Dwg. POR-PI-406, Rev. 1



Tank Number	Product Stored	Diameter	Height Shell	Type of Construction	Volume (gal) Shell Ht.	Year of Construction
Tank Farm 1						
36	Slop Oil	16	14.583	Riveted Steel	21,933	1907
1471	Hydraulic Tractor Fluid	10.75	28.708	Riveted Steel	19,491	1921
2561	Marine Fuel Oil	78	46.583	Riveted Steel	1,665,039	1929
2579	Hydraulic Tractor Fluid	10.75	29.667	Welded Steel	20,142	1929
2669	Marine Diesel	48	35.25	Riveted Steel	477,144	1931
2713	Unax AW 46	24	35	Welded Steel	118,440	1937
2714	Guardol 15W/40	24	35	Welded Steel	118,440	1937
2783	Decant Oil	60	46.583	Riveted Steel	985,230	1937
2784	Diesel #2	78	40.833	Riveted Steel	1,459,514	1937
2917	RLOP 220 N	48	48	Welded Steel	649,728	1938
3623	Gasoline Additive	10.75	30	Welded Steel	20,368	1950
3639	SUP SYN BL 5W/30	25	36	Welded Steel	132,188	1951
4389	RLOP 220N	10.75	30	Welded Steel	20,368	1979
4441	Diesel Lubriaty Additive	10.75	30	Welded Steel	20,368	1993
Tank Farm 2						
2915	Unleaded Gasoline	120	42	Welded Steel	3,553,200	1938
2916	Diesel #1/Diesel#2	78	48	Welded Steel	1,715,688	1938
2982	Diesel #1	48	36	Welded Steel	487,296	1941
2983	RLOP 220 N	36	42	Welded Steel	319,788	1941
3407	Unleaded Gasoline	120	40	Welded Steel	3,384,000	1949
3408	Unleaded Gasoline	90	40	Welded Steel	1,903,500	1949
3409	Unleaded Gasoline	70	40	Welded Steel	1,151,500	1949
3410	Ethanol	35	42	Welded Steel	302,269	1949
3411	Unleaded Gasoline	35	42	Welded Steel	302,269	1949
3412	Ethanol	35	42	Welded Steel	302,269	1949
3413	Unleaded Gasoline	35	42	Welded Steel	302,269	1949
4223	Out of service	10.75	30	Welded Steel	20,368	1968
4259	Transmix	35	32	Welded Steel	230,300	1968
4327	Out of service	8.5	24	Welded Steel	10,187	1974

Tank Number	Product Stored	Diameter	Height Shell	Type of Construction	Volume (gal) Shell Ht.	Year of Construction
Lube Blending Warehouse						
T-100	Lubrizol	12	7.8	Welded Steel	6,599	2000
4338	Conoco AN 801	3.5	14	Welded Steel	1,008	1974
4339	Ethyl HITEC 534	3.5	14	Welded Steel	1,008	1974
4340	Ethyl HITEC 385	3.5	14	Welded Steel	1,008	1974
4341	Lubrizol 6477 C	3.5	14	Welded Steel	1,008	1974
4342	HITEC 008	3.5	14	Welded Steel	1,008	1974
4343	Viscoplex 1-302	3.5	14	Welded Steel	1,008	1974
4344	Oleic Acid/Emersol 213	3.5	14	Welded Steel	1,008	1974
4345	Lubrizol 8790	3.5	14	Welded Steel	1,008	1974
4346	Lubrizol 48007	3.5	14	Welded Steel	1,008	1974
4347	Lubrizol 48007	3.5	14	Welded Steel	1,008	1974
F-8	Utility	5.5	5.5	Welded Steel	977	1968
F-9	Line Clippings	7	9	Welded Steel	2591	1954
F-13	Slops - Under Lab	5.25	30	Welded Steel	4,858	1981
F-14	Flush - Under Lab	5.25	30	Welded Steel	4,858	1981

Tank Number	Product Stored	Diameter	Height Shell	Type of Construction	Volume (gal) Shell Ht.	Year of Construction
Tank Farm 3						
3414	RLOP 600 N	30	42	Welded Steel	222,075	1949
3415	SUN 525	30	42	Welded Steel	222,075	1949
3416	RLOP 100N	30	42	Welded Steel	222,075	1949
3417	ULTRA S-4	30	42	Welded Steel	222,075	1949
3579	Industrial Fuel Oil	120	40	Welded Steel	3,384,000	1950
3739	SUN 150 B/S	30	42	Welded Steel	222,075	1954
3740	RLOP 600 N	35	42	Welded Steel	302,269	1954
3761	Diesel #2	120	40	Welded Steel	3,384,000	1954
4244	Mohawk 450	10.75	30	Welded Steel	20,368	1968
4245	SUN 525	10.75	30	Welded Steel	20,368	1968
4252	Residual Fuel Oil	50	32	Welded Steel	470,000	1968
4253	Residual Fuel Oil	50	32	Welded Steel	470,000	1968
4254	PS 300	50	32	Welded Steel	470,000	1968
4255	Biodiesl	50	32	Welded Steel	470,000	1968
4256	Out of Service	35	32	Welded Steel	230,300	1968
4257	Out of Service	25	16	Welded Steel	58,750	1968
4258	Line Clippings	10.75	30	Welded Steel	20,368	1968
4266	Flush	10.75	30	Welded Steel	20,368	1968
4302	RLOP 600N	10.75	30	Welded Steel	20,368	1971
4303	RLOP 100N	10.75	30	Welded Steel	20,368	1971
4305	Out of Service	8.5	24	Welded Steel	10,187	1971
4306	RLOP 100N	30	42.208	Welded Steel	223,175	1971
4318	Diesel #2	80	43.25	Welded Steel	1,626,200	1973
4320	Sup Syn BL 10W/30	15	32.208	Welded Steel	42,575	1973
4321	Uniguide II 100	15	32.208	Welded Steel	42,575	1973
4322	T5X HD 15W/40	15	32.208	Welded Steel	42,575	1973
4323	Super ATF	15	32.208	Welded Steel	42,575	1973
F103	UTRA S-8	12.5	32	Welded Steel	29,375	1973
F104	UTRA S-8	10.75	32	Welded Steel	21,726	1973
F-Tank Farm						
4335	Utility	10.75	30	Welded Steel	20,368	1973
4336	Utility	10.75	30	Welded Steel	20,368	1973
4337	Utility	10.75	30	Welded Steel	20,368	1973
4436	Unax AW 32	10.75	30	Welded Steel	20,368	1990
4437	Unax WR 32	10.75	30	Welded Steel	20,368	1990
F10	Utility	10.75	10	Welded Steel	6,789	1954
F11	Utility	10.75	10	Welded Steel	6,789	1954
F12	Utility	10.75	10	Welded Steel	6,789	1954
BOILER BUILDING						
N/A	DIESEL FUEL	8	25	Welded Steel	2426 (Partial Fill)	N/A

Tank Number	Product Stored	Diameter	Height Shell	Type of Construction	Volume (gal) Shell	Year of Construction
Upper Lube Cell						
3741	Ramar CLF 17E	10.75	30	Welded Steel	20,368	1954
3742	MP 80/90	10.75	30	Welded Steel	20,368	1954
3743	Utility	10.75	30	Welded Steel	20,368	1954
3744	HYNAP N100	10.75	30	Welded Steel	20,368	1954
3745	HITEC 5751	10.75	30	Welded Steel	20,368	1954
3746	Lubrizol 4998C	10.75	30	Welded Steel	20,368	1954
3747	Lubrizol 4990CH	10.75	30	Welded Steel	20,368	1954
3757	HITEC 1193 A	10.75	30	Welded Steel	20,368	1954
3760	Raffene 750L	10.75	30	Welded Steel	20,368	1954
4191	Lubrizol 48254 C	10.75	30	Welded Steel	20,368	1964
4192	Lubrizol 7077 D	10.75	30	Welded Steel	20,368	1964
4241	UNAX AW 68	10.75	30	Welded Steel	20,368	1968
4242	UNAX AW 68	10.75	30	Welded Steel	20,368	1968
4243	Family FLT SupeC 15/40W	10.75	30	Welded Steel	20,368	1968
4281	Family Super ATF	10.75	30	Welded Steel	20,368	1969
4332	Super ATF	10.75	30	Welded Steel	20,368	1973
4333	Super Syn Blend 5W/20W	10.75	30	Welded Steel	20,368	1973
4334	Super Syn Blend 5W/20W	10.75	30	Welded Steel	20,368	1973
Lower Lube Cell						
4300	Ramar CLF 17E	12.5	32	Welded Steel	29,375	1969
4331	Ethyl HITEC 6888E	12.5	32	Welded Steel	29,375	1973
4388	Utility	9.333	23.75	Welded Steel	12,154	1984
4389	Utility	9.333	23.75	Welded Steel	12,154	1984
4390	Bar & Chain 150	9.333	23.75	Welded Steel	12,154	1985
4391	Utility	9.333	23.75	Welded Steel	12,154	1985
4392	Utility	9.333	23.75	Welded Steel	12,154	1985
4393	Utility	9.333	23.75	Welded Steel	12,154	1985
4394	Utility	9.333	23.75	Welded Steel	12,154	1985
4395	Utility	9.333	23.75	Welded Steel	12,154	1985
4397	HITEC 8888C	9.333	23.75	Welded Steel	12,154	1985
4398	OLDA 1255	9.333	23.75	Welded Steel	12,154	1985
4399	Firebird 15W/40	9.333	23.75	Welded Steel	12,154	1985
4400	Guardol 30	9.333	23.75	Welded Steel	12,154	1985
4401	Mohawk 150	9.333	23.75	Welded Steel	12,154	1985
4402	TSX HD10	9.333	23.75	Welded Steel	12,154	1985
4403	HT4/30W	9.333	23.75	Welded Steel	12,154	1985
4404	HT4/10W	9.333	23.75	Welded Steel	12,154	1985
4405	HITEC 3472	9.333	23.75	Welded Steel	12,154	1987
4406	Lubrizol 9990A	9.333	23.75	Welded Steel	12,154	1987
4407	HITEC 388	9.333	23.75	Welded Steel	12,154	1987
4408	HITEC 5756	9.333	23.75	Welded Steel	12,154	1987

DRAWING NO.	REFERENCE DRAWING	NO.	REVISION DESCRIPTION	REV BY	CHK BY	APPR. BY	DATE
		A	UPDATED FOR SWPCP	DAB	SM	WHB	02/12/98
		B	REVISE BARRELS ON TANK DATA AND LOGO	QKB	WHB	WHB	03/10/03
		C	ADD LUBE OIL CANOPY AND WASTE STORAGE	QKB	WHB	WHB	11/22/04
		D	GENERAL REVISION	CEW	WHB	WHB	12/08/06
		E	SPCC 2009 UPDATES	MJB	JPD	JPD	05/11/09
		F	UPDATED TANK DATA TABLE	MJB	JPD	JPD	07/16/09

NO. | REVISION DESCRIPTION | REV BY | CHK BY | APPR. BY | DATE

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NOT TO BE DISCLOSED, USED OR DUPLICATED EXCEPT AS AUTHORIZED IN WRITING BY CONOCOPHILLIPS PIPELINE COMPANY

ConocoPhillips Pipe Line Company
5528 N.W. DOANE AVE
PORTLAND OREGON

ALPHA ENGINEERS and CONSTRUCTORS, INC.
2929 NW 29th AVE, PORTLAND, OR. 97210 Tel:(503)227-3317/Fax:(503)227-3244

AECI PROJECT NUMBER: 25-31

DR. D.A.BYNUM	CONTRACTOR No.
DSGN. D.A.BYNUM	PROJECT NO. 25-31
CK. MK AP. KJP	DWG. SCALE AS SHOWN
DATE 02/12/98	PLOT SCALE

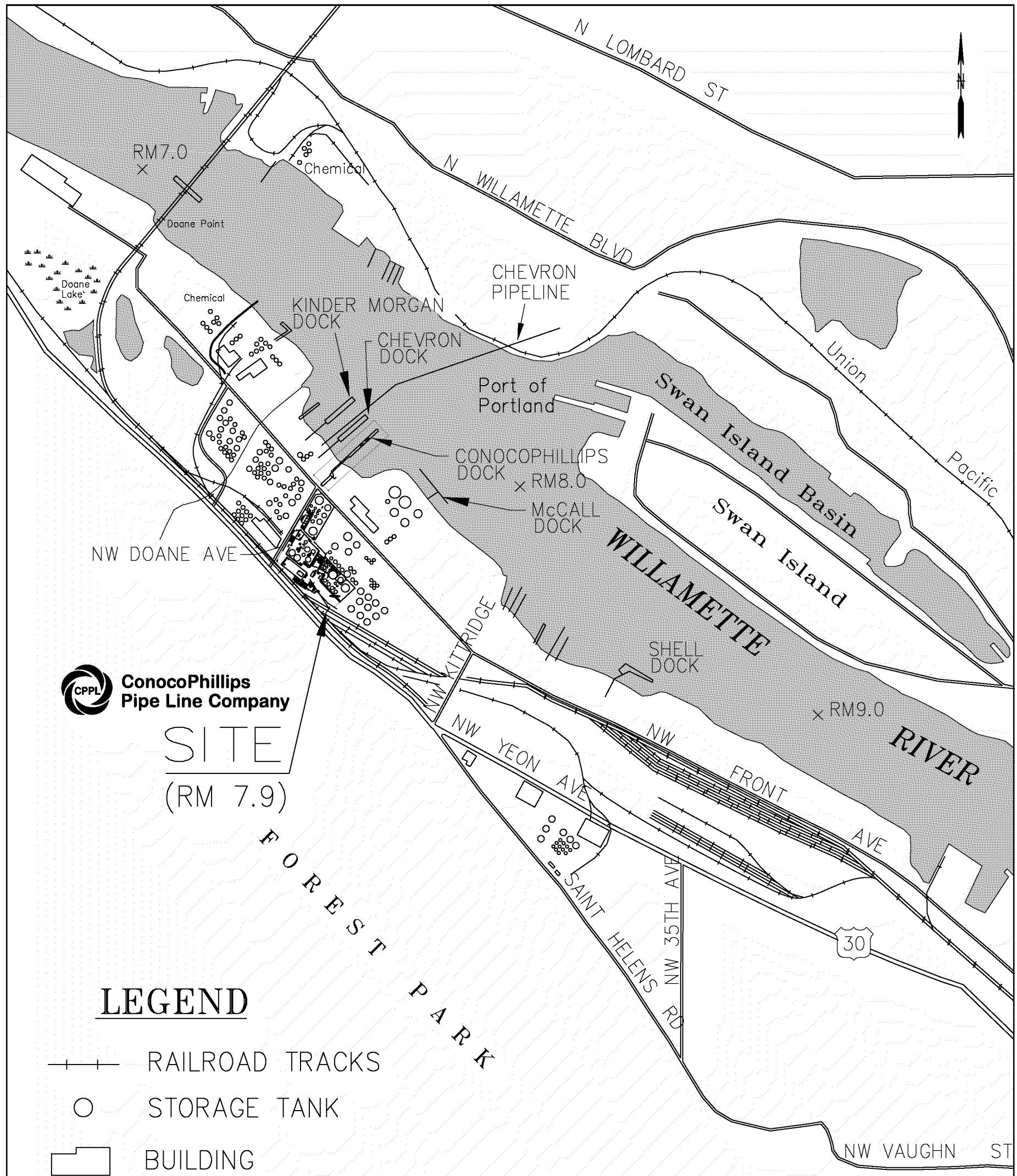
0608-C-1000-D.dwg <DPD: 12/8/2006 [Time: 4:12:40 PM]>

PORTLAND TERMINAL

TITLE: SITE PLAN

DWG. No. 0608-C-1000 SHEET 1 OF 1 REV. No. F

COP0017362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N WILLAMETTE BLVD
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Chemical
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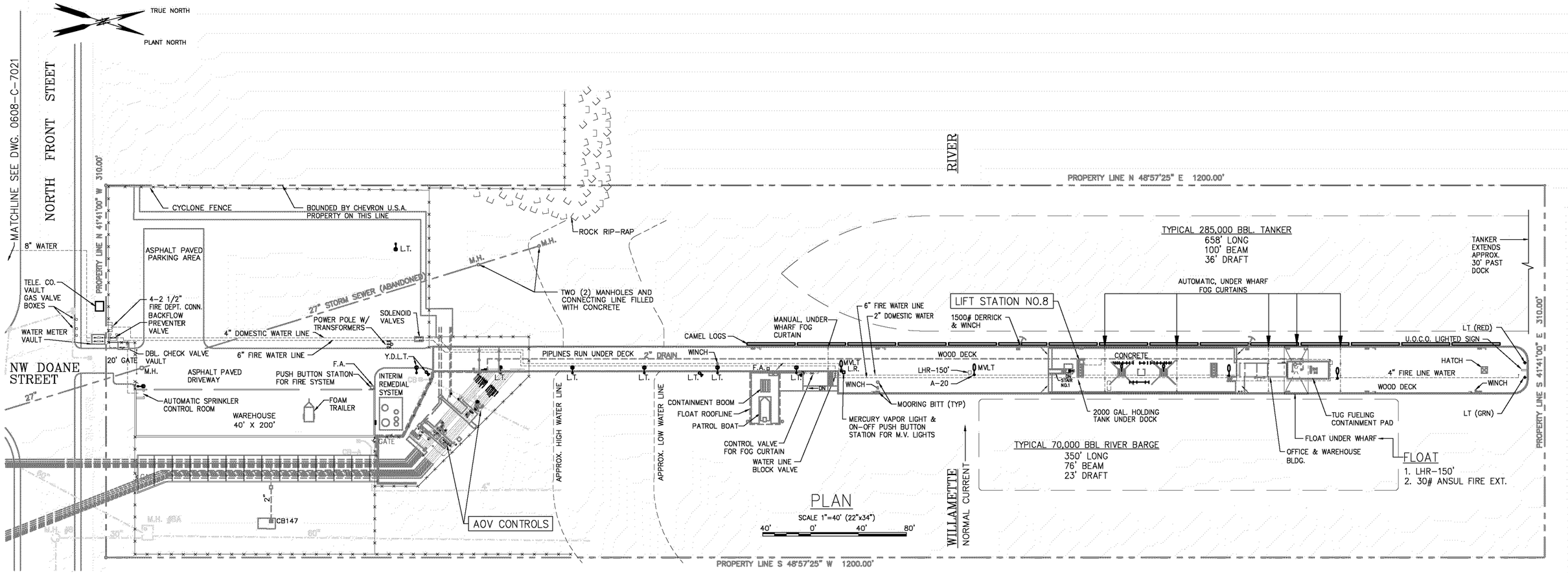
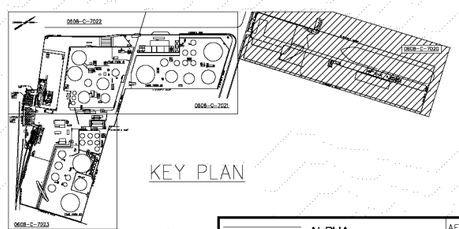
Doane Lake
Chemical
KINDER MORGAN DOCK
CHEVRON DOCK
CHEVRON PIPELINE
Port of Portland
Swan Island Basin
Swan Island
Union Pacific
CONOCOPHILLIPS DOCK
RM8.0
McCALL DOCK
NW DOANE AVE
WILLAMETTE RIVER
NW KITTRIDGE
SHELL DOCK
RM9.0
NW YEON AVE
NW FRONT AVE
SAINT HELENS RD
NW 35TH AVE
30
FOREST PARK
NW VAUGHN ST
ConocoPhillips Pipe Line Company
SITE
(RM 7.9)
LEGEND
RAILROAD TRACKS
STORAGE TANK
BUILDING
RIVER/STREAM
× RM100
SCALE
2000' 0' 2000' 4000'
ConocoPhillips Pipe Line Company
5528 N.W. DOANE AVE., PORTLAND, OREGON 97210
ALPHA ENGINEERS and CONSTRUCTORS, INC.
2929 NW 29th AVE, PORTLAND, OR. 97210 Tel:(503)227-3317/Fax:(503)227-3244
DRAWN BY D.A.BYNUM
CHKD BY WHB
APPD BY SM
SCALE AS SHOWN
DATE 03/16/97
PORTLAND TERMINAL
PORTLAND, OREGON
SITE LOCATION MAP
DRAWING NO. 0608-C-7006
SHEET 1 OF 1
REV. 1
6807006.dwg <CPD: 12/8/2006 [Time: 3:26:57 PM]>

COP0017363



LEGEND

- STORM DRAINAGE TO SEPARATOR
- STORM DRAINAGE TO RIVER
- PROCESS DRAIN
- SANITARY SEWER
- CITY WATER
- NATURAL GAS
- UNTREATED DRAINAGE
- PROCESS WATER DIRECTED TO PROCESS SEPARATOR #003



KEY PLAN

ALPHA ENGINEERS and CONSTRUCTORS, INC.
2929 NW 29th AVE., PORTLAND, OR. 97210 Tel:(503)227-2317/Fax:(503)227-3244

AECI PROJECT NUMBER 25-31

DRAWING NO.	REFERENCE DRAWING	NO.	REVISION DESCRIPTION	REV BY	CHK BY	APPR. BY	DATE
0608-C-7021	TANK FARM NO.1 GENERAL ARRANGEMENT	A	FOR REVIEW AND COMMENT	DAB	MK	WHB	03/06/97
		B	GENERAL UPDATE	DAB	MK	WHB	03/26/97
		C	REVISE STORM DRAINAGE LEGEND	DAB	MK	WHB	07/24/97
		D	UPDATED FOR SWPCP	DAB	SM	WHB	02/12/98
		E	ADDED AOV CONTROLS,	QKB	WHB	WHB	03/14/03
		E	REMOVED BARGE LOADING NOTE				
		F	UPDATED TITLEBLOCK	CEW	WHB	WHB	12/08/06

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ConocoPhillips Pipe Line Company
5228 SW DOANE. AVE.
PORTLAND OR 97210

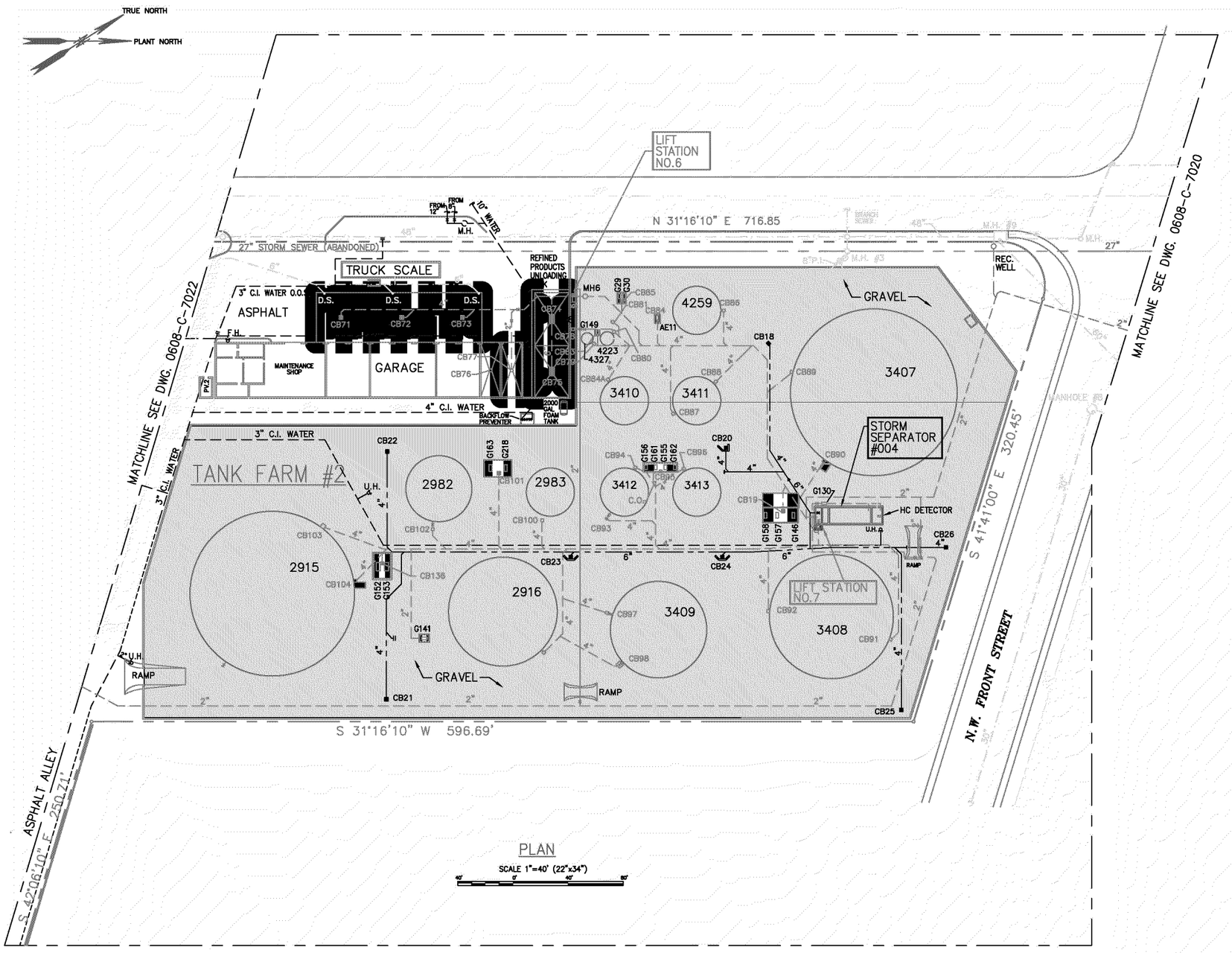
DR. C.W.PORFILY	CONTRACTOR No.
DSGN. D.A.BYNUM	PROJECT NO. 25-31
CK. WHB AP.	DWG. SCALE AS SHOWN
DATE 03/16/97	PLOT SCALE

PORTLAND TERMINAL

TITLE: DOCK FACILITIES
SITE DRAINAGE PLAN

DWG. No. 0608-C-7020-F | SHEET 1 OF 1 | REV. No. F

COP0017364

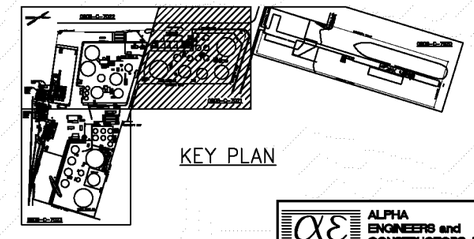


PLAN

SCALE 1"=40' (22"x34")

LEGEND

- STORM DRAINAGE TO SEPARATOR
- STORM DRAINAGE TO RIVER
- PROCESS DRAIN
- RECOVERED OIL TO STORAGE
- SANITARY SEWER
- CITY WATER
- NATURAL GAS
- UNTREATED DRAINAGE
- STORM WATER DIRECTED TO STORM WATER SEPERATOR #004
- PROCESS WATER DIRECTED TO PROCESS SEPARATOR #003



KEY PLAN

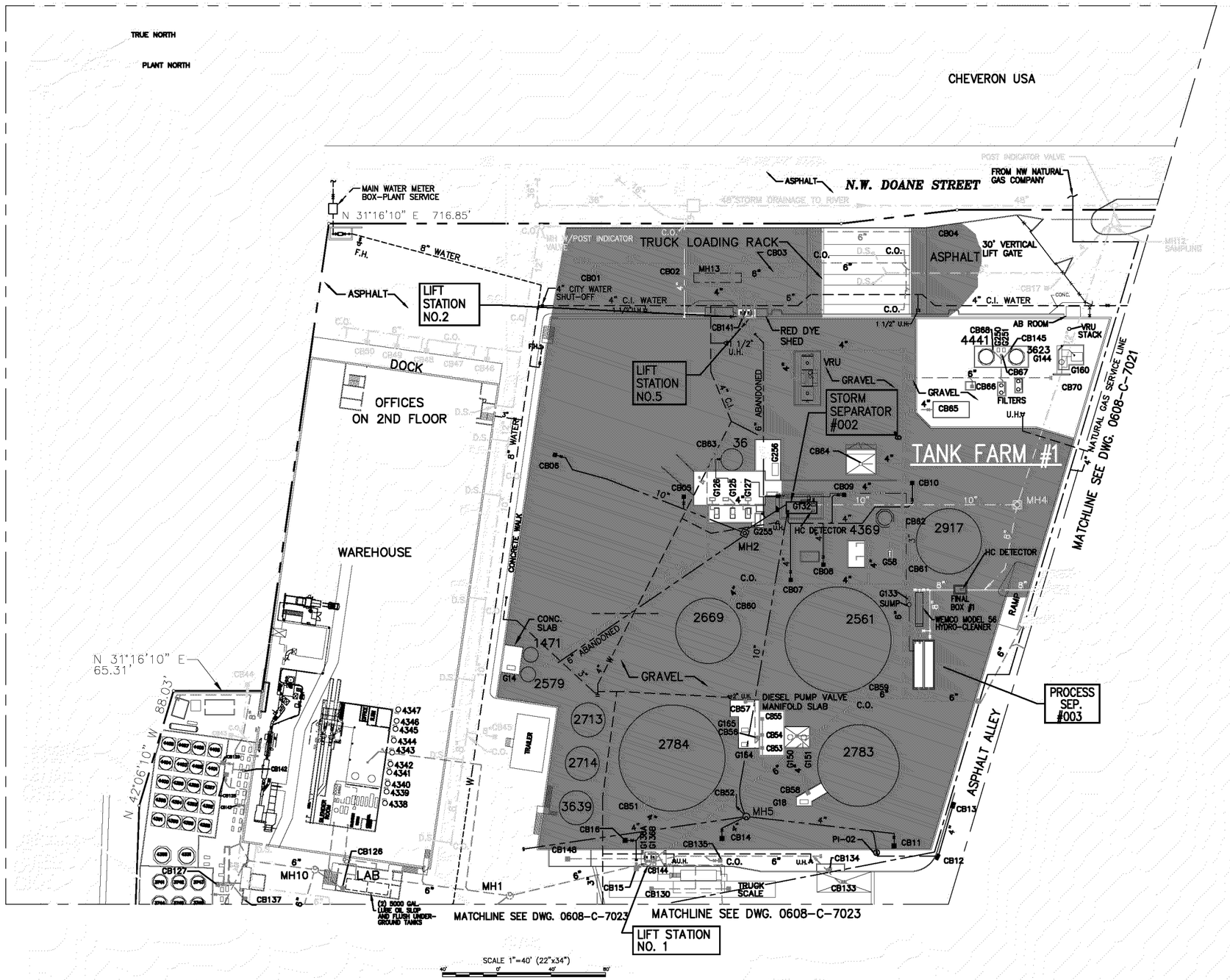
ALPHA ENGINEERS and CONSTRUCTORS, INC.

AECI PROJECT NUMBER 25-31

0608-C-7020	DOCK FACILITIES GENERAL ARRANGEMENT
0608-C-7021	TANK FARM NO.1 GENERAL ARRANGEMENT

ConocoPhillips Pipe Line Company

COP0017365



STORM DRAINAGE TO SEPARATOR

STORM DRAINAGE TO RIVER

PROCESS DRAIN

RECOVERED OIL TO STORAGE

SANITARY SEWER

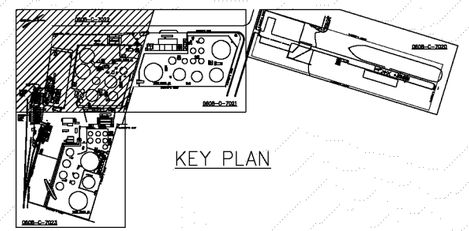
CITY WATER

NATURAL GAS

UNTREATED DRAINAGE

STORM WATER DIRECTED TO STORM WATER SEPERATOR #002

PROCESS WATER DIRECTED TO PROCESS SEPARATOR #003



DRAWING NO.	REFERENCE DRAWING
0608–C–7021	TANK FARM NO.2 GENERAL ARRANGEMENT
0608–C–7023	TANK FARM NO.3 GENERAL ARRANGEMENT

NO.	REVISION DESCRIPTION	REV BY	CHK BY	APPR. BY	DATE
A	FOR REVIEW AND COMMENT	DAB	MK	WHB	03/06/97
B	GENERAL UPDATE	DAB	MK	WHB	03/25/97
C	REVISE STORM DRAINAGE LEGEND	DAB	MK	WHB	07/24/97
D	UPDATED FOR SWPCP	DAB	SM	WHB	02/12/98
E	UPDATE TO REFLECT CHANGES ON 0608–C–7000	DAB	SM	WHB	09/10/99
F	REMOVE FIGURE NO. AND REVISE LOGO	QKB	WHB	WHB	03/04/03
G	UPDATE TITEBLOCK	CEW	WHB	WHB	12/08/06
H	SPCC 2009 UPDATES	MJB	DAB	JPD	05–11–09

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ConocoPhillips Pipe Line Company
5228 SW DOANE. AVE.
PORTLAND OR 97210

ALPHA ENGINEERS and CONSTRUCTORS, INC.
2929 NW 29th AVE, PORTLAND, OR. 97210 Tel:(503)227–3317/Fax:(503)227–3244

AECI PROJECT NUMBER 25–86

DR. C.W.PORFILY	CONTRACTOR No.
DSGN. D.A.BYNUM	PROJECT NO. 25–31
CK. WHB AP.	DWG. SCALE AS SHOWN
DATE 03/16/97	PLOT SCALE

PORTLAND TERMINAL

TITLE: TANK FARM 1
SITE DRAINAGE PLAN

DWG. No. 0608–C–7022 | SHEET 1 OF 1 | REV. No. H

COP0017366

MATCHLINE SEE DWG. 0608-C-7022

UPPER LUBE CELL

BURLINGTON NORTHERN RAILROAD

RAIL SPUR

RAIL SPUR

RAIL SPUR

N 42°06'10" W 406.46'

S 56°39'00" W 150.48'

S 86°40' W 75.80'

N 56°38'50" W 108.82'

S 48°19'00" W 411.97'

S 42°06'10" E 646.10'

BOILER HOUSE

DIESEL TANK

ELEC. RM

TESTING ROOM

ASPHALT

NATURAL GAS SHUT-OFF

MFD

NG

6" CITY WATER SHUT-OFF

BLACK OIL TRUCK LOADING RACK

LUBE UNLOADING

BASE STOCK PUMPS

LUBE OIL PUMPS

F-TANK FARM

STORM WATER SEP. #001

SPILL RETENTSION BASIN

FINAL BOX #2

LIFT STATION NO.4

LIFT STATION NO.3

4000 GAL UG TANK

3" CITY WATER SHUT-OFF

WASTE STORAGE

EARTH DIKE

RAMP

GRAVEL

CONC. BLOCK SUB-DIKE

LUBE OIL CANOPY

GATE

STORM DRAIN SAND FILTER

CONCRETE DIKE

TO KITTRIDGE OUTFALL

CHEVRON USA

CHEVRON USA

TANK FARM #3

3739 3414 3415 4244 4266 4245 4258

3740 3416 3417 4302 4303 4305

4306

4252 3579 4253 4254 4256 4257 4318 4255 3761

F-103 F-104 4320 4321 4322 4323

TRUE NORTH

PLANT NORTH

LEGEND

- STORM DRAINAGE TO SEPARATOR
- STORM DRAINAGE TO RIVER
- PROCESS DRAIN
- SANITARY SEWER
- CITY WATER
- NATURAL GAS
- UNTREATED DRAINAGE
- STORM WATER DIRECTED TO STORM WATER SEPERATOR #001
- PROCESS WATER DIRECTED TO PROCESS SEPARATOR #003

PLAN

SCALE 1"=40' (22"x34")

KEY PLAN

DRAWING NO.	REFERENCE DRAWING
0608-C-7021	TANK FARM NO.1 GENERAL ARRANGEMENT

NO.	REVISION DESCRIPTION	REV BY	CHK BY	APPR. BY	DATE
A	FOR REVIEW AND COMMENT	DAB	MK	WHB	03/06/97
B	GENERAL UPDATE	DAB	MK	WHB	03/26/97
C	REVISE STORM DRAINAGE LEGEND	DAB	MK	WHB	07/24/97
D	UPDATED FOR SWPCP	DAB	SM	WHB	02/12/98
E	UPDATE FOR CHANGES ON 0608-C-7000	DAB	SM	WHB	09/10/99
F	REMOVE FIGURE NO. AND REVISED LOGO	QKB	WHB	WHB	03/14/03
G	UPDATED TITLEBLOCK	CEW	WHB	WHB	12/08/06

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ConocoPhillips Pipe Line Company
5228 SW DOANE. AVE.
PORTLAND OR 97210

ALPHA ENGINEERS and CONSTRUCTORS, INC.

AECI PROJECT NUMBER 25-31

DR.	D.A.BYNUM	CONTRACTOR No.	
DSGN.	D.A.BYNUM	PROJECT NO.	25-31
CK.	MK AP. KJP	DWG. SCALE	AS SHOWN
DATE	03/16/97	PLOT SCALE	

PORTLAND TERMINAL

TITLE: TANK FARM 3
SITE DRAINAGE PLAN

DWG. No. 0608-C-7023 SHEET 1 OF 1 REV. No. G

COP0017367

TRUE NORTH
PLANT NORTH

BLACK OIL SYSTEM BLOCK VALVES

HEATING OIL, TRANSMIX, AND LUBE OIL VALVES

DIESEL BLOCK VALVES

DIESEL NO.1 AND DIESEL NO.2 BLOCK VALVES

GASOLINE PUMP AREA BLOCK VALVES

LUBE OIL BLOCK VALVES

OLYMPIC PIPELINE MANIFOLD AREA

SHORE VALVES

TANKER/BARGE OFFLOADING & LOADING

TUG FUELING

KINDER MORGAN TRANSFER MANIFOLD PUMP G160

OLYMPIC PIPELINE MANIFOLD-GASOLINE

OLYMPIC PIPELINE MANIFOLD-DISTILATES

CHEVRON USA

N.W. DOANE STREET

MATCH LINE A

TRUCK LOADING RACK

TRUCK SCALE

REFINED PRODUCTS UNLOADING RACK

TANK FARM #1

TANK FARM #2

TANK FARM #3

F-TANK FARM

OFFICES ON 2ND FLOOR

WAREHOUSE

LOWER LUBE CELL

UPPER LUBE CELL

LUBE OIL CANOPY

BOILER HOUSE

TESTING ROOM

SAFETY TRAILER

LAB

DOCK

ASPHALT

GRAVEL

KINDER MORGAN DOCK

CHEVRON DOCK

INTER-TERMINAL PIPELINE TO/FROM CHEVRON U.S.A.

INTER-TERMINAL PIPELINE TO/FROM McCall

N 48°57'25" E 1200.00'

S 48°57'25" W 1200.00'

S 41°41'00" E 310.00'

PATROL BOAT

TANKER

TWO (2) 4-BOOM DERRICKS

DOCK OFFICE

RIVER BARGE

CONOCOPHILLIPS DOCK

WILLAMETTE RIVER

BURLINGTON NORTHERN RAILROAD

N.W. FRONT STREET

SITE PLAN
SCALE: 1"= 90'
90' 0' 90' 180'

LEGEND

U.S. COAST GUARD JURISTDICITONAL LIMITS

DRAWING NO.	REFERENCE DRAWING	NO.	REVISION DESCRIPTION	REV BY	CHK BY	APPR. BY	DATE
NA		0	ISSUED FOR INFORMATION	DAB	MK		08/26/97
		1	UPDATED TRUCK LOADING RACK	DAB	MK		09/12/97
		2	REVISED LOGO	QKB	WHB		03/17/03
		3	ADDED INTERCOMPANY	DAB	WHB		08/08/04
		4	REMOVED TKS 31 7& 141, GENERAL UPDATE	DAB	WHB		01/19/07

NO.	REVISION DESCRIPTION	REV BY	CHK BY	APPR. BY	DATE

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ConocoPhillips Pipe Line Company
5528 N.W. DOANE ST.
PORTLAND, OREGON 97210

DR. DAB	CONTRACTOR No.
DSGN. DAB	PROJECT NO. 2908
CK. WHB AP. MK	DWG. SCALE 1"=90'
DATE 08/26/97	PLOT SCALE

ALPHA ENGINEERS and CONSTRUCTORS, INC.
2929 NW 29TH AVENUE, PORTLAND, OR. 97210 Tel(503)227-3317/Fax(503)227-3244

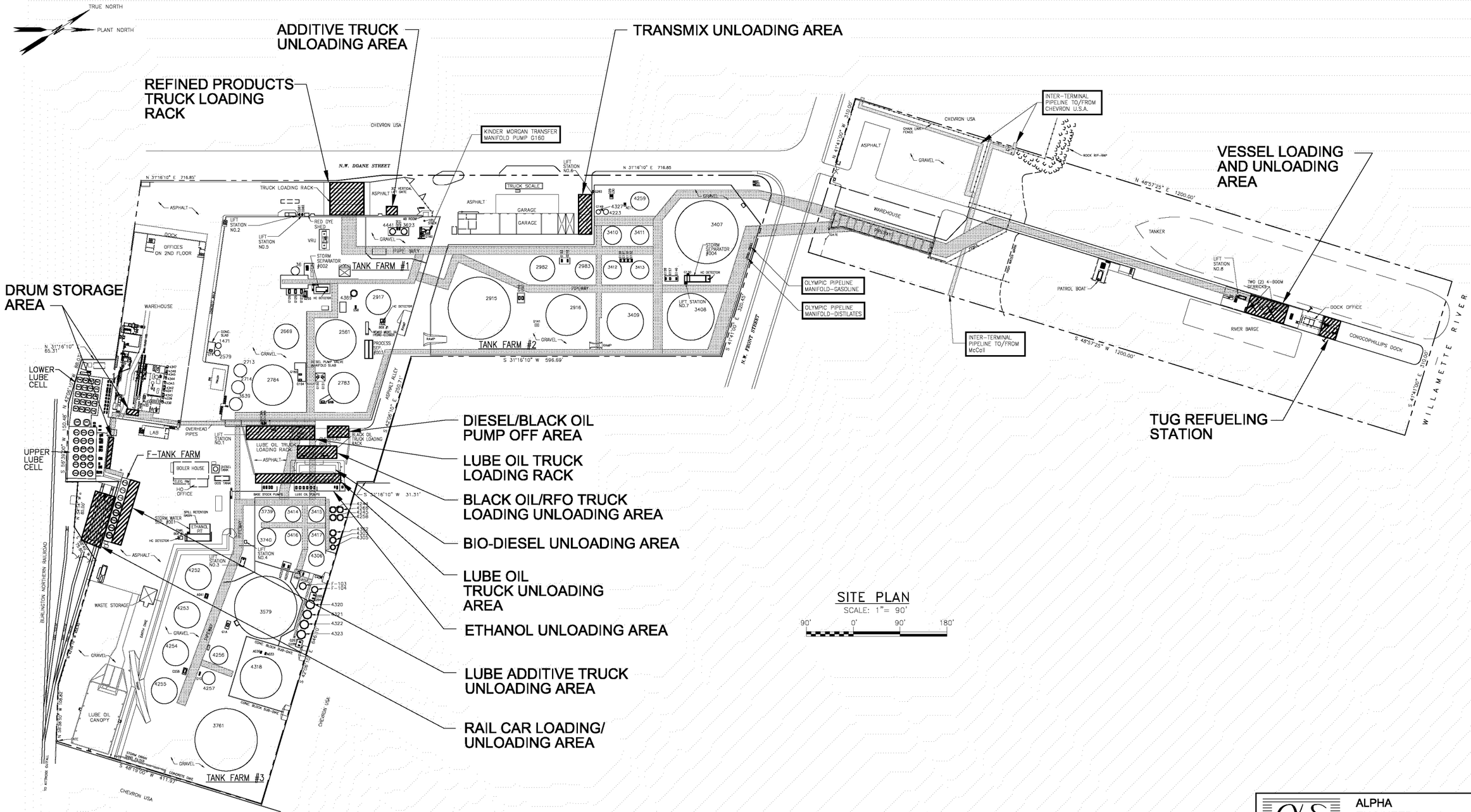
AECI PROJECT NUMBER 29-08

PORTLAND TERMINAL

TITLE:
SITE PLAN PIPELINE SYSTEM ISOLATION LOCATIONS

DWG. No. 0608-C-1200 SHEET 1 OF 1 REV. No. 4

COP0017368



DRAWING NO.	REFERENCE DRAWING	NO.	REVISION DESCRIPTION	REV BY	CHK BY	APPR. BY	DATE	NO.	REVISION DESCRIPTION	REV BY	CHK BY	APPR. BY	DATE
–		0	FOR INFORMATION ONLY	DAB	KJP		09/12/97						
		1	UPDATED FOR SPCC PLAN	DAB	WHB		03/13/00						
		2	REMOVE VEHICLE FUELING, ADD D. STORAGE	QKB	WHB		03/14/04						
		3	ADD LUBE CANOPY	DAB	WHB		02/28/06						
		4	GENERAL REVISION	CWP	DAB	JPD	04/14/08						
		5	SPCC 2009 UPATES	MJB	DAB	JPD	05/11/09						

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ConocoPhillips Pipe Line Company
5528 NW DOANE ST
PORTLAND, OREGON 97210

ALPHA ENGINEERS and CONSTRUCTORS, INC.
2929 NW 29th AVE, PORTLAND, OR. 97210 Tel:(503)227-3317/Fax:(503)227-3244

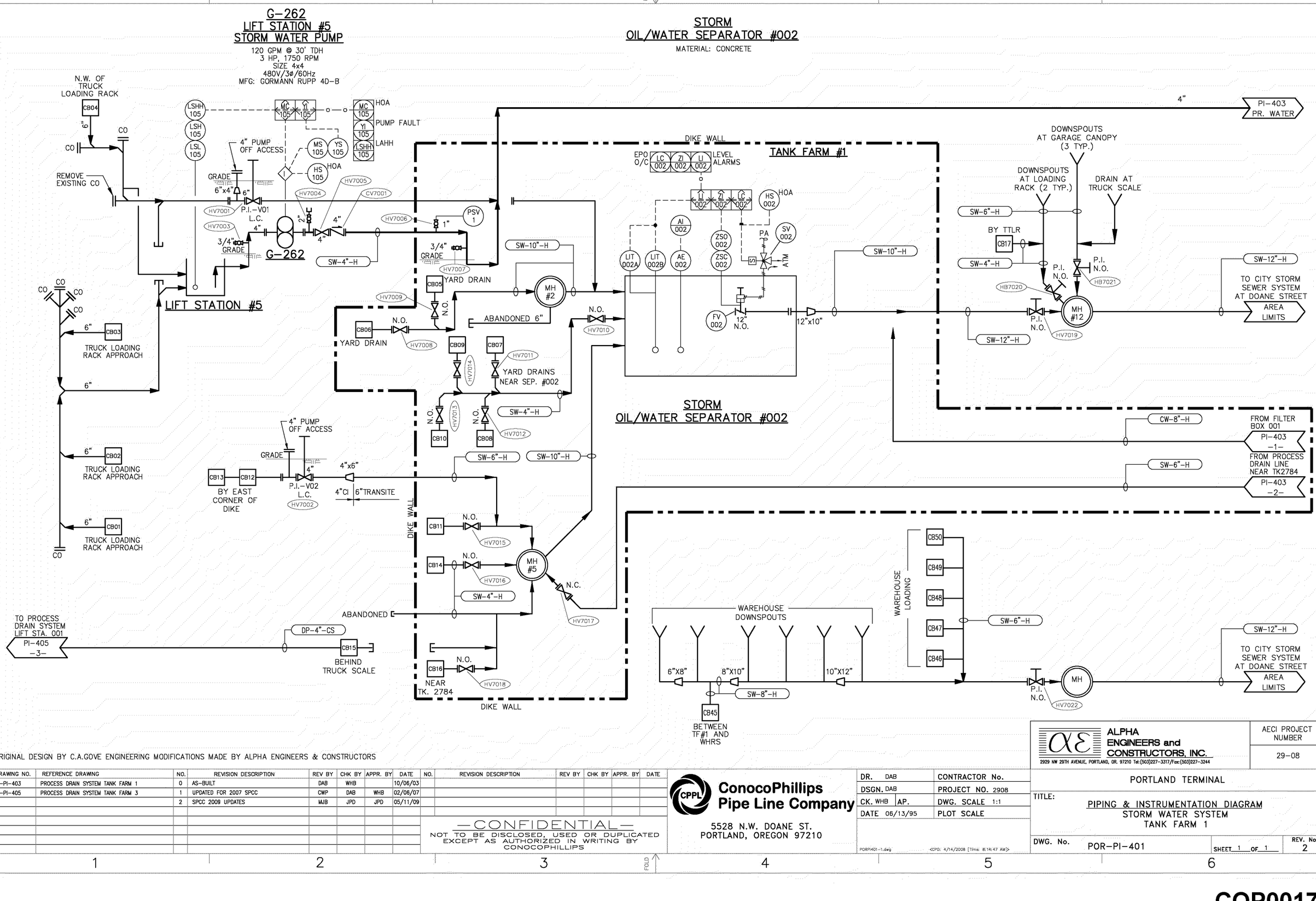
DR. D.A.BYNUM	CONTRACTOR No.	AECI PROJECT NUMBER	25-31
DSGN. D.A.BYNUM	PROJECT NO. 25-31		
CK. WHB AP.	DWG. SCALE AS SHOWN		
DATE 07/30/97	PLOT SCALE 1"=90'		

PORTLAND TERMINAL

TITLE: SITE PLAN TRANSFER LOCATIONS

DWG. No. 0608-C-1201 | SHEET 1 OF 1 | REV. No. 5

COP0017369



ORIGINAL DESIGN BY C.A.GOVE ENGINEERING MODIFICATIONS MADE BY ALPHA ENGINEERS & CONSTRUCTORS

DRAWING NO.	REFERENCE DRAWING	NO.	REVISION DESCRIPTION	REV BY	CHK BY	APPR. BY	DATE
POR-PI-403	PROCESS DRAIN SYSTEM TANK FARM 1	0	AS-BUILT	DAB	WHB		10/06/03
POR-PI-405	PROCESS DRAIN SYSTEM TANK FARM 3	1	UPDATED FOR 2007 SPCC	CWP	DAB	WHB	02/06/07
		2	SPCC 2009 UPDATES	MJB	JPD	JPD	05/11/09

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ConocoPhillips Pipe Line Company
5528 N.W. DOANE ST.
PORTLAND, OREGON 97210

ALPHA ENGINEERS and CONSTRUCTORS, INC.
2929 NW 29TH AVENUE, PORTLAND, OR. 97210 Tel:(503)227-3317/Fax:(503)227-3244

AECI PROJECT NUMBER 29-08

DR. DAB	CONTRACTOR No.
DSGN. DAB	PROJECT NO. 2908
CK. WHB AP.	DWG. SCALE 1:1
DATE 06/13/95	PLOT SCALE

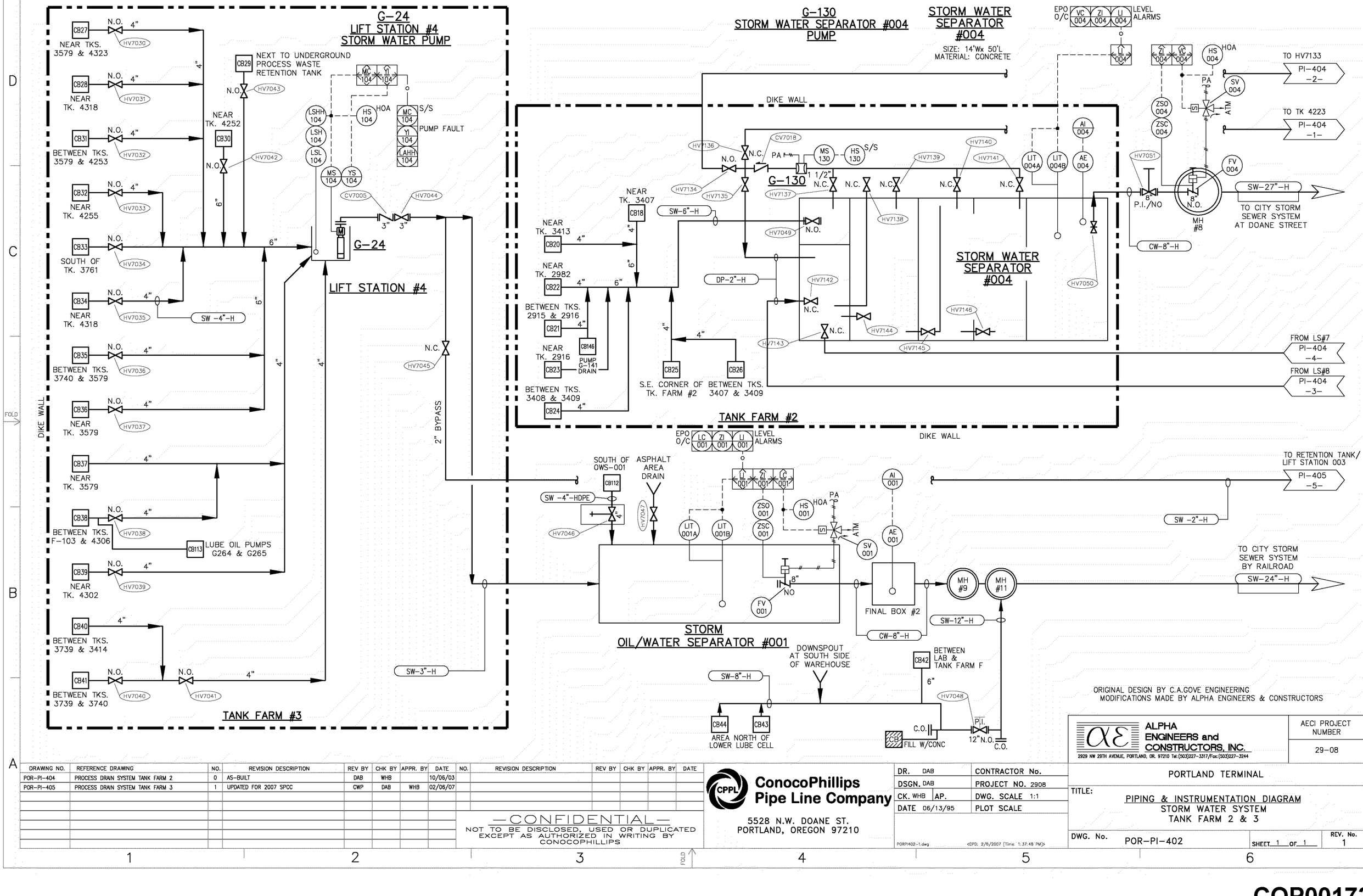
PORPI401-1.dwg <DPD: 4/14/2008 [Time: 8:14:47 AM]>

PORTLAND TERMINAL

TITLE:
PIPING & INSTRUMENTATION DIAGRAM
STORM WATER SYSTEM
TANK FARM 1

DWG. No. POR-PI-401 | SHEET 1 OF 1 | REV. No. 2

COP0017370



ORIGINAL DESIGN BY C.A.GOVE ENGINEERING
MODIFICATIONS MADE BY ALPHA ENGINEERS & CONSTRUCTORS

DRAWING NO.	REFERENCE DRAWING	NO.	REVISION DESCRIPTION	REV BY	CHK BY	APPR. BY	DATE
POR-PI-404	PROCESS DRAIN SYSTEM TANK FARM 2	0	AS-BUILT	DAB	WHB		10/06/03
POR-PI-405	PROCESS DRAIN SYSTEM TANK FARM 3	1	UPDATED FOR 2007 SPCC	CWP	DAB	WHB	02/06/07

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ConocoPhillips Pipe Line Company
5528 N.W. DOANE ST.
PORTLAND, OREGON 97210

DR. DAB	CONTRACTOR No.
DSGN. DAB	PROJECT NO. 2908
CK. WHB AP.	DWG. SCALE 1:1
DATE 06/13/95	PLOT SCALE

PORPI402-1.dwg <DPD: 2/8/2007 [Time: 1:37:48 PM]>

ALPHA ENGINEERS and CONSTRUCTORS, INC.
2929 NW 29TH AVENUE, PORTLAND, OR. 97210 Tel:(503)227-3317/Fax:(503)227-3244

AECI PROJECT NUMBER 29-08

PORTLAND TERMINAL

TITLE:
PIPING & INSTRUMENTATION DIAGRAM
STORM WATER SYSTEM
TANK FARM 2 & 3

DWG. No. POR-PI-402 | SHEET 1 OF 1 | REV. No. 1

COP0017371

G-261 LIFT STATION #2 STORM WATER PUMP	G-133 RECLAIMED OIL PUMP	PROCESS SEPARATOR #003	G-135 PROCESS SEPARATOR #003 PUMP	G-134 PROCESS SEPARATOR #003 PUMP
120 GPM @ 30' TDH 3 HP, 1750 RPM SIZE: 4x4 480V/3ø/60Hz		MATERIAL: CONCRETE	150 GPM 3 HP, 1750 RPM 480V/3ø/60Hz	150 GPM 3 HP, 1750 RPM 480V/3ø/60Hz

TANK FARM #1

DIKE WALL

STREET (UNOCAL) NEAR RAMP & MH#3 — CB139

FROM LIFT STATION #7 — PI-404 -2-

FROM LIFT STATION #001 — PI-405 -1-

TO MH#5 — PI-401 -2-

2784 — HV7060 N.C. — DP-4"-H — HV7061 N.C. — CB52 — CB51 — CB53,54,55,56,57 — CB58

D/O PUMP MANIFOLD PUMP CELL NEAR (5 PLCS) TANK 2783

2561 — DP-4"-H — CW-6"-H — HV7062 N.C. — CB59

DP-6"-H — SW-6"-H

2669 — HV7063 N.C. — CB60

2917 — HV7064 N.C. — CB61

4369 — HV7065 N.C. — CB62

PUMP BASE DRAIN NEAR G58

PUMP BASE DRAINS (2 TYP.) NEAR G125, G126 AND G127

ADDITIVE 4441 — CB67 PUMP CELL NEAR ADD. TK. — HV7068 N.C. — CB68

3623 — HV7110 N.C. — CB145

FILTER SLABS (2 TYP.)

36 — HV7066 N.C. — CB63

CONC. SLAB NEAR TK. 1471

PUMP BASE DRAINS (6 TYP.)

CONC. SLAB NEAR ADD. TK. CB65 — HV7067 N.C.

CB64 HAZARDOUS WASTE SLAB

HV7069 — CB70 WEST OF ADD. TANK

CB69 EAST OF LOADING RACK AND SOUTH OF ADDITIVE TANK

HV7096 N.C.

DP-6"-H — LIT 003A — LIT 003B — LSHH 003 — LSH 003 — LSL 003 — HS 135 HOA — YI 135 PUMP FAULT — LI 003 LEVEL ALARMS — LAHH 003

HV7093 — HV7095 — 6"P.I. N.O. — 2" — HV7092

PROCESS SEPARATOR #003

G-135 — YS 135 — MS 135

G-134 — YS 134 — MS 134 — HS 134 HOA

PSV 133 — SET @ 75 PSIG — HV7091 — HV7089 — HV7090

FIELD VERIFY — MS 133 — HS 133 S/S — HV7087 — HV7088

G-133

HV7085 — HV7084 — CV7011 — HV7086 — RECLAIMED OIL SUMP

HV7097 — YI 134 — MC 134 — YI 134 PUMP FAULT

CW-6"-H — PSV — HV7075 — FE — HV7081 — HYDROCLEANER — HV7077 — HV7076 — HV7080 — HV7078 — HV7079 — SAMPLE/FLUSH LINE — AE 003

CW-8"-H — FILTER BOX #1 — SV — SV — HV7082 — 1/2" — HS HOA — HS HOA

UTILITY WATER

TO MH#4 — PI-401 -1-

CW-8"-H

TO SLOPS TANKS 36 2669 — PI-121 -?-

CW-6"-HDPE

ZSC 003 — ZSO 003 — 8" — ZI 003 — VC 003 — ZI 003 — VC 003 EPO O/C

FV 003 NO/FC — ATM — SV 003 — PA — HS 003 HOA

MH #3

HV7083 — P.I.V. EXISTING N.O. — 8" CW TO STORM WATER

PSV 2 — HV7073 — HV7071 — 4" — DP-4"-H — HV7072 — CV7010 — G-261 — FLEX HOSE — HV7070 3/4" — HV7074 3/4"

YI 261 PUMP FAULT — LAHH 102 — HS 261 HOA — YS 261 — MS 261 — YI 261 — MC 261

LIFT STATION #2

LSL 102 — LSH 102 — LSHH 102

CONC. CONTAINMENT — CB141 — 4" — TRUCK LOADING RACK SPILL TANK — DP-6"-H — STRIP DRAINS AT LOADING RACK

P-401 PR. WATER FROM LIFT STATION #5

ORIGINAL DESIGN BY C.A.GOVE ENGINEERING MODIFICATIONS MADE BY ALPHA ENGINEERS & CONSTRUCTORS

DRAWING NO.	REFERENCE DRAWING	NO.	REVISION DESCRIPTION	REV BY	CHK BY	APPR. BY	DATE
POR-PI-121	BLACK OIL BLENDING SYSTEM SHEET 2 OF 5	0	AS-BUILT	DAB	WHB		10/06/03
POR-PI-401	STORM WATER SYSTEM TANK FARM 1	1	UPDATED FOR 2007 SPCC	CWP	DAB	WHB	02/07/08
POR-PI-404	PROCESS DRAIN SYSTEM TANK FARM 2	2	SPCC 2009 UPDATES	MJB	DAB	JPD	05/11/09
POR-PI-405	PROCESS DRAIN SYSTEM TANK FARM 3	3	ADD TANK 3623 WAS ON DWG POR-PI-404	MJB	JPD	JPD	07/28/09

NO.	REVISION DESCRIPTION	REV BY	CHK BY	APPR. BY	DATE

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ConocoPhillips Pipe Line Company
5528 N.W. DOANE ST.
PORTLAND, OREGON 97210

DR. DAB	CONTRACTOR No.
DSGN. DAB	PROJECT NO. 2908
CK. WHB AP.	DWG. SCALE 1:1
DATE 06/13/95	PLOT SCALE

PORPI403-1.dwg <CPD: 2/6/2007 [Time: 1:40:17 PM]>

ALPHA ENGINEERS and CONSTRUCTORS, INC.
2929 NW 29TH AVENUE, PORTLAND, OR. 97210 Tel:(503)227-3317/Fax:(503)227-3244

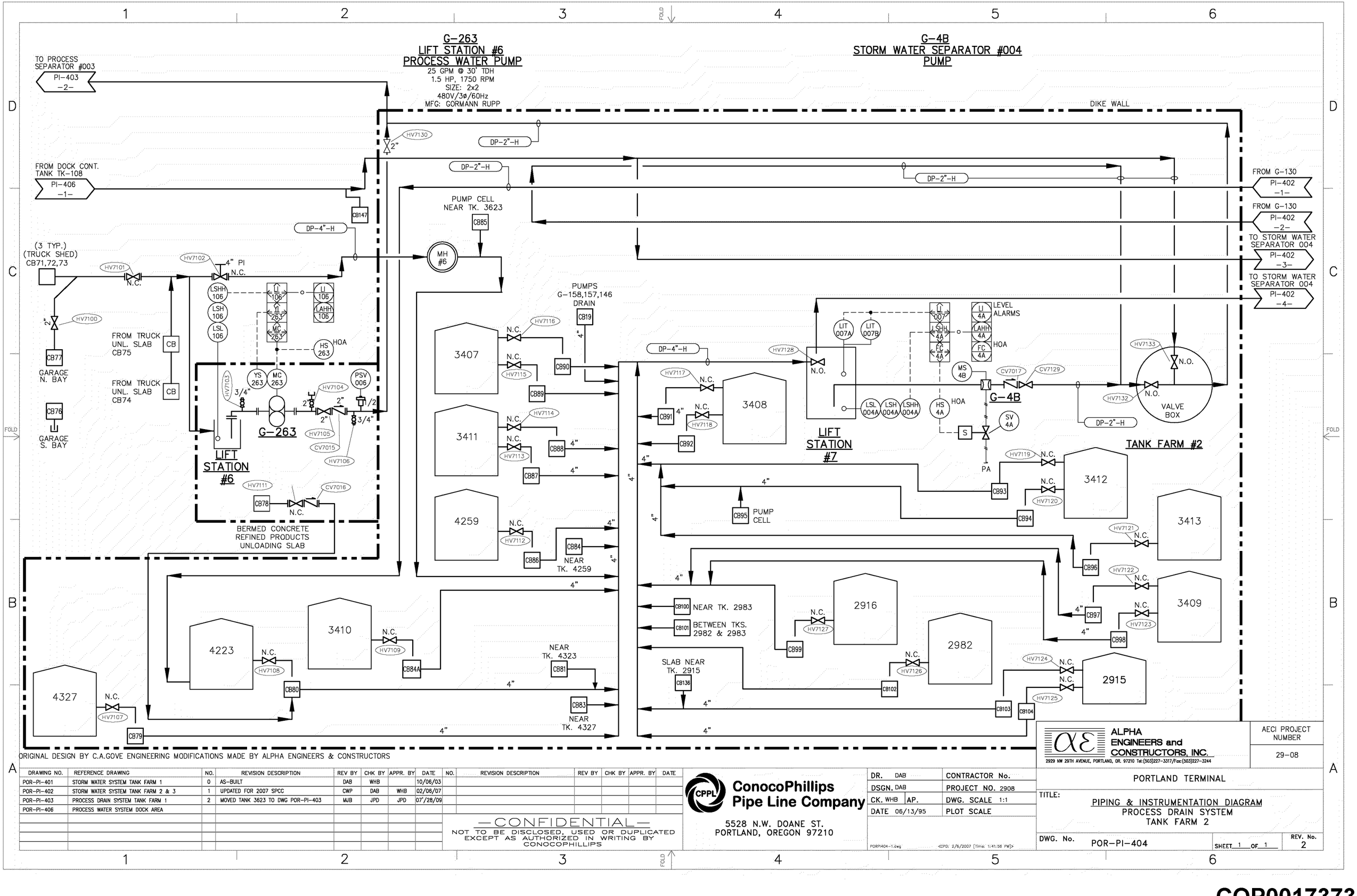
AECI PROJECT NUMBER 29-08

PORTLAND TERMINAL

TITLE: PIPING & INSTRUMENTATION DIAGRAM
PROCESS DRAIN SYSTEM
TANK FARM 1

DWG. No. POR-PI-403 — SHEET 1 OF 1 — REV. No. 3

COP0017372



ORIGINAL DESIGN BY C.A.GOVE ENGINEERING MODIFICATIONS MADE BY ALPHA ENGINEERS & CONSTRUCTORS

DRAWING NO.	REFERENCE DRAWING	NO.	REVISION DESCRIPTION	REV BY	CHK BY	APPR. BY	DATE
POR-PI-401	STORM WATER SYSTEM TANK FARM 1	0	AS-BUILT	DAB	WHB		10/06/03
POR-PI-402	STORM WATER SYSTEM TANK FARM 2 & 3	1	UPDATED FOR 2007 SPCC	CWP	DAB	WHB	02/06/07
POR-PI-403	PROCESS DRAIN SYSTEM TANK FARM 1	2	MOVED TANK 3623 TO DWG POR-PI-403	MJB	JPD	JPD	07'/28/09
POR-PI-406	PROCESS WATER SYSTEM DOCK AREA						

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ConocoPhillips Pipe Line Company
5528 N.W. DOANE ST.
PORTLAND, OREGON 97210

DR. DAB	CONTRACTOR No.
DSGN. DAB	PROJECT NO. 2908
CK. WHB AP.	DWG. SCALE 1:1
DATE 06/13/95	PLOT SCALE

PORPI404-1.dwg <DPD: 2/6/2007 [Time: 1:41:56 PM]>

ALPHA ENGINEERS and CONSTRUCTORS, INC.
2929 NW 29TH AVENUE, PORTLAND, OR. 97210 Tel:(503)227-3317/Fax:(503)227-3244

AECI PROJECT NUMBER 29-08

PORTLAND TERMINAL

TITLE:
PIPING & INSTRUMENTATION DIAGRAM
PROCESS DRAIN SYSTEM
TANK FARM 2

DWG. No. POR-PI-404 | SHEET 1 OF 1 | REV. No. 2

COP0017373

FROM CB 15
PI-401
-3-

DP-4"-CS

AG-20
ETHANOL PUMP
OUT OF SERVICE

G-137
LIFT STATION #3
PROCESS WATER PUMP

G-136A & G-136B
LIFT STATION #1
PROCESS WATER PUMP
120 GPM @ 30' TDH
3 HP, 1750 RPM
SIZE: 4x4
480V/3ø/60Hz

COMPRESSOR BLDG. D.S.
COMPRESSOR DRAIN
WAREHOUSE DRAIN
WHSE DRAIN
DRAIN AT BLDG. WEST OF WAREHOUSE
DRAIN AT WEST SIDE OF WAREHOUSE
DP-3"-H
BY LAB
CB126
DRAIN AT S.E. CORNER OF WAREHOUSE
DRAIN AT BOILER HOUSE
SUMP
SLAB NEAR BOILER HOUSE
MH #10
MH #1
DP-6"-H

LI 101 LEVEL ALARMS
LIT 101D
LIT 101C
LSHH 101
LSH 101
LSL 101
LSHH 101A
LSH 101A
PUMP AREA DRAINS
CB148
LSH 107A
LAHH 107A
YI 136A PUMP FAULT
YI 136B PUMP FAULT

HS 136A HOA
YS 136A
MS 136A
HV7164
HV7165
CV7021
HV7166
N.O.
G-136A
HS 136B HOA
YS 136B
MS 136B
HV7161
HV7162
CV7020
HV7163
G-136B

DUPLEX LIFT STATION #1
CB144
4" SLAB DRAIN

DP-6"-H
TO PROCESS SEPARATOR #003
PI-403
-1-

DIKE WALL
LOWER LUBE CELL
CB129
N.C.
HV7150
NEAR TK. 4401
HV7151
N.O.
CB128
BETWEEN UPPER CELL & LAB
CB137
NEAR LOWER LUBE CELL
CB142
CB143
TRENCH
PUMP CELL BETWEEN UPPER & LOWER LUBE CELLS
L/O PUMP AREA
DP-4"-H
CB127
N.C.
PUMP CELL
HV7152
DIKE WALL
UPPER LUBE CELL
N.C. HV7153
N.C. HV7154
N.C. HV7155
N.C. HV7156

ETHANOL PIT
OUT OF SERVICE
PA
AG-20
OUT OF SERVICE
DP-2"-H

DP-3"-H
HV7173
P.I.
N.O.
DP-4"-H

DIKE WALL
AT PUMPS G266 & G267
CB113
DP-6"-H
DP-4"-H
AT TANK 3579
CB106
CB107
3761
N.C. HV7174
W.D.
N.C. HV7175
W.D.
CB105
6"
HV7179
4" HV7180
4000 GAL. UNDER-GROUND PROCESS WASTE RETENTION TANK
LIFT STATION #3
DP-4"-H
LAHH 103
LI 103
LSHH 103
LSH 103
LSL 103
FC 103
EPO S/S
HS 103 HOA
S
PA
SV 103
MS 3
G-3
4" HV7181
CV7022
G252 & G253 CB111
NEAR TK. 4303 CB108
NEAR TK. 4302 CB109
NEAR TK. 4245 CB110
TANK FARM #3
DIKE WALL

HV7160
N.O.
6" P.I.V.
4" PUMP-OFF ACCESS
6"x4"
N.C.
HV7159

DRAINS UNDER TRUCK SCALE
TRUCK SCALE
CB130
4" PUMP-OFF ACCESS
HV7169
N.O.
4" VO4
N.O.
HV7167
CB135
BEHIND TRUCK SCALE
N.O.
HV7168
CB134
D/O UNLOADING SLAB
CB133
D/O UNLOADING SLAB
ASPHALT RACK
CB131
HV7170
ASPHALT RACK
CB132
HV7171
NEXT TO RACK PUMP CELL
CB138
HV7172
PUMP CELL SOUTH OF ASPHALT RACK
STRIP DRAIN
DP-4"-H

RAILCAR UNL. AREA
CB
AT RAILCAR LOADING AREA (4 TYP.)
CB116 THRU CB119
PUMP BASE DRAINS (5 TYP.)
CB120 THRU CB124
PUMP BASE DRAINS SOUTH OF F-TANK FARM (2 TYP.)
DP-6"-H
DIKE WALL
F-TANK FARM
CB115
N.C.
HV7157
CB114
N.C.
HV7158
DP-4"-H
CB125
BETWEEN RETENTION TANK & TK. FARM #3
TRUCK WASH RETENTION TANK

FROM LIFT STATION 004-BYPASS
PI-402
-5-

ORIGINAL DESIGN BY C.A.GOVE ENGINEERING MODIFICATIONS MADE BY ALPHA ENGINEERS & CONSTRUCTORS

DRAWING NO.	REFERENCE DRAWING	NO.	REVISION DESCRIPTION	REV BY	CHK BY	APPR. BY	DATE
POR-PI-401	STORM WATER SYSTEM TANK FARM 1	0	AS-BUILT	DAB	WHB		10/06/03
POR-PI-402	STORM WATER SYSTEM TANK FARM 1	1	UPDATED FOR 2007 SPCC	CWP	DAB	WHB	02/06/07
POR-PI-403	PROCESS DRAIN YSTEM TANK FARM 1						

NO.	REVISION DESCRIPTION	REV BY	CHK BY	APPR. BY	DATE

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ConocoPhillips Pipe Line Company
5528 N.W. DOANE ST.
PORTLAND, OREGON 97210

ALPHA ENGINEERS and CONSTRUCTORS, INC.
2929 NW 29TH AVENUE, PORTLAND, OR. 97210 Tel:(503)227-3317/Fax:(503)227-3244

DR. DAB	CONTRACTOR No.
DSGN. DAB	PROJECT NO. 2908
CK. WHB AP.	DWG. SCALE 1:1
DATE 06/13/95	PLOT SCALE

AECI PROJECT NUMBER 29-08

PORTLAND TERMINAL

TITLE:
PIPING & INSTRUMENTATION DIAGRAM
PROCESS DRAIN SYSTEM
TANK FARM 3

DWG. No. POR-PI-405 | SHEET 1 OF 1 | REV. No. 1

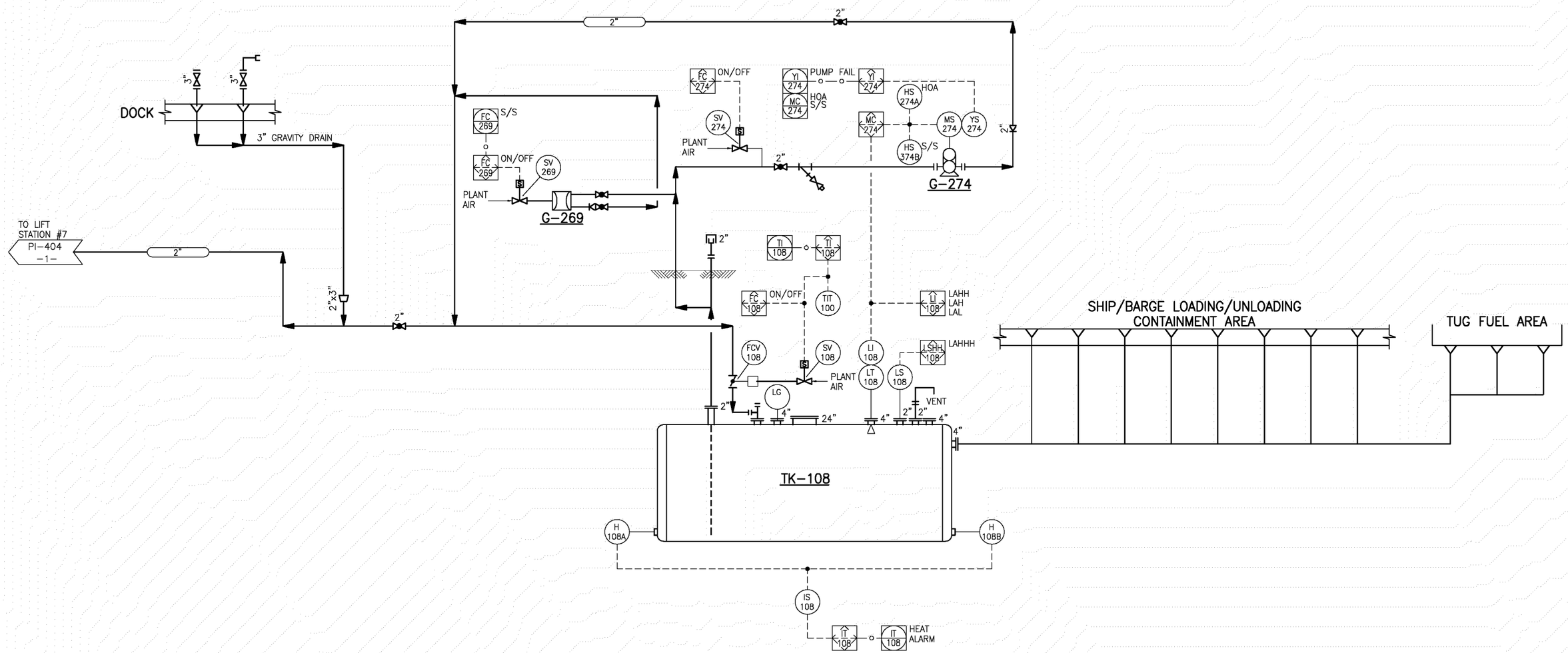
PORPI405-1.dwg <CPD: 2/6/2007 [Time: 2:03:38 PM]>

COP0017374

G-269
SECONDARY PUMP
MFG.: WARREN RUPP
TYPE: DOUBLE DIAPHRAGM
CAP.: 50 GPM @ 190' TDH
IMP.: DIAPHRAGM
MOTOR: AIR 100 PSI

G-274
PRIMARY PUMP
MFG.: BLACKMERE
TYPE: PD MODEL GX3E
CAP.: 60 GPM @ 190' TDH
IMP.: VANE
MOTOR: 7.5HP @ 1750RPM
460V, 3ø, 60HZ
MATL.: CAST IRON

TK-108
DOCK CONTAINMENT TANK
SIZE: 5'-0" DIA. x 13'-11 3/4" LG.
DESIGN SG.: 0.9 - 1.0
DESIGH TEMP.: AMBIENT
CAP.: 2,000 GALS.
TYPE: SINGLE WALL STAINLESS STEEL



DRAWING NO.	REFERENCE DRAWING	NO.	REVISION DESCRIPTION	REV BY	CHK BY	APPR. BY	DATE
POR-PI-404	PROCESS DRAIN SYSTEM TANK FARM 2	0	AS-BUILT	DAB	WHB		10/06/03
		1	UPDATED FOR 2007 SPCC	CWP	DAB	WHB	02/06/07

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ConocoPhillips Pipe Line Company
5528 N.W. DOANE ST.
PORTLAND, OREGON 97210

DR. DAB	CONTRACTOR No.
DSGN. DAB	PROJECT NO. 2908
CK. WHB AP.	DWG. SCALE 1:1
DATE 06/13/95	PLOT SCALE

PORPI406-1.dwg <CPD: 2/8/2007 [Time: 2:04:32 PM]>

ALPHA ENGINEERS and CONSTRUCTORS, INC.
2929 NW 29TH AVENUE, PORTLAND, OR. 97210 Tel:(503)227-3317/Fax:(503)227-3244

AECI PROJECT NUMBER 29-08

PORTLAND TERMINAL

TITLE:
PIPING & INSTRUMENTATION DIAGRAM
PROCESS WATER SYSTEM
DOCK AREA

DWG. No. POR-PI-406 | SHEET 1 OF 1 | REV. No. 1

COP0017375

Appendix D
Oil Spill Contingency Plan

This SPCC Plan will become part of the Facility Response & Oil Spill Contingency Plan.

Appendix E
Calculations

Tank Farm	Tank No.	Diameter	Height Shell	Volume (Gallons) (Based on Shell Height)	Barrels Shell
				(5.875 x D^2 x H)	Gals/42
1	**36**	16	14.583	21,933	522
1	**1471**	10.75	28.708	19,491	464
1	**2561**	78	46.583	1,665,039	39,644
1	**2579**	10.75	29.667	20,142	480
1	**2669**	48	35.25	477,144	11,361
1	**2713**	24	35	118,440	2,820
1	**2714**	24	35	118,440	2,820
1	**2783**	60	46.583	985,230	23,458
1	**2784**	78	40.833	1,459,514	34,750
1	**2917**	48	48	649,728	15,470
1	**3623**	10.75	30	20,368	485
1	**3639**	25	36	132,188	3,147
1	**4369**	10.75	30	20,368	485
1	**4441**	10.75	30	20,368	485
2	**2915**	120	42	3,553,200	84,600
2	**2916**	78	48	1,715,688	40,850
2	**2982**	48	36	487,296	11,602
2	**2983**	36	42	319,788	7,614
2	**3407**	120	40	3,384,000	80,571
2	**3408**	90	40	1,903,500	45,321
2	**3409**	70	40	1,151,500	27,417
2	**3410**	35	42	302,269	7,197
2	**3411**	35	42	302,269	7,197
2	**3412**	35	42	302,269	7,197
2	**3413**	35	42	302,269	7,197
2	**4223**	10.75	30	20,368	485
2	**4259**	35	32	230,300	5,483
2	**4327**	8.5	24	10,187	243
3	**3414**	30	42	222,075	5,288
3	**3415**	30	42	222,075	5,288
3	**3416**	30	42	222,075	5,288
3	**3417**	30	42	222,075	5,288
3	**3579**	120	40	3,384,000	80,571
3	**3739**	30	42	222,075	5,288
3	**3740**	35	42	302,269	7,197
3	**3761**	120	40	3,384,000	80,571
3	**4244**	10.75	30	20,368	485
3	**4245**	10.75	30	20,368	485
3	**4252**	50	32	470,000	11,190

Tank Farm	Tank No.	Diameter	Height Shell	Volume (Gallons) (Based on Shell Height)	Barrels Shell
				(5.875 x D^2 x H)	Gals/42
3	**4253**	50	32	470,000	11,190
3	**4254**	50	32	470,000	11,190
3	**4255**	50	32	470,000	11,190
3	**4256**	35	32	230,300	5,483
3	**4257**	25	16	58,750	1,399
3	**4258**	10.75	30	20,368	485
3	**4266**	10.75	30	20,368	485
3	**4302**	10.75	30	20,368	485
3	**4303**	10.75	30	20,368	485
3	**4305**	8.5	24	10,187	243
3	**4306**	30	42.208	223,175	5,314
3	**4318**	80	43.25	1,626,200	38,719
3	**4320**	15	32.208	42,575	1,014
3	**4321**	15	32.208	42,575	1,014
3	**4322**	15	32.208	42,575	1,014
3	**4323**	15	32.208	42,575	1,014
3	**F-103**	12.5	32	29,375	699
3	**F-104**	10.75	32	21,726	517
F Tk Farm	**4335**	10.75	30	20,368	485
F Tk Farm	**4336**	10.75	30	20,368	485
F Tk Farm	**4337**	10.75	30	20,368	485
F Tk Farm	**4436**	10.75	30	20,368	485
F Tk Farm	**4437**	10.75	30	20,368	485
F Tk Farm	**F-10**	10.75	10	6,789	162
F Tk Farm	**F-11**	10.75	10	6,789	162
F Tk Farm	**F-12**	10.75	10	6,789	162
Boiler Fuel Tank	**NA**	8	25	2,426	58
Boiler Fuel Tank				(Partial Fill)	
Upper Lube Cell	**3741**	10.75	30	20,368	485
Upper Lube Cell	**3742**	10.75	30	20,368	485
Upper Lube Cell	**3743**	10.75	30	20,368	485
Upper Lube Cell	**3744**	10.75	30	20,368	485
Upper Lube Cell	**3745**	10.75	30	20,368	485
Upper Lube Cell	**3746**	10.75	30	20,368	485
Upper Lube Cell	**3747**	10.75	30	20,368	485
Upper Lube Cell	**3757**	10.75	30	20,368	485
Upper Lube Cell	**3760**	10.75	30	20,368	485
Upper Lube Cell	**4191**	10.75	30	20,368	485

Tank Farm	Tank No.	Diameter	Height Shell	Volume (Gallons) (Based on Shell Height)	Barrels Shell
				(5.875 x D^2 x H)	Gals/42
Upper Lube Cell	**4192**	10.75	30	20,368	485
Upper Lube Cell	**4241**	10.75	30	20,368	485
Upper Lube Cell	**4242**	10.75	30	20,368	485
Upper Lube Cell	**4243**	10.75	30	20,368	485
Upper Lube Cell	**4281**	10.75	30	20,368	485
Upper Lube Cell	**4332**	10.75	30	20,368	485
Upper Lube Cell	**4333**	10.75	30	20,368	485
Upper Lube Cell	**4334**	10.75	30	20,368	485
Lower Lube Cell	**4300**	12.5	32	29,375	699
Lower Lube Cell	**4331**	12.5	32	29,375	699
Lower Lube Cell	**4388**	9.333	23.75	12,154	289
Lower Lube Cell	**4389**	9.333	23.75	12,154	289
Lower Lube Cell	**4390**	9.333	23.75	12,154	289
Lower Lube Cell	**4391**	9.333	23.75	12,154	289
Lower Lube Cell	**4392**	9.333	23.75	12,154	289
Lower Lube Cell	**4393**	9.333	23.75	12,154	289
Lower Lube Cell	**4394**	9.333	23.75	12,154	289
Lower Lube Cell	**4395**	9.333	23.75	12,154	289
Lower Lube Cell	**4397**	9.333	23.75	12,154	289
Lower Lube Cell	**4398**	9.333	23.75	12,154	289
Lower Lube Cell	**4399**	9.333	23.75	12,154	289
Lower Lube Cell	**4400**	9.333	23.75	12,154	289
Lower Lube Cell	**4401**	9.333	23.75	12,154	289
Lower Lube Cell	**4402**	9.333	23.75	12,154	289
Lower Lube Cell	**4403**	9.333	23.75	12,154	289
Lower Lube Cell	**4404**	9.333	23.75	12,154	289
Lower Lube Cell	**4405**	9.333	23.75	12,154	289
Lower Lube Cell	**4406**	9.333	23.75	12,154	289
Lower Lube Cell	**4407**	9.333	23.75	12,154	289
Lower Lube Cell	**4408**	9.333	23.75	12,154	289
Warehouse	**T-100**	12	7.8	6,599	157
Warehouse	**4338**	3.5	14	1,008	24
Warehouse	**4339**	3.5	14	1,008	24
Warehouse	**4340**	3.5	14	1,008	24
Warehouse	**4341**	3.5	14	1,008	24
Warehouse	**4342**	3.5	14	1,008	24
Warehouse	**4343**	3.5	14	1,008	24
Warehouse	**4344**	3.5	14	1,008	24
Warehouse	**4345**	3.5	14	1,008	24

Tank Farm	Tank No.	Diameter	Height Shell	Volume (Gallons) (Based on Shell Height)	Barrels Shell
				(5.875 x D^2 x H)	Gals/42
Warehouse	**4346**	3.5	14	1,008	24
Warehouse	**4347**	3.5	14	1,008	24
Warehouse	**F-8**	5.5	5.5	977	23
Warehouse	**F-9**	7.0	9	2,591	62
Warehouse	**F-13**	5.25	30	4,858	116
Warehouse	**F-14**	5.25	30	4,858	116

		Volumetric Capacity of Containment Area										Secondary Containment Capacity based U.F.C					Containment Capacity	
No.	Area	Total Contain-ment Area Note 2	Dike wall elev. minus ave. grade elev. Note 2	Volumetric Capacity of Contain-ment Area without Tanks, $V_{TF}= A_{TF} \times H_T \times 7.48$	Storage Tank Number	Storage Tank Shell Cap.	Storage Tank Dia.	Storage Tank Areas, $A_{TK}=\pi r^2 \times A_{LT}$ (largest tank)	Total Tank Area, A_{TKTOT} =sum (A_{TK})	Contain-ment area excluding Tanks area, $A_T = A_{TF} - A_{TKTOT}$	Volumetric Capacity of Contain-ment area excluding Tanks, $V_T = H_T \times A_T \times 7.48$	Capacity of Largest Tank Note 3	Rainfall 25 yr. storm, 24 hour period, V_{FT} = (3.7"/12) x (ATF) x 7.48 Note 1	20 min fire protection from Fire Dept. monitor V_{FM} = 20 min x 500 gpm Note 5	20 min fire protection from plant system, VFP =(0.10 / FT2) x A_{LT}) (20 min) (FT3 / 7.48)	Total Volumetric Cap. reqd. per UFC $V_C = V_{LT} + V_{RF} + V_{FM} + V_{FP}$	Containment Cap. includes area of largest tank V_{ACT} = ($A_T + A_{LT}$) x H_T x 7.48 Note 4	Surplus Capacity $Vs = V_{ACT} - V_C$
		(FT^2)	(FT)	(gals)		(gals)	(FT)	(FT^2)	(FT^2)	(FT^2)	(gals)	(gals)	(gals)	(gals)	(gals)	(gals)	(gals)	(gals)
		A_{TF}=	H_T=	V_{TF}=	I.D.	Cap=	Dia.	A_{TK} =	A_{TKTOT} =	A_T =	V_T =	V_{LT} =	V_{RF} =	V_{FM} =	V_{FP} =	V_C =	V_{ACT} =	V_S =
1.0	**Tank Farm No.1**			Largest Tank in TF. No.1 (A_{LT})														
		139,900	4.83	5,054,363	2,561	1,665,039	78.00	4,778	18,054	121,846	4,402,108	**1,665,039**	**322,656**	**10,000**	**n/a**	**1,997,695**	**4,574,743**	2,577,048
				Other Tanks in TF.No.1														
					36	21,933	16.00	201										
					1471	19,491	10.75	91										
					2579	20,142	10.75	91										
					2669	477,144	48.00	1,810										
					2713	118,440	24.00	452										
					2714	118,440	24.00	452										
					2783	985,230	60.00	2,827										
					2784	1,459,514	78.00	4,778										
					2917	649,728	48.00	1,810										
					3623	20,368	10.75	91										
					3639	132,188	25.00	491										
					4369	20,368	10.75	91										
					4441	20,368	10.75	91										

Notes:

1. Rainfall data based on Figure 28 Isopluvials of 25-yr 24-hr precipitation Map, Source U.S. Dept. of Comm. NOAA NWS, Office of Hydrology.
2. Based on survey and calculations by Norwest Engineering Dated March 1996.
3. See "Storage Tank Capacity" tables
4. Calculations subject to rounding error.
5. Fire protection flow rate of 20 min. at 500 gpm based on local Fire Department requirements.
6. Tank 3623 added (moved from Tank Farm 2)

		Volumetric Capacity of Containment Area										Secondary Containment Capacity based U.F.C					Containment Capacity	
No.	Area	Total Contain-ment Area Note 2	Dike wall elev. minus ave. grade elev. Note 2	Volumetric Capacity of Contain-ment Area without Tanks, $V_{TF}= A_{TF} \times H_T \times 7.48$	Storage Tank Number	Storage Tank Shell Cap.	Storage Tank Dia.	Storage Tank Areas, $A_{TK}=\pi r^2 \times A_{LT}$ (largest tank)	Total Tank Area, A_{TKTOT} =sum (A_{TK})	Contain-ment area excluding Tanks area, $A_T = A_{TF} - A_{TKTOT}$	Volumetric Capacity of Contain-ment area excluding Tanks, $V_T = H_T \times A_T \times 7.48$	Capacity of Largest Tank Note 3	Rainfall 25 yr. storm, 24 hour period, V_{FT} = (3.7"/12) x (ATF) x 7.48 Note 1	20 min fire protection from Fire Dept. monitor V_{FM} = 20 min x 500 gpm Note 5	20 min fire protection from plant system, VFP =(0.10 / FT2) x A_{LT}) (20 min) (FT3 / 7.48)	Total Volumetric Cap. reqd. per UFC $V_C = V_{LT} + V_{RF} + V_{FM} + V_{FP}$	Containment Cap. includes area of largest tank V_{ACT} = $(A_T + A_{LT}) \times H_T \times 7.48$ Note 4	Surplus Capacity $Vs = V_{ACT} - V_C$
		(FT^2)	(FT)	(gals)		(gals)	(FT)	(FT^2)	(FT^2)	(FT^2)	(gals)	(gals)	(gals)	(gals)	(gals)	(gals)	(gals)	(gals)
		A_{TF}=	H_T=	V_{TF}=	I.D.	Cap=	Dia.	A_{TK} =	A_{TKTOT} =	A_T =	V_T =	V_{LT} =	V_{RF} =	V_{FM} =	V_{FP} =	V_C =	V_{ACT} =	V_S =
2.0	**Tank Farm No.2**			Largest Tank in TF. No.2 (A_{LT})														
		156,600	5.00	5,856,840	2915	3,553,200	120.00	11,310	44,466	112,134	4,193,797	**3,553,200**	**361,172**	**10,000**	**3,024**	**3,927,396**	**4,616,781**	689,385
					Other Tanks in TF.No.2													
					2916	1,715,688	78.00	4,778										
					2982	487,296	48.00	1,810										
					2983	319,788	36.00	1,018										
					3407	3,384,000	120.00	11,310										
					3408	1,903,500	90.00	6,362										
					3409	1,151,500	70.00	3,848										
					3410	302,269	35.00	962										
					3411	302,269	35.00	35										
					3412	302,269	35.00	962										
					3413	302,269	35.00	962										
					4223	20,368	10.75	91										
					4259	230,300	35.00	962										
					4327	10,187	8.50	57										

Notes:

1. Rainfall data based on Figure 28 Isopluvials of 25-yr 24-hr precipitation Map, Source U.S. Dept. of Comm. NOAA NWS, Office of Hydrology.
2. Based on survey and calculations by Norwest Engineering Dated March 1996.
3. See "Storage Tank Capacity" tables.
4. Calculations subject to rounding error.
5. Fire protection flow rate of 20 min. at 500 gpm based on local Fire Department requirements.
6. Tank 3623 moved to Tank Farm 1.

		Volumetric Capacity of Containment Area										Secondary Containment Capacity based U.F.C					Containment Capacity	
No.	Area	Total Containment Area Note 2	Dike wall elev. minus ave. grade elev. Note 2	Volumetric Capacity of Containment Area without Tanks, $V_{TF} = A_{TF} \times H_T \times 7.48$	Storage Tank Number	Storage Tank Shell Cap.	Storage Tank Dia.	Storage Tank Areas, $A_{TK} = \pi r^2 \times A_{LT}$ (largest tank)	Total Tank Area, A_{TKTOT} =sum (A_{TK})	Containment area excluding Tanks area, $A_T = A_{TF} - A_{TKTOT}$	Volumetric Capacity of Containment area excluding Tanks, $V_T = H_T \times A_T \times 7.48$	Capacity of Largest Tank Note 3	Rainfall 25 yr. storm, 24 hour period, V_{FT} = (3.7"/12) x (ATF) x 7.48 Note 1	20 min fire protection from Fire Dept. monitor V_{FM} = 20 min x 500 gpm Note 5	20 min fire protection from plant system, VFP =(0.10 / FT2) x A_{LT}) (20 min) (FT3 / 7.48)	Total Volumetric Cap. reqd. per UFC $V_C = V_{LT} + V_{RF} + V_{FM} + V_{FP}$	Containment Cap. includes area of largest tank $V_{ACT} = (A_T + A_{LT}) \times H_T \times 7.48$ Note 4	Surplus Capacity $Vs = V_{ACT} - V_C$
		(FT^2)	(FT)	(gals)		(gals)	(FT)	(FT^2)	(FT^2)	(FT^2)	(gals)	(gals)	(gals)	(gals)	(gals)	(gals)	(gals)	(gals)
		A_{TF}=	H_T=	V_{TF}=	I.D.	Cap=	Dia.	A_{TK} =	A_{TKTOT} =	A_T =	V_T =	V_{LT} =	V_{RF} =	V_{FM} =	V_{FP} =	V_C =	V_{ACT} =	V_S =
3.0	**Tank Farm No.3**			Largest Tank in TF. No.3														
		160,000	4.50	5,385,600	3579	3,384,000	120.00	11,310	43,678	116,322	3,915,402	**3,384,000**	**369,013**	**10,000**	**3,024**	**3,766,037**	**4,296,087**	530,050
				Other Tanks in TF.No.3 (A_{LT})														
					3414	222,075	30.00	707										
					3415	222,075	30.00	707										
					3416	222,075	30.00	707										
					3417	222,075	30.00	707										
					3739	222,075	30.00	707										
					3740	302,269	35.00	962										
					3761	3,384,000	120.00	11,310										
					4244	20,368	10.75	91										
					4245	20,368	10.75	91										
					4252	470,000	50.00	1,963										
					4253	470,000	50.00	1,963										
					4254	470,000	50.00	1,963										
					4255	470,000	50.00	1,963										
					4256	230,300	35.00	962										
					4257	58,750	25.00	491										
					4258	20,368	10.75	91										
					4266	20,368	10.75	91										
					4302	20,368	10.75	91										
					4303	20,368	10.75	91										
					4305	10,187	8.50	57										
					4306	223,175	30.00	707										
					4318	1,626,200	80.00	5,027										
					4320	42,575	15.00	177										
					4321	42,575	15.00	177										
					4322	42,575	15.00	177										
					4323	42,575	15.00	177										
					F103	29,375	12.50	123										
					F104	21,726	10.75	91										

Notes:

1. Rainfall data based on Figure 28 Isopluvials of 25-yr 24-hr precipitation Map, Source U.S. Dept. of Comm. NOAA NWS, Office of Hydrology.
2. Based on survey and calculations by Norwest Engineering Dated March 1996.
3. See "Storage Tank Capacity" tables.
4. Calculations subject to rounding error.
5. Fire protection flow rate of 20 min. at 500 gpm based on local Fire Department requirements.

		Volumetric Capacity of Containment Area										Secondary Containment Capacity based U.F.C					Containment Capacity	
No.	Area	Total Containment Area Note 2	Dike wall elev. minus ave. grade elev. Note 2	Volumetric Capacity of Containment Area without Tanks, $V_{TF}= A_{TF} \times H_T \times 7.48$	Storage Tank Number	Storage Tank Shell Cap.	Storage Tank Dia.	Storage Tank Areas, $A_{TK}=\pi r^2 \times A_{LT}$ (largest tank)	Total Tank Area, A_{TKTOT} =sum (A_{TK})	Containment area excluding Tanks area, $A_T = A_{TF} - A_{TKTOT}$	Volumetric Capacity of Containment area excluding Tanks, $V_T = H_T \times A_T \times 7.48$	Capacity of Largest Tank Note 3	Rainfall 25 yr. storm, 24 hour period, V_{FT} = (3.7"/12) x (ATF) x 7.48 Note 1	20 min fire protection from Fire Dept. monitor V_{FM} = 20 min x 500 gpm Note 5	20 min fire protection from plant system, VFP =(0.10 / FT2) x A_{LT}) (20 min) (FT3 / 7.48)	Total Volumetric Cap. reqd. per UFC $V_C = V_{LT} + V_{RF} + V_{FM} + V_{FP}$	Containment Cap. includes area of largest tank V_{ACT} = $(A_T + A_{LT}) \times H_T \times 7.48$ Note 4	Surplus Capacity $Vs = V_{ACT} - V_C$
		(FT^2)	(FT)	(gals)		(gals)	(FT)	(FT^2)	(FT^2)	(FT^2)	(gals)	(gals)	(gals)	(gals)	(gals)	(gals)	(gals)	(gals)
		A_{TF}=	H_T=	V_{TF}=	I.D.	Cap=	Dia.	A_{TK} =	A_{TKTOT} =	A_T =	V_T =	V_{LT} =	V_{RF} =	V_{FM} =	V_{FP} =	V_C =	V_{ACT} =	V_S =
4.0	**Tank Farm No.4 (Lower Lube Cell)**				Largest Tank in TF. No.4													
		4,645	2.00	69,489	4300	29,375	12.50	123	1,604	3,041	45,493	**29,375**	**10,713**	**10,000**	**N/A**	**50,088**	**47,329**	
		240	1.50	26,928												Pump Area	**26,928**	
					Other Tanks in TF.No.4											Note 6	**74,257**	24,854
					4331	29,375	12.50	123										
					4388	12,154	9.30	68										
					4389	12,154	9.30	68										
					4390	12,154	9.30	68										
					4391	12,154	9.30	68										
					4392	12,154	9.30	68										
					4393	12,154	9.30	68										
					4394	12,154	9.30	68										
					4395	12,154	9.30	68										
					4397	12,154	9.30	68										
					4398	12,154	9.30	68										
					4399	12,154	9.30	68										
					4400	12,154	9.30	68										
					4401	12,154	9.30	68										
					4402	12,154	9.30	68										
					4403	12,154	9.30	68										
					4404	12,154	9.30	68										
					4405	12,154	9.30	68										
					4406	12,154	9.30	68										
					4407	12,154	9.30	68										
					4408	12,154	9.30	68										

Notes:

1. Rainfall data based on Figure 28 Isopluvials of 25-yr 24-hr precipitation Map, Source U.S. Dept. of Comm. NOAA NWS, Office of Hydrology.
2. Based on survey and calculations by Norwest Engineering Dated March 1996.
3. See "Storage Tank Capacity" tables.
4. Calculations subject to rounding error.
5. Containment of fire protection volume is not required for Class IIB Liquids with flash point > 200 deg. F, NFPA 30 Figure 4-4.2.6.

		Volumetric Capacity of Containment Area										Secondary Containment Capacity based U.F.C					Containment Capacity	
No.	Area	Total Containment Area Note 2	Dike wall elev. minus ave. grade elev. Note 2	Volumetric Capacity of Containment Area without Tanks, $V_{TF}= A_{TF} \times H_T \times 7.48$	Storage Tank Number	Storage Tank Shell Cap.	Storage Tank Dia.	Storage Tank Areas, $A_{TK}=\pi r^2 \times A_{LT}$ (largest tank)	Total Tank Area, A_{TKTOT} =sum (A_{TK})	Containment area excluding Tanks area, $A_T = A_{TF} - A_{TKTOT}$	Volumetric Capacity of Containment area excluding Tanks, $V_T = H_T \times A_T \times 7.48$	Capacity of Largest Tank Note 3	Rainfall 25 yr. storm, 24 hour period, V_{FT} = (3.7"/12) x (ATF) x 7.48 Note 1	20 min fire protection from Fire Dept. monitor V_{FM} = 20 min x 500 gpm Note 5	20 min fire protection from plant system, VFP =(0.10 / FT2) x A_{LT}) (20 min) (FT3 / 7.48)	Total Volumetric Cap. reqd. per UFC $V_C = V_{LT} + V_{RF} + V_{FM} + V_{FP}$	Containment Cap. includes area of largest tank V_{ACT} = $(A_T + A_{LT}) \times H_T \times 7.48$ Note 4	Surplus Capacity $Vs = V_{ACT} - V_C$
		(FT^2)	(FT)	(gals)		(gals)	(FT)	(FT^2)	(FT^2)	(FT^2)	(gals)	(gals)	(gals)	(gals)	(gals)	(gals)	(gals)	(gals)
		A_{TF}=	H_T=	V_{TF}=	I.D.	Cap=	Dia.	A_{TK} =	A_{TKTOT} =	A_T =	V_T =	V_{LT} =	V_{RF} =	V_{FM} =	V_{FP} =	V_C =	V_{ACT} =	V_S =
5.0	**Tank Farm No.5 (Upper Lube Cell)**				Largest Tank in TF No. 5 (A_{LT})													
		5,318	1.50	59,668	3745	20,368	10.75	91	1,634	3,684	41,338	**20,368**	**12,265**	**N/A**	**N/A**	**32,633**	**42,356**	9,723
					Other Tanks in TF.No.5													
					3741	20,368	10.75	91										
					3742	20,368	10.75	91										
					3743	20,368	10.75	91										
					3744	20,368	10.75	91										
					3746	20,368	10.75	91										
					3747	20,368	10.75	91										
					3757	20,368	10.75	91										
					3760	20,368	10.75	91										
					4191	20,368	10.75	91										
					4192	20,368	10.75	91										
					4241	20,368	10.75	91										
					4242	20,368	10.75	91										
					4243	20,368	10.75	91										
					4281	20,368	10.75	91										
					4332	20,368	10.75	91										
					4333	20,368	10.75	91										
					4334	20,368	10.75	91										

Notes:

1. Rainfall data based on Figure 28 Isopluvials of 25-yr 24-hr precipitation Map, Source U.S. Dept. of Comm. NOAA NWS, Office of Hydrology.
2. Based on survey and calculations by Norwest Engineering Dated March 1996.
3. See "Storage Tank Capacity" tables.
4. Calculations subject to rounding error.
5. Containment of fire protection volume is not required for Class IIB Liquids with flash point > 200 deg. F, NFPA 30 Figure 4-4.2.6.

		Volumetric Capacity of Containment Area										Secondary Containment Capacity based U.F.C					Containment Capacity	
No.	Area	Total Containment Area Note 2	Dike wall elev. minus ave. grade elev. Note 2	Volumetric Capacity of Containment Area without Tanks, $V_{TF}= A_{TF} \times H_T \times 7.48$	Storage Tank Number	Storage Tank Shell Cap.	Storage Tank Dia.	Storage Tank Areas, $A_{TK}=\pi r^2 \times A_{LT}$ (largest tank)	Total Tank Area, A_{TKTOT} =sum (A_{TK})	Containment area excluding Tanks area, $A_T = A_{TF} - A_{TKTOT}$	Volumetric Capacity of Containment area excluding Tanks, $V_T = H_T \times A_T \times 7.48$	Capacity of Largest Tank Note 3	Rainfall 25 yr. storm, 24 hour period, V_{FT} = (3.7"/12) x (ATF) x 7.48 Note 1	20 min fire protection from Fire Dept. monitor V_{FM} = 20 min x 500 gpm Note 5	20 min fire protection from plant system, VFP =(0.10 / FT2) x A_{LT}) (20 min) (FT3 / 7.48)	Total Volumetric Cap. reqd. per UFC $V_C = V_{LT} + V_{RF} + V_{FM} + V_{FP}$	Containment Cap. includes area of largest tank V_{ACT} = ($A_T + A_{LT}$) x H_T x 7.48 Note 4	Surplus Capacity $Vs = V_{ACT} - V_C$
		(FT^2)	(FT)	(gals)		(gals)	(FT)	(FT^2)	(FT^2)	(FT^2)	(gals)	(gals)	(gals)	(gals)	(gals)	(gals)	(gals)	(gals)
		A_{TF}=	H_T=	V_{TF}=	I.D.	Cap=	Dia.	A_{TK} =	A_{TKTOT} =	A_T =	V_T =	V_{LT} =	V_{RF} =	V_{FM} =	V_{FP} =	V_C =	V_{ACT} =	V_S =
6.0	**Tank Farm No.6 (F-Tank Farm)**				Largest Tank in TF No. 6 (A_{LT})													
		2,008	1.59	23,882	4335	20,368	10.75	34	102	1,906	22,668	**20,368**	**4,631**	**N/A**	**N/A**	**24,999**	**23,073**	
				Other Tanks in TF.No.6												Ethanol Pit	**30,000**	
					4336	20,368	10.75	34	Note: Tanks 4335, 4336, & 4437 have sloped bottoms							Note 6.	**53,073**	**28,457**
					4337	20,368	10.75	34										
					4436		10.75	n/a	Tank Bottom above top of dike wall									
					4437		10.75	n/a	Tank Bottom above top of dike wall									
					F10		10.75	n/a	Tank Bottom above top of dike wall									
					F11		10.75	n/a	Tank Bottom above top of dike wall									
					F12		10.75	n/a	Tank Bottom above top of dike wall									

Notes:

1. Rainfall data based on Figure 28 Isopluvials of 25-yr 24-hr precipitation Map, Source U.S. Dept. of Comm. NOAA NWS, Office of Hydrology.
2. Based on survey and calculations by Norwest Engineering Dated March 1996; revised by Tosco November 1997.
3. See "Storage Tank Capacity" tables.
4. Calculations subject to rounding error.
5. Containment of fire protection volume is not required for Class IIB Liquids with flash point > 200 deg. F, NFPA 30 Figure 4-4.2.6.
6. Additional capacity is avaliable by closing the post indicator valve at the corner of the tank farm which diverts the flow into the 20,000 gallon ethanol pit.

		Volumetric Capacity of Containment Area										Secondary Containment Capacity based U.F.C					Containment Capacity	
No.	Area	Total Contain-ment Area Note 2	Dike wall elev. minus ave. grade elev. Note 2	Volumetric Capacity of Contain-ment Area without Tanks, $V_{TF}= A_{TF} \times H_T \times 7.48$	Storage Tank Number	Storage Tank Shell Cap.	Storage Tank Dia.	Storage Tank Areas, $A_{TK}=\pi r^2 \times A_{LT}$ (largest tank)	Total Tank Area, A_{TKTOT} =sum (A_{TK})	Contain-ment area excluding Tanks area, $A_T = A_{TF} - A_{TKTOT}$	Volumetric Capacity of Contain-ment area excluding Tanks, $V_T = H_T \times A_T \times 7.48$	Capacity of Largest Tank Note 3	Rainfall 25 yr. storm, 24 hour period, V_{FT} = (3.7"/12) x (ATF) x 7.48 Note 1	20 min fire protection from Fire Dept. monitor V_{FM} = 20 min x 500 gpm Note 5	20 min fire protection from plant system, VFP =(0.10 / FT2) x A_{LT}) (20 min) (FT3 / 7.48)	Total Volumetric Cap. reqd. per UFC $V_C = V_{LT} + V_{RF} + V_{FM} + V_{FP}$	Containment Cap. includes area of largest tank V_{ACT} = $(A_T + A_{LT}) \times H_T \times 7.48$ Note 4	Surplus Capacity $Vs = V_{ACT} - V_C$
		(FT^2)	(FT)	(gals)		(gals)	(FT)	(FT^2)	(FT^2)	(FT^2)	(gals)	(gals)	(gals)	(gals)	(gals)	(gals)	(gals)	(gals)
		A_{TF}=	H_T=	V_{TF}=	I.D.	Cap=	Dia.	A_{TK} =	A_{TKTOT} =	A_T =	V_T =	V_{LT} =	V_{RF} =	V_{FM} =	V_{FP} =	V_C =	V_{ACT} =	V_S =
7.0	**Warehouse**			Largest Tank in Warehouse (A_{LT})														
		33,830	0.17	43,018	T-100	6,599	12.00	113	209	33,621	42,752	**6,599**	**N/A**	**10,000**	**N/A**	**16,599**	**42,896**	26,297
					Other Tanks in TF.No.1													
					4338	1,008	3.50	10										
					4339	1,008	3.50	10										
					4340	1,008	3.50	10										
					4341	1,008	3.50	10										
					4342	1,008	3.50	10										
					4343	1,008	3.50	10										
					4344	1,008	3.50	10										
					4345	1,008	3.50	10										
					4346	1,008	3.50	10										
					4347	1,008	3.50	10										
		Note: Tanks F-8/9 & F-13/14 (u/g) not applicable																

Notes:

1. Rainfall N/A, warehouse is covered.
2. Based on survey and calculations by Alpha Engineers and Constructors September 1999.
3. See "Storage Tank Capacity" tables.
4. Calculations subject to rounding error.
5. Fire protection flow rate of 20 min. at 500 gpm based on local Fire Department requirements.

		Volumetric Capacity of Containment Area										Secondary Containment Capacity based U.F.C					Containment Capacity	
No.	Area	Total Contain-ment Area Note 2	Dike wall elev. minus ave. grade elev. Note 2	Volumetric Capacity of Contain-ment Area without Tanks, $V_{TF}= A_{TF} \times H_T \times 7.48$	Storage Tank Number	Storage Tank Shell Cap.	Storage Tank Dia.	Storage Tank Areas, $A_{TK}=\pi r^2 \times A_{LT}$ (largest tank)	Total Tank Area, A_{TKTOT} =sum (A_{TK})	Contain-ment area excluding Tanks area, $A_T = A_{T\,F} - A_{TKTOT}$	Volumetric Capacity of Contain-ment area excluding Tanks, $V_T = H_T \times A_T \times 7.48$	Capacity of Largest Tank Note 3	Rainfall 25 yr. storm, 24 hour period, V_{FT} = (3.7"/12) x (ATF) x 7.48 Note 1	20 min fire protection from Fire Dept. monitor V_{FM} = 20 min x 500 gpm Note 5	20 min fire protection from plant system, VFP =(0.10 / FT2) x A_{LT}) (20 min) (FT3 / 7.48)	Total Volumetric Cap. reqd. per UFC $V_C = V_{LT} + V_{RF} + V_{FM} + V_{FP}$	Containment Cap. includes area of largest tank V_{ACT} = $(A_T + A_{LT}) \times H_T \times 7.48$ Note 4	Surplus Capacity $Vs = V_{ACT} - V_C$
		(FT^2)	(FT)	(gals)		(gals)	(FT)	(FT^2)	(FT^2)	(FT^2)	(gals)	(gals)	(gals)	(gals)	(gals)	(gals)	(gals)	(gals)
		A_{TF}=	H_T=	V_{TF}=	I.D.	Cap=	Dia.	A_{TK} =	A_{TKTOT} =	A_T =	V_T =	V_{LT} =	V_{RF} =	V_{FM} =	V_{FP} =	V_C =	V_{ACT} =	V_S =
8.0	**Boiler Fuel Tank**				Largest Tank													
		225	1.75	2,945	N/A	9,399	8'	50	0	225	2,945	**9,399**	**519**	**N/A**	**N/A**	**9,918**	**2,945**	see note 6
					Other Tanks (None)													

Notes:

1. Rainfall data based on Figure 28 Isopluvials of 25-yr 24-hr precipitation Map, Source U.S. Dept. of Comm. NOAA NWS, Office of Hydrology.
2. Based on survey and calculations by Alpha Engineers and Constructors April 2009.
3. See "Storage Tank Capacity" tables.
4. Calculations subject to rounding error.
5. Containment of fire protection volume is not required for Class IIB Liquids with flash point > 200 deg. F, NFPA 30 Figure 4-4.2.6.
6. Limit tank to partial fill = 2945 gal.(available containment) -519 gal. (25 year storm rainfall) = 2426 gals.

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Mr. Mike Romero
Oregon Department of Environmental Quality
Northwest Region
2020 Southwest 4th Street, Suite 400
Portland, Oregon 97201

ENVIRONMENT

Subject:
Documentation of Construction Activities
60-Inch Storm Sewer Cure-In-Place Pipe (CIPP) Installation Report
ConocoPhillips Willbridge Terminal
5888 NW Front Avenue
Portland, Oregon

Date:
September 30, 2009

Contact:
Grant V. Sprick

Phone:
503.220.8201 x1104

Email:
Grant.Sprick@arcadis-us.com

Our ref:
B0045452.0006.00600
B0046601.0001.00600

Dear Mr. Romero:

ARCADIS, on behalf of Chevron Environmental Management Company (CEMC) and ConocoPhillips (CP), performed lining of a 60-inch diameter City of Portland (City) concrete storm sewer located at the ConocoPhillips Willbridge Terminal (the Site), 5888 NW Front Avenue in Portland, Oregon from July 1, 2009 to August 7, 2009 (Figures 1 and 2). The objective for this source control measure was to reduce the potential for infiltration of hydrocarbon-impacted groundwater and non-aqueous phase liquids (NAPL) into the 60-inch diameter storm sewer. The purpose of this report is to document the tasks performed during the period of construction activities.

Construction activities were performed in accordance (except where noted in this report) with the work plan (*Cure-in-Place Pipe Lining Work Plan for 60-inch Storm Sewer Discharging at City of Portland Outfall #22 to Willamette River* by Stantec Consulting Corporation (Stantec), dated August 14, 2008 [Attachment A]. ARCADIS served as the general contractor. Insituform performed pipe lining activities.

This documentation letter has been organized into the following sections:

- Background
- Permits and Regulatory Framework
- Pre-Construction Activities
- Construction Activities

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- Operation and Maintenance
- Conclusions

BACKGROUND

The Site is located at 5888 Northwest Front Avenue in Portland, Oregon (Figure 1). The 60-inch-diameter concrete storm sewer is owned by the City and is located at river mile 7.5 beneath CP property southeast of the CP marine dock. City Outfall #22 is the terminus of this storm sewer. The 60-inch storm sewer runs for approximately 365 linear feet between City manhole AAM077 (MH77) and City Outfall #22 at the Willamette River. The site overview map is shown in Figure 2.

CP and Chevron Products Company (Chevron) are two of three parties (the third is Kinder Morgan Liquid Terminals, LLC) which together comprise the Willbridge Terminals Group (WTG [ECSI No. 25]). The WTG was formed to facilitate a joint response to the Oregon Department of Environmental Quality (DEQ) requirement for completing a Remedial Investigation/Feasibility Study (RI/FS) of their terminals. A Consent Order (DEQ No. WMCSR-NWR-94-06) between the DEQ and the WTG was established in 1994.

Stormwater runoff from the upland areas of the CP and Chevron terminals ultimately is discharged at City Outfall #22. Based on a historical pattern of recurring oily sheens at City Outfall #22 and at the adjacent discharge point of a former City 27-inch-diameter wood stave storm sewer, the WTG has implemented a number of source control measures (SCMs) to minimize the potential for oily sheen discharges to the Willamette River from their shared riverfront properties. Previous storm water related SCMs specific to CP and Chevron include:

- installation of a sheet pile cutoff wall around the backfill of the 60-inch-diameter storm sewer at City Outfall #22 in 2001

- installation of a sheet pile cutoff wall across the former location of the 27-inch-diameter wood stave storm sewer and nearby Holbrook Slough in 2006 and installation of recovery wells along the river bank between the Ordinary Low Water Line (OLWL) and Ordinary High Water Line (OHWL)

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- Ongoing replacement or lining of various storm sewer lines on the CP and Chevron properties

- Routine inspection and cleanout of storm water catch basins

During the past three years, oily sheen discharges have been observed intermittently at City Outfall #22 from January to March 2007, January to April 2008, and from January to May 2009. Based on historical fingerprint analytical data, hydrocarbon-impacted groundwater with oily sheen was believed to be entering the 60-inch-diameter storm sewer bedding from the surrounding subsurface soils, and then entering the concrete pipe at open joints or through cracks at the joints. The new SCM of lining the interior of the 60-inch-diameter concrete storm sewer along with continued operation of the sheet pile cutoff wall and recovery systems is expected to close this migration pathway.

PERMITS AND REGULATORY CORRESPONDENCE

ARCADIS obtained applicable permits before construction activities were initiated at the Site. The following organizations were contacted to obtain the necessary permits or approval:

City of Portland - Bureau of Environmental Services

ARCADIS performed construction activities under the City of Portland, Bureau of Environmental Services (BES) Public Improvement Permit (Job No. 8919). The BES-approved permit was obtained by ARCADIS on February 23, 2009. However, additional clarifications and work plans were submitted to BES through July 2009. The Public Improvement Permit and supporting submittals (1 through 14) are included in this report as Attachment B. Submittal 6, the construction schedule, was not included in Attachment B because BES did not respond to its submittal.

Oregon Department of Environmental Quality

A plan documenting the procedures for managing water generated during the CIPP lining project, dated July 6, 2009 was sent to the DEQ for review. The DEQ provided approval of the water management plan via email correspondence dated July 7,

2009 (Romero, pers. comm. 2009a). The Outfall 22 Lining - Water Management Plan (ARCADIS 2009) is included as Attachment C.

United States Coast Guard

A site security plan revision request outlining the security measures that would be maintained during the CIPP lining project, dated June 11, 2009, was sent to the United States Coast Guard for review. The United States Coast Guard issued an approval letter of the site security plan revision request dated June 25, 2009. The revised site security plan and the United States Coast Guard approval letter are included as Attachment D.

PRE-CONSTRUCTION ACTIVITIES

Pre-construction activities were completed before the installation of the CIPP lining in City Outfall #22 began. The following pre-construction activities were performed:

- Site-specific environmental health and safety plan
- Underground utility clearance
- Waste classification
- Site security fencing installation
- Well modifications
- Gravel road installation
- Water containment structure installation
- Diversion piping installation
- Pipe cleaning activities

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Site-Specific Environmental Health and Safety Plan

Prior to the implementation of any fieldwork, a site-specific health and safety plan (HASP) was developed in accordance with Occupational Safety and Health Administration's Hazardous Waste Operations and Emergency Response regulation 29 CFR 1910.120. The HASP includes Job Loss Analyses for specific tasks performed as part of the CIPP lining in City Outfall #22. ARCADIS employees, subcontractors, and site visitors were required to read and acknowledge the conditions and procedures explained in the HASP.

Underground Utility Clearance

A utility one-call notification was placed on June 11, 2009. In addition, a private utility locator service (Locates Down Under) was contacted to locate potential unidentified utilities not identified from the utility one call. In addition to the utility one call and private utility locator survey, McCall Oil terminal personnel notified ARCADIS field personnel of the presence of two 10-inch steel product lines running parallel to the southern boundary of the Site, approximately three feet north of the boundary line. These lines were visually identified using a vacuum truck on July 7, 2009. The lines are approximately three feet below ground surface (bgs). Prior to construction traffic entering the Site, steel plates were placed at the entrance of the site to protect subsurface petroleum pipelines beneath the work area from heavy equipment loads.

Waste Classification

On October 17, 2008, Stratus Corporation, Inc. (Stratus) under the oversight of Stantec, used a vacuum truck to excavate to the top of the MH77 vault. The excavation was performed as reconnaissance for the installation of the CIPP lining to understand the construction of the MH77 vault. Stantec collected three soil samples from the excavation that were analyzed for total metals by the United States Environmental Protection Agency (USEPA) Method 6000/7000 series, polycyclic aromatic hydrocarbons (PAH) by the USEPA Method 8270 SIM, volatile organic compounds (VOCs) by the USEPA Method 8021B, TCLP benzene by the USEPA Method 1311/8260B, and TCLP lead by the USEPA Method 6000/7000 series. Lab analytical results are presented in Appendix E. The analytical data were used to generate a non-hazardous waste profile sheet and permit to dispose of non-hazardous materials, both of which are presented in Appendix F. At the conclusion of

reconnaissance activities, the excavation was backfilled with the original excavated earth materials.

Site Security Fencing Installation

To facilitate maneuverability of heavy equipment used during the installation of the CIPP liner, the pre-existing security fencing was removed. Temporary security fencing and gate were installed that met Marine Security (MARSEC) code requirements in accordance with the site security plan approved by the United States Coast Guard.

Well Modifications

Wells located near MH77 were modified with DEQ approval into flush mount wells to provide maneuverability for heavy equipment used during CIPP lining activities (Romero, pers. comm. 2009b). In addition, traffic-rated heavy-duty vault boxes were installed to sustain overhead pressure from heavy equipment without being damaged. Upon completion of construction activities, the measuring point elevations of the modified wells will be resurveyed by a State of Oregon licensed surveyor.

Gravel Road Installation

A gravel road was installed on July 8, 2009 between Front Avenue and the work area to accommodate heavy equipment used during the installation of the CIPP liner. The gravel road consists of a geotextile overlain with approximately 12-inch thick gravel layer. A total of 643.37 tons of crushed rock gravel was used to grade the Site. The approximate location of the gravel road is shown in Figure 2.

Water Containment Structure Installation

A ¼-inch-thick steel cofferdam was installed at City Outfall #22 to provide a dry working area during CIPP lining and curing by keeping water from the Willamette River out of the pipe, and to allow containment of water generated during the line cleaning. Elevations of the Willamette River observed prior to construction activities indicated that the Willamette River elevation had the potential to submerge City Outfall #22 during construction activities. The approximate location of the cofferdam is shown in Figure 2. Following curing of the CIPP and post video-logging activities,

the cofferdam was removed on July 31, 2009. Activities associated with the cofferdam are presented in the BES-approved scope of work entitled, "*Outfall #22 Pipe Lining*" by ARCADIS, dated June 29, 2009 (Attachment B, Submittal 9).

Diversion Piping Installation

A water diversion system was installed to divert runoff water from entering MH77 and the 60-inch-diameter storm sewer during lining and curing of the liner. Both a 30-inch-diameter and a 48-inch-diameter storm sewer transport storm water runoff from upgradient sources into the 60-inch storm sewer. During construction activities, a flow-through type inflatable plug was fitted to the ends of the 30-inch and 48-inch diameter pipes, connected to two centrifugal pumps, and routed into hard piping that discharged into the riprap area at City Outfall #22. Sandbags were placed at the discharge point to mitigate erosion. The water diversion system was approved by BES as part of Public Improvement Permit (Job No. 8919) which is included in this report as Attachment B, Submittal 4.

On July 28, 2009, shortly after the installation and inflation of the plugs, the 48-inch diameter plug ruptured and failed. Due to the loss of the plug and the minute amount of water flowing through the 48-inch storm sewer, a dam was constructed in the sewer to replace the 48-inch plug. The dam was constructed using sandbags to block approximately 75 percent of the sewer, with the 6-inch suction line of the diversion pumping system up gradient of the dam to remove pooling water. This system was approved by the onsite BES inspector and supervising engineer. As a precaution, a 2-inch submersible pump was placed in the vault to de-water leakage from the dam.

Pipe Cleaning Activities

On July 12 and July 29, 2009, pipe cleaning activities were conducted in the 60-inch storm sewer. The storm sewer was jet washed using a self-propelled jet washer supplied by Insituform. The line was then inspected using a remote-controlled camera, from City Outfall #22 to the MH77 vault. Waste water generated during cleaning activities was contained in the cofferdam, pumped into the onsite storage tank, and transferred into the onsite groundwater treatment system. Approximately 18,000 gallons of water was treated and discharged into the City sanitary sewer system.

COP0017396

Following the cleaning and video inspection of the 60-inch storm sewer, a confined space entry was executed to remove approximately 20 bolts protruding from the inside of the storm sewer. The bolts were cut flush to the storm sewer walls as a precautionary measure because they could have potentially punctured the CIPP line during installation.

CONSTRUCTION ACTIVITIES

Construction activities included site preparation activities at MH77, repair activities at MH77, CIPP lining activities in the 60-inch storm sewer, and site restoration activities. Construction progress reports, detailing and documenting construction activities have been included as Attachment G.

MH77 Preparation

Manhole preparation was performed to create an adequate working space from which to access the 60-inch storm sewer. Site preparation activities performed at MH77 included excavation and shoring, soil erosion control, disposal of excavated soil, saw cutting activities, and manhole casing and vault top removal.

Excavation and Shoring

An approximately 18-foot square by 9-foot deep trench was excavated above the vault at the intersection of the MH77 riser and 60-inch-diameter concrete storm sewer. The sides of the excavation were secured with slide-rail shoring. Excavated soil was directly loaded into trucks and trailers for transport to the offsite landfill.

Ambient air monitoring was conducted during site excavation activities to maintain a safe working environment for site workers. Ambient air monitoring was performed using a QRAE-brand multi-meter to detect VOC, hydrogen sulfide (H_2S), carbon dioxide (CO_2), oxygen (O_2) and lower explosive limit (LEL). In addition, a DustTrak-brand particulate meter was used to monitor air-borne particulates potentially generated during excavation activities. Action levels for each monitored constituent were established and listed in the ARCADIS Health and Safety Plan. Action levels were not exceeded for either ambient air monitoring or dust monitoring activities during the course of the project.

Soil Erosion Control

During excavation activities straw waddles were staked into place along the site boundaries in areas where the surface was not covered by gravel or steel plates in accordance with the BES permit. Throughout the project, water was sprayed on the areas with sandy surfaces for dust suppression.

Disposal of Excavated Soil

Excavated material was directly loaded at the excavation area into trucks and transported offsite for disposal at the Waste Management Landfill Facility in Hillsboro, Oregon. During the project, approximately 187.15 tons of non-hazardous material was loaded and delivered to the landfill. The table below summarizes waste disposal activities for the project. The material was transported and disposed of under disposal permits obtained prior to construction activities. Disposal permits and waste profile forms are included as Attachment F.

Table 1. Waste Disposal Loads and Quantities

Date	Number of Loads	Tons
07/14/09	5	158.72
07/15/09	1	15.09
07/16/09	1	11.53
08/04/09	1	1.81
Total	8	187.15

Manhole Riser Removal

Upon completion of shoring installation and excavation activities at MH77, the pre-existing manhole lid and risers were removed. The manhole lid and risers were removed by gently breaking the grout seal between the risers with the excavator bucket. Pick holes were then drilled into the sides of each riser using a rotary hammer concrete drill. Three sections of riser were removed using rated chains

attached to the excavator bucket and stored onsite pending transport to a concrete recycling facility. A fourth riser, approximately one foot in height, was removed from the vault lid manually using a sledge hammer. The one foot piece of riser was cemented to the vault top with rebar holding it in place. Pieces of concrete that fell into the vault were removed by hand.

Saw Cutting Activities and Vault Top Removal

On July 16 and 17, 2009, Accurate Concrete Cutting was onsite to perform saw cutting activities on the MH77 vault top. Two length-wise cuts were made on the vault top prior to L-iron supports being secured in place with eye-bolts which were set into the vault top with high strength epoxy, and allowed to cure overnight. These cuts were made approximately 13-inches from the vault edge. The sections of vault top were then lifted from the vault by connecting to the excavator bucket using rated chains and the eye bolts in the L-irons. The two pieces of concrete removed from the vault lid totaled 8.58 tons, and were transported offsite to a concrete recycling facility.

MH 77 Repair

New Manhole Casing and Vault Top Installation

The new MH77 vault top was installed on July 20, 2009. The pre-fabricated vault top was lifted into place by a crane from Interstate Crane, operated by a certified crane operator. Two strips of mastic seal were laid down along the vault edge prior to the vault top being placed. Once the top was in place, doweling activities were initiated. Dowel holes were pre-drilled in the vault lid and a rotary hammer was used to drill holes into the vault walls. High-strength epoxy was then poured into each dowel hole followed by a ¾-inch piece of rebar. Additional epoxy was added until all of the dowel holes were filled.

Materials and procedures used in the vault top installation were as per the approved project plan. The installation and doweling process was observed by BES inspectors, and no issues were identified.

On July 21, 2009, new MH77 risers were installed. Two riser rings were installed with strips of mastic seal between each piece. The risers were set into place using rated lifting chains and an excavator. Prior to the riser installation, a new ladder was

installed inside the vault beneath the new risers, as per the project plan. After CIPP liner installation was complete, the new vault lid and manhole cover were installed.

The vault top, lid and risers were subsequently grouted and sealed according to BES specifications after the CIPP liner installation was completed. The ladder for the old vault riser was removed, and all of the joints, seams, and exposed rebar were sealed with quick-setting concrete grout.

Backfill of Excavation

Backfilling activities took place on July 22, 2009. Four truck loads of sand from Glacier Materials (105.70 tons) were delivered to the site and placed into the excavation area using an excavator. During backfilling a 24-inch poly vinyl chloride (PVC) riser was placed on top of the vault top that extended above the ground surface. The PVC riser was used as a temporary conduit for piping associated with the water diversion system. The piping connected the plugs on the 30-inch-diameter and 48-inch-diameter storm sewers to water pumps located on the ground surface. The temporary 24-inch PVC conduit was removed and backfilled after the water diversion system was demobilized. Backfill reached approximately 6-inches below the top of the new MH77 risers, to facilitate the CIPP installation. The slide rail shoring system was removed and temporary grading activities were performed around the new MH77 risers.

Cure In-Place Pipe Installation

The CIPP installation took place in the early morning on July 29, 2009. Due to unexpected high day-time temperatures, liner installation activities took place at night. Prior to the installation, the sandbag dam and pumps in the 30-inch and 48-inch storm lines were put in place. The 60-inch storm sewer was jet washed and video inspected, with BES observation and approval. Installation activities commenced at approximately 6 AM. The liner was installed without complication by Insituform. BES inspectors were onsite during the entire installation process. Water generated during the cleaning of the 60-inch storm sewer, and during liner installation was captured in the cofferdam and later pumped into the groundwater treatment system for treatment and discharge.

The liner was cured by injecting steam at temperatures of 170 degrees Fahrenheit into the liner for approximately 3.5 hours. The curing process occurred between approximately 12 PM and 4 PM on July 29, 2009. The liner was allowed to cool in place after the steam injection for approximately 2 hours. BES inspectors were onsite and observed the curing process. On July 30, 2009, Insituform returned to the site to cut the liner ends and demobilize their equipment. The ends of the liner were cement grouted to the 60-inch storm sewer, and covered with a layer of high strength epoxy to create a seal around the liner ends.

After the installation was complete and the ends were cut from the liner, a post-installation storm sewer camera survey was conducted. BES approved the installation.

Site Restoration Activities and Other Visible Features

After CIPP liner installation operations were completed, the Site was cleared of equipment and supplies. The onsite storage tank was drained to the groundwater treatment system, cleaned and removed from the site. Final grading and compacting activities took place around the new MH77 lid. In addition, the temporary security fencing was removed and replaced with new permanent security fencing and gate that meets MARSEC security code requirements. The approximate locations of the original, temporary, and new security fence are shown in Figure 2.

Diversion Piping Removal

Upon completion of lining activities, the diversion pumping system was demobilized and removed from the site. Pumps and piping were removed and the PVC temporary piping conduit was removed and backfilled.

Water Containment Structure Removal

Upon completion of CIPP lining activities, the cofferdam was removed from City Outfall #22. Using an excavator, the cofferdam was unstrapped from the 60 inch storm sewer and removed from its position. Upon removal minor amounts of chipping occurred on the outside of the 60 inch storm sewer. No damage occurred to the CIPP liner. The concrete that chipped off did not compromise the integrity of the 60 inch storm sewer or the liner, and was repaired with concrete grout immediately.

COP0017401

Riprap at the outfall was returned to its original positions at the outfall after cofferdam removal.

CONCLUSION

ARCADIS has completed the construction activities associated with the lining of a 60-inch-diameter City of Portland concrete storm sewer located at the ConocoPhillips Willbridge Terminal. Deviations from the work plan (Stantec 2008) have been described in this document and were made after consultation with appropriate BES and DEQ representatives. Site construction photos are presented in Attachment H Pre- and post-video-logging surveys are presented in Attachment I.

If you have any questions regarding this documentation of ARCADIS construction activities letter, or require any additional information, please contact Grant V. Sprick at your convenience.

Sincerely,

ARCADIS

REGISTERED PROFESSIONAL ENGINEER
78790PE
OREGON
June 30, 2008
GRANT V. SPRICK
EXPIRES: 6/30/10

Grant V. Sprick, P.E.
Senior Project Manager

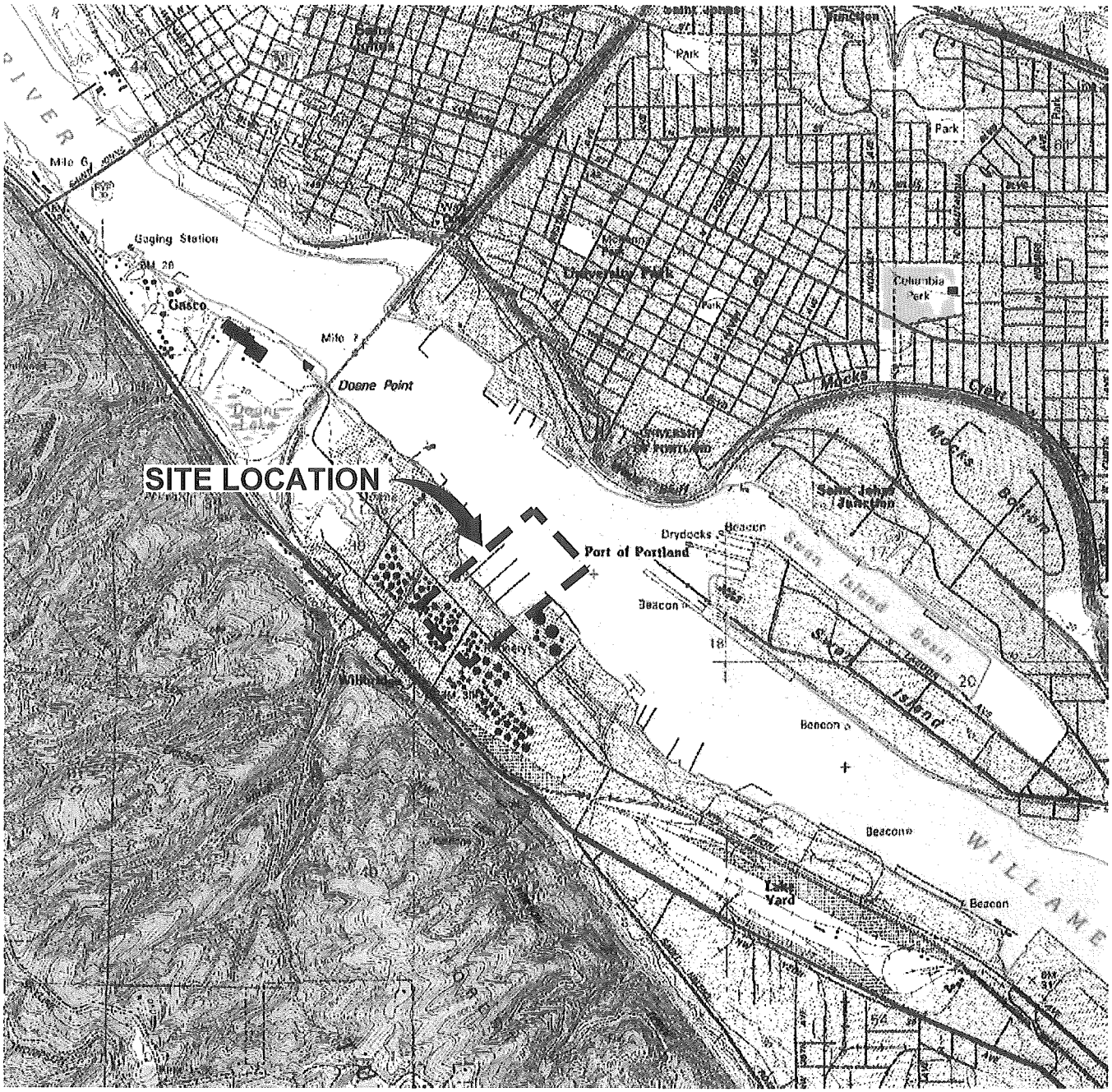
Matthew W. Bowman
Senior Project Manager

Enclosures:
CD containing Attachments A through I
Figures 1 and 2

Copies:

Brett Hunter, Chevron Environmental Management Company
Erik Durshpek, City of Portland – Bureau of Environmental Services
Myron Smith, ConocoPhillips
Tom Lyons, ConocoPhillips

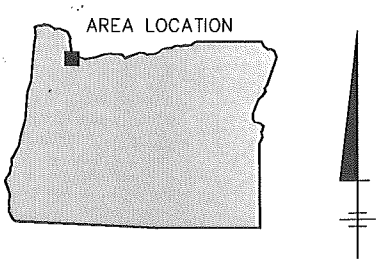
Figures



REFERENCE: BASE MAP USGS QUADS., 7.5 MIN. SERIES (TOPOGRAPHIC) – PORTLAND, OREGON. AND LINNTON, OREGON.

0 2000' 4000'

GRAPHIC SCALE



OREGON

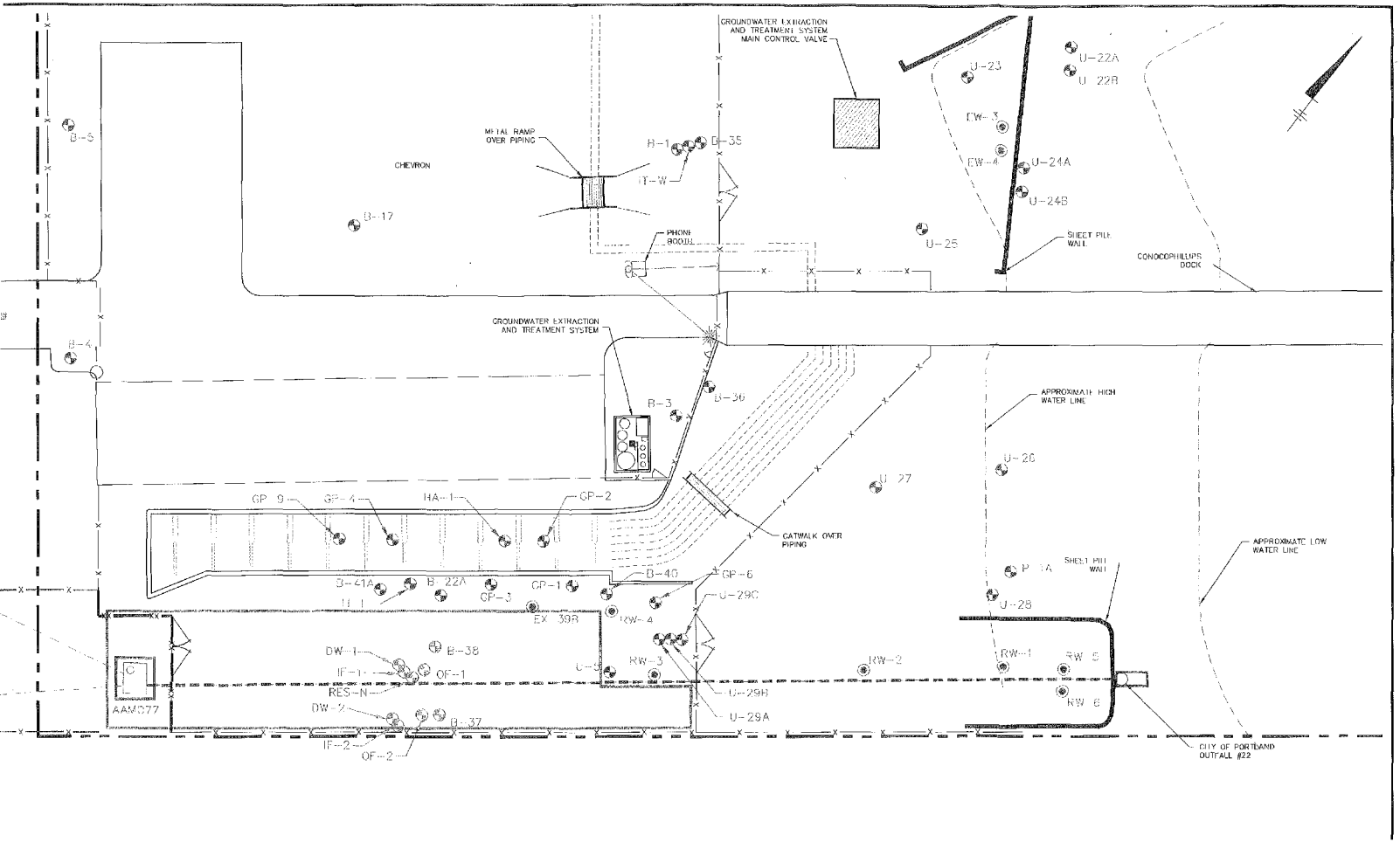
CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY AND CONOCO PHILLIPS
WILLBRIDGE TERMINAL, No. 354972
60-INCH STORM SEWER CIPP INSTALLATION REPORT

SITE LOCATION MAP

ARCADIS

FIGURE 1

CITY:(Reqd) DIV/GROU...(Reqd) DB:(Reqd) LD:(Opt) PIC:(Opt) PM:(Reqd) TM:(Opt) LYR:(Opt)ON=*;OFF=*REF*
G:\PROJECTS\Chevron MBU\1001868 Willbridge Terminal\ConocoPhillips Terminal\CAD Data\Figures.dwg LAYOUT: SITE LOCATION SAVED: 9/22/2009 2:12 PM ACADVER: 17.0S (LMS TECH) PAGESETUP: —PLOTSTYLETABLE: PLTFULL.CTB PLOTTED: 9/29/2009 1:54 PM BY: D...SON, CHRISTOPHER
XREFS: 46601X01
IMAGES: PROJECTNAME: —
GoogleMap.jpg
GoogleMap_End.jpg
GoogleMap_Start.jpg
Linnton_045122E7_geo.tif
Portland_045122E6_geo.tif


GROUNDWATER EXTRACTION AND TREATMENT SYSTEM MAIN CONTROL VALVE
U-23
U-22A
U-22B
EW-3
EW-4
U-24A
U-24B
B-5
METAL RAMP OVER PIPING
B-1
B-35
IT-W
CHEVRON
B-17
PHONE BOOTH
U-25
SHEET PILE WALL
CONOCOPHILLIPS DOCK
GROUNDWATER EXTRACTION AND TREATMENT SYSTEM
B-4
B-3
B-36
APPROXIMATE HIGH WATER LINE
U-26
U-27
GP-9
GP-4
HA-1
GP-2
CATWALK OVER PIPING
APPROXIMATE LOW WATER LINE
SHEET PILE WALL
P-1A
B-40
GP-6
B-41A
B-22A
GP-3
GP-1
U-29C
U-28
EX-39R
RW-4
DW-1
B-38
IF-1
OF-1
RES-N
RW-3
RW-2
RW-1
RW-5
RW-6
AAM077
DW-2
B-37
U-29H
U-29A
IF-2
OF-2
CITY OF PORTLAND OUTFALL #22

COP0017405

Incident ID: 110203

Short Description: Portland Product TerminaL - Pilot Regulator Gasoline Drip [E]

Responsible Dept\Unit: Terminals : Terminals - West Coast Division : Portland Product Terminal

Incident Type: Incident

Status : Closed

Potential Risk Rating: I - Low

General

Responsible Supervisor:	THOMAS LYONS
High Learning Value Event Status:	Not Reviewed for HLVE
Location:	
Specific Location:	Tank Farm #2, Olympic Header
Date Occurred: (mm/dd/yyyy)	10/7/2009 9:00:00 AM
Date Reported: (mm/dd/yyyy)	10/7/2009 2:00:00 PM
Date Entered:	10/7/2009 3:32:05 PM (GMT-07:00)
REPORTEDBY:	THOMAS LYONS
Incident Description:	On October 7, 2009, at 09:30 AM, an Operator discovered a gasoline drip from the weep hole on the small pilot valve on the Olympic overpressure relief valve. Diaphragm had failed. Operator put a pan under valve. Cleaned up 10 gallons of stained soil. Estimated product on the soil was about 1 quart. All appropriate notifications were made.
Weather:	Clear
Lighting:	Day
Address:	5528 NW Doane Avenue
City:	Portland
Country:	United States
State/Province:	Oregon
Zip/Postal Code:	97210
Incident Flags:	Hydrocarbon Loss of Containment
Entered By:	LYONS, THOMAS
Immediate Actions Taken:	Operator put a pan under valve. Cleaned up 10 gallons of stained soil. Estimated product on the soil was about 1 quart. All appropriate notifications were made.

Sub Types

Check All That Apply: General: Environmental (e.g.: Spills, Releases, Odor Complaints, Unplanned Releases, Permit Exceedences, RV Operations, Process Upsets)

Responsibilities

Workflow Supervisor *

Name Response

THOMAS LYONS

Incident Owner *

Name	Response
THOMAS LYONS	

Creator *

Name	Response
THOMAS LYONS	

Notes

Notes: No Data is Available

Equipment

Equipment

Equipment Involved	Critical	Equipment Number/Description
Relief and Vent Systems: Pressure Relief Valve	NO	11497669

People

Contractor Involvement : No Data is Available

		Consequence Number					
Name	Employee Type	Injury / Illness	Property	Transportation	Security	Quality	Environmental
CUSTER, COLLEEN	Employee						18788 Open View

Witnesses

Name	Employee,Contractor,or Other	Phone
Jim Teske	Employee	503-248-1565
Tom Lyons	Employee	503-248-1572

Consequence

Incident Consequences

ID	Type	Description	Party Involved	Status
18788 Open View	Environmental	...	CUSTER, COLLEEN G	Open

Pending Consequences : No Data is Available

Investigation

Investigations: No Data is Available

Action Items

Action Items: No Data is Available

Summary

Equipment:	1
Employees:	1
Contractors:	None
Witnesses:	2
Investigations:	None
Recordable:	No
Last Updated Date :	11/10/2009 12:35:13 PM (GMT-08:00)

Consequence — Injury/Illness: None

COP0017407

Incident ID: 110347

Short Description: Biodiesel Absorbent Pads Smoldering

Responsible Dept\Unit: Terminals : Terminals - West Coast Division : Portland Product Terminal

Status: Closed

Incident Type: Near Miss

Potential Risk Rating: II - Medium

General

Responsible Supervisor: THOMAS LYONS

High Learning Value Event Status: Not Reviewed for HLVE

Location:

Specific Location: Maintenance Garage

Date Occurred: (mm/dd/yyyy) 10/8/2009 10:30:00 AM

Date Reported: (mm/dd/yyyy) 10/9/2009 11:28:00 AM

Date Entered: 10/9/2009 12:44:39 PM (GMT-07:00)

REPORTEDBY: THOMAS LYONS

Incident Description: On October 8th, at about 10:30 AM, a Terminal Maintenance Technician noticed that absorbent pads were smoldering in a containment storage drum. He doused the smoldering absorbent pads with a nearby water hose. The Terminal's waste removal vendor came and transferred the absorbent pads offsite for disposal.

Weather: Clear

Lighting: Day

Address: 5528 NW Doane Avenue

City: Portland

Country: United States

State/Province: Oregon

Zip/Postal Code: 97210

Incident Flags: Unsafe Condition, Practice, or Hazard

Entered By: LYONS, THOMAS

Immediate Actions Taken: He doused the smoldering absorbent pads with a nearby water hose. The Terminal's waste removal vendor came and transferred the absorbent pads offsite for disposal.

Sub Types

Check All That Apply: General: Property Damage / Loss (e.g.: Fires, Explosions, Loss of Well Control, Business Interruptions, Abnormal Operations, Production Loss / Reduction)

Responsibilities

Workflow Supervisor *

Name	Response
THOMAS LYONS	

Incident Owner *

Name	Response
THOMAS LYONS	

Creator *

Name	Response
THOMAS LYONS	

Notes

Notes: No Data is Available

Equipment

Equipment

Equipment Involved	Critical	Equipment Number/Description
Shop Equipment: Shop Equipment	NO	

People

Contractor Involvement : No Data is Available

Consequence Number : No Data is Available

Witnesses

Name	Employee,Contractor,or Other	Phone
Tom Lyons	Employee	503-248-1572
Wagar Carey	Employee	503-248-1559

Consequence

Incident Consequences:
No Data is Available

Pending Consequences

ID	Type	Description	Party Involved
Recommended	Property Damage/Loss	Property Damage/Loss Consequence	

Investigation

Investigations: No Data is Available

Action Items

Action Items: No Data is Available

Summary

Equipment:	1
Employees:	None
Contractors:	None
Witnesses:	2
Investigations:	None
Recordable:	No
Last Updated Date :	11/13/2009 9:22:04 AM (GMT-08:00)

Consequence

Injury/Illness:	None
Environmental:	None
Community:	None
Business Interruption:	None
Public Notification:	None
Process Safety Event:	None

COP0017409

Oregon
Theodore Kulongoski, Governor

Department of Environmental Quality
Northwest Region Portland Office
2020 SW 4th Avenue, Suite 400
Portland, OR 97201-4987
(503) 229-5263
FAX (503) 229-6945
TTY (503) 229-5471

October 19, 2009

Jessica Eckart, R.G.
Delta Consultants
4640 SW Macadam Avenue, Ste. 110
Portland, OR 97239

AOC # 00922

Re: Feasibility Scoping Document Addendum, Willbridge Terminals, Portland, OR
ECSI #1549

Dear Jessica:

The Oregon Department of Environmental Quality (DEQ) has completed its review of the Feasibility Scoping Document Addendum, Willbridge Terminals, Portland, OR dated July 27, 2009. Delta Environmental prepared on behalf of the Willbridge Terminal Group (WTG) consisting of Chevron, Conoco Phillips and Kinder Morgan. DEQ has the following comments:

General Comments

1. DEQ approves the request by the WTG to prepare separate site-specific Source Control Evaluations (SCE) and Feasibility Study (FS) reports.

2. DEQ agrees that the risk assessment presented in the RI needs to be updated. The update should include the vapor intrusion pathways and consider new information gained from additional groundwater investigations, soil sampling and spills/releases that have occurred since the RI was submitted.

3. The Scoping Addendum sometimes confuses the SCE and FS processes. The SCE process is intended to evaluate and address Portland Harbor-specific migration and exposure pathways, and to develop and implement source control measures as needed while meeting Portland Harbor Source Control schedule requirements. The FS process addresses unacceptable risks identified in project risk assessments (including non-Portland Harbor exposure pathways related to direct contact, inhalation, etc.) and results in a final remedy. Each facility should prepare one report that includes a section for the FS and a section for the SCE.

4. Work Plans for each facility SCE and FS report should be prepared and submitted to DEQ. Guidelines for SCE preparation presented in the EPA/DEQ Joint Source Control Strategy should be followed. DEQ's 1998 Guidance for Conducting Feasibility Studies should be followed when preparing the FS work plan.

   The FS work plan, at a minimum, should include the following:

- Summary of unacceptable risks, including figures showing the extent of various media that require remediation. Although some of this information was provided in the WTG 9/20/05 letter. The FS will need to be updated for each facility based on subsequent additional investigations and the revisited risk assessment.
- Remedial Action Objectives (RAOs) should consider new information obtained since the RI was completed.
- Final Hot Spot Evaluation.
- List of likely remedial alternatives that will be evaluated; the 9/20/05 FS scoping document only listed general response actions.
- Brief summary of DEQ's FS process that acknowledges components such as protectiveness, balancing factors and comparative evaluations.

Specific Comments

1. Ground Water to Surface Water Pathway section, page 3. The conclusion that PAHs detected above SLVs in seep samples are not due to operations at Kinder Morgan and Chevron is premature and is not supported by sufficient evidence.

2. Hot Spot Evaluation, page 4. SPH having been determined to be a hotspot during the RI doesn't necessarily translate to it being a groundwater hotspot. The determination of hotspots in groundwater follows a slightly different approach than for media other than groundwater. Contamination in groundwater is a hot spot if it has a significant adverse impact to the beneficial water use. For Portland Harbor, the beneficial water use is ambient water quality levels (AWQL) and maximum contaminant levels (MCLs) for drinking water.

   The RI likely determined the SPH as a hotspot for media other than groundwater. All hotspot determinations should be revisited during the FS following the process outlined in the guidance and should consider the results from the amended risk assessment. The JSCS does not use the term hotspot and instead utilizes a weight-of-evidence approach for significant exceedences above SLVs. All members of the WTG should review the FS guidance section on hotspots so that hotspots are determined in a consistent manner in each site-specific FS.

3. WTG Independent Path Forward. This section is a bit confusing in its attempt to explain the path forward because of the co-mingling of the FS and SCE processes. The WTG should review the specific requirements of the FS and SCE process further in an effort to better refine what will need to be addressed in each site-specific work plan and report. DEQ can meet with the WTG to discuss each contaminant migration and exposure pathway and provide better guidance on how to proceed in a manner that will thoroughly address what is necessary for a complete SCE and FS.

4. WTG Independent Path Forward, page 7. DEQ is concerned with the lack of a specified consultant for Conoco Phillips for all the tasks other than the storm water SCE. Conoco should clearly identify who will be performing critical FS and SCE tasks in this phase of

the project so that work can commence upon receipt of this letter. Completion of SCE and Source Control Measure (SCMs) is the top priority at all Portland Harbor upland sites.

Please submit site-specific FS and SCE work plans within 30 days of receipt of this letter. DEQ can meet with the WTG terminal group to discuss these comments and help development of the site specific work plans. Please contact me at Romero.Mike@deq.state.or.us or (503) 229-5563 should you have any questions.

Sincerely,

Michael Romero, Project Manager
NWR Cleanup Section

cc: Grant Sprick, ARCADIS
Ken Thiessen, DEQ
Tim Browning, Delta
Rob Trudinger, Kinder Morgan
Myron Smith, Conoco Philips
Brett Hunter, Chevron
Rick Fetterly, Stantec
ECSI File #1549

DEQ-DC1

Stantec Consulting Corporation
7730 Southwest Mohawk Street
Tualatin, OR 97062
Tel: (503) 691-2030
Fax: (503) 692-7074

Stantec

November 24, 2009

Mr. Michael Romero
Oregon Department of Environmental Quality
NW Region Cleanup Section
2020 SW Fourth Avenue, Suite 400
Portland, Oregon 97201

Reference: **Stormwater Sampling Report**
ConocoPhillips Portland Terminal
5528 NW Doane Avenue, Portland, Oregon 97210

Dear Mr. Romero:

Stantec Consulting Corporation (Stantec) on behalf of the ConocoPhillips Company (ConocoPhillips) is pleased to present this Stormwater Sampling Report which describes four stormwater sampling events directed by the Oregon Department of Environmental Quality (ODEQ) under guidance from the Joint Source Control Strategy (JSCS) developed jointly by ODEQ and U.S. Environmental Protection Agency (USEPA) in December 2005.

BACKGROUND

The ConocoPhillips Portland Terminal (the Site) is located at 5528 NW Doane Avenue in Portland, Multnomah County, Oregon (Figure 1—Site Location Map). The approximate 30-acre Site is situated on the west bank of the Willamette River at River Mile (RM) 7.5, within the boundaries of the Portland Harbor Superfund Site study area. The main terminal area has an estimated 870,000 square feet of surface area; and an additional approximately 117,000 square feet of property along the Willamette River, which is leased from the Port of Portland for a marine dock fuel loading/unloading facility.

The Portland Harbor Superfund Site is an approximate 12-mile stretch of the Willamette River extending from downtown Portland to the confluence of the Columbia River that has been heavily developed by various industries over the past century. The ConocoPhillips Terminal is situated within this stretch of the Willamette River and is part of the Willbridge Bulk Fuels Facility Area.

Chevron Products Company (Chevron), Unocal Oil Company (Unocal), and Shell Oil Products Company (Shell) were required by the ODEQ to perform a Remedial Investigation (RI) and Feasibility Study (FS) for the Willbridge Bulk Fuels Area as part of Consent Order WMCSR-NWR-94-06. The Consent Order (CO) was signed by ODEQ, Chevron, Shell, and Unocal on April 6, 1994. When the CO was signed, the Willbridge Facility was composed of the Chevron Willbridge Light Products Terminal, the Unocal Portland Terminal, and the Shell Willbridge Plant. Following signing of the CO, control of the Shell Willbridge Plant was transferred to GATX Terminals Corporation (GATX) by sale agreement on November 23, 1994, with Shell retaining a portion of the environmental responsibility for the terminal. On March 1, 2003, the GATX terminal was sold to Kinder Morgan Liquid Terminals LLC (KMLT). Control of the Unocal Portland Terminal was transferred to Tosco Refining Company (Tosco) by sale agreement on March 31, 1997, with Tosco assuming remedial responsibility for the Terminal and Unocal retaining environmental liability. Subsequently, the Tosco facility was purchased by Phillips Petroleum Company on September 18, 2001. Phillips Petroleum Company and Conoco, Inc. subsequently merged on September 1, 2002 forming ConocoPhillips, which is now responsible for the remediation of the former Unocal terminal. ConocoPhillips, Chevron, and KMLT are working together collectively referred to as Willbridge Terminals Group (WTG) to complete the RI/FS in their portion of the Willbridge Bulk Fuels Facility Area.

Reference: ConocoPhillips Portland Terminal Stormwater Sampling Report

During December 2000, the Portland Harbor was added to the National Priorities List (NPL). The final NPL listing specifies that USEPA Region IX is the lead agency for the in-water portion of the remedial investigation and feasibility studies, while ODEQ is the lead agency for the upland portions (including the WTG area).

Consistent with the JSCS developed jointly by ODEQ and USEPA in December 2005, identification and mitigation of upland sources of contamination to the Willamette River and associated aquatic sediments is necessary to facilitate future cleanup actions in the Portland Harbor. As the lead agency for upland sources, ODEQ requested each WTG company to conduct stormwater sampling in accordance with established ODEQ guidelines to identify potential chemicals of interest (COI) that may be entering the Willamette River and associated sediments via stormwater runoff. This report documents four stormwater sampling events conducted by Stantec between October 2008 and May 2009.

SITE SETTING

As noted above, the Portland Terminal occupies approximately 30 acres on the west bank of the Willamette River at RM 7.5, within the boundaries of the Portland Harbor Superfund Site study area. Overall, the topography gently slopes toward the Willamette River. The main Terminal area has an estimated 870,000 square feet of surface area; an estimated 25-30 percent is paved or otherwise impervious to water. In addition, the Terminal leases approximately 117,000 square feet of property along the Willamette River from the Port of Portland for the marine dock; an estimated 20 percent of this area is paved or otherwise impervious.

The Terminal's petroleum product storage consists of 102 active and 15 out-of-service aboveground storage tanks (ASTs) situated in six tank farms; three refined product/additive tank farms (i.e., Tank Farm 1, Tank Farm 2, and Tank Farm 3) and three lube oil tank farms (Lower Lube Cell, Upper Lube Cell, and Tank Farm F). These features are shown on the site plan included as Figure 2.

SEPTEMBER 2007 CATCH BASIN SAMPLING

Stormwater sampling locations and COI were determined largely through the results of Catch Basin Sampling conducted by Delta Consultants (Delta) in September 2007. A brief description of Delta's 2007 Catch Basin Sampling Event follows.

Catch basin sediment sampling was performed at the Terminal by Delta on September 24 through 27, 2007. Delta's sampling team collected composite sediment samples from 12 catch basins. All of the sediment samples were analyzed for the following COI using the designated analytical methods and method reporting limits (MRLs). The analytes included gasoline-range organics (GRO), diesel-range organics (DRO), oil-range organics (ORO), volatile organic compounds (VOCs), polynuclear aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), organochlorine pesticides, and metals.

Laboratory results from the catch basin sediment sampling were compared against specific stormwater sediment Screening Level Values (SLVs) presented in Table 3-1 of the Portland Harbor JSCS, which was revised on July 16, 2007 (JSCS, 2005b – See Attachment A). Exceedances of SLVs in one or more catch basin sediment samples included: 1) all PAHs except benzo(k)fluoranthene; 2) many toxic metals (arsenic, cadmium, chromium, copper, lead, mercury, nickel, and zinc); 3) certain phthalates (diethyl phthalate, di-n-butyl phthalate, and bis(2-ethylhexyl)phthalate; and 4) certain organochlorine pesticides (gamma-BHC, chlordane, dieldrin, heptachlor, heptachlor epoxide, 4,4'-DDD, 4,4'-DDE, and 4,4'-DDT). Additionally, PCB Arochlors were detected in two catch basin sediment samples at concentrations below their respective SLVs, but the total PCB concentrations in each sample exceeded the bioaccumulation SLV. Due to matrix interference, the organochlorine pesticides MRLs were raised above the SLVs for catch basin samples

collected from most areas of the Terminal, including the Truck Load Rack, Tank Farm 1, Tank Farm 3, Warehouse Loading Dock, and the catch basin near the boiler house.

STORMWATER SAMPLING LOCATIONS

The following locations were selected for potential stormwater sampling based on their locations relative to designated drainage areas on site.

Drainage Area	Storm Water Sample Location
Truck Load Rack	Manhole 12
Warehouse Loading Dock	Manhole X
Boiler House Area	Manhole X
Tank Farm 1	Manhole 12
Tank Farm 2	Manhole 3
River Dock Area	WR-368, WR-370, and WR-012 (Metals only roof drain outfall)

The stormwater sampling locations are shown on the site map in Figure 2.

COI AND ANALYSES SELECTED

Stormwater samples collected were analyzed for the following COI and analyses based on the results of the September 2007 catch basin sampling event and subsequent feedback from ODEQ.

Analysis	Method
GRO	Northwest Method NWTPH-Gx
DRO	Northwest Method NWTPH-Dx
ORO	Northwest Method NWTPH-Dx
TOC	EPA Method 9060M
VOCs	EPA Method 8260
PAHs	EPA Method 8270M SIM
PCBs	EPA Method 8082
Phthalates	EPA Method 8270-SIM
Total Metals	EPA Methods 6000/7000 Series
Pesticides	EPA Method 8081A

STORMWATER SAMPLING EVENTS AND CRITERIA

Four stormwater sampling events were completed on October 31, 2008, March 16, 2009, April 28, 2009, and May 12, 2009. Storm event criteria was defined by: 1) an antecedent "dry" period of at least 24-hours, during which less than 0.1-inch of precipitation fell at the Terminal; 2) minimum predicted rainfall volume that was greater than 0.2-inch; and 3) expected storm duration was at least three hours. Qualifying storms were predicted using web sites from the National Weather Service (NWS) and the National Oceanic and Atmospheric Administration (NOAA). Rainfall totals were determined using an electronic rain gauge installed

at the Portland Terminal site and through use of the United States Geological Service (USGS) maintained Yeon Avenue Rain Gauge located approximately 1-mile from the terminal. Hourly rainfall quantities from the Yeon Avenue Rain Gauge for each storm event are presented in Table 1.

Please note that qualifying rainfall events did not necessarily result in viable stormwater sampling conditions at each listed stormwater sampling point. During each stormwater sampling event, priority was given to the beach drains, sampling points WR-368, WR-370, and WR-012 which are the stormwater sampling points directly in contact with the Willamette River. The beach drains were sampled first during each event followed by the manholes containing an adequate quantity of groundwater. In several events, even though rainfall was sufficient to define a qualifying event, an insufficient quantity of water was present at some manholes to allow for sampling for the required analyses. Manhole 3 was dry for all four stormwater sampling events; therefore, it could not be sampled during any of the stormwater events.

STORMWATER SAMPLING RESULTS

All grab stormwater samples collected were placed in a cooler on ice and submitted to Test America Laboratories of Portland, Oregon for the analyses. Complete laboratory results are presented in Attachment B. A description of the results for each category of COI follows:

Gasoline Range Organics (GRO)

GRO was below detectable limits for each stormwater sample point during each of the four stormwater sampling events. JSCS Table 3-1 SLV has not been prescribed by ODEQ for GRO. Laboratory results for GRO are presented in Table 2.

Diesel Range Organics (DRO)

The sample collected from manhole MH-X on October 31, 2008 registered a DRO concentration of 0.244 milligrams per liter (mg/L). All other grab stormwater samples were below detectable limits. JSCS Table 3-1 SLV has not been prescribed by ODEQ for DRO. Laboratory results for DRO are presented in Table 2.

Oil Range Organics (ORO)

ORO was below detectable limits for each stormwater sample point during each of the four stormwater sampling events. JSCS Table 3-1SLV has not been prescribed by ODEQ for ORO. Laboratory results for ORO are presented in Table 2.

Total Organic Carbon (TOC)

TOC was detected in at least one stormwater sampling point during all four stormwater sampling events. Concentrations for TOC ranged between 1.34 and 10.3 mg/L. JSCS Table 3-1 SLV has not been prescribed by ODEQ for TOC. Laboratory results for TOC are presented in Table 2.

Volatile Organic Compounds (VOCs)

Stormwater samples collected were analyzed for a total of 45 different VOCs under EPA Method 8260 on October 31, 2008. Ethylbenzene was detected twice in grab stormwater samples collected from the 12-inch diameter line entering Manhole 12 on October 31, 2008 (13.5 micrograms per Liter [µg/L]) and April 28, 2009 (7.78 µg/L). Both detected concentrations of ethylbenzene were above the JSCS Table 3-1 SLV of 7.3 µg/L. Historically, ethylbenzene, along with benzene, toluene and xylenes (BTEX), have been present in groundwater samples collected at the Portland Terminal site. All other grab stormwater samples collected were below MRLs for the respective analytes. MRLs for non-detected compounds exceeded the JSCS Table

3-1 SLVs. The MRL and SLV for m & p xylenes were 2.0 and 1.8 µg/L, respectively. Laboratory results for VOCs are presented in Tables 3A through 3C.

Polynuclear Aromatic Hydrocarbons (PAHs)

Grab stormwater samples collected were analyzed for a total of 17 different PAHs under EPA Method 8270M SIM. JSCS Table 3-1 SLVs were exceeded in the following instances:

- Chrysene – Detectable concentrations exceeding the SLV for chrysene were detected in grab stormwater sample collected from manhole MH-X at 0.0392 µg/L and from the beach drain WR-370 at 0.0380 µg/L on October 31, 2008. The JSCS Table 3-1 SLV for chrysene is 0.018 µg/L.

- Benzo(k)fluoranthene – Detectable concentrations exceeding the SLV for benzo(k)fluoranthene were detected in grab stormwater sample collected from manhole MH-X at 0.0199 µg/L on October 31, 2008. The JSCS Table 3-1 SLV for benzo(k)fluoranthene is 0.018 µg/L.

- Benzo(a)pyrene – Detectable concentrations exceeding the SLV for benzo(a)pyrene were detected in grab stormwater sample collected from manhole MH-X at 0.0190 µg/L on October 31, 2008. The JSCS Table 3-1 SLV for benzo(a)pyrene is 0.018 µg/L.

- Ideno(1,2,3-cd)pyrene – Detectable concentrations exceeding the SLV for ideno(1,2,3-cd)pyrene were detected in grab stormwater sample collected from manhole MH-X at 0.0209 µg/L on October 31, 2008. The JSCS Table 3-1 SLV for ideno(1,2,3-cd)pyrene is 0.018 µg/L.

All other analyses for PAHs were either below SLVs or MRLs for each respective analyte. As with the BTEX related VOCs, PAHs also have historically been present in groundwater samples collected from the Portland Terminal site. MRLs for all PAHs analyzed were below the JSCS Table 3-1 SLVs for each respective analyte. Laboratory results for PAHs are presented in Table 4.

Polychlorinated Biphenyls (PCBs)

Grab stormwater samples collected were analyzed for seven PCB compounds under EPA Method 8082. All grab stormwater samples collected during each event were below MRLs for each respective analyte; however, the MRLs exceeded the JSCS Table 3-1 SLVs for the analytes. Based on information collected during a Site audit conducted in August 2008, PCBs have not historically been present at the Portland Terminal since the terminal has never had a PCB-containing transformer. Therefore, it is unlikely that PCBs are present in grab stormwater samples at any concentration above the SLVs. Laboratory results for PCBs are presented in Table 5.

Phthalates

Stormwater samples collected were analyzed for six phthalate compounds under EPA Method 8270 SIM. JSCS Table 3-1 SLVs were exceeded in the following instances:

- Dimethylphthalate - Detectable concentrations exceeding the SLV for dimethylphthalate were detected in grab stormwater sample collected from the 4-inch diameter line entering manhole MH-12 at 3.70 µg/L on October 31, 2008. The SLV for dimethylphthalate is 3 µg/L.

- Butylbenzylphthalate – Detectable concentrations exceeding the SLV for butylbenzylphthalate were detected in grab stormwater sample collected from manhole MH-X at 5.60 µg/L on October 31, 2008. The SLV for butylbenzylphthalate is 3 µg/L.

- Bis(2-Ethylhexyl)phthalate – Detectable concentrations exceeding the SLV for bis(2-ethylhexyl)phthalate were detected in grab stormwater sample collected from manhole MH-X at 2.28 µg/L on October 31, 2008. The SLV for bis(2-ethylhexyl)phthalate is 2.2 µg/L.

All other analyses for phthalates were below SLVs or MRLs for each respective grab stormwater sample. MRLs for each phthalate analyzed were below the respective SLV for each phthalate analyzed. The Portland Terminal does not have a history of storing or manufacturing plasticizing agents; detectable concentrations of phthalates have not been detected in groundwater sampling events. Laboratory results for phthalates are presented in Table 6.

Metals

Grab stormwater samples were collected for 11 metals under the EPA Method 6000/7000 series. JSCS Table 3-1 SLVs were exceeded in the following instances:

- Arsenic – Detectable concentrations exceeding the SLV were recorded in grab stormwater sampling points MH-X, WR-369, and WR-370. In cases where arsenic was below MRLs, the MRL exceeded the SLV of 0.000045 mg/L.

- Cadmium – Detectable concentrations exceeding the SLV were detected in grab stormwater sample collected from WR-012 at 0.00226 mg/L on October 31, 2008 and in the sample collected from WR-012 at 0.000760 mg/L on April 28, 2009. In all other instances, cadmium was below MRLs; however, the MRL exceeded the SLV of 0.000094 mg/L.

- Copper – Detectable concentrations exceeding the SLV were recorded for all viable stormwater sampling points. The laboratory MRL for copper was below the SLV. The highest concentration for copper was detected in the grab stormwater sample collected from WR-370 at 0.0706 mg/L on April 28, 2009. The SLV copper is 0.00270 mg/L.

- Lead – Detectable concentrations exceeding the SLV were recorded for all viable stormwater sampling points. The laboratory MRL for lead was below the SLV. The highest concentration for lead was detected in the grab stormwater sample collected from WR-012 at 0.0168 mg/L on April 28, 2009. The SLV for lead is 0.00054 mg/L.

- Manganese – Detectable concentrations exceeding the SLV were recorded at stormwater sampling points MH-12 (4- and 12-inch diameter influent streams) and WR-370. The laboratory MRL for manganese was below the SLV. The highest concentration for manganese was detected in the grab stormwater sample collected from MH-12 (12-inch diameter influent) at 0.948 mg/L on April 28, 2009. The SLV for manganese is 0.0500 mg/L.

- Zinc – Detectable concentrations exceeding the SLV were recorded for all viable stormwater sampling points. The laboratory MRL for zinc was below the SLV. The highest concentration for zinc was detected in the grab stormwater sample collected from WR-012 at 0.636 mg/L on October 31, 2008. The SLV for zinc is 0.036 mg/L.

Analytical results for chromium, mercury, and selenium did not indicate any concentrations above the SLV. The laboratory MRLs for chromium, mercury, and selenium were below the SLVs.

Analytical results for silver were all below the laboratory MRL for silver; however, the MRL exceeded the SLV.

Laboratory results for metals are presented in Table 7.

Pesticides

Grab stormwater samples collected were analyzed for 21 organochlorine pesticides under EPA Method 8081A. No concentrations of pesticides above MRLs were detected, however, MRLs for several analytes exceeded the JSCS Table 3-1 SLVs. Historical pesticide use was also researched as part of the August 2008 Site audit and no historic use of any of the pesticides analyzed was determined. For this reason, it is unlikely that the pesticide analytes are present in compounds exceeding the JSCS Table 3-1 SLVs. Laboratory results for pesticides are presented in Table 8.

CONCLUSIONS

- The majority of the grab stormwater samples analyzed for the ODEQ prescribed COI were either below the JSCS Table 3-1 SLVs or below MRLs for respective analytes.

- Detectable concentrations for most analytes were usually highest during the first stormwater sampling event on October 31, 2008. This may be explained by the fact that the storm on this date was among the first major rain events of the fall 2008/winter 2009 rainy season. Thus, compounds that may have been accumulating since late spring.

- Low concentrations of petroleum related VOCs and PAHs were detected and are consistent with past and present Site use and conditions. At present, the largest pathway for VOCs and PAHs to enter the Willamette River is through Outfall 22. A major project was completed in July 2009 to line the 60-inch pipe leading to Outfall 22, and this should result in reduced incidents of VOCs and PAHs entering the river.

- PCBs and pesticides were not detected on the Site in concentrations above MRLs. This is also consistent with past and present Site use and conditions.

- Metals were detected in quantities slightly above SLVs. Many of the metals detected during the stormwater sampling events are common on sites with ASTs and heavy vehicular traffic such as the Portland Terminal and neighboring properties.

RECOMMENDATIONS

After a review of the annual stormwater sampling events at the ConocoPhillips Portland Terminal, the following recommendations are proposed as a path forward to implement source controls:

- The material manufacturer of the epoxy sealant will do their own chemical analyses to determine a compatible sealant for MH-12. After the compatability test is completed by the manufacturer, MH-12 will be repaired. A workplan will be prepared and submitted to ODEQ to investigate the groundwater conditions in the vicinity of MH-12.

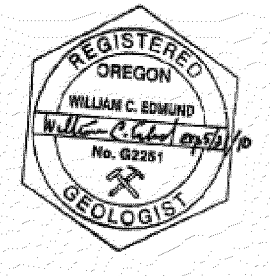
- The beachfront area appears to indicate detectable concentrations of metals (copper, lead, and zinc) during all of the four stormwater sampling events. These metals were detected in stormwater samples collected from WR-012, WR-369, and WR-370 during all four events. Arsenic appears to be detected in the vicinity of the riverdock area (sample WR-370). Additional shallow soil samples may be warranted to assess the existing background metal concentrations in the vicinity of WR-012, WR-369, and WR-370.

Reference: ConocoPhillips Portland Terminal Stormwater Sampling Report

- During the initial stormwater sampling event in October 2008, all PAHs except benzo(k)Fluoranthene) were detected in the vicinity of MH-X, phthalates diethyl phthalate, di-n-butyl phthalate, and bis(2-ethylhexyl)phthalate; and 4 were detected in the MH-12 4-inch diameter influent, and ethylbenzene was detected in MH-12 12-inch diameter influent. General housekeeping and inventory searches (review of material safety data sheets (MSDSs), visual inspection of area and neighboring buildings) need to be reviewed and maintained to mitigate any runoff in the vicinity of the loading racks, the warehouse and the boiler room.

Stantec appreciates the opportunity to assist ConocoPhillips and ODEQ with this project. Please contact the undersigned at (503) 691-2030 if you have any questions or comments.

Sincerely,
Stantec Consulting Corporation



William C. Edmund, P.G, R.G.
Managing Principal Geologist

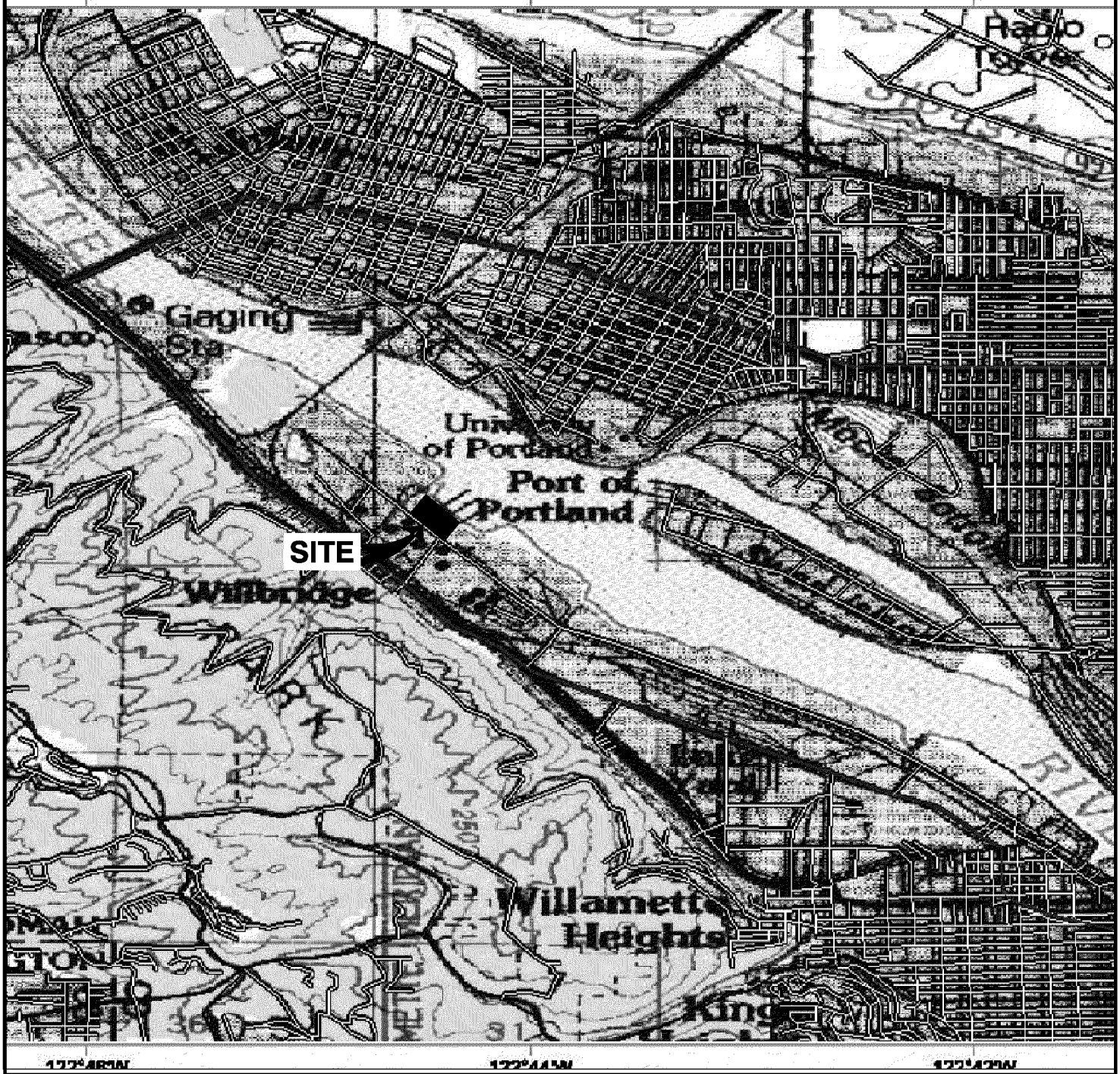
FEF/WCE:ad

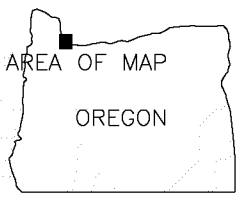
cc: Tom Lyons, ConocoPhillips Pipeline & Terminal, Facility Manager
Brent Hunter, Chevron
Grant Sprick, ARCADIS US, Inc.
Tim Browning, Delta Consultants
Jessica Eckert, Delta Consultants
Myron Smith, ConocoPhillips Site Manager

Attachments:

	Figure 1	Site Location Map
	Figure 2	Site Plan with Stormwater Sampling Locations
	Table 1	Estimated Rainfall during 2008/2009 Stormwater Sampling Events
	Table 2	Summary of Stormwater Analytical Results for GRO, DRO, ORO and TOC
	Table 3	Summary of Stormwater Analytical Results for VOCs
	Table 4	Summary of Stormwater Analytical Results for PAHs
	Table 5	Summary of Stormwater Analytical Results for PCBs
	Table 6	Summary of Stormwater Analytical Results for Phthalates
	Table 7	Summary of Stormwater Analytical Results for Metals
	Table 8	Summary of Stormwater Analytical Results for Pesticides
	Attachment A	2005 Portland Harbor JSCS Table 3-1
	Attachment B	Laboratory Analytical Results

FIGURES





QUADRANGLE LOCATION

N

0 1/4 1/2

SCALE (MILES)

REFERENCE: USGS 7.5 MINUTE QUADRANGLE; PORTLAND, OREGON; 1999

Stantec 7730 SW MOHAWK STREET TUALATIN, OREGON PHONE: (503) 691-2030/692-7074 (FAX)	FOR: ConocoPhillips FACILITY 0922 - PORTLAND (RM&R 0922) 5528 NW DOANE AVENUE PORTLAND, OREGON		**SITE LOCATION MAP**		FIGURE: **1**
	JOB NUMBER: 15CP.00922.40.8521	DRAWN BY: DJH	CHECKED BY: FAF	APPROVED BY: MAT	DATE: 9/2/08

Q:/15CP/CLIENTS/CONOCO PHILLIPS/ 15CP

15CP-00922-40-8521-1SLM.DWG

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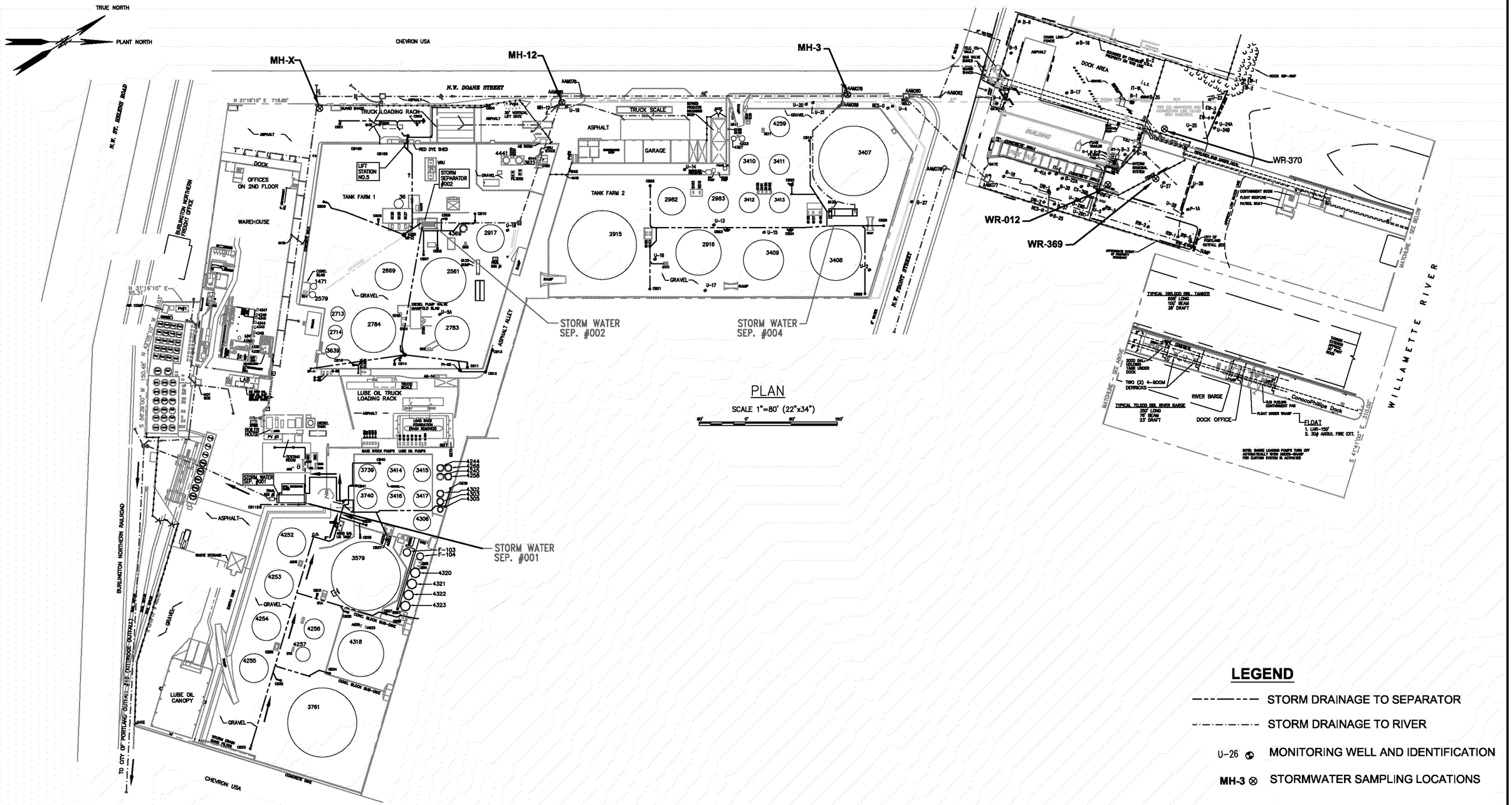

PLAN

SCALE 1"=80' (22"x34")

LEGEND

- STORM DRAINAGE TO SEPARATOR
- STORM DRAINAGE TO RIVER
- U-26 MONITORING WELL AND IDENTIFICATION
- MH-3 STORMWATER SAMPLING LOCATIONS

Note

1. Updated from Delta, Inc Drawing 0608-C-7011-C, Dated 3/16/97.

No warranty is made by Stantec as to the accuracy, reliability, or completeness of these data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed electronically, and may be updated without notification. Any reproduction may result in a loss of scale and or information.

Stantec
7730 SW MOHAWK STREET
TUALATIN, OREGON 97062
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FOR: ConocoPhillips
PORTLAND TERMINAL
5528 NW DOANE AVENUE
PORTLAND, OREGON

SITE PLAN WITH STORMWATER SAMPLING LOCATIONS

FIGURE: **2**

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
15CP.00922.43	DJH	J.ECKART	JLE	MARCH 7, 2008

FILEPATH:K:\1-CLIENTS\ConocoPhillips\15CP\00922-PTLD TERMINAL\212301479 (11-09)\922-STANTEC sample locs.dwg|dheller|Nov 19, 2009 at 12:30|Layout: FIG.2

TABLES

TABLE 1
ESTIMATED RAINFALL DURING 2008/2009 STORMWATER SAMPLING EVENTS
ConcoPhillips Facility 0922 Portland Terminal
5528 Doane Avenue NW
Portland, OR

October 31, 2008									TOTAL
Time of Day	4:00 AM	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	
Inches	0.01	0.05	0.04	0.02	0.07	0.01	0.01	0.01	**0.22**
March 16, 2009									**TOTAL**
Time of Day	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	
Inches	0.03	0.04	0.07	0	0.02	0.00	0.02	0.05	**0.23**
April 28, 2009									**TOTAL**
Time of Day	3:00 AM	4:00 AM	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	
Inches	0.01	0.00	0.03	0.04	0.10	0.08	0.02	0	**0.28**
May 12, 2009									**TOTAL**
Time of Day	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	
Inches	0.01	0.02	0.08	0.06	0.04	0.09	0.07	0.05	**0.42**

Source: USGS Yeon Avenue Raingage located at 3395 NW Yeon Avenue, Portland, OR

Note: This data is presented as a rough estimate of hourly flow during each sampling event. Onsite rainfall was estimated using a non-incremental electronic gauge. Actual rainfall on the site may vary from rainfall presented in this table.

TABLE 2
SUMMARY OF STORMWATER ANALYTICAL RESULTS FOR GRO, DRO, ORO, AND TOC
ConocoPhillips Facility 0922 Portland Terminal
5528 Doane Avenue NW
Portland, OR

Stormwater Sampling Point	Sample Date	GRO µg/L	DRO mg/L	ORO mg/L	TOC mg/L
MH-12 4-inch Influent	10/31/08	<80	<0.238	<476	3.52
	03/16/09	Dry	Dry	Dry	Dry
	04/28/09	Dry	Dry	Dry	Dry
	05/12/09	Dry	Dry	Dry	Dry
MH-12 12-inch Influent	10/31/08	<80	<0.240	<481	4.03
	03/16/09	Dry	Dry	Dry	Dry
	04/28/09	<238	<476	<80	3.61
	05/12/09	Dry	Dry	Dry	Dry
MH-X	10/31/08	<80	0.244	<0.476	2.22
	03/16/09	Dry	Dry	Dry	Dry
	04/28/09	<80	<0.238	<0.476	1.34
	05/12/09	<80	<0.238	<0.476	2.19
MH-3	10/31/08	Dry	Dry	Dry	Dry
	03/16/09	Dry	Dry	Dry	Dry
	04/28/09	Dry	Dry	Dry	Dry
	05/12/09	Dry	Dry	Dry	Dry
WR-012	10/31/08	NA	NA	NA	NA
	03/16/09	NA	NA	NA	NA
	04/28/09	NA	NA	NA	NA
	05/12/09	NA	NA	NA	NA
WR-369	10/31/08	<80	<0.238	<0.476	2.76
	03/16/09	<80	<0.236	<0.472	<1.00
	04/28/09	<80	<0.238	<0.481	3.61
	05/12/09	<80	<0.238	<0.476	1.47

TABLE 2
SUMMARY OF STORMWATER ANALYTICAL RESULTS FOR GRO, DRO, ORO, AND TOC
ConocoPhillips Facility 0922 Portland Terminal
5528 Doane Avenue NW
Portland, OR

Stormwater Sampling Point	Sample Date	GRO µg/L	DRO mg/L	ORO mg/L	TOC mg/L
WR-370	10/31/08	<80	<0.238	<0.476	4.39
	03/16/09	<80	<0.240	<0.481	2.06
	04/28/09	<80	<0.240	<0.476	10.3
	05/12/09	<80	<0.240	<0.481	6.87
SLV		ND	ND	ND	ND

EXPLANATIONS:
GRO=Gasoline Range Organics
DRO=Diesel Range Organics
ORO=Oil Range Organics
TOC=Total Organic Carbon
µg/L=Micrograms per Liter
mg/L=Millgrams per Liter
SLV=Screening Level Values from Portland Harbor Joint Source Control Study Table 3-1
Dry=Insuffiient Water to collect sample
NA=Not Analyzed - GRO, DRO, ORO and TOC Analysis not required for this sampling point
ND=SLV not determined for this constituent

TABLE 3
SUMMARY OF STORMWATER ANALYTICAL RESULTS FOR VOCs
ConocoPhillips Facility 0922 Portland Terminal
5528 Doane Avenue NW
Portland, OR

COMPOUND NAME (reported in µg/L)	STORMWATER SAMPLING POINT																												SLV
	MH-12 4-inch Influent				MH-12 12-inch Influent				MH-X				MH-3				WR-012				WR-369				WR-370				
	10/31/08	03/16/09	04/28/09	05/12/09	10/31/08	03/16/09	04/28/09	05/12/09	10/31/08	03/16/09	04/28/09	05/12/09	10/31/08	03/16/09	04/28/09	05/12/09	10/31/08	03/16/09	04/28/09	05/12/09	10/31/08	03/16/09	04/28/09	05/12/09	10/31/08	03/16/09	04/28/09	05/12/09	
1,1,1,2- Tetrachloroethane	<1.00	Dry	Dry	Dry	<1.00	Dry	<1.0	Dry	<1.00	Dry	<1.0	<1.0	Dry	Dry	Dry	Dry	NA	NA	NA	NA	<1.00	NA	NA	NA	<1.00	NA	NA	NA	2.5
1,1,1- Trichloroethane (TCA)	<1.00	Dry	Dry	Dry	<1.00	Dry	<1.0	Dry	<1.00	Dry	<1.0	<1.0	Dry	Dry	Dry	Dry	NA	NA	NA	NA	<1.00	NA	NA	NA	<1.00	NA	NA	NA	11
1,1,2,2- Tetrachloroethane	<1.00	Dry	Dry	Dry	<1.00	Dry	<1.0	Dry	<1.00	Dry	<1.0	<1.0	Dry	Dry	Dry	Dry	NA	NA	NA	NA	<1.00	NA	NA	NA	<1.00	NA	NA	NA	0.33
1,1,2- Trichloroethane	<1.00	Dry	Dry	Dry	<1.00	Dry	<1.0	Dry	<1.00	Dry	<1.0	<1.0	Dry	Dry	Dry	Dry	NA	NA	NA	NA	<1.00	NA	NA	NA	<1.00	NA	NA	NA	1.2
1,1- Dichloroethane	<1.00	Dry	Dry	Dry	<1.00	Dry	<1.0	Dry	<1.00	Dry	<1.0	<1.0	Dry	Dry	Dry	Dry	NA	NA	NA	NA	<1.00	NA	NA	NA	<1.00	NA	NA	NA	47
1,2,3- Trichloropropane	<1.00	Dry	Dry	Dry	<1.00	Dry	<1.0	Dry	<1.00	Dry	<1.0	<1.0	Dry	Dry	Dry	Dry	NA	NA	NA	NA	<1.00	NA	NA	NA	<1.00	NA	NA	NA	0.0095
1,2- Dichloroethane (EDC)	<1.00	Dry	Dry	Dry	<1.00	Dry	<1.0	Dry	<1.00	Dry	<1.0	<1.0	Dry	Dry	Dry	Dry	NA	NA	NA	NA	<1.00	NA	NA	NA	<1.00	NA	NA	NA	0.73
cis-1,2-Dichloroethlyene	<1.00	Dry	Dry	Dry	<1.00	Dry	<1.0	Dry	<1.00	Dry	<1.0	<1.0	Dry	Dry	Dry	Dry	NA	NA	NA	NA	<1.00	NA	NA	NA	<1.00	NA	NA	NA	61
1,2- Dichloropropane	<1.00	Dry	Dry	Dry	<1.00	Dry	<1.0	Dry	<1.00	Dry	<1.0	<1.0	Dry	Dry	Dry	Dry	NA	NA	NA	NA	<1.00	NA	NA	NA	<1.00	NA	NA	NA	0.97
1,2- Dibromoethane (EDB)	<1.00	Dry	Dry	Dry	<1.00	Dry	<1.0	Dry	<1.00	Dry	<1.0	<1.0	Dry	Dry	Dry	Dry	NA	NA	NA	NA	<1.00	NA	NA	NA	<1.00	NA	NA	NA	0.033
2- Butanone (MEK)	<10.0	Dry	Dry	Dry	<10.0	Dry	<12	Dry	<10.0	Dry	<10	<10	Dry	Dry	Dry	Dry	NA	NA	NA	NA	<10.0	NA	NA	NA	<10.0	NA	NA	NA	7,100
2- Hexanone	<10.0	Dry	Dry	Dry	<10.0	Dry	<12	Dry	<10.0	Dry	<10	<10	Dry	Dry	Dry	Dry	NA	NA	NA	NA	<10.0	NA	NA	NA	<10.0	NA	NA	NA	99
4- Methyl-2-Pentanone (MIBK)	<5.00	Dry	Dry	Dry	<5.0	Dry	<5.0	Dry	<5.00	Dry	<5.0	<5.0	Dry	Dry	Dry	Dry	NA	NA	NA	NA	<5.0	NA	NA	NA	<5.0	NA	NA	NA	170
Acetone	<25.0	Dry	Dry	Dry	<25.0	Dry	<25	Dry	25.4	Dry	<25	<25	Dry	Dry	Dry	Dry	NA	NA	NA	NA	<25.0	NA	NA	NA	<25.0	NA	NA	NA	1500
Bromochloromethane	<1.00	Dry	Dry	Dry	<1.00	Dry	<1.0	Dry	<1.00	Dry	<1.0	<1.0	Dry	Dry	Dry	Dry	NA	NA	NA	NA	<1.00	NA	NA	NA	<1.00	NA	NA	NA	ND
Bromodichloromethane	<1.00	Dry	Dry	Dry	<1.00	Dry	<1.0	Dry	<1.00	Dry	<1.0	<1.0	Dry	Dry	Dry	Dry	NA	NA	NA	NA	<1.00	NA	NA	NA	<1.00	NA	NA	NA	1.1
Bromoform	<1.00	Dry	Dry	Dry	<1.0	Dry	NA	Dry	<1.0	Dry	NA	NA	Dry	Dry	Dry	Dry	NA	NA	NA	NA	<1.00	NA	NA	<1.0	<1.0	NA	NA	<1.0	8.5
Bromomethane	<5.00	Dry	Dry	Dry	<5.0	Dry	NA	Dry	<5.0	Dry	NA	NA	Dry	Dry	Dry	Dry	NA	NA	NA	NA	<5.00	NA	NA	<5.0	<5.0	NA	NA	<5.0	8.7
Carbon Disulfide	<10.0	Dry	Dry	Dry	<10	Dry	NA	Dry	<10	Dry	NA	NA	Dry	Dry	Dry	Dry	NA	NA	NA	NA	<10.0	NA	NA	NA	<10	NA	NA	NA	0.92
Carbon Tetrachloride	<1.00	Dry	Dry	Dry	<1.0	Dry	NA	Dry	<1.0	Dry	NA	NA	Dry	Dry	Dry	Dry	NA	NA	NA	NA	<1.00	NA	NA	NA	<1.0	NA	NA	NA	0.51
Chlorobenzene	<1.00	Dry	Dry	Dry	<1.0	Dry	NA	Dry	<1.0	Dry	NA	NA	Dry	Dry	Dry	Dry	NA	NA	NA	NA	<1.00	NA	NA	NA	<1.0	NA	NA	NA	50
Chlorodibromomethane	<1.00	Dry	Dry	Dry	<1.0	Dry	NA	Dry	<1.0	Dry	NA	NA	Dry	Dry	Dry	Dry	NA	NA	NA	NA	<1.00	NA	NA	NA	<1.0	NA	NA	NA	0.79
Chloroethane	<1.00	Dry	Dry	Dry	<1.0	Dry	NA	Dry	<1.0	Dry	NA	NA	Dry	Dry	Dry	Dry	NA	NA	NA	NA	<1.00	NA	NA	NA	<1.0	NA	NA	NA	23
Chloroform	<0.200	Dry	Dry	Dry	<0.2	Dry	NA	Dry	<0.2	Dry	NA	NA	Dry	Dry	Dry	Dry	NA	NA	NA	NA	<0.200	NA	NA	NA	<0.2	NA	NA	NA	0.17
Chloromethane	<5.00	Dry	Dry	Dry	<5.0	Dry	NA	Dry	<5.0	Dry	NA	NA	Dry	Dry	Dry	Dry	NA	NA	NA	NA	<5.00	NA	NA	NA	<5.0	NA	NA	NA	2.1
cis-1,2-dichloroethylene	<1.00	Dry	Dry	Dry	<1.0	Dry	NA	Dry	<1.0	Dry	NA	NA	Dry	Dry	Dry	Dry	NA	NA	NA	NA	<1.00	NA	NA	NA	<1.0	NA	NA	NA	590
cis-1,3-Dichloropropene	<1.00	Dry	Dry	Dry	<1.0	Dry	NA	Dry	<1.0	Dry	NA	NA	Dry	Dry	Dry	Dry	NA	NA	NA	NA	<1.00	NA	NA	NA	<1.0	NA	NA	NA	0.055
Dibromomethane	<1.00	Dry	Dry	Dry	<1.0	Dry	NA	Dry	<1.0	Dry	NA	NA	Dry	Dry	Dry	Dry	NA	NA	NA	NA	<1.00	NA	NA	NA	<1.0	NA	NA	NA	61
Dichlorodifluoromethane	<5.00	Dry	Dry	Dry	<5.0	Dry	NA	Dry	<5.0	Dry	NA	NA	Dry	Dry	Dry	Dry	NA	NA	NA	NA	<5.00	NA	NA	NA	<5.0	NA	NA	NA	390
Isopropylbenzene	<2.00	Dry	Dry	Dry	<2.0	Dry	NA	Dry	<2.0	Dry	NA	NA	Dry	Dry	Dry	Dry	NA	NA	NA	NA	<2.00	NA	NA	NA	<2.0	NA	NA	NA	660
Methylene chloride	<5.00	Dry	Dry	Dry	<5.0	Dry	NA	Dry	<5.0	Dry	NA	NA	Dry	Dry	Dry	Dry	NA	NA	NA	NA	<5.00	NA	NA	NA	<5.0	NA	NA	NA	8.9
Styrene	<1.00	Dry	Dry	Dry	11.6	Dry	NA	Dry	<1.0	Dry	NA	NA	Dry	Dry	Dry	Dry	NA	NA	NA	NA	<1.00	NA	NA	NA	<1.0	NA	NA	NA	100
Trichlorofluoromethane	<1.00	Dry	Dry	Dry	<1.0	Dry	NA	Dry	<1.00	Dry	NA	NA	Dry	Dry	Dry	Dry	NA	NA	NA	NA	<1.00	NA	NA	NA	<1.00	NA	NA	NA	1,300
Benzene	<0.200	Dry	Dry	Dry	<0.2	Dry	<0.200	Dry	<0.200	Dry	<0.200	<0.200	Dry	Dry	Dry	Dry	NA	NA	NA	NA	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	1.2
EthylBenzene	<1.00	Dry	Dry	Dry	13.5	Dry	7.78	Dry	<1.00	Dry	<1.00	<1.00	Dry	Dry	Dry	Dry	NA	NA	NA	NA	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	7.3
m,p-Xylene	<2.00	Dry	Dry	Dry	<2.0	Dry	<2.00	Dry	<2.00	Dry	<2.00	<2.00	Dry	Dry	Dry	Dry	NA	NA	NA	NA	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	1.8
o-Xylene	<1.00	Dry	Dry	Dry	<1.0	Dry	<1.00	Dry	<1.00	Dry	<1.00	<1.00	Dry	Dry	Dry	Dry	NA	NA	NA	NA	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	13

TABLE 3
SUMMARY OF STORMWATER ANALYTICAL RESULTS FOR VOCs
ConocoPhillips Facility 0922 Portland Terminal
5528 Doane Avenue NW
Portland, OR

COMPOUND NAME (reported in µg/L)	STORMWATER SAMPLING POINT																												SLV
	MH-12 4-inch Influent				MH-12 12-inch Influent				MH-X				MH-3				WR-012				WR-369				WR-370				
	10/31/08	03/16/09	04/28/09	05/12/09	10/31/08	03/16/09	04/28/09	05/12/09	10/31/08	03/16/09	04/28/09	05/12/09	10/31/08	03/16/09	04/28/09	05/12/09	10/31/08	03/16/09	04/28/09	05/12/09	10/31/08	03/16/09	04/28/09	05/12/09	10/31/08	03/16/09	04/28/09	05/12/09	
Xylenes (total)	<3.00	Dry	Dry	Dry	<3.0	Dry	<2.00	Dry	<3.00	Dry	<2.00	<2.00	Dry	Dry	Dry	Dry	NA	NA	NA	NA	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	200
Methyl tert-butyl ether (MTBE)	<1.00	Dry	Dry	Dry	<1.0	Dry	<1.00	Dry	<1.00	Dry	<1.00	<1.00	Dry	Dry	Dry	Dry	NA	NA	NA	NA	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	37
Tetrachloroethene (PCE)	<1.00	Dry	Dry	Dry	<1.0	Dry	NA	Dry	<1.00	Dry	NA	NA	Dry	Dry	Dry	Dry	NA	NA	NA	NA	<1.00	NA	NA	NA	<1.00	NA	NA	NA	0.12
Toluene	<1.00	Dry	Dry	Dry	<1.00	Dry	<1.00	Dry	<1.00	Dry	<1.00	<1.00	Dry	Dry	Dry	Dry	NA	NA	NA	NA	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	9.8
trans-1,2-Dichloroethene	<1.00	Dry	Dry	Dry	<1.0	Dry	NA	Dry	<1.00	Dry	NA	NA	Dry	Dry	Dry	Dry	NA	NA	NA	NA	<1.00	NA	NA	NA	<1.00	NA	NA	NA	100
trans-1,3-Dichloropropene	<1.00	Dry	Dry	Dry	<1.0	Dry	NA	Dry	<1.00	Dry	NA	NA	Dry	Dry	Dry	Dry	NA	NA	NA	NA	<1.00	NA	NA	NA	<1.00	NA	NA	NA	0.055
Trichloroethene (TCE)	<1.00	Dry	Dry	Dry	<1.0	Dry	NA	Dry	<1.00	Dry	NA	NA	Dry	Dry	Dry	Dry	NA	NA	NA	NA	<1.00	NA	NA	NA	<1.00	NA	NA	NA	0.17
Vinyl Chloride	<1.00	Dry	Dry	Dry	<1.0	Dry	NA	Dry	<1.00	Dry	NA	NA	Dry	Dry	Dry	Dry	NA	NA	NA	NA	<1.00	NA	NA	NA	<1.00	NA	NA	NA	0.015

EXPLANATIONS:
VOCs=Volatile Organic Compounds
µg/L=Micrograms per Liter
SLV=Screening Level Values from Portland Harbor Joint Source Control Study Table 3-1
Method Reporting Limit (MRL) exceeded SLV
Exceeded SLV for given constituent
Dry=Insuffiient Water to collect Sample
NA=Not Analyzed - VOC Analysis not required for this sampling point
ND=SLV Not Determined for this constituent.

TABLE 4
SUMMARY OF STORMWATER ANALYTICAL RESULTS FOR PAHs
ConocoPhillips Facility 0922 Portland Terminal
5528 Doane Avenue NW
Portland, OR

COMPOUND NAME (reported in µg/L)	STORMWATER SAMPLING POINT																												SLV
	MH-12 4-inch Influent				MH-12 12-inch Influent				MH-X				MH-3				WR-012				WR-369				WR-370				
	10/31/08	03/16/09	04/28/09	05/12/09	10/31/08	03/16/09	04/28/09	05/12/09	10/31/08	03/16/09	04/28/09	05/12/09	10/31/08	03/16/09	04/28/09	05/12/09	10/31/08	03/16/09	04/28/09	05/12/09	10/31/08	03/16/09	04/28/09	05/12/09	10/31/08	03/16/09	04/28/09	05/12/09	
Naphthalene	<0.190	Dry	Dry	Dry	<0.190	Dry	<0.0943	Dry	<0.190	Dry	<0.0952	<0.0952	Dry	Dry	Dry	Dry	NA	NA	NA	NA	<0.190	<0.0962	<0.0943	<0.0952	<0.190	<0.0952	<0.0952	<0.0952	0.200
2-Methylnaphthalene	<0.190	Dry	Dry	Dry	<0.190	Dry	<0.0943	Dry	<0.190	Dry	<0.0943	<0.0952	Dry	Dry	Dry	Dry	NA	NA	NA	NA	<0.190	<0.0962	<0.0943	<0.0952	<0.190	<0.0952	<0.0952	<0.0952	0.200
Acenaphthylene	<0.190	Dry	Dry	Dry	<0.190	Dry	<0.0943	Dry	<0.190	Dry	<0.0943	<0.0952	Dry	Dry	Dry	Dry	NA	NA	NA	NA	<0.190	<0.0962	<0.0943	<0.0952	<0.190	<0.0952	<0.0952	<0.0952	0.200
Acenaphthene	<0.190	Dry	Dry	Dry	<0.190	Dry	<0.0943	Dry	<0.190	Dry	<0.0943	<0.0952	Dry	Dry	Dry	Dry	NA	NA	NA	NA	<0.190	<0.0962	<0.0943	<0.0952	<0.190	<0.0952	<0.0952	<0.0952	0.200
Fluorene	<0.190	Dry	Dry	Dry	<0.190	Dry	<0.0943	Dry	<0.190	Dry	<0.0952	<0.0952	Dry	Dry	Dry	Dry	NA	NA	NA	NA	<0.190	<0.0962	<0.0943	<0.0952	<0.190	<0.0952	<0.0952	<0.0952	0.200
Phenanthrene	<0.190	Dry	Dry	Dry	<0.190	Dry	<0.0943	Dry	<0.190	Dry	<0.0952	<0.0952	Dry	Dry	Dry	Dry	NA	NA	NA	NA	<0.190	<0.0962	<0.0943	<0.0952	<0.190	<0.0952	<0.0952	<0.0952	0.200
Anthracene	<0.190	Dry	Dry	Dry	<0.190	Dry	<0.0943	Dry	<0.190	Dry	<0.0943	<0.0952	Dry	Dry	Dry	Dry	NA	NA	NA	NA	<0.190	<0.0962	<0.0943	<0.0952	<0.190	<0.0952	<0.0952	<0.0952	0.200
Fluoranthene	<0.190	Dry	Dry	Dry	<0.190	Dry	<0.0943	Dry	<0.190	Dry	<0.0952	<0.0952	Dry	Dry	Dry	Dry	NA	NA	NA	NA	<0.190	<0.0962	<0.0943	<0.0952	<0.190	<0.0952	<0.0952	<0.0952	0.200
Pyrene	<0.190	Dry	Dry	Dry	<0.190	Dry	<0.0943	Dry	<0.190	Dry	<0.0952	<0.0952	Dry	Dry	Dry	Dry	NA	NA	NA	NA	<0.190	<0.0962	<0.0943	<0.0952	<0.190	<0.0952	<0.0952	<0.0952	0.200
Benzo(a)anthracene	<0.00952	Dry	Dry	Dry	<0.00952	Dry	<0.00472	Dry	0.0178	Dry	0.00623	<0.00476	Dry	Dry	Dry	Dry	NA	NA	NA	NA	<0.00952	<0.00481	<0.00472	<0.00476	0.0142	0.00585	<0.00476	<0.00476	0.018
Benzo(k)fluoranthene	<0.00952	Dry	Dry	Dry	<0.00952	Dry	<0.00472	Dry	0.0199	Dry	0.00969	<0.00476	Dry	Dry	Dry	Dry	NA	NA	NA	NA	<0.00952	<0.00481	<0.00472	<0.00476	0.0135	0.00811	<0.00476	<0.00476	0.018
Benzo(a)pyrene	<0.00952	Dry	Dry	Dry	<0.00952	Dry	<0.00472	Dry	0.0190	Dry	0.00835	<0.00476	Dry	Dry	Dry	Dry	NA	NA	NA	NA	<0.00952	<0.00481	<0.00472	<0.00476	0.0106	0.00678	<0.00476	<0.00476	0.018
Indeno(1,2,3-cd)pyrene	<0.00952	Dry	Dry	Dry	<0.00952	Dry	<0.00472	Dry	0.0209	Dry	0.00907	<0.00476	Dry	Dry	Dry	Dry	NA	NA	NA	NA	<0.00952	<0.00481	<0.00472	<0.00476	0.0118	0.00669	<0.00476	<0.00476	0.018
Dibenz(a,h)anthracene	<0.00952	Dry	Dry	Dry	<0.00952	Dry	<0.00472	Dry	<0.00952	Dry	<0.00476	<0.00476	Dry	Dry	Dry	Dry	NA	NA	NA	NA	<0.00952	<0.00481	<0.00472	<0.00476	<0.00952	<0.00476	<0.00476	<0.00476	0.018
Chrysene	0.0114	Dry	Dry	Dry	0.00969	Dry	0.00907	Dry	0.0392	Dry	0.0161	0.00959	Dry	Dry	Dry	Dry	NA	NA	NA	NA	0.0138	0.00592	<0.00472	<0.00476	0.038	0.0177	<0.00476	0.00933	0.018
Benzo(g,h,i)perylene	<0.190	Dry	Dry	Dry	<0.190	Dry	<0.0943	Dry	<0.190	Dry	<0.0943	<0.0952	Dry	Dry	Dry	Dry	NA	NA	NA	NA	<0.190	<0.0962	<0.0943	<0.0952	<0.190	<0.0952	<0.0952	<0.0952	0.200

EXPLANATION:
PAHs=Polycyclic Aromatic Hydrocarbons
SLV=Screening Level Values from Portland Harbor Joint Source Control Study Table 3-1
µg/L=Micrograms per Liter
Exceeded SLV for given constituent
Dry=Insuffiient Water to collect Sample
NA=Not Analyzed - PAH Analysis not required for this sampling point

TABLE 5
SUMMARY OF STORMWATER ANALYTICAL RESULTS FOR PCBs
ConocoPhillips Facility 0922 Portland Terminal
5528 Doane Avenue NW
Portland, OR

Stormwater Sampling Point	Sample Date	Aroclor (reported in µg/L)						
		1016	1221	1232	1242	1248	1254	1260
MH-12 4-inch Influent	10/31/08	<0.0952	<0.190	<0.0952	<0.0952	<0.0952	<0.0952	<0.0952
	03/16/09	Dry	Dry	Dry	Dry	Dry	Dry	Dry
	04/28/09	Dry	Dry	Dry	Dry	Dry	Dry	Dry
	05/12/09	Dry	Dry	Dry	Dry	Dry	Dry	Dry
MH-12 12-inch Influent	10/31/08	<0.0952	<0.190	<0.0952	<0.0952	<0.0952	<0.0952	<0.0952
	03/16/09	Dry	Dry	Dry	Dry	Dry	Dry	Dry
	04/28/09	<0.190	<0.381	<0.190	<0.190	<0.190	<0.190	<0.190
	05/12/09	Dry	Dry	Dry	Dry	Dry	Dry	Dry
MH-X	10/31/08	<0.0952	<0.190	<0.0952	<0.0952	<0.0952	<0.0952	<0.0952
	03/16/09	Dry	Dry	Dry	Dry	Dry	Dry	Dry
	04/28/09	<0.0952	<0.190	<0.0952	<0.0952	<0.0952	<0.0952	<0.0952
	05/12/09	<0.0943	<0.190	<0.0943	<0.0943	<0.0943	<0.0943	<0.0943
MH-3	10/31/08	Dry	Dry	Dry	Dry	Dry	Dry	Dry
	03/16/09	Dry	Dry	Dry	Dry	Dry	Dry	Dry
	04/28/09	Dry	Dry	Dry	Dry	Dry	Dry	Dry
	05/12/09	Dry	Dry	Dry	Dry	Dry	Dry	Dry
WR-012	10/31/08	NA	NA	NA	NA	NA	NA	NA
	03/16/09	NA	NA	NA	NA	NA	NA	NA
	04/28/09	NA	NA	NA	NA	NA	NA	NA
	05/12/09	NA	NA	NA	NA	NA	NA	NA
WR-369	10/31/08	<0.0952	<0.190	<0.0952	<0.0952	<0.0952	<0.0952	<0.0952
	03/16/09	<0.0957	<0.191	<0.0957	<0.0957	<0.0957	<0.0957	<0.0957
	04/28/09	<0.190	<0.381	<0.190	<0.190	<0.190	<0.190	<0.190
	05/12/09	<0.0962	<0.192	<0.0962	<0.0962	<0.0962	<0.0962	<0.0962
WR-370	10/31/08	<0.0952	<0.190	<0.0952	<0.0952	<0.0952	<0.0952	<0.0952
	03/16/09	<0.0957	<0.191	<0.0957	<0.0957	<0.0957	<0.0957	<0.0957
	04/28/09	<0.190	<0.381	<0.190	<0.190	<0.190	<0.190	<0.190
	05/12/09	<0.0952	<0.190	<0.0952	<0.0952	<0.0952	<0.0952	<0.0952
SLV		0.96	0.034	0.034	0.034	0.034	0.033	0.034

EXPLANATION:

PCBs=Polychlorinated Biphenyls

µg/L=Micrograms per Liter

SLV=Screening Level Values from Portland Harbor Joint Source Control Study Table 3-1
Method Reporting Limit (MRL) exceeded SLV

Dry=Insuffiient Water to collect Sample

NA=Not Analyzed - PCB Analysis not required for this sampling point

TABLE 6

SUMMARY OF STORMWATER ANALYTICAL RESULTS FOR PHTHALATES

ConocoPhillips Facility 0922 Portland Terminal

5528 Doane Avenue NW

Portland, OR

Stormwater Sampling Point	Sample Date	Dimethyl phthalate	Diethyl phthalate	Di-n-butyl phthalate	Butylbenzyl phthalate	Di-n-octyl phthalate	bis(2-Ethylhexyl)phthalate
MH-12 4-inch Influent	10/31/08	3.70	<0.952	<0.952	<0.952	<0.952	<0.952
	03/16/09	Dry	Dry	Dry	Dry	Dry	Dry
	04/28/09	Dry	Dry	Dry	Dry	Dry	Dry
	05/12/09	Dry	Dry	Dry	Dry	Dry	Dry
MH-12 12-inch Influent	10/31/08	<0.952	<0.952	<0.952	<0.952	<0.952	<0.952
	03/16/09	Dry	Dry	Dry	Dry	Dry	Dry
	04/28/09	<0.943	<0.943	<0.943	<0.943	<0.943	<0.943
	05/12/09	Dry	Dry	Dry	Dry	Dry	Dry
MH-X	10/31/08	1.75	<0.952	<0.952	5.60	<0.952	2.28
	03/16/09	Dry	Dry	Dry	Dry	Dry	Dry
	04/28/09	<0.943	<0.943	<0.943	<0.943	<0.943	<0.943
	05/12/09	<0.943	<0.943	<0.943	1.45	<0.943	<0.943
MH-3	10/31/08	Dry	Dry	Dry	Dry	Dry	Dry
	03/16/09	Dry	Dry	Dry	Dry	Dry	Dry
	04/28/09	Dry	Dry	Dry	Dry	Dry	Dry
	05/12/09	Dry	Dry	Dry	Dry	Dry	Dry
WR-012	10/31/08	NA	NA	NA	NA	NA	NA
	03/16/09	NA	NA	NA	NA	NA	NA
	04/28/09	NA	NA	NA	NA	NA	NA
	05/12/09	NA	NA	NA	NA	NA	NA

TABLE 6

SUMMARY OF STORMWATER ANALYTICAL RESULTS FOR PHTHALATES

ConocoPhillips Facility 0922 Portland Terminal

5528 Doane Avenue NW

Portland, OR

Stormwater Sampling Point	Sample Date	Dimethyl phthalate	Diethyl phthalate	Di-n-butyl phthalate	Butylbenzyl phthalate	Di-n-octyl phthalate	bis(2-Ethylhexyl)phthalate
WR-369	10/31/08	<0.952	<0.952	<0.952	<0.952	<0.952	<0.952
	03/16/09	<0.962	<0.962	<0.962	<0.962	<0.962	<0.962
	04/28/09	0.949	<0.943	<0.943	<0.943	<0.943	<0.943
	05/12/09	<0.952	<0.952	<0.952	<0.952	<0.952	<0.952
WR-370	10/31/08	1.00	<0.952	<0.952	<0.952	<0.952	1.96
	03/16/09	<0.952	<0.952	<0.952	<0.952	<0.952	<0.952
	04/28/09	1.31	<0.952	<0.952	<0.952	<0.952	<0.952
	05/12/09	<0.952	<0.952	<0.952	<0.952	<0.952	<0.952
SLV		3.00	3.00	3.00	3.00	3.00	2.20

EXPLANATION:

µg/L=Micrograms per Liter

SLV=Screening Level Values from Portland Harbor Joint Source Control Study Table 3-1

Exceeded SLV for given constituent

Dry=Insuffiient Water to collect Sample

NA=Not Analyzed - Phthalate Analysis not required for this sampling point

TABLE 7

SUMMARY OF STORMWATER ANALYTICAL RESULTS FOR METALS

ConocoPhillips Facility 0922 Portland Terminal

5528 Doane Avenue NW

Portland, OR

Stormwater Sampling Point	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 ug/L	Silver mg/L	Zinc mg/L
MH-12 4-inch Influent	10/31/08	<0.00100	0.0139	<0.0005	<0.00200	0.0152	0.00400	0.0549	<0.000200	<0.000500	<0.00100	0.306
	03/16/09	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry
	04/28/09	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry
	05/12/09	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry
MH-12 12-inch Influent	10/31/08	0.00562	0.0545	<0.000500	0.00260	0.0228	0.00925	0.197	<0.000200	<0.000500	<0.00100	0.113
	03/16/09	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry
	04/28/09	<0.00100	0.0179	<0.000500	<0.00200	0.00477	<0.00100	0.0948	<0.000200	<0.000500	<0.00100	0.0945
	05/12/09	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry
MH-X	10/31/08	<0.00100	0.0130	<0.000500	<0.00200	0.00508	0.00256	0.0226	<0.000200	<0.000500	<0.00100	0.221
	03/16/09	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry
	04/28/09	0.00190	0.0105	<0.000500	<0.00200	0.00438	0.00184	0.0262	<0.000200	<0.000500	<0.00100	0.157
	05/12/09	<0.00100	0.0159	<0.000500	<0.00200	0.00494	0.00445	0.136	<0.000200	<0.000500	<0.00100	0.221
MH-3	10/31/08	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry
	03/16/09	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry
	04/28/09	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry
	05/12/09	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry
WR-012	10/31/08	<0.00100	0.00809	0.00226	<0.00200	0.00347	0.00169	0.00997	<0.000200	<0.000500	<0.00100	0.636
	03/16/09	<0.00100	0.00222	<0.000500	<0.00200	<0.00200	0.00483	<0.00200	<0.000200	<0.000500	<0.00100	0.102
	04/28/09	<0.00100	0.00657	0.000760	<0.00200	0.00313	0.0168	0.0151	<0.000200	<0.000500	<0.00100	0.298
	05/12/09	<0.00100	0.00476	<0.000500	<0.00200	<0.00200	0.00297	0.0157	<0.000200	<0.000500	<0.00100	0.209
WR-369	10/31/08	0.00171	0.0106	<0.000500	0.00209	0.0133	0.00502	0.0261	<0.000200	<0.000500	<0.00100	0.0988
	03/16/09	<0.00100	0.00313	<0.000500	<0.00200	0.00324	0.00324	0.00947	<0.000200	<0.000500	<0.00100	0.0480
	04/28/09	0.00118	0.00439	<0.000500	<0.00200	0.0429	0.00267	0.0126	<0.000200	<0.000500	<0.00100	0.0715
	05/12/09	<0.00100	0.00394	<0.000500	<0.00200	0.0104	0.00205	0.0102	<0.000200	<0.000500	<0.00100	0.074
WR-370	10/31/08	0.00446	0.0162	<0.000500	0.00351	0.0308	0.0113	0.0649	<0.000200	<0.000500	<0.00100	0.0191
	03/16/09	0.00256	0.0165	<0.000500	<0.00200	0.0139	0.0112	0.0662	<0.000200	<0.000500	<0.00100	0.0682
	04/28/09	0.00279	0.00954	<0.000500	<0.00200	0.0706	0.00326	0.0356	<0.000200	<0.000500	<0.00100	0.0700
	05/12/09	0.0040	0.0112	<0.000500	<0.00200	0.0298	0.00282	0.0861	<0.000200	<0.000500	<0.00100	0.128
SLV		0.000045	-	0.000094	0.1	0.00270	0.00054	0.0500	0.00077	0.0050	0.00012	0.036

EXPLANATION

mg/L=Millgrams per Liter

µg/L=Micrograms per Liter

SLV=Screening Level Values from Portland Harbor Joint Source Control Study Table 3-1

Method Reporting Limit (MRL) exceeded SLV

Exceeded SLV for given constituent

Dry=Insuffiient Water to collect Sample

TABLE 8
SUMMARY OF STORMWATER ANALYTICAL RESULTS FOR PESTICIDES
ConocoPhillips Facility 0922 Portland Terminal
5528 Doane Avenue NW
Portland, OR

Stormwater Sampling Point	MH-12 4-inch Influent				MH-12 12-inch Influent				MH-X				MH-3				WR-012				WR-369				WR-370				SLV
	10/31/08	03/16/09	04/28/09	05/12/09	10/31/08	03/16/09	04/28/09	05/12/09	10/31/08	03/16/09	04/28/09	05/12/09	10/31/08	03/16/09	04/28/09	05/12/09	10/31/08	03/16/09	04/28/09	05/12/09	10/31/08	03/16/09	04/28/09	05/12/09	10/31/08	03/16/09	04/28/09	05/12/09	
α - BHC	<0.0190	Dry	Dry	Dry	<0.0189	Dry	<0.0190	Dry	<0.0189	Dry	<0.0190	<0.0190	Dry	Dry	Dry	Dry	NA	NA	NA	NA	<0.0190	<0.0189	<0.0190	<0.0190	<0.0190	<0.0190	<0.0190	<0.0190	0.0049
β - BHC	<0.0190	Dry	Dry	Dry	<0.0283	Dry	<0.0190	Dry	<0.0189	Dry	<0.0190	<0.0190	Dry	Dry	Dry	Dry	NA	NA	NA	NA	<0.0286	<0.0189	<0.0381	<0.0190	<0.0388	<0.0190	<0.0381	<0.0286	0.017
γ - BHC (Lindane)	<0.0190	Dry	Dry	Dry	<0.0189	Dry	<0.0190	Dry	<0.0189	Dry	<0.0190	<0.0190	Dry	Dry	Dry	Dry	NA	NA	NA	NA	<0.0190	<0.0189	<0.0190	<0.0190	<0.0194	<0.0190	<0.0190	<0.0190	0.052
δ - BHC	<0.0190	Dry	Dry	Dry	<0.0189	Dry	<0.0570	Dry	<0.0189	Dry	<0.0190	<0.0190	Dry	Dry	Dry	Dry	NA	NA	NA	NA	<0.0190	<0.0189	<0.0190	<0.0190	<0.0194	<0.0190	<0.0190	<0.0190	0.037
Heptachlor	<0.0190	Dry	Dry	Dry	<0.0189	Dry	<0.0190	Dry	<0.0189	Dry	<0.0190	<0.0190	Dry	Dry	Dry	Dry	NA	NA	NA	NA	<0.019	<0.0189	<0.0190	<0.0190	<0.0194	<0.0190	<0.0190	<0.0190	7.9E-05
Heptachlor epoxide	<0.0190	Dry	Dry	Dry	<0.0189	Dry	<0.0190	Dry	<0.0189	Dry	<0.0190	<0.0190	Dry	Dry	Dry	Dry	NA	NA	NA	NA	<0.0190	<0.0189	<0.0190	<0.0190	<0.0194	<0.0190	<0.0190	<0.0190	3.9E-05
Aldrin	<0.0190	Dry	Dry	Dry	<0.0189	Dry	<0.0190	Dry	<0.0189	Dry	<0.0190	<0.0190	Dry	Dry	Dry	Dry	NA	NA	NA	NA	<0.0190	<0.0189	<0.0190	<0.0190	<0.0194	<0.0190	<0.0190	<0.0190	0.00005
Chlordane	<0.190	Dry	Dry	Dry	<0.189	Dry	<0.190	Dry	<0.189	Dry	<0.190	<0.190	Dry	Dry	Dry	Dry	NA	NA	NA	NA	<0.190	<0.189	<0.190	<0.190	<0.194	<0.190	<0.190	<0.190	0.00081
Endosulfan I	<0.0190	Dry	Dry	Dry	<0.0189	Dry	<0.0190	Dry	<0.0189	Dry	<0.0190	<0.0190	Dry	Dry	Dry	Dry	NA	NA	NA	NA	<.0190	<0.0189	<0.0190	<0.0190	<0.0194	<0.0190	<0.020	<0.0190	0.056
Endosulfan II	<.0190	Dry	Dry	Dry	<0.0189	Dry	<0.0190	Dry	<0.0189	Dry	<0.0190	<0.0190	Dry	Dry	Dry	Dry	NA	NA	NA	NA	<.0190	<0.0189	<0.0190	<0.0190	<0.0194	<0.0190	<0.019	<0.0190	0.056
DDE	<0.0190	Dry	Dry	Dry	<0.0189	Dry	<0.0190	Dry	<0.0189	Dry	<0.0189	<0.0189	Dry	Dry	Dry	Dry	NA	NA	NA	NA	<0.0190	<0.0189	<0.0190	<0.0190	<0.0194	<0.0190	<0.0190	<0.0190	0.00022
DDD	<0.0190	Dry	Dry	Dry	<0.0189	Dry	<0.0190	Dry	<0.0190	Dry	<0.0190	<0.0190	Dry	Dry	Dry	Dry	NA	NA	NA	NA	<0.0190	<0.0189	<0.0190	<0.0190	<0.0194	<0.0190	<0.0190	<0.0190	0.00031
DDT	<0.0190	Dry	Dry	Dry	<0.0943	Dry	<0.0190	Dry	<0.0948	Dry	<0.0190	<0.0190	Dry	Dry	Dry	Dry	NA	NA	NA	NA	<0.0190	<0.0189	<0.0190	<0.0190	<0.0485	<0.0190	<0.0190	<0.0190	0.00022
DDT - total (sum DDE+DDE+DDT)	<0.1328	Dry	Dry	Dry	<0.1321	Dry	<0.0570	Dry	<0.1328	Dry	<0.0570	<0.0570	Dry	Dry	Dry	Dry	NA	NA	NA	NA	<0.0570	<0.0567	<0.0570	<0.0570	<0.0873	<0.0570	<0.0570	<0.0570	0.2
Dieldrin	<0.0190	Dry	Dry	Dry	<0.0189	Dry	<0.0190	Dry	<0.0190	Dry	<0.0190	<0.0190	Dry	Dry	Dry	Dry	NA	NA	NA	NA	<0.0190	<0.0189	<0.0190	<0.0190	<0.0194	<0.0190	<0.0190	<0.0190	5.4E-05
Endrin	<0.0190	Dry	Dry	Dry	<0.0189	Dry	<0.0190	Dry	<0.0190	Dry	<0.0190	<0.0190	Dry	Dry	Dry	Dry	NA	NA	NA	NA	<0.0190	<0.0189	<0.0190	<0.0190	<0.0194	<0.0190	<0.0190	<0.0190	0.036
Endrin aldehyde	<0.0190	Dry	Dry	Dry	<0.0189	Dry	<0.0190	Dry	<0.019	Dry	<0.0190	<0.0190	Dry	Dry	Dry	Dry	NA	NA	NA	NA	<0.0190	<0.0189	<0.0190	<0.0190	<0.0194	<0.0190	<0.0190	<0.0190	0.3
Endrin ketone	<0.0190	Dry	Dry	Dry	<0.0189	Dry	<0.0190	Dry	<0.0190	Dry	<0.0190	<0.0190	Dry	Dry	Dry	Dry	NA	NA	NA	NA	<0.0190	<0.0189	<0.0190	<0.0190	<0.0194	<0.0190	<0.0190	<0.0190	--
Methoxychlor	<0.0948	Dry	Dry	Dry	<0.0943	Dry	<0.0190	Dry	<0.0948	Dry	<0.0190	<0.0190	Dry	Dry	Dry	Dry	NA	NA	NA	NA	<0.0190	<0.0189	<0.0190	<0.0190	<0.0485	<0.0190	<0.0190	<0.0190	0.03
Toxaphene	<0.474	Dry	Dry	Dry	<0.472	Dry	<0.476	Dry	<0.474	Dry	<0.476	<0.476	Dry	Dry	Dry	Dry	NA	NA	NA	NA	<0.476	<0.472	<0.476	<0.476	<0.485	<0.476	<0.476	<0.476	0.0002

EXPLANATION:

µg/L=Micrograms per Liter

SLV=Screening Level Values from Portland Harbor Joint Source Control Study Table 3-1

Method Detection Limit (MDL) exceeded SLV

Dry=Insuffiient Water to collect Sample

NA=Not Analyzed - Pesticide Analysis not required for this sampling point

Attachment A

2005 Portland Harbor JSCS Table 3-1

Table 3-1 7/16/07 Revision

Table 3-1 Screening Level Values for Soil/Stormwater Sediment, Stormwater, Groundwater, and Surface Water[A]

		GROUNDWATER / SURFACE WATER / STORMWATER						GROUNDWATER / SURFACE WATER / STORMWATER			UPLAND SOIL / STORMWATER SEDIMENT [D]	
		Water [C]									**Soil/Stormwater Sediment[D]**	
		Human Health #						Ecological Receptors #			Toxicity	Bioaccumulation
		Fish Consumption				Drinking Water						
Chemical		EPA's 2004 NRWQC (organism only) 17.5 g/day consumption rate	Portland Harbor specific fish consumption rate 175 g/day consumption rate	DEQ's 2004 AWQC (organism only) 17.5 g/day consumption rate	Portland Harbor specific fish consumption rate 175 g/day consumption rate	MCL	Tap Water PRGs	EPA's 2004 NRWQC (chronic)	DEQ's 2004 AWQC (chronic)	Oak Ridge National Laboratory's (Tier II SCV)[(i)]	MacDonald PECs and other SQVs [(1)]	DEQ 2007 Bioaccumulative Sediment SLVs [(E)]
Units		µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/kg	µg/kg
NOTE: Numbers highlighted in yellow are values to be used for initial upland source control screening evaluations for water.											**NOTE: Numbers highlighted in orange are to be used for initial upland source control screening evaluations for soil and stormwater sediment.**	
Metals/Inorganics	CAS #	Metals in these columns are expressed as dissolved metal in the water column except where noted		Metals in these columns are expressed in terms of total recoverable metal in the water coulmn				Metals in this column are expressed as dissolved metal in the water column except where noted	Metals in this column are expressed in terms of total recoverable metal in the water coulmn			
Aluminum (pH 6.5 - 9.0)[(13)]	7429-90-5					**(50-200)[29]**	37,000	87				
Antimony	7440-36-0	640	64	640	64	**6**	15		1600 [(16)]	30	64,000 [(3)]	
Arsenic	7440-38-2	0.14	0.014	0.14	0.014	10	**0.045**	150		3.1[(a)]	33,000 [(2)]	7000 [(31)]
Arsenic III	22569-72-8								**190 [(14)]**			
Cadmium[(15)]	7440-43-9					5	18	**0.094**	0.38 [(14)]		4,980 [(2)]	1000 [(31)]
Chromium, total	7440-47-3					**100**					111,000 [(2)]	
Chromium, hexavalent	18540-29-9						110	**11**	11 [(14)]			
Copper[(15)]	7440-50-8					1,300 = TT	1,400	**2.7**	3.6 [(14)]		149,000 [(2)]	
Lead[(15)]	7439-92-1					15 = TT	15	**0.54**	0.54 [(14)]		128,000 [(2)]	17000 [(31)]
Manganese	7439-96-5	100	10	100	10	**(50)[29]**	1700			120	1,100,000 [(6,2)]	
Mercury	7439-97-6			0.146	0.0146	2	11	**0.77**	0.012	1.3[(b)]	1,060 [(2)]	70 [(31)]
Methyl Mercury	22967-92-6	300 µg/kg [(20)]	30 µg/kg [(20)]	300 µg/kg [(20)]	30 µg/kg [(20)]		3.7			**0.0028**		
Nickel[(15)]	7440-02-0	4,600	460	4,600	460		730	**16**	49 [(14)]		48,600 [(2)]	
Selenium	7782-49-2	4,200	420	4,200	420	50	180	**5 [(19)]**	35 [(14)]		5,000 [(4)]	2000 [(31)]
Silver [(15)]	7440-22-4					(100)[29]	180		**0.12 [(14)]**	0.36	5,000 [(5,4)]	
Zinc[(15)]	7440-66-6	26,000	2,600	26,000	2,600	(5,000)[29]	11,000	**36**	33		459,000 [(2)]	
Perchlorate	14797-73-0						**<24.5**					
Cyanide[(18)]	57-12-5	140	14	140	14	200	730	**5.2**	5.2			

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Table 3-1 Screening Level Values for Soil/Stormwater Sediment, Stormwater, Groundwater, and Surface Water[A]

Chemical		GROUNDWATER / SURFACE WATER / STORMWATER						GROUNDWATER / SURFACE WATER / STORMWATER			UPLAND SOIL / STORMWATER SEDIMENT [D]	
		Water [C]									Soil/Stormwater Sediment[D]	
		Human Health #						Ecological Receptors #			Toxicity	Bioaccumulation
		Fish Consumption				Drinking Water						
		EPA's 2004 NRWQC (organism only)	Portland Harbor specific fish consumption rate	DEQ's 2004 AWQC (organism only)	Portland Harbor specific fish consumption rate	MCL	Tap Water PRGs	EPA's 2004 NRWQC (chronic)	DEQ's 2004 AWQC (chronic)	Oak Ridge National Laboratory's (Tier II SCV)[G]	MacDonald PECs and other SQVs [1]	DEQ 2007 Bioaccumulative Sediment SLVs [E]
		17.5 g/day consumption rate	175 g/day consumption rate	17.5 g/day consumption rate	175 g/day consumption rate							
Units		µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/kg	µg/kg
Butyltins [12]												
Monobutyltin	78763-54-9											
Dibutyltin	1002-53-5											
Tributyltin	56573-85-4						11	**0.072**				**2.3** [32]
Tetrabutyltin	1461-25-2											
PCBs Aroclors												
Aroclor 1016	12674-11-2						**0.96**				**530** [9]	
Aroclor 1221	11104-28-2						**0.034**			0.28		
Aroclor 1232	11141-16-5						**0.034**			0.58		
Aroclor 1242							**0.034**			0.053		
Aroclor 1248	12672-29-6						**0.034**			0.081	**1,500** [9]	
Aroclor 1254	11097-69-1						0.034			**0.033**	**300** [9]	
Aroclor 1260	11096-82-5						**0.034**			94	**200** [9]	
Aroclor 1262	37324-23-5											
Aroclor 1268	11100-14-4											
Total PCBs		**0.000064**	0.0000064	0.000064	0.0000064	0.5	0.034	0.014	0.014	0.14	676 [2]	**0.39** [33]
PCB Congeners												
All 209 PCB congener target analytes												
3,3',4,4'-TCB	32598-13-3											**0.052** [33]
3,4,4',5-TCB												**0.017** [33]
2,3,3',4,4'-PeCB	32598-14-4											**0.17** [33]
2,3,4,4',5-PeCB												**0.17** [33]
2,3',4,4',5-PeCB	31508-00-6											**0.12** [33]
2',3,4,4',5-PeCB												**0.21** [33]
3,3',4,4',5-PeCB												**0.00005** [33]
2,3,3',4,4',5'-HxCB												**0.21** [33]
2,3,3',4,4',5-HxCB												**0.21** [33]
2,3',4,4',5,5'-HxCB												**0.21** [33]
3,3',4,4',5,5'-HxCB	32774-16-6											**0.00021** [33]
2,3,3',4,4',5,5'-HpCB												**1.2** [33]
Chlorinated Herbicides												
Dalapon	75-99-0					**200**	1,100					

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Table 3-1 Screening Level Values for Soil/Stormwater Sediment, Stormwater, Groundwater, and Surface Water[A]

Chemical		GROUNDWATER / SURFACE WATER / STORMWATER						GROUNDWATER / SURFACE WATER / STORMWATER			UPLAND SOIL / STORMWATER SEDIMENT [D]	
		Water [C]									Soil/Stormwater Sediment[D]	
		Human Health #						Ecological Receptors #			Toxicity	Bioaccumulation
		Fish Consumption				Drinking Water						
		EPA's 2004 NRWQC (organism only)	Portland Harbor specific fish consumption rate	DEQ's 2004 AWQC (organism only)	Portland Harbor specific fish consumption rate	MCL	Tap Water PRGs	EPA's 2004 NRWQC (chronic)	DEQ's 2004 AWQC (chronic)	Oak Ridge National Laboratory's (Tier II SCV)[(J)]	MacDonald PECs and other SQVs [(1)]	DEQ 2007 Bioaccumulative Sediment SLVs [(E)]
		17.5 g/day consumption rate	175 g/day consumption rate	17.5 g/day consumption rate	175 g/day consumption rate							
Units		µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/kg	µg/kg
Dicamba	1918-00-9						**1,100**					
MCPA	94-74-6						**18**					
Dichlorprop	120-36-5						**370**					
2,4-D	94-75-7					**70**	370					
2,4,5-TP (Silvex)	93-72-1					**50**	370					
2,4,5-T	93-76-5						**370**					
2,4-DB	94-82-6						**290**					
Dinoseb	88-85-7					**7**	37					
MCPP	93-65-2						**37**					
Organochlorine Pesticides												
α - BHC	319-84-6	**0.0049**	0.00049	0.0049	0.00049		0.011			2.2[(c)]		
β - BHC	319-85-7	**0.017**	0.0017	0.017	0.0017		0.037					
γ - BHC (Lindane)	58-89-9	1.8	0.18	1.8	0.18		**0.052**		0.08		4.99 [(2)]	
δ - BHC	319-86-8						**0.037**					
Heptachlor	76-44-8	**0.000079**	0.0000079	0.000079	0.0000079	0.4	0.015	0.0038	0.0038	0.0069	10 [(6)]	
Heptachlor epoxide	102-45-73	**0.000039**	0.0000039	0.000039	0.0000039	0.2	0.0074	0.0038	0.0038		16 [(2)]	
Aldrin	309-00-2	**0.00005**	0.000005	0.00005	0.000005		0.004				40 [(6)]	
Chlordane	57-74-9	**0.00081**	0.000081	0.00081	0.000081	2	0.19	0.0043	0.0043		17.6 [(2)]	**0.37** [(35)]
Endosulfan alpha-	959-98-8	89	8.9	89	8.9		220	0.056	0.056	**0.051**		
Endosulfan beta-	33213-65-9	89	8.9	89	8.9		220	0.056	0.056	**0.051**		
Endosulfan sulfate	1031-07-8	**89**	8.9	89	8.9							
DDE [(34)]	72-55-9	**0.00022**	0.000022	0.00022	0.000022		0.2				31.3 [(2)]	**0.33**
DDD [(34)]	72-54-8	**0.00031**	0.000031	0.00031	0.000031		0.28			0.011[(d)]	28 [(2)]	**0.33**
DDT [(34)]	50-29-3	**0.00022**	0.000022	0.00022	0.000022		0.2	0.001	0.001	0.013[(e)]	62.9 [(2)]	**0.33**
DDT - total [(35)]	50-29-3						**0.2**					**0.33** [(33)]
Dieldrin	60-57-1	**0.000054**	0.0000054	0.000054	0.0000054		0.0042	0.056	0.0019[(14)]		61.8 [(2)]	**0.0081** [(33)]
Endrin	72-20-8	0.06	0.006	0.06	0.006	2	11	**0.036**	0.0023 [(14)]	0.061	**207** [(2)]	
Endrin aldehyde	7421-93-4	0.3	0.03	0.3	0.03							
Endrin ketone	53494-70-5											
Methoxychlor	72-43-5					40	180	**0.03**	0.03	0.019		
Toxaphene	8001-35-2	0.00028	0.000028	0.00028	0.000028	3	0.061	**0.0002**	0.0002			
oxy chlordane							**0.19**					
cis - nonachlor	5103-73-1						**0.19**					
trans - nonachlor	39765-80-5						**0.19**					
Volatile Organic Compounds												

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Table 3-1 Screening Level Values for Soil/Stormwater Sediment, Stormwater, Groundwater, and Surface Water[A]

Chemical		GROUNDWATER / SURFACE WATER / STORMWATER						GROUNDWATER / SURFACE WATER / STORMWATER			UPLAND SOIL / STORMWATER SEDIMENT [D]	
		Water [C]									Soil/Stormwater Sediment[D]	
		Human Health #						Ecological Receptors #			Toxicity	Bioaccumulation
		Fish Consumption				Drinking Water						
		EPA's 2004 NRWQC (organism only)	Portland Harbor specific fish consumption rate	DEQ's 2004 AWQC (organism only)	Portland Harbor specific fish consumption rate	MCL	Tap Water PRGs	EPA's 2004 NRWQC (chronic)	DEQ's 2004 AWQC (chronic)	Oak Ridge National Laboratory's (Tier II SCV)[G]	MacDonald PECs and other SQVs [1]	DEQ 2007 Bioaccumulative Sediment SLVs [E]
		17.5 g/day consumption rate	175 g/day consumption rate	17.5 g/day consumption rate	175 g/day consumption rate							
Units		µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/kg	µg/kg
1,1,1,2- Tetrachloroethane	630-20-6						**2.5**					
1,1,1- Trichloroethane (TCA)	71-55-6					200	840			**11**		
1,1,2,2- Tetrachloroethane	79-34-5	4	0.4	4	0.4		**0.33**		2,400 [16]	**610**		
1,1,2- Trichloroethane	79-00-5	16	1.6	16	1.6	5	**1.2**		9,400 [16]	**1,200**		
1,1- Dichloroethane	75-34-3						1200			**47**		
1,2,3- Trichloropropane	96-18-4						**0.0095**					
1,2- Dichloroethane (EDC)	107-06-2	37	3.7	37	3.7	5	**0.73**		20,000 [16]	910		
cis-1,2-Dichloroethlyene	156-59-2					70	**61**					
1,2- Dichloropropane	78-87-5	15	1.5	15	1.5	5	**0.97**					
1,2- Dibromoethane (EDB)	106-93-4						**0.033**					
2- Butanone (MEK)	78-93-3						**7,100**			14,000		
2- Chloroethyl Vinyl Ether	110-75-8											
2- Hexanone	591-78-6									**99**		
4- Methyl-2-Pentanone (MIBK)	108-10-1						2000			**170**		
Acetone	67-64-1						5,500			**1,500**		
Acrolein	107-02-8	290	29	290	29		**0.042**		21 [16]			
Acrylonitrile	107-13-1	0.25	0.025	0.25	0.025		**0.12**		2,600 [16]			
Bromochloromethane	74-97-5											
Bromodichloromethane	75-27-4						**1.1**					
Bromoform	75-25-2	140	14	140	14		**8.5**					
Bromomethane	74-83-9						**8.7**					
Carbon Disulfide	75-15-0						1,000			**0.92**		
Carbon Tetrachloride	56-23-5	1.6	0.16	1.6	0.16	5	**0.51**			9.8		
Chlorobenzene	108-90-7	1600	160	1,600	160	100	91		**50** [16]	64		
Chlorodibromomethane	124-48-1	13	1.3	13	1.3		**0.79**					
Chloroethane	75-00-3						**23**					
Chloroform	67-66-3	470	47	470	47		**0.17**		1,240 [16]	28		
Chloromethane	74-87-3						**2.1**					
cis-1,2-dichloroethylene	156-59-2									**590**		
cis-1,3-Dichloropropene	10061-01-5									**0.055**		
Dibromomethane	74-95-3						**61**					
Dichlorodifluoromethane	75-71-8						**390**					
Iodomethane (Methyl Iodide)	74-88-4											
Isopropylbenzene	98-82-8						**660**					
Methylene chloride	75-09-2	590	59	590	59		**8.9**			2,200		
Styrene	100-42-5					**100**	1,600					
trans-1,4-Dichloro-2-butene	110-57-6						**7100**					
Trichlorofluoromethane	75-69-4						**1,300**					
Vinyl Acetate	108-05-4						410			**16**		
Benzene	71-43-2	51	5.1	51	5.1	5	**1.2**			130		

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Table 3-1 Screening Level Values for Soil/Stormwater Sediment, Stormwater, Groundwater, and Surface Water[A]

Chemical		GROUNDWATER / SURFACE WATER / STORMWATER						GROUNDWATER / SURFACE WATER / STORMWATER			UPLAND SOIL / STORMWATER SEDIMENT [D]	
		Water [C]									**Soil/Stormwater Sediment[D]**	
		Human Health #						Ecological Receptors #			Toxicity	Bioaccumulation
		Fish Consumption				Drinking Water						
		EPA's 2004 NRWQC (organism only)	Portland Harbor specific fish consumption rate	DEQ's 2004 AWQC (organism only)	Portland Harbor specific fish consumption rate	MCL	Tap Water PRGs	EPA's 2004 NRWQC (chronic)	DEQ's 2004 AWQC (chronic)	Oak Ridge National Laboratory's (Tier II SCV)[G]	MacDonald PECs and other SQVs [1]	DEQ 2007 Bioaccumulative Sediment SLVs [E]
		17.5 g/day consumption rate	175 g/day consumption rate	17.5 g/day consumption rate	175 g/day consumption rate							
Units		µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/kg	µg/kg
EthylBenzene	100-41-4	2,100	210	2,100	210	700	1,300			**7.3**		
m,p-Xylene										**1.8**[f]		
o-Xylene	95-47-6						1400			**13**[g]		
Xylenes (total)	1330-20-7					10,000	**200**					
Methyltert-butyl ether	1634-04-4						**37**					
Tetrachloroethene (PCE)	127-18-4	3.3	0.33	3.3	0.33	5	**0.12**		840 [16]	98	500[f]	
Toluene	108-88-3	15,000	1,500	15,000	1,500	1,000	2300			**9.8**		
trans-1,2-Dichloroethene	156-60-5	10,000	1,000	10,000	1,000	100	**110**			590		
trans-1,3-Dichloropropene	10061-02-6						0.4			**0.055**		
Trichloroethene (TCE)	79-01-6	30	3	30	3	5	**0.17**		21,900 [16]	47	**2,100**[f]	
Vinyl Chloride	75-01-4	2.4	0.24	2.4	0.24	2	**0.015**					
Semivolatile Organic Compounds												
Halogenated Compounds												
1,2-Dichlorobenzene	95-50-1	1,300	130	1,300	130	600	**49**		763 [16]	14	**1,700**[f]	
1,3-Dichlorobenzene	541-73-1	960	96	960	96		**14**		763 [16]	71	**300**[f]	
1,4-Dichlorobenzene	106-46-7	190	19	190	19	75	**2.8**		763 [16]	15	**300**[f]	
1,2,4-Trichlorobenzene	120-82-1	70	7	70	7	70	**8.2**			110	**9,200**[f]	
Hexachlorobenzene	118-74-1	**0.00029**	0.000029	0.00029	0.000029	1	0.042				100 [6]	**19** [33]
2-Chloronaphthalene	91-58-7	1,600	160	1,600	160		**490**					
Hexachloroethane	67-72-1	**3.3**	0.33	3.3	0.33		4.8		540 [16]	12		
Hexachlorobutadiene	87-68-3	18	1.8	18	1.8		**0.86**		9.3 [16]		**600**[f]	
Hexachlorocyclopentadiene	77-47-4	1,100	110	1,100	110	50	220		**5.2** [16]		**400**[f]	
2,2'-oxybis(1-chloropropane)	108-60-1						**0.95**					
Bis-(2-chloroethoxy) methane	111-91-1											
Bis-(2-chloroethyl) ether	111-44-4	0.53	0.053	0.53	0.053		**0.06**					
4-Chlorophenyl-phenyl ether	7005-72-3						**0.06**					
4-bromophenyl-phenyl ether	101-55-3											
3,3'-Dichlorobenzidine	91-94-1	**0.028**	0.0028	0.028	0.0028		0.15		763 [16]			
4-Chloroaniline	106-47-8						**150**					
Organonitrogen Compounds												
Nitrobenzene	98-95-3	690	69	690	69		**3.4**					
Aniline	62-53-3						**12**					
2-Nitroaniline	88-74-4						**110.0**					
3-Nitroaniline	99-09-2						**3.2**					
4-Nitroaniline	100-01-6						**3.2**					

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Table 3-1 Screening Level Values for Soil/Stormwater Sediment, Stormwater, Groundwater, and Surface Water[A]

Chemical		GROUNDWATER / SURFACE WATER / STORMWATER						GROUNDWATER / SURFACE WATER / STORMWATER			UPLAND SOIL / STORMWATER SEDIMENT [D]	
		Water [C]									Soil/Stormwater Sediment[D]	
		Human Health #						Ecological Receptors #			Toxicity	Bioaccumulation
		Fish Consumption				Drinking Water						
		EPA's 2004 NRWQC (organism only)	Portland Harbor specific fish consumption rate	DEQ's 2004 AWQC (organism only)	Portland Harbor specific fish consumption rate	MCL	Tap Water PRGs	EPA's 2004 NRWQC (chronic)	DEQ's 2004 AWQC (chronic)	Oak Ridge National Laboratory's (Tier II SCV)[G]	MacDonald PECs and other SQVs [1]	DEQ 2007 Bioaccumulative Sediment SLVs [E]
		17.5 g/day consumption rate	175 g/day consumption rate	17.5 g/day consumption rate	175 g/day consumption rate							
Units		µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/kg	µg/kg
N-Nitrosodimethylamine	62-75-9	3	0.3	3	0.3		**0.00042**					
N-Nitroso-di-n-propylamine	621-64-7	0.51	0.051	0.51	0.051		**0.0096**					
N-Nitrosodiphenylamine	86-30-6	**6**	0.6	6	0.6		14			210		
2,4-Dinitrotoluene	121-14-2	**3.4**	0.34	3.4	0.34		73					
2,6-Dinitrotoluene	606-20-2						**37**					
Carbazole	86-74-8						**3.4**				1,600 [5]	
Oxygen-Containing Compounds												
Benzoic Acid	65-85-0						150,000			**42**		
Benzyl Alcohol	100-51-6						11,000			**8.6**		
Dibenzofuran	132-64-9						12			**3.7**		
Isophorone	78-59-1	960	96	960	96		**71**					
Phenols and Substituted Phenols												
Phenol	108-95-2	1,700,000	170,000	1,700,000	170,000		11,000		**2,560 [16]**		50 [5, 6]	
2-Methylphenol (o-Cresol)	95-48-7						1,800			**13**		
4-Methylphenol (p-Cresol)	106-44-5						**180**					
2,4-Dimethylphenol	105-67-9	850	85	850	85		**730**					
2-Chlorophenol	95-57-8	150	15	150	15		**30**		2,000 [16]			
2,4-Dichlorophenol	120-83-2	290	29	290	29		**110**		365 [16]			
2,4,5-Trichlorophenol	95-95-4	**3,600 [24]**	360 [24]	3,600	360		3,700					
2,4,6-trichlorophenol	88-06-2	**2.4**	0.24	2.4	0.24		6.1		970 [16]			
2,3,4,6-Tetrachlorophenol	58-90-2						**1,100**					
Pentachlorophenol	87-86-5	3	0.3	3	0.3	1	**0.56**	15 [22]	13 [14,23]		1,000 [8]	250 [33]
4-Chloro-3-methylphenol	59-50-7											
2-Nitrophenol	88-75-5						1100		**150 [16]**			
4-Nitrophenol	100-02-7						290		**150 [16]**	300		
2,4-Dinitrophenol	51-28-5	5,300	530	5,300	530		**73**		150 [16]			
Methyl-4,6-Dinitrophenol 2-	534-52-1	280	28	280	28				**150 [16]**			
Phthalate Esters												
Dimethylphthalate	131-11-3	1,100,000	110,000	1,100,000	110,000		370,000		**3 [16]**			
Diethylphthalate	84-66-2	44,000	4,400	44,000	4,400		29,000		**3 [16]**	210	600 [7]	
Di-n-butylphthalate	84-74-2	4,500	450	4,500	450		3,700		**3 [16]**		100 [6]	60
Butylbenzylphthalate	85-68-7	1900	190	1900	190		7,300		**3 [16]**	19		
Di-n-octylphthalate	117-84-0						1,500		**3 [16]**			
bis(2-Ethylhexyl)phthalate	117-81-7	**2.2**	0.22	2.2	0.22	6	4.8		3 [16]		800 [5, 6]	330

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Table 3-1 Screening Level Values for Soil/Stormwater Sediment, Stormwater, Groundwater, and Surface Water[A]

Chemical		GROUNDWATER / SURFACE WATER / STORMWATER						GROUNDWATER / SURFACE WATER / STORMWATER			UPLAND SOIL / STORMWATER SEDIMENT [D]	
		Water [C]									Soil/Stormwater Sediment[D]	
		Human Health #						Ecological Receptors #			Toxicity	Bioaccumulation
		Fish Consumption				Drinking Water						
		EPA's 2004 NRWQC (organism only)	Portland Harbor specific fish consumption rate	DEQ's 2004 AWQC (organism only)	Portland Harbor specific fish consumption rate	MCL	Tap Water PRGs	EPA's 2004 NRWQC (chronic)	DEQ's 2004 AWQC (chronic)	Oak Ridge National Laboratory's (Tier II SCV)[G]	MacDonald PECs and other SQVs [1]	DEQ 2007 Bioaccumulative Sediment SLVs [E]
		17.5 g/day consumption rate	175 g/day consumption rate	17.5 g/day consumption rate	175 g/day consumption rate							
Units		µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/kg	µg/kg
Polycyclic Aromatic Hydrocarbons												
Naphthalene	91-20-3					**0.2** [26]	6.2		620 [16]	12	**561** [2]	
2-Methylnaphthalene	91-57-6					**0.2** [26]				2.1 [h]	**200** [11]	
Acenaphthylene	208-96-8					**0.2** [26]					**200** [6]	
Acenaphthene	83-32-9	990	99	990	99	**0.2** [26]	370		520 [16]		**300** [6]	
Fluorene	86-73-7	5,300	530	5,300	530	**0.2** [26]	240			3.9	**536** [2]	
Phenanthrene	85-01-8					**0.2** [26]					**1,170** [2]	
Anthracene	120-12-7	40,000	4,000	40,000	4,000	**0.2** [26]	1,800			0.73	**845** [2]	
Fluoranthene	206-44-0	140	14	140	14	**0.2** [26]	1,500				**2,230** [2]	37000 [32]
Pyrene	129-00-0	4,000	400	4,000	400	**0.2** [26]	180				**1,520** [2]	1900 [32]
Benzo(a)anthracene	56-55-3	**0.018**	0.0018	0.018	0.0018	0.2 [26]	0.092			0.027	**1,050** [2]	
Chrysene	218-01-9	**0.018**	0.0018	0.018	0.0018	0.2 [26]	9.2				**1,290** [2]	
Benzo(b)fluoranthene	205-99-2	**0.018**	0.0018	0.018	0.0018	0.2 [26]	0.092					
Benzo(k)fluoranthene	207-08-9	**0.018**	0.0018	0.018	0.0018	0.2 [26]	0.92				**13,000** [6]	
Benzo(a)pyrene	50-32-8	**0.018**	0.0018	0.018	0.0018	0.2	0.0092			0.014	**1,450** [2]	
Indeno(1,2,3-cd)pyrene	193-39-5	**0.018**	0.0018	0.018	0.0018	0.2 [26]	0.092				**100** [10]	
Dibenz(a,h)anthracene	53-70-3	**0.018**	0.0018	0.018	0.0018	0.2 [26]	0.0092				**1,300** [9]	
Benzo(g,h,i)perylene	191-24-2					**0.2** [26]					**300** [16]	
Chlorinated Dioxins and Furans												
2,3,7,8,-TCDD (Toxicity Equivalence Quotient	1746-01-6	**5.1E-09**	5.1E-10	5.1E-09	5.1E-10	0.00003	4.5E-07					
2,3,7,8,-TCDD	1746-01-6	**5.1E-09**	5.1E-10	5.1E-09	5.1E-10		4.5E-07		0.00038 [16]		0.009 [6]	**0.0000091** [33]
2,3,7,8,-TCDF												**0.00077** [33]
1,2,3,7,8,-PeCDD												**0.0026** [33]
1,2,3,7,8,-PeCDF												**0.0026** [33]
2,3,4,7,8,-PeCDF												**0.00003** [33]
2,3,4,7,8,-PeCDF												
1,2,3,6,7,8,-HxCDD												
1,2,3,7,8,9,-HxCDD												
1,2,3,4,7,8,-HxCDF												**0.0027** [33]
1,2,3,6,7,8,-HxCDF												**0.0027** [33]
1,2,3,7,8,9,-HxCDF												**0.0027** [33]

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Table 3-1 Screening Level Values for Soil/Stormwater Sediment, Stormwater, Groundwater, and Surface Water[A]

Chemical		GROUNDWATER / SURFACE WATER / STORMWATER						GROUNDWATER / SURFACE WATER / STORMWATER			UPLAND SOIL / STORMWATER SEDIMENT [D]	
		Water [C]									**Soil/Stormwater Sediment[D]**	
		Human Health #						Ecological Receptors #			Toxicity	Bioaccumulation
		Fish Consumption				Drinking Water						
		EPA's 2004 NRWQC (organism only)	Portland Harbor specific fish consumption rate	DEQ's 2004 AWQC (organism only)	Portland Harbor specific fish consumption rate	MCL	Tap Water PRGs	EPA's 2004 NRWQC (chronic)	DEQ's 2004 AWQC (chronic)	Oak Ridge National Laboratory's (Tier II SCV)[G]	MacDonald PECs and other SQVs [1]	DEQ 2007 Bioaccumulative Sediment SLVs [E]
		17.5 g/day consumption rate	175 g/day consumption rate	17.5 g/day consumption rate	175 g/day consumption rate							
Units		µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/kg	µg/kg
2,3,4,6,7,8,-HxCDF												0.0027 [33]
1,2,3,4,6,7,8,-HpCDD												0.69 [33]
1,2,3,4,6,7,8,-HpCDF												0.69 [33]
1,2,3,4,7,8,9,-HpCDF												0.69 [33]
OCDD	3268-87-9											23 [33]
OCDF	39001-02-0											23 [33]
Total tetrachlorinated dioxins												
Total pentachlorinated dioxins												
Total hexachlorinated dioxins												
Total heptachlorinated dioxins												
Total tetrachlorinated furans												
Total pentachlorinated furans												
Total hexachlorinated furans												
Total heptachlorinated furans												

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Notes:

[A] Stormwater values in this table are intended for screening non-permitted discharges.

[C] EPA, under CERCLA authority, has identified the Sage Drinking Water Act's MCLs and AWQCs (federal and state, once approved) as potentialARARs under CERCLA. The final determination of whether MCLs or AWQC are ARARs will be made in the EPA Portland Harbor Record of Decision (ROD). Decisions to implement source control, prior to the EPA Portland Harbor ROD, due to an exceedance of an SLV in upland groundwater or stormwater will be prioritized and evaluated on a case-by-case basis.

[D] Stormwater sediment is defined as either catch basin sediment, conveyance line sediment, or stormwater particulates

[E] All values are from DEQ Guidance for Assessing Bioaccumulative Chemicals of Concern in Sediment, January 31, 2007.

a blank cell indicates an SLV was not available at the time of the last update. DEQ or EPA may develop additional SLVs as determined necessary, on a case-by-case basis.

[1] The values were chosen by first referring to the PEC's in the paper listed in footnote 2. If the analyte was not found, we then used the other literature listed in footnotes 3 through 11 to find the value.

[2] These values were taken MacDonald DD, Ingersoll C.G., Berger T.A. (2000) Development and Evaluation of Consensus-Based Sediment Quality Guidelines for Freshwater Ecosystems. Environmental Contamination and Toxicity 39: 20-31.

[3] Sediment quality value (Hyalella), Washington State, quoted in MacDonald et al. (1999); Appendix 3-1.

[4] Quoted in MacDonald et al. (1999); Appendix 3-1

[5] Lowest Apparent Effects Threshold (LAET), Table 11, WDOE (1997)

[6] Upper Effects Threshold (UET), Freshwater Sediment (NOAA, 1999)

[7] USEPA sediment quality advisory level, quoted in MacDonald et al. (1999); Appendix 3-1

[8] New York State acute criterion, quoted in MacDonald et al. (1999); Appendix 3-1

[9] Severe effect level, British Columbia, quoted in MacDonald et al. (1999); Appendix 3-1

[10] 5x conversion from measured "LOW" to estimated "HIGH", NOAEL to chronic LOAEL per USEPA (1997b)

[11] PEL, British Columbia, quoted in MacDonald et al. (1999); Appendix 3-1

[12] Based on Notice of Availability of Final Aquatic Life Criteria Document for Tributyltin (69 Fed. Reg. 2, 342). USGS web site (http://nwis.waterdata.usgs.gov/or/nwis/qwdata/?site_no=14211720&agency_cd=USGS)

[13] These values for aluminum are expressed in terms of "total recoverable" concentration of metal in the water column. The criterion applies at pH<6.6 and hardness<12 mg/L (as $CaCO_3$)

[14] These values were taken from OAR 340-41 Table 20 because they will remain the enforceable values for these particular analytes

[15] This is a hardness dependent metal. All values were calculated based on 25 mg/l of $CaCO_3$.

[16] Values were taken from Table 33c (OAR 340-41), which are Water Quality Guidance Values, not criteria, that can be used in the application of Oregon's Narrative Toxics Criteria to waters of the state in order to protect aquatic life.

[18] Cyanide value is based on a free cyanide value per DEQ OAR 340-41 Table 33, and EPA values are based on total Cyanide

[19] This metal is listed as the total recoverable metal in the water column

[20] This fish tissue residue criterion for methylmercury is based on a total fish consumption rate of 0.0175 kg/day

[22] Freshwater aquatic life values for pentachlorophenol are expressed as a function of pH, and are calculated as follows: Chronic = exp(1.005(ph)-5.134). The value displayed in the table corresponds to a pH of 7.8

[23] Freshwater aquatic life values for pentachlorophenol are expressed as a function of pH, and are calculated as follows: Chronic = exp(1.005(ph)-5.29). The value displayed in the table corresponds to a pH of 7.8

[24] Listed as a secondary pollutant by EPA

[#] Table 20 from OAR 340-40 was superceded by Tables 33A, 33B, and 33C. As noted above, 33A and 33C were adopted the Oregon Environmental Commission and were effective in February 2005. Implementation of Table 33B (i.e., metals) is pending EPA approval; Table 20 will be used for the compounds listed in Table 33B, pending approval and implementation.

Tier II SCV

(a) = value for Arsenic V

(b) = see notation for ORNL's Mercury value

(c) = SCV for BHC (other)

(d) = SCV for p,p' DDD

(e) = SCV for p,p' DDT

(f) = SCV for m-Xylene

General

AWQC = ambient water quality criteria

MRL = minimum reporting limit

NRWQC = National Recommended Water Quality Criteria

ORNL = Oak Ridge National Laboratory

PRG = preliminary remediation goals

Note: This table may be revised when new data becomes available. Check http://deq.state.or.us/nwr/Portland Harbor/jscs for updates (!)

(g) = SCV for Xylene mixture

(h) = SCV for 1-Methylnaphthalene

(!) Screening level values (SLVs) presented in this table may be revised or augmented as data become available from the Portland Harbor RI/FS or in the event the standards, criteria, guidelines or toxicological data are updated. Prior to using this Table, DEQ's website should be checked for updates to this table at http://www.deq.state.or.us/nwr/PortlandHarbor/jscs.

(j) = Tier II SCV values were taken from Suter II, G.W. and Tsao, C.L., 1996. Toxicological Benchmarks for Screening Potential Contaminants of Concern for Effects on Aquatic Biota: 1996 Revision. ORNL publication ES/ER/TM-96/R2

MCL

[26] MCL is based on benzo(a)pyrene

[29] National Secondary Drinking Water Standards

[31] Presumed background, per Table A-1, DEQ Guidance for Assessing Bioaccumulative Chemicals of Concern in Sediment, January, 31, 2007.

[32] Freshwater fish, per Table A-1, DEQ Guidance for Bioaccumulative Chemcials of Concern in Sediment, January 31, 2007.

[33] Human Health General Population, per Table A-1, DEQ Guidance for Bioaccumulative Chemicals of Concern in Sediment, January 31, 2007.

[34] This value represents the sum of the 2,4' and 4,4' isomers.

[35] This value represents the sum of DDE + DDD + DDT.

TT = see footnote 7 on EPA NPD Drinking Water Standards

Attachment B

Laboratory Analytical Results

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

PORTLAND, OR 9405 S.W. NIMBUS AVENUE
BEAVERTON, OR 97008-7132
ph: (503) 906.9200 fax: (503) 906.9210

ORELAP#: OR100021

November 14, 2008

Rick Fetterly
Stantec
7730 SW Mohawk Street
Tualatin, OR 97062

RE: Portland Terminal - Stormwater

Enclosed are the results of analyses for samples received by the laboratory on 10/31/08 16:07. The following list is a summary of the Work Orders contained in this report, generated on 11/14/08 16:40.

If you have any questions concerning this report, please feel free to contact me.

Work Order	Project	ProjectNumber
PRJ1097	Portland Terminal - Stormwat	0922 - ConocoPhillips

TestAmerica Portland

Estella K Rieben

Estella Rieben, Project Manager

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Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	11/14/08 16:40

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
WR-012	PRJ1097-01	Water	10/31/08 09:30	10/31/08 16:07
WR-369	PRJ1097-02	Water	10/31/08 09:35	10/31/08 16:07
WR-370	PRJ1097-03	Water	10/31/08 09:45	10/31/08 16:07
MH-X	PRJ1097-04	Water	10/31/08 10:05	10/31/08 16:07
MH-12 4 inch	PRJ1097-05	Water	10/31/08 11:45	10/31/08 16:07
MH-12 12 inch	PRJ1097-06	Water	10/31/08 12:05	10/31/08 16:07

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Estella K Rieben

Estella Rieben, Project Manager

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ph: (503) 906.9200 fax: (503) 906.9210

Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	11/14/08 16:40

Gasoline Hydrocarbons per NW TPH-Gx Method

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PRJ1097-02 (WR-369)			**Water**			**Sampled: 10/31/08 09:35**				
Gasoline Range Hydrocarbons	NW TPH-Gx	ND	-----	80.0	ug/l	1x	8101256	11/03/08 15:30	11/03/08 22:19	
Surrogate(s): 4-BFB				*84.9%*		*50 - 150%*	"			"
PRJ1097-03 (WR-370)			**Water**			**Sampled: 10/31/08 09:45**				
Gasoline Range Hydrocarbons	NW TPH-Gx	ND	-----	80.0	ug/l	1x	8101256	11/03/08 15:30	11/03/08 22:47	
Surrogate(s): 4-BFB				*92.5%*		*50 - 150%*	"			"
PRJ1097-04 (MH-X)			**Water**			**Sampled: 10/31/08 10:05**				
Gasoline Range Hydrocarbons	NW TPH-Gx	ND	-----	80.0	ug/l	1x	8101256	11/03/08 15:30	11/03/08 23:14	
Surrogate(s): 4-BFB				*84.5%*		*50 - 150%*	"			"
PRJ1097-05 (MH-12 4 inch)			**Water**			**Sampled: 10/31/08 11:45**				
Gasoline Range Hydrocarbons	NW TPH-Gx	ND	-----	80.0	ug/l	1x	8101256	11/03/08 15:30	11/03/08 23:42	
Surrogate(s): 4-BFB				*85.5%*		*50 - 150%*	"			"
PRJ1097-06 (MH-12 12 inch)			**Water**			**Sampled: 10/31/08 12:05**				
Gasoline Range Hydrocarbons	NW TPH-Gx	ND	-----	80.0	ug/l	1x	8101256	11/03/08 15:30	11/04/08 00:09	
Surrogate(s): 4-BFB				*87.2%*		*50 - 150%*	"			"

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Estella Rieben, Project Manager

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Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	11/14/08 16:40

Diesel and Heavy Range Hydrocarbons per NWTPH-Dx Method with Acid/Silica Gel Cleanup

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PRJ1097-02 (WR-369)			**Water**			**Sampled: 10/31/08 09:35**				
Diesel Range Organics	NWTPH-Dx	ND	-----	0.238	mg/l	1x	8110081	11/04/08 17:00	11/05/08 19:21	
Heavy Oil Range Hydrocarbons	"	ND	-----	0.476	"	"	"	"	"	
Surrogate(s): 1-Chlorooctadecane				*92.1%*		*50 - 150%*	"			"
PRJ1097-03 (WR-370)			**Water**			**Sampled: 10/31/08 09:45**				
Diesel Range Organics	NWTPH-Dx	ND	-----	0.238	mg/l	1x	8110081	11/04/08 17:00	11/05/08 19:41	
Heavy Oil Range Hydrocarbons	"	ND	-----	0.476	"	"	"	"	"	
Surrogate(s): 1-Chlorooctadecane				*93.3%*		*50 - 150%*	"			"
PRJ1097-04 (MH-X)			**Water**			**Sampled: 10/31/08 10:05**				
Diesel Range Organics	NWTPH-Dx	**0.244**	-----	0.238	mg/l	1x	8110081	11/04/08 17:00	11/05/08 20:02	**Q11**
Heavy Oil Range Hydrocarbons	"	ND	-----	0.476	"	"	"	"	"	
Surrogate(s): 1-Chlorooctadecane				*92.3%*		*50 - 150%*	"			"
PRJ1097-05 (MH-12 4 inch)			**Water**			**Sampled: 10/31/08 11:45**				
Diesel Range Organics	NWTPH-Dx	ND	-----	0.238	mg/l	1x	8110081	11/04/08 17:00	11/05/08 20:22	
Heavy Oil Range Hydrocarbons	"	ND	-----	0.476	"	"	"	"	"	
Surrogate(s): 1-Chlorooctadecane				*95.2%*		*50 - 150%*	"			"
PRJ1097-06 (MH-12 12 inch)			**Water**			**Sampled: 10/31/08 12:05**				
Diesel Range Organics	NWTPH-Dx	ND	-----	0.240	mg/l	1x	8110081	11/04/08 17:00	11/05/08 20:42	
Heavy Oil Range Hydrocarbons	"	ND	-----	0.481	"	"	"	"	"	
Surrogate(s): 1-Chlorooctadecane				*94.0%*		*50 - 150%*	"			"

TestAmerica Portland

Estella K Rieben

Estella Rieben, Project Manager

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Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	11/14/08 16:40

Total Metals per EPA 6000/7000 Series Methods

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PRJ1097-01 (WR-012)			**Water**			**Sampled: 10/31/08 09:30**				
Arsenic	EPA 6020	ND	-----	0.00100	mg/l	1x	8110235	11/07/08 11:02	11/08/08 00:46	
Barium	"	**0.00809**	-----	0.00100	"	"	"	"	"	
Cadmium	"	**0.00226**	-----	0.000500	"	"	"	"	"	
Chromium	"	ND	-----	0.00200	"	"	"	"	"	
Copper	"	**0.00347**	-----	0.00200	"	"	"	"	"	
Lead	"	**0.00169**	-----	0.00100	"	"	"	"	"	
Manganese	"	**0.00997**	-----	0.00200	"	"	"	"	"	
Selenium	"	ND	-----	0.000500	"	"	"	"	11/11/08 23:04	
Silver	"	ND	-----	0.00100	"	"	"	"	11/08/08 00:46	
Zinc	"	**0.636**	-----	0.00500	"	"	"	"	"	
PRJ1097-02 (WR-369)			**Water**			**Sampled: 10/31/08 09:35**				
Arsenic	EPA 6020	**0.00171**	-----	0.00100	mg/l	1x	8110235	11/07/08 11:02	11/08/08 00:53	
Barium	"	**0.0106**	-----	0.00100	"	"	"	"	"	
Cadmium	"	ND	-----	0.000500	"	"	"	"	"	
Chromium	"	**0.00209**	-----	0.00200	"	"	"	"	"	
Copper	"	**0.0133**	-----	0.00200	"	"	"	"	"	
Lead	"	**0.00502**	-----	0.00100	"	"	"	"	"	
Manganese	"	**0.0261**	-----	0.00200	"	"	"	"	"	
Selenium	"	ND	-----	0.000500	"	"	"	"	11/11/08 23:12	
Silver	"	ND	-----	0.00100	"	"	"	"	11/08/08 00:53	
Zinc	"	**0.0988**	-----	0.00500	"	"	"	"	"	
PRJ1097-03 (WR-370)			**Water**			**Sampled: 10/31/08 09:45**				
Arsenic	EPA 6020	**0.00446**	-----	0.00100	mg/l	1x	8110235	11/07/08 11:02	11/08/08 01:01	
Barium	"	**0.0162**	-----	0.00100	"	"	"	"	"	
Cadmium	"	ND	-----	0.000500	"	"	"	"	"	
Chromium	"	**0.00351**	-----	0.00200	"	"	"	"	"	
Copper	"	**0.0308**	-----	0.00200	"	"	"	"	"	
Lead	"	**0.0113**	-----	0.00100	"	"	"	"	"	
Manganese	"	**0.0649**	-----	0.00200	"	"	"	"	"	
Selenium	"	ND	-----	0.000500	"	"	"	"	11/11/08 23:19	
Silver	"	ND	-----	0.00100	"	"	"	"	11/08/08 01:01	
Zinc	"	**0.191**	-----	0.00500	"	"	"	"	"	

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Estella K Rieben

Estella Rieben, Project Manager

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Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	11/14/08 16:40

Total Metals per EPA 6000/7000 Series Methods

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PRJ1097-04 (MH-X)			**Water**			**Sampled: 10/31/08 10:05**				
Arsenic	EPA 6020	ND	-----	0.00100	mg/l	1x	8110235	11/07/08 11:02	11/08/08 01:16	
Barium	"	**0.0130**	-----	0.00100	"	"	"	"	"	
Cadmium	"	ND	-----	0.000500	"	"	"	"	"	
Chromium	"	ND	-----	0.00200	"	"	"	"	"	
Copper	"	**0.00508**	-----	0.00200	"	"	"	"	"	
Lead	"	**0.00256**	-----	0.00100	"	"	"	"	"	
Manganese	"	**0.0226**	-----	0.00200	"	"	"	"	"	
Selenium	"	ND	-----	0.000500	"	"	"	"	11/11/08 23:49	
Silver	"	ND	-----	0.00100	"	"	"	"	11/08/08 01:16	
Zinc	"	**0.221**	-----	0.00500	"	"	"	"	"	
PRJ1097-05 (MH-12 4 inch)			**Water**			**Sampled: 10/31/08 11:45**				
Arsenic	EPA 6020	ND	-----	0.00100	mg/l	1x	8110235	11/07/08 11:02	11/08/08 01:23	
Barium	"	**0.0139**	-----	0.00100	"	"	"	"	"	
Cadmium	"	ND	-----	0.000500	"	"	"	"	"	
Chromium	"	ND	-----	0.00200	"	"	"	"	"	
Copper	"	**0.0152**	-----	0.00200	"	"	"	"	"	
Lead	"	**0.00400**	-----	0.00100	"	"	"	"	"	
Manganese	"	**0.0549**	-----	0.00200	"	"	"	"	"	
Selenium	"	ND	-----	0.000500	"	"	"	"	11/11/08 23:56	
Silver	"	ND	-----	0.00100	"	"	"	"	11/08/08 01:23	
Zinc	"	**0.306**	-----	0.00500	"	"	"	"	"	
PRJ1097-06 (MH-12 12 inch)			**Water**			**Sampled: 10/31/08 12:05**				
Arsenic	EPA 6020	**0.00562**	-----	0.00100	mg/l	1x	8110235	11/07/08 11:02	11/08/08 01:31	
Barium	"	**0.0545**	-----	0.00100	"	"	"	"	"	
Cadmium	"	ND	-----	0.000500	"	"	"	"	"	
Chromium	"	**0.00260**	-----	0.00200	"	"	"	"	"	
Copper	"	**0.0228**	-----	0.00200	"	"	"	"	"	
Lead	"	**0.00925**	-----	0.00100	"	"	"	"	"	
Manganese	"	**0.197**	-----	0.00200	"	"	"	"	"	
Selenium	"	ND	-----	0.000500	"	"	"	"	11/12/08 00:04	
Silver	"	ND	-----	0.00100	"	"	"	"	11/08/08 01:31	
Zinc	"	**0.113**	-----	0.00500	"	"	"	"	"	

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Estella K Rieben

Estella Rieben, Project Manager

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PORTLAND, OR 9405 S.W. NIMBUS AVENUE
BEAVERTON, OR 97008-7132
ph: (503) 906.9200 fax: (503) 906.9210

Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	11/14/08 16:40

Total Mercury per EPA Method 7470A

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PRJ1097-01 (WR-012)			**Water**			**Sampled: 10/31/08 09:30**				
Mercury	EPA 7470A	ND	-----	0.000200	mg/l	1x	8110024	11/03/08 10:25	11/03/08 15:26	
PRJ1097-02 (WR-369)			**Water**			**Sampled: 10/31/08 09:35**				
Mercury	EPA 7470A	ND	-----	0.000200	mg/l	1x	8110024	11/03/08 10:25	11/03/08 15:42	
PRJ1097-03 (WR-370)			**Water**			**Sampled: 10/31/08 09:45**				
Mercury	EPA 7470A	ND	-----	0.000200	mg/l	1x	8110024	11/03/08 10:25	11/03/08 15:44	
PRJ1097-04 (MH-X)			**Water**			**Sampled: 10/31/08 10:05**				
Mercury	EPA 7470A	ND	-----	0.000200	mg/l	1x	8110024	11/03/08 10:25	11/03/08 15:46	
PRJ1097-05 (MH-12 4 inch)			**Water**			**Sampled: 10/31/08 11:45**				
Mercury	EPA 7470A	ND	-----	0.000200	mg/l	1x	8110024	11/03/08 10:25	11/03/08 15:48	
PRJ1097-06 (MH-12 12 inch)			**Water**			**Sampled: 10/31/08 12:05**				
Mercury	EPA 7470A	ND	-----	0.000200	mg/l	1x	8110024	11/03/08 10:25	11/03/08 15:51	

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7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	11/14/08 16:40

Organochlorine Pesticides per EPA Method 8081A

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PRJ1097-02 (WR-369)		**Water**				**Sampled: 10/31/08 09:35**				**RL3**
Aldrin	EPA 8081A	ND	-----	0.0190	ug/l	2x	8110105	11/04/08 22:25	11/10/08 13:22	
alpha-BHC	"	ND	-----	0.0190	"	"	"	"	"	
beta-BHC	"	ND	-----	0.0286	"	"	"	"	"	**RL1**
delta-BHC	"	ND	-----	0.0190	"	"	"	"	"	
gamma-BHC (Lindane)	"	ND	-----	0.0190	"	"	"	"	"	
gamma-Chlordane	"	ND	-----	0.0190	"	"	"	"	"	
alpha-Chlordane	"	ND	-----	0.0190	"	"	"	"	"	
Chlordane (tech)	"	ND	-----	0.190	"	"	"	"	"	
4,4´-DDD	"	ND	-----	0.0190	"	"	"	"	"	
4,4´-DDE	"	ND	-----	0.0190	"	"	"	"	"	
4,4´-DDT	"	ND	-----	0.0190	"	"	"	"	"	
Dieldrin	"	ND	-----	0.0190	"	"	"	"	"	
Endosulfan I	"	ND	-----	0.0190	"	"	"	"	"	
Endosulfan II	"	ND	-----	0.0190	"	"	"	"	"	
Endosulfan sulfate	"	ND	-----	0.0190	"	"	"	"	"	
Endrin	"	ND	-----	0.0190	"	"	"	"	"	
Endrin aldehyde	"	ND	-----	0.0190	"	"	"	"	"	
Endrin ketone	"	ND	-----	0.0190	"	"	"	"	"	
Heptachlor	"	ND	-----	0.0190	"	"	"	"	"	
Heptachlor epoxide	"	ND	-----	0.0190	"	"	"	"	"	
Methoxychlor	"	ND	-----	0.0190	"	"	"	"	"	
Toxaphene	"	ND	-----	0.476	"	"	"	"	"	
Surrogate(s): 2,4,5,6-Tetrachloro-m-xylene				*67.3%*		*16 - 137 %*	"			"
PRJ1097-03 (WR-370)		**Water**				**Sampled: 10/31/08 09:45**				**RL3**
Aldrin	EPA 8081A	ND	-----	0.0194	ug/l	2x	8110105	11/04/08 22:25	11/10/08 02:18	
alpha-BHC	"	ND	-----	0.0194	"	"	"	"	"	
beta-BHC	"	ND	-----	0.0388	"	"	"	"	"	**RL1**
delta-BHC	"	ND	-----	0.0194	"	"	"	"	"	
gamma-BHC (Lindane)	"	ND	-----	0.0194	"	"	"	"	"	
gamma-Chlordane	"	ND	-----	0.0194	"	"	"	"	"	
alpha-Chlordane	"	ND	-----	0.0194	"	"	"	"	"	
Chlordane (tech)	"	ND	-----	0.194	"	"	"	"	"	
4,4´-DDD	"	ND	-----	0.0194	"	"	"	"	"	
4,4´-DDE	"	ND	-----	0.0194	"	"	"	"	"	
4,4´-DDT	"	ND	-----	0.0485	"	5x	"	"	11/10/08 13:48	**RL1**

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Estella Rieben, Project Manager

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Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	11/14/08 16:40

Organochlorine Pesticides per EPA Method 8081A

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PRJ1097-03 (WR-370)		**Water**				**Sampled: 10/31/08 09:45**				**RL3**
Dieldrin	EPA 8081A	ND	-----	0.0194	ug/l	2x	8110105	11/04/08 22:25	11/10/08 02:18	
Endosulfan I	"	ND	-----	0.0194	"	"	"	"	"	
Endosulfan II	"	ND	-----	0.0194	"	"	"	"	"	
Endosulfan sulfate	"	ND	-----	0.0194	"	"	"	"	"	
Endrin	"	ND	-----	0.0194	"	"	"	"	"	
Endrin aldehyde	"	ND	-----	0.0194	"	"	"	"	"	
Endrin ketone	"	ND	-----	0.0194	"	"	"	"	"	
Heptachlor	"	ND	-----	0.0194	"	"	"	"	"	
Heptachlor epoxide	"	ND	-----	0.0194	"	"	"	"	"	
Methoxychlor	"	ND	-----	0.0485	"	5x	"	"	11/10/08 13:48	**RL1**
Toxaphene	"	ND	-----	0.485	"	2x	"	"	11/10/08 02:18	
Surrogate(s): 2,4,5,6-Tetrachloro-m-xylene				*74.2%*		*16 - 137 %*	*5x*		*11/10/08 13:48*	
PRJ1097-04 (MH-X)		**Water**				**Sampled: 10/31/08 10:05**				**RL3**
Aldrin	EPA 8081A	ND	-----	0.0189	ug/l	2x	8110105	11/04/08 22:25	11/10/08 01:52	
alpha-BHC	"	ND	-----	0.0189	"	"	"	"	"	
beta-BHC	"	ND	-----	0.0189	"	"	"	"	"	
delta-BHC	"	ND	-----	0.0189	"	"	"	"	"	
gamma-BHC (Lindane)	"	ND	-----	0.0189	"	"	"	"	"	
gamma-Chlordane	"	ND	-----	0.0189	"	"	"	"	"	
alpha-Chlordane	"	ND	-----	0.0189	"	"	"	"	"	
Chlordane (tech)	"	ND	-----	0.189	"	"	"	"	"	
4,4´-DDD	"	ND	-----	0.0189	"	"	"	"	"	
4,4´-DDE	"	ND	-----	0.0189	"	"	"	"	"	
4,4´-DDT	"	ND	-----	0.0472	"	5x	"	"	11/10/08 14:14	**RL1**
Dieldrin	"	ND	-----	0.0189	"	2x	"	"	11/10/08 01:52	
Endosulfan I	"	ND	-----	0.0189	"	"	"	"	"	
Endosulfan II	"	ND	-----	0.0189	"	"	"	"	"	
Endosulfan sulfate	"	ND	-----	0.0189	"	"	"	"	"	
Endrin	"	ND	-----	0.0189	"	"	"	"	"	
Endrin aldehyde	"	ND	-----	0.0189	"	"	"	"	"	
Endrin ketone	"	ND	-----	0.0189	"	"	"	"	"	
Heptachlor	"	ND	-----	0.0189	"	"	"	"	"	
Heptachlor epoxide	"	ND	-----	0.0189	"	"	"	"	"	
Methoxychlor	"	ND	-----	0.0472	"	5x	"	"	11/10/08 14:14	**RL1**
Toxaphene	"	ND	-----	0.472	"	2x	"	"	11/10/08 01:52	

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7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	11/14/08 16:40

Organochlorine Pesticides per EPA Method 8081A

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PRJ1097-04 (MH-X)		**Water**				**Sampled: 10/31/08 10:05**				**RL3**
Surrogate(s): 2,4,5,6-Tetrachloro-m-xylene		*78.4%*		*16 - 137 %*		*5x*			*11/10/08 14:14*	
PRJ1097-05 (MH-12 4 inch)		**Water**				**Sampled: 10/31/08 11:45**				**RL3**
Aldrin	EPA 8081A	ND	-----	0.0190	ug/l	2x	8110105	11/04/08 22:25	11/10/08 01:26	
alpha-BHC	"	ND	-----	0.0190	"	"	"	"	"	
beta-BHC	"	ND	-----	0.0190	"	"	"	"	"	
delta-BHC	"	ND	-----	0.0190	"	"	"	"	"	
gamma-BHC (Lindane)	"	ND	-----	0.0190	"	"	"	"	"	
gamma-Chlordane	"	ND	-----	0.0190	"	"	"	"	"	
alpha-Chlordane	"	ND	-----	0.0190	"	"	"	"	"	
Chlordane (tech)	"	ND	-----	0.190	"	"	"	"	"	
4,4´-DDD	"	ND	-----	0.0190	"	"	"	"	"	
4,4´-DDE	"	ND	-----	0.0190	"	"	"	"	"	
4,4´-DDT	"	ND	-----	0.0948	"	10x	"	"	11/07/08 17:00	**RL1**
Dieldrin	"	ND	-----	0.0190	"	2x	"	"	11/10/08 01:26	
Endosulfan I	"	ND	-----	0.0190	"	"	"	"	"	
Endosulfan II	"	ND	-----	0.0190	"	"	"	"	"	
Endosulfan sulfate	"	ND	-----	0.0190	"	"	"	"	"	
Endrin	"	ND	-----	0.0190	"	"	"	"	"	
Endrin aldehyde	"	ND	-----	0.0190	"	"	"	"	"	
Endrin ketone	"	ND	-----	0.0190	"	"	"	"	"	
Heptachlor	"	ND	-----	0.0190	"	"	"	"	"	
Heptachlor epoxide	"	ND	-----	0.0190	"	"	"	"	"	
Methoxychlor	"	ND	-----	0.0948	"	10x	"	"	11/07/08 17:00	**RL1**
Toxaphene	"	ND	-----	0.474	"	2x	"	"	11/10/08 01:26	
Surrogate(s): 2,4,5,6-Tetrachloro-m-xylene		*70.4%*		*16 - 137 %*		*10x*			*11/07/08 17:00*	
PRJ1097-06 (MH-12 12 inch)		**Water**				**Sampled: 10/31/08 12:05**				**RL3**
Aldrin	EPA 8081A	ND	-----	0.0189	ug/l	2x	8110105	11/04/08 22:25	11/10/08 01:00	
alpha-BHC	"	ND	-----	0.0189	"	"	"	"	"	
beta-BHC	"	ND	-----	0.0283	"	"	"	"	"	**RL1**
delta-BHC	"	ND	-----	0.0189	"	"	"	"	"	
gamma-BHC (Lindane)	"	ND	-----	0.0189	"	"	"	"	"	
gamma-Chlordane	"	ND	-----	0.0189	"	"	"	"	"	
alpha-Chlordane	"	ND	-----	0.0189	"	"	"	"	"	
Chlordane (tech)	"	ND	-----	0.189	"	"	"	"	"	

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7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	11/14/08 16:40

Organochlorine Pesticides per EPA Method 8081A

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PRJ1097-06 (MH-12 12 inch)			**Water**			**Sampled: 10/31/08 12:05**				**RL3**
4,4´-DDD	EPA 8081A	ND	-----	0.0189	ug/l	2x	8110105	11/04/08 22:25	11/10/08 01:00	
4,4´-DDE	"	ND	-----	0.0189	"	"	"	"	"	
4,4´-DDT	"	ND	-----	0.0943	"	10x	"	"	11/07/08 17:26	**RL1**
Dieldrin	"	ND	-----	0.0189	"	2x	"	"	11/10/08 01:00	
Endosulfan I	"	ND	-----	0.0189	"	"	"	"	"	
Endosulfan II	"	ND	-----	0.0189	"	"	"	"	"	
Endosulfan sulfate	"	ND	-----	0.0189	"	"	"	"	"	
Endrin	"	ND	-----	0.0189	"	"	"	"	"	
Endrin aldehyde	"	ND	-----	0.0189	"	"	"	"	"	
Endrin ketone	"	ND	-----	0.0189	"	"	"	"	"	
Heptachlor	"	ND	-----	0.0189	"	"	"	"	"	
Heptachlor epoxide	"	ND	-----	0.0189	"	"	"	"	"	
Methoxychlor	"	ND	-----	0.0943	"	10x	"	"	11/07/08 17:26	**RL1**
Toxaphene	"	ND	-----	0.472	"	2x	"	"	11/10/08 01:00	
Surrogate(s): 2,4,5,6-Tetrachloro-m-xylene				*62.1%*		*16 - 137 %*	*10x*		*11/07/08 17:26*	

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7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	11/14/08 16:40

Polychlorinated Biphenyls per EPA Method 8082

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PRJ1097-02 (WR-369)			**Water**			**Sampled: 10/31/08 09:35**				
Aroclor 1016	EPA 8082	ND	-----	0.0952	ug/l	1x	8110160	11/06/08 12:00	11/10/08 14:12	
Aroclor 1221	"	ND	-----	0.190	"	"	"	"	"	
Aroclor 1232	"	ND	-----	0.0952	"	"	"	"	"	
Aroclor 1242	"	ND	-----	0.0952	"	"	"	"	"	
Aroclor 1248	"	ND	-----	0.0952	"	"	"	"	"	
Aroclor 1254	"	ND	-----	0.0952	"	"	"	"	"	
Aroclor 1260	"	ND	-----	0.0952	"	"	"	"	"	
Surrogate(s): *Decachlorobiphenyl*				*84.5%*		*12 - 130%*	"			"
PRJ1097-03 (WR-370)			**Water**			**Sampled: 10/31/08 09:45**				
Aroclor 1016	EPA 8082	ND	-----	0.0952	ug/l	1x	8110160	11/06/08 12:00	11/10/08 14:34	
Aroclor 1221	"	ND	-----	0.190	"	"	"	"	"	
Aroclor 1232	"	ND	-----	0.0952	"	"	"	"	"	
Aroclor 1242	"	ND	-----	0.0952	"	"	"	"	"	
Aroclor 1248	"	ND	-----	0.0952	"	"	"	"	"	
Aroclor 1254	"	ND	-----	0.0952	"	"	"	"	"	
Aroclor 1260	"	ND	-----	0.0952	"	"	"	"	"	
Surrogate(s): *Decachlorobiphenyl*				*77.6%*		*12 - 130%*	"			"
PRJ1097-04 (MH-X)			**Water**			**Sampled: 10/31/08 10:05**				
Aroclor 1016	EPA 8082	ND	-----	0.0952	ug/l	1x	8110160	11/06/08 12:00	11/10/08 14:56	
Aroclor 1221	"	ND	-----	0.190	"	"	"	"	"	
Aroclor 1232	"	ND	-----	0.0952	"	"	"	"	"	
Aroclor 1242	"	ND	-----	0.0952	"	"	"	"	"	
Aroclor 1248	"	ND	-----	0.0952	"	"	"	"	"	
Aroclor 1254	"	ND	-----	0.0952	"	"	"	"	"	
Aroclor 1260	"	ND	-----	0.0952	"	"	"	"	"	
Surrogate(s): *Decachlorobiphenyl*				*93.5%*		*12 - 130%*	"			"
PRJ1097-05 (MH-12 4 inch)			**Water**			**Sampled: 10/31/08 11:45**				
Aroclor 1016	EPA 8082	ND	-----	0.0952	ug/l	1x	8110160	11/06/08 12:00	11/10/08 15:18	
Aroclor 1221	"	ND	-----	0.190	"	"	"	"	"	
Aroclor 1232	"	ND	-----	0.0952	"	"	"	"	"	
Aroclor 1242	"	ND	-----	0.0952	"	"	"	"	"	
Aroclor 1248	"	ND	-----	0.0952	"	"	"	"	"	

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Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	11/14/08 16:40

Polychlorinated Biphenyls per EPA Method 8082

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PRJ1097-05 (MH-12 4 inch)			**Water**			**Sampled: 10/31/08 11:45**				
Aroclor 1254	EPA 8082	ND	-----	0.0952	ug/l	1x	8110160	11/06/08 12:00	11/10/08 15:18	
Aroclor 1260	"	ND	-----	0.0952	"	"	"	"	"	
Surrogate(s): Decachlorobiphenyl				*85.9%*		*12 - 130%*	"			"
PRJ1097-06 (MH-12 12 inch)			**Water**			**Sampled: 10/31/08 12:05**				
Aroclor 1016	EPA 8082	ND	-----	0.0952	ug/l	1x	8110160	11/06/08 12:00	11/10/08 15:40	
Aroclor 1221	"	ND	-----	0.190	"	"	"	"	"	
Aroclor 1232	"	ND	-----	0.0952	"	"	"	"	"	
Aroclor 1242	"	ND	-----	0.0952	"	"	"	"	"	
Aroclor 1248	"	ND	-----	0.0952	"	"	"	"	"	
Aroclor 1254	"	ND	-----	0.0952	"	"	"	"	"	
Aroclor 1260	"	ND	-----	0.0952	"	"	"	"	"	
Surrogate(s): Decachlorobiphenyl				*91.4%*		*12 - 130%*	"			"

TestAmerica Portland

Estella K Rieben

Estella Rieben, Project Manager

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PORTLAND, OR 9405 S.W. NIMBUS AVENUE
BEAVERTON, OR 97008-7132
ph: (503) 906.9200 fax: (503) 906.9210

Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	11/14/08 16:40

Volatile Organic Compounds per EPA Method 8260B

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PRJ1097-02 (WR-369)			**Water**			**Sampled: 10/31/08 09:35**				
Acetone	EPA 8260B	ND	-----	25.0	ug/l	1x	8110292	11/10/08 10:20	11/10/08 18:05	
Benzene	"	ND	-----	0.200	"	"	"	"	"	
Bromobenzene	"	ND	-----	1.00	"	"	"	"	"	
Bromochloromethane	"	ND	-----	1.00	"	"	"	"	"	
Bromodichloromethane	"	ND	-----	1.00	"	"	"	"	"	
Bromoform	"	ND	-----	1.00	"	"	"	"	"	
Bromomethane	"	ND	-----	5.00	"	"	"	"	"	
2-Butanone (MEK)	"	ND	-----	10.0	"	"	"	"	"	
n-Butylbenzene	"	ND	-----	5.00	"	"	"	"	"	
sec-Butylbenzene	"	ND	-----	1.00	"	"	"	"	"	
tert-Butylbenzene	"	ND	-----	1.00	"	"	"	"	"	
Carbon disulfide	"	ND	-----	10.0	"	"	"	"	"	
Carbon tetrachloride	"	ND	-----	1.00	"	"	"	"	"	
Chlorobenzene	"	ND	-----	1.00	"	"	"	"	"	
Chloroethane	"	ND	-----	1.00	"	"	"	"	"	
Chloroform	"	ND	-----	0.200	"	"	"	"	"	
Chloromethane	"	ND	-----	5.00	"	"	"	"	"	
2-Chlorotoluene	"	ND	-----	1.00	"	"	"	"	"	
4-Chlorotoluene	"	ND	-----	1.00	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	"	ND	-----	5.00	"	"	"	"	"	
Dibromochloromethane	"	ND	-----	1.00	"	"	"	"	"	
1,2-Dibromoethane	"	ND	-----	1.00	"	"	"	"	"	
Dibromomethane	"	ND	-----	1.00	"	"	"	"	"	
1,2-Dichlorobenzene	"	ND	-----	1.00	"	"	"	"	"	
1,3-Dichlorobenzene	"	ND	-----	1.00	"	"	"	"	"	
1,4-Dichlorobenzene	"	ND	-----	1.00	"	"	"	"	"	
Dichlorodifluoromethane	"	ND	-----	5.00	"	"	"	"	"	
1,1-Dichloroethane	"	ND	-----	1.00	"	"	"	"	"	
1,2-Dichloroethane	"	ND	-----	1.00	"	"	"	"	"	
1,1-Dichloroethene	"	ND	-----	1.00	"	"	"	"	"	
cis-1,2-Dichloroethene	"	ND	-----	1.00	"	"	"	"	"	
trans-1,2-Dichloroethene	"	ND	-----	1.00	"	"	"	"	"	
1,2-Dichloropropane	"	ND	-----	1.00	"	"	"	"	"	
1,3-Dichloropropane	"	ND	-----	1.00	"	"	"	"	"	
2,2-Dichloropropane	"	ND	-----	1.00	"	"	"	"	"	
1,1-Dichloropropene	"	ND	-----	1.00	"	"	"	"	"	

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Estella K Rieben

Estella Rieben, Project Manager

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PORTLAND, OR 9405 S.W. NIMBUS AVENUE
BEAVERTON, OR 97008-7132
ph: (503) 906.9200 fax: (503) 906.9210

Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	11/14/08 16:40

Volatile Organic Compounds per EPA Method 8260B

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PRJ1097-02 (WR-369)			**Water**			**Sampled: 10/31/08 09:35**				
cis-1,3-Dichloropropene	EPA 8260B	ND	-----	1.00	ug/l	1x	8110292	11/10/08 10:20	11/10/08 18:05	
trans-1,3-Dichloropropene	"	ND	-----	1.00	"	"	"	"	"	
Ethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
Hexachlorobutadiene	"	ND	-----	4.00	"	"	"	"	"	
2-Hexanone	"	ND	-----	10.0	"	"	"	"	"	
Isopropylbenzene	"	ND	-----	2.00	"	"	"	"	"	
p-Isopropyltoluene	"	ND	-----	2.00	"	"	"	"	"	
4-Methyl-2-pentanone	"	ND	-----	5.00	"	"	"	"	"	
Methyl tert-butyl ether	"	ND	-----	1.00	"	"	"	"	"	
Methylene chloride	"	ND	-----	5.00	"	"	"	"	"	
Naphthalene	"	ND	-----	2.00	"	"	"	"	"	
n-Propylbenzene	"	ND	-----	1.00	"	"	"	"	"	
Styrene	"	ND	-----	1.00	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	"	ND	-----	1.00	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	"	ND	-----	1.00	"	"	"	"	"	
Tetrachloroethene	"	ND	-----	1.00	"	"	"	"	"	
Toluene	"	ND	-----	1.00	"	"	"	"	"	
1,2,3-Trichlorobenzene	"	ND	-----	1.00	"	"	"	"	"	
1,2,4-Trichlorobenzene	"	ND	-----	1.00	"	"	"	"	"	
1,1,1-Trichloroethane	"	ND	-----	1.00	"	"	"	"	"	
1,1,2-Trichloroethane	"	ND	-----	1.00	"	"	"	"	"	
Trichloroethene	"	ND	-----	1.00	"	"	"	"	"	
Trichlorofluoromethane	"	ND	-----	1.00	"	"	"	"	"	
1,2,3-Trichloropropane	"	ND	-----	1.00	"	"	"	"	"	
1,2,4-Trimethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
1,3,5-Trimethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
Vinyl chloride	"	ND	-----	1.00	"	"	"	"	"	
o-Xylene	"	ND	-----	1.00	"	"	"	"	"	
m,p-Xylene	"	ND	-----	2.00	"	"	"	"	"	
Surrogate(s): *4-BFB*			*97.4%*		*80 - 120%*	"			"	
1,2-DCA-d4			*94.0%*		*80 - 120%*	"			"	
Dibromofluoromethane			*95.6%*		*80 - 120%*	"			"	
Toluene-d8			*100%*		*80 - 120%*	"			"	

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Estella Rieben, Project Manager

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Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	11/14/08 16:40

Volatile Organic Compounds per EPA Method 8260B

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PRJ1097-03 (WR-370)			**Water**			**Sampled: 10/31/08 09:45**				
Acetone	EPA 8260B	ND	-----	25.0	ug/l	1x	8110292	11/10/08 10:20	11/10/08 18:33	
Benzene	"	ND	-----	0.200	"	"	"	"	"	
Bromobenzene	"	ND	-----	1.00	"	"	"	"	"	
Bromochloromethane	"	ND	-----	1.00	"	"	"	"	"	
Bromodichloromethane	"	ND	-----	1.00	"	"	"	"	"	
Bromoform	"	ND	-----	1.00	"	"	"	"	"	
Bromomethane	"	ND	-----	5.00	"	"	"	"	"	
2-Butanone (MEK)	"	ND	-----	10.0	"	"	"	"	"	
n-Butylbenzene	"	ND	-----	5.00	"	"	"	"	"	
sec-Butylbenzene	"	ND	-----	1.00	"	"	"	"	"	
tert-Butylbenzene	"	ND	-----	1.00	"	"	"	"	"	
Carbon disulfide	"	ND	-----	10.0	"	"	"	"	"	
Carbon tetrachloride	"	ND	-----	1.00	"	"	"	"	"	
Chlorobenzene	"	ND	-----	1.00	"	"	"	"	"	
Chloroethane	"	ND	-----	1.00	"	"	"	"	"	
Chloroform	"	ND	-----	0.200	"	"	"	"	"	
Chloromethane	"	ND	-----	5.00	"	"	"	"	"	
2-Chlorotoluene	"	ND	-----	1.00	"	"	"	"	"	
4-Chlorotoluene	"	ND	-----	1.00	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	"	ND	-----	5.00	"	"	"	"	"	
Dibromochloromethane	"	ND	-----	1.00	"	"	"	"	"	
1,2-Dibromoethane	"	ND	-----	1.00	"	"	"	"	"	
Dibromomethane	"	ND	-----	1.00	"	"	"	"	"	
1,2-Dichlorobenzene	"	ND	-----	1.00	"	"	"	"	"	
1,3-Dichlorobenzene	"	ND	-----	1.00	"	"	"	"	"	
1,4-Dichlorobenzene	"	ND	-----	1.00	"	"	"	"	"	
Dichlorodifluoromethane	"	ND	-----	5.00	"	"	"	"	"	
1,1-Dichloroethane	"	ND	-----	1.00	"	"	"	"	"	
1,2-Dichloroethane	"	ND	-----	1.00	"	"	"	"	"	
1,1-Dichloroethene	"	ND	-----	1.00	"	"	"	"	"	
cis-1,2-Dichloroethene	"	ND	-----	1.00	"	"	"	"	"	
trans-1,2-Dichloroethene	"	ND	-----	1.00	"	"	"	"	"	
1,2-Dichloropropane	"	ND	-----	1.00	"	"	"	"	"	
1,3-Dichloropropane	"	ND	-----	1.00	"	"	"	"	"	
2,2-Dichloropropane	"	ND	-----	1.00	"	"	"	"	"	
1,1-Dichloropropene	"	ND	-----	1.00	"	"	"	"	"	

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Estella K Rieben

Estella Rieben, Project Manager

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Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	11/14/08 16:40

Volatile Organic Compounds per EPA Method 8260B

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PRJ1097-03 (WR-370)			**Water**			**Sampled: 10/31/08 09:45**				
cis-1,3-Dichloropropene	EPA 8260B	ND	-----	1.00	ug/l	1x	8110292	11/10/08 10:20	11/10/08 18:33	
trans-1,3-Dichloropropene	"	ND	-----	1.00	"	"	"	"	"	
Ethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
Hexachlorobutadiene	"	ND	-----	4.00	"	"	"	"	"	
2-Hexanone	"	ND	-----	10.0	"	"	"	"	"	
Isopropylbenzene	"	ND	-----	2.00	"	"	"	"	"	
p-Isopropyltoluene	"	ND	-----	2.00	"	"	"	"	"	
4-Methyl-2-pentanone	"	ND	-----	5.00	"	"	"	"	"	
Methyl tert-butyl ether	"	ND	-----	1.00	"	"	"	"	"	
Methylene chloride	"	ND	-----	5.00	"	"	"	"	"	
Naphthalene	"	ND	-----	2.00	"	"	"	"	"	
n-Propylbenzene	"	ND	-----	1.00	"	"	"	"	"	
Styrene	"	ND	-----	1.00	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	"	ND	-----	1.00	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	"	ND	-----	1.00	"	"	"	"	"	
Tetrachloroethene	"	ND	-----	1.00	"	"	"	"	"	
Toluene	"	ND	-----	1.00	"	"	"	"	"	
1,2,3-Trichlorobenzene	"	ND	-----	1.00	"	"	"	"	"	
1,2,4-Trichlorobenzene	"	ND	-----	1.00	"	"	"	"	"	
1,1,1-Trichloroethane	"	ND	-----	1.00	"	"	"	"	"	
1,1,2-Trichloroethane	"	ND	-----	1.00	"	"	"	"	"	
Trichloroethene	"	ND	-----	1.00	"	"	"	"	"	
Trichlorofluoromethane	"	ND	-----	1.00	"	"	"	"	"	
1,2,3-Trichloropropane	"	ND	-----	1.00	"	"	"	"	"	
1,2,4-Trimethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
1,3,5-Trimethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
Vinyl chloride	"	ND	-----	1.00	"	"	"	"	"	
o-Xylene	"	ND	-----	1.00	"	"	"	"	"	
m,p-Xylene	"	ND	-----	2.00	"	"	"	"	"	
Surrogate(s): *4-BFB*			*96.7%*		*80 - 120%*	"			"	
1,2-DCA-d4			*96.4%*		*80 - 120%*	"			"	
Dibromofluoromethane			*99.0%*		*80 - 120%*	"			"	
Toluene-d8			*102%*		*80 - 120%*	"			"	

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Estella K Rieben

Estella Rieben, Project Manager

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Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	11/14/08 16:40

Volatile Organic Compounds per EPA Method 8260B

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PRJ1097-04 (MH-X)			**Water**			**Sampled: 10/31/08 10:05**				
Acetone	EPA 8260B	**25.4**	-----	25.0	ug/l	1x	8110292	11/10/08 10:20	11/10/08 19:00	
Benzene	"	ND	-----	0.200	"	"	"	"	"	
Bromobenzene	"	ND	-----	1.00	"	"	"	"	"	
Bromochloromethane	"	ND	-----	1.00	"	"	"	"	"	
Bromodichloromethane	"	ND	-----	1.00	"	"	"	"	"	
Bromoform	"	ND	-----	1.00	"	"	"	"	"	
Bromomethane	"	ND	-----	5.00	"	"	"	"	"	
2-Butanone (MEK)	"	ND	-----	10.0	"	"	"	"	"	
n-Butylbenzene	"	ND	-----	5.00	"	"	"	"	"	
sec-Butylbenzene	"	ND	-----	1.00	"	"	"	"	"	
tert-Butylbenzene	"	ND	-----	1.00	"	"	"	"	"	
Carbon disulfide	"	ND	-----	10.0	"	"	"	"	"	
Carbon tetrachloride	"	ND	-----	1.00	"	"	"	"	"	
Chlorobenzene	"	ND	-----	1.00	"	"	"	"	"	
Chloroethane	"	ND	-----	1.00	"	"	"	"	"	
Chloroform	"	ND	-----	0.200	"	"	"	"	"	
Chloromethane	"	ND	-----	5.00	"	"	"	"	"	
2-Chlorotoluene	"	ND	-----	1.00	"	"	"	"	"	
4-Chlorotoluene	"	ND	-----	1.00	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	"	ND	-----	5.00	"	"	"	"	"	
Dibromochloromethane	"	ND	-----	1.00	"	"	"	"	"	
1,2-Dibromoethane	"	ND	-----	1.00	"	"	"	"	"	
Dibromomethane	"	ND	-----	1.00	"	"	"	"	"	
1,2-Dichlorobenzene	"	ND	-----	1.00	"	"	"	"	"	
1,3-Dichlorobenzene	"	ND	-----	1.00	"	"	"	"	"	
1,4-Dichlorobenzene	"	ND	-----	1.00	"	"	"	"	"	
Dichlorodifluoromethane	"	ND	-----	5.00	"	"	"	"	"	
1,1-Dichloroethane	"	ND	-----	1.00	"	"	"	"	"	
1,2-Dichloroethane	"	ND	-----	1.00	"	"	"	"	"	
1,1-Dichloroethene	"	ND	-----	1.00	"	"	"	"	"	
cis-1,2-Dichloroethene	"	ND	-----	1.00	"	"	"	"	"	
trans-1,2-Dichloroethene	"	ND	-----	1.00	"	"	"	"	"	
1,2-Dichloropropane	"	ND	-----	1.00	"	"	"	"	"	
1,3-Dichloropropane	"	ND	-----	1.00	"	"	"	"	"	
2,2-Dichloropropane	"	ND	-----	1.00	"	"	"	"	"	
1,1-Dichloropropene	"	ND	-----	1.00	"	"	"	"	"	

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Estella K Rieben

Estella Rieben, Project Manager

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Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	11/14/08 16:40

Volatile Organic Compounds per EPA Method 8260B

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PRJ1097-04 (MH-X)			**Water**			**Sampled: 10/31/08 10:05**				
cis-1,3-Dichloropropene	EPA 8260B	ND	-----	1.00	ug/l	1x	8110292	11/10/08 10:20	11/10/08 19:00	
trans-1,3-Dichloropropene	"	ND	-----	1.00	"	"	"	"	"	
Ethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
Hexachlorobutadiene	"	ND	-----	4.00	"	"	"	"	"	
2-Hexanone	"	ND	-----	10.0	"	"	"	"	"	
Isopropylbenzene	"	ND	-----	2.00	"	"	"	"	"	
p-Isopropyltoluene	"	ND	-----	2.00	"	"	"	"	"	
4-Methyl-2-pentanone	"	ND	-----	5.00	"	"	"	"	"	
Methyl tert-butyl ether	"	ND	-----	1.00	"	"	"	"	"	
Methylene chloride	"	ND	-----	5.00	"	"	"	"	"	
Naphthalene	"	ND	-----	2.00	"	"	"	"	"	
n-Propylbenzene	"	ND	-----	1.00	"	"	"	"	"	
Styrene	"	ND	-----	1.00	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	"	ND	-----	1.00	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	"	ND	-----	1.00	"	"	"	"	"	
Tetrachloroethene	"	ND	-----	1.00	"	"	"	"	"	
Toluene	"	ND	-----	1.00	"	"	"	"	"	
1,2,3-Trichlorobenzene	"	ND	-----	1.00	"	"	"	"	"	
1,2,4-Trichlorobenzene	"	ND	-----	1.00	"	"	"	"	"	
1,1,1-Trichloroethane	"	ND	-----	1.00	"	"	"	"	"	
1,1,2-Trichloroethane	"	ND	-----	1.00	"	"	"	"	"	
Trichloroethene	"	ND	-----	1.00	"	"	"	"	"	
Trichlorofluoromethane	"	ND	-----	1.00	"	"	"	"	"	
1,2,3-Trichloropropane	"	ND	-----	1.00	"	"	"	"	"	
1,2,4-Trimethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
1,3,5-Trimethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
Vinyl chloride	"	ND	-----	1.00	"	"	"	"	"	
o-Xylene	"	ND	-----	1.00	"	"	"	"	"	
m,p-Xylene	"	ND	-----	2.00	"	"	"	"	"	
Surrogate(s): *4-BFB*				*96.5%*		*80 - 120%*	"		"	
1,2-DCA-d4				*95.5%*		*80 - 120%*	"		"	
Dibromofluoromethane				*95.1%*		*80 - 120%*	"		"	
Toluene-d8				*99.6%*		*80 - 120%*	"		"	

TestAmerica Portland

Estella K Rieben

Estella Rieben, Project Manager

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PORTLAND, OR 9405 S.W. NIMBUS AVENUE
BEAVERTON, OR 97008-7132
ph: (503) 906.9200 fax: (503) 906.9210

Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	11/14/08 16:40

Volatile Organic Compounds per EPA Method 8260B

TestAmerica Portland

PRJ1097-05 (MH-12 4 inch) — **Water** — **Sampled: 10/31/08 11:45**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
Acetone	EPA 8260B	ND	-----	25.0	ug/l	1x	8110292	11/10/08 10:20	11/10/08 19:28	
Benzene	"	ND	-----	0.200	"	"	"	"	"	
Bromobenzene	"	ND	-----	1.00	"	"	"	"	"	
Bromochloromethane	"	ND	-----	1.00	"	"	"	"	"	
Bromodichloromethane	"	ND	-----	1.00	"	"	"	"	"	
Bromoform	"	ND	-----	1.00	"	"	"	"	"	
Bromomethane	"	ND	-----	5.00	"	"	"	"	"	
2-Butanone (MEK)	"	ND	-----	10.0	"	"	"	"	"	
n-Butylbenzene	"	ND	-----	5.00	"	"	"	"	"	
sec-Butylbenzene	"	ND	-----	1.00	"	"	"	"	"	
tert-Butylbenzene	"	ND	-----	1.00	"	"	"	"	"	
Carbon disulfide	"	ND	-----	10.0	"	"	"	"	"	
Carbon tetrachloride	"	ND	-----	1.00	"	"	"	"	"	
Chlorobenzene	"	ND	-----	1.00	"	"	"	"	"	
Chloroethane	"	ND	-----	1.00	"	"	"	"	"	
Chloroform	"	ND	-----	0.200	"	"	"	"	"	
Chloromethane	"	ND	-----	5.00	"	"	"	"	"	
2-Chlorotoluene	"	ND	-----	1.00	"	"	"	"	"	
4-Chlorotoluene	"	ND	-----	1.00	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	"	ND	-----	5.00	"	"	"	"	"	
Dibromochloromethane	"	ND	-----	1.00	"	"	"	"	"	
1,2-Dibromoethane	"	ND	-----	1.00	"	"	"	"	"	
Dibromomethane	"	ND	-----	1.00	"	"	"	"	"	
1,2-Dichlorobenzene	"	ND	-----	1.00	"	"	"	"	"	
1,3-Dichlorobenzene	"	ND	-----	1.00	"	"	"	"	"	
1,4-Dichlorobenzene	"	ND	-----	1.00	"	"	"	"	"	
Dichlorodifluoromethane	"	ND	-----	5.00	"	"	"	"	"	
1,1-Dichloroethane	"	ND	-----	1.00	"	"	"	"	"	
1,2-Dichloroethane	"	ND	-----	1.00	"	"	"	"	"	
1,1-Dichloroethene	"	ND	-----	1.00	"	"	"	"	"	
cis-1,2-Dichloroethene	"	ND	-----	1.00	"	"	"	"	"	
trans-1,2-Dichloroethene	"	ND	-----	1.00	"	"	"	"	"	
1,2-Dichloropropane	"	ND	-----	1.00	"	"	"	"	"	
1,3-Dichloropropane	"	ND	-----	1.00	"	"	"	"	"	
2,2-Dichloropropane	"	ND	-----	1.00	"	"	"	"	"	
1,1-Dichloropropene	"	ND	-----	1.00	"	"	"	"	"	

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Estella K Rieben

Estella Rieben, Project Manager

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PORTLAND, OR 9405 S.W. NIMBUS AVENUE
BEAVERTON, OR 97008-7132
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Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	11/14/08 16:40

Volatile Organic Compounds per EPA Method 8260B

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PRJ1097-05 (MH-12 4 inch)			**Water**			**Sampled: 10/31/08 11:45**				
cis-1,3-Dichloropropene	EPA 8260B	ND	-----	1.00	ug/l	1x	8110292	11/10/08 10:20	11/10/08 19:28	
trans-1,3-Dichloropropene	"	ND	-----	1.00	"	"	"	"	"	
Ethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
Hexachlorobutadiene	"	ND	-----	4.00	"	"	"	"	"	
2-Hexanone	"	ND	-----	10.0	"	"	"	"	"	
Isopropylbenzene	"	ND	-----	2.00	"	"	"	"	"	
p-Isopropyltoluene	"	ND	-----	2.00	"	"	"	"	"	
4-Methyl-2-pentanone	"	ND	-----	5.00	"	"	"	"	"	
Methyl tert-butyl ether	"	ND	-----	1.00	"	"	"	"	"	
Methylene chloride	"	ND	-----	5.00	"	"	"	"	"	
Naphthalene	"	ND	-----	2.00	"	"	"	"	"	
n-Propylbenzene	"	ND	-----	1.00	"	"	"	"	"	
Styrene	"	ND	-----	1.00	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	"	ND	-----	1.00	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	"	ND	-----	1.00	"	"	"	"	"	
Tetrachloroethene	"	ND	-----	1.00	"	"	"	"	"	
Toluene	"	ND	-----	1.00	"	"	"	"	"	
1,2,3-Trichlorobenzene	"	ND	-----	1.00	"	"	"	"	"	
1,2,4-Trichlorobenzene	"	ND	-----	1.00	"	"	"	"	"	
1,1,1-Trichloroethane	"	ND	-----	1.00	"	"	"	"	"	
1,1,2-Trichloroethane	"	ND	-----	1.00	"	"	"	"	"	
Trichloroethene	"	ND	-----	1.00	"	"	"	"	"	
Trichlorofluoromethane	"	ND	-----	1.00	"	"	"	"	"	
1,2,3-Trichloropropane	"	ND	-----	1.00	"	"	"	"	"	
1,2,4-Trimethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
1,3,5-Trimethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
Vinyl chloride	"	ND	-----	1.00	"	"	"	"	"	
o-Xylene	"	ND	-----	1.00	"	"	"	"	"	
m,p-Xylene	"	ND	-----	2.00	"	"	"	"	"	
Surrogate(s): *4-BFB*			*95.8%*		*80 - 120%*	"			"	
1,2-DCA-d4			*94.1%*		*80 - 120%*	"			"	
Dibromofluoromethane			*95.6%*		*80 - 120%*	"			"	
Toluene-d8			*100%*		*80 - 120%*	"			"	

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Estella Rieben, Project Manager

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Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	11/14/08 16:40

Volatile Organic Compounds per EPA Method 8260B

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PRJ1097-06 (MH-12 12 inch)			**Water**			**Sampled: 10/31/08 12:05**				
Acetone	EPA 8260B	ND	-----	25.0	ug/l	1x	8110292	11/10/08 10:20	11/10/08 19:56	
Benzene	"	ND	-----	0.200	"	"	"	"	"	
Bromobenzene	"	ND	-----	1.00	"	"	"	"	"	
Bromochloromethane	"	ND	-----	1.00	"	"	"	"	"	
Bromodichloromethane	"	ND	-----	1.00	"	"	"	"	"	
Bromoform	"	ND	-----	1.00	"	"	"	"	"	
Bromomethane	"	ND	-----	5.00	"	"	"	"	"	
2-Butanone (MEK)	"	ND	-----	10.0	"	"	"	"	"	
n-Butylbenzene	"	ND	-----	5.00	"	"	"	"	"	
sec-Butylbenzene	"	ND	-----	1.00	"	"	"	"	"	
tert-Butylbenzene	"	ND	-----	1.00	"	"	"	"	"	
Carbon disulfide	"	ND	-----	10.0	"	"	"	"	"	
Carbon tetrachloride	"	ND	-----	1.00	"	"	"	"	"	
Chlorobenzene	"	ND	-----	1.00	"	"	"	"	"	
Chloroethane	"	ND	-----	1.00	"	"	"	"	"	
Chloroform	"	ND	-----	0.200	"	"	"	"	"	
Chloromethane	"	ND	-----	5.00	"	"	"	"	"	
2-Chlorotoluene	"	ND	-----	1.00	"	"	"	"	"	
4-Chlorotoluene	"	ND	-----	1.00	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	"	ND	-----	5.00	"	"	"	"	"	
Dibromochloromethane	"	ND	-----	1.00	"	"	"	"	"	
1,2-Dibromoethane	"	ND	-----	1.00	"	"	"	"	"	
Dibromomethane	"	ND	-----	1.00	"	"	"	"	"	
1,2-Dichlorobenzene	"	ND	-----	1.00	"	"	"	"	"	
1,3-Dichlorobenzene	"	ND	-----	1.00	"	"	"	"	"	
1,4-Dichlorobenzene	"	ND	-----	1.00	"	"	"	"	"	
Dichlorodifluoromethane	"	ND	-----	5.00	"	"	"	"	"	
1,1-Dichloroethane	"	ND	-----	1.00	"	"	"	"	"	
1,2-Dichloroethane	"	ND	-----	1.00	"	"	"	"	"	
1,1-Dichloroethene	"	ND	-----	1.00	"	"	"	"	"	
cis-1,2-Dichloroethene	"	ND	-----	1.00	"	"	"	"	"	
trans-1,2-Dichloroethene	"	ND	-----	1.00	"	"	"	"	"	
1,2-Dichloropropane	"	ND	-----	1.00	"	"	"	"	"	
1,3-Dichloropropane	"	ND	-----	1.00	"	"	"	"	"	
2,2-Dichloropropane	"	ND	-----	1.00	"	"	"	"	"	
1,1-Dichloropropene	"	ND	-----	1.00	"	"	"	"	"	

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Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	11/14/08 16:40

Volatile Organic Compounds per EPA Method 8260B

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PRJ1097-06 (MH-12 12 inch)			**Water**			**Sampled: 10/31/08 12:05**				
cis-1,3-Dichloropropene	EPA 8260B	ND	-----	1.00	ug/l	1x	8110292	11/10/08 10:20	11/10/08 19:56	
trans-1,3-Dichloropropene	"	ND	-----	1.00	"	"	"	"	"	
Ethylbenzene	"	**13.5**	-----	1.00	"	"	"	"	"	
Hexachlorobutadiene	"	ND	-----	4.00	"	"	"	"	"	
2-Hexanone	"	ND	-----	10.0	"	"	"	"	"	
Isopropylbenzene	"	ND	-----	2.00	"	"	"	"	"	
p-Isopropyltoluene	"	ND	-----	2.00	"	"	"	"	"	
4-Methyl-2-pentanone	"	ND	-----	5.00	"	"	"	"	"	
Methyl tert-butyl ether	"	ND	-----	1.00	"	"	"	"	"	
Methylene chloride	"	ND	-----	5.00	"	"	"	"	"	
Naphthalene	"	ND	-----	2.00	"	"	"	"	"	
n-Propylbenzene	"	ND	-----	1.00	"	"	"	"	"	
Styrene	"	**11.6**	-----	1.00	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	"	ND	-----	1.00	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	"	ND	-----	1.00	"	"	"	"	"	
Tetrachloroethene	"	ND	-----	1.00	"	"	"	"	"	
Toluene	"	ND	-----	1.00	"	"	"	"	"	
1,2,3-Trichlorobenzene	"	ND	-----	1.00	"	"	"	"	"	
1,2,4-Trichlorobenzene	"	ND	-----	1.00	"	"	"	"	"	
1,1,1-Trichloroethane	"	ND	-----	1.00	"	"	"	"	"	
1,1,2-Trichloroethane	"	ND	-----	1.00	"	"	"	"	"	
Trichloroethene	"	ND	-----	1.00	"	"	"	"	"	
Trichlorofluoromethane	"	ND	-----	1.00	"	"	"	"	"	
1,2,3-Trichloropropane	"	ND	-----	1.00	"	"	"	"	"	
1,2,4-Trimethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
1,3,5-Trimethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
Vinyl chloride	"	ND	-----	1.00	"	"	"	"	"	
o-Xylene	"	ND	-----	1.00	"	"	"	"	"	
m,p-Xylene	"	ND	-----	2.00	"	"	"	"	"	
Surrogate(s): *4-BFB*			*97.4%*		*80 - 120%*	"			"	
1,2-DCA-d4			*95.2%*		*80 - 120%*	"			"	
Dibromofluoromethane			*96.0%*		*80 - 120%*	"			"	
Toluene-d8			*101%*		*80 - 120%*	"			"	

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Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	11/14/08 16:40

Polynuclear Aromatic Compounds per EPA 8270M-SIM

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PRJ1097-02 (WR-369)			**Water**			**Sampled: 10/31/08 09:35**				
2-Methylnaphthalene	EPA 8270m	ND	-----	0.190	ug/l	1x	8110099	11/04/08 16:00	11/10/08 15:59	
Acenaphthene	"	ND	-----	0.190	"	"	"	"	"	
Acenaphthylene	"	ND	-----	0.190	"	"	"	"	"	
Anthracene	"	ND	-----	0.190	"	"	"	"	"	
Benzo (a) anthracene	"	ND	-----	0.00952	"	"	"	"	"	
Benzo (a) pyrene	"	ND	-----	0.00952	"	"	"	"	"	
Benzo (b) fluoranthene	"	ND	-----	0.00952	"	"	"	"	"	
Benzo (ghi) perylene	"	ND	-----	0.190	"	"	"	"	"	
Benzo (k) fluoranthene	"	ND	-----	0.00952	"	"	"	"	"	
Chrysene	"	**0.0138**	-----	0.00952	"	"	"	"	"	
Dibenzo (a,h) anthracene	"	ND	-----	0.00952	"	"	"	"	"	
Fluoranthene	"	ND	-----	0.190	"	"	"	"	"	
Fluorene	"	ND	-----	0.190	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	"	ND	-----	0.00952	"	"	"	"	"	
Naphthalene	"	ND	-----	0.190	"	"	"	"	"	
Phenanthrene	"	ND	-----	0.190	"	"	"	"	"	
Pyrene	"	ND	-----	0.190	"	"	"	"	"	
Surrogate(s):	*Fluorene-d10*			*102%*		*25 - 125%*	"			"
	Pyrene-d10			*109%*		*23 - 150%*	"			"
	Benzo (a) pyrene-d12			*47.8%*		*10 - 125%*	"			"
PRJ1097-03 (WR-370)			**Water**			**Sampled: 10/31/08 09:45**				
2-Methylnaphthalene	EPA 8270m	ND	-----	0.190	ug/l	1x	8110099	11/04/08 16:00	11/10/08 16:29	
Acenaphthene	"	ND	-----	0.190	"	"	"	"	"	
Acenaphthylene	"	ND	-----	0.190	"	"	"	"	"	
Anthracene	"	ND	-----	0.190	"	"	"	"	"	
Benzo (a) anthracene	"	**0.0142**	-----	0.00952	"	"	"	"	"	
Benzo (a) pyrene	"	**0.0106**	-----	0.00952	"	"	"	"	"	
Benzo (b) fluoranthene	"	**0.0193**	-----	0.00952	"	"	"	"	"	
Benzo (ghi) perylene	"	ND	-----	0.190	"	"	"	"	"	
Benzo (k) fluoranthene	"	**0.0135**	-----	0.00952	"	"	"	"	"	
Chrysene	"	**0.0380**	-----	0.00952	"	"	"	"	"	
Dibenzo (a,h) anthracene	"	ND	-----	0.00952	"	"	"	"	"	
Fluoranthene	"	ND	-----	0.190	"	"	"	"	"	
Fluorene	"	ND	-----	0.190	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	"	**0.0118**	-----	0.00952	"	"	"	"	"	

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Estella Rieben, Project Manager

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Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	11/14/08 16:40

Polynuclear Aromatic Compounds per EPA 8270M-SIM

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PRJ1097-03 (WR-370)			**Water**			**Sampled: 10/31/08 09:45**				
Naphthalene	EPA 8270m	ND	-----	0.190	ug/l	1x	8110099	11/04/08 16:00	11/10/08 16:29	
Phenanthrene	"	ND	-----	0.190	"	"	"	"	"	
Pyrene	"	ND	-----	0.190	"	"	"	"	"	
Surrogate(s): Fluorene-d10				*98.2%*		*25 - 125 %*	"			"
Pyrene-d10				*105%*		*23 - 150 %*	"			"
Benzo (a) pyrene-d12				*41.8%*		*10 - 125 %*	"			"
PRJ1097-04 (MH-X)			**Water**			**Sampled: 10/31/08 10:05**				
2-Methylnaphthalene	EPA 8270m	ND	-----	0.190	ug/l	1x	8110099	11/04/08 16:00	11/10/08 16:59	
Acenaphthene	"	ND	-----	0.190	"	"	"	"	"	
Acenaphthylene	"	ND	-----	0.190	"	"	"	"	"	
Anthracene	"	ND	-----	0.190	"	"	"	"	"	
Benzo (a) anthracene	"	**0.0178**	-----	0.00952	"	"	"	"	"	
Benzo (a) pyrene	"	**0.0190**	-----	0.00952	"	"	"	"	"	
Benzo (b) fluoranthene	"	**0.0289**	-----	0.00952	"	"	"	"	"	
Benzo (ghi) perylene	"	ND	-----	0.190	"	"	"	"	"	
Benzo (k) fluoranthene	"	**0.0199**	-----	0.00952	"	"	"	"	"	
Chrysene	"	**0.0392**	-----	0.00952	"	"	"	"	"	
Dibenzo (a,h) anthracene	"	ND	-----	0.00952	"	"	"	"	"	
Fluoranthene	"	ND	-----	0.190	"	"	"	"	"	
Fluorene	"	ND	-----	0.190	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	"	**0.0209**	-----	0.00952	"	"	"	"	"	
Naphthalene	"	ND	-----	0.190	"	"	"	"	"	
Phenanthrene	"	ND	-----	0.190	"	"	"	"	"	
Pyrene	"	ND	-----	0.190	"	"	"	"	"	
Surrogate(s): Fluorene-d10				*57.5%*		*25 - 125 %*	"			"
Pyrene-d10				*124%*		*23 - 150 %*	"			"
Benzo (a) pyrene-d12				*76.4%*		*10 - 125 %*	"			"
PRJ1097-05 (MH-12 4 inch)			**Water**			**Sampled: 10/31/08 11:45**				
2-Methylnaphthalene	EPA 8270m	ND	-----	0.190	ug/l	1x	8110099	11/04/08 16:00	11/10/08 17:29	
Acenaphthene	"	ND	-----	0.190	"	"	"	"	"	
Acenaphthylene	"	ND	-----	0.190	"	"	"	"	"	
Anthracene	"	ND	-----	0.190	"	"	"	"	"	
Benzo (a) anthracene	"	ND	-----	0.00952	"	"	"	"	"	
Benzo (a) pyrene	"	ND	-----	0.00952	"	"	"	"	"	

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Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	11/14/08 16:40

Polynuclear Aromatic Compounds per EPA 8270M-SIM

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PRJ1097-05 (MH-12 4 inch)			**Water**			**Sampled: 10/31/08 11:45**				
Benzo (b) fluoranthene	EPA 8270m	ND	-----	0.00952	ug/l	1x	8110099	11/04/08 16:00	11/10/08 17:29	
Benzo (ghi) perylene	"	ND	-----	0.190	"	"	"	"	"	
Benzo (k) fluoranthene	"	ND	-----	0.00952	"	"	"	"	"	
Chrysene	"	**0.0114**	-----	0.00952	"	"	"	"	"	
Dibenzo (a,h) anthracene	"	ND	-----	0.00952	"	"	"	"	"	
Fluoranthene	"	ND	-----	0.190	"	"	"	"	"	
Fluorene	"	ND	-----	0.190	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	"	ND	-----	0.00952	"	"	"	"	"	
Naphthalene	"	ND	-----	0.190	"	"	"	"	"	
Phenanthrene	"	ND	-----	0.190	"	"	"	"	"	
Pyrene	"	ND	-----	0.190	"	"	"	"	"	
Surrogate(s): *Fluorene-d10*				*106%*		*25 - 125 %*	"			"
Pyrene-d10				*117%*		*23 - 150 %*	"			"
Benzo (a) pyrene-d12				*74.5%*		*10 - 125 %*	"			"
PRJ1097-06 (MH-12 12 inch)			**Water**			**Sampled: 10/31/08 12:05**				
2-Methylnaphthalene	EPA 8270m	ND	-----	0.190	ug/l	1x	8110099	11/04/08 16:00	11/10/08 17:59	
Acenaphthene	"	ND	-----	0.190	"	"	"	"	"	
Acenaphthylene	"	ND	-----	0.190	"	"	"	"	"	
Anthracene	"	ND	-----	0.190	"	"	"	"	"	
Benzo (a) anthracene	"	ND	-----	0.00952	"	"	"	"	"	
Benzo (a) pyrene	"	ND	-----	0.00952	"	"	"	"	"	
Benzo (b) fluoranthene	"	ND	-----	0.00952	"	"	"	"	"	
Benzo (ghi) perylene	"	ND	-----	0.190	"	"	"	"	"	
Benzo (k) fluoranthene	"	ND	-----	0.00952	"	"	"	"	"	
Chrysene	"	**0.00969**	-----	0.00952	"	"	"	"	"	
Dibenzo (a,h) anthracene	"	ND	-----	0.00952	"	"	"	"	"	
Fluoranthene	"	ND	-----	0.190	"	"	"	"	"	
Fluorene	"	ND	-----	0.190	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	"	ND	-----	0.00952	"	"	"	"	"	
Naphthalene	"	ND	-----	0.190	"	"	"	"	"	
Phenanthrene	"	ND	-----	0.190	"	"	"	"	"	
Pyrene	"	ND	-----	0.190	"	"	"	"	"	
Surrogate(s): *Fluorene-d10*				*89.7%*		*25 - 125 %*	"			"
Pyrene-d10				*105%*		*23 - 150 %*	"			"
Benzo (a) pyrene-d12				*51.3%*		*10 - 125 %*	"			"

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Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	11/14/08 16:40

Polynuclear Aromatic Compounds per EPA 8270M-SIM

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Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes

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Tualatin, OR 97062	Project Manager:	Rick Fetterly	11/14/08 16:40

Phthalates per EPA 8270-SIM

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PRJ1097-02 (WR-369)			**Water**			**Sampled: 10/31/08 09:35**				
Dimethyl phthalate	EPA 8270m	ND	-----	0.952	ug/l	1x	8110099	11/04/08 16:00	11/06/08 17:29	
Diethyl phthalate	"	ND	-----	0.952	"	"	"	"	"	
Di-n-butyl phthalate	"	ND	-----	0.952	"	"	"	"	"	
Butyl benzyl phthalate	"	ND	-----	0.952	"	"	"	"	"	
Bis(2-ethylhexyl)phthalate	"	ND	-----	0.952	"	"	"	"	"	
Di-n-octyl phthalate	"	ND	-----	0.952	"	"	"	"	"	
Surrogate(s): 2-Fluorobiphenyl				*115%*		*10 - 150%*	"			"
p-Terphenyl-d14				*78.8%*		*10 - 150%*	"			"
PRJ1097-03 (WR-370)			**Water**			**Sampled: 10/31/08 09:45**				
Dimethyl phthalate	EPA 8270m	**1.00**	-----	0.952	ug/l	1x	8110099	11/04/08 16:00	11/06/08 18:00	
Diethyl phthalate	"	ND	-----	0.952	"	"	"	"	"	
Di-n-butyl phthalate	"	ND	-----	0.952	"	"	"	"	"	
Butyl benzyl phthalate	"	ND	-----	0.952	"	"	"	"	"	
Bis(2-ethylhexyl)phthalate	"	**1.96**	-----	0.952	"	"	"	"	"	
Di-n-octyl phthalate	"	ND	-----	0.952	"	"	"	"	"	
Surrogate(s): 2-Fluorobiphenyl				*74.1%*		*10 - 150%*	"			"
p-Terphenyl-d14				*74.9%*		*10 - 150%*	"			"
PRJ1097-04 (MH-X)			**Water**			**Sampled: 10/31/08 10:05**				
Dimethyl phthalate	EPA 8270m	**1.75**	-----	0.952	ug/l	1x	8110099	11/04/08 16:00	11/06/08 18:31	
Diethyl phthalate	"	ND	-----	0.952	"	"	"	"	"	
Di-n-butyl phthalate	"	ND	-----	0.952	"	"	"	"	"	
Butyl benzyl phthalate	"	**5.60**	-----	0.952	"	"	"	"	"	
Bis(2-ethylhexyl)phthalate	"	**2.28**	-----	0.952	"	"	"	"	"	
Di-n-octyl phthalate	"	ND	-----	0.952	"	"	"	"	"	
Surrogate(s): 2-Fluorobiphenyl				*133%*		*10 - 150%*	"			"
p-Terphenyl-d14				*98.5%*		*10 - 150%*	"			"
PRJ1097-05 (MH-12 4 inch)			**Water**			**Sampled: 10/31/08 11:45**				
Dimethyl phthalate	EPA 8270m	**3.70**	-----	0.952	ug/l	1x	8110099	11/04/08 16:00	11/06/08 19:02	
Diethyl phthalate	"	ND	-----	0.952	"	"	"	"	"	
Di-n-butyl phthalate	"	ND	-----	0.952	"	"	"	"	"	
Butyl benzyl phthalate	"	ND	-----	0.952	"	"	"	"	"	
Bis(2-ethylhexyl)phthalate	"	ND	-----	0.952	"	"	"	"	"	
Di-n-octyl phthalate	"	ND	-----	0.952	"	"	"	"	"	

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7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	11/14/08 16:40

Phthalates per EPA 8270-SIM

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PRJ1097-05 (MH-12 4 inch)			**Water**				**Sampled: 10/31/08 11:45**			
Surrogate(s): 2-Fluorobiphenyl				*119%*		*10 - 150%*	"			"
p-Terphenyl-d14				*78.2%*		*10 - 150%*	"			"
PRJ1097-06 (MH-12 12 inch)			**Water**				**Sampled: 10/31/08 12:05**			
Dimethyl phthalate	EPA 8270m	ND	-----	0.952	ug/l	1x	8110099	11/04/08 16:00	11/06/08 19:32	
Diethyl phthalate	"	ND	-----	0.952	"	"	"	"	"	
Di-n-butyl phthalate	"	ND	-----	0.952	"	"	"	"	"	
Butyl benzyl phthalate	"	ND	-----	0.952	"	"	"	"	"	
Bis(2-ethylhexyl)phthalate	"	ND	-----	0.952	"	"	"	"	"	
Di-n-octyl phthalate	"	ND	-----	0.952	"	"	"	"	"	
Surrogate(s): 2-Fluorobiphenyl				*80.1%*		*10 - 150%*	"			"
p-Terphenyl-d14				*70.8%*		*10 - 150%*	"			"

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Tualatin, OR 97062	Project Manager:	Rick Fetterly	11/14/08 16:40

Conventional Chemistry Parameters per Standard Methods

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PRJ1097-02 (WR-369)			**Water**			**Sampled: 10/31/08 09:35**				
Total Organic Carbon	SM 5310C	**2.76**	-----	1.00	mg/l	1x	8110153	11/05/08 16:30	11/06/08 04:05	
PRJ1097-03 (WR-370)			**Water**			**Sampled: 10/31/08 09:45**				
Total Organic Carbon	SM 5310C	**4.39**	-----	1.00	mg/l	1x	8110153	11/05/08 16:30	11/06/08 04:05	
PRJ1097-04 (MH-X)			**Water**			**Sampled: 10/31/08 10:05**				
Total Organic Carbon	SM 5310C	**2.22**	-----	1.00	mg/l	1x	8110153	11/05/08 16:30	11/06/08 04:05	
PRJ1097-05 (MH-12 4 inch)			**Water**			**Sampled: 10/31/08 11:45**				
Total Organic Carbon	SM 5310C	**3.52**	-----	1.00	mg/l	1x	8110153	11/05/08 16:30	11/06/08 04:05	
PRJ1097-06 (MH-12 12 inch)			**Water**			**Sampled: 10/31/08 12:05**				
Total Organic Carbon	SM 5310C	**4.03**	-----	1.00	mg/l	1x	8110153	11/05/08 16:30	11/06/08 04:05	

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Tualatin, OR 97062	Project Manager:	Rick Fetterly	11/14/08 16:40

Gasoline Hydrocarbons per NW TPH-Gx Method - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 8101256 **Water Preparation Method: EPA 5030B**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (8101256-BLK1)									**Extracted: 10/31/08 15:14**					
Gasoline Range Hydrocarbons	NW TPH-Gx	ND	---	80.0	ug/l	1x	--	--	--	--	--	--	11/03/08 18:13	
Surrogate(s): 4-BFB		*Recovery: 84.7%*			*Limits: 50-150%*	"							*11/03/08 18:13*	
LCS (8101256-BS1)									**Extracted: 10/31/08 15:14**					
Gasoline Range Hydrocarbons	NW TPH-Gx	511	---	80.0	ug/l	1x	--	500	102%	(70-130)	--	--	11/03/08 17:19	
Surrogate(s): 4-BFB		*Recovery: 107%*			*Limits: 50-150%*	"							*11/03/08 17:19*	
LCS Dup (8101256-BSD1)									**Extracted: 10/31/08 15:14**					
Gasoline Range Hydrocarbons	NW TPH-Gx	479	---	80.0	ug/l	1x	--	500	95.9%	(70-130)	6.36%	(35)	11/03/08 17:46	
Surrogate(s): 4-BFB		*Recovery: 101%*			*Limits: 50-150%*	"							*11/03/08 17:46*	
Duplicate (8101256-DUP1)					**QC Source: PRJ1020-01**				**Extracted: 10/31/08 15:14**					
Gasoline Range Hydrocarbons	NW TPH-Gx	5520	---	800	ug/l	10x	5920	--	--	--	6.95%	(35)	11/04/08 00:36	
Surrogate(s): 4-BFB		*Recovery: 104%*			*Limits: 50-150%*	*1x*							*11/04/08 00:36*	
Duplicate (8101256-DUP2)					**QC Source: PRJ1020-04**				**Extracted: 10/31/08 15:14**					
Gasoline Range Hydrocarbons	NW TPH-Gx	8810	---	800	ug/l	10x	8650	--	--	--	1.75%	(35)	11/04/08 01:58	
Surrogate(s): 4-BFB		*Recovery: 102%*			*Limits: 50-150%*	*1x*							*11/04/08 01:58*	

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7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	11/14/08 16:40

Diesel and Heavy Range Hydrocarbons per NWTPH-Dx Method with Acid/Silica Gel Cleanup - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 8110081 **Water Preparation Method: EPA 3510 Fuels**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (8110081-BLK1)								**Extracted: 11/04/08 17:00**						
Diesel Range Organics	NWTPH-Dx	ND	---	0.250	mg/l	1x	--	--	--	--	--	--	11/06/08 19:43	
Heavy Oil Range Hydrocarbons	"	ND	---	0.500	"	"	--	--	--	--	--	--	"	
Surrogate(s): 1-Chlorooctadecane		*Recovery: 96.0%*			*Limits: 50-150%*	"							*11/06/08 19:43*	
LCS (8110081-BS1)								**Extracted: 11/04/08 17:00**						
Diesel Range Organics	NWTPH-Dx	2.55	---	0.250	mg/l	1x	--	2.50	102%	(50-150)	--	--	11/06/08 20:04	
Heavy Oil Range Hydrocarbons	"	1.61	---	0.500	"	"	--	1.50	107%	"	--	--	"	
Surrogate(s): 1-Chlorooctadecane		*Recovery: 101%*			*Limits: 50-150%*	"							*11/06/08 20:04*	
LCS Dup (8110081-BSD1)								**Extracted: 11/04/08 17:00**						
Diesel Range Organics	NWTPH-Dx	2.32	---	0.250	mg/l	1x	--	2.50	92.6%	(50-150)	9.76%	(50)	11/06/08 20:24	
Heavy Oil Range Hydrocarbons	"	1.45	---	0.500	"	"	--	1.50	96.3%	"	10.9%	"	"	
Surrogate(s): 1-Chlorooctadecane		*Recovery: 85.8%*			*Limits: 50-150%*	"							*11/06/08 20:24*	

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7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	11/14/08 16:40

Total Metals per EPA 6000/7000 Series Methods - Laboratory Quality Control Results

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QC Batch: 8110235 **Water Preparation Method: EPA 200/3005**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (8110235-BLK1)									Extracted: 11/07/08 11:02					
Arsenic	EPA 6020	ND	---	0.00100	mg/l	1x	--	--	--	--	--	--	11/07/08 22:52	
Barium	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Cadmium	"	ND	---	0.000500	"	"	--	--	--	--	--	--	"	
Chromium	"	ND	---	0.00200	"	"	--	--	--	--	--	--	"	
Copper	"	ND	---	0.00200	"	"	--	--	--	--	--	--	"	
Lead	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Manganese	"	ND	---	0.00200	"	"	--	--	--	--	--	--	"	
Selenium	"	ND	---	0.000500	"	"	--	--	--	--	--	--	11/11/08 22:18	
Silver	"	ND	---	0.00100	"	"	--	--	--	--	--	--	11/07/08 22:52	
Zinc	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	
LCS (8110235-BS1)									Extracted: 11/07/08 11:02					
Arsenic	EPA 6020	0.0968	---	0.00100	mg/l	1x	--	0.100	96.8%	(80-120)	--	--	11/07/08 22:59	
Barium	"	0.0960	---	0.00100	"	"	--	"	96.0%	"	--	--	"	
Cadmium	"	0.0912	---	0.000500	"	"	--	"	91.2%	"	--	--	"	
Chromium	"	0.103	---	0.00200	"	"	--	"	103%	"	--	--	"	
Copper	"	0.102	---	0.00200	"	"	--	"	102%	"	--	--	"	
Lead	"	0.0973	---	0.00100	"	"	--	"	97.3%	"	--	--	"	
Manganese	"	0.0997	---	0.00200	"	"	--	"	99.7%	"	--	--	"	
Selenium	"	0.0948	---	0.000500	"	"	--	"	94.8%	"	--	--	11/11/08 22:26	
Silver	"	0.0465	---	0.00100	"	"	--	0.0500	92.9%	"	--	--	11/07/08 22:59	
Zinc	"	0.100	---	0.00500	"	"	--	0.100	100%	"	--	--	"	
Duplicate (8110235-DUP1)					QC Source: PRJ1087-01				Extracted: 11/07/08 11:02					
Arsenic	EPA 6020	0.00362	---	0.00100	mg/l	1x	0.00357	--	--	--	1.39%	(20)	11/07/08 23:29	
Barium	"	0.259	---	0.00100	"	"	0.260	--	--	--	0.462%	"	"	
Cadmium	"	ND	---	0.000500	"	"	ND	--	--	--	8.00%	"	"	
Chromium	"	0.0519	---	0.00200	"	"	0.0511	--	--	--	1.57%	"	"	
Copper	"	0.119	---	0.00200	"	"	0.118	--	--	--	1.18%	"	"	
Lead	"	0.00433	---	0.00100	"	"	0.00432	--	--	--	0.231%	"	"	
Manganese	"	0.0897	---	0.00200	"	"	0.0879	--	--	--	2.04%	"	"	
Selenium	"	ND	---	0.000500	"	"	ND	--	--	--	NR	"	11/11/08 22:41	
Silver	"	ND	---	0.00100	"	"	ND	--	--	--	NR	"	11/07/08 23:29	
Zinc	"	0.174	---	0.00500	"	"	0.171	--	--	--	1.79%	"	"	

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Estella Rieben, Project Manager

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PORTLAND, OR 9405 S.W. NIMBUS AVENUE
BEAVERTON, OR 97008-7132
ph: (503) 906.9200 fax: (503) 906.9210

Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	11/14/08 16:40

Total Metals per EPA 6000/7000 Series Methods - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 8110235 **Water Preparation Method: EPA 200/3005**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Matrix Spike (8110235-MS1)				**QC Source: PRJ1087-01**					**Extracted: 11/07/08 11:02**					
Arsenic	EPA 6020	0.105	---	0.00100	mg/l	1x	0.00357	0.100	102%	(75-125)	--	--	11/07/08 23:44	
Barium	"	0.369	---	0.00100	"	"	0.260	"	109%	"	--	--	"	
Cadmium	"	0.0968	---	0.000500	"	"	0.000390	"	96.4%	"	--	--	"	
Chromium	"	0.158	---	0.00200	"	"	0.0511	"	107%	"	--	--	"	
Copper	"	0.221	---	0.00200	"	"	0.118	"	103%	"	--	--	"	
Lead	"	0.100	---	0.00100	"	"	0.00432	"	96.1%	"	--	--	"	
Manganese	"	0.207	---	0.00200	"	"	0.0879	"	119%	"	--	--	"	
Selenium	"	0.0988	---	0.000500	"	"	ND	"	98.8%	"	--	--	11/11/08 22:57	
Silver	"	0.0466	---	0.00100	"	"	ND	0.0500	93.1%	"	--	--	11/07/08 23:44	
Zinc	"	0.278	---	0.00500	"	"	0.171	0.100	107%	"	--	--	"	
Matrix Spike (8110235-MS2)				**QC Source: PRJ1097-03**					**Extracted: 11/07/08 11:02**					
Arsenic	EPA 6020	0.0960	---	0.00100	mg/l	1x	0.00446	0.100	91.5%	(75-125)	--	--	11/08/08 01:08	
Barium	"	0.117	---	0.00100	"	"	0.0162	"	101%	"	--	--	"	
Cadmium	"	0.0979	---	0.000500	"	"	0.000230	"	97.6%	"	--	--	"	
Chromium	"	0.0987	---	0.00200	"	"	0.00351	"	95.2%	"	--	--	"	
Copper	"	0.123	---	0.00200	"	"	0.0308	"	91.9%	"	--	--	"	
Lead	"	0.114	---	0.00100	"	"	0.0113	"	102%	"	--	--	"	
Manganese	"	0.159	---	0.00200	"	"	0.0649	"	94.4%	"	--	--	"	
Selenium	"	0.0924	---	0.000500	"	"	0.0000900	"	92.3%	"	--	--	11/11/08 23:27	
Silver	"	0.0486	---	0.00100	"	"	ND	0.0500	97.2%	"	--	--	11/08/08 01:08	
Zinc	"	0.264	---	0.00500	"	"	0.191	0.100	73.5%	"	--	--	"	M8

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Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	11/14/08 16:40

Total Mercury per EPA Method 7470A - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 8110024 **Water Preparation Method: EPA 7470A**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (8110024-BLK1)								**Extracted: 11/03/08 10:25**						
Mercury	EPA 7470A	ND	---	0.000200	mg/l	1x	--	--	--	--	--	--	11/03/08 15:01	
LCS (8110024-BS1)								**Extracted: 11/03/08 10:25**						
Mercury	EPA 7470A	0.00487	---	0.000200	mg/l	1x	--	0.00500	97.4%	(85-115)	--	--	11/03/08 15:03	
LCS Dup (8110024-BSD1)								**Extracted: 11/03/08 10:25**						
Mercury	EPA 7470A	0.00505	---	0.000200	mg/l	1x	--	0.00500	101%	(85-115)	3.61%	(20)	11/03/08 15:07	
Duplicate (8110024-DUP1)					**QC Source: PRJ1032-02**			**Extracted: 11/03/08 10:25**						
Mercury	EPA 7470A	ND	---	0.000200	mg/l	1x	ND	--	--	--	NR	(20)	11/03/08 15:10	
Matrix Spike (8110024-MS1)					**QC Source: PRJ1032-02**			**Extracted: 11/03/08 10:25**						
Mercury	EPA 7470A	0.00498	---	0.000200	mg/l	1x	ND	0.00500	99.6%	(75-125)	--	--	11/03/08 15:13	
Matrix Spike Dup (8110024-MSD1)					**QC Source: PRJ1032-02**			**Extracted: 11/03/08 10:25**						
Mercury	EPA 7470A	0.00518	---	0.000200	mg/l	1x	ND	0.00500	104%	(75-125)	4.02%	(20)	11/03/08 15:16	

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7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	11/14/08 16:40

Organochlorine Pesticides per EPA Method 8081A - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 8110105 **Water Preparation Method: EPA 3510/600 Series**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (8110105-BLK1)									**Extracted: 11/04/08 22:25**					
Aldrin	EPA 8081A	ND	---	0.0100	ug/l	1x	--	--	--	--	--	--	11/07/08 12:26	
alpha-BHC	"	ND	---	0.0100	"	"	--	--	--	--	--	--	"	
beta-BHC	"	ND	---	0.0100	"	"	--	--	--	--	--	--	"	
delta-BHC	"	ND	---	0.0100	"	"	--	--	--	--	--	--	"	
gamma-BHC (Lindane)	"	ND	---	0.0100	"	"	--	--	--	--	--	--	"	
gamma-Chlordane	"	ND	---	0.0100	"	"	--	--	--	--	--	--	"	
alpha-Chlordane	"	ND	---	0.0100	"	"	--	--	--	--	--	--	"	
Chlordane (tech)	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
4,4´-DDD	"	ND	---	0.0100	"	"	--	--	--	--	--	--	"	
4,4´-DDE	"	ND	---	0.0100	"	"	--	--	--	--	--	--	"	
4,4´-DDT	"	ND	---	0.0100	"	"	--	--	--	--	--	--	"	
Dieldrin	"	ND	---	0.0100	"	"	--	--	--	--	--	--	"	
Endosulfan I	"	ND	---	0.0100	"	"	--	--	--	--	--	--	"	
Endosulfan II	"	ND	---	0.0100	"	"	--	--	--	--	--	--	"	
Endosulfan sulfate	"	ND	---	0.0100	"	"	--	--	--	--	--	--	"	
Endrin	"	ND	---	0.0100	"	"	--	--	--	--	--	--	"	
Endrin aldehyde	"	ND	---	0.0100	"	"	--	--	--	--	--	--	"	
Endrin ketone	"	ND	---	0.0100	"	"	--	--	--	--	--	--	"	
Heptachlor	"	ND	---	0.0100	"	"	--	--	--	--	--	--	"	
Heptachlor epoxide	"	ND	---	0.0100	"	"	--	--	--	--	--	--	"	
Methoxychlor	"	ND	---	0.0100	"	"	--	--	--	--	--	--	"	
Toxaphene	"	ND	---	0.250	"	"	--	--	--	--	--	--	"	
Surrogate(s): 2,4,5,6-Tetrachloro-m-xylene		*Recovery: 70.8%*			*Limits: 16-137%*	"							*11/07/08 12:26*	
LCS (8110105-BS1)									**Extracted: 11/04/08 22:25**					
Aldrin	EPA 8081A	0.0348	---	0.0100	ug/l	1x	--	0.0500	69.6%	(43-115)	--	--	11/07/08 12:52	
gamma-BHC (Lindane)	"	0.0454	---	0.0100	"	"	--	"	90.8%	(61-120)	--	--	"	
4,4´-DDT	"	0.0480	---	0.0100	"	"	--	"	96.0%	(58-128)	--	--	"	
Dieldrin	"	0.0465	---	0.0100	"	"	--	"	93.0%	(60-128)	--	--	"	
Endrin	"	0.0471	---	0.0100	"	"	--	"	94.3%	(68-136)	--	--	"	
Heptachlor	"	0.0386	---	0.0100	"	"	--	"	77.2%	(49-116)	--	--	"	
Surrogate(s): 2,4,5,6-Tetrachloro-m-xylene		*Recovery: 75.7%*			*Limits: 16-137%*	"							*11/07/08 12:52*	

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Estella Rieben, Project Manager

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Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	11/14/08 16:40

Organochlorine Pesticides per EPA Method 8081A - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 8110105 **Water Preparation Method: EPA 3510/600 Series**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
LCS Dup (8110105-BSD1)								**Extracted: 11/04/08 22:25**						
Aldrin	EPA 8081A	0.0344	---	0.0100	ug/l	1x	--	0.0500	68.9%	(43-115)	1.03%	(22)	11/07/08 13:18	
gamma-BHC (Lindane)	"	0.0440	---	0.0100	"	"	--	"	88.0%	(61-120)	3.04%	"	"	
4,4'-DDT	"	0.0452	---	0.0100	"	"	--	"	90.4%	(58-128)	6.07%	"	"	
Dieldrin	"	0.0454	---	0.0100	"	"	--	"	90.8%	(60-128)	2.49%	"	"	
Endrin	"	0.0459	---	0.0100	"	"	--	"	91.8%	(68-136)	2.69%	"	"	
Heptachlor	"	0.0385	---	0.0100	"	"	--	"	77.1%	(49-116)	0.117%	"	"	
Surrogate(s): 2,4,5,6-Tetrachloro-m-xylene		*Recovery: 75.9%*			*Limits: 16-137%*	"							*11/07/08 13:18*	

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Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	11/14/08 16:40

Polychlorinated Biphenyls per EPA Method 8082 - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 8110160 **Water Preparation Method: EPA 3510/600 Series**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (8110160-BLK1)									**Extracted: 11/06/08 12:00**					
Aroclor 1016	EPA 8082	ND	---	0.100	ug/l	1x	--	--	--	--	--	--	11/10/08 16:02	
Aroclor 1221	"	ND	---	0.200	"	"	--	--	--	--	--	--	"	
Aroclor 1232	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Aroclor 1242	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Aroclor 1248	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Aroclor 1254	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Aroclor 1260	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Surrogate(s): Decachlorobiphenyl		*Recovery: 95.7%*			*Limits: 12-130%*	"							*11/10/08 16:02*	
LCS (8110160-BS1)									**Extracted: 11/06/08 12:00**					
Aroclor 1016	EPA 8082	0.865	---	0.100	ug/l	1x	--	1.00	86.5%	(50-114)	--	--	11/10/08 16:24	
Aroclor 1260	"	0.929	---	0.100	"	"	--	"	92.9%	(8-127)	--	--	"	
Surrogate(s): Decachlorobiphenyl		*Recovery: 99.4%*			*Limits: 12-130%*	"							*11/10/08 16:24*	
LCS Dup (8110160-BSD1)									**Extracted: 11/06/08 12:00**					
Aroclor 1016	EPA 8082	0.789	---	0.100	ug/l	1x	--	1.00	78.9%	(50-114)	9.29%	(22)	11/10/08 16:46	
Aroclor 1260	"	0.854	---	0.100	"	"	--	"	85.4%	(8-127)	8.42%	(23)	"	
Surrogate(s): Decachlorobiphenyl		*Recovery: 90.7%*			*Limits: 12-130%*	"							*11/10/08 16:46*	

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Estella Rieben, Project Manager

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Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	11/14/08 16:40

Volatile Organic Compounds per EPA Method 8260B - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 8110292 **Water Preparation Method: EPA 5030B**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (8110292-BLK1)							**Extracted: 11/10/08 10:20**							
Acetone	EPA 8260B	ND	---	25.0	ug/l	1x	--	--	--	--	--	--	11/10/08 13:21	
Benzene	"	ND	---	0.200	"	"	--	--	--	--	--	--	"	
Bromobenzene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Bromochloromethane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Bromodichloromethane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Bromoform	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Bromomethane	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
2-Butanone (MEK)	"	ND	---	10.0	"	"	--	--	--	--	--	--	"	
n-Butylbenzene	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
sec-Butylbenzene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
tert-Butylbenzene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Carbon disulfide	"	ND	---	10.0	"	"	--	--	--	--	--	--	"	
Carbon tetrachloride	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Chlorobenzene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Chloroethane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Chloroform	"	ND	---	0.200	"	"	--	--	--	--	--	--	"	
Chloromethane	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
2-Chlorotoluene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
4-Chlorotoluene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,2-Dibromo-3-chloropropane	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
Dibromochloromethane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,2-Dibromoethane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Dibromomethane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,2-Dichlorobenzene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,3-Dichlorobenzene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,4-Dichlorobenzene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Dichlorodifluoromethane	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
1,1-Dichloroethane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,2-Dichloroethane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,1-Dichloroethene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
cis-1,2-Dichloroethene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
trans-1,2-Dichloroethene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,2-Dichloropropane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,3-Dichloropropane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
2,2-Dichloropropane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,1-Dichloropropene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
cis-1,3-Dichloropropene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
trans-1,3-Dichloropropene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Ethylbenzene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	

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Estella K Rieben

Estella Rieben, Project Manager

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7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	11/14/08 16:40

Volatile Organic Compounds per EPA Method 8260B - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 8110292 **Water Preparation Method: EPA 5030B**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (8110292-BLK1)							**Extracted: 11/10/08 10:20**							
Hexachlorobutadiene	EPA 8260B	ND	---	4.00	ug/l	1x	--	--	--	--	--	--	11/10/08 13:21	
2-Hexanone	"	ND	---	10.0	"	"	--	--	--	--	--	--	"	
Isopropylbenzene	"	ND	---	2.00	"	"	--	--	--	--	--	--	"	
p-Isopropyltoluene	"	ND	---	2.00	"	"	--	--	--	--	--	--	"	
4-Methyl-2-pentanone	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
Methyl tert-butyl ether	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Methylene chloride	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
Naphthalene	"	ND	---	2.00	"	"	--	--	--	--	--	--	"	
n-Propylbenzene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Styrene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,1,1,2-Tetrachloroethane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,1,2,2-Tetrachloroethane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Tetrachloroethene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Toluene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,2,3-Trichlorobenzene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,2,4-Trichlorobenzene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,1,1-Trichloroethane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,1,2-Trichloroethane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Trichloroethene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Trichlorofluoromethane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,2,3-Trichloropropane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,2,4-Trimethylbenzene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,3,5-Trimethylbenzene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Vinyl chloride	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
o-Xylene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
m,p-Xylene	"	ND	---	2.00	"	"	--	--	--	--	--	--	"	
Surrogate(s):	*4-BFB*	*Recovery:*	*102%*		*Limits:*	*80-120%*	"						*11/10/08 13:21*	
	1,2-DCA-d4		*95.2%*			*80-120%*	"						"	
	Dibromofluoromethane		*98.0%*			*80-120%*	"						"	
	Toluene-d8		*102%*			*80-120%*	"						"	

TestAmerica Portland

Estella K Rieben

Estella Rieben, Project Manager

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THE LEADER IN ENVIRONMENTAL TESTING

PORTLAND, OR 9405 S.W. NIMBUS AVENUE
BEAVERTON, OR 97008-7132
ph: (503) 906.9200 fax: (503) 906.9210

Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	11/14/08 16:40

Volatile Organic Compounds per EPA Method 8260B - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 8110292 **Water Preparation Method: EPA 5030B**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
LCS (8110292-BS1)							**Extracted: 11/10/08 10:20**							
Acetone	EPA 8260B	51.6	---	25.0	ug/l	1x	--	40.0	129%	(56-141)	--	--	11/10/08 11:35	
Benzene	"	18.5	---	0.200	"	"	--	20.0	92.4%	(80-120)	--	--	"	
Bromobenzene	"	16.9	---	1.00	"	"	--	"	84.5%	(78-120)	--	--	"	
Bromochloromethane	"	17.4	---	1.00	"	"	--	"	87.2%	(76-121)	--	--	"	
Bromodichloromethane	"	17.9	---	1.00	"	"	--	"	89.4%	(84-127)	--	--	"	
Bromoform	"	15.8	---	1.00	"	"	--	"	79.0%	(55-134)	--	--	"	
Bromomethane	"	18.0	---	5.00	"	"	--	"	90.0%	(38-150)	--	--	"	
2-Butanone (MEK)	"	53.6	---	10.0	"	"	--	40.0	134%	(71-136)	--	--	"	
n-Butylbenzene	"	18.4	---	5.00	"	"	--	20.0	92.0%	(76-126)	--	--	"	
sec-Butylbenzene	"	18.4	---	1.00	"	"	--	"	91.8%	(64-129)	--	--	"	
tert-Butylbenzene	"	17.8	---	1.00	"	"	--	"	89.0%	(71-127)	--	--	"	
Carbon disulfide	"	51.5	---	10.0	"	"	--	40.0	129%	(58-120)	--	--	"	L
Carbon tetrachloride	"	16.4	---	1.00	"	"	--	20.0	82.0%	(73-134)	--	--	"	
Chlorobenzene	"	16.9	---	1.00	"	"	--	"	84.6%	(80-124)	--	--	"	
Chloroethane	"	19.3	---	1.00	"	"	--	"	96.6%	(79-124)	--	--	"	
Chloroform	"	17.2	---	0.200	"	"	--	"	86.0%	(80-120)	--	--	"	
Chloromethane	"	17.4	---	5.00	"	"	--	"	87.0%	(47-146)	--	--	"	
2-Chlorotoluene	"	18.2	---	1.00	"	"	--	"	90.8%	(72-125)	--	--	"	
4-Chlorotoluene	"	18.2	---	1.00	"	"	--	"	90.8%	(77-124)	--	--	"	
1,2-Dibromo-3-chloropropane	"	16.0	---	5.00	"	"	--	"	80.2%	(73-134)	--	--	"	
Dibromochloromethane	"	15.8	---	1.00	"	"	--	"	79.0%	(69-138)	--	--	"	
1,2-Dibromoethane	"	18.2	---	1.00	"	"	--	"	91.2%	(80-122)	--	--	"	
Dibromomethane	"	18.1	---	1.00	"	"	--	"	90.4%	(80-120)	--	--	"	
1,2-Dichlorobenzene	"	17.2	---	1.00	"	"	--	"	86.2%	(80-113)	--	--	"	
1,3-Dichlorobenzene	"	17.2	---	1.00	"	"	--	"	86.0%	(76-123)	--	--	"	
1,4-Dichlorobenzene	"	16.9	---	1.00	"	"	--	"	84.7%	(73-120)	--	--	"	
Dichlorodifluoromethane	"	15.2	---	5.00	"	"	--	"	76.1%	(48-140)	--	--	"	
1,1-Dichloroethane	"	18.0	---	1.00	"	"	--	"	90.2%	(80-120)	--	--	"	
1,2-Dichloroethane	"	16.3	---	1.00	"	"	--	"	81.5%	(78-123)	--	--	"	
1,1-Dichloroethene	"	18.0	---	1.00	"	"	--	"	90.0%	(78-120)	--	--	"	
cis-1,2-Dichloroethene	"	17.6	---	1.00	"	"	--	"	88.2%	(80-120)	--	--	"	
trans-1,2-Dichloroethene	"	17.9	---	1.00	"	"	--	"	89.4%	"	--	--	"	
1,2-Dichloropropane	"	18.9	---	1.00	"	"	--	"	94.3%	(80-126)	--	--	"	
1,3-Dichloropropane	"	18.5	---	1.00	"	"	--	"	92.5%	(80-120)	--	--	"	
2,2-Dichloropropane	"	17.7	---	1.00	"	"	--	"	88.6%	(60-144)	--	--	"	
1,1-Dichloropropene	"	17.9	---	1.00	"	"	--	"	89.7%	(80-120)	--	--	"	
cis-1,3-Dichloropropene	"	19.4	---	1.00	"	"	--	"	97.0%	(80-125)	--	--	"	
trans-1,3-Dichloropropene	"	18.8	---	1.00	"	"	--	"	93.9%	(80-130)	--	--	"	
Ethylbenzene	"	18.3	---	1.00	"	"	--	"	91.4%	(80-120)	--	--	"	

TestAmerica Portland

Estella K Rieben

Estella Rieben, Project Manager

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PORTLAND, OR 9405 S.W. NIMBUS AVENUE
BEAVERTON, OR 97008-7132
ph: (503) 906.9200 fax: (503) 906.9210

Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	11/14/08 16:40

Volatile Organic Compounds per EPA Method 8260B - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 8110292 **Water Preparation Method: EPA 5030B**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
LCS (8110292-BS1)									**Extracted: 11/10/08 10:20**					
Hexachlorobutadiene	EPA 8260B	16.6	---	4.00	ug/l	1x	--	20.0	82.8%	(64-145)	--	--	11/10/08 11:35	
2-Hexanone	"	48.1	---	10.0	"	"	--	40.0	120%	(73-139)	--	--	"	
Isopropylbenzene	"	18.1	---	2.00	"	"	--	20.0	90.5%	(77-124)	--	--	"	
p-Isopropyltoluene	"	17.6	---	2.00	"	"	--	"	88.1%	(68-130)	--	--	"	
4-Methyl-2-pentanone	"	50.2	---	5.00	"	"	--	40.0	126%	(72-134)	--	--	"	
Methyl tert-butyl ether	"	17.5	---	1.00	"	"	--	20.0	87.4%	(80-129)	--	--	"	
Methylene chloride	"	18.0	---	5.00	"	"	--	"	90.2%	(80-120)	--	--	"	
Naphthalene	"	17.4	---	2.00	"	"	--	"	87.0%	(72-149)	--	--	"	
n-Propylbenzene	"	19.0	---	1.00	"	"	--	"	94.9%	(76-128)	--	--	"	
Styrene	"	18.6	---	1.00	"	"	--	"	92.8%	(72-127)	--	--	"	
1,1,1,2-Tetrachloroethane	"	17.7	---	1.00	"	"	--	"	88.5%	(69-138)	--	--	"	
1,1,2,2-Tetrachloroethane	"	20.6	---	1.00	"	"	--	"	103%	(77-128)	--	--	"	
Tetrachloroethene	"	16.1	---	1.00	"	"	--	"	80.3%	(80-124)	--	--	"	
Toluene	"	18.1	---	1.00	"	"	--	"	90.6%	"	--	--	"	
1,2,3-Trichlorobenzene	"	16.4	---	1.00	"	"	--	"	82.0%	(69-138)	--	--	"	
1,2,4-Trichlorobenzene	"	16.7	---	1.00	"	"	--	"	83.3%	(75-127)	--	--	"	
1,1,1-Trichloroethane	"	16.7	---	1.00	"	"	--	"	83.6%	(76-132)	--	--	"	
1,1,2-Trichloroethane	"	18.1	---	1.00	"	"	--	"	90.5%	(80-123)	--	--	"	
Trichloroethene	"	17.5	---	1.00	"	"	--	"	87.3%	(80-132)	--	--	"	
Trichlorofluoromethane	"	17.0	---	1.00	"	"	--	"	85.0%	(77-137)	--	--	"	
1,2,3-Trichloropropane	"	18.6	---	1.00	"	"	--	"	93.0%	(75-125)	--	--	"	
1,2,4-Trimethylbenzene	"	18.0	---	1.00	"	"	--	"	90.0%	(73-132)	--	--	"	
1,3,5-Trimethylbenzene	"	18.2	---	1.00	"	"	--	"	91.2%	(75-132)	--	--	"	
Vinyl chloride	"	17.4	---	1.00	"	"	--	"	86.8%	(76-133)	--	--	"	
o-Xylene	"	18.6	---	1.00	"	"	--	"	92.9%	(77-123)	--	--	"	
m,p-Xylene	"	38.2	---	2.00	"	"	--	40.0	95.6%	(72-127)	--	--	"	

Surrogate(s):	*4-BFB*	*Recovery:*	*106%*	*Limits:*	*80-120%*	*11/10/08 11:35*
	1,2-DCA-d4		*93.7%*		*80-120%*	"
	Dibromofluoromethane		*102%*		*80-120%*	"
	Toluene-d8		*104%*		*80-120%*	"

TestAmerica Portland

Estella K Rieben

Estella Rieben, Project Manager

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Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	11/14/08 16:40

Volatile Organic Compounds per EPA Method 8260B - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 8110292 **Water Preparation Method: EPA 5030B**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
LCS Dup (8110292-BSD1)							**Extracted: 11/10/08 10:20**							
Acetone	EPA 8260B	55.8	---	25.0	ug/l	1x	--	40.0	140%	(56-141)	7.87%	(25)	11/10/08 12:08	
Benzene	"	17.7	---	0.200	"	"	--	20.0	88.5%	(80-120)	4.31%	"	"	
Bromobenzene	"	16.2	---	1.00	"	"	--	"	81.1%	(78-120)	4.11%	"	"	
Bromochloromethane	"	16.7	---	1.00	"	"	--	"	83.6%	(76-121)	4.22%	"	"	
Bromodichloromethane	"	17.4	---	1.00	"	"	--	"	86.9%	(84-127)	2.89%	"	"	
Bromoform	"	15.3	---	1.00	"	"	--	"	76.7%	(55-134)	3.02%	"	"	
Bromomethane	"	16.4	---	5.00	"	"	--	"	82.1%	(38-150)	9.18%	"	"	
2-Butanone (MEK)	"	54.7	---	10.0	"	"	--	40.0	137%	(71-136)	1.98%	"	"	L
n-Butylbenzene	"	18.4	---	5.00	"	"	--	20.0	92.0%	(76-126)	0.0543%	"	"	
sec-Butylbenzene	"	17.9	---	1.00	"	"	--	"	89.6%	(64-129)	2.48%	"	"	
tert-Butylbenzene	"	17.5	---	1.00	"	"	--	"	87.4%	(71-127)	1.82%	"	"	
Carbon disulfide	"	48.5	---	10.0	"	"	--	40.0	121%	(58-120)	5.94%	"	"	L
Carbon tetrachloride	"	15.9	---	1.00	"	"	--	20.0	79.4%	(73-134)	3.22%	"	"	
Chlorobenzene	"	16.4	---	1.00	"	"	--	"	82.2%	(80-124)	2.94%	"	"	
Chloroethane	"	17.6	---	1.00	"	"	--	"	88.2%	(79-124)	9.14%	"	"	
Chloroform	"	16.5	---	0.200	"	"	--	"	82.4%	(80-120)	4.28%	"	"	
Chloromethane	"	16.5	---	5.00	"	"	--	"	82.4%	(47-146)	5.37%	"	"	
2-Chlorotoluene	"	17.2	---	1.00	"	"	--	"	85.8%	(72-125)	5.78%	"	"	
4-Chlorotoluene	"	17.2	---	1.00	"	"	--	"	85.9%	(77-124)	5.49%	"	"	
1,2-Dibromo-3-chloropropane	"	17.4	---	5.00	"	"	--	"	87.0%	(73-134)	8.20%	"	"	
Dibromochloromethane	"	15.8	---	1.00	"	"	--	"	79.0%	(69-138)	0.127%	"	"	
1,2-Dibromoethane	"	17.9	---	1.00	"	"	--	"	89.4%	(80-122)	2.05%	"	"	
Dibromomethane	"	17.6	---	1.00	"	"	--	"	88.2%	(80-120)	2.46%	"	"	
1,2-Dichlorobenzene	"	16.8	---	1.00	"	"	--	"	83.8%	(80-113)	2.76%	"	"	
1,3-Dichlorobenzene	"	16.4	---	1.00	"	"	--	"	81.8%	(76-123)	5.06%	"	"	
1,4-Dichlorobenzene	"	16.3	---	1.00	"	"	--	"	81.4%	(73-120)	4.03%	"	"	
Dichlorodifluoromethane	"	14.3	---	5.00	"	"	--	"	71.6%	(48-140)	6.16%	"	"	
1,1-Dichloroethane	"	17.3	---	1.00	"	"	--	"	86.6%	(80-120)	4.13%	"	"	
1,2-Dichloroethane	"	16.0	---	1.00	"	"	--	"	80.0%	(78-123)	1.80%	"	"	
1,1-Dichloroethene	"	17.2	---	1.00	"	"	--	"	85.8%	(78-120)	4.78%	"	"	
cis-1,2-Dichloroethene	"	17.0	---	1.00	"	"	--	"	85.1%	(80-120)	3.63%	"	"	
trans-1,2-Dichloroethene	"	16.8	---	1.00	"	"	--	"	84.1%	"	6.05%	"	"	
1,2-Dichloropropane	"	18.7	---	1.00	"	"	--	"	93.4%	(80-126)	0.905%	"	"	
1,3-Dichloropropane	"	18.3	---	1.00	"	"	--	"	91.5%	(80-120)	1.09%	"	"	
2,2-Dichloropropane	"	16.8	---	1.00	"	"	--	"	84.0%	(60-144)	5.27%	"	"	
1,1-Dichloropropene	"	17.0	---	1.00	"	"	--	"	85.0%	(80-120)	5.44%	"	"	
cis-1,3-Dichloropropene	"	18.9	---	1.00	"	"	--	"	94.3%	(80-125)	2.77%	"	"	
trans-1,3-Dichloropropene	"	18.4	---	1.00	"	"	--	"	92.1%	(80-130)	1.94%	"	"	
Ethylbenzene	"	17.4	---	1.00	"	"	--	"	86.9%	(80-120)	5.10%	"	"	

TestAmerica Portland

Estella K Rieben

Estella Rieben, Project Manager

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Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	11/14/08 16:40

Volatile Organic Compounds per EPA Method 8260B - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 8110292 **Water Preparation Method: EPA 5030B**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
LCS Dup (8110292-BSD1)							**Extracted: 11/10/08 10:20**							
Hexachlorobutadiene	EPA 8260B	17.0	---	4.00	ug/l	1x	--	20.0	85.0%	(64-145)	2.50%	(25)	11/10/08 12:08	
2-Hexanone	"	51.6	---	10.0	"	"	--	40.0	129%	(73-139)	7.00%	"	"	
Isopropylbenzene	"	17.5	---	2.00	"	"	--	20.0	87.6%	(77-124)	3.31%	"	"	
p-Isopropyltoluene	"	17.2	---	2.00	"	"	--	"	86.2%	(68-130)	2.12%	"	"	
4-Methyl-2-pentanone	"	52.0	---	5.00	"	"	--	40.0	130%	(72-134)	3.42%	"	"	
Methyl tert-butyl ether	"	17.5	---	1.00	"	"	--	20.0	87.7%	(80-129)	0.400%	"	"	
Methylene chloride	"	17.2	---	5.00	"	"	--	"	85.8%	(80-120)	4.94%	"	"	
Naphthalene	"	18.8	---	2.00	"	"	--	"	94.2%	(72-149)	7.94%	"	"	
n-Propylbenzene	"	18.2	---	1.00	"	"	--	"	90.8%	(76-128)	4.47%	"	"	
Styrene	"	17.4	---	1.00	"	"	--	"	86.8%	(72-127)	6.68%	"	"	
1,1,1,2-Tetrachloroethane	"	17.1	---	1.00	"	"	--	"	85.6%	(69-138)	3.27%	"	"	
1,1,2,2-Tetrachloroethane	"	20.2	---	1.00	"	"	--	"	101%	(77-128)	1.81%	"	"	
Tetrachloroethene	"	15.6	---	1.00	"	"	--	"	78.0%	(80-124)	2.97%	"	"	L5
Toluene	"	17.4	---	1.00	"	"	--	"	87.2%	"	3.88%	"	"	
1,2,3-Trichlorobenzene	"	17.7	---	1.00	"	"	--	"	88.3%	(69-138)	7.34%	"	"	
1,2,4-Trichlorobenzene	"	16.7	---	1.00	"	"	--	"	83.6%	(75-127)	0.359%	"	"	
1,1,1-Trichloroethane	"	15.6	---	1.00	"	"	--	"	78.2%	(76-132)	6.67%	"	"	
1,1,2-Trichloroethane	"	18.2	---	1.00	"	"	--	"	91.2%	(80-123)	0.716%	"	"	
Trichloroethene	"	16.6	---	1.00	"	"	--	"	82.8%	(80-132)	5.35%	"	"	
Trichlorofluoromethane	"	16.2	---	1.00	"	"	--	"	80.9%	(77-137)	5.00%	"	"	
1,2,3-Trichloropropane	"	18.3	---	1.00	"	"	--	"	91.3%	(75-125)	1.84%	"	"	
1,2,4-Trimethylbenzene	"	17.3	---	1.00	"	"	--	"	86.3%	(73-132)	4.14%	"	"	
1,3,5-Trimethylbenzene	"	17.7	---	1.00	"	"	--	"	88.3%	(75-132)	3.23%	"	"	
Vinyl chloride	"	16.4	---	1.00	"	"	--	"	82.2%	(76-133)	5.56%	"	"	
o-Xylene	"	17.5	---	1.00	"	"	--	"	87.5%	(77-123)	5.99%	"	"	
m,p-Xylene	"	36.5	---	2.00	"	"	--	40.0	91.2%	(72-127)	4.76%	"	"	

Surrogate(s):	*4-BFB*	*Recovery:*	*97.6%*	*Limits:* *80-120%*	"	*11/10/08 12:08*
	1,2-DCA-d4		*89.2%*	*80-120%*	"	"
	Dibromofluoromethane		*96.0%*	*80-120%*	"	"
	Toluene-d8		*97.7%*	*80-120%*	"	"

TestAmerica Portland

Estella K Rieben

Estella Rieben, Project Manager

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PORTLAND, OR 9405 S.W. NIMBUS AVENUE
BEAVERTON, OR 97008-7132
ph: (503) 906.9200 fax: (503) 906.9210

Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	11/14/08 16:40

Polynuclear Aromatic Compounds per EPA 8270M-SIM - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 8110099 **Water Preparation Method: 3520B Liq-Liq**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (8110099-BLK1)							**Extracted: 11/04/08 16:00**							
2-Methylnaphthalene	EPA 8270m	ND	---	0.200	ug/l	1x	--	--	--	--	--	--	11/10/08 14:30	
Acenaphthene	"	ND	---	0.200	"	"	--	--	--	--	--	--	"	
Acenaphthylene	"	ND	---	0.200	"	"	--	--	--	--	--	--	"	
Anthracene	"	ND	---	0.200	"	"	--	--	--	--	--	--	"	
Benzo (a) anthracene	"	ND	---	0.0100	"	"	--	--	--	--	--	--	"	
Benzo (a) pyrene	"	ND	---	0.0100	"	"	--	--	--	--	--	--	"	
Benzo (b) fluoranthene	"	ND	---	0.0100	"	"	--	--	--	--	--	--	"	
Benzo (ghi) perylene	"	ND	---	0.200	"	"	--	--	--	--	--	--	"	
Benzo (k) fluoranthene	"	ND	---	0.0100	"	"	--	--	--	--	--	--	"	
Chrysene	"	ND	---	0.0100	"	"	--	--	--	--	--	--	"	
Dibenzo (a,h) anthracene	"	ND	---	0.0100	"	"	--	--	--	--	--	--	"	
Fluoranthene	"	ND	---	0.200	"	"	--	--	--	--	--	--	"	
Fluorene	"	ND	---	0.200	"	"	--	--	--	--	--	--	"	
Indeno (1,2,3-cd) pyrene	"	ND	---	0.0100	"	"	--	--	--	--	--	--	"	
Naphthalene	"	ND	---	0.200	"	"	--	--	--	--	--	--	"	
Phenanthrene	"	ND	---	0.200	"	"	--	--	--	--	--	--	"	
Pyrene	"	ND	---	0.200	"	"	--	--	--	--	--	--	"	
Surrogate(s): Fluorene-d10		*Recovery: 103%*			*Limits: 25-125%*	"							*11/10/08 14:30*	
Pyrene-d10		*132%*			*23-150%*	"							"	
Benzo (a) pyrene-d12		*107%*			*10-125%*	"							"	
LCS (8110099-BS1)							**Extracted: 11/04/08 16:00**							
Acenaphthene	EPA 8270m	2.78	---	0.200	ug/l	1x	--	2.50	111%	(26-135)	--	--	11/10/08 15:00	
Benzo (a) pyrene	"	2.55	---	0.0100	"	"	--	"	102%	(38-137)	--	--	"	
Pyrene	"	3.21	---	0.200	"	"	--	"	128%	(30-147)	--	--	"	
Surrogate(s): Fluorene-d10		*Recovery: 108%*			*Limits: 25-125%*	"							*11/10/08 15:00*	
Pyrene-d10		*139%*			*23-150%*	"							"	
Benzo (a) pyrene-d12		*106%*			*10-125%*	"							"	
LCS Dup (8110099-BSD1)							**Extracted: 11/04/08 16:00**							
Acenaphthene	EPA 8270m	2.69	---	0.200	ug/l	1x	--	2.50	107%	(26-135)	3.43%	(50)	11/10/08 15:29	
Benzo (a) pyrene	"	2.46	---	0.0100	"	"	--	"	98.4%	(38-137)	3.53%	"	"	
Pyrene	"	3.04	---	0.200	"	"	--	"	121%	(30-147)	5.61%	"	"	
Surrogate(s): Fluorene-d10		*Recovery: 101%*			*Limits: 25-125%*	"							*11/10/08 15:29*	
Pyrene-d10		*128%*			*23-150%*	"							"	
Benzo (a) pyrene-d12		*101%*			*10-125%*	"							"	

TestAmerica Portland

Estella K Rieben

Estella Rieben, Project Manager

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PORTLAND, OR 9405 S.W. NIMBUS AVENUE
BEAVERTON, OR 97008-7132
ph: (503) 906.9200 fax: (503) 906.9210

Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	11/14/08 16:40

Phthalates per EPA 8270-SIM - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 8110099 **Water Preparation Method: 3520B Liq-Liq**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (8110099-BLK1)							**Extracted: 11/04/08 16:00**							
Dimethyl phthalate	EPA 8270m	ND	---	1.00	ug/l	1x	--	--	--	--	--	--	11/06/08 15:57	
Diethyl phthalate	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Di-n-butyl phthalate	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Butyl benzyl phthalate	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Bis(2-ethylhexyl)phthalate	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Di-n-octyl phthalate	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Surrogate(s): 2-Fluorobiphenyl		*Recovery: 88.8%*			*Limits: 10-150%*	"							*11/06/08 15:57*	
p-Terphenyl-d14		*86.6%*			*10-150%*	"							"	
LCS (8110099-BS1)							**Extracted: 11/04/08 16:00**							
Dimethyl phthalate	EPA 8270m	3.49	---	1.00	ug/l	1x	--	4.00	87.2%	(20-150)	--	--	11/06/08 16:28	
Diethyl phthalate	"	3.73	---	1.00	"	"	--	"	93.3%	"	--	--	"	
Di-n-butyl phthalate	"	3.85	---	1.00	"	"	--	"	96.1%	"	--	--	"	
Butyl benzyl phthalate	"	3.60	---	1.00	"	"	--	"	90.0%	"	--	--	"	
Bis(2-ethylhexyl)phthalate	"	3.79	---	1.00	"	"	--	"	94.8%	"	--	--	"	
Di-n-octyl phthalate	"	3.54	---	1.00	"	"	--	"	88.4%	"	--	--	"	
Surrogate(s): 2-Fluorobiphenyl		*Recovery: 88.1%*			*Limits: 10-150%*	"							*11/06/08 16:28*	
p-Terphenyl-d14		*72.6%*			*10-150%*	"							"	
LCS Dup (8110099-BSD1)							**Extracted: 11/04/08 16:00**							
Dimethyl phthalate	EPA 8270m	3.38	---	1.00	ug/l	1x	--	4.00	84.6%	(20-150)	3.04%	(50)	11/06/08 16:59	
Diethyl phthalate	"	3.60	---	1.00	"	"	--	"	90.1%	"	3.55%	"	"	
Di-n-butyl phthalate	"	3.68	---	1.00	"	"	--	"	91.9%	"	4.48%	"	"	
Butyl benzyl phthalate	"	3.50	---	1.00	"	"	--	"	87.5%	"	2.73%	"	"	
Bis(2-ethylhexyl)phthalate	"	3.56	---	1.00	"	"	--	"	88.9%	"	6.44%	"	"	
Di-n-octyl phthalate	"	3.37	---	1.00	"	"	--	"	84.2%	"	4.92%	"	"	
Surrogate(s): 2-Fluorobiphenyl		*Recovery: 82.8%*			*Limits: 10-150%*	"							*11/06/08 16:59*	
p-Terphenyl-d14		*74.0%*			*10-150%*	"							"	

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Estella K Rieben

Estella Rieben, Project Manager

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BEAVERTON, OR 97008-7132
ph: (503) 906.9200 fax: (503) 906.9210

Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	11/14/08 16:40

Conventional Chemistry Parameters per Standard Methods - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 8110153 **Water Preparation Method: General Preparation**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (8110153-BLK1)								**Extracted: 11/05/08 16:30**						
Total Organic Carbon	SM 5310C	ND	---	1.00	mg/l	1x	--	--	--	--	--	--	11/06/08 04:05	
LCS (8110153-BS1)								**Extracted: 11/05/08 16:30**						
Total Organic Carbon	SM 5310C	20.2	---	1.00	mg/l	1x	--	20.0	101%	(85-115)	--	--	11/06/08 04:05	
Duplicate (8110153-DUP1)				**QC Source: PRJ1012-01**				**Extracted: 11/05/08 16:30**						
Total Organic Carbon	SM 5310C	1.66	---	1.00	mg/l	1x	1.66	--	--	--	0.289%	(20)	11/06/08 04:05	
Matrix Spike (8110153-MS1)				**QC Source: PRJ1012-01**				**Extracted: 11/05/08 16:30**						
Total Organic Carbon	SM 5310C	26.0	---	1.01	mg/l	1x	1.66	25.3	96.3%	(75-125)	--	--	11/06/08 04:05	

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Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	11/14/08 16:40

Notes and Definitions

Report Specific Notes:

L	-	Laboratory Control Sample and/or Laboratory Control Sample Duplicate recovery was above the acceptance limits. Analyte not detected, data not impacted.
L5	-	Analyte recovery outside of specified criteria. Individual analyte criteria exceedences allowed for multi-component analyses without disqualification of data per NELAC Standard, DOD QSM and/or AFCEE QAPP.
M8	-	The MS and/or MSD were below the acceptance limits. See Blank Spike (LCS).
Q11	-	Detected hydrocarbons in the diesel range do not have a distinct diesel pattern and may be due to heavily weathered diesel.
RL1	-	Reporting limit raised due to sample matrix effects.
RL3	-	Reporting limit raised due to high concentrations of non-target analytes.

Laboratory Reporting Conventions:

DET	-	Analyte DETECTED at or above the Reporting Limit. Qualitative Analyses only.
ND	-	Analyte NOT DETECTED at or above the reporting limit (MDL or MRL, as appropriate).
NR/NA	-	Not Reported / Not Available
dry	-	Sample results reported on a Dry Weight Basis. Results and Reporting Limits have been corrected for Percent Dry Weight.
wet	-	Sample results and reporting limits reported on a Wet Weight Basis (as received). Results with neither 'wet' nor 'dry' are reported on a Wet Weight Basis.
RPD	-	RELATIVE PERCENT DIFFERENCE (RPDs calculated using Results, not Percent Recoveries).
MRL	-	METHOD REPORTING LIMIT. Reporting Level at, or above, the lowest level standard of the Calibration Table.
MDL*	-	METHOD DETECTION LIMIT. Reporting Level at, or above, the statistically derived limit based on 40CFR, Part 136, Appendix B. *MDLs are listed on the report only if the data has been evaluated below the MRL. Results between the MDL and MRL are reported as Estimated Results.
Dil	-	Dilutions are calculated based on deviations from the standard dilution performed for an analysis, and may not represent the dilution found on the analytical raw data.
Reporting Limits	-	Reporting limits (MDLs and MRLs) are adjusted based on variations in sample preparation amounts, analytical dilutions and percent solids, where applicable.
Electronic Signature	-	Electronic Signature added in accordance with TestAmerica's *Electronic Reporting and Electronic Signatures Policy.* Application of electronic signature indicates that the report has been reviewed and approved for release by the laboratory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

TestAmerica Portland

Estella K Rieben

Estella Rieben, Project Manager

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TestAmerica Portland
9405 SW Nimbus Avenue

Beaverton, OR 97008
phone 503.906.9200 fax 503.906.9210

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Rick Fetterly	~~Site Contact~~: Norman Swanson	Date: 10-31-08	COC No:
Stantec Consulting Corporation	Tel/Fax: (503) 691-2030	Lab Contact: Estella Rieben	Carrier:	1 of 1 COCs
7730 SW Mohawk St	Analysis Turnaround Time			Job No. PO 1097
Tualatin, OR 97062	Calendar (C) or Work Days (W)			SDG No.
(503) 691-2030 Phone	TAT if different from Below ___Standard___			
(503) 692-7074 FAX	☐ 2 weeks			
Project Name: 0922 Portland Terminal (Conoco Phillips)	☐ 1 week			
Site:0922	☐ 2 days			
P O # Direct bill to Stantec	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	NWTPH-Gx	NWTPH-Dx w/Silica gel cleanup	BTEX, MTBE 8260B	Total Metals * (See Notes)	PAH & Phthalates 8270 SIM **(see Notes)	Total Organic Carbon SM5310C	PCBs 8082	Pesticides 8081A	Sample Specific Notes:
WR-012	10-31-08	0930	G	W	1					X					*Total Metals:
WR-369	10-31-08	0935	G	W	15		X	X	X	X	X	X	X	X	EPA Method 6000/7000 series
WR-370	10-31-08	0945	G	W	15		X	X	X	X	X	X	X	X	Arsenic, Ba, Cd, Cr, Cu, Pb,
MH-X	10-31-08	1005	G	W	15		X	X	X	X	X	X	X	X	Mn, Hg, Se, Ag, and Zn
MH-12-4inch	10-31-08	1145	G	W	15		X	X	X	X	X	X	X	X	
MH-12-12inch	10-31-08	1205	G	W	15		X	X	X	X	X	X	X	X	
TB 217 (3 coolers 1 each)	N/O	Analysis													
															**PAH 8270SIM
															please include 2-Methylnaphthalene

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
☐ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* *Poison B* ☐ *Unknown* ■

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ■ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Special Instructions/QC Requirements & Comments: Project number: 15CP.00922.61 NWTPH-Dx Silica Gell Cleanup. Please do not send invoice to Conoco Phillips. Please obtain and use Joint Source Control detection levels.
Please send results to: Rick.Fetterly@stantec.com and Norman.Swanson@stantec.com

Please dispose of x-tra containers.

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Norman Swanson	Stantec	10-31-08 1607	KAREN WILSON	TA-P	11-2-08 1607
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

3.9, 6.8, 15.8°C

TestAmerica Sample Receipt Checklist

Cooler ID(s)

Received by: *(section A)* Date: VF Time: 1031 Initials: LCC

Unpacked by: *(section B)* Date: VF Initials: 1031

Logged-in by: Date: 10/31/08 Initials: JMS

Work Order No. PBJ1097

Client: Stantec

Project: Portland Terminal

Temperature out of range:

___Not enough Ice
___No Ice
___Ice Melted
___W/in 4 Hours
___Other:

***ESI Clients *(see Section C)*

Digi #1
Digi #2

Cooler Temperature (IR): 3.4, 5.8 °C plastic glass NA *(oil/air samples, ESI client)*

Temperature Blank: _____ °C

A

Custody Seals: (#____)

Signature: Y (N) Dated:_____

____None

Container Type:

X #Cooler(s)

____#Box(s)

____None (___#Other:_____)

Coolant Type:

X Gel Ice

X Loose Ice

____None

Packing Material:

X Bubble Bags

____Styrofoam Cubbies

____Peanuts

____None (___Other:_____)

Received from:

___TA Courier

___Senvoy

___UPS

___Fed Ex

X Client

___TDP

___DHL

___SDS

___Mid-Valley

___GS/TA

___GS/Senvoy

___Other:

_____

B

Sample Status:
(If N circled, see NOD)

General:			
Intact?	(Y)	N	
# Containers Match COC?	(Y)	N	none given
IDs Match COC?	(Y)	N	
For Analyses Requested:			
Cyanide Checked?	Y	N	(NA)
Correct Type & Preservation?	(Y)	N	
Adequate Volume?	(Y)	N	
Within Hold Time?	(Y)	N	
Volatiles/ Oil Quality:			
VOAs/ Syringes free of Headspace?	Y	N	(NA)
TB on COC? not provided	Y	N	(NA)
Metals:			
HNO3 Preserved?	(Y)	N	NA
Dissolved Metals Filtered?	(Y)	N	NA

C

***ESI Clients Only:

Temperature Blank: _____ °C not provided Digi: # 1 #2

All preserved bottles checked Y N NA *(voas/soils/all unp.)*

All preserved accordingly? Y N *(see NOD)* NA *(voas/soils/all unp.)*

FED EX/ UPS: Was the tracking paper keepable? YES NO

If circled NO, what is the Tracking number? _____

FED EX Goldstreak UPS DHL Other: _____

Project Managers:

Comments: _____

PM Reviewed: _____ *(Initial/Date)*

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PORTLAND, OR 9405 S.W. NIMBUS AVENUE
BEAVERTON, OR 97008-7132
ph: (503) 906.9200 fax: (503) 906.9210

ORELAP#: OR100021

March 30, 2009

Rick Fetterly
Stantec
7730 SW Mohawk Street
Tualatin, OR 97062

RE: Portland Terminal - Stormwater

Enclosed are the results of analyses for samples received by the laboratory on 03/16/09 14:30. The following list is a summary of the Work Orders contained in this report, generated on 03/30/09 15:57.

If you have any questions concerning this report, please feel free to contact me.

Work Order	Project	ProjectNumber
PSC0470	Portland Terminal - Stormwat	0922 - ConocoPhillips

TestAmerica Portland

Estella K Rieben

Estella Rieben, Project Manager

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ph: (503) 906.9200 fax: (503) 906.9210

Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	03/30/09 15:57

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
WR-369	PSC0470-01	Water	03/16/09 11:15	03/16/09 14:30
WR-370	PSC0470-02	Water	03/16/09 11:30	03/16/09 14:30
WR-012	PSC0470-03	Water	03/16/09 11:00	03/16/09 14:30

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PORTLAND, OR 9405 S.W. NIMBUS AVENUE
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ph: (503) 906.9200 fax: (503) 906.9210

Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	03/30/09 15:57

Gasoline Hydrocarbons per NW TPH-Gx Method

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Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSC0470-01 (WR-369)			**Water**			**Sampled: 03/16/09 11:15**				
Gasoline Range Hydrocarbons	NW TPH-Gx	ND	-----	80.0	ug/l	1x	9030644	03/19/09 17:01	03/20/09 00:06	
Surrogate(s): 4-BFB (FID)				*89.0%*		*50 - 150%*	"			"
PSC0470-02 (WR-370)			**Water**			**Sampled: 03/16/09 11:30**				
Gasoline Range Hydrocarbons	NW TPH-Gx	ND	-----	80.0	ug/l	1x	9030644	03/19/09 17:01	03/20/09 00:34	
Surrogate(s): 4-BFB (FID)				*89.7%*		*50 - 150%*	"			"

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Tualatin, OR 97062	Project Manager:	Rick Fetterly	03/30/09 15:57

Diesel and Heavy Range Hydrocarbons per NWTPH-Dx Method with Acid/Silica Gel Cleanup

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSC0470-01 (WR-369)			**Water**			**Sampled: 03/16/09 11:15**				
Diesel Range Organics	NWTPH-Dx	ND	-----	0.236	mg/l	1x	9030597	03/19/09 13:20	03/20/09 12:03	
Heavy Oil Range Hydrocarbons	"	ND	-----	0.472	"	"	"	"	"	
Surrogate(s): 1-Chlorooctadecane				*130%*		*50 - 150%*	"			"
PSC0470-02 (WR-370)			**Water**			**Sampled: 03/16/09 11:30**				
Diesel Range Organics	NWTPH-Dx	ND	-----	0.240	mg/l	1x	9030597	03/19/09 13:20	03/20/09 12:18	
Heavy Oil Range Hydrocarbons	"	ND	-----	0.481	"	"	"	"	"	
Surrogate(s): 1-Chlorooctadecane				*126%*		*50 - 150%*	"			"

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Total Metals per EPA 6000/7000 Series Methods

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Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSC0470-01 (WR-369)			**Water**			**Sampled: 03/16/09 11:15**				
Arsenic	EPA 6020	ND	-----	0.00100	mg/l	1x	9030613	03/19/09 10:33	03/25/09 04:31	
Barium	"	**0.00313**	-----	0.00100	"	"	"	"	"	
Cadmium	"	ND	-----	0.000500	"	"	"	"	"	
Chromium	"	ND	-----	0.00200	"	"	"	"	"	
Copper	"	**0.00324**	-----	0.00200	"	"	"	"	"	
Lead	"	**0.00324**	-----	0.00100	"	"	"	"	"	
Manganese	"	**0.00947**	-----	0.00200	"	"	"	"	"	
Selenium	"	ND	-----	0.000500	"	"	"	"	"	
Silver	"	ND	-----	0.00100	"	"	"	"	"	
Zinc	"	**0.0480**	-----	0.00500	"	"	"	"	"	
PSC0470-02 (WR-370)			**Water**			**Sampled: 03/16/09 11:30**				
Arsenic	EPA 6020	**0.00256**	-----	0.00100	mg/l	1x	9030613	03/19/09 10:33	03/25/09 04:36	
Barium	"	**0.0165**	-----	0.00100	"	"	"	"	"	
Cadmium	"	ND	-----	0.000500	"	"	"	"	"	
Chromium	"	**0.00200**	-----	0.00200	"	"	"	"	"	
Copper	"	**0.0139**	-----	0.00200	"	"	"	"	"	
Lead	"	**0.0112**	-----	0.00100	"	"	"	"	"	
Manganese	"	**0.0662**	-----	0.00200	"	"	"	"	"	
Selenium	"	ND	-----	0.000500	"	"	"	"	"	
Silver	"	ND	-----	0.00100	"	"	"	"	"	
Zinc	"	**0.0682**	-----	0.00500	"	"	"	"	"	
PSC0470-03 (WR-012)			**Water**			**Sampled: 03/16/09 11:00**				
Arsenic	EPA 6020	ND	-----	0.00100	mg/l	1x	9030613	03/19/09 10:33	03/25/09 04:41	
Barium	"	**0.00222**	-----	0.00100	"	"	"	"	"	
Cadmium	"	ND	-----	0.000500	"	"	"	"	"	
Chromium	"	ND	-----	0.00200	"	"	"	"	"	
Copper	"	ND	-----	0.00200	"	"	"	"	"	
Lead	"	**0.00483**	-----	0.00100	"	"	"	"	"	
Manganese	"	ND	-----	0.00200	"	"	"	"	"	
Selenium	"	ND	-----	0.000500	"	"	"	"	"	
Silver	"	ND	-----	0.00100	"	"	"	"	"	
Zinc	"	**0.102**	-----	0.00500	"	"	"	"	"	

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7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	03/30/09 15:57

Total Mercury per EPA Method 7470A

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Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSC0470-01 (WR-369)			**Water**			**Sampled: 03/16/09 11:15**				
Mercury	EPA 7470A	ND	-----	0.000200	mg/l	1x	9030556	03/18/09 10:02	03/18/09 15:16	
PSC0470-02 (WR-370)			**Water**			**Sampled: 03/16/09 11:30**				
Mercury	EPA 7470A	ND	-----	0.000200	mg/l	1x	9030556	03/18/09 10:02	03/18/09 15:19	
PSC0470-03 (WR-012)			**Water**			**Sampled: 03/16/09 11:00**				
Mercury	EPA 7470A	ND	-----	0.000200	mg/l	1x	9030556	03/18/09 10:02	03/18/09 15:21	

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Tualatin, OR 97062	Project Manager:	Rick Fetterly	03/30/09 15:57

Organochlorine Pesticides per EPA Method 8081A

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Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSC0470-01 (WR-369)		**Water**				**Sampled: 03/16/09 11:15**				**RL4**
Aldrin	EPA 8081A	ND	-----	0.0189	ug/l	1x	9030652	03/20/09 14:45	03/21/09 14:00	
alpha-BHC	"	ND	-----	0.0189	"	"	"	"	"	
beta-BHC	"	ND	-----	0.0189	"	"	"	"	"	
delta-BHC	"	ND	-----	0.0189	"	"	"	"	"	
gamma-BHC (Lindane)	"	ND	-----	0.0189	"	"	"	"	"	
gamma-Chlordane	"	ND	-----	0.0189	"	"	"	"	"	
alpha-Chlordane	"	ND	-----	0.0189	"	"	"	"	"	
Chlordane (tech)	"	ND	-----	0.189	"	"	"	"	"	
4,4´-DDD	"	ND	-----	0.0189	"	"	"	"	"	
4,4´-DDE	"	ND	-----	0.0189	"	"	"	"	"	
4,4´-DDT	"	ND	-----	0.0189	"	"	"	"	"	
Dieldrin	"	ND	-----	0.0189	"	"	"	"	"	
Endosulfan I	"	ND	-----	0.0189	"	"	"	"	"	
Endosulfan II	"	ND	-----	0.0189	"	"	"	"	"	
Endosulfan sulfate	"	ND	-----	0.0189	"	"	"	"	"	
Endrin	"	ND	-----	0.0189	"	"	"	"	"	C
Endrin aldehyde	"	ND	-----	0.0189	"	"	"	"	"	
Endrin ketone	"	ND	-----	0.0189	"	"	"	"	"	
Heptachlor	"	ND	-----	0.0189	"	"	"	"	"	
Heptachlor epoxide	"	ND	-----	0.0189	"	"	"	"	"	
Methoxychlor	"	ND	-----	0.0189	"	"	"	"	"	
Toxaphene	"	ND	-----	0.472	"	"	"	"	"	
Surrogate(s): 2,4,5,6-Tetrachloro-m-xylene				*77.5%*		*16 - 137 %*	"		"	
PSC0470-02 (WR-370)		**Water**				**Sampled: 03/16/09 11:30**				**RL4**
Aldrin	EPA 8081A	ND	-----	0.0190	ug/l	1x	9030652	03/20/09 14:45	03/21/09 16:31	
alpha-BHC	"	ND	-----	0.0190	"	"	"	"	"	
beta-BHC	"	ND	-----	0.0190	"	"	"	"	"	
delta-BHC	"	ND	-----	0.0190	"	"	"	"	"	
gamma-BHC (Lindane)	"	ND	-----	0.0190	"	"	"	"	"	
gamma-Chlordane	"	ND	-----	0.0190	"	"	"	"	"	
alpha-Chlordane	"	ND	-----	0.0190	"	"	"	"	"	
Chlordane (tech)	"	ND	-----	0.190	"	"	"	"	"	
4,4´-DDD	"	ND	-----	0.0190	"	"	"	"	"	
4,4´-DDE	"	ND	-----	0.0190	"	"	"	"	"	
4,4´-DDT	"	ND	-----	0.0190	"	"	"	"	"	

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7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	03/30/09 15:57

Organochlorine Pesticides per EPA Method 8081A

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Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSC0470-02 (WR-370)			**Water**			**Sampled: 03/16/09 11:30**				**RL4**
Dieldrin	EPA 8081A	ND	-----	0.0190	ug/l	1x	9030652	03/20/09 14:45	03/21/09 16:31	
Endosulfan I	"	ND	-----	0.0190	"	"	"	"	"	
Endosulfan II	"	ND	-----	0.0190	"	"	"	"	"	
Endosulfan sulfate	"	ND	-----	0.0190	"	"	"	"	"	
Endrin	"	ND	-----	0.0190	"	"	"	"	"	C
Endrin aldehyde	"	ND	-----	0.0190	"	"	"	"	"	
Endrin ketone	"	ND	-----	0.0190	"	"	"	"	"	
Heptachlor	"	ND	-----	0.0190	"	"	"	"	"	
Heptachlor epoxide	"	ND	-----	0.0190	"	"	"	"	"	
Methoxychlor	"	ND	-----	0.0190	"	"	"	"	"	
Toxaphene	"	ND	-----	0.476	"	"	"	"	"	
Surrogate(s): 2,4,5,6-Tetrachloro-m-xylene				*73.7%*		*16 - 137%*	"		"	

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Polychlorinated Biphenyls per EPA Method 8082

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Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSC0470-01 (WR-369)			**Water**			**Sampled: 03/16/09 11:15**				
Aroclor 1016	EPA 8082	ND	-----	0.0957	ug/l	1x	9030545	03/18/09 15:20	03/24/09 16:47	
Aroclor 1221	"	ND	-----	0.191	"	"	"	"	"	
Aroclor 1232	"	ND	-----	0.0957	"	"	"	"	"	
Aroclor 1242	"	ND	-----	0.0957	"	"	"	"	"	
Aroclor 1248	"	ND	-----	0.0957	"	"	"	"	"	
Aroclor 1254	"	ND	-----	0.0957	"	"	"	"	"	
Aroclor 1260	"	ND	-----	0.0957	"	"	"	"	"	
Surrogate(s): Decachlorobiphenyl				*86.3%*		*12 - 130%*	"			"
PSC0470-02 (WR-370)			**Water**			**Sampled: 03/16/09 11:30**				
Aroclor 1016	EPA 8082	ND	-----	0.0957	ug/l	1x	9030545	03/18/09 15:20	03/24/09 17:09	
Aroclor 1221	"	ND	-----	0.191	"	"	"	"	"	
Aroclor 1232	"	ND	-----	0.0957	"	"	"	"	"	
Aroclor 1242	"	ND	-----	0.0957	"	"	"	"	"	
Aroclor 1248	"	ND	-----	0.0957	"	"	"	"	"	
Aroclor 1254	"	ND	-----	0.0957	"	"	"	"	"	
Aroclor 1260	"	ND	-----	0.0957	"	"	"	"	"	
Surrogate(s): Decachlorobiphenyl				*82.1%*		*12 - 130%*	"			"

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Volatile Organic Compounds per EPA Method 8260B

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSC0470-01 (WR-369)			**Water**			**Sampled: 03/16/09 11:15**				
Benzene	EPA 8260B	ND	-----	0.200	ug/l	1x	9030509	03/17/09 10:00	03/17/09 18:24	
Ethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
Methyl tert-butyl ether	"	ND	-----	1.00	"	"	"	"	"	
Toluene	"	ND	-----	1.00	"	"	"	"	"	
o-Xylene	"	ND	-----	1.00	"	"	"	"	"	
m,p-Xylene	"	ND	-----	2.00	"	"	"	"	"	
Surrogate(s):	*Dibromofluoromethane*			*130%*		*80 - 120%*	"		"	*Z2*
	1,2-DCA-d4			*120%*		*80 - 120%*	"		"	
	Toluene-d8			*134%*		*80 - 120%*	"		"	*Z2*
	4-BFB			*130%*		*80 - 120%*	"		"	*Z2*
PSC0470-02 (WR-370)			**Water**			**Sampled: 03/16/09 11:30**				
Benzene	EPA 8260B	ND	-----	0.200	ug/l	1x	9030509	03/17/09 10:00	03/17/09 18:51	
Ethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
Methyl tert-butyl ether	"	ND	-----	1.00	"	"	"	"	"	
Toluene	"	ND	-----	1.00	"	"	"	"	"	
o-Xylene	"	ND	-----	1.00	"	"	"	"	"	
m,p-Xylene	"	ND	-----	2.00	"	"	"	"	"	
Surrogate(s):	*Dibromofluoromethane*			*104%*		*80 - 120%*	"		"	
	1,2-DCA-d4			*94.1%*		*80 - 120%*	"		"	
	Toluene-d8			*107%*		*80 - 120%*	"		"	
	4-BFB			*104%*		*80 - 120%*	"		"	

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Polynuclear Aromatic Compounds per EPA 8270M-SIM

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Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSC0470-01 (WR-369)			**Water**			**Sampled: 03/16/09 11:15**				
2-Methylnaphthalene	EPA 8270m	ND	-----	0.0962	ug/l	1x	9030576	03/18/09 12:00	03/20/09 20:27	
Acenaphthene	"	ND	-----	0.0962	"	"	"	"	"	
Acenaphthylene	"	ND	-----	0.0962	"	"	"	"	"	
Anthracene	"	ND	-----	0.0962	"	"	"	"	"	
Benzo (a) anthracene	"	ND	-----	0.00481	"	"	"	"	"	
Benzo (a) pyrene	"	ND	-----	0.00481	"	"	"	"	"	
Benzo (b) fluoranthene	"	ND	-----	0.00481	"	"	"	"	"	
Benzo (ghi) perylene	"	ND	-----	0.0962	"	"	"	"	"	
Benzo (k) fluoranthene	"	ND	-----	0.00481	"	"	"	"	"	
Chrysene	"	**0.00592**	-----	0.00481	"	"	"	"	"	
Dibenzo (a,h) anthracene	"	ND	-----	0.00481	"	"	"	"	"	
Fluoranthene	"	ND	-----	0.0962	"	"	"	"	"	
Fluorene	"	ND	-----	0.0962	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	"	ND	-----	0.00481	"	"	"	"	"	
Naphthalene	"	ND	-----	0.0962	"	"	"	"	"	
Phenanthrene	"	ND	-----	0.0962	"	"	"	"	"	
Pyrene	"	ND	-----	0.0962	"	"	"	"	"	
Surrogate(s):	*Fluorene-d10*			*71.7%*		*25 - 125%*	"			"
	Pyrene-d10			*62.0%*		*23 - 150%*	"			"
	Benzo (a) pyrene-d12			*70.4%*		*10 - 125%*	"			"
PSC0470-02 (WR-370)			**Water**			**Sampled: 03/16/09 11:30**				
2-Methylnaphthalene	EPA 8270m	ND	-----	0.0952	ug/l	1x	9030576	03/18/09 12:00	03/20/09 20:56	
Acenaphthene	"	ND	-----	0.0952	"	"	"	"	"	
Acenaphthylene	"	ND	-----	0.0952	"	"	"	"	"	
Anthracene	"	ND	-----	0.0952	"	"	"	"	"	
Benzo (a) anthracene	"	**0.00585**	-----	0.00476	"	"	"	"	"	
Benzo (a) pyrene	"	**0.00678**	-----	0.00476	"	"	"	"	"	
Benzo (b) fluoranthene	"	**0.0112**	-----	0.00476	"	"	"	"	"	
Benzo (ghi) perylene	"	ND	-----	0.0952	"	"	"	"	"	
Benzo (k) fluoranthene	"	**0.00811**	-----	0.00476	"	"	"	"	"	
Chrysene	"	**0.0177**	-----	0.00476	"	"	"	"	"	
Dibenzo (a,h) anthracene	"	ND	-----	0.00476	"	"	"	"	"	
Fluoranthene	"	ND	-----	0.0952	"	"	"	"	"	
Fluorene	"	ND	-----	0.0952	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	"	**0.00669**	-----	0.00476	"	"	"	"	"	

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ph: (503) 906.9200 fax: (503) 906.9210

Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	03/30/09 15:57

Polynuclear Aromatic Compounds per EPA 8270M-SIM

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSC0470-02 (WR-370)			**Water**			**Sampled: 03/16/09 11:30**				
Naphthalene	EPA 8270m	ND	-----	0.0952	ug/l	1x	9030576	03/18/09 12:00	03/20/09 20:56	
Phenanthrene	"	ND	-----	0.0952	"	"	"	"	"	
Pyrene	"	ND	-----	0.0952	"	"	"	"	"	
Surrogate(s): Fluorene-d10				*83.6%*		*25 - 125 %*	"			"
Pyrene-d10				*79.5%*		*23 - 150 %*	"			"
Benzo (a) pyrene-d12				*83.7%*		*10 - 125 %*	"			"

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Phthalates per EPA 8270-SIM

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Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSC0470-01 (WR-369)			**Water**			**Sampled: 03/16/09 11:15**				
Dimethyl phthalate	EPA 8270m	ND	-----	0.962	ug/l	2x	9030576	03/18/09 12:00	03/23/09 21:33	
Diethyl phthalate	"	ND	-----	0.962	"	"	"	"	"	
Di-n-butyl phthalate	"	ND	-----	0.962	"	"	"	"	"	
Butyl benzyl phthalate	"	ND	-----	0.962	"	"	"	"	"	
Bis(2-ethylhexyl)phthalate	"	ND	-----	0.962	"	"	"	"	"	
Di-n-octyl phthalate	"	ND	-----	0.962	"	"	"	"	"	
Surrogate(s): 2-Fluorobiphenyl				*71.0%*		*10 - 150%*	"			"
p-Terphenyl-d14				*82.8%*		*10 - 150%*	"			"
PSC0470-02 (WR-370)			**Water**			**Sampled: 03/16/09 11:30**				
Dimethyl phthalate	EPA 8270m	ND	-----	0.952	ug/l	2x	9030576	03/18/09 12:00	03/23/09 22:09	
Diethyl phthalate	"	ND	-----	0.952	"	"	"	"	"	
Di-n-butyl phthalate	"	ND	-----	0.952	"	"	"	"	"	
Butyl benzyl phthalate	"	ND	-----	0.952	"	"	"	"	"	
Bis(2-ethylhexyl)phthalate	"	ND	-----	0.952	"	"	"	"	"	
Di-n-octyl phthalate	"	ND	-----	0.952	"	"	"	"	"	
Surrogate(s): 2-Fluorobiphenyl				*69.5%*		*10 - 150%*	"			"
p-Terphenyl-d14				*80.3%*		*10 - 150%*	"			"

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Tualatin, OR 97062	Project Manager:	Rick Fetterly	03/30/09 15:57

Conventional Chemistry Parameters per Standard Methods

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Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSC0470-01 (WR-369)			**Water**			**Sampled: 03/16/09 11:15**				
Total Organic Carbon	SM 5310C	ND	-----	1.00	mg/l	1x	9030497	03/17/09 08:46	03/18/09 00:43	
PSC0470-02 (WR-370)			**Water**			**Sampled: 03/16/09 11:30**				
Total Organic Carbon	SM 5310C	**2.06**	-----	1.00	mg/l	1x	9030497	03/17/09 08:46	03/18/09 00:43	**P7**

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Tualatin, OR 97062	Project Manager:	Rick Fetterly	03/30/09 15:57

Gasoline Hydrocarbons per NW TPH-Gx Method - Laboratory Quality Control Results

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QC Batch: 9030644 **Water Preparation Method: EPA 5030B**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (9030644-BLK1)								**Extracted: 03/19/09 17:01**						
Gasoline Range Hydrocarbons	NW TPH-Gx	ND	---	80.0	ug/l	1x	--	--	--	--	--	--	03/19/09 23:38	
Surrogate(s): 4-BFB (FID)		*Recovery: 89.7%*			*Limits: 50-150%*	"							*03/19/09 23:38*	
LCS (9030644-BS1)								**Extracted: 03/19/09 17:01**						
Gasoline Range Hydrocarbons	NW TPH-Gx	438	---	80.0	ug/l	1x	--	500	87.5%	(70-130)	--	--	03/19/09 22:41	
Surrogate(s): 4-BFB (FID)		*Recovery: 92.0%*			*Limits: 50-150%*	"							*03/19/09 22:41*	
LCS Dup (9030644-BSD1)								**Extracted: 03/19/09 17:01**						
Gasoline Range Hydrocarbons	NW TPH-Gx	385	---	80.0	ug/l	1x	--	500	77.0%	(70-130)	12.8%	(35)	03/19/09 23:09	
Surrogate(s): 4-BFB (FID)		*Recovery: 91.8%*			*Limits: 50-150%*	"							*03/19/09 23:09*	
Duplicate (9030644-DUP1)							**QC Source: PSC0527-02**	**Extracted: 03/19/09 17:01**						
Gasoline Range Hydrocarbons	NW TPH-Gx	27700	---	8000	ug/l	100x	27100	--	--	--	2.28%	(35)	03/20/09 12:06	
Surrogate(s): 4-BFB (FID)		*Recovery: 88.3%*			*Limits: 50-150%*	*1x*							*03/20/09 12:06*	
Duplicate (9030644-DUP2)							**QC Source: PSC0527-06**	**Extracted: 03/19/09 17:01**						
Gasoline Range Hydrocarbons	NW TPH-Gx	56100	---	8000	ug/l	100x	58300	--	--	--	3.82%	(35)	03/20/09 14:55	QP
Surrogate(s): 4-BFB (FID)		*Recovery: 90.5%*			*Limits: 50-150%*	*1x*							*03/20/09 14:55*	

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7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	03/30/09 15:57

Diesel and Heavy Range Hydrocarbons per NWTPH-Dx Method with Acid/Silica Gel Cleanup - Laboratory Quality Control Results

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QC Batch: 9030597 **Water Preparation Method: EPA 3510 Fuels**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (9030597-BLK1)								**Extracted: 03/19/09 12:30**						
Diesel Range Organics	NWTPH-Dx	ND	---	0.250	mg/l	1x	--	--	--	--	--	--	03/19/09 12:48	
Heavy Oil Range Hydrocarbons	"	ND	---	0.500	"	"	--	--	--	--	--	--	"	
Surrogate(s): 1-Chlorooctadecane		*Recovery: 105%*			*Limits: 50-150%*	"							*03/19/09 12:48*	
LCS (9030597-BS1)								**Extracted: 03/19/09 12:30**						
Diesel Range Organics	NWTPH-Dx	2.39	---	0.250	mg/l	1x	--	2.50	95.4%	(50-150)	--	--	03/19/09 13:02	
Heavy Oil Range Hydrocarbons	"	1.21	---	0.500	"	"	--	1.50	80.7%	"	--	--	"	
Surrogate(s): 1-Chlorooctadecane		*Recovery: 96.8%*			*Limits: 50-150%*	"							*03/19/09 13:02*	
LCS Dup (9030597-BSD1)								**Extracted: 03/19/09 12:30**						
Diesel Range Organics	NWTPH-Dx	2.64	---	0.250	mg/l	1x	--	2.50	106%	(50-150)	10.2%	(50)	03/19/09 13:21	
Heavy Oil Range Hydrocarbons	"	1.27	---	0.500	"	"	--	1.50	84.7%	"	4.83%	"	"	
Surrogate(s): 1-Chlorooctadecane		*Recovery: 110%*			*Limits: 50-150%*	"							*03/19/09 13:21*	

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7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	03/30/09 15:57

Total Metals per EPA 6000/7000 Series Methods - Laboratory Quality Control Results

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QC Batch: 9030613 **Water Preparation Method: EPA 200/3005**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (9030613-BLK1)								**Extracted: 03/19/09 10:33**						
Arsenic	EPA 6020	ND	---	0.00100	mg/l	1x	--	--	--	--	--	--	03/25/09 03:53	
Barium	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Cadmium	"	ND	---	0.000500	"	"	--	--	--	--	--	--	"	
Chromium	"	ND	---	0.00200	"	"	--	--	--	--	--	--	"	
Copper	"	ND	---	0.00200	"	"	--	--	--	--	--	--	"	
Lead	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Manganese	"	ND	---	0.00200	"	"	--	--	--	--	--	--	"	
Selenium	"	ND	---	0.000500	"	"	--	--	--	--	--	--	"	
Silver	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Zinc	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	
LCS (9030613-BS1)								**Extracted: 03/19/09 10:33**						
Arsenic	EPA 6020	0.103	---	0.00100	mg/l	1x	--	0.100	103%	(80-120)	--	--	03/25/09 03:59	
Barium	"	0.0988	---	0.00100	"	"	--	"	98.8%	"	--	--	"	
Cadmium	"	0.0991	---	0.000500	"	"	--	"	99.1%	"	--	--	"	
Chromium	"	0.102	---	0.00200	"	"	--	"	102%	"	--	--	"	
Copper	"	0.0957	---	0.00200	"	"	--	"	95.7%	"	--	--	"	
Lead	"	0.100	---	0.00100	"	"	--	"	100%	"	--	--	"	
Manganese	"	0.106	---	0.00200	"	"	--	"	106%	"	--	--	"	
Selenium	"	0.0942	---	0.000500	"	"	--	"	94.2%	"	--	--	"	
Silver	"	0.0487	---	0.00100	"	"	--	0.0500	97.4%	"	--	--	"	
Zinc	"	0.0930	---	0.00500	"	"	--	0.100	93.0%	"	--	--	"	
Duplicate (9030613-DUP1)						**QC Source: PSC0510-02**			**Extracted: 03/19/09 10:33**					
Arsenic	EPA 6020	ND	---	0.00100	mg/l	1x	ND	--	--	--	8.62%	(20)	03/25/09 06:07	
Barium	"	0.0128	---	0.00100	"	"	0.0128	--	--	--	0.156%	"	"	
Cadmium	"	0.00136	---	0.000500	"	"	0.00130	--	--	--	4.44%	"	"	
Chromium	"	0.00321	---	0.00200	"	"	0.00325	--	--	--	1.30%	"	"	
Copper	"	0.0106	---	0.00200	"	"	0.0104	--	--	--	1.71%	"	"	
Lead	"	0.0162	---	0.00100	"	"	0.0164	--	--	--	1.35%	"	"	
Manganese	"	0.00980	---	0.00200	"	"	0.0101	--	--	--	2.93%	"	"	
Selenium	"	ND	---	0.000500	"	"	ND	--	--	--	NR	"	"	
Silver	"	ND	---	0.00100	"	"	ND	--	--	--	NR	"	"	
Zinc	"	0.0596	---	0.00500	"	"	0.0599	--	--	--	0.569%	"	"	

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7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	03/30/09 15:57

Total Metals per EPA 6000/7000 Series Methods - Laboratory Quality Control Results

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QC Batch: 9030613 **Water Preparation Method: EPA 200/3005**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Matrix Spike (9030613-MS1)				**QC Source: PSC0510-02**					**Extracted: 03/19/09 10:33**					
Arsenic	EPA 6020	0.106	---	0.00100	mg/l	1x	0.000242	0.100	105%	(75-125)	--	--	03/25/09 06:18	
Barium	"	0.112	---	0.00100	"	"	0.0128	"	99.6%	"	--	--	"	
Cadmium	"	0.102	---	0.000500	"	"	0.00130	"	101%	"	--	--	"	
Chromium	"	0.103	---	0.00200	"	"	0.00325	"	100%	"	--	--	"	
Copper	"	0.108	---	0.00200	"	"	0.0104	"	97.8%	"	--	--	"	
Lead	"	0.117	---	0.00100	"	"	0.0164	"	101%	"	--	--	"	
Manganese	"	0.115	---	0.00200	"	"	0.0101	"	105%	"	--	--	"	
Selenium	"	0.0976	---	0.000500	"	"	ND	"	97.6%	"	--	--	"	
Silver	"	0.0487	---	0.00100	"	"	ND	0.0500	97.3%	"	--	--	"	
Zinc	"	0.155	---	0.00500	"	"	0.0599	0.100	95.3%	"	--	--	"	
Matrix Spike (9030613-MS2)				**QC Source: PSC0455-01**					**Extracted: 03/19/09 10:33**					
Arsenic	EPA 6020	0.106	---	0.00100	mg/l	1x	0.000815	0.100	105%	(75-125)	--	--	03/25/09 04:26	
Barium	"	0.142	---	0.00100	"	"	0.0470	"	95.5%	"	--	--	"	
Cadmium	"	0.101	---	0.000500	"	"	0.000264	"	101%	"	--	--	"	
Chromium	"	0.106	---	0.00200	"	"	0.00529	"	100%	"	--	--	"	
Copper	"	0.120	---	0.00200	"	"	0.0250	"	94.8%	"	--	--	"	
Lead	"	0.108	---	0.00100	"	"	0.00826	"	99.3%	"	--	--	"	
Manganese	"	0.197	---	0.00200	"	"	0.0973	"	99.5%	"	--	--	"	
Selenium	"	0.0965	---	0.000500	"	"	0.000936	"	95.6%	"	--	--	"	
Silver	"	0.0500	---	0.00100	"	"	ND	0.0500	99.9%	"	--	--	"	
Zinc	"	0.802	---	0.00500	"	"	0.742	0.100	59.5%	"	--	--	"	MHA

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Tualatin, OR 97062	Project Manager:	Rick Fetterly	03/30/09 15:57

Total Mercury per EPA Method 7470A - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 9030556 **Water Preparation Method: EPA 7470A**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (9030556-BLK1)								**Extracted: 03/18/09 10:02**						
Mercury	EPA 7470A	ND	---	0.000200	mg/l	1x	--	--	--	--	--	--	03/18/09 14:42	
LCS (9030556-BS1)								**Extracted: 03/18/09 10:02**						
Mercury	EPA 7470A	0.00488	---	0.000200	mg/l	1x	--	0.00500	97.6%	(85-115)	--	--	03/18/09 14:45	
LCS Dup (9030556-BSD1)								**Extracted: 03/18/09 10:02**						
Mercury	EPA 7470A	0.00496	---	0.000200	mg/l	1x	--	0.00500	99.1%	(85-115)	1.55%	(20)	03/18/09 14:48	
Duplicate (9030556-DUP1)					**QC Source: PSC0430-01**			**Extracted: 03/18/09 10:02**						
Mercury	EPA 7470A	ND	---	0.000200	mg/l	1x	ND	--	--	--	NR	(20)	03/18/09 14:52	
Matrix Spike (9030556-MS1)					**QC Source: PSC0430-01**			**Extracted: 03/18/09 10:02**						
Mercury	EPA 7470A	0.00483	---	0.000200	mg/l	1x	ND	0.00500	96.5%	(75-125)	--	--	03/18/09 14:54	
Matrix Spike Dup (9030556-MSD1)					**QC Source: PSC0430-01**			**Extracted: 03/18/09 10:02**						
Mercury	EPA 7470A	0.00476	---	0.000200	mg/l	1x	ND	0.00500	95.1%	(75-125)	1.45%	(20)	03/18/09 14:57	

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7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	03/30/09 15:57

Organochlorine Pesticides per EPA Method 8081A - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 9030652 **Water Preparation Method: EPA 3510/600 Series**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (9030652-BLK1)									**Extracted: 03/20/09 14:45**					
Aldrin	EPA 8081A	ND	---	0.0200	ug/l	1x	--	--	--	--	--	--	03/21/09 12:07	
alpha-BHC	"	ND	---	0.0200	"	"	--	--	--	--	--	--	"	
beta-BHC	"	ND	---	0.0200	"	"	--	--	--	--	--	--	"	
delta-BHC	"	ND	---	0.0200	"	"	--	--	--	--	--	--	"	
gamma-BHC (Lindane)	"	ND	---	0.0200	"	"	--	--	--	--	--	--	"	
gamma-Chlordane	"	ND	---	0.0200	"	"	--	--	--	--	--	--	"	
alpha-Chlordane	"	ND	---	0.0200	"	"	--	--	--	--	--	--	"	
Chlordane (tech)	"	ND	---	0.200	"	"	--	--	--	--	--	--	"	
4,4'-DDD	"	ND	---	0.0200	"	"	--	--	--	--	--	--	"	
4,4'-DDE	"	ND	---	0.0200	"	"	--	--	--	--	--	--	"	
4,4'-DDT	"	ND	---	0.0200	"	"	--	--	--	--	--	--	"	
Dieldrin	"	ND	---	0.0200	"	"	--	--	--	--	--	--	"	
Endosulfan I	"	ND	---	0.0200	"	"	--	--	--	--	--	--	"	
Endosulfan II	"	ND	---	0.0200	"	"	--	--	--	--	--	--	"	
Endosulfan sulfate	"	ND	---	0.0200	"	"	--	--	--	--	--	--	"	
Endrin	"	ND	---	0.0200	"	"	--	--	--	--	--	--	"	
Endrin aldehyde	"	ND	---	0.0200	"	"	--	--	--	--	--	--	"	
Endrin ketone	"	ND	---	0.0200	"	"	--	--	--	--	--	--	"	
Heptachlor	"	ND	---	0.0200	"	"	--	--	--	--	--	--	"	
Heptachlor epoxide	"	ND	---	0.0200	"	"	--	--	--	--	--	--	"	
Methoxychlor	"	ND	---	0.0200	"	"	--	--	--	--	--	--	"	
Toxaphene	"	ND	---	0.500	"	"	--	--	--	--	--	--	"	
Surrogate(s): 2,4,5,6-Tetrachloro-m-xylene		*Recovery: 73.5%*			*Limits: 16-137%*	"							*03/21/09 12:07*	
LCS (9030652-BS1)									**Extracted: 03/20/09 14:45**					
Aldrin	EPA 8081A	0.0641	---	0.0200	ug/l	1x	--	0.100	64.1%	(43-115)	--	--	03/21/09 12:33	
gamma-BHC (Lindane)	"	0.0772	---	0.0200	"	"	--	"	77.2%	(61-120)	--	--	"	
4,4'-DDT	"	0.0780	---	0.0200	"	"	--	"	78.0%	(58-128)	--	--	"	
Dieldrin	"	0.0763	---	0.0200	"	"	--	"	76.3%	(60-128)	--	--	"	
Endrin	"	0.0821	---	0.0200	"	"	--	"	82.1%	(68-136)	--	--	"	
Heptachlor	"	0.0754	---	0.0200	"	"	--	"	75.4%	(49-116)	--	--	"	
Surrogate(s): 2,4,5,6-Tetrachloro-m-xylene		*Recovery: 63.2%*			*Limits: 16-137%*	"							*03/21/09 12:33*	

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Estella K Rieben

Estella Rieben, Project Manager

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PORTLAND, OR 9405 S.W. NIMBUS AVENUE
BEAVERTON, OR 97008-7132
ph: (503) 906.9200 fax: (503) 906.9210

Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	03/30/09 15:57

Organochlorine Pesticides per EPA Method 8081A - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 9030652 **Water Preparation Method: EPA 3510/600 Series**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
LCS Dup (9030652-BSD1)								**Extracted: 03/20/09 14:45**						
Aldrin	EPA 8081A	0.0726	---	0.0200	ug/l	1x	--	0.100	72.6%	(43-115)	12.4%	(22)	03/21/09 12:59	
gamma-BHC (Lindane)	"	0.0826	---	0.0200	"	"	--	"	82.6%	(61-120)	6.86%	"	"	
4,4'-DDT	"	0.0836	---	0.0200	"	"	--	"	83.6%	(58-128)	6.91%	"	"	
Dieldrin	"	0.0804	---	0.0200	"	"	--	"	80.4%	(60-128)	5.26%	"	"	
Endrin	"	0.0886	---	0.0200	"	"	--	"	88.6%	(68-136)	7.64%	"	"	
Heptachlor	"	0.0812	---	0.0200	"	"	--	"	81.2%	(49-116)	7.35%	"	"	
Surrogate(s): 2,4,5,6-Tetrachloro-m-xylene		*Recovery: 64.0%*			*Limits: 16-137%*	"							*03/21/09 12:59*	

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Estella Rieben, Project Manager

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Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	03/30/09 15:57

Polychlorinated Biphenyls per EPA Method 8082 - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 9030545 **Water Preparation Method: EPA 3510/600 Series**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (9030545-BLK1)									**Extracted: 03/18/09 15:20**					
Aroclor 1016	EPA 8082	ND	---	0.100	ug/l	1x	--	--	--	--	--	--	03/24/09 17:32	
Aroclor 1221	"	ND	---	0.200	"	"	--	--	--	--	--	--	"	
Aroclor 1232	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Aroclor 1242	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Aroclor 1248	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Aroclor 1254	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Aroclor 1260	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Aroclor 1262	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Aroclor 1268	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Surrogate(s): Decachlorobiphenyl		*Recovery: 93.9%*			*Limits: 12-130%*	"							*03/24/09 17:32*	
LCS (9030545-BS1)									**Extracted: 03/18/09 15:20**					
Aroclor 1016	EPA 8082	0.913	---	0.100	ug/l	1x	--	1.00	91.3%	(50-114)	--	--	03/24/09 17:54	
Aroclor 1260	"	0.906	---	0.100	"	"	--	"	90.6%	(8-127)	--	--	"	
Surrogate(s): Decachlorobiphenyl		*Recovery: 101%*			*Limits: 12-130%*	"							*03/24/09 17:54*	
LCS Dup (9030545-BSD1)									**Extracted: 03/18/09 15:20**					
Aroclor 1016	EPA 8082	0.887	---	0.100	ug/l	1x	--	1.00	88.7%	(50-114)	2.84%	(22)	03/24/09 18:16	
Aroclor 1260	"	0.928	---	0.100	"	"	--	"	92.8%	(8-127)	2.40%	(23)	"	
Surrogate(s): Decachlorobiphenyl		*Recovery: 108%*			*Limits: 12-130%*	"							*03/24/09 18:16*	

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Estella Rieben, Project Manager

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Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	03/30/09 15:57

Volatile Organic Compounds per EPA Method 8260B - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 9030509 **Water Preparation Method: EPA 5030B**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (9030509-BLK1)							**Extracted: 03/17/09 10:00**							
Acetone	EPA 8260B	ND	---	25.0	ug/l	1x	--	--	--	--	--	--	03/17/09 14:17	
Benzene	"	ND	---	0.200	"	"	--	--	--	--	--	--	"	
Bromobenzene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Bromochloromethane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Bromodichloromethane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Bromoform	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Bromomethane	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
2-Butanone (MEK)	"	ND	---	10.0	"	"	--	--	--	--	--	--	"	
n-Butylbenzene	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
sec-Butylbenzene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
tert-Butylbenzene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Carbon disulfide	"	ND	---	10.0	"	"	--	--	--	--	--	--	"	
Carbon tetrachloride	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Chlorobenzene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Chloroethane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Chloroform	"	ND	---	0.200	"	"	--	--	--	--	--	--	"	
Chloromethane	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
2-Chlorotoluene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
4-Chlorotoluene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,2-Dibromo-3-chloropropane	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
Dibromochloromethane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,2-Dibromoethane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Dibromomethane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,2-Dichlorobenzene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,3-Dichlorobenzene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,4-Dichlorobenzene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Dichlorodifluoromethane	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
1,1-Dichloroethane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,2-Dichloroethane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,1-Dichloroethene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
cis-1,2-Dichloroethene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
trans-1,2-Dichloroethene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,2-Dichloropropane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,3-Dichloropropane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
2,2-Dichloropropane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,1-Dichloropropene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
cis-1,3-Dichloropropene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
trans-1,3-Dichloropropene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Ethylbenzene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	

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Estella K Rieben

Estella Rieben, Project Manager

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Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	03/30/09 15:57

Volatile Organic Compounds per EPA Method 8260B - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 9030509 **Water Preparation Method: EPA 5030B**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (9030509-BLK1)							**Extracted: 03/17/09 10:00**							
Hexachlorobutadiene	EPA 8260B	ND	---	4.00	ug/l	1x	--	--	--	--	--	--	03/17/09 14:17	
2-Hexanone	"	ND	---	10.0	"	"	--	--	--	--	--	--	"	
Isopropylbenzene	"	ND	---	2.00	"	"	--	--	--	--	--	--	"	
p-Isopropyltoluene	"	ND	---	2.00	"	"	--	--	--	--	--	--	"	
4-Methyl-2-pentanone	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
Methyl tert-butyl ether	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Methylene chloride	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
Naphthalene	"	ND	---	2.00	"	"	--	--	--	--	--	--	"	
n-Propylbenzene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Styrene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,1,1,2-Tetrachloroethane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,1,2,2-Tetrachloroethane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Tetrachloroethene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Toluene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,2,3-Trichlorobenzene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,2,4-Trichlorobenzene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,1,1-Trichloroethane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,1,2-Trichloroethane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Trichloroethene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Trichlorofluoromethane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,2,3-Trichloropropane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,2,4-Trimethylbenzene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,3,5-Trimethylbenzene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Vinyl chloride	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
o-Xylene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
m,p-Xylene	"	ND	---	2.00	"	"	--	--	--	--	--	--	"	
Surrogate(s):	*Dibromofluoromethane*	*Recovery:*	*102%*		*Limits:*	*80-120%*	"						*03/17/09 14:17*	
	1,2-DCA-d4		*94.8%*			*80-120%*	"						"	
	Toluene-d8		*105%*			*80-120%*	"						"	
	4-BFB		*99.4%*			*80-120%*	"						"	

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Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	03/30/09 15:57

Volatile Organic Compounds per EPA Method 8260B - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 9030509 **Water Preparation Method: EPA 5030B**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
LCS (9030509-BS1)								**Extracted: 03/17/09 10:00**						
Acetone	EPA 8260B	140	---	25.0	ug/l	1x	--	100	140%	(56-141)	--	--	03/17/09 11:32	
Benzene	"	19.5	---	0.200	"	"	--	20.0	97.4%	(80-120)	--	--	"	
Bromobenzene	"	18.6	---	1.00	"	"	--	"	93.2%	(78-120)	--	--	"	
Bromochloromethane	"	19.8	---	1.00	"	"	--	"	99.0%	(76-121)	--	--	"	
Bromodichloromethane	"	20.5	---	1.00	"	"	--	"	103%	(84-127)	--	--	"	
Bromoform	"	22.1	---	1.00	"	"	--	"	111%	(55-134)	--	--	"	
Bromomethane	"	19.6	---	5.00	"	"	--	"	98.0%	(38-150)	--	--	"	
2-Butanone (MEK)	"	127	---	10.0	"	"	--	100	127%	(71-136)	--	--	"	
n-Butylbenzene	"	20.1	---	5.00	"	"	--	20.0	101%	(76-126)	--	--	"	
sec-Butylbenzene	"	20.1	---	1.00	"	"	--	"	100%	(64-129)	--	--	"	
tert-Butylbenzene	"	18.7	---	1.00	"	"	--	"	93.6%	(71-127)	--	--	"	
Carbon disulfide	"	41.8	---	10.0	"	"	--	40.0	104%	(58-120)	--	--	"	
Carbon tetrachloride	"	21.8	---	1.00	"	"	--	20.0	109%	(73-134)	--	--	"	
Chlorobenzene	"	19.9	---	1.00	"	"	--	"	99.6%	(80-124)	--	--	"	
Chloroethane	"	21.2	---	1.00	"	"	--	"	106%	(79-124)	--	--	"	
Chloroform	"	19.4	---	0.200	"	"	--	"	96.8%	(80-120)	--	--	"	
Chloromethane	"	22.5	---	5.00	"	"	--	"	113%	(47-146)	--	--	"	
2-Chlorotoluene	"	19.2	---	1.00	"	"	--	"	96.2%	(72-125)	--	--	"	
4-Chlorotoluene	"	19.1	---	1.00	"	"	--	"	95.4%	(77-124)	--	--	"	
1,2-Dibromo-3-chloropropane	"	22.7	---	5.00	"	"	--	"	113%	(73-134)	--	--	"	
Dibromochloromethane	"	20.3	---	1.00	"	"	--	"	101%	(69-138)	--	--	"	
1,2-Dibromoethane	"	20.1	---	1.00	"	"	--	"	100%	(80-122)	--	--	"	
Dibromomethane	"	19.5	---	1.00	"	"	--	"	97.7%	(80-120)	--	--	"	
1,2-Dichlorobenzene	"	18.3	---	1.00	"	"	--	"	91.4%	(80-113)	--	--	"	
1,3-Dichlorobenzene	"	18.6	---	1.00	"	"	--	"	92.8%	(76-123)	--	--	"	
1,4-Dichlorobenzene	"	18.7	---	1.00	"	"	--	"	93.7%	(73-120)	--	--	"	
Dichlorodifluoromethane	"	20.6	---	5.00	"	"	--	"	103%	(48-140)	--	--	"	
1,1-Dichloroethane	"	18.9	---	1.00	"	"	--	"	94.4%	(80-120)	--	--	"	
1,2-Dichloroethane	"	18.7	---	1.00	"	"	--	"	93.4%	(78-123)	--	--	"	
1,1-Dichloroethene	"	20.0	---	1.00	"	"	--	"	99.8%	(78-120)	--	--	"	
cis-1,2-Dichloroethene	"	19.8	---	1.00	"	"	--	"	98.8%	(80-120)	--	--	"	
trans-1,2-Dichloroethene	"	19.9	---	1.00	"	"	--	"	99.5%	"	--	--	"	
1,2-Dichloropropane	"	19.6	---	1.00	"	"	--	"	98.2%	(80-126)	--	--	"	
1,3-Dichloropropane	"	19.6	---	1.00	"	"	--	"	97.8%	(80-120)	--	--	"	
2,2-Dichloropropane	"	18.2	---	1.00	"	"	--	"	91.0%	(60-144)	--	--	"	
1,1-Dichloropropene	"	19.3	---	1.00	"	"	--	"	96.7%	(80-120)	--	--	"	
cis-1,3-Dichloropropene	"	19.6	---	1.00	"	"	--	"	98.2%	(80-125)	--	--	"	
trans-1,3-Dichloropropene	"	18.6	---	1.00	"	"	--	"	93.1%	(80-130)	--	--	"	
Ethylbenzene	"	19.4	---	1.00	"	"	--	"	97.2%	(80-120)	--	--	"	

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Estella K Rieben

Estella Rieben, Project Manager

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PORTLAND, OR 9405 S.W. NIMBUS AVENUE
BEAVERTON, OR 97008-7132
ph: (503) 906.9200 fax: (503) 906.9210

Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	03/30/09 15:57

Volatile Organic Compounds per EPA Method 8260B - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 9030509 **Water Preparation Method: EPA 5030B**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
LCS (9030509-BS1)							**Extracted: 03/17/09 10:00**							
Hexachlorobutadiene	EPA 8260B	18.4	---	4.00	ug/l	1x	--	20.0	92.0%	(64-145)	--	--	03/17/09 11:32	
2-Hexanone	"	109	---	10.0	"	"	--	100	109%	(73-139)	--	--	"	
Isopropylbenzene	"	19.2	---	2.00	"	"	--	20.0	96.0%	(77-124)	--	--	"	
p-Isopropyltoluene	"	19.5	---	2.00	"	"	--	"	97.6%	(68-130)	--	--	"	
4-Methyl-2-pentanone	"	108	---	5.00	"	"	--	100	108%	(72-134)	--	--	"	
Methyl tert-butyl ether	"	17.7	---	1.00	"	"	--	20.0	88.6%	(80-129)	--	--	"	
Methylene chloride	"	20.9	---	5.00	"	"	--	"	104%	(80-120)	--	--	"	
Naphthalene	"	18.3	---	2.00	"	"	--	"	91.4%	(72-149)	--	--	"	
n-Propylbenzene	"	20.0	---	1.00	"	"	--	"	100%	(76-128)	--	--	"	
Styrene	"	19.0	---	1.00	"	"	--	"	94.8%	(72-127)	--	--	"	
1,1,1,2-Tetrachloroethane	"	21.4	---	1.00	"	"	--	"	107%	(69-138)	--	--	"	
1,1,2,2-Tetrachloroethane	"	20.8	---	1.00	"	"	--	"	104%	(77-128)	--	--	"	
Tetrachloroethene	"	19.4	---	1.00	"	"	--	"	96.8%	(80-124)	--	--	"	
Toluene	"	20.6	---	1.00	"	"	--	"	103%	"	--	--	"	
1,2,3-Trichlorobenzene	"	18.4	---	1.00	"	"	--	"	91.8%	(69-138)	--	--	"	
1,2,4-Trichlorobenzene	"	18.5	---	1.00	"	"	--	"	92.6%	(75-127)	--	--	"	
1,1,1-Trichloroethane	"	20.1	---	1.00	"	"	--	"	101%	(76-132)	--	--	"	
1,1,2-Trichloroethane	"	19.4	---	1.00	"	"	--	"	97.0%	(80-123)	--	--	"	
Trichloroethene	"	19.4	---	1.00	"	"	--	"	96.8%	(80-132)	--	--	"	
Trichlorofluoromethane	"	19.3	---	1.00	"	"	--	"	96.4%	(77-137)	--	--	"	
1,2,3-Trichloropropane	"	19.3	---	1.00	"	"	--	"	96.6%	(75-125)	--	--	"	
1,2,4-Trimethylbenzene	"	19.2	---	1.00	"	"	--	"	96.2%	(73-132)	--	--	"	
1,3,5-Trimethylbenzene	"	19.2	---	1.00	"	"	--	"	96.2%	(75-132)	--	--	"	
Vinyl chloride	"	20.6	---	1.00	"	"	--	"	103%	(76-133)	--	--	"	
o-Xylene	"	19.4	---	1.00	"	"	--	"	97.2%	(77-123)	--	--	"	
m,p-Xylene	"	39.8	---	2.00	"	"	--	40.0	99.5%	(72-127)	--	--	"	

Surrogate(s):	*Dibromofluoromethane*	*Recovery:*	*102%*	*Limits:*	*80-120%*	*03/17/09 11:32*
	1,2-DCA-d4		*94.4%*		*80-120%*	"
	Toluene-d8		*105%*		*80-120%*	"
	4-BFB		*99.8%*		*80-120%*	"

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Estella K Rieben

Estella Rieben, Project Manager

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BEAVERTON, OR 97008-7132
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Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	03/30/09 15:57

Volatile Organic Compounds per EPA Method 8260B - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 9030509 **Water Preparation Method: EPA 5030B**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
LCS Dup (9030509-BSD1)							**Extracted: 03/17/09 10:00**							
Acetone	EPA 8260B	132	---	25.0	ug/l	1x	--	100	132%	(56-141)	5.75%	(25)	03/17/09 11:58	
Benzene	"	18.5	---	0.200	"	"	--	20.0	92.4%	(80-120)	5.27%	"	"	
Bromobenzene	"	18.0	---	1.00	"	"	--	"	90.0%	(78-120)	3.55%	"	"	
Bromochloromethane	"	18.4	---	1.00	"	"	--	"	92.2%	(76-121)	7.16%	"	"	
Bromodichloromethane	"	19.7	---	1.00	"	"	--	"	98.3%	(84-127)	4.28%	"	"	
Bromoform	"	21.1	---	1.00	"	"	--	"	105%	(55-134)	5.00%	"	"	
Bromomethane	"	21.2	---	5.00	"	"	--	"	106%	(38-150)	7.65%	"	"	
2-Butanone (MEK)	"	117	---	10.0	"	"	--	100	117%	(71-136)	7.75%	"	"	
n-Butylbenzene	"	20.7	---	5.00	"	"	--	20.0	104%	(76-126)	2.94%	"	"	
sec-Butylbenzene	"	20.8	---	1.00	"	"	--	"	104%	(64-129)	3.77%	"	"	
tert-Butylbenzene	"	19.3	---	1.00	"	"	--	"	96.6%	(71-127)	3.10%	"	"	
Carbon disulfide	"	50.2	---	10.0	"	"	--	40.0	125%	(58-120)	18.3%	"	"	L
Carbon tetrachloride	"	21.9	---	1.00	"	"	--	20.0	109%	(73-134)	0.596%	"	"	
Chlorobenzene	"	18.9	---	1.00	"	"	--	"	94.4%	(80-124)	5.31%	"	"	
Chloroethane	"	21.5	---	1.00	"	"	--	"	108%	(79-124)	1.45%	"	"	
Chloroform	"	18.4	---	0.200	"	"	--	"	91.8%	(80-120)	5.25%	"	"	
Chloromethane	"	22.9	---	5.00	"	"	--	"	114%	(47-146)	1.50%	"	"	
2-Chlorotoluene	"	19.2	---	1.00	"	"	--	"	95.9%	(72-125)	0.312%	"	"	
4-Chlorotoluene	"	19.1	---	1.00	"	"	--	"	95.6%	(77-124)	0.210%	"	"	
1,2-Dibromo-3-chloropropane	"	19.5	---	5.00	"	"	--	"	97.4%	(73-134)	15.1%	"	"	
Dibromochloromethane	"	18.9	---	1.00	"	"	--	"	94.6%	(69-138)	6.89%	"	"	
1,2-Dibromoethane	"	18.4	---	1.00	"	"	--	"	91.9%	(80-122)	8.84%	"	"	
Dibromomethane	"	17.6	---	1.00	"	"	--	"	88.0%	(80-120)	10.5%	"	"	
1,2-Dichlorobenzene	"	18.0	---	1.00	"	"	--	"	90.2%	(80-113)	1.32%	"	"	
1,3-Dichlorobenzene	"	18.6	---	1.00	"	"	--	"	92.9%	(76-123)	0.108%	"	"	
1,4-Dichlorobenzene	"	18.7	---	1.00	"	"	--	"	93.6%	(73-120)	0.0534%	"	"	
Dichlorodifluoromethane	"	22.0	---	5.00	"	"	--	"	110%	(48-140)	6.63%	"	"	
1,1-Dichloroethane	"	18.0	---	1.00	"	"	--	"	90.0%	(80-120)	4.72%	"	"	
1,2-Dichloroethane	"	17.1	---	1.00	"	"	--	"	85.5%	(78-123)	8.89%	"	"	
1,1-Dichloroethene	"	19.0	---	1.00	"	"	--	"	95.2%	(78-120)	4.72%	"	"	
cis-1,2-Dichloroethene	"	18.4	---	1.00	"	"	--	"	92.0%	(80-120)	7.13%	"	"	
trans-1,2-Dichloroethene	"	18.8	---	1.00	"	"	--	"	94.0%	"	5.74%	"	"	
1,2-Dichloropropane	"	18.5	---	1.00	"	"	--	"	92.3%	(80-126)	6.19%	"	"	
1,3-Dichloropropane	"	17.7	---	1.00	"	"	--	"	88.5%	(80-120)	9.93%	"	"	
2,2-Dichloropropane	"	17.6	---	1.00	"	"	--	"	88.2%	(60-144)	3.01%	"	"	
1,1-Dichloropropene	"	18.3	---	1.00	"	"	--	"	91.4%	(80-120)	5.69%	"	"	
cis-1,3-Dichloropropene	"	18.5	---	1.00	"	"	--	"	92.6%	(80-125)	5.82%	"	"	
trans-1,3-Dichloropropene	"	17.4	---	1.00	"	"	--	"	87.0%	(80-130)	6.83%	"	"	
Ethylbenzene	"	19.2	---	1.00	"	"	--	"	96.2%	(80-120)	0.931%	"	"	

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Estella K Rieben

Estella Rieben, Project Manager

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BEAVERTON, OR 97008-7132
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Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	03/30/09 15:57

Volatile Organic Compounds per EPA Method 8260B - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 9030509 **Water Preparation Method: EPA 5030B**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
LCS Dup (9030509-BSD1)							**Extracted: 03/17/09 10:00**							
Hexachlorobutadiene	EPA 8260B	19.7	---	4.00	ug/l	1x	--	20.0	98.4%	(64-145)	6.73%	(25)	03/17/09 11:58	
2-Hexanone	"	104	---	10.0	"	"	--	100	104%	(73-139)	5.18%	"	"	
Isopropylbenzene	"	19.6	---	2.00	"	"	--	20.0	98.2%	(77-124)	2.37%	"	"	
p-Isopropyltoluene	"	20.3	---	2.00	"	"	--	"	101%	(68-130)	3.82%	"	"	
4-Methyl-2-pentanone	"	105	---	5.00	"	"	--	100	105%	(72-134)	2.52%	"	"	
Methyl tert-butyl ether	"	16.4	---	1.00	"	"	--	20.0	81.8%	(80-129)	8.10%	"	"	
Methylene chloride	"	19.5	---	5.00	"	"	--	"	97.3%	(80-120)	7.09%	"	"	
Naphthalene	"	17.0	---	2.00	"	"	--	"	84.8%	(72-149)	7.44%	"	"	
n-Propylbenzene	"	20.3	---	1.00	"	"	--	"	102%	(76-128)	1.49%	"	"	
Styrene	"	18.6	---	1.00	"	"	--	"	92.9%	(72-127)	2.08%	"	"	
1,1,1,2-Tetrachloroethane	"	20.7	---	1.00	"	"	--	"	104%	(69-138)	3.09%	"	"	
1,1,2,2-Tetrachloroethane	"	19.6	---	1.00	"	"	--	"	97.8%	(77-128)	6.44%	"	"	
Tetrachloroethene	"	18.6	---	1.00	"	"	--	"	92.8%	(80-124)	4.27%	"	"	
Toluene	"	19.5	---	1.00	"	"	--	"	97.6%	"	5.38%	"	"	
1,2,3-Trichlorobenzene	"	18.4	---	1.00	"	"	--	"	91.8%	(69-138)	0.00%	"	"	
1,2,4-Trichlorobenzene	"	18.9	---	1.00	"	"	--	"	94.6%	(75-127)	2.08%	"	"	
1,1,1-Trichloroethane	"	19.2	---	1.00	"	"	--	"	96.0%	(76-132)	4.63%	"	"	
1,1,2-Trichloroethane	"	17.6	---	1.00	"	"	--	"	88.0%	(80-123)	9.78%	"	"	
Trichloroethene	"	18.4	---	1.00	"	"	--	"	92.1%	(80-132)	4.92%	"	"	
Trichlorofluoromethane	"	20.4	---	1.00	"	"	--	"	102%	(77-137)	5.69%	"	"	
1,2,3-Trichloropropane	"	17.4	---	1.00	"	"	--	"	86.8%	(75-125)	10.8%	"	"	
1,2,4-Trimethylbenzene	"	19.5	---	1.00	"	"	--	"	97.6%	(73-132)	1.39%	"	"	
1,3,5-Trimethylbenzene	"	19.6	---	1.00	"	"	--	"	98.0%	(75-132)	1.80%	"	"	
Vinyl chloride	"	21.4	---	1.00	"	"	--	"	107%	(76-133)	3.43%	"	"	
o-Xylene	"	19.4	---	1.00	"	"	--	"	97.2%	(77-123)	0.0514%	"	"	
m,p-Xylene	"	39.9	---	2.00	"	"	--	40.0	99.8%	(72-127)	0.376%	"	"	
Surrogate(s):	*Dibromofluoromethane*	*Recovery:*	*106%*	*Limits:*	*80-120%*	"							*03/17/09 11:58*	
	1,2-DCA-d4		*95.4%*		*80-120%*	"							"	
	Toluene-d8		*106%*		*80-120%*	"							"	
	4-BFB		*106%*		*80-120%*	"							"	

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Estella K Rieben

Estella Rieben, Project Manager

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Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	03/30/09 15:57

Volatile Organic Compounds per EPA Method 8260B - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 9030509 **Water Preparation Method: EPA 5030B**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Matrix Spike (9030509-MS1)				**QC Source: PSC0271-01**					**Extracted: 03/17/09 10:00**					
Acetone	EPA 8260B	136	---	25.0	ug/l	1x	ND	100	136%	(59.9-143)	--	--	03/17/09 12:46	
Benzene	"	21.8	---	0.200	"	"	ND	20.0	109%	(80-124)	--	--	"	
Bromobenzene	"	20.8	---	1.00	"	"	ND	"	104%	(80-121)	--	--	"	
Bromochloromethane	"	22.3	---	1.00	"	"	ND	"	112%	(80-129)	--	--	"	
Bromodichloromethane	"	22.5	---	1.00	"	"	ND	"	113%	(80-135)	--	--	"	
Bromoform	"	25.5	---	1.00	"	"	1.19	"	121%	(69.4-151)	--	--	"	
Bromomethane	"	20.9	---	5.00	"	"	ND	"	104%	(31-155)	--	--	"	
2-Butanone (MEK)	"	122	---	10.0	"	"	ND	100	122%	(72.3-143)	--	--	"	
n-Butylbenzene	"	21.9	---	5.00	"	"	ND	20.0	110%	(70.8-140)	--	--	"	
sec-Butylbenzene	"	22.2	---	1.00	"	"	ND	"	111%	(72.5-134)	--	--	"	
tert-Butylbenzene	"	20.9	---	1.00	"	"	ND	"	105%	(72.3-132)	--	--	"	
Carbon disulfide	"	45.4	---	10.0	"	"	ND	40.0	114%	(40-167)	--	--	"	
Carbon tetrachloride	"	25.9	---	1.00	"	"	ND	20.0	129%	(78.8-129)	--	--	"	
Chlorobenzene	"	22.8	---	1.00	"	"	0.370	"	112%	(72.9-134)	--	--	"	
Chloroethane	"	21.8	---	1.00	"	"	ND	"	109%	(79-126)	--	--	"	
Chloroform	"	21.5	---	0.200	"	"	0.260	"	106%	(80-124)	--	--	"	
Chloromethane	"	22.6	---	5.00	"	"	0.130	"	112%	(40-150)	--	--	"	
2-Chlorotoluene	"	21.8	---	1.00	"	"	ND	"	109%	(80-120)	--	--	"	
4-Chlorotoluene	"	21.8	---	1.00	"	"	ND	"	109%	(80-121)	--	--	"	
1,2-Dibromo-3-chloropropane	"	25.0	---	5.00	"	"	ND	"	125%	(58.5-143)	--	--	"	
Dibromochloromethane	"	22.3	---	1.00	"	"	ND	"	111%	(80-129)	--	--	"	
1,2-Dibromoethane	"	22.0	---	1.00	"	"	ND	"	110%	(80-128)	--	--	"	
Dibromomethane	"	21.5	---	1.00	"	"	ND	"	108%	(76.4-131)	--	--	"	
1,2-Dichlorobenzene	"	20.1	---	1.00	"	"	ND	"	100%	(80-120)	--	--	"	
1,3-Dichlorobenzene	"	21.0	---	1.00	"	"	ND	"	105%	(80-122)	--	--	"	
1,4-Dichlorobenzene	"	21.6	---	1.00	"	"	0.180	"	107%	(80-120)	--	--	"	
Dichlorodifluoromethane	"	22.3	---	5.00	"	"	ND	"	111%	(63.2-134)	--	--	"	
1,1-Dichloroethane	"	21.6	---	1.00	"	"	ND	"	108%	(80-123)	--	--	"	
1,2-Dichloroethane	"	20.1	---	1.00	"	"	ND	"	100%	(80-121)	--	--	"	
1,1-Dichloroethene	"	22.6	---	1.00	"	"	ND	"	113%	(79.3-127)	--	--	"	
cis-1,2-Dichloroethene	"	22.2	---	1.00	"	"	ND	"	111%	(76.6-136)	--	--	"	
trans-1,2-Dichloroethene	"	22.0	---	1.00	"	"	ND	"	110%	(80-120)	--	--	"	
1,2-Dichloropropane	"	21.5	---	1.00	"	"	ND	"	108%	"	--	--	"	
1,3-Dichloropropane	"	21.2	---	1.00	"	"	ND	"	106%	(80-132)	--	--	"	
2,2-Dichloropropane	"	20.8	---	1.00	"	"	ND	"	104%	(74.8-143)	--	--	"	
1,1-Dichloropropene	"	21.2	---	1.00	"	"	ND	"	106%	(80-123)	--	--	"	
cis-1,3-Dichloropropene	"	21.8	---	1.00	"	"	ND	"	109%	(80-130)	--	--	"	
trans-1,3-Dichloropropene	"	21.0	---	1.00	"	"	ND	"	105%	(80-135)	--	--	"	
Ethylbenzene	"	22.2	---	1.00	"	"	ND	"	111%	(80-124)	--	--	"	

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Estella K Rieben

Estella Rieben, Project Manager

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PORTLAND, OR 9405 S.W. NIMBUS AVENUE
BEAVERTON, OR 97008-7132
ph: (503) 906.9200 fax: (503) 906.9210

Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	03/30/09 15:57

Volatile Organic Compounds per EPA Method 8260B - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 9030509 **Water Preparation Method: EPA 5030B**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Matrix Spike (9030509-MS1)				**QC Source: PSC0271-01**				**Extracted: 03/17/09 10:00**						
Hexachlorobutadiene	EPA 8260B	22.6	---	4.00	ug/l	1x	ND	20.0	113%	(46.3-157)	--	--	03/17/09 12:46	
2-Hexanone	"	117	---	10.0	"	"	ND	100	117%	(62.7-152)	--	--	"	
Isopropylbenzene	"	21.9	---	2.00	"	"	ND	20.0	109%	(80-129)	--	--	"	
p-Isopropyltoluene	"	22.0	---	2.00	"	"	ND	"	110%	(71.9-138)	--	--	"	
4-Methyl-2-pentanone	"	115	---	5.00	"	"	ND	100	115%	(58.7-151)	--	--	"	
Methyl tert-butyl ether	"	19.5	---	1.00	"	"	ND	20.0	97.4%	(80-130)	--	--	"	
Methylene chloride	"	24.3	---	5.00	"	"	0.720	"	118%	(80-120)	--	--	"	
Naphthalene	"	22.2	---	2.00	"	"	ND	"	111%	(69-163)	--	--	"	
n-Propylbenzene	"	22.6	---	1.00	"	"	ND	"	113%	(74.3-133)	--	--	"	
Styrene	"	21.6	---	1.00	"	"	ND	"	108%	(47.7-152)	--	--	"	
1,1,1,2-Tetrachloroethane	"	23.6	---	1.00	"	"	ND	"	118%	(80-129)	--	--	"	
1,1,2,2-Tetrachloroethane	"	23.3	---	1.00	"	"	ND	"	116%	(78.9-146)	--	--	"	
Tetrachloroethene	"	21.5	---	1.00	"	"	ND	"	107%	(80-125)	--	--	"	
Toluene	"	22.8	---	1.00	"	"	ND	"	114%	(79.7-131)	--	--	"	
1,2,3-Trichlorobenzene	"	21.2	---	1.00	"	"	ND	"	106%	(70.1-154)	--	--	"	
1,2,4-Trichlorobenzene	"	20.8	---	1.00	"	"	ND	"	104%	(71.2-148)	--	--	"	
1,1,1-Trichloroethane	"	22.7	---	1.00	"	"	ND	"	113%	(80-127)	--	--	"	
1,1,2-Trichloroethane	"	21.3	---	1.00	"	"	ND	"	107%	(80-130)	--	--	"	
Trichloroethene	"	21.4	---	1.00	"	"	ND	"	107%	(68.4-130)	--	--	"	
Trichlorofluoromethane	"	20.3	---	1.00	"	"	ND	"	102%	(79.1-129)	--	--	"	
1,2,3-Trichloropropane	"	21.0	---	1.00	"	"	ND	"	105%	(80-131)	--	--	"	
1,2,4-Trimethylbenzene	"	21.8	---	1.00	"	"	ND	"	109%	(80-136)	--	--	"	
1,3,5-Trimethylbenzene	"	22.0	---	1.00	"	"	ND	"	110%	(73.4-141)	--	--	"	
Vinyl chloride	"	20.7	---	1.00	"	"	ND	"	104%	(73.1-132)	--	--	"	
o-Xylene	"	22.3	---	1.00	"	"	ND	"	111%	(85.5-124)	--	--	"	
m,p-Xylene	"	45.2	---	2.00	"	"	ND	40.0	113%	(76.2-134)	--	--	"	
Surrogate(s):	*Dibromofluoromethane*	*Recovery:*	*101%*	*Limits:*	*80-120%*	"							*03/17/09 12:46*	
	1,2-DCA-d4		*90.8%*		*80-120%*	"							"	
	Toluene-d8		*102%*		*80-120%*	"							"	
	4-BFB		*101%*		*80-120%*	"							"	

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Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	03/30/09 15:57

Volatile Organic Compounds per EPA Method 8260B - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 9030509 **Water Preparation Method: EPA 5030B**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Matrix Spike Dup (9030509-MSD1)				**QC Source: PSC0271-01**					**Extracted: 03/17/09 10:00**					
Acetone	EPA 8260B	139	---	25.0	ug/l	1x	ND	100	139%	(59.9-143)	2.14%	(25)	03/17/09 13:13	
Benzene	"	19.3	---	0.200	"	"	ND	20.0	96.5%	(80-124)	11.9%	"	"	
Bromobenzene	"	19.0	---	1.00	"	"	ND	"	94.8%	(80-121)	9.35%	"	"	
Bromochloromethane	"	20.0	---	1.00	"	"	ND	"	99.8%	(80-129)	11.2%	"	"	
Bromodichloromethane	"	20.9	---	1.00	"	"	ND	"	104%	(80-135)	7.51%	"	"	
Bromoform	"	23.0	---	1.00	"	"	1.19	"	109%	(69.4-151)	10.1%	"	"	
Bromomethane	"	22.6	---	5.00	"	"	ND	"	113%	(31-155)	8.00%	"	"	
2-Butanone (MEK)	"	124	---	10.0	"	"	ND	100	124%	(72.3-143)	1.68%	"	"	
n-Butylbenzene	"	22.3	---	5.00	"	"	ND	20.0	111%	(70.8-140)	1.58%	"	"	
sec-Butylbenzene	"	21.8	---	1.00	"	"	ND	"	109%	(72.5-134)	1.77%	"	"	
tert-Butylbenzene	"	20.5	---	1.00	"	"	ND	"	102%	(72.3-132)	2.17%	"	"	
Carbon disulfide	"	49.5	---	10.0	"	"	ND	40.0	124%	(40-167)	8.70%	"	"	
Carbon tetrachloride	"	23.2	---	1.00	"	"	ND	20.0	116%	(78.8-129)	10.8%	"	"	
Chlorobenzene	"	20.5	---	1.00	"	"	0.370	"	101%	(72.9-134)	10.5%	"	"	
Chloroethane	"	22.8	---	1.00	"	"	ND	"	114%	(79-126)	4.52%	"	"	
Chloroform	"	19.7	---	0.200	"	"	0.260	"	97.0%	(80-124)	8.94%	"	"	
Chloromethane	"	22.4	---	5.00	"	"	0.130	"	111%	(40-150)	0.801%	"	"	
2-Chlorotoluene	"	20.2	---	1.00	"	"	ND	"	101%	(80-120)	7.52%	"	"	
4-Chlorotoluene	"	20.1	---	1.00	"	"	ND	"	100%	(80-121)	8.54%	"	"	
1,2-Dibromo-3-chloropropane	"	22.8	---	5.00	"	"	ND	"	114%	(58.5-143)	9.09%	"	"	
Dibromochloromethane	"	20.1	---	1.00	"	"	ND	"	100%	(80-129)	10.3%	"	"	
1,2-Dibromoethane	"	19.1	---	1.00	"	"	ND	"	95.6%	(80-128)	14.0%	"	"	
Dibromomethane	"	18.8	---	1.00	"	"	ND	"	94.1%	(76.4-131)	13.5%	"	"	
1,2-Dichlorobenzene	"	19.1	---	1.00	"	"	ND	"	95.6%	(80-120)	5.05%	"	"	
1,3-Dichlorobenzene	"	19.6	---	1.00	"	"	ND	"	98.2%	(80-122)	6.65%	"	"	
1,4-Dichlorobenzene	"	20.1	---	1.00	"	"	0.180	"	99.7%	(80-120)	6.91%	"	"	
Dichlorodifluoromethane	"	22.8	---	5.00	"	"	ND	"	114%	(63.2-134)	2.57%	"	"	
1,1-Dichloroethane	"	19.4	---	1.00	"	"	ND	"	97.2%	(80-123)	10.6%	"	"	
1,2-Dichloroethane	"	18.0	---	1.00	"	"	ND	"	89.9%	(80-121)	10.9%	"	"	
1,1-Dichloroethene	"	20.8	---	1.00	"	"	ND	"	104%	(79.3-127)	8.66%	"	"	
cis-1,2-Dichloroethene	"	19.6	---	1.00	"	"	ND	"	98.0%	(76.6-136)	12.6%	"	"	
trans-1,2-Dichloroethene	"	19.9	---	1.00	"	"	ND	"	99.6%	(80-120)	10.1%	"	"	
1,2-Dichloropropane	"	19.5	---	1.00	"	"	ND	"	97.5%	"	9.85%	"	"	
1,3-Dichloropropane	"	18.8	---	1.00	"	"	ND	"	93.8%	(80-132)	12.0%	"	"	
2,2-Dichloropropane	"	18.8	---	1.00	"	"	ND	"	93.9%	(74.8-143)	10.4%	"	"	
1,1-Dichloropropene	"	19.3	---	1.00	"	"	ND	"	96.5%	(80-123)	9.43%	"	"	
cis-1,3-Dichloropropene	"	19.6	---	1.00	"	"	ND	"	97.8%	(80-130)	10.8%	"	"	
trans-1,3-Dichloropropene	"	18.8	---	1.00	"	"	ND	"	93.8%	(80-135)	11.4%	"	"	
Ethylbenzene	"	20.5	---	1.00	"	"	ND	"	102%	(80-124)	8.16%	"	"	

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Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	03/30/09 15:57

Volatile Organic Compounds per EPA Method 8260B - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 9030509 **Water Preparation Method: EPA 5030B**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Matrix Spike Dup (9030509-MSD1)					**QC Source: PSC0271-01**				**Extracted: 03/17/09 10:00**					
Hexachlorobutadiene	EPA 8260B	21.5	---	4.00	ug/l	1x	ND	20.0	107%	(46.3-157)	4.91%	(25)	03/17/09 13:13	
2-Hexanone	"	123	---	10.0	"	"	ND	100	123%	(62.7-152)	4.90%	"	"	
Isopropylbenzene	"	20.8	---	2.00	"	"	ND	20.0	104%	(80-129)	5.02%	"	"	
p-Isopropyltoluene	"	21.3	---	2.00	"	"	ND	"	107%	(71.9-138)	2.91%	"	"	
4-Methyl-2-pentanone	"	122	---	5.00	"	"	ND	100	122%	(58.7-151)	5.38%	"	"	
Methyl tert-butyl ether	"	17.6	---	1.00	"	"	ND	20.0	88.1%	(80-130)	10.1%	"	"	
Methylene chloride	"	22.4	---	5.00	"	"	0.720	"	109%	(80-120)	7.91%	"	"	
Naphthalene	"	21.2	---	2.00	"	"	ND	"	106%	(69-163)	4.75%	"	"	
n-Propylbenzene	"	21.8	---	1.00	"	"	ND	"	109%	(74.3-133)	3.78%	"	"	
Styrene	"	20.0	---	1.00	"	"	ND	"	100%	(47.7-152)	7.64%	"	"	
1,1,1,2-Tetrachloroethane	"	21.4	---	1.00	"	"	ND	"	107%	(80-129)	9.85%	"	"	
1,1,2,2-Tetrachloroethane	"	20.9	---	1.00	"	"	ND	"	105%	(78.9-146)	10.8%	"	"	
Tetrachloroethene	"	19.6	---	1.00	"	"	ND	"	98.0%	(80-125)	9.10%	"	"	
Toluene	"	20.7	---	1.00	"	"	ND	"	104%	(79.7-131)	9.43%	"	"	
1,2,3-Trichlorobenzene	"	21.2	---	1.00	"	"	ND	"	106%	(70.1-154)	0.330%	"	"	
1,2,4-Trichlorobenzene	"	20.8	---	1.00	"	"	ND	"	104%	(71.2-148)	0.241%	"	"	
1,1,1-Trichloroethane	"	20.2	---	1.00	"	"	ND	"	101%	(80-127)	11.8%	"	"	
1,1,2-Trichloroethane	"	18.9	---	1.00	"	"	ND	"	94.4%	(80-130)	12.2%	"	"	
Trichloroethene	"	19.4	---	1.00	"	"	ND	"	97.0%	(68.4-130)	9.76%	"	"	
Trichlorofluoromethane	"	20.7	---	1.00	"	"	ND	"	104%	(79.1-129)	1.95%	"	"	
1,2,3-Trichloropropane	"	19.2	---	1.00	"	"	ND	"	95.9%	(80-131)	9.30%	"	"	
1,2,4-Trimethylbenzene	"	20.8	---	1.00	"	"	ND	"	104%	(80-136)	4.60%	"	"	
1,3,5-Trimethylbenzene	"	20.8	---	1.00	"	"	ND	"	104%	(73.4-141)	5.62%	"	"	
Vinyl chloride	"	21.6	---	1.00	"	"	ND	"	108%	(73.1-132)	4.11%	"	"	
o-Xylene	"	20.2	---	1.00	"	"	ND	"	101%	(85.5-124)	9.99%	"	"	
m,p-Xylene	"	41.9	---	2.00	"	"	ND	40.0	105%	(76.2-134)	7.54%	"	"	
Surrogate(s):	*Dibromofluoromethane*	*Recovery:*	*103%*	*Limits:*	*80-120%*	"							*03/17/09 13:13*	
	1,2-DCA-d4		*92.8%*		*80-120%*	"							"	
	Toluene-d8		*106%*		*80-120%*	"							"	
	4-BFB		*103%*		*80-120%*	"							"	

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Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	03/30/09 15:57

Polynuclear Aromatic Compounds per EPA 8270M-SIM - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 9030576 **Water Preparation Method: 3520B Liq-Liq**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (9030576-BLK1)							**Extracted: 03/18/09 12:00**							
2-Methylnaphthalene	EPA 8270m	ND	---	0.100	ug/l	1x	--	--	--	--	--	--	03/20/09 17:32	
Acenaphthene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Acenaphthylene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Anthracene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Benzo (a) anthracene	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	
Benzo (a) pyrene	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	
Benzo (b) fluoranthene	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	
Benzo (ghi) perylene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Benzo (k) fluoranthene	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	
Chrysene	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	
Dibenzo (a,h) anthracene	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	
Fluoranthene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Fluorene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Indeno (1,2,3-cd) pyrene	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	
Naphthalene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Phenanthrene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Pyrene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Surrogate(s): Fluorene-d10		*Recovery: 108%*			*Limits: 25-125%*	"							*03/20/09 17:32*	
Pyrene-d10		*96.6%*			*23-150%*	"							"	
Benzo (a) pyrene-d12		*121%*			*10-125%*	"							"	
LCS (9030576-BS1)							**Extracted: 03/18/09 12:00**							
Acenaphthene	EPA 8270m	1.43	---	0.100	ug/l	1x	--	1.25	114%	(26-135)	--	--	03/20/09 18:01	
Benzo (a) pyrene	"	1.45	---	0.00500	"	"	--	"	116%	(38-137)	--	--	"	
Pyrene	"	1.01	---	0.100	"	"	--	"	80.8%	(30-147)	--	--	"	
Surrogate(s): Fluorene-d10		*Recovery: 112%*			*Limits: 25-125%*	"							*03/20/09 18:01*	
Pyrene-d10		*92.2%*			*23-150%*	"							"	
Benzo (a) pyrene-d12		*123%*			*10-125%*	"							"	
LCS Dup (9030576-BSD1)							**Extracted: 03/18/09 12:00**							
Acenaphthene	EPA 8270m	1.47	---	0.100	ug/l	1x	--	1.25	118%	(26-135)	3.11%	(50)	03/20/09 18:30	
Benzo (a) pyrene	"	1.46	---	0.00500	"	"	--	"	117%	(38-137)	0.707%	"	"	
Pyrene	"	1.02	---	0.100	"	"	--	"	82.0%	(30-147)	1.41%	"	"	
Surrogate(s): Fluorene-d10		*Recovery: 114%*			*Limits: 25-125%*	"							*03/20/09 18:30*	
Pyrene-d10		*91.2%*			*23-150%*	"							"	
Benzo (a) pyrene-d12		*122%*			*10-125%*	"							"	

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Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	03/30/09 15:57

Phthalates per EPA 8270-SIM - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 9030576 **Water Preparation Method: 3520B Liq-Liq**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (9030576-BLK2)								**Extracted: 03/18/09 12:00**						
Dimethyl phthalate	EPA 8270m	ND	---	1.00	ug/l	2x	--	--	--	--	--	--	03/20/09 15:22	
Diethyl phthalate	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Di-n-butyl phthalate	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Butyl benzyl phthalate	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Bis(2-ethylhexyl)phthalate	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Di-n-octyl phthalate	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Surrogate(s):	*2-Fluorobiphenyl*	*Recovery:*	*95.1%*	*Limits:*	*10-150%*	"							*03/20/09 15:22*	
	p-Terphenyl-d14		*111%*		*10-150%*	"							"	
LCS (9030576-BS2)								**Extracted: 03/18/09 12:00**						
Dimethyl phthalate	EPA 8270m	1.72	---	1.00	ug/l	2x	--	2.00	86.0%	(20-150)	--	--	03/20/09 15:59	
Diethyl phthalate	"	1.77	---	1.00	"	"	--	"	88.3%	"	--	--	"	
Di-n-butyl phthalate	"	2.04	---	1.00	"	"	--	"	102%	"	--	--	"	
Butyl benzyl phthalate	"	2.33	---	1.00	"	"	--	"	116%	"	--	--	"	
Bis(2-ethylhexyl)phthalate	"	0.850	---	1.00	"	"	--	"	42.5%	"	--	--	"	
Di-n-octyl phthalate	"	0.561	---	1.00	"	"	--	"	28.1%	"	--	--	"	
Surrogate(s):	*2-Fluorobiphenyl*	*Recovery:*	*92.7%*	*Limits:*	*10-150%*	"							*03/20/09 15:59*	
	p-Terphenyl-d14		*105%*		*10-150%*	"							"	
LCS Dup (9030576-BSD2)								**Extracted: 03/18/09 12:00**						
Dimethyl phthalate	EPA 8270m	1.81	---	1.00	ug/l	2x	--	2.00	90.4%	(20-150)	5.08%	(50)	03/20/09 16:35	
Diethyl phthalate	"	1.84	---	1.00	"	"	--	"	91.9%	"	3.98%	"	"	
Di-n-butyl phthalate	"	2.07	---	1.00	"	"	--	"	104%	"	1.64%	"	"	
Butyl benzyl phthalate	"	2.35	---	1.00	"	"	--	"	117%	"	0.992%	"	"	
Bis(2-ethylhexyl)phthalate	"	1.03	---	1.00	"	"	--	"	51.4%	"	18.9%	"	"	
Di-n-octyl phthalate	"	0.854	---	1.00	"	"	--	"	42.7%	"	41.4%	"	"	
Surrogate(s):	*2-Fluorobiphenyl*	*Recovery:*	*103%*	*Limits:*	*10-150%*	"							*03/20/09 16:35*	
	p-Terphenyl-d14		*112%*		*10-150%*	"							"	

TestAmerica Portland

Estella K Rieben

Estella Rieben, Project Manager

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THE LEADER IN ENVIRONMENTAL TESTING

PORTLAND, OR 9405 S.W. NIMBUS AVENUE
BEAVERTON, OR 97008-7132
ph: (503) 906.9200 fax: (503) 906.9210

Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	03/30/09 15:57

Conventional Chemistry Parameters per Standard Methods - Laboratory Quality Control Results

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QC Batch: 9030497 **Water Preparation Method: General Preparation**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (9030497-BLK1)								**Extracted: 03/17/09 08:46**						
Total Organic Carbon	SM 5310C	ND	---	1.00	mg/l	1x	--	--	--	--	--	--	03/18/09 00:43	
LCS (9030497-BS1)								**Extracted: 03/17/09 08:46**						
Total Organic Carbon	SM 5310C	18.9	---	1.00	mg/l	1x	--	20.0	94.4%	(85-115)	--	--	03/18/09 00:43	
Duplicate (9030497-DUP1)					**QC Source: PSC0483-04**				**Extracted: 03/17/09 08:46**					
Total Organic Carbon	SM 5310C	ND	---	1.00	mg/l	1x	ND	--	--	--	7.63%	(20)	03/18/09 00:43	
Matrix Spike (9030497-MS1)					**QC Source: PSC0483-04**				**Extracted: 03/17/09 08:46**					
Total Organic Carbon	SM 5310C	25.6	---	1.01	mg/l	1x	0.713	25.3	98.3%	(75-125)	--	--	03/18/09 00:43	

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7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	03/30/09 15:57

Notes and Definitions

Report Specific Notes:

C	-	Calibration Verification recovery was above the method control limit for this analyte. Analyte not detected, data not impacted.
L	-	Laboratory Control Sample and/or Laboratory Control Sample Duplicate recovery was above the acceptance limits. Analyte not detected, data not impacted.
MHA	-	Due to high levels of analyte in the sample, the MS/MSD calculation does not provide useful spike recovery information. See Blank Spike (LCS).
P7	-	Sample filtered in lab.
QP	-	Hydrocarbon result partly due to individual peak(s) in quantitation range.
RL4	-	Reporting limit raised due to insufficient sample volume.
Z2	-	Surrogate recovery was above the acceptance limits. Data not impacted.

Laboratory Reporting Conventions:

DET	-	Analyte DETECTED at or above the Reporting Limit. Qualitative Analyses only.
ND	-	Analyte NOT DETECTED at or above the reporting limit (MDL or MRL, as appropriate).
NR/NA	-	Not Reported / Not Available
dry	-	Sample results reported on a Dry Weight Basis. Results and Reporting Limits have been corrected for Percent Dry Weight.
wet	-	Sample results and reporting limits reported on a Wet Weight Basis (as received). Results with neither 'wet' nor 'dry' are reported on a Wet Weight Basis.
RPD	-	RELATIVE PERCENT DIFFERENCE (RPDs calculated using Results, not Percent Recoveries).
MRL	-	METHOD REPORTING LIMIT. Reporting Level at, or above, the lowest level standard of the Calibration Table.
MDL*	-	METHOD DETECTION LIMIT. Reporting Level at, or above, the statistically derived limit based on 40CFR, Part 136, Appendix B. *MDLs are listed on the report only if the data has been evaluated below the MRL. Results between the MDL and MRL are reported as Estimated Results.
Dil	-	Dilutions are calculated based on deviations from the standard dilution performed for an analysis, and may not represent the dilution found on the analytical raw data.
Reporting Limits	-	Reporting limits (MDLs and MRLs) are adjusted based on variations in sample preparation amounts, analytical dilutions and percent solids, where applicable.
Electronic Signature	-	Electronic Signature added in accordance with TestAmerica's *Electronic Reporting and Electronic Signatures Policy*. Application of electronic signature indicates that the report has been reviewed and approved for release by the laboratory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

TestAmerica Portland

Estella K Rieben

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11720 North Creek Pkwy N Suite 400, Bothell, WA 98011-8244 425-420-9200 FAX 420-9210
11922 E. First Ave, Spokane, WA 99206-5302 509-924-9200 FAX 924-9290
9405 SW Nimbus Ave, Beaverton, OR 97008-7145 503-906-9200 FAX 906-9210
[illegible] Airport Rd Ste A-10, Anchorage, AK 99518 [illegible]

CHAIN OF CUSTODY REPORT

Work Order #: PSC0470

CLIENT: Stantec

INVOICE TO: Send to ConocoPhillips

REPORT TO: Rick Fetterly
ADDRESS: Stantec Consulting
7730 SW Mohawk St Tualatin, OR 97062

PHONE: (503) 691-2030 FAX: 503 692-7074

P.O. NUMBER:

PROJECT NAME: 0922 - ~~PDX~~ PDX Terminal Stormwater Sampling

PROJECT NUMBER: 15CP.00922.98 / x1230480

SAMPLED BY: Arby Lewis, Chris Carlton-Franco

TURNAROUND REQUEST

in Business Days *

Organic & Inorganic Analyses

10 STD | 7 | 5 | 4 | 3 | 2 | 1 | <1

Petroleum Hydrocarbon Analyses

5 STD | 4 | 3 | 2 | 1 | <1

OTHER Specify:

* Turnaround Requests less than standard may incur Rush Charges.

	CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME	PRESERVATIVE												MATRIX (W, S, O)	# OF CONT.	LOCATION/ COMMENTS	TA WO ID
			H	H	SG	H	—	—	—	NO_3	—							
			REQUESTED ANALYSES															
			NW-TPHGx	NW-TPHDx	SM5310C	8260B	8270M-SIM	8270-SIM	8082	6000-7000 Metals	8081A							
1	WR-369	1115; 16 MAR 09	X	X	X	X	X	X	X	X	X				W	15		
2	WR-370	1130; 16 MAR 09	X	X	X	X	X	X	X	X	X				W	15		
3	WR-012	~~1100~~ 1100; 16 MAR 09								X					W	1		
4																		
5																		
6																		
7																		
8																		
9																		
10																		

RELEASED BY: PRINT NAME: Chris Carlton-Franco FIRM: DATE: 16 MAR 09 TIME: 1430

RECEIVED BY: PRINT NAME: Jessica Mejia FIRM: TAL DATE: 3/16/09 TIME: 1430

RELEASED BY: PRINT NAME: FIRM: DATE: TIME:

RECEIVED BY: PRINT NAME: FIRM: DATE: TIME:

ADDITIONAL REMARKS:
* 8260B → BTEX + MTBE, 6000-7000 → total metals

TEMP: 2.2

PAGE OF

TAL-1000(0408)

COP0017534

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Sample Receiving Checklist

Work Order #: PSC0470 Date/Time Received: 3/16/09 1430

Client Name and Project: Stantec

Portland Terminal - Stormwater

PM to Complete This Section:	Yes	No		Yes	No
Residual Chlorine Check Required:	☐	☐	Quarantined:	☐	☐

Quote #:

Special Instructions:

Time Zone:

☐EDT/EST ☐CDT/CST ☐MDT/MST ☐PDT/PST ☐OTHER

Unpacking Checks:

Cooler #(s): 1

Temperatures: 2.3

Digi #1 ☐ Digi #2 ☐ IR Gun ☒ (☒Plastic ☐Glass)

Temperature out of Range:

__Not enough or No Ice

__Ice Melted

__W/in 4 Hrs of collection

__Other:

Initials: SM

N/A	Yes	No	
☒	☐	☐	1. If ESI client, were temp blanks received? If no, document on NOD.
☒	☐	☐	2. Cooler Seals intact? (N/A if hand delivered) if no, document on NOD.
	☒	☐	3. Chain of Custody present? If no, document on NOD.
	☒	☐	4. Bottles received intact? If no, document on NOD.
	☒	☐	5. Sample is not multiphasic? If no, document on NOD.
	☒	☐	6. Proper Container and preservatives used? If no, document on NOD.
☐	☒	☐	7. pH of all samples checked and meet requirements? If no, document on NOD.
☒	☐	☐	8. Cyanide samples checked for sulfides and meet requirements? If no, notify PM.
☒	☐	☐	9. HF Dilution required?
	☒	☐	10. Sufficient volume provided for all analysis? If no, document on NOD and consult PM before proceeding.
	☒	☐	11. Did chain of custody agree with samples received? If no, document on NOD.
☐	☒	☐	12. Were VOA/Oil Syringe samples without headspace?
☐	☒	☐	13. Were VOA vials preserved? ☒HCL ☐Sodium Thiosulfate ☐Ascorbic Acid
	☐	☒	14. Did samples require preservation with sodium thiosulfate?
☒	☐	☐	15. If yes to #14, was the residual chlorine test negative? If no, document on NOD.
☒	☐	☐	16. Are dissolved/field filtered metals bottles sediment-free? If no, document on NOD.
☒	☐	☐	17. Is sufficient volume provided for client requested MS/MSD or matrix duplicates? If no, document on NOD and contact PM before proceeding.
☒	☐	☐	18. Are analyses with short holding times received in hold?
	☒	☐	19. Was Standard Turn Around (TAT) requested?
	☒	☐	20. Receipt date(s) < 48 hours past the collection date(s)? If no, notify PM.

TestAmerica Portland

Sample Receiving Checklist

Work Order #: PSC0470

Login Checks:

Initials: BLE

N/A	Yes	No	
	☒	☐	21. Sufficient volume provided for all analysis? If no, document on NOD & contact PM.
☒	☐	☐	22. Sufficient volume provided for client requested MS/MSD or matrix duplicates? If no, document on NOD and contact PM.
	☒	☐	23. Did the chain of custody include "received by" and "relinquished by" signatures, dates and times?
☐	☒	☐	24. Were special log in instructions read and followed?
	☒	☐	25. Were tests logged checked against the COC?
☒	☐	☐	26. Were rush notices printed and delivered?
☒	☐	☐	27. Were short hold notices printed and delivered?
☒	☐	☐	28. Were subcontract COCs printed?
☒	☐	☐	29. Was HF dilution logged?

Labeling and Storage Checks:

Initials:

N/A	Yes	No	
☒	☐	☐	30. Were the subcontracted samples/containers put in Sx fridge?
☐	☒	☐	31. Were sample bottles and COC double checked for dissolved/filtered metals?
	☒	☐	32. Did the sample ID, Date, and Time from label match what was logged?
☒	☐	☐	33. Were Foreign sample stickers affixed to each container and containers stored in foreign fridge?
☒	☐	☐	34. Were HF stickers affixed to each container, and containers stored in Sx fridge?

Document any problems or discrepancies and the actions taken to resolve them on a Notice of Discrepancy form (NOD).

COP0017536

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PORTLAND, OR 9405 S.W. NIMBUS AVENUE
BEAVERTON, OR 97008-7132
ph: (503) 906.9200 fax: (503) 906.9210

ORELAP#: OR100021

May 13, 2009

Rick Fetterly
Stantec
7730 SW Mohawk Street
Tualatin, OR 97062

RE: Portland Terminal - Stormwater

Enclosed are the results of analyses for samples received by the laboratory on 04/28/09 16:00. The following list is a summary of the Work Orders contained in this report, generated on 05/13/09 16:39.

If you have any questions concerning this report, please feel free to contact me.

Work Order	Project	ProjectNumber
PSD0959	Portland Terminal - Stormwat	0922 - ConocoPhillips

TestAmerica Portland

Estella K Rieben

Estella Rieben, Project Manager

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Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	05/13/09 16:39

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MH-12 (12')	PSD0959-01	Water	04/28/09 12:20	04/28/09 16:00
WR-369	PSD0959-02	Water	04/28/09 10:45	04/28/09 16:00
WR-370	PSD0959-03	Water	04/28/09 11:05	04/28/09 16:00
WR-012	PSD0959-04	Water	04/28/09 11:10	04/28/09 16:00
TB-1 (Trip Blank)	PSD0959-05	Water	04/28/09 00:00	04/28/09 16:00
MH-X	PSD0959-06	Water	04/28/09 13:20	04/28/09 16:00

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Estella Rieben, Project Manager

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Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	05/13/09 16:39

Gasoline Hydrocarbons per NW TPH-Gx Method

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSD0959-01 (MH-12 (12'))			**Water**			**Sampled: 04/28/09 12:20**				
Gasoline Range Hydrocarbons	NW TPH-Gx	ND	-----	80.0	ug/l	1x	9050004	05/04/09 12:00	05/04/09 21:27	
Surrogate(s): 4-BFB (FID)				*101%*		*50 - 150%*	"			"
PSD0959-02 (WR-369)			**Water**			**Sampled: 04/28/09 10:45**				
Gasoline Range Hydrocarbons	NW TPH-Gx	ND	-----	80.0	ug/l	1x	9050004	05/04/09 12:00	05/04/09 21:59	
Surrogate(s): 4-BFB (FID)				*96.0%*		*50 - 150%*	"			"
PSD0959-03 (WR-370)			**Water**			**Sampled: 04/28/09 11:05**				
Gasoline Range Hydrocarbons	NW TPH-Gx	ND	-----	80.0	ug/l	1x	9050004	05/04/09 12:00	05/04/09 22:32	
Surrogate(s): 4-BFB (FID)				*96.3%*		*50 - 150%*	"			"
PSD0959-06 (MH-X)			**Water**			**Sampled: 04/28/09 13:20**				
Gasoline Range Hydrocarbons	NW TPH-Gx	ND	-----	80.0	ug/l	1x	9050004	05/04/09 12:00	05/04/09 23:37	
Surrogate(s): 4-BFB (FID)				*99.4%*		*50 - 150%*	"			"

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7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	05/13/09 16:39

Diesel and Heavy Range Hydrocarbons per NWTPH-Dx Method with Acid/Silica Gel Cleanup

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSD0959-01 (MH-12 (12'))			**Water**			**Sampled: 04/28/09 12:20**				
Diesel Range Organics	NWTPH-Dx	ND	-----	0.238	mg/l	1x	9050015	05/01/09 12:40	05/01/09 21:33	
Heavy Oil Range Hydrocarbons	"	ND	-----	0.476	"	"	"	"	"	
Surrogate(s): 1-Chlorooctadecane				*103%*		*50 - 150%*	"			"
PSD0959-02 (WR-369)			**Water**			**Sampled: 04/28/09 10:45**				
Diesel Range Organics	NWTPH-Dx	ND	-----	0.238	mg/l	1x	9050015	05/01/09 12:40	05/01/09 21:51	
Heavy Oil Range Hydrocarbons	"	ND	-----	0.476	"	"	"	"	"	
Surrogate(s): 1-Chlorooctadecane				*98.3%*		*50 - 150%*	"			"
PSD0959-03 (WR-370)			**Water**			**Sampled: 04/28/09 11:05**				
Diesel Range Organics	NWTPH-Dx	ND	-----	0.240	mg/l	1x	9050015	05/01/09 12:40	05/01/09 22:09	
Heavy Oil Range Hydrocarbons	"	ND	-----	0.481	"	"	"	"	"	
Surrogate(s): 1-Chlorooctadecane				*100%*		*50 - 150%*	"			"
PSD0959-06 (MH-X)			**Water**			**Sampled: 04/28/09 13:20**				
Diesel Range Organics	NWTPH-Dx	ND	-----	0.236	mg/l	1x	9050015	05/01/09 12:40	05/01/09 23:08	
Heavy Oil Range Hydrocarbons	"	ND	-----	0.472	"	"	"	"	"	
Surrogate(s): 1-Chlorooctadecane				*103%*		*50 - 150%*	"			"

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Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	05/13/09 16:39

Total Metals per EPA 6000/7000 Series Methods

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Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSD0959-01 (MH-12 (12'))			**Water**			**Sampled: 04/28/09 12:20**				
Arsenic	EPA 6020	ND	-----	0.00100	mg/l	1x	9050073	05/04/09 14:06	05/04/09 21:32	
Barium	"	**0.0179**	-----	0.00100	"	"	"	"	"	
Cadmium	"	ND	-----	0.000500	"	"	"	"	"	
Chromium	"	ND	-----	0.00200	"	"	"	"	"	
Copper	"	**0.00477**	-----	0.00200	"	"	"	"	"	
Lead	"	ND	-----	0.00100	"	"	"	"	"	
Manganese	"	**0.0948**	-----	0.00200	"	"	"	"	"	
Selenium	"	ND	-----	0.000500	"	"	"	"	"	
Silver	"	ND	-----	0.00100	"	"	"	"	"	
Zinc	"	**0.0945**	-----	0.00500	"	"	"	"	"	
PSD0959-02 (WR-369)			**Water**			**Sampled: 04/28/09 10:45**				
Arsenic	EPA 6020	**0.00118**	-----	0.00100	mg/l	1x	9050073	05/04/09 14:06	05/04/09 21:54	
Barium	"	**0.00439**	-----	0.00100	"	"	"	"	"	
Cadmium	"	ND	-----	0.000500	"	"	"	"	"	
Chromium	"	ND	-----	0.00200	"	"	"	"	"	
Copper	"	**0.0429**	-----	0.00200	"	"	"	"	"	
Lead	"	**0.00267**	-----	0.00100	"	"	"	"	"	
Manganese	"	**0.0126**	-----	0.00200	"	"	"	"	"	
Selenium	"	ND	-----	0.000500	"	"	"	"	"	
Silver	"	ND	-----	0.00100	"	"	"	"	"	
Zinc	"	**0.0715**	-----	0.00500	"	"	"	"	"	
PSD0959-03 (WR-370)			**Water**			**Sampled: 04/28/09 11:05**				
Arsenic	EPA 6020	**0.00279**	-----	0.00100	mg/l	1x	9050073	05/04/09 14:06	05/04/09 22:01	
Barium	"	**0.00954**	-----	0.00100	"	"	"	"	"	
Cadmium	"	ND	-----	0.000500	"	"	"	"	"	
Chromium	"	ND	-----	0.00200	"	"	"	"	"	
Copper	"	**0.0706**	-----	0.00200	"	"	"	"	"	
Lead	"	**0.00326**	-----	0.00100	"	"	"	"	"	
Manganese	"	**0.0356**	-----	0.00200	"	"	"	"	"	
Selenium	"	ND	-----	0.000500	"	"	"	"	"	
Silver	"	ND	-----	0.00100	"	"	"	"	"	
Zinc	"	**0.0700**	-----	0.00500	"	"	"	"	"	

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Estella K Rieben

Estella Rieben, Project Manager

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PORTLAND, OR 9405 S.W. NIMBUS AVENUE
BEAVERTON, OR 97008-7132
ph: (503) 906.9200 fax: (503) 906.9210

Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	05/13/09 16:39

Total Metals per EPA 6000/7000 Series Methods

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSD0959-04 (WR-012)			**Water**			**Sampled: 04/28/09 11:10**				
Arsenic	EPA 6020	ND	-----	0.00100	mg/l	1x	9050073	05/04/09 14:06	05/04/09 22:09	
Barium	"	**0.00657**	-----	0.00100	"	"	"	"	"	
Cadmium	"	**0.000760**	-----	0.000500	"	"	"	"	"	
Chromium	"	ND	-----	0.00200	"	"	"	"	"	
Copper	"	**0.00313**	-----	0.00200	"	"	"	"	"	
Lead	"	**0.0168**	-----	0.00100	"	"	"	"	"	
Manganese	"	**0.0151**	-----	0.00200	"	"	"	"	"	
Selenium	"	ND	-----	0.000500	"	"	"	"	"	
Silver	"	ND	-----	0.00100	"	"	"	"	"	
Zinc	"	**0.298**	-----	0.00500	"	"	"	"	"	
PSD0959-06 (MH-X)			**Water**			**Sampled: 04/28/09 13:20**				
Arsenic	EPA 6020	**0.00190**	-----	0.00100	mg/l	1x	9050073	05/04/09 14:06	05/04/09 22:16	
Barium	"	**0.0105**	-----	0.00100	"	"	"	"	"	
Cadmium	"	ND	-----	0.000500	"	"	"	"	"	
Chromium	"	ND	-----	0.00200	"	"	"	"	"	
Copper	"	**0.00438**	-----	0.00200	"	"	"	"	"	
Lead	"	**0.00184**	-----	0.00100	"	"	"	"	"	
Manganese	"	**0.0262**	-----	0.00200	"	"	"	"	"	
Selenium	"	ND	-----	0.000500	"	"	"	"	"	
Silver	"	ND	-----	0.00100	"	"	"	"	"	
Zinc	"	**0.157**	-----	0.00500	"	"	"	"	"	

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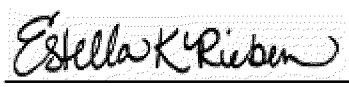

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Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	05/13/09 16:39

Total Mercury per EPA Method 7470A

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSD0959-01 (MH-12 (12'))			**Water**			**Sampled: 04/28/09 12:20**				
Mercury	EPA 7470A	ND	-----	0.000200	mg/l	1x	9041131	04/30/09 14:47	05/01/09 09:08	
PSD0959-02 (WR-369)			**Water**			**Sampled: 04/28/09 10:45**				
Mercury	EPA 7470A	ND	-----	0.000200	mg/l	1x	9041131	04/30/09 14:47	05/01/09 09:16	
PSD0959-03 (WR-370)			**Water**			**Sampled: 04/28/09 11:05**				
Mercury	EPA 7470A	ND	-----	0.000200	mg/l	1x	9041131	04/30/09 14:47	05/01/09 09:18	
PSD0959-04 (WR-012)			**Water**			**Sampled: 04/28/09 11:10**				
Mercury	EPA 7470A	ND	-----	0.000200	mg/l	1x	9041131	04/30/09 14:47	05/01/09 09:20	
PSD0959-06 (MH-X)			**Water**			**Sampled: 04/28/09 13:20**				
Mercury	EPA 7470A	ND	-----	0.000200	mg/l	1x	9041131	04/30/09 14:47	05/01/09 09:23	

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Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	05/13/09 16:39

Organochlorine Pesticides per EPA Method 8081A

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSD0959-01 (MH-12 (12'))		**Water**				**Sampled: 04/28/09 12:20**				**RL4**
Aldrin	EPA 8081A	ND	-----	0.0190	ug/l	1x	9050107	05/05/09 16:15	05/08/09 20:17	
alpha-BHC	"	ND	-----	0.0190	"	"	"	"	"	
beta-BHC	"	ND	-----	0.0190	"	"	"	"	"	
delta-BHC	"	ND	-----	0.0190	"	"	"	"	"	
gamma-BHC (Lindane)	"	ND	-----	0.0190	"	"	"	"	"	
gamma-Chlordane	"	ND	-----	0.0190	"	"	"	"	"	
alpha-Chlordane	"	ND	-----	0.0190	"	"	"	"	"	
Chlordane (tech)	"	ND	-----	0.190	"	"	"	"	"	
4,4´-DDD	"	ND	-----	0.0190	"	"	"	"	"	
4,4´-DDE	"	ND	-----	0.0190	"	"	"	"	"	
4,4´-DDT	"	ND	-----	0.0190	"	"	"	"	"	
Dieldrin	"	ND	-----	0.0190	"	"	"	"	"	
Endosulfan I	"	ND	-----	0.0190	"	"	"	"	"	
Endosulfan II	"	ND	-----	0.0190	"	"	"	"	"	
Endosulfan sulfate	"	ND	-----	0.0190	"	"	"	"	"	
Endrin	"	ND	-----	0.0190	"	"	"	"	"	
Endrin aldehyde	"	ND	-----	0.0190	"	"	"	"	"	
Endrin ketone	"	ND	-----	0.0190	"	"	"	"	"	
Heptachlor	"	ND	-----	0.0190	"	"	"	"	"	
Heptachlor epoxide	"	ND	-----	0.0190	"	"	"	"	"	
Methoxychlor	"	ND	-----	0.0190	"	"	"	"	"	
Toxaphene	"	ND	-----	0.476	"	"	"	"	"	
Surrogate(s): 2,4,5,6-Tetrachloro-m-xylene				*57.3%*		*16 - 137 %*	"		"	
PSD0959-02 (WR-369)		**Water**				**Sampled: 04/28/09 10:45**				**RL4**
Aldrin	EPA 8081A	ND	-----	0.0190	ug/l	1x	9050107	05/05/09 16:15	05/08/09 20:43	
alpha-BHC	"	ND	-----	0.0190	"	"	"	"	"	
beta-BHC	"	ND	-----	0.0381	"	"	"	"	"	**RL1**
delta-BHC	"	ND	-----	0.0190	"	"	"	"	"	
gamma-BHC (Lindane)	"	ND	-----	0.0190	"	"	"	"	"	
gamma-Chlordane	"	ND	-----	0.0190	"	"	"	"	"	
alpha-Chlordane	"	ND	-----	0.0190	"	"	"	"	"	
Chlordane (tech)	"	ND	-----	0.190	"	"	"	"	"	
4,4´-DDD	"	ND	-----	0.0190	"	"	"	"	"	
4,4´-DDE	"	ND	-----	0.0190	"	"	"	"	"	
4,4´-DDT	"	ND	-----	0.0190	"	"	"	"	"	

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Estella Rieben, Project Manager

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Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	05/13/09 16:39

Organochlorine Pesticides per EPA Method 8081A

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSD0959-02 (WR-369)			**Water**			**Sampled: 04/28/09 10:45**				**RL4**
Dieldrin	EPA 8081A	ND	-----	0.0190	ug/l	1x	9050107	05/05/09 16:15	05/08/09 20:43	
Endosulfan I	"	ND	-----	0.0190	"	"	"	"	"	
Endosulfan II	"	ND	-----	0.0190	"	"	"	"	"	
Endosulfan sulfate	"	ND	-----	0.0190	"	"	"	"	"	
Endrin	"	ND	-----	0.0190	"	"	"	"	"	
Endrin aldehyde	"	ND	-----	0.0190	"	"	"	"	"	
Endrin ketone	"	ND	-----	0.0190	"	"	"	"	"	
Heptachlor	"	ND	-----	0.0190	"	"	"	"	"	
Heptachlor epoxide	"	ND	-----	0.0190	"	"	"	"	"	
Methoxychlor	"	ND	-----	0.0190	"	"	"	"	"	
Toxaphene	"	ND	-----	0.476	"	"	"	"	"	
Surrogate(s): 2,4,5,6-Tetrachloro-m-xylene				*56.8%*		*16 - 137%*	"		"	
PSD0959-03 (WR-370)			**Water**			**Sampled: 04/28/09 11:05**				**RL4**
Aldrin	EPA 8081A	ND	-----	0.0190	ug/l	1x	9050107	05/05/09 16:15	05/08/09 21:09	
alpha-BHC	"	ND	-----	0.0190	"	"	"	"	"	
beta-BHC	"	ND	-----	0.0381	"	"	"	"	"	**RL1**
delta-BHC	"	ND	-----	0.0190	"	"	"	"	"	
gamma-BHC (Lindane)	"	ND	-----	0.0190	"	"	"	"	"	
gamma-Chlordane	"	ND	-----	0.0190	"	"	"	"	"	
alpha-Chlordane	"	ND	-----	0.0190	"	"	"	"	"	
Chlordane (tech)	"	ND	-----	0.190	"	"	"	"	"	
4,4´-DDD	"	ND	-----	0.0190	"	"	"	"	"	
4,4´-DDE	"	ND	-----	0.0190	"	"	"	"	"	
4,4´-DDT	"	ND	-----	0.0190	"	"	"	"	"	
Dieldrin	"	ND	-----	0.0190	"	"	"	"	"	
Endosulfan I	"	ND	-----	0.0190	"	"	"	"	"	
Endosulfan II	"	ND	-----	0.0190	"	"	"	"	"	
Endosulfan sulfate	"	ND	-----	0.0190	"	"	"	"	"	
Endrin	"	ND	-----	0.0190	"	"	"	"	"	
Endrin aldehyde	"	ND	-----	0.0190	"	"	"	"	"	
Endrin ketone	"	ND	-----	0.0190	"	"	"	"	"	
Heptachlor	"	ND	-----	0.0190	"	"	"	"	"	
Heptachlor epoxide	"	ND	-----	0.0190	"	"	"	"	"	
Methoxychlor	"	ND	-----	0.0190	"	"	"	"	"	
Toxaphene	"	ND	-----	0.476	"	"	"	"	"	

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Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	05/13/09 16:39

Organochlorine Pesticides per EPA Method 8081A

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSD0959-03 (WR-370)				**Water**			**Sampled: 04/28/09 11:05**			**RL4**
Surrogate(s): 2,4,5,6-Tetrachloro-m-xylene				*54.1%*		*16 - 137 %*	*1x*		*05/08/09 21:09*	
PSD0959-06 (MH-X)				**Water**			**Sampled: 04/28/09 13:20**			**RL4**
Aldrin	EPA 8081A	ND	-----	0.0190	ug/l	1x	9050107	05/05/09 16:15	05/08/09 21:35	
alpha-BHC	"	ND	-----	0.0190	"	"	"	"	"	
beta-BHC	"	ND	-----	0.0190	"	"	"	"	"	
delta-BHC	"	ND	-----	0.0190	"	"	"	"	"	
gamma-BHC (Lindane)	"	ND	-----	0.0190	"	"	"	"	"	
gamma-Chlordane	"	ND	-----	0.0190	"	"	"	"	"	
alpha-Chlordane	"	ND	-----	0.0190	"	"	"	"	"	
Chlordane (tech)	"	ND	-----	0.190	"	"	"	"	"	
4,4´-DDD	"	ND	-----	0.0190	"	"	"	"	"	
4,4´-DDE	"	ND	-----	0.0190	"	"	"	"	"	
4,4´-DDT	"	ND	-----	0.0190	"	"	"	"	"	
Dieldrin	"	ND	-----	0.0190	"	"	"	"	"	
Endosulfan I	"	ND	-----	0.0190	"	"	"	"	"	
Endosulfan II	"	ND	-----	0.0190	"	"	"	"	"	
Endosulfan sulfate	"	ND	-----	0.0190	"	"	"	"	"	
Endrin	"	ND	-----	0.0190	"	"	"	"	"	
Endrin aldehyde	"	ND	-----	0.0190	"	"	"	"	"	
Endrin ketone	"	ND	-----	0.0190	"	"	"	"	"	
Heptachlor	"	ND	-----	0.0190	"	"	"	"	"	
Heptachlor epoxide	"	ND	-----	0.0190	"	"	"	"	"	
Methoxychlor	"	ND	-----	0.0190	"	"	"	"	"	
Toxaphene	"	ND	-----	0.476	"	"	"	"	"	
Surrogate(s): 2,4,5,6-Tetrachloro-m-xylene				*61.5%*		*16 - 137 %*	"		"	

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Estella Rieben, Project Manager

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7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	05/13/09 16:39

Polychlorinated Biphenyls per EPA Method 8082

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSD0959-01 (MH-12 (12'))			**Water**			**Sampled: 04/28/09 12:20**				
Aroclor 1016	EPA 8082	ND	-----	0.190	ug/l	1x	9050109	05/05/09 16:15	05/08/09 19:06	
Aroclor 1221	"	ND	-----	0.381	"	"	"	"	"	
Aroclor 1232	"	ND	-----	0.190	"	"	"	"	"	
Aroclor 1242	"	ND	-----	0.190	"	"	"	"	"	
Aroclor 1248	"	ND	-----	0.190	"	"	"	"	"	
Aroclor 1254	"	ND	-----	0.190	"	"	"	"	"	
Aroclor 1260	"	ND	-----	0.190	"	"	"	"	"	
Surrogate(s): Decachlorobiphenyl				*52.2%*		*12 - 130%*	"			"
PSD0959-02 (WR-369)			**Water**			**Sampled: 04/28/09 10:45**				
Aroclor 1016	EPA 8082	ND	-----	0.190	ug/l	1x	9050109	05/05/09 16:15	05/08/09 19:28	
Aroclor 1221	"	ND	-----	0.381	"	"	"	"	"	
Aroclor 1232	"	ND	-----	0.190	"	"	"	"	"	
Aroclor 1242	"	ND	-----	0.190	"	"	"	"	"	
Aroclor 1248	"	ND	-----	0.190	"	"	"	"	"	
Aroclor 1254	"	ND	-----	0.190	"	"	"	"	"	
Aroclor 1260	"	ND	-----	0.190	"	"	"	"	"	
Surrogate(s): Decachlorobiphenyl				*46.8%*		*12 - 130%*	"			"
PSD0959-03 (WR-370)			**Water**			**Sampled: 04/28/09 11:05**				
Aroclor 1016	EPA 8082	ND	-----	0.190	ug/l	1x	9050109	05/05/09 16:15	05/08/09 19:50	
Aroclor 1221	"	ND	-----	0.381	"	"	"	"	"	
Aroclor 1232	"	ND	-----	0.190	"	"	"	"	"	
Aroclor 1242	"	ND	-----	0.190	"	"	"	"	"	
Aroclor 1248	"	ND	-----	0.190	"	"	"	"	"	
Aroclor 1254	"	ND	-----	0.190	"	"	"	"	"	
Aroclor 1260	"	ND	-----	0.190	"	"	"	"	"	
Surrogate(s): Decachlorobiphenyl				*44.7%*		*12 - 130%*	"			"
PSD0959-06 (MH-X)			**Water**			**Sampled: 04/28/09 13:20**				
Aroclor 1016	EPA 8082	ND	-----	0.190	ug/l	1x	9050109	05/05/09 16:15	05/08/09 20:12	
Aroclor 1221	"	ND	-----	0.381	"	"	"	"	"	
Aroclor 1232	"	ND	-----	0.190	"	"	"	"	"	
Aroclor 1242	"	ND	-----	0.190	"	"	"	"	"	
Aroclor 1248	"	ND	-----	0.190	"	"	"	"	"	

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7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	05/13/09 16:39

Polychlorinated Biphenyls per EPA Method 8082

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Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSD0959-06 (MH-X)			**Water**			**Sampled: 04/28/09 13:20**				
Aroclor 1254	EPA 8082	ND	-----	0.190	ug/l	1x	9050109	05/05/09 16:15	05/08/09 20:12	
Aroclor 1260	"	ND	-----	0.190	"	"	"	"	"	
Surrogate(s): Decachlorobiphenyl				*53.9%*		*12 - 130%*	"			"

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7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	05/13/09 16:39

Volatile Organic Compounds per EPA Method 8260B

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSD0959-01 (MH-12 (12'))			**Water**			**Sampled: 04/28/09 12:20**				
Benzene	EPA 8260B	ND	-----	0.200	ug/l	1x	9050225	05/07/09 10:00	05/07/09 15:10	
Ethylbenzene	"	**7.78**	-----	1.00	"	"	"	"	"	
Methyl tert-butyl ether	"	ND	-----	1.00	"	"	"	"	"	
Toluene	"	ND	-----	1.00	"	"	"	"	"	
o-Xylene	"	ND	-----	1.00	"	"	"	"	"	
m,p-Xylene	"	ND	-----	2.00	"	"	"	"	"	
Surrogate(s):	*Dibromofluoromethane*			*100%*		*80 - 120%*	"			"
	1,2-DCA-d4			*104%*		*80 - 120%*	"			"
	Toluene-d8			*103%*		*80 - 120%*	"			"
	4-BFB			*100%*		*80 - 120%*	"			"
PSD0959-02 (WR-369)			**Water**			**Sampled: 04/28/09 10:45**				
Benzene	EPA 8260B	ND	-----	0.200	ug/l	1x	9050225	05/07/09 10:00	05/07/09 15:38	
Ethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
Methyl tert-butyl ether	"	ND	-----	1.00	"	"	"	"	"	
Toluene	"	ND	-----	1.00	"	"	"	"	"	
o-Xylene	"	ND	-----	1.00	"	"	"	"	"	
m,p-Xylene	"	ND	-----	2.00	"	"	"	"	"	
Surrogate(s):	*Dibromofluoromethane*			*100%*		*80 - 120%*	"			"
	1,2-DCA-d4			*103%*		*80 - 120%*	"			"
	Toluene-d8			*99.8%*		*80 - 120%*	"			"
	4-BFB			*98.2%*		*80 - 120%*	"			"
PSD0959-03 (WR-370)			**Water**			**Sampled: 04/28/09 11:05**				
Benzene	EPA 8260B	ND	-----	0.200	ug/l	1x	9050225	05/07/09 10:00	05/07/09 16:05	
Ethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
Methyl tert-butyl ether	"	ND	-----	1.00	"	"	"	"	"	
Toluene	"	ND	-----	1.00	"	"	"	"	"	
o-Xylene	"	ND	-----	1.00	"	"	"	"	"	
m,p-Xylene	"	ND	-----	2.00	"	"	"	"	"	
Surrogate(s):	*Dibromofluoromethane*			*98.4%*		*80 - 120%*	"			"
	1,2-DCA-d4			*102%*		*80 - 120%*	"			"
	Toluene-d8			*102%*		*80 - 120%*	"			"
	4-BFB			*98.6%*		*80 - 120%*	"			"

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Estella K Rieben

Estella Rieben, Project Manager

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ph: (503) 906.9200 fax: (503) 906.9210

Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	05/13/09 16:39

Volatile Organic Compounds per EPA Method 8260B

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSD0959-05 (TB-1 (Trip Blank))		**Water**				**Sampled: 04/28/09 00:00**				
Benzene	EPA 8260B	ND	-----	0.200	ug/l	1x	9050225	05/07/09 10:00	05/07/09 14:16	
Ethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
Methyl tert-butyl ether	"	ND	-----	1.00	"	"	"	"	"	
Toluene	"	ND	-----	1.00	"	"	"	"	"	
o-Xylene	"	ND	-----	1.00	"	"	"	"	"	
m,p-Xylene	"	ND	-----	2.00	"	"	"	"	"	
Surrogate(s):	*Dibromofluoromethane*			*99.5%*		*80 - 120%*	"			"
	1,2-DCA-d4			*104%*		*80 - 120%*	"			"
	Toluene-d8			*102%*		*80 - 120%*	"			"
	4-BFB			*96.5%*		*80 - 120%*	"			"
PSD0959-06 (MH-X)		**Water**				**Sampled: 04/28/09 13:20**				
Benzene	EPA 8260B	ND	-----	0.200	ug/l	1x	9050225	05/07/09 10:00	05/07/09 16:32	
Ethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
Methyl tert-butyl ether	"	ND	-----	1.00	"	"	"	"	"	
Toluene	"	ND	-----	1.00	"	"	"	"	"	
o-Xylene	"	ND	-----	1.00	"	"	"	"	"	
m,p-Xylene	"	ND	-----	2.00	"	"	"	"	"	
Surrogate(s):	*Dibromofluoromethane*			*98.6%*		*80 - 120%*	"			"
	1,2-DCA-d4			*101%*		*80 - 120%*	"			"
	Toluene-d8			*100%*		*80 - 120%*	"			"
	4-BFB			*96.6%*		*80 - 120%*	"			"

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Estella Rieben, Project Manager

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7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	05/13/09 16:39

Polynuclear Aromatic Compounds per EPA 8270M-SIM

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSD0959-01 (MH-12 (12'))			**Water**			**Sampled: 04/28/09 12:20**				
2-Methylnaphthalene	EPA 8270m	ND	-----	0.0943	ug/l	1x	9050110	05/05/09 16:50	05/08/09 16:19	
Acenaphthene	"	ND	-----	0.0943	"	"	"	"	"	
Acenaphthylene	"	ND	-----	0.0943	"	"	"	"	"	
Anthracene	"	ND	-----	0.0943	"	"	"	"	"	
Benzo (a) anthracene	"	ND	-----	0.00472	"	"	"	"	"	
Benzo (a) pyrene	"	ND	-----	0.00472	"	"	"	"	"	
Benzo (b) fluoranthene	"	ND	-----	0.00472	"	"	"	"	"	
Benzo (ghi) perylene	"	ND	-----	0.0943	"	"	"	"	"	
Benzo (k) fluoranthene	"	ND	-----	0.00472	"	"	"	"	"	
Chrysene	"	**0.00907**	-----	0.00472	"	"	"	"	"	
Dibenzo (a,h) anthracene	"	ND	-----	0.00472	"	"	"	"	"	
Fluoranthene	"	ND	-----	0.0943	"	"	"	"	"	
Fluorene	"	ND	-----	0.0943	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	"	ND	-----	0.00472	"	"	"	"	"	
Naphthalene	"	ND	-----	0.0943	"	"	"	"	"	
Phenanthrene	"	ND	-----	0.0943	"	"	"	"	"	
Pyrene	"	ND	-----	0.0943	"	"	"	"	"	
Surrogate(s): *Fluorene-d10*				*75.8%*		*25 - 125%*	"			"
Pyrene-d10				*71.3%*		*23 - 150%*	"			"
Benzo (a) pyrene-d12				*65.2%*		*10 - 125%*	"			"
PSD0959-02 (WR-369)			**Water**			**Sampled: 04/28/09 10:45**				
2-Methylnaphthalene	EPA 8270m	ND	-----	0.0943	ug/l	1x	9050110	05/05/09 16:50	05/08/09 16:52	
Acenaphthene	"	ND	-----	0.0943	"	"	"	"	"	
Acenaphthylene	"	ND	-----	0.0943	"	"	"	"	"	
Anthracene	"	ND	-----	0.0943	"	"	"	"	"	
Benzo (a) anthracene	"	ND	-----	0.00472	"	"	"	"	"	
Benzo (a) pyrene	"	ND	-----	0.00472	"	"	"	"	"	
Benzo (b) fluoranthene	"	ND	-----	0.00472	"	"	"	"	"	
Benzo (ghi) perylene	"	ND	-----	0.0943	"	"	"	"	"	
Benzo (k) fluoranthene	"	ND	-----	0.00472	"	"	"	"	"	
Chrysene	"	ND	-----	0.00472	"	"	"	"	"	
Dibenzo (a,h) anthracene	"	ND	-----	0.00472	"	"	"	"	"	
Fluoranthene	"	ND	-----	0.0943	"	"	"	"	"	
Fluorene	"	ND	-----	0.0943	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	"	ND	-----	0.00472	"	"	"	"	"	

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Estella Rieben, Project Manager

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Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	05/13/09 16:39

Polynuclear Aromatic Compounds per EPA 8270M-SIM

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSD0959-02 (WR-369)			**Water**			**Sampled: 04/28/09 10:45**				
Naphthalene	EPA 8270m	ND	-----	0.0943	ug/l	1x	9050110	05/05/09 16:50	05/08/09 16:52	
Phenanthrene	"	ND	-----	0.0943	"	"	"	"	"	
Pyrene	"	ND	-----	0.0943	"	"	"	"	"	
Surrogate(s): Fluorene-d10				*68.5%*		*25 - 125 %*	"			"
Pyrene-d10				*58.3%*		*23 - 150 %*	"			"
Benzo (a) pyrene-d12				*56.8%*		*10 - 125 %*	"			"
PSD0959-03 (WR-370)			**Water**			**Sampled: 04/28/09 11:05**				
2-Methylnaphthalene	EPA 8270m	ND	-----	0.0952	ug/l	1x	9050110	05/05/09 16:50	05/08/09 17:20	
Acenaphthene	"	ND	-----	0.0952	"	"	"	"	"	
Acenaphthylene	"	ND	-----	0.0952	"	"	"	"	"	
Anthracene	"	ND	-----	0.0952	"	"	"	"	"	
Benzo (a) anthracene	"	ND	-----	0.00476	"	"	"	"	"	
Benzo (a) pyrene	"	ND	-----	0.00476	"	"	"	"	"	
Benzo (b) fluoranthene	"	ND	-----	0.00476	"	"	"	"	"	
Benzo (ghi) perylene	"	ND	-----	0.0952	"	"	"	"	"	
Benzo (k) fluoranthene	"	ND	-----	0.00476	"	"	"	"	"	
Chrysene	"	ND	-----	0.00476	"	"	"	"	"	
Dibenzo (a,h) anthracene	"	ND	-----	0.00476	"	"	"	"	"	
Fluoranthene	"	ND	-----	0.0952	"	"	"	"	"	
Fluorene	"	ND	-----	0.0952	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	"	ND	-----	0.00476	"	"	"	"	"	
Naphthalene	"	ND	-----	0.0952	"	"	"	"	"	
Phenanthrene	"	ND	-----	0.0952	"	"	"	"	"	
Pyrene	"	ND	-----	0.0952	"	"	"	"	"	
Surrogate(s): Fluorene-d10				*64.9%*		*25 - 125 %*	"			"
Pyrene-d10				*55.1%*		*23 - 150 %*	"			"
Benzo (a) pyrene-d12				*55.1%*		*10 - 125 %*	"			"
PSD0959-06 (MH-X)			**Water**			**Sampled: 04/28/09 13:20**				
2-Methylnaphthalene	EPA 8270m	ND	-----	0.0943	ug/l	1x	9050110	05/05/09 16:50	05/08/09 17:49	
Acenaphthene	"	ND	-----	0.0943	"	"	"	"	"	
Acenaphthylene	"	ND	-----	0.0943	"	"	"	"	"	
Anthracene	"	ND	-----	0.0943	"	"	"	"	"	
Benzo (a) anthracene	"	**0.00623**	-----	0.00472	"	"	"	"	"	
Benzo (a) pyrene	"	**0.00835**	-----	0.00472	"	"	"	"	"	

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Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	05/13/09 16:39

Polynuclear Aromatic Compounds per EPA 8270M-SIM

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSD0959-06 (MH-X)			**Water**			**Sampled: 04/28/09 13:20**				
Benzo (b) fluoranthene	EPA 8270m	**0.0134**	-----	0.00472	ug/l	1x	9050110	05/05/09 16:50	05/08/09 17:49	
Benzo (ghi) perylene	"	ND	-----	0.0943	"	"	"	"	"	
Benzo (k) fluoranthene	"	**0.00969**	-----	0.00472	"	"	"	"	"	
Chrysene	"	**0.0161**	-----	0.00472	"	"	"	"	"	
Dibenzo (a,h) anthracene	"	ND	-----	0.00472	"	"	"	"	"	
Fluoranthene	"	ND	-----	0.0943	"	"	"	"	"	
Fluorene	"	ND	-----	0.0943	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	"	**0.00907**	-----	0.00472	"	"	"	"	"	
Naphthalene	"	ND	-----	0.0943	"	"	"	"	"	
Phenanthrene	"	ND	-----	0.0943	"	"	"	"	"	
Pyrene	"	ND	-----	0.0943	"	"	"	"	"	
Surrogate(s): *Fluorene-d10*				*59.9%*		*25 - 125 %*	"			"
Pyrene-d10				*67.7%*		*23 - 150 %*	"			"
Benzo (a) pyrene-d12				*68.4%*		*10 - 125 %*	"			"

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7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	05/13/09 16:39

Phthalates per EPA 8270-SIM

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSD0959-01 (MH-12 (12'))			**Water**			**Sampled: 04/28/09 12:20**				
Dimethyl phthalate	EPA 8270m	ND	-----	0.943	ug/l	1x	9050110	05/05/09 16:50	05/12/09 18:50	
Diethyl phthalate	"	ND	-----	0.943	"	"	"	"	"	
Di-n-butyl phthalate	"	ND	-----	0.943	"	"	"	"	"	
Butyl benzyl phthalate	"	ND	-----	0.943	"	"	"	"	"	
Bis(2-ethylhexyl)phthalate	"	ND	-----	0.943	"	"	"	"	"	
Di-n-octyl phthalate	"	ND	-----	0.943	"	"	"	"	"	
Surrogate(s): 2-Fluorobiphenyl				*66.4%*		*10 - 150%*	"			"
p-Terphenyl-d14				*95.8%*		*10 - 150%*	"			"
PSD0959-02 (WR-369)			**Water**			**Sampled: 04/28/09 10:45**				
Dimethyl phthalate	EPA 8270m	**0.949**	-----	0.943	ug/l	1x	9050110	05/05/09 16:50	05/12/09 19:26	
Diethyl phthalate	"	ND	-----	0.943	"	"	"	"	"	
Di-n-butyl phthalate	"	ND	-----	0.943	"	"	"	"	"	
Butyl benzyl phthalate	"	ND	-----	0.943	"	"	"	"	"	
Bis(2-ethylhexyl)phthalate	"	ND	-----	0.943	"	"	"	"	"	
Di-n-octyl phthalate	"	ND	-----	0.943	"	"	"	"	"	
Surrogate(s): 2-Fluorobiphenyl				*70.2%*		*10 - 150%*	"			"
p-Terphenyl-d14				*89.4%*		*10 - 150%*	"			"
PSD0959-03 (WR-370)			**Water**			**Sampled: 04/28/09 11:05**				
Dimethyl phthalate	EPA 8270m	**1.31**	-----	0.952	ug/l	1x	9050110	05/05/09 16:50	05/12/09 20:01	
Diethyl phthalate	"	ND	-----	0.952	"	"	"	"	"	
Di-n-butyl phthalate	"	ND	-----	0.952	"	"	"	"	"	
Butyl benzyl phthalate	"	ND	-----	0.952	"	"	"	"	"	
Bis(2-ethylhexyl)phthalate	"	ND	-----	0.952	"	"	"	"	"	
Di-n-octyl phthalate	"	ND	-----	0.952	"	"	"	"	"	
Surrogate(s): 2-Fluorobiphenyl				*70.5%*		*10 - 150%*	"			"
p-Terphenyl-d14				*118%*		*10 - 150%*	"			"
PSD0959-06 (MH-X)			**Water**			**Sampled: 04/28/09 13:20**				
Dimethyl phthalate	EPA 8270m	ND	-----	0.943	ug/l	1x	9050110	05/05/09 16:50	05/12/09 20:38	
Diethyl phthalate	"	ND	-----	0.943	"	"	"	"	"	
Di-n-butyl phthalate	"	ND	-----	0.943	"	"	"	"	"	
Butyl benzyl phthalate	"	ND	-----	0.943	"	"	"	"	"	
Bis(2-ethylhexyl)phthalate	"	ND	-----	0.943	"	"	"	"	"	
Di-n-octyl phthalate	"	ND	-----	0.943	"	"	"	"	"	

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7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	05/13/09 16:39

Phthalates per EPA 8270-SIM

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSD0959-06 (MH-X)			**Water**			**Sampled: 04/28/09 13:20**				
Surrogate(s): 2-Fluorobiphenyl				*59.3%*		*10 - 150%*	*1x*		*05/12/09 20:38*	
p-Terphenyl-d14				*82.7%*		*10 - 150%*	*"*		*"*	

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Conventional Chemistry Parameters per Standard Methods

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSD0959-01 (MH-12 (12'))			**Water**			**Sampled: 04/28/09 12:20**				
Total Organic Carbon	SM 5310C	**3.61**	-----	1.00	mg/l	1x	9041096	04/30/09 08:05	04/30/09 17:33	
PSD0959-02 (WR-369)			**Water**			**Sampled: 04/28/09 10:45**				
Total Organic Carbon	SM 5310C	**3.61**	-----	1.00	mg/l	1x	9041096	04/30/09 08:05	04/30/09 17:33	
PSD0959-03 (WR-370)			**Water**			**Sampled: 04/28/09 11:05**				
Total Organic Carbon	SM 5310C	**10.3**	-----	1.00	mg/l	1x	9041096	04/30/09 08:05	04/30/09 17:33	
PSD0959-06 (MH-X)			**Water**			**Sampled: 04/28/09 13:20**				
Total Organic Carbon	SM 5310C	**1.34**	-----	1.00	mg/l	1x	9041096	04/30/09 08:05	04/30/09 17:33	

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7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	05/13/09 16:39

Gasoline Hydrocarbons per NW TPH-Gx Method - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 9050004 **Water Preparation Method: EPA 5030B**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (9050004-BLK1)								**Extracted: 05/04/09 12:00**						
Gasoline Range Hydrocarbons	NW TPH-Gx	ND	---	80.0	ug/l	1x	--	--	--	--	--	--	05/04/09 14:55	
Surrogate(s): 4-BFB (FID)		*Recovery: 98.1%*			*Limits: 50-150%*	"							*05/04/09 14:55*	
LCS (9050004-BS2)								**Extracted: 05/04/09 12:00**						
Gasoline Range Hydrocarbons	NW TPH-Gx	495	---	80.0	ug/l	1x	--	500	99.1%	(70-130)	--	--	05/05/09 01:48	
Surrogate(s): 4-BFB (FID)		*Recovery: 96.3%*			*Limits: 50-150%*	"							*05/05/09 01:48*	
LCS Dup (9050004-BSD2)								**Extracted: 05/04/09 12:00**						
Gasoline Range Hydrocarbons	NW TPH-Gx	499	---	80.0	ug/l	1x	--	500	99.8%	(70-130)	0.773%	(35)	05/05/09 02:21	
Surrogate(s): 4-BFB (FID)		*Recovery: 97.5%*			*Limits: 50-150%*	"							*05/05/09 02:21*	
Duplicate (9050004-DUP1)							**QC Source: PSD0959-06**						**Extracted: 05/04/09 12:00**	
Gasoline Range Hydrocarbons	NW TPH-Gx	ND	---	80.0	ug/l	1x	ND	--	--	--	NR	(35)	05/04/09 23:04	
Surrogate(s): 4-BFB (FID)		*Recovery: 95.7%*			*Limits: 50-150%*	"							*05/04/09 23:04*	

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Estella Rieben, Project Manager

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PORTLAND, OR 9405 S.W. NIMBUS AVENUE
BEAVERTON, OR 97008-7132
ph: (503) 906.9200 fax: (503) 906.9210

Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	05/13/09 16:39

Diesel and Heavy Range Hydrocarbons per NWTPH-Dx Method with Acid/Silica Gel Cleanup - Laboratory Quality Control Results

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QC Batch: 9050015 **Water Preparation Method: EPA 3510 Fuels**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (9050015-BLK1)							**Extracted: 05/01/09 12:40**							
Diesel Range Organics	NWTPH-Dx	ND	---	0.250	mg/l	1x	--	--	--	--	--	--	05/01/09 20:00	
Heavy Oil Range Hydrocarbons	"	ND	---	0.500	"	"	--	--	--	--	--	--	"	
Surrogate(s): 1-Chlorooctadecane		*Recovery: 108%*			*Limits: 50-150%*	"							*05/01/09 20:00*	
LCS (9050015-BS1)							**Extracted: 05/01/09 12:40**							
Diesel Range Organics	NWTPH-Dx	2.83	---	0.250	mg/l	1x	--	2.50	113%	(50-150)	--	--	05/01/09 20:19	
Heavy Oil Range Hydrocarbons	"	1.51	---	0.500	"	"	--	1.50	101%	"	--	--	"	
Surrogate(s): 1-Chlorooctadecane		*Recovery: 104%*			*Limits: 50-150%*	"							*05/01/09 20:19*	
LCS Dup (9050015-BSD1)							**Extracted: 05/01/09 12:40**							
Diesel Range Organics	NWTPH-Dx	2.90	---	0.250	mg/l	1x	--	2.50	116%	(50-150)	2.26%	(50)	05/01/09 20:37	
Heavy Oil Range Hydrocarbons	"	1.52	---	0.500	"	"	--	1.50	101%	"	0.554%	"	"	
Surrogate(s): 1-Chlorooctadecane		*Recovery: 106%*			*Limits: 50-150%*	"							*05/01/09 20:37*	

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7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	05/13/09 16:39

Total Metals per EPA 6000/7000 Series Methods - Laboratory Quality Control Results

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QC Batch: 9050073 **Water Preparation Method: EPA 200/3005**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (9050073-BLK1)								**Extracted: 05/04/09 14:06**						
Arsenic	EPA 6020	ND	---	0.00100	mg/l	1x	--	--	--	--	--	--	05/04/09 20:26	
Barium	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Cadmium	"	ND	---	0.000500	"	"	--	--	--	--	--	--	"	
Chromium	"	ND	---	0.00200	"	"	--	--	--	--	--	--	"	
Copper	"	ND	---	0.00200	"	"	--	--	--	--	--	--	"	
Lead	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Manganese	"	ND	---	0.00200	"	"	--	--	--	--	--	--	"	
Selenium	"	ND	---	0.000500	"	"	--	--	--	--	--	--	"	
Silver	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Zinc	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	
LCS (9050073-BS1)								**Extracted: 05/04/09 14:06**						
Arsenic	EPA 6020	0.0982	---	0.00100	mg/l	1x	--	0.100	98.2%	(80-120)	--	--	05/04/09 20:34	
Barium	"	0.0956	---	0.00100	"	"	--	"	95.6%	"	--	--	"	
Cadmium	"	0.0915	---	0.000500	"	"	--	"	91.5%	"	--	--	"	
Chromium	"	0.100	---	0.00200	"	"	--	"	100%	"	--	--	"	
Copper	"	0.0949	---	0.00200	"	"	--	"	94.9%	"	--	--	"	
Lead	"	0.0985	---	0.00100	"	"	--	"	98.5%	"	--	--	"	
Manganese	"	0.102	---	0.00200	"	"	--	"	102%	"	--	--	"	
Selenium	"	0.100	---	0.000500	"	"	--	"	100%	"	--	--	"	
Silver	"	0.0492	---	0.00100	"	"	--	0.0500	98.4%	"	--	--	"	
Zinc	"	0.101	---	0.00500	"	"	--	0.100	101%	"	--	--	"	
Duplicate (9050073-DUP1)						**QC Source: PSD0958-01**			**Extracted: 05/04/09 14:06**					
Arsenic	EPA 6020	ND	---	0.00100	mg/l	1x	ND	--	--	--	NR	(20)	05/04/09 20:48	
Barium	"	ND	---	0.00100	"	"	ND	--	--	--	NR	"	"	
Cadmium	"	ND	---	0.000500	"	"	ND	--	--	--	NR	"	"	
Chromium	"	ND	---	0.00200	"	"	ND	--	--	--	NR	"	"	
Copper	"	ND	---	0.00200	"	"	ND	--	--	--	NR	"	"	
Lead	"	ND	---	0.00100	"	"	ND	--	--	--	NR	"	"	
Manganese	"	ND	---	0.00200	"	"	ND	--	--	--	19.2%	"	"	
Selenium	"	ND	---	0.000500	"	"	ND	--	--	--	NR	"	"	
Silver	"	ND	---	0.00100	"	"	ND	--	--	--	NR	"	"	
Zinc	"	ND	---	0.00500	"	"	ND	--	--	--	2.67%	"	"	

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Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	05/13/09 16:39

Total Metals per EPA 6000/7000 Series Methods - Laboratory Quality Control Results

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QC Batch: 9050073 **Water Preparation Method: EPA 200/3005**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Matrix Spike (9050073-MS1)				**QC Source: PSD0958-02**				**Extracted: 05/04/09 14:06**						
Arsenic	EPA 6020	0.101	---	0.00100	mg/l	1x	0.00274	0.100	98.4%	(75-125)	--	--	05/04/09 21:11	
Barium	"	0.115	---	0.00100	"	"	0.0190	"	95.6%	"	--	--	"	
Cadmium	"	0.0912	---	0.000500	"	"	ND	"	91.2%	"	--	--	"	
Chromium	"	0.101	---	0.00200	"	"	0.00702	"	93.8%	"	--	--	"	
Copper	"	0.0933	---	0.00200	"	"	0.00372	"	89.6%	"	--	--	"	
Lead	"	0.0970	---	0.00100	"	"	0.00164	"	95.4%	"	--	--	"	
Manganese	"	0.113	---	0.00200	"	"	0.0166	"	96.3%	"	--	--	"	
Selenium	"	0.102	---	0.000500	"	"	ND	"	102%	"	--	--	"	
Silver	"	0.0482	---	0.00100	"	"	0.000310	0.0500	95.7%	"	--	--	"	
Zinc	"	0.107	---	0.00500	"	"	0.00546	0.100	102%	"	--	--	"	
Matrix Spike (9050073-MS2)				**QC Source: PSD0959-06**				**Extracted: 05/04/09 14:06**						
Arsenic	EPA 6020	0.0999	---	0.00100	mg/l	1x	0.00190	0.100	98.0%	(75-125)	--	--	05/04/09 22:23	
Barium	"	0.108	---	0.00100	"	"	0.0105	"	97.1%	"	--	--	"	
Cadmium	"	0.0937	---	0.000500	"	"	0.000160	"	93.6%	"	--	--	"	
Chromium	"	0.0988	---	0.00200	"	"	0.000690	"	98.1%	"	--	--	"	
Copper	"	0.0976	---	0.00200	"	"	0.00438	"	93.3%	"	--	--	"	
Lead	"	0.101	---	0.00100	"	"	0.00184	"	99.1%	"	--	--	"	
Manganese	"	0.122	---	0.00200	"	"	0.0262	"	96.1%	"	--	--	"	
Selenium	"	0.105	---	0.000500	"	"	0.0000800	"	105%	"	--	--	"	
Silver	"	0.0497	---	0.00100	"	"	ND	0.0500	99.4%	"	--	--	"	
Zinc	"	0.255	---	0.00500	"	"	0.157	0.100	97.5%	"	--	--	"	

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7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	05/13/09 16:39

Total Mercury per EPA Method 7470A - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 9041131 **Water Preparation Method: EPA 7470A**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (9041131-BLK1)								**Extracted: 04/30/09 14:47**						
Mercury	EPA 7470A	ND	---	0.000200	mg/l	1x	--	--	--	--	--	--	05/01/09 08:44	
LCS (9041131-BS1)								**Extracted: 04/30/09 14:47**						
Mercury	EPA 7470A	0.00497	---	0.000200	mg/l	1x	--	0.00500	99.4%	(85-115)	--	--	05/01/09 08:46	
LCS Dup (9041131-BSD1)								**Extracted: 04/30/09 14:47**						
Mercury	EPA 7470A	0.00504	---	0.000200	mg/l	1x	--	0.00500	101%	(85-115)	1.44%	(20)	05/01/09 08:50	
Duplicate (9041131-DUP1)				**QC Source: PSD0898-01**				**Extracted: 04/30/09 14:47**						
Mercury	EPA 7470A	ND	---	0.000200	mg/l	1x	ND	--	--	--	NR	(20)	05/01/09 08:53	
Matrix Spike (9041131-MS1)				**QC Source: PSD0898-01**				**Extracted: 04/30/09 14:47**						
Mercury	EPA 7470A	0.00485	---	0.000200	mg/l	1x	ND	0.00500	97.1%	(75-125)	--	--	05/01/09 08:55	
Matrix Spike Dup (9041131-MSD1)				**QC Source: PSD0898-01**				**Extracted: 04/30/09 14:47**						
Mercury	EPA 7470A	0.00473	---	0.000200	mg/l	1x	ND	0.00500	94.6%	(75-125)	2.54%	(20)	05/01/09 08:58	

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Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	05/13/09 16:39

Organochlorine Pesticides per EPA Method 8081A - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 9050107 **Water Preparation Method: EPA 3510/600 Series**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (9050107-BLK1)									**Extracted: 05/05/09 16:15**					
Aldrin	EPA 8081A	ND	---	0.0200	ug/l	1x	--	--	--	--	--	--	05/08/09 14:32	
alpha-BHC	"	ND	---	0.0200	"	"	--	--	--	--	--	--	"	
beta-BHC	"	ND	---	0.0200	"	"	--	--	--	--	--	--	"	
delta-BHC	"	ND	---	0.0200	"	"	--	--	--	--	--	--	"	
gamma-BHC (Lindane)	"	ND	---	0.0200	"	"	--	--	--	--	--	--	"	
gamma-Chlordane	"	ND	---	0.0200	"	"	--	--	--	--	--	--	"	
alpha-Chlordane	"	ND	---	0.0200	"	"	--	--	--	--	--	--	"	
Chlordane (tech)	"	ND	---	0.200	"	"	--	--	--	--	--	--	"	
4,4'-DDD	"	ND	---	0.0200	"	"	--	--	--	--	--	--	"	
4,4'-DDE	"	ND	---	0.0200	"	"	--	--	--	--	--	--	"	
4,4'-DDT	"	ND	---	0.0200	"	"	--	--	--	--	--	--	"	
Dieldrin	"	ND	---	0.0200	"	"	--	--	--	--	--	--	"	
Endosulfan I	"	ND	---	0.0200	"	"	--	--	--	--	--	--	"	
Endosulfan II	"	ND	---	0.0200	"	"	--	--	--	--	--	--	"	
Endosulfan sulfate	"	ND	---	0.0200	"	"	--	--	--	--	--	--	"	
Endrin	"	ND	---	0.0200	"	"	--	--	--	--	--	--	"	
Endrin aldehyde	"	ND	---	0.0200	"	"	--	--	--	--	--	--	"	
Endrin ketone	"	ND	---	0.0200	"	"	--	--	--	--	--	--	"	
Heptachlor	"	ND	---	0.0200	"	"	--	--	--	--	--	--	"	
Heptachlor epoxide	"	ND	---	0.0200	"	"	--	--	--	--	--	--	"	
Methoxychlor	"	ND	---	0.0200	"	"	--	--	--	--	--	--	"	
Toxaphene	"	ND	---	0.500	"	"	--	--	--	--	--	--	"	
Surrogate(s): 2,4,5,6-Tetrachloro-m-xylene		*Recovery: 65.9%*			*Limits: 16-137%*	"							*05/08/09 14:32*	
LCS (9050107-BS1)									**Extracted: 05/05/09 16:15**					
Aldrin	EPA 8081A	0.0633	---	0.0200	ug/l	1x	--	0.100	63.3%	(43-115)	--	--	05/08/09 14:58	
gamma-BHC (Lindane)	"	0.0771	---	0.0200	"	"	--	"	77.1%	(61-120)	--	--	"	
4,4'-DDT	"	0.0755	---	0.0200	"	"	--	"	75.5%	(58-128)	--	--	"	
Dieldrin	"	0.0758	---	0.0200	"	"	--	"	75.8%	(60-128)	--	--	"	
Endrin	"	0.0736	---	0.0200	"	"	--	"	73.6%	(68-136)	--	--	"	
Heptachlor	"	0.0668	---	0.0200	"	"	--	"	66.8%	(49-116)	--	--	"	
Surrogate(s): 2,4,5,6-Tetrachloro-m-xylene		*Recovery: 62.3%*			*Limits: 16-137%*	"							*05/08/09 14:58*	

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Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	05/13/09 16:39

Organochlorine Pesticides per EPA Method 8081A - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 9050107 **Water Preparation Method: EPA 3510/600 Series**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
LCS Dup (9050107-BSD1)								**Extracted: 05/05/09 16:15**						
Aldrin	EPA 8081A	0.0624	---	0.0200	ug/l	1x	--	0.100	62.4%	(43-115)	1.29%	(22)	05/08/09 15:23	
gamma-BHC (Lindane)	"	0.0768	---	0.0200	"	"	--	"	76.8%	(61-120)	0.338%	"	"	
4,4'-DDT	"	0.0763	---	0.0200	"	"	--	"	76.3%	(58-128)	1.12%	"	"	
Dieldrin	"	0.0768	---	0.0200	"	"	--	"	76.8%	(60-128)	1.24%	"	"	
Endrin	"	0.0748	---	0.0200	"	"	--	"	74.8%	(68-136)	1.71%	"	"	
Heptachlor	"	0.0658	---	0.0200	"	"	--	"	65.8%	(49-116)	1.66%	"	"	
Surrogate(s): 2,4,5,6-Tetrachloro-m-xylene		*Recovery: 61.2%*			*Limits: 16-137%*	"							*05/08/09 15:23*	

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7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	05/13/09 16:39

Polychlorinated Biphenyls per EPA Method 8082 - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 9050109 **Water Preparation Method: EPA 3510/600 Series**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (9050109-BLK1)									**Extracted: 05/05/09 16:15**					
Aroclor 1016	EPA 8082	ND	---	0.200	ug/l	1x	--	--	--	--	--	--	05/08/09 20:34	
Aroclor 1221	"	ND	---	0.400	"	"	--	--	--	--	--	--	"	
Aroclor 1232	"	ND	---	0.200	"	"	--	--	--	--	--	--	"	
Aroclor 1242	"	ND	---	0.200	"	"	--	--	--	--	--	--	"	
Aroclor 1248	"	ND	---	0.200	"	"	--	--	--	--	--	--	"	
Aroclor 1254	"	ND	---	0.200	"	"	--	--	--	--	--	--	"	
Aroclor 1260	"	ND	---	0.200	"	"	--	--	--	--	--	--	"	
Surrogate(s): Decachlorobiphenyl		*Recovery: 79.2%*			*Limits: 12-130%*	"							*05/08/09 20:34*	
LCS (9050109-BS1)									**Extracted: 05/05/09 16:15**					
Aroclor 1016	EPA 8082	1.88	---	0.200	ug/l	1x	--	2.00	94.2%	(50-114)	--	--	05/08/09 20:56	
Aroclor 1260	"	1.95	---	0.200	"	"	--	"	97.3%	(8-127)	--	--	"	
Surrogate(s): Decachlorobiphenyl		*Recovery: 85.6%*			*Limits: 12-130%*	"							*05/08/09 20:56*	
LCS Dup (9050109-BSD1)									**Extracted: 05/05/09 16:15**					
Aroclor 1016	EPA 8082	1.89	---	0.200	ug/l	1x	--	2.00	94.7%	(50-114)	0.530%	(22)	05/08/09 21:18	
Aroclor 1260	"	1.93	---	0.200	"	"	--	"	96.3%	(8-127)	1.04%	(23)	"	
Surrogate(s): Decachlorobiphenyl		*Recovery: 84.3%*			*Limits: 12-130%*	"							*05/08/09 21:18*	

TestAmerica Portland

Estella K Rieben

Estella Rieben, Project Manager

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THE LEADER IN ENVIRONMENTAL TESTING

PORTLAND, OR 9405 S.W. NIMBUS AVENUE
BEAVERTON, OR 97008-7132
ph: (503) 906.9200 fax: (503) 906.9210

Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	05/13/09 16:39

Volatile Organic Compounds per EPA Method 8260B - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 9050225 **Water Preparation Method: EPA 5030B**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (9050225-BLK1)								**Extracted: 05/07/09 10:00**						
Benzene	EPA 8260B	ND	---	0.200	ug/l	1x	--	--	--	--	--	--	05/07/09 12:54	
Ethylbenzene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Methyl tert-butyl ether	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Toluene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
o-Xylene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
m,p-Xylene	"	ND	---	2.00	"	"	--	--	--	--	--	--	"	
Surrogate(s): Dibromofluoromethane		*Recovery: 99.2%*			*Limits: 80-120%*	"							*05/07/09 12:54*	
1,2-DCA-d4		*101%*			*80-120%*	"							"	
Toluene-d8		*98.9%*			*80-120%*	"							"	
4-BFB		*97.8%*			*80-120%*	"							"	
LCS (9050225-BS1)								**Extracted: 05/07/09 10:00**						
Benzene	EPA 8260B	20.7	---	0.200	ug/l	1x	--	20.0	104%	(80-120)	--	--	05/07/09 10:27	
Ethylbenzene	"	21.0	---	1.00	"	"	--	"	105%	"	--	--	"	
Methyl tert-butyl ether	"	18.5	---	1.00	"	"	--	"	92.3%	(80-129)	--	--	"	
Toluene	"	20.4	---	1.00	"	"	--	"	102%	(80-124)	--	--	"	
o-Xylene	"	20.3	---	1.00	"	"	--	"	102%	(77-123)	--	--	"	
m,p-Xylene	"	42.2	---	2.00	"	"	--	40.0	105%	(72-127)	--	--	"	
Surrogate(s): Dibromofluoromethane		*Recovery: 103%*			*Limits: 80-120%*	"							*05/07/09 10:27*	
1,2-DCA-d4		*98.0%*			*80-120%*	"							"	
Toluene-d8		*102%*			*80-120%*	"							"	
4-BFB		*101%*			*80-120%*	"							"	
LCS Dup (9050225-BSD1)								**Extracted: 05/07/09 10:00**						
Benzene	EPA 8260B	20.4	---	0.200	ug/l	1x	--	20.0	102%	(80-120)	1.51%	(25)	05/07/09 10:54	
Ethylbenzene	"	21.0	---	1.00	"	"	--	"	105%	"	0.00%	"	"	
Methyl tert-butyl ether	"	19.3	---	1.00	"	"	--	"	96.5%	(80-129)	4.45%	"	"	
Toluene	"	20.5	---	1.00	"	"	--	"	102%	(80-124)	0.342%	"	"	
o-Xylene	"	20.7	---	1.00	"	"	--	"	103%	(77-123)	1.76%	"	"	
m,p-Xylene	"	41.8	---	2.00	"	"	--	40.0	104%	(72-127)	0.977%	"	"	
Surrogate(s): Dibromofluoromethane		*Recovery: 104%*			*Limits: 80-120%*	"							*05/07/09 10:54*	
1,2-DCA-d4		*100%*			*80-120%*	"							"	
Toluene-d8		*103%*			*80-120%*	"							"	
4-BFB		*102%*			*80-120%*	"							"	

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Estella K Rieben

Estella Rieben, Project Manager

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Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	05/13/09 16:39

Polynuclear Aromatic Compounds per EPA 8270M-SIM - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 9050110 **Water Preparation Method: 3520B Liq-Liq**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (9050110-BLK1)							**Extracted: 05/05/09 16:50**							
2-Methylnaphthalene	EPA 8270m	ND	---	0.100	ug/l	1x	--	--	--	--	--	--	05/08/09 12:22	
Acenaphthene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Acenaphthylene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Anthracene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Benzo (a) anthracene	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	
Benzo (a) pyrene	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	
Benzo (b) fluoranthene	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	
Benzo (ghi) perylene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Benzo (k) fluoranthene	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	
Chrysene	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	
Dibenzo (a,h) anthracene	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	
Fluoranthene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Fluorene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Indeno (1,2,3-cd) pyrene	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	
Naphthalene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Phenanthrene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Pyrene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Surrogate(s): Fluorene-d10		*Recovery: 76.5%*			*Limits: 25-125%*	"							*05/08/09 12:22*	
Pyrene-d10		*73.7%*			*23-150%*	"							"	
Benzo (a) pyrene-d12		*78.9%*			*10-125%*	"							"	
LCS (9050110-BS1)							**Extracted: 05/05/09 16:50**							
Acenaphthene	EPA 8270m	0.933	---	0.100	ug/l	1x	--	1.25	74.7%	(26-135)	--	--	05/08/09 14:22	
Benzo (a) pyrene	"	0.913	---	0.00500	"	"	--	"	73.0%	(38-137)	--	--	"	
Pyrene	"	0.942	---	0.100	"	"	--	"	75.4%	(30-147)	--	--	"	
Surrogate(s): Fluorene-d10		*Recovery: 75.4%*			*Limits: 25-125%*	"							*05/08/09 14:22*	
Pyrene-d10		*72.3%*			*23-150%*	"							"	
Benzo (a) pyrene-d12		*76.0%*			*10-125%*	"							"	
LCS Dup (9050110-BSD1)							**Extracted: 05/05/09 16:50**							
Acenaphthene	EPA 8270m	0.985	---	0.100	ug/l	1x	--	1.25	78.8%	(26-135)	5.38%	(50)	05/08/09 14:51	
Benzo (a) pyrene	"	0.979	---	0.00500	"	"	--	"	78.3%	(38-137)	7.03%	"	"	
Pyrene	"	0.984	---	0.100	"	"	--	"	78.7%	(30-147)	4.30%	"	"	
Surrogate(s): Fluorene-d10		*Recovery: 77.0%*			*Limits: 25-125%*	"							*05/08/09 14:51*	
Pyrene-d10		*73.8%*			*23-150%*	"							"	
Benzo (a) pyrene-d12		*78.5%*			*10-125%*	"							"	

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Estella K Rieben

Estella Rieben, Project Manager

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Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	05/13/09 16:39

Phthalates per EPA 8270-SIM - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 9050110 **Water Preparation Method: 3520B Liq-Liq**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (9050110-BLK2)								**Extracted: 05/05/09 16:50**						
Dimethyl phthalate	EPA 8270m	ND	---	1.00	ug/l	1x	--	--	--	--	--	--	05/12/09 15:50	
Diethyl phthalate	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Di-n-butyl phthalate	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Butyl benzyl phthalate	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Bis(2-ethylhexyl)phthalate	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Di-n-octyl phthalate	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Surrogate(s): 2-Fluorobiphenyl		*Recovery: 71.3%*			*Limits: 10-150%*	"							*05/12/09 15:50*	
p-Terphenyl-d14		*104%*			*10-150%*	"							"	
LCS (9050110-BS2)								**Extracted: 05/05/09 16:50**						
Dimethyl phthalate	EPA 8270m	1.29	---	1.00	ug/l	1x	--	2.00	64.5%	(20-150)	--	--	05/12/09 16:26	
Diethyl phthalate	"	1.33	---	1.00	"	"	--	"	66.6%	"	--	--	"	
Di-n-butyl phthalate	"	1.43	---	1.00	"	"	--	"	71.6%	"	--	--	"	
Butyl benzyl phthalate	"	1.36	---	1.00	"	"	--	"	68.1%	"	--	--	"	
Bis(2-ethylhexyl)phthalate	"	1.32	---	1.00	"	"	--	"	66.2%	"	--	--	"	
Di-n-octyl phthalate	"	1.31	---	1.00	"	"	--	"	65.4%	"	--	--	"	
Surrogate(s): 2-Fluorobiphenyl		*Recovery: 51.8%*			*Limits: 10-150%*	"							*05/12/09 16:26*	
p-Terphenyl-d14		*89.3%*			*10-150%*	"							"	
LCS Dup (9050110-BSD2)								**Extracted: 05/05/09 16:50**						
Dimethyl phthalate	EPA 8270m	1.40	---	1.00	ug/l	1x	--	2.00	69.8%	(20-150)	7.80%	(50)	05/12/09 17:02	
Diethyl phthalate	"	1.44	---	1.00	"	"	--	"	71.8%	"	7.44%	"	"	
Di-n-butyl phthalate	"	1.58	---	1.00	"	"	--	"	79.1%	"	9.90%	"	"	
Butyl benzyl phthalate	"	1.48	---	1.00	"	"	--	"	73.9%	"	8.11%	"	"	
Bis(2-ethylhexyl)phthalate	"	1.48	---	1.00	"	"	--	"	74.1%	"	11.2%	"	"	
Di-n-octyl phthalate	"	1.40	---	1.00	"	"	--	"	69.9%	"	6.74%	"	"	
Surrogate(s): 2-Fluorobiphenyl		*Recovery: 62.1%*			*Limits: 10-150%*	"							*05/12/09 17:02*	
p-Terphenyl-d14		*79.7%*			*10-150%*	"							"	

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Estella Rieben, Project Manager

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Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	05/13/09 16:39

Conventional Chemistry Parameters per Standard Methods - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 9041096 **Water Preparation Method: General Preparation**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (9041096-BLK1)								**Extracted: 04/30/09 08:05**						
Total Organic Carbon	SM 5310C	ND	---	1.00	mg/l	1x	--	--	--	--	--	--	04/30/09 17:33	
LCS (9041096-BS1)								**Extracted: 04/30/09 08:05**						
Total Organic Carbon	SM 5310C	19.3	---	1.00	mg/l	1x	--	20.0	96.4%	(85-115)	--	--	04/30/09 17:33	
Duplicate (9041096-DUP1)				**QC Source: PSD0958-01**				**Extracted: 04/30/09 08:05**						
Total Organic Carbon	SM 5310C	ND	---	1.00	mg/l	1x	ND	--	--	--	NR	(20)	04/30/09 17:33	
Matrix Spike (9041096-MS1)				**QC Source: PSD0958-01**				**Extracted: 04/30/09 08:05**						
Total Organic Carbon	SM 5310C	24.4	---	1.01	mg/l	1x	ND	25.3	96.4%	(75-125)	--	--	04/30/09 17:33	

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Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	05/13/09 16:39

Notes and Definitions

Report Specific Notes:

RL1 - Reporting limit raised due to sample matrix effects.

RL4 - Reporting limit raised due to insufficient sample volume.

Laboratory Reporting Conventions:

DET - Analyte DETECTED at or above the Reporting Limit. Qualitative Analyses only.

ND - Analyte NOT DETECTED at or above the reporting limit (MDL or MRL, as appropriate).

NR/NA - Not Reported / Not Available

dry - Sample results reported on a Dry Weight Basis. Results and Reporting Limits have been corrected for Percent Dry Weight.

wet - Sample results and reporting limits reported on a Wet Weight Basis (as received). Results with neither 'wet' nor 'dry' are reported on a Wet Weight Basis.

RPD - RELATIVE PERCENT DIFFERENCE (RPDs calculated using Results, not Percent Recoveries).

MRL - METHOD REPORTING LIMIT. Reporting Level at, or above, the lowest level standard of the Calibration Table.

MDL* - METHOD DETECTION LIMIT. Reporting Level at, or above, the statistically derived limit based on 40CFR, Part 136, Appendix B. *MDLs are listed on the report only if the data has been evaluated below the MRL. Results between the MDL and MRL are reported as Estimated Results.

Dil - Dilutions are calculated based on deviations from the standard dilution performed for an analysis, and may not represent the dilution found on the analytical raw data.

Reporting Limits - Reporting limits (MDLs and MRLs) are adjusted based on variations in sample preparation amounts, analytical dilutions and percent solids, where applicable.

Electronic Signature - Electronic Signature added in accordance with TestAmerica's *Electronic Reporting and Electronic Signatures Policy.* Application of electronic signature indicates that the report has been reviewed and approved for release by the laboratory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

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2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119 907-563-9200 FAX 563-9210

CHAIN OF CUSTODY REPORT

Work Order #: PSD0959

CLIENT: Stantec

REPORT TO: Rick Fetterly
ADDRESS: 7730 SW Mohawk ST. Tualatin, OR 97062
PHONE (503) 641 2030 FAX: (503) 692-7074

INVOICE TO:

P.O. NUMBER:

PROJECT NAME: 0922 stormwater (24 APR09)
PROJECT NUMBER (same as March 16, 2009)
SAMPLED BY: Chris Carlton-France/Arby Lewis

TURNAROUND REQUEST in Business Days *
Organic & Inorganic Analyses: 10 STD | 7 | 5 | 4 | 3 | 2 | 1 | <1
Petroleum Hydrocarbon Analyses: 5 STD. | 4 | 3 | 2 | 1 | <1
OTHER Specify:
* Turnaround Requests less than standard may incur Rush Charges

PRESERVATIVE: HCl | HCl | H2SO4 | HCl | NA | NA | NA | HNO3 | | | | |

REQUESTED ANALYSES: NWTPHGx | NWTPHDX | SM 5310C | 8260B BTEX+MTBE | 8270M-SIM | 8270-SIM | 8082 | Total Metals 6010-7000 | 8081A

	CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME	NWTPHGx	NWTPHDX	SM 5310C	8260B BTEX+MTBE	8270M-SIM	8270-SIM	8082	Total Metals 6010-7000	8081A	MATRIX (W, S, O)	# OF CONT.	LOCATION/ COMMENTS	TA WO ID
1	MH-12 (12")	28 APR09 @1220	X	X	X	X	X	X	X	X	X	W	14		
2	~~MH-12 (4")~~	~~28 APR09~~	X							X	X				
3	WR-369	28 APR09 @1045	X	X	X	X	X	X	X	X	X	W	15		
4	WR-370	28 APR09 @ 1105	X	X	X	X	X	X	X	X	X	W	15		
5	WR-012	28 APR09 @ 1110								X		W	1		
6	TB-1 (trip blank)	28 APR 09 —	X			X						W	1		
7															
8															
9															
10															

RELEASED BY: PRINT NAME: Chris Carlton-France FIRM: [signature] DATE: 1600 TIME: 28 APR09
RECEIVED BY: [signature] PRINT NAME: KAREN WILSON FIRM: TA-P DATE: 4-28-09 TIME: 1600

RELEASED BY: PRINT NAME: FIRM: DATE: TIME:
RECEIVED BY: PRINT NAME: FIRM: DATE: TIME:

ADDITIONAL REMARKS:
* missing 1 L Amber (unpreserved) for MH-12 (12"), need to filter Total metals sample for MH-12 (12")

1.9° TEMP: PAGE OF
3.9°
2.8° C
2.1°

TAL-1000(0108)

COP0017570

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Sample Receiving Checklist

Work Order #: PSD0959 Date/Time Received: 4-28-09 1600

Client Name and Project: STATEC / stormwater

PM to Complete This Section:	Yes	No		Yes	No
Residual Chlorine Check Required:	☐	☐	Quarantined:	☐	☐

Quote #:

Special Instructions:

Time Zone:
☐EDT/EST ☐CDT/CST ☐MDT/MST ☐PDT/PST ☐OTHER

Unpacking Checks:

Cooler #(s): 1 1 1 1 ____

Temperatures: 1.9 3.9 2.8 2.1 ____

Digi #1 ☐ Digi #2 ☐ IR Gun ☒ (2 Plastic 2 Glass)

Temperature out of Range:

__Not enough or No Ice
__Ice Melted
__W/in 4 Hrs of collection
__Other:____

N/A	Yes	No		Initials: JM
☒	☐	☐	1. If ESI client, were temp blanks received? If no, document on NOD.	
☒	☐	☐	2. Cooler Seals intact? (N/A if hand delivered) if no, document on NOD.	
	☑	☐	3. Chain of Custody present? If no, document on NOD.	
	☑	☐	4. Bottles received intact? If no, document on NOD.	
	☑	☐	5. Sample is not multiphasic? If no, document on NOD.	
	☒	☑	6. Proper Container and preservatives used? If no, document on NOD. JM	MH-12, HNO3 prsvd in lab 4/29 @ 800 JM
☐	☑	☐	7. pH of all samples checked and meet requirements? If no, document on NOD.	
☑	☐	☐	8. Cyanide samples checked for sulfides and meet requirements? If no, notify PM.	
☑	☐	☐	9. HF Dilution required?	
	☑	☐	10. Sufficient volume provided for all analysis? If no, document on NOD and consult PM before proceeding.	
	☐	☑	11. Did chain of custody agree with samples received? If no, document on NOD.	
☐	☑	☐	12. Were VOA/Oil Syringe samples without headspace?	Recvd MH-X samples not on coc. also 6 HCl voas- NO ID'S JM
☐	☑	☐	13. Were VOA vials preserved? ☑HCL ☐Sodium Thiosulfate ☐Ascorbic Acid	
	☐	☑	14. Did samples require preservation with sodium thiosulfate?	
☑	☐	☐	15. If yes to #14, was the residual chlorine test negative? If no, document on NOD.	
☑	☐	☐	16. Are dissolved/field filtered metals bottles sediment-free? If no, document on NOD.	
☑	☐	☐	17. Is sufficient volume provided for client requested MS/MSD or matrix duplicates? If no, document on NOD and contact PM before proceeding.	
☑	☐	☐	18. Are analyses with short holding times received in hold?	
	☑	☐	19. Was Standard Turn Around (TAT) requested?	
	☑	☐	20. Receipt date(s) < 48 hours past the collection date(s)? If no, notify PM.	

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Sample Receiving Checklist

Work Order #: PSD0959

Login Checks: Initials: JM

N/A	Yes	No	
	☑	☐	21. Sufficient volume provided for all analysis? If no, document on NOD & contact PM.
☑	☐	☐	22. Sufficient volume provided for client requested MS/MSD or matrix duplicates? If no, document on NOD and contact PM.
	☑	☐	23. Did the chain of custody include "received by" and "relinquished by" signatures, dates and times?
☐	☑	☐	24. Were special log in instructions read and followed?
	☑	☐	25. Were tests logged checked against the COC?
☑	☐	☐	26. Were rush notices printed and delivered?
☑	☐	☐	27. Were short hold notices printed and delivered?
☑	☐	☐	28. Were subcontract COCs printed?
☑	☐	☐	29. Was HF dilution logged?

Labeling and Storage Checks: Initials: JM

N/A	Yes	No	
☑	☐	☐	30. Were the subcontracted samples/containers put in Sx fridge?
☐	☑	☐	31. Were sample bottles and COC double checked for dissolved/filtered metals?
	☑	☐	32. Did the sample ID, Date, and Time from label match what was logged?
☑	☐	☐	33. Were Foreign sample stickers affixed to each container and containers stored in foreign fridge?
☑	☐	☐	34. Were HF stickers affixed to each container, and containers stored in Sx fridge?
☐	☑	☐	35. Was an NOD for created for noted discrepancies and placed in folder?

Document any problems or discrepancies and the actions taken to resolve them on a Notice of Discrepancy form (NOD).

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PORTLAND, OR 9405 S.W. NIMBUS AVENUE
BEAVERTON, OR 97008-7132
ph: (503) 906.9200 fax: (503) 906.9210

ORELAP#: OR100021

May 27, 2009

Rick Fetterly
Stantec
7730 SW Mohawk Street
Tualatin, OR 97062

RE: Portland Terminal - Stormwater

Enclosed are the results of analyses for samples received by the laboratory on 05/12/09 17:00. The following list is a summary of the Work Orders contained in this report, generated on 05/27/09 16:01.

If you have any questions concerning this report, please feel free to contact me.

Work Order	Project	ProjectNumber
PSE0425	Portland Terminal - Stormwat	0922 - ConocoPhillips

TestAmerica Portland

Estella K Rieben

Estella Rieben, Project Manager

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ph: (503) 906.9200 fax: (503) 906.9210

Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	05/27/09 16:01

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
WR-370	PSE0425-01	Water	05/12/09 10:50	05/12/09 17:00
MH-X	PSE0425-02	Water	05/12/09 14:50	05/12/09 17:00
WR-369	PSE0425-03	Water	05/12/09 11:20	05/12/09 17:00
WR-012	PSE0425-04	Water	05/12/09 11:15	05/12/09 17:00

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Estella Rieben, Project Manager

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Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	05/27/09 16:01

Gasoline Hydrocarbons per NW TPH-Gx Method

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSE0425-01 (WR-370)			**Water**			**Sampled: 05/12/09 10:50**				
Gasoline Range Hydrocarbons	NW TPH-Gx	ND	-----	80.0	ug/l	1x	9050480	05/13/09 15:10	05/13/09 20:23	
Surrogate(s): 4-BFB (FID)				*96.0%*		*50 - 150%*	"			"
PSE0425-02 (MH-X)			**Water**			**Sampled: 05/12/09 14:50**				
Gasoline Range Hydrocarbons	NW TPH-Gx	ND	-----	80.0	ug/l	1x	9050480	05/13/09 15:10	05/13/09 20:56	
Surrogate(s): 4-BFB (FID)				*97.5%*		*50 - 150%*	"			"
PSE0425-03 (WR-369)			**Water**			**Sampled: 05/12/09 11:20**				
Gasoline Range Hydrocarbons	NW TPH-Gx	ND	-----	80.0	ug/l	1x	9050480	05/13/09 15:10	05/13/09 21:30	
Surrogate(s): 4-BFB (FID)				*96.2%*		*50 - 150%*	"			"

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ph: (503) 906.9200 fax: (503) 906.9210

Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	05/27/09 16:01

Diesel and Heavy Range Hydrocarbons per NWTPH-Dx Method with Acid/Silica Gel Cleanup

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSE0425-01 (WR-370)			**Water**			**Sampled: 05/12/09 10:50**				
Diesel Range Organics	NWTPH-Dx	ND	-----	0.240	mg/l	1x	9050537	05/14/09 15:45	05/15/09 01:49	
Heavy Oil Range Hydrocarbons	"	ND	-----	0.481	"	"	"	"	"	
Surrogate(s): 1-Chlorooctadecane				*102%*		*50 - 150%*	"			"
PSE0425-02 (MH-X)			**Water**			**Sampled: 05/12/09 14:50**				
Diesel Range Organics	NWTPH-Dx	ND	-----	0.238	mg/l	1x	9050537	05/14/09 15:45	05/15/09 02:08	
Heavy Oil Range Hydrocarbons	"	ND	-----	0.476	"	"	"	"	"	
Surrogate(s): 1-Chlorooctadecane				*100%*		*50 - 150%*	"			"
PSE0425-03 (WR-369)			**Water**			**Sampled: 05/12/09 11:20**				
Diesel Range Organics	NWTPH-Dx	ND	-----	0.238	mg/l	1x	9050537	05/14/09 15:45	05/15/09 02:28	
Heavy Oil Range Hydrocarbons	"	ND	-----	0.476	"	"	"	"	"	
Surrogate(s): 1-Chlorooctadecane				*93.7%*		*50 - 150%*	"			"

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Estella Rieben, Project Manager

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Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	05/27/09 16:01

Total Metals per EPA 6000/7000 Series Methods

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSE0425-01 (WR-370)			**Water**			**Sampled: 05/12/09 10:50**				
Arsenic	EPA 6020	**0.00400**	-----	0.00100	mg/l	1x	9050632	05/18/09 14:09	05/19/09 03:34	
Barium	"	**0.0112**	-----	0.00100	"	"	"	"	"	
Cadmium	"	ND	-----	0.000500	"	"	"	"	"	
Chromium	"	ND	-----	0.00200	"	"	"	"	"	
Copper	"	**0.0298**	-----	0.00200	"	"	"	"	"	
Lead	"	**0.00282**	-----	0.00100	"	"	"	"	"	
Manganese	"	**0.0861**	-----	0.00200	"	"	"	"	"	
Selenium	"	ND	-----	0.000500	"	"	"	"	05/19/09 23:05	
Silver	"	ND	-----	0.00100	"	"	"	"	05/19/09 03:34	
Zinc	"	**0.128**	-----	0.00500	"	"	"	"	"	
PSE0425-02 (MH-X)			**Water**			**Sampled: 05/12/09 14:50**				
Arsenic	EPA 6020	ND	-----	0.00100	mg/l	1x	9050632	05/18/09 14:09	05/19/09 03:39	
Barium	"	**0.0159**	-----	0.00100	"	"	"	"	"	
Cadmium	"	ND	-----	0.000500	"	"	"	"	"	
Chromium	"	ND	-----	0.00200	"	"	"	"	"	
Copper	"	**0.00494**	-----	0.00200	"	"	"	"	"	
Lead	"	**0.00445**	-----	0.00100	"	"	"	"	"	
Manganese	"	**0.136**	-----	0.00200	"	"	"	"	"	
Selenium	"	ND	-----	0.000500	"	"	"	"	05/19/09 23:11	
Silver	"	ND	-----	0.00100	"	"	"	"	05/19/09 03:39	
Zinc	"	**0.221**	-----	0.00500	"	"	"	"	"	
PSE0425-03 (WR-369)			**Water**			**Sampled: 05/12/09 11:20**				
Arsenic	EPA 6020	ND	-----	0.00100	mg/l	1x	9050632	05/18/09 14:09	05/19/09 03:44	
Barium	"	**0.00394**	-----	0.00100	"	"	"	"	"	
Cadmium	"	ND	-----	0.000500	"	"	"	"	"	
Chromium	"	ND	-----	0.00200	"	"	"	"	"	
Copper	"	**0.0104**	-----	0.00200	"	"	"	"	"	
Lead	"	**0.00205**	-----	0.00100	"	"	"	"	"	
Manganese	"	**0.0102**	-----	0.00200	"	"	"	"	"	
Selenium	"	ND	-----	0.000500	"	"	"	"	05/19/09 23:16	
Silver	"	ND	-----	0.00100	"	"	"	"	05/19/09 03:44	
Zinc	"	**0.0740**	-----	0.00500	"	"	"	"	"	

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Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	05/27/09 16:01

Total Metals per EPA 6000/7000 Series Methods

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSE0425-04 (WR-012)		**Water**				**Sampled: 05/12/09 11:15**				
Arsenic	EPA 6020	ND	-----	0.00100	mg/l	1x	9050632	05/18/09 14:09	05/19/09 03:50	
Barium	"	**0.00476**	-----	0.00100	"	"	"	"	"	
Cadmium	"	ND	-----	0.000500	"	"	"	"	"	
Chromium	"	ND	-----	0.00200	"	"	"	"	"	
Copper	"	ND	-----	0.00200	"	"	"	"	"	
Lead	"	**0.00297**	-----	0.00100	"	"	"	"	"	
Manganese	"	**0.0157**	-----	0.00200	"	"	"	"	"	
Selenium	"	ND	-----	0.000500	"	"	"	"	05/19/09 23:22	
Silver	"	ND	-----	0.00100	"	"	"	"	05/19/09 03:50	
Zinc	"	**0.209**	-----	0.00500	"	"	"	"	"	

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Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	05/27/09 16:01

Total Mercury per EPA Method 7470A

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSE0425-01 (WR-370)			**Water**			**Sampled: 05/12/09 10:50**				
Mercury	EPA 7470A	ND	-----	0.000200	mg/l	1x	9050577	05/15/09 13:40	05/15/09 16:04	
PSE0425-02 (MH-X)			**Water**			**Sampled: 05/12/09 14:50**				
Mercury	EPA 7470A	ND	-----	0.000200	mg/l	1x	9050577	05/15/09 13:40	05/15/09 16:06	
PSE0425-03 (WR-369)			**Water**			**Sampled: 05/12/09 11:20**				
Mercury	EPA 7470A	ND	-----	0.000200	mg/l	1x	9050577	05/15/09 13:40	05/15/09 16:08	
PSE0425-04 (WR-012)			**Water**			**Sampled: 05/12/09 11:15**				
Mercury	EPA 7470A	ND	-----	0.000200	mg/l	1x	9050577	05/15/09 13:40	05/15/09 16:10	

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Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	05/27/09 16:01

Organochlorine Pesticides per EPA Method 8081A

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSE0425-01 (WR-370)			**Water**			**Sampled: 05/12/09 10:50**				**RL4**
Aldrin	EPA 8081A	ND	-----	0.0190	ug/l	1x	9050645	05/19/09 10:50	05/20/09 16:48	
alpha-BHC	"	ND	-----	0.0190	"	"	"	"	"	
beta-BHC	"	ND	-----	0.0286	"	"	"	"	"	**RL3**
delta-BHC	"	ND	-----	0.0190	"	"	"	"	"	
gamma-BHC (Lindane)	"	ND	-----	0.0190	"	"	"	"	"	
gamma-Chlordane	"	ND	-----	0.0190	"	"	"	"	"	
alpha-Chlordane	"	ND	-----	0.0190	"	"	"	"	"	
Chlordane (tech)	"	ND	-----	0.190	"	"	"	"	"	
4,4´-DDD	"	ND	-----	0.0190	"	"	"	"	"	
4,4´-DDE	"	ND	-----	0.0190	"	"	"	"	"	
4,4´-DDT	"	ND	-----	0.0190	"	"	"	"	"	
Dieldrin	"	ND	-----	0.0190	"	"	"	"	"	
Endosulfan I	"	ND	-----	0.0190	"	"	"	"	"	
Endosulfan II	"	ND	-----	0.0190	"	"	"	"	"	
Endosulfan sulfate	"	ND	-----	0.0190	"	"	"	"	"	
Endrin	"	ND	-----	0.0190	"	"	"	"	"	
Endrin aldehyde	"	ND	-----	0.0190	"	"	"	"	"	
Endrin ketone	"	ND	-----	0.0190	"	"	"	"	"	
Heptachlor	"	ND	-----	0.0190	"	"	"	"	"	
Heptachlor epoxide	"	ND	-----	0.0190	"	"	"	"	"	
Methoxychlor	"	ND	-----	0.0190	"	"	"	"	"	
Toxaphene	"	ND	-----	0.476	"	"	"	"	"	
Surrogate(s): 2,4,5,6-Tetrachloro-m-xylene				*57.0%*		*16 - 137 %*	"			"
PSE0425-02 (MH-X)			**Water**			**Sampled: 05/12/09 14:50**				**RL4**
Aldrin	EPA 8081A	ND	-----	0.0190	ug/l	1x	9050645	05/19/09 10:50	05/20/09 16:22	
alpha-BHC	"	ND	-----	0.0190	"	"	"	"	"	
beta-BHC	"	ND	-----	0.0190	"	"	"	"	"	
delta-BHC	"	ND	-----	0.0190	"	"	"	"	"	
gamma-BHC (Lindane)	"	ND	-----	0.0190	"	"	"	"	"	
gamma-Chlordane	"	ND	-----	0.0190	"	"	"	"	"	
alpha-Chlordane	"	ND	-----	0.0190	"	"	"	"	"	
Chlordane (tech)	"	ND	-----	0.190	"	"	"	"	"	
4,4´-DDD	"	ND	-----	0.0190	"	"	"	"	"	
4,4´-DDE	"	ND	-----	0.0190	"	"	"	"	"	
4,4´-DDT	"	ND	-----	0.0190	"	"	"	"	"	

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Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	05/27/09 16:01

Organochlorine Pesticides per EPA Method 8081A

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSE0425-02 (MH-X)			**Water**			**Sampled: 05/12/09 14:50**				**RL4**
Dieldrin	EPA 8081A	ND	-----	0.0190	ug/l	1x	9050645	05/19/09 10:50	05/20/09 16:22	
Endosulfan I	"	ND	-----	0.0190	"	"	"	"	"	
Endosulfan II	"	ND	-----	0.0190	"	"	"	"	"	
Endosulfan sulfate	"	ND	-----	0.0190	"	"	"	"	"	
Endrin	"	ND	-----	0.0190	"	"	"	"	"	
Endrin aldehyde	"	ND	-----	0.0190	"	"	"	"	"	
Endrin ketone	"	ND	-----	0.0190	"	"	"	"	"	
Heptachlor	"	ND	-----	0.0190	"	"	"	"	"	
Heptachlor epoxide	"	ND	-----	0.0190	"	"	"	"	"	
Methoxychlor	"	ND	-----	0.0190	"	"	"	"	"	
Toxaphene	"	ND	-----	0.476	"	"	"	"	"	
Surrogate(s): 2,4,5,6-Tetrachloro-m-xylene				*59.0%*		*16 - 137%*	"		"	
PSE0425-03 (WR-369)			**Water**			**Sampled: 05/12/09 11:20**				**RL4**
Aldrin	EPA 8081A	ND	-----	0.0190	ug/l	1x	9050645	05/19/09 10:50	05/20/09 15:56	
alpha-BHC	"	ND	-----	0.0190	"	"	"	"	"	
beta-BHC	"	ND	-----	0.0190	"	"	"	"	"	
delta-BHC	"	ND	-----	0.0190	"	"	"	"	"	
gamma-BHC (Lindane)	"	ND	-----	0.0190	"	"	"	"	"	
gamma-Chlordane	"	ND	-----	0.0190	"	"	"	"	"	
alpha-Chlordane	"	ND	-----	0.0190	"	"	"	"	"	
Chlordane (tech)	"	ND	-----	0.190	"	"	"	"	"	
4,4´-DDD	"	ND	-----	0.0190	"	"	"	"	"	
4,4´-DDE	"	ND	-----	0.0190	"	"	"	"	"	
4,4´-DDT	"	ND	-----	0.0190	"	"	"	"	"	
Dieldrin	"	ND	-----	0.0190	"	"	"	"	"	
Endosulfan I	"	ND	-----	0.0190	"	"	"	"	"	
Endosulfan II	"	ND	-----	0.0190	"	"	"	"	"	
Endosulfan sulfate	"	ND	-----	0.0190	"	"	"	"	"	
Endrin	"	ND	-----	0.0190	"	"	"	"	"	
Endrin aldehyde	"	ND	-----	0.0190	"	"	"	"	"	
Endrin ketone	"	ND	-----	0.0190	"	"	"	"	"	
Heptachlor	"	ND	-----	0.0190	"	"	"	"	"	
Heptachlor epoxide	"	ND	-----	0.0190	"	"	"	"	"	
Methoxychlor	"	ND	-----	0.0190	"	"	"	"	"	
Toxaphene	"	ND	-----	0.476	"	"	"	"	"	

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Estella K Rieben

Estella Rieben, Project Manager

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Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	05/27/09 16:01

Organochlorine Pesticides per EPA Method 8081A

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSE0425-03	**(WR-369)**		**Water**			**Sampled: 05/12/09 11:20**				**RL4**
Surrogate(s):	*2,4,5,6-Tetrachloro-m-xylene*			*64.5%*		*16 - 137 %*	*1x*		*05/20/09 15:56*	

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ph: (503) 906.9200 fax: (503) 906.9210

Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	05/27/09 16:01

Polychlorinated Biphenyls per EPA Method 8082

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSE0425-01 (WR-370)			**Water**			**Sampled: 05/12/09 10:50**				
Aroclor 1016	EPA 8082	ND	-----	0.0952	ug/l	1x	9050605	05/18/09 17:05	05/20/09 16:39	
Aroclor 1221	"	ND	-----	0.190	"	"	"	"	"	
Aroclor 1232	"	ND	-----	0.0952	"	"	"	"	"	
Aroclor 1242	"	ND	-----	0.0952	"	"	"	"	"	
Aroclor 1248	"	ND	-----	0.0952	"	"	"	"	"	
Aroclor 1254	"	ND	-----	0.0952	"	"	"	"	"	
Aroclor 1260	"	ND	-----	0.0952	"	"	"	"	"	
Aroclor 1262	"	ND	-----	0.0952	"	"	"	"	"	
Aroclor 1268	"	ND	-----	0.0952	"	"	"	"	"	
Surrogate(s): Decachlorobiphenyl				*98.3%*		*12 - 130%*	"		"	
PSE0425-02 (MH-X)			**Water**			**Sampled: 05/12/09 14:50**				
Aroclor 1016	EPA 8082	ND	-----	0.0943	ug/l	1x	9050605	05/18/09 17:05	05/20/09 17:01	
Aroclor 1221	"	ND	-----	0.189	"	"	"	"	"	
Aroclor 1232	"	ND	-----	0.0943	"	"	"	"	"	
Aroclor 1242	"	ND	-----	0.0943	"	"	"	"	"	
Aroclor 1248	"	ND	-----	0.0943	"	"	"	"	"	
Aroclor 1254	"	ND	-----	0.0943	"	"	"	"	"	
Aroclor 1260	"	ND	-----	0.0943	"	"	"	"	"	
Aroclor 1262	"	ND	-----	0.0943	"	"	"	"	"	
Aroclor 1268	"	ND	-----	0.0943	"	"	"	"	"	
Surrogate(s): Decachlorobiphenyl				*102%*		*12 - 130%*	"		"	
PSE0425-03 (WR-369)			**Water**			**Sampled: 05/12/09 11:20**				
Aroclor 1016	EPA 8082	ND	-----	0.0962	ug/l	1x	9050605	05/18/09 17:05	05/20/09 17:23	
Aroclor 1221	"	ND	-----	0.192	"	"	"	"	"	
Aroclor 1232	"	ND	-----	0.0962	"	"	"	"	"	
Aroclor 1242	"	ND	-----	0.0962	"	"	"	"	"	
Aroclor 1248	"	ND	-----	0.0962	"	"	"	"	"	
Aroclor 1254	"	ND	-----	0.0962	"	"	"	"	"	
Aroclor 1260	"	ND	-----	0.0962	"	"	"	"	"	
Aroclor 1262	"	ND	-----	0.0962	"	"	"	"	"	
Aroclor 1268	"	ND	-----	0.0962	"	"	"	"	"	
Surrogate(s): Decachlorobiphenyl				*103%*		*12 - 130%*	"		"	

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Estella Rieben, Project Manager

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Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	05/27/09 16:01

Volatile Organic Compounds per EPA Method 8260B

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSE0425-01 (WR-370)			**Water**			**Sampled: 05/12/09 10:50**				
Benzene	EPA 8260B	ND	-----	0.200	ug/l	1x	9050599	05/18/09 09:00	05/18/09 20:05	
Ethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
Methyl tert-butyl ether	"	ND	-----	1.00	"	"	"	"	"	
Toluene	"	ND	-----	1.00	"	"	"	"	"	
o-Xylene	"	ND	-----	1.00	"	"	"	"	"	
m,p-Xylene	"	ND	-----	2.00	"	"	"	"	"	
Surrogate(s):	*Dibromofluoromethane*			*100%*		*80 - 120%*	"			"
	1,2-DCA-d4			*104%*		*80 - 120%*	"			"
	Toluene-d8			*105%*		*80 - 120%*	"			"
	4-BFB			*93.2%*		*80 - 120%*	"			"
PSE0425-02 (MH-X)			**Water**			**Sampled: 05/12/09 14:50**				
Benzene	EPA 8260B	ND	-----	0.200	ug/l	1x	9050599	05/18/09 09:00	05/18/09 19:38	
Ethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
Methyl tert-butyl ether	"	ND	-----	1.00	"	"	"	"	"	
Toluene	"	ND	-----	1.00	"	"	"	"	"	
o-Xylene	"	ND	-----	1.00	"	"	"	"	"	
m,p-Xylene	"	ND	-----	2.00	"	"	"	"	"	
Surrogate(s):	*Dibromofluoromethane*			*99.8%*		*80 - 120%*	"			"
	1,2-DCA-d4			*102%*		*80 - 120%*	"			"
	Toluene-d8			*101%*		*80 - 120%*	"			"
	4-BFB			*90.6%*		*80 - 120%*	"			"
PSE0425-03 (WR-369)			**Water**			**Sampled: 05/12/09 11:20**				
Benzene	EPA 8260B	ND	-----	0.200	ug/l	1x	9050599	05/18/09 09:00	05/18/09 19:12	
Ethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
Methyl tert-butyl ether	"	ND	-----	1.00	"	"	"	"	"	
Toluene	"	ND	-----	1.00	"	"	"	"	"	
o-Xylene	"	ND	-----	1.00	"	"	"	"	"	
m,p-Xylene	"	ND	-----	2.00	"	"	"	"	"	
Surrogate(s):	*Dibromofluoromethane*			*101%*		*80 - 120%*	"			"
	1,2-DCA-d4			*103%*		*80 - 120%*	"			"
	Toluene-d8			*105%*		*80 - 120%*	"			"
	4-BFB			*93.5%*		*80 - 120%*	"			"

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Estella Rieben, Project Manager

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Tualatin, OR 97062	Project Manager:	Rick Fetterly	05/27/09 16:01

Polynuclear Aromatic Compounds per EPA 8270M-SIM

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSE0425-01 (WR-370)			**Water**			**Sampled: 05/12/09 10:50**				
2-Methylnaphthalene	EPA 8270m	ND	-----	0.0952	ug/l	1x	9050596	05/18/09 09:50	05/20/09 14:45	
Acenaphthene	"	ND	-----	0.0952	"	"	"	"	"	
Acenaphthylene	"	ND	-----	0.0952	"	"	"	"	"	
Anthracene	"	ND	-----	0.0952	"	"	"	"	"	
Benzo (a) anthracene	"	ND	-----	0.00476	"	"	"	"	"	
Benzo (a) pyrene	"	ND	-----	0.00476	"	"	"	"	"	
Benzo (b) fluoranthene	"	ND	-----	0.00476	"	"	"	"	"	
Benzo (ghi) perylene	"	ND	-----	0.0952	"	"	"	"	"	
Benzo (k) fluoranthene	"	ND	-----	0.00476	"	"	"	"	"	
Chrysene	"	**0.00933**	-----	0.00476	"	"	"	"	"	
Dibenzo (a,h) anthracene	"	ND	-----	0.00476	"	"	"	"	"	
Fluoranthene	"	ND	-----	0.0952	"	"	"	"	"	
Fluorene	"	ND	-----	0.0952	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	"	ND	-----	0.00476	"	"	"	"	"	
Naphthalene	"	ND	-----	0.0952	"	"	"	"	"	
Phenanthrene	"	ND	-----	0.0952	"	"	"	"	"	
Pyrene	"	ND	-----	0.0952	"	"	"	"	"	
Surrogate(s):	*Fluorene-d10*			*84.1%*		*25 - 125%*	"			"
	Pyrene-d10			*78.8%*		*23 - 150%*	"			"
	Benzo (a) pyrene-d12			*78.3%*		*10 - 125%*	"			"
PSE0425-02 (MH-X)			**Water**			**Sampled: 05/12/09 14:50**				
2-Methylnaphthalene	EPA 8270m	ND	-----	0.0952	ug/l	1x	9050596	05/18/09 09:50	05/20/09 15:14	
Acenaphthene	"	ND	-----	0.0952	"	"	"	"	"	
Acenaphthylene	"	ND	-----	0.0952	"	"	"	"	"	
Anthracene	"	ND	-----	0.0952	"	"	"	"	"	
Benzo (a) anthracene	"	ND	-----	0.00476	"	"	"	"	"	
Benzo (a) pyrene	"	ND	-----	0.00476	"	"	"	"	"	
Benzo (b) fluoranthene	"	**0.00693**	-----	0.00476	"	"	"	"	"	
Benzo (ghi) perylene	"	ND	-----	0.0952	"	"	"	"	"	
Benzo (k) fluoranthene	"	ND	-----	0.00476	"	"	"	"	"	
Chrysene	"	**0.00959**	-----	0.00476	"	"	"	"	"	
Dibenzo (a,h) anthracene	"	ND	-----	0.00476	"	"	"	"	"	
Fluoranthene	"	ND	-----	0.0952	"	"	"	"	"	
Fluorene	"	ND	-----	0.0952	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	"	ND	-----	0.00476	"	"	"	"	"	

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7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	05/27/09 16:01

Polynuclear Aromatic Compounds per EPA 8270M-SIM

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSE0425-02 (MH-X)			**Water**			**Sampled: 05/12/09 14:50**				
Naphthalene	EPA 8270m	ND	-----	0.0952	ug/l	1x	9050596	05/18/09 09:50	05/20/09 15:14	
Phenanthrene	"	ND	-----	0.0952	"	"	"	"	"	
Pyrene	"	ND	-----	0.0952	"	"	"	"	"	
Surrogate(s): Fluorene-d10				*88.3%*		*25 - 125 %*	"			"
Pyrene-d10				*79.8%*		*23 - 150 %*	"			"
Benzo (a) pyrene-d12				*79.3%*		*10 - 125 %*	"			"
PSE0425-03 (WR-369)			**Water**			**Sampled: 05/12/09 11:20**				
2-Methylnaphthalene	EPA 8270m	ND	-----	0.0952	ug/l	1x	9050596	05/18/09 09:50	05/20/09 15:43	
Acenaphthene	"	ND	-----	0.0952	"	"	"	"	"	
Acenaphthylene	"	ND	-----	0.0952	"	"	"	"	"	
Anthracene	"	ND	-----	0.0952	"	"	"	"	"	
Benzo (a) anthracene	"	ND	-----	0.00476	"	"	"	"	"	
Benzo (a) pyrene	"	ND	-----	0.00476	"	"	"	"	"	
Benzo (b) fluoranthene	"	ND	-----	0.00476	"	"	"	"	"	
Benzo (ghi) perylene	"	ND	-----	0.0952	"	"	"	"	"	
Benzo (k) fluoranthene	"	ND	-----	0.00476	"	"	"	"	"	
Chrysene	"	ND	-----	0.00476	"	"	"	"	"	
Dibenzo (a,h) anthracene	"	ND	-----	0.00476	"	"	"	"	"	
Fluoranthene	"	ND	-----	0.0952	"	"	"	"	"	
Fluorene	"	ND	-----	0.0952	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	"	ND	-----	0.00476	"	"	"	"	"	
Naphthalene	"	ND	-----	0.0952	"	"	"	"	"	
Phenanthrene	"	ND	-----	0.0952	"	"	"	"	"	
Pyrene	"	ND	-----	0.0952	"	"	"	"	"	
Surrogate(s): Fluorene-d10				*81.4%*		*25 - 125 %*	"			"
Pyrene-d10				*76.4%*		*23 - 150 %*	"			"
Benzo (a) pyrene-d12				*78.2%*		*10 - 125 %*	"			"

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Phthalates per EPA 8270-SIM

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Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSE0425-01 (WR-370)			**Water**			**Sampled: 05/12/09 10:50**				
Dimethyl phthalate	EPA 8270m	ND	-----	0.952	ug/l	1x	9050596	05/18/09 09:50	05/20/09 20:03	
Diethyl phthalate	"	ND	-----	0.952	"	"	"	"	"	
Di-n-butyl phthalate	"	ND	-----	0.952	"	"	"	"	"	
Butyl benzyl phthalate	"	ND	-----	0.952	"	"	"	"	"	
Bis(2-ethylhexyl)phthalate	"	ND	-----	0.952	"	"	"	"	"	
Di-n-octyl phthalate	"	ND	-----	0.952	"	"	"	"	"	
Surrogate(s): 2-Fluorobiphenyl				*68.5%*		*10 - 150%*	"			"
p-Terphenyl-d14				*74.8%*		*10 - 150%*	"			"
PSE0425-02 (MH-X)			**Water**			**Sampled: 05/12/09 14:50**				
Dimethyl phthalate	EPA 8270m	ND	-----	0.952	ug/l	1x	9050596	05/18/09 09:50	05/20/09 20:39	
Diethyl phthalate	"	ND	-----	0.952	"	"	"	"	"	
Di-n-butyl phthalate	"	ND	-----	0.952	"	"	"	"	"	
Butyl benzyl phthalate	"	**1.45**	-----	0.952	"	"	"	"	"	
Bis(2-ethylhexyl)phthalate	"	ND	-----	0.952	"	"	"	"	"	
Di-n-octyl phthalate	"	ND	-----	0.952	"	"	"	"	"	
Surrogate(s): 2-Fluorobiphenyl				*52.4%*		*10 - 150%*	"			"
p-Terphenyl-d14				*80.8%*		*10 - 150%*	"			"
PSE0425-03 (WR-369)			**Water**			**Sampled: 05/12/09 11:20**				
Dimethyl phthalate	EPA 8270m	ND	-----	0.952	ug/l	1x	9050596	05/18/09 09:50	05/20/09 21:15	
Diethyl phthalate	"	ND	-----	0.952	"	"	"	"	"	
Di-n-butyl phthalate	"	ND	-----	0.952	"	"	"	"	"	
Butyl benzyl phthalate	"	ND	-----	0.952	"	"	"	"	"	
Bis(2-ethylhexyl)phthalate	"	ND	-----	0.952	"	"	"	"	"	
Di-n-octyl phthalate	"	ND	-----	0.952	"	"	"	"	"	
Surrogate(s): 2-Fluorobiphenyl				*66.0%*		*10 - 150%*	"			"
p-Terphenyl-d14				*130%*		*10 - 150%*	"			"

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Conventional Chemistry Parameters per Standard Methods

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSE0425-01 (WR-370)			**Water**			**Sampled: 05/12/09 10:50**				
Total Organic Carbon	SM 5310C	**6.87**	-----	1.00	mg/l	1x	9050502	05/14/09 08:59	05/15/09 02:23	
PSE0425-02 (MH-X)			**Water**			**Sampled: 05/12/09 14:50**				
Total Organic Carbon	SM 5310C	**2.19**	-----	1.00	mg/l	1x	9050502	05/14/09 08:59	05/15/09 02:23	
PSE0425-03 (WR-369)			**Water**			**Sampled: 05/12/09 11:20**				
Total Organic Carbon	SM 5310C	**1.47**	-----	1.00	mg/l	1x	9050502	05/14/09 08:59	05/15/09 02:23	

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Gasoline Hydrocarbons per NW TPH-Gx Method - Laboratory Quality Control Results

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QC Batch: 9050480 **Water Preparation Method: EPA 5030B**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (9050480-BLK1)								**Extracted: 05/13/09 15:10**						
Gasoline Range Hydrocarbons	NW TPH-Gx	ND	---	80.0	ug/l	1x	--	--	--	--	--	--	05/13/09 19:16	
Surrogate(s): 4-BFB (FID)		*Recovery: 98.7%*			*Limits: 50-150%*	"							*05/13/09 19:16*	
LCS (9050480-BS1)								**Extracted: 05/13/09 15:10**						
Gasoline Range Hydrocarbons	NW TPH-Gx	480	---	80.0	ug/l	1x	--	500	96.0%	(70-130)	--	--	05/13/09 18:11	
Surrogate(s): 4-BFB (FID)		*Recovery: 105%*			*Limits: 50-150%*	"							*05/13/09 18:11*	
LCS Dup (9050480-BSD1)								**Extracted: 05/13/09 15:10**						
Gasoline Range Hydrocarbons	NW TPH-Gx	520	---	80.0	ug/l	1x	--	500	104%	(70-130)	7.98%	(35)	05/13/09 18:43	
Surrogate(s): 4-BFB (FID)		*Recovery: 101%*			*Limits: 50-150%*	"							*05/13/09 18:43*	
Duplicate (9050480-DUP1)							**QC Source: PSE0425-01**	**Extracted: 05/13/09 15:10**						
Gasoline Range Hydrocarbons	NW TPH-Gx	ND	---	80.0	ug/l	1x	ND	--	--	--	NR	(35)	05/13/09 19:49	
Surrogate(s): 4-BFB (FID)		*Recovery: 95.9%*			*Limits: 50-150%*	"							*05/13/09 19:49*	

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Tualatin, OR 97062	Project Manager:	Rick Fetterly	05/27/09 16:01

Diesel and Heavy Range Hydrocarbons per NWTPH-Dx Method with Acid/Silica Gel Cleanup - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 9050537 **Water Preparation Method: EPA 3510 Fuels**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (9050537-BLK1)								**Extracted: 05/14/09 15:45**						
Diesel Range Organics	NWTPH-Dx	ND	---	0.250	mg/l	1x	--	--	--	--	--	--	05/15/09 00:29	
Heavy Oil Range Hydrocarbons	"	ND	---	0.500	"	"	--	--	--	--	--	--	"	
Surrogate(s): 1-Chlorooctadecane		*Recovery: 100%*			*Limits: 50-150%*	"							*05/15/09 00:29*	
LCS (9050537-BS1)								**Extracted: 05/14/09 15:45**						
Diesel Range Organics	NWTPH-Dx	2.48	---	0.250	mg/l	1x	--	2.50	99.4%	(50-150)	--	--	05/15/09 00:50	
Heavy Oil Range Hydrocarbons	"	1.35	---	0.500	"	"	--	1.50	90.1%	"	--	--	"	
Surrogate(s): 1-Chlorooctadecane		*Recovery: 95.1%*			*Limits: 50-150%*	"							*05/15/09 00:50*	
LCS Dup (9050537-BSD1)								**Extracted: 05/14/09 15:45**						
Diesel Range Organics	NWTPH-Dx	2.87	---	0.250	mg/l	1x	--	2.50	115%	(50-150)	14.3%	(50)	05/15/09 01:08	
Heavy Oil Range Hydrocarbons	"	1.52	---	0.500	"	"	--	1.50	102%	"	12.0%	"	"	
Surrogate(s): 1-Chlorooctadecane		*Recovery: 110%*			*Limits: 50-150%*	"							*05/15/09 01:08*	

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Estella Rieben, Project Manager

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PORTLAND, OR 9405 S.W. NIMBUS AVENUE
BEAVERTON, OR 97008-7132
ph: (503) 906.9200 fax: (503) 906.9210

Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	05/27/09 16:01

Total Metals per EPA 6000/7000 Series Methods - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 9050632 **Water Preparation Method: EPA 200/3005**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (9050632-BLK1)								Extracted: 05/18/09 14:09						
Arsenic	EPA 6020	ND	---	0.00100	mg/l	1x	--	--	--	--	--	--	05/19/09 02:23	
Barium	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Cadmium	"	ND	---	0.000500	"	"	--	--	--	--	--	--	"	
Chromium	"	ND	---	0.00200	"	"	--	--	--	--	--	--	"	
Copper	"	ND	---	0.00200	"	"	--	--	--	--	--	--	"	
Lead	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Manganese	"	ND	---	0.00200	"	"	--	--	--	--	--	--	"	
Selenium	"	ND	---	0.000500	"	"	--	--	--	--	--	--	05/19/09 14:15	
Silver	"	ND	---	0.00100	"	"	--	--	--	--	--	--	05/19/09 02:23	
Zinc	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	
LCS (9050632-BS1)								Extracted: 05/18/09 14:09						
Arsenic	EPA 6020	0.101	---	0.00100	mg/l	1x	--	0.100	101%	(80-120)	--	--	05/19/09 02:28	
Barium	"	0.0968	---	0.00100	"	"	--	"	96.8%	"	--	--	"	
Cadmium	"	0.0967	---	0.000500	"	"	--	"	96.7%	"	--	--	"	
Chromium	"	0.107	---	0.00200	"	"	--	"	107%	"	--	--	"	
Copper	"	0.100	---	0.00200	"	"	--	"	100%	"	--	--	"	
Lead	"	0.0985	---	0.00100	"	"	--	"	98.5%	"	--	--	"	
Manganese	"	0.112	---	0.00200	"	"	--	"	112%	"	--	--	"	
Selenium	"	0.0990	---	0.000500	"	"	--	"	99.0%	"	--	--	05/19/09 14:21	
Silver	"	0.0506	---	0.00100	"	"	--	0.0500	101%	"	--	--	05/19/09 02:28	
Zinc	"	0.0984	---	0.00500	"	"	--	0.100	98.4%	"	--	--	"	
Duplicate (9050632-DUP1)						QC Source: PSE0413-01			Extracted: 05/18/09 14:09					
Arsenic	EPA 6020	ND	---	0.00100	mg/l	1x	ND	--	--	--	11.5%	(20)	05/19/09 02:39	
Barium	"	0.0227	---	0.00100	"	"	0.0230	--	--	--	1.18%	"	"	
Cadmium	"	ND	---	0.000500	"	"	ND	--	--	--	25.5%	"	"	R4
Chromium	"	0.0254	---	0.00200	"	"	0.0250	--	--	--	1.35%	"	"	
Copper	"	0.0412	---	0.00200	"	"	0.0419	--	--	--	1.76%	"	"	
Lead	"	0.0401	---	0.00100	"	"	0.0408	--	--	--	1.76%	"	"	
Manganese	"	0.190	---	0.00200	"	"	0.192	--	--	--	1.52%	"	"	
Selenium	"	ND	---	0.0100	"	20x	ND	--	--	--	NR	"	05/19/09 14:32	
Silver	"	ND	---	0.00100	"	1x	ND	--	--	--	NR	"	05/19/09 02:39	
Zinc	"	18.8	---	0.100	"	20x	18.6	--	--	--	0.834%	"	05/19/09 14:32	

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Estella Rieben, Project Manager

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ph: (503) 906.9200 fax: (503) 906.9210

Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	05/27/09 16:01

Total Metals per EPA 6000/7000 Series Methods - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 9050632 **Water Preparation Method: EPA 200/3005**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Matrix Spike (9050632-MS1)				**QC Source: PSE0413-02**					**Extracted: 05/18/09 14:09**					
Arsenic	EPA 6020	0.0999	---	0.00100	mg/l	1x	ND	0.100	99.9%	(75-125)	--	--	05/19/09 02:55	
Barium	"	0.0997	---	0.00100	"	"	0.00656	"	93.2%	"	--	--	"	
Cadmium	"	0.0963	---	0.000500	"	"	ND	"	96.3%	"	--	--	"	
Chromium	"	0.107	---	0.00200	"	"	0.00132	"	105%	"	--	--	"	
Copper	"	0.103	---	0.00200	"	"	0.00431	"	99.1%	"	--	--	"	
Lead	"	0.0944	---	0.00100	"	"	0.00131	"	93.1%	"	--	--	"	
Manganese	"	0.209	---	0.00200	"	"	0.113	"	95.8%	"	--	--	"	
Selenium	"	0.0958	---	0.0100	"	20x	ND	"	95.8%	"	--	--	05/19/09 14:48	
Silver	"	0.0489	---	0.00100	"	1x	ND	0.0500	97.8%	"	--	--	05/19/09 02:55	
Zinc	"	8.98	---	0.100	"	20x	9.07	0.100	-88.0%	"	--	--	05/19/09 14:48	MHA
Matrix Spike (9050632-MS2)				**QC Source: PSE0454-06**					**Extracted: 05/18/09 14:09**					
Arsenic	EPA 6020	0.0972	---	0.00100	mg/l	1x	ND	0.100	97.2%	(75-125)	--	--	05/19/09 04:01	
Barium	"	0.0956	---	0.00100	"	"	0.00202	"	93.6%	"	--	--	"	
Cadmium	"	0.0942	---	0.000500	"	"	ND	"	94.2%	"	--	--	"	
Chromium	"	0.104	---	0.00200	"	"	0.00111	"	103%	"	--	--	"	
Copper	"	0.105	---	0.00200	"	"	0.0107	"	94.4%	"	--	--	"	
Lead	"	0.0919	---	0.00100	"	"	ND	"	91.9%	"	--	--	"	
Manganese	"	0.113	---	0.00200	"	"	0.00685	"	107%	"	--	--	"	
Selenium	"	0.0947	---	0.000500	"	"	ND	"	94.7%	"	--	--	05/19/09 23:33	
Silver	"	0.0478	---	0.00100	"	"	0.000593	0.0500	94.4%	"	--	--	05/19/09 04:01	
Zinc	"	0.110	---	0.00500	"	"	0.0143	0.100	95.6%	"	--	--	"	

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Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	05/27/09 16:01

Total Mercury per EPA Method 7470A - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 9050577 **Water Preparation Method: EPA 7470A**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (9050577-BLK1)								**Extracted: 05/15/09 13:40**						
Mercury	EPA 7470A	ND	---	0.000200	mg/l	1x	--	--	--	--	--	--	05/15/09 14:44	
LCS (9050577-BS1)								**Extracted: 05/15/09 13:40**						
Mercury	EPA 7470A	0.00477	---	0.000200	mg/l	1x	--	0.00500	95.4%	(85-115)	--	--	05/15/09 14:46	
LCS Dup (9050577-BSD1)								**Extracted: 05/15/09 13:40**						
Mercury	EPA 7470A	0.00496	---	0.000200	mg/l	1x	--	0.00500	99.3%	(85-115)	4.03%	(20)	05/15/09 14:50	
Duplicate (9050577-DUP1)					**QC Source: PSE0264-01**				**Extracted: 05/15/09 13:40**					
Mercury	EPA 7470A	ND	---	0.000200	mg/l	1x	ND	--	--	--	NR	(20)	05/15/09 14:53	
Matrix Spike (9050577-MS1)					**QC Source: PSE0264-01**				**Extracted: 05/15/09 13:40**					
Mercury	EPA 7470A	0.00500	---	0.000200	mg/l	1x	ND	0.00500	100%	(75-125)	--	--	05/15/09 14:56	
Matrix Spike (9050577-MS2)					**QC Source: PSE0498-01**				**Extracted: 05/15/09 13:40**					
Mercury	EPA 7470A	0.00498	---	0.000200	mg/l	1x	ND	0.00500	99.6%	(75-125)	--	--	05/15/09 15:02	
Matrix Spike Dup (9050577-MSD1)					**QC Source: PSE0264-01**				**Extracted: 05/15/09 13:40**					
Mercury	EPA 7470A	0.00492	---	0.000200	mg/l	1x	ND	0.00500	98.5%	(75-125)	1.58%	(20)	05/15/09 14:59	
Matrix Spike Dup (9050577-MSD2)					**QC Source: PSE0498-01**				**Extracted: 05/15/09 13:40**					
Mercury	EPA 7470A	0.00500	---	0.000200	mg/l	1x	ND	0.00500	100%	(75-125)	0.415%	(20)	05/15/09 15:05	

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Estella Rieben, Project Manager

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Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	05/27/09 16:01

Organochlorine Pesticides per EPA Method 8081A - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 9050645 **Water Preparation Method: EPA 3510/600 Series**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (9050645-BLK1)									**Extracted: 05/19/09 10:50**					
Aldrin	EPA 8081A	ND	---	0.0200	ug/l	1x	--	--	--	--	--	--	05/20/09 12:10	
alpha-BHC	"	ND	---	0.0200	"	"	--	--	--	--	--	--	"	
beta-BHC	"	ND	---	0.0200	"	"	--	--	--	--	--	--	"	
delta-BHC	"	ND	---	0.0200	"	"	--	--	--	--	--	--	"	
gamma-BHC (Lindane)	"	ND	---	0.0200	"	"	--	--	--	--	--	--	"	
gamma-Chlordane	"	ND	---	0.0200	"	"	--	--	--	--	--	--	"	
alpha-Chlordane	"	ND	---	0.0200	"	"	--	--	--	--	--	--	"	
Chlordane (tech)	"	ND	---	0.200	"	"	--	--	--	--	--	--	"	
4,4'-DDD	"	ND	---	0.0200	"	"	--	--	--	--	--	--	"	
4,4'-DDE	"	ND	---	0.0200	"	"	--	--	--	--	--	--	"	
4,4'-DDT	"	ND	---	0.0200	"	"	--	--	--	--	--	--	"	
Dieldrin	"	ND	---	0.0200	"	"	--	--	--	--	--	--	"	
Endosulfan I	"	ND	---	0.0200	"	"	--	--	--	--	--	--	"	
Endosulfan II	"	ND	---	0.0200	"	"	--	--	--	--	--	--	"	
Endosulfan sulfate	"	ND	---	0.0200	"	"	--	--	--	--	--	--	"	
Endrin	"	ND	---	0.0200	"	"	--	--	--	--	--	--	"	
Endrin aldehyde	"	ND	---	0.0200	"	"	--	--	--	--	--	--	"	
Endrin ketone	"	ND	---	0.0200	"	"	--	--	--	--	--	--	"	
Heptachlor	"	ND	---	0.0200	"	"	--	--	--	--	--	--	"	
Heptachlor epoxide	"	ND	---	0.0200	"	"	--	--	--	--	--	--	"	
Methoxychlor	"	ND	---	0.0200	"	"	--	--	--	--	--	--	"	
Toxaphene	"	ND	---	0.500	"	"	--	--	--	--	--	--	"	
Surrogate(s): 2,4,5,6-Tetrachloro-m-xylene		*Recovery: 70.6%*			*Limits: 16-137%*	"							*05/20/09 12:10*	
LCS (9050645-BS1)									**Extracted: 05/19/09 10:50**					
Aldrin	EPA 8081A	0.0682	---	0.0200	ug/l	1x	--	0.100	68.2%	(43-115)	--	--	05/20/09 12:36	
gamma-BHC (Lindane)	"	0.0709	---	0.0200	"	"	--	"	70.9%	(61-120)	--	--	"	
4,4'-DDT	"	0.0759	---	0.0200	"	"	--	"	75.9%	(58-128)	--	--	"	
Dieldrin	"	0.0737	---	0.0200	"	"	--	"	73.7%	(60-128)	--	--	"	
Endrin	"	0.0717	---	0.0200	"	"	--	"	71.7%	(68-136)	--	--	"	
Heptachlor	"	0.0694	---	0.0200	"	"	--	"	69.4%	(49-116)	--	--	"	
Surrogate(s): 2,4,5,6-Tetrachloro-m-xylene		*Recovery: 63.1%*			*Limits: 16-137%*	"							*05/20/09 12:36*	

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Estella K Rieben

Estella Rieben, Project Manager

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Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	05/27/09 16:01

Organochlorine Pesticides per EPA Method 8081A - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 9050645 **Water Preparation Method: EPA 3510/600 Series**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
LCS Dup (9050645-BSD1)								**Extracted: 05/19/09 10:50**						
Aldrin	EPA 8081A	0.0678	---	0.0200	ug/l	1x	--	0.100	67.8%	(43-115)	0.529%	(22)	05/20/09 13:02	
gamma-BHC (Lindane)	"	0.0711	---	0.0200	"	"	--	"	71.1%	(61-120)	0.380%	"	"	
4,4'-DDT	"	0.0746	---	0.0200	"	"	--	"	74.6%	(58-128)	1.70%	"	"	
Dieldrin	"	0.0733	---	0.0200	"	"	--	"	73.3%	(60-128)	0.571%	"	"	
Endrin	"	0.0720	---	0.0200	"	"	--	"	72.0%	(68-136)	0.473%	"	"	
Heptachlor	"	0.0682	---	0.0200	"	"	--	"	68.2%	(49-116)	1.74%	"	"	
Surrogate(s): 2,4,5,6-Tetrachloro-m-xylene		*Recovery: 61.4%*			*Limits: 16-137%*	"							*05/20/09 13:02*	

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Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	05/27/09 16:01

Polychlorinated Biphenyls per EPA Method 8082 - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 9050605 **Water Preparation Method: EPA 3510/600 Series**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (9050605-BLK1)									**Extracted: 05/18/09 17:05**					
Aroclor 1016	EPA 8082	ND	---	0.100	ug/l	1x	--	--	--	--	--	--	05/20/09 17:45	
Aroclor 1221	"	ND	---	0.200	"	"	--	--	--	--	--	--	"	
Aroclor 1232	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Aroclor 1242	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Aroclor 1248	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Aroclor 1254	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Aroclor 1260	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Aroclor 1262	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Aroclor 1268	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Surrogate(s): Decachlorobiphenyl		*Recovery: 100%*			*Limits: 12-130%*	"							*05/20/09 17:45*	
LCS (9050605-BS1)									**Extracted: 05/18/09 17:05**					
Aroclor 1016	EPA 8082	1.03	---	0.100	ug/l	1x	--	1.00	103%	(50-114)	--	--	05/20/09 18:07	
Aroclor 1260	"	1.03	---	0.100	"	"	--	"	103%	(8-127)	--	--	"	
Surrogate(s): Decachlorobiphenyl		*Recovery: 104%*			*Limits: 12-130%*	"							*05/20/09 18:07*	
LCS Dup (9050605-BSD1)									**Extracted: 05/18/09 17:05**					
Aroclor 1016	EPA 8082	1.02	---	0.100	ug/l	1x	--	1.00	102%	(50-114)	0.705%	(22)	05/20/09 18:29	
Aroclor 1260	"	1.03	---	0.100	"	"	--	"	103%	(8-127)	0.0192%	(23)	"	
Surrogate(s): Decachlorobiphenyl		*Recovery: 104%*			*Limits: 12-130%*	"							*05/20/09 18:29*	

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Estella K Rieben

Estella Rieben, Project Manager

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ph: (503) 906.9200 fax: (503) 906.9210

Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	05/27/09 16:01

Volatile Organic Compounds per EPA Method 8260B - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 9050599 **Water Preparation Method: EPA 5030B**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (9050599-BLK1)							**Extracted: 05/18/09 09:00**							
Acetone	EPA 8260B	ND	---	25.0	ug/l	1x	--	--	--	--	--	--	05/18/09 11:49	
Benzene	"	ND	---	0.200	"	"	--	--	--	--	--	--	"	
Bromobenzene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Bromochloromethane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Bromodichloromethane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Bromoform	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Bromomethane	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
2-Butanone (MEK)	"	ND	---	10.0	"	"	--	--	--	--	--	--	"	
n-Butylbenzene	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
sec-Butylbenzene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
tert-Butylbenzene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Carbon disulfide	"	ND	---	10.0	"	"	--	--	--	--	--	--	"	
Carbon tetrachloride	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Chlorobenzene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Chloroethane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Chloroform	"	ND	---	0.200	"	"	--	--	--	--	--	--	"	
Chloromethane	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
2-Chlorotoluene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
4-Chlorotoluene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,2-Dibromo-3-chloropropane	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
Dibromochloromethane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,2-Dibromoethane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Dibromomethane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,2-Dichlorobenzene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,3-Dichlorobenzene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,4-Dichlorobenzene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Dichlorodifluoromethane	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
1,1-Dichloroethane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,2-Dichloroethane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,1-Dichloroethene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
cis-1,2-Dichloroethene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
trans-1,2-Dichloroethene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,2-Dichloropropane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,3-Dichloropropane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
2,2-Dichloropropane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,1-Dichloropropene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
cis-1,3-Dichloropropene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
trans-1,3-Dichloropropene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Ethylbenzene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	

TestAmerica Portland

Estella K Rieben

Estella Rieben, Project Manager

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THE LEADER IN ENVIRONMENTAL TESTING

PORTLAND, OR 9405 S.W. NIMBUS AVENUE
BEAVERTON, OR 97008-7132
ph: (503) 906.9200 fax: (503) 906.9210

Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	05/27/09 16:01

Volatile Organic Compounds per EPA Method 8260B - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 9050599 **Water Preparation Method: EPA 5030B**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (9050599-BLK1)								**Extracted: 05/18/09 09:00**						
Hexachlorobutadiene	EPA 8260B	ND	---	4.00	ug/l	1x	--	--	--	--	--	--	05/18/09 11:49	
2-Hexanone	"	ND	---	10.0	"	"	--	--	--	--	--	--	"	
Isopropylbenzene	"	ND	---	2.00	"	"	--	--	--	--	--	--	"	
p-Isopropyltoluene	"	ND	---	2.00	"	"	--	--	--	--	--	--	"	
4-Methyl-2-pentanone	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
Methyl tert-butyl ether	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Methylene chloride	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
Naphthalene	"	ND	---	2.00	"	"	--	--	--	--	--	--	"	
n-Propylbenzene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Styrene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,1,1,2-Tetrachloroethane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,1,2,2-Tetrachloroethane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Tetrachloroethene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Toluene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,2,3-Trichlorobenzene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,2,4-Trichlorobenzene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,1,1-Trichloroethane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,1,2-Trichloroethane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Trichloroethene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Trichlorofluoromethane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,2,3-Trichloropropane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,2,4-Trimethylbenzene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,3,5-Trimethylbenzene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Vinyl chloride	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
o-Xylene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
m,p-Xylene	"	ND	---	2.00	"	"	--	--	--	--	--	--	"	
Surrogate(s):	*Dibromofluoromethane*	*Recovery:*	*102%*		*Limits:*	*80-120%*	"						*05/18/09 11:49*	
	1,2-DCA-d4		*103%*			*80-120%*	"						"	
	Toluene-d8		*104%*			*80-120%*	"						"	
	4-BFB		*95.2%*			*80-120%*	"						"	

TestAmerica Portland

Estella K Rieben

Estella Rieben, Project Manager

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PORTLAND, OR 9405 S.W. NIMBUS AVENUE
BEAVERTON, OR 97008-7132
ph: (503) 906.9200 fax: (503) 906.9210

Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	05/27/09 16:01

Volatile Organic Compounds per EPA Method 8260B - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 9050599 **Water Preparation Method: EPA 5030B**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
LCS (9050599-BS1)								**Extracted: 05/18/09 09:00**						
Acetone	EPA 8260B	107	---	25.0	ug/l	1x	--	100	107%	(56-141)	--	--	05/18/09 10:21	
Benzene	"	20.2	---	0.200	"	"	--	20.0	101%	(80-120)	--	--	"	
Bromobenzene	"	19.1	---	1.00	"	"	--	"	95.3%	(78-120)	--	--	"	
Bromochloromethane	"	18.6	---	1.00	"	"	--	"	93.0%	(76-121)	--	--	"	
Bromodichloromethane	"	21.4	---	1.00	"	"	--	"	107%	(84-127)	--	--	"	
Bromoform	"	18.7	---	1.00	"	"	--	"	93.4%	(55-134)	--	--	"	
Bromomethane	"	17.8	---	5.00	"	"	--	"	88.8%	(38-150)	--	--	"	
2-Butanone (MEK)	"	110	---	10.0	"	"	--	100	110%	(71-136)	--	--	"	
n-Butylbenzene	"	22.6	---	5.00	"	"	--	20.0	113%	(76-126)	--	--	"	
sec-Butylbenzene	"	20.3	---	1.00	"	"	--	"	102%	(64-129)	--	--	"	
tert-Butylbenzene	"	20.1	---	1.00	"	"	--	"	100%	(71-127)	--	--	"	
Carbon disulfide	"	35.2	---	10.0	"	"	--	40.0	88.0%	(58-120)	--	--	"	
Carbon tetrachloride	"	24.3	---	1.00	"	"	--	20.0	121%	(73-134)	--	--	"	
Chlorobenzene	"	21.0	---	1.00	"	"	--	"	105%	(80-124)	--	--	"	
Chloroethane	"	19.8	---	1.00	"	"	--	"	98.9%	(79-124)	--	--	"	
Chloroform	"	20.6	---	0.200	"	"	--	"	103%	(80-120)	--	--	"	
Chloromethane	"	16.3	---	5.00	"	"	--	"	81.4%	(47-146)	--	--	"	
2-Chlorotoluene	"	19.3	---	1.00	"	"	--	"	96.4%	(72-125)	--	--	"	
4-Chlorotoluene	"	19.6	---	1.00	"	"	--	"	98.2%	(77-124)	--	--	"	
1,2-Dibromo-3-chloropropane	"	22.8	---	5.00	"	"	--	"	114%	(73-134)	--	--	"	
Dibromochloromethane	"	22.7	---	1.00	"	"	--	"	113%	(69-138)	--	--	"	
1,2-Dibromoethane	"	21.2	---	1.00	"	"	--	"	106%	(80-122)	--	--	"	
Dibromomethane	"	20.0	---	1.00	"	"	--	"	100%	(80-120)	--	--	"	
1,2-Dichlorobenzene	"	21.1	---	1.00	"	"	--	"	105%	(80-113)	--	--	"	
1,3-Dichlorobenzene	"	19.3	---	1.00	"	"	--	"	96.4%	(76-123)	--	--	"	
1,4-Dichlorobenzene	"	19.2	---	1.00	"	"	--	"	96.0%	(73-120)	--	--	"	
Dichlorodifluoromethane	"	15.8	---	5.00	"	"	--	"	78.8%	(48-140)	--	--	"	
1,1-Dichloroethane	"	20.5	---	1.00	"	"	--	"	102%	(80-120)	--	--	"	
1,2-Dichloroethane	"	20.2	---	1.00	"	"	--	"	101%	(78-123)	--	--	"	
1,1-Dichloroethene	"	18.0	---	1.00	"	"	--	"	89.8%	(78-120)	--	--	"	
cis-1,2-Dichloroethene	"	20.1	---	1.00	"	"	--	"	100%	(80-120)	--	--	"	
trans-1,2-Dichloroethene	"	19.8	---	1.00	"	"	--	"	99.2%	"	--	--	"	
1,2-Dichloropropane	"	20.9	---	1.00	"	"	--	"	104%	(80-126)	--	--	"	
1,3-Dichloropropane	"	21.0	---	1.00	"	"	--	"	105%	(80-120)	--	--	"	
2,2-Dichloropropane	"	20.6	---	1.00	"	"	--	"	103%	(60-144)	--	--	"	
1,1-Dichloropropene	"	18.8	---	1.00	"	"	--	"	94.2%	(80-120)	--	--	"	
cis-1,3-Dichloropropene	"	22.2	---	1.00	"	"	--	"	111%	(80-125)	--	--	"	
trans-1,3-Dichloropropene	"	22.5	---	1.00	"	"	--	"	112%	(80-130)	--	--	"	
Ethylbenzene	"	18.6	---	1.00	"	"	--	"	93.2%	(80-120)	--	--	"	

TestAmerica Portland

Estella K Rieben

Estella Rieben, Project Manager

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Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	05/27/09 16:01

Volatile Organic Compounds per EPA Method 8260B - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 9050599 **Water Preparation Method: EPA 5030B**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
LCS (9050599-BS1)								**Extracted: 05/18/09 09:00**						
Hexachlorobutadiene	EPA 8260B	22.6	---	4.00	ug/l	1x	--	20.0	113%	(64-145)	--	--	05/18/09 10:21	
2-Hexanone	"	119	---	10.0	"	"	--	100	119%	(73-139)	--	--	"	
Isopropylbenzene	"	19.2	---	2.00	"	"	--	20.0	95.9%	(77-124)	--	--	"	
p-Isopropyltoluene	"	20.2	---	2.00	"	"	--	"	101%	(68-130)	--	--	"	
4-Methyl-2-pentanone	"	110	---	5.00	"	"	--	100	110%	(72-134)	--	--	"	
Methyl tert-butyl ether	"	18.7	---	1.00	"	"	--	20.0	93.6%	(80-129)	--	--	"	
Methylene chloride	"	20.2	---	5.00	"	"	--	"	101%	(80-120)	--	--	"	
Naphthalene	"	23.0	---	2.00	"	"	--	"	115%	(72-149)	--	--	"	
n-Propylbenzene	"	20.1	---	1.00	"	"	--	"	100%	(76-128)	--	--	"	
Styrene	"	20.2	---	1.00	"	"	--	"	101%	(72-127)	--	--	"	
1,1,1,2-Tetrachloroethane	"	22.9	---	1.00	"	"	--	"	115%	(69-138)	--	--	"	
1,1,2,2-Tetrachloroethane	"	21.9	---	1.00	"	"	--	"	110%	(77-128)	--	--	"	
Tetrachloroethene	"	19.7	---	1.00	"	"	--	"	98.4%	(80-124)	--	--	"	
Toluene	"	21.0	---	1.00	"	"	--	"	105%	"	--	--	"	
1,2,3-Trichlorobenzene	"	21.6	---	1.00	"	"	--	"	108%	(69-138)	--	--	"	
1,2,4-Trichlorobenzene	"	21.6	---	1.00	"	"	--	"	108%	(75-127)	--	--	"	
1,1,1-Trichloroethane	"	20.0	---	1.00	"	"	--	"	100%	(76-132)	--	--	"	
1,1,2-Trichloroethane	"	21.4	---	1.00	"	"	--	"	107%	(80-123)	--	--	"	
Trichloroethene	"	19.5	---	1.00	"	"	--	"	97.4%	(80-132)	--	--	"	
Trichlorofluoromethane	"	19.1	---	1.00	"	"	--	"	95.6%	(77-137)	--	--	"	
1,2,3-Trichloropropane	"	20.3	---	1.00	"	"	--	"	101%	(75-125)	--	--	"	
1,2,4-Trimethylbenzene	"	19.8	---	1.00	"	"	--	"	99.0%	(73-132)	--	--	"	
1,3,5-Trimethylbenzene	"	20.2	---	1.00	"	"	--	"	101%	(75-132)	--	--	"	
Vinyl chloride	"	19.0	---	1.00	"	"	--	"	95.2%	(76-133)	--	--	"	
o-Xylene	"	19.1	---	1.00	"	"	--	"	95.4%	(77-123)	--	--	"	
m,p-Xylene	"	37.7	---	2.00	"	"	--	40.0	94.3%	(72-127)	--	--	"	

Surrogate(s):	*Dibromofluoromethane*	*Recovery:*	*102%*	*Limits:*	*80-120%*	*" 05/18/09 10:21*
	1,2-DCA-d4		*101%*		*80-120%*	*"*
	Toluene-d8		*106%*		*80-120%*	*"*
	4-BFB		*95.8%*		*80-120%*	*"*

TestAmerica Portland

Estella K Rieben

Estella Rieben, Project Manager

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Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	05/27/09 16:01

Volatile Organic Compounds per EPA Method 8260B - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 9050599 **Water Preparation Method: EPA 5030B**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
LCS Dup (9050599-BSD1)								**Extracted: 05/18/09 09:00**						
Acetone	EPA 8260B	102	---	25.0	ug/l	1x	--	100	102%	(56-141)	4.98%	(25)	05/18/09 10:55	
Benzene	"	19.3	---	0.200	"	"	--	20.0	96.4%	(80-120)	4.46%	"	"	
Bromobenzene	"	17.8	---	1.00	"	"	--	"	88.8%	(78-120)	7.01%	"	"	
Bromochloromethane	"	17.5	---	1.00	"	"	--	"	87.4%	(76-121)	6.15%	"	"	
Bromodichloromethane	"	20.0	---	1.00	"	"	--	"	99.8%	(84-127)	6.92%	"	"	
Bromoform	"	17.9	---	1.00	"	"	--	"	89.5%	(55-134)	4.21%	"	"	
Bromomethane	"	16.8	---	5.00	"	"	--	"	83.8%	(38-150)	5.79%	"	"	
2-Butanone (MEK)	"	104	---	10.0	"	"	--	100	104%	(71-136)	5.56%	"	"	
n-Butylbenzene	"	22.5	---	5.00	"	"	--	20.0	112%	(76-126)	0.621%	"	"	
sec-Butylbenzene	"	20.2	---	1.00	"	"	--	"	101%	(64-129)	0.444%	"	"	
tert-Butylbenzene	"	19.8	---	1.00	"	"	--	"	98.8%	(71-127)	1.66%	"	"	
Carbon disulfide	"	31.2	---	10.0	"	"	--	40.0	78.1%	(58-120)	11.9%	"	"	
Carbon tetrachloride	"	24.2	---	1.00	"	"	--	20.0	121%	(73-134)	0.206%	"	"	
Chlorobenzene	"	19.4	---	1.00	"	"	--	"	97.2%	(80-124)	7.62%	"	"	
Chloroethane	"	19.2	---	1.00	"	"	--	"	95.8%	(79-124)	3.13%	"	"	
Chloroform	"	19.4	---	0.200	"	"	--	"	97.1%	(80-120)	5.85%	"	"	
Chloromethane	"	15.4	---	5.00	"	"	--	"	77.0%	(47-146)	5.49%	"	"	
2-Chlorotoluene	"	18.1	---	1.00	"	"	--	"	90.6%	(72-125)	6.20%	"	"	
4-Chlorotoluene	"	18.5	---	1.00	"	"	--	"	92.6%	(77-124)	5.87%	"	"	
1,2-Dibromo-3-chloropropane	"	22.2	---	5.00	"	"	--	"	111%	(73-134)	2.80%	"	"	
Dibromochloromethane	"	21.1	---	1.00	"	"	--	"	105%	(69-138)	7.31%	"	"	
1,2-Dibromoethane	"	19.8	---	1.00	"	"	--	"	99.2%	(80-122)	6.58%	"	"	
Dibromomethane	"	18.7	---	1.00	"	"	--	"	93.4%	(80-120)	6.78%	"	"	
1,2-Dichlorobenzene	"	19.4	---	1.00	"	"	--	"	97.2%	(80-113)	8.04%	"	"	
1,3-Dichlorobenzene	"	18.1	---	1.00	"	"	--	"	90.4%	(76-123)	6.53%	"	"	
1,4-Dichlorobenzene	"	18.0	---	1.00	"	"	--	"	90.1%	(73-120)	6.39%	"	"	
Dichlorodifluoromethane	"	15.3	---	5.00	"	"	--	"	76.4%	(48-140)	3.16%	"	"	
1,1-Dichloroethane	"	19.4	---	1.00	"	"	--	"	97.1%	(80-120)	5.26%	"	"	
1,2-Dichloroethane	"	18.6	---	1.00	"	"	--	"	92.8%	(78-123)	8.51%	"	"	
1,1-Dichloroethene	"	18.4	---	1.00	"	"	--	"	91.8%	(78-120)	2.20%	"	"	
cis-1,2-Dichloroethene	"	18.9	---	1.00	"	"	--	"	94.3%	(80-120)	6.17%	"	"	
trans-1,2-Dichloroethene	"	19.3	---	1.00	"	"	--	"	96.3%	"	2.97%	"	"	
1,2-Dichloropropane	"	19.4	---	1.00	"	"	--	"	96.8%	(80-126)	7.41%	"	"	
1,3-Dichloropropane	"	19.5	---	1.00	"	"	--	"	97.6%	(80-120)	7.31%	"	"	
2,2-Dichloropropane	"	20.2	---	1.00	"	"	--	"	101%	(60-144)	2.35%	"	"	
1,1-Dichloropropene	"	18.9	---	1.00	"	"	--	"	94.5%	(80-120)	0.318%	"	"	
cis-1,3-Dichloropropene	"	21.0	---	1.00	"	"	--	"	105%	(80-125)	5.60%	"	"	
trans-1,3-Dichloropropene	"	20.8	---	1.00	"	"	--	"	104%	(80-130)	8.00%	"	"	
Ethylbenzene	"	17.9	---	1.00	"	"	--	"	89.4%	(80-120)	4.16%	"	"	

TestAmerica Portland

Estella K Rieben

Estella Rieben, Project Manager

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THE LEADER IN ENVIRONMENTAL TESTING

PORTLAND, OR 9405 S.W. NIMBUS AVENUE
BEAVERTON, OR 97008-7132
ph: (503) 906.9200 fax: (503) 906.9210

Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	05/27/09 16:01

Volatile Organic Compounds per EPA Method 8260B - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 9050599 **Water Preparation Method: EPA 5030B**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
LCS Dup (9050599-BSD1)							**Extracted: 05/18/09 09:00**							
Hexachlorobutadiene	EPA 8260B	23.0	---	4.00	ug/l	1x	--	20.0	115%	(64-145)	2.02%	(25)	05/18/09 10:55	
2-Hexanone	"	111	---	10.0	"	"	--	100	111%	(73-139)	6.21%	"	"	
Isopropylbenzene	"	18.6	---	2.00	"	"	--	20.0	92.8%	(77-124)	3.23%	"	"	
p-Isopropyltoluene	"	19.8	---	2.00	"	"	--	"	99.2%	(68-130)	1.70%	"	"	
4-Methyl-2-pentanone	"	101	---	5.00	"	"	--	100	101%	(72-134)	8.11%	"	"	
Methyl tert-butyl ether	"	17.7	---	1.00	"	"	--	20.0	88.7%	(80-129)	5.43%	"	"	
Methylene chloride	"	19.1	---	5.00	"	"	--	"	95.7%	(80-120)	5.49%	"	"	
Naphthalene	"	21.9	---	2.00	"	"	--	"	109%	(72-149)	5.00%	"	"	
n-Propylbenzene	"	19.3	---	1.00	"	"	--	"	96.3%	(76-128)	4.07%	"	"	
Styrene	"	18.8	---	1.00	"	"	--	"	94.2%	(72-127)	6.97%	"	"	
1,1,1,2-Tetrachloroethane	"	20.9	---	1.00	"	"	--	"	104%	(69-138)	9.35%	"	"	
1,1,2,2-Tetrachloroethane	"	21.0	---	1.00	"	"	--	"	105%	(77-128)	4.43%	"	"	
Tetrachloroethene	"	19.4	---	1.00	"	"	--	"	96.9%	(80-124)	1.49%	"	"	
Toluene	"	19.7	---	1.00	"	"	--	"	98.7%	"	6.19%	"	"	
1,2,3-Trichlorobenzene	"	20.8	---	1.00	"	"	--	"	104%	(69-138)	3.73%	"	"	
1,2,4-Trichlorobenzene	"	20.6	---	1.00	"	"	--	"	103%	(75-127)	4.98%	"	"	
1,1,1-Trichloroethane	"	19.5	---	1.00	"	"	--	"	97.5%	(76-132)	2.58%	"	"	
1,1,2-Trichloroethane	"	19.9	---	1.00	"	"	--	"	99.7%	(80-123)	7.02%	"	"	
Trichloroethene	"	18.9	---	1.00	"	"	--	"	94.6%	(80-132)	2.92%	"	"	
Trichlorofluoromethane	"	18.5	---	1.00	"	"	--	"	92.4%	(77-137)	3.35%	"	"	
1,2,3-Trichloropropane	"	19.5	---	1.00	"	"	--	"	97.4%	(75-125)	4.12%	"	"	
1,2,4-Trimethylbenzene	"	19.2	---	1.00	"	"	--	"	96.2%	(73-132)	2.82%	"	"	
1,3,5-Trimethylbenzene	"	19.4	---	1.00	"	"	--	"	97.0%	(75-132)	4.09%	"	"	
Vinyl chloride	"	18.6	---	1.00	"	"	--	"	93.0%	(76-133)	2.34%	"	"	
o-Xylene	"	17.8	---	1.00	"	"	--	"	89.0%	(77-123)	6.94%	"	"	
m,p-Xylene	"	36.0	---	2.00	"	"	--	40.0	90.0%	(72-127)	4.72%	"	"	

Surrogate(s):	*Dibromofluoromethane*	*Recovery:*	*97.6%*	*Limits:*	*80-120%*	"	*05/18/09 10:55*
	1,2-DCA-d4		*96.5%*		*80-120%*	"	"
	Toluene-d8		*102%*		*80-120%*	"	"
	4-BFB		*94.2%*		*80-120%*	"	"

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Estella K Rieben

Estella Rieben, Project Manager

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Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	05/27/09 16:01

Polynuclear Aromatic Compounds per EPA 8270M-SIM - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 9050596 **Water Preparation Method: 3520B Liq-Liq**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (9050596-BLK1)							**Extracted: 05/18/09 09:50**							
2-Methylnaphthalene	EPA 8270m	ND	---	0.100	ug/l	1x	--	--	--	--	--	--	05/20/09 13:18	
Acenaphthene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Acenaphthylene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Anthracene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Benzo (a) anthracene	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	
Benzo (a) pyrene	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	
Benzo (b) fluoranthene	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	
Benzo (ghi) perylene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Benzo (k) fluoranthene	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	
Chrysene	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	
Dibenzo (a,h) anthracene	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	
Fluoranthene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Fluorene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Indeno (1,2,3-cd) pyrene	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	
Naphthalene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Phenanthrene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Pyrene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Surrogate(s): Fluorene-d10		*Recovery: 85.5%*			*Limits: 25-125%*	"							*05/20/09 13:18*	
Pyrene-d10		*82.0%*			*23-150%*	"							"	
Benzo (a) pyrene-d12		*85.5%*			*10-125%*	"							"	
LCS (9050596-BS1)							**Extracted: 05/18/09 09:50**							
Acenaphthene	EPA 8270m	1.18	---	0.100	ug/l	1x	--	1.25	94.7%	(26-135)	--	--	05/20/09 13:47	
Benzo (a) pyrene	"	1.16	---	0.00500	"	"	--	"	93.2%	(38-137)	--	--	"	
Pyrene	"	1.12	---	0.100	"	"	--	"	90.0%	(30-147)	--	--	"	
Surrogate(s): Fluorene-d10		*Recovery: 91.1%*			*Limits: 25-125%*	"							*05/20/09 13:47*	
Pyrene-d10		*82.7%*			*23-150%*	"							"	
Benzo (a) pyrene-d12		*91.4%*			*10-125%*	"							"	
LCS Dup (9050596-BSD1)							**Extracted: 05/18/09 09:50**							
Acenaphthene	EPA 8270m	1.16	---	0.100	ug/l	1x	--	1.25	93.1%	(26-135)	1.72%	(50)	05/20/09 14:16	
Benzo (a) pyrene	"	1.12	---	0.00500	"	"	--	"	89.4%	(38-137)	4.10%	"	"	
Pyrene	"	1.10	---	0.100	"	"	--	"	87.8%	(30-147)	2.46%	"	"	
Surrogate(s): Fluorene-d10		*Recovery: 89.7%*			*Limits: 25-125%*	"							*05/20/09 14:16*	
Pyrene-d10		*82.6%*			*23-150%*	"							"	
Benzo (a) pyrene-d12		*89.6%*			*10-125%*	"							"	

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Estella K Rieben

Estella Rieben, Project Manager

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Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	05/27/09 16:01

Phthalates per EPA 8270-SIM - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 9050596 **Water Preparation Method: 3520B Liq-Liq**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (9050596-BLK1)								**Extracted: 05/18/09 09:50**						
Dimethyl phthalate	EPA 8270m	ND	---	1.00	ug/l	1x	--	--	--	--	--	--	05/20/09 16:26	
Diethyl phthalate	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Di-n-butyl phthalate	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Butyl benzyl phthalate	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Bis(2-ethylhexyl)phthalate	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Di-n-octyl phthalate	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Surrogate(s): 2-Fluorobiphenyl		*Recovery: 73.5%*			*Limits: 10-150%*	"							*05/20/09 16:26*	
p-Terphenyl-d14		*89.5%*			*10-150%*	"							"	
LCS (9050596-BS1)								**Extracted: 05/18/09 09:50**						
Dimethyl phthalate	EPA 8270m	1.66	---	1.00	ug/l	1x	--	2.00	82.8%	(20-150)	--	--	05/20/09 17:02	
Diethyl phthalate	"	1.71	---	1.00	"	"	--	"	85.6%	"	--	--	"	
Di-n-butyl phthalate	"	1.79	---	1.00	"	"	--	"	89.6%	"	--	--	"	
Butyl benzyl phthalate	"	1.86	---	1.00	"	"	--	"	92.8%	"	--	--	"	
Bis(2-ethylhexyl)phthalate	"	1.77	---	1.00	"	"	--	"	88.7%	"	--	--	"	
Di-n-octyl phthalate	"	1.90	---	1.00	"	"	--	"	94.8%	"	--	--	"	
Surrogate(s): 2-Fluorobiphenyl		*Recovery: 56.8%*			*Limits: 10-150%*	"							*05/20/09 17:02*	
p-Terphenyl-d14		*88.5%*			*10-150%*	"							"	
LCS Dup (9050596-BSD1)								**Extracted: 05/18/09 09:50**						
Dimethyl phthalate	EPA 8270m	1.65	---	1.00	ug/l	1x	--	2.00	82.3%	(20-150)	0.607%	(50)	05/20/09 17:38	
Diethyl phthalate	"	1.68	---	1.00	"	"	--	"	83.8%	"	2.18%	"	"	
Di-n-butyl phthalate	"	1.73	---	1.00	"	"	--	"	86.5%	"	3.58%	"	"	
Butyl benzyl phthalate	"	1.87	---	1.00	"	"	--	"	93.7%	"	0.946%	"	"	
Bis(2-ethylhexyl)phthalate	"	1.91	---	1.00	"	"	--	"	95.7%	"	7.63%	"	"	
Di-n-octyl phthalate	"	1.97	---	1.00	"	"	--	"	98.3%	"	3.61%	"	"	
Surrogate(s): 2-Fluorobiphenyl		*Recovery: 56.5%*			*Limits: 10-150%*	"							*05/20/09 17:38*	
p-Terphenyl-d14		*88.9%*			*10-150%*	"							"	

TestAmerica Portland

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Estella Rieben, Project Manager

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Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	05/27/09 16:01

Conventional Chemistry Parameters per Standard Methods - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 9050502 **Water Preparation Method: General Preparation**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (9050502-BLK1)								**Extracted: 05/14/09 08:59**						
Total Organic Carbon	SM 5310C	ND	---	1.00	mg/l	1x	--	--	--	--	--	--	05/15/09 02:23	
LCS (9050502-BS1)								**Extracted: 05/14/09 08:59**						
Total Organic Carbon	SM 5310C	19.1	---	1.00	mg/l	1x	--	20.0	95.5%	(85-115)	--	--	05/15/09 02:23	
Duplicate (9050502-DUP1)					**QC Source: PSE0425-01**			**Extracted: 05/14/09 08:59**						
Total Organic Carbon	SM 5310C	7.06	---	1.00	mg/l	1x	6.87	--	--	--	2.75%	(20)	05/15/09 02:23	
Matrix Spike (9050502-MS1)					**QC Source: PSE0425-01**			**Extracted: 05/14/09 08:59**						
Total Organic Carbon	SM 5310C	33.2	---	1.01	mg/l	1x	6.87	25.3	104%	(75-125)	--	--	05/15/09 02:23	

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Stantec	Project Name:	**Portland Terminal - Stormwater**	
7730 SW Mohawk Street	Project Number:	0922 - ConocoPhillips	Report Created:
Tualatin, OR 97062	Project Manager:	Rick Fetterly	05/27/09 16:01

Notes and Definitions

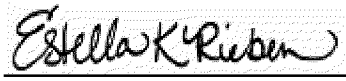
Report Specific Notes:

MHA	-	Due to high levels of analyte in the sample, the MS/MSD calculation does not provide useful spike recovery information. See Blank Spike (LCS).
R4	-	Due to the low levels of analyte in the sample, the duplicate RPD calculation does not provide useful information.
RL3	-	Reporting limit raised due to high concentrations of non-target analytes.
RL4	-	Reporting limit raised due to insufficient sample volume.

Laboratory Reporting Conventions:

DET	-	Analyte DETECTED at or above the Reporting Limit. Qualitative Analyses only.
ND	-	Analyte NOT DETECTED at or above the reporting limit (MDL or MRL, as appropriate).
NR/NA	-	Not Reported / Not Available
dry	-	Sample results reported on a Dry Weight Basis. Results and Reporting Limits have been corrected for Percent Dry Weight.
wet	-	Sample results and reporting limits reported on a Wet Weight Basis (as received). Results with neither 'wet' nor 'dry' are reported on a Wet Weight Basis.
RPD	-	RELATIVE PERCENT DIFFERENCE (RPDs calculated using Results, not Percent Recoveries).
MRL	-	METHOD REPORTING LIMIT. Reporting Level at, or above, the lowest level standard of the Calibration Table.
MDL*	-	METHOD DETECTION LIMIT. Reporting Level at, or above, the statistically derived limit based on 40CFR, Part 136, Appendix B. *MDLs are listed on the report only if the data has been evaluated below the MRL. Results between the MDL and MRL are reported as Estimated Results.
Dil	-	Dilutions are calculated based on deviations from the standard dilution performed for an analysis, and may not represent the dilution found on the analytical raw data.
Reporting Limits	-	Reporting limits (MDLs and MRLs) are adjusted based on variations in sample preparation amounts, analytical dilutions and percent solids, where applicable.
Electronic Signature	-	Electronic Signature added in accordance with TestAmerica's *Electronic Reporting and Electronic Signatures Policy.* Application of electronic signature indicates that the report has been reviewed and approved for release by the laboratory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

TestAmerica Portland



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9405 SW Nimbus Ave, Beaverton, OR 97008-7145 503-906-9200 FAX 906-9210
[illegible]

CHAIN OF CUSTODY REPORT

Work Order #: PSE0425

CLIENT: Stantec

INVOICE TO: Stantec

REPORT TO: Rich Fetterly
ADDRESS: 7730 SW Mohawk Street
Tualatin, OR 97062
PHONE: (503) 692-2030 FAX: (503) 692-7074

P.O. NUMBER:

PROJECT NAME: 0922 - Stormwater

PROJECT NUMBER: 0922

SAMPLED BY: CCF/AL

TURNAROUND REQUEST

in Business Days *

Organic & Inorganic Analyses: 10 (STD) | 7 | 5 | 4 | 3 | 2 | 1 | <1

Petroleum Hydrocarbon Analyses: 5 (STD) | 4 | 3 | 2 | 1 | <1

OTHER Specify:

* Turnaround Requests less than standard may incur Rush Charges

PRESERVATIVE: HCl | HCl | ~~H2SO4~~ | ~~HNO3~~ | NA | ~~NA~~

REQUESTED ANALYSES

	CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME	NWTPH-Gx	NWTPH-Dx	SM 5310C	8260B, BTEX + MTBE		8270M-SIM	8270-SIM	8082	Total metals	6000-7000	8081A		MATRIX (W, S, O)	# OF CONT.	LOCATION/ COMMENTS	TA WO ID
1	WR-370	1050 12MAY09	X	X	X	X	[redacted]	X	X	X	X	X	X		W	15		
2	MH-X	1430 12MAY09	X	X	X	X		X	X	X	X	X	X		W	15		
3	WR-369	1120 12MAY09	X	X	X	X		X	X	X	X	X	X		W	15		
4	~~WR-370~~-012	1115 12MAY09									X				W	1		
5	TB-1	12 May 09	X			X										1	[redacted]	
6																		
7																		
8																		
9																		
10																		

RELEASED BY:			DATE: 12 MAY 09	RECEIVED BY: [illegible]	DATE: 5/12/09
PRINT NAME: Chris Carlton-Franco	FIRM: [illegible]		TIME: 1700	PRINT NAME: Brianna Earley	FIRM: TAP	TIME: 1700
RELEASED BY:			DATE:	RECEIVED BY:	DATE:
PRINT NAME:	FIRM:		TIME:	PRINT NAME:	FIRM:	TIME:

ADDITIONAL REMARKS:

TEMP: 13.3°C CUSTODY SEAL: OF

11.8°C
13.4°C
12.4°C

TAL-1000040811

COP0017607

TestAmerica Portland

Sample Receiving Checklist

Work Order #: PSE0425 Date/Time Received: 5/12/09 @ 1700

Client Name and Project: Stantec

PM to Complete This Section: Yes No Yes No

Residual Chlorine Check Required: ☐ ☐ Quarantined: ☐ ☐

Quote #:

Special Instructions:

Time Zone:

☐EDT/EST ☐CDT/CST ☐MDT/MST ☐PDT/PST ☐OTHER

Unpacking Checks:

Cooler #(s): 1 1 1 1

Temperatures: 13.3 11.8 13.4 12.4

Digi #1 ☐ Digi #2 ☐ ~~IR Gun~~ Raytek ☒ (☐Plastic ☒Glass)

Temperature out of Range:

__Not enough or No Ice

__Ice Melted

__W/in 4 Hrs of collection

__Other:_____

Initials: BLE

N/A	Yes	No	
☐	☐	☐	1. If ESI client, were temp blanks received? If no, document on NOD.
☐	☐	☐	2. Cooler Seals intact? (N/A if hand delivered) if no, document on NOD.
	☒	☐	3. Chain of Custody present? If no, document on NOD.
	☒	☐	4. Bottles received intact? If no, document on NOD.
	☒	☐	5. Sample is not multiphasic? If no, document on NOD.
	☒	☐	6. Proper Container and preservatives used? If no, document on NOD.
☐	☒	☐	7. pH of all samples checked and meet requirements? If no, document on NOD.
☒	☐	☐	8. Cyanide samples checked for sulfides and meet requirements? If no, notify PM.
☐	☐	☐	9. HF Dilution required?
	☒	☐	10. Sufficient volume provided for all analysis? If no, document on NOD and consult PM before proceeding. Only 5 Ambers for SSC 8081, 8082, 8270 BS
	☒	☒	11. Did chain of custody agree with samples received? If no, document on NOD. TB not received BS
☐	☒	☐	12. Were VOA/Oil Syringe samples without headspace?
☐	☒	☐	13. Were VOA vials preserved? ☒HCL ☐Sodium Thiosulfate ☐Ascorbic Acid
	☐	☒	14. Did samples require preservation with sodium thiosulfate?
☒	☐	☐	15. If yes to #14, was the residual chlorine test negative? If no, document on NOD.
☒	☐	☐	16. Are dissolved/field filtered metals bottles sediment-free? If no, document on NOD.
☒	☐	☐	17. Is sufficient volume provided for client requested MS/MSD or matrix duplicates? If no, document on NOD and contact PM before proceeding.
☒	☐	☐	18. Are analyses with short holding times received in hold?
	☒	☐	19. Was Standard Turn Around (TAT) requested?
	☒	☐	20. Receipt date(s) < 48 hours past the collection date(s)? If no, notify PM.

TestAmerica Portland

Sample Receiving Checklist

Work Order #: PSE0425

Login Checks:

Initials: PS

N/A	Yes	No	
	☐	☑	21. Sufficient volume provided for all analysis? If no, document on NOD & contact PM. PS
☑	☐	☐	22. Sufficient volume provided for client requested MS/MSD or matrix duplicates? If no, document on NOD and contact PM.
	☑	☐	23. Did the chain of custody include "received by" and "relinquished by" signatures, dates and times?
☑	☐	☐	24. Were special log in instructions read and followed?
	☑	☐	25. Were tests logged checked against the COC?
☑	☐	☐	26. Were rush notices printed and delivered?
☑	☐	☐	27. Were short hold notices printed and delivered?
☑	☐	☐	28. Were subcontract COCs printed?
☑	☐	☐	29. Was HF dilution logged?

Labeling and Storage Checks:

Initials: MK

N/A	Yes	No	
☒	☐	☐	30. Were the subcontracted samples/containers put in Sx fridge?
☒	☐	☐	31. Were sample bottles and COC double checked for dissolved/filtered metals?
	☒	☐	32. Did the sample ID, Date, and Time from label match what was logged?
☐	☐	☐	33. Were Foreign sample stickers affixed to each container and containers stored in foreign fridge?
☒	☐	☐	34. Were HF stickers affixed to each container, and containers stored in Sx fridge?
☐	☒	☐	35. Was an NOD for created for noted discrepancies and placed in folder?

Document any problems or discrepancies and the actions taken to resolve them on a Notice of Discrepancy form (NOD).

COP0017609

Incident ID: 113919

Short Description: Portland Product Terminal - Gasoline on Floating Roof [E]

Responsible Dept\Unit: Terminals : Terminals - West Coast Division : Portland Product Terminal

Incident Type: Incident

Status: Closed

Potential Risk Rating: I - Low

General

Responsible Supervisor: THOMAS LYONS

High Learning Value Event Status: Not Reviewed for HLVE

Location:

Specific Location: Tank 3408

Date Occurred: (mm/dd/yyyy) 11/21/2009 9:30:00 AM

Date Reported: (mm/dd/yyyy) 11/25/2009 2:08:00 PM

Date Entered: 11/25/2009 3:17:19 PM (GMT-08:00)

REPORTEDBY: THOMAS LYONS

Incident Description: After completing a tank repair project, premium unleaded tank 3408 was turned over to Operations and the tank was refilled to an 8' level on November 18th. An entrant moved the legs to their low legs setting on November 21st. While he was on top of the floating roof, he noticed product on top of the vapor barrier fabric in the annulus between the floating roof and the tank shell on the west side of the tank. The product was about 4" deep on the fabric, and thinned out to no product on top of the fabric at a distance of about 15' in either direction.

Notifications were made to the environmental coordinator and to the state compliance engineer.

Weather: Clear

Lighting: Day

Address: 5528 NW Doane Avenue

City: Portland

Country: United States

State/Province: Oregon

Zip/Postal Code: 97210

Incident Flags: Mechanical Integrity

Entered By: LYONS, THOMAS

Immediate Actions Taken: Notifications were made to the environmental coordinator and to the state compliance engineer.

Sub Types

Check All That Apply: General: Environmental (e.g.: Spills, Releases, Odor Complaints, Unplanned Releases, Permit Exceedences, RV Operations, Process Upsets)

Responsibilities

Workflow Supervisor *

Name	Response
THOMAS LYONS	

Incident Owner *

Name	Response
THOMAS LYONS	

Environmental Expert

Name	Response
VALERIE UYEDA	

Creator *

Name	Response
THOMAS LYONS	

Notes

Notes: No Data is Available

Equipment

Equipment: No Data is Available

People

		Consequence Number					
Name	Employee Type	Injury / Illness	Property	Transportation	Security	Quality	Environmental
HOLLAND, SONIA	Employee						19306 Open View

Witnesses

Name	Employee,Contractor,or Other	Phone
Scott Gilfillan	Contractor	360-957-2018

Contractor Involvement

Contractor	Involvement Type
COWLITZ CLEAN SWEEP, INC.	Oper. and Main

Consequence

Incident Consequences

ID	Type	Description	Party Involved	Status
19306 Open View	Environmental	LEL was monitored entire time....	HOLLAND, SONIA K	Closed

Pending Consequences : No Data is Available

Investigation

Investigations: No Data is Available

Action Items

Action Items: No Data is Available

Summary

Equipment:	None
Employees:	1
Contractors:	None
Witnesses:	1
Investigations:	None

COP0017611

December 8, 2009

Mr. Mike Romero
Oregon Department of Environmental Quality - NW Region
2020 SW Fourth Avenue, Suite 400
Portland, Oregon 97201

RE: Paramount Asphalt Well Information
Willbridge Terminal Group, Portland, Oregon
WMCSR-NWR-94-06, ECSI # 1549

Dear Mr. Romero:

On behalf of the Willbridge Terminal Group (WTG; Figure 1 and Figure 2): Kinder Morgan Liquids Terminals (KMLT), ConocoPhillips Company (ConocoPhillips), and Chevron Products Company (Chevron), Delta Consultants (Delta) has prepared this letter in response to an Oregon Department of Environmental Quality's (DEQ) comment made in a letter dated June 21, 2006. The DEQ comment was in response to the Remedial Investigation (RI) conditional approval. The DEQ comment addressed in this letter is:

> *Potential impacts to the Chevron (now Paramount) Asphalt well from the migration of site contaminants were not evaluated. The DEQ will assume that active pumping of this well could potentially cause contaminant migration toward the well and impair its beneficial use as an industrial water supply. Therefore, the FS must identify and evaluate remedies that control the migration of site contaminants to the well and protect the beneficial use of this well.*

DELTA

This letter only presents the readily available information about the Paramount Asphalt well use and construction. Site-specific evaluations by Chevron, ConocoPhillips, and Kinder Morgan will be prepared that will discuss the vertical chemistry data that was collected from the deep wells and will discuss vertical migration with respect to the locality of the facility and potential impacts to the underlying Columbia River Basalt (CRB). As mentioned in the DEQ's 2006 letter, site-specific FS documents will identify and evaluate remedies that control the migration of site contaminants to the well and protect its beneficial uses if applicable.

PARAMOUNT ASPHALT WELL

The Paramount Asphalt facility is used for asphalt refining, emulsions manufacturing, and asphalt blending. The facility layout occupies 38 acres and includes 91 product storage tanks with a containment capacity of 1,642,600 barrels, eight tank-truck loading racks and one tank car loading rack. The facility has a 15,000-barrels-per-day crude oil vacuum distillation unit, a continuous and batch air still refining process, an emulsions manufacturing process, an asphalt blending process, a boiler plant and hot oil heating system, bulk storage and tank car, tank truck and pipeline shipping and receiving operations. Crude oil and charge stocks for the refining process are received by tanker shipments at the Chevron Willbridge Distribution Center

a member of Inogen Environmental Alliance

4640 SW Macadam Avenue Suite 110 Portland, OR 97239 USA
Phone: +1 503.639.8098 / USA Toll Free: 800.477.7411
Fax: +1 503.639.7619 www.deltaenv.com

dock. Compounding stocks and additives are received in bulk by tank cars or transport trucks. Asphalt vacuum gas oils, fuel oil and naphtha are received by barge and tanker over the Willbridge Distribution Center dock, in addition to tank car, pipeline and tank truck deliveries. The facility typically handles an average of approximately 200,000 barrels of petroleum products per month. The facility has been in continuous operation since 1947

The Paramount Asphalt Well is located in the northeastern area of the Paramount site, approximately 250 feet southwest of Front Avenue and adjacent to the southwest side of the maintenance warehouse (Figure 3). According to the Oregon Water Resources Department (OWRD) water well report log (Attachment A), the well was constructed in 1989 and installed to a total depth of 310 feet bgs. The water-drawing interval located from 81 to 310 feet bgs is an open hole. The interval from 81 feet to the ground surface is constructed with an 8-inch diameter steel casing surrounded by a concrete seal. According to the well log, basalt was encountered at 70 feet bgs. Since the well casing extends to 81 feet bgs that means the well is cased 9 feet into the CRB and it is open hole for approximately 230 feet.

The well log indicates that the well is intended for industrial use only. Paramount personnel stated that the well is used for asphalt emulsions production, which mainly occurs in the summer months. Groundwater is pumped through two systems, directly into holding tanks where human and/or ecological contact with the groundwater is minimized because the water is contained within piping and the holding tanks, using approximately 9,840 gallons (anionic) and 13,500 gallons (cationic) per cycle for asphalt production. According to Paramount personnel the calculated weekly summer usage of groundwater is approximately 108,840 gallons, but typical weekly (Monday through Friday) water production during summer months would most likely be increased because the weekly gallon usage calculation was based on a lower than normal asphalt production rate (Attachment B).

If you have any questions regarding the contents of this report, please contact Jessica Eckart (Delta) at (503) 863-2105.

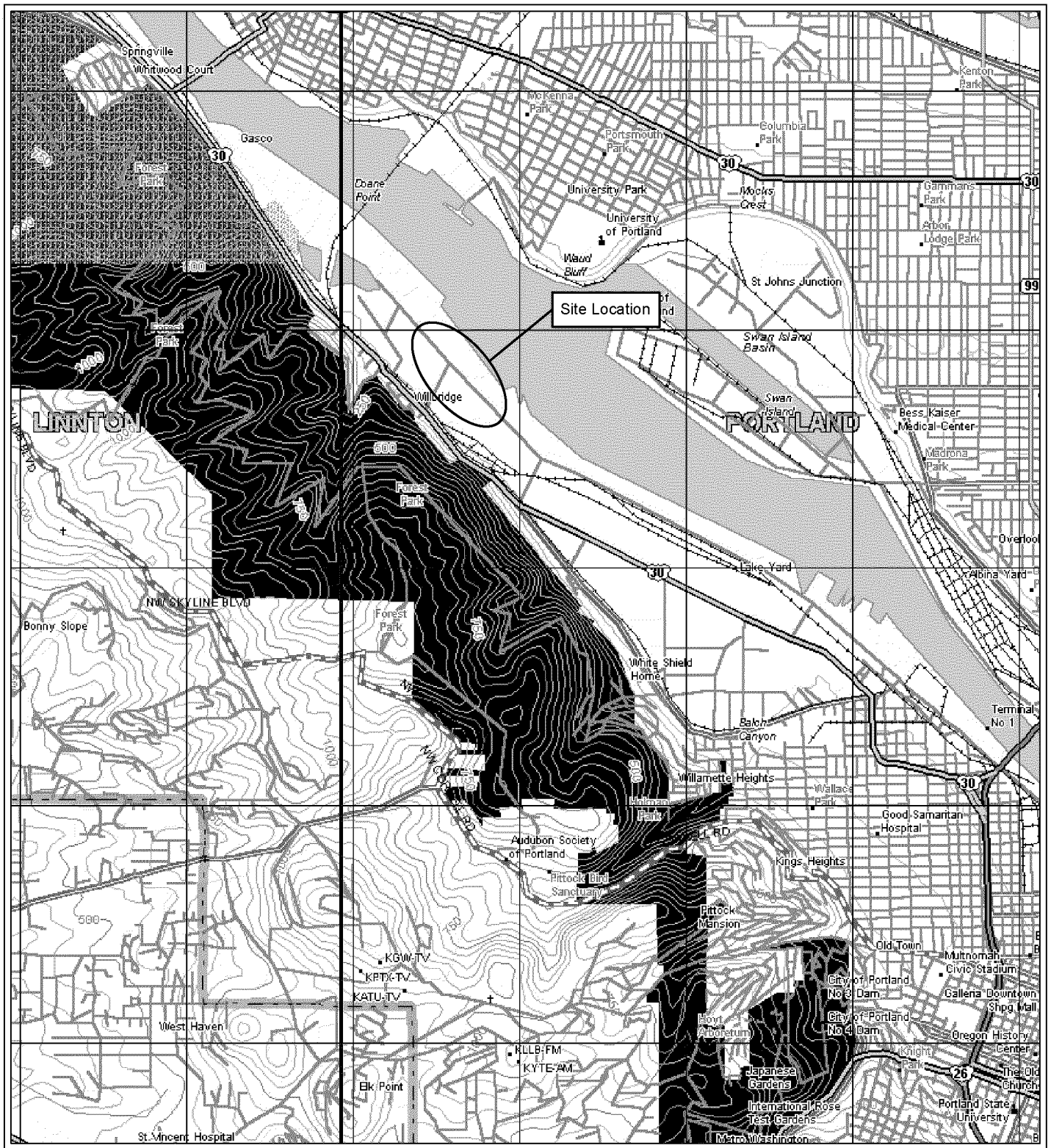
Sincerely,
DELTA CONSULTANTS

Jessica Eckart, R.G.
jeckart@deltaenv.com
Project Manager

Attachments: Figure 1 - Site Location Map
Figure 2 - Site Plan
Figure 3 – Paramount Site Plan with Asphalt Well Location
Attachment A - OWRD Well Log Reports
Attachment B – Electronic Mail Notification from Paramount Personnel

cc: Myron Smith, ConocoPhillips
Brett Hunter, Chevron
Robert Truedinger, KMEP
Grant Sprick, ARCADIS (electronic copy)
Bill Edmunds, Stantec (electronic copy)
Tim Browning, Delta Consultants (electronic copy)
David Broderick, Paramount Petroleum Corporation (electronic copy)
Mark Wells, Paramount Petroleum Corporation (electronic copy)

FIGURES



REFERENCES

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

North

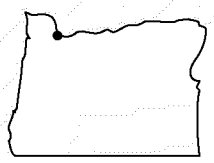


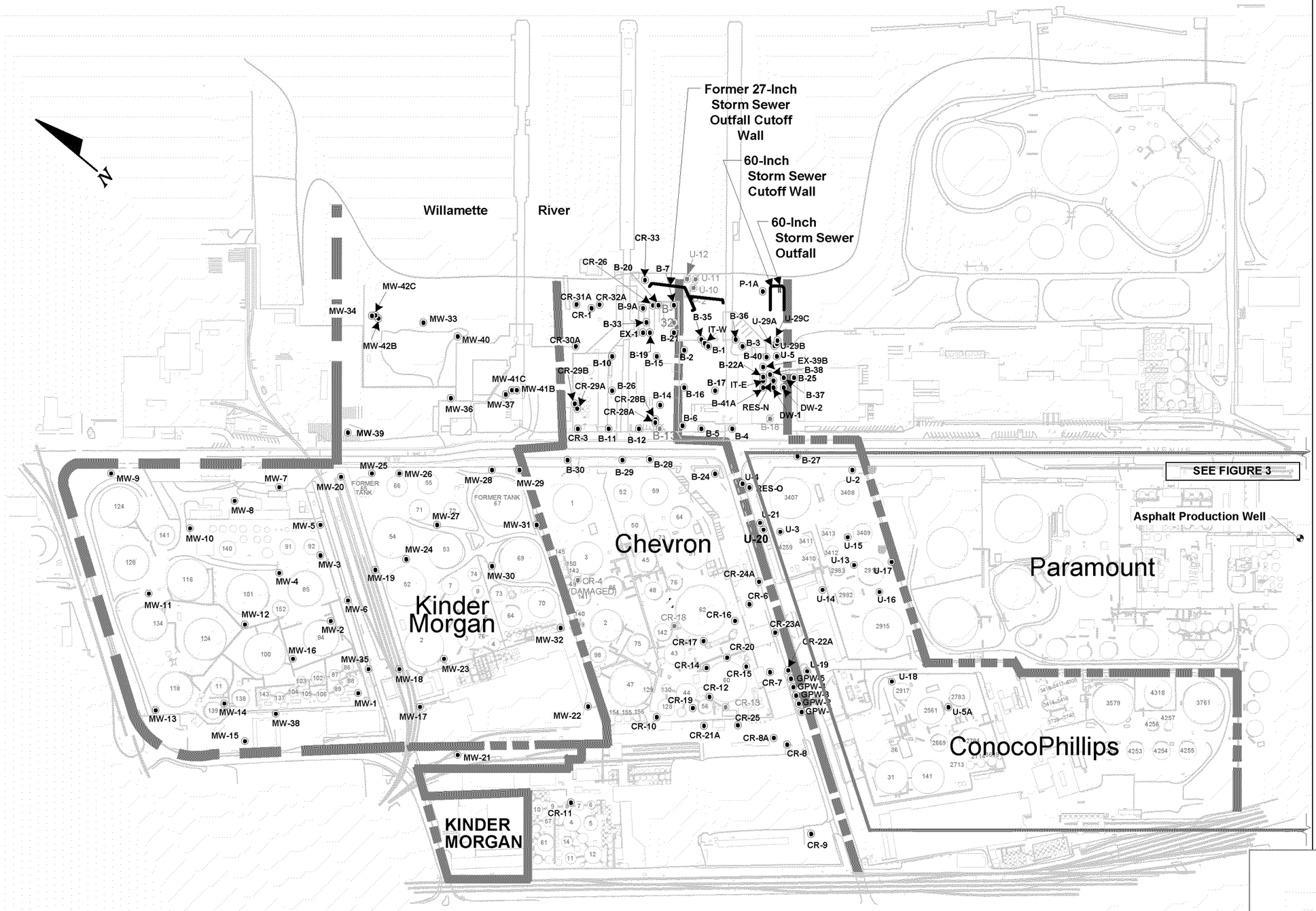
FIGURE 1

SITE LOCATION MAP

Willbridge Petroleum Terminals
Portland, Oregon

PROJECT NO. ORZ0922GW-6	DRAWN BY KNT 6-12-03
FILE NO.	PREPARED BY CRF 4/5/06
REVISION NO.	REVIEWED BY

DELTA



LEGEND

MW-15	◉	Monitoring Well Location And Designation
CR-18	◉	Damaged, Abandoned, Or Missing Well Location And Designation
Asphalt Production Well	◉	Asphalt Production Well

Note: Not All Wells Are Presented On This Figure.

FIGURE 2

SITE PLAN

WILLBRIDGE PETROLEUM TERMINALS
PORTLAND, OREGON

PROJECT NO. WTG	DRAWN BY CRF 4/5/06
FILE NO. GWM	PREPARED BY CRF 6/1/09
REVISION NO.	REVIEWED BY

DELTA

LEGEND

- MONITORING WELL LOCATION
- ASPHALT WELL

0 200

APPROX. SCALE IN FEET

FIGURE 3

PARAMOUNT SITE PLAN WITH ASPHALT WELL LOCATION

PARAMOUNT TERMINAL
P0RTLAND, OREGON

Project No.	Drawn By:
Project Name:	Prepared By: CRF 8/21/09
Revision	Date:

DELTA

ATTACHMENT A

ORWD WELL LOG REPORTS

STATE OF OREGON

WATER WELL REPORT

(as required by ORS 537.765)

MULT 991

RECEIVED

MAY 26 1989

WATER RESOURCES DEPT.
SALEM, OREGON

11/18/1966

(START CARD) # 9987

Well Number:

(1) OWNER:

Name Chevron USA, Inc.

Address P. O. Box 4168

City Portland State OR Zip 97208

(2) TYPE OF WORK:

[X] New Well [ ] Deepen [ ] Recondition [ ] Abandon

(3) DRILL METHOD

[X] Rotary Air [X] Rotary Mud [ ] Cable

[ ] Other

(4) PROPOSED USE:

[ ] Domestic [ ] Community [XX] Industrial [ ] Irrigation

[ ] Thermal [ ] Injection [ ] Other

(5) BORE HOLE CONSTRUCTION:

Special Construction approval Yes [ ] No [X] Depth of Completed Well 310 ft.

Explosives used Yes [ ] No [X] Type Amount

HOLE Diameter	From	To	SEAL Material	From	To	Amount sacks or pounds
12"	0	81	Cement	0	81	35 sacks +
8"	81	310				gel

How was seal placed: Method [X] A [ ] B [X] C [ ] D [ ] E

[ ] Other

Backfill placed from ft. to ft. Material

Gravel placed from ft. to ft. Size of gravel

(6) CASING/LINER:

	Diameter	From	To	Gauge	Steel	Plastic	Welded	Threaded
Casing:	8"	+1	81	250	[X]	[ ]	[X]	[ ]
					[ ]	[ ]	[ ]	[ ]
					[ ]	[ ]	[ ]	[ ]
					[ ]	[ ]	[ ]	[ ]
Liner:					[ ]	[ ]	[ ]	[ ]
					[ ]	[ ]	[ ]	[ ]

Final location of shoe(s)

(7) PERFORATIONS/SCREENS:

[ ] Perforations Method

[ ] Screens Type Material

From	To	Slot size	Number	Diameter	Tele/pipe size	Casing	Liner
						[ ]	[ ]
						[ ]	[ ]
						[ ]	[ ]
						[ ]	[ ]
						[ ]	[ ]
						[ ]	[ ]

(8) WELL TESTS: Minimum testing time is 1 hour

[X] Pump [ ] Bailer [ ] Air [ ] Flowing Artesian

Yield gal/min	Drawdown	Drill stem at	Time
150	78'		1 hr.
135	58'		1 hr.

Temperature of water Depth Artesian Flow Found

Was a water analysis done? [ ] Yes By whom

Did any strata contain water not suitable for intended use? [ ] Too little

[ ] Salty [ ] Muddy [ ] Odor [ ] Colored [ ] Other

Depth of strata:

(9) LOCATION OF WELL by legal description:

County Multnomah Latitude ' " Longitude ' "

Township 1N N or S, Range 1 E E or W, WM.

Section 19 SE ¼ NW ¼

Tax Lot Lot Block Subdivision

Street Address of Well (or nearest address) 5501 NW Front Ave.
Portland, Oregon 97208

(10) STATIC WATER LEVEL:

27 ft. below land surface. Date 4/26/89

Artesian pressure lb. per square inch. Date

(11) WATER BEARING ZONES:

Depth at which water was first found 94'

From	To	Estimated Flow Rate	SWL
94	101	20	27
196	207	40	"
280	289	100	"
289	310	20	"

(12) WELL LOG:

Ground elevation 40'

Material	From	To	SWL
Pavement, rock fill	0	2	
Brown silty sand-occ. clay	2	19	
Black silty sand-occ. clay	19	40	
Gray silt, wood	40	46	
Gray-brown silty clay	46	60	
Blue-gray silty clay	60	68	
Black gravel / broken rock	68	70	
Gray-black basalt, hard	70	94	
Brown basalt & lava, broken	94	101	27
Gray-black basalt, hard, occ. fracture	101	155	
Gray basalt, hard	155	196	
Black-brown basalt & lava, broken	196	207	
Gray basalt, hard	207	280	
Brown basalt, broken	280	289	
Gray-black basalt, hard, occ. broken	289	310	

Date started 4/17/89 Completed 4/26/89

(unbonded) Water Well Constructor Certification:

I certify that the work I performed on the construction, alteration, or abandonment of this well is in compliance with Oregon well construction standards. Materials used and information reported above are true to my best knowledge and belief.

WWC Number

Signed Date

(bonded) Water Well Constructor Certification:

I accept responsibility for the construction, alteration, or abandonment work performed on this well during the construction dates reported above. all work performed during this time is in compliance with Oregon well construction standards. This report is true to the best of my knowledge and belief.

WWC Number 573

Signed Date 5/24/89

ORIGINAL & FIRST COPY - WATER RESOURCES DEPARTMENT SECOND COPY - CONSTRUCTOR THIRD COPY - CUSTOMER 9809C 3/88

COP0017619

MULT 95701

08-22-2008

STATE OF OREGON
WATER SUPPLY WELL REPORT
(as required by ORS 537.765 & OAR 690-205-0210)

WELL LABEL # L

START CARD # 1004265

(1) LAND OWNER

Owner Well I.D.

First Name Last Name

Company AIR LIQUIDE

Address 3535 W 12TH STREET

City HOUSTON State TX Zip 77008

(2) TYPE OF WORK

☐ New Well ☐ Deepening ☐ Conversion
☐ Alteration (repair/recondition) ☒ Abandonment

(3) DRILL METHOD

☐ Rotary Air ☐ Rotary Mud ☐ Cable ☐ Auger ☐ Cable Mud
☐ Reverse Rotary ☒ Other

(4) PROPOSED USE

☒ Domestic ☐ Irrigation ☐ Community
☐ Industrial/ Commericial ☐ Livestock ☐ Dewatering
☐ Thermal ☐ Injection ☐ Other

(5) BORE HOLE CONSTRUCTION

Special Standard ☐ Attach copy

Depth of Completed Well 300.00 ft.

BORE HOLE Dia	From	To	SEAL Material	From	To	Amt	sacks/ lbs
8	0	300					

How was seal placed: Method ☐ A ☐ B ☒ C ☐ D ☐ E

☐ Other

Backfill placed from ft. to ft. Material

Filter pack from ft. to ft. Material Size

Explosives used: ☐ Yes Type Amount

(6) CASING/LINER

Casing	Liner	Dia	+	From	To	Gauge	Stl	Plstc	Wld	Thrd
●	○	8		2	117	.25	●	○	☒	☐
○	○						○	○	☐	☐
○	○						○	○	☐	☐
○	○						○	○	☐	☐
○	○						○	○	☐	☐

Shoe ☐ Inside ☐ Outside ☐ Other Location of shoe(s)

Temp casing ☐ Yes Dia From To

(7) PERFORATIONS/SCREENS

Perforations Method

Screens Type Material

Perf/S creen	Casing/ Liner	Screen Dia	From	To	Scrn/slot width	Slot length	# of slots	Tele/ pipe size

(8) WELL TESTS: Minimum testing time is 1 hour

○ Pump ○ Bailer ○ Air ○ Flowing Artesian

Yield gal/min	Drawdown	Drill stem/Pump depth	Duration (hr)

Temperature °F Lab analysis ☐ Yes By

Water quality concerns? ☐ Yes (describe below)

From	To	Description	Amount	Units

(9) LOCATION OF WELL (legal description)

County Multnomah Twp 1.00 N N/S Range 1.00 W E/W WM

Sec 13 SE 1/4 of the SE 1/4 Tax Lot 00700

Tax Map Number Lot

Lat ° ' " or 45.56991600 DMS or DD

Long ° ' " or -122.74723700 DMS or DD

● Street address of well ○ Nearest address

6529 NW FRONT AVE
PORTLAND, OR 97210

(10) STATIC WATER LEVEL

	Date	SWL(psi)	+	SWL(ft)
Existing Well / Predeepening				
Completed Well				

Flowing Artesian? ☐ Dry Hole? ☐

WATER BEARING ZONES Depth water was first found

SWL Date	From	To	Est Flow	SWL(psi)	+	SWL(ft)

(11) WELL LOG

Ground Elevation

Material	From	To

Date Started 07-25-2008 Completed 07-30-2008

(unbonded) Water Well Constructor Certification

I certify that the work I performed on the construction, deepening, alteration, or abandonment of this well is in compliance with Oregon water supply well construction standards. Materials used and information reported above are true to the best of my knowledge and belief.

License Number 1672 Date 08-22-2008

Electronically Filed

Signed TERRY M MCCOY JR (E-filed)

(bonded) Water Well Constructor Certification

I accept responsibility for the construction, deepening, alteration, or abandonment work performed on this well during the construction dates reported above. All work performed during this time is in compliance with Oregon water supply well construction standards. This report is true to the best of my knowledge and belief.

License Number 1523 Date 08-22-2008

Electronically Filed

Signed ROBERT STADELI (E-filed)

Contact Info (optional)

ORIGINAL - WATER RESOURCES DEPARTMENT

THIS REPORT MUST BE SUBMITTED TO THE WATER RESOURCES DEPARTMENT WITHIN 30 DAYS OF COMPLETION OF WORK

Form Version: 0.89

COP0017620

(5) BORE HOLE CONSTRUCTION

BORE HOLE Dia	From	To	SEAL Material	From	To	Amt	sacks/ lbs

FILTER PACK

From	To	Material	Size

(6) CASING/LINER

Casing	Liner	Dia	+	From	To	Gauge	Stl	Plstc	Wld	Thrd

(7) PERFORATIONS/SCREENS

Perf/Screen	Casing/ Liner	Screen Dia	From	To	Scrn/slot width	Slot length	# of slots	Tele/ pipe size

(8) WELL TESTS: Minimum testing time is 1 hour

Yield gal/min	Drawdown	Drill stem/Pump depth	Duration (hr)

Water Quality Concerns

From	To	Description	Amount	Units

(10) STATIC WATER LEVEL

Water Bearing Zones

SWL Date	From	To	Est Flow	SWL(psi)	+	SWL(ft)

(11) WELL LOG

Material	From	To

ATTACHMENT B

ELECTRONIC MAIL NOTIFICATION FROM PARAMOUNT PERSONNEL

Devon Roulette

From: David Broderick [DBroderick@ppcla.com]
Sent: Friday, June 27, 2008 1:36 PM
To: Mark Wells; Sprick, Grant
Subject: RE: Willbridge Asphalt Deep Well

Grant,

We have two types of emulsions, anionic and cationic. The two systems are completely separate other than the water inlets.

The anionic system has two mix tanks, each 1230 gallons. They normally make 8 batches in a "run" – four batches in each tank. Each batch takes about 20 minutes and they try to stager them, i.e. start filling the second tank as soon as the first one starts manufacturing.

The cationic system has three mix tanks, each take about 4500 gallons. Each batch takes about 1 hour. They often make three batches in a "run" but it can be 1 to 5 batches a day.

Due to weather it has been a slow start to the "season" so last week was a little slower than it will be in July and August, but just for a reference, we made 8 batches, or one "run", of the anionic and 22 batches of the cationic last week.

If this is not clear please call me.

David Broderick
Paramount Petroleum Corporation
503-273-4741
cell 971-322-4214

From: Mark Wells
Sent: Friday, June 27, 2008 12:19 PM
To: David Broderick
Subject: RE: Willbridge Asphalt Deep Well

Is amount of water used per batch consistent?

D. Mark Wells, P.E.
Northwest Environmental Manager
Paramount Petroleum Corporation
20555 Richmond Beach Drive N.W.
Seattle,WA 98177
(206) 546-0504 office
(206) 794-9759 cell
mwells@ppcla.com

From: David Broderick
Sent: Friday, June 27, 2008 12:16 PM
To: Mark Wells
Subject: RE: Willbridge Asphalt Deep Well

No plans to increase. If anything we will be using less.

David Broderick
Paramount Petroleum Corporation
503-273-4741
cell 971-322-4214

From: Mark Wells
Sent: Friday, June 27, 2008 10:11 AM
To: David Broderick
Subject: FW: Willbridge Asphalt Deep Well

Dave,

Please see Grant's question below and let me know.

Thanks,

mark

D. Mark Wells, P.E.
Northwest Environmental Manager
Paramount Petroleum Corporation
20555 Richmond Beach Drive N.W.
Seattle,WA 98177
(206) 546-0504 office
(206) 794-9759 cell
mwells@ppcla.com

From: Sprick, Grant [mailto:Grant.Sprick@arcadis-us.com]
Sent: Friday, June 27, 2008 8:31 AM
To: Mark Wells
Subject: Willbridge Asphalt Deep Well

Mark. The DEQ asked a question yesterday regarding your deep well. He understands that the deep well is turned on periodically for emulsions. Are there any plans to increase flow rate or volume needed? He is concerned that our pump test will only be reflective of current conditions, and wouldn't account for any future increase of flow rate or volume needed.

Can you verify that there are no planned flow rate or volume increases? Is the amount of water needed fairly similar for each batch?

Thanks for the help.
-Grant

ARCADIS
Grant V. Sprick, P.E.
Senior Project Manager

111 SW Columbia Street, Suite 725
Portland, Oregon 97201
Tel 503.220.8201 x1104
Fax 503.220.8209
Cell 503.539.8616
grant.sprick@arcadis-us.com

www.arcadis-us.com

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Bill C Edmund
Grant Spreeke
Ken Thuesen
ODEQ
Mike Romero
ODEQ
Jim Bennett Bennett
Delta
KM

Willbridge Terminal Group
Quarterly Meeting
December 17, 2009

DRAFT Agenda

1. Chevron Terminal
   - Storm Water SCE
   - Enhance Anaerobic Bio Pilot Study

2. Chevron and ConocoPhillips Terminals
   - Groundwater SCE
   - 48" Stormwater Line
   - Summary of Outfall 22 Sheen Monitoring

AOC #00922

3. Kinder Morgan
   - Storm Water and Groundwater SCE
   - Recent Releases – Status

4. General
   - DEQ October 19, 2009 Letter, requested deliverables
   - FS scoping doc.

12/17/09 WTG Mtg.

(1) - Storm Water SCE
  - waiting for last samples - peak gw
  - due by end of 1st qtr. 2010
  - format for report from ODEQ coming (for all members of group)

- Bio Study
  - sulfate pilot study
  - TPHd in gw (highest levels on COP property)
  - doing ROST survey in test area (west of COP asphalt shed - other side of fence - river side)
  - need permits from UIC for injection of material
  - Rost showed major impacts in one (1) well at the top of water table down approx. 15' below
    - ~~Greg~~ did the survey

(2) - gw SCE awaiting ODEQ response
- transducers installed to measure any tidal influences
- capacity tests
  - shallow wells 5 gpm
  - intermediate 0.5 gpm
  - deep wells 1.0 gpm
- report due late 1st qtr or 2nd qtr. 2010

12/17/09 WTG Group Mtg.

(2)
- 48" storm sewer lining
  - more data coming in Jan-10
  - dry weather/wet weather flow samples
  - sample up gradient of COP/CUX connections
    - line goes along way upgradient
  - city looking into source sampling up the line
- outfall 22 sheen
  - no sheens to date from last event (may 09)
  - in "sheen season"
    - high gw and rain events

* make sure COP storm water drains to outfall 22 and not to outfall 19 too ??

- fix Manhole 12 lining
  - put together work plan to sample gw and compatability with lining material
  - a few ft. of failure
- investigate why MH-3 is always dry
  - check with terminal ops
  - connected to o/w seperator
  - going to sanitary sewer ?
  - injection well ?

** update master proj. status/date/tracking sheet

12/17/09

(3) - SCE written, issues with City and waiting on docs and tables
- address seep issues near river (in cove)
- finish all
- aviation leak 2yrs ago
  gasoline leak in sept. 09
  (6-9K release) jet fuel leak in oct. 09
  } work plan in process: status report
  * did impact storm water drains, not into river
  * how will the releases impact the SEC?

(4) - letter response to ODEQ
- going to give ODEQ info, but need to extend due dates
- need clarification from ODEQ
- separate work plans for FS for each site (address co-mingle issues)
- include vapor intrusion risk

Paul Sidel ODEQ - risk assessor for ODEQ

* write ~~task~~ scoping memo [risk assessment]
- summary of risk(s) overall and site specific
- release summary
- items to include in CSM

* add this to task/schedule list/sheet

Stantec Consulting Corporation
7730 Southwest Mohawk Street
Tualatin OR 97062
Tel: (503) 691-2030
Fax: (503) 692-7074

Stantec

December 22, 2009

Mr. Michael Romero
Oregon Department of Environmental Quality
NW Region Cleanup Section
2020 SW Fourth Avenue, Suite 400
Portland, Oregon 97201

Re: Work Plan for Asphalt Maintenance and Soil Sampling
ConocoPhillips Site No. 0922
5528 Doane Avenue
Portland, Oregon 97210

Dear Mr. Romero:

Stantec Consulting Corporation (Stantec), formerly SECOR International Incorporated, presents this Work Plan for Asphalt Maintenance and Soil Sampling at the above referenced location in Portland, Oregon (the Site). Stantec has prepared this Work Plan on behalf of ConocoPhillips Company Risk Management and Remediation in order to notify the Oregon Department of Environmental Quality (ODEQ) of upcoming construction activities at the Site which will involve some soil characterization for disposal and provide an opportunity for some additional assessment activities. The assessment activities include collection and laboratory analysis of soil to further delineate soil impacts on the Site. Soil materials will be disposed of as outlined in the Contaminated Media Management Plan (Stantec, 2009)

SCOPE OF WORK

The scope of work includes routine maintenance involving the removal and replacement of two sections of asphalt identified as Areas 2, 3 and 4 near the black-oil offloading rack. Area 2 is on the southern end of the loading rack and measures 55 by 39 feet; also known as the helicopter landing pad. Area 3 is located south of Area 2; the asphalt repair work will expose an area measuring 102 by 39 feet. Area 4 is located on the northern end of the loading rack and measures 54 by 100 feet. There are no monitoring wells in the immediate area. The closest monitoring well, U-5A, is located approximately 80 feet away in Tank Farm 1 west of Tank #2783. Erosion control measures will be implemented to prevent any soil materials from entering adjacent catch basins or migrating from the work area. Areas 2, 3 and 4 can be seen on Figure 1 and Appendix A. The following tasks will be completed during the investigation:

- Task 1 – Observation;
- Task-2 – Waste management;
- Task 3 – Laboratory analytical testing; and
- Task 4 – Data analysis and reporting.

Details of each task are described below:

Task 1 – Observation

The purpose of the observation is to document asphalt maintenance activities, and observe and monitor soils for possible hydrocarbon contamination. Field personnel will use a photoionization detector (PID) to measure for volatizing compounds and record the data. Exposed soil will be visually inspected for any evidence of hydrocarbon contamination. Photo documentation of exposed soil will be collected. If field observations and PID readings indicate that soils have hydrocarbon impacts, soil samples will be collected as warranted.

Task 2 – Waste Management

All removed soil materials will be segregated and placed into lined roll-off bins and temporarily stored onsite. Once scope of work is complete and disposal is warranted, soil samples will be analyzed according to the facility's requirements. The analytical test results will be used to characterize the soil for transportation and disposal at an approved disposal facility.

Task 3 – Laboratory Analytical Testing

If soil samples are collected from each location, samples will be submitted for the following analytical tests:

- TPH-D and TPH-O per Northwest Method NWTPH-Dx with silica gel cleanup;
- TPH-G per Northwest Method NWTPH-Gx;
- DEQ Risk-Based Decision Making (RBDM)[1] VOCs[2] per Environmental Protection Agency (EPA) Method 8260B; and
- Polycyclic Aromatic Hydrocarbons (PAHs) per EPA Method 8270 SIM if diesel is detected.

Task 4 – Data Analysis and Reporting

An assessment report will be prepared by Stantec after the final analytical data reports are received. The assessment report will include a summary of field activities, soil sample locations, soil analytical results, findings, and conclusions.

---

[1] DEQ, 2003. Risk-Based Decision Making for the Remediation of Petroleum-Contaminated Sites, Oregon Department of Environmental Quality, Underground Tanks Program, September 2003.

[2] RBDM VOCs include benzene, toluene, ethylbenzene, total xylenes (BTEX), methyl tert-butyl ether (MTBE), naphthalene, 1,2,4 trimethylbenzene, 1,3,5-trimethylbenzene, isopropylbenzene, n-propylbenzene, 1,2 dibromoethane (EDB), and 1,2-dichloroethane (EDC).

If you have any questions on this Work Plan or the project in general, please contact the undersigned at 503-691-2030.

Sincerely,
Stantec Consulting Corporation

Chris Carlton-Franco, M.Sc.
Staff Scientist

William C. Edmund, P.G.
Managing Principal Geologist

REGISTERED OREGON WILLIAM C. EDMUND No. G2281 GEOLOGIST 5/31/10

Figure 1 – Site Plan

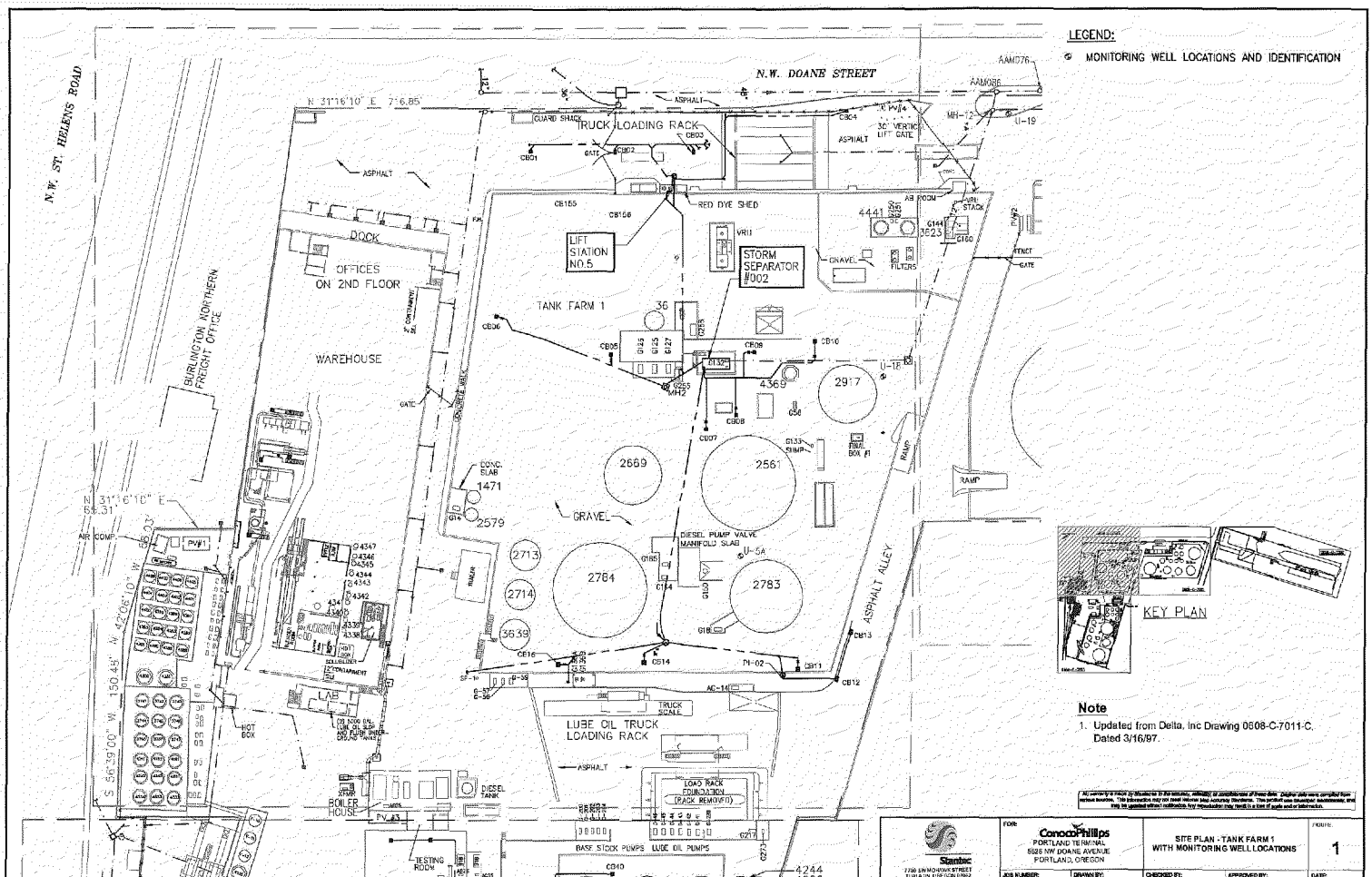
Appendix A – Aerial Photographs of Area 2, Area 3 and Area 4

CCF/WCE

cc: Mr. Myron Smith, ConocoPhillips, 1230 W. Washington St., Suite 212, Tempe, AZ 85281

Stantec

FIGURE



FILEPATH:K:\1-CLIENTS\ConocoPhillips\15CP\00922-PTLD TERMINAL\12-2009 FIG. 2B & 2C\15OT-00922-40 STANTEC TB.dwg|rlund|Dec 22, 2009 at 11:43|Layout: FIG.2C

COP0017634

Stantec

APPENDIX A

Area 2
Area 3
Google

Area 4
Google

Portland Waste
2009

Date	Type of waste	Recycled	Manifest #	Copy of Manifest	Vol (gals.)	Wt (Lbs.)	Lbs. to Tons	St. Code	Fed. Code	LDR	# bins	Transporter	Disposal Facility	Material	Initial HW Mgmt Code	Final HW Mgmt Code	2nd Facility	Profile#	Comment
11/19/2009	HW	N	005379610JJK	Y	450	3960	1.98		D008	Y	9 drum	CCS	Arlington	Lead Paint & chips		H111		OR302267	Piping project
			Total HW Disposed			3960	1.98												
2/9/2009	HW	Y	005279587JJK	Y	30	200	0.10		D001	Y	1 drum	CCS	Burlington Env	Hexane from Lab	H061	H050-final		330041-03	Profile attached to manifest
5/27/2009	HW	Y	005379686JJK	Y	20	150	0.08		D001	Y	1 drum	CCS	Burlington Env	Hexane from Lab	H061	H050 - final		410905-00	Profile attached to manifest
9/24/2009	HW	Y	005379603JJK	Y	30	225	0.11		D001	Y	1 drum	CCS	Burlington Env	Hexane from Lab	H141	H141			
1/15/2009	HW	Y	001637852SKS	Y	15	101	0.05		D001, D018, D039, D040	Y	1 drum	Safety-Kleen	Safety-Kleen	Parts Cleaner	H141	H020			1/6/10 - per Safety Kleen, they tranfer petroleum naptha to a recycling facility in Dalton, IL. Use H020 for final management code (solvent recovery) Per MSDS, solvent density is 6.4-6.7 lb/gal
3/9/2009	HW	Y	001653796SKS	Y	15	101	0.05		D001, D018, D039, D040	Y	1 drum	Safety-Kleen	Safety-Kleen	Parts Cleaner	H141	H020			
5/4/2009	HW	Y	001909312SKS	Y	15	101	0.05		D001, D018, D039, D040	Y	1 drum	Safety-Kleen	Safety-Kleen	Parts Cleaner	H141	H020			
6/30/2009	HW	Y	001881360SKS	Y	15	101	0.05		D001, D018, D039, D040	Y	1 drum	Safety-Kleen	Safety-Kleen	Parts Cleaner	H141	H020			
8/24/2009	HW	Y	002099419SKS	Y	15	101	0.05		D001, D018, D039, D040	Y	1 drum	Safety-Kleen	Safety-Kleen	Parts Cleaner	H141	H020			
10/21/2009	HW	Y	002025179SKS	Y	15	101	0.05		D001, D018, D039, D040	Y	1 drum	Safety-Kleen	Safety-Kleen	Parts Cleaner	H141	H020			
12/17/2009	HW	Y	002025580SKS	Y	16	107	0.05		D001, D018, D039, D040		1 drum		Safety-Kleen	Parts Cleaner	H141	H020			
			Total HW Recycled			1286	0.64												

COP0017638

Date	Type of waste	Recycled	Manifest #	Copy of Manifest	Vol (gals.)	Wt (Lbs.)	Lbs. to Tons	St. Code	Fed. Code	LDR	# bins	Transporter	Disposal Facility	Material	Initial HW Mgmt Code	Final HW Mgmt Code	2nd Facility	Profile#	Comment
3/10/2009	UHW	Y	2152			408	0.20				4 CF		EcoLights	Universal Waste - light tubes					assume 1.5 lbs/linear foot. 272 LF total
3/10/2009	UHW	Y	2152			12	0.01				1 CF		EcoLights	Universal Waste - HID bulbs					assume 1.5 lbs/linear foot. 8 LF total
3/10/2009	UHW	Y	2152			10	0.01				1 DF		EcoLights	Universal waste - non PCP ballast					
3/10/2009	UHW	Y	2152			25	0.01				1 DF		EcoLights	Universal waste - batteries					
12/10/2009	UHW	Y	005379613JJK	Y		150	0.08	OR X002					Ecolights	Lamps					Per Oregon DEQ Fact sheet on State-only wastes, do not report this as hazardous waste on annual report.
12/10/2009	UHW	Y	BOL 84169			300	0.15				406 ea		Ecolights	4 foot (light tubes)					
12/10/2009	UHW	Y	BOL 84169			111	0.06				74 ea		Ecolights	non-PCB ballasts					guesstimate ballast weighs 1.5 lbs each.
12/10/2009	UHW	Y	BOL 84169			95	0.05				63 ea		Ecolights	PCB ballasts					Note: these were manifested as HW on 005379613JJK as they were sent to WA state
12/10/2009	UHW	Y	BOL 84169			6	0.00				12 ea		Ecolights	HID lights					guesstimate light bulb weighs 0.5 lbs each.
			Total UW Recycled			1117	0.56												
1/14/2009	NHW	N	2107			15000	7.50				1 CM		Hillsboro Landfill	sand blast					Have analytical attached to non-HW manifest
2/9/2009	NHW	N	212623			500	0.25				1 drum		Hillsboro Landfill	Dead legs lite oil				104107OR	
2/9/2009	NHW	N	2127			300	0.15						Hillsboro Landfill	asphalt & rock by Tk 4255				104107OR	
3/27/2009	NHW	N	BOL 72118			19740	9.87						Hillsboro Landfill	Petroleum cont soil					Analytical & unnumbered profile attached to BOL
4/2/2009	NHW	N	ASN4			100	0.05				2 bags		Hillsboro	Asbestos					
5/5/2009	NHW	N	ASN4			1190	0.60				34 bags		Hillsboro	Asbestos					assume each bag weighs 35 lbs.
5/8/2009	NHW	N	BOL 121089			300	0.15						Hillsboro Landfill	6 aborsorbent boom pads (50 lbs each)					Remediation
5/8/2009	NHW	N	BOL 121089			100	0.05				2 drums		Hillsboro Landfill	pads					Remediation
5/8/2009	NHW	N	BOL 121088			6000	3.00				16 drums		Hillsboro Landfill	Granular activated carbon					Remediation
5/11/2009	NHW	N	BOL 121090			3000	1.50				9 drums		Hillsboro Landfill	Granular activated carbon					Remediation
6/15/2009	NHW	N	ASN4			6300	3.15				180 bags		Hillsboro	Asbestos					
6/24/2009	NHW	N	ASN4			7000	3.50				200 bags		Hillsboro	Asbestos					
7/15/2009	NHW	N	BOL 71902			5840	2.92						Hillsboro Landfill	Treated wood waste - dock					

COP0017639

Date	Type of waste	Recycled	Manifest #	Copy of Manifest	Vol (gals.)	Wt (Lbs.)	Lbs. to Tons	St. Code	Fed. Code	LDR	# bins	Transporter	Disposal Facility	Material	Initial HW Mgmt Code	Final HW Mgmt Code	2nd Facility	Profile#	Comment
7/24/2009	NHW	N	1221660			540	0.27						Hillsboro Landfill	Soil from black oil spill					
8/26/2009	NHW	N	BOL 1223826			27320	13.66						Hillsboro Landfill	Contaminated soil (biodiesel tank)					
8/26/2009	NHW	N	BOL 1223822			30480	15.24						Hillsboro Landfill	Contaminated soil (biodiesel tank)					
8/26/2009	NHW	N	BOL 1223801			25440	12.72						Hillsboro Landfill	Contaminated soil (biodiesel tank)					
8/26/2009	NHW	N	BOL 1223799			25960	12.98						Hillsboro Landfill	Contaminated soil (biodiesel tank)					
8/26/2009	NHW	N	BOL 1223810			62780	31.39						Hillsboro Landfill	Contaminated soil (biodiesel tank)					
9/3/2009	NHW	N	BOL 122263		45	280	31.39						Hillsboro Landfill	Paint chips - Tank 3408				104690OR	No lead - confirmed with analytical. Got weight from Kevin Manzano, CCS.
9/3/2009	NHW	N	BOL 1224114			280	0.14						Hillsboro Landfill	Contaminated soil					
9/15/2009	NHW	N	ASN4			105	0.05				1/8 CY		Hillsboro	Asbestos					
10/29/2009	NHW	N	BOL 1227235			30620	15.31						Hillsboro Landfill	Contaminated soil (biodiesel tank)					
10/29/2009	NHW	N	BOL 1227236			32340	16.17						Hillsboro Landfill	Contaminated soil (biodiesel tank)					
10/29/2009	NHW	N	BOL 1227246			64500	32.25						Hillsboro Landfill	Contaminated soil (biodiesel tank)					
12/23/2009	NHW	N	37200951	Y		38580	19.29						Hillsboro Landfill	Petroleum contaminated soil					Have analytical results 2/11/09 - Spoke with Dana @ NRC - he will find weight ticket. Kevin Manzano provided weight of 19.29 tons
			Total NHW disposed			404595	234												
1/8/2009	NHW	Y	BOL 120934		335	2794	1.40						ORRCO	B-100 baker tank bottoms & water					
2/9/2009	NHW	Y	BOL 212623			500	0.25				1 bin		Fuel Processors	absorbent pads					
2/26/2009	NHW	Y	BOL 213829			500	0.25				1 bin		Fuel Processors	D Filters - Lite Oil					
3/10/2009	NHW	Y	BOL 214611			500	0.25				1 bin		ORRCO	Oily Pads					
3/30/2009	NHW	Y	BOL 121007		1200	10008	5.00						ORRCO	emuslfied fuel/water					Generated from cleaning out load rack strip drains and UST

Portland Waste
2009

Date	Type of waste	Recycled	Manifest #	Copy of Manifest	Vol (gals.)	Wt (Lbs.)	Lbs. to Tons	St. Code	Fed. Code	LDR	# bins	Transporter	Disposal Facility	Material	Initial HW Mgmt Code	Final HW Mgmt Code	2nd Facility	Profile#	Comment
3/30/2009	NHW	Y	BOL 121007		35	292	0.15						ORRCO	oily solids					Generated from cleaning out load rack strip drains and UST
5/13/2009	NHW	Y	BOL 217431			250	0.13				1 bin		Fuel Processors	Oily pads					
5/21/2009	NHW	Y	BOL 218117			150	0.08				1 bin		Fuel Processors	D Filters - Lite oil					
6/5/2009	NHW	Y	BOL 121032		140	1168	0.58						ORRCO	Oily solids - separator cleaning					
6/5/2009	NHW	Y	BOL 121032		15	125	0.06						ORRCO	Oily water					
6/19/2009	NHW	Y	BOL 120799		15	125	0.06						ORRCO	Lube oil tank bottoms					
7/23/2009	NHW	Y	BOL 122153		1430	11926	5.96						ORRCO	Emulsified fuel & water generated from tanks 2915, 3761, 4318, 2784, 2916					
8/12/2009	NHW	Y	BOL 122216		940	7840	3.92						ORRCO	Oily water (Separator 003)					
8/12/2009	NHW	Y	BOL 122216		500	4170	2.09						ORRCO	Oily solids (Separator 003)					
8/12/2009	NHW	Y	BOL 122217		1490	12427	6.21						ORRCO	Oily water (Separator 003)					
8/12/2009	NHW	Y	BOL 122217		175	1460	0.73						ORRCO	Oily solids (Separator 003)					
8/29/2009	NHW	Y	BOL 122034		2526	21067	10.53						ORRCO	Water/gas from tank 2915					
8/29/2009	NHW	Y	BOL 122255		618	5154	2.58						ORRCO	Emulsified fuel & water from tank 2915					
8/31/2009	NHW	Y	BOL 222773		209	1952	0.98						Fuel Processors	Spent antifreeze from VRU					Assume specific gravity = 1.12 (9.34 lbs/gal) based on MSDS
9/10/2009	NHW	Y	BOL 223901			150	0.08				1 bin		Fuel Processors	D Filters - Lite Oil					
9/24/2009	NHW	Y	005379603JJK	Y	50	417	0.21				2 drums		Burlington Env	Fuel Additive Tank Bottoms - Material not regulated by DOT		H061 - initial H050 - final		425559-00	Per Steve Adams, Mistake by CCS - material should not have been manifested as HW 2/11/10 - confirmed with Burlington disposition.
9/25/2009	NHW	Y	BOL 122000		315	2627	1.31						ORRCO	water tank 2915					

COP0017641

Portland Waste
2009

Date	Type of waste	Recycled	Manifest #	Copy of Manifest	Vol (gals.)	Wt (Lbs.)	Lbs. to Tons	St. Code	Fed. Code	LDR	# bins	Transporter	Disposal Facility	Material	Initial HW Mgmt Code	Final HW Mgmt Code	2nd Facility	Profile#	Comment
9/25/2009	NHW	Y	BOL 122000		20	167	0.08						ORRCO	gas tank 2915					
10/8/2009	NHW	Y	BOL 224548			500	0.25				1 bin		Fuel Processors	Oily Pads					
12/8/2009	NHW	Y	BOL 122435		2716	22651	11.33						ORRCO	Gasoline & water from tank 3408					
12/8/2009	NHW	Y	BOL 122436		2701	22526	11.26						ORRCO	Gasoline & water from tank 3408					
12/8/2009	NHW	Y	BOL 122437		2690	22435	11.22						ORRCO	Gasoline & water from tank 3408					
12/8/2009	NHW	Y	BOL 122438		2700	22518	11.26						ORRCO	Gasoline & water from tank 3408					
12/9/2009	NHW	Y	BOL 122439		665	5546	2.77						ORRCO	Gasoline & water from tank 3408					
12/15/2009	NHW	Y	BOL 122409		725	6047	3.02						ORRCO	Emulsified fuel & water from tank 3408					
			Total NHW recycled			187990	94.00												
			HW - disposed		**1.98**	**tons**													
			HW - recycled		**0.64**	**tons**													
			UHW - recycled		**0.56**	**tons**													
					3.18														
			NHW - disposed		**233.55**	**tons**													
			NHW - recycled		**94.00**	**tons**													
					327.54														
			Total recycled		**94.55**														

DELIVERY VOLUME REPORTED BY BARRELS FOR PORLTLAND TERMINAL - 2009
TOTAL TERMINAL VOLUME (INCLUDING 3RD PARTY)

	January		February		March		April		May		June		July		August		September		October		November		December		
Reporting Location	Branded	Unbranded	Branded	Unbranded	Branded	Unbranded	Branded	Unbranded	Branded	Unbranded	Branded	Unbranded	Branded	Unbranded	Branded	Unbranded	Branded	Unbranded	Branded	Unbranded	Branded	Unbranded	Branded	Unbranded	YTD
TOTAL PDX RACK																									
Premium	26,604	388	25,399	411	27,268	1,998	29,090	3,038	29,543	2,410	29,072	1,134	32,104	1,582	30,676	922	29,158	1,700	28,157	4,372	27,307	1,407	37,263	3,216	374,219
Subgrade	366,646	30,979	327,151	30,798	351,855	87,243	371,098	40,113	383,249	72,985	362,918	67,735	383,138	40,076	378,372	22,608	355,038	36,397	363,378	97,222	344,008	31,657	371,144	59,531	4,975,339
U/L Reg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ethanol	43,834	3,502	39,350	3,484	42,255	9,951	44,543	4,805	45,920	8,391	43,600	7,656	46,137	4,620	45,543	2,616	42,828	4,249	43,769	11,353	41,570	3,704	45,666	7,017	596,363
Diesel	51,491	100,033	44,802	126,611	54,193	140,036	56,904	112,591	54,525	98,832	53,360	133,039	56,467	193,626	19,790	89,774	10,913	59,737	2,487	30,417	2,288	26,238	2,590	25,214	1,545,958
Diesel Red	1,743	66,011	699	59,511	1,634	44,317	1,990	20,212	428	23,359	516	32,521	647	53,415	756	41,282	386	27,643	3,798	11,017	3,294	5,601	232	8,948	409,960
Bio Diesel Dyed	0	0	0	0	0	0	0	0	0	0	0	0	24	31	379	7,078	1,146	18,701	502	38,124	419	24,600	643	35,120	126,767
Bio Diesel	3,243	24,944	2,805	22,957	3,346	23,043	3,196	14,130	3,115	17,161	2,853	11,982	3,452	12,992	40,064	44,578	46,257	91,541	50,782	153,449	42,864	104,439	49,172	146,831	919,196
Bio	168	1,289	145	1,132	173	1,192	165	732	162	890	148	623	181	679	932	1,346	1,068	2,767	1,231	4,207	1,039	2,871	1,112	4,150	28,402
Black Oil		7,315		4,932		3,648		516		248		0		147		0		391		954		2,823		6,016	26,990
Total Rack	**493,729**	**234,461**	**440,351**	**249,836**	**480,724**	**311,428**	**506,986**	**196,137**	**516,942**	**224,276**	**492,467**	**254,690**	**522,150**	**307,168**	**516,512**	**210,204**	**486,794**	**243,126**	**494,104**	**351,115**	**462,789**	**203,340**	**507,822**	**296,043**	**9,003,194**
TOTAL PDX BARGE																									
Diesel		91,519		68,545		84,675		164,772		63,002		139,234		156,180		119,630		118,232		69,021		55,138		39,992	1,169,940
Diesel Red		7,379		7,561		8,973		0		0		0		0		0		0		0		0		0	23,913
Black Oil		25,393		13,223		23,825		10,450		16,421		40,179		10,657		29,071		28,727		55,664		36,681		34,028	324,319
Total Barge		**124,291**		**89,329**		**117,473**		**175,222**		**79,423**		**179,413**		**166,837**		**148,701**		**146,959**		**124,685**		**91,819**		**74,020**	**1,518,172**
TOTAL PDX RAIL																									
Black Oil Total		**0**		**0**		**0**		**0**		**0**		**0**		**0**		**0**		**0**		**0**		**0**		**0**	0
TOTAL PDX PIPELINE ICPL																									
Premium		14,877		17,056		0		0		7,016		11,010		6,519		11,979		17,047		0		5,998		4,851	96,353
Subgrade		20,191		90,126		15,099		0		14,994		15,011		0		0		0		0		30,048		25,173	210,642
U/L Reg		0		0		0		0		0		0		0		0		0		0		0		0	0
Diesel		70,027		57,799		50,470		24,007		48,469		30,603		42,926		94,708		9,868		47,978		10,061		70,123	557,039
Total ICPL		**105,095**		**164,981**		**65,569**		**24,007**		**70,479**		**56,624**		**49,445**		**106,687**		**26,915**		**47,978**		**46,107**		**100,147**	**864,034**
TOTAL PDX PIPELINE KINDERMORGAN																									
Premium		0		0		0		0		0		0		0		0		0		0		0		0	0
U/L Reg		0		0		0		0		0		0		0		0		0		0		0		0	0
Diesel		0		0		0		455		0		0		0		0		0		0		0		0	455
Total KINDERMORGAN		**0**		**0**		**0**		**455**		**0**		**0**		**0**		**0**		**0**		**0**		**0**		**0**	**455**
TOTAL PDX LIGHTERING																									
Premium		0		0		0		0		7,310		0		0		0		0		0		0		0	7,310
Subgrade		0		0		20,065		0		0		19,821		0		0		56,630		0		0		0	96,516
U/L Reg		0		0		0		0		0		0		0		0		0		0		0		0	0
Diesel L/S		0		13,869		0		0		0		25,070		7,076		0		0		0		0		0	46,015
Diesel Red		0		0		0		0		0		0		0		0		0		0		0		0	0
Bio Diesel		0		0		0		0		0		0		0		0		0		0		0		0	0
Total Lightering		**0**		**13,869**		**20,065**		**0**		**7,310**		**44,891**		**7,076**		**0**		**56,630**		**0**		**0**		**0**	**149,841**
TOTAL PDX TERM																									
Premium	26,604	15,265	25,399	17,467	27,268	1,998	29,090	3,038	29,543	16,736	29,072	12,144	32,104	8,101	30,676	12,901	29,158	18,747	28,157	4,372	27,307	7,405	37,263	8,067	477,882
Subgrade	366,646	51,170	327,151	120,924	351,855	122,407	371,098	40,113	383,249	87,979	362,918	102,567	383,138	40,076	378,372	22,608	355,038	93,027	363,378	97,222	344,008	61,705	371,144	84,704	5,282,497
U/L Reg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ethanol	43,834	3,502	39,350	3,484	42,255	9,951	44,543	4,805	45,920	8,391	43,600	7,656	46,137	4,620	45,543	2,616	42,828	4,249	43,769	11,353	41,570	3,704	45,666	7,017	596,363
Diesel	51,491	261,579	44,802	266,824	54,193	275,181	56,904	301,825	54,525	210,303	53,360	327,946	56,467	399,808	19,790	304,112	10,913	187,837	2,487	147,416	2,288	91,437	2,590	135,329	3,319,407
Diesel Red	1,743	73,390	699	67,072	1,634	53,290	1,990	20,212	428	23,359	516	32,521	647	53,415	756	41,282	386	27,643	3,798	11,017	3,294	5,601	232	8,948	433,873
Bio Diesel Dyed	0	0	0	0	0	0	0	0	0	0	0	0	24	31	379	7,078	1,146	18,701	502	38,124	419	24,600	643	35,120	126,767
Bio Diesel	3,243	24,944	2,805	22,957	3,346	23,043	3,196	14,130	3,115	17,161	2,853	11,982	3,452	12,992	40,064	44,578	46,257	91,541	50,782	153,449	42,864	104,439	49,172	146,831	919,196
Bio	168	1,289	145	1,132	173	1,192	165	732	162	890	148	623	181	679	932	1,346	1,068	2,767	1,231	4,207	1,039	2,871	1,112	4,150	28,402
Black Oil		32,708		18,155		27,473		10,966		16,669		40,179		10,804		29,071		29,118		56,618		39,504		40,044	351,309
TOTAL PDX TERM	**493,729**	**463,847**	**440,351**	**518,015**	**480,724**	**514,535**	**506,986**	**395,821**	**516,942**	**381,488**	**492,467**	**535,618**	**522,150**	**530,526**	**516,512**	**465,592**	**486,794**	**473,630**	**494,104**	**523,778**	**462,789**	**341,266**	**507,822**	**470,210**	**11,535,696**
	957,576		**958,366**		**995,259**		**902,807**		**898,430**		**1,028,085**		**1,052,676**		**982,104**		**960,424**		**1,017,882**		**804,055**		**978,032**		11,535,696
AVERAGE BPD	**30,890**		**34,227**		**32,105**		**30,094**		**28,982**		**34,270**		**33,957**		**31,681**		**32,014**		**32,835**		**26,802**		**31,549**		

COP0017643

PORTLAND TERMINAL
TANK TO TANK TRANSFERS 2009 Estimates

2009	87	84	92	D/O #2	D/O #1	Total	Black Oil
January	0	30,000	3,500	199,344	0	232,844	7,100
February	0	8,000	10,300	135,150	0	153,450	4,685
March	0	18,000	17,000	250,000	0	285,000	0
April	0	0	13,000	168,200	0	181,200	5,736
May	0	20,000	18,000	190,450	0	228,450	3,173
June	0	26,000	3,500	199,100	0	228,600	588
July	0	10,000	4,000	301,050	0	315,050	5,167
August	0	30,000	11,000	260,250	0	301,250	0
September	0	14,000	16,440	243,685	0	274,125	6,795
October	0	38,000	4,000	350,210	0	392,210	2,024
November	0	16,000	11,600	189,000	0	216,600	7,786
December	0	24,000	9,585	240,300	0	273,885	410
Total	**0**	**234,000**	**121,925**	**2,726,739**	**0**	**3,082,664**	**43,464**

Reported in Bbls

2009 LUBE AND GREASE TERMINAL THROUGHPUT
Portland Terminal

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Blending													
Lube Oil	1,423,186	1,372,074	1,387,560	1,397,156	1,333,823	1,756,685	1,516,977	1,440,119	1,306,716	1,305,373	999,966	1,103,889	16,343,524
Grease	38,765	25,192	36,084	48,888	36,872	62,652	42,493	43,195	46,185	27,649	36,189	18,336	462,500
			0										
Total	1,461,951	1,397,266	1,423,644	1,446,044	1,370,695	1,819,337	1,559,470	1,483,314	1,352,901	1,333,022	1,036,155	1,122,225	16,806,024
Filling													
Drums	125,870	101,241	117,556	100,096	153,578	125,484	132,053	111,746	128,007	104,657	63,852	100,787	1,364,927
Qtr Bbls	1,406	0	1,520	881	878	884	1,624	587	2,054	1,046	585	1,845	13,310
Pails	18,163	15,264	17,285	13,209	17,271	20,221	18,016	17,270	18,648	13,515	11,314	8,367	188,543
Jugs	0	0	0	0	0	0	0	0	0	0	0	0	0
24/1	0	0	0	0	0	0	0	0	0	0	0	0	0
12/1	62,898	76,002	100,929	63,915	56,544	77,637	58,527	76,515	53,469	33,342	13,137	27,792	700,707
Tote Bins	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	208,337	192,507	237,290	178,101	228,271	224,226	210,220	206,118	202,178	152,560	88,888	138,791	2,267,487
Bulk/Ship													
Trk/Bulk	748,160	723,605	721,532	775,008	744,087	1,000,773	876,400	1,010,960	826,411	761,116	673,541	598,153	9,459,746
Rail/Bulk	390,869	392,662	427,612	505,911	323,392	414,996	369,201	375,465	264,931	290,466	253,499	266,551	4,275,555
Trk/base	18,512	32,211	7,011	35,460	26,105	23,418	31,975	36,073	42,030	45,149	39,115	27,008	364,067
Rail/base	0	0	0	0	0	0	0	0	0	0	0	0	0
FOB/Trk/BK	0	0	0	0	0	0	0	0	0	0	0	0	0
FOB/Rail/BK	0	0	0	0	0	0	0	0	0	0	0	0	0
Exports	0	0	0	0	0	0	0	0	0	0	0	0	0
Contract Pkger	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1,157,541	1,148,478	1,156,155	1,316,379	1,093,584	1,439,187	1,277,576	1,422,498	1,133,372	1,096,731	966,155	891,712	14,099,368
Orders													
#Mkters	0	0	0	0	0	0	0	0	0	0	0	0	0
#Retail	0	0	0	0	0	0	0	0	0	0	0	0	0
#Xport	0	0	0	0	0	0	0	0	0	0	0	0	0
#Other	0	0	0	0	0	0	0	0	0	0	0	0	0
							0						
Total	0	0	0	0	0	0	0	0	0	0	0	0	0
#Blk/Trks	117	113	107	119	115	146	134	150	125	118	102	95	1,441
#Blk/Rail	21	21	25	27	20	23	22	20	16	16	16	15	242
#Pkg/Trks	117	126	138	135	129	159	137	159	130	103	79	96	1,508
Pkg/Ship													
M/T Pkg	0	0	0	0	0	0	0	0	0	0	0	0	0
CC/Pkg	0	0	0	0	0	0	0	0	0	0	0	0	0
LD/Pkg	0	0	0	0	0	0	0	0	0	0	0	0	0
XPORT/Pkg	0	0	0	0	0	0	0	0	0	0	0	0	0
FOB/Pkg	0	0	0	0	0	0	0	0	0	0	0	0	0
Total lbs	1,854,180	2,070,255	2,312,505	2,278,583	2,143,230	2,565,090	2,196,930	2,640,443	2,038,043	1,828,650	1,440,458	1,558,823	24,927,190
Total Gal	247,224	276,034	308,334	303,811	285,764	342,012	292,924	352,059	271,739	243,820	192,061	207,843	3,323,625
TOTAL	1,404,765	1,424,512	1,464,489	1,620,190	1,379,348	1,781,199	1,570,500	1,774,557	1,405,111	1,340,551	1,158,216	1,099,555	17,422,993
Receiving													
Marine	905,056	1,761,502	0	1,902,532	1,081,440	1,026,743	1,008,416	1,037,815	898,450	1,159,974	597,199	1,207,932	12,587,059
Trk/Base	0	0	14,720	9,032	18,218	15,239	11,695	5,939	12,015	5,963	6,095	14,311	113,227
Rail/Base	127,266	239,831	236,879	232,756	311,498	260,356	281,232	275,133	262,137	280,185	92,414	45,273	2,644,960
Trk/Fin	0	0	0	0	0	0	0	0	0	0	0	0	0
Trk/Add	11,875	5,466	11,893	17,563	0	5,232	5,364	5,919	0	4,142	0	0	67,454
Rail/Add	114,570	82,767	103,023	86,932	116,333	112,138	117,698	125,328	94,219	91,779	51,817	83,356	1,179,960
Pkg/Add	889	10,398	5,243	4,552	4,925	11,445	18,559	16,358	4,248	0	4,668	393	81,678
Pkg/Gr	11,777	20,814	17,360	16,633	31,896	23,339	32,415	39,155	32,992	28,115	28,050	19,190	301,736
Pkg/Lub	86,860	50,720	63,348	50,783	52,234	91,689	68,639	82,704	57,096	47,097	32,324	63,124	746,618
Rail/Fin	0	0	0	0	0	0	0	0	0	0	0	0	0
Bulktainer Add	0	0	0	0	0	0	0	0	0	0	0	0	0
Polymers	4,456	0	4,185	4,444	4,433	7,657	4,169	4,456	4,150	4,823	0	4,088	46,861
Total	1,262,749	2,171,498	456,651	2,325,227	1,620,977	1,553,838	1,548,187	1,592,807	1,365,307	1,622,078	812,567	1,437,667	17,769,553

January 25, 2010

Mr. Michael Romero
Oregon Department of Environmental Quality
2020 SW 4th Avenue, Suite 400
Portland, Oregon 97201

Subject: Semi-Annual Groundwater Monitoring Report
April through September 2009
Willbridge Bulk Fuel Facilities, Portland, Oregon
Consent Order WMCSR-NWR-94-06

Dear Mr. Romero:

On behalf of the Willbridge Terminal Group (WTG), Delta Consultants (Delta) has prepared this Semi-Annual Groundwater Monitoring Report for the above referenced facilities located in Portland, Oregon (Figure 1). The WTG consists of Chevron Products Company (Chevron), ConocoPhillips Company (ConocoPhillips), and Kinder Morgan Liquid Terminals (Kinder Morgan) (Figure 2). The field sampling activities described in this letter report were completed by Arcadis U.S., Inc (Arcadis) on behalf of Chevron, by Stantec Consulting and Arcadis on behalf of ConocoPhillips, and by Delta on behalf of Kinder Morgan. This sampling event fulfills the requirements outlined in Section 7F of the Oregon Department of Environmental Quality (DEQ) Consent Order WMCSR-NWR-94-06.

DELTA

This letter report summarizes groundwater monitoring activities that were completed from April through September 2009. Groundwater monitoring and separate phase hydrocarbon (SPH) recovery were completed June 15, 2009 (second quarter 2009) and September 14 through 23, 2009 (third quarter 2009). Groundwater monitoring 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.

GROUNDWATER MONITORING

Depth-to-water measurements were collected from each monitoring well. Depth-to-water measurements were not collected from recovery wells due to active pumping and inaccessibility. Recorded depth-to-water measurements are presented in Tables 1A through 1C. Measurements ranged from 2.52 feet to 27.03 feet below ground surface across the facilities. Groundwater elevation contours for each quarter are presented in Figures 3 through 6. Evaluation of the groundwater elevation data for this semi-annual period suggests that groundwater flows to the northeast toward the Willamette River.

a member of: Inogen Environmental Alliance

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The daily mean Willamette River stage, measured at the Morrison Bridge river gauge and converted to the City of Portland (COP) datum, ranged from a high of 13.44 feet on June 9, 2009 to a low of 3.91 feet on September 27, 2009. The average river stage elevation was 8.21 feet between April 1, 2009 and September 30, 2009. Precipitation and river stage data are presented in Figure 7.

Separate Phase Hydrocarbons (SPH)

SPH is measured and removed from each facility on a monthly basis. Monthly SPH removal was conducted on wells containing measureable amounts of SPH between April and September 2009. SPH thicknesses recorded during this semi-annual event are summarized in Tables 1A through 1C. A summary of monthly SPH removal volume is summarized in Table 1D. Observable sheen and SPH thicknesses are presented in Figures 3 and 5.

In the second quarter, eight Chevron wells (B-24, B-30, CR-6, CR-10, CR-15, CR-19, CR-25, and GPW-4) contained measurable thicknesses of SPH, ranging from 0.01 feet in multiple wells to 0.44 feet in CR-19. Additionally, a 12-inch manhole contained a measureable thickness of 0.01 feet. During the third quarter, ten Chevron wells (B-20, B-30, CR-6, CR-10, CR-15, CR-19, CR-23A, CR-25, GPW-2, and GPW-4) contained measurable thicknesses of SPH, ranging from 0.01 feet in multiple wells to 0.34 feet in well CR-19. SPH occurrences were consistent with historical measurements in all wells during this semi-annual event.

In the second quarter, four Kinder Morgan wells (MW-7, MW-19, MW-23, and MW-24) had measureable SPH thicknesses ranging from 0.01 feet in well MW-23 to 0.15 feet in well MW-7. Additionally, sheen was observed in wells MW-6 and MW-28. In the third quarter, four Kinder Morgan wells (MW-7, MW-11, MW-24, and MW-28) contained measurable SPH thicknesses ranging from 0.01 feet in well MW-24 to 0.06 feet in wells MW-7 and MW-11. Sheen was observed in wells MW-19 and MW-23. SPH occurrences were consistent with historical measurements in all wells during this semi-annual event.

In the second quarter, six ConocoPhillips wells (B-4, B-40, DW-1, RES-N, GP-3, and OF-2) contained measurable SPH thicknesses ranging from 0.01 feet in multiple wells to 0.04 feet in well B-40. In the third quarter, five ConocoPhillips wells (B-4, GP-3, U-4, U-5A, and U-13) contained measurable thicknesses of SPH, ranging from 0.01 feet in multiple wells to 0.15 feet in well U-13. SPH occurrences were consistent with historical measurements in all wells during this semi-annual event.

SPH recovery is performed in each well where SPH is measured. Manual SPH recovery/removal from monitoring wells consists of bailing, pumping, or the use of a sorbent sock installed in the well. Approximately 196 gallons of SPH have been removed to date by the above-referenced manual recovery methods. Recovered SPH volumes for this reporting period (April 2009 to October 2009) totaled approximately 1.3 gallons.

In addition to the monthly SPH recovery events, SPH recovery is conducted with the aid of a remediation system and series of recovery wells located between the Chevron and ConocoPhillips terminals. Approximately 4,500 gallons of SPH have been removed through this system. During this semi-annual monitoring period, the treatment system recovered 45 gallons of SPH. Recovered SPH is presently stored in an on-site batch tank, and once its capacity is reached it will be transported to Oil-Re-Refining in Portland, Oregon for recycling.

Analytical Sampling Plan

Groundwater was sampled from selected Chevron, ConocoPhillips, and Kinder Morgan monitoring wells during the third quarter monitoring event. Groundwater samples were not collected from monitoring wells containing observable sheen or measurable quantities of SPH. Groundwater monitoring and sampling procedures are included in Appendix A.

The wells sampled for the third quarter monitoring event include the following:

- Chevron: B-9A, B-10, B-21, B-28, B-29, and CR-1.
- ConocoPhillips: B-35, B-36, B-37, OF-1, P-1A, U-2, U-14, U-15, U-16, U-17, U-18, U-20, U-21, U-22A, U-22B, U-23, U-24A, U-24B, U-25, U-26, U-27, U-28, U-29A, and U-29C.
- Kinder Morgan: MW-8, MW-25, MW-26, MW-33, MW-34, MW-36, MW-37, and MW-40.

Each well listed above was tested for:

- 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 Resource Conservation Recovery Act (RCRA) metals using EPA Method 6000/7000 Series. RCRA metals included arsenic, cadmium, chromium, copper, lead, manganese, mercury, selenium, silver, and zinc.

Groundwater samples were submitted to TestAmerica in Beaverton, Oregon and Pace Analytical Services, Inc. in Seattle, Washington for analytical testing. The analytical laboratory reports are included in Appendix A and the analytical data is summarized in Tables 2 through 4.

Analytical Findings

For *comparison purposes only*, the semi-annual groundwater monitoring data were screened against the Portland Harbor Joint Source Control Strategy (JSCS) screening level values (SLVs) presented in Table 3-1 of the JSCS guidance document, updated in July 2007.

The Table 3-1 JSCS SLVs used in the screening process for this monitoring report were the human health, fish consumption, EPA 2004 NRWQC organism only; human health, fish consumption, DEQ 2004 Ambient Water Quality Criteria (AWQC) organism only; ecological receptors, EPA NRWQC chronic; ecological receptor, EPA NRWQC chronic; ecological receptor, DEQ 2004 AWQC; and ecological receptor Oak Ridge National Laboratory's Tier II secondary chronic values (SCVs). Tables 5 through 8 include a summary of analytical data collected since 2008, compared with the JSCS SLVs.

Evaluation of the groundwater sampling data shows Chevron wells B-10 and CR-1; Kinder Morgan well MW-36; and ConocoPhillips wells U-22A, U-23, and U-29A with groundwater sample concentrations above the JSCS SLVs for PAHs. The analytical results from groundwater samples collected from monitoring wells at each terminal exceeded one or more JSCS SLVs for total metals. No groundwater sample collected from the Dock Area monitoring wells exceeded any of the BTEX JSCS SLVs.

ISSUES

The following issues were encountered during the second and third quarter 2009 monitoring events:

Each monitoring well was sampled as required with the following exceptions. First, during the second quarter monitoring event, depth-to-water measurements were not collected from Chevron wells CR-11, CR-21A, CR-21B, CR-22A, CR-22B, and GPW-5, and ConocoPhillips well B-17, due to inaccessibility. In addition, a depth-to-water measurement was not collected from ConocoPhillips well B-25 because it could not be located. During the third quarter monitoring event, depth-to-water measurements were not collected from Chevron wells B-24, CR-20, CR-21A, CR-21B, and GPW-1 due to inaccessibility. Groundwater samples were not collected from ConocoPhillips wells B-4 and U-4, and Chevron well B-30 because of measurable SPH. ConocoPhillips wells B-40 and U-5A were not sampled during the September 2009 sampling event. B-40 was not sampled due to an oversight by the Arcadis field team and U-5A was not sampled because of measurable SPH (0.13 feet) in the well. A depth to water measurement was not collected from ConocoPhillips well B-25 because it could not be located.

UPCOMING ACTIVITIES

The following tasks are planned for the fourth quarter of 2009 and first quarter of 2010:

- Measure depth to water and SPH in all WTG wells during the fourth quarter 2009 (December 2009) and first quarter 2010 (March 2010) monitoring events. Fourth quarter 2009 gauging was completed on December 21, 2009.
- Sample selected WTG wells during the first quarter of 2010 (March 2010) semiannual sampling event following just the *Sampling and Analysis Plan Addendum*. First quarter 2010 monitoring is tentatively scheduled for March 21, 2009.
- Continue to perform monthly SPH recovery from wells that have historically contained SPH.
- Continue operation of the remediation system located between the Chevron and ConocoPhillips terminals.

LIMITATIONS

The conclusions and recommendations contained in this report represent Delta's professional opinions based upon the currently available information and are determined 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 fourth party. Other than as contained in this paragraph, Delta makes no express or implied warranty as to the contents of this report.

Sincerely,
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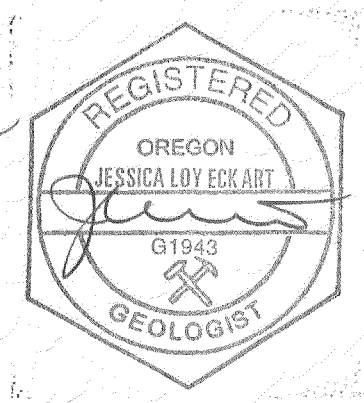

Attachments:

Table 1A	Groundwater Elevation and SPH Recovery Data Chevron Products Company
Table 1B	Groundwater Elevation and SPH Recovery Data Kinder Morgan Liquid Terminals, LLC
Table 1C	Groundwater Elevation and SPH Recovery Data ConocoPhillips Company
Table 1D	Groundwater Elevation and SPH Recovery Data Willbridge Terminal Group Summary
Table 2	Groundwater Analytical Results – TPH, BTEX and MTBE Compounds
Table 3	Groundwater Analytical Results – PAH Compounds
Table 4	Groundwater Analytical Results – Total Metals
Table 5	Groundwater Screening Level Comparisons– Dock Area Shallow Wells– TPH, VOCs, and Metals
Table 6	Groundwater Screening Level Comparisons– Dock Area Shallow Wells– PAHs
Table 7	Groundwater Screening Level Comparisons– Dock Area Cluster Wells– TPH, VOCs, and Metals
Table 8	Groundwater Screening Level Comparisons– Dock Area Cluster Wells– PAHs
Figure 1	Site Location Map
Figure 2	Site Plan
Figure 3	Groundwater Elevation Contours and SPH Thickness Map - Second Quarter 2009
Figure 4	Groundwater Elevation Contours Dock Area – Second Quarter 2009
Figure 5	Groundwater Elevation Contours and SPH Thickness Map - Third Quarter 2009
Figure 6	Groundwater Elevation Contours Dock Area – Third Quarter 2009
Figure 7	Precipitation and River Stage Hydrograph (April 2009 to October 2009)
Appendix A	Groundwater Monitoring and Sampling Procedures, Certified Analytical Laboratory Reports and Chain-Of-Custody Documentation (CD Only)

TABLES

TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Chevron Products 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	15.76	NP	-	18.09	NA
	6/23/2008	16.31	NP	-	17.54	NA
	9/22/2008	16.73	NP	-	17.12	NA
	1/5/2009	15.59	NP	-	18.26	NA
	3/16/2009	16.00	NP	-	17.85	NA
	6/15/2009	**16.21**	**NP**	**-**	**17.64**	**NA**
	9/14/2009	**16.49**	**NP**	**-**	**17.36**	**NA**
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				

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Chevron Products 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-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
	6/23/2008	15.37	NP	-	18.21	NA
	9/22/2008	15.94	NP	-	17.64	NA
	1/5/2009	14.92	NP	-	18.66	NA
	3/16/2009	15.28	NP	-	18.30	NA
	6/15/2009	**15.43**	**NP**	**-**	**18.15**	**NA**
	9/14/2009	**15.83**	**NP**	**-**	**17.75**	**NA**
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
	6/23/2008	15.62	NP	-	19.16	NA
	9/22/2008	16.41	NP	-	18.37	NA
	1/5/2009	Well Inaccessible				
	3/16/2009	15.64	NP	-	19.14	NA
	6/15/2009	**15.71**	**NP**	**-**	**19.07**	**NA**
	9/14/2009	**16.40**	**NP**	**-**	**18.38**	**NA**

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Chevron Products 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-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
	6/23/2008	15.49	NP	-	19.50	NA
	9/22/2008	16.31	NP	-	18.68	NA
	1/5/2009	15.29	NP	-	19.70	NA
	3/16/2009	15.53	NP	-	19.46	NA
	6/15/2009	**15.59**	**NP**	**-**	**19.40**	**NA**
	9/14/2009	**16.29**	**NP**	**-**	**18.70**	**NA**
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
	6/23/2008	15.92	NP	-	19.25	NA
	9/22/2008	16.71	NP	-	18.46	NA
	1/5/2009	15.73	NP	-	19.44	NA
	3/16/2009	15.96	NP	-	19.21	NA
	6/15/2009	**15.96**	**NP**	**-**	**19.21**	**NA**
(35.44)	**9/14/2009**	**16.67**	**NP**	**-**	**18.77**	**NA**

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Chevron Products 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-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					
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
	6/23/2008	17.70	NP	-	18.92	NA
	9/22/2008	18.39	NP	-	18.23	NA
	1/5/2009	17.90	NP	-	18.72	NA
	3/16/2009	NM	NM	NM	NM	NA
	6/15/2009	**NM**	**NM**	**NM**	**NM**	**NA**
N/A	**9/14/2009**	**18.36**	**NP**	**-**	**NM**	**NA**

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Chevron Products 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-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
	6/23/2008	16.76	NP	-	18.82	NA
	9/22/2008	17.46	NP	-	18.12	NA
	1/5/2009	16.62	NP	-	18.96	NA
	3/16/2009	16.80	NP	-	18.78	NA
	6/15/2009	**NM**	**NM**	**NM**	**NM**	**NA**
	9/14/2009	**16.43**	**NP**	**-**	**19.15**	**NA**
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
	6/23/2008	16.02	NP	-	18.64	NA
	9/22/2008	16.69	NP	-	17.97	NA
	1/5/2009	15.72	NP	-	18.94	NA
	3/16/2009	16.01	NP	-	18.65	NA
	6/15/2009	**16.11**	**NP**	**-**	**18.55**	**NA**
	9/14/2009	**16.64**	**NP**	**-**	**18.02**	**NA**

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Chevron Products 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-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
	6/23/2008	15.92	15.91	0.01	17.41	NA
	9/22/2008	16.11	NP	-	17.22	NA
	1/5/2009	15.16	15.07	0.09	18.24	0.0
	3/16/2009	15.59	NP	-	17.74	0.0
	6/15/2009	**15.82**	**NP**	**-**	**17.51**	**0.0**
	9/14/2009	**16.07**	**16.04**	**0.03**	**17.28**	**0.0**
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
	6/23/2008	16.34	NP	-	18.48	NA
	9/22/2008	16.92	NP	-	17.90	NA
	1/5/2009	15.93	NP	-	18.89	NA
	3/16/2009	16.35	NP	-	18.47	NA
	6/15/2009	**16.42**	**NP**	**-**	**18.40**	**NA**
	9/14/2009	**16.84**	**NP**	**-**	**17.98**	**NA**

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Chevron Products 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-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
	6/23/2008	15.93	15.90	0.03	18.79	0.0
	9/22/2008	16.61	16.59	0.02	18.11	0.0
	1/5/2009	15.70	NP	-	19.00	0.0
	3/16/2009	NM	NM	NM	NM	0.0
	6/15/2009	**15.96**	**15.95**	**0.01**	**18.75**	**0.0**
	9/14/2009	**Inaccessible**				**NA**
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
	6/23/2008	16.05	NP	-	19.28	NA
	9/22/2008	16.84	NP	-	18.49	NA
	1/5/2009	15.70	NP	-	19.63	NA
	3/16/2009	16.10	NP	-	19.23	NA
	6/15/2009	**16.12**	**NP**	**-**	**19.21**	**NA**
	9/14/2009	**16.82**	**NP**	**-**	**18.51**	**NA**

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Chevron Products 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-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	NA
	12/17/2007	15.93	NP	-	19.35	NA
	1/22/2008	15.15	NP	-	20.13	NA
	3/24/2008	15.30	NP	-	19.98	NA
	6/23/2008	15.83	NP	-	19.45	NA
	9/22/2008	16.14	NP	-	19.14	NA
	1/5/2009	15.82	NP	-	19.46	NA
	3/16/2009	15.90	NP	-	19.38	NA
	6/15/2009	**15.91**	**NP**	**-**	**19.37**	**NA**
	9/14/2009	**16.20**	**NP**	**-**	**19.08**	**NA**
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
	6/23/2008	15.54	NP	-	20.46	NA
	9/22/2008	16.44	NP	-	19.56	NA
	1/5/2009	14.74	NP	-	21.26	NA
	3/16/2009	15.78	NP	-	20.22	NA
	6/15/2009	**15.87**	**NP**	**-**	**20.13**	**NA**
	9/14/2009	**16.53**	**NP**	**-**	**19.47**	**NA**

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Chevron Products 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-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
	6/23/2008	15.50	15.49	0.01	19.90	0.0
	9/22/2008	16.38	16.37	0.01	19.02	0.0
	1/5/2009	15.19	15.18	0.01	20.21	0.0
	3/16/2009	15.50	15.48	0.02	19.91	0.0
	6/15/2009	**15.58**	**15.55**	**0.03**	**19.83**	**0.0**
	9/14/2009	**16.34**	**16.33**	**0.01**	**19.06**	**0.0**
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				

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Chevron Products 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-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
	6/23/2008	15.91	NP	-	18.43	NA
	9/22/2008	16.54	NP	-	17.80	NA
	1/5/2009	15.49	NP	-	18.85	NA
	3/16/2009	15.96	NP	-	18.38	NA
	6/15/2009	**15.93**	**NP**	**-**	**18.41**	**NA**
	9/14/2009	**16.48**	**NP**	**-**	**17.86**	**NA**
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	2.56	NP	-	19.13	NA
	6/23/2008	3.10	NP	-	18.59	NA
	9/22/2008	3.93	NP	-	17.76	NA
	1/5/2009	2.29	NP	-	19.40	NA
	3/16/2009	2.80	NP	-	18.89	NA
	6/15/2009	**3.25**	**NP**	**-**	**18.44**	**NA**
	9/14/2009	**3.98**	**NP**	**-**	**17.71**	**NA**

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Chevron Products 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-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
	6/23/2008	14.66	NP	-	19.65	NA
	9/22/2008	15.51	NP	-	18.80	NA
	1/5/2009	14.24	NP	-	20.07	NA
	3/16/2009	14.70	NP	-	19.61	NA
	6/15/2009	**14.78**	**NP**	**-**	**19.53**	**NA**
	9/14/2009	**15.50**	**NP**	**-**	**18.81**	**NA**
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	-	28.59	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	6.20	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----------				
	6/23/2008	NM	NM	NM	NM	NA
	9/22/2008	NM	NM	NM	NM	NA
	1/5/2009	NM	NM	NM	NM	NA
	3/16/2009	NM	NM	NM	NM	NA
	6/15/2009	**NM**	**NM**	**NM**	**NM**	**NA**
	9/14/2009	**NM**	**NM**	**NM**	**NM**	**NA**

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Chevron Products 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-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
	6/23/2008	12.44	12.43	0.01	23.18	NA
	9/22/2008	13.54	13.50	0.04	22.10	NA
	1/5/2009	11.79	11.72	0.07	23.88	0.0
	3/16/2009	12.25	12.20	0.05	23.40	0.0
	6/15/2009	**12.35**	**12.30**	**0.05**	**23.30**	**0.0**
	9/14/2009	**13.35**	**13.31**	**0.04**	**22.29**	**0.0**
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	-	24.83	NA
	3/19/2007	-	-	-	-	-
	6/18/2007	11.40	Trace	-	24.17	NA
	9/17/2007	12.59	Trace	-	22.98	NA
	12/17/2007	Inaccessible				
	3/24/2008	10.00	10.00	Trace	25.57	NA
	6/23/2008	10.80	NP	-	24.77	NA
	9/22/2008	12.19	12.18	0.01	23.39	-
	1/5/2009	9.79	NP	-	25.78	NA
	3/16/2009	10.77	NP	-	24.80	NA
	6/15/2009	**10.79**	**NP**	**-**	**24.78**	**NA**
	9/14/2009	**11.89**	**NP**	**-**	**23.68**	**NA**

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Chevron Products 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-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	26.51	NA
	6/23/2008	7.12	NP	-	26.02	NA
	9/22/2008	8.81	NP	-	24.33	NA
	1/5/2009	6.62	NP	-	26.52	NA
	3/16/2009	5.80	NP	-	27.34	NA
	6/15/2009	**6.69**	**NP**	**-**	**26.45**	**NA**
	9/14/2009	**7.85**	**NP**	**-**	**25.29**	**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
	6/23/2008	5.92	NP	-	-	NA
	9/22/2008	7.07	7.07	Sheen	-	NA
	1/5/2009	4.40	4.40	Sheen	-	NA
	3/16/2009	Inaccessible				
	6/15/2009	**5.94**	**NP**	**-**	**-**	**NA**
	9/14/2009	**7.16**	**NP**	**-**	**-**	**NA**

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Chevron Products 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
	6/23/2008	5.53	NP	-	30.19	NA
	9/22/2008	6.98	NP	-	28.74	NA
	1/5/2009	3.10	NP	-	32.62	NA
	3/16/2009	3.78	NP	-	31.94	NA
	6/15/2009	**6.02**	**NP**	**-**	**29.70**	**NA**
	9/14/2009	**6.98**	**NP**	**-**	**28.74**	**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	4.54	4.50	0.04	31.03	0.08
	6/23/2008	5.64	5.60	0.04	29.96	0.01
	9/22/2008	7.65	7.42	0.23	27.94	0.08
	1/5/2009	4.75	4.29	0.46	30.86	0.40
	3/16/2009	5.31	5.27	0.04	30.26	0.03
	6/15/2009	**6.20**	**6.15**	**0.05**	**29.37**	**0.08**
	9/14/2009	**7.69**	**7.62**	**0.07**	**27.89**	**0.15**

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Chevron Products 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
	6/23/2008	2.10	NP	-	32.33	NA
	9/22/2008	4.40	4.30	0.10	30.11	NA
	1/5/2009	3.57	3.57	Sheen	30.86	NA
	3/16/2009	5.45	NP	-	28.98	NA
	6/15/2009	**Inaccessible**				**NA**
	9/14/2009	**4.01**	**NP**	**-**	**30.42**	**NA**

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Chevron Products 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
	6/23/2008	5.72	NP	-	29.87	NA
	9/22/2008	Inaccessible				NA
	1/5/2009	3.98	NP	-	31.61	NA
	3/16/2009	5.29	NP	-	30.30	NA
	6/15/2009	**5.55**	**NP**	**-**	**30.04**	**NA**
	9/14/2009	**6.64**	**NP**	**-**	**28.95**	**NA**

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Chevron Products 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
Chevron Products 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
	6/23/2008	5.80	NP	-	29.63	NA
	9/22/2008	7.09	NP	-	28.34	NA
	1/5/2009	4.38	NP	-	31.05	NA
	3/16/2009	5.43	NP	-	30.00	NA
	6/15/2009	**5.86**	**NP**	**-**	**29.57**	**NA**
	9/14/2009	**6.96**	**NP**	**-**	**28.47**	**NA**

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Chevron Products 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	24.96	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
	6/26/2006	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
	6/23/2008	10.10	9.99	0.11	25.41	0.37
	9/22/2008	11.71	NP	-	23.71	0.29
	1/5/2009	8.71	8.64	0.07	26.77	0.04
	3/16/2009	10.08	9.95	0.13	25.44	0.00
	6/15/2009	**10.22**	**10.07**	**0.15**	**25.32**	**0.16**
	9/14/2009	**11.35**	**11.24**	**0.11**	**24.16**	**0.08**

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Chevron Products 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
	6/23/2008	11.64	NP	-	23.13	NA
	9/22/2008	12.22	NP	-	22.55	NA
	1/5/2009	9.97	9.97	Trace	24.80	NA
	3/16/2009	11.56	NP	-	23.21	NA
	6/15/2009	**11.55**	**NP**	**-**	**23.22**	**NA**
	9/14/2009	**12.18**	**NP**	**-**	**22.59**	**NA**

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Chevron Products 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	6.90	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	7.51	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	6.52	NP	-	27.94	NA
	6/23/2008	7.45	NP	-	27.01	NA
	9/22/2008	8.98	NP	-	25.48	NA
	1/5/2009	6.48	NP	-	27.98	NA
	3/16/2009	7.36	NP	-	27.10	NA
	6/15/2009	**7.52**	**NP**	**-**	**26.94**	**NA**
	9/14/2009	**8.97**	**NP**	**-**	**25.49**	**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
Chevron Products 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
	6/23/2008	6.21	6.00	0.21	29.45	0.57
	9/22/2008	7.97	7.49	0.48	27.90	0.70
	1/5/2009	5.05	4.60	0.45	30.80	0.30
	3/16/2009	6.24	5.69	0.55	29.69	0.42
	6/15/2009	**6.42**	**5.98**	**0.44**	**29.42**	**0.11**
	9/14/2009	**7.40**	**7.18**	**0.22**	**28.27**	**0.11**

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Chevron Products 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)	8/16/1999	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
	6/23/2008	8.14	NP	-	27.00	NA
	9/22/2008	10.34	NP	-	24.80	NA
	1/5/2009	6.78	NP	-	28.36	NA
	3/16/2009	8.09	NP	-	27.05	NA
	6/15/2009	**8.24**	**NP**	**-**	**26.90**	**NA**
	9/14/2009	**Inaccessible**				**NA**

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Chevron Products 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-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
	6/23/2008	Inaccessible				NA
	9/22/2008	Inaccessible				NA
	1/5/2009	Inaccessible				NA
	3/16/2009	Inaccessible				NA
	6/15/2009	**Inaccessible**				**NA**
	9/14/2009	**Inaccessible**				**NA**
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
	6/23/2008	Inaccessible				NA
	9/22/2008	Inaccessible				NA
	1/5/2009	Inaccessible				NA
	3/16/2009	Inaccessible				NA
	6/15/2009	**Inaccessible**				**NA**
	9/14/2009	**Inaccessible**				**NA**

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Chevron Products 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
	6/23/2008	11.37	NP	-	23.43	NA
	9/22/2008	12.48	NP	-	22.32	NA
	1/5/2009	10.36	NP	-	24.44	NA
	3/16/2009	11.34	NP	-	23.46	NA
	6/15/2009	**Inaccessible**				**NA**
	9/14/2009	**12.21**	**NP**	**-**	**22.59**	**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
	6/23/2008	10.42	NP	-	24.77	NA
	9/22/2008	11.82	NP	-	23.37	NA
	1/5/2009	9.70	NP	-	25.49	NA
	3/16/2009	10.25	NP	-	24.94	NA
	6/15/2009	**Inaccessible**				**NA**
	9/14/2009	**11.50**	**NP**	**-**	**23.69**	**NA**

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Chevron Products 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
	6/23/2008	12.98	NP	-	23.37	NA
	9/22/2008	Inaccessible				NA
	1/5/2009	11.39	NP	-	24.96	NA
	3/16/2009	12.75	NP	-	23.60	NA
	6/15/2009	**12.44**	**NP**	**-**	**23.91**	**NA**
	9/14/2009	**13.56**	**13.55**	**0.01**	**22.80**	**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
	6/23/2008	11.91	NP	-	24.36	NA
	9/22/2008	NM	NM	NM	NM	NA
	1/5/2009	11.00	NP	-	25.27	NA
	3/16/2009	11.80	NP	-	24.47	NA
	6/15/2009	**13.81**	**NP**	**-**	**22.46**	**NA**
	9/14/2009	**12.81**	**NP**	**-**	**23.46**	**NA**

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Chevron Products 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
	6/23/2008	13.73	NP	-	22.48	NA
	9/22/2008	14.81	NP	-	21.40	NA
	1/5/2009	12.55	NP	-	23.66	NA
	3/16/2009	13.81	NP	-	22.40	NA
	6/15/2009	**14.60**	**NP**	**-**	**21.61**	**NA**
N/A	**9/14/2009**	**14.35**	**NP**	**-**	**NM**	**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
	6/23/2008	12.70	NP	-	23.62	NA
	9/22/2008	13.91	NP	-	22.41	NA
	1/5/2009	12.11	NP	-	24.21	NA
	3/16/2009	12.84	Trace	-	23.48	NA
	6/15/2009	**12.60**	**NP**	**-**	**24.48**	**NA**
	9/14/2009	**13.30**	**NP**	**-**	**25.48**	**NA**

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Chevron Products 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
	6/23/2008	7.40	7.35	0.05	26.91	0.06
	9/22/2008	8.97	8.89	0.08	25.36	0.10
	1/5/2009	6.28	6.23	0.05	28.03	0.05
	3/16/2009	6.99	6.90	0.09	27.35	0.03
	6/15/2009	**7.40**	**7.28**	**0.12**	**26.97**	**0.02**
	9/14/2009	**8.54**	**8.52**	**0.02**	**25.75**	**0.00**
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
	6/23/2008	16.89	NP	-	16.32	NA
	9/22/2008	23.70	NP	-	9.51	NA
	1/5/2009	19.38	NP	-	13.83	NA
	3/16/2009	20.39	NP	-	12.82	NA
	6/15/2009	**18.24**	**NP**	**-**	**14.97**	**NA**
	9/14/2009	**22.08**	**NP**	**-**	**11.13**	**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
	6/23/2008	17.20	NP	-	16.11	NA
	9/22/2008	22.41	NP	-	10.90	NA
	1/5/2009	17.60	NP	-	15.71	NA
	3/16/2009	20.34	NP	-	12.97	NA
	6/15/2009	**19.38**	**NP**	**-**	**13.93**	**NA**

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Chevron Products 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)
	9/14/2009	**21.40**	**NP**	**-**	**11.91**	**NA**

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Chevron Products 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	NA
	1/22/2008	15.22	NP	-	19.68	NA
	3/24/2008	15.38	NP	-	19.52	NA
	6/23/2008	15.95	NP	-	18.95	NA
	9/22/2008	16.65	NP	-	18.25	NA
	1/5/2009	15.86	NP	-	19.04	NA
	3/16/2009	16.14	NP	-	18.76	NA
	6/15/2009	**15.80**	**NP**	**-**	**19.10**	**NA**
	9/14/2009	**16.64**	**NP**	**-**	**18.26**	**NA**
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
	6/23/2008	14.05	NP	-	20.82	NA
	9/22/2008	16.02	NP	-	18.85	NA
	1/5/2009	15.78	NP	-	19.09	NA
	3/16/2009	15.80	NP	-	19.07	NA
	6/15/2009	**16.04**	**NP**	**-**	**18.83**	**NA**
	9/14/2009	**16.08**	**NP**	**-**	**18.79**	**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
	6/23/2008	13.46	NP	-	21.29	NA
	9/22/2008	15.52	NP	-	19.23	NA
	1/5/2009	13.30	NP	-	21.45	NA
	3/16/2009	14.16	NP	-	20.59	NA
	6/15/2009	**14.23**	**NP**	**-**	**20.52**	**NA**
	9/14/2009	**16.18**	**NP**	**-**	**18.57**	**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
	6/23/2008	14.66	NP	-	19.53	NA
	9/22/2008	15.49	NP	-	18.70	NA
	1/5/2009	14.20	NP	-	19.99	NA
	3/16/2009	14.68	NP	-	19.51	NA
	6/15/2009	**14.76**	**NP**	**-**	**19.43**	**NA**
	9/14/2009	**14.48**	**NP**	**-**	**19.71**	**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
	6/23/2008	14.39	NP	-	19.93	NA
	9/22/2008	17.16	NP	-	17.16	NA
	1/5/2009	14.40	NP	-	19.92	NA
	3/16/2009	16.30	NP	-	18.02	NA
	6/15/2009	**15.32**	**NP**	**-**	**19.00**	**NA**
	9/14/2009	**17.16**	**NP**	**-**	**17.16**	**NA**

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Chevron Products 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-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
	6/23/2008	13.86	NP	-	19.22	NA
	9/22/2008	14.67	NP	-	18.41	NA
	1/5/2009	13.11	NP	-	19.97	NA
	3/16/2009	13.72	NP	-	19.36	NA
	6/15/2009	**13.96**	**NP**	**-**	**19.12**	**NA**
	9/14/2009	**14.65**	**NP**	**-**	**18.43**	**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
	6/23/2008	14.45	NP	-	17.88	NA
	9/22/2008	18.74	NP	-	13.59	NA
	1/5/2009	14.55	NP	-	17.78	NA
	3/16/2009	16.89	NP	-	15.44	NA
	6/15/2009	**15.99**	**NP**	**-**	**16.34**	**NA**
	9/14/2009	**18.54**	**NP**	**-**	**13.79**	**NA**
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
	6/23/2008	2.97	NP	-	18.61	NA
	9/22/2008	3.74	NP	-	17.84	NA
	1/5/2009	2.18	NP	-	19.40	NA
	3/16/2009	2.70	NP	-	18.88	NA
	6/15/2009	**3.14**	**NP**	**-**	**18.44**	**NA**
	9/14/2009	**3.74**	**NP**	**-**	**17.84**	**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
	6/23/2008	5.54	NP	-	16.16	NA
	9/22/2008	10.73	NP	-	10.97	NA
	1/5/2009	5.58	NP	-	16.12	NA
	3/16/2009	8.66	NP	-	13.04	NA
	6/15/2009	**7.50**	**NP**	**-**	**14.20**	**NA**
	9/14/2009	**10.73**	**NP**	**-**	**10.97**	**NA**

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Chevron Products 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-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
	6/23/2008	3.26	NP	-	18.65	NA
	9/22/2008	4.08	NP	-	17.83	NA
	1/5/2009	2.45	NP	-	19.46	NA
	3/16/2009	2.97	NP	-	18.94	NA
	6/15/2009	**3.44**	**NP**	**-**	**18.47**	**NA**
	9/14/2009	**4.03**	**NP**	**-**	**17.88**	**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
	6/23/2008	5.72	NP	-	16.36	NA
	9/22/2008	10.47	NP	-	11.61	NA
	1/5/2009	6.03	NP	-	16.05	NA
	3/16/2009	8.73	NP	-	13.35	NA
	6/15/2009	**7.92**	**NP**	**-**	**14.16**	**NA**
	9/14/2009	**10.40**	**NP**	**-**	**11.68**	**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
	6/23/2008	7.86	NP	-	13.90	NA
	9/22/2008	11.38	NP	-	10.38	NA
	1/5/2009	5.86	NP	-	15.90	NA
	3/16/2009	9.20	NP	-	12.56	NA
	6/15/2009	**7.90**	**NP**	**-**	**13.86**	**NA**
	9/14/2009	**10.50**	**NP**	**-**	**11.26**	**NA**

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Chevron Products 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-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
	6/23/2008	3.00	NP	-	13.86	NA
	9/22/2008	7.01	NP	-	9.85	NA
	1/5/2009	4.69	NP	-	12.17	NA
	3/16/2009	6.23	NP	-	10.63	NA
	6/15/2009	**4.67**	**NP**	**-**	**12.19**	**NA**
	9/14/2009	**6.45**	**NP**	**-**	**10.41**	**NA**
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
	6/23/2008	11.74	NP	-	22.92	NA
	9/22/2008	7.90	NP	-	26.76	NA
	1/5/2009	6.89	NP	-	27.77	NA
	3/16/2009	9.43	9.42	0.01	25.24	NA
	6/15/2009	**11.09**	**NP**	**-**	**23.57**	**NA**
	9/14/2009	**Inaccessible**				**NA**

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Chevron Products 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
	6/23/2008	10.96	10.84	0.12	24.12	0.1
	9/22/2008	12.20	12.02	0.18	22.92	NA
	1/5/2009	8.24	8.23	0.01	26.75	0.01
	3/16/2009	10.85	10.51	0.34	24.40	0.10
	6/15/2009	**10.55**	**NP**	**-**	**24.43**	**0.00**
	9/14/2009	**11.76**	**NP**	**-**	**23.22**	**0.01**
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	23.86	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
	6/23/2008	11.33	-	-	23.75	NA
	9/22/2008	11.89	11.88	0.01	23.20	NA
	1/5/2009	10.94	10.85	0.09	24.21	0.00
	3/16/2009	11.20	NP	-	23.88	0.00
	6/15/2009	**11.13**	**NP**	**-**	**23.95**	**0.00**
	9/14/2009	**11.76**	**NP**	**-**	**23.32**	**0.00**

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Chevron Products 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
	6/23/2008	12.01	Trace	-	23.06	NA
	9/22/2008	12.87	12.78	0.09	22.27	NA
	1/5/2009	NM	NM	NM	NM	-
	3/16/2009	11.90	11.81	0.09	23.24	NA
	6/15/2009	**11.85**	**11.76**	**0.09**	**23.29**	**NA**
	9/14/2009	**12.79**	**12.75**	**0.04**	**22.31**	**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	-
	6/23/2008	11.58	NP	-	23.27	-
	9/22/2008	12.55	NP	-	22.30	-
	1/5/2009	NM	NM	NM	NM	-
	3/16/2009	11.42	NP	-	23.43	-
	6/15/2009	**Inaccessible**				**NA**
	9/14/2009	**12.39**	**NP**	**-**	**22.46**	**-**

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Chevron Products 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	16.86	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	NP	-	18.73	NA
	1/22/2008	14.94	NP	-	19.41	NA
	3/24/2008	15.02	NP	-	19.33	NA
	6/23/2008	15.50	NP	-	18.85	NA
	9/22/2008	16.19	NP	-	18.16	NA
	1/5/2009	15.21	NP	-	19.14	NA
	3/16/2009	15.50	NP	-	18.85	NA
	6/15/2009	**15.63**	**NP**	**-**	**18.72**	**NA**
	9/14/2009	**16.04**	**NP**	**-**	**18.31**	**NA**

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 bailer
- = 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 RECOVERY DATA
Kinder Morgan Liquid Terminals, LLC - 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
	12/172007	4.74	NP	-	30.69	NA
	3/24/2008	3.78	NP	-	31.65	NA
	6/23/2008	5.53	NP	-	29.90	NA
	9/22/2008	7.41	NP	-	28.02	NA
	1/5/2009	3.64	NP	-	31.79	NA
	3/16/2009	4.77	NP	-	30.66	NA
	6/15/2009	**5.28**	**NP**	**-**	**30.15**	**NA**
	9/14/2009	**6.91**	**NP**	**-**	**28.52**	**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
	6/23/2008	7.24	NP	-	28.53	NA
	9/22/2008	9.01	NP	-	26.76	NA
	1/5/2009	5.98	NP	-	29.79	NA
	3/16/2009	7.19	NP	-	28.58	NA
	6/15/2009	**7.39**	**NP**	**-**	**28.38**	**NA**
	9/14/2009	**9.09**	**NP**	**-**	**26.68**	**NA**

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TABLE 1B
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Kinder Morgan Liquid Terminals, LLC - 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
	6/23/2008	8.46	NP	-	27.56	NA
	9/22/2008	10.10	NP	-	25.92	NA
	1/5/2009	7.31	NP	-	28.71	NA
	3/16/2009	8.33	NP	-	27.69	NA
	6/15/2009	**8.58**	**NP**	**-**	**27.44**	**NA**
	9/14/2009	**10.06**	**NP**	**-**	**25.96**	**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
	6/23/2008	7.93	NP	-	28.46	NA
	9/22/2008	9.68	NP	-	26.71	NA
	1/5/2009	6.88	NP	-	29.51	NA
	3/16/2009	7.86	NP	-	28.53	NA
	6/15/2009	**8.08**	**NP**	**-**	**28.31**	**NA**
	9/14/2009	**9.65**	**NP**	**-**	**26.74**	**NA**

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TABLE 1B
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Kinder Morgan Liquid Terminals, LLC - 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
	6/23/2008	6.82	NP	-	26.70	NA
	9/22/2008	9.02	NP	-	24.50	NA
	1/5/2009	6.06	NP	-	27.46	NA
	3/16/2009	6.65	NP	-	26.87	NA
	6/15/2009	**7.00**	**NP**	**-**	**26.52**	**NA**
	9/14/2009	**8.83**	**NP**	**-**	**24.69**	**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
	6/23/2008	5.20	sheen	-	28.14	0.02
	9/22/2008	6.81	sheen	-	26.53	0.03
	1/5/2009	3.99	NP	-	29.35	0.03
	3/16/2009	5.10	NP	-	28.24	0.03
	6/15/2009	**5.27**	**sheen**	**-**	**28.07**	**0.01**
	9/14/2009	**6.80**	**NP**	**-**	**26.54**	**0.02**

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TABLE 1B
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Kinder Morgan Liquid Terminals, LLC - 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
	6/23/2008	9.30	9.11	0.19	24.97	0.25
	9/22/2008	10.51	10.26	0.25	23.81	0.10
	1/5/2009	8.93	8.93	0.00	25.19	1.00
	3/16/2009	9.12	9.10	0.02	25.02	0.04
	6/15/2009	**9.35**	**9.20**	**0.15**	**24.89**	**0.09**
	9/14/2009	**10.42**	**10.36**	**0.06**	**23.75**	**0.07**
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
	6/23/2008	8.22	NP	-	25.73	NA
	9/22/2008	9.69	NP	-	24.26	NA
	1/5/2009	7.98	NP	-	25.97	NA
	3/16/2009	8.30	NP	-	25.65	NA
	6/15/2009	**8.43**	**NP**	**-**	**25.52**	**NA**
	9/14/2009	**9.71**	**NP**	**-**	**24.24**	**NA**

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TABLE 1B
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Kinder Morgan Liquid Terminals, LLC - 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
	6/23/2008	10.32	NP	-	26.21	NA
	9/22/2008	11.73	NP	-	24.80	NA
	1/5/2009	10.77	NP	-	25.76	NA
	3/16/2009	10.38	NP	-	26.15	NA
	6/15/2009	**10.46**	**NP**	**-**	**26.07**	**NA**
	9/14/2009	**11.73**	**NP**	**-**	**24.80**	**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
	6/23/2008	9.97	NP	-	25.85	NA
	9/22/2008	11.65	NP	-	24.17	NA
	1/5/2009	9.27	NP	-	26.55	NA
	3/16/2009	9.91	NP	-	25.91	NA
	6/15/2009	**10.11**	**NP**	**-**	**25.71**	**NA**
	9/14/2009	**11.67**	**NP**	**-**	**24.15**	**NA**

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TABLE 1B
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Kinder Morgan Liquid Terminals, LLC - 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
	6/23/2008	6.64	NP	-	29.83	NA
	9/22/2008	8.27	NP	-	28.20	NA
	1/5/2009	5.31	NP	-	31.16	NA
	3/16/2009	6.13	NP	-	30.34	NA
	6/15/2009	**7.04**	**NP**	**-**	**29.43**	**NA**
	9/14/2009	**8.51**	**8.45**	**0.06**	**28.01**	**0**
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	7.06	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
	6/23/2008	7.14	NP	-	28.81	NA
	9/22/2008	9.20	NP	-	26.75	NA
	1/5/2009	5.80	NP	-	30.15	NA
	3/16/2009	6.84	NP	-	29.11	NA
	6/15/2009	**7.31**	**NP**	**-**	**28.64**	**NA**
	9/14/2009	**9.17**	**NP**	**-**	**26.78**	**NA**

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TABLE 1B
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Kinder Morgan Liquid Terminals, LLC - 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
	6/23/2008	5.69	NP	-	32.20	NA
	9/22/2008	7.20	NP	-	30.69	NA
	1/5/2009	3.78	NP	-	34.11	NA
	3/16/2009	4.76	NP	-	33.13	NA
	6/15/2009	**5.77**	**NP**	**-**	**32.12**	**NA**
	9/14/2009	**7.24**	**NP**	**-**	**30.65**	**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
	6/23/2008	5.28	NP	-	31.00	NA
	9/22/2008	6.93	NP	-	29.35	NA
	1/5/2009	3.11	NP	-	33.17	NA
	3/16/2009	4.42	NP	-	31.86	NA
	6/15/2009	**5.15**	**NP**	**-**	**31.13**	**NA**
	9/14/2009	**6.81**	**NP**	**-**	**29.47**	**NA**

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TABLE 1B
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Kinder Morgan Liquid Terminals, LLC - 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	-	27.99	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
	6/23/2008	6.71	NP	-	30.79	NA
	9/22/2008	9.16	NP	-	28.34	NA
	1/5/2009	3.56	NP	-	33.94	NA
	3/16/2009	5.81	NP	-	31.69	NA
	6/15/2009	**6.64**	**NP**	**-**	**30.86**	**NA**
	9/14/2009	**8.92**	**NP**	**-**	**28.58**	**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
	6/23/2008	5.45	NP	-	29.48	NA
	9/22/2008	7.52	NP	-	27.41	NA
	1/5/2009	4.23	NP	-	30.70	NA
	3/16/2009	5.19	NP	-	29.74	NA
	6/15/2009	**5.57**	**NP**	**-**	**29.36**	**NA**
	9/14/2009	**7.46**	**NP**	**-**	**27.47**	**NA**

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TABLE 1B
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Kinder Morgan Liquid Terminals, LLC - 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
	6/23/2008	4.88	NP	-	31.17	NA
	9/22/2008	6.11	NP	-	29.94	NA
	1/5/2009	3.84	NP	-	32.21	NA
	3/16/2009	4.14	NP	-	31.91	NA
	6/15/2009	**4.94**	**NP**	**-**	**31.11**	**NA**
	9/14/2009	**5.94**	**NP**	**-**	**30.11**	**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
	3/13/2005	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----------				
	6/23/2008	----------Cannot locate well----------				
	9/22/2008	3.88	NP	-	29.88	NA
	1/5/2009	0.79	NP	-	32.97	NA
	3/16/2009	1.58	NP	-	32.18	NA
	6/15/2009	**2.52**	**NP**	**-**	**31.24**	**NA**
	9/14/2009	**3.70**	**NP**	**-**	**30.06**	**NA**

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TABLE 1B
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Kinder Morgan Liquid Terminals, LLC - 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
	6/23/2008	4.37	4.35	0.02	29.02	0.01
	9/22/2008	5.91	sheen	-	27.48	0.01
	1/5/2009	2.38	NP	-	31.01	0.04
	3/16/2009	3.71	NP	-	29.68	0.03
	6/15/2009	**4.14**	**4.10**	**0.04**	**29.28**	**0.01**
	9/14/2009	**5.92**	**sheen**	**-**	**27.47**	**0.02**
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
	6/23/2008	10.39	NP	-	24.37	NA
	9/22/2008	11.51	NP	-	23.25	NA
	1/5/2009	9.29	NP	-	25.47	NA
	3/16/2009	10.32	NP	-	24.44	NA
	6/15/2009	**10.44**	**NP**	**-**	**24.32**	**NA**
	9/14/2009	**11.81**	**NP**	**-**	**22.95**	**NA**

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TABLE 1B
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Kinder Morgan Liquid Terminals, LLC - 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				
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
	6/23/2008	4.83	NP	-	30.82	0
	9/22/2008	6.20	NP	-	29.45	0
	1/5/2009	3.70	NP	-	31.95	0
	3/16/2009	4.58	NP	-	31.07	0.01
	6/15/2009	**4.92**	**NP**	**-**	**30.73**	**0**
	9/14/2009	**6.64**	**NP**	**-**	**29.01**	**0**

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TABLE 1B
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Kinder Morgan Liquid Terminals, LLC - 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
	6/23/2008	5.11	5.10	0.01	30.95	0.01
	9/22/2008	6.18	NP	-	29.88	0.01
	1/5/2009	4.14	sheen	-	31.92	0.01
	3/16/2009	4.58	NP	-	31.48	0.02
	6/15/2009	**5.76**	**5.75**	**0.01**	**30.31**	**0**
	9/14/2009	**6.13**	**sheen**	**-**	**29.93**	**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
	6/23/2008	NM	5.50	-	-**	0.05
	9/22/2008	5.40	sheen	-	29.75	0.04
	1/5/2009	4.47	4.42	0.05	30.72	0.02
	3/16/2009	NM	4.95	-	-**	0.03
	6/15/2009	**5.57**	**5.55**	**0.02**	**29.60**	**0.04**
	9/14/2009	**8.46**	**8.45**	**0.01**	**26.70**	**0.02**

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TABLE 1B
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Kinder Morgan Liquid Terminals, LLC - 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
	6/23/2008	10.94	NP	-	23.79	NA
	9/22/2008	12.49	NP	-	22.24	NA
	1/5/2009	10.21	NP	-	24.52	NA
	3/16/2009	11.04	NP	-	23.69	NA
	6/15/2009	**NM**	**NM**	**-**	**NM**	**NA**
	9/14/2009	**12.43**	**NP**	**-**	**22.30**	**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
	6/23/2008	11.43	NP	-	23.35	NA
	9/22/2008	12.89	NP	-	21.89	NA
	1/5/2009	10.88	NP	-	23.90	NA
	3/16/2009	11.52	NP	-	23.26	NA
	6/15/2009	**NM**	**NM**	**-**	**NM**	**NA**
	9/14/2009	**12.84**	**NP**	**-**	**21.94**	**NA**

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TABLE 1B
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Kinder Morgan Liquid Terminals, LLC - 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
	6/23/2008	5.12	NP	-	30.57	NA
	9/22/2008	6.15	NP	-	29.54	NA
	1/5/2009	4.21	NP	-	31.48	NA
	3/16/2009	4.73	NP	-	30.96	NA
	6/15/2009	**5.22**	**NP**	**-**	**30.47**	**NA**
	9/14/2009	**6.00**	**NP**	**-**	**29.69**	**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	20.86	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
	6/23/2008	6.96	sheen	-	27.43	0.01
	9/22/2008	12.40	12.36	0.04	22.02	0.02
	1/5/2009	4.56	4.55	0.01	29.84	0.03
	3/16/2009	6.38	sheen	-	28.01	0.03
	6/15/2009	**7.00**	**sheen**	**-**	**27.39**	**0.01**
	9/14/2009	**11.91**	**11.86**	**0.05**	**22.52**	**0.02**

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TABLE 1B
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Kinder Morgan Liquid Terminals, LLC - 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
	6/23/2008	13.60	NP	-	22.17	NA
	9/22/2008	15.02	NP	-	20.75	NA
	1/5/2009	13.44	NP	-	22.33	NA
	3/16/2009	13.71	NP	-	22.06	NA
	6/15/2009	**13.73**	**NP**	**-**	**22.04**	**NA**
	9/14/2009	**14.96**	**NP**	**-**	**20.81**	**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
	6/23/2008	5.79	NP	-	30.60	NA
	9/22/2008	7.33	NP	-	29.06	NA
	1/5/2009	4.05	NP	-	32.34	NA
	3/16/2009	5.00	NP	-	31.39	NA
	6/15/2009	**8.84**	**NP**	**-**	**27.55**	**NA**
	9/14/2009	**7.28**	**NP**	**-**	**29.11**	**NA**

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TABLE 1B
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Kinder Morgan Liquid Terminals, LLC - 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	8.55	NP	-	27.11	NA
	3/7/2005	8.43	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
	6/23/2008	7.31	NP	-	28.35	0
	9/22/2008	9.06	9.05	0.01	26.61	0
	1/5/2009	5.34	sheen	0.00	30.32	0.04
	3/16/2009	6.01	NP	-	29.65	0
	6/15/2009	**7.23**	**NP**	**-**	**28.43**	**0**
	9/14/2009	**8.91**	**NP**	**-**	**26.75**	**0**
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
	6/23/2008	5.51	NP	-	31.50	NA
	9/22/2008	7.05	NP	-	29.96	NA
	1/5/2009	4.14	NP	-	32.87	NA
	3/16/2009	4.90	NP	-	32.11	NA
	6/15/2009	**6.51**	**NP**	**-**	**30.50**	**NA**
	9/14/2009	**6.81**	**NP**	**-**	**30.20**	**NA**

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TABLE 1B
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Kinder Morgan Liquid Terminals, LLC - 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	20.66	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
	6/23/2008	20.02	NP	-	19.31	NA
	9/22/2008	20.83	NP	-	18.50	NA
	1/5/2009	19.19	NP	-	20.14	NA
	3/16/2009	20.00	NP	-	19.33	NA
	6/15/2009	**20.16**	**NP**	**-**	**19.17**	**NA**
	9/14/2009	**20.84**	**NP**	**-**	**18.49**	**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
	6/23/2008	19.68	NP	-	19.96	NA
	9/22/2008	20.20	NP	-	19.44	NA
	1/5/2009	18.73	NP	-	20.91	NA
	3/16/2009	19.68	NP	-	19.96	NA
	6/15/2009	**19.70**	**NP**	**-**	**19.94**	**NA**
	9/14/2009	**20.17**	**NP**	**-**	**19.47**	**NA**

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TABLE 1B
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Kinder Morgan Liquid Terminals, LLC - 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
	6/23/2008	3.91	NP	-	29.48	0
	9/22/2008	5.53	NP	-	27.86	0
	1/5/2009	2.02	NP	-	31.37	0
	3/16/2009	4.85	NP	-	28.54	0
	6/15/2009	**3.97**	**NP**	**-**	**29.42**	**0**
	9/14/2009	**5.41**	**NP**	**-**	**27.98**	**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
	6/23/2008	14.67	NP	-	20.33	NA
	9/22/2008	15.50	NP	-	19.50	NA
	1/5/2009	14.13	NP	-	20.87	NA
	3/16/2009	14.68	NP	-	20.32	NA
	6/15/2009	**14.76**	**NP**	**-**	**20.24**	**NA**
	9/14/2009	**14.49**	**NP**	**-**	**20.51**	**NA**

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TABLE 1B
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Kinder Morgan Liquid Terminals, LLC - 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
	6/23/2008	15.25	NP	-	19.72	NA
	9/22/2008	16.09	NP	-	18.88	NA
	1/5/2009	14.69	NP	-	20.28	NA
	3/16/2009	15.21	NP	-	19.76	NA
	6/15/2009	**15.37**	**NP**	**-**	**19.60**	**NA**
	9/14/2009	**16.11**	**NP**	**-**	**18.86**	**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
	6/23/2008	6.63	NP	-	30.87	NA
	9/22/2008	8.68	NP	-	28.82	NA
	1/5/2009	6.30	NP	-	31.20	NA
	3/16/2009	6.49	NP	-	31.01	NA
	6/15/2009	**6.89**	**NP**	**-**	**30.61**	**NA**
	9/14/2009	**8.57**	**NP**	**-**	**28.93**	**NA**

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TABLE 1B
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Kinder Morgan Liquid Terminals, LLC - 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
	6/23/2008	13.44	NP	-	21.74	NA
	9/22/2008	14.22	NP	-	20.96	NA
	1/5/2009	13.45	NP	-	21.73	NA
	3/16/2009	--Unable to Access--				
	6/15/2009	**13.49**	**NP**	**-**	**21.69**	**NA**
	9/14/2009	**14.22**	**NP**	**-**	**20.96**	**NA**
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
	9/19/2001	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
	6/23/2008	14.21	NP	-	19.54	NA
	9/22/2008	15.06	NP	-	18.69	NA
	1/5/2009	13.25	NP	-	20.50	NA
	3/16/2009	14.16	NP	-	19.59	NA
	6/15/2009	**14.34**	**NP**	**-**	**19.41**	**NA**
	9/14/2009	**15.73**	**NP**	**-**	**18.02**	**NA**

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TABLE 1B
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Kinder Morgan Liquid Terminals, LLC - Willbridge Terminal
Portland, Oregon

Well Designation	Date Gauged	Depth to Groundwater	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation	SPH Recovered* (gallons)
MW-41B	1/22/2008	15.78	NP	-	19.06	NA
(34.84)	3/24/2008	15.84	NP	-	19.00	NA
	6/23/2008	14.97	NP	-	19.87	NA
	9/22/2008	17.90	NP	-	16.94	NA
	1/5/2009	15.00	NP	-	19.84	NA
	3/16/2009	16.48	NP	-	18.36	NA
	6/15/2009	**15.43**	**NP**	**-**	**19.41**	**NA**
	9/14/2009	**17.86**	**NP**	**-**	**16.98**	**NA**
MW-41C	1/22/2008	15.34	NP	-	19.34	NA
(34.68)	3/24/2008	15.40	NP	-	19.28	NA
	6/23/2008	14.24	NP	-	20.44	NA
	9/22/2008	17.50	NP	-	17.18	NA
	1/5/2009	14.20	NP	-	20.48	NA
	3/16/2009	15.93	NP	-	18.75	NA
	6/15/2009	**15.82**	**NP**	**-**	**18.86**	**NA**
	9/14/2009	**17.45**	**NP**	**-**	**17.23**	**NA**
MW-42B	1/22/2008	23.52	NP	-	15.73	NA
(39.25)	3/24/2008	23.60	NP	-	15.65	NA
	6/23/2008	19.68	NP	-	19.57	NA
	9/22/2008	25.70	NP	-	13.55	NA
	1/5/2009	21.68	NP	-	17.57	NA
	3/16/2009	24.22	NP	-	15.03	NA
	6/15/2009	**23.38**	**NP**	**-**	**15.87**	**NA**
	9/14/2009	**25.71**	**NP**	**-**	**13.54**	**NA**
MW-42C	1/22/2008	24.83	NP	-	14.40	NA
(39.23)	3/24/2008	24.71	NP	-	14.52	NA
	6/23/2008	22.13	NP	-	17.10	NA
	9/22/2008	27.16	NP	-	12.07	NA
	1/5/2009	22.28	NP	-	16.95	NA
	3/16/2009	25.05	NP	-	14.18	NA
	6/15/2009	**24.06**	**NP**	**-**	**15.17**	**NA**
	9/14/2009	**27.03**	**NP**	**-**	**12.20**	**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 RECOVERY DATA
ConocoPhillips 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-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
	6/23/2008	17.03	NP	-	17.62	NA
	9/22/2008	17.53	NP	-	17.12	NA
	1/5/2009	16.61	NP	-	18.04	NA
	3/16/2009	17.05	NP	-	17.60	NA
	6/15/2009	**17.13**	**NP**	**-**	**17.52**	**NA**
	9/14/2009	**17.50**	**NP**	**-**	**17.15**	**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
	6/23/2008	17.04	NP	-	18.50	NA
	9/22/2008	17.60	NP	-	17.94	NA
	1/5/2009	16.58	NP	-	18.96	NA
	3/16/2009	17.09	NP	-	18.45	NA
	6/15/2009	**17.09**	**NP**	**-**	**18.45**	**NA**
	9/14/2009	**17.56**	**NP**	**-**	**17.98**	**NA**

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TABLE 1C
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
ConocoPhillips 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-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
	6/23/2008	18.45	NP	-	16.35	NA
	9/22/2008	19.70	NP	-	15.10	NA
	1/5/2009	17.33	NP	-	17.47	NA
	3/16/2009	18.51	NP	-	16.29	NA
	6/15/2009	**18.70**	**NP**	**-**	**16.10**	**NA**
	9/14/2009	**18.94**	**NP**	**-**	**15.86**	**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
	6/23/2008	17.84	NP	-	16.85	NA
	9/22/2008	19.30	NP	-	15.39	NA
	1/5/2009	17.58	NP	-	17.11	NA
	3/16/2009	17.99	17.97	0.02	16.72	0
	6/15/2009	**17.96**	**17.95**	**0.01**	**16.74**	**0**
	9/14/2009	**18.29**	**18.23**	**0.06**	**16.45**	**0**

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TABLE 1C
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
ConocoPhillips 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-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
	6/23/2008	16.58	NP	-	18.25	NA
	9/22/2008	17.10	NP	-	17.73	NA
	1/5/2009	16.85	NP	-	17.98	NA
	3/16/2009	16.63	NP	-	18.20	NA
	6/15/2009	**16.60**	**NP**	**-**	**18.23**	**NA**
	9/14/2009	**17.08**	**NP**	**-**	**17.75**	**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
	6/23/2008	16.80	NP	-	18.66	NA
	9/22/2008	17.51	NP	-	17.95	NA
	1/5/2009	16.72	NP	-	18.74	NA
	3/16/2009	16.95	NP	-	18.51	NA
	6/15/2009	**19.63**	**NP**	**-**	**15.83**	**NA**
	9/14/2009	**17.57**	**NP**	**-**	**17.89**	**NA**

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TABLE 1C
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
ConocoPhillips 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-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
	6/23/2008	17.33	NP	-	18.60	NA
	9/22/2008	17.92	NP	-	18.01	NA
	1/5/2009	17.14	NP	-	18.79	NA
	3/16/2009	17.35	NP	-	18.58	NA
	6/15/2009	**17.38**	**NP**	**-**	**18.55**	**NA**
	9/14/2009	**17.91**	**NP**	**-**	**18.02**	**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
	6/23/2008	17.14	NP	-	18.47	NA
	9/22/2008	17.73	NP	-	17.88	NA
	1/5/2009	17.00	NP	-	18.61	NA
	3/16/2009	17.20	NP	-	18.41	NA
	6/15/2009	**----Inaccessible----**				
	9/14/2009	**17.71**	**NP**	**-**	**17.90**	**NA**

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TABLE 1C
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
ConocoPhillips 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-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 -----				
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
	6/23/2008	18.33	NP	-	16.52	NA
	9/22/2008	18.80	NP	-	16.05	NA
	1/5/2009	15.76	NP	-	19.09	NA
	3/16/2009	18.36	NP	-	16.49	NA
	6/15/2009	**18.53**	**NP**	**-**	**16.32**	**NA**
	9/14/2009	**18.52**	**NP**	**-**	**16.33**	**NA**

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TABLE 1C
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
ConocoPhillips 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-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----				
	6/23/2008	18.38	NP	-	17.38	NA
	9/22/2008	18.95	NP	-	16.81	NA
	1/5/2009	18.17	NP	-	17.59	NA
	3/16/2009	NM	NM	NM	NM	NA
	6/15/2009	**----Could Not Locate----**				
	9/14/2009	**----Could Not Locate----**				

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TABLE 1C
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
ConocoPhillips 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-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	17.84	17.81	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	17.15	NP	-	18.59	0
	6/23/2008	17.39	NP	-	18.35	0
	9/22/2008	18.10	NP	-	17.64	0
	1/5/2009	17.80	NP	-	17.94	0
	3/16/2009	17.69	17.63	0.06	18.10	0
	6/15/2009	**17.39**	**NP**	**-**	**18.35**	**0**
	9/18/2009	**NM**	**NM**	**NM**	**NM**	**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
	3/13/2005	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
	6/23/2008	15.95	NP	-	17.59	NA
	9/22/2008	16.40	NP	-	17.14	NA
	1/5/2009	15.40	NP	-	18.14	NA
	3/16/2009	15.95	NP	-	17.59	NA
	6/15/2009	**16.03**	**NP**	**-**	**17.51**	**NA**
	9/14/2009	**16.38**	**NP**	**-**	**17.16**	**NA**

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TABLE 1C
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
ConocoPhillips 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-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
	6/23/2008	14.69	NP	-	16.31	NA
	9/22/2008	15.30	NP	-	15.70	NA
	1/5/2009	13.48	NP	-	17.52	NA
	3/16/2009	14.72	NP	-	16.28	NA
	6/15/2009	**14.91**	**NP**	**-**	**16.09**	**NA**
	9/14/2009	**15.16**	**NP**	**-**	**15.84**	**NA**
B-37	2/14/2000	18.96	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
	6/23/2008	19.00	NP	-	16.79	NA
	9/22/2008	19.52	NP	-	16.27	NA
	1/5/2009	18.50	NP	-	17.29	NA
	3/16/2009	19.02	NP	-	16.77	NA
	6/15/2009	**19.19**	**NP**	**-**	**16.60**	**NA**
	9/14/2009	**20.42**	**NP**	**-**	**15.37**	**NA**

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TABLE 1C
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
ConocoPhillips 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-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
	6/23/2008	Dry	NP	-	-	NA
	9/22/2008	Dry	NP	-	-	NA
	1/5/2009	18.93	NP	-	17.14	NA
	3/16/2009	19.55	NP	-	16.52	NA
	6/15/2009	**Dry**	**NP**	**-**	**-**	**NA**
	9/14/2009	**17.90**	**NP**	**-**	**18.17**	**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
	6/23/2008	17.93	17.92	0.01	15.76	0.01
	9/22/2008	18.50	sheen	-	15.18	0.02
	1/5/2009	17.19	16.75	0.44	16.84	0
	3/16/2009	18.36	17.79	0.57	15.78	0.20
	6/15/2009	**18.24**	**18.20**	**0.04**	**15.47**	**0**
	9/14/2009	**17.92**	**NP**	**-**	**15.76**	**0**
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 -----					

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TABLE 1C
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
ConocoPhillips 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-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
	6/23/2008	18.39	NP	-	16.69	NA
	9/22/2008	18.80	NP	-	16.28	NA
	1/5/2009	17.91	NP	-	17.17	NA
	3/16/2009	18.44	NP	-	16.64	NA
	6/15/2009	**18.55**	**NP**	**-**	**16.53**	**NA**
	9/14/2009	**18.69**	**NP**	**-**	**16.39**	**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
	6/23/2008	NM	NM	NM	NM	NM
	9/22/2008	19.46	NP	-	16.44	NA
	1/5/2009	18.63	NP	-	17.27	NA
	3/16/2009	19.02	NP	-	16.88	NA
	6/15/2009	**19.12**	**19.11**	**0.01**	**16.79**	**NA**
	9/14/2009	**20.39**	**NP**	**-**	**15.51**	**NA**

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TABLE 1C
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
ConocoPhillips 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)
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	19.85	NP	-	16.20	NA
	12/20/2002	19.88	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
	6/23/2008	18.99	NP	-	17.05	NA
	9/22/2008	19.56	NP	-	16.48	NA
	1/5/2009	18.65	NP	-	17.39	NA
	3/16/2009	19.12	NP	-	16.92	NA
	6/15/2009	**19.13**	**NP**	**-**	**16.91**	**NA**
	9/14/2009	**20.34**	**NP**	**-**	**15.70**	**NA**
EW-1	1/22/2008	12.30	NP	-	6.01	-
(18.31)	6/23/2008	5.24	NP	-	13.07	NA
	9/22/2008	8.49	NP	-	9.82	NA
	1/5/2009	12.00	NP	-	6.31	NA
	3/16/2009	NM	NM	NM	NM	NA
	6/15/2009	**NM**	**NM**	**NM**	**NM**	**NA**
	9/14/2009	**NM**	**NM**	**NM**	**NM**	**NA**
EW-2	1/22/2008	10.70	NP	-	7.08	-
(17.78)	6/23/2008	9.82	NP	-	7.96	NA
	9/22/2008	5.75	NP	-	12.03	NA
	1/5/2009	11.00	NP	-	6.78	NA
	3/16/2009	NM	NM	NM	NM	NA
	6/15/2009	**NM**	**NM**	**NM**	**NM**	**NA**
	9/14/2009	**NM**	**NM**	**NM**	**NM**	**NA**
EW-3	1/22/2008	10.13	NP	-	4.89	NA
(15.02)	6/23/2008	10.68	NP	-	4.34	NA
	9/22/2008	11.30	NP	-	3.72	NA
	1/5/2009	10.00	NP	-	5.02	NA
	3/16/2009	NM	NM	NM	NM	NA
	6/15/2009	**NM**	**NM**	**NM**	**NM**	**NA**
	9/14/2009	**NM**	**NM**	**NM**	**NM**	**NA**
EW-4	1/22/2008	12.15	NP	-	5.48	NA
(17.63)	6/23/2008	12.04	NP	-	5.59	NA
	9/22/2008	13.15	NP	-	4.48	NA
	1/5/2009	12.20	NP	-	5.43	NA
	3/16/2009	NM	NM	NM	NM	NA
	6/15/2009	**NM**	**NM**	**NM**	**NM**	**NA**
	9/14/2009	**NM**	**NM**	**NM**	**NM**	**NA**
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 -----					

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TABLE 1C
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
ConocoPhillips 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-39B	12/20/2002	18.85	18.87	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
	6/23/2008	19.14	NP	-	15.49	NA
	9/22/2008	19.46	NP	-	15.17	NA
	1/5/2009	19.88	NP	-	14.58	NA
	3/16/2009	19.70	NP	-	14.76	NA
	6/15/2009	**NM**	**NM**	**NM**	**NM**	**NA**
	9/14/2009	**NM**	**NM**	**NM**	**NM**	**NA**

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TABLE 1C
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
ConocoPhillips 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)
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
	6/23/2008	19.39	NP	-	16.68	NA
	9/22/2008	19.85	NP	-	16.22	NA
	1/5/2009	18.86	NP	-	17.21	NA
	3/16/2009	NM	NM	NM	NM	NA
	6/15/2009	**NM**	**NM**	**NM**	**NM**	**NA**
	9/14/2009	**NM**	**NM**	**NM**	**NM**	**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
	6/23/2008	17.75	NP	-	18.16	NA
	9/22/2008	18.21	NP	-	17.70	NA
	1/5/2009	17.38	NP	-	18.53	NA
	3/16/2009	17.75	NP	-	18.16	NA
	6/15/2009	**17.80**	**NP**	**-**	**18.11**	**NA**
	9/14/2009	**18.16**	**NP**	**-**	**17.75**	**NA**

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TABLE 1C
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
ConocoPhillips 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)
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
	6/23/2008	5.74	NP	-	12.74	NA
	9/22/2008	9.60	NP	-	8.88	NA
	1/5/2009	6.61	NP	-	11.87	NA
	3/16/2009	6.64	NP	-	11.84	NA
	6/15/2009	**8.03**	**NP**	**-**	**10.45**	**NA**
	9/14/2009	**9.16**	**NP**	**-**	**9.32**	**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 RECOVERY DATA
ConocoPhillips 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)
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
	6/23/2008	21.00	NP	-	17.00	NA
	9/22/2008	25.54	NP	-	12.46	NA
	1/5/2009	20.82	NP	-	17.18	NA
	3/16/2009	21.29	NP	-	16.71	NA
	6/15/2009	**21.04**	**21.03**	**0.01**	**16.97**	**NA**
	9/14/2009	**20.32**	**NP**	**-**	**17.68**	**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
	6/23/2008	14.99	14.98	0.01	19.67	NA
	9/22/2008	15.84	NP	-	18.81	NA
	1/5/2009	14.55	NP	-	20.10	NA
	3/16/2009	NM	NM	NM	NM	NA
	6/15/2009	**NM**	**NM**	**NM**	**NM**	**NA**
	9/14/2009	**NM**	**NM**	**NM**	**NM**	**NA**

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TABLE 1C
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
ConocoPhillips 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)
RW-1	1/22/2008	14.30	NP	-	7.44	NA
(21.74)	3/24/2008	NM	NM	NM	NM	NA
	6/23/2008	16.86	NM	NM	4.88	NA
	9/22/2008	18.06	NM	NM	3.68	NA
	1/5/2009	16.08	NM	NM	5.66	NA
	3/16/2009	NM	NM	NM	NM	NA
	6/15/2009	**NM**	**NM**	**NM**	**NM**	**NA**
	9/14/2009	**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
	6/23/2008	16.57	NM	NM	10.88	NA
	9/22/2008	19.71	NM	NM	7.74	NA
	1/5/2009	16.00	NM	NM	11.45	NA
	3/16/2009	11.30	NM	NM	16.15	NA
	6/15/2009	**NM**	**NM**	**NM**	**NM**	**NA**
	9/14/2009	**13.30**	**NM**	**NM**	**14.15**	**NA**
RW-3	1/22/2008	23.20	NP	-	10.82	NA
(34.02)	3/24/2008	NM	NM	NM	NM	NA
	6/23/2008	23.60	NM	NM	10.42	NA
	9/22/2008	12.01	NM	NM	22.01	NA
	1/5/2009	17.62	NM	NM	16.40	NA
	3/16/2009	NM	NM	NM	NM	NA
	6/15/2009	**NM**	**NM**	**NM**	**NM**	**NA**
	9/14/2009	**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
	6/23/2008	19.88	NM	NM	13.93	NA
	9/22/2008	19.49	NM	NM	14.32	NA
	1/5/2009	19.90	NM	NM	13.91	NA
	3/16/2009	20.70	NM	NM	13.11	NA
	6/15/2009	**NM**	**NM**	**NM**	**NM**	**NA**
	9/14/2009	**22.70**	**NM**	**NM**	**11.11**	**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
	6/23/2008	13.60	NM	NM	4.73	NA
	9/22/2008	8.12	NM	NM	10.21	NA
	1/5/2009	12.67	NM	NM	5.66	NA
	3/16/2009	8.35	NM	NM	9.98	NA
	6/15/2009	**NM**	**NM**	**NM**	**NM**	**NA**
	9/14/2009	**10.35**	**NM**	**NM**	**7.98**	**NA**
RW-6	1/22/2008	10.70	NP	-	7.99	NA
(18.69)	3/24/2008	NM	NM	NM	NM	NA
	6/23/2008	13.52	NM	NM	5.17	NA
	9/22/2008	9.45	NM	NM	9.24	NA
	1/5/2009	12.55	NM	NM	6.14	NA
	3/16/2009	8.20	NM	NM	10.49	NA
	6/15/2009	**NM**	**NM**	**NM**	**NM**	**NA**
	9/14/2009	**NM**	**NM**	**NM**	**NM**	**NA**

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TABLE 1C
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
ConocoPhillips 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)
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
	6/23/2008	15.10	NP	-	19.92	NA
	9/22/2008	16.30	16.29	0.01	18.72	NA
	1/5/2009	15.68	NP	-	19.34	NA
	3/17/2009	15.46	NP	-	19.56	NA
	6/15/2009	**15.24**	**NP**	**-**	**19.78**	**NA**
	9/18/2009	**15.98**	**NP**	**-**	**19.04**	**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
	6/23/2008	13.22	NP	-	22.03	NA
	9/22/2008	13.97	NP	-	21.28	NA
	1/5/2009	12.63	NP	-	22.62	NA
	3/17/2009	12.97	NP	-	22.28	NA
	6/15/2009	**12.99**	**NP**	**-**	**22.26**	**NA**
	9/18/2009	**13.97**	**NP**	**-**	**21.28**	**NA**

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TABLE 1C
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
ConocoPhillips 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)
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	16.83	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
	6/23/2008	15.82	15.74	0.08	18.30	0.01
	9/22/2008	16.40	NP	-	17.66	0.07
	1/5/2009	15.56	NP	-	18.50	0
	3/17/2009	15.75	NP	-	18.31	0
	6/15/2009	**15.80**	**15.75**	**0.05**	**18.30**	**0.03**
	9/18/2009	**16.27**	**16.25**	**0.02**	**17.81**	**0.01**
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
	6/23/2008	18.73	NP	-	15.37	NA
	9/22/2008	18.99	NP	-	15.11	NA
	1/5/2009	17.88	NP	-	16.22	NA
	3/16/2009	18.25	NP	-	15.85	NA
	6/15/2009	**18.91**	**NP**	**-**	**15.19**	**NA**
	9/18/2009	**18.76**	**NP**	**-**	**15.34**	**NA**

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TABLE 1C
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
ConocoPhillips 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)
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
	6/23/2008	7.12	sheen	-	26.65	0.01
	9/22/2008	8.85	8.70	0.15	25.04	0.1
	1/5/2009	7.03	NP	-	26.74	0
	3/17/2009	6.89	NP	-	26.88	0
	6/15/2009	**NM**	**NM**	**NM**	**NM**	**0**
	9/18/2009	**NM**	**NM**	**0.13**	**NM**	**0.08**
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 RECOVERY DATA
ConocoPhillips 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)
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
	6/23/2008	14.11	13.94	0.17	21.52	0.02
	9/22/2008	15.47	15.35	0.12	20.20	0.04
	1/5/2009	14.79	14.51	0.28	20.76	0
	3/17/2009	14.40	14.16	0.24	21.18	2
	6/15/2009	**14.18**	**13.95**	**0.23**	**21.41**	**0.04**
	9/18/2009	**15.35**	**15.20**	**0.15**	**20.30**	**0.03**
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
	6/23/2008	14.04	NP	-	23.17	NA
	9/22/2008	15.02	NP	-	22.19	NA
	1/5/2009	12.14	NP	-	25.07	NA
	3/17/2009	14.10	NP	-	23.11	NA
	6/15/2009	**13.82**	**NP**	**-**	**23.39**	**NA**
	9/18/2009	**14.72**	**NP**	**-**	**22.49**	**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
	6/23/2008	13.42	13.41	0.01	22.14	NA
	9/22/2008	14.50	NP	-	21.07	NA
	1/5/2009	13.35	NP	-	22.22	NA
	3/17/2009	13.65	sheen	-	21.92	NA
	6/15/2009	**13.27**	**NP**	**-**	**22.30**	**NA**
	9/18/2009	**14.27**	**NP**	**-**	**21.30**	**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
	6/23/2008	13.94	NP	-	22.14	NA
	9/22/2008	13.83	NP	-	22.25	NA
	1/5/2009	12.82	NP	-	23.26	NA
	3/17/2009	13.10	NP	-	22.98	NA
	6/15/2009	**12.78**	**NP**	**-**	**23.30**	**NA**
	9/18/2009	**13.85**	**NP**	**-**	**22.23**	**NA**

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TABLE 1C
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
ConocoPhillips 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)
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
	6/23/2008	13.54	NP	-	22.23	NA
	9/22/2008	14.83	NP	-	20.94	NA
	1/5/2009	14.50	NP	-	21.27	NA
	3/17/2009	13.77	NP	-	22.00	NA
	6/15/2009	**13.61**	**13.60**	**0.01**	**22.15**	**0.01**
	9/18/2009	**14.74**	**NP**	**-**	**21.03**	**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
	6/23/2008	8.96	NP	-	25.87	NA
	9/22/2008	10.54	NP	-	24.29	NA
	1/5/2009	8.54	NP	-	26.29	NA
	3/17/2009	8.70	NP	-	26.13	NA
	6/15/2009	**8.95**	**NP**	**-**	**25.88**	**NA**
	9/18/2009	**10.40**	**NP**	**-**	**24.43**	**NA**
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
	6/23/2008	14.69	NP	-	19.53	NA
	9/22/2008	15.20	NP	-	19.02	NA
	1/5/2009	13.31	NP	-	20.91	NA
	3/16/2009	NM	NM	NM	NM	NA
	6/15/2009	**13.94**	**NP**	**-**	**20.28**	**NA**
	9/18/2009	**NM**	**NM**	**NM**	**NM**	**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
	6/23/2008	14.39	NP	-	21.00	NA
	9/22/2008	15.22	NP	-	20.17	NA
	1/5/2009	13.66	NP	-	21.73	NA
	3/17/2009	14.34	NP	-	21.05	NA
	6/15/2009	**14.35**	**NP**	**-**	**21.04**	**NA**
	9/18/2009	**15.28**	**NP**	**-**	**20.11**	**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
	6/23/2008	14.56	NP	-	21.18	NA
	9/22/2008	15.41	NP	-	20.33	NA
	1/5/2009	13.84	NP	-	21.90	NA
	3/17/2009	14.50	NP	-	21.24	NA
	6/15/2009	**14.50**	**NP**	**-**	**21.24**	**NA**
	9/18/2009	**15.10**	**NP**	**-**	**20.64**	**NA**
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
	6/23/2008	4.85	NP	-	12.45	NA
	9/22/2008	10.15	NP	-	7.15	NA
	1/5/2009	5.48	NP	-	11.82	NA
	3/16/2009	9.02	NP	-	8.28	NA
	6/15/2009	**7.67**	**NP**	**-**	**9.63**	**NA**
	9/14/2009	**10.12**	**NP**	**-**	**7.18**	**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
	6/23/2008	19.22	NP	-	-2.31	NA
	9/22/2008	11.98	NP	-	4.93	NA
	1/5/2009	11.90	NP	-	5.01	NA
	3/16/2009	8.84	NP	-	8.07	NA
	6/15/2009	**9.10**	**NP**	**-**	**7.81**	**NA**
	9/14/2009	**8.58**	**NP**	**-**	**8.33**	**NA**

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TABLE 1C
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
ConocoPhillips 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)
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
	6/23/2008	5.61	NP	-	13.69	NA
	9/22/2008	6.55	NP	-	12.75	NA
	1/5/2009	4.37	NP	-	14.93	NA
	3/16/2009	4.99	NP	-	14.31	NA
	6/15/2009	**5.59**	**NP**	**-**	**13.71**	**NA**
	9/14/2009	**5.49**	**NP**	**-**	**13.81**	**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
	6/23/2008	7.14	NP	-	12.80	NA
	9/22/2008	9.93	NP	-	10.01	NA
	1/5/2009	7.80	NP	-	12.14	NA
	3/16/2009	8.75	NP	-	11.19	NA
	6/15/2009	**8.76**	**NP**	**-**	**11.18**	**NA**
	9/14/2009	**9.53**	**NP**	**-**	**10.41**	**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
	6/23/2008	5.83	NP	-	14.26	NA
	9/22/2008	9.71	NP	-	10.38	NA
	1/5/2009	6.77	NP	-	13.32	NA
	3/16/2009	8.63	NP	-	11.46	NA
	6/15/2009	**7.22**	**NP**	**-**	**12.87**	**NA**
	9/14/2009	**9.35**	**NP**	**-**	**10.74**	**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
	6/23/2008	6.16	NP	-	14.83	NA
	9/22/2008	7.22	NP	-	13.77	NA
	1/5/2009	5.01	NP	-	15.98	NA
	3/16/2009	6.37	NP	-	14.62	NA
	6/15/2009	**5.55**	**NP**	**-**	**15.44**	**NA**
	9/14/2009	**6.95**	**NP**	**-**	**14.04**	**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
	6/23/2008	6.50	NP	-	13.01	NA
	9/22/2008	9.48	NP	-	10.03	NA
	1/5/2009	6.80	NP	-	12.71	NA
	3/16/2009	7.33	NP	-	12.18	NA
	6/15/2009	**7.79**	**NP**	**-**	**11.72**	**NA**
	9/14/2009	**8.85**	**NP**	**-**	**10.66**	**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
	6/23/2008	11.35	NP	-	15.09	NA
	9/22/2008	13.85	NP	-	12.59	NA
	1/5/2009	9.08	NP	-	17.36	NA
	3/16/2009	11.89	NP	-	14.55	NA
	6/15/2009	**11.97**	**NP**	**-**	**14.47**	**NA**
	9/14/2009	**13.32**	**NP**	**-**	**13.12**	**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
	6/23/2008	7.86	NP	-	12.20	NA
	9/22/2008	17.78	NP	-	2.28	NA
	1/5/2009	7.79	NP	-	12.27	NA
	3/16/2009	9.45	NP	-	10.61	NA
	6/15/2009	**9.50**	**NP**	**-**	**10.56**	**NA**
	9/14/2009	**10.03**	**NP**	**-**	**10.03**	**NA**

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TABLE 1C
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
ConocoPhillips 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)
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
	6/23/2008	18.02	18.00	0.02	15.36	0.01
	9/22/2008	18.36	NP	-	15.04	0.003
	1/5/2009	16.59	NP	-	16.81	NA
	3/16/2009	17.63	NP	-	15.77	NA
	6/15/2009	**18.25**	**NP**	**-**	**15.15**	**NA**
	9/14/2009	**17.65**	**NP**	**-**	**15.75**	**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
	6/23/2008	36.12	NP	-	-3.27	NA
	9/22/2008	20.60	NP	-	12.25	NA
	1/5/2009	18.95	NP	-	13.90	NA
	3/16/2009	23.71	NP	-	9.14	NA
	6/15/2009	**19.59**	**NP**	**-**	**13.26**	**NA**
	9/14/2009	**20.17**	**NP**	**-**	**12.68**	**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
	6/23/2008	18.00	NP	-	14.73	NA
	9/22/2008	24.79	NP	-	7.94	NA
	1/5/2009	18.99	NP	-	13.74	NA
	3/16/2009	22.56	NP	-	10.17	NA
	6/15/2009	**20.73**	**NP**	**-**	**12.00**	**NA**
	9/14/2009	**24.49**	**NP**	**-**	**8.24**	**NA**

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

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TABLE 1D
GROUNDWATER SPH RECOVERY DATA - WILLBRIDGE TERMINAL GROUP SUMMARY
Willbridge Terminals
Portland, Oregon

Well ID	Gauging Date	SPH Thickness, feet	SPH Recovery (gallons)
CHEVRON			
B-7	12/17/2007	trace	-
	1/21/2008	trace	-
B-10	12/17/2007	trace	-
	1/21/2008	0.01	-
	9/22/2008	0.01	-
B-14	12/17/2007	0.02	-
	1/21/2008	trace	-
B-20	5/22/2008	0.01	Trace
	6/23/2008	0.01	-
	7/21/2008	0.01	Trace
	8/22/2008	0.01	Trace
	10/21/2008	0.01	0
	1/5/2009	0.09	0
	9/14/2009	0.03	0
B-24	12/17/2007	0.03	-
	1/21/2008	0.03	-
	3/24/2008	0.03	-
	6/23/2008	0.03	-
	7/21/2008	0.01	Trace
	9/22/2008	0.24	-
	6/15/2009	0.01	0
B-30	12/17/2007	0.04	-
	1/21/2008	0.02	-
	3/24/2008	0.01	-
	6/23/2008	0.01	-
	7/21/2008	0.03	Trace
	8/29/2008	0.01	-
	9/22/2008	0.01	-
	10/21/2008	0.01	0
	1/5/2009	0.01	0
	3/16/2009	0.02	0
	6/15/2009	0.03	0
	9/14/2009	0.01	0
CR-6	6/23/2008	0.01	-
	9/22/2008	0.04	-
	1/5/2009	0.07	0
	3/16/2009	0.05	0
	6/15/2009	0.05	0
	9/14/2009	0.04	0
CR-8 Sump	8/29/2008	trace	-
CR-10	10/2/2007	0.37	0.66
	11/30/2007	0.18	0.30
	12/7/2007	0.06	-
	1/28/2008	0.02	0.03
	2/8/2008	Not Measured	0
	3/24/2008	0.04	0.05
	5/22/2008	0.04	0.01
	6/23/2008	0.04	-
	7/21/2008	0.01	Trace
	8/29/2008	0.15	0.16
	9/22/2008	0.23	0.13
	10/21/2008	0.01	0
	1/5/2009	0.09	0.4
	3/16/2009	0.04	0.03
	4/21/2009	NM	0.03
	6/25/2009	0.05	0.05
	9/14/2009	0.07	0.15

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TABLE 1D
GROUNDWATER SPH RECOVERY DATA - WILLBRIDGE TERMINAL GROUP SUMMARY
Willbridge Terminals
Portland, Oregon

Well ID	Gauging Date	SPH Thickness, feet	SPH Recovery (gallons)
CR-12	3/24/2008	0.01	-
CR-15	10/2/2007	0.06	0.03
	11/30/2007	0.00	0
	12/7/2007	0.10	-
	1/28/2008	0.21	0.16
	2/8/2008	Not Measured	0
	3/24/2008	0.23	0.13
	4/25/2008	0.20	0.17
	5/22/2008	0.17	0.09
	6/23/2008	0.11	0.11
	7/21/2008	0.01	Trace
	8/29/2008	0.05	0.13
	1/5/2009	0.01	0.04
	3/16/2009	0.13	0.00
	4/21/2009	NM	0.13
	6/25/2009	0.15	0.03
	9/14/2009	0.11	0.08
CR-19	10/7/2007	trace	0
	11/30/2007	0.00	0
	12/7/2007	1.03	-
	1/28/2008	1.80	0.60
	2/8/2008	Not Measured	0
	3/24/2008	0.06	0.11
	4/25/2008	0.77	0.34
	5/22/2008	0.28	0.12
	6/23/2008	0.21	0.11
	8/29/2008	0.01	-
	9/22/2008	0.48	0.07
	10/21/2008	0.42	0
	1/5/2009	0.09	0.3
	3/16/2009	0.55	0.42
	4/21/2009	NM	0.02
	6/25/2009	0.44	0.09
	9/14/2009	0.22	0.11
CR-21A	10/7/2007	trace	0.03
	11/30/2007	trace	0
	12/7/2007	Not Accessible	-
	1/28/2008	0.20	0.02
	2/8/2008	Not Measured	0
	3/24/2008	0.05	0.07
CR24B	3/16/2009	trace	0.00
CR-25	10/7/2007	trace	0
	11/30/2007	0.18	0.07
	12/7/2007	0.07	-
	1/28/2008	0.11	0.07
	2/8/2008	Not Measured	0
	3/24/2008	0.09	0.03
	4/25/2008	0.10	0.03
	5/22/2008	0.01	Trace
	6/23/2008	0.05	0.03
	7/21/2008	0.06	0.04
	8/29/2008	0.04	0.08
	9/22/2008	0.08	0.03
	10/21/2008	0.09	0
	1/5/2009	0.05	0.05
	3/16/2009	0.09	0.03
	6/25/2009	0.12	0.02
	9/14/2009	0.02	0
GPW-1	3/16/2009	0.01	0
GPW-2	3/24/2008	0.47	-
	6/23/2008	0.12	0.05
	9/22/2008	0.18	0.01
	1/5/2009	0.01	0.01
	3/16/2009	0.34	0.1
	9/14/2009	0.00	0.01
GPW-3	3/24/2008	0.01	-
	1/5/2009	0.09	0
GPW-4	3/24/2008	0.02	-
	6/15/2009	0.09	-
	9/14/2009	0.04	-

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TABLE 1D
GROUNDWATER SPH RECOVERY DATA - WILLBRIDGE TERMINAL GROUP SUMMARY
Willbridge Terminals
Portland, Oregon

Well ID	Gauging Date	SPH Thickness, feet	SPH Recovery (gallons)
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
	3/16/2009	0.02	0
	7/27/2009	0.01	0
	8/31/2009	Trace	0
	9/14/2009	0.01	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
	3/16/2009	0.06	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
	9/22/2008	0.10	0.02
	1/5/2009	0.44	-
	3/16/2009	0.57	0.2
	8/31/2009	0.01	0
GP-3	8/22/2008	0.27	0.01
	9/22/2008	0.23	0.01
	1/5/2009	0.01	0
	9/14/2009	0.01	0
GP-4	8/22/2008	0.18	0.01
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
	8/22/2008	0.11	0.07
	6/15/2009	0.05	0.03
	9/18/2009	0.02	0.01
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
	9/22/2008	0.15	0.10
	9/18/2009	0.13	0.08

TABLE 1D
GROUNDWATER SPH RECOVERY DATA - WILLBRIDGE TERMINAL GROUP SUMMARY
Willbridge Terminals
Portland, Oregon

Well ID	Gauging Date	SPH Thickness, feet	SPH Recovery (gallons)
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
	6/16/2008	0.00	0.01
	8/22/2008	0.10	0.02
	9/22/2008	0.12	0.02
	1/5/2009	0.28	0
	3/17/2009	0.24	2
	6/15/2009	0.23	0.04
	9/18/2009	0.15	0.03
U-15	3/17/2009	sheen	0
U-17	6/15/2009	0.01	0.01
U-29A	6/16/2008	0.00	0.01
	8/22/2008	0.02	Trace

TABLE 1D
GROUNDWATER SPH RECOVERY DATA - WILLBRIDGE TERMINAL GROUP SUMMARY
Willbridge Terminals
Portland, Oregon

Well ID	Gauging Date	SPH Thickness, feet	SPH Recovery (gallons)
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
	5/29/2008	0.00	Trace
	6/23/2008	sheen	Trace
	8/26/2008	0.03	0.02
	9/29/2008	sheen	0.01
	10/20/2008	0.00	Trace
	11/25/2008	sheen	Trace
	12/30/2008	0.00	0.01
	1/30/2009	0.00	0.01
	2/26/2009	0.00	0.01
	3/26/2009	0.00	0.01
	4/21/2009	0.00	Trace
	5/21/2009	0.00	0.01
	6/15/2009	sheen	Trace
	7/31/2009	0.00	Trace
	8/27/2009	0.01	0.02
	9/14/2009	0.00	Trace
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
	5/29/2008	0.16	0.05
	6/23/2008	0.19	0.1
	8/26/2008	0.16	0.05
	9/29/2008	0.25	0.05
	10/20/2008	0.07	0.15
	11/25/2008	0.13	0.1
	12/30/2008	0.02	0.75
	1/30/2009	0.04	0.02
	2/26/2009	0.00	0
	3/26/2009	0.02	0.02
	4/21/2009	0.03	Trace
	5/21/2009	0.01	0.02
	6/15/2009	0.15	0.05
	7/31/2009	0.12	0.02
	8/27/2009	0.08	0.03
	9/14/2009	0.06	0.02
MW-11	9/14/2009	0.06	0
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	Trace
	4/17/2008	0.00	0
	5/29/2008	0.02	Trace
	6/23/2008	0.02	Trace
	8/26/2008	sheen	0
	9/29/2008	sheen	0.01
	10/20/2008	0.01	0.02
	11/25/2008	sheen	Trace
	12/30/2008	0.00	0.01
	1/30/2009	0.02	0.01
	2/26/2009	0.00	0.01
	3/26/2009	0.00	0.01
	4/21/2009	0.00	0.01
	6/15/2009	0.04	Trace
	7/31/2009	0.03	0.02
	8/27/2009	0.00	Trace
	9/14/2009	0.00	Trace

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TABLE 1D
GROUNDWATER SPH RECOVERY DATA - WILLBRIDGE TERMINAL GROUP SUMMARY
Willbridge Terminals
Portland, Oregon

Well ID	Gauging Date	SPH Thickness, feet	SPH Recovery (gallons)
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
	5/29/2008	0.00	0
	6/23/2008	0.00	0
	8/26/2008	0.00	0
	9/29/2008	0.00	0
	3/26/2009	0.00	Trace
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
	5/29/2008	0.00	0
	6/23/2008	0.01	Trace
	8/26/2008	0.10	0
	9/29/2008	0.00	0.01
	10/20/2008	0.01	Trace
	11/25/2008	sheen	Trace
	12/30/2008	sheen	Trace
	1/30/2009	0.00	Trace
	2/26/2009	0.00	0.01
	3/26/2009	0.00	0.01
	6/15/2009	0.01	0.01
	7/31/2009	-**	0.02
	8/27/2009	sheen	Trace
	9/14/2009	sheen	Trace
MW-24	11/25/2008	-**	0.01
	12/30/2008	-**	0.02
	1/30/2009	-**	0.1
	2/26/2009	-**	0.01
	3/26/2009	-**	0.01
	3/31/2008	-**	0
	4/17/2008	0.00	0.03
	5/29/2008	0.14	0.01
	6/23/2008	-**	0.01
	8/26/2008	-**	0.02
	9/29/2008	0.00	0.02
	10/20/2008	-**	0.01
	11/25/2008	-**	0.01
	12/30/2008	-**	Trace
	1/30/2009	0.02	0.01
	2/26/2009	sheen	0.01
	3/26/2009	-**	0.01
	6/15/2009	0.02	0.04
	4/21/2009	-**	0.02
	5/21/2009	sheen	0.01
	6/15/2009	0.02	0.01
	7/31/2009	-**	0.02
	8/27/2009	0.01	Trace
	9/14/2009	0.01	Trace

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TABLE 1D
GROUNDWATER SPH RECOVERY DATA - WILLBRIDGE TERMINAL GROUP SUMMARY
Willbridge Terminals
Portland, Oregon

Well ID	Gauging Date	SPH Thickness, feet	SPH Recovery (gallons)
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
	5/29/2008	0.00	0
	6/23/2008	0.00	Trace
	8/26/2008	0.01	Trace
	9/29/2008	0.04	0.01
	10/20/2008	0.01	0.01
	11/25/2008	0.03	Trace
	12/30/2008	sheen	0.01
	1/30/2009	0.00	0.01
	2/26/2009	sheen	0.01
	3/26/2009	sheen	0.01
	4/21/2009	0.00	Trace
	5/21/2009	0.00	Trace
	6/15/2009	sheen	Trace
	7/31/2009	sheen	0.01
	8/27/2009	0.01	0.01
	9/14/2009	0.05	Trace
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
	5/29/2008	0.00	0
	6/23/2008	0.00	0
	8/26/2008	0.00	0
	9/29/2008	0.01	0
	10/20/2008	0.01	0.02
	11/25/2008	sheen	0.01
	12/30/2008	sheen	0.01
	1/30/2009	0.00	0
	2/26/2009	sheen	0
	3/26/2009	0.00	0
	9/14/2009	0.00	Trace
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
	5/29/2008	-	-
	6/23/2008	0.00	0
	8/26/2008	0.00	0
	9/29/2008	0.00	0

Notes:
** - Unable to determine due to SPH viscosity
- = Not measured

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TABLE 2
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)	TOC (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	-
	06/24/08	383	8,980	<481	0.250	0.330	<1.00	0.910	0.230	-
	09/23/08	331	18,000	608	0.210	0.340	<1.00	0.520	0.210	-
dup	09/23/08	460	4,690	<485	0.240	0.350	0.0800	0.690	0.270	-
	01/06/09	<4,000	26,900	593	<0.200	<1.00	<1.00	0.0900	<1.00	-
	03/18/09	<80.0	12,600	<495	<0.200	<1.00	<1.00	<3.00	<1.00	-
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	-
	06/24/08	1,770	26,200	961	0.160	0.360	<1.00	0.190	0.200	-
	09/23/08	404	37,900	1,720	0.100	0.190	<1.00	0.170	0.0900	-
dup	09/23/08	469	19,500	972	<0.200	0.210	<1.00	0.220	<1.00	-
	01/06/09	589	16,700	566	0.100	0.270	<1.00	0.160	0.100	-
dup	01/06/09	549	1,280	<490	0.110	0.310	0.100	0.200	0.120	-
	03/24/09	439	18,700	867	<0.200	<1.00	<1.00	<3.00	<1.00	-
	09/22/09	285	20,200	1,050	<0.200	<1.00	<1.00	<3.00	<1.00	-
dup	09/22/09	550	19,200	902	<0.200	<1.00	<1.00	<3.00	<1.00	-

TABLE 2
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)	TOC (µg/l)
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	-	-
	09/23/08	792	2,080	<485	1.02	1.14	0.450	2.90	<1.00	-
	03/24/09	743	13,700	<500	1.06	1.46	<1.00	2.15	<1.00	-
dup	03/24/09	746	25,100	722	0.980	1.31	<1.00	2.02	<1.00	-
	09/22/09	697	5,660	<500	0.720	1.13	<1.00	2.17	<1.00	-
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	-
	06/25/08	-	-	-	0.850	1.61	0.130	2.55	<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	-
	06/26/08	-	-	-	0.270	0.630	0.230	1.74	<1.00	-
	03/18/09	928	63,100	1,730	<1.00	<5.00	<5.00	<15.00	<5.00	-
dup	03/18/09	920	33,900	816	0.340	<1.00	<1.00	<3.00	<1.00	-

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TABLE 2
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)	TOC (µg/l)
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	<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[5]	<490	0.570	1.93	<0.500	1.18	<2.00	-
	09/23/08	627	2,100	<485	0.450	1.99	0.100	1.79	0.370	-
	03/24/09	674	36,300	847	0.350	1.59	<1.00	<1.50	<1.00	-
	09/22/09	472	21,000	575	0.400	1.60	<1.00	1.47	<1.00	-
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	-
	06/26/08	-	-	-	7.66	0.850	64.8	6.56	<1.00	-
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	-
	09/23/08	<80.0	<250	<500	<0.200	<1.00	<1.00	<3.00	1.11	-
	03/24/09	<80.0	<248	<495	<0.200	<1.00	<1.00	<3.00	1.27	-
	09/22/09	<80.0	<250	<500	<0.200	<1.00	<1.00	<3.00	1.16	-

COP0017741

TABLE 2
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)	TOC (µg/l)
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	-
	09/23/08	<80.0	<243	<485	<0.200	<1.00	<1.00	<3.00	0.100	-
	03/24/09	<80.0	248	<495	<0.200	<1.00	<1.00	<3.00	<1.00	-
	09/22/09	<80.0	<250	<500	<0.200	<1.00	<1.00	<3.00	<1.00	-
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	-

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TABLE 2
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)	TOC (µg/l)
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	-
	06/26/08	-	-	-	0.280	0.900	<1.00	0.930	<1.00	-
	03/18/09	408	35,500	1,570	0.210	<1.00	<1.00	<3.00	<1.00	-
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	-
	09/24/08	154	376	<485	<0.400	<2.00	<2.00	<6.00	<2.00	-
	03/25/09	<80.0	<248	<495	<0.200	<1.00	<1.00	<3.00	<1.00	-
	09/22/09	<80.0	523	<500	<0.200	<1.00	<1.00	<3.00	<1.00	-
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	-
	06/26/08	-	-	-	<0.200	<1.00	<1.00	<3.00	<1.00	-
	09/26/08	-	-	-	<0.200	<1.00	<1.00	<3.00	<1.00	-

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TABLE 2
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)	TOC (µg/l)
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	-
	06/24/08	<80.0	<240	<481	<0.200	<1.00	<1.00	<3.00	<1.00	8,200
	09/23/08	<80.0	<243	<485	<0.200	<1.00	<1.00	<3.00	<1.00	4,820
	01/06/09	<80.0	287	<490	<0.200	<1.00	<1.00	<3.00	<1.00	3,950
CR-27C	03/25/08	<80.0	<245	<490	<0.200	<0.500	<0.500	<1.00	<2.00	-
	06/24/08	<80.0	<240	<481	<0.200	<1.00	<1.00	<3.00	<1.00	4,200
	09/23/08	<80.0	<243	<485	<0.200	<1.00	<1.00	<3.00	<1.00	6,900
	01/06/09	<80.0	<245	<490	<0.200	<1.00	<1.00	<3.00	<1.00	3,080
CR-28A	06/25/08	9,760	2,330	<485	10.8	6.40	1,300	115	<10.0	13,000
	09/25/08	10,200	2,630	344	7.80	6.80	1,410	121	<10.0	9,620
CR-28B	06/25/08	39.7	<243	<485	<0.200	<1.00	0.0800	<3.00	<1.00	3,800
	09/25/08	<80.0	<245	<490	<0.200	<1.00	0.150	<3.00	<1.00	3,660
CR-28C	06/25/08	<80.0	<243	<485	<0.200	0.120	0.320	<3.00	<1.00	3,600
	09/25/08	97.7	<245	<490	<0.200	<1.00	7.23	0.610	<1.00	2,960
CR-29A	06/26/08	2,070	837	<485	<0.200	0.350	5.05	1.18	<1.00	-
	09/25/08	2,540	726	<490	<1.00	0.700	13.8	1.90	<5.00	-
CR-29B	06/26/08	<80.0	<243	<485	<0.200	<1.00	<1.00	<3.00	<1.00	-
	09/25/08	<80.0	<245	<490	<0.200	<1.00	<1.00	<3.00	<1.00	-
CR-30A	06/26/08	566	986	<485	<0.200	<1.00	0.160	0.320	<1.00	-
	09/24/08	707	502	<480	0.0900	0.140	0.370	0.360	<1.00	-
CR-30B	06/26/08	<80.0	<238	<476	<0.200	<1.00	<1.00	<3.00	<1.00	-
	09/24/08	<80.0	<245	<490	<0.200	<1.00	<1.00	<3.00	<1.00	-

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TABLE 2
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)	TOC (µg/l)
CR-31A	06/26/08	697	5,080	380	0.110	0.130	<1.00	0.470	<1.00	-
	09/24/08	328	4,230	292	<0.400	<2.00	<2.00	<6.00	<2.00	-
CR-31B	06/26/08	<80.0	<243	<485	<0.200	<1.00	<1.00	<3.00	<1.00	-
	09/24/08	<80.0	<245	<490	<0.200	<1.00	0.160	<3.00	<1.00	-
CR-32A	06/26/08	251	3,630	483	<0.200	<1.00	<1.00	<3.00	<1.00	22,000
	09/24/08	132	3,050	305	<0.400	<2.00	<2.00	<6.00	<2.00	19,800
CR-32B	06/26/08	<80.0	<243	<485	<0.200	<1.00	<1.00	<3.00	<1.00	7,200
	09/24/08	<80.0	<245	<490	<0.400	<2.00	<2.00	<6.00	<2.00	4,010
CR-32C	06/26/08	<80.0	<243	<485	<0.200	<1.00	<1.00	<3.00	<1.00	4,800
	09/24/08	<80.0	<245	<490	<0.200	<1.00	0.0800	<3.00	<1.00	4,290
CR-33	03/26/08[10]	<400	1,960[5]	<481	<0.400	<1.00	<1.00	<2.00	<4.00	-
	06/24/08	211	209	<481	0.140	0.280	0.250	0.860	0.300	-
	09/24/08	145	547	<485	<0.400	<2.00	<2.00	0.180	0.400	-
	01/06/09	205	1,410	<490	<0.200	<1.00	0.350	0.810	0.350	-
	03/18/09	196	458	<495	<0.200	<1.00	<1.00	<3.00	<1.00	-
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	-
	03/25/08	-	-	-	<0.200	<0.500	<0.500	<1.00	<2.00	-
	09/22/08	-	-	-	<0.200	<1.00	<1.00	<3.00	<1.00	-
	03/26/08	-	-	-	<0.200	<0.500	<0.500	<1.00	<2.00	-
	03/26/08	-	-	-	<0.200	<0.500	<0.500	<1.00	<2.00	-
	09/25/08				<0.200	<1.00	<1.00	<3.00	<1.00	-

TABLE 2
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)	TOC (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	-
	09/22/08	-	-	-	<0.50	0.17	<0.50	0.91	<0.50	-
dup	09/22/08	-	-	-	<0.50	0.20	0.050	1.05	<0.50	-
	03/16/09	-	-	-	<0.200	<1.00	<1.00	<3.00	<1.00	-
dup	03/16/09	-	-	-	<0.200	<1.00	<1.00	<3.00	<1.00	-
	09/15/09	-	-	-	<1.65	<0.500	<0.500	1.23	-	-
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	-	-

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TABLE 2
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)	TOC (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	-
	09/22/08	-	-	-	<0.50	<0.50	<0.50	<1.00	<0.50	-
	03/16/09	-	-	-	<0.200	<1.00	<1.00	<3.00	<1.00	-
	09/15/09	-	-	-	<0.500	<0.500	<0.500	<1.00	-	-

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TABLE 2
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)	TOC (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	-
	09/22/08	-	-	-	<2.5	0.35	0.25	1.5	<2.5	-
	03/16/09	-	-	-	<1.00	<5.00	<5.00	<15.0	<5.00	-
	09/15/09	-	-	-	<7.05	<21.5	<4.85	<12.8	-	-
dup	09/15/09	-	-	-	<6.00	<19.3	<4.15	<135	-	-
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	-	-

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TABLE 2
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)	TOC (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	-
	09/23/08	<250	14	34	<0.50	<0.50	<0.50	<1.00	<0.50	-
	03/16/09	-	-	-	<0.200	<1.00	<1.00	<3.00	<1.00	-
	09/14/09	-	-	-	<0.500	<0.500	<0.500	<1.00	-	-
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	-
	06/24/08	<250	19[14]	36[14]	<0.045	<0.048	<0.042	<0.115	<0.070	-
	09/23/08	150	53	140	<0.50	<0.50	<0.50	0.080	0.18	5,200
	01/05/09	<80	<238	<476	<0.200	<1.00	<1.00	<1.00	<1.00	<1.00
	03/16/09	-	-	-	<0.200	<1.00	<1.00	<3.00	<1.00	-
	09/14/09	-	-	-	<0.500	<0.500	<0.500	<1.00	-	-

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TABLE 2
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)	TOC (µg/l)
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	-
	09/23/08	120	20	<500	<0.50	<0.50	<0.50	0.18	0.080	-
	03/16/09	-	-	-	<0.200	<1.00	<1.00	<3.00	<1.00	-
	09/14/09	-	-	-	<0.500	<0.500	<0.500	<1.00	-	-
dup	09/14/09	-	-	-	<0.500	<0.500	<0.500	1.04	-	-
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	-
dup	03/25/08	670[15]	3,500	130[14]	<0.14	0.26[14]	<0.13	0.11[14]	<0.20	-
	06/23/08	400	370	33[14]	0.12[14]	0.22[14]	<0.042	0.47[14]	<0.12	-
	09/23/08	670	3,500	69	<0.50	0.050	<0.50	0.24	<0.50	5,600
dup	09/23/08	550	3,700	63	<0.50	0.060	<0.50	0.36	<0.50	5,500
	01/05/09	128[11]	3,780	<490	<0.200	<1.00	<1.00	<1.00	<1.00	3,740
	03/16/09	-	-	-	<0.200	<1.00	<1.00	<3.00	<1.00	-
	09/14/09	-	-	-	<0.500	<0.500	<0.500	<1.00	-	-

COP0017750

TABLE 2
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)	TOC (µg/l)
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	-
	09/23/08	53	21	64	<0.50	<0.50	<0.50	0.13	0.17	-
	03/16/09	-	-	-	<0.200	<1.00	<1.00	<3.00	<1.00	-
	09/14/09	-	-	-	<0.500	<0.500	<0.500	<1.00	-	-
MW-41B	03/25/08	<13	12[14]	52[14]	<0.14	0.13[14]	<0.13	<0.33	<0.20	-
	06/24/08	<250	14[14]	59[14]	0.060[14]	0.11[14]	<0.042	<0.0115	<0.070	-
dup	06/24/08	<250	<11	29[14]	<0.045	0.090[14]	<0.042	<0.0115	<0.070	-
	09/23/08	<250	15	77	<0.50	<0.50	<0.50	<1.00	<0.50	3,100
	01/05/09	<80	<236	<472	<0.200	<1.00	<1.00	<1.00	<1.00	2,050
MW-41C	03/25/08	42[14]	19[14]	68[14]	<0.14	0.11[14]	<0.13	<0.33	<0.20	-
	06/24/08	<250	20[14]	86[14]	0.050[14]	0.070[14]	<0.042	<0.0115	<0.070	-
	09/23/08	24	16	39	<0.50	<0.50	<0.50	<1.00	<0.50	6,800
	01/05/09	<80	<238	<476	<0.200	<1.00	<1.00	<1.00	<1.00	5,090
MW-42B	03/25/08	<13	<12	58[14]	<0.14	0.12[14]	<0.13	<0.33	<0.20	-
	06/24/08	<250	<11	55[14]	<0.045	0.060[14]	<0.042	<0.0115	<0.070	-
	09/23/08	<250	16	42	<0.50	0.050	<0.50	<1.00	<0.50	4,200
	01/05/09	<80	<243	<485	<0.200	<1.00	<1.00	<1.00	<1.00	3,320
MW-42C	03/25/08	17[14]	15[14]	110[14]	0.14[14]	0.20[14]	<0.13	<0.33	<0.20	-
	06/24/08	<250	14[14]	78[14]	0.050[14]	0.060[14]	<0.042	<0.0115	<0.070	-
	09/23/08	<250	25	120	<0.50	<0.50	<0.50	<1.00	<0.50	4,600
	01/05/09	<80	<245	<490	<0.200	<1.00	<1.00	<1.00	<1.00	2,690
dup	01/05/09	<80	<238	<476	<0.200	<1.00	<1.00	<1.00	<1.00	2,770

COP0017751

TABLE 2
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)	TOC (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	6.02	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	-
	09/24/08	943	30,800	566	0.900	2.98	<1.00	3.04	<1.00	-
dup	09/24/08	1,350	5,730	<481	1.72	4.62	<1.00	7.13	<1.00	-
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	-

COP0017752

TABLE 2
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)	TOC (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	-
	09/24/08	1,720	21,300	868	3.48	6.72	<2.00	10.68	<2.00	-
	03/23/09	1,240	21,700	1,110	2.44	6.88	<1.00	9.83	<1.00	-
	09/18/09	1,110	16,200	871	2.80	7.38	<1.00	9.84	<1.00	-
dup	09/18/09	1,110	6,960	<490	2.76	6.86	<2.00	5.90	<2.00	-
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	-
	09/24/08	947	632	<485	0.480	<2.00	<2.00	<6.00	<2.00	-
	03/23/09	<80.0	<248	<495	<0.200	<1.00	<1.00	<3.00	<1.00	-
dup	03/23/09	102	<248	<495	<0.200	<1.00	<1.00	<3.00	<1.00	-
	09/18/09	885	704	<490	0.53	1.23	<1.00	<3.00	<1.00	-

COP0017753

TABLE 2
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)	TOC (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	-
	09/24/08	188	<243	<485	<0.200	<1.00	<1.00	<3.00	<1.00	-
	03/20/09	156	<243	<485	<0.200	<1.00	<1.00	<3.00	<1.00	-
dup	03/20/09	145	<243	<485	<0.200	<1.00	<1.00	<3.00	<1.00	-
	09/18/09	107	<248	<495	<0.200	<1.00	<1.00	<3.00	<1.00	-
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	-
	09/22/08	-	-	-	-	-	-	-	-	-
OF-1	03/26/08	953[11]	6,920[5]	<490	<0.200	<0.500	<0.500	<1.00	<2.00	-
	09/18/09	82.8	44,400	985	<0.200	<1.00	<1.00	<3.00	<1.00	-
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	-
	06/25/08	<80.0	<236	<472	1.99	1.32	<0.500	<1.00	<2.00	-
	09/23/08	<80.0	<243	<485	1.87	<1.00	<1.00	<3.00	<1.00	-
	01/07/09	<80.0	<250	<500	<0.200	<1.00	<1.00	<3.00	<1.00	-
	03/20/09	<80.0	<250	<500	<0.200	<1.00	<1.00	<3.00	<1.00	-
	09/18/09	<80.0	<248	<495	0.320	<1.00	<1.00	<3.00	<1.00	-

COP0017754

TABLE 2
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)	TOC (µg/l)
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	-	-
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	-
	09/25/08	<80.0[16]	<243	<485	<0.200	<1.00	<1.00	<3.00	<1.00	-
	03/17/09	970	399	<485	5.08	<1.00	<1.00	<3.00	<1.00	-
	09/21/09	112	42[14]	240[14]	0.25[14]	<1.0	<1.0	<3.0	<1.0	-
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	-
	09/24/08	666	4,290	<481	<0.200	<1.00	<1.00	<3.00	5.52	-
dup	09/24/08	701	18,400	<490	<0.200	<1.00	<1.00	<3.00	5.35	-

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TABLE 2
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)	TOC (µg/l)
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	-
	09/24/08	652	26,700	3,870	<0.200	<1.00	<1.00	<3.00	<1.00	-
U-5A	03/27/08	2,100	14,100[5]	4,650	0.400	1.18	<0.500	1.66	<2.00	-
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	-
	09/25/08	<80.0[16]	<243	<485	<0.200	<1.00	<1.00	<3.00	<1.00	-
	03/18/09	<80.0	<243	<485	<0.200	<1.00	<1.00	<3.00	<1.00	-
	09/22/09	27.5[14]	<77	<380	<1.0	<1.0	<1.0	<3.0	<1.0	-
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	-
	09/25/08	<80.0[16]	<243	<485	0.860	<1.00	1.28	<3.00	<1.00	-
	03/17/09	711	314	5,310	2.26	<1.00	15.9	20.0	<1.00	-
	09/21/09	22.6[14]	<76	110[14]	<1.0	<1.0	<1.0	<3.0	<1.0	-

COP0017756

TABLE 2
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)	TOC (µg/l)
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	-
	09/25/08	642[16]	2,230	<485	0.620	<2.00	<2.00	<6.00	<2.00	-
	03/17/09	657	2,280	497	0.640	<2.00	<2.00	<6.00	<2.00	-
	09/21/09	1,030	330	100[14]	0.56[14]	0.36[14]	0.46[14]	0.78[14]	0.53[14]	-
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	-
	09/25/08	808[16]	688	<485	<0.400	<2.00	<2.00	<6.00	<2.00	-
	03/17/09	898	981	<478	<0.400	<2.00	<2.00	<6.00	<2.00	-
	09/21/09	1,200	1,300	170[14]	0.14[14]	0.39[14]	<1.0	0.39[14]	<1.0	-
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	-
	09/25/08	941[16]	1,540	<485	1.32	2.24	<2.00	<6.00	<2.00	-
	03/17/09	<80.0	<236	<472	<0.400	<2.00	<2.00	<6.00	<2.00	-
	09/22/09	879	5,800	2,300	0.71[14]	2.1	<1.0	4.1	<1.0	-
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	-
	09/25/08	-	-	-	-	-	-	-	-	-
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	-
	09/25/08	3,600[16]	1,450	<485	<1.00[18]	<5.00[18]	<5.00[18]	<15.00[18]	7.80[18]	-
	03/17/09	295	563	<485	9.88	4.35	3.74	8.26	2.88	-
	09/21/09	328	400	110[14]	<1.0	<1.0	<1.0	0.21[14]	4.7	-
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]	-
	09/25/08	706[16]	807	<485	<0.200	<1.00	<1.00	<3.00	5.27	-
	03/17/09	1,810	1,190	<485	<0.200	<1.00	<1.00	<3.00	5.61	-
	09/22/09	3,910	500	89[14]	0.17[14]	<1.0	1.2	0.50[14]	8.2	-
U-22A	03/27/08	322[11]	10,000[5]	490	<0.400	<1.00	<1.00	<2.00	<4.00	-
	06/24/08	322	3,550	<476	<0.200	<0.500	<0.500	<1.00	<2.00	-
	09/23/08	237	2,410	<476	<0.200	<1.00	<1.00	<3.00	<1.00	-
	01/06/09	279	1,790	<485	<0.200	<1.00	<1.00	<3.00	<1.00	-
	03/19/09	303	1,680	<495	<0.200	<1.00	<1.00	<3.00	<1.00	-
	09/17/09	264	8,780	1,380	<0.400	<2.00	<2.00	<6.00	<2.00	-
dup	09/17/09	304	4,170	759	<0.200	<1.00	<1.00	<3.00	<1.00	-
U-22B	03/27/08	<80.0	473[4]	<481	<0.200	<0.500	<0.500	<1.00	<2.00	-
	06/24/08	<80.0	<238	<476	<0.200	<0.500	<0.500	<1.00	<2.00	-
	09/23/08	<80.0	455	<476	<0.200	<1.00	<1.00	<3.00	<1.00	-
	01/07/09	<80.0	<250	<500	<0.200	<1.00	<1.00	<3.00	<1.00	-
	03/19/09	<80.0	384	<495	<0.200	<1.00	<1.00	<3.00	<1.00	-
dup	03/19/09	<80.0	1,160	<556	<0.200	<1.00	<1.00	<3.00	<1.00	-
	09/17/09	<80.0	<263	<526	<0.200	<1.00	<1.00	<3.00	<1.00	-

COP0017757

TABLE 2
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)	TOC (µg/l)
U-22C	06/25/08	304	1,170	<472	<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	-
	06/24/08	3,550	2,690	<476	6.96	1.32	1.56	3.16	<2.00	-
	09/23/08	532	1,450	<476	17.0	1.58	<1.00	2.16	<1.00	-
	01/06/09	303	6,700	<481	<0.200	<1.00	<1.00	<3.00	<1.00	-
	03/19/09	<80.0	3,430	<495	<0.200	<1.00	<1.00	<3.00	<1.00	-
	09/17/09	176	12,600	<500	<0.200	<1.00	<1.00	<3.00	<1.00	-
U-24A	03/27/08	<400	<243	<485	<1.00	<2.50	<2.50	<5.00	<10.0	-
	06/24/08	<80.0	386	<476	<0.200	<0.500	<0.500	<1.00	<2.00	-
	09/23/08	<80.0	<238	<476	<0.200	<1.00	<1.00	<3.00	1.52	-
	01/06/09	<80.0	<236	<472	<0.200	<1.00	<1.00	<3.00	1.17	-
	03/19/09	<80.0	281	<495	<0.200	<1.00	<1.00	<3.00	1.22	-
	09/17/09	<80.0	803	<526	<0.200	<1.00	<1.00	<3.00	1.49	-
dup	09/17/09	<80.0	<250	<500	<0.200	<1.00	<1.00	<3.00	1.51	-
U-24B	03/27/08	<400	<238	<476	<1.00	<2.50	<2.50	<5.00	<10.0	-
	06/25/08	<80.0	<236	<472	<0.200	<0.500	0.510	<1.00	<2.00	-
	09/24/08	<80.0	<243	<485	<0.200	<1.00	<1.00	<3.00	<1.00	-
	01/07/09	<80.0	<250	<500	<0.200	<1.00	<1.00	<3.00	<1.00	-
	03/19/09	<80.0	<248	<495	<0.200	<1.00	<1.00	<3.00	<1.00	-
dup	03/19/09	<80.0	<248	<495	<0.200	<1.00	<1.00	<3.00	<1.00	-
	09/17/09	<80.0	<263	<526	<0.200	<1.00	<1.00	<3.00	<1.00	-
U-25	03/27/08	722	<240	<481	<0.200	<0.500	<0.500	<1.00	<2.00	-
	06/24/08	869	301	<476	<0.200	<0.500	<0.500	<1.00	<2.00	-
	09/24/08	211	388	<485	<0.400	<2.00	<2.00	<6.00	<2.00	-
	01/06/09	555	309	<500	<0.200	<1.00	<1.00	<3.00	<1.00	-
	03/19/09	<80.0	<278	<556	<0.200	<1.00	<1.00	<3.00	<1.00	-
	09/17/09	<80.0	<250	<500	<0.200	<1.00	<1.00	<3.00	<1.00	-
U-26	03/26/08	<80.0	<245	<490	<0.200	<0.500	<0.500	<1.00	<2.00	-
	06/25/08	<80.0	<236	<472	<0.200	<0.500	<0.500	<1.00	<2.00	-
	09/23/08	<80.0	<238	<476	<0.200	<1.00	<1.00	<3.00	<1.00	-
	01/07/09	<80.0	<250	<500	<0.200	<1.00	<1.00	<3.00	<1.00	-
	03/20/09	<80.0	<240	<481	<0.200	<1.00	<1.00	<3.00	<1.00	-
	09/17/09	<80.0	<263	<526	<0.200	<1.00	<1.00	<3.00	<1.00	-
U-27	03/26/08	<80.0	<245	<490	<0.200	<0.500	<0.500	<1.00	<2.00	-
	06/25/08	<80.0	<236	<472	<0.200	<0.500	<0.500	<1.00	<2.00	-
	09/23/08	<80.0	<238	<476	<0.200	<1.00	<1.00	<3.00	<1.00	-
	01/07/09	<80.0	<250	<500	<0.200	<1.00	<1.00	<3.00	<1.00	-
	03/20/09	<80.0	<240	<481	<0.200	<1.00	<1.00	<3.00	<1.00	-
	09/17/09	<80.0	<250	<500	<0.200	<1.00	<1.00	<3.00	<1.00	-
U-28	03/26/08	<80.0	<245	<490	<0.200	<0.500	<0.500	<1.00	<2.00	-
	06/25/08	<80.0	<236	<472	<0.200	<0.500	<0.500	<1.00	<2.00	-
	09/24/08	<80.0	<243	<485	<0.200	<1.00	<1.00	<3.00	<1.00	-
	01/07/09	<80.0	<250	<500	<0.200	<1.00	<1.00	<3.00	<1.00	-
	03/20/09	<80.0	<240	<481	<0.200	<1.00	<1.00	<3.00	<1.00	-
	09/17/09	<80.0	<263	<526	<0.200	<1.00	<1.00	<3.00	<1.00	-
U-29A	06/26/08	1,150[3]	--	--	<0.200	<0.500	<0.500	<1.00	<2.00	-
	09/24/08	492	--	--	0.210	<1.00	<1.00	<3.00	<1.00	-
	03/20/09	2,700	386,000	29,100	<0.200	<1.00	<1.00	<3.00	<1.00	-
	09/17/09	605	52,400	4,210	0.200	<1.00	<1.00	<3.00	<1.00	-
U-29B	03/26/08	<80.0	430[3]	<490	<0.200	<0.500	<0.500	<1.00	<2.00	-
	06/25/08	<80.0	<236	<472	<0.200	<0.500	<0.500	<1.00	<2.00	-
	09/24/08	<80.0	<243	<485	<0.200	<1.00	<1.00	<3.00	<1.00	-
dup	09/24/08	<80.0	<243	<485	<0.200	<1.00	<1.00	<3.00	<1.00	-
	01/07/09	<80.0	<250	<500	<0.200	<1.00	<1.00	<3.00	<1.00	-
	09/17/09	<80.0	<250	<500	<0.200	<1.00	<1.00	<3.00	<1.00	-
U-29C	03/26/08	<80.0	<245	<490	<0.200	<0.500	<0.500	<1.00	<2.00	-
	06/25/08	<80.0	<236	<472	<0.200	<0.500	<0.500	<1.00	<2.00	-
	09/23/08	<80.0	<238	<476	<0.200	<1.00	<1.00	<3.00	<1.00	-
	01/07/09	<80.0	<250	<500	<0.200	<1.00	<1.00	<3.00	<1.00	-

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TABLE 2
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)	TOC (µg/l)
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
NA = Not available
ND = Not detected at or below detection limit
<0.200 = Not detected above the laboratory method reporting limit (MRL) of 0.200 µg/L.
TPH-G = Total petroleum hydrocarbons in the gasoline range
TPH-D = Total petroleum hydrocarbons in the diesel range
TPH-O = Total petroleum hydrocarbons in the heavy oil range
TOC = Total organic carbon
BTEX and MTBE analysis by USEPA Method 8021B or 8260B
TPH-G analysis using Northwest Method NWTPH-Gx
TPH-D and TPH-O analysis using Northwest Method NWTPH-Dx with silica gel cleanup.
TOC analysis using EPA Method 415
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.
[16] = The sample was analyzed one day past holding time.
[17] = Detected hydrocarbons in the diesel range are primarily due to overlap from a gasoline range product.
[18] = The reporting limit was raised due to high concentrations non-target analytes.

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TABLE 3
GROUNDWATER ANALYTICAL RESULTS - PAH COMPOUNDS
Willbridge Terminals
Portland, Oregon

Well Identification	Date Sampled	1-Methyl-naphthalene	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)	(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	0.962
	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	4.64	ND	ND	2.82	ND
	05/17/01	-	-	0.934	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.59	ND	ND	0.564	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
	06/24/08	-	<2.44	3.02	<2.44	<4.88	0.0403	0.0256	<0.0244	<0.488	<0.0244	0.150	<0.0244	<0.488	9.17	0.0250	<2.44	6.70	0.468
	09/23/08	-	<0.476	1.35	<0.476	<0.476	<0.0238	<0.0238	<0.0238	<0.476	<0.0238	0.0249	<0.0238	<0.476	5.14	<0.0238	<0.952[6]	2.57	<0.476
dup	09/23/08	-	<0.476	1.42	<0.476	<1.43[6]	<0.0238	<0.0238	<0.0238	<0.476	<0.0238	0.0479	<0.0238	<0.476	5.66	<0.0238	<0.952	3.96	<0.476
	01/06/09	-	<0.490	1.26	<1.96	<0.980	0.0544	0.0382	0.0337	<0.490	0.0327	0.121	<0.0245	<0.490	4.63	0.0364	<1.47	4.64	0.712
	03/18/09	-	<0.290	1.46	<0.966	<0.966	0.0288	0.0202	0.0191	<0.290	0.0164	0.0839	<0.0145	<0.966	5.85	0.0167	<0.580	2.30	<0.725
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	0.508	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	0.679	<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	1.99	<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[6]	<9.76[6]	<9.76[6]	<9.76[6]	0.341	0.189	0.156	<1.95	0.117	0.498	<0.0976	<9.76[6]	68.2	0.120	<19.5[6]	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
	06/24/08	-	3.08	6.25	<2.44	<7.32	0.250	0.219	0.159	<0.488	0.129	0.471	0.0394	<0.976	22.2	0.160	<4.88	21.5	0.967
	09/23/08	-	1.33	2.72	<0.952[3]	<1.43[3]	0.106	0.0750	0.0597	<0.952[3]	0.0497	0.211	<0.0476[3]	0.487	12.5	0.0548	<2.86[3]	7.27	0.496
dup	09/23/08	-	1.42	2.89	<0.952[3]	<1.43[3]	0.130	0.0930	0.0786	<0.952[3]	0.0620	0.255	<0.0476[3]	0.570	12.8	0.0644	<2.38[3]	7.15	0.638
	01/06/09	-	1.01	2.32	<1.96	<1.96	0.174	0.223	0.272	0.350	0.268	0.368	0.0948	<1.96	10.2	0.296	<3.92	3.44	<1.96
dup	01/06/09	-	0.682	1.20	<0.485	<0.485	0.0744	0.0876	0.0922	0.128	0.0968	0.147	0.0340	0.290	7.19	0.109	<1.46	2.19	0.435
	03/24/09	-	0.475	1.70	<0.891	<1.19	0.137	0.138	0.149	<0.297	0.150	0.265	0.0427	0.503	14.4	0.140	<1.34	6.88	0.914
	09/22/09	-	1.14	2.81	<0.980	<0.980	0.0516	0.0578	0.0499	<0.980	0.0542	0.0954	<0.0490	<0.980	12.0	<0.0490	<1.47	5.73	<0.980
dup	09/22/09	-	1.79	3.42	<1.46	<0.971	0.0682	0.0779	0.0797	<0.971	0.0761	0.122	<0.0485	<0.971	14.8	0.0633	<1.46	6.39	<0.971

COP0017760

TABLE 3
GROUNDWATER ANALYTICAL RESULTS - PAH COMPOUNDS
Willbridge Terminals
Portland, Oregon

Well Identification	Date Sampled	1-Methyl-naphthalene	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	0.632	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	1.68	0.211
	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[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	5.26	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
	09/23/08	-	<0.476[8]	<1.19[8]	<0.476[8]	<0.476[8]	0.182	0.148	0.146	<0.476[8]	0.131	0.267	0.0500	0.671	1.87	0.136	<0.952[8]	1.11	0.584
	03/24/09	-	<2.43	2.69	<2.43	<2.43	0.0367	0.0247	0.0251	<0.194	0.0196	0.0853	<0.00971	<2.43	8.59	0.0215	<2.43	4.96	0.819
dup	03/24/09	-	<0.971	1.85	<0.971	<0.971	0.0355	0.0236	0.0249	<0.194	0.0179	0.0782	<0.00971	<0.971	7.45	0.0217	<0.971	4.66	0.782
	09/22/09	-	<0.0980	1.09	<0.196	<0.294	0.00944	<0.00490	0.00494	<0.0980	<0.00490	0.0197	<0.00490	0.366	1.48	<0.00490	<0.392	1.25	0.396
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	1.76	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	ND	0.729	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	1.06	<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
	06/22/05	-	-	0.685	<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	1.36	<0.0990	<1.58	0.743	0.124
	06/25/08	-	0.319	0.268	<0.0952	<0.0952	0.0198	0.0260	0.0376	<0.0952	0.0219	0.0341	0.0121	<0.0952	0.314	0.0348	<0.667	0.0891	0.0764

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TABLE 3
GROUNDWATER ANALYTICAL RESULTS - PAH COMPOUNDS
Willbridge Terminals
Portland, Oregon

Well Identification	Date Sampled	1-Methyl-naphthalene	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	-	-	2.96	<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	<0.396	<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	-	-	1.97	<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
	06/26/08	-	<0.952	2.83	<0.952	<3.81	0.0473	0.0235	0.0193	<0.0952	0.0117	0.118	0.00480	<0.952	8.35	0.0154	<2.86	18.7	0.322
	03/18/09	-	<0.985	1.59	<0.985	<0.985	0.0132	0.00630	<0.00493	<0.0985	<0.00493	0.0397	<0.00493	<0.985	5.41	<0.00493	<0.985	7.71	0.234
dup	03/18/09	-	<0.485	1.69	<0.971	<1.46	0.0403	0.0187	0.0130	<0.0971	0.0115	0.103	<0.00485	<0.485	9.63	0.0114	<1.21	11.4	0.591
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	1.18	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	8.20	<0.0160	<0.957	5.05	<0.319
	09/23/08	-	<0.476[8]	2.08	<0.476[8]	<1.43[8]	0.0361	0.0258	0.0295	<0.476[8]	<0.0238[8]	0.0612	<0.0238[8]	0.284	8.25	<0.0238[8]	<1.43[8]	6.48	<0.476[8]
	03/24/09	-	<1.99	3.37	<1.99	<1.99	0.0561	0.0382	0.0288	<0.398	0.0271	0.120	<0.0199	<1.99	15.0	0.0215	<1.99	14.1	0.646
	09/22/09	-	<0.388	3.46	<0.971	<0.583	0.0300	0.0207	0.0197	<0.388	<0.0194	0.0585	<0.0194	<0.388	13.1	<0.0194	<0.583	10.7	<0.388

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TABLE 3
GROUNDWATER ANALYTICAL RESULTS - PAH COMPOUNDS
Willbridge Terminals
Portland, Oregon

Well Identification	Date Sampled	1-Methyl-naphthalene	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	0.588	<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
	06/26/08	-	1.87	0.412	<0.190	<0.190	0.0407	0.0301	0.0603	<0.190	0.0415	0.0763	0.0130	0.163	0.324	0.0399	1.24	0.357	0.218
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	0.0823	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
	09/23/08	-	<0.0952	<0.0952	<0.0952	<0.0952	0.00908	0.0101	0.00913	<0.0952	0.00866	0.0124	<0.00476	<0.0952	<0.0952	0.00885	<0.0952	<0.0952	<0.0952
	03/24/09	-	<0.0971	<0.0971	<0.0971	<0.0971	0.0238	0.0287	0.0360	<0.0971	0.0311	0.0412	0.00832	<0.0971	<0.0971	0.0260	<0.0971	<0.0971	<0.0971
	09/22/09	-	<0.0980	<0.0980	<0.0980	<0.0980	0.00748	0.0115	0.0103	<0.0980	0.00990	0.0109	<0.00490	<0.0980	<0.0980	0.00892	<0.0980	<0.0980	<0.0980
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	0.0238
	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
	09/23/08	-	<0.0952	<0.0952	<0.0952	<0.0952	0.00789	0.00553	0.00665	<0.0952	<0.00476	0.0112	<0.00476	<0.0952	<0.0952	<0.00476	<0.0952	<0.0952	<0.0952
	03/24/09	-	<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	0.00533	<0.0995	<0.0995	<0.0995
	09/22/09	-	<0.0976	<0.0976	<0.0976	<0.0976	0.0106	0.0141	0.0133	<0.0976	0.0108	0.0137	<0.00488	<0.0976	<0.0976	0.0122	<0.0976	<0.0976	<0.0976

COP0017763

TABLE 3
GROUNDWATER ANALYTICAL RESULTS - PAH COMPOUNDS
Willbridge Terminals
Portland, Oregon

Well Identification	Date Sampled	1-Methyl-naphthalene	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	0.0605	0.0596	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	0.637
	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	0.369	0.0353	<0.292	0.260	0.323
dup	03/14/06	-	-	0.375	<0.182	0.0933	0.106	0.0871	0.0607	0.0674	0.0564	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	0.0869	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[8]	<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[8]	<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	0.256
	03/15/06	-	-	<0.0190	<0.0190	<0.0952	<0.0190	<0.0190	<0.0190	<0.0190	<0.0190	0.0280	<0.0190	0.193	<0.0762	<0.0190	<0.152	<0.0381	0.206

COP0017764

TABLE 3
GROUNDWATER ANALYTICAL RESULTS - PAH COMPOUNDS
Willbridge Terminals
Portland, Oregon

Well Identification	Date Sampled	1-Methyl-naphthalene	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-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	6.82	<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
	06/26/08	-	<0.476	1.28	<0.476	<0.476	0.0855	0.0864	0.148	<0.476	0.0980	0.208	0.0307	0.450	2.93	0.0955	<0.952	2.86	0.475
	03/18/09	-	<1.94	3.17	<1.94	<1.94	0.418	0.370	0.615	<1.94	0.505	1.01	0.111	2.14	12.7	0.363	<1.94	13.5	3.22
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	0.789	ND	ND	0.194	ND
	09/24/02	-	-	1.40	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.32	ND	0.887	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	<0.850	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	<0.788	1.07	0.0513
	03/22/07	-	-	0.118	<0.0343[6]	<0.0490[6]	<0.00490	<0.00490	<0.00490	<0.00980	<0.00490	<0.0147[6]	<0.00490	<0.0245[6]	0.838	<0.00490	<0.275[6]	0.140	<0.0784[6]
	09/20/07	-	<0.500[6]	1.01	<0.500[6]	<0.500[6]	<0.0250[6]	0.0112[4]	0.0146[4]	<0.100	0.0120[4]	<0.0250[6]	0.00524[4]	<0.500[6]	9.81	0.00512[4]	<2.50	1.03	<0.500[6]
	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
	09/24/08	-	<0.0952	0.500	<0.0952	<0.0952	0.00712	0.00625	0.00645	<0.0952	0.00486	0.0145	<0.00476	<0.0952	2.38	0.00599	<0.571[8]	0.375	<0.0952
	03/25/09	-	<0.0971	0.125	<0.0971	<0.0971	0.00665	0.00565	0.00614	<0.0971	0.00595	0.0129	0.00515	<0.0971	0.411	0.00674	<0.0971	<0.0971	<0.0971
	09/22/09	-	<0.0962	0.619	<0.0962	<0.0962	0.0161	0.0183	0.0150	<0.0962	0.0134	0.0245	<0.00481	<0.0962	2.53	0.0119	<0.240	0.448	<0.0962
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
	06/22/05	-	-	<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
	06/26/08	-	<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
	09/26/08	-	<0.0962	<0.0962	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.0962	<0.00481	<0.0962	<0.0962	<0.0962
CR-8	02/18/00	-	-	0.749	ND	0.264	0.981	2.47	1.6	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	0.326	ND	0.27	ND	0.613	ND	ND	0.458
	08/25/00	-	-	ND	ND	ND	0.313	0.666	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

COP0017765

TABLE 3
GROUNDWATER ANALYTICAL RESULTS - PAH COMPOUNDS
Willbridge Terminals
Portland, Oregon

Well Identification	Date Sampled	1-Methyl-naphthalene	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)
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-26	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
	06/22/05	-	-	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.200	<0.100	0.264	<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
	06/24/08	-	<0.0985	<0.0985	<0.0985	<0.0985	0.0238	0.0271	0.0326	<0.0985	0.0283	0.0394	0.0101	0.0583	0.0849	0.0267	<0.0985	0.0720	0.0583
	09/23/08	-	<0.0952	<0.0952	<0.0952	<0.0952	0.0144	0.0150	0.0142	<0.0952	0.0158	0.0221	0.00510	<0.0952	0.0574	0.0129	<0.0952	<0.0952	<0.0952
	01/06/09	-	<0.0980	<0.0980	<0.0980	<0.0980	0.0146	0.0151	0.0199	<0.0980	0.0162	0.0254	0.00513	0.0518	0.0508	0.0171	<0.0980	<0.0980	<0.0980
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	0.0136	<0.0995	<0.0995	0.0415	<0.0995	<0.0995	<0.0995
	06/24/08	-	<0.0971	<0.0971	<0.0971	<0.0971	0.101	0.125	0.148	0.141	0.142	0.173	0.0455	0.200	<0.0971	0.126	<0.0971	0.129	0.198
	09/23/08	-	<0.0952	<0.0952	<0.0952	<0.0952	0.0948	0.0996	0.104	0.105	0.0911	0.140	0.0344	0.215	<0.0952	0.0928	<0.0952	0.130	0.240
	01/06/09	-	<0.0971	<0.0971	<0.0971	0.0693	0.238	0.334	0.377	0.327	0.334	0.404	0.101	0.506	<0.0971	0.292	<0.0971	0.442	0.329
CR-28A	06/25/08	-	55.3	0.448	<0.476	<0.476	<0.0238	<0.0238	<0.0238	<0.476	<0.0238	0.0262	<0.0238	<0.476	0.535	<0.0238	177	0.399	<0.476
	09/25/08	-	55.6	0.422	<0.481	<0.481	0.0268	<0.0240	<0.0240	<0.481	<0.0240	0.0307	<0.0240	<0.481	0.557	<0.0240	184	0.442	<0.481
CR-28B	06/25/08	-	<0.192	<0.192	<0.192	<0.192	<0.00962	<0.00962	<0.00962	<0.192	<0.00962	<0.00962	<0.00962	<0.192	<0.192	<0.00962	<0.192	<0.192	<0.192
	09/25/08	-	<0.0962	<0.0962	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00481	0.00498	<0.00481	<0.0962	<0.0962	<0.00481	<0.0962	<0.0962	<0.0962
CR-28C	06/25/08	-	<0.0952	<0.0952	<0.0952	<0.0952	0.0494	0.0421	0.0517	<0.0952	0.0478	0.0649	0.0131	0.102	<0.0952	0.0345	<0.0952	<0.0952	0.119
	09/25/08	-	0.0783	<0.0962	<0.0962	<0.0962	0.0171	0.00854	0.0129	<0.0962	0.00891	0.0203	<0.00481	<0.0962	<0.0962	0.00713	0.481	<0.0962	<0.0962
CR-29A	06/26/08	-	10.9	0.473	<0.0952	0.0707	0.00636	<0.00476	<0.00476	0.0952	<0.00476	0.00733	<0.00476	0.0479	0.574	<0.00476	2.51	0.873	0.0621
	09/25/08	-	11.2	0.723	<0.144	0.0654	0.0148	<0.00481	<0.00481	<0.0962	<0.00481	0.0167	<0.00481	0.0653	0.685	<0.00481	<4.33	0.990	0.103
CR-29B	06/26/08	-	<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
	09/25/08	-	<0.0962	<0.0962	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.0962	<0.00481	<0.0962	<0.0962	<0.0962

COP0017766

TABLE 3
GROUNDWATER ANALYTICAL RESULTS - PAH COMPOUNDS
Willbridge Terminals
Portland, Oregon

Well Identification	Date Sampled	1-Methyl-naphthalene	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)
CR-30A	06/26/08	-	<0.0952	0.811	<0.190	0.0838	0.0117	0.00653	<0.00476	<0.0952	<0.00476	0.0154	<0.00476	<0.0952	1.15	<0.00476	<0.857	1.15	0.115
	09/24/08	-	<0.0962	0.602	<0.0962	<0.0962	0.0170	0.0104	0.00658	<0.0962	0.00622	0.0253	<0.00481	<0.0962	0.921	0.00599	<0.817	0.427	0.130
CR-30B	06/26/08	-	<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
	09/24/08	-	<0.0962	<0.0962	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.0962	<0.00481	<0.0962	<0.0962	<0.0962
CR-31A	06/26/08	-	<0.0952	1.50	<0.952	<0.190	0.0205	0.0148	0.00918	<0.0952	0.00794	0.0331	<0.00476	<0.0952	6.63	0.00892	<0.952	1.69	0.0977
	09/24/08	-	<0.481	1.23	<0.481	<0.481	<0.0240	<0.0240	<0.0240	<0.481	<0.0240	0.0257	<0.0240	<0.481	5.90	<0.0240	<1.20	1.34	<0.481
CR-31B	06/26/08	-	<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
	09/24/08	-	<0.0962	<0.0962	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.0962	<0.00481	<0.0962	<0.0962	<0.0962
CR-32A	06/26/08	-	<0.0952	0.396	<0.0952	<0.190	0.00625	<0.00476	<0.00476	<0.0952	<0.00476	0.0101	<0.00476	<0.0952	1.41	<0.00476	<0.381	0.445	<0.0952
	09/24/08	-	<0.192	0.746	<0.192	<0.192	<0.0192	<0.00962	<0.00962	<0.192	<0.00962	<0.0192	<0.00962	<0.192	2.56	<0.00962	<0.865	0.646	<0.192
CR-32B	06/26/08	-	<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
	09/24/08	-	<0.0962	<0.0962	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.0962	<0.00481	<0.0962	<0.0962	<0.0962
CR-32C	06/26/08	-	<0.0952	<0.0952	<0.0952	<0.0952	0.00614	0.00780	0.00869	<0.0952	0.00884	0.00964	<0.00476	<0.0952	<0.0952	0.00737	<0.0952	<0.0952	<0.0952
	09/24/08	-	<0.0962	<0.0962	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.0962	<0.00481	<0.0962	<0.0962	<0.0962
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
	06/24/08	-	<0.398	<0.398	<0.398	<0.398	<0.00498	<0.00498	<0.00498	0.0995	<0.00498	0.00751	<0.00498	<0.398	0.413	<0.00498	<0.796	<0.398	<0.0995
	09/24/08	-	<0.385[6]	<0.385[6]	<0.385[6]	<0.385[6]	0.00503	<0.00481	<0.00481	<0.0962	<0.00481	0.00821	0.00712	<0.385[6]	0.559	0.00873	<0.769[6]	<0.385[6]	<0.0962
	01/06/09	-	<0.980	<0.980	<0.980	<0.980	0.00710	0.00683	0.00831	<0.0980	0.00624	0.0133	<0.00490	<0.980	0.547	0.00849	<0.980	<0.980	<0.980
	03/18/09	-	<0.0976	<0.976	<0.976	<0.390	<0.00488	<0.00488	<0.00488	<0.0976	<0.00488	<0.00976	<0.00488	<0.390	<0.976	<0.00488	<0.390	<0.390	<0.146

COP0017767

TABLE 3
GROUNDWATER ANALYTICAL RESULTS - PAH COMPOUNDS
Willbridge Terminals
Portland, Oregon

Well Identification	Date Sampled	1-Methyl-naphthalene	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)	(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	-	-	0.128	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]	0.0601	0.0326
	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
	09/22/08	-	0.0042	0.053	0.0050	0.0050	<0.0026	<0.0043	<0.0023	<0.0029	<0.0025	<0.0034	<0.0025	<0.0044	0.010	<0.0026	0.16	0.0095	0.0098
dup	09/22/08	-	0.0044	0.066	0.0048	0.0047	<0.0026	<0.0043	0.0038	<0.0029	<0.0025	<0.0034	<0.0025	0.0045	0.010	<0.0026	0.18	0.011	0.0097
	03/16/09	-	<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
dup	03/16/09	-	<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	<0.190	<0.0952	<0.0952
	09/15/09	0.630	<0.0952	<0.0952	<0.0952	<0.0952	<0.00476	0.00654	0.00612	<0.0952	0.00525	0.00619	0.00524	<0.0952	<0.0952	0.00819	<0.143	<0.0952	<0.0952

COP0017768

TABLE 3
GROUNDWATER ANALYTICAL RESULTS - PAH COMPOUNDS
Willbridge Terminals
Portland, Oregon

Well Identification	Date Sampled	1-Methyl-naphthalene	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

COP0017769

TABLE 3
GROUNDWATER ANALYTICAL RESULTS - PAH COMPOUNDS
Willbridge Terminals
Portland, Oregon

Well Identification	Date Sampled	1-Methyl-naphthalene	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	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.135	<0.0192	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	<0.0204	<0.184[6]	<0.0306[6]	0.0633
	03/22/07	-	-	0.175	<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	<0.382[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[6]	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
	09/22/08	-	<0.013	0.25	<0.011	0.011	<0.0026	0.0069	0.0042	0.0078	<0.0025	<0.0034	<0.0025	<0.0044	<0.0038	0.0048	0.24	0.023	0.077
	03/16/09	-	<0.0952	0.136	<0.0952	<0.0952	<0.00476	<0.00476	<0.00476	<0.0952	<0.00476	0.00620	<0.00476	<0.0952	<0.0952	<0.00476	<0.286	<0.0952	<0.0952
	09/15/09	<0.0952	<0.0952	0.229	<0.0952	<0.0952	0.00593	0.00843	0.00515	<0.0952	0.00488	0.00972	<0.00476	<0.0952	<0.0952	0.00520	<0.143	<0.0952	<0.0952
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	<1.96[6]	0.331	<0.0980
	09/20/07	-	<0.0500[6]	0.602	<0.0300[6]	0.0440	0.0125	<0.0100	<0.0100	0.0114[4]	<0.0100	0.0196	<0.0100	0.390	0.477	<0.0100	<1.25[6]	0.0903	0.334
	03/25/08	-	12[8]	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[8]	0.78	<0.070[6]	0.064	0.073	0.050	0.042	0.037	<0.0025	0.11	0.0061	0.73	0.55	0.030	<0.68[6]	0.67	0.56
	09/22/08	-	0.25	1.6	<0.060	0.12	0.081	0.031	0.040	0.034	<0.0025	0.083	0.0075	1.1	1.3	0.021	0.88	0.88	0.83
	03/16/09	-	0.422	1.15	<0.200	<0.200	0.0540	0.0218	0.0202	<0.200	0.0116	0.0795	<0.0100	0.917	0.825	0.0130	<0.600	1.29	0.554
	09/15/09	11.1	0.192	1.59	<0.0952	0.239	0.0537	0.0214	0.0176	<0.0952	0.0130	0.0805	0.00490	0.959	1.10	0.0129	<0.429	2.87	0.531
dup	09/15/09	5.02	<0.0966	0.983	<0.0966	0.165	0.0390	0.0139	0.0122	<0.0966	0.00866	0.0550	<0.00483	0.710	0.597	0.00803	<0.242	1.69	0.375

COP0017770

TABLE 3
GROUNDWATER ANALYTICAL RESULTS - PAH COMPOUNDS
Willbridge Terminals
Portland, Oregon

Well Identification	Date Sampled	1-Methyl-naphthalene	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	02/16/00	-	-	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
	08/23/00	-	-	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

COP0017771

TABLE 3
GROUNDWATER ANALYTICAL RESULTS - PAH COMPOUNDS
Willbridge Terminals
Portland, Oregon

Well Identification	Date Sampled	1-Methyl-naphthalene	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	<0.0396	<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
	09/23/08	-	0.0026	<0.0044	<0.0034	<0.0036	0.0069	<0.0043	<0.0023	<0.0029	<0.0025	0.0039	<0.0025	<0.0044	<0.0038	<0.0026	0.0038	<0.0050	0.029
	03/16/09	-	<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
	09/14/09	<0.0962	<0.0962	<0.0962	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.0962	<0.00481	<0.0962	<0.0962	<0.0962
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	<0.971[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
	06/24/08	-	0.0073	0.063	0.0069	0.010	0.0078	0.0057	0.0062	0.013	0.0045	0.0079	0.0068	0.0090	0.0091	0.014	0.11	0.020	0.016
	09/23/08	-	0.0089	0.31	<0.0034	<0.0036	0.0074	<0.0043	<0.0023	0.0029	<0.0025	0.0051	<0.0025	<0.0044	<0.0038	0.0033	<0.18	<0.0050	0.018
	01/05/09	-	<0.0909	<0.0909	<0.0909	<0.0909	<0.00455	<0.00455	<0.00455	<0.0909	<0.00455	<0.00455	<0.00455	<0.0909	<0.0909	<0.00455	<0.0909	<0.0909	<0.0909
	03/16/09	-	<0.100	<0.100	<0.100	<0.100	<0.00500	<0.00500	<0.00500	<0.100	<0.00500	<0.00500	<0.00500	<0.100	<0.100	<0.00500	<0.150	<0.100	<0.100
	09/14/09	<0.0952	<0.0952	0.148	<0.0952	<0.0952	<0.00476	0.00477	<0.00476	<0.0952	<0.00476	0.00509	<0.00476	<0.0952	<0.0952	<0.00476	<0.0952	<0.0952	<0.0952

COP0017772

TABLE 3
GROUNDWATER ANALYTICAL RESULTS - PAH COMPOUNDS
Willbridge Terminals
Portland, Oregon

Well Identification	Date Sampled	1-Methyl-naphthalene	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)	(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	-	-	0.246	<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	0.0616
	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
	09/23/08	-	0.0089	0.44	<0.0034	<0.0036	<0.0026	<0.0043	<0.0023	<0.0029	<0.0025	<0.0034	<0.0025	<0.0044	<0.0038	<0.0026	<0.18	0.050	0.10
	03/16/09	-	<0.0952	0.272	<0.0952	<0.0952	<0.00476	<0.00476	<0.00476	<0.0952	<0.00476	<0.00476	<0.00476	<0.0952	<0.0952	<0.00476	<0.190	<0.0952	<0.0952
	09/14/09	<0.0971	<0.0971	0.304	<0.0971	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.0971	<0.00485	<0.0971	<0.0971	<0.0971
dup	09/14/09	3.41	<0.0962	0.809	<0.0962	0.117	0.0265	0.0106	0.00920	<0.0962	0.00597	0.0421	<0.00481	0.515	0.482	0.00562	<0.192	1.22	0.293
MW-37	02/16/00	-	-	1.56	ND	0.0862	0.0584	0.0773	0.0564	ND	ND	583	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	0.660	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	2.86	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	0.0562	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]	0.0167	<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	<0.48[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	0.026	0.018	0.074	1.7	0.21	<1.1[6]	0.23	0.15
	06/24/08	-	0.012	0.56	<0.19	0.025	<0.0075	0.017	0.015	0.035	0.0053	0.0044	0.0054	0.033	0.75	0.036	0.46	0.099	0.053
	09/23/08	-	<0.0023	0.70	<0.29	0.031	0.055	0.071	0.065	0.085	0.026	0.051	0.013	0.10	0.68	0.081	<0.69	0.12	0.18
dup	09/23/08	-	0.031	0.67	<0.22	0.026	0.0079	0.0089	0.0070	0.013	<0.0025	0.0038	<0.0025	0.048	0.58	0.012	<0.52	0.10	0.058
	01/05/09	-	<0.0930	0.474	<0.465[6]	<0.465[6]	0.0119	0.0438	0.0215	0.222	0.0107	0.0247	0.0243	<0.465[6]	0.406	0.161	<1.40[6]	<0.465[6]	<0.0930
	03/16/09	-	<0.286	0.399	<0.286	<0.0952	0.00564	0.00791	0.00532	<0.0952	<0.00476	0.00894	<0.00476	<0.0952	0.366	0.0100	<0.429	<0.0952	<0.0952

COP0017773

TABLE 3
GROUNDWATER ANALYTICAL RESULTS - PAH COMPOUNDS
Willbridge Terminals
Portland, Oregon

Well Identification	Date Sampled	1-Methyl-naphthalene	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)	(µg/l)
	09/14/09	20.0	<0.0971	0.631	<0.243	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.00485	0.00506	<0.00485	<0.0971	0.578	<0.00485	<0.340	0.175	<0.0971

COP0017774

TABLE 3
GROUNDWATER ANALYTICAL RESULTS - PAH COMPOUNDS
Willbridge Terminals
Portland, Oregon

Well Identification	Date Sampled	1-Methyl-naphthalene	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-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	1.16	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	02/16/00	-	-	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	0.0266	<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	<0.0190	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	<0.0192	<0.0769	0.0297	<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[6]	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[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
	09/23/08	-	<0.0023	0.10	<0.0034	<0.0036	<0.0026	<0.0043	<0.0023	<0.0029	<0.0025	<0.0034	<0.0025	<0.0044	<0.0038	<0.0026	<0.090	0.022	<0.0035
	03/16/09	-	<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
	09/14/09	<0.0962	<0.0962	<0.0962	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.0962	<0.00481	<0.0962	<0.0962	<0.0962
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
	06/24/08	-	0.0063	<0.0044	<0.0034	0.0076	0.0038	<0.0043	<0.0023	0.0031	<0.0025	<0.0034	<0.0025	<0.0044	0.0077	<0.0026	0.058	0.011	0.0036
dup	06/24/08	-	0.0074	<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	0.036	<0.0050	<0.0035
	09/23/08	-	0.0072	<0.0044	<0.0034	<0.0036	<0.0026	<0.0043	<0.0023	<0.0029	<0.0025	<0.0034	<0.0025	<0.0044	0.0062	<0.0026	0.046	<0.0050	<0.0035
	01/05/09	-	<0.0930	<0.0930	<0.0930	<0.0930	<0.00465	<0.00465	<0.00465	<0.0930	<0.00465	<0.00465	<0.00465	<0.0930	<0.0930	<0.00465	<0.0930	<0.0930	<0.0930
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
	06/24/08	-	<0.0023	<0.0044	<0.0034	<0.0036	<0.0026	<0.0043	<0.0023	0.0042	<0.0025	<0.0034	<0.0025	<0.0044	<0.0038	0.0028	0.032	<0.0050	<0.0035
	09/23/08	-	<0.0023	<0.0044	<0.0034	<0.0036	<0.0026	<0.0043	<0.0023	<0.0029	<0.0025	<0.0034	<0.0025	<0.0044	0.017	<0.0026	<0.0030	<0.0050	<0.0035
	01/05/09	-	<0.0909	<0.0909	<0.0909	<0.0909	<0.00455	<0.00455	<0.00455	<0.0909	<0.00455	<0.00455	<0.00455	<0.0909	<0.0909	<0.00455	<0.0909	<0.0909	<0.0909
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
	06/24/08	-	0.0070	<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	0.031	0.0065	<0.0035
	09/23/08	-	0.0090	<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	0.013	0.0083	<0.0035
	01/05/09	-	<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	<0.0990	<0.0990	<0.0990
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
	06/24/08	-	0.0094	<0.0046	0.0073	<0.0038	0.0044	<0.0045	<0.0024	0.0031	<0.0027	<0.0036	<0.0027	<0.0046	<0.0040	<0.0028	0.091	0.012	<0.0037
	09/23/08	-	<0.0023	0.0057	0.011	<0.0038	<0.0026	<0.0043	<0.0023	<0.0029	<0.0025	<0.0034	<0.0025	<0.0044	<0.0038	<0.0026	0.016	<0.0050	<0.0035
	01/05/09	-	<0.0909	<0.0909	<0.0909	<0.0909	<0.00455	<0.00455	<0.00455	<0.0909	<0.00455	<0.00455	<0.00455	<0.0909	<0.0909	<0.00455	<0.0909	<0.0909	<0.0909
dup	01/05/09	-	<0.0909	<0.0909	<0.0909	<0.0909	<0.00455	<0.00455	<0.00455	<0.0909	<0.00455	<0.00455	<0.00455	<0.0909	<0.0909	<0.00455	<0.0909	<0.0909	<0.0909

COP0017775

TABLE 3
GROUNDWATER ANALYTICAL RESULTS - PAH COMPOUNDS
Willbridge Terminals
Portland, Oregon

Well Identification	Date Sampled	1-Methyl-naphthalene	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	0.620	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	0.889	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	0.523
	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
	09/24/08	-	<0.481	2.04	<0.481	1.19	0.111	<0.0240	<0.0240	<0.481	<0.0240	0.100	<0.0240	0.988	3.35	<0.0240	<1.68[6]	5.68	0.927
dup	09/24/08	-	<0.481	2.14	<0.481	<1.44	0.102	<0.0240	<0.0240	<0.481	<0.0240	0.112	<0.0240	1.00	3.73	<0.0240	<1.92[6]	8.03	0.972
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	4.96	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	0.236	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

COP0017776

TABLE 3
GROUNDWATER ANALYTICAL RESULTS - PAH COMPOUNDS
Willbridge Terminals
Portland, Oregon

Well Identification	Date Sampled	1-Methyl-naphthalene	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)	(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	7.16	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	6.78	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	0.493	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	0.797	<0.400	5.150	16.900	<0.400	<3.60	24.9	3.23
	03/14/06	-	-	4.63	<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	0.496
	09/26/06	-	-	5.99	<0.619[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
	09/24/08	-	<0.962	5.27	<1.44[6]	<3.85[6]	0.706	0.139	0.176	<0.962	0.124	0.728	<0.0481	3.65	16.0	<0.0481	<4.81[6]	35.3	2.71
	03/23/09	-	<0.971	5.15	<1.94	<3.40	0.959	0.220	0.272	<0.971	0.202	0.953	<0.0485	5.79	24.3	0.0623	<1.94	32.9	3.82
	09/18/09	-	<0.194	4.59	<0.971	<0.971	0.0995	0.0221	0.0277	<0.194	0.021	0.117	<0.00971	0.974	13.1	<0.00971	<0.680	13.2	0.529
dup	09/18/09	-	<0.966	4.73	<0.966	<0.966	0.125	0.0285	0.0361	<0.193	0.0276	0.145	<0.00966	1.12	13	<0.00966	<0.966	14.0	0.618
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
	08/28/00	-	-	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	0.180	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	-	-	0.0866	<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]	<0.0693[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
	09/24/08	-	<0.385[6]	0.708	<0.385[6]	<0.385[6]	0.00563	0.00905	<0.0144[6]	<0.0962	<0.0144[6]	0.00799	<0.00481	<0.385[6]	1.63	0.00788	<1.92[6]	<0.385[6]	<0.0962
	03/23/09	-	<0.0995	0.444	<0.0995	<0.0995	0.0133	0.0188	0.0125	<0.0995	0.0116	0.0181	<0.00498	<0.0995	1.07	0.0138	<0.299	<0.0995	0.170
dup	03/23/09	-	<0.0990	0.352	<0.0990	<0.0990	0.0224	0.0313	0.0184	<0.0990	0.0204	0.0331	<0.00495	<0.0990	0.849	0.0205	<0.297	<0.0990	0.198
	09/18/09	-	<0.146	0.966	<0.485	<0.485	<0.00485	0.00542	<0.00485	<0.0971	<0.00485	0.00971	<0.00485	<0.485	2.08	<0.00485	<0.777	<0.485	<0.0971

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TABLE 3
GROUNDWATER ANALYTICAL RESULTS - PAH COMPOUNDS
Willbridge Terminals
Portland, Oregon

Well Identification	Date Sampled	1-Methyl-naphthalene	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	-	-	0.0683	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	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	<0.225[6]	0.0214	0.0208
	03/20/07	-	-	0.186	<0.0288	0.0199	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.962	0.0517	0.0636
	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]	0.0826	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
	09/24/08	-	<0.0962	0.116	<0.0962	<0.0962	0.00641	0.00660	0.00510	<0.0962	<0.00481	0.00940	<0.00481	<0.0962	<0.0962	0.00617	<0.192[6]	<0.0962	<0.0962
	03/20/09	-	<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	<0.246	<0.0985	<0.0985
dup	03/20/09	-	<0.0985	<0.0985	<0.0985	<0.0985	<0.00493	0.00520	<0.00493	<0.0985	<0.00493	0.00530	<0.00493	<0.0985	<0.0985	<0.00493	<0.246	<0.0985	<0.0985
	09/18/09	-	<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	<0.146	<0.0976	<0.0976
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[9]	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[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	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
	09/22/08	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

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TABLE 3
GROUNDWATER ANALYTICAL RESULTS - PAH COMPOUNDS
Willbridge Terminals
Portland, Oregon

Well Identification	Date Sampled	1-Methyl-naphthalene	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	03/26/08	-	<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
	09/18/09	-	<0.485	<0.485	<0.485	<0.485	<0.00485	<0.00485	<0.00485	<0.0971	<0.00485	<0.00485	<0.00485	<0.485	<0.485	<0.00485	<0.485	<0.485	<0.0971
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	<0.00976	<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
	06/25/08	-	<0.0971	<0.0971	<0.0971	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.0971	<0.00485	<0.0971	<0.0971	<0.0971
	09/23/08	-	<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
	01/07/09	-	<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
	03/20/09	-	<0.0971	<0.0971	<0.0971	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.0971	<0.00485	<0.0971	<0.0971	<0.0971
	09/18/09	-	<0.0971	<0.0971	<0.0971	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.0971	<0.00485	<0.0971	<0.0971	<0.0971
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	0.683	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
	09/20/01	-	-	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
	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
	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	0.0680	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	<0.0194	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
	09/25/08	-	<0.0962	<0.0962	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00481	0.00588	<0.00481	<0.0962	<0.0962	<0.00481	<0.144[6]	<0.0962	<0.0962
	03/17/09	-	<0.0976	0.104	<0.0976	<0.0976	<0.00488	<0.00488	<0.00488	<0.0976	<0.00488	<0.00488	<0.00488	<0.0976	0.119	<0.00488	<0.976	<0.0976	<0.0976
	09/21/09	0.13[4]	0.118[4]	0.019[4]	<0.0096	0.0067[4,10]	0.021	0.053[4]	0.094[4]	0.022	0.018	0.017	<0.0096	0.034[4]	0.034[4]	0.058	0.095	0.029[4]	0.039[4]
U-3	02/17/00	-	-	0.142	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.17	ND	ND	0.066	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

COP0017779

TABLE 3
GROUNDWATER ANALYTICAL RESULTS - PAH COMPOUNDS
Willbridge Terminals
Portland, Oregon

Well Identification	Date Sampled	1-Methyl-naphthalene	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	0.367	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	6.00	<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
	09/24/08	-	<0.481	1.78	<0.481	0.666	0.0290	<0.0240	<0.0240	<0.481	<0.0240	0.0612	<0.0240	<0.481	4.78	<0.0240	<1.68[6]	3.70	0.499
dup	09/24/08	-	<0.481	2.15	<0.721[6]	<0.721[6]	0.0444	<0.0240	<0.0240	<0.481	<0.0240	0.0978	<0.0240	<0.481	5.55	<0.0240	<2.16[6]	4.73	0.796
U-5	02/17/00	-	-	1.19	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.63	ND	ND	1.42	0.0674
	05/26/00	-	-	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	5.52	ND	ND	2.29	ND
	11/29/00	-	-	0.800	0.100	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	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
	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
	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
	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	0.189	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[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]	37.6	8.00
	09/24/08	-	2.68	11.4	<4.81	<12.0[6]	1.02	0.483	<0.481[6]	<4.81	<0.240	2.25	0.276	<4.81	22.5	<0.240	<7.21[6]	63.1	10.2

COP0017780

TABLE 3
GROUNDWATER ANALYTICAL RESULTS - PAH COMPOUNDS
Willbridge Terminals
Portland, Oregon

Well Identification	Date Sampled	1-Methyl-naphthalene	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-5A	03/27/08	-	<0.721	2.95	<1.68	<0.481	<2.40	<0.144	<0.192	<0.962	<0.240	0.388	<0.0481	<0.481	6.56	0.0793	<5.29	2.26	0.519
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	<0.0291	<0.0194	<0.0291
U-11	03/18/03	-	-	0.711	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	1.59	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	2.56	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	0.615	<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	-	-	0.329	<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	0.0284	<0.0194	<0.369	0.0292	<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
	09/25/08	-	<0.0962	<0.0962	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.0962	<0.00481	<3.37[6]	<0.0962	<0.0962
	03/18/09	-	<0.0962	<0.0962	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.0962	<0.00481	<0.0962	<0.0962	<0.0962
	09/22/09	0.0042[4,10]	0.015[4]	0.0019[4,10]	0.0047[10]	0.0036[4,10]	0.012	0.046[4]	0.090[4]	0.0093[10]	0.0076[10]	0.010	<0.0095	0.016[4]	0.0023[4,10]	0.046	<0.0095	0.017[4]	0.0098[4]
U-15	09/27/06	-	-	<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	<0.0784[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
	09/25/08	-	<0.0962	<0.0962	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.0962	<0.00481	<0.0962	<0.0962	<0.0962
	03/17/09	-	0.122	<0.0962	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.0962	<0.00481	1.85	<0.0962	<0.0962
	09/21/09	0.024[4]	0.042[4]	0.0033[4,10]	<0.0095	0.0047[4,10]	0.015	0.046[4]	0.086[4]	0.013	0.0081[10]	<0.0095	<0.0095	0.020[4]	0.034[4]	0.049	0.055	0.027[4]	0.012[4]
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
	09/25/08	-	<0.481	0.390	<0.481	<0.481	<0.0240	<0.0240	<0.0240	<0.481	<0.0240	0.0358	<0.0240	<0.481	0.880	<0.0240	<0.962[6]	<0.481	<0.481
	03/17/09	-	<0.192	0.406	<0.144	<0.0962	0.00798	<0.00481	<0.00481	<0.0962	<0.00481	0.0148	<0.00481	<0.0962	1.08	<0.00481	<0.673	0.104	<0.0962
	09/21/09	4.5[4]	0.068[4]	0.55[4]	0.15	0.067[4]	<0.0095	0.043[4]	0.081[4]	<0.0095	<0.0095	<0.0095	<0.0095	0.039[4]	1.2[4]	0.044	0.44	0.15[4]	0.049[4]
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	0.698	<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	0.0306	<0.00962	<0.00962	<0.192	<0.00962	0.0300	<0.00962	<0.385	1.70	<0.00962	2.40	1.46	<0.385
	09/25/08	-	<0.385[6]	0.434	<0.385[6]	<0.0962	0.0224	<0.00481	<0.00481	<0.0962	<0.00481	0.0224	<0.00481	<0.0962	0.751	<0.00481	<1.15[6]	0.922	0.147
	03/17/09	-	<0.478	<1.91	<1.91	<0.478	0.0226	0.00556	<0.00478	<0.0957	<0.00957	0.0234	<0.00478	<0.478	<1.91	<0.00478	<1.44	1.72	0.251
	09/21/09	66.4[4]	0.14[4]	0.89[4]	0.27	0.16[4]	0.048	0.051[4]	0.089[4]	0.013	0.011	0.031	<0.0095	0.23[4]	1.4[4]	0.048	1.4	1.7[4]	0.26[4]

COP0017781

TABLE 3
GROUNDWATER ANALYTICAL RESULTS - PAH COMPOUNDS
Willbridge Terminals
Portland, Oregon

Well Identification	Date Sampled	1-Methyl-naphthalene	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-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
	09/25/08	-	<0.481	1.07	<0.481	<0.481	<0.0240	<0.0240	<0.0240	<0.481	<0.0240	0.0250	<0.0240	<0.481	2.86	<0.0240	<1.44	0.819	<0.481
	03/17/09	-	<0.0962	<0.0962	<0.0962	<0.0962	<0.00962	0.00793	<0.00481	<0.0962	<0.00481	<0.0144	<0.00481	<0.0962	<0.0962	0.00642	<0.144	<0.0962	<0.144
	09/22/09	4.2[4]	0.12[4]	2.6[4]	0.47	0.27[4]	0.16	0.15[4]	0.16[4]	0.087	0.063	0.13	<0.0096	0.27[4]	8.4[4]	0.097	0.79	2.0[4]	0.39[4]
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	0.0406	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	4.56	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
	09/25/08	-	<0.0962	0.806	<0.385[6]	<0.0962	0.0424	0.0229	0.0164	<0.0962	0.0147	0.0474	0.00597	0.169	1.42	0.0139	<1.44[6]	0.259	0.190
	03/17/09	-	<0.0966	0.655	<0.193	<0.145	<0.00483	<0.00483	<0.00483	<0.0966	<0.00483	<0.00483	<0.00483	<0.0966	1.46	<0.00483	<0.386	1.11	<0.0966
	09/21/09	0.49[4]	0.080[4]	1.5[4]	0.36	0.1[4]	0.0093[10]	0.044[4]	0.083[4]	0.0092[10]	<0.0095	0.0098	<0.0095	0.029[4]	3.2[4]	0.045	0.50	3.0[4]	0.050[4]
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	0.0186	<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
	09/25/08	-	<0.0962	0.896	<0.385[6]	<0.385[6]	0.00645	0.00614	<0.00481	<0.0962	<0.00481	0.0106	<0.00481	<0.0962	1.95	0.00500	<0.962[6]	1.86	<0.0962
	03/17/09	-	<0.0962	0.789	<0.337	<0.0962	0.0223	0.0122	0.00868	<0.0962	0.00723	0.0286	<0.00481	0.120	1.47	0.00616	<0.433	0.170	0.172
	09/22/09	0.23[4]	0.11[4]	1.7[4]	<0.0095	0.14[4]	0.038	0.049[4]	0087[4]	0.012	0.0092[10]	0.031	<0.0095	0.28[4]	3.0[4]	0.047	1.3	0.37[4]	0.27[4]
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
	06/24/08	-	<0.476[6]	1.14	<0.476[6]	<0.476[6]	<0.00476	<0.00476	<0.00476	<0.0952	<0.00476	<0.00952[6]	<0.00476	<0.476[6]	3.35	<0.00476	<0.952[6]	0.741	<0.0952
	09/23/08	-	<0.190[6]	0.820	<0.190[6]	<0.0952	<0.00476	<0.00476	<0.00476	<0.0952	<0.00476	0.00656	<0.00476	<0.0952	2.80	<0.00476	<0.857[6]	0.593	<0.0952
	01/06/09	-	<0.488[6]	0.964	<0.488[6]	<0.488[6]	<0.0244	<0.00488	<0.00488	<0.0976	<0.00488	<0.0244	<0.00488	<0.488[6]	3.98	<0.00488	1.22	0.962	<0.488[6]
	03/19/09	-	<0.0962	1.11	<0.385	<0.385	0.00720	<0.00481	<0.00481	<0.0962	<0.00481	0.0131	<0.00481	<0.385	4.13	<0.00481	<0.433	<0.385	<0.144
	09/17/09	-	<0.0971	1.27	<0.243	<0.146	0.0116	0.00817	0.00680	<0.0971	<0.00485	0.0309	<0.00485	<0.0971	4.38	0.00543	<0.243	0.914	<0.0971
dup	09/17/09	-	<0.0971	0.978	<0.194	<0.146	0.00934	0.00539	<0.00485	<0.0971	<0.00485	0.0205	<0.00485	<0.0971	3.36	<0.00485	<0.194	0.773	<0.0971
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
	06/24/08	-	<0.0957	<0.0957	<0.0957	<0.0957	<0.00478	<0.00478	<0.00478	<0.0957	<0.00478	<0.00478	<0.00478	<0.0957	<0.0957	<0.00478	<0.0957	<0.0957	<0.0957
	09/23/08	-	<0.0952	<0.0952	<0.0952	<0.0952	<0.00476	<0.00476	<0.00476	<0.0952	<0.00476	<0.00476	<0.00476	<0.0952	0.159	<0.00476	<0.0952	<0.0952	<0.0952
	01/07/09	-	<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
	03/19/09	-	<0.0962	<0.0962	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.0962	<0.00481	<0.0962	<0.0962	<0.0962
dup	03/19/09	-	<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
	09/17/09	-	<0.0971	<0.0971	<0.0971	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.0971	<0.00485	<0.0971	<0.0971	<0.0971
U-22C	06/25/08	-	<0.481[6]	0.977	<0.481[6]	<0.481[6]	<0.0962[6]	<0.00481	<0.00481	<0.0962	<0.00481	<0.0962[6]	<0.00481	<0.481[6]	2.90	<0.00481	<0.962[6]	0.387	<0.0962
U-23	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
	06/24/08	-	<0.476[6]	0.562	<0.476[6]	<1.43[6]	0.0129	0.00535	0.00596	<0.0952	<0.00476	0.0281	<0.00476	<0.190[6]	1.93	<0.00476	<1.43[6]	2.12	0.121
	09/23/08	-	<0.0952	<0.238[6]	<0.0952	<0.190[6]	0.00600	<0.00476	<0.00476	<0.0952	<0.00476	0.00973	<0.00476	<0.0952	0.926	<0.00476	<0.619[6]	0.314	<0.0952
	01/06/09	-	<0.483[6]	<0.483[6]	<0.483[6]	<0.483[6]	<0.0242	<0.00483	<0.00483	<0.0966	<0.00483	<0.0242	<0.00483	<0.483[6]	0.498	<0.00483	<0.483[6]	<0.725[6]	<0.483[6]
	03/19/09	-	<0.0985	<0.0985	<0.0985	<0.0985	<0.00493	<0.00493	<0.00493	<0.0985	<0.00493	<0.00493	<0.00493	<0.0985	<0.246	<0.00493	<0.0985	<0.0985	<0.148
	09/17/09	-	<0.388	<0.388	<0.388	<0.583	0.0252	<0.0194	<0.0194	<0.388	<0.0194	0.0421	<0.0194	<0.388	1.04	<0.0194	<0.388	<0.583	<0.388

COP0017782

TABLE 3
GROUNDWATER ANALYTICAL RESULTS - PAH COMPOUNDS
Willbridge Terminals
Portland, Oregon

Well Identification	Date Sampled		1-Methyl-naphthalene	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-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	<0.0962	<0.00962	<0.0962	<0.0962	<0.0962
	06/24/08	-	<0.0962	<0.0962	<0.0962	<0.0962	0.00780	0.00770	<0.00481	<0.0962	<0.00481	0.00824	<0.00481	<0.0962	<0.0962	<0.0962	0.00501	<0.0962	<0.0962	<0.0962
	09/23/08	-	<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	<0.0952	<0.00476	<0.0952	<0.0952	<0.0952
	01/06/09	-	<0.0980	<0.0980	<0.0980	<0.0980	<0.00490	<0.00490	<0.00490	<0.0980	<0.00490	<0.00490	0.00784	<0.0980	<0.0980	<0.0980	0.00652	<0.0980	<0.0980	<0.0980
	03/19/09	-	<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	<0.0985	<0.00493	<0.0985	<0.0985	<0.0985
	09/17/09	-	<0.0971	<0.0971	<0.0971	<0.0971	<0.00485	0.00537	<0.00485	<0.0971	<0.00485	<0.00485	<0.00485	<0.00485	<0.0971	<0.0971	<0.00485	<0.0971	<0.0971	<0.0971
dup	09/17/09	-	<0.0971	<0.0971	<0.0971	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.00485	<0.00485	<0.00485	<0.00485	<0.0971	<0.0971	<0.00485	<0.0971	<0.0971	<0.0971
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	<0.00952	<0.0952	<0.0952	<0.00952	<0.0952	<0.0952	<0.0952
	06/25/08	-	<0.0971	<0.0971	<0.0971	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.00485	<0.00485	<0.00485	<0.00485	<0.0971	<0.0971	<0.00485	<0.0971	<0.0971	<0.0971
	09/24/08	-	<0.0962	<0.0962	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00481	<0.00481	<0.00481	<0.00481	<0.0962	<0.0962	<0.00481	<0.0962	<0.0962	<0.0962
	01/07/09	-	<0.0976	<0.0976	<0.0976	<0.0976	<0.00488	<0.00488	<0.00488	<0.0976	<0.00488	<0.00488	<0.00488	<0.00488	<0.0976	<0.0976	<0.00488	<0.0976	<0.0976	<0.0976
	03/19/09	-	<0.0976	<0.0976	<0.0976	<0.0976	<0.00488	<0.00488	<0.00488	<0.0976	<0.00488	<0.00488	<0.00488	<0.00488	<0.0976	<0.0976	<0.00488	<0.0976	<0.0976	<0.0976
dup	03/19/09	-	<0.0976	<0.0976	<0.0976	<0.0976	<0.00488	<0.00488	<0.00488	<0.0976	<0.00488	0.00527	<0.00488	<0.00488	<0.0976	<0.0976	<0.00488	<0.0976	<0.0976	<0.0976
	09/17/09	-	<0.0971	<0.0971	<0.0971	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.00485	<0.00485	<0.00485	<0.00485	<0.0971	<0.0971	<0.00485	<0.0971	<0.0971	<0.0971
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	<0.00962	<0.0962	<0.0962	<0.00962	<0.240	<0.0962	<0.0962
	06/24/08	-	<0.0952	0.0999	<0.0952	<0.0952	<0.00476	<0.00476	<0.00952[6]	<0.0952	<0.00952[6]	<0.00476	<0.00476	<0.00476	<0.0952	0.160	<0.00476	<0.667[6]	<0.0952	<0.0952
	09/24/08	-	<0.0962	<0.0962	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00481	<0.00481	<0.00481	<0.00481	<0.0962	<0.0962	<0.00481	<0.577[6]	<0.0962	<0.0962
	01/06/09	-	<0.0971	<0.0971	<0.0971	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.00485	<0.00485	<0.00485	<0.00485	<0.0971	0.155	<0.00485	1.36[6]	<0.0971	<0.0971
	03/19/09	-	<0.0962	<0.0962	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00481	0.00557	<0.00481	<0.0962	<0.0962	<0.0962	<0.00481	<0.0962	<0.0962	<0.0962
	09/17/09	-	<0.0971	0.144	<0.0971	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.00485	<0.00485	<0.00485	<0.00485	<0.0971	0.235	<0.00485	<0.291	<0.0971	<0.0971
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	<0.00962	<0.0962	<0.0962	<0.00962	<0.0962	<0.0962	<0.0962
	06/25/08	-	<0.0971	<0.0971	<0.0971	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.00485	<0.00485	<0.00485	<0.00485	<0.0971	<0.0971	<0.00485	<0.0971	<0.0971	<0.0971
	09/23/08	-	<0.0952	<0.0952	<0.0952	<0.0952	<0.00476	<0.00476	<0.00476	<0.0952	<0.00476	<0.00476	<0.00476	<0.00476	<0.0952	<0.0952	<0.00476	<0.0952	<0.0952	<0.0952
	01/07/09	-	<0.0976	<0.0976	<0.0976	<0.0976	<0.00488	<0.00488	<0.00488	<0.0976	<0.00488	<0.00488	<0.00488	<0.00488	<0.0976	<0.0976	<0.00488	<0.0976	<0.0976	<0.0976
	03/20/09	-	<0.0971	<0.0971	<0.0971	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.00485	<0.00485	<0.00485	<0.00485	<0.0971	<0.0971	<0.00485	<0.0971	<0.0971	<0.0971
	09/17/09	-	<0.0971	<0.0971	<0.0971	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.00485	<0.00485	<0.00485	<0.00485	<0.0971	<0.0971	<0.00485	<0.0971	<0.0971	<0.0971
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	<0.00962	<0.0962	<0.0962	<0.00962	<0.0962	<0.0962	<0.0962
	06/25/08	-	<0.0971	<0.0971	<0.0971	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.00485	<0.00485	<0.00485	<0.00485	<0.0971	<0.0971	<0.00485	<0.0971	<0.0971	<0.0971
	09/23/08	-	<0.0952	<0.0952	<0.0952	<0.0952	<0.00476	<0.00476	<0.00476	<0.0952	<0.00476	<0.00476	<0.00476	<0.00476	<0.0952	<0.0952	<0.00476	<0.0952	<0.0952	<0.0952
	01/07/09	-	<0.0976	<0.0976	<0.0976	<0.0976	<0.00488	<0.00488	<0.00488	<0.0976	<0.00488	<0.00488	<0.00488	<0.00488	<0.0976	<0.0976	<0.00488	<0.0976	<0.0976	<0.0976
	03/20/09	-	<0.0971	<0.0971	<0.0971	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.00485	<0.00485	<0.00485	<0.00485	<0.0971	<0.0971	<0.00485	<0.0971	<0.0971	<0.0971
	09/17/09	-	<0.0962	<0.0962	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00481	<0.00481	<0.00481	<0.00481	<0.0962	<0.0962	<0.00481	<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	<0.00962	<0.0962	<0.0962	<0.00962	<0.0962	<0.0962	<0.0962
	06/25/08	-	<0.0962	<0.0962	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00481	<0.00481	<0.00481	<0.00481	<0.0962	<0.0962	<0.00481	<0.0962	<0.0962	<0.0962
	09/24/08	-	<0.0962	<0.0962	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00481	<0.00481	<0.00481	<0.00481	<0.0962	<0.0962	<0.00481	<0.0962	<0.0962	<0.0962
	01/07/09	-	<0.0943	<0.0943	<0.0943	<0.0943	<0.00472	<0.00472	<0.00472	<0.0943	<0.00472	<0.00472	<0.00472	<0.00472	<0.0943	<0.0943	<0.00472	<0.0943	<0.0943	<0.0943
	03/20/09	-	<0.0962	<0.0962	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00481	<0.00481	<0.00481	<0.00481	<0.0962	<0.0962	<0.00481	<0.0962	<0.0962	<0.0962
	09/17/09	-	<0.0962	<0.0962	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00481	<0.00481	<0.00481	<0.00481	<0.0962	<0.0962	<0.00481	<0.0962	<0.0962	<0.0962
U-29A	03/20/09	-	105	18.4	<9.95	<14.9	1.08	0.792	<0.597	4.80	<0.199	2.35	0.541	<9.95	42.8	0.436	<9.95	62.4	24.9	
	09/17/09	-	63.9	<10.1	<10.1	<10.1	0.330	0.226	<0.152	1.50	<0.0505	0.788	0.151	<10.1	13.7	0.116	<10.1	19.0	4.73	
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	
	06/25/08	-	0.224	<0.0962	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.0962	<0.00481	<0.0962	<0.0962	<0.0962	
	09/24/08	-	0.230	0.103	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00481	0.00683	<0.00481	<0.0962	0.145	<0.00481	<0.144[6]	<0.0962	<0.0962	
dup	09/24/08	-	0.457	0.110	<0.0962	<0.0962	0.00917	0.0111	0.00688	<0.0962	0.00647	0.0126	<0.00481	<0.0962	0.157	0.00651	<0.144[6]	0.107	<0.0962	
	01/07/09	-	0.413	<0.0976	<0.0976	<0.0976	<0.00488	<0.00488	<0.00488	<0.0976	<0.00488	<0.00488	<0.00488	<0.0976	0.116	<0.00488	<0.146[6]	0.104	<0.0976	
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	<0.0962	<0.00962	<0.0962	<0.0962	<0.0962
	06/25/08	-	<0.0952	<0.0952	<0.0952	<0.0952	<0.00476	<0.00476	<0.00476	<0.0952	<0.00476	0.00483	<0.00476	<0.0952	<0.0952	<0.0952	<0.00476	<0.0952	<0.0952	<0.0952
	09/23/08	-	<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	<0.0952	<0.00476	<0.0952	<0.0952	<0.0952
	01/07/09	-	<0.0985	<0.0985	<0.0985	<0.0985	<0.00493	<0.00493	<0.00493	<0.0985	<0.00493	0.00531	<0.00493	<0.0985	<0.0985	<0.0985	<0.00493	<0.0985	<0.0985	<0.0985

COP0017783

TABLE 3
GROUNDWATER ANALYTICAL RESULTS - PAH COMPOUNDS
Willbridge Terminals
Portland, Oregon

Well Identification	Date Sampled	1-Methyl-naphthalene	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
NA = Not available
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

COP0017784

TABLE 4
GROUNDWATER ANALYTICAL RESULTS - TOTAL METALS
Willbridge Terminals
Portland, Oregon

Sample I.D.	Sample Date	Arsenic (µg/l)	Barium (µg/l)	Cadmium (µg/l)	Chromium (µg/l)	Copper (µg/l)	Lead (µg/l)	Manganese (µg/l)	Mercury (µg/l)	Selenium (µg/l)	Silver (µg/l)	Zinc (µg/l)
CHEVRON												
B-7	02/18/00	28.0	122	1.07	6.60	13.4	4.25	NA	ND	1.25	ND	23.4
	05/23/00	26.8	228	ND	26.4	44.1	11.5	NA	ND	1.93	ND	86.3
dup	05/23/00	27.6	259	ND	30.4	51	13.7	NA	ND	2.11	ND	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	31.0	71.9	ND	ND	3.11	ND	NA	ND	ND	ND	5.13
	05/17/01	36.4	58.7	ND	ND	1.57	ND	NA	ND	ND	ND	ND
	03/20/03	27.5	64.2	ND	ND	20.9	ND	NA	ND	ND	ND	ND
	09/29/03	30.4	81.5	ND	2.78	6.08	1.21	NA	ND	1.32	ND	7.82
	03/30/04	30.3	86.9	1.38	3.20	6.47	1.75	NA	<0.200	<1.00	<1.00	13.5
	03/09/05	34.2	110	<1.00	4.34	8.22	2.39	NA	<0.200	<2.00	<1.00	19.3
dup	03/09/05	33.8	108	<1.00	4.90	9.78	2.73	NA	<0.200	<2.00	<1.00	21.8
	09/22/05	36.3	85.7	<1.00	2.41	4.83	<1.00	NA	<0.200	<2.00	<1.00	7.87
	03/25/08	7.99	-	<0.380	1.41	9.47	<0.540	4,110	<0.200	<5.00	<0.120	<33.0
	06/24/08	24.7	73.2	<0.500	2.05	4.28	0.875	2,820	<0.200	<0.500	<1.00	9.48
	09/23/08	22.0	117	<0.500	8.56	13.9	3.02	2,970	<0.200	0.460	<1.00	26.7
dup	09/23/08	19.1	103	<0.500	7.49	12.3	2.53	2,780	<0.200	0.411	<1.00	23.2
	01/06/09	20.6	90.9	0.100	5.14	7.53	1.78	3,140	<0.200	0.130	<1.00	17.3
	03/18/09	7.89	41.7	<2.50	<2.00	7.80	<1.00	1,760	0.0496	<2.50	<1.00	11.9
B-9	05/23/00	17.7	139	ND	17.6	28.6	8.48	NA	ND	1.23	ND	61.6
	08/25/00	11.6	53.4	ND	2.70	7.50	2.14	NA	ND	ND	ND	22.8
	11/30/00	10.8	153	1.49	15.9	35.4	11.4	NA	ND	1.25	ND	82.3
	02/22/01	17.3	46.0	ND	ND	2.13	ND	NA	ND	1.27	ND	ND
	05/17/01	20.8	70.6	ND	4.44	6.34	2.41	NA	ND	ND	ND	16.1
	09/19/01	16.1	75.3	ND	2.56	9.93	2.66	NA	ND	ND	ND	13.6
	03/21/02	10.5	48.8	ND	2.57	6.83	3.98	NA	ND	ND	ND	50.6
	09/24/02	18.5	46.9	ND	ND	ND	ND	NA	ND	ND	ND	ND
	03/20/03	9.92	40.1	ND	1.65	4.21	3.17	NA	ND	ND	ND	28.3
	09/30/03	9.05	137	1.36	8.12	28.5	15.5	NA	ND	ND	ND	53.2
	03/30/04	38.4	349	3.82	39.5	99.1	46.7	NA	<0.200	1.47	<1.00	331
	03/08/05	30.5	59.2	<1.00	<1.00	<2.00	<1.00	NA	<0.200	<2.00	<1.00	7.59
	06/22/05	26.8	48.1	<1.00	<1.00	2.25	<1.00	NA	<0.200	<2.00	<1.00	18.7
	09/21/05	33.8	57.9	<1.00	<1.00	<2.00	<1.00	NA	<0.200	<2.00	<1.00	6.48
	09/26/06	29.8	70.8	<1.00	<1.00	3.15	2.18	NA	<0.200	<1.00	<1.00	33.8
	03/22/07	19.8	72.4	0.352	5.75	16.5	26.8	2,430	0.00989	<1.60	<0.800	71.1

COP0017785

TABLE 4
GROUNDWATER ANALYTICAL RESULTS - TOTAL METALS
Willbridge Terminals
Portland, Oregon

Sample I.D.	Sample Date	Arsenic (µg/l)	Barium (µg/l)	Cadmium (µg/l)	Chromium (µg/l)	Copper (µg/l)	Lead (µg/l)	Manganese (µg/l)	Mercury (µg/l)	Selenium (µg/l)	Silver (µg/l)	Zinc (µg/l)
B-9A	09/19/07	7.60	341	<0.0752	54.5	63.8	24.0	2,280	<0.200	<1.60	0.138	177
	03/25/08	20.9	-	<0.380	14.0	21.8	11.5	3,260	<0.200	<5.00	<0.120	72.4
	06/24/08	17.4	262	<0.500	33.4	67.4	26.8	2,900	0.0754	0.722	<1.00	146
dup	06/24/08	18.3	328	<0.500	41.4	77.7	31.1	2,870	0.0884	0.645	<1.00	169
	09/23/08	4.72	104	<0.500	14.0	24.7	8.83	1,720	0.0162	0.385	<1.00	57.3
dup	09/23/08	4.70	114	<0.500	15.7	26.4	9.88	1,840	0.0108	0.311	<1.00	58.9
	01/06/09	1.90	51.6	<0.500	3.00	4.98	2.59	2,220	<0.200	<0.500	<1.00	11.6
dup	01/06/09	1.80	47.6	0.150	2.21	4.10	1.89	2,030	<0.200	0.120	<1.00	10.5
	03/24/09	5.45	45.1	<0.500	<10.0	7.70	3.64	1,270	0.00768	<0.500	<1.00	28.5
	09/22/09	2.21	59.2	<0.500	3.50	<10.0	2.28	2,480	0.00942	<0.500	<1.00	<25.0
dup	09/22/09	1.99	52.2	<0.500	2.55	<10.0	1.76	2,450	0.00579	<0.500	<1.00	<25.0
B-10	02/18/00	36.7	337	0.840	35.5	57.2	20.2	NA	ND	0.53	0.190	96.5
dup	02/18/00	39.4	375	1.41	44.8	74.5	27.0	NA	ND	5.25	0.200	123
	05/23/00	35.4	211	ND	26.5	38.4	11.5	NA	ND	2.29	ND	63.1
	08/25/00	31.4	65.7	ND	1.99	3.66	1.41	NA	ND	1.05	ND	177
	11/30/00	30.7	94.6	ND	5.90	8.00	2.57	NA	ND	1.31	ND	16.5
	02/23/01	32.3	61.1	ND	ND	ND	ND	ND	ND	1.84	ND	ND
	05/17/01	39.5	56.7	ND	ND	ND	ND	ND	ND	ND	ND	ND
	09/19/01	23.4	194	ND	24.9	46.6	16.1	NA	ND	1.04	ND	79.3
	03/21/02	30.1	64.4	ND	ND	ND	ND	NA	ND	ND	ND	ND
	09/24/02	29.0	60.7	ND	ND	ND	ND	NA	ND	ND	ND	ND
	03/20/03	32.7	62.0	ND	ND	ND	ND	NA	ND	ND	ND	ND
	09/29/03	33.7	82.0	ND	2.85	4.41	2.17	NA	ND	1.65	ND	13.2
	03/30/04	33.2	128	<1.00	10.0	16.2	7.83	NA	<0.200	<1.00	<1.00	40.2
	03/08/05	39.5	88.1	<1.00	2.31	3.59	3.05	NA	<0.200	<2.00	<1.00	11.1
	09/21/05	36.9	64.1	<1.00	<1.00	<2.00	<1.00	NA	<0.200	<2.00	<1.00	<5.00
	03/14/06	36.6	65.9	<1.00	<1.00	<2.00	<1.00	NA	<0.200	<2.00	<1.00	<5.00
	09/26/06	27.4	90.2	0.080	2.27	<1.60	1.55	NA	<5.00	<10.0	<0.0960	10.3
	03/21/07	28.6	80.8	0.080	3.39	4.35	2.15	4,290	0.00618	<1.60	<0.0960	14.2
dup	03/21/07	31.0	87.7	0.104	4.50	5.81	2.90	3,950	0.00833	<1.60	<0.0960	16.9
	09/18/07	36.0	84.3	<0.0752	3.16	5.91	1.87	4,660	<0.200	<1.60	<0.0970	15.1
	03/25/08	32.4	-	<0.380	<1.00	<2.70	<0.540	3,860	<0.200	<5.00	<0.120	<33.0
	09/23/08	32.7	76.4	<5.00	<20.0	<20.0	<10.0	4,340	0.00117	<5.00	<10.0	11.7
	03/24/09	32.2	123	<0.500	<20.0	9.58	3.90	4,570	0.0505	<0.500	<1.00	30.5
dup	03/24/09	32.2	166	<0.500	<20.0	22.1	7.22	4,670	0.0225	<0.500	<1.00	48.2
	09/22/09	31.8	83.5	<0.500	3.06	<10.0	1.26	4,530	<0.00500	<0.500	<1.00	<25.0

COP0017786

TABLE 4
GROUNDWATER ANALYTICAL RESULTS - TOTAL METALS
Willbridge Terminals
Portland, Oregon

Sample I.D.	Sample Date	Arsenic (µg/l)	Barium (µg/l)	Cadmium (µg/l)	Chromium (µg/l)	Copper (µg/l)	Lead (µg/l)	Manganese (µg/l)	Mercury (µg/l)	Selenium (µg/l)	Silver (µg/l)	Zinc (µg/l)
B-11	02/18/00	38.6	985	4.08	130	214	95.9	NA	ND	3.4	0.470	356
	05/23/00	21.9	236	ND	25.8	40.7	17.2	NA	ND	2.33	ND	73.2
	08/25/00	29.2	80.9	ND	5.43	7.65	3.98	NA	ND	ND	ND	27.3
	11/30/00	27.7	113	ND	9.86	12.7	5.75	NA	ND	1.46	ND	28.8
	02/22/01	23.4	57.3	ND	ND	ND	ND	NA	ND	ND	ND	ND
	05/17/01	29.1	55.3	ND	ND	ND	ND	NA	ND	ND	ND	ND
	03/30/04	24.1	115	1.64	9.04	15.2	8.96	NA	<0.200	<1.00	<1.00	31.5
	03/09/05	26.5	97.2	2.08	5.34	9.43	6.15	NA	<0.200	<2.00	<1.00	26.1
	06/22/05	26.9	106	<1.00	9.78	12.3	5.43	NA	<0.200	<2.00	<1.00	25.8
	09/21/05	30.8	60.3	<1.00	1.82	3.13	1.66	NA	<0.200	<2.00	<1.00	7.32
	06/25/08	16.7	119	0.521	3.60	5.27	3.65	7,450	<0.200	0.251	<1.00	17.9
B-14	02/18/00	36.7	297	0.600	29.0	53	40.3	NA	0.095	1.34	0.160	87.4
	05/23/00	32.7	155	ND	15.20	26.4	18.6	NA	ND	1.68	ND	42.1
	08/25/00	30.0	77.4	ND	1.75	3.39	5.68	NA	ND	1.13	ND	20.7
	11/30/00	29.2	72.4	ND	ND	ND	3.26	NA	ND	1.24	ND	ND
	02/22/01	29.9	60.3	ND	ND	2.02	1.02	NA	ND	1.04	ND	6.96
	05/17/01	37.3	55.3	ND	ND	ND	ND	NA	ND	ND	ND	ND
B-19	03/20/03	45.3	69.3	ND	ND	ND	ND	NA	ND	ND	ND	ND
	09/29/03	40.4	208	ND	20.3	29.7	9.09	NA	0.234	ND	ND	57.7
	03/29/04	43.5	104	<1.00	4.87	8.31	2.79	NA	<0.200	<1.00	<1.00	19.2
	03/09/05	40.7	210	<1.00	18.1	30.7	9.18	NA	<0.200	<2.00	<1.00	54.5
	06/22/05	47.8	223	<1.00	26.5	37	9.22	NA	<0.200	<2.00	<1.00	63.3
	09/22/05	48.1	101	<1.00	3.47	5.98	1.59	NA	<0.200	<2.00	<1.00	10.5
	03/14/06	52.3	113	<1.00	3.91	5.68	1.67	NA	<0.200	<2.00	<1.00	11.7
	06/26/08	36.7	135	0.388	10.0	16.2	6.05	4,110	<0.200	0.146	<1.00	32.0
	03/18/09	39.8	162	<5.00	14.0	18.2	4.84	4,590	0.0170	<5.00	<1.00	35.1
dup	03/18/09	40.7	214	<5.00	22.2	31.3	8.40	4,110	0.0590	<5.00	<1.00	56.0

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TABLE 4
GROUNDWATER ANALYTICAL RESULTS - TOTAL METALS
Willbridge Terminals
Portland, Oregon

Sample I.D.	Sample Date	Arsenic (µg/l)	Barium (µg/l)	Cadmium (µg/l)	Chromium (µg/l)	Copper (µg/l)	Lead (µg/l)	Manganese (µg/l)	Mercury (µg/l)	Selenium (µg/l)	Silver (µg/l)	Zinc (µg/l)
B-20	03/20/03	10.7	45.9	ND	1.09	3.89	ND	NA	ND	ND	ND	5.01
	09/29/03	130	4,350	49.4	808	1,140	643	NA	0.934	8.40	ND	3960
	03/30/04	1.65	41.7	<1.00	1.84	5.08	1.21	NA	<2.00	<1.00	<1.00	9.10
	03/09/05	36.0	79.5	<1.00	1.13	2.12	<1.00	NA	<0.200	<2.00	<1.00	<5.00
	09/22/05	37.4	69.1	<1.00	<1.00	<2.00	<1.00	NA	<0.200	<2.00	<1.00	<5.00
	03/25/08	8.01	-	<0.380	<1.00	<2.70	<0.540	3,010	<0.200	<5.00	<0.120	<33.0
B-21	09/19/01	30.6	107	ND	8.33	10.7	3.22	NA	ND	ND	ND	25.9
	03/21/02	40.5	66.2	ND	ND	ND	ND	NA	ND	ND	1.09	8.52
	09/24/02	41.2	69.5	ND	ND	ND	ND	NA	ND	ND	ND	ND
	03/20/03	74.0	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND
	09/29/03	47.4	75.9	ND	ND	ND	ND	NA	ND	ND	ND	ND
	03/29/04	46.9	132	<1.00	9.84	14.1	4.78	NA	<2.00	<1.00	<1.00	34
	03/08/05	55.9	179	<1.00	14.3	18.8	5.35	NA	<0.200	<2.00	<1.00	37.4
	09/22/05	55.4	88.4	<1.00	<1.00	<2.00	<1.00	NA	<0.200	<2.00	<1.00	<5.00
	03/15/06	53.1	86.6	<1.00	1.02	<2.00	<1.00	NA	<0.200	<2.00	<1.00	<5.00
	09/26/06	43.2	85.4	<1.00	<1.00	<1.00	<1.00	NA	<0.200	<1.00	<1.00	<10.0
	03/21/07	39.0	94.7	0.088	2.13	3.62	2.62	2,760	0.0144	<1.60	<0.0960	13.6
	09/19/07	43.0	130	<0.800	8.80	10.8	3.78	2,740	<0.200	<1.60	<0.800	18.5
	03/26/08	41.2	77.0	<0.380	2.09	3.87	2.00	2,510	0.444	<5.00	<0.120	<33.0
	09/23/08	43.4	72.9	<0.500	1.63	4.16	1.39	3,100	0.0186	0.198	<1.00	8.22
	03/24/09	44.1	153	<0.500	<20.0	13.6	6.07	3,320	0.0879	<0.500	<1.00	34.3
	09/22/09	39.1	70.4	<0.500	<2.00	<10.0	<1.00	3,540	<0.00500	<0.500	<1.00	<25.0
B-26	03/30/04	3.45	232	30.5	22.0	48.5	41.5	NA	<0.200	<1.00	<1.00	140
	03/09/05	34.5	85.2	4.11	2.74	8.01	6.96	NA	<0.200	<2.00	<1.00	17.6
	06/22/05	39.7	146	13.0	15.2	31.9	20.8	NA	<0.200	<2.00	<1.00	68.9
	09/22/05	35.1	81.2	6.01	3.20	10.3	7.54	NA	<0.200	<2.00	<1.00	26.1
	06/26/08	34.6	102	4.02	6.21	14.1	13.5	4,060	<0.200	0.113	<1.00	219

COP0017788

TABLE 4
GROUNDWATER ANALYTICAL RESULTS - TOTAL METALS
Willbridge Terminals
Portland, Oregon

Sample I.D.	Sample Date	Arsenic (µg/l)	Barium (µg/l)	Cadmium (µg/l)	Chromium (µg/l)	Copper (µg/l)	Lead (µg/l)	Manganese (µg/l)	Mercury (µg/l)	Selenium (µg/l)	Silver (µg/l)	Zinc (µg/l)
B-28	02/18/00	12.2	422	3.68	43.7	104	49.6	NA	0.088	1.56	0.250	165
	05/23/00	9.56	245	1.44	25.8	46.8	20.5	NA	ND	2.77	ND	91.3
	08/25/00	5.30	120	ND	8.25	15.2	5.65	NA	ND	1.34	ND	50.4
	11/30/00	17.9	459	ND	42.1	64	30.3	NA	ND	2.71	ND	149
	02/23/01	7.56	131	ND	8.96	14.2	5.55	NA	ND	1.81	ND	36.3
	05/17/01	5.61	91.4	ND	4.98	7.37	2.72	NA	ND	1.99	ND	20.0
	09/20/01	43.4	82.1	ND	1.66	5.46	ND	NA	ND	1.09	ND	7.82
	03/21/02	4.07	69.2	ND	3.11	11.5	2.92	NA	ND	ND	ND	14.8
	09/24/02	2.98	51.9	ND	ND	ND	ND	NA	ND	2.44	ND	ND
	03/20/03	2.20	48.9	ND	ND	ND	ND	NA	ND	1.64	ND	ND
	09/30/03	21.9	483	1.73	57.2	109	40.4	NA	ND	ND	ND	205
	03/29/04	6.00	111	1.18	9.42	28.7	8.52	NA	<0.200	<1.00	<1.00	34.1
	09/21/05	5.08	83.8	<1.00	3.64	9.80	2.68	NA	<0.200	<2.00	<1.00	17.9
	03/14/06	6.40	192	2.87	31.6	139	172	NA	<0.200	<2.00	<1.00	451
	09/28/06	3.96	88.0	<1.00	4.17	45.1	3.7	NA	<0.200	<2.00	<1.00	20.1
	09/18/07	2.77	53.0	0.228	<0.800	2.88	0.989	1,270	<0.200	<1.60	<0.0970	7.12
	03/25/08	4.46	108	1.52	4.90	68.1	6.75	1,200	<0.200	<5.00	<0.120	<33.0
	09/23/08	4.74	152	2.05	8.20	80.6	13.6	1,370	0.0841	1.73	<10.0	51.5
	03/24/09	3.60	90.2	1.20	5.70	42.0	8.43	1,220	0.0613	<0.500	<1.00	23.0
	09/22/09	7.54	249	2.43	19.9	144	21.4	1,470	0.0719	<0.500	<1.00	101
B-29	09/20/01	11.0	292	ND	28.6	53.1	26.4	NA	ND	3.85	ND	122
	03/21/02	1.26	60.0	ND	ND	3.72	ND	NA	ND	ND	ND	7.1
	09/24/02	ND	60.1	ND	ND	ND	ND	NA	ND	1.03	1.02	ND
	03/20/03	ND	59.3	ND	ND	2.63	ND	NA	ND	1.43	ND	ND
	09/30/03	3.32	322	13.3	29.5	167	28	NA	ND	ND	ND	125
	03/29/04	5.28	367	20.6	29.3	162	45.7	NA	<0.200	<1.00	<1.00	146
	09/21/05	3.08	193	2.90	15.9	58.7	12.7	NA	<0.200	<2.00	<1.00	72
	03/14/06	1.26	98.6	<1.00	2.34	8.34	3.52	NA	<0.200	<2.00	<1.00	13.6
	09/28/06	<1.00	64.1	<1.00	<1.00	12.2	<1.00	NA	<0.200	<2.00	<1.00	13.2
	03/22/07	1.55	156	3.46	11.00	88.2	12.2	3,470	<0.00500	<1.60	<0.800[6]	36.7[7]
	09/18/07	1.62	120	3.09	7.09	95.4	6.29	3,890	<0.200	<1.60	<0.0970	42.9
	03/25/08	0.920	62.9	<0.380	<1.00	<2.70	<0.540	2,790	<0.200	<5.00	<0.120	<33.0
	09/23/08	<10.0	117	1.46	5.34	36.1	17.9	4,950	0.00930	2.46	<10.0	84.2
	03/24/09	3.72	302	10.6	24.1	246	27.1	5,000	0.0664	<0.500	<1.00	170
	09/22/09	<1.00	87.8	1.11	2.46	42.4	2.83	4,530	0.0158	<0.500	<1.00	<25.0

COP0017789

TABLE 4
GROUNDWATER ANALYTICAL RESULTS - TOTAL METALS
Willbridge Terminals
Portland, Oregon

Sample I.D.	Sample Date	Arsenic (µg/l)	Barium (µg/l)	Cadmium (µg/l)	Chromium (µg/l)	Copper (µg/l)	Lead (µg/l)	Manganese (µg/l)	Mercury (µg/l)	Selenium (µg/l)	Silver (µg/l)	Zinc (µg/l)
B-30	02/18/00	18.5	327	35.5	26.90	67.1	48.2	NA	ND	2.65	0.210	238
	05/23/00	14.1	117	9.78	9.04	71.3	10.8	NA	ND	2.67	ND	52.7
	08/25/00	22.1	49.7	14.6	1.53	17.6	4.49	NA	ND	ND	ND	63.2
	11/30/00	17.5	51.3	ND	ND	ND	ND	NA	ND	1.03	ND	11.6
	02/23/01	14.4	70.4	ND	ND	ND	ND	NA	ND	ND	ND	ND
dup**	02/23/01	14.0	67.0	ND	ND	ND	ND	NA	ND	ND	ND	ND
	05/17/01	17.7	47.7	ND	ND	ND	ND	NA	ND	1.75	ND	ND
	09/20/01	2.11	82.5	1.67	3.47	20.8	16.1	NA	ND	1.90	ND	30.8
dup	09/20/01	13.8	56.4	ND	ND	2.18	ND	NA	ND	1.10	ND	ND
	03/21/02	17.7	43.8	8.23	1.11	5.33	2.27	NA	ND	ND	1.00	19.1
dup	03/21/01	21.0	48.9	3.02	1.42	6.98	4.58	NA	ND	ND	ND	22.0
	09/24/02	12.6	49.5	ND	ND	ND	ND	NA	ND	1.97	1.26	ND
	03/20/03	15.8	48.3	ND	ND	ND	ND	NA	ND	ND	ND	ND
dup*	03/20/03	14.4	48.6	ND	ND	ND	ND	NA	ND	ND	ND	ND
	09/30/30	23.8	193	22.1	19.5	63.1	39.2	NA	ND	ND	ND	159
dup***	09/30/30	26.7	276	30.1	26.8	84.2	57.4	NA	ND	ND	ND	211
	03/29/04	18.3	52.9	2.29	1.06	4.05	3.30	NA	<0.200	<1.00	<1.00	7.52
	09/21/05	17.9	56.7	1.80	<1.00	5.01	3.32	NA	<0.200	<2.00	<1.00	11.3
dup****	09/21/05	17.7	54.4	<1.00	1.17	3.84	2.94	NA	<0.200	<2.00	<1.00	10.6
	03/14/06	20.6	66.8	<1.00	<1.00	2.69	2.02	NA	<0.200	<2.00	<1.00	5.57
dup	03/14/06	20.4	69.2	1.02	1.03	3.23	2.55	NA	<0.200	<2.00	<1.00	7.50
	09/28/06	16.4	58.0	<1.00	<1.00	<2.00	2.02	NA	<0.200	<2.00	<1.00	9.10
	03/22/07	13.6	72.5	0.800	2.83	7.19	3.08	2,100	0.0235	<2.00	<0.800[6]	14.6
	09/18/07	21.1	51.1	0.394	0.94	5.31	1.55	3,170	<0.200	<2.00	<0.0970	8.93
dup	09/18/07	19.2	51.7	0.280	0.97	5.33	1.84	3,390	<0.200	<2.00	<0.0970	8.92
B-32	03/20/03	3.67	42.9	ND	1.10	ND	ND	NA	ND	ND	ND	ND
	09/29/03	122	6,840	17.0	1,040	1,640	1,150	NA	0.754	19.0	ND	3,740
	03/29/04	9.17	434	2.02	61.5	108	38.7	NA	0.221	22.4	<1.00	215
	03/09/05	7.80	128	<1.00	-	18.0	6.80	NA	<0.200	2.03	<1.00	39.4
	09/22/05	10.0	227	<1.00	23.0	33.6	11.8	NA	<0.200	<2.00	<1.00	73.7
	03/15/06	6.84	82.3	<1.00	3.16	5.51	2.22	NA	<0.200	<2.00	<1.00	11.0

TABLE 4
GROUNDWATER ANALYTICAL RESULTS - TOTAL METALS
Willbridge Terminals
Portland, Oregon

Sample I.D.	Sample Date	Arsenic (µg/l)	Barium (µg/l)	Cadmium (µg/l)	Chromium (µg/l)	Copper (µg/l)	Lead (µg/l)	Manganese (µg/l)	Mercury (µg/l)	Selenium (µg/l)	Silver (µg/l)	Zinc (µg/l)
B-33	03/20/03	4.83	43.0	ND	4.37	11.4	12.4	NA	ND	ND	ND	22.3
	09/30/03	34.2	242	6.99	71.1	248	128	NA	ND	1.24	ND	385
	03/30/04	15.5	199	8.30	45.1	164	110	NA	<2.00	<1.00	<1.00	389
	03/09/05	26.4	175	1.06	34.2	66.8	51.3	NA	<0.200	2.04	<1.00	157
	06/22/05	15.6	140	<1.00	22.1	56.0	26.4	NA	<0.200	<2.00	<1.00	99.8
	09/22/05	23.7	111	<1.00	9.16	25.0	10.9	NA	<0.200	<2.00	<1.00	48.4
	03/15/06	5.79	49.4	<1.00	2.61	6.65	4.41	NA	<0.200	<2.00	<1.00	68.3
	06/26/08	33.9	92.5	0.386	6.21	16.3	10.1	3,460	<0.200	0.093	<1.00	246
	03/18/09	61.7	245	<5.00	39.2	116	70.1	4,380	0.110	<5.00	<1.00	2,520
CR-1	09/21/01	14.3	60.6	ND	2.03	4.68	2.83	NA	ND	1.18	ND	8.46
	03/21/02	1.73	18.8	ND	1.13	3.97	ND	NA	ND	ND	ND	16.3
	09/24/02	2.04	27.4	ND	ND	ND	ND	NA	ND	ND	ND	6.09
	03/20/03	11.9	30.0	ND	1.56	11.2	2.11	NA	ND	ND	ND	17.9
	09/30/03	8.32	47.9	ND	2.49	8.36	3.91	NA	ND	1.89	ND	13.9
	03/30/04	2.10	261	5.83	22.0	53.5	67.6	NA	<0.200	<1.00	<1.00	212
	03/08/05	1.67	24.5	<1.00	<1.00	2.62	<1.00	NA	<0.200	<2.00	<1.00	10.2
	09/21/05	3.25	21.5	<1.00	<1.00	2.31	<1.00	NA	<0.200	<2.00	<1.00	<5.00
	09/27/06	1.94	20.7	0.144	<0.800	2.77	0.440	NA	<5.00	<2.00	<0.0960	10.9
	03/22/07	0.912	12.2	<0.0752	<0.800	3.92	<0.432[6]	185	<0.00500	<1.60	<0.800[6]	9.58
	09/20/07	1.41	20.1	<0.800	<0.800	<1.60	<0.800	862	<0.200	<1.60	<0.800	<4.00
	03/25/08	0.510	12.8	<0.380	<1.00	3.40	<0.540	76.1	<0.200	<5.00	<0.120	<33.0
	09/24/08	3.47	19.8	<0.500	1.17	3.97	1.19	595	0.00198	<0.500	<1.00	13.3
	03/25/09	<1.00	12.1	<0.500	<2.00	<2.00	<1.00	127	<0.00500	<0.500	<1.00	7.68
	09/22/09	1.24	13.2	<0.500	<2.00	68.2	<1.00	560	<0.00500	<0.500	<1.00	74.8

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TABLE 4
GROUNDWATER ANALYTICAL RESULTS - TOTAL METALS
Willbridge Terminals
Portland, Oregon

Sample I.D.	Sample Date	Arsenic (µg/l)	Barium (µg/l)	Cadmium (µg/l)	Chromium (µg/l)	Copper (µg/l)	Lead (µg/l)	Manganese (µg/l)	Mercury (µg/l)	Selenium (µg/l)	Silver (µg/l)	Zinc (µg/l)
CR-3	03/09/05	15.6	414	2.83	23.9	59.1	41.0	NA	<0.200	<2.00	<1.00	216
	06/22/05	25.9	431	2.06	41.4	70.8	50.4	NA	<0.200	<2.00	<1.00	218
	09/22/05	1.91	28.0	<1.00	<1.00	3.46	1.23	NA	<0.200	<2.00	<1.00	7.06
	06/26/08	1.13	27.4	0.109	0.876	1.37	1.40	463	<0.200	<0.500	<1.00	11.7
	09/26/08	1.82	44.1	<0.500	3.63	6.21	4.38	594	<0.200	0.267	<1.00	18.4
CR-8	02/18/00	82.7	762	3.45	57.8	127	99.7	NA	ND	3.21	0.370	404
	05/23/00	25.6	342	3.12	22.8	68.4	36.5	NA	ND	2.04	ND	155
	08/25/00	20.3	105	ND	6.97	15.1	10.1	NA	ND	ND	ND	44.2
	11/30/00	16.7	89.0	ND	5.65	14.9	7.81	NA	ND	1.58	ND	33.1
	02/22/01	21.5	116	ND	4.85	12.3	6.66	NA	ND	ND	ND	28.8
	05/16/01	13.5	37.4	ND	1.28	2.31	1.47	NA	ND	ND	ND	ND
CR-9	02/18/00	16.7	236	0.26	19.4	28.6	15.6	NA	ND	1.87	0.100	76.9
	05/23/00	2.98	41.3	ND	3.00	3.81	1.88	NA	ND	1.12	ND	8.93
	08/25/00	1.60	30.5	ND	ND	1.43	ND	NA	ND	ND	ND	ND
dup	08/25/00	1.60	30.5	ND	ND	1.7	ND	NA	ND	ND	ND	16.5
	11/30/00	1.62	22.2	ND	ND	ND	ND	NA	ND	2.83	ND	5.03
dup	11/30/00	ND	22.2	ND	ND	ND	ND	NA	ND	1.14	ND	ND
	02/22/01	ND	23.5	ND	ND	ND	ND	NA	ND	ND	ND	ND
	05/16/01	1.42	29.1	ND	ND	2.46	ND	NA	ND	ND	ND	ND
	05/16/01	1.45	33.9	ND	1.51	2.05	ND	NA	ND	ND	ND	ND
CR-11	02/18/00	65.6	440	5.59	25.2	57.1	29.6	NA	ND	4.53	0.140	123
	05/23/00	49.3	382	6.59	35.8	68.5	39.1	NA	ND	3.21	ND	168
	08/25/00	63.1	83.4	ND	1.01	3.25	1.37	NA	ND	1.83	ND	17.9
	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	53.6	126	ND	1.04	3.56	ND	NA	ND	3.24	ND	7.84
	05/16/01	58.7	111	ND	3.62	6.28	3.14	NA	ND	2.43	ND	19.3
CR-26	03/09/05	143	319	<1.00	18.2	22.9	10.9	NA	<0.200	2.09	<1.00	67.0
	06/22/05	157	212	<1.00	5.99	6.61	2.68	NA	<0.200	<2.00	<1.00	17.5
	09/22/05	210	164	<1.00	<1.00	<2.00	<1.00	NA	<0.200	<2.00	<1.00	<5.00
	03/25/08	134	-	<0.380	27.9	37.4	22.0	7,060	<0.200	<5.00	0.180	97.3
	06/24/08	158	148	<0.500	0.500	0.743	0.791	6,900	<0.200	0.389	<1.00	7.77
	09/23/08	152	137	0.153	0.531	1.32	0.351	7,010	<0.200	0.954	<1.00	2.89
	01/06/09	136	260	0.170	14.8	15.6	8.35	7,840	<0.200	0.170	<1.00	49.4

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TABLE 4
GROUNDWATER ANALYTICAL RESULTS - TOTAL METALS
Willbridge Terminals
Portland, Oregon

Sample I.D.	Sample Date	Arsenic (µg/l)	Barium (µg/l)	Cadmium (µg/l)	Chromium (µg/l)	Copper (µg/l)	Lead (µg/l)	Manganese (µg/l)	Mercury (µg/l)	Selenium (µg/l)	Silver (µg/l)	Zinc (µg/l)
CR-27C	03/25/08	7.02	-	<0.380	<1.00	<2.70	1.07	470	<0.200	<5.00	<0.120	<33.0
[8]	03/25/08	7.25	-	<0.380	<1.00	<2.70	<0.540	489	<0.200	<5.00	<0.120	<33.0
	06/24/08	7.70	97.7	<0.500	<2.00	0.795	0.606	560	<0.200	1.01	<1.00	6.55
[8]	06/24/08	7.26	86.7	0.076	<2.00	0.699	<1.00	589	<0.200	0.652	<1.00	6.55
	09/23/08	6.78	78.4	0.111	0.526	2.79	1.06	315	<0.200	1.20	<1.00	14.5
[8]	09/23/08	4.28	64.1	0.070	<2.00	1.50	<1.00	328	0.0435[5]	<0.500	<1.00	9.46
	01/06/09	7.42	91.1	0.120	1.18	1.60	2.20	446	<0.200	<0.500	<1.00	18.4
[8]	01/06/09	7.55	91.8	<0.500	<2.00	1.13	<1.00	498	<0.200	0.667	<1.00	12.9
CR-28A	06/25/08	32.0	340	0.746	37.6	64.5	67.5	4,480	0.106	0.588	0.221	132
[8]	06/25/08	25.5	60.6	<0.500	<2.00	0.457	5.57	3,520	<0.200	<0.500	<1.00	3.62
	09/25/08	26.8	291	<5.00	33.3	64.3	58.3	4,350	0.0906	<5.00	<10.0	139
[8]	09/25/08	24.9	50.2	<0.500	<2.00	0.689	5.49	3,480	<0.200	<0.500	<1.00	5.81
CR-28B	06/25/08	3.83	61.1	0.127	<2.00	<2.00	<1.00	3,630	<0.200	<0.500	<1.00	2.30
[8]	06/25/08	3.88	64.8	0.092	<2.00	2.82	<1.00	3,460	<0.200	<0.500	<1.00	4.41
	09/25/08	4.38	70.0	<5.00	<20.0	<20.0	<10.0	3,850	<0.200	<5.00	<10.0	<50.0
[8]	09/25/08	4.53	65.4	<0.500	<2.00	3.26	<1.00	3,860	<0.200	0.596	<1.00	9.64
CR-28C	06/25/08	0.491	121	0.539	0.45	1.74	1.76	246	<0.200	<0.500	<1.00	29.3
[8]	06/25/08	0.214	124	0.077	<2.00	1.33	<1.00	275	<0.200	<0.500	<1.00	11.4
	09/25/08	0.826	138	<0.500	<2.00	1.01	0.429	400	<0.200	0.939	<1.00	5.89
[8]	09/25/08	0.673	138	<0.500	<2.00	0.858	0.220	380	<0.200	0.542	<1.00	10.1
CR-29A	06/26/08	21.7	57.3	0.069	3.26	4.26	2.96	3,750	<0.200	0.0970	<1.00	13.0
[8]	06/26/08	23.4	35.9	<0.500	<2.00	0.902	<1.00	3,260	<0.200	0.151	<10.0	4.88
	09/25/08	33.2	214	<5.00	27.8	43.1	16.9	4,790	<0.200	1.49	<10.0	79.3
[8]	09/25/08	30.1	56.0	<0.500	<2.00	1.08	0.310	3,830	<0.200	<0.500	<1.00	5.06
CR-29B	06/26/08	8.23	109	0.179	3.40	5.72	3.93	4,500	<0.200	<0.500	<1.00	19.4
[8]	06/26/08	5.03	69.6	0.072	<2.00	2.28	<1.00	4,370	<0.200	0.598	<1.00	6.54
	09/25/08	15.7	213	<5.00	11.6	24.4	11.5	6,480	<0.200	0.900	<10.0	64.3
[8]	09/25/08	4.91	74.9	0.083	<2.00	1.04	0.233	5,400	<0.200	0.698	<1.00	6.75

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TABLE 4
GROUNDWATER ANALYTICAL RESULTS - TOTAL METALS
Willbridge Terminals
Portland, Oregon

Sample I.D.	Sample Date	Arsenic (µg/l)	Barium (µg/l)	Cadmium (µg/l)	Chromium (µg/l)	Copper (µg/l)	Lead (µg/l)	Manganese (µg/l)	Mercury (µg/l)	Selenium (µg/l)	Silver (µg/l)	Zinc (µg/l)
CR-30A	06/26/08	20.9	272	0.366	23.6	39.9	23.7	3,400	0.0924	0.364	<1.00	86.5
[8]	06/26/08	14.4	33.0	<0.500	<2.00	1.47	<1.00	2,220	<0.200	<0.500	<1.00	6.14
	09/24/08	19.1	104	<5.00	10.0	18.6	8.71	3,450	<0.200	1.00	<10.0	33.0
[8]	09/24/08	25.7	49.4	<0.500	<2.00	0.705	<1.00	3,280	<0.200	<0.500	<1.00	6.32
CR-30B	06/26/08	10.9	72.3	0.101	<2.00	<2.00	<1.00	6,020	<0.200	<0.500	<1.00	2.67
[8]	06/26/08	12.0	70.7	<0.500	<2.00	1.98	<1.00	6,510	<0.200	0.797	<1.00	5.09
	09/24/08	20.5	105	0.283	1.85	4.68	2.14	8,070	<0.200	1.38	<1.00	17.4
[8]	09/24/08	18.4	82.5	<0.500	<2.00	1.04	<1.00	7,650	0.101	0.663	<1.00	6.96
CR-31A	06/26/08	8.04	78.8	0.091	5.97	8.34	3.98	1,630	<0.200	0.0840	0.586	19.7
[8]	06/26/08	5.94	34.5	<0.500	<2.00	<2.00	<1.00	1,490	<0.200	0.894	<1.00	4.72
	09/24/08	20.3	66.1	<5.00	<20.0	5.97	<10.0	2,530	<0.200	<5.00	<10.0	11.4
[8]	09/24/08	19.1	51.2	<0.500	<2.00	0.341	<1.00	2,210	<0.200	<0.500	<1.00	7.89
CR-31B	06/26/08	102	84.0	0.239	0.651	0.394	0.489	8,170	<0.200	<0.500	<1.00	13.3
[8]	06/26/08	115	79.8	<0.500	0.445	0.931	<1.00	8,120	<0.200	0.762	<1.00	4.90
	09/24/08	95.9	83.2	<5.00	<20.0	4.00	<10.0	8,650	<0.200	<5.00	<10.0	15.5
[8]	09/24/08	77.2	63.5	<0.500	<2.00	1.12	<1.00	7,970	<0.200	0.382	<10.0	11.0
CR-32A	06/26/08	3.40	36.9	<0.500	0.972	2.76	1.19	885	<0.200	0.105	<1.00	8.38
[8]	06/26/08	1.01	17.3	0.068	<2.00	1.21	<1.00	831	<0.200	0.277	<1.00	8.35
	09/24/08	3.21	43.1	<0.500	1.36	3.92	0.928	1,110	<0.200	0.198	<1.00	9.55
[8]	09/24/08	2.67	32.0	<0.500	<2.00	1.20	<1.00	1,200	<0.200	<0.500	<1.00	10.5
CR-32B	06/26/08	62.4	120	0.411	0.597	1.37	0.891	9,280	<0.200	<0.500	<1.00	5.15
[8]	06/26/08	72.2	114	<0.500	0.696	1.73	<1.00	8,870	<0.200	0.411	<1.00	6.43
	09/24/08	57.6	120	<5.00	<20.0	3.05	<10.0	9,760	<0.200	<5.00	<10.0	7.83
[8]	09/24/08	67.3	112	<0.500	<2.00	3.76	0.262	8,830	<0.200	0.324	<1.00	7.56
CR-32C	06/26/08	3.40	130	1.38	0.588	1.97	2.20	771	<0.200	<0.500	<1.00	66.9
[8]	06/26/08	0.893	119	0.811	0.394	1.94	<1.00	703	<0.200	0.571	<1.00	56.1
	09/24/08	10.2	206	0.082	6.44	17.0	12.3	1,120	<0.200	0.988	<1.00	27.9
[8]	09/24/08	9.02	128	<0.500	<2.00	0.582	<1.00	877	<0.200	0.518	<1.00	4.06
CR-33	03/26/08	4.42	-	<0.380	4.39	8.12	5.25	3,860	<0.200	<5.00	<0.120	<33.0
[8]	03/26/08	0.910	-	<0.380	<1.00	<2.70	<0.540	3,920	<0.200	<5.00	<0.120	<33.0
	06/24/08	23.8	543	<0.500	48.4	81.7	40.5	5,160	0.0826	1.71	<1.00	205
[8]	06/24/08	12.2	124	<0.500	<2.00	1.30	<1.00	4,450	<0.200	0.182	<1.00	8.14
	09/24/08	19.9	131	<0.500	3.55	4.58	2.41	4,880	<0.200	0.745	<1.00	13.8
[8]	09/24/08	15.7	119	<0.500	<2.00	0.860	<1.00	4,400	<0.200	1.20	<1.00	6.09
	01/06/09	16.4	78.0	<0.500	0.350	0.350	0.290	5,130	<0.200	0.190	<1.00	2.03
[8]	01/06/09	16.2	89.6	1.64	<20.0	0.430	<10.0	4,670	<0.200	<5.00	8.01	<50.0
	03/18/09	3.58	58.1	<5.00	<2.00	<2.00	<1.00	3,470	<0.00500	<5.00	<1.00	<5.00

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TABLE 4
GROUNDWATER ANALYTICAL RESULTS - TOTAL METALS
Willbridge Terminals
Portland, Oregon

Sample I.D.	Sample Date	Arsenic (µg/l)	Barium (µg/l)	Cadmium (µg/l)	Chromium (µg/l)	Copper (µg/l)	Lead (µg/l)	Manganese (µg/l)	Mercury (µg/l)	Selenium (µg/l)	Silver (µg/l)	Zinc (µg/l)
KINDER MORGAN												
MW-8	09/22/08	3.96	19.4	0.556	0.56	1.98	1.23	425	--	0.4	0.027	19.7
dup	09/22/08	3.79	20.7	0.584	0.35	1.96	0.936	467	--	0.4	0.016	19.8
	03/16/09	2.25	22.8	<0.500	<2.00	<2.00	<1.00	NA	<0.200	<0.500	<1.00	13.6
dup	03/16/09	2.25	22.0	<0.500	<2.00	<2.00	<1.00	NA	<0.200	<0.500	<1.00	10.5
	09/15/09	5.69	25.4	0.890	<2.00	2.72	2.06	NA	<0.200	<0.500	<1.00	22.3
MW-9	02/16/00	9.74	56.6	0.73	3.96	4.76	5.69	NA	ND	ND	ND	34.4
	05/31/00	3.48	22.6	ND	ND	ND	ND	NA	ND	ND	ND	7.88
	08/24/00	13.6	38.1	ND	ND	ND	ND	NA	ND	ND	ND	7.99
	12/01/00	17.7	71.0	2.36	1.95	2.72	2.50	NA	ND	2.39	ND	20.7
	02/22/01	11.1	24.9	ND	1.30	2.34	ND	NA	ND	ND	ND	7.20
	05/16/01	9.42	30.8	ND	ND	1.19	ND	NA	ND	ND	ND	ND
dup	05/16/01	9.31	31.6	ND	ND	1.35	ND	NA	ND	ND	ND	20.8
	09/21/01	16.8	63.7	1.41	2.19	3.5	ND	NA	ND	ND	ND	13.8
	03/14/02	1.98	21.3	ND	ND	3.76	ND	NA	ND	ND	ND	8.24
dup	03/14/02	2.81	22.0	ND	ND	3.37	ND	NA	ND	ND	ND	11.5
	09/27/02	11.6	59.2	1.30	2.58	5.14	2.94	NA	ND	ND	ND	23.0
	03/18/03	4.12	40.8	ND	ND	NS	ND	NA	ND	ND	ND	NS
dup	03/18/03	3.52	40.8	ND	ND	NS	ND	NA	ND	ND	ND	NS
	09/24/03	10.8	28.1	ND	ND	ND	ND	NA	ND	ND	ND	6.70
	03/30/04	1.50	23.8	<1.00	<1.00	<2.00	<1.00	NA	<0.200	<1.00	<1.00	10.7
	09/27/04	16.0	85.8	2.68	5.98	8.98	5.62	NA	<0.200	<1.00	<1.00	61.3
dup	09/27/04	16.7	110	3.95	4.54	13.0	7.05	NA	<0.200	<1.00	<1.00	88.8
	03/29/05	3.73	14.7	1.46	0.360	1.64	1.15	NA	<0.200	<1.00	<1.00	22.9
	09/21/05	8.67	25.8	1.28	<1.00	4.25	1.81	NA	<0.200	<2.00	<1.00	21.7
	03/15/06	2.16	24.4	<1.00	<1.00	2.34	<1.00	NA	<0.200	<2.00	<1.00	23.4
dup	03/15/06	1.64	24.5	<1.00	<1.00	2.04	<1.00	NA	<0.200	<2.00	<1.00	22.2
	09/26/06	8.84	27.6	4.08	<1.00	2.98	1.49	NA	<0.200	<2.00	<1.00	43.0
	03/22/07	2.08	20.5	<1.00	<1.00	<1.00	<1.00	NA	<0.200	<1.00	<1.00	13.8
	09/20/07	7.20	22.2	<1.00	2.09	5.22	2.68	NA	<0.200	<2.00	<1.00	20.9
dup	09/20/07	6.90	13.7	<1.00	<1.00	<2.00	<1.00	NA	<0.200	<2.00	<1.00	12.2
	03/25/08	0.80	13.7	0.272	0.220	1.59	0.248	30.5	NA	<0.2	0.009[g]	10.4
MW-10	02/16/00	31.1	266	0.270	25.0	49.3	25.6	NA	ND	2.00	<1.00	113
	05/31/00	15.8	199	ND	15.5	29.2	18.2	NA	ND	1.79	ND	75.6
	08/24/00	19.6	51.8	ND	ND	ND	ND	NA	ND	1.30	ND	5.49
	12/01/00	28.4	28.4	ND	4.24	7.04	4.37	NA	ND	1.25	ND	18.1
	02/22/01	22.2	67.0	ND	1.69	3.31	1.02	NA	ND	ND	ND	8.93
	05/16/01	19.9	72.9	ND	ND	ND	ND	NA	ND	ND	ND	ND

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TABLE 4
GROUNDWATER ANALYTICAL RESULTS - TOTAL METALS
Willbridge Terminals
Portland, Oregon

Sample I.D.	Sample Date	Arsenic (µg/l)	Barium (µg/l)	Cadmium (µg/l)	Chromium (µg/l)	Copper (µg/l)	Lead (µg/l)	Manganese (µg/l)	Mercury (µg/l)	Selenium (µg/l)	Silver (µg/l)	Zinc (µg/l)
MW-11	02/16/00	67.7	398	0.180	34.4	67.2	78.6	NA	0.065	1.34	0.150	168
	05/31/00	59.5	454	ND	29.1	57.7	70.5	NA	0.201	2.96	ND	153
	08/24/00	50.9	111	ND	4.84	8.28	21.0	NA	ND	3.15	ND	20.3
	12/01/00	47.8	125	ND	7.19	11.4	37.2	NA	ND	4.38	ND	31.1
	02/22/01	50.9	113	ND	5.90	11.0	39.9	NA	ND	ND	ND	31.0
	05/16/01	44.5	81.6	ND	1.84	3.88	30.0	NA	ND	ND	ND	15.8
MW-13	02/16/00	17.0	305	0.110	28.5	43.8	23.5	NA	ND	0.72	0.160	130
	05/31/00	11.5	411	ND	26.4	40.9	22.8	NA	ND	2	ND	114
	08/24/00	3.31	85.4	ND	5.00	8.17	3.73	NA	ND	4.31	ND	20.7
	12/01/00	3.84	78.4	ND	4.94	7.52	1.39	NA	ND	1.46	ND	20.1
dup	12/01/00	4.65	79.5	ND	5.04	6.82	3.44	NA	ND	1.62	ND	20.7
	02/22/01	1.46	62.1	ND	4.09	5.81	2.37	NA	ND	ND	ND	17.6
	05/16/01	1.74	52.3	ND	2.18	3.08	1.69	NA	ND	ND	ND	12.3
MW-15	02/17/00	1.70	87.4	0.040	6.51	5.46	2.06	NA	ND	0.34	ND	21.9
dup	02/17/00	1.52	87.7	0.080	6.55	5.32	3.40	NA	-	0.46	ND	21.0
	05/31/00	ND	94.1	ND	6.00	5.97	3.22	NA	ND	ND	ND	29.8
	08/24/00	ND	141	ND	9.89	8.79	4.20	NA	ND	4.81	ND	38.8
	12/01/00	3.16	148	ND	13.3	12.0	6.97	NA	ND	1.15	ND	53.4
	02/22/01	1.29	108	ND	8.40	9.51	6.64	NA	ND	ND	ND	208
	05/16/01	ND	68.1	ND	1.26	1.54	1.13	NA	ND	ND	ND	24.6
MW-21	02/17/00	4.00	188	2.19	7.77	9.10	9.88	NA	ND	0.71	ND	45.9
	05/30/00	5.99	335	7.01	19.6	24.8	24.7	NA	ND	1.85	ND	126
	08/23/00	3.39	185	ND	2.02	2.95	1.26	NA	ND	1.53	ND	14.0
	12/01/00	3.44	141	1.48	ND	ND	ND	NA	ND	1.76	ND	14.0
	02/22/01	3.50	184	ND	1.17	ND	ND	NA	ND	ND	ND	10.7
	05/16/01	4.71	21.9	ND	ND	1.27	1.03	NA	ND	ND	ND	18.2
MW-22	02/17/00	92.8	251	0.170	12.10	8.34	39.1	NA	ND	1.21	ND	49.2
dup	02/17/00	-	-	-	-	-	-	NA	ND	-	-	-
	05/30/00	94.5	244	ND	9.70	9.50	21.6	NA	ND	2.42	ND	38.8
	08/23/00	104	194	ND	1.25	2.01	6.95	NA	ND	2.74	ND	ND
	12/01/00	83.1	295	ND	1.99	2.13	10.5	NA	ND	3.00	ND	26.5
	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

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TABLE 4
GROUNDWATER ANALYTICAL RESULTS - TOTAL METALS
Willbridge Terminals
Portland, Oregon

Sample I.D.	Sample Date	Arsenic (µg/l)	Barium (µg/l)	Cadmium (µg/l)	Chromium (µg/l)	Copper (µg/l)	Lead (µg/l)	Manganese (µg/l)	Mercury (µg/l)	Selenium (µg/l)	Silver (µg/l)	Zinc (µg/l)
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	9.09	58.2	ND	1.75	8.17	4.41	NA	ND	ND	ND	9.83
	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-25	09/21/01	56.3	95.8	ND	3.39	3.65	4.11	NA	ND	ND	ND	25.8
	03/14/02	40.6	115	ND	5.73	8.32	9.69	NA	ND	ND	1.15	27.8
	09/27/02	116	186	ND	6.06	8.97	9.90	NA	ND	ND	ND	33.4
	03/18/03	38.6	44.0	ND	ND	NS	ND	NA	ND	1.15	1.10	NS
	09/24/03	66.1	181	1.25	14.4	23	20.1	NA	ND	1.79	ND	71.2
	03/30/04	52.1	58.0	<1.00	1.57	<2.00	<1.15	NA	<0.200	<1.00	<1.00	8.10
	09/27/04	71.2	140	<1.00	5.06	11.2	11.2	NA	<0.200	<1.00	<1.00	30.4
	03/28/05	61.6	94.1	<1.00	1.16	2.53	4.74	NA	<0.200	0.400	<1.00	11.8
	09/21/05	62.2	64.7	<1.00	1.40	2.99	1.89	NA	<0.200	<2.00	<1.00	8.38
	03/15/06	60.7	70.1	<1.00	<1.00	4.69	1.83	NA	<0.200	<2.00	<1.00	9.20
	09/26/06	52.9	76.3	<1.00	1.79	2.58	3.40	NA	<0.200	<2.00	<1.00	11.7
	03/22/07	46.8	77.1	<1.00	2.88	3.93	4.52	NA	<0.200	<1.00	<1.00	16.2
	09/20/07	121	201	<1.00	8.85	12.6	15.7	NA	<0.200	<2.00	<1.00	43.6
	03/24/08	40.2	119	0.372	5.28	12.0	12.2	4,790	NA	<0.2	0.035	27.1
	09/22/08	39.0	239	0.666	9.18	20.6	24.3	5,160	NA	0.4	0.072	44.0
	03/16/09	58.8	162	<0.500	9.16	15.4	15.0	NA	<0.200	<0.500	<1.00	37.2
	09/15/09	51.9	119	<0.500	6.72	9.30	8.94	NA	<0.200	<0.500	<1.00	24.5

TABLE 4
GROUNDWATER ANALYTICAL RESULTS - TOTAL METALS
Willbridge Terminals
Portland, Oregon

Sample I.D.	Sample Date	Arsenic (µg/l)	Barium (µg/l)	Cadmium (µg/l)	Chromium (µg/l)	Copper (µg/l)	Lead (µg/l)	Manganese (µg/l)	Mercury (µg/l)	Selenium (µg/l)	Silver (µg/l)	Zinc (µg/l)
MW-26	02/17/00	47.4	94.3	0.050	4.68	3.68	3.42	NA	ND	0.6	ND	14.1
dup	02/17/00	48.7	90.4	0.500	4.34	4.96	3.12	NA	ND	0.33	ND	42.2
	05/30/00	44.3	102	ND	4.53	5.01	4.92	NA	ND	ND	ND	16.2
	08/23/00	53.0	59.4	ND	2.18	2.49	2.28	NA	ND	ND	ND	ND
dup	08/23/00	57.6	64.2	ND	2.27	3.84	2.28	NA	ND	ND	ND	7.91
	12/01/00	52.6	62.0	ND	1.58	ND	2.54	NA	ND	1.16	ND	7.96
	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	59.0	67.8	ND	2.21	1.70	2.25	NA	ND	ND	ND	12.0
	09/27/02	45.0	52.4	ND	1.23	ND	2.20	NA	ND	ND	ND	16.9
	03/18/03	20.5	67.0	ND	ND	NS	ND	NA	ND	ND	1.09	
	09/24/03	51.0	51.2	ND	ND	ND	2.14	NA	ND	ND	ND	5.07
	03/30/04	43.1	66.1	<1.00	<1.00	<1.00	1.02	NA	<0.200	<1.00	<1.00	<5.00
	09/27/04	65.7	66.2	<1.00	2.06	4.48	6.54	NA	<0.200	<1.00	<1.00	18.8
	03/28/05	55.4	74.9	1.04	1.29	3.13	5.86	NA	<0.200	0.53	<1.00	15.8
	09/21/05	62.3	46.2	<1.00	<1.00	<2.00	1.22	NA	<0.200	<2.00	<1.00	<5.00
	03/15/06	47.6	77.1	<1.00	<1.00	<2.00	<1.00	NA	<0.200	<2.00	<1.00	<5.00
	09/26/06	45.7	68.4	<1.00	<1.00	<2.00	<1.00	NA	<0.200	<2.00	<1.00	5.05
dup	09/26/06	48.0	69.2	<1.00	<1.00	2.12	<1.00	NA	<0.200	<2.00	<1.00	<5.00
	03/22/07	43.8	71.0	<1.00	<1.00	<1.00	<1.00	NA	<0.200	<1.00	<1.00	13.5
	09/20/07	50.1	68.5	<1.00	<1.00	<2.00	1.18	NA	<0.200	<2.00	<1.00	7.64
	03/24/08	39.5	74.0	0.048	1.06	1.18	2.22	5,640	NA	<0.2	0.006[9]	5.85
dup	03/24/08	37.9	87.5	0.099	1.66	1.96	3.35	5,580	NA	<0.2	0.011[9]	9.57
	09/22/08	39.5	102	0.112	2.97	3.39	4.98	4,660	NA	0.4	0.017	13.8
	03/16/09	47.0	105	<0.500	3.99	4.56	5.49	NA	<0.200	<0.500	<1.00	17.7
	09/15/09	43.8	81.4	<0.500	3.33	2.87	4.24	NA	<0.200	<0.500	<1.00	16.4
dup	09/15/09	42.1	87.0	<0.500	2.87	2.59	3.79	NA	<0.200	<0.500	<1.00	11.3

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TABLE 4
GROUNDWATER ANALYTICAL RESULTS - TOTAL METALS
Willbridge Terminals
Portland, Oregon

Sample I.D.	Sample Date	Arsenic (µg/l)	Barium (µg/l)	Cadmium (µg/l)	Chromium (µg/l)	Copper (µg/l)	Lead (µg/l)	Manganese (µg/l)	Mercury (µg/l)	Selenium (µg/l)	Silver (µg/l)	Zinc (µg/l)
MW-28	02/16/00	0.320	8.03	ND	0.47	2.00	3.87	NA	ND	ND	ND	17.2
	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	5.04	16.0	ND	0.42	2.22	1.35	NA	ND	ND	ND	2.18
	05/30/00	6.64	19.0	ND	ND	ND	ND	NA	ND	ND	ND	ND
	08/23/00	18.1	20.0	ND	ND	ND	ND	NA	ND	ND	ND	ND
	12/01/00	13.4	17.9	ND	ND	ND	2.80	NA	ND	ND	ND	ND
	02/22/01	14.8	22.8	ND	ND	ND	ND	NA	ND	ND	ND	7.23
	05/17/01	15.0	21.0	ND	ND	ND	2.44	NA	ND	ND	ND	13.2
MW-32	02/16/00	0.710	18.9	0.070	2.97	3.99	3.09	NA	ND	ND	ND	6.03
	05/30/00	1.47	26.8	ND	1.95	4.30	1.59	NA	ND	ND	ND	6.86
	08/23/00	ND	14.7	ND	ND	2.51	ND	NA	ND	ND	ND	ND
	12/01/00	1.93	14.2	ND	ND	ND	ND	NA	ND	1.20	ND	ND
	02/22/01	ND	9.21	ND	1.19	ND	ND	NA	ND	ND	ND	ND
	05/16/01	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND

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TABLE 4
GROUNDWATER ANALYTICAL RESULTS - TOTAL METALS
Willbridge Terminals
Portland, Oregon

Sample I.D.	Sample Date	Arsenic (µg/l)	Barium (µg/l)	Cadmium (µg/l)	Chromium (µg/l)	Copper (µg/l)	Lead (µg/l)	Manganese (µg/l)	Mercury (µg/l)	Selenium (µg/l)	Silver (µg/l)	Zinc (µg/l)
MW-33	02/16/00	8.42	76.8	0.060	1.62	4.23	3.68	NA	ND	ND	ND	7.46
	05/30/00	6.55	111	ND	1.79	3.38	1.54	NA	ND	ND	ND	7.21
	08/24/00	10.3	227	ND	1.04	2.46	ND	NA	ND	2.59	ND	ND
	11/30/00	58.0	563	ND	2.23	3.43	ND	NA	ND	1.63	ND	8.82
	02/22/01	14.2	91.0	ND	1.79	3.39	1.03	NA	ND	ND	ND	9.44
dup	02/22/01	14.2	104	ND	1.88	3.90	1.55	NA	ND	ND	ND	11
	05/16/01	17.8	184	ND	ND	1.28	ND	NA	ND	ND	ND	ND
	09/21/01	10.0	75.7	ND	ND	ND	ND	NA	ND	1.51	ND	ND
	03/14/02	9.75	72.2	ND	ND	ND	ND	NA	ND	ND	2.02	ND
	09/27/02	30.2	356	ND	2.06	3.03	1.36	NA	ND	ND	ND	20.5
	03/18/03	8.67	40.1	ND	ND	NS	ND	NA	ND	ND	1.40	NS
	09/24/03	23.2	191	ND	ND	ND	ND	NA	ND	ND	ND	ND
	03/29/04	12.4	55.2	<1.00	1.14	<2.00	<1.00	NA	<0.200	<1.00	<1.00	<5.00
	09/27/04	132	1410	<2.00	6.28	13.5	<2.00	NA	0.490	<2.00	<2.00	31.9
	03/29/05	7.57	325	<1.00	0.360	2.44	0.210	NA	<0.200	<1.00	<1.00	7.37
	09/21/05	18.1	398	<1.00	1.65	2.90	<1.00	NA	<0.200	<2.00	<1.00	5.80
dup	09/21/05	16.3	366	<1.00	1.51	2.92	<1.00	NA	<0.200	<2.00	<1.00	5.16
	03/15/06	11.2	58.8	<1.00	<1.00	<2.00	<1.00	NA	<0.200	<2.00	<1.00	6.00
	09/27/06	26.3	409	<0.0752	<0.800	<1.60	<0.432	NA	7.24	<1.60	<0.0960	24.4
	03/22/07	13.9	123	0.205	<0.800	<1.60	<0.432	NA	0.00767	<1.60	<0.0960	8.27
dup	03/22/07	37.3	380	0.952	1.10	2.42	<0.432	NA	<0.00500	<1.60	<0.0960	18.4
	09/18/07	32.9	488	<1.00	1.33	2.73	<1.00	NA	0.0166	<2.00	<1.00	24.5
	03/25/08	12.1	71.4	0.047	0.580	1.41	0.478	1,100	0.0235	<0.2	0.009[9]	3.14
	09/23/08	32.0	466	0.135	1.31	3.28	0.764	1,780	0.167	0.4	0.029	8.11
	03/16/09	12.7	96.5	<0.500	<2.00	<2.00	<1.00	NA	0.0126	<0.500	<1.00	<5.00
	09/14/09	14.1	208	<0.500	<2.00	2.92	1.43	NA	0.0137	<0.500	<1.00	7.84

TABLE 4
GROUNDWATER ANALYTICAL RESULTS - TOTAL METALS
Willbridge Terminals
Portland, Oregon

Sample I.D.	Sample Date	Arsenic (µg/l)	Barium (µg/l)	Cadmium (µg/l)	Chromium (µg/l)	Copper (µg/l)	Lead (µg/l)	Manganese (µg/l)	Mercury (µg/l)	Selenium (µg/l)	Silver (µg/l)	Zinc (µg/l)
MW-34	09/21/01	69.7	381	2.39	14.3	144	14.6	NA	ND	1.46	ND	104
	03/14/02	37.6	178	ND	5.82	13.2	5.49	NA	ND	ND	1.51	32.1
	09/27/02	162	670	1.64	26.4	67.6	22.6	NA	ND	1.3	ND	126
	03/18/03	14.8	93.4	ND	6.02	NS	5.41	NA	ND	ND	1.13	NS
	09/24/03	10.9	65.4	ND	1.06	2.36	1.17	NA	ND	ND	ND	9.94
	03/29/04	3.64	35.0	<1.00	1.14	<2.00	<1.00	NA	<0.200	<1.00	<1.00	<5.00
	09/27/04	87.9	355	<1.00	11.4	28.5	11.1	NA	<0.200	1.31	<1.00	54.7
dup	03/29/05	12.6	-	<1.00	0.530	4.75	1.58	NA	<0.200	0.350	<1.00	12.7
	03/29/05	12.5	75.6	<1.00	0.460	3.82	1.48	NA	<0.200	0.430	<1.00	11.9
	09/21/05	53.7	133	<1.00	1.05	3.54	1.13	NA	<0.200	<2.00	<1.00	7.54
	03/15/06	5.90	57.2	<1.00	3.08	3.29	2.46	NA	<0.200	<2.00	<1.00	13.2
	09/27/06	14.3	70.0	0.103	0.899	3.18	1.39	NA	<0.00500	<1.60	<0.0960	15.0
	03/22/07	25.2	117	0.176	4.01	9.22	5.01	NA	0.00877	<1.60	<0.0960	32.9
	09/18/07	32.5	114	<1.00	3.14	8.00	3.51	NA	0.0208	<2.00	<1.00	20.2
	03/25/08	4.33	45.4	0.203	1.27	2.25	1.61	1,200	0.0098	<0.2	0.008[9]	5.69
	06/24/08	8.70	-	0.108	1.87	4.37	2.95	1,800	0.00789	0.3[9]	0.016[9]	13.6
	09/23/08	27.3	254	0.578	7.36	26.5	13.2	5,040	0.00776	0.4	0.075	49.7
	01/05/09	4.81	36.3	<0.500	<2.00	2.36	1.10	160	0.00422	<0.500	<1.00	5.59
	03/16/09	11.0	122	<0.500	6.68	12.7	8.64	NA	0.0388	<0.500	<1.00	28.4
	09/14/09	26.8	281	3.22	18.3	52.7	20.4	NA	0.0543	<0.500	<1.00	73.2

TABLE 4
GROUNDWATER ANALYTICAL RESULTS - TOTAL METALS
Willbridge Terminals
Portland, Oregon

Sample I.D.	Sample Date	Arsenic (µg/l)	Barium (µg/l)	Cadmium (µg/l)	Chromium (µg/l)	Copper (µg/l)	Lead (µg/l)	Manganese (µg/l)	Mercury (µg/l)	Selenium (µg/l)	Silver (µg/l)	Zinc (µg/l)
MW-36	02/16/00	14.6	57.5	0.050	4.13	6.14	3.55	NA	ND	0.22	ND	13.1
	05/31/00	14.9	51.2	ND	1.80	3.08	ND	NA	ND	ND	ND	ND
	08/24/00	18.7	57.0	ND	ND	2.22	ND	NA	ND	1.11	ND	10.8
	11/30/00	22.5	70.1	ND	ND	ND	ND	NA	ND	1.47	ND	ND
	02/21/01	20.1	56.0	ND	1.51	2.80	ND	NA	ND	ND	ND	6.77
	05/16/01	29.7	82.6	ND	ND	16.9	ND	NA	ND	ND	ND	14.9
	09/21/01	16.8	54.1	ND	ND	ND	ND	NA	ND	1.08	ND	ND
	03/13/02	4.42	25.2	ND	ND	2.97	ND	NA	ND	ND	ND	12.2
	03/18/03	5.41	31.6	ND	1.22	NS	ND	NA	ND	ND	ND	NS
	09/24/03	43.6	116	ND	1.03	2.34	ND	NA	ND	ND	ND	ND
	3/29/04	10.8	33.9	<1.00	1.31	3.85	1.44	NA	<0.200	<1.00	<1.00	<5.00
	9/27/2004	32.0	67.9	<1.00	2.38	7.39	3.34	NA	<0.200	1.40	<1.00	6.75
	09/21/05	33.6	56.7	<1.00	<1.00	3.07	<1.00	NA	<0.200	<2.00	<1.00	<5.00
	03/15/06	5.90	23.8	<1.00	<1.00	3.84	<1.00	NA	<0.200	<2.00	<1.00	<5.00
	09/27/06	17.6	54.5	<0.0752	<0.800	1.70	<0.432	NA	<0.00500	<1.60	<0.0960	4.50
dup	09/27/06	15.7	48.0	<0.0752	<0.800	1.60	<0.432	NA	<0.00500	<1.60	<0.0960	<4.00
	03/22/07	8.58	33.4	<0.0752	<0.800	2.64	0.652	NA	0.00540	<1.60	<0.0960	6.28
	09/18/07	18.9	51.0	<1.00	<1.00	<2.00	<1.00	NA	<0.00500	<2.00	<1.00	<5.00
dup	09/18/07	30.4	78.3	<1.00	<1.00	4.49	1.07	NA	<0.00500	<2.00	<1.00	9.78
	03/25/08	8.28	28.6	0.032	0.64	3.85	0.702	1,510	0.0071	<0.2	0.005[9]	5.45
	09/23/08	21.6	64.4	0.018	0.67	2.46	0.652	3,570	0.00443	0.8	0.018	2.80
	03/16/09	24.2	56.5	<0.500	<2.00	3.56	2.70	NA	0.00608	<0.500	<1.00	5.42
	09/14/09	29.3	77.6	<0.500	<2.00	3.02	1.75	NA	0.00790	<0.500	<1.00	<5.00
dup	09/14/09	30.8	80.8	<0.500	<2.00	2.85	1.67	NA	0.00411	<0.500	<1.00	<5.00

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TABLE 4
GROUNDWATER ANALYTICAL RESULTS - TOTAL METALS
Willbridge Terminals
Portland, Oregon

Sample I.D.	Sample Date	Arsenic (µg/l)	Barium (µg/l)	Cadmium (µg/l)	Chromium (µg/l)	Copper (µg/l)	Lead (µg/l)	Manganese (µg/l)	Mercury (µg/l)	Selenium (µg/l)	Silver (µg/l)	Zinc (µg/l)
MW-37	02/16/00	18.4	74.8	0.220	7.21	11.8	4.69	NA	ND	0.32	ND	18.4
	05/30/00	19.9	56.7	ND	3.56	5.72	1.80	NA	ND	1.58	ND	11.1
dup	05/30/00	18.9	58.6	ND	4.08	6.37	2.05	NA	ND	ND	ND	12.1
	08/24/00	22.7	45.3	ND	ND	ND	ND	NA	ND	1.58	ND	5.98
	11/30/00	22.1	69.3	ND	4.19	6.05	3.53	NA	ND	1.23	ND	12.3
	02/21/01	22.3	40.4	ND	1.53	2.06	ND	NA	ND	ND	ND	5.26
	05/16/01	20.9	40.3	ND	ND	ND	ND	NA	ND	ND	ND	ND
	09/21/01	22.2	43.2	ND	1.27	ND	1.47	NA	ND	ND	ND	ND
	09/27/02	19.0	42.9	ND	ND	ND	ND	NA	ND	ND	ND	ND
dup	09/27/02	19.4	42.3	ND	ND	ND	ND	NA	ND	ND	ND	9.23
	03/18/03	8.64	25.9	ND	ND	NS	ND	NA	ND	ND	1.41	NS
	09/27/04	24.2	67.9	<1.00	3.08	5.65	3.34	NA	<0.200	<1.00	<1.00	18.1
	03/29/05	15.3	30.0	<1.00	0.230	<1.00	0.580	NA	<0.200	<1.00	<1.00	4.49
	09/21/05	19.4	39.0	<1.00	<1.00	<2.00	1.44	NA	<0.200	<2.00	<1.00	<5.00
	03/15/06	12.0	49.3	<1.00	<1.00	<2.00	1.41	NA	<0.200	<2.00	<1.00	9.59
	09/27/06	19.9	39.4	<0.0752	<0.800	<1.60	<0.432	NA	<0.00500	<1.60	<0.0960	<4.00
	03/22/07	21.0	46.8	0.173	<0.800	<1.60	0.81	NA	<0.00500	<1.60	<0.0960	8.43
	09/18/07	23.6	37.8	<1.00	<1.00	<2.00	3.08	NA	<0.00500	<2.00	<1.00	8.03
	03/25/08	22.1	54.2	0.617	1.26	2.77	1.91	2,300	0.0034	<0.2	0.016[9]	11.4
dup	03/25/08	24.9	68.0	1.01	1.55	2.99	2.52	2,180	0.0078	<0.2	0.019[9]	10.9
	06/24/08	18.0	-	0.084	0.380	0.390	0.39	2,490	0.00064	<0.29	0.004[9]	2.60
	09/23/08	18.7	42.0	0.270	0.37	0.89	1.29	2,530	0.00223	0.4	0.019	4.47
dup	09/23/08	19.0	41	0.198	0.29	0.77	1.16	2,560	0.00197	0.4	0.009	4.92
	01/05/09	19.0	35.2	0.673	<2.00	<2.00	1.80	1,730	0.00267	<0.500	<1.00	14.8
	03/16/09	19.8	31.0	<0.500	<2.00	<2.00	3.52	NA	0.00114	<0.500	<1.00	<5.00
	09/14/09	16.2	29.8	<0.500	<2.00	<2.00	<1.00	NA	0.000946	<0.500	<1.00	<5.00
MW-39	03/29/04	17.4	110	<1.00	9.88	16.3	8.23	NA	<0.200	<1.00	<1.00	34.6
	09/27/04	30.4	281	<1.00	24.8	83.2	19.0	NA	<0.200	1.40	<1.00	113
	09/21/05	19.9	89.1	<1.00	2.18	11.0	2.38	NA	<0.200	<2.00	<1.00	13.9

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TABLE 4
GROUNDWATER ANALYTICAL RESULTS - TOTAL METALS
Willbridge Terminals
Portland, Oregon

Sample I.D.	Sample Date	Arsenic (µg/l)	Barium (µg/l)	Cadmium (µg/l)	Chromium (µg/l)	Copper (µg/l)	Lead (µg/l)	Manganese (µg/l)	Mercury (µg/l)	Selenium (µg/l)	Silver (µg/l)	Zinc (µg/l)
MW-40	02/16/00	22.1	185	0.110	20.2	28.9	25.4	NA	ND	0.47	0.12	66.9
	05/30/00	25.0	107	ND	7.83	10.7	8.37	NA	ND	ND	ND	24.5
	08/24/00	27.0	123	ND	1.62	3.16	1.41	NA	ND	3.85	ND	16.0
	11/30/00	31.9	144	ND	4.33	7.34	4.91	NA	ND	1.87	ND	17.8
	02/21/01	38.7	119	ND	3.75	6.07	3.30	NA	ND	ND	ND	18.3
	05/16/01	23.9	102	ND	2.24	3.14	1.93	NA	ND	ND	ND	8.62
	09/21/01	24.8	106	ND	3.06	3.43	2.54	NA	ND	2.32	ND	10.7
	03/13/02	12.6	53.8	ND	1.97	3.36	1.94	NA	ND	ND	ND	12.4
	09/27/02	28.1	219	ND	8.81	10.4	8.08	NA	ND	ND	ND	25.0
	03/18/03	17.4	48.5	ND	1.35	NS	1.30	NA	ND	ND	ND	NS
	09/24/03	44.8	254	ND	8.95	13.1	31.6	NA	ND	ND	ND	32.6
dup	09/24/03	67.8	397	ND	17.9	24.9	53.8	NA	ND	ND	ND	62.7
	03/29/04	19.0	89.7	<1.00	1.24	2.64	1.24	NA	<0.200	<2.00	<1.00	<5.00
dup	03/29/04	17.8	79.7	<1.00	7.19	<2.00	1.28	NA	<0.200	<2.00	<1.00	<5.00
	9/27/2004	61.1	343	<1.00	17.9	29.3	30.8	NA	<0.200	<2.00	<1.00	76.4
	3/29/2005	19.8	62.7	<1.00	0.380	3.60	2.29	NA	<0.200	0.480	<1.00	7.18
	09/21/05	29.5	80.7	<1.00	<1.00	4.34	1.26	NA	<0.200	<2.00	<1.00	5.92
	03/15/06	16.2	54.0	<1.00	1.39	3.68	1.57	NA	<0.200	<2.00	<1.00	7.58
	03/22/07	19.1	53.8	<0.0752	<0.800	2.05	0.886	NA	0.00558	<1.60	<0.0960	7.51
	09/18/07	22.0	91.4	<1.00	<1.00	<2.00	<1.00	NA	<0.00500	<2.00	<1.00	5.58
	03/25/08	15.7	46.6	0.008	0.430	0.56	0.365	1,950	0.0023	0.4[g]	<0.003	5.25
	09/23/08	104	527	0.013	1.48	3.00	2.35	3,840	0.0158	0.4	0.012	9.64
	03/16/09	23.0	83.7	<0.500	<2.00	<2.00	<1.00	NA	0.00280	<0.500	<1.00	<5.00
	09/14/09	19.3	85.1	<0.500	<2.00	<2.00	<1.00	NA	0.00359	<0.500	<1.00	9.61
MW-41B	03/25/08	9.68	98.2	0.132	4.93	7.91	5.74	2,130	0.0099	<0.2	0.037	22.6
	06/24/08	8.73	-	0.085	3.62	5.29	2.64	2,050	0.00504	<0.2	0.036	13.8
dup	06/24/08	8.40	-	0.084	3.34	5.23	2.67	2,060	0.00451	0.6[g]	0.030	13.3
	09/23/08	5.7	67	0.084	1.42	3.68	2.59	1,120	0.00329	0.7	0.009	22
	01/05/09	9.2	55.0	<0.500	<2.00	2.51	<1.00	1,980	0.00158	<0.500	<1.00	6.00
MW-41C	03/25/08	4.55	144	0.126	2.99	9.16	5.74	1,440	0.01070	<0.4	0.021	27.6
	06/24/08	5.50	-	0.088	4.17	10.5	6.17	1,180	0.00988	0.5[g]	0.030	23.9
	09/23/08	2.9	135	0.076	2.89	5.22	6.17	1,120	0.00917	0.5	0.009	28.4
	01/05/09	7.47	176	<0.500	8.76	11.6	2.95	1,480	0.00449	<0.500	<1.00	36.1
MW-42B	03/25/08	26.5	159	0.168	8.10	9.27	5.82	9,090	0.01060	<0.2	0.054	18.7
	06/24/08	20.7	-	0.091	2.35	5.00	1.80	8,600	0.00477	<0.2	0.019[g]	14.0
	09/23/08	15.4	99	0.036	0.91	2.69	1.07	8,160	0.00741	1.1	0.009	14.8
	01/05/09	37.5	107	<0.500	<2.00	<2.00	<1.00	10,500	0.00457	0.827	<1.00	<5.00
MW-42C	03/25/08	1.97	151	0.086	3.89	10.7	5.88	979	0.00600	<0.2	0.032	20.9
	06/24/08	1.09	-	0.068	0.800	4.32	3.12	784	0.00243	1.0[g]	0.010[g]	10.3
	09/23/08	0.8	133	0.106	0.49	3.93	2.69	711	0.00177	0.4	0.009	10.7
	01/05/09	<1.00	134	<0.500	<2.00	3.05	<1.00	676	0.00200	<0.500	<1.00	8.64
dup	01/05/09	<1.00	126	<0.500	<2.00	2.25	<1.00	669	0.00107	<0.500	<1.00	<5.00

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TABLE 4
GROUNDWATER ANALYTICAL RESULTS - TOTAL METALS
Willbridge Terminals
Portland, Oregon

Sample I.D.	Sample Date	Arsenic (µg/l)	Barium (µg/l)	Cadmium (µg/l)	Chromium (µg/l)	Copper (µg/l)	Lead (µg/l)	Manganese (µg/l)	Mercury (µg/l)	Selenium (µg/l)	Silver (µg/l)	Zinc (µg/l)
CONOCOPHILLIPS										0		
B-4	05/26/00	35.0	245	ND	27.5	42.5	14.0	NA	ND	ND	ND	75.0
dup	05/26/00	36.7	259	ND	28.3	44.3	14.7	NA	ND	ND	ND	78.5
	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	31.6	106	ND	5.32	9.68	2.85	NA	ND	1.65	ND	17.6
	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	30.8	99.9	ND	5.41	8.85	2.72	NA	ND	1.29	ND	25.9
	09/25/03	31.6	92.8	ND	2.58	4.97	1.55	NA	ND	1.29	ND	14.7
	09/26/06	36.1	113	<1.00	3.84	6.73	2.31	NA	<0.200	<2.00	<1.00	21.6
	03/21/07	33.8	95.5	<1.00	1.82	3.62	1.59	NA	<0.200	<1.00	<1.00	18.2
	09/20/07	39.5	89.1	<0.800	1.29	4.21	0.898	NA	<0.200	<1.60	<0.800	15.8
	03/26/08	33.6	268	<1.00	27.8	47.6	17.0	3,220[f]	<0.200	<2.00	<1.00	101
	09/24/08	33.3	189	0.617	9.07	13.5	4.22	3,850	<0.200	0.525	<1.00	71.3
dup	09/24/08	37.3	192	2.30	15.0	23.3	6.50	4,300	<0.200	0.535	<1.00	75.7
B-17	02/17/00	57.9	549	0.360	91.0	140	67.6	NA	ND	1.52	0.280	215
	05/26/00	50.9	195	ND	19.1	29	17.1	NA	ND	1.26	ND	48.5
	08/28/00	53.2	113	ND	2.79	4.17	6.60	NA	ND	ND	ND	12.0
	11/29/00	52.5	111	ND	2.17	6.95	6.36	NA	ND	2.20	ND	9.79
	02/23/01	51.9	82.1	ND	1.30	3.02	4.70	NA	ND	ND	ND	9.66
dup	02/23/01	51.1	88.5	ND	3.05	6.91	5.35	NA	ND	1.19	ND	14.3
	05/17/01	65.6	125	ND	5.18	7.46	8.12	NA	ND	ND	ND	28.7
dup	05/17/01	65.0	114	ND	4.06	5.46	7.18	NA	ND	1.26	ND	15.0
B-18	02/17/00	22.3	507	0.440	79.7	110	29.3	NA	0.098	1.58	0.220	174
	05/26/00	22.8	203	ND	21.1	31.3	9.22	NA	ND	ND	ND	55.8
	08/28/00	22.1	130	1.11	5.63	6.84	3.15	NA	ND	ND	ND	27.0
	11/29/00	17.1	128	ND	2.38	4.51	1.20	NA	ND	1.53	ND	15.7
	02/23/01	25.6	118	ND	5.38	10.7	2.94	NA	ND	ND	ND	50.6
	05/17/01	37.2	138	ND	7.74	9.59	3.10	NA	ND	1.06	1.01	30.9
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	25.5	126	ND	10.50	18.7	5.61	NA	ND	ND	ND	38.5
	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

TABLE 4
GROUNDWATER ANALYTICAL RESULTS - TOTAL METALS
Willbridge Terminals
Portland, Oregon

Sample I.D.	Sample Date	Arsenic (µg/l)	Barium (µg/l)	Cadmium (µg/l)	Chromium (µg/l)	Copper (µg/l)	Lead (µg/l)	Manganese (µg/l)	Mercury (µg/l)	Selenium (µg/l)	Silver (µg/l)	Zinc (µg/l)
B-35	02/17/00	60.2	480	0.620	89.3	122	82.8	NA	ND	1.64	0.21	311
	05/26/00	10.2	116	ND	7.86	11.4	2.64	NA	ND	1.3	ND	23.3
	08/28/00	37.7	128	1.53	4.67	6.12	6.43	NA	ND	ND	ND	33.9
	11/29/00	46.8	131	ND	3.16	6.91	6.19	NA	ND	2.12	ND	20.8
	02/23/01	34.7	81.6	ND	2.00	3.8	3.05	NA	ND	1.00	ND	30.8
	05/17/01	50.4	153	ND	10.7	14.1	10.6	NA	ND	ND	ND	51.1
	09/20/01	34.4	90.1	ND	1.78	4.2	1.60	NA	ND	ND	ND	6.32
	03/14/02	33.5	308	ND	46.3	53.4	29.8	NA	ND	1.39	1.45	146
	09/26/02	29.6	225	ND	29.8	31.4	14.7	NA	ND	1.31	ND	81.6
	03/18/03	38.7	95.8	ND	1.55	4.22	2.77	NA	ND	ND	ND	7.00
	09/25/03	51.7	132	ND	3.34	6.31	5.36	NA	ND	ND	ND	17.1
	03/30/04	29.1	135	<1.00	11.9	14.9	7.79	NA	<0.200	<1.00	<1.00	15.2
	09/28/04	42.2	182	<1.00	8.29	NA	9.93	NA	1.71	<1.00	<1.00	NA
	03/28/05	38.1	160	<1.00	12.4	18.0	15.6	NA	<0.200	<1.00	<1.00	77.6
	09/20/05	42.6	282	<1.00	32.9	40.8	30.6	NA	<0.200	<2.00	<1.00	107
	03/14/06	42.3	105	<1.00	1.92	5.34	2.85	NA	<0.200	<2.00	<1.00	39.6
	09/26/06	38.7	116	<1.00	2.33	4.24	3.44	NA	<0.200	<2.00	<1.00	23.3
	03/21/07	33.6	272	<1.00	26.5	27.0	20.7	NA	<0.200	<1.00	<1.00	114
	09/20/07	39.8	135	<0.800	7.66	12.1	5.65	NA	<0.200	<1.60	<0.800	38.6
	03/27/08	61.0	498	<3.80	82.5	144	91.4	6,180	<0.200	<50.0	0.255	388
	09/24/08	55.6	347	<1.00	48.8	57.2	31.5	5,290	<0.200	<1.00	<2.00	369
	03/23/09	34.9	68.1	<0.500	<2.00	<2.00	<1.00	3,730	0.0257	<0.500	<1.00	<5.00
	09/18/09	36.6	158	<0.500	16.5	18.8	14.6	3,870	0.0151	<0.500	<1.00	67.8
dup	09/18/09	42.8	176	<0.500	<20.0	29.7	18.5	4,270	0.0170	<0.500	<1.00	85.3

COP0017806

TABLE 4
GROUNDWATER ANALYTICAL RESULTS - TOTAL METALS
Willbridge Terminals
Portland, Oregon

Sample I.D.	Sample Date	Arsenic (µg/l)	Barium (µg/l)	Cadmium (µg/l)	Chromium (µg/l)	Copper (µg/l)	Lead (µg/l)	Manganese (µg/l)	Mercury (µg/l)	Selenium (µg/l)	Silver (µg/l)	Zinc (µg/l)
B-36	02/17/00	10.5	168	0.210	22.2	30.6	7.79	NA	ND	0.64	ND	55.1
	05/26/00	10.5	120	ND	8.19	12.0	2.51	NA	ND	ND	ND	25.0
	08/28/00	22.4	156	ND	7.84	8.76	3.22	NA	ND	ND	ND	47.4
	11/29/00	22.3	130	ND	5.25	8.34	1.71	NA	ND	2.02	ND	17.1
	02/23/01	48.8	174	ND	3.71	6.66	1.42	NA	ND	2.34	ND	24.4
	05/17/01	38.7	476	ND	57.2	69.6	16.5	NA	ND	3.01	ND	138
	09/20/01	18.5	86.1	ND	1.54	3.02	ND	NA	ND	ND	ND	7.61
dup	09/20/01	20.4	97.4	ND	2.94	4.11	ND	NA	ND	ND	ND	13.2
	03/14/02	8.40	90.1	ND	8.74	11.4	2.71	NA	ND	ND	ND	29.4
	09/26/02	17.0	109	ND	6.88	9.1	4.40	NA	ND	ND	ND	33.4
	03/18/03	4.02	40.9	ND	2.34	3.93	1.44	NA	ND	ND	ND	7.29
	09/25/03	20.0	64.4	ND	ND	ND	ND	NA	ND	1.05	ND	ND
	03/30/04	7.19	58.6	<1.00	3.13	5.80	1.49	NA	<0.200	<1.00	<1.00	15.2
	09/28/04	23.3	112	<1.00	3.49	NA	1.20	NA	0.285	<1.00	<1.00	NA
dup	09/28/04	22.1	81.4	<1.00	2.22	NA	<1.00	NA	<0.200	<1.00	<1.00	NA
	03/28/05	24.0	104	<1.00	3.67	4.82	1.53	NA	<0.200	<1.00	<1.00	19.5
	09/20/05	20.5	103	<1.00	4.50	6.37	1.45	NA	<0.200	<2.00	<1.00	13.2
	03/14/06	8.03	40.1	<1.00	<1.00	3.31	<1.00	NA	<0.200	<2.00	<1.00	5.31
	09/26/06	21.7	87.4	<1.00	<1.00	<2.00	<1.00	NA	<0.200	<2.00	<1.00	6.71
	03/21/07	15.1	259	<1.00	28.4	38.4	9.70	NA	<0.200	<1.00	<1.00	81.2
	09/20/07	24.1	169	<0.800	11.2	18.0	4.47	NA	<0.200	<1.60	<0.800	50.0
	03/27/08	18.0	397	<0.380	46.7	77.3	18.6	3,890	0.202	<5.00	0.203	168
	09/24/08	23.3	162	<0.500	13.5	17.6	4.06	5,720	<0.200	<0.500	<1.00	54.2
	03/23/09	18.2	334	<0.500	44.3	62.2	16.7	3,130	0.0750	<0.500	<1.00	125
dup	03/23/09	19.9	455	<0.500	55.8	81.1	21.5	3,740	0.0843	0.584	<1.00	160
	09/18/09	11.3	67.0	<0.500	<2.00	2.02	<1.00	3,830	0.0402	<0.500	<1.00	7.05

COP0017807

TABLE 4
GROUNDWATER ANALYTICAL RESULTS - TOTAL METALS
Willbridge Terminals
Portland, Oregon

Sample I.D.	Sample Date	Arsenic (µg/l)	Barium (µg/l)	Cadmium (µg/l)	Chromium (µg/l)	Copper (µg/l)	Lead (µg/l)	Manganese (µg/l)	Mercury (µg/l)	Selenium (µg/l)	Silver (µg/l)	Zinc (µg/l)
B-37	02/17/00	369	152	0.330	15.9	29.7	7.05	NA	ND	1.59	ND	54.4
dup	02/17/00	327	34.4	0.400	0.660	1.45	2.36	NA	ND	0.25	ND	1.59
	05/26/00	418	92.0	ND	5.26	13.1	2.34	NA	ND	ND	ND	21.5
	08/28/00	897	227	ND	4.62	9.38	2.09	NA	ND	ND	ND	30.3
	11/29/00	391	99.0	ND	2.21	6.08	ND	NA	ND	1.32	ND	12.0
	02/23/01	198	74.7	ND	ND	3.39	ND	NA	ND	ND	ND	17.0
	05/17/01	521	168	ND	4.08	9.84	1.64	NA	ND	ND	ND	35.5
	03/14/02	86.9	252	ND	17.0	40.9	7.46	NA	ND	ND	ND	76.4
	09/26/02	117	119	ND	6.03	10.0	6.25	NA	ND	ND	ND	34.8
	03/18/03	75.8	121	ND	8.29	17.8	4.29	NA	ND	ND	2.22	53.9
dup	03/18/03	68.3	95.8	ND	5.72	11.5	2.88	NA	ND	ND	1.41	36.4
	09/25/03	260	158	ND	2.90	8.53	1.19	NA	ND	1.69	ND	21.5
dup	09/25/03	247	182	ND	5.13	14.3	2.17	NA	ND	ND	ND	33.0
	03/31/04	125	54.6	<1.00	1.37	4.54	1.31	NA	<0.200	<1.00	<1.00	8.42
	09/28/04	131	78.4	<1.00	2.18	NA	<1.00	NA	<0.200	<1.00	<1.00	NA
	03/28/05	73.4	79.8	<1.00	1.87	5.93	1.57	NA	<0.200	<1.00	<1.00	27.0
	09/20/05	80.2	82.7	<1.00	1.15	2.29	<1.00	NA	<0.200	<2.00	<1.00	13.3
	03/14/06	230	61.6	<1.00	<1.00	4.34	<1.00	NA	<0.200	<2.00	<1.00	6.15
dup	03/14/06	217	72.0	<1.00	1.10	4.81	<1.00	NA	<0.200	<2.00	<1.00	8.20
	09/26/06	165	61.3	<1.00	<1.00	2.88	<1.00	NA	<0.200	<2.00	<1.00	11.0
	03/21/07	151	45.8	<1.00	<1.00	<1.00	<1.00	NA	<0.200	<1.00	<1.00	<10.0
	09/20/07	97.8	66.6	<0.800	1.28	3.92	0.963	NA	<0.200	<1.60	<0.800	14.3
	03/27/08	140	78.7	<0.380	4.55	10.6	3.15	1,470	<0.200	<5.00	<0.120	<33.0
	09/24/08	186	98.4	<0.500	6.22	10.4	4.18	2,230	<0.200	<0.500	<1.00	27.6
	03/20/09	214	96.9	<0.500	4.21	10.5	4.64	1,450	0.0357	<0.500	<1.00	26.4
dup	03/20/09	218	69.9	<0.500	2.05	6.42	2.92	1,480	0.0107	<0.500	<1.00	18.1
	09/18/09	276	34.9	<0.500	<2.00	<2.00	<1.00	1,710	<0.00500	<0.500	<1.00	<5.00
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	18.4	67.3	<0.0752	<0.800	3.67	<0.432	NA	<0.00500	<1.60	<0.0960	16.6
	03/20/07	21.4	80.8	<0.752	1.85	7.12	2.01	0	<0.00500	<1.60	<0.800	57.0
	09/20/07	24.2	64.0	<0.800	<0.800	1.85	<0.800	0	<0.00500	<1.60	<0.800	13.6
	03/26/08	20.9	145	<1.00	14.0	32.8	9.28	ND	<0.200	<2.00	<1.00	150
	09/22/08	NS	NS	NS	NS	NS	NS	ND	NS	NS	NS	NS

COP0017808

TABLE 4
GROUNDWATER ANALYTICAL RESULTS - TOTAL METALS
Willbridge Terminals
Portland, Oregon

Sample I.D.	Sample Date	Arsenic (µg/l)	Barium (µg/l)	Cadmium (µg/l)	Chromium (µg/l)	Copper (µg/l)	Lead (µg/l)	Manganese (µg/l)	Mercury (µg/l)	Selenium (µg/l)	Silver (µg/l)	Zinc (µg/l)
OF-1	03/26/08	56.4	290	11.2	25.0	74.9	28.9	ND	<0.200	<2.00	<1.00	242
	09/22/08	NS	NS	NS	NS	NS	NS	ND	NS	NS	NS	NS
	09/18/09	38.5	114	1.69	3.63	15.2	4.36	3,190	0.0126	<0.50	<1.00	39.7
P-1	03/17/03	22.5	1270	ND	216	239	94.6	ND	0.604	ND	ND	625
	03/31/04	52.7	4370	<10.0	642	848	244	ND	0.816	<10.0	<10.0	1,730
	03/14/06	3.34	141	1.68	20.5	29.1	7.79	ND	<0.200	<2.00	<1.00	64.6
	09/26/06	14.0	1210	4.58	130	185	41.8	NA	0.300[4,5]	<1.60	0.732	358
	03/20/07	<0.800	20.8	<0.752	2.26	3.11	<0.800	NA	<0.00500	<1.60	<0.800	6.98
	09/20/07	NA	NA	NA	NA	NA	NA	NA	0.0665	NA	NA	NA
	Well Abandoned											
P-1A	03/26/08	6.99	233	<1.00	28.3	36.9	28.2	797[7]	<0.200	<2.00	<1.00	151
	06/25/08	1.60	55.4	0.746	2.26	6.51	4.48	892	<0.200	<0.500	<1.00	54.2
	09/23/08	8.17	349	<5.00	36.2	51.4	30.2	2,400	<0.200	<5.00	<1.00	234
	01/07/09	1.46	26.0	0.690	3.92	7.03	4.18	72.0	<0.200	<0.500	<1.00	50.7
	03/20/09	1.40	31.6	<0.500	3.60	6.57	4.33	73.6	0.0104	<0.500	<1.00	37.6
	09/18/09	2.19	67.1	<0.500	5.74	9.38	5.55	1,210	0.00933	<0.500	<1.00	59.4
P-2	03/17/03	11.1	78.3	ND	2.32	7.22	2.88	NA	ND	ND	1.06	9.79
	09/25/03[1]	9.66	116	ND	4.43	11.6	5.53	NA	ND	1.09	ND	13.7
	03/30/04	8.05	131	<1.00	1.87	4.47	1.26	NA	<0.200	<1.00	<1.00	12.3
	09/28/04	10.3	163	<1.00	5.70	NA	7.42	NA	0.214	1.03	<1.00	NA
	03/28/05	9.51	141	<1.00	3.35	9.00	4.54	NA	<0.200	<1.00	<1.00	11.9
	09/20/05	6.59	144	<1.00	5.67	15.2	7.28	NA	<0.200	<2.00	<1.00	13.1
	03/14/06	5.40	51.7	<1.00	<1.00	2.66	<1.00	NA	<0.200	<2.00	<1.00	<5.00

COP0017809

TABLE 4
GROUNDWATER ANALYTICAL RESULTS - TOTAL METALS
Willbridge Terminals
Portland, Oregon

Sample I.D.	Sample Date	Arsenic (µg/l)	Barium (µg/l)	Cadmium (µg/l)	Chromium (µg/l)	Copper (µg/l)	Lead (µg/l)	Manganese (µg/l)	Mercury (µg/l)	Selenium (µg/l)	Silver (µg/l)	Zinc (µg/l)
U-2	02/17/00	18.6	63.2	0.230	3.63	11.6	4.99	NA	ND	0.34	ND	24.1
	05/26/00	11.0	50.3	ND	1.37	5.37	1.45	NA	ND	ND	ND	10.9
	08/28/00	11.9	50.3	1.20	1.09	3.77	1.69	NA	ND	ND	ND	14.7
	11/29/00	7.29	49.9	ND	1.58	3.14	1.09	NA	ND	1.05	ND	13.1
	02/23/01	8.87	37.3	ND	ND	9.35	1.73	NA	ND	ND	ND	21.2
	05/17/01	9.53	42.7	ND	1.29	9.16	2.57	NA	ND	ND	ND	20.5
	09/20/01	6.80	39.7	ND	ND	4.21	ND	NA	ND	ND	ND	7.00
	03/14/02	10.8	53.4	ND	1.68	6.66	1.83	NA	ND	ND	ND	43.6
	09/26/02	6.78	44.3	ND	ND	2.77	ND	NA	ND	1.27	ND	11.6
	03/18/03	10.0	48.7	ND	1.00	5.83	1.11	NA	ND	ND	ND	39.8
	09/25/03	9.78	74.9	ND	6.58	8.96	2.68	NA	ND	ND	ND	63.6
	03/31/04	15.8	64.6	<1.00	2.43	10.7	3.13	NA	<0.200	1.16	<1.00	50.0
	09/28/04	11.1	76.2	<1.00	3.18	NA	2.82	NA	<0.200	<1.00	<1.00	NA
	03/28/05	13.2	99.6	<1.00	3.26	18.7	5.31	NA	<0.200	<1.00	<1.00	94.4
	09/20/05	19.8	129	<1.00	1.74	17.0	5.50	NA	<0.200	<2.00	<1.00	52.0
	03/14/06	15.6	45.1	<1.00	<1.00	7.75	2.28	NA	<0.200	<2.00	<1.00	32.7
	09/27/06	16.0	61.7	<1.00	<1.00	19.6	<1.00	NA	<0.200	<2.00	<1.00	10.6
	03/21/07	18.1	70.2	<1.00	1.17	-	1.58	NA	<0.200	<1.00	<1.00	-
	09/19/07	13.5	92.5	<0.800	1.81	7.47	2.36	NA	<0.200	<1.60	<0.800	39.2
	03/25/08	27.6	62.0	<1.00	2.13	12.2	3.76	4,100	<0.200	<2.00	<1.00	20.9
	09/25/08	13.4	74.0	<0.500	<2.14	8.33	<4.10	3,860	<0.200	<0.500	<1.00	<47.5
	03/17/09	36.0	92.8	<0.500	2.17	10.8	2.88	4,310	<0.200	<0.500	<1.00	18.7
	09/21/09	7.7	34.3	0.091	<0.50	0.86	0.66	3,570	<0.20	<0.50	<0.50	5.7
U-3	02/17/00	42.1	194	0.230	24.1	17.1	22.5	NA	ND	1.02	ND	268
	05/26/00	40.0	171	ND	14.9	11.6	18.2	NA	ND	1.45	ND	139
	08/28/00	36.5	124	ND	7.04	6.73	21.2	NA	ND	2.02	ND	103
	11/29/00	42.8	170	ND	9.94	9.49	16.7	NA	ND	3.42	ND	107
dup	11/29/00	41.3	172	ND	9.96	9.32	14.9	NA	ND	2.84	ND	97.3
	02/23/01	119	631	ND	170	107	303	NA	ND	ND	ND	1,470
	05/17/01	45.0	111	ND	3.59	4.39	4.27	NA	ND	1.70	ND	25.8

COP0017810

TABLE 4
GROUNDWATER ANALYTICAL RESULTS - TOTAL METALS
Willbridge Terminals
Portland, Oregon

Sample I.D.	Sample Date	Arsenic (µg/l)	Barium (µg/l)	Cadmium (µg/l)	Chromium (µg/l)	Copper (µg/l)	Lead (µg/l)	Manganese (µg/l)	Mercury (µg/l)	Selenium (µg/l)	Silver (µg/l)	Zinc (µg/l)
U-4	05/26/00	18.8	101	ND	3.67	7.49	2.68	NA	ND	ND	ND	14.9
	08/28/00	19.8	93.0	ND	ND	2.14	1.29	NA	ND	ND	ND	15.0
dup	08/28/00	18.9	92.2	ND	ND	2.99	1.31	NA	ND	ND	ND	15.7
	11/29/00	19.8	91.1	ND	ND	ND	ND	NA	ND	1.94	ND	8.95
	02/23/01	21.6	80.2	ND	ND	ND	ND	NA	ND	ND	ND	5.87
	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	18.3	106	ND	4.32	10.5	4.84	NA	ND	1.80	ND	37.7
dup	09/26/02	18.3	106	ND	4.03	9.76	3.79	NA	ND	1.28	ND	31.3
	09/27/06	17.1	81.6	<1.00	<1.00	2.34	<1.00	NA	<0.200	<2.00	<1.00	9.96
	03/21/07	18.2	94.4	<1.00	0.308	8.63	2.53	NA	<0.200	<1.00	<1.00	29.4
	09/19/07	18.4	84.2	<0.800	<0.800	2.35	<0.800	NA	<0.200	<1.60	<0.800	10.5
	03/27/08	19.0	101	<0.380	4.02	11.3	4.09	2,690	<0.200	<5.00	<0.120	<33.0
	09/24/08	16.4	90.2	<0.500	<2.00	3.97	1.10	5,740	<0.200	0.573	<1.00	10.8
dup	09/24/08	17.4	93.3	<0.500	<2.00	4.64	1.33	5,480	<0.200	0.580	<1.00	21.7
U-5	02/17/00	12.7	164	0.940	17.5	45.6	18.9	NA	ND	0.95	ND	933
	05/26/00	10.4	74.8	ND	2.25	9.12	3.70	NA	ND	ND	ND	286
	08/28/00	10.9	219	ND	7.59	21.6	14.3	NA	ND	1.65	ND	884
	11/29/00	12.3	124	ND	5.47	21.6	8.56	NA	ND	2.16	ND	825
	02/23/01	12.6	101	ND	6.92	34.5	14.0	NA	ND	1.00	ND	1,170
	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	11.0	170	ND	12.9	66.3	15.8	NA	ND	ND	3.23	2590
	09/25/03	12.6	102	ND	7.36	20.1	9.47	NA	ND	1.18	ND	800
	03/31/04	8.02	85.2	<1.00	7.58	23.0	11.5	NA	<0.200	<1.00	<1.00	785
	09/28/04	9.87	103	<1.00	6.23	NA	10.6	NA	0.228	<1.00	<1.00	NA
	03/28/05	12.3	131	<1.00	22.9	64.5	38.1	NA	<0.200	<1.00	<1.00	1,980
	09/20/05	7.04	107	<1.00	5.83	18.8	12.4	NA	<0.200	<2.00	<1.00	720
	03/14/06	8.16	132	<1.00	11.7	30.7	12.7	NA	<0.200	<2.00	<1.00	669
	09/26/06[2]	6.21	122	0.532	9.60	31.0	15.1	NA	0.0182	<3.20[3]	<0.0960	1,070[3]
	03/20/07	11.7	301	1.45	26.8	54.8	43.2	NA	0.0248	<1.60	<0.800	2,130
	09/20/07	26.0	334	<8.00	16.7	131	22.4	NA	0.0233	<16.0	<0.800	2,970
	09/24/08	13.2	151	<1.00	13.5	46.5	192	2,910	<0.200	<1.00	<2.00	752

COP0017811

TABLE 4
GROUNDWATER ANALYTICAL RESULTS - TOTAL METALS
Willbridge Terminals
Portland, Oregon

Sample I.D.	Sample Date	Arsenic (µg/l)	Barium (µg/l)	Cadmium (µg/l)	Chromium (µg/l)	Copper (µg/l)	Lead (µg/l)	Manganese (µg/l)	Mercury (µg/l)	Selenium (µg/l)	Silver (µg/l)	Zinc (µg/l)
U-5A	03/27/08	52.6	63.0	<0.380	3.00	19.4	53.0	6,170	<0.200	<5.0	<0.120	204
U-10	03/18/03	107	3390	ND	313	403	176	NA	0.551	ND	ND	1,220
	09/25/03	9.75	196	ND	13.2	14.9	9.04	NA	ND	ND	ND	49.3
	03/30/04	31.6	128	<1.00	4.81	5.73	22.5	NA	<0.200	<1.00	<1.00	28.8
	09/28/04	6.57	201	<1.00	9.66	NA	8.52	NA	<0.200	<1.00	<1.00	NA
	03/28/05	6.43	127	<1.00	5.29	6.00	4.62	NA	<0.200	<1.00	<1.00	29.3
	09/20/05	6.86	123	<1.00	1.20	2.58	2.05	NA	<0.200	<2.00	<1.00	10.6
	03/14/06	9.18	140	<1.00	6.07	9.33	4.86	NA	<0.200	<2.00	<1.00	40.3
U-11	03/18/03	9.42	372	ND	29.7	33.9	33.6	NA	0.211	1.53	ND	110
	09/25/03	34.3	89.3	ND	2.20	2.87	8.30	NA	ND	1.01	ND	12.4
	03/30/04	6.79	363	<1.00	34.1	312	21.2	NA	<0.200	1.65	<1.00	103
dup	03/30/04	35.7	108	<1.00	4.00	5.94	20.1	NA	<0.200	<1.00	<1.00	29.2
	09/28/04	10.6	534	<1.00	56.1	NA	68.4	NA	0.472	1.92	<1.00	NA
	03/28/05	38.8	106	<1.00	1.52	2.18	5.62	NA	<0.200	<1.00	<1.00	13.7
	09/20/05	45.3	273	<1.00	24.2	30.9	116	NA	0.270	<2.00	<1.00	140
	03/14/06	42.0	101	<1.00	1.37	17.2	6.69	NA	<0.200	<2.00	<1.00	12.0
U-12	03/18/03	32.3	136	ND	6.00	7.11	22.8	NA	ND	ND	ND	33.8
	09/25/03	41.8	1,910	ND	362	372	302	NA	0.559	4.8	ND	1,200
	03/30/04	6.55	248	<1.00	17.9	23.3	22.0	NA	<0.200	1.85	<1.00	72.8
	09/28/04	36.9	208	<1.00	10.2	NA	49.9	NA	<0.200	<1.00	<1.00	NA
	03/28/05	17.2	1,010	2.11	132	140	146	NA	<0.200	3.45	<1.00	570
	09/20/05	6.26	176	<1.00	7.98	9.98	12.5	NA	<0.200	<2.00	<1.00	41.7
	03/14/06	4.53	216	<1.00	8.23	10.5	6.92	NA	<0.200	<2.00	<1.00	27.3
U-14	09/27/06	67.4	1,970	1.84	122	159	175	NA	0.558	<2.00	<1.00	496
	03/21/07	9.93	266	<1.00	14.1	18.1	25.0	NA	<0.200	1.52	<1.00	83.1
	09/19/07	163	2,500	<0.800	83.3	106	120	NA	0.452	3.10	<0.800	822
	03/25/08	22.3	188	<1.00	11.9	14.7	21.8	949	<0.200	<2.00	<1.00	71.0
	09/25/08	16.0	104	<0.500	3.78	6.08	10.2	2,390	<0.200	<0.500	<1.00	46.3
	03/18/09	8.83	109	<0.500	5.49	7.25	14.0	780	<0.200	<0.500	<1.00	45.2
	09/22/09	<2.5	27.1	<0.40	<2.5	<2.5	0.26[5]	718	<0.20	<2.5	<2.5	12.6[5]
U-15	09/27/06	89.9	777	1.26	90.3	109	179	NA	0.221	<2.00	<1.00	292
	03/21/07	75.1	416	<1.00	46.1	58.1	86.3	NA	<0.200	1.15	<1.00	158
	09/19/07	126	4,790	1.99	232	388	508	NA	0.780	5.38	1.42	2,150
	03/25/08	68.5	284	<1.00	19.6	46.4	43.9	11,900	<0.200	<2.00	<1.00	146
	09/25/08	86.7	502	<1.00	55.0	71.1	81.6	12,200	<0.200	<1.00	<2.00	239
	03/17/09	60.8	144	<0.500	7.85	10.8	15.6	10,800	<0.200	<0.500	<1.00	72.2
	09/21/09	58.6	71.9	<0.080	<0.50	<0.50	0.45	9,900	<0.20	<0.50	<0.50	3.6[5]

COP0017812

TABLE 4
GROUNDWATER ANALYTICAL RESULTS - TOTAL METALS
Willbridge Terminals
Portland, Oregon

Sample I.D.	Sample Date	Arsenic (µg/l)	Barium (µg/l)	Cadmium (µg/l)	Chromium (µg/l)	Copper (µg/l)	Lead (µg/l)	Manganese (µg/l)	Mercury (µg/l)	Selenium (µg/l)	Silver (µg/l)	Zinc (µg/l)
U-16	09/27/06	85.4	866	1.31	84.7	113	111	NA	1.70	<2.00	<1.00	239
	03/21/07	112	746	1.53	76.4	113	107	NA	1.35	1.74	<1.00	260
	09/19/07	105	280	<0.800	15.6	26.2	19.1	NA	0.247	<1.60	<0.800	76.4
	03/25/08	86.8	153	<1.00	5.82	8.59	7.97	9,970	<0.200	<2.00	<1.00	54.8
	09/25/08	97.2	310	<0.500	20.6	29.6	27.1	10,600	0.345	0.763	<1.00	94.1
	03/17/09	76.8	226	<0.500	11.6	16.9	16.7	9,250	<0.200	<0.500	<1.00	51.6
	09/21/09	80.2	101	<0.40	<2.5	<2.5	<0.40[5]	11,900	<0.20	<2.5	<2.5	<25.0
U-17	09/27/06	58.1	606	<1.00	69.4	87.3	55.2	NA	<0.200	<2.00	<1.00	183
	03/21/07	23.9	141	<1.00	12.3	18.5	25.2	NA	<0.200	<1.00	<1.00	45.4
	09/19/07	47.6	294	<0.800	26.1	42.3	38.1	NA	<0.200	<1.60	<0.800	98.2
	03/25/08	24.0	87.4	<1.00	1.98	4.21	5.56	4,380	<0.200	<2.00	<1.00	13.8
	09/25/08	24.7	111	<0.500	10.2	14.8	10.9	3,160	<0.200	<0.500	<10.0	36.2
	03/17/09	21.2	62.7	0.540	2.96	4.15	5.91	3,750	<0.200	<0.500	<1.00	12.6
	09/21/09	16.2	25.4	<0.40	<2.5	<2.5	<0.50	1,680	<0.20	<2.5	<2.5	<25.0
U-18	03/21/07	69.0	491	<1.00	53.9	92	64.2	NA	<0.200	1.12	<1.00	213
	09/19/07	95.7	259	<0.800	20.4	40.3	21.9	NA	<0.200	<1.60	<0.800	101
	03/25/08	81.0	95.3	<1.00	6.69	10.9	12.8	1,360	<0.200	<2.00	<1.00	45.3
	09/25/08	57.1	91.9	<0.500	8.11	15.8	14.6	2,330	<0.200	<0.500	<1.00	45.3
	03/17/09	83.8	79.9	0.500	3.62	8.71	7.68	594	<0.200	<0.500	<1.00	19.9
	09/22/09	11.0	25.2	<0.080	2.3	<5.0	4.3	429	<0.20	0.30[5]	<0.50	11.3
U-19	03/21/07	76.6	262	<1.00	12.0	22.4	23.2	NA	0.201	<1.00	<1.00	139
	09/19/07	96.8	100	<0.800	4.42	10.6	8.99	NA	<0.200	<1.60	<0.800	163
	03/25/08	93.4	160	<1.00	6.94	11.9	13.0	4,950	<0.200	<2.00	<1.00	169
U-20	03/21/07	50.0	352	<1.00	41.1	45.6	53.4	NA	<0.200	1.03	<1.00	157
	09/19/07	28.1	61.9	<0.800	<0.800	<1.60	<0.800	NA	<0.200	<1.60	<0.800	4.38
	03/25/08	17.4	61.7	<1.00	<1.00	<2.00	1.08	5,350[7]	<0.200	<2.00	<1.00	5.22
dup	03/25/08	14.5	57.5	<1.00	<1.00	<2.00	<1.00	5,170[7]	<0.200	<2.00	<1.00	<5.00
	09/25/08	47.7	910	<1.00	87.5	104	67.1	7,510	<0.200	1.87	<2.00	356
	03/17/09	43.2	84.3	<0.500	3.81	5.64	5.24	3,650	<0.200	<0.500	<1.00	15.2
	09/21/09	69.2	69.3	<0.40	<2.5	<2.5	<0.50	7,360	<0.20	<2.5	<2.5	<25.0
U-21	03/21/07	8.28	280	<1.00	24.4	30.6	24.1	NA	<0.200	<1.00	<1.00	88.6
	09/19/07	6.28	74.8	<0.800	0.954	3.11	4.00	NA	<0.200	<1.60	<0.800	9.39
	03/26/08	2.76	83.6	<1.00	1.10	5.18	1.12	1,380[7]	<0.200	<2.00	<1.00	13.2
	09/25/08	56.2	301	<1.00	37.9	44.1	45.0	6,400	<0.200	<1.00	<2.00	180
	03/17/09	8.13	122	<0.500	7.09	10.0	9.51	4,260	<0.200	<0.500	<1.00	32.4
	09/22/09	7.8	48.8	<0.40	<2.5	<2.5	2.3	6,450	<0.20	<2.5	<2.5	<25.0

COP0017813

TABLE 4
GROUNDWATER ANALYTICAL RESULTS - TOTAL METALS
Willbridge Terminals
Portland, Oregon

Sample I.D.	Sample Date	Arsenic (µg/l)	Barium (µg/l)	Cadmium (µg/l)	Chromium (µg/l)	Copper (µg/l)	Lead (µg/l)	Manganese (µg/l)	Mercury (µg/l)	Selenium (µg/l)	Silver (µg/l)	Zinc (µg/l)
U-22A	03/27/08	10.3	134	<0.380	3.44	5.29	24.2	3,300	<0.200	<5.00	<0.120	41.0
	06/24/08	10.3	109	<0.500	<2.00	3.25	4.41	3,260	<0.200	<0.500	<1.00	14.5
	09/23/08	9.20	249	<5.00	<20.0	<20.0	36.9	2,730	<0.200	<5.00	<1.00	53.9
	01/06/09	13.6	119	<0.500	<2.00	<2.00	2.67	3,640	<0.200	<0.500	<1.00	17.7
	03/19/09	7.02	132	<0.500	3.00	3.36	12.0	3,640	0.0168	<5.00	<1.00	19.9
	09/17/09	14.8	128	<0.500	2.88	3.01	11.4	3,540	<0.200	<0.500	<1.00	25.6
dup	09/17/09	14.4	109	<0.500	<2.00	2.01	8.67	3,540	<0.200	<0.500	<1.00	16.4
U-22B	03/27/08	9.78	464	<0.380	51.1	63	23.7	2,080	<0.200	<5.00	0.128	179
	06/24/08	2.57	108	<0.500	3.72	4.73	2.65	1,320	<0.200	<0.500	<1.00	25.2
	09/23/08	5.29	194	<5.00	<20.0	<20.0	7.41	1,510	<0.200	<5.00	<1.00	48.3
	01/07/09	1.34	47.8	<0.500	<2.00	<2.00	<1.00	1,130	<0.200	<0.500	<1.00	23.2
	03/19/09	1.89	71.4	<0.500	<2.00	<2.00	<1.00	1,020	<0.00500	<1.00	<1.00	5.52
dup	03/19/09	1.92	70.0	<0.500	<2.00	<2.00	<1.00	1,040	<0.00500	<1.00	<1.00	5.39
	09/17/09	3.50	63.9	<0.500	<2.00	<2.00	<10.0	1,380	<0.200	<0.500	<1.00	5.11
U-22C	06/25/08	10.2	110	<0.500	<2.00	<2.00	2.28	3,450	<0.200	<0.500	<1.00	10.6
U-23	03/27/08	13.6	1,450	<0.380	57.1	105	83.1	4,000	0.295	<5.00	0.333	383
	06/24/08	8.66	427	0.952	34.7	71.2	45.6[7]	5,510	<0.200	0.742	<1.00	174
	09/23/08	20.5	1,110	<10.0	168	315	67.7	9,260	<0.200	<10.0	<1.00	390
	01/06/09	3.60	120	<0.500	10.5	21.9	11.9	2,050	<0.200	<0.500	<1.00	75.6
	03/19/09	6.72	168	<0.500	5.58	22.8	12.4	5,860	0.0770	<5.00	<1.00	34.3
	09/17/09	4.86	50.4	<0.500	<2.00	3.45	<1.00	4,930	<0.200	<0.500	<1.00	5.91
U-24A	03/27/08	29.4	497	<0.380	60.5	103	19.8	13,400	<0.200	<5.00	0.200	173
	06/24/08	10.1	210	<0.500	19.2	29.6	9.21[7]	6,790	<0.200	<0.500	<1.00	67.1
	09/23/08	7.20	125	<10.0	<40.0	<40.0	2.90	9,350	<0.200	<10.0	<1.00	28.8
	01/06/09	11.2	122	<0.500	9.81	16.3	3.64	9,620	<0.200	<0.500	<1.00	43.3
	03/19/09	6.77	43.8	<0.500	<2.00	<2.00	<1.00	9,610	<0.00500	<10.0	<1.00	<5.00
	09/17/09	<20.0	224	<0.500	<40.0	125	<20.0	10,800	<0.200	<0.500	<20.0	<100
dup	09/17/09	18.9	208	<0.500	23.3	34.2	<20.0	10,600	<0.200	<0.500	<1.00	61.6
U-24B	03/27/08	1.58	212	<0.380	1.79	<2.70	0.823	2,970	<0.200	<5.00	0.120	<33.0
	06/25/08	<1.00	161	<0.500	<2.00	<2.00	<1.00	2,480	<0.200	<0.500	<1.00	17.5
	09/24/08	1.88	186	<0.500	4.11	3.49	1.80	2,770	<0.200	0.77	<1.00	106
	01/07/09	<1.00	100	<0.500	<2.00	<2.00	<1.00	1,970	<0.200	<0.500	<1.00	12.9
	03/19/09	1.19	112	<0.500	<2.00	<2.00	<1.00	1,900	<0.00500	<2.50	<1.00	<5.00
dup	03/19/09	1.48	129	<0.500	2.97	<2.00	<1.00	2,240	<0.00500	<5.00	<1.00	10.0
	09/17/09	1.26	99.9	<0.500	3.16	<2.00	<1.00	1,710	<0.200	<0.500	<1.00	10.0
U-25	03/27/08	9.33	60.6	<0.380	3.44	5.17	2.33	4,150	<0.200	<5.00	<0.120	<33.0
	06/24/08	8.18	47.1	<0.500	<2.00	2.75	<1.00[9]	4,840	<0.200	<0.500	<1.00	8.70
	09/24/08	14.3	47.9	<0.500	<2.00	2.37	<1.00	7,900	<0.200	0.604	<1.00	9.82
	01/06/09	12.7	63.8	<0.500	4.95	5.63	2.53	5,400	<0.200	<0.500	<1.00	19.2
	03/19/09	8.10	36.5	<0.500	<2.00	2.69	<1.00	3,370	0.00941	<5.00	<1.00	5.65
	09/17/09	1.85	21.8	<0.500	<2.00	<2.00	<1.00	3,290	<0.200	<0.500	<1.00	<5.00

COP0017814

TABLE 4
GROUNDWATER ANALYTICAL RESULTS - TOTAL METALS
Willbridge Terminals
Portland, Oregon

Sample I.D.	Sample Date	Arsenic (µg/l)	Barium (µg/l)	Cadmium (µg/l)	Chromium (µg/l)	Copper (µg/l)	Lead (µg/l)	Manganese (µg/l)	Mercury (µg/l)	Selenium (µg/l)	Silver (µg/l)	Zinc (µg/l)
U-26	03/26/08	11.2	959	<1.00	13.0	22.6	43.6	798[7]	<0.200	<2.00	<1.00	87.2
	06/25/08	5.16	140	<0.500	4.22	6.67	10.1	2,150	<0.200	<0.500	<1.00	26.5
	09/23/08	38.2	740	<10.0	124	123	35.4	9,080	<0.200	<10.0	<1.00	201
	01/07/09	5.12	63.1	<0.500	3.19	8.55	11.0	960	<0.200	<0.500	<1.00	46.8
	03/20/09	15.3	488	<0.500	12.9	22.3	43.4	824	0.0451	<0.500	<1.00	88.4
	09/17/09	11.0	173	<0.500	6.89	8.25	11.0	389	<0.200	<0.500	<1.00	30.9
U-27	03/26/08	15.8	149	<1.00	20.9	23.6	7.45	3,120[7]	<0.200	<0.500	<1.00	43.6
	06/25/08	22.8	77.2	<0.500	10.6	13.7	3.49	4,960	<0.200	<0.500	<1.00	29.4
	09/23/08	32.3	971	<10.0	156	235	36.4	7,870	0.226	<10.0	<1.00	335
	01/07/09	3.73	77.6	<0.500	11.8	10.6	6.82	252	<0.200	<0.500	<1.00	47.2
	03/20/09	8.11	68.9	<0.500	9.63	10.8	4.43	1,340	0.0316	<0.500	<1.00	27.5
	09/17/09	11.2	56.4	<0.500	6.99	6.29	<5.00	1,620	<0.200	<0.500	<1.00	17.4
U-28	03/26/08	4.37	85.9	<1.00	2.44	3.94	1.10	3,700[7]	<0.200	<2.00	<1.00	13.0
	06/25/08	4.48	75.1	<0.500	<2.00	<2.00	<1.00	3,880	<0.200	<0.500	<1.00	9.26
	09/24/08	4.56	104	<0.500	4.00	5.94	1.48	4,390	<0.200	0.883	<1.00	21.3
	01/07/09	4.26	79.1	<0.500	<2.00	<2.00	<1.00	3,840	<0.200	<0.500	<1.00	5.74
	03/20/09	3.02	85.1	<0.500	<2.00	3.85	1.02	1,900	<0.00500	0.872	<1.00	11.6
	09/17/09	1.72	67.2	<0.500	<2.00	<2.00	<1.00	3,670	<0.200	<0.500	<1.00	15.0
U-29A	09/24/08	20.3	249	2.58	23.3	24.5	10.1	7,220	<0.200	0.502	<1.00	82.4
	03/20/09	23.1	174	<2.50	10.1	15.1	10.7	4,820	0.0138	<2.50	<5.00	32.6
	09/17/09	19.1	80.0	1.27	<2.00	3.36	<10.0	4,260	<0.200	<0.500	<1.00	13.4
U-29B	03/26/08	5.74	216	<1.00	5.38	7.38	2.57	1,550[7]	<0.200	<2.00	<1.00	16.6
	06/25/08	5.77	194	0.586	2.40	2.40	1.24	1,500	<0.200	<0.500	<1.00	9.87
	09/24/08	12.2	399	<1.00	56.5	55.3	15.3	1,990	<0.200	1.85	<2.00	122
dup	09/24/08	9.45	354	2.55	39.5	39.7	10.8	1,890	<0.200	1.62	<2.00	99.9
	01/07/09	6.04	239	5.71	13.3	15.9	8.20	1,320	<0.200	0.590	<1.00	64.0
U-29C	03/26/08	7.71	106	<1.00	3.67	5.76	7.20	3,890[7]	<0.200	<2.00	<1.00	25.4
	06/25/08	3.25	95.6	<0.500	<2.00	<2.00	<1.00	1,660	<0.200	<0.500	<1.00	24.6
	09/23/08	12.1	223	<5.00	<20.0	31.0	8.08	1,830	<0.200	<5.00	<1.00	64.0
	01/07/09	3.66	85.2	<0.500	<2.00	<2.00	1.54	1,350	<0.200	<0.500	<1.00	21.7

COP0017815

TABLE 4
GROUNDWATER ANALYTICAL RESULTS - TOTAL METALS
Willbridge Terminals
Portland, Oregon

Sample I.D.	Sample Date	Arsenic (µg/l)	Barium (µg/l)	Cadmium (µg/l)	Chromium (µg/l)	Copper (µg/l)	Lead (µg/l)	Manganese (µg/l)	Mercury (µg/l)	Selenium (µg/l)	Silver (µg/l)	Zinc (µg/l)

NOTES:

µg/L = micrograms per liter
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 0.200 µg/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

COP0017816

TABLE 5
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)	Manganese (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**	NA	<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**	**4,290**	**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**	**3,950**	**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**	**4,660**	<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	**3,860**	<0.200	<5.00	<0.120	<33.0
	09/23/08	**792**	**2,080**	<485	**1.02**	**1.14**	**0.450**	**2.90**	<1.00	**32.7**	<5.00	<20.0	<20.0	<10.0	**4,340**	**0.001170**	<5.00	<10.0	**11.7**
	03/24/09	**743**	**13,700**	<500	**1.06**	**1.46**	<1.00	**2.15**	<1.00	**32.2**	<0.500	<20.0	**9.58**	**3.90**	**4,570**	**0.0505**	<0.500	<1.00	**30.5**
dup	03/24/09	**746**	**25,100**	**722**	**0.980**	**1.31**	<1.00	**2.02**	<1.00	**32.2**	<0.500	<20.0	**22.1**	**7.22**	**4,670**	**0.0225**	<0.500	<1.00	**48.2**
	09/22/09	697	5,660	<500	0.720	1.13	<1.00	2.17	<1.00	**31.8**	<0.500	**3.06**	<10.0	**1.26**	**4,530**	<0.00500	<0.500	<1.00	<25.0
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**	NA	<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	**185**	<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	**862**	<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	**76.1**	<0.200	<5.00	<0.120	<33.0
	09/24/08	**154**	**376**	<485	<0.400	<2.00	<2.00	<6.00	<2.00	**3.47**	<0.500	**1.17**	**3.97**	**1.19**	**595**	**0.00198**	<0.500	<1.00	**13.3**
	03/25/09	<80.0	<248	<495	<0.200	<1.00	<1.00	<3.00	<1.00	<1.00	<0.500	<2.00	<2.00	<1.00	**127**	<0.00500	<0.500	<1.00	**7.68**
	09/22/09	<80.0	523	<500	<0.200	<1.00	<1.00	<3.00	<1.00	**1.24**	<0.500	<2.00	**68.2**	<1.00	**560**	<0.00500	<0.500	<1.00	**74.8**
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**	**3,860**	<0.200	<5.00	<0.120	<33.0
	06/24/08	**211**	**209**	<481	**0.140**	**0.280**	**0.250**	**0.860**	**0.300**	**23.8**	<0.500	**48.4**	**81.7**	**40.5**	**5,160**	**0.0826**	**1.71**	<1.00	**205**
	09/24/08	**145**	**547**	<485	<0.400	<2.00	<2.00	**0.180**	0.400	**19.9**	<0.500	**3.55**	**4.58**	**2.41**	**4,880**	<0.200	**0.745**	<1.00	**13.8**
	01/06/09	**205**	**1,410**	<490	<0.200	<1.00	**0.350**	**0.810**	**0.350**	**16.2**	**1.64**	<20.0	**0.430**	<10.0	**4,670**	<0.200	<5.00	**8.01**	<50.0
	03/18/09	**196**	**458**	<495	<0.200	<1.00	<1.00	<3.00	<1.00	**3.58**	<5.00	<2.00	<2.00	<1.00	**3,470**	<0.00500	<5.00	<1.00	<5.00
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**	**1,100**	**0.0235**	<0.2	**0.009**	**3.14**
	09/23/08	<250	**14**	**34**	<0.50	<0.50	<0.50	<1.00	<0.50	**32.0**	**0.135**	**1.31**	**3.28**	**0.764**	**1,780**	**0.167**	**0.4**	**0.029**	**8.11**
	03/16/09	-	-	-	<0.200	<1.00	<1.00	<3.00	<1.00	**12.7**	<0.500	<2.00	<2.00	<1.00	NA	**0.0126**	<0.500	<1.00	<5.00
	09/14/09	-	-	-	<0.500	<0.500	<0.500	<1.00	-	**14.1**	<0.500	<2.00	**2.92**	**1.43**	NA	**0.0137**	<0.500	<1.00	**7.84**
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**
	06/24/08	<250	**19**	**36**	<0.045	<0.048	<0.042	<0.115	<0.070	**8.70**	**0.108**	**1.87**	**4.37**	**2.95**	**1,800**	**0.00789**	**0.3**	**0.016**	**13.6**
	09/23/08	**150**	**53**	**140**	<0.50	<0.50	<0.50	**0.080**	**0.18**	**27.3**	**0.578**	**7.36**	**26.5**	**13.2**	**5,040**	**0.00776**	**0.4**	**0.075**	**49.7**
	01/05/09	<80	<238	<476	<0.200	<1.00	<1.00	<1.00	<1.00	**4.81**	<0.500	<2.00	**2.36**	**1.10**	**160**	**0.00422**	<0.500	<1.00	**5.59**
	03/16/09	-	-	-	<0.200	<1.00	<1.00	<3.00	<1.00	**11.0**	<0.500	**6.68**	**12.7**	**8.64**	NA	**0.0388**	<0.500	<1.00	**28.4**
	09/14/09	-	-	-	<0.500	<0.500	<0.500	<1.00	-	**26.8**	**3.22**	**18.3**	**52.7**	**20.4**	NA	**0.0543**	<0.500	<1.00	**73.2**

COP0017817

TABLE 5
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)	Manganese (µg/l)	Mercury (µg/l)	Selenium (µg/l)	Silver (µg/l)	Zinc (µg/l)
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**
	09/23/08	**120**	**20**	<500	<0.50	<0.50	<0.50	**0.18**	**0.080**	**21.6**	**0.018**	**0.67**	**2.46**	**0.652**	**3,570**	**0.00443**	**0.8**	**0.018**	**2.80**
	03/16/09	-	-	-	<0.200	<1.00	<1.00	<3.00	<1.00	**24.2**	<0.500	<2.00	**3.56**	**2.70**	NA	**0.00608**	<0.500	<1.00	**5.42**
	09/14/09	-	-	-	<0.500	<0.500	<0.500	<1.00	-	**29.3**	<0.500	<2.00	**3.02**	**1.75**	NA	**0.00790**	<0.500	<1.00	<5.00
dup	09/14/09	-	-	-	<0.500	<0.500	<0.500	1.04	-	**30.8**	<0.500	<2.00	**2.85**	**1.67**	NA	**0.00411**	<0.500	<1.00	<5.00
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**
	06/23/08	**400**	**370**	**33**	**0.12**	**0.22**	<0.042	**0.47**	<0.12	**18.0**	**0.084**	**0.380**	**0.390**	**0.39**	**2,490**	**0.00064**	<0.29	**0.004**	**2.60**
	09/23/08	**670**	**3,500**	**69**	<0.50	**0.050**	<0.50	**0.24**	<0.50	**18.7**	**0.270**	**0.37**	**0.89**	**1.29**	**2,530**	**0.00223**	**0.4**	**0.019**	**4.47**
dup	09/23/08	**550**	**3,700**	**63**	<0.50	**0.060**	<0.50	**0.36**	<0.50	**19.0**	**0.198**	**0.29**	**0.77**	**1.16**	**2,560**	**0.00197**	**0.4**	**0.009**	**4.92**
	01/05/09	**128**	**3,780**	<490	<0.200	<1.00	<1.00	<1.00	<1.00	**19.0**	**0.673**	<2.00	<2.00	**1.80**	**1,730**	**0.00267**	<0.500	<1.00	**14.8**
	03/16/09	-	-	-	<0.200	<1.00	<1.00	<3.00	<1.00	**19.8**	<0.500	<2.00	<2.00	**3.52**	NA	**0.00114**	<0.500	<1.00	<5.00
	09/14/09	-	-	-	<0.500	<0.500	<0.500	<1.00	-	**16.2**	<0.500	<2.00	<2.00	<1.00	NA	**0.000946**	<0.500	<1.00	<5.00
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**
	09/23/08	**53**	**21**	**64**	<0.50	<0.50	<0.50	**0.13**	**0.17**	**104**	**0.013**	**1.48**	**3.00**	**2.35**	**3,840**	**0.0158**	**0.4**	**0.012**	**9.64**
	03/16/09	-	-	-	<0.200	<1.00	<1.00	<3.00	<1.00	**23.0**	<0.500	<2.00	<2.00	<1.00	NA	**0.00280**	<0.500	<1.00	<5.00
	09/14/09	-	-	-	<0.500	<0.500	<0.500	<1.00	-	**19.3**	<0.500	<2.00	<2.00	<1.00	NA	**0.00359**	<0.500	<1.00	**9.61**

COP0017818

TABLE 5
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)	Manganese (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	NA	<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**	NA	<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	<0.800	<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**	**3,160**	<0.200	<2.00	<1.00	**150**
	06/24/08	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	09/24/08	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	03/19/09	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
P-1	09/26/06	-	-	-	<0.200	<0.500	<0.500	<1.00	<2.00	**14.0**	**4.58**	**130**	**185**	**41.8**	NA	<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	NA	<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**
85	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**	**797**	<0.200	<2.00	<1.00	**151**
	06/25/08	<80.0	<236	<472	**1.99**	**1.32**	<0.500	<1.00	<2.00	**1.60**	**0.746**	**2.26**	**6.51**	**4.48**	**892**	<0.200	<0.500	<1.00	**54.2**
	09/23/08	<80.0	<243	<485	**1.87**	<1.00	<1.00	<3.00	<1.00	**8.17**	<5.00	**36.2**	**51.4**	**30.2**	**2,400**	<0.200	<5.00	<1.00	**234**
	01/07/09	<80.0	<250	<500	<0.200	<1.00	<1.00	<3.00	<1.00	**1.46**	**0.690**	**3.92**	**7.03**	**4.18**	**72.0**	<0.200	<0.500	<1.00	**50.7**
	03/20/09	<80.0	<250	<500	<0.200	<1.00	<1.00	<3.00	<1.00	**1.40**	<0.500	**3.60**	**6.57**	**4.33**	**73.6**	**0.0104**	<0.500	<1.00	**37.6**
	09/18/09	<80.0	<248	<495	**0.320**	<1.00	<1.00	<3.00	<1.00	**2.19**	<0.500	**5.74**	**9.38**	**5.55**	**1,210**	**0.00933**	<0.500	<1.00	**59.4**
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**	**5.48**	**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**
	09/24/08	**652**	**26,700**	**3,870**	<0.200	<1.00	<1.00	<3.00	<1.00	**13.2**	<1.00	**13.5**	**46.5**	**192**	**2,910**	<0.200	<1.00	<2.00	**752**
	03/19/09	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
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**	**3,300**	<0.200	<5.00	<0.120	**41**
	06/24/08	**322**	**3,550**	<476	<0.200	<0.500	<0.500	<1.00	<2.00	**10.3**	<0.500	<2.00	**3.25**	**4.41**	**3,260**	<0.200	<0.500	<1.00	**14.5**
	09/23/08	**237**	**2,410**	<476	<0.200	<1.00	<1.00	<3.00	<1.00	**9.20**	<5.00	<20.0	<20.0	**36.9**	**2,730**	<0.200	<5.00	<1.00	**53.9**
	01/06/09	**279**	**1,790**	<485	<0.200	<1.00	<1.00	<3.00	<1.00	**13.6**	<0.500	<2.00	<2.00	**2.67**	**3,640**	<0.200	<0.500	<1.00	**17.7**
	03/19/09	**303**	**1,680**	<495	<0.200	<1.00	<1.00	<3.00	<1.00	**7.02**	<0.500	**3.00**	**3.36**	**12.0**	**3,640**	**0.0168**	<5.00	<1.00	**19.9**
	09/17/09	264	8,780	1,380	<0.400	<2.00	<2.00	<6.00	<2.00	**14.8**	<0.500	**2.88**	**3.01**	**11.4**	**3,540**	<0.200	<0.500	<1.00	**25.6**
dup	09/17/09	304	4,170	759	<0.200	<1.00	<1.00	<3.00	<1.00	**14.4**	<0.500	<2.00	**2.01**	**8.67**	**3,540**	<0.200	<0.500	<1.00	**16.4**
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**	**2,080**	<0.200	<5.00	**0.128**	**179**
	06/24/08	<80.0	<238	<476	<0.200	<0.500	<0.500	<1.00	<2.00	**2.57**	<0.500	**3.72**	**4.73**	**2.65**	**1,320**	<0.200	<0.500	<1.00	**25.2**
	09/23/08	<80.0	**455**	<476	<0.200	<1.00	<1.00	<3.00	<1.00	**5.29**	<5.00	<20.0	<20.0	**7.41**	**1,510**	<0.200	<5.00	<1.00	**48.3**
	01/07/09	<80.0	<250	<500	<0.200	<1.00	<1.00	<3.00	<1.00	**1.34**	<0.500	<2.00	<2.00	<1.00	**1,130**	<0.200	<0.500	<1.00	**23.2**
	03/19/09	<80.0	**384**	<495	<0.200	<1.00	<1.00	<3.00	<1.00	**1.89**	<0.500	<2.00	<2.00	<1.00	**1,020**	<0.00500	<1.00	<1.00	**5.52**
dup	03/19/09	<80.0	**1,160**	<556	<0.200	<1.00	<1.00	<3.00	<1.00	**1.92**	<0.500	<2.00	<2.00	<1.00	**1,040**	<0.00500	<1.00	<1.00	**5.39**
	09/17/09	<80.0	<263	<526	<0.200	<1.00	<1.00	<3.00	<1.00	**3.50**	<0.500	<2.00	<2.00	<10.0	**1,380**	<0.200	<0.500	<1.00	**5.11**

COP0017819

TABLE 5
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)	Manganese (µg/l)	Mercury (µg/l)	Selenium (µg/l)	Silver (µg/l)	Zinc (µg/l)
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**	**4,000**	**0.295**	<5.00	**0.333**	**383**
	06/24/08	**3,550**	**2,690**[5]	<476	**6.96**	**1.32**	**1.56**	**3.16**	<2.00	**8.66**	**0.952**	**34.7**	**71.2**	**45.6**	**5,510**	<0.200	**0.742**	<1.00	**174**
	09/23/08	**532**	**1,450**	<476	**17.0**	**1.58**	<1.00	**2.16**	<1.00	**20.5**	<10.0	**168**	**315**	**67.7**	**9,260**	<0.200	<10.0	<1.00	**390**
	01/06/09	**303**	**6,700**	<481	<0.200	<1.00	<1.00	<3.00	<1.00	**3.60**	<0.500	**10.5**	**21.9**	**11.9**	**2,050**	<0.200	<0.500	<1.00	**75.6**
	03/19/09	<80.0	**3,430**	<495	<0.200	<1.00	<1.00	<3.00	<1.00	**6.72**	<0.500	**5.58**	**22.8**	**12.4**	**5,860**	**0.0770**	<5.00	<1.00	**34.3**
	09/17/09	176	12,600	<500	<0.200	<1.00	<1.00	<3.00	<1.00	**4.86**	<0.500	<2.00	**3.45**	<1.00	**4,930**	<0.200	<0.500	<1.00	**5.91**
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**	**13,400**	<0.200	<5.00	**0.20**	**173**
	06/24/08	<80.0	**386**[4]	<476	<0.200	<0.500	<0.500	<1.00	<2.00	**10.1**	<0.500	**19.2**	**29.6**	**9.21**	**6,790**	<0.200	<0.500	<1.00	**67.1**
	09/23/08	<80.0	<238	<476	<0.200	<1.00	<1.00	<3.00	**1.52**	**7.20**	<10.0	<40.0	<40.0	**2.90**	**9,350**	<0.200	<10.0	<1.00	**28.8**
	01/06/09	<80.0	<236	<472	<0.200	<1.00	<1.00	<3.00	**1.17**	**11.2**	<0.500	**9.81**	**16.3**	**3.64**	**9,620**	<0.200	<0.500	<1.00	**43.3**
	03/19/09	<80.0	**281**	<495	<0.200	<1.00	<1.00	<3.00	**1.22**	**6.77**	<0.500	<2.00	<2.00	<1.00	**9,610**	<0.00500	<10.0	<1.00	<5.00
	09/17/09	<80.0	803	<526	<0.200	<1.00	<1.00	<3.00	1.49	<20.0	<0.500	<40.0	**125**	<20.0	**10,800**	<0.200	<0.500	<20.0	<100
dup	09/17/09	<80.0	<250	<500	<0.200	<1.00	<1.00	<3.00	1.51	**18.9**	<0.500	**23.3**	**34.2**	<20.0	**10,600**	<0.200	<0.500	<1.00	**61.6**
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**	**6,520**	**2,030**	<0.200	<0.500	<0.500	<1.00	<2.00	**0.664**	<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**	**2,970**	<0.200	<5.00	**0.12**	<33.0
	06/25/08	<80.0	<236	<472	<0.200	<0.500	0.510	<1.00	<2.00	<1.00	<0.500	<2.00	<2.00	<1.00	**2,480**	<0.200	<0.500	<1.00	**17.5**
	09/24/08	<80.0	<243	<485	<0.200	<1.00	<1.00	<3.00	<1.00	**1.88**	<0.500	**4.11**	**3.49**	**1.80**	**2,770**	<0.200	**0.770**	<1.00	**106**
	01/07/09	<80.0	<250	<500	<0.200	<1.00	<1.00	<3.00	<1.00	<1.00	<0.500	<2.00	<2.00	<1.00	**1,970**	<0.200	<0.500	<1.00	**12.9**
	03/19/09	<80.0	<248	<495	<0.200	<1.00	<1.00	<3.00	<1.00	**1.19**	<0.500	<2.00	<2.00	<1.00	**1,900**	<0.00500	<2.50	<1.00	<5.00
dup	03/19/09	<80.0	<248	<495	<0.200	<1.00	<1.00	<3.00	<1.00	**1.48**	<0.500	**2.97**	<2.00	<1.00	**2,240**	<0.00500	<5.00	<1.00	**10.0**
	09/17/09	<80.0	<263	<526	<0.200	<1.00	<1.00	<3.00	<1.00	**1.26**	<0.500	**3.16**	<2.00	<1.00	**1,710**	<0.200	<0.500	<1.00	**10.0**
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**	**4,150**	<0.200	<5.00	<0.120	<33.0
	06/24/08	**869**	**301**[3]	<476	<0.200	<0.500	<0.500	<1.00	<2.00	**8.18**	<0.500	<2.00	**2.75**	<1.00[9]	**4,840**	<0.200	<0.500	<1.00	**8.70**
	09/24/08	**211**	**388**	<485	<0.400	<2.00	<2.00	<6.00	<2.00	**14.3**	<0.500	<2.00	**2.37**	<1.00	**7,900**	<0.200	**0.604**	<1.00	**9.82**
	01/06/09	**555**	**309**	<500	<0.200	<1.00	<1.00	<3.00	<1.00	**12.7**	<0.500	**4.95**	**5.63**	**2.53**	**5,400**	<0.200	<0.500	<1.00	**19.2**
	03/19/09	<80.0	<278	<556	<0.200	<1.00	<1.00	<3.00	<1.00	**8.10**	<0.500	<2.00	**2.69**	<1.00	**3,370**	**0.00941**	<5.00	<1.00	**5.65**
	09/17/09	<80.0	<250	<500	<0.200	<1.00	<1.00	<3.00	<1.00	**1.85**	<0.500	<2.00	<2.00	<1.00	**3,290**	<0.200	<0.500	<1.00	<5.00
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**	**798**	<0.200	<2.00	<1.00	**87.2**
	06/25/08	<80.0	<236	<472	<0.200	<0.500	<0.500	<1.00	<2.00	**5.16**	<0.500	**4.22**	**6.67**	**10.1**	**2,150**	<0.200	<0.500	<1.00	**26.5**
	09/23/08	<80.0	<238	<476	<0.200	<1.00	<1.00	<3.00	<1.00	**38.2**	<10.0	**124**	**123**	**35.4**	**9,080**	<0.200	<10.0	<1.00	**201**
	01/07/09	<80.0	<250	<500	<0.200	<1.00	<1.00	<3.00	<1.00	**5.12**	<0.500	**3.19**	**8.55**	**11.0**	**960**	<0.200	<0.500	<1.00	**46.8**
	03/20/09	<80.0	<240	<481	<0.200	<1.00	<1.00	<3.00	<1.00	**15.3**	<0.500	**12.9**	**22.3**	**43.4**	**824**	**0.0451**	<0.500	<1.00	**88.4**
	09/17/09	<80.0	<263	<526	<0.200	<1.00	<1.00	<3.00	<1.00	**11.0**	<0.500	**6.89**	**8.25**	**11.0**	**389**	<0.200	<0.500	<1.00	**30.9**

COP0017820

TABLE 5
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)	Manganese (µg/l)	Mercury (µg/l)	Selenium (µg/l)	Silver (µg/l)	Zinc (µg/l)
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**	**3,120**	<0.200	<2.00	<1.00	**43.6**
	06/25/08	<80.0	<236	<472	<0.200	<0.500	<0.500	<1.00	<2.00	**22.8**	<0.500	**10.6**	**13.7**	**3.49**	**4,960**	<0.200	<0.500	<1.00	**29.4**
	09/23/08	<80.0	<238	<476	<0.200	<1.00	<1.00	<3.00	<1.00	**32.3**	<10.0	**156**	**235**	**36.4**	**7,870**	**0.226**	<10.0	<1.00	**335**
	01/07/09	<80.0	<250	<500	<0.200	<1.00	<1.00	<3.00	<1.00	**3.73**	<0.500	**11.8**	**10.6**	**6.82**	**252**	<0.200	<0.500	<1.00	**47.2**
	03/20/09	<80.0	<240	<481	<0.200	<1.00	<1.00	<3.00	<1.00	**8.11**	<0.500	**9.63**	**10.8**	**4.43**	**1,340**	**0.0316**	<0.500	<1.00	**27.5**
	09/17/09	<80.0	<250	<500	<0.200	<1.00	<1.00	<3.00	<1.00	**11.2**	<0.500	**6.99**	**6.29**	<5.00	**1,620**	<0.200	<0.500	<1.00	**17.4**
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**	**3,700**	<0.200	<2.00	<1.00	**13**
	06/25/08	<80.0	<236	<472	<0.200	<0.500	<0.500	<1.00	<2.00	**4.48**	<0.500	<2.00	<2.00	<1.00	**3,880**	<0.200	<0.500	<1.00	**9.26**
	09/24/08	<80.0	<243	<485	<0.200	<1.00	<1.00	<3.00	<1.00	**4.56**	<0.500	**4.00**	**5.94**	**1.48**	**4,390**	<0.200	**0.883**	<1.00	**21.3**
	01/07/09	<80.0	<250	<500	<0.200	<1.00	<1.00	<3.00	<1.00	**4.26**	<0.500	<2.00	<2.00	<1.00	**3,840**	<0.200	<0.500	<1.00	**5.74**
	03/20/09	<80.0	<240	<481	<0.200	<1.00	<1.00	<3.00	<1.00	**3.02**	<0.500	<2.00	**3.85**	**1.02**	**1,900**	<0.00500	**0.872**	<1.00	**11.6**
	09/17/09	<80.0	<263	<526	<0.200	<1.00	<1.00	<3.00	<1.00	**1.72**	<0.500	<2.00	<2.00	<1.00	**3,670**	<0.200	<0.500	<1.00	**15.0**
U-29A	01/29/08	**414**	--	--	<0.200	<0.500	<0.500	<1.00	<2.00	**-**	-	-	-	-	-	**0.176**	-	-	-
	06/26/08	**1,150**	--	--	<0.200	<0.500	<0.500	<1.00	<2.00	-	-	-	-	-	-	-	-	-	-
	09/24/08	**492**	--	--	**0.210**	<1.00	<1.00	<3.00	<1.00	**20.3**	**2.58**	**23.3**	**24.5**	**10.1**	**7,220**	<0.200	**0.502**	<1.00	**82.4**
	03/20/09	**2,700**	**386,000**	**29,100**	<0.200	<1.00	<1.00	<3.00	<1.00	**23.1**	<2.50	**10.1**	**15.1**	**10.7**	**4,820**	**0.0138**	<2.50	<5.00	**32.6**
	09/17/09	605	52,400	4,210	0.200	<1.00	<1.00	<3.00	<1.00	**19.1**	**1.27**	<2.00	**3.36**	<10.0	**4,260**	<0.200	<0.500	<1.00	**13.4**
Portland Harbor Joint Source Control Screening Level Values																			
EPA's 2004 NRWQC (organism only)		--	--	--	51	15,000	2,100	--	--	0.14	--	--	--	--	100	--	4,200	--	26,000
DEQ's 2004 AWQC (organism only)		--	--	--	51	15,000	2,100	--	--	0.14	--	--	--	--	100	0.146	4,200	--	26,000
EPA's 2004 NRWQC ecological receptors (chronic)		--	--	--	--	--	--	--	--	150	0.094	--	2.7	0.54	--	0.77	5	--	36
DEQ's 2004 AWQC ecological receptors (chronic)		--	--	--	--	--	--	--	--	--	0.38	--	3.6	0.54	--	0.012	35	0.12	33
Oak Ridge National Lab (Tier II SCV)		--	--	--	130	9.8	7.3	--	--	3.1	--	--	--	--	120	1.3	--	0.36	--

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 and revised in July 2007.
Bold face font indicates analyte was detected above the laboratory MRL or MDL
-- = Not analyzed
NS = Not sampled
NA = Not available
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.

COP0017821

TABLE 6
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**	**0.0578**	**0.0643**	**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**
	09/23/08	<0.476[1]	<1.19[1]	<0.476[1]	<0.476[1]	**0.182**	**0.148**	**0.146**	<0.476[1]	**0.131**	**0.267**	**0.0500**	**0.671**	**1.87**	**0.136**	<0.952[1]	**1.11**	**0.584**
	03/24/09	<2.43	**2.69**	<2.43	<2.43	0.0367	0.0247	0.0251	<0.194	0.0196	0.0853	<0.00971	<2.43	**8.59**	0.0215	<2.43	**4.96**	**0.819**
dup	03/24/09	<0.971	**1.85**	<0.971	<0.971	0.0355	0.0236	0.0249	<0.194	0.0179	0.0782	<0.00971	<0.971	**7.45**	0.0217	<0.971	**4.66**	**0.782**
	09/22/09	<0.0980	**1.09**	<0.196	<0.294	**0.00944**	<0.00490	0.00494	<0.0980	<0.00490	**0.0197**	<0.00490	**0.366**	**1.48**	<0.00490	<0.392	**1.25**	**0.396**
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
	09/24/08	<0.0952	**0.500**	<0.0952	<0.0952	**0.00712**	**0.00625**	**0.00645**	<0.0952	**0.00486**	**0.0145**	<0.00476	<0.0952	**2.38**	**0.00599**	<0.571[8]	**0.375**	<0.0952
	03/25/09	<0.0971	**0.125**	<0.0971	<0.0971	**0.00665**	**0.00565**	**0.00614**	<0.0971	**0.00595**	**0.0129**	**0.00515**	<0.0971	**0.411**	**0.00674**	<0.0971	<0.0971	<0.0971
	09/22/09	<0.0962	**0.619**	<0.0962	<0.0962	**0.0161**	**0.0183**	**0.0150**	<0.0962	**0.0134**	**0.0245**	<0.00481	<0.0962	**2.53**	**0.0119**	<0.240	**0.448**	<0.0962
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
	06/24/08	<0.398	<0.398	<0.398	<0.398	<0.00498	<0.00498	<0.00498	**0.0995**	<0.00498	**0.00751**	<0.00498	<0.398	**0.413**	<0.00498	<0.796	<0.398	<0.0995
	09/24/08	<0.385[2]	<0.385[2]	<0.385[2]	<0.385[2]	**0.00503**	<0.00481	<0.00481	<0.0962	<0.00481	**0.00821**	**0.00712**	<0.385[2]	**0.559**	**0.00873**	<0.769[2]	<0.385[2]	<0.0962
	01/06/09	<0.980	<0.980	<0.980	<0.980	**0.00710**	**0.00683**	**0.00831**	<0.0980	**0.00624**	**0.0133**	<0.00490	<0.980	**0.547**	**0.00849**	<0.980	<0.980	<0.980
	03/18/09	<0.0976	<0.976	<0.976	<0.390	<0.00488	<0.00488	<0.00488	<0.0976	<0.00488	<0.00976	<0.00488	<0.390	<0.976	<0.00488	<0.390	<0.390	<0.146

COP0017822

TABLE 6
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)
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
	09/23/08	**0.0026**	<0.0044	<0.0034	<0.0036	**0.0069**	<0.0043	<0.0023	<0.0029	<0.0025	**0.0039**	<0.0025	<0.0044	<0.0038	<0.0026	**0.0038**	<0.0050	**0.029**
	03/16/09	<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
	09/14/09	<0.0962	<0.0962	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.0962	<0.00481	<0.0962	<0.0962	<0.0962
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[6]	**0.0065**	**0.012**
	06/24/08	**0.0073**	**0.063**	**0.0069**	**0.010**	**0.0078**	**0.0057**	**0.0062**	**0.013**	**0.0045**	**0.0079**	**0.0068**	**0.0090**	**0.0091**	**0.014**	**0.11**	**0.020**	**0.016**
	09/23/08	**0.0089**	**0.31**	<0.0034	<0.0036	**0.0074**	<0.0043	<0.0023	**0.0029**	<0.0025	**0.0051**	<0.0025	<0.0044	<0.0038	**0.0033**	<0.18	<0.0050	**0.018**
	01/05/09	<0.0909	<0.0909	<0.0909	<0.0909	<0.00455	<0.00455	<0.00455	<0.0909	<0.00455	<0.00455	<0.00455	<0.0909	<0.0909	<0.00455	<0.0909	<0.0909	<0.0909
	03/16/09	<0.100	<0.100	<0.100	<0.100	<0.00500	<0.00500	<0.00500	<0.100	<0.00500	<0.00500	<0.00500	<0.100	<0.100	<0.00500	<0.150	<0.100	<0.100
	09/14/09	<0.0952	**0.148**	<0.0952	<0.0952	<0.00476	**0.00477**	<0.00476	<0.0952	<0.00476	**0.00509**	<0.00476	<0.0952	<0.0952	<0.00476	<0.0952	<0.0952	<0.0952
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**
	09/23/08	**0.0089**	**0.44**	<0.0034	<0.0036	<0.0026	<0.0043	<0.0023	<0.0029	<0.0025	<0.0034	<0.0025	<0.0044	<0.0038	<0.0026	<0.18	**0.050**	**0.10**
	03/16/09	<0.0952	**0.272**	<0.0952	<0.0952	<0.00476	<0.00476	<0.00476	<0.0952	<0.00476	<0.00476	<0.00476	<0.0952	<0.0952	<0.00476	<0.190	<0.0952	<0.0952
	09/14/09	<0.0971	**0.304**	<0.0971	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.0971	<0.00485	<0.0971	<0.0971	<0.0971
dup	09/14/09	<0.0962	**0.809**	<0.0962	**0.117**	**0.0265**	**0.0106**	**0.00920**	<0.0962	**0.00597**	**0.0421**	<0.00481	**0.515**	**0.482**	**0.00562**	<0.192	**1.22**	**0.293**

COP0017823

TABLE 6
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)
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**
	06/24/08	**0.012**	**0.56**	<0.19	**0.025**	<0.0075	**0.017**	**0.015**	**0.035**	**0.0053**	**0.0044**	**0.0054**	**0.033**	**0.75**	**0.036**	**0.46**	**0.099**	**0.053**
	09/23/08	<0.0023	**0.70**	<0.29	**0.031**	**0.055**	**0.071**	**0.065**	**0.085**	**0.026**	**0.051**	**0.013**	**0.10**	**0.68**	**0.081**	<0.69	**0.12**	**0.18**
dup	09/23/08	**0.031**	**0.67**	<0.22	**0.026**	**0.0079**	**0.0089**	**0.0070**	**0.013**	<0.0025	**0.0038**	<0.0025	**0.048**	**0.58**	**0.012**	<0.52	**0.10**	**0.058**
	01/05/09	<0.0930	**0.474**	<0.465[6]	<0.465[6]	**0.0119**	**0.0438**	**0.0215**	**0.222**	**0.0107**	**0.0247**	**0.0243**	<0.465[6]	**0.406**	**0.161**	<1.40[6]	<0.465[6]	<0.0930
	03/16/09	<0.286	**0.399**	<0.286	<0.0952	**0.00564**	**0.00791**	**0.00532**	<0.0952	<0.00476	**0.00894**	<0.00476	<0.0952	**0.366**	**0.0100**	<0.429	<0.0952	<0.0952
	09/14/09	<0.0971	**0.631**	<0.243	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.00485	**0.00506**	<0.00485	<0.0971	**0.578**	<0.00485	<0.340	**0.175**	<0.0971
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**
	09/23/08	<0.0023	**0.10**	<0.0034	<0.0036	<0.0026	<0.0043	<0.0023	<0.0029	<0.0025	<0.0034	<0.0025	<0.0044	<0.0038	<0.0026	<0.090	**0.022**	<0.0035
	03/16/09	<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
	09/14/09	<0.0962	<0.0962	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.0962	<0.00481	<0.0962	<0.0962	<0.0962

COP0017824

TABLE 6
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**
	09/22/08	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	03/19/09	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	09/18/09	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
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
	06/25/08	<0.0971	<0.0971	<0.0971	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.0971	<0.00485	<0.0971	<0.0971	<0.0971
	09/23/08	<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
	01/07/09	<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
	03/20/09	<0.0971	<0.0971	<0.0971	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.0971	<0.00485	<0.0971	<0.0971	<0.0971
	09/18/09	<0.0971	<0.0971	<0.0971	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.0971	<0.00485	<0.0971	<0.0971	<0.0971
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**
	06/25/08	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	09/24/08	**2.68**	**11.4**	<4.81	<12.0[6]	**1.02**	**0.483**	<0.481[6]	<4.81	<0.240	**2.25**	**0.276**	<4.81	**22.5**	<0.240	<7.21[6]	**63.1**	**10.2**
	03/19/09	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
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**
	06/24/08	<0.476[6]	**1.14**	<0.476[6]	<0.476[6]	<0.00476	<0.00476	<0.00476	<0.0952	<0.00476	<0.00952[6]	<0.00476	<0.476[6]	**3.35**	<0.00476	<0.952[6]	**0.741**	<0.0952
	09/23/08	<0.190[6]	**0.820**	<0.190[6]	<0.0952	<0.00476	<0.00476	<0.00476	<0.0952	<0.00476	**0.00656**	<0.00476	<0.0952	**2.80**	<0.00476	<0.857[6]	**0.593**	<0.0952
	01/06/09	<0.488	**0.964**	<0.488	<0.488	<0.0244	<0.00488	<0.00488	<0.0976	<0.00488	<0.0244	<0.00488	<0.488	**3.98**	<0.00488	**1.22**	**0.962**	<0.488
	03/19/09	<0.0962	**1.11**	<0.385	<0.385	**0.00720**	<0.00481	<0.00481	<0.0962	<0.00481	**0.0131**	<0.00481	<0.385	**4.13**	<0.00481	<0.433	<0.385	<0.144
	09/17/09	<0.0971	**1.27**	<0.243	<0.146	**0.0116**	**0.00817**	**0.00680**	<0.0971	<0.00485	**0.0309**	<0.00485	<0.0971	**4.38**	**0.00543**	<0.243	**0.914**	<0.0971
dup	09/17/09	<0.0971	**0.978**	<0.194	<0.146	**0.00934**	**0.00539**	<0.00485	<0.0971	<0.00485	**0.0205**	<0.00485	<0.0971	**3.36**	<0.00485	<0.194	**0.773**	<0.0971

COP0017825

TABLE 6
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)
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
	06/24/08	<0.0957	<0.0957	<0.0957	<0.0957	<0.00478	<0.00478	<0.00478	<0.0957	<0.00478	<0.00478	<0.00478	<0.0957	<0.0957	<0.00478	<0.0957	<0.0957	<0.0957
	09/23/08	<0.0952	<0.0952	<0.0952	<0.0952	<0.00476	<0.00476	<0.00476	<0.0952	<0.00476	<0.00476	<0.00476	<0.0952	**0.159**	<0.00476	<0.0952	<0.0952	<0.0952
	01/07/09	<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
	03/19/09	<0.0962	<0.0962	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.0962	<0.00481	<0.0962	<0.0962	<0.0962
dup	03/19/09	<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
	09/17/09	<0.0971	<0.0971	<0.0971	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.0971	<0.00485	<0.0971	<0.0971	<0.0971
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
	06/24/08	<0.476[6]	**0.562**	<0.476[6]	<1.43[6]	**0.0129**	**0.00535**	**0.00596**	<0.0952	<0.00476	**0.0281**	<0.00476	<0.190[6]	**1.93**	<0.00476	<1.43[6]	**2.12**	**0.121**
	09/23/08	<0.0952	<0.238[6]	<0.0952	<0.190[6]	**0.00600**	<0.00476	<0.00476	<0.0952	<0.00476	**0.00973**	<0.00476	<0.0952	**0.926**	<0.00476	<0.619[6]	**0.314**	<0.0952
	01/06/09	<0.483	<0.483	<0.483	<0.483	<0.0242	<0.00483	<0.00483	<0.0966	<0.00483	<0.0242	<0.00483	<0.483	**0.498**	<0.00483	<0.483	<0.725	<0.483
	03/19/09	<0.0985	<0.0985	<0.0985	<0.0985	<0.00493	<0.00493	<0.00493	<0.0985	<0.00493	<0.00493	<0.00493	<0.0985	<0.246	<0.00493	<0.0985	<0.0985	<0.148
	09/17/09	<0.388	<0.388	<0.388	<0.583	**0.0252**	<0.0194	<0.0194	<0.388	<0.0194	**0.0421**	<0.0194	<0.388	**1.04**	<0.0194	<0.388	**<0.583**	<0.388
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
	06/24/08	<0.0962	<0.0962	<0.0962	<0.0962	**0.00780**	**0.00770**	<0.00481	<0.0962	<0.00481	**0.00824**	<0.00481	<0.0962	<0.0962	**0.00501**	<0.0962	<0.0962	<0.0962
	09/23/08	<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
	01/06/09	<0.0980	<0.0980	<0.0980	<0.0980	<0.00490	<0.00490	<0.00490	<0.0980	<0.00490	<0.00490	**0.00784**	<0.0980	<0.0980	**0.00652**	<0.0980	<0.0980	<0.0980
	03/19/09	<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
	09/17/09	<0.0971	<0.0971	<0.0971	<0.0971	<0.00485	**0.00537**	<0.00485	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.0971	<0.00485	<0.0971	<0.0971	<0.0971
dup	09/17/09	<0.0971	<0.0971	<0.0971	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.0971	<0.00485	<0.0971	<0.0971	<0.0971
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
	06/25/08	<0.0971	<0.0971	<0.0971	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.0971	<0.00485	<0.0971	<0.0971	<0.0971
	09/24/08	<0.0962	<0.0962	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.0962	<0.00481	<0.0962	<0.0962	<0.0962
	01/07/09	<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
	03/19/09	<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
dup	03/19/09	<0.0976	<0.0976	<0.0976	<0.0976	<0.00488	<0.00488	<0.00488	<0.0976	<0.00488	**0.00527**	<0.00488	<0.0976	<0.0976	<0.00488	<0.0976	<0.0976	<0.0976
	09/17/09	<0.0971	<0.0971	<0.0971	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.0971	<0.00485	<0.0971	<0.0971	<0.0971

COP0017826

TABLE 6
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)
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
	06/24/08	<0.0952	**0.0999**	<0.0952	<0.0952	<0.00476	<0.00476	<0.00952[6]	<0.0952	<0.00952[6]	<0.00476	<0.00476	<0.0952	**0.160**	<0.00476	<0.667[6]	<0.0952	<0.0952
	09/24/08	<0.0962	<0.0962	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.0962	<0.00481	<0.577[6]	<0.0962	<0.0962
	01/06/09	<0.0971	<0.0971	<0.0971	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	**0.155**	<0.00485	**1.36**	<0.0971	<0.0971
	03/19/09	<0.0962	<0.0962	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00481	**0.00557**	<0.00481	<0.0962	<0.0962	<0.00481	<0.0962	<0.0962	<0.0962
	09/17/09	<0.0971	**0.144**	<0.0971	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	**0.235**	<0.00485	<0.291	<0.0971	<0.0971
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
	06/25/08	<0.0971	<0.0971	<0.0971	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.0971	<0.00485	<0.0971	<0.0971	<0.0971
	09/23/08	<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
	01/07/09	<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
	03/20/09	<0.0971	<0.0971	<0.0971	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.0971	<0.00485	<0.0971	<0.0971	<0.0971
	09/17/09	<0.0971	<0.0971	<0.0971	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.0971	<0.00485	<0.0971	<0.0971	<0.0971
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
	06/25/08	<0.0971	<0.0971	<0.0971	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.0971	<0.00485	<0.0971	<0.0971	<0.0971
	09/23/08	<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
	01/07/09	<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
	03/20/09	<0.0971	<0.0971	<0.0971	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.0971	<0.00485	<0.0971	<0.0971	<0.0971
	09/17/09	<0.0962	<0.0962	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.0962	<0.00481	<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
	06/25/08	<0.0962	<0.0962	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.0962	<0.00481	<0.0962	<0.0962	<0.0962
	09/24/08	<0.0962	<0.0962	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.0962	<0.00481	<0.0962	<0.0962	<0.0962
	01/07/09	<0.0943	<0.0943	<0.0943	<0.0943	<0.00472	<0.00472	<0.00472	<0.0943	<0.00472	<0.00472	<0.00472	<0.0943	<0.0943	<0.00472	<0.0943	<0.0943	<0.0943
	03/20/09	<0.0962	<0.0962	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.0962	<0.00481	<0.0962	<0.0962	<0.0962
	09/17/09	<0.0962	<0.0962	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.0962	<0.00481	<0.0962	<0.0962	<0.0962
U-29A	01/29/08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	03/20/09	**105**	**18.4**	<9.95	<14.9	**1.08**	**0.792**	<0.597	**4.80**	<0.199	**2.35**	**0.541**	<9.95	**42.8**	**0.436**	<9.95	**62.4**	**24.9**
	09/17/09	**63.9**	<10.1	<10.1	<10.1	**0.330**	**0.226**	<0.152	**1.50**	<0.0505	**0.788**	**0.151**	<10.1	**13.7**	**0.116**	<10.1	**19.0**	**4.73**

COP0017827

TABLE 6
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)
Portland Harbor Joint Source Control Screening Level Values																		
EPA's 2004 NRWQC (organism only)		--	990	--	40,000	0.018	0.018	0.018	--	0.018	0.018	0.018	140	5,300	0.018	--	--	4,000
DEQ's 2004 AWQC (organism only)		--	990	--	40,000	0.018	0.018	0.018	--	0.018	0.018	0.018	140	5,300	0.018	--	--	4,000
EPA's 2004 NRWQC ecological receptors (chronic)		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DEQ's 2004 AWQC ecological receptors (chronic)		--	520	--	--	--	--	--	--	--	--	--	--	--	--	620	--	--

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 and revised in July 2007.
Bold face font indicates analyte was detected above the laboratory MRL or MDL
-- = Not analyzed
NS = Not sampled
NA = Not available
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

COP0017828

TABLE 7
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)	Manganese (µg/l)	Mercury (µg/l)	Selenium (µg/l)	Silver (µg/l)	Zinc (µg/l)
CHEVRON																			
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
	06/26/08	--	--	--	**0.270**	**0.630**	**0.230**	**1.74**	<1.00	**36.7**	**0.388**	**10.0**	**16.2**	**6.05**	**4,110**	<0.200	**0.146**	<1.00	**32.0**
	03/18/09	**928**	**63,100**	**1,730**	<1.00	<5.00	<5.00	<15.00	<5.00	**39.8**	<5.00	**14.0**	**18.2**	**4.84**	**4,590**	**0.0170**	<5.00	<1.00	**35.1**
dup	03/18/09	**920**	**33,900**	**816**	**0.340**	<1.00	<1.00	<3.00	<1.00	**40.7**	<5.00	**22.2**	**31.3**	**8.40**	**4,110**	**0.0590**	<5.00	<1.00	**56.0**
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**
	06/26/08	--	--	--	**7.66**	**0.850**	**64.8**	**6.56**	<1.00	**34.6**	**4.02**	**6.21**	**14.1**	**13.5**	**4,060**	<0.200	**0.113**	<1.00	**219**
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**
	06/26/08	--	--	--	**0.280**	**0.900**	<1.00	**0.930**	<1.00	**33.9**	**0.386**	**6.21**	**16.3**	**10.1**	**3,460**	<0.200	**0.093**	<1.00	**246**
	03/18/09	**408**	**35,500**	**1,570**	0.210	<1.00	<1.00	<3.00	<1.00	**61.7**	<5.00	**39.2**	**116**	**70.1**	**4,380**	**0.110**	<5.00	<1.00	**2,520**
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
	06/26/08	--	--	--	<0.200	<1.00	<1.00	<3.00	<1.00	**1.13**	**0.109**	**0.876**	**1.37**	**1.40**	**463**	<0.200	<0.500	<1.00	**11.7**
	09/26/08	--	--	--	<0.200	<1.00	<1.00	<3.00	<1.00	**1.82**	<0.500	**3.63**	**6.21**	**4.38**	**594**	<0.200	**0.267**	<1.00	**18.4**
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**
	06/24/08	<80.0	<240	<481	<0.200	<1.00	<1.00	<3.00	<1.00	**158**	<0.500	**0.500**	**0.743**	**0.791**	**6,900**	<0.200	**0.389**	<1.00	**7.77**
	09/23/08	<80.0	<243	<485	<0.200	<1.00	<1.00	<3.00	<1.00	**152**	**0.153**	**0.531**	**1.32**	**0.351**	**7,010**	<0.200	**0.954**	<1.00	**2.89**
	01/06/09	<80.0	**287**	<490	<0.200	<1.00	<1.00	<3.00	<1.00	**136**	**0.170**	**14.8**	**15.6**	**8.35**	**7,840**	<0.200	**0.170**	<1.00	**49.4**
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
	06/24/08	<80.0	<240	<481	<0.200	<1.00	<1.00	<3.00	<1.00	**7.70**	<0.500	<2.00	**0.795**	**0.606**	**560**	<0.200	**1.01**	<1.00	**6.55**
	09/23/08	<80.0	<243	<485	<0.200	<1.00	<1.00	<3.00	<1.00	**6.78**	**0.111**	**0.526**	**2.79**	**1.06**	**315**	<0.200	**1.20**	<1.00	**14.5**
	01/06/09	<80.0	<245	<490	<0.200	<1.00	<1.00	<3.00	<1.00	**7.42**	**0.120**	**1.18**	**1.60**	**2.20**	**446**	<0.200	<0.500	<1.00	**18.4**
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**
	06/25/08	**9,760**	**2,330**	<485	**10.8**	**6.40**	**1,300**	**115**	<10.0	**32.0**	**0.746**	**37.6**	**64.5**	**67.5**	**4,480**	**0.106**	**0.588**	**0.221**	**132**
	09/25/08	**10,200**	**2,630**	**344**	**7.80**	**6.80**	**1,410**	**121**	<10.0	**26.8**	<5.00	**33.3**	**64.3**	**58.3**	**4,350**	**0.0906**	<5.00	<10.0	**139**
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
	06/25/08	**39.7**	<243	<485	<0.200	<1.00	**0.0800**	<3.00	<1.00	**3.83**	**0.127**	<2.00	<2.00	<1.00	**3,630**	<0.200	<0.500	<1.00	**2.30**
	09/25/08	<80.0	<245	<490	<0.200	<1.00	**0.150**	<3.00	<1.00	**4.38**	<5.00	<20.0	<20.0	<10.0	**3,850**	<0.200	<5.00	<10.0	<50.0
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
	06/25/08	<80.0	<243	<485	<0.200	**0.120**	**0.320**	<3.00	<1.00	**0.491**	**0.539**	**0.45**	**1.74**	**1.76**	**246**	<0.200	<0.500	<1.00	**29.3**
	09/25/08	**97.7**	<245	<490	<0.200	<1.00	**7.23**	**0.610**	<1.00	**0.826**	<0.500	<2.00	**1.01**	**0.429**	**400**	<0.200	**0.939**	<1.00	**5.89**

COP0017829

TABLE 7
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)	Manganese (µg/l)	Mercury (µg/l)	Selenium (µg/l)	Silver (µg/l)	Zinc (µg/l)
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
	06/26/08	**2,070**	**837**	<485	<0.200	**0.350**	**5.05**	**1.18**	<1.00	**21.7**	**0.069**	**3.26**	**4.26**	**2.96**	**3,750**	<0.200	**0.0970**	<1.00	**13.0**
	09/25/08	**2,540**	**726**	<490	<1.00	**0.700**	**13.8**	**1.90**	<5.00	**33.2**	<5.00	**27.8**	**43.1**	**16.9**	**4,790**	<0.200	**1.49**	<10.0	**79.3**
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
	06/26/08	<80.0	<243	<485	<0.200	<1.00	<1.00	<3.00	<1.00	**8.23**	**0.179**	**3.40**	**5.72**	**3.93**	**4,500**	<0.200	<0.500	<1.00	**19.4**
	09/25/08	<80.0	<245	<490	<0.200	<1.00	<1.00	<3.00	<1.00	**15.7**	<5.00	**11.6**	**24.4**	**11.5**	**6,480**	<0.200	**0.900**	<10.0	**64.3**
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
	06/26/08	**566**	**986**	<485	<0.200	<1.00	**0.160**	**0.320**	<1.00	**20.9**	**0.366**	**23.6**	**39.9**	**23.7**	**3,400**	**0.0924**	**0.364**	<1.00	**86.5**
	09/24/08	**707**	**502**	<480	**0.0900**	**0.140**	**0.370**	**0.360**	<1.00	**19.1**	<5.00	**10.0**	**18.6**	**8.71**	**3,450**	<0.200	**1.00**	<10.0	**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
	06/26/08	<80.0	<238	<476	<0.200	<1.00	<1.00	<3.00	<1.00	**10.9**	**0.101**	<2.00	<2.00	<1.00	**6,020**	<0.200	<0.500	<1.00	**2.67**
	09/24/08	<80.0	<245	<490	<0.200	<1.00	<1.00	<3.00	<1.00	**20.5**	**0.283**	**1.85**	**4.68**	**2.14**	**8,070**	<0.200	**1.38**	<1.00	**17.4**
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
	06/26/08	**697**	**5,080**	**380**	**0.110**	**0.130**	<1.00	**0.470**	<1.00	**8.04**	**0.091**	**5.97**	**8.34**	**3.98**	**1,630**	<0.200	**0.0840**	**0.586**	**19.7**
	09/24/08	**328**	**4,230**	**292**	<0.400	<2.00	<2.00	<6.00	<2.00	**20.3**	<5.00	<20.0	**5.97**	<10.0	**2,530**	<0.200	<5.00	<10.0	**11.4**
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
	06/26/08	<80.0	<243	<485	<0.200	<1.00	<1.00	<3.00	<1.00	**102**	**0.239**	**0.651**	**0.394**	**0.489**	**8,170**	<0.200	<0.500	<1.00	**13.3**
	09/24/08	<80.0	<245	<490	<0.200	<1.00	**0.160**	<3.00	<1.00	**95.9**	<5.00	<20.0	**4.00**	<10.0	**8,650**	<0.200	<5.00	<10.0	**15.5**
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
	06/26/08	**251**	**3,630**	**483**	<0.200	<1.00	<1.00	<3.00	<1.00	**3.40**	<0.500	**0.972**	**2.76**	**1.19**	**885**	<0.200	**0.105**	<1.00	**8.38**
	09/24/08	**132**	**3,050**	**305**	<0.400	<2.00	<2.00	<6.00	<2.00	**3.21**	<0.500	**1.36**	**3.92**	**0.928**	**1,110**	<0.200	**0.198**	<1.00	**9.55**
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
	06/26/08	<80.0	<243	<485	<0.200	<1.00	<1.00	<3.00	<1.00	**62.4**	**0.411**	**0.597**	**1.37**	**0.891**	**9,280**	<0.200	<0.500	<1.00	**5.15**
	09/24/08	<80.0	<245	<490	<0.400	<2.00	<2.00	<6.00	<2.00	**57.6**	<5.00	<20.0	**3.05**	<10.0	**9,760**	<0.200	<5.00	<10.0	**7.83**
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**
	06/26/08	<80.0	<243	<485	<0.200	<1.00	<1.00	<3.00	<1.00	**3.40**	**1.38**	**0.588**	**1.97**	**2.20**	**771**	<0.200	<0.500	<1.00	**66.9**
	09/24/08	<80.0	<245	<490	<0.200	<1.00	**0.0800**	<3.00	<1.00	**10.2**	**0.082**	**6.44**	**17.0**	**12.3**	**1,120**	<0.200	**0.988**	<1.00	**27.9**

COP0017830

TABLE 7
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)	Manganese (µg/l)	Mercury (µg/l)	Selenium (µg/l)	Silver (µg/l)	Zinc (µg/l)
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**
	06/24/08	<250	**14**	**59**	**0.060**	**0.11**	<0.042	<0.0115	<0.070	**8.73**	**0.085**	**3.62**	**5.29**	**2.64**	**2,050**	**0.00504**	<0.2	**0.036**	**13.8**
dup	06/24/08	<250	<11	**29**	<0.045	**0.090**	<0.042	<0.0115	<0.070	**8.40**	**0.084**	**3.34**	**5.23**	**2.67**	**2,060**	**0.00451**	**0.6**	**0.030**	**13.3**
	09/23/08	<250	**15**	**77**	<0.50	<0.50	<0.50	<1.00	<0.50	**5.65**	**0.084**	**1.42**	**3.68**	**2.59**	**1,120**	**0.00329**	**0.7**	**0.009**	**22.0**
	01/05/09	<80	<236	<472	<0.200	<1.00	<1.00	<1.00	<1.00	**9.2**	<0.500	<2.00	**2.51**	<1.00	**1,980**	**0.00158**	<0.500	<1.00	**6.00**
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**
	06/24/08	<250	**20**	**86**	**0.050**	**0.070**	<0.042	<0.0115	<0.070	**5.50**	**0.088**	**4.17**	**10.5**	**6.17**	**1,180**	**0.00988**	**0.5**	**0.030**	**23.9**
	09/23/08	**24**	**16**	**39**	<0.50	<0.50	<0.50	<1.00	<0.50	**2.91**	**0.076**	**2.89**	**5.22**	**6.17**	**1,120**	**0.00917**	**0.5**	**0.009**	**28.4**
	01/05/09	<80	<238	<476	<0.200	<1.00	<1.00	<1.00	<1.00	**7.47**	<0.500	**8.76**	**11.6**	**2.95**	**1,480**	**0.00449**	<0.500	<1.00	**36.1**
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**
	06/24/08	<250	<11	**55**	<0.045	**0.060**	<0.042	<0.0115	<0.070	**20.7**	**0.091**	**2.35**	**5.00**	**1.80**	**8,600**	**0.00477**	<0.2	**0.019**	**14.0**
	09/23/08	<250	**16**	**42**	<0.50	**0.050**	<0.50	<1.00	<0.50	**15.4**	**0.036**	**0.91**	**2.69**	**1.07**	**8,160**	**0.00741**	**1.1**	**0.009**	**14.8**
	01/05/09	<80	<243	<485	<0.200	<1.00	<1.00	<1.00	<1.00	**37.5**	<0.500	<2.00	<2.00	<1.00	**10,500**	**0.00457**	**0.827**	<1.00	<5.00
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**	**15**	**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**
	06/24/08	<250	**14**	**78**	**0.050**	**0.060**	<0.042	<0.0115	<0.070	**1.09**	**0.068**	**0.800**	**4.32**	**3.12**	**784**	**0.00243**	**1.0**	**0.010**	**10.3**
	09/23/08	<250	**25**	**120**	<0.50	<0.50	<0.50	<1.00	<0.50	**0.76**	**0.106**	**0.49**	**3.93**	**2.69**	**711**	**0.00177**	**0.4**	**0.009**	**10.7**
	01/05/09	<80	<245	<490	<0.200	<1.00	<1.00	<1.00	<1.00	<1.00	<0.500	<2.00	**3.05**	<1.00	**676**	**0.00200**	<0.500	<1.00	**8.64**
dup	01/05/09	<80	<238	<476	<0.200	<1.00	<1.00	<1.00	<1.00	<1.00	<0.500	<2.00	**2.25**	<1.00	**669**	**0.00107**	<0.500	<1.00	<5.00
CONOCOPHILLIPS																			
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**	--	**0.170**	--	--	**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**
	06/25/08	<80.0	<236	<472	<0.200	<0.500	<0.500	<1.00	<2.00	**5.77**	**0.586**	**2.40**	**2.40**	**1.24**	**1,500**	<0.200	<0.500	<1.00	**9.87**
	09/24/08	<80.0	<243	<485	<0.200	<1.00	<1.00	<3.00	<1.00	**12.2**	<1.00	**56.5**	**55.3**	**15.3**	**1,990**	<0.200	**1.85**	<2.00	**122**
dup	09/24/08	<80.0	<243	<485	<0.200	<1.00	<1.00	<3.00	<1.00	**9.45**	**2.55**	**39.5**	**39.7**	**10.8**	**1,890**	<0.200	**1.62**	<2.00	**99.9**
	01/07/09	<80.0	<250	<500	<0.200	<1.00	<1.00	<3.00	<1.00	**6.04**	**5.71**	**13.3**	**15.9**	**8.20**	**1,320**	<0.200	**0.590**	<1.00	**64.0**
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**
	06/25/08	<80.0	<236	<472	<0.200	<0.500	<0.500	<1.00	<2.00	**3.25**	<0.500	<2.00	<2.00	<1.00	**1,660**	<0.200	<0.500	<1.00	**24.6**
	09/23/08	<80.0	<238	<476	<0.200	<1.00	<1.00	<3.00	<1.00	**12.1**	<5.00	<20.0	**31.0**	**8.08**	**1,830**	<0.200	<5.00	<1.00	**64.0**
	01/07/09	<80.0	<250	<500	<0.200	<1.00	<1.00	<3.00	<1.00	**3.66**	<0.500	<2.00	<2.00	**1.54**	**1,350**	<0.200	<0.500	<1.00	**21.7**

COP0017831

TABLE 7
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)	Manganese (µg/l)	Mercury (µg/l)	Selenium (µg/l)	Silver (µg/l)	Zinc (µg/l)
Portland Harbor Joint Source Control Screening Level Values																			
EPA's 2004 NRWQC (organism only)		--	--	--	51	15,000	2,100	--	--	0.14	--	--	--	--	100	--	4,200	--	26,000
DEQ's 2004 AWQC (organism only)		--	--	--	51	15,000	2,100	--	--	0.14	--	--	--	--	100	0.146	4,200	--	26,000
EPA's 2004 NRWQC ecological receptors (chronic)		--	--	--	--	--	--	--	--	150	0.094	--	2.7	0.54	--	0.77	5	--	36
DEQ's 2004 AWQC ecological receptors (chronic)		--	--	--	--	--	--	--	--	--	0.38	--	3.6	0.54	--	0.012	35	0.12	33
Oak Ridge National Lab (Tier II SCV)		--	--	--	130	9.8	7.3	--	--	3.1	--	--	--	--	120	1.3	--	0.36	--

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 and revised in July 2007.
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

COP0017832

TABLE 8
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-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**
	06/26/08	<0.952	**2.83**	<0.952	<3.81	**0.0473**	**0.0235**	**0.0193**	<0.0952	**0.0117**	**0.118**	**0.00480**	<0.952	**8.35**	**0.0154**	<2.86	**18.7**	**0.322**
	03/18/09	<0.985	**1.59**	<0.985	<0.985	**0.0132**	**0.00630**	<0.00493	<0.0985	<0.00493	**0.0397**	<0.00493	<0.985	**5.41**	<0.00493	<0.985	**7.71**	**0.234**
dup	03/18/09	<0.485	**1.69**	<0.971	<1.46	**0.0403**	**0.0187**	**0.0130**	<0.0971	**0.0115**	**0.103**	<0.00485	<0.485	**9.63**	**0.0114**	**<1.21**	**11.4**	**0.591**
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
	06/26/08	**1.87**	**0.412**	<0.190	<0.190	**0.0407**	**0.0301**	**0.0603**	<0.190	**0.0415**	**0.0763**	**0.0130**	**0.163**	**0.324**	**0.0399**	**1.24**	**0.357**	**0.218**
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
	06/26/08	<0.476	**1.28**	<0.476	<0.476	**0.0855**	**0.0864**	**0.148**	<0.476	**0.0980**	**0.208**	**0.0307**	**0.450**	**2.93**	**0.0955**	<0.952	**2.86**	**0.475**
	03/18/09	<1.94	**3.17**	<1.94	<1.94	**0.418**	**0.370**	**0.615**	<1.94	**0.505**	**1.01**	**0.111**	**2.14**	**12.7**	**0.363**	<1.94	**13.5**	**3.22**
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
	06/26/08	<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
	09/26/08	<0.0962	<0.0962	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.0962	<0.00481	<0.0962	<0.0962	<0.0962
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
	06/24/08	<0.0985	<0.0985	<0.0985	<0.0985	**0.0238**	**0.0271**	**0.0326**	<0.0985	**0.0283**	**0.0394**	**0.0101**	**0.0583**	**0.0849**	**0.0267**	<0.0985	**0.0720**	**0.0583**
	09/23/08	<0.0952	<0.0952	<0.0952	<0.0952	**0.0144**	**0.0150**	**0.0142**	<0.0952	**0.0158**	**0.0221**	**0.00510**	<0.0952	**0.0574**	**0.0129**	<0.0952	<0.0952	<0.0952
	01/06/09	<0.0980	<0.0980	<0.0980	<0.0980	**0.0146**	**0.0151**	**0.0199**	<0.0980	**0.0162**	**0.0254**	**0.00513**	**0.0518**	**0.0508**	**0.0171**	<0.0980	<0.0980	<0.0980
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
	06/24/08	<0.0971	<0.0971	<0.0971	<0.0971	**0.101**	**0.125**	**0.148**	**0.141**	**0.142**	**0.173**	**0.0455**	**0.200**	<0.0971	**0.126**	<0.0971	**0.129**	**0.198**
	09/23/08	<0.0952	<0.0952	<0.0952	<0.0952	**0.0948**	**0.0996**	**0.104**	**0.105**	**0.0911**	**0.140**	**0.0344**	**0.215**	<0.0952	**0.0928**	<0.0952	**0.130**	**0.240**
	01/06/09	<0.0971	<0.0971	<0.0971	**0.0693**	**0.238**	**0.334**	**0.377**	**0.327**	**0.334**	**0.404**	**0.101**	**0.506**	<0.0971	**0.292**	<0.0971	**0.442**	**0.329**
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
	06/25/08	**55.3**	**0.448**	<0.476	<0.476	<0.0238	<0.0238	<0.0238	<0.476	<0.0238	**0.0262**	<0.0238	<0.476	**0.535**	<0.0238	**177**	**0.399**	<0.476
	09/25/08	**55.6**	**0.422**	<0.481	<0.481	**0.0268**	<0.0240	<0.0240	<0.481	<0.0240	**0.0307**	<0.0240	<0.481	**0.557**	<0.0240	**184**	**0.442**	<0.481
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
	06/25/08	<0.192	<0.192	<0.192	<0.192	<0.00962	<0.00962	<0.00962	<0.192	<0.00962	<0.00962	<0.00962	<0.192	<0.192	<0.00962	<0.192	<0.192	<0.192
	09/25/08	<0.0962	<0.0962	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00481	**0.00498**	<0.00481	<0.0962	<0.0962	<0.00481	<0.0962	<0.0962	<0.0962
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
	06/25/08	<0.0952	<0.0952	<0.0952	<0.0952	**0.0494**	**0.0421**	**0.0517**	<0.0952	**0.0478**	**0.0649**	**0.0131**	**0.102**	<0.0952	**0.0345**	<0.0952	<0.0952	**0.119**
	09/25/08	**0.0783**	<0.0962	<0.0962	<0.0962	**0.0171**	**0.00854**	**0.0129**	<0.0962	**0.00891**	**0.0203**	<0.00481	<0.0962	<0.0962	**0.00713**	**0.481**	<0.0962	<0.0962

COP0017833

TABLE 8
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 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
	06/26/08	**10.9**	**0.473**	<0.0952	**0.0707**	**0.00636**	<0.00476	<0.00476	**0.0952**	<0.00476	**0.00733**	<0.00476	**0.0479**	**0.574**	<0.00476	**2.51**	**0.873**	**0.0621**
	09/25/08	**11.2**	**0.723**	<0.144	**0.0654**	**0.0148**	<0.00481	<0.00481	<0.0962	<0.00481	**0.0167**	<0.00481	**0.0653**	**0.685**	<0.00481	<4.33	**0.990**	**0.103**
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
	06/26/08	<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
	09/25/08	<0.0962	<0.0962	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.0962	<0.00481	<0.0962	<0.0962	<0.0962
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**	**0.00658**	<0.293	**0.550**	<0.0976
	06/26/08	<0.0952	**0.811**	<0.190	**0.0838**	**0.0117**	**0.00653**	<0.00476	<0.0952	<0.00476	**0.0154**	<0.00476	<0.0952	**1.15**	<0.00476	<0.857	**1.15**	**0.115**
	09/24/08	<0.0962	**0.602**	<0.0962	<0.0962	**0.0170**	**0.0104**	**0.00658**	<0.0962	**0.00622**	**0.0253**	<0.00481	<0.0962	**0.921**	**0.00599**	<0.817	**0.427**	**0.130**
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
	06/26/08	<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
	09/24/08	<0.0962	<0.0962	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.0962	<0.00481	<0.0962	<0.0962	<0.0962
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
	06/26/08	<0.0952	**1.50**	<0.952	<0.190	**0.0205**	**0.0148**	**0.00918**	<0.0952	**0.00794**	**0.0331**	<0.00476	<0.0952	**6.63**	**0.00892**	<0.952	**1.69**	**0.0977**
	09/24/08	<0.481	**1.23**	<0.481	<0.481	<0.0240	<0.0240	<0.0240	<0.481	<0.0240	**0.0257**	<0.0240	<0.481	**5.90**	<0.0240	<1.20	**1.34**	<0.481
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
	06/26/08	<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
	09/24/08	<0.0962	<0.0962	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.0962	<0.00481	<0.0962	<0.0962	<0.0962
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
	06/26/08	<0.0952	**0.396**	<0.0952	<0.190	**0.00625**	<0.00476	<0.00476	<0.0952	<0.00476	**0.0101**	<0.00476	<0.0952	**1.41**	<0.00476	<0.381	**0.445**	<0.0952
	09/24/08	<0.192	**0.746**	<0.192	<0.192	<0.0192	<0.00962	<0.00962	<0.192	<0.00962	<0.0192	<0.00962	<0.192	**2.56**	<0.00962	<0.865	**0.646**	<0.192
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
	06/26/08	<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
	09/24/08	<0.0962	<0.0962	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.0962	<0.00481	<0.0962	<0.0962	<0.0962
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
	06/26/08	<0.0952	<0.0952	<0.0952	<0.0952	**0.00614**	**0.00780**	**0.00869**	<0.0952	**0.00884**	**0.00964**	<0.00476	<0.0952	<0.0952	**0.00737**	<0.0952	<0.0952	<0.0952
	09/24/08	<0.0962	<0.0962	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.0962	<0.00481	<0.0962	<0.0962	<0.0962

COP0017834

TABLE 8
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)
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
	06/24/08	**0.0063**	<0.0044	<0.0034	**0.0076**	**0.0038**	<0.0043	<0.0023	**0.0031**	<0.0025	<0.0034	<0.0025	<0.0044	**0.0077**	<0.0026	**0.058**	**0.011**	**0.0036**
dup	06/24/08	**0.0074**	<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	**0.036**	<0.0050	<0.0035
	09/23/08	**0.0072**	<0.0044	<0.0034	<0.0036	<0.0026	<0.0043	<0.0023	<0.0029	<0.0025	<0.0034	<0.0025	<0.0044	**0.0062**	<0.0026	**0.046**	<0.0050	<0.0035
	01/05/09	<0.0930	<0.0930	<0.0930	<0.0930	<0.00465	<0.00465	<0.00465	<0.0930	<0.00465	<0.00465	<0.00465	<0.0930	<0.0930	<0.00465	<0.0930	<0.0930	<0.0930
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
	06/24/08	<0.0023	<0.0044	<0.0034	<0.0036	<0.0026	<0.0043	<0.0023	**0.0042**	<0.0025	<0.0034	<0.0025	<0.0044	<0.0038	**0.0028**	**0.032**	<0.0050	<0.0035
	09/23/08	<0.0023	<0.0044	<0.0034	<0.0036	<0.0026	<0.0043	<0.0023	<0.0029	<0.0025	<0.0034	<0.0025	<0.0044	**0.017**	<0.0026	<0.0030	<0.0050	<0.0035
	01/05/09	<0.0909	<0.0909	<0.0909	<0.0909	<0.00455	<0.00455	<0.00455	<0.0909	<0.00455	<0.00455	<0.00455	<0.0909	<0.0909	<0.00455	<0.0909	<0.0909	<0.0909
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
	06/24/08	**0.0070**	<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	**0.031**	**0.0065**	<0.0035
	09/23/08	**0.0090**	<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	**0.013**	**0.0083**	<0.0035
	01/05/09	<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	<0.0990	<0.0990	<0.0990
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
	06/24/08	**0.0094**	<0.0046	**0.0073**	<0.0038	**0.0044**	<0.0045	<0.0024	**0.0031**	<0.0027	<0.0036	<0.0027	<0.0046	<0.0040	<0.0028	**0.091**	**0.012**	<0.0037
	09/23/08	<0.0023	**0.0057**	**0.011**	<0.0038	<0.0026	<0.0043	<0.0023	<0.0029	<0.0025	<0.0034	<0.0025	<0.0044	<0.0038	<0.0026	**0.016**	<0.0050	<0.0035
	01/05/09	<0.0909	<0.0909	<0.0909	<0.0909	<0.00455	<0.00455	<0.00455	<0.0909	<0.00455	<0.00455	<0.00455	<0.0909	<0.0909	<0.00455	<0.0909	<0.0909	<0.0909
dup	01/05/09	<0.0909	<0.0909	<0.0909	<0.0909	<0.00455	<0.00455	<0.00455	<0.0909	<0.00455	<0.00455	<0.00455	<0.0909	<0.0909	<0.00455	<0.0909	<0.0909	<0.0909
CONOCOPHILLIPS																		
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
	06/25/08	**0.224**	<0.0962	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.0962	<0.00481	<0.0962	<0.0962	<0.0962
	09/24/08	**0.230**	**0.103**	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00481	**0.00683**	<0.00481	<0.0962	**0.145**	<0.00481	<0.144	<0.0962	<0.0962
	09/24/08	**0.457**	**0.110**	<0.0962	<0.0962	**0.00917**	**0.0111**	**0.00688**	<0.0962	**0.00647**	**0.0126**	<0.00481	<0.0962	**0.157**	**0.00651**	<0.144	**0.107**	<0.0962
	01/07/09	**0.413**	<0.0976	<0.0976	<0.0976	<0.00488	<0.00488	<0.00488	<0.0976	<0.00488	<0.00488	<0.00488	<0.0976	**0.116**	<0.00488	<0.146	**0.104**	<0.0976
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
	06/25/08	<0.0952	<0.0952	<0.0952	<0.0952	<0.00476	<0.00476	<0.00476	<0.0952	<0.00476	**0.00483**	<0.00476	<0.0952	<0.0952	<0.00476	<0.0952	<0.0952	<0.0952
	09/23/08	<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
	01/07/09	<0.0985	<0.0985	<0.0985	<0.0985	<0.00493	<0.00493	<0.00493	<0.0985	<0.00493	**0.00531**	<0.00493	<0.0985	<0.0985	<0.00493	<0.0985	<0.0985	<0.0985

COP0017835

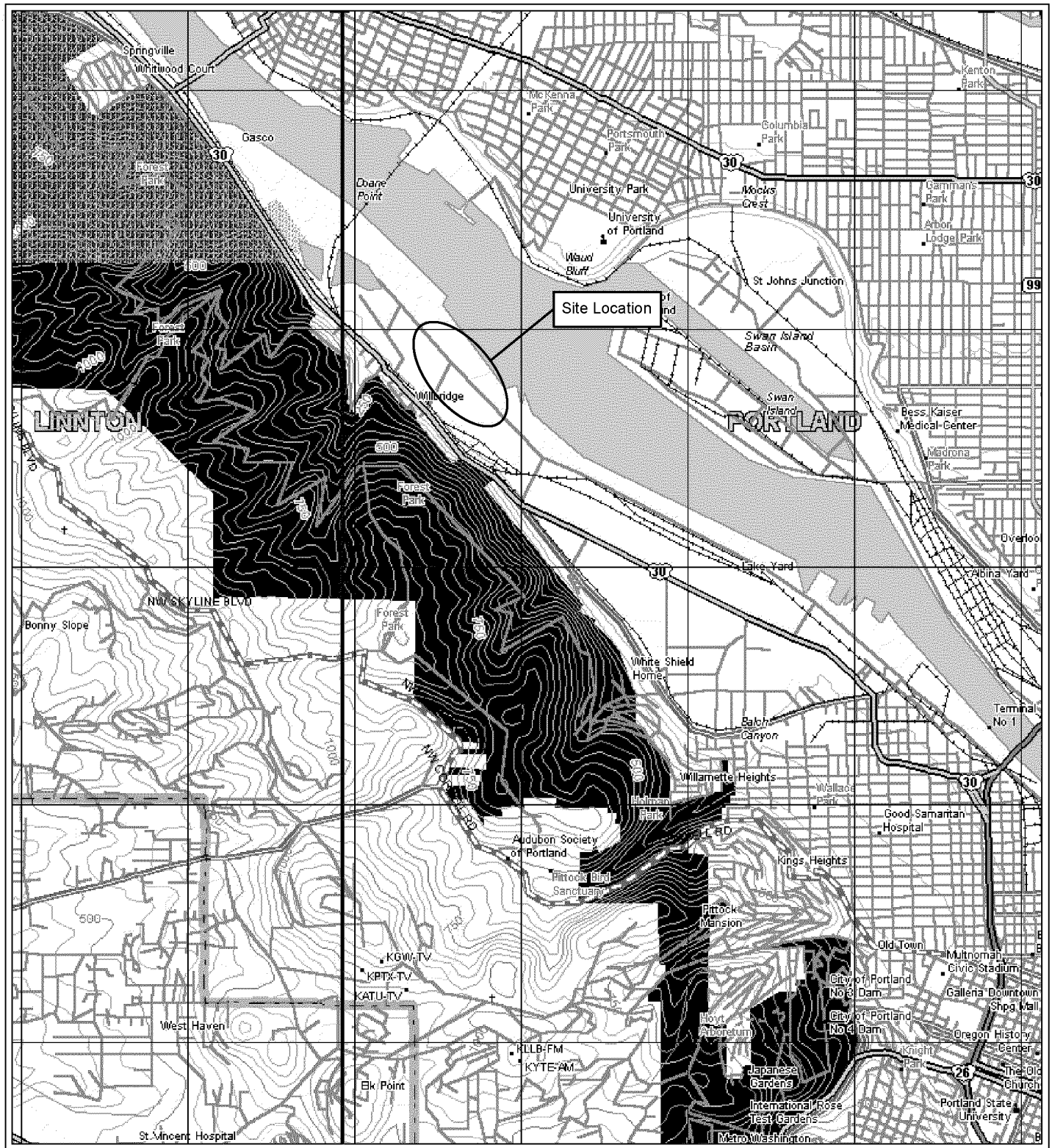
TABLE 8
GROUNDWATER SCREENING LEVEL COMPARISONS - DOCK AREA CLUSTER WELLS - PAHs
Willbridge Terminals
Portland, Oregon

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)
Portland Harbor Joint Source Control Screening Level Values																		
EPA's 2004 NRWQC (organism only)		--	990	--	40,000	0.018	0.018	0.018	--	0.018	0.018	0.018	140	5,300	0.018	--	--	4,000
DEQ's 2004 AWQC (organism only)		--	990	--	40,000	0.018	0.018	0.018	--	0.018	0.018	0.018	140	5,300	0.018	--	--	4,000
EPA's 2004 NRWQC ecological receptors (chronic)		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DEQ's 2004 AWQC ecological receptors (chronic)		--	520	--	--	--	--	--	--	--	--	--	--	--	--	620	--	--

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 and revised in July 2007.
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

COP0017836

FIGURES



REFERENCES

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

North

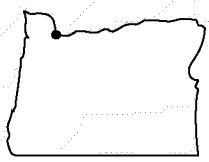


FIGURE 1

SITE LOCATION MAP

Willbridge Petroleum Terminals
Portland, Oregon

PROJECT NO. ORZ0922GW-6	DRAWN BY KNT 6-12-03
FILE NO.	PREPARED BY CRF 11/7/07
REVISION NO.	REVIEWED BY

DELTA

COP0017839

SHORELINE

NW FRONT AVENUE

CHEVRON

KINDER MORGAN

KINDER MORGAN

CONOCOPHILLIPS

FORMER TANK 67

CR-4 (DAMAGED)

60-INCH STORM SEWER OUTFALL

60-INCH STORM SEWER CUTOFF WALL

FORMER 27-INCH STORM SEWER OUTFALL CUTOFF WALL

MW-9 MW-7 MW-8 MW-20 MW-25 MW-26 MW-28 MW-29 MW-10 MW-5 MW-27 MW-31 MW-3 MW-4 MW-24 MW-19 MW-30 MW-11 MW-6 MW-2 MW-12 MW-16 MW-35 MW-18 MW-23 MW-32 MW-1 MW-13 MW-14 MW-38 MW-17 MW-22 MW-15 MW-21

MW-42B MW-42C MW-34 MW-33 MW-40 MW-41C MW-41B MW-36 MW-37 MW-39

CR-32C CR-33 CR-32A CR-27C CR-26 CR-31A CR-1 OSN OSS B-20 B-9A B-7 U-23 U-25 U-22A U-24A U-26 P-1A RW-5 RW-6 RW-1 U-28 RW-2 B-33 B-21 B-35 B-36 U-27 U-29A EX-1 B-19 IT-W B-1 B-3 RW-4 RW-3 U-5 EX-39B CR-30A B-10 B-2 B-40 B-15 B-38 B-22A IT-E B-25 B-26 B-41A B-37 B-14 B-16 B-17 CR-29A CR-28A DW-2 RES-N B-6 B-5 B-4 DW-1 CR-3 B-11 B-12 B-13

B-30 B-29 B-28 B-24 B-27 U-4 U-2 RES-O U-21 U-20 U-3 U-15 U-13 U-17 CR-24A CR-6 U-14 U-16 CR-16 CR-23A CR-18 CR-17 CR-20 CR-14 CR-15 CR-7 U-22A U-19 GPW-5 GPW-4 GPW-3 GPW-2 GPW-1 U-18 U-5A CR-19 CR-12 CR-10 CR-8A CR-21A CR-25 CR-8 CR-11 CR-9

LEGEND

MW-15 MONITORING WELL LOCATION AND DESIGNATION

CR-4 DAMAGED, ABANDONED, OR MISSING WELL LOCATION AND DESIGNATION

NOTE: NOT ALL WELLS ARE PRESENTED ON THIS FIGURE. SEE FIGURES 4 AND 6 FOR ADDITIONAL WELLS IN THE DOCK AREA.

0 200

SCALE IN FEET

FIGURE 2

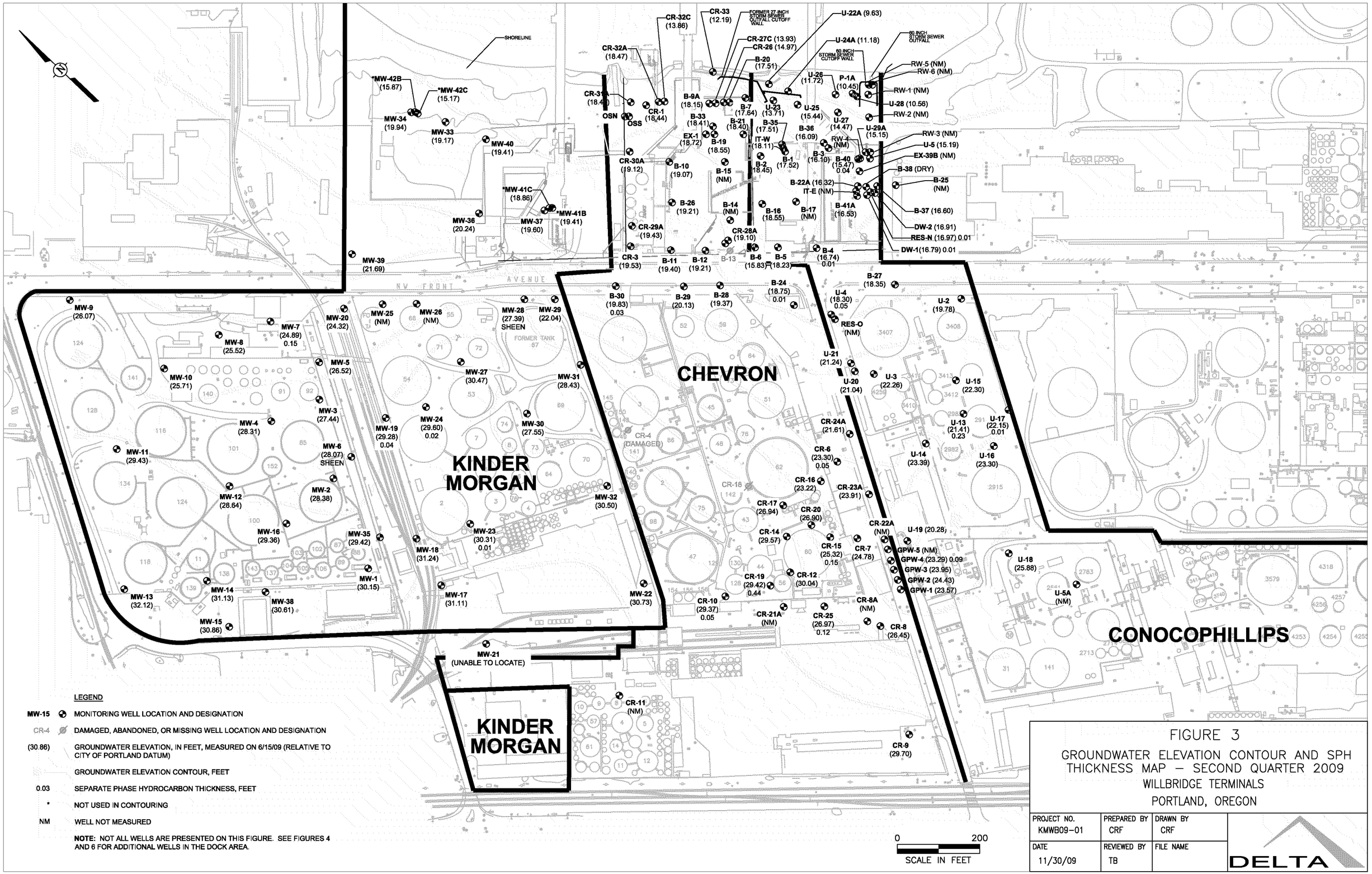
SITE PLAN

WILLBRIDGE TERMINALS
PORTLAND, OREGON

PROJECT NO.	PREPARED BY	DRAWN BY
KMWB09-01	CRF	CRF
DATE	REVIEWED BY	FILE NAME
11/30/09	TB	

DELTA

COP0017840



LEGEND

MW-15	⊕	MONITORING WELL LOCATION AND DESIGNATION
CR-4	⊘	DAMAGED, ABANDONED, OR MISSING WELL LOCATION AND DESIGNATION
(30.86)		GROUNDWATER ELEVATION, IN FEET, MEASURED ON 6/15/09 (RELATIVE TO CITY OF PORTLAND DATUM)
		GROUNDWATER ELEVATION CONTOUR, FEET
0.03		SEPARATE PHASE HYDROCARBON THICKNESS, FEET
*		NOT USED IN CONTOURING
NM		WELL NOT MEASURED

NOTE: NOT ALL WELLS ARE PRESENTED ON THIS FIGURE. SEE FIGURES 4 AND 6 FOR ADDITIONAL WELLS IN THE DOCK AREA.

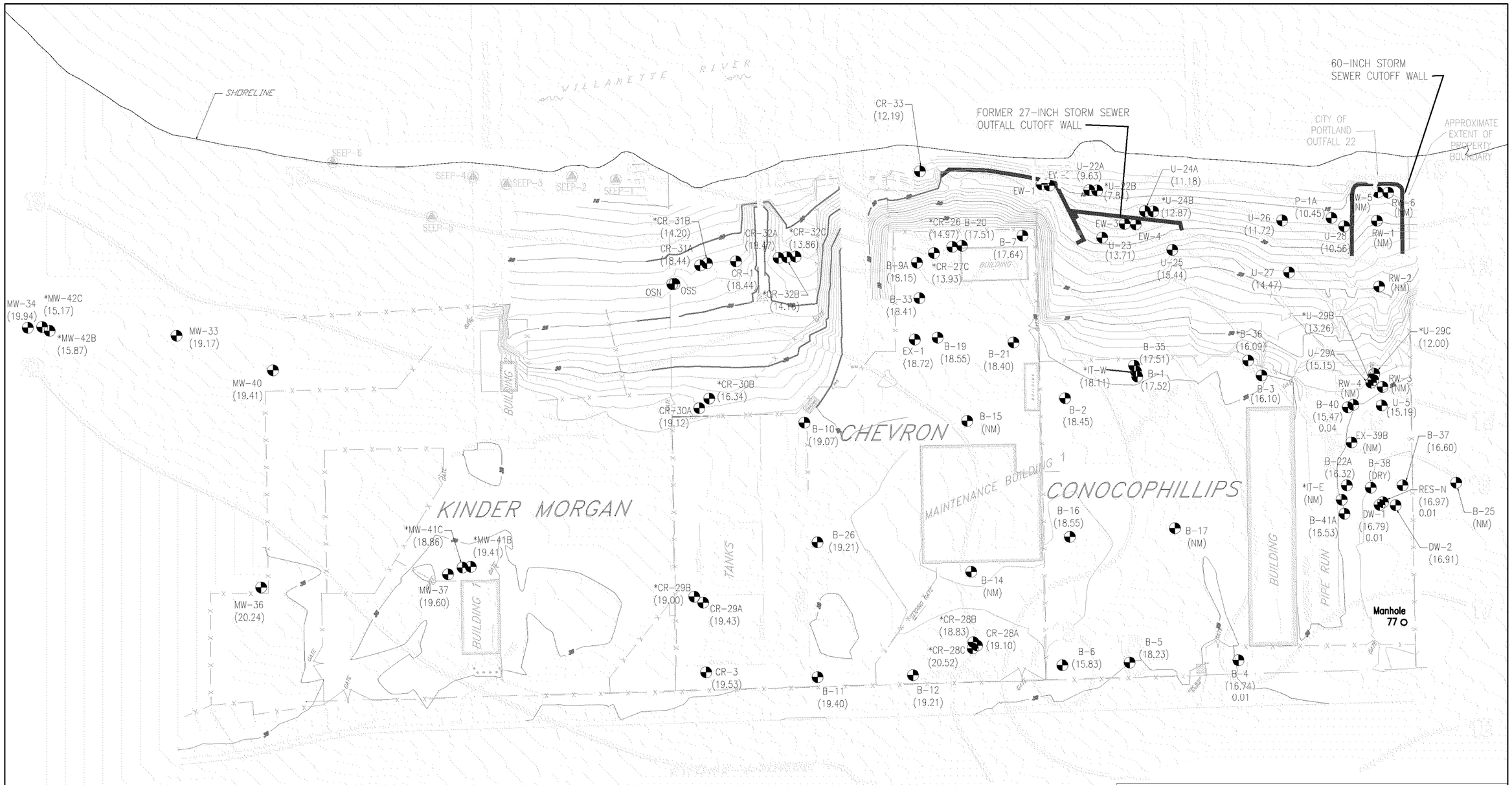
FIGURE 3

GROUNDWATER ELEVATION CONTOUR AND SPH THICKNESS MAP – SECOND QUARTER 2009

WILLBRIDGE TERMINALS

PORTLAND, OREGON

PROJECT NO.	PREPARED BY	DRAWN BY	
KMWB09-01	CRF	CRF	
DATE	REVIEWED BY	FILE NAME	DELTA
11/30/09	TB		



LEGEND

MW-36 (20.24)	MONITORING WELL; GROUNDWATER ELEVATION, MEASURED ON 3/16/09
	GROUNDWATER ELEVATION CONTOUR, FEET
0.01	SEPARATE PHASE HYDROCARBON THICKNESS, FEET
*	GROUNDWATER ELEVATION NOT USED TO CONSTRUCT CONTOURS
	FENCE LINE
	TOPOGRAPHIC CONTOUR LINES

North

0 100

SCALE IN FEET

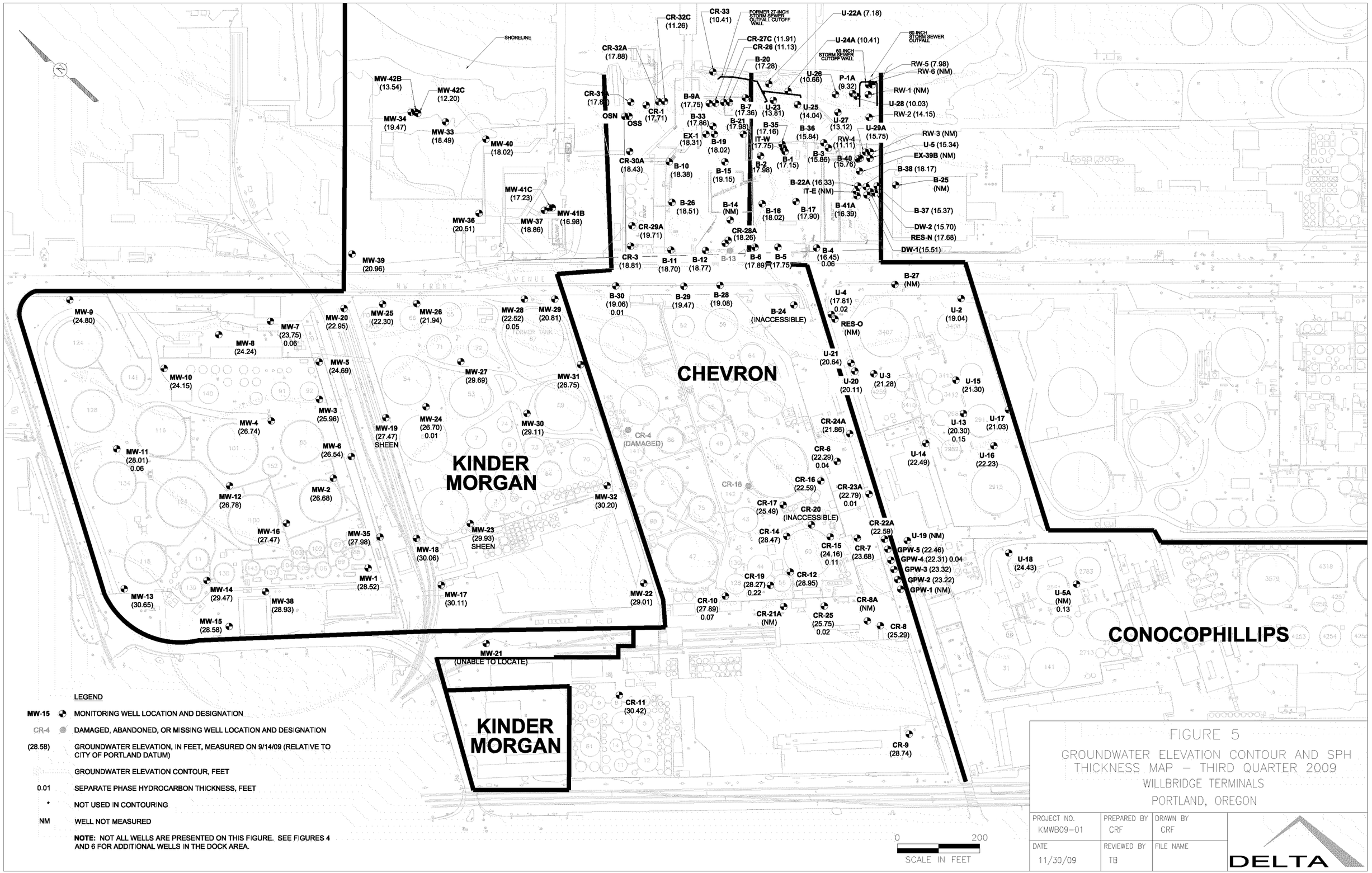
FIGURE 4
GROUNDWATER ELEVATION CONTOURS – DOCK AREA
SECOND QUARTER 2009

WILLBRIDGE PETROLEUM TERMINALS
PORTLAND, OREGON

PROJECT NO.	PREPARED BY	DRAWN BY
KMWB09-01	CRF	DR
DATE	REVIEWED BY	FILE NAME
11/30/09		PTWB01M2-Site

DELTA

COP0017842



LEGEND

MW-15	◔	MONITORING WELL LOCATION AND DESIGNATION
CR-4	◌	DAMAGED, ABANDONED, OR MISSING WELL LOCATION AND DESIGNATION
(28.58)		GROUNDWATER ELEVATION, IN FEET, MEASURED ON 9/14/09 (RELATIVE TO CITY OF PORTLAND DATUM)
		GROUNDWATER ELEVATION CONTOUR, FEET
0.01		SEPARATE PHASE HYDROCARBON THICKNESS, FEET
*		NOT USED IN CONTOURING
NM		WELL NOT MEASURED

NOTE: NOT ALL WELLS ARE PRESENTED ON THIS FIGURE. SEE FIGURES 4 AND 6 FOR ADDITIONAL WELLS IN THE DOCK AREA.

0 200
SCALE IN FEET

FIGURE 5

GROUNDWATER ELEVATION CONTOUR AND SPH THICKNESS MAP – THIRD QUARTER 2009

WILLBRIDGE TERMINALS

PORTLAND, OREGON

PROJECT NO.	PREPARED BY	DRAWN BY
KMWB09-01	CRF	CRF
DATE	REVIEWED BY	FILE NAME
11/30/09	TB	

DELTA

WILLAMETTE RIVER

SHORELINE

60-INCH STORM SEWER CUTOFF WALL

FORMER 27-INCH STORM SEWER OUTFALL CUTOFF WALL

CITY OF PORTLAND OUTFALL 22

APPROXIMATE EXTENT OF PROPERTY BOUNDARY

SEEP-6 SEEP-5 SEEP-4 SEEP-3 SEEP-2 SEEP-1

CR-33 (10.41)

EW-2 EW-1 EW-3 EW-4

U-22A (7.18)

*U-22B (8.35)

U-24A (10.41)

*U-24B (10.74)

U-23 (13.81)

U-25 (14.04)

U-26 (10.66)

P-1A (9.32)

U-28 (10.03)

RW-5 (7.98)

RW-6 (NM)

RW-1 (NM)

U-27 (13.12)

*RW-2 (14.15)

*CR-31B (10.97)

CR-31A (17.84)

CR-32A (17.86)

*CR-32C (11.26)

CR-1 (17.71)

*CR-32B (11.68)

OSN OSS

*CR-26 (11.13)

B-20 (17.28) 0.03

B-7 (17.36)

B-9A (17.75)

*CR-27C (11.91)

BUILDING

B-33 (17.86)

EX-1 (18.31)

B-19 (18.02)

B-21 (17.98)

*B-36 (15.84)

B-35 (17.16)

*IT-W (17.75)

B-1 (17.15)

B-3 (15.86)

*U-29B (12.68)

U-29A (15.75)

*U-29C (8.24)

RW-4 (11.11)

RW-3 (NM)

B-40 (15.76)

U-5 (15.34)

EX-39B (NM)

B-37 (15.37)

B-22A (16.33)

B-38 (18.17)

RES-N (17.68)

B-25 (NM)

*IT-E (NM)

B-41A (16.39)

DW-1 (15.51)

DW-2 (15.70)

Manhole 77

MW-34 (19.47) *MW-42C (12.20) *MW-42B (13.54)

MW-33 (18.49)

MW-40 (18.02)

*CR-30B (13.79)

CR-30A (18.43)

B-10 (18.38)

CHEVRON

B-15 (19.15)

B-2 (17.98)

MAINTENANCE BUILDING 1

CONOCOPHILLIPS

B-16 (18.02)

B-17 (17.90)

BUILDING

PIPE RUN

KINDER MORGAN

*MW-41C (17.23) *MW-41B (16.98)

MW-37 (18.86)

MW-36 (20.51)

TANKS

*CR-29B (17.16) CR-29A (19.71)

B-26 (18.51)

B-14 (NM)

*CR-28B (18.79) CR-28A (18.26) *CR-28C (18.57)

B-6 (17.89)

B-5 (17.75)

B-4 (16.45) 0.06

CR-3 (18.81)

B-11 (18.70)

B-12 (18.77)

LEGEND

MW-36 (20.51)	MONITORING WELL; GROUNDWATER ELEVATION, MEASURED ON 9/14/09
	GROUNDWATER ELEVATION CONTOUR, FEET
0.01	SEPARATE PHASE HYDROCARBON THICKNESS, FEET
*	GROUNDWATER ELEVATION NOT USED TO CONSTRUCT CONTOURS
	FENCE LINE
	TOPOGRAPHIC CONTOUR LINES

North

0 100

SCALE IN FEET

FIGURE 6
GROUNDWATER ELEVATION CONTOURS – DOCK AREA
THIRD QUARTER 2009

WILLBRIDGE PETROLEUM TERMINALS
PORTLAND, OREGON

PROJECT NO.	PREPARED BY	DRAWN BY
KMWB09-01	CRF	DR
DATE	REVIEWED BY	FILE NAME
11/30/09		PTWB01M2-Site

DELTA

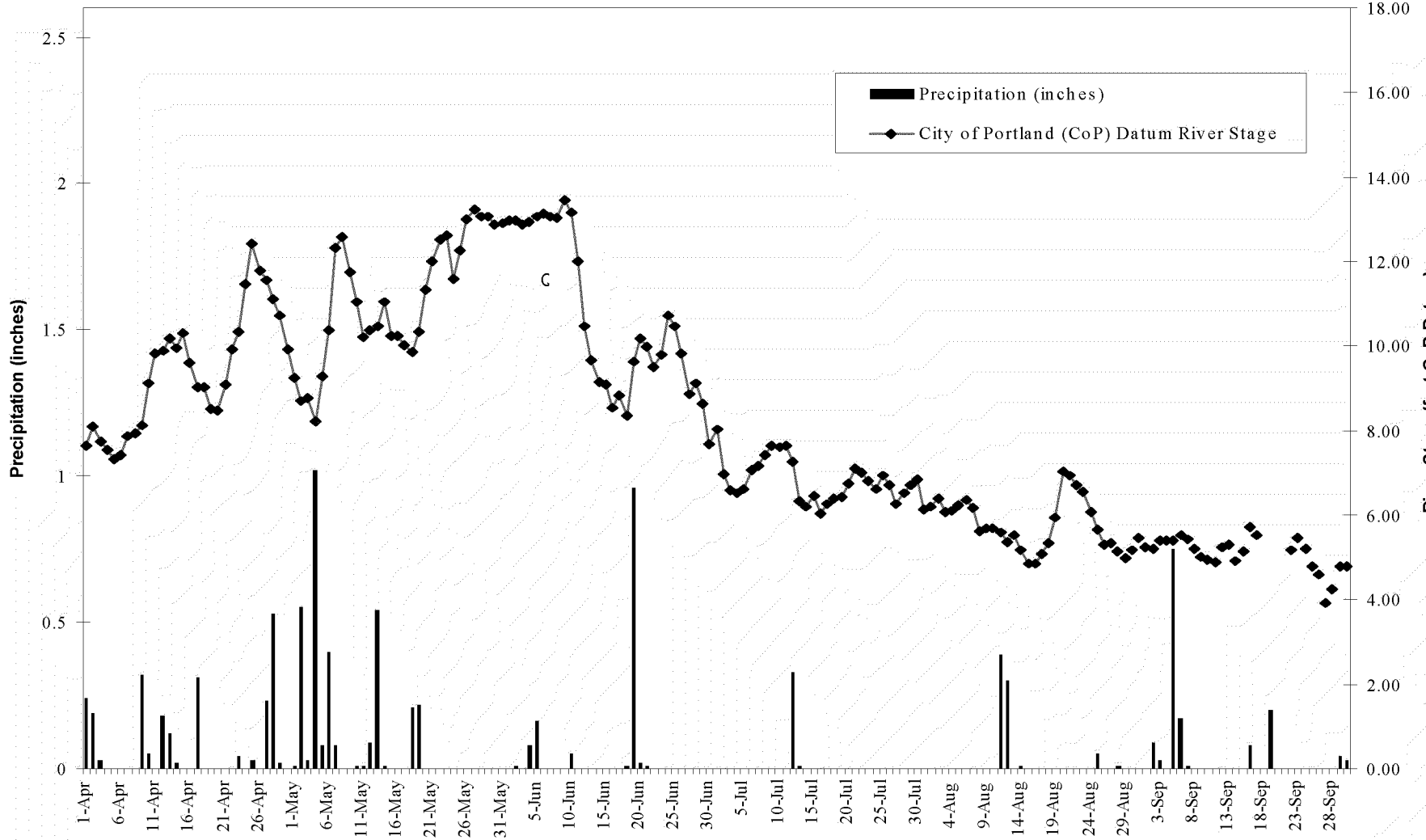


FIGURE 7

PRECIPITATION AND RIVER STAGE
(APRIL 2009 TO OCTOBER 2009)

Willbridge Terminal
Portland, Oregon

PROJECT NO. KMWB-09-01	DRAWN BY CRF 10/2/09
FILE NO. WTG	PREPARED BY CRF 10/2/09
REVISION NO. 0	REVIEWED BY

DELTA

Sources:

Precipitation data from Preliminary Climatology Data at National Weather Service Forecast Office, Portland, Oregon.

River stage data from United States Geological Survey (USGS) National Water Information System:
Station 14211720 Willamette River at Portland, Oregon
(Location--Lat 45° 31'07", long 122° 40'00", in NW 1/4 NE 1/4 sec.3, T.1 S., R.1 E., Multnomah County, Hydrologic Unit 17090012, in pier at east end of drawspan, on upstream side of Morrison Bridge, in Portland, and at mile 12.8.) USGS elevation is adjusted to City of Portland Datum using a correction of +2.925 feet.

APPENDIX A

GROUNDWATER MONITORING AND SAMPLING PROCEDURES, CERTIFIED ANALYTICAL LABORATORY REPORTS AND CHAIN-OF-CUSTODY DOCUMENTATION (CD ONLY)

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

PORTLAND, OR 9405 S.W. NIMBUS AVENUE
BEAVERTON, OR 97008-7132
ph: (503) 906.9200 fax: (503) 906.9210

ORELAP#: OR100021

October 09, 2009

Jason Nail
ARCADIS U.S., Inc
111 SW Columbia Street - Suite 725
Portland, OR 97201

RE: Chevron - RI Well Subset

Enclosed are the results of analyses for samples received by the laboratory on 09/23/09 13:00. The following list is a summary of the Work Orders contained in this report, generated on 10/09/09 14:45.

If you have any questions concerning this report, please feel free to contact me.

Work Order	Project	ProjectNumber
PSI0840	Chevron - RI Well Subset	100-1868

TestAmerica Portland

Estella K Rieben

Estella Rieben, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.

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BEAVERTON, OR 97008-7132
ph: (503) 906.9200 fax: (503) 906.9210

ARCADIS U.S., Inc	Project Name:	**Chevron - RI Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	100-1868	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/09/09 14:45

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
B-9A	PSI0840-01	Water	09/22/09 09:30	09/23/09 13:00
B-10	PSI0840-02	Water	09/22/09 09:45	09/23/09 13:00
B-21	PSI0840-03	Water	09/22/09 10:30	09/23/09 13:00
B-29	PSI0840-04	Water	09/22/09 10:45	09/23/09 13:00
B-28	PSI0840-05	Water	09/22/09 11:00	09/23/09 13:00
CR-1	PSI0840-06	Water	09/22/09 13:00	09/23/09 13:00
TB-266	PSI0840-07	Water	09/22/09 00:00	09/23/09 13:00
BD-RI-01	PSI0840-08	Water	09/22/09 00:00	09/23/09 13:00

TestAmerica Portland

Estella K Rieben

Estella Rieben, Project Manager

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ph: (503) 906.9200 fax: (503) 906.9210

ARCADIS U.S., Inc	Project Name:	**Chevron - RI Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	100-1868	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/09/09 14:45

Gasoline Hydrocarbons per NW TPH-Gx Method

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed		Notes
PSI0840-01 (B-9A)				**Water**				**Sampled: 09/22/09 09:30**			
Gasoline Range Hydrocarbons	NW TPH-Gx	**285**	-----	80.0	ug/l	1x	9091037	09/29/09 15:47	09/30/09 02:17		
Surrogate(s): 4-BFB (FID)				*101%*		*50 - 150%*				"	
PSI0840-02 (B-10)				**Water**				**Sampled: 09/22/09 09:45**			
Gasoline Range Hydrocarbons	NW TPH-Gx	**697**	-----	80.0	ug/l	1x	9091037	09/29/09 15:47	09/30/09 02:44		
Surrogate(s): 4-BFB (FID)				*155%*		*50 - 150%*				"	*ZX*
PSI0840-03 (B-21)				**Water**				**Sampled: 09/22/09 10:30**			
Gasoline Range Hydrocarbons	NW TPH-Gx	**472**	-----	80.0	ug/l	1x	9091037	09/29/09 15:47	09/30/09 03:12		
Surrogate(s): 4-BFB (FID)				*128%*		*50 - 150%*				"	
PSI0840-04 (B-29)				**Water**				**Sampled: 09/22/09 10:45**			
Gasoline Range Hydrocarbons	NW TPH-Gx	ND	-----	80.0	ug/l	1x	9091037	09/29/09 15:47	09/30/09 00:55		
Surrogate(s): 4-BFB (FID)				*91.0%*		*50 - 150%*				"	
PSI0840-05 (B-28)				**Water**				**Sampled: 09/22/09 11:00**			
Gasoline Range Hydrocarbons	NW TPH-Gx	ND	-----	80.0	ug/l	1x	9091037	09/29/09 15:47	09/30/09 01:50		
Surrogate(s): 4-BFB (FID)				*79.5%*		*50 - 150%*				"	
PSI0840-06 (CR-1)				**Water**				**Sampled: 09/22/09 13:00**			
Gasoline Range Hydrocarbons	NW TPH-Gx	ND	-----	80.0	ug/l	1x	9091037	09/29/09 15:47	09/30/09 00:28		
Surrogate(s): 4-BFB (FID)				*91.8%*		*50 - 150%*				"	
PSI0840-08 (BD-RI-01)				**Water**				**Sampled: 09/22/09 00:00**			
Gasoline Range Hydrocarbons	NW TPH-Gx	**550**	-----	80.0	ug/l	1x	9091037	09/29/09 15:47	09/30/09 03:39		**Q1**
Surrogate(s): 4-BFB (FID)				*120%*		*50 - 150%*				"	

TestAmerica Portland

Estella K Rieben

Estella Rieben, Project Manager

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BEAVERTON, OR 97008-7132
ph: (503) 906.9200 fax: (503) 906.9210

ARCADIS U.S., Inc	Project Name:	**Chevron - RI Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	100-1868	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/09/09 14:45

Diesel and Heavy Range Hydrocarbons per NWTPH-Dx Method with Acid/Silica Gel Cleanup

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSI0840-01 (B-9A)				**Water**			**Sampled: 09/22/09 09:30**			
Diesel Range Organics	NWTPH-Dx	**20.2**	-----	0.250	mg/l	1x	9090953	09/28/09 15:30	09/29/09 10:27	**Q9**
Heavy Oil Range Hydrocarbons	"	**1.05**	-----	0.500	"	"	"	"	"	**Q7**
Surrogate(s): 1-Chlorooctadecane				*103%*		*50 - 150%*				"
PSI0840-02 (B-10)				**Water**			**Sampled: 09/22/09 09:45**			
Diesel Range Organics	NWTPH-Dx	**5.66**	-----	0.250	mg/l	1x	9090953	09/28/09 15:30	09/29/09 11:25	**Q9**
Heavy Oil Range Hydrocarbons	"	ND	-----	0.500	"	"	"	"	"	
Surrogate(s): 1-Chlorooctadecane				*75.3%*		*50 - 150%*				"
PSI0840-03 (B-21)				**Water**			**Sampled: 09/22/09 10:30**			
Diesel Range Organics	NWTPH-Dx	**21.0**	-----	0.250	mg/l	1x	9090953	09/28/09 15:30	09/29/09 11:44	**Q9**
Heavy Oil Range Hydrocarbons	"	**0.575**	-----	0.500	"	"	"	"	"	**Q7**
Surrogate(s): 1-Chlorooctadecane				*108%*		*50 - 150%*				"
PSI0840-04 (B-29)				**Water**			**Sampled: 09/22/09 10:45**			
Diesel Range Organics	NWTPH-Dx	ND	-----	0.250	mg/l	1x	9090953	09/28/09 15:30	09/29/09 12:02	
Heavy Oil Range Hydrocarbons	"	ND	-----	0.500	"	"	"	"	"	
Surrogate(s): 1-Chlorooctadecane				*65.0%*		*50 - 150%*				"
PSI0840-05 (B-28)				**Water**			**Sampled: 09/22/09 11:00**			
Diesel Range Organics	NWTPH-Dx	ND	-----	0.250	mg/l	1x	9090953	09/28/09 15:30	09/29/09 12:21	
Heavy Oil Range Hydrocarbons	"	ND	-----	0.500	"	"	"	"	"	
Surrogate(s): 1-Chlorooctadecane				*67.4%*		*50 - 150%*				"
PSI0840-06 (CR-1)				**Water**			**Sampled: 09/22/09 13:00**			
Diesel Range Organics	NWTPH-Dx	**0.523**	-----	0.250	mg/l	1x	9090953	09/28/09 15:30	09/29/09 12:39	**Q9**
Heavy Oil Range Hydrocarbons	"	ND	-----	0.500	"	"	"	"	"	
Surrogate(s): 1-Chlorooctadecane				*70.0%*		*50 - 150%*				"
PSI0840-08 (BD-RI-01)				**Water**			**Sampled: 09/22/09 00:00**			
Diesel Range Organics	NWTPH-Dx	**19.2**	-----	0.250	mg/l	1x	9090953	09/28/09 15:30	09/29/09 12:58	**Q9**
Heavy Oil Range Hydrocarbons	"	**0.902**	-----	0.500	"	"	"	"	"	**Q7**
Surrogate(s): 1-Chlorooctadecane				*85.7%*		*50 - 150%*				"

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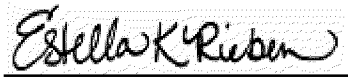

Estella Rieben, Project Manager

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ph: (503) 906.9200 fax: (503) 906.9210

ARCADIS U.S., Inc	Project Name:	**Chevron - RI Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	100-1868	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/09/09 14:45

Total Metals per EPA 6000/7000 Series Methods

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSI0840-01 (B-9A)			**Water**			**Sampled: 09/22/09 09:30**				
Arsenic	EPA 6020	**0.00221**	-----	0.00100	mg/l	1x	9091020	09/29/09 12:37	10/01/09 08:21	
Barium	"	**0.0592**	-----	0.00100	"	"	"	"	"	
Cadmium	"	ND	-----	0.000500	"	"	"	"	"	
Chromium	"	**0.00350**	-----	0.00200	"	"	"	"	"	
Copper	"	ND	-----	0.0100	"	5x	"	"	10/02/09 01:30	
Lead	"	**0.00228**	-----	0.00100	"	1x	"	"	10/01/09 08:21	
Manganese	"	**2.48**	-----	0.0100	"	5x	"	"	10/01/09 15:20	
Selenium	"	ND	-----	0.000500	"	1x	"	"	10/01/09 08:21	
Silver	"	ND	-----	0.00100	"	"	"	"	"	
Zinc	"	ND	-----	0.0250	"	5x	"	"	10/02/09 20:57	
PSI0840-02 (B-10)			**Water**			**Sampled: 09/22/09 09:45**				
Arsenic	EPA 6020	**0.0318**	-----	0.00100	mg/l	1x	9091020	09/29/09 12:37	10/01/09 08:28	
Barium	"	**0.0835**	-----	0.00100	"	"	"	"	"	
Cadmium	"	ND	-----	0.000500	"	"	"	"	"	
Chromium	"	**0.00306**	-----	0.00200	"	"	"	"	"	
Copper	"	ND	-----	0.0100	"	5x	"	"	10/02/09 01:38	
Lead	"	**0.00126**	-----	0.00100	"	1x	"	"	10/01/09 08:28	
Manganese	"	**4.53**	-----	0.0100	"	5x	"	"	10/01/09 15:27	
Selenium	"	ND	-----	0.000500	"	1x	"	"	10/01/09 08:28	
Silver	"	ND	-----	0.00100	"	"	"	"	"	
Zinc	"	ND	-----	0.0250	"	5x	"	"	10/02/09 21:03	
PSI0840-03 (B-21)			**Water**			**Sampled: 09/22/09 10:30**				
Arsenic	EPA 6020	**0.0391**	-----	0.00100	mg/l	1x	9091020	09/29/09 12:37	10/01/09 08:50	
Barium	"	**0.0704**	-----	0.00100	"	"	"	"	"	
Cadmium	"	ND	-----	0.000500	"	"	"	"	"	
Chromium	"	ND	-----	0.00200	"	"	"	"	"	
Copper	"	ND	-----	0.0100	"	5x	"	"	10/02/09 02:00	
Lead	"	ND	-----	0.00100	"	1x	"	"	10/01/09 08:50	
Manganese	"	**3.54**	-----	0.0100	"	5x	"	"	10/01/09 15:49	
Selenium	"	ND	-----	0.000500	"	1x	"	"	10/01/09 08:50	
Silver	"	ND	-----	0.00100	"	"	"	"	"	
Zinc	"	ND	-----	0.0250	"	5x	"	"	10/02/09 21:09	

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Estella K Rieben

Estella Rieben, Project Manager

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PORTLAND, OR 9405 S.W. NIMBUS AVENUE
BEAVERTON, OR 97008-7132
ph: (503) 906.9200 fax: (503) 906.9210

ARCADIS U.S., Inc	Project Name:	**Chevron - RI Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	100-1868	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/09/09 14:45

Total Metals per EPA 6000/7000 Series Methods

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSI0840-04 (B-29)			**Water**			**Sampled: 09/22/09 10:45**				
Arsenic	EPA 6020	ND	-----	0.00100	mg/l	1x	9091020	09/29/09 12:37	10/01/09 08:57	
Barium	"	**0.0878**	-----	0.00100	"	"	"	"	"	
Cadmium	"	**0.00111**	-----	0.000500	"	"	"	"	"	
Chromium	"	**0.00246**	-----	0.00200	"	"	"	"	"	
Copper	"	**0.0424**	-----	0.0100	"	5x	"	"	10/02/09 02:08	
Lead	"	**0.00283**	-----	0.00100	"	1x	"	"	10/01/09 08:57	
Manganese	"	**4.53**	-----	0.0100	"	5x	"	"	10/01/09 15:57	
Selenium	"	ND	-----	0.000500	"	1x	"	"	10/01/09 08:57	
Silver	"	ND	-----	0.00100	"	"	"	"	"	
Zinc	"	ND	-----	0.0250	"	5x	"	"	10/02/09 21:14	
PSI0840-05 (B-28)			**Water**			**Sampled: 09/22/09 11:00**				
Arsenic	EPA 6020	**0.00754**	-----	0.00100	mg/l	1x	9091020	09/29/09 12:37	10/01/09 09:05	
Barium	"	**0.249**	-----	0.00100	"	"	"	"	"	
Cadmium	"	**0.00243**	-----	0.000500	"	"	"	"	"	
Chromium	"	**0.0199**	-----	0.00200	"	"	"	"	"	
Copper	"	**0.144**	-----	0.0100	"	5x	"	"	10/02/09 02:15	
Lead	"	**0.0214**	-----	0.00100	"	1x	"	"	10/01/09 09:05	
Manganese	"	**1.47**	-----	0.0100	"	5x	"	"	10/01/09 16:04	
Selenium	"	ND	-----	0.000500	"	1x	"	"	10/01/09 09:05	
Silver	"	ND	-----	0.00100	"	"	"	"	"	
Zinc	"	**0.101**	-----	0.0250	"	5x	"	"	10/02/09 21:20	
PSI0840-06 (CR-1)			**Water**			**Sampled: 09/22/09 13:00**				
Arsenic	EPA 6020	**0.00124**	-----	0.00100	mg/l	1x	9091020	09/29/09 12:37	10/01/09 09:12	
Barium	"	**0.0132**	-----	0.00100	"	"	"	"	"	
Cadmium	"	ND	-----	0.000500	"	"	"	"	"	
Chromium	"	ND	-----	0.00200	"	"	"	"	"	
Copper	"	**0.0682**	-----	0.00200	"	"	"	"	10/02/09 02:23	
Lead	"	ND	-----	0.00100	"	"	"	"	10/01/09 09:12	
Manganese	"	**0.560**	-----	0.00200	"	"	"	"	"	
Selenium	"	ND	-----	0.000500	"	"	"	"	"	
Silver	"	ND	-----	0.00100	"	"	"	"	"	
Zinc	"	**0.0748**	-----	0.00500	"	"	"	"	10/02/09 21:26	

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Estella K Rieben

Estella Rieben, Project Manager

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PORTLAND, OR 9405 S.W. NIMBUS AVENUE
BEAVERTON, OR 97008-7132
ph: (503) 906.9200 fax: (503) 906.9210

ARCADIS U.S., Inc	Project Name:	**Chevron - RI Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	100-1868	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/09/09 14:45

Total Metals per EPA 6000/7000 Series Methods

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSI0840-08 (BD-RI-01)			**Water**			**Sampled: 09/22/09 00:00**				
Arsenic	EPA 6020	**0.00199**	-----	0.00100	mg/l	1x	9091020	09/29/09 12:37	10/01/09 09:19	
Barium	"	**0.0522**	-----	0.00100	"	"	"	"	"	
Cadmium	"	ND	-----	0.000500	"	"	"	"	"	
Chromium	"	**0.00255**	-----	0.00200	"	"	"	"	"	
Copper	"	ND	-----	0.0100	"	5x	"	"	10/02/09 02:30	
Lead	"	**0.00176**	-----	0.00100	"	1x	"	"	10/01/09 09:19	
Manganese	"	**2.45**	-----	0.0100	"	5x	"	"	10/01/09 16:19	
Selenium	"	ND	-----	0.000500	"	1x	"	"	10/01/09 09:19	
Silver	"	ND	-----	0.00100	"	"	"	"	"	
Zinc	"	ND	-----	0.0250	"	5x	"	"	10/02/09 21:31	

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Estella K Rieben

Estella Rieben, Project Manager

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111 SW Columbia Street - Suite 725	Project Number:	100-1868	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/09/09 14:45

Mercury per EPA Method 1631E

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSI0840-01 (B-9A)			**Water**			**Sampled: 09/22/09 09:30**				
Mercury	EPA 1631 Mod.	**0.00942**	-----	0.00500	ug/l	1x	9091041	09/29/09 16:28	09/30/09 14:50	
PSI0840-02 (B-10)			**Water**			**Sampled: 09/22/09 09:45**				
Mercury	EPA 1631 Mod.	ND	-----	0.00500	ug/l	1x	9091041	09/29/09 16:28	09/30/09 14:54	
PSI0840-03 (B-21)			**Water**			**Sampled: 09/22/09 10:30**				
Mercury	EPA 1631 Mod.	ND	-----	0.00500	ug/l	1x	9091041	09/29/09 16:28	09/30/09 15:05	
PSI0840-04 (B-29)			**Water**			**Sampled: 09/22/09 10:45**				
Mercury	EPA 1631 Mod.	**0.0158**	-----	0.00500	ug/l	1x	9091041	09/29/09 16:28	09/30/09 15:09	
PSI0840-05 (B-28)			**Water**			**Sampled: 09/22/09 11:00**				
Mercury	EPA 1631 Mod.	**0.0719**	-----	0.00500	ug/l	1x	9091041	09/29/09 16:28	09/30/09 15:12	
PSI0840-06 (CR-1)			**Water**			**Sampled: 09/22/09 13:00**				
Mercury	EPA 1631 Mod.	ND	-----	0.00500	ug/l	1x	9091041	09/29/09 16:28	09/30/09 15:16	
PSI0840-08 (BD-RI-01)			**Water**			**Sampled: 09/22/09 00:00**				
Mercury	EPA 1631 Mod.	**0.00579**	-----	0.00500	ug/l	1x	9091041	09/29/09 16:28	09/30/09 15:20	

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Estella Rieben, Project Manager

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ARCADIS U.S., Inc	Project Name:	**Chevron - RI Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	100-1868	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/09/09 14:45

Selected Volatile Organic Compounds (Including BTEX) per EPA Method 8260B

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSI0840-01 (B-9A)			**Water**			**Sampled: 09/22/09 09:30**				
Methyl tert-butyl ether	EPA 8260B	ND	-----	1.00	ug/l	1x	9090972	09/28/09 16:00	09/28/09 20:57	
Benzene	"	ND	-----	0.200	"	"	"	"	"	
1,2-Dichloroethane	"	ND	-----	1.00	"	"	"	"	"	
Toluene	"	ND	-----	1.00	"	"	"	"	"	
1,2-Dibromoethane	"	ND	-----	1.00	"	"	"	"	"	
Ethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
m,p-Xylene	"	ND	-----	2.00	"	"	"	"	"	
o-Xylene	"	ND	-----	1.00	"	"	"	"	"	
Isopropylbenzene	"	**3.17**	-----	2.00	"	"	"	"	"	
n-Propylbenzene	"	**6.23**	-----	1.00	"	"	"	"	"	
1,3,5-Trimethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
1,2,4-Trimethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
Naphthalene	"	ND	-----	2.00	"	"	"	"	"	
Surrogate(s):	*Dibromofluoromethane*			*100%*		*80 - 120%*				"
	1,2-DCA-d4			*102%*		*80 - 120%*				"
	Toluene-d8			*104%*		*80 - 120%*				"
	4-BFB			*97.0%*		*80 - 120%*				"
PSI0840-02 (B-10)			**Water**			**Sampled: 09/22/09 09:45**				
Methyl tert-butyl ether	EPA 8260B	ND	-----	1.00	ug/l	1x	9090972	09/28/09 16:00	09/28/09 21:23	
Benzene	"	**0.720**	-----	0.200	"	"	"	"	"	
1,2-Dichloroethane	"	ND	-----	1.00	"	"	"	"	"	
Toluene	"	**1.13**	-----	1.00	"	"	"	"	"	
1,2-Dibromoethane	"	ND	-----	1.00	"	"	"	"	"	
Ethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
m,p-Xylene	"	**2.17**	-----	2.00	"	"	"	"	"	
o-Xylene	"	ND	-----	1.00	"	"	"	"	"	
Isopropylbenzene	"	**13.4**	-----	2.00	"	"	"	"	"	
n-Propylbenzene	"	**23.0**	-----	1.00	"	"	"	"	"	
1,3,5-Trimethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
1,2,4-Trimethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
Naphthalene	"	ND	-----	2.00	"	"	"	"	"	
Surrogate(s):	*Dibromofluoromethane*			*101%*		*80 - 120%*				"
	1,2-DCA-d4			*97.8%*		*80 - 120%*				"
	Toluene-d8			*102%*		*80 - 120%*				"
	4-BFB			*97.8%*		*80 - 120%*				"

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Estella K Rieben

Estella Rieben, Project Manager

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ph: (503) 906.9200 fax: (503) 906.9210

ARCADIS U.S., Inc	Project Name:	**Chevron - RI Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	100-1868	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/09/09 14:45

Selected Volatile Organic Compounds (Including BTEX) per EPA Method 8260B

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSI0840-03 (B-21)			**Water**			**Sampled: 09/22/09 10:30**				
Methyl tert-butyl ether	EPA 8260B	ND	-----	1.00	ug/l	1x	9090972	09/28/09 16:00	09/28/09 21:50	
Benzene	"	**0.400**	-----	0.200	"	"	"	"	"	
1,2-Dichloroethane	"	ND	-----	1.00	"	"	"	"	"	
Toluene	"	**1.60**	-----	1.00	"	"	"	"	"	
1,2-Dibromoethane	"	ND	-----	1.00	"	"	"	"	"	
Ethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
m,p-Xylene	"	ND	-----	2.00	"	"	"	"	"	
o-Xylene	"	**1.47**	-----	1.00	"	"	"	"	"	
Isopropylbenzene	"	**7.43**	-----	2.00	"	"	"	"	"	
n-Propylbenzene	"	**7.86**	-----	1.00	"	"	"	"	"	
1,3,5-Trimethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
1,2,4-Trimethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
Naphthalene	"	ND	-----	2.00	"	"	"	"	"	
Surrogate(s): *Dibromofluoromethane*				*101%*		*80 - 120%*				"
1,2-DCA-d4				*97.2%*		*80 - 120%*				"
Toluene-d8				*103%*		*80 - 120%*				"
4-BFB				*98.6%*		*80 - 120%*				"
PSI0840-04 (B-29)			**Water**			**Sampled: 09/22/09 10:45**				
Methyl tert-butyl ether	EPA 8260B	ND	-----	1.00	ug/l	1x	9090972	09/28/09 16:00	09/28/09 22:16	
Benzene	"	ND	-----	0.200	"	"	"	"	"	
1,2-Dichloroethane	"	ND	-----	1.00	"	"	"	"	"	
Toluene	"	ND	-----	1.00	"	"	"	"	"	
1,2-Dibromoethane	"	ND	-----	1.00	"	"	"	"	"	
Ethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
m,p-Xylene	"	ND	-----	2.00	"	"	"	"	"	
o-Xylene	"	ND	-----	1.00	"	"	"	"	"	
Isopropylbenzene	"	ND	-----	2.00	"	"	"	"	"	
n-Propylbenzene	"	ND	-----	1.00	"	"	"	"	"	
1,3,5-Trimethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
1,2,4-Trimethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
Naphthalene	"	ND	-----	2.00	"	"	"	"	"	
Surrogate(s): *Dibromofluoromethane*				*100%*		*80 - 120%*				"
1,2-DCA-d4				*97.5%*		*80 - 120%*				"
Toluene-d8				*103%*		*80 - 120%*				"
4-BFB				*99.1%*		*80 - 120%*				"

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Estella K Rieben

Estella Rieben, Project Manager

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ph: (503) 906.9200 fax: (503) 906.9210

ARCADIS U.S., Inc	Project Name:	**Chevron - RI Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	100-1868	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/09/09 14:45

Selected Volatile Organic Compounds (Including BTEX) per EPA Method 8260B

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSI0840-05 (B-28)			**Water**			**Sampled: 09/22/09 11:00**				
Methyl tert-butyl ether	EPA 8260B	**1.16**	-----	1.00	ug/l	1x	9090972	09/28/09 16:00	09/28/09 22:43	
Benzene	"	ND	-----	0.200	"	"	"	"	"	
1,2-Dichloroethane	"	ND	-----	1.00	"	"	"	"	"	
Toluene	"	ND	-----	1.00	"	"	"	"	"	
1,2-Dibromoethane	"	ND	-----	1.00	"	"	"	"	"	
Ethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
m,p-Xylene	"	ND	-----	2.00	"	"	"	"	"	
o-Xylene	"	ND	-----	1.00	"	"	"	"	"	
Isopropylbenzene	"	ND	-----	2.00	"	"	"	"	"	
n-Propylbenzene	"	ND	-----	1.00	"	"	"	"	"	
1,3,5-Trimethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
1,2,4-Trimethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
Naphthalene	"	ND	-----	2.00	"	"	"	"	"	
Surrogate(s): *Dibromofluoromethane*				*101%*		*80 - 120%*				"
1,2-DCA-d4				*99.2%*		*80 - 120%*				"
Toluene-d8				*106%*		*80 - 120%*				"
4-BFB				*103%*		*80 - 120%*				"
PSI0840-06 (CR-1)			**Water**			**Sampled: 09/22/09 13:00**				
Methyl tert-butyl ether	EPA 8260B	ND	-----	1.00	ug/l	1x	9090972	09/28/09 16:00	09/28/09 23:10	
Benzene	"	ND	-----	0.200	"	"	"	"	"	
1,2-Dichloroethane	"	ND	-----	1.00	"	"	"	"	"	
Toluene	"	ND	-----	1.00	"	"	"	"	"	
1,2-Dibromoethane	"	ND	-----	1.00	"	"	"	"	"	
Ethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
m,p-Xylene	"	ND	-----	2.00	"	"	"	"	"	
o-Xylene	"	ND	-----	1.00	"	"	"	"	"	
Isopropylbenzene	"	ND	-----	2.00	"	"	"	"	"	
n-Propylbenzene	"	ND	-----	1.00	"	"	"	"	"	
1,3,5-Trimethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
1,2,4-Trimethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
Naphthalene	"	ND	-----	2.00	"	"	"	"	"	
Surrogate(s): *Dibromofluoromethane*				*104%*		*80 - 120%*				"
1,2-DCA-d4				*100%*		*80 - 120%*				"
Toluene-d8				*105%*		*80 - 120%*				"
4-BFB				*104%*		*80 - 120%*				"

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Estella K Rieben

Estella Rieben, Project Manager

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111 SW Columbia Street - Suite 725	Project Number:	100-1868	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/09/09 14:45

Selected Volatile Organic Compounds (Including BTEX) per EPA Method 8260B

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSI0840-07 (TB-266)			**Water**			**Sampled: 09/22/09 00:00**				
Methyl tert-butyl ether	EPA 8260B	ND	-----	1.00	ug/l	1x	9090972	09/28/09 16:00	09/29/09 00:03	
Benzene	"	ND	-----	0.200	"	"	"	"	"	
1,2-Dichloroethane	"	ND	-----	1.00	"	"	"	"	"	
Toluene	"	ND	-----	1.00	"	"	"	"	"	
1,2-Dibromoethane	"	ND	-----	1.00	"	"	"	"	"	
Ethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
m,p-Xylene	"	ND	-----	2.00	"	"	"	"	"	
o-Xylene	"	ND	-----	1.00	"	"	"	"	"	
Isopropylbenzene	"	ND	-----	2.00	"	"	"	"	"	
n-Propylbenzene	"	ND	-----	1.00	"	"	"	"	"	
1,3,5-Trimethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
1,2,4-Trimethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
Naphthalene	"	ND	-----	2.00	"	"	"	"	"	
Surrogate(s):	*Dibromofluoromethane*			*99.2%*		*80 - 120%*				"
	1,2-DCA-d4			*96.0%*		*80 - 120%*				"
	Toluene-d8			*103%*		*80 - 120%*				"
	4-BFB			*100%*		*80 - 120%*				"
PSI0840-08 (BD-RI-01)			**Water**			**Sampled: 09/22/09 00:00**				
Methyl tert-butyl ether	EPA 8260B	ND	-----	1.00	ug/l	1x	9090972	09/28/09 16:00	09/28/09 23:36	
Benzene	"	ND	-----	0.200	"	"	"	"	"	
1,2-Dichloroethane	"	ND	-----	1.00	"	"	"	"	"	
Toluene	"	ND	-----	1.00	"	"	"	"	"	
1,2-Dibromoethane	"	ND	-----	1.00	"	"	"	"	"	
Ethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
m,p-Xylene	"	ND	-----	2.00	"	"	"	"	"	
o-Xylene	"	ND	-----	1.00	"	"	"	"	"	
Isopropylbenzene	"	**4.31**	-----	2.00	"	"	"	"	"	
n-Propylbenzene	"	**7.34**	-----	1.00	"	"	"	"	"	
1,3,5-Trimethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
1,2,4-Trimethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
Naphthalene	"	ND	-----	2.00	"	"	"	"	"	
Surrogate(s):	*Dibromofluoromethane*			*100%*		*80 - 120%*				"
	1,2-DCA-d4			*96.1%*		*80 - 120%*				"
	Toluene-d8			*101%*		*80 - 120%*				"
	4-BFB			*100%*		*80 - 120%*				"

TestAmerica Portland

Estella K Rieben

Estella Rieben, Project Manager

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PORTLAND, OR 9405 S.W. NIMBUS AVENUE
BEAVERTON, OR 97008-7132
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ARCADIS U.S., Inc	Project Name:	**Chevron - RI Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	100-1868	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/09/09 14:45

Polynuclear Aromatic Compounds per EPA 8270M-SIM

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSI0840-01 (B-9A)			Water			Sampled: 09/22/09 09:30				RL3
2-Methylnaphthalene	EPA 8270m	**1.14**	-----	0.980	ug/l	10x	9090905	09/25/09 12:55	10/01/09 03:27	
Acenaphthene	"	**2.81**	-----	0.980	"	"	"	"	"	
Acenaphthylene	"	ND	-----	0.980	"	"	"	"	"	
Anthracene	"	ND	-----	0.980	"	"	"	"	"	
Benzo (a) anthracene	"	**0.0516**	-----	0.0490	"	"	"	"	"	
Benzo (a) pyrene	"	**0.0578**	-----	0.0490	"	"	"	"	"	
Benzo (b) fluoranthene	"	**0.0499**	-----	0.0490	"	"	"	"	"	
Benzo (ghi) perylene	"	ND	-----	0.980	"	"	"	"	"	
Benzo (k) fluoranthene	"	**0.0542**	-----	0.0490	"	"	"	"	"	
Chrysene	"	**0.0954**	-----	0.0490	"	"	"	"	"	
Dibenzo (a,h) anthracene	"	ND	-----	0.0490	"	"	"	"	"	
Fluoranthene	"	ND	-----	0.980	"	"	"	"	"	
Fluorene	"	**12.0**	-----	0.980	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	"	ND	-----	0.0490	"	"	"	"	"	
Naphthalene	"	ND	-----	1.47	"	"	"	"	"	RL1
Phenanthrene	"	**5.73**	-----	0.980	"	"	"	"	"	
Pyrene	"	ND	-----	0.980	"	"	"	"	"	
Surrogate(s):	*Fluorene-d10*			*140%*		*25 - 125 %*			"	*ZX*
	Pyrene-d10			*89.7%*		*23 - 150 %*			"	
	Benzo (a) pyrene-d12			*89.9%*		*10 - 125 %*			"	
PSI0840-02 (B-10)			Water			Sampled: 09/22/09 09:45				
2-Methylnaphthalene	EPA 8270m	ND	-----	0.0980	ug/l	1x	9090905	09/25/09 12:55	10/02/09 18:26	
Acenaphthene	"	**1.09**	-----	0.0980	"	"	"	"	"	
Acenaphthylene	"	ND	-----	0.196	"	"	"	"	"	RL1
Anthracene	"	ND	-----	0.294	"	"	"	"	"	RL1
Benzo (a) anthracene	"	**0.00944**	-----	0.00490	"	"	"	"	"	
Benzo (a) pyrene	"	ND	-----	0.00490	"	"	"	"	"	
Benzo (b) fluoranthene	"	**0.00494**	-----	0.00490	"	"	"	"	"	
Benzo (ghi) perylene	"	ND	-----	0.0980	"	"	"	"	"	
Benzo (k) fluoranthene	"	ND	-----	0.00490	"	"	"	"	"	
Chrysene	"	**0.0197**	-----	0.00490	"	"	"	"	"	
Dibenzo (a,h) anthracene	"	ND	-----	0.00490	"	"	"	"	"	
Fluoranthene	"	**0.366**	-----	0.0980	"	"	"	"	"	
Fluorene	"	**1.48**	-----	0.0980	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	"	ND	-----	0.00490	"	"	"	"	"	

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ARCADIS U.S., Inc	Project Name:	**Chevron - RI Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	100-1868	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/09/09 14:45

Polynuclear Aromatic Compounds per EPA 8270M-SIM

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSI0840-02 (B-10)			Water			Sampled: 09/22/09 09:45				
Naphthalene	EPA 8270m	ND	-----	0.392	ug/l	1x	9090905	09/25/09 12:55	10/02/09 18:26	**RL1**
Phenanthrene	"	**1.25**	-----	0.0980	"	"	"	"	"	
Pyrene	"	**0.396**	-----	0.0980	"	"	"	"	"	
Surrogate(s): Fluorene-d10				*104%*		*25 - 125 %*			"	
Pyrene-d10				*84.8%*		*23 - 150 %*			"	
Benzo (a) pyrene-d12				*85.3%*		*10 - 125 %*			"	
PSI0840-03 (B-21)			Water			Sampled: 09/22/09 10:30				**RL3**
2-Methylnaphthalene	EPA 8270m	ND	-----	0.388	ug/l	4x	9090905	09/25/09 12:55	10/02/09 17:27	
Acenaphthene	"	**3.46**	-----	0.388	"	"	"	"	"	
Acenaphthylene	"	ND	-----	0.971	"	"	"	"	"	**RL1**
Anthracene	"	ND	-----	0.583	"	"	"	"	"	**RL1**
Benzo (a) anthracene	"	**0.0300**	-----	0.0194	"	"	"	"	"	
Benzo (a) pyrene	"	**0.0207**	-----	0.0194	"	"	"	"	"	
Benzo (b) fluoranthene	"	**0.0197**	-----	0.0194	"	"	"	"	"	
Benzo (ghi) perylene	"	ND	-----	0.388	"	"	"	"	"	
Benzo (k) fluoranthene	"	ND	-----	0.0194	"	"	"	"	"	
Chrysene	"	**0.0585**	-----	0.0194	"	"	"	"	"	
Dibenzo (a,h) anthracene	"	ND	-----	0.0194	"	"	"	"	"	
Fluoranthene	"	ND	-----	0.388	"	"	"	"	"	
Fluorene	"	**13.1**	-----	0.971	"	10x	"	"	10/01/09 03:57	
Indeno (1,2,3-cd) pyrene	"	ND	-----	0.0194	"	4x	"	"	10/02/09 17:27	
Naphthalene	"	ND	-----	0.583	"	"	"	"	"	**RL1**
Phenanthrene	"	**10.7**	-----	0.971	"	10x	"	"	10/01/09 03:57	
Pyrene	"	ND	-----	0.388	"	4x	"	"	10/02/09 17:27	
Surrogate(s): Fluorene-d10				*196%*		*25 - 125 %*			"	*ZX*
Pyrene-d10				*95.9%*		*23 - 150 %*			"	
Benzo (a) pyrene-d12				*87.8%*		*10 - 125 %*			"	
PSI0840-04 (B-29)			Water			Sampled: 09/22/09 10:45				
2-Methylnaphthalene	EPA 8270m	ND	-----	0.0976	ug/l	1x	9090905	09/25/09 12:55	09/30/09 19:06	
Acenaphthene	"	ND	-----	0.0976	"	"	"	"	"	
Acenaphthylene	"	ND	-----	0.0976	"	"	"	"	"	
Anthracene	"	ND	-----	0.0976	"	"	"	"	"	
Benzo (a) anthracene	"	**0.0106**	-----	0.00488	"	"	"	"	"	
Benzo (a) pyrene	"	**0.0141**	-----	0.00488	"	"	"	"	"	

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111 SW Columbia Street - Suite 725	Project Number:	100-1868	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/09/09 14:45

Polynuclear Aromatic Compounds per EPA 8270M-SIM

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSI0840-04 (B-29)			**Water**			**Sampled: 09/22/09 10:45**				
Benzo (b) fluoranthene	EPA 8270m	**0.0133**	-----	0.00488	ug/l	1x	9090905	09/25/09 12:55	09/30/09 19:06	
Benzo (ghi) perylene	"	ND	-----	0.0976	"	"	"	"	"	
Benzo (k) fluoranthene	"	**0.0108**	-----	0.00488	"	"	"	"	"	
Chrysene	"	**0.0137**	-----	0.00488	"	"	"	"	"	
Dibenzo (a,h) anthracene	"	ND	-----	0.00488	"	"	"	"	"	
Fluoranthene	"	ND	-----	0.0976	"	"	"	"	"	
Fluorene	"	ND	-----	0.0976	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	"	**0.0122**	-----	0.00488	"	"	"	"	"	
Naphthalene	"	ND	-----	0.0976	"	"	"	"	"	
Phenanthrene	"	ND	-----	0.0976	"	"	"	"	"	
Pyrene	"	ND	-----	0.0976	"	"	"	"	"	
Surrogate(s):	*Fluorene-d10*			*95.9%*		*25 - 125 %*				"
	Pyrene-d10			*85.7%*		*23 - 150 %*				"
	Benzo (a) pyrene-d12			*80.8%*		*10 - 125 %*				"
PSI0840-05 (B-28)			**Water**			**Sampled: 09/22/09 11:00**				
2-Methylnaphthalene	EPA 8270m	ND	-----	0.0980	ug/l	1x	9090905	09/25/09 12:55	09/30/09 19:35	
Acenaphthene	"	ND	-----	0.0980	"	"	"	"	"	
Acenaphthylene	"	ND	-----	0.0980	"	"	"	"	"	
Anthracene	"	ND	-----	0.0980	"	"	"	"	"	
Benzo (a) anthracene	"	**0.00748**	-----	0.00490	"	"	"	"	"	
Benzo (a) pyrene	"	**0.0115**	-----	0.00490	"	"	"	"	"	
Benzo (b) fluoranthene	"	**0.0103**	-----	0.00490	"	"	"	"	"	
Benzo (ghi) perylene	"	ND	-----	0.0980	"	"	"	"	"	
Benzo (k) fluoranthene	"	**0.00990**	-----	0.00490	"	"	"	"	"	
Chrysene	"	**0.0109**	-----	0.00490	"	"	"	"	"	
Dibenzo (a,h) anthracene	"	ND	-----	0.00490	"	"	"	"	"	
Fluoranthene	"	ND	-----	0.0980	"	"	"	"	"	
Fluorene	"	ND	-----	0.0980	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	"	**0.00892**	-----	0.00490	"	"	"	"	"	
Naphthalene	"	ND	-----	0.0980	"	"	"	"	"	
Phenanthrene	"	ND	-----	0.0980	"	"	"	"	"	
Pyrene	"	ND	-----	0.0980	"	"	"	"	"	
Surrogate(s):	*Fluorene-d10*			*98.7%*		*25 - 125 %*				"
	Pyrene-d10			*93.1%*		*23 - 150 %*				"
	Benzo (a) pyrene-d12			*86.0%*		*10 - 125 %*				"

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ARCADIS U.S., Inc	Project Name:	**Chevron - RI Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	100-1868	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/09/09 14:45

Polynuclear Aromatic Compounds per EPA 8270M-SIM

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSI0840-06 (CR-1)			**Water**			**Sampled: 09/22/09 13:00**				
2-Methylnaphthalene	EPA 8270m	ND	-----	0.0962	ug/l	1x	9090905	09/25/09 12:55	09/30/09 20:05	
Acenaphthene	"	**0.619**	-----	0.0962	"	"	"	"	"	
Acenaphthylene	"	ND	-----	0.0962	"	"	"	"	"	
Anthracene	"	ND	-----	0.0962	"	"	"	"	"	
Benzo (a) anthracene	"	**0.0161**	-----	0.00481	"	"	"	"	"	
Benzo (a) pyrene	"	**0.0183**	-----	0.00481	"	"	"	"	"	
Benzo (b) fluoranthene	"	**0.0150**	-----	0.00481	"	"	"	"	"	
Benzo (ghi) perylene	"	ND	-----	0.0962	"	"	"	"	"	
Benzo (k) fluoranthene	"	**0.0134**	-----	0.00481	"	"	"	"	"	
Chrysene	"	**0.0245**	-----	0.00481	"	"	"	"	"	
Dibenzo (a,h) anthracene	"	**0.00481**	-----	0.00481	"	"	"	"	"	
Fluoranthene	"	ND	-----	0.0962	"	"	"	"	"	
Fluorene	"	**2.53**	-----	0.385	"	4x	"	"	10/01/09 02:58	
Indeno (1,2,3-cd) pyrene	"	**0.0119**	-----	0.00481	"	1x	"	"	09/30/09 20:05	
Naphthalene	"	ND	-----	0.240	"	"	"	"	"	**RL1**
Phenanthrene	"	**0.448**	-----	0.0962	"	"	"	"	"	
Pyrene	"	ND	-----	0.0962	"	"	"	"	"	
Surrogate(s):	*Fluorene-d10*			*83.1%*		*25 - 125%*			"	
	Pyrene-d10			*77.4%*		*23 - 150%*			"	
	Benzo (a) pyrene-d12			*87.2%*		*10 - 125%*			"	
PSI0840-08 (BD-RI-01)			**Water**			**Sampled: 09/22/09 00:00**				**RL3**
2-Methylnaphthalene	EPA 8270m	**1.79**	-----	0.971	ug/l	10x	9090905	09/25/09 12:55	10/02/09 17:57	
Acenaphthene	"	**3.42**	-----	0.971	"	"	"	"	"	
Acenaphthylene	"	ND	-----	1.46	"	"	"	"	"	**RL1**
Anthracene	"	ND	-----	0.971	"	"	"	"	"	
Benzo (a) anthracene	"	**0.0682**	-----	0.0485	"	"	"	"	"	
Benzo (a) pyrene	"	**0.0779**	-----	0.0485	"	"	"	"	"	
Benzo (b) fluoranthene	"	**0.0797**	-----	0.0485	"	"	"	"	"	
Benzo (ghi) perylene	"	ND	-----	0.971	"	"	"	"	"	
Benzo (k) fluoranthene	"	**0.0761**	-----	0.0485	"	"	"	"	"	
Chrysene	"	**0.122**	-----	0.0485	"	"	"	"	"	
Dibenzo (a,h) anthracene	"	ND	-----	0.0485	"	"	"	"	"	
Fluoranthene	"	ND	-----	0.971	"	"	"	"	"	
Fluorene	"	**14.8**	-----	0.971	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	"	**0.0633**	-----	0.0485	"	"	"	"	"	

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111 SW Columbia Street - Suite 725	Project Number:	100-1868	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/09/09 14:45

Polynuclear Aromatic Compounds per EPA 8270M-SIM

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSI0840-08 (BD-RI-01)			**Water**			**Sampled: 09/22/09 00:00**				**RL3**
Naphthalene	"	ND	-----	1.46	"	"	"	"	"	**RL1**
Phenanthrene	"	**6.39**	-----	0.971	"	"	"	"	"	
Pyrene	"	ND	-----	0.971	"	"	"	"	"	
Surrogate(s): *Fluorene-d10*				*233%*		*25 - 125%*			"	*ZX*
Pyrene-d10				*88.5%*		*23 - 150%*			"	
Benzo (a) pyrene-d12				*88.3%*		*10 - 125%*			"	

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111 SW Columbia Street - Suite 725	Project Number:	100-1868	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/09/09 14:45

Gasoline Hydrocarbons per NW TPH-Gx Method - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 9091037 **Water Preparation Method: EPA 5030B**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (9091037-BLK1)							**Extracted: 09/29/09 15:47**							
Gasoline Range Hydrocarbons	NW TPH-Gx	ND	---	80.0	ug/l	1x	--	--	--	--	--	--	09/29/09 19:54	
Surrogate(s): 4-BFB (FID)		*Recovery: 85.2%*			*Limits: 50-150%*								*09/29/09 19:54*	
LCS (9091037-BS1)							**Extracted: 09/29/09 15:47**							
Gasoline Range Hydrocarbons	NW TPH-Gx	388	---	80.0	ug/l	1x	--	500	77.5%	(70-130)	--	--	09/29/09 19:00	
Surrogate(s): 4-BFB (FID)		*Recovery: 106%*			*Limits: 50-150%*								*09/29/09 19:00*	
LCS Dup (9091037-BSD1)							**Extracted: 09/29/09 15:47**							
Gasoline Range Hydrocarbons	NW TPH-Gx	424	---	80.0	ug/l	1x	--	500	84.8%	(70-130)	8.97%	(35)	09/29/09 19:27	
Surrogate(s): 4-BFB (FID)		*Recovery: 99.7%*			*Limits: 50-150%*								*09/29/09 19:27*	
Duplicate (9091037-DUP1)							**QC Source: PSI0949-05** **Extracted: 09/29/09 15:47**							
Gasoline Range Hydrocarbons	NW TPH-Gx	5120	---	800	ug/l	10x	5190	--	--	--	1.39%	(35)	09/29/09 22:11	QP
Surrogate(s): 4-BFB (FID)		*Recovery: 106%*			*Limits: 50-150%*								*09/29/09 22:11*	
Duplicate (9091037-DUP2)							**QC Source: PSI0840-05** **Extracted: 09/29/09 15:47**							
Gasoline Range Hydrocarbons	NW TPH-Gx	ND	---	80.0	ug/l	1x	ND	--	--	--	NR	(35)	09/30/09 01:23	
Surrogate(s): 4-BFB (FID)		*Recovery: 89.2%*			*Limits: 50-150%*								*09/30/09 01:23*	

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Estella K Rieben

Estella Rieben, Project Manager

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PORTLAND, OR 9405 S.W. NIMBUS AVENUE
BEAVERTON, OR 97008-7132
ph: (503) 906.9200 fax: (503) 906.9210

ARCADIS U.S., Inc	Project Name:	**Chevron - RI Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	100-1868	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/09/09 14:45

Diesel and Heavy Range Hydrocarbons per NWTPH-Dx Method with Acid/Silica Gel Cleanup - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 9090953 **Water Preparation Method: EPA 3510 Fuels**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (9090953-BLK1)								**Extracted: 09/28/09 15:30**						
Diesel Range Organics	NWTPH-Dx	ND	---	0.250	mg/l	1x	--	--	--	--	--	--	09/29/09 07:53	
Heavy Oil Range Hydrocarbons	"	ND	---	0.500	"	"	--	--	--	--	--	--	"	
Surrogate(s): 1-Chlorooctadecane		*Recovery: 71.6%*			*Limits: 50-150%*								*09/29/09 07:53*	
LCS (9090953-BS1)								**Extracted: 09/28/09 15:30**						
Diesel Range Organics	NWTPH-Dx	2.50	---	0.250	mg/l	1x	--	2.50	100%	(50-150)	--	--	09/29/09 08:08	
Heavy Oil Range Hydrocarbons	"	1.59	---	0.500	"	"	--	1.50	106%	"	--	--	"	
Surrogate(s): 1-Chlorooctadecane		*Recovery: 70.7%*			*Limits: 50-150%*								*09/29/09 08:08*	
LCS Dup (9090953-BSD1)								**Extracted: 09/28/09 15:30**						
Diesel Range Organics	NWTPH-Dx	2.60	---	0.250	mg/l	1x	--	2.50	104%	(50-150)	3.82%	(50)	09/29/09 08:25	
Heavy Oil Range Hydrocarbons	"	1.59	---	0.500	"	"	--	1.50	106%	"	0.0422%	"	"	
Surrogate(s): 1-Chlorooctadecane		*Recovery: 68.8%*			*Limits: 50-150%*								*09/29/09 08:25*	

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ARCADIS U.S., Inc	Project Name:	**Chevron - RI Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	100-1868	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/09/09 14:45

Total Metals per EPA 6000/7000 Series Methods - Laboratory Quality Control Results

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QC Batch: 9091020 **Water Preparation Method: EPA 200/3005**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (9091020-BLK1)								**Extracted: 09/29/09 12:37**						
Arsenic	EPA 6020	ND	---	0.00100	mg/l	1x	--	--	--	--	--	--	10/01/09 07:38	
Barium	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Cadmium	"	ND	---	0.000500	"	"	--	--	--	--	--	--	"	
Chromium	"	ND	---	0.00200	"	"	--	--	--	--	--	--	"	
Copper	"	ND	---	0.00200	"	"	--	--	--	--	--	--	10/02/09 00:46	
Lead	"	ND	---	0.00100	"	"	--	--	--	--	--	--	10/01/09 07:38	
Manganese	"	ND	---	0.00200	"	"	--	--	--	--	--	--	"	
Selenium	"	ND	---	0.000500	"	"	--	--	--	--	--	--	"	
Silver	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Zinc	"	ND	---	0.00500	"	"	--	--	--	--	--	--	10/02/09 23:55	
LCS (9091020-BS1)								**Extracted: 09/29/09 12:37**						
Arsenic	EPA 6020	0.0888	---	0.00100	mg/l	1x	--	0.100	88.8%	(80-120)	--	--	10/01/09 07:45	
Barium	"	0.0962	---	0.00100	"	"	--	"	96.2%	"	--	--	"	
Cadmium	"	0.0906	---	0.000500	"	"	--	"	90.6%	"	--	--	"	
Chromium	"	0.0952	---	0.00200	"	"	--	"	95.2%	"	--	--	"	
Copper	"	0.0988	---	0.00200	"	"	--	"	98.8%	"	--	--	10/02/09 00:54	
Lead	"	0.0972	---	0.00100	"	"	--	"	97.2%	"	--	--	10/01/09 07:45	
Manganese	"	0.0957	---	0.00200	"	"	--	"	95.7%	"	--	--	"	
Selenium	"	0.0840	---	0.000500	"	"	--	"	84.0%	"	--	--	"	
Silver	"	0.0480	---	0.00100	"	"	--	0.0500	96.0%	"	--	--	"	
Zinc	"	0.0936	---	0.00500	"	"	--	0.100	93.6%	"	--	--	10/02/09 14:38	
Duplicate (9091020-DUP1)						**QC Source: PSI0719-01**			**Extracted: 09/29/09 12:37**					
Arsenic	EPA 6020	ND	---	0.00100	mg/l	1x	ND	--	--	--	NR	(20)	10/01/09 07:59	
Barium	"	0.00204	---	0.00100	"	"	0.00204	--	--	--	0.00%	"	"	
Cadmium	"	ND	---	0.000500	"	"	ND	--	--	--	NR	"	"	
Chromium	"	ND	---	0.00200	"	"	ND	--	--	--	NR	"	"	
Copper	"	ND	---	0.00200	"	"	ND	--	--	--	32.2%	"	10/02/09 01:08	R4
Lead	"	ND	---	0.00100	"	"	ND	--	--	--	NR	"	10/01/09 07:59	
Manganese	"	ND	---	0.00200	"	"	ND	--	--	--	NR	"	"	
Selenium	"	ND	---	0.000500	"	"	ND	--	--	--	26.1%	"	"	R4
Silver	"	ND	---	0.00100	"	"	ND	--	--	--	NR	"	"	
Zinc	"	ND	---	0.00500	"	"	ND	--	--	--	16.5%	"	10/02/09 14:50	

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Estella Rieben, Project Manager

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ARCADIS U.S., Inc	Project Name:	**Chevron - RI Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	100-1868	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/09/09 14:45

Total Metals per EPA 6000/7000 Series Methods - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 9091020 **Water Preparation Method: EPA 200/3005**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Matrix Spike (9091020-MS1)				**QC Source: PSI0719-01**				**Extracted: 09/29/09 12:37**						
Arsenic	EPA 6020	0.0888	---	0.00100	mg/l	1x	0.000200	0.100	88.6%	(75-125)	--	--	10/01/09 08:14	
Barium	"	0.0976	---	0.00100	"	"	0.00204	"	95.5%	"	--	--	"	
Cadmium	"	0.0925	---	0.000500	"	"	ND	"	92.5%	"	--	--	"	
Chromium	"	0.0947	---	0.00200	"	"	0.000400	"	94.3%	"	--	--	"	
Copper	"	0.0977	---	0.00200	"	"	0.000730	"	97.0%	"	--	--	10/02/09 01:23	
Lead	"	0.0951	---	0.00100	"	"	ND	"	95.1%	"	--	--	10/01/09 08:14	
Manganese	"	0.0955	---	0.00200	"	"	ND	"	95.5%	"	--	--	"	
Selenium	"	0.0912	---	0.000500	"	"	0.000130	"	91.1%	"	--	--	"	
Silver	"	0.0476	---	0.00100	"	"	ND	0.0500	95.1%	"	--	--	"	
Zinc	"	0.0942	---	0.00500	"	"	0.00478	0.100	89.5%	"	--	--	10/02/09 14:55	
Matrix Spike (9091020-MS2)				**QC Source: PSI0848-10**				**Extracted: 09/29/09 12:37**						
Arsenic	EPA 6020	0.0916	---	0.00100	mg/l	1x	0.00128	0.100	90.3%	(75-125)	--	--	10/01/09 09:49	
Barium	"	0.150	---	0.00100	"	"	0.0527	"	97.3%	"	--	--	"	
Cadmium	"	0.0921	---	0.000500	"	"	ND	"	92.1%	"	--	--	"	
Chromium	"	0.0952	---	0.00200	"	"	ND	"	95.2%	"	--	--	"	
Copper	"	0.0971	---	0.0100	"	5x	0.0394	"	57.6%	"	--	--	10/02/09 03:00	M8
Lead	"	0.0933	---	0.00100	"	1x	ND	"	93.3%	"	--	--	10/01/09 09:49	
Manganese	"	1.07	---	0.0100	"	5x	0.991	"	75.5%	"	--	--	10/01/09 16:48	
Selenium	"	0.0970	---	0.000500	"	1x	ND	"	97.0%	"	--	--	10/01/09 09:49	
Silver	"	0.0466	---	0.00100	"	"	ND	0.0500	93.2%	"	--	--	"	
Zinc	"	0.0949	---	0.00500	"	"	0.00332	0.100	91.5%	"	--	--	10/02/09 15:07	

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ARCADIS U.S., Inc	Project Name:	**Chevron - RI Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	100-1868	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/09/09 14:45

Mercury per EPA Method 1631E - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 9091041 **Water Preparation Method: EPA 1631**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (9091041-BLK1)								**Extracted: 09/29/09 16:28**						
Mercury	EPA 1631 Mod.	ND	---	0.00500	ug/l	1x	--	--	--	--	--	--	09/30/09 13:37	
LCS (9091041-BS1)								**Extracted: 09/29/09 16:28**						
Mercury	EPA 1631 Mod.	0.0518	---	0.00500	ug/l	1x	--	0.0500	104%	(85-115)	--	--	09/30/09 13:41	
LCS Dup (9091041-BSD1)								**Extracted: 09/29/09 16:28**						
Mercury	EPA 1631 Mod.	0.0494	---	0.00500	ug/l	1x	--	0.0500	98.8%	(85-115)	4.80%	(20)	09/30/09 13:44	
Duplicate (9091041-DUP1)					**QC Source: PSI0604-02**				**Extracted: 09/29/09 16:28**					
Mercury	EPA 1631 Mod.	ND	---	0.00500	ug/l	1x	ND	--	--	--	NR	(20)	09/30/09 13:48	
Matrix Spike (9091041-MS1)					**QC Source: PSI0604-02**				**Extracted: 09/29/09 16:28**					
Mercury	EPA 1631 Mod.	0.0544	---	0.00500	ug/l	1x	ND	0.0500	109%	(71-125)	--	--	09/30/09 13:52	
Matrix Spike (9091041-MS2)					**QC Source: PSI0840-01**				**Extracted: 09/29/09 16:28**					
Mercury	EPA 1631 Mod.	0.0503	---	0.00500	ug/l	1x	0.00942	0.0500	81.8%	(71-125)	--	--	09/30/09 13:59	
Matrix Spike Dup (9091041-MSD1)					**QC Source: PSI0604-02**				**Extracted: 09/29/09 16:28**					
Mercury	EPA 1631 Mod.	0.0496	---	0.00500	ug/l	1x	ND	0.0500	99.2%	(71-125)	9.27%	(20)	09/30/09 13:55	
Matrix Spike Dup (9091041-MSD2)					**QC Source: PSI0840-01**				**Extracted: 09/29/09 16:28**					
Mercury	EPA 1631 Mod.	0.0512	---	0.00500	ug/l	1x	0.00942	0.0500	83.5%	(71-125)	1.68%	(20)	09/30/09 14:03	

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ARCADIS U.S., Inc	Project Name:	**Chevron - RI Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	100-1868	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/09/09 14:45

Selected Volatile Organic Compounds (Including BTEX) per EPA Method 8260B - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 9090972 **Water Preparation Method: EPA 5030B**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (9090972-BLK1)							**Extracted: 09/28/09 13:00**							
Methyl tert-butyl ether	EPA 8260B	ND	---	1.00	ug/l	1x	--	--	--	--	--	--	09/28/09 16:57	
Benzene	"	ND	---	0.200	"	"	--	--	--	--	--	--	"	
1,2-Dichloroethane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Toluene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,2-Dibromoethane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Ethylbenzene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
m,p-Xylene	"	ND	---	2.00	"	"	--	--	--	--	--	--	"	
o-Xylene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Isopropylbenzene	"	ND	---	2.00	"	"	--	--	--	--	--	--	"	
n-Propylbenzene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,3,5-Trimethylbenzene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,2,4-Trimethylbenzene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Naphthalene	"	ND	---	2.00	"	"	--	--	--	--	--	--	"	
Surrogate(s):	*Dibromofluoromethane*	*Recovery:*	*104%*		*Limits:*	*80-120%*							*09/28/09 16:57*	
	1,2-DCA-d4		*105%*			*80-120%*							"	
	Toluene-d8		*104%*			*80-120%*							"	
	4-BFB		*95.4%*			*80-120%*							"	
LCS (9090972-BS1)							**Extracted: 09/28/09 13:00**							
Methyl tert-butyl ether	EPA 8260B	19.4	---	1.00	ug/l	1x	--	20.0	96.8%	(80-129)	--	--	09/28/09 15:37	
Benzene	"	20.4	---	0.200	"	"	--	"	102%	(80-120)	--	--	"	
1,2-Dichloroethane	"	21.5	---	1.00	"	"	--	"	108%	(78-123)	--	--	"	
Toluene	"	21.4	---	1.00	"	"	--	"	107%	(80-124)	--	--	"	
1,2-Dibromoethane	"	21.1	---	1.00	"	"	--	"	105%	(80-122)	--	--	"	
Ethylbenzene	"	20.2	---	1.00	"	"	--	"	101%	(80-120)	--	--	"	
m,p-Xylene	"	41.1	---	2.00	"	"	--	40.0	103%	(72-127)	--	--	"	
o-Xylene	"	20.4	---	1.00	"	"	--	20.0	102%	(77-123)	--	--	"	
Isopropylbenzene	"	20.8	---	2.00	"	"	--	"	104%	(77-124)	--	--	"	
n-Propylbenzene	"	21.2	---	1.00	"	"	--	"	106%	(76-128)	--	--	"	
1,3,5-Trimethylbenzene	"	21.8	---	1.00	"	"	--	"	109%	(75-132)	--	--	"	
1,2,4-Trimethylbenzene	"	22.0	---	1.00	"	"	--	"	110%	(73-132)	--	--	"	
Naphthalene	"	18.1	---	2.00	"	"	--	"	90.3%	(72-149)	--	--	"	
Surrogate(s):	*Dibromofluoromethane*	*Recovery:*	*103%*		*Limits:*	*80-120%*							*09/28/09 15:37*	
	1,2-DCA-d4		*104%*			*80-120%*							"	
	Toluene-d8		*106%*			*80-120%*							"	
	4-BFB		*98.8%*			*80-120%*							"	

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ARCADIS U.S., Inc	Project Name:	**Chevron - RI Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	100-1868	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/09/09 14:45

Selected Volatile Organic Compounds (Including BTEX) per EPA Method 8260B - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 9090972 **Water Preparation Method: EPA 5030B**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
LCS Dup (9090972-BSD1)							**Extracted: 09/28/09 13:00**							
Methyl tert-butyl ether	EPA 8260B	19.8	---	1.00	ug/l	1x	--	20.0	98.9%	(80-129)	2.15%	(25)	09/28/09 16:04	
Benzene	"	20.2	---	0.200	"	"	--	"	101%	(80-120)	0.986%	"	"	
1,2-Dichloroethane	"	21.5	---	1.00	"	"	--	"	107%	(78-123)	0.186%	"	"	
Toluene	"	21.0	---	1.00	"	"	--	"	105%	(80-124)	2.03%	"	"	
1,2-Dibromoethane	"	21.0	---	1.00	"	"	--	"	105%	(80-122)	0.190%	"	"	
Ethylbenzene	"	20.2	---	1.00	"	"	--	"	101%	(80-120)	0.148%	"	"	
m,p-Xylene	"	41.0	---	2.00	"	"	--	40.0	102%	(72-127)	0.219%	"	"	
o-Xylene	"	20.4	---	1.00	"	"	--	20.0	102%	(77-123)	0.245%	"	"	
Isopropylbenzene	"	20.7	---	2.00	"	"	--	"	104%	(77-124)	0.385%	"	"	
n-Propylbenzene	"	21.4	---	1.00	"	"	--	"	107%	(76-128)	0.469%	"	"	
1,3,5-Trimethylbenzene	"	21.9	---	1.00	"	"	--	"	110%	(75-132)	0.503%	"	"	
1,2,4-Trimethylbenzene	"	21.9	---	1.00	"	"	--	"	109%	(73-132)	0.456%	"	"	
Naphthalene	"	18.8	---	2.00	"	"	--	"	93.8%	(72-149)	3.75%	"	"	

Surrogate(s):	*Dibromofluoromethane*	*Recovery:*	*101%*	*Limits: 80-120%*	*09/28/09 16:04*
	1,2-DCA-d4		*102%*	*80-120%*	"
	Toluene-d8		*101%*	*80-120%*	"
	4-BFB		*97.4%*	*80-120%*	"

TestAmerica Portland

Estella K Rieben

Estella Rieben, Project Manager

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THE LEADER IN ENVIRONMENTAL TESTING

PORTLAND, OR 9405 S.W. NIMBUS AVENUE
BEAVERTON, OR 97008-7132
ph: (503) 906.9200 fax: (503) 906.9210

ARCADIS U.S., Inc	Project Name:	**Chevron - RI Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	100-1868	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/09/09 14:45

Polynuclear Aromatic Compounds per EPA 8270M-SIM - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 9090905 **Water Preparation Method: 3520B Liq-Liq**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (9090905-BLK1)							**Extracted: 09/25/09 12:55**							
2-Methylnaphthalene	EPA 8270m	ND	---	0.100	ug/l	1x	--	--	--	--	--	--	09/30/09 17:37	
Acenaphthene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Acenaphthylene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Anthracene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Benzo (a) anthracene	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	
Benzo (a) pyrene	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	
Benzo (b) fluoranthene	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	
Benzo (ghi) perylene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Benzo (k) fluoranthene	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	
Chrysene	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	
Dibenzo (a,h) anthracene	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	
Fluoranthene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Fluorene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Indeno (1,2,3-cd) pyrene	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	
Naphthalene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Phenanthrene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Pyrene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Surrogate(s): Fluorene-d10		*Recovery: 91.0%*			*Limits: 25-125%*								*09/30/09 17:37*	
Pyrene-d10		*86.1%*			*23-150%*								"	
Benzo (a) pyrene-d12		*84.2%*			*10-125%*								"	
LCS (9090905-BS1)							**Extracted: 09/25/09 12:55**							
Acenaphthene	EPA 8270m	1.09	---	0.100	ug/l	1x	--	1.25	86.9%	(26-135)	--	--	09/30/09 18:06	
Benzo (a) pyrene	"	0.986	---	0.00500	"	"	--	"	78.9%	(38-137)	--	--	"	
Pyrene	"	1.01	---	0.100	"	"	--	"	80.5%	(30-147)	--	--	"	
Surrogate(s): Fluorene-d10		*Recovery: 92.0%*			*Limits: 25-125%*								*09/30/09 18:06*	
Pyrene-d10		*85.1%*			*23-150%*								"	
Benzo (a) pyrene-d12		*88.2%*			*10-125%*								"	
LCS Dup (9090905-BSD1)							**Extracted: 09/25/09 12:55**							
Acenaphthene	EPA 8270m	1.20	---	0.100	ug/l	1x	--	1.25	96.1%	(26-135)	10.1%	(50)	09/30/09 18:36	
Benzo (a) pyrene	"	1.12	---	0.00500	"	"	--	"	89.3%	(38-137)	12.4%	"	"	
Pyrene	"	1.13	---	0.100	"	"	--	"	90.4%	(30-147)	11.5%	"	"	
Surrogate(s): Fluorene-d10		*Recovery: 99.7%*			*Limits: 25-125%*								*09/30/09 18:36*	
Pyrene-d10		*93.7%*			*23-150%*								"	
Benzo (a) pyrene-d12		*97.8%*			*10-125%*								"	

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Estella K Rieben

Estella Rieben, Project Manager

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ph: (503) 906.9200 fax: (503) 906.9210

ARCADIS U.S., Inc	Project Name:	**Chevron - RI Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	100-1868	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/09/09 14:45

Notes and Definitions

Report Specific Notes:

M8	-	The MS and/or MSD were below the acceptance limits. See Blank Spike (LCS).
Q1	-	Does not match typical pattern
Q7	-	The heavy oil range organics present are due to hydrocarbons eluting primarily in the diesel range.
Q9	-	Hydrocarbon pattern most closely resembles weathered diesel.
QP	-	Hydrocarbon result partly due to individual peak(s) in quantitation range.
R4	-	Due to the low levels of analyte in the sample, the duplicate RPD calculation does not provide useful information.
RL1	-	Reporting limit raised due to sample matrix effects.
RL3	-	Reporting limit raised due to high concentrations of non-target analytes.
ZX	-	Due to sample matrix effects, the surrogate recovery was outside the acceptance limits.

Laboratory Reporting Conventions:

DET	-	Analyte DETECTED at or above the Reporting Limit. Qualitative Analyses only.
ND	-	Analyte NOT DETECTED at or above the reporting limit (MDL or MRL, as appropriate).
NR/NA	-	Not Reported / Not Available
dry	-	Sample results reported on a Dry Weight Basis. Results and Reporting Limits have been corrected for Percent Dry Weight.
wet	-	Sample results and reporting limits reported on a Wet Weight Basis (as received). Results with neither 'wet' nor 'dry' are reported on a Wet Weight Basis.
RPD	-	RELATIVE PERCENT DIFFERENCE (RPDs calculated using Results, not Percent Recoveries).
MRL	-	METHOD REPORTING LIMIT. Reporting Level at, or above, the lowest level standard of the Calibration Table.
MDL*	-	METHOD DETECTION LIMIT. Reporting Level at, or above, the statistically derived limit based on 40CFR, Part 136, Appendix B. *MDLs are listed on the report only if the data has been evaluated below the MRL. Results between the MDL and MRL are reported as Estimated Results.
Dil	-	Dilutions are calculated based on deviations from the standard dilution performed for an analysis, and may not represent the dilution found on the analytical raw data.
Reporting Limits	-	Reporting limits (MDLs and MRLs) are adjusted based on variations in sample preparation amounts, analytical dilutions and percent solids, where applicable.
Electronic Signature	-	Electronic Signature added in accordance with TestAmerica's *Electronic Reporting and Electronic Signatures Policy*. Application of electronic signature indicates that the report has been reviewed and approved for release by the laboratory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

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Estella K Rieben

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11922 E. First Ave, Spokane, WA 99206-5302 509-924-9200 FAX 924-9290
9405 SW Nimbus Ave,Beaverton, OR 97008-7145 503-906-9200 FAX 906-9210
2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119 907-563-9200 FAX 563-9210

CHAIN OF CUSTODY REPORT

Work Order #: PSIC84C

CLIENT: ARCADIS

REPORT TO: 111 SW Columbia St. Suite 725
ADDRESS: Portland, OR 97201

PHONE: (503) 220-8201 FAX: (503) 220-8209

PROJECT NAME: Chevron W. Hibridge
PROJECT NUMBER: 100186
SAMPLED BY: CP/MO

INVOICE TO: Jason Nail

P.O. NUMBER:

TURNAROUND REQUEST in Business Days *

Organic & Inorganic Analyses: 10 STD | 7 | 5 | 4 | 3 | 2 | 1 | <1

Petroleum Hydrocarbon Analyses: 5 STD | 4 | 3 | 2 | 1 | <1

OTHER Specify:

* Turnaround Requests less than standard may incur Rush Charges

	CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME	PRESERVATIVE	REQUESTED ANALYSES							MATRIX (W, S, O)	# OF CONT.	LOCATION/ COMMENTS	TA WO ID
				NWTPH Dx w Silica	NWTPH Dx w Silica	VOC MTBE 8260B	PAH's 8270C	Total Metals	Low Level Hg					
				HCl	HCl	HCl	~	HNO_3	HCl					
1	B-9A	9/22/09 / 930		3	2	3	2	1	1		W	12		
2	B-10	9/22/09 / 945		3	2	3	2	1	1		W	12		
~~3~~	~~B-20~~	~~9/22/09 1000~~		~~3~~	~~2~~	~~3~~	~~2~~	~~1~~	~~1~~		~~W~~	~~12~~		
4	B-21	9/22/09 / 1030		3	2	3	2	1	1		W	12		
5	B-29	9/22/09 / 1045		3	2	3	2	1	1		W	12		
6	B-28	9/22/09 / 1100		3	2	3	2	1	1		W	12		
7	CR-1	9/22/09 / 1300		3	2	3	2	1	1		W	12		
8	TB-266	9/22/09 -				1					W	1		
9	BD-RI-01	9/22/09 / -		3	2	3	2	1	1		W	1		
10														

RELEASED BY: Cole Pentwood — DATE: 9/23/09 — TIME: 1045 — RECEIVED BY: Bob K — DATE: 9/23/09 — TIME: 10:45
PRINT NAME: Cole Pentwood — FIRM: ARCADIS — PRINT NAME: Bob K — FIRM: TAP
RELEASED BY: Bob K — DATE: 9/23/09 — TIME: 13:00 — RECEIVED BY: Peggy Sieg/Fried — DATE: 9/23/09 — TIME: 1300
PRINT NAME: Bob K — FIRM: TAP — PRINT NAME: Peggy Sieg/Fried — FIRM: TAP

ADDITIONAL REMARKS:

TEMP: 3.8 — PAGE OF

TAL-1000030083

Metals include: arsenic, barium, cadmium, Chromium, copper, lead, manganese, mercury Selenium, Silver & Zinc

* Chevron RI wells 2.4 3.1

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Sample Receiving Checklist

Work Order #: 250840 Date/Time Received: 9/23/09 1300

Client Name and Project: Arcadis - ~~Conoco Phillips W.Hbr dge~~ Chevron RI Wells

Time Zone:
☐EDT/EST ☐CDT/CST ☐MDT/MST ☑PDT/PST ☐AK ☐OTHER

Unpacking Checks:

Cooler #(s): 1 | 1 | 1 | | |

Temperatures: 3.2 | 1.4 | 3.9 | | |

Digi #1 ☐ Digi #2 ☐ IR Gun ☒ (☒Plastic ☒Glass)

Temperature out of Range:

__Not enough or No Ice
__Ice Melted
__W/in 4 Hrs of collection
__Other:_____

Initials: ES

N/A	Yes	No	
☐	☐	☐	1. If ESI client, were temp blanks received? If no, document on NOD.
☑	☐	☐	2. Cooler Seals intact? (N/A if hand delivered) if no, document on NOD.
	☑	☐	3. Chain of Custody present? If no, document on NOD.
	☑	☐	4. Bottles received intact? If no, document on NOD.
	☑	☐	5. Sample is not multiphasic? If no, document on NOD.
	☑	☐	6. Proper Container and preservatives used? If no, document on NOD.
☐	☑	☐	7. pH of all samples checked and meet requirements? If no, document on NOD.
☑	☐	☐	8. Cyanide samples checked for sulfides and meet requirements? If no, notify PM.
☑	☐	☐	9. HF Dilution required?
	☑	☐	10. Sufficient volume provided for all analysis? If no, document on NOD and consult PM before proceeding.
	☑	☐	11. Did chain of custody agree with samples received? If no, document on NOD.
	☑	☐	12. Is the "Sampled by" section of the COC completed?
☐	☑	☐	13. Were VOA/Oil Syringe samples without headspace?
☐	☑	☐	14. Were VOA vials preserved? ☑HCl ☐Sodium Thiosulfate ☐Ascorbic Acid
	☐	☑	15. Did samples require preservation with sodium thiosulfate?
☐	☐	☐	16. If yes to #14, was the residual chlorine test negative? If no, document on NOD.
☑	☐	☐	17. Are dissolved/field filtered metals bottles sediment-free? If no, document on NOD.
☑	☐	☐	18. Is sufficient volume provided for client requested MS/MSD or matrix duplicates? If no, document on NOD and contact PM before proceeding.
☑	☐	☐	19. Are analyses with short holding times received in hold?
	☑	☐	20. Was Standard Turn Around (TAT) requested?
	☑	☐	21. Receipt date(s) < 48 hours past the collection date(s)? If no, notify PM.

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Sample Receiving Checklist

Work Order #: PSI0840

Login Checks:

Initials: [signature]

N/A	Yes	No	
	☒	☐	22. Sufficient volume provided for all analysis? If no, document on NOD & contact PM.
☒	☐	☐	23. Sufficient volume provided for client requested MS/MSD or matrix duplicates? If no, document on NOD and contact PM.
	☒	☐	24. Did the chain of custody include "received by" and "relinquished by" signatures, dates and times?
☒	☐	☐	25. Were special log in instructions read and followed?
	☒	☐	26. Were tests logged checked against the COC?
☒	☐	☐	27. Were rush notices printed and delivered?
☒	☐	☐	28. Were short hold notices printed and delivered?
☒	☐	☐	29. Were subcontract COCs printed?
☒	☐	☐	30. Was HF dilution logged?

Labeling and Storage Checks:

Initials: _____

N/A	Yes	No	
☐	☐	☐	31. Were the subcontracted samples/containers put in Sx fridge?
☐	☐	☐	32. Were sample bottles and COC double checked for dissolved/filtered metals?
	☐	☐	33. Did the sample ID, Date, and Time from label match what was logged?
☐	☐	☐	34. Were Foreign sample stickers affixed to each container and containers stored in foreign fridge?
☐	☐	☐	35. Were HF stickers affixed to each container, and containers stored in Sx fridge?
☐	☐	☐	36. Was an NOD for created for noted discrepancies and placed in folder?

Document any problems or discrepancies and the actions taken to resolve them on a Notice of Discrepancy form (NOD).

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PORTLAND, OR 9405 S.W. NIMBUS AVENUE
BEAVERTON, OR 97008-7132
ph: (503) 906.9200 fax: (503) 906.9210

ORELAP#: OR100021

October 02, 2009

Jason Nail
ARCADIS U.S., Inc
111 SW Columbia Street - Suite 725
Portland, OR 97201

RE: ConocoPhillips - Sheetpile Well Subset

Enclosed are the results of analyses for samples received by the laboratory on 09/17/09 17:35. The following list is a summary of the Work Orders contained in this report, generated on 10/02/09 16:18.

If you have any questions concerning this report, please feel free to contact me.

Work Order	Project	ProjectNumber
PSI0633	ConocoPhillips - Sheetpile We	354972

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Estella K Rieben

Estella Rieben, Project Manager

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ARCADIS U.S., Inc	Project Name:	**ConocoPhillips - Sheetpile Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	354972	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/02/09 16:18

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
U-27	PSI0633-01	Water	09/17/09 13:35	09/17/09 17:35
U-28	PSI0633-02	Water	09/17/09 14:05	09/17/09 17:35
TRIP BLANK	PSI0633-03	Water	09/17/09 00:00	09/17/09 17:35
U-22A	PSI0633-04	Water	09/17/09 10:00	09/17/09 17:35
U-22B	PSI0633-05	Water	09/17/09 10:10	09/17/09 17:35
U-24A	PSI0633-06	Water	09/17/09 10:15	09/17/09 17:35
U-24B	PSI0633-07	Water	09/17/09 10:20	09/17/09 17:35
BD-CO-SP-1	PSI0633-08	Water	09/17/09 00:00	09/17/09 17:35
BD-CO-SP-2	PSI0633-09	Water	09/17/09 00:00	09/17/09 17:35
U-29A	PSI0633-10	Water	09/17/09 12:45	09/17/09 17:35
U-23	PSI0633-11	Water	09/17/09 13:00	09/17/09 17:35
U-25	PSI0633-12	Water	09/17/09 13:05	09/17/09 17:35
U-26	PSI0633-13	Water	09/17/09 13:30	09/17/09 17:35

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ARCADIS U.S., Inc	Project Name:	**ConocoPhillips - Sheetpile Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	354972	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/02/09 16:18

Gasoline Hydrocarbons per NW TPH-Gx Method

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSI0633-01 (U-27)			**Water**			**Sampled: 09/17/09 13:35**				
Gasoline Range Hydrocarbons	NW TPH-Gx	ND	-----	80.0	ug/l	1x	9090771	09/22/09 15:43	09/23/09 21:26	
Surrogate(s): 4-BFB (FID)				*88.2%*		*50 - 150%*				"
PSI0633-02 (U-28)			**Water**			**Sampled: 09/17/09 14:05**				
Gasoline Range Hydrocarbons	NW TPH-Gx	ND	-----	80.0	ug/l	1x	9090771	09/22/09 15:43	09/23/09 21:53	
Surrogate(s): 4-BFB (FID)				*89.9%*		*50 - 150%*				"
PSI0633-04 (U-22A)			**Water**			**Sampled: 09/17/09 10:00**				
Gasoline Range Hydrocarbons	NW TPH-Gx	**264**	-----	160	ug/l	2x	9090771	09/22/09 15:43	09/23/09 22:21	
Surrogate(s): 4-BFB (FID)				*97.5%*		*50 - 150%*				"
PSI0633-05 (U-22B)			**Water**			**Sampled: 09/17/09 10:10**				
Gasoline Range Hydrocarbons	NW TPH-Gx	ND	-----	80.0	ug/l	1x	9090771	09/22/09 15:43	09/23/09 22:48	
Surrogate(s): 4-BFB (FID)				*91.8%*		*50 - 150%*				"
PSI0633-06 (U-24A)			**Water**			**Sampled: 09/17/09 10:15**				
Gasoline Range Hydrocarbons	NW TPH-Gx	ND	-----	80.0	ug/l	1x	9090771	09/22/09 15:43	09/24/09 00:11	
Surrogate(s): 4-BFB (FID)				*89.2%*		*50 - 150%*				"
PSI0633-07 (U-24B)			**Water**			**Sampled: 09/17/09 10:20**				
Gasoline Range Hydrocarbons	NW TPH-Gx	ND	-----	80.0	ug/l	1x	9090771	09/22/09 15:43	09/24/09 00:38	
Surrogate(s): 4-BFB (FID)				*88.7%*		*50 - 150%*				"
PSI0633-08 (BD-CO-SP-1)			**Water**			**Sampled: 09/17/09 00:00**				
Gasoline Range Hydrocarbons	NW TPH-Gx	**304**	-----	80.0	ug/l	1x	9090771	09/22/09 15:43	09/24/09 01:06	
Surrogate(s): 4-BFB (FID)				*112%*		*50 - 150%*				"
PSI0633-09 (BD-CO-SP-2)			**Water**			**Sampled: 09/17/09 00:00**				
Gasoline Range Hydrocarbons	NW TPH-Gx	ND	-----	80.0	ug/l	1x	9090771	09/22/09 15:43	09/24/09 01:33	
Surrogate(s): 4-BFB (FID)				*90.4%*		*50 - 150%*				"

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ARCADIS U.S., Inc	Project Name:	**ConocoPhillips - Sheetpile Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	354972	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/02/09 16:18

Gasoline Hydrocarbons per NW TPH-Gx Method

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSI0633-10 (U-29A)			**Water**			**Sampled: 09/17/09 12:45**				
Gasoline Range Hydrocarbons	NW TPH-Gx	**605**	-----	80.0	ug/l	1x	9090771	09/22/09 15:43	09/24/09 03:23	**Q8**
Surrogate(s): 4-BFB (FID)				*109%*		*50 - 150%*				"
PSI0633-11 (U-23)			**Water**			**Sampled: 09/17/09 13:00**				
Gasoline Range Hydrocarbons	NW TPH-Gx	**176**	-----	80.0	ug/l	1x	9090771	09/22/09 15:43	09/24/09 02:56	
Surrogate(s): 4-BFB (FID)				*103%*		*50 - 150%*				"
PSI0633-12 (U-25)			**Water**			**Sampled: 09/17/09 13:05**				
Gasoline Range Hydrocarbons	NW TPH-Gx	ND	-----	80.0	ug/l	1x	9090771	09/22/09 15:43	09/24/09 02:01	
Surrogate(s): 4-BFB (FID)				*91.7%*		*50 - 150%*				"
PSI0633-13 (U-26)			**Water**			**Sampled: 09/17/09 13:30**				
Gasoline Range Hydrocarbons	NW TPH-Gx	ND	-----	80.0	ug/l	1x	9090771	09/22/09 15:43	09/24/09 02:28	
Surrogate(s): 4-BFB (FID)				*87.9%*		*50 - 150%*				"

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PORTLAND, OR 9405 S.W. NIMBUS AVENUE
BEAVERTON, OR 97008-7132
ph: (503) 906.9200 fax: (503) 906.9210

ARCADIS U.S., Inc	Project Name:	**ConocoPhillips - Sheetpile Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	354972	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/02/09 16:18

Diesel and Heavy Range Hydrocarbons per NWTPH-Dx Method with Acid/Silica Gel Cleanup

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed		Notes
PSI0633-01 (U-27)				**Water**			**Sampled: 09/17/09 13:35**				
Diesel Range Organics	NWTPH-Dx	ND	-----	0.250	mg/l	1x	9090616	09/18/09 12:45	09/20/09 09:45		
Heavy Oil Range Hydrocarbons	"	ND	-----	0.500	"	"	"	"	"		
Surrogate(s): 1-Chlorooctadecane				*111%*		*50 - 150%*				"	
PSI0633-02 (U-28)				**Water**			**Sampled: 09/17/09 14:05**				
Diesel Range Organics	NWTPH-Dx	ND	-----	0.263	mg/l	1x	9090616	09/18/09 12:45	09/20/09 10:05		**RL4**
Heavy Oil Range Hydrocarbons	"	ND	-----	0.526	"	"	"	"	"		**RL4**
Surrogate(s): 1-Chlorooctadecane				*116%*		*50 - 150%*				"	*RL4*
PSI0633-04 (U-22A)				**Water**			**Sampled: 09/17/09 10:00**				
Diesel Range Organics	NWTPH-Dx	**8.78**	-----	0.263	mg/l	1x	9090616	09/18/09 12:45	09/20/09 10:25		**RL4, Q9**
Heavy Oil Range Hydrocarbons	"	**1.38**	-----	0.526	"	"	"	"	"		**RL4**
Surrogate(s): 1-Chlorooctadecane				*130%*		*50 - 150%*				"	*RL4*
PSI0633-05 (U-22B)				**Water**			**Sampled: 09/17/09 10:10**				
Diesel Range Organics	NWTPH-Dx	ND	-----	0.263	mg/l	1x	9090616	09/18/09 12:45	09/20/09 10:43		**RL4**
Heavy Oil Range Hydrocarbons	"	ND	-----	0.526	"	"	"	"	"		**RL4**
Surrogate(s): 1-Chlorooctadecane				*115%*		*50 - 150%*				"	*RL4*
PSI0633-06 (U-24A)				**Water**			**Sampled: 09/17/09 10:15**				
Diesel Range Organics	NWTPH-Dx	**0.803**	-----	0.263	mg/l	1x	9090616	09/18/09 12:45	09/20/09 11:02		**RL4, Q9**
Heavy Oil Range Hydrocarbons	"	ND	-----	0.526	"	"	"	"	"		**RL4**
Surrogate(s): 1-Chlorooctadecane				*111%*		*50 - 150%*				"	*RL4*
PSI0633-07 (U-24B)				**Water**			**Sampled: 09/17/09 10:20**				
Diesel Range Organics	NWTPH-Dx	ND	-----	0.263	mg/l	1x	9090616	09/18/09 12:45	09/20/09 11:19		**RL4**
Heavy Oil Range Hydrocarbons	"	ND	-----	0.526	"	"	"	"	"		**RL4**
Surrogate(s): 1-Chlorooctadecane				*114%*		*50 - 150%*				"	*RL4*
PSI0633-08 (BD-CO-SP-1)				**Water**			**Sampled: 09/17/09 00:00**				
Diesel Range Organics	NWTPH-Dx	**4.17**	-----	0.248	mg/l	1x	9090617	09/18/09 16:35	09/20/09 15:15		**Q9**
Heavy Oil Range Hydrocarbons	"	**0.759**	-----	0.495	"	"	"	"	"		
Surrogate(s): 1-Chlorooctadecane				*122%*		*50 - 150%*				"	

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Estella K Rieben

Estella Rieben, Project Manager

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PORTLAND, OR 9405 S.W. NIMBUS AVENUE
BEAVERTON, OR 97008-7132
ph: (503) 906.9200 fax: (503) 906.9210

ARCADIS U.S., Inc	Project Name:	**ConocoPhillips - Sheetpile Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	354972	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/02/09 16:18

Diesel and Heavy Range Hydrocarbons per NWTPH-Dx Method with Acid/Silica Gel Cleanup

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed		Notes
PSI0633-09 (BD-CO-SP-2)			**Water**			**Sampled: 09/17/09 00:00**					
Diesel Range Organics	NWTPH-Dx	ND	-----	0.250	mg/l	1x	9090617	09/18/09 16:35	09/20/09 15:33		
Heavy Oil Range Hydrocarbons	"	ND	-----	0.500	"	"	"	"	"		
Surrogate(s): 1-Chlorooctadecane				*114%*		*50 - 150%*				"	
PSI0633-10 (U-29A)			**Water**			**Sampled: 09/17/09 12:45**					
Diesel Range Organics	NWTPH-Dx	**52.4**	-----	0.263	mg/l	1x	9090617	09/18/09 16:35	09/20/09 15:50		**RL4, Q9**
Heavy Oil Range Hydrocarbons	"	**4.21**	-----	0.526	"	"	"	"	"		**RL4**
Surrogate(s): 1-Chlorooctadecane				*173%*		*50 - 150%*				"	*RL4, ZX*
PSI0633-11 (U-23)			**Water**			**Sampled: 09/17/09 13:00**					
Diesel Range Organics	NWTPH-Dx	**12.6**	-----	0.250	mg/l	1x	9090617	09/18/09 16:35	09/20/09 16:07		**Q9**
Heavy Oil Range Hydrocarbons	"	ND	-----	0.500	"	"	"	"	"		
Surrogate(s): 1-Chlorooctadecane				*122%*		*50 - 150%*				"	
PSI0633-12 (U-25)			**Water**			**Sampled: 09/17/09 13:05**					
Diesel Range Organics	NWTPH-Dx	ND	-----	0.250	mg/l	1x	9090617	09/18/09 16:35	09/20/09 16:25		
Heavy Oil Range Hydrocarbons	"	ND	-----	0.500	"	"	"	"	"		
Surrogate(s): 1-Chlorooctadecane				*101%*		*50 - 150%*				"	
PSI0633-13 (U-26)			**Water**			**Sampled: 09/17/09 13:30**					
Diesel Range Organics	NWTPH-Dx	ND	-----	0.263	mg/l	1x	9090617	09/18/09 16:35	09/20/09 16:44		**RL4**
Heavy Oil Range Hydrocarbons	"	ND	-----	0.526	"	"	"	"	"		**RL4**
Surrogate(s): 1-Chlorooctadecane				*107%*		*50 - 150%*				"	*RL4*

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Estella K Rieben

Estella Rieben, Project Manager

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111 SW Columbia Street - Suite 725	Project Number:	354972	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/02/09 16:18

Total Metals per EPA 6000/7000 Series Methods

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSI0633-01 (U-27)			Water			Sampled: 09/17/09 13:35				
Arsenic	EPA 6020	**0.0112**	-----	0.00100	mg/l	1x	9090874	09/24/09 13:24	09/28/09 01:13	
Barium	"	**0.0564**	-----	0.00500	"	5x	"	"	09/28/09 22:29	
Cadmium	"	ND	-----	0.000500	"	1x	"	"	09/28/09 01:13	
Chromium	"	**0.00699**	-----	0.00200	"	"	"	"	"	
Copper	"	**0.00629**	-----	0.00200	"	"	"	"	"	
Lead	"	ND	-----	0.00500	"	5x	"	"	09/28/09 22:29	
Manganese	"	**1.62**	-----	0.0100	"	"	"	"	"	
Selenium	"	ND	-----	0.000500	"	1x	"	"	09/28/09 01:13	
Silver	"	ND	-----	0.00100	"	"	"	"	"	
Zinc	"	**0.0174**	-----	0.00500	"	"	"	"	"	
PSI0633-02 (U-28)			Water			Sampled: 09/17/09 14:05				
Arsenic	EPA 6020	**0.00172**	-----	0.00100	mg/l	1x	9090875	09/24/09 13:29	09/26/09 03:06	
Barium	"	**0.0672**	-----	0.00100	"	"	"	"	"	
Cadmium	"	ND	-----	0.000500	"	"	"	"	"	
Chromium	"	ND	-----	0.00200	"	"	"	"	"	
Copper	"	ND	-----	0.00200	"	"	"	"	"	
Lead	"	ND	-----	0.00100	"	"	"	"	"	
Manganese	"	**3.67**	-----	0.0200	"	10x	"	"	09/26/09 12:10	
Selenium	"	ND	-----	0.000500	"	1x	"	"	09/26/09 03:06	
Silver	"	ND	-----	0.00100	"	"	"	"	"	
Zinc	"	**0.0150**	-----	0.00500	"	"	"	"	"	
PSI0633-04 (U-22A)			Water			Sampled: 09/17/09 10:00				
Arsenic	EPA 6020	**0.0148**	-----	0.00100	mg/l	1x	9090875	09/24/09 13:29	09/26/09 03:38	
Barium	"	**0.128**	-----	0.0100	"	10x	"	"	09/26/09 12:42	
Cadmium	"	ND	-----	0.000500	"	1x	"	"	09/26/09 03:38	
Chromium	"	**0.00288**	-----	0.00200	"	"	"	"	"	
Copper	"	**0.00301**	-----	0.00200	"	"	"	"	"	
Lead	"	**0.0114**	-----	0.0100	"	10x	"	"	09/26/09 12:42	
Manganese	"	**3.54**	-----	0.0200	"	"	"	"	"	
Selenium	"	ND	-----	0.000500	"	1x	"	"	09/26/09 03:38	
Silver	"	ND	-----	0.00100	"	"	"	"	"	
Zinc	"	**0.0256**	-----	0.00500	"	"	"	"	"	

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Estella K Rieben

Estella Rieben, Project Manager

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ARCADIS U.S., Inc	Project Name:	**ConocoPhillips - Sheetpile Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	354972	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/02/09 16:18

Total Metals per EPA 6000/7000 Series Methods

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSI0633-05 (U-22B)			**Water**			**Sampled: 09/17/09 10:10**				
Arsenic	EPA 6020	**0.00350**	-----	0.00100	mg/l	1x	9090875	09/24/09 13:29	09/26/09 03:46	
Barium	"	**0.0639**	-----	0.0100	"	10x	"	"	09/26/09 12:50	
Cadmium	"	ND	-----	0.000500	"	1x	"	"	09/26/09 03:46	
Chromium	"	ND	-----	0.00200	"	"	"	"	"	
Copper	"	ND	-----	0.00200	"	"	"	"	"	
Lead	"	ND	-----	0.0100	"	10x	"	"	09/26/09 12:50	**RL3**
Manganese	"	**1.38**	-----	0.0200	"	"	"	"	"	
Selenium	"	ND	-----	0.000500	"	1x	"	"	09/26/09 03:46	
Silver	"	ND	-----	0.00100	"	"	"	"	"	
Zinc	"	**0.00511**	-----	0.00500	"	"	"	"	"	
PSI0633-06 (U-24A)			**Water**			**Sampled: 09/17/09 10:15**				
Arsenic	EPA 6020	ND	-----	0.0200	mg/l	20x	9090875	09/24/09 13:29	09/26/09 12:58	**RL3**
Barium	"	**0.224**	-----	0.0200	"	"	"	"	"	
Cadmium	"	ND	-----	0.000500	"	1x	"	"	09/26/09 03:54	
Chromium	"	ND	-----	0.0400	"	20x	"	"	09/26/09 12:58	**RL3**
Copper	"	**0.125**	-----	0.0400	"	"	"	"	"	
Lead	"	ND	-----	0.0200	"	"	"	"	"	**RL3**
Manganese	"	**10.8**	-----	0.0400	"	"	"	"	"	
Selenium	"	ND	-----	0.000500	"	1x	"	"	09/26/09 03:54	
Silver	"	ND	-----	0.0200	"	20x	"	"	09/26/09 12:58	**RL3**
Zinc	"	ND	-----	0.100	"	"	"	"	"	**RL3**
PSI0633-07 (U-24B)			**Water**			**Sampled: 09/17/09 10:20**				
Arsenic	EPA 6020	**0.00126**	-----	0.00100	mg/l	1x	9090875	09/24/09 13:29	09/26/09 04:01	
Barium	"	**0.0999**	-----	0.00100	"	"	"	"	"	
Cadmium	"	ND	-----	0.000500	"	"	"	"	"	
Chromium	"	**0.00316**	-----	0.00200	"	"	"	"	"	
Copper	"	ND	-----	0.00200	"	"	"	"	"	
Lead	"	ND	-----	0.00100	"	"	"	"	"	
Manganese	"	**1.71**	-----	0.0200	"	10x	"	"	09/26/09 13:06	
Selenium	"	ND	-----	0.000500	"	1x	"	"	09/26/09 04:01	
Silver	"	ND	-----	0.00100	"	"	"	"	"	
Zinc	"	**0.0100**	-----	0.00500	"	"	"	"	"	

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111 SW Columbia Street - Suite 725	Project Number:	354972	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/02/09 16:18

Total Metals per EPA 6000/7000 Series Methods

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSI0633-08 (BD-CO-SP-1)			**Water**			**Sampled: 09/17/09 00:00**				
Arsenic	EPA 6020	**0.0144**	-----	0.00100	mg/l	1x	9090875	09/24/09 13:29	09/26/09 04:25	
Barium	"	**0.109**	-----	0.00100	"	"	"	"	"	
Cadmium	"	ND	-----	0.000500	"	"	"	"	"	
Chromium	"	ND	-----	0.00200	"	"	"	"	"	
Copper	"	**0.00201**	-----	0.00200	"	"	"	"	"	
Lead	"	**0.00867**	-----	0.00100	"	"	"	"	"	
Manganese	"	**3.54**	-----	0.0200	"	10x	"	"	09/26/09 13:29	
Selenium	"	ND	-----	0.000500	"	1x	"	"	09/26/09 04:25	
Silver	"	ND	-----	0.00100	"	"	"	"	"	
Zinc	"	**0.0164**	-----	0.00500	"	"	"	"	"	
PSI0633-09 (BD-CO-SP-2)			**Water**			**Sampled: 09/17/09 00:00**				
Arsenic	EPA 6020	**0.0189**	-----	0.00100	mg/l	1x	9090875	09/24/09 13:29	09/26/09 04:33	
Barium	"	**0.208**	-----	0.00100	"	"	"	"	"	
Cadmium	"	ND	-----	0.000500	"	"	"	"	"	
Chromium	"	**0.0233**	-----	0.00200	"	"	"	"	"	
Copper	"	**0.0342**	-----	0.00200	"	"	"	"	"	
Lead	"	ND	-----	0.0200	"	20x	"	"	09/26/09 13:37	
Manganese	"	**10.6**	-----	0.0400	"	"	"	"	"	
Selenium	"	ND	-----	0.000500	"	1x	"	"	09/26/09 04:33	
Silver	"	ND	-----	0.00100	"	"	"	"	"	
Zinc	"	**0.0616**	-----	0.00500	"	"	"	"	"	
PSI0633-10 (U-29A)			**Water**			**Sampled: 09/17/09 12:45**				
Arsenic	EPA 6020	**0.0191**	-----	0.00100	mg/l	1x	9090875	09/24/09 13:29	09/26/09 04:41	
Barium	"	**0.0800**	-----	0.0100	"	10x	"	"	09/26/09 13:45	
Cadmium	"	**0.00127**	-----	0.000500	"	1x	"	"	09/26/09 04:41	
Chromium	"	ND	-----	0.00200	"	"	"	"	"	
Copper	"	**0.00336**	-----	0.00200	"	"	"	"	"	
Lead	"	ND	-----	0.0100	"	10x	"	"	09/26/09 13:45	
Manganese	"	**4.26**	-----	0.0200	"	"	"	"	"	
Selenium	"	ND	-----	0.000500	"	1x	"	"	09/26/09 04:41	
Silver	"	ND	-----	0.00100	"	"	"	"	"	
Zinc	"	**0.0134**	-----	0.00500	"	"	"	"	"	

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Estella K Rieben

Estella Rieben, Project Manager

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111 SW Columbia Street - Suite 725	Project Number:	354972	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/02/09 16:18

Total Metals per EPA 6000/7000 Series Methods

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSI0633-11 (U-23)			**Water**			**Sampled: 09/17/09 13:00**				
Arsenic	EPA 6020	**0.00486**	-----	0.00100	mg/l	1x	9090875	09/24/09 13:29	09/26/09 04:48	
Barium	"	**0.0504**	-----	0.00100	"	"	"	"	"	
Cadmium	"	ND	-----	0.000500	"	"	"	"	"	
Chromium	"	ND	-----	0.00200	"	"	"	"	"	
Copper	"	**0.00345**	-----	0.00200	"	"	"	"	"	
Lead	"	ND	-----	0.00100	"	"	"	"	"	
Manganese	"	**4.93**	-----	0.0200	"	10x	"	"	09/26/09 13:53	
Selenium	"	ND	-----	0.000500	"	1x	"	"	09/26/09 04:48	
Silver	"	ND	-----	0.00100	"	"	"	"	"	
Zinc	"	**0.00591**	-----	0.00500	"	"	"	"	"	
PSI0633-12 (U-25)			**Water**			**Sampled: 09/17/09 13:05**				
Arsenic	EPA 6020	**0.00185**	-----	0.00100	mg/l	1x	9090875	09/24/09 13:29	09/26/09 04:56	
Barium	"	**0.0218**	-----	0.00100	"	"	"	"	"	
Cadmium	"	ND	-----	0.000500	"	"	"	"	"	
Chromium	"	ND	-----	0.00200	"	"	"	"	"	
Copper	"	ND	-----	0.00200	"	"	"	"	"	
Lead	"	ND	-----	0.00100	"	"	"	"	"	
Manganese	"	**3.29**	-----	0.0200	"	10x	"	"	09/26/09 14:01	
Selenium	"	ND	-----	0.000500	"	1x	"	"	09/26/09 04:56	
Silver	"	ND	-----	0.00100	"	"	"	"	"	
Zinc	"	ND	-----	0.00500	"	"	"	"	"	
PSI0633-13 (U-26)			**Water**			**Sampled: 09/17/09 13:30**				
Arsenic	EPA 6020	**0.0110**	-----	0.00100	mg/l	1x	9090875	09/24/09 13:29	09/26/09 05:04	
Barium	"	**0.173**	-----	0.00100	"	"	"	"	"	
Cadmium	"	ND	-----	0.000500	"	"	"	"	"	
Chromium	"	**0.00689**	-----	0.00200	"	"	"	"	"	
Copper	"	**0.00825**	-----	0.00200	"	"	"	"	"	
Lead	"	**0.0110**	-----	0.00100	"	"	"	"	"	
Manganese	"	**0.389**	-----	0.0200	"	10x	"	"	09/26/09 14:08	
Selenium	"	ND	-----	0.000500	"	1x	"	"	09/26/09 05:04	
Silver	"	ND	-----	0.00100	"	"	"	"	"	
Zinc	"	**0.0309**	-----	0.00500	"	"	"	"	"	

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Estella Rieben, Project Manager

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Portland, OR 97201	Project Manager:	Jason Nail	10/02/09 16:18

Total Mercury per EPA Method 7470A

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSI0633-01 (U-27)			**Water**				**Sampled: 09/17/09 13:35**			
Mercury	EPA 7470A	ND	-----	0.000200	mg/l	1x	9090967	09/28/09 10:46	09/28/09 17:23	
PSI0633-02 (U-28)			**Water**				**Sampled: 09/17/09 14:05**			
Mercury	EPA 7470A	ND	-----	0.000200	mg/l	1x	9090967	09/28/09 10:46	09/28/09 17:25	
PSI0633-04 (U-22A)			**Water**				**Sampled: 09/17/09 10:00**			
Mercury	EPA 7470A	ND	-----	0.000200	mg/l	1x	9090967	09/28/09 10:46	09/28/09 17:28	
PSI0633-05 (U-22B)			**Water**				**Sampled: 09/17/09 10:10**			
Mercury	EPA 7470A	ND	-----	0.000200	mg/l	1x	9090967	09/28/09 10:46	09/28/09 17:30	
PSI0633-06 (U-24A)			**Water**				**Sampled: 09/17/09 10:15**			
Mercury	EPA 7470A	ND	-----	0.000200	mg/l	1x	9090967	09/28/09 10:46	09/28/09 17:37	
PSI0633-07 (U-24B)			**Water**				**Sampled: 09/17/09 10:20**			
Mercury	EPA 7470A	ND	-----	0.000200	mg/l	1x	9090967	09/28/09 10:46	09/28/09 17:40	
PSI0633-08 (BD-CO-SP-1)			**Water**				**Sampled: 09/17/09 00:00**			
Mercury	EPA 7470A	ND	-----	0.000200	mg/l	1x	9090967	09/28/09 10:46	09/28/09 17:42	
PSI0633-09 (BD-CO-SP-2)			**Water**				**Sampled: 09/17/09 00:00**			
Mercury	EPA 7470A	ND	-----	0.000200	mg/l	1x	9090967	09/28/09 10:46	09/28/09 17:44	
PSI0633-10 (U-29A)			**Water**				**Sampled: 09/17/09 12:45**			
Mercury	EPA 7470A	ND	-----	0.000200	mg/l	1x	9090967	09/28/09 10:46	09/28/09 17:46	
PSI0633-11 (U-23)			**Water**				**Sampled: 09/17/09 13:00**			
Mercury	EPA 7470A	ND	-----	0.000200	mg/l	1x	9090967	09/28/09 10:46	09/28/09 17:48	
PSI0633-12 (U-25)			**Water**				**Sampled: 09/17/09 13:05**			
Mercury	EPA 7470A	ND	-----	0.000200	mg/l	1x	9090967	09/28/09 10:46	09/28/09 17:51	

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Estella Rieben, Project Manager

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PORTLAND, OR 9405 S.W. NIMBUS AVENUE
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ARCADIS U.S., Inc	Project Name:	**ConocoPhillips - Sheetpile Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	354972	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/02/09 16:18

Total Mercury per EPA Method 7470A

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSI0633-13 (U-26)			**Water**			**Sampled: 09/17/09 13:30**				
Mercury	EPA 7470A	ND	-----	0.000200	mg/l	1x	9090967	09/28/09 10:46	09/28/09 17:53	

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111 SW Columbia Street - Suite 725	Project Number:	354972	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/02/09 16:18

Volatile Organic Compounds per EPA Method 8260B

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Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSI0633-01 (U-27)			**Water**			**Sampled: 09/17/09 13:35**				
Benzene	EPA 8260B	ND	-----	0.200	ug/l	1x	9090800	09/23/09 09:00	09/23/09 12:43	
Ethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
Methyl tert-butyl ether	"	ND	-----	1.00	"	"	"	"	"	
Toluene	"	ND	-----	1.00	"	"	"	"	"	
o-Xylene	"	ND	-----	1.00	"	"	"	"	"	
m,p-Xylene	"	ND	-----	2.00	"	"	"	"	"	
Surrogate(s):	*Dibromofluoromethane*			*96.4%*		*80 - 120%*				"
	1,2-DCA-d4			*96.4%*		*80 - 120%*				"
	Toluene-d8			*99.8%*		*80 - 120%*				"
	4-BFB			*110%*		*80 - 120%*				"
PSI0633-02 (U-28)			**Water**			**Sampled: 09/17/09 14:05**				
Benzene	EPA 8260B	ND	-----	0.200	ug/l	1x	9090800	09/23/09 09:00	09/23/09 13:07	
Ethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
Methyl tert-butyl ether	"	ND	-----	1.00	"	"	"	"	"	
Toluene	"	ND	-----	1.00	"	"	"	"	"	
o-Xylene	"	ND	-----	1.00	"	"	"	"	"	
m,p-Xylene	"	ND	-----	2.00	"	"	"	"	"	
Surrogate(s):	*Dibromofluoromethane*			*95.2%*		*80 - 120%*				"
	1,2-DCA-d4			*96.3%*		*80 - 120%*				"
	Toluene-d8			*98.4%*		*80 - 120%*				"
	4-BFB			*104%*		*80 - 120%*				"
PSI0633-03 (TRIP BLANK)			**Water**			**Sampled: 09/17/09 00:00**				
Benzene	EPA 8260B	ND	-----	0.200	ug/l	1x	9090800	09/23/09 09:00	09/23/09 12:20	
Ethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
Methyl tert-butyl ether	"	ND	-----	1.00	"	"	"	"	"	
Toluene	"	ND	-----	1.00	"	"	"	"	"	
o-Xylene	"	ND	-----	1.00	"	"	"	"	"	
m,p-Xylene	"	ND	-----	2.00	"	"	"	"	"	
Surrogate(s):	*Dibromofluoromethane*			*94.2%*		*80 - 120%*				"
	1,2-DCA-d4			*97.4%*		*80 - 120%*				"
	Toluene-d8			*99.6%*		*80 - 120%*				"
	4-BFB			*106%*		*80 - 120%*				"

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111 SW Columbia Street - Suite 725	Project Number:	354972	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/02/09 16:18

Volatile Organic Compounds per EPA Method 8260B

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSI0633-04 (U-22A)			**Water**			**Sampled: 09/17/09 10:00**				**RL1**
Benzene	EPA 8260B	ND	-----	0.400	ug/l	2x	9090800	09/23/09 09:00	09/23/09 17:01	
Ethylbenzene	"	ND	-----	2.00	"	"	"	"	"	
Methyl tert-butyl ether	"	ND	-----	2.00	"	"	"	"	"	
Toluene	"	ND	-----	2.00	"	"	"	"	"	
o-Xylene	"	ND	-----	2.00	"	"	"	"	"	
m,p-Xylene	"	ND	-----	4.00	"	"	"	"	"	
Surrogate(s):	*Dibromofluoromethane*			*97.9%*		*80 - 120%*				"
	1,2-DCA-d4			*96.8%*		*80 - 120%*				"
	Toluene-d8			*101%*		*80 - 120%*				"
	4-BFB			*109%*		*80 - 120%*				"
PSI0633-05 (U-22B)			**Water**			**Sampled: 09/17/09 10:10**				
Benzene	EPA 8260B	ND	-----	0.200	ug/l	1x	9090800	09/23/09 09:00	09/23/09 13:30	
Ethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
Methyl tert-butyl ether	"	ND	-----	1.00	"	"	"	"	"	
Toluene	"	ND	-----	1.00	"	"	"	"	"	
o-Xylene	"	ND	-----	1.00	"	"	"	"	"	
m,p-Xylene	"	ND	-----	2.00	"	"	"	"	"	
Surrogate(s):	*Dibromofluoromethane*			*94.5%*		*80 - 120%*				"
	1,2-DCA-d4			*98.6%*		*80 - 120%*				"
	Toluene-d8			*97.7%*		*80 - 120%*				"
	4-BFB			*104%*		*80 - 120%*				"
PSI0633-06 (U-24A)			**Water**			**Sampled: 09/17/09 10:15**				
Benzene	EPA 8260B	ND	-----	0.200	ug/l	1x	9090800	09/23/09 09:00	09/23/09 13:54	
Ethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
Methyl tert-butyl ether	"	**1.49**	-----	1.00	"	"	"	"	"	
Toluene	"	ND	-----	1.00	"	"	"	"	"	
o-Xylene	"	ND	-----	1.00	"	"	"	"	"	
m,p-Xylene	"	ND	-----	2.00	"	"	"	"	"	
Surrogate(s):	*Dibromofluoromethane*			*97.8%*		*80 - 120%*				"
	1,2-DCA-d4			*98.0%*		*80 - 120%*				"
	Toluene-d8			*98.8%*		*80 - 120%*				"
	4-BFB			*108%*		*80 - 120%*				"

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111 SW Columbia Street - Suite 725	Project Number:	354972	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/02/09 16:18

Volatile Organic Compounds per EPA Method 8260B

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSI0633-07 (U-24B)			**Water**			**Sampled: 09/17/09 10:20**				
Benzene	EPA 8260B	ND	-----	0.200	ug/l	1x	9090800	09/23/09 09:00	09/23/09 14:17	
Ethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
Methyl tert-butyl ether	"	ND	-----	1.00	"	"	"	"	"	
Toluene	"	ND	-----	1.00	"	"	"	"	"	
o-Xylene	"	ND	-----	1.00	"	"	"	"	"	
m,p-Xylene	"	ND	-----	2.00	"	"	"	"	"	
Surrogate(s):	*Dibromofluoromethane*			*95.6%*		*80 - 120%*				"
	1,2-DCA-d4			*99.0%*		*80 - 120%*				"
	Toluene-d8			*98.8%*		*80 - 120%*				"
	4-BFB			*109%*		*80 - 120%*				"
PSI0633-08 (BD-CO-SP-1)			**Water**			**Sampled: 09/17/09 00:00**				
Benzene	EPA 8260B	ND	-----	0.200	ug/l	1x	9090800	09/23/09 09:00	09/23/09 14:41	
Ethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
Methyl tert-butyl ether	"	ND	-----	1.00	"	"	"	"	"	
Toluene	"	ND	-----	1.00	"	"	"	"	"	
o-Xylene	"	ND	-----	1.00	"	"	"	"	"	
m,p-Xylene	"	ND	-----	2.00	"	"	"	"	"	
Surrogate(s):	*Dibromofluoromethane*			*99.7%*		*80 - 120%*				"
	1,2-DCA-d4			*98.8%*		*80 - 120%*				"
	Toluene-d8			*97.6%*		*80 - 120%*				"
	4-BFB			*109%*		*80 - 120%*				"
PSI0633-09 (BD-CO-SP-2)			**Water**			**Sampled: 09/17/09 00:00**				
Benzene	EPA 8260B	ND	-----	0.200	ug/l	1x	9090800	09/23/09 09:00	09/23/09 15:04	
Ethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
Methyl tert-butyl ether	"	**1.51**	-----	1.00	"	"	"	"	"	
Toluene	"	ND	-----	1.00	"	"	"	"	"	
o-Xylene	"	ND	-----	1.00	"	"	"	"	"	
m,p-Xylene	"	ND	-----	2.00	"	"	"	"	"	
Surrogate(s):	*Dibromofluoromethane*			*101%*		*80 - 120%*				"
	1,2-DCA-d4			*98.8%*		*80 - 120%*				"
	Toluene-d8			*100%*		*80 - 120%*				"
	4-BFB			*109%*		*80 - 120%*				"

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111 SW Columbia Street - Suite 725	Project Number:	354972	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/02/09 16:18

Volatile Organic Compounds per EPA Method 8260B

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Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSI0633-10 (U-29A)			**Water**			**Sampled: 09/17/09 12:45**				
Benzene	EPA 8260B	**0.200**	-----	0.200	ug/l	1x	9090800	09/23/09 09:00	09/23/09 15:27	
Ethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
Methyl tert-butyl ether	"	ND	-----	1.00	"	"	"	"	"	
Toluene	"	ND	-----	1.00	"	"	"	"	"	
o-Xylene	"	ND	-----	1.00	"	"	"	"	"	
m,p-Xylene	"	ND	-----	2.00	"	"	"	"	"	
Surrogate(s):	*Dibromofluoromethane*			*97.6%*		*80 - 120%*				"
	1,2-DCA-d4			*98.8%*		*80 - 120%*				"
	Toluene-d8			*98.4%*		*80 - 120%*				"
	4-BFB			*112%*		*80 - 120%*				"
PSI0633-11 (U-23)			**Water**			**Sampled: 09/17/09 13:00**				
Benzene	EPA 8260B	ND	-----	0.200	ug/l	1x	9090800	09/23/09 09:00	09/23/09 15:51	
Ethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
Methyl tert-butyl ether	"	ND	-----	1.00	"	"	"	"	"	
Toluene	"	ND	-----	1.00	"	"	"	"	"	
o-Xylene	"	ND	-----	1.00	"	"	"	"	"	
m,p-Xylene	"	ND	-----	2.00	"	"	"	"	"	
Surrogate(s):	*Dibromofluoromethane*			*98.0%*		*80 - 120%*				"
	1,2-DCA-d4			*97.6%*		*80 - 120%*				"
	Toluene-d8			*99.4%*		*80 - 120%*				"
	4-BFB			*110%*		*80 - 120%*				"
PSI0633-12 (U-25)			**Water**			**Sampled: 09/17/09 13:05**				
Benzene	EPA 8260B	ND	-----	0.200	ug/l	1x	9090800	09/23/09 09:00	09/23/09 16:14	
Ethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
Methyl tert-butyl ether	"	ND	-----	1.00	"	"	"	"	"	
Toluene	"	ND	-----	1.00	"	"	"	"	"	
o-Xylene	"	ND	-----	1.00	"	"	"	"	"	
m,p-Xylene	"	ND	-----	2.00	"	"	"	"	"	
Surrogate(s):	*Dibromofluoromethane*			*94.8%*		*80 - 120%*				"
	1,2-DCA-d4			*96.8%*		*80 - 120%*				"
	Toluene-d8			*101%*		*80 - 120%*				"
	4-BFB			*108%*		*80 - 120%*				"

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111 SW Columbia Street - Suite 725	Project Number:	354972	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/02/09 16:18

Volatile Organic Compounds per EPA Method 8260B

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSI0633-13 (U-26)			**Water**			**Sampled: 09/17/09 13:30**				
Benzene	EPA 8260B	ND	-----	0.200	ug/l	1x	9090800	09/23/09 09:00	09/23/09 16:38	
Ethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
Methyl tert-butyl ether	"	ND	-----	1.00	"	"	"	"	"	
Toluene	"	ND	-----	1.00	"	"	"	"	"	
o-Xylene	"	ND	-----	1.00	"	"	"	"	"	
m,p-Xylene	"	ND	-----	2.00	"	"	"	"	"	
Surrogate(s):	*Dibromofluoromethane*			*96.8%*		*80 - 120%*				"
	1,2-DCA-d4			*96.0%*		*80 - 120%*				"
	Toluene-d8			*99.8%*		*80 - 120%*				"
	4-BFB			*111%*		*80 - 120%*				"

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ARCADIS U.S., Inc	Project Name:	**ConocoPhillips - Sheetpile Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	354972	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/02/09 16:18

Polynuclear Aromatic Compounds per EPA 8270M-SIM

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSI0633-01 (U-27)			**Water**			**Sampled: 09/17/09 13:35**				
2-Methylnaphthalene	EPA 8270m	ND	-----	0.0962	ug/l	1x	9090722	09/22/09 13:35	09/25/09 15:11	
Acenaphthene	"	ND	-----	0.0962	"	"	"	"	"	
Acenaphthylene	"	ND	-----	0.0962	"	"	"	"	"	
Anthracene	"	ND	-----	0.0962	"	"	"	"	"	
Benzo (a) anthracene	"	ND	-----	0.00481	"	"	"	"	"	
Benzo (a) pyrene	"	ND	-----	0.00481	"	"	"	"	"	
Benzo (b) fluoranthene	"	ND	-----	0.00481	"	"	"	"	"	
Benzo (ghi) perylene	"	ND	-----	0.0962	"	"	"	"	"	
Benzo (k) fluoranthene	"	ND	-----	0.00481	"	"	"	"	"	
Chrysene	"	ND	-----	0.00481	"	"	"	"	"	
Dibenzo (a,h) anthracene	"	ND	-----	0.00481	"	"	"	"	"	
Fluoranthene	"	ND	-----	0.0962	"	"	"	"	"	
Fluorene	"	ND	-----	0.0962	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	"	ND	-----	0.00481	"	"	"	"	"	
Naphthalene	"	ND	-----	0.0962	"	"	"	"	"	
Phenanthrene	"	ND	-----	0.0962	"	"	"	"	"	
Pyrene	"	ND	-----	0.0962	"	"	"	"	"	
Surrogate(s):	*Fluorene-d10*			*76.7%*		*25 - 125%*				"
	Pyrene-d10			*80.9%*		*23 - 150%*				"
	Benzo (a) pyrene-d12			*87.5%*		*10 - 125%*				"
PSI0633-02 (U-28)			**Water**			**Sampled: 09/17/09 14:05**				
2-Methylnaphthalene	EPA 8270m	ND	-----	0.0962	ug/l	1x	9090722	09/22/09 13:35	09/25/09 15:41	
Acenaphthene	"	ND	-----	0.0962	"	"	"	"	"	
Acenaphthylene	"	ND	-----	0.0962	"	"	"	"	"	
Anthracene	"	ND	-----	0.0962	"	"	"	"	"	
Benzo (a) anthracene	"	ND	-----	0.00481	"	"	"	"	"	
Benzo (a) pyrene	"	ND	-----	0.00481	"	"	"	"	"	
Benzo (b) fluoranthene	"	ND	-----	0.00481	"	"	"	"	"	
Benzo (ghi) perylene	"	ND	-----	0.0962	"	"	"	"	"	
Benzo (k) fluoranthene	"	ND	-----	0.00481	"	"	"	"	"	
Chrysene	"	ND	-----	0.00481	"	"	"	"	"	
Dibenzo (a,h) anthracene	"	ND	-----	0.00481	"	"	"	"	"	
Fluoranthene	"	ND	-----	0.0962	"	"	"	"	"	
Fluorene	"	ND	-----	0.0962	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	"	ND	-----	0.00481	"	"	"	"	"	

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Estella K Rieben

Estella Rieben, Project Manager

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PORTLAND, OR 9405 S.W. NIMBUS AVENUE
BEAVERTON, OR 97008-7132
ph: (503) 906.9200 fax: (503) 906.9210

ARCADIS U.S., Inc	Project Name:	**ConocoPhillips - Sheetpile Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	354972	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/02/09 16:18

Polynuclear Aromatic Compounds per EPA 8270M-SIM

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSI0633-02 (U-28)			**Water**			**Sampled: 09/17/09 14:05**				
Naphthalene	EPA 8270m	ND	-----	0.0962	ug/l	1x	9090722	09/22/09 13:35	09/25/09 15:41	
Phenanthrene	"	ND	-----	0.0962	"	"	"	"	"	
Pyrene	"	ND	-----	0.0962	"	"	"	"	"	
Surrogate(s): Fluorene-d10				*87.5%*		*25 - 125 %*			"	
Pyrene-d10				*85.9%*		*23 - 150 %*			"	
Benzo (a) pyrene-d12				*89.4%*		*10 - 125 %*			"	
PSI0633-04 (U-22A)			**Water**			**Sampled: 09/17/09 10:00**				
2-Methylnaphthalene	EPA 8270m	ND	-----	0.0971	ug/l	1x	9090722	09/22/09 13:35	09/26/09 15:31	
Acenaphthene	"	**1.27**	-----	0.0971	"	"	"	"	"	
Acenaphthylene	"	ND	-----	0.243	"	"	"	"	"	**RL1**
Anthracene	"	ND	-----	0.146	"	"	"	"	"	**RL1**
Benzo (a) anthracene	"	**0.0116**	-----	0.00485	"	"	"	"	"	
Benzo (a) pyrene	"	**0.00817**	-----	0.00485	"	"	"	"	"	
Benzo (b) fluoranthene	"	**0.00680**	-----	0.00485	"	"	"	"	"	
Benzo (ghi) perylene	"	ND	-----	0.0971	"	"	"	"	"	
Benzo (k) fluoranthene	"	ND	-----	0.00485	"	"	"	"	"	
Chrysene	"	**0.0309**	-----	0.00485	"	"	"	"	"	
Dibenzo (a,h) anthracene	"	ND	-----	0.00485	"	"	"	"	"	
Fluoranthene	"	ND	-----	0.0971	"	"	"	"	"	
Fluorene	"	**4.38**	-----	0.485	"	5x	"	"	09/25/09 21:54	
Indeno (1,2,3-cd) pyrene	"	**0.00543**	-----	0.00485	"	1x	"	"	09/26/09 15:31	
Naphthalene	"	ND	-----	0.243	"	"	"	"	"	**RL1**
Phenanthrene	"	**0.914**	-----	0.0971	"	"	"	"	"	
Pyrene	"	ND	-----	0.0971	"	"	"	"	"	
Surrogate(s): Fluorene-d10				*114%*		*25 - 125 %*			"	
Pyrene-d10				*67.1%*		*23 - 150 %*			"	
Benzo (a) pyrene-d12				*85.2%*		*10 - 125 %*			"	
PSI0633-05 (U-22B)			**Water**			**Sampled: 09/17/09 10:10**				
2-Methylnaphthalene	EPA 8270m	ND	-----	0.0971	ug/l	1x	9090722	09/22/09 13:35	09/25/09 16:10	
Acenaphthene	"	ND	-----	0.0971	"	"	"	"	"	
Acenaphthylene	"	ND	-----	0.0971	"	"	"	"	"	
Anthracene	"	ND	-----	0.0971	"	"	"	"	"	
Benzo (a) anthracene	"	ND	-----	0.00485	"	"	"	"	"	
Benzo (a) pyrene	"	ND	-----	0.00485	"	"	"	"	"	

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Estella K Rieben

Estella Rieben, Project Manager

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PORTLAND, OR 9405 S.W. NIMBUS AVENUE
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ARCADIS U.S., Inc	Project Name:	**ConocoPhillips - Sheetpile Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	354972	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/02/09 16:18

Polynuclear Aromatic Compounds per EPA 8270M-SIM

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSI0633-05 (U-22B)			**Water**			**Sampled: 09/17/09 10:10**				
Benzo (b) fluoranthene	EPA 8270m	ND	-----	0.00485	ug/l	1x	9090722	09/22/09 13:35	09/25/09 16:10	
Benzo (ghi) perylene	"	ND	-----	0.0971	"	"	"	"	"	
Benzo (k) fluoranthene	"	ND	-----	0.00485	"	"	"	"	"	
Chrysene	"	ND	-----	0.00485	"	"	"	"	"	
Dibenzo (a,h) anthracene	"	ND	-----	0.00485	"	"	"	"	"	
Fluoranthene	"	ND	-----	0.0971	"	"	"	"	"	
Fluorene	"	ND	-----	0.0971	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	"	ND	-----	0.00485	"	"	"	"	"	
Naphthalene	"	ND	-----	0.0971	"	"	"	"	"	
Phenanthrene	"	ND	-----	0.0971	"	"	"	"	"	
Pyrene	"	ND	-----	0.0971	"	"	"	"	"	
Surrogate(s):	*Fluorene-d10*			*83.8%*		*25 - 125 %*				"
	Pyrene-d10			*81.5%*		*23 - 150 %*				"
	Benzo (a) pyrene-d12			*84.4%*		*10 - 125 %*				"
PSI0633-06 (U-24A)			**Water**			**Sampled: 09/17/09 10:15**				
2-Methylnaphthalene	EPA 8270m	ND	-----	0.0971	ug/l	1x	9090722	09/22/09 13:35	09/25/09 16:40	
Acenaphthene	"	ND	-----	0.0971	"	"	"	"	"	
Acenaphthylene	"	ND	-----	0.0971	"	"	"	"	"	
Anthracene	"	ND	-----	0.0971	"	"	"	"	"	
Benzo (a) anthracene	"	ND	-----	0.00485	"	"	"	"	"	
Benzo (a) pyrene	"	**0.00537**	-----	0.00485	"	"	"	"	"	
Benzo (b) fluoranthene	"	ND	-----	0.00485	"	"	"	"	"	
Benzo (ghi) perylene	"	ND	-----	0.0971	"	"	"	"	"	
Benzo (k) fluoranthene	"	ND	-----	0.00485	"	"	"	"	"	
Chrysene	"	ND	-----	0.00485	"	"	"	"	"	
Dibenzo (a,h) anthracene	"	ND	-----	0.00485	"	"	"	"	"	
Fluoranthene	"	ND	-----	0.0971	"	"	"	"	"	
Fluorene	"	ND	-----	0.0971	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	"	ND	-----	0.00485	"	"	"	"	"	
Naphthalene	"	ND	-----	0.0971	"	"	"	"	"	
Phenanthrene	"	ND	-----	0.0971	"	"	"	"	"	
Pyrene	"	ND	-----	0.0971	"	"	"	"	"	
Surrogate(s):	*Fluorene-d10*			*79.3%*		*25 - 125 %*				"
	Pyrene-d10			*72.9%*		*23 - 150 %*				"
	Benzo (a) pyrene-d12			*76.6%*		*10 - 125 %*				"

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Estella K Rieben

Estella Rieben, Project Manager

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ARCADIS U.S., Inc	Project Name:	**ConocoPhillips - Sheetpile Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	354972	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/02/09 16:18

Polynuclear Aromatic Compounds per EPA 8270M-SIM

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSI0633-07 (U-24B)			**Water**			**Sampled: 09/17/09 10:20**				
2-Methylnaphthalene	EPA 8270m	ND	-----	0.0971	ug/l	1x	9090722	09/22/09 13:35	09/25/09 17:09	
Acenaphthene	"	ND	-----	0.0971	"	"	"	"	"	
Acenaphthylene	"	ND	-----	0.0971	"	"	"	"	"	
Anthracene	"	ND	-----	0.0971	"	"	"	"	"	
Benzo (a) anthracene	"	ND	-----	0.00485	"	"	"	"	"	
Benzo (a) pyrene	"	ND	-----	0.00485	"	"	"	"	"	
Benzo (b) fluoranthene	"	ND	-----	0.00485	"	"	"	"	"	
Benzo (ghi) perylene	"	ND	-----	0.0971	"	"	"	"	"	
Benzo (k) fluoranthene	"	ND	-----	0.00485	"	"	"	"	"	
Chrysene	"	ND	-----	0.00485	"	"	"	"	"	
Dibenzo (a,h) anthracene	"	ND	-----	0.00485	"	"	"	"	"	
Fluoranthene	"	ND	-----	0.0971	"	"	"	"	"	
Fluorene	"	ND	-----	0.0971	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	"	ND	-----	0.00485	"	"	"	"	"	
Naphthalene	"	ND	-----	0.0971	"	"	"	"	"	
Phenanthrene	"	ND	-----	0.0971	"	"	"	"	"	
Pyrene	"	ND	-----	0.0971	"	"	"	"	"	
Surrogate(s):	*Fluorene-d10*			*76.5%*		*25 - 125%*				"
	Pyrene-d10			*76.9%*		*23 - 150%*				"
	Benzo (a) pyrene-d12			*83.6%*		*10 - 125%*				"
PSI0633-08 (BD-CO-SP-1)			**Water**			**Sampled: 09/17/09 00:00**				
2-Methylnaphthalene	EPA 8270m	ND	-----	0.0971	ug/l	1x	9090722	09/22/09 13:35	09/26/09 16:00	
Acenaphthene	"	**0.978**	-----	0.0971	"	"	"	"	"	
Acenaphthylene	"	ND	-----	0.194	"	"	"	"	"	**RL1**
Anthracene	"	ND	-----	0.146	"	"	"	"	"	**RL1**
Benzo (a) anthracene	"	**0.00934**	-----	0.00485	"	"	"	"	"	
Benzo (a) pyrene	"	**0.00539**	-----	0.00485	"	"	"	"	"	
Benzo (b) fluoranthene	"	ND	-----	0.00485	"	"	"	"	"	
Benzo (ghi) perylene	"	ND	-----	0.0971	"	"	"	"	"	
Benzo (k) fluoranthene	"	ND	-----	0.00485	"	"	"	"	"	
Chrysene	"	**0.0205**	-----	0.00485	"	"	"	"	"	
Dibenzo (a,h) anthracene	"	ND	-----	0.00485	"	"	"	"	"	
Fluoranthene	"	ND	-----	0.0971	"	"	"	"	"	
Fluorene	"	**3.36**	-----	0.388	"	4x	"	"	09/25/09 22:25	
Indeno (1,2,3-cd) pyrene	"	ND	-----	0.00485	"	1x	"	"	09/26/09 16:00	

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Estella K Rieben

Estella Rieben, Project Manager

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ARCADIS U.S., Inc	Project Name:	**ConocoPhillips - Sheetpile Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	354972	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/02/09 16:18

Polynuclear Aromatic Compounds per EPA 8270M-SIM

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSI0633-08 (BD-CO-SP-1)			**Water**			**Sampled: 09/17/09 00:00**				
Naphthalene	EPA 8270m	ND	-----	0.194	ug/l	1x	9090722	09/22/09 13:35	09/26/09 16:00	**RL1**
Phenanthrene	"	**0.773**	-----	0.0971	"	"	"	"	"	
Pyrene	"	ND	-----	0.0971	"	"	"	"	"	
Surrogate(s): Fluorene-d10				*89.2%*		*25 - 125 %*				"
Pyrene-d10				*64.6%*		*23 - 150 %*				"
Benzo (a) pyrene-d12				*84.5%*		*10 - 125 %*				"
PSI0633-09 (BD-CO-SP-2)			**Water**			**Sampled: 09/17/09 00:00**				
2-Methylnaphthalene	EPA 8270m	ND	-----	0.0971	ug/l	1x	9090722	09/22/09 13:35	09/25/09 17:39	
Acenaphthene	"	ND	-----	0.0971	"	"	"	"	"	
Acenaphthylene	"	ND	-----	0.0971	"	"	"	"	"	
Anthracene	"	ND	-----	0.0971	"	"	"	"	"	
Benzo (a) anthracene	"	ND	-----	0.00485	"	"	"	"	"	
Benzo (a) pyrene	"	ND	-----	0.00485	"	"	"	"	"	
Benzo (b) fluoranthene	"	ND	-----	0.00485	"	"	"	"	"	
Benzo (ghi) perylene	"	ND	-----	0.0971	"	"	"	"	"	
Benzo (k) fluoranthene	"	ND	-----	0.00485	"	"	"	"	"	
Chrysene	"	ND	-----	0.00485	"	"	"	"	"	
Dibenzo (a,h) anthracene	"	ND	-----	0.00485	"	"	"	"	"	
Fluoranthene	"	ND	-----	0.0971	"	"	"	"	"	
Fluorene	"	ND	-----	0.0971	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	"	ND	-----	0.00485	"	"	"	"	"	
Naphthalene	"	ND	-----	0.0971	"	"	"	"	"	
Phenanthrene	"	ND	-----	0.0971	"	"	"	"	"	
Pyrene	"	ND	-----	0.0971	"	"	"	"	"	
Surrogate(s): Fluorene-d10				*78.6%*		*25 - 125 %*				"
Pyrene-d10				*75.9%*		*23 - 150 %*				"
Benzo (a) pyrene-d12				*80.1%*		*10 - 125 %*				"
PSI0633-10 (U-29A)			**Water**			**Sampled: 09/17/09 12:45**				**RL7**
2-Methylnaphthalene	EPA 8270m	**63.9**	-----	10.1	ug/l	100x	9090722	09/22/09 13:35	09/25/09 23:24	
Acenaphthene	"	ND	-----	10.1	"	"	"	"	"	**RL1**
Acenaphthylene	"	ND	-----	10.1	"	"	"	"	"	**RL1**
Anthracene	"	ND	-----	10.1	"	"	"	"	"	**RL1**
Benzo (a) anthracene	"	**0.330**	-----	0.0505	"	10x	"	"	09/26/09 16:30	
Benzo (a) pyrene	"	**0.226**	-----	0.0505	"	"	"	"	"	

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Estella K Rieben

Estella Rieben, Project Manager

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ARCADIS U.S., Inc	Project Name:	**ConocoPhillips - Sheetpile Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	354972	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/02/09 16:18

Polynuclear Aromatic Compounds per EPA 8270M-SIM

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSI0633-10 (U-29A)			**Water**			**Sampled: 09/17/09 12:45**				**RL7**
Benzo (b) fluoranthene	EPA 8270m	ND	-----	0.152	ug/l	10x	9090722	09/22/09 13:35	09/26/09 16:30	**RL1**
Benzo (ghi) perylene	"	**1.50**	-----	1.01	"	"	"	"	"	
Benzo (k) fluoranthene	"	ND	-----	0.0505	"	"	"	"	"	
Chrysene	"	**0.788**	-----	0.0505	"	"	"	"	"	
Dibenzo (a,h) anthracene	"	**0.151**	-----	0.0505	"	"	"	"	"	
Fluoranthene	"	ND	-----	10.1	"	100x	"	"	09/25/09 23:24	**RL1**
Fluorene	"	**13.7**	-----	10.1	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	"	**0.116**	-----	0.0505	"	10x	"	"	09/26/09 16:30	
Naphthalene	"	ND	-----	10.1	"	100x	"	"	09/25/09 23:24	**RL1**
Phenanthrene	"	**19.0**	-----	10.1	"	"	"	"	"	
Pyrene	"	**4.73**	-----	1.01	"	10x	"	"	09/26/09 16:30	
Surrogate(s):	*Fluorene-d10*			*90.1%*		*25 - 125 %*			*09/25/09 23:24*	
	Pyrene-d10			*74.2%*		*23 - 150 %*			*09/26/09 16:30*	
	Benzo (a) pyrene-d12			*69.4%*		*10 - 125 %*			"	
PSI0633-11 (U-23)			**Water**			**Sampled: 09/17/09 13:00**				**RL3**
2-Methylnaphthalene	EPA 8270m	ND	-----	0.388	ug/l	4x	9090722	09/22/09 13:35	09/25/09 22:55	
Acenaphthene	"	ND	-----	0.388	"	"	"	"	"	
Acenaphthylene	"	ND	-----	0.388	"	"	"	"	"	
Anthracene	"	ND	-----	0.583	"	"	"	"	"	**RL1**
Benzo (a) anthracene	"	**0.0252**	-----	0.0194	"	"	"	"	"	
Benzo (a) pyrene	"	ND	-----	0.0194	"	"	"	"	"	
Benzo (b) fluoranthene	"	ND	-----	0.0194	"	"	"	"	"	
Benzo (ghi) perylene	"	ND	-----	0.388	"	"	"	"	"	
Benzo (k) fluoranthene	"	ND	-----	0.0194	"	"	"	"	"	
Chrysene	"	**0.0421**	-----	0.0194	"	"	"	"	"	
Dibenzo (a,h) anthracene	"	ND	-----	0.0194	"	"	"	"	"	
Fluoranthene	"	ND	-----	0.388	"	"	"	"	"	
Fluorene	"	**1.04**	-----	0.388	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	"	ND	-----	0.0194	"	"	"	"	"	
Naphthalene	"	ND	-----	0.388	"	"	"	"	"	
Phenanthrene	"	ND	-----	0.583	"	"	"	"	"	**RL1**
Pyrene	"	ND	-----	0.388	"	"	"	"	"	
Surrogate(s):	*Fluorene-d10*			*148%*		*25 - 125 %*			"	*ZX, A-01*
	Pyrene-d10			*67.9%*		*23 - 150 %*			"	
	Benzo (a) pyrene-d12			*75.3%*		*10 - 125 %*			"	

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Estella K Rieben

Estella Rieben, Project Manager

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111 SW Columbia Street - Suite 725	Project Number:	354972	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/02/09 16:18

Polynuclear Aromatic Compounds per EPA 8270M-SIM

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSI0633-12 (U-25)			**Water**			**Sampled: 09/17/09 13:05**				
2-Methylnaphthalene	EPA 8270m	ND	-----	0.0971	ug/l	1x	9090722	09/22/09 13:35	09/25/09 18:09	
Acenaphthene	"	**0.144**	-----	0.0971	"	"	"	"	"	
Acenaphthylene	"	ND	-----	0.0971	"	"	"	"	"	
Anthracene	"	ND	-----	0.0971	"	"	"	"	"	
Benzo (a) anthracene	"	ND	-----	0.00485	"	"	"	"	"	
Benzo (a) pyrene	"	ND	-----	0.00485	"	"	"	"	"	
Benzo (b) fluoranthene	"	ND	-----	0.00485	"	"	"	"	"	
Benzo (ghi) perylene	"	ND	-----	0.0971	"	"	"	"	"	
Benzo (k) fluoranthene	"	ND	-----	0.00485	"	"	"	"	"	
Chrysene	"	ND	-----	0.00485	"	"	"	"	"	
Dibenzo (a,h) anthracene	"	ND	-----	0.00485	"	"	"	"	"	
Fluoranthene	"	ND	-----	0.0971	"	"	"	"	"	
Fluorene	"	**0.235**	-----	0.0971	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	"	ND	-----	0.00485	"	"	"	"	"	
Naphthalene	"	ND	-----	0.291	"	"	"	"	"	**RL1**
Phenanthrene	"	ND	-----	0.0971	"	"	"	"	"	
Pyrene	"	ND	-----	0.0971	"	"	"	"	"	
Surrogate(s): *Fluorene-d10*				*98.1%*		*25 - 125 %*				"
Pyrene-d10				*89.0%*		*23 - 150 %*				"
Benzo (a) pyrene-d12				*93.9%*		*10 - 125 %*				"
PSI0633-13 (U-26)			**Water**			**Sampled: 09/17/09 13:30**				
2-Methylnaphthalene	EPA 8270m	ND	-----	0.0971	ug/l	1x	9090722	09/22/09 13:35	09/25/09 18:42	
Acenaphthene	"	ND	-----	0.0971	"	"	"	"	"	
Acenaphthylene	"	ND	-----	0.0971	"	"	"	"	"	
Anthracene	"	ND	-----	0.0971	"	"	"	"	"	
Benzo (a) anthracene	"	ND	-----	0.00485	"	"	"	"	"	
Benzo (a) pyrene	"	ND	-----	0.00485	"	"	"	"	"	
Benzo (b) fluoranthene	"	ND	-----	0.00485	"	"	"	"	"	
Benzo (ghi) perylene	"	ND	-----	0.0971	"	"	"	"	"	
Benzo (k) fluoranthene	"	ND	-----	0.00485	"	"	"	"	"	
Chrysene	"	ND	-----	0.00485	"	"	"	"	"	
Dibenzo (a,h) anthracene	"	ND	-----	0.00485	"	"	"	"	"	
Fluoranthene	"	ND	-----	0.0971	"	"	"	"	"	
Fluorene	"	ND	-----	0.0971	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	"	ND	-----	0.00485	"	"	"	"	"	

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Estella Rieben, Project Manager

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BEAVERTON, OR 97008-7132
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ARCADIS U.S., Inc	Project Name:	**ConocoPhillips - Sheetpile Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	354972	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/02/09 16:18

Polynuclear Aromatic Compounds per EPA 8270M-SIM

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSI0633-13 (U-26)			**Water**			**Sampled: 09/17/09 13:30**				
Naphthalene	EPA 8270m	ND	-----	0.0971	ug/l	1x	9090722	09/22/09 13:35	09/25/09 18:42	
Phenanthrene	"	ND	-----	0.0971	"	"	"	"	"	
Pyrene	"	ND	-----	0.0971	"	"	"	"	"	
Surrogate(s):	*Fluorene-d10*			*109%*		*25 - 125 %*				"
	Pyrene-d10			*89.4%*		*23 - 150 %*				"
	Benzo (a) pyrene-d12			*101%*		*10 - 125 %*				"

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111 SW Columbia Street - Suite 725	Project Number:	354972	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/02/09 16:18

Gasoline Hydrocarbons per NW TPH-Gx Method - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 9090771 **Water Preparation Method: EPA 5030B**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (9090771-BLK1)									**Extracted: 09/22/09 15:43**					
Gasoline Range Hydrocarbons	NW TPH-Gx	ND	---	80.0	ug/l	1x	--	--	--	--	--	--	09/23/09 13:23	
Surrogate(s): 4-BFB (FID)		*Recovery: 93.0%*			*Limits: 50-150%*								*09/23/09 13:23*	
LCS (9090771-BS1)									**Extracted: 09/22/09 15:43**					
Gasoline Range Hydrocarbons	NW TPH-Gx	415	---	80.0	ug/l	1x	--	500	82.9%	(70-130)	--	--	09/23/09 12:28	
Surrogate(s): 4-BFB (FID)		*Recovery: 113%*			*Limits: 50-150%*								*09/23/09 12:28*	
LCS Dup (9090771-BSD1)									**Extracted: 09/22/09 15:43**					
Gasoline Range Hydrocarbons	NW TPH-Gx	449	---	80.0	ug/l	1x	--	500	89.7%	(70-130)	7.89%	(35)	09/23/09 12:55	
Surrogate(s): 4-BFB (FID)		*Recovery: 103%*			*Limits: 50-150%*								*09/23/09 12:55*	
Duplicate (9090771-DUP1)					**QC Source: PSI0614-04**				**Extracted: 09/22/09 15:43**					
Gasoline Range Hydrocarbons	NW TPH-Gx	8650	---	800	ug/l	10x	8900	--	--	--	2.77%	(35)	09/23/09 17:02	
Surrogate(s): 4-BFB (FID)		*Recovery: 102%*			*Limits: 50-150%*								*09/23/09 17:02*	
Duplicate (9090771-DUP2)					**QC Source: PSI0614-05**				**Extracted: 09/22/09 15:43**					
Gasoline Range Hydrocarbons	NW TPH-Gx	14200	---	800	ug/l	10x	13400	--	--	--	5.80%	(35)	09/23/09 19:35	
Surrogate(s): 4-BFB (FID)		*Recovery: 135%*			*Limits: 50-150%*								*09/23/09 19:35*	

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ARCADIS U.S., Inc	Project Name:	**ConocoPhillips - Sheetpile Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	354972	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/02/09 16:18

Diesel and Heavy Range Hydrocarbons per NWTPH-Dx Method with Acid/Silica Gel Cleanup - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 9090616 **Water Preparation Method: EPA 3510 Fuels**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (9090616-BLK1)								**Extracted: 09/18/09 12:45**						
Diesel Range Organics	NWTPH-Dx	ND	---	0.250	mg/l	1x	--	--	--	--	--	--	09/20/09 02:46	
Heavy Oil Range Hydrocarbons	"	ND	---	0.500	"	"	--	--	--	--	--	--	"	
Surrogate(s): 1-Chlorooctadecane		*Recovery: 111%*			*Limits: 50-150%*								*09/20/09 02:46*	
LCS (9090616-BS1)								**Extracted: 09/18/09 12:45**						
Diesel Range Organics	NWTPH-Dx	2.42	---	0.250	mg/l	1x	--	2.50	96.8%	(50-150)	--	--	09/20/09 03:06	
Heavy Oil Range Hydrocarbons	"	1.62	---	0.500	"	"	--	1.50	108%	"	--	--	"	
Surrogate(s): 1-Chlorooctadecane		*Recovery: 114%*			*Limits: 50-150%*								*09/20/09 03:06*	
LCS Dup (9090616-BSD1)								**Extracted: 09/18/09 12:45**						
Diesel Range Organics	NWTPH-Dx	2.53	---	0.250	mg/l	1x	--	2.50	101%	(50-150)	4.36%	(50)	09/20/09 03:26	
Heavy Oil Range Hydrocarbons	"	1.70	---	0.500	"	"	--	1.50	113%	"	4.90%	"	"	
Surrogate(s): 1-Chlorooctadecane		*Recovery: 118%*			*Limits: 50-150%*								*09/20/09 03:26*	

QC Batch: 9090617 **Water Preparation Method: EPA 3510 Fuels**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (9090617-BLK2)								**Extracted: 09/18/09 16:35**						
Diesel Range Organics	NWTPH-Dx	ND	---	0.250	mg/l	1x	--	--	--	--	--	--	09/20/09 14:20	
Heavy Oil Range Hydrocarbons	"	ND	---	0.500	"	"	--	--	--	--	--	--	"	
Surrogate(s): 1-Chlorooctadecane		*Recovery: 104%*			*Limits: 50-150%*								*09/20/09 14:20*	
LCS (9090617-BS2)								**Extracted: 09/18/09 16:35**						
Diesel Range Organics	NWTPH-Dx	2.17	---	0.250	mg/l	1x	--	2.50	86.7%	(50-150)	--	--	09/20/09 14:40	
Heavy Oil Range Hydrocarbons	"	1.54	---	0.500	"	"	--	1.50	103%	"	--	--	"	
Surrogate(s): 1-Chlorooctadecane		*Recovery: 114%*			*Limits: 50-150%*								*09/20/09 14:40*	
LCS Dup (9090617-BSD2)								**Extracted: 09/18/09 16:35**						
Diesel Range Organics	NWTPH-Dx	2.56	---	0.250	mg/l	1x	--	2.50	102%	(50-150)	16.5%	(50)	09/20/09 14:58	
Heavy Oil Range Hydrocarbons	"	1.52	---	0.500	"	"	--	1.50	101%	"	1.11%	"	"	
Surrogate(s): 1-Chlorooctadecane		*Recovery: 116%*			*Limits: 50-150%*								*09/20/09 14:58*	

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ARCADIS U.S., Inc	Project Name:	**ConocoPhillips - Sheetpile Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	354972	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/02/09 16:18

Total Metals per EPA 6000/7000 Series Methods - Laboratory Quality Control Results

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QC Batch: 9090874 **Water Preparation Method: EPA 200/3005**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (9090874-BLK1)									Extracted: 09/24/09 13:24					
Arsenic	EPA 6020	ND	---	0.00100	mg/l	1x	--	--	--	--	--	--	09/27/09 22:06	
Barium	"	ND	---	0.00100	"	"	--	--	--	--	--	--	09/28/09 20:47	
Cadmium	"	ND	---	0.000500	"	"	--	--	--	--	--	--	09/27/09 22:06	
Chromium	"	ND	---	0.00200	"	"	--	--	--	--	--	--	"	
Copper	"	ND	---	0.00200	"	"	--	--	--	--	--	--	"	
Lead	"	ND	---	0.00100	"	"	--	--	--	--	--	--	09/28/09 20:47	
Manganese	"	ND	---	0.00200	"	"	--	--	--	--	--	--	09/27/09 22:06	
Selenium	"	ND	---	0.000500	"	"	--	--	--	--	--	--	"	
Silver	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Zinc	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	
LCS (9090874-BS1)									Extracted: 09/24/09 13:24					
Arsenic	EPA 6020	0.0945	---	0.00100	mg/l	1x	--	0.100	94.5%	(80-120)	--	--	09/27/09 22:13	
Barium	"	0.0935	---	0.00100	"	"	--	"	93.5%	"	--	--	09/28/09 20:55	
Cadmium	"	0.0918	---	0.000500	"	"	--	"	91.8%	"	--	--	09/27/09 22:13	
Chromium	"	0.0930	---	0.00200	"	"	--	"	93.0%	"	--	--	"	
Copper	"	0.0962	---	0.00200	"	"	--	"	96.2%	"	--	--	"	
Lead	"	0.100	---	0.00100	"	"	--	"	100%	"	--	--	09/28/09 20:55	
Manganese	"	0.0975	---	0.00200	"	"	--	"	97.5%	"	--	--	09/27/09 22:13	
Selenium	"	0.0913	---	0.000500	"	"	--	"	91.3%	"	--	--	"	
Silver	"	0.0471	---	0.00100	"	"	--	0.0500	94.2%	"	--	--	"	
Zinc	"	0.0944	---	0.00500	"	"	--	0.100	94.4%	"	--	--	"	
Duplicate (9090874-DUP1)						QC Source: PSI0585-01			Extracted: 09/24/09 13:24					
Arsenic	EPA 6020	0.0518	---	0.00100	mg/l	1x	0.0509	--	--	--	1.87%	(20)	09/27/09 22:37	
Barium	"	0.119	---	0.00100	"	"	0.118	--	--	--	1.44%	"	09/28/09 21:18	
Cadmium	"	ND	---	0.000500	"	"	ND	--	--	--	5.71%	"	09/27/09 22:37	
Chromium	"	0.00354	---	0.00200	"	"	0.00383	--	--	--	7.87%	"	"	
Copper	"	0.00570	---	0.00200	"	"	0.00514	--	--	--	10.3%	"	"	
Lead	"	ND	---	0.00100	"	"	ND	--	--	--	1.71%	"	09/28/09 21:18	
Manganese	"	0.257	---	0.00200	"	"	0.259	--	--	--	0.892%	"	09/27/09 22:37	
Selenium	"	ND	---	0.000500	"	"	ND	--	--	--	7.79%	"	"	
Silver	"	ND	---	0.00100	"	"	ND	--	--	--	NR	"	"	
Zinc	"	0.0237	---	0.00500	"	"	0.0233	--	--	--	1.87%	"	"	

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Estella K Rieben

Estella Rieben, Project Manager

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ARCADIS U.S., Inc	Project Name:	**ConocoPhillips - Sheetpile Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	354972	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/02/09 16:18

Total Metals per EPA 6000/7000 Series Methods - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 9090874 **Water Preparation Method: EPA 200/3005**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Matrix Spike (9090874-MS1)					**QC Source: PSI0585-01**				**Extracted: 09/24/09 13:24**					
Arsenic	EPA 6020	0.148	---	0.00100	mg/l	1x	0.0509	0.100	96.7%	(75-125)	--	--	09/27/09 22:52	
Barium	"	0.210	---	0.00100	"	"	0.118	"	92.0%	"	--	--	09/28/09 21:34	
Cadmium	"	0.0926	---	0.000500	"	"	0.000180	"	92.5%	"	--	--	09/27/09 22:52	
Chromium	"	0.0982	---	0.00200	"	"	0.00383	"	94.4%	"	--	--	"	
Copper	"	0.0952	---	0.00200	"	"	0.00514	"	90.1%	"	--	--	"	
Lead	"	0.0904	---	0.00100	"	"	0.000580	"	89.8%	"	--	--	09/28/09 21:34	
Manganese	"	0.347	---	0.00200	"	"	0.259	"	88.0%	"	--	--	09/27/09 22:52	
Selenium	"	0.0925	---	0.000500	"	"	0.000400	"	92.1%	"	--	--	"	
Silver	"	0.0453	---	0.00100	"	"	ND	0.0500	90.7%	"	--	--	"	
Zinc	"	0.111	---	0.00500	"	"	0.0233	0.100	88.1%	"	--	--	"	
Matrix Spike (9090874-MS2)					**QC Source: PSI0618-04**				**Extracted: 09/24/09 13:24**					
Arsenic	EPA 6020	0.0950	---	0.00100	mg/l	1x	0.000200	0.100	94.8%	(75-125)	--	--	09/27/09 23:16	
Barium	"	0.0958	---	0.00100	"	"	0.00413	"	91.6%	"	--	--	09/28/09 21:50	
Cadmium	"	0.0947	---	0.000500	"	"	0.0000700	"	94.6%	"	--	--	09/27/09 23:16	
Chromium	"	0.0916	---	0.00200	"	"	0.000790	"	90.8%	"	--	--	"	
Copper	"	0.177	---	0.00200	"	"	0.0876	"	89.6%	"	--	--	"	
Lead	"	0.0939	---	0.00100	"	"	0.000780	"	93.2%	"	--	--	09/28/09 21:50	
Manganese	"	0.148	---	0.00200	"	"	0.0529	"	95.3%	"	--	--	09/27/09 23:16	
Selenium	"	0.0918	---	0.000500	"	"	ND	"	91.8%	"	--	--	"	
Silver	"	0.0454	---	0.00100	"	"	ND	0.0500	90.8%	"	--	--	"	
Zinc	"	0.119	---	0.00500	"	"	0.0289	0.100	90.3%	"	--	--	"	

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111 SW Columbia Street - Suite 725	Project Number:	354972	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/02/09 16:18

Total Metals per EPA 6000/7000 Series Methods - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 9090875 **Water Preparation Method: EPA 200/3005**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (9090875-BLK1)								**Extracted: 09/24/09 13:29**						
Arsenic	EPA 6020	ND	---	0.00100	mg/l	1x	--	--	--	--	--	--	09/26/09 02:51	
Barium	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Cadmium	"	ND	---	0.000500	"	"	--	--	--	--	--	--	"	
Chromium	"	ND	---	0.00200	"	"	--	--	--	--	--	--	"	
Copper	"	ND	---	0.00200	"	"	--	--	--	--	--	--	"	
Lead	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Manganese	"	ND	---	0.00200	"	"	--	--	--	--	--	--	09/26/09 11:54	
Selenium	"	ND	---	0.000500	"	"	--	--	--	--	--	--	09/26/09 02:51	
Silver	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Zinc	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	
LCS (9090875-BS1)								**Extracted: 09/24/09 13:29**						
Arsenic	EPA 6020	0.0941	---	0.00100	mg/l	1x	--	0.100	94.1%	(80-120)	--	--	09/26/09 02:58	
Barium	"	0.0870	---	0.00100	"	"	--	"	87.0%	"	--	--	"	
Cadmium	"	0.0916	---	0.000500	"	"	--	"	91.6%	"	--	--	"	
Chromium	"	0.0922	---	0.00200	"	"	--	"	92.2%	"	--	--	"	
Copper	"	0.0926	---	0.00200	"	"	--	"	92.6%	"	--	--	"	
Lead	"	0.0966	---	0.00100	"	"	--	"	96.6%	"	--	--	"	
Manganese	"	0.0970	---	0.00200	"	"	--	"	97.0%	"	--	--	09/26/09 12:02	
Selenium	"	0.0926	---	0.000500	"	"	--	"	92.6%	"	--	--	09/26/09 02:58	
Silver	"	0.0475	---	0.00100	"	"	--	0.0500	95.0%	"	--	--	"	
Zinc	"	0.0937	---	0.00500	"	"	--	0.100	93.7%	"	--	--	"	
Duplicate (9090875-DUP1)						**QC Source: PSI0633-02**			**Extracted: 09/24/09 13:29**					
Arsenic	EPA 6020	0.00160	---	0.00100	mg/l	1x	0.00172	--	--	--	7.23%	(20)	09/26/09 03:14	
Barium	"	0.0671	---	0.00100	"	"	0.0672	--	--	--	0.0447%	"	"	
Cadmium	"	ND	---	0.000500	"	"	ND	--	--	--	11.8%	"	"	
Chromium	"	ND	---	0.00200	"	"	ND	--	--	--	0.00%	"	"	
Copper	"	ND	---	0.00200	"	"	ND	--	--	--	0.504%	"	"	
Lead	"	ND	---	0.00100	"	"	ND	--	--	--	8.00%	"	"	
Manganese	"	3.83	---	0.0200	"	10x	3.67	--	--	--	4.35%	"	09/26/09 12:18	
Selenium	"	ND	---	0.000500	"	1x	ND	--	--	--	NR	"	09/26/09 03:14	
Silver	"	ND	---	0.00100	"	"	ND	--	--	--	NR	"	"	
Zinc	"	0.0148	---	0.00500	"	"	0.0150	--	--	--	1.41%	"	"	

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Estella K Rieben

Estella Rieben, Project Manager

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PORTLAND, OR 9405 S.W. NIMBUS AVENUE
BEAVERTON, OR 97008-7132
ph: (503) 906.9200 fax: (503) 906.9210

ARCADIS U.S., Inc	Project Name:	**ConocoPhillips - Sheetpile Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	354972	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/02/09 16:18

Total Metals per EPA 6000/7000 Series Methods - Laboratory Quality Control Results

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QC Batch: 9090875 **Water Preparation Method: EPA 200/3005**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Matrix Spike (9090875-MS1)				**QC Source: PSI0633-02**					**Extracted: 09/24/09 13:29**					
Arsenic	EPA 6020	0.0955	---	0.00100	mg/l	1x	0.00172	0.100	93.8%	(75-125)	--	--	09/26/09 03:30	
Barium	"	0.158	---	0.00100	"	"	0.0672	"	90.4%	"	--	--	"	
Cadmium	"	0.0920	---	0.000500	"	"	0.000360	"	91.6%	"	--	--	"	
Chromium	"	0.0930	---	0.00200	"	"	0.00108	"	92.0%	"	--	--	"	
Copper	"	0.0899	---	0.00200	"	"	0.00199	"	87.9%	"	--	--	"	
Lead	"	0.0907	---	0.00100	"	"	0.000910	"	89.8%	"	--	--	"	
Manganese	"	3.68	---	0.0200	"	10x	3.67	"	13.0%	"	--	--	09/26/09 12:34	MHA
Selenium	"	0.0911	---	0.000500	"	1x	0.000140	"	90.9%	"	--	--	09/26/09 03:30	
Silver	"	0.0464	---	0.00100	"	"	ND	0.0500	92.7%	"	--	--	"	
Zinc	"	0.105	---	0.00500	"	"	0.0150	0.100	90.4%	"	--	--	"	
Matrix Spike (9090875-MS2)				**QC Source: PSI0633-13**					**Extracted: 09/24/09 13:29**					
Arsenic	EPA 6020	0.105	---	0.00100	mg/l	1x	0.0110	0.100	94.1%	(75-125)	--	--	09/26/09 05:12	
Barium	"	0.276	---	0.00100	"	"	0.173	"	102%	"	--	--	"	
Cadmium	"	0.0916	---	0.000500	"	"	ND	"	91.6%	"	--	--	"	
Chromium	"	0.0994	---	0.00200	"	"	0.00689	"	92.6%	"	--	--	"	
Copper	"	0.101	---	0.00200	"	"	0.00825	"	92.6%	"	--	--	"	
Lead	"	0.103	---	0.00100	"	"	0.0110	"	92.1%	"	--	--	"	
Manganese	"	0.487	---	0.0200	"	10x	0.389	"	98.3%	"	--	--	09/26/09 14:16	
Selenium	"	0.0918	---	0.000500	"	1x	0.000130	"	91.7%	"	--	--	09/26/09 05:12	
Silver	"	0.0467	---	0.00100	"	"	ND	0.0500	93.4%	"	--	--	"	
Zinc	"	0.126	---	0.00500	"	"	0.0309	0.100	94.7%	"	--	--	"	

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Estella Rieben, Project Manager

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ARCADIS U.S., Inc	Project Name:	**ConocoPhillips - Sheetpile Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	354972	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/02/09 16:18

Total Mercury per EPA Method 7470A - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 9090967 **Water Preparation Method: EPA 7470A**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (9090967-BLK1)								**Extracted: 09/28/09 10:46**						
Mercury	EPA 7470A	ND	---	0.000200	mg/l	1x	--	--	--	--	--	--	09/28/09 17:08	
LCS (9090967-BS1)								**Extracted: 09/28/09 10:46**						
Mercury	EPA 7470A	0.00498	---	0.000200	mg/l	1x	--	0.00500	99.7%	(85-115)	--	--	09/28/09 17:11	
LCS Dup (9090967-BSD1)								**Extracted: 09/28/09 10:46**						
Mercury	EPA 7470A	0.00492	---	0.000200	mg/l	1x	--	0.00500	98.4%	(85-115)	1.33%	(20)	09/28/09 17:13	
Duplicate (9090967-DUP1)				**QC Source: PSI0633-01**				**Extracted: 09/28/09 10:46**						
Mercury	EPA 7470A	ND	---	0.000200	mg/l	1x	ND	--	--	--	NR	(20)	09/28/09 17:16	
Matrix Spike (9090967-MS1)				**QC Source: PSI0956-01**				**Extracted: 09/28/09 10:46**						
Mercury	EPA 7470A	0.00476	---	0.000200	mg/l	1x	ND	0.00500	95.1%	(75-125)	--	--	09/28/09 17:18	
Matrix Spike Dup (9090967-MSD1)				**QC Source: PSI0956-01**				**Extracted: 09/28/09 10:46**						
Mercury	EPA 7470A	0.00472	---	0.000200	mg/l	1x	ND	0.00500	94.3%	(75-125)	0.829%	(20)	09/28/09 17:21	

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ARCADIS U.S., Inc	Project Name:	**ConocoPhillips - Sheetpile Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	354972	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/02/09 16:18

Volatile Organic Compounds per EPA Method 8260B - Laboratory Quality Control Results

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QC Batch: 9090800 **Water Preparation Method: EPA 5030B**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (9090800-BLK1)							**Extracted: 09/23/09 09:00**							
Acetone	EPA 8260B	ND	---	25.0	ug/l	1x	--	--	--	--	--	--	09/23/09 11:09	
Benzene	"	ND	---	0.200	"	"	--	--	--	--	--	--	"	
Bromobenzene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Bromochloromethane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Bromodichloromethane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Bromoform	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Bromomethane	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
2-Butanone (MEK)	"	ND	---	10.0	"	"	--	--	--	--	--	--	"	
n-Butylbenzene	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
sec-Butylbenzene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
tert-Butylbenzene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Carbon disulfide	"	ND	---	10.0	"	"	--	--	--	--	--	--	"	
Carbon tetrachloride	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Chlorobenzene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Chloroethane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Chloroform	"	ND	---	0.200	"	"	--	--	--	--	--	--	"	
Chloromethane	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
2-Chlorotoluene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
4-Chlorotoluene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,2-Dibromo-3-chloropropane	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
Dibromochloromethane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,2-Dibromoethane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Dibromomethane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,2-Dichlorobenzene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,3-Dichlorobenzene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,4-Dichlorobenzene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Dichlorodifluoromethane	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
1,1-Dichloroethane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,2-Dichloroethane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,1-Dichloroethene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
cis-1,2-Dichloroethene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
trans-1,2-Dichloroethene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,2-Dichloropropane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,3-Dichloropropane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
2,2-Dichloropropane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,1-Dichloropropene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
cis-1,3-Dichloropropene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
trans-1,3-Dichloropropene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Ethylbenzene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	

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Estella Rieben, Project Manager

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ARCADIS U.S., Inc	Project Name:	**ConocoPhillips - Sheetpile Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	354972	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/02/09 16:18

Volatile Organic Compounds per EPA Method 8260B - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 9090800 **Water Preparation Method: EPA 5030B**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (9090800-BLK1)							**Extracted: 09/23/09 09:00**							
Hexachlorobutadiene	EPA 8260B	ND	---	4.00	ug/l	1x	--	--	--	--	--	--	09/23/09 11:09	
2-Hexanone	"	ND	---	10.0	"	"	--	--	--	--	--	--	"	
Isopropylbenzene	"	ND	---	2.00	"	"	--	--	--	--	--	--	"	
p-Isopropyltoluene	"	ND	---	2.00	"	"	--	--	--	--	--	--	"	
4-Methyl-2-pentanone	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
Methyl tert-butyl ether	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Methylene chloride	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
Naphthalene	"	ND	---	2.00	"	"	--	--	--	--	--	--	"	
n-Propylbenzene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Styrene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,1,1,2-Tetrachloroethane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,1,2,2-Tetrachloroethane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Tetrachloroethene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Toluene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,2,3-Trichlorobenzene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,2,4-Trichlorobenzene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,1,1-Trichloroethane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,1,2-Trichloroethane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Trichloroethene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Trichlorofluoromethane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,2,3-Trichloropropane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,2,4-Trimethylbenzene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,3,5-Trimethylbenzene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Vinyl chloride	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
o-Xylene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
m,p-Xylene	"	ND	---	2.00	"	"	--	--	--	--	--	--	"	

Surrogate(s):	*Dibromofluoromethane*	*Recovery: 96.9%*	*Limits: 80-120%*	*09/23/09 11:09*
	1,2-DCA-d4	*98.9%*	*80-120%*	"
	Toluene-d8	*99.4%*	*80-120%*	"
	4-BFB	*109%*	*80-120%*	"

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Estella K Rieben

Estella Rieben, Project Manager

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ARCADIS U.S., Inc	Project Name:	**ConocoPhillips - Sheetpile Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	354972	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/02/09 16:18

Volatile Organic Compounds per EPA Method 8260B - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 9090800 **Water Preparation Method: EPA 5030B**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
LCS (9090800-BS1)							**Extracted: 09/23/09 09:00**							
Acetone	EPA 8260B	96.4	---	25.0	ug/l	1x	--	100	96.4%	(56-141)	--	--	09/23/09 09:59	
Benzene	"	21.0	---	0.200	"	"	--	20.0	105%	(80-120)	--	--	"	
Bromobenzene	"	19.9	---	1.00	"	"	--	"	99.4%	(78-120)	--	--	"	
Bromochloromethane	"	21.3	---	1.00	"	"	--	"	106%	(76-121)	--	--	"	
Bromodichloromethane	"	21.7	---	1.00	"	"	--	"	109%	(84-127)	--	--	"	
Bromoform	"	19.7	---	1.00	"	"	--	"	98.6%	(55-134)	--	--	"	
Bromomethane	"	21.6	---	5.00	"	"	--	"	108%	(38-150)	--	--	"	
2-Butanone (MEK)	"	95.1	---	10.0	"	"	--	100	95.1%	(71-136)	--	--	"	
n-Butylbenzene	"	20.5	---	5.00	"	"	--	20.0	102%	(76-126)	--	--	"	
sec-Butylbenzene	"	21.0	---	1.00	"	"	--	"	105%	(64-129)	--	--	"	
tert-Butylbenzene	"	21.0	---	1.00	"	"	--	"	105%	(71-127)	--	--	"	
Carbon disulfide	"	45.2	---	10.0	"	"	--	40.0	113%	(58-120)	--	--	"	
Carbon tetrachloride	"	22.2	---	1.00	"	"	--	20.0	111%	(73-134)	--	--	"	
Chlorobenzene	"	20.8	---	1.00	"	"	--	"	104%	(80-124)	--	--	"	
Chloroethane	"	20.2	---	1.00	"	"	--	"	101%	(79-124)	--	--	"	
Chloroform	"	21.3	---	0.200	"	"	--	"	106%	(80-120)	--	--	"	
Chloromethane	"	20.8	---	5.00	"	"	--	"	104%	(47-146)	--	--	"	
2-Chlorotoluene	"	20.2	---	1.00	"	"	--	"	101%	(72-125)	--	--	"	
4-Chlorotoluene	"	21.2	---	1.00	"	"	--	"	106%	(77-124)	--	--	"	
1,2-Dibromo-3-chloropropane	"	21.3	---	5.00	"	"	--	"	107%	(73-134)	--	--	"	
Dibromochloromethane	"	19.4	---	1.00	"	"	--	"	97.0%	(69-138)	--	--	"	
1,2-Dibromoethane	"	21.7	---	1.00	"	"	--	"	108%	(80-122)	--	--	"	
Dibromomethane	"	21.7	---	1.00	"	"	--	"	108%	(80-120)	--	--	"	
1,2-Dichlorobenzene	"	19.8	---	1.00	"	"	--	"	99.2%	(80-113)	--	--	"	
1,3-Dichlorobenzene	"	21.1	---	1.00	"	"	--	"	106%	(76-123)	--	--	"	
1,4-Dichlorobenzene	"	20.6	---	1.00	"	"	--	"	103%	(73-120)	--	--	"	
Dichlorodifluoromethane	"	20.2	---	5.00	"	"	--	"	101%	(48-140)	--	--	"	
1,1-Dichloroethane	"	21.2	---	1.00	"	"	--	"	106%	(80-120)	--	--	"	
1,2-Dichloroethane	"	21.1	---	1.00	"	"	--	"	106%	(78-123)	--	--	"	
1,1-Dichloroethene	"	22.4	---	1.00	"	"	--	"	112%	(78-120)	--	--	"	
cis-1,2-Dichloroethene	"	20.9	---	1.00	"	"	--	"	105%	(80-120)	--	--	"	
trans-1,2-Dichloroethene	"	21.2	---	1.00	"	"	--	"	106%	"	--	--	"	
1,2-Dichloropropane	"	21.2	---	1.00	"	"	--	"	106%	(80-126)	--	--	"	
1,3-Dichloropropane	"	21.6	---	1.00	"	"	--	"	108%	(80-120)	--	--	"	
2,2-Dichloropropane	"	22.2	---	1.00	"	"	--	"	111%	(60-144)	--	--	"	
1,1-Dichloropropene	"	21.5	---	1.00	"	"	--	"	108%	(80-120)	--	--	"	
cis-1,3-Dichloropropene	"	19.2	---	1.00	"	"	--	"	95.8%	(80-125)	--	--	"	
trans-1,3-Dichloropropene	"	19.1	---	1.00	"	"	--	"	95.3%	(80-130)	--	--	"	
Ethylbenzene	"	20.3	---	1.00	"	"	--	"	102%	(80-120)	--	--	"	

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Estella K Rieben

Estella Rieben, Project Manager

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PORTLAND, OR 9405 S.W. NIMBUS AVENUE
BEAVERTON, OR 97008-7132
ph: (503) 906.9200 fax: (503) 906.9210

ARCADIS U.S., Inc	Project Name:	**ConocoPhillips - Sheetpile Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	354972	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/02/09 16:18

Volatile Organic Compounds per EPA Method 8260B - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 9090800 **Water Preparation Method: EPA 5030B**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
LCS (9090800-BS1)							**Extracted: 09/23/09 09:00**							
Hexachlorobutadiene	EPA 8260B	17.7	---	4.00	ug/l	1x	--	20.0	88.3%	(64-145)	--	--	09/23/09 09:59	
2-Hexanone	"	105	---	10.0	"	"	--	100	105%	(73-139)	--	--	"	
Isopropylbenzene	"	20.7	---	2.00	"	"	--	20.0	104%	(77-124)	--	--	"	
p-Isopropyltoluene	"	21.3	---	2.00	"	"	--	"	107%	(68-130)	--	--	"	
4-Methyl-2-pentanone	"	108	---	5.00	"	"	--	100	108%	(72-134)	--	--	"	
Methyl tert-butyl ether	"	21.6	---	1.00	"	"	--	20.0	108%	(80-129)	--	--	"	
Methylene chloride	"	22.4	---	5.00	"	"	--	"	112%	(80-120)	--	--	"	
Naphthalene	"	18.1	---	2.00	"	"	--	"	90.4%	(72-149)	--	--	"	
n-Propylbenzene	"	21.5	---	1.00	"	"	--	"	108%	(76-128)	--	--	"	
Styrene	"	21.3	---	1.00	"	"	--	"	106%	(72-127)	--	--	"	
1,1,1,2-Tetrachloroethane	"	23.1	---	1.00	"	"	--	"	115%	(69-138)	--	--	"	
1,1,2,2-Tetrachloroethane	"	21.5	---	1.00	"	"	--	"	107%	(77-128)	--	--	"	
Tetrachloroethene	"	21.3	---	1.00	"	"	--	"	106%	(80-124)	--	--	"	
Toluene	"	22.1	---	1.00	"	"	--	"	110%	"	--	--	"	
1,2,3-Trichlorobenzene	"	17.8	---	1.00	"	"	--	"	89.0%	(69-138)	--	--	"	
1,2,4-Trichlorobenzene	"	18.8	---	1.00	"	"	--	"	93.8%	(75-127)	--	--	"	
1,1,1-Trichloroethane	"	22.9	---	1.00	"	"	--	"	115%	(76-132)	--	--	"	
1,1,2-Trichloroethane	"	21.3	---	1.00	"	"	--	"	106%	(80-123)	--	--	"	
Trichloroethene	"	21.1	---	1.00	"	"	--	"	106%	(80-132)	--	--	"	
Trichlorofluoromethane	"	20.7	---	1.00	"	"	--	"	103%	(77-137)	--	--	"	
1,2,3-Trichloropropane	"	22.2	---	1.00	"	"	--	"	111%	(75-125)	--	--	"	
1,2,4-Trimethylbenzene	"	21.6	---	1.00	"	"	--	"	108%	(73-132)	--	--	"	
1,3,5-Trimethylbenzene	"	21.4	---	1.00	"	"	--	"	107%	(75-132)	--	--	"	
Vinyl chloride	"	21.2	---	1.00	"	"	--	"	106%	(76-133)	--	--	"	
o-Xylene	"	20.9	---	1.00	"	"	--	"	104%	(77-123)	--	--	"	
m,p-Xylene	"	41.5	---	2.00	"	"	--	40.0	104%	(72-127)	--	--	"	

Surrogate(s):	*Dibromofluoromethane*	*Recovery: 97.8%*	*Limits: 80-120%*	*09/23/09 09:59*
	1,2-DCA-d4	*93.6%*	*80-120%*	*"*
	Toluene-d8	*101%*	*80-120%*	*"*
	4-BFB	*110%*	*80-120%*	*"*

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Estella K Rieben

Estella Rieben, Project Manager

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ARCADIS U.S., Inc	Project Name:	**ConocoPhillips - Sheetpile Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	354972	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/02/09 16:18

Volatile Organic Compounds per EPA Method 8260B - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 9090800 **Water Preparation Method: EPA 5030B**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
LCS Dup (9090800-BSD1)							**Extracted: 09/23/09 09:00**							
Acetone	EPA 8260B	93.7	---	25.0	ug/l	1x	--	100	93.7%	(56-141)	2.76%	(25)	09/23/09 10:23	
Benzene	"	20.5	---	0.200	"	"	--	20.0	103%	(80-120)	2.50%	"	"	
Bromobenzene	"	19.3	---	1.00	"	"	--	"	96.4%	(78-120)	3.01%	"	"	
Bromochloromethane	"	21.8	---	1.00	"	"	--	"	109%	(76-121)	2.41%	"	"	
Bromodichloromethane	"	21.6	---	1.00	"	"	--	"	108%	(84-127)	0.369%	"	"	
Bromoform	"	18.6	---	1.00	"	"	--	"	92.8%	(55-134)	6.01%	"	"	
Bromomethane	"	21.1	---	5.00	"	"	--	"	106%	(38-150)	2.06%	"	"	
2-Butanone (MEK)	"	98.0	---	10.0	"	"	--	100	98.0%	(71-136)	2.98%	"	"	
n-Butylbenzene	"	20.2	---	5.00	"	"	--	20.0	101%	(76-126)	1.58%	"	"	
sec-Butylbenzene	"	20.1	---	1.00	"	"	--	"	100%	(64-129)	4.67%	"	"	
tert-Butylbenzene	"	19.8	---	1.00	"	"	--	"	98.8%	(71-127)	5.90%	"	"	
Carbon disulfide	"	44.0	---	10.0	"	"	--	40.0	110%	(58-120)	2.87%	"	"	
Carbon tetrachloride	"	22.0	---	1.00	"	"	--	20.0	110%	(73-134)	0.950%	"	"	
Chlorobenzene	"	21.1	---	1.00	"	"	--	"	105%	(80-124)	1.48%	"	"	
Chloroethane	"	20.5	---	1.00	"	"	--	"	102%	(79-124)	1.38%	"	"	
Chloroform	"	21.2	---	0.200	"	"	--	"	106%	(80-120)	0.518%	"	"	
Chloromethane	"	19.9	---	5.00	"	"	--	"	99.6%	(47-146)	4.46%	"	"	
2-Chlorotoluene	"	19.8	---	1.00	"	"	--	"	98.8%	(72-125)	2.35%	"	"	
4-Chlorotoluene	"	19.9	---	1.00	"	"	--	"	99.5%	(77-124)	6.18%	"	"	
1,2-Dibromo-3-chloropropane	"	21.6	---	5.00	"	"	--	"	108%	(73-134)	1.35%	"	"	
Dibromochloromethane	"	19.7	---	1.00	"	"	--	"	98.6%	(69-138)	1.58%	"	"	
1,2-Dibromoethane	"	22.0	---	1.00	"	"	--	"	110%	(80-122)	1.42%	"	"	
Dibromomethane	"	21.5	---	1.00	"	"	--	"	108%	(80-120)	0.741%	"	"	
1,2-Dichlorobenzene	"	19.6	---	1.00	"	"	--	"	98.2%	(80-113)	0.962%	"	"	
1,3-Dichlorobenzene	"	20.2	---	1.00	"	"	--	"	101%	(76-123)	4.30%	"	"	
1,4-Dichlorobenzene	"	20.0	---	1.00	"	"	--	"	99.8%	(73-120)	3.16%	"	"	
Dichlorodifluoromethane	"	19.4	---	5.00	"	"	--	"	97.2%	(48-140)	4.03%	"	"	
1,1-Dichloroethane	"	21.0	---	1.00	"	"	--	"	105%	(80-120)	0.853%	"	"	
1,2-Dichloroethane	"	21.5	---	1.00	"	"	--	"	107%	(78-123)	1.64%	"	"	
1,1-Dichloroethene	"	22.0	---	1.00	"	"	--	"	110%	(78-120)	1.80%	"	"	
cis-1,2-Dichloroethene	"	20.3	---	1.00	"	"	--	"	101%	(80-120)	3.21%	"	"	
trans-1,2-Dichloroethene	"	21.1	---	1.00	"	"	--	"	105%	"	0.804%	"	"	
1,2-Dichloropropane	"	20.8	---	1.00	"	"	--	"	104%	(80-126)	1.95%	"	"	
1,3-Dichloropropane	"	21.3	---	1.00	"	"	--	"	106%	(80-120)	1.31%	"	"	
2,2-Dichloropropane	"	21.8	---	1.00	"	"	--	"	109%	(60-144)	1.82%	"	"	
1,1-Dichloropropene	"	21.1	---	1.00	"	"	--	"	105%	(80-120)	2.11%	"	"	
cis-1,3-Dichloropropene	"	19.4	---	1.00	"	"	--	"	97.2%	(80-125)	1.35%	"	"	
trans-1,3-Dichloropropene	"	19.5	---	1.00	"	"	--	"	97.3%	(80-130)	2.08%	"	"	
Ethylbenzene	"	19.7	---	1.00	"	"	--	"	98.7%	(80-120)	2.80%	"	"	

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Estella K Rieben

Estella Rieben, Project Manager

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ARCADIS U.S., Inc	Project Name:	**ConocoPhillips - Sheetpile Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	354972	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/02/09 16:18

Volatile Organic Compounds per EPA Method 8260B - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 9090800 **Water Preparation Method: EPA 5030B**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
LCS Dup (9090800-BSD1)							**Extracted: 09/23/09 09:00**							
Hexachlorobutadiene	EPA 8260B	17.0	---	4.00	ug/l	1x	--	20.0	85.0%	(64-145)	3.75%	(25)	09/23/09 10:23	
2-Hexanone	"	109	---	10.0	"	"	--	100	109%	(73-139)	3.51%	"	"	
Isopropylbenzene	"	19.6	---	2.00	"	"	--	20.0	98.2%	(77-124)	5.30%	"	"	
p-Isopropyltoluene	"	20.6	---	2.00	"	"	--	"	103%	(68-130)	3.63%	"	"	
4-Methyl-2-pentanone	"	114	---	5.00	"	"	--	100	114%	(72-134)	4.96%	"	"	
Methyl tert-butyl ether	"	21.9	---	1.00	"	"	--	20.0	110%	(80-129)	1.24%	"	"	
Methylene chloride	"	22.0	---	5.00	"	"	--	"	110%	(80-120)	1.85%	"	"	
Naphthalene	"	18.1	---	2.00	"	"	--	"	90.4%	(72-149)	0.0553%	"	"	
n-Propylbenzene	"	20.2	---	1.00	"	"	--	"	101%	(76-128)	6.38%	"	"	
Styrene	"	20.2	---	1.00	"	"	--	"	101%	(72-127)	5.06%	"	"	
1,1,1,2-Tetrachloroethane	"	22.6	---	1.00	"	"	--	"	113%	(69-138)	1.97%	"	"	
1,1,2,2-Tetrachloroethane	"	20.7	---	1.00	"	"	--	"	104%	(77-128)	3.60%	"	"	
Tetrachloroethene	"	21.2	---	1.00	"	"	--	"	106%	(80-124)	0.566%	"	"	
Toluene	"	21.6	---	1.00	"	"	--	"	108%	"	2.15%	"	"	
1,2,3-Trichlorobenzene	"	17.5	---	1.00	"	"	--	"	87.5%	(69-138)	1.76%	"	"	
1,2,4-Trichlorobenzene	"	18.2	---	1.00	"	"	--	"	91.2%	(75-127)	2.76%	"	"	
1,1,1-Trichloroethane	"	22.6	---	1.00	"	"	--	"	113%	(76-132)	1.27%	"	"	
1,1,2-Trichloroethane	"	21.6	---	1.00	"	"	--	"	108%	(80-123)	1.26%	"	"	
Trichloroethene	"	21.2	---	1.00	"	"	--	"	106%	(80-132)	0.378%	"	"	
Trichlorofluoromethane	"	20.3	---	1.00	"	"	--	"	102%	(77-137)	1.76%	"	"	
1,2,3-Trichloropropane	"	21.9	---	1.00	"	"	--	"	109%	(75-125)	1.63%	"	"	
1,2,4-Trimethylbenzene	"	20.8	---	1.00	"	"	--	"	104%	(73-132)	4.00%	"	"	
1,3,5-Trimethylbenzene	"	20.3	---	1.00	"	"	--	"	102%	(75-132)	5.08%	"	"	
Vinyl chloride	"	20.7	---	1.00	"	"	--	"	104%	(76-133)	2.29%	"	"	
o-Xylene	"	20.0	---	1.00	"	"	--	"	99.9%	(77-123)	4.45%	"	"	
m,p-Xylene	"	39.0	---	2.00	"	"	--	40.0	97.4%	(72-127)	6.29%	"	"	

Surrogate(s):	*Dibromofluoromethane*	*Recovery:*	*97.9%*	*Limits: 80-120%*	*09/23/09 10:23*
	1,2-DCA-d4		*95.2%*	*80-120%*	*"*
	Toluene-d8		*104%*	*80-120%*	*"*
	4-BFB		*109%*	*80-120%*	*"*

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Estella K Rieben

Estella Rieben, Project Manager

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111 SW Columbia Street - Suite 725	Project Number:	354972	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/02/09 16:18

Polynuclear Aromatic Compounds per EPA 8270M-SIM - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 9090722 **Water Preparation Method: 3520B Liq-Liq**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (9090722-BLK1)							**Extracted: 09/22/09 13:35**							
2-Methylnaphthalene	EPA 8270m	ND	---	0.100	ug/l	1x	--	--	--	--	--	--	09/25/09 13:42	
Acenaphthene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Acenaphthylene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Anthracene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Benzo (a) anthracene	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	
Benzo (a) pyrene	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	
Benzo (b) fluoranthene	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	
Benzo (ghi) perylene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Benzo (k) fluoranthene	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	
Chrysene	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	
Dibenzo (a,h) anthracene	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	
Fluoranthene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Fluorene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Indeno (1,2,3-cd) pyrene	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	
Naphthalene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Phenanthrene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Pyrene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Surrogate(s): Fluorene-d10		*Recovery: 91.6%*			*Limits: 25-125%*								*09/25/09 13:42*	
Pyrene-d10		*99.2%*			*23-150%*								"	
Benzo (a) pyrene-d12		*99.9%*			*10-125%*								"	
LCS (9090722-BS1)							**Extracted: 09/22/09 13:35**							
Acenaphthene	EPA 8270m	1.14	---	0.100	ug/l	1x	--	1.25	91.3%	(26-135)	--	--	09/25/09 14:11	
Benzo (a) pyrene	"	1.20	---	0.00500	"	"	--	"	95.8%	(38-137)	--	--	"	
Pyrene	"	1.22	---	0.100	"	"	--	"	97.4%	(30-147)	--	--	"	
Surrogate(s): Fluorene-d10		*Recovery: 92.2%*			*Limits: 25-125%*								*09/25/09 14:11*	
Pyrene-d10		*96.8%*			*23-150%*								"	
Benzo (a) pyrene-d12		*102%*			*10-125%*								"	
LCS Dup (9090722-BSD1)							**Extracted: 09/22/09 13:35**							
Acenaphthene	EPA 8270m	1.08	---	0.100	ug/l	1x	--	1.25	86.7%	(26-135)	5.20%	(50)	09/25/09 14:41	
Benzo (a) pyrene	"	1.14	---	0.00500	"	"	--	"	91.1%	(38-137)	4.97%	"	"	
Pyrene	"	1.16	---	0.100	"	"	--	"	92.8%	(30-147)	4.78%	"	"	
Surrogate(s): Fluorene-d10		*Recovery: 87.5%*			*Limits: 25-125%*								*09/25/09 14:41*	
Pyrene-d10		*94.7%*			*23-150%*								"	
Benzo (a) pyrene-d12		*100%*			*10-125%*								"	

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Estella K Rieben

Estella Rieben, Project Manager

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111 SW Columbia Street - Suite 725	Project Number:	354972	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/02/09 16:18

Notes and Definitions

Report Specific Notes:

A-01	-	Surrogate was above control limits. The other two were within the limits. Data was reported based on two passing surrogate recoveries.
MHA	-	Due to high levels of analyte in the sample, the MS/MSD calculation does not provide useful spike recovery information. See Blank Spike (LCS).
Q8	-	Detected hydrocarbons in the gasoline range appear to be due to overlap of diesel range hydrocarbons.
Q9	-	Hydrocarbon pattern most closely resembles weathered diesel.
RL1	-	Reporting limit raised due to sample matrix effects.
RL3	-	Reporting limit raised due to high concentrations of non-target analytes.
RL4	-	Reporting limit raised due to insufficient sample volume.
RL7	-	Sample required dilution due to high concentrations of target analyte.
ZX	-	Due to sample matrix effects, the surrogate recovery was outside the acceptance limits.

Laboratory Reporting Conventions:

DET	-	Analyte DETECTED at or above the Reporting Limit. Qualitative Analyses only.
ND	-	Analyte NOT DETECTED at or above the reporting limit (MDL or MRL, as appropriate).
NR/NA	-	Not Reported / Not Available
dry	-	Sample results reported on a Dry Weight Basis. Results and Reporting Limits have been corrected for Percent Dry Weight.
wet	-	Sample results and reporting limits reported on a Wet Weight Basis (as received). Results with neither 'wet' nor 'dry' are reported on a Wet Weight Basis.
RPD	-	RELATIVE PERCENT DIFFERENCE (RPDs calculated using Results, not Percent Recoveries).
MRL	-	METHOD REPORTING LIMIT. Reporting Level at, or above, the lowest level standard of the Calibration Table.
MDL*	-	METHOD DETECTION LIMIT. Reporting Level at, or above, the statistically derived limit based on 40CFR, Part 136, Appendix B. *MDLs are listed on the report only if the data has been evaluated below the MRL. Results between the MDL and MRL are reported as Estimated Results.
Dil	-	Dilutions are calculated based on deviations from the standard dilution performed for an analysis, and may not represent the dilution found on the analytical raw data.
Reporting Limits	-	Reporting limits (MDLs and MRLs) are adjusted based on variations in sample preparation amounts, analytical dilutions and percent solids, where applicable.
Electronic Signature	-	Electronic Signature added in accordance with TestAmerica's *Electronic Reporting and Electronic Signatures Policy*. Application of electronic signature indicates that the report has been reviewed and approved for release by the laboratory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

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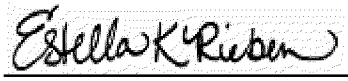

Estella Rieben, Project Manager

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9405 SW Nimbus Ave,Beaverton, OR 97008-7145 503-906-9200 FAX 906-9210
2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119 907-563-9200 FAX 563-9210

CHAIN OF CUSTODY REPORT

Work Order #: PSI0633

CLIENT: ARCADIS

REPORT TO: 111 SW Columbia St Suite 725

ADDRESS: Portland OR 97201

PHONE: (503) 220 8201 FAX: (503) 220 8201

INVOICE TO: Jason NA 1

P.O. NUMBER:

PROJECT NAME: Conoco Phillips

PROJECT NUMBER: 354972

SAMPLED BY: CP/MO

TURNAROUND REQUEST in Business Days *

Organic & Inorganic Analyses: 10 STD | 7 | 5 | 4 | 3 | 2 | 1 | <1

Petroleum Hydrocarbon Analyses: 5 STD | 4 | 3 | 2 | 1 | <1

OTHER Specify:

* Turnaround Requests less than standard may incur Rush Charges

CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME	PRESERVATIVE	REQUESTED ANALYSES							MATRIX (W, S, O)	# OF CONT.	LOCATION/ COMMENTS	TA WO ID
		HCL	HCL		HCL	—	HNO3						
		NWTPH Dx w/Silica Gel	NWTPH Dx w/Silica		BTEX MTBE EDB	PAH's 8270C	Total Metals						
1 U-27	9/17/09 1335	3	2		3	2	1			W	11		
2 U-28	9/17/09 1405	3	2		3	2	1			W	11		
3 TB-267	9/17/09 —				1					W	1		
4													
5													
6													
7													
8													
9													
10													

RELEASED BY: DATE: 9/17/09

PRINT NAME: Cole Packwood FIRM: ARCADIS TIME: 1400

RECEIVED BY: DATE: 9/17/09

PRINT NAME: Bob F FIRM: TAP TIME: 16:05

RELEASED BY: DATE:

PRINT NAME: Bob F FIRM: TAP TIME: 17:35

RECEIVED BY: DATE:

PRINT NAME: FIRM: TIME:

ADDITIONAL REMARKS:

TEMP: 3.0, 4.6, 4.5, 4.5, 8.6 °C

PAGE 1/2 OF

TAL 1000(0408)

Conoco Phillips Sheet pile

COP0017915

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11922 E. First Ave, Spokane, WA 99206-5302 509-924-9200 FAX 924-9290
9405 SW Nimbus Ave Beaverton, OR 97008-7145 503-906-9200 FAX 906-9210
2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119 907-563-9200 FAX 563-9210

CHAIN OF CUSTODY REPORT

Work Order #: PSI0633

CLIENT: ARCADIS

REPORT TO: 111 SW Columbia St. Suite 725
ADDRESS: Portland, OR 97201

PHONE: (503) 220-8201 FAX: (503) 220-8201

INVOICE TO: JASON NAIL

P.O. NUMBER:

PROJECT NAME: Conoco Phillips Willbridge

PROJECT NUMBER: 354972

SAMPLED BY: CP/MD

PRESERVATIVE: HCL | HCL | HCL | — | HNO_3

REQUESTED ANALYSES: NWTPH Dx w/ Silica Gel | NWTPH Dx w/ Silica Gel | BTEX (MTBE) 8260B | PAH's 8270C | Total Metals

TURNAROUND REQUEST in Business Days*
Organic & Inorganic Analyses: (10) STD | 7 | 5 | 4 | 3 | 2 | 1 | <1
Petroleum Hydrocarbon Analyses: 5 STD | 4 | 3 | 2 | 1 | <1
OTHER Specify:
* Turnaround Requests less than standard may incur Rush Charges.

	CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME	NWTPH Dx w/ Silica Gel	NWTPH Dx w/ Silica Gel	BTEX (MTBE) 8260B	PAH's 8270C	Total Metals	MATRIX (W, S, O)	# OF CONT.	LOCATION/ COMMENTS	TA WO ID
1	U-22A	9/17/09 1000	3	2	3	2	1	W	11		
2	U-22B	9/17/09 1010	3	2	3	2	1	W	11		
3	U-21A	9/17/09 1015	3	2	3	2	1	W	11		
4	U-21B	9/17/09 1020	3	2	3	2	1	W	11		
5	BD-CO-SP-1	9/17/09 —	3	2	3	2	1	W	11		
6	BD-CO-SP-2	9/17/09 —	3	2	3	2	1	W	11		
7	U-29A	9/17/09 1245	3	2	3	2	1	W	11		
8	U-23	9/17/09 1300	3	2	3	2	1	W	11		
9	U-25	9/17/09 1305	3	2	3	2	1	W	11		
10	U-26	9/17/09 1330	3	2	3	2	1	W	11		

RELEASED BY: [signature] DATE: 9/17/09
PRINT NAME: Cole Packwood FIRM: ARCADIS TIME: 1405

RECEIVED BY: [signature] DATE: 9/17/9
PRINT NAME: Bob F FIRM: TAP TIME: 16:0

RELEASED BY: [signature] DATE: 9/17/9
PRINT NAME: Bob F FIRM: TAP TIME: 17:35

RECEIVED BY: DATE:
PRINT NAME: FIRM: TIME:

ADDITIONAL REMARKS:

TEMP:

PAGE: OF

Conoco Phillips Sheet Pile 30, 4.6, 4.5, 4.5, 8.6 oz

2/2

TAL-1000(0408)

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Sample Receiving Checklist

Work Order #: PSI0633 Date/Time Received: 9/17/09 1735

Client Name and Project: Acadis Conoco Phillips

Time Zone:

☐EDT/EST ☐CDT/CST ☐MDT/MST ☒PDT/PST ☐AK ☐OTHER

Unpacking Checks:

Cooler #(s): 1 2 3 4 5

Temperatures: 3.0 4.6 4.5 4.5 8.6 - see below

Digi #1 ☐ Digi #2 ☐ IR Gun ☒ (☒Plastic ☐Glass)

Temperature out of Range:

☒Not enough or No Ice

☒Ice Melted

__W/in 4 Hrs of collection

__Other:_____

Initials: PS

N/A	Yes	No	
☒	☐	☐	1. If ESI client, were temp blanks received? If no, document on NOD.
☒	☐	☐	2. Cooler Seals intact? (N/A if hand delivered) if no, document on NOD.
	☒	☐	3. Chain of Custody present? If no, document on NOD.
	☒	☐	4. Bottles received intact? If no, document on NOD.
	☒	☐	5. Sample is not multiphasic? If no, document on NOD.
	☒	☐	6. Proper Container and preservatives used? If no, document on NOD.
☐	☒	☐	7. pH of all samples checked and meet requirements? If no, document on NOD.
☒	☐	☐	8. Cyanide samples checked for sulfides and meet requirements? If no, notify PM.
☒	☐	☐	9. HF Dilution required?
	☒	☐	10. Sufficient volume provided for all analysis? If no, document on NOD and consult PM before proceeding.
	☒	☐	11. Did chain of custody agree with samples received? If no, document on NOD.
	☒	☐	12. Is the "Sampled by" section of the COC completed?
☐	☒	☐	13. Were VOA/Oil Syringe samples without headspace?
☐	☒	☐	14. Were VOA vials preserved? ☒HCl ☐Sodium Thiosulfate ☐Ascorbic Acid
	☐	☒	15. Did samples require preservation with sodium thiosulfate?
☒	☐	☐	16. If yes to #14, was the residual chlorine test negative? If no, document on NOD.
☒	☐	☐	17. Are dissolved/field filtered metals bottles sediment-free? If no, document on NOD.
☒	☐	☐	18. Is sufficient volume provided for client requested MS/MSD or matrix duplicates? If no, document on NOD and contact PM before proceeding.
☒	☐	☐	19. Are analyses with short holding times received in hold?
	☒	☐	20. Was Standard Turn Around (TAT) requested?
	☒	☐	21. Receipt date(s) < 48 hours past the collection date(s)? If no, notify PM.

U-25, U-23 @ 8.6°C

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Sample Receiving Checklist

Work Order #: PSI0633

Login Checks: Initials: PS

N/A	Yes	No	
	☑	☐	22. Sufficient volume provided for all analysis? If no, document on NOD & contact PM.
☑	☐	☐	23. Sufficient volume provided for client requested MS/MSD or matrix duplicates? If no, document on NOD and contact PM.
	☑	☐	24. Did the chain of custody include "received by" and "relinquished by" signatures, dates and times?
☑	☐	☐	25. Were special log in instructions read and followed?
	☑	☐	26. Were tests logged checked against the COC?
☑	☐	☐	27. Were rush notices printed and delivered?
☑	☐	☐	28. Were short hold notices printed and delivered?
☑	☐	☐	29. Were subcontract COCs printed?
☑	☐	☐	30. Was HF dilution logged?

Labeling and Storage Checks: Initials: PS

N/A	Yes	No	
☑	☐	☐	31. Were the subcontracted samples/containers put in Sx fridge?
☑	☐	☐	32. Were sample bottles and COC double checked for dissolved/filtered metals?
	☑	☐	33. Did the sample ID, Date, and Time from label match what was logged?
☑	☐	☐	34. Were Foreign sample stickers affixed to each container and containers stored in foreign fridge?
☑	☐	☐	35. Were HF stickers affixed to each container, and containers stored in Sx fridge?
☑	☐	☐	36. Was an NOD for created for noted discrepancies and placed in folder?

Document any problems or discrepancies and the actions taken to resolve them on a Notice of Discrepancy form (NOD).

COP0017918

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PORTLAND, OR 9405 S.W. NIMBUS AVENUE
BEAVERTON, OR 97008-7132
ph: (503) 906.9200 fax: (503) 906.9210

ORELAP#: OR100021

October 02, 2009

Jason Nail
ARCADIS U.S., Inc
111 SW Columbia Street - Suite 725
Portland, OR 97201

RE: ConocoPhillips - RI Well Subset

Enclosed are the results of analyses for samples received by the laboratory on 09/18/09 14:45. The following list is a summary of the Work Orders contained in this report, generated on 10/02/09 16:21.

If you have any questions concerning this report, please feel free to contact me.

Work Order	Project	ProjectNumber
PSI0692	ConocoPhillips - RI Well Subs	354972 - Willbridge

TestAmerica Portland

Estella K Rieben

Estella Rieben, Project Manager

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BEAVERTON, OR 97008-7132
ph: (503) 906.9200 fax: (503) 906.9210

ARCADIS U.S., Inc	Project Name:	**ConocoPhillips - RI Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	354972 - Willbridge	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/02/09 16:21

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
EB-R1-CO-1	PSI0692-01	Water	09/18/09 12:00	09/18/09 14:45
B-35	PSI0692-02	Water	09/18/09 11:30	09/18/09 14:45
B-36	PSI0692-03	Water	09/18/09 11:40	09/18/09 14:45
B-37	PSI0692-04	Water	09/18/09 12:10	09/18/09 14:45
P-1A	PSI0692-05	Water	09/18/09 12:15	09/18/09 14:45
OF-1	PSI0692-06	Water	09/18/09 12:30	09/18/09 14:45
BD-RI-CO-1	PSI0692-07	Water	09/18/09 00:00	09/18/09 14:45
TB-268	PSI0692-08	Water	09/18/09 00:00	09/18/09 14:45

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Estella K Rieben

Estella Rieben, Project Manager

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ARCADIS U.S., Inc	Project Name:	**ConocoPhillips - RI Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	354972 - Willbridge	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/02/09 16:21

Gasoline Hydrocarbons per NW TPH-Gx Method

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed		Notes
PSI0692-01 (EB-R1-CO-1)			**Water**			**Sampled: 09/18/09 12:00**					
Gasoline Range Hydrocarbons	NW TPH-Gx	ND	-----	80.0	ug/l	1x	9090831	09/23/09 17:16	09/24/09 23:23		
Surrogate(s): 4-BFB (FID)				*84.7%*		*50 - 150%*				"	
PSI0692-02 (B-35)			**Water**			**Sampled: 09/18/09 11:30**					
Gasoline Range Hydrocarbons	NW TPH-Gx	**1110**	-----	80.0	ug/l	1x	9090831	09/23/09 17:16	09/24/09 23:51		
Surrogate(s): 4-BFB (FID)				*195%*		*50 - 150%*				"	*ZX*
PSI0692-03 (B-36)			**Water**			**Sampled: 09/18/09 11:40**					
Gasoline Range Hydrocarbons	NW TPH-Gx	**885**	-----	80.0	ug/l	1x	9090831	09/23/09 17:16	09/25/09 00:18		
Surrogate(s): 4-BFB (FID)				*206%*		*50 - 150%*				"	*ZX*
PSI0692-04 (B-37)			**Water**			**Sampled: 09/18/09 12:10**					
Gasoline Range Hydrocarbons	NW TPH-Gx	**107**	-----	80.0	ug/l	1x	9090831	09/23/09 17:16	09/25/09 00:45		
Surrogate(s): 4-BFB (FID)				*89.3%*		*50 - 150%*				"	
PSI0692-05 (P-1A)			**Water**			**Sampled: 09/18/09 12:15**					
Gasoline Range Hydrocarbons	NW TPH-Gx	ND	-----	80.0	ug/l	1x	9090831	09/23/09 17:16	09/25/09 01:13		
Surrogate(s): 4-BFB (FID)				*91.3%*		*50 - 150%*				"	
PSI0692-06 (OF-1)			**Water**			**Sampled: 09/18/09 12:30**					
Gasoline Range Hydrocarbons	NW TPH-Gx	**82.8**	-----	80.0	ug/l	1x	9090831	09/23/09 17:16	09/25/09 03:02		
Surrogate(s): 4-BFB (FID)				*89.4%*		*50 - 150%*				"	
PSI0692-07 (BD-RI-CO-1)			**Water**			**Sampled: 09/18/09 00:00**					
Gasoline Range Hydrocarbons	NW TPH-Gx	**1110**	-----	80.0	ug/l	1x	9090831	09/23/09 17:16	09/25/09 01:40		
Surrogate(s): 4-BFB (FID)				*199%*		*50 - 150%*				"	*ZX*

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Estella K Rieben

Estella Rieben, Project Manager

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ARCADIS U.S., Inc	Project Name:	**ConocoPhillips - RI Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	354972 - Willbridge	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/02/09 16:21

Diesel and Heavy Range Hydrocarbons per NWTPH-Dx Method with Acid/Silica Gel Cleanup

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSI0692-01 (EB-R1-CO-1)			**Water**			**Sampled: 09/18/09 12:00**				
Diesel Range Organics	NWTPH-Dx	ND	-----	0.243	mg/l	1x	9090732	09/22/09 15:15	09/23/09 23:45	
Heavy Oil Range Hydrocarbons	"	ND	-----	0.485	"	"	"	"	"	
Surrogate(s): 1-Chlorooctadecane				*98.9%*		*50 - 150%*			"	
PSI0692-02 (B-35)			**Water**			**Sampled: 09/18/09 11:30**				
Diesel Range Organics	NWTPH-Dx	**16.2**	-----	0.243	mg/l	1x	9090732	09/22/09 15:15	09/24/09 00:05	**Q9**
Heavy Oil Range Hydrocarbons	"	**0.871**	-----	0.485	"	"	"	"	"	**Q7**
Surrogate(s): 1-Chlorooctadecane				*104%*		*50 - 150%*			"	
PSI0692-03 (B-36)			**Water**			**Sampled: 09/18/09 11:40**				
Diesel Range Organics	NWTPH-Dx	**0.704**	-----	0.245	mg/l	1x	9090732	09/22/09 15:15	09/24/09 00:25	**Q10**
Heavy Oil Range Hydrocarbons	"	ND	-----	0.490	"	"	"	"	"	
Surrogate(s): 1-Chlorooctadecane				*95.3%*		*50 - 150%*			"	
PSI0692-04 (B-37)			**Water**			**Sampled: 09/18/09 12:10**				
Diesel Range Organics	NWTPH-Dx	ND	-----	0.248	mg/l	1x	9090732	09/22/09 15:15	09/24/09 00:45	
Heavy Oil Range Hydrocarbons	"	ND	-----	0.495	"	"	"	"	"	
Surrogate(s): 1-Chlorooctadecane				*94.1%*		*50 - 150%*			"	
PSI0692-05 (P-1A)			**Water**			**Sampled: 09/18/09 12:15**				
Diesel Range Organics	NWTPH-Dx	ND	-----	0.248	mg/l	1x	9090732	09/22/09 15:15	09/24/09 01:05	
Heavy Oil Range Hydrocarbons	"	ND	-----	0.495	"	"	"	"	"	
Surrogate(s): 1-Chlorooctadecane				*80.3%*		*50 - 150%*			"	
PSI0692-06 (OF-1)			**Water**			**Sampled: 09/18/09 12:30**				
Diesel Range Organics	NWTPH-Dx	**44.4**	-----	0.250	mg/l	1x	9090732	09/22/09 15:15	09/24/09 01:25	**Q9**
Heavy Oil Range Hydrocarbons	"	**0.985**	-----	0.500	"	"	"	"	"	**Q7**
Surrogate(s): 1-Chlorooctadecane				*116%*		*50 - 150%*			"	
PSI0692-07 (BD-RI-CO-1)			**Water**			**Sampled: 09/18/09 00:00**				
Diesel Range Organics	NWTPH-Dx	**6.96**	-----	0.245	mg/l	1x	9090732	09/22/09 15:15	09/24/09 01:45	**Q9**
Heavy Oil Range Hydrocarbons	"	ND	-----	0.490	"	"	"	"	"	
Surrogate(s): 1-Chlorooctadecane				*104%*		*50 - 150%*			"	

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Estella K Rieben

Estella Rieben, Project Manager

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ph: (503) 906.9200 fax: (503) 906.9210

ARCADIS U.S., Inc	Project Name:	**ConocoPhillips - RI Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	354972 - Willbridge	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/02/09 16:21

Total Metals per EPA 6000/7000 Series Methods

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSI0692-01 (EB-R1-CO-1)			**Water**			**Sampled: 09/18/09 12:00**				
Arsenic	EPA 6020	ND	-----	0.00100	mg/l	1x	9090875	09/24/09 13:29	09/26/09 06:15	
Barium	"	ND	-----	0.00100	"	"	"	"	"	
Cadmium	"	ND	-----	0.000500	"	"	"	"	"	
Chromium	"	ND	-----	0.00200	"	"	"	"	"	
Copper	"	ND	-----	0.00200	"	"	"	"	"	
Lead	"	ND	-----	0.00100	"	"	"	"	"	
Manganese	"	ND	-----	0.00200	"	"	"	"	09/26/09 14:24	
Selenium	"	ND	-----	0.000500	"	"	"	"	09/26/09 06:15	
Silver	"	ND	-----	0.00100	"	"	"	"	"	
Zinc	"	ND	-----	0.00500	"	"	"	"	"	
PSI0692-02 (B-35)			**Water**			**Sampled: 09/18/09 11:30**				
Arsenic	EPA 6020	**0.0366**	-----	0.00100	mg/l	1x	9090875	09/24/09 13:29	09/26/09 06:23	
Barium	"	**0.158**	-----	0.00100	"	"	"	"	"	
Cadmium	"	ND	-----	0.000500	"	"	"	"	"	
Chromium	"	**0.0165**	-----	0.00200	"	"	"	"	"	
Copper	"	**0.0188**	-----	0.00200	"	"	"	"	"	
Lead	"	**0.0146**	-----	0.00100	"	"	"	"	"	
Manganese	"	**3.87**	-----	0.0200	"	10x	"	"	09/26/09 14:32	
Selenium	"	ND	-----	0.000500	"	1x	"	"	09/26/09 06:23	
Silver	"	ND	-----	0.00100	"	"	"	"	"	
Zinc	"	**0.0678**	-----	0.00500	"	"	"	"	"	
PSI0692-03 (B-36)			**Water**			**Sampled: 09/18/09 11:40**				
Arsenic	EPA 6020	**0.0113**	-----	0.00100	mg/l	1x	9090875	09/24/09 13:29	09/26/09 06:31	
Barium	"	**0.0670**	-----	0.00100	"	"	"	"	"	
Cadmium	"	ND	-----	0.000500	"	"	"	"	"	
Chromium	"	ND	-----	0.00200	"	"	"	"	"	
Copper	"	**0.00202**	-----	0.00200	"	"	"	"	"	
Lead	"	ND	-----	0.00100	"	"	"	"	"	
Manganese	"	**3.83**	-----	0.0200	"	10x	"	"	09/26/09 14:40	
Selenium	"	ND	-----	0.000500	"	1x	"	"	09/26/09 06:31	
Silver	"	ND	-----	0.00100	"	"	"	"	"	
Zinc	"	**0.00705**	-----	0.00500	"	"	"	"	"	

TestAmerica Portland

Estella K Rieben

Estella Rieben, Project Manager

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PORTLAND, OR 9405 S.W. NIMBUS AVENUE
BEAVERTON, OR 97008-7132
ph: (503) 906.9200 fax: (503) 906.9210

ARCADIS U.S., Inc	Project Name:	**ConocoPhillips - RI Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	354972 - Willbridge	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/02/09 16:21

Total Metals per EPA 6000/7000 Series Methods

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSI0692-04 (B-37)			**Water**			**Sampled: 09/18/09 12:10**				
Arsenic	EPA 6020	**0.276**	-----	0.00100	mg/l	1x	9090915	09/25/09 11:44	09/26/09 16:06	
Barium	"	**0.0349**	-----	0.00100	"	"	"	"	"	
Cadmium	"	ND	-----	0.000500	"	"	"	"	"	
Chromium	"	ND	-----	0.00200	"	"	"	"	"	
Copper	"	ND	-----	0.00200	"	"	"	"	"	
Lead	"	ND	-----	0.00100	"	"	"	"	"	
Manganese	"	**1.71**	-----	0.0100	"	5x	"	"	09/29/09 07:54	
Selenium	"	ND	-----	0.000500	"	1x	"	"	09/26/09 16:06	
Silver	"	ND	-----	0.00100	"	"	"	"	"	
Zinc	"	ND	-----	0.00500	"	"	"	"	"	
PSI0692-05 (P-1A)			**Water**			**Sampled: 09/18/09 12:15**				
Arsenic	EPA 6020	**0.00219**	-----	0.00100	mg/l	1x	9090915	09/25/09 11:44	09/26/09 16:14	
Barium	"	**0.0671**	-----	0.00100	"	"	"	"	"	
Cadmium	"	ND	-----	0.000500	"	"	"	"	"	
Chromium	"	**0.00574**	-----	0.00200	"	"	"	"	"	
Copper	"	**0.00938**	-----	0.00200	"	"	"	"	"	
Lead	"	**0.00555**	-----	0.00100	"	"	"	"	"	
Manganese	"	**1.21**	-----	0.0100	"	5x	"	"	09/29/09 08:02	
Selenium	"	ND	-----	0.000500	"	1x	"	"	09/26/09 16:14	
Silver	"	ND	-----	0.00100	"	"	"	"	"	
Zinc	"	**0.0594**	-----	0.00500	"	"	"	"	"	
PSI0692-06 (OF-1)			**Water**			**Sampled: 09/18/09 12:30**				
Arsenic	EPA 6020	**0.0385**	-----	0.00100	mg/l	1x	9090915	09/25/09 11:44	09/26/09 16:38	
Barium	"	**0.114**	-----	0.00100	"	"	"	"	"	
Cadmium	"	**0.00169**	-----	0.000500	"	"	"	"	"	
Chromium	"	**0.00363**	-----	0.00200	"	"	"	"	"	
Copper	"	**0.0152**	-----	0.00200	"	"	"	"	"	
Lead	"	**0.00436**	-----	0.00100	"	"	"	"	"	
Manganese	"	**3.19**	-----	0.0100	"	5x	"	"	09/29/09 08:10	
Selenium	"	ND	-----	0.000500	"	1x	"	"	09/26/09 16:38	
Silver	"	ND	-----	0.00100	"	"	"	"	"	
Zinc	"	**0.0397**	-----	0.00500	"	"	"	"	"	

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Estella K Rieben

Estella Rieben, Project Manager

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THE LEADER IN ENVIRONMENTAL TESTING

PORTLAND, OR 9405 S.W. NIMBUS AVENUE
BEAVERTON, OR 97008-7132
ph: (503) 906.9200 fax: (503) 906.9210

ARCADIS U.S., Inc	Project Name:	**ConocoPhillips - RI Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	354972 - Willbridge	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/02/09 16:21

Total Metals per EPA 6000/7000 Series Methods

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSI0692-07 (BD-RI-CO-1)			**Water**			**Sampled: 09/18/09 00:00**				
Arsenic	EPA 6020	**0.0428**	-----	0.0100	mg/l	10x	9090915	09/25/09 11:44	09/29/09 08:18	
Barium	"	**0.176**	-----	0.00100	"	1x	"	"	09/26/09 16:45	
Cadmium	"	ND	-----	0.000500	"	"	"	"	"	
Chromium	"	ND	-----	0.0200	"	10x	"	"	09/29/09 08:18	
Copper	"	**0.0297**	-----	0.0200	"	"	"	"	"	
Lead	"	**0.0185**	-----	0.00100	"	1x	"	"	09/26/09 16:45	
Manganese	"	**4.27**	-----	0.0200	"	10x	"	"	09/29/09 08:18	
Selenium	"	ND	-----	0.000500	"	1x	"	"	09/26/09 16:45	
Silver	"	ND	-----	0.00100	"	"	"	"	"	
Zinc	"	**0.0853**	-----	0.0500	"	10x	"	"	09/29/09 08:18	

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Portland, OR 97201	Project Manager:	Jason Nail	10/02/09 16:21

Mercury per EPA Method 1631E

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSI0692-01 (EB-R1-CO-1)			**Water**			**Sampled: 09/18/09 12:00**				
Mercury	EPA 1631 Mod.	ND	-----	0.00500	ug/l	1x	9091041	09/29/09 16:28	09/30/09 14:25	
PSI0692-02 (B-35)			**Water**			**Sampled: 09/18/09 11:30**				
Mercury	EPA 1631 Mod.	**0.0151**	-----	0.00500	ug/l	1x	9091041	09/29/09 16:28	09/30/09 14:28	
PSI0692-03 (B-36)			**Water**			**Sampled: 09/18/09 11:40**				
Mercury	EPA 1631 Mod.	**0.0402**	-----	0.00500	ug/l	1x	9091041	09/29/09 16:28	09/30/09 14:32	
PSI0692-04 (B-37)			**Water**			**Sampled: 09/18/09 12:10**				
Mercury	EPA 1631 Mod.	ND	-----	0.00500	ug/l	1x	9091041	09/29/09 16:28	09/30/09 14:36	
PSI0692-05 (P-1A)			**Water**			**Sampled: 09/18/09 12:15**				
Mercury	EPA 1631 Mod.	**0.00933**	-----	0.00500	ug/l	1x	9091041	09/29/09 16:28	09/30/09 14:39	
PSI0692-06 (OF-1)			**Water**			**Sampled: 09/18/09 12:30**				
Mercury	EPA 1631 Mod.	**0.0126**	-----	0.00500	ug/l	1x	9091041	09/29/09 16:28	09/30/09 14:43	
PSI0692-07 (BD-RI-CO-1)			**Water**			**Sampled: 09/18/09 00:00**				
Mercury	EPA 1631 Mod.	**0.0170**	-----	0.00500	ug/l	1x	9091041	09/29/09 16:28	09/30/09 14:47	

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111 SW Columbia Street - Suite 725	Project Number:	354972 - Willbridge	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/02/09 16:21

Selected Volatile Organic Compounds (Including BTEX) per EPA Method 8260B

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSI0692-01 (EB-R1-CO-1)			**Water**			**Sampled: 09/18/09 12:00**				
Methyl tert-butyl ether	EPA 8260B	ND	-----	1.00	ug/l	1x	9090770	09/22/09 15:00	09/22/09 18:24	
Benzene	"	ND	-----	0.200	"	"	"	"	"	
1,2-Dichloroethane	"	ND	-----	1.00	"	"	"	"	"	
Toluene	"	ND	-----	1.00	"	"	"	"	"	
1,2-Dibromoethane	"	ND	-----	1.00	"	"	"	"	"	
Ethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
m,p-Xylene	"	ND	-----	2.00	"	"	"	"	"	
o-Xylene	"	ND	-----	1.00	"	"	"	"	"	
Isopropylbenzene	"	ND	-----	2.00	"	"	"	"	"	
n-Propylbenzene	"	ND	-----	1.00	"	"	"	"	"	
1,3,5-Trimethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
1,2,4-Trimethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
Naphthalene	"	ND	-----	2.00	"	"	"	"	"	
Surrogate(s):	*Dibromofluoromethane*			*101%*		*80 - 120%*				"
	1,2-DCA-d4			*95.8%*		*80 - 120%*				"
	Toluene-d8			*102%*		*80 - 120%*				"
	4-BFB			*108%*		*80 - 120%*				"
PSI0692-02 (B-35)			**Water**			**Sampled: 09/18/09 11:30**				
Methyl tert-butyl ether	EPA 8260B	ND	-----	1.00	ug/l	1x	9090770	09/22/09 15:00	09/22/09 18:01	
Benzene	"	**2.80**	-----	0.200	"	"	"	"	"	
1,2-Dichloroethane	"	ND	-----	1.00	"	"	"	"	"	
Toluene	"	**7.38**	-----	1.00	"	"	"	"	"	
1,2-Dibromoethane	"	ND	-----	1.00	"	"	"	"	"	
Ethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
m,p-Xylene	"	**3.58**	-----	2.00	"	"	"	"	"	
o-Xylene	"	**6.26**	-----	1.00	"	"	"	"	"	
Isopropylbenzene	"	**21.7**	-----	2.00	"	"	"	"	"	
n-Propylbenzene	"	**44.7**	-----	1.00	"	"	"	"	"	
1,3,5-Trimethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
1,2,4-Trimethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
Naphthalene	"	ND	-----	2.00	"	"	"	"	"	
Surrogate(s):	*Dibromofluoromethane*			*99.5%*		*80 - 120%*				"
	1,2-DCA-d4			*99.8%*		*80 - 120%*				"
	Toluene-d8			*99.6%*		*80 - 120%*				"
	4-BFB			*103%*		*80 - 120%*				"

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Estella K Rieben

Estella Rieben, Project Manager

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111 SW Columbia Street - Suite 725	Project Number:	354972 - Willbridge	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/02/09 16:21

Selected Volatile Organic Compounds (Including BTEX) per EPA Method 8260B

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSI0692-03 (B-36)			**Water**			**Sampled: 09/18/09 11:40**				
Methyl tert-butyl ether	EPA 8260B	ND	-----	1.00	ug/l	1x	9090770	09/22/09 15:00	09/22/09 17:37	
Benzene	"	**0.530**	-----	0.200	"	"	"	"	"	
1,2-Dichloroethane	"	ND	-----	1.00	"	"	"	"	"	
Toluene	"	**1.23**	-----	1.00	"	"	"	"	"	
1,2-Dibromoethane	"	ND	-----	1.00	"	"	"	"	"	
Ethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
m,p-Xylene	"	ND	-----	2.00	"	"	"	"	"	
o-Xylene	"	ND	-----	1.00	"	"	"	"	"	
Isopropylbenzene	"	**24.8**	-----	2.00	"	"	"	"	"	
n-Propylbenzene	"	**33.5**	-----	1.00	"	"	"	"	"	
1,3,5-Trimethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
1,2,4-Trimethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
Naphthalene	"	ND	-----	2.00	"	"	"	"	"	
Surrogate(s):	*Dibromofluoromethane*		*99.2%*		*80 - 120%*					"
	1,2-DCA-d4		*98.3%*		*80 - 120%*					"
	Toluene-d8		*98.6%*		*80 - 120%*					"
	4-BFB		*108%*		*80 - 120%*					"
PSI0692-04 (B-37)			**Water**			**Sampled: 09/18/09 12:10**				
Methyl tert-butyl ether	EPA 8260B	ND	-----	1.00	ug/l	1x	9090770	09/22/09 15:00	09/22/09 17:14	
Benzene	"	ND	-----	0.200	"	"	"	"	"	
1,2-Dichloroethane	"	ND	-----	1.00	"	"	"	"	"	
Toluene	"	ND	-----	1.00	"	"	"	"	"	
1,2-Dibromoethane	"	ND	-----	1.00	"	"	"	"	"	
Ethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
m,p-Xylene	"	ND	-----	2.00	"	"	"	"	"	
o-Xylene	"	ND	-----	1.00	"	"	"	"	"	
Isopropylbenzene	"	ND	-----	2.00	"	"	"	"	"	
n-Propylbenzene	"	ND	-----	1.00	"	"	"	"	"	
1,3,5-Trimethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
1,2,4-Trimethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
Naphthalene	"	ND	-----	2.00	"	"	"	"	"	
Surrogate(s):	*Dibromofluoromethane*		*99.4%*		*80 - 120%*					"
	1,2-DCA-d4		*99.7%*		*80 - 120%*					"
	Toluene-d8		*99.2%*		*80 - 120%*					"
	4-BFB		*115%*		*80 - 120%*					"

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Estella K Rieben

Estella Rieben, Project Manager

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ARCADIS U.S., Inc	Project Name:	**ConocoPhillips - RI Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	354972 - Willbridge	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/02/09 16:21

Selected Volatile Organic Compounds (Including BTEX) per EPA Method 8260B

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSI0692-05 (P-1A)			**Water**			**Sampled: 09/18/09 12:15**				
Methyl tert-butyl ether	EPA 8260B	ND	-----	1.00	ug/l	1x	9090770	09/22/09 15:00	09/22/09 16:50	
Benzene	"	**0.320**	-----	0.200	"	"	"	"	"	
1,2-Dichloroethane	"	ND	-----	1.00	"	"	"	"	"	
Toluene	"	ND	-----	1.00	"	"	"	"	"	
1,2-Dibromoethane	"	ND	-----	1.00	"	"	"	"	"	
Ethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
m,p-Xylene	"	ND	-----	2.00	"	"	"	"	"	
o-Xylene	"	ND	-----	1.00	"	"	"	"	"	
Isopropylbenzene	"	ND	-----	2.00	"	"	"	"	"	
n-Propylbenzene	"	ND	-----	1.00	"	"	"	"	"	
1,3,5-Trimethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
1,2,4-Trimethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
Naphthalene	"	ND	-----	2.00	"	"	"	"	"	
Surrogate(s): *Dibromofluoromethane*				*99.4%*		*80 - 120%*				"
1,2-DCA-d4				*104%*		*80 - 120%*				"
Toluene-d8				*103%*		*80 - 120%*				"
4-BFB				*112%*		*80 - 120%*				"
PSI0692-06 (OF-1)			**Water**			**Sampled: 09/18/09 12:30**				
Methyl tert-butyl ether	EPA 8260B	ND	-----	1.00	ug/l	1x	9090770	09/22/09 15:00	09/22/09 16:27	
Benzene	"	ND	-----	0.200	"	"	"	"	"	
1,2-Dichloroethane	"	ND	-----	1.00	"	"	"	"	"	
Toluene	"	ND	-----	1.00	"	"	"	"	"	
1,2-Dibromoethane	"	ND	-----	1.00	"	"	"	"	"	
Ethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
m,p-Xylene	"	ND	-----	2.00	"	"	"	"	"	
o-Xylene	"	ND	-----	1.00	"	"	"	"	"	
Isopropylbenzene	"	ND	-----	2.00	"	"	"	"	"	
n-Propylbenzene	"	ND	-----	1.00	"	"	"	"	"	
1,3,5-Trimethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
1,2,4-Trimethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
Naphthalene	"	ND	-----	2.00	"	"	"	"	"	
Surrogate(s): *Dibromofluoromethane*				*98.5%*		*80 - 120%*				"
1,2-DCA-d4				*100%*		*80 - 120%*				"
Toluene-d8				*98.5%*		*80 - 120%*				"
4-BFB				*112%*		*80 - 120%*				"

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Estella K Rieben

Estella Rieben, Project Manager

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111 SW Columbia Street - Suite 725	Project Number:	354972 - Willbridge	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/02/09 16:21

Selected Volatile Organic Compounds (Including BTEX) per EPA Method 8260B

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSI0692-07 (BD-RI-CO-1)			**Water**			**Sampled: 09/18/09 00:00**				**RL3**
Methyl tert-butyl ether	EPA 8260B	ND	-----	2.00	ug/l	2x	9090770	09/22/09 15:00	09/22/09 16:04	
Benzene	"	**2.76**	-----	0.400	"	"	"	"	"	
1,2-Dichloroethane	"	ND	-----	2.00	"	"	"	"	"	
Toluene	"	**6.86**	-----	2.00	"	"	"	"	"	
1,2-Dibromoethane	"	ND	-----	2.00	"	"	"	"	"	
Ethylbenzene	"	ND	-----	2.00	"	"	"	"	"	
m,p-Xylene	"	ND	-----	4.00	"	"	"	"	"	
o-Xylene	"	**5.90**	-----	2.00	"	"	"	"	"	
Isopropylbenzene	"	**23.1**	-----	4.00	"	"	"	"	"	
n-Propylbenzene	"	**49.4**	-----	2.00	"	"	"	"	"	
1,3,5-Trimethylbenzene	"	ND	-----	2.00	"	"	"	"	"	
1,2,4-Trimethylbenzene	"	ND	-----	2.00	"	"	"	"	"	
Naphthalene	"	ND	-----	4.00	"	"	"	"	"	
Surrogate(s):	*Dibromofluoromethane*			*99.7%*		*80 - 120%*				"
	1,2-DCA-d4			*101%*		*80 - 120%*				"
	Toluene-d8			*99.0%*		*80 - 120%*				"
	4-BFB			*107%*		*80 - 120%*				"
PSI0692-08 (TB-268)			**Water**			**Sampled: 09/18/09 00:00**				
Methyl tert-butyl ether	EPA 8260B	ND	-----	1.00	ug/l	1x	9090770	09/22/09 15:00	09/22/09 15:40	
Benzene	"	ND	-----	0.200	"	"	"	"	"	
1,2-Dichloroethane	"	ND	-----	1.00	"	"	"	"	"	
Toluene	"	ND	-----	1.00	"	"	"	"	"	
1,2-Dibromoethane	"	ND	-----	1.00	"	"	"	"	"	
Ethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
m,p-Xylene	"	ND	-----	2.00	"	"	"	"	"	
o-Xylene	"	ND	-----	1.00	"	"	"	"	"	
Isopropylbenzene	"	ND	-----	2.00	"	"	"	"	"	
n-Propylbenzene	"	ND	-----	1.00	"	"	"	"	"	
1,3,5-Trimethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
1,2,4-Trimethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
Naphthalene	"	ND	-----	2.00	"	"	"	"	"	
Surrogate(s):	*Dibromofluoromethane*			*98.8%*		*80 - 120%*				"
	1,2-DCA-d4			*99.0%*		*80 - 120%*				"
	Toluene-d8			*100%*		*80 - 120%*				"
	4-BFB			*113%*		*80 - 120%*				"

TestAmerica Portland

Estella K Rieben

Estella Rieben, Project Manager

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PORTLAND, OR 9405 S.W. NIMBUS AVENUE
BEAVERTON, OR 97008-7132
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ARCADIS U.S., Inc	Project Name:	**ConocoPhillips - RI Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	354972 - Willbridge	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/02/09 16:21

Polynuclear Aromatic Compounds per EPA 8270M-SIM

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSI0692-01 (EB-R1-CO-1)			**Water**			**Sampled: 09/18/09 12:00**				
2-Methylnaphthalene	EPA 8270m	ND	-----	0.100	ug/l	1x	9090722	09/22/09 13:35	09/26/09 12:04	
Acenaphthene	"	ND	-----	0.100	"	"	"	"	"	
Acenaphthylene	"	ND	-----	0.100	"	"	"	"	"	
Anthracene	"	ND	-----	0.100	"	"	"	"	"	
Benzo (a) anthracene	"	ND	-----	0.00500	"	"	"	"	"	
Benzo (a) pyrene	"	ND	-----	0.00500	"	"	"	"	"	
Benzo (b) fluoranthene	"	ND	-----	0.00500	"	"	"	"	"	
Benzo (ghi) perylene	"	ND	-----	0.100	"	"	"	"	"	
Benzo (k) fluoranthene	"	ND	-----	0.00500	"	"	"	"	"	
Chrysene	"	ND	-----	0.00500	"	"	"	"	"	
Dibenzo (a,h) anthracene	"	ND	-----	0.00500	"	"	"	"	"	
Fluoranthene	"	ND	-----	0.100	"	"	"	"	"	
Fluorene	"	ND	-----	0.100	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	"	ND	-----	0.00500	"	"	"	"	"	
Naphthalene	"	ND	-----	0.100	"	"	"	"	"	
Phenanthrene	"	ND	-----	0.100	"	"	"	"	"	
Pyrene	"	ND	-----	0.100	"	"	"	"	"	
Surrogate(s): *Fluorene-d10*				*105%*		*25 - 125 %*				"
Pyrene-d10				*92.9%*		*23 - 150 %*				"
Benzo (a) pyrene-d12				*98.3%*		*10 - 125 %*				"
PSI0692-02 (B-35)			**Water**			**Sampled: 09/18/09 11:30**				**RL3**
2-Methylnaphthalene	EPA 8270m	ND	-----	0.194	ug/l	2x	9090722	09/22/09 13:35	09/26/09 13:34	
Acenaphthene	"	**4.59**	-----	0.971	"	10x	"	"	09/25/09 23:54	
Acenaphthylene	"	ND	-----	0.971	"	"	"	"	"	**RL1**
Anthracene	"	ND	-----	0.971	"	"	"	"	"	**RL1**
Benzo (a) anthracene	"	**0.0995**	-----	0.00971	"	2x	"	"	09/26/09 13:34	
Benzo (a) pyrene	"	**0.0221**	-----	0.00971	"	"	"	"	"	
Benzo (b) fluoranthene	"	**0.0277**	-----	0.00971	"	"	"	"	"	
Benzo (ghi) perylene	"	ND	-----	0.194	"	"	"	"	"	
Benzo (k) fluoranthene	"	**0.0210**	-----	0.00971	"	"	"	"	"	
Chrysene	"	**0.117**	-----	0.00971	"	"	"	"	"	
Dibenzo (a,h) anthracene	"	ND	-----	0.00971	"	"	"	"	"	
Fluoranthene	"	**0.974**	-----	0.971	"	10x	"	"	09/25/09 23:54	
Fluorene	"	**13.1**	-----	0.971	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	"	ND	-----	0.00971	"	2x	"	"	09/26/09 13:34	

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Estella K Rieben

Estella Rieben, Project Manager

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ARCADIS U.S., Inc	Project Name:	**ConocoPhillips - RI Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	354972 - Willbridge	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/02/09 16:21

Polynuclear Aromatic Compounds per EPA 8270M-SIM

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSI0692-02 (B-35)			Water			Sampled: 09/18/09 11:30				RL3
Naphthalene	EPA 8270m	ND	-----	0.680	ug/l	2x	9090722	09/22/09 13:35	09/26/09 13:34	**RL1**
Phenanthrene	"	**13.2**	-----	0.971	"	10x	"	"	09/25/09 23:54	
Pyrene	"	**0.529**	-----	0.194	"	2x	"	"	09/26/09 13:34	
Surrogate(s): Fluorene-d10				*118%*		*25 - 125 %*			*09/25/09 23:54*	
Pyrene-d10				*69.3%*		*23 - 150 %*			*09/26/09 13:34*	
Benzo (a) pyrene-d12				*81.5%*		*10 - 125 %*			"	
PSI0692-03 (B-36)			Water			Sampled: 09/18/09 11:40				
2-Methylnaphthalene	EPA 8270m	ND	-----	0.146	ug/l	1x	9090722	09/22/09 13:35	09/26/09 10:36	**RL1**
Acenaphthene	"	**0.966**	-----	0.485	"	5x	"	"	09/26/09 14:03	
Acenaphthylene	"	ND	-----	0.485	"	"	"	"	"	**RL1**
Anthracene	"	ND	-----	0.485	"	"	"	"	"	**RL1**
Benzo (a) anthracene	"	ND	-----	0.00485	"	1x	"	"	09/26/09 10:36	
Benzo (a) pyrene	"	**0.00542**	-----	0.00485	"	"	"	"	"	
Benzo (b) fluoranthene	"	ND	-----	0.00485	"	"	"	"	"	
Benzo (ghi) perylene	"	ND	-----	0.0971	"	"	"	"	"	
Benzo (k) fluoranthene	"	ND	-----	0.00485	"	"	"	"	"	
Chrysene	"	ND	-----	0.00971	"	"	"	"	"	**RL1**
Dibenzo (a,h) anthracene	"	ND	-----	0.00485	"	"	"	"	"	
Fluoranthene	"	ND	-----	0.485	"	5x	"	"	09/26/09 14:03	**RL1**
Fluorene	"	**2.08**	-----	0.485	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	"	ND	-----	0.00485	"	1x	"	"	09/26/09 10:36	
Naphthalene	"	ND	-----	0.777	"	"	"	"	"	**RL1**
Phenanthrene	"	ND	-----	0.485	"	5x	"	"	09/26/09 14:03	
Pyrene	"	ND	-----	0.0971	"	1x	"	"	09/26/09 10:36	
Surrogate(s): Fluorene-d10				*105%*		*25 - 125 %*			*09/26/09 14:03*	
Pyrene-d10				*67.7%*		*23 - 150 %*			*09/26/09 10:36*	
Benzo (a) pyrene-d12				*93.7%*		*10 - 125 %*			"	
PSI0692-04 (B-37)			Water			Sampled: 09/18/09 12:10				
2-Methylnaphthalene	EPA 8270m	ND	-----	0.0976	ug/l	1x	9090722	09/22/09 13:35	09/26/09 11:05	
Acenaphthene	"	ND	-----	0.0976	"	"	"	"	"	
Acenaphthylene	"	ND	-----	0.0976	"	"	"	"	"	
Anthracene	"	ND	-----	0.0976	"	"	"	"	"	
Benzo (a) anthracene	"	ND	-----	0.00488	"	"	"	"	"	
Benzo (a) pyrene	"	ND	-----	0.00488	"	"	"	"	"	

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Estella K Rieben

Estella Rieben, Project Manager

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111 SW Columbia Street - Suite 725	Project Number:	354972 - Willbridge	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/02/09 16:21

Polynuclear Aromatic Compounds per EPA 8270M-SIM

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSI0692-04 (B-37)			**Water**			**Sampled: 09/18/09 12:10**				
Benzo (b) fluoranthene	EPA 8270m	ND	-----	0.00488	ug/l	1x	9090722	09/22/09 13:35	09/26/09 11:05	
Benzo (ghi) perylene	"	ND	-----	0.0976	"	"	"	"	"	
Benzo (k) fluoranthene	"	ND	-----	0.00488	"	"	"	"	"	
Chrysene	"	ND	-----	0.00488	"	"	"	"	"	
Dibenzo (a,h) anthracene	"	ND	-----	0.00488	"	"	"	"	"	
Fluoranthene	"	ND	-----	0.0976	"	"	"	"	"	
Fluorene	"	ND	-----	0.0976	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	"	ND	-----	0.00488	"	"	"	"	"	
Naphthalene	"	ND	-----	0.146	"	"	"	"	"	RL1
Phenanthrene	"	ND	-----	0.0976	"	"	"	"	"	
Pyrene	"	ND	-----	0.0976	"	"	"	"	"	
Surrogate(s): *Fluorene-d10*				*98.0%*		*25 - 125 %*			"	
Pyrene-d10				*88.6%*		*23 - 150 %*			"	
Benzo (a) pyrene-d12				*97.8%*		*10 - 125 %*			"	
PSI0692-05 (P-1A)			**Water**			**Sampled: 09/18/09 12:15**				
2-Methylnaphthalene	EPA 8270m	ND	-----	0.0971	ug/l	1x	9090722	09/22/09 13:35	09/26/09 11:35	
Acenaphthene	"	ND	-----	0.0971	"	"	"	"	"	
Acenaphthylene	"	ND	-----	0.0971	"	"	"	"	"	
Anthracene	"	ND	-----	0.0971	"	"	"	"	"	
Benzo (a) anthracene	"	ND	-----	0.00485	"	"	"	"	"	
Benzo (a) pyrene	"	ND	-----	0.00485	"	"	"	"	"	
Benzo (b) fluoranthene	"	ND	-----	0.00485	"	"	"	"	"	
Benzo (ghi) perylene	"	ND	-----	0.0971	"	"	"	"	"	
Benzo (k) fluoranthene	"	ND	-----	0.00485	"	"	"	"	"	
Chrysene	"	ND	-----	0.00485	"	"	"	"	"	
Dibenzo (a,h) anthracene	"	ND	-----	0.00485	"	"	"	"	"	
Fluoranthene	"	ND	-----	0.0971	"	"	"	"	"	
Fluorene	"	ND	-----	0.0971	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	"	ND	-----	0.00485	"	"	"	"	"	
Naphthalene	"	ND	-----	0.0971	"	"	"	"	"	
Phenanthrene	"	ND	-----	0.0971	"	"	"	"	"	
Pyrene	"	ND	-----	0.0971	"	"	"	"	"	
Surrogate(s): *Fluorene-d10*				*105%*		*25 - 125 %*			"	
Pyrene-d10				*89.6%*		*23 - 150 %*			"	
Benzo (a) pyrene-d12				*97.5%*		*10 - 125 %*			"	

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Estella K Rieben

Estella Rieben, Project Manager

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111 SW Columbia Street - Suite 725	Project Number:	354972 - Willbridge	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/02/09 16:21

Polynuclear Aromatic Compounds per EPA 8270M-SIM

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSI0692-06 (OF-1)			**Water**			**Sampled: 09/18/09 12:30**				
2-Methylnaphthalene	EPA 8270m	ND	-----	0.485	ug/l	5x	9090722	09/22/09 13:35	09/26/09 14:32	**RL1**
Acenaphthene	"	ND	-----	0.485	"	"	"	"	"	**RL1**
Acenaphthylene	"	ND	-----	0.485	"	"	"	"	"	**RL1**
Anthracene	"	ND	-----	0.485	"	"	"	"	"	**RL1**
Benzo (a) anthracene	"	**0.0123**	-----	0.00485	"	1x	"	"	09/26/09 12:34	
Benzo (a) pyrene	"	**0.00687**	-----	0.00485	"	"	"	"	"	
Benzo (b) fluoranthene	"	**0.00653**	-----	0.00485	"	"	"	"	"	
Benzo (ghi) perylene	"	ND	-----	0.0971	"	"	"	"	"	
Benzo (k) fluoranthene	"	ND	-----	0.00485	"	"	"	"	"	
Chrysene	"	**0.0307**	-----	0.00485	"	"	"	"	"	
Dibenzo (a,h) anthracene	"	ND	-----	0.00485	"	"	"	"	"	
Fluoranthene	"	ND	-----	0.485	"	5x	"	"	09/26/09 14:32	**RL1**
Fluorene	"	ND	-----	0.485	"	"	"	"	"	**RL1**
Indeno (1,2,3-cd) pyrene	"	ND	-----	0.00485	"	1x	"	"	09/26/09 12:34	
Naphthalene	"	ND	-----	0.485	"	5x	"	"	09/26/09 14:32	**RL1**
Phenanthrene	"	ND	-----	0.485	"	"	"	"	"	**RL1**
Pyrene	"	**0.219**	-----	0.0971	"	1x	"	"	09/26/09 12:34	
Surrogate(s):	*Fluorene-d10*			*92.3%*		*25 - 125 %*			*09/26/09 14:32*	
	Pyrene-d10			*63.0%*		*23 - 150 %*			*09/26/09 12:34*	
	Benzo (a) pyrene-d12			*84.6%*		*10 - 125 %*			"	
PSI0692-07 (BD-RI-CO-1)			**Water**			**Sampled: 09/18/09 00:00**				**RL3**
2-Methylnaphthalene	EPA 8270m	ND	-----	0.966	ug/l	10x	9090722	09/22/09 13:35	09/26/09 13:04	**RL1**
Acenaphthene	"	**4.73**	-----	0.966	"	"	"	"	"	
Acenaphthylene	"	ND	-----	0.966	"	"	"	"	"	**RL1**
Anthracene	"	ND	-----	0.966	"	"	"	"	"	**RL1**
Benzo (a) anthracene	"	**0.125**	-----	0.00966	"	2x	"	"	09/26/09 15:02	
Benzo (a) pyrene	"	**0.0285**	-----	0.00966	"	"	"	"	"	
Benzo (b) fluoranthene	"	**0.0361**	-----	0.00966	"	"	"	"	"	
Benzo (ghi) perylene	"	ND	-----	0.193	"	"	"	"	"	
Benzo (k) fluoranthene	"	**0.0276**	-----	0.00966	"	"	"	"	"	
Chrysene	"	**0.145**	-----	0.00966	"	"	"	"	"	
Dibenzo (a,h) anthracene	"	ND	-----	0.00966	"	"	"	"	"	
Fluoranthene	"	**1.12**	-----	0.966	"	10x	"	"	09/26/09 13:04	
Fluorene	"	**13.0**	-----	0.966	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	"	ND	-----	0.00966	"	2x	"	"	09/26/09 15:02	

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Estella K Rieben

Estella Rieben, Project Manager

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111 SW Columbia Street - Suite 725	Project Number:	354972 - Willbridge	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/02/09 16:21

Polynuclear Aromatic Compounds per EPA 8270M-SIM

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSI0692-07 (BD-RI-CO-1)			**Water**			**Sampled: 09/18/09 00:00**				**RL3**
Naphthalene	EPA 8270m	ND	-----	0.966	ug/l	10x	9090722	09/22/09 13:35	09/26/09 13:04	**RL1**
Phenanthrene	"	**14.0**	-----	0.966	"	"	"	"	"	
Pyrene	"	**0.618**	-----	0.193	"	2x	"	"	09/26/09 15:02	
Surrogate(s):	*Fluorene-d10*			*120%*		*25 - 125 %*			*09/26/09 13:04*	
	Pyrene-d10			*75.1%*		*23 - 150 %*			*09/26/09 15:02*	
	Benzo (a) pyrene-d12			*90.6%*		*10 - 125 %*			"	

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111 SW Columbia Street - Suite 725	Project Number:	354972 - Willbridge	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/02/09 16:21

Gasoline Hydrocarbons per NW TPH-Gx Method - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 9090831 **Water Preparation Method: EPA 5030B**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (9090831-BLK1)							**Extracted: 09/23/09 17:16**							
Gasoline Range Hydrocarbons	NW TPH-Gx	ND	---	80.0	ug/l	1x	--	--	--	--	--	--	09/24/09 16:47	
Surrogate(s): 4-BFB (FID)		*Recovery: 90.3%*			*Limits: 50-150%*								*09/24/09 16:47*	
LCS (9090831-BS1)							**Extracted: 09/23/09 17:16**							
Gasoline Range Hydrocarbons	NW TPH-Gx	410	---	80.0	ug/l	1x	--	500	81.9%	(70-130)	--	--	09/24/09 15:52	
Surrogate(s): 4-BFB (FID)		*Recovery: 109%*			*Limits: 50-150%*								*09/24/09 15:52*	
LCS Dup (9090831-BSD1)							**Extracted: 09/23/09 17:16**							
Gasoline Range Hydrocarbons	NW TPH-Gx	435	---	80.0	ug/l	1x	--	500	87.0%	(70-130)	6.03%	(35)	09/24/09 16:19	
Surrogate(s): 4-BFB (FID)		*Recovery: 111%*			*Limits: 50-150%*								*09/24/09 16:19*	
Duplicate (9090831-DUP1)							**QC Source: PSI0426-02** **Extracted: 09/23/09 17:16**							
Gasoline Range Hydrocarbons	NW TPH-Gx	4240	---	800	ug/l	10x	4050	--	--	--	4.74%	(35)	09/24/09 17:53	QP
Surrogate(s): 4-BFB (FID)		*Recovery: 93.3%*			*Limits: 50-150%*								*09/24/09 17:53*	
Duplicate (9090831-DUP2)							**QC Source: PSI0675-02** **Extracted: 09/23/09 17:16**							
Gasoline Range Hydrocarbons	NW TPH-Gx	104000	---	8000	ug/l	100x	101000	--	--	--	2.22%	(35)	09/24/09 18:48	
Surrogate(s): 4-BFB (FID)		*Recovery: 106%*			*Limits: 50-150%*								*09/24/09 18:48*	

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Estella K Rieben

Estella Rieben, Project Manager

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111 SW Columbia Street - Suite 725	Project Number:	354972 - Willbridge	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/02/09 16:21

Diesel and Heavy Range Hydrocarbons per NWTPH-Dx Method with Acid/Silica Gel Cleanup - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 9090732 **Water Preparation Method: EPA 3510 Fuels**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (9090732-BLK1)								**Extracted: 09/22/09 15:15**						
Diesel Range Organics	NWTPH-Dx	ND	---	0.250	mg/l	1x	--	--	--	--	--	--	09/23/09 18:47	
Heavy Oil Range Hydrocarbons	"	ND	---	0.500	"	"	--	--	--	--	--	--	"	
Surrogate(s): 1-Chlorooctadecane		*Recovery: 102%*			*Limits: 50-150%*								*09/23/09 18:47*	
LCS (9090732-BS1)								**Extracted: 09/22/09 15:15**						
Diesel Range Organics	NWTPH-Dx	2.15	---	0.250	mg/l	1x	--	2.50	86.0%	(50-150)	--	--	09/23/09 19:07	
Heavy Oil Range Hydrocarbons	"	1.45	---	0.500	"	"	--	1.50	96.2%	"	--	--	"	
Surrogate(s): 1-Chlorooctadecane		*Recovery: 98.6%*			*Limits: 50-150%*								*09/23/09 19:07*	
LCS Dup (9090732-BSD1)								**Extracted: 09/22/09 15:15**						
Diesel Range Organics	NWTPH-Dx	2.31	---	0.250	mg/l	1x	--	2.50	92.3%	(50-150)	7.13%	(50)	09/23/09 19:27	
Heavy Oil Range Hydrocarbons	"	1.55	---	0.500	"	"	--	1.50	103%	"	6.65%	"	"	
Surrogate(s): 1-Chlorooctadecane		*Recovery: 105%*			*Limits: 50-150%*								*09/23/09 19:27*	

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Estella Rieben, Project Manager

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PORTLAND, OR 9405 S.W. NIMBUS AVENUE
BEAVERTON, OR 97008-7132
ph: (503) 906.9200 fax: (503) 906.9210

ARCADIS U.S., Inc	Project Name:	**ConocoPhillips - RI Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	354972 - Willbridge	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/02/09 16:21

Total Metals per EPA 6000/7000 Series Methods - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 9090875 **Water Preparation Method: EPA 200/3005**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (9090875-BLK1)								Extracted: 09/24/09 13:29						
Arsenic	EPA 6020	ND	---	0.00100	mg/l	1x	--	--	--	--	--	--	09/26/09 02:51	
Barium	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Cadmium	"	ND	---	0.000500	"	"	--	--	--	--	--	--	"	
Chromium	"	ND	---	0.00200	"	"	--	--	--	--	--	--	"	
Copper	"	ND	---	0.00200	"	"	--	--	--	--	--	--	"	
Lead	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Manganese	"	ND	---	0.00200	"	"	--	--	--	--	--	--	09/26/09 11:54	
Selenium	"	ND	---	0.000500	"	"	--	--	--	--	--	--	09/26/09 02:51	
Silver	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Zinc	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	
LCS (9090875-BS1)								Extracted: 09/24/09 13:29						
Arsenic	EPA 6020	0.0941	---	0.00100	mg/l	1x	--	0.100	94.1%	(80-120)	--	--	09/26/09 02:58	
Barium	"	0.0870	---	0.00100	"	"	--	"	87.0%	"	--	--	"	
Cadmium	"	0.0916	---	0.000500	"	"	--	"	91.6%	"	--	--	"	
Chromium	"	0.0922	---	0.00200	"	"	--	"	92.2%	"	--	--	"	
Copper	"	0.0926	---	0.00200	"	"	--	"	92.6%	"	--	--	"	
Lead	"	0.0966	---	0.00100	"	"	--	"	96.6%	"	--	--	"	
Manganese	"	0.0970	---	0.00200	"	"	--	"	97.0%	"	--	--	09/26/09 12:02	
Selenium	"	0.0926	---	0.000500	"	"	--	"	92.6%	"	--	--	09/26/09 02:58	
Silver	"	0.0475	---	0.00100	"	"	--	0.0500	95.0%	"	--	--	"	
Zinc	"	0.0937	---	0.00500	"	"	--	0.100	93.7%	"	--	--	"	
Duplicate (9090875-DUP1)						QC Source: PSI0633-02			Extracted: 09/24/09 13:29					
Arsenic	EPA 6020	0.00160	---	0.00100	mg/l	1x	0.00172	--	--	--	7.23%	(20)	09/26/09 03:14	
Barium	"	0.0671	---	0.00100	"	"	0.0672	--	--	--	0.0447%	"	"	
Cadmium	"	ND	---	0.000500	"	"	ND	--	--	--	11.8%	"	"	
Chromium	"	ND	---	0.00200	"	"	ND	--	--	--	0.00%	"	"	
Copper	"	ND	---	0.00200	"	"	ND	--	--	--	0.504%	"	"	
Lead	"	ND	---	0.00100	"	"	ND	--	--	--	8.00%	"	"	
Manganese	"	3.83	---	0.0200	"	10x	3.67	--	--	--	4.35%	"	09/26/09 12:18	
Selenium	"	ND	---	0.000500	"	1x	ND	--	--	--	NR	"	09/26/09 03:14	
Silver	"	ND	---	0.00100	"	"	ND	--	--	--	NR	"	"	
Zinc	"	0.0148	---	0.00500	"	"	0.0150	--	--	--	1.41%	"	"	

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Estella K Rieben

Estella Rieben, Project Manager

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ARCADIS U.S., Inc	Project Name:	**ConocoPhillips - RI Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	354972 - Willbridge	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/02/09 16:21

Total Metals per EPA 6000/7000 Series Methods - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 9090875 **Water Preparation Method: EPA 200/3005**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Matrix Spike (9090875-MS1)				**QC Source: PSI0633-02**					**Extracted: 09/24/09 13:29**					
Arsenic	EPA 6020	0.0955	---	0.00100	mg/l	1x	0.00172	0.100	93.8%	(75-125)	--	--	09/26/09 03:30	
Barium	"	0.158	---	0.00100	"	"	0.0672	"	90.4%	"	--	--	"	
Cadmium	"	0.0920	---	0.000500	"	"	0.000360	"	91.6%	"	--	--	"	
Chromium	"	0.0930	---	0.00200	"	"	0.00108	"	92.0%	"	--	--	"	
Copper	"	0.0899	---	0.00200	"	"	0.00199	"	87.9%	"	--	--	"	
Lead	"	0.0907	---	0.00100	"	"	0.000910	"	89.8%	"	--	--	"	
Manganese	"	3.68	---	0.0200	"	10x	3.67	"	13.0%	"	--	--	09/26/09 12:34	MHA
Selenium	"	0.0911	---	0.000500	"	1x	0.000140	"	90.9%	"	--	--	09/26/09 03:30	
Silver	"	0.0464	---	0.00100	"	"	ND	0.0500	92.7%	"	--	--	"	
Zinc	"	0.105	---	0.00500	"	"	0.0150	0.100	90.4%	"	--	--	"	
Matrix Spike (9090875-MS2)				**QC Source: PSI0633-13**					**Extracted: 09/24/09 13:29**					
Arsenic	EPA 6020	0.105	---	0.00100	mg/l	1x	0.0110	0.100	94.1%	(75-125)	--	--	09/26/09 05:12	
Barium	"	0.276	---	0.00100	"	"	0.173	"	102%	"	--	--	"	
Cadmium	"	0.0916	---	0.000500	"	"	ND	"	91.6%	"	--	--	"	
Chromium	"	0.0994	---	0.00200	"	"	0.00689	"	92.6%	"	--	--	"	
Copper	"	0.101	---	0.00200	"	"	0.00825	"	92.6%	"	--	--	"	
Lead	"	0.103	---	0.00100	"	"	0.0110	"	92.1%	"	--	--	"	
Manganese	"	0.487	---	0.0200	"	10x	0.389	"	98.3%	"	--	--	09/26/09 14:16	
Selenium	"	0.0918	---	0.000500	"	1x	0.000130	"	91.7%	"	--	--	09/26/09 05:12	
Silver	"	0.0467	---	0.00100	"	"	ND	0.0500	93.4%	"	--	--	"	
Zinc	"	0.126	---	0.00500	"	"	0.0309	0.100	94.7%	"	--	--	"	

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Estella Rieben, Project Manager

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ARCADIS U.S., Inc	Project Name:	**ConocoPhillips - RI Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	354972 - Willbridge	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/02/09 16:21

Total Metals per EPA 6000/7000 Series Methods - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 9090915 **Water Preparation Method: EPA 200/3005**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (9090915-BLK1)							**Extracted: 09/25/09 11:44**							
Arsenic	EPA 6020	ND	---	0.00100	mg/l	1x	--	--	--	--	--	--	09/26/09 15:04	
Barium	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Cadmium	"	ND	---	0.000500	"	"	--	--	--	--	--	--	"	
Chromium	"	ND	---	0.00200	"	"	--	--	--	--	--	--	"	
Copper	"	ND	---	0.00200	"	"	--	--	--	--	--	--	"	
Lead	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Manganese	"	ND	---	0.00200	"	"	--	--	--	--	--	--	"	
Selenium	"	ND	---	0.000500	"	"	--	--	--	--	--	--	"	
Silver	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Zinc	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	
LCS (9090915-BS1)							**Extracted: 09/25/09 11:44**							
Arsenic	EPA 6020	0.0928	---	0.00100	mg/l	1x	--	0.100	92.8%	(80-120)	--	--	09/26/09 15:11	
Barium	"	0.0916	---	0.00100	"	"	--	"	91.6%	"	--	--	"	
Cadmium	"	0.0903	---	0.000500	"	"	--	"	90.3%	"	--	--	"	
Chromium	"	0.0915	---	0.00200	"	"	--	"	91.5%	"	--	--	"	
Copper	"	0.0914	---	0.00200	"	"	--	"	91.4%	"	--	--	"	
Lead	"	0.0941	---	0.00100	"	"	--	"	94.1%	"	--	--	"	
Manganese	"	0.0950	---	0.00200	"	"	--	"	95.0%	"	--	--	"	
Selenium	"	0.0920	---	0.000500	"	"	--	"	92.0%	"	--	--	"	
Silver	"	0.0471	---	0.00100	"	"	--	0.0500	94.2%	"	--	--	"	
Zinc	"	0.0910	---	0.00500	"	"	--	0.100	91.0%	"	--	--	"	
Duplicate (9090915-DUP1)							**QC Source: PSI0604-02**		**Extracted: 09/25/09 11:44**					
Arsenic	EPA 6020	ND	---	0.00100	mg/l	1x	ND	--	--	--	30.8%	(20)	09/26/09 15:27	R4
Barium	"	0.0154	---	0.00100	"	"	0.0150	--	--	--	2.30%	"	"	
Cadmium	"	ND	---	0.000500	"	"	ND	--	--	--	NR	"	"	
Chromium	"	ND	---	0.00200	"	"	ND	--	--	--	NR	"	"	
Copper	"	ND	---	0.00200	"	"	ND	--	--	--	NR	"	"	
Lead	"	ND	---	0.00100	"	"	ND	--	--	--	NR	"	"	
Manganese	"	0.00364	---	0.00200	"	"	0.00357	--	--	--	1.94%	"	"	
Selenium	"	ND	---	0.000500	"	"	ND	--	--	--	NR	"	"	
Silver	"	ND	---	0.00100	"	"	ND	--	--	--	NR	"	"	
Zinc	"	ND	---	0.00500	"	"	ND	--	--	--	NR	"	"	

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Estella K Rieben

Estella Rieben, Project Manager

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111 SW Columbia Street - Suite 725	Project Number:	354972 - Willbridge	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/02/09 16:21

Total Metals per EPA 6000/7000 Series Methods - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 9090915 **Water Preparation Method: EPA 200/3005**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Matrix Spike (9090915-MS1)				**QC Source: PSI0604-02**					**Extracted: 09/25/09 11:44**					
Arsenic	EPA 6020	0.0950	---	0.00100	mg/l	1x	0.000300	0.100	94.8%	(75-125)	--	--	09/26/09 15:43	
Barium	"	0.109	---	0.00100	"	"	0.0150	"	93.7%	"	--	--	"	
Cadmium	"	0.0926	---	0.000500	"	"	ND	"	92.6%	"	--	--	"	
Chromium	"	0.0916	---	0.00200	"	"	ND	"	91.6%	"	--	--	"	
Copper	"	0.0899	---	0.00200	"	"	0.000300	"	89.6%	"	--	--	"	
Lead	"	0.0944	---	0.00100	"	"	ND	"	94.4%	"	--	--	"	
Manganese	"	0.0987	---	0.00200	"	"	0.00357	"	95.1%	"	--	--	"	
Selenium	"	0.0930	---	0.000500	"	"	0.000130	"	92.9%	"	--	--	"	
Silver	"	0.0476	---	0.00100	"	"	ND	0.0500	95.3%	"	--	--	"	
Zinc	"	0.0919	---	0.00500	"	"	ND	0.100	91.9%	"	--	--	"	
Matrix Spike (9090915-MS2)				**QC Source: PSI0716-03**					**Extracted: 09/25/09 11:44**					
Arsenic	EPA 6020	0.0952	---	0.00100	mg/l	1x	0.00390	0.100	91.3%	(75-125)	--	--	09/26/09 17:24	
Barium	"	0.177	---	0.00100	"	"	0.0848	"	92.4%	"	--	--	"	
Cadmium	"	0.0945	---	0.000500	"	"	0.00128	"	93.2%	"	--	--	"	
Chromium	"	1.19	---	0.00400	"	2x	1.07	"	122%	"	--	--	09/29/09 08:50	
Copper	"	0.209	---	0.00200	"	1x	0.126	"	83.0%	"	--	--	09/26/09 17:24	
Lead	"	0.136	---	0.00100	"	"	0.0443	"	91.6%	"	--	--	"	
Manganese	"	0.654	---	0.00200	"	"	0.570	"	83.4%	"	--	--	"	
Selenium	"	0.101	---	0.000500	"	"	0.00242	"	98.6%	"	--	--	"	
Silver	"	0.0454	---	0.00100	"	"	0.000220	0.0500	90.4%	"	--	--	"	

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ARCADIS U.S., Inc	Project Name:	**ConocoPhillips - RI Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	354972 - Willbridge	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/02/09 16:21

Mercury per EPA Method 1631E - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 9091041 **Water Preparation Method: EPA 1631**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (9091041-BLK1)								**Extracted: 09/29/09 16:28**						
Mercury	EPA 1631 Mod.	ND	---	0.00500	ug/l	1x	--	--	--	--	--	--	09/30/09 13:37	
LCS (9091041-BS1)								**Extracted: 09/29/09 16:28**						
Mercury	EPA 1631 Mod.	0.0518	---	0.00500	ug/l	1x	--	0.0500	104%	(85-115)	--	--	09/30/09 13:41	
LCS Dup (9091041-BSD1)								**Extracted: 09/29/09 16:28**						
Mercury	EPA 1631 Mod.	0.0494	---	0.00500	ug/l	1x	--	0.0500	98.8%	(85-115)	4.80%	(20)	09/30/09 13:44	
Duplicate (9091041-DUP1)					**QC Source: PSI0604-02**				**Extracted: 09/29/09 16:28**					
Mercury	EPA 1631 Mod.	ND	---	0.00500	ug/l	1x	ND	--	--	--	NR	(20)	09/30/09 13:48	
Matrix Spike (9091041-MS1)					**QC Source: PSI0604-02**				**Extracted: 09/29/09 16:28**					
Mercury	EPA 1631 Mod.	0.0544	---	0.00500	ug/l	1x	ND	0.0500	109%	(71-125)	--	--	09/30/09 13:52	
Matrix Spike (9091041-MS2)					**QC Source: PSI0840-01**				**Extracted: 09/29/09 16:28**					
Mercury	EPA 1631 Mod.	0.0503	---	0.00500	ug/l	1x	0.00942	0.0500	81.8%	(71-125)	--	--	09/30/09 13:59	
Matrix Spike Dup (9091041-MSD1)					**QC Source: PSI0604-02**				**Extracted: 09/29/09 16:28**					
Mercury	EPA 1631 Mod.	0.0496	---	0.00500	ug/l	1x	ND	0.0500	99.2%	(71-125)	9.27%	(20)	09/30/09 13:55	
Matrix Spike Dup (9091041-MSD2)					**QC Source: PSI0840-01**				**Extracted: 09/29/09 16:28**					
Mercury	EPA 1631 Mod.	0.0512	---	0.00500	ug/l	1x	0.00942	0.0500	83.5%	(71-125)	1.68%	(20)	09/30/09 14:03	

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Estella K Rieben

Estella Rieben, Project Manager

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111 SW Columbia Street - Suite 725	Project Number:	354972 - Willbridge	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/02/09 16:21

Selected Volatile Organic Compounds (Including BTEX) per EPA Method 8260B - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 9090770 **Water Preparation Method: EPA 5030B**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (9090770-BLK1)							**Extracted: 09/22/09 13:00**							
Methyl tert-butyl ether	EPA 8260B	ND	---	1.00	ug/l	1x	--	--	--	--	--	--	09/22/09 14:59	
Benzene	"	ND	---	0.200	"	"	--	--	--	--	--	--	"	
1,2-Dichloroethane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Toluene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,2-Dibromoethane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Ethylbenzene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
m,p-Xylene	"	ND	---	2.00	"	"	--	--	--	--	--	--	"	
o-Xylene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Isopropylbenzene	"	ND	---	2.00	"	"	--	--	--	--	--	--	"	
n-Propylbenzene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,3,5-Trimethylbenzene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,2,4-Trimethylbenzene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Naphthalene	"	ND	---	2.00	"	"	--	--	--	--	--	--	"	
Surrogate(s):	*Dibromofluoromethane*	*Recovery:*	*104%*		*Limits:*	*80-120%*							*09/22/09 14:59*	
	1,2-DCA-d4		*103%*			*80-120%*							"	
	Toluene-d8		*104%*			*80-120%*							"	
	4-BFB		*118%*			*80-120%*							"	
LCS (9090770-BS1)							**Extracted: 09/22/09 13:00**							
Methyl tert-butyl ether	EPA 8260B	21.2	---	1.00	ug/l	1x	--	20.0	106%	(80-129)	--	--	09/22/09 13:49	
Benzene	"	21.4	---	0.200	"	"	--	"	107%	(80-120)	--	--	"	
1,2-Dichloroethane	"	21.6	---	1.00	"	"	--	"	108%	(78-123)	--	--	"	
Toluene	"	22.9	---	1.00	"	"	--	"	114%	(80-124)	--	--	"	
1,2-Dibromoethane	"	23.4	---	1.00	"	"	--	"	117%	(80-122)	--	--	"	
Ethylbenzene	"	20.7	---	1.00	"	"	--	"	104%	(80-120)	--	--	"	
m,p-Xylene	"	42.1	---	2.00	"	"	--	40.0	105%	(72-127)	--	--	"	
o-Xylene	"	20.8	---	1.00	"	"	--	20.0	104%	(77-123)	--	--	"	
Isopropylbenzene	"	20.6	---	2.00	"	"	--	"	103%	(77-124)	--	--	"	
n-Propylbenzene	"	20.9	---	1.00	"	"	--	"	105%	(76-128)	--	--	"	
1,3,5-Trimethylbenzene	"	21.0	---	1.00	"	"	--	"	105%	(75-132)	--	--	"	
1,2,4-Trimethylbenzene	"	21.0	---	1.00	"	"	--	"	105%	(73-132)	--	--	"	
Naphthalene	"	17.1	---	2.00	"	"	--	"	85.7%	(72-149)	--	--	"	
Surrogate(s):	*Dibromofluoromethane*	*Recovery:*	*96.6%*		*Limits:*	*80-120%*							*09/22/09 13:49*	
	1,2-DCA-d4		*96.8%*			*80-120%*							"	
	Toluene-d8		*102%*			*80-120%*							"	
	4-BFB		*105%*			*80-120%*							"	

TestAmerica Portland

Estella K Rieben

Estella Rieben, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

PORTLAND, OR 9405 S.W. NIMBUS AVENUE
BEAVERTON, OR 97008-7132
ph: (503) 906.9200 fax: (503) 906.9210

ARCADIS U.S., Inc	Project Name:	**ConocoPhillips - RI Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	354972 - Willbridge	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/02/09 16:21

Selected Volatile Organic Compounds (Including BTEX) per EPA Method 8260B - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 9090770 **Water Preparation Method: EPA 5030B**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
LCS Dup (9090770-BSD1)								**Extracted: 09/22/09 13:00**						
Methyl tert-butyl ether	EPA 8260B	22.5	---	1.00	ug/l	1x	--	20.0	112%	(80-129)	5.72%	(25)	09/22/09 14:13	
Benzene	"	22.4	---	0.200	"	"	--	"	112%	(80-120)	4.44%	"	"	
1,2-Dichloroethane	"	22.9	---	1.00	"	"	--	"	114%	(78-123)	5.99%	"	"	
Toluene	"	23.2	---	1.00	"	"	--	"	116%	(80-124)	1.52%	"	"	
1,2-Dibromoethane	"	23.5	---	1.00	"	"	--	"	118%	(80-122)	0.512%	"	"	
Ethylbenzene	"	21.5	---	1.00	"	"	--	"	107%	(80-120)	3.51%	"	"	
m,p-Xylene	"	42.9	---	2.00	"	"	--	40.0	107%	(72-127)	1.93%	"	"	
o-Xylene	"	22.0	---	1.00	"	"	--	20.0	110%	(77-123)	5.28%	"	"	
Isopropylbenzene	"	21.5	---	2.00	"	"	--	"	108%	(77-124)	4.37%	"	"	
n-Propylbenzene	"	22.3	---	1.00	"	"	--	"	112%	(76-128)	6.56%	"	"	
1,3,5-Trimethylbenzene	"	22.4	---	1.00	"	"	--	"	112%	(75-132)	6.37%	"	"	
1,2,4-Trimethylbenzene	"	22.5	---	1.00	"	"	--	"	113%	(73-132)	7.22%	"	"	
Naphthalene	"	19.0	---	2.00	"	"	--	"	95.2%	(72-149)	10.6%	"	"	

Surrogate(s):	*Dibromofluoromethane*	*Recovery:*	*98.6%*	*Limits: 80-120%*	*09/22/09 14:13*
	1,2-DCA-d4		*99.4%*	*80-120%*	"
	Toluene-d8		*102%*	*80-120%*	"
	4-BFB		*107%*	*80-120%*	"

TestAmerica Portland

Estella K Rieben

Estella Rieben, Project Manager

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PORTLAND, OR 9405 S.W. NIMBUS AVENUE
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ph: (503) 906.9200 fax: (503) 906.9210

ARCADIS U.S., Inc	Project Name:	**ConocoPhillips - RI Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	354972 - Willbridge	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/02/09 16:21

Polynuclear Aromatic Compounds per EPA 8270M-SIM - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 9090722 **Water Preparation Method: 3520B Liq-Liq**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (9090722-BLK1)							**Extracted: 09/22/09 13:35**							
2-Methylnaphthalene	EPA 8270m	ND	---	0.100	ug/l	1x	--	--	--	--	--	--	09/25/09 13:42	
Acenaphthene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Acenaphthylene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Anthracene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Benzo (a) anthracene	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	
Benzo (a) pyrene	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	
Benzo (b) fluoranthene	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	
Benzo (ghi) perylene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Benzo (k) fluoranthene	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	
Chrysene	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	
Dibenzo (a,h) anthracene	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	
Fluoranthene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Fluorene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Indeno (1,2,3-cd) pyrene	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	
Naphthalene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Phenanthrene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Pyrene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Surrogate(s): Fluorene-d10		*Recovery: 91.6%*			*Limits: 25-125%*								*09/25/09 13:42*	
Pyrene-d10		*99.2%*			*23-150%*								"	
Benzo (a) pyrene-d12		*99.9%*			*10-125%*								"	
LCS (9090722-BS1)							**Extracted: 09/22/09 13:35**							
Acenaphthene	EPA 8270m	1.14	---	0.100	ug/l	1x	--	1.25	91.3%	(26-135)	--	--	09/25/09 14:11	
Benzo (a) pyrene	"	1.20	---	0.00500	"	"	--	"	95.8%	(38-137)	--	--	"	
Pyrene	"	1.22	---	0.100	"	"	--	"	97.4%	(30-147)	--	--	"	
Surrogate(s): Fluorene-d10		*Recovery: 92.2%*			*Limits: 25-125%*								*09/25/09 14:11*	
Pyrene-d10		*96.8%*			*23-150%*								"	
Benzo (a) pyrene-d12		*102%*			*10-125%*								"	
LCS Dup (9090722-BSD1)							**Extracted: 09/22/09 13:35**							
Acenaphthene	EPA 8270m	1.08	---	0.100	ug/l	1x	--	1.25	86.7%	(26-135)	5.20%	(50)	09/25/09 14:41	
Benzo (a) pyrene	"	1.14	---	0.00500	"	"	--	"	91.1%	(38-137)	4.97%	"	"	
Pyrene	"	1.16	---	0.100	"	"	--	"	92.8%	(30-147)	4.78%	"	"	
Surrogate(s): Fluorene-d10		*Recovery: 87.5%*			*Limits: 25-125%*								*09/25/09 14:41*	
Pyrene-d10		*94.7%*			*23-150%*								"	
Benzo (a) pyrene-d12		*100%*			*10-125%*								"	

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Estella Rieben, Project Manager

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THE LEADER IN ENVIRONMENTAL TESTING

PORTLAND, OR 9405 S.W. NIMBUS AVENUE
BEAVERTON, OR 97008-7132
ph: (503) 906.9200 fax: (503) 906.9210

ARCADIS U.S., Inc	Project Name:	**ConocoPhillips - RI Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	354972 - Willbridge	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/02/09 16:21

Notes and Definitions

Report Specific Notes:

MHA	-	Due to high levels of analyte in the sample, the MS/MSD calculation does not provide useful spike recovery information. See Blank Spike (LCS).
Q10	-	Hydrocarbon pattern most closely resembles a blend of heavy gasoline/light diesel range components.
Q7	-	The heavy oil range organics present are due to hydrocarbons eluting primarily in the diesel range.
Q9	-	Hydrocarbon pattern most closely resembles weathered diesel.
QP	-	Hydrocarbon result partly due to individual peak(s) in quantitation range.
R4	-	Due to the low levels of analyte in the sample, the duplicate RPD calculation does not provide useful information.
RL1	-	Reporting limit raised due to sample matrix effects.
RL3	-	Reporting limit raised due to high concentrations of non-target analytes.
ZX	-	Due to sample matrix effects, the surrogate recovery was outside the acceptance limits.

Laboratory Reporting Conventions:

DET	-	Analyte DETECTED at or above the Reporting Limit. Qualitative Analyses only.
ND	-	Analyte NOT DETECTED at or above the reporting limit (MDL or MRL, as appropriate).
NR/NA	-	Not Reported / Not Available
dry	-	Sample results reported on a Dry Weight Basis. Results and Reporting Limits have been corrected for Percent Dry Weight.
wet	-	Sample results and reporting limits reported on a Wet Weight Basis (as received). Results with neither 'wet' nor 'dry' are reported on a Wet Weight Basis.
RPD	-	RELATIVE PERCENT DIFFERENCE (RPDs calculated using Results, not Percent Recoveries).
MRL	-	METHOD REPORTING LIMIT. Reporting Level at, or above, the lowest level standard of the Calibration Table.
MDL*	-	METHOD DETECTION LIMIT. Reporting Level at, or above, the statistically derived limit based on 40CFR, Part 136, Appendix B. *MDLs are listed on the report only if the data has been evaluated below the MRL. Results between the MDL and MRL are reported as Estimated Results.
Dil	-	Dilutions are calculated based on deviations from the standard dilution performed for an analysis, and may not represent the dilution found on the analytical raw data.
Reporting Limits	-	Reporting limits (MDLs and MRLs) are adjusted based on variations in sample preparation amounts, analytical dilutions and percent solids, where applicable.
Electronic Signature	-	Electronic Signature added in accordance with TestAmerica's *Electronic Reporting and Electronic Signatures Policy*. Application of electronic signature indicates that the report has been reviewed and approved for release by the laboratory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

TestAmerica Portland

Estella K Rieben

Estella Rieben, Project Manager

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THE LEADER IN ENVIRONMENTAL TESTING

11720 North Creek Pkwy N Suite 400, Bothell, WA 98011-8244 425-420-9200 FAX 420-9210
11922 E. First Ave, Spokane, WA 99206-5302 509-924-9200 FAX 924-9290
9405 SW Nimbus Ave,Beaverton, OR 97008-7145 503-906-9200 FAX 906-9210
2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119 907-563-9200 FAX 563-9210

CHAIN OF CUSTODY REPORT

Work Order #: PSI0692

CLIENT: ARCADIS

REPORT TO: 111 SW Columbia St. Suite 725
ADDRESS: Portland OR

PHONE: (503) 220 8201 FAX: (503) 220-8209

INVOICE TO: Jason Nail

P.O. NUMBER:

PROJECT NAME: Conoco Willbridge terminal
PROJECT NUMBER: 354975
SAMPLED BY: CP/MO

TURNAROUND REQUEST in Business Days *

Organic & Inorganic Analyses: 10 STD | 7 | 5 | 4 | 3 | 2 | 1 | <1

Petroleum Hydrocarbon Analyses: 5 STD. | 4 | 3 | 2 | 1 | <1

OTHER Specify:

* Turnaround Requests less than standard may incur Rush Charges.

	CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME	PRESERVATIVE							MATRIX (W, S, O)	# OF CONT.	LOCATION/ COMMENTS	TA WO ID
			HCL	HCL	HCL	–	HNO_3	HCL					
			NWTPH Gx w/ Silica	NWTPH Dx w/ Silica	VOCs 8260B	PAH's 8270C	Total metals	Low Level Hg					
1	EB-R1-CO-1	9/18/09 / 1200	3	2	3	2	1	1		W	12		
2	B-35	9/18/09 / 1130	3	2	3	2	1	1		W	12		
3	B-36	9/18/09 / 1140	3	2	3	2	1	1		W	12		
4	B-37	9/18/09 / 1210	3	2	3	2	1	1		W	12		
5	P-1A	9/18/09 / 1215	3	2	3	2	1	1		W	12		
6	OF-1	9/18/09 / 1230	3	2	3	2	1	1		W	12		
7	BD-R1-CO-1	9/18/09 –	3	2	3	2	1	1		W	12		
8	TB-268	9/18/09 –			1					W	1		
9													
10													

RELEASED BY: [signature] DATE: 9/18/09
PRINT NAME: Cole Petrucci FIRM: ARCADIS TIME: 1445

RECEIVED BY: [signature]
PRINT NAME: KAREN WILSON FIRM: TA-P DATE: 9-18-09 TIME: 1445

RELEASED BY: DATE:
PRINT NAME: FIRM: TIME:

RECEIVED BY: DATE:
PRINT NAME: FIRM: TIME:

ADDITIONAL REMARKS:

TEMP: 16.9° 12.9° 17.5° C

PAGE OF

TAL-1000(0408)

Conoco Phillips R1 wells

COP0017947

TestAmerica Portland

Sample Receiving Checklist

Work Order #: PSI0692 Date/Time Received: 1/5/09 14:45

Client Name and Project: Arcadis Conoco Willbridge RI

Time Zone:

☐EDT/EST ☐CDT/CST ☐MDT/MST ☒PDT/PST ☐AK ☐OTHER

Unpacking Checks:

Cooler #(s): 1 2 3 ____ ____

Temperatures: 16.9 12.9 17.5 ____ ____

Digi #1 ☐ Digi #2 ☐ IR Gun ☒ (☐Plastic ☒Glass)

Temperature out of Range:

__Not enough or No Ice

__Ice Melted

☒W/in 4 Hrs of collection

__Other:_____

Initials: KH

N/A	Yes	No	
☒	☐	☐	1. If ESI client, were temp blanks received? If no, document on NOD.
☒	☐	☐	2. Cooler Seals intact? (N/A if hand delivered) if no, document on NOD.
	☒	☐	3. Chain of Custody present? If no, document on NOD.
	☒	☐	4. Bottles received intact? If no, document on NOD.
	☒	☐	5. Sample is not multiphasic? If no, document on NOD.
	☒	☐	6. Proper Container and preservatives used? If no, document on NOD.
☐	☒	☐	7. pH of all samples checked and meet requirements? If no, document on NOD.
☒	☐	☐	8. Cyanide samples checked for sulfides and meet requirements? If no, notify PM.
☒	☐	☐	9. HF Dilution required?
	☒	☐	10. Sufficient volume provided for all analysis? If no, document on NOD and consult PM before proceeding.
	☒	☐	11. Did chain of custody agree with samples received? If no, document on NOD.
	☒	☐	12. Is the "Sampled by" section of the COC completed?
☐	☒	☐	13. Were VOA/Oil Syringe samples without headspace? TB was bubbles
☐	☒	☐	14. Were VOA vials preserved? ☒HCl ☐Sodium Thiosulfate ☐Ascorbic Acid
	☐	☒	15. Did samples require preservation with sodium thiosulfate?
☒	☐	☐	16. If yes to #14, was the residual chlorine test negative? If no, document on NOD.
☒	☐	☐	17. Are dissolved/field filtered metals bottles sediment-free? If no, document on NOD.
☒	☐	☐	18. Is sufficient volume provided for client requested MS/MSD or matrix duplicates? If no, document on NOD and contact PM before proceeding.
☒	☐	☐	19. Are analyses with short holding times received in hold?
	☒	☐	20. Was Standard Turn Around (TAT) requested?
	☒	☐	21. Receipt date(s) < 48 hours past the collection date(s)? If no, notify PM.

TestAmerica Portland

Sample Receiving Checklist

Work Order #: PSI0692

Login Checks:

Initials: PS

N/A	Yes	No	
	☑	☐	22. Sufficient volume provided for all analysis? If no, document on NOD & contact PM.
☑	☐	☐	23. Sufficient volume provided for client requested MS/MSD or matrix duplicates? If no, document on NOD and contact PM.
	☑	☐	24. Did the chain of custody include "received by" and "relinquished by" signatures, dates and times?
☑	☐	☐	25. Were special log in instructions read and followed?
	☑	☐	26. Were tests logged checked against the COC?
☑	☐	☐	27. Were rush notices printed and delivered?
☑	☐	☐	28. Were short hold notices printed and delivered?
☑	☐	☐	29. Were subcontract COCs printed?
☑	☐	☐	30. Was HF dilution logged?

Labeling and Storage Checks:

Initials: PS

N/A	Yes	No	
☑	☐	☐	31. Were the subcontracted samples/containers put in Sx fridge?
☑	☐	☐	32. Were sample bottles and COC double checked for dissolved/filtered metals?
	☑	☐	33. Did the sample ID, Date, and Time from label match what was logged?
☑	☐	☐	34. Were Foreign sample stickers affixed to each container and containers stored in foreign fridge?
☑	☐	☐	35. Were HF stickers affixed to each container, and containers stored in Sx fridge?
☐	☑	☐	36. Was an NOD for created for noted discrepancies and placed in folder?

Document any problems or discrepancies and the actions taken to resolve them on a Notice of Discrepancy form (NOD).

COP0017949

October 13, 2009

Rick Fetterly
Stantec
7730 SW Mohawk Street
Tualatin, OR 97062

RE: Project: 00922 - Oregon COP
Pace Project No.: 252156

Dear Rick Fetterly:
Enclosed are the analytical results for sample(s) received by the laboratory on September 23, 2009. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

One of six VOA vials for U-18 were out of EPA compliance for headspace. The client was notified on 09/24/09 via email of the sample acknowledgement form.

The method blank extracted and analyzed for PAH SIM had target analyte detection greater than the reporting limit. The samples were re-extracted beyond the holding time.

The method blank associated with the re-extraction also had low level hits. The PAH SIM results from the first extraction, which is within the holding time, are being provided within this report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Neeleshma Jyothi Swamy for
Jennifer Gross
jennifer.gross@pacelabs.com
Project Manager

REPORT OF LABORATORY ANALYSIS

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Enclosures

cc: Chris Carlton-Franco, Stantec
Bill Edmund, COP_Stantec Washington
Janet Nash, Stantec

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CERTIFICATIONS

Project: 00922 - Oregon COP
Pace Project No.: 252156

Minnesota Certification IDs

North Carolina Certification #: 530
Arizona Certification #: AZ-0014
California Certification #: 01155CA
Florida/NELAP Certification #: E87605
Illinois Certification #: 200011
Iowa Certification #: 368
Kansas Certification #: E-10167
Wisconsin Certification #: 999407970
Washington Certification #: C754
Tennessee Certification #: 02818
Pennsylvania Certification #: 68-00563
Oregon Certification #: MN200001
North Dakota Certification #: R-036
Alaska Certification #: UST-078
New York Certification #: 11647
New Jersey Certification #: MN-002
Montana Certification #: MT CERT0092
Minnesota Certification #: 027-053-137
Maine Certification #: 2007029
Louisiana Certification #: LA080009
Louisiana Certification #: 03086

Washington Certification IDs

Alaska CS Certification #: UST-025
Alaska Drinking Water VOC Certification #: WA01-09
Alaska Drinking Water Micro Certification #: WA01230
California Certification #: 01153CA
Florida/NELAP Certification #: E87617
Oregon Certification #: WA200007
Washington Certification #: C1229

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SAMPLE SUMMARY

Project: 00922 - Oregon COP
Pace Project No.: 252156

Lab ID	Sample ID	Matrix	Date Collected	Date Received
252156001	**U-2**	Water	09/21/09 09:55	09/23/09 07:10
252156002	**U-15**	Water	09/21/09 10:45	09/23/09 07:10
252156003	**U-16**	Water	09/21/09 12:35	09/23/09 07:10
252156004	**U-17**	Water	09/21/09 11:55	09/23/09 07:10
252156005	**U-18**	Water	09/22/09 10:31	09/23/09 07:10
252156006	**U-20**	Water	09/21/09 14:35	09/23/09 07:10
252156007	**U-21**	Water	09/22/09 13:00	09/23/09 07:10
252156008	**U-14**	Water	09/22/09 12:00	09/23/09 07:10
252156009	**TB**	Water	09/22/09 00:00	09/23/09 07:10

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SAMPLE ANALYTE COUNT

Project: 00922 - Oregon COP
Pace Project No.: 252156

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
252156001	**U-2**	EPA 5030B/8260	ATH	9	PASI-S
		EPA 6020	RJS	10	PASI-M
		EPA 7470	TEM	1	PASI-M
		EPA 8270 by SIM	JMW	21	PASI-S
		NWTPH-Dx	ATH	4	PASI-S
		NWTPH-Gx	ATH	3	PASI-S
252156002	**U-15**	EPA 5030B/8260	ATH	9	PASI-S
		EPA 6020	RJS	10	PASI-M
		EPA 7470	TEM	1	PASI-M
		EPA 8270 by SIM	JMW	21	PASI-S
		NWTPH-Dx	ATH	4	PASI-S
		NWTPH-Gx	ATH	3	PASI-S
252156003	**U-16**	EPA 5030B/8260	ATH	9	PASI-S
		EPA 6020	RJS	10	PASI-M
		EPA 7470	TEM	1	PASI-M
		EPA 8270 by SIM	JMW	21	PASI-S
		NWTPH-Dx	ATH	4	PASI-S
		NWTPH-Gx	ATH	3	PASI-S
252156004	**U-17**	EPA 5030B/8260	ATH	9	PASI-S
		EPA 6020	RJS	10	PASI-M
		EPA 7470	TEM	1	PASI-M
		EPA 8270 by SIM	JMW	21	PASI-S
		NWTPH-Dx	ATH	4	PASI-S
		NWTPH-Gx	ATH	3	PASI-S
252156005	**U-18**	EPA 5030B/8260	ATH	9	PASI-S
		EPA 6020	RJS	10	PASI-M
		EPA 7470	TEM	1	PASI-M
		EPA 8270 by SIM	JMW	21	PASI-S
		NWTPH-Dx	ATH	4	PASI-S
		NWTPH-Gx	ATH	3	PASI-S
252156006	**U-20**	EPA 5030B/8260	ATH	9	PASI-S
		EPA 6020	RJS	10	PASI-M
		EPA 7470	TEM	1	PASI-M
		EPA 8270 by SIM	JMW	21	PASI-S
		NWTPH-Dx	ATH	4	PASI-S
		NWTPH-Gx	ATH	3	PASI-S
252156007	**U-21**	EPA 5030B/8260	LPM	9	PASI-S

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SAMPLE ANALYTE COUNT

Project: 00922 - Oregon COP
Pace Project No.: 252156

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 6020	RJS	10	PASI-M
		EPA 7470	TEM	1	PASI-M
		EPA 8270 by SIM	JMW	21	PASI-S
		NWTPH-Dx	ATH	4	PASI-S
		NWTPH-Gx	ATH	3	PASI-S
252156008	**U-14**	EPA 5030B/8260	LPM	9	PASI-S
		EPA 6020	RJS	10	PASI-M
		EPA 7470	TEM	1	PASI-M
		EPA 8270 by SIM	JMW	21	PASI-S
		NWTPH-Dx	ATH	4	PASI-S
		NWTPH-Gx	ATH	3	PASI-S
252156009	**TB**	EPA 5030B/8260	LPM	9	PASI-S
		NWTPH-Gx	ATH	3	PASI-S

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ANALYTICAL RESULTS

Project: 00922 - Oregon COP
Pace Project No.: 252156

Sample: U-2 **Lab ID: 252156001** Collected: 09/21/09 09:55 Received: 09/23/09 07:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Dx GCS	Analytical Method: NWTPH-Dx Preparation Method: EPA 3510								
Diesel Range SG	**0.042J**	mg/L	0.076	0.035	1	09/28/09 16:00	09/30/09 18:19		
Motor Oil Range SG	**0.24J**	mg/L	0.38	0.058	1	09/28/09 16:00	09/30/09 18:19	64742-65-0	
n-Octacosane (S) SG	111	%	50-150		1	09/28/09 16:00	09/30/09 18:19	630-02-4	
o-Terphenyl (S) SG	109	%	50-150		1	09/28/09 16:00	09/30/09 18:19	84-15-1	
NWTPH-Gx GCV	Analytical Method: NWTPH-Gx								
Gasoline Range Organics	**112**	ug/L	50.0	13.4	1		09/25/09 12:31		
a,a,a-Trifluorotoluene (S)	126	%	50-150		1		09/25/09 12:31	98-08-8	
4-Bromofluorobenzene (S)	110	%	50-150		1		09/25/09 12:31	460-00-4	
6020 MET ICPMS	Analytical Method: EPA 6020								
Arsenic	**7.7**	ug/L	0.50	0.25	1	10/03/09 08:29	10/07/09 12:33	7440-38-2	
Barium	**34.3**	ug/L	0.30	0.15	1	10/03/09 08:29	10/07/09 12:33	7440-39-3	
Cadmium	**0.091**	ug/L	0.080	0.040	1	10/03/09 08:29	10/07/09 12:33	7440-43-9	
Chromium	ND	ug/L	0.50	0.25	1	10/03/09 08:29	10/07/09 12:33	7440-47-3	
Copper	**0.86**	ug/L	0.50	0.25	1	10/03/09 08:29	10/07/09 12:33	7440-50-8	
Lead	**0.66**	ug/L	0.10	0.050	1	10/03/09 08:29	10/07/09 12:33	7439-92-1	
Manganese	**3570**	ug/L	12.5	6.2	25	10/03/09 08:29	10/07/09 12:46	7439-96-5	M1
Selenium	ND	ug/L	0.50	0.25	1	10/03/09 08:29	10/07/09 12:33	7782-49-2	
Silver	ND	ug/L	0.50	0.25	1	10/03/09 08:29	10/07/09 12:33	7440-22-4	
Zinc	**5.7**	ug/L	5.0	2.5	1	10/03/09 08:29	10/07/09 12:33	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470								
Mercury	ND	ug/L	0.20	0.10	1	10/06/09 19:52	10/07/09 12:02	7439-97-6	
8270 MSSV Low Level PAH SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
1-Methylnaphthalene	**0.13**	ug/L	0.0096	0.0038	1	09/28/09 11:00	09/29/09 20:37	90-12-0	Z2
2-Methylnaphthalene	**0.018**	ug/L	0.0096	0.0038	1	09/28/09 11:00	09/29/09 20:37	91-57-6	Z2
Acenaphthene	**0.019**	ug/L	0.0096	0.0016	1	09/28/09 11:00	09/29/09 20:37	83-32-9	Z2
Acenaphthylene	ND	ug/L	0.0096	0.0038	1	09/28/09 11:00	09/29/09 20:37	208-96-8	
Anthracene	**0.0067J**	ug/L	0.0096	0.0018	1	09/28/09 11:00	09/29/09 20:37	120-12-7	Z2
Benzo(a)anthracene	**0.021**	ug/L	0.0096	0.0078	1	09/28/09 11:00	09/29/09 20:37	56-55-3	
Benzo(a)pyrene	**0.053**	ug/L	0.0096	0.0047	1	09/28/09 11:00	09/29/09 20:37	50-32-8	Z2
Benzo(b)fluoranthene	**0.094**	ug/L	0.0096	0.0048	1	09/28/09 11:00	09/29/09 20:37	205-99-2	Z2
Benzo(g,h,i)perylene	**0.022**	ug/L	0.0096	0.0080	1	09/28/09 11:00	09/29/09 20:37	191-24-2	
Benzo(k)fluoranthene	**0.018**	ug/L	0.0096	0.0062	1	09/28/09 11:00	09/29/09 20:37	207-08-9	
Chrysene	**0.017**	ug/L	0.0096	0.0087	1	09/28/09 11:00	09/29/09 20:37	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.0096	0.0076	1	09/28/09 11:00	09/29/09 20:37	53-70-3	
Fluoranthene	**0.034**	ug/L	0.0096	0.0035	1	09/28/09 11:00	09/29/09 20:37	206-44-0	Z2
Fluorene	**0.034**	ug/L	0.0096	0.0018	1	09/28/09 11:00	09/29/09 20:37	86-73-7	Z2
Indeno(1,2,3-cd)pyrene	**0.058**	ug/L	0.0096	0.0096	1	09/28/09 11:00	09/29/09 20:37	193-39-5	
Naphthalene	**0.095**	ug/L	0.0096	0.0094	1	09/28/09 11:00	09/29/09 20:37	91-20-3	
Phenanthrene	**0.029**	ug/L	0.0096	0.0024	1	09/28/09 11:00	09/29/09 20:37	85-01-8	Z2
Pyrene	**0.039**	ug/L	0.0096	0.0029	1	09/28/09 11:00	09/29/09 20:37	129-00-0	Z2
Nitrobenzene-d5 (S)	91	%	22-159		1	09/28/09 11:00	09/29/09 20:37	4165-60-0	

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ANALYTICAL RESULTS

Project: 00922 - Oregon COP
Pace Project No.: 252156

Sample: U-2 **Lab ID: 252156001** Collected: 09/21/09 09:55 Received: 09/23/09 07:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Low Level PAH SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
2-Fluorobiphenyl (S)	71	%	20-138		1	09/28/09 11:00	09/29/09 20:37	321-60-8	
Terphenyl-d14 (S)	92	%	33-160		1	09/28/09 11:00	09/29/09 20:37	1718-51-0	
8260 MSV	Analytical Method: EPA 5030B/8260								
Benzene	**0.25J**	ug/L	1.0	0.12	1		09/29/09 13:25	71-43-2	
Ethylbenzene	ND	ug/L	1.0	0.20	1		09/29/09 13:25	100-41-4	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.16	1		09/29/09 13:25	1634-04-4	
Toluene	ND	ug/L	1.0	0.21	1		09/29/09 13:25	108-88-3	
Xylene (Total)	ND	ug/L	3.0	0.15	1		09/29/09 13:25	1330-20-7	
4-Bromofluorobenzene (S)	104	%	78-125		1		09/29/09 13:25	460-00-4	
Dibromofluoromethane (S)	90	%	87-118		1		09/29/09 13:25	1868-53-7	
1,2-Dichloroethane-d4 (S)	93	%	75-125		1		09/29/09 13:25	17060-07-0	
Toluene-d8 (S)	95	%	85-120		1		09/29/09 13:25	2037-26-5	

Sample: U-15 **Lab ID: 252156002** Collected: 09/21/09 10:45 Received: 09/23/09 07:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Dx GCS	Analytical Method: NWTPH-Dx Preparation Method: EPA 3510								
Diesel Range SG	ND	mg/L	0.076	0.035	1	09/28/09 16:00	09/30/09 18:37		
Motor Oil Range SG	**0.11J**	mg/L	0.38	0.058	1	09/28/09 16:00	09/30/09 18:37	64742-65-0	
n-Octacosane (S) SG	104	%	50-150		1	09/28/09 16:00	09/30/09 18:37	630-02-4	
o-Terphenyl (S) SG	86	%	50-150		1	09/28/09 16:00	09/30/09 18:37	84-15-1	
NWTPH-Gx GCV	Analytical Method: NWTPH-Gx								
Gasoline Range Organics	**22.6J**	ug/L	50.0	13.4	1		09/25/09 13:18		1n
a,a,a-Trifluorotoluene (S)	131	%	50-150		1		09/25/09 13:18	98-08-8	
4-Bromofluorobenzene (S)	117	%	50-150		1		09/25/09 13:18	460-00-4	
6020 MET ICPMS	Analytical Method: EPA 6020								
Arsenic	**58.6**	ug/L	0.50	0.25	1	10/03/09 08:29	10/07/09 12:51	7440-38-2	
Barium	**71.9**	ug/L	0.30	0.15	1	10/03/09 08:29	10/07/09 12:51	7440-39-3	
Cadmium	ND	ug/L	0.080	0.040	1	10/03/09 08:29	10/07/09 12:51	7440-43-9	
Chromium	ND	ug/L	0.50	0.25	1	10/03/09 08:29	10/07/09 12:51	7440-47-3	
Copper	ND	ug/L	0.50	0.25	1	10/03/09 08:29	10/07/09 12:51	7440-50-8	
Lead	**0.45**	ug/L	0.10	0.050	1	10/03/09 08:29	10/07/09 12:51	7439-92-1	
Manganese	**9900**	ug/L	25.0	12.5	50	10/03/09 08:29	10/07/09 12:55	7439-96-5	
Selenium	ND	ug/L	0.50	0.25	1	10/03/09 08:29	10/07/09 12:51	7782-49-2	
Silver	ND	ug/L	0.50	0.25	1	10/03/09 08:29	10/07/09 12:51	7440-22-4	
Zinc	**3.6J**	ug/L	5.0	2.5	1	10/03/09 08:29	10/07/09 12:51	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470								
Mercury	ND	ug/L	0.20	0.10	1	10/06/09 19:52	10/07/09 12:04	7439-97-6	

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ANALYTICAL RESULTS

Project: 00922 - Oregon COP
Pace Project No.: 252156

Sample: U-15 **Lab ID: 252156002** Collected: 09/21/09 10:45 Received: 09/23/09 07:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Low Level PAH SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
1-Methylnaphthalene	**0.024**	ug/L	0.0095	0.0037	1	09/28/09 11:00	09/29/09 20:54	90-12-0	Z2
2-Methylnaphthalene	**0.042**	ug/L	0.0095	0.0037	1	09/28/09 11:00	09/29/09 20:54	91-57-6	Z2
Acenaphthene	**0.0033J**	ug/L	0.0095	0.0016	1	09/28/09 11:00	09/29/09 20:54	83-32-9	Z2
Acenaphthylene	ND	ug/L	0.0095	0.0037	1	09/28/09 11:00	09/29/09 20:54	208-96-8	
Anthracene	**0.0047J**	ug/L	0.0095	0.0018	1	09/28/09 11:00	09/29/09 20:54	120-12-7	Z2
Benzo(a)anthracene	**0.015**	ug/L	0.0095	0.0077	1	09/28/09 11:00	09/29/09 20:54	56-55-3	
Benzo(a)pyrene	**0.046**	ug/L	0.0095	0.0047	1	09/28/09 11:00	09/29/09 20:54	50-32-8	Z2
Benzo(b)fluoranthene	**0.086**	ug/L	0.0095	0.0048	1	09/28/09 11:00	09/29/09 20:54	205-99-2	Z2
Benzo(g,h,i)perylene	**0.013**	ug/L	0.0095	0.0079	1	09/28/09 11:00	09/29/09 20:54	191-24-2	
Benzo(k)fluoranthene	**0.0081J**	ug/L	0.0095	0.0061	1	09/28/09 11:00	09/29/09 20:54	207-08-9	
Chrysene	ND	ug/L	0.0095	0.0086	1	09/28/09 11:00	09/29/09 20:54	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.0095	0.0075	1	09/28/09 11:00	09/29/09 20:54	53-70-3	
Fluoranthene	**0.020**	ug/L	0.0095	0.0034	1	09/28/09 11:00	09/29/09 20:54	206-44-0	Z2
Fluorene	**0.034**	ug/L	0.0095	0.0018	1	09/28/09 11:00	09/29/09 20:54	86-73-7	Z2
Indeno(1,2,3-cd)pyrene	**0.049**	ug/L	0.0095	0.0095	1	09/28/09 11:00	09/29/09 20:54	193-39-5	
Naphthalene	**0.055**	ug/L	0.0095	0.0093	1	09/28/09 11:00	09/29/09 20:54	91-20-3	
Phenanthrene	**0.027**	ug/L	0.0095	0.0024	1	09/28/09 11:00	09/29/09 20:54	85-01-8	Z2
Pyrene	**0.012**	ug/L	0.0095	0.0029	1	09/28/09 11:00	09/29/09 20:54	129-00-0	Z2
Nitrobenzene-d5 (S)	88	%	22-159		1	09/28/09 11:00	09/29/09 20:54	4165-60-0	
2-Fluorobiphenyl (S)	72	%	20-138		1	09/28/09 11:00	09/29/09 20:54	321-60-8	
Terphenyl-d14 (S)	91	%	33-160		1	09/28/09 11:00	09/29/09 20:54	1718-51-0	
8260 MSV	Analytical Method: EPA 5030B/8260								
Benzene	ND	ug/L	1.0	0.12	1		09/29/09 13:48	71-43-2	
Ethylbenzene	ND	ug/L	1.0	0.20	1		09/29/09 13:48	100-41-4	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.16	1		09/29/09 13:48	1634-04-4	
Toluene	ND	ug/L	1.0	0.21	1		09/29/09 13:48	108-88-3	
Xylene (Total)	ND	ug/L	3.0	0.15	1		09/29/09 13:48	1330-20-7	
4-Bromofluorobenzene (S)	101	%	78-125		1		09/29/09 13:48	460-00-4	
Dibromofluoromethane (S)	91	%	87-118		1		09/29/09 13:48	1868-53-7	
1,2-Dichloroethane-d4 (S)	94	%	75-125		1		09/29/09 13:48	17060-07-0	
Toluene-d8 (S)	95	%	85-120		1		09/29/09 13:48	2037-26-5	

Sample: U-16 **Lab ID: 252156003** Collected: 09/21/09 12:35 Received: 09/23/09 07:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Dx GCS	Analytical Method: NWTPH-Dx Preparation Method: EPA 3510								
Diesel Range SG	**0.33**	mg/L	0.076	0.035	1	09/28/09 16:00	09/30/09 18:56		
Motor Oil Range SG	**0.10J**	mg/L	0.38	0.058	1	09/28/09 16:00	09/30/09 18:56	64742-65-0	
n-Octacosane (S) SG	110	%	50-150		1	09/28/09 16:00	09/30/09 18:56	630-02-4	
o-Terphenyl (S) SG	111	%	50-150		1	09/28/09 16:00	09/30/09 18:56	84-15-1	

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ANALYTICAL RESULTS

Project: 00922 - Oregon COP
Pace Project No.: 252156

Sample: U-16 **Lab ID: 252156003** Collected: 09/21/09 12:35 Received: 09/23/09 07:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Gx GCV	Analytical Method: NWTPH-Gx								
Gasoline Range Organics	**1030**	ug/L	50.0	13.4	1		09/25/09 13:41		
a,a,a-Trifluorotoluene (S)	138	%	50-150		1		09/25/09 13:41	98-08-8	
4-Bromofluorobenzene (S)	184	%	50-150		1		09/25/09 13:41	460-00-4	S2
6020 MET ICPMS	Analytical Method: EPA 6020								
Arsenic	**80.2**	ug/L	2.5	1.2	5	10/03/09 08:29	10/08/09 07:22	7440-38-2	
Barium	**101**	ug/L	1.5	0.75	5	10/03/09 08:29	10/08/09 07:22	7440-39-3	
Cadmium	ND	ug/L	0.40	0.20	5	10/03/09 08:29	10/08/09 07:22	7440-43-9	
Chromium	ND	ug/L	2.5	1.2	5	10/03/09 08:29	10/08/09 07:22	7440-47-3	
Copper	ND	ug/L	2.5	1.2	5	10/03/09 08:29	10/08/09 07:22	7440-50-8	
Lead	**0.40J**	ug/L	0.50	0.25	5	10/03/09 08:29	10/08/09 07:22	7439-92-1	
Manganese	**11900**	ug/L	25.0	12.5	50	10/03/09 08:29	10/08/09 07:26	7439-96-5	
Selenium	ND	ug/L	2.5	1.2	5	10/03/09 08:29	10/08/09 07:22	7782-49-2	
Silver	ND	ug/L	2.5	1.2	5	10/03/09 08:29	10/08/09 07:22	7440-22-4	
Zinc	ND	ug/L	25.0	12.5	5	10/03/09 08:29	10/08/09 07:22	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470								
Mercury	ND	ug/L	0.20	0.10	1	10/06/09 19:52	10/07/09 12:08	7439-97-6	
8270 MSSV Low Level PAH SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
1-Methylnaphthalene	**4.5**	ug/L	0.0095	0.0037	1	09/28/09 11:00	09/29/09 21:47	90-12-0	Z2
2-Methylnaphthalene	**0.068**	ug/L	0.0095	0.0037	1	09/28/09 11:00	09/29/09 21:47	91-57-6	Z2
Acenaphthene	**0.55**	ug/L	0.0095	0.0016	1	09/28/09 11:00	09/29/09 21:47	83-32-9	Z2
Acenaphthylene	**0.15**	ug/L	0.0095	0.0037	1	09/28/09 11:00	09/29/09 21:47	208-96-8	
Anthracene	**0.067**	ug/L	0.0095	0.0018	1	09/28/09 11:00	09/29/09 21:47	120-12-7	Z2
Benzo(a)anthracene	ND	ug/L	0.0095	0.0077	1	09/28/09 11:00	09/29/09 21:47	56-55-3	
Benzo(a)pyrene	**0.043**	ug/L	0.0095	0.0046	1	09/28/09 11:00	09/29/09 21:47	50-32-8	Z2
Benzo(b)fluoranthene	**0.081**	ug/L	0.0095	0.0047	1	09/28/09 11:00	09/29/09 21:47	205-99-2	Z2
Benzo(g,h,i)perylene	ND	ug/L	0.0095	0.0079	1	09/28/09 11:00	09/29/09 21:47	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.0095	0.0061	1	09/28/09 11:00	09/29/09 21:47	207-08-9	
Chrysene	ND	ug/L	0.0095	0.0085	1	09/28/09 11:00	09/29/09 21:47	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.0095	0.0075	1	09/28/09 11:00	09/29/09 21:47	53-70-3	
Fluoranthene	**0.039**	ug/L	0.0095	0.0034	1	09/28/09 11:00	09/29/09 21:47	206-44-0	Z2
Fluorene	**1.2**	ug/L	0.0095	0.0018	1	09/28/09 11:00	09/29/09 21:47	86-73-7	Z2
Indeno(1,2,3-cd)pyrene	**0.044**	ug/L	0.0095	0.0095	1	09/28/09 11:00	09/29/09 21:47	193-39-5	
Naphthalene	**0.44**	ug/L	0.0095	0.0093	1	09/28/09 11:00	09/29/09 21:47	91-20-3	
Phenanthrene	**0.15**	ug/L	0.0095	0.0024	1	09/28/09 11:00	09/29/09 21:47	85-01-8	Z2
Pyrene	**0.049**	ug/L	0.0095	0.0028	1	09/28/09 11:00	09/29/09 21:47	129-00-0	Z2
Nitrobenzene-d5 (S)	81	%	22-159		1	09/28/09 11:00	09/29/09 21:47	4165-60-0	
2-Fluorobiphenyl (S)	63	%	20-138		1	09/28/09 11:00	09/29/09 21:47	321-60-8	
Terphenyl-d14 (S)	91	%	33-160		1	09/28/09 11:00	09/29/09 21:47	1718-51-0	
8260 MSV	Analytical Method: EPA 5030B/8260								
Benzene	**0.56J**	ug/L	1.0	0.12	1		09/29/09 14:30	71-43-2	
Ethylbenzene	**0.46J**	ug/L	1.0	0.20	1		09/29/09 14:30	100-41-4	

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ANALYTICAL RESULTS

Project: 00922 - Oregon COP
Pace Project No.: 252156

Sample: U-16 **Lab ID: 252156003** Collected: 09/21/09 12:35 Received: 09/23/09 07:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Methyl-tert-butyl ether	**0.53J**	ug/L	1.0	0.16	1		09/29/09 14:30	1634-04-4	
Toluene	**0.36J**	ug/L	1.0	0.21	1		09/29/09 14:30	108-88-3	
Xylene (Total)	**0.78J**	ug/L	3.0	0.15	1		09/29/09 14:30	1330-20-7	
4-Bromofluorobenzene (S)	104	%	78-125		1		09/29/09 14:30	460-00-4	
Dibromofluoromethane (S)	97	%	87-118		1		09/29/09 14:30	1868-53-7	
1,2-Dichloroethane-d4 (S)	104	%	75-125		1		09/29/09 14:30	17060-07-0	
Toluene-d8 (S)	95	%	85-120		1		09/29/09 14:30	2037-26-5	

Sample: U-17 **Lab ID: 252156004** Collected: 09/21/09 11:55 Received: 09/23/09 07:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Dx GCS	Analytical Method: NWTPH-Dx Preparation Method: EPA 3510								
Diesel Range SG	**1.3**	mg/L	0.076	0.035	1	09/28/09 16:00	09/30/09 19:14		
Motor Oil Range SG	**0.17J**	mg/L	0.38	0.058	1	09/28/09 16:00	09/30/09 19:14	64742-65-0	
n-Octacosane (S) SG	113	%	50-150		1	09/28/09 16:00	09/30/09 19:14	630-02-4	
o-Terphenyl (S) SG	112	%	50-150		1	09/28/09 16:00	09/30/09 19:14	84-15-1	
NWTPH-Gx GCV	Analytical Method: NWTPH-Gx								
Gasoline Range Organics	**1200**	ug/L	50.0	13.4	1		09/25/09 14:05		
a,a,a-Trifluorotoluene (S)	143	%	50-150		1		09/25/09 14:05	98-08-8	
4-Bromofluorobenzene (S)	161	%	50-150		1		09/25/09 14:05	460-00-4	S2
6020 MET ICPMS	Analytical Method: EPA 6020								
Arsenic	**16.2**	ug/L	2.5	1.2	5	10/03/09 08:29	10/08/09 07:31	7440-38-2	
Barium	**25.4**	ug/L	1.5	0.75	5	10/03/09 08:29	10/08/09 07:31	7440-39-3	
Cadmium	ND	ug/L	0.40	0.20	5	10/03/09 08:29	10/08/09 07:31	7440-43-9	D3
Chromium	ND	ug/L	2.5	1.2	5	10/03/09 08:29	10/08/09 07:31	7440-47-3	D3
Copper	ND	ug/L	2.5	1.2	5	10/03/09 08:29	10/08/09 07:31	7440-50-8	D3
Lead	ND	ug/L	0.50	0.25	5	10/03/09 08:29	10/08/09 07:31	7439-92-1	D3
Manganese	**1680**	ug/L	2.5	1.2	5	10/03/09 08:29	10/08/09 07:31	7439-96-5	
Selenium	ND	ug/L	2.5	1.2	5	10/03/09 08:29	10/08/09 07:31	7782-49-2	D3
Silver	ND	ug/L	2.5	1.2	5	10/03/09 08:29	10/08/09 07:31	7440-22-4	D3
Zinc	ND	ug/L	25.0	12.5	5	10/03/09 08:29	10/08/09 07:31	7440-66-6	D3
7470 Mercury	Analytical Method: EPA 7470								
Mercury	ND	ug/L	0.20	0.10	1	10/06/09 19:52	10/07/09 12:09	7439-97-6	
8270 MSSV Low Level PAH SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
1-Methylnaphthalene	**66.4**	ug/L	0.24	0.093	25	09/28/09 11:00	10/06/09 19:33	90-12-0	Z2
2-Methylnaphthalene	**0.14**	ug/L	0.0095	0.0037	1	09/28/09 11:00	09/29/09 22:05	91-57-6	Z2
Acenaphthene	**0.89**	ug/L	0.0095	0.0016	1	09/28/09 11:00	09/29/09 22:05	83-32-9	Z2
Acenaphthylene	**0.27**	ug/L	0.0095	0.0037	1	09/28/09 11:00	09/29/09 22:05	208-96-8	
Anthracene	**0.16**	ug/L	0.0095	0.0018	1	09/28/09 11:00	09/29/09 22:05	120-12-7	Z2

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ANALYTICAL RESULTS

Project: 00922 - Oregon COP
Pace Project No.: 252156

Sample: U-17 **Lab ID: 252156004** Collected: 09/21/09 11:55 Received: 09/23/09 07:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Low Level PAH SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
Benzo(a)anthracene	**0.048**	ug/L	0.0095	0.0077	1	09/28/09 11:00	09/29/09 22:05	56-55-3	
Benzo(a)pyrene	**0.051**	ug/L	0.0095	0.0047	1	09/28/09 11:00	09/29/09 22:05	50-32-8	Z2
Benzo(b)fluoranthene	**0.089**	ug/L	0.0095	0.0048	1	09/28/09 11:00	09/29/09 22:05	205-99-2	Z2
Benzo(g,h,i)perylene	**0.013**	ug/L	0.0095	0.0079	1	09/28/09 11:00	09/29/09 22:05	191-24-2	
Benzo(k)fluoranthene	**0.011**	ug/L	0.0095	0.0061	1	09/28/09 11:00	09/29/09 22:05	207-08-9	
Chrysene	**0.031**	ug/L	0.0095	0.0086	1	09/28/09 11:00	09/29/09 22:05	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.0095	0.0075	1	09/28/09 11:00	09/29/09 22:05	53-70-3	
Fluoranthene	**0.23**	ug/L	0.0095	0.0034	1	09/28/09 11:00	09/29/09 22:05	206-44-0	Z2
Fluorene	**1.4**	ug/L	0.0095	0.0018	1	09/28/09 11:00	09/29/09 22:05	86-73-7	Z2
Indeno(1,2,3-cd)pyrene	**0.048**	ug/L	0.0095	0.0095	1	09/28/09 11:00	09/29/09 22:05	193-39-5	
Naphthalene	**1.4**	ug/L	0.0095	0.0093	1	09/28/09 11:00	09/29/09 22:05	91-20-3	
Phenanthrene	**1.7**	ug/L	0.0095	0.0024	1	09/28/09 11:00	09/29/09 22:05	85-01-8	Z2
Pyrene	**0.26**	ug/L	0.0095	0.0029	1	09/28/09 11:00	09/29/09 22:05	129-00-0	Z2
Nitrobenzene-d5 (S)	125	%	22-159		1	09/28/09 11:00	09/29/09 22:05	4165-60-0	
2-Fluorobiphenyl (S)	44	%	20-138		1	09/28/09 11:00	09/29/09 22:05	321-60-8	
Terphenyl-d14 (S)	92	%	33-160		1	09/28/09 11:00	09/29/09 22:05	1718-51-0	
8260 MSV	Analytical Method: EPA 5030B/8260								
Benzene	**0.14J**	ug/L	1.0	0.12	1		09/29/09 14:53	71-43-2	
Ethylbenzene	ND	ug/L	1.0	0.20	1		09/29/09 14:53	100-41-4	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.16	1		09/29/09 14:53	1634-04-4	
Toluene	**0.39J**	ug/L	1.0	0.21	1		09/29/09 14:53	108-88-3	
Xylene (Total)	**0.26J**	ug/L	3.0	0.15	1		09/29/09 14:53	1330-20-7	
4-Bromofluorobenzene (S)	105	%	78-125		1		09/29/09 14:53	460-00-4	
Dibromofluoromethane (S)	89	%	87-118		1		09/29/09 14:53	1868-53-7	
1,2-Dichloroethane-d4 (S)	95	%	75-125		1		09/29/09 14:53	17060-07-0	
Toluene-d8 (S)	96	%	85-120		1		09/29/09 14:53	2037-26-5	

Sample: U-18 **Lab ID: 252156005** Collected: 09/22/09 10:31 Received: 09/23/09 07:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Dx GCS	Analytical Method: NWTPH-Dx Preparation Method: EPA 3510								
Diesel Range SG	**5.8**	mg/L	0.077	0.036	1	09/28/09 16:00	09/30/09 19:32		
Motor Oil Range SG	**2.3**	mg/L	0.38	0.059	1	09/28/09 16:00	09/30/09 19:32	64742-65-0	
n-Octacosane (S) SG	105	%	50-150		1	09/28/09 16:00	09/30/09 19:32	630-02-4	
o-Terphenyl (S) SG	106	%	50-150		1	09/28/09 16:00	09/30/09 19:32	84-15-1	
NWTPH-Gx GCV	Analytical Method: NWTPH-Gx								
Gasoline Range Organics	**879**	ug/L	50.0	13.4	1		09/25/09 14:29		
a,a,a-Trifluorotoluene (S)	128	%	50-150		1		09/25/09 14:29	98-08-8	
4-Bromofluorobenzene (S)	154	%	50-150		1		09/25/09 14:29	460-00-4	S2

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 00922 - Oregon COP
Pace Project No.: 252156

Sample: U-18 **Lab ID: 252156005** Collected: 09/22/09 10:31 Received: 09/23/09 07:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020								
Arsenic	**11.0**	ug/L	0.50	0.25	1	10/03/09 08:29	10/08/09 07:39	7440-38-2	
Barium	**25.2**	ug/L	0.30	0.15	1	10/03/09 08:29	10/08/09 07:39	7440-39-3	
Cadmium	ND	ug/L	0.080	0.040	1	10/03/09 08:29	10/08/09 07:39	7440-43-9	
Chromium	**2.3**	ug/L	0.50	0.25	1	10/03/09 08:29	10/08/09 07:39	7440-47-3	
Copper	**5.0**	ug/L	0.50	0.25	1	10/03/09 08:29	10/08/09 07:39	7440-50-8	
Lead	**4.3**	ug/L	0.10	0.050	1	10/03/09 08:29	10/08/09 07:39	7439-92-1	
Manganese	**429**	ug/L	0.50	0.25	1	10/03/09 08:29	10/08/09 07:39	7439-96-5	
Selenium	**0.30J**	ug/L	0.50	0.25	1	10/03/09 08:29	10/08/09 07:39	7782-49-2	
Silver	ND	ug/L	0.50	0.25	1	10/03/09 08:29	10/08/09 07:39	7440-22-4	
Zinc	**11.3**	ug/L	5.0	2.5	1	10/03/09 08:29	10/08/09 07:39	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470								
Mercury	ND	ug/L	0.20	0.10	1	10/06/09 19:52	10/07/09 12:11	7439-97-6	
8270 MSSV Low Level PAH SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
1-Methylnaphthalene	**4.2**	ug/L	0.0096	0.0038	1	09/28/09 11:00	09/29/09 22:40	90-12-0	Z2
2-Methylnaphthalene	**0.12**	ug/L	0.0096	0.0038	1	09/28/09 11:00	09/29/09 22:40	91-57-6	Z2
Acenaphthene	**2.6**	ug/L	0.0096	0.0016	1	09/28/09 11:00	09/29/09 22:40	83-32-9	Z2
Acenaphthylene	**0.47**	ug/L	0.0096	0.0038	1	09/28/09 11:00	09/29/09 22:40	208-96-8	
Anthracene	**0.27**	ug/L	0.0096	0.0018	1	09/28/09 11:00	09/29/09 22:40	120-12-7	Z2
Benzo(a)anthracene	**0.16**	ug/L	0.0096	0.0078	1	09/28/09 11:00	09/29/09 22:40	56-55-3	
Benzo(a)pyrene	**0.15**	ug/L	0.0096	0.0047	1	09/28/09 11:00	09/29/09 22:40	50-32-8	Z2
Benzo(b)fluoranthene	**0.16**	ug/L	0.0096	0.0048	1	09/28/09 11:00	09/29/09 22:40	205-99-2	Z2
Benzo(g,h,i)perylene	**0.087**	ug/L	0.0096	0.0080	1	09/28/09 11:00	09/29/09 22:40	191-24-2	
Benzo(k)fluoranthene	**0.063**	ug/L	0.0096	0.0062	1	09/28/09 11:00	09/29/09 22:40	207-08-9	
Chrysene	**0.13**	ug/L	0.0096	0.0087	1	09/28/09 11:00	09/29/09 22:40	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.0096	0.0076	1	09/28/09 11:00	09/29/09 22:40	53-70-3	
Fluoranthene	**0.27**	ug/L	0.0096	0.0035	1	09/28/09 11:00	09/29/09 22:40	206-44-0	Z2
Fluorene	**8.4**	ug/L	0.0096	0.0018	1	09/28/09 11:00	09/29/09 22:40	86-73-7	Z2
Indeno(1,2,3-cd)pyrene	**0.097**	ug/L	0.0096	0.0096	1	09/28/09 11:00	09/29/09 22:40	193-39-5	
Naphthalene	**0.79**	ug/L	0.0096	0.0094	1	09/28/09 11:00	09/29/09 22:40	91-20-3	
Phenanthrene	**2.0**	ug/L	0.0096	0.0024	1	09/28/09 11:00	09/29/09 22:40	85-01-8	Z2
Pyrene	**0.39**	ug/L	0.0096	0.0029	1	09/28/09 11:00	09/29/09 22:40	129-00-0	Z2
Nitrobenzene-d5 (S)	91	%	22-159		1	09/28/09 11:00	09/29/09 22:40	4165-60-0	
2-Fluorobiphenyl (S)	80	%	20-138		1	09/28/09 11:00	09/29/09 22:40	321-60-8	
Terphenyl-d14 (S)	89	%	33-160		1	09/28/09 11:00	09/29/09 22:40	1718-51-0	
8260 MSV	Analytical Method: EPA 5030B/8260								
Benzene	**0.71J**	ug/L	1.0	0.12	1		09/29/09 15:15	71-43-2	
Ethylbenzene	ND	ug/L	1.0	0.20	1		09/29/09 15:15	100-41-4	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.16	1		09/29/09 15:15	1634-04-4	
Toluene	**2.1**	ug/L	1.0	0.21	1		09/29/09 15:15	108-88-3	
Xylene (Total)	**4.1**	ug/L	3.0	0.15	1		09/29/09 15:15	1330-20-7	
4-Bromofluorobenzene (S)	107	%	78-125		1		09/29/09 15:15	460-00-4	
Dibromofluoromethane (S)	92	%	87-118		1		09/29/09 15:15	1868-53-7	
1,2-Dichloroethane-d4 (S)	99	%	75-125		1		09/29/09 15:15	17060-07-0	

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ANALYTICAL RESULTS

Project: 00922 - Oregon COP
Pace Project No.: 252156

Sample: U-18 **Lab ID: 252156005** Collected: 09/22/09 10:31 Received: 09/23/09 07:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Toluene-d8 (S)	97	%	85-120		1		09/29/09 15:15	2037-26-5	

Sample: U-20 **Lab ID: 252156006** Collected: 09/21/09 14:35 Received: 09/23/09 07:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Dx GCS	Analytical Method: NWTPH-Dx Preparation Method: EPA 3510								
Diesel Range SG	**0.40**	mg/L	0.076	0.035	1	09/28/09 16:00	09/30/09 20:08		
Motor Oil Range SG	**0.11J**	mg/L	0.38	0.058	1	09/28/09 16:00	09/30/09 20:08	64742-65-0	
n-Octacosane (S) SG	112	%	50-150		1	09/28/09 16:00	09/30/09 20:08	630-02-4	
o-Terphenyl (S) SG	113	%	50-150		1	09/28/09 16:00	09/30/09 20:08	84-15-1	
NWTPH-Gx GCV	Analytical Method: NWTPH-Gx								
Gasoline Range Organics	**328**	ug/L	50.0	13.4	1		09/25/09 14:52		
a,a,a-Trifluorotoluene (S)	128	%	50-150		1		09/25/09 14:52	98-08-8	
4-Bromofluorobenzene (S)	116	%	50-150		1		09/25/09 14:52	460-00-4	
6020 MET ICPMS	Analytical Method: EPA 6020								
Arsenic	**69.2**	ug/L	2.5	1.2	5	10/03/09 08:29	10/08/09 07:48	7440-38-2	
Barium	**69.3**	ug/L	1.5	0.75	5	10/03/09 08:29	10/08/09 07:48	7440-39-3	
Cadmium	ND	ug/L	0.40	0.20	5	10/03/09 08:29	10/08/09 07:48	7440-43-9	D3
Chromium	ND	ug/L	2.5	1.2	5	10/03/09 08:29	10/08/09 07:48	7440-47-3	D3
Copper	ND	ug/L	2.5	1.2	5	10/03/09 08:29	10/08/09 07:48	7440-50-8	D3
Lead	ND	ug/L	0.50	0.25	5	10/03/09 08:29	10/08/09 07:48	7439-92-1	D3
Manganese	**7360**	ug/L	25.0	12.5	50	10/03/09 08:29	10/08/09 13:48	7439-96-5	
Selenium	ND	ug/L	2.5	1.2	5	10/03/09 08:29	10/08/09 07:48	7782-49-2	D3
Silver	ND	ug/L	2.5	1.2	5	10/03/09 08:29	10/08/09 07:48	7440-22-4	D3
Zinc	ND	ug/L	25.0	12.5	5	10/03/09 08:29	10/08/09 07:48	7440-66-6	D3
7470 Mercury	Analytical Method: EPA 7470								
Mercury	ND	ug/L	0.20	0.10	1	10/06/09 19:52	10/07/09 12:12	7439-97-6	
8270 MSSV Low Level PAH SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
1-Methylnaphthalene	**0.49**	ug/L	0.0095	0.0037	1	09/28/09 11:00	09/29/09 21:12	90-12-0	Z2
2-Methylnaphthalene	**0.080**	ug/L	0.0095	0.0037	1	09/28/09 11:00	09/29/09 21:12	91-57-6	Z2
Acenaphthene	**1.5**	ug/L	0.0095	0.0016	1	09/28/09 11:00	09/29/09 21:12	83-32-9	Z2
Acenaphthylene	**0.36**	ug/L	0.0095	0.0037	1	09/28/09 11:00	09/29/09 21:12	208-96-8	
Anthracene	**0.10**	ug/L	0.0095	0.0018	1	09/28/09 11:00	09/29/09 21:12	120-12-7	Z2
Benzo(a)anthracene	**0.0093J**	ug/L	0.0095	0.0077	1	09/28/09 11:00	09/29/09 21:12	56-55-3	
Benzo(a)pyrene	**0.044**	ug/L	0.0095	0.0047	1	09/28/09 11:00	09/29/09 21:12	50-32-8	Z2
Benzo(b)fluoranthene	**0.083**	ug/L	0.0095	0.0048	1	09/28/09 11:00	09/29/09 21:12	205-99-2	Z2
Benzo(g,h,i)perylene	**0.0092J**	ug/L	0.0095	0.0079	1	09/28/09 11:00	09/29/09 21:12	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.0095	0.0061	1	09/28/09 11:00	09/29/09 21:12	207-08-9	
Chrysene	**0.0098**	ug/L	0.0095	0.0086	1	09/28/09 11:00	09/29/09 21:12	218-01-9	

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ANALYTICAL RESULTS

Project: 00922 - Oregon COP
Pace Project No.: 252156

Sample: U-20 **Lab ID: 252156006** Collected: 09/21/09 14:35 Received: 09/23/09 07:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Low Level PAH SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
Dibenz(a,h)anthracene	ND	ug/L	0.0095	0.0075	1	09/28/09 11:00	09/29/09 21:12	53-70-3	
Fluoranthene	**0.029**	ug/L	0.0095	0.0034	1	09/28/09 11:00	09/29/09 21:12	206-44-0	Z2
Fluorene	**3.2**	ug/L	0.0095	0.0018	1	09/28/09 11:00	09/29/09 21:12	86-73-7	Z2
Indeno(1,2,3-cd)pyrene	**0.045**	ug/L	0.0095	0.0095	1	09/28/09 11:00	09/29/09 21:12	193-39-5	
Naphthalene	**0.50**	ug/L	0.0095	0.0093	1	09/28/09 11:00	09/29/09 21:12	91-20-3	
Phenanthrene	**3.0**	ug/L	0.0095	0.0024	1	09/28/09 11:00	09/29/09 21:12	85-01-8	Z2
Pyrene	**0.050**	ug/L	0.0095	0.0029	1	09/28/09 11:00	09/29/09 21:12	129-00-0	Z2
Nitrobenzene-d5 (S)	89	%	22-159		1	09/28/09 11:00	09/29/09 21:12	4165-60-0	
2-Fluorobiphenyl (S)	58	%	20-138		1	09/28/09 11:00	09/29/09 21:12	321-60-8	
Terphenyl-d14 (S)	82	%	33-160		1	09/28/09 11:00	09/29/09 21:12	1718-51-0	
8260 MSV	Analytical Method: EPA 5030B/8260								
Benzene	ND	ug/L	1.0	0.12	1		09/29/09 15:38	71-43-2	
Ethylbenzene	ND	ug/L	1.0	0.20	1		09/29/09 15:38	100-41-4	
Methyl-tert-butyl ether	**4.7**	ug/L	1.0	0.16	1		09/29/09 15:38	1634-04-4	
Toluene	ND	ug/L	1.0	0.21	1		09/29/09 15:38	108-88-3	
Xylene (Total)	**0.21J**	ug/L	3.0	0.15	1		09/29/09 15:38	1330-20-7	
4-Bromofluorobenzene (S)	104	%	78-125		1		09/29/09 15:38	460-00-4	
Dibromofluoromethane (S)	89	%	87-118		1		09/29/09 15:38	1868-53-7	
1,2-Dichloroethane-d4 (S)	93	%	75-125		1		09/29/09 15:38	17060-07-0	
Toluene-d8 (S)	92	%	85-120		1		09/29/09 15:38	2037-26-5	

Sample: U-21 **Lab ID: 252156007** Collected: 09/22/09 13:00 Received: 09/23/09 07:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Dx GCS	Analytical Method: NWTPH-Dx Preparation Method: EPA 3510								
Diesel Range SG	**0.50**	mg/L	0.077	0.036	1	09/28/09 16:00	09/30/09 20:27		
Motor Oil Range SG	**0.089J**	mg/L	0.38	0.059	1	09/28/09 16:00	09/30/09 20:27	64742-65-0	
n-Octacosane (S) SG	112	%	50-150		1	09/28/09 16:00	09/30/09 20:27	630-02-4	
o-Terphenyl (S) SG	111	%	50-150		1	09/28/09 16:00	09/30/09 20:27	84-15-1	
NWTPH-Gx GCV	Analytical Method: NWTPH-Gx								
Gasoline Range Organics	**3910**	ug/L	50.0	13.4	1		09/25/09 15:39		
a,a,a-Trifluorotoluene (S)	127	%	50-150		1		09/25/09 15:39	98-08-8	
4-Bromofluorobenzene (S)	249	%	50-150		1		09/25/09 15:39	460-00-4	S2
6020 MET ICPMS	Analytical Method: EPA 6020								
Arsenic	**7.8**	ug/L	2.5	1.2	5	10/03/09 08:29	10/08/09 13:52	7440-38-2	
Barium	**48.8**	ug/L	1.5	0.75	5	10/03/09 08:29	10/08/09 13:52	7440-39-3	
Cadmium	ND	ug/L	0.40	0.20	5	10/03/09 08:29	10/08/09 13:52	7440-43-9	D3
Chromium	ND	ug/L	2.5	1.2	5	10/03/09 08:29	10/08/09 13:52	7440-47-3	D3
Copper	ND	ug/L	2.5	1.2	5	10/03/09 08:29	10/08/09 13:52	7440-50-8	D3
Lead	**2.3**	ug/L	0.50	0.25	5	10/03/09 08:29	10/08/09 13:52	7439-92-1	

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ANALYTICAL RESULTS

Project: 00922 - Oregon COP
Pace Project No.: 252156

Sample: U-21 **Lab ID: 252156007** Collected: 09/22/09 13:00 Received: 09/23/09 07:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020								
Manganese	**6450**	ug/L	25.0	12.5	50	10/03/09 08:29	10/08/09 13:57	7439-96-5	
Selenium	ND	ug/L	2.5	1.2	5	10/03/09 08:29	10/08/09 13:52	7782-49-2	D3
Silver	ND	ug/L	2.5	1.2	5	10/03/09 08:29	10/08/09 13:52	7440-22-4	D3
Zinc	ND	ug/L	25.0	12.5	5	10/03/09 08:29	10/08/09 13:52	7440-66-6	D3
7470 Mercury	Analytical Method: EPA 7470								
Mercury	ND	ug/L	0.20	0.10	1	10/06/09 19:52	10/07/09 12:13	7439-97-6	
8270 MSSV Low Level PAH SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
1-Methylnaphthalene	**0.23**	ug/L	0.0095	0.0037	1	09/28/09 11:00	09/30/09 18:20	90-12-0	Z2
2-Methylnaphthalene	**0.11**	ug/L	0.0095	0.0037	1	09/28/09 11:00	09/30/09 18:20	91-57-6	Z2
Acenaphthene	**1.7**	ug/L	0.0095	0.0016	1	09/28/09 11:00	09/30/09 18:20	83-32-9	Z2
Acenaphthylene	ND	ug/L	0.0095	0.0037	1	09/28/09 11:00	09/30/09 18:20	208-96-8	
Anthracene	**0.14**	ug/L	0.0095	0.0018	1	09/28/09 11:00	09/30/09 18:20	120-12-7	Z2
Benzo(a)anthracene	**0.038**	ug/L	0.0095	0.0077	1	09/28/09 11:00	09/30/09 18:20	56-55-3	
Benzo(a)pyrene	**0.049**	ug/L	0.0095	0.0047	1	09/28/09 11:00	09/30/09 18:20	50-32-8	Z2
Benzo(b)fluoranthene	**0.087**	ug/L	0.0095	0.0048	1	09/28/09 11:00	09/30/09 18:20	205-99-2	Z2
Benzo(g,h,i)perylene	**0.012**	ug/L	0.0095	0.0079	1	09/28/09 11:00	09/30/09 18:20	191-24-2	
Benzo(k)fluoranthene	**0.0092J**	ug/L	0.0095	0.0061	1	09/28/09 11:00	09/30/09 18:20	207-08-9	
Chrysene	**0.031**	ug/L	0.0095	0.0086	1	09/28/09 11:00	09/30/09 18:20	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.0095	0.0075	1	09/28/09 11:00	09/30/09 18:20	53-70-3	
Fluoranthene	**0.28**	ug/L	0.0095	0.0034	1	09/28/09 11:00	09/30/09 18:20	206-44-0	Z2
Fluorene	**3.0**	ug/L	0.0095	0.0018	1	09/28/09 11:00	09/30/09 18:20	86-73-7	Z2
Indeno(1,2,3-cd)pyrene	**0.047**	ug/L	0.0095	0.0095	1	09/28/09 11:00	09/30/09 18:20	193-39-5	
Naphthalene	**1.3**	ug/L	0.0095	0.0093	1	09/28/09 11:00	09/30/09 18:20	91-20-3	
Phenanthrene	**0.37**	ug/L	0.0095	0.0024	1	09/28/09 11:00	09/30/09 18:20	85-01-8	Z2
Pyrene	**0.27**	ug/L	0.0095	0.0029	1	09/28/09 11:00	09/30/09 18:20	129-00-0	Z2
Nitrobenzene-d5 (S)	102	%	22-159		1	09/28/09 11:00	09/30/09 18:20	4165-60-0	
2-Fluorobiphenyl (S)	79	%	20-138		1	09/28/09 11:00	09/30/09 18:20	321-60-8	
Terphenyl-d14 (S)	100	%	33-160		1	09/28/09 11:00	09/30/09 18:20	1718-51-0	
8260 MSV	Analytical Method: EPA 5030B/8260								
Benzene	**0.17J**	ug/L	1.0	0.12	1		09/30/09 17:55	71-43-2	
Ethylbenzene	**1.2**	ug/L	1.0	0.20	1		09/30/09 17:55	100-41-4	
Methyl-tert-butyl ether	**8.2**	ug/L	1.0	0.16	1		09/30/09 17:55	1634-04-4	
Toluene	ND	ug/L	1.0	0.21	1		09/30/09 17:55	108-88-3	
Xylene (Total)	**0.50J**	ug/L	3.0	0.15	1		09/30/09 17:55	1330-20-7	
4-Bromofluorobenzene (S)	102	%	78-125		1		09/30/09 17:55	460-00-4	
Dibromofluoromethane (S)	91	%	87-118		1		09/30/09 17:55	1868-53-7	
1,2-Dichloroethane-d4 (S)	100	%	75-125		1		09/30/09 17:55	17060-07-0	
Toluene-d8 (S)	96	%	85-120		1		09/30/09 17:55	2037-26-5	

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ANALYTICAL RESULTS

Project: 00922 - Oregon COP
Pace Project No.: 252156

Sample: U-14 **Lab ID: 252156008** Collected: 09/22/09 12:00 Received: 09/23/09 07:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Dx GCS	Analytical Method: NWTPH-Dx Preparation Method: EPA 3510								
Diesel Range SG	ND	mg/L	0.077	0.036	1	09/28/09 16:00	09/30/09 20:45		
Motor Oil Range SG	ND	mg/L	0.38	0.059	1	09/28/09 16:00	09/30/09 20:45	64742-65-0	
n-Octacosane (S) SG	109	%	50-150		1	09/28/09 16:00	09/30/09 20:45	630-02-4	
o-Terphenyl (S) SG	108	%	50-150		1	09/28/09 16:00	09/30/09 20:45	84-15-1	
NWTPH-Gx GCV	Analytical Method: NWTPH-Gx								
Gasoline Range Organics	**27.5J**	ug/L	50.0	13.4	1		09/29/09 19:51		1n
a,a,a-Trifluorotoluene (S)	134	%	50-150		1		09/29/09 19:51	98-08-8	
4-Bromofluorobenzene (S)	126	%	50-150		1		09/29/09 19:51	460-00-4	
6020 MET ICPMS	Analytical Method: EPA 6020								
Arsenic	ND	ug/L	2.5	1.2	5	10/03/09 08:29	10/08/09 14:01	7440-38-2	D3
Barium	**27.1**	ug/L	1.5	0.75	5	10/03/09 08:29	10/08/09 14:01	7440-39-3	
Cadmium	ND	ug/L	0.40	0.20	5	10/03/09 08:29	10/08/09 14:01	7440-43-9	D3
Chromium	ND	ug/L	2.5	1.2	5	10/03/09 08:29	10/08/09 14:01	7440-47-3	D3
Copper	ND	ug/L	2.5	1.2	5	10/03/09 08:29	10/08/09 14:01	7440-50-8	D3
Lead	**0.26J**	ug/L	0.50	0.25	5	10/03/09 08:29	10/08/09 14:01	7439-92-1	D3
Manganese	**718**	ug/L	2.5	1.2	5	10/03/09 08:29	10/08/09 14:01	7439-96-5	
Selenium	ND	ug/L	2.5	1.2	5	10/03/09 08:29	10/08/09 14:01	7782-49-2	D3
Silver	ND	ug/L	2.5	1.2	5	10/03/09 08:29	10/08/09 14:01	7440-22-4	D3
Zinc	**12.6J**	ug/L	25.0	12.5	5	10/03/09 08:29	10/08/09 14:01	7440-66-6	D3
7470 Mercury	Analytical Method: EPA 7470								
Mercury	ND	ug/L	0.20	0.10	1	10/06/09 19:52	10/07/09 12:15	7439-97-6	
8270 MSSV Low Level PAH SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
1-Methylnaphthalene	**0.0042J**	ug/L	0.0095	0.0037	1	09/28/09 11:00	09/29/09 21:30	90-12-0	Z2
2-Methylnaphthalene	**0.015**	ug/L	0.0095	0.0037	1	09/28/09 11:00	09/29/09 21:30	91-57-6	Z2
Acenaphthene	**0.0019J**	ug/L	0.0095	0.0016	1	09/28/09 11:00	09/29/09 21:30	83-32-9	Z2
Acenaphthylene	**0.0047J**	ug/L	0.0095	0.0037	1	09/28/09 11:00	09/29/09 21:30	208-96-8	
Anthracene	**0.0036J**	ug/L	0.0095	0.0018	1	09/28/09 11:00	09/29/09 21:30	120-12-7	Z2
Benzo(a)anthracene	**0.012**	ug/L	0.0095	0.0077	1	09/28/09 11:00	09/29/09 21:30	56-55-3	
Benzo(a)pyrene	**0.046**	ug/L	0.0095	0.0047	1	09/28/09 11:00	09/29/09 21:30	50-32-8	Z2
Benzo(b)fluoranthene	**0.090**	ug/L	0.0095	0.0048	1	09/28/09 11:00	09/29/09 21:30	205-99-2	Z2
Benzo(g,h,i)perylene	**0.0093J**	ug/L	0.0095	0.0079	1	09/28/09 11:00	09/29/09 21:30	191-24-2	
Benzo(k)fluoranthene	**0.0076J**	ug/L	0.0095	0.0061	1	09/28/09 11:00	09/29/09 21:30	207-08-9	
Chrysene	**0.010**	ug/L	0.0095	0.0086	1	09/28/09 11:00	09/29/09 21:30	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.0095	0.0075	1	09/28/09 11:00	09/29/09 21:30	53-70-3	
Fluoranthene	**0.016**	ug/L	0.0095	0.0034	1	09/28/09 11:00	09/29/09 21:30	206-44-0	Z2
Fluorene	**0.0023J**	ug/L	0.0095	0.0018	1	09/28/09 11:00	09/29/09 21:30	86-73-7	Z2
Indeno(1,2,3-cd)pyrene	**0.046**	ug/L	0.0095	0.0095	1	09/28/09 11:00	09/29/09 21:30	193-39-5	
Naphthalene	ND	ug/L	0.0095	0.0093	1	09/28/09 11:00	09/29/09 21:30	91-20-3	
Phenanthrene	**0.017**	ug/L	0.0095	0.0024	1	09/28/09 11:00	09/29/09 21:30	85-01-8	Z2
Pyrene	**0.0098**	ug/L	0.0095	0.0029	1	09/28/09 11:00	09/29/09 21:30	129-00-0	Z2
Nitrobenzene-d5 (S)	81	%	22-159		1	09/28/09 11:00	09/29/09 21:30	4165-60-0	

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ANALYTICAL RESULTS

Project: 00922 - Oregon COP
Pace Project No.: 252156

Sample: U-14 **Lab ID: 252156008** Collected: 09/22/09 12:00 Received: 09/23/09 07:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Low Level PAH SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
2-Fluorobiphenyl (S)	69	%	20-138		1	09/28/09 11:00	09/29/09 21:30	321-60-8	
Terphenyl-d14 (S)	89	%	33-160		1	09/28/09 11:00	09/29/09 21:30	1718-51-0	
8260 MSV	Analytical Method: EPA 5030B/8260								
Benzene	ND	ug/L	1.0	0.12	1		09/30/09 18:18	71-43-2	
Ethylbenzene	ND	ug/L	1.0	0.20	1		09/30/09 18:18	100-41-4	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.16	1		09/30/09 18:18	1634-04-4	
Toluene	ND	ug/L	1.0	0.21	1		09/30/09 18:18	108-88-3	
Xylene (Total)	ND	ug/L	3.0	0.15	1		09/30/09 18:18	1330-20-7	
4-Bromofluorobenzene (S)	104	%	78-125		1		09/30/09 18:18	460-00-4	
Dibromofluoromethane (S)	89	%	87-118		1		09/30/09 18:18	1868-53-7	
1,2-Dichloroethane-d4 (S)	93	%	75-125		1		09/30/09 18:18	17060-07-0	
Toluene-d8 (S)	95	%	85-120		1		09/30/09 18:18	2037-26-5	

Sample: TB **Lab ID: 252156009** Collected: 09/22/09 00:00 Received: 09/23/09 07:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Gx GCV	Analytical Method: NWTPH-Gx								
Gasoline Range Organics	**14.3J**	ug/L	50.0	13.4	1		09/25/09 12:08		1n
a,a,a-Trifluorotoluene (S)	121	%	50-150		1		09/25/09 12:08	98-08-8	
4-Bromofluorobenzene (S)	109	%	50-150		1		09/25/09 12:08	460-00-4	
8260 MSV	Analytical Method: EPA 5030B/8260								
Benzene	ND	ug/L	1.0	0.12	1		09/30/09 15:17	71-43-2	
Ethylbenzene	ND	ug/L	1.0	0.20	1		09/30/09 15:17	100-41-4	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.16	1		09/30/09 15:17	1634-04-4	
Toluene	ND	ug/L	1.0	0.21	1		09/30/09 15:17	108-88-3	
Xylene (Total)	ND	ug/L	3.0	0.15	1		09/30/09 15:17	1330-20-7	
4-Bromofluorobenzene (S)	103	%	78-125		1		09/30/09 15:17	460-00-4	
Dibromofluoromethane (S)	89	%	87-118		1		09/30/09 15:17	1868-53-7	
1,2-Dichloroethane-d4 (S)	88	%	75-125		1		09/30/09 15:17	17060-07-0	
Toluene-d8 (S)	96	%	85-120		1		09/30/09 15:17	2037-26-5	

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COP0017967

QUALITY CONTROL DATA

Project: 00922 - Oregon COP
Pace Project No.: 252156

QC Batch: ICPM/17479 Analysis Method: EPA 6020
QC Batch Method: EPA 6020 Analysis Description: 6020 MET
Associated Lab Samples: 252156001, 252156002, 252156003, 252156004, 252156005, 252156006, 252156007, 252156008

METHOD BLANK: 688328 Matrix: Water
Associated Lab Samples: 252156001, 252156002, 252156003, 252156004, 252156005, 252156006, 252156007, 252156008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	ug/L	ND	0.50	10/07/09 12:24	
Barium	ug/L	ND	0.30	10/07/09 12:24	
Cadmium	ug/L	ND	0.080	10/07/09 12:24	
Chromium	ug/L	ND	0.50	10/07/09 12:24	
Copper	ug/L	ND	0.50	10/07/09 12:24	
Lead	ug/L	ND	0.10	10/07/09 12:24	
Manganese	ug/L	ND	0.50	10/07/09 12:24	
Selenium	ug/L	ND	0.50	10/07/09 12:24	
Silver	ug/L	ND	0.50	10/07/09 12:24	
Zinc	ug/L	ND	5.0	10/07/09 12:24	

LABORATORY CONTROL SAMPLE: 688329

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	ug/L	80	79.1	99	85-115	
Barium	ug/L	80	79.2	99	85-115	
Cadmium	ug/L	80	79.6	99	85-115	
Chromium	ug/L	80	78.3	98	85-115	
Copper	ug/L	80	81.2	102	85-115	
Lead	ug/L	80	80.1	100	85-115	
Manganese	ug/L	80	80.4	100	85-115	
Selenium	ug/L	80	80.0	100	85-115	
Silver	ug/L	80	83.4	104	85-115	
Zinc	ug/L	80	82.2	103	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 688330 688331

Parameter	Units	252156001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	ug/L	7.7	80	80	85.9	87.2	98	99	70-130	2	20	
Barium	ug/L	34.3	80	80	111	113	96	99	70-130	2	20	
Cadmium	ug/L	0.091	80	80	78.8	80.0	98	100	70-130	2	20	
Chromium	ug/L	ND	80	80	77.0	77.9	96	97	70-130	1	20	
Copper	ug/L	0.86	80	80	83.8	84.0	104	104	70-130	0	20	
Lead	ug/L	0.66	80	80	79.2	79.8	98	99	70-130	1	20	
Manganese	ug/L	3570	80	80	3610	3680	46	133	70-130	2	20	M1
Selenium	ug/L	ND	80	80	79.8	82.6	100	103	70-130	3	20	
Silver	ug/L	ND	80	80	82.2	84.6	103	106	70-130	3	20	
Zinc	ug/L	5.7	80	80	89.2	88.6	104	104	70-130	1	20	

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QUALITY CONTROL DATA

Project: 00922 - Oregon COP
Pace Project No.: 252156

MATRIX SPIKE SAMPLE: 688332

Parameter	Units	20727233 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Arsenic	ug/L	2.7	80	96.0	117	70-130	
Barium	ug/L	51.3	80	150	123	70-130	
Cadmium	ug/L	<0.040	80	91.1	114	70-130	
Chromium	ug/L	0.73	80	89.4	111	70-130	
Copper	ug/L	2.6	80	95.8	117	70-130	
Lead	ug/L	1.7	80	84.8	104	70-130	
Manganese	ug/L	199	80	326	158	70-130	M1
Selenium	ug/L	6.3	80	101	119	70-130	
Silver	ug/L	<0.25	80	46.3	58	70-130	M1
Zinc	ug/L	4.4J	80	94.3	112	70-130	

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QUALITY CONTROL DATA

Project: 00922 - Oregon COP
Pace Project No.: 252156

QC Batch: MSV/1535 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 252156001, 252156002, 252156003, 252156004, 252156005, 252156006

METHOD BLANK: 12532 Matrix: Water
Associated Lab Samples: 252156001, 252156002, 252156003, 252156004, 252156005, 252156006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	1.0	09/29/09 09:18	
Ethylbenzene	ug/L	ND	1.0	09/29/09 09:18	
Methyl-tert-butyl ether	ug/L	ND	1.0	09/29/09 09:18	
Toluene	ug/L	ND	1.0	09/29/09 09:18	
Xylene (Total)	ug/L	ND	3.0	09/29/09 09:18	
1,2-Dichloroethane-d4 (S)	%	91	75-125	09/29/09 09:18	
4-Bromofluorobenzene (S)	%	103	78-125	09/29/09 09:18	
Dibromofluoromethane (S)	%	89	87-118	09/29/09 09:18	
Toluene-d8 (S)	%	95	85-120	09/29/09 09:18	

LABORATORY CONTROL SAMPLE & LCSD: 12533 12534

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Benzene	ug/L	10	8.6	8.1	86	81	75-124	6	30	
Ethylbenzene	ug/L	10	8.8	8.4	88	84	76-124	5	30	
Methyl-tert-butyl ether	ug/L	10	9.7	9.6	97	96	72-130	3	30	
Toluene	ug/L	10	8.0	7.6	80	76	75-124	5	30	
Xylene (Total)	ug/L	30	27.1	25.7	90	86	76-123	5	30	
1,2-Dichloroethane-d4 (S)	%				98	99	75-125			
4-Bromofluorobenzene (S)	%				102	101	78-125			
Dibromofluoromethane (S)	%				96	96	87-118			
Toluene-d8 (S)	%				92	93	85-120			

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QUALITY CONTROL DATA

Project: 00922 - Oregon COP
Pace Project No.: 252156

QC Batch: MERC/3874 Analysis Method: EPA 7470
QC Batch Method: EPA 7470 Analysis Description: 7470 Mercury
Associated Lab Samples: 252156001, 252156002, 252156003, 252156004, 252156005, 252156006, 252156007, 252156008

METHOD BLANK: 692359 Matrix: Water
Associated Lab Samples: 252156001, 252156002, 252156003, 252156004, 252156005, 252156006, 252156007, 252156008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ug/L	ND	0.20	10/07/09 11:55	

LABORATORY CONTROL SAMPLE: 692360

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	5	4.6	91	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 692361 692362

Parameter	Units	10113247001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ug/L	ND	5	5	4.8	4.8	96	96	80-120	1	20	

MATRIX SPIKE SAMPLE: 692363

Parameter	Units	20727705 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	<0.10	5	0.80	16	80-120	M0

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QUALITY CONTROL DATA

Project: 00922 - Oregon COP
Pace Project No.: 252156

QC Batch: GCV/1262 Analysis Method: NWTPH-Gx
QC Batch Method: NWTPH-Gx Analysis Description: NWTPH-Gx GCV Water
Associated Lab Samples: 252156008

METHOD BLANK: 12540 Matrix: Water
Associated Lab Samples: 252156008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Gasoline Range Organics	ug/L	16.7J	50.0	09/29/09 18:40	
4-Bromofluorobenzene (S)	%	122	50-150	09/29/09 18:40	
a,a,a-Trifluorotoluene (S)	%	132	50-150	09/29/09 18:40	

LABORATORY CONTROL SAMPLE: 12541

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Gasoline Range Organics	ug/L	250	328	131	50-163	
4-Bromofluorobenzene (S)	%			129	50-150	
a,a,a-Trifluorotoluene (S)	%			140	50-150	

SAMPLE DUPLICATE: 12607

Parameter	Units	252182005 Result	Dup Result	RPD	Max RPD	Qualifiers
Gasoline Range Organics	ug/L	ND	ND		30	
4-Bromofluorobenzene (S)	%	124	107	15		
a,a,a-Trifluorotoluene (S)	%	133	117	13		

SAMPLE DUPLICATE: 12608

Parameter	Units	252166001 Result	Dup Result	RPD	Max RPD	Qualifiers
Gasoline Range Organics	ug/L	ND	ND		30	
4-Bromofluorobenzene (S)	%	114	106	8		
a,a,a-Trifluorotoluene (S)	%	122	112	8		

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QUALITY CONTROL DATA

Project: 00922 - Oregon COP
Pace Project No.: 252156

QC Batch: GCV/1259 Analysis Method: NWTPH-Gx
QC Batch Method: NWTPH-Gx Analysis Description: NWTPH-Gx GCV Water
Associated Lab Samples: 252156001, 252156002, 252156003, 252156004, 252156005, 252156006, 252156007, 252156009

METHOD BLANK: 12418 Matrix: Water
Associated Lab Samples: 252156001, 252156002, 252156003, 252156004, 252156005, 252156006, 252156007, 252156009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Gasoline Range Organics	ug/L	14.8J	50.0	09/25/09 11:44	
4-Bromofluorobenzene (S)	%	123	50-150	09/25/09 11:44	
a,a,a-Trifluorotoluene (S)	%	135	50-150	09/25/09 11:44	

LABORATORY CONTROL SAMPLE: 12419

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Gasoline Range Organics	ug/L	250	324	130	50-163	
4-Bromofluorobenzene (S)	%			130	50-150	
a,a,a-Trifluorotoluene (S)	%			145	50-150	

SAMPLE DUPLICATE: 12581

Parameter	Units	252156001 Result	Dup Result	RPD	Max RPD	Qualifiers
Gasoline Range Organics	ug/L	112	129	15	30	
4-Bromofluorobenzene (S)	%	110	109	.9		
a,a,a-Trifluorotoluene (S)	%	126	122	3		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 00922 - Oregon COP
Pace Project No.: 252156

QC Batch: OEXT/1540 Analysis Method: EPA 8270 by SIM
QC Batch Method: EPA 3510 Analysis Description: 8270 Low Level PAH SIM
Associated Lab Samples: 252156001, 252156002, 252156003, 252156004, 252156005, 252156006, 252156007, 252156008

METHOD BLANK: 12466 Matrix: Water
Associated Lab Samples: 252156001, 252156002, 252156003, 252156004, 252156005, 252156006, 252156007, 252156008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1-Methylnaphthalene	ug/L	0.0040J	0.010	09/29/09 19:26	
2-Methylnaphthalene	ug/L	0.019	0.010	09/29/09 19:26	B+
Acenaphthene	ug/L	0.0031J	0.010	09/29/09 19:26	
Acenaphthylene	ug/L	ND	0.010	09/29/09 19:26	
Anthracene	ug/L	0.0028J	0.010	09/29/09 19:26	
Benzo(a)anthracene	ug/L	ND	0.010	09/29/09 19:26	
Benzo(a)pyrene	ug/L	0.044	0.010	09/29/09 19:26	B+
Benzo(b)fluoranthene	ug/L	0.084	0.010	09/29/09 19:26	B+
Benzo(g,h,i)perylene	ug/L	ND	0.010	09/29/09 19:26	
Benzo(k)fluoranthene	ug/L	ND	0.010	09/29/09 19:26	
Chrysene	ug/L	ND	0.010	09/29/09 19:26	
Dibenz(a,h)anthracene	ug/L	ND	0.010	09/29/09 19:26	
Fluoranthene	ug/L	0.028	0.010	09/29/09 19:26	B+
Fluorene	ug/L	0.0055J	0.010	09/29/09 19:26	
Indeno(1,2,3-cd)pyrene	ug/L	ND	0.010	09/29/09 19:26	
Naphthalene	ug/L	ND	0.010	09/29/09 19:26	
Phenanthrene	ug/L	0.031	0.010	09/29/09 19:26	B+
Pyrene	ug/L	0.014	0.010	09/29/09 19:26	B+
2-Fluorobiphenyl (S)	%	63	20-138	09/29/09 19:26	
Nitrobenzene-d5 (S)	%	100	22-159	09/29/09 19:26	
Terphenyl-d14 (S)	%	99	33-160	09/29/09 19:26	

LABORATORY CONTROL SAMPLE & LCSD: 12467 12468

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1-Methylnaphthalene	ug/L	1.2	1.0	1.0	84	80	14-126	5	30	
2-Methylnaphthalene	ug/L	1.2	1.2	1.1	93	89	19-126	4	30	
Acenaphthene	ug/L	1.2	1.2	1.2	98	95	20-130	3	30	
Acenaphthylene	ug/L	1.2	1.2	1.1	92	89	20-134	3	30	
Anthracene	ug/L	1.2	1.4	1.3	108	105	20-143	3	30	
Benzo(a)anthracene	ug/L	1.2	1.6	1.6	131	129	20-177	1	30	
Benzo(a)pyrene	ug/L	1.2	1.6	1.6	128	128	20-160	3	30	
Benzo(b)fluoranthene	ug/L	1.2	1.7	1.7	137	139	20-186	2	30	
Benzo(g,h,i)perylene	ug/L	1.2	1.6	1.6	128	126	20-160	2	30	
Benzo(k)fluoranthene	ug/L	1.2	1.4	1.4	114	112	20-172	2	30	
Chrysene	ug/L	1.2	1.4	1.4	110	112	20-168	1	30	
Dibenz(a,h)anthracene	ug/L	1.2	1.7	1.7	138	135	20-160	2	30	
Fluoranthene	ug/L	1.2	1.6	1.6	129	126	20-160	2	30	
Fluorene	ug/L	1.2	1.4	1.3	111	105	20-138	6	30	
Indeno(1,2,3-cd)pyrene	ug/L	1.2	1.7	1.6	132	130	20-160	2	30	
Naphthalene	ug/L	1.2	1.2	1.1	93	88	20-124	5	30	

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QUALITY CONTROL DATA

Project: 00922 - Oregon COP
Pace Project No.: 252156

LABORATORY CONTROL SAMPLE & LCSD: 12467 12468

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Phenanthrene	ug/L	1.2	1.4	1.3	111	107	20-152	3	30	
Pyrene	ug/L	1.2	1.5	1.5	118	117	30-142	.9	30	
2-Fluorobiphenyl (S)	%				68	61	20-138			
Nitrobenzene-d5 (S)	%				111	104	22-159			
Terphenyl-d14 (S)	%				102	98	33-160			

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 00922 - Oregon COP
Pace Project No.: 252156

QC Batch: MSV/1543 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 252156007, 252156008, 252156009

METHOD BLANK: 12631 Matrix: Water
Associated Lab Samples: 252156007, 252156008, 252156009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	1.0	09/30/09 14:55	
Ethylbenzene	ug/L	ND	1.0	09/30/09 14:55	
Methyl-tert-butyl ether	ug/L	ND	1.0	09/30/09 14:55	
Toluene	ug/L	ND	1.0	09/30/09 14:55	
Xylene (Total)	ug/L	ND	3.0	09/30/09 14:55	
1,2-Dichloroethane-d4 (S)	%	94	75-125	09/30/09 14:55	
4-Bromofluorobenzene (S)	%	100	78-125	09/30/09 14:55	
Dibromofluoromethane (S)	%	90	87-118	09/30/09 14:55	
Toluene-d8 (S)	%	96	85-120	09/30/09 14:55	

LABORATORY CONTROL SAMPLE & LCSD: 12632 12633

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Benzene	ug/L	10	9.4	9.3	94	93	75-124	.4	30	
Ethylbenzene	ug/L	10	9.1	9.0	91	90	76-124	1	30	
Methyl-tert-butyl ether	ug/L	10	9.3	10.1	93	101	72-130	9	30	
Toluene	ug/L	10	8.3	8.3	83	83	75-124	.1	30	
Xylene (Total)	ug/L	30	27.8	27.7	93	92	76-123	.6	30	
1,2-Dichloroethane-d4 (S)	%				92	95	75-125			
4-Bromofluorobenzene (S)	%				100	101	78-125			
Dibromofluoromethane (S)	%				96	96	87-118			
Toluene-d8 (S)	%				92	91	85-120			

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QUALITY CONTROL DATA

Project: 00922 - Oregon COP
Pace Project No.: 252156

QC Batch: OEXT/1541 Analysis Method: NWTPH-Dx
QC Batch Method: EPA 3510 Analysis Description: NWTPH-Dx GCS
Associated Lab Samples: 252156001, 252156002, 252156003, 252156004, 252156005, 252156006, 252156007, 252156008

METHOD BLANK: 12469 Matrix: Water
Associated Lab Samples: 252156001, 252156002, 252156003, 252156004, 252156005, 252156006, 252156007, 252156008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Diesel Range SG	mg/L	ND	0.080	10/01/09 13:31	
Motor Oil Range SG	mg/L	0.092J	0.40	10/01/09 13:31	
n-Octacosane (S) SG	%	63	50-150	10/01/09 13:31	
o-Terphenyl (S) SG	%	57	50-150	10/01/09 13:31	

LABORATORY CONTROL SAMPLE & LCSD: 12470 12471

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Diesel Range SG	mg/L	5	4.8	4.8	97	95	51-147	1	30	
Motor Oil Range SG	mg/L	5	5.4	5.5	107	109	20-160	2	30	
n-Octacosane (S) SG	%				110	113	50-150			
o-Terphenyl (S) SG	%				114	113	50-150			

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QUALIFIERS

Project: 00922 - Oregon COP
Pace Project No.: 252156

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

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LABORATORIES

PASI-M	Pace Analytical Services - Minneapolis
PASI-S	Pace Analytical Services - Seattle

BATCH QUALIFIERS

Batch: MSSV/1142

[M5]	A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.
[1]	Samples in 252156 were re-extracted out of hold and re-analyzed due to blank contamination.

Batch: GCSV/1265

[M5]	A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

1n	Analyte present in the associated method blank above the method detection limit but below 1/2 of the RDL.
B+	Analyte was detected in the associated method blank as well as in the sample.
D3	Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.
M0	Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
S2	Surrogate recovery outside laboratory control limits due to matrix interferences (confirmed by similar results from sample re-analysis).
Z2	Analyte present in the associated method blank above the detection limit.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 00922 - Oregon COP
Pace Project No.: 252156

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
252156001	**U-2**	NWTPH-Gx	GCV/1259		
252156002	**U-15**	NWTPH-Gx	GCV/1259		
252156003	**U-16**	NWTPH-Gx	GCV/1259		
252156004	**U-17**	NWTPH-Gx	GCV/1259		
252156005	**U-18**	NWTPH-Gx	GCV/1259		
252156006	**U-20**	NWTPH-Gx	GCV/1259		
252156007	**U-21**	NWTPH-Gx	GCV/1259		
252156009	**TB**	NWTPH-Gx	GCV/1259		
252156001	**U-2**	EPA 3510	OEXT/1540	EPA 8270 by SIM	MSSV/1142
252156002	**U-15**	EPA 3510	OEXT/1540	EPA 8270 by SIM	MSSV/1142
252156003	**U-16**	EPA 3510	OEXT/1540	EPA 8270 by SIM	MSSV/1142
252156004	**U-17**	EPA 3510	OEXT/1540	EPA 8270 by SIM	MSSV/1142
252156005	**U-18**	EPA 3510	OEXT/1540	EPA 8270 by SIM	MSSV/1142
252156006	**U-20**	EPA 3510	OEXT/1540	EPA 8270 by SIM	MSSV/1142
252156007	**U-21**	EPA 3510	OEXT/1540	EPA 8270 by SIM	MSSV/1142
252156008	**U-14**	EPA 3510	OEXT/1540	EPA 8270 by SIM	MSSV/1142
252156001	**U-2**	EPA 3510	OEXT/1541	NWTPH-Dx	GCSV/1265
252156002	**U-15**	EPA 3510	OEXT/1541	NWTPH-Dx	GCSV/1265
252156003	**U-16**	EPA 3510	OEXT/1541	NWTPH-Dx	GCSV/1265
252156004	**U-17**	EPA 3510	OEXT/1541	NWTPH-Dx	GCSV/1265
252156005	**U-18**	EPA 3510	OEXT/1541	NWTPH-Dx	GCSV/1265
252156006	**U-20**	EPA 3510	OEXT/1541	NWTPH-Dx	GCSV/1265
252156007	**U-21**	EPA 3510	OEXT/1541	NWTPH-Dx	GCSV/1265
252156008	**U-14**	EPA 3510	OEXT/1541	NWTPH-Dx	GCSV/1265
252156001	**U-2**	EPA 5030B/8260	MSV/1535		
252156002	**U-15**	EPA 5030B/8260	MSV/1535		
252156003	**U-16**	EPA 5030B/8260	MSV/1535		
252156004	**U-17**	EPA 5030B/8260	MSV/1535		
252156005	**U-18**	EPA 5030B/8260	MSV/1535		
252156006	**U-20**	EPA 5030B/8260	MSV/1535		
252156008	**U-14**	NWTPH-Gx	GCV/1262		
252156007	**U-21**	EPA 5030B/8260	MSV/1543		
252156008	**U-14**	EPA 5030B/8260	MSV/1543		
252156009	**TB**	EPA 5030B/8260	MSV/1543		
252156001	**U-2**	EPA 6020	ICPM/17479	EPA 6020	ICPM/7194
252156002	**U-15**	EPA 6020	ICPM/17479	EPA 6020	ICPM/7194
252156003	**U-16**	EPA 6020	ICPM/17479	EPA 6020	ICPM/7194
252156004	**U-17**	EPA 6020	ICPM/17479	EPA 6020	ICPM/7194
252156005	**U-18**	EPA 6020	ICPM/17479	EPA 6020	ICPM/7194
252156006	**U-20**	EPA 6020	ICPM/17479	EPA 6020	ICPM/7194
252156007	**U-21**	EPA 6020	ICPM/17479	EPA 6020	ICPM/7194
252156008	**U-14**	EPA 6020	ICPM/17479	EPA 6020	ICPM/7194
252156001	**U-2**	EPA 7470	MERC/3874	EPA 7470	MERC/4720
252156002	**U-15**	EPA 7470	MERC/3874	EPA 7470	MERC/4720
252156003	**U-16**	EPA 7470	MERC/3874	EPA 7470	MERC/4720

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 00922 - Oregon COP
Pace Project No.: 252156

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
252156004	**U-17**	EPA 7470	MERC/3874	EPA 7470	MERC/4720
252156005	**U-18**	EPA 7470	MERC/3874	EPA 7470	MERC/4720
252156006	**U-20**	EPA 7470	MERC/3874	EPA 7470	MERC/4720
252156007	**U-21**	EPA 7470	MERC/3874	EPA 7470	MERC/4720
252156008	**U-14**	EPA 7470	MERC/3874	EPA 7470	MERC/4720

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PORTLAND, OR 9405 S.W. NIMBUS AVENUE
BEAVERTON, OR 97008-7132
ph: (503) 906.9200 fax: (503) 906.9210

ORELAP#: OR100021

September 29, 2009

Tim Browning
Delta Consultants - Portland
4640 SW Macadam Avenue, Suite 110
Portland, OR 97239

RE: Kinder Morgan - Willbridge

Enclosed are the results of analyses for samples received by the laboratory on 09/15/09 17:35. The following list is a summary of the Work Orders contained in this report, generated on 09/29/09 13:41.

If you have any questions concerning this report, please feel free to contact me.

Work Order	Project	ProjectNumber
PSI0525	Kinder Morgan - Willbridge	KMWB 09 01

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Estella K Rieben

Estella Rieben, Project Manager

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Delta Consultants - Portland	Project Name:	**Kinder Morgan - Willbridge**	
4640 SW Macadam Avenue, Suite 110	Project Number:	KMWB 09 01	Report Created:
Portland, OR 97239	Project Manager:	Tim Browning	09/29/09 13:41

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-8	PSI0525-01	Water	09/15/09 09:20	09/15/09 17:35
MW-25	PSI0525-02	Water	09/15/09 08:45	09/15/09 17:35
MW-26	PSI0525-03	Water	09/15/09 08:20	09/15/09 17:35
MW-33	PSI0525-04	Water	09/14/09 14:00	09/15/09 17:35
MW-34	PSI0525-05	Water	09/14/09 14:30	09/15/09 17:35
MW-36	PSI0525-06	Water	09/14/09 13:10	09/15/09 17:35
MW-37	PSI0525-07	Water	09/14/09 14:55	09/15/09 17:35
MW-40	PSI0525-08	Water	09/14/09 13:40	09/15/09 17:35
DUP-1	PSI0525-09	Water	09/14/09 00:00	09/15/09 17:35
DUP-2	PSI0525-10	Water	09/15/09 00:00	09/15/09 17:35

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Estella Rieben, Project Manager

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Delta Consultants - Portland	Project Name:	**Kinder Morgan - Willbridge**	
4640 SW Macadam Avenue, Suite 110	Project Number:	KMWB 09 01	Report Created:
Portland, OR 97239	Project Manager:	Tim Browning	09/29/09 13:41

BTEX per EPA Method 8021B

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Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSI0525-01 (MW-8)			**Water**			**Sampled: 09/15/09 09:20**				
Benzene	EPA 8021B	ND	-----	1.65	ug/l	1x	9090583	09/17/09 12:13	09/17/09 21:17	**RL1**
Toluene	"	ND	-----	0.500	"	"	"	"	"	
Ethylbenzene	"	ND	-----	0.500	"	"	"	"	"	
Xylenes (total)	"	**1.23**	-----	1.00	"	"	"	"	"	
Surrogate(s): 4-BFB (PID)				*113%*		*70 - 130%*				"
PSI0525-02 (MW-25)			**Water**			**Sampled: 09/15/09 08:45**				
Benzene	EPA 8021B	ND	-----	0.500	ug/l	1x	9090583	09/17/09 12:13	09/17/09 21:50	
Toluene	"	ND	-----	0.500	"	"	"	"	"	
Ethylbenzene	"	ND	-----	0.500	"	"	"	"	"	
Xylenes (total)	"	ND	-----	1.00	"	"	"	"	"	
Surrogate(s): 4-BFB (PID)				*95.8%*		*70 - 130%*				"
PSI0525-03 (MW-26)			**Water**			**Sampled: 09/15/09 08:20**				**RL1**
Benzene	EPA 8021B	ND	-----	7.05	ug/l	1x	9090583	09/17/09 12:13	09/17/09 22:22	
Toluene	"	ND	-----	21.5	"	"	"	"	"	
Ethylbenzene	"	ND	-----	4.85	"	"	"	"	"	
Xylenes (total)	"	ND	-----	12.8	"	"	"	"	"	
Surrogate(s): 4-BFB (PID)				*99.6%*		*70 - 130%*				"
PSI0525-04 (MW-33)			**Water**			**Sampled: 09/14/09 14:00**				
Benzene	EPA 8021B	ND	-----	0.500	ug/l	1x	9090583	09/17/09 12:13	09/17/09 22:55	
Toluene	"	ND	-----	0.500	"	"	"	"	"	
Ethylbenzene	"	ND	-----	0.500	"	"	"	"	"	
Xylenes (total)	"	ND	-----	1.00	"	"	"	"	"	
Surrogate(s): 4-BFB (PID)				*94.7%*		*70 - 130%*				"
PSI0525-05 (MW-34)			**Water**			**Sampled: 09/14/09 14:30**				
Benzene	EPA 8021B	ND	-----	0.500	ug/l	1x	9090583	09/17/09 12:13	09/17/09 23:27	
Toluene	"	ND	-----	0.500	"	"	"	"	"	
Ethylbenzene	"	ND	-----	0.500	"	"	"	"	"	
Xylenes (total)	"	ND	-----	1.00	"	"	"	"	"	
Surrogate(s): 4-BFB (PID)				*97.3%*		*70 - 130%*				"

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Estella K Rieben

Estella Rieben, Project Manager

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Delta Consultants - Portland	Project Name:	**Kinder Morgan - Willbridge**	
4640 SW Macadam Avenue, Suite 110	Project Number:	KMWB 09 01	Report Created:
Portland, OR 97239	Project Manager:	Tim Browning	09/29/09 13:41

BTEX per EPA Method 8021B

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Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSI0525-06 (MW-36)			**Water**			**Sampled: 09/14/09 13:10**				
Benzene	EPA 8021B	ND	-----	0.500	ug/l	1x	9090583	09/17/09 12:13	09/18/09 00:00	
Toluene	"	ND	-----	0.500	"	"	"	"	"	
Ethylbenzene	"	ND	-----	0.500	"	"	"	"	"	
Xylenes (total)	"	ND	-----	1.00	"	"	"	"	"	
Surrogate(s): 4-BFB (PID)			*99.4%*		*70 - 130%*				"	
PSI0525-07 (MW-37)			**Water**			**Sampled: 09/14/09 14:55**				
Benzene	EPA 8021B	ND	-----	0.500	ug/l	1x	9090583	09/17/09 12:13	09/18/09 01:38	
Toluene	"	ND	-----	0.500	"	"	"	"	"	
Ethylbenzene	"	ND	-----	0.500	"	"	"	"	"	
Xylenes (total)	"	ND	-----	1.00	"	"	"	"	"	
Surrogate(s): 4-BFB (PID)			*105%*		*70 - 130%*				"	
PSI0525-08 (MW-40)			**Water**			**Sampled: 09/14/09 13:40**				
Benzene	EPA 8021B	ND	-----	0.500	ug/l	1x	9090583	09/17/09 12:13	09/18/09 02:10	
Toluene	"	ND	-----	0.500	"	"	"	"	"	
Ethylbenzene	"	ND	-----	0.500	"	"	"	"	"	
Xylenes (total)	"	ND	-----	1.00	"	"	"	"	"	
Surrogate(s): 4-BFB (PID)			*102%*		*70 - 130%*				"	
PSI0525-09 (DUP-1)			**Water**			**Sampled: 09/14/09 00:00**				
Benzene	EPA 8021B	ND	-----	0.500	ug/l	1x	9090583	09/17/09 12:13	09/18/09 02:43	
Toluene	"	ND	-----	0.500	"	"	"	"	"	
Ethylbenzene	"	ND	-----	0.500	"	"	"	"	"	
Xylenes (total)	"	**1.04**	-----	1.00	"	"	"	"	"	
Surrogate(s): 4-BFB (PID)			*103%*		*70 - 130%*				"	
PSI0525-10 (DUP-2)			**Water**			**Sampled: 09/15/09 00:00**				**RL1**
Benzene	EPA 8021B	ND	-----	6.00	ug/l	1x	9090583	09/17/09 12:13	09/18/09 03:16	
Toluene	"	ND	-----	19.3	"	"	"	"	"	
Ethylbenzene	"	ND	-----	4.15	"	"	"	"	"	
Xylenes (total)	"	ND	-----	135	"	"	"	"	"	
Surrogate(s): 4-BFB (PID)			*106%*		*70 - 130%*				"	

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Estella K Rieben

Estella Rieben, Project Manager

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Delta Consultants - Portland	Project Name:	**Kinder Morgan - Willbridge**	
4640 SW Macadam Avenue, Suite 110	Project Number:	KMWB 09 01	Report Created:
Portland, OR 97239	Project Manager:	Tim Browning	09/29/09 13:41

Total Metals per EPA 200 Series Methods

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Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSI0525-01 (MW-8)			Water			Sampled: 09/15/09 09:20				
Arsenic	EPA 200.8	**0.00569**	-----	0.00100	mg/l	1x	9090806	09/23/09 11:47	09/24/09 00:49	
Barium	"	**0.0254**	-----	0.00100	"	"	"	"	"	
Cadmium	"	**0.000890**	-----	0.000500	"	"	"	"	"	
Chromium	"	ND	-----	0.00200	"	"	"	"	"	
Copper	"	**0.00272**	-----	0.00200	"	"	"	"	"	
Lead	"	**0.00206**	-----	0.00100	"	"	"	"	"	
Selenium	"	ND	-----	0.000500	"	"	"	"	"	
Silver	"	ND	-----	0.00100	"	"	"	"	"	
Zinc	"	**0.0223**	-----	0.00500	"	"	"	"	"	
PSI0525-02 (MW-25)			Water			Sampled: 09/15/09 08:45				
Arsenic	EPA 200.8	**0.0519**	-----	0.00100	mg/l	1x	9090806	09/23/09 11:47	09/24/09 00:57	
Barium	"	**0.119**	-----	0.00100	"	"	"	"	"	
Cadmium	"	ND	-----	0.000500	"	"	"	"	"	
Chromium	"	**0.00672**	-----	0.00200	"	"	"	"	"	
Copper	"	**0.00930**	-----	0.00200	"	"	"	"	"	
Lead	"	**0.00894**	-----	0.00100	"	"	"	"	"	
Selenium	"	ND	-----	0.000500	"	"	"	"	"	
Silver	"	ND	-----	0.00100	"	"	"	"	"	
Zinc	"	**0.0245**	-----	0.00500	"	"	"	"	"	
PSI0525-03 (MW-26)			Water			Sampled: 09/15/09 08:20				
Arsenic	EPA 200.8	**0.0438**	-----	0.00100	mg/l	1x	9090806	09/23/09 11:47	09/24/09 01:20	
Barium	"	**0.0814**	-----	0.00100	"	"	"	"	"	
Cadmium	"	ND	-----	0.000500	"	"	"	"	"	
Chromium	"	**0.00333**	-----	0.00200	"	"	"	"	"	
Copper	"	**0.00287**	-----	0.00200	"	"	"	"	"	
Lead	"	**0.00424**	-----	0.00100	"	"	"	"	"	
Selenium	"	ND	-----	0.000500	"	"	"	"	"	
Silver	"	ND	-----	0.00100	"	"	"	"	"	
Zinc	"	**0.0164**	-----	0.00500	"	"	"	"	"	

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Estella K Rieben

Estella Rieben, Project Manager

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Delta Consultants - Portland	Project Name:	**Kinder Morgan - Willbridge**	
4640 SW Macadam Avenue, Suite 110	Project Number:	KMWB 09 01	Report Created:
Portland, OR 97239	Project Manager:	Tim Browning	09/29/09 13:41

Total Metals per EPA 200 Series Methods

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSI0525-04 (MW-33)			Water			Sampled: 09/14/09 14:00				
Arsenic	EPA 200.8	**0.0141**	-----	0.00100	mg/l	1x	9090806	09/23/09 11:47	09/24/09 01:28	
Barium	"	**0.208**	-----	0.00100	"	"	"	"	"	
Cadmium	"	ND	-----	0.000500	"	"	"	"	"	
Chromium	"	ND	-----	0.00200	"	"	"	"	"	
Copper	"	**0.00292**	-----	0.00200	"	"	"	"	"	
Lead	"	**0.00143**	-----	0.00100	"	"	"	"	"	
Selenium	"	ND	-----	0.000500	"	"	"	"	"	
Silver	"	ND	-----	0.00100	"	"	"	"	"	
Zinc	"	**0.00784**	-----	0.00500	"	"	"	"	"	
PSI0525-05 (MW-34)			Water			Sampled: 09/14/09 14:30				
Arsenic	EPA 200.8	**0.0268**	-----	0.00100	mg/l	1x	9090806	09/23/09 11:47	09/24/09 01:36	
Barium	"	**0.281**	-----	0.00100	"	"	"	"	"	
Cadmium	"	**0.00322**	-----	0.000500	"	"	"	"	"	
Chromium	"	**0.0183**	-----	0.00200	"	"	"	"	"	
Copper	"	**0.0527**	-----	0.00200	"	"	"	"	"	
Lead	"	**0.0204**	-----	0.00100	"	"	"	"	"	
Selenium	"	ND	-----	0.000500	"	"	"	"	"	
Silver	"	ND	-----	0.00100	"	"	"	"	"	
Zinc	"	**0.0732**	-----	0.00500	"	"	"	"	"	
PSI0525-06 (MW-36)			Water			Sampled: 09/14/09 13:10				
Arsenic	EPA 200.8	**0.0293**	-----	0.00100	mg/l	1x	9090806	09/23/09 11:47	09/24/09 01:44	
Barium	"	**0.0776**	-----	0.00100	"	"	"	"	"	
Cadmium	"	ND	-----	0.000500	"	"	"	"	"	
Chromium	"	ND	-----	0.00200	"	"	"	"	"	
Copper	"	**0.00302**	-----	0.00200	"	"	"	"	"	
Lead	"	**0.00175**	-----	0.00100	"	"	"	"	"	
Selenium	"	ND	-----	0.000500	"	"	"	"	"	
Silver	"	ND	-----	0.00100	"	"	"	"	"	
Zinc	"	ND	-----	0.00500	"	"	"	"	"	

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Estella K Rieben

Estella Rieben, Project Manager

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Delta Consultants - Portland	Project Name:	**Kinder Morgan - Willbridge**	
4640 SW Macadam Avenue, Suite 110	Project Number:	KMWB 09 01	Report Created:
Portland, OR 97239	Project Manager:	Tim Browning	09/29/09 13:41

Total Metals per EPA 200 Series Methods

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Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSI0525-07 (MW-37)			**Water**			**Sampled: 09/14/09 14:55**				
Arsenic	EPA 200.8	**0.0162**	-----	0.00100	mg/l	1x	9090806	09/23/09 11:47	09/24/09 01:52	
Barium	"	**0.0298**	-----	0.00100	"	"	"	"	"	
Cadmium	"	ND	-----	0.000500	"	"	"	"	"	
Chromium	"	ND	-----	0.00200	"	"	"	"	"	
Copper	"	ND	-----	0.00200	"	"	"	"	"	
Lead	"	ND	-----	0.00100	"	"	"	"	"	
Selenium	"	ND	-----	0.000500	"	"	"	"	"	
Silver	"	ND	-----	0.00100	"	"	"	"	"	
Zinc	"	ND	-----	0.00500	"	"	"	"	"	
PSI0525-08 (MW-40)			**Water**			**Sampled: 09/14/09 13:40**				
Arsenic	EPA 200.8	**0.0193**	-----	0.00100	mg/l	1x	9090797	09/23/09 09:20	09/25/09 18:27	
Barium	"	**0.0851**	-----	0.00100	"	"	"	"	"	
Cadmium	"	ND	-----	0.000500	"	"	"	"	"	
Chromium	"	ND	-----	0.00200	"	"	"	"	"	
Copper	"	ND	-----	0.00200	"	"	"	"	"	
Lead	"	ND	-----	0.00100	"	"	"	"	"	
Selenium	"	ND	-----	0.000500	"	"	"	"	"	
Silver	"	ND	-----	0.00100	"	"	"	"	"	
Zinc	"	**0.00961**	-----	0.00500	"	"	"	"	"	
PSI0525-09 (DUP-1)			**Water**			**Sampled: 09/14/09 00:00**				
Arsenic	EPA 200.8	**0.0308**	-----	0.00100	mg/l	1x	9090797	09/23/09 09:20	09/25/09 18:58	
Barium	"	**0.0808**	-----	0.00100	"	"	"	"	"	
Cadmium	"	ND	-----	0.000500	"	"	"	"	"	
Chromium	"	ND	-----	0.00200	"	"	"	"	"	
Copper	"	**0.00285**	-----	0.00200	"	"	"	"	"	
Lead	"	**0.00167**	-----	0.00100	"	"	"	"	"	
Selenium	"	ND	-----	0.000500	"	"	"	"	"	
Silver	"	ND	-----	0.00100	"	"	"	"	"	
Zinc	"	ND	-----	0.00500	"	"	"	"	"	

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Estella K Rieben

Estella Rieben, Project Manager

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ph: (503) 906.9200 fax: (503) 906.9210

Delta Consultants - Portland	Project Name:	**Kinder Morgan - Willbridge**	
4640 SW Macadam Avenue, Suite 110	Project Number:	KMWB 09 01	Report Created:
Portland, OR 97239	Project Manager:	Tim Browning	09/29/09 13:41

Total Metals per EPA 200 Series Methods

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSI0525-10 (DUP-2)			**Water**			**Sampled: 09/15/09 00:00**				
Arsenic	EPA 200.8	**0.0421**	-----	0.00100	mg/l	1x	9090797	09/23/09 09:20	09/25/09 19:06	
Barium	"	**0.0870**	-----	0.00100	"	"	"	"	"	
Cadmium	"	ND	-----	0.000500	"	"	"	"	"	
Chromium	"	**0.00287**	-----	0.00200	"	"	"	"	"	
Copper	"	**0.00259**	-----	0.00200	"	"	"	"	"	
Lead	"	**0.00379**	-----	0.00100	"	"	"	"	"	
Selenium	"	ND	-----	0.000500	"	"	"	"	"	
Silver	"	ND	-----	0.00100	"	"	"	"	"	
Zinc	"	**0.0113**	-----	0.00500	"	"	"	"	"	

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Estella K Rieben

Estella Rieben, Project Manager

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PORTLAND, OR 9405 S.W. NIMBUS AVENUE
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Delta Consultants - Portland	Project Name:	**Kinder Morgan - Willbridge**	
4640 SW Macadam Avenue, Suite 110	Project Number:	KMWB 09 01	Report Created:
Portland, OR 97239	Project Manager:	Tim Browning	09/29/09 13:41

Mercury per EPA Method 1631E

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSI0525-04 (MW-33)			**Water**			**Sampled: 09/14/09 14:00**				
Mercury	EPA 1631E	**0.0137**	-----	0.000500	ug/l	1x	9090731	09/21/09 09:08	09/25/09 18:22	
PSI0525-05 (MW-34)			**Water**			**Sampled: 09/14/09 14:30**				
Mercury	EPA 1631E	**0.0543**	-----	0.00150	ug/l	3x	9090731	09/21/09 09:08	09/25/09 19:15	
PSI0525-06 (MW-36)			**Water**			**Sampled: 09/14/09 13:10**				
Mercury	EPA 1631E	**0.00790**	-----	0.000500	ug/l	1x	9090731	09/21/09 09:08	09/25/09 18:36	
PSI0525-07 (MW-37)			**Water**			**Sampled: 09/14/09 14:55**				
Mercury	EPA 1631E	**0.000946**	-----	0.000500	ug/l	1x	9090731	09/21/09 09:08	09/25/09 18:42	
PSI0525-08 (MW-40)			**Water**			**Sampled: 09/14/09 13:40**				
Mercury	EPA 1631E	**0.00359**	-----	0.000500	ug/l	1x	9090731	09/21/09 09:08	09/25/09 19:02	
PSI0525-09 (DUP-1)			**Water**			**Sampled: 09/14/09 00:00**				
Mercury	EPA 1631E	**0.00411**	-----	0.000500	ug/l	1x	9090731	09/21/09 09:08	09/25/09 19:09	

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Delta Consultants - Portland	Project Name:	**Kinder Morgan - Willbridge**	
4640 SW Macadam Avenue, Suite 110	Project Number:	KMWB 09 01	Report Created:
Portland, OR 97239	Project Manager:	Tim Browning	09/29/09 13:41

Total Mercury per EPA Method 7470A

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSI0525-01 (MW-8)			**Water**				**Sampled: 09/15/09 09:20**			
Mercury	EPA 7470A	ND	-----	0.000200	mg/l	1x	9090711	09/21/09 16:03	09/21/09 21:48	
PSI0525-02 (MW-25)			**Water**				**Sampled: 09/15/09 08:45**			
Mercury	EPA 7470A	ND	-----	0.000200	mg/l	1x	9090711	09/21/09 16:03	09/21/09 21:55	
PSI0525-03 (MW-26)			**Water**				**Sampled: 09/15/09 08:20**			
Mercury	EPA 7470A	ND	-----	0.000200	mg/l	1x	9090711	09/21/09 16:03	09/21/09 21:57	
PSI0525-04 (MW-33)			**Water**				**Sampled: 09/14/09 14:00**			
Mercury	EPA 7470A	ND	-----	0.000200	mg/l	1x	9090711	09/21/09 16:03	09/21/09 22:00	
PSI0525-05 (MW-34)			**Water**				**Sampled: 09/14/09 14:30**			
Mercury	EPA 7470A	ND	-----	0.000200	mg/l	1x	9090711	09/21/09 16:03	09/21/09 22:02	
PSI0525-06 (MW-36)			**Water**				**Sampled: 09/14/09 13:10**			
Mercury	EPA 7470A	ND	-----	0.000200	mg/l	1x	9090711	09/21/09 16:03	09/21/09 22:04	
PSI0525-07 (MW-37)			**Water**				**Sampled: 09/14/09 14:55**			
Mercury	EPA 7470A	ND	-----	0.000200	mg/l	1x	9090711	09/21/09 16:03	09/21/09 22:06	
PSI0525-08 (MW-40)			**Water**				**Sampled: 09/14/09 13:40**			
Mercury	EPA 7470A	ND	-----	0.000200	mg/l	1x	9090711	09/21/09 16:03	09/21/09 22:09	
PSI0525-09 (DUP-1)			**Water**				**Sampled: 09/14/09 00:00**			
Mercury	EPA 7470A	ND	-----	0.000200	mg/l	1x	9090711	09/21/09 16:03	09/21/09 22:11	
PSI0525-10 (DUP-2)			**Water**				**Sampled: 09/15/09 00:00**			
Mercury	EPA 7470A	ND	-----	0.000200	mg/l	1x	9090711	09/21/09 16:03	09/21/09 22:13	

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Estella Rieben, Project Manager

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Delta Consultants - Portland	Project Name:	**Kinder Morgan - Willbridge**	
4640 SW Macadam Avenue, Suite 110	Project Number:	KMWB 09 01	Report Created:
Portland, OR 97239	Project Manager:	Tim Browning	09/29/09 13:41

Polynuclear Aromatic Compounds per EPA 8270M-SIM

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSI0525-01 (MW-8)			Water			Sampled: 09/15/09 09:20				
1-Methylnaphthalene	EPA 8270m	**0.630**	-----	0.0952	ug/l	1x	9090619	09/18/09 15:55	09/21/09 18:51	
2-Methylnaphthalene	"	ND	-----	0.0952	"	"	"	"	"	
Acenaphthene	"	ND	-----	0.0952	"	"	"	"	"	
Acenaphthylene	"	ND	-----	0.0952	"	"	"	"	"	
Anthracene	"	ND	-----	0.0952	"	"	"	"	"	
Benzo (a) anthracene	"	ND	-----	0.00476	"	"	"	"	"	
Benzo (a) pyrene	"	**0.00654**	-----	0.00476	"	"	"	"	"	
Benzo (b) fluoranthene	"	**0.00612**	-----	0.00476	"	"	"	"	"	
Benzo (ghi) perylene	"	ND	-----	0.0952	"	"	"	"	"	
Benzo (k) fluoranthene	"	**0.00525**	-----	0.00476	"	"	"	"	"	
Chrysene	"	**0.00619**	-----	0.00476	"	"	"	"	"	
Dibenzo (a,h) anthracene	"	**0.00524**	-----	0.00476	"	"	"	"	"	
Fluoranthene	"	ND	-----	0.0952	"	"	"	"	"	
Fluorene	"	ND	-----	0.0952	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	"	**0.00819**	-----	0.00476	"	"	"	"	"	
Naphthalene	"	ND	-----	0.143	"	"	"	"	"	**RL1**
Phenanthrene	"	ND	-----	0.0952	"	"	"	"	"	
Pyrene	"	ND	-----	0.0952	"	"	"	"	"	
Surrogate(s):	*Fluorene-d10*			*90.4%*		*25 - 125 %*			"	
	Pyrene-d10			*93.4%*		*23 - 150 %*			"	
	Benzo (a) pyrene-d12			*86.7%*		*10 - 125 %*			"	
PSI0525-02 (MW-25)			Water			Sampled: 09/15/09 08:45				
1-Methylnaphthalene	EPA 8270m	ND	-----	0.0952	ug/l	1x	9090619	09/18/09 15:55	09/21/09 19:21	
2-Methylnaphthalene	"	ND	-----	0.0952	"	"	"	"	"	
Acenaphthene	"	**0.229**	-----	0.0952	"	"	"	"	"	
Acenaphthylene	"	ND	-----	0.0952	"	"	"	"	"	
Anthracene	"	ND	-----	0.0952	"	"	"	"	"	
Benzo (a) anthracene	"	**0.00593**	-----	0.00476	"	"	"	"	"	
Benzo (a) pyrene	"	**0.00843**	-----	0.00476	"	"	"	"	"	
Benzo (b) fluoranthene	"	**0.00515**	-----	0.00476	"	"	"	"	"	
Benzo (ghi) perylene	"	ND	-----	0.0952	"	"	"	"	"	
Benzo (k) fluoranthene	"	**0.00488**	-----	0.00476	"	"	"	"	"	
Chrysene	"	**0.00972**	-----	0.00476	"	"	"	"	"	
Dibenzo (a,h) anthracene	"	ND	-----	0.00476	"	"	"	"	"	
Fluoranthene	"	ND	-----	0.0952	"	"	"	"	"	

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Estella K Rieben

Estella Rieben, Project Manager

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Delta Consultants - Portland	Project Name:	**Kinder Morgan - Willbridge**	
4640 SW Macadam Avenue, Suite 110	Project Number:	KMWB 09 01	Report Created:
Portland, OR 97239	Project Manager:	Tim Browning	09/29/09 13:41

Polynuclear Aromatic Compounds per EPA 8270M-SIM

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSI0525-02 (MW-25)			**Water**			**Sampled: 09/15/09 08:45**				
Fluorene	EPA 8270m	ND	-----	0.0952	ug/l	1x	9090619	09/18/09 15:55	09/21/09 19:21	
Indeno (1,2,3-cd) pyrene	"	**0.00520**	-----	0.00476	"	"	"	"	"	
Naphthalene	"	ND	-----	0.143	"	"	"	"	"	**RL1**
Phenanthrene	"	ND	-----	0.0952	"	"	"	"	"	
Pyrene	"	ND	-----	0.0952	"	"	"	"	"	
Surrogate(s): *Fluorene-d10*				*80.4%*		*25 - 125 %*				"
Pyrene-d10				*88.7%*		*23 - 150 %*				"
Benzo (a) pyrene-d12				*81.0%*		*10 - 125 %*				"
PSI0525-03 (MW-26)			**Water**			**Sampled: 09/15/09 08:20**				
1-Methylnaphthalene	EPA 8270m	**11.1**	-----	0.952	ug/l	10x	9090619	09/18/09 15:55	09/23/09 14:00	
2-Methylnaphthalene	"	**0.192**	-----	0.0952	"	1x	"	"	09/21/09 19:50	
Acenaphthene	"	**1.59**	-----	0.0952	"	"	"	"	"	
Acenaphthylene	"	ND	-----	0.0952	"	"	"	"	"	
Anthracene	"	**0.239**	-----	0.0952	"	"	"	"	"	
Benzo (a) anthracene	"	**0.0537**	-----	0.00476	"	"	"	"	"	
Benzo (a) pyrene	"	**0.0214**	-----	0.00476	"	"	"	"	"	
Benzo (b) fluoranthene	"	**0.0176**	-----	0.00476	"	"	"	"	"	
Benzo (ghi) perylene	"	ND	-----	0.0952	"	"	"	"	"	
Benzo (k) fluoranthene	"	**0.0130**	-----	0.00476	"	"	"	"	"	
Chrysene	"	**0.0805**	-----	0.00476	"	"	"	"	"	
Dibenzo (a,h) anthracene	"	**0.00490**	-----	0.00476	"	"	"	"	"	
Fluoranthene	"	**0.959**	-----	0.0952	"	"	"	"	"	
Fluorene	"	**1.10**	-----	0.0952	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	"	**0.0129**	-----	0.00476	"	"	"	"	"	
Naphthalene	"	ND	-----	0.429	"	"	"	"	"	**RL1**
Phenanthrene	"	**2.87**	-----	0.952	"	10x	"	"	09/23/09 14:00	
Pyrene	"	**0.531**	-----	0.0952	"	1x	"	"	09/21/09 19:50	
Surrogate(s): *Fluorene-d10*				*84.1%*		*25 - 125 %*				"
Pyrene-d10				*82.0%*		*23 - 150 %*				"
Benzo (a) pyrene-d12				*84.1%*		*10 - 125 %*				"

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Portland, OR 97239	Project Manager:	Tim Browning	09/29/09 13:41

Polynuclear Aromatic Compounds per EPA 8270M-SIM

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSI0525-04 (MW-33)			**Water**			**Sampled: 09/14/09 14:00**				
1-Methylnaphthalene	EPA 8270m	ND	-----	0.0962	ug/l	1x	9090619	09/18/09 15:55	09/21/09 20:19	
2-Methylnaphthalene	"	ND	-----	0.0962	"	"	"	"	"	
Acenaphthene	"	ND	-----	0.0962	"	"	"	"	"	
Acenaphthylene	"	ND	-----	0.0962	"	"	"	"	"	
Anthracene	"	ND	-----	0.0962	"	"	"	"	"	
Benzo (a) anthracene	"	ND	-----	0.00481	"	"	"	"	"	
Benzo (a) pyrene	"	ND	-----	0.00481	"	"	"	"	"	
Benzo (b) fluoranthene	"	ND	-----	0.00481	"	"	"	"	"	
Benzo (ghi) perylene	"	ND	-----	0.0962	"	"	"	"	"	
Benzo (k) fluoranthene	"	ND	-----	0.00481	"	"	"	"	"	
Chrysene	"	ND	-----	0.00481	"	"	"	"	"	
Dibenzo (a,h) anthracene	"	ND	-----	0.00481	"	"	"	"	"	
Fluoranthene	"	ND	-----	0.0962	"	"	"	"	"	
Fluorene	"	ND	-----	0.0962	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	"	ND	-----	0.00481	"	"	"	"	"	
Naphthalene	"	ND	-----	0.0962	"	"	"	"	"	
Phenanthrene	"	ND	-----	0.0962	"	"	"	"	"	
Pyrene	"	ND	-----	0.0962	"	"	"	"	"	
Surrogate(s):	*Fluorene-d10*			*82.3%*		*25 - 125 %*				"
	Pyrene-d10			*80.6%*		*23 - 150 %*				"
	Benzo (a) pyrene-d12			*74.8%*		*10 - 125 %*				"
PSI0525-05 (MW-34)			**Water**			**Sampled: 09/14/09 14:30**				
1-Methylnaphthalene	EPA 8270m	ND	-----	0.0952	ug/l	1x	9090619	09/18/09 15:55	09/21/09 20:49	
2-Methylnaphthalene	"	ND	-----	0.0952	"	"	"	"	"	
Acenaphthene	"	**0.148**	-----	0.0952	"	"	"	"	"	
Acenaphthylene	"	ND	-----	0.0952	"	"	"	"	"	
Anthracene	"	ND	-----	0.0952	"	"	"	"	"	
Benzo (a) anthracene	"	ND	-----	0.00476	"	"	"	"	"	
Benzo (a) pyrene	"	**0.00477**	-----	0.00476	"	"	"	"	"	
Benzo (b) fluoranthene	"	ND	-----	0.00476	"	"	"	"	"	
Benzo (ghi) perylene	"	ND	-----	0.0952	"	"	"	"	"	
Benzo (k) fluoranthene	"	ND	-----	0.00476	"	"	"	"	"	
Chrysene	"	**0.00509**	-----	0.00476	"	"	"	"	"	
Dibenzo (a,h) anthracene	"	ND	-----	0.00476	"	"	"	"	"	
Fluoranthene	"	ND	-----	0.0952	"	"	"	"	"	

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Polynuclear Aromatic Compounds per EPA 8270M-SIM

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Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSI0525-05 (MW-34)			**Water**			**Sampled: 09/14/09 14:30**				
Fluorene	EPA 8270m	ND	-----	0.0952	ug/l	1x	9090619	09/18/09 15:55	09/21/09 20:49	
Indeno (1,2,3-cd) pyrene	"	ND	-----	0.00476	"	"	"	"	"	
Naphthalene	"	ND	-----	0.0952	"	"	"	"	"	
Phenanthrene	"	ND	-----	0.0952	"	"	"	"	"	
Pyrene	"	ND	-----	0.0952	"	"	"	"	"	
Surrogate(s):	*Fluorene-d10*			*82.5%*		*25 - 125 %*				"
	Pyrene-d10			*83.4%*		*23 - 150 %*				"
	Benzo (a) pyrene-d12			*83.9%*		*10 - 125 %*				"
PSI0525-06 (MW-36)			**Water**			**Sampled: 09/14/09 13:10**				
1-Methylnaphthalene	EPA 8270m	ND	-----	0.0971	ug/l	1x	9090619	09/18/09 15:55	09/21/09 21:20	
2-Methylnaphthalene	"	ND	-----	0.0971	"	"	"	"	"	
Acenaphthene	"	**0.304**	-----	0.0971	"	"	"	"	"	
Acenaphthylene	"	ND	-----	0.0971	"	"	"	"	"	
Anthracene	"	ND	-----	0.0971	"	"	"	"	"	
Benzo (a) anthracene	"	ND	-----	0.00485	"	"	"	"	"	
Benzo (a) pyrene	"	ND	-----	0.00485	"	"	"	"	"	
Benzo (b) fluoranthene	"	ND	-----	0.00485	"	"	"	"	"	
Benzo (ghi) perylene	"	ND	-----	0.0971	"	"	"	"	"	
Benzo (k) fluoranthene	"	ND	-----	0.00485	"	"	"	"	"	
Chrysene	"	ND	-----	0.00485	"	"	"	"	"	
Dibenzo (a,h) anthracene	"	ND	-----	0.00485	"	"	"	"	"	
Fluoranthene	"	ND	-----	0.0971	"	"	"	"	"	
Fluorene	"	ND	-----	0.0971	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	"	ND	-----	0.00485	"	"	"	"	"	
Naphthalene	"	ND	-----	0.0971	"	"	"	"	"	
Phenanthrene	"	ND	-----	0.0971	"	"	"	"	"	
Pyrene	"	ND	-----	0.0971	"	"	"	"	"	
Surrogate(s):	*Fluorene-d10*			*73.8%*		*25 - 125 %*				"
	Pyrene-d10			*83.3%*		*23 - 150 %*				"
	Benzo (a) pyrene-d12			*87.4%*		*10 - 125 %*				"

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Portland, OR 97239	Project Manager:	Tim Browning	09/29/09 13:41

Polynuclear Aromatic Compounds per EPA 8270M-SIM

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSI0525-07 (MW-37)			**Water**			**Sampled: 09/14/09 14:55**				
1-Methylnaphthalene	EPA 8270m	**20.0**	-----	1.94	ug/l	20x	9090619	09/18/09 15:55	09/23/09 14:30	
2-Methylnaphthalene	"	ND	-----	0.0971	"	1x	"	"	09/21/09 21:50	
Acenaphthene	"	**0.631**	-----	0.0971	"	"	"	"	"	
Acenaphthylene	"	ND	-----	0.243	"	"	"	"	"	**RL1**
Anthracene	"	ND	-----	0.0971	"	"	"	"	"	
Benzo (a) anthracene	"	ND	-----	0.00485	"	"	"	"	"	
Benzo (a) pyrene	"	ND	-----	0.00485	"	"	"	"	"	
Benzo (b) fluoranthene	"	ND	-----	0.00485	"	"	"	"	"	
Benzo (ghi) perylene	"	ND	-----	0.0971	"	"	"	"	"	
Benzo (k) fluoranthene	"	ND	-----	0.00485	"	"	"	"	"	
Chrysene	"	**0.00506**	-----	0.00485	"	"	"	"	"	
Dibenzo (a,h) anthracene	"	ND	-----	0.00485	"	"	"	"	"	
Fluoranthene	"	ND	-----	0.0971	"	"	"	"	"	
Fluorene	"	**0.578**	-----	0.0971	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	"	ND	-----	0.00485	"	"	"	"	"	
Naphthalene	"	ND	-----	0.340	"	"	"	"	"	**RL1**
Phenanthrene	"	**0.175**	-----	0.0971	"	"	"	"	"	
Pyrene	"	ND	-----	0.0971	"	"	"	"	"	
Surrogate(s):	*Fluorene-d10*			*79.3%*		*25 - 125 %*				"
	Pyrene-d10			*82.7%*		*23 - 150 %*				"
	Benzo (a) pyrene-d12			*83.0%*		*10 - 125 %*				"
PSI0525-08 (MW-40)			**Water**			**Sampled: 09/14/09 13:40**				
1-Methylnaphthalene	EPA 8270m	ND	-----	0.0962	ug/l	1x	9090619	09/18/09 15:55	09/21/09 22:20	
2-Methylnaphthalene	"	ND	-----	0.0962	"	"	"	"	"	
Acenaphthene	"	ND	-----	0.0962	"	"	"	"	"	
Acenaphthylene	"	ND	-----	0.0962	"	"	"	"	"	
Anthracene	"	ND	-----	0.0962	"	"	"	"	"	
Benzo (a) anthracene	"	ND	-----	0.00481	"	"	"	"	"	
Benzo (a) pyrene	"	ND	-----	0.00481	"	"	"	"	"	
Benzo (b) fluoranthene	"	ND	-----	0.00481	"	"	"	"	"	
Benzo (ghi) perylene	"	ND	-----	0.0962	"	"	"	"	"	
Benzo (k) fluoranthene	"	ND	-----	0.00481	"	"	"	"	"	
Chrysene	"	ND	-----	0.00481	"	"	"	"	"	
Dibenzo (a,h) anthracene	"	ND	-----	0.00481	"	"	"	"	"	
Fluoranthene	"	ND	-----	0.0962	"	"	"	"	"	

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Estella Rieben, Project Manager

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BEAVERTON, OR 97008-7132
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Delta Consultants - Portland	Project Name:	**Kinder Morgan - Willbridge**	
4640 SW Macadam Avenue, Suite 110	Project Number:	KMWB 09 01	Report Created:
Portland, OR 97239	Project Manager:	Tim Browning	09/29/09 13:41

Polynuclear Aromatic Compounds per EPA 8270M-SIM

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSI0525-08 (MW-40)			Water			Sampled: 09/14/09 13:40				
Fluorene	EPA 8270m	ND	-----	0.0962	ug/l	1x	9090619	09/18/09 15:55	09/21/09 22:20	
Indeno (1,2,3-cd) pyrene	"	ND	-----	0.00481	"	"	"	"	"	
Naphthalene	"	ND	-----	0.0962	"	"	"	"	"	
Phenanthrene	"	ND	-----	0.0962	"	"	"	"	"	
Pyrene	"	ND	-----	0.0962	"	"	"	"	"	
Surrogate(s): *Fluorene-d10*				*85.1%*		*25 - 125 %*				"
Pyrene-d10				*86.1%*		*23 - 150 %*				"
Benzo (a) pyrene-d12				*88.9%*		*10 - 125 %*				"
PSI0525-09 (DUP-1)			Water			Sampled: 09/14/09 00:00				
1-Methylnaphthalene	EPA 8270m	**3.41**	-----	0.481	ug/l	5x	9090619	09/18/09 15:55	09/23/09 14:59	
2-Methylnaphthalene	"	ND	-----	0.0962	"	1x	"	"	09/21/09 22:49	
Acenaphthene	"	**0.809**	-----	0.0962	"	"	"	"	"	
Acenaphthylene	"	ND	-----	0.0962	"	"	"	"	"	
Anthracene	"	**0.117**	-----	0.0962	"	"	"	"	"	
Benzo (a) anthracene	"	**0.0265**	-----	0.00481	"	"	"	"	"	
Benzo (a) pyrene	"	**0.0106**	-----	0.00481	"	"	"	"	"	
Benzo (b) fluoranthene	"	**0.00920**	-----	0.00481	"	"	"	"	"	
Benzo (ghi) perylene	"	ND	-----	0.0962	"	"	"	"	"	
Benzo (k) fluoranthene	"	**0.00597**	-----	0.00481	"	"	"	"	"	
Chrysene	"	**0.0421**	-----	0.00481	"	"	"	"	"	
Dibenzo (a,h) anthracene	"	ND	-----	0.00481	"	"	"	"	"	
Fluoranthene	"	**0.515**	-----	0.0962	"	"	"	"	"	
Fluorene	"	**0.482**	-----	0.0962	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	"	**0.00562**	-----	0.00481	"	"	"	"	"	
Naphthalene	"	ND	-----	0.192	"	"	"	"	"	**RL1**
Phenanthrene	"	**1.22**	-----	0.0962	"	"	"	"	"	
Pyrene	"	**0.293**	-----	0.0962	"	"	"	"	"	
Surrogate(s): *Fluorene-d10*				*78.8%*		*25 - 125 %*				"
Pyrene-d10				*80.3%*		*23 - 150 %*				"
Benzo (a) pyrene-d12				*84.4%*		*10 - 125 %*				"

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Delta Consultants - Portland	Project Name:	**Kinder Morgan - Willbridge**	
4640 SW Macadam Avenue, Suite 110	Project Number:	KMWB 09 01	Report Created:
Portland, OR 97239	Project Manager:	Tim Browning	09/29/09 13:41

Polynuclear Aromatic Compounds per EPA 8270M-SIM

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSI0525-10 (DUP-2)			**Water**			**Sampled: 09/15/09 00:00**				
1-Methylnaphthalene	EPA 8270m	**5.02**	-----	0.483	ug/l	5x	9090619	09/18/09 15:55	09/23/09 15:29	
2-Methylnaphthalene	"	ND	-----	0.0966	"	1x	"	"	09/21/09 23:19	
Acenaphthene	"	**0.983**	-----	0.0966	"	"	"	"	"	
Acenaphthylene	"	ND	-----	0.0966	"	"	"	"	"	
Anthracene	"	**0.165**	-----	0.0966	"	"	"	"	"	
Benzo (a) anthracene	"	**0.0390**	-----	0.00483	"	"	"	"	"	
Benzo (a) pyrene	"	**0.0139**	-----	0.00483	"	"	"	"	"	
Benzo (b) fluoranthene	"	**0.0122**	-----	0.00483	"	"	"	"	"	
Benzo (ghi) perylene	"	ND	-----	0.0966	"	"	"	"	"	
Benzo (k) fluoranthene	"	**0.00866**	-----	0.00483	"	"	"	"	"	
Chrysene	"	**0.0550**	-----	0.00483	"	"	"	"	"	
Dibenzo (a,h) anthracene	"	ND	-----	0.00483	"	"	"	"	"	
Fluoranthene	"	**0.710**	-----	0.0966	"	"	"	"	"	
Fluorene	"	**0.597**	-----	0.0966	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	"	**0.00803**	-----	0.00483	"	"	"	"	"	
Naphthalene	"	ND	-----	0.242	"	"	"	"	"	**RL1**
Phenanthrene	"	**1.69**	-----	0.0966	"	"	"	"	"	
Pyrene	"	**0.375**	-----	0.0966	"	"	"	"	"	
Surrogate(s):	*Fluorene-d10*			*82.2%*		*25 - 125 %*				"
	Pyrene-d10			*86.9%*		*23 - 150 %*				"
	Benzo (a) pyrene-d12			*91.6%*		*10 - 125 %*				"

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Estella K Rieben

Estella Rieben, Project Manager

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Delta Consultants - Portland	Project Name:	**Kinder Morgan - Willbridge**	
4640 SW Macadam Avenue, Suite 110	Project Number:	KMWB 09 01	Report Created:
Portland, OR 97239	Project Manager:	Tim Browning	09/29/09 13:41

BTEX per EPA Method 8021B - Laboratory Quality Control Results

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QC Batch: 9090583 **Water Preparation Method: EPA 5030B**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (9090583-BLK1)									**Extracted: 09/17/09 12:13**					
Benzene	EPA 8021B	ND	---	0.500	ug/l	1x	--	--	--	--	--	--	09/17/09 20:12	
Toluene	"	ND	---	0.500	"	"	--	--	--	--	--	--	"	
Ethylbenzene	"	ND	---	0.500	"	"	--	--	--	--	--	--	"	
Xylenes (total)	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Surrogate(s): 4-BFB (PID)		*Recovery: 92.0%*			*Limits: 70-130%*								*09/17/09 20:12*	
LCS (9090583-BS1)									**Extracted: 09/17/09 12:13**					
Benzene	EPA 8021B	16.5	---	0.500	ug/l	1x	--	20.0	82.3%	(75-125)	--	--	09/17/09 19:07	
Toluene	"	16.7	---	0.500	"	"	--	"	83.3%	(80-120)	--	--	"	
Ethylbenzene	"	17.3	---	0.500	"	"	--	"	86.3%	(80-130)	--	--	"	
Xylenes (total)	"	53.5	---	1.00	"	"	--	60.0	89.2%	"	--	--	"	
o-Xylene	"	17.8	---	1.00	"	"	--	20.0	88.8%	"	--	--	"	
m,p-Xylene	"	35.7	---	1.00	"	"	--	40.0	89.4%	"	--	--	"	
Surrogate(s): 4-BFB (PID)		*Recovery: 107%*			*Limits: 70-130%*								*09/17/09 19:07*	
LCS Dup (9090583-BSD1)									**Extracted: 09/17/09 12:13**					
Benzene	EPA 8021B	19.5	---	0.500	ug/l	1x	--	20.0	97.7%	(75-125)	17.1%	(20)	09/17/09 19:39	
Toluene	"	19.7	---	0.500	"	"	--	"	98.4%	(80-120)	16.7%	"	"	
Ethylbenzene	"	20.4	---	0.500	"	"	--	"	102%	(80-130)	16.4%	"	"	
Xylenes (total)	"	62.8	---	1.00	"	"	--	60.0	105%	"	16.1%	"	"	
o-Xylene	"	21.0	---	1.00	"	"	--	20.0	105%	"	16.7%	"	"	
m,p-Xylene	"	41.9	---	1.00	"	"	--	40.0	105%	"	15.8%	"	"	
Surrogate(s): 4-BFB (PID)		*Recovery: 112%*			*Limits: 70-130%*								*09/17/09 19:39*	

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Delta Consultants - Portland	Project Name:	**Kinder Morgan - Willbridge**	
4640 SW Macadam Avenue, Suite 110	Project Number:	KMWB 09 01	Report Created:
Portland, OR 97239	Project Manager:	Tim Browning	09/29/09 13:41

Total Metals per EPA 200 Series Methods - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 9090797 **Water Preparation Method: EPA 200/3005**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (9090797-BLK1)								**Extracted: 09/23/09 09:20**						
Arsenic	EPA 200.8	ND	---	0.00100	mg/l	1x	--	--	--	--	--	--	09/25/09 18:11	
Barium	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Cadmium	"	ND	---	0.000500	"	"	--	--	--	--	--	--	"	
Chromium	"	ND	---	0.00200	"	"	--	--	--	--	--	--	"	
Copper	"	ND	---	0.00200	"	"	--	--	--	--	--	--	"	
Lead	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Selenium	"	ND	---	0.000500	"	"	--	--	--	--	--	--	"	
Silver	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Zinc	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	
LCS (9090797-BS1)								**Extracted: 09/23/09 09:20**						
Arsenic	EPA 200.8	0.0935	---	0.00100	mg/l	1x	--	0.100	93.5%	(85-115)	--	--	09/25/09 18:19	
Barium	"	0.0904	---	0.00100	"	"	--	"	90.4%	"	--	--	"	
Cadmium	"	0.0870	---	0.000500	"	"	--	"	87.0%	"	--	--	"	
Chromium	"	0.0909	---	0.00200	"	"	--	"	90.9%	"	--	--	"	
Copper	"	0.0921	---	0.00200	"	"	--	"	92.1%	"	--	--	"	
Lead	"	0.0853	---	0.00100	"	"	--	"	85.3%	"	--	--	"	
Selenium	"	0.0906	---	0.000500	"	"	--	"	90.6%	"	--	--	"	
Silver	"	0.0455	---	0.00100	"	"	--	0.0500	91.1%	"	--	--	"	
Zinc	"	0.0900	---	0.00500	"	"	--	0.100	90.0%	"	--	--	"	
Duplicate (9090797-DUP1)							**QC Source: PSI0525-08**			**Extracted: 09/23/09 09:20**				
Arsenic	EPA 200.8	0.0191	---	0.00100	mg/l	1x	0.0193	--	--	--	0.833%	(20)	09/25/09 18:34	
Barium	"	0.0852	---	0.00100	"	"	0.0851	--	--	--	0.106%	"	"	
Cadmium	"	ND	---	0.000500	"	"	ND	--	--	--	NR	"	"	
Chromium	"	ND	---	0.00200	"	"	ND	--	--	--	10.5%	"	"	
Copper	"	ND	---	0.00200	"	"	ND	--	--	--	2.30%	"	"	
Lead	"	ND	---	0.00100	"	"	ND	--	--	--	11.2%	"	"	
Selenium	"	ND	---	0.000500	"	"	ND	--	--	--	NR	"	"	
Silver	"	ND	---	0.00100	"	"	ND	--	--	--	NR	"	"	
Zinc	"	0.0103	---	0.00500	"	"	0.00961	--	--	--	7.22%	"	"	

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Delta Consultants - Portland	Project Name:	**Kinder Morgan - Willbridge**	
4640 SW Macadam Avenue, Suite 110	Project Number:	KMWB 09 01	Report Created:
Portland, OR 97239	Project Manager:	Tim Browning	09/29/09 13:41

Total Metals per EPA 200 Series Methods - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 9090797 **Water Preparation Method: EPA 200/3005**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Matrix Spike (9090797-MS1)				**QC Source: PSI0525-08**					**Extracted: 09/23/09 09:20**					
Arsenic	EPA 200.8	0.113	---	0.00100	mg/l	1x	0.0193	0.100	93.8%	(70-130)	--	--	09/25/09 18:50	
Barium	"	0.177	---	0.00100	"	"	0.0851	"	91.7%	"	--	--	"	
Cadmium	"	0.0890	---	0.000500	"	"	0.0000900	"	88.9%	"	--	--	"	
Chromium	"	0.0919	---	0.00200	"	"	0.000500	"	91.4%	(75-125)	--	--	"	
Copper	"	0.0909	---	0.00200	"	"	0.000880	"	90.0%	"	--	--	"	
Lead	"	0.0824	---	0.00100	"	"	0.000470	"	82.0%	"	--	--	"	
Selenium	"	0.0912	---	0.000500	"	"	0.000130	"	91.1%	(70-130)	--	--	"	
Silver	"	0.0456	---	0.00100	"	"	ND	0.0500	91.1%	"	--	--	"	
Zinc	"	0.104	---	0.00500	"	"	0.00961	0.100	94.5%	"	--	--	"	
Matrix Spike (9090797-MS2)				**QC Source: PSI0544-02**					**Extracted: 09/23/09 09:20**					
Arsenic	EPA 200.8	0.0981	---	0.00100	mg/l	1x	0.000260	0.100	97.9%	(70-130)	--	--	09/25/09 20:33	
Barium	"	0.0951	---	0.00100	"	"	0.00654	"	88.5%	"	--	--	"	
Cadmium	"	0.0886	---	0.000500	"	"	0.000520	"	88.1%	"	--	--	"	
Chromium	"	0.0921	---	0.00200	"	"	0.00364	"	88.4%	(75-125)	--	--	"	
Copper	"	0.139	---	0.00200	"	"	0.0518	"	86.9%	"	--	--	"	
Lead	"	0.0889	---	0.00100	"	"	0.000830	"	88.1%	"	--	--	09/26/09 01:00	
Selenium	"	0.0950	---	0.000500	"	"	0.000300	"	94.7%	(70-130)	--	--	09/25/09 20:33	
Silver	"	0.109	---	0.00200	"	2x	0.0679	0.0500	81.5%	"	--	--	09/26/09 01:08	
Zinc	"	0.281	---	0.00500	"	1x	0.195	0.100	86.1%	"	--	--	09/25/09 20:33	

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Delta Consultants - Portland	Project Name:	**Kinder Morgan - Willbridge**	
4640 SW Macadam Avenue, Suite 110	Project Number:	KMWB 09 01	Report Created:
Portland, OR 97239	Project Manager:	Tim Browning	09/29/09 13:41

Total Metals per EPA 200 Series Methods - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 9090806 **Water Preparation Method: EPA 200/3005**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (9090806-BLK1)								**Extracted: 09/23/09 11:47**						
Arsenic	EPA 200.8	ND	---	0.00100	mg/l	1x	--	--	--	--	--	--	09/23/09 22:10	
Barium	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Cadmium	"	ND	---	0.000500	"	"	--	--	--	--	--	--	"	
Chromium	"	ND	---	0.00200	"	"	--	--	--	--	--	--	"	
Copper	"	ND	---	0.00200	"	"	--	--	--	--	--	--	"	
Lead	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Selenium	"	ND	---	0.000500	"	"	--	--	--	--	--	--	"	
Silver	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Zinc	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	
LCS (9090806-BS1)								**Extracted: 09/23/09 11:47**						
Arsenic	EPA 200.8	0.0944	---	0.00100	mg/l	1x	--	0.100	94.4%	(85-115)	--	--	09/23/09 22:18	
Barium	"	0.0901	---	0.00100	"	"	--	"	90.1%	"	--	--	"	
Cadmium	"	0.0923	---	0.000500	"	"	--	"	92.3%	"	--	--	"	
Chromium	"	0.0920	---	0.00200	"	"	--	"	92.0%	"	--	--	"	
Copper	"	0.0962	---	0.00200	"	"	--	"	96.2%	"	--	--	"	
Lead	"	0.0908	---	0.00100	"	"	--	"	90.8%	"	--	--	"	
Selenium	"	0.0900	---	0.000500	"	"	--	"	90.0%	"	--	--	"	
Silver	"	0.0473	---	0.00100	"	"	--	0.0500	94.5%	"	--	--	"	
Zinc	"	0.0909	---	0.00500	"	"	--	0.100	90.9%	"	--	--	"	
Duplicate (9090806-DUP1)						**QC Source: PSI0241-01**				**Extracted: 09/23/09 11:47**				
Arsenic	EPA 200.8	ND	---	0.200	mg/l	200x	0.202	--	--	--	24.4%	(20)	09/23/09 22:33	R4
Barium	"	59.5	---	0.200	"	"	62.5	--	--	--	4.92%	"	"	
Cadmium	"	0.198	---	0.100	"	"	0.212	--	--	--	6.83%	"	"	
Chromium	"	ND	---	0.400	"	"	ND	--	--	--	6.61%	"	"	
Copper	"	0.474	---	0.400	"	"	0.498	--	--	--	4.94%	"	"	
Lead	"	ND	---	0.200	"	"	ND	--	--	--	8.99%	"	"	
Selenium	"	ND	---	0.100	"	"	ND	--	--	--	NR	"	"	
Silver	"	ND	---	0.200	"	"	ND	--	--	--	NR	"	"	
Zinc	"	4.76	---	1.00	"	"	4.80	--	--	--	1.00%	"	"	

TestAmerica Portland

Estella K Rieben

Estella Rieben, Project Manager

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THE LEADER IN ENVIRONMENTAL TESTING

PORTLAND, OR 9405 S.W. NIMBUS AVENUE
BEAVERTON, OR 97008-7132
ph: (503) 906.9200 fax: (503) 906.9210

Delta Consultants - Portland	Project Name:	**Kinder Morgan - Willbridge**	
4640 SW Macadam Avenue, Suite 110	Project Number:	KMWB 09 01	Report Created:
Portland, OR 97239	Project Manager:	Tim Browning	09/29/09 13:41

Total Metals per EPA 200 Series Methods - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 9090806 **Water Preparation Method: EPA 200/3005**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Matrix Spike (9090806-MS1)				**QC Source: PSI0241-01**					**Extracted: 09/23/09 11:47**					
Arsenic	EPA 200.8	0.244	---	0.200	mg/l	200x	0.202	0.100	42.0%	(70-130)	--	--	09/23/09 22:49	M4
Barium	"	58.4	---	0.200	"	"	62.5	"	-4100%	"	--	--	"	M4
Cadmium	"	0.272	---	0.100	"	"	0.212	"	60.0%	"	--	--	"	M4
Chromium	"	0.302	---	0.400	"	"	0.250	"	52.0%	(75-125)	--	--	"	M4
Copper	"	0.566	---	0.400	"	"	0.498	"	68.0%	"	--	--	"	M4
Lead	"	0.248	---	0.200	"	"	0.186	"	62.0%	"	--	--	"	M4
Selenium	"	0.106	---	0.100	"	"	ND	"	106%	(70-130)	--	--	"	
Silver	"	0.0560	---	0.200	"	"	ND	0.0500	112%	"	--	--	"	
Zinc	"	4.99	---	1.00	"	"	4.80	0.100	190%	"	--	--	"	M4
Matrix Spike (9090806-MS2)				**QC Source: PSI0513-02**					**Extracted: 09/23/09 11:47**					
Arsenic	EPA 200.8	0.0938	---	0.00100	mg/l	1x	0.000910	0.100	92.9%	(70-130)	--	--	09/24/09 00:33	
Barium	"	0.0962	---	0.00100	"	"	0.00924	"	87.0%	"	--	--	"	
Cadmium	"	0.0927	---	0.000500	"	"	0.000410	"	92.2%	"	--	--	"	
Chromium	"	0.114	---	0.00200	"	"	0.0208	"	92.7%	(75-125)	--	--	"	
Copper	"	0.110	---	0.00200	"	"	0.0192	"	91.0%	"	--	--	"	
Lead	"	0.0867	---	0.00100	"	"	0.000700	"	86.0%	"	--	--	"	
Selenium	"	0.0886	---	0.000500	"	"	0.000170	"	88.5%	(70-130)	--	--	"	
Silver	"	0.0570	---	0.00100	"	"	0.0134	0.0500	87.3%	"	--	--	"	
Zinc	"	0.114	---	0.00500	"	"	0.0238	0.100	90.6%	"	--	--	"	

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4640 SW Macadam Avenue, Suite 110	Project Number:	KMWB 09 01	Report Created:
Portland, OR 97239	Project Manager:	Tim Browning	09/29/09 13:41

Mercury per EPA Method 1631E - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 9090731 **Water Preparation Method: EPA 1631**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (9090731-BLK1)								**Extracted: 09/21/09 09:08**						
Mercury	EPA 1631E	ND	---	0.000500	ug/l	1x	--	--	--	--	--	--	09/25/09 15:28	
LCS (9090731-BS1)								**Extracted: 09/21/09 09:08**						
Mercury	EPA 1631E	0.00444	---	0.000500	ug/l	1x	--	0.00500	88.8%	(85-115)	--	--	09/25/09 16:02	
LCS Dup (9090731-BSD1)								**Extracted: 09/21/09 09:08**						
Mercury	EPA 1631E	0.00436	---	0.000500	ug/l	1x	--	0.00500	87.2%	(85-115)	1.78%	(20)	09/25/09 16:38	
Duplicate (9090731-DUP1)					**QC Source: PSI0525-04**			**Extracted: 09/21/09 09:08**						
Mercury	EPA 1631E	0.00957	---	0.000500	ug/l	1x	0.0137	--	--	--	35.8%	(20)	09/25/09 16:45	R2
Matrix Spike (9090731-MS1)					**QC Source: PSI0525-04**			**Extracted: 09/21/09 09:08**						
Mercury	EPA 1631E	0.0171	---	0.000500	ug/l	1x	0.0137	0.00500	67.2%	(70-125)	--	--	09/25/09 18:04	M8
Matrix Spike Dup (9090731-MSD1)					**QC Source: PSI0525-04**			**Extracted: 09/21/09 09:08**						
Mercury	EPA 1631E	0.0173	---	0.000500	ug/l	1x	0.0137	0.00500	70.2%	(70-125)	0.876%	(20)	09/25/09 18:10	

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Delta Consultants - Portland	Project Name:	**Kinder Morgan - Willbridge**	
4640 SW Macadam Avenue, Suite 110	Project Number:	KMWB 09 01	Report Created:
Portland, OR 97239	Project Manager:	Tim Browning	09/29/09 13:41

Total Mercury per EPA Method 7470A - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 9090711 **Water Preparation Method: EPA 7470A**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (9090711-BLK1)								**Extracted: 09/21/09 16:03**						
Mercury	EPA 7470A	ND	---	0.000200	mg/l	1x	--	--	--	--	--	--	09/21/09 21:25	
LCS (9090711-BS1)								**Extracted: 09/21/09 16:03**						
Mercury	EPA 7470A	0.00523	---	0.000200	mg/l	1x	--	0.00500	105%	(85-115)	--	--	09/21/09 21:28	
LCS Dup (9090711-BSD1)								**Extracted: 09/21/09 16:03**						
Mercury	EPA 7470A	0.00519	---	0.000200	mg/l	1x	--	0.00500	104%	(85-115)	0.705%	(20)	09/21/09 21:30	
Duplicate (9090711-DUP1)					**QC Source: PSI0358-01**				**Extracted: 09/21/09 16:03**					
Mercury	EPA 7470A	ND	---	0.000200	mg/l	1x	ND	--	--	--	NR	(20)	09/21/09 21:33	
Matrix Spike (9090711-MS1)					**QC Source: PSI0358-01**				**Extracted: 09/21/09 16:03**					
Mercury	EPA 7470A	0.00498	---	0.000200	mg/l	1x	ND	0.00500	99.7%	(75-125)	--	--	09/21/09 21:35	
Matrix Spike Dup (9090711-MSD1)					**QC Source: PSI0358-01**				**Extracted: 09/21/09 16:03**					
Mercury	EPA 7470A	0.00478	---	0.000200	mg/l	1x	ND	0.00500	95.6%	(75-125)	4.15%	(20)	09/21/09 21:38	

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Delta Consultants - Portland	Project Name:	**Kinder Morgan - Willbridge**	
4640 SW Macadam Avenue, Suite 110	Project Number:	KMWB 09 01	Report Created:
Portland, OR 97239	Project Manager:	Tim Browning	09/29/09 13:41

Polynuclear Aromatic Compounds per EPA 8270M-SIM - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 9090619 **Water Preparation Method: 3520B Liq-Liq**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (9090619-BLK1)							**Extracted: 09/18/09 15:55**							
1-Methylnaphthalene	EPA 8270m	ND	---	0.100	ug/l	1x	--	--	--	--	--	--	09/21/09 17:18	
2-Methylnaphthalene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Acenaphthene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Acenaphthylene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Anthracene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Benzo (a) anthracene	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	
Benzo (a) pyrene	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	
Benzo (b) fluoranthene	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	
Benzo (ghi) perylene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Benzo (k) fluoranthene	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	
Chrysene	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	
Dibenzo (a,h) anthracene	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	
Fluoranthene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Fluorene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Indeno (1,2,3-cd) pyrene	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	
Naphthalene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Phenanthrene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Pyrene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Surrogate(s):	*Fluorene-d10*	*Recovery:*	*93.1%*	*Limits:*	*25-125%*								*09/21/09 17:18*	
	Pyrene-d10		*96.1%*		*23-150%*								"	
	Benzo (a) pyrene-d12		*91.1%*		*10-125%*								"	
LCS (9090619-BS1)							**Extracted: 09/18/09 15:55**							
Acenaphthene	EPA 8270m	1.32	---	0.100	ug/l	1x	--	1.25	105%	(26-135)	--	--	09/21/09 17:52	
Benzo (a) pyrene	"	1.19	---	0.00500	"	"	--	"	95.5%	(38-137)	--	--	"	
Pyrene	"	1.30	---	0.100	"	"	--	"	104%	(30-147)	--	--	"	
Surrogate(s):	*Fluorene-d10*	*Recovery:*	*105%*	*Limits:*	*25-125%*								*09/21/09 17:52*	
	Pyrene-d10		*104%*		*23-150%*								"	
	Benzo (a) pyrene-d12		*106%*		*10-125%*								"	

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Estella K Rieben

Estella Rieben, Project Manager

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Delta Consultants - Portland	Project Name:	**Kinder Morgan - Willbridge**	
4640 SW Macadam Avenue, Suite 110	Project Number:	KMWB 09 01	Report Created:
Portland, OR 97239	Project Manager:	Tim Browning	09/29/09 13:41

Polynuclear Aromatic Compounds per EPA 8270M-SIM - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 9090619 **Water Preparation Method: 3520B Liq-Liq**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
LCS Dup (9090619-BSD1)							**Extracted: 09/18/09 15:55**							
Acenaphthene	EPA 8270m	1.19	---	0.100	ug/l	1x	--	1.25	95.3%	(26-135)	9.93%	(50)	09/21/09 18:22	
Benzo (a) pyrene	"	1.15	---	0.00500	"	"	--	"	91.6%	(38-137)	4.11%	"	"	
Pyrene	"	1.19	---	0.100	"	"	--	"	95.4%	(30-147)	8.92%	"	"	
Surrogate(s):	*Fluorene-d10*	*Recovery:*	*92.0%*		*Limits:*	*25-125%*							*09/21/09 18:22*	
	Pyrene-d10		*93.7%*			*23-150%*							*"*	
	Benzo (a) pyrene-d12		*96.9%*			*10-125%*							*"*	

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4640 SW Macadam Avenue, Suite 110	Project Number:	KMWB 09 01	Report Created:
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Notes and Definitions

Report Specific Notes:

M4	-	The sample required a dilution due to matrix interference. Because of this dilution, the matrix spike concentrations in the sample were reduced to a level where the recovery calculation does not provide useful information. See Blank Spike (LCS).
M8	-	The MS and/or MSD were below the acceptance limits. See Blank Spike (LCS).
R2	-	The RPD exceeded the acceptance limit.
R4	-	Due to the low levels of analyte in the sample, the duplicate RPD calculation does not provide useful information.
RL1	-	Reporting limit raised due to sample matrix effects.

Laboratory Reporting Conventions:

DET	-	Analyte DETECTED at or above the Reporting Limit. Qualitative Analyses only.
ND	-	Analyte NOT DETECTED at or above the reporting limit (MDL or MRL, as appropriate).
NR/NA	-	Not Reported / Not Available
dry	-	Sample results reported on a Dry Weight Basis. Results and Reporting Limits have been corrected for Percent Dry Weight.
wet	-	Sample results and reporting limits reported on a Wet Weight Basis (as received). Results with neither 'wet' nor 'dry' are reported on a Wet Weight Basis.
RPD	-	RELATIVE PERCENT DIFFERENCE (RPDs calculated using Results, not Percent Recoveries).
MRL	-	METHOD REPORTING LIMIT. Reporting Level at, or above, the lowest level standard of the Calibration Table.
MDL*	-	METHOD DETECTION LIMIT. Reporting Level at, or above, the statistically derived limit based on 40CFR, Part 136, Appendix B. *MDLs are listed on the report only if the data has been evaluated below the MRL. Results between the MDL and MRL are reported as Estimated Results.
Dil	-	Dilutions are calculated based on deviations from the standard dilution performed for an analysis, and may not represent the dilution found on the analytical raw data.
Reporting Limits	-	Reporting limits (MDLs and MRLs) are adjusted based on variations in sample preparation amounts, analytical dilutions and percent solids, where applicable.
Electronic Signature	-	Electronic Signature added in accordance with TestAmerica's *Electronic Reporting and Electronic Signatures Policy*. Application of electronic signature indicates that the report has been reviewed and approved for release by the laboratory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

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Chain of Custody Record

Sampler ID BNL / KCM

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☒

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THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124-280 (0508)

PSIC525

Client	Project Manager	Date	Chain of Custody Number
Delta Consultants	Tim Browning TBrowning@deltaenv.com	9/15/09	113359
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page** 1 of 1
4640 SW Macadam Ave #110	503-863-2106 / 503-639-7619		
City Portland / **State** OR / **Zip Code** 97239	**Site Contact**	**Lab Contact**	
Project Name and Location (State) Kinder Morgan Willbridge (OR)	**Carrier/Waybill Number**		
Contract/Purchase Order/Quote No.			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis: BTEX (8021B)	PAHs (8270C-SIM)**	RCRA8 metals + Cu, Zn	Low level Hg (1631) *	Special Instructions/ Conditions of Receipt
MW-8	9/15/09	0920		X			2		1	3			X	X	X		
MW-25	9/15/09	0845					2		1	3							
MW-26	9/15/09	0820					2		1	3							
MW-33	9/14/09	1400					2		1	4						X	
MW-34	9/14/09	1430					2		1	4							
MW-36	9/14/09	1310					2		1	4							
MW-37	9/14/09	1455					2		1	4							
MW-40	9/14/09	1340					2		1	4							
DUP-1	9/14/09	—					2		1	4						X	
DUP-2	9/15/09	—		X			2		1	3			X	X	X		

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
(A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify)

	Relinquished By	Date	Time	Received By	Date	Time
1.	KMC Delta				9/15/9	15:50
2.		9/15/9	17:35		9/15/09	17:35
3.						

Comments
*Use lower Willamette Harbor detection limits, **Add 1-methylnaphthalene & 2-methylnaphthalene

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

6.1°C, 4.6°C

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Sample Receiving Checklist

Work Order #: PSI0525 Date/Time Received: 01/15/09 17:35

Client Name and Project: Delta Consultants Kinder Morgan - Willbridge

Time Zone:
☐EDT/EST ☐CDT/CST ☐MDT/MST ☒PDT/PST ☐AK ☐OTHER

Unpacking Checks:

Cooler #(s): 1 2

Temperatures: 1.6 6.1

Digi #1 ☐ Digi #2 ☐ IR Gun ☒ (☐Plastic ☒Glass)

Temperature out of Range:

__Not enough or No Ice
__Ice Melted
__W/in 4 Hrs of collection
__Other:

Initials: KH

N/A	Yes	No	
☒	☐	☐	1. If ESI client, were temp blanks received? If no, document on NOD.
☒	☐	☐	2. Cooler Seals intact? (N/A if hand delivered) if no, document on NOD.
	☒	☐	3. Chain of Custody present? If no, document on NOD.
	☒	☐	4. Bottles received intact? If no, document on NOD.
	☒	☐	5. Sample is not multiphasic? If no, document on NOD.
	☒	☐	6. Proper Container and preservatives used? If no, document on NOD.
☒	☐	☐	7. pH of all samples checked and meet requirements? If no, document on NOD.
☒	☐	☐	8. Cyanide samples checked for sulfides and meet requirements? If no, notify PM.
☒	☐	☐	9. HF Dilution required?
	☒	☐	10. Sufficient volume provided for all analysis? If no, document on NOD and consult PM before proceeding.
	☒	☐	11. Did chain of custody agree with samples received? If no, document on NOD.
	☒	☐	12. Is the "Sampled by" section of the COC completed?
☒	☐	☐	13. Were VOA/Oil Syringe samples without headspace?
☐	☒	☐	14. Were VOA vials preserved? ☐HCl ☐Sodium Thiosulfate ☐Ascorbic Acid
	☐	☒	15. Did samples require preservation with sodium thiosulfate?
☒	☐	☐	16. If yes to #14, was the residual chlorine test negative? If no, document on NOD.
☒	☐	☐	17. Are dissolved/field filtered metals bottles sediment-free? If no, document on NOD.
☒	☐	☐	18. Is sufficient volume provided for client requested MS/MSD or matrix duplicates? If no, document on NOD and contact PM before proceeding.
☒	☐	☐	19. Are analyses with short holding times received in hold?
	☒	☐	20. Was Standard Turn Around (TAT) requested?
	☒	☐	21. Receipt date(s) < 48 hours past the collection date(s)? If no, notify PM.

COP0018009

TestAmerica Portland

Sample Receiving Checklist

Work Order #: PSI0525

Login Checks: Initials: PS

N/A	Yes	No	
	☑	☐	22. Sufficient volume provided for all analysis? If no, document on NOD & contact PM.
☑	☐	☐	23. Sufficient volume provided for client requested MS/MSD or matrix duplicates? If no, document on NOD and contact PM.
	☑	☐	24. Did the chain of custody include "received by" and "relinquished by" signatures, dates and times?
☑	☐	☐	25. Were special log in instructions read and followed?
	☑	☐	26. Were tests logged checked against the COC?
☑	☐	☐	27. Were rush notices printed and delivered?
☑	☐	☐	28. Were short hold notices printed and delivered?
☑	☐	☐	29. Were subcontract COCs printed?
☑	☐	☐	30. Was HF dilution logged?

Labeling and Storage Checks: Initials: KH

N/A	Yes	No	
☒	☐	☐	31. Were the subcontracted samples/containers put in Sx fridge?
☒	☐	☐	32. Were sample bottles and COC double checked for dissolved/filtered metals?
	☒	☐	33. Did the sample ID, Date, and Time from label match what was logged?
☒	☐	☐	34. Were Foreign sample stickers affixed to each container and containers stored in foreign fridge?
☒	☐	☐	35. Were HF stickers affixed to each container, and containers stored in Sx fridge?
☒	☐	☐	36. Was an NOD for created for noted discrepancies and placed in folder?

Document any problems or discrepancies and the actions taken to resolve them on a Notice of Discrepancy form (NOD).

Oregon Department of Environmental Quality
Land Quality - DeqHazWaste.NET

HOME **FORMS** PROFILE ADMIN

Production Database **Reporting Forms Log**

User: vuyeda **Role:** Administrator Log Off

P17

RCRA Site ID: ORD087458196

Conoco Phillips Company
5528 NW DOANE AVE
PORTLAND, OR 97210

Open Pre-printed Site ID Form

Reporting Forms Log

Site ID Form History

Add

Type	Status	Effective	Legal Owner	Submitted	E-Filer	
AR: RY2009	LQG	12/31/2009	ConocoPhillips Company	Yes	Yes	·View ·Print
AR: RY2008	SQG	12/31/2008	ConocoPhillips Company	Yes	Yes	·View ·Print
AR: RY2007	SQG	12/31/2007	ConocoPhillips Company	Yes	Yes	·View ·Print
AR: RY2006	LQG	12/31/2006	ConocoPhillips Company	Yes	Yes	·View ·Print
Revised: RY2005	SQG	12/31/2005	ConocoPhillips Company	Yes	Yes	·View ·Print
Revised: RY2004	SQG	12/31/2004	ConocoPhillips Company	Yes	Yes	·View ·Print
Revised: RY2003	LQG	12/31/2003	ConocoPhillips Company	Yes	Yes	·View ·Print
New: RY2002	SQG	1/1/2003	ConocoPhillips Company	Yes	No	·View ·Print
Withdraw: RY2001	LQG	2/20/2002	Tosco Corporation	Yes	No	·View ·Print
AR: RY2000	LQG	3/15/2001	Tosco Corporation	Yes	No	·View ·Print
AR: RY1999	LQG	2/29/2000	Tosco Corporation	Yes	No	·View ·Print
AR: RY1998	LQG	2/22/1999	Tosco Corporation	Yes	No	·View ·Print
AR: RY1997	LQG	3/3/1998	Tosco Corporation	Yes	No	·View ·Print
New	SQG	3/31/1997	Tosco Corporation	Yes	No	·Amend ·View ·Print
Withdraw: RY1996	CEG	2/7/1997	76 Products Co Pipelines and Terminals	Yes	No	·View ·Print
AR: RY1995	CEG	2/22/1996	76 Products Co Pipelines and Terminals	Yes	No	·View ·Print
AR: RY1994	CEG	2/24/1995	76 Products Co Pipelines and Terminals	Yes	No	·View ·Print
AR: RY1993	SQG	2/3/1994	76 Products Co Pipelines and Terminals	Yes	No	·View ·Print
AR: RY1992	SQG	2/26/1993	76 Products Co Pipelines and Terminals	Yes	No	·View ·Print
New: RY1991	LQG	2/12/1992	76 Products Co Pipelines and Terminals	Yes	No	·View ·Print

Annual Report Form History

Add

— **Reporting Year: 2009, Submitted: Yes**

Sent: 12/10/2009 **Effective:** 12/31/2009

Status Flags		Annual Report Data	Functions
Submitted:	Yes	Site ID Form: Yes	Export Files
E-Filer:	Yes		Amend Data
Extension Granted:	No		

COP0018011

GM - Waste Streams Generated (3)
WR - Waste Streams Received (0)
OI - Off-site Facilities (5)

+ **Reporting Year: 2008, Submitted: Yes**
+ **Reporting Year: 2007, Submitted: Yes**
+ **Reporting Year: 2006, Submitted: Yes**
+ **Reporting Year: 2005, Submitted: Yes**
+ **Reporting Year: 2004, Submitted: Yes**
+ **Reporting Year: 2003, Submitted: Yes**
+ **Reporting Year: 2002, Submitted: Yes**
+ **Reporting Year: 2001, Submitted: Yes**
+ **Reporting Year: 2000, Submitted: Yes**
+ **Reporting Year: 1999, Submitted: Yes**
+ **Reporting Year: 1998, Submitted: Yes**
+ **Reporting Year: 1997, Submitted: Yes**
+ **Reporting Year: 1996, Submitted: Yes**
+ **Reporting Year: 1995, Submitted: Yes**
+ **Reporting Year: 1994, Submitted: Yes**
+ **Reporting Year: 1993, Submitted: Yes**
+ **Reporting Year: 1992, Submitted: Yes**
+ **Reporting Year: 1991, Submitted: Yes**

RCRA Waste Site Identification Form

Site ID

State of Oregon Department of Environmental Quality
Accounting Section
811 SW Sixth Avenue, Portland, OR 97204-1390
Questions: (503)229-6938 in Portland, OR or toll free in Oregon: (800)452-4011 Ext. 6938
Fax: (503)229-6977
TTY: (800)735-2900
Email: hazwaste@deq.state.or.us
Web site: www.DeqHazWaste.net

1. Reason for Submittal

- ☐ To provide New Notification of Regulated Waste Activity (complete entire form)
  - ☐ Initial Notification ($200 non-refundable fee required)
  - ☐ Change in business ownership (represent the new owner) (No fee required)
  - ☐ Reactivation of RCRA Site ID Number (no fee required)
- ☐ To provide **Revised** Site Identification Information
- ☐ To **Withdraw** Site Identification Number Effective Date: 12/31/2009
  - ☐ Completion of RCRA waste activity
  - ☐ Change in business ownership (represent the old owner)
- ☒ To provide as a component of the **Annual Hazardous Waste Report** (skip section 11, 12, and 13)

Reporting Year: 2009 If ownership changed: ☒ Filing for entire year ☐ Filing for partial year

2. RCRA Site ID Number: ORD087458196

3a. Site Location Information

Company Name: Conoco Phillips Company
Site Location: 5528 NW DOANE AVE
PORTLAND, OR 97210
County: MULTNOMAH
Corp. Div. Reg. Nbr.:
NAICS Code: 424710
Employee Count: 36

4a. Site Contact

Person Name: Tom Lyons
Mailing Address: 5528 NW Doane Ave
Portland, OR 97210
Country: UNITED STATES
Phone Number (Ext): (503) 248-1572
Email Address: thomas.lyons@conocophillips.com

5a. Land Owner

Name: ConocoPhillips Company
Mailing Address: 600 N Dairy Ashford Rd
Houston, TX 77079
Country: UNITED STATES
Phone Number (Ext): 281 293 1000
Owner Type: ☒ Private ☐ Federal ☐ State ☐ County ☐ District ☐ Municipal ☐ Tribal ☐ Other

COP0018013

RCRA Waste Site Identification Form

Site ID

RCRA Site ID Number: ORD087458196

6a. Legal Owner

Name: ConocoPhillips Company
Mailing Address: 600 N Dairy Ashford Rd
Houston, TX 77079
Country: UNITED STATES
Phone Number (Ext): 281 293 1000
Owner Since: 01/01/2003
Owner Type: ☒ Private ☐ Federal ☐ State ☐ County ☐ District ☐ Municipal ☐ Tribal ☐ Other

7a. Site Operator

Name: ConocoPhillips Company
Mailing Address: 600 N Dairy Ashford Rd
Houston, TX 77079
Country: UNITED STATES
Phone Number (Ext): 281 293 1000
Operator Since:
Operator Type: ☒ Private ☐ Federal ☐ State ☐ County ☐ District ☐ Municipal ☐ Tribal ☐ Other

8a. Hazardous Waste Forms Contact

Person Name: Thomas Lyons
Organization: ConocoPhillips Company
Mailing Address: 5528 NW Doane Ave
Portland, OR 97210
Country: UNITED STATES
Phone Number (Ext): (503) 248-1572
Email Address: thomas.lyons@conocophillips.com

9a. Hazardous Waste Fee Contact

Person Name: Thomas Lyons
Organization: ConocoPhillips Company
Mailing Address: 5528 NW Doane Ave
Portland, OR 97210
Country: UNITED STATES
Phone Number (Ext): (503) 248-1572
Email Address: thomas.lyons@conocophillips.com

RCRA Waste Site Identification Form

Site ID

RCRA Site ID Number: ORD087458196

10. Hazardous Waste Activities (Mark the appropriate boxes for activities that apply to your site)

1. Generator of Hazardous Waste

- [X] a. LQG: Large Quantity Generator (Generates greater than 2,200 lbs/mo or more than 2.2 lbs of acute hazardous waste)
- [ ] b. SQG: Small Quantity Generator: (Generates between 220-2,200 lbs/mo or more than 2,200 lbs accumulated on-site)
- [ ] c. CEG: Conditionally Exempt Generator: (Generates between 0-220 lbs/mo, less than 2.2 lbs of acute hazardous waste and less than 2,200 lbs accumulated on-site)

2. Are you a hazardous waste generator due to remediation of environmental contamination or a business closure?

- [ ] Yes
- [X] No

If yes, find out about expedited annual reporting at: www.deq.state.or.us/wmc/hw/factsheets/HWFeesForCleanups.pdf

- [ ] **3. Importer of Hazardous Waste**
- [ ] **4. Generator of Mixed Waste (hazardous and radioactive)**

5. Transporter of Hazardous Waste

- [ ] a. Transports hazardous waste generated at this facility
- [ ] b. Transports for commercial purposes
- [ ] c. Hazardous Waste Transfer Facility

- [ ] **6. Treatment, Storage, Disposal (TSD) Facility**

(Note: A RCRA Permit is required for this activity)

7. Recycler of Hazardous Waste

- [ ] a. Recycles HW generated at this facility
- [ ] b. Recycles HW generated by other facilities

8. Hazardous waste management in RCRA permit exempt units (e.g. elementary neutralization units, waste water treatment units, or accumulation tanks or containers)

- [ ] a. Manages HW generated at this facility
- [ ] b. Manages HW generated by other facilities

9. Exempt Boiler and/or Industrial Furnace

- [ ] a. Small Quantity On-Site Burner Exemption
- [ ] b. Smelting, Melting, Refining Furnace Exemption

- [ ] **10. Underground Injection Control**

If yes, there may be addition reporting requirements at: www.deq.state.or.us/wq/groundwa/uichome.htm

11. Description of Hazardous Wastes

1. Waste Codes for Federally Regulated Hazardous Wastes: Identify the federal hazardous waste codes that best describe your waste (e.g., D001 - Ignitable, D002 - Corrosive, D003 - Reactive, etc.) List additional federal codes in the comments section.

D001, D018, D008, D0039, D0040

2. Waste Codes for State Regulated(i.e., non-federal) Hazardous Wastes: Identify the Oregon state-only hazardous waste codes that best describe your waste (e.g., ORX001, ORX007, ORP003, ORU001, etc.)

12. Universal Waste Activities (Mark the appropriate boxes for activities that apply to your site)

- [ ] **1. Large Quantity Handler of Universal Waste**

(Accumulates a total of 11,000 lbs. or more of universal waste at any time, at the location at which it was generated)

- [ ] **2. Off-site Universal Waste Collection Site**

(Accumulates a total of 2,200 lbs. or more of universal waste received from off-site). If yes, there are additional notification requirements at: www.deq.state.or.us/wmc/documents/uwnotification.pdf

- [ ] **3. Pesticide Collection Program**

(Collects and accumulates waste pesticides from off-site). If yes, there are additional notification requirements at: www.deq.state.or.us/wmc/documents/uwnotification.pdf

- [ ] **4. Destination Facility for Universal Waste**

(A facility that treats, disposes of, or recycles universal wastes on-site)

5. Mark all boxes that apply

	Generate	Accumulate
a. Batteries	☐	☐
b. Mercury containing equipment	☐	☐
c. Lamps	☐	☐
d. Pesticides	☐	☐

13. Used Oil Activities (Mark the appropriate boxes for activities that apply to your site)

- [ ] **1. Used Oil Collection Center**
- [ ] **2. Used Oil Transporter**
- [ ] **3. Used Oil Transfer Facility**

4. Used Oil Processor/Re-refiner

Indicate type(s) of activity(s)

- [ ] a. Processor
- [ ] b. Re-refiner

- [ ] **5. Off-Specification Used Oil Burner (not used oil space heaters operating according to CFR 279.23)**

6. Used Oil Fuel Marketer

Indicate type(s) of activity(s)

- [ ] a. Marketer who directs shipments of off-specification used oil to off-specification used oil burner
- [ ] b. Marketer who first claims the used oil to meet the specifications

COP0018015

RCRA Waste Site Identification Form

Site ID

RCRA Site ID Number: ORD087458196

14. Comments

15. Certification

This form cannot be processed without a signature

I certify that under penalty of law that I have personally examined and am familiar with the information submitted in this demonstration and all attached documents, and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Signature **Date**

Name (print or type) **Title**

If you have special accommodation needs or require this documentin an alternative format, please contact the Hazardous Waste Section in Portland at 503-229-6938 or toll-free within the State of Oregon at 1-800-452-4011, extension 6938

16. Electronic Submittals

DEQ will issue a PIN number and electronic filing instructions in a letter addressed to the Forms Contact in Section 8 on this form. The electronic reporting system may be used for your company's annual reporting and site identification updates.

COP0018016

Generation and Management Answer Sheet

GM

Please enter your RCRA Site ID number and your site name in the box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your waste streams. Complete one answer sheet for each waste stream that was generated.

Reference the instructions as you complete this form. Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: ORD087458196 Year: 2009

Site Name: Conoco Phillips Company

For DEQ Use Only:

Date Received: _____

A. Description of Hazardous Waste Stream

Sequence Number: 1

A-1. What is your waste stream identification? LEAD PAINT AND CHIPS

A-2. Briefly describe the hazardous waste stream:
Piping project waste

A-3. Which EPA hazardous waste codes are associated with this waste stream?
D008

A-4. Which Oregon state-only hazardous waste code is associated with this waste stream?

A-5. Which source code best describes the type of process or activity from which this waste stream was generated? G06

A-5.a. If you specified source code G25 in question A-5, please enter the management method code from the on-site hazardous waste management system:

A-5.b. If you specified source code G62 in question A-5, please enter the country of origin from which this waste was received:

A-6. Which form code best corresponds to the physical form or chemical composition of this waste stream? W209

A-7. If there were toxic substances in this waste stream that your facility reported on the most recent Toxic Chemical Release Inventory (TRI) Reporting Form (Form R), please provide the CAS numbers reported:

A-8. Did this waste stream contain mercury? ☐ Yes ☒ No

A-8.a. If you answered yes to question A-8, please provide a reasonable estimate of the percentage of mercury in this waste stream: 0.00

B. Hazardous Waste Management Activities

B-1. What is the total quantity of this waste stream generated in the reporting year and what is the unit of measure?

Quantity: 3960.00 ☒ Pounds ☐ Gallons ☐ Tons ☐ Cubic Yards ☐ Kilograms

B-1.a. If the waste stream is measured in gallons or cubic yards, what is its density?

Density: ☐ Pounds/gallon ☐ Specific gravity ☐ Pounds/cubic yard

B-2. Was the waste stream managed on-site, off-site, or both?

☐ On-site ☒ Off-site ☐ Both

B-3. If all or part of this waste stream was managed on-site, how much was managed on-site and how was it managed?

Quantity: 0.00 Management Method Code:

B-4. Indicate the quantity of this waste stream that was remaining on-site at the end of the calendar year you are reporting:

0.00

B-5. Indicate the quantity of this waste stream that was carried forward from the previous reporting year: 0.00

COP0018017

B-6. Please provide the following information for each off-site shipment of waste:

Shipment DT	Manifest NR	Reported QT	Transporter ID NR	Mgmt System CD	RCRA Site ID NR
11/19/2009	005379610JJK	3960.00	WAH000014944	H111	ORD089452353

C. Comments

Use the Comments section to provide any additional comments, information or explanations as necessary. In your comments always provide the reference to the specific question number.

COP0018018

Generation and Management Answer Sheet

GM

Please enter your RCRA Site ID number and your site name in the box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your waste streams. Complete one answer sheet for each waste stream that was generated.

Reference the instructions as you complete this form. Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: ORD087458196 Year: 2009

Site Name: Conoco Phillips Company

For DEQ Use Only:

Date Received: _____

A. Description of Hazardous Waste Stream

Sequence Number: 2

A-1. What is your waste stream identification?

A-2. Briefly describe the hazardous waste stream:
Spent hexane

A-3. Which EPA hazardous waste codes are associated with this waste stream?
D001

A-4. Which Oregon state-only hazardous waste code is associated with this waste stream?

A-5. Which source code best describes the type of process or activity from which this waste stream was generated? G22

A-5.a. If you specified source code G25 in question A-5, please enter the management method code from the on-site hazardous waste management system:

A-5.b. If you specified source code G62 in question A-5, please enter the country of origin from which this waste was received:

A-6. Which form code best corresponds to the physical form or chemical composition of this waste stream? W203

A-7. If there were toxic substances in this waste stream that your facility reported on the most recent Toxic Chemical Release Inventory (TRI) Reporting Form (Form R), please provide the CAS numbers reported:

A-8. Did this waste stream contain mercury? ☐ Yes ☒ No

A-8.a. If you answered yes to question A-8, please provide a reasonable estimate of the percentage of mercury in this waste stream: 0.00

B. Hazardous Waste Management Activities

B-1. What is the total quantity of this waste stream generated in the reporting year and what is the unit of measure?

Quantity: 575.00 ☒ Pounds ☐ Gallons ☐ Tons ☐ Cubic Yards ☐ Kilograms

B-1.a. If the waste stream is measured in gallons or cubic yards, what is its density?

Density: ☐ Pounds/gallon ☐ Specific gravity ☐ Pounds/cubic yard

B-2. Was the waste stream managed on-site, off-site, or both?

☐ On-site ☒ Off-site ☐ Both

B-3. If all or part of this waste stream was managed on-site, how much was managed on-site and how was it managed?

Quantity: Management Method Code:

B-4. Indicate the quantity of this waste stream that was remaining on-site at the end of the calendar year you are reporting:
0.00

B-5. Indicate the quantity of this waste stream that was carried forward from the previous reporting year: 0.00

COP0018019

B-6. Please provide the following information for each off-site shipment of waste:

Shipment DT	Manifest NR	Reported QT	Transporter ID NR	Mgmt System CD	RCRA Site ID NR
02/09/2009	005279587JJK	200.00	WAH000014944	H050	WAD991281767
05/27/2009	005379686JJK	150.00	WAH000014944	H050	WAD991281767
09/24/2009	005379603JJK	225.00	WAH000014944	H050	WAD991281767

C. Comments

Use the Comments section to provide any additional comments, information or explanations as necessary. In your comments always provide the reference to the specific question number:

Generation and Management Answer Sheet

GM

Please enter your RCRA Site ID number and your site name in the box at the right, before making as many two-sided copies of this answer sheet as you will need to report each of your waste streams. Complete one answer sheet for each waste stream that was generated.

Reference the instructions as you complete this form. Please type or print legibly in blue or black ink.

Please Enter:

Your RCRA Site ID Number: ORD087458196 Year: 2009

Site Name: Conoco Phillips Company

For DEQ Use Only:

Date Received: _____

A. Description of Hazardous Waste Stream

Sequence Number: 3

A-1. What is your waste stream identification?

A-2. Briefly describe the hazardous waste stream:
Spent parts cleaning solvent

A-3. Which EPA hazardous waste codes are associated with this waste stream?
D001 D018 D039 D040

A-4. Which Oregon state-only hazardous waste code is associated with this waste stream?

A-5. Which source code best describes the type of process or activity from which this waste stream was generated? G13

A-5.a. If you specified source code G25 in question A-5, please enter the management method code from the on-site hazardous waste management system:

A-5.b. If you specified source code G62 in question A-5, please enter the country of origin from which this waste was received:

A-6. Which form code best corresponds to the physical form or chemical composition of this waste stream? W211

A-7. If there were toxic substances in this waste stream that your facility reported on the most recent Toxic Chemical Release Inventory (TRI) Reporting Form (Form R), please provide the CAS numbers reported:

A-8. Did this waste stream contain mercury? ☐ Yes ☒ No

A-8.a. If you answered yes to question A-8, please provide a reasonable estimate of the percentage of mercury in this waste stream: 0.00

B. Hazardous Waste Management Activities

B-1. What is the total quantity of this waste stream generated in the reporting year and what is the unit of measure?
Quantity: 713.00 ☒ Pounds ☐ Gallons ☐ Tons ☐ Cubic Yards ☐ Kilograms

B-1.a. If the waste stream is measured in gallons or cubic yards, what is its density?
Density: ☐ Pounds/gallon ☐ Specific gravity ☐ Pounds/cubic yard

B-2. Was the waste stream managed on-site, off-site, or both?
☐ On-site ☒ Off-site ☐ Both

B-3. If all or part of this waste stream was managed on-site, how much was managed on-site and how was it managed?
Quantity: Management Method Code:

B-4. Indicate the quantity of this waste stream that was remaining on-site at the end of the calendar year you are reporting:
0.00

B-5. Indicate the quantity of this waste stream that was carried forward from the previous reporting year: 0.00

COP0018021

B-6. Please provide the following information for each off-site shipment of waste:

Shipment DT	Manifest NR	Reported QT	Transporter ID NR	Mgmt System CD	RCRA Site ID NR
01/15/2009	001637852SKS	101.00	TXR000050930	H020	ORD981766124
03/09/2009	001653796SKS	101.00	TXR000050930	H020	ORD981766124
05/04/2009	001909312SKS	101.00	TXR000050930	H020	ORD981766124
06/30/2009	001881360SKS	101.00	TXR000050930	H020	ORD981766124
08/24/2009	002099419SKS	101.00	TXR000050930	H020	ORD981766124
10/21/2009	002025179SKS	101.00	TXR000050930	H020	ORD981766124
12/17/2009	002025580SKS	107.00	TXR000050930	H020	ORD981766124

C. Comments

Use the Comments section to provide any additional comments, information or explanations as necessary. In your comments always provide the reference to the specific question number:

Incident ID: 121685

Short Description: Red Dye Load at Portland

Responsible Dept\Unit: Terminals : Terminals - West Coast Division : Portland Product Terminal

Status: Closed

Incident Type: Incident

Potential Risk Rating: I - Low

General

Responsible Supervisor: THOMAS LYONS

High Learning Value Event Status: Not Reviewed for HLVE

Location:

Specific Location: Refined Truck Loading Rack

Date Occurred: (mm/dd/yyyy) 2/22/2010 4:00:00 AM

Date Reported: (mm/dd/yyyy) 2/22/2010 12:27:00 PM

Date Entered: 2/26/2010 11:44:37 AM (GMT-08:00)

REPORTEDBY: THOMAS LYONS

Incident Description: Hattenhauer driver requested a compartment of clear biodiesel (B5) at the Portland Terminal. Following what appeared to be a normal load, he left the terminal. During the transfer of the product into a station underground tank, the driver noticed red dye in the product and contacted the terminal. All stakeholders were notified and the underground tank was isolated, product recovered and replaced. The recovered product was transferred to a station red dye sales tank. All product was tested and found compliant.

The red dye additive injection on load arm #15 was locked-out and an investigation into the cause of the failure is ongoing.

Weather: Clear

Lighting: Dawn

Address: 5528 NW Doane Avenue

City: Portland

Country: United States

State/Province: Oregon

Zip/Postal Code: 97210

Entered By: LYONS, THOMAS

Immediate Actions Taken: All stakeholders were notified and the underground tank was isolated, product recovered and replaced. The recovered product was transferred to a station red dye sales tank. All product was tested and found compliant.

The red dye additive injection on load arm #15 was locked-out and an investigation into the cause of the failure is ongoing.

Sub Types

Check All That Apply: General: Quality (e.g.: Customer Complaints, Contaminations, Off Specifications)

Responsibilities

Workflow Supervisor *

Name	Response
THOMAS LYONS	

Incident Owner *

Name	Response
THOMAS LYONS	

Creator *

Name	Response
THOMAS LYONS	

Notes

Notes: No Data is Available

Equipment

Equipment

Equipment Involved	Critical	Equipment Number/Description
Loading Rack: Loading Arm	NO	

People

Consequence Number : No Data is Available

Witnesses

Name	Employee,Contractor,or Other	Phone
Rick Snyder	Contractor	541-296-3515
Andrew Janke	Employee	503-248-1565

Contractor Involvement

Contractor	Involvement Type
HATTENHAUER TRANSPORTATION LLC	Other

Consequence

Incident Consequences:
No Data is Available

Pending Consequences

ID	Type	Description	Party Involved
Recommended	Quality	Quality Consequence	

Investigation

Investigations: No Data is Available

Action Items

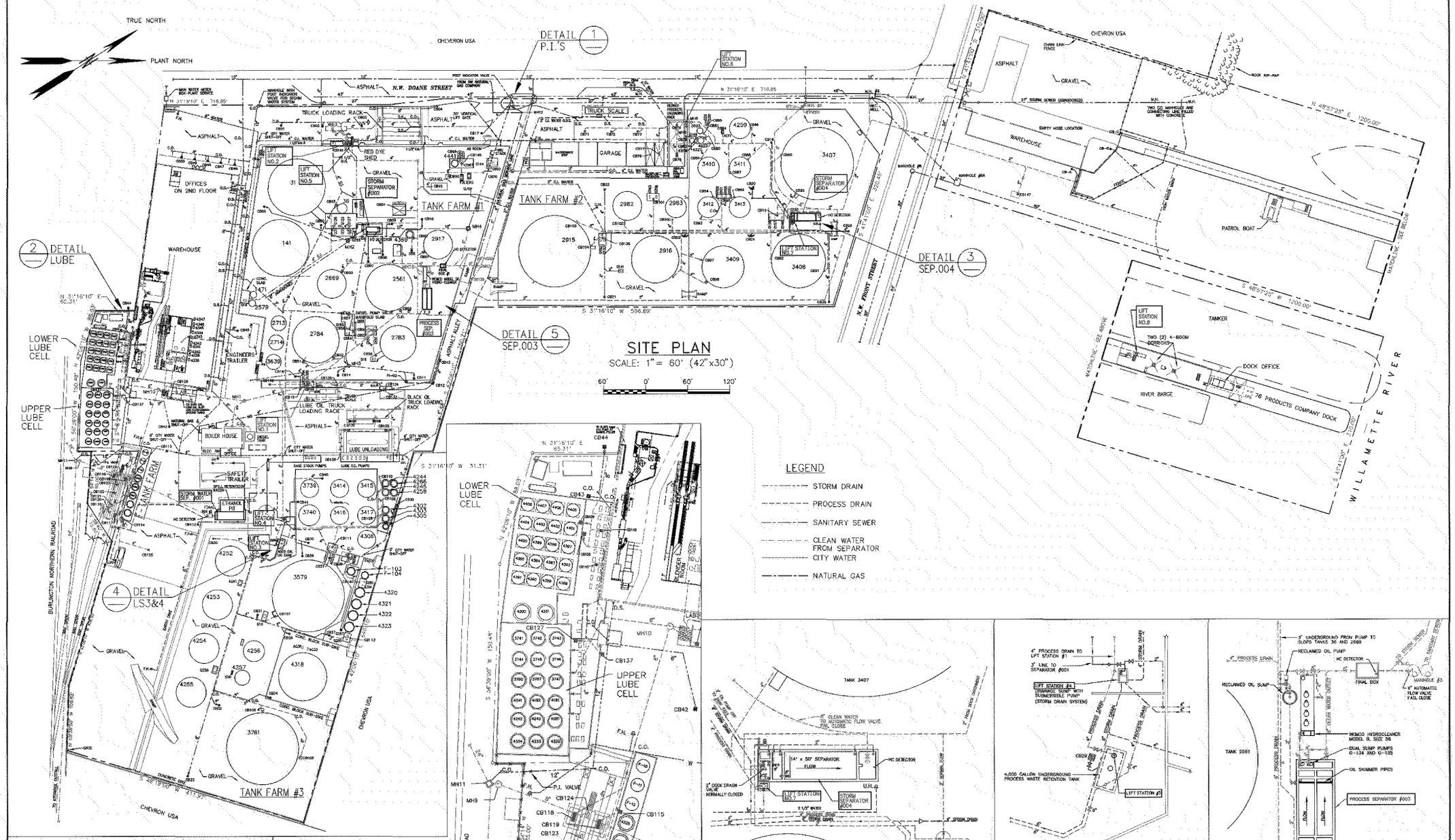
Action Items: No Data is Available

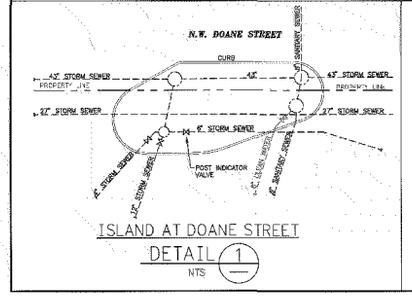
Summary

Equipment:	1
Employees:	None
Contractors:	None
Witnesses:	2
Investigations:	None
Recordable:	No
Last Updated Date :	3/10/2010 12:13:14 PM (GMT-08:00)

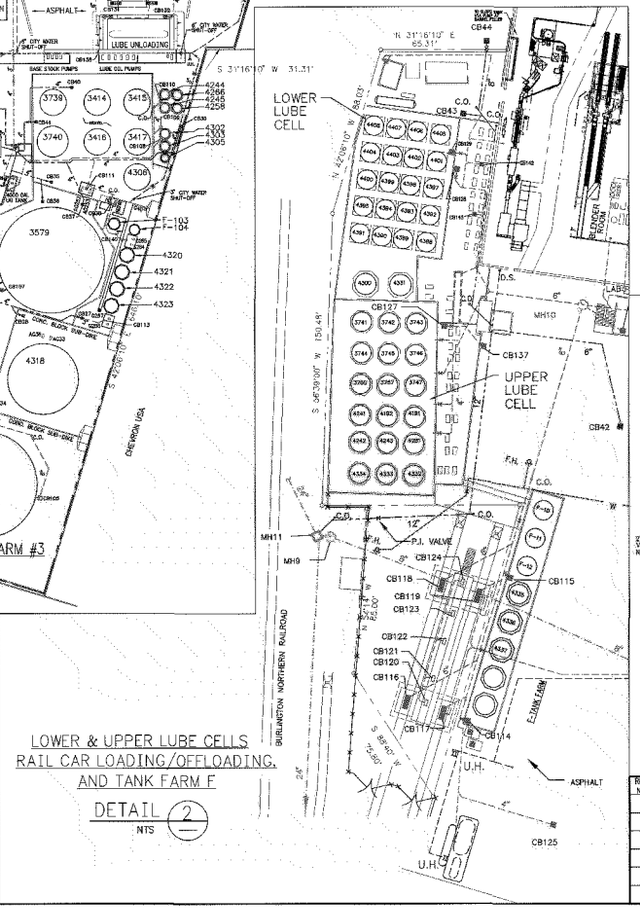
COP0018024

COP0018025

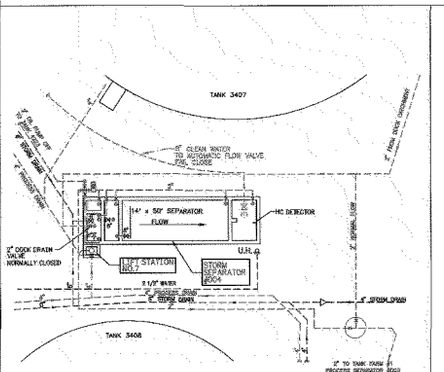




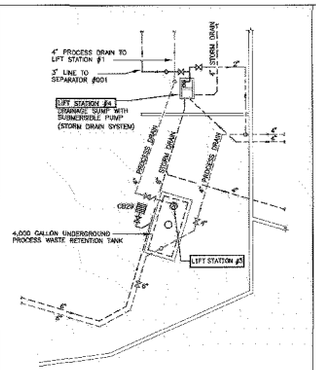
ISLAND AT DOANE STREET
DETAIL 1
NTS



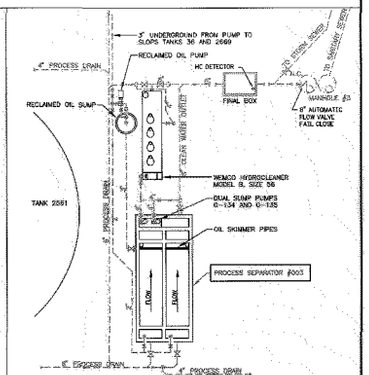
LOWER & UPPER LUBE CELLS RAIL CAR LOADING/OFFLOADING, AND TANK FARM F
DETAIL 2
NTS



OIL/WATER SEPARATOR #004 FOR STORM AND PROCESS DRAINS - TANK FARM 2
DETAIL 3
NTS



PROCESS WASTE RETENTION TANK AND STORM DRAIN SUMP - TANK FARM 3
DETAIL 4
NTS



A.P.I SEPARATOR #003 AND HYDROCLEANER - TANK FARM 1
DETAIL 5
NTS

REV. NO.	DATE	REVISED	DRAWN BY	CKD. BY
0	10/15/96	UPDATED PER COAST GUARD REQUIREMENTS	DAB	WHB
1	03/04/97	GENERAL REVISION TO CURRENT STATUS	DAB	KJP

UNOCAL 76
76 PRODUCTS COMPANY
Los Angeles, California

ALPHA ENGINEERS and CONSTRUCTORS, INC.
19 NW 5th AVE, SUITE 304, PORTLAND, OR. 97209 Tel:(503)227-3317/Fax:(503)227-7244

DRAWN BY	D.A.BYNUM
CHKD BY	WHB
APPD BY	KJP
SCALE	AS SHOWN
DATE	10/15/96

PORTLAND TERMINAL
PORTLAND, OREGON
PLOT PLAN
PROCESS, STORM, AND SANITARY DRAINAGE

DRAWING NO.	SHEET	REV.
0608-C-7000	1 OF 1	1

608C7001.DWG <CPD: 03/24/97 [TIME: 08:59 AM] >

ARCADIS
Infrastructure, environment, buildings

AGENDA

AOC# 00922

First Quarter 2010 WTG Meeting

Meeting Agenda

Date: March 16, 2010

Time: 1:00 pm (Pacific Standard Time)

Location: **10th Floor** Conference Room; 111 SW Columbia Street

Phone: 877.999.1272

Password: 7513028#

---

1. **Safety Moment** - ARCADIS
2. **Introductions** – All
   - **New Stantec Contact – Mark Trewartha**
3. **Coordinator Role Discussion** - All
4. **Source Control Timing and DEQ Expectations** – DEQ
5. **Terminal-Specific Spill Contingency Plans** - DEQ
   * be on same page as Terminal *
6. **Human Health Risk Assessment Update** – ALL
   must be on same page - all RP's
7. **Paramount Industrial Well** - ARCADIS
8. **Storm Water Source Control Evaluation Update**
   - **ConocoPhillips** – Stantec — we need to get access from BN RR
   - **Chevron** – ARCADIS — COP/DEQ mtg. good and summary notes of work plan for 48"
   - **Kinder Morgan** – Delta
9. **Groundwater Source Control Evaluation Update**

consistant communications written and verbal, as a group and individual RP's

late 2012 need to tell US EPA of our RI/FS and Remedial Action Plan - complete plan

DRAFT

COP0018026

- **ConocoPhillips/Chevron** – ARCADIS
- **Kinder Morgan** – Delta

10. **NW Doane Avenue Storm Sewer Update** - ARCADIS
    new system in 2010
11. **Redesign of the GWET System** - ARCADIS
12. **ConocoPhillips Terminal Projects Update** – Stantec
    - **Fire Building Construction – Soil excavation sampling results**
    - **Asphalt Maintenance and Soil Sampling Work Plan**
    - **Meeting with DEQ regarding Source Control Evaluation**
13. **Chevron Terminal Projects Update** - ARCADIS
    - **Ethanol Spill Evaluation**
    - **Enhanced Bio Pilot Study** use remediation water for mixing with Bio mix and injection
14. **Kinder Morgan Terminal Projects Update** - Delta
    - **Schedule Scoping Meeting Saltzman, Certain Teed**
15. **Closing Thoughts** - All
    - **Action Item Discussion**

- schedule update
- define coordinator role

Smith, Myron - Environmental:

From: Sprick, Grant [Grant.Sprick@arcadis-us.com]
Sent: Thursday, March 11, 2010 4:29 PM
To: ROMERO Mike; 'THIESSEN Kenneth'; Smith, Myron - Environmental:; Hunter, Brett (BLHU); Rob Truedinger (KinderMorgan)
Cc: Trewartha, Mark; Timothy Browning
Subject: 1Q10 WTG Meeting - agenda
Attachments: WTG Meeting 20100316.doc

All, please see the attached agenda for Tuesday's meeting.

Also note the meeting room location on the 10th floor of the Columbia Square Building! Call-in information is provided on the attached as well.

Cheers
-Grant

Grant V. Sprick | Certified Project Manager I | grant.sprick@arcadis-us.com
ARCADIS U.S., Inc. | 111 SW Columbia St., Suite 725 | Portland, OR 97201
T. 503.220.8201 x1104 | M. 503.539.8616 | F. 503.220.8209
www.arcadis-us.com
Professional Engineer/PE-OR, 78790
ARCADIS, Imagine the result
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Smith, Myron - Environmental:

Subject: Pre-meet in advance of 1Q10 WTG - ODEQ Meeting
Location: Arcadis' Portland

Start: Tue 3/16/2010 11:00 AM
End: Tue 3/16/2010 12:00 PM

Recurrence: (none)

Meeting Status: Accepted

Required Attendees: Timothy Browning; Jessica Eckart; Sprick, Grant; Smith, Myron - Environmental:; Rob Truedinger (KinderMorgan)

When: Tuesday, March 16, 2010 11:00 AM-12:00 PM (GMT-08:00) Pacific Time (US & Canada).
Where: Arcadis' Portland

Note: The GMT offset above does not reflect daylight saving time adjustments.

~~*~*~*~*~*~*~*~*~*

All,

I would like to propose a quick meeting in advance of our 1Q10 WTG meeting with ODEQ (Mike Romero). I believe it would be good to be on the same page as it relates to two specific and related topics:

WTG Project Manager(s) role to satisfy expectations of Consent Order
I propose each WTG member designate a single PM from Stantech, Delta, and Arcadis to represent its WTG interests to DEQ. I believe this would be compliant with and would satisfy the intent of the Order (to enable more efficient communication and decision making). In going forward I would suggest: good to go, all RP's on same page

* Continuing the quarterly WTG meetings.
1. These are an important opportunity for each WTG member and/or designated PM to present/receive common and consistent communication to/from ODEQ.
2. Individual WTG members and/or designated PM can present status updates related to their independent progress on FS and Joint Source Control Evaluation Measures (JSCEM).
3. WTG members would alternate hosting the quarterly meetings. Hosting would involve meeting coordination, agenda development, and meeting summary. good to go

* Each WTG member (or designated PM) would serve as the main representative and primary point of contact for all communication to/from ODEQ outside of quarterly meetings relating to their independent progress on FS and JSCEM. good to go

WTG members independent path forward relative to FS, JSCEM, and Risk Assessment

* Follow-up on 2009 proposal to ODEQ to pursue remaining tasks independently
* Establish clarity about who is doing what by when

I think these are topics of interest to Mike Romero. I offer the above for discussion in hopes we can be in alignment before meeting with Mike. All other suggestions are welcome. Please indicate if a conference call works better and we'll accommodate.

Thanks,

Brett

3/16/10

COP/CUX/Arcadis

Portland Terminal issues:

- fire clothing - overalls/coveralls, incl. rain wear
- remediation
  - not in bld.
  - not at end of bld.
  - put in sand lot?
    - lots of stuff under ground
- bio/ox at CUX site
  - source of water for injection mix needed
    - fire hyd. is across street
    - use treated water from remediation
      - 4000 gal poly trailer/several time per day until 15k gal is needed - lasts for a quarter
- communicate to Ravero
  - RI/FS, who will complete
  - address gaps
    - per and post Unocal
- role of coordinator role
  - each RP prepare their own docs
    - post Unocal BCA, if any, gaps
  - CUX invisions each RP to proceed independently
- use of RBCA
  - current risk assessment is out dated
  - assumptions are out dated and not current with ODEQ stds.
  - 3 independent docs for each facility data gaps and use of updated stds.
  - ODEQ wants a work plan, all on same page

AOC No.	Site No. (AOC No.)	ADDRESS
922	922 (922.00)	Portland Terminal (00922.00)
944	944 (00944.00)	101 Blair Boulevard
947	947 (00947.00)	1700 Lafayette Avenue
948	948 (00948.00)	1893 Roseburg Road
951	00951 (00951.00)	422 Sixth Street
952	952 (00952.00)	1744 Northeast Diamond Lake Blvd.
953	2611019 (00953.00)	1580 Hawthorne Ave., NE
954	954 (00954.00)	1555 Silverton Road, NE
956	956 (00956.00)	2120 W. Washington Street
957	957 (00957.00)	241 C Street
1323	254889 (01323.00)	14030 SW Pacific Hwy
1362	255133 (01362.00)	5065 SW Scholls Ferry Road
1452	255664 (01452.00)	110 SW Arthur Street
1459	255700 (01459.00)	1657 Mohawk Blvd
1505	255953 (01505.00)	12205 N Center Ave
1593	6475 (01593.00)	12405 SE 97th Avenue
1654	257387 (01654.00)	990 N Adair
2395	2705468 (02395.00)	5720 E Main Street
2473	2705648 (02473.00)	1453 W Central
4355	2705689 (04355.00)	3883 Commerical Street., SE
4701	4701 (4701.00)	4701 - Tidewater McMinnville
4934	255450 (04934.01)	2505 SE 39th Ave
4962	2611042 (04962.01)	10775 SW Greenburg Road
4985	4985 (04985.00)	611 Thunderegg Boulevard

		Cell
	Dan Schreiner	
	Justin Dauphinais	503-764-7061
	Alice Larsen	360-850-7323

Oregon
Theodore Kulongoski, Governor

Department of Environmental Quality
Northwest Region Portland Office
2020 SW 4th Avenue, Suite 400
Portland, OR 97201-4987
(503) 229-5263
FAX (503) 229-6945
TTY (503) 229-5471

March 25, 2010

ACC # 00922

Grant Sprick, P.E
ARCADIS
111 Southwest Coulumbia St, Ste. 725
Portland, OR 97201

Re: Willbridge Terminal Tracking Schedules, Willbridge Terminals, Portland, OR
ECSI #1549

Dear Grant:

The Oregon Department of Environmental Quality (DEQ) has completed its review of the Willbridge Terminal Tracking Schedules, Willbridge Terminals, Portland, OR dated March 24, 2010. Thank you for submitting the updated project tracking schedules. I have a few observations and requests.

The disparity of attention to detail and lack of detail between the schedules proposed for the sites is clear. The level of detail in the Chevron schedule appears to be adequate and well thought out. If we are to continue down this path of more independent approaches under the unified Order, schedules and level of detail should be on par with each other. Ideally the same format for the tracking schedules/Gannt Charts should be used so that DEQ and the rotating coordinator can easily uses these tracking schedules most efficiently.

The division of duties between Chevron and Conoco is not entirely clear in this document. My understanding is that Chevron/Arcadis are handling the groundwater and Doane Ave 48" line for both Conoco and Chevron and that Conoco/Stantec is covering everything else. Is this correct? Please clarify and clearly document these specific details either in this tracking schedule or in another document.

It is not clear where the vapor intrusion (VI) screening/evaluation fits into these schedules. Is that included in the update to the Human Health Risk Assessments? I expect to see work plans for the VI evaluation that consider DEQ's VI guidance so it seems to me that this should be separate tasks in the schedules.

Also, it appears that there is no task identified for updating the site specific Risk Assessments in either the Conoco or Kinder Morgan schedules. Please revise the schedules to include this. I realize DEQ has some action items related to this that will affect the schedules but I'd at least like to see it on theses schedules to be reassured that the facilities are committed to getting this done.

Also, I ask that all the facilities critically and realistically evaluate where you currently are in each of these tasks and compare to the scope of work for these tasks. In particular, the stormwater evaluations should be looked at more closely. Based my understanding of where the stormwater evaluations are in regards to remaining work and the dwindling rainy season, the schedules as presented may not be realistic. Our goal with this is to use these schedules to be hard dates for deliverables and, technically, we could consider these to be compliance dates under the Order.

Please revisit the proposed schedules and revise them for DEQ review within 14 days. In the revisions, consider that DEQ typically utilizes 30 days as a reasonable turnaround time for project deliverables and review. I know we have all not necessarily met those turnaround times in the past, but it is a goal we should strive for. The 14 day turnaround in this instance is shorter b/c most of the work on this has already been completed and this is just a touch up to the schedules.

Please contact me at Romero.Mike@deq.state.or.us or (503) 229-5563 if you have any questions.

Sincerely,

Michael Romero, Project Manager
NWR Cleanup Section

cc: Grant Sprick, ARCADIS
Ken Thiessen, DEQ
Tim Browning, Delta
Rob Trudinger, Kinder Morgan
Myron Smith, Conoco Philips
Brett Hunter, Chevron
Mark Trewartha, Stantec
ECSI File #1549

DEQ-DC1

Trewartha, Mark

From: Trewartha, Mark
Sent: Tuesday, April 06, 2010 2:15 PM
To: 'Smith, Myron - Environmental:'
Cc: McIlroy, Sarah; Bare, Mark; Larsen, Alice
Subject: Stormwater memos

Attachments: Photos -Roof Drain Memo.doc; Stormwater Memo--MH-12 and roof drain.doc; Photos - Separator 1 Memo.doc; StormWater Memo--Separator 1 and MH-X.doc

Myron,

Attached are two memos regarding proposed source control evaluation sampling. One concerns the six inch line entering MH-12. The other are observations regarding sampling at MH-9 and MH-X. I would like to submit these to DEQ and the other WTG members this week.

Photos -Roof Drain Memo.doc (5... Stormwater emo--MH-12 and roc

Please review and get back to me when you can.

Photos - Separator 1 Memo.doc ... StormWater emo--Separator 1 a

AOC #0922

Mark Trewartha, R.G.
Senior Hydrogeologist
Stantec
7730 Southwest Mohawk Street
Tualatin OR 97062
Ph: (503) 691-2030 Ext. 120
Fx: (503) 692-7074
Cell: (503) 807-8568
Mark.Trewartha@stantec.com
stantec.com

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Memo

Stantec

To:	Mr. Mike Romero Oregon Department of Environmental Quality Northwest Region Cleanup Program 2020 SW 4th Avenue, Suite 400 Portland, OR 97201	From:	Mark Trewartha Stantec Consulting 7730 SW Mohawk Street Tualatin, OR 97062
File:	Storm Water Memo – MH-12	Date:	April 5, 2010

Reference: MH-12 (six inch line) & Roof Drainage

During the Storm Water Sampling Event conducted on March 25, 2010, Stantec personnel investigated the lack of flow of storm water from the six inch line which empties into manhole 12 (MH-12). Field personnel have not seen evidence of water flow from this line during the most recent event or during events conducted during 2008 and 2009. This six inch line is presumably intended to funnel water into MH-12 from the roof of the maintenance office and shop area. Field personnel examined the roof drains and discovered that none of the pipes coming off of the building are connected to the trenched area between the building itself and the truck scale. One pipe is connected to the scale shack, but the bottom of the pipe is not connected to anything. Another pipe on the building is not connected to the roof at all. There is a third pipe adjacent to the second one which comes out of the trenched area about 4 inches above ground, but is filled with concrete. There was no evidence on the building where storm water draining from the roof would be able to flow into the six inch line. Based on this and field observations during previous sampling events, no stormwater is currently routed to the six inch line that leads to MH-12. Therefore, collection of storm water samples from the six inch line at MH-12 is not possible and should not be considered part of the source control evaluation sampling program.

Please feel free to contact myself or Mark Trewartha with any concerns.

STANTEC CONSULTING CORPORATION

Chris Carlton-Franco, M.Sc
Staff Scientist
chris.carltoncranco@stantec.com

Mark Trewartha
Senior Hydrogeologist
mark.trewartha@stantec.com

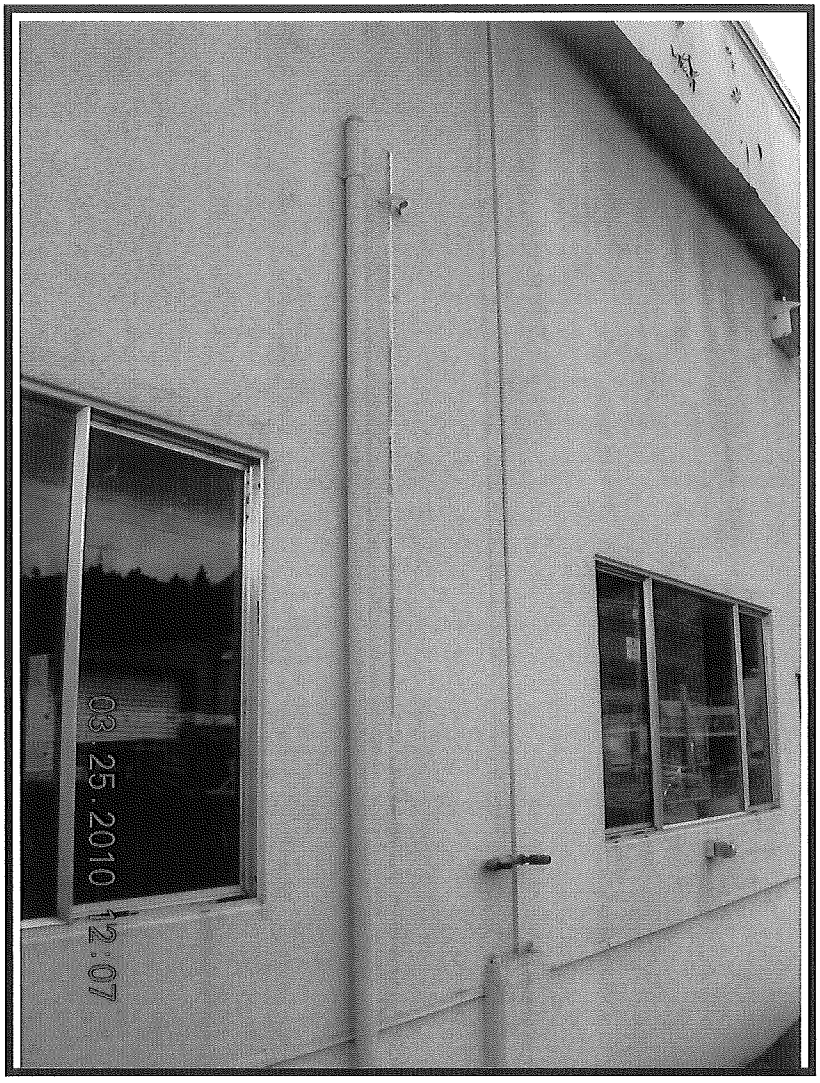
One Team. Infinite Solutions.

mat c:\documents and settings\mtrewartha.corp\local settings\temporary internet files\olk3e1\stormwater memo--mh-12 and roof drain.doc

Reference: Error! Reference source not found.

cc: Myron Smith, ConocoPhillips
Grant Sprick, Arcadis
Tim Browning, Delta

1. Maintenance Building & Truck Scale



2. Drain Pipe—not connected to roof

3. Drain Pipe—filled with concrete

4. Drain Pipe—no connection after scale shack

Memo

Stantec

To:	Mr Mike Romero Oregon Department of Environmental Quality Northwest Region Cleanup Program 2020 SW 4th Avenue, Suite 400 Portland, OR 97201	From:	Chris Carlton-Franco Stantec Consulting 7730 SW Mohawk Street Tualatin, OR 97062
File:	Storm Water Sampling – MH-9 and MH-X	Date:	April 5, 2010

Reference: MH-9 & MH-X

MH-9

On March 25, 2010, field personnel attempted to collect samples from the cleanout located along the rail line behind the F-Tank Farm but were unable to collect a storm water sample from this location. This sampling location was selected in order to collect a stormwater sample upstream of the release point from Separator 1 in manhole 9 (MH-9), located on Burlington Northern Sante Fe (BNSF) property. Further investigation into additional sampling locations was conducted on March 30, 2010. The closest alternative sampling points were found to be catch basin 42 (CB-42) and CB-43 (see attached photos). Both catch basins have a fabric cover under the metal grate, which would need to be removed before sampling. These two locations are upstream of the cleanout sampling point and eventually empty into MH-9. Unless a site assess arrangement/agreement with BNSF can be obtained, Stantec recommends collecting storm water samples from the final box of Separator 1 and from either CB-42 or CB-43 to satisfy source control evaluation sampling requirements.

MH-X

Field personnel did not collect a storm water sample from MH-X on March 25, 2010. This manhole is consistently full of water and no flowing water has ever been observed at this location (see photo for details). A liner was recently installed on MH-X, but it is possible that there may be a crack in the liner and groundwater could be leaking into the manhole. Stantec recommends pumping out the standing water prior to a storm event. The purposes of removing the standing water are 1) expose the discharge pipe so samples of water flowing from the pipe and discharging into MH-X can be sampled and 2) evaluate whether the water in the manhole is from storm water or if groundwater is infiltrating the liner and leaking into the manhole.

Reference: MH-9 & MH-X

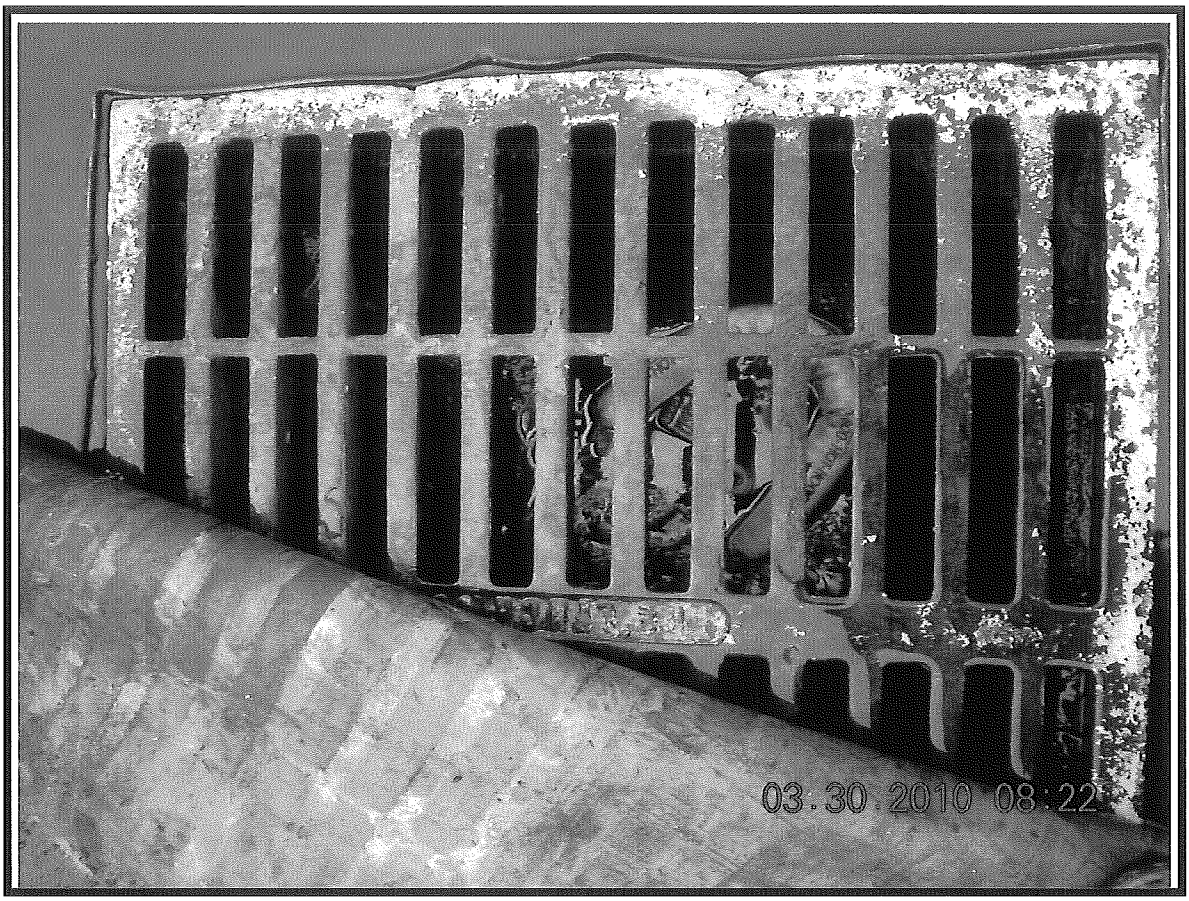
Please feel free to contact myself or Mark Trewartha with any concerns.

STANTEC CONSULTING CORPORATION

Chris Carlton-Franco, M.Sc
Staff Scientist
Chris.CarltonFranco@stantec.com

Mark Trewartha
Senior Hydrogeologist
mark.trewartha@stantec.com

cc: Myron Smith, ConocoPhillips
Grant Sprick, Arcadis
Tim Browning, Delta

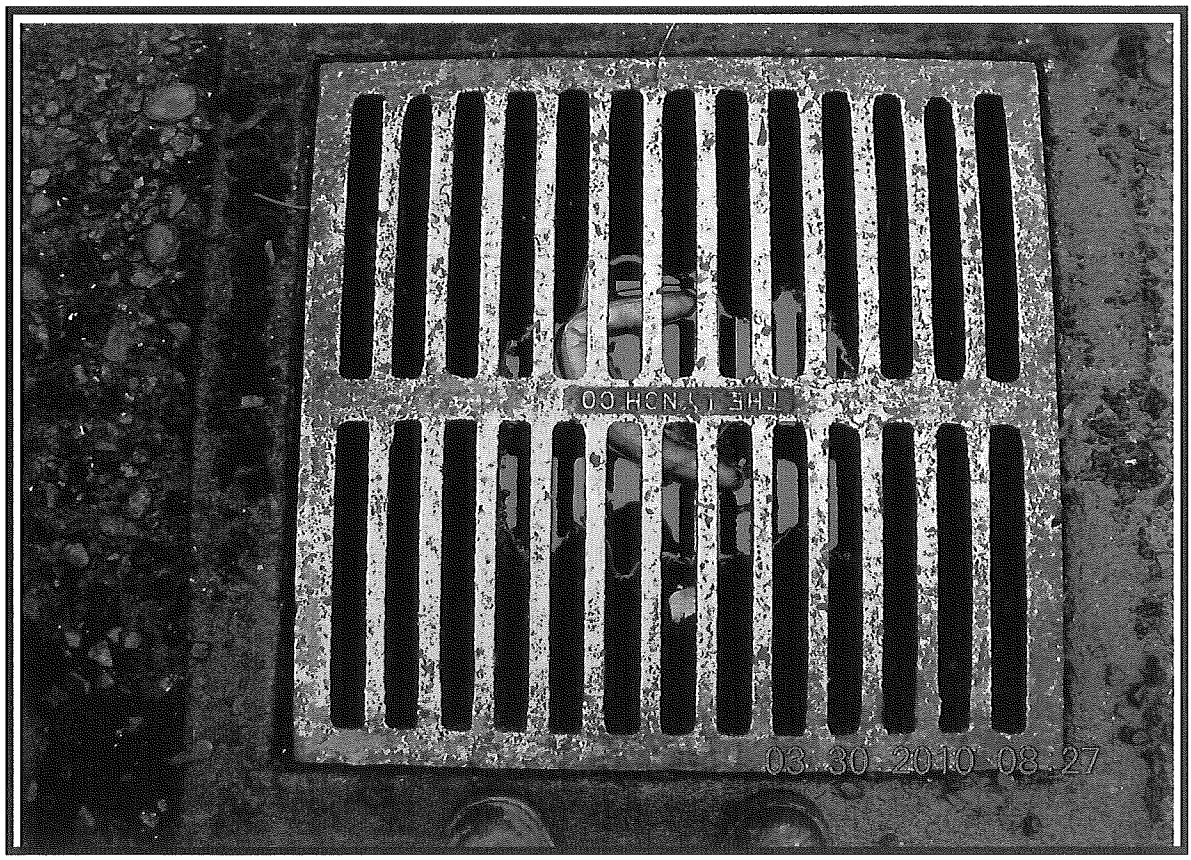


1. CB-42

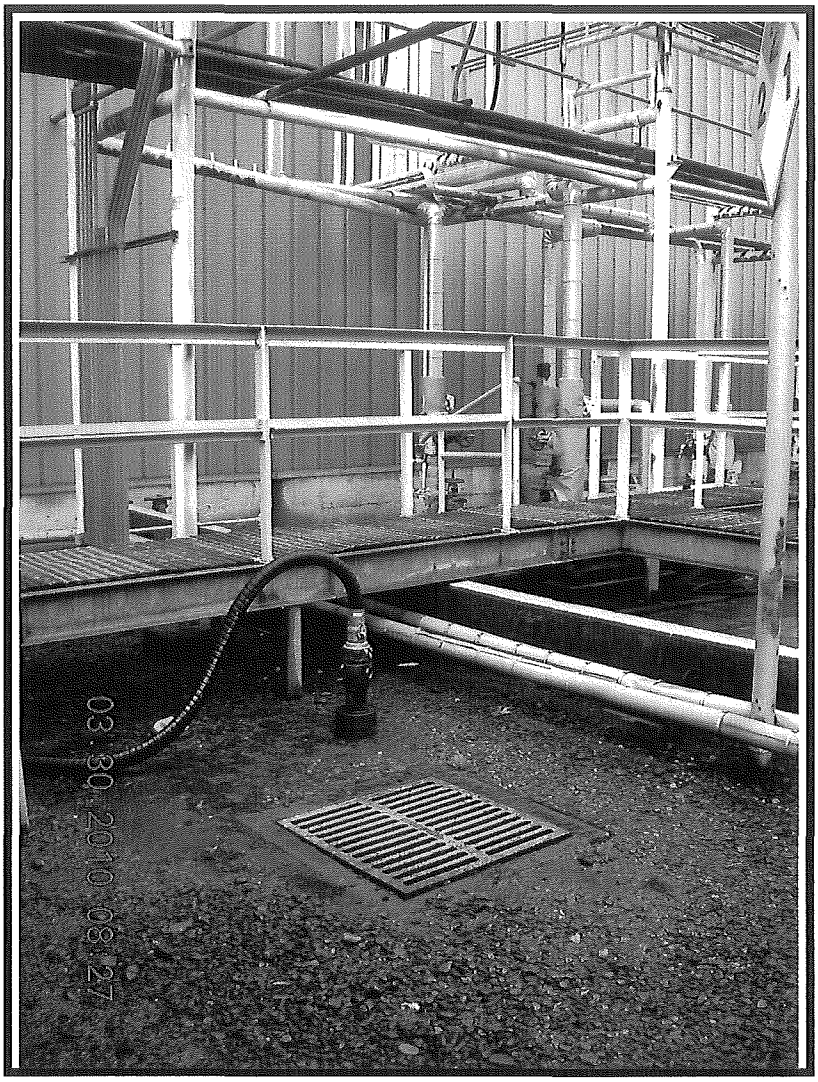
ConocoPhillips Portland Terminal
5528 NW Doanne Ave.
Portland, OR

2. CB-42

3. CB-42



4. CB-43



5. CB-43

Incident ID: 128350

Short Description: [E] Marine Diesel Oil Leak

Responsible Dept\Unit: Terminals : Terminals - West Coast Division : Portland Product Terminal

Status: Closed

Incident Type: Incident

Potential Risk Rating: I - Low

General

Responsible Supervisor:	THOMAS LYONS
High Learning Value Event Status:	Not Reviewed for HLVE
Specific Location:	Shore Valve Area
Date Occurred: (mm/dd/yyyy)	5/9/2010 6:20:00 PM
Date Reported: (mm/dd/yyyy)	5/10/2010 3:14:00 PM
Date Entered:	5/10/2010 4:28:01 PM (GMT-07:00)
REPORTEDBY:	THOMAS LYONS
Incident Description:	On May 9th, 2010, at 6:30 PM, an Operator discovered a flange dripping a small amount of Marine Diesel Oil at the Portland Terminal. The Operators immediately tightened the flange and installed a catch pan under the flange. The Operators used sorbent pads to wipe up the product on the pipe, and removed the top layer of sand under the flange that was impacted into an appropriate 55 gallon drum container. Another Operator was called out to monitor the flange throughout the night as a safety precaution. No further drips were observed. In the morning, a further small amount of staining was noticed and the sand removed. Notifications have been made to all stakeholders. The estimate of the total leak volume is 5 gallons. An investigation is underway.
Weather:	Clear
Lighting:	Day
Address:	5528 NW Doane Avenue
City:	Portland
Country:	United States
State/Province:	Oregon
Zip/Postal Code:	97210
Incident Flags:	Hydrocarbon Loss of Containment
Entered By:	LYONS, THOMAS
Immediate Actions Taken:	Operators used sorbent pads to wipe up the product on the pipe, and removed the top layer of sand under the flange that was impacted into an appropriate 55 gallon drum container. Another Operator was called out to monitor the flange throughout the night as a safety precaution. No further drips were observed. In the morning, a further small amount of staining was noticed and the sand removed. Notifications have been made to all stakeholders. The estimate of the total leak volume is 5 gallons. An investigation is underway

Sub Types

Check All That Apply: General: Environmental (e.g.: Spills, Releases, Odor Complaints, Unplanned Releases, Permit Exceedences, RV Operations, Process Upsets)

Responsibilities

Workflow Supervisor *

Name	Response
THOMAS LYONS	

Incident Owner *

Name	Response
THOMAS LYONS	

Environmental Expert

Name	Response
VALERIE UYEDA	

Creator *

Name	Response
THOMAS LYONS	

Notes

Notes: No Data is Available

Equipment

Equipment

Equipment Involved	Critical	Equipment Number/Description
Piping Systems and Piping Components: Flanges	NO	

People

Contractor Involvement : No Data is Available

		Consequence Number					
Name	Employee Type	Injury / Illness	Property	Transportation	Security	Quality	Environmental
UYEDA, VALERIE	Employee						21417 Open View

Witnesses

Name	Employee,Contractor,or Other	Phone
Andrew Janke	Employee	503-248-1565
Rob Gross	Employee	503-248-1565
Mat Paul	Employee	503-248-1565

Consequence

Incident Consequences

ID	Type	Description	Party Involved	Status
21417 Open View	Environmental	...	UYEDA, VALERIE J	Closed

Pending Consequences : No Data is Available

Investigation

Investigations: No Data is Available

Action Items

Action Items: No Data is Available

Summary

Equipment:	1
Employees:	1
Contractors:	None

COP0018048

Incident ID: 139676

Short Description: [E] Drip on Fuel Oil Pipe

Responsible Dept\Unit: Terminals : Terminals - West Coast Division : Portland Product Terminal

Status: Closed

Incident Type: Incident

Potential Risk Rating: I - Low

General

Responsible Supervisor:	THOMAS LYONS
High Learning Value Event Status:	Not Reviewed for HLVE
Specific Location:	Railcar Rack
Date Occurred: (mm/dd/yyyy)	9/1/2010 8:30:00 PM
Date Reported: (mm/dd/yyyy)	9/8/2010 2:05:40 PM
Date Entered:	9/8/2010 2:12:23 PM (GMT-07:00)
REPORTEDBY:	THOMAS LYONS
Incident Description:	On September 1st at approximately 8:30 pm, an Operator noticed a drip on an insulated suction line to a black oil pump at the railcar unloading rack. The suction line was isolated, drained down, and the drip stopped. About 1 gallon of product fell to concrete containment, and it was cleaned up. Appropriate notifications were made.
Weather:	Clear
Lighting:	Dusk
Address:	5528 NW Doane Avenue
City:	Portland
Country:	United States
State/Province:	Oregon
Zip/Postal Code:	97210
Incident Flags:	Loss of Process Containment , Mechanical Integrity
Entered By:	LYONS, THOMAS
Immediate Actions Taken:	The suction line was isolated, drained down, and the drip stopped. About 1 gallon of product fell to concrete containment, and it was cleaned up. Appropriate notifications were made.

Sub Types

Check All That Apply: General: Environmental (e.g.: Spills, Releases, Odor Complaints, Unplanned Releases, Permit Exceedences, RV Operations, Process Upsets)

Responsibilities

Workflow Supervisor *

Name	Response
THOMAS LYONS	

Incident Owner *

Name	Response
THOMAS LYONS	

Environmental Expert

Name	Response
VALERIE UYEDA	

Creator *

Name	Response
THOMAS LYONS	

Marine Notification

Name	Response
WEI HENRY	

Notes

Notes: No Data is Available

Equipment

Equipment: No Data is Available

People

Contractor Involvement : No Data is Available

		Consequence Number					
Name	Employee Type	Injury / Illness	Property	Transportation	Security	Quality	Environmental
UYEDA, VALERIE	Employee						23266 Open View

Witnesses

Name	Employee,Contractor,or Other	Phone
Les Hubert	Employee	503-248-1565

Consequence

Incident Consequences

ID	Type	Description	Party Involved	Status
23266 Open View	Environmental	...	UYEDA, VALERIE J	Closed

Pending Consequences : No Data is Available

Investigation

Investigations: No Data is Available

Action Items

Action Items: No Data is Available

Summary

Equipment:	None
Employees:	1
Contractors:	None
Witnesses:	1
Investigations:	None
Recordable:	No
Last Updated Date :	10/12/2010 3:29:10 PM (GMT-07:00)

Consequence — Injury/Illness: None

COP0018050

Incident ID: 140172

Short Description: [E] Header Flange Dripping Product

Responsible Dept\Unit: Terminals : Terminals - West Coast Division : Portland Product Terminal

Incident Type: Incident

Status: Closed

Potential Risk Rating: I - Low

General

Responsible Supervisor:	THOMAS LYONS
High Learning Value Event Status:	Not Reviewed for HLVE
Specific Location:	Marine Dock Header
Date Occurred: (mm/dd/yyyy)	9/13/2010 12:00:00 PM
Date Reported: (mm/dd/yyyy)	9/14/2010 5:47:30 AM
Date Entered:	9/14/2010 5:55:11 AM (GMT-07:00)
REPORTEDBY:	THOMAS LYONS
Incident Description:	At about 12:00 pm on September 13, 2010, maintenance personnel performing work on the Portland dock smelled hydro carbons and immediately investigated, finding a small gasoline drip from a hose connection. Approximately 2 quarts of product were released onto a containment drip pan. The release was promptly stopped and cleaned. All appropriate stakeholders were notified.
Weather:	Clear
Lighting:	Day
Address:	5528 NW Doane Avenue
City:	Portland
Country:	United States
State/Province:	Oregon
Zip/Postal Code:	97210
Incident Flags:	Hydrocarbon Loss of Containment
Entered By:	LYONS, THOMAS
Immediate Actions Taken:	The release was promptly stopped and cleaned. All appropriate stakeholders were notified.

Sub Types

Check All That Apply: General: Environmental (e.g.: Spills, Releases, Odor Complaints, Unplanned Releases, Permit Exceedences, RV Operations, Process Upsets)

Responsibilities

Workflow Supervisor *

Name	Response
THOMAS LYONS	

Incident Owner *

Name	Response
THOMAS LYONS	

Environmental Expert

Name	Response
VALERIE UYEDA	

Creator *

Name	Response
THOMAS LYONS	

Marine Notification

Name	Response
WEI HENRY	

Notes

Notes: No Data is Available

Equipment

Equipment: No Data is Available

People

Contractor Involvement : No Data is Available

		Consequence Number					
Name	Employee Type	Injury / Illness	Property	Transportation	Security	Quality	Environmental
UYEDA, VALERIE	Employee						22962 Open View

Witnesses

Name	Employee,Contractor,or Other	Phone
Jeff Fossum	Employee	503-248-1558

Consequence

Incident Consequences

ID	Type	Description	Party Involved	Status
22962 Open View	Environmental	...	UYEDA, VALERIE J	Closed

Pending Consequences : No Data is Available

Investigation

Investigations: No Data is Available

Action Items

Action Items: No Data is Available

Summary

Equipment:	**None**
Employees:	**1**
Contractors:	**None**
Witnesses:	**1**
Investigations:	**None**
Recordable:	**No**
Last Updated Date :	**10/12/2010 3:30:09 PM (GMT-07:00)**

Consequence Injury/Illness: **None**

Memo

Stantec

To:	Mr. Grant Sprick ARCADIS U.S.	From:	Mark Trewartha, R.S. Stantec Consulting Services Inc.
File:	ConocoPhillips Portland Terminal	Date:	October 12, 2010

Reference: Request for Information

The following is a summary of activities conducted at the ConocoPhillips Portland Terminal that provided groundwater source control.

- On October 1, 2008, the inside walls of MH-12 were lined with an silica resin provided by RS Lining Systems. Stratus Corporation applied the resin with oversight from SECOR Environmental (now Stantec). This work was performed to prevent groundwater from seeping into the storm water.

- On July 19, 2010, Stantec Consulting was onsite to provide environmental oversight for the repair of the 12-inch-diameter pipe in Man Hole 12 (MH-12). Stantec hired Stratus Corporation and ProPipe to perform this work. The repair was performed in order to correct and prevent any leaks which would allow groundwater to seep into the pipe.

- On May 10th, 2010, Stantec was on-site to collect soil samples from the area of a marine diesel spill along the McCall/ConocoPhillips pipeline near the shoreline. Four soil samples were collected from the area surrounding the concrete footings for the pipeline subsequent to remedial excavation. Results of soil samples collected from the excavation limits indicated concentrations of total petroleum hydrocarbons as diesel ranging from nondetect to 19,900 mg/kg. Further excavation was not feasible due to the presence of concrete footings and underground pipelines.

Please feel free to contact Stantec with any questions or concerns.

Sincerely,

Mark Trewartha, R.G.

STANTEC CONSULTING CORPORATION

Stantec Consulting Corporation
9400 SW Barnes Road, Suite 200
Portland OR 97225-6690
Tel: (503) 297-1631
Fax: (503) 297-5429

Stantec

October 20, 2010

Mr. Michael Romero
Oregon Department of Environmental Quality
NW Region Cleanup Section
2020 SW Fourth Avenue, Suite 400
Portland, Oregon 97201

Re: Interim Report for Asphalt Maintenance and Soil Sampling
ConocoPhillips Site No. 0922
5528 Doane Avenue
Portland, Oregon 97210

Dear Mr. Romero:

Stantec Consulting Corporation (Stantec) presents this Interim Report (IR) for Asphalt Maintenance and Soil Sampling at the above referenced location in Portland, Oregon (the Site [Figure 1]). Stantec has prepared this IR on behalf of ConocoPhillips Company (CoP) in order to inform the Oregon Department of Environmental Quality (ODEQ) of construction activities at the Site which involved some soil characterization for disposal and provided an opportunity for some additional assessment activities. The assessment activities included collection and laboratory analysis of soil accessible in the course of the construction project. The report is considered interim at this time because additional asphalt maintenance and soil sampling activities are proposed over the next several months. At the completion of asphalt maintenance and associated soil sampling activities, a final report will be submitted summarizing all asphalt maintenance and soil sampling activities.

SCOPE OF WORK

The scope of work included routine maintenance involving the removal and replacement of asphalt identified as Area 2, located near the black-oil offloading rack. Area 2 is on the southern end of the loading rack and measures 55 by 39 feet; also known as the helicopter landing pad (see Figures 2 & 3). The asphalt repair work exposed all of Area 2 and extended north under the western side of the offloading rack. There are no monitoring wells in the vicinity of this construction project. The closest monitoring well, U-5A, is located to the east approximately 80 feet away in Tank Farm 1; west of above ground storage tank (AST) #2783. Erosion control measures were implemented by the construction contractor to prevent any soil materials from entering adjacent catch basins or migrating from the work area. Appendix A includes aerial photographs of Areas 2, 3 and 4. The following tasks were completed during the investigation:

- Task 1 – Observation;
- Task-2 – Waste Management; and
- Task 3 – Laboratory Analytical Testing and Results.

Details of each task performed are described below:

Reference: **Interim Report for Asphalt Maintenance and Soil Sampling**
ConocoPhillips Site No. 0922

Task 1 – Observation

Construction activities were performed on Area 2 (details can be viewed on Figure 3). A front end loader was used to remove up to one foot (ft.) of asphalt and gravel from the area. Field personnel conducted field observations of the exposed area for possible hydrocarbon contamination. A photoionization detector (PID) was used to measure for volatizing compounds. There was no evidence, visual or olfactory, of hydrocarbon contamination observed during the excavation, and all PID readings were non-detect (0.00 parts per million [ppm]). See Table 1 for details. The exposed area can be viewed in Appendix D.

Task 2 – Waste Management

All removed soil materials were placed into four, lined roll-off bins; numbered 158, 178, 181 and 193. The bins were temporarily stored onsite pending analytical results. Samples were collected from each bin and submitted for laboratory analysis. Results for Toxicity Characteristic Leaching Potential (TCLP) lead and benzene analyses were below the method reporting limits. Approximately 40 tons of materials were disposed of at the Waste Management Landfill in Hillsboro, Oregon. Disposal documentation is on file at the Site. Soil materials were disposed of as outlined in the Contaminated Media Management Plan (Stantec, 2009)

Laboratory analytical results of the waste material can be viewed on Tables 2, 3 and Appendix C.

Task 3 – Laboratory Analytical Testing and Results

On January 14, 2010, Stantec personnel completed field observations and collected four soil samples during the asphalt removal project. The soil samples, labeled HB-1 through HB-4, were collected by hand auger between two and three feet (ft.) below the ground surface (bgs) from the exposed area. Sample locations can be viewed on Figure 3. On January 18, 2010, Stantec personnel collected waste material samples (samples Bin-181 Bin-158, Bin-193 and Bin-178) for waste characterization. Samples were submitted for the following analyses:

- TPH-D and TPH-O per Northwest Method NWTPH-Dx with silica gel cleanup;
- TPH-G per Northwest Method NWTPH-Gx;
- ODEQ Risk-Based Decision Making (RBDM)[1] VOCs[2] per Environmental Protection Agency (EPA) Method 8260B; and
- Polycyclic Aromatic Hydrocarbons (PAHs) per EPA Method 8270 SIM as follow-up where TPH-D is detected.

TPH-G was detected in soil samples Bin-181 [16.8 milligrams per kilogram (mg/kg)], Bin-158 (11.8 mg/kg), Bin-193 (3.8 J mg/kg), HB-3 (1.4 mg/kg) and Bin-178 (0.98 J mg/kg). The "J" value

[1] DEQ, 2003. Risk-Based Decision Making for the Remediation of Petroleum-Contaminated Sites, Oregon Department of Environmental Quality, Underground Tanks Program, September 2003.

[2] RBDM VOCs include benzene, toluene, ethylbenzene, total xylenes (BTEX), methyl tert-butyl ether (MTBE), naphthalene, 1,2,4 trimethylbenzene, 1,3,5-trimethylbenzene, isopropylbenzene, n-propylbenzene, 1,2 dibromoethane (EDB), and 1,2-dichloroethane (EDC).

indicates that the value reported is below the routine reporting limit, but exceeds the detection limit threshold and should be considered an estimate.

TPH-D was detected in soil samples Bin-181(412 mg/kg), Bin-158 (209 mg/kg), HB-3 (33.4 mg/kg), Bin-193 (31.8 mg/kg), Bin-178 (13.0 J mg/kg) and HB-4 (7.5 J mg/kg).

TPH-O was detected in soil samples Bin-158 (1,710 mg/kg) Bin-181 (895 mg/kg), HB-3 (171 mg/kg), Bin-193 (119 mg/kg), and Bin-178 (52.7 J mg/kg).

Benzene was not detected above the method detection limit (MDL) in any of the soil samples collected during this event.

Toluene was detected in the soil sample collected from Bin-181 at a concentration of 0.43 J mg/kg.

Ethylbenzene was detected in soil samples HB-3 (0.72 J mg/kg), Bin-158 (0.70 J mg/kg), Bin-178 (0.58 J mg/kg), Bin-181 (0.58 J mg/kg) and Bin-193 (0.42 J mg/kg).

Total xylenes were detected in soil samples Bin-158 (9.7 mg/kg), Bin-181 (7.6 mg/kg), HB-3 (7.5 mg/kg) and Bin-193 (7.4 mg/kg).

The following PAHs were detected in the soil samples collected during this event:

- Acenaphthalene: Bin-181 (0.042 J mg/kg);
- Acenaphthylene: Bin-181 (0.013 J mg/kg), Bin-158 (0.0039 J mg/kg), Bin-193 (0.0020 J mg/kg), and HB-3 (0.00048 J mg/kg);
- Anthracene: Bin-181 (0.059 mg/kg), Bin-158 (0.020 J mg/kg), Bin-193 (0.0050 J mg/kg) and HB-3 (0.00095 J mg/kg);
- Benzo(a)anthracene: Bin-181 (0.079 mg/kg), Bin-193 (0.016 mg/kg), Bin-158 (0.040 J mg/kg), and HB-3 (0.0018 J mg/kg);
- Benzo(a)pyrene: Bin-181 (0.72 mg/kg), Bin-193 (0.015 mg/kg), Bin15 (0.059 J mg/kg) and HB-3 (0.0033 J mg/kg);
- Benzo(b)fluoranthene: Bin-181 (0.056 mg/kg), Bin-193 (0.011 mg/kg), Bin-158 (0.044 J mg/kg) and HB-3 (0.0023 J mg/kg);
- Benzo(g,h,i)perylene: Bin-181 (0.11 mg/kg), Bin-158 (0.082 mg/kg), Bin-193 (0.019 mg/kg) and HB-3 (0.011 mg/kg);
- Benzo(k)fluoranthene: Bin-193 (0.086 mg/kg), Bin-158 (0.029 J mg/kg), Bin-181 (0.024 J mg/kg) and HB-3 (0.0016 J mg/kg);
- Chrysene: Bin-181 (0.19 mg/kg), Bin-158 (0.13 mg/kg), Bin-193 (0.021 mg/kg) and HB-3 (0.0058 J mg/kg);

- Dibenz(a,h)anthracene: Bin-181 (0.029 J mg/kg), Bin-158 (0.027 J mg/kg) and Bin-193 (0.0036 J mg/kg):
- Fluoranthene: Bin-181 (0.075 mg/kg), Bin-193 (0.015 mg/kg), Bin-158 (0.043 J mg/kg) and HB-3 (0.0026 J mg/kg);
- Fluorene: Bin-181 (0.027 J mg/kg), and Bin-193 (0.0021 J mg/kg);
- Indeno(1,2,3-cd)pyrene: Bin-181 (0.052 mg/kg), Bin-193 (0.010 mg/kg), Bin-158 (0.024 J mg/kg) and HB-3 (0.0032 J mg/kg);
- Naphthalene: Bin-193 (0.017 mg/kg), Bin-158 (0.029 J mg/kg) and Bin-181 (0.022 J mg/kg);
- Phenanthrene: Bin-181 (0.058 mg/kg) Bin-193 (0.011 mg/kg) and Bin-158 0.046 J mg/kg); and
- Pyrene: Bin-181 (0.26 mg/kg) Bin-158 (0.18 mg/kg) Bin-193 (0.030 mg/kg) and HB-3 (0.0062 J mg/kg).

The laboratory analyses did not result in any detections above the ODEQ RBDM Risk-Based Concentrations (RBCs) for the occupational, construction worker or excavation worker receptors or the Portland Harbor Joint Source Control Strategy (JSCS) Bioaccumaltive Sediment Screening Level Values (SLVs).

Laboratory analytical results of the soil samples collected during this event can be viewed in Tables 2, 3 and Appendix B.

The excavated area, Area 2, was subsequently restored to grade and repaved.

If you have any questions on this IR or the project in general, please contact the undersigned at 503-297-1631

Sincerely,
Stantec Consulting Corporation

Chris Carlton-Franco, M.Sc.
Staff Scientist

Mark Trewartha, R.G.
Senior Hydrogeologist

Alice Larsen
Senior Project Manager

Reference: **Interim Report for Asphalt Maintenance and Soil Sampling**
ConocoPhillips Site No. 0922

ATTACHMENTS:

Figure 1 – Site Location Map
Figure 2 – Site Plan
Figure 3 – Site Plan with Hand Boring Results

Table 1 – Summary of Soil PID Readings
Tables 2 and 3 – Summary of Soil and Waste Material Analytical Results

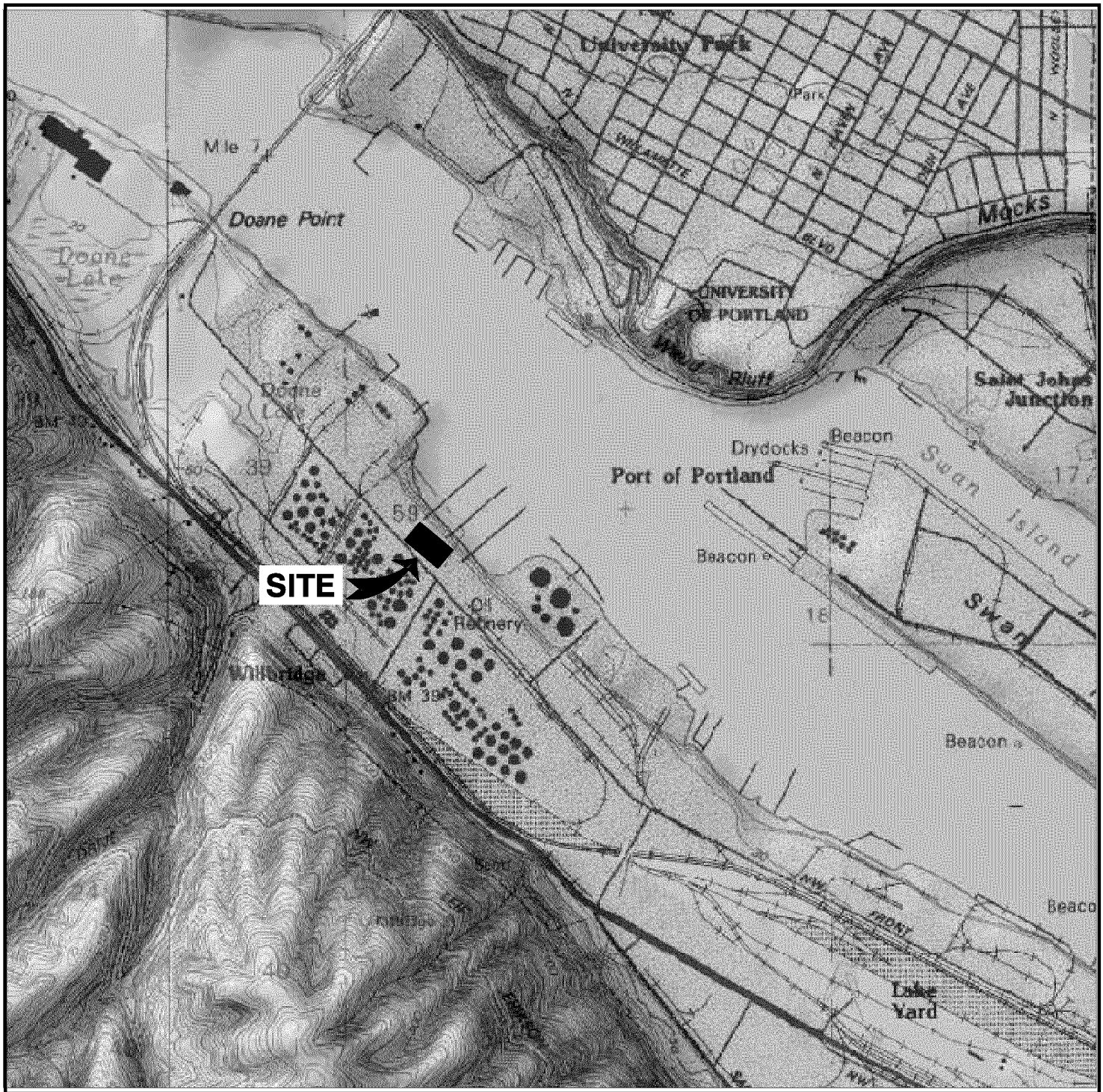
Appendix A – Aerial Photographs of Area 2, Area 3 and Area 4
Appendix B – Soil Samples Laboratory Analytical Report and Chain-of-Custody Record
Appendix C – Waste Material Laboratory Analytical Report and Chain-of-Custody Record
Appendix D – Photograph of Exposed Area

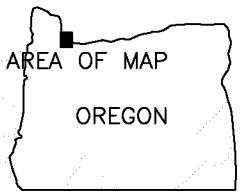
CCF/MAT

cc: Mr. Rich Solomon, ConocoPhillips, 3900 Kilroy Airport Way, Suite 210, Long Beach, CA 90806
Mr. Tom Lyons, ConocoPhillips Portland Terminal, 5528 NW Doane Avenue, Portland, OR 97210
Ms. Valerie Uyeda, ConocoPhillips (via email)

Stantec

FIGURES





QUADRANGLE LOCATION

N

0 1/4 1/2

SCALE (MILES)

REFERENCE: USGS 7.5 MINUTE QUADRANGLE; PORTLAND, OREGON; 1999

Stantec
9400 SW BARNES ROAD
PORTLAND, OREGON
PHONE: (503) 297-1631/297-5429 (FAX)

FOR: ConocoPhillips
FACILITY 0922 - PORTLAND (RM&R 0922)
5528 NW DOANE AVENUE
PORTLAND, OREGON

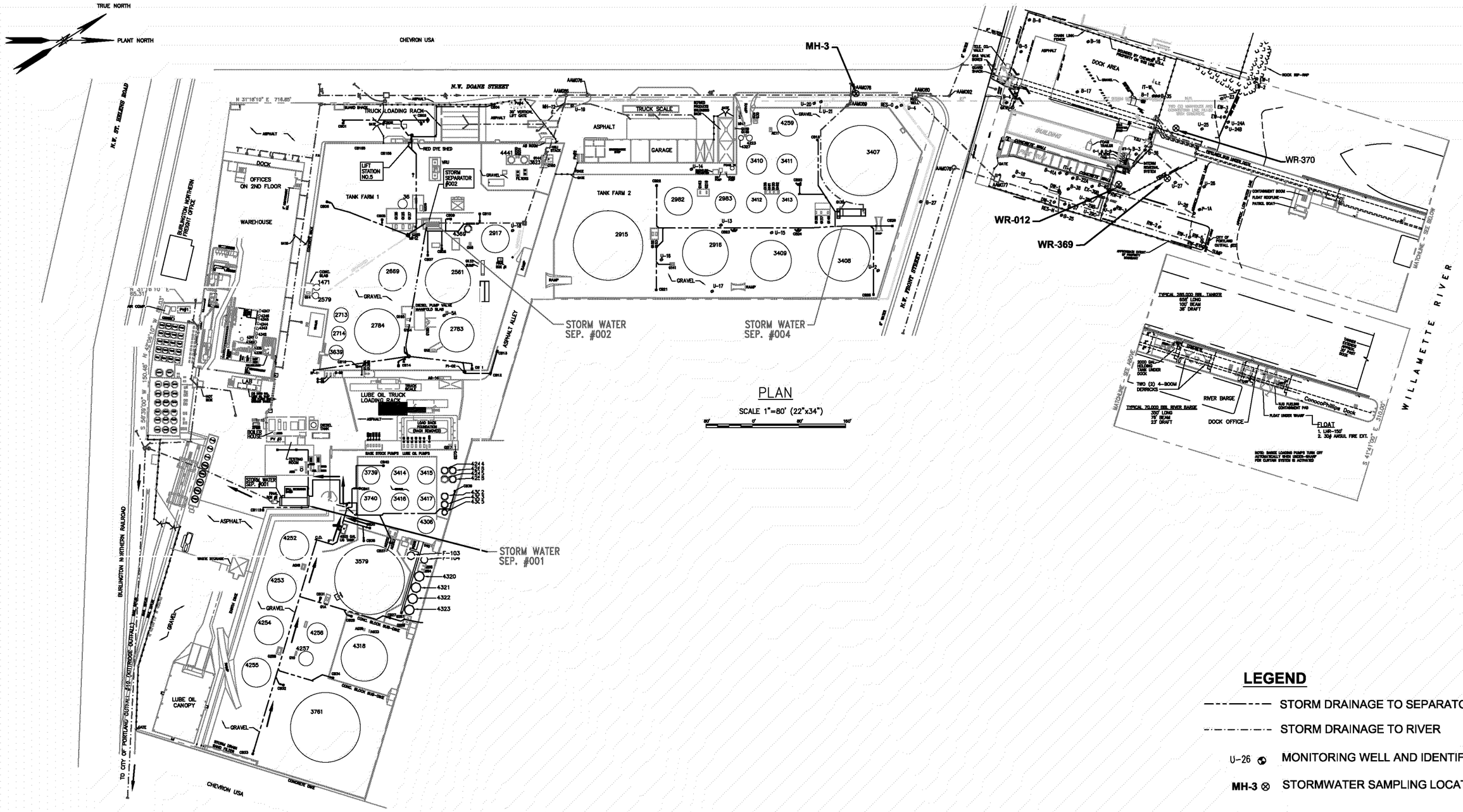
SITE LOCATION MAP

FIGURE: **1**

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
212302313	DJH	CCF	MAT	8/9/10

FILEPATH:K:\1-CLIENTS\ConocoPhillips\15CP\00922-PTLD TERMINAL\212302313-2010\212302313-1SLM.dwg|DHeller|Aug 12, 2010 at 15:09|Layout: SLM-FIG.1 (3)

COP0018060



PLAN

SCALE 1"=80' (22"x34")

LEGEND

- STORM DRAINAGE TO SEPARATOR
- STORM DRAINAGE TO RIVER
- U-26 MONITORING WELL AND IDENTIFICATION
- MH-3 STORMWATER SAMPLING LOCATIONS

Note

1. Updated from Delta, Inc Drawing 0608-C-7011-C, Dated 3/16/97.

No warranty is made by Stantec as to the accuracy, reliability, or completeness of these data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed electronically, and may be updated without notification. Any reproduction may result in a loss of scale and or information.

Stantec
9400 SW BARNES ROAD
PORTLAND, OREGON
(503) 297-1631/297-5429 (FAX)

FOR: ConocoPhillips
PORTLAND TERMINAL
5528 NW DOANE AVENUE
PORTLAND, OREGON

SITE PLAN

FIGURE: **2**

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
212302313	DJH	CCF	MAT	8/9/2010

FILEPATH:K:\1-CLIENTS\ConocoPhillips\15CP\00922-PTLD TERMINAL\212302313-2010\212302313-SP FIG.2&3.dwg|DHeller|Aug 12, 2010 at 15:33|Layout: FIG.2

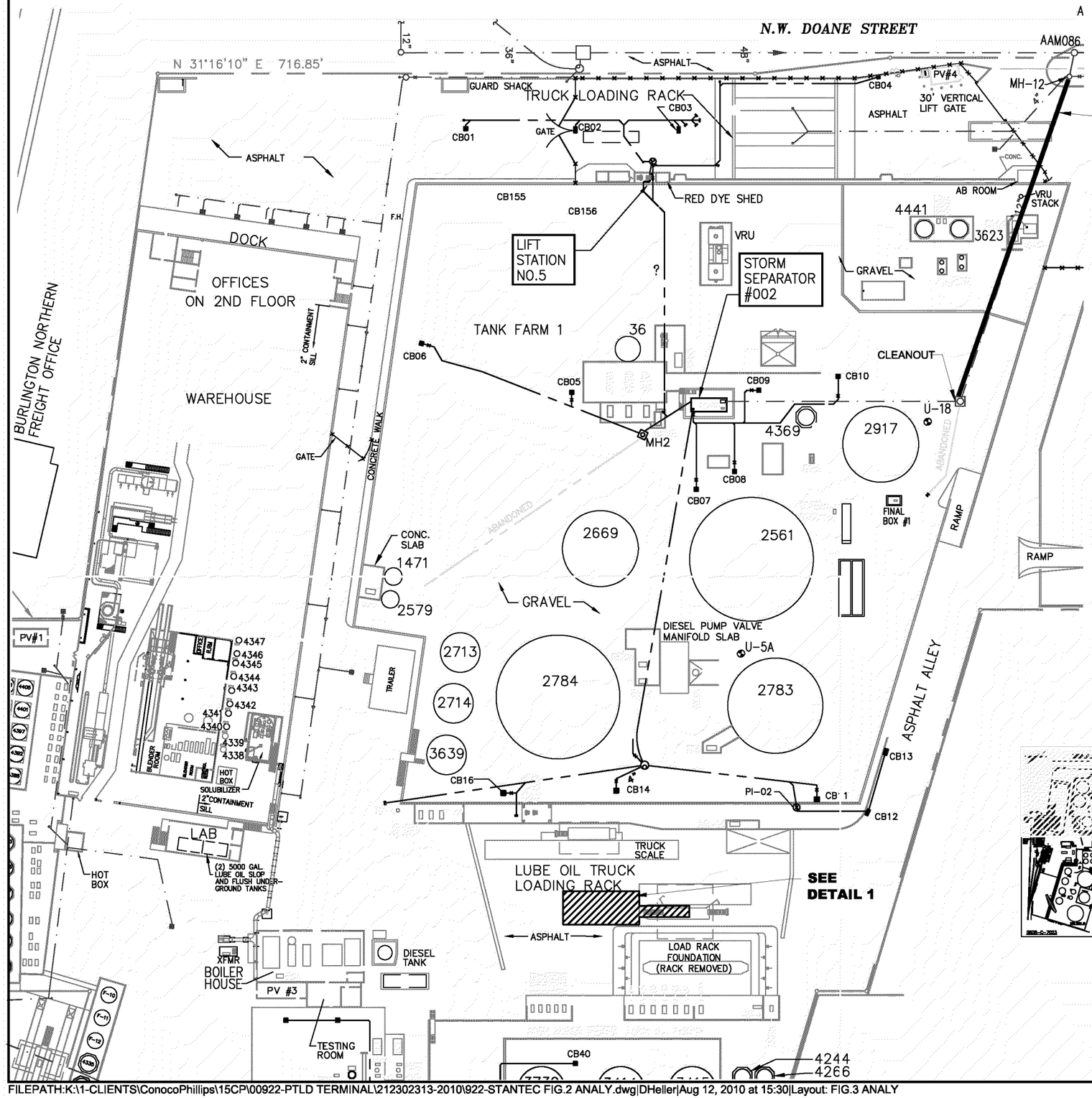
LEGEND:

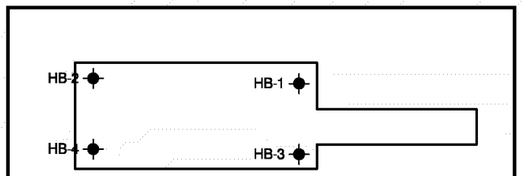
U–18 ⊙ MONITORING WELL LOCATIONS *AND* IDENTIFICATION

HB-1 ✦ HAND BORING LOCATIONS *AND* IDENTIFICATION

▨ AREA OF EXCAVATION

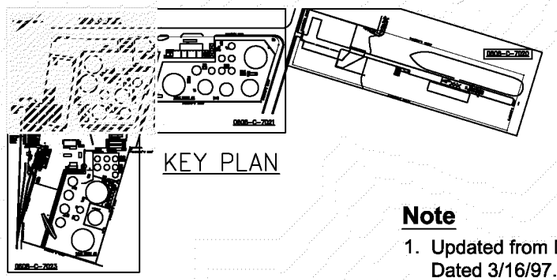
REPAIRS WERE MADE JUST UPSTREAM OF MH-12
THE HYDRO-JET WAS INSERTED INTO A CLEANOUT
NEXT TO MONITORING WELL U-18





DETAIL 1- EXCAVATION AREA

ALL RESULTS ARE MILLIGRAM PER KILOGRAM (mg/kg)
ALL RESULTS COLLECTED ON 1/14/2010



KEY PLAN

Note

1. Updated from Delta, Inc Drawing 0608-C-7011-C, Dated 3/16/97.

No warranty is made by Stantec as to the accuracy, reliability, or completeness of these data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed electronically, and may be updated without notification. Any reproduction may result in a loss of scale and or information.

Stantec 9400 SW BARNES ROAD PORTLAND, OREGON (503)297-1631/297-5429 (FAX)	FOR: ConocoPhillips PORTLAND TERMINAL 5528 NW DOANE AVENUE PORTLAND, OREGON		SITE PLAN -WITH HAND BORING RESULTS	FIGURE: 3
	JOB NUMBER: 212302313	DRAWN BY: DJH	CHECKED BY: CCF	APPROVED BY: MAT	DATE: 8/9/2010

FILEPATH:K:\1-CLIENTS\ConocoPhillips\15CP\00922-PTLD TERMINAL\212302313-2010\922-STANTEC FIG.2 ANALY.dwg|DHeller|Aug 12, 2010 at 15:30|Layout: FIG.3 ANALY

COP0018062

TABLES

Table 1. Summary of Soil PID Readings
ConocoPhillips Portland Terminal (RM&R No. 922)
5528 NW Doane Avenue
Portland, Oregon

Date	Sample ID	PID Reading (ppm)
1/14/2010	HB-1	0.00
	HB-2	0.00
	HB-3	0.00
	HB-4	0.00

-- = Not measured
ppm = parts per million
PID = Photoionization detector

COP0018064

Table 2. Summary of Soil Analytical Results - TPH and RBDM VOCs
ConocoPhillips Portland Terminal (RM&R No. 922)
5528 NW Doane Avenue
Portland, Oregon

Date	Sample ID	TPH-G[1] (mg/kg)	TPH-D[2] (mg/kg)	TPH-O[2] (mg/kg)	VOCs[3]											
					Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Total Xylenes (mg/kg)	MTBE (mg/kg)	Naph-thalene (mg/kg)	1,2,4-Trimethyl-benzene (mg/kg)	1,3,5-Trimethyl-benzene (mg/kg)	Isopropyl-benzene (mg/kg)	n-Propyl-benzene (mg/kg)	1,2-Dibromo-ethane (mg/kg)	1,2-Dichloro-ethane (mg/kg)
1/14/2010	HB-1	<0.23	<3.5	<23.4	<0.16	<0.33	<0.41	<0.81	--	--	--	--	--	--	--	--
1/14/2010	HB-2	<0.23	<3.4	<23.0	<0.16	<0.33	<0.40	<0.79	--	--	--	--	--	--	--	--
1/14/2010	HB-3	1.4 (J)	33.4	171	<0.17	<0.35	0.72 (J)	7.5	--	--	--	--	--	--	--	--
1/14/2010	HB-4	<0.24	7.5 (J)	<24.5	<0.15	<0.31	<0.38	<0.75	--	--	--	--	--	--	--	--
1/18/2010	Bin 158	11.8	209	1,710	<0.14	<0.30	0.70 (J)	9.7	--	--	--	--	--	--	--	--
1/18/2010	Bin 178	0.98 (J)	13.0 (J)	52.7 (J)	<0.17	<0.35	0.58 (J)	<0.84	--	--	--	--	--	--	--	--
1/18/2010	Bin 181	16.8	412	895	<0.16	0.43 (J)	0.58 (J)	7.6	--	--	--	--	--	--	--	--
1/18/2010	Bin 193	3.8 (J)	31.8	119	<0.16	<0.33	0.42 (J)	7.4	--	--	--	--	--	--	--	--
Soil $RBCs_{ss}$ (mg/kg) Exposure Pathway: Soil Ingestion Dermal Contact, and Inhalation	Occupational Receptor	22,000	70,000	NE	34	77,000	140.0	24,000	1,000	22	16,000	1,500	51,000	4,900	0.68	15
	Construction Worker	13,000	23,000	40,000	340	24,000	1,600	19,000	10,000	540	1,600	1,400	24,000	2,300	8.1	180
	Excavation Worker Receptor	NE	NE	NE	9,400	NE	43,000	NE	NE	15,000	44,000	40,000	NE	65,000	230	5,000
Soil $RBCs_{so}$ (mg/kg) Exposure Pathway: Volatilization to Outdoor Air	Construction and Excavation Worker	80,000	NE	NE	48	NE	150	NE	1,400	26	790	NE	NE	NE	0.65	14
Sol $RBCs_{si}$ (mg/kg) Exposure Pathway: Vapor Intrusion into Buildings	Occupational Receptor	NE	NE	NE	1.2	NE	12	NE	70	93	840	140	NE	NE	0.14	0.56

COP0018065

Table 2. Summary of Soil Analytical Results - TPH and RBDM VOCs
ConocoPhillips Portland Terminal (RM&R No. 922)
5528 NW Doane Avenue
Portland, Oregon

Date	Sample ID	TPH-G[1] (mg/kg)	TPH-D[2] (mg/kg)	TPH-O[2] (mg/kg)	VOCs[3]											
					Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Total Xylenes (mg/kg)	MTBE (mg/kg)	Naph-thalene (mg/kg)	1,2,4-Trimethyl-benzene (mg/kg)	1,3,5-Trimethyl-benzene (mg/kg)	Isopropyl-benzene (mg/kg)	n-Propyl-benzene (mg/kg)	1,2-Dibromo-ethane (mg/kg)	1,2-Dichloro-ethane (mg/kg)
Soil $RBCs_{sw}$ (mg/kg) Exposure Pathway: Leaching to Groundwater	Occupational Receptor	110	NE	NE	0.052	NE	0.86	100	0.50	0.41	55	12	NE	NE	0.00044	0.0074
JSCS Upland Soil & Stormwater Sediment SLVs[4]	ODEQ 2007 Bioaccumaltive Sedimnet SLVs	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE

NOTES:

[1] Total Petroleum Hydrocarbons as gasoline-range hydrocarbons (TPH-G) per NWTPH-Gx Method.

[2] Total Petroleum Hydrocarbons as diesel-range hydrocarbons (TPH-D) and oil-range hydrocarbons (TPH-O) per NWTPH-Dx Method.

[3] Volatile Organic Compounds (VOCs) per EPA Method 8260B.

[4] Portland Harbor Joint Source Control Strategy (JSCS), Screening Level Values (SLVs) for Soil/Stormwater Sediment, Stormwater, Groundwater, and Surface Water. Oregon DEQ. December 2005 Risk-Based Concentrations (RBCs) from Appendix A (Revision: September 15, 2009): Table of Risk-Based Concentrations, from *Decision Making for the Remediation of Petroleum-Contaminated Sites*, Oregon DEQ, September 22, 2003.

-- = Not Analyzed

NA = Not Applicable

NE = The RBC for this indirect pathway is not printed, since it is assumed that it is not physically possible to exceed the unacceptable risk level by this pathway.

< = Less than the laboratory detection limit threshold

mg/kg = milligrams per kilogram

J = The value reported is below the routine reporting limit, but exceeds the detection limit threshold, and should be considered an estimate

B = The analyte of interest was detected in both the sample and the associated method blank and is applied without regard to the relative concentration reported in the sample and in the blank.

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Table 3. Summary of Soil Analytical Results -PAHs
ConocoPhillips Portland Terminal(RM&R No. 922)
5528 NW Doane Avenue
Portland, Oregon

Date	Sample ID	PAHs [a] (mg/kg)															
		Ace-naph-thene	Ace-naph-thylene	Anthra-cene	Benzo(a) anthra-cene	Benzo(a) pyrene	Benzo(b) fluor-anthene	Benzo (g,h,i) perylene	Benzo(k) fluor-anthene	Chry-sene	Dibenz(a,h) anthra-cene	Fluor-anthene	Fluor-ene	Indeno (1,2,3-cd) pyrene	Naph-thalene	Phenan-threne	Pyrene
1/14/2010	HB-1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1/14/2010	HB-2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1/14/2010	HB-3	<0.0018	0.00048 (J)	0.00095 (J)	0.0018 (J)	0.0033 (J)	0.0023 (J)	0.011	0.0016 (J)	0.0058 (J)	<0.00032	0.0026 (J)	<0.0021	0.0032 (J)	<0.0021	<0.0037	0.0062 (J)
1/14/2010	HB-4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1/18/2010	Bin 158	<0.017	0.0039 (J)	0.020 (J)	0.040 (J)	0.059 (J)	0.044 (J)	0.082	0.029 (J)	0.13	0.027 (J)	0.043 (J)	<0.020	0.024 (J)	0.029 (J)	0.046 (J)	0.18
1/18/2010	Bin 178	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1/18/2010	Bin 181	0.042 (J)	0.013 (J)	0.059	0.079	0.072	0.056	0.11	0.024 (J)	0.19	0.029 (J)	0.075	0.027 (J)	0.052	0.022 (J)	0.058	0.26
1/18/2010	Bin 193	<0.0017	0.0020 (J)	0.0050 (J)	0.016	0.015	0.011	0.019	0.0086	0.021	0.0036 (J)	0.015	0.0021 (J)	0.010	0.017	0.011	0.030
Soil RBCs$_{ss}$ (mg/kg) Exposure Pathway: Soil Ingestion, Dermal Contact and Inhalation	Occupational Receptor	41,000	NE	NE	2.7	0.27	2.7	NE	27	270	0.27	29,000	35,000	2.7	22	NE	21,000
	Construction Worker Receptor	16,000	NE	90,000	21	2.1	21	NE	210	2,100	2.1	8,900	12,000	21	540	NE	6,700
	Excavation Worker Receptor	NE	NE	NE	590	59	590	NE	5,900	59,000	59	NE	NE	590	15,000	NE	NE
Soil RBCs$_{so}$ (mg/kg) Exposure Pathway: Volatilization to Outdoor Air	Occupational Receptor	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	26	NE	NE
Soil RBCs$_{si}$ (mg/kg) Exposure Pathway: Vapor Intrusion into Buildings	Occupational Receptor	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	93	NE	NE
Soil RBCs$_{sw}$ (mg/kg) Exposure Pathway: Leaching to Groundwater	Occupational Receptor	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	30	0.41	NE	NE
JSCS Upland Soil & Stormwater Sediment SLVs[1]	ODEQ 2007 Bioaccumaltive Sedimnet SLVs	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	37	NE	NE	NE	NE	1.9

NOTES:
[a] Polynuclear Aromatic Hydrocarbon (PAHs) analysis by EPA Method 8270-SIM.
[1] Portland Harbor Joint Source Control Strategy (JSCS), Screening Level Values (SLVs) for Soil/Stormwater Sediment, Stormwater, Groundwater, and Surface Water. Oregon DEQ. December 2005.
Risk-Based Concentrations (RBCs) from Appendix A (Revision: September 15, 2009): Table of Risk-Based Concentrations, *Risk-Based Decision Making for the Remediation of Petroleum-Contaminated Sites*, Oregon DEQ, September 22, 2003.
-- = Not Analyzed
< = Less than the laboratory detection limit threshold
mg/kg = milligrams per kilogram
NA = Not Applicable
NE = The RBC for this indirect pathway is not printed, since it is assumed that it is not physically possible to exceed the unacceptable risk level by this pathway.
J = The value reported is below the routine reporting limit, but exceeds the detection limit threshold, and should be considered an estimate

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APPENDIX A
AERIAL PHOTOGRAPHS OF AREA 2, AREA 3 AND AREA 4

39 FEET
55 FEET
102 FEET X 39 FEET
RE-STRIPE CURB ONLY
Google

188' X 54'
Image © 2009 DigitalGlobe
Image © 2009 Portland, Oregon
© 2009 Pictometry International
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Stantec

APPENDIX B
SOIL SAMPLE LABORATORY ANALYTICAL REPORT AND CHAIN-OF-CUSTODY RECORD
PACE REPORT 252857

Pace Analytical Services, Inc.
940 South Harney
Seattle, WA 98108
(206)767-5060

February 01, 2010

Bill Edmund
COP_Stantec Washington
12034 134th CT
Redmond, WA 98052

RE: Project: 00922-Asphalt Work Area 2 PDX
Pace Project No.: 252857

Dear Bill Edmund:
Enclosed are the analytical results for sample(s) received by the laboratory on January 20, 2010. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jennifer Gross

jennifer.gross@pacelabs.com
Project Manager

Enclosures

cc: Chris Carlton-Franco, Stantec
Janet Nash, Stantec

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Seattle, WA 98108
(206)767-5060

CERTIFICATIONS

Project: 00922-Asphalt Work Area 2 PDX
Pace Project No.: 252857

Washington Certification IDs

Alaska CS Certification #: UST-025
Alaska Drinking Water VOC Certification #: WA01-09
Alaska Drinking Water Micro Certification #: WA01230
940 South Harney Street Seattle, WA 98108
Florida/NELAP Certification #: E87617
Oregon Certification #: WA200007
Washington Certification #: C1229
California Certification #: 01153CA

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Seattle, WA 98108
(206)767-5060

SAMPLE SUMMARY

Project: 00922-Asphalt Work Area 2 PDX
Pace Project No.: 252857

Lab ID	Sample ID	Matrix	Date Collected	Date Received
252857001	**Area 2 - HB-1 (922)**	Solid	01/14/10 15:00	01/20/10 14:16
252857002	**Area 2 - HB-2 (922)**	Solid	01/14/10 15:20	01/20/10 14:16
252857003	**Area 2 - HB-3 (922)**	Solid	01/14/10 15:40	01/20/10 14:16
252857004	**Area 2 - HB-4 (922)**	Solid	01/14/10 15:45	01/20/10 14:16
252857005	**TB-1 (922)**	Water	01/14/10 00:00	01/20/10 14:16

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SAMPLE ANALYTE COUNT

Project: 00922-Asphalt Work Area 2 PDX
Pace Project No.: 252857

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
252857001	**Area 2 - HB-1 (922)**	NWTPH-Dx	DMT	4	PASI-S
		NWTPH-Gx	LPM	3	PASI-S
		EPA 8260	LPM	8	PASI-S
252857002	**Area 2 - HB-2 (922)**	NWTPH-Dx	DMT	4	PASI-S
		NWTPH-Gx	LPM	3	PASI-S
		EPA 8260	LPM	8	PASI-S
252857003	**Area 2 - HB-3 (922)**	NWTPH-Dx	DMT	4	PASI-S
		NWTPH-Gx	LPM	3	PASI-S
		EPA 8270 by SIM	DMT	21	PASI-S
		EPA 8260	LPM	8	PASI-S
252857004	**Area 2 - HB-4 (922)**	NWTPH-Dx	DMT	4	PASI-S
		NWTPH-Gx	LPM	3	PASI-S
		EPA 8260	LPM	8	PASI-S
252857005	**TB-1 (922)**	NWTPH-Gx	LPM	3	PASI-S
		EPA 5030B/8260	LPM	8	PASI-S

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Seattle, WA 98108
(206)767-5060

ANALYTICAL RESULTS

Project: 00922-Asphalt Work Area 2 PDX
Pace Project No.: 252857

Sample: Area 2 - HB-1 (922) **Lab ID: 252857001** Collected: 01/14/10 15:00 Received: 01/20/10 14:16 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Dx GCS SG	Analytical Method: NWTPH-Dx Preparation Method: EPA 3546								
Diesel Range SG	ND	mg/kg	21.8	3.5	1	01/22/10 17:45	01/24/10 00:41		
Motor Oil Range SG	ND	mg/kg	87.0	23.4	1	01/22/10 17:45	01/24/10 00:41	64742-65-0	
n-Octacosane (S) SG	103	%	50-150		1	01/22/10 17:45	01/24/10 00:41	630-02-4	
o-Terphenyl (S) SG	103	%	50-150		1	01/22/10 17:45	01/24/10 00:41	84-15-1	
NWTPH-Gx GCV	Analytical Method: NWTPH-Gx Preparation Method: NWTPH-Gx								
Gasoline Range Organics	ND	mg/kg	5.7	0.23	1	01/20/10 17:00	01/26/10 00:27		3n,Z2
a,a,a-Trifluorotoluene (S)	94	%	50-150		1	01/20/10 17:00	01/26/10 00:27	98-08-8	
4-Bromofluorobenzene (S)	88	%	50-150		1	01/20/10 17:00	01/26/10 00:27	460-00-4	
8260 MSV 5030	Analytical Method: EPA 8260								
Benzene	ND	ug/kg	3.2	0.16	1		01/27/10 21:46	71-43-2	
Ethylbenzene	ND	ug/kg	3.2	0.41	1		01/27/10 21:46	100-41-4	
Toluene	ND	ug/kg	3.2	0.33	1		01/27/10 21:46	108-88-3	
Xylene (Total)	ND	ug/kg	6.5	0.81	1		01/27/10 21:46	1330-20-7	
Dibromofluoromethane (S)	92	%	80-136		1		01/27/10 21:46	1868-53-7	4n
Toluene-d8 (S)	103	%	80-120		1		01/27/10 21:46	2037-26-5	
4-Bromofluorobenzene (S)	103	%	72-122		1		01/27/10 21:46	460-00-4	
1,2-Dichloroethane-d4 (S)	91	%	80-143		1		01/27/10 21:46	17060-07-0	
	Analytical Method: ASTM D2974-87								
Percent Moisture	**8.3**	%	0.10	0.10	1		01/21/10 10:16		

Sample: Area 2 - HB-2 (922) **Lab ID: 252857002** Collected: 01/14/10 15:20 Received: 01/20/10 14:16 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Dx GCS SG	Analytical Method: NWTPH-Dx Preparation Method: EPA 3546								
Diesel Range SG	ND	mg/kg	21.3	3.4	1	01/22/10 17:45	01/24/10 00:58		
Motor Oil Range SG	ND	mg/kg	85.4	23.0	1	01/22/10 17:45	01/24/10 00:58	64742-65-0	
n-Octacosane (S) SG	105	%	50-150		1	01/22/10 17:45	01/24/10 00:58	630-02-4	
o-Terphenyl (S) SG	105	%	50-150		1	01/22/10 17:45	01/24/10 00:58	84-15-1	
NWTPH-Gx GCV	Analytical Method: NWTPH-Gx Preparation Method: NWTPH-Gx								
Gasoline Range Organics	ND	mg/kg	5.8	0.23	1	01/20/10 17:00	01/26/10 00:51		3n,Z2
a,a,a-Trifluorotoluene (S)	98	%	50-150		1	01/20/10 17:00	01/26/10 00:51	98-08-8	
4-Bromofluorobenzene (S)	92	%	50-150		1	01/20/10 17:00	01/26/10 00:51	460-00-4	
8260 MSV 5030	Analytical Method: EPA 8260								
Benzene	ND	ug/kg	3.2	0.16	1		01/27/10 22:06	71-43-2	
Ethylbenzene	ND	ug/kg	3.2	0.40	1		01/27/10 22:06	100-41-4	
Toluene	ND	ug/kg	3.2	0.33	1		01/27/10 22:06	108-88-3	

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940 South Harney
Seattle, WA 98108
(206)767-5060

ANALYTICAL RESULTS

Project: 00922-Asphalt Work Area 2 PDX
Pace Project No.: 252857

Sample: Area 2 - HB-2 (922) **Lab ID: 252857002** Collected: 01/14/10 15:20 Received: 01/20/10 14:16 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030	Analytical Method: EPA 8260								
Xylene (Total)	ND	ug/kg	6.3	0.79	1		01/27/10 22:06	1330-20-7	
Dibromofluoromethane (S)	94	%	80-136		1		01/27/10 22:06	1868-53-7	4n
Toluene-d8 (S)	103	%	80-120		1		01/27/10 22:06	2037-26-5	
4-Bromofluorobenzene (S)	103	%	72-122		1		01/27/10 22:06	460-00-4	
1,2-Dichloroethane-d4 (S)	92	%	80-143		1		01/27/10 22:06	17060-07-0	
	Analytical Method: ASTM D2974-87								
Percent Moisture	**10.7**	%	0.10	0.10	1		01/21/10 10:20		

Sample: Area 2 - HB-3 (922) **Lab ID: 252857003** Collected: 01/14/10 15:40 Received: 01/20/10 14:16 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Dx GCS SG	Analytical Method: NWTPH-Dx Preparation Method: EPA 3546								
Diesel Range SG	**33.4**	mg/kg	23.7	3.8	1	01/22/10 17:45	01/24/10 01:14		
Motor Oil Range SG	**171**	mg/kg	94.7	25.5	1	01/22/10 17:45	01/24/10 01:14	64742-65-0	
n-Octacosane (S) SG	99	%	50-150		1	01/22/10 17:45	01/24/10 01:14	630-02-4	
o-Terphenyl (S) SG	105	%	50-150		1	01/22/10 17:45	01/24/10 01:14	84-15-1	
NWTPH-Gx GCV	Analytical Method: NWTPH-Gx Preparation Method: NWTPH-Gx								
Gasoline Range Organics	**1.4J**	mg/kg	6.3	0.25	1	01/20/10 17:00	01/26/10 01:15		3n,Z2
a,a,a-Trifluorotoluene (S)	98	%	50-150		1	01/20/10 17:00	01/26/10 01:15	98-08-8	
4-Bromofluorobenzene (S)	94	%	50-150		1	01/20/10 17:00	01/26/10 01:15	460-00-4	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
1-Methylnaphthalene	ND	mg/kg	0.0079	0.0010	1	01/22/10 18:00	01/29/10 23:52	90-12-0	
2-Methylnaphthalene	ND	mg/kg	0.0079	0.0021	1	01/22/10 18:00	01/29/10 23:52	91-57-6	
Acenaphthene	ND	mg/kg	0.0079	0.0018	1	01/22/10 18:00	01/29/10 23:52	83-32-9	
Acenaphthylene	**0.00048J**	mg/kg	0.0079	0.00027	1	01/22/10 18:00	01/29/10 23:52	208-96-8	
Anthracene	**0.00095J**	mg/kg	0.0079	0.00044	1	01/22/10 18:00	01/29/10 23:52	120-12-7	
Benzo(a)anthracene	**0.0018J**	mg/kg	0.0079	0.00012	1	01/22/10 18:00	01/29/10 23:52	56-55-3	
Benzo(a)pyrene	**0.0033J**	mg/kg	0.0079	0.00019	1	01/22/10 18:00	01/29/10 23:52	50-32-8	
Benzo(b)fluoranthene	**0.0023J**	mg/kg	0.0079	0.00078	1	01/22/10 18:00	01/29/10 23:52	205-99-2	
Benzo(g,h,i)perylene	**0.011**	mg/kg	0.0079	0.00035	1	01/22/10 18:00	01/29/10 23:52	191-24-2	
Benzo(k)fluoranthene	**0.0016J**	mg/kg	0.0079	0.00056	1	01/22/10 18:00	01/29/10 23:52	207-08-9	
Chrysene	**0.0058J**	mg/kg	0.0079	0.00036	1	01/22/10 18:00	01/29/10 23:52	218-01-9	
Dibenz(a,h)anthracene	ND	mg/kg	0.0079	0.00032	1	01/22/10 18:00	01/29/10 23:52	53-70-3	
Fluoranthene	**0.0026J**	mg/kg	0.0079	0.00092	1	01/22/10 18:00	01/29/10 23:52	206-44-0	
Fluorene	ND	mg/kg	0.0079	0.0021	1	01/22/10 18:00	01/29/10 23:52	86-73-7	
Indeno(1,2,3-cd)pyrene	**0.0032J**	mg/kg	0.0079	0.00029	1	01/22/10 18:00	01/29/10 23:52	193-39-5	
Naphthalene	ND	mg/kg	0.0079	0.0021	1	01/22/10 18:00	01/29/10 23:52	91-20-3	
Phenanthrene	ND	mg/kg	0.0079	0.0037	1	01/22/10 18:00	01/29/10 23:52	85-01-8	

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Seattle, WA 98108
(206)767-5060

ANALYTICAL RESULTS

Project: 00922-Asphalt Work Area 2 PDX
Pace Project No.: 252857

Sample: Area 2 - HB-3 (922) **Lab ID: 252857003** Collected: 01/14/10 15:40 Received: 01/20/10 14:16 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Pyrene	**0.0062J**	mg/kg	0.0079	0.00035	1	01/22/10 18:00	01/29/10 23:52	129-00-0	
Nitrobenzene-d5 (S)	67	%	63-138		1	01/22/10 18:00	01/29/10 23:52	4165-60-0	
2-Fluorobiphenyl (S)	72	%	55-136		1	01/22/10 18:00	01/29/10 23:52	321-60-8	
Terphenyl-d14 (S)	79	%	60-144		1	01/22/10 18:00	01/29/10 23:52	1718-51-0	
8260 MSV 5030	Analytical Method: EPA 8260								
Benzene	ND	ug/kg	3.4	0.17	1		01/27/10 22:26	71-43-2	
Ethylbenzene	**0.72J**	ug/kg	3.4	0.43	1		01/27/10 22:26	100-41-4	
Toluene	ND	ug/kg	3.4	0.35	1		01/27/10 22:26	108-88-3	
Xylene (Total)	**7.5**	ug/kg	6.7	0.84	1		01/27/10 22:26	1330-20-7	
Dibromofluoromethane (S)	91	%	80-136		1		01/27/10 22:26	1868-53-7	4n
Toluene-d8 (S)	104	%	80-120		1		01/27/10 22:26	2037-26-5	
4-Bromofluorobenzene (S)	104	%	72-122		1		01/27/10 22:26	460-00-4	
1,2-Dichloroethane-d4 (S)	89	%	80-143		1		01/27/10 22:26	17060-07-0	
	Analytical Method: ASTM D2974-87								
Percent Moisture	**15.8**	%	0.10	0.10	1		01/21/10 10:23		

Sample: Area 2 - HB-4 (922) **Lab ID: 252857004** Collected: 01/14/10 15:45 Received: 01/20/10 14:16 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Dx GCS SG	Analytical Method: NWTPH-Dx Preparation Method: EPA 3546								
Diesel Range SG	**7.5J**	mg/kg	22.7	3.6	1	01/22/10 17:45	01/24/10 01:30		J
Motor Oil Range SG	ND	mg/kg	91.0	24.5	1	01/22/10 17:45	01/24/10 01:30	64742-65-0	
n-Octacosane (S) SG	110	%	50-150		1	01/22/10 17:45	01/24/10 01:30	630-02-4	
o-Terphenyl (S) SG	105	%	50-150		1	01/22/10 17:45	01/24/10 01:30	84-15-1	
NWTPH-Gx GCV	Analytical Method: NWTPH-Gx Preparation Method: NWTPH-Gx								
Gasoline Range Organics	ND	mg/kg	6.1	0.24	1	01/20/10 17:00	01/26/10 01:39		3n,Z2
a,a,a-Trifluorotoluene (S)	90	%	50-150		1	01/20/10 17:00	01/26/10 01:39	98-08-8	
4-Bromofluorobenzene (S)	85	%	50-150		1	01/20/10 17:00	01/26/10 01:39	460-00-4	
8260 MSV 5030	Analytical Method: EPA 8260								
Benzene	ND	ug/kg	3.0	0.15	1		01/27/10 22:47	71-43-2	
Ethylbenzene	ND	ug/kg	3.0	0.38	1		01/27/10 22:47	100-41-4	
Toluene	ND	ug/kg	3.0	0.31	1		01/27/10 22:47	108-88-3	
Xylene (Total)	ND	ug/kg	6.0	0.75	1		01/27/10 22:47	1330-20-7	
Dibromofluoromethane (S)	92	%	80-136		1		01/27/10 22:47	1868-53-7	4n
Toluene-d8 (S)	105	%	80-120		1		01/27/10 22:47	2037-26-5	
4-Bromofluorobenzene (S)	104	%	72-122		1		01/27/10 22:47	460-00-4	
1,2-Dichloroethane-d4 (S)	91	%	80-143		1		01/27/10 22:47	17060-07-0	

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ANALYTICAL RESULTS

Project: 00922-Asphalt Work Area 2 PDX
Pace Project No.: 252857

Sample: Area 2 - HB-4 (922) **Lab ID: 252857004** Collected: 01/14/10 15:45 Received: 01/20/10 14:16 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
	Analytical Method: ASTM D2974-87								
Percent Moisture	**12.2**	%	0.10	0.10	1		01/21/10 10:26		

Sample: TB-1 (922) **Lab ID: 252857005** Collected: 01/14/10 00:00 Received: 01/20/10 14:16 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Gx GCV	Analytical Method: NWTPH-Gx								
Gasoline Range Organics	ND	ug/L	50.0	13.4	1		01/25/10 20:47		3n
a,a,a-Trifluorotoluene (S)	111	%	50-150		1		01/25/10 20:47	98-08-8	
4-Bromofluorobenzene (S)	109	%	50-150		1		01/25/10 20:47	460-00-4	
8260 MSV	Analytical Method: EPA 5030B/8260								
Benzene	ND	ug/L	1.0	0.12	1		01/26/10 20:24	71-43-2	
Ethylbenzene	ND	ug/L	1.0	0.20	1		01/26/10 20:24	100-41-4	
Toluene	ND	ug/L	1.0	0.21	1		01/26/10 20:24	108-88-3	
Xylene (Total)	ND	ug/L	3.0	0.42	1		01/26/10 20:24	1330-20-7	
4-Bromofluorobenzene (S)	101	%	80-120		1		01/26/10 20:24	460-00-4	3n
Dibromofluoromethane (S)	92	%	80-122		1		01/26/10 20:24	1868-53-7	
1,2-Dichloroethane-d4 (S)	94	%	80-124		1		01/26/10 20:24	17060-07-0	
Toluene-d8 (S)	104	%	80-123		1		01/26/10 20:24	2037-26-5	

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QUALITY CONTROL DATA

Project: 00922-Asphalt Work Area 2 PDX
Pace Project No.: 252857

QC Batch: OEXT/1804 Analysis Method: NWTPH-Dx
QC Batch Method: EPA 3546 Analysis Description: NWTPH-Dx GCS
Associated Lab Samples: 252857001, 252857002, 252857003, 252857004

METHOD BLANK: 19484 Matrix: Solid
Associated Lab Samples: 252857001, 252857002, 252857003, 252857004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Diesel Range SG	mg/kg	ND	20.0	01/23/10 22:14	2n
Motor Oil Range SG	mg/kg	ND	80.0	01/23/10 22:14	
n-Octacosane (S) SG	%	111	50-150	01/23/10 22:14	
o-Terphenyl (S) SG	%	107	50-150	01/23/10 22:14	

LABORATORY CONTROL SAMPLE: 19485

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Diesel Range SG	mg/kg	500	434	87	56-124	
Motor Oil Range SG	mg/kg	500	485	97	50-150	
n-Octacosane (S) SG	%			87	50-150	
o-Terphenyl (S) SG	%			67	50-150	

SAMPLE DUPLICATE: 19486

Parameter	Units	252856001 Result	Dup Result	RPD	Max RPD	Qualifiers
Diesel Range SG	mg/kg	13.0J	10.3J		50	
Motor Oil Range SG	mg/kg	52.7J	34.0J		50	
n-Octacosane (S) SG	%	108	114	5		
o-Terphenyl (S) SG	%	104	111	6		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 00922-Asphalt Work Area 2 PDX
Pace Project No.: 252857

QC Batch: GCV/1420 Analysis Method: NWTPH-Gx
QC Batch Method: NWTPH-Gx Analysis Description: NWTPH-Gx Solid GCV
Associated Lab Samples: 252857001, 252857002, 252857003, 252857004

METHOD BLANK: 19685 Matrix: Solid
Associated Lab Samples: 252857001, 252857002, 252857003, 252857004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Gasoline Range Organics	mg/kg	ND	5.0	01/25/10 21:36	3n
4-Bromofluorobenzene (S)	%	65	50-150	01/25/10 21:36	
a,a,a-Trifluorotoluene (S)	%	69	50-150	01/25/10 21:36	

LABORATORY CONTROL SAMPLE: 19686

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Gasoline Range Organics	mg/kg	12.5	13.1	105	54-156	
4-Bromofluorobenzene (S)	%			95	50-150	
a,a,a-Trifluorotoluene (S)	%			101	50-150	

SAMPLE DUPLICATE: 19786

Parameter	Units	252856003 Result	Dup Result	RPD	Max RPD	Qualifiers
Gasoline Range Organics	mg/kg	16.8	13.9	19	50	
4-Bromofluorobenzene (S)	%	103	89	14		
a,a,a-Trifluorotoluene (S)	%	103	93	9		

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QUALITY CONTROL DATA

Project: 00922-Asphalt Work Area 2 PDX
Pace Project No.: 252857

QC Batch: GCV/1421 Analysis Method: NWTPH-Gx
QC Batch Method: NWTPH-Gx Analysis Description: NWTPH-Gx GCV Water
Associated Lab Samples: 252857005

METHOD BLANK: 19687 Matrix: Water
Associated Lab Samples: 252857005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Gasoline Range Organics	ug/L	14.6J	50.0	01/25/10 07:07	3n
4-Bromofluorobenzene (S)	%	106	50-150	01/25/10 07:07	
a,a,a-Trifluorotoluene (S)	%	116	50-150	01/25/10 07:07	

LABORATORY CONTROL SAMPLE: 19688

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Gasoline Range Organics	ug/L	250	300	120	50-163	
4-Bromofluorobenzene (S)	%			108	50-150	
a,a,a-Trifluorotoluene (S)	%			113	50-150	

SAMPLE DUPLICATE: 19756

Parameter	Units	252868001 Result	Dup Result	RPD	Max RPD	Qualifiers
Gasoline Range Organics	ug/L	ND	ND		30	
4-Bromofluorobenzene (S)	%	104	120	14		
a,a,a-Trifluorotoluene (S)	%	111	122	9		

SAMPLE DUPLICATE: 19757

Parameter	Units	252883001 Result	Dup Result	RPD	Max RPD	Qualifiers
Gasoline Range Organics	ug/L	ND	ND		30	
4-Bromofluorobenzene (S)	%	121	121	.2		
a,a,a-Trifluorotoluene (S)	%	118	118	.7		

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QUALITY CONTROL DATA

Project: 00922-Asphalt Work Area 2 PDX
Pace Project No.: 252857

QC Batch: OEXT/1805 Analysis Method: EPA 8270 by SIM
QC Batch Method: EPA 3546 Analysis Description: 8270/3546 MSSV PAH by SIM
Associated Lab Samples: 252857003

METHOD BLANK: 19487 Matrix: Solid
Associated Lab Samples: 252857003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1-Methylnaphthalene	mg/kg	ND	0.0067	01/23/10 22:04	
2-Methylnaphthalene	mg/kg	ND	0.0067	01/23/10 22:04	
Acenaphthene	mg/kg	ND	0.0067	01/23/10 22:04	
Acenaphthylene	mg/kg	ND	0.0067	01/23/10 22:04	
Anthracene	mg/kg	ND	0.0067	01/23/10 22:04	
Benzo(a)anthracene	mg/kg	ND	0.0067	01/23/10 22:04	
Benzo(a)pyrene	mg/kg	ND	0.0067	01/23/10 22:04	
Benzo(b)fluoranthene	mg/kg	ND	0.0067	01/23/10 22:04	
Benzo(g,h,i)perylene	mg/kg	ND	0.0067	01/23/10 22:04	
Benzo(k)fluoranthene	mg/kg	ND	0.0067	01/23/10 22:04	
Chrysene	mg/kg	ND	0.0067	01/23/10 22:04	
Dibenz(a,h)anthracene	mg/kg	ND	0.0067	01/23/10 22:04	
Fluoranthene	mg/kg	ND	0.0067	01/23/10 22:04	
Fluorene	mg/kg	ND	0.0067	01/23/10 22:04	
Indeno(1,2,3-cd)pyrene	mg/kg	ND	0.0067	01/23/10 22:04	
Naphthalene	mg/kg	ND	0.0067	01/23/10 22:04	
Phenanthrene	mg/kg	ND	0.0067	01/23/10 22:04	
Pyrene	mg/kg	ND	0.0067	01/23/10 22:04	
2-Fluorobiphenyl (S)	%	86	55-136	01/23/10 22:04	
Nitrobenzene-d5 (S)	%	87	63-138	01/23/10 22:04	
Terphenyl-d14 (S)	%	100	60-144	01/23/10 22:04	

LABORATORY CONTROL SAMPLE: 19488

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1-Methylnaphthalene	mg/kg	.083	0.077	92	61-132	
2-Methylnaphthalene	mg/kg	.083	0.080	96	56-153	
Acenaphthene	mg/kg	.083	0.074	88	49-141	
Acenaphthylene	mg/kg	.083	0.064	77	53-139	
Anthracene	mg/kg	.083	0.080	96	53-148	
Benzo(a)anthracene	mg/kg	.083	0.076	91	42-146	
Benzo(a)pyrene	mg/kg	.083	0.079	95	34-147	
Benzo(b)fluoranthene	mg/kg	.083	0.081	97	33-154	
Benzo(g,h,i)perylene	mg/kg	.083	0.084	101	47-148	
Benzo(k)fluoranthene	mg/kg	.083	0.086	104	61-152	
Chrysene	mg/kg	.083	0.083	100	57-145	
Dibenz(a,h)anthracene	mg/kg	.083	0.085	102	55-154	
Fluoranthene	mg/kg	.083	0.082	98	32-150	
Fluorene	mg/kg	.083	0.070	84	45-152	
Indeno(1,2,3-cd)pyrene	mg/kg	.083	0.084	101	35-151	
Naphthalene	mg/kg	.083	0.079	94	44-140	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 00922-Asphalt Work Area 2 PDX
Pace Project No.: 252857

LABORATORY CONTROL SAMPLE: 19488

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Phenanthrene	mg/kg	.083	0.082	99	38-155	
Pyrene	mg/kg	.083	0.079	95	51-153	
2-Fluorobiphenyl (S)	%			82	55-136	
Nitrobenzene-d5 (S)	%			79	63-138	
Terphenyl-d14 (S)	%			90	60-144	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 19489 19490

Parameter	Units	252856002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1-Methylnaphthalene	mg/kg	0.031J	.091	.092	0.097	0.098	72	73	61-132	1	30	
2-Methylnaphthalene	mg/kg	0.073J	.091	.092	0.14	0.14	70	72	56-153	1	30	
Acenaphthene	mg/kg	ND	.091	.092	0.077	0.071J	84	78	49-141		30	
Acenaphthylene	mg/kg	0.0039J	.091	.092	0.082	0.084	85	87	53-139	2	30	
Anthracene	mg/kg	0.020J	.091	.092	0.075	0.072J	60	57	53-148		30	
Benzo(a)anthracene	mg/kg	0.040J	.091	.092	0.13	0.11	93	77	42-146	13	30	
Benzo(a)pyrene	mg/kg	0.059J	.091	.092	0.12	0.11	61	57	34-147	3	30	
Benzo(b)fluoranthene	mg/kg	0.044J	.091	.092	0.12	0.11	85	75	33-154	8	30	
Benzo(g,h,i)perylene	mg/kg	0.082	.091	.092	0.13	0.11	52	36	47-148	12	30	M0
Benzo(k)fluoranthene	mg/kg	0.029J	.091	.092	0.087	0.082	63	57	61-152	7	30	M0
Chrysene	mg/kg	0.13	.091	.092	0.17	0.17	41	38	57-145	2	30	M0
Dibenz(a,h)anthracene	mg/kg	0.027J	.091	.092	0.090	0.083	69	61	55-154	9	30	
Fluoranthene	mg/kg	0.043J	.091	.092	0.12	0.10	81	62	32-150	16	30	
Fluorene	mg/kg	ND	.091	.092	0.083	0.081	76	74	45-152	2	30	
Indeno(1,2,3-cd)pyrene	mg/kg	0.024J	.091	.092	0.089	0.081	72	62	35-151	10	30	
Naphthalene	mg/kg	0.029J	.091	.092	0.097	0.10	74	79	44-140	5	30	1n,P3
Phenanthrene	mg/kg	0.046J	.091	.092	0.11	0.098	71	56	38-155	13	30	
Pyrene	mg/kg	0.18	.091	.092	0.16	0.15	-25	-31	51-153	4	30	M0
2-Fluorobiphenyl (S)	%						76	74	55-136			
Nitrobenzene-d5 (S)	%						55	49	63-138			S0
Terphenyl-d14 (S)	%						76	71	60-144			

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QUALITY CONTROL DATA

Project: 00922-Asphalt Work Area 2 PDX
Pace Project No.: 252857

QC Batch: MSV/1940
QC Batch Method: EPA 5030B/8260
Analysis Method: EPA 5030B/8260
Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 252857005

METHOD BLANK: 19790 Matrix: Water
Associated Lab Samples: 252857005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	1.0	01/26/10 17:46	
Ethylbenzene	ug/L	ND	1.0	01/26/10 17:46	
Toluene	ug/L	ND	1.0	01/26/10 17:46	
Xylene (Total)	ug/L	ND	3.0	01/26/10 17:46	
1,2-Dichloroethane-d4 (S)	%	94	80-124	01/26/10 17:46	
4-Bromofluorobenzene (S)	%	103	80-120	01/26/10 17:46	3n
Dibromofluoromethane (S)	%	92	80-122	01/26/10 17:46	
Toluene-d8 (S)	%	103	80-123	01/26/10 17:46	

LABORATORY CONTROL SAMPLE & LCSD: 19791 19792

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Benzene	ug/L	20	20.5	19.8	103	99	75-124	3	30	
Ethylbenzene	ug/L	20	17.3	16.5	87	82	76-124	5	30	
Toluene	ug/L	20	18.6	17.8	93	89	75-124	4	30	
Xylene (Total)	ug/L	60	50.3	48.2	84	80	76-123	4	30	
1,2-Dichloroethane-d4 (S)	%				99	98	80-124			
4-Bromofluorobenzene (S)	%				100	100	80-120			
Dibromofluoromethane (S)	%				99	101	80-122			
Toluene-d8 (S)	%				95	95	80-123			

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QUALITY CONTROL DATA

Project: 00922-Asphalt Work Area 2 PDX
Pace Project No.: 252857

QC Batch: MSV/1944 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV 5030 Volatile Organics
Associated Lab Samples: 252857001, 252857002, 252857003, 252857004

METHOD BLANK: 19876 Matrix: Solid
Associated Lab Samples: 252857001, 252857002, 252857003, 252857004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/kg	ND	3.0	01/27/10 18:03	
Ethylbenzene	ug/kg	ND	3.0	01/27/10 18:03	
Toluene	ug/kg	ND	3.0	01/27/10 18:03	
Xylene (Total)	ug/kg	ND	6.0	01/27/10 18:03	
1,2-Dichloroethane-d4 (S)	%	96	80-143	01/27/10 18:03	
4-Bromofluorobenzene (S)	%	105	72-122	01/27/10 18:03	
Dibromofluoromethane (S)	%	96	80-136	01/27/10 18:03	4n
Toluene-d8 (S)	%	109	80-120	01/27/10 18:03	

LABORATORY CONTROL SAMPLE: 19877

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/kg	40	51.2	128	68-124	L3
Ethylbenzene	ug/kg	40	51.1	128	63-131	
Toluene	ug/kg	40	46.4	116	61-126	
Xylene (Total)	ug/kg	120	135	113	68-129	
1,2-Dichloroethane-d4 (S)	%			101	80-143	
4-Bromofluorobenzene (S)	%			99	72-122	
Dibromofluoromethane (S)	%			105	80-136	
Toluene-d8 (S)	%			99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 20009 20010

Parameter	Units	252856003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/kg	ND	43.5	40.7	31.7	32.3	73	79	68-124	2	30	
Ethylbenzene	ug/kg	0.58J	43.5	40.7	19.8	21.9	44	52	63-131	10	30	M0
Toluene	ug/kg	0.43J	43.5	40.7	24.7	26.3	56	64	61-126	6	30	M0
Xylene (Total)	ug/kg	7.6	131	122	57.0	62.8	38	45	68-129	10	30	M0
1,2-Dichloroethane-d4 (S)	%						102	102	80-143			
4-Bromofluorobenzene (S)	%						109	107	72-122			
Dibromofluoromethane (S)	%						103	105	80-136			
Toluene-d8 (S)	%						103	102	80-120			

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QUALITY CONTROL DATA

Project: 00922-Asphalt Work Area 2 PDX
Pace Project No.: 252857

QC Batch: PMST/1152 Analysis Method: ASTM D2974-87
QC Batch Method: ASTM D2974-87 Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 252857001, 252857002, 252857003, 252857004

SAMPLE DUPLICATE: 19491

Parameter	Units	252856001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	12.1	13.6	11	30	

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QUALIFIERS

Project: 00922-Asphalt Work Area 2 PDX
Pace Project No.: 252857

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

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LABORATORIES

PASI-S	Pace Analytical Services - Seattle

ANALYTE QUALIFIERS

1n	Matrix spike sample does not provide reliable recovery data due to sample matrix; sample unable to be concentrated to routine final volume.
2n	Sample evaluated to the mdl for all compounds.
3n	Sample was evaluated to the MDL.
4n	Sample was reported to the MDL.
J	Analyte detected below reporting limit, therefore result is an estimate.
L3	Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.
M0	Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.
P3	Sample extract could not be concentrated to the routine final volume, resulting in elevated reporting limits.
S0	Surrogate recovery outside laboratory control limits.
Z2	Analyte present in the associated method blank above the detection limit.

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940 South Harney
Seattle, WA 98108
(206)767-5060

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 00922-Asphalt Work Area 2 PDX
Pace Project No.: 252857

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
252857001	**Area 2 - HB-1 (922)**	EPA 3546	OEXT/1804	NWTPH-Dx	GCSV/1428
252857002	**Area 2 - HB-2 (922)**	EPA 3546	OEXT/1804	NWTPH-Dx	GCSV/1428
252857003	**Area 2 - HB-3 (922)**	EPA 3546	OEXT/1804	NWTPH-Dx	GCSV/1428
252857004	**Area 2 - HB-4 (922)**	EPA 3546	OEXT/1804	NWTPH-Dx	GCSV/1428
252857001	**Area 2 - HB-1 (922)**	NWTPH-Gx	GCV/1420	NWTPH-Gx	GCV/1422
252857002	**Area 2 - HB-2 (922)**	NWTPH-Gx	GCV/1420	NWTPH-Gx	GCV/1422
252857003	**Area 2 - HB-3 (922)**	NWTPH-Gx	GCV/1420	NWTPH-Gx	GCV/1422
252857004	**Area 2 - HB-4 (922)**	NWTPH-Gx	GCV/1420	NWTPH-Gx	GCV/1422
252857005	**TB-1 (922)**	NWTPH-Gx	GCV/1421		
252857003	**Area 2 - HB-3 (922)**	EPA 3546	OEXT/1805	EPA 8270 by SIM	MSSV/1199
252857005	**TB-1 (922)**	EPA 5030B/8260	MSV/1940		
252857001	**Area 2 - HB-1 (922)**	EPA 8260	MSV/1944		
252857002	**Area 2 - HB-2 (922)**	EPA 8260	MSV/1944		
252857003	**Area 2 - HB-3 (922)**	EPA 8260	MSV/1944		
252857004	**Area 2 - HB-4 (922)**	EPA 8260	MSV/1944		

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CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 1 of 1

1318301

Section A Required Client Information:

Company: Stantec
Address: 7730 SW Mohawk St.
Tualatin, OR 97062
Email To: bill.edmund@stantec.com
Phone: (503) 691-2030 Fax: (503) 692-7074
Requested Due Date/TAT: STD

Section B Required Project Information:

Report To: bill.edmund@stantec.com
Copy To: Chris.carltonfranco@stantec.com
Purchase Order No.: 4512826035
Project Name: Asphalt work - Area 2, PDX Terminal
Project Number: 223023.13

Section C Invoice Information:

Attention: Conoco ConocoPhillips
Company Name:
Address:
Pace Quote Reference:
Pace Project Manager:
Pace Profile #:

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER _____

Site Location STATE: OR

Requested Analysis Filtered (Y/N)

ITEM #	Section D Required Client Information — SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test ↓ Y/N	NWTPH Gx	BTEX	NWTPH Dx w/ silica gel cleanup	8270 SIM if dclse detected	dclse detected	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	Area 2 - HB-1 (922)	SL	G	14 Jan 10		1500			2	2								Y	X	X	X	X			252857 001
2	Area 2 - HB-2 (922)	SL	G	14 Jan 10		1520			2	2								Y	X	X	X	X			002
3	Area 2 - HB-3 (922)	SL	G	14 Jan 10		1540			2	2								Y	X	X	X	X			003
4	Area 2 - HB-4 (922)	SL	G	14 Jan 10		1545			2	2								Y	X	X	X	X			004
5	TB-1	WT	-	18 Jan 10					2									Y	X	X					005
6																									
7																									
8																									
9																									
10																									
11																									
12																									

Matrix Codes (MATRIX / CODE): Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Tissue TS; Other OT

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	CCF / Stantec	19 Jan 10	1200	Courtney Pace	1/20/10	0800	2.4	Y	Y	Y

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Chris Carlton-Franco

SIGNATURE of SAMPLER:

DATE Signed (MM/DD/YY): 18 Jan 10

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-Q-020rev.07, 15-May-2007

COP0018090

Sample Condition Upon Receipt

Pace Analytical

Client Name: Stantec Project # 252857

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other Pcs

Tracking #: ———

Optional
Proj. Due Date:
Proj. Name:

Custody Seal on Cooler/Box Present: ☑ yes ☐ no Seals intact: ☑ yes ☐ no

Packing Material: ☐ Bubble Wrap ☑ Bubble Bags ☐ None ☐ Other

Thermometer Used: Horiba 132013 Type of Ice: (Wet) Blue None ☐ Samples on ice, cooling process has begun

Cooler Temperature: 2.4 Biological Tissue is Frozen: Yes No

Temp should be above freezing to 6°C

Date and Initials of person examining contents: 1/20/10 AP

Comments:

Chain of Custody Present:	☑Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☑Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☑Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☑Yes ☐No ☐N/A	4.
Samples Arrived within Hold Time:	☐Yes ☑No ☐N/A	5. Samples received 5 days after sampling date - outside of 48 hr. extract or analyze requirements by COP*
Short Hold Time Analysis (<72hr):	☑Yes ☐No ☐N/A	6.
Rush Turn Around Time Requested:	☐Yes ☑No ☐N/A	7.
Sufficient Volume:	☑Yes ☐No ☐N/A	8.
Correct Containers Used:	☑Yes ☐No ☐N/A	9. Water trip blanks recived for soil samples.
-Pace Containers Used:	☑Yes ☐No ☐N/A	
Containers Intact:	☑Yes ☐No ☐N/A	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☑N/A	11.
Sample Labels match COC:	☐Yes ☑No ☐N/A	12. Sample 2: 1/2 jars mis-labeled HB-1 matched according to time.
-Includes date/time/ID/Analysis Matrix: Soil		
All containers needing preservation have been checked.	☐Yes ☐No ☑N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes ☐No ☑N/A	
exceptions: (VOA) coliform, TOC, O&G, WI-DRO (water)	☑Yes ☐No	Initial when completed / Lot # of added preservative
Samples checked for dechlorination:	☐Yes ☐No ☑N/A	14.
Headspace in VOA Vials (>6mm):	☐Yes ☐No ☑N/A	15.
Trip Blank Present:	☑Yes ☐No ☐N/A	16. See number 9
Trip Blank Custody Seals Present	☐Yes ☐No ☐N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: Date/Time:

Comments/ Resolution:

Project Manager Review: JENNI GROSS Date: 1/20/10

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

APPENDIX C
WASTE MATERIAL LABORATORY ANALYTICAL REPORT AND CHAIN-OF-CUSTODY RECORD
PACE REPORT 252856

Pace Analytical Services, Inc.
940 South Harney
Seattle, WA 98108
(206)767-5060

February 03, 2010

Bill Edmund
COP_Stantec Washington
12034 134th CT
Redmond, WA 98052

RE: Project: 00922-Asphalt Work Area 2 PDX
Pace Project No.: 252856

Dear Bill Edmund:
Enclosed are the analytical results for sample(s) received by the laboratory on January 20, 2010. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jennifer Gross

jennifer.gross@pacelabs.com
Project Manager

Enclosures

cc: Chris Carlton-Franco, Stantec
Janet Nash, Stantec

REPORT OF LABORATORY ANALYSIS

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Seattle, WA 98108
(206)767-5060

CERTIFICATIONS

Project: 00922-Asphalt Work Area 2 PDX
Pace Project No.: 252856

Washington Certification IDs
Florida/NELAP Certification #: E87617
Oregon Certification #: WA200007
Washington Certification #: C1229
940 South Harney Street Seattle, WA 98108
Alaska CS Certification #: UST-025
Alaska Drinking Water VOC Certification #: WA01-09
Alaska Drinking Water Micro Certification #: WA01230
California Certification #: 01153CA

Kansas Certification IDs
Kansas/NELAP Certification #: E-10116
Iowa Certification #: 118
Illinois Certification #: 001191
Arkansas Certification #: 05-008-0
Louisiana Certification #: 03055
Nevada Certification #: KS000212008A
Oklahoma Certification #: 9205/9935
Oregon Certification #: KS200001
Texas Certification #: T104704407-08-TX
A2LA Certification #: 2456.01
Washington Certification #: C2069
9608 Loiret Boulevard Lenexa, KS 66219
Utah Certification #: 9135995665

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Seattle, WA 98108
(206)767-5060

SAMPLE SUMMARY

Project: 00922-Asphalt Work Area 2 PDX
Pace Project No.: 252856

Lab ID	Sample ID	Matrix	Date Collected	Date Received
252856001	**BIN 178 (922)**	Solid	01/18/10 08:40	01/20/10 08:00
252856002	**BIN 158 (922)**	Solid	01/18/10 08:50	01/20/10 08:00
252856003	**BIN 181 (922)**	Solid	01/18/10 09:00	01/20/10 08:00
252856004	**BIN 193 (922)**	Solid	01/18/10 09:10	01/20/10 08:00
252856005	**TB-1 (922)**	Water	01/18/10 00:00	01/20/10 08:00

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SAMPLE ANALYTE COUNT

Project: 00922-Asphalt Work Area 2 PDX
Pace Project No.: 252856

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
252856001	**BIN 178 (922)**	NWTPH-Dx	DMT	4	PASI-S
		NWTPH-Gx	LPM	3	PASI-S
		EPA 6010	BGA	1	PASI-S
		EPA 8260	BAG	5	PASI-K
		EPA 8260	LPM	8	PASI-S
252856002	**BIN 158 (922)**	NWTPH-Dx	DMT	4	PASI-S
		NWTPH-Gx	LPM	3	PASI-S
		EPA 6010	BGA	1	PASI-S
		EPA 8270 by SIM	DMT	21	PASI-S
		EPA 8260	BAG	5	PASI-K
		EPA 8260	LPM	8	PASI-S
252856003	**BIN 181 (922)**	NWTPH-Dx	DMT	4	PASI-S
		NWTPH-Gx	LPM	3	PASI-S
		EPA 6010	BGA	1	PASI-S
		EPA 8270 by SIM	DMT	21	PASI-S
		EPA 8260	BAG	5	PASI-K
		EPA 8260	LPM	8	PASI-S
252856004	**BIN 193 (922)**	NWTPH-Dx	DMT	4	PASI-S
		NWTPH-Gx	LPM	3	PASI-S
		EPA 6010	BGA	1	PASI-S
		EPA 8270 by SIM	DMT	21	PASI-S
		EPA 8260	BAG	5	PASI-K
		EPA 8260	LPM	8	PASI-S
252856005	**TB-1 (922)**	NWTPH-Gx	LPM	3	PASI-S
		EPA 5030B/8260	LPM	8	PASI-S

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(206)767-5060

ANALYTICAL RESULTS

Project: 00922-Asphalt Work Area 2 PDX
Pace Project No.: 252856

Sample: BIN 178 (922) **Lab ID: 252856001** Collected: 01/18/10 08:40 Received: 01/20/10 08:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Dx GCS SG	Analytical Method: NWTPH-Dx Preparation Method: EPA 3546								
Diesel Range SG	**13.0J**	mg/kg	22.3	3.5	1	01/22/10 17:45	01/23/10 22:47		J
Motor Oil Range SG	**52.7J**	mg/kg	89.2	24.0	1	01/22/10 17:45	01/23/10 22:47	64742-65-0	J
n-Octacosane (S) SG	108	%	50-150		1	01/22/10 17:45	01/23/10 22:47	630-02-4	
o-Terphenyl (S) SG	104	%	50-150		1	01/22/10 17:45	01/23/10 22:47	84-15-1	
NWTPH-Gx GCV	Analytical Method: NWTPH-Gx Preparation Method: NWTPH-Gx								
Gasoline Range Organics	**0.98J**	mg/kg	6.1	0.24	1	01/20/10 17:00	01/25/10 22:01		5n,Z2
a,a,a-Trifluorotoluene (S)	99	%	50-150		1	01/20/10 17:00	01/25/10 22:01	98-08-8	
4-Bromofluorobenzene (S)	97	%	50-150		1	01/20/10 17:00	01/25/10 22:01	460-00-4	
6010 MET ICP, TCLP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
	Leachate Method/Date: EPA 1311; 01/21/10 15:29								
Lead	ND	mg/L	1.0	1.0	1	01/22/10 08:52	01/22/10 15:26	7439-92-1	
8260 MSV TCLP	Analytical Method: EPA 8260								
Benzene	ND	ug/L	50.0	2.9	1		02/01/10 04:33	71-43-2	
1,2-Dichloroethane-d4 (S)	98	%	81-121		1		02/01/10 04:33	17060-07-0	
Toluene-d8 (S)	98	%	89-111		1		02/01/10 04:33	2037-26-5	
4-Bromofluorobenzene (S)	100	%	87-115		1		02/01/10 04:33	460-00-4	
Dibromofluoromethane (S)	93	%	87-113		1		02/01/10 04:33	1868-53-7	
8260 MSV 5030	Analytical Method: EPA 8260								
Benzene	ND	ug/kg	3.4	0.17	1		01/27/10 23:07	71-43-2	
Ethylbenzene	**0.58J**	ug/kg	3.4	0.43	1		01/27/10 23:07	100-41-4	
Toluene	ND	ug/kg	3.4	0.35	1		01/27/10 23:07	108-88-3	
Xylene (Total)	ND	ug/kg	6.8	0.84	1		01/27/10 23:07	1330-20-7	
Dibromofluoromethane (S)	92	%	80-136		1		01/27/10 23:07	1868-53-7	6n
Toluene-d8 (S)	104	%	80-120		1		01/27/10 23:07	2037-26-5	
4-Bromofluorobenzene (S)	106	%	72-122		1		01/27/10 23:07	460-00-4	
1,2-Dichloroethane-d4 (S)	90	%	80-143		1		01/27/10 23:07	17060-07-0	
	Analytical Method: ASTM D2974-87								
Percent Moisture	**12.1**	%	0.10	0.10	1		01/21/10 09:40		

Sample: BIN 158 (922) **Lab ID: 252856002** Collected: 01/18/10 08:50 Received: 01/20/10 08:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Dx GCS SG	Analytical Method: NWTPH-Dx Preparation Method: EPA 3546								
Diesel Range SG	**209**	mg/kg	20.9	3.3	1	01/22/10 17:45	01/23/10 23:20		
Motor Oil Range SG	**1710**	mg/kg	83.6	22.5	1	01/22/10 17:45	01/23/10 23:20	64742-65-0	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 00922-Asphalt Work Area 2 PDX
Pace Project No.: 252856

Sample: BIN 158 (922) **Lab ID: 252856002** Collected: 01/18/10 08:50 Received: 01/20/10 08:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Dx GCS SG	Analytical Method: NWTPH-Dx Preparation Method: EPA 3546								
n-Octacosane (S) SG	100	%	50-150		1	01/22/10 17:45	01/23/10 23:20	630-02-4	
o-Terphenyl (S) SG	100	%	50-150		1	01/22/10 17:45	01/23/10 23:20	84-15-1	
NWTPH-Gx GCV	Analytical Method: NWTPH-Gx Preparation Method: NWTPH-Gx								
Gasoline Range Organics	**11.8**	mg/kg	6.1	0.24	1	01/20/10 17:00	01/25/10 22:25		Z2
a,a,a-Trifluorotoluene (S)	96	%	50-150		1	01/20/10 17:00	01/25/10 22:25	98-08-8	
4-Bromofluorobenzene (S)	95	%	50-150		1	01/20/10 17:00	01/25/10 22:25	460-00-4	
6010 MET ICP, TCLP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
	Leachate Method/Date: EPA 1311; 01/21/10 15:29								
Lead	ND	mg/L	1.0	1.0	1	01/22/10 08:52	01/22/10 15:45	7439-92-1	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
1-Methylnaphthalene	**0.031J**	mg/kg	0.073	0.0096	1	01/22/10 18:00	01/31/10 19:30	90-12-0	
2-Methylnaphthalene	**0.073J**	mg/kg	0.073	0.020	1	01/22/10 18:00	01/31/10 19:30	91-57-6	
Acenaphthene	ND	mg/kg	0.073	0.017	1	01/22/10 18:00	01/31/10 19:30	83-32-9	
Acenaphthylene	**0.0039J**	mg/kg	0.073	0.0025	1	01/22/10 18:00	01/31/10 19:30	208-96-8	
Anthracene	**0.020J**	mg/kg	0.073	0.0041	1	01/22/10 18:00	01/31/10 19:30	120-12-7	
Benzo(a)anthracene	**0.040J**	mg/kg	0.073	0.0012	1	01/22/10 18:00	01/31/10 19:30	56-55-3	
Benzo(a)pyrene	**0.059J**	mg/kg	0.073	0.0017	1	01/22/10 18:00	01/31/10 19:30	50-32-8	
Benzo(b)fluoranthene	**0.044J**	mg/kg	0.073	0.0073	1	01/22/10 18:00	01/31/10 19:30	205-99-2	
Benzo(g,h,i)perylene	**0.082**	mg/kg	0.073	0.0032	1	01/22/10 18:00	01/31/10 19:30	191-24-2	
Benzo(k)fluoranthene	**0.029J**	mg/kg	0.073	0.0052	1	01/22/10 18:00	01/31/10 19:30	207-08-9	
Chrysene	**0.13**	mg/kg	0.073	0.0034	1	01/22/10 18:00	01/31/10 19:30	218-01-9	
Dibenz(a,h)anthracene	**0.027J**	mg/kg	0.073	0.0030	1	01/22/10 18:00	01/31/10 19:30	53-70-3	
Fluoranthene	**0.043J**	mg/kg	0.073	0.0085	1	01/22/10 18:00	01/31/10 19:30	206-44-0	
Fluorene	ND	mg/kg	0.073	0.020	1	01/22/10 18:00	01/31/10 19:30	86-73-7	
Indeno(1,2,3-cd)pyrene	**0.024J**	mg/kg	0.073	0.0027	1	01/22/10 18:00	01/31/10 19:30	193-39-5	
Naphthalene	**0.029J**	mg/kg	0.073	0.019	1	01/22/10 18:00	01/31/10 19:30	91-20-3	P3
Phenanthrene	**0.046J**	mg/kg	0.073	0.034	1	01/22/10 18:00	01/31/10 19:30	85-01-8	
Pyrene	**0.18**	mg/kg	0.073	0.0032	1	01/22/10 18:00	01/31/10 19:30	129-00-0	
Nitrobenzene-d5 (S)	58	%	63-138		1	01/22/10 18:00	01/31/10 19:30	4165-60-0	1n,S0
2-Fluorobiphenyl (S)	84	%	55-136		1	01/22/10 18:00	01/31/10 19:30	321-60-8	
Terphenyl-d14 (S)	89	%	60-144		1	01/22/10 18:00	01/31/10 19:30	1718-51-0	
8260 MSV TCLP	Analytical Method: EPA 8260								
Benzene	ND	ug/L	50.0	2.9	1		02/01/10 05:07	71-43-2	
1,2-Dichloroethane-d4 (S)	103	%	81-121		1		02/01/10 05:07	17060-07-0	
Toluene-d8 (S)	99	%	89-111		1		02/01/10 05:07	2037-26-5	
4-Bromofluorobenzene (S)	101	%	87-115		1		02/01/10 05:07	460-00-4	
Dibromofluoromethane (S)	97	%	87-113		1		02/01/10 05:07	1868-53-7	
8260 MSV 5030	Analytical Method: EPA 8260								
Benzene	ND	ug/kg	2.9	0.14	1		01/27/10 23:27	71-43-2	

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Pace Analytical Services, Inc.
940 South Harney
Seattle, WA 98108
(206)767-5060

ANALYTICAL RESULTS

Project: 00922-Asphalt Work Area 2 PDX
Pace Project No.: 252856

Sample: BIN 158 (922) **Lab ID: 252856002** Collected: 01/18/10 08:50 Received: 01/20/10 08:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030	Analytical Method: EPA 8260								
Ethylbenzene	**0.70J**	ug/kg	2.9	0.37	1		01/27/10 23:27	100-41-4	
Toluene	ND	ug/kg	2.9	0.30	1		01/27/10 23:27	108-88-3	
Xylene (Total)	**9.7**	ug/kg	5.8	0.72	1		01/27/10 23:27	1330-20-7	
Dibromofluoromethane (S)	91	%	80-136		1		01/27/10 23:27	1868-53-7	6n
Toluene-d8 (S)	104	%	80-120		1		01/27/10 23:27	2037-26-5	
4-Bromofluorobenzene (S)	109	%	72-122		1		01/27/10 23:27	460-00-4	
1,2-Dichloroethane-d4 (S)	92	%	80-143		1		01/27/10 23:27	17060-07-0	
	Analytical Method: ASTM D2974-87								
Percent Moisture	**10.1**	%	0.10	0.10	1		01/21/10 09:42		

Sample: BIN 181 (922) **Lab ID: 252856003** Collected: 01/18/10 09:00 Received: 01/20/10 08:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Dx GCS SG	Analytical Method: NWTPH-Dx Preparation Method: EPA 3546								
Diesel Range SG	**412**	mg/kg	21.0	3.3	1	01/22/10 17:45	01/23/10 23:36		
Motor Oil Range SG	**895**	mg/kg	84.0	22.6	1	01/22/10 17:45	01/23/10 23:36	64742-65-0	
n-Octacosane (S) SG	122	%	50-150		1	01/22/10 17:45	01/23/10 23:36	630-02-4	
o-Terphenyl (S) SG	80	%	50-150		1	01/22/10 17:45	01/23/10 23:36	84-15-1	
NWTPH-Gx GCV	Analytical Method: NWTPH-Gx Preparation Method: NWTPH-Gx								
Gasoline Range Organics	**16.8**	mg/kg	5.7	0.23	1	01/20/10 17:00	01/25/10 23:14		Z2
a,a,a-Trifluorotoluene (S)	103	%	50-150		1	01/20/10 17:00	01/25/10 23:14	98-08-8	
4-Bromofluorobenzene (S)	103	%	50-150		1	01/20/10 17:00	01/25/10 23:14	460-00-4	
6010 MET ICP, TCLP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
	Leachate Method/Date: EPA 1311; 01/21/10 15:29								
Lead	ND	mg/L	1.0	1.0	1	01/22/10 08:52	01/22/10 15:48	7439-92-1	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
1-Methylnaphthalene	**0.013J**	mg/kg	0.036	0.0048	5	01/22/10 18:00	01/31/10 19:12	90-12-0	
2-Methylnaphthalene	**0.029J**	mg/kg	0.036	0.0099	5	01/22/10 18:00	01/31/10 19:12	91-57-6	
Acenaphthene	**0.024J**	mg/kg	0.036	0.0084	5	01/22/10 18:00	01/31/10 19:12	83-32-9	
Acenaphthylene	**0.013J**	mg/kg	0.036	0.0012	5	01/22/10 18:00	01/31/10 19:12	208-96-8	
Anthracene	**0.059**	mg/kg	0.036	0.0020	5	01/22/10 18:00	01/31/10 19:12	120-12-7	
Benzo(a)anthracene	**0.079**	mg/kg	0.036	0.00058	5	01/22/10 18:00	01/31/10 19:12	56-55-3	
Benzo(a)pyrene	**0.072**	mg/kg	0.036	0.00087	5	01/22/10 18:00	01/31/10 19:12	50-32-8	
Benzo(b)fluoranthene	**0.056**	mg/kg	0.036	0.0036	5	01/22/10 18:00	01/31/10 19:12	205-99-2	
Benzo(g,h,i)perylene	**0.11**	mg/kg	0.036	0.0016	5	01/22/10 18:00	01/31/10 19:12	191-24-2	
Benzo(k)fluoranthene	**0.024J**	mg/kg	0.036	0.0026	5	01/22/10 18:00	01/31/10 19:12	207-08-9	
Chrysene	**0.19**	mg/kg	0.036	0.0017	5	01/22/10 18:00	01/31/10 19:12	218-01-9	

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(206)767-5060

ANALYTICAL RESULTS

Project: 00922-Asphalt Work Area 2 PDX
Pace Project No.: 252856

Sample: BIN 181 (922) **Lab ID: 252856003** Collected: 01/18/10 09:00 Received: 01/20/10 08:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
Dibenz(a,h)anthracene	**0.029J**	mg/kg	0.036	0.0015	5	01/22/10 18:00	01/31/10 19:12	53-70-3	
Fluoranthene	**0.075**	mg/kg	0.036	0.0043	5	01/22/10 18:00	01/31/10 19:12	206-44-0	
Fluorene	**0.027J**	mg/kg	0.036	0.0098	5	01/22/10 18:00	01/31/10 19:12	86-73-7	
Indeno(1,2,3-cd)pyrene	**0.052**	mg/kg	0.036	0.0014	5	01/22/10 18:00	01/31/10 19:12	193-39-5	
Naphthalene	**0.022J**	mg/kg	0.036	0.0097	5	01/22/10 18:00	01/31/10 19:12	91-20-3	3n
Phenanthrene	**0.058**	mg/kg	0.036	0.017	5	01/22/10 18:00	01/31/10 19:12	85-01-8	
Pyrene	**0.26**	mg/kg	0.036	0.0016	5	01/22/10 18:00	01/31/10 19:12	129-00-0	
Nitrobenzene-d5 (S)	67	%	63-138		5	01/22/10 18:00	01/31/10 19:12	4165-60-0	
2-Fluorobiphenyl (S)	98	%	55-136		5	01/22/10 18:00	01/31/10 19:12	321-60-8	
Terphenyl-d14 (S)	105	%	60-144		5	01/22/10 18:00	01/31/10 19:12	1718-51-0	
8260 MSV TCLP	Analytical Method: EPA 8260								
Benzene	ND	ug/L	50.0	2.9	1		02/01/10 05:24	71-43-2	
1,2-Dichloroethane-d4 (S)	105	%	81-121		1		02/01/10 05:24	17060-07-0	
Toluene-d8 (S)	100	%	89-111		1		02/01/10 05:24	2037-26-5	
4-Bromofluorobenzene (S)	103	%	87-115		1		02/01/10 05:24	460-00-4	
Dibromofluoromethane (S)	98	%	87-113		1		02/01/10 05:24	1868-53-7	
8260 MSV 5030	Analytical Method: EPA 8260								
Benzene	ND	ug/kg	3.2	0.16	1		01/27/10 23:47	71-43-2	
Ethylbenzene	**0.58J**	ug/kg	3.2	0.41	1		01/27/10 23:47	100-41-4	M0
Toluene	**0.43J**	ug/kg	3.2	0.33	1		01/27/10 23:47	108-88-3	M0,Z2
Xylene (Total)	**7.6**	ug/kg	6.4	0.80	1		01/27/10 23:47	1330-20-7	M0
Dibromofluoromethane (S)	92	%	80-136		1		01/27/10 23:47	1868-53-7	6n
Toluene-d8 (S)	102	%	80-120		1		01/27/10 23:47	2037-26-5	
4-Bromofluorobenzene (S)	110	%	72-122		1		01/27/10 23:47	460-00-4	
1,2-Dichloroethane-d4 (S)	93	%	80-143		1		01/27/10 23:47	17060-07-0	
	Analytical Method: ASTM D2974-87								
Percent Moisture	**9.6**	%	0.10	0.10	1		01/21/10 09:49		

Sample: BIN 193 (922) **Lab ID: 252856004** Collected: 01/18/10 09:10 Received: 01/20/10 08:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Dx GCS SG	Analytical Method: NWTPH-Dx Preparation Method: EPA 3546								
Diesel Range SG	**31.8**	mg/kg	21.5	3.4	1	01/22/10 17:45	01/23/10 23:52		
Motor Oil Range SG	**119**	mg/kg	85.8	23.1	1	01/22/10 17:45	01/23/10 23:52	64742-65-0	
n-Octacosane (S) SG	108	%	50-150		1	01/22/10 17:45	01/23/10 23:52	630-02-4	
o-Terphenyl (S) SG	108	%	50-150		1	01/22/10 17:45	01/23/10 23:52	84-15-1	

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ANALYTICAL RESULTS

Project: 00922-Asphalt Work Area 2 PDX
Pace Project No.: 252856

Sample: BIN 193 (922) **Lab ID: 252856004** Collected: 01/18/10 09:10 Received: 01/20/10 08:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Gx GCV	Analytical Method: NWTPH-Gx Preparation Method: NWTPH-Gx								
Gasoline Range Organics	**3.8J**	mg/kg	6.0	0.24	1	01/20/10 17:00	01/26/10 00:03		5n,Z2
a,a,a-Trifluorotoluene (S)	83	%	50-150		1	01/20/10 17:00	01/26/10 00:03	98-08-8	
4-Bromofluorobenzene (S)	78	%	50-150		1	01/20/10 17:00	01/26/10 00:03	460-00-4	
6010 MET ICP, TCLP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
	Leachate Method/Date: EPA 1311; 01/21/10 15:29								
Lead	ND	mg/L	1.0	1.0	1	01/22/10 08:52	01/22/10 15:51	7439-92-1	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
1-Methylnaphthalene	**0.016**	mg/kg	0.0075	0.00099	1	01/22/10 18:00	01/31/10 18:55	90-12-0	
2-Methylnaphthalene	**0.030**	mg/kg	0.0075	0.0020	1	01/22/10 18:00	01/31/10 18:55	91-57-6	
Acenaphthene	ND	mg/kg	0.0075	0.0017	1	01/22/10 18:00	01/31/10 18:55	83-32-9	
Acenaphthylene	**0.0020J**	mg/kg	0.0075	0.00025	1	01/22/10 18:00	01/31/10 18:55	208-96-8	
Anthracene	**0.0050J**	mg/kg	0.0075	0.00042	1	01/22/10 18:00	01/31/10 18:55	120-12-7	
Benzo(a)anthracene	**0.016**	mg/kg	0.0075	0.00012	1	01/22/10 18:00	01/31/10 18:55	56-55-3	
Benzo(a)pyrene	**0.015**	mg/kg	0.0075	0.00018	1	01/22/10 18:00	01/31/10 18:55	50-32-8	
Benzo(b)fluoranthene	**0.011**	mg/kg	0.0075	0.00075	1	01/22/10 18:00	01/31/10 18:55	205-99-2	
Benzo(g,h,i)perylene	**0.019**	mg/kg	0.0075	0.00033	1	01/22/10 18:00	01/31/10 18:55	191-24-2	
Benzo(k)fluoranthene	**0.0086**	mg/kg	0.0075	0.00054	1	01/22/10 18:00	01/31/10 18:55	207-08-9	
Chrysene	**0.021**	mg/kg	0.0075	0.00035	1	01/22/10 18:00	01/31/10 18:55	218-01-9	
Dibenz(a,h)anthracene	**0.0036J**	mg/kg	0.0075	0.00031	1	01/22/10 18:00	01/31/10 18:55	53-70-3	
Fluoranthene	**0.015**	mg/kg	0.0075	0.00087	1	01/22/10 18:00	01/31/10 18:55	206-44-0	
Fluorene	**0.0021J**	mg/kg	0.0075	0.0020	1	01/22/10 18:00	01/31/10 18:55	86-73-7	
Indeno(1,2,3-cd)pyrene	**0.010**	mg/kg	0.0075	0.00028	1	01/22/10 18:00	01/31/10 18:55	193-39-5	
Naphthalene	**0.017**	mg/kg	0.0075	0.0020	1	01/22/10 18:00	01/31/10 18:55	91-20-3	
Phenanthrene	**0.011**	mg/kg	0.0075	0.0035	1	01/22/10 18:00	01/31/10 18:55	85-01-8	
Pyrene	**0.030**	mg/kg	0.0075	0.00033	1	01/22/10 18:00	01/31/10 18:55	129-00-0	
Nitrobenzene-d5 (S)	65	%	63-138		1	01/22/10 18:00	01/31/10 18:55	4165-60-0	
2-Fluorobiphenyl (S)	73	%	55-136		1	01/22/10 18:00	01/31/10 18:55	321-60-8	
Terphenyl-d14 (S)	83	%	60-144		1	01/22/10 18:00	01/31/10 18:55	1718-51-0	
8260 MSV TCLP	Analytical Method: EPA 8260								
Benzene	ND	ug/L	50.0	2.9	1		02/01/10 05:41	71-43-2	
1,2-Dichloroethane-d4 (S)	106	%	81-121		1		02/01/10 05:41	17060-07-0	
Toluene-d8 (S)	100	%	89-111		1		02/01/10 05:41	2037-26-5	
4-Bromofluorobenzene (S)	98	%	87-115		1		02/01/10 05:41	460-00-4	
Dibromofluoromethane (S)	97	%	87-113		1		02/01/10 05:41	1868-53-7	
8260 MSV 5030	Analytical Method: EPA 8260								
Benzene	ND	ug/kg	3.2	0.16	1		01/28/10 00:08	71-43-2	
Ethylbenzene	**0.42J**	ug/kg	3.2	0.40	1		01/28/10 00:08	100-41-4	
Toluene	ND	ug/kg	3.2	0.33	1		01/28/10 00:08	108-88-3	
Xylene (Total)	**7.4**	ug/kg	6.4	0.80	1		01/28/10 00:08	1330-20-7	
Dibromofluoromethane (S)	91	%	80-136		1		01/28/10 00:08	1868-53-7	6n

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ANALYTICAL RESULTS

Project: 00922-Asphalt Work Area 2 PDX
Pace Project No.: 252856

Sample: BIN 193 (922) **Lab ID: 252856004** Collected: 01/18/10 09:10 Received: 01/20/10 08:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030	Analytical Method: EPA 8260								
Toluene-d8 (S)	104	%	80-120		1		01/28/10 00:08	2037-26-5	
4-Bromofluorobenzene (S)	107	%	72-122		1		01/28/10 00:08	460-00-4	
1,2-Dichloroethane-d4 (S)	93	%	80-143		1		01/28/10 00:08	17060-07-0	
	Analytical Method: ASTM D2974-87								
Percent Moisture	**11.7**	%	0.10	0.10	1		01/21/10 09:53		

Sample: TB-1 (922) **Lab ID: 252856005** Collected: 01/18/10 00:00 Received: 01/20/10 08:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Gx GCV	Analytical Method: NWTPH-Gx								
Gasoline Range Organics	ND	ug/L	50.0	13.4	1		01/25/10 20:23		5n
a,a,a-Trifluorotoluene (S)	112	%	50-150		1		01/25/10 20:23	98-08-8	
4-Bromofluorobenzene (S)	114	%	50-150		1		01/25/10 20:23	460-00-4	
8260 MSV	Analytical Method: EPA 5030B/8260								
Benzene	ND	ug/L	1.0	0.12	1		01/26/10 20:47	71-43-2	
Ethylbenzene	ND	ug/L	1.0	0.20	1		01/26/10 20:47	100-41-4	
Toluene	ND	ug/L	1.0	0.21	1		01/26/10 20:47	108-88-3	
Xylene (Total)	ND	ug/L	3.0	0.42	1		01/26/10 20:47	1330-20-7	
4-Bromofluorobenzene (S)	102	%	80-120		1		01/26/10 20:47	460-00-4	5n
Dibromofluoromethane (S)	90	%	80-122		1		01/26/10 20:47	1868-53-7	
1,2-Dichloroethane-d4 (S)	94	%	80-124		1		01/26/10 20:47	17060-07-0	
Toluene-d8 (S)	104	%	80-123		1		01/26/10 20:47	2037-26-5	

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QUALITY CONTROL DATA

Project: 00922-Asphalt Work Area 2 PDX
Pace Project No.: 252856

QC Batch: OEXT/1804 Analysis Method: NWTPH-Dx
QC Batch Method: EPA 3546 Analysis Description: NWTPH-Dx GCS
Associated Lab Samples: 252856001, 252856002, 252856003, 252856004

METHOD BLANK: 19484 Matrix: Solid
Associated Lab Samples: 252856001, 252856002, 252856003, 252856004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Diesel Range SG	mg/kg	ND	20.0	01/23/10 22:14	4n
Motor Oil Range SG	mg/kg	ND	80.0	01/23/10 22:14	
n-Octacosane (S) SG	%	111	50-150	01/23/10 22:14	
o-Terphenyl (S) SG	%	107	50-150	01/23/10 22:14	

LABORATORY CONTROL SAMPLE: 19485

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Diesel Range SG	mg/kg	500	434	87	56-124	
Motor Oil Range SG	mg/kg	500	485	97	50-150	
n-Octacosane (S) SG	%			87	50-150	
o-Terphenyl (S) SG	%			67	50-150	

SAMPLE DUPLICATE: 19486

Parameter	Units	252856001 Result	Dup Result	RPD	Max RPD	Qualifiers
Diesel Range SG	mg/kg	13.0J	10.3J		50	
Motor Oil Range SG	mg/kg	52.7J	34.0J		50	
n-Octacosane (S) SG	%	108	114	5		
o-Terphenyl (S) SG	%	104	111	6		

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QUALITY CONTROL DATA

Project: 00922-Asphalt Work Area 2 PDX
Pace Project No.: 252856

QC Batch: GCV/1420 Analysis Method: NWTPH-Gx
QC Batch Method: NWTPH-Gx Analysis Description: NWTPH-Gx Solid GCV
Associated Lab Samples: 252856001, 252856002, 252856003, 252856004

METHOD BLANK: 19685 Matrix: Solid
Associated Lab Samples: 252856001, 252856002, 252856003, 252856004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Gasoline Range Organics	mg/kg	0.62J	5.0	01/25/10 21:36	5n
4-Bromofluorobenzene (S)	%	65	50-150	01/25/10 21:36	
a,a,a-Trifluorotoluene (S)	%	69	50-150	01/25/10 21:36	

LABORATORY CONTROL SAMPLE: 19686

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Gasoline Range Organics	mg/kg	12.5	13.1	105	54-156	
4-Bromofluorobenzene (S)	%			95	50-150	
a,a,a-Trifluorotoluene (S)	%			101	50-150	

SAMPLE DUPLICATE: 19786

Parameter	Units	252856003 Result	Dup Result	RPD	Max RPD	Qualifiers
Gasoline Range Organics	mg/kg	16.8	13.9	19	50	
4-Bromofluorobenzene (S)	%	103	89	14		
a,a,a-Trifluorotoluene (S)	%	103	93	9		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 00922-Asphalt Work Area 2 PDX
Pace Project No.: 252856

QC Batch: GCV/1421 Analysis Method: NWTPH-Gx
QC Batch Method: NWTPH-Gx Analysis Description: NWTPH-Gx GCV Water
Associated Lab Samples: 252856005

METHOD BLANK: 19687 Matrix: Water
Associated Lab Samples: 252856005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Gasoline Range Organics	ug/L	14.6J	50.0	01/25/10 07:07	5n
4-Bromofluorobenzene (S)	%	106	50-150	01/25/10 07:07	
a,a,a-Trifluorotoluene (S)	%	116	50-150	01/25/10 07:07	

LABORATORY CONTROL SAMPLE: 19688

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Gasoline Range Organics	ug/L	250	300	120	50-163	
4-Bromofluorobenzene (S)	%			108	50-150	
a,a,a-Trifluorotoluene (S)	%			113	50-150	

SAMPLE DUPLICATE: 19756

Parameter	Units	252868001 Result	Dup Result	RPD	Max RPD	Qualifiers
Gasoline Range Organics	ug/L	ND	ND		30	
4-Bromofluorobenzene (S)	%	104	120	14		
a,a,a-Trifluorotoluene (S)	%	111	122	9		

SAMPLE DUPLICATE: 19757

Parameter	Units	252883001 Result	Dup Result	RPD	Max RPD	Qualifiers
Gasoline Range Organics	ug/L	ND	ND		30	
4-Bromofluorobenzene (S)	%	121	121	.2		
a,a,a-Trifluorotoluene (S)	%	118	118	.7		

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QUALITY CONTROL DATA

Project: 00922-Asphalt Work Area 2 PDX
Pace Project No.: 252856

QC Batch: MPRP/1430 Analysis Method: EPA 6010
QC Batch Method: EPA 3010 Analysis Description: 6010 MET TCLP
Associated Lab Samples: 252856001, 252856002, 252856003, 252856004

METHOD BLANK: 19573 Matrix: Water
Associated Lab Samples: 252856001, 252856002, 252856003, 252856004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Lead	mg/L	ND	1.0	01/22/10 15:21	

LABORATORY CONTROL SAMPLE: 19574

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Lead	mg/L	.5	0.46	92	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 19575 19576

Parameter	Units	252856001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Lead	mg/L	ND	5	5	4.7	4.5	93	90	75-125	3	20	

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QUALITY CONTROL DATA

Project: 00922-Asphalt Work Area 2 PDX
Pace Project No.: 252856

QC Batch: OEXT/1805 Analysis Method: EPA 8270 by SIM
QC Batch Method: EPA 3546 Analysis Description: 8270/3546 MSSV PAH by SIM
Associated Lab Samples: 252856002, 252856003, 252856004

METHOD BLANK: 19487 Matrix: Solid
Associated Lab Samples: 252856002, 252856003, 252856004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1-Methylnaphthalene	mg/kg	ND	0.0067	01/23/10 22:04	
2-Methylnaphthalene	mg/kg	ND	0.0067	01/23/10 22:04	
Acenaphthene	mg/kg	ND	0.0067	01/23/10 22:04	
Acenaphthylene	mg/kg	ND	0.0067	01/23/10 22:04	
Anthracene	mg/kg	ND	0.0067	01/23/10 22:04	
Benzo(a)anthracene	mg/kg	ND	0.0067	01/23/10 22:04	
Benzo(a)pyrene	mg/kg	ND	0.0067	01/23/10 22:04	
Benzo(b)fluoranthene	mg/kg	ND	0.0067	01/23/10 22:04	
Benzo(g,h,i)perylene	mg/kg	ND	0.0067	01/23/10 22:04	
Benzo(k)fluoranthene	mg/kg	ND	0.0067	01/23/10 22:04	
Chrysene	mg/kg	ND	0.0067	01/23/10 22:04	
Dibenz(a,h)anthracene	mg/kg	ND	0.0067	01/23/10 22:04	
Fluoranthene	mg/kg	ND	0.0067	01/23/10 22:04	
Fluorene	mg/kg	ND	0.0067	01/23/10 22:04	
Indeno(1,2,3-cd)pyrene	mg/kg	ND	0.0067	01/23/10 22:04	
Naphthalene	mg/kg	ND	0.0067	01/23/10 22:04	
Phenanthrene	mg/kg	ND	0.0067	01/23/10 22:04	
Pyrene	mg/kg	ND	0.0067	01/23/10 22:04	
2-Fluorobiphenyl (S)	%	86	55-136	01/23/10 22:04	
Nitrobenzene-d5 (S)	%	87	63-138	01/23/10 22:04	
Terphenyl-d14 (S)	%	100	60-144	01/23/10 22:04	

LABORATORY CONTROL SAMPLE: 19488

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1-Methylnaphthalene	mg/kg	.083	0.077	92	61-132	
2-Methylnaphthalene	mg/kg	.083	0.080	96	56-153	
Acenaphthene	mg/kg	.083	0.074	88	49-141	
Acenaphthylene	mg/kg	.083	0.064	77	53-139	
Anthracene	mg/kg	.083	0.080	96	53-148	
Benzo(a)anthracene	mg/kg	.083	0.076	91	42-146	
Benzo(a)pyrene	mg/kg	.083	0.079	95	34-147	
Benzo(b)fluoranthene	mg/kg	.083	0.081	97	33-154	
Benzo(g,h,i)perylene	mg/kg	.083	0.084	101	47-148	
Benzo(k)fluoranthene	mg/kg	.083	0.086	104	61-152	
Chrysene	mg/kg	.083	0.083	100	57-145	
Dibenz(a,h)anthracene	mg/kg	.083	0.085	102	55-154	
Fluoranthene	mg/kg	.083	0.082	98	32-150	
Fluorene	mg/kg	.083	0.070	84	45-152	
Indeno(1,2,3-cd)pyrene	mg/kg	.083	0.084	101	35-151	
Naphthalene	mg/kg	.083	0.079	94	44-140	

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QUALITY CONTROL DATA

Project: 00922-Asphalt Work Area 2 PDX
Pace Project No.: 252856

LABORATORY CONTROL SAMPLE: 19488

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Phenanthrene	mg/kg	.083	0.082	99	38-155	
Pyrene	mg/kg	.083	0.079	95	51-153	
2-Fluorobiphenyl (S)	%			82	55-136	
Nitrobenzene-d5 (S)	%			79	63-138	
Terphenyl-d14 (S)	%			90	60-144	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 19489 19490

Parameter	Units	252856002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1-Methylnaphthalene	mg/kg	0.031J	.091	.092	0.097	0.098	72	73	61-132	1	30	
2-Methylnaphthalene	mg/kg	0.073J	.091	.092	0.14	0.14	70	72	56-153	1	30	
Acenaphthene	mg/kg	ND	.091	.092	0.077	0.071J	84	78	49-141		30	
Acenaphthylene	mg/kg	0.0039J	.091	.092	0.082	0.084	85	87	53-139	2	30	
Anthracene	mg/kg	0.020J	.091	.092	0.075	0.072J	60	57	53-148		30	
Benzo(a)anthracene	mg/kg	0.040J	.091	.092	0.13	0.11	93	77	42-146	13	30	
Benzo(a)pyrene	mg/kg	0.059J	.091	.092	0.12	0.11	61	57	34-147	3	30	
Benzo(b)fluoranthene	mg/kg	0.044J	.091	.092	0.12	0.11	85	75	33-154	8	30	
Benzo(g,h,i)perylene	mg/kg	0.082	.091	.092	0.13	0.11	52	36	47-148	12	30	M0
Benzo(k)fluoranthene	mg/kg	0.029J	.091	.092	0.087	0.082	63	57	61-152	7	30	M0
Chrysene	mg/kg	0.13	.091	.092	0.17	0.17	41	38	57-145	2	30	M0
Dibenz(a,h)anthracene	mg/kg	0.027J	.091	.092	0.090	0.083	69	61	55-154	9	30	
Fluoranthene	mg/kg	0.043J	.091	.092	0.12	0.10	81	62	32-150	16	30	
Fluorene	mg/kg	ND	.091	.092	0.083	0.081	76	74	45-152	2	30	
Indeno(1,2,3-cd)pyrene	mg/kg	0.024J	.091	.092	0.089	0.081	72	62	35-151	10	30	
Naphthalene	mg/kg	0.029J	.091	.092	0.097	0.10	74	79	44-140	5	30	2n,P3
Phenanthrene	mg/kg	0.046J	.091	.092	0.11	0.098	71	56	38-155	13	30	
Pyrene	mg/kg	0.18	.091	.092	0.16	0.15	-25	-31	51-153	4	30	M0
2-Fluorobiphenyl (S)	%						76	74	55-136			
Nitrobenzene-d5 (S)	%						55	49	63-138			S0
Terphenyl-d14 (S)	%						76	71	60-144			

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 00922-Asphalt Work Area 2 PDX
Pace Project No.: 252856

QC Batch: MSV/26495 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV TCLP
Associated Lab Samples: 252856001, 252856002, 252856003, 252856004

METHOD BLANK: 597277 Matrix: Water
Associated Lab Samples: 252856001, 252856002, 252856003, 252856004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	50.0	02/01/10 04:16	
1,2-Dichloroethane-d4 (S)	%	102	81-121	02/01/10 04:16	
4-Bromofluorobenzene (S)	%	99	87-115	02/01/10 04:16	
Dibromofluoromethane (S)	%	95	87-113	02/01/10 04:16	
Toluene-d8 (S)	%	102	89-111	02/01/10 04:16	

LABORATORY CONTROL SAMPLE: 597278

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	500	472	94	81-114	
1,2-Dichloroethane-d4 (S)	%			99	81-121	
4-Bromofluorobenzene (S)	%			100	87-115	
Dibromofluoromethane (S)	%			100	87-113	
Toluene-d8 (S)	%			99	89-111	

MATRIX SPIKE SAMPLE: 597279

Parameter	Units	252856001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	ND	500	225	45	65-140	M0
1,2-Dichloroethane-d4 (S)	%				102	81-121	
4-Bromofluorobenzene (S)	%				102	87-115	
Dibromofluoromethane (S)	%				99	87-113	
Toluene-d8 (S)	%				101	89-111	

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QUALITY CONTROL DATA

Project: 00922-Asphalt Work Area 2 PDX
Pace Project No.: 252856

QC Batch: MSV/1940
QC Batch Method: EPA 5030B/8260
Analysis Method: EPA 5030B/8260
Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 252856005

METHOD BLANK: 19790
Matrix: Water
Associated Lab Samples: 252856005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	1.0	01/26/10 17:46	
Ethylbenzene	ug/L	ND	1.0	01/26/10 17:46	
Toluene	ug/L	ND	1.0	01/26/10 17:46	
Xylene (Total)	ug/L	ND	3.0	01/26/10 17:46	
1,2-Dichloroethane-d4 (S)	%	94	80-124	01/26/10 17:46	
4-Bromofluorobenzene (S)	%	103	80-120	01/26/10 17:46	5n
Dibromofluoromethane (S)	%	92	80-122	01/26/10 17:46	
Toluene-d8 (S)	%	103	80-123	01/26/10 17:46	

LABORATORY CONTROL SAMPLE & LCSD: 19791 19792

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Benzene	ug/L	20	20.5	19.8	103	99	75-124	3	30	
Ethylbenzene	ug/L	20	17.3	16.5	87	82	76-124	5	30	
Toluene	ug/L	20	18.6	17.8	93	89	75-124	4	30	
Xylene (Total)	ug/L	60	50.3	48.2	84	80	76-123	4	30	
1,2-Dichloroethane-d4 (S)	%				99	98	80-124			
4-Bromofluorobenzene (S)	%				100	100	80-120			
Dibromofluoromethane (S)	%				99	101	80-122			
Toluene-d8 (S)	%				95	95	80-123			

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QUALITY CONTROL DATA

Project: 00922-Asphalt Work Area 2 PDX
Pace Project No.: 252856

QC Batch: MSV/1944 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV 5030 Volatile Organics
Associated Lab Samples: 252856001, 252856002, 252856003, 252856004

METHOD BLANK: 19876 Matrix: Solid
Associated Lab Samples: 252856001, 252856002, 252856003, 252856004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/kg	ND	3.0	01/27/10 18:03	
Ethylbenzene	ug/kg	ND	3.0	01/27/10 18:03	
Toluene	ug/kg	0.37J	3.0	01/27/10 18:03	
Xylene (Total)	ug/kg	ND	6.0	01/27/10 18:03	
1,2-Dichloroethane-d4 (S)	%	96	80-143	01/27/10 18:03	
4-Bromofluorobenzene (S)	%	105	72-122	01/27/10 18:03	
Dibromofluoromethane (S)	%	96	80-136	01/27/10 18:03	6n
Toluene-d8 (S)	%	109	80-120	01/27/10 18:03	

LABORATORY CONTROL SAMPLE: 19877

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/kg	40	51.2	128	68-124	L3
Ethylbenzene	ug/kg	40	51.1	128	63-131	
Toluene	ug/kg	40	46.4	116	61-126	
Xylene (Total)	ug/kg	120	135	113	68-129	
1,2-Dichloroethane-d4 (S)	%			101	80-143	
4-Bromofluorobenzene (S)	%			99	72-122	
Dibromofluoromethane (S)	%			105	80-136	
Toluene-d8 (S)	%			99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 20009 20010

Parameter	Units	252856003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/kg	ND	43.5	40.7	31.7	32.3	73	79	68-124	2	30	
Ethylbenzene	ug/kg	0.58J	43.5	40.7	19.8	21.9	44	52	63-131	10	30	M0
Toluene	ug/kg	0.43J	43.5	40.7	24.7	26.3	56	64	61-126	6	30	M0
Xylene (Total)	ug/kg	7.6	131	122	57.0	62.8	38	45	68-129	10	30	M0
1,2-Dichloroethane-d4 (S)	%						102	102	80-143			
4-Bromofluorobenzene (S)	%						109	107	72-122			
Dibromofluoromethane (S)	%						103	105	80-136			
Toluene-d8 (S)	%						103	102	80-120			

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QUALITY CONTROL DATA

Project: 00922-Asphalt Work Area 2 PDX
Pace Project No.: 252856

QC Batch: PMST/1152 Analysis Method: ASTM D2974-87
QC Batch Method: ASTM D2974-87 Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 252856001, 252856002, 252856003, 252856004

SAMPLE DUPLICATE: 19491

Parameter	Units	252856001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	12.1	13.6	11	30	

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QUALIFIERS

Project: 00922-Asphalt Work Area 2 PDX
Pace Project No.: 252856

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

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LABORATORIES

PASI-K	Pace Analytical Services - Kansas City
PASI-S	Pace Analytical Services - Seattle

ANALYTE QUALIFIERS

1n	Low surrogate recovery confirmed by the matrix spike/duplicate sample performed.
2n	Matrix spike sample does not provide reliable recovery data due to sample matrix; sample unable to be concentrated to routine final volume.
3n	Sample evaluated at dilution due to matrix interference and chromatographic interference.
4n	Sample evaluated to the mdl for all compounds.
5n	Sample was evaluated to the MDL.
6n	Sample was reported to the MDL.
J	Analyte detected below reporting limit, therefore result is an estimate.
L3	Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.
M0	Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.
P3	Sample extract could not be concentrated to the routine final volume, resulting in elevated reporting limits.
S0	Surrogate recovery outside laboratory control limits.
Z2	Analyte present in the associated method blank above the detection limit.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 00922-Asphalt Work Area 2 PDX
Pace Project No.: 252856

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
252856001	**BIN 178 (922)**	EPA 3546	OEXT/1804	NWTPH-Dx	GCSV/1428
252856002	**BIN 158 (922)**	EPA 3546	OEXT/1804	NWTPH-Dx	GCSV/1428
252856003	**BIN 181 (922)**	EPA 3546	OEXT/1804	NWTPH-Dx	GCSV/1428
252856004	**BIN 193 (922)**	EPA 3546	OEXT/1804	NWTPH-Dx	GCSV/1428
252856001	**BIN 178 (922)**	NWTPH-Gx	GCV/1420	NWTPH-Gx	GCV/1422
252856002	**BIN 158 (922)**	NWTPH-Gx	GCV/1420	NWTPH-Gx	GCV/1422
252856003	**BIN 181 (922)**	NWTPH-Gx	GCV/1420	NWTPH-Gx	GCV/1422
252856004	**BIN 193 (922)**	NWTPH-Gx	GCV/1420	NWTPH-Gx	GCV/1422
252856005	**TB-1 (922)**	NWTPH-Gx	GCV/1421		
252856001	**BIN 178 (922)**	EPA 3010	MPRP/1430	EPA 6010	ICP/1355
252856002	**BIN 158 (922)**	EPA 3010	MPRP/1430	EPA 6010	ICP/1355
252856003	**BIN 181 (922)**	EPA 3010	MPRP/1430	EPA 6010	ICP/1355
252856004	**BIN 193 (922)**	EPA 3010	MPRP/1430	EPA 6010	ICP/1355
252856002	**BIN 158 (922)**	EPA 3546	OEXT/1805	EPA 8270 by SIM	MSSV/1199
252856003	**BIN 181 (922)**	EPA 3546	OEXT/1805	EPA 8270 by SIM	MSSV/1199
252856004	**BIN 193 (922)**	EPA 3546	OEXT/1805	EPA 8270 by SIM	MSSV/1199
252856001	**BIN 178 (922)**	EPA 8260	MSV/26495		
252856002	**BIN 158 (922)**	EPA 8260	MSV/26495		
252856003	**BIN 181 (922)**	EPA 8260	MSV/26495		
252856004	**BIN 193 (922)**	EPA 8260	MSV/26495		
252856005	**TB-1 (922)**	EPA 5030B/8260	MSV/1940		
252856001	**BIN 178 (922)**	EPA 8260	MSV/1944		
252856002	**BIN 158 (922)**	EPA 8260	MSV/1944		
252856003	**BIN 181 (922)**	EPA 8260	MSV/1944		
252856004	**BIN 193 (922)**	EPA 8260	MSV/1944		

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C. USTODY / Analytical Request Document

The Chain-o. LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: / of 1306113

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: Stantec	Report To: bill.edmund@stantec.com	Attention: ConocoPhillips
Address: 7730 SW Mohawk St. Tualatin, OR 97062	Copy To: chris.carltonfranco@stantec.com	Company Name:
Email To: Bill Edmund	Purchase Order No.: 4512826035	Address:
Phone: (503) 691-2030 Fax: (503)-692-7074	Project Name: Asphalt work Area 2, PDX Terminal	Pace Quote Reference:
Requested Due Date/TAT: STD	Project Number: 212302313	Pace Project Manager:
		Pace Profile #:

REGULATORY AGENCY: ☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER ☐ UST ☐ RCRA ☐ OTHER

Site Location STATE: OR

Section D Required Client Information

Matrix Codes — MATRIX / CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Tissue TS; Other OT

ITEM #	SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test ↓ Y/N	NWTPH-Gx	NWTPH-Dx w/ silica gel cleanup	8270 SIM if diesel detected	BTEX	TCLP Benzene	TCLP Lead	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	Bin #178 (922)	SL	G	18 Jan 10		0840			2	2									X	X		X	X	X		252856-001
2	Bin 158 (922)	SL	G	18 Jan 10		0850			2	2									X	X		X	X	X		002
3	Bin 181 (922)	SL	G	18 Jan 10		0900			2	2									X	X		X	X	X		003
4	Bin 193 (922)	SL	G	19 Jan 10		0910			2	2									X	X		X	X	X		004
5	TB-1	WT	-	18 Jan 10					2										X			X				005
6																											
7																											
8																											
9																											
10																											
11																											
12																											

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	CCF / Stantec	19 Jan 10	1200	Andy By IPaw	1/20/10	0800	2.4	Y	Y	Y

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Chris Carlton-Franco

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 18 Jan 10

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

Sample Condition Upon Receipt

Pace Analytical

Client Name: Stantec Project # 252856

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other PCS

Tracking #: _____

Optional
Proj. Due Date:
Proj. Name:

Custody Seal on Cooler/Box Present: ☑ yes ☐ no Seals intact: ☑ yes ☐ no

Packing Material: ☐ Bubble Wrap ☑ Bubble Bags ☐ None ☐ Other _____

Thermometer Used Horiba 132013 Type of Ice: (Wet) Blue None ☐ Samples on ice, cooling process has begun

Cooler Temperature 2.4 Biological Tissue is Frozen: Yes No

Temp should be above freezing to 6°C

Date and Initials of person examining contents: _____

Comments:

Chain of Custody Present:	☑Yes	☐No	☐N/A
Chain of Custody Filled Out:	☑Yes	☐No	☐N/A
Chain of Custody Relinquished:	☑Yes	☐No	☐N/A
Sampler Name & Signature on COC:	☑Yes	☐No	☐N/A
Samples Arrived within Hold Time:	☐Yes	☑No	☐N/A
Short Hold Time Analysis (<72hr):	☑Yes	☐No	☐N/A
Rush Turn Around Time Requested:	☐Yes	☑No	☐N/A
Sufficient Volume:	☑Yes	☐No	☐N/A
Correct Containers Used:	☑Yes	☐No	☐N/A
-Pace Containers Used:	☑Yes	☐No	☐N/A
Containers Intact:	☑Yes	☐No	☐N/A
Filtered volume received for Dissolved tests	☐Yes	☐No	☑N/A
Sample Labels match COC:	☑Yes	☐No	☐N/A
-Includes date/time/ID/Analysis Matrix: Soil			
All containers needing preservation have been checked.	☐Yes	☐No	☑N/A
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes	☐No	☑N/A
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	☑Yes	☐No	
Samples checked for dechlorination:	☐Yes	☐No	☑N/A
Headspace in VOA Vials (>6mm):	☐Yes	☐No	☑N/A
Trip Blank Present:	☑Yes	☐No	☐N/A
Trip Blank Custody Seals Present	☐Yes	☐No	☐N/A
Pace Trip Blank Lot # (if purchased): _____			

1.
2.
3.
4.
5. Samples recieved outside of 48 hr. extraction
6. Analyze requirement by COP
7.
8.
9. Water trip blanks recieved for Soil Samples.
10.
11.
12.
13.

Initial when completed	Lot # of added preservative

14.
15.
16. See number 9.

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: JENNI GROSS Date: 1/20/10

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

APPENDIX D
PHOTOGRAPH OF EXPOSED AREA

1. Exposed Area

Memo

Stantec

To:	Rich Solomon ConocoPhillips Company	From:	Chris Carlton-Franco Stantec Consulting
File:	Portland Terminal MH-9 Investigation	Date:	November 4, 2010

Reference: Portland Terminal MH-9 Investigation

On 7 September 2010, Stantec Consulting (Stantec) was on-Site at the ConocoPhillips Portland Terminal (Terminal) to meet a Burlington Northern Santa Fe (BNSF) Railroad employee to conduct an investigation of storm water flow in the area of catch basin-44 (CB-44) and man hole-9 (MH-9). It was expected that storm water collected in CB-44, which is located on BNSF property, was flowing downstream onto the Terminal through CB-43 and eventually into MH-9. Water was added into CB-44 using a garden hose for approximately 30 minutes in attempt to induce flow into CB-43 and onto MH-9. However, no flow was observed and there was no increase in the water level inside CB-44. The BNSF employee informed Stantec that CB-44 had been covered and filled with gravel until recently; the catch basin was uncovered and the gravel was removed within the past year. The BNSF employee also stated that she believed there was a possibility that CB-44 had been sealed off from the downstream pipe. There is a possibility that the CB-44 has a crack and storm water is leaking from the catch basin into the surrounding soil.

Chris Carlton-Franco, M.Sc.
Staff Scientist
chris.carltonfranco@stantec.com

Mark Trewartha, R.G.
Senior Hydrogeologist
mark.trewartha@stantec.com

Incident ID: 147495

Short Description: [NC] Process Water Piping Leak [E]

Responsible Dept\Unit: Terminals : Terminals - West Coast Division : Portland Product Terminal

Status: Closed

Incident Type: Incident

Potential Risk Rating: I - Low

General

Responsible Supervisor:	THOMAS LYONS
High Learning Value Event Status:	Not Reviewed for HLVE
Specific Location:	Tank Farm #2
Date Occurred: (mm/dd/yyyy)	11/30/2010 3:30:00 PM
Date Reported: (mm/dd/yyyy)	11/30/2010 5:39:08 PM
Date Entered:	11/30/2010 5:52:47 PM (GMT-08:00)
REPORTEDBY:	THOMAS LYONS
Incident Description:	On November 30th at approximately 3:30 pm, a drip on an above-ground 2" process water line was found in tank farm #2. The line was immediately isolated and temporary repairs were made. An estimated 3 gallons of clean water were released to secondary containment. Appropriate notifications were made.
Weather:	Clear
Lighting:	Day
Address:	5528 NW Doane Avenue
City:	Portland
Country:	United States
State/Province:	Oregon
Zip/Postal Code:	97210
Incident Flags:	Mechanical Integrity
Entered By:	LYONS, THOMAS
Immediate Actions Taken:	The line was immediately isolated and temporary repairs were made. An estimated 3 gallons of clean water were released to secondary containment. Appropriate notifications were made.

Sub Types

Check All That Apply: General: Environmental (e.g.: Spills, Releases, Odor Complaints, Unplanned Releases, Permit Exceedences, RV Operations, Process Upsets)

Responsibilities

Workflow Supervisor *

Name	Response
THOMAS LYONS	

Incident Owner *

Name	Response
THOMAS LYONS	

Creator *

Name	Response
THOMAS LYONS	

Marine Notification

Name	Response
WEI HENRY	

Notes

Notes: No Data is Available

Equipment

Equipment

Equipment Involved	Critical	Equipment Number/Description
Piping Systems and Piping Components: Pipe	NO	

People

Contractor Involvement : No Data is Available

Name	Employee Type	Consequence Number: Injury / Illness	Property	Transportation	Security	Quality	Environmental	
HOLLAND, SONIA	Employee						24106	Open View

Witnesses

Name	Employee,Contractor,or Other	Phone
Randall McKnight	Contactor	979-292-5747
Jeff Fossum	Employee	503-248-1558

Consequence

Incident Consequences

ID	Type	Description	Party Involved	Status
24106 Open View	Environmental	...	HOLLAND, SONIA K	Closed

Pending Consequences : No Data is Available

Investigation

Investigations: No Data is Available

Action Items

Action Items: No Data is Available

Summary

Equipment:	1
Employees:	1
Contractors:	None
Witnesses:	2
Investigations:	None
Recordable:	No
Last Updated Date :	12/15/2010 11:27:12 AM (GMT-08:00)

Consequence — Injury/Illness: None

COP0018121

December 14, 2010

Mr. Michael Romero
Oregon Department of Environmental Quality
2020 SW 4th Avenue, Suite 400
Portland, Oregon 97201

Subject: Semi-Annual Groundwater Monitoring Report
April 2010 through September 2010
Willbridge Bulk Fuel Facilities, Portland, Oregon
Consent Order WMCSR-NWR-94-06

Dear Mr. Romero:

On behalf of the Willbridge Terminal Group (WTG), Delta Consultants (Delta) has prepared this Semi-Annual Groundwater Monitoring Report for the above referenced facilities located in Portland, Oregon (Figure 1). The WTG consists of Chevron Products Company (Chevron), ConocoPhillips Company (ConocoPhillips), and Kinder Morgan Liquid Terminals (Kinder Morgan) (Figure 2). The field sampling activities described in this letter report were completed by Arcadis U.S., Inc (Arcadis) on behalf of Chevron, by Stantec Consulting (Stantec) and Arcadis on behalf of ConocoPhillips, and by Delta on behalf of Kinder Morgan. This sampling event fulfills the requirements outlined in Section 7F of the Oregon Department of Environmental Quality (DEQ) Consent Order WMCSR-NWR-94-06.

DELTA

This letter report summarizes groundwater monitoring activities that were completed from April 2010 through September 2010. Groundwater monitoring and separate phase hydrocarbon (SPH) recovery were completed June 21, 2010 (second quarter 2010) and September 20 through 23, 2010 (third quarter 2010). Groundwater monitoring and sampling activities were conducted in accordance with the *Sampling and Analysis Plan Addendum,* dated September 22, 2006.

GROUNDWATER MONITORING

Depth-to-water measurements were collected from each monitoring well. Depth-to-water measurements were not collected from inaccessible wells or from actively pumping recovery wells. Recorded depth-to-water measurements are presented in Tables 1A through 1C. Measurements ranged from 1.60 feet to 7.72 feet below ground surface (bgs) across the facilities. Groundwater elevation contours for each quarter are presented in Figures 3 through 6. Evaluation of the groundwater elevation data for this semi-annual period suggests that groundwater flows to the northeast toward the Willamette River.

a member of Inogen Environmental Alliance

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The daily mean Willamette River stage, measured at the Morrison Bridge river gauge and converted to the City of Portland (COP) datum, ranged from a high of 17.25 feet on June 12, 2010 to a low of 4.56 feet on September 2, 2010. The average river stage elevation was 8.15 feet between April 1, 2010 and September 30, 2010. Precipitation and river stage data are presented in Figure 7.

Separate Phase Hydrocarbons (SPH)

SPH is measured and removed from each facility on a monthly basis. Monthly SPH removal was conducted on wells containing measureable amounts of SPH between April and September 2010. SPH thicknesses recorded during this semi-annual event are summarized in Tables 1A through 1C. A summary of monthly SPH removal volume is summarized in Table 1D. Observable sheen and SPH thicknesses are presented in Figures 3 and 5.

During the second quarter monitoring event, four Chevron wells (CR-6, CR-15, CR-25, and GPW-3) contained measurable thicknesses of SPH, ranging from 0.01 feet in multiple wells to 0.23 feet in CR-15. Additionally, sheen and/or trace SPH was observed in wells CR-10, CR-11, and CR-19. During the third quarter monitoring event, six Chevron wells (CR-6, CR-10, CR-15, CR-19, CR-25, and GPW-2) contained measurable thicknesses of SPH, ranging from 0.02 feet in CR-25 to 0.32 feet in well GPW-2. SPH occurrences were consistent with historical measurements in all wells during this semi-annual event.

During the second quarter monitoring event, two Kinder Morgan wells (MW-24 and MW-31) had measureable SPH thicknesses of 0.02 and 0.01 feet, respectively. Additionally, sheen was observed in wells MW-7, MW-23, and MW-28. During the third quarter monitoring event, two Kinder Morgan wells (MW-19 and MW-23) had measureable SPH thicknesses of 0.02 and 0.01 feet, respectively. Sheen was observed in two wells (MW-7 and MW-28). SPH occurrences were consistent with historical measurements in all wells during this semi-annual event.

During the second quarter monitoring event, nine ConocoPhillips wells (B-4, B-27, B-40, U-4, U-5A, U-13, U-15, U-16, and U-17) contained measurable SPH thicknesses, ranging from 0.01 feet in multiple wells to 1.40 feet in well B-27. During the third quarter monitoring event, six ConocoPhillips wells (B-4, B-27, B-40, U-4, U-5A, and U-13) contained measurable thicknesses of SPH, ranging from 0.01 feet in multiple wells to 0.63 feet in well U-13. The SPH thickness measured in well B-27 during the first and second quarter of 2010 exceeded the historical range for this well by an order of magnitude, however they returned to a level consistent with historical readings during the third quarter event. SPH occurrences were consistent with historical measurements in all other wells during this semi-annual event.

SPH recovery is performed in each well where SPH is measured. Manual SPH recovery/removal from monitoring wells consists of bailing, pumping, or the use of a sorbent sock installed in the well. Approximately 205 gallons of SPH have been removed to date by the above-referenced manual recovery methods. Recovered SPH volumes for this reporting period (April 2010 through September 2010) totaled approximately 4.7 gallons.

In addition to the monthly SPH recovery events, SPH recovery is conducted with the aid of a remediation system and series of recovery wells located between the Chevron and ConocoPhillips terminals. Approximately 4,500 gallons of SPH have been removed through this system. Recovered SPH is presently stored in an onsite batch tank, and once its capacity is reached it will be transported to Oil-Re-Refining in Portland, Oregon for recycling.

Analytical Sampling Plan

Groundwater was sampled from selected Chevron, ConocoPhillips, and Kinder Morgan monitoring wells during the third quarter 2010 monitoring event. Groundwater samples were not collected from monitoring wells containing observable sheen or measurable quantities of SPH.

The wells sampled for the third quarter 2010 monitoring event included the following:

- Chevron: B-9A, B-10, B-21, B-28, B-29, B-30, and CR-1.
- ConocoPhillips: B-36, B-37, OF-1, P-1A, U-2, U-14, U-15, U-16, U-17, U-18, U-20, and U-21.
- Kinder Morgan: MW-8, MW-25, MW-26, MW-33, MW-34, MW-36, MW-37, and MW-40.

Each well listed above was tested for:

- 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.
- Total Resource Conservation Recovery Act (RCRA) metals using EPA Method 6000/7000 Series. RCRA metals included arsenic, cadmium, chromium, copper, lead, manganese, mercury, selenium, silver, and zinc.
- Total petroleum hydrocarbons (TPH) in the gasoline, diesel, and oil range (Chevron and ConocoPhillips wells only) using Northwest Method NWTPH-Gx and NWTPH-Dx.

Groundwater samples were submitted to TestAmerica in Beaverton, Oregon and Pace Analytical Services, Inc. in Seattle, Washington for analytical testing. The analytical laboratory reports are included in Appendix A and the analytical data is summarized in Tables 2 through 4.

Analytical Findings

For *comparison purposes only*, the semi-annual groundwater monitoring data collected in the vicinity of the dock area were screened against the Portland Harbor Joint Source Control Strategy (JSCS) screening level values (SLVs) presented in Table 3-1 of the JSCS guidance document, updated in July 2007.

The Table 3-1 JSCS SLVs used in the screening process for this monitoring report are listed below:

- EPA 2004 National Recommended Water Quality Criteria (NRWQC), organism only;
- DEQ 2004 Ambient Water Quality Criteria (AWQC) organism only;
- EPA NRWQC ecological receptors, chronic;
- EPA NRWQC ecological receptors, chronic;
- DEQ 2004 AWQC; and
- Oak Ridge National Laboratory's Tier II secondary chronic values (SCVs).

Tables 5 through 8 include a summary of analytical data collected since 2008, compared with the JSCS SLVs.

Evaluation of the groundwater sampling data shows Chevron wells B-9A, B-10, and B-21 with groundwater sample concentrations above the JSCS SLVs for PAHs. The detection of chrysene exceeding the JSCS SLV in well B-10 is an estimated value, and is considered for evaluation purposes based on historical results of similar concentrations. The analytical results from groundwater samples collected from monitoring wells at each terminal exceeded one or more JSCS SLVs for total metals. No groundwater sample collected from the Dock Area monitoring wells exceeded any of the BTEX JSCS SLVs.

ISSUES

The following issues were encountered during the second and third quarter 2010 monitoring events:

Each monitoring well was gauged and/or sampled as required with the following exceptions. Depth to water measurements were not collected during both monitoring events from Chevron wells CR-21A and CR-21B; COP well DW-2; and Kinder Morgan well MW-39 because these wells were inaccessible. ConocoPhillips well B-25 was not gauged during both monitoring events due to damage. During the second quarter monitoring event, Chevron wells B-9A, and GPW-4; and ConocoPhillips wells IT-E and U-5 were not gauged

due to inaccessibility, and a depth to water measurement was not collected from Kinder Morgan well MW-24 due to highly viscous SPH affecting the accuracy of the interface probe.

During the third quarter sampling event, groundwater samples were not collected from ConocoPhillips wells B-4, B-40, U-4, and U-5A because of measurable SPH. ConocoPhillips well B-35 was not sampled and well U-5 was not gauged during the September 2010 sampling event due to construction activities.

UPCOMING ACTIVITIES

The following tasks are planned for the fourth quarter 2010 and first quarter of 2011:

- Measure depth to water and SPH in all WTG wells during the fourth quarter 2010 (December) and first quarter 2011 (March) monitoring events.
- Sample selected WTG wells during the first quarter (March 2011) semi-annual sampling event following just the *Sampling and Analysis Plan Addendum*. Fourth quarter 2010 monitoring is tentatively scheduled for December 13, 2010.
- Continue to perform monthly SPH recovery from wells that have historically contained SPH.
- Continue operation of the remediation system located between the Chevron and ConocoPhillips terminals.

LIMITATIONS

The conclusions and recommendations contained in this report represent Delta's professional opinions based upon the currently available information and are determined 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 fourth party. Other than as contained in this paragraph, Delta makes no express or implied warranty as to the contents of this report.

Sincerely,
DELTA CONSULTANTS

Cale Fleming
cfleming@deltaenv.com
Staff Scientist

Kevin McCarthy
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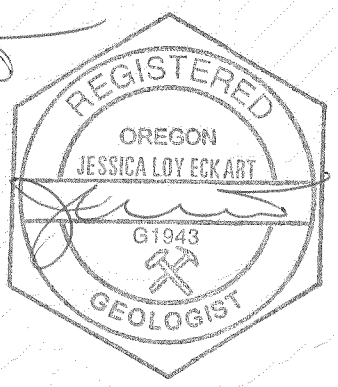

ATTACHMENTS:

Table 1A	Groundwater Elevation and SPH Recovery Data Chevron Products Company
Table 1B	Groundwater Elevation and SPH Recovery Data Kinder Morgan Liquid Terminals, LLC
Table 1C	Groundwater Elevation and SPH Recovery Data ConocoPhillips Company
Table 1D	Groundwater Elevation and SPH Recovery Data Willbridge Terminal Group Summary
Table 2	Groundwater Analytical Results – TPH, BTEX and MTBE Compounds
Table 3	Groundwater Analytical Results – PAH Compounds
Table 4	Groundwater Analytical Results – Total Metals
Table 5	Groundwater Screening Level Comparisons– Dock Area Shallow Wells– TPH, VOCs, and Metals
Table 6	Groundwater Screening Level Comparisons– Dock Area Shallow Wells– PAHs
Table 7	Groundwater Screening Level Comparisons– Dock Area Cluster Wells– TPH, VOCs, and Metals
Table 8	Groundwater Screening Level Comparisons– Dock Area Cluster Wells– PAHs
Figure 1	Site Location Map
Figure 2	Site Plan
Figure 3	Groundwater Elevation Contours and SPH Thickness Map - Second Quarter 2010
Figure 4	Groundwater Elevation Contours Dock Area – Second Quarter 2010
Figure 5	Groundwater Elevation Contours and SPH Thickness Map - Third Quarter 2010
Figure 6	Groundwater Elevation Contours Dock Area – Third Quarter 2010
Figure 7	Precipitation and River Stage Hydrograph (April 2010 to October 2010)
Appendix A	Certified Analytical Laboratory Reports and Chain-Of-Custody Documentation (CD Only)

TABLES

TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Chevron Products 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	19.47	sheen	16.26	NA
	2/20/2001	19.37	NP	-	16.36	NA
	5/15/2001	19.36	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	15.93	Trace	17.92	NA
	3/24/2008	15.76	NP	-	18.09	NA
	6/23/2008	16.31	NP	-	17.54	NA
	9/22/2008	16.73	NP	-	17.12	NA
	1/5/2009	15.59	NP	-	18.26	NA
	3/16/2009	16.00	NP	-	17.85	NA
	6/15/2009	16.21	NP	-	17.64	NA
	9/14/2009	16.49	NP	-	17.36	NA
	12/21/2009	15.75	NP	-	18.10	NA
	3/16/2010	15.72	NP	-	18.13	NA
	6/21/2010	**15.50**	**NP**	**-**	**18.35**	**NA**
	9/20/2010	**16.12**	**NP**	**-**	**17.73**	**NA**
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				

COP0018128

TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Chevron Products 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-9A	9/17/2007	16.23	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
	6/23/2008	15.37	NP	-	18.21	NA
	9/22/2008	15.94	NP	-	17.64	NA
	1/5/2009	14.92	NP	-	18.66	NA
	3/16/2009	15.28	NP	-	18.30	NA
	6/15/2009	15.43	NP	-	18.15	NA
	9/14/2009	15.83	NP	-	17.75	NA
	12/21/2009	NM	NM	-	NM	NA
	3/16/2010	14.91	NP	-	18.67	NA
	6/21/2010	**NM**	**NM**	**-**	**NM**	**NA**
	9/20/2010	**15.44**	**NP**	**-**	**18.14**	**NA**
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
	6/23/2008	15.62	NP	-	19.16	NA
	9/22/2008	16.41	NP	-	18.37	NA
	1/5/2009	Well Inaccessible				
	3/16/2009	15.64	NP	-	19.14	NA
	6/15/2009	15.71	NP	-	19.07	NA
	9/14/2009	16.40	NP	-	18.38	NA
	12/21/2009	15.73	NP	-	19.05	NA
	3/16/2010	15.11	NP	-	19.67	NA
	6/21/2010	**15.97**	**NP**	**-**	**18.81**	**NA**
	9/20/2010	**15.96**	**NP**	**-**	**18.82**	**NA**

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Chevron Products 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-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	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	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	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
	6/23/2008	15.49	NP	-	19.50	NA
	9/22/2008	16.31	NP	-	18.68	NA
	1/5/2009	15.29	NP	-	19.70	NA
	3/16/2009	15.53	NP	-	19.46	NA
	6/15/2009	15.59	NP	-	19.40	NA
	9/14/2009	16.29	NP	-	18.70	NA
	12/21/2009	15.80	NP	-	19.19	NA
	3/16/2010	15.01	NP	-	19.98	NA
	6/21/2010	**14.82**	**NP**	**-**	**20.17**	**NA**
	9/20/2010	**15.90**	**NP**	**-**	**19.09**	**NA**
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
	6/23/2008	15.92	NP	-	19.25	NA
	9/22/2008	16.71	NP	-	18.46	NA
	1/5/2009	15.73	NP	-	19.44	NA
	3/16/2009	15.96	NP	-	19.21	NA
	6/15/2009	15.96	NP	-	19.21	NA
(35.44)	9/14/2009	16.67	NP	-	18.77	NA
	12/21/2009	16.21	NP	-	19.23	NA
	3/16/2010	15.50	NP	-	19.94	NA
	6/21/2010	**15.26**	**NP**	**-**	**20.18**	**NA**
	9/20/2010	**16.31**	**NP**	**-**	**19.13**	**NA**

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Chevron Products 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-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					
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
	6/23/2008	17.70	NP	-	18.92	NA
	9/22/2008	18.39	NP	-	18.23	NA
	1/5/2009	17.90	NP	-	18.72	NA
	3/16/2009	NM	NM	NM	NM	NA
	6/15/2009	NM	NM	NM	NM	NA
N/A	9/14/2009	18.36	NP	-	NM	NA
N/A	12/21/2009	17.94	NP	-	NM	NA
	3/16/2010	17.28	NP	-	NM	NA
	6/21/2010	**17.00**	**NP**	**-**	**NM**	**NA**
	9/20/2010	**18.02**	**NP**	**-**	**NM**	**NA**

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Chevron Products 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-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
	6/23/2008	16.76	NP	-	18.82	NA
	9/22/2008	17.46	NP	-	18.12	NA
	1/5/2009	16.62	NP	-	18.96	NA
	3/16/2009	16.80	NP	-	18.78	NA
	6/15/2009	NM	NM	NM	NM	NA
	9/14/2009	16.43	NP	-	19.15	NA
	12/21/2009	16.94	NP	-	18.64	NA
	3/16/2010	16.36	NP	-	19.22	NA
	6/21/2010	**16.18**	**NP**	**-**	**19.40**	**NA**
	9/20/2010	**17.10**	**NP**	**-**	**18.48**	**NA**
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	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
	6/23/2008	16.02	NP	-	18.64	NA
	9/22/2008	16.69	NP	-	17.97	NA
	1/5/2009	15.72	NP	-	18.94	NA
	3/16/2009	16.01	NP	-	18.65	NA
	6/15/2009	16.11	NP	-	18.55	NA
	9/14/2009	16.64	NP	-	18.02	NA
	12/21/2009	16.02	NP	-	18.64	NA
	3/16/2010	15.57	NP	-	19.09	NA
	6/21/2010	**15.40**	**NP**	**-**	**19.26**	**NA**
	9/20/2010	**16.25**	**NP**	**-**	**18.41**	**NA**

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Chevron Products 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-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	17.99	sheen	15.33	NA
	2/20/2001	17.79	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	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
	6/23/2008	15.92	15.91	0.01	17.42	NA
	9/22/2008	16.11	NP	-	17.22	NA
	1/5/2009	15.16	15.07	0.09	18.24	0.0
	3/16/2009	15.59	NP	-	17.74	0.0
	6/15/2009	15.82	NP	-	17.51	0.0
	9/14/2009	16.07	16.04	0.03	17.28	0.0
	12/21/2009	15.35	15.34	0.01	17.99	0.0
	3/16/2010	15.27	NP	-	18.06	0.0
	6/21/2010	**15.20**	**NP**	-	**18.13**	**0.0**
	9/20/2010	**15.66**	**NP**	**-**	**17.67**	**0.0**
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
	6/23/2008	16.34	NP	-	18.48	NA
	9/22/2008	16.92	NP	-	17.90	NA
	1/5/2009	15.93	NP	-	18.89	NA
	3/16/2009	16.35	NP	-	18.47	NA
	6/15/2009	16.42	NP	-	18.40	NA
	9/14/2009	16.84	NP	-	17.98	NA
	12/21/2009	16.30	NP	-	18.52	NA
	3/16/2010	15.93	NP	-	18.89	NA
	6/21/2010	**15.78**	**NP**	**-**	**19.04**	**NA**
	9/20/2010	**16.55**	**NP**	**-**	**18.27**	**NA**

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Chevron Products 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-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	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	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	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	15.84	Trace	18.86	0.0
	3/19/2007	15.21	NP	-	19.49	0.0
	6/18/2007	6.14	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
	6/23/2008	15.93	15.90	0.03	18.79	0.0
	9/22/2008	16.61	16.59	0.02	18.11	0.0
	1/5/2009	15.70	NP	-	19.00	0.0
	3/16/2009	NM	NM	NM	NM	0.0
	6/15/2009	15.96	15.95	0.01	18.75	0.0
	9/14/2009	Inaccessible				NA
	12/21/2009	16.18	NP	-	18.52	0.0
	3/16/2010	15.45	NP	-	19.25	0.0
	6/21/2010	**15.34**	**NP**	**-**	**19.36**	**0.0**
	9/20/2010	**16.17**	**NP**	**-**	**18.53**	**0.0**
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	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
	6/23/2008	16.05	NP	-	19.28	NA
	9/22/2008	16.84	NP	-	18.49	NA
	1/5/2009	15.70	NP	-	19.63	NA
	3/16/2009	16.10	NP	-	19.23	NA
	6/15/2009	16.12	NP	-	19.21	NA
	9/14/2009	16.82	NP	-	18.51	NA
	12/21/2009	16.26	NP	-	19.07	NA
	3/16/2010	15.50	NP	-	19.83	NA
	6/21/2010	**15.39**	**NP**	**-**	**19.94**	**NA**
	9/20/2010	**16.42**	**NP**	**-**	**18.91**	**NA**

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Chevron Products 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-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	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	NA
	12/17/2007	15.93	NP	-	19.35	NA
	1/22/2008	15.15	NP	-	20.13	NA
	3/24/2008	15.30	NP	-	19.98	NA
	6/23/2008	15.83	NP	-	19.45	NA
	9/22/2008	16.14	NP	-	19.14	NA
	1/5/2009	15.82	NP	-	19.46	NA
	3/16/2009	15.90	NP	-	19.38	NA
	6/15/2009	15.91	NP	-	19.37	NA
	9/14/2009	16.20	NP	-	19.08	NA
	12/21/2009	NM	NM	-	NM	NA
	3/16/2010	15.58	NP	-	19.70	NA
	6/21/2010	**15.40**	**NP**	**-**	**19.88**	**NA**
	9/20/2010	**16.12**	**NP**	**-**	**19.16**	**NA**
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	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
	6/23/2008	15.54	NP	-	20.46	NA
	9/22/2008	16.44	NP	-	19.56	NA
	1/5/2009	14.74	NP	-	21.26	NA
	3/16/2009	15.78	NP	-	20.22	NA
	6/15/2009	15.87	NP	-	20.13	NA
	9/14/2009	16.53	NP	-	19.47	NA
	12/21/2009	16.15	NP	-	19.85	NA
	3/16/2010	15.31	NP	-	20.69	NA
	6/21/2010	**15.02**	**NP**	**-**	**20.98**	**NA**
	9/20/2010	**16.02**	**NP**	**-**	**19.98**	**NA**

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Chevron Products 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-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	19.27	0.005
	3/7/2005	15.77	15.77	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
	6/23/2008	15.50	15.49	0.01	19.90	0.0
	9/22/2008	16.38	16.37	0.01	19.02	0.0
	1/5/2009	15.19	15.18	0.01	20.21	0.0
	3/16/2009	15.50	15.48	0.02	19.91	0.0
	6/15/2009	15.58	15.55	0.03	19.83	0.0
	9/14/2009	16.34	16.33	0.01	19.06	0.0
	12/21/2009	15.79	15.78	0.01	19.61	0.0
	3/16/2010	14.97	14.96	0.01	20.43	0.0
	6/21/2010	**14.72**	**NP**	-	**20.67**	**0.0**
	9/20/2010	**15.89**	**NP**	-	**19.50**	**0.0**
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				

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Chevron Products 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-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
	6/23/2008	15.91	NP	-	18.43	NA
	9/22/2008	16.54	NP	-	17.80	NA
	1/5/2009	15.49	NP	-	18.85	NA
	3/16/2009	15.96	NP	-	18.38	NA
	6/15/2009	15.93	NP	-	18.41	NA
	9/14/2009	16.48	NP	-	17.86	NA
	12/21/2009	15.85	NP	-	18.49	NA
	3/16/2010	16.41	NP	-	17.93	NA
	6/21/2010	**16.30**	**NP**	**-**	**18.04**	**NA**
	9/20/2010	**16.07**	**NP**	**-**	**18.27**	**NA**
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	2.56	NP	-	19.13	NA
	6/23/2008	3.10	NP	-	18.59	NA
	9/22/2008	3.93	NP	-	17.76	NA
	1/5/2009	2.29	NP	-	19.40	NA
	3/16/2009	2.80	NP	-	18.89	NA
	6/15/2009	3.25	NP	-	18.44	NA
	9/14/2009	3.98	NP	-	17.71	NA
	12/21/2009	3.20	NP	-	18.49	NA
	3/16/2010	2.64	NP	-	19.05	NA
	6/21/2010	**2.51**	**NP**	**-**	**19.18**	**NA**
	9/20/2010	**3.31**	**NP**	**-**	**18.38**	**NA**

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Chevron Products 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-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
	6/23/2008	14.66	NP	-	19.65	NA
	9/22/2008	15.51	NP	-	18.80	NA
	1/5/2009	14.24	NP	-	20.07	NA
	3/16/2009	14.70	NP	-	19.61	NA
	6/15/2009	14.78	NP	-	19.53	NA
	9/14/2009	15.50	NP	-	18.81	NA
	12/21/2009	NM	NM	-	NM	NA
	3/16/2010	14.15	NP	-	20.16	NA
	6/21/2010	**13.96**	**NP**	**-**	**20.35**	**NA**
	9/20/2010	**15.10**	**NP**	**-**	**19.21**	**NA**
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	-	28.59	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	6.20	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----------				
	6/23/2008	NM	NM	NM	NM	NA
	9/22/2008	NM	NM	NM	NM	NA
	1/5/2009	NM	NM	NM	NM	NA
	3/16/2009	NM	NM	NM	NM	NA
	6/15/2009	NM	NM	NM	NM	NA
	9/14/2009	NM	NM	NM	NM	NA
	12/21/2009	NM	NM	NM	NM	NA
	3/16/2010	NM	NM	NM	NM	NA
	6/21/2010	**NM**	**NM**	**NM**	**NM**	**NA**
	9/20/2010	**NM**	**NM**	**NM**	**NM**	**NA**

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Chevron Products 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-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	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	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	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	13.86	Trace	21.75	NA
	12/17/2007	12.43	NP	-	23.18	NA
	3/24/2008	11.70	NP	-	23.91	NA
	6/23/2008	12.44	12.43	0.01	23.18	NA
	9/22/2008	13.54	13.50	0.04	22.10	NA
	1/5/2009	11.79	11.72	0.07	23.88	0.0
	3/16/2009	12.25	12.20	0.05	23.40	0.0
	6/15/2009	12.35	12.30	0.05	23.30	0.0
	9/14/2009	13.35	13.31	0.04	22.29	0.0
	12/21/2009	12.13	12.10	0.03	23.50	0.0
	3/16/2010	10.02	NP	-	25.59	0.0
	6/21/2010	**11.17**	**11.16**	**0.01**	**24.45**	**0.0**
	9/20/2010	**13.01**	**12.98**	**0.03**	**22.62**	**0.0**
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	NM	-
	2/20/2001	11.30	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	10.74	Trace	24.83	NA
	3/19/2007	-	-	-	-	-
	6/18/2007	11.40	11.40	Trace	24.17	NA
	9/17/2007	12.59	12.59	Trace	22.98	NA
	12/17/2007	Inaccessible				
	3/24/2008	10.00	10.00	Trace	25.57	NA
	6/23/2008	10.80	NP	-	24.77	NA
	9/22/2008	12.19	12.18	0.01	23.39	-
	1/5/2009	9.79	NP	-	25.78	NA
	3/16/2009	10.77	NP	-	24.80	NA
	6/15/2009	10.79	NP	-	24.78	NA
	9/14/2009	11.89	NP	-	23.68	NA
	12/21/2009	NM	NM	NM	NM	NA
	3/16/2010	11.78	11.76	0.02	23.81	0.0
	6/21/2010	**9.45**	**NP**	**-**	**26.12**	**NA**
	9/20/2010	**11.50**	**NP**	**-**	**24.07**	**NA**

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Chevron Products 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-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	26.51	NA
	6/23/2008	7.12	NP	-	26.02	NA
	9/22/2008	8.81	NP	-	24.33	NA
	1/5/2009	6.62	NP	-	26.52	NA
	3/16/2009	5.80	NP	-	27.34	NA
	6/15/2009	6.69	NP	-	26.45	NA
	9/14/2009	7.85	NP	-	25.29	NA
	12/21/2009	5.98	NP	-	27.16	NA
	3/16/2010	6.11	NP	-	27.03	NA
	6/21/2010	**7.07**	**NP**	**-**	**26.07**	**NA**
	9/20/2010	**7.50**	**NP**	**-**	**25.64**	**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
	6/23/2008	5.92	NP	-	-	NA
	9/22/2008	7.07	7.07	Sheen	-	NA
	1/5/2009	4.40	4.40	Sheen	-	NA
	3/16/2009	Inaccessible				
	6/15/2009	5.94	NP	-	-	NA
	9/14/2009	7.16	NP	-	-	NA
	12/21/2009	4.95	NP	-	-	NA
	3/16/2010	4.96	NP	-	-	NA
	6/21/2010	**4.90**	**NP**	**-**	**-**	**NA**
	9/20/2010	**5.57**	**NP**	**-**	**-**	**NA**

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Chevron Products 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
	6/23/2008	5.53	NP	-	30.19	NA
	9/22/2008	6.98	NP	-	28.74	NA
	1/5/2009	3.10	NP	-	32.62	NA
	3/16/2009	3.78	NP	-	31.94	NA
	6/15/2009	6.02	NP	-	29.70	NA
	9/14/2009	6.98	NP	-	28.74	NA
	12/21/2009	3.76	NP	-	31.96	NA
	3/16/2010	3.43	NP	-	32.29	NA
	6/21/2010	**4.80**	**NP**	**-**	**30.92**	**NA**
	9/20/2010	**5.65**	**NP**	**-**	**30.07**	**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	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	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	4.54	4.50	0.04	31.06	0.08
	6/23/2008	5.64	5.60	0.04	29.96	0.01
	9/22/2008	7.65	7.42	0.23	28.10	0.08
	1/5/2009	4.75	4.29	0.46	31.19	0.40
	3/16/2009	5.31	5.27	0.04	30.29	0.03
	6/15/2009	6.20	6.15	0.05	29.41	0.08
	9/14/2009	7.69	7.62	0.07	27.94	0.15
	12/21/2009	5.88	5.32	0.56	30.14	0.00
	3/16/2010	5.11	5.10	0.01	30.47	0.37
	6/21/2010	**4.58**	**4.58**	**Trace**	**30.99**	**0.03**
	9/20/2010	**6.57**	**6.49**	**0.08**	**29.06**	**0.08**

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Chevron Products 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	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				NA
	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
	6/23/2008	2.10	NP	-	32.33	NA
	9/22/2008	4.40	4.30	0.10	30.11	NA
	1/5/2009	3.57	3.57	Sheen	30.86	NA
	3/16/2009	5.45	NP	-	28.98	NA
	6/15/2009	Inaccessible				NA
	9/14/2009	4.01	NP	-	30.42	NA
	12/21/2009	3.98	NP	-	30.45	NA
	3/16/2010	3.44	NP	-	30.99	NA
	6/21/2010	**1.60**	**1.60**	**Sheen**	**32.83**	**NA**
	9/20/2010	**2.04**	**NP**	**-**	**32.39**	**NA**

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Chevron Products 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
	6/23/2008	5.72	NP	-	29.87	NA
	9/22/2008	Inaccessible				NA
	1/5/2009	3.98	NP	-	31.61	NA
	3/16/2009	5.29	NP	-	30.30	NA
	6/15/2009	5.55	NP	-	30.04	NA
	9/14/2009	6.64	NP	-	28.95	NA
	12/21/2009	5.00	NP	-	30.59	NA
	3/16/2010	4.60	NP	-	30.99	NA
	6/21/2010	**4.65**	**NP**	**-**	**30.94**	**NA**
	9/20/2010	**6.06**	**NP**	**-**	**29.53**	**NA**

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Chevron Products 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
Chevron Products 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
	6/23/2008	5.80	NP	-	29.63	NA
	9/22/2008	7.09	NP	-	28.34	NA
	1/5/2009	4.38	NP	-	31.05	NA
	3/16/2009	5.43	NP	-	30.00	NA
	6/15/2009	5.86	NP	-	29.57	NA
	9/14/2009	6.96	NP	-	28.47	NA
	12/21/2009	5.63	NP	-	29.80	NA
	3/16/2010	5.06	NP	-	30.37	NA
	6/21/2010	**5.37**	**NP**	**-**	**30.06**	**NA**
	9/20/2010	**6.48**	**NP**	**-**	**28.95**	**NA**

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Chevron Products 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	24.96	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
	6/26/2006	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
	6/23/2008	10.10	9.99	0.11	25.41	0.37
	9/22/2008	11.71	NP	-	23.71	0.29
	1/5/2009	8.71	8.64	0.07	26.77	0.04
	3/16/2009	10.08	9.95	0.13	25.44	0.00
	6/15/2009	10.22	10.07	0.15	25.32	0.16
	9/14/2009	11.35	11.24	0.11	24.16	0.08
	12/21/2009	9.72	9.48	0.24	25.89	0.15
	3/16/2010	9.43	9.08	0.35	26.27	0.54
	6/21/2010	**8.80**	**8.57**	**0.23**	**26.80**	**0.50**
	9/20/2010	**10.98**	**10.90**	**0.08**	**24.50**	**0.21**

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Chevron Products 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	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
	6/23/2008	11.64	NP	-	23.13	NA
	9/22/2008	12.22	NP	-	22.55	NA
	1/5/2009	9.97	9.97	Trace	24.80	NA
	3/16/2009	11.56	NP	-	23.21	NA
	6/15/2009	11.55	NP	-	23.22	NA
	9/14/2009	12.18	NP	-	22.59	NA
	12/21/2009	11.16	NP	-	23.61	NA
	3/16/2010	10.62	NP	-	24.15	NA
	6/21/2010	**10.28**	**NP**	**-**	**24.49**	**NA**
	9/20/2010	**11.90**	**NP**	**-**	**22.87**	**NA**

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Chevron Products 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	6.90	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	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	7.51	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	6.52	NP	-	27.94	NA
	6/23/2008	7.45	NP	-	27.01	NA
	9/22/2008	8.98	NP	-	25.48	NA
	1/5/2009	6.48	NP	-	27.98	NA
	3/16/2009	7.36	NP	-	27.10	NA
	6/15/2009	7.52	NP	-	26.94	NA
	9/14/2009	8.97	NP	-	25.49	NA
	12/21/2009	NM	NM	NM	NM	NA
	3/16/2010	6.72	NP	-	27.74	NA
	6/21/2010	**6.51**	**NP**	**-**	**27.95**	**NA**
	9/20/2010	**8.52**	**NP**	**-**	**25.94**	**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
Chevron Products 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	4.45	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	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	-	29.55	0.00
	3/24/2008	4.89	4.83	0.06	30.65	0.70
	6/23/2008	6.21	6.00	0.21	29.45	0.57
	9/22/2008	7.97	7.49	0.48	27.90	0.70
	1/5/2009	5.05	4.60	0.45	30.80	0.30
	3/16/2009	6.24	5.69	0.55	29.69	0.42
	6/15/2009	6.42	5.98	0.44	29.42	0.11
	9/14/2009	7.40	7.18	0.22	28.27	0.11
	12/21/2009	NM	NM	NM	NM	0.40
	3/16/2010	4.98	4.91	0.07	30.57	0.05
	6/21/2010	**5.82**	**5.82**	**Trace**	**29.67**	**0.11**
	9/20/2010	**6.81**	**6.72**	**0.09**	**28.75**	**0.05**

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Chevron Products 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)	8/16/1999	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
	6/23/2008	8.14	NP	-	27.00	NA
	9/22/2008	10.34	NP	-	24.80	NA
	1/5/2009	6.78	NP	-	28.36	NA
	3/16/2009	8.09	NP	-	27.05	NA
	6/15/2009	8.24	NP	-	26.90	NA
	9/14/2009	Inaccessible				NA
	12/21/2009	Inaccessible				NA
	3/16/2010	NM	NM	NM	NM	NA
	6/21/2010	**6.99**	**NP**	**-**	**28.15**	**NA**
	9/20/2010	**NM**	**NM**	**NM**	**NM**	**NA**

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Chevron Products 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-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	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
	6/23/2008	Inaccessible				NA
	9/22/2008	Inaccessible				NA
	1/5/2009	Inaccessible				NA
	3/16/2009	Inaccessible				NA
	6/15/2009	Inaccessible				NA
	9/14/2009	Inaccessible				NA
	12/21/2009	Inaccessible				NA
	3/16/2010	4.86	4.45	0.41	29.58	0.00
	6/21/2010	**Inaccessible**				**NA**
	9/20/2010	**Inaccessible**				**NA**
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
	6/23/2008	Inaccessible				NA
	9/22/2008	Inaccessible				NA
	1/5/2009	Inaccessible				NA
	3/16/2009	Inaccessible				NA
	6/15/2009	Inaccessible				NA
	9/14/2009	Inaccessible				NA
	12/21/2009	Inaccessible				NA
	3/16/2010	Inaccessible				NA
	6/21/2010	**Inaccessible**				**NA**
	9/20/2010	**Inaccessible**				**NA**

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Chevron Products 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	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	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
	6/23/2008	11.37	NP	-	23.43	NA
	9/22/2008	12.48	NP	-	22.32	NA
	1/5/2009	10.36	NP	-	24.44	NA
	3/16/2009	11.34	NP	-	23.46	NA
	6/15/2009	Inaccessible				NA
	9/14/2009	12.21	NP	-	22.59	NA
	12/21/2009	11.00	NP	-	23.80	NA
	3/16/2010	10.56	NP	-	24.24	NA
	6/21/2010	**10.11**	**NP**	**-**	**24.69**	**NA**
	9/20/2010	**11.91**	**NP**	**-**	**22.89**	**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
	6/23/2008	10.42	NP	-	24.77	NA
	9/22/2008	11.82	NP	-	23.37	NA
	1/5/2009	9.70	NP	-	25.49	NA
	3/16/2009	10.25	NP	-	24.94	NA
	6/15/2009	Inaccessible				NA
	9/14/2009	11.50	NP	-	23.69	NA
	12/21/2009	11.14	NP	-	24.05	NA
	3/16/2010	9.60	NP	-	25.59	NA
	6/21/2010	**9.09**	**NP**	**-**	**26.10**	**NA**
	9/20/2010	**11.07**	**NP**	**-**	**24.12**	**NA**

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Chevron Products 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
	6/23/2008	12.98	NP	-	23.37	NA
	9/22/2008	Inaccessible				NA
	1/5/2009	11.39	NP	-	24.96	NA
	3/16/2009	12.75	NP	-	23.60	NA
	6/15/2009	12.44	NP	-	23.91	NA
	9/14/2009	13.56	13.55	0.01	22.80	NA
	12/21/2009	NM	NM	NM	NM	NA
	3/16/2010	12.04	NP	-	24.31	NA
	6/21/2010	**11.50**	**NP**	**-**	**24.85**	**NA**
	9/20/2010	**13.19**	**NP**	**-**	**23.16**	**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
	6/23/2008	11.91	NP	-	24.36	NA
	9/22/2008	NM	NM	NM	NM	NA
	1/5/2009	11.00	NP	-	25.27	NA
	3/16/2009	11.80	NP	-	24.47	NA
	6/15/2009	13.81	NP	-	22.46	NA
	9/14/2009	12.81	NP	-	23.46	NA
	12/21/2009	NM	NM	NM	NM	NA
(36.27)	3/16/2010	11.80	NP	-	24.47	NA
	6/21/2010	**11.24**	**NP**	**-**	**25.03**	**NA**
	9/20/2010	**12.19**	**NP**	**-**	**24.08**	**NA**

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Chevron Products 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
	6/23/2008	13.73	NP	-	22.48	NA
	9/22/2008	14.81	NP	-	21.40	NA
	1/5/2009	12.55	NP	-	23.66	NA
	3/16/2009	13.81	NP	-	22.40	NA
	6/15/2009	14.60	NP	-	21.61	NA
N/A	9/14/2009	14.35	NP	-	NM	NA
N/A	12/21/2009	13.54	NP	-	NM	NA
	3/16/2010	13.16	NP	-	NM	NA
	6/21/2010	**12.78**	**NP**	**-**	**23.43**	**NA**
	9/20/2010	**14.12**	**NP**	**-**	**22.09**	**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	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
	6/23/2008	12.70	NP	-	23.62	NA
	9/22/2008	13.91	NP	-	22.41	NA
	1/5/2009	12.11	NP	-	24.21	NA
	3/16/2009	12.84	12.84	Trace	23.48	NA
	6/15/2009	12.60	NP	-	23.72	NA
	9/14/2009	13.30	NP	-	23.02	NA
	12/21/2009	13.67	NP	-	22.65	NA
	3/16/2010	12.02	NP	-	24.30	NA
	6/21/2010	**11.92**	**NP**	**-**	**24.40**	**NA**
	9/20/2010	**13.36**	**NP**	**-**	**22.96**	**NA**

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Chevron Products 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	NP	-	27.12	0.07
	3/24/2008	6.49	6.40	0.09	27.85	0.10
	6/23/2008	7.40	7.35	0.05	26.91	0.06
	9/22/2008	8.97	8.89	0.08	25.36	0.10
	1/5/2009	6.28	6.23	0.05	28.03	0.05
	3/16/2009	6.99	6.90	0.09	27.35	0.03
	6/15/2009	7.40	7.28	0.12	26.97	0.02
	9/14/2009	8.54	8.52	0.02	25.75	0.00
	12/21/2009	6.97	6.91	0.06	27.35	0.01
	3/16/2010	6.35	6.34	0.01	27.93	0.00
	6/21/2010	**6.31**	**6.23**	**0.08**	**28.02**	**0.05**
	9/20/2010	**7.99**	**7.97**	**0.02**	**26.30**	**0.03**
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
	6/23/2008	16.89	NP	-	16.32	NA
	9/22/2008	23.70	NP	-	9.51	NA
	1/5/2009	19.38	NP	-	13.83	NA
	3/16/2009	20.39	NP	-	12.82	NA
	6/15/2009	18.24	NP	-	14.97	NA
	9/14/2009	22.08	NP	-	11.13	NA
	12/21/2009	NM	NM	NM	NM	NA
	3/16/2010	21.06	NP	-	12.15	NA
	6/21/2010	**17.60**	**NP**	**-**	**15.61**	**NA**
	9/20/2010	**21.70**	**NP**	**-**	**11.51**	**NA**

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Chevron Products 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-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
	6/23/2008	17.20	NP	-	16.11	NA
	9/22/2008	22.41	NP	-	10.90	NA
	1/5/2009	17.60	NP	-	15.71	NA
	3/16/2009	20.34	NP	-	12.97	NA
	6/15/2009	19.38	NP	-	13.93	NA
	9/14/2009	21.40	NP	-	11.91	NA
	12/21/2009	NM	NM	NM	NM	NA
	3/16/2010	20.53	NP	-	12.78	NA
	6/21/2010	**17.42**	**NP**	**-**	**15.89**	**NA**
	9/20/2010	**20.23**	**NP**	**-**	**13.08**	**NA**

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Chevron Products 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	NA
	1/22/2008	15.22	NP	-	19.68	NA
	3/24/2008	15.38	NP	-	19.52	NA
	6/23/2008	15.95	NP	-	18.95	NA
	9/22/2008	16.65	NP	-	18.25	NA
	1/5/2009	15.86	NP	-	19.04	NA
	3/16/2009	16.14	NP	-	18.76	NA
	6/15/2009	15.80	NP	-	19.10	NA
	9/14/2009	16.64	NP	-	18.26	NA
	12/21/2009	NM	NM	NM	NM	NA
	3/16/2010	15.55	NP	-	19.35	NA
	6/21/2010	**15.35**	**NP**	**-**	**19.55**	**NA**
	9/20/2010	**16.28**	**NP**	**-**	**18.62**	**NA**
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
	6/23/2008	14.05	NP	-	20.82	NA
	9/22/2008	16.02	NP	-	18.85	NA
	1/5/2009	15.78	NP	-	19.09	NA
	3/16/2009	15.80	NP	-	19.07	NA
	6/15/2009	16.04	NP	-	18.83	NA
	9/14/2009	16.08	NP	-	18.79	NA
	12/21/2009	NM	NM	NM	NM	NA
	3/16/2010	14.79	NP	-	20.08	NA
	6/21/2010	**13.38**	**NP**	**-**	**21.49**	**NA**
	9/20/2010	**15.57**	**NP**	**-**	**19.30**	**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
	6/23/2008	13.46	NP	-	21.29	NA
	9/22/2008	15.52	NP	-	19.23	NA
	1/5/2009	13.30	NP	-	21.45	NA
	3/16/2009	14.16	NP	-	20.59	NA
	6/15/2009	14.23	NP	-	20.52	NA
	9/14/2009	16.18	NP	-	18.57	NA
	12/21/2009	NM	NM	NM	NM	NA
	3/16/2010	13.83	NP	-	20.92	NA
	6/21/2010	**12.72**	**NP**	**-**	**22.03**	**NA**
	9/20/2010	**14.57**	**NP**	**-**	**20.18**	**NA**

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Chevron Products 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-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
	6/23/2008	14.66	NP	-	19.53	NA
	9/22/2008	15.49	NP	-	18.70	NA
	1/5/2009	14.20	NP	-	19.99	NA
	3/16/2009	14.68	NP	-	19.51	NA
	6/15/2009	14.76	NP	-	19.43	NA
	9/14/2009	14.48	NP	-	19.71	NA
	12/21/2009	14.87	NP	-	19.32	NA
	3/16/2010	14.12	NP	-	20.07	NA
	6/21/2010	**13.95**	**NP**	**-**	**20.24**	**NA**
	9/20/2010	**15.05**	**NP**	**-**	**19.14**	**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
	6/23/2008	14.39	NP	-	19.93	NA
	9/22/2008	17.16	NP	-	17.16	NA
	1/5/2009	14.40	NP	-	19.92	NA
	3/16/2009	16.30	NP	-	18.02	NA
	6/15/2009	15.32	NP	-	19.00	NA
	9/14/2009	17.16	NP	-	17.16	NA
	12/21/2009	16.45	NP	-	17.87	NA
	3/16/2010	16.01	NP	-	18.31	NA
	6/21/2010	**14.40**	**NP**	**-**	**19.92**	**NA**
	9/20/2010	**15.95**	**NP**	**-**	**18.37**	**NA**

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Chevron Products 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-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
	6/23/2008	13.86	NP	-	19.22	NA
	9/22/2008	14.67	NP	-	18.41	NA
	1/5/2009	13.11	NP	-	19.97	NA
	3/16/2009	13.72	NP	-	19.36	NA
	6/15/2009	13.96	NP	-	19.12	NA
	9/14/2009	14.65	NP	-	18.43	NA
	12/21/2009	13.89	NP	-	19.19	NA
	3/16/2010	13.29	NP	-	19.79	NA
	6/21/2010	**13.32**	**NP**	**-**	**19.76**	**NA**
	9/20/2010	**14.20**	**NP**	**-**	**18.88**	**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
	6/23/2008	14.45	NP	-	17.88	NA
	9/22/2008	18.74	NP	-	13.59	NA
	1/5/2009	14.55	NP	-	17.78	NA
	3/16/2009	16.89	NP	-	15.44	NA
	6/15/2009	15.99	NP	-	16.34	NA
	9/14/2009	18.54	NP	-	13.79	NA
	12/21/2009	16.80	NP	-	15.53	NA
	3/16/2010	16.95	NP	-	15.38	NA
	6/21/2010	**14.39**	**NP**	**-**	**17.94**	**NA**
	9/20/2010	**18.16**	**NP**	**-**	**14.17**	**NA**
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
	6/23/2008	2.97	NP	-	18.61	NA
	9/22/2008	3.74	NP	-	17.84	NA
	1/5/2009	2.18	NP	-	19.40	NA
	3/16/2009	2.70	NP	-	18.88	NA
	6/15/2009	3.14	NP	-	18.44	NA
	9/14/2009	3.74	NP	-	17.84	NA
	12/21/2009	2.80	NP	-	18.78	NA
	3/16/2010	2.49	NP	-	19.09	NA
	6/21/2010	**2.51**	**NP**	**-**	**19.07**	**NA**
	9/20/2010	**3.20**	**NP**	**-**	**18.38**	**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
	6/23/2008	5.54	NP	-	16.16	NA
	9/22/2008	10.73	NP	-	10.97	NA
	1/5/2009	5.58	NP	-	16.12	NA
	3/16/2009	8.66	NP	-	13.04	NA
	6/15/2009	7.50	NP	-	14.20	NA
	9/14/2009	10.73	NP	-	10.97	NA
	12/21/2009	9.65	NP	-	12.05	NA
	3/16/2010	8.85	NP	-	12.85	NA
	6/21/2010	**5.82**	**NP**	**-**	**15.88**	**NA**
	9/20/2010	**9.97**	**NP**	**-**	**11.73**	**NA**

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Chevron Products 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-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
	6/23/2008	3.26	NP	-	18.65	NA
	9/22/2008	4.08	NP	-	17.83	NA
	1/5/2009	2.45	NP	-	19.46	NA
	3/16/2009	2.97	NP	-	18.94	NA
	6/15/2009	3.44	NP	-	18.47	NA
	9/14/2009	4.03	NP	-	17.88	NA
	12/21/2009	NM	NM	NM	NM	NA
	3/16/2010	2.78	NP	-	19.13	NA
	6/21/2010	**2.71**	**NP**	**-**	**19.20**	**NA**
	9/20/2010	**3.49**	**NP**	**-**	**18.42**	**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
	6/23/2008	5.72	NP	-	16.36	NA
	9/22/2008	10.47	NP	-	11.61	NA
	1/5/2009	6.03	NP	-	16.05	NA
	3/16/2009	8.73	NP	-	13.35	NA
	6/15/2009	7.92	NP	-	14.16	NA
	9/14/2009	10.40	NP	-	11.68	NA
	12/21/2009	NM	NM	NM	NM	NA
	3/16/2010	8.85	NP	-	13.23	NA
	6/21/2010	**5.73**	**NP**	**-**	**16.35**	**NA**
	9/20/2010	**9.54**	**NP**	**-**	**12.54**	**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
	6/23/2008	7.86	NP	-	13.90	NA
	9/22/2008	11.38	NP	-	10.38	NA
	1/5/2009	5.86	NP	-	15.90	NA
	3/16/2009	9.20	NP	-	12.56	NA
	6/15/2009	7.90	NP	-	13.86	NA
	9/14/2009	10.50	NP	-	11.26	NA
	12/21/2009	NM	NM	NM	NM	NA
	3/16/2010	9.48	NP	-	12.28	NA
	6/21/2010	**6.24**	**NP**	**-**	**15.52**	**NA**
	9/20/2010	**10.58**	**NP**	**-**	**11.18**	**NA**

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Chevron Products 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-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
	6/23/2008	3.00	NP	-	13.86	NA
	9/22/2008	7.01	NP	-	9.85	NA
	1/5/2009	4.69	NP	-	12.17	NA
	3/16/2009	6.23	NP	-	10.63	NA
	6/15/2009	4.67	NP	-	12.19	NA
	9/14/2009	6.45	NP	-	10.41	NA
	12/21/2009	5.73	NP	-	11.13	NA
	3/16/2010	7.56	NP	-	9.30	NA
	6/21/2010	**3.62**	**NP**	**-**	**13.24**	**NA**
	9/20/2010	**6.07**	**NP**	**-**	**10.79**	**NA**
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
	6/23/2008	11.74	NP	-	22.92	NA
	9/22/2008	7.90	NP	-	26.76	NA
	1/5/2009	6.89	NP	-	27.77	NA
	3/16/2009	9.43	9.42	0.01	25.24	NA
	6/15/2009	11.09	NP	-	23.57	NA
	9/14/2009	Inaccessible				NA
	12/21/2009	Inaccessible				NA
	3/16/2010	7.15	NP	-	27.51	NA
	6/21/2010	**7.37**	**NP**	**-**	**27.29**	**NA**
	9/20/2010	**12.42**	**NP**	**-**	**22.24**	**NA**

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Chevron Products 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	0.25	24.25	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	-	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	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	NP	-	25.69	NA
	3/24/2008	10.01	9.54	0.47	25.35	NA
	6/23/2008	10.96	10.84	0.12	24.12	0.1
	9/22/2008	12.20	12.02	0.18	22.92	NA
	1/5/2009	8.24	8.23	0.01	26.75	0.01
	3/16/2009	10.85	10.51	0.34	24.40	0.10
	6/15/2009	10.55	NP	-	24.43	0.00
	9/14/2009	11.76	NP	-	23.22	0.01
	12/21/2009	9.98	9.93	0.05	25.04	0.01
	3/16/2010	8.54	8.53	0.01	26.45	0.00
	6/21/2010	**8.23**	**NP**	**-**	**26.75**	**0.00**
	9/20/2010	**11.52**	**11.20**	**0.32**	**23.72**	**0.00**
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	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	23.86	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	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
	6/23/2008	11.33	-	-	23.75	NA
	9/22/2008	11.89	11.88	0.01	23.20	NA
	1/5/2009	10.94	10.85	0.09	24.21	0.00
	3/16/2009	11.20	NP	-	23.88	0.00
	6/15/2009	11.13	NP	-	23.95	0.00
	9/14/2009	11.76	NP	-	23.32	0.00
	12/21/2009	11.00	NP	-	24.08	0.00
	3/16/2010	10.59	10.58	0.01	24.50	0.00
	6/21/2010	**10.26**	**10.25**	**0.01**	**24.83**	**0.00**
	9/20/2010	**11.49**	**NP**	**-**	**23.59**	**0.00**

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Chevron Products 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	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	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
	6/23/2008	12.01	12.01	Trace	23.06	NA
	9/22/2008	12.87	12.78	0.09	22.27	NA
	1/5/2009	NM	NM	NM	NM	-
	3/16/2009	11.90	11.81	0.09	23.24	NA
	6/15/2009	11.85	11.76	0.09	23.29	NA
	9/14/2009	12.79	12.75	0.04	22.31	NA
	12/21/2009	11.53	11.48	0.05	23.58	NA
	3/16/2010	10.20	10.17	0.03	24.89	NA
	6/21/2010	**NM**	**NM**	**NM**	**NM**	**-**
	9/20/2010	**12.49**	**NP**	**-**	**22.58**	**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	11.42	Trace	23.43	NA
	3/19/2007	NM	NM	NM	NM	-
	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	-
	6/23/2008	11.58	NP	-	23.27	-
	9/22/2008	12.55	NP	-	22.30	-
	1/5/2009	NM	NM	NM	NM	-
	3/16/2009	11.42	NP	-	23.43	-
	6/15/2009	Inaccessible				NA
	9/14/2009	12.39	NP	-	22.46	-
	12/21/2009	11.25	11.24	0.01	23.61	-
	3/16/2010	NM	NM	NM	NM	-
	6/21/2010	**10.27**	**NP**	-	**24.58**	**-**
	9/20/2010	**12.06**	**NP**	-	**22.79**	**-**

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TABLE 1A
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Chevron Products 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	16.86	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	16.45	Trace	17.90	NA
	12/17/2007	15.62	NP	-	18.73	NA
	1/22/2008	14.94	NP	-	19.41	NA
	3/24/2008	15.02	NP	-	19.33	NA
	6/23/2008	15.50	NP	-	18.85	NA
	9/22/2008	16.19	NP	-	18.16	NA
	1/5/2009	15.21	NP	-	19.14	NA
	3/16/2009	15.50	NP	-	18.85	NA
	6/15/2009	15.63	NP	-	18.72	NA
	9/14/2009	16.04	NP	-	18.31	NA
	12/21/2009	15.58	NP	-	18.77	NA
	3/16/2010	15.14	NP	-	19.21	NA
	6/21/2010	**15.94**	**NP**	**-**	**18.41**	**NA**
	9/20/2010	**13.75**	**NP**	**-**	**20.60**	**NA**

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 bailer
- = 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 RECOVERY DATA
Kinder Morgan Liquid Terminals, LLC - 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
	12/172007	4.74	NP	-	30.69	NA
	3/24/2008	3.78	NP	-	31.65	NA
	6/23/2008	5.53	NP	-	29.90	NA
	9/22/2008	7.41	NP	-	28.02	NA
	1/5/2009	3.64	NP	-	31.79	NA
	3/16/2009	4.77	NP	-	30.66	NA
	6/15/2009	5.28	NP	-	30.15	NA
	9/14/2009	6.91	NP	-	28.52	NA
	12/21/2009	4.45	NP	-	30.98	NA
	3/16/2010	3.71	NP	-	31.72	NA
	6/21/2010	**3.79**	**NP**	**-**	**31.64**	**NA**
	9/20/2010	**5.71**	**NP**	**-**	**29.72**	**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
	6/23/2008	7.24	NP	-	28.53	NA
	9/22/2008	9.01	NP	-	26.76	NA
	1/5/2009	5.98	NP	-	29.79	NA
	3/16/2009	7.19	NP	-	28.58	NA
	6/15/2009	7.39	NP	-	28.38	NA
	9/14/2009	9.09	NP	-	26.68	NA
	12/21/2009	7.37	NP	-	28.40	NA
	3/16/2010	5.82	NP	-	29.95	NA
	6/21/2010	**5.64**	**NP**	**-**	**30.13**	**NA**
	9/20/2010	**8.04**	**NP**	**-**	**27.73**	**NA**

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TABLE 1B
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Kinder Morgan Liquid Terminals, LLC - 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
	6/23/2008	8.46	NP	-	27.56	NA
	9/22/2008	10.10	NP	-	25.92	NA
	1/5/2009	7.31	NP	-	28.71	NA
	3/16/2009	8.33	NP	-	27.69	NA
	6/15/2009	8.58	NP	-	27.44	NA
	9/14/2009	10.06	NP	-	25.96	NA
	12/21/2009	8.58	NP	-	27.44	NA
	3/16/2010	6.97	NP	-	29.05	NA
	6/21/2010	**6.85**	**NP**	**-**	**29.17**	**NA**
	9/20/2010	**9.20**	**NP**	**-**	**26.82**	**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
	6/23/2008	7.93	NP	-	28.46	NA
	9/22/2008	9.68	NP	-	26.71	NA
	1/5/2009	6.88	NP	-	29.51	NA
	3/16/2009	7.86	NP	-	28.53	NA
	6/15/2009	8.08	NP	-	28.31	NA
	9/14/2009	9.65	NP	-	26.74	NA
	12/21/2009	8.09	NP	-	28.30	NA
	3/16/2010	5.35	NP	-	31.04	NA
	6/21/2010	**6.14**	**NP**	**-**	**30.25**	**NA**
	9/20/2010	**8.70**	**NP**	**-**	**27.69**	**NA**

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TABLE 1B
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Kinder Morgan Liquid Terminals, LLC - 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	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
	6/23/2008	6.82	NP	-	26.70	NA
	9/22/2008	9.02	NP	-	24.50	NA
	1/5/2009	6.06	NP	-	27.46	NA
	3/16/2009	6.65	NP	-	26.87	NA
	6/15/2009	7.00	NP	-	26.52	NA
	9/14/2009	8.83	NP	-	24.69	NA
	12/21/2009	7.27	NP	-	26.25	NA
	3/16/2010	5.45	NP	-	28.07	NA
	6/21/2010	**4.68**	**NP**	**-**	**28.84**	**NA**
	9/20/2010	**7.72**	**NP**	**-**	**25.80**	**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	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	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	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	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	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	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
	6/23/2008	5.20	5.20	sheen	28.14	0.02
	9/22/2008	6.81	6.81	sheen	26.53	0.03
	1/5/2009	3.99	NP	-	29.35	0.03
	3/16/2009	5.10	NP	-	28.24	0.03
	6/15/2009	5.27	5.27	sheen	28.07	0.01
	9/14/2009	6.80	NP	-	26.54	0.02
	12/21/2009	5.31	5.31	sheen	28.03	0.05
	3/16/2010	3.91	3.91	sheen	29.43	0.01
	6/21/2010	**3.62**	**NP**	**-**	**29.72**	**0.01**
	9/20/2010	**5.85**	**5.85**	**sheen**	**27.49**	**0.01**

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TABLE 1B
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Kinder Morgan Liquid Terminals, LLC - 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	NM	NM	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
	6/23/2008	9.30	9.11	0.19	24.97	0.25
	9/22/2008	10.51	10.26	0.25	23.81	0.10
	1/5/2009	8.93	8.93	0.00	25.19	1.00
	3/16/2009	9.12	9.10	0.02	25.02	0.04
	6/15/2009	9.35	9.20	0.15	24.89	0.09
	9/14/2009	10.42	10.36	0.06	23.75	0.07
	12/21/2009	9.39	9.39	sheen	24.73	0.10
	3/16/2010	7.94	7.94	sheen	26.18	0.02
	6/21/2010	**7.76**	**7.76**	**sheen**	**26.36**	**0.01**
	9/20/2010	**9.61**	**9.61**	**sheen**	**24.51**	**0.02**
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
	6/23/2008	8.22	NP	-	25.73	NA
	9/22/2008	9.69	NP	-	24.26	NA
	1/5/2009	7.98	NP	-	25.97	NA
	3/16/2009	8.30	NP	-	25.65	NA
	6/15/2009	8.43	NP	-	25.52	NA
	9/14/2009	9.71	NP	-	24.24	NA
	12/21/2009	8.59	NP	-	25.36	NA
	3/16/2010	6.95	NP	-	27.00	NA
	6/21/2010	**6.61**	**NP**	**-**	**27.34**	**NA**
	9/20/2010	**8.91**	**NP**	**-**	**25.04**	**NA**

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TABLE 1B
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Kinder Morgan Liquid Terminals, LLC - 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
	6/23/2008	10.32	NP	-	26.21	NA
	9/22/2008	11.73	NP	-	24.80	NA
	1/5/2009	10.77	NP	-	25.76	NA
	3/16/2009	10.38	NP	-	26.15	NA
	6/15/2009	10.46	NP	-	26.07	NA
	9/14/2009	11.73	NP	-	24.80	NA
	12/21/2009	11.01	NP	-	25.52	NA
	3/16/2010	9.26	NP	-	27.27	NA
	6/21/2010	**8.66**	**NP**	**-**	**27.87**	**NA**
	9/20/2010	**10.68**	**NP**	**-**	**25.85**	**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
	6/23/2008	9.97	NP	-	25.85	NA
	9/22/2008	11.65	NP	-	24.17	NA
	1/5/2009	9.27	NP	-	26.55	NA
	3/16/2009	9.91	NP	-	25.91	NA
	6/15/2009	10.11	NP	-	25.71	NA
	9/14/2009	11.67	NP	-	24.15	NA
	12/21/2009	10.13	NP	-	25.69	NA
	3/16/2010	8.43	NP	-	27.39	NA
	6/21/2010	**8.16**	**NP**	**-**	**27.66**	**NA**
	9/20/2010	**10.64**	**NP**	**-**	**25.18**	**NA**

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TABLE 1B
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Kinder Morgan Liquid Terminals, LLC - 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
	6/23/2008	6.64	NP	-	29.83	NA
	9/22/2008	8.27	NP	-	28.20	NA
	1/5/2009	5.31	NP	-	31.16	NA
	3/16/2009	6.13	NP	-	30.34	NA
	6/15/2009	7.04	NP	-	29.43	NA
	9/14/2009	8.51	8.45	0.06	28.01	0
	12/21/2009	5.83	NP	-	28.12	NA
	3/16/2010	5.32	NP	-	28.63	NA
	6/21/2010	**5.17**	**NP**	**-**	**28.78**	**NA**
	9/20/2010	**6.80**	**NP**	**-**	**27.15**	**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	7.06	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
	6/23/2008	7.14	NP	-	28.81	NA
	9/22/2008	9.20	NP	-	26.75	NA
	1/5/2009	5.80	NP	-	30.15	NA
	3/16/2009	6.84	NP	-	29.11	NA
	6/15/2009	7.31	NP	-	28.64	NA
	9/14/2009	9.17	NP	-	26.78	NA
	12/21/2009	7.04	NP	-	28.91	NA
	3/16/2010	5.29	NP	-	30.66	NA
	6/21/2010	**5.12**	**NP**	**-**	**30.83**	**NA**
	9/20/2010	**7.96**	**NP**	**-**	**27.99**	**NA**

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TABLE 1B
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Kinder Morgan Liquid Terminals, LLC - 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
	6/23/2008	5.69	NP	-	32.20	NA
	9/22/2008	7.20	NP	-	30.69	NA
	1/5/2009	3.78	NP	-	34.11	NA
	3/16/2009	4.76	NP	-	33.13	NA
	6/15/2009	5.77	NP	-	32.12	NA
	9/14/2009	7.24	NP	-	30.65	NA
	12/21/2009	4.52	NP	-	33.37	NA
	3/16/2010	3.99	NP	-	33.90	NA
	6/21/2010	**4.05**	**NP**	**-**	**33.84**	**NA**
	9/20/2010	**5.58**	**NP**	**-**	**32.31**	**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
	6/23/2008	5.28	NP	-	31.00	NA
	9/22/2008	6.93	NP	-	29.35	NA
	1/5/2009	3.11	NP	-	33.17	NA
	3/16/2009	4.42	NP	-	31.86	NA
	6/15/2009	5.15	NP	-	31.13	NA
	9/14/2009	6.81	NP	-	29.47	NA
	12/21/2009	4.21	NP	-	32.07	NA
	3/16/2010	3.16	NP	-	33.12	NA
	6/21/2010	**3.17**	**NP**	**-**	**33.11**	**NA**
	9/20/2010	**5.41**	**NP**	**-**	**30.87**	**NA**

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TABLE 1B
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Kinder Morgan Liquid Terminals, LLC - 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	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	-	27.99	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
	6/23/2008	6.71	NP	-	30.79	NA
	9/22/2008	9.16	NP	-	28.34	NA
	1/5/2009	3.56	NP	-	33.94	NA
	3/16/2009	5.81	NP	-	31.69	NA
	6/15/2009	6.64	NP	-	30.86	NA
	9/14/2009	8.92	NP	-	28.58	NA
	12/21/2009	4.73	NP	-	32.77	NA
	3/16/2010	3.92	NP	-	33.58	NA
	6/21/2010	**4.20**	**NP**	**-**	**33.30**	**NA**
	9/20/2010	**7.74**	**NP**	**-**	**29.76**	**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
	6/23/2008	5.45	NP	-	29.48	NA
	9/22/2008	7.52	NP	-	27.41	NA
	1/5/2009	4.23	NP	-	30.70	NA
	3/16/2009	5.19	NP	-	29.74	NA
	6/15/2009	5.57	NP	-	29.36	NA
	9/14/2009	7.46	NP	-	27.47	NA
	12/21/2009	5.36	NP	-	29.57	NA
	3/16/2010	3.81	NP	-	31.12	NA
	6/21/2010	**3.67**	**NP**	**-**	**31.26**	**NA**
	9/20/2010	**6.18**	**NP**	**-**	**28.75**	**NA**

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TABLE 1B
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Kinder Morgan Liquid Terminals, LLC - 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	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
	6/23/2008	4.88	NP	-	31.17	NA
	9/22/2008	6.11	NP	-	29.94	NA
	1/5/2009	3.84	NP	-	32.21	NA
	3/16/2009	4.14	NP	-	31.91	NA
	6/15/2009	4.94	NP	-	31.11	NA
	9/14/2009	5.94	NP	-	30.11	NA
	12/21/2009	4.27	NP	-	31.78	NA
	3/16/2010	4.07	NP	-	31.98	NA
	6/21/2010	**4.31**	**NP**	**-**	**31.74**	**NA**
	9/20/2010	**5.06**	**NP**	**-**	**30.99**	**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	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	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
	3/13/2005	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----------				
	6/23/2008	----------Cannot locate well----------				
	9/22/2008	3.88	NP	-	29.88	NA
	1/5/2009	0.79	NP	-	32.97	NA
	3/16/2009	1.58	NP	-	32.18	NA
	6/15/2009	2.52	NP	-	31.24	NA
	9/14/2009	3.70	NP	-	30.06	NA
	12/21/2009	1.48	NP	-	32.28	NA
	3/16/2010	1.51	NP	-	32.25	NA
	6/21/2010	**1.72**	**NP**	**-**	**32.04**	**NA**
	9/20/2010	**2.69**	**NP**	**-**	**31.07**	**NA**

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TABLE 1B
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Kinder Morgan Liquid Terminals, LLC - 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	5.03	sheen	28.36	0.1
	5/15/2001	4.09	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	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	5.34	sheen	28.05	NA
	9/27/2004	6.04	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	3.21	sheen	30.18	NA
	9/19/2005	6.27	6.27	sheen	27.12	NA
	12/12/2005	3.94	NP	-	29.45	NA
	3/13/2006	2.70	2.70	sheen	30.69	0
	6/27/2006	3.39	3.39	sheen	30.00	0
	9/25/2006	6.15	6.15	sheen	27.24	0
	12/11/2006	3.08	NP	-	30.31	0
	3/19/2007	2.85	2.85	sheen	30.54	0
	4/20/2007	3.08	3.08	sheen	30.31	0
	6/18/2007	4.06	4.06	sheen	29.33	0.11
	9/17/2007	6.26	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
	6/23/2008	4.37	4.35	0.02	29.04	0.01
	9/22/2008	5.91	5.91	sheen	27.48	0.01
	1/5/2009	2.38	NP	-	31.01	0.04
	3/16/2009	3.71	NP	-	29.68	0.03
	6/15/2009	4.14	4.10	0.04	29.28	0.01
	9/14/2009	5.92	5.92	sheen	27.47	0.02
	12/21/2009	3.11	NP	-	30.28	0
	3/16/2010	2.57	NP	-	30.82	0
	6/21/2010	**2.94**	**NP**	**-**	**30.45**	**0.00**
	9/20/2010	**4.42**	**4.40**	**0.02**	**28.99**	**0.02**
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
	6/23/2008	10.39	NP	-	24.37	NA
	9/22/2008	11.51	NP	-	23.25	NA
	1/5/2009	9.29	NP	-	25.47	NA
	3/16/2009	10.32	NP	-	24.44	NA
	6/15/2009	10.44	NP	-	24.32	NA
	9/14/2009	11.81	NP	-	22.95	NA
	12/21/2009	10.34	NP	-	24.42	NA
	3/16/2010	9.49	NP	-	25.27	NA
	6/21/2010	**9.08**	**NP**	**-**	**25.68**	**NA**
	9/20/2010	**11.15**	**NP**	**-**	**23.61**	**NA**

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TABLE 1B
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Kinder Morgan Liquid Terminals, LLC - 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				
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	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	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	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	31.57	NA
	6/29/2004	5.48	NP	-	30.17	NA
	9/27/2004	5.79	5.79	sheen	29.86	NA
	12/14/2004	5.60	NP	-	30.05	NA
	3/7/2005	5.40	5.40	sheen	30.25	0.1
	6/20/2005	4.81	NP	-	30.84	NA
	9/19/2005	6.03	6.03	sheen	29.62	0.1
	12/12/2005	4.37	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	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
	6/23/2008	4.83	NP	-	30.82	0
	9/22/2008	6.20	NP	-	29.45	0
	1/5/2009	3.70	NP	-	31.95	0
	3/16/2009	4.58	NP	-	31.07	0.01
	6/15/2009	4.92	NP	-	30.73	0
	9/14/2009	6.64	NP	-	29.01	0
	12/21/2009	4.27	NP	-	31.38	0
	3/16/2010	3.69	NP	-	31.96	0
	6/21/2010	**3.65**	**NP**	**-**	**32.00**	**NA**
	9/20/2010	**5.46**	**NP**	**-**	**30.19**	**NA**

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TABLE 1B
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Kinder Morgan Liquid Terminals, LLC - 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	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	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	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	6.58	sheen	29.48	NA
	9/27/2004	5.91	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	5.14	sheen	30.92	NA
	9/25/2006	6.31	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	5.20	sheen	30.86	0.2
	9/17/2007	6.27	6.27	sheen	29.79	0.21
	12/17/2007	4.72	4.72	sheen	31.34	0.01
	3/24/2008	4.04	NP	-	32.02	0.02
	6/23/2008	5.11	5.10	0.01	30.96	0.01
	9/22/2008	6.18	NP	-	29.88	0.01
	1/5/2009	4.14	4.14	sheen	31.92	0.01
	3/16/2009	4.58	NP	-	31.48	0.02
	6/15/2009	5.76	5.75	0.01	30.31	0
	9/14/2009	6.13	6.13	sheen	29.93	0.02
	12/21/2009	4.38	4.38	sheen	31.68	0.01
	3/16/2010	4.04	4.04	sheen	32.02	0
	6/21/2010	**4.25**	**4.25**	**sheen**	**31.81**	**0.01**
	9/20/2010	**5.32**	**5.31**	**0.01**	**30.75**	**0.01**
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	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	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	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	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*	30.51	0.10
	3/29/2004	5.35	5.33	0.02*	29.82	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	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	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	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
	6/23/2008	NM	5.50	-	-	0.05
	9/22/2008	5.40	5.40	sheen	29.75	0.04
	1/5/2009	4.47	4.42	0.05	30.72	0.02
	3/16/2009	NM	4.95	-	-	0.03
	6/15/2009	5.57	5.55	0.02	29.60	0.04
	9/14/2009	8.46	8.45	0.01	26.70	0.02
	12/21/2009	4.75	4.74	0.01	30.41	0.01
	3/16/2010	4.62	4.62	sheen	30.53	0.03
	6/21/2010	**4.79**	**4.77**	**0.02**	**30.38**	**0.01**
	9/20/2010	**-****	**5.62**	**-**	**-**	**0.01**

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TABLE 1B
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Kinder Morgan Liquid Terminals, LLC - 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
	6/23/2008	10.94	NP	-	23.79	NA
	9/22/2008	12.49	NP	-	22.24	NA
	1/5/2009	10.21	NP	-	24.52	NA
	3/16/2009	11.04	NP	-	23.69	NA
	6/15/2009	NM	NM	-	NM	NA
	9/14/2009	12.43	NP	-	22.30	NA
	12/21/2009	11.15	NP	-	23.58	NA
	3/16/2010	10.08	NP	-	24.65	NA
	6/21/2010	**10.42**	**NP**	**-**	**24.31**	**NA**
	9/20/2010	**12.44**	**NP**	**-**	**22.29**	**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	12.33	sheen	22.45	NA
	5/15/2001	12.24	NP	-	22.54	NA
	9/19/2001	13.47	13.47	sheen	21.31	NA
	12/19/2001	11.04	NP	-	23.74	NA
	3/13/2002	10.91	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
	6/23/2008	11.43	NP	-	23.35	NA
	9/22/2008	12.89	NP	-	21.89	NA
	1/5/2009	10.88	NP	-	23.90	NA
	3/16/2009	11.52	NP	-	23.26	NA
	6/15/2009	NM	NM	-	NM	NA
	9/14/2009	12.84	NP	-	21.94	NA
	12/21/2009	11.51	NP	-	23.27	NA
	3/16/2010	10.61	NP	-	24.17	NA
	6/21/2010	**9.88**	**NP**	**-**	**24.90**	**NA**
	9/20/2010	**12.23**	**NP**	**-**	**22.55**	**NA**

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TABLE 1B
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Kinder Morgan Liquid Terminals, LLC - 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
	6/23/2008	5.12	NP	-	30.57	NA
	9/22/2008	6.15	NP	-	29.54	NA
	1/5/2009	4.21	NP	-	31.48	NA
	3/16/2009	4.73	NP	-	30.96	NA
	6/15/2009	5.22	NP	-	30.47	NA
	9/14/2009	6.00	NP	-	29.69	NA
	12/21/2009	4.60	NP	-	31.09	NA
	3/16/2010	4.39	NP	-	31.30	NA
	6/21/2010	**4.36**	**NP**	**-**	**31.33**	**NA**
	9/20/2010	**5.32**	**NP**	**-**	**30.37**	**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	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	8.54	sheen	25.85	NA
	9/19/2001	13.75	13.48	0.27	20.86	0.6
	12/19/2001	4.47	NP	-	29.92	0.4
	3/13/2002	4.49	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	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	-	28.52	NA
	3/29/2004	5.97	5.97	sheen	28.42	NA
	6/29/2004	9.68	9.68	sheen	24.71	NA
	9/27/2004	13.35	13.33	0.02	21.06	NA
	12/14/2004	7.51	7.51	sheen	26.88	0.4
	3/7/2005	10.65	10.65	sheen	23.74	0.2
	6/20/2005	7.85	7.85	sheen	26.54	0.2
	9/19/2005	12.65	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	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	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
	6/23/2008	6.96	6.96	sheen	27.43	0.01
	9/22/2008	12.40	12.36	0.04	22.02	0.02
	1/5/2009	4.56	4.55	0.01	29.84	0.03
	3/16/2009	6.38	6.38	sheen	28.01	0.03
	6/15/2009	7.00	7.00	sheen	27.39	0.01
	9/14/2009	11.91	11.86	0.05	22.52	0.02
	12/21/2009	5.99	NP	-	28.40	0.25
	3/16/2010	5.01	5.01	sheen	29.38	0
	6/21/2010	**5.24**	**5.24**	**sheen**	**29.15**	**0.01**
	9/20/2010	**7.09**	**7.09**	**sheen**	**27.30**	**0.01**

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TABLE 1B
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Kinder Morgan Liquid Terminals, LLC - 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
	6/23/2008	13.60	NP	-	22.17	NA
	9/22/2008	15.02	NP	-	20.75	NA
	1/5/2009	13.44	NP	-	22.33	NA
	3/16/2009	13.71	NP	-	22.06	NA
	6/15/2009	13.73	NP	-	22.04	NA
	9/14/2009	14.96	NP	-	20.81	NA
	12/21/2009	13.87	NP	-	21.90	NA
	3/16/2010	13.15	NP	-	22.62	NA
	6/21/2010	**12.82**	**NP**	**-**	**22.95**	**NA**
	9/20/2010	**14.37**	**NP**	**-**	**21.40**	**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
	6/23/2008	5.79	NP	-	30.60	NA
	9/22/2008	7.33	NP	-	29.06	NA
	1/5/2009	4.05	NP	-	32.34	NA
	3/16/2009	5.00	NP	-	31.39	NA
	6/15/2009	8.84	NP	-	27.55	NA
	9/14/2009	7.28	NP	-	29.11	NA
	12/21/2009	4.15	NP	-	32.24	NA
	3/16/2010	4.68	NP	-	31.71	NA
	6/21/2010	**4.85**	**NP**	**-**	**31.54**	**NA**
	9/20/2010	**6.13**	**NP**	**-**	**30.26**	**NA**

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TABLE 1B
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Kinder Morgan Liquid Terminals, LLC - 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	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	8.31	sheen	27.35	NA
	9/27/2004	9.38	9.38	sheen	26.28	NA
	12/14/2004	8.55	NP	-	27.11	NA
	3/7/2005	8.43	NP	-	27.23	NA
	6/20/2005	7.43	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	7.19	sheen	28.47	NA
	9/25/2006	9.34	9.26	0.08	26.38	0.21
	12/11/2006	5.85	5.85	sheen	29.81	0.1
	3/19/2007	5.00	5.00	sheen	30.66	0.3
	6/18/2007	7.58	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	5.77	sheen	29.89	0.01
	3/24/2008	5.71	NP	-	29.95	0.03
	6/23/2008	7.31	NP	-	28.35	0
	9/22/2008	9.06	9.05	0.01	26.61	0
	1/5/2009	5.34	5.34	sheen	30.32	0.04
	3/16/2009	6.01	NP	-	29.65	0
	6/15/2009	7.23	NP	-	28.43	0
	9/14/2009	8.91	NP	-	26.75	0
	12/21/2009	6.18	NP	-	29.48	0
	3/16/2010	5.81	5.81	sheen	29.85	0
	6/21/2010	**5.90**	**5.89**	**0.01**	**29.77**	**0.00**
	9/20/2010	**7.74**	**NP**	**-**	**27.92**	**0.01**
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	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
	6/23/2008	5.51	NP	-	31.50	NA
	9/22/2008	7.05	NP	-	29.96	NA
	1/5/2009	4.14	NP	-	32.87	NA
	3/16/2009	4.90	NP	-	32.11	NA
	6/15/2009	6.51	NP	-	30.50	NA
	9/14/2009	6.81	NP	-	30.20	NA
	12/21/2009	5.07	NP	-	31.94	NA
	3/16/2010	4.32	NP	-	32.69	NA
	6/21/2010	**4.39**	**NP**	**-**	**32.62**	**NA**
	9/20/2010	**5.04**	**NP**	**-**	**31.97**	**NA**

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TABLE 1B
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Kinder Morgan Liquid Terminals, LLC - 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	20.66	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	NP	-	19.98	NA
	3/24/2008	19.66	NP	-	19.67	NA
	6/23/2008	20.02	NP	-	19.31	NA
	9/22/2008	20.83	NP	-	18.50	NA
	1/5/2009	19.19	NP	-	20.14	NA
	3/16/2009	20.00	NP	-	19.33	NA
	6/15/2009	20.16	NP	-	19.17	NA
	9/14/2009	20.84	NP	-	18.49	NA
	12/21/2009	20.00	NP	-	19.33	NA
	3/16/2010	19.55	NP	-	19.78	NA
	6/21/2010	**19.41**	**NP**	**-**	**19.92**	**NA**
	9/20/2010	**20.34**	**NP**	**-**	**18.99**	**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	NP	-	20.62	NA
	3/24/2008	19.35	NP	-	20.29	NA
	6/23/2008	19.68	NP	-	19.96	NA
	9/22/2008	20.20	NP	-	19.44	NA
	1/5/2009	18.73	NP	-	20.91	NA
	3/16/2009	19.68	NP	-	19.96	NA
	6/15/2009	19.70	NP	-	19.94	NA
	9/14/2009	20.17	NP	-	19.47	NA
	12/21/2009	22.58	NP	-	17.06	NA
	3/16/2010	19.24	NP	-	20.40	NA
	6/21/2010	**19.08**	**NP**	**-**	**20.56**	**NA**
	9/20/2010	**19.87**	**NP**	**-**	**19.77**	**NA**

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TABLE 1B
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Kinder Morgan Liquid Terminals, LLC - 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	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	6.60	sheen	26.79	0
	12/17/2007	3.51	NP	-	29.88	0
	1/22/2008	3.73	NP	-	29.66	0
	3/24/2008	2.68	NP	-	30.71	0
	6/23/2008	3.91	NP	-	29.48	0
	9/22/2008	5.53	NP	-	27.86	0
	1/5/2009	2.02	NP	-	31.37	0
	3/16/2009	4.85	NP	-	28.54	0
	6/15/2009	3.97	NP	-	29.42	0
	9/14/2009	5.41	NP	-	27.98	0
	12/21/2009	2.98	NP	-	30.41	0
	3/16/2010	2.74	NP	-	30.65	0
	6/21/2010	**2.66**	**NP**	**-**	**30.73**	**NA**
	9/20/2010	**4.66**	**NP**	**-**	**28.73**	**NA**
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	NP	-	21.23	NA
	3/24/2008	14.07	NP	-	20.93	NA
	6/23/2008	14.67	NP	-	20.33	NA
	9/22/2008	15.50	NP	-	19.50	NA
	1/5/2009	14.13	NP	-	20.87	NA
	3/16/2009	14.68	NP	-	20.32	NA
	6/15/2009	14.76	NP	-	20.24	NA
	9/14/2009	14.49	NP	-	20.51	NA
	12/21/2009	14.81	NP	-	20.19	NA
	3/16/2010	14.03	NP	-	20.97	NA
	6/21/2010	**13.82**	**NP**	**-**	**21.18**	**NA**
	9/20/2010	**15.62**	**NP**	**-**	**19.38**	**NA**

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TABLE 1B
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Kinder Morgan Liquid Terminals, LLC - 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	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	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	NP	-	20.71	NA
	3/24/2008	14.51	NP	-	20.46	NA
	6/23/2008	15.25	NP	-	19.72	NA
	9/22/2008	16.09	NP	-	18.88	NA
	1/5/2009	14.69	NP	-	20.28	NA
	3/16/2009	15.21	NP	-	19.76	NA
	6/15/2009	15.37	NP	-	19.60	NA
	9/14/2009	16.11	NP	-	18.86	NA
	12/21/2009	15.32	NP	-	19.65	NA
	3/16/2010	14.51	NP	-	20.46	NA
	6/21/2010	**14.14**	**NP**	**-**	**20.83**	**NA**
	9/20/2010	**14.59**	**NP**	**-**	**20.38**	**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	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
	6/23/2008	6.63	NP	-	30.87	NA
	9/22/2008	8.68	NP	-	28.82	NA
	1/5/2009	6.30	NP	-	31.20	NA
	3/16/2009	6.49	NP	-	31.01	NA
	6/15/2009	6.89	NP	-	30.61	NA
	9/14/2009	8.57	NP	-	28.93	NA
	12/21/2009	7.04	NP	-	30.46	NA
	3/16/2010	5.09	NP	-	32.41	NA
	6/21/2010	**5.05**	**NP**	**-**	**32.45**	**NA**
	9/20/2010	**7.43**	**NP**	**-**	**30.07**	**NA**

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TABLE 1B
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Kinder Morgan Liquid Terminals, LLC - 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	NP	-	22.37	NA
	3/24/2008	13.00	NP	-	22.18	NA
	6/23/2008	13.44	NP	-	21.74	NA
	9/22/2008	14.22	NP	-	20.96	NA
	1/5/2009	13.45	NP	-	21.73	NA
	3/16/2009	--Unable to Access--				
	6/15/2009	13.49	NP	-	21.69	NA
	9/14/2009	14.22	NP	-	20.96	NA
	12/21/2009	--Unable to Access--				
	3/16/2010	--Unable to Access--				
	6/21/2010	**--Unable to Access--**				
	9/20/2010	**--Unable to Access--**				
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
	9/19/2001	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
	6/23/2008	14.21	NP	-	19.54	NA
	9/22/2008	15.06	NP	-	18.69	NA
	1/5/2009	13.25	NP	-	20.50	NA
	3/16/2009	14.16	NP	-	19.59	NA
	6/15/2009	14.34	NP	-	19.41	NA
	9/14/2009	15.73	NP	-	18.02	NA
	12/21/2009	14.16	NP	-	19.59	NA
	3/16/2010	13.66	NP	-	20.09	NA
	6/21/2010	**13.56**	**NP**	**-**	**20.19**	**NA**
	9/20/2010	**15.16**	**NP**	**-**	**18.59**	**NA**

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TABLE 1B
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
Kinder Morgan Liquid Terminals, LLC - Willbridge Terminal
Portland, Oregon

Well Designation	Date Gauged	Depth to Groundwater	Depth to SPH (feet)	SPH Thickness (feet)	Groundwater Elevation	SPH Recovered* (gallons)
MW-41B	1/22/2008	15.78	NP	-	19.06	NA
(34.84)	3/24/2008	15.84	NP	-	19.00	NA
	6/23/2008	14.97	NP	-	19.87	NA
	9/22/2008	17.90	NP	-	16.94	NA
	1/5/2009	15.00	NP	-	19.84	NA
	3/16/2009	16.48	NP	-	18.36	NA
	6/15/2009	15.43	NP	-	19.41	NA
	9/14/2009	17.86	NP	-	16.98	NA
	12/21/2009	16.39	NP	-	18.45	NA
	3/16/2010	16.17	NP	-	18.67	NA
	6/21/2010	**14.19**	**NP**	**-**	**20.65**	**NA**
	9/20/2010	**17.34**	**NP**	**-**	**17.50**	**NA**
MW-41C	1/22/2008	15.34	NP	-	19.34	NA
(34.68)	3/24/2008	15.40	NP	-	19.28	NA
	6/23/2008	14.24	NP	-	20.44	NA
	9/22/2008	17.50	NP	-	17.18	NA
	1/5/2009	14.20	NP	-	20.48	NA
	3/16/2009	15.93	NP	-	18.75	NA
	6/15/2009	15.82	NP	-	18.86	NA
	9/14/2009	17.45	NP	-	17.23	NA
	12/21/2009	15.92	NP	-	18.76	NA
	3/16/2010	15.75	NP	-	18.93	NA
	6/21/2010	**13.75**	**NP**	**-**	**20.93**	**NA**
	9/20/2010	**17.03**	**NP**	**-**	**17.65**	**NA**
MW-42B	1/22/2008	23.52	NP	-	15.73	NA
(39.25)	3/24/2008	23.60	NP	-	15.65	NA
	6/23/2008	19.68	NP	-	19.57	NA
	9/22/2008	25.70	NP	-	13.55	NA
	1/5/2009	21.68	NP	-	17.57	NA
	3/16/2009	24.22	NP	-	15.03	NA
	6/15/2009	23.38	NP	-	15.87	NA
	9/14/2009	25.71	NP	-	13.54	NA
	12/21/2009	24.09	NP	-	15.16	NA
	3/16/2010	24.26	NP	-	14.99	NA
	6/21/2010	**21.77**	**NP**	**-**	**17.48**	**NA**
	9/20/2010	**25.37**	**NP**	**-**	**13.88**	**NA**
MW-42C	1/22/2008	24.83	NP	-	14.40	NA
(39.23)	3/24/2008	24.71	NP	-	14.52	NA
	6/23/2008	22.13	NP	-	17.10	NA
	9/22/2008	27.16	NP	-	12.07	NA
	1/5/2009	22.28	NP	-	16.95	NA
	3/16/2009	25.05	NP	-	14.18	NA
	6/15/2009	24.06	NP	-	15.17	NA
	9/14/2009	27.03	NP	-	12.20	NA
	12/21/2009	24.94	NP	-	14.29	NA
	3/16/2010	25.15	NP	-	14.08	NA
	6/21/2010	**22.22**	**NP**	**-**	**17.01**	**NA**
	9/20/2010	**26.63**	**NP**	**-**	**12.60**	**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 RECOVERY DATA
ConocoPhillips 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-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
	6/23/2008	17.03	NP	-	17.62	NA
	9/22/2008	17.53	NP	-	17.12	NA
	1/5/2009	16.61	NP	-	18.04	NA
	3/16/2009	17.05	NP	-	17.60	NA
	6/15/2009	17.13	NP	-	17.52	NA
	9/14/2009	17.50	NP	-	17.15	NA
	12/21/2009	16.96	NP	-	17.69	NA
	3/16/2010	16.79	NP	-	17.86	NA
	6/21/2010	**16.49**	**NP**	**-**	**18.16**	**NA**
	9/20/2010	**17.13**	**NP**	**-**	**17.52**	**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
	6/23/2008	17.04	NP	-	18.50	NA
	9/22/2008	17.60	NP	-	17.94	NA
	1/5/2009	16.58	NP	-	18.96	NA
	3/16/2009	17.09	NP	-	18.45	NA
	6/15/2009	17.09	NP	-	18.45	NA
	9/14/2009	17.56	NP	-	17.98	NA
	12/21/2009	17.02	NP	-	18.52	NA
	3/16/2010	16.78	NP	-	18.76	NA
	6/21/2010	**16.45**	**NP**	**-**	**19.09**	**NA**
	9/20/2010	**17.23**	**NP**	**-**	**18.31**	**NA**

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TABLE 1C
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
ConocoPhillips 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-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
	6/23/2008	18.45	NP	-	16.35	NA
	9/22/2008	19.70	NP	-	15.10	NA
	1/5/2009	17.33	NP	-	17.47	NA
	3/16/2009	18.51	NP	-	16.29	NA
	6/15/2009	18.70	NP	-	16.10	NA
	9/14/2009	18.94	NP	-	15.86	NA
	12/21/2009	17.96	NP	-	16.84	NA
	3/16/2010	17.90	NP	-	16.90	NA
	6/21/2010	**17.28**	**NP**	**-**	**17.52**	**NA**
	9/20/2010	**17.92**	**NP**	**-**	**16.88**	**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	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	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	-	NM	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	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
	6/23/2008	17.84	NP	-	16.85	NA
	9/22/2008	19.30	NP	-	15.39	NA
	1/5/2009	17.58	NP	-	17.11	NA
	3/16/2009	17.99	17.97	0.02	16.72	0
	6/15/2009	17.96	17.95	0.01	16.74	0
	9/14/2009	18.29	18.23	0.06	16.45	0
	12/21/2009	17.91	17.90	0.01	16.79	0
	3/16/2010	17.68	17.66	0.02	17.03	0
	6/21/2010	**17.35**	**17.34**	**0.01**	**17.35**	**0**
	9/20/2010	**17.88**	**17.87**	**0.01**	**16.82**	**0**

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TABLE 1C
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
ConocoPhillips 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-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
	6/23/2008	16.58	NP	-	18.25	NA
	9/22/2008	17.10	NP	-	17.73	NA
	1/5/2009	16.85	NP	-	17.98	NA
	3/16/2009	16.63	NP	-	18.20	NA
	6/15/2009	16.60	NP	-	18.23	NA
	9/14/2009	17.08	NP	-	17.75	NA
	12/21/2009	16.75	NP	-	18.08	NA
	3/16/2010	16.29	NP	-	18.54	NA
	6/21/2010	**16.10**	**NP**	**-**	**18.73**	**NA**
	9/20/2010	**16.81**	**NP**	**-**	**18.02**	**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
	6/23/2008	16.80	NP	-	18.66	NA
	9/22/2008	17.51	NP	-	17.95	NA
	1/5/2009	16.72	NP	-	18.74	NA
	3/16/2009	16.95	NP	-	18.51	NA
	6/15/2009	19.63	NP	-	15.83	NA
	9/14/2009	17.57	NP	-	17.89	NA
	12/21/2009	17.09	NP	-	18.37	NA
	3/16/2010	16.57	NP	-	18.89	NA
	6/21/2010	**16.36**	**NP**	**-**	**19.10**	**NA**
	9/20/2010	**17.13**	**NP**	**-**	**18.33**	**NA**

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TABLE 1C
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
ConocoPhillips 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-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
	6/23/2008	17.33	NP	-	18.60	NA
	9/22/2008	17.92	NP	-	18.01	NA
	1/5/2009	17.14	NP	-	18.79	NA
	3/16/2009	17.35	NP	-	18.58	NA
	6/15/2009	17.38	NP	-	18.55	NA
	9/14/2009	17.91	NP	-	18.02	NA
	12/21/2009	17.49	NP	-	18.44	NA
	3/16/2010	16.98	NP	-	18.95	NA
	6/21/2010	**16.76**	**NP**	**-**	**19.17**	**NA**
	9/20/2010	**17.60**	**NP**	**-**	**18.33**	**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
	6/23/2008	17.14	NP	-	18.47	NA
	9/22/2008	17.73	NP	-	17.88	NA
	1/5/2009	17.00	NP	-	18.61	NA
	3/16/2009	17.20	NP	-	18.41	NA
	6/15/2009	----Inaccessible----				
	9/14/2009	17.71	NP	-	17.90	NA
	12/21/2009	NM	NM	NM	NM	NA
	3/16/2010	16.86	NP	-	18.75	NA
	6/21/2010	**16.64**	**NP**	**-**	**18.97**	**NA**
	9/20/2010	**17.40**	**NP**	**-**	**18.21**	**NA**

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TABLE 1C
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
ConocoPhillips 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-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 -----				
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
	6/23/2008	18.33	NP	-	16.52	NA
	9/22/2008	18.80	NP	-	16.05	NA
	1/5/2009	15.76	NP	-	19.09	NA
	3/16/2009	18.36	NP	-	16.49	NA
	6/15/2009	18.53	NP	-	16.32	NA
	9/14/2009	18.52	NP	-	16.33	NA
	12/21/2009	18.07	NP	-	16.78	NA
	3/16/2010	17.76	NP	-	17.09	NA
	6/21/2010	**17.17**	**NP**	**-**	**17.68**	**NA**
	9/20/2010	**17.75**	**NP**	**-**	**17.10**	**NA**

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TABLE 1C
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
ConocoPhillips 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-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----				
	6/23/2008	18.38	NP	-	17.38	NA
	9/22/2008	18.95	NP	-	16.81	NA
	1/5/2009	18.17	NP	-	17.59	NA
	3/16/2009	NM	NM	NM	NM	NA
	6/15/2009	----Could Not Locate----				
	9/14/2009	----Could Not Locate----				
	12/21/2009	NM	NM	NM	NM	NA
	3/16/2010	----Could Not Locate----				
	6/21/2010	**----Damaged----**				
	9/20/2010	**NM**	**NM**	**NM**	**NM**	**NA**

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TABLE 1C
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
ConocoPhillips 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-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	17.84	17.81	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	17.15	NP	-	18.59	0
	6/23/2008	17.39	NP	-	18.35	0
	9/22/2008	18.10	NP	-	17.64	0
	1/5/2009	17.80	NP	-	17.94	0
	3/16/2009	17.69	17.63	0.06	18.10	0
	6/15/2009	17.39	NP	-	18.35	0
	9/18/2009	NM	NM	NM	NM	0
	12/21/2009	NM	NM	NM	NM	0
	3/16/2010	18.23	17.04	1.19	18.46	0.50
	6/21/2010	**18.20**	**16.80**	**1.40**	**18.66**	**0.23**
	9/20/2010	**18.25**	**17.80**	**0.45**	**17.85**	**0.08**
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
	3/13/2005	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	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
	6/23/2008	15.95	NP	-	17.59	NA
	9/22/2008	16.40	NP	-	17.14	NA
	1/5/2009	15.40	NP	-	18.14	NA
	3/16/2009	15.95	NP	-	17.59	NA
	6/15/2009	16.03	NP	-	17.51	NA
	9/14/2009	16.38	NP	-	17.16	NA
	12/21/2009	15.88	NP	-	17.66	NA
	3/16/2010	15.72	NP	-	17.82	NA
	6/21/2010	**15.45**	**NP**	**-**	**18.09**	**NA**
	9/20/2010	**16.02**	**NP**	**-**	**17.52**	**NA**

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TABLE 1C
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
ConocoPhillips 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-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
	6/23/2008	14.69	NP	-	16.31	NA
	9/22/2008	15.30	NP	-	15.70	NA
	1/5/2009	13.48	NP	-	17.52	NA
	3/16/2009	14.72	NP	-	16.28	NA
	6/15/2009	14.91	NP	-	16.09	NA
	9/14/2009	15.16	NP	-	15.84	NA
	12/21/2009	14.06	NP	-	16.94	NA
	3/16/2010	14.10	NP	-	16.90	NA
	6/21/2010	**14.52**	**NP**	**-**	**16.48**	**NA**
	9/20/2010	**14.02**	**NP**	**-**	**16.98**	**NA**
B-37	2/14/2000	18.96	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
	6/23/2008	19.00	NP	-	16.79	NA
	9/22/2008	19.52	NP	-	16.27	NA
	1/5/2009	18.50	NP	-	17.29	NA
	3/16/2009	19.02	NP	-	16.77	NA
	6/15/2009	19.19	NP	-	16.60	NA
	9/14/2009	20.42	NP	-	15.37	NA
	12/21/2009	NM	NM	NM	NM	NA
	3/16/2010	19.57	NP	-	16.22	NA
	6/21/2010	**18.92**	**NP**	**-**	**16.87**	**NA**
	9/20/2010	**19.56**	**NP**	**-**	**16.23**	**NA**

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TABLE 1C
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
ConocoPhillips 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-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
	6/23/2008	Dry	NP	-	-	NA
	9/22/2008	Dry	NP	-	-	NA
	1/5/2009	18.93	NP	-	17.14	NA
	3/16/2009	19.55	NP	-	16.52	NA
	6/15/2009	Dry	NP	-	-	NA
	9/14/2009	17.90	NP	-	18.17	NA
	12/21/2009	NM	NM	NM	NM	NA
	3/16/2010	19.89	NP	-	16.18	NA
	6/21/2010	**19.28**	**NP**	**-**	**16.79**	**NA**
	9/20/2010	**19.88**	**NP**	**-**	**16.19**	**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	18.58	sheen	16.12	NA
	9/27/2004	18.76	18.76	sheen	15.94	0.10
	12/14/2004	18.18	18.17	0.01	16.53	0.20
	3/7/2005	18.35	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	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	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
	6/23/2008	17.93	17.92	0.01	15.76	0.01
	9/22/2008	18.50	18.50	sheen	15.18	0.02
	1/5/2009	17.19	16.75	0.44	16.84	0
	3/16/2009	18.36	17.79	0.57	15.78	0.20
	6/15/2009	18.24	18.20	0.04	15.47	0
	9/14/2009	17.92	NP	-	15.76	0
	12/21/2009	17.25	NP	-	16.43	0
	3/16/2010	17.11	17.10	0.01	16.58	0
	6/21/2010	**16.07**	**16.06**	**0.01**	**17.62**	**0**
	9/20/2010	**16.69**	**16.68**	**0.01**	**17.00**	**0**
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	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 -----					

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TABLE 1C
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
ConocoPhillips 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-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
	6/23/2008	18.39	NP	-	16.69	NA
	9/22/2008	18.80	NP	-	16.28	NA
	1/5/2009	17.91	NP	-	17.17	NA
	3/16/2009	18.44	NP	-	16.64	NA
	6/15/2009	18.55	NP	-	16.53	NA
	9/14/2009	18.69	NP	-	16.39	NA
	12/21/2009	18.23	NP	-	16.85	NA
	3/16/2010	17.92	NP	-	17.16	NA
	6/21/2010	**17.36**	**NP**	**-**	**17.72**	**NA**
	9/20/2010	**17.99**	**NP**	**-**	**17.09**	**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
	6/23/2008	NM	NM	NM	NM	NM
	9/22/2008	19.46	NP	-	16.44	NA
	1/5/2009	18.63	NP	-	17.27	NA
	3/16/2009	19.02	NP	-	16.88	NA
	6/15/2009	19.12	19.11	0.01	16.79	NA
	9/14/2009	20.39	NP	-	15.51	NA
	12/21/2009	20.01	NP	-	15.89	NA
	3/16/2010	19.66	NP	-	16.24	NA
	6/21/2010	**19.19**	**NP**	**-**	**16.71**	**NA**
	9/20/2010	**19.80**	**NP**	**-**	**16.10**	**NA**

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TABLE 1C
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
ConocoPhillips 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)
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	19.85	NP	-	16.20	NA
	12/20/2002	19.88	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
	6/23/2008	18.99	NP	-	17.05	NA
	9/22/2008	19.56	NP	-	16.48	NA
	1/5/2009	18.65	NP	-	17.39	NA
	3/16/2009	19.12	NP	-	16.92	NA
	6/15/2009	19.13	NP	-	16.91	NA
	9/14/2009	20.34	NP	-	15.70	NA
	12/21/2009	NM	NM	NM	NM	NA
	3/16/2010	19.59	NP	-	16.45	NA
	6/21/2010	**NM**	**NM**	**NM**	**NM**	**NA**
	9/20/2010	**NM**	**NM**	**NM**	**NM**	**NA**
EW-1	1/22/2008	12.30	NP	-	6.01	-
(18.31)	6/23/2008	5.24	NP	-	13.07	NA
	9/22/2008	8.49	NP	-	9.82	NA
	1/5/2009	12.00	NP	-	6.31	NA
	3/16/2009	NM	NM	NM	NM	NA
	6/15/2009	NM	NM	NM	NM	NA
	9/14/2009	NM	NM	NM	NM	NA
	12/21/2009	NM	NM	NM	NM	NA
	3/16/2010	NM	NM	NM	NM	NA
	6/21/2010	**NM**	**NM**	**NM**	**NM**	**NA**
	9/20/2010	**NM**	**NM**	**NM**	**NM**	**NA**
EW-2	1/22/2008	10.70	NP	-	7.08	-
(17.78)	6/23/2008	9.82	NP	-	7.96	NA
	9/22/2008	5.75	NP	-	12.03	NA
	1/5/2009	11.00	NP	-	6.78	NA
	3/16/2009	NM	NM	NM	NM	NA
	6/15/2009	NM	NM	NM	NM	NA
	9/14/2009	NM	NM	NM	NM	NA
	12/21/2009	NM	NM	NM	NM	NA
	3/16/2010	NM	NM	NM	NM	NA
	6/21/2010	**NM**	**NM**	**NM**	**NM**	**NA**
	9/20/2010	**NM**	**NM**	**NM**	**NM**	**NA**
EW-3	1/22/2008	10.13	NP	-	4.89	NA
(15.02)	6/23/2008	10.68	NP	-	4.34	NA
	9/22/2008	11.30	NP	-	3.72	NA
	1/5/2009	10.00	NP	-	5.02	NA
	3/16/2009	NM	NM	NM	NM	NA
	6/15/2009	NM	NM	NM	NM	NA
	9/14/2009	NM	NM	NM	NM	NA
	12/21/2009	NM	NM	NM	NM	NA
	3/16/2010	NM	NM	NM	NM	NA
	6/21/2010	**NM**	**NM**	**NM**	**NM**	**NA**
	9/20/2010	**NM**	**NM**	**NM**	**NM**	**NA**
EW-4	1/22/2008	12.15	NP	-	5.48	NA
(17.63)	6/23/2008	12.04	NP	-	5.59	NA
	9/22/2008	13.15	NP	-	4.48	NA
	1/5/2009	12.20	NP	-	5.43	NA
	3/16/2009	NM	NM	NM	NM	NA
	6/15/2009	NM	NM	NM	NM	NA
	9/14/2009	NM	NM	NM	NM	NA
	12/21/2009	NM	NM	NM	NM	NA
	3/16/2010	NM	NM	NM	NM	NA
	6/21/2010	**NM**	**NM**	**NM**	**NM**	**NA**
	9/20/2010	**NM**	**NM**	**NM**	**NM**	**NA**

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TABLE 1C
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
ConocoPhillips 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-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	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	18.85	18.87	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	18.30	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	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	17.20	sheen	17.43	0.00
	6/26/2006	18.00	18.00	sheen	16.63	NA
	9/25/2006	18.68	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
	6/23/2008	19.14	NP	-	15.49	NA
	9/22/2008	19.46	NP	-	15.17	NA
	1/5/2009	19.88	NP	-	14.58	NA
	3/16/2009	19.70	NP	-	14.76	NA
	6/15/2009	NM	NM	NM	NM	NA
	9/14/2009	NM	NM	NM	NM	NA
	12/21/2009	NM	NM	NM	NM	NA
	3/16/2010	NM	NM	NM	NM	NA
	6/21/2010	**NM**	**NM**	**NM**	**NM**	**NA**
	9/20/2010	**NM**	**NM**	**NM**	**NM**	**NA**

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TABLE 1C
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
ConocoPhillips 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)
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
	6/23/2008	19.39	NP	-	16.68	NA
	9/22/2008	19.85	NP	-	16.22	NA
	1/5/2009	18.86	NP	-	17.21	NA
	3/16/2009	NM	NM	NM	NM	NA
	6/15/2009	NM	NM	NM	NM	NA
	9/14/2009	NM	NM	NM	NM	NA
	12/21/2009	NM	NM	NM	NM	NA
	3/16/2010	NM	NM	NM	NM	NA
	6/21/2010	**18.37**	**NP**	**-**	**17.70**	**NA**
	9/20/2010	**NM**	**NM**	**NM**	**NM**	**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
	6/23/2008	17.75	NP	-	18.16	NA
	9/22/2008	18.21	NP	-	17.70	NA
	1/5/2009	17.38	NP	-	18.53	NA
	3/16/2009	17.75	NP	-	18.16	NA
	6/15/2009	17.80	NP	-	18.11	NA
	9/14/2009	18.16	NP	-	17.75	NA
	12/21/2009	17.68	NP	-	18.23	NA
	3/16/2010	NM	NM	NM	NM	NA
	6/21/2010	**17.23**	**NP**	**-**	**18.68**	**NA**
	9/20/2010	**17.80**	**NP**	**-**	**18.11**	**NA**

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TABLE 1C
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
ConocoPhillips 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)
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
	6/23/2008	5.74	NP	-	12.74	NA
	9/22/2008	9.60	NP	-	8.88	NA
	1/5/2009	6.61	NP	-	11.87	NA
	3/16/2009	6.64	NP	-	11.84	NA
	6/15/2009	8.03	NP	-	10.45	NA
	9/14/2009	9.16	NP	-	9.32	NA
	12/21/2009	7.01	NP	-	11.47	NA
	3/16/2010	7.94	NP	-	10.54	NA
	6/21/2010	**6.30**	**NP**	**-**	**12.18**	**NA**
	9/20/2010	**7.99**	**NP**	**-**	**10.49**	**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 RECOVERY DATA
ConocoPhillips 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)
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	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
	6/23/2008	21.00	NP	-	17.00	NA
	9/22/2008	25.54	NP	-	12.46	NA
	1/5/2009	20.82	NP	-	17.18	NA
	3/16/2009	21.29	NP	-	16.71	NA
	6/15/2009	21.04	21.03	0.01	16.97	NA
	9/14/2009	20.32	NP	-	17.68	NA
	12/21/2009	19.93	NP	-	18.07	NA
	3/16/2010	19.59	NP	-	18.41	NA
	6/21/2010	**19.12**	**NP**	**-**	**18.88**	**NA**
	9/20/2010	**19.73**	**NP**	**-**	**18.27**	**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	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
	6/23/2008	14.99	14.98	0.01	19.67	NA
	9/22/2008	15.84	NP	-	18.81	NA
	1/5/2009	14.55	NP	-	20.10	NA
	3/16/2009	NM	NM	NM	NM	NA
	6/15/2009	NM	NM	NM	NM	NA
	9/14/2009	NM	NM	NM	NM	NA
	12/21/2009	NM	NM	NM	NM	NA
	3/16/2010	NM	NM	NM	NM	NA
	6/21/2010	**NM**	**NM**	**NM**	**NM**	**NA**
	9/20/2010	**NM**	**NM**	**NM**	**NM**	**NA**

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TABLE 1C
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
ConocoPhillips 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)
RW-1	1/22/2008	14.30	NP	-	7.44	NA
(21.74)	3/24/2008	NM	NM	NM	NM	NA
	6/23/2008	16.86	NM	NM	4.88	NA
	9/22/2008	18.06	NM	NM	3.68	NA
	1/5/2009	16.08	NM	NM	5.66	NA
	3/16/2009	NM	NM	NM	NM	NA
	6/15/2009	NM	NM	NM	NM	NA
	9/14/2009	NM	NM	NM	NM	NA
	12/21/2009	NM	NM	NM	NM	NA
	3/16/2010	NM	NM	NM	NM	NA
	6/21/2010	**NM**	**NM**	**NM**	**NM**	**NA**
	9/20/2010	**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
	6/23/2008	16.57	NM	NM	10.88	NA
	9/22/2008	19.71	NM	NM	7.74	NA
	1/5/2009	16.00	NM	NM	11.45	NA
	3/16/2009	11.30	NM	NM	16.15	NA
	6/15/2009	NM	NM	NM	NM	NA
	9/14/2009	13.30	NM	NM	14.15	NA
	12/21/2009	NM	NM	NM	NM	NA
	3/16/2010	NM	NM	NM	NM	NA
	6/21/2010	**NM**	**NM**	**NM**	**NM**	**NA**
	9/20/2010	**NM**	**NM**	**NM**	**NM**	**NA**
RW-3	1/22/2008	NM	NM	NM	NM	NA
(34.02)	3/24/2008	NM	NM	NM	NM	NA
	6/23/2008	23.60	NM	NM	10.42	NA
	9/22/2008	12.01	NM	NM	22.01	NA
	1/5/2009	17.62	NM	NM	16.40	NA
	3/16/2009	NM	NM	NM	NM	NA
	6/15/2009	NM	NM	NM	NM	NA
	9/14/2009	NM	NM	NM	NM	NA
	12/21/2009	NM	NM	NM	NM	NA
	3/16/2010	NM	NM	NM	NM	NA
	6/21/2010	**NM**	**NM**	**NM**	**NM**	**NA**
	9/20/2010	**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
	6/23/2008	19.88	NM	NM	13.93	NA
	9/22/2008	19.49	NM	NM	14.32	NA
	1/5/2009	19.90	NM	NM	13.91	NA
	3/16/2009	20.70	NM	NM	13.11	NA
	6/15/2009	NM	NM	NM	NM	NA
	9/14/2009	22.70	NM	NM	11.11	NA
	12/21/2009	NM	NM	NM	NM	NA
	3/16/2010	NM	NM	NM	NM	NA
	6/21/2010	**NM**	**NM**	**NM**	**NM**	**NA**
	9/20/2010	**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
	6/23/2008	13.60	NM	NM	4.73	NA
	9/22/2008	8.12	NM	NM	10.21	NA
	1/5/2009	12.67	NM	NM	5.66	NA
	3/16/2009	8.35	NM	NM	9.98	NA
	6/15/2009	NM	NM	NM	NM	NA
	9/14/2009	10.35	NM	NM	7.98	NA
	12/21/2009	NM	NM	NM	NM	NA
	3/16/2010	NM	NM	NM	NM	NA
	6/21/2010	**NM**	**NM**	**NM**	**NM**	**NA**
	9/20/2010	**NM**	**NM**	**NM**	**NM**	**NA**
RW-6	1/22/2008	10.70	NP	-	7.99	NA
(18.69)	3/24/2008	NM	NM	NM	NM	NA
	6/23/2008	13.52	NM	NM	5.17	NA
	9/22/2008	9.45	NM	NM	9.24	NA
	1/5/2009	12.55	NM	NM	6.14	NA
	3/16/2009	8.20	NM	NM	10.49	NA
	6/15/2009	NM	NM	NM	NM	NA
	9/14/2009	NM	NM	NM	NM	NA
	12/21/2009	NM	NM	NM	NM	NA
	3/16/2010	NM	NM	NM	NM	NA
	6/21/2010	**NM**	**NM**	**NM**	**NM**	**NA**
	9/20/2010	**NM**	**NM**	**NM**	**NM**	**NA**

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TABLE 1C
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
ConocoPhillips 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)
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
	6/23/2008	15.10	NP	-	19.92	NA
	9/22/2008	16.30	16.29	0.01	18.72	NA
	1/5/2009	15.68	NP	-	19.34	NA
	3/17/2009	15.46	NP	-	19.56	NA
	6/15/2009	15.24	NP	-	19.78	NA
	9/18/2009	15.98	NP	-	19.04	NA
	12/21/2009	15.77	NP	-	19.25	NA
	3/16/2010	14.81	NP	-	20.21	NA
	6/21/2010	**15.50**	**NP**	**-**	**19.52**	**NA**
	9/20/2010	**15.51**	**NP**	**-**	**19.51**	**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
	6/23/2008	13.22	NP	-	22.03	NA
	9/22/2008	13.97	NP	-	21.28	NA
	1/5/2009	12.63	NP	-	22.62	NA
	3/17/2009	12.97	NP	-	22.28	NA
	6/15/2009	12.99	NP	-	22.26	NA
	9/18/2009	13.97	NP	-	21.28	NA
	12/21/2009	13.08	NP	-	22.17	NA
	3/16/2010	12.55	NP	-	22.70	NA
	6/21/2010	**12.33**	**NP**	**-**	**22.92**	**NA**
	9/20/2010	**13.52**	**NP**	**-**	**21.73**	**NA**

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TABLE 1C
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
ConocoPhillips 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)
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	16.83	NP	-	17.63	NA
	2/20/2001	16.85	16.85	sheen	17.61	NA
	5/15/2001	16.61	16.57	0.04	17.88	0.1
	9/18/2001	19.96	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	14.25	sheen	20.21	0
	6/26/2006	15.50	15.50	sheen	18.96	NA
	9/25/2006	16.21	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	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
	6/23/2008	15.82	15.74	0.08	18.30	0.01
	9/22/2008	16.40	NP	-	17.66	0.07
	1/5/2009	15.56	NP	-	18.50	0
	3/17/2009	15.75	NP	-	18.31	0
	6/15/2009	15.80	15.75	0.05	18.30	0.03
	9/18/2009	16.27	16.25	0.02	17.81	0.01
	12/21/2009	15.98	NP	-	18.08	0
	3/16/2010	14.69	14.63	0.06	19.42	0.20
	6/21/2010	**14.56**	**14.46**	**0.10**	**19.58**	**0.07**
	9/20/2010	**16.19**	**15.98**	**0.21**	**18.04**	**0.14**
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	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	17.39	sheen	16.71	NA
	6/23/2008	18.73	NP	-	15.37	NA
	9/22/2008	18.99	NP	-	15.11	NA
	1/5/2009	17.88	NP	-	16.22	NA
	3/16/2009	18.25	NP	-	15.85	NA
	6/15/2009	18.91	NP	-	15.19	NA
	9/18/2009	18.76	NP	-	15.34	NA
	12/21/2009	17.87	NP	-	16.23	NA
	3/16/2010	17.32	NP	-	16.78	NA
	6/21/2010	**16.68**	**NP**	**-**	**17.42**	**NA**
	9/20/2010	**NM**	**NM**	**NM**	**NM**	**NA**

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TABLE 1C
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
ConocoPhillips 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)
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	8.99	sheen	24.78	NA
	9/18/2001	10.29	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	8.22	sheen	25.55	0.2
	6/20/2005	7.41	7.41	sheen	26.36	0.1
	9/19/2005	19.14	NP	-	14.63	0.1
	12/12/2005	7.91	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	**	NM	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
	6/23/2008	7.12	7.12	sheen	26.65	0.01
	9/22/2008	8.85	8.70	0.15	25.04	0.1
	1/5/2009	7.03	NP	-	26.74	0
	3/17/2009	6.89	NP	-	26.88	0
	6/15/2009	NM	NM	NM	NM	0
	9/18/2009	NM	NM	0.13	NM	0.08
	12/21/2009	7.82	NP	-	25.95	0.00
	3/16/2010	6.05	NP	-	27.72	0.00
	6/21/2010	**6.03**	**5.99**	**0.04**	**27.77**	**0.03**
	9/20/2010	**7.62**	**7.00**	**0.62**	**26.65**	**0.40**
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	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 RECOVERY DATA
ConocoPhillips 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)
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	20.12	0.3
	12/17/2007	14.73	14.62	0.11	21.13	0.02
	3/24/2008	13.30	13.25	0.05	22.51	0.02
	6/23/2008	14.11	13.94	0.17	21.80	0.02
	9/22/2008	15.47	15.35	0.12	20.40	0.04
	1/5/2009	14.79	14.51	0.28	21.20	0
	3/17/2009	14.40	14.16	0.24	21.56	2
	6/15/2009	14.18	13.95	0.23	21.77	0.04
	9/18/2009	15.35	15.20	0.15	20.54	0.03
	12/21/2009	15.02	14.63	0.39	21.06	0.10
	3/16/2010	13.84	13.12	0.72	22.51	1.0
	6/21/2010	**13.52**	**12.76**	**0.76**	**22.86**	**2.5**
	9/20/2010	**15.08**	**14.45**	**0.63**	**21.19**	**0.1**
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
	6/23/2008	14.04	NP	-	23.17	NA
	9/22/2008	15.02	NP	-	22.19	NA
	1/5/2009	12.14	NP	-	25.07	NA
	3/17/2009	14.10	NP	-	23.11	NA
	6/15/2009	13.82	NP	-	23.39	NA
	9/18/2009	14.72	NP	-	22.49	NA
	12/21/2009	---Inaccessible Due to Construction---				
	3/16/2010	12.65	NP	-	24.56	NA
	6/21/2010	**12.44**	**NP**	**-**	**24.77**	**NA**
	9/20/2010	**14.34**	**NP**	**-**	**22.87**	**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
	6/23/2008	13.42	13.41	0.01	22.14	NA
	9/22/2008	14.50	NP	-	21.07	NA
	1/5/2009	13.35	NP	-	22.22	NA
	3/17/2009	13.65	13.65	sheen	21.92	NA
	6/15/2009	13.27	NP	-	22.30	NA
	9/18/2009	14.27	NP	-	21.30	NA
	12/21/2009	13.59	NP	-	21.98	NA
	3/16/2010	12.80	NP	-	22.77	NA
	6/21/2010	**12.60**	**12.58**	**0.02**	**22.97**	**NA**
	9/20/2010	**13.98**	**NP**	**-**	**21.59**	**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
	6/23/2008	13.94	NP	-	22.14	NA
	9/22/2008	13.83	NP	-	22.25	NA
	1/5/2009	12.82	NP	-	23.26	NA
	3/17/2009	13.10	NP	-	22.98	NA
	6/15/2009	12.78	NP	-	23.30	NA
	9/18/2009	13.85	NP	-	22.23	NA
	12/21/2009	13.24	NP	-	22.84	NA
	3/16/2010	11.83	NP	-	24.25	NA
	6/21/2010	**11.67**	**11.65**	**0.02**	**24.41**	**NA**
	9/20/2010	**13.52**	**NP**	**-**	**22.56**	**NA**

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TABLE 1C
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
ConocoPhillips 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)
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
	6/23/2008	13.54	NP	-	22.23	NA
	9/22/2008	14.83	NP	-	20.94	NA
	1/5/2009	14.50	NP	-	21.27	NA
	3/17/2009	13.77	NP	-	22.00	NA
	6/15/2009	13.61	13.60	0.01	22.15	0.01
	9/18/2009	14.74	NP	-	21.03	NA
	12/21/2009	14.49	NP	-	21.28	NA
	3/16/2010	12.98	NP	-	22.79	NA
	6/21/2010	**12.63**	**12.61**	**0.02**	**23.14**	**NA**
	9/20/2010	**14.11**	**NP**	**-**	**21.66**	**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
	6/23/2008	8.96	NP	-	25.87	NA
	9/22/2008	10.54	NP	-	24.29	NA
	1/5/2009	8.54	NP	-	26.29	NA
	3/17/2009	8.70	NP	-	26.13	NA
	6/15/2009	8.95	NP	-	25.88	NA
	9/18/2009	10.40	NP	-	24.43	NA
	12/21/2009	9.52	NP	-	25.31	NA
	3/16/2010	7.96	NP	-	26.87	NA
	6/21/2010	**7.99**	**7.99**	**sheen**	**26.84**	**NA**
	9/20/2010	**9.44**	**NP**	**-**	**25.39**	**NA**
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
	6/23/2008	14.69	NP	-	19.53	NA
	9/22/2008	15.20	NP	-	19.02	NA
	1/5/2009	13.31	NP	-	20.91	NA
	3/16/2009	NM	NM	NM	NM	NA
	6/15/2009	13.94	NP	-	20.28	NA
	9/18/2009	NM	NM	NM	NM	NA
	12/21/2009	NM	NM	NM	NM	NA
	3/16/2010	NM	NM	NM	NM	NA
	6/21/2010	**NM**	**NM**	**NM**	**NM**	**NA**
	9/20/2010	**NM**	**NM**	**NM**	**NM**	**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
	6/23/2008	14.39	NP	-	21.00	NA
	9/22/2008	15.22	NP	-	20.17	NA
	1/5/2009	13.66	NP	-	21.73	NA
	3/17/2009	14.34	NP	-	21.05	NA
	6/15/2009	14.35	NP	-	21.04	NA
	9/18/2009	15.28	NP	-	20.11	NA
	12/21/2009	14.27	NP	-	21.12	NA
	3/16/2010	13.60	NP	-	21.79	NA
	6/21/2010	**13.50**	**NP**	**-**	**21.89**	**NA**
	9/20/2010	**13.66**	**NP**	**-**	**21.73**	**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
	6/23/2008	14.56	NP	-	21.18	NA
	9/22/2008	15.41	NP	-	20.33	NA
	1/5/2009	13.84	NP	-	21.90	NA
	3/17/2009	14.50	NP	-	21.24	NA
	6/15/2009	14.50	NP	-	21.24	NA
	9/18/2009	15.10	NP	-	20.64	NA
	12/21/2009	14.42	NP	-	21.32	NA
	3/16/2010	13.80	NP	-	21.94	NA
	6/21/2010	**12.27**	**NP**	**-**	**23.47**	**NA**
	9/20/2010	**14.70**	**NP**	**-**	**21.04**	**NA**
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
	6/23/2008	4.85	NP	-	12.45	NA
	9/22/2008	10.15	NP	-	7.15	NA
	1/5/2009	5.48	NP	-	11.82	NA
	3/16/2009	9.02	NP	-	8.28	NA
	6/15/2009	7.67	NP	-	9.63	NA
	9/14/2009	10.12	NP	-	7.18	NA
	12/21/2009	8.59	NP	-	8.71	NA
	3/16/2010	9.34	NP	-	7.96	NA
	6/21/2010	**4.98**	**NP**	**-**	**12.32**	**NA**
	9/20/2010	**9.73**	**NP**	**-**	**7.57**	**NA**

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TABLE 1C
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
ConocoPhillips 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)
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
	6/23/2008	19.22	NP	-	-2.31	NA
	9/22/2008	11.98	NP	-	4.93	NA
	1/5/2009	11.90	NP	-	5.01	NA
	3/16/2009	8.84	NP	-	8.07	NA
	6/15/2009	9.10	NP	-	7.81	NA
	9/14/2009	8.58	NP	-	8.33	NA
	12/21/2009	16.37	NP	-	0.54	NA
	3/16/2010	11.11	NP	-	5.80	NA
	6/21/2010	**10.99**	**NP**	**-**	**5.92**	**NA**
	9/20/2010	**10.41**	**NP**	**-**	**6.50**	**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
	6/23/2008	5.61	NP	-	13.69	NA
	9/22/2008	6.55	NP	-	12.75	NA
	1/5/2009	4.37	NP	-	14.93	NA
	3/16/2009	4.99	NP	-	14.31	NA
	6/15/2009	5.59	NP	-	13.71	NA
	9/14/2009	5.49	NP	-	13.81	NA
	12/21/2009	4.61	NP	-	14.69	NA
	3/16/2010	4.63	NP	-	14.67	NA
	6/21/2010	**2.92**	**NP**	**-**	**16.38**	**NA**
	9/20/2010	**5.80**	**NP**	**-**	**13.50**	**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
	6/23/2008	7.14	NP	-	12.80	NA
	9/22/2008	9.93	NP	-	10.01	NA
	1/5/2009	7.80	NP	-	12.14	NA
	3/16/2009	8.75	NP	-	11.19	NA
	6/15/2009	8.76	NP	-	11.18	NA
	9/14/2009	9.53	NP	-	10.41	NA
	12/21/2009	8.69	NP	-	11.25	NA
	3/16/2010	8.70	NP	-	11.24	NA
	6/21/2010	**7.31**	**NP**	**-**	**12.63**	**NA**
	9/20/2010	**9.10**	**NP**	**-**	**10.84**	**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
	6/23/2008	5.83	NP	-	14.26	NA
	9/22/2008	9.71	NP	-	10.38	NA
	1/5/2009	6.77	NP	-	13.32	NA
	3/16/2009	8.63	NP	-	11.46	NA
	6/15/2009	7.22	NP	-	12.87	NA
	9/14/2009	9.35	NP	-	10.74	NA
	12/21/2009	7.99	NP	-	12.10	NA
	3/16/2010	8.56	NP	-	11.53	NA
	6/21/2010	**5.21**	**NP**	**-**	**14.88**	**NA**
	9/20/2010	**9.14**	**NP**	**-**	**10.95**	**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
	6/23/2008	6.16	NP	-	14.83	NA
	9/22/2008	7.22	NP	-	13.77	NA
	1/5/2009	5.01	NP	-	15.98	NA
	3/16/2009	6.37	NP	-	14.62	NA
	6/15/2009	5.55	NP	-	15.44	NA
	9/14/2009	6.95	NP	-	14.04	NA
	12/21/2009	5.85	NP	-	15.14	NA
	3/16/2010	6.04	NP	-	14.95	NA
	6/21/2010	**4.72**	**NP**	**-**	**16.27**	**NA**
	9/20/2010	**6.04**	**NP**	**-**	**14.95**	**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
	6/23/2008	6.50	NP	-	13.01	NA
	9/22/2008	9.48	NP	-	10.03	NA
	1/5/2009	6.80	NP	-	12.71	NA
	3/16/2009	7.33	NP	-	12.18	NA
	6/15/2009	7.79	NP	-	11.72	NA
	9/14/2009	8.85	NP	-	10.66	NA
	12/21/2009	7.23	NP	-	12.28	NA
	3/16/2010	7.47	NP	-	12.04	NA
	6/21/2010	**7.09**	**NP**	**-**	**12.42**	**NA**
	9/20/2010	**7.78**	**NP**	**-**	**11.73**	**NA**

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TABLE 1C
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
ConocoPhillips 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)
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
	6/23/2008	11.35	NP	-	15.09	NA
	9/22/2008	13.85	NP	-	12.59	NA
	1/5/2009	9.08	NP	-	17.36	NA
	3/16/2009	11.89	NP	-	14.55	NA
	6/15/2009	11.97	NP	-	14.47	NA
	9/14/2009	13.32	NP	-	13.12	NA
	12/21/2009	10.82	NP	-	15.62	NA
	3/16/2010	10.88	NP	-	15.56	NA
	6/21/2010	**9.18**	**NP**	**-**	**17.26**	**NA**
	9/20/2010	**10.66**	**NP**	**-**	**15.78**	**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
	6/23/2008	7.86	NP	-	12.20	NA
	9/22/2008	17.78	NP	-	2.28	NA
	1/5/2009	7.79	NP	-	12.27	NA
	3/16/2009	9.45	NP	-	10.61	NA
	6/15/2009	9.50	NP	-	10.56	NA
	9/14/2009	10.03	NP	-	10.03	NA
	12/21/2009	9.40	NP	-	10.66	NA
	3/16/2010	8.97	NP	-	11.09	NA
	6/21/2010	**6.66**	**NP**	**-**	**13.40**	**NA**
	9/20/2010	**8.57**	**NP**	**-**	**11.49**	**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
	6/23/2008	18.02	18.00	0.02	15.36	0.01
	9/22/2008	18.36	NP	-	15.04	0.003
	1/5/2009	16.59	NP	-	16.81	NA
	3/16/2009	17.63	NP	-	15.77	NA
	6/15/2009	18.25	NP	-	15.15	NA
	9/14/2009	17.65	NP	-	15.75	NA
	12/21/2009	NM	NM	NM	NM	NA
	3/16/2010	16.72	NP	-	16.68	NA
	6/21/2010	**16.78**	**NP**	**-**	**16.62**	**NA**
	9/20/2010	**16.20**	**NP**	**-**	**17.20**	**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
	6/23/2008	36.12	NP	-	-3.27	NA
	9/22/2008	20.60	NP	-	12.25	NA
	1/5/2009	18.95	NP	-	13.90	NA
	3/16/2009	23.71	NP	-	9.14	NA
	6/15/2009	19.59	NP	-	13.26	NA
	9/14/2009	20.17	NP	-	12.68	NA
	12/21/2009	NM	NM	NM	NM	NA
	3/16/2010	19.50	NP	-	13.35	NA
	6/21/2010	**18.33**	**NP**	**-**	**14.52**	**NA**
	9/20/2010	**18.73**	**NP**	**-**	**14.12**	**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
	6/23/2008	18.00	NP	-	14.73	NA
	9/22/2008	24.79	NP	-	7.94	NA
	1/5/2009	18.99	NP	-	13.74	NA
	3/16/2009	22.56	NP	-	10.17	NA
	6/15/2009	20.73	NP	-	12.00	NA
	9/14/2009	24.49	NP	-	8.24	NA
	12/21/2009	NM	NM	NM	NM	NA
	3/16/2010	23.02	NP	-	9.71	NA
	6/21/2010	**20.50**	**NP**	**-**	**12.23**	**NA**
	9/20/2010	**21.95**	**NP**	**-**	**10.78**	**NA**

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

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TABLE 1D
GROUNDWATER SPH RECOVERY DATA - WILLBRIDGE TERMINAL GROUP SUMMARY
Willbridge Terminals
Portland, Oregon

Well ID	Gauging Date	SPH Thickness, feet	SPH Recovery (gallons)
CHEVRON			
B-7	12/17/2007	trace	-
	1/21/2008	trace	-
B-10	12/17/2007	trace	-
	1/21/2008	0.01	-
	9/22/2008	0.01	-
B-14	12/17/2007	0.02	-
	1/21/2008	trace	-
B-20	5/22/2008	0.01	Trace
	6/23/2008	0.01	-
	7/21/2008	0.01	Trace
	8/22/2008	0.01	Trace
	10/21/2008	0.01	0.00
	1/5/2009	0.09	0.00
	9/14/2009	0.03	0.00
	10/30/2009	0.01	0.00
	12/21/2009	0.01	0.00
B-24	12/17/2007	0.03	-
	1/21/2008	0.03	-
	3/24/2008	0.03	-
	6/23/2008	0.03	-
	7/21/2008	0.01	Trace
	9/22/2008	0.24	-
	6/15/2009	0.01	0.00
B-30	12/17/2007	0.04	-
	1/21/2008	0.02	-
	3/24/2008	0.01	-
	6/23/2008	0.01	-
	7/21/2008	0.03	Trace
	8/29/2008	0.01	-
	9/22/2008	0.01	-
	10/21/2008	0.01	0.00
	1/5/2009	0.01	0.00
	3/16/2009	0.02	0.00
	6/15/2009	0.03	0.00
	9/14/2009	0.01	0.00
	10/30/2009	0.01	0.00
	12/21/2009	0.01	0.00
CR-6	6/23/2008	0.01	-
	9/22/2008	0.04	-
	1/5/2009	0.07	0.00
	3/16/2009	0.05	0.00
	6/15/2009	0.05	0.00
	9/14/2009	0.04	0.00
	10/30/2009	0.04	0.00
	12/21/2009	0.03	0.00
CR-8 Sump	8/29/2008	trace	-
CR-10	10/2/2007	0.37	0.66
	11/30/2007	0.18	0.30
	12/7/2007	0.06	-
	1/28/2008	0.02	0.03
	2/8/2008	Not Measured	0.00
	3/24/2008	0.04	0.05
	5/22/2008	0.04	0.01
	6/23/2008	0.04	-
	7/21/2008	0.01	Trace
	8/29/2008	0.15	0.16
	9/22/2008	0.23	0.13
	10/21/2008	0.01	0.00
	1/5/2009	0.09	0.40
	3/16/2009	0.04	0.03
	4/21/2009	NM	0.03
	6/25/2009	0.05	0.05
	9/14/2009	0.07	0.15
	10/30/2009	0.01	0.00
	12/21/2009	0.56	0.00
	1/29/2010	0.57	0.37
	Apr-10	NM	0.03
	Jul-10	NM	0.03
	Sep-10	0.08	0.05

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TABLE 1D
GROUNDWATER SPH RECOVERY DATA - WILLBRIDGE TERMINAL GROUP SUMMARY
Willbridge Terminals
Portland, Oregon

Well ID	Gauging Date	SPH Thickness, feet	SPH Recovery (gallons)
CR-12	3/24/2008	0.01	-
CR-15	10/2/2007	0.06	0.03
	11/30/2007	0.00	0.00
	12/7/2007	0.10	-
	1/28/2008	0.21	0.16
	2/8/2008	Not Measured	0.00
	3/24/2008	0.23	0.13
	4/25/2008	0.20	0.17
	5/22/2008	0.17	0.09
	6/23/2008	0.11	0.11
	7/21/2008	0.01	Trace
	8/29/2008	0.05	0.13
	1/5/2009	0.01	0.04
	3/16/2009	0.13	0.00
	4/21/2009	NM	0.13
	6/25/2009	0.15	0.03
	9/14/2009	0.11	0.08
	10/30/2009	0.10	0.13
	12/21/2009	0.24	0.01
	2/27/2010	0.35	0.21
	3/26/2010	0.35	0.33
	Apr-10	NM	0.26
	May-10	NM	0.07
	Jun-10	0.23	0.17
	Jul-10	NM	0.08
	Aug-10	NM	0.09
	Sep-10	0.08	0.04
CR-19	10/7/2007	trace	0.00
	11/30/2007	0.00	0.00
	12/7/2007	1.03	-
	1/28/2008	1.80	0.60
	2/8/2008	Not Measured	0.00
	3/24/2008	0.06	0.11
	4/25/2008	0.77	0.34
	5/22/2008	0.28	0.12
	6/23/2008	0.21	0.11
	8/29/2008	0.01	-
	9/22/2008	0.48	0.07
	10/21/2008	0.42	0.00
	1/5/2009	0.09	0.30
	3/16/2009	0.55	0.42
	4/21/2009	NM	0.02
	6/25/2009	0.44	0.09
	9/14/2009	0.22	0.11
	10/30/2009	0.32	0.12
	12/21/2009	Not Measured	0.28
	3/26/2010	0.07	0.05
	May-10	Not Measured	0.11
	Aug-10	Not Measured	0.04
	Sep-10	0.11	0.01
CR-21A	10/7/2007	trace	0.03
	11/30/2007	trace	0.00
	12/7/2007	Not Accessible	-
	1/28/2008	0.20	0.02
	2/8/2008	Not Measured	0.00
	3/24/2008	0.05	0.07
CR24B	3/16/2009	trace	0.00
CR-25	10/7/2007	trace	0.00
	11/30/2007	0.18	0.07
	12/7/2007	0.07	-
	1/28/2008	0.11	0.07
	2/8/2008	Not Measured	0.00
	3/24/2008	0.09	0.03
	4/25/2008	0.10	0.03
	5/22/2008	0.01	Trace
	6/23/2008	0.05	0.03
	7/21/2008	0.06	0.04
	8/29/2008	0.04	0.08
	9/22/2008	0.08	0.03
	10/21/2008	0.09	0.00
	1/5/2009	0.05	0.05
	3/16/2009	0.09	0.03
	6/25/2009	0.12	0.02
	9/14/2009	0.02	0.00
	10/30/2009	0.06	0.00
	12/21/2009	0.06	0.01
	May-10	Not Measured	0.02
	Jun-10	0.08	0.03
	Jul-10	Not Measured	0.03
GPW-1	3/16/2009	0.01	0.00
GPW-2	3/24/2008	0.47	-
	6/23/2008	0.12	0.05
	9/22/2008	0.18	0.01
	1/5/2009	0.01	0.01
	3/16/2009	0.34	0.10
	9/14/2009	0.00	0.01
	10/30/2009	0.04	0.00
	12/21/2009	0.05	0.00
GPW-3	3/24/2008	0.01	-
	1/5/2009	0.09	0.00
GPW-4	3/24/2008	0.02	-
	6/15/2009	0.09	-
	9/14/2009	0.04	-
	10/30/2009	0.02	0.00
	12/21/2009	0.05	0.00
GPW-5	12/21/2009	0.01	0.00

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TABLE 1D
GROUNDWATER SPH RECOVERY DATA - WILLBRIDGE TERMINAL GROUP SUMMARY
Willbridge Terminals
Portland, Oregon

Well ID	Gauging Date	SPH Thickness, feet	SPH Recovery (gallons)
CONOCOPHILLIPS			
B-4	10/30/2007	0.00	Trace
	11/28/2007	0.00	0.01
	12/17/2007	0.00	0.00
	1/22/2008	0.00	0.00
	2/28/2008	0.00	0.00
	3/24/2008	0.00	0.00
	3/16/2009	0.02	0.00
	7/27/2009	0.01	0.00
	8/31/2009	Trace	0.00
	9/14/2009	0.01	0.00
	12/21/2009	0.01	0.00
B-27	10/30/2007	0.00	0.00
	11/28/2007	0.00	0.00
	12/17/2007	0.00	0.00
	1/22/2008	0.00	0.00
	2/28/2008	0.00	0.00
	3/24/2008	0.00	0.00
	3/16/2009	0.06	0.00
	3/16/2010	1.19	0.50
	6/21/2010	1.40	0.23
	9/20/2010	0.45	0.08
B-40	10/30/2007	0.00	0.00
	11/28/2007	0.00	0.00
	12/17/2007	0.04	0.00
	1/22/2008	0.01	Trace
	2/28/2008	0.00	0.00
	3/24/2008	0.00	0.00
	9/22/2008	0.10	0.02
	1/5/2009	0.44	-
	3/16/2009	0.57	0.20
	8/31/2009	0.01	0.00
GP-3	8/22/2008	0.27	0.01
	9/22/2008	0.23	0.01
	1/5/2009	0.01	0.00
	9/14/2009	0.01	0.00
	12/21/2009	0.02	0.00
GP-4	8/22/2008	0.18	0.01
U-4	10/30/2007	0.00	0.00
	11/28/2007	0.00	0.00
	12/17/2007	0.00	0.00
	1/22/2008	0.00	0.00
	2/28/2008	0.00	0.00
	3/24/2008	0.05	Trace
	8/22/2008	0.11	0.07
	6/15/2009	0.05	0.03
	9/18/2009	0.02	0.01
	3/16/2010	0.06	0.20
	6/21/2010	0.10	0.07
	9/20/2010	0.21	0.14
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
	9/22/2008	0.15	0.10
	9/18/2009	0.13	0.08
	6/21/2010	0.04	0.03
	9/20/2010	0.62	0.40
U-13	10/30/2007	0.11	0.02
	11/28/2007	0.00	0.00
	12/17/2007	0.11	0.05
	1/22/2008	0.11	0.10
	2/28/2008	0.08	0.02
	3/24/2008	0.05	0.01
	6/16/2008	0.00	0.01
	8/22/2008	0.10	0.02
	9/22/2008	0.12	0.02
	1/5/2009	0.28	0.00
	3/17/2009	0.24	2.00
	6/15/2009	0.23	0.04
	9/18/2009	0.15	0.03
	12/21/2009	0.39	0.10
	3/16/2010	0.72	1.00
	6/21/2010	0.76	2.5
	9/20/2010	0.63	0.1
U-15	3/17/2009	sheen	0.00
U-17	6/15/2009	0.01	0.01
U-29A	6/16/2008	0.00	0.01
	8/22/2008	0.02	Trace

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TABLE 1D
GROUNDWATER SPH RECOVERY DATA - WILLBRIDGE TERMINAL GROUP SUMMARY
Willbridge Terminals
Portland, Oregon

Well ID	Gauging Date	SPH Thickness, feet	SPH Recovery (gallons)
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
	5/29/2008	0.00	Trace
	6/23/2008	sheen	Trace
	8/26/2008	0.03	0.02
	9/29/2008	sheen	0.01
	10/20/2008	0.00	Trace
	11/25/2008	sheen	Trace
	12/30/2008	0.00	0.01
	1/30/2009	0.00	0.01
	2/26/2009	0.00	0.01
	3/26/2009	0.00	0.01
	4/21/2009	0.00	Trace
	5/21/2009	0.00	0.01
	6/15/2009	sheen	Trace
	7/31/2009	0.00	Trace
	8/27/2009	0.01	0.02
	9/14/2009	0.00	Trace
	10/29/2009	sheen	Trace
	11/23/2009	sheen	0.05
	12/21/2009	0.00	Trace
	2/25/2010	sheen	Trace
	3/16/2010	sheen	0.01
MW-7	10/30/2007	0.33	0.25
	11/29/2007	0.09	0.20
	12/28/2007	0.14	0.30
	1/22/2008	0.03	0.01
	2/26/2008	0.05	0.10
	3/31/2008	0.05	0.10
	4/17/2008	0.11	0.10
	5/29/2008	0.16	0.05
	6/23/2008	0.19	0.10
	8/26/2008	0.16	0.05
	9/29/2008	0.25	0.05
	10/20/2008	0.07	0.15
	11/25/2008	0.13	0.10
	12/30/2008	0.02	0.75
	1/30/2009	0.04	0.02
	2/26/2009	0.00	0.00
	3/26/2009	0.02	0.02
	4/21/2009	0.03	Trace
	5/21/2009	0.01	0.02
	6/15/2009	0.15	0.05
	7/31/2009	0.12	0.02
	8/27/2009	0.08	0.03
	9/14/2009	0.06	0.02
	10/29/2009	0.08	0.10
	11/23/2009	sheen	Trace
	12/21/2009	sheen	Trace
	1/29/2010	0.01	0.01
	2/25/2010	0.01	Trace
	3/16/2010	sheen	0.01
MW-11	9/14/2009	0.06	0.00
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	Trace
	4/17/2008	0.00	0.00
	5/29/2008	0.02	Trace
	6/23/2008	0.02	Trace
	8/26/2008	sheen	0.00
	9/29/2008	sheen	0.01
	10/20/2008	0.01	0.02
	11/25/2008	sheen	Trace
	12/30/2008	0.00	0.01
	1/30/2009	0.02	0.01
	2/26/2009	0.00	0.01
	3/26/2009	0.00	0.01
	4/21/2009	0.00	0.01
	6/15/2009	0.04	Trace
	7/31/2009	0.03	0.02
	8/27/2009	0.00	Trace
	9/14/2009	0.00	Trace
	10/29/2009	sheen	Trace

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TABLE 1D
GROUNDWATER SPH RECOVERY DATA - WILLBRIDGE TERMINAL GROUP SUMMARY
Willbridge Terminals
Portland, Oregon

Well ID	Gauging Date	SPH Thickness, feet	SPH Recovery (gallons)
MW-22	10/30/2007	0.00	Trace
	11/29/2007	0.00	0.00
	12/28/2007	0.00	Trace
	1/22/2008	0.00	Trace
	2/26/2008	0.00	0.00
	3/31/2008	0.00	0.00
	4/17/2008	0.00	0.00
	5/29/2008	0.00	0.00
	6/23/2008	0.00	0.00
	8/26/2008	0.00	0.00
	9/29/2008	0.00	0.00
	3/26/2009	0.00	Trace
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	0.00
	5/29/2008	0.00	0.00
	6/23/2008	0.01	Trace
	8/26/2008	0.10	0.00
	9/29/2008	0.00	0.01
	10/20/2008	0.01	Trace
	11/25/2008	sheen	Trace
	12/30/2008	sheen	Trace
	1/30/2009	0.00	Trace
	2/26/2009	0.00	0.01
	3/26/2009	0.00	0.01
	6/15/2009	0.01	0.01
	7/31/2009	-**	0.02
	8/27/2009	sheen	Trace
	9/14/2009	sheen	Trace
	10/29/2009	sheen	Trace
	11/23/2009	0.00	Trace
	12/21/2009	sheen	Trace
	1/29/2010	Sheen	Trace
	2/25/2010	Sheen	Trace
	3/16/2010	Sheen	Trace
MW-24	11/25/2008	-**	0.01
	12/30/2008	-**	0.02
	1/30/2009	-**	0.10
	2/26/2009	-**	0.01
	3/26/2009	-**	0.01
	3/31/2008	-**	0.00
	4/17/2008	0.00	0.03
	5/29/2008	0.14	0.01
	6/23/2008	-**	0.01
	8/26/2008	-**	0.02
	9/29/2008	0.00	0.02
	10/20/2008	-**	0.01
	11/25/2008	-**	0.01
	12/30/2008	-**	Trace
	1/30/2009	0.02	0.01
	2/26/2009	sheen	0.01
	3/26/2009	-**	0.01
	6/15/2009	0.02	0.04
	4/21/2009	-**	0.02
	5/21/2009	sheen	0.01
	6/15/2009	0.02	0.01
	7/31/2009	-**	0.02
	8/27/2009	0.01	Trace
	9/14/2009	0.01	Trace
	10/29/2009	sheen	Trace
	11/23/2009	0.02	0.01
	12/21/2009	0.01	Trace
	1/29/2010	-**	0.01
	2/25/2010	0.40	0.01
	3/16/2010	sheen	0.01

COP0018213

TABLE 1D
GROUNDWATER SPH RECOVERY DATA - WILLBRIDGE TERMINAL GROUP SUMMARY
Willbridge Terminals
Portland, Oregon

Well ID	Gauging Date	SPH Thickness, feet	SPH Recovery (gallons)
MW-28	10/30/2007	0.00	0.00
	11/29/2007	0.00	0.00
	12/28/2007	0.00	0.00
	1/22/2008	0.02	Trace
	2/26/2008	0.00	0.00
	3/31/2008	0.00	0.01
	4/17/2008	0.00	0.00
	5/29/2008	0.00	0.00
	6/23/2008	0.00	Trace
	8/26/2008	0.01	Trace
	9/29/2008	0.04	0.01
	10/20/2008	0.01	0.01
	11/25/2008	0.03	Trace
	12/30/2008	sheen	0.01
	1/30/2009	0.00	0.01
	2/26/2009	sheen	0.01
	3/26/2009	sheen	0.01
	4/21/2009	0.00	Trace
	5/21/2009	0.00	Trace
	6/15/2009	sheen	Trace
	7/31/2009	sheen	0.01
	8/27/2009	0.01	0.01
	9/14/2009	0.05	Trace
	10/29/2009	0.25	Trace
	11/23/2009	0.01	0.25
	12/21/2009	0.00	Trace
	1/29/2010	sheen	Trace
	2/25/2010	sheen	Trace
	3/16/2010	sheen	Trace
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	0.00
	5/29/2008	0.00	0.00
	6/23/2008	0.00	0.00
	8/26/2008	0.00	0.00
	9/29/2008	0.01	0.00
	10/20/2008	0.01	0.02
	11/25/2008	sheen	0.01
	12/30/2008	sheen	0.01
	1/30/2009	0.00	0.00
	2/26/2009	sheen	0.00
	3/26/2009	0.00	0.00
	9/14/2009	0.00	Trace
	11/23/2009	0.00	Trace
	1/29/2010	sheen	Trace
	2/25/2010	sheen	Trace
	3/16/2010	sheen	0.00
MW-35	10/30/2007	0.00	0.00
	11/29/2007	0.00	0.00
	12/28/2007	0.00	Trace
	1/22/2008	0.00	0.00
	2/26/2008	0.00	Trace
	3/31/2008	0.00	0.00
	4/17/2008	0.00	0.00
	5/29/2008	-	-
	6/23/2008	0.00	0.00
	8/26/2008	0.00	0.00
	9/29/2008	0.00	0.00

Notes:
** - Unable to determine due to SPH viscosity
- = Not measured

COP0018214

TABLE 2
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)	TOC (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	-
	06/24/08	383	8,980	<481	0.250	0.330	<1.00	0.910	0.230	-
	09/23/08	331	18,000	608	0.210	0.340	<1.00	0.520	0.210	-
dup	09/23/08	460	4,690	<485	0.240	0.350	0.0800	0.690	0.270	-
	01/06/09	<4,000	26,900	593	<0.200	<1.00	<1.00	0.0900	<1.00	-
	03/18/09	<80.0	12,600	<495	<0.200	<1.00	<1.00	<3.00	<1.00	-
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	-
	06/24/08	1,770	26,200	961	0.160	0.360	<1.00	0.190	0.200	-
	09/23/08	404	37,900	1,720	0.100	0.190	<1.00	0.170	0.0900	-
dup	09/23/08	469	19,500	972	<0.200	0.210	<1.00	0.220	<1.00	-
	01/06/09	589	16,700	566	0.100	0.270	<1.00	0.160	0.100	-
dup	01/06/09	549	1,280	<490	0.110	0.310	0.100	0.200	0.120	-
	03/24/09	439	18,700	867	<0.200	<1.00	<1.00	<3.00	<1.00	-
	09/22/09	285	20,200	1,050	<0.200	<1.00	<1.00	<3.00	<1.00	-
dup	09/22/09	550	19,200	902	<0.200	<1.00	<1.00	<3.00	<1.00	-
	03/18/10	606	21,400	1,170	<0.200	<1.00	<1.00	<3.00	<1.00	-
	09/21/10	402	14,100	795	<0.200	<1.00	<1.00	<3.00	<1.00	-

COP0018215

TABLE 2
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)	TOC (µg/l)
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	-	-
	09/23/08	792	2,080	<485	1.02	1.14	0.450	2.90	<1.00	-
	03/24/09	743	13,700	<500	1.06	1.46	<1.00	2.15	<1.00	-
dup	03/24/09	746	25,100	722	0.980	1.31	<1.00	2.02	<1.00	-
	09/22/09	697	5,660	<500	0.720	1.13	<1.00	2.17	<1.00	-
	03/18/10	497	2,150	<495	0.390	1.43	<1.00	<3.00	<1.00	-
	09/21/10	954	9,200	<472	0.490	<1.00	<1.00	<3.00	<1.00	-
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	-
	06/25/08	-	-	-	0.850	1.61	0.130	2.55	<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	-
	06/26/08	-	-	-	0.270	0.630	0.230	1.74	<1.00	-
	03/18/09	928	63,100	1,730	<1.00	<5.00	<5.00	<15.00	<5.00	-
dup	03/18/09	920	33,900	816	0.340	<1.00	<1.00	<3.00	<1.00	-

COP0018216

TABLE 2
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)	TOC (µg/l)
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	<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[5]	<490	0.570	1.93	<0.500	1.18	<2.00	-
	09/23/08	627	2,100	<485	0.450	1.99	0.100	1.79	0.370	-
	03/24/09	674	36,300	847	0.350	1.59	<1.00	<1.50	<1.00	-
	09/22/09	472	21,000	575	0.400	1.60	<1.00	1.47	<1.00	-
	03/18/10	604	10,000	<500	0.430	1.49	<1.00	1.42	<1.00	-
	09/22/10	713	24,200	541	0.450	1.72	<1.00	1.37	<1.00	-
dup	09/22/10	566	50,500	1,190	0.520	<2.00	<2.00	<6.00	<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	-
	06/26/08	-	-	-	7.66	0.850	64.8	6.56	<1.00	-
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	-
	09/23/08	<80.0	<250	<500	<0.200	<1.00	<1.00	<3.00	1.11	-
	03/24/09	<80.0	<248	<495	<0.200	<1.00	<1.00	<3.00	1.27	-
	09/22/09	<80.0	<250	<500	<0.200	<1.00	<1.00	<3.00	1.16	-
	09/21/10	<80.0	<97.1	<485	<0.200	<1.00	<1.00	<3.00	1.57	-

COP0018217

TABLE 2
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)	TOC (µg/l)
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	-
	09/23/08	<80.0	<243	<485	<0.200	<1.00	<1.00	<3.00	0.100	-
	03/24/09	<80.0	248	<495	<0.200	<1.00	<1.00	<3.00	<1.00	-
	09/22/09	<80.0	<250	<500	<0.200	<1.00	<1.00	<3.00	<1.00	-
	03/19/10	<80.0	<248	<495	<0.200	<1.00	<1.00	<3.00	<1.00	-
	09/21/10	<80.0	<94.3	<472	<0.200	<1.00	<1.00	<3.00	<1.00	-
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	-
	09/21/10	1,120	12,500	2,400	41.9	11.4	2.15	15.3	<1.00	-

COP0018218

TABLE 2
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)	TOC (µg/l)
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	-
	06/26/08	-	-	-	0.280	0.900	<1.00	0.930	<1.00	-
	03/18/09	408	35,500	1,570	0.210	<1.00	<1.00	<3.00	<1.00	-
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	-
	09/24/08	154	376	<485	<0.400	<2.00	<2.00	<6.00	<2.00	-
	03/25/09	<80.0	<248	<495	<0.200	<1.00	<1.00	<3.00	<1.00	-
	09/22/09	<80.0	523	<500	<0.200	<1.00	<1.00	<3.00	<1.00	-
	03/19/10	87.4	<245	<490	<0.200	<1.00	<1.00	<3.00	<1.00	-
dup	03/19/10	150	<245	<490	<0.200	<1.00	<1.00	<3.00	<1.00	-
	09/22/10	122	7,320	580	<0.200	<1.00	<1.00	<3.00	<1.00	-
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	-
	06/26/08	-	-	-	<0.200	<1.00	<1.00	<3.00	<1.00	-
	09/26/08	-	-	-	<0.200	<1.00	<1.00	<3.00	<1.00	-

COP0018219

TABLE 2
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)	TOC (µg/l)
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	-
	06/24/08	<80.0	<240	<481	<0.200	<1.00	<1.00	<3.00	<1.00	8,200
	09/23/08	<80.0	<243	<485	<0.200	<1.00	<1.00	<3.00	<1.00	4,820
	01/06/09	<80.0	287	<490	<0.200	<1.00	<1.00	<3.00	<1.00	3,950
CR-27C	03/25/08	<80.0	<245	<490	<0.200	<0.500	<0.500	<1.00	<2.00	-
	06/24/08	<80.0	<240	<481	<0.200	<1.00	<1.00	<3.00	<1.00	4,200
	09/23/08	<80.0	<243	<485	<0.200	<1.00	<1.00	<3.00	<1.00	6,900
	01/06/09	<80.0	<245	<490	<0.200	<1.00	<1.00	<3.00	<1.00	3,080
CR-28A	06/25/08	9,760	2,330	<485	10.8	6.40	1,300	115	<10.0	13,000
	09/25/08	10,200	2,630	344	7.80	6.80	1,410	121	<10.0	9,620
CR-28B	06/25/08	39.7	<243	<485	<0.200	<1.00	0.0800	<3.00	<1.00	3,800
	09/25/08	<80.0	<245	<490	<0.200	<1.00	0.150	<3.00	<1.00	3,660
CR-28C	06/25/08	<80.0	<243	<485	<0.200	0.120	0.320	<3.00	<1.00	3,600
	09/25/08	97.7	<245	<490	<0.200	<1.00	7.23	0.610	<1.00	2,960
CR-29A	06/26/08	2,070	837	<485	<0.200	0.350	5.05	1.18	<1.00	-
	09/25/08	2,540	726	<490	<1.00	0.700	13.8	1.90	<5.00	-
CR-29B	06/26/08	<80.0	<243	<485	<0.200	<1.00	<1.00	<3.00	<1.00	-
	09/25/08	<80.0	<245	<490	<0.200	<1.00	<1.00	<3.00	<1.00	-
CR-30A	06/26/08	566	986	<485	<0.200	<1.00	0.160	0.320	<1.00	-
	09/24/08	707	502	<480	0.0900	0.140	0.370	0.360	<1.00	-
CR-30B	06/26/08	<80.0	<238	<476	<0.200	<1.00	<1.00	<3.00	<1.00	-
	09/24/08	<80.0	<245	<490	<0.200	<1.00	<1.00	<3.00	<1.00	-

COP0018220

TABLE 2
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)	TOC (µg/l)
CR-31A	06/26/08	697	5,080	380	0.110	0.130	<1.00	0.470	<1.00	-
	09/24/08	328	4,230	292	<0.400	<2.00	<2.00	<6.00	<2.00	-
CR-31B	06/26/08	<80.0	<243	<485	<0.200	<1.00	<1.00	<3.00	<1.00	-
	09/24/08	<80.0	<245	<490	<0.200	<1.00	0.160	<3.00	<1.00	-
CR-32A	06/26/08	251	3,630	483	<0.200	<1.00	<1.00	<3.00	<1.00	22,000
	09/24/08	132	3,050	305	<0.400	<2.00	<2.00	<6.00	<2.00	19,800
CR-32B	06/26/08	<80.0	<243	<485	<0.200	<1.00	<1.00	<3.00	<1.00	7,200
	09/24/08	<80.0	<245	<490	<0.400	<2.00	<2.00	<6.00	<2.00	4,010
CR-32C	06/26/08	<80.0	<243	<485	<0.200	<1.00	<1.00	<3.00	<1.00	4,800
	09/24/08	<80.0	<245	<490	<0.200	<1.00	0.0800	<3.00	<1.00	4,290
CR-33	03/26/08[10]	<400	1,960[5]	<481	<0.400	<1.00	<1.00	<2.00	<4.00	-
	06/24/08	211	209	<481	0.140	0.280	0.250	0.860	0.300	-
	09/24/08	145	547	<485	<0.400	<2.00	<2.00	0.180	0.400	-
	01/06/09	205	1,410	<490	<0.200	<1.00	0.350	0.810	0.350	-
	03/18/09	196	458	<495	<0.200	<1.00	<1.00	<3.00	<1.00	-
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	-
	03/25/08	-	-	-	<0.200	<0.500	<0.500	<1.00	<2.00	-
	09/22/08	-	-	-	<0.200	<1.00	<1.00	<3.00	<1.00	-
	03/26/08	-	-	-	<0.200	<0.500	<0.500	<1.00	<2.00	-
	03/26/08	-	-	-	<0.200	<0.500	<0.500	<1.00	<2.00	-
	09/25/08				<0.200	<1.00	<1.00	<3.00	<1.00	-

COP0018221

TABLE 2
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)	TOC (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	-
	09/22/08	-	-	-	<0.50	0.17	<0.50	0.91	<0.50	-
dup	09/22/08	-	-	-	<0.50	0.20	0.050	1.05	<0.50	-
	03/16/09	-	-	-	<0.200	<1.00	<1.00	<3.00	<1.00	-
dup	03/16/09	-	-	-	<0.200	<1.00	<1.00	<3.00	<1.00	-
	09/15/09	-	-	-	<1.65	<0.500	<0.500	1.23	-	-
	03/17/10	-	-	-	<0.200	<1.00	<1.00	<3.00	<1.00	-
	09/20/10	-	-	-	14.5	<1.00	<1.00	<3.00	<1.00	-
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	-	-

COP0018222

TABLE 2
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)	TOC (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	-
	09/22/08	-	-	-	<0.50	<0.50	<0.50	<1.00	<0.50	-
	03/16/09	-	-	-	<0.200	<1.00	<1.00	<3.00	<1.00	-
	09/15/09	-	-	-	<0.500	<0.500	<0.500	<1.00	-	-
	03/16/10	-	-	-	<0.200	<1.00	<1.00	<3.00	<1.00	-
	09/20/10	-	-	-	<0.200	<1.00	<1.00	<3.00	<1.00	-

COP0018223

TABLE 2
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)	TOC (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	-
	09/22/08	-	-	-	<2.5	0.35	0.25	1.5	<2.5	-
	03/16/09	-	-	-	<1.00	<5.00	<5.00	<15.0	<5.00	-
	09/15/09	-	-	-	<7.05	<21.5	<4.85	<12.8	-	-
dup	09/15/09	-	-	-	<6.00	<19.3	<4.15	<135	-	-
	03/16/10	-	-	-	<0.200	<1.00	<1.00	1.02	<1.00	-
	09/20/10	-	-	-	<0.200	<1.00	<1.00	<3.00	<1.00	-
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	-	-

COP0018224

TABLE 2
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)	TOC (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	-
	09/23/08	<250	14	34	<0.50	<0.50	<0.50	<1.00	<0.50	-
	03/16/09	-	-	-	<0.200	<1.00	<1.00	<3.00	<1.00	-
	09/14/09	-	-	-	<0.500	<0.500	<0.500	<1.00	-	-
	03/16/10	-	-	-	<0.200	<1.00	<1.00	<3.00	<1.00	-
	09/20/10	-	-	-	<0.200	<1.00	<1.00	<3.00	<1.00	-
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	-
	06/24/08	<250	19[14]	36[14]	<0.045	<0.048	<0.042	<0.115	<0.070	-
	09/23/08	150	53	140	<0.50	<0.50	<0.50	0.080	0.18	5,200
	01/05/09	<80	<238	<476	<0.200	<1.00	<1.00	<1.00	<1.00	<1.00
	03/16/09	-	-	-	<0.200	<1.00	<1.00	<3.00	<1.00	-
	09/14/09	-	-	-	<0.500	<0.500	<0.500	<1.00	-	-
	03/16/10	-	-	-	<0.200	<1.00	<1.00	<3.00	<1.00	-
	09/20/10	-	-	-	<0.200	<1.00	<1.00	<3.00	<1.00	-

COP0018225

TABLE 2
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)	TOC (µg/l)
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	-
	09/23/08	120	20	<500	<0.50	<0.50	<0.50	0.18	0.080	-
	03/16/09	-	-	-	<0.200	<1.00	<1.00	<3.00	<1.00	-
	09/14/09	-	-	-	<0.500	<0.500	<0.500	<1.00	-	-
dup	09/14/09	-	-	-	<0.500	<0.500	<0.500	1.04	-	-
	03/16/10	-	-	-	<0.200	<1.00	<1.00	<3.00	<1.00	-
	09/20/10	-	-	-	<0.200	<1.00	<1.00	<3.00	<1.00	-
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	-
dup	03/25/08	670[15]	3,500	130[14]	<0.14	0.26[14]	<0.13	0.11[14]	<0.20	-
	06/23/08	400	370	33[14]	0.12[14]	0.22[14]	<0.042	0.47[14]	<0.12	-
	09/23/08	670	3,500	69	<0.50	0.050	<0.50	0.24	<0.50	5,600
dup	09/23/08	550	3,700	63	<0.50	0.060	<0.50	0.36	<0.50	5,500
	01/05/09	128[11]	3,780	<490	<0.200	<1.00	<1.00	<1.00	<1.00	3,740
	03/16/09	-	-	-	<0.200	<1.00	<1.00	<3.00	<1.00	-
	09/14/09	-	-	-	<0.500	<0.500	<0.500	<1.00	-	-
	03/16/10	-	-	-	<0.200	<1.00	<1.00	<3.00	<1.00	-
dup	03/16/10	-	-	-	<0.200	<1.00	<1.00	<3.00	<1.00	-
	09/20/10	-	-	-	<0.200	<1.00	<1.00	<3.00	<1.00	-
dup	09/20/10	-	-	-	<0.200	<1.00	<1.00	<3.00	<1.00	-

COP0018226

TABLE 2
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)	TOC (µg/l)
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	-
	09/23/08	53	21	64	<0.50	<0.50	<0.50	0.13	0.17	-
	03/16/09	-	-	-	<0.200	<1.00	<1.00	<3.00	<1.00	-
	09/14/09	-	-	-	<0.500	<0.500	<0.500	<1.00	-	-
	03/16/10	-	-	-	<0.200	<1.00	<1.00	<3.00	<1.00	-
	09/20/10	-	-	-	<0.200	<1.00	<1.00	<3.00	<1.00	-
MW-41B	03/25/08	<13	12[14]	52[14]	<0.14	0.13[14]	<0.13	<0.33	<0.20	-
	06/24/08	<250	14[14]	59[14]	0.060[14]	0.11[14]	<0.042	<0.0115	<0.070	-
dup	06/24/08	<250	<11	29[14]	<0.045	0.090[14]	<0.042	<0.0115	<0.070	-
	09/23/08	<250	15	77	<0.50	<0.50	<0.50	<1.00	<0.50	3,100
	01/05/09	<80	<236	<472	<0.200	<1.00	<1.00	<1.00	<1.00	2,050
MW-41C	03/25/08	42[14]	19[14]	68[14]	<0.14	0.11[14]	<0.13	<0.33	<0.20	-
	06/24/08	<250	20[14]	86[14]	0.050[14]	0.070[14]	<0.042	<0.0115	<0.070	-
	09/23/08	24	16	39	<0.50	<0.50	<0.50	<1.00	<0.50	6,800
	01/05/09	<80	<238	<476	<0.200	<1.00	<1.00	<1.00	<1.00	5,090
MW-42B	03/25/08	<13	<12	58[14]	<0.14	0.12[14]	<0.13	<0.33	<0.20	-
	06/24/08	<250	<11	55[14]	<0.045	0.060[14]	<0.042	<0.0115	<0.070	-
	09/23/08	<250	16	42	<0.50	0.050	<0.50	<1.00	<0.50	4,200
	01/05/09	<80	<243	<485	<0.200	<1.00	<1.00	<1.00	<1.00	3,320
MW-42C	03/25/08	17[14]	15[14]	110[14]	0.14[14]	0.20[14]	<0.13	<0.33	<0.20	-
	06/24/08	<250	14[14]	78[14]	0.050[14]	0.060[14]	<0.042	<0.0115	<0.070	-
	09/23/08	<250	25	120	<0.50	<0.50	<0.50	<1.00	<0.50	4,600
	01/05/09	<80	<245	<490	<0.200	<1.00	<1.00	<1.00	<1.00	2,690
dup	01/05/09	<80	<238	<476	<0.200	<1.00	<1.00	<1.00	<1.00	2,770

COP0018227

TABLE 2
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)	TOC (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	6.02	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	-
	09/24/08	943	30,800	566	0.900	2.98	<1.00	3.04	<1.00	-
dup	09/24/08	1,350	5,730	<481	1.72	4.62	<1.00	7.13	<1.00	-
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 2
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)	TOC (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	-
	09/24/08	1,720	21,300	868	3.48	6.72	<2.00	10.68	<2.00	-
	03/23/09	1,240	21,700	1,110	2.44	6.88	<1.00	9.83	<1.00	-
	09/18/09	1,110	16,200	871	2.80	7.38	<1.00	9.84	<1.00	-
dup	09/18/09	1,110	6,960	<490	2.76	6.86	<2.00	5.90	<2.00	-
	03/31/10	1,290	32,600	1,510	2.40	6.32	<2.00	6.12	<2.00	-
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	-
	09/24/08	947	632	<485	0.480	<2.00	<2.00	<6.00	<2.00	-
	03/23/09	<80.0	<248	<495	<0.200	<1.00	<1.00	<3.00	<1.00	-
dup	03/23/09	102	<248	<495	<0.200	<1.00	<1.00	<3.00	<1.00	-
	09/18/09	885	704	<490	0.53	1.23	<1.00	<3.00	<1.00	-
	03/31/10	<80.0	<245	<490	<0.200	<1.00	<1.00	<3.00	<1.00	-
	09/23/10	995	299	<0.500	0.380	<1.00	<1.00	<3.00	1.04	-
dup	09/23/10	950	465	<490	0.410	<1.00	<1.00	<3.00	<1.00	-

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TABLE 2
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)	TOC (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	-
	09/24/08	188	<243	<485	<0.200	<1.00	<1.00	<3.00	<1.00	-
	03/20/09	156	<243	<485	<0.200	<1.00	<1.00	<3.00	<1.00	-
dup	03/20/09	145	<243	<485	<0.200	<1.00	<1.00	<3.00	<1.00	-
	09/18/09	107	<248	<495	<0.200	<1.00	<1.00	<3.00	<1.00	-
	03/31/10	150	<243	<485	<0.200	<1.00	<1.00	<3.00	<1.00	-
dup	03/31/10	126	<250	<500	<0.200	<1.00	<1.00	<3.00	<1.00	-
	09/23/10	161	<100	<500	<0.200	<1.00	<1.00	<3.00	<1.00	-
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	-
	09/22/08	-	-	-	-	-	-	-	-	-
OF-1	03/26/08	953[11]	6,920[5]	<490	<0.200	<0.500	<0.500	<1.00	<2.00	-
	09/18/09	82.8	44,400	985	<0.200	<1.00	<1.00	<3.00	<1.00	-
	03/31/10	<80.0	11,300	<500	<0.200	<1.00	<1.00	<3.00	<1.00	-
	09/23/10	<80.0	7,620	<485	<0.200	<1.00	<1.00	<3.00	<1.00	-
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	-
	06/25/08	<80.0	<236	<472	1.99	1.32	<0.500	<1.00	<2.00	-
	09/23/08	<80.0	<243	<485	1.87	<1.00	<1.00	<3.00	<1.00	-
	01/07/09	<80.0	<250	<500	<0.200	<1.00	<1.00	<3.00	<1.00	-
	03/20/09	<80.0	<250	<500	<0.200	<1.00	<1.00	<3.00	<1.00	-
	09/18/09	<80.0	<248	<495	0.320	<1.00	<1.00	<3.00	<1.00	-
	03/31/10	<80.0	<240	<481	<0.200	<1.00	<1.00	<3.00	<1.00	-
	09/23/10	<80.0	<98	<490	<0.200	<1.00	<1.00	<3.00	<1.00	-

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TABLE 2
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)	TOC (µg/l)
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	-	-
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	-
	09/25/08	<80.0[16]	<243	<485	<0.200	<1.00	<1.00	<3.00	<1.00	-
	03/17/09	970	399	<485	5.08	<1.00	<1.00	<3.00	<1.00	-
	09/21/09	112	42[14]	240[14]	0.25[14]	<1.0	<1.0	<3.0	<1.0	-
	03/16/10	96.8	<75	<380	0.42[14]	<1.0	<1.0	<3.0	<1.0	-
	09/20/10	98.8[14,19]	<35.1	<57.8	2.5	0.27[14]	<0.20	<0.42	<0.16	4,100
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	-
	09/24/08	666	4,290	<481	<0.200	<1.00	<1.00	<3.00	5.52	-
dup	09/24/08	701	18,400	<490	<0.200	<1.00	<1.00	<3.00	5.35	-

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TABLE 2
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)	TOC (µg/l)
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	-
	09/24/08	652	26,700	3,870	<0.200	<1.00	<1.00	<3.00	<1.00	-
U-5A	03/27/08	2,100	14,100[5]	4,650	0.400	1.18	<0.500	1.66	<2.00	-
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	-
	09/25/08	<80.0[16]	<243	<485	<0.200	<1.00	<1.00	<3.00	<1.00	-
	03/18/09	<80.0	<243	<485	<0.200	<1.00	<1.00	<3.00	<1.00	-
	09/22/09	27.5[14]	<77	<380	<1.0	<1.0	<1.0	<3.0	<1.0	-
	03/16/10	<50	<76	<380	<1.0	<1.0	<1.0	<3.0	<1.0	-
	09/21/10	14.6[14]	<35.2	<58.1	<0.12	<0.21	<0.20	<0.42	<0.16	1,400
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	-
	09/25/08	<80.0[16]	<243	<485	0.860	<1.00	1.28	<3.00	<1.00	-
	03/17/09	711	314	5,310	2.26	<1.00	15.9	20.0	<1.00	-
	09/21/09	22.6[14]	<76	110[14]	<1.0	<1.0	<1.0	<3.0	<1.0	-
	03/16/10	1,230	<76	<380	8.8	0.38[14]	75.9	72.9	<1.0	-
	09/20/10	266[19]	<35.1	<57.8	0.88[14]	<0.21	6.2	10.5	<0.16	5,200

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TABLE 2
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)	TOC (µg/l)
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	-
	09/25/08	642[16]	2,230	<485	0.620	<2.00	<2.00	<6.00	<2.00	-
	03/17/09	657	2,280	497	0.640	<2.00	<2.00	<6.00	<2.00	-
	09/21/09	1,030	330	100[14]	0.56[14]	0.36[14]	0.46[14]	0.78[14]	0.53[14]	-
	03/16/10	662	160	<380	0.34[14]	0.45[14]	0.39[14]	5.3	2.0	-
	09/20/10	887[19]	196	<57.8	0.46[14]	0.54[14]	0.35[14]	3.2	0.75[14]	7,500
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	-
	09/25/08	808[16]	688	<485	<0.400	<2.00	<2.00	<6.00	<2.00	-
	03/17/09	898	981	<478	<0.400	<2.00	<2.00	<6.00	<2.00	-
	09/21/09	1,200	1,300	170[14]	0.14[14]	0.39[14]	<1.0	0.39[14]	<1.0	-
	03/16/10	1,090	540	<380	0.20[14]	0.58[14]	0.28[14]	5.5	<1.0	-
	09/20/10	717[19]	713	<57.8	0.22[14]	0.55[14]	1.0	2.7[14]	0.26[14]	7,500
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	-
	09/25/08	941[16]	1,540	<485	1.32	2.24	<2.00	<6.00	<2.00	-
	03/17/09	<80.0	<236	<472	<0.400	<2.00	<2.00	<6.00	<2.00	-
	09/22/09	879	5,800	2,300	0.71[14]	2.1	<1.0	4.1	<1.0	-
	03/16/10	45[14]	64[14]	<380	<1.0	<1.0	<1.0	<3.0	<1.0	-
	09/21/10	259	332	<58.7	<0.12	1.1	<0.20	<0.42	<0.16	9,600
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	-
	09/25/08	-	-	-	-	-	-	-	-	-
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	-
	09/25/08	3,600[16]	1,450	<485	<1.00[18]	<5.00[18]	<5.00[18]	<15.00[18]	7.80[18]	-
	03/17/09	295	563	<485	9.88	4.35	3.74	8.26	2.88	-
	09/21/09	328	400	110[14]	<1.0	<1.0	<1.0	0.21[14]	4.7	-
	03/16/10	216	230	<380	<1.0	<1.0	<1.0	<3.0	5.3	-
	09/21/10[20]	279	273	<59.2	<0.12	<0.21	<0.20	<0.42	5.6	5,000
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]	-
	09/25/08	706[16]	807	<485	<0.200	<1.00	<1.00	<3.00	5.27	-
	03/17/09	1,810	1,190	<485	<0.200	<1.00	<1.00	<3.00	5.61	-
	09/22/09	3,910	500	89[14]	0.17[14]	<1.0	1.2	0.50[14]	8.2	-
	03/16/10	648	190	<390	<1.0	<1.0	<1.0	<3.0	6.9	-
	09/21/10[20]	1,430	220	<58.7	<0.12	<0.21	<0.20	<0.42	12.9	10,900
U-22A	03/27/08	322[11]	10,000[5]	490	<0.400	<1.00	<1.00	<2.00	<4.00	-
	06/24/08	322	3,550	<476	<0.200	<0.500	<0.500	<1.00	<2.00	-
	09/23/08	237	2,410	<476	<0.200	<1.00	<1.00	<3.00	<1.00	-
	01/06/09	279	1,790	<485	<0.200	<1.00	<1.00	<3.00	<1.00	-
	03/19/09	303	1,680	<495	<0.200	<1.00	<1.00	<3.00	<1.00	-
	09/17/09	264	8,780	1,380	<0.400	<2.00	<2.00	<6.00	<2.00	-
dup	09/17/09	304	4,170	759	<0.200	<1.00	<1.00	<3.00	<1.00	-
U-22B	03/27/08	<80.0	473[4]	<481	<0.200	<0.500	<0.500	<1.00	<2.00	-
	06/24/08	<80.0	<238	<476	<0.200	<0.500	<0.500	<1.00	<2.00	-
	09/23/08	<80.0	455	<476	<0.200	<1.00	<1.00	<3.00	<1.00	-
	01/07/09	<80.0	<250	<500	<0.200	<1.00	<1.00	<3.00	<1.00	-
	03/19/09	<80.0	384	<495	<0.200	<1.00	<1.00	<3.00	<1.00	-
dup	03/19/09	<80.0	1,160	<556	<0.200	<1.00	<1.00	<3.00	<1.00	-
	09/17/09	<80.0	<263	<526	<0.200	<1.00	<1.00	<3.00	<1.00	-

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TABLE 2
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)	TOC (µg/l)
U-22C	06/25/08	304	1,170	<472	<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	-
	06/24/08	3,550	2,690	<476	6.96	1.32	1.56	3.16	<2.00	-
	09/23/08	532	1,450	<476	17.0	1.58	<1.00	2.16	<1.00	-
	01/06/09	303	6,700	<481	<0.200	<1.00	<1.00	<3.00	<1.00	-
	03/19/09	<80.0	3,430	<495	<0.200	<1.00	<1.00	<3.00	<1.00	-
	09/17/09	176	12,600	<500	<0.200	<1.00	<1.00	<3.00	<1.00	-
U-24A	03/27/08	<400	<243	<485	<1.00	<2.50	<2.50	<5.00	<10.0	-
	06/24/08	<80.0	386	<476	<0.200	<0.500	<0.500	<1.00	<2.00	-
	09/23/08	<80.0	<238	<476	<0.200	<1.00	<1.00	<3.00	1.52	-
	01/06/09	<80.0	<236	<472	<0.200	<1.00	<1.00	<3.00	1.17	-
	03/19/09	<80.0	281	<495	<0.200	<1.00	<1.00	<3.00	1.22	-
	09/17/09	<80.0	803	<526	<0.200	<1.00	<1.00	<3.00	1.49	-
dup	09/17/09	<80.0	<250	<500	<0.200	<1.00	<1.00	<3.00	1.51	-
U-24B	03/27/08	<400	<238	<476	<1.00	<2.50	<2.50	<5.00	<10.0	-
	06/25/08	<80.0	<236	<472	<0.200	<0.500	0.510	<1.00	<2.00	-
	09/24/08	<80.0	<243	<485	<0.200	<1.00	<1.00	<3.00	<1.00	-
	01/07/09	<80.0	<250	<500	<0.200	<1.00	<1.00	<3.00	<1.00	-
	03/19/09	<80.0	<248	<495	<0.200	<1.00	<1.00	<3.00	<1.00	-
dup	03/19/09	<80.0	<248	<495	<0.200	<1.00	<1.00	<3.00	<1.00	-
	09/17/09	<80.0	<263	<526	<0.200	<1.00	<1.00	<3.00	<1.00	-
U-25	03/27/08	722	<240	<481	<0.200	<0.500	<0.500	<1.00	<2.00	-
	06/24/08	869	301	<476	<0.200	<0.500	<0.500	<1.00	<2.00	-
	09/24/08	211	388	<485	<0.400	<2.00	<2.00	<6.00	<2.00	-
	01/06/09	555	309	<500	<0.200	<1.00	<1.00	<3.00	<1.00	-
	03/19/09	<80.0	<278	<556	<0.200	<1.00	<1.00	<3.00	<1.00	-
	09/17/09	<80.0	<250	<500	<0.200	<1.00	<1.00	<3.00	<1.00	-
U-26	03/26/08	<80.0	<245	<490	<0.200	<0.500	<0.500	<1.00	<2.00	-
	06/25/08	<80.0	<236	<472	<0.200	<0.500	<0.500	<1.00	<2.00	-
	09/23/08	<80.0	<238	<476	<0.200	<1.00	<1.00	<3.00	<1.00	-
	01/07/09	<80.0	<250	<500	<0.200	<1.00	<1.00	<3.00	<1.00	-
	03/20/09	<80.0	<240	<481	<0.200	<1.00	<1.00	<3.00	<1.00	-
	09/17/09	<80.0	<263	<526	<0.200	<1.00	<1.00	<3.00	<1.00	-
U-27	03/26/08	<80.0	<245	<490	<0.200	<0.500	<0.500	<1.00	<2.00	-
	06/25/08	<80.0	<236	<472	<0.200	<0.500	<0.500	<1.00	<2.00	-
	09/23/08	<80.0	<238	<476	<0.200	<1.00	<1.00	<3.00	<1.00	-
	01/07/09	<80.0	<250	<500	<0.200	<1.00	<1.00	<3.00	<1.00	-
	03/20/09	<80.0	<240	<481	<0.200	<1.00	<1.00	<3.00	<1.00	-
	09/17/09	<80.0	<250	<500	<0.200	<1.00	<1.00	<3.00	<1.00	-
U-28	03/26/08	<80.0	<245	<490	<0.200	<0.500	<0.500	<1.00	<2.00	-
	06/25/08	<80.0	<236	<472	<0.200	<0.500	<0.500	<1.00	<2.00	-
	09/24/08	<80.0	<243	<485	<0.200	<1.00	<1.00	<3.00	<1.00	-
	01/07/09	<80.0	<250	<500	<0.200	<1.00	<1.00	<3.00	<1.00	-
	03/20/09	<80.0	<240	<481	<0.200	<1.00	<1.00	<3.00	<1.00	-
	09/17/09	<80.0	<263	<526	<0.200	<1.00	<1.00	<3.00	<1.00	-
U-29A	06/26/08	1,150[3]	--	--	<0.200	<0.500	<0.500	<1.00	<2.00	-
	09/24/08	492	--	--	0.210	<1.00	<1.00	<3.00	<1.00	-
	03/20/09	2,700	386,000	29,100	<0.200	<1.00	<1.00	<3.00	<1.00	-
	09/17/09	605	52,400	4,210	0.200	<1.00	<1.00	<3.00	<1.00	-
U-29B	03/26/08	<80.0	430[3]	<490	<0.200	<0.500	<0.500	<1.00	<2.00	-
	06/25/08	<80.0	<236	<472	<0.200	<0.500	<0.500	<1.00	<2.00	-
	09/24/08	<80.0	<243	<485	<0.200	<1.00	<1.00	<3.00	<1.00	-
dup	09/24/08	<80.0	<243	<485	<0.200	<1.00	<1.00	<3.00	<1.00	-
	01/07/09	<80.0	<250	<500	<0.200	<1.00	<1.00	<3.00	<1.00	-
	09/17/09	<80.0	<250	<500	<0.200	<1.00	<1.00	<3.00	<1.00	-
U-29C	03/26/08	<80.0	<245	<490	<0.200	<0.500	<0.500	<1.00	<2.00	-
	06/25/08	<80.0	<236	<472	<0.200	<0.500	<0.500	<1.00	<2.00	-
	09/23/08	<80.0	<238	<476	<0.200	<1.00	<1.00	<3.00	<1.00	-
	01/07/09	<80.0	<250	<500	<0.200	<1.00	<1.00	<3.00	<1.00	-

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TABLE 2
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)	TOC (µg/l)
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
NA = Not available
ND = Not detected at or below detection limit
<0.200 = Not detected above the laboratory method reporting limit (MRL) of 0.200 µg/L.
TPH-G = Total petroleum hydrocarbons in the gasoline range
TPH-D = Total petroleum hydrocarbons in the diesel range
TPH-O = Total petroleum hydrocarbons in the heavy oil range
TOC = Total organic carbon
BTEX and MTBE analysis by USEPA Method 8021B or 8260B
TPH-G analysis using Northwest Method NWTPH-Gx
TPH-D and TPH-O analysis using Northwest Method NWTPH-Dx with silica gel cleanup.
TOC analysis using EPA Method 415
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.
[16] = The sample was analyzed one day past holding time.
[17] = Detected hydrocarbons in the diesel range are primarily due to overlap from a gasoline range product.
[18] = The reporting limit was raised due to high concentrations non-target analytes.
[19] = Analyte was detected in the associated method blank
[20] = Samples U-20 and U-21 were misidentified as the other in the field.

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TABLE 3
GROUNDWATER ANALYTICAL RESULTS - PAH COMPOUNDS
Willbridge Terminals
Portland, Oregon

Well Identification	Date Sampled	1-Methyl-naphthalene	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	0.962
	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	4.64	ND	ND	2.82	ND
	05/17/01	-	-	0.934	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.59	ND	ND	0.564	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
	06/24/08	-	<2.44	3.02	<2.44	<4.88	0.0403	0.0256	<0.0244	<0.488	<0.0244	0.150	<0.0244	<0.488	9.17	0.0250	<2.44	6.70	0.468
	09/23/08	-	<0.476	1.35	<0.476	<0.476	<0.0238	<0.0238	<0.0238	<0.476	<0.0238	0.0249	<0.0238	<0.476	5.14	<0.0238	<0.952[6]	2.57	<0.476
dup	09/23/08	-	<0.476	1.42	<0.476	<1.43[6]	<0.0238	<0.0238	<0.0238	<0.476	<0.0238	0.0479	<0.0238	<0.476	5.66	<0.0238	<0.952	3.96	<0.476
	01/06/09	-	<0.490	1.26	<1.96	<0.980	0.0544	0.0382	0.0337	<0.490	0.0327	0.121	<0.0245	<0.490	4.63	0.0364	<1.47	4.64	0.712
	03/18/09	-	<0.290	1.46	<0.966	<0.966	0.0288	0.0202	0.0191	<0.290	0.0164	0.0839	<0.0145	<0.966	5.85	0.0167	<0.580	2.30	<0.725
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	0.508	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	0.679	<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	1.99	<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[6]	<9.76[5]	<9.76[6]	0.341	0.189	0.156	<1.95	0.117	0.498	<0.0976	<9.76[5]	68.2	0.120	<19.5[6]	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
	06/24/08	-	3.08	6.25	<2.44	<7.32	0.250	0.219	0.159	<0.488	0.129	0.471	0.0394	<0.976	22.2	0.160	<4.88	21.5	0.967
	09/23/08	-	1.33	2.72	<0.952[8]	<1.43[8]	0.106	0.0750	0.0597	<0.952[8]	0.0497	0.211	<0.0476[8]	0.487	12.5	0.0548	<2.86[8]	7.27	0.496
dup	09/23/08	-	1.42	2.89	<0.952[8]	<1.43[8]	0.130	0.0930	0.0786	<0.952[8]	0.0620	0.255	<0.0476[8]	0.570	12.8	0.0644	<2.38[8]	7.15	0.638
	01/06/09	-	1.01	2.32	<1.96	<1.96	0.174	0.223	0.272	0.350	0.268	0.368	0.0948	<1.96	10.2	0.296	<3.92	3.44	<1.96
dup	01/06/09	-	0.682	1.20	<0.485	<0.485	0.0744	0.0876	0.0922	0.128	0.0968	0.147	0.0340	0.290	7.19	0.109	<1.46	2.19	0.435
	03/24/09	-	0.475	1.70	<0.891	<1.19	0.137	0.138	0.149	<0.297	0.150	0.265	0.0427	0.503	14.4	0.140	<1.34	6.88	0.914
	09/22/09	-	1.14	2.81	<0.980	<0.980	0.0516	0.0578	0.0499	<0.980	0.0542	0.0954	<0.0490	<0.980	12.0	<0.0490	<1.47	5.73	<0.980
dup	09/22/09	-	1.79	3.42	<1.46	<0.971	0.0682	0.0779	0.0797	<0.971	0.0761	0.122	<0.0485	<0.971	14.8	0.0633	<1.46	6.39	<0.971
	03/18/10	-	<1.90	3.08	<1.90	<1.90	0.471	0.450	0.438	<1.90	0.425	0.689	0.127	<1.90	12.6	0.407	<1.90	5.75	<1.90
	09/21/10	-	<0.500	1.29	<0.500	<0.500	0.159	0.1600	0.160[9]	<0.500	0.131[9]	0.234[9]	0.0506	<0.500	5.21	0.174[9]	<0.750	1.69	0.533

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TABLE 3
GROUNDWATER ANALYTICAL RESULTS - PAH COMPOUNDS
Willbridge Terminals
Portland, Oregon

Well Identification	Date Sampled	1-Methyl-naphthalene	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	0.632	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	1.68	0.211
	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[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	5.26	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
	09/23/08	-	<0.476[8]	<1.19[8]	<0.476[8]	<0.476[8]	0.182	0.148	0.146	<0.476[8]	0.131	0.267	0.0500	0.671	1.87	0.136	<0.952[8]	1.11	0.584
	03/24/09	-	<2.43	2.69	<2.43	<2.43	0.0367	0.0247	0.0251	<0.194	0.0196	0.0853	<0.00971	<2.43	8.59	0.0215	<2.43	4.96	0.819
dup	03/24/09	-	<0.971	1.85	<0.971	<0.971	0.0355	0.0236	0.0249	<0.194	0.0179	0.0782	<0.00971	<0.971	7.45	0.0217	<0.971	4.66	0.782
	09/22/09	-	<0.0980	1.09	<0.196	<0.294	0.00944	<0.00490	0.00494	<0.0980	<0.00490	0.0197	<0.00490	0.366	1.48	<0.00490	<0.392	1.25	0.396
	03/18/10	-	<0.0952	0.327[11]	<0.0952	<0.0952	<0.00476	<0.00476	<0.00476	<0.0952	<0.00476	0.00970	<0.00476	<0.0952	0.857[11]	<0.00476	<0.143	0.470[11]	<0.0952
	09/21/10	-	<0.200	0.899	<0.200	<0.200	0.0117	<0.0100	<0.0100	<0.200	<0.0100	0.0190[12]	<0.0100	0.208	2.72	<0.0100	<0.400	1.67	0.283
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	1.76	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	ND	0.729	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	1.06	<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
	06/22/05	-	-	0.685	<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	1.36	<0.0990	<1.58	0.743	0.124
	06/25/08	-	0.319	0.268	<0.0952	<0.0952	0.0198	0.0260	0.0376	<0.0952	0.0219	0.0341	0.0121	<0.0952	0.314	0.0348	<0.667	0.0891	0.0764

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TABLE 3
GROUNDWATER ANALYTICAL RESULTS - PAH COMPOUNDS
Willbridge Terminals
Portland, Oregon

Well Identification	Date Sampled	1-Methyl-naphthalene	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	-	-	2.96	<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	<0.396	<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	-	-	1.97	<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
	06/26/08	-	<0.952	2.83	<0.952	<3.81	0.0473	0.0235	0.0193	<0.0952	0.0117	0.118	0.00480	<0.952	8.35	0.0154	<2.86	18.7	0.322
	03/18/09	-	<0.985	1.59	<0.985	<0.985	0.0132	0.00630	<0.00493	<0.0985	<0.00493	0.0397	<0.00493	<0.985	5.41	<0.00493	<0.985	7.71	0.234
dup	03/18/09	-	<0.485	1.69	<0.971	<1.46	0.0403	0.0187	0.0130	<0.0971	0.0115	0.103	<0.00485	<0.485	9.63	0.0114	<1.21	11.4	0.591
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	1.18	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	8.20	<0.0160	<0.957	5.05	<0.319
	09/23/08	-	<0.476[8]	2.08	<0.476[8]	<1.43[8]	0.0361	0.0258	0.0295	<0.476[8]	<0.0238[8]	0.0612	<0.0238[8]	0.284	8.25	<0.0238[8]	<1.43[8]	6.48	<0.476[8]
	03/24/09	-	<1.99	3.37	<1.99	<1.99	0.0561	0.0382	0.0288	<0.398	0.0271	0.120	<0.0199	<1.99	15.0	0.0215	<1.99	14.1	0.646
	09/22/09	-	<0.388	3.46	<0.971	<0.583	0.0300	0.0207	0.0197	<0.388	<0.0194	0.0585	<0.0194	<0.388	13.1	<0.0194	<0.583	10.7	<0.388
	03/18/10	-	<0.0980	0.713	<0.196	<0.147	0.00898	0.00732	0.00661	<0.0980	0.00650	0.0162	<0.00490	<0.0980	2.54	0.00540	<0.147	0.478	<0.0980
	09/22/10	-	<0.500	2.81	<1.00	<2.50	0.0621	0.0404	<0.0384[9]	<0.500	<0.0250	<0.0105[9]	<0.0250	<0.500	16.1	0.0304[12]	<1.00	13.8	0.622
dup	09/22/10	-	<2.50	3.60	<2.50	<2.50	0.0878	0.0504	<0.0452[9]	<0.500	<0.0270[12]	0.161[9]	<0.0250	<0.500	17.8	0.0324[12]	<2.50	18.1	0.883

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TABLE 3
GROUNDWATER ANALYTICAL RESULTS - PAH COMPOUNDS
Willbridge Terminals
Portland, Oregon

Well Identification	Date Sampled	1-Methyl-naphthalene	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	0.588	<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
	06/26/08	-	1.87	0.412	<0.190	<0.190	0.0407	0.0301	0.0603	<0.190	0.0415	0.0763	0.0130	0.163	0.324	0.0399	1.24	0.357	0.218
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	0.0823	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
	09/23/08	-	<0.0952	<0.0952	<0.0952	<0.0952	0.00908	0.0101	0.00913	<0.0952	0.00866	0.0124	<0.00476	<0.0952	<0.0952	0.00885	<0.0952	<0.0952	<0.0952
	03/24/09	-	<0.0971	<0.0971	<0.0971	<0.0971	0.0238	0.0287	0.0360	<0.0971	0.0311	0.0412	0.00832	<0.0971	<0.0971	0.0260	<0.0971	<0.0971	<0.0971
	09/22/09	-	<0.0980	<0.0980	<0.0980	<0.0980	0.00748	0.0115	0.0103	<0.0980	0.00990	0.0109	<0.00490	<0.0980	<0.0980	0.00892	<0.0980	<0.0980	<0.0980
	03/19/10	-	<0.0957	<0.0957	<0.0957	<0.0957	0.00733	0.00888	0.00828	<0.0957	0.00714	0.00984	<0.00478	<0.0957	<0.0957	0.00741	<0.0957	<0.0957	<0.0957
	09/21/10	-	<0.100	<0.100	<0.100	<0.100	0.00750	0.00932	0.00872 [T2]	<0.100	0.00638 [T2]	0.00833 [T2]	<0.00500	<0.100	<0.100	0.00944 [T2]	<0.100	<0.100	<0.100
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	0.0238
	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
	09/23/08	-	<0.0952	<0.0952	<0.0952	<0.0952	0.00789	0.00553	0.00665	<0.0952	<0.00476	0.0112	<0.00476	<0.0952	<0.0952	<0.00476	<0.0952	<0.0952	<0.0952
	03/24/09	-	<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	0.00533	<0.0995	<0.0995	<0.0995
	09/22/09	-	<0.0976	<0.0976	<0.0976	<0.0976	0.0106	0.0141	0.0133	<0.0976	0.0108	0.0137	<0.00488	<0.0976	<0.0976	0.0122	<0.0976	<0.0976	<0.0976
	03/19/10	-	<0.0962	<0.0962	<0.0962	<0.0962	0.00829	0.00577	0.00542	<0.0962	<0.00481	0.00991	<0.00481	<0.0962	<0.0962	<0.00481	<0.0962	<0.0962	<0.0962
	09/21/10	-	<0.100	<0.100	<0.100	<0.100	<0.00500	<0.00500	<0.00500	<0.100	<0.00500	<0.00500	<0.00500	<0.100	<0.100	0.00600 [T2]	<0.100	<0.100	<0.100

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TABLE 3
GROUNDWATER ANALYTICAL RESULTS - PAH COMPOUNDS
Willbridge Terminals
Portland, Oregon

Well Identification	Date Sampled	1-Methyl-naphthalene	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	0.0605	0.0596	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	0.637
	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	0.369	0.0353	<0.292	0.260	0.323
dup	03/14/06	-	-	0.375	<0.182	0.0933	0.106	0.0871	0.0607	0.0674	0.0564	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	0.0869	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
	09/21/10	-	<0.500	<0.500	<0.500	<0.200	0.256	0.228	0.160[9]	<0.200	0.155[9]	0.233[9]	0.0550	0.465	<0.500	0.160[9]	<0.500	0.279	0.778
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	0.256
	03/15/06	-	-	<0.0190	<0.0190	<0.0952	<0.0190	<0.0190	<0.0190	<0.0190	<0.0190	0.0280	<0.0190	0.193	<0.0762	<0.0190	<0.152	<0.0381	0.206

COP0018240

TABLE 3
GROUNDWATER ANALYTICAL RESULTS - PAH COMPOUNDS
Willbridge Terminals
Portland, Oregon

Well Identification	Date Sampled	1-Methyl-naphthalene	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-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	6.82	<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
	06/26/08	-	<0.476	1.28	<0.476	<0.476	0.0855	0.0864	0.148	<0.476	0.0980	0.208	0.0307	0.450	2.93	0.0955	<0.952	2.86	0.475
	03/18/09	-	<1.94	3.17	<1.94	<1.94	0.418	0.370	0.615	<1.94	0.505	1.01	0.111	2.14	12.7	0.363	<1.94	13.5	3.22
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	0.789	ND	ND	0.194	ND
	09/24/02	-	-	1.40	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.32	ND	0.887	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	<0.850	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	<0.788	1.07	0.0513
	03/22/07	-	-	0.118	<0.0343[6]	<0.0490[6]	<0.00490	<0.00490	<0.00490	<0.00980	<0.00490	<0.0147[6]	<0.00490	<0.0245[6]	0.838	<0.00490	<0.275[6]	0.140	<0.0784[6]
	09/20/07	-	<0.500[6]	1.01	<0.500[6]	<0.500[6]	<0.0250[8]	0.0112[4]	0.0146[4]	<0.100	0.0120[4]	<0.0250[6]	0.00524[4]	<0.500[6]	9.81	0.00512[4]	<2.50	1.03	<0.500[6]
	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
	09/24/08	-	<0.0952	0.500	<0.0952	<0.0952	0.00712	0.00625	0.00645	<0.0952	0.00486	0.0145	<0.00476	<0.0952	2.38	0.00599	<0.571[8]	0.375	<0.0952
	03/25/09	-	<0.0971	0.125	<0.0971	<0.0971	0.00665	0.00565	0.00614	<0.0971	0.00595	0.0129	0.00515	<0.0971	0.411	0.00674	<0.0971	<0.0971	<0.0971
	09/22/09	-	<0.0962	0.619	<0.0962	<0.0962	0.0161	0.0183	0.0150	<0.0962	0.0134	0.0245	<0.00481	<0.0962	2.53	0.0119	<0.240	0.448	<0.0962
	03/19/10	-	<0.0962	<0.0962	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00481	<0.00721	<0.00481	<0.0962	0.182	<0.00481	<0.0962	<0.0962	<0.0962
dup	03/19/10	-	<0.0980	0.105	<0.0980	<0.0980	<0.00490	<0.00490	<0.00490	<0.0980	<0.00490	<0.00735	<0.00490	<0.0980	0.390	<0.00490	<0.0980	<0.0980	<0.0980
	09/22/10	-	<0.200	0.782	<0.300	<0.250	0.0130	0.00592	<0.0100	<0.100	<0.00500	0.0344[9]	0.00525	<0.100	2.62	0.00670[12]	<0.300	1.19	<0.100
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
	06/22/05	-	-	<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
	06/26/08	-	<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
	09/26/08	-	<0.0962	<0.0962	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.0962	<0.00481	<0.0962	<0.0962	<0.0962
CR-8	02/18/00	-	-	0.749	ND	0.264	0.981	2.47	1.6	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	0.326	ND	0.27	ND	0.613	ND	ND	0.458
	08/25/00	-	-	ND	ND	ND	0.313	0.666	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

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TABLE 3
GROUNDWATER ANALYTICAL RESULTS - PAH COMPOUNDS
Willbridge Terminals
Portland, Oregon

Well Identification	Date Sampled	1-Methyl-naphthalene	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)
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-26	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
	06/22/05	-	-	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.200	<0.100	0.264	<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
	06/24/08	-	<0.0985	<0.0985	<0.0985	<0.0985	0.0238	0.0271	0.0326	<0.0985	0.0283	0.0394	0.0101	0.0583	0.0849	0.0267	<0.0985	0.0720	0.0583
	09/23/08	-	<0.0952	<0.0952	<0.0952	<0.0952	0.0144	0.0150	0.0142	<0.0952	0.0158	0.0221	0.00510	<0.0952	0.0574	0.0129	<0.0952	<0.0952	<0.0952
	01/06/09	-	<0.0980	<0.0980	<0.0980	<0.0980	0.0146	0.0151	0.0199	<0.0980	0.0162	0.0254	0.00513	0.0518	0.0508	0.0171	<0.0980	<0.0980	<0.0980
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	0.0136	<0.0995	<0.0995	0.0415	<0.0995	<0.0995	<0.0995
	06/24/08	-	<0.0971	<0.0971	<0.0971	<0.0971	0.101	0.125	0.148	0.141	0.142	0.173	0.0455	0.200	<0.0971	0.126	<0.0971	0.129	0.198
	09/23/08	-	<0.0952	<0.0952	<0.0952	<0.0952	0.0948	0.0996	0.104	0.105	0.0911	0.140	0.0344	0.215	<0.0952	0.0928	<0.0952	0.130	0.240
	01/06/09	-	<0.0971	<0.0971	<0.0971	0.0693	0.238	0.334	0.377	0.327	0.334	0.404	0.101	0.506	<0.0971	0.292	<0.0971	0.442	0.329
CR-28A	06/25/08	-	55.3	0.448	<0.476	<0.476	<0.0238	<0.0238	<0.0238	<0.476	<0.0238	0.0262	<0.0238	<0.476	0.535	<0.0238	177	0.399	<0.476
	09/25/08	-	55.6	0.422	<0.481	<0.481	0.0268	<0.0240	<0.0240	<0.481	<0.0240	0.0307	<0.0240	<0.481	0.557	<0.0240	184	0.442	<0.481
CR-28B	06/25/08	-	<0.192	<0.192	<0.192	<0.192	<0.00962	<0.00962	<0.00962	<0.192	<0.00962	<0.00962	<0.00962	<0.192	<0.192	<0.00962	<0.192	<0.192	<0.192
	09/25/08	-	<0.0962	<0.0962	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00481	0.00498	<0.00481	<0.0962	<0.0962	<0.00481	<0.0962	<0.0962	<0.0962
CR-28C	06/25/08	-	<0.0952	<0.0952	<0.0952	<0.0952	0.0494	0.0421	0.0517	<0.0952	0.0478	0.0649	0.0131	0.102	<0.0952	0.0345	<0.0952	<0.0952	0.119
	09/25/08	-	0.0783	<0.0962	<0.0962	<0.0962	0.0171	0.00854	0.0129	<0.0962	0.00891	0.0203	<0.00481	<0.0962	<0.0962	0.00713	0.481	<0.0962	<0.0962
CR-29A	06/26/08	-	10.9	0.473	<0.0952	0.0707	0.00636	<0.00476	<0.00476	0.0952	<0.00476	0.00733	<0.00476	0.0479	0.574	<0.00476	2.51	0.873	0.0621
	09/25/08	-	11.2	0.723	<0.144	0.0654	0.0148	<0.00481	<0.00481	<0.0962	<0.00481	0.0167	<0.00481	0.0653	0.685	<0.00481	<4.33	0.990	0.103
CR-29B	06/26/08	-	<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
	09/25/08	-	<0.0962	<0.0962	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.0962	<0.00481	<0.0962	<0.0962	<0.0962

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TABLE 3
GROUNDWATER ANALYTICAL RESULTS - PAH COMPOUNDS
Willbridge Terminals
Portland, Oregon

Well Identification	Date Sampled	1-Methyl-naphthalene	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)
CR-30A	06/26/08	-	<0.0952	0.811	<0.190	0.0838	0.0117	0.00653	<0.00476	<0.0952	<0.00476	0.0154	<0.00476	<0.0952	1.15	<0.00476	<0.857	1.15	0.115
	09/24/08	-	<0.0962	0.602	<0.0962	<0.0962	0.0170	0.0104	0.00658	<0.0962	0.00622	0.0253	<0.00481	<0.0962	0.921	0.00599	<0.817	0.427	0.130
CR-30B	06/26/08	-	<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
	09/24/08	-	<0.0962	<0.0962	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.0962	<0.00481	<0.0962	<0.0962	<0.0962
CR-31A	06/26/08	-	<0.0952	1.50	<0.952	<0.190	0.0205	0.0148	0.00918	<0.0952	0.00794	0.0331	<0.00476	<0.0952	6.63	0.00892	<0.952	1.69	0.0977
	09/24/08	-	<0.481	1.23	<0.481	<0.481	<0.0240	<0.0240	<0.0240	<0.481	<0.0240	0.0257	<0.0240	<0.481	5.90	<0.0240	<1.20	1.34	<0.481
CR-31B	06/26/08	-	<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
	09/24/08	-	<0.0962	<0.0962	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.0962	<0.00481	<0.0962	<0.0962	<0.0962
CR-32A	06/26/08	-	<0.0952	0.396	<0.0952	<0.190	0.00625	<0.00476	<0.00476	<0.0952	<0.00476	0.0101	<0.00476	<0.0952	1.41	<0.00476	<0.381	0.445	<0.0952
	09/24/08	-	<0.192	0.746	<0.192	<0.192	<0.0192	<0.00962	<0.00962	<0.192	<0.00962	<0.0192	<0.00962	<0.192	2.56	<0.00962	<0.865	0.646	<0.192
CR-32B	06/26/08	-	<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
	09/24/08	-	<0.0962	<0.0962	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.0962	<0.00481	<0.0962	<0.0962	<0.0962
CR-32C	06/26/08	-	<0.0952	<0.0952	<0.0952	<0.0952	0.00614	0.00780	0.00869	<0.0952	0.00884	0.00964	<0.00476	<0.0952	<0.0952	0.00737	<0.0952	<0.0952	<0.0952
	09/24/08	-	<0.0962	<0.0962	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.0962	<0.00481	<0.0962	<0.0962	<0.0962
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
	06/24/08	-	<0.398	<0.398	<0.398	<0.398	<0.00498	<0.00498	<0.00498	0.0995	<0.00498	0.00751	<0.00498	<0.398	0.413	<0.00498	<0.796	<0.398	<0.0995
	09/24/08	-	<0.385[6]	<0.385[6]	<0.385[6]	<0.385[6]	0.00503	<0.00481	<0.00481	<0.0962	<0.00481	0.00821	0.00712	<0.385[6]	0.559	0.00873	<0.769[6]	<0.385[6]	<0.0962
	01/06/09	-	<0.980	<0.980	<0.980	<0.980	0.00710	0.00683	0.00831	<0.0980	0.00624	0.0133	<0.00490	<0.980	0.547	0.00849	<0.980	<0.980	<0.980
	03/18/09	-	<0.0976	<0.976	<0.976	<0.390	<0.00488	<0.00488	<0.00488	<0.0976	<0.00488	<0.00976	<0.00488	<0.390	<0.976	<0.00488	<0.390	<0.390	<0.146

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TABLE 3
GROUNDWATER ANALYTICAL RESULTS - PAH COMPOUNDS
Willbridge Terminals
Portland, Oregon

Well Identification	Date Sampled	1-Methyl-naphthalene	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	-	-	0.128	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]	0.0601	0.0326
	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
	09/22/08	-	0.0042	0.053	0.0050	0.0050	<0.0026	<0.0043	<0.0023	<0.0029	<0.0025	<0.0034	<0.0025	<0.0044	0.010	<0.0026	0.16	0.0095	0.0098
dup	09/22/08	-	0.0044	0.066	0.0048	0.0047	<0.0026	<0.0043	0.0038	<0.0029	<0.0025	<0.0034	<0.0025	0.0045	0.010	<0.0026	0.18	0.011	0.0097
	03/16/09	-	<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
dup	03/16/09	-	<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	<0.190	<0.0952	<0.0952
	09/15/09	0.630	<0.0952	<0.0952	<0.0952	<0.0952	<0.00476	0.00654	0.00612	<0.0952	0.00525	0.00619	0.00524	<0.0952	<0.0952	0.00819	<0.143	<0.0952	<0.0952
	03/17/10	<0.0962	<0.0962	<0.0962	<0.0962	<0.0962	0.00587	0.00633	0.00764	<0.0962	0.00617	0.0103	<0.00481	<0.0962	<0.0962	0.00590	<0.0962	<0.0962	<0.0962
	09/20/10	-	<0.190	<0.190	<0.190	<0.190	<0.00952	<0.00952	<0.00952	<0.190	<0.00952	<0.00952	<0.00952	<0.190	<0.190	<0.00952	<0.190	<0.190	<0.190

COP0018244

TABLE 3
GROUNDWATER ANALYTICAL RESULTS - PAH COMPOUNDS
Willbridge Terminals
Portland, Oregon

Well Identification	Date Sampled	1-Methyl-naphthalene	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

COP0018245

TABLE 3
GROUNDWATER ANALYTICAL RESULTS - PAH COMPOUNDS
Willbridge Terminals
Portland, Oregon

Well Identification	Date Sampled	1-Methyl-naphthalene	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	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.135	<0.0192	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[5]	<0.0306[5]	0.0633
	03/22/07	-	-	0.175	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	<0.382[5]	<0.0294[5]	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[5]	0.0338	0.0577
	03/24/08	-	<0.0075[6]	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[5]	0.023	0.14
	09/22/08	-	<0.013	0.25	<0.011	0.011	<0.0026	0.0069	0.0042	0.0078	<0.0025	<0.0034	<0.0025	<0.0044	<0.0038	0.0048	0.24	0.023	0.077
	03/16/09	-	<0.0952	0.136	<0.0952	<0.0952	<0.00476	<0.00476	<0.00476	<0.0952	<0.00476	0.00620	<0.00476	<0.0952	<0.0952	<0.00476	<0.286	<0.0952	<0.0952
	09/15/09	<0.0952	<0.0952	0.229	<0.0952	<0.0952	0.00593	0.00843	0.00515	<0.0952	0.00488	0.00972	<0.00476	<0.0952	<0.0952	0.00520	<0.143	<0.0952	<0.0952
	03/16/10	<0.0971	<0.0971	0.200	<0.0971	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.0971	<0.00485	<0.0971	<0.0971	<0.0971
	09/20/10	-	<0.190	0.366	<0.190	<0.190	<0.00952	<0.00952	<0.00952	<0.190	<0.00952	<0.00952	<0.00952	<0.190	<0.190	<0.00952	<0.286	<0.190	<0.190
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	<1.96[6]	0.331	<0.0980
	09/20/07	-	<0.0500[6]	0.602	<0.0300[6]	0.0440	0.0125	<0.0100	<0.0100	0.0114[4]	<0.0100	0.0196	<0.0100	0.390	0.477	<0.0100	<1.25[6]	0.0903	0.334
	03/25/08	-	12[8]	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[8]	0.78	<0.070[6]	0.064	0.073	0.050	0.042	0.037	<0.0025	0.11	0.0061	0.73	0.55	0.030	<0.68[6]	0.67	0.56
	09/22/08	-	0.25	1.6	<0.060	0.12	0.081	0.031	0.040	0.034	<0.0025	0.083	0.0075	1.1	1.3	0.021	0.88	0.88	0.83
	03/16/09	-	0.422	1.15	<0.200	<0.200	0.0540	0.0218	0.0202	<0.200	0.0116	0.0795	<0.0100	0.917	0.825	0.0130	<0.600	1.29	0.554
	09/15/09	11.1	0.192	1.59	<0.0952	0.239	0.0537	0.0214	0.0176	<0.0952	0.0130	0.0805	0.00490	0.959	1.10	0.0129	<0.429	2.87	0.531
dup	09/15/09	5.02	<0.0966	0.983	<0.0966	0.165	0.0390	0.0139	0.0122	<0.0966	0.00866	0.0550	<0.00483	0.710	0.597	0.00803	<0.242	1.69	0.375
	03/16/10	12.7	1.80	0.491	<0.0980	<0.0980	0.0295	0.0169	0.0114	<0.0980	0.00677	0.0494	<0.00490	0.367	0.230	0.00958	<0.490	<0.0980	0.306
	09/20/10	-	0.291	1.41	<0.190	<0.190	0.0561	0.0222	0.0161	<0.190	0.0102	0.0727	0.0106	0.507	1.20	0.0156	<0.524	1.20	0.335

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TABLE 3
GROUNDWATER ANALYTICAL RESULTS - PAH COMPOUNDS
Willbridge Terminals
Portland, Oregon

Well Identification	Date Sampled	1-Methyl-naphthalene	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	02/16/00	-	-	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
	08/23/00	-	-	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 3
GROUNDWATER ANALYTICAL RESULTS - PAH COMPOUNDS
Willbridge Terminals
Portland, Oregon

Well Identification	Date Sampled	1-Methyl-naphthalene	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	<0.0396	<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	<0.0200	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
	09/23/08	-	0.0026	<0.0044	<0.0034	<0.0036	0.0069	<0.0043	<0.0023	<0.0029	<0.0025	0.0039	<0.0025	<0.0044	<0.0038	<0.0026	0.0038	<0.0050	0.029
	03/16/09	-	<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
	09/14/09	<0.0962	<0.0962	<0.0962	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.0962	<0.00481	<0.0962	<0.0962	<0.0962
	03/16/10	<0.0952	<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
	09/20/10	-	<0.190	<0.190	<0.190	<0.190	<0.00952	<0.00952	<0.00952	<0.190	<0.00952	<0.00952	<0.00952	<0.190	<0.190	<0.00952	<0.190	<0.190	<0.190
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	<0.971[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
	06/24/08	-	0.0073	0.063	0.0069	0.010	0.0078	0.0057	0.0062	0.013	0.0045	0.0079	0.0068	0.0090	0.0091	0.014	0.11	0.020	0.016
	09/23/08	-	0.0089	0.31	<0.0034	<0.0036	0.0074	<0.0043	<0.0023	0.0029	<0.0025	0.0051	<0.0025	<0.0044	<0.0038	0.0033	<0.18	<0.0050	0.018
	01/05/09	-	<0.0909	<0.0909	<0.0909	<0.0909	<0.00455	<0.00455	<0.00455	<0.0909	<0.00455	<0.00455	<0.00455	<0.0909	<0.0909	<0.00455	<0.0909	<0.0909	<0.0909
	03/16/09	-	<0.100	<0.100	<0.100	<0.100	<0.00500	<0.00500	<0.00500	<0.100	<0.00500	<0.00500	<0.00500	<0.100	<0.100	<0.00500	<0.150	<0.100	<0.100
	09/14/09	<0.0952	<0.0952	0.148	<0.0952	<0.0952	<0.00476	0.00477	<0.00476	<0.0952	<0.00476	0.00509	<0.00476	<0.0952	<0.0952	<0.00476	<0.0952	<0.0952	<0.0952
	03/16/10	<0.0952	<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
	09/20/10	-	<0.190	0.206	<0.190	<0.190	<0.00952	<0.00952	<0.00952	<0.190	<0.00952	<0.00952	<0.00952	<0.190	<0.190	<0.00952	<0.190	<0.190	<0.190

COP0018248

TABLE 3
GROUNDWATER ANALYTICAL RESULTS - PAH COMPOUNDS
Willbridge Terminals
Portland, Oregon

Well Identification	Date Sampled	1-Methyl-naphthalene	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	-	-	0.246	<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	0.0616
	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	<0.0100	<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
	09/23/08	-	0.0089	0.44	<0.0034	<0.0036	<0.0026	<0.0043	<0.0023	<0.0029	<0.0025	<0.0034	<0.0025	<0.0044	<0.0038	<0.0026	<0.18	0.050	0.10
	03/16/09	-	<0.0952	0.272	<0.0952	<0.0952	<0.00476	<0.00476	<0.00476	<0.0952	<0.00476	<0.00476	<0.00476	<0.0952	<0.0952	<0.00476	<0.190	<0.0952	<0.0952
	09/14/09	<0.0971	<0.0971	0.304	<0.0971	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.0971	<0.00485	<0.0971	<0.0971	<0.0971
dup	09/14/09	3.41	<0.0962	0.809	<0.0962	0.117	0.0265	0.0106	0.00920	<0.0962	0.00597	0.0421	<0.00481	0.515	0.482	0.00562	<0.192	1.22	0.293
	03/16/10	<0.0971	<0.0971	0.196	<0.0971	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.0971	<0.00485	<0.0971	<0.0971	<0.0971
	09/20/10	-	<0.190	0.324	<0.190	<0.190	<0.00952	<0.00952	<0.00952	<0.190	<0.00952	<0.00952	<0.00952	<0.190	<0.190	<0.00952	<0.190	<0.190	<0.190
MW-37	02/16/00	-	-	1.56	ND	0.0862	0.0584	0.0773	0.0564	ND	ND	583	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	0.660	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	2.86	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	0.0562	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]	0.0167	<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	<0.48[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	0.026	0.018	0.074	1.7	0.21	<1.1[6]	0.23	0.15
	06/24/08	-	0.012	0.56	<0.19	0.025	<0.0075	0.017	0.015	0.035	0.0053	0.0044	0.0054	0.033	0.75	0.036	0.46	0.099	0.053
	09/23/08	-	<0.0023	0.70	<0.29	0.031	0.055	0.071	0.065	0.085	0.026	0.051	0.013	0.10	0.68	0.081	<0.69	0.12	0.18
dup	09/23/08	-	0.031	0.67	<0.22	0.026	0.0079	0.0089	0.0070	0.013	<0.0025	0.0038	<0.0025	0.048	0.58	0.012	<0.52	0.10	0.058
	01/05/09	-	<0.0930	0.474	<0.465[6]	<0.465[6]	0.0119	0.0438	0.0215	0.222	0.0107	0.0247	0.0243	<0.465[6]	0.406	0.161	<1.40[6]	<0.465[6]	<0.0930
	03/16/09	-	<0.286	0.399	<0.286	<0.0952	0.00564	0.00791	0.00532	<0.0952	<0.00476	0.00894	<0.00476	<0.0952	0.366	0.0100	<0.429	<0.0952	<0.0952
	09/14/09	20.0	<0.0971	0.631	<0.243	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.00485	0.00506	<0.00485	<0.0971	0.578	<0.00485	<0.340	0.175	<0.0971
	03/16/10	<0.0976	<0.0976	<0.0976	<0.0976	<0.0976	0.0113	0.0271	0.0153	<0.0976	0.0133	0.0153	0.00761	<0.0976	<0.0976	0.0367	<0.293	<0.0976	<0.0976
dup	03/16/10	0.313	<0.0962	<0.0962	<0.0962	<0.0962	<0.00481	0.00697	<0.00481	<0.0962	<0.00481	0.00612	<0.00481	<0.0962	<0.0962	0.0102	<0.0962	<0.0962	<0.0962
	09/20/10	-	<0.194	0.375	<0.194	<0.194	<0.00971	<0.00971	<0.00971	<0.194	<0.00971	<0.00971	<0.00971	<0.194	0.338	0.0112	<0.291	<0.194	<0.194
dup	09/20/10	-	<0.194	0.336	<0.194	<0.194	<0.00971	<0.00971	<0.00971	<0.194	<0.00971	<0.00971	<0.00971	<0.194	0.290	<0.00971	<0.291	<0.194	<0.194

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TABLE 3
GROUNDWATER ANALYTICAL RESULTS - PAH COMPOUNDS
Willbridge Terminals
Portland, Oregon

Well Identification	Date Sampled	1-Methyl-naphthalene	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-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	1.16	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	02/16/00	-	-	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	0.0266	<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	0.0297	<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
	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[5]	<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[5]	0.028	0.011
	09/23/08	-	<0.0023	0.10	<0.0034	<0.0036	<0.0026	<0.0043	<0.0023	<0.0029	<0.0025	<0.0034	<0.0025	<0.0044	<0.0038	<0.0026	<0.090	0.022	<0.0035
	03/16/09	-	<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
	09/14/09	<0.0962	<0.0962	<0.0962	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.0962	<0.00481	<0.0962	<0.0962	<0.0962
	03/16/10	<0.0976	<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
	09/20/10	-	<0.192	<0.192	<0.192	<0.192	<0.00962	<0.00962	<0.00962	<0.192	<0.00962	<0.00962	<0.00962	<0.192	<0.192	<0.00962	<0.192	<0.192	<0.192
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
	06/24/08	-	0.0063	<0.0044	<0.0034	0.0076	0.0038	<0.0043	<0.0023	0.0031	<0.0025	<0.0034	<0.0025	<0.0044	0.0077	<0.0026	0.058	0.011	0.0036
dup	06/24/08	-	0.0074	<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	0.036	<0.0050	<0.0035
	09/23/08	-	0.0072	<0.0044	<0.0034	<0.0036	<0.0026	<0.0043	<0.0023	<0.0029	<0.0025	<0.0034	<0.0025	<0.0044	0.0062	<0.0026	0.046	<0.0050	<0.0035
	01/05/09	-	<0.0930	<0.0930	<0.0930	<0.0930	<0.00465	<0.00465	<0.00465	<0.0930	<0.00465	<0.00465	<0.00465	<0.0930	<0.0930	<0.00465	<0.0930	<0.0930	<0.0930
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
	06/24/08	-	<0.0023	<0.0044	<0.0034	<0.0036	<0.0026	<0.0043	<0.0023	0.0042	<0.0025	<0.0034	<0.0025	<0.0044	<0.0038	0.0028	0.032	<0.0050	<0.0035
	09/23/08	-	<0.0023	<0.0044	<0.0034	<0.0036	<0.0026	<0.0043	<0.0023	<0.0029	<0.0025	<0.0034	<0.0025	<0.0044	0.017	<0.0026	<0.0030	<0.0050	<0.0035
	01/05/09	-	<0.0909	<0.0909	<0.0909	<0.0909	<0.00455	<0.00455	<0.00455	<0.0909	<0.00455	<0.00455	<0.00455	<0.0909	<0.0909	<0.00455	<0.0909	<0.0909	<0.0909
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
	06/24/08	-	0.0070	<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	0.031	0.0065	<0.0035
	09/23/08	-	0.0090	<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	0.013	0.0083	<0.0035
	01/05/09	-	<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	<0.0990	<0.0990	<0.0990
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
	06/24/08	-	0.0094	<0.0046	0.0073	<0.0038	0.0044	<0.0045	<0.0024	0.0031	<0.0027	<0.0036	<0.0027	<0.0046	<0.0040	<0.0028	0.091	0.012	<0.0037
	09/23/08	-	<0.0023	0.0057	0.011	<0.0038	<0.0026	<0.0043	<0.0023	<0.0029	<0.0025	<0.0034	<0.0025	<0.0044	<0.0038	<0.0026	0.016	<0.0050	<0.0035
	01/05/09	-	<0.0909	<0.0909	<0.0909	<0.0909	<0.00455	<0.00455	<0.00455	<0.0909	<0.00455	<0.00455	<0.00455	<0.0909	<0.0909	<0.00455	<0.0909	<0.0909	<0.0909
dup	01/05/09	-	<0.0909	<0.0909	<0.0909	<0.0909	<0.00455	<0.00455	<0.00455	<0.0909	<0.00455	<0.00455	<0.00455	<0.0909	<0.0909	<0.00455	<0.0909	<0.0909	<0.0909

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TABLE 3
GROUNDWATER ANALYTICAL RESULTS - PAH COMPOUNDS
Willbridge Terminals
Portland, Oregon

Well Identification	Date Sampled	1-Methyl-naphthalene	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	0.620	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	0.889	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	0.523
	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
	09/24/08	-	<0.481	2.04	<0.481	1.19	0.111	<0.0240	<0.0240	<0.481	<0.0240	0.100	<0.0240	0.988	3.35	<0.0240	<1.68[6]	5.68	0.927
dup	09/24/08	-	<0.481	2.14	<0.481	<1.44	0.102	<0.0240	<0.0240	<0.481	<0.0240	0.112	<0.0240	1.00	3.73	<0.0240	<1.92[6]	8.03	0.972
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	4.96	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	0.236	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 3
GROUNDWATER ANALYTICAL RESULTS - PAH COMPOUNDS
Willbridge Terminals
Portland, Oregon

Well Identification	Date Sampled	1-Methyl-naphthalene	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-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	7.16	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	6.78	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	0.493	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	0.797	<0.400	5.150	16.900	<0.400	<3.60	24.9	3.23
	03/14/06	-	-	4.63	<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	0.496
	09/26/06	-	-	5.99	<0.619[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
	09/24/08	-	<0.962	5.27	<1.44[5]	<3.85[6]	0.706	0.139	0.176	<0.962	0.124	0.728	<0.0481	3.65	16.0	<0.0481	<4.81[5]	35.3	2.71
	03/23/09	-	<0.971	5.15	<1.94	<3.40	0.959	0.220	0.272	<0.971	0.202	0.953	<0.0485	5.79	24.3	0.0623	<1.94	32.9	3.82
	09/18/09	-	<0.194	4.59	<0.971	<0.971	0.0995	0.0221	0.0277	<0.194	0.021	0.117	<0.00971	0.974	13.1	<0.00971	<0.680	13.2	0.529
dup	09/18/09	-	<0.966	4.73	<0.966	<0.966	0.125	0.0285	0.0361	<0.193	0.0276	0.145	<0.00966	1.12	13	<0.00966	<0.966	14.0	0.618
	03/31/10	-	<1.00	4.79	<1.50	<2.00	0.583	0.126	0.164	<1.00	0.118	0.623	<0.0500	3.42	15.3	<0.0500	<2.00	20.0	3.05
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
	08/28/00	-	-	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	0.180	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	-	-	0.0866	<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]	<0.0693[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
	09/24/08	-	<0.385[6]	0.708	<0.385[6]	<0.385[6]	0.00563	0.00905	<0.0144[6]	<0.0962	<0.0144[6]	0.00799	<0.00481	<0.385[6]	1.63	0.00788	<1.92[6]	<0.385[6]	<0.0962
	03/23/09	-	<0.0995	0.444	<0.0995	<0.0995	0.0133	0.0188	0.0125	<0.0995	0.0116	0.0181	<0.00498	<0.0995	1.07	0.0138	<0.299	<0.0995	0.170
dup	03/23/09	-	<0.0990	0.352	<0.0990	<0.0990	0.0224	0.0313	0.0184	<0.0990	0.0204	0.0331	<0.00495	<0.0990	0.849	0.0205	<0.297	<0.0990	0.198
	09/18/09	-	<0.146	0.966	<0.485	<0.485	<0.00485	0.00542	<0.00485	<0.0971	<0.00485	0.00971	<0.00485	<0.485	2.08	<0.00485	<0.777	<0.485	<0.0971
	03/31/10	-	<0.0976	0.144	<0.0976	<0.0976	0.0261	0.0370	0.0207	<0.0976	0.0196	0.0317	0.00516	<0.0976	0.362	0.0301	<0.0976	<0.0976	0.150
	09/23/10	-	0.114	1.04	<0.300	<0.100	0.00978	0.0121	0.00760[12]	<0.100	0.00620[12]	0.0125[12]	<0.00500	<0.100	1.99	0.00930[12]	<0.450	<0.100	<0.100
dup	09/23/10	-	<0.100	1.02	<0.300	<0.100	0.0322	0.0332	0.0.189[12]	<0.100	0.0196[12]	0.0313[12]	0.00666	<0.100	1.96	0.0241[12]	<0.450	<0.150	0.106

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TABLE 3
GROUNDWATER ANALYTICAL RESULTS - PAH COMPOUNDS
Willbridge Terminals
Portland, Oregon

Well Identification	Date Sampled	1-Methyl-naphthalene	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	-	-	0.0683	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	<0.0198	0.0217	<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	<0.0196	<0.0196	<0.0196	<0.0196	<0.0196	<0.225[6]	0.0214	0.0208
	03/20/07	-	-	0.186	<0.0288	0.0199	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.0192	<0.962	0.0517	0.0636
	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]	0.0826	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
	09/24/08	-	<0.0962	0.116	<0.0962	<0.0962	0.00641	0.00660	0.00510	<0.0962	<0.00481	0.00940	<0.00481	<0.0962	<0.0962	0.00617	<0.192[6]	<0.0962	<0.0962
	03/20/09	-	<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	<0.246	<0.0985	<0.0985
dup	03/20/09	-	<0.0985	<0.0985	<0.0985	<0.0985	<0.00493	0.00520	<0.00493	<0.0985	<0.00493	0.00530	<0.00493	<0.0985	<0.0985	<0.00493	<0.246	<0.0985	<0.0985
	09/18/09	-	<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	<0.146	<0.0976	<0.0976
	03/31/10	-	<0.100	<0.100	<0.100	<0.100	<0.00500	<0.00500	<0.00500	<0.100	<0.00500	<0.00500	<0.00500	<0.100	<0.100	<0.00500	<0.200	<0.100	<0.100
dup	03/31/10	-	<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	<0.190	<0.0952	<0.0952
	09/23/10	-	<0.100	<0.100	<0.100	<0.100	<0.00500	<0.00500	<0.00500	<0.100	<0.00500	<0.00500	<0.00500	<0.100	<0.100	<0.00500	<0.100	<0.100	<0.100
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[9]	-	-	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[9]	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[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	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
	09/22/08	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

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TABLE 3
GROUNDWATER ANALYTICAL RESULTS - PAH COMPOUNDS
Willbridge Terminals
Portland, Oregon

Well Identification	Date Sampled	1-Methyl-naphthalene	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	03/26/08	-	<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
	09/18/09	-	<0.485	<0.485	<0.485	<0.485	<0.00485	<0.00485	<0.00485	<0.0971	<0.00485	<0.00485	<0.00485	<0.485	<0.485	<0.00485	<0.485	<0.485	<0.0971
	03/31/10	-	<0.286	<0.286	<0.286	<0.190	0.0132	0.00498	<0.00476	<0.0952	<0.00476	0.0247	<0.00476	<0.0952	<0.286	<0.00476	<0.286	<0.143	0.251
	09/23/10	-	<0.300	<0.300	<0.300	<0.300	0.0192	0.00897	0.0245[12,13]	<0.100	<0.00500	0.0339	<0.00500	<0.300	<0.300	0.00755[12]	<0.300	<0.300	<0.300
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	<0.00976	<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
	06/25/08	-	<0.0971	<0.0971	<0.0971	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.0971	<0.00485	<0.0971	<0.0971	<0.0971
	09/23/08	-	<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
	01/07/09	-	<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
	03/20/09	-	<0.0971	<0.0971	<0.0971	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.0971	<0.00485	<0.0971	<0.0971	<0.0971
	09/18/09	-	<0.0971	<0.0971	<0.0971	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.0971	<0.00485	<0.0971	<0.0971	<0.0971
	03/31/10	-	<0.0952	<0.0952	<0.0952	<0.0952	0.00565	0.00602	0.00624	<0.0952	0.00564	0.00913	<0.00476	<0.0952	<0.0952	0.00563	<0.0952	<0.0952	<0.0952
	09/23/10	-	<0.100	<0.100	<0.100	<0.100	<0.00500	<0.00500	<0.00500	<0.100	<0.00500	0.00628[12]	<0.00500	<0.100	<0.100	<0.00500	<0.100	<0.100	<0.100
P-2	03/17/03	-	-	2.61	ND	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	0.683	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
	09/20/01	-	-	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
	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
	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	0.0680	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
	09/25/08	-	<0.0962	<0.0962	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00481	0.00588	<0.00481	<0.0962	<0.0962	<0.00481	<0.144[6]	<0.0962	<0.0962
	03/17/09	-	<0.0976	0.104	<0.0976	<0.0976	<0.00488	<0.00488	<0.00488	<0.0976	<0.00488	<0.00488	<0.00488	<0.0976	0.119	<0.00488	<0.976	<0.0976	<0.0976
	09/21/09	0.13[4]	0.118[4]	0.019[4]	<0.0096	0.0067[4,10]	0.021	0.053[4]	0.094[4]	0.022	0.018	0.017	<0.0096	0.034[4]	0.034[4]	0.058	0.095	0.029[4]	0.039[4]
	09/20/10	<0.0061	<0.012	<0.00068	<0.00069	0.0054[10]	<0.0017	<0.00068	<0.0019	<0.0017	<0.00068	<0.0017	<0.0017	0.0092[10]	<0.0037	<0.0015	<0.0014	0.0064[10]	0.042
U-3	02/17/00	-	-	0.142	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.17	ND	ND	0.066	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

COP0018254

TABLE 3
GROUNDWATER ANALYTICAL RESULTS - PAH COMPOUNDS
Willbridge Terminals
Portland, Oregon

Well Identification	Date Sampled	1-Methyl-naphthalene	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	0.367	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	6.00	<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
	09/24/08	-	<0.481	1.78	<0.481	0.666	0.0290	<0.0240	<0.0240	<0.481	<0.0240	0.0612	<0.0240	<0.481	4.78	<0.0240	<1.68[6]	3.70	0.499
dup	09/24/08	-	<0.481	2.15	<0.721[6]	<0.721[6]	0.0444	<0.0240	<0.0240	<0.481	<0.0240	0.0978	<0.0240	<0.481	5.55	<0.0240	<2.16[6]	4.73	0.796
U-5	02/17/00	-	-	1.19	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.63	ND	ND	1.42	0.0674
	05/26/00	-	-	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	5.52	ND	ND	2.29	ND
	11/29/00	-	-	0.800	0.100	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	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
	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
	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
	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	0.189	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[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]	37.6	8.00
	09/24/08	-	2.68	11.4	<4.81	<12.0[6]	1.02	0.483	<0.481[6]	<4.81	<0.240	2.25	0.276	<4.81	22.5	<0.240	<7.21[6]	63.1	10.2

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TABLE 3
GROUNDWATER ANALYTICAL RESULTS - PAH COMPOUNDS
Willbridge Terminals
Portland, Oregon

Well Identification	Date Sampled	1-Methyl-naphthalene	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-5A	03/27/08	-	<0.721	2.95	<1.68	<0.481	<2.40	<0.144	<0.192	<0.962	<0.240	0.388	<0.0481	<0.481	6.56	0.0793	<5.29	2.26	0.519
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	<0.0291	<0.0194	<0.0291
U-11	03/18/03	-	-	0.711	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	1.59	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	2.56	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	0.615	<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	-	-	0.329	<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	0.0284	<0.0194	<0.369	0.0292	<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
	09/25/08	-	<0.0962	<0.0962	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.0962	<0.00481	<3.37[6]	<0.0962	<0.0962
	03/18/09	-	<0.0962	<0.0962	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.0962	<0.00481	<0.0962	<0.0962	<0.0962
	09/22/09	0.0042[4,10]	0.015[4]	0.0019[4,10]	0.0047[10]	0.0036[4,10]	0.012	0.046[4]	0.090[4]	0.0093[10]	0.0076[10]	0.010	<0.0095	0.016[4]	0.0023[4,10]	0.046	<0.0095	0.017[4]	0.0098[4]
	09/21/10	<0.0060	0.032	<0.00067	<0.00068	<0.0012	<0.0017	<0.00067	<0.0019	<0.0016	<0.00067	<0.0017	<0.0017	0.0045[10]	0.0045[10]	<0.0014	0.011[10]	0.012[10]	0.0022[10]
U-15	09/27/06	-	-	<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	<0.0784[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
	09/25/08	-	<0.0962	<0.0962	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.0962	<0.00481	<0.0962	<0.0962	<0.0962
	03/17/09	-	0.122	<0.0962	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.0962	<0.00481	1.85	<0.0962	<0.0962
	09/21/09	0.024[4]	0.042[4]	0.0033[4,10]	<0.0095	0.0047[4,10]	0.015	0.046[4]	0.086[4]	0.013	0.0081[10]	<0.0095	<0.0095	0.020[4]	0.034[4]	0.049	0.055	0.027[4]	0.012[4]
	09/20/10	0.025	0.049	0.0053[10]	<0.00068	0.0058[10]	<0.0017	<0.00067	0.015	<0.0016	0.020	0.0081[10]	<0.0017	0.019	<0.0036	<0.0014	0.049	0.014	0.016
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
	09/25/08	-	<0.481	0.390	<0.481	<0.481	<0.0240	<0.0240	<0.0240	<0.481	<0.0240	0.0358	<0.0240	<0.481	0.880	<0.0240	<0.962[6]	<0.481	<0.481
	03/17/09	-	<0.192	0.406	<0.144	<0.0962	0.00798	<0.00481	<0.00481	<0.0962	<0.00481	0.0148	<0.00481	<0.0962	1.08	<0.00481	<0.673	0.104	<0.0962
	09/21/09	4.5[4]	0.068[4]	0.55[4]	0.15	0.067[4]	<0.0095	0.043[4]	0.081[4]	<0.0095	<0.0095	<0.0095	<0.0095	0.039[4]	1.2[4]	0.044	0.44	0.15[4]	0.049[4]
	03/16/10	-	0.042	0.37	0.11	0.055	0.0065[10]	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	0.011[10]	0.80	<0.014	0.58	0.090	0.021
	09/20/10	7.6	<0.012	0.44	0.14	0.039	<0.0017	<0.00066	<0.0019	<0.0016	<0.00066	<0.0017	<0.0017	0.011[10]	0.88	<0.0014	0.69	0.063	0.022
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	0.698	<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	0.0306	<0.00962	<0.00962	<0.192	<0.00962	0.0300	<0.00962	<0.385	1.70	<0.00962	2.40	1.46	<0.385
	09/25/08	-	<0.385[6]	0.434	<0.385[6]	<0.0962	0.0224	<0.00481	<0.00481	<0.0962	<0.00481	0.0224	<0.00481	<0.0962	0.751	<0.00481	<1.15[6]	0.922	0.147
	03/17/09	-	<0.478	<1.91	<1.91	<0.478	0.0226	0.00556	<0.00478	<0.0957	<0.00957	0.0234	<0.00478	<0.478	<1.91	<0.00478	<1.44	1.72	0.251
	09/21/09	66.4[4]	0.14[4]	0.89[4]	0.27	0.16[4]	0.048	0.051[4]	0.089[4]	0.013	0.011	0.031	<0.0095	0.23[4]	1.4[4]	0.048	1.4	1.7[4]	0.26[4]
	03/16/10	-	0.14	1.3	0.30	0.17	0.028	0.0058[10]	0.0038[10]	<0.014	0.0030[10]	0.021	<0.014	0.13	1.7	<0.014	1.6	1.5	0.18
	09/20/10	40.7	<0.012	1.1	0.23	0.098	0.026	<0.00066	<0.0019	<0.0016	<0.00066	0.022	<0.0017	0.14	1.7	<0.0014	1.7	0.52	0.18

COP0018256

TABLE 3
GROUNDWATER ANALYTICAL RESULTS - PAH COMPOUNDS
Willbridge Terminals
Portland, Oregon

Well Identification	Date Sampled	1-Methyl-naphthalene	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-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
	09/25/08	-	<0.481	1.07	<0.481	<0.481	<0.0240	<0.0240	<0.0240	<0.481	<0.0240	0.0250	<0.0240	<0.481	2.86	<0.0240	<1.44	0.819	<0.481
	03/17/09	-	<0.0962	<0.0962	<0.0962	<0.0962	<0.00962	0.00793	<0.00481	<0.0962	<0.00481	<0.0144	<0.00481	<0.0962	<0.0962	0.00642	<0.144	<0.0962	<0.144
	09/22/09	4.2[4]	0.12[4]	2.6[4]	0.47	0.27[4]	0.16	0.15[4]	0.16[4]	0.087	0.063	0.13	<0.0096	0.27[4]	8.4[4]	0.097	0.79	2.0[4]	0.39[4]
	09/21/10	8.1	0.086	1.0	0.23	0.11	<0.0017	<0.00066	<0.0019	<0.0016	<0.00066	<0.0017	<0.0017	0.039	5.8	<0.0014	1.2	1.5	0.045
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	0.0406	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	4.56	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
	09/25/08	-	<0.0962	0.806	<0.385[6]	<0.0962	0.0424	0.0229	0.0164	<0.0962	0.0147	0.0474	0.00597	0.169	1.42	0.0139	<1.44[6]	0.259	0.190
	03/17/09	-	<0.0966	0.655	<0.193	<0.145	<0.00483	<0.00483	<0.00483	<0.0966	<0.00483	<0.00483	<0.00483	<0.0966	1.46	<0.00483	<0.386	1.11	<0.0966
	09/21/09	0.49[4]	0.080[4]	1.5[4]	0.36	0.1[4]	0.0093[10]	0.044[4]	0.083[4]	0.0092[10]	<0.0095	0.0098	<0.0095	0.029[4]	3.2[4]	0.045	0.50	3.0[4]	0.050[4]
	03/16/10	-	0.038	1.3	0.34	0.14	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	0.0083[10]	3.4	<0.014	0.54	2.9	0.035
	09/21/10[14]	<0.0062	<0.012	1.1	0.30	0.12	<0.0018	<0.00069	<0.0020	<0.0017	<0.00069	<0.0018	<0.0018	0.0098[10]	2.5	<0.0015	0.5	2.2	0.032
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	0.0186	<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
	09/25/08	-	<0.0962	0.896	<0.385[6]	<0.385[6]	0.00645	0.00614	<0.00481	<0.0962	<0.00481	0.0106	<0.00481	<0.0962	1.95	0.00500	<0.962[6]	1.86	<0.0962
	03/17/09	-	<0.0962	0.789	<0.337	<0.0962	0.0223	0.0122	0.00868	<0.0962	0.00723	0.0286	<0.00481	0.120	1.47	0.00616	<0.433	0.170	0.172
	09/22/09	0.23[4]	0.11[4]	1.7[4]	<0.0095	0.14[4]	0.038	0.049[4]	0087[4]	0.012	0.0092[10]	0.031	<0.0095	0.28[4]	3.0[4]	0.047	1.3	0.37[4]	0.27[4]
	03/16/10	-	0.030	0.58	0.18	0.090	0.025	0.011[10]	0.0097[10]	0.0064[10]	0.0053[10]	0.023	<0.016	0.12	1.2	0.0047[10]	0.69	0.074	0.13
	09/21/10[14]	14.8	<0.012	0.25	0.10	0.045	<0.0017	<0.00067	<0.0019	<0.0016	<0.00067	0.0034[10]	<0.0017	0.035	0.48	<0.0014	1.1	0.31	0.029
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
	06/24/08	-	<0.476[6]	1.14	<0.476[6]	<0.476[6]	<0.00476	<0.00476	<0.00476	<0.0952	<0.00476	<0.00952[6]	<0.00476	<0.476[6]	3.35	<0.00476	<0.952[6]	0.741	<0.0952
	09/23/08	-	<0.190[6]	0.820	<0.190[6]	<0.0952	<0.00476	<0.00476	<0.00476	<0.0952	<0.00476	0.00656	<0.00476	<0.0952	2.80	<0.00476	<0.857[6]	0.593	<0.0952
	01/06/09	-	<0.488[6]	0.964	<0.488[6]	<0.488[6]	<0.0244	<0.00488	<0.00488	<0.0976	<0.00488	<0.0244	<0.00488	<0.488[6]	3.98	<0.00488	1.22	0.962	<0.488[6]
	03/19/09	-	<0.0962	1.11	<0.385	<0.385	0.00720	<0.00481	<0.00481	<0.0962	<0.00481	0.0131	<0.00481	<0.385	4.13	<0.00481	<0.433	<0.385	<0.144
	09/17/09	-	<0.0971	1.27	<0.243	<0.146	0.0116	0.00817	0.00680	<0.0971	<0.00485	0.0309	<0.00485	<0.0971	4.38	0.00543	<0.243	0.914	<0.0971
dup	09/17/09	-	<0.0971	0.978	<0.194	<0.146	0.00934	0.00539	<0.00485	<0.0971	<0.00485	0.0205	<0.00485	<0.0971	3.36	<0.00485	<0.194	0.773	<0.0971
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
	06/24/08	-	<0.0957	<0.0957	<0.0957	<0.0957	<0.00478	<0.00478	<0.00478	<0.0957	<0.00478	<0.00478	<0.00478	<0.0957	<0.0957	<0.00478	<0.0957	<0.0957	<0.0957
	09/23/08	-	<0.0952	<0.0952	<0.0952	<0.0952	<0.00476	<0.00476	<0.00476	<0.0952	<0.00476	<0.00476	<0.00476	<0.0952	0.159	<0.00476	<0.0952	<0.0952	<0.0952
	01/07/09	-	<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
	03/19/09	-	<0.0962	<0.0962	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.0962	<0.00481	<0.0962	<0.0962	<0.0962
dup	03/19/09	-	<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
	09/17/09	-	<0.0971	<0.0971	<0.0971	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.0971	<0.00485	<0.0971	<0.0971	<0.0971
U-22C	06/25/08	-	<0.481[6]	0.977	<0.481[6]	<0.481[6]	<0.00962[6]	<0.00481	<0.00481	<0.0962	<0.00481	<0.00962[6]	<0.00481	<0.481[6]	2.90	<0.00481	<0.962[6]	0.387	<0.0962
U-23	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
	06/24/08	-	<0.476[6]	0.562	<0.476[6]	<1.43[6]	0.0129	0.00535	0.00596	<0.0952	<0.00476	0.0281	<0.00476	<0.190[6]	1.93	<0.00476	<1.43[6]	2.12	0.121
	09/23/08	-	<0.0952	<0.238[6]	<0.0952	<0.190[6]	0.00600	<0.00476	<0.00476	<0.0952	<0.00476	0.00973	<0.00476	<0.0952	0.926	<0.00476	<0.619[6]	0.314	<0.0952
	01/06/09	-	<0.483[6]	<0.483[6]	<0.483[6]	<0.483[6]	<0.0242	<0.00483	<0.00483	<0.0966	<0.00483	<0.0242	<0.00483	<0.483[6]	0.498	<0.00483	<0.483[6]	<0.725[6]	<0.483[6]
	03/19/09	-	<0.0985	<0.0985	<0.0985	<0.0985	<0.00493	<0.00493	<0.00493	<0.0985	<0.00493	<0.00493	<0.00493	<0.0985	<0.246	<0.00493	<0.0985	<0.0985	<0.148
	09/17/09	-	<0.388	<0.388	<0.388	<0.583	0.0252	<0.0194	<0.0194	<0.388	<0.0194	0.0421	<0.0194	<0.388	1.04	<0.0194	<0.388	<0.583	<0.388

COP0018257

TABLE 3
GROUNDWATER ANALYTICAL RESULTS - PAH COMPOUNDS
Willbridge Terminals
Portland, Oregon

Well Identification	Date Sampled	1-Methyl-naphthalene	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-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
	06/24/08	-	<0.0962	<0.0962	<0.0962	<0.0962	0.00780	0.00770	<0.00481	<0.0962	<0.00481	0.00824	<0.00481	<0.0962	<0.0962	0.00501	<0.0962	<0.0962	<0.0962
	09/23/08	-	<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
	01/06/09	-	<0.0980	<0.0980	<0.0980	<0.0980	<0.00490	<0.00490	<0.00490	<0.0980	<0.00490	<0.00490	0.00784	<0.0980	<0.0980	0.00652	<0.0980	<0.0980	<0.0980
	03/19/09	-	<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
	09/17/09	-	<0.0971	<0.0971	<0.0971	<0.0971	<0.00485	0.00537	<0.00485	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.0971	<0.00485	<0.0971	<0.0971	<0.0971
dup	09/17/09	-	<0.0971	<0.0971	<0.0971	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.0971	<0.00485	<0.0971	<0.0971	<0.0971
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
	06/25/08	-	<0.0971	<0.0971	<0.0971	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.0971	<0.00485	<0.0971	<0.0971	<0.0971
	09/24/08	-	<0.0962	<0.0962	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.0962	<0.00481	<0.0962	<0.0962	<0.0962
	01/07/09	-	<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
	03/19/09	-	<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
dup	03/19/09	-	<0.0976	<0.0976	<0.0976	<0.0976	<0.00488	<0.00488	<0.00488	<0.0976	<0.00488	0.00527	<0.00488	<0.0976	<0.0976	<0.00488	<0.0976	<0.0976	<0.0976
	09/17/09	-	<0.0971	<0.0971	<0.0971	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.0971	<0.00485	<0.0971	<0.0971	<0.0971
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
	06/24/08	-	<0.0952	0.0999	<0.0952	<0.0952	<0.00476	<0.00476	<0.00952[6]	<0.0952	<0.00952[6]	<0.00476	<0.00476	<0.0952	0.160	<0.00476	<0.667[6]	<0.0952	<0.0952
	09/24/08	-	<0.0962	<0.0962	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.0962	<0.00481	<0.577[6]	<0.0962	<0.0962
	01/06/09	-	<0.0971	<0.0971	<0.0971	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	0.155	<0.00485	1.36[6]	<0.0971	<0.0971
	03/19/09	-	<0.0962	<0.0962	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00481	0.00557	<0.00481	<0.0962	<0.0962	<0.00481	<0.0962	<0.0962	<0.0962
	09/17/09	-	<0.0971	0.144	<0.0971	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	0.235	<0.00485	<0.291	<0.0971	<0.0971
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
	06/25/08	-	<0.0971	<0.0971	<0.0971	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.0971	<0.00485	<0.0971	<0.0971	<0.0971
	09/23/08	-	<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
	01/07/09	-	<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
	03/20/09	-	<0.0971	<0.0971	<0.0971	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.0971	<0.00485	<0.0971	<0.0971	<0.0971
	09/17/09	-	<0.0971	<0.0971	<0.0971	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.0971	<0.00485	<0.0971	<0.0971	<0.0971
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
	06/25/08	-	<0.0971	<0.0971	<0.0971	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.0971	<0.00485	<0.0971	<0.0971	<0.0971
	09/23/08	-	<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
	01/07/09	-	<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
	03/20/09	-	<0.0971	<0.0971	<0.0971	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.0971	<0.00485	<0.0971	<0.0971	<0.0971
	09/17/09	-	<0.0962	<0.0962	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.0962	<0.00481	<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
	06/25/08	-	<0.0962	<0.0962	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.0962	<0.00481	<0.0962	<0.0962	<0.0962
	09/24/08	-	<0.0962	<0.0962	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.0962	<0.00481	<0.0962	<0.0962	<0.0962
	01/07/09	-	<0.0943	<0.0943	<0.0943	<0.0943	<0.00472	<0.00472	<0.00472	<0.0943	<0.00472	<0.00472	<0.00472	<0.0943	<0.0943	<0.00472	<0.0943	<0.0943	<0.0943
	03/20/09	-	<0.0962	<0.0962	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.0962	<0.00481	<0.0962	<0.0962	<0.0962
	09/17/09	-	<0.0962	<0.0962	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.0962	<0.00481	<0.0962	<0.0962	<0.0962
U-29A	03/20/09	-	105	18.4	<9.95	<14.9	1.08	0.792	<0.597	4.80	<0.199	2.35	0.541	<9.95	42.8	0.436	<9.95	62.4	24.9
	09/17/09	-	63.9	<10.1	<10.1	<10.1	0.330	0.226	<0.152	1.50	<0.0505	0.788	0.151	<10.1	13.7	0.116	<10.1	19.0	4.73
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
	06/25/08	-	0.224	<0.0962	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.0962	<0.00481	<0.0962	<0.0962	<0.0962
	09/24/08	-	0.230	0.103	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00481	0.00683	<0.00481	<0.0962	0.145	<0.00481	<0.144[6]	<0.0962	<0.0962
dup	09/24/08	-	0.457	0.110	<0.0962	<0.0962	0.00917	0.0111	0.00688	<0.0962	0.00647	0.0126	<0.00481	<0.0962	0.157	0.00651	<0.144[6]	0.107	<0.0962
	01/07/09	-	0.413	<0.0976	<0.0976	<0.0976	<0.00488	<0.00488	<0.00488	<0.0976	<0.00488	<0.00488	<0.00488	<0.0976	0.116	<0.00488	<0.146[6]	0.104	<0.0976
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
	06/25/08	-	<0.0952	<0.0952	<0.0952	<0.0952	<0.00476	<0.00476	<0.00476	<0.0952	<0.00476	0.00483	<0.00476	<0.0952	<0.0952	<0.00476	<0.0952	<0.0952	<0.0952
	09/23/08	-	<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
	01/07/09	-	<0.0985	<0.0985	<0.0985	<0.0985	<0.00493	<0.00493	<0.00493	<0.0985	<0.00493	0.00531	<0.00493	<0.0985	<0.0985	<0.00493	<0.0985	<0.0985	<0.0985

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TABLE 3
GROUNDWATER ANALYTICAL RESULTS - PAH COMPOUNDS
Willbridge Terminals
Portland, Oregon

Well Identification	Date Sampled	1-Methyl-naphthalene	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
NA = Not available
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.
[11] = Analysis shows low surrogate recoveries. Lab notes do not indicated any extraction issues. Insufficient volume for re-extraction. The results should be considered estimated.
[12] = Analyte was detected in the batch blank between the MRL and 1/2 the MRL. See lab case narrative for amounts. Result should be considered an estimate.
[13] = Value reported represents total Benzo(b+k) fluoranthene.
[14] = Samples U-20 and U-21 were misidentified as the other in the field.
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

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TABLE 4
GROUNDWATER ANALYTICAL RESULTS - TOTAL METALS
Willbridge Terminals
Portland, Oregon

Sample I.D.	Sample Date	Arsenic (µg/l)	Barium (µg/l)	Cadmium (µg/l)	Chromium (µg/l)	Copper (µg/l)	Lead (µg/l)	Manganese (µg/l)	Mercury (µg/l)	Selenium (µg/l)	Silver (µg/l)	Zinc (µg/l)
CHEVRON												
B-7	02/18/00	28.0	122	1.07	6.60	13.4	4.25	NA	ND	1.25	ND	23.4
	05/23/00	26.8	228	ND	26.4	44.1	11.5	NA	ND	1.93	ND	86.3
dup	05/23/00	27.6	259	ND	30.4	51	13.7	NA	ND	2.11	ND	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	31.0	71.9	ND	ND	3.11	ND	NA	ND	ND	ND	5.13
	05/17/01	36.4	58.7	ND	ND	1.57	ND	NA	ND	ND	ND	ND
	03/20/03	27.5	64.2	ND	ND	20.9	ND	NA	ND	ND	ND	ND
	09/29/03	30.4	81.5	ND	2.78	6.08	1.21	NA	ND	1.32	ND	7.82
	03/30/04	30.3	86.9	1.38	3.20	6.47	1.75	NA	<0.200	<1.00	<1.00	13.5
	03/09/05	34.2	110	<1.00	4.34	8.22	2.39	NA	<0.200	<2.00	<1.00	19.3
dup	03/09/05	33.8	108	<1.00	4.90	9.78	2.73	NA	<0.200	<2.00	<1.00	21.8
	09/22/05	36.3	85.7	<1.00	2.41	4.83	<1.00	NA	<0.200	<2.00	<1.00	7.87
	03/25/08	7.99	-	<0.380	1.41	9.47	<0.540	4,110	<0.200	<5.00	<0.120	<33.0
	06/24/08	24.7	73.2	<0.500	2.05	4.28	0.875	2,820	<0.200	<0.500	<1.00	9.48
	09/23/08	22.0	117	<0.500	8.56	13.9	3.02	2,970	<0.200	0.460	<1.00	26.7
dup	09/23/08	19.1	103	<0.500	7.49	12.3	2.53	2,780	<0.200	0.411	<1.00	23.2
	01/06/09	20.6	90.9	0.100	5.14	7.53	1.78	3,140	<0.200	0.130	<1.00	17.3
	03/18/09	7.89	41.7	<2.50	<2.00	7.80	<1.00	1,760	0.0496	<2.50	<1.00	11.9
B-9	05/23/00	17.7	139	ND	17.6	28.6	8.48	NA	ND	1.23	ND	61.6
	08/25/00	11.6	53.4	ND	2.70	7.50	2.14	NA	ND	ND	ND	22.8
	11/30/00	10.8	153	1.49	15.9	35.4	11.4	NA	ND	1.25	ND	82.3
	02/22/01	17.3	46.0	ND	ND	2.13	ND	NA	ND	1.27	ND	ND
	05/17/01	20.8	70.6	ND	4.44	6.34	2.41	NA	ND	ND	ND	16.1
	09/19/01	16.1	75.3	ND	2.56	9.93	2.66	NA	ND	ND	ND	13.6
	03/21/02	10.5	48.8	ND	2.57	6.83	3.98	NA	ND	ND	ND	50.6
	09/24/02	18.5	46.9	ND	ND	ND	ND	NA	ND	ND	ND	ND
	03/20/03	9.92	40.1	ND	1.65	4.21	3.17	NA	ND	ND	ND	28.3
	09/30/03	9.05	137	1.36	8.12	28.5	15.5	NA	ND	ND	ND	53.2
	03/30/04	38.4	349	3.82	39.5	99.1	46.7	NA	<0.200	1.47	<1.00	331
	03/08/05	30.5	59.2	<1.00	<1.00	<2.00	<1.00	NA	<0.200	<2.00	<1.00	7.59
	06/22/05	26.8	48.1	<1.00	<1.00	2.25	<1.00	NA	<0.200	<2.00	<1.00	18.7
	09/21/05	33.8	57.9	<1.00	<1.00	<2.00	<1.00	NA	<0.200	<2.00	<1.00	6.48
	09/26/06	29.8	70.8	<1.00	<1.00	3.15	2.18	NA	<0.200	<1.00	<1.00	33.8
	03/22/07	19.8	72.4	0.352	5.75	16.5	26.8	2,430	0.00989	<1.60	<0.800	71.1

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TABLE 4
GROUNDWATER ANALYTICAL RESULTS - TOTAL METALS
Willbridge Terminals
Portland, Oregon

Sample I.D.	Sample Date	Arsenic (µg/l)	Barium (µg/l)	Cadmium (µg/l)	Chromium (µg/l)	Copper (µg/l)	Lead (µg/l)	Manganese (µg/l)	Mercury (µg/l)	Selenium (µg/l)	Silver (µg/l)	Zinc (µg/l)
B-9A	09/19/07	7.60	341	<0.0752	54.5	63.8	24.0	2,280	<0.200	<1.60	0.138	177
	03/25/08	20.9	-	<0.380	14.0	21.8	11.5	3,260	<0.200	<5.00	<0.120	72.4
	06/24/08	17.4	262	<0.500	33.4	67.4	26.8	2,900	0.0754	0.722	<1.00	146
dup	06/24/08	18.3	328	<0.500	41.4	77.7	31.1	2,870	0.0884	0.645	<1.00	169
	09/23/08	4.72	104	<0.500	14.0	24.7	8.83	1,720	0.0162	0.385	<1.00	57.3
dup	09/23/08	4.70	114	<0.500	15.7	26.4	9.88	1,840	0.0108	0.311	<1.00	58.9
	01/06/09	1.90	51.6	<0.500	3.00	4.98	2.59	2,220	<0.200	<0.500	<1.00	11.6
dup	01/06/09	1.80	47.6	0.150	2.21	4.10	1.89	2,030	<0.200	0.120	<1.00	10.5
	03/24/09	5.45	45.1	<0.500	<10.0	7.70	3.64	1,270	0.00768	<0.500	<1.00	28.5
	09/22/09	2.21	59.2	<0.500	3.50	<10.0	2.28	2,480	0.00942	<0.500	<1.00	<25.0
dup	09/22/09	1.99	52.2	<0.500	2.55	<10.0	1.76	2,450	0.00579	<0.500	<1.00	<25.0
	03/18/10	5.96	42.0	<1.00	<2.00	<2.00	<1.00	2,260	<0.00500	<1.00	<1.00	<10.0
	09/21/10	1.73	20.2	<1.00	<2.00	3.02	<1.00	702	<0.00500	<1.00	<1.00	<10.0
B-10	02/18/00	36.7	337	0.840	35.5	57.2	20.2	NA	ND	0.53	0.190	96.5
dup	02/18/00	39.4	375	1.41	44.8	74.5	27.0	NA	ND	5.25	0.200	123
	05/23/00	35.4	211	ND	26.5	38.4	11.5	NA	ND	2.29	ND	63.1
	08/25/00	31.4	65.7	ND	1.99	3.66	1.41	NA	ND	1.05	ND	177
	11/30/00	30.7	94.6	ND	5.90	8.00	2.57	NA	ND	1.31	ND	16.5
	02/23/01	32.3	61.1	ND	ND	ND	ND	ND	ND	1.84	ND	ND
	05/17/01	39.5	56.7	ND	ND	ND	ND	ND	ND	ND	ND	ND
	09/19/01	23.4	194	ND	24.9	46.6	16.1	NA	ND	1.04	ND	79.3
	03/21/02	30.1	64.4	ND	ND	ND	ND	NA	ND	ND	ND	ND
	09/24/02	29.0	60.7	ND	ND	ND	ND	NA	ND	ND	ND	ND
	03/20/03	32.7	62.0	ND	ND	ND	ND	NA	ND	ND	ND	ND
	09/29/03	33.7	82.0	ND	2.85	4.41	2.17	NA	ND	1.65	ND	13.2
	03/30/04	33.2	128	<1.00	10.0	16.2	7.83	NA	<0.200	<1.00	<1.00	40.2
	03/08/05	39.5	88.1	<1.00	2.31	3.59	3.05	NA	<0.200	<2.00	<1.00	11.1
	09/21/05	36.9	64.1	<1.00	<1.00	<2.00	<1.00	NA	<0.200	<2.00	<1.00	<5.00
	03/14/06	36.6	65.9	<1.00	<1.00	<2.00	<1.00	NA	<0.200	<2.00	<1.00	<5.00
	09/26/06	27.4	90.2	0.080	2.27	<1.60	1.55	NA	<5.00	<10.0	<0.0960	10.3
	03/21/07	28.6	80.8	0.080	3.39	4.35	2.15	4,290	0.00618	<1.60	<0.0960	14.2
dup	03/21/07	31.0	87.7	0.104	4.50	5.81	2.90	3,950	0.00833	<1.60	<0.0960	16.9
	09/18/07	36.0	84.3	<0.0752	3.16	5.91	1.87	4,660	<0.200	<1.60	<0.0970	15.1
	03/25/08	32.4	-	<0.380	<1.00	<2.70	<0.540	3,860	<0.200	<5.00	<0.120	<33.0
	09/23/08	32.7	76.4	<5.00	<20.0	<20.0	<10.0	4,340	0.00117	<5.00	<10.0	11.7
	03/24/09	32.2	123	<0.500	<20.0	9.58	3.90	4,570	0.0505	<0.500	<1.00	30.5
dup	03/24/09	32.2	166	<0.500	<20.0	22.1	7.22	4,670	0.0225	<0.500	<1.00	48.2
	09/22/09	31.8	83.5	<0.500	3.06	<10.0	1.26	4,530	<0.00500	<0.500	<1.00	<25.0
	03/18/10	23.0	50.4	<1.00	<2.00	<2.00	<1.00	4,330	<0.00500	<1.00	<1.00	<10.0
	09/21/10	39.9	149	<1.00	10.6	14.8	<10.0	4,560	0.0327	<1.00	<1.00	37.0

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TABLE 4
GROUNDWATER ANALYTICAL RESULTS - TOTAL METALS
Willbridge Terminals
Portland, Oregon

Sample I.D.	Sample Date	Arsenic (µg/l)	Barium (µg/l)	Cadmium (µg/l)	Chromium (µg/l)	Copper (µg/l)	Lead (µg/l)	Manganese (µg/l)	Mercury (µg/l)	Selenium (µg/l)	Silver (µg/l)	Zinc (µg/l)
B-11	02/18/00	38.6	985	4.08	130	214	95.9	NA	ND	3.4	0.470	356
	05/23/00	21.9	236	ND	25.8	40.7	17.2	NA	ND	2.33	ND	73.2
	08/25/00	29.2	80.9	ND	5.43	7.65	3.98	NA	ND	ND	ND	27.3
	11/30/00	27.7	113	ND	9.86	12.7	5.75	NA	ND	1.46	ND	28.8
	02/22/01	23.4	57.3	ND	ND	ND	ND	NA	ND	ND	ND	ND
	05/17/01	29.1	55.3	ND	ND	ND	ND	NA	ND	ND	ND	ND
	03/30/04	24.1	115	1.64	9.04	15.2	8.96	NA	<0.200	<1.00	<1.00	31.5
	03/09/05	26.5	97.2	2.08	5.34	9.43	6.15	NA	<0.200	<2.00	<1.00	26.1
	06/22/05	26.9	106	<1.00	9.78	12.3	5.43	NA	<0.200	<2.00	<1.00	25.8
	09/21/05	30.8	60.3	<1.00	1.82	3.13	1.66	NA	<0.200	<2.00	<1.00	7.32
	06/25/08	16.7	119	0.521	3.60	5.27	3.65	7,450	<0.200	0.251	<1.00	17.9
B-14	02/18/00	36.7	297	0.600	29.0	53	40.3	NA	0.095	1.34	0.160	87.4
	05/23/00	32.7	155	ND	15.20	26.4	18.6	NA	ND	1.68	ND	42.1
	08/25/00	30.0	77.4	ND	1.75	3.39	5.68	NA	ND	1.13	ND	20.7
	11/30/00	29.2	72.4	ND	ND	ND	3.26	NA	ND	1.24	ND	ND
	02/22/01	29.9	60.3	ND	ND	2.02	1.02	NA	ND	1.04	ND	6.96
	05/17/01	37.3	55.3	ND	ND	ND	ND	NA	ND	ND	ND	ND
B-19	03/20/03	45.3	69.3	ND	ND	ND	ND	NA	ND	ND	ND	ND
	09/29/03	40.4	208	ND	20.3	29.7	9.09	NA	0.234	ND	ND	57.7
	03/29/04	43.5	104	<1.00	4.87	8.31	2.79	NA	<0.200	<1.00	<1.00	19.2
	03/09/05	40.7	210	<1.00	18.1	30.7	9.18	NA	<0.200	<2.00	<1.00	54.5
	06/22/05	47.8	223	<1.00	26.5	37	9.22	NA	<0.200	<2.00	<1.00	63.3
	09/22/05	48.1	101	<1.00	3.47	5.98	1.59	NA	<0.200	<2.00	<1.00	10.5
	03/14/06	52.3	113	<1.00	3.91	5.68	1.67	NA	<0.200	<2.00	<1.00	11.7
	06/26/08	36.7	135	0.388	10.0	16.2	6.05	4,110	<0.200	0.146	<1.00	32.0
	03/18/09	39.8	162	<5.00	14.0	18.2	4.84	4,590	0.0170	<5.00	<1.00	35.1
dup	03/18/09	40.7	214	<5.00	22.2	31.3	8.40	4,110	0.0590	<5.00	<1.00	56.0

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TABLE 4
GROUNDWATER ANALYTICAL RESULTS - TOTAL METALS
Willbridge Terminals
Portland, Oregon

Sample I.D.	Sample Date	Arsenic (µg/l)	Barium (µg/l)	Cadmium (µg/l)	Chromium (µg/l)	Copper (µg/l)	Lead (µg/l)	Manganese (µg/l)	Mercury (µg/l)	Selenium (µg/l)	Silver (µg/l)	Zinc (µg/l)
B-20	03/20/03	10.7	45.9	ND	1.09	3.89	ND	NA	ND	ND	ND	5.01
	09/29/03	130	4,350	49.4	808	1,140	643	NA	0.934	8.40	ND	3960
	03/30/04	1.65	41.7	<1.00	1.84	5.08	1.21	NA	<2.00	<1.00	<1.00	9.10
	03/09/05	36.0	79.5	<1.00	1.13	2.12	<1.00	NA	<0.200	<2.00	<1.00	<5.00
	09/22/05	37.4	69.1	<1.00	<1.00	<2.00	<1.00	NA	<0.200	<2.00	<1.00	<5.00
	03/25/08	8.01	-	<0.380	<1.00	<2.70	<0.540	3,010	<0.200	<5.00	<0.120	<33.0
B-21	09/19/01	30.6	107	ND	8.33	10.7	3.22	NA	ND	ND	ND	25.9
	03/21/02	40.5	66.2	ND	ND	ND	ND	NA	ND	ND	1.09	8.52
	09/24/02	41.2	69.5	ND	ND	ND	ND	NA	ND	ND	ND	ND
	03/20/03	74.0	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND
	09/29/03	47.4	75.9	ND	ND	ND	ND	NA	ND	ND	ND	ND
	03/29/04	46.9	132	<1.00	9.84	14.1	4.78	NA	<2.00	<1.00	<1.00	34
	03/08/05	55.9	179	<1.00	14.3	18.8	5.35	NA	<0.200	<2.00	<1.00	37.4
	09/22/05	55.4	88.4	<1.00	<1.00	<2.00	<1.00	NA	<0.200	<2.00	<1.00	<5.00
	03/15/06	53.1	86.6	<1.00	1.02	<2.00	<1.00	NA	<0.200	<2.00	<1.00	<5.00
	09/26/06	43.2	85.4	<1.00	<1.00	<1.00	<1.00	NA	<0.200	<1.00	<1.00	<10.0
	03/21/07	39.0	94.7	0.088	2.13	3.62	2.62	2,760	0.0144	<1.60	<0.0960	13.6
	09/19/07	43.0	130	<0.800	8.80	10.8	3.78	2,740	<0.200	<1.60	<0.800	18.5
	03/26/08	41.2	77.0	<0.380	2.09	3.87	2.00	2,510	0.444	<5.00	<0.120	<33.0
	09/23/08	43.4	72.9	<0.500	1.63	4.16	1.39	3,100	0.0186	0.198	<1.00	8.22
	03/24/09	44.1	153	<0.500	<20.0	13.6	6.07	3,320	0.0879	<0.500	<1.00	34.3
	09/22/09	39.1	70.4	<0.500	<2.00	<10.0	<1.00	3,540	<0.00500	<0.500	<1.00	<25.0
	03/18/10	32.7	64.0	<1.00	<2.00	<2.00	<1.00	3,420	0.0232	<1.00	<1.00	<10.0
	09/22/10	47.9	104	<1.00	<2.00	3.00	<10.0	3,720	0.299	<1.00	<1.00	<10.0
dup	09/22/10	49.2	102	<1.00	<2.00	2.10	<10.0	3,610	0.550	<1.00	<1.00	<10.0
B-26	03/30/04	3.45	232	30.5	22.0	48.5	41.5	NA	<0.200	<1.00	<1.00	140
	03/09/05	34.5	85.2	4.11	2.74	8.01	6.96	NA	<0.200	<2.00	<1.00	17.6
	06/22/05	39.7	146	13.0	15.2	31.9	20.8	NA	<0.200	<2.00	<1.00	68.9
	09/22/05	35.1	81.2	6.01	3.20	10.3	7.54	NA	<0.200	<2.00	<1.00	26.1
	06/26/08	34.6	102	4.02	6.21	14.1	13.5	4,060	<0.200	0.113	<1.00	219

COP0018263

TABLE 4
GROUNDWATER ANALYTICAL RESULTS - TOTAL METALS
Willbridge Terminals
Portland, Oregon

Sample I.D.	Sample Date	Arsenic (µg/l)	Barium (µg/l)	Cadmium (µg/l)	Chromium (µg/l)	Copper (µg/l)	Lead (µg/l)	Manganese (µg/l)	Mercury (µg/l)	Selenium (µg/l)	Silver (µg/l)	Zinc (µg/l)
B-28	02/18/00	12.2	422	3.68	43.7	104	49.6	NA	0.088	1.56	0.250	165
	05/23/00	9.56	245	1.44	25.8	46.8	20.5	NA	ND	2.77	ND	91.3
	08/25/00	5.30	120	ND	8.25	15.2	5.65	NA	ND	1.34	ND	50.4
	11/30/00	17.9	459	ND	42.1	64	30.3	NA	ND	2.71	ND	149
	02/23/01	7.56	131	ND	8.96	14.2	5.55	NA	ND	1.81	ND	36.3
	05/17/01	5.61	91.4	ND	4.98	7.37	2.72	NA	ND	1.99	ND	20.0
	09/20/01	43.4	82.1	ND	1.66	5.46	ND	NA	ND	1.09	ND	7.82
	03/21/02	4.07	69.2	ND	3.11	11.5	2.92	NA	ND	ND	ND	14.8
	09/24/02	2.98	51.9	ND	ND	ND	ND	NA	ND	2.44	ND	ND
	03/20/03	2.20	48.9	ND	ND	ND	ND	NA	ND	1.64	ND	ND
	09/30/03	21.9	483	1.73	57.2	109	40.4	NA	ND	ND	ND	205
	03/29/04	6.00	111	1.18	9.42	28.7	8.52	NA	<0.200	<1.00	<1.00	34.1
	09/21/05	5.08	83.8	<1.00	3.64	9.80	2.68	NA	<0.200	<2.00	<1.00	17.9
	03/14/06	6.40	192	2.87	31.6	139	172	NA	<0.200	<2.00	<1.00	451
	09/28/06	3.96	88.0	<1.00	4.17	45.1	3.7	NA	<0.200	<2.00	<1.00	20.1
	09/18/07	2.77	53.0	0.228	<0.800	2.88	0.989	1,270	<0.200	<1.60	<0.0970	7.12
	03/25/08	4.46	108	1.52	4.90	68.1	6.75	1,200	<0.200	<5.00	<0.120	<33.0
	09/23/08	4.74	152	2.05	8.20	80.6	13.6	1,370	0.0841	1.73	<10.0	51.5
	03/24/09	3.60	90.2	1.20	5.70	42.0	8.43	1,220	0.0613	<0.500	<1.00	23.0
	09/22/09	7.54	249	2.43	19.9	144	21.4	1,470	0.0719	<0.500	<1.00	101
	03/19/10	3.75	71.0	<1.00	3.75	18.9	3.59	1,240	0.0247	<1.00	<1.00	17.6
	09/21/10	4.32	123	<1.00	8.54	35.7	8.40	1,250	0.0135	<1.00	<1.00	48.6
B-29	09/20/01	11.0	292	ND	28.6	53.1	26.4	NA	ND	3.85	ND	122
	03/21/02	1.26	60.0	ND	ND	3.72	ND	NA	ND	ND	ND	7.1
	09/24/02	ND	60.1	ND	ND	ND	ND	NA	ND	1.03	1.02	ND
	03/20/03	ND	59.3	ND	ND	2.63	ND	NA	ND	1.43	ND	ND
	09/30/03	3.32	322	13.3	29.5	167	28	NA	ND	ND	ND	125
	03/29/04	5.28	367	20.6	29.3	162	45.7	NA	<0.200	<1.00	<1.00	146
	09/21/05	3.08	193	2.90	15.9	58.7	12.7	NA	<0.200	<2.00	<1.00	72
	03/14/06	1.26	98.6	<1.00	2.34	8.34	3.52	NA	<0.200	<2.00	<1.00	13.6
	09/28/06	<1.00	64.1	<1.00	<1.00	12.2	<1.00	NA	<0.200	<2.00	<1.00	13.2
	03/22/07	1.55	156	3.46	11.00	88.2	12.2	3,470	<0.00500	<1.60	<0.800[6]	36.7[7]
	09/18/07	1.62	120	3.09	7.09	95.4	6.29	3,890	<0.200	<1.60	<0.0970	42.9
	03/25/08	0.920	62.9	<0.380	<1.00	<2.70	<0.540	2,790	<0.200	<5.00	<0.120	<33.0
	09/23/08	<10.0	117	1.46	5.34	36.1	17.9	4,950	0.00930	2.46	<10.0	84.2
	03/24/09	3.72	302	10.6	24.1	246	27.1	5,000	0.0664	<0.500	<1.00	170
	09/22/09	<1.00	87.8	1.11	2.46	42.4	2.83	4,530	0.0158	<0.500	<1.00	<25.0
	03/19/10	<1.00	55.9	<1.00	<2.00	8.68	<1.00	4,010	0.0154	<1.00	<1.00	<10.0
	09/21/10	1.68	146	2.22	8.44	64.5	<10.0	4,600	0.0199	<1.00	<1.00	40.5

COP0018264

TABLE 4
GROUNDWATER ANALYTICAL RESULTS - TOTAL METALS
Willbridge Terminals
Portland, Oregon

Sample I.D.	Sample Date	Arsenic (µg/l)	Barium (µg/l)	Cadmium (µg/l)	Chromium (µg/l)	Copper (µg/l)	Lead (µg/l)	Manganese (µg/l)	Mercury (µg/l)	Selenium (µg/l)	Silver (µg/l)	Zinc (µg/l)
B-30	02/18/00	18.5	327	35.5	26.90	67.1	48.2	NA	ND	2.65	0.210	238
	05/23/00	14.1	117	9.78	9.04	71.3	10.8	NA	ND	2.67	ND	52.7
	08/25/00	22.1	49.7	14.6	1.53	17.6	4.49	NA	ND	ND	ND	63.2
	11/30/00	17.5	51.3	ND	ND	ND	ND	NA	ND	1.03	ND	11.6
	02/23/01	14.4	70.4	ND	ND	ND	ND	NA	ND	ND	ND	ND
dup**	02/23/01	14.0	67.0	ND	ND	ND	ND	NA	ND	ND	ND	ND
	05/17/01	17.7	47.7	ND	ND	ND	ND	NA	ND	1.75	ND	ND
	09/20/01	2.11	82.5	1.67	3.47	20.8	16.1	NA	ND	1.90	ND	30.8
dup	09/20/01	13.8	56.4	ND	ND	2.18	ND	NA	ND	1.10	ND	ND
	03/21/02	17.7	43.8	8.23	1.11	5.33	2.27	NA	ND	ND	1.00	19.1
dup	03/21/01	21.0	48.9	3.02	1.42	6.98	4.58	NA	ND	ND	ND	22.0
	09/24/02	12.6	49.5	ND	ND	ND	ND	NA	ND	1.97	1.26	ND
	03/20/03	15.8	48.3	ND	ND	ND	ND	NA	ND	ND	ND	ND
dup*	03/20/03	14.4	48.6	ND	ND	ND	ND	NA	ND	ND	ND	ND
	09/30/30	23.8	193	22.1	19.5	63.1	39.2	NA	ND	ND	ND	159
dup***	09/30/30	26.7	276	30.1	26.8	84.2	57.4	NA	ND	ND	ND	211
	03/29/04	18.3	52.9	2.29	1.06	4.05	3.30	NA	<0.200	<1.00	<1.00	7.52
	09/21/05	17.9	56.7	1.80	<1.00	5.01	3.32	NA	<0.200	<2.00	<1.00	11.3
dup****	09/21/05	17.7	54.4	<1.00	1.17	3.84	2.94	NA	<0.200	<2.00	<1.00	10.6
	03/14/06	20.6	66.8	<1.00	<1.00	2.69	2.02	NA	<0.200	<2.00	<1.00	5.57
dup	03/14/06	20.4	69.2	1.02	1.03	3.23	2.55	NA	<0.200	<2.00	<1.00	7.50
	09/28/06	16.4	58.0	<1.00	<1.00	<2.00	2.02	NA	<0.200	<2.00	<1.00	9.10
	03/22/07	13.6	72.5	0.800	2.83	7.19	3.08	2,100	0.0235	<2.00	<0.800[6]	14.6
	09/18/07	21.1	51.1	0.394	0.94	5.31	1.55	3,170	<0.200	<2.00	<0.0970	8.93
dup	09/18/07	19.2	51.7	0.280	0.97	5.33	1.84	3,390	<0.200	<2.00	<0.0970	8.92
	09/21/10	25.0	130	13.1	8.86	77.2	29.8	3,180	0.0550	<1.00	<1.00	789
B-32	03/20/03	3.67	42.9	ND	1.10	ND	ND	NA	ND	ND	ND	ND
	09/29/03	122	6,840	17.0	1,040	1,640	1,150	NA	0.754	19.0	ND	3,740
	03/29/04	9.17	434	2.02	61.5	108	38.7	NA	0.221	22.4	<1.00	215
	03/09/05	7.80	128	<1.00	-	18.0	6.80	NA	<0.200	2.03	<1.00	39.4
	09/22/05	10.0	227	<1.00	23.0	33.6	11.8	NA	<0.200	<2.00	<1.00	73.7
	03/15/06	6.84	82.3	<1.00	3.16	5.51	2.22	NA	<0.200	<2.00	<1.00	11.0

COP0018265

TABLE 4
GROUNDWATER ANALYTICAL RESULTS - TOTAL METALS
Willbridge Terminals
Portland, Oregon

Sample I.D.	Sample Date	Arsenic (µg/l)	Barium (µg/l)	Cadmium (µg/l)	Chromium (µg/l)	Copper (µg/l)	Lead (µg/l)	Manganese (µg/l)	Mercury (µg/l)	Selenium (µg/l)	Silver (µg/l)	Zinc (µg/l)
B-33	03/20/03	4.83	43.0	ND	4.37	11.4	12.4	NA	ND	ND	ND	22.3
	09/30/03	34.2	242	6.99	71.1	248	128	NA	ND	1.24	ND	385
	03/30/04	15.5	199	8.30	45.1	164	110	NA	<2.00	<1.00	<1.00	389
	03/09/05	26.4	175	1.06	34.2	66.8	51.3	NA	<0.200	2.04	<1.00	157
	06/22/05	15.6	140	<1.00	22.1	56.0	26.4	NA	<0.200	<2.00	<1.00	99.8
	09/22/05	23.7	111	<1.00	9.16	25.0	10.9	NA	<0.200	<2.00	<1.00	48.4
	03/15/06	5.79	49.4	<1.00	2.61	6.65	4.41	NA	<0.200	<2.00	<1.00	68.3
	06/26/08	33.9	92.5	0.386	6.21	16.3	10.1	3,460	<0.200	0.093	<1.00	246
	03/18/09	61.7	245	<5.00	39.2	116	70.1	4,380	0.110	<5.00	<1.00	2,520
CR-1	09/21/01	14.3	60.6	ND	2.03	4.68	2.83	NA	ND	1.18	ND	8.46
	03/21/02	1.73	18.8	ND	1.13	3.97	ND	NA	ND	ND	ND	16.3
	09/24/02	2.04	27.4	ND	ND	ND	ND	NA	ND	ND	ND	6.09
	03/20/03	11.9	30.0	ND	1.56	11.2	2.11	NA	ND	ND	ND	17.9
	09/30/03	8.32	47.9	ND	2.49	8.36	3.91	NA	ND	1.89	ND	13.9
	03/30/04	2.10	261	5.83	22.0	53.5	67.6	NA	<0.200	<1.00	<1.00	212
	03/08/05	1.67	24.5	<1.00	<1.00	2.62	<1.00	NA	<0.200	<2.00	<1.00	10.2
	09/21/05	3.25	21.5	<1.00	<1.00	2.31	<1.00	NA	<0.200	<2.00	<1.00	<5.00
	09/27/06	1.94	20.7	0.144	<0.800	2.77	0.440	NA	<5.00	<2.00	<0.0960	10.9
	03/22/07	0.912	12.2	<0.0752	<0.800	3.92	<0.432[6]	185	<0.00500	<1.60	<0.800[6]	9.58
	09/20/07	1.41	20.1	<0.800	<0.800	<1.60	<0.800	862	<0.200	<1.60	<0.800	<4.00
	03/25/08	0.510	12.8	<0.380	<1.00	3.40	<0.540	76.1	<0.200	<5.00	<0.120	<33.0
	09/24/08	3.47	19.8	<0.500	1.17	3.97	1.19	595	0.00198	<0.500	<1.00	13.3
	03/25/09	<1.00	12.1	<0.500	<2.00	<2.00	<1.00	127	<0.00500	<0.500	<1.00	7.68
	09/22/09	1.24	13.2	<0.500	<2.00	68.2	<1.00	560	<0.00500	<0.500	<1.00	74.8
	03/19/10	<1.00	10.3	<1.00	<2.00	<2.00	<1.00	113	<0.00500	<1.00	<1.00	<10.0
dup	03/19/10	<1.00	9.95	<1.00	<2.00	<2.00	<1.00	146	<0.00500	<1.00	<1.00	<10.0
	09/22/10	<1.00	13.6	<1.00	<2.00	2.53	<1.00	214	<0.00500	<1.00	<1.00	<10.0

COP0018266

TABLE 4
GROUNDWATER ANALYTICAL RESULTS - TOTAL METALS
Willbridge Terminals
Portland, Oregon

Sample I.D.	Sample Date	Arsenic (µg/l)	Barium (µg/l)	Cadmium (µg/l)	Chromium (µg/l)	Copper (µg/l)	Lead (µg/l)	Manganese (µg/l)	Mercury (µg/l)	Selenium (µg/l)	Silver (µg/l)	Zinc (µg/l)
CR-3	03/09/05	15.6	414	2.83	23.9	59.1	41.0	NA	<0.200	<2.00	<1.00	216
	06/22/05	25.9	431	2.06	41.4	70.8	50.4	NA	<0.200	<2.00	<1.00	218
	09/22/05	1.91	28.0	<1.00	<1.00	3.46	1.23	NA	<0.200	<2.00	<1.00	7.06
	06/26/08	1.13	27.4	0.109	0.876	1.37	1.40	463	<0.200	<0.500	<1.00	11.7
	09/26/08	1.82	44.1	<0.500	3.63	6.21	4.38	594	<0.200	0.267	<1.00	18.4
CR-8	02/18/00	82.7	762	3.45	57.8	127	99.7	NA	ND	3.21	0.370	404
	05/23/00	25.6	342	3.12	22.8	68.4	36.5	NA	ND	2.04	ND	155
	08/25/00	20.3	105	ND	6.97	15.1	10.1	NA	ND	ND	ND	44.2
	11/30/00	16.7	89.0	ND	5.65	14.9	7.81	NA	ND	1.58	ND	33.1
	02/22/01	21.5	116	ND	4.85	12.3	6.66	NA	ND	ND	ND	28.8
	05/16/01	13.5	37.4	ND	1.28	2.31	1.47	NA	ND	ND	ND	ND
CR-9	02/18/00	16.7	236	0.26	19.4	28.6	15.6	NA	ND	1.87	0.100	76.9
	05/23/00	2.98	41.3	ND	3.00	3.81	1.88	NA	ND	1.12	ND	8.93
	08/25/00	1.60	30.5	ND	ND	1.43	ND	NA	ND	ND	ND	ND
dup	08/25/00	1.60	30.5	ND	ND	1.7	ND	NA	ND	ND	ND	16.5
	11/30/00	1.62	22.2	ND	ND	ND	ND	NA	ND	2.83	ND	5.03
dup	11/30/00	ND	22.2	ND	ND	ND	ND	NA	ND	1.14	ND	ND
	02/22/01	ND	23.5	ND	ND	ND	ND	NA	ND	ND	ND	ND
	05/16/01	1.42	29.1	ND	ND	2.46	ND	NA	ND	ND	ND	ND
	05/16/01	1.45	33.9	ND	1.51	2.05	ND	NA	ND	ND	ND	ND
CR-11	02/18/00	65.6	440	5.59	25.2	57.1	29.6	NA	ND	4.53	0.140	123
	05/23/00	49.3	382	6.59	35.8	68.5	39.1	NA	ND	3.21	ND	168
	08/25/00	63.1	83.4	ND	1.01	3.25	1.37	NA	ND	1.83	ND	17.9
	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	53.6	126	ND	1.04	3.56	ND	NA	ND	3.24	ND	7.84
	05/16/01	58.7	111	ND	3.62	6.28	3.14	NA	ND	2.43	ND	19.3
CR-26	03/09/05	143	319	<1.00	18.2	22.9	10.9	NA	<0.200	2.09	<1.00	67.0
	06/22/05	157	212	<1.00	5.99	6.61	2.68	NA	<0.200	<2.00	<1.00	17.5
	09/22/05	210	164	<1.00	<1.00	<2.00	<1.00	NA	<0.200	<2.00	<1.00	<5.00
	03/25/08	134	-	<0.380	27.9	37.4	22.0	7,060	<0.200	<5.00	0.180	97.3
	06/24/08	158	148	<0.500	0.500	0.743	0.791	6,900	<0.200	0.389	<1.00	7.77
	09/23/08	152	137	0.153	0.531	1.32	0.351	7,010	<0.200	0.954	<1.00	2.89
	01/06/09	136	260	0.170	14.8	15.6	8.35	7,840	<0.200	0.170	<1.00	49.4

COP0018267

TABLE 4
GROUNDWATER ANALYTICAL RESULTS - TOTAL METALS
Willbridge Terminals
Portland, Oregon

Sample I.D.	Sample Date	Arsenic (µg/l)	Barium (µg/l)	Cadmium (µg/l)	Chromium (µg/l)	Copper (µg/l)	Lead (µg/l)	Manganese (µg/l)	Mercury (µg/l)	Selenium (µg/l)	Silver (µg/l)	Zinc (µg/l)
CR-27C	03/25/08	7.02	-	<0.380	<1.00	<2.70	1.07	470	<0.200	<5.00	<0.120	<33.0
[8]	03/25/08	7.25	-	<0.380	<1.00	<2.70	<0.540	489	<0.200	<5.00	<0.120	<33.0
	06/24/08	7.70	97.7	<0.500	<2.00	0.795	0.606	560	<0.200	1.01	<1.00	6.55
[8]	06/24/08	7.26	86.7	0.076	<2.00	0.699	<1.00	589	<0.200	0.652	<1.00	6.55
	09/23/08	6.78	78.4	0.111	0.526	2.79	1.06	315	<0.200	1.20	<1.00	14.5
[8]	09/23/08	4.28	64.1	0.070	<2.00	1.50	<1.00	328	0.0435[5]	<0.500	<1.00	9.46
	01/06/09	7.42	91.1	0.120	1.18	1.60	2.20	446	<0.200	<0.500	<1.00	18.4
[8]	01/06/09	7.55	91.8	<0.500	<2.00	1.13	<1.00	498	<0.200	0.667	<1.00	12.9
CR-28A	06/25/08	32.0	340	0.746	37.6	64.5	67.5	4,480	0.106	0.588	0.221	132
[8]	06/25/08	25.5	60.6	<0.500	<2.00	0.457	5.57	3,520	<0.200	<0.500	<1.00	3.62
	09/25/08	26.8	291	<5.00	33.3	64.3	58.3	4,350	0.0906	<5.00	<10.0	139
[8]	09/25/08	24.9	50.2	<0.500	<2.00	0.689	5.49	3,480	<0.200	<0.500	<1.00	5.81
CR-28B	06/25/08	3.83	61.1	0.127	<2.00	<2.00	<1.00	3,630	<0.200	<0.500	<1.00	2.30
[8]	06/25/08	3.88	64.8	0.092	<2.00	2.82	<1.00	3,460	<0.200	<0.500	<1.00	4.41
	09/25/08	4.38	70.0	<5.00	<20.0	<20.0	<10.0	3,850	<0.200	<5.00	<10.0	<50.0
[8]	09/25/08	4.53	65.4	<0.500	<2.00	3.26	<1.00	3,860	<0.200	0.596	<1.00	9.64
CR-28C	06/25/08	0.491	121	0.539	0.45	1.74	1.76	246	<0.200	<0.500	<1.00	29.3
[8]	06/25/08	0.214	124	0.077	<2.00	1.33	<1.00	275	<0.200	<0.500	<1.00	11.4
	09/25/08	0.826	138	<0.500	<2.00	1.01	0.429	400	<0.200	0.939	<1.00	5.89
[8]	09/25/08	0.673	138	<0.500	<2.00	0.858	0.220	380	<0.200	0.542	<1.00	10.1
CR-29A	06/26/08	21.7	57.3	0.069	3.26	4.26	2.96	3,750	<0.200	0.0970	<1.00	13.0
[8]	06/26/08	23.4	35.9	<0.500	<2.00	0.902	<1.00	3,260	<0.200	0.151	<10.0	4.88
	09/25/08	33.2	214	<5.00	27.8	43.1	16.9	4,790	<0.200	1.49	<10.0	79.3
[8]	09/25/08	30.1	56.0	<0.500	<2.00	1.08	0.310	3,830	<0.200	<0.500	<1.00	5.06
CR-29B	06/26/08	8.23	109	0.179	3.40	5.72	3.93	4,500	<0.200	<0.500	<1.00	19.4
[8]	06/26/08	5.03	69.6	0.072	<2.00	2.28	<1.00	4,370	<0.200	0.598	<1.00	6.54
	09/25/08	15.7	213	<5.00	11.6	24.4	11.5	6,480	<0.200	0.900	<10.0	64.3
[8]	09/25/08	4.91	74.9	0.083	<2.00	1.04	0.233	5,400	<0.200	0.698	<1.00	6.75

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TABLE 4
GROUNDWATER ANALYTICAL RESULTS - TOTAL METALS
Willbridge Terminals
Portland, Oregon

Sample I.D.	Sample Date	Arsenic (µg/l)	Barium (µg/l)	Cadmium (µg/l)	Chromium (µg/l)	Copper (µg/l)	Lead (µg/l)	Manganese (µg/l)	Mercury (µg/l)	Selenium (µg/l)	Silver (µg/l)	Zinc (µg/l)
CR-30A	06/26/08	20.9	272	0.366	23.6	39.9	23.7	3,400	0.0924	0.364	<1.00	86.5
[8]	06/26/08	14.4	33.0	<0.500	<2.00	1.47	<1.00	2,220	<0.200	<0.500	<1.00	6.14
	09/24/08	19.1	104	<5.00	10.0	18.6	8.71	3,450	<0.200	1.00	<10.0	33.0
[8]	09/24/08	25.7	49.4	<0.500	<2.00	0.705	<1.00	3,280	<0.200	<0.500	<1.00	6.32
CR-30B	06/26/08	10.9	72.3	0.101	<2.00	<2.00	<1.00	6,020	<0.200	<0.500	<1.00	2.67
[8]	06/26/08	12.0	70.7	<0.500	<2.00	1.98	<1.00	6,510	<0.200	0.797	<1.00	5.09
	09/24/08	20.5	105	0.283	1.85	4.68	2.14	8,070	<0.200	1.38	<1.00	17.4
[8]	09/24/08	18.4	82.5	<0.500	<2.00	1.04	<1.00	7,650	0.101	0.663	<1.00	6.96
CR-31A	06/26/08	8.04	78.8	0.091	5.97	8.34	3.98	1,630	<0.200	0.0840	0.586	19.7
[8]	06/26/08	5.94	34.5	<0.500	<2.00	<2.00	<1.00	1,490	<0.200	0.894	<1.00	4.72
	09/24/08	20.3	66.1	<5.00	<20.0	5.97	<10.0	2,530	<0.200	<5.00	<10.0	11.4
[8]	09/24/08	19.1	51.2	<0.500	<2.00	0.341	<1.00	2,210	<0.200	<0.500	<1.00	7.89
CR-31B	06/26/08	102	84.0	0.239	0.651	0.394	0.489	8,170	<0.200	<0.500	<1.00	13.3
[8]	06/26/08	115	79.8	<0.500	0.445	0.931	<1.00	8,120	<0.200	0.762	<1.00	4.90
	09/24/08	95.9	83.2	<5.00	<20.0	4.00	<10.0	8,650	<0.200	<5.00	<10.0	15.5
[8]	09/24/08	77.2	63.5	<0.500	<2.00	1.12	<1.00	7,970	<0.200	0.382	<10.0	11.0
CR-32A	06/26/08	3.40	36.9	<0.500	0.972	2.76	1.19	885	<0.200	0.105	<1.00	8.38
[8]	06/26/08	1.01	17.3	0.068	<2.00	1.21	<1.00	831	<0.200	0.277	<1.00	8.35
	09/24/08	3.21	43.1	<0.500	1.36	3.92	0.928	1,110	<0.200	0.198	<1.00	9.55
[8]	09/24/08	2.67	32.0	<0.500	<2.00	1.20	<1.00	1,200	<0.200	<0.500	<1.00	10.5
CR-32B	06/26/08	62.4	120	0.411	0.597	1.37	0.891	9,280	<0.200	<0.500	<1.00	5.15
[8]	06/26/08	72.2	114	<0.500	0.696	1.73	<1.00	8,870	<0.200	0.411	<1.00	6.43
	09/24/08	57.6	120	<5.00	<20.0	3.05	<10.0	9,760	<0.200	<5.00	<10.0	7.83
[8]	09/24/08	67.3	112	<0.500	<2.00	3.76	0.262	8,830	<0.200	0.324	<1.00	7.56
CR-32C	06/26/08	3.40	130	1.38	0.588	1.97	2.20	771	<0.200	<0.500	<1.00	66.9
[8]	06/26/08	0.893	119	0.811	0.394	1.94	<1.00	703	<0.200	0.571	<1.00	56.1
	09/24/08	10.2	206	0.082	6.44	17.0	12.3	1,120	<0.200	0.988	<1.00	27.9
[8]	09/24/08	9.02	128	<0.500	<2.00	0.582	<1.00	877	<0.200	0.518	<1.00	4.06
CR-33	03/26/08	4.42	-	<0.380	4.39	8.12	5.25	3,860	<0.200	<5.00	<0.120	<33.0
[8]	03/26/08	0.910	-	<0.380	<1.00	<2.70	<0.540	3,920	<0.200	<5.00	<0.120	<33.0
	06/24/08	23.8	543	<0.500	48.4	81.7	40.5	5,160	0.0826	1.71	<1.00	205
[8]	06/24/08	12.2	124	<0.500	<2.00	1.30	<1.00	4,450	<0.200	0.182	<1.00	8.14
	09/24/08	19.9	131	<0.500	3.55	4.58	2.41	4,880	<0.200	0.745	<1.00	13.8
[8]	09/24/08	15.7	119	<0.500	<2.00	0.860	<1.00	4,400	<0.200	1.20	<1.00	6.09
	01/06/09	16.4	78.0	<0.500	0.350	0.350	0.290	5,130	<0.200	0.190	<1.00	2.03
[8]	01/06/09	16.2	89.6	1.64	<20.0	0.430	<10.0	4,670	<0.200	<5.00	8.01	<50.0
	03/18/09	3.58	58.1	<5.00	<2.00	<2.00	<1.00	3,470	<0.00500	<5.00	<1.00	<5.00

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TABLE 4
GROUNDWATER ANALYTICAL RESULTS - TOTAL METALS
Willbridge Terminals
Portland, Oregon

Sample I.D.	Sample Date	Arsenic (µg/l)	Barium (µg/l)	Cadmium (µg/l)	Chromium (µg/l)	Copper (µg/l)	Lead (µg/l)	Manganese (µg/l)	Mercury (µg/l)	Selenium (µg/l)	Silver (µg/l)	Zinc (µg/l)
KINDER MORGAN												
MW-8	02/16/00	9.74	56.6	0.73	3.96	4.76	5.69	NA	ND	ND	ND	34.4
	05/31/00	3.48	22.6	ND	ND	ND	ND	NA	ND	ND	ND	7.88
	08/24/00	13.6	38.1	ND	ND	ND	ND	NA	ND	ND	ND	7.99
	12/01/00	17.7	71.0	2.36	1.95	2.72	2.50	NA	ND	2.39	ND	20.7
	02/22/01	11.1	24.9	ND	1.30	2.34	ND	NA	ND	ND	ND	7.20
	05/16/01	9.42	30.8	ND	ND	1.19	ND	NA	ND	ND	ND	ND
dup	05/16/01	9.31	31.6	ND	ND	1.35	ND	NA	ND	ND	ND	20.8
	09/21/01	16.8	63.7	1.41	2.19	3.5	ND	NA	ND	ND	ND	13.8
	03/14/02	1.98	21.3	ND	ND	3.76	ND	NA	ND	ND	ND	8.24
dup	03/14/02	2.81	22.0	ND	ND	3.37	ND	NA	ND	ND	ND	11.5
	09/27/02	11.6	59.2	1.30	2.58	5.14	2.94	NA	ND	ND	ND	23.0
	03/18/03	4.12	40.8	ND	ND	NS	ND	NA	ND	ND	ND	NS
dup	03/18/03	3.52	40.8	ND	ND	NS	ND	NA	ND	ND	ND	NS
	09/24/03	10.8	28.1	ND	ND	ND	ND	NA	ND	ND	ND	6.70
	03/30/04	1.50	23.8	<1.00	<1.00	<2.00	<1.00	NA	<0.200	<1.00	<1.00	10.7
	09/27/04	16.0	85.8	2.68	5.98	8.98	5.62	NA	<0.200	<1.00	<1.00	61.3
dup	09/27/04	16.7	110	3.95	4.54	13.0	7.05	NA	<0.200	<1.00	<1.00	88.8
	03/29/05	3.73	14.7	1.46	0.360	1.64	1.15	NA	<0.200	<1.00	<1.00	22.9
	09/21/05	8.67	25.8	1.28	<1.00	4.25	1.81	NA	<0.200	<2.00	<1.00	21.7
	03/15/06	2.16	24.4	<1.00	<1.00	2.34	<1.00	NA	<0.200	<2.00	<1.00	23.4
dup	03/15/06	1.64	24.5	<1.00	<1.00	2.04	<1.00	NA	<0.200	<2.00	<1.00	22.2
	09/26/06	8.84	27.6	4.08	<1.00	2.98	1.49	NA	<0.200	<2.00	<1.00	43.0
	03/22/07	2.08	20.5	<1.00	<1.00	<1.00	<1.00	NA	<0.200	<1.00	<1.00	13.8
	09/20/07	7.20	22.2	<1.00	2.09	5.22	2.68	NA	<0.200	<2.00	<1.00	20.9
dup	09/20/07	6.90	13.7	<1.00	<1.00	<2.00	<1.00	NA	<0.200	<2.00	<1.00	12.2
	03/25/08	0.80	13.7	0.272	0.220	1.59	0.248	30.5	NA	<0.2	0.009[9]	10.4
	09/22/08	3.96	19.4	0.556	0.56	1.98	1.23	425	--	0.4	0.027	19.7
dup	09/22/08	3.79	20.7	0.584	0.35	1.96	0.936	467	--	0.4	0.016	19.8
	03/16/09	2.25	22.8	<0.500	<2.00	<2.00	<1.00	NA	<0.200	<0.500	<1.00	13.6
dup	03/16/09	2.25	22.0	<0.500	<2.00	<2.00	<1.00	NA	<0.200	<0.500	<1.00	10.5
	09/15/09	5.69	25.4	0.890	<2.00	2.72	2.06	NA	<0.200	<0.500	<1.00	22.3
	03/17/10	5.29	29.9	1.38	<2.00	2.94	1.87	218	NA	<1.00	<1.00	39.9
	09/20/10	3.50	15.5	<1.00	<2.00	<2.00	<1.00	901	<0.200	<1.00	<1.00	<10.0
MW-10	02/16/00	31.1	266	0.270	25.0	49.3	25.6	NA	ND	2.00	<1.00	113
	05/31/00	15.8	199	ND	15.5	29.2	18.2	NA	ND	1.79	ND	75.6
	08/24/00	19.6	51.8	ND	ND	ND	ND	NA	ND	1.30	ND	5.49
	12/01/00	28.4	28.4	ND	4.24	7.04	4.37	NA	ND	1.25	ND	18.1
	02/22/01	22.2	67.0	ND	1.69	3.31	1.02	NA	ND	ND	ND	8.93
	05/16/01	19.9	72.9	ND	ND	ND	ND	NA	ND	ND	ND	ND

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TABLE 4
GROUNDWATER ANALYTICAL RESULTS - TOTAL METALS
Willbridge Terminals
Portland, Oregon

Sample I.D.	Sample Date	Arsenic (µg/l)	Barium (µg/l)	Cadmium (µg/l)	Chromium (µg/l)	Copper (µg/l)	Lead (µg/l)	Manganese (µg/l)	Mercury (µg/l)	Selenium (µg/l)	Silver (µg/l)	Zinc (µg/l)
MW-11	02/16/00	67.7	398	0.180	34.4	67.2	78.6	NA	0.065	1.34	0.150	168
	05/31/00	59.5	454	ND	29.1	57.7	70.5	NA	0.201	2.96	ND	153
	08/24/00	50.9	111	ND	4.84	8.28	21.0	NA	ND	3.15	ND	20.3
	12/01/00	47.8	125	ND	7.19	11.4	37.2	NA	ND	4.38	ND	31.1
	02/22/01	50.9	113	ND	5.90	11.0	39.9	NA	ND	ND	ND	31.0
	05/16/01	44.5	81.6	ND	1.84	3.88	30.0	NA	ND	ND	ND	15.8
MW-13	02/16/00	17.0	305	0.110	28.5	43.8	23.5	NA	ND	0.72	0.160	130
	05/31/00	11.5	411	ND	26.4	40.9	22.8	NA	ND	2	ND	114
	08/24/00	3.31	85.4	ND	5.00	8.17	3.73	NA	ND	4.31	ND	20.7
	12/01/00	3.84	78.4	ND	4.94	7.52	1.39	NA	ND	1.46	ND	20.1
dup	12/01/00	4.65	79.5	ND	5.04	6.82	3.44	NA	ND	1.62	ND	20.7
	02/22/01	1.46	62.1	ND	4.09	5.81	2.37	NA	ND	ND	ND	17.6
	05/16/01	1.74	52.3	ND	2.18	3.08	1.69	NA	ND	ND	ND	12.3
MW-15	02/17/00	1.70	87.4	0.040	6.51	5.46	2.06	NA	ND	0.34	ND	21.9
dup	02/17/00	1.52	87.7	0.080	6.55	5.32	3.40	NA	-	0.46	ND	21.0
	05/31/00	ND	94.1	ND	6.00	5.97	3.22	NA	ND	ND	ND	29.8
	08/24/00	ND	141	ND	9.89	8.79	4.20	NA	ND	4.81	ND	38.8
	12/01/00	3.16	148	ND	13.3	12.0	6.97	NA	ND	1.15	ND	53.4
	02/22/01	1.29	108	ND	8.40	9.51	6.64	NA	ND	ND	ND	208
	05/16/01	ND	68.1	ND	1.26	1.54	1.13	NA	ND	ND	ND	24.6
MW-21	02/17/00	4.00	188	2.19	7.77	9.10	9.88	NA	ND	0.71	ND	45.9
	05/30/00	5.99	335	7.01	19.6	24.8	24.7	NA	ND	1.85	ND	126
	08/23/00	3.39	185	ND	2.02	2.95	1.26	NA	ND	1.53	ND	14.0
	12/01/00	3.44	141	1.48	ND	ND	ND	NA	ND	1.76	ND	14.0
	02/22/01	3.50	184	ND	1.17	ND	ND	NA	ND	ND	ND	10.7
	05/16/01	4.71	21.9	ND	ND	1.27	1.03	NA	ND	ND	ND	18.2
MW-22	02/17/00	92.8	251	0.170	12.10	8.34	39.1	NA	ND	1.21	ND	49.2
dup	02/17/00	-	-	-	-	-	-	NA	ND	-	-	-
	05/30/00	94.5	244	ND	9.70	9.50	21.6	NA	ND	2.42	ND	38.8
	08/23/00	104	194	ND	1.25	2.01	6.95	NA	ND	2.74	ND	ND
	12/01/00	83.1	295	ND	1.99	2.13	10.5	NA	ND	3.00	ND	26.5
	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

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TABLE 4
GROUNDWATER ANALYTICAL RESULTS - TOTAL METALS
Willbridge Terminals
Portland, Oregon

Sample I.D.	Sample Date	Arsenic (µg/l)	Barium (µg/l)	Cadmium (µg/l)	Chromium (µg/l)	Copper (µg/l)	Lead (µg/l)	Manganese (µg/l)	Mercury (µg/l)	Selenium (µg/l)	Silver (µg/l)	Zinc (µg/l)
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	9.09	58.2	ND	1.75	8.17	4.41	NA	ND	ND	ND	9.83
	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-25	09/21/01	56.3	95.8	ND	3.39	3.65	4.11	NA	ND	ND	ND	25.8
	03/14/02	40.6	115	ND	5.73	8.32	9.69	NA	ND	ND	1.15	27.8
	09/27/02	116	186	ND	6.06	8.97	9.90	NA	ND	ND	ND	33.4
	03/18/03	38.6	44.0	ND	ND	NS	ND	NA	ND	1.15	1.10	NS
	09/24/03	66.1	181	1.25	14.4	23	20.1	NA	ND	1.79	ND	71.2
	03/30/04	52.1	58.0	<1.00	1.57	<2.00	<1.15	NA	<0.200	<1.00	<1.00	8.10
	09/27/04	71.2	140	<1.00	5.06	11.2	11.2	NA	<0.200	<1.00	<1.00	30.4
	03/28/05	61.6	94.1	<1.00	1.16	2.53	4.74	NA	<0.200	0.400	<1.00	11.8
	09/21/05	62.2	64.7	<1.00	1.40	2.99	1.89	NA	<0.200	<2.00	<1.00	8.38
	03/15/06	60.7	70.1	<1.00	<1.00	4.69	1.83	NA	<0.200	<2.00	<1.00	9.20
	09/26/06	52.9	76.3	<1.00	1.79	2.58	3.40	NA	<0.200	<2.00	<1.00	11.7
	03/22/07	46.8	77.1	<1.00	2.88	3.93	4.52	NA	<0.200	<1.00	<1.00	16.2
	09/20/07	121	201	<1.00	8.85	12.6	15.7	NA	<0.200	<2.00	<1.00	43.6
	03/24/08	40.2	119	0.372	5.28	12.0	12.2	4,790	NA	<0.2	0.035	27.1
	09/22/08	39.0	239	0.666	9.18	20.6	24.3	5,160	NA	0.4	0.072	44.0
	03/16/09	58.8	162	<0.500	9.16	15.4	15.0	NA	<0.200	<0.500	<1.00	37.2
	09/15/09	51.9	119	<0.500	6.72	9.30	8.94	NA	<0.200	<0.500	<1.00	24.5
	03/16/10	60.4	89.8	<1.00	<10.0	<10.0	6.87	4,970	NA	<1.00	<1.00	<50.0
	09/20/10	70.9	187	<5.00	10.6	20.6	15.4	4,980	<0.200	<5.00	<5.00	<50.0

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TABLE 4
GROUNDWATER ANALYTICAL RESULTS - TOTAL METALS
Willbridge Terminals
Portland, Oregon

Sample I.D.	Sample Date	Arsenic (µg/l)	Barium (µg/l)	Cadmium (µg/l)	Chromium (µg/l)	Copper (µg/l)	Lead (µg/l)	Manganese (µg/l)	Mercury (µg/l)	Selenium (µg/l)	Silver (µg/l)	Zinc (µg/l)
MW-26	02/17/00	47.4	94.3	0.050	4.68	3.68	3.42	NA	ND	0.6	ND	14.1
dup	02/17/00	48.7	90.4	0.500	4.34	4.96	3.12	NA	ND	0.33	ND	42.2
	05/30/00	44.3	102	ND	4.53	5.01	4.92	NA	ND	ND	ND	16.2
	08/23/00	53.0	59.4	ND	2.18	2.49	2.28	NA	ND	ND	ND	ND
dup	08/23/00	57.6	64.2	ND	2.27	3.84	2.28	NA	ND	ND	ND	7.91
	12/01/00	52.6	62.0	ND	1.58	ND	2.54	NA	ND	1.16	ND	7.96
	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	59.0	67.8	ND	2.21	1.70	2.25	NA	ND	ND	ND	12.0
	09/27/02	45.0	52.4	ND	1.23	ND	2.20	NA	ND	ND	ND	16.9
	03/18/03	20.5	67.0	ND	ND	NS	ND	NA	ND	ND	1.09	
	09/24/03	51.0	51.2	ND	ND	ND	2.14	NA	ND	ND	ND	5.07
	03/30/04	43.1	66.1	<1.00	<1.00	<1.00	1.02	NA	<0.200	<1.00	<1.00	<5.00
	09/27/04	65.7	66.2	<1.00	2.06	4.48	6.54	NA	<0.200	<1.00	<1.00	18.8
	03/28/05	55.4	74.9	1.04	1.29	3.13	5.86	NA	<0.200	0.53	<1.00	15.8
	09/21/05	62.3	46.2	<1.00	<1.00	<2.00	1.22	NA	<0.200	<2.00	<1.00	<5.00
	03/15/06	47.6	77.1	<1.00	<1.00	<2.00	<1.00	NA	<0.200	<2.00	<1.00	<5.00
	09/26/06	45.7	68.4	<1.00	<1.00	<2.00	<1.00	NA	<0.200	<2.00	<1.00	5.05
dup	09/26/06	48.0	69.2	<1.00	<1.00	2.12	<1.00	NA	<0.200	<2.00	<1.00	<5.00
	03/22/07	43.8	71.0	<1.00	<1.00	<1.00	<1.00	NA	<0.200	<1.00	<1.00	13.5
	09/20/07	50.1	68.5	<1.00	<1.00	<2.00	1.18	NA	<0.200	<2.00	<1.00	7.64
	03/24/08	39.5	74.0	0.048	1.06	1.18	2.22	5,640	NA	<0.2	0.006[9]	5.85
dup	03/24/08	37.9	87.5	0.099	1.66	1.96	3.35	5,580	NA	<0.2	0.011[9]	9.57
	09/22/08	39.5	102	0.112	2.97	3.39	4.98	4,660	NA	0.4	0.017	13.8
	03/16/09	47.0	105	<0.500	3.99	4.56	5.49	NA	<0.200	<0.500	<1.00	17.7
	09/15/09	43.8	81.4	<0.500	3.33	2.87	4.24	NA	<0.200	<0.500	<1.00	16.4
dup	09/15/09	42.1	87.0	<0.500	2.87	2.59	3.79	NA	<0.200	<0.500	<1.00	11.3
	03/16/10	35.8	67.6	<1.00	<2.00	<2.00	2.68	5,860	NA	<1.00	<1.00	<10.0
	09/20/10	44.4	151	<5.00	<10.0	<10.0	11.1	4,410	<0.200	<5.00	<5.00	<50.0

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TABLE 4
GROUNDWATER ANALYTICAL RESULTS - TOTAL METALS
Willbridge Terminals
Portland, Oregon

Sample I.D.	Sample Date	Arsenic (µg/l)	Barium (µg/l)	Cadmium (µg/l)	Chromium (µg/l)	Copper (µg/l)	Lead (µg/l)	Manganese (µg/l)	Mercury (µg/l)	Selenium (µg/l)	Silver (µg/l)	Zinc (µg/l)
MW-28	02/16/00	0.320	8.03	ND	0.47	2.00	3.87	NA	ND	ND	ND	17.2
	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	5.04	16.0	ND	0.42	2.22	1.35	NA	ND	ND	ND	2.18
	05/30/00	6.64	19.0	ND	ND	ND	ND	NA	ND	ND	ND	ND
	08/23/00	18.1	20.0	ND	ND	ND	ND	NA	ND	ND	ND	ND
	12/01/00	13.4	17.9	ND	ND	ND	2.80	NA	ND	ND	ND	ND
	02/22/01	14.8	22.8	ND	ND	ND	ND	NA	ND	ND	ND	7.23
	05/17/01	15.0	21.0	ND	ND	ND	2.44	NA	ND	ND	ND	13.2
MW-32	02/16/00	0.710	18.9	0.070	2.97	3.99	3.09	NA	ND	ND	ND	6.03
	05/30/00	1.47	26.8	ND	1.95	4.30	1.59	NA	ND	ND	ND	6.86
	08/23/00	ND	14.7	ND	ND	2.51	ND	NA	ND	ND	ND	ND
	12/01/00	1.93	14.2	ND	ND	ND	ND	NA	ND	1.20	ND	ND
	02/22/01	ND	9.21	ND	1.19	ND	ND	NA	ND	ND	ND	ND
	05/16/01	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND

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TABLE 4
GROUNDWATER ANALYTICAL RESULTS - TOTAL METALS
Willbridge Terminals
Portland, Oregon

Sample I.D.	Sample Date	Arsenic (µg/l)	Barium (µg/l)	Cadmium (µg/l)	Chromium (µg/l)	Copper (µg/l)	Lead (µg/l)	Manganese (µg/l)	Mercury (µg/l)	Selenium (µg/l)	Silver (µg/l)	Zinc (µg/l)
MW-33	02/16/00	8.42	76.8	0.060	1.62	4.23	3.68	NA	ND	ND	ND	7.46
	05/30/00	6.55	111	ND	1.79	3.38	1.54	NA	ND	ND	ND	7.21
	08/24/00	10.3	227	ND	1.04	2.46	ND	NA	ND	2.59	ND	ND
	11/30/00	58.0	563	ND	2.23	3.43	ND	NA	ND	1.63	ND	8.82
	02/22/01	14.2	91.0	ND	1.79	3.39	1.03	NA	ND	ND	ND	9.44
dup	02/22/01	14.2	104	ND	1.88	3.90	1.55	NA	ND	ND	ND	11
	05/16/01	17.8	184	ND	ND	1.28	ND	NA	ND	ND	ND	ND
	09/21/01	10.0	75.7	ND	ND	ND	ND	NA	ND	1.51	ND	ND
	03/14/02	9.75	72.2	ND	ND	ND	ND	NA	ND	ND	2.02	ND
	09/27/02	30.2	356	ND	2.06	3.03	1.36	NA	ND	ND	ND	20.5
	03/18/03	8.67	40.1	ND	ND	NS	ND	NA	ND	ND	1.40	NS
	09/24/03	23.2	191	ND	ND	ND	ND	NA	ND	ND	ND	ND
	03/29/04	12.4	55.2	<1.00	1.14	<2.00	<1.00	NA	<0.200	<1.00	<1.00	<5.00
	09/27/04	132	1410	<2.00	6.28	13.5	<2.00	NA	0.490	<2.00	<2.00	31.9
	03/29/05	7.57	325	<1.00	0.360	2.44	0.210	NA	<0.200	<1.00	<1.00	7.37
	09/21/05	18.1	398	<1.00	1.65	2.90	<1.00	NA	<0.200	<2.00	<1.00	5.80
dup	09/21/05	16.3	366	<1.00	1.51	2.92	<1.00	NA	<0.200	<2.00	<1.00	5.16
	03/15/06	11.2	58.8	<1.00	<1.00	<2.00	<1.00	NA	<0.200	<2.00	<1.00	6.00
	09/27/06	26.3	409	<0.0752	<0.800	<1.60	<0.432	NA	7.24	<1.60	<0.0960	24.4
	03/22/07	13.9	123	0.205	<0.800	<1.60	<0.432	NA	0.00767	<1.60	<0.0960	8.27
dup	03/22/07	37.3	380	0.952	1.10	2.42	<0.432	NA	<0.00500	<1.60	<0.0960	18.4
	09/18/07	32.9	488	<1.00	1.33	2.73	<1.00	NA	0.0166	<2.00	<1.00	24.5
	03/25/08	12.1	71.4	0.047	0.580	1.41	0.478	1,100	0.0235	<0.2	0.009[9]	3.14
	09/23/08	32.0	466	0.135	1.31	3.28	0.764	1,780	0.167	0.4	0.029	8.11
	03/16/09	12.7	96.5	<0.500	<2.00	<2.00	<1.00	NA	0.0126	<0.500	<1.00	<5.00
	09/14/09	14.1	208	<0.500	<2.00	2.92	1.43	NA	0.0137	<0.500	<1.00	7.84
	03/16/10	12.1	80.9	<1.00	<4.00	<4.00	1.32	1,210	0.00496	<1.00	<1.00	<20.0
	09/20/10	20.3	259	<2.00	<2.00	2.51	1.11	1,470	0.0301	<2.00	<1.00	<10.0

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TABLE 4
GROUNDWATER ANALYTICAL RESULTS - TOTAL METALS
Willbridge Terminals
Portland, Oregon

Sample I.D.	Sample Date	Arsenic (µg/l)	Barium (µg/l)	Cadmium (µg/l)	Chromium (µg/l)	Copper (µg/l)	Lead (µg/l)	Manganese (µg/l)	Mercury (µg/l)	Selenium (µg/l)	Silver (µg/l)	Zinc (µg/l)
MW-34	09/21/01	69.7	381	2.39	14.3	144	14.6	NA	ND	1.46	ND	104
	03/14/02	37.6	178	ND	5.82	13.2	5.49	NA	ND	ND	1.51	32.1
	09/27/02	162	670	1.64	26.4	67.6	22.6	NA	ND	1.3	ND	126
	03/18/03	14.8	93.4	ND	6.02	NS	5.41	NA	ND	ND	1.13	NS
	09/24/03	10.9	65.4	ND	1.06	2.36	1.17	NA	ND	ND	ND	9.94
	03/29/04	3.64	35.0	<1.00	1.14	<2.00	<1.00	NA	<0.200	<1.00	<1.00	<5.00
	09/27/04	87.9	355	<1.00	11.4	28.5	11.1	NA	<0.200	1.31	<1.00	54.7
dup	03/29/05	12.6	-	<1.00	0.530	4.75	1.58	NA	<0.200	0.350	<1.00	12.7
	03/29/05	12.5	75.6	<1.00	0.460	3.82	1.48	NA	<0.200	0.430	<1.00	11.9
	09/21/05	53.7	133	<1.00	1.05	3.54	1.13	NA	<0.200	<2.00	<1.00	7.54
	03/15/06	5.90	57.2	<1.00	3.08	3.29	2.46	NA	<0.200	<2.00	<1.00	13.2
	09/27/06	14.3	70.0	0.103	0.899	3.18	1.39	NA	<0.00500	<1.60	<0.0960	15.0
	03/22/07	25.2	117	0.176	4.01	9.22	5.01	NA	0.00877	<1.60	<0.0960	32.9
	09/18/07	32.5	114	<1.00	3.14	8.00	3.51	NA	0.0208	<2.00	<1.00	20.2
	03/25/08	4.33	45.4	0.203	1.27	2.25	1.61	1,200	0.0098	<0.2	0.008[9]	5.69
	06/24/08	8.70	-	0.108	1.87	4.37	2.95	1,800	0.00789	0.3[9]	0.016[9]	13.6
	09/23/08	27.3	254	0.578	7.36	26.5	13.2	5,040	0.00776	0.4	0.075	49.7
	01/05/09	4.81	36.3	<0.500	<2.00	2.36	1.10	160	0.00422	<0.500	<1.00	5.59
	03/16/09	11.0	122	<0.500	6.68	12.7	8.64	NA	0.0388	<0.500	<1.00	28.4
	09/14/09	26.8	281	3.22	18.3	52.7	20.4	NA	0.0543	<0.500	<1.00	73.2
	03/16/10	38.8	566	<1.00	46.5	56.6	51.7	1,860	0.00209	<2.00	<1.00	157
	09/20/10	4.90	45.0	<2.00	<2.00	<2.00	<1.00	1,250	0.00590	<2.00	<1.00	<10.0

COP0018276

TABLE 4
GROUNDWATER ANALYTICAL RESULTS - TOTAL METALS
Willbridge Terminals
Portland, Oregon

Sample I.D.	Sample Date	Arsenic (µg/l)	Barium (µg/l)	Cadmium (µg/l)	Chromium (µg/l)	Copper (µg/l)	Lead (µg/l)	Manganese (µg/l)	Mercury (µg/l)	Selenium (µg/l)	Silver (µg/l)	Zinc (µg/l)
MW-36	02/16/00	14.6	57.5	0.050	4.13	6.14	3.55	NA	ND	0.22	ND	13.1
	05/31/00	14.9	51.2	ND	1.80	3.08	ND	NA	ND	ND	ND	ND
	08/24/00	18.7	57.0	ND	ND	2.22	ND	NA	ND	1.11	ND	10.8
	11/30/00	22.5	70.1	ND	ND	ND	ND	NA	ND	1.47	ND	ND
	02/21/01	20.1	56.0	ND	1.51	2.80	ND	NA	ND	ND	ND	6.77
	05/16/01	29.7	82.6	ND	ND	16.9	ND	NA	ND	ND	ND	14.9
	09/21/01	16.8	54.1	ND	ND	ND	ND	NA	ND	1.08	ND	ND
	03/13/02	4.42	25.2	ND	ND	2.97	ND	NA	ND	ND	ND	12.2
	03/18/03	5.41	31.6	ND	1.22	NS	ND	NA	ND	ND	ND	NS
	09/24/03	43.6	116	ND	1.03	2.34	ND	NA	ND	ND	ND	ND
	3/29/04	10.8	33.9	<1.00	1.31	3.85	1.44	NA	<0.200	<1.00	<1.00	<5.00
	9/27/2004	32.0	67.9	<1.00	2.38	7.39	3.34	NA	<0.200	1.40	<1.00	6.75
	09/21/05	33.6	56.7	<1.00	<1.00	3.07	<1.00	NA	<0.200	<2.00	<1.00	<5.00
	03/15/06	5.90	23.8	<1.00	<1.00	3.84	<1.00	NA	<0.200	<2.00	<1.00	<5.00
	09/27/06	17.6	54.5	<0.0752	<0.800	1.70	<0.432	NA	<0.00500	<1.60	<0.0960	4.50
dup	09/27/06	15.7	48.0	<0.0752	<0.800	1.60	<0.432	NA	<0.00500	<1.60	<0.0960	<4.00
	03/22/07	8.58	33.4	<0.0752	<0.800	2.64	0.652	NA	0.00540	<1.60	<0.0960	6.28
	09/18/07	18.9	51.0	<1.00	<1.00	<2.00	<1.00	NA	<0.00500	<2.00	<1.00	<5.00
dup	09/18/07	30.4	78.3	<1.00	<1.00	4.49	1.07	NA	<0.00500	<2.00	<1.00	9.78
	03/25/08	8.28	28.6	0.032	0.64	3.85	0.702	1,510	0.0071	<0.2	0.005[9]	5.45
	09/23/08	21.6	64.4	0.018	0.67	2.46	0.652	3,570	0.00443	0.8	0.018	2.80
	03/16/09	24.2	56.5	<0.500	<2.00	3.56	2.70	NA	0.00608	<0.500	<1.00	5.42
	09/14/09	29.3	77.6	<0.500	<2.00	3.02	1.75	NA	0.00790	<0.500	<1.00	<5.00
dup	09/14/09	30.8	80.8	<0.500	<2.00	2.85	1.67	NA	0.00411	<0.500	<1.00	<5.00
	03/16/10	9.94	31.6	<1.00	<2.00	3.27	2.87	2,100	0.00579	<1.00	<1.00	<10.0
	09/20/10	38.0	144	<1.00	<2.00	2.87	1.34	7,550	0.00737	<10.0	<1.00	<10.0

TABLE 4
GROUNDWATER ANALYTICAL RESULTS - TOTAL METALS
Willbridge Terminals
Portland, Oregon

Sample I.D.	Sample Date	Arsenic (µg/l)	Barium (µg/l)	Cadmium (µg/l)	Chromium (µg/l)	Copper (µg/l)	Lead (µg/l)	Manganese (µg/l)	Mercury (µg/l)	Selenium (µg/l)	Silver (µg/l)	Zinc (µg/l)
MW-37	02/16/00	18.4	74.8	0.220	7.21	11.8	4.69	NA	ND	0.32	ND	18.4
	05/30/00	19.9	56.7	ND	3.56	5.72	1.80	NA	ND	1.58	ND	11.1
dup	05/30/00	18.9	58.6	ND	4.08	6.37	2.05	NA	ND	ND	ND	12.1
	08/24/00	22.7	45.3	ND	ND	ND	ND	NA	ND	1.58	ND	5.98
	11/30/00	22.1	69.3	ND	4.19	6.05	3.53	NA	ND	1.23	ND	12.3
	02/21/01	22.3	40.4	ND	1.53	2.06	ND	NA	ND	ND	ND	5.26
	05/16/01	20.9	40.3	ND	ND	ND	ND	NA	ND	ND	ND	ND
	09/21/01	22.2	43.2	ND	1.27	ND	1.47	NA	ND	ND	ND	ND
	09/27/02	19.0	42.9	ND	ND	ND	ND	NA	ND	ND	ND	ND
dup	09/27/02	19.4	42.3	ND	ND	ND	ND	NA	ND	ND	ND	9.23
	03/18/03	8.64	25.9	ND	ND	NS	ND	NA	ND	ND	1.41	NS
	09/27/04	24.2	67.9	<1.00	3.08	5.65	3.34	NA	<0.200	<1.00	<1.00	18.1
	03/29/05	15.3	30.0	<1.00	0.230	<1.00	0.580	NA	<0.200	<1.00	<1.00	4.49
	09/21/05	19.4	39.0	<1.00	<1.00	<2.00	1.44	NA	<0.200	<2.00	<1.00	<5.00
	03/15/06	12.0	49.3	<1.00	<1.00	<2.00	1.41	NA	<0.200	<2.00	<1.00	9.59
	09/27/06	19.9	39.4	<0.0752	<0.800	<1.60	<0.432	NA	<0.00500	<1.60	<0.0960	<4.00
	03/22/07	21.0	46.8	0.173	<0.800	<1.60	0.81	NA	<0.00500	<1.60	<0.0960	8.43
	09/18/07	23.6	37.8	<1.00	<1.00	<2.00	3.08	NA	<0.00500	<2.00	<1.00	8.03
	03/25/08	22.1	54.2	0.617	1.26	2.77	1.91	2,300	0.0034	<0.2	0.016[9]	11.4
dup	03/25/08	24.9	68.0	1.01	1.55	2.99	2.52	2,180	0.0078	<0.2	0.019[9]	10.9
	06/24/08	18.0	-	0.084	0.380	0.390	0.39	2,490	0.00064	<0.29	0.004[9]	2.60
	09/23/08	18.7	42.0	0.270	0.37	0.89	1.29	2,530	0.00223	0.4	0.019	4.47
dup	09/23/08	19.0	41	0.198	0.29	0.77	1.16	2,560	0.00197	0.4	0.009	4.92
	01/05/09	19.0	35.2	0.673	<2.00	<2.00	1.80	1,730	0.00267	<0.500	<1.00	14.8
	03/16/09	19.8	31.0	<0.500	<2.00	<2.00	3.52	NA	0.00114	<0.500	<1.00	<5.00
	09/14/09	16.2	29.8	<0.500	<2.00	<2.00	<1.00	NA	0.000946	<0.500	<1.00	<5.00
	03/16/10	9.77	27.5	<1.00	<2.00	2.06	8.98	1,310	0.0131	<1.00	<1.00	<10.0
dup	03/16/10	9.42	27.3	<1.00	<2.00	<2.00	7.52	1,380	0.00794	<1.00	<1.00	<10.0
	09/20/10	15.7	22.1	<1.00	<2.00	<2.00	3.11	2,070	0.00171	<10.0	<1.00	<10.0
dup	09/20/10	16.0	22.5	<1.00	<2.00	<2.00	2.56	2,090	0.00266	<10.0	<1.00	<10.0
MW-39	03/29/04	17.4	110	<1.00	9.88	16.3	8.23	NA	<0.200	<1.00	<1.00	34.6
	09/27/04	30.4	281	<1.00	24.8	83.2	19.0	NA	<0.200	1.40	<1.00	113
	09/21/05	19.9	89.1	<1.00	2.18	11.0	2.38	NA	<0.200	<2.00	<1.00	13.9

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TABLE 4
GROUNDWATER ANALYTICAL RESULTS - TOTAL METALS
Willbridge Terminals
Portland, Oregon

Sample I.D.	Sample Date	Arsenic (µg/l)	Barium (µg/l)	Cadmium (µg/l)	Chromium (µg/l)	Copper (µg/l)	Lead (µg/l)	Manganese (µg/l)	Mercury (µg/l)	Selenium (µg/l)	Silver (µg/l)	Zinc (µg/l)
MW-40	02/16/00	22.1	185	0.110	20.2	28.9	25.4	NA	ND	0.47	0.12	66.9
	05/30/00	25.0	107	ND	7.83	10.7	8.37	NA	ND	ND	ND	24.5
	08/24/00	27.0	123	ND	1.62	3.16	1.41	NA	ND	3.85	ND	16.0
	11/30/00	31.9	144	ND	4.33	7.34	4.91	NA	ND	1.87	ND	17.8
	02/21/01	38.7	119	ND	3.75	6.07	3.30	NA	ND	ND	ND	18.3
	05/16/01	23.9	102	ND	2.24	3.14	1.93	NA	ND	ND	ND	8.62
	09/21/01	24.8	106	ND	3.06	3.43	2.54	NA	ND	2.32	ND	10.7
	03/13/02	12.6	53.8	ND	1.97	3.36	1.94	NA	ND	ND	ND	12.4
	09/27/02	28.1	219	ND	8.81	10.4	8.08	NA	ND	ND	ND	25.0
	03/18/03	17.4	48.5	ND	1.35	NS	1.30	NA	ND	ND	ND	NS
	09/24/03	44.8	254	ND	8.95	13.1	31.6	NA	ND	ND	ND	32.6
dup	09/24/03	67.8	397	ND	17.9	24.9	53.8	NA	ND	ND	ND	62.7
	03/29/04	19.0	89.7	<1.00	1.24	2.64	1.24	NA	<0.200	<2.00	<1.00	<5.00
dup	03/29/04	17.8	79.7	<1.00	7.19	<2.00	1.28	NA	<0.200	<2.00	<1.00	<5.00
	9/27/2004	61.1	343	<1.00	17.9	29.3	30.8	NA	<0.200	<2.00	<1.00	76.4
	3/29/2005	19.8	62.7	<1.00	0.380	3.60	2.29	NA	<0.200	0.480	<1.00	7.18
	09/21/05	29.5	80.7	<1.00	<1.00	4.34	1.26	NA	<0.200	<2.00	<1.00	5.92
	03/15/06	16.2	54.0	<1.00	1.39	3.68	1.57	NA	<0.200	<2.00	<1.00	7.58
	03/22/07	19.1	53.8	<0.0752	<0.800	2.05	0.886	NA	0.00558	<1.60	<0.0960	7.51
	09/18/07	22.0	91.4	<1.00	<1.00	<2.00	<1.00	NA	<0.00500	<2.00	<1.00	5.58
	03/25/08	15.7	46.6	0.008	0.430	0.56	0.365	1,950	0.0023	0.4[9]	<0.003	5.25
	09/23/08	104	527	0.013	1.48	3.00	2.35	3,840	0.0158	0.4	0.012	9.64
	03/16/09	23.0	83.7	<0.500	<2.00	<2.00	<1.00	NA	0.00280	<0.500	<1.00	<5.00
	09/14/09	19.3	85.1	<0.500	<2.00	<2.00	<1.00	NA	0.00359	<0.500	<1.00	9.61
	03/16/10	15.3	50.1	<1.00	<2.00	<2.00	<1.00	2,050	0.119	<1.00	<1.00	<10.0
	09/20/10	19.4	88.7	<1.00	<2.00	<2.00	<1.00	3,600	0.00166	<10.0	<1.00	<10.0
MW-41B	03/25/08	9.68	98.2	0.132	4.93	7.91	5.74	2,130	0.0099	<0.2	0.037	22.6
	06/24/08	8.73	-	0.085	3.62	5.29	2.64	2,050	0.00504	<0.2	0.036	13.8
dup	06/24/08	8.40	-	0.084	3.34	5.23	2.67	2,060	0.00451	0.6[9]	0.030	13.3
	09/23/08	5.7	67	0.084	1.42	3.68	2.59	1,120	0.00329	0.7	0.009	22
	01/05/09	9.2	55.0	<0.500	<2.00	2.51	<1.00	1,980	0.00158	<0.500	<1.00	6.00
MW-41C	03/25/08	4.55	144	0.126	2.99	9.16	5.74	1,440	0.01070	<0.4	0.021	27.6
	06/24/08	5.50	-	0.088	4.17	10.5	6.17	1,180	0.00988	0.5[9]	0.030	23.9
	09/23/08	2.9	135	0.076	2.89	5.22	6.17	1,120	0.00917	0.5	0.009	28.4
	01/05/09	7.47	176	<0.500	8.76	11.6	2.95	1,480	0.00449	<0.500	<1.00	36.1
MW-42B	03/25/08	26.5	159	0.168	8.10	9.27	5.82	9,090	0.01060	<0.2	0.054	18.7
	06/24/08	20.7	-	0.091	2.35	5.00	1.80	8,600	0.00477	<0.2	0.019[9]	14.0
	09/23/08	15.4	99	0.036	0.91	2.69	1.07	8,160	0.00741	1.1	0.009	14.8
	01/05/09	37.5	107	<0.500	<2.00	<2.00	<1.00	10,500	0.00457	0.827	<1.00	<5.00
MW-42C	03/25/08	1.97	151	0.086	3.89	10.7	5.88	979	0.00600	<0.2	0.032	20.9
	06/24/08	1.09	-	0.068	0.800	4.32	3.12	784	0.00243	1.0[9]	0.010[9]	10.3
	09/23/08	0.8	133	0.106	0.49	3.93	2.69	711	0.00177	0.4	0.009	10.7
	01/05/09	<1.00	134	<0.500	<2.00	3.05	<1.00	676	0.00200	<0.500	<1.00	8.64
dup	01/05/09	<1.00	126	<0.500	<2.00	2.25	<1.00	669	0.00107	<0.500	<1.00	<5.00

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TABLE 4
GROUNDWATER ANALYTICAL RESULTS - TOTAL METALS
Willbridge Terminals
Portland, Oregon

Sample I.D.	Sample Date	Arsenic (µg/l)	Barium (µg/l)	Cadmium (µg/l)	Chromium (µg/l)	Copper (µg/l)	Lead (µg/l)	Manganese (µg/l)	Mercury (µg/l)	Selenium (µg/l)	Silver (µg/l)	Zinc (µg/l)
CONOCOPHILLIPS										0		
B-4	05/26/00	35.0	245	ND	27.5	42.5	14.0	NA	ND	ND	ND	75.0
dup	05/26/00	36.7	259	ND	28.3	44.3	14.7	NA	ND	ND	ND	78.5
	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	31.6	106	ND	5.32	9.68	2.85	NA	ND	1.65	ND	17.6
	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	30.8	99.9	ND	5.41	8.85	2.72	NA	ND	1.29	ND	25.9
	09/25/03	31.6	92.8	ND	2.58	4.97	1.55	NA	ND	1.29	ND	14.7
	09/26/06	36.1	113	<1.00	3.84	6.73	2.31	NA	<0.200	<2.00	<1.00	21.6
	03/21/07	33.8	95.5	<1.00	1.82	3.62	1.59	NA	<0.200	<1.00	<1.00	18.2
	09/20/07	39.5	89.1	<0.800	1.29	4.21	0.898	NA	<0.200	<1.60	<0.800	15.8
	03/26/08	33.6	268	<1.00	27.8	47.6	17.0	3,220[f]	<0.200	<2.00	<1.00	101
	09/24/08	33.3	189	0.617	9.07	13.5	4.22	3,850	<0.200	0.525	<1.00	71.3
dup	09/24/08	37.3	192	2.30	15.0	23.3	6.50	4,300	<0.200	0.535	<1.00	75.7
B-17	02/17/00	57.9	549	0.360	91.0	140	67.6	NA	ND	1.52	0.280	215
	05/26/00	50.9	195	ND	19.1	29	17.1	NA	ND	1.26	ND	48.5
	08/28/00	53.2	113	ND	2.79	4.17	6.60	NA	ND	ND	ND	12.0
	11/29/00	52.5	111	ND	2.17	6.95	6.36	NA	ND	2.20	ND	9.79
	02/23/01	51.9	82.1	ND	1.30	3.02	4.70	NA	ND	ND	ND	9.66
dup	02/23/01	51.1	88.5	ND	3.05	6.91	5.35	NA	ND	1.19	ND	14.3
	05/17/01	65.6	125	ND	5.18	7.46	8.12	NA	ND	ND	ND	28.7
dup	05/17/01	65.0	114	ND	4.06	5.46	7.18	NA	ND	1.26	ND	15.0
B-18	02/17/00	22.3	507	0.440	79.7	110	29.3	NA	0.098	1.58	0.220	174
	05/26/00	22.8	203	ND	21.1	31.3	9.22	NA	ND	ND	ND	55.8
	08/28/00	22.1	130	1.11	5.63	6.84	3.15	NA	ND	ND	ND	27.0
	11/29/00	17.1	128	ND	2.38	4.51	1.20	NA	ND	1.53	ND	15.7
	02/23/01	25.6	118	ND	5.38	10.7	2.94	NA	ND	ND	ND	50.6
	05/17/01	37.2	138	ND	7.74	9.59	3.10	NA	ND	1.06	1.01	30.9
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	25.5	126	ND	10.50	18.7	5.61	NA	ND	ND	ND	38.5
	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 4
GROUNDWATER ANALYTICAL RESULTS - TOTAL METALS
Willbridge Terminals
Portland, Oregon

Sample I.D.	Sample Date	Arsenic (µg/l)	Barium (µg/l)	Cadmium (µg/l)	Chromium (µg/l)	Copper (µg/l)	Lead (µg/l)	Manganese (µg/l)	Mercury (µg/l)	Selenium (µg/l)	Silver (µg/l)	Zinc (µg/l)
B-35	02/17/00	60.2	480	0.620	89.3	122	82.8	NA	ND	1.64	0.21	311
	05/26/00	10.2	116	ND	7.86	11.4	2.64	NA	ND	1.3	ND	23.3
	08/28/00	37.7	128	1.53	4.67	6.12	6.43	NA	ND	ND	ND	33.9
	11/29/00	46.8	131	ND	3.16	6.91	6.19	NA	ND	2.12	ND	20.8
	02/23/01	34.7	81.6	ND	2.00	3.8	3.05	NA	ND	1.00	ND	30.8
	05/17/01	50.4	153	ND	10.7	14.1	10.6	NA	ND	ND	ND	51.1
	09/20/01	34.4	90.1	ND	1.78	4.2	1.60	NA	ND	ND	ND	6.32
	03/14/02	33.5	308	ND	46.3	53.4	29.8	NA	ND	1.39	1.45	146
	09/26/02	29.6	225	ND	29.8	31.4	14.7	NA	ND	1.31	ND	81.6
	03/18/03	38.7	95.8	ND	1.55	4.22	2.77	NA	ND	ND	ND	7.00
	09/25/03	51.7	132	ND	3.34	6.31	5.36	NA	ND	ND	ND	17.1
	03/30/04	29.1	135	<1.00	11.9	14.9	7.79	NA	<0.200	<1.00	<1.00	15.2
	09/28/04	42.2	182	<1.00	8.29	NA	9.93	NA	1.71	<1.00	<1.00	NA
	03/28/05	38.1	160	<1.00	12.4	18.0	15.6	NA	<0.200	<1.00	<1.00	77.6
	09/20/05	42.6	282	<1.00	32.9	40.8	30.6	NA	<0.200	<2.00	<1.00	107
	03/14/06	42.3	105	<1.00	1.92	5.34	2.85	NA	<0.200	<2.00	<1.00	39.6
	09/26/06	38.7	116	<1.00	2.33	4.24	3.44	NA	<0.200	<2.00	<1.00	23.3
	03/21/07	33.6	272	<1.00	26.5	27.0	20.7	NA	<0.200	<1.00	<1.00	114
	09/20/07	39.8	135	<0.800	7.66	12.1	5.65	NA	<0.200	<1.60	<0.800	38.6
	03/27/08	61.0	498	<3.80	82.5	144	91.4	6,180	<0.200	<50.0	0.255	388
	09/24/08	55.6	347	<1.00	48.8	57.2	31.5	5,290	<0.200	<1.00	<2.00	369
	03/23/09	34.9	68.1	<0.500	<2.00	<2.00	<1.00	3,730	0.0257	<0.500	<1.00	<5.00
	09/18/09	36.6	158	<0.500	16.5	18.8	14.6	3,870	0.0151	<0.500	<1.00	67.8
dup	09/18/09	42.8	176	<0.500	<20.0	29.7	18.5	4,270	0.0170	<0.500	<1.00	85.3
	03/31/10	4.45	22.8	<1.00	<2.00	<2.00	<1.00	311	<0.00500	<1.00	<1.00	<10.0

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TABLE 4
GROUNDWATER ANALYTICAL RESULTS - TOTAL METALS
Willbridge Terminals
Portland, Oregon

Sample I.D.	Sample Date	Arsenic (µg/l)	Barium (µg/l)	Cadmium (µg/l)	Chromium (µg/l)	Copper (µg/l)	Lead (µg/l)	Manganese (µg/l)	Mercury (µg/l)	Selenium (µg/l)	Silver (µg/l)	Zinc (µg/l)
B-36	02/17/00	10.5	168	0.210	22.2	30.6	7.79	NA	ND	0.64	ND	55.1
	05/26/00	10.5	120	ND	8.19	12.0	2.51	NA	ND	ND	ND	25.0
	08/28/00	22.4	156	ND	7.84	8.76	3.22	NA	ND	ND	ND	47.4
	11/29/00	22.3	130	ND	5.25	8.34	1.71	NA	ND	2.02	ND	17.1
	02/23/01	48.8	174	ND	3.71	6.66	1.42	NA	ND	2.34	ND	24.4
	05/17/01	38.7	476	ND	57.2	69.6	16.5	NA	ND	3.01	ND	138
	09/20/01	18.5	86.1	ND	1.54	3.02	ND	NA	ND	ND	ND	7.61
dup	09/20/01	20.4	97.4	ND	2.94	4.11	ND	NA	ND	ND	ND	13.2
	03/14/02	8.40	90.1	ND	8.74	11.4	2.71	NA	ND	ND	ND	29.4
	09/26/02	17.0	109	ND	6.88	9.1	4.40	NA	ND	ND	ND	33.4
	03/18/03	4.02	40.9	ND	2.34	3.93	1.44	NA	ND	ND	ND	7.29
	09/25/03	20.0	64.4	ND	ND	ND	ND	NA	ND	1.05	ND	ND
	03/30/04	7.19	58.6	<1.00	3.13	5.80	1.49	NA	<0.200	<1.00	<1.00	15.2
	09/28/04	23.3	112	<1.00	3.49	NA	1.20	NA	0.285	<1.00	<1.00	NA
dup	09/28/04	22.1	81.4	<1.00	2.22	NA	<1.00	NA	<0.200	<1.00	<1.00	NA
	03/28/05	24.0	104	<1.00	3.67	4.82	1.53	NA	<0.200	<1.00	<1.00	19.5
	09/20/05	20.5	103	<1.00	4.50	6.37	1.45	NA	<0.200	<2.00	<1.00	13.2
	03/14/06	8.03	40.1	<1.00	<1.00	3.31	<1.00	NA	<0.200	<2.00	<1.00	5.31
	09/26/06	21.7	87.4	<1.00	<1.00	<2.00	<1.00	NA	<0.200	<2.00	<1.00	6.71
	03/21/07	15.1	259	<1.00	28.4	38.4	9.70	NA	<0.200	<1.00	<1.00	81.2
	09/20/07	24.1	169	<0.800	11.2	18.0	4.47	NA	<0.200	<1.60	<0.800	50.0
	03/27/08	18.0	397	<0.380	46.7	77.3	18.6	3,890	0.202	<5.00	0.203	168
	09/24/08	23.3	162	<0.500	13.5	17.6	4.06	5,720	<0.200	<0.500	<1.00	54.2
	03/23/09	18.2	334	<0.500	44.3	62.2	16.7	3,130	0.0750	<0.500	<1.00	125
dup	03/23/09	19.9	455	<0.500	55.8	81.1	21.5	3,740	0.0843	0.584	<1.00	160
	09/18/09	11.3	67.0	<0.500	<2.00	2.02	<1.00	3,830	0.0402	<0.500	<1.00	7.05
	03/31/10	39.7	67.0	<1.00	<2.00	<2.00	<1.00	2,840	0.00601	<1.00	<1.00	<10.0
	09/23/10	14.2	112	<1.00	5.45	10.1	2.54	2,590	0.0127	<5.00	<1.00	21.2
dup	09/23/10	15.0	118	<1.00	5.65	10.3	2.60	2,630	0.0136	<5.00	<1.00	23.0

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TABLE 4
GROUNDWATER ANALYTICAL RESULTS - TOTAL METALS
Willbridge Terminals
Portland, Oregon

Sample I.D.	Sample Date	Arsenic (µg/l)	Barium (µg/l)	Cadmium (µg/l)	Chromium (µg/l)	Copper (µg/l)	Lead (µg/l)	Manganese (µg/l)	Mercury (µg/l)	Selenium (µg/l)	Silver (µg/l)	Zinc (µg/l)
B-37	02/17/00	369	152	0.330	15.9	29.7	7.05	NA	ND	1.59	ND	54.4
dup	02/17/00	327	34.4	0.400	0.660	1.45	2.36	NA	ND	0.25	ND	1.59
	05/26/00	418	92.0	ND	5.26	13.1	2.34	NA	ND	ND	ND	21.5
	08/28/00	897	227	ND	4.62	9.38	2.09	NA	ND	ND	ND	30.3
	11/29/00	391	99.0	ND	2.21	6.08	ND	NA	ND	1.32	ND	12.0
	02/23/01	198	74.7	ND	ND	3.39	ND	NA	ND	ND	ND	17.0
	05/17/01	521	168	ND	4.08	9.84	1.64	NA	ND	ND	ND	35.5
	03/14/02	86.9	252	ND	17.0	40.9	7.46	NA	ND	ND	ND	76.4
	09/26/02	117	119	ND	6.03	10.0	6.25	NA	ND	ND	ND	34.8
	03/18/03	75.8	121	ND	8.29	17.8	4.29	NA	ND	ND	2.22	53.9
dup	03/18/03	68.3	95.8	ND	5.72	11.5	2.88	NA	ND	ND	1.41	36.4
	09/25/03	260	158	ND	2.90	8.53	1.19	NA	ND	1.69	ND	21.5
dup	09/25/03	247	182	ND	5.13	14.3	2.17	NA	ND	ND	ND	33.0
	03/31/04	125	54.6	<1.00	1.37	4.54	1.31	NA	<0.200	<1.00	<1.00	8.42
	09/28/04	131	78.4	<1.00	2.18	NA	<1.00	NA	<0.200	<1.00	<1.00	NA
	03/28/05	73.4	79.8	<1.00	1.87	5.93	1.57	NA	<0.200	<1.00	<1.00	27.0
	09/20/05	80.2	82.7	<1.00	1.15	2.29	<1.00	NA	<0.200	<2.00	<1.00	13.3
	03/14/06	230	61.6	<1.00	<1.00	4.34	<1.00	NA	<0.200	<2.00	<1.00	6.15
dup	03/14/06	217	72.0	<1.00	1.10	4.81	<1.00	NA	<0.200	<2.00	<1.00	8.20
	09/26/06	165	61.3	<1.00	<1.00	2.88	<1.00	NA	<0.200	<2.00	<1.00	11.0
	03/21/07	151	45.8	<1.00	<1.00	<1.00	<1.00	NA	<0.200	<1.00	<1.00	<10.0
	09/20/07	97.8	66.6	<0.800	1.28	3.92	0.963	NA	<0.200	<1.60	<0.800	14.3
	03/27/08	140	78.7	<0.380	4.55	10.6	3.15	1,470	<0.200	<5.00	<0.120	<33.0
	09/24/08	186	98.4	<0.500	6.22	10.4	4.18	2,230	<0.200	<0.500	<1.00	27.6
	03/20/09	214	96.9	<0.500	4.21	10.5	4.64	1,450	0.0357	<0.500	<1.00	26.4
dup	03/20/09	218	69.9	<0.500	2.05	6.42	2.92	1,480	0.0107	<0.500	<1.00	18.1
	09/18/09	276	34.9	<0.500	<2.00	<2.00	<1.00	1,710	<0.00500	<0.500	<1.00	<5.00
	03/31/10	334	37.7	<1.00	<2.00	<2.00	<1.00	1,500	<0.00500	<1.00	<1.00	<10.0
dup	03/31/10	312	38.2	<1.00	<2.00	<2.00	<1.00	1,700	0.0105	<1.00	<1.00	<10.0
	09/23/10	197	41.4	<1.00	<2.00	<2.00	<1.00	1,710	0.00556	<5.00	<1.00	<10.0
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	18.4	67.3	<0.0752	<0.800	3.67	<0.432	NA	<0.00500	<1.60	<0.0960	16.6
	03/20/07	21.4	80.8	<0.752	1.85	7.12	2.01	0	<0.00500	<1.60	<0.800	57.0
	09/20/07	24.2	64.0	<0.800	<0.800	1.85	<0.800	0	<0.00500	<1.60	<0.800	13.6
	03/26/08	20.9	145	<1.00	14.0	32.8	9.28	ND	<0.200	<2.00	<1.00	150
	09/22/08	NS	NS	NS	NS	NS	NS	ND	NS	NS	NS	NS

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TABLE 4
GROUNDWATER ANALYTICAL RESULTS - TOTAL METALS
Willbridge Terminals
Portland, Oregon

Sample I.D.	Sample Date	Arsenic (µg/l)	Barium (µg/l)	Cadmium (µg/l)	Chromium (µg/l)	Copper (µg/l)	Lead (µg/l)	Manganese (µg/l)	Mercury (µg/l)	Selenium (µg/l)	Silver (µg/l)	Zinc (µg/l)
OF-1	03/26/08	56.4	290	11.2	25.0	74.9	28.9	ND	<0.200	<2.00	<1.00	242
	09/22/08	NS	NS	NS	NS	NS	NS	ND	NS	NS	NS	NS
	09/18/09	38.5	114	1.69	3.63	15.2	4.36	3,190	0.0126	<0.50	<1.00	39.7
	03/31/10	2.73	12.8	<1.00	<2.00	<2.00	<1.00	169	<0.00500	<1.00	<1.00	<10.0
	09/23/10	13.8	81.2	1.30	5.99	16.1	5.95	949	0.0130	<1.00	<1.00	49.5
P-1	03/17/03	22.5	1270	ND	216	239	94.6	ND	0.604	ND	ND	625
	03/31/04	52.7	4370	<10.0	642	848	244	ND	0.816	<10.0	<10.0	1,730
	03/14/06	3.34	141	1.68	20.5	29.1	7.79	ND	<0.200	<2.00	<1.00	64.6
	09/26/06	14.0	1210	4.58	130	185	41.8	NA	0.300[4,5]	<1.60	0.732	358
	03/20/07	<0.800	20.8	<0.752	2.26	3.11	<0.800	NA	<0.00500	<1.60	<0.800	6.98
	09/20/07	NA	NA	NA	NA	NA	NA	NA	0.0665	NA	NA	NA
	Well Abandoned											
P-1A	03/26/08	6.99	233	<1.00	28.3	36.9	28.2	797[7]	<0.200	<2.00	<1.00	151
	06/25/08	1.60	55.4	0.746	2.26	6.51	4.48	892	<0.200	<0.500	<1.00	54.2
	09/23/08	8.17	349	<5.00	36.2	51.4	30.2	2,400	<0.200	<5.00	<1.00	234
	01/07/09	1.46	26.0	0.690	3.92	7.03	4.18	72.0	<0.200	<0.500	<1.00	50.7
	03/20/09	1.40	31.6	<0.500	3.60	6.57	4.33	73.6	0.0104	<0.500	<1.00	37.6
	09/18/09	2.19	67.1	<0.500	5.74	9.38	5.55	1,210	0.00933	<0.500	<1.00	59.4
	03/31/10	3.18	69.7	<1.00	7.16	10.7	8.35	276	0.0335	<1.00	<1.00	55.9
	09/23/10	13.2	575	1.83	51.2	86.1	59.9	3,490	0.240	<5.00	<1.00	411
P-2	03/17/03	11.1	78.3	ND	2.32	7.22	2.88	NA	ND	ND	1.06	9.79
	09/25/03[1]	9.66	116	ND	4.43	11.6	5.53	NA	ND	1.09	ND	13.7
	03/30/04	8.05	131	<1.00	1.87	4.47	1.26	NA	<0.200	<1.00	<1.00	12.3
	09/28/04	10.3	163	<1.00	5.70	NA	7.42	NA	0.214	1.03	<1.00	NA
	03/28/05	9.51	141	<1.00	3.35	9.00	4.54	NA	<0.200	<1.00	<1.00	11.9
	09/20/05	6.59	144	<1.00	5.67	15.2	7.28	NA	<0.200	<2.00	<1.00	13.1
	03/14/06	5.40	51.7	<1.00	<1.00	2.66	<1.00	NA	<0.200	<2.00	<1.00	<5.00

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TABLE 4
GROUNDWATER ANALYTICAL RESULTS - TOTAL METALS
Willbridge Terminals
Portland, Oregon

Sample I.D.	Sample Date	Arsenic (µg/l)	Barium (µg/l)	Cadmium (µg/l)	Chromium (µg/l)	Copper (µg/l)	Lead (µg/l)	Manganese (µg/l)	Mercury (µg/l)	Selenium (µg/l)	Silver (µg/l)	Zinc (µg/l)
U-2	02/17/00	18.6	63.2	0.230	3.63	11.6	4.99	NA	ND	0.34	ND	24.1
	05/26/00	11.0	50.3	ND	1.37	5.37	1.45	NA	ND	ND	ND	10.9
	08/28/00	11.9	50.3	1.20	1.09	3.77	1.69	NA	ND	ND	ND	14.7
	11/29/00	7.29	49.9	ND	1.58	3.14	1.09	NA	ND	1.05	ND	13.1
	02/23/01	8.87	37.3	ND	ND	9.35	1.73	NA	ND	ND	ND	21.2
	05/17/01	9.53	42.7	ND	1.29	9.16	2.57	NA	ND	ND	ND	20.5
	09/20/01	6.80	39.7	ND	ND	4.21	ND	NA	ND	ND	ND	7.00
	03/14/02	10.8	53.4	ND	1.68	6.66	1.83	NA	ND	ND	ND	43.6
	09/26/02	6.78	44.3	ND	ND	2.77	ND	NA	ND	1.27	ND	11.6
	03/18/03	10.0	48.7	ND	1.00	5.83	1.11	NA	ND	ND	ND	39.8
	09/25/03	9.78	74.9	ND	6.58	8.96	2.68	NA	ND	ND	ND	63.6
	03/31/04	15.8	64.6	<1.00	2.43	10.7	3.13	NA	<0.200	1.16	<1.00	50.0
	09/28/04	11.1	76.2	<1.00	3.18	NA	2.82	NA	<0.200	<1.00	<1.00	NA
	03/28/05	13.2	99.6	<1.00	3.26	18.7	5.31	NA	<0.200	<1.00	<1.00	94.4
	09/20/05	19.8	129	<1.00	1.74	17.0	5.50	NA	<0.200	<2.00	<1.00	52.0
	03/14/06	15.6	45.1	<1.00	<1.00	7.75	2.28	NA	<0.200	<2.00	<1.00	32.7
	09/27/06	16.0	61.7	<1.00	<1.00	19.6	<1.00	NA	<0.200	<2.00	<1.00	10.6
	03/21/07	18.1	70.2	<1.00	1.17	-	1.58	NA	<0.200	<1.00	<1.00	-
	09/19/07	13.5	92.5	<0.800	1.81	7.47	2.36	NA	<0.200	<1.60	<0.800	39.2
	03/25/08	27.6	62.0	<1.00	2.13	12.2	3.76	4,100	<0.200	<2.00	<1.00	20.9
	09/25/08	13.4	74.0	<0.500	<2.14	8.33	<4.10	3,860	<0.200	<0.500	<1.00	<47.5
	03/17/09	36.0	92.8	<0.500	2.17	10.8	2.88	4,310	<0.200	<0.500	<1.00	18.7
	09/21/09	7.7	34.3	0.091	<0.50	0.86	0.66	3,570	<0.20	<0.50	<0.50	5.7
	03/16/10	3.8	25.8	<0.40	<2.5	<2.5	0.50	2,320	<0.20	<2.5	<2.5	<25.0
	09/20/10	1.7	2.5[11]	<0.020	<0.24	<0.20	<0.020	3,010[11]	<0.011	<0.10	0.37[10,11]	5.4[11]
U-3	02/17/00	42.1	194	0.230	24.1	17.1	22.5	NA	ND	1.02	ND	268
	05/26/00	40.0	171	ND	14.9	11.6	18.2	NA	ND	1.45	ND	139
	08/28/00	36.5	124	ND	7.04	6.73	21.2	NA	ND	2.02	ND	103
	11/29/00	42.8	170	ND	9.94	9.49	16.7	NA	ND	3.42	ND	107
dup	11/29/00	41.3	172	ND	9.96	9.32	14.9	NA	ND	2.84	ND	97.3
	02/23/01	119	631	ND	170	107	303	NA	ND	ND	ND	1,470
	05/17/01	45.0	111	ND	3.59	4.39	4.27	NA	ND	1.70	ND	25.8

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TABLE 4
GROUNDWATER ANALYTICAL RESULTS - TOTAL METALS
Willbridge Terminals
Portland, Oregon

Sample I.D.	Sample Date	Arsenic (µg/l)	Barium (µg/l)	Cadmium (µg/l)	Chromium (µg/l)	Copper (µg/l)	Lead (µg/l)	Manganese (µg/l)	Mercury (µg/l)	Selenium (µg/l)	Silver (µg/l)	Zinc (µg/l)
U-4	05/26/00	18.8	101	ND	3.67	7.49	2.68	NA	ND	ND	ND	14.9
	08/28/00	19.8	93.0	ND	ND	2.14	1.29	NA	ND	ND	ND	15.0
dup	08/28/00	18.9	92.2	ND	ND	2.99	1.31	NA	ND	ND	ND	15.7
	11/29/00	19.8	91.1	ND	ND	ND	ND	NA	ND	1.94	ND	8.95
	02/23/01	21.6	80.2	ND	ND	ND	ND	NA	ND	ND	ND	5.87
	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	18.3	106	ND	4.32	10.5	4.84	NA	ND	1.80	ND	37.7
dup	09/26/02	18.3	106	ND	4.03	9.76	3.79	NA	ND	1.28	ND	31.3
	09/27/06	17.1	81.6	<1.00	<1.00	2.34	<1.00	NA	<0.200	<2.00	<1.00	9.96
	03/21/07	18.2	94.4	<1.00	0.308	8.63	2.53	NA	<0.200	<1.00	<1.00	29.4
	09/19/07	18.4	84.2	<0.800	<0.800	2.35	<0.800	NA	<0.200	<1.60	<0.800	10.5
	03/27/08	19.0	101	<0.380	4.02	11.3	4.09	2,690	<0.200	<5.00	<0.120	<33.0
	09/24/08	16.4	90.2	<0.500	<2.00	3.97	1.10	5,740	<0.200	0.573	<1.00	10.8
dup	09/24/08	17.4	93.3	<0.500	<2.00	4.64	1.33	5,480	<0.200	0.580	<1.00	21.7
U-5	02/17/00	12.7	164	0.940	17.5	45.6	18.9	NA	ND	0.95	ND	933
	05/26/00	10.4	74.8	ND	2.25	9.12	3.70	NA	ND	ND	ND	286
	08/28/00	10.9	219	ND	7.59	21.6	14.3	NA	ND	1.65	ND	884
	11/29/00	12.3	124	ND	5.47	21.6	8.56	NA	ND	2.16	ND	825
	02/23/01	12.6	101	ND	6.92	34.5	14.0	NA	ND	1.00	ND	1,170
	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	11.0	170	ND	12.9	66.3	15.8	NA	ND	ND	3.23	2590
	09/25/03	12.6	102	ND	7.36	20.1	9.47	NA	ND	1.18	ND	800
	03/31/04	8.02	85.2	<1.00	7.58	23.0	11.5	NA	<0.200	<1.00	<1.00	785
	09/28/04	9.87	103	<1.00	6.23	NA	10.6	NA	0.228	<1.00	<1.00	NA
	03/28/05	12.3	131	<1.00	22.9	64.5	38.1	NA	<0.200	<1.00	<1.00	1,980
	09/20/05	7.04	107	<1.00	5.83	18.8	12.4	NA	<0.200	<2.00	<1.00	720
	03/14/06	8.16	132	<1.00	11.7	30.7	12.7	NA	<0.200	<2.00	<1.00	669
	09/26/06[2]	6.21	122	0.532	9.60	31.0	15.1	NA	0.0182	<3.20[3]	<0.0960	1,070[3]
	03/20/07	11.7	301	1.45	26.8	54.8	43.2	NA	0.0248	<1.60	<0.800	2,130
	09/20/07	26.0	334	<8.00	16.7	131	22.4	NA	0.0233	<16.0	<0.800	2,970
	09/24/08	13.2	151	<1.00	13.5	46.5	192	2,910	<0.200	<1.00	<2.00	752

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TABLE 4
GROUNDWATER ANALYTICAL RESULTS - TOTAL METALS
Willbridge Terminals
Portland, Oregon

Sample I.D.	Sample Date	Arsenic (µg/l)	Barium (µg/l)	Cadmium (µg/l)	Chromium (µg/l)	Copper (µg/l)	Lead (µg/l)	Manganese (µg/l)	Mercury (µg/l)	Selenium (µg/l)	Silver (µg/l)	Zinc (µg/l)
U-5A	03/27/08	52.6	63.0	<0.380	3.00	19.4	53.0	6,170	<0.200	<5.0	<0.120	204
U-10	03/18/03	107	3390	ND	313	403	176	NA	0.551	ND	ND	1,220
	09/25/03	9.75	196	ND	13.2	14.9	9.04	NA	ND	ND	ND	49.3
	03/30/04	31.6	128	<1.00	4.81	5.73	22.5	NA	<0.200	<1.00	<1.00	28.8
	09/28/04	6.57	201	<1.00	9.66	NA	8.52	NA	<0.200	<1.00	<1.00	NA
	03/28/05	6.43	127	<1.00	5.29	6.00	4.62	NA	<0.200	<1.00	<1.00	29.3
	09/20/05	6.86	123	<1.00	1.20	2.58	2.05	NA	<0.200	<2.00	<1.00	10.6
	03/14/06	9.18	140	<1.00	6.07	9.33	4.86	NA	<0.200	<2.00	<1.00	40.3
U-11	03/18/03	9.42	372	ND	29.7	33.9	33.6	NA	0.211	1.53	ND	110
	09/25/03	34.3	89.3	ND	2.20	2.87	8.30	NA	ND	1.01	ND	12.4
	03/30/04	6.79	363	<1.00	34.1	312	21.2	NA	<0.200	1.65	<1.00	103
dup	03/30/04	35.7	108	<1.00	4.00	5.94	20.1	NA	<0.200	<1.00	<1.00	29.2
	09/28/04	10.6	534	<1.00	56.1	NA	68.4	NA	0.472	1.92	<1.00	NA
	03/28/05	38.8	106	<1.00	1.52	2.18	5.62	NA	<0.200	<1.00	<1.00	13.7
	09/20/05	45.3	273	<1.00	24.2	30.9	116	NA	0.270	<2.00	<1.00	140
	03/14/06	42.0	101	<1.00	1.37	17.2	6.69	NA	<0.200	<2.00	<1.00	12.0
U-12	03/18/03	32.3	136	ND	6.00	7.11	22.8	NA	ND	ND	ND	33.8
	09/25/03	41.8	1,910	ND	362	372	302	NA	0.559	4.8	ND	1,200
	03/30/04	6.55	248	<1.00	17.9	23.3	22.0	NA	<0.200	1.85	<1.00	72.8
	09/28/04	36.9	208	<1.00	10.2	NA	49.9	NA	<0.200	<1.00	<1.00	NA
	03/28/05	17.2	1,010	2.11	132	140	146	NA	<0.200	3.45	<1.00	570
	09/20/05	6.26	176	<1.00	7.98	9.98	12.5	NA	<0.200	<2.00	<1.00	41.7
	03/14/06	4.53	216	<1.00	8.23	10.5	6.92	NA	<0.200	<2.00	<1.00	27.3
U-14	09/27/06	67.4	1,970	1.84	122	159	175	NA	0.558	<2.00	<1.00	496
	03/21/07	9.93	266	<1.00	14.1	18.1	25.0	NA	<0.200	1.52	<1.00	83.1
	09/19/07	163	2,500	<0.800	83.3	106	120	NA	0.452	3.10	<0.800	822
	03/25/08	22.3	188	<1.00	11.9	14.7	21.8	949	<0.200	<2.00	<1.00	71.0
	09/25/08	16.0	104	<0.500	3.78	6.08	10.2	2,390	<0.200	<0.500	<1.00	46.3
	03/18/09	8.83	109	<0.500	5.49	7.25	14.0	780	<0.200	<0.500	<1.00	45.2
	09/22/09	<2.5	27.1	<0.40	<2.5	<2.5	0.26[5]	718	<0.20	<2.5	<2.5	12.6[5]
	03/16/10	<2.5	14.9	<0.40	<2.5	<2.5	<0.50	2.2[10]	<0.20	<2.5	<2.5	<25.0
	09/21/10	0.14[10]	17.2[11]	<0.020	0.46[10]	0.52	0.12	24.4[11]	<0.011	<0.10	0.19[10,11]	4.5[10,11]
U-15	09/27/06	89.9	777	1.26	90.3	109	179	NA	0.221	<2.00	<1.00	292
	03/21/07	75.1	416	<1.00	46.1	58.1	86.3	NA	<0.200	1.15	<1.00	158
	09/19/07	126	4,790	1.99	232	388	508	NA	0.780	5.38	1.42	2,150
	03/25/08	68.5	284	<1.00	19.6	46.4	43.9	11,900	<0.200	<2.00	<1.00	146
	09/25/08	86.7	502	<1.00	55.0	71.1	81.6	12,200	<0.200	<1.00	<2.00	239
	03/17/09	60.8	144	<0.500	7.85	10.8	15.6	10,800	<0.200	<0.500	<1.00	72.2
	09/21/09	58.6	71.9	<0.080	<0.50	<0.50	0.45	9,900	<0.20	<0.50	<0.50	3.6[5]
	03/16/10	57.2	71.4	<0.40	<2.5	<2.5	0.32[10]	10,600	<0.20	<2.5	<2.5	<25.0
	09/20/10	54.3	68.6[11]	0.050[10]	<0.24	<0.20	0.19[11]	10,500[11]	<0.011	<0.10	<0.071	3.7[10,11]

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TABLE 4
GROUNDWATER ANALYTICAL RESULTS - TOTAL METALS
Willbridge Terminals
Portland, Oregon

Sample I.D.	Sample Date	Arsenic (µg/l)	Barium (µg/l)	Cadmium (µg/l)	Chromium (µg/l)	Copper (µg/l)	Lead (µg/l)	Manganese (µg/l)	Mercury (µg/l)	Selenium (µg/l)	Silver (µg/l)	Zinc (µg/l)
U-16	09/27/06	85.4	866	1.31	84.7	113	111	NA	1.70	<2.00	<1.00	239
	03/21/07	112	746	1.53	76.4	113	107	NA	1.35	1.74	<1.00	260
	09/19/07	105	280	<0.800	15.6	26.2	19.1	NA	0.247	<1.60	<0.800	76.4
	03/25/08	86.8	153	<1.00	5.82	8.59	7.97	9,970	<0.200	<2.00	<1.00	54.8
	09/25/08	97.2	310	<0.500	20.6	29.6	27.1	10,600	0.345	0.763	<1.00	94.1
	03/17/09	76.8	226	<0.500	11.6	16.9	16.7	9,250	<0.200	<0.500	<1.00	51.6
	09/21/09	80.2	101	<0.40	<2.5	<2.5	<0.40[5]	11,900	<0.20	<2.5	<2.5	<25.0
	03/16/10	75.9	95.3	0.21[10]	<2.5	<2.5	0.56	8,530	<0.20	<2.5	<2.5	<25.0
	09/20/10	76.0	92.6[11]	0.069[10]	0.33[10]	0.22[10,11]	0.27[11]	8,370[11]	<0.011	<0.10	<0.071	3.3[10,11]
U-17	09/27/06	58.1	606	<1.00	69.4	87.3	55.2	NA	<0.200	<2.00	<1.00	183
	03/21/07	23.9	141	<1.00	12.3	18.5	25.2	NA	<0.200	<1.00	<1.00	45.4
	09/19/07	47.6	294	<0.800	26.1	42.3	38.1	NA	<0.200	<1.60	<0.800	98.2
	03/25/08	24.0	87.4	<1.00	1.98	4.21	5.56	4,380	<0.200	<2.00	<1.00	13.8
	09/25/08	24.7	111	<0.500	10.2	14.8	10.9	3,160	<0.200	<0.500	<10.0	36.2
	03/17/09	21.2	62.7	0.540	2.96	4.15	5.91	3,750	<0.200	<0.500	<1.00	12.6
	09/21/09	16.2	25.4	<0.40	<2.5	<2.5	<0.50	1,680	<0.20	<2.5	<2.5	<25.0
	03/16/10	18.3	34.8	<0.40	<2.5	<2.5	0.28[10]	2,600	<0.20	<2.5	<2.5	<25.0
	09/20/10	16.8	22.5[11]	<0.020	0.51	0.20[10]	0.057[10]	1,920[11]	<0.011	<0.10	2.1[11]	2.1[10,11]
U-18	03/21/07	69.0	491	<1.00	53.9	92	64.2	NA	<0.200	1.12	<1.00	213
	09/19/07	95.7	259	<0.800	20.4	40.3	21.9	NA	<0.200	<1.60	<0.800	101
	03/25/08	81.0	95.3	<1.00	6.69	10.9	12.8	1,360	<0.200	<2.00	<1.00	45.3
	09/25/08	57.1	91.9	<0.500	8.11	15.8	14.6	2,330	<0.200	<0.500	<1.00	45.3
	03/17/09	83.8	79.9	0.500	3.62	8.71	7.68	594	<0.200	<0.500	<1.00	19.9
	09/22/09	11.0	25.2	<0.080	2.3	<5.0	4.3	429	<0.20	0.30[5]	<0.50	11.3
	03/16/10	10.6	24.8	<0.40	<2.5	1.2[10]	<0.50	307	<0.20	<2.5	<2.5	<25.0
	09/21/10	50.1	40.5[11]	<0.020	0.29[10]	0.51	0.18	1,850[11]	<0.011	<0.10	0.096[10,11]	3.2[10,11]
U-19	03/21/07	76.6	262	<1.00	12.0	22.4	23.2	NA	0.201	<1.00	<1.00	139
	09/19/07	96.8	100	<0.800	4.42	10.6	8.99	NA	<0.200	<1.60	<0.800	163
	03/25/08	93.4	160	<1.00	6.94	11.9	13.0	4,950	<0.200	<2.00	<1.00	169
U-20	03/21/07	50.0	352	<1.00	41.1	45.6	53.4	NA	<0.200	1.03	<1.00	157
	09/19/07	28.1	61.9	<0.800	<0.800	<1.60	<0.800	NA	<0.200	<1.60	<0.800	4.38
	03/25/08	17.4	61.7	<1.00	<1.00	<2.00	1.08	5,350[7]	<0.200	<2.00	<1.00	5.22
dup	03/25/08	14.5	57.5	<1.00	<1.00	<2.00	<1.00	5,170[7]	<0.200	<2.00	<1.00	<5.00
	09/25/08	47.7	910	<1.00	87.5	104	67.1	7,510	<0.200	1.87	<2.00	356
	03/17/09	43.2	84.3	<0.500	3.81	5.64	5.24	3,650	<0.200	<0.500	<1.00	15.2
	09/21/09	69.2	69.3	<0.40	<2.5	<2.5	<0.50	7,360	<0.20	<2.5	<2.5	<25.0
	03/16/10	70.4	67.8	<0.40	<2.5	<2.5	<0.50	8,120	<0.20	<2.5	<2.5	<25.0
	09/21/10[12]	71.4	65.3[11]	<0.020	<0.24	<0.20	0.28[11]	8,400[11]	<0.011	<0.10	<0.071	2.0[10,11]
U-21	03/21/07	8.28	280	<1.00	24.4	30.6	24.1	NA	<0.200	<1.00	<1.00	88.6
	09/19/07	6.28	74.8	<0.800	0.954	3.11	4.00	NA	<0.200	<1.60	<0.800	9.39
	03/26/08	2.76	83.6	<1.00	1.10	5.18	1.12	1,380[7]	<0.200	<2.00	<1.00	13.2
	09/25/08	56.2	301	<1.00	37.9	44.1	45.0	6,400	<0.200	<1.00	<2.00	180
	03/17/09	8.13	122	<0.500	7.09	10.0	9.51	4,260	<0.200	<0.500	<1.00	32.4
	09/22/09	7.8	48.8	<0.40	<2.5	<2.5	2.3	6,450	<0.20	<2.5	<2.5	<25.0
	03/16/10	8.0	76.3	<0.40	<2.5	<2.5	1.1	3,910	<0.20	<2.5	<2.5	<25.0
	09/21/10[12]	55.0	60.4[11]	0.18	0.28[10]	0.29[10,11]	7.9[11]	14,700[11]	<0.011	0.13[10]	<0.071	5.5[11]

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TABLE 4
GROUNDWATER ANALYTICAL RESULTS - TOTAL METALS
Willbridge Terminals
Portland, Oregon

Sample I.D.	Sample Date	Arsenic (µg/l)	Barium (µg/l)	Cadmium (µg/l)	Chromium (µg/l)	Copper (µg/l)	Lead (µg/l)	Manganese (µg/l)	Mercury (µg/l)	Selenium (µg/l)	Silver (µg/l)	Zinc (µg/l)
U-22A	03/27/08	10.3	134	<0.380	3.44	5.29	24.2	3,300	<0.200	<5.00	<0.120	41.0
	06/24/08	10.3	109	<0.500	<2.00	3.25	4.41	3,260	<0.200	<0.500	<1.00	14.5
	09/23/08	9.20	249	<5.00	<20.0	<20.0	36.9	2,730	<0.200	<5.00	<1.00	53.9
	01/06/09	13.6	119	<0.500	<2.00	<2.00	2.67	3,640	<0.200	<0.500	<1.00	17.7
	03/19/09	7.02	132	<0.500	3.00	3.36	12.0	3,640	0.0168	<5.00	<1.00	19.9
	09/17/09	14.8	128	<0.500	2.88	3.01	11.4	3,540	<0.200	<0.500	<1.00	25.6
dup	09/17/09	14.4	109	<0.500	<2.00	2.01	8.67	3,540	<0.200	<0.500	<1.00	16.4
U-22B	03/27/08	9.78	464	<0.380	51.1	63	23.7	2,080	<0.200	<5.00	0.128	179
	06/24/08	2.57	108	<0.500	3.72	4.73	2.65	1,320	<0.200	<0.500	<1.00	25.2
	09/23/08	5.29	194	<5.00	<20.0	<20.0	7.41	1,510	<0.200	<5.00	<1.00	48.3
	01/07/09	1.34	47.8	<0.500	<2.00	<2.00	<1.00	1,130	<0.200	<0.500	<1.00	23.2
	03/19/09	1.89	71.4	<0.500	<2.00	<2.00	<1.00	1,020	<0.00500	<1.00	<1.00	5.52
dup	03/19/09	1.92	70.0	<0.500	<2.00	<2.00	<1.00	1,040	<0.00500	<1.00	<1.00	5.39
	09/17/09	3.50	63.9	<0.500	<2.00	<2.00	<10.0	1,380	<0.200	<0.500	<1.00	5.11
U-22C	06/25/08	10.2	110	<0.500	<2.00	<2.00	2.28	3,450	<0.200	<0.500	<1.00	10.6
U-23	03/27/08	13.6	1,450	<0.380	57.1	105	83.1	4,000	0.295	<5.00	0.333	383
	06/24/08	8.66	427	0.952	34.7	71.2	45.6[7]	5,510	<0.200	0.742	<1.00	174
	09/23/08	20.5	1,110	<10.0	168	315	67.7	9,260	<0.200	<10.0	<1.00	390
	01/06/09	3.60	120	<0.500	10.5	21.9	11.9	2,050	<0.200	<0.500	<1.00	75.6
	03/19/09	6.72	168	<0.500	5.58	22.8	12.4	5,860	0.0770	<5.00	<1.00	34.3
	09/17/09	4.86	50.4	<0.500	<2.00	3.45	<1.00	4,930	<0.200	<0.500	<1.00	5.91
U-24A	03/27/08	29.4	497	<0.380	60.5	103	19.8	13,400	<0.200	<5.00	0.200	173
	06/24/08	10.1	210	<0.500	19.2	29.6	9.21[7]	6,790	<0.200	<0.500	<1.00	67.1
	09/23/08	7.20	125	<10.0	<40.0	<40.0	2.90	9,350	<0.200	<10.0	<1.00	28.8
	01/06/09	11.2	122	<0.500	9.81	16.3	3.64	9,620	<0.200	<0.500	<1.00	43.3
	03/19/09	6.77	43.8	<0.500	<2.00	<2.00	<1.00	9,610	<0.00500	<10.0	<1.00	<5.00
	09/17/09	<20.0	224	<0.500	<40.0	125	<20.0	10,800	<0.200	<0.500	<20.0	<100
dup	09/17/09	18.9	208	<0.500	23.3	34.2	<20.0	10,600	<0.200	<0.500	<1.00	61.6
U-24B	03/27/08	1.58	212	<0.380	1.79	<2.70	0.823	2,970	<0.200	<5.00	0.120	<33.0
	06/25/08	<1.00	161	<0.500	<2.00	<2.00	<1.00	2,480	<0.200	<0.500	<1.00	17.5
	09/24/08	1.88	186	<0.500	4.11	3.49	1.80	2,770	<0.200	0.77	<1.00	106
	01/07/09	<1.00	100	<0.500	<2.00	<2.00	<1.00	1,970	<0.200	<0.500	<1.00	12.9
	03/19/09	1.19	112	<0.500	<2.00	<2.00	<1.00	1,900	<0.00500	<2.50	<1.00	<5.00
dup	03/19/09	1.48	129	<0.500	2.97	<2.00	<1.00	2,240	<0.00500	<5.00	<1.00	10.0
	09/17/09	1.26	99.9	<0.500	3.16	<2.00	<1.00	1,710	<0.200	<0.500	<1.00	10.0
U-25	03/27/08	9.33	60.6	<0.380	3.44	5.17	2.33	4,150	<0.200	<5.00	<0.120	<33.0
	06/24/08	8.18	47.1	<0.500	<2.00	2.75	<1.00[9]	4,840	<0.200	<0.500	<1.00	8.70
	09/24/08	14.3	47.9	<0.500	<2.00	2.37	<1.00	7,900	<0.200	0.604	<1.00	9.82
	01/06/09	12.7	63.8	<0.500	4.95	5.63	2.53	5,400	<0.200	<0.500	<1.00	19.2
	03/19/09	8.10	36.5	<0.500	<2.00	2.69	<1.00	3,370	0.00941	<5.00	<1.00	5.65
	09/17/09	1.85	21.8	<0.500	<2.00	<2.00	<1.00	3,290	<0.200	<0.500	<1.00	<5.00

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TABLE 4
GROUNDWATER ANALYTICAL RESULTS - TOTAL METALS
Willbridge Terminals
Portland, Oregon

Sample I.D.	Sample Date	Arsenic (µg/l)	Barium (µg/l)	Cadmium (µg/l)	Chromium (µg/l)	Copper (µg/l)	Lead (µg/l)	Manganese (µg/l)	Mercury (µg/l)	Selenium (µg/l)	Silver (µg/l)	Zinc (µg/l)
U-26	03/26/08	11.2	959	<1.00	13.0	22.6	43.6	798[7]	<0.200	<2.00	<1.00	87.2
	06/25/08	5.16	140	<0.500	4.22	6.67	10.1	2,150	<0.200	<0.500	<1.00	26.5
	09/23/08	38.2	740	<10.0	124	123	35.4	9,080	<0.200	<10.0	<1.00	201
	01/07/09	5.12	63.1	<0.500	3.19	8.55	11.0	960	<0.200	<0.500	<1.00	46.8
	03/20/09	15.3	488	<0.500	12.9	22.3	43.4	824	0.0451	<0.500	<1.00	88.4
	09/17/09	11.0	173	<0.500	6.89	8.25	11.0	389	<0.200	<0.500	<1.00	30.9
U-27	03/26/08	15.8	149	<1.00	20.9	23.6	7.45	3,120[7]	<0.200	<0.500	<1.00	43.6
	06/25/08	22.8	77.2	<0.500	10.6	13.7	3.49	4,960	<0.200	<0.500	<1.00	29.4
	09/23/08	32.3	971	<10.0	156	235	36.4	7,870	0.226	<10.0	<1.00	335
	01/07/09	3.73	77.6	<0.500	11.8	10.6	6.82	252	<0.200	<0.500	<1.00	47.2
	03/20/09	8.11	68.9	<0.500	9.63	10.8	4.43	1,340	0.0316	<0.500	<1.00	27.5
	09/17/09	11.2	56.4	<0.500	6.99	6.29	<5.00	1,620	<0.200	<0.500	<1.00	17.4
U-28	03/26/08	4.37	85.9	<1.00	2.44	3.94	1.10	3,700[7]	<0.200	<2.00	<1.00	13.0
	06/25/08	4.48	75.1	<0.500	<2.00	<2.00	<1.00	3,880	<0.200	<0.500	<1.00	9.26
	09/24/08	4.56	104	<0.500	4.00	5.94	1.48	4,390	<0.200	0.883	<1.00	21.3
	01/07/09	4.26	79.1	<0.500	<2.00	<2.00	<1.00	3,840	<0.200	<0.500	<1.00	5.74
	03/20/09	3.02	85.1	<0.500	<2.00	3.85	1.02	1,900	<0.00500	0.872	<1.00	11.6
	09/17/09	1.72	67.2	<0.500	<2.00	<2.00	<1.00	3,670	<0.200	<0.500	<1.00	15.0
U-29A	09/24/08	20.3	249	2.58	23.3	24.5	10.1	7,220	<0.200	0.502	<1.00	82.4
	03/20/09	23.1	174	<2.50	10.1	15.1	10.7	4,820	0.0138	<2.50	<5.00	32.6
	09/17/09	19.1	80.0	1.27	<2.00	3.36	<10.0	4,260	<0.200	<0.500	<1.00	13.4
U-29B	03/26/08	5.74	216	<1.00	5.38	7.38	2.57	1,550[7]	<0.200	<2.00	<1.00	16.6
	06/25/08	5.77	194	0.586	2.40	2.40	1.24	1,500	<0.200	<0.500	<1.00	9.87
	09/24/08	12.2	399	<1.00	56.5	55.3	15.3	1,990	<0.200	1.85	<2.00	122
dup	09/24/08	9.45	354	2.55	39.5	39.7	10.8	1,890	<0.200	1.62	<2.00	99.9
	01/07/09	6.04	239	5.71	13.3	15.9	8.20	1,320	<0.200	0.590	<1.00	64.0
U-29C	03/26/08	7.71	106	<1.00	3.67	5.76	7.20	3,890[7]	<0.200	<2.00	<1.00	25.4
	06/25/08	3.25	95.6	<0.500	<2.00	<2.00	<1.00	1,660	<0.200	<0.500	<1.00	24.6
	09/23/08	12.1	223	<5.00	<20.0	31.0	8.08	1,830	<0.200	<5.00	<1.00	64.0
	01/07/09	3.66	85.2	<0.500	<2.00	<2.00	1.54	1,350	<0.200	<0.500	<1.00	21.7

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TABLE 4
GROUNDWATER ANALYTICAL RESULTS - TOTAL METALS
Willbridge Terminals
Portland, Oregon

Sample I.D.	Sample Date	Arsenic (µg/l)	Barium (µg/l)	Cadmium (µg/l)	Chromium (µg/l)	Copper (µg/l)	Lead (µg/l)	Manganese (µg/l)	Mercury (µg/l)	Selenium (µg/l)	Silver (µg/l)	Zinc (µg/l)

NOTES:

µg/L = micrograms per liter
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 0.200 µg/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.
[10] = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
[11] = Analyte was detected in the associated method blank
[12] = Samples U-20 and U-21 were misidentified as the other in the field.
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

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TABLE 5
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)	Manganese (µg/l)	Mercury (µg/l)	Selenium (µg/l)	Silver (µg/l)	Zinc (µg/l)
CHEVRON																			
B-9A	03/18/10	**606**	**21,400**	**1,170**	<0.200	<1.00	<1.00	<3.00	<1.00	**5.96**	<1.00	<2.00	<2.00	<1.00	**2,260**	<0.00500	<1.00	<1.00	<10.0
	09/21/10	**402**	**14,100**	**795**	<0.200	<1.00	<1.00	<3.00	<1.00	**1.73**	<1.00	<2.00	**3.02**	<1.00	**702**	<0.00500	<1.00	<1.00	<10.0
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**	NA	<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**	**4,290**	**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**	**3,950**	**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**	**4,660**	<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	**3,860**	<0.200	<5.00	<0.120	<33.0
	09/23/08	**792**	**2,080**	<485	**1.02**	**1.14**	**0.450**	**2.90**	<1.00	**32.7**	<5.00	<20.0	<20.0	<10.0	**4,340**	**0.001170**	<5.00	<10.0	**11.7**
	03/24/09	**743**	**13,700**	<500	**1.06**	**1.46**	<1.00	**2.15**	<1.00	**32.2**	<0.500	<20.0	**9.58**	**3.90**	**4,570**	**0.0505**	<0.500	<1.00	**30.5**
dup	03/24/09	**746**	**25,100**	**722**	**0.980**	**1.31**	<1.00	**2.02**	<1.00	**32.2**	<0.500	<20.0	**22.1**	**7.22**	**4,670**	**0.0225**	<0.500	<1.00	**48.2**
	09/22/09	**697**	**5,660**	<500	**0.720**	**1.13**	<1.00	**2.17**	<1.00	**31.8**	<0.500	**3.06**	<10.0	**1.26**	**4,530**	<0.00500	<0.500	<1.00	<25.0
	03/18/10	**497**	**2,150**	<495	**0.390**	**1.43**	<1.00	<3.00	<1.00	**23.0**	<1.00	<2.00	<2.00	<1.00	**4,330**	<0.00500	<1.00	<1.00	<10.0
	09/21/10	**954**	**9,200**	<472	**0.490**	<1.00	<1.00	<3.00	<1.00	**39.9**	<1.00	**10.6**	**14.8**	<10.0	**4,560**	**0.0327**	<1.00	<1.00	**37.0**
B-21	03/18/10	**604**	**10,000**	<500	**0.430**	**1.49**	<1.00	**1.42**	<1.00	**32.7**	<1.00	<2.00	<2.00	<1.00	**3,420**	**0.0232**	<1.00	<1.00	<10.0
	09/22/10	**713**	**24,200**	**541**	**0.450**	**1.72**	<1.00	**1.37**	<1.00	**47.9**	<1.00	<2.00	**3.00**	<10.0	**3,720**	**0.299**	<1.00	<1.00	<10.0
dup	09/22/10	**566**	**50,500**	**1,190**	**0.520**	<2.00	<2.00	<6.00	<2.00	**49.2**	<1.00	<2.00	**2.10**	<10.0	**3,610**	**0.550**	<1.00	<1.00	<10.0
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**	NA	<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	**185**	<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	**862**	<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	**76.1**	<0.200	<5.00	<0.120	<33.0
	09/24/08	**154**	**376**	<485	<0.400	<2.00	<2.00	<6.00	<2.00	**3.47**	<0.500	**1.17**	**3.97**	**1.19**	**595**	**0.00198**	<0.500	<1.00	**13.3**
	03/25/09	<80.0	<248	<495	<0.200	<1.00	<1.00	<3.00	<1.00	<1.00	<0.500	<2.00	<2.00	<1.00	**127**	<0.00500	<0.500	<1.00	**7.68**
	09/22/09	<80.0	**523**	<500	<0.200	<1.00	<1.00	<3.00	<1.00	**1.24**	<0.500	<2.00	**68.2**	<1.00	**560**	<0.00500	<0.500	<1.00	**74.8**
	03/19/10	**87.4**	<245	<490	<0.200	<1.00	<1.00	<3.00	<1.00	<1.00	<1.00	<2.00	<2.00	<1.00	**113**	<0.00500	<1.00	<1.00	<10.0
dup	03/19/10	**150**	<245	<490	<0.200	<1.00	<1.00	<3.00	<1.00	<1.00	<1.00	<2.00	<2.00	<1.00	**146**	<0.00500	<1.00	<1.00	<10.0
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**	**3,860**	<0.200	<5.00	<0.120	<33.0
	06/24/08	**211**	**209**	<481	**0.140**	**0.280**	**0.250**	**0.860**	**0.300**	**23.8**	<0.500	**48.4**	**81.7**	**40.5**	**5,160**	**0.0826**	**1.71**	<1.00	**205**
	09/24/08	**145**	**547**	<485	<0.400	<2.00	<2.00	**0.180**	0.400	**19.9**	<0.500	**3.55**	**4.58**	**2.41**	**4,880**	<0.200	**0.745**	<1.00	**13.8**
	01/06/09	**205**	**1,410**	<490	<0.200	<1.00	**0.350**	**0.810**	**0.350**	**16.2**	**1.64**	<20.0	**0.430**	<10.0	**4,670**	<0.200	<5.00	**8.01**	<50.0
	03/18/09	**196**	**458**	<495	<0.200	<1.00	<1.00	<3.00	<1.00	**3.58**	<5.00	<2.00	<2.00	<1.00	**3,470**	<0.00500	<5.00	<1.00	<5.00

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TABLE 5
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)	Manganese (µg/l)	Mercury (µg/l)	Selenium (µg/l)	Silver (µg/l)	Zinc (µg/l)
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**	**1,100**	**0.0235**	<0.2	**0.009**	**3.14**
	09/23/08	<250	**14**	**34**	<0.50	<0.50	<0.50	<1.00	<0.50	**32.0**	**0.135**	**1.31**	**3.28**	**0.764**	**1,780**	**0.167**	**0.4**	**0.029**	**8.11**
	03/16/09	-	-	-	<0.200	<1.00	<1.00	<3.00	<1.00	**12.7**	<0.500	<2.00	<2.00	<1.00	NA	**0.0126**	<0.500	<1.00	<5.00
	09/14/09	-	-	-	<0.500	<0.500	<0.500	<1.00	-	**14.1**	<0.500	<2.00	**2.92**	**1.43**	NA	**0.0137**	<0.500	<1.00	**7.84**
	03/16/10	-	-	-	<0.200	<1.00	<1.00	<3.00	<1.00	**12.1**	<1.00	<4.00	<4.00	**1.32**	**1,210**	**0.00496**	<1.00	<1.00	<20.0
	09/20/10	-	-	-	<0.200	<1.00	<1.00	<3.00	<1.00	**20.3**	<2.00	<2.00	**2.51**	**1.11**	**1,470**	**0.0301**	<2.00	<1.00	<10.0
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**
	06/24/08	<250	**19**	**36**	<0.045	<0.048	<0.042	<0.115	<0.070	**8.70**	**0.108**	**1.87**	**4.37**	**2.95**	**1,800**	**0.00789**	**0.3**	**0.016**	**13.6**
	09/23/08	**150**	**53**	**140**	<0.50	<0.50	<0.50	**0.080**	**0.18**	**27.3**	**0.578**	**7.36**	**26.5**	**13.2**	**5,040**	**0.00776**	**0.4**	**0.075**	**49.7**
	01/05/09	<80	<238	<476	<0.200	<1.00	<1.00	<1.00	<1.00	**4.81**	<0.500	<2.00	**2.36**	**1.10**	**160**	**0.00422**	<0.500	<1.00	**5.59**
	03/16/09	-	-	-	<0.200	<1.00	<1.00	<3.00	<1.00	**11.0**	<0.500	**6.68**	**12.7**	**8.64**	NA	**0.0388**	<0.500	<1.00	**28.4**
	09/14/09	-	-	-	<0.500	<0.500	<0.500	<1.00	-	**26.8**	**3.22**	**18.3**	**52.7**	**20.4**	NA	**0.0543**	<0.500	<1.00	**73.2**
	03/16/10	-	-	-	<0.200	<1.00	<1.00	<3.00	<1.00	**38.8**	<1.00	**46.5**	**56.6**	**51.7**	**1,860**	**0.00209**	<2.00	<1.00	**157**
	09/20/10	-	-	-	<0.200	<1.00	<1.00	<3.00	<1.00	**4.90**	<2.00	<2.00	<2.00	<1.00	**1,250**	**0.00590**	<2.00	<1.00	<10.0
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**
	09/23/08	**120**	**20**	<500	<0.50	<0.50	<0.50	**0.18**	**0.080**	**21.6**	**0.018**	**0.67**	**2.46**	**0.652**	**3,570**	**0.00443**	**0.8**	**0.018**	**2.80**
	03/16/09	-	-	-	<0.200	<1.00	<1.00	<3.00	<1.00	**24.2**	<0.500	<2.00	**3.56**	**2.70**	NA	**0.00608**	<0.500	<1.00	**5.42**
	09/14/09	-	-	-	<0.500	<0.500	<0.500	<1.00	-	**29.3**	<0.500	<2.00	**3.02**	**1.75**	NA	**0.00790**	<0.500	<1.00	<5.00
dup	09/14/09	-	-	-	<0.500	<0.500	<0.500	1.04	-	**30.8**	<0.500	<2.00	**2.85**	**1.67**	NA	**0.00411**	<0.500	<1.00	<5.00
	03/16/10	-	-	-	<0.200	<1.00	<1.00	<3.00	<1.00	**9.94**	<1.00	<2.00	**3.27**	**2.87**	**2,100**	**0.00579**	<1.00	<1.00	<10.0
	09/20/10	-	-	-	<0.200	<1.00	<1.00	<3.00	<1.00	**38.0**	<1.00	<2.00	**2.87**	**1.34**	**7,550**	**0.00737**	<10.0	<1.00	<10.0

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		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)	Manganese (µg/l)	Mercury (µg/l)	Selenium (µg/l)	Silver (µg/l)	Zinc (µg/l)
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**
	06/23/08	**400**	**370**	**33**	**0.12**	**0.22**	<0.042	**0.47**	<0.12	**18.0**	**0.084**	**0.380**	**0.390**	**0.39**	**2,490**	**0.00064**	<0.29	**0.004**	**2.60**
	09/23/08	**670**	**3,500**	**69**	<0.50	**0.050**	<0.50	**0.24**	<0.50	**18.7**	**0.270**	**0.37**	**0.89**	**1.29**	**2,530**	**0.00223**	**0.4**	**0.019**	**4.47**
dup	09/23/08	**550**	**3,700**	**63**	<0.50	**0.060**	<0.50	**0.36**	<0.50	**19.0**	**0.198**	**0.29**	**0.77**	**1.16**	**2,560**	**0.00197**	**0.4**	**0.009**	**4.92**
	01/05/09	**128**	**3,780**	<490	<0.200	<1.00	<1.00	<1.00	<1.00	**19.0**	**0.673**	<2.00	<2.00	**1.80**	**1,730**	**0.00267**	<0.500	<1.00	**14.8**
	03/16/09	-	-	-	<0.200	<1.00	<1.00	<3.00	<1.00	**19.8**	<0.500	<2.00	<2.00	**3.52**	NA	**0.00114**	<0.500	<1.00	<5.00
	09/14/09	-	-	-	<0.500	<0.500	<0.500	<1.00	-	**16.2**	<0.500	<2.00	<2.00	<1.00	NA	**0.000946**	<0.500	<1.00	<5.00
	03/16/10	-	-	-	<0.200	<1.00	<1.00	<3.00	<1.00	**9.77**	<1.00	<2.00	**2.06**	**8.98**	**1,310**	**0.0131**	<1.00	<1.00	<10.0
dup	03/16/10	-	-	-	<0.200	<1.00	<1.00	<3.00	<1.00	**9.42**	<1.00	<2.00	<2.00	**7.52**	**1,380**	**0.00794**	<1.00	<1.00	<10.0
	09/20/10	-	-	-	<0.200	<1.00	<1.00	<3.00	<1.00	**15.7**	<1.00	<2.00	<2.00	**3.11**	**2,070**	**0.00171**	<10.0	<1.00	<10.0
dup	09/20/10	-	-	-	<0.200	<1.00	<1.00	<3.00	<1.00	**16.0**	<1.00	<2.00	<2.00	**2.56**	**2,090**	**0.00266**	<10.0	<1.00	<10.0
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**
	09/23/08	**53**	**21**	**64**	<0.50	<0.50	<0.50	**0.13**	**0.17**	**104**	**0.013**	**1.48**	**3.00**	**2.35**	**3,840**	**0.0158**	**0.4**	**0.012**	**9.64**
	03/16/09	-	-	-	<0.200	<1.00	<1.00	<3.00	<1.00	**23.0**	<0.500	<2.00	<2.00	<1.00	NA	**0.00280**	<0.500	<1.00	<5.00
	09/14/09	-	-	-	<0.500	<0.500	<0.500	<1.00	-	**19.3**	<0.500	<2.00	<2.00	<1.00	NA	**0.00359**	<0.500	<1.00	**9.61**
	03/16/10	-	-	-	<0.200	<1.00	<1.00	<3.00	<1.00	**15.3**	<1.00	<2.00	<2.00	<1.00	**2,050**	**0.119**	<1.00	<1.00	<10.0
	09/20/10	-	-	-	<0.200	<1.00	<1.00	<3.00	<1.00	**19.4**	<1.00	<2.00	<2.00	<1.00	**3,600**	**0.00166**	<10.0	<1.00	<10.0

COP0018294

TABLE 5
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)	Manganese (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	NA	<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**	NA	<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	<0.800	<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**	**3,160**	<0.200	<2.00	<1.00	**150**
	06/24/08	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	09/24/08	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	03/19/09	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
P-1	09/26/06	-	-	-	<0.200	<0.500	<0.500	<1.00	<2.00	**14.0**	**4.58**	**130**	**185**	**41.8**	NA	<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	NA	<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**	**797**	<0.200	<2.00	<1.00	**151**
	06/25/08	<80.0	<236	<472	**1.99**	**1.32**	<0.500	<1.00	<2.00	**1.60**	**0.746**	**2.26**	**6.51**	**4.48**	**892**	<0.200	<0.500	<1.00	**54.2**
	09/23/08	<80.0	<243	<485	**1.87**	<1.00	<1.00	<3.00	<1.00	**8.17**	<5.00	**36.2**	**51.4**	**30.2**	**2,400**	<0.200	<5.00	<1.00	**234**
	01/07/09	<80.0	<250	<500	<0.200	<1.00	<1.00	<3.00	<1.00	**1.46**	**0.690**	**3.92**	**7.03**	**4.18**	**72.0**	<0.200	<0.500	<1.00	**50.7**
	03/20/09	<80.0	<250	<500	<0.200	<1.00	<1.00	<3.00	<1.00	**1.40**	<0.500	**3.60**	**6.57**	**4.33**	**73.6**	**0.0104**	<0.500	<1.00	**37.6**
	09/18/09	<80.0	<248	<495	**0.320**	<1.00	<1.00	<3.00	<1.00	**2.19**	<0.500	**5.74**	**9.38**	**5.55**	**1,210**	**0.00933**	<0.500	<1.00	**59.4**
	03/31/10	<80.0	<240	<481	<0.200	<1.00	<1.00	<3.00	<1.00	**3.18**	<1.00	**7.16**	**10.7**	**8.35**	**276**	**0.0335**	<1.00	<1.00	**55.9**
	09/23/10	<80.0	<98	<490	<0.200	<1.00	<1.00	<3.00	<1.00	**13.2**	**1.83**	**51.2**	**86.1**	**59.9**	**3,490**	**0.240**	<5.00	<1.00	**411**
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**	**5.48**	**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**
	09/24/08	**652**	**26,700**	**3,870**	<0.200	<1.00	<1.00	<3.00	<1.00	**13.2**	<1.00	**13.5**	**46.5**	**192**	**2,910**	<0.200	<1.00	<2.00	**752**
	03/19/09	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
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**	**3,300**	<0.200	<5.00	<0.120	**41**
	06/24/08	**322**	**3,550**	<476	<0.200	<0.500	<0.500	<1.00	<2.00	**10.3**	<0.500	<2.00	**3.25**	**4.41**	**3,260**	<0.200	<0.500	<1.00	**14.5**
	09/23/08	**237**	**2,410**	<476	<0.200	<1.00	<1.00	<3.00	<1.00	**9.20**	<5.00	<20.0	<20.0	**36.9**	**2,730**	<0.200	<5.00	<1.00	**53.9**
	01/06/09	**279**	**1,790**	<485	<0.200	<1.00	<1.00	<3.00	<1.00	**13.6**	<0.500	<2.00	<2.00	**2.67**	**3,640**	<0.200	<0.500	<1.00	**17.7**
	03/19/09	**303**	**1,680**	<495	<0.200	<1.00	<1.00	<3.00	<1.00	**7.02**	<0.500	**3.00**	**3.36**	**12.0**	**3,640**	**0.0168**	<5.00	<1.00	**19.9**
	09/17/09	**264**	**8,780**	**1,380**	<0.400	<2.00	<2.00	<6.00	<2.00	**14.8**	<0.500	**2.88**	**3.01**	**11.4**	**3,540**	<0.200	<0.500	<1.00	**25.6**
dup	09/17/09	**304**	**4,170**	**759**	<0.200	<1.00	<1.00	<3.00	<1.00	**14.4**	<0.500	<2.00	**2.01**	**8.67**	**3,540**	<0.200	<0.500	<1.00	**16.4**
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**	**2,080**	<0.200	<5.00	**0.128**	**179**
	06/24/08	<80.0	<238	<476	<0.200	<0.500	<0.500	<1.00	<2.00	**2.57**	<0.500	**3.72**	**4.73**	**2.65**	**1,320**	<0.200	<0.500	<1.00	**25.2**
	09/23/08	<80.0	**455**	<476	<0.200	<1.00	<1.00	<3.00	<1.00	**5.29**	<5.00	<20.0	<20.0	**7.41**	**1,510**	<0.200	<5.00	<1.00	**48.3**
	01/07/09	<80.0	<250	<500	<0.200	<1.00	<1.00	<3.00	<1.00	**1.34**	<0.500	<2.00	<2.00	<1.00	**1,130**	<0.200	<0.500	<1.00	**23.2**
	03/19/09	<80.0	**384**	<495	<0.200	<1.00	<1.00	<3.00	<1.00	**1.89**	<0.500	<2.00	<2.00	<1.00	**1,020**	<0.00500	<1.00	<1.00	**5.52**
dup	03/19/09	<80.0	**1,160**	<556	<0.200	<1.00	<1.00	<3.00	<1.00	**1.92**	<0.500	<2.00	<2.00	<1.00	**1,040**	<0.00500	<1.00	<1.00	**5.39**
	09/17/09	<80.0	<263	<526	<0.200	<1.00	<1.00	<3.00	<1.00	**3.50**	<0.500	<2.00	<2.00	<10.0	**1,380**	<0.200	<0.500	<1.00	**5.11**

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TABLE 5
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)	Manganese (µg/l)	Mercury (µg/l)	Selenium (µg/l)	Silver (µg/l)	Zinc (µg/l)
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**	**4,000**	**0.295**	<5.00	**0.333**	**383**
	06/24/08	**3,550**	**2,690**[5]	<476	**6.96**	**1.32**	**1.56**	**3.16**	<2.00	**8.66**	**0.952**	**34.7**	**71.2**	**45.6**	**5,510**	<0.200	**0.742**	<1.00	**174**
	09/23/08	**532**	**1,450**	<476	**17.0**	**1.58**	<1.00	**2.16**	<1.00	**20.5**	<10.0	**168**	**315**	**67.7**	**9,260**	<0.200	<10.0	<1.00	**390**
	01/06/09	**303**	**6,700**	<481	<0.200	<1.00	<1.00	<3.00	<1.00	**3.60**	<0.500	**10.5**	**21.9**	**11.9**	**2,050**	<0.200	<0.500	<1.00	**75.6**
	03/19/09	<80.0	**3,430**	<495	<0.200	<1.00	<1.00	<3.00	<1.00	**6.72**	<0.500	**5.58**	**22.8**	**12.4**	**5,860**	**0.0770**	<5.00	<1.00	**34.3**
	09/17/09	**176**	**12,600**	<500	<0.200	<1.00	<1.00	<3.00	<1.00	**4.86**	<0.500	<2.00	**3.45**	<1.00	**4,930**	<0.200	<0.500	<1.00	**5.91**
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**	**13,400**	<0.200	<5.00	**0.20**	**173**
	06/24/08	<80.0	**386**[4]	<476	<0.200	<0.500	<0.500	<1.00	<2.00	**10.1**	<0.500	**19.2**	**29.6**	**9.21**	**6,790**	<0.200	<0.500	<1.00	**67.1**
	09/23/08	<80.0	<238	<476	<0.200	<1.00	<1.00	<3.00	**1.52**	**7.20**	<10.0	<40.0	<40.0	**2.90**	**9,350**	<0.200	<10.0	<1.00	**28.8**
	01/06/09	<80.0	<236	<472	<0.200	<1.00	<1.00	<3.00	**1.17**	**11.2**	<0.500	**9.81**	**16.3**	**3.64**	**9,620**	<0.200	<0.500	<1.00	**43.3**
	03/19/09	<80.0	**281**	<495	<0.200	<1.00	<1.00	<3.00	**1.22**	**6.77**	<0.500	<2.00	<2.00	<1.00	**9,610**	<0.00500	<10.0	<1.00	<5.00
	09/17/09	<80.0	**803**	<526	<0.200	<1.00	<1.00	<3.00	**1.49**	<20.0	<0.500	<40.0	**125**	<20.0	**10,800**	<0.200	<0.500	<20.0	<100
dup	09/17/09	<80.0	<250	<500	<0.200	<1.00	<1.00	<3.00	**1.51**	**18.9**	<0.500	**23.3**	**34.2**	<20.0	**10,600**	<0.200	<0.500	<1.00	**61.6**
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**	**6,520**	**2,030**	<0.200	<0.500	<0.500	<1.00	<2.00	**0.664**	<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**	**2,970**	<0.200	<5.00	**0.12**	<33.0
	06/25/08	<80.0	<236	<472	<0.200	<0.500	0.510	<1.00	<2.00	<1.00	<0.500	<2.00	<2.00	<1.00	**2,480**	<0.200	<0.500	<1.00	**17.5**
	09/24/08	<80.0	<243	<485	<0.200	<1.00	<1.00	<3.00	<1.00	**1.88**	<0.500	**4.11**	**3.49**	**1.80**	**2,770**	<0.200	**0.770**	<1.00	**106**
	01/07/09	<80.0	<250	<500	<0.200	<1.00	<1.00	<3.00	<1.00	<1.00	<0.500	<2.00	<2.00	<1.00	**1,970**	<0.200	<0.500	<1.00	**12.9**
	03/19/09	<80.0	<248	<495	<0.200	<1.00	<1.00	<3.00	<1.00	**1.19**	<0.500	<2.00	<2.00	<1.00	**1,900**	<0.00500	<2.50	<1.00	<5.00
dup	03/19/09	<80.0	<248	<495	<0.200	<1.00	<1.00	<3.00	<1.00	**1.48**	<0.500	**2.97**	<2.00	<1.00	**2,240**	<0.00500	<5.00	<1.00	**10.0**
	09/17/09	<80.0	<263	<526	<0.200	<1.00	<1.00	<3.00	<1.00	**1.26**	<0.500	**3.16**	<2.00	<1.00	**1,710**	<0.200	<0.500	<1.00	**10.0**
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**	**4,150**	<0.200	<5.00	<0.120	<33.0
	06/24/08	**869**	**301**[3]	<476	<0.200	<0.500	<0.500	<1.00	<2.00	**8.18**	<0.500	<2.00	**2.75**	<1.00[9]	**4,840**	<0.200	<0.500	<1.00	**8.70**
	09/24/08	**211**	**388**	<485	<0.400	<2.00	<2.00	<6.00	<2.00	**14.3**	<0.500	<2.00	**2.37**	<1.00	**7,900**	<0.200	**0.604**	<1.00	**9.82**
	01/06/09	**555**	**309**	<500	<0.200	<1.00	<1.00	<3.00	<1.00	**12.7**	<0.500	**4.95**	**5.63**	**2.53**	**5,400**	<0.200	<0.500	<1.00	**19.2**
	03/19/09	<80.0	<278	<556	<0.200	<1.00	<1.00	<3.00	<1.00	**8.10**	<0.500	<2.00	**2.69**	<1.00	**3,370**	**0.00941**	<5.00	<1.00	**5.65**
	09/17/09	<80.0	<250	<500	<0.200	<1.00	<1.00	<3.00	<1.00	**1.85**	<0.500	<2.00	<2.00	<1.00	**3,290**	<0.200	<0.500	<1.00	<5.00
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**	**798**	<0.200	<2.00	<1.00	**87.2**
	06/25/08	<80.0	<236	<472	<0.200	<0.500	<0.500	<1.00	<2.00	**5.16**	<0.500	**4.22**	**6.67**	**10.1**	**2,150**	<0.200	<0.500	<1.00	**26.5**
	09/23/08	<80.0	<238	<476	<0.200	<1.00	<1.00	<3.00	<1.00	**38.2**	<10.0	**124**	**123**	**35.4**	**9,080**	<0.200	<10.0	<1.00	**201**
	01/07/09	<80.0	<250	<500	<0.200	<1.00	<1.00	<3.00	<1.00	**5.12**	<0.500	**3.19**	**8.55**	**11.0**	**960**	<0.200	<0.500	<1.00	**46.8**
	03/20/09	<80.0	<240	<481	<0.200	<1.00	<1.00	<3.00	<1.00	**15.3**	<0.500	**12.9**	**22.3**	**43.4**	**824**	**0.0451**	<0.500	<1.00	**88.4**
	09/17/09	<80.0	<263	<526	<0.200	<1.00	<1.00	<3.00	<1.00	**11.0**	<0.500	**6.89**	**8.25**	**11.0**	**389**	<0.200	<0.500	<1.00	**30.9**

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TABLE 5
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)	Manganese (µg/l)	Mercury (µg/l)	Selenium (µg/l)	Silver (µg/l)	Zinc (µg/l)
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**	**3,120**	<0.200	<2.00	<1.00	**43.6**
	06/25/08	<80.0	<236	<472	<0.200	<0.500	<0.500	<1.00	<2.00	**22.8**	<0.500	**10.6**	**13.7**	**3.49**	**4,960**	<0.200	<0.500	<1.00	**29.4**
	09/23/08	<80.0	<238	<476	<0.200	<1.00	<1.00	<3.00	<1.00	**32.3**	<10.0	**156**	**235**	**36.4**	**7,870**	**0.226**	<10.0	<1.00	**335**
	01/07/09	<80.0	<250	<500	<0.200	<1.00	<1.00	<3.00	<1.00	**3.73**	<0.500	**11.8**	**10.6**	**6.82**	**252**	<0.200	<0.500	<1.00	**47.2**
	03/20/09	<80.0	<240	<481	<0.200	<1.00	<1.00	<3.00	<1.00	**8.11**	<0.500	**9.63**	**10.8**	**4.43**	**1,340**	**0.0316**	<0.500	<1.00	**27.5**
	09/17/09	<80.0	<250	<500	<0.200	<1.00	<1.00	<3.00	<1.00	**11.2**	<0.500	**6.99**	**6.29**	<5.00	**1,620**	<0.200	<0.500	<1.00	**17.4**
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**	**3,700**	<0.200	<2.00	<1.00	**13**
	06/25/08	<80.0	<236	<472	<0.200	<0.500	<0.500	<1.00	<2.00	**4.48**	<0.500	<2.00	<2.00	<1.00	**3,880**	<0.200	<0.500	<1.00	**9.26**
	09/24/08	<80.0	<243	<485	<0.200	<1.00	<1.00	<3.00	<1.00	**4.56**	<0.500	**4.00**	**5.94**	**1.48**	**4,390**	<0.200	**0.883**	<1.00	**21.3**
	01/07/09	<80.0	<250	<500	<0.200	<1.00	<1.00	<3.00	<1.00	**4.26**	<0.500	<2.00	<2.00	<1.00	**3,840**	<0.200	<0.500	<1.00	**5.74**
	03/20/09	<80.0	<240	<481	<0.200	<1.00	<1.00	<3.00	<1.00	**3.02**	<0.500	<2.00	**3.85**	**1.02**	**1,900**	<0.00500	**0.872**	<1.00	**11.6**
	09/17/09	<80.0	<263	<526	<0.200	<1.00	<1.00	<3.00	<1.00	**1.72**	<0.500	<2.00	<2.00	<1.00	**3,670**	<0.200	<0.500	<1.00	**15.0**
U-29A	01/29/08	**414**	--	--	<0.200	<0.500	<0.500	<1.00	<2.00	**-**	-	-	-	-	-	**0.176**	-	-	-
	06/26/08	**1,150**	--	--	<0.200	<0.500	<0.500	<1.00	<2.00	-	-	-	-	-	-	-	-	-	-
	09/24/08	**492**	--	--	**0.210**	<1.00	<1.00	<3.00	<1.00	**20.3**	**2.58**	**23.3**	**24.5**	**10.1**	**7,220**	<0.200	**0.502**	<1.00	**82.4**
	03/20/09	**2,700**	**386,000**	**29,100**	<0.200	<1.00	<1.00	<3.00	<1.00	**23.1**	<2.50	**10.1**	**15.1**	**10.7**	**4,820**	**0.0138**	<2.50	<5.00	**32.6**
	09/17/09	**605**	**52,400**	**4,210**	**0.200**	<1.00	<1.00	<3.00	<1.00	**19.1**	**1.27**	<2.00	**3.36**	<10.0	**4,260**	<0.200	<0.500	<1.00	**13.4**
Portland Harbor Joint Source Control Screening Level Values																			
EPA's 2004 NRWQC (organism only)		--	--	--	51	15,000	2,100	--	--	0.14	--	--	--	--	100	--	4,200	--	26,000
DEQ's 2004 AWQC (organism only)		--	--	--	51	15,000	2,100	--	--	0.14	--	--	--	--	100	0.146	4,200	--	26,000
EPA's 2004 NRWQC ecological receptors (chronic)		--	--	--	--	--	--	--	--	150	0.094	--	2.7	0.54	--	0.77	5	--	36
DEQ's 2004 AWQC ecological receptors (chronic)		--	--	--	--	--	--	--	--	--	0.38	--	3.6	0.54	--	0.012	35	0.12	33
Oak Ridge National Lab (Tier II SCV)		--	--	--	130	9.8	7.3	--	--	3.1	--	--	--	--	120	1.3	--	0.36	--

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 and revised in July 2007.
Bold face font indicates analyte was detected above the laboratory MRL or MDL
-- = Not analyzed
NS = Not sampled
NA = Not available
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 6
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-9A	03/18/10	<1.90	**3.08**	<1.90	<1.90	**0.471**	**0.450**	**0.438**	<1.90	**0.425**	**0.689**	**0.127**	<1.90	**12.6**	**0.407**	<1.90	**5.75**	<1.90
	09/21/10	<0.500	**1.29**	<0.500	<0.500	**0.159**	**0.1600**	**0.160**[6]	<0.500	**0.131**[6]	**0.234**[6]	**0.0506**	<0.500	**5.21**	**0.174**[6]	<0.750	**1.69**	**0.533**
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**	**0.0578**	**0.0643**	**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**
	09/23/08	<0.476[1]	<1.19[1]	<0.476[1]	<0.476[1]	**0.182**	**0.148**	**0.146**	<0.476[1]	**0.131**	**0.267**	**0.0500**	**0.671**	**1.87**	**0.136**	<0.952[1]	**1.11**	**0.584**
	03/24/09	<2.43	**2.69**	<2.43	<2.43	0.0367	0.0247	0.0251	<0.194	0.0196	0.0853	<0.00971	<2.43	**8.59**	0.0215	<2.43	**4.96**	**0.819**
dup	03/24/09	<0.971	**1.85**	<0.971	<0.971	0.0355	0.0236	0.0249	<0.194	0.0179	0.0782	<0.00971	<0.971	**7.45**	0.0217	<0.971	**4.66**	**0.782**
	09/22/09	<0.0980	**1.09**	<0.196	<0.294	**0.00944**	<0.00490	0.00494	<0.0980	<0.00490	**0.0197**	<0.00490	**0.366**	**1.48**	<0.00490	<0.392	**1.25**	**0.396**
	03/18/10	<0.0952	**0.327**[8]	<0.0952	<0.0952	<0.00476	<0.00476	<0.00476	<0.0952	<0.00476	**0.00970**	<0.00476	<0.0952	**0.857**[8]	<0.00476	<0.143	**0.470**[8]	<0.0952
	09/21/10	<0.200	**0.899**	<0.200	<0.200	**0.0117**	<0.0100	<0.0100	<0.200	<0.0100	0.0190[8]	<0.0100	**0.208**	**2.72**	<0.0100	<0.400	**1.67**	**0.283**
B-21	03/18/10	<0.0980	**0.713**	<0.196	<0.147	**0.00898**	**0.00732**	**0.00661**	<0.0980	**0.00650**	**0.0162**	<0.00490	<0.0980	**2.54**	**0.00540**	<0.147	**0.478**	<0.0980
	09/22/10	<0.500	**2.81**	<1.00	<2.50	**0.0621**	**0.0404**	<0.0384[9]	<0.500	<0.0250	<0.0105[9]	<0.0250	<0.500	**16.1**	**0.0304**[12]	<1.00	**13.8**	**0.622**
dup	09/22/10	<2.50	**3.60**	<2.50	<2.50	**0.0878**	**0.0504**	<0.0452[6]	<0.500	<0.0270[8]	**0.161**[8]	<0.0250	<0.500	**17.8**	**0.0324**[8]	<2.50	**18.1**	**0.883**
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
	09/24/08	<0.0952	**0.500**	<0.0952	<0.0952	**0.00712**	**0.00625**	**0.00645**	<0.0952	**0.00486**	**0.0145**	<0.00476	<0.0952	**2.38**	**0.00599**	<0.571[8]	**0.375**	<0.0952
	03/25/09	<0.0971	**0.125**	<0.0971	<0.0971	**0.00665**	**0.00565**	**0.00614**	<0.0971	**0.00595**	**0.0129**	**0.00515**	<0.0971	**0.411**	**0.00674**	<0.0971	<0.0971	<0.0971
	09/22/09	<0.0962	**0.619**	<0.0962	<0.0962	**0.0161**	**0.0183**	**0.0150**	<0.0962	**0.0134**	**0.0245**	<0.00481	<0.0962	**2.53**	**0.0119**	<0.240	**0.448**	<0.0962
	03/19/10	<0.0962	<0.0962	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00481	<0.00721	<0.00481	<0.0962	**0.182**	<0.00481	<0.0962	<0.0962	<0.0962
dup	03/19/10	<0.0980	**0.105**	<0.0980	<0.0980	<0.00490	<0.00490	<0.00490	<0.0980	<0.00490	<0.00735	<0.00490	<0.0980	**0.390**	<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
	06/24/08	<0.398	<0.398	<0.398	<0.398	<0.00498	<0.00498	<0.00498	**0.0995**	<0.00498	**0.00751**	<0.00498	<0.398	**0.413**	<0.00498	<0.796	<0.398	<0.0995
	09/24/08	<0.385[2]	<0.385[2]	<0.385[2]	<0.385[2]	**0.00503**	<0.00481	<0.00481	<0.0962	<0.00481	**0.00821**	**0.00712**	<0.385[2]	**0.559**	**0.00873**	<0.769[2]	<0.385[2]	<0.0962
	01/06/09	<0.980	<0.980	<0.980	<0.980	**0.00710**	**0.00683**	**0.00831**	<0.0980	**0.00624**	**0.0133**	<0.00490	<0.980	**0.547**	**0.00849**	<0.980	<0.980	<0.980
	03/18/09	<0.0976	<0.976	<0.976	<0.390	<0.00488	<0.00488	<0.00488	<0.0976	<0.00488	<0.00976	<0.00488	<0.390	<0.976	<0.00488	<0.390	<0.390	<0.146

COP0018298

TABLE 6
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)
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
	09/23/08	**0.0026**	<0.0044	<0.0034	<0.0036	**0.0069**	<0.0043	<0.0023	<0.0029	<0.0025	**0.0039**	<0.0025	<0.0044	<0.0038	<0.0026	**0.0038**	<0.0050	**0.029**
	03/16/09	<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
	09/14/09	<0.0962	<0.0962	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.0962	<0.00481	<0.0962	<0.0962	<0.0962
	03/16/10	<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
	09/20/10	<0.190	<0.190	<0.190	<0.190	<0.00952	<0.00952	<0.00952	<0.190	<0.00952	<0.00952	<0.00952	<0.190	<0.190	<0.00952	<0.190	<0.190	<0.190
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[6]	**0.0065**	**0.012**
	06/24/08	**0.0073**	**0.063**	**0.0069**	**0.010**	**0.0078**	**0.0057**	**0.0062**	**0.013**	**0.0045**	**0.0079**	**0.0068**	**0.0090**	**0.0091**	**0.014**	**0.11**	**0.020**	**0.016**
	09/23/08	**0.0089**	**0.31**	<0.0034	<0.0036	**0.0074**	<0.0043	<0.0023	**0.0029**	<0.0025	**0.0051**	<0.0025	<0.0044	<0.0038	**0.0033**	<0.18	<0.0050	**0.018**
	01/05/09	<0.0909	<0.0909	<0.0909	<0.0909	<0.00455	<0.00455	<0.00455	<0.0909	<0.00455	<0.00455	<0.00455	<0.0909	<0.0909	<0.00455	<0.0909	<0.0909	<0.0909
	03/16/09	<0.100	<0.100	<0.100	<0.100	<0.00500	<0.00500	<0.00500	<0.100	<0.00500	<0.00500	<0.00500	<0.100	<0.100	<0.00500	<0.150	<0.100	<0.100
	09/14/09	<0.0952	**0.148**	<0.0952	<0.0952	<0.00476	**0.00477**	<0.00476	<0.0952	<0.00476	**0.00509**	<0.00476	<0.0952	<0.0952	<0.00476	<0.0952	<0.0952	<0.0952
	03/16/10	<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
	09/20/10	<0.190	**0.206**	<0.190	<0.190	<0.00952	<0.00952	<0.00952	<0.190	<0.00952	<0.00952	<0.00952	<0.190	<0.190	<0.00952	<0.190	<0.190	<0.190
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**
	09/23/08	**0.0089**	**0.44**	<0.0034	<0.0036	<0.0026	<0.0043	<0.0023	<0.0029	<0.0025	<0.0034	<0.0025	<0.0044	<0.0038	<0.0026	<0.18	**0.050**	**0.10**
	03/16/09	<0.0952	**0.272**	<0.0952	<0.0952	<0.00476	<0.00476	<0.00476	<0.0952	<0.00476	<0.00476	<0.00476	<0.0952	<0.0952	<0.00476	<0.190	<0.0952	<0.0952
	09/14/09	<0.0971	**0.304**	<0.0971	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.0971	<0.00485	<0.0971	<0.0971	<0.0971
dup	09/14/09	<0.0962	**0.809**	<0.0962	**0.117**	**0.0265**	**0.0106**	**0.00920**	<0.0962	**0.00597**	**0.0421**	<0.00481	**0.515**	**0.482**	**0.00562**	<0.192	**1.22**	**0.293**
	03/16/10	<0.0971	**0.196**	<0.0971	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.0971	<0.00485	<0.0971	<0.0971	<0.0971
	09/20/10	<0.190	**0.324**	<0.190	<0.190	<0.00952	<0.00952	<0.00952	<0.190	<0.00952	<0.00952	<0.00952	<0.190	<0.190	<0.00952	<0.190	<0.190	<0.190

COP0018299

TABLE 6
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)
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**
	06/24/08	**0.012**	**0.56**	<0.19	**0.025**	<0.0075	**0.017**	**0.015**	**0.035**	**0.0053**	**0.0044**	**0.0054**	**0.033**	**0.75**	**0.036**	**0.46**	**0.099**	**0.053**
	09/23/08	<0.0023	**0.70**	<0.29	**0.031**	**0.055**	**0.071**	**0.065**	**0.085**	**0.026**	**0.051**	**0.013**	**0.10**	**0.68**	**0.081**	<0.69	**0.12**	**0.18**
dup	09/23/08	**0.031**	**0.67**	<0.22	**0.026**	**0.0079**	**0.0089**	**0.0070**	**0.013**	<0.0025	**0.0038**	<0.0025	**0.048**	**0.58**	**0.012**	<0.52	**0.10**	**0.058**
	01/05/09	<0.0930	**0.474**	<0.465[6]	<0.465[6]	**0.0119**	**0.0438**	**0.0215**	**0.222**	**0.0107**	**0.0247**	**0.0243**	<0.465[6]	**0.406**	**0.161**	<1.40[6]	<0.465[6]	<0.0930
	03/16/09	<0.286	**0.399**	<0.286	<0.0952	**0.00564**	**0.00791**	**0.00532**	<0.0952	<0.00476	**0.00894**	<0.00476	<0.0952	**0.366**	**0.0100**	<0.429	<0.0952	<0.0952
	09/14/09	<0.0971	**0.631**	<0.243	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.00485	**0.00506**	<0.00485	<0.0971	**0.578**	<0.00485	<0.340	**0.175**	<0.0971
	03/16/10	<0.0976	<0.0976	<0.0976	<0.0976	**0.0113**	**0.0271**	**0.0153**	<0.0976	**0.0133**	**0.0153**	**0.00761**	<0.0976	<0.0976	**0.0367**	<0.293	<0.0976	<0.0976
	03/16/10	<0.0962	<0.0962	<0.0962	<0.0962	<0.00481	**0.00697**	<0.00481	<0.0962	<0.00481	**0.00612**	<0.00481	<0.0962	<0.0962	**0.0102**	<0.0962	<0.0962	<0.0962
	09/20/10	<0.194	**0.375**	<0.194	<0.194	<0.00971	<0.00971	<0.00971	<0.194	<0.00971	<0.00971	<0.00971	<0.194	**0.338**	**0.0112**	<0.291	<0.194	<0.194
dup	09/20/10	<0.194	**0.336**	<0.194	<0.194	<0.00971	<0.00971	<0.00971	<0.194	<0.00971	<0.00971	<0.00971	<0.194	**0.290**	<0.00971	<0.291	<0.194	<0.194
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**
	09/23/08	<0.0023	**0.10**	<0.0034	<0.0036	<0.0026	<0.0043	<0.0023	<0.0029	<0.0025	<0.0034	<0.0025	<0.0044	<0.0038	<0.0026	<0.090	**0.022**	<0.0035
	03/16/09	<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
	09/14/09	<0.0962	<0.0962	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.0962	<0.00481	<0.0962	<0.0962	<0.0962
	03/16/10	<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
	09/20/10	<0.192	<0.192	<0.192	<0.192	<0.00962	<0.00962	<0.00962	<0.192	<0.00962	<0.00962	<0.00962	<0.192	<0.192	<0.00962	<0.192	<0.192	<0.192

COP0018300

TABLE 6
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**
	09/22/08	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	03/19/09	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	09/18/09	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
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
	06/25/08	<0.0971	<0.0971	<0.0971	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.0971	<0.00485	<0.0971	<0.0971	<0.0971
	09/23/08	<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
	01/07/09	<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
	03/20/09	<0.0971	<0.0971	<0.0971	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.0971	<0.00485	<0.0971	<0.0971	<0.0971
	09/18/09	<0.0971	<0.0971	<0.0971	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.0971	<0.00485	<0.0971	<0.0971	<0.0971
	03/31/10	<0.0952	<0.0952	<0.0952	<0.0952	**0.00565**	**0.00602**	**0.00624**	<0.0952	**0.00564**	**0.00913**	<0.00476	<0.0952	<0.0952	**0.00563**	<0.0952	<0.0952	<0.0952
	09/23/10	<0.100	<0.100	<0.100	<0.100	<0.00500	<0.00500	<0.00500	<0.100	<0.00500	**0.00628**[8]	<0.00500	<0.100	<0.100	<0.00500	<0.100	<0.100	<0.100
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**
	06/25/08	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	09/24/08	**2.68**	**11.4**	<4.81	<12.0[6]	**1.02**	**0.483**	<0.481[6]	<4.81	<0.240	**2.25**	**0.276**	<4.81	**22.5**	<0.240	<7.21[6]	**63.1**	**10.2**
	03/19/09	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

COP0018301

TABLE 6
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)
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**
	06/24/08	<0.476[6]	**1.14**	<0.476[6]	<0.476[6]	<0.00476	<0.00476	<0.00476	<0.0952	<0.00476	<0.00952[6]	<0.00476	<0.476[6]	**3.35**	<0.00476	<0.952[6]	**0.741**	<0.0952
	09/23/08	<0.190[6]	**0.820**	<0.190[6]	<0.0952	<0.00476	<0.00476	<0.00476	<0.0952	<0.00476	**0.00656**	<0.00476	<0.0952	**2.80**	<0.00476	<0.857[6]	**0.593**	<0.0952
	01/06/09	<0.488	**0.964**	<0.488	<0.488	<0.0244	<0.00488	<0.00488	<0.0976	<0.00488	<0.0244	<0.00488	<0.488	**3.98**	<0.00488	**1.22**	**0.962**	<0.488
	03/19/09	<0.0962	**1.11**	<0.385	<0.385	**0.00720**	<0.00481	<0.00481	<0.0962	<0.00481	**0.0131**	<0.00481	<0.385	**4.13**	<0.00481	<0.433	<0.385	<0.144
	09/17/09	<0.0971	**1.27**	<0.243	<0.146	**0.0116**	**0.00817**	**0.00680**	<0.0971	<0.00485	**0.0309**	<0.00485	<0.0971	**4.38**	**0.00543**	<0.243	**0.914**	<0.0971
dup	09/17/09	<0.0971	**0.978**	<0.194	<0.146	**0.00934**	**0.00539**	<0.00485	<0.0971	<0.00485	**0.0205**	<0.00485	<0.0971	**3.36**	<0.00485	<0.194	**0.773**	<0.0971

COP0018302

TABLE 6
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)
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
	06/24/08	<0.0957	<0.0957	<0.0957	<0.0957	<0.00478	<0.00478	<0.00478	<0.0957	<0.00478	<0.00478	<0.00478	<0.0957	<0.0957	<0.00478	<0.0957	<0.0957	<0.0957
	09/23/08	<0.0952	<0.0952	<0.0952	<0.0952	<0.00476	<0.00476	<0.00476	<0.0952	<0.00476	<0.00476	<0.00476	<0.0952	**0.159**	<0.00476	<0.0952	<0.0952	<0.0952
	01/07/09	<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
	03/19/09	<0.0962	<0.0962	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.0962	<0.00481	<0.0962	<0.0962	<0.0962
dup	03/19/09	<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
	09/17/09	<0.0971	<0.0971	<0.0971	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.0971	<0.00485	<0.0971	<0.0971	<0.0971
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
	06/24/08	<0.476[6]	**0.562**	<0.476[6]	<1.43[6]	**0.0129**	**0.00535**	**0.00596**	<0.0952	<0.00476	**0.0281**	<0.00476	<0.190[6]	**1.93**	<0.00476	<1.43[6]	**2.12**	**0.121**
	09/23/08	<0.0952	<0.238[6]	<0.0952	<0.190[6]	**0.00600**	<0.00476	<0.00476	<0.0952	<0.00476	**0.00973**	<0.00476	<0.0952	**0.926**	<0.00476	<0.619[6]	**0.314**	<0.0952
	01/06/09	<0.483	<0.483	<0.483	<0.483	<0.0242	<0.00483	<0.00483	<0.0966	<0.00483	<0.0242	<0.00483	<0.483	**0.498**	<0.00483	<0.483	<0.725	<0.483
	03/19/09	<0.0985	<0.0985	<0.0985	<0.0985	<0.00493	<0.00493	<0.00493	<0.0985	<0.00493	<0.00493	<0.00493	<0.0985	<0.246	<0.00493	<0.0985	<0.0985	<0.148
	09/17/09	<0.388	<0.388	<0.388	<0.583	**0.0252**	<0.0194	<0.0194	<0.388	<0.0194	**0.0421**	<0.0194	<0.388	**1.04**	<0.0194	<0.388	**<0.583**	<0.388
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
	06/24/08	<0.0962	<0.0962	<0.0962	<0.0962	**0.00780**	**0.00770**	<0.00481	<0.0962	<0.00481	**0.00824**	<0.00481	<0.0962	<0.0962	**0.00501**	<0.0962	<0.0962	<0.0962
	09/23/08	<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
	01/06/09	<0.0980	<0.0980	<0.0980	<0.0980	<0.00490	<0.00490	<0.00490	<0.0980	<0.00490	<0.00490	**0.00784**	<0.0980	<0.0980	**0.00652**	<0.0980	<0.0980	<0.0980
	03/19/09	<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
	09/17/09	<0.0971	<0.0971	<0.0971	<0.0971	<0.00485	**0.00537**	<0.00485	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.0971	<0.00485	<0.0971	<0.0971	<0.0971
dup	09/17/09	<0.0971	<0.0971	<0.0971	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.0971	<0.00485	<0.0971	<0.0971	<0.0971
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
	06/25/08	<0.0971	<0.0971	<0.0971	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.0971	<0.00485	<0.0971	<0.0971	<0.0971
	09/24/08	<0.0962	<0.0962	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.0962	<0.00481	<0.0962	<0.0962	<0.0962
	01/07/09	<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
	03/19/09	<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
dup	03/19/09	<0.0976	<0.0976	<0.0976	<0.0976	<0.00488	<0.00488	<0.00488	<0.0976	<0.00488	**0.00527**	<0.00488	<0.0976	<0.0976	<0.00488	<0.0976	<0.0976	<0.0976
	09/17/09	<0.0971	<0.0971	<0.0971	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.0971	<0.00485	<0.0971	<0.0971	<0.0971

COP0018303

TABLE 6
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)
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
	06/24/08	<0.0952	**0.0999**	<0.0952	<0.0952	<0.00476	<0.00476	<0.00952[6]	<0.0952	<0.00952[6]	<0.00476	<0.00476	<0.0952	**0.160**	<0.00476	<0.667[6]	<0.0952	<0.0952
	09/24/08	<0.0962	<0.0962	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.0962	<0.00481	<0.577[6]	<0.0962	<0.0962
	01/06/09	<0.0971	<0.0971	<0.0971	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	**0.155**	<0.00485	**1.36**	<0.0971	<0.0971
	03/19/09	<0.0962	<0.0962	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00481	**0.00557**	<0.00481	<0.0962	<0.0962	<0.00481	<0.0962	<0.0962	<0.0962
	09/17/09	<0.0971	**0.144**	<0.0971	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	**0.235**	<0.00485	<0.291	<0.0971	<0.0971
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
	06/25/08	<0.0971	<0.0971	<0.0971	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.0971	<0.00485	<0.0971	<0.0971	<0.0971
	09/23/08	<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
	01/07/09	<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
	03/20/09	<0.0971	<0.0971	<0.0971	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.0971	<0.00485	<0.0971	<0.0971	<0.0971
	09/17/09	<0.0971	<0.0971	<0.0971	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.0971	<0.00485	<0.0971	<0.0971	<0.0971
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
	06/25/08	<0.0971	<0.0971	<0.0971	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.0971	<0.00485	<0.0971	<0.0971	<0.0971
	09/23/08	<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
	01/07/09	<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
	03/20/09	<0.0971	<0.0971	<0.0971	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.00485	<0.00485	<0.00485	<0.0971	<0.0971	<0.00485	<0.0971	<0.0971	<0.0971
	09/17/09	<0.0962	<0.0962	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.0962	<0.00481	<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
	06/25/08	<0.0962	<0.0962	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.0962	<0.00481	<0.0962	<0.0962	<0.0962
	09/24/08	<0.0962	<0.0962	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.0962	<0.00481	<0.0962	<0.0962	<0.0962
	01/07/09	<0.0943	<0.0943	<0.0943	<0.0943	<0.00472	<0.00472	<0.00472	<0.0943	<0.00472	<0.00472	<0.00472	<0.0943	<0.0943	<0.00472	<0.0943	<0.0943	<0.0943
	03/20/09	<0.0962	<0.0962	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.0962	<0.00481	<0.0962	<0.0962	<0.0962
	09/17/09	<0.0962	<0.0962	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.0962	<0.00481	<0.0962	<0.0962	<0.0962
U-29A	01/29/08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	03/20/09	**105**	**18.4**	<9.95	<14.9	**1.08**	**0.792**	<0.597	**4.80**	<0.199	**2.35**	**0.541**	<9.95	**42.8**	**0.436**	<9.95	**62.4**	**24.9**
	09/17/09	**63.9**	<10.1	<10.1	<10.1	**0.330**	**0.226**	<0.152	**1.50**	<0.0505	**0.788**	**0.151**	<10.1	**13.7**	**0.116**	<10.1	**19.0**	**4.73**

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TABLE 6
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)
Portland Harbor Joint Source Control Screening Level Values																		
EPA's 2004 NRWQC (organism only)		--	990	--	40,000	0.018	0.018	0.018	--	0.018	0.018	0.018	140	5,300	0.018	--	--	4,000
DEQ's 2004 AWQC (organism only)		--	990	--	40,000	0.018	0.018	0.018	--	0.018	0.018	0.018	140	5,300	0.018	--	--	4,000
EPA's 2004 NRWQC ecological receptors (chronic)		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DEQ's 2004 AWQC ecological receptors (chronic)		--	520	--	--	--	--	--	--	--	--	--	--	--	--	620	--	--

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 and revised in July 2007.
Bold face font indicates analyte was detected above the laboratory MRL or MDL
-- = Not analyzed
NS = Not sampled
NA = Not available
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 7
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)	Manganese (µg/l)	Mercury (µg/l)	Selenium (µg/l)	Silver (µg/l)	Zinc (µg/l)
CHEVRON																			
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
	06/26/08	--	--	--	**0.270**	**0.630**	**0.230**	**1.74**	<1.00	**36.7**	**0.388**	**10.0**	**16.2**	**6.05**	**4,110**	<0.200	**0.146**	<1.00	**32.0**
	03/18/09	**928**	**63,100**	**1,730**	<1.00	<5.00	<5.00	<15.00	<5.00	**39.8**	<5.00	**14.0**	**18.2**	**4.84**	**4,590**	**0.0170**	<5.00	<1.00	**35.1**
dup	03/18/09	**920**	**33,900**	**816**	**0.340**	<1.00	<1.00	<3.00	<1.00	**40.7**	<5.00	**22.2**	**31.3**	**8.40**	**4,110**	**0.0590**	<5.00	<1.00	**56.0**
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**
	06/26/08	--	--	--	**7.66**	**0.850**	**64.8**	**6.56**	<1.00	**34.6**	**4.02**	**6.21**	**14.1**	**13.5**	**4,060**	<0.200	**0.113**	<1.00	**219**
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**
	06/26/08	--	--	--	**0.280**	**0.900**	<1.00	**0.930**	<1.00	**33.9**	**0.386**	**6.21**	**16.3**	**10.1**	**3,460**	<0.200	**0.093**	<1.00	**246**
	03/18/09	**408**	**35,500**	**1,570**	0.210	<1.00	<1.00	<3.00	<1.00	**61.7**	<5.00	**39.2**	**116**	**70.1**	**4,380**	**0.110**	<5.00	<1.00	**2,520**
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
	06/26/08	--	--	--	<0.200	<1.00	<1.00	<3.00	<1.00	**1.13**	**0.109**	**0.876**	**1.37**	**1.40**	**463**	<0.200	<0.500	<1.00	**11.7**
	09/26/08	--	--	--	<0.200	<1.00	<1.00	<3.00	<1.00	**1.82**	<0.500	**3.63**	**6.21**	**4.38**	**594**	<0.200	**0.267**	<1.00	**18.4**
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**
	06/24/08	<80.0	<240	<481	<0.200	<1.00	<1.00	<3.00	<1.00	**158**	<0.500	**0.500**	**0.743**	**0.791**	**6,900**	<0.200	**0.389**	<1.00	**7.77**
	09/23/08	<80.0	<243	<485	<0.200	<1.00	<1.00	<3.00	<1.00	**152**	**0.153**	**0.531**	**1.32**	**0.351**	**7,010**	<0.200	**0.954**	<1.00	**2.89**
	01/06/09	<80.0	**287**	<490	<0.200	<1.00	<1.00	<3.00	<1.00	**136**	**0.170**	**14.8**	**15.6**	**8.35**	**7,840**	<0.200	**0.170**	<1.00	**49.4**
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
	06/24/08	<80.0	<240	<481	<0.200	<1.00	<1.00	<3.00	<1.00	**7.70**	<0.500	<2.00	**0.795**	**0.606**	**560**	<0.200	**1.01**	<1.00	**6.55**
	09/23/08	<80.0	<243	<485	<0.200	<1.00	<1.00	<3.00	<1.00	**6.78**	**0.111**	**0.526**	**2.79**	**1.06**	**315**	<0.200	**1.20**	<1.00	**14.5**
	01/06/09	<80.0	<245	<490	<0.200	<1.00	<1.00	<3.00	<1.00	**7.42**	**0.120**	**1.18**	**1.60**	**2.20**	**446**	<0.200	<0.500	<1.00	**18.4**
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**
	06/25/08	**9,760**	**2,330**	<485	**10.8**	**6.40**	**1,300**	**115**	<10.0	**32.0**	**0.746**	**37.6**	**64.5**	**67.5**	**4,480**	**0.106**	**0.588**	**0.221**	**132**
	09/25/08	**10,200**	**2,630**	**344**	**7.80**	**6.80**	**1,410**	**121**	<10.0	**26.8**	<5.00	**33.3**	**64.3**	**58.3**	**4,350**	**0.0906**	<5.00	<10.0	**139**
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
	06/25/08	**39.7**	<243	<485	<0.200	<1.00	**0.0800**	<3.00	<1.00	**3.83**	**0.127**	<2.00	<2.00	<1.00	**3,630**	<0.200	<0.500	<1.00	**2.30**
	09/25/08	<80.0	<245	<490	<0.200	<1.00	**0.150**	<3.00	<1.00	**4.38**	<5.00	<20.0	<20.0	<10.0	**3,850**	<0.200	<5.00	<10.0	<50.0
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
	06/25/08	<80.0	<243	<485	<0.200	**0.120**	**0.320**	<3.00	<1.00	**0.491**	**0.539**	**0.45**	**1.74**	**1.76**	**246**	<0.200	<0.500	<1.00	**29.3**
	09/25/08	**97.7**	<245	<490	<0.200	<1.00	**7.23**	**0.610**	<1.00	**0.826**	<0.500	<2.00	**1.01**	**0.429**	**400**	<0.200	**0.939**	<1.00	**5.89**

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TABLE 7
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)	Manganese (µg/l)	Mercury (µg/l)	Selenium (µg/l)	Silver (µg/l)	Zinc (µg/l)
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
	06/26/08	**2,070**	**837**	<485	<0.200	**0.350**	**5.05**	**1.18**	<1.00	**21.7**	**0.069**	**3.26**	**4.26**	**2.96**	**3,750**	<0.200	**0.0970**	<1.00	**13.0**
	09/25/08	**2,540**	**726**	<490	<1.00	**0.700**	**13.8**	**1.90**	<5.00	**33.2**	<5.00	**27.8**	**43.1**	**16.9**	**4,790**	<0.200	**1.49**	<10.0	**79.3**
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
	06/26/08	<80.0	<243	<485	<0.200	<1.00	<1.00	<3.00	<1.00	**8.23**	**0.179**	**3.40**	**5.72**	**3.93**	**4,500**	<0.200	<0.500	<1.00	**19.4**
	09/25/08	<80.0	<245	<490	<0.200	<1.00	<1.00	<3.00	<1.00	**15.7**	<5.00	**11.6**	**24.4**	**11.5**	**6,480**	<0.200	**0.900**	<10.0	**64.3**
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
	06/26/08	**566**	**986**	<485	<0.200	<1.00	**0.160**	**0.320**	<1.00	**20.9**	**0.366**	**23.6**	**39.9**	**23.7**	**3,400**	**0.0924**	**0.364**	<1.00	**86.5**
	09/24/08	**707**	**502**	<480	**0.0900**	**0.140**	**0.370**	**0.360**	<1.00	**19.1**	<5.00	**10.0**	**18.6**	**8.71**	**3,450**	<0.200	**1.00**	<10.0	**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
	06/26/08	<80.0	<238	<476	<0.200	<1.00	<1.00	<3.00	<1.00	**10.9**	**0.101**	<2.00	<2.00	<1.00	**6,020**	<0.200	<0.500	<1.00	**2.67**
	09/24/08	<80.0	<245	<490	<0.200	<1.00	<1.00	<3.00	<1.00	**20.5**	**0.283**	**1.85**	**4.68**	**2.14**	**8,070**	<0.200	**1.38**	<1.00	**17.4**
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
	06/26/08	**697**	**5,080**	**380**	**0.110**	**0.130**	<1.00	**0.470**	<1.00	**8.04**	**0.091**	**5.97**	**8.34**	**3.98**	**1,630**	<0.200	**0.0840**	**0.586**	**19.7**
	09/24/08	**328**	**4,230**	**292**	<0.400	<2.00	<2.00	<6.00	<2.00	**20.3**	<5.00	<20.0	**5.97**	<10.0	**2,530**	<0.200	<5.00	<10.0	**11.4**
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
	06/26/08	<80.0	<243	<485	<0.200	<1.00	<1.00	<3.00	<1.00	**102**	**0.239**	**0.651**	**0.394**	**0.489**	**8,170**	<0.200	<0.500	<1.00	**13.3**
	09/24/08	<80.0	<245	<490	<0.200	<1.00	**0.160**	<3.00	<1.00	**95.9**	<5.00	<20.0	**4.00**	<10.0	**8,650**	<0.200	<5.00	<10.0	**15.5**
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
	06/26/08	**251**	**3,630**	**483**	<0.200	<1.00	<1.00	<3.00	<1.00	**3.40**	<0.500	**0.972**	**2.76**	**1.19**	**885**	<0.200	**0.105**	<1.00	**8.38**
	09/24/08	**132**	**3,050**	**305**	<0.400	<2.00	<2.00	<6.00	<2.00	**3.21**	<0.500	**1.36**	**3.92**	**0.928**	**1,110**	<0.200	**0.198**	<1.00	**9.55**
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
	06/26/08	<80.0	<243	<485	<0.200	<1.00	<1.00	<3.00	<1.00	**62.4**	**0.411**	**0.597**	**1.37**	**0.891**	**9,280**	<0.200	<0.500	<1.00	**5.15**
	09/24/08	<80.0	<245	<490	<0.400	<2.00	<2.00	<6.00	<2.00	**57.6**	<5.00	<20.0	**3.05**	<10.0	**9,760**	<0.200	<5.00	<10.0	**7.83**
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**
	06/26/08	<80.0	<243	<485	<0.200	<1.00	<1.00	<3.00	<1.00	**3.40**	**1.38**	**0.588**	**1.97**	**2.20**	**771**	<0.200	<0.500	<1.00	**66.9**
	09/24/08	<80.0	<245	<490	<0.200	<1.00	**0.0800**	<3.00	<1.00	**10.2**	**0.082**	**6.44**	**17.0**	**12.3**	**1,120**	<0.200	**0.988**	<1.00	**27.9**

COP0018307

TABLE 7
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)	Manganese (µg/l)	Mercury (µg/l)	Selenium (µg/l)	Silver (µg/l)	Zinc (µg/l)
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**
	06/24/08	<250	**14**	**59**	**0.060**	**0.11**	<0.042	<0.0115	<0.070	**8.73**	**0.085**	**3.62**	**5.29**	**2.64**	**2,050**	**0.00504**	<0.2	**0.036**	**13.8**
dup	06/24/08	<250	<11	**29**	<0.045	**0.090**	<0.042	<0.0115	<0.070	**8.40**	**0.084**	**3.34**	**5.23**	**2.67**	**2,060**	**0.00451**	**0.6**	**0.030**	**13.3**
	09/23/08	<250	**15**	**77**	<0.50	<0.50	<0.50	<1.00	<0.50	**5.65**	**0.084**	**1.42**	**3.68**	**2.59**	**1,120**	**0.00329**	**0.7**	**0.009**	**22.0**
	01/05/09	<80	<236	<472	<0.200	<1.00	<1.00	<1.00	<1.00	**9.2**	<0.500	<2.00	**2.51**	<1.00	**1,980**	**0.00158**	<0.500	<1.00	**6.00**
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**
	06/24/08	<250	**20**	**86**	**0.050**	**0.070**	<0.042	<0.0115	<0.070	**5.50**	**0.088**	**4.17**	**10.5**	**6.17**	**1,180**	**0.00988**	**0.5**	**0.030**	**23.9**
	09/23/08	**24**	**16**	**39**	<0.50	<0.50	<0.50	<1.00	<0.50	**2.91**	**0.076**	**2.89**	**5.22**	**6.17**	**1,120**	**0.00917**	**0.5**	**0.009**	**28.4**
	01/05/09	<80	<238	<476	<0.200	<1.00	<1.00	<1.00	<1.00	**7.47**	<0.500	**8.76**	**11.6**	**2.95**	**1,480**	**0.00449**	<0.500	<1.00	**36.1**
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**
	06/24/08	<250	<11	**55**	<0.045	**0.060**	<0.042	<0.0115	<0.070	**20.7**	**0.091**	**2.35**	**5.00**	**1.80**	**8,600**	**0.00477**	<0.2	**0.019**	**14.0**
	09/23/08	<250	**16**	**42**	<0.50	**0.050**	<0.50	<1.00	<0.50	**15.4**	**0.036**	**0.91**	**2.69**	**1.07**	**8,160**	**0.00741**	**1.1**	**0.009**	**14.8**
	01/05/09	<80	<243	<485	<0.200	<1.00	<1.00	<1.00	<1.00	**37.5**	<0.500	<2.00	<2.00	<1.00	**10,500**	**0.00457**	**0.827**	<1.00	<5.00
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**	**15**	**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**
	06/24/08	<250	**14**	**78**	**0.050**	**0.060**	<0.042	<0.0115	<0.070	**1.09**	**0.068**	**0.800**	**4.32**	**3.12**	**784**	**0.00243**	**1.0**	**0.010**	**10.3**
	09/23/08	<250	**25**	**120**	<0.50	<0.50	<0.50	<1.00	<0.50	**0.76**	**0.106**	**0.49**	**3.93**	**2.69**	**711**	**0.00177**	**0.4**	**0.009**	**10.7**
	01/05/09	<80	<245	<490	<0.200	<1.00	<1.00	<1.00	<1.00	<1.00	<0.500	<2.00	**3.05**	<1.00	**676**	**0.00200**	<0.500	<1.00	**8.64**
dup	01/05/09	<80	<238	<476	<0.200	<1.00	<1.00	<1.00	<1.00	<1.00	<0.500	<2.00	**2.25**	<1.00	**669**	**0.00107**	<0.500	<1.00	<5.00
CONOCOPHILLIPS																			
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**	--	**0.170**	--	--	**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**
	06/25/08	<80.0	<236	<472	<0.200	<0.500	<0.500	<1.00	<2.00	**5.77**	**0.586**	**2.40**	**2.40**	**1.24**	**1,500**	<0.200	<0.500	<1.00	**9.87**
	09/24/08	<80.0	<243	<485	<0.200	<1.00	<1.00	<3.00	<1.00	**12.2**	<1.00	**56.5**	**55.3**	**15.3**	**1,990**	<0.200	**1.85**	<2.00	**122**
dup	09/24/08	<80.0	<243	<485	<0.200	<1.00	<1.00	<3.00	<1.00	**9.45**	**2.55**	**39.5**	**39.7**	**10.8**	**1,890**	<0.200	**1.62**	<2.00	**99.9**
	01/07/09	<80.0	<250	<500	<0.200	<1.00	<1.00	<3.00	<1.00	**6.04**	**5.71**	**13.3**	**15.9**	**8.20**	**1,320**	<0.200	**0.590**	<1.00	**64.0**
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**
	06/25/08	<80.0	<236	<472	<0.200	<0.500	<0.500	<1.00	<2.00	**3.25**	<0.500	<2.00	<2.00	<1.00	**1,660**	<0.200	<0.500	<1.00	**24.6**
	09/23/08	<80.0	<238	<476	<0.200	<1.00	<1.00	<3.00	<1.00	**12.1**	<5.00	<20.0	**31.0**	**8.08**	**1,830**	<0.200	<5.00	<1.00	**64.0**
	01/07/09	<80.0	<250	<500	<0.200	<1.00	<1.00	<3.00	<1.00	**3.66**	<0.500	<2.00	<2.00	**1.54**	**1,350**	<0.200	<0.500	<1.00	**21.7**

COP0018308

TABLE 7
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)	Manganese (µg/l)	Mercury (µg/l)	Selenium (µg/l)	Silver (µg/l)	Zinc (µg/l)
Portland Harbor Joint Source Control Screening Level Values																			
EPA's 2004 NRWQC (organism only)		--	--	--	51	15,000	2,100	--	--	0.14	--	--	--	--	100	--	4,200	--	26,000
DEQ's 2004 AWQC (organism only)		--	--	--	51	15,000	2,100	--	--	0.14	--	--	--	--	100	0.146	4,200	--	26,000
EPA's 2004 NRWQC ecological receptors (chronic)		--	--	--	--	--	--	--	--	150	0.094	--	2.7	0.54	--	0.77	5	--	36
DEQ's 2004 AWQC ecological receptors (chronic)		--	--	--	--	--	--	--	--	--	0.38	--	3.6	0.54	--	0.012	35	0.12	33
Oak Ridge National Lab (Tier II SCV)		--	--	--	130	9.8	7.3	--	--	3.1	--	--	--	--	120	1.3	--	0.36	--

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 and revised in July 2007.
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

COP0018309

TABLE 8
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-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**
	06/26/08	<0.952	**2.83**	<0.952	<3.81	**0.0473**	**0.0235**	**0.0193**	<0.0952	**0.0117**	**0.118**	**0.00480**	<0.952	**8.35**	**0.0154**	<2.86	**18.7**	**0.322**
	03/18/09	<0.985	**1.59**	<0.985	<0.985	**0.0132**	**0.00630**	<0.00493	<0.0985	<0.00493	**0.0397**	<0.00493	<0.985	**5.41**	<0.00493	<0.985	**7.71**	**0.234**
dup	03/18/09	<0.485	**1.69**	<0.971	<1.46	**0.0403**	**0.0187**	**0.0130**	<0.0971	**0.0115**	**0.103**	<0.00485	<0.485	**9.63**	**0.0114**	**<1.21**	**11.4**	**0.591**
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
	06/26/08	**1.87**	**0.412**	<0.190	<0.190	**0.0407**	**0.0301**	**0.0603**	<0.190	**0.0415**	**0.0763**	**0.0130**	**0.163**	**0.324**	**0.0399**	**1.24**	**0.357**	**0.218**
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
	06/26/08	<0.476	**1.28**	<0.476	<0.476	**0.0855**	**0.0864**	**0.148**	<0.476	**0.0980**	**0.208**	**0.0307**	**0.450**	**2.93**	**0.0955**	<0.952	**2.86**	**0.475**
	03/18/09	<1.94	**3.17**	<1.94	<1.94	**0.418**	**0.370**	**0.615**	<1.94	**0.505**	**1.01**	**0.111**	**2.14**	**12.7**	**0.363**	<1.94	**13.5**	**3.22**
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
	06/26/08	<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
	09/26/08	<0.0962	<0.0962	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.0962	<0.00481	<0.0962	<0.0962	<0.0962
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
	06/24/08	<0.0985	<0.0985	<0.0985	<0.0985	**0.0238**	**0.0271**	**0.0326**	<0.0985	**0.0283**	**0.0394**	**0.0101**	**0.0583**	**0.0849**	**0.0267**	<0.0985	**0.0720**	**0.0583**
	09/23/08	<0.0952	<0.0952	<0.0952	<0.0952	**0.0144**	**0.0150**	**0.0142**	<0.0952	**0.0158**	**0.0221**	**0.00510**	<0.0952	**0.0574**	**0.0129**	<0.0952	<0.0952	<0.0952
	01/06/09	<0.0980	<0.0980	<0.0980	<0.0980	**0.0146**	**0.0151**	**0.0199**	<0.0980	**0.0162**	**0.0254**	**0.00513**	**0.0518**	**0.0508**	**0.0171**	<0.0980	<0.0980	<0.0980
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
	06/24/08	<0.0971	<0.0971	<0.0971	<0.0971	**0.101**	**0.125**	**0.148**	**0.141**	**0.142**	**0.173**	**0.0455**	**0.200**	<0.0971	**0.126**	<0.0971	**0.129**	**0.198**
	09/23/08	<0.0952	<0.0952	<0.0952	<0.0952	**0.0948**	**0.0996**	**0.104**	**0.105**	**0.0911**	**0.140**	**0.0344**	**0.215**	<0.0952	**0.0928**	<0.0952	**0.130**	**0.240**
	01/06/09	<0.0971	<0.0971	<0.0971	**0.0693**	**0.238**	**0.334**	**0.377**	**0.327**	**0.334**	**0.404**	**0.101**	**0.506**	<0.0971	**0.292**	<0.0971	**0.442**	**0.329**
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
	06/25/08	**55.3**	**0.448**	<0.476	<0.476	<0.0238	<0.0238	<0.0238	<0.476	<0.0238	**0.0262**	<0.0238	<0.476	**0.535**	<0.0238	**177**	**0.399**	<0.476
	09/25/08	**55.6**	**0.422**	<0.481	<0.481	**0.0268**	<0.0240	<0.0240	<0.481	<0.0240	**0.0307**	<0.0240	<0.481	**0.557**	<0.0240	**184**	**0.442**	<0.481
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
	06/25/08	<0.192	<0.192	<0.192	<0.192	<0.00962	<0.00962	<0.00962	<0.192	<0.00962	<0.00962	<0.00962	<0.192	<0.192	<0.00962	<0.192	<0.192	<0.192
	09/25/08	<0.0962	<0.0962	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00481	**0.00498**	<0.00481	<0.0962	<0.0962	<0.00481	<0.0962	<0.0962	<0.0962
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
	06/25/08	<0.0952	<0.0952	<0.0952	<0.0952	**0.0494**	**0.0421**	**0.0517**	<0.0952	**0.0478**	**0.0649**	**0.0131**	**0.102**	<0.0952	**0.0345**	<0.0952	<0.0952	**0.119**
	09/25/08	**0.0783**	<0.0962	<0.0962	<0.0962	**0.0171**	**0.00854**	**0.0129**	<0.0962	**0.00891**	**0.0203**	<0.00481	<0.0962	<0.0962	**0.00713**	**0.481**	<0.0962	<0.0962

COP0018310

TABLE 8
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 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
	06/26/08	**10.9**	**0.473**	<0.0952	**0.0707**	**0.00636**	<0.00476	<0.00476	**0.0952**	<0.00476	**0.00733**	<0.00476	**0.0479**	**0.574**	<0.00476	**2.51**	**0.873**	**0.0621**
	09/25/08	**11.2**	**0.723**	<0.144	**0.0654**	**0.0148**	<0.00481	<0.00481	<0.0962	<0.00481	**0.0167**	<0.00481	**0.0653**	**0.685**	<0.00481	<4.33	**0.990**	**0.103**
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
	06/26/08	<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
	09/25/08	<0.0962	<0.0962	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.0962	<0.00481	<0.0962	<0.0962	<0.0962
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**	**0.00658**	<0.293	**0.550**	<0.0976
	06/26/08	<0.0952	**0.811**	<0.190	**0.0838**	**0.0117**	**0.00653**	<0.00476	<0.0952	<0.00476	**0.0154**	<0.00476	<0.0952	**1.15**	<0.00476	<0.857	**1.15**	**0.115**
	09/24/08	<0.0962	**0.602**	<0.0962	<0.0962	**0.0170**	**0.0104**	**0.00658**	<0.0962	**0.00622**	**0.0253**	<0.00481	<0.0962	**0.921**	**0.00599**	<0.817	**0.427**	**0.130**
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
	06/26/08	<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
	09/24/08	<0.0962	<0.0962	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.0962	<0.00481	<0.0962	<0.0962	<0.0962
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
	06/26/08	<0.0952	**1.50**	<0.952	<0.190	**0.0205**	**0.0148**	**0.00918**	<0.0952	**0.00794**	**0.0331**	<0.00476	<0.0952	**6.63**	**0.00892**	<0.952	**1.69**	**0.0977**
	09/24/08	<0.481	**1.23**	<0.481	<0.481	<0.0240	<0.0240	<0.0240	<0.481	<0.0240	**0.0257**	<0.0240	<0.481	**5.90**	<0.0240	<1.20	**1.34**	<0.481
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
	06/26/08	<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
	09/24/08	<0.0962	<0.0962	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.0962	<0.00481	<0.0962	<0.0962	<0.0962
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
	06/26/08	<0.0952	**0.396**	<0.0952	<0.190	**0.00625**	<0.00476	<0.00476	<0.0952	<0.00476	**0.0101**	<0.00476	<0.0952	**1.41**	<0.00476	<0.381	**0.445**	<0.0952
	09/24/08	<0.192	**0.746**	<0.192	<0.192	<0.0192	<0.00962	<0.00962	<0.192	<0.00962	<0.0192	<0.00962	<0.192	**2.56**	<0.00962	<0.865	**0.646**	<0.192
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
	06/26/08	<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
	09/24/08	<0.0962	<0.0962	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.0962	<0.00481	<0.0962	<0.0962	<0.0962
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
	06/26/08	<0.0952	<0.0952	<0.0952	<0.0952	**0.00614**	**0.00780**	**0.00869**	<0.0952	**0.00884**	**0.00964**	<0.00476	<0.0952	<0.0952	**0.00737**	<0.0952	<0.0952	<0.0952
	09/24/08	<0.0962	<0.0962	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.0962	<0.00481	<0.0962	<0.0962	<0.0962

COP0018311

TABLE 8
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)
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
	06/24/08	**0.0063**	<0.0044	<0.0034	**0.0076**	**0.0038**	<0.0043	<0.0023	**0.0031**	<0.0025	<0.0034	<0.0025	<0.0044	**0.0077**	<0.0026	**0.058**	**0.011**	**0.0036**
dup	06/24/08	**0.0074**	<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	**0.036**	<0.0050	<0.0035
	09/23/08	**0.0072**	<0.0044	<0.0034	<0.0036	<0.0026	<0.0043	<0.0023	<0.0029	<0.0025	<0.0034	<0.0025	<0.0044	**0.0062**	<0.0026	**0.046**	<0.0050	<0.0035
	01/05/09	<0.0930	<0.0930	<0.0930	<0.0930	<0.00465	<0.00465	<0.00465	<0.0930	<0.00465	<0.00465	<0.00465	<0.0930	<0.0930	<0.00465	<0.0930	<0.0930	<0.0930
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
	06/24/08	<0.0023	<0.0044	<0.0034	<0.0036	<0.0026	<0.0043	<0.0023	**0.0042**	<0.0025	<0.0034	<0.0025	<0.0044	<0.0038	**0.0028**	**0.032**	<0.0050	<0.0035
	09/23/08	<0.0023	<0.0044	<0.0034	<0.0036	<0.0026	<0.0043	<0.0023	<0.0029	<0.0025	<0.0034	<0.0025	<0.0044	**0.017**	<0.0026	<0.0030	<0.0050	<0.0035
	01/05/09	<0.0909	<0.0909	<0.0909	<0.0909	<0.00455	<0.00455	<0.00455	<0.0909	<0.00455	<0.00455	<0.00455	<0.0909	<0.0909	<0.00455	<0.0909	<0.0909	<0.0909
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
	06/24/08	**0.0070**	<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	**0.031**	**0.0065**	<0.0035
	09/23/08	**0.0090**	<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	**0.013**	**0.0083**	<0.0035
	01/05/09	<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	<0.0990	<0.0990	<0.0990
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
	06/24/08	**0.0094**	<0.0046	**0.0073**	<0.0038	**0.0044**	<0.0045	<0.0024	**0.0031**	<0.0027	<0.0036	<0.0027	<0.0046	<0.0040	<0.0028	**0.091**	**0.012**	<0.0037
	09/23/08	<0.0023	**0.0057**	**0.011**	<0.0038	<0.0026	<0.0043	<0.0023	<0.0029	<0.0025	<0.0034	<0.0025	<0.0044	<0.0038	<0.0026	**0.016**	<0.0050	<0.0035
	01/05/09	<0.0909	<0.0909	<0.0909	<0.0909	<0.00455	<0.00455	<0.00455	<0.0909	<0.00455	<0.00455	<0.00455	<0.0909	<0.0909	<0.00455	<0.0909	<0.0909	<0.0909
dup	01/05/09	<0.0909	<0.0909	<0.0909	<0.0909	<0.00455	<0.00455	<0.00455	<0.0909	<0.00455	<0.00455	<0.00455	<0.0909	<0.0909	<0.00455	<0.0909	<0.0909	<0.0909
CONOCOPHILLIPS																		
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
	06/25/08	**0.224**	<0.0962	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.0962	<0.00481	<0.0962	<0.0962	<0.0962
	09/24/08	**0.230**	**0.103**	<0.0962	<0.0962	<0.00481	<0.00481	<0.00481	<0.0962	<0.00481	**0.00683**	<0.00481	<0.0962	**0.145**	<0.00481	<0.144	<0.0962	<0.0962
	09/24/08	**0.457**	**0.110**	<0.0962	<0.0962	**0.00917**	**0.0111**	**0.00688**	<0.0962	**0.00647**	**0.0126**	<0.00481	<0.0962	**0.157**	**0.00651**	<0.144	**0.107**	<0.0962
	01/07/09	**0.413**	<0.0976	<0.0976	<0.0976	<0.00488	<0.00488	<0.00488	<0.0976	<0.00488	<0.00488	<0.00488	<0.0976	**0.116**	<0.00488	<0.146	**0.104**	<0.0976
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
	06/25/08	<0.0952	<0.0952	<0.0952	<0.0952	<0.00476	<0.00476	<0.00476	<0.0952	<0.00476	**0.00483**	<0.00476	<0.0952	<0.0952	<0.00476	<0.0952	<0.0952	<0.0952
	09/23/08	<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
	01/07/09	<0.0985	<0.0985	<0.0985	<0.0985	<0.00493	<0.00493	<0.00493	<0.0985	<0.00493	**0.00531**	<0.00493	<0.0985	<0.0985	<0.00493	<0.0985	<0.0985	<0.0985

COP0018312

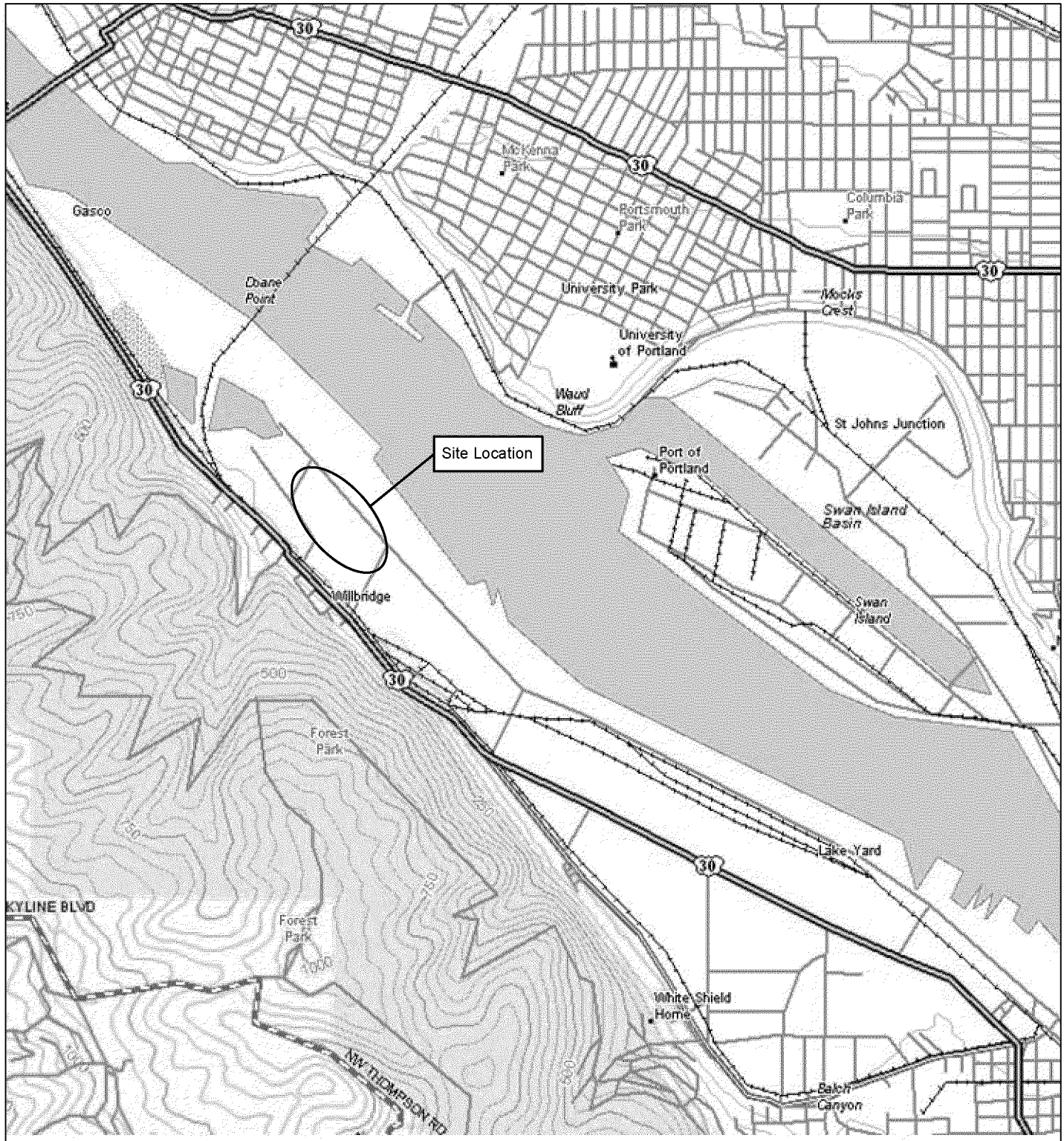
TABLE 8
GROUNDWATER SCREENING LEVEL COMPARISONS - DOCK AREA CLUSTER WELLS - PAHs
Willbridge Terminals
Portland, Oregon

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)
Portland Harbor Joint Source Control Screening Level Values																		
EPA's 2004 NRWQC (organism only)		--	990	--	40,000	0.018	0.018	0.018	--	0.018	0.018	0.018	140	5,300	0.018	--	--	4,000
DEQ's 2004 AWQC (organism only)		--	990	--	40,000	0.018	0.018	0.018	--	0.018	0.018	0.018	140	5,300	0.018	--	--	4,000
EPA's 2004 NRWQC ecological receptors (chronic)		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DEQ's 2004 AWQC ecological receptors (chronic)		--	520	--	--	--	--	--	--	--	--	--	--	--	--	620	--	--

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 and revised in July 2007.
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

COP0018313

FIGURES



REFERENCES

USGS 7.5 Minute Topographic Maps
Portland, Oregon-Washington
Linnton, Oregon
DeLorme TopoQuads, 1999
SCALE: 1 inch = 2,000 feet

North

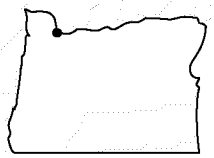


FIGURE 1

SITE LOCATION MAP

Willbridge Petroleum Terminals
Portland, Oregon

PROJECT NO. KMWB 10-01	DRAWN BY CRF 11/19/10
FILE NO.	PREPARED BY CRF 11/19/10
REVISION NO.	REVIEWED BY

DELTA

COP00183316

SHORELINE

CHEVRON

KINDER MORGAN

KINDER MORGAN

CONOCOPHILLIPS

NW FRONT AVENUE

FORMER TANK

MAINTENANCE BUILDING

FIRE WATER TANKS

FORMER 27-INCH STORM SEWER OUTFALL CUTOFF WALL

60-INCH STORM SEWER OUTFALL

60-INCH STORM SEWER CUTOFF WALL

MW-1 MW-2 MW-3 MW-4 MW-5 MW-6 MW-7 MW-8 MW-9 MW-10 MW-11 MW-12 MW-13 MW-14 MW-15 MW-16 MW-17 MW-18 MW-19 MW-20 MW-21 MW-22 MW-23 MW-24 MW-25 MW-26 MW-27 MW-28 MW-29 MW-30 MW-31 MW-32 MW-33 MW-34 MW-35 MW-36 MW-37 MW-38 MW-39 MW-40 MW-41B MW-41C MW-42B MW-42C

CR-1 CR-3 CR-4 (DAMAGED) CR-6 CR-7 CR-8 CR-8A CR-9 CR-10 CR-11 CR-12 CR-14 CR-15 CR-16 CR-17 CR-18 CR-19 CR-20 CR-21A CR-22A CR-23A CR-24A CR-25 CR-26 CR-27C CR-28A CR-29A CR-30A CR-31A CR-32A CR-32C CR-33

B-1 B-2 B-3 B-4 B-5 B-6 B-7 B-9A B-10 B-11 B-12 B-13 B-14 B-15 B-16 B-17 B-19 B-20 B-21 B-22A B-24 B-25 B-26 B-27 B-28 B-29 B-30 B-33 B-35 B-36 B-37 B-38 B-40 B-41A

EX-1 EX-39B

IT-E IT-W

OSN OSS

P-1A

RES-N RES-O

RW-1 RW-2 RW-3 RW-4 RW-5 RW-6

U-2 U-3 U-4 U-5 U-13 U-14 U-15 U-16 U-17 U-18 U-19 U-20 U-21 U-22A U-23 U-24A U-25 U-26 U-27 U-28 U-29A

GPW-1 GPW-2 GPW-3 GPW-4 GPW-5

DW-1 DW-2

EW-1 EW-2 EW-3 EW-4

U-5A

LEGEND

MW-15 MONITORING WELL LOCATION AND DESIGNATION

CR-4 DAMAGED, ABANDONED, OR MISSING WELL LOCATION AND DESIGNATION

NOTE: NOT ALL WELLS ARE PRESENTED ON THIS FIGURE. SEE FIGURES 4 AND 6 FOR ADDITIONAL WELLS IN THE DOCK AREA.

0 200

SCALE IN FEET

FIGURE 2

SITE PLAN

WILLBRIDGE TERMINALS
PORTLAND, OREGON

PROJECT NO.	PREPARED BY	DRAWN BY
KMWB10-01	CRF	CRF
DATE	REVIEWED BY	FILE NAME
11/18/10	TB	

DELTA

COP00183177

SHORELINE

NW FRONT AVENUE

CHEVRON

KINDER MORGAN

KINDER MORGAN

CONOCOPHILLIPS

FORMER TANK 67

MAINTENANCE BUILDING

FORMER 27-INCH STORM SEWER OUTFALL CUTOFF WALL

60-INCH STORM SEWER OUTFALL

60-INCH STORM SEWER CUTOFF WALL

*MW-42B (17.48)
*MW-42C (17.01)
MW-34 (20.56)
MW-33 (19.92)
MW-40 (20.19)
MW-36 (21.18)
*MW-41C (20.93)
*MW-41B (20.65)
MW-37 (20.83)
MW-39 (NM)
CR-32A (19.20)
CR-32C (15.52)
CR-33 (13.24)
CR-27C (15.89)
CR-26 (15.61)
B-20 (18.13)
U-22A (12.32)
U-24A (12.63)
CR-31A (19.07)
OSN
OSS
CR-1 (19.18)
B-9A (NM)
EW-1
EW-2
EW-3
EW-4
B-7 (18.35)
U-23 (16.38)
U-25 (16.27)
U-26 (12.42)
P-1A (12.18)
RW-5 (NM)
RW-6 (NM)
RW-1 (NM)
U-28 (13.40)
RW-2 (NM)
B-33 (18.04)
B-21 (19.04)
B-35 (18.09)
B-36 (16.48)
U-27 (17.26)
U-29A(16.62)
RW-3 (NM)
U-5 (17.42)
EX-39B (NM)
B-38 (16.79)
B-25 (NM)
EX-1 (18.41)
B-19 (19.26)
IT-W (18.68)
RW-4 (NM)
B-3 (17.52)
B-40 (17.62) 0.01
CR-30A (19.76)
B-10 (18.81)
B-2 (19.09)
B-1 (18.16)
B-15 (19.40)
B-22A (17.68)
IT-E (17.70)
B-26 (19.94)
B-14 (NM)
B-16 (19.17)
B-17 (18.97)
B-41A (17.72)
B-37 (16.87)
CR-29A (20.24)
CR-28B (21.49)
CR-28A (19.55)
DW-2 (NM)
RES-N (18.88)
CR-3 (20.35)
B-11 (20.17)
B-12 (20.18)
B-13
B-4 (17.35) 0.01
DW-1(16.71)
B-6 (19.10)
B-5 (18.73)
B-30 (20.67)
B-29 (20.98)
B-28 (19.88)
B-24 (19.36)
B-27 (18.66) 1.40
U-4 (19.58) 0.10
RES-O (NM)
U-2 (19.52)
U-21 (23.47)
U-3 (22.92)
U-20 (21.89)
U-15 (22.97) 0.02
U-17 (23.14) 0.02
U-13 (22.86) 0.76
U-14 (24.77)
U-16 (24.41) 0.02
CR-24A (23.43)
CR-6 (24.45) 0.01
CR-4 (DAMAGED)
CR-18
CR-16 (24.49)
CR-23A (24.85)
CR-17 (27.95)
CR-20 (28.15)
CR-22A (24.69)
U-19 (NM)
GPW-5 (24.58)
GPW-4 (NM)
GPW-3 (24.83) 0.01
GPW-2 (26.75)
GPW-1 (27.29)
CR-14 (30.06)
CR-15 (26.80) 0.23
CR-7 (26.12)
CR-19 (29.67) TRACE
CR-12 (30.94)
CR-10 (30.99) TRACE
CR-21A (NM)
CR-25 (28.02) 0.08
CR-8A (NM)
CR-8 (26.07)
CR-9 (30.92)
U-18 (26.84) SHEEN
U-5A (27.77) 0.04
MW-9 (27.87)
MW-10 (27.66)
MW-8 (27.34)
MW-7 (26.36) SHEEN
MW-20 (25.68)
MW-25 (24.31)
MW-26 (24.90)
MW-28 (29.15) SHEEN
MW-29 (22.95)
MW-5 (28.84)
MW-27 (31.33)
MW-31 (29.77) 0.01
MW-3 (29.17)
MW-4 (30.25)
MW-6 (29.72)
MW-11 (28.78)
MW-19 (30.45)
MW-24 (30.38) 0.02
MW-30 (31.54)
MW-12 (30.83)
MW-2 (30.13)
MW-32 (32.62)
MW-23 (31.81) SHEEN
MW-16 (31.26)
MW-35 (30.73)
MW-18 (32.04)
MW-1 (31.64)
MW-13 (33.84)
MW-14 (33.11)
MW-38 (32.45)
MW-15 (33.30)
MW-17 (31.74)
MW-22 (32.00)
MW-21 (UNABLE TO LOCATE)
CR-11 (32.83) SHEEN

0 200
SCALE IN FEET

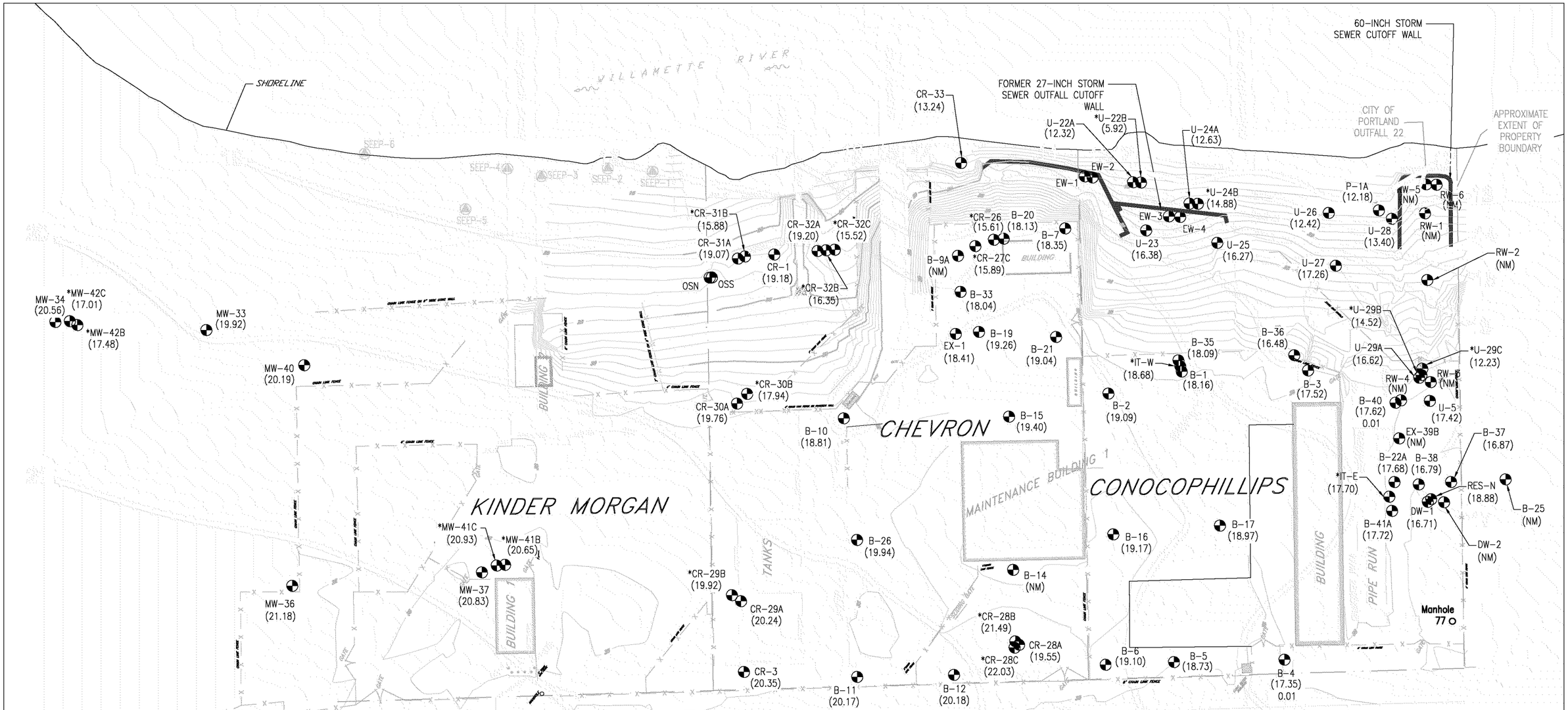
LEGEND

MW-24 — MONITORING WELL LOCATION AND DESIGNATION
CR-4 — DAMAGED, ABANDONED, OR MISSING WELL LOCATION AND DESIGNATION
(30.41) — GROUNDWATER ELEVATION, IN FEET, MEASURED ON 6/21/10 (RELATIVE TO CITY OF PORTLAND DATUM)
— GROUNDWATER ELEVATION CONTOUR, FEET
0.01 — SEPARATE PHASE HYDROCARBON THICKNESS, FEET
* — NOT USED IN CONTOURING

FIGURE 3
GROUNDWATER ELEVATION CONTOUR AND SPH THICKNESS MAP – SECOND QUARTER 2010

WILLBRIDGE TERMINALS
PORTLAND, OREGON

PROJECT NO.	PREPARED BY	DRAWN BY	
KMWB10-01	CRF	CRF	
DATE	REVIEWED BY	FILE NAME	DELTA
9/22/10	TB	GWM	



LEGEND

MW-36	MONITORING WELL
(21.18)	GROUNDWATER ELEVATION, MEASURED ON 6/21/10
	GROUNDWATER ELEVATION CONTOUR, FEET
(0.01)	SEPARATE PHASE HYDROCARBON THICKNESS, FEET
*	GROUNDWATER ELEVATION NOT USED TO CONSTRUCT CONTOURS
	FENCE LINE
	TOPOGRAPHIC CONTOUR LINES

North

0 80

SCALE IN FEET

FIGURE 4
GROUNDWATER ELEVATION CONTOURS – DOCK AREA
SECOND QUARTER 2010

WILLBRIDGE PETROLEUM TERMINALS
PORTLAND, OREGON

PROJECT NO.	PREPARED BY	DRAWN BY
KMWB 10-01	CRF	DR
DATE	REVIEWED BY	FILE NAME
10/18/10		PTWB01M2-Site

DELTA

COP00183191

SHORELINE

NW FRONT AVENUE

CHEVRON

KINDER MORGAN

KINDER MORGAN

CONOCOPHILLIPS

FORMER TANK 67

MAINTENANCE SHOPS

MAINTENANCE

*MW-42B (13.88)
*MW-42C (12.60)
MW-34 (19.77)
MW-33 (18.99)
MW-40 (18.59)
*MW-41C (17.65)
MW-36 (19.38)
MW-37 (20.38)
*MW-41B (17.50)
MW-39 (NM)
CR-32C (11.18)
CR-33 (10.79)
FORMER 27-INCH STORM SEWER OUTFALL CUTOFF WALL
CR-32A (18.42)
CR-27C (13.08)
CR-26 (11.51)
B-20 (17.67)
U-22A (7.57)
U-24A (10.84)
60-INCH STORM SEWER CUTOFF WALL
60-INCH STORM SEWER OUTFALL
CR-31A (18.38)
OSN
OSS
CR-1 (18.38)
B-9A (18.14)
EW-1
EW-2
EW-3
EW-4
B-7 (17.73)
U-23 (13.50)
U-25 (14.95)
U-26 (11.73)
P-1A (10.49)
RW-5 (NM)
RW-6 (NM)
RW-1 (NM)
U-28 (11.49)
RW-2 (NM)
B-33 (18.27)
B-21 (18.27)
B-35 (17.52)
B-36 (16.98)
U-27 (15.78)
EX-1 (20.60)
B-19 (18.41)
IT-W (18.11)
RW-4 (NM)
U-29A(17.20)
RW-3 (NM)
U-5 (NM)
EX-39B (NM)
CR-30A (18.88)
B-10 (18.82)
B-15 (18.48)
B-2 (18.31)
B-1 (17.52)
B-3 (16.88)
B-40 (17.00) 0.01
B-38 (16.19)
B-22A (17.10)
IT-E (NM)
B-25 (NM)
B-26 (18.91)
B-14 (NM)
B-16 (18.33)
B-17 (18.21)
B-41A (17.09)
B-37 (16.23)
CR-29A (19.14)
CR-28B (19.30)
CR-28A (18.62)
DW-2 (NM)
RES-N (18.27)
CR-3 (19.21)
B-11 (19.09)
B-12 (19.13)
B-13
B-4 (16.82) 0.01
DW-1(16.10)
B-6 (18.33)
B-5 (18.02)
B-30 (19.50)
B-29 (19.98)
B-28 (19.16)
B-24 (18.53)
B-27 (17.85) 0.45
U-4 (18.04) 0.21
RES-O (NM)
U-2 (19.51)
U-21 (21.04)
U-20 (21.73)
U-3 (21.73)
U-15 (21.59)
U-17 (21.66)
U-13 (21.19) 0.63
U-14 (22.87)
U-16 (22.56)
CR-24A (22.09)
CR-6 (22.62) 0.03
CR-18
CR-16 (22.87)
CR-23A (23.16)
CR-17 (25.94)
CR-20 (NM)
CR-22A (22.89)
U-19 (NM)
GPW-5 (22.79)
GPW-4 (22.58)
GPW-3 (23.59)
GPW-2 (23.72) 0.32
GPW-1 (22.24)
CR-14 (28.95)
CR-15 (24.50) 0.08
CR-7 (24.07)
U-18 (25.39)
CR-19 (28.75) 0.09
CR-12 (29.53)
CR-10 (29.06) 0.08
CR-21A (NM)
CR-25 (26.30) 0.02
CR-8A (NM)
U-5A (26.65) 0.62
CR-8 (25.64)
MW-9 (25.85)
MW-8 (25.04)
MW-7 (24.51) SHEEN
MW-20 (23.61)
MW-25 (22.29)
MW-26 (22.55)
MW-28 (27.30) SHEEN
MW-29 (21.40)
MW-5 (25.80)
MW-10 (25.18)
MW-27 (30.37)
MW-31 (27.92)
MW-3 (26.82)
MW-4 (27.69)
MW-24 (NM) SPH
MW-19 (28.99) 0.02
MW-30 (30.26)
MW-6 (27.49) SHEEN
MW-11 (27.15)
MW-2 (27.73)
MW-32 (31.97)
MW-12 (27.99)
MW-23 (30.75) 0.01
MW-16 (28.75)
MW-35 (28.73)
MW-18 (31.07)
MW-1 (29.72)
MW-13 (32.31)
MW-14 (30.87)
MW-38 (30.07)
MW-17 (30.99)
MW-22 (30.19)
MW-15 (29.76)
MW-21 (UNABLE TO LOCATE)
CR-11 (32.39)
CR-9 (30.07)

0 200
SCALE IN FEET

LEGEND

MW-1	⊕	MONITORING WELL LOCATION AND DESIGNATION
CR-4	⊘	DAMAGED, ABANDONED, OR MISSING WELL LOCATION AND DESIGNATION
(29.72)		GROUNDWATER ELEVATION, IN FEET, MEASURED ON 9/20/10 (RELATIVE TO CITY OF PORTLAND DATUM)
		GROUNDWATER ELEVATION CONTOUR, FEET
0.08		SEPARATE PHASE HYDROCARBON THICKNESS, FEET
*		NOT USED IN CONTOURING

FIGURE 5
GROUNDWATER ELEVATION CONTOUR AND SPH THICKNESS MAP – THIRD QUARTER 2010

WILLBRIDGE TERMINALS
PORTLAND, OREGON

PROJECT NO.	PREPARED BY	DRAWN BY
KMWB10-01	CRF	CRF
DATE	REVIEWED BY	FILE NAME
10/18/10	TB	GWM

DELTA

COP0018320

SHORELINE

WILLAMETTE RIVER

SEEP-6 SEEP-5 SEEP-4 SEEP-3 SEEP-2 SEEP-1

60-INCH STORM SEWER CUTOFF WALL

FORMER 27-INCH STORM SEWER OUTFALL CUTOFF WALL

CITY OF PORTLAND OUTFALL 22

APPROXIMATE EXTENT OF PROPERTY BOUNDARY

CR-33 (10.79)

EW-1 EW-2 EW-3 EW-4

U-22A (7.57) *U-22B (6.50) U-24A (10.84) *U-24B (10.95)

U-23 (13.50) U-25 (14.95) U-26 (11.73) U-27 (15.78)

P-1A (10.49) W-5 (NM) RW-6 (NM) U-28 (11.49) RW-1 (NM)

RW-2 (NM)

*CR-31B (11.73) CR-31A (18.38) CR-32A (18.42) *CR-32C (11.18) CR-1 (18.38) *CR-32B (12.54) OSN OSS

*CR-26 (11.51) B-20 (17.67) B-7 (17.73) B-9A (18.14) *CR-27C (13.08) BUILDING

B-33 (18.27)

EX-1 (20.60) B-19 (18.41) B-21 (18.27)

*U-29B (14.12) *U-29C (10.78) U-29A (17.20) RW-4 (NM) RW-5 (NM) U-5 (NM)

*B-36 (16.98) B-35 (17.52) *IT-W (18.11) B-1 (17.52) B-3 (16.88)

B-2 (18.31)

B-40 (17.00) 0.01

EX-39B (NM)

B-37 (16.23)

B-22A (17.10) B-38 (16.19) *IT-E (NM) RES-N (18.27) B-25 (NM) B-41A (17.09) DW-1 (16.10) DW-2 (NM)

Manhole 77

MW-34 (19.77) *MW-42C (12.60) *MW-42B (13.88)

MW-33 (18.99)

MW-40 (18.59)

*CR-30B (14.17) CR-30A (18.88)

B-10 (18.82) CHEVRON B-15 (18.48)

MAINTENANCE BUILDING 1

CONOCOPHILLIPS

BUILDING

PIPE RUN

*MW-41C (17.65) *MW-41B (17.50) MW-37 (20.38)

MW-36 (19.38)

BUILDING 1

TANKS

*CR-29B (18.37) CR-29A (19.14)

B-26 (18.91)

B-14 (NM)

*CR-28B (19.30) CR-28A (18.62) *CR-28C (20.18)

B-16 (18.33) B-17 (18.21)

B-6 (18.33) B-5 (18.02) B-4 (16.82) 0.01

CR-3 (19.21) B-11 (19.09) B-12 (19.13)

KINDER MORGAN

LEGEND

MW-36	MONITORING WELL
(19.38)	GROUNDWATER ELEVATION, MEASURED ON 9/20/10
	GROUNDWATER ELEVATION CONTOUR, FEET
(0.01)	SEPARATE PHASE HYDROCARBON THICKNESS, FEET
*	GROUNDWATER ELEVATION NOT USED TO CONSTRUCT CONTOURS
	FENCE LINE
	TOPOGRAPHIC CONTOUR LINES

North

0 80

SCALE IN FEET

FIGURE 6
GROUNDWATER ELEVATION CONTOURS – DOCK AREA
THIRD QUARTER 2010

WILLBRIDGE PETROLEUM TERMINALS
PORTLAND, OREGON

PROJECT NO.	PREPARED BY	DRAWN BY
KMWB 10-01	CRF	DR
DATE	REVIEWED BY	FILE NAME
10/18/10		DOCK AREA

DELTA

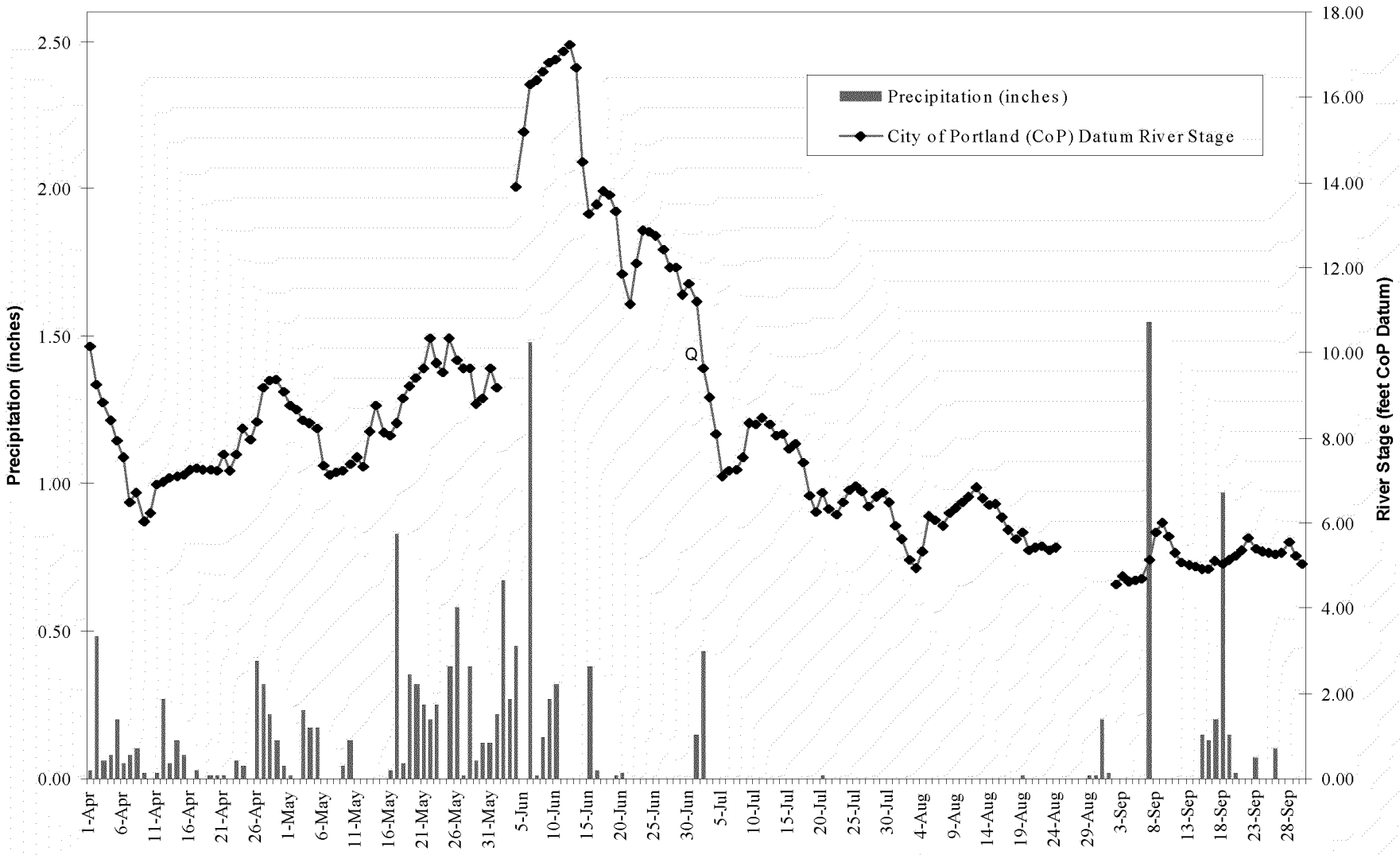


FIGURE 7

PRECIPITATION AND RIVER STAGE
(APRIL 2010 TO OCTOBER 2010)

Willbridge Terminal
Portland, Oregon

Sources:

Precipitation data from Preliminary Climatology Data at National Weather Service Forecast Office, Portland, Oregon.

River stage data from United States Geological Survey (USGS) National Water Information System:
Station 14211720 Willamette River at Portland, Oregon
(Location--Lat 45° 31'07", long 122° 40'00", in NW 1/4 NE 1/4 sec.3, T.1 S., R.1 E., Multnomah County, Hydrologic Unit 17090012, in pier at east end of drawspan, on upstream side of Morrison Bridge, in Portland, and at mile 12.8.) USGS elevation is adjusted to City of Portland Datum using a correction of +2.925 feet.

PROJECT NO. KMWB-10-01	DRAWN BY CRF 10/12/10
FILE NO. WTG	PREPARED BY CRF 10/12/10
REVISION NO. 0	REVIEWED BY JE 10/28/10

DELTA

APPENDIX A

CERTIFIED ANALYTICAL LABORATORY REPORTS AND CHAIN-OF-CUSTODY DOCUMENTATION (CD ONLY)

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

PORTLAND, OR 9405 S.W. NIMBUS AVENUE
BEAVERTON, OR 97008-7132
ph: (503) 906.9200 fax: (503) 906.9210

ORELAP#: OR100021

October 08, 2010

Jason Nail
ARCADIS U.S., Inc
111 SW Columbia Street - Suite 725
Portland, OR 97201

RE: Chevron - RI Well Subset

Enclosed are the results of analyses for samples received by the laboratory on 09/22/10 16:28. The following list is a summary of the Work Orders contained in this report, generated on 10/08/10 18:53.

If you have any questions concerning this report, please feel free to contact me.

Work Order	Project	ProjectNumber
PTI0748	Chevron - RI Well Subset	100-1868

TestAmerica Portland

Vanessa Frahs

Vanessa Frahs, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.

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PORTLAND, OR 9405 S.W. NIMBUS AVENUE
BEAVERTON, OR 97008-7132
ph: (503) 906.9200 fax: (503) 906.9210

ARCADIS U.S., Inc	Project Name:	**Chevron - RI Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	100-1868	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/08/10 18:53

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
B-9A	PTI0748-01	Water	09/21/10 15:10	09/22/10 16:28
B-10	PTI0748-02	Water	09/21/10 15:30	09/22/10 16:28
B-21	PTI0748-03	Water	09/22/10 11:00	09/22/10 16:28
B-28	PTI0748-04	Water	09/21/10 12:15	09/22/10 16:28
B-29	PTI0748-05	Water	09/21/10 13:00	09/22/10 16:28
B-30	PTI0748-06	Water	09/21/10 10:15	09/22/10 16:28
CR-1	PTI0748-07	Water	09/22/10 14:30	09/22/10 16:28
BD-R1-Chev-1	PTI0748-08	Water	09/22/10 00:00	09/22/10 16:28
TB-301	PTI0748-09	Water	09/22/10 00:00	09/22/10 16:28

TestAmerica Portland

Vanessa Frahs

Vanessa Frahs, Project Manager

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PORTLAND, OR 9405 S.W. NIMBUS AVENUE
BEAVERTON, OR 97008-7132
ph: (503) 906.9200 fax: (503) 906.9210

ARCADIS U.S., Inc	Project Name:	**Chevron - RI Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	100-1868	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/08/10 18:53

Analytical Case Narrative

TestAmerica - Portland, OR

PTI0748

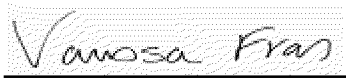
N1 Qualifier:

Chrysene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, and Indeno were detected in the batch blank between the MRL and 1/2 the MRL. The amounts detected in the blank are:

Chrysene = 0.00314 ppb
Benzo(b)fluoranthene = 0.00352 ppb
Benzo(k)fluoranthene = 0.00322 ppb
Indeno(1, 2, 3-cd)pyrene = 0.00400 ppb

Results should be considered estimates.

TestAmerica Portland



Vanessa Frahs, Project Manager

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ARCADIS U.S., Inc	Project Name:	**Chevron - RI Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	100-1868	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/08/10 18:53

Gasoline Hydrocarbons per NW TPH-Gx Method

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PTI0748-01 (B-9A)			**Water**			**Sampled: 09/21/10 15:10**				
Gasoline Range Hydrocarbons	NW TPH-Gx	**402**	-----	80.0	ug/l	1x	10I0796	09/27/10 12:56	09/28/10 03:17	**Q1**
Surrogate(s): 4-BFB (FID)				*92.8%*		*50 - 150%*	"		"	
PTI0748-02 (B-10)			**Water**			**Sampled: 09/21/10 15:30**				
Gasoline Range Hydrocarbons	NW TPH-Gx	**954**	-----	80.0	ug/l	1x	10I0796	09/27/10 12:56	09/28/10 04:27	
Surrogate(s): 4-BFB (FID)				*95.0%*		*50 - 150%*	"		"	
PTI0748-03 (B-21)			**Water**			**Sampled: 09/22/10 11:00**				
Gasoline Range Hydrocarbons	NW TPH-Gx	**713**	-----	80.0	ug/l	1x	10I0796	09/27/10 12:56	09/28/10 05:38	
Surrogate(s): 4-BFB (FID)				*93.6%*		*50 - 150%*	"		"	
PTI0748-04 (B-28)			**Water**			**Sampled: 09/21/10 12:15**				
Gasoline Range Hydrocarbons	NW TPH-Gx	ND	-----	80.0	ug/l	1x	10I0796	09/27/10 12:56	09/28/10 06:14	
Surrogate(s): 4-BFB (FID)				*96.4%*		*50 - 150%*	"		"	
PTI0748-05 (B-29)			**Water**			**Sampled: 09/21/10 13:00**				
Gasoline Range Hydrocarbons	NW TPH-Gx	ND	-----	80.0	ug/l	1x	10I0796	09/27/10 12:56	09/28/10 06:49	
Surrogate(s): 4-BFB (FID)				*91.0%*		*50 - 150%*	"		"	
PTI0748-06 (B-30)			**Water**			**Sampled: 09/21/10 10:15**				
Gasoline Range Hydrocarbons	NW TPH-Gx	**1120**	-----	80.0	ug/l	1x	10I0796	09/27/10 12:56	09/28/10 07:24	
Surrogate(s): 4-BFB (FID)				*92.3%*		*50 - 150%*	"		"	
PTI0748-07 (CR-1)			**Water**			**Sampled: 09/22/10 14:30**				
Gasoline Range Hydrocarbons	NW TPH-Gx	**122**	-----	80.0	ug/l	1x	10I0796	09/27/10 12:56	09/28/10 07:59	**Q1**
Surrogate(s): 4-BFB (FID)				*91.3%*		*50 - 150%*	"		"	
PTI0748-08 (BD-R1-Chev-1)			**Water**			**Sampled: 09/22/10 00:00**				
Gasoline Range Hydrocarbons	NW TPH-Gx	**566**	-----	80.0	ug/l	1x	10I0796	09/27/10 12:56	09/28/10 11:59	
Surrogate(s): 4-BFB (FID)				*92.4%*		*50 - 150%*	"		"	

TestAmerica Portland

Vanessa Frahs, Project Manager

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ph: (503) 906.9200 fax: (503) 906.9210

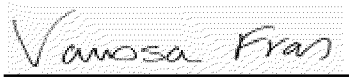
ARCADIS U.S., Inc	Project Name:	**Chevron - RI Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	100-1868	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/08/10 18:53

Diesel and Heavy Range Hydrocarbons per NWTPH-Dx Method with Acid/Silica Gel Cleanup

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PTI0748-01 (B-9A)			**Water**			**Sampled: 09/21/10 15:10**				
Diesel Range Organics	NWTPH-Dx	**14.1**	-----	0.0990	mg/l	1x	10I0777	09/27/10 10:50	09/27/10 16:16	**Q9**
Residual Range/Heavy Oil Organics	"	**0.795**	-----	0.495	"	"	"	"	"	**Q7**
Surrogate(s): 1-Chlorooctadecane				*102%*		*50 - 150%*	"			"
PTI0748-02 (B-10)			**Water**			**Sampled: 09/21/10 15:30**				
Diesel Range Organics	NWTPH-Dx	**9.20**	-----	0.0943	mg/l	1x	10I0777	09/27/10 10:50	09/27/10 16:35	**Q9**
Residual Range/Heavy Oil Organics	"	ND	-----	0.472	"	"	"	"	"	
Surrogate(s): 1-Chlorooctadecane				*78.4%*		*50 - 150%*	"			"
PTI0748-03 (B-21)			**Water**			**Sampled: 09/22/10 11:00**				
Diesel Range Organics	NWTPH-Dx	**24.2**	-----	0.0971	mg/l	1x	10I0777	09/27/10 10:50	09/27/10 16:53	**Q9**
Residual Range/Heavy Oil Organics	"	**0.541**	-----	0.485	"	"	"	"	"	**Q7**
Surrogate(s): 1-Chlorooctadecane				*54.0%*		*50 - 150%*	"			"
PTI0748-04 (B-28)			**Water**			**Sampled: 09/21/10 12:15**				
Diesel Range Organics	NWTPH-Dx	ND	-----	0.0971	mg/l	1x	10I0777	09/27/10 10:50	09/27/10 17:12	
Residual Range/Heavy Oil Organics	"	ND	-----	0.485	"	"	"	"	"	
Surrogate(s): 1-Chlorooctadecane				*62.4%*		*50 - 150%*	"			"
PTI0748-05 (B-29)			**Water**			**Sampled: 09/21/10 13:00**				
Diesel Range Organics	NWTPH-Dx	ND	-----	0.0943	mg/l	1x	10I0777	09/27/10 10:50	09/27/10 17:30	
Residual Range/Heavy Oil Organics	"	ND	-----	0.472	"	"	"	"	"	
Surrogate(s): 1-Chlorooctadecane				*78.9%*		*50 - 150%*	"			"
PTI0748-06 (B-30)			**Water**			**Sampled: 09/21/10 10:15**				
Diesel Range Organics	NWTPH-Dx	**12.5**	-----	0.0943	mg/l	1x	10I0777	09/27/10 10:50	09/27/10 18:27	**Q9**
Residual Range/Heavy Oil Organics	"	**2.40**	-----	0.472	"	"	"	"	"	
Surrogate(s): 1-Chlorooctadecane				*86.3%*		*50 - 150%*	"			"
PTI0748-07 (CR-1)			**Water**			**Sampled: 09/22/10 14:30**				
Diesel Range Organics	NWTPH-Dx	**7.32**	-----	0.0971	mg/l	1x	10I0777	09/27/10 10:50	09/27/10 18:45	**Q9**

TestAmerica Portland



Vanessa Frahs, Project Manager

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PORTLAND, OR 9405 S.W. NIMBUS AVENUE
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ph: (503) 906.9200 fax: (503) 906.9210

ARCADIS U.S., Inc	Project Name:	**Chevron - RI Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	100-1868	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/08/10 18:53

Diesel and Heavy Range Hydrocarbons per NWTPH-Dx Method with Acid/Silica Gel Cleanup

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PTI0748-07 (CR-1)			**Water**			**Sampled: 09/22/10 14:30**				
Residual Range/Heavy Oil Organics	NWTPH-Dx	**0.580**	-----	0.485	mg/l	1x	10I0777	09/27/10 10:50	09/27/10 18:45	**Q7**
Surrogate(s): 1-Chlorooctadecane				*98.9%*		*50 - 150%*	"		"	
PTI0748-08 (BD-R1-Chev-1)			**Water**			**Sampled: 09/22/10 00:00**				
Diesel Range Organics	NWTPH-Dx	**50.5**	-----	0.0971	mg/l	1x	10I0777	09/27/10 10:50	09/27/10 19:04	**Q9**
Residual Range/Heavy Oil Organics	"	**1.19**	-----	0.485	"	"	"	"	"	**Q7**
Surrogate(s): 1-Chlorooctadecane				*58.5%*		*50 - 150%*	"		"	

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Vanessa Frahs

Vanessa Frahs, Project Manager

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PORTLAND, OR 9405 S.W. NIMBUS AVENUE
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ph: (503) 906.9200 fax: (503) 906.9210

ARCADIS U.S., Inc	Project Name:	**Chevron - RI Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	100-1868	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/08/10 18:53

Total Metals per EPA 6000/7000 Series Methods

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PTI0748-01 (B-9A)			Water			Sampled: 09/21/10 15:10				
Arsenic	EPA 6020	**0.00173**	-----	0.00100	mg/l	1x	10I0737	09/24/10 07:26	09/26/10 19:38	
Barium	"	**0.0202**	-----	0.00100	"	"	"	"	"	
Cadmium	"	ND	-----	0.00100	"	"	"	"	"	
Chromium	"	ND	-----	0.00200	"	"	"	"	"	
Copper	"	**0.00302**	-----	0.00200	"	"	"	"	"	
Lead	"	ND	-----	0.00100	"	"	"	"	09/27/10 17:52	
Manganese	"	**0.702**	-----	0.00200	"	"	"	"	"	
Selenium	"	ND	-----	0.00100	"	"	"	"	09/26/10 19:38	
Silver	"	ND	-----	0.00100	"	"	"	"	"	
Zinc	"	ND	-----	0.0100	"	"	"	"	"	
PTI0748-02 (B-10)			Water			Sampled: 09/21/10 15:30				
Arsenic	EPA 6020	**0.0399**	-----	0.00100	mg/l	1x	10I0737	09/24/10 07:26	09/26/10 19:43	
Barium	"	**0.149**	-----	0.00100	"	"	"	"	"	
Cadmium	"	ND	-----	0.00100	"	"	"	"	"	
Chromium	"	**0.0106**	-----	0.00200	"	"	"	"	"	
Copper	"	**0.0148**	-----	0.00200	"	"	"	"	"	
Lead	"	ND	-----	0.0100	"	10x	"	"	09/27/10 17:55	
Manganese	"	**4.56**	-----	0.0200	"	"	"	"	"	
Selenium	"	ND	-----	0.00100	"	1x	"	"	09/26/10 19:43	
Silver	"	ND	-----	0.00100	"	"	"	"	"	
Zinc	"	**0.0370**	-----	0.0100	"	"	"	"	"	
PTI0748-03 (B-21)			Water			Sampled: 09/22/10 11:00				
Arsenic	EPA 6020	**0.0479**	-----	0.00100	mg/l	1x	10I0737	09/24/10 07:26	09/26/10 19:49	
Barium	"	**0.104**	-----	0.00100	"	"	"	"	"	
Cadmium	"	ND	-----	0.00100	"	"	"	"	"	
Chromium	"	ND	-----	0.00200	"	"	"	"	"	
Copper	"	**0.00300**	-----	0.00200	"	"	"	"	"	
Lead	"	ND	-----	0.0100	"	10x	"	"	09/27/10 17:59	
Manganese	"	**3.72**	-----	0.0200	"	"	"	"	"	
Selenium	"	ND	-----	0.00100	"	1x	"	"	09/26/10 19:49	
Silver	"	ND	-----	0.00100	"	"	"	"	"	
Zinc	"	ND	-----	0.0100	"	"	"	"	"	

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ph: (503) 906.9200 fax: (503) 906.9210

ARCADIS U.S., Inc	Project Name:	**Chevron - RI Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	100-1868	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/08/10 18:53

Total Metals per EPA 6000/7000 Series Methods

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PTI0748-04 (B-28)			**Water**			**Sampled: 09/21/10 12:15**				
Arsenic	EPA 6020	**0.00432**	-----	0.00100	mg/l	1x	10I0737	09/24/10 07:26	09/26/10 19:54	
Barium	"	**0.123**	-----	0.00100	"	"	"	"	"	
Cadmium	"	ND	-----	0.00100	"	"	"	"	"	
Chromium	"	**0.00854**	-----	0.00200	"	"	"	"	"	
Copper	"	**0.0357**	-----	0.00200	"	"	"	"	"	
Lead	"	**0.00840**	-----	0.00500	"	5x	"	"	09/27/10 18:05	
Manganese	"	**1.25**	-----	0.0100	"	"	"	"	"	
Selenium	"	ND	-----	0.00100	"	1x	"	"	09/26/10 19:54	
Silver	"	ND	-----	0.00100	"	"	"	"	"	
Zinc	"	**0.0486**	-----	0.0100	"	"	"	"	"	
PTI0748-05 (B-29)			**Water**			**Sampled: 09/21/10 13:00**				
Arsenic	EPA 6020	**0.00168**	-----	0.00100	mg/l	1x	10I0737	09/24/10 07:26	09/26/10 20:06	
Barium	"	**0.146**	-----	0.00100	"	"	"	"	"	
Cadmium	"	**0.00222**	-----	0.00100	"	"	"	"	"	
Chromium	"	**0.00844**	-----	0.00200	"	"	"	"	"	
Copper	"	**0.0645**	-----	0.00200	"	"	"	"	"	
Lead	"	ND	-----	0.0100	"	10x	"	"	09/27/10 18:14	
Manganese	"	**4.60**	-----	0.0200	"	"	"	"	"	
Selenium	"	ND	-----	0.00100	"	1x	"	"	09/26/10 20:06	
Silver	"	ND	-----	0.00100	"	"	"	"	"	
Zinc	"	**0.0405**	-----	0.0100	"	"	"	"	"	
PTI0748-06 (B-30)			**Water**			**Sampled: 09/21/10 10:15**				
Arsenic	EPA 6020	**0.0250**	-----	0.00100	mg/l	1x	10I0737	09/24/10 07:26	09/26/10 20:11	
Barium	"	**0.130**	-----	0.00100	"	"	"	"	"	
Cadmium	"	**0.0131**	-----	0.00100	"	"	"	"	"	
Chromium	"	**0.00886**	-----	0.00200	"	"	"	"	"	
Copper	"	**0.0772**	-----	0.00200	"	"	"	"	"	
Lead	"	**0.0298**	-----	0.0100	"	10x	"	"	09/27/10 18:18	
Manganese	"	**3.18**	-----	0.0200	"	"	"	"	"	
Selenium	"	ND	-----	0.00100	"	1x	"	"	09/26/10 20:11	
Silver	"	ND	-----	0.00100	"	"	"	"	"	
Zinc	"	**0.789**	-----	0.0100	"	"	"	"	"	

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ARCADIS U.S., Inc	Project Name:	**Chevron - RI Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	100-1868	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/08/10 18:53

Total Metals per EPA 6000/7000 Series Methods

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PTI0748-07 (CR-1)			**Water**			**Sampled: 09/22/10 14:30**				
Arsenic	EPA 6020	ND	-----	0.00100	mg/l	1x	10I0737	09/24/10 07:26	09/26/10 20:17	
Barium	"	**0.0136**	-----	0.00100	"	"	"	"	"	
Cadmium	"	ND	-----	0.00100	"	"	"	"	"	
Chromium	"	ND	-----	0.00200	"	"	"	"	"	
Copper	"	**0.00253**	-----	0.00200	"	"	"	"	"	
Lead	"	ND	-----	0.00100	"	"	"	"	09/27/10 18:22	
Manganese	"	**0.214**	-----	0.00200	"	"	"	"	"	
Selenium	"	ND	-----	0.00100	"	"	"	"	09/26/10 20:17	
Silver	"	ND	-----	0.00100	"	"	"	"	"	
Zinc	"	ND	-----	0.0100	"	"	"	"	"	
PTI0748-08 (BD-R1-Chev-1)			**Water**			**Sampled: 09/22/10 00:00**				
Arsenic	EPA 6020	**0.0492**	-----	0.00100	mg/l	1x	10I0737	09/24/10 07:26	09/26/10 20:34	
Barium	"	**0.102**	-----	0.00100	"	"	"	"	"	
Cadmium	"	ND	-----	0.00100	"	"	"	"	"	
Chromium	"	ND	-----	0.00200	"	"	"	"	"	
Copper	"	**0.00210**	-----	0.00200	"	"	"	"	"	
Lead	"	ND	-----	0.0100	"	10x	"	"	09/27/10 18:26	
Manganese	"	**3.61**	-----	0.0200	"	"	"	"	"	
Selenium	"	ND	-----	0.00100	"	1x	"	"	09/26/10 20:34	
Silver	"	ND	-----	0.00100	"	"	"	"	"	
Zinc	"	ND	-----	0.0100	"	"	"	"	"	

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ARCADIS U.S., Inc	Project Name:	**Chevron - RI Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	100-1868	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/08/10 18:53

Mercury per EPA Method 1631E

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PTI0748-01 (B-9A)				**Water**				**Sampled: 09/21/10 15:10**		
Mercury	EPA 1631E	ND	-----	0.00500	ug/l	1x	10I0860	09/28/10 16:37	09/29/10 12:05	
PTI0748-02 (B-10)				**Water**				**Sampled: 09/21/10 15:30**		
Mercury	EPA 1631E	**0.0327**	-----	0.00500	ug/l	1x	10I0860	09/28/10 16:37	09/29/10 12:10	
PTI0748-03 (B-21)				**Water**				**Sampled: 09/22/10 11:00**		
Mercury	EPA 1631E	**0.299**	-----	0.00500	ug/l	1x	10I0860	09/28/10 16:37	09/29/10 12:15	
PTI0748-04 (B-28)				**Water**				**Sampled: 09/21/10 12:15**		
Mercury	EPA 1631E	**0.0135**	-----	0.00500	ug/l	1x	10I0860	09/28/10 16:37	09/29/10 12:20	
PTI0748-05 (B-29)				**Water**				**Sampled: 09/21/10 13:00**		
Mercury	EPA 1631E	**0.0199**	-----	0.00500	ug/l	1x	10I0860	09/28/10 16:37	09/29/10 12:25	
PTI0748-06 (B-30)				**Water**				**Sampled: 09/21/10 10:15**		
Mercury	EPA 1631E	**0.0550**	-----	0.00500	ug/l	1x	10I0860	09/28/10 16:37	09/29/10 12:30	
PTI0748-07 (CR-1)				**Water**				**Sampled: 09/22/10 14:30**		
Mercury	EPA 1631E	ND	-----	0.00500	ug/l	1x	10I0860	09/28/10 16:37	09/29/10 12:35	
PTI0748-08 (BD-R1-Chev-1)				**Water**				**Sampled: 09/22/10 00:00**		
Mercury	EPA 1631E	**0.550**	-----	0.0500	ug/l	10x	10I0860	09/28/10 16:37	09/29/10 13:27	

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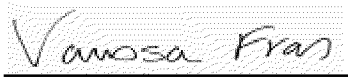

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111 SW Columbia Street - Suite 725	Project Number:	100-1868	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/08/10 18:53

Selected Volatile Organic Compounds (Including BTEX) per EPA Method 8260B

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PTI0748-01 (B-9A)			**Water**			**Sampled: 09/21/10 15:10**				
Methyl tert-butyl ether	EPA 8260B	ND	-----	1.00	ug/l	1x	10I0885	09/29/10 11:30	09/29/10 14:17	
Benzene	"	ND	-----	0.200	"	"	"	"	"	
1,2-Dichloroethane	"	ND	-----	1.00	"	"	"	"	"	
Toluene	"	ND	-----	1.00	"	"	"	"	"	
1,2-Dibromoethane	"	ND	-----	1.00	"	"	"	"	"	
Ethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
m,p-Xylene	"	ND	-----	2.00	"	"	"	"	"	
o-Xylene	"	ND	-----	1.00	"	"	"	"	"	
Isopropylbenzene	"	**3.76**	-----	2.00	"	"	"	"	"	
n-Propylbenzene	"	**5.08**	-----	1.00	"	"	"	"	"	
1,3,5-Trimethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
1,2,4-Trimethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
Naphthalene	"	ND	-----	2.00	"	"	"	"	"	
Surrogate(s):	*Dibromofluoromethane*			*104%*		*80 - 120%*	"		"	
	1,2-DCA-d4			*101%*		*80 - 120%*	"		"	
	Toluene-d8			*100%*		*80 - 120%*	"		"	
	4-BFB			*89.4%*		*80 - 120%*	"		"	
PTI0748-02 (B-10)			**Water**			**Sampled: 09/21/10 15:30**				
Methyl tert-butyl ether	EPA 8260B	ND	-----	1.00	ug/l	1x	10I0885	09/29/10 11:30	09/29/10 14:44	
Benzene	"	**0.490**	-----	0.200	"	"	"	"	"	
1,2-Dichloroethane	"	ND	-----	1.00	"	"	"	"	"	
Toluene	"	ND	-----	1.00	"	"	"	"	"	
1,2-Dibromoethane	"	ND	-----	1.00	"	"	"	"	"	
Ethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
m,p-Xylene	"	ND	-----	2.00	"	"	"	"	"	
o-Xylene	"	ND	-----	1.00	"	"	"	"	"	
Isopropylbenzene	"	**9.01**	-----	2.00	"	"	"	"	"	
n-Propylbenzene	"	**15.9**	-----	1.00	"	"	"	"	"	
1,3,5-Trimethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
1,2,4-Trimethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
Naphthalene	"	ND	-----	2.00	"	"	"	"	"	
Surrogate(s):	*Dibromofluoromethane*			*108%*		*80 - 120%*	"		"	
	1,2-DCA-d4			*105%*		*80 - 120%*	"		"	
	Toluene-d8			*104%*		*80 - 120%*	"		"	
	4-BFB			*91.3%*		*80 - 120%*	"		"	

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Vanessa Frahs, Project Manager

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111 SW Columbia Street - Suite 725	Project Number:	100-1868	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/08/10 18:53

Selected Volatile Organic Compounds (Including BTEX) per EPA Method 8260B

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PTI0748-03 (B-21)			**Water**			**Sampled: 09/22/10 11:00**				
Methyl tert-butyl ether	EPA 8260B	ND	-----	1.00	ug/l	1x	10I0885	09/29/10 11:30	09/29/10 15:11	
Benzene	"	**0.450**	-----	0.200	"	"	"	"	"	
1,2-Dichloroethane	"	ND	-----	1.00	"	"	"	"	"	
Toluene	"	**1.72**	-----	1.00	"	"	"	"	"	
1,2-Dibromoethane	"	ND	-----	1.00	"	"	"	"	"	
Ethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
m,p-Xylene	"	ND	-----	2.00	"	"	"	"	"	
o-Xylene	"	**1.37**	-----	1.00	"	"	"	"	"	
Isopropylbenzene	"	**6.70**	-----	2.00	"	"	"	"	"	
n-Propylbenzene	"	**6.64**	-----	1.00	"	"	"	"	"	
1,3,5-Trimethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
1,2,4-Trimethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
Naphthalene	"	ND	-----	2.00	"	"	"	"	"	
Surrogate(s): *Dibromofluoromethane*				*106%*		*80 - 120%*	"		"	
1,2-DCA-d4				*102%*		*80 - 120%*	"		"	
Toluene-d8				*102%*		*80 - 120%*	"		"	
4-BFB				*91.6%*		*80 - 120%*	"		"	
PTI0748-04 (B-28)			**Water**			**Sampled: 09/21/10 12:15**				
Methyl tert-butyl ether	EPA 8260B	**1.57**	-----	1.00	ug/l	1x	10I0885	09/29/10 11:30	09/29/10 15:38	
Benzene	"	ND	-----	0.200	"	"	"	"	"	
1,2-Dichloroethane	"	ND	-----	1.00	"	"	"	"	"	
Toluene	"	ND	-----	1.00	"	"	"	"	"	
1,2-Dibromoethane	"	ND	-----	1.00	"	"	"	"	"	
Ethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
m,p-Xylene	"	ND	-----	2.00	"	"	"	"	"	
o-Xylene	"	ND	-----	1.00	"	"	"	"	"	
Isopropylbenzene	"	ND	-----	2.00	"	"	"	"	"	
n-Propylbenzene	"	ND	-----	1.00	"	"	"	"	"	
1,3,5-Trimethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
1,2,4-Trimethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
Naphthalene	"	ND	-----	2.00	"	"	"	"	"	
Surrogate(s): *Dibromofluoromethane*				*105%*		*80 - 120%*	"		"	
1,2-DCA-d4				*101%*		*80 - 120%*	"		"	
Toluene-d8				*102%*		*80 - 120%*	"		"	
4-BFB				*95.1%*		*80 - 120%*	"		"	

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ARCADIS U.S., Inc	Project Name:	**Chevron - RI Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	100-1868	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/08/10 18:53

Selected Volatile Organic Compounds (Including BTEX) per EPA Method 8260B

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PTI0748-05 (B-29)			**Water**			**Sampled: 09/21/10 13:00**				
Methyl tert-butyl ether	EPA 8260B	ND	-----	1.00	ug/l	1x	10I0885	09/29/10 11:30	09/29/10 16:06	
Benzene	"	ND	-----	0.200	"	"	"	"	"	
1,2-Dichloroethane	"	ND	-----	1.00	"	"	"	"	"	
Toluene	"	ND	-----	1.00	"	"	"	"	"	
1,2-Dibromoethane	"	ND	-----	1.00	"	"	"	"	"	
Ethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
m,p-Xylene	"	ND	-----	2.00	"	"	"	"	"	
o-Xylene	"	ND	-----	1.00	"	"	"	"	"	
Isopropylbenzene	"	ND	-----	2.00	"	"	"	"	"	
n-Propylbenzene	"	ND	-----	1.00	"	"	"	"	"	
1,3,5-Trimethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
1,2,4-Trimethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
Naphthalene	"	ND	-----	2.00	"	"	"	"	"	
Surrogate(s):	*Dibromofluoromethane*			*105%*		*80 - 120%*	"		"	
	1,2-DCA-d4			*100%*		*80 - 120%*	"		"	
	Toluene-d8			*102%*		*80 - 120%*	"		"	
	4-BFB			*95.6%*		*80 - 120%*	"		"	
PTI0748-06 (B-30)			**Water**			**Sampled: 09/21/10 10:15**				
Methyl tert-butyl ether	EPA 8260B	ND	-----	1.00	ug/l	1x	10I0885	09/29/10 11:30	09/29/10 16:33	
Benzene	"	**41.9**	-----	0.200	"	"	"	"	"	
1,2-Dichloroethane	"	ND	-----	1.00	"	"	"	"	"	
Toluene	"	**11.4**	-----	1.00	"	"	"	"	"	
1,2-Dibromoethane	"	ND	-----	1.00	"	"	"	"	"	
Ethylbenzene	"	**2.15**	-----	1.00	"	"	"	"	"	
m,p-Xylene	"	**13.7**	-----	2.00	"	"	"	"	"	
o-Xylene	"	**1.61**	-----	1.00	"	"	"	"	"	
Isopropylbenzene	"	**12.5**	-----	2.00	"	"	"	"	"	
n-Propylbenzene	"	**21.2**	-----	1.00	"	"	"	"	"	
1,3,5-Trimethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
1,2,4-Trimethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
Naphthalene	"	ND	-----	2.00	"	"	"	"	"	
Surrogate(s):	*Dibromofluoromethane*			*105%*		*80 - 120%*	"		"	
	1,2-DCA-d4			*101%*		*80 - 120%*	"		"	
	Toluene-d8			*103%*		*80 - 120%*	"		"	
	4-BFB			*92.7%*		*80 - 120%*	"		"	

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PORTLAND, OR 9405 S.W. NIMBUS AVENUE
BEAVERTON, OR 97008-7132
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ARCADIS U.S., Inc	Project Name:	**Chevron - RI Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	100-1868	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/08/10 18:53

Selected Volatile Organic Compounds (Including BTEX) per EPA Method 8260B

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PTI0748-07 (CR-1)			**Water**			**Sampled: 09/22/10 14:30**				
Methyl tert-butyl ether	EPA 8260B	ND	-----	1.00	ug/l	1x	10I0885	09/29/10 11:30	09/29/10 17:00	
Benzene	"	ND	-----	0.200	"	"	"	"	"	
1,2-Dichloroethane	"	ND	-----	1.00	"	"	"	"	"	
Toluene	"	ND	-----	1.00	"	"	"	"	"	
1,2-Dibromoethane	"	ND	-----	1.00	"	"	"	"	"	
Ethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
m,p-Xylene	"	ND	-----	2.00	"	"	"	"	"	
o-Xylene	"	ND	-----	1.00	"	"	"	"	"	
Isopropylbenzene	"	ND	-----	2.00	"	"	"	"	"	
n-Propylbenzene	"	ND	-----	1.00	"	"	"	"	"	
1,3,5-Trimethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
1,2,4-Trimethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
Naphthalene	"	ND	-----	2.00	"	"	"	"	"	
Surrogate(s):	*Dibromofluoromethane*			*104%*		*80 - 120%*	"		"	
	1,2-DCA-d4			*98.8%*		*80 - 120%*	"		"	
	Toluene-d8			*102%*		*80 - 120%*	"		"	
	4-BFB			*94.8%*		*80 - 120%*	"		"	
PTI0748-08 (BD-R1-Chev-1)			**Water**			**Sampled: 09/22/10 00:00**				**RL1**
Methyl tert-butyl ether	EPA 8260B	ND	-----	2.00	ug/l	2x	10I0885	09/29/10 11:30	09/29/10 17:27	
Benzene	"	**0.520**	-----	0.400	"	"	"	"	"	
1,2-Dichloroethane	"	ND	-----	2.00	"	"	"	"	"	
Toluene	"	ND	-----	2.00	"	"	"	"	"	
1,2-Dibromoethane	"	ND	-----	2.00	"	"	"	"	"	
Ethylbenzene	"	ND	-----	2.00	"	"	"	"	"	
m,p-Xylene	"	ND	-----	4.00	"	"	"	"	"	
o-Xylene	"	ND	-----	2.00	"	"	"	"	"	
Isopropylbenzene	"	**7.50**	-----	4.00	"	"	"	"	"	
n-Propylbenzene	"	**7.38**	-----	2.00	"	"	"	"	"	
1,3,5-Trimethylbenzene	"	ND	-----	2.00	"	"	"	"	"	
1,2,4-Trimethylbenzene	"	ND	-----	2.00	"	"	"	"	"	
Naphthalene	"	ND	-----	4.00	"	"	"	"	"	
Surrogate(s):	*Dibromofluoromethane*			*105%*		*80 - 120%*	*1x*		"	
	1,2-DCA-d4			*98.5%*		*80 - 120%*	"		"	
	Toluene-d8			*101%*		*80 - 120%*	"		"	
	4-BFB			*94.8%*		*80 - 120%*	"		"	

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Vanessa Frahs, Project Manager

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ARCADIS U.S., Inc	Project Name:	**Chevron - RI Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	100-1868	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/08/10 18:53

Selected Volatile Organic Compounds (Including BTEX) per EPA Method 8260B

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PTI0748-09 (TB-301)			**Water**			**Sampled: 09/22/10 00:00**				
Methyl tert-butyl ether	EPA 8260B	ND	-----	1.00	ug/l	1x	10I0885	09/29/10 11:30	09/29/10 13:49	
Benzene	"	ND	-----	0.200	"	"	"	"	"	
1,2-Dichloroethane	"	ND	-----	1.00	"	"	"	"	"	
Toluene	"	ND	-----	1.00	"	"	"	"	"	
1,2-Dibromoethane	"	ND	-----	1.00	"	"	"	"	"	
Ethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
m,p-Xylene	"	ND	-----	2.00	"	"	"	"	"	
o-Xylene	"	ND	-----	1.00	"	"	"	"	"	
Isopropylbenzene	"	ND	-----	2.00	"	"	"	"	"	
n-Propylbenzene	"	ND	-----	1.00	"	"	"	"	"	
1,3,5-Trimethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
1,2,4-Trimethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
Naphthalene	"	ND	-----	2.00	"	"	"	"	"	
Surrogate(s):	*Dibromofluoromethane*			*105%*		*80 - 120%*	"		"	
	1,2-DCA-d4			*103%*		*80 - 120%*	"		"	
	Toluene-d8			*101%*		*80 - 120%*	"		"	
	4-BFB			*90.8%*		*80 - 120%*	"		"	

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111 SW Columbia Street - Suite 725	Project Number:	100-1868	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/08/10 18:53

Polynuclear Aromatic Compounds per EPA 8270M-SIM

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PTI0748-01 (B-9A)			Water			Sampled: 09/21/10 15:10				
2-Methylnaphthalene	EPA 8270m	ND	-----	0.500	ug/l	5x	10I0832	09/28/10 16:30	10/04/10 10:24	
Acenaphthene	"	**1.29**	-----	0.500	"	"	"	"	"	
Acenaphthylene	"	ND	-----	0.500	"	"	"	"	"	
Anthracene	"	ND	-----	0.500	"	"	"	"	"	
Benzo (a) anthracene	"	**0.159**	-----	0.0250	"	"	"	"	"	
Benzo (a) pyrene	"	**0.160**	-----	0.0250	"	"	"	"	"	
Benzo (b) fluoranthene	"	**0.160**	-----	0.0250	"	"	"	"	"	**B1**
Benzo (ghi) perylene	"	ND	-----	0.500	"	"	"	"	"	
Benzo (k) fluoranthene	"	**0.131**	-----	0.0250	"	"	"	"	"	**B1**
Chrysene	"	**0.234**	-----	0.0250	"	"	"	"	"	**B1**
Dibenzo (a,h) anthracene	"	**0.0506**	-----	0.0250	"	"	"	"	"	
Fluoranthene	"	ND	-----	0.500	"	"	"	"	"	
Fluorene	"	**5.21**	-----	0.500	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	"	**0.174**	-----	0.0250	"	"	"	"	"	**B1**
Naphthalene	"	ND	-----	0.750	"	"	"	"	"	**RL1**
Phenanthrene	"	**1.69**	-----	0.500	"	"	"	"	"	
Pyrene	"	**0.533**	-----	0.500	"	"	"	"	"	
Surrogate(s):	*Fluorene-d10*			*42.0%*		*25 - 125 %*	"		"	
	Pyrene-d10			*46.7%*		*23 - 150 %*	"		"	
	Benzo (a) pyrene-d12			*29.4%*		*10 - 125 %*	"		"	
PTI0748-02 (B-10)			Water			Sampled: 09/21/10 15:30				
2-Methylnaphthalene	EPA 8270m	ND	-----	0.200	ug/l	2x	10I0832	09/28/10 16:30	10/04/10 14:42	
Acenaphthene	"	**0.899**	-----	0.200	"	"	"	"	"	
Acenaphthylene	"	ND	-----	0.200	"	"	"	"	"	
Anthracene	"	ND	-----	0.200	"	"	"	"	"	
Benzo (a) anthracene	"	**0.0117**	-----	0.0100	"	"	"	"	"	
Benzo (a) pyrene	"	ND	-----	0.0100	"	"	"	"	"	
Benzo (b) fluoranthene	"	ND	-----	0.0100	"	"	"	"	"	
Benzo (ghi) perylene	"	ND	-----	0.200	"	"	"	"	"	
Benzo (k) fluoranthene	"	ND	-----	0.0100	"	"	"	"	"	
Chrysene	"	**0.0190**	-----	0.0100	"	"	"	"	"	**N1**
Dibenzo (a,h) anthracene	"	ND	-----	0.0100	"	"	"	"	"	
Fluoranthene	"	**0.208**	-----	0.200	"	"	"	"	"	
Fluorene	"	**2.72**	-----	0.200	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	"	ND	-----	0.0100	"	"	"	"	"	

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ARCADIS U.S., Inc	Project Name:	**Chevron - RI Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	100-1868	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/08/10 18:53

Polynuclear Aromatic Compounds per EPA 8270M-SIM

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PTI0748-02 (B-10)			**Water**			**Sampled: 09/21/10 15:30**				
Naphthalene	EPA 8270m	ND	-----	0.400	ug/l	2x	10I0832	09/28/10 16:30	10/04/10 14:42	**RL1**
Phenanthrene	"	**1.67**	-----	0.200	"	"	"	"	"	
Pyrene	"	**0.283**	-----	0.200	"	"	"	"	"	
Surrogate(s): Fluorene-d10				*41.0%*		*25 - 125 %*	"		"	
Pyrene-d10				*43.1%*		*23 - 150 %*	"		"	
Benzo (a) pyrene-d12				*25.6%*		*10 - 125 %*	"		"	
PTI0748-03 (B-21)			**Water**			**Sampled: 09/22/10 11:00**				
2-Methylnaphthalene	EPA 8270m	ND	-----	0.500	ug/l	5x	10I0832	09/28/10 16:30	10/04/10 10:57	
Acenaphthene	"	**2.81**	-----	0.500	"	"	"	"	"	
Acenaphthylene	"	ND	-----	1.00	"	"	"	"	"	**RL1**
Anthracene	"	ND	-----	2.50	"	25x	"	"	10/04/10 16:32	**RL1**
Benzo (a) anthracene	"	**0.0621**	-----	0.0250	"	5x	"	"	10/04/10 10:57	
Benzo (a) pyrene	"	**0.0404**	-----	0.0250	"	"	"	"	"	
Benzo (b) fluoranthene	"	**0.0384**	-----	0.0250	"	"	"	"	"	**B1**
Benzo (ghi) perylene	"	ND	-----	0.500	"	"	"	"	"	
Benzo (k) fluoranthene	"	ND	-----	0.0250	"	"	"	"	"	
Chrysene	"	**0.105**	-----	0.0250	"	"	"	"	"	**B1**
Dibenzo (a,h) anthracene	"	ND	-----	0.0250	"	"	"	"	"	
Fluoranthene	"	ND	-----	0.500	"	"	"	"	"	
Fluorene	"	**16.1**	-----	2.50	"	25x	"	"	10/04/10 16:32	
Indeno (1,2,3-cd) pyrene	"	**0.0304**	-----	0.0250	"	5x	"	"	10/04/10 10:57	**N1**
Naphthalene	"	ND	-----	1.00	"	"	"	"	"	**RL1**
Phenanthrene	"	**13.8**	-----	2.50	"	25x	"	"	10/04/10 16:32	
Pyrene	"	**0.622**	-----	0.500	"	5x	"	"	10/04/10 10:57	
Surrogate(s): Fluorene-d10				*67.6%*		*25 - 125 %*	"		"	
Pyrene-d10				*56.2%*		*23 - 150 %*	"		"	
Benzo (a) pyrene-d12				*29.5%*		*10 - 125 %*	"		"	
PTI0748-04 (B-28)			**Water**			**Sampled: 09/21/10 12:15**				
2-Methylnaphthalene	EPA 8270m	ND	-----	0.100	ug/l	1x	10I0832	09/28/10 16:30	10/05/10 18:48	
Acenaphthene	"	ND	-----	0.100	"	"	"	"	"	
Acenaphthylene	"	ND	-----	0.100	"	"	"	"	"	
Anthracene	"	ND	-----	0.100	"	"	"	"	"	
Benzo (a) anthracene	"	**0.00750**	-----	0.00500	"	"	"	"	"	
Benzo (a) pyrene	"	**0.00932**	-----	0.00500	"	"	"	"	"	

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ARCADIS U.S., Inc	Project Name:	**Chevron - RI Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	100-1868	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/08/10 18:53

Polynuclear Aromatic Compounds per EPA 8270M-SIM

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PTI0748-04 (B-28)			**Water**			**Sampled: 09/21/10 12:15**				
Benzo (b) fluoranthene	EPA 8270m	**0.00872**	-----	0.00500	ug/l	1x	10I0832	09/28/10 16:30	10/05/10 18:48	**N1**
Benzo (ghi) perylene	"	ND	-----	0.100	"	"	"	"	"	
Benzo (k) fluoranthene	"	**0.00638**	-----	0.00500	"	"	"	"	"	**N1**
Chrysene	"	**0.00833**	-----	0.00500	"	"	"	"	"	**N1**
Dibenzo (a,h) anthracene	"	ND	-----	0.00500	"	"	"	"	"	
Fluoranthene	"	ND	-----	0.100	"	"	"	"	"	
Fluorene	"	ND	-----	0.100	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	"	**0.00944**	-----	0.00500	"	"	"	"	"	**N1**
Naphthalene	"	ND	-----	0.100	"	"	"	"	"	
Phenanthrene	"	ND	-----	0.100	"	"	"	"	"	
Pyrene	"	ND	-----	0.100	"	"	"	"	"	
Surrogate(s): *Fluorene-d10*				*75.0%*		*25 - 125 %*	"		"	
Pyrene-d10				*55.5%*		*23 - 150 %*	"		"	
Benzo (a) pyrene-d12				*32.5%*		*10 - 125 %*	"		"	
PTI0748-05 (B-29)			**Water**			**Sampled: 09/21/10 13:00**				
2-Methylnaphthalene	EPA 8270m	ND	-----	0.100	ug/l	1x	10I0832	09/28/10 16:30	10/05/10 19:16	
Acenaphthene	"	ND	-----	0.100	"	"	"	"	"	
Acenaphthylene	"	ND	-----	0.100	"	"	"	"	"	
Anthracene	"	ND	-----	0.100	"	"	"	"	"	
Benzo (a) anthracene	"	ND	-----	0.00500	"	"	"	"	"	
Benzo (a) pyrene	"	ND	-----	0.00500	"	"	"	"	"	
Benzo (b) fluoranthene	"	ND	-----	0.00500	"	"	"	"	"	
Benzo (ghi) perylene	"	ND	-----	0.100	"	"	"	"	"	
Benzo (k) fluoranthene	"	ND	-----	0.00500	"	"	"	"	"	
Chrysene	"	ND	-----	0.00500	"	"	"	"	"	
Dibenzo (a,h) anthracene	"	ND	-----	0.00500	"	"	"	"	"	
Fluoranthene	"	ND	-----	0.100	"	"	"	"	"	
Fluorene	"	ND	-----	0.100	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	"	**0.00600**	-----	0.00500	"	"	"	"	"	**N1**
Naphthalene	"	ND	-----	0.100	"	"	"	"	"	
Phenanthrene	"	ND	-----	0.100	"	"	"	"	"	
Pyrene	"	ND	-----	0.100	"	"	"	"	"	
Surrogate(s): *Fluorene-d10*				*68.4%*		*25 - 125 %*	"		"	
Pyrene-d10				*45.6%*		*23 - 150 %*	"		"	
Benzo (a) pyrene-d12				*29.6%*		*10 - 125 %*	"		"	

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111 SW Columbia Street - Suite 725	Project Number:	100-1868	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/08/10 18:53

Polynuclear Aromatic Compounds per EPA 8270M-SIM

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Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PTI0748-06 (B-30)			**Water**			**Sampled: 09/21/10 10:15**				**RL3**
2-Methylnaphthalene	EPA 8270m	ND	-----	0.500	ug/l	5x	10I0832	09/28/10 16:30	10/04/10 11:24	**RL1**
Acenaphthene	"	ND	-----	0.500	"	"	"	"	"	**RL1**
Acenaphthylene	"	ND	-----	0.500	"	"	"	"	"	**RL1**
Anthracene	"	ND	-----	0.200	"	2x	"	"	10/05/10 19:43	
Benzo (a) anthracene	"	**0.256**	-----	0.0100	"	"	"	"	"	
Benzo (a) pyrene	"	**0.228**	-----	0.0100	"	"	"	"	"	
Benzo (b) fluoranthene	"	**0.160**	-----	0.0100	"	"	"	"	"	**B1**
Benzo (ghi) perylene	"	ND	-----	0.200	"	"	"	"	"	
Benzo (k) fluoranthene	"	**0.155**	-----	0.0100	"	"	"	"	"	**B1**
Chrysene	"	**0.233**	-----	0.0100	"	"	"	"	"	**B1**
Dibenzo (a,h) anthracene	"	**0.0550**	-----	0.0100	"	"	"	"	"	
Fluoranthene	"	**0.465**	-----	0.200	"	"	"	"	"	
Fluorene	"	ND	-----	0.500	"	5x	"	"	10/04/10 11:24	**RL1**
Indeno (1,2,3-cd) pyrene	"	**0.160**	-----	0.0100	"	2x	"	"	10/05/10 19:43	**B1**
Naphthalene	"	ND	-----	0.500	"	5x	"	"	10/04/10 11:24	**RL1**
Phenanthrene	"	**0.279**	-----	0.200	"	2x	"	"	10/05/10 19:43	
Pyrene	"	**0.778**	-----	0.200	"	"	"	"	"	
Surrogate(s):	*Fluorene-d10*			*52.1%*		*25 - 125%*	*5x*		*10/04/10 11:24*	
	Pyrene-d10			*57.8%*		*23 - 150%*	*2x*		*10/05/10 19:43*	
	Benzo (a) pyrene-d12			*36.0%*		*10 - 125%*	"		"	
PTI0748-07 (CR-1)			**Water**			**Sampled: 09/22/10 14:30**				
2-Methylnaphthalene	EPA 8270m	ND	-----	0.200	ug/l	2x	10I0832	09/28/10 16:30	10/05/10 16:31	**RL1**
Acenaphthene	"	**0.782**	-----	0.200	"	"	"	"	"	
Acenaphthylene	"	ND	-----	0.300	"	"	"	"	"	**RL1**
Anthracene	"	ND	-----	0.250	"	1x	"	"	10/05/10 13:36	**RL1**
Benzo (a) anthracene	"	**0.0130**	-----	0.00500	"	"	"	"	"	
Benzo (a) pyrene	"	**0.00592**	-----	0.00500	"	"	"	"	"	
Benzo (b) fluoranthene	"	ND	-----	0.0100	"	"	"	"	"	**RL1**
Benzo (ghi) perylene	"	ND	-----	0.100	"	"	"	"	"	
Benzo (k) fluoranthene	"	ND	-----	0.00500	"	"	"	"	"	
Chrysene	"	**0.0344**	-----	0.00500	"	"	"	"	"	**B1**
Dibenzo (a,h) anthracene	"	**0.00525**	-----	0.00500	"	"	"	"	"	
Fluoranthene	"	ND	-----	0.100	"	"	"	"	"	
Fluorene	"	**2.62**	-----	0.200	"	2x	"	"	10/05/10 16:31	
Indeno (1,2,3-cd) pyrene	"	**0.00670**	-----	0.00500	"	1x	"	"	10/05/10 13:36	**N1**

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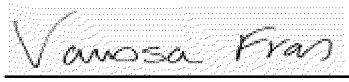

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PORTLAND, OR 9405 S.W. NIMBUS AVENUE
BEAVERTON, OR 97008-7132
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ARCADIS U.S., Inc	Project Name:	**Chevron - RI Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	100-1868	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/08/10 18:53

Polynuclear Aromatic Compounds per EPA 8270M-SIM

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PTI0748-07 (CR-1)			**Water**			**Sampled: 09/22/10 14:30**				
Naphthalene	EPA 8270m	ND	-----	0.300	ug/l	2x	10I0832	09/28/10 16:30	10/05/10 16:31	**RL1**
Phenanthrene	"	**1.19**	-----	0.100	"	1x	"	"	10/05/10 13:36	
Pyrene	"	ND	-----	0.100	"	"	"	"	"	
Surrogate(s): Fluorene-d10				*73.9%*		*25 - 125 %*	*2x*		*10/05/10 16:31*	
Pyrene-d10				*77.4%*		*23 - 150 %*	*1x*		*10/05/10 13:36*	
Benzo (a) pyrene-d12				*62.0%*		*10 - 125 %*	"		"	
PTI0748-08 (BD-R1-Chev-1)			**Water**			**Sampled: 09/22/10 00:00**				
2-Methylnaphthalene	EPA 8270m	ND	-----	2.50	ug/l	25x	10I0832	09/28/10 16:30	10/04/10 17:00	**RL1**
Acenaphthene	"	**3.60**	-----	2.50	"	"	"	"	"	
Acenaphthylene	"	ND	-----	2.50	"	"	"	"	"	**RL1**
Anthracene	"	ND	-----	2.50	"	"	"	"	"	**RL1**
Benzo (a) anthracene	"	**0.0878**	-----	0.0250	"	5x	"	"	10/04/10 11:52	
Benzo (a) pyrene	"	**0.0504**	-----	0.0250	"	"	"	"	"	
Benzo (b) fluoranthene	"	**0.0452**	-----	0.0250	"	"	"	"	"	**B1**
Benzo (ghi) perylene	"	ND	-----	0.500	"	"	"	"	"	
Benzo (k) fluoranthene	"	**0.0270**	-----	0.0250	"	"	"	"	"	**N1**
Chrysene	"	**0.161**	-----	0.0250	"	"	"	"	"	**B1**
Dibenzo (a,h) anthracene	"	ND	-----	0.0250	"	"	"	"	"	
Fluoranthene	"	ND	-----	0.500	"	"	"	"	"	
Fluorene	"	**17.8**	-----	2.50	"	25x	"	"	10/04/10 17:00	
Indeno (1,2,3-cd) pyrene	"	**0.0324**	-----	0.0250	"	5x	"	"	10/04/10 11:52	**N1**
Naphthalene	"	ND	-----	2.50	"	25x	"	"	10/04/10 17:00	**RL1**
Phenanthrene	"	**18.1**	-----	2.50	"	"	"	"	"	
Pyrene	"	**0.883**	-----	0.500	"	5x	"	"	10/04/10 11:52	
Surrogate(s): Fluorene-d10				*61.9%*		*25 - 125 %*	*25x*		*10/04/10 17:00*	
Pyrene-d10				*62.3%*		*23 - 150 %*	*5x*		*10/04/10 11:52*	
Benzo (a) pyrene-d12				*36.5%*		*10 - 125 %*	"		"	

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ARCADIS U.S., Inc	Project Name:	**Chevron - RI Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	100-1868	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/08/10 18:53

Gasoline Hydrocarbons per NW TPH-Gx Method - Laboratory Quality Control Results

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QC Batch: 10I0796 **Water Preparation Method: EPA 5030B**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (10I0796-BLK1)							**Extracted: 09/27/10 12:56**							
Gasoline Range Hydrocarbons	NW TPH-Gx	ND	---	80.0	ug/l	1x	--	--	--	--	--	--	09/27/10 19:03	
Surrogate(s): 4-BFB (FID)		*Recovery: 94.2%*			*Limits: 50-150%*	"							*09/27/10 19:03*	
LCS (10I0796-BS2)							**Extracted: 09/27/10 12:56**							
Gasoline Range Hydrocarbons	NW TPH-Gx	574	---	80.0	ug/l	1x	--	500	115%	(70-130)	--	--	09/27/10 17:53	
Surrogate(s): 4-BFB (FID)		*Recovery: 98.6%*			*Limits: 50-150%*	"							*09/27/10 17:53*	
LCS Dup (10I0796-BSD2)							**Extracted: 09/27/10 12:56**							
Gasoline Range Hydrocarbons	NW TPH-Gx	596	---	80.0	ug/l	1x	--	500	119%	(70-130)	3.74%	(35)	09/27/10 18:28	
Surrogate(s): 4-BFB (FID)		*Recovery: 100%*			*Limits: 50-150%*	"							*09/27/10 18:28*	
Duplicate (10I0796-DUP1)							**QC Source: PTI0748-01** **Extracted: 09/27/10 12:56**							
Gasoline Range Hydrocarbons	NW TPH-Gx	418	---	80.0	ug/l	1x	402	--	--	--	3.93%	(35)	09/28/10 03:52	Q1
Surrogate(s): 4-BFB (FID)		*Recovery: 92.9%*			*Limits: 50-150%*	"							*09/28/10 03:52*	
Duplicate (10I0796-DUP2)							**QC Source: PTI0748-02** **Extracted: 09/27/10 12:56**							
Gasoline Range Hydrocarbons	NW TPH-Gx	862	---	80.0	ug/l	1x	954	--	--	--	10.2%	(35)	09/28/10 05:03	
Surrogate(s): 4-BFB (FID)		*Recovery: 93.6%*			*Limits: 50-150%*	"							*09/28/10 05:03*	

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ARCADIS U.S., Inc	Project Name:	**Chevron - RI Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	100-1868	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/08/10 18:53

Diesel and Heavy Range Hydrocarbons per NWTPH-Dx Method with Acid/Silica Gel Cleanup - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 10I0777 **Water Preparation Method: EPA 3510 Fuels**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (10I0777-BLK1)								**Extracted: 09/27/10 10:50**						
Diesel Range Organics	NWTPH-Dx	ND	---	0.100	mg/l	1x	--	--	--	--	--	--	09/27/10 14:21	
Residual Range/Heavy Oil Organics	"	ND	---	0.500	"	"	--	--	--	--	--	--	"	
Surrogate(s): 1-Chlorooctadecane		*Recovery: 87.0%*			*Limits: 50-150%*	"							*09/27/10 14:21*	
LCS (10I0777-BS1)								**Extracted: 09/27/10 10:50**						
Diesel Range Organics	NWTPH-Dx	2.18	---	0.100	mg/l	1x	--	2.50	87.4%	(50-150)	--	--	09/27/10 14:40	
Residual Range/Heavy Oil Organics	"	1.42	---	0.500	"	"	--	1.50	94.9%	"	--	--	"	
Surrogate(s): 1-Chlorooctadecane		*Recovery: 88.4%*			*Limits: 60-120%*	"							*09/27/10 14:40*	
LCS Dup (10I0777-BSD1)								**Extracted: 09/27/10 10:50**						
Diesel Range Organics	NWTPH-Dx	2.16	---	0.100	mg/l	1x	--	2.50	86.6%	(50-150)	0.939%	(20)	09/27/10 14:58	
Residual Range/Heavy Oil Organics	"	1.39	---	0.500	"	"	--	1.50	92.9%	"	2.07%	"	"	
Surrogate(s): 1-Chlorooctadecane		*Recovery: 87.2%*			*Limits: 60-120%*	"							*09/27/10 14:58*	

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ARCADIS U.S., Inc	Project Name:	**Chevron - RI Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	100-1868	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/08/10 18:53

Total Metals per EPA 6000/7000 Series Methods - Laboratory Quality Control Results

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QC Batch: 10I0737 **Water Preparation Method: EPA 200/3005**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (10I0737-BLK1)								**Extracted: 09/24/10 07:26**						
Arsenic	EPA 6020	ND	---	0.00100	mg/l	1x	--	--	--	--	--	--	09/26/10 18:19	
Barium	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Cadmium	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Chromium	"	ND	---	0.00200	"	"	--	--	--	--	--	--	"	
Copper	"	ND	---	0.00200	"	"	--	--	--	--	--	--	"	
Lead	"	ND	---	0.00100	"	"	--	--	--	--	--	--	09/27/10 17:07	
Manganese	"	ND	---	0.00200	"	"	--	--	--	--	--	--	"	
Selenium	"	ND	---	0.00100	"	"	--	--	--	--	--	--	09/26/10 18:19	
Silver	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Zinc	"	ND	---	0.0100	"	"	--	--	--	--	--	--	"	
LCS (10I0737-BS1)								**Extracted: 09/24/10 07:26**						
Arsenic	EPA 6020	0.0991	---	0.00100	mg/l	1x	--	0.100	99.1%	(80-120)	--	--	09/26/10 18:25	
Barium	"	0.0947	---	0.00100	"	"	--	"	94.7%	"	--	--	"	
Cadmium	"	0.0963	---	0.00100	"	"	--	"	96.3%	"	--	--	"	
Chromium	"	0.101	---	0.00200	"	"	--	"	101%	"	--	--	"	
Copper	"	0.107	---	0.00200	"	"	--	"	107%	"	--	--	"	
Lead	"	0.0992	---	0.00100	"	"	--	"	99.2%	"	--	--	09/27/10 17:11	
Manganese	"	0.0960	---	0.00200	"	"	--	"	96.0%	"	--	--	"	
Selenium	"	0.0981	---	0.00100	"	"	--	"	98.1%	"	--	--	09/26/10 18:25	
Silver	"	0.0500	---	0.00100	"	"	--	0.0500	99.9%	"	--	--	"	
Zinc	"	0.104	---	0.0100	"	"	--	0.100	104%	"	--	--	"	
Duplicate (10I0737-DUP1)						**QC Source: PT10688-01**			**Extracted: 09/24/10 07:26**					
Arsenic	EPA 6020	ND	---	0.00100	mg/l	1x	ND	--	--	--	9.25%	(20)	09/26/10 18:58	
Barium	"	0.00648	---	0.00100	"	"	0.00643	--	--	--	0.790%	"	"	
Cadmium	"	ND	---	0.00100	"	"	ND	--	--	--	NR	"	"	
Chromium	"	ND	---	0.00200	"	"	ND	--	--	--	12.4%	"	"	
Copper	"	0.0118	---	0.00200	"	"	0.0116	--	--	--	1.96%	"	"	
Lead	"	ND	---	0.00100	"	"	ND	--	--	--	20.7%	"	09/27/10 17:28	R4
Manganese	"	ND	---	0.00200	"	"	ND	--	--	--	19.0%	"	"	
Selenium	"	0.00108	---	0.00100	"	"	0.00107	--	--	--	0.743%	"	09/26/10 18:58	
Silver	"	ND	---	0.00100	"	"	ND	--	--	--	38.7%	"	"	R4
Zinc	"	ND	---	0.0100	"	"	ND	--	--	--	2.51%	"	"	

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Vanessa Frahs, Project Manager

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ARCADIS U.S., Inc	Project Name:	**Chevron - RI Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	100-1868	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/08/10 18:53

Total Metals per EPA 6000/7000 Series Methods - Laboratory Quality Control Results

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QC Batch: 10I0737 **Water Preparation Method: EPA 200/3005**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Matrix Spike (10I0737-MS1)				**QC Source: PTI0719-01**					**Extracted: 09/24/10 07:26**					
Arsenic	EPA 6020	0.110	---	0.00500	mg/l	5x	0.00225	0.100	107%	(75-125)	--	--	09/28/10 01:06	
Barium	"	0.0969	---	0.00500	"	"	0.00415	"	92.8%	"	--	--	"	
Cadmium	"	0.0922	---	0.00500	"	"	ND	"	92.2%	"	--	--	"	
Chromium	"	0.138	---	0.0100	"	"	0.0210	"	117%	"	--	--	"	
Copper	"	0.104	---	0.0100	"	"	0.00840	"	96.0%	"	--	--	"	
Lead	"	0.0878	---	0.00500	"	"	0.00375	"	84.1%	"	--	--	"	
Manganese	"	1.21	---	0.0100	"	"	1.00	"	208%	"	--	--	"	MHA
Selenium	"	0.118	---	0.00500	"	"	0.00315	"	115%	"	--	--	"	
Silver	"	0.0435	---	0.00500	"	"	0.000300	0.0500	86.4%	"	--	--	"	
Zinc	"	0.709	---	0.0500	"	"	0.572	0.100	137%	"	--	--	"	M7
Matrix Spike (10I0737-MS2)				**QC Source: PTI0748-04**					**Extracted: 09/24/10 07:26**					
Arsenic	EPA 6020	0.0984	---	0.00100	mg/l	1x	0.00432	0.100	94.0%	(75-125)	--	--	09/26/10 20:00	
Barium	"	0.212	---	0.00100	"	"	0.123	"	88.5%	"	--	--	"	
Cadmium	"	0.0994	---	0.00100	"	"	0.000796	"	98.6%	"	--	--	"	
Chromium	"	0.102	---	0.00200	"	"	0.00854	"	93.3%	"	--	--	"	
Copper	"	0.125	---	0.00200	"	"	0.0357	"	89.6%	"	--	--	"	
Lead	"	0.104	---	0.00500	"	5x	0.00840	"	95.4%	"	--	--	09/27/10 18:09	
Manganese	"	1.36	---	0.0100	"	"	1.25	"	111%	"	--	--	"	
Selenium	"	0.0952	---	0.00100	"	1x	0.000220	"	95.0%	"	--	--	09/26/10 20:00	
Silver	"	0.0498	---	0.00100	"	"	0.0000530	0.0500	99.5%	"	--	--	"	
Zinc	"	0.134	---	0.0100	"	"	0.0486	0.100	85.7%	"	--	--	"	

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ARCADIS U.S., Inc	Project Name:	**Chevron - RI Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	100-1868	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/08/10 18:53

Mercury per EPA Method 1631E - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 10I0860 **Water Preparation Method: EPA 1631**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (10I0860-BLK1)								**Extracted: 09/28/10 16:37**						
Mercury	EPA 1631E	ND	---	0.00500	ug/l	1x	--	--	--	--	--	--	09/29/10 11:04	
Blank (10I0860-BLK2)								**Extracted: 09/28/10 16:37**						
Mercury	EPA 1631E	ND	---	0.00500	ug/l	1x	--	--	--	--	--	--	09/29/10 11:09	
Blank (10I0860-BLK3)								**Extracted: 09/28/10 16:37**						
Mercury	EPA 1631E	ND	---	0.00500	ug/l	1x	--	--	--	--	--	--	09/29/10 11:14	
LCS (10I0860-BS1)								**Extracted: 09/28/10 16:37**						
Mercury	EPA 1631E	0.0501	---	0.00500	ug/l	1x	--	0.0500	100%	(75-125)	--	--	09/29/10 11:19	
LCS Dup (10I0860-BSD1)								**Extracted: 09/28/10 16:37**						
Mercury	EPA 1631E	0.0510	---	0.00500	ug/l	1x	--	0.0500	102%	(75-125)	1.75%	(20)	09/29/10 11:24	
Duplicate (10I0860-DUP1)							**QC Source: PTI0748-01**			**Extracted: 09/28/10 16:37**				
Mercury	EPA 1631E	ND	---	0.00500	ug/l	1x	ND	--	--	--	53.9%	(20)	09/29/10 11:29	R4
Matrix Spike (10I0860-MS1)							**QC Source: PTI0748-01**			**Extracted: 09/28/10 16:37**				
Mercury	EPA 1631E	0.0483	---	0.00500	ug/l	1x	0.00166	0.0500	93.2%	(71-125)	--	--	09/29/10 11:34	
Matrix Spike (10I0860-MS2)							**QC Source: PTI0794-02**			**Extracted: 09/28/10 16:37**				
Mercury	EPA 1631E	0.0549	---	0.00500	ug/l	1x	0.0127	0.0500	84.4%	(71-125)	--	--	09/29/10 11:44	
Matrix Spike Dup (10I0860-MSD1)							**QC Source: PTI0748-01**			**Extracted: 09/28/10 16:37**				
Mercury	EPA 1631E	0.0486	---	0.00500	ug/l	1x	0.00166	0.0500	93.8%	(71-125)	0.589%	(20)	09/29/10 11:39	
Matrix Spike Dup (10I0860-MSD2)							**QC Source: PTI0794-02**			**Extracted: 09/28/10 16:37**				
Mercury	EPA 1631E	0.0553	---	0.00500	ug/l	1x	0.0127	0.0500	85.2%	(71-125)	0.674%	(20)	09/29/10 11:49	

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Vanessa Frahs, Project Manager

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PORTLAND, OR 9405 S.W. NIMBUS AVENUE
BEAVERTON, OR 97008-7132
ph: (503) 906.9200 fax: (503) 906.9210

ARCADIS U.S., Inc	Project Name:	**Chevron - RI Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	100-1868	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/08/10 18:53

Selected Volatile Organic Compounds (Including BTEX) per EPA Method 8260B - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 10I0885 **Water Preparation Method: EPA 5030B**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (10I0885-BLK1)									**Extracted: 09/29/10 10:00**					
Methyl tert-butyl ether	EPA 8260B	ND	---	1.00	ug/l	1x	--	--	--	--	--	--	09/29/10 12:55	
Benzene	"	ND	---	0.200	"	"	--	--	--	--	--	--	"	
1,2-Dichloroethane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Toluene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,2-Dibromoethane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Ethylbenzene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
m,p-Xylene	"	ND	---	2.00	"	"	--	--	--	--	--	--	"	
o-Xylene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Isopropylbenzene	"	ND	---	2.00	"	"	--	--	--	--	--	--	"	
n-Propylbenzene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,3,5-Trimethylbenzene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,2,4-Trimethylbenzene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Naphthalene	"	ND	---	2.00	"	"	--	--	--	--	--	--	"	
Surrogate(s):	*Dibromofluoromethane*	*Recovery:*	*104%*		*Limits:*	*80-120%*	"						*09/29/10 12:55*	
	1,2-DCA-d4		*101%*			*80-120%*	"						"	
	Toluene-d8		*99.6%*			*80-120%*	"						"	
	4-BFB		*89.3%*			*80-120%*	"						"	
LCS (10I0885-BS1)									**Extracted: 09/29/10 10:00**					
Methyl tert-butyl ether	EPA 8260B	20.3	---	1.00	ug/l	1x	--	20.0	102%	(80-129)	--	--	09/29/10 11:07	
Benzene	"	20.2	---	0.200	"	"	--	"	101%	(80-120)	--	--	"	
1,2-Dichloroethane	"	21.4	---	1.00	"	"	--	"	107%	(78-123)	--	--	"	
Toluene	"	20.2	---	1.00	"	"	--	"	101%	(80-124)	--	--	"	
1,2-Dibromoethane	"	21.0	---	1.00	"	"	--	"	105%	(80-122)	--	--	"	
Ethylbenzene	"	18.3	---	1.00	"	"	--	"	91.6%	(80-120)	--	--	"	
m,p-Xylene	"	35.8	---	2.00	"	"	--	40.0	89.4%	(72-127)	--	--	"	
o-Xylene	"	17.9	---	1.00	"	"	--	20.0	89.4%	(77-123)	--	--	"	
Isopropylbenzene	"	18.0	---	2.00	"	"	--	"	90.2%	(77-124)	--	--	"	
n-Propylbenzene	"	18.9	---	1.00	"	"	--	"	94.6%	(76-128)	--	--	"	
1,3,5-Trimethylbenzene	"	18.8	---	1.00	"	"	--	"	93.9%	(75-132)	--	--	"	
1,2,4-Trimethylbenzene	"	18.7	---	1.00	"	"	--	"	93.4%	(73-132)	--	--	"	
Naphthalene	"	19.2	---	2.00	"	"	--	"	96.2%	(72-149)	--	--	"	
Surrogate(s):	*Dibromofluoromethane*	*Recovery:*	*103%*		*Limits:*	*80-120%*	"						*09/29/10 11:07*	
	1,2-DCA-d4		*101%*			*80-120%*	"						"	
	Toluene-d8		*100%*			*80-120%*	"						"	
	4-BFB		*91.2%*			*80-120%*	"						"	

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Vanessa Frahs, Project Manager

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ARCADIS U.S., Inc	Project Name:	**Chevron - RI Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	100-1868	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/08/10 18:53

Selected Volatile Organic Compounds (Including BTEX) per EPA Method 8260B - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 10I0885 **Water Preparation Method: EPA 5030B**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
LCS Dup (10I0885-BSD1)							**Extracted: 09/29/10 10:00**							
Methyl tert-butyl ether	EPA 8260B	19.9	---	1.00	ug/l	1x	--	20.0	99.6%	(80-129)	1.99%	(25)	09/29/10 11:34	
Benzene	"	20.2	---	0.200	"	"	--	"	101%	(80-120)	0.0990%	"	"	
1,2-Dichloroethane	"	20.8	---	1.00	"	"	--	"	104%	(78-123)	2.94%	"	"	
Toluene	"	19.8	---	1.00	"	"	--	"	99.1%	(80-124)	2.15%	"	"	
1,2-Dibromoethane	"	19.7	---	1.00	"	"	--	"	98.7%	(80-122)	6.04%	"	"	
Ethylbenzene	"	17.7	---	1.00	"	"	--	"	88.7%	(80-120)	3.16%	"	"	
m,p-Xylene	"	34.5	---	2.00	"	"	--	40.0	86.3%	(72-127)	3.50%	"	"	
o-Xylene	"	17.0	---	1.00	"	"	--	20.0	85.0%	(77-123)	4.99%	"	"	
Isopropylbenzene	"	17.5	---	2.00	"	"	--	"	87.3%	(77-124)	3.32%	"	"	
n-Propylbenzene	"	17.8	---	1.00	"	"	--	"	89.2%	(76-128)	5.77%	"	"	
1,3,5-Trimethylbenzene	"	17.8	---	1.00	"	"	--	"	89.0%	(75-132)	5.30%	"	"	
1,2,4-Trimethylbenzene	"	17.7	---	1.00	"	"	--	"	88.7%	(73-132)	5.22%	"	"	
Naphthalene	"	17.6	---	2.00	"	"	--	"	88.1%	(72-149)	8.74%	"	"	
Surrogate(s):	*Dibromofluoromethane*	*Recovery:*	*104%*	*Limits:*	*80-120%*	"							*09/29/10 11:34*	
	1,2-DCA-d4		*102%*		*80-120%*	"							"	
	Toluene-d8		*101%*		*80-120%*	"							"	
	4-BFB		*91.8%*		*80-120%*	"							"	

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ARCADIS U.S., Inc	Project Name:	**Chevron - RI Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	100-1868	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/08/10 18:53

Polynuclear Aromatic Compounds per EPA 8270M-SIM - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 10I0832 **Water Preparation Method: 3520B Liq-Liq**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (10I0832-BLK1)							**Extracted: 09/28/10 16:30**							
2-Methylnaphthalene	EPA 8270m	ND	---	0.100	ug/l	1x	--	--	--	--	--	--	10/04/10 09:12	
Acenaphthene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Acenaphthylene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Anthracene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Benzo (a) anthracene	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	
Benzo (a) pyrene	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	
Benzo (b) fluoranthene	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	N1
Benzo (ghi) perylene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Benzo (k) fluoranthene	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	N1
Chrysene	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	N1
Dibenzo (a,h) anthracene	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	
Fluoranthene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Fluorene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Indeno (1,2,3-cd) pyrene	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	N1
Naphthalene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Phenanthrene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Pyrene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Surrogate(s): *Fluorene-d10*		*Recovery:* *85.1%*			*Limits:* *25-125%*	"							*10/04/10 09:12*	
Pyrene-d10		*87.6%*			*23-150%*	"							"	
Benzo (a) pyrene-d12		*83.6%*			*10-125%*	"							"	
LCS (10I0832-BS1)							**Extracted: 09/28/10 16:30**							
Acenaphthene	EPA 8270m	0.964	---	0.100	ug/l	1x	--	1.25	77.2%	(26-135)	--	--	10/04/10 13:20	
Benzo (a) pyrene	"	1.00	---	0.00500	"	"	--	"	80.4%	(38-137)	--	--	"	
Pyrene	"	1.06	---	0.100	"	"	--	"	84.5%	(30-147)	--	--	"	
Surrogate(s): *Fluorene-d10*		*Recovery:* *85.2%*			*Limits:* *25-125%*	"							*10/04/10 13:20*	
Pyrene-d10		*77.7%*			*23-150%*	"							"	
Benzo (a) pyrene-d12		*79.0%*			*10-125%*	"							"	
LCS Dup (10I0832-BSD1)							**Extracted: 09/28/10 16:30**							
Acenaphthene	EPA 8270m	0.911	---	0.100	ug/l	1x	--	1.25	72.8%	(26-135)	5.75%	(50)	10/04/10 13:47	
Benzo (a) pyrene	"	0.995	---	0.00500	"	"	--	"	79.6%	(38-137)	0.909%	"	"	
Pyrene	"	1.07	---	0.100	"	"	--	"	85.9%	(30-147)	1.66%	"	"	
Surrogate(s): *Fluorene-d10*		*Recovery:* *82.0%*			*Limits:* *25-125%*	"							*10/04/10 13:47*	
Pyrene-d10		*79.9%*			*23-150%*	"							"	
Benzo (a) pyrene-d12		*78.3%*			*10-125%*	"							"	

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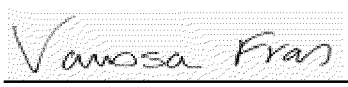

Vanessa Frahs, Project Manager

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ARCADIS U.S., Inc	Project Name:	**Chevron - RI Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	100-1868	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/08/10 18:53

Notes and Definitions

Report Specific Notes:

B1	-	Analyte was detected in the associated method blank. Analyte concentration in the sample is greater than 10x the concentration found in the method blank.
M7	-	The MS and/or MSD were above the acceptance limits. See Blank Spike (LCS).
MHA	-	Due to high levels of analyte in the sample, the MS/MSD calculation does not provide useful spike recovery information. See Blank Spike (LCS).
N1	-	See case narrative.
Q1	-	Does not match typical pattern
Q7	-	The heavy oil range organics present are due to hydrocarbons eluting primarily in the diesel range.
Q9	-	Hydrocarbon pattern most closely resembles weathered diesel.
R4	-	Due to the low levels of analyte in the sample, the duplicate RPD calculation does not provide useful information.
RL1	-	Reporting limit raised due to sample matrix effects.
RL3	-	Reporting limit raised due to high concentrations of non-target analytes.

Laboratory Reporting Conventions:

DET	-	Analyte DETECTED at or above the Reporting Limit. Qualitative Analyses only.
ND	-	Analyte NOT DETECTED at or above the reporting limit (MDL or MRL, as appropriate).
NR/NA	-	Not Reported / Not Available
dry	-	Sample results reported on a Dry Weight Basis. Results and Reporting Limits have been corrected for Percent Dry Weight.
wet	-	Sample results and reporting limits reported on a Wet Weight Basis (as received). Results with neither 'wet' nor 'dry' are reported on a Wet Weight Basis.
RPD	-	RELATIVE PERCENT DIFFERENCE (RPDs calculated using Results, not Percent Recoveries).
MRL	-	METHOD REPORTING LIMIT. Reporting Level at, or above, the lowest level standard of the Calibration Table.
MDL*	-	METHOD DETECTION LIMIT. Reporting Level at, or above, the statistically derived limit based on 40CFR, Part 136, Appendix B. *MDLs are listed on the report only if the data has been evaluated below the MRL. Results between the MDL and MRL are reported as Estimated Results.
Dil	-	Dilutions are calculated based on deviations from the standard dilution performed for an analysis, and may not represent the dilution found on the analytical raw data.
Reporting Limits	-	Reporting limits (MDLs and MRLs) are adjusted based on variations in sample preparation amounts, analytical dilutions and percent solids, where applicable.
Electronic Signature	-	Electronic Signature added in accordance with TestAmerica's *Electronic Reporting and Electronic Signatures Policy.* Application of electronic signature indicates that the report has been reviewed and approved for release by the laboratory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

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Vanessa Frahs, Project Manager

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CERTIFICATION SUMMARY

TestAmerica Portland

Method	Matrix	Oregon
EPA 1631E	Water	X
EPA 6020	Water	X
EPA 8260B	Water	X
EPA 8270m	Water	X
NW TPH-Gx	Water	X
NWTPH-Dx	Water	X

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11922 E. First Ave, Spokane, WA 99206-5302 509-924-9200 FAX 924-9290
9405 SW Nimbus Ave,Beaverton, OR 97008-7145 503-906-9200 FAX 906-9210
2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119 907-563-9200 FAX 563-9210

CHAIN OF CUSTODY REPORT

Work Order #: PT10748

CLIENT: ARCADIS

REPORT TO: Jason Nail
ADDRESS: 111 SW Columbia St. Suit 725
Portland, OR 97201

PHONE: (503) 220-8201 FAX: (503) 220-8209

INVOICE TO: JASON NAIL

P.O. NUMBER:

PROJECT NAME: Chevron Wilbridge RI wells

PROJECT NUMBER: 10018LE

SAMPLED BY: CP / TW

TURNAROUND REQUEST
in Business Days *
Organic & Inorganic Analyses: (10) STD. | 7 | 5 | 4 | 3 | 2 | 1 | <1
Petroleum Hydrocarbon Analyses: 5 STD. | 4 | 3 | 2 | 1 | <1
OTHER Specify:
* Turnaround Requests less than standard may incur Rush Charges.

	CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME	PRESERVATIVE	REQUESTED ANALYSES: Methyl Mylate BTX	Methyl Mylate DX by silica	RBCA VOC/ NAPTHA	PAH's	Total Metals	Hg	MATRIX (W, S, O)	# OF CONT.	LOCATION/ COMMENTS	TA WO ID
1	B9A	9/21/10/1510		3	2	3	2	1	1	W	10		
2	B-10	9/21/10/1530											
3	B-21	9/22/10/1100											
4	B-28	9/21/10/1215											
5	B-29	9/21/10/1300											
6	B-30	9/21/10/1015											
7	CR-1	9/22/10/1430											
8	~~BD~~ RI-Chev-1	9/22/10/—											
9	TB-301	9/22/10/—		X		X							
10													

RELEASED BY: [signature] DATE: 9/22/10
PRINT NAME: Tobin Woodley FIRM: ARCADIS TIME: 1628

RECEIVED BY: [signature] DATE: 09/22/10
PRINT NAME: Megan Hennig FIRM: TAP TIME: 1628

RELEASED BY: DATE:
PRINT NAME: FIRM: TIME:

RECEIVED BY: DATE:
PRINT NAME: FIRM: TIME:

ADDITIONAL REMARKS:

TEMP:

PAGE 1 OF 1

TAL-1000(0408)

* All analysis for low level detection limits

Chevron RI wells

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TestAmerica Portland

Sample Receiving Checklist

Work Order #: PT10748 Date/Time Received: 09/22/10 1628

Client Name and Project: Arcadis

Chevron Willbridge RI Wells

Time Zone:

☐EDT/EST ☐CDT/CST ☐MDT/MST ☐PDT/PST ☐AK ☐OTHER

Unpacking Checks:

Cooler #(s):	1	2	3	4	
Temperatures:	2.0	2.5	3.8	3.6	
Digi #1	☐	☐			
Digi #2	☐	☐			
IR Gun	☒	☒			
(☐Plastic/☒Glass)					

Temperature out of Range:

__Not enough or No Ice
__Ice Melted
__W/in 4 Hrs of collection
__Other:_____

Initials: JM

N/A	Yes	No		
☑	☐	☐	1.	If ESI client, were temp blanks received? If no, document on NOD.
☑	☐	☐	2.	Cooler Seals intact? (N/A if hand delivered) if no, document on NOD.
	☑	☐	3.	Chain of Custody present? If no, document on NOD.
	☑	☐	4.	Bottles received intact? If no, document on NOD.
	☑	☐	5.	Sample is not multiphasic? If no, document on NOD.
	☑	☐	6.	Proper Container and preservatives used? If no, document on NOD.
☐	☑	☐	7.	pH of all samples checked and meet requirements? If no, document on NOD.
☑	☐	☐	8.	Cyanide samples checked for sulfides and meet requirements? If no, notify PM.
☑	☐	☐	9.	HF Dilution required?
	☑	☐	10.	Sufficient volume provided for all analysis? If no, document on NOD and consult PM before proceeding.
	☑	☐	11.	Did chain of custody agree with samples received? If no, document on NOD.
	☑	☐	12.	Is the "Sampled by" section of the COC completed?
☐	☑	☐	13.	Were VOA/Oil Syringe samples without headspace?
☐	☑	☐	14.	Were VOA vials preserved? ☑HCl ☐Sodium Thiosulfate ☐Ascorbic Acid
	☐	☑	15.	Did samples require preservation with sodium thiosulfate?
☑	☐	☐	16.	If yes to #15, was the residual chlorine test negative? If no, document on NOD.
☑	☐	☐	17.	Are dissolved/field filtered metals bottles sediment-free? If no, document on NOD.
☑	☐	☐	18.	Is sufficient volume provided for client requested MS/MSD or matrix duplicates? If no, document on NOD and contact PM before proceeding.
☑	☐	☐	19.	Are analyses with short holding times received in hold?
	☑	☐	20.	Was Standard Turn Around (TAT) requested?
	☑	☐	21.	Receipt date(s) < 48 hours past the collection date(s)? If no, notify PM.

TestAmerica Portland

Sample Receiving Checklist

Work Order #: PT10748

Login Checks:

Initials: JM

N/A	Yes	No	
	☑	☐	22. Sufficient volume provided for all analysis? If no, document on NOD & contact PM.
☑	☐	☐	23. Sufficient volume provided for client requested MS/MSD or matrix duplicates? If no, document on NOD and contact PM.
	☑	☐	24. Did the chain of custody include "received by" and "relinquished by" signatures, dates and times?
☐	☑	☐	25. Were special log in instructions read and followed?
	☑	☐	26. Were tests logged checked against the COC?
☑	☐	☐	27. Were rush notices printed and delivered?
☑	☐	☐	28. Were short hold notices printed and delivered?
☑	☐	☐	29. Were subcontract COCs printed?
☑	☐	☐	30. Was HF dilution logged?

Labeling and Storage Checks:

Initials: JM

N/A	Yes	No	
☑	☐	☐	31. Were the subcontracted samples/containers put in Sx fridge?
☑	☐	☐	32. Were sample bottles and COC double checked for dissolved/filtered metals?
	☑	☐	33. Did the sample ID, Date, and Time from label match what was logged?
☑	☐	☐	34. Were Foreign sample stickers affixed to each container and containers stored in foreign fridge?
☑	☐	☐	35. Were HF stickers affixed to each container, and containers stored in Sx fridge?
☑	☐	☐	36. Was an NOD for created for noted discrepancies and placed in folder?

Document any problems or discrepancies and the actions taken to resolve them on a Notice of Discrepancy form (NOD).

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PORTLAND, OR 9405 S.W. NIMBUS AVENUE
BEAVERTON, OR 97008-7132
ph: (503) 906.9200 fax: (503) 906.9210

ORELAP#: OR100021

October 11, 2010

Jason Nail
ARCADIS U.S., Inc
111 SW Columbia Street - Suite 725
Portland, OR 97201

RE: ConocoPhillips - RI Well Subset

Enclosed are the results of analyses for samples received by the laboratory on 09/23/10 17:10. The following list is a summary of the Work Orders contained in this report, generated on 10/11/10 10:32.

If you have any questions concerning this report, please feel free to contact me.

Work Order	Project	ProjectNumber
PTI0794	ConocoPhillips - RI Well Subs	354972 - Willbridge

TestAmerica Portland

Vanessa Frahs

Vanessa Frahs, Project Manager

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ARCADIS U.S., Inc	Project Name:	**ConocoPhillips - RI Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	354972 - Willbridge	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/11/10 10:32

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
B37	PTI0794-01	Water	09/23/10 15:30	09/23/10 17:10
B36	PTI0794-02	Water	09/23/10 15:00	09/23/10 17:10
BD-RI-COP-1	PTI0794-03	Water	09/23/10 00:00	09/23/10 17:10
OF1	PTI0794-04	Water	09/23/10 15:00	09/23/10 17:10
P1A	PTI0794-05	Water	09/23/10 15:30	09/23/10 17:10
TB-301	PTI0794-06	Water	09/23/10 00:00	09/23/10 17:10

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Vanessa Frahs, Project Manager

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111 SW Columbia Street - Suite 725	Project Number:	354972 - Willbridge	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/11/10 10:32

Analytical Case Narrative

TestAmerica - Portland, OR

PTI0794

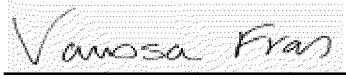
N1 Qualifier:

Chrysene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, and Indeno were detected in the batch blank between the MRL and 1/2 the MRL. The amounts detected in the blank are:

Chrysene = 0.00314 ppb
Benzo(b)fluoranthene = 0.00352 ppb
Benzo(k)fluoranthene = 0.00322 ppb
Indeno(1, 2, 3-cd)pyrene = 0.00400 ppb

Results should be considered estimates.

TestAmerica Portland



Vanessa Frahs, Project Manager

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111 SW Columbia Street - Suite 725	Project Number:	354972 - Willbridge	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/11/10 10:32

Gasoline Hydrocarbons per NW TPH-Gx Method

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PTI0794-01 (B37)			**Water**			**Sampled: 09/23/10 15:30**				
Gasoline Range Hydrocarbons	NW TPH-Gx	**161**	-----	80.0	ug/l	1x	10I0879	09/29/10 09:49	09/29/10 23:24	
Surrogate(s): 4-BFB (FID)				*97.6%*		*50 - 150%*	"			"
PTI0794-02 (B36)			**Water**			**Sampled: 09/23/10 15:00**				
Gasoline Range Hydrocarbons	NW TPH-Gx	**995**	-----	80.0	ug/l	1x	10I0879	09/29/10 09:49	09/29/10 23:59	
Surrogate(s): 4-BFB (FID)				*101%*		*50 - 150%*	"			"
PTI0794-03 (BD-RI-COP-1)			**Water**			**Sampled: 09/23/10 00:00**				
Gasoline Range Hydrocarbons	NW TPH-Gx	**950**	-----	80.0	ug/l	1x	10I0879	09/29/10 09:49	09/29/10 19:17	
Surrogate(s): 4-BFB (FID)				*101%*		*50 - 150%*	"			"
PTI0794-04 (OF1)			**Water**			**Sampled: 09/23/10 15:00**				
Gasoline Range Hydrocarbons	NW TPH-Gx	ND	-----	80.0	ug/l	1x	10I0879	09/29/10 09:49	09/29/10 20:27	
Surrogate(s): 4-BFB (FID)				*97.7%*		*50 - 150%*	"			"
PTI0794-05 (P1A)			**Water**			**Sampled: 09/23/10 15:30**				
Gasoline Range Hydrocarbons	NW TPH-Gx	ND	-----	80.0	ug/l	1x	10I0879	09/29/10 09:49	09/29/10 21:38	
Surrogate(s): 4-BFB (FID)				*99.8%*		*50 - 150%*	"			"
PTI0794-06 (TB-301)			**Water**			**Sampled: 09/23/10 00:00**				
Gasoline Range Hydrocarbons	NW TPH-Gx	ND	-----	80.0	ug/l	1x	10I0879	09/29/10 09:49	09/29/10 18:42	
Surrogate(s): 4-BFB (FID)				*99.9%*		*50 - 150%*	"			"

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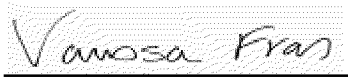

Vanessa Frahs, Project Manager

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ARCADIS U.S., Inc	Project Name:	**ConocoPhillips - RI Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	354972 - Willbridge	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/11/10 10:32

Diesel and Heavy Range Hydrocarbons per NWTPH-Dx Method with Acid/Silica Gel Cleanup

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PTI0794-01 (B37)			**Water**			**Sampled: 09/23/10 15:30**				
Diesel Range Organics	NWTPH-Dx	ND	-----	0.100	mg/l	1x	10I0838	09/28/10 15:00	09/28/10 23:19	
Residual Range/Heavy Oil Organics	"	ND	-----	0.500	"	"	"	"	"	
Surrogate(s): 1-Chlorooctadecane				*80.9%*		*50 - 150%*	"			"
PTI0794-02 (B36)			**Water**			**Sampled: 09/23/10 15:00**				
Diesel Range Organics	NWTPH-Dx	**0.299**	-----	0.100	mg/l	1x	10I0838	09/28/10 15:00	09/28/10 23:36	**Q5**
Residual Range/Heavy Oil Organics	"	ND	-----	0.500	"	"	"	"	"	
Surrogate(s): 1-Chlorooctadecane				*72.2%*		*50 - 150%*	"			"
PTI0794-03 (BD-RI-COP-1)			**Water**			**Sampled: 09/23/10 00:00**				
Diesel Range Organics	NWTPH-Dx	**0.465**	-----	0.0980	mg/l	1x	10I0838	09/28/10 15:00	09/28/10 23:54	**Q5**
Residual Range/Heavy Oil Organics	"	ND	-----	0.490	"	"	"	"	"	
Surrogate(s): 1-Chlorooctadecane				*78.6%*		*50 - 150%*	"			"
PTI0794-04 (OF1)			**Water**			**Sampled: 09/23/10 15:00**				
Diesel Range Organics	NWTPH-Dx	**7.62**	-----	0.0971	mg/l	1x	10I0838	09/28/10 15:00	09/29/10 00:11	**Q9**
Residual Range/Heavy Oil Organics	"	ND	-----	0.485	"	"	"	"	"	
Surrogate(s): 1-Chlorooctadecane				*83.8%*		*50 - 150%*	"			"
PTI0794-05 (P1A)			**Water**			**Sampled: 09/23/10 15:30**				
Diesel Range Organics	NWTPH-Dx	ND	-----	0.0980	mg/l	1x	10I0838	09/28/10 15:00	09/29/10 10:15	
Residual Range/Heavy Oil Organics	"	ND	-----	0.490	"	"	"	"	"	
Surrogate(s): 1-Chlorooctadecane				*68.4%*		*50 - 150%*	"			"

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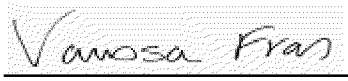

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ARCADIS U.S., Inc	Project Name:	**ConocoPhillips - RI Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	354972 - Willbridge	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/11/10 10:32

Total Metals per EPA 6000/7000 Series Methods

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Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PTI0794-01 (B37)			**Water**			**Sampled: 09/23/10 15:30**				
Arsenic	EPA 6020	**0.197**	-----	0.00100	mg/l	1x	10I0800	09/27/10 13:45	09/28/10 06:09	
Barium	"	**0.0414**	-----	0.00100	"	"	"	"	"	
Cadmium	"	ND	-----	0.00100	"	"	"	"	"	
Chromium	"	ND	-----	0.00200	"	"	"	"	"	
Copper	"	ND	-----	0.00200	"	"	"	"	"	
Lead	"	ND	-----	0.00100	"	"	"	"	"	
Manganese	"	**1.71**	-----	0.0100	"	5x	"	"	09/28/10 16:07	
Selenium	"	ND	-----	0.00500	"	"	"	"	09/28/10 20:36	
Silver	"	ND	-----	0.00100	"	1x	"	"	09/28/10 06:09	
Zinc	"	ND	-----	0.0100	"	"	"	"	"	
PTI0794-02 (B36)			**Water**			**Sampled: 09/23/10 15:00**				
Arsenic	EPA 6020	**0.0142**	-----	0.00100	mg/l	1x	10I0800	09/27/10 13:45	09/28/10 06:13	
Barium	"	**0.112**	-----	0.00100	"	"	"	"	"	
Cadmium	"	ND	-----	0.00100	"	"	"	"	"	
Chromium	"	**0.00545**	-----	0.00200	"	"	"	"	"	
Copper	"	**0.0101**	-----	0.00200	"	"	"	"	"	
Lead	"	**0.00254**	-----	0.00100	"	"	"	"	"	
Manganese	"	**2.59**	-----	0.0100	"	5x	"	"	09/28/10 16:11	
Selenium	"	ND	-----	0.00500	"	"	"	"	09/28/10 20:40	
Silver	"	ND	-----	0.00100	"	1x	"	"	09/28/10 06:13	
Zinc	"	**0.0212**	-----	0.0100	"	"	"	"	"	
PTI0794-03 (BD-RI-COP-1)			**Water**			**Sampled: 09/23/10 00:00**				
Arsenic	EPA 6020	**0.0150**	-----	0.00100	mg/l	1x	10I0800	09/27/10 13:45	09/28/10 06:24	
Barium	"	**0.118**	-----	0.00100	"	"	"	"	"	
Cadmium	"	ND	-----	0.00100	"	"	"	"	"	
Chromium	"	**0.00565**	-----	0.00200	"	"	"	"	"	
Copper	"	**0.0103**	-----	0.00200	"	"	"	"	"	
Lead	"	**0.00260**	-----	0.00100	"	"	"	"	"	
Manganese	"	**2.63**	-----	0.0100	"	5x	"	"	09/28/10 16:15	
Selenium	"	ND	-----	0.00500	"	"	"	"	09/28/10 20:43	
Silver	"	ND	-----	0.00100	"	1x	"	"	09/28/10 06:24	
Zinc	"	**0.0230**	-----	0.0100	"	"	"	"	"	

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ARCADIS U.S., Inc	Project Name:	**ConocoPhillips - RI Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	354972 - Willbridge	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/11/10 10:32

Total Metals per EPA 6000/7000 Series Methods

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PTI0794-04 (OF1)			**Water**			**Sampled: 09/23/10 15:00**				
Arsenic	EPA 6020	**0.0138**	-----	0.00100	mg/l	1x	10I0800	09/27/10 13:45	09/28/10 06:28	
Barium	"	**0.0812**	-----	0.00100	"	"	"	"	"	
Cadmium	"	**0.00130**	-----	0.00100	"	"	"	"	"	
Chromium	"	**0.00599**	-----	0.00200	"	"	"	"	"	
Copper	"	**0.0161**	-----	0.00200	"	"	"	"	"	
Lead	"	**0.00595**	-----	0.00100	"	"	"	"	"	
Manganese	"	**0.949**	-----	0.00200	"	"	"	"	"	
Selenium	"	ND	-----	0.00100	"	"	"	"	09/28/10 20:47	
Silver	"	ND	-----	0.00100	"	"	"	"	09/28/10 06:28	
Zinc	"	**0.0495**	-----	0.0100	"	"	"	"	"	
PTI0794-05 (P1A)			**Water**			**Sampled: 09/23/10 15:30**				
Arsenic	EPA 6020	**0.0132**	-----	0.00100	mg/l	1x	10I0800	09/27/10 13:45	09/28/10 06:32	
Barium	"	**0.575**	-----	0.00100	"	"	"	"	"	
Cadmium	"	**0.00183**	-----	0.00100	"	"	"	"	"	
Chromium	"	**0.0512**	-----	0.00200	"	"	"	"	"	
Copper	"	**0.0861**	-----	0.00200	"	"	"	"	"	
Lead	"	**0.0599**	-----	0.00100	"	"	"	"	"	
Manganese	"	**3.49**	-----	0.0100	"	5x	"	"	09/28/10 16:23	
Selenium	"	ND	-----	0.00500	"	"	"	"	09/28/10 20:54	
Silver	"	ND	-----	0.00100	"	1x	"	"	09/28/10 06:32	
Zinc	"	**0.411**	-----	0.0100	"	"	"	"	"	

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111 SW Columbia Street - Suite 725	Project Number:	354972 - Willbridge	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/11/10 10:32

Mercury per EPA Method 1631E

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PTI0794-01 (B37)			**Water**			**Sampled: 09/23/10 15:30**				
Mercury	EPA 1631E	**0.00556**	-----	0.00500	ug/l	1x	10I0860	09/28/10 16:37	09/29/10 12:51	
PTI0794-02 (B36)			**Water**			**Sampled: 09/23/10 15:00**				
Mercury	EPA 1631E	**0.0127**	-----	0.00500	ug/l	1x	10I0860	09/28/10 16:37	09/29/10 13:06	
PTI0794-03 (BD-RI-COP-1)			**Water**			**Sampled: 09/23/10 00:00**				
Mercury	EPA 1631E	**0.0136**	-----	0.00500	ug/l	1x	10I0860	09/28/10 16:37	09/29/10 13:11	
PTI0794-04 (OF1)			**Water**			**Sampled: 09/23/10 15:00**				
Mercury	EPA 1631E	**0.0130**	-----	0.00500	ug/l	1x	10I0860	09/28/10 16:37	09/29/10 13:16	
PTI0794-05 (P1A)			**Water**			**Sampled: 09/23/10 15:30**				
Mercury	EPA 1631E	**0.240**	-----	0.00500	ug/l	1x	10I0860	09/28/10 16:37	09/29/10 13:21	

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111 SW Columbia Street - Suite 725	Project Number:	354972 - Willbridge	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/11/10 10:32

Selected Volatile Organic Compounds (Including BTEX) per EPA Method 8260B

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PTI0794-01 (B37)			**Water**			**Sampled: 09/23/10 15:30**				
Methyl tert-butyl ether	EPA 8260B	ND	-----	1.00	ug/l	1x	10J0137	10/05/10 17:16	10/05/10 19:17	
Benzene	"	ND	-----	0.200	"	"	"	"	"	
1,2-Dichloroethane	"	ND	-----	1.00	"	"	"	"	"	
Toluene	"	ND	-----	1.00	"	"	"	"	"	
1,2-Dibromoethane	"	ND	-----	1.00	"	"	"	"	"	
Ethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
m,p-Xylene	"	ND	-----	2.00	"	"	"	"	"	
o-Xylene	"	ND	-----	1.00	"	"	"	"	"	
Isopropylbenzene	"	ND	-----	2.00	"	"	"	"	"	
n-Propylbenzene	"	ND	-----	1.00	"	"	"	"	"	
1,3,5-Trimethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
1,2,4-Trimethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
Naphthalene	"	ND	-----	2.00	"	"	"	"	"	
Surrogate(s):	*Dibromofluoromethane*			*94.4%*		*80 - 120%*	"		"	
	1,2-DCA-d4			*104%*		*80 - 120%*	"		"	
	Toluene-d8			*92.4%*		*80 - 120%*	"		"	
	4-BFB			*87.4%*		*80 - 120%*	"		"	
PTI0794-02 (B36)			**Water**			**Sampled: 09/23/10 15:00**				
Methyl tert-butyl ether	EPA 8260B	**1.04**	-----	1.00	ug/l	1x	10J0137	10/05/10 17:16	10/05/10 19:40	
Benzene	"	**0.380**	-----	0.200	"	"	"	"	"	
1,2-Dichloroethane	"	ND	-----	1.00	"	"	"	"	"	
Toluene	"	ND	-----	1.00	"	"	"	"	"	
1,2-Dibromoethane	"	ND	-----	1.00	"	"	"	"	"	
Ethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
m,p-Xylene	"	ND	-----	2.00	"	"	"	"	"	
o-Xylene	"	ND	-----	1.00	"	"	"	"	"	
Isopropylbenzene	"	**14.8**	-----	2.00	"	"	"	"	"	
n-Propylbenzene	"	**12.3**	-----	1.00	"	"	"	"	"	
1,3,5-Trimethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
1,2,4-Trimethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
Naphthalene	"	ND	-----	2.00	"	"	"	"	"	
Surrogate(s):	*Dibromofluoromethane*			*97.9%*		*80 - 120%*	"		"	
	1,2-DCA-d4			*106%*		*80 - 120%*	"		"	
	Toluene-d8			*94.7%*		*80 - 120%*	"		"	
	4-BFB			*89.2%*		*80 - 120%*	"		"	

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PORTLAND, OR 9405 S.W. NIMBUS AVENUE
BEAVERTON, OR 97008-7132
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ARCADIS U.S., Inc	Project Name:	**ConocoPhillips - RI Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	354972 - Willbridge	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/11/10 10:32

Selected Volatile Organic Compounds (Including BTEX) per EPA Method 8260B

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PTI0794-03 (BD-RI-COP-1)			**Water**			**Sampled: 09/23/10 00:00**				
Methyl tert-butyl ether	EPA 8260B	ND	-----	1.00	ug/l	1x	10J0137	10/05/10 17:16	10/05/10 20:02	
Benzene	"	**0.410**	-----	0.200	"	"	"	"	"	
1,2-Dichloroethane	"	ND	-----	1.00	"	"	"	"	"	
Toluene	"	ND	-----	1.00	"	"	"	"	"	
1,2-Dibromoethane	"	ND	-----	1.00	"	"	"	"	"	
Ethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
m,p-Xylene	"	ND	-----	2.00	"	"	"	"	"	
o-Xylene	"	ND	-----	1.00	"	"	"	"	"	
Isopropylbenzene	"	**13.3**	-----	2.00	"	"	"	"	"	
n-Propylbenzene	"	**11.7**	-----	1.00	"	"	"	"	"	
1,3,5-Trimethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
1,2,4-Trimethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
Naphthalene	"	ND	-----	2.00	"	"	"	"	"	
Surrogate(s): *Dibromofluoromethane*				*91.8%*		*80 - 120%*	"		"	
1,2-DCA-d4				*99.6%*		*80 - 120%*	"		"	
Toluene-d8				*91.8%*		*80 - 120%*	"		"	
4-BFB				*85.5%*		*80 - 120%*	"		"	
PTI0794-04 (OF1)			**Water**			**Sampled: 09/23/10 15:00**				
Methyl tert-butyl ether	EPA 8260B	ND	-----	1.00	ug/l	1x	10J0137	10/05/10 17:16	10/05/10 20:24	
Benzene	"	ND	-----	0.200	"	"	"	"	"	
1,2-Dichloroethane	"	ND	-----	1.00	"	"	"	"	"	
Toluene	"	ND	-----	1.00	"	"	"	"	"	
1,2-Dibromoethane	"	ND	-----	1.00	"	"	"	"	"	
Ethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
m,p-Xylene	"	ND	-----	2.00	"	"	"	"	"	
o-Xylene	"	ND	-----	1.00	"	"	"	"	"	
Isopropylbenzene	"	ND	-----	2.00	"	"	"	"	"	
n-Propylbenzene	"	ND	-----	1.00	"	"	"	"	"	
1,3,5-Trimethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
1,2,4-Trimethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
Naphthalene	"	ND	-----	2.00	"	"	"	"	"	
Surrogate(s): *Dibromofluoromethane*				*95.4%*		*80 - 120%*	"		"	
1,2-DCA-d4				*104%*		*80 - 120%*	"		"	
Toluene-d8				*93.0%*		*80 - 120%*	"		"	
4-BFB				*87.4%*		*80 - 120%*	"		"	

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ARCADIS U.S., Inc	Project Name:	**ConocoPhillips - RI Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	354972 - Willbridge	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/11/10 10:32

Selected Volatile Organic Compounds (Including BTEX) per EPA Method 8260B

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PTI0794-05 (P1A)			**Water**			**Sampled: 09/23/10 15:30**				
Methyl tert-butyl ether	EPA 8260B	ND	-----	1.00	ug/l	1x	10J0137	10/05/10 17:16	10/05/10 20:47	
Benzene	"	ND	-----	0.200	"	"	"	"	"	
1,2-Dichloroethane	"	ND	-----	1.00	"	"	"	"	"	
Toluene	"	ND	-----	1.00	"	"	"	"	"	
1,2-Dibromoethane	"	ND	-----	1.00	"	"	"	"	"	
Ethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
m,p-Xylene	"	ND	-----	2.00	"	"	"	"	"	
o-Xylene	"	ND	-----	1.00	"	"	"	"	"	
Isopropylbenzene	"	ND	-----	2.00	"	"	"	"	"	
n-Propylbenzene	"	ND	-----	1.00	"	"	"	"	"	
1,3,5-Trimethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
1,2,4-Trimethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
Naphthalene	"	ND	-----	2.00	"	"	"	"	"	
Surrogate(s):	*Dibromofluoromethane*			*95.8%*		*80 - 120%*	"		"	
	1,2-DCA-d4			*105%*		*80 - 120%*	"		"	
	Toluene-d8			*91.8%*		*80 - 120%*	"		"	
	4-BFB			*88.6%*		*80 - 120%*	"		"	
PTI0794-06 (TB-301)			**Water**			**Sampled: 09/23/10 00:00**				
Methyl tert-butyl ether	EPA 8260B	ND	-----	1.00	ug/l	1x	10J0137	10/05/10 17:16	10/05/10 18:55	
Benzene	"	ND	-----	0.200	"	"	"	"	"	
1,2-Dichloroethane	"	ND	-----	1.00	"	"	"	"	"	
Toluene	"	ND	-----	1.00	"	"	"	"	"	
1,2-Dibromoethane	"	ND	-----	1.00	"	"	"	"	"	
Ethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
m,p-Xylene	"	ND	-----	2.00	"	"	"	"	"	
o-Xylene	"	ND	-----	1.00	"	"	"	"	"	
Isopropylbenzene	"	ND	-----	2.00	"	"	"	"	"	
n-Propylbenzene	"	ND	-----	1.00	"	"	"	"	"	
1,3,5-Trimethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
1,2,4-Trimethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
Naphthalene	"	ND	-----	2.00	"	"	"	"	"	
Surrogate(s):	*Dibromofluoromethane*			*99.8%*		*80 - 120%*	"		"	
	1,2-DCA-d4			*109%*		*80 - 120%*	"		"	
	Toluene-d8			*95.4%*		*80 - 120%*	"		"	
	4-BFB			*91.2%*		*80 - 120%*	"		"	

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ARCADIS U.S., Inc	Project Name:	**ConocoPhillips - RI Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	354972 - Willbridge	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/11/10 10:32

Polynuclear Aromatic Compounds per EPA 8270M-SIM

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PTI0794-01 (B37)			**Water**			**Sampled: 09/23/10 15:30**				
2-Methylnaphthalene	EPA 8270m	ND	-----	0.100	ug/l	1x	10I0832	09/28/10 16:30	10/05/10 14:59	
Acenaphthene	"	ND	-----	0.100	"	"	"	"	"	
Acenaphthylene	"	ND	-----	0.100	"	"	"	"	"	
Anthracene	"	ND	-----	0.100	"	"	"	"	"	
Benzo (a) anthracene	"	ND	-----	0.00500	"	"	"	"	"	
Benzo (a) pyrene	"	ND	-----	0.00500	"	"	"	"	"	
Benzo (b) fluoranthene	"	ND	-----	0.00500	"	"	"	"	"	
Benzo (ghi) perylene	"	ND	-----	0.100	"	"	"	"	"	
Benzo (k) fluoranthene	"	ND	-----	0.00500	"	"	"	"	"	
Chrysene	"	ND	-----	0.00500	"	"	"	"	"	
Dibenzo (a,h) anthracene	"	ND	-----	0.00500	"	"	"	"	"	
Fluoranthene	"	ND	-----	0.100	"	"	"	"	"	
Fluorene	"	ND	-----	0.100	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	"	ND	-----	0.00500	"	"	"	"	"	
Naphthalene	"	ND	-----	0.100	"	"	"	"	"	
Phenanthrene	"	ND	-----	0.100	"	"	"	"	"	
Pyrene	"	ND	-----	0.100	"	"	"	"	"	
Surrogate(s):	*Fluorene-d10*			*59.9%*		*25 - 125%*	"			"
	Pyrene-d10			*49.0%*		*23 - 150%*	"			"
	Benzo (a) pyrene-d12			*33.7%*		*10 - 125%*	"			"
PTI0794-02 (B36)			**Water**			**Sampled: 09/23/10 15:00**				
2-Methylnaphthalene	EPA 8270m	**0.114**	-----	0.100	ug/l	1x	10I0832	09/28/10 16:30	10/05/10 15:26	
Acenaphthene	"	**1.04**	-----	0.300	"	3x	"	"	10/06/10 15:24	
Acenaphthylene	"	ND	-----	0.300	"	"	"	"	"	**RL1**
Anthracene	"	ND	-----	0.100	"	1x	"	"	10/05/10 15:26	
Benzo (a) anthracene	"	**0.00978**	-----	0.00500	"	"	"	"	"	
Benzo (a) pyrene	"	**0.0121**	-----	0.00500	"	"	"	"	"	
Benzo (b) fluoranthene	"	**0.00760**	-----	0.00500	"	"	"	"	"	**N1**
Benzo (ghi) perylene	"	ND	-----	0.100	"	"	"	"	"	
Benzo (k) fluoranthene	"	**0.00620**	-----	0.00500	"	"	"	"	"	**N1**
Chrysene	"	**0.0125**	-----	0.00500	"	"	"	"	"	**N1**
Dibenzo (a,h) anthracene	"	ND	-----	0.00500	"	"	"	"	"	
Fluoranthene	"	ND	-----	0.100	"	"	"	"	"	
Fluorene	"	**1.99**	-----	0.300	"	3x	"	"	10/06/10 15:24	
Indeno (1,2,3-cd) pyrene	"	**0.00930**	-----	0.00500	"	1x	"	"	10/05/10 15:26	**N1**

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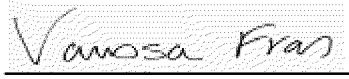

Vanessa Frahs, Project Manager

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ARCADIS U.S., Inc	Project Name:	**ConocoPhillips - RI Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	354972 - Willbridge	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/11/10 10:32

Polynuclear Aromatic Compounds per EPA 8270M-SIM

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PTI0794-02 (B36)			**Water**			**Sampled: 09/23/10 15:00**				
Naphthalene	EPA 8270m	ND	-----	0.450	ug/l	1x	10I0832	09/28/10 16:30	10/05/10 15:26	**RL1**
Phenanthrene	"	ND	-----	0.100	"	"	"	"	"	
Pyrene	"	ND	-----	0.100	"	"	"	"	"	
Surrogate(s): Fluorene-d10				*65.5%*		*25 - 125 %*	*3x*		*10/06/10 15:24*	
Pyrene-d10				*57.6%*		*23 - 150 %*	*1x*		*10/05/10 15:26*	
Benzo (a) pyrene-d12				*32.3%*		*10 - 125 %*	"		"	
PTI0794-03 (BD-RI-COP-1)			**Water**			**Sampled: 09/23/10 00:00**				
2-Methylnaphthalene	EPA 8270m	ND	-----	0.100	ug/l	1x	10I0832	09/28/10 16:30	10/05/10 15:53	
Acenaphthene	"	**1.02**	-----	0.300	"	3x	"	"	10/06/10 09:26	
Acenaphthylene	"	ND	-----	0.300	"	"	"	"	"	**RL1**
Anthracene	"	ND	-----	0.100	"	1x	"	"	10/05/10 15:53	
Benzo (a) anthracene	"	**0.0322**	-----	0.00500	"	"	"	"	"	
Benzo (a) pyrene	"	**0.0332**	-----	0.00500	"	"	"	"	"	
Benzo (b) fluoranthene	"	**0.0189**	-----	0.00500	"	"	"	"	"	**N1**
Benzo (ghi) perylene	"	ND	-----	0.100	"	"	"	"	"	
Benzo (k) fluoranthene	"	**0.0196**	-----	0.00500	"	"	"	"	"	**N1**
Chrysene	"	**0.0313**	-----	0.00500	"	"	"	"	"	**N1**
Dibenzo (a,h) anthracene	"	**0.00666**	-----	0.00500	"	"	"	"	"	
Fluoranthene	"	ND	-----	0.100	"	"	"	"	"	
Fluorene	"	**1.96**	-----	0.300	"	3x	"	"	10/06/10 09:26	
Indeno (1,2,3-cd) pyrene	"	**0.0241**	-----	0.00500	"	1x	"	"	10/05/10 15:53	**N1**
Naphthalene	"	ND	-----	0.450	"	"	"	"	"	**RL1**
Phenanthrene	"	ND	-----	0.150	"	"	"	"	"	**RL1**
Pyrene	"	**0.106**	-----	0.100	"	"	"	"	"	
Surrogate(s): Fluorene-d10				*73.4%*		*25 - 125 %*	*3x*		*10/06/10 09:26*	
Pyrene-d10				*54.0%*		*23 - 150 %*	*1x*		*10/05/10 15:53*	
Benzo (a) pyrene-d12				*27.4%*		*10 - 125 %*	"		"	
PTI0794-04 (OF1)			**Water**			**Sampled: 09/23/10 15:00**				
2-Methylnaphthalene	EPA 8270m	ND	-----	0.300	ug/l	3x	10I0832	09/28/10 16:30	10/06/10 15:52	**RL1**
Acenaphthene	"	ND	-----	0.300	"	"	"	"	"	**RL1**
Acenaphthylene	"	ND	-----	0.300	"	"	"	"	"	**RL1**
Anthracene	"	ND	-----	0.300	"	"	"	"	"	**RL1**
Benzo (a) anthracene	"	**0.0192**	-----	0.0150	"	"	"	"	"	
Benzo (a) pyrene	"	**0.00897**	-----	0.00500	"	1x	"	"	10/05/10 17:53	

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ARCADIS U.S., Inc	Project Name:	**ConocoPhillips - RI Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	354972 - Willbridge	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/11/10 10:32

Polynuclear Aromatic Compounds per EPA 8270M-SIM

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PTI0794-04 (OF1)			**Water**			**Sampled: 09/23/10 15:00**				
Benzo (b) fluoranthene	EPA 8270m	**0.0245**	-----	0.00500	ug/l	1x	10I0832	09/28/10 16:30	10/05/10 17:53	**ID3, N1**
Benzo (ghi) perylene	"	ND	-----	0.100	"	"	"	"	"	
Benzo (k) fluoranthene	"	ND	-----	0.00500	"	"	"	"	"	**ID3**
Chrysene	"	**0.0339**	-----	0.0150	"	3x	"	"	10/06/10 15:52	**B1**
Dibenzo (a,h) anthracene	"	ND	-----	0.00500	"	1x	"	"	10/05/10 17:53	
Fluoranthene	"	ND	-----	0.300	"	3x	"	"	10/06/10 15:52	**RL1**
Fluorene	"	ND	-----	0.300	"	"	"	"	"	**RL1**
Indeno (1,2,3-cd) pyrene	"	**0.00755**	-----	0.00500	"	1x	"	"	10/05/10 17:53	**N1**
Naphthalene	"	ND	-----	0.300	"	3x	"	"	10/06/10 15:52	**RL1**
Phenanthrene	"	ND	-----	0.300	"	"	"	"	"	**RL1**
Pyrene	"	ND	-----	0.300	"	"	"	"	"	**RL1**
Surrogate(s): Fluorene-d10				*85.5%*		*25 - 125 %*	"		"	
Pyrene-d10				*70.7%*		*23 - 150 %*	"		"	
Benzo (a) pyrene-d12				*49.5%*		*10 - 125 %*	*1x*		*10/05/10 17:53*	
PTI0794-05 (P1A)			**Water**			**Sampled: 09/23/10 15:30**				
2-Methylnaphthalene	EPA 8270m	ND	-----	0.100	ug/l	1x	10I0832	09/28/10 16:30	10/05/10 18:20	
Acenaphthene	"	ND	-----	0.100	"	"	"	"	"	
Acenaphthylene	"	ND	-----	0.100	"	"	"	"	"	
Anthracene	"	ND	-----	0.100	"	"	"	"	"	
Benzo (a) anthracene	"	ND	-----	0.00500	"	"	"	"	"	
Benzo (a) pyrene	"	ND	-----	0.00500	"	"	"	"	"	
Benzo (b) fluoranthene	"	ND	-----	0.00500	"	"	"	"	"	
Benzo (ghi) perylene	"	ND	-----	0.100	"	"	"	"	"	
Benzo (k) fluoranthene	"	ND	-----	0.00500	"	"	"	"	"	
Chrysene	"	**0.00628**	-----	0.00500	"	"	"	"	"	**N1**
Dibenzo (a,h) anthracene	"	ND	-----	0.00500	"	"	"	"	"	
Fluoranthene	"	ND	-----	0.100	"	"	"	"	"	
Fluorene	"	ND	-----	0.100	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	"	ND	-----	0.00500	"	"	"	"	"	
Naphthalene	"	ND	-----	0.100	"	"	"	"	"	
Phenanthrene	"	ND	-----	0.100	"	"	"	"	"	
Pyrene	"	ND	-----	0.100	"	"	"	"	"	
Surrogate(s): Fluorene-d10				*76.5%*		*25 - 125 %*	"		"	
Pyrene-d10				*44.9%*		*23 - 150 %*	"		"	
Benzo (a) pyrene-d12				*24.9%*		*10 - 125 %*	"		"	

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Vanessa Frahs, Project Manager

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PORTLAND, OR 9405 S.W. NIMBUS AVENUE
BEAVERTON, OR 97008-7132
ph: (503) 906.9200 fax: (503) 906.9210

ARCADIS U.S., Inc	Project Name:	**ConocoPhillips - RI Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	354972 - Willbridge	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/11/10 10:32

Polynuclear Aromatic Compounds per EPA 8270M-SIM

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Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes

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Vanessa Frahs, Project Manager

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111 SW Columbia Street - Suite 725	Project Number:	354972 - Willbridge	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/11/10 10:32

Gasoline Hydrocarbons per NW TPH-Gx Method - Laboratory Quality Control Results

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QC Batch: 10I0879 **Water Preparation Method: EPA 5030B**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (10I0879-BLK1)							**Extracted: 09/29/10 09:49**							
Gasoline Range Hydrocarbons	NW TPH-Gx	ND	---	80.0	ug/l	1x	--	--	--	--	--	--	09/29/10 17:32	
Surrogate(s): 4-BFB (FID)		*Recovery: 100%*			*Limits: 50-150%*	"							*09/29/10 17:32*	
LCS (10I0879-BS1)							**Extracted: 09/29/10 09:49**							
Gasoline Range Hydrocarbons	NW TPH-Gx	578	---	80.0	ug/l	1x	--	500	116%	(70-130)	--	--	09/29/10 16:21	
Surrogate(s): 4-BFB (FID)		*Recovery: 106%*			*Limits: 50-150%*	"							*09/29/10 16:21*	
LCS Dup (10I0879-BSD1)							**Extracted: 09/29/10 09:49**							
Gasoline Range Hydrocarbons	NW TPH-Gx	627	---	80.0	ug/l	1x	--	500	125%	(70-130)	8.13%	(35)	09/29/10 16:56	
Surrogate(s): 4-BFB (FID)		*Recovery: 105%*			*Limits: 50-150%*	"							*09/29/10 16:56*	
Duplicate (10I0879-DUP1)					**QC Source: PTI0794-04**		**Extracted: 09/29/10 09:49**							
Gasoline Range Hydrocarbons	NW TPH-Gx	ND	---	80.0	ug/l	1x	ND	--	--	--	--	(35)	09/29/10 19:52	
Surrogate(s): 4-BFB (FID)		*Recovery: 97.7%*			*Limits: 50-150%*	"							*09/29/10 19:52*	
Duplicate (10I0879-DUP2)					**QC Source: PTI0794-05**		**Extracted: 09/29/10 09:49**							
Gasoline Range Hydrocarbons	NW TPH-Gx	ND	---	80.0	ug/l	1x	ND	--	--	--	NR	(35)	09/29/10 21:02	
Surrogate(s): 4-BFB (FID)		*Recovery: 100%*			*Limits: 50-150%*	"							*09/29/10 21:02*	

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Portland, OR 97201	Project Manager:	Jason Nail	10/11/10 10:32

Diesel and Heavy Range Hydrocarbons per NWTPH-Dx Method with Acid/Silica Gel Cleanup - Laboratory Quality Control Results

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QC Batch: 10I0838 **Water Preparation Method: EPA 3510 Fuels**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (10I0838-BLK1)								**Extracted: 09/28/10 15:00**						
Diesel Range Organics	NWTPH-Dx	ND	---	0.100	mg/l	1x	--	--	--	--	--	--	09/28/10 20:38	
Residual Range/Heavy Oil Organics	"	ND	---	0.500	"	"	--	--	--	--	--	--	"	
Surrogate(s): 1-Chlorooctadecane		*Recovery: 84.1%*			*Limits: 50-150%*	"							*09/28/10 20:38*	
LCS (10I0838-BS1)								**Extracted: 09/28/10 15:00**						
Diesel Range Organics	NWTPH-Dx	2.19	---	0.100	mg/l	1x	--	2.50	87.4%	(50-150)	--	--	09/28/10 20:56	
Residual Range/Heavy Oil Organics	"	1.37	---	0.500	"	"	--	1.50	91.0%	"	--	--	"	
Surrogate(s): 1-Chlorooctadecane		*Recovery: 87.1%*			*Limits: 60-120%*	"							*09/28/10 20:56*	
LCS Dup (10I0838-BSD1)								**Extracted: 09/28/10 15:00**						
Diesel Range Organics	NWTPH-Dx	2.10	---	0.100	mg/l	1x	--	2.50	83.8%	(50-150)	4.20%	(20)	09/28/10 21:13	
Residual Range/Heavy Oil Organics	"	1.40	---	0.500	"	"	--	1.50	93.2%	"	2.39%	"	"	
Surrogate(s): 1-Chlorooctadecane		*Recovery: 81.4%*			*Limits: 60-120%*	"							*09/28/10 21:13*	

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111 SW Columbia Street - Suite 725	Project Number:	354972 - Willbridge	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/11/10 10:32

Total Metals per EPA 6000/7000 Series Methods - Laboratory Quality Control Results

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QC Batch: 10I0800 **Water Preparation Method: EPA 200/3005**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (10I0800-BLK1)								**Extracted: 09/27/10 13:45**						
Arsenic	EPA 6020	ND	---	0.00100	mg/l	1x	--	--	--	--	--	--	09/28/10 04:51	
Barium	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Cadmium	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Chromium	"	ND	---	0.00200	"	"	--	--	--	--	--	--	"	
Copper	"	ND	---	0.00200	"	"	--	--	--	--	--	--	"	
Lead	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Manganese	"	ND	---	0.00200	"	"	--	--	--	--	--	--	"	
Selenium	"	ND	---	0.00100	"	"	--	--	--	--	--	--	09/28/10 15:05	
Silver	"	ND	---	0.00100	"	"	--	--	--	--	--	--	09/28/10 04:51	
Zinc	"	ND	---	0.0100	"	"	--	--	--	--	--	--	"	
LCS (10I0800-BS1)								**Extracted: 09/27/10 13:45**						
Arsenic	EPA 6020	0.0931	---	0.00100	mg/l	1x	--	0.100	93.1%	(80-120)	--	--	09/28/10 04:55	
Barium	"	0.0930	---	0.00100	"	"	--	"	93.0%	"	--	--	"	
Cadmium	"	0.0967	---	0.00100	"	"	--	"	96.7%	"	--	--	"	
Chromium	"	0.0950	---	0.00200	"	"	--	"	95.0%	"	--	--	"	
Copper	"	0.0956	---	0.00200	"	"	--	"	95.6%	"	--	--	"	
Lead	"	0.0980	---	0.00100	"	"	--	"	98.0%	"	--	--	"	
Manganese	"	0.0963	---	0.00200	"	"	--	"	96.3%	"	--	--	"	
Selenium	"	0.0972	---	0.00100	"	"	--	"	97.2%	"	--	--	09/28/10 15:09	
Silver	"	0.0492	---	0.00100	"	"	--	0.0500	98.5%	"	--	--	09/28/10 04:55	
Zinc	"	0.0934	---	0.0100	"	"	--	0.100	93.4%	"	--	--	"	
Duplicate (10I0800-DUP1)							**QC Source: PTI0721-04**			**Extracted: 09/27/10 13:45**				
Arsenic	EPA 6020	ND	---	0.00100	mg/l	1x	ND	--	--	--	9.09%	(20)	09/28/10 05:18	
Barium	"	0.0109	---	0.00100	"	"	0.0106	--	--	--	2.23%	"	"	
Cadmium	"	ND	---	0.00100	"	"	ND	--	--	--	NR	"	"	
Chromium	"	ND	---	0.00200	"	"	ND	--	--	--	NR	"	"	
Copper	"	0.0395	---	0.00200	"	"	0.0398	--	--	--	0.933%	"	"	
Lead	"	ND	---	0.00100	"	"	ND	--	--	--	NR	"	"	
Manganese	"	0.0181	---	0.00200	"	"	0.0180	--	--	--	0.553%	"	"	
Selenium	"	ND	---	0.00100	"	"	ND	--	--	--	128%	"	09/28/10 15:28	R4
Silver	"	ND	---	0.00100	"	"	ND	--	--	--	NR	"	09/28/10 05:18	
Zinc	"	ND	---	0.0100	"	"	ND	--	--	--	4.99%	"	"	

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111 SW Columbia Street - Suite 725	Project Number:	354972 - Willbridge	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/11/10 10:32

Total Metals per EPA 6000/7000 Series Methods - Laboratory Quality Control Results

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QC Batch: 10I0800 **Water Preparation Method: EPA 200/3005**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Matrix Spike (10I0800-MS1)				**QC Source: PTI0721-02**					**Extracted: 09/27/10 13:45**					
Arsenic	EPA 6020	0.0976	---	0.00100	mg/l	1x	0.000230	0.100	97.4%	(75-125)	--	--	09/28/10 05:11	
Barium	"	0.100	---	0.00100	"	"	0.0115	"	89.0%	"	--	--	"	
Cadmium	"	0.0964	---	0.00100	"	"	ND	"	96.4%	"	--	--	"	
Chromium	"	0.0975	---	0.00200	"	"	0.00101	"	96.5%	"	--	--	"	
Copper	"	0.133	---	0.00200	"	"	0.0426	"	90.6%	"	--	--	"	
Lead	"	0.0890	---	0.00100	"	"	ND	"	89.0%	"	--	--	"	
Manganese	"	0.116	---	0.00200	"	"	0.0188	"	96.8%	"	--	--	"	
Selenium	"	0.100	---	0.00100	"	"	0.000350	"	99.8%	"	--	--	09/28/10 15:21	
Silver	"	0.0457	---	0.00100	"	"	ND	0.0500	91.4%	"	--	--	09/28/10 05:11	
Zinc	"	0.0969	---	0.0100	"	"	0.00844	0.100	88.5%	"	--	--	"	
Matrix Spike (10I0800-MS2)				**QC Source: PTI0793-03**					**Extracted: 09/27/10 13:45**					
Arsenic	EPA 6020	0.0964	---	0.00200	mg/l	2x	0.00366	0.100	92.8%	(75-125)	--	--	09/28/10 06:01	
Barium	"	0.171	---	0.00200	"	"	0.0830	"	87.7%	"	--	--	"	
Cadmium	"	0.0957	---	0.00200	"	"	ND	"	95.7%	"	--	--	"	
Chromium	"	0.0927	---	0.00400	"	"	ND	"	92.7%	"	--	--	"	
Copper	"	0.0944	---	0.00400	"	"	0.00182	"	92.6%	"	--	--	"	
Lead	"	0.0925	---	0.00200	"	"	0.00100	"	91.5%	"	--	--	"	
Manganese	"	3.08	---	0.0100	"	5x	3.09	"	-9.50%	"	--	--	09/28/10 16:00	MHA
Selenium	"	0.0981	---	0.00500	"	"	ND	"	98.1%	"	--	--	09/28/10 20:28	
Silver	"	0.0474	---	0.00200	"	2x	ND	0.0500	94.9%	"	--	--	09/28/10 06:01	
Zinc	"	0.0996	---	0.0200	"	"	0.00938	0.100	90.2%	"	--	--	"	

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Portland, OR 97201	Project Manager:	Jason Nail	10/11/10 10:32

Mercury per EPA Method 1631E - Laboratory Quality Control Results

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QC Batch: 10I0860 **Water Preparation Method: EPA 1631**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (10I0860-BLK1)								**Extracted: 09/28/10 16:37**						
Mercury	EPA 1631E	ND	---	0.00500	ug/l	1x	--	--	--	--	--	--	09/29/10 11:04	
Blank (10I0860-BLK2)								**Extracted: 09/28/10 16:37**						
Mercury	EPA 1631E	ND	---	0.00500	ug/l	1x	--	--	--	--	--	--	09/29/10 11:09	
Blank (10I0860-BLK3)								**Extracted: 09/28/10 16:37**						
Mercury	EPA 1631E	ND	---	0.00500	ug/l	1x	--	--	--	--	--	--	09/29/10 11:14	
LCS (10I0860-BS1)								**Extracted: 09/28/10 16:37**						
Mercury	EPA 1631E	0.0501	---	0.00500	ug/l	1x	--	0.0500	100%	(75-125)	--	--	09/29/10 11:19	
LCS Dup (10I0860-BSD1)								**Extracted: 09/28/10 16:37**						
Mercury	EPA 1631E	0.0510	---	0.00500	ug/l	1x	--	0.0500	102%	(75-125)	1.75%	(20)	09/29/10 11:24	
Duplicate (10I0860-DUP1)							**QC Source: PTI0748-01**			**Extracted: 09/28/10 16:37**				
Mercury	EPA 1631E	ND	---	0.00500	ug/l	1x	ND	--	--	--	53.9%	(20)	09/29/10 11:29	R4
Matrix Spike (10I0860-MS1)							**QC Source: PTI0748-01**			**Extracted: 09/28/10 16:37**				
Mercury	EPA 1631E	0.0483	---	0.00500	ug/l	1x	0.00166	0.0500	93.2%	(71-125)	--	--	09/29/10 11:34	
Matrix Spike (10I0860-MS2)							**QC Source: PTI0794-02**			**Extracted: 09/28/10 16:37**				
Mercury	EPA 1631E	0.0549	---	0.00500	ug/l	1x	0.0127	0.0500	84.4%	(71-125)	--	--	09/29/10 11:44	
Matrix Spike Dup (10I0860-MSD1)							**QC Source: PTI0748-01**			**Extracted: 09/28/10 16:37**				
Mercury	EPA 1631E	0.0486	---	0.00500	ug/l	1x	0.00166	0.0500	93.8%	(71-125)	0.589%	(20)	09/29/10 11:39	
Matrix Spike Dup (10I0860-MSD2)							**QC Source: PTI0794-02**			**Extracted: 09/28/10 16:37**				
Mercury	EPA 1631E	0.0553	---	0.00500	ug/l	1x	0.0127	0.0500	85.2%	(71-125)	0.674%	(20)	09/29/10 11:49	

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Selected Volatile Organic Compounds (Including BTEX) per EPA Method 8260B - Laboratory Quality Control Results

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QC Batch: 10J0137 **Water Preparation Method: EPA 5030B**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (10J0137-BLK1)									**Extracted: 10/05/10 17:00**					
Methyl tert-butyl ether	EPA 8260B	ND	---	1.00	ug/l	1x	--	--	--	--	--	--	10/05/10 18:32	
Benzene	"	ND	---	0.200	"	"	--	--	--	--	--	--	"	
1,2-Dichloroethane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Toluene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,2-Dibromoethane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Ethylbenzene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
m,p-Xylene	"	ND	---	2.00	"	"	--	--	--	--	--	--	"	
o-Xylene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Isopropylbenzene	"	ND	---	2.00	"	"	--	--	--	--	--	--	"	
n-Propylbenzene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,3,5-Trimethylbenzene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,2,4-Trimethylbenzene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Naphthalene	"	ND	---	2.00	"	"	--	--	--	--	--	--	"	
Surrogate(s):	*Dibromofluoromethane*	*Recovery:*	*94.8%*	*Limits:*	*80-120%*	"							*10/05/10 18:32*	
	1,2-DCA-d4		*103%*		*80-120%*	"							"	
	Toluene-d8		*91.1%*		*80-120%*	"							"	
	4-BFB		*86.0%*		*80-120%*	"							"	
LCS (10J0137-BS1)									**Extracted: 10/05/10 17:00**					
Methyl tert-butyl ether	EPA 8260B	17.6	---	1.00	ug/l	1x	--	20.0	88.0%	(80-129)	--	--	10/05/10 17:25	
Benzene	"	16.6	---	0.200	"	"	--	"	83.2%	(80-120)	--	--	"	
1,2-Dichloroethane	"	19.4	---	1.00	"	"	--	"	97.2%	(78-123)	--	--	"	
Toluene	"	17.3	---	1.00	"	"	--	"	86.6%	(80-124)	--	--	"	
1,2-Dibromoethane	"	17.9	---	1.00	"	"	--	"	89.7%	(80-122)	--	--	"	
Ethylbenzene	"	17.5	---	1.00	"	"	--	"	87.6%	(80-120)	--	--	"	
m,p-Xylene	"	33.4	---	2.00	"	"	--	40.0	83.4%	(72-127)	--	--	"	
o-Xylene	"	16.1	---	1.00	"	"	--	20.0	80.6%	(77-123)	--	--	"	
Isopropylbenzene	"	17.1	---	2.00	"	"	--	"	85.4%	(77-124)	--	--	"	
n-Propylbenzene	"	17.7	---	1.00	"	"	--	"	88.4%	(76-128)	--	--	"	
1,3,5-Trimethylbenzene	"	17.4	---	1.00	"	"	--	"	86.8%	(75-132)	--	--	"	
1,2,4-Trimethylbenzene	"	17.3	---	1.00	"	"	--	"	86.6%	(73-132)	--	--	"	
Naphthalene	"	19.2	---	2.00	"	"	--	"	95.9%	(72-149)	--	--	"	
Surrogate(s):	*Dibromofluoromethane*	*Recovery:*	*98.3%*	*Limits:*	*80-120%*	"							*10/05/10 17:25*	
	1,2-DCA-d4		*104%*		*80-120%*	"							"	
	Toluene-d8		*93.2%*		*80-120%*	"							"	
	4-BFB		*89.6%*		*80-120%*	"							"	

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PORTLAND, OR 9405 S.W. NIMBUS AVENUE
BEAVERTON, OR 97008-7132
ph: (503) 906.9200 fax: (503) 906.9210

ARCADIS U.S., Inc	Project Name:	**ConocoPhillips - RI Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	354972 - Willbridge	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/11/10 10:32

Selected Volatile Organic Compounds (Including BTEX) per EPA Method 8260B - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 10J0137 **Water Preparation Method: EPA 5030B**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
LCS Dup (10J0137-BSD1)							**Extracted: 10/05/10 17:00**							
Methyl tert-butyl ether	EPA 8260B	17.6	---	1.00	ug/l	1x	--	20.0	88.2%	(80-129)	0.113%	(25)	10/05/10 17:48	
Benzene	"	16.5	---	0.200	"	"	--	"	82.7%	(80-120)	0.543%	"	"	
1,2-Dichloroethane	"	19.4	---	1.00	"	"	--	"	97.0%	(78-123)	0.206%	"	"	
Toluene	"	17.4	---	1.00	"	"	--	"	87.0%	(80-124)	0.461%	"	"	
1,2-Dibromoethane	"	18.3	---	1.00	"	"	--	"	91.6%	(80-122)	2.04%	"	"	
Ethylbenzene	"	17.8	---	1.00	"	"	--	"	89.1%	(80-120)	1.75%	"	"	
m,p-Xylene	"	34.2	---	2.00	"	"	--	40.0	85.4%	(72-127)	2.40%	"	"	
o-Xylene	"	16.5	---	1.00	"	"	--	20.0	82.4%	(77-123)	2.21%	"	"	
Isopropylbenzene	"	17.9	---	2.00	"	"	--	"	89.6%	(77-124)	4.86%	"	"	
n-Propylbenzene	"	18.8	---	1.00	"	"	--	"	93.8%	(76-128)	5.98%	"	"	
1,3,5-Trimethylbenzene	"	18.3	---	1.00	"	"	--	"	91.6%	(75-132)	5.44%	"	"	
1,2,4-Trimethylbenzene	"	18.4	---	1.00	"	"	--	"	92.0%	(73-132)	6.05%	"	"	
Naphthalene	"	20.3	---	2.00	"	"	--	"	101%	(72-149)	5.62%	"	"	
Surrogate(s): *Dibromofluoromethane*		*Recovery:* *95.6%*			*Limits:* *80-120%*	"							*10/05/10 17:48*	
1,2-DCA-d4		*101%*			*80-120%*	"							"	
Toluene-d8		*92.8%*			*80-120%*	"							"	
4-BFB		*89.8%*			*80-120%*	"							"	

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Vanessa Frahs, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.

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BEAVERTON, OR 97008-7132
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ARCADIS U.S., Inc	Project Name:	**ConocoPhillips - RI Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	354972 - Willbridge	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/11/10 10:32

Polynuclear Aromatic Compounds per EPA 8270M-SIM - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 10I0832 **Water Preparation Method: 3520B Liq-Liq**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (10I0832-BLK1)							**Extracted: 09/28/10 16:30**							
2-Methylnaphthalene	EPA 8270m	ND	---	0.100	ug/l	1x	--	--	--	--	--	--	10/04/10 09:12	
Acenaphthene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Acenaphthylene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Anthracene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Benzo (a) anthracene	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	
Benzo (a) pyrene	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	
Benzo (b) fluoranthene	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	N1
Benzo (ghi) perylene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Benzo (k) fluoranthene	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	N1
Chrysene	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	N1
Dibenzo (a,h) anthracene	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	
Fluoranthene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Fluorene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Indeno (1,2,3-cd) pyrene	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	N1
Naphthalene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Phenanthrene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Pyrene	"	ND	---	0.100	"	"	--	--	--	--	--	--	"	
Surrogate(s): *Fluorene-d10*		*Recovery:* *85.1%*			*Limits:* *25-125%*	"							*10/04/10 09:12*	
Pyrene-d10		*87.6%*			*23-150%*	"							"	
Benzo (a) pyrene-d12		*83.6%*			*10-125%*	"							"	
LCS (10I0832-BS1)							**Extracted: 09/28/10 16:30**							
Acenaphthene	EPA 8270m	0.964	---	0.100	ug/l	1x	--	1.25	77.2%	(26-135)	--	--	10/04/10 13:20	
Benzo (a) pyrene	"	1.00	---	0.00500	"	"	--	"	80.4%	(38-137)	--	--	"	
Pyrene	"	1.06	---	0.100	"	"	--	"	84.5%	(30-147)	--	--	"	
Surrogate(s): *Fluorene-d10*		*Recovery:* *85.2%*			*Limits:* *25-125%*	"							*10/04/10 13:20*	
Pyrene-d10		*77.7%*			*23-150%*	"							"	
Benzo (a) pyrene-d12		*79.0%*			*10-125%*	"							"	
LCS Dup (10I0832-BSD1)							**Extracted: 09/28/10 16:30**							
Acenaphthene	EPA 8270m	0.911	---	0.100	ug/l	1x	--	1.25	72.8%	(26-135)	5.75%	(50)	10/04/10 13:47	
Benzo (a) pyrene	"	0.995	---	0.00500	"	"	--	"	79.6%	(38-137)	0.909%	"	"	
Pyrene	"	1.07	---	0.100	"	"	--	"	85.9%	(30-147)	1.66%	"	"	
Surrogate(s): *Fluorene-d10*		*Recovery:* *82.0%*			*Limits:* *25-125%*	"							*10/04/10 13:47*	
Pyrene-d10		*79.9%*			*23-150%*	"							"	
Benzo (a) pyrene-d12		*78.3%*			*10-125%*	"							"	

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Vanessa Frahs, Project Manager

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PORTLAND, OR 9405 S.W. NIMBUS AVENUE
BEAVERTON, OR 97008-7132
ph: (503) 906.9200 fax: (503) 906.9210

ARCADIS U.S., Inc	Project Name:	**ConocoPhillips - RI Well Subset**	
111 SW Columbia Street - Suite 725	Project Number:	354972 - Willbridge	Report Created:
Portland, OR 97201	Project Manager:	Jason Nail	10/11/10 10:32

Notes and Definitions

Report Specific Notes:

B1	-	Analyte was detected in the associated method blank. Analyte concentration in the sample is greater than 10x the concentration found in the method blank.
ID3	-	Due to matrix unable to resolve Benzofluoranthene isomers. Value reported only in Benzo(b) category represents Total Benzo(b+k)fluoranthene.
MHA	-	Due to high levels of analyte in the sample, the MS/MSD calculation does not provide useful spike recovery information. See Blank Spike (LCS).
N1	-	See case narrative.
Q5	-	Results in the diesel organics range are primarily due to overlap from a gasoline range product.
Q9	-	Hydrocarbon pattern most closely resembles weathered diesel.
R4	-	Due to the low levels of analyte in the sample, the duplicate RPD calculation does not provide useful information.
RL1	-	Reporting limit raised due to sample matrix effects.

Laboratory Reporting Conventions:

DET	-	Analyte DETECTED at or above the Reporting Limit. Qualitative Analyses only.
ND	-	Analyte NOT DETECTED at or above the reporting limit (MDL or MRL, as appropriate).
NR/NA	-	Not Reported / Not Available
dry	-	Sample results reported on a Dry Weight Basis. Results and Reporting Limits have been corrected for Percent Dry Weight.
wet	-	Sample results and reporting limits reported on a Wet Weight Basis (as received). Results with neither 'wet' nor 'dry' are reported on a Wet Weight Basis.
RPD	-	RELATIVE PERCENT DIFFERENCE (RPDs calculated using Results, not Percent Recoveries).
MRL	-	METHOD REPORTING LIMIT. Reporting Level at, or above, the lowest level standard of the Calibration Table.
MDL*	-	METHOD DETECTION LIMIT. Reporting Level at, or above, the statistically derived limit based on 40CFR, Part 136, Appendix B. *MDLs are listed on the report only if the data has been evaluated below the MRL. Results between the MDL and MRL are reported as Estimated Results.
Dil	-	Dilutions are calculated based on deviations from the standard dilution performed for an analysis, and may not represent the dilution found on the analytical raw data.
Reporting Limits	-	Reporting limits (MDLs and MRLs) are adjusted based on variations in sample preparation amounts, analytical dilutions and percent solids, where applicable.
Electronic Signature	-	Electronic Signature added in accordance with TestAmerica's *Electronic Reporting and Electronic Signatures Policy.* Application of electronic signature indicates that the report has been reviewed and approved for release by the laboratory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

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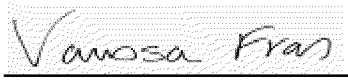

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CERTIFICATION SUMMARY

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Method	Matrix	Oregon
EPA 1631E	Water	X
EPA 6020	Water	X
EPA 8260B	Water	X
EPA 8270m	Water	X
NW TPH-Gx	Water	X
NWTPH-Dx	Water	X

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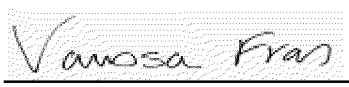

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11720 North Creek Pkwy N Suite 400, Bothell, WA 98011-8244 425-420-9200 FAX 420-9210
11922 E. First Ave, Spokane, WA 99206-5302 509-924-9200 FAX 924-9290
9405 SW Nimbus Ave,Beaverton, OR 97008-7145 503-906-9200 FAX 906-9210
2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119 907-563-9200 FAX 563-9210

PT+0794

CHAIN OF CUSTODY REPORT

Work Order #:

CLIENT: ARCADIS

REPORT TO: 111 SW Columbia st. Suite 725
ADDRESS: Portland or 97201

PHONE (503) 220 8201 FAX (503) 220-8209

INVOICE TO: Jason Nail

P.O. NUMBER:

PROJECT NAME: Conoco Phillips RI wells
PROJECT NUMBER: 354972
SAMPLED BY: CP/TW

TURNAROUND REQUEST
in Business Days *

Organic & Inorganic Analyses: (10) STD. | 7 | 5 | 4 | 3 | 2 | 1 | <1

Petroleum Hydrocarbon Analyses: 5 STD. | 4 | 3 | 2 | 1 | <1

OTHER Specify:

* Turnaround Requests less than standard may incur Rush Charges.

CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME	PRESERVATIVE	NWTPH-Dx w/SGC	NWTPH-Gx w/SGC	BTEX VOC/MTBE	PAH's	Total Metals	Hg	MATRIX (W, S, O)	# OF CONT.	LOCATION/ COMMENTS	TA WO ID
1 B37	9/23/10 1530		3	2	3	2	1	1	W	12		
2 ~~B38~~												
3 B36	9/23/10 1500											
4 BD-RI-COP-1	9/23/10 —											
5 OF1	9/23/10 1500											
6 P1A	9/23/10 1530		X	X	X	X	X	X				
7 TB-301	9/23/10 —		X		X				W	2		
8												
9												
10												

REQUESTED ANALYSES

RELEASED BY:		DATE: 9/23/10	RECEIVED BY:	DATE: 09/23/10
PRINT NAME: Tobin Woodley	FIRM: ARCADIS	TIME: 17:10	PRINT NAME: Megan Henning	FIRM: TAP TIME: 1710
RELEASED BY:		DATE:	RECEIVED BY:	DATE:
PRINT NAME:	FIRM:	TIME:	PRINT NAME:	FIRM: TIME:

ADDITIONAL REMARKS:

TEMP: 2.3 0.7 2.0 2.1

PAGE 1 OF 1

TAL-1000(0408)

* Conoco Phillips RI wells
* run all analytes for low level analysis

COP0018381

TestAmerica Portland

Sample Receiving Checklist

Work Order #: PTI0794 Date/Time Received: 09/25/10 1710

Client Name and Project: Arcadis Conoca Phillips RT wells

Time Zone:

☐EDT/EST ☐CDT/CST ☐MDT/MST ☑PDT/PST ☐AK ☐OTHER

Unpacking Checks:

Cooler #(s): 1 2 3 4 ____

Temperatures: 3.3 0.1 2.0 2.1 ____

Digi #1 ☐ Digi #2 ☐ IR Gun ☒ (☒Plastic ☐Glass)

Temperature out of Range:

__Not enough or No Ice

__Ice Melted

__W/in 4 Hrs of collection

__Other:____

Initials: MM

N/A	Yes	No	
☒	☐	☐	1. If ESI client, were temp blanks received? If no, document on NOD.
☒	☐	☐	2. Cooler Seals intact? (N/A if hand delivered) if no, document on NOD.
	☒	☐	3. Chain of Custody present? If no, document on NOD.
	☒	☐	4. Bottles received intact? If no, document on NOD.
	☒	☐	5. Sample is not multiphasic? If no, document on NOD.
	☒	☐	6. Proper Container and preservatives used? If no, document on NOD.
☐	☒	☐	7. pH of all samples checked and meet requirements? If no, document on NOD.
☒	☐	☐	8. Cyanide samples checked for sulfides and meet requirements? If no, notify PM.
☒	☐	☐	9. HF Dilution required?
	☒	☐	10. Sufficient volume provided for all analysis? If no, document on NOD and consult PM before proceeding.
	☒	☐	11. Did chain of custody agree with samples received? If no, document on NOD.
	☒	☐	12. Is the "Sampled by" section of the COC completed?
☐	☒	☐	13. Were VOA/Oil Syringe samples without headspace?
☐	☒	☐	14. Were VOA vials preserved? ☒HCl ☐Sodium Thiosulfate ☐Ascorbic Acid
	☐	☒	15. Did samples require preservation with sodium thiosulfate?
☒	☐	☐	16. If yes to #15, was the residual chlorine test negative? If no, document on NOD.
☒	☐	☐	17. Are dissolved/field filtered metals bottles sediment-free? If no, document on NOD.
☒	☐	☐	18. Is sufficient volume provided for client requested MS/MSD or matrix duplicates? If no, document on NOD and contact PM before proceeding.
☒	☐	☐	19. Are analyses with short holding times received in hold?
	☒	☐	20. Was Standard Turn Around (TAT) requested?
	☒	☐	21. Receipt date(s) < 48 hours past the collection date(s)? If no, notify PM.

received 3 trip Blanks

TestAmerica Portland

Sample Receiving Checklist

Work Order #: PTE0794

Login Checks:

Initials: MM

N/A	Yes	No	
	X	☐	22. Sufficient volume provided for all analysis? If no, document on NOD & contact PM.
X	☐	☐	23. Sufficient volume provided for client requested MS/MSD or matrix duplicates? If no, document on NOD and contact PM.
	X	☐	24. Did the chain of custody include "received by" and "relinquished by" signatures, dates and times?
X	☐	☐	25. Were special log in instructions read and followed?
	X	☐	26. Were tests logged checked against the COC?
X	☐	☐	27. Were rush notices printed and delivered?
X	☐	☐	28. Were short hold notices printed and delivered?
X	☐	☐	29. Were subcontract COCs printed?
X	☐	☐	30. Was HF dilution logged?

Labeling and Storage Checks:

Initials: MM

N/A	Yes	No	
X	☐	☐	31. Were the subcontracted samples/containers put in Sx fridge?
X	☐	☐	32. Were sample bottles and COC double checked for dissolved/filtered metals?
	X	☐	33. Did the sample ID, Date, and Time from label match what was logged?
X	☐	☐	34. Were Foreign sample stickers affixed to each container and containers stored in foreign fridge?
X	☐	☐	35. Were HF stickers affixed to each container, and containers stored in Sx fridge?
☐	X	☐	36. Was an NOD for created for noted discrepancies and placed in folder?

Document any problems or discrepancies and the actions taken to resolve them on a Notice of Discrepancy form (NOD).

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
940 South Harney
Seattle, WA 98108
(206)767-5060

October 18, 2010

Mark Trewartha
Stantec
9400 SW Barnes Rd.,
Suite 200
Portland, OR 97225

RE: Project: Sep GWM (922) 212302370
Pace Project No.: 255046

Dear Mark Trewartha:
Enclosed are the analytical results for sample(s) received by the laboratory on September 22, 2010. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

The client would like to note that in the field two locations were mislabeled. It appears that locations U-20 and U-21 were switched.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Ronald Boquist for
Jennifer Gross
jennifer.gross@pacelabs.com
Project Manager

Enclosures

REPORT OF LABORATORY ANALYSIS

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ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical Services, Inc.
940 South Harney
Seattle, WA 98108
(206)767-5060

CERTIFICATIONS

Project: Sep GWM (922) 212302370
Pace Project No.: 255046

Minnesota Certification IDs

1700 Elm Street SE Suite 200, Minneapolis, MN 55414
Alaska Certification #: UST-078
Alaska Certification #MN00064
Arizona Certification #: AZ-0014
Arkansas Certification #: 88-0680
California Certification #: 01155CA
EPA Region 8 Certification #: Pace
Florida/NELAP Certification #: E87605
Georgia Certification #: 959
Idaho Certification #: MN00064
Illinois Certification #: 200011
Iowa Certification #: 368
Kansas Certification #: E-10167
Louisiana Certification #: 03086
Louisiana Certification #: LA080009
Maine Certification #: 2007029
Maryland Certification #: 322
Michigan DEQ Certification #: 9909
Minnesota Certification #: 027-053-137
Mississippi Certification #: Pace
Montana Certification #: MT CERT0092
Nevada Certification #: MN_00064
Nebraska Certification #: Pace
New Jersey Certification #: MN-002
New Mexico Certification #: Pace
New York Certification #: 11647
North Carolina Certification #: 530
North Dakota Certification #: R-036
North Dakota Certification #: R-036A
Ohio VAP Certification #: CL101
Oklahoma Certification #: D9921
Oklahoma Certification #: 9507
Oregon Certification #: MN200001
Pennsylvania Certification #: 68-00563
Puerto Rico Certification
Tennessee Certification #: 02818
Texas Certification #: T104704192
Washington Certification #: C754
Wisconsin Certification #: 999407970

Washington Certification IDs

940 South Harney Street, Seattle, WA 98108
Alaska CS Certification #: UST-025
Alaska Drinking Water VOC Certification #: WA01230
Alaska Drinking Water Micro Certification #: WA01230
California Certification #: 01153CA
Florida/NELAP Certification #: E87617
Oregon Certification #: WA200007
Washington Certification #: C1229

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940 South Harney
Seattle, WA 98108
(206)767-5060

SAMPLE SUMMARY

Project: Sep GWM (922) 212302370
Pace Project No.: 255046

Lab ID	Sample ID	Matrix	Date Collected	Date Received
255046001	**U-16**	Water	09/20/10 08:50	09/22/10 08:35
255046002	**U-17**	Water	09/20/10 09:35	09/22/10 08:35
255046003	**U-15**	Water	09/20/10 11:51	09/22/10 08:35
255046004	**U-2**	Water	09/20/10 12:30	09/22/10 08:35
255046005	**U-20**	Water	09/21/10 09:30	09/22/10 08:35
255046006	**U-14**	Water	09/21/10 10:30	09/22/10 08:35
255046007	**U-21**	Water	09/21/10 11:30	09/22/10 08:35
255046008	**U-18**	Water	09/21/10 08:30	09/22/10 08:35
255046009	**TB**	Water	09/21/10 00:00	09/22/10 08:35

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940 South Harney
Seattle, WA 98108
(206)767-5060

SAMPLE ANALYTE COUNT

Project: Sep GWM (922) 212302370
Pace Project No.: 255046

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
255046001	U-16	EPA 8082	KL1	11	PASI-M
		NWTPH-Dx	ERB	4	PASI-S
		NWTPH-Gx/8021	DJT	2	PASI-M
		EPA 6020	CJS	10	PASI-M
		EPA 6020	RJS	10	PASI-M
		EPA 7470	BGA	1	PASI-S
		EPA 7470	BGA	1	PASI-S
		EPA 8270 by SIM	DMT	20	PASI-S
		EPA 5030B/8260	LPM	71	PASI-S
		SM 2540D	KMT	1	PASI-S
		EPA 9060	KMT	1	PASI-S
255046002	U-17	EPA 8082	KL1	11	PASI-M
		NWTPH-Dx	ERB	4	PASI-S
		NWTPH-Gx/8021	DJT	2	PASI-M
		EPA 6020	RJS	10	PASI-M
		EPA 6020	RJS	10	PASI-M
		EPA 7470	BGA	1	PASI-S
		EPA 7470	BGA	1	PASI-S
		EPA 8270 by SIM	DMT	20	PASI-S
		EPA 5030B/8260	LPM	71	PASI-S
		SM 2540D	KMT	1	PASI-S
		EPA 9060	KMT	1	PASI-S
255046003	U-15	EPA 8082	KL1	11	PASI-M
		NWTPH-Dx	ERB	4	PASI-S
		NWTPH-Gx/8021	DJT	2	PASI-M
		EPA 6020	CJS	10	PASI-M
		EPA 6020	RJS	10	PASI-M
		EPA 7470	BGA	1	PASI-S
		EPA 7470	BGA	1	PASI-S
		EPA 8270 by SIM	DMT	20	PASI-S
		EPA 5030B/8260	LPM	71	PASI-S
		SM 2540D	KMT	1	PASI-S
		EPA 9060	KMT	1	PASI-S
255046004	U-2	EPA 8082	KL1	11	PASI-M
		NWTPH-Dx	ERB	4	PASI-S
		NWTPH-Gx/8021	DJT	2	PASI-M
		EPA 6020	RJS	10	PASI-M

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940 South Harney
Seattle, WA 98108
(206)767-5060

SAMPLE ANALYTE COUNT

Project: Sep GWM (922) 212302370
Pace Project No.: 255046

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 6020	RJS	10	PASI-M
		EPA 7470	BGA	1	PASI-S
		EPA 7470	BGA	1	PASI-S
		EPA 8270 by SIM	DMT	20	PASI-S
		EPA 5030B/8260	LPM	71	PASI-S
		SM 2540D	KMT	1	PASI-S
		EPA 9060	KMT	1	PASI-S
255046005	**U-20**	EPA 8082	KL1	11	PASI-M
		NWTPH-Dx	ERB	4	PASI-S
		NWTPH-Gx	AY1	3	PASI-S
		EPA 6020	CJS	10	PASI-M
		EPA 6020	RJS	10	PASI-M
		EPA 7470	BGA	1	PASI-S
		EPA 7470	BGA	1	PASI-S
		EPA 8270 by SIM	DMT	20	PASI-S
		EPA 5030B/8260	LPM	71	PASI-S
		SM 2540D	KMT	1	PASI-S
		EPA 9060	KMT	1	PASI-S
255046006	**U-14**	EPA 8082	KL1	11	PASI-M
		NWTPH-Dx	ERB	4	PASI-S
		NWTPH-Gx	AY1	3	PASI-S
		EPA 6020	RJS	10	PASI-M
		EPA 6020	RJS	10	PASI-M
		EPA 7470	BGA	1	PASI-S
		EPA 7470	BGA	1	PASI-S
		EPA 8270 by SIM	DMT	20	PASI-S
		EPA 5030B/8260	LPM	71	PASI-S
		SM 2540D	KMT	1	PASI-S
		EPA 9060	KMT	1	PASI-S
255046007	**U-21**	EPA 8082	KL1	11	PASI-M
		NWTPH-Dx	ERB	4	PASI-S
		NWTPH-Gx	AY1	3	PASI-S
		EPA 6020	CJS	10	PASI-M
		EPA 6020	RJS	10	PASI-M
		EPA 7470	BGA	1	PASI-S
		EPA 7470	BGA	1	PASI-S
		EPA 8270 by SIM	DMT	20	PASI-S

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Seattle, WA 98108
(206)767-5060

SAMPLE ANALYTE COUNT

Project: Sep GWM (922) 212302370
Pace Project No.: 255046

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 5030B/8260	LPM	71	PASI-S
		SM 2540D	KMT	1	PASI-S
		EPA 9060	KMT	1	PASI-S
255046008	**U-18**	EPA 8082	KL1	11	PASI-M
		NWTPH-Dx	ERB	4	PASI-S
		NWTPH-Gx	AY1	3	PASI-S
		EPA 6020	RJS	10	PASI-M
		EPA 6020	RJS	10	PASI-M
		EPA 7470	BGA	1	PASI-S
		EPA 7470	BGA	1	PASI-S
		EPA 8270 by SIM	DMT	20	PASI-S
		EPA 5030B/8260	LPM	71	PASI-S
		SM 2540D	KMT	1	PASI-S
		EPA 9060	KMT	1	PASI-S
255046009	**TB**	NWTPH-Gx	AY1	3	PASI-S
		EPA 5030B/8260	LPM	71	PASI-S

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ANALYTICAL RESULTS

Project: Sep GWM (922) 212302370
Pace Project No.: 255046

Sample: U-16 **Lab ID: 255046001** Collected: 09/20/10 08:50 Received: 09/22/10 08:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB	Analytical Method: EPA 8082								
PCB-1016 (Aroclor 1016)	**<0.32**	ug/L	1.0	0.32	10	09/27/10 14:28	10/04/10 14:07	12674-11-2	
PCB-1221 (Aroclor 1221)	**<0.45**	ug/L	1.0	0.45	10	09/27/10 14:28	10/04/10 14:07	11104-28-2	
PCB-1232 (Aroclor 1232)	**<0.38**	ug/L	1.0	0.38	10	09/27/10 14:28	10/04/10 14:07	11141-16-5	
PCB-1242 (Aroclor 1242)	**<0.12**	ug/L	1.0	0.12	10	09/27/10 14:28	10/04/10 14:07	53469-21-9	
PCB-1248 (Aroclor 1248)	**<0.38**	ug/L	1.0	0.38	10	09/27/10 14:28	10/04/10 14:07	12672-29-6	
PCB-1254 (Aroclor 1254)	**<0.24**	ug/L	1.0	0.24	10	09/27/10 14:28	10/04/10 14:07	11097-69-1	
PCB-1260 (Aroclor 1260)	**<0.30**	ug/L	1.0	0.30	10	09/27/10 14:28	10/04/10 14:07	11096-82-5	
PCB-1262 (Aroclor 1262)	**<0.15**	ug/L	1.0	0.15	10	09/27/10 14:28	10/04/10 14:07	37324-23-5	
PCB-1268 (Aroclor 1268)	**<0.41**	ug/L	1.0	0.41	10	09/27/10 14:28	10/04/10 14:07	11100-14-4	
Tetrachloro-m-xylene (S)	0	%	30-145		10	09/27/10 14:28	10/04/10 14:07	877-09-8	D3,S4
Decachlorobiphenyl (S)	0	%	30-150		10	09/27/10 14:28	10/04/10 14:07	2051-24-3	S4
NWTPH-Dx GCS SG	Analytical Method: NWTPH-Dx Preparation Method: EPA 3510								
Diesel Range SG	**196**	ug/L	75.8	35.1	1	09/30/10 13:50	10/02/10 05:31		
Motor Oil Range SG	**<57.8**	ug/L	379	57.8	1	09/30/10 13:50	10/02/10 05:31	64742-65-0	
n-Octacosane (S) SG	129	%	50-150		1	09/30/10 13:50	10/02/10 05:31	630-02-4	
o-Terphenyl (S) SG	103	%	50-150		1	09/30/10 13:50	10/02/10 05:31	84-15-1	
NWTPH-Gx/8021BGx GCV	Analytical Method: NWTPH-Gx/8021								
TPH as Gas	**887**	ug/L	100	6.3	1		10/01/10 01:06		B
a,a,a-Trifluorotoluene (S)	122	%	70-130		1		10/01/10 01:06	98-08-8	
6020 MET ICPMS	Analytical Method: EPA 6020								
Arsenic	**76.0**	ug/L	0.50	0.062	1	10/01/10 17:44	10/03/10 11:39	7440-38-2	
Barium	**92.6**	ug/L	0.30	0.043	1	10/01/10 17:44	10/03/10 11:39	7440-39-3	B
Cadmium	**0.069J**	ug/L	0.080	0.020	1	10/01/10 17:44	10/03/10 11:39	7440-43-9	
Chromium	**0.33J**	ug/L	0.50	0.24	1	10/01/10 17:44	10/03/10 11:39	7440-47-3	
Copper	**0.22J**	ug/L	0.50	0.20	1	10/01/10 17:44	10/03/10 11:39	7440-50-8	B
Lead	**0.27**	ug/L	0.10	0.020	1	10/01/10 17:44	10/03/10 11:39	7439-92-1	B
Manganese	**8370**	ug/L	0.50	0.050	1	10/01/10 17:44	10/03/10 11:39	7439-96-5	B
Selenium	**<0.10**	ug/L	0.50	0.10	1	10/01/10 17:44	10/03/10 11:39	7782-49-2	
Silver	**<0.071**	ug/L	0.50	0.071	1	10/01/10 17:44	10/03/10 11:39	7440-22-4	
Zinc	**3.3J**	ug/L	5.0	1.3	1	10/01/10 17:44	10/03/10 11:39	7440-66-6	B
6020 MET ICPMS, Dissolved	Analytical Method: EPA 6020								
Arsenic, Dissolved	**5.3**	ug/L	0.50	0.062	1	10/01/10 17:51	10/05/10 03:42	7440-38-2	
Barium, Dissolved	**33.1**	ug/L	0.30	0.043	1	10/01/10 17:51	10/05/10 03:42	7440-39-3	B
Cadmium, Dissolved	**0.030J**	ug/L	0.080	0.020	1	10/01/10 17:51	10/05/10 03:42	7440-43-9	
Chromium, Dissolved	**<0.24**	ug/L	0.50	0.24	1	10/01/10 17:51	10/05/10 03:42	7440-47-3	
Copper, Dissolved	**<0.20**	ug/L	0.50	0.20	1	10/01/10 17:51	10/05/10 03:42	7440-50-8	
Lead, Dissolved	**0.20**	ug/L	0.10	0.020	1	10/01/10 17:51	10/05/10 03:42	7439-92-1	
Manganese, Dissolved	**7870**	ug/L	25.0	2.5	50	10/01/10 17:51	10/05/10 14:30	7439-96-5	B
Selenium, Dissolved	**0.17J**	ug/L	0.50	0.10	1	10/01/10 17:51	10/05/10 03:42	7782-49-2	
Silver, Dissolved	**<0.071**	ug/L	0.50	0.071	1	10/01/10 17:51	10/05/10 03:42	7440-22-4	
Zinc, Dissolved	**9.7**	ug/L	5.0	1.3	1	10/01/10 17:51	10/05/10 03:42	7440-66-6	B

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(206)767-5060

ANALYTICAL RESULTS

Project: Sep GWM (922) 212302370
Pace Project No.: 255046

Sample: U-16 **Lab ID: 255046001** Collected: 09/20/10 08:50 Received: 09/22/10 08:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470								
Mercury	**<0.011**	ug/L	0.20	0.011	1	10/01/10 11:05	10/01/10 15:16	7439-97-6	
7470 Mercury, Dissolved	Analytical Method: EPA 7470 Preparation Method: EPA 7470								
Mercury, Dissolved	**<0.072**	ug/L	0.20	0.072	1	10/01/10 11:05	10/01/10 16:17	7439-97-6	
8270 MSSV Low Level PAH SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
1-Methylnaphthalene	**7.6**	ug/L	0.014	0.0060	1	09/27/10 08:45	09/28/10 19:57	90-12-0	
2-Methylnaphthalene	**<0.012**	ug/L	0.014	0.012	1	09/27/10 08:45	09/28/10 19:57	91-57-6	
Acenaphthene	**0.44**	ug/L	0.014	0.00066	1	09/27/10 08:45	09/28/10 19:57	83-32-9	
Acenaphthylene	**0.14**	ug/L	0.014	0.00067	1	09/27/10 08:45	09/28/10 19:57	208-96-8	
Anthracene	**0.039**	ug/L	0.014	0.0012	1	09/27/10 08:45	09/28/10 19:57	120-12-7	
Benzo(a)anthracene	**<0.0017**	ug/L	0.014	0.0017	1	09/27/10 08:45	09/28/10 19:57	56-55-3	
Benzo(a)pyrene	**<0.00066**	ug/L	0.014	0.00066	1	09/27/10 08:45	09/28/10 19:57	50-32-8	
Benzo(b)fluoranthene	**<0.0019**	ug/L	0.014	0.0019	1	09/27/10 08:45	09/28/10 19:57	205-99-2	
Benzo(g,h,i)perylene	**<0.0016**	ug/L	0.014	0.0016	1	09/27/10 08:45	09/28/10 19:57	191-24-2	
Benzo(k)fluoranthene	**<0.00066**	ug/L	0.014	0.00066	1	09/27/10 08:45	09/28/10 19:57	207-08-9	
Chrysene	**<0.0017**	ug/L	0.014	0.0017	1	09/27/10 08:45	09/28/10 19:57	218-01-9	
Dibenz(a,h)anthracene	**<0.0017**	ug/L	0.014	0.0017	1	09/27/10 08:45	09/28/10 19:57	53-70-3	
Fluoranthene	**0.011J**	ug/L	0.014	0.0018	1	09/27/10 08:45	09/28/10 19:57	206-44-0	
Fluorene	**0.88**	ug/L	0.014	0.0036	1	09/27/10 08:45	09/28/10 19:57	86-73-7	
Indeno(1,2,3-cd)pyrene	**<0.0014**	ug/L	0.014	0.0014	1	09/27/10 08:45	09/28/10 19:57	193-39-5	
Naphthalene	**0.69**	ug/L	0.014	0.0014	1	09/27/10 08:45	09/28/10 19:57	91-20-3	
Phenanthrene	**0.063**	ug/L	0.014	0.0036	1	09/27/10 08:45	09/28/10 19:57	85-01-8	
Pyrene	**0.022**	ug/L	0.014	0.0019	1	09/27/10 08:45	09/28/10 19:57	129-00-0	
2-Fluorobiphenyl (S)	81	%	40-106		1	09/27/10 08:45	09/28/10 19:57	321-60-8	
Terphenyl-d14 (S)	75	%	55-146		1	09/27/10 08:45	09/28/10 19:57	1718-51-0	
8260 MSV	Analytical Method: EPA 5030B/8260								
1,1,1,2-Tetrachloroethane	**<0.15**	ug/L	1.0	0.15	1		09/29/10 02:19	630-20-6	
1,1,1-Trichloroethane	**<0.20**	ug/L	1.0	0.20	1		09/29/10 02:19	71-55-6	
1,1,2,2-Tetrachloroethane	**<0.22**	ug/L	1.0	0.22	1		09/29/10 02:19	79-34-5	
1,1,2-Trichloroethane	**<0.19**	ug/L	1.0	0.19	1		09/29/10 02:19	79-00-5	
1,1-Dichloroethane	**<0.23**	ug/L	1.0	0.23	1		09/29/10 02:19	75-34-3	
1,1-Dichloroethene	**<0.12**	ug/L	1.0	0.12	1		09/29/10 02:19	75-35-4	
1,1-Dichloropropene	**<0.094**	ug/L	1.0	0.094	1		09/29/10 02:19	563-58-6	
1,2,3-Trichlorobenzene	**<0.11**	ug/L	1.0	0.11	1		09/29/10 02:19	87-61-6	
1,2,3-Trichloropropane	**<0.37**	ug/L	1.0	0.37	1		09/29/10 02:19	96-18-4	
1,2,4-Trichlorobenzene	**<0.15**	ug/L	1.0	0.15	1		09/29/10 02:19	120-82-1	
1,2,4-Trimethylbenzene	**<0.086**	ug/L	1.0	0.086	1		09/29/10 02:19	95-63-6	
1,2-Dibromo-3-chloropropane	**<0.79**	ug/L	1.0	0.79	1		09/29/10 02:19	96-12-8	
1,2-Dibromoethane (EDB)	**<0.20**	ug/L	1.0	0.20	1		09/29/10 02:19	106-93-4	
1,2-Dichlorobenzene	**<0.25**	ug/L	1.0	0.25	1		09/29/10 02:19	95-50-1	
1,2-Dichloroethane	**<0.074**	ug/L	1.0	0.074	1		09/29/10 02:19	107-06-2	
1,2-Dichloroethene (Total)	**<0.50**	ug/L	2.0	0.50	1		09/29/10 02:19	540-59-0	
1,2-Dichloropropane	**<0.16**	ug/L	1.0	0.16	1		09/29/10 02:19	78-87-5	
1,3,5-Trimethylbenzene	**<0.16**	ug/L	1.0	0.16	1		09/29/10 02:19	108-67-8	

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Seattle, WA 98108
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ANALYTICAL RESULTS

Project: Sep GWM (922) 212302370
Pace Project No.: 255046

Sample: U-16 **Lab ID: 255046001** Collected: 09/20/10 08:50 Received: 09/22/10 08:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
1,3-Dichlorobenzene	**<0.16**	ug/L	1.0	0.16	1		09/29/10 02:19	541-73-1	
1,3-Dichloropropane	**<0.22**	ug/L	1.0	0.22	1		09/29/10 02:19	142-28-9	
1,4-Dichlorobenzene	**<0.20**	ug/L	1.0	0.20	1		09/29/10 02:19	106-46-7	
2,2-Dichloropropane	**<0.27**	ug/L	1.0	0.27	1		09/29/10 02:19	594-20-7	
2-Butanone (MEK)	**<1.6**	ug/L	5.0	1.6	1		09/29/10 02:19	78-93-3	
2-Chlorotoluene	**<0.098**	ug/L	1.0	0.098	1		09/29/10 02:19	95-49-8	
2-Hexanone	**<0.57**	ug/L	5.0	0.57	1		09/29/10 02:19	591-78-6	
4-Chlorotoluene	**<0.13**	ug/L	1.0	0.13	1		09/29/10 02:19	106-43-4	
4-Methyl-2-pentanone (MIBK)	**<0.32**	ug/L	5.0	0.32	1		09/29/10 02:19	108-10-1	
Acetone	**<0.75**	ug/L	5.0	0.75	1		09/29/10 02:19	67-64-1	
Benzene	**0.46J**	ug/L	1.0	0.12	1		09/29/10 02:19	71-43-2	
Bromobenzene	**<0.16**	ug/L	1.0	0.16	1		09/29/10 02:19	108-86-1	
Bromochloromethane	**<0.34**	ug/L	1.0	0.34	1		09/29/10 02:19	74-97-5	
Bromodichloromethane	**1.2**	ug/L	1.0	0.11	1		09/29/10 02:19	75-27-4	
Bromoform	**<0.23**	ug/L	1.0	0.23	1		09/29/10 02:19	75-25-2	
Bromomethane	**<0.072**	ug/L	1.0	0.072	1		09/29/10 02:19	74-83-9	
Carbon disulfide	**<0.16**	ug/L	1.0	0.16	1		09/29/10 02:19	75-15-0	
Carbon tetrachloride	**<0.25**	ug/L	1.0	0.25	1		09/29/10 02:19	56-23-5	
Chlorobenzene	**<0.12**	ug/L	1.0	0.12	1		09/29/10 02:19	108-90-7	
Chloroethane	**<0.27**	ug/L	1.0	0.27	1		09/29/10 02:19	75-00-3	
Chloroform	**<0.15**	ug/L	1.0	0.15	1		09/29/10 02:19	67-66-3	
Chloromethane	**<0.20**	ug/L	1.0	0.20	1		09/29/10 02:19	74-87-3	
Dibromochloromethane	**<0.12**	ug/L	1.0	0.12	1		09/29/10 02:19	124-48-1	
Dibromomethane	**<0.18**	ug/L	1.0	0.18	1		09/29/10 02:19	74-95-3	
Dichlorodifluoromethane	**<0.19**	ug/L	1.0	0.19	1		09/29/10 02:19	75-71-8	
Ethylbenzene	**0.35J**	ug/L	1.0	0.20	1		09/29/10 02:19	100-41-4	
Hexachloro-1,3-butadiene	**<0.27**	ug/L	1.0	0.27	1		09/29/10 02:19	87-68-3	
Isopropylbenzene (Cumene)	**40.4**	ug/L	1.0	0.11	1		09/29/10 02:19	98-82-8	
Methyl-tert-butyl ether	**0.75J**	ug/L	1.0	0.16	1		09/29/10 02:19	1634-04-4	
Methylene chloride	**<0.26**	ug/L	4.0	0.26	1		09/29/10 02:19	75-09-2	
Naphthalene	**1.7**	ug/L	1.0	0.10	1		09/29/10 02:19	91-20-3	
Styrene	**<0.074**	ug/L	1.0	0.074	1		09/29/10 02:19	100-42-5	
Tetrachloroethene	**<0.10**	ug/L	1.0	0.10	1		09/29/10 02:19	127-18-4	
Toluene	**0.54J**	ug/L	1.0	0.21	1		09/29/10 02:19	108-88-3	
Trichloroethene	**<0.060**	ug/L	1.0	0.060	1		09/29/10 02:19	79-01-6	
Trichlorofluoromethane	**<0.24**	ug/L	1.0	0.24	1		09/29/10 02:19	75-69-4	
Vinyl chloride	**<0.050**	ug/L	1.0	0.050	1		09/29/10 02:19	75-01-4	
Xylene (Total)	**3.2**	ug/L	3.0	0.42	1		09/29/10 02:19	1330-20-7	
cis-1,2-Dichloroethene	**<0.32**	ug/L	1.0	0.32	1		09/29/10 02:19	156-59-2	
cis-1,3-Dichloropropene	**<0.086**	ug/L	1.0	0.086	1		09/29/10 02:19	10061-01-5	
m&p-Xylene	**2.0**	ug/L	2.0	0.27	1		09/29/10 02:19	179601-23-1	
n-Butylbenzene	**<0.10**	ug/L	1.0	0.10	1		09/29/10 02:19	104-51-8	
n-Propylbenzene	**38.9**	ug/L	1.0	0.16	1		09/29/10 02:19	103-65-1	
o-Xylene	**1.2**	ug/L	1.0	0.15	1		09/29/10 02:19	95-47-6	
p-Isopropyltoluene	**<0.074**	ug/L	1.0	0.074	1		09/29/10 02:19	99-87-6	
sec-Butylbenzene	**7.1**	ug/L	1.0	0.10	1		09/29/10 02:19	135-98-8	

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ANALYTICAL RESULTS

Project: Sep GWM (922) 212302370
Pace Project No.: 255046

Sample: U-16 **Lab ID: 255046001** Collected: 09/20/10 08:50 Received: 09/22/10 08:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
tert-Butylbenzene	**1.9**	ug/L	1.0	0.11	1		09/29/10 02:19	98-06-6	
trans-1,2-Dichloroethene	**<0.22**	ug/L	1.0	0.22	1		09/29/10 02:19	156-60-5	
trans-1,3-Dichloropropene	**<0.16**	ug/L	1.0	0.16	1		09/29/10 02:19	10061-02-6	
4-Bromofluorobenzene (S)	98	%	80-120		1		09/29/10 02:19	460-00-4	
Dibromofluoromethane (S)	100	%	80-122		1		09/29/10 02:19	1868-53-7	
1,2-Dichloroethane-d4 (S)	94	%	80-124		1		09/29/10 02:19	17060-07-0	
Toluene-d8 (S)	101	%	80-123		1		09/29/10 02:19	2037-26-5	
2540D Total Suspended Solids	Analytical Method: SM 2540D								
Total Suspended Solids	**66000**	ug/L	4000	4000	1		09/27/10 16:30		
Total Organic Carbon	Analytical Method: EPA 9060								
Mean Total Organic Carbon	**7.5**	mg/L	1.0	0.080	1		09/28/10 19:00	7440-44-0	

Sample: U-17 **Lab ID: 255046002** Collected: 09/20/10 09:35 Received: 09/22/10 08:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB	Analytical Method: EPA 8082								
PCB-1016 (Aroclor 1016)	**<0.032**	ug/L	0.10	0.032	1	09/24/10 11:20	10/01/10 17:48	12674-11-2	
PCB-1221 (Aroclor 1221)	**<0.045**	ug/L	0.10	0.045	1	09/24/10 11:20	10/01/10 17:48	11104-28-2	
PCB-1232 (Aroclor 1232)	**<0.038**	ug/L	0.10	0.038	1	09/24/10 11:20	10/01/10 17:48	11141-16-5	
PCB-1242 (Aroclor 1242)	**<0.012**	ug/L	0.10	0.012	1	09/24/10 11:20	10/01/10 17:48	53469-21-9	
PCB-1248 (Aroclor 1248)	**<0.038**	ug/L	0.10	0.038	1	09/24/10 11:20	10/01/10 17:48	12672-29-6	
PCB-1254 (Aroclor 1254)	**<0.024**	ug/L	0.10	0.024	1	09/24/10 11:20	10/01/10 17:48	11097-69-1	
PCB-1260 (Aroclor 1260)	**<0.030**	ug/L	0.10	0.030	1	09/24/10 11:20	10/01/10 17:48	11096-82-5	
PCB-1262 (Aroclor 1262)	**<0.015**	ug/L	0.10	0.015	1	09/24/10 11:20	10/01/10 17:48	37324-23-5	
PCB-1268 (Aroclor 1268)	**<0.041**	ug/L	0.10	0.041	1	09/24/10 11:20	10/01/10 17:48	11100-14-4	
Tetrachloro-m-xylene (S)	64	%	30-145		1	09/24/10 11:20	10/01/10 17:48	877-09-8	
Decachlorobiphenyl (S)	54	%	30-150		1	09/24/10 11:20	10/01/10 17:48	2051-24-3	
NWTPH-Dx GCS SG	Analytical Method: NWTPH-Dx Preparation Method: EPA 3510								
Diesel Range SG	**713**	ug/L	75.8	35.1	1	09/30/10 13:50	10/02/10 05:53		
Motor Oil Range SG	**<57.8**	ug/L	379	57.8	1	09/30/10 13:50	10/02/10 05:53	64742-65-0	
n-Octacosane (S) SG	119	%	50-150		1	09/30/10 13:50	10/02/10 05:53	630-02-4	
o-Terphenyl (S) SG	92	%	50-150		1	09/30/10 13:50	10/02/10 05:53	84-15-1	
NWTPH-Gx/8021BGx GCV	Analytical Method: NWTPH-Gx/8021								
TPH as Gas	**717**	ug/L	100	6.3	1		10/01/10 01:28		B
a,a,a-Trifluorotoluene (S)	111	%	70-130		1		10/01/10 01:28	98-08-8	
6020 MET ICPMS	Analytical Method: EPA 6020								
Arsenic	**16.8**	ug/L	0.50	0.062	1	10/04/10 13:37	10/05/10 16:27	7440-38-2	

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ANALYTICAL RESULTS

Project: Sep GWM (922) 212302370
Pace Project No.: 255046

Sample: U-17 **Lab ID: 255046002** Collected: 09/20/10 09:35 Received: 09/22/10 08:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020								
Barium	**22.5**	ug/L	0.30	0.043	1	10/04/10 13:37	10/05/10 16:27	7440-39-3	B
Cadmium	**<0.020**	ug/L	0.080	0.020	1	10/04/10 13:37	10/05/10 16:27	7440-43-9	
Chromium	**0.51**	ug/L	0.50	0.24	1	10/04/10 13:37	10/05/10 16:27	7440-47-3	
Copper	**0.20J**	ug/L	0.50	0.20	1	10/04/10 13:37	10/05/10 16:27	7440-50-8	
Lead	**0.057J**	ug/L	0.10	0.020	1	10/04/10 13:37	10/05/10 16:27	7439-92-1	
Manganese	**1920**	ug/L	2.5	0.25	5	10/04/10 13:37	10/05/10 16:41	7439-96-5	B,M1
Selenium	**<0.10**	ug/L	0.50	0.10	1	10/04/10 13:37	10/05/10 16:27	7782-49-2	
Silver	**2.1**	ug/L	0.50	0.071	1	10/04/10 13:37	10/05/10 16:27	7440-22-4	B
Zinc	**2.1J**	ug/L	5.0	1.3	1	10/04/10 13:37	10/05/10 16:27	7440-66-6	B
6020 MET ICPMS, Dissolved	Analytical Method: EPA 6020								
Arsenic, Dissolved	**6.2**	ug/L	0.50	0.062	1	10/01/10 17:51	10/05/10 03:47	7440-38-2	
Barium, Dissolved	**1.1**	ug/L	0.30	0.043	1	10/01/10 17:51	10/05/10 03:47	7440-39-3	B
Cadmium, Dissolved	**<0.020**	ug/L	0.080	0.020	1	10/01/10 17:51	10/05/10 03:47	7440-43-9	
Chromium, Dissolved	**0.37J**	ug/L	0.50	0.24	1	10/01/10 17:51	10/05/10 03:47	7440-47-3	
Copper, Dissolved	**<0.20**	ug/L	0.50	0.20	1	10/01/10 17:51	10/05/10 03:47	7440-50-8	
Lead, Dissolved	**0.059J**	ug/L	0.10	0.020	1	10/01/10 17:51	10/05/10 03:47	7439-92-1	
Manganese, Dissolved	**1650**	ug/L	5.0	0.50	10	10/01/10 17:51	10/05/10 14:35	7439-96-5	B
Selenium, Dissolved	**<0.10**	ug/L	0.50	0.10	1	10/01/10 17:51	10/05/10 03:47	7782-49-2	
Silver, Dissolved	**<0.071**	ug/L	0.50	0.071	1	10/01/10 17:51	10/05/10 03:47	7440-22-4	
Zinc, Dissolved	**1.9J**	ug/L	5.0	1.3	1	10/01/10 17:51	10/05/10 03:47	7440-66-6	B
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470								
Mercury	**<0.011**	ug/L	0.20	0.011	1	10/01/10 11:05	10/01/10 15:22	7439-97-6	
7470 Mercury, Dissolved	Analytical Method: EPA 7470 Preparation Method: EPA 7470								
Mercury, Dissolved	**<0.072**	ug/L	0.20	0.072	1	10/01/10 11:05	10/01/10 16:23	7439-97-6	
8270 MSSV Low Level PAH SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
1-Methylnaphthalene	**40.7**	ug/L	0.14	0.060	10	09/27/10 08:45	10/04/10 18:21	90-12-0	
2-Methylnaphthalene	**<0.012**	ug/L	0.014	0.012	1	09/27/10 08:45	09/28/10 20:14	91-57-6	
Acenaphthene	**1.1**	ug/L	0.014	0.00066	1	09/27/10 08:45	09/28/10 20:14	83-32-9	
Acenaphthylene	**0.23**	ug/L	0.014	0.00067	1	09/27/10 08:45	09/28/10 20:14	208-96-8	
Anthracene	**0.098**	ug/L	0.014	0.0012	1	09/27/10 08:45	09/28/10 20:14	120-12-7	
Benzo(a)anthracene	**0.026**	ug/L	0.014	0.0017	1	09/27/10 08:45	09/28/10 20:14	56-55-3	
Benzo(a)pyrene	**<0.00066**	ug/L	0.014	0.00066	1	09/27/10 08:45	09/28/10 20:14	50-32-8	
Benzo(b)fluoranthene	**<0.0019**	ug/L	0.014	0.0019	1	09/27/10 08:45	09/28/10 20:14	205-99-2	
Benzo(g,h,i)perylene	**<0.0016**	ug/L	0.014	0.0016	1	09/27/10 08:45	09/28/10 20:14	191-24-2	
Benzo(k)fluoranthene	**<0.00066**	ug/L	0.014	0.00066	1	09/27/10 08:45	09/28/10 20:14	207-08-9	
Chrysene	**0.022**	ug/L	0.014	0.0017	1	09/27/10 08:45	09/28/10 20:14	218-01-9	
Dibenz(a,h)anthracene	**<0.0017**	ug/L	0.014	0.0017	1	09/27/10 08:45	09/28/10 20:14	53-70-3	
Fluoranthene	**0.14**	ug/L	0.014	0.0018	1	09/27/10 08:45	09/28/10 20:14	206-44-0	
Fluorene	**1.7**	ug/L	0.014	0.0036	1	09/27/10 08:45	09/28/10 20:14	86-73-7	
Indeno(1,2,3-cd)pyrene	**<0.0014**	ug/L	0.014	0.0014	1	09/27/10 08:45	09/28/10 20:14	193-39-5	
Naphthalene	**1.7**	ug/L	0.014	0.0014	1	09/27/10 08:45	09/28/10 20:14	91-20-3	

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ANALYTICAL RESULTS

Project: Sep GWM (922) 212302370
Pace Project No.: 255046

Sample: U-17 **Lab ID: 255046002** Collected: 09/20/10 09:35 Received: 09/22/10 08:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Low Level PAH SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
Phenanthrene	**0.52**	ug/L	0.014	0.0036	1	09/27/10 08:45	09/28/10 20:14	85-01-8	
Pyrene	**0.18**	ug/L	0.014	0.0019	1	09/27/10 08:45	09/28/10 20:14	129-00-0	
2-Fluorobiphenyl (S)	62	%	40-106		1	09/27/10 08:45	09/28/10 20:14	321-60-8	
Terphenyl-d14 (S)	81	%	55-146		1	09/27/10 08:45	09/28/10 20:14	1718-51-0	
8260 MSV	Analytical Method: EPA 5030B/8260								
1,1,1,2-Tetrachloroethane	**<0.15**	ug/L	1.0	0.15	1		09/29/10 02:39	630-20-6	
1,1,1-Trichloroethane	**<0.20**	ug/L	1.0	0.20	1		09/29/10 02:39	71-55-6	
1,1,2,2-Tetrachloroethane	**<0.22**	ug/L	1.0	0.22	1		09/29/10 02:39	79-34-5	
1,1,2-Trichloroethane	**<0.19**	ug/L	1.0	0.19	1		09/29/10 02:39	79-00-5	
1,1-Dichloroethane	**<0.23**	ug/L	1.0	0.23	1		09/29/10 02:39	75-34-3	
1,1-Dichloroethene	**<0.12**	ug/L	1.0	0.12	1		09/29/10 02:39	75-35-4	
1,1-Dichloropropene	**<0.094**	ug/L	1.0	0.094	1		09/29/10 02:39	563-58-6	
1,2,3-Trichlorobenzene	**<0.11**	ug/L	1.0	0.11	1		09/29/10 02:39	87-61-6	
1,2,3-Trichloropropane	**<0.37**	ug/L	1.0	0.37	1		09/29/10 02:39	96-18-4	
1,2,4-Trichlorobenzene	**<0.15**	ug/L	1.0	0.15	1		09/29/10 02:39	120-82-1	
1,2,4-Trimethylbenzene	**2.9**	ug/L	1.0	0.086	1		09/29/10 02:39	95-63-6	
1,2-Dibromo-3-chloropropane	**<0.79**	ug/L	1.0	0.79	1		09/29/10 02:39	96-12-8	
1,2-Dibromoethane (EDB)	**<0.20**	ug/L	1.0	0.20	1		09/29/10 02:39	106-93-4	
1,2-Dichlorobenzene	**<0.25**	ug/L	1.0	0.25	1		09/29/10 02:39	95-50-1	
1,2-Dichloroethane	**<0.074**	ug/L	1.0	0.074	1		09/29/10 02:39	107-06-2	
1,2-Dichloroethene (Total)	**<0.50**	ug/L	2.0	0.50	1		09/29/10 02:39	540-59-0	
1,2-Dichloropropane	**<0.16**	ug/L	1.0	0.16	1		09/29/10 02:39	78-87-5	
1,3,5-Trimethylbenzene	**1.9**	ug/L	1.0	0.16	1		09/29/10 02:39	108-67-8	
1,3-Dichlorobenzene	**<0.16**	ug/L	1.0	0.16	1		09/29/10 02:39	541-73-1	
1,3-Dichloropropane	**<0.22**	ug/L	1.0	0.22	1		09/29/10 02:39	142-28-9	
1,4-Dichlorobenzene	**<0.20**	ug/L	1.0	0.20	1		09/29/10 02:39	106-46-7	
2,2-Dichloropropane	**<0.27**	ug/L	1.0	0.27	1		09/29/10 02:39	594-20-7	
2-Butanone (MEK)	**<1.6**	ug/L	5.0	1.6	1		09/29/10 02:39	78-93-3	
2-Chlorotoluene	**<0.098**	ug/L	1.0	0.098	1		09/29/10 02:39	95-49-8	
2-Hexanone	**<0.57**	ug/L	5.0	0.57	1		09/29/10 02:39	591-78-6	
4-Chlorotoluene	**0.78J**	ug/L	1.0	0.13	1		09/29/10 02:39	106-43-4	
4-Methyl-2-pentanone (MIBK)	**<0.32**	ug/L	5.0	0.32	1		09/29/10 02:39	108-10-1	
Acetone	**<0.75**	ug/L	5.0	0.75	1		09/29/10 02:39	67-64-1	
Benzene	**0.22J**	ug/L	1.0	0.12	1		09/29/10 02:39	71-43-2	
Bromobenzene	**<0.16**	ug/L	1.0	0.16	1		09/29/10 02:39	108-86-1	
Bromochloromethane	**<0.34**	ug/L	1.0	0.34	1		09/29/10 02:39	74-97-5	
Bromodichloromethane	**<0.11**	ug/L	1.0	0.11	1		09/29/10 02:39	75-27-4	
Bromoform	**<0.23**	ug/L	1.0	0.23	1		09/29/10 02:39	75-25-2	
Bromomethane	**<0.072**	ug/L	1.0	0.072	1		09/29/10 02:39	74-83-9	
Carbon disulfide	**<0.16**	ug/L	1.0	0.16	1		09/29/10 02:39	75-15-0	
Carbon tetrachloride	**<0.25**	ug/L	1.0	0.25	1		09/29/10 02:39	56-23-5	
Chlorobenzene	**<0.12**	ug/L	1.0	0.12	1		09/29/10 02:39	108-90-7	
Chloroethane	**<0.27**	ug/L	1.0	0.27	1		09/29/10 02:39	75-00-3	
Chloroform	**<0.15**	ug/L	1.0	0.15	1		09/29/10 02:39	67-66-3	
Chloromethane	**<0.20**	ug/L	1.0	0.20	1		09/29/10 02:39	74-87-3	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Sep GWM (922) 212302370
Pace Project No.: 255046

Sample: U-17 **Lab ID: 255046002** Collected: 09/20/10 09:35 Received: 09/22/10 08:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Dibromochloromethane	**<0.12**	ug/L	1.0	0.12	1		09/29/10 02:39	124-48-1	
Dibromomethane	**<0.18**	ug/L	1.0	0.18	1		09/29/10 02:39	74-95-3	
Dichlorodifluoromethane	**<0.19**	ug/L	1.0	0.19	1		09/29/10 02:39	75-71-8	
Ethylbenzene	**1.0**	ug/L	1.0	0.20	1		09/29/10 02:39	100-41-4	
Hexachloro-1,3-butadiene	**<0.27**	ug/L	1.0	0.27	1		09/29/10 02:39	87-68-3	
Isopropylbenzene (Cumene)	**18.9**	ug/L	1.0	0.11	1		09/29/10 02:39	98-82-8	
Methyl-tert-butyl ether	**0.26J**	ug/L	1.0	0.16	1		09/29/10 02:39	1634-04-4	
Methylene chloride	**<0.26**	ug/L	4.0	0.26	1		09/29/10 02:39	75-09-2	
Naphthalene	**2.7**	ug/L	1.0	0.10	1		09/29/10 02:39	91-20-3	
Styrene	**<0.074**	ug/L	1.0	0.074	1		09/29/10 02:39	100-42-5	
Tetrachloroethene	**<0.10**	ug/L	1.0	0.10	1		09/29/10 02:39	127-18-4	
Toluene	**0.55J**	ug/L	1.0	0.21	1		09/29/10 02:39	108-88-3	
Trichloroethene	**<0.060**	ug/L	1.0	0.060	1		09/29/10 02:39	79-01-6	
Trichlorofluoromethane	**<0.24**	ug/L	1.0	0.24	1		09/29/10 02:39	75-69-4	
Vinyl chloride	**<0.050**	ug/L	1.0	0.050	1		09/29/10 02:39	75-01-4	
Xylene (Total)	**2.7J**	ug/L	3.0	0.42	1		09/29/10 02:39	1330-20-7	
cis-1,2-Dichloroethene	**<0.32**	ug/L	1.0	0.32	1		09/29/10 02:39	156-59-2	
cis-1,3-Dichloropropene	**<0.086**	ug/L	1.0	0.086	1		09/29/10 02:39	10061-01-5	
m&p-Xylene	**2.7**	ug/L	2.0	0.27	1		09/29/10 02:39	179601-23-1	
n-Butylbenzene	**<0.10**	ug/L	1.0	0.10	1		09/29/10 02:39	104-51-8	
n-Propylbenzene	**24.7**	ug/L	1.0	0.16	1		09/29/10 02:39	103-65-1	
o-Xylene	**<0.15**	ug/L	1.0	0.15	1		09/29/10 02:39	95-47-6	
p-Isopropyltoluene	**<0.074**	ug/L	1.0	0.074	1		09/29/10 02:39	99-87-6	
sec-Butylbenzene	**9.7**	ug/L	1.0	0.10	1		09/29/10 02:39	135-98-8	
tert-Butylbenzene	**2.4**	ug/L	1.0	0.11	1		09/29/10 02:39	98-06-6	
trans-1,2-Dichloroethene	**<0.22**	ug/L	1.0	0.22	1		09/29/10 02:39	156-60-5	
trans-1,3-Dichloropropene	**<0.16**	ug/L	1.0	0.16	1		09/29/10 02:39	10061-02-6	
4-Bromofluorobenzene (S)	99	%	80-120		1		09/29/10 02:39	460-00-4	
Dibromofluoromethane (S)	100	%	80-122		1		09/29/10 02:39	1868-53-7	
1,2-Dichloroethane-d4 (S)	95	%	80-124		1		09/29/10 02:39	17060-07-0	
Toluene-d8 (S)	99	%	80-123		1		09/29/10 02:39	2037-26-5	
2540D Total Suspended Solids	Analytical Method: SM 2540D								
Total Suspended Solids	**14000**	ug/L	2000	2000	1		09/27/10 16:30		
Total Organic Carbon	Analytical Method: EPA 9060								
Mean Total Organic Carbon	**7.5**	mg/L	1.0	0.080	1		09/28/10 19:00	7440-44-0	

Sample: U-15 **Lab ID: 255046003** Collected: 09/20/10 11:51 Received: 09/22/10 08:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB	Analytical Method: EPA 8082								
PCB-1016 (Aroclor 1016)	**<0.32**	ug/L	1.0	0.32	10	09/24/10 11:20	10/04/10 13:17	12674-11-2	

REPORT OF LABORATORY ANALYSIS

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Seattle, WA 98108
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ANALYTICAL RESULTS

Project: Sep GWM (922) 212302370
Pace Project No.: 255046

Sample: U-15 **Lab ID: 255046003** Collected: 09/20/10 11:51 Received: 09/22/10 08:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB	Analytical Method: EPA 8082								
PCB-1221 (Aroclor 1221)	**<0.45**	ug/L	1.0	0.45	10	09/24/10 11:20	10/04/10 13:17	11104-28-2	
PCB-1232 (Aroclor 1232)	**<0.38**	ug/L	1.0	0.38	10	09/24/10 11:20	10/04/10 13:17	11141-16-5	
PCB-1242 (Aroclor 1242)	**<0.12**	ug/L	1.0	0.12	10	09/24/10 11:20	10/04/10 13:17	53469-21-9	
PCB-1248 (Aroclor 1248)	**<0.38**	ug/L	1.0	0.38	10	09/24/10 11:20	10/04/10 13:17	12672-29-6	
PCB-1254 (Aroclor 1254)	**<0.24**	ug/L	1.0	0.24	10	09/24/10 11:20	10/04/10 13:17	11097-69-1	
PCB-1260 (Aroclor 1260)	**<0.30**	ug/L	1.0	0.30	10	09/24/10 11:20	10/04/10 13:17	11096-82-5	
PCB-1262 (Aroclor 1262)	**<0.15**	ug/L	1.0	0.15	10	09/24/10 11:20	10/04/10 13:17	37324-23-5	
PCB-1268 (Aroclor 1268)	**<0.41**	ug/L	1.0	0.41	10	09/24/10 11:20	10/04/10 13:17	11100-14-4	
Tetrachloro-m-xylene (S)	0	%	30-145		10	09/24/10 11:20	10/04/10 13:17	877-09-8	D3,S4
Decachlorobiphenyl (S)	0	%	30-150		10	09/24/10 11:20	10/04/10 13:17	2051-24-3	S4
NWTPH-Dx GCS SG	Analytical Method: NWTPH-Dx Preparation Method: EPA 3510								
Diesel Range SG	**<35.1**	ug/L	75.8	35.1	1	09/30/10 13:50	10/02/10 06:14		
Motor Oil Range SG	**<57.8**	ug/L	379	57.8	1	09/30/10 13:50	10/02/10 06:14	64742-65-0	
n-Octacosane (S) SG	111	%	50-150		1	09/30/10 13:50	10/02/10 06:14	630-02-4	
o-Terphenyl (S) SG	83	%	50-150		1	09/30/10 13:50	10/02/10 06:14	84-15-1	
NWTPH-Gx/8021BGx GCV	Analytical Method: NWTPH-Gx/8021								
TPH as Gas	**266**	ug/L	100	6.3	1		10/01/10 01:50		B
a,a,a-Trifluorotoluene (S)	113	%	70-130		1		10/01/10 01:50	98-08-8	
6020 MET ICPMS	Analytical Method: EPA 6020								
Arsenic	**54.3**	ug/L	0.50	0.062	1	10/01/10 17:44	10/03/10 11:56	7440-38-2	
Barium	**68.6**	ug/L	0.30	0.043	1	10/01/10 17:44	10/03/10 11:56	7440-39-3	B
Cadmium	**0.050J**	ug/L	0.080	0.020	1	10/01/10 17:44	10/03/10 11:56	7440-43-9	
Chromium	**<0.24**	ug/L	0.50	0.24	1	10/01/10 17:44	10/03/10 11:56	7440-47-3	
Copper	**<0.20**	ug/L	0.50	0.20	1	10/01/10 17:44	10/03/10 11:56	7440-50-8	
Lead	**0.19**	ug/L	0.10	0.020	1	10/01/10 17:44	10/03/10 11:56	7439-92-1	B
Manganese	**10500**	ug/L	0.50	0.050	1	10/01/10 17:44	10/03/10 11:56	7439-96-5	B
Selenium	**<0.10**	ug/L	0.50	0.10	1	10/01/10 17:44	10/03/10 11:56	7782-49-2	
Silver	**<0.071**	ug/L	0.50	0.071	1	10/01/10 17:44	10/03/10 11:56	7440-22-4	
Zinc	**3.7J**	ug/L	5.0	1.3	1	10/01/10 17:44	10/03/10 11:56	7440-66-6	B
6020 MET ICPMS, Dissolved	Analytical Method: EPA 6020								
Arsenic, Dissolved	**5.3**	ug/L	0.50	0.062	1	10/01/10 17:51	10/05/10 03:51	7440-38-2	
Barium, Dissolved	**32.1**	ug/L	0.30	0.043	1	10/01/10 17:51	10/05/10 03:51	7440-39-3	B
Cadmium, Dissolved	**<0.020**	ug/L	0.080	0.020	1	10/01/10 17:51	10/05/10 03:51	7440-43-9	
Chromium, Dissolved	**<0.24**	ug/L	0.50	0.24	1	10/01/10 17:51	10/05/10 03:51	7440-47-3	
Copper, Dissolved	**<0.20**	ug/L	0.50	0.20	1	10/01/10 17:51	10/05/10 03:51	7440-50-8	
Lead, Dissolved	**0.040J**	ug/L	0.10	0.020	1	10/01/10 17:51	10/05/10 03:51	7439-92-1	
Manganese, Dissolved	**9940**	ug/L	25.0	2.5	50	10/01/10 17:51	10/05/10 14:39	7439-96-5	B
Selenium, Dissolved	**<0.10**	ug/L	0.50	0.10	1	10/01/10 17:51	10/05/10 03:51	7782-49-2	
Silver, Dissolved	**<0.071**	ug/L	0.50	0.071	1	10/01/10 17:51	10/05/10 03:51	7440-22-4	
Zinc, Dissolved	**2.0J**	ug/L	5.0	1.3	1	10/01/10 17:51	10/05/10 03:51	7440-66-6	B

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Seattle, WA 98108
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ANALYTICAL RESULTS

Project: Sep GWM (922) 212302370
Pace Project No.: 255046

Sample: U-15 **Lab ID: 255046003** Collected: 09/20/10 11:51 Received: 09/22/10 08:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470								
Mercury	**<0.011**	ug/L	0.20	0.011	1	10/01/10 11:05	10/01/10 15:25	7439-97-6	
7470 Mercury, Dissolved	Analytical Method: EPA 7470 Preparation Method: EPA 7470								
Mercury, Dissolved	**<0.072**	ug/L	0.20	0.072	1	10/01/10 11:05	10/01/10 16:26	7439-97-6	
8270 MSSV Low Level PAH SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
1-Methylnaphthalene	**0.025**	ug/L	0.014	0.0060	1	09/27/10 08:45	09/28/10 20:30	90-12-0	
2-Methylnaphthalene	**0.049**	ug/L	0.014	0.012	1	09/27/10 08:45	09/28/10 20:30	91-57-6	
Acenaphthene	**0.0053J**	ug/L	0.014	0.00067	1	09/27/10 08:45	09/28/10 20:30	83-32-9	
Acenaphthylene	**<0.00068**	ug/L	0.014	0.00068	1	09/27/10 08:45	09/28/10 20:30	208-96-8	
Anthracene	**0.0058J**	ug/L	0.014	0.0012	1	09/27/10 08:45	09/28/10 20:30	120-12-7	
Benzo(a)anthracene	**<0.0017**	ug/L	0.014	0.0017	1	09/27/10 08:45	09/28/10 20:30	56-55-3	
Benzo(a)pyrene	**<0.00067**	ug/L	0.014	0.00067	1	09/27/10 08:45	09/28/10 20:30	50-32-8	
Benzo(b)fluoranthene	**0.015**	ug/L	0.014	0.0019	1	09/27/10 08:45	09/28/10 20:30	205-99-2	
Benzo(g,h,i)perylene	**<0.0016**	ug/L	0.014	0.0016	1	09/27/10 08:45	09/28/10 20:30	191-24-2	
Benzo(k)fluoranthene	**0.020**	ug/L	0.014	0.00067	1	09/27/10 08:45	09/28/10 20:30	207-08-9	
Chrysene	**0.0081J**	ug/L	0.014	0.0017	1	09/27/10 08:45	09/28/10 20:30	218-01-9	
Dibenz(a,h)anthracene	**<0.0017**	ug/L	0.014	0.0017	1	09/27/10 08:45	09/28/10 20:30	53-70-3	
Fluoranthene	**0.019**	ug/L	0.014	0.0018	1	09/27/10 08:45	09/28/10 20:30	206-44-0	
Fluorene	**<0.0036**	ug/L	0.014	0.0036	1	09/27/10 08:45	09/28/10 20:30	86-73-7	
Indeno(1,2,3-cd)pyrene	**<0.0014**	ug/L	0.014	0.0014	1	09/27/10 08:45	09/28/10 20:30	193-39-5	
Naphthalene	**0.049**	ug/L	0.014	0.0014	1	09/27/10 08:45	09/28/10 20:30	91-20-3	
Phenanthrene	**0.014**	ug/L	0.014	0.0036	1	09/27/10 08:45	09/28/10 20:30	85-01-8	
Pyrene	**0.016**	ug/L	0.014	0.0019	1	09/27/10 08:45	09/28/10 20:30	129-00-0	
2-Fluorobiphenyl (S)	77	%	40-106		1	09/27/10 08:45	09/28/10 20:30	321-60-8	
Terphenyl-d14 (S)	87	%	55-146		1	09/27/10 08:45	09/28/10 20:30	1718-51-0	
8260 MSV	Analytical Method: EPA 5030B/8260								
1,1,1,2-Tetrachloroethane	**<0.15**	ug/L	1.0	0.15	1		09/29/10 02:59	630-20-6	
1,1,1-Trichloroethane	**<0.20**	ug/L	1.0	0.20	1		09/29/10 02:59	71-55-6	
1,1,2,2-Tetrachloroethane	**<0.22**	ug/L	1.0	0.22	1		09/29/10 02:59	79-34-5	
1,1,2-Trichloroethane	**<0.19**	ug/L	1.0	0.19	1		09/29/10 02:59	79-00-5	
1,1-Dichloroethane	**<0.23**	ug/L	1.0	0.23	1		09/29/10 02:59	75-34-3	
1,1-Dichloroethene	**<0.12**	ug/L	1.0	0.12	1		09/29/10 02:59	75-35-4	
1,1-Dichloropropene	**<0.094**	ug/L	1.0	0.094	1		09/29/10 02:59	563-58-6	
1,2,3-Trichlorobenzene	**<0.11**	ug/L	1.0	0.11	1		09/29/10 02:59	87-61-6	
1,2,3-Trichloropropane	**<0.37**	ug/L	1.0	0.37	1		09/29/10 02:59	96-18-4	
1,2,4-Trichlorobenzene	**<0.15**	ug/L	1.0	0.15	1		09/29/10 02:59	120-82-1	
1,2,4-Trimethylbenzene	**5.0**	ug/L	1.0	0.086	1		09/29/10 02:59	95-63-6	
1,2-Dibromo-3-chloropropane	**<0.79**	ug/L	1.0	0.79	1		09/29/10 02:59	96-12-8	
1,2-Dibromoethane (EDB)	**<0.20**	ug/L	1.0	0.20	1		09/29/10 02:59	106-93-4	
1,2-Dichlorobenzene	**<0.25**	ug/L	1.0	0.25	1		09/29/10 02:59	95-50-1	
1,2-Dichloroethane	**<0.074**	ug/L	1.0	0.074	1		09/29/10 02:59	107-06-2	
1,2-Dichloroethene (Total)	**<0.50**	ug/L	2.0	0.50	1		09/29/10 02:59	540-59-0	
1,2-Dichloropropane	**<0.16**	ug/L	1.0	0.16	1		09/29/10 02:59	78-87-5	
1,3,5-Trimethylbenzene	**3.4**	ug/L	1.0	0.16	1		09/29/10 02:59	108-67-8	

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ANALYTICAL RESULTS

Project: Sep GWM (922) 212302370
Pace Project No.: 255046

Sample: U-15 **Lab ID: 255046003** Collected: 09/20/10 11:51 Received: 09/22/10 08:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
1,3-Dichlorobenzene	**<0.16**	ug/L	1.0	0.16	1		09/29/10 02:59	541-73-1	
1,3-Dichloropropane	**<0.22**	ug/L	1.0	0.22	1		09/29/10 02:59	142-28-9	
1,4-Dichlorobenzene	**<0.20**	ug/L	1.0	0.20	1		09/29/10 02:59	106-46-7	
2,2-Dichloropropane	**<0.27**	ug/L	1.0	0.27	1		09/29/10 02:59	594-20-7	
2-Butanone (MEK)	**<1.6**	ug/L	5.0	1.6	1		09/29/10 02:59	78-93-3	
2-Chlorotoluene	**<0.098**	ug/L	1.0	0.098	1		09/29/10 02:59	95-49-8	
2-Hexanone	**<0.57**	ug/L	5.0	0.57	1		09/29/10 02:59	591-78-6	
4-Chlorotoluene	**<0.13**	ug/L	1.0	0.13	1		09/29/10 02:59	106-43-4	
4-Methyl-2-pentanone (MIBK)	**<0.32**	ug/L	5.0	0.32	1		09/29/10 02:59	108-10-1	
Acetone	**<0.75**	ug/L	5.0	0.75	1		09/29/10 02:59	67-64-1	
Benzene	**0.88J**	ug/L	1.0	0.12	1		09/29/10 02:59	71-43-2	
Bromobenzene	**<0.16**	ug/L	1.0	0.16	1		09/29/10 02:59	108-86-1	
Bromochloromethane	**<0.34**	ug/L	1.0	0.34	1		09/29/10 02:59	74-97-5	
Bromodichloromethane	**<0.11**	ug/L	1.0	0.11	1		09/29/10 02:59	75-27-4	
Bromoform	**<0.23**	ug/L	1.0	0.23	1		09/29/10 02:59	75-25-2	
Bromomethane	**<0.072**	ug/L	1.0	0.072	1		09/29/10 02:59	74-83-9	
Carbon disulfide	**<0.16**	ug/L	1.0	0.16	1		09/29/10 02:59	75-15-0	
Carbon tetrachloride	**<0.25**	ug/L	1.0	0.25	1		09/29/10 02:59	56-23-5	
Chlorobenzene	**<0.12**	ug/L	1.0	0.12	1		09/29/10 02:59	108-90-7	
Chloroethane	**<0.27**	ug/L	1.0	0.27	1		09/29/10 02:59	75-00-3	
Chloroform	**<0.15**	ug/L	1.0	0.15	1		09/29/10 02:59	67-66-3	
Chloromethane	**<0.20**	ug/L	1.0	0.20	1		09/29/10 02:59	74-87-3	
Dibromochloromethane	**<0.12**	ug/L	1.0	0.12	1		09/29/10 02:59	124-48-1	
Dibromomethane	**<0.18**	ug/L	1.0	0.18	1		09/29/10 02:59	74-95-3	
Dichlorodifluoromethane	**<0.19**	ug/L	1.0	0.19	1		09/29/10 02:59	75-71-8	
Ethylbenzene	**6.2**	ug/L	1.0	0.20	1		09/29/10 02:59	100-41-4	
Hexachloro-1,3-butadiene	**<0.27**	ug/L	1.0	0.27	1		09/29/10 02:59	87-68-3	
Isopropylbenzene (Cumene)	**1.7**	ug/L	1.0	0.11	1		09/29/10 02:59	98-82-8	
Methyl-tert-butyl ether	**<0.16**	ug/L	1.0	0.16	1		09/29/10 02:59	1634-04-4	
Methylene chloride	**<0.26**	ug/L	4.0	0.26	1		09/29/10 02:59	75-09-2	
Naphthalene	**<0.10**	ug/L	1.0	0.10	1		09/29/10 02:59	91-20-3	
Styrene	**<0.074**	ug/L	1.0	0.074	1		09/29/10 02:59	100-42-5	
Tetrachloroethene	**<0.10**	ug/L	1.0	0.10	1		09/29/10 02:59	127-18-4	
Toluene	**<0.21**	ug/L	1.0	0.21	1		09/29/10 02:59	108-88-3	
Trichloroethene	**<0.060**	ug/L	1.0	0.060	1		09/29/10 02:59	79-01-6	
Trichlorofluoromethane	**<0.24**	ug/L	1.0	0.24	1		09/29/10 02:59	75-69-4	
Vinyl chloride	**<0.050**	ug/L	1.0	0.050	1		09/29/10 02:59	75-01-4	
Xylene (Total)	**10.5**	ug/L	3.0	0.42	1		09/29/10 02:59	1330-20-7	
cis-1,2-Dichloroethene	**<0.32**	ug/L	1.0	0.32	1		09/29/10 02:59	156-59-2	
cis-1,3-Dichloropropene	**<0.086**	ug/L	1.0	0.086	1		09/29/10 02:59	10061-01-5	
m&p-Xylene	**8.1**	ug/L	2.0	0.27	1		09/29/10 02:59	179601-23-1	
n-Butylbenzene	**<0.10**	ug/L	1.0	0.10	1		09/29/10 02:59	104-51-8	
n-Propylbenzene	**1.9**	ug/L	1.0	0.16	1		09/29/10 02:59	103-65-1	
o-Xylene	**2.4**	ug/L	1.0	0.15	1		09/29/10 02:59	95-47-6	
p-Isopropyltoluene	**<0.074**	ug/L	1.0	0.074	1		09/29/10 02:59	99-87-6	
sec-Butylbenzene	**<0.10**	ug/L	1.0	0.10	1		09/29/10 02:59	135-98-8	

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ANALYTICAL RESULTS

Project: Sep GWM (922) 212302370
Pace Project No.: 255046

Sample: U-15 **Lab ID: 255046003** Collected: 09/20/10 11:51 Received: 09/22/10 08:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
tert-Butylbenzene	**<0.11**	ug/L	1.0	0.11	1		09/29/10 02:59	98-06-6	
trans-1,2-Dichloroethene	**<0.22**	ug/L	1.0	0.22	1		09/29/10 02:59	156-60-5	
trans-1,3-Dichloropropene	**<0.16**	ug/L	1.0	0.16	1		09/29/10 02:59	10061-02-6	
4-Bromofluorobenzene (S)	100	%	80-120		1		09/29/10 02:59	460-00-4	
Dibromofluoromethane (S)	98	%	80-122		1		09/29/10 02:59	1868-53-7	
1,2-Dichloroethane-d4 (S)	95	%	80-124		1		09/29/10 02:59	17060-07-0	
Toluene-d8 (S)	101	%	80-123		1		09/29/10 02:59	2037-26-5	
2540D Total Suspended Solids	Analytical Method: SM 2540D								
Total Suspended Solids	**50000**	ug/L	4000	4000	1		09/27/10 16:30		
Total Organic Carbon	Analytical Method: EPA 9060								
Mean Total Organic Carbon	**5.2**	mg/L	1.0	0.080	1		09/28/10 19:00	7440-44-0	

Sample: U-2 **Lab ID: 255046004** Collected: 09/20/10 12:30 Received: 09/22/10 08:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB	Analytical Method: EPA 8082								
PCB-1016 (Aroclor 1016)	**<0.32**	ug/L	1.0	0.32	10	09/24/10 11:20	10/04/10 13:33	12674-11-2	
PCB-1221 (Aroclor 1221)	**<0.45**	ug/L	1.0	0.45	10	09/24/10 11:20	10/04/10 13:33	11104-28-2	
PCB-1232 (Aroclor 1232)	**<0.38**	ug/L	1.0	0.38	10	09/24/10 11:20	10/04/10 13:33	11141-16-5	
PCB-1242 (Aroclor 1242)	**<0.12**	ug/L	1.0	0.12	10	09/24/10 11:20	10/04/10 13:33	53469-21-9	
PCB-1248 (Aroclor 1248)	**<0.38**	ug/L	1.0	0.38	10	09/24/10 11:20	10/04/10 13:33	12672-29-6	
PCB-1254 (Aroclor 1254)	**<0.24**	ug/L	1.0	0.24	10	09/24/10 11:20	10/04/10 13:33	11097-69-1	
PCB-1260 (Aroclor 1260)	**<0.30**	ug/L	1.0	0.30	10	09/24/10 11:20	10/04/10 13:33	11096-82-5	
PCB-1262 (Aroclor 1262)	**<0.15**	ug/L	1.0	0.15	10	09/24/10 11:20	10/04/10 13:33	37324-23-5	
PCB-1268 (Aroclor 1268)	**<0.41**	ug/L	1.0	0.41	10	09/24/10 11:20	10/04/10 13:33	11100-14-4	
Tetrachloro-m-xylene (S)	0	%	30-145		10	09/24/10 11:20	10/04/10 13:33	877-09-8	D3,S4
Decachlorobiphenyl (S)	0	%	30-150		10	09/24/10 11:20	10/04/10 13:33	2051-24-3	S4
NWTPH-Dx GCS SG	Analytical Method: NWTPH-Dx Preparation Method: EPA 3510								
Diesel Range SG	**<35.1**	ug/L	75.8	35.1	1	09/30/10 13:50	10/02/10 06:36		
Motor Oil Range SG	**<57.8**	ug/L	379	57.8	1	09/30/10 13:50	10/02/10 06:36	64742-65-0	
n-Octacosane (S) SG	124	%	50-150		1	09/30/10 13:50	10/02/10 06:36	630-02-4	
o-Terphenyl (S) SG	101	%	50-150		1	09/30/10 13:50	10/02/10 06:36	84-15-1	
NWTPH-Gx/8021BGx GCV	Analytical Method: NWTPH-Gx/8021								
TPH as Gas	**98.8J**	ug/L	100	6.3	1		10/01/10 02:12		B
a,a,a-Trifluorotoluene (S)	110	%	70-130		1		10/01/10 02:12	98-08-8	
6020 MET ICPMS	Analytical Method: EPA 6020								
Arsenic	**1.7**	ug/L	0.50	0.062	1	10/04/10 13:37	10/05/10 16:45	7440-38-2	

REPORT OF LABORATORY ANALYSIS

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940 South Harney
Seattle, WA 98108
(206)767-5060

ANALYTICAL RESULTS

Project: Sep GWM (922) 212302370
Pace Project No.: 255046

Sample: U-2 **Lab ID: 255046004** Collected: 09/20/10 12:30 Received: 09/22/10 08:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020								
Barium	**2.5**	ug/L	0.30	0.043	1	10/04/10 13:37	10/05/10 16:45	7440-39-3	B
Cadmium	**<0.020**	ug/L	0.080	0.020	1	10/04/10 13:37	10/05/10 16:45	7440-43-9	
Chromium	**<0.24**	ug/L	0.50	0.24	1	10/04/10 13:37	10/05/10 16:45	7440-47-3	
Copper	**<0.20**	ug/L	0.50	0.20	1	10/04/10 13:37	10/05/10 16:45	7440-50-8	
Lead	**<0.020**	ug/L	0.10	0.020	1	10/04/10 13:37	10/05/10 16:45	7439-92-1	
Manganese	**3010**	ug/L	5.0	0.50	10	10/04/10 13:37	10/06/10 10:32	7439-96-5	B
Selenium	**<0.10**	ug/L	0.50	0.10	1	10/04/10 13:37	10/05/10 16:45	7782-49-2	
Silver	**0.37J**	ug/L	0.50	0.071	1	10/04/10 13:37	10/05/10 16:45	7440-22-4	B
Zinc	**5.4**	ug/L	5.0	1.3	1	10/04/10 13:37	10/05/10 16:45	7440-66-6	B
6020 MET ICPMS, Dissolved	Analytical Method: EPA 6020								
Arsenic, Dissolved	**1.9**	ug/L	0.50	0.062	1	10/01/10 17:51	10/05/10 03:56	7440-38-2	
Barium, Dissolved	**3.4**	ug/L	0.30	0.043	1	10/01/10 17:51	10/05/10 03:56	7440-39-3	B
Cadmium, Dissolved	**<0.020**	ug/L	0.080	0.020	1	10/01/10 17:51	10/05/10 03:56	7440-43-9	
Chromium, Dissolved	**<0.24**	ug/L	0.50	0.24	1	10/01/10 17:51	10/05/10 03:56	7440-47-3	
Copper, Dissolved	**0.32J**	ug/L	0.50	0.20	1	10/01/10 17:51	10/05/10 03:56	7440-50-8	
Lead, Dissolved	**0.060J**	ug/L	0.10	0.020	1	10/01/10 17:51	10/05/10 03:56	7439-92-1	
Manganese, Dissolved	**2860**	ug/L	25.0	2.5	50	10/01/10 17:51	10/05/10 14:44	7439-96-5	B,M1
Selenium, Dissolved	**<0.10**	ug/L	0.50	0.10	1	10/01/10 17:51	10/05/10 03:56	7782-49-2	
Silver, Dissolved	**<0.071**	ug/L	0.50	0.071	1	10/01/10 17:51	10/05/10 03:56	7440-22-4	
Zinc, Dissolved	**6.3**	ug/L	5.0	1.3	1	10/01/10 17:51	10/05/10 03:56	7440-66-6	B
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470								
Mercury	**<0.011**	ug/L	0.20	0.011	1	10/01/10 11:05	10/01/10 15:27	7439-97-6	
7470 Mercury, Dissolved	Analytical Method: EPA 7470 Preparation Method: EPA 7470								
Mercury, Dissolved	**<0.072**	ug/L	0.20	0.072	1	10/01/10 11:05	10/01/10 16:28	7439-97-6	
8270 MSSV Low Level PAH SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
1-Methylnaphthalene	**<0.0061**	ug/L	0.015	0.0061	1	09/27/10 08:45	09/28/10 20:47	90-12-0	
2-Methylnaphthalene	**<0.012**	ug/L	0.015	0.012	1	09/27/10 08:45	09/28/10 20:47	91-57-6	
Acenaphthene	**<0.00068**	ug/L	0.015	0.00068	1	09/27/10 08:45	09/28/10 20:47	83-32-9	
Acenaphthylene	**<0.00069**	ug/L	0.015	0.00069	1	09/27/10 08:45	09/28/10 20:47	208-96-8	
Anthracene	**0.0054J**	ug/L	0.015	0.0013	1	09/27/10 08:45	09/28/10 20:47	120-12-7	
Benzo(a)anthracene	**<0.0017**	ug/L	0.015	0.0017	1	09/27/10 08:45	09/28/10 20:47	56-55-3	
Benzo(a)pyrene	**<0.00068**	ug/L	0.015	0.00068	1	09/27/10 08:45	09/28/10 20:47	50-32-8	
Benzo(b)fluoranthene	**<0.0019**	ug/L	0.015	0.0019	1	09/27/10 08:45	09/28/10 20:47	205-99-2	
Benzo(g,h,i)perylene	**<0.0017**	ug/L	0.015	0.0017	1	09/27/10 08:45	09/28/10 20:47	191-24-2	
Benzo(k)fluoranthene	**<0.00068**	ug/L	0.015	0.00068	1	09/27/10 08:45	09/28/10 20:47	207-08-9	
Chrysene	**<0.0017**	ug/L	0.015	0.0017	1	09/27/10 08:45	09/28/10 20:47	218-01-9	
Dibenz(a,h)anthracene	**<0.0017**	ug/L	0.015	0.0017	1	09/27/10 08:45	09/28/10 20:47	53-70-3	
Fluoranthene	**0.0092J**	ug/L	0.015	0.0018	1	09/27/10 08:45	09/28/10 20:47	206-44-0	
Fluorene	**<0.0037**	ug/L	0.015	0.0037	1	09/27/10 08:45	09/28/10 20:47	86-73-7	
Indeno(1,2,3-cd)pyrene	**<0.0015**	ug/L	0.015	0.0015	1	09/27/10 08:45	09/28/10 20:47	193-39-5	
Naphthalene	**<0.0014**	ug/L	0.015	0.0014	1	09/27/10 08:45	09/28/10 20:47	91-20-3	

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ANALYTICAL RESULTS

Project: Sep GWM (922) 212302370
Pace Project No.: 255046

Sample: U-2 **Lab ID: 255046004** Collected: 09/20/10 12:30 Received: 09/22/10 08:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Low Level PAH SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
Phenanthrene	**0.0064J**	ug/L	0.015	0.0037	1	09/27/10 08:45	09/28/10 20:47	85-01-8	
Pyrene	**0.042**	ug/L	0.015	0.0019	1	09/27/10 08:45	09/28/10 20:47	129-00-0	
2-Fluorobiphenyl (S)	58	%	40-106		1	09/27/10 08:45	09/28/10 20:47	321-60-8	
Terphenyl-d14 (S)	76	%	55-146		1	09/27/10 08:45	09/28/10 20:47	1718-51-0	
8260 MSV	Analytical Method: EPA 5030B/8260								
1,1,1,2-Tetrachloroethane	**<0.15**	ug/L	1.0	0.15	1		09/29/10 03:20	630-20-6	
1,1,1-Trichloroethane	**<0.20**	ug/L	1.0	0.20	1		09/29/10 03:20	71-55-6	
1,1,2,2-Tetrachloroethane	**<0.22**	ug/L	1.0	0.22	1		09/29/10 03:20	79-34-5	
1,1,2-Trichloroethane	**<0.19**	ug/L	1.0	0.19	1		09/29/10 03:20	79-00-5	
1,1-Dichloroethane	**<0.23**	ug/L	1.0	0.23	1		09/29/10 03:20	75-34-3	
1,1-Dichloroethene	**<0.12**	ug/L	1.0	0.12	1		09/29/10 03:20	75-35-4	
1,1-Dichloropropene	**<0.094**	ug/L	1.0	0.094	1		09/29/10 03:20	563-58-6	
1,2,3-Trichlorobenzene	**<0.11**	ug/L	1.0	0.11	1		09/29/10 03:20	87-61-6	
1,2,3-Trichloropropane	**<0.37**	ug/L	1.0	0.37	1		09/29/10 03:20	96-18-4	
1,2,4-Trichlorobenzene	**<0.15**	ug/L	1.0	0.15	1		09/29/10 03:20	120-82-1	
1,2,4-Trimethylbenzene	**<0.086**	ug/L	1.0	0.086	1		09/29/10 03:20	95-63-6	
1,2-Dibromo-3-chloropropane	**<0.79**	ug/L	1.0	0.79	1		09/29/10 03:20	96-12-8	
1,2-Dibromoethane (EDB)	**<0.20**	ug/L	1.0	0.20	1		09/29/10 03:20	106-93-4	
1,2-Dichlorobenzene	**<0.25**	ug/L	1.0	0.25	1		09/29/10 03:20	95-50-1	
1,2-Dichloroethane	**<0.074**	ug/L	1.0	0.074	1		09/29/10 03:20	107-06-2	
1,2-Dichloroethene (Total)	**<0.50**	ug/L	2.0	0.50	1		09/29/10 03:20	540-59-0	
1,2-Dichloropropane	**<0.16**	ug/L	1.0	0.16	1		09/29/10 03:20	78-87-5	
1,3,5-Trimethylbenzene	**<0.16**	ug/L	1.0	0.16	1		09/29/10 03:20	108-67-8	
1,3-Dichlorobenzene	**<0.16**	ug/L	1.0	0.16	1		09/29/10 03:20	541-73-1	
1,3-Dichloropropane	**<0.22**	ug/L	1.0	0.22	1		09/29/10 03:20	142-28-9	
1,4-Dichlorobenzene	**<0.20**	ug/L	1.0	0.20	1		09/29/10 03:20	106-46-7	
2,2-Dichloropropane	**<0.27**	ug/L	1.0	0.27	1		09/29/10 03:20	594-20-7	
2-Butanone (MEK)	**<1.6**	ug/L	5.0	1.6	1		09/29/10 03:20	78-93-3	
2-Chlorotoluene	**<0.098**	ug/L	1.0	0.098	1		09/29/10 03:20	95-49-8	
2-Hexanone	**<0.57**	ug/L	5.0	0.57	1		09/29/10 03:20	591-78-6	
4-Chlorotoluene	**<0.13**	ug/L	1.0	0.13	1		09/29/10 03:20	106-43-4	
4-Methyl-2-pentanone (MIBK)	**<0.32**	ug/L	5.0	0.32	1		09/29/10 03:20	108-10-1	
Acetone	**<0.75**	ug/L	5.0	0.75	1		09/29/10 03:20	67-64-1	
Benzene	**2.5**	ug/L	1.0	0.12	1		09/29/10 03:20	71-43-2	
Bromobenzene	**<0.16**	ug/L	1.0	0.16	1		09/29/10 03:20	108-86-1	
Bromochloromethane	**<0.34**	ug/L	1.0	0.34	1		09/29/10 03:20	74-97-5	
Bromodichloromethane	**<0.11**	ug/L	1.0	0.11	1		09/29/10 03:20	75-27-4	
Bromoform	**<0.23**	ug/L	1.0	0.23	1		09/29/10 03:20	75-25-2	
Bromomethane	**<0.072**	ug/L	1.0	0.072	1		09/29/10 03:20	74-83-9	
Carbon disulfide	**<0.16**	ug/L	1.0	0.16	1		09/29/10 03:20	75-15-0	
Carbon tetrachloride	**<0.25**	ug/L	1.0	0.25	1		09/29/10 03:20	56-23-5	
Chlorobenzene	**<0.12**	ug/L	1.0	0.12	1		09/29/10 03:20	108-90-7	
Chloroethane	**<0.27**	ug/L	1.0	0.27	1		09/29/10 03:20	75-00-3	
Chloroform	**<0.15**	ug/L	1.0	0.15	1		09/29/10 03:20	67-66-3	
Chloromethane	**<0.20**	ug/L	1.0	0.20	1		09/29/10 03:20	74-87-3	

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ANALYTICAL RESULTS

Project: Sep GWM (922) 212302370
Pace Project No.: 255046

Sample: U-2 **Lab ID: 255046004** Collected: 09/20/10 12:30 Received: 09/22/10 08:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Dibromochloromethane	**<0.12**	ug/L	1.0	0.12	1		09/29/10 03:20	124-48-1	
Dibromomethane	**<0.18**	ug/L	1.0	0.18	1		09/29/10 03:20	74-95-3	
Dichlorodifluoromethane	**<0.19**	ug/L	1.0	0.19	1		09/29/10 03:20	75-71-8	
Ethylbenzene	**<0.20**	ug/L	1.0	0.20	1		09/29/10 03:20	100-41-4	
Hexachloro-1,3-butadiene	**<0.27**	ug/L	1.0	0.27	1		09/29/10 03:20	87-68-3	
Isopropylbenzene (Cumene)	**2.9**	ug/L	1.0	0.11	1		09/29/10 03:20	98-82-8	
Methyl-tert-butyl ether	**<0.16**	ug/L	1.0	0.16	1		09/29/10 03:20	1634-04-4	
Methylene chloride	**<0.26**	ug/L	4.0	0.26	1		09/29/10 03:20	75-09-2	
Naphthalene	**<0.10**	ug/L	1.0	0.10	1		09/29/10 03:20	91-20-3	
Styrene	**<0.074**	ug/L	1.0	0.074	1		09/29/10 03:20	100-42-5	
Tetrachloroethene	**<0.10**	ug/L	1.0	0.10	1		09/29/10 03:20	127-18-4	
Toluene	**0.27J**	ug/L	1.0	0.21	1		09/29/10 03:20	108-88-3	
Trichloroethene	**<0.060**	ug/L	1.0	0.060	1		09/29/10 03:20	79-01-6	
Trichlorofluoromethane	**<0.24**	ug/L	1.0	0.24	1		09/29/10 03:20	75-69-4	
Vinyl chloride	**<0.050**	ug/L	1.0	0.050	1		09/29/10 03:20	75-01-4	
Xylene (Total)	**<0.42**	ug/L	3.0	0.42	1		09/29/10 03:20	1330-20-7	
cis-1,2-Dichloroethene	**<0.32**	ug/L	1.0	0.32	1		09/29/10 03:20	156-59-2	
cis-1,3-Dichloropropene	**<0.086**	ug/L	1.0	0.086	1		09/29/10 03:20	10061-01-5	
m&p-Xylene	**<0.27**	ug/L	2.0	0.27	1		09/29/10 03:20	179601-23-1	
n-Butylbenzene	**<0.10**	ug/L	1.0	0.10	1		09/29/10 03:20	104-51-8	
n-Propylbenzene	**3.2**	ug/L	1.0	0.16	1		09/29/10 03:20	103-65-1	
o-Xylene	**<0.15**	ug/L	1.0	0.15	1		09/29/10 03:20	95-47-6	
p-Isopropyltoluene	**<0.074**	ug/L	1.0	0.074	1		09/29/10 03:20	99-87-6	
sec-Butylbenzene	**1.9**	ug/L	1.0	0.10	1		09/29/10 03:20	135-98-8	
tert-Butylbenzene	**<0.11**	ug/L	1.0	0.11	1		09/29/10 03:20	98-06-6	
trans-1,2-Dichloroethene	**<0.22**	ug/L	1.0	0.22	1		09/29/10 03:20	156-60-5	
trans-1,3-Dichloropropene	**<0.16**	ug/L	1.0	0.16	1		09/29/10 03:20	10061-02-6	
4-Bromofluorobenzene (S)	100	%	80-120		1		09/29/10 03:20	460-00-4	
Dibromofluoromethane (S)	99	%	80-122		1		09/29/10 03:20	1868-53-7	
1,2-Dichloroethane-d4 (S)	94	%	80-124		1		09/29/10 03:20	17060-07-0	
Toluene-d8 (S)	100	%	80-123		1		09/29/10 03:20	2037-26-5	
2540D Total Suspended Solids	Analytical Method: SM 2540D								
Total Suspended Solids	**216000**	ug/L	4000	4000	1		09/27/10 16:30		
Total Organic Carbon	Analytical Method: EPA 9060								
Mean Total Organic Carbon	**4.1**	mg/L	1.0	0.080	1		09/28/10 19:00	7440-44-0	

Sample: U-20 **Lab ID: 255046005** Collected: 09/21/10 09:30 Received: 09/22/10 08:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB	Analytical Method: EPA 8082								
PCB-1016 (Aroclor 1016)	**<0.32**	ug/L	1.0	0.32	10	09/27/10 14:28	10/04/10 14:23	12674-11-2	

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ANALYTICAL RESULTS

Project: Sep GWM (922) 212302370
Pace Project No.: 255046

Sample: U-20 **Lab ID: 255046005** Collected: 09/21/10 09:30 Received: 09/22/10 08:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB	Analytical Method: EPA 8082								
PCB-1221 (Aroclor 1221)	**<0.45**	ug/L	1.0	0.45	10	09/27/10 14:28	10/04/10 14:23	11104-28-2	
PCB-1232 (Aroclor 1232)	**<0.38**	ug/L	1.0	0.38	10	09/27/10 14:28	10/04/10 14:23	11141-16-5	
PCB-1242 (Aroclor 1242)	**<0.12**	ug/L	1.0	0.12	10	09/27/10 14:28	10/04/10 14:23	53469-21-9	
PCB-1248 (Aroclor 1248)	**<0.38**	ug/L	1.0	0.38	10	09/27/10 14:28	10/04/10 14:23	12672-29-6	
PCB-1254 (Aroclor 1254)	**<0.24**	ug/L	1.0	0.24	10	09/27/10 14:28	10/04/10 14:23	11097-69-1	
PCB-1260 (Aroclor 1260)	**<0.30**	ug/L	1.0	0.30	10	09/27/10 14:28	10/04/10 14:23	11096-82-5	
PCB-1262 (Aroclor 1262)	**<0.15**	ug/L	1.0	0.15	10	09/27/10 14:28	10/04/10 14:23	37324-23-5	
PCB-1268 (Aroclor 1268)	**<0.41**	ug/L	1.0	0.41	10	09/27/10 14:28	10/04/10 14:23	11100-14-4	
Tetrachloro-m-xylene (S)	96	%	30-145		10	09/27/10 14:28	10/04/10 14:23	877-09-8	D3
Decachlorobiphenyl (S)	86	%	30-150		10	09/27/10 14:28	10/04/10 14:23	2051-24-3	
NWTPH-Dx GCS SG	Analytical Method: NWTPH-Dx Preparation Method: EPA 3510								
Diesel Range SG	**220**	ug/L	76.9	35.6	1	09/30/10 13:50	10/02/10 07:40		
Motor Oil Range SG	**<58.7**	ug/L	385	58.7	1	09/30/10 13:50	10/02/10 07:40	64742-65-0	
n-Octacosane (S) SG	123	%	50-150		1	09/30/10 13:50	10/02/10 07:40	630-02-4	
o-Terphenyl (S) SG	97	%	50-150		1	09/30/10 13:50	10/02/10 07:40	84-15-1	
NWTPH-Gx GCV	Analytical Method: NWTPH-Gx								
Gasoline Range Organics	**1430**	ug/L	50.0	13.4	1		09/29/10 21:06		
a,a,a-Trifluorotoluene (S)	105	%	50-150		1		09/29/10 21:06	98-08-8	
4-Bromofluorobenzene (S)	119	%	50-150		1		09/29/10 21:06	460-00-4	
6020 MET ICPMS	Analytical Method: EPA 6020								
Arsenic	**55.0**	ug/L	0.50	0.062	1	10/01/10 17:44	10/03/10 12:02	7440-38-2	
Barium	**64.0**	ug/L	0.30	0.043	1	10/01/10 17:44	10/03/10 12:02	7440-39-3	B
Cadmium	**0.18**	ug/L	0.080	0.020	1	10/01/10 17:44	10/03/10 12:02	7440-43-9	
Chromium	**0.28J**	ug/L	0.50	0.24	1	10/01/10 17:44	10/03/10 12:02	7440-47-3	
Copper	**0.29J**	ug/L	0.50	0.20	1	10/01/10 17:44	10/03/10 12:02	7440-50-8	B
Lead	**7.9**	ug/L	0.10	0.020	1	10/01/10 17:44	10/03/10 12:02	7439-92-1	B
Manganese	**14700**	ug/L	0.50	0.050	1	10/01/10 17:44	10/03/10 12:02	7439-96-5	B
Selenium	**0.13J**	ug/L	0.50	0.10	1	10/01/10 17:44	10/03/10 12:02	7782-49-2	
Silver	**<0.071**	ug/L	0.50	0.071	1	10/01/10 17:44	10/03/10 12:02	7440-22-4	
Zinc	**5.5**	ug/L	5.0	1.3	1	10/01/10 17:44	10/03/10 12:02	7440-66-6	B
6020 MET ICPMS, Dissolved	Analytical Method: EPA 6020								
Arsenic, Dissolved	**5.0**	ug/L	0.50	0.062	1	10/01/10 17:51	10/05/10 04:23	7440-38-2	
Barium, Dissolved	**25.1**	ug/L	0.30	0.043	1	10/01/10 17:51	10/05/10 04:23	7440-39-3	B
Cadmium, Dissolved	**0.022J**	ug/L	0.080	0.020	1	10/01/10 17:51	10/05/10 04:23	7440-43-9	
Chromium, Dissolved	**<0.24**	ug/L	0.50	0.24	1	10/01/10 17:51	10/05/10 04:23	7440-47-3	
Copper, Dissolved	**0.44J**	ug/L	0.50	0.20	1	10/01/10 17:51	10/05/10 04:23	7440-50-8	
Lead, Dissolved	**6.1**	ug/L	0.10	0.020	1	10/01/10 17:51	10/05/10 04:23	7439-92-1	
Manganese, Dissolved	**14000**	ug/L	25.0	2.5	50	10/01/10 17:51	10/05/10 14:49	7439-96-5	B
Selenium, Dissolved	**0.26J**	ug/L	0.50	0.10	1	10/01/10 17:51	10/05/10 04:23	7782-49-2	
Silver, Dissolved	**0.13J**	ug/L	0.50	0.071	1	10/01/10 17:51	10/05/10 04:23	7440-22-4	B
Zinc, Dissolved	**5.5**	ug/L	5.0	1.3	1	10/01/10 17:51	10/05/10 04:23	7440-66-6	B

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ANALYTICAL RESULTS

Project: Sep GWM (922) 212302370
Pace Project No.: 255046

Sample: U-20 **Lab ID: 255046005** Collected: 09/21/10 09:30 Received: 09/22/10 08:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470								
Mercury	**<0.011**	ug/L	0.20	0.011	1	10/01/10 11:05	10/01/10 15:29	7439-97-6	
7470 Mercury, Dissolved	Analytical Method: EPA 7470 Preparation Method: EPA 7470								
Mercury, Dissolved	**<0.072**	ug/L	0.20	0.072	1	10/01/10 11:05	10/01/10 16:30	7439-97-6	
8270 MSSV Low Level PAH SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
1-Methylnaphthalene	**14.8**	ug/L	0.014	0.0061	1	09/27/10 08:45	10/04/10 18:37	90-12-0	
2-Methylnaphthalene	**<0.012**	ug/L	0.014	0.012	1	09/27/10 08:45	10/04/10 18:37	91-57-6	
Acenaphthene	**0.25**	ug/L	0.014	0.00067	1	09/27/10 08:45	10/04/10 18:37	83-32-9	
Acenaphthylene	**0.10**	ug/L	0.014	0.00068	1	09/27/10 08:45	10/04/10 18:37	208-96-8	
Anthracene	**0.045**	ug/L	0.014	0.0012	1	09/27/10 08:45	10/04/10 18:37	120-12-7	
Benzo(a)anthracene	**<0.0017**	ug/L	0.014	0.0017	1	09/27/10 08:45	10/04/10 18:37	56-55-3	
Benzo(a)pyrene	**<0.00067**	ug/L	0.014	0.00067	1	09/27/10 08:45	10/04/10 18:37	50-32-8	
Benzo(b)fluoranthene	**<0.0019**	ug/L	0.014	0.0019	1	09/27/10 08:45	10/04/10 18:37	205-99-2	
Benzo(g,h,i)perylene	**<0.0016**	ug/L	0.014	0.0016	1	09/27/10 08:45	10/04/10 18:37	191-24-2	
Benzo(k)fluoranthene	**<0.00067**	ug/L	0.014	0.00067	1	09/27/10 08:45	10/04/10 18:37	207-08-9	
Chrysene	**0.0034J**	ug/L	0.014	0.0017	1	09/27/10 08:45	10/04/10 18:37	218-01-9	
Dibenz(a,h)anthracene	**<0.0017**	ug/L	0.014	0.0017	1	09/27/10 08:45	10/04/10 18:37	53-70-3	
Fluoranthene	**0.035**	ug/L	0.014	0.0018	1	09/27/10 08:45	10/04/10 18:37	206-44-0	
Fluorene	**0.48**	ug/L	0.014	0.0037	1	09/27/10 08:45	10/04/10 18:37	86-73-7	
Indeno(1,2,3-cd)pyrene	**<0.0014**	ug/L	0.014	0.0014	1	09/27/10 08:45	10/04/10 18:37	193-39-5	
Naphthalene	**1.1**	ug/L	0.014	0.0014	1	09/27/10 08:45	10/04/10 18:37	91-20-3	
Phenanthrene	**0.31**	ug/L	0.014	0.0037	1	09/27/10 08:45	10/04/10 18:37	85-01-8	
Pyrene	**0.029**	ug/L	0.014	0.0019	1	09/27/10 08:45	10/04/10 18:37	129-00-0	
2-Fluorobiphenyl (S)	52	%	40-106		1	09/27/10 08:45	10/04/10 18:37	321-60-8	
Terphenyl-d14 (S)	81	%	55-146		1	09/27/10 08:45	10/04/10 18:37	1718-51-0	
8260 MSV	Analytical Method: EPA 5030B/8260								
1,1,1,2-Tetrachloroethane	**<0.15**	ug/L	1.0	0.15	1		09/29/10 03:40	630-20-6	
1,1,1-Trichloroethane	**<0.20**	ug/L	1.0	0.20	1		09/29/10 03:40	71-55-6	
1,1,2,2-Tetrachloroethane	**<0.22**	ug/L	1.0	0.22	1		09/29/10 03:40	79-34-5	
1,1,2-Trichloroethane	**<0.19**	ug/L	1.0	0.19	1		09/29/10 03:40	79-00-5	
1,1-Dichloroethane	**<0.23**	ug/L	1.0	0.23	1		09/29/10 03:40	75-34-3	
1,1-Dichloroethene	**<0.12**	ug/L	1.0	0.12	1		09/29/10 03:40	75-35-4	
1,1-Dichloropropene	**<0.094**	ug/L	1.0	0.094	1		09/29/10 03:40	563-58-6	
1,2,3-Trichlorobenzene	**<0.11**	ug/L	1.0	0.11	1		09/29/10 03:40	87-61-6	
1,2,3-Trichloropropane	**<0.37**	ug/L	1.0	0.37	1		09/29/10 03:40	96-18-4	
1,2,4-Trichlorobenzene	**<0.15**	ug/L	1.0	0.15	1		09/29/10 03:40	120-82-1	
1,2,4-Trimethylbenzene	**<0.086**	ug/L	1.0	0.086	1		09/29/10 03:40	95-63-6	
1,2-Dibromo-3-chloropropane	**<0.79**	ug/L	1.0	0.79	1		09/29/10 03:40	96-12-8	
1,2-Dibromoethane (EDB)	**<0.20**	ug/L	1.0	0.20	1		09/29/10 03:40	106-93-4	
1,2-Dichlorobenzene	**<0.25**	ug/L	1.0	0.25	1		09/29/10 03:40	95-50-1	
1,2-Dichloroethane	**<0.074**	ug/L	1.0	0.074	1		09/29/10 03:40	107-06-2	
1,2-Dichloroethene (Total)	**<0.50**	ug/L	2.0	0.50	1		09/29/10 03:40	540-59-0	
1,2-Dichloropropane	**<0.16**	ug/L	1.0	0.16	1		09/29/10 03:40	78-87-5	
1,3,5-Trimethylbenzene	**<0.16**	ug/L	1.0	0.16	1		09/29/10 03:40	108-67-8	

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ANALYTICAL RESULTS

Project: Sep GWM (922) 212302370
Pace Project No.: 255046

Sample: U-20 **Lab ID: 255046005** Collected: 09/21/10 09:30 Received: 09/22/10 08:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
1,3-Dichlorobenzene	**<0.16**	ug/L	1.0	0.16	1		09/29/10 03:40	541-73-1	
1,3-Dichloropropane	**<0.22**	ug/L	1.0	0.22	1		09/29/10 03:40	142-28-9	
1,4-Dichlorobenzene	**<0.20**	ug/L	1.0	0.20	1		09/29/10 03:40	106-46-7	
2,2-Dichloropropane	**<0.27**	ug/L	1.0	0.27	1		09/29/10 03:40	594-20-7	
2-Butanone (MEK)	**<1.6**	ug/L	5.0	1.6	1		09/29/10 03:40	78-93-3	
2-Chlorotoluene	**<0.098**	ug/L	1.0	0.098	1		09/29/10 03:40	95-49-8	
2-Hexanone	**<0.57**	ug/L	5.0	0.57	1		09/29/10 03:40	591-78-6	
4-Chlorotoluene	**<0.13**	ug/L	1.0	0.13	1		09/29/10 03:40	106-43-4	
4-Methyl-2-pentanone (MIBK)	**<0.32**	ug/L	5.0	0.32	1		09/29/10 03:40	108-10-1	
Acetone	**<0.75**	ug/L	5.0	0.75	1		09/29/10 03:40	67-64-1	
Benzene	**<0.12**	ug/L	1.0	0.12	1		09/29/10 03:40	71-43-2	
Bromobenzene	**<0.16**	ug/L	1.0	0.16	1		09/29/10 03:40	108-86-1	
Bromochloromethane	**<0.34**	ug/L	1.0	0.34	1		09/29/10 03:40	74-97-5	
Bromodichloromethane	**<0.11**	ug/L	1.0	0.11	1		09/29/10 03:40	75-27-4	
Bromoform	**<0.23**	ug/L	1.0	0.23	1		09/29/10 03:40	75-25-2	
Bromomethane	**<0.072**	ug/L	1.0	0.072	1		09/29/10 03:40	74-83-9	
Carbon disulfide	**<0.16**	ug/L	1.0	0.16	1		09/29/10 03:40	75-15-0	
Carbon tetrachloride	**<0.25**	ug/L	1.0	0.25	1		09/29/10 03:40	56-23-5	
Chlorobenzene	**<0.12**	ug/L	1.0	0.12	1		09/29/10 03:40	108-90-7	
Chloroethane	**<0.27**	ug/L	1.0	0.27	1		09/29/10 03:40	75-00-3	
Chloroform	**<0.15**	ug/L	1.0	0.15	1		09/29/10 03:40	67-66-3	
Chloromethane	**<0.20**	ug/L	1.0	0.20	1		09/29/10 03:40	74-87-3	
Dibromochloromethane	**<0.12**	ug/L	1.0	0.12	1		09/29/10 03:40	124-48-1	
Dibromomethane	**<0.18**	ug/L	1.0	0.18	1		09/29/10 03:40	74-95-3	
Dichlorodifluoromethane	**<0.19**	ug/L	1.0	0.19	1		09/29/10 03:40	75-71-8	
Ethylbenzene	**<0.20**	ug/L	1.0	0.20	1		09/29/10 03:40	100-41-4	
Hexachloro-1,3-butadiene	**<0.27**	ug/L	1.0	0.27	1		09/29/10 03:40	87-68-3	
Isopropylbenzene (Cumene)	**9.8**	ug/L	1.0	0.11	1		09/29/10 03:40	98-82-8	
Methyl-tert-butyl ether	**12.9**	ug/L	1.0	0.16	1		09/29/10 03:40	1634-04-4	
Methylene chloride	**<0.26**	ug/L	4.0	0.26	1		09/29/10 03:40	75-09-2	
Naphthalene	**1.7**	ug/L	1.0	0.10	1		09/29/10 03:40	91-20-3	
Styrene	**<0.074**	ug/L	1.0	0.074	1		09/29/10 03:40	100-42-5	
Tetrachloroethene	**<0.10**	ug/L	1.0	0.10	1		09/29/10 03:40	127-18-4	
Toluene	**<0.21**	ug/L	1.0	0.21	1		09/29/10 03:40	108-88-3	
Trichloroethene	**<0.060**	ug/L	1.0	0.060	1		09/29/10 03:40	79-01-6	
Trichlorofluoromethane	**<0.24**	ug/L	1.0	0.24	1		09/29/10 03:40	75-69-4	
Vinyl chloride	**<0.050**	ug/L	1.0	0.050	1		09/29/10 03:40	75-01-4	
Xylene (Total)	**<0.42**	ug/L	3.0	0.42	1		09/29/10 03:40	1330-20-7	
cis-1,2-Dichloroethene	**<0.32**	ug/L	1.0	0.32	1		09/29/10 03:40	156-59-2	
cis-1,3-Dichloropropene	**<0.086**	ug/L	1.0	0.086	1		09/29/10 03:40	10061-01-5	
m&p-Xylene	**<0.27**	ug/L	2.0	0.27	1		09/29/10 03:40	179601-23-1	
n-Butylbenzene	**1.6**	ug/L	1.0	0.10	1		09/29/10 03:40	104-51-8	
n-Propylbenzene	**5.6**	ug/L	1.0	0.16	1		09/29/10 03:40	103-65-1	
o-Xylene	**<0.15**	ug/L	1.0	0.15	1		09/29/10 03:40	95-47-6	
p-Isopropyltoluene	**<0.074**	ug/L	1.0	0.074	1		09/29/10 03:40	99-87-6	
sec-Butylbenzene	**5.2**	ug/L	1.0	0.10	1		09/29/10 03:40	135-98-8	

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ANALYTICAL RESULTS

Project: Sep GWM (922) 212302370
Pace Project No.: 255046

Sample: U-20 **Lab ID: 255046005** Collected: 09/21/10 09:30 Received: 09/22/10 08:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
tert-Butylbenzene	**2.4**	ug/L	1.0	0.11	1		09/29/10 03:40	98-06-6	
trans-1,2-Dichloroethene	**<0.22**	ug/L	1.0	0.22	1		09/29/10 03:40	156-60-5	
trans-1,3-Dichloropropene	**<0.16**	ug/L	1.0	0.16	1		09/29/10 03:40	10061-02-6	
4-Bromofluorobenzene (S)	102	%	80-120		1		09/29/10 03:40	460-00-4	
Dibromofluoromethane (S)	98	%	80-122		1		09/29/10 03:40	1868-53-7	
1,2-Dichloroethane-d4 (S)	95	%	80-124		1		09/29/10 03:40	17060-07-0	
Toluene-d8 (S)	99	%	80-123		1		09/29/10 03:40	2037-26-5	
2540D Total Suspended Solids	Analytical Method: SM 2540D								
Total Suspended Solids	**72000**	ug/L	4000	4000	1		09/27/10 16:30		
Total Organic Carbon	Analytical Method: EPA 9060								
Mean Total Organic Carbon	**10.9**	mg/L	1.0	0.080	1		09/28/10 19:00	7440-44-0	

Sample: U-14 **Lab ID: 255046006** Collected: 09/21/10 10:30 Received: 09/22/10 08:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB	Analytical Method: EPA 8082								
PCB-1016 (Aroclor 1016)	**<0.032**	ug/L	0.10	0.032	1	09/27/10 14:28	10/01/10 20:42	12674-11-2	
PCB-1221 (Aroclor 1221)	**<0.045**	ug/L	0.10	0.045	1	09/27/10 14:28	10/01/10 20:42	11104-28-2	
PCB-1232 (Aroclor 1232)	**<0.038**	ug/L	0.10	0.038	1	09/27/10 14:28	10/01/10 20:42	11141-16-5	
PCB-1242 (Aroclor 1242)	**<0.012**	ug/L	0.10	0.012	1	09/27/10 14:28	10/01/10 20:42	53469-21-9	
PCB-1248 (Aroclor 1248)	**<0.038**	ug/L	0.10	0.038	1	09/27/10 14:28	10/01/10 20:42	12672-29-6	
PCB-1254 (Aroclor 1254)	**<0.024**	ug/L	0.10	0.024	1	09/27/10 14:28	10/01/10 20:42	11097-69-1	
PCB-1260 (Aroclor 1260)	**<0.030**	ug/L	0.10	0.030	1	09/27/10 14:28	10/01/10 20:42	11096-82-5	
PCB-1262 (Aroclor 1262)	**<0.015**	ug/L	0.10	0.015	1	09/27/10 14:28	10/01/10 20:42	37324-23-5	
PCB-1268 (Aroclor 1268)	**<0.041**	ug/L	0.10	0.041	1	09/27/10 14:28	10/01/10 20:42	11100-14-4	
Tetrachloro-m-xylene (S)	67	%	30-145		1	09/27/10 14:28	10/01/10 20:42	877-09-8	
Decachlorobiphenyl (S)	75	%	30-150		1	09/27/10 14:28	10/01/10 20:42	2051-24-3	
NWTPH-Dx GCS SG	Analytical Method: NWTPH-Dx Preparation Method: EPA 3510								
Diesel Range SG	**<35.2**	ug/L	76.2	35.2	1	09/30/10 13:50	10/02/10 08:02		
Motor Oil Range SG	**<58.1**	ug/L	381	58.1	1	09/30/10 13:50	10/02/10 08:02	64742-65-0	
n-Octacosane (S) SG	119	%	50-150		1	09/30/10 13:50	10/02/10 08:02	630-02-4	
o-Terphenyl (S) SG	95	%	50-150		1	09/30/10 13:50	10/02/10 08:02	84-15-1	
NWTPH-Gx GCV	Analytical Method: NWTPH-Gx								
Gasoline Range Organics	**14.6J**	ug/L	50.0	13.4	1		09/29/10 21:54		
a,a,a-Trifluorotoluene (S)	97	%	50-150		1		09/29/10 21:54	98-08-8	
4-Bromofluorobenzene (S)	91	%	50-150		1		09/29/10 21:54	460-00-4	

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, Inc.
940 South Harney
Seattle, WA 98108
(206)767-5060

ANALYTICAL RESULTS

Project: Sep GWM (922) 212302370
Pace Project No.: 255046

Sample: U-14 **Lab ID: 255046006** Collected: 09/21/10 10:30 Received: 09/22/10 08:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020								
Arsenic	**0.14J**	ug/L	0.50	0.062	1	10/04/10 13:37	10/05/10 16:50	7440-38-2	
Barium	**17.2**	ug/L	0.30	0.043	1	10/04/10 13:37	10/05/10 16:50	7440-39-3	B
Cadmium	**<0.020**	ug/L	0.080	0.020	1	10/04/10 13:37	10/05/10 16:50	7440-43-9	
Chromium	**0.46J**	ug/L	0.50	0.24	1	10/04/10 13:37	10/05/10 16:50	7440-47-3	
Copper	**0.52**	ug/L	0.50	0.20	1	10/04/10 13:37	10/05/10 16:50	7440-50-8	
Lead	**0.12**	ug/L	0.10	0.020	1	10/04/10 13:37	10/05/10 16:50	7439-92-1	
Manganese	**24.4**	ug/L	0.50	0.050	1	10/04/10 13:37	10/05/10 16:50	7439-96-5	B
Selenium	**<0.10**	ug/L	0.50	0.10	1	10/04/10 13:37	10/05/10 16:50	7782-49-2	
Silver	**0.19J**	ug/L	0.50	0.071	1	10/04/10 13:37	10/05/10 16:50	7440-22-4	B
Zinc	**4.5J**	ug/L	5.0	1.3	1	10/04/10 13:37	10/05/10 16:50	7440-66-6	B
6020 MET ICPMS, Dissolved	Analytical Method: EPA 6020								
Arsenic, Dissolved	**0.26J**	ug/L	0.50	0.062	1	10/01/10 17:51	10/05/10 04:28	7440-38-2	
Barium, Dissolved	**16.3**	ug/L	0.30	0.043	1	10/01/10 17:51	10/05/10 04:28	7440-39-3	B
Cadmium, Dissolved	**0.040J**	ug/L	0.080	0.020	1	10/01/10 17:51	10/05/10 04:28	7440-43-9	
Chromium, Dissolved	**0.44J**	ug/L	0.50	0.24	1	10/01/10 17:51	10/05/10 04:28	7440-47-3	
Copper, Dissolved	**0.46J**	ug/L	0.50	0.20	1	10/01/10 17:51	10/05/10 04:28	7440-50-8	
Lead, Dissolved	**0.099J**	ug/L	0.10	0.020	1	10/01/10 17:51	10/05/10 04:28	7439-92-1	
Manganese, Dissolved	**18.1**	ug/L	0.50	0.050	1	10/01/10 17:51	10/05/10 04:28	7439-96-5	B
Selenium, Dissolved	**0.14J**	ug/L	0.50	0.10	1	10/01/10 17:51	10/05/10 04:28	7782-49-2	
Silver, Dissolved	**<0.071**	ug/L	0.50	0.071	1	10/01/10 17:51	10/05/10 04:28	7440-22-4	
Zinc, Dissolved	**5.1**	ug/L	5.0	1.3	1	10/01/10 17:51	10/05/10 04:28	7440-66-6	B
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470								
Mercury	**<0.011**	ug/L	0.20	0.011	1	10/01/10 11:05	10/01/10 15:35	7439-97-6	
7470 Mercury, Dissolved	Analytical Method: EPA 7470 Preparation Method: EPA 7470								
Mercury, Dissolved	**<0.072**	ug/L	0.20	0.072	1	10/01/10 11:05	10/01/10 16:36	7439-97-6	
8270 MSSV Low Level PAH SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
1-Methylnaphthalene	**<0.0060**	ug/L	0.014	0.0060	1	09/27/10 08:45	10/04/10 18:54	90-12-0	
2-Methylnaphthalene	**0.032**	ug/L	0.014	0.012	1	09/27/10 08:45	10/04/10 18:54	91-57-6	
Acenaphthene	**<0.00067**	ug/L	0.014	0.00067	1	09/27/10 08:45	10/04/10 18:54	83-32-9	
Acenaphthylene	**<0.00068**	ug/L	0.014	0.00068	1	09/27/10 08:45	10/04/10 18:54	208-96-8	
Anthracene	**<0.0012**	ug/L	0.014	0.0012	1	09/27/10 08:45	10/04/10 18:54	120-12-7	
Benzo(a)anthracene	**<0.0017**	ug/L	0.014	0.0017	1	09/27/10 08:45	10/04/10 18:54	56-55-3	
Benzo(a)pyrene	**<0.00067**	ug/L	0.014	0.00067	1	09/27/10 08:45	10/04/10 18:54	50-32-8	
Benzo(b)fluoranthene	**<0.0019**	ug/L	0.014	0.0019	1	09/27/10 08:45	10/04/10 18:54	205-99-2	
Benzo(g,h,i)perylene	**<0.0016**	ug/L	0.014	0.0016	1	09/27/10 08:45	10/04/10 18:54	191-24-2	
Benzo(k)fluoranthene	**<0.00067**	ug/L	0.014	0.00067	1	09/27/10 08:45	10/04/10 18:54	207-08-9	
Chrysene	**<0.0017**	ug/L	0.014	0.0017	1	09/27/10 08:45	10/04/10 18:54	218-01-9	
Dibenz(a,h)anthracene	**<0.0017**	ug/L	0.014	0.0017	1	09/27/10 08:45	10/04/10 18:54	53-70-3	
Fluoranthene	**0.0045J**	ug/L	0.014	0.0018	1	09/27/10 08:45	10/04/10 18:54	206-44-0	
Fluorene	**0.0045J**	ug/L	0.014	0.0036	1	09/27/10 08:45	10/04/10 18:54	86-73-7	
Indeno(1,2,3-cd)pyrene	**<0.0014**	ug/L	0.014	0.0014	1	09/27/10 08:45	10/04/10 18:54	193-39-5	

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ANALYTICAL RESULTS

Project: Sep GWM (922) 212302370
Pace Project No.: 255046

Sample: U-14 **Lab ID: 255046006** Collected: 09/21/10 10:30 Received: 09/22/10 08:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Low Level PAH SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
Naphthalene	**0.011J**	ug/L	0.014	0.0014	1	09/27/10 08:45	10/04/10 18:54	91-20-3	
Phenanthrene	**0.012J**	ug/L	0.014	0.0036	1	09/27/10 08:45	10/04/10 18:54	85-01-8	
Pyrene	**0.0022J**	ug/L	0.014	0.0019	1	09/27/10 08:45	10/04/10 18:54	129-00-0	
2-Fluorobiphenyl (S)	62	%	40-106		1	09/27/10 08:45	10/04/10 18:54	321-60-8	
Terphenyl-d14 (S)	81	%	55-146		1	09/27/10 08:45	10/04/10 18:54	1718-51-0	
8260 MSV	Analytical Method: EPA 5030B/8260								
1,1,1,2-Tetrachloroethane	**<0.15**	ug/L	1.0	0.15	1		09/29/10 04:00	630-20-6	
1,1,1-Trichloroethane	**<0.20**	ug/L	1.0	0.20	1		09/29/10 04:00	71-55-6	
1,1,2,2-Tetrachloroethane	**<0.22**	ug/L	1.0	0.22	1		09/29/10 04:00	79-34-5	
1,1,2-Trichloroethane	**<0.19**	ug/L	1.0	0.19	1		09/29/10 04:00	79-00-5	
1,1-Dichloroethane	**<0.23**	ug/L	1.0	0.23	1		09/29/10 04:00	75-34-3	
1,1-Dichloroethene	**<0.12**	ug/L	1.0	0.12	1		09/29/10 04:00	75-35-4	
1,1-Dichloropropene	**<0.094**	ug/L	1.0	0.094	1		09/29/10 04:00	563-58-6	
1,2,3-Trichlorobenzene	**<0.11**	ug/L	1.0	0.11	1		09/29/10 04:00	87-61-6	
1,2,3-Trichloropropane	**<0.37**	ug/L	1.0	0.37	1		09/29/10 04:00	96-18-4	
1,2,4-Trichlorobenzene	**<0.15**	ug/L	1.0	0.15	1		09/29/10 04:00	120-82-1	
1,2,4-Trimethylbenzene	**<0.086**	ug/L	1.0	0.086	1		09/29/10 04:00	95-63-6	
1,2-Dibromo-3-chloropropane	**<0.79**	ug/L	1.0	0.79	1		09/29/10 04:00	96-12-8	
1,2-Dibromoethane (EDB)	**<0.20**	ug/L	1.0	0.20	1		09/29/10 04:00	106-93-4	
1,2-Dichlorobenzene	**<0.25**	ug/L	1.0	0.25	1		09/29/10 04:00	95-50-1	
1,2-Dichloroethane	**<0.074**	ug/L	1.0	0.074	1		09/29/10 04:00	107-06-2	
1,2-Dichloroethene (Total)	**<0.50**	ug/L	2.0	0.50	1		09/29/10 04:00	540-59-0	
1,2-Dichloropropane	**<0.16**	ug/L	1.0	0.16	1		09/29/10 04:00	78-87-5	
1,3,5-Trimethylbenzene	**<0.16**	ug/L	1.0	0.16	1		09/29/10 04:00	108-67-8	
1,3-Dichlorobenzene	**<0.16**	ug/L	1.0	0.16	1		09/29/10 04:00	541-73-1	
1,3-Dichloropropane	**<0.22**	ug/L	1.0	0.22	1		09/29/10 04:00	142-28-9	
1,4-Dichlorobenzene	**<0.20**	ug/L	1.0	0.20	1		09/29/10 04:00	106-46-7	
2,2-Dichloropropane	**<0.27**	ug/L	1.0	0.27	1		09/29/10 04:00	594-20-7	
2-Butanone (MEK)	**<1.6**	ug/L	5.0	1.6	1		09/29/10 04:00	78-93-3	
2-Chlorotoluene	**<0.098**	ug/L	1.0	0.098	1		09/29/10 04:00	95-49-8	
2-Hexanone	**<0.57**	ug/L	5.0	0.57	1		09/29/10 04:00	591-78-6	
4-Chlorotoluene	**<0.13**	ug/L	1.0	0.13	1		09/29/10 04:00	106-43-4	
4-Methyl-2-pentanone (MIBK)	**<0.32**	ug/L	5.0	0.32	1		09/29/10 04:00	108-10-1	
Acetone	**<0.75**	ug/L	5.0	0.75	1		09/29/10 04:00	67-64-1	
Benzene	**<0.12**	ug/L	1.0	0.12	1		09/29/10 04:00	71-43-2	
Bromobenzene	**<0.16**	ug/L	1.0	0.16	1		09/29/10 04:00	108-86-1	
Bromochloromethane	**<0.34**	ug/L	1.0	0.34	1		09/29/10 04:00	74-97-5	
Bromodichloromethane	**<0.11**	ug/L	1.0	0.11	1		09/29/10 04:00	75-27-4	
Bromoform	**<0.23**	ug/L	1.0	0.23	1		09/29/10 04:00	75-25-2	
Bromomethane	**<0.072**	ug/L	1.0	0.072	1		09/29/10 04:00	74-83-9	
Carbon disulfide	**<0.16**	ug/L	1.0	0.16	1		09/29/10 04:00	75-15-0	
Carbon tetrachloride	**<0.25**	ug/L	1.0	0.25	1		09/29/10 04:00	56-23-5	
Chlorobenzene	**<0.12**	ug/L	1.0	0.12	1		09/29/10 04:00	108-90-7	
Chloroethane	**<0.27**	ug/L	1.0	0.27	1		09/29/10 04:00	75-00-3	
Chloroform	**<0.15**	ug/L	1.0	0.15	1		09/29/10 04:00	67-66-3	

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ANALYTICAL RESULTS

Project: Sep GWM (922) 212302370
Pace Project No.: 255046

Sample: U-14 **Lab ID: 255046006** Collected: 09/21/10 10:30 Received: 09/22/10 08:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Chloromethane	**<0.20**	ug/L	1.0	0.20	1		09/29/10 04:00	74-87-3	
Dibromochloromethane	**<0.12**	ug/L	1.0	0.12	1		09/29/10 04:00	124-48-1	
Dibromomethane	**<0.18**	ug/L	1.0	0.18	1		09/29/10 04:00	74-95-3	
Dichlorodifluoromethane	**<0.19**	ug/L	1.0	0.19	1		09/29/10 04:00	75-71-8	
Ethylbenzene	**<0.20**	ug/L	1.0	0.20	1		09/29/10 04:00	100-41-4	
Hexachloro-1,3-butadiene	**<0.27**	ug/L	1.0	0.27	1		09/29/10 04:00	87-68-3	
Isopropylbenzene (Cumene)	**<0.11**	ug/L	1.0	0.11	1		09/29/10 04:00	98-82-8	
Methyl-tert-butyl ether	**<0.16**	ug/L	1.0	0.16	1		09/29/10 04:00	1634-04-4	
Methylene chloride	**<0.26**	ug/L	4.0	0.26	1		09/29/10 04:00	75-09-2	
Naphthalene	**<0.10**	ug/L	1.0	0.10	1		09/29/10 04:00	91-20-3	
Styrene	**<0.074**	ug/L	1.0	0.074	1		09/29/10 04:00	100-42-5	
Tetrachloroethene	**<0.10**	ug/L	1.0	0.10	1		09/29/10 04:00	127-18-4	
Toluene	**<0.21**	ug/L	1.0	0.21	1		09/29/10 04:00	108-88-3	
Trichloroethene	**<0.060**	ug/L	1.0	0.060	1		09/29/10 04:00	79-01-6	
Trichlorofluoromethane	**<0.24**	ug/L	1.0	0.24	1		09/29/10 04:00	75-69-4	
Vinyl chloride	**<0.050**	ug/L	1.0	0.050	1		09/29/10 04:00	75-01-4	
Xylene (Total)	**<0.42**	ug/L	3.0	0.42	1		09/29/10 04:00	1330-20-7	
cis-1,2-Dichloroethene	**<0.32**	ug/L	1.0	0.32	1		09/29/10 04:00	156-59-2	
cis-1,3-Dichloropropene	**<0.086**	ug/L	1.0	0.086	1		09/29/10 04:00	10061-01-5	
m&p-Xylene	**<0.27**	ug/L	2.0	0.27	1		09/29/10 04:00	179601-23-1	
n-Butylbenzene	**<0.10**	ug/L	1.0	0.10	1		09/29/10 04:00	104-51-8	
n-Propylbenzene	**<0.16**	ug/L	1.0	0.16	1		09/29/10 04:00	103-65-1	
o-Xylene	**<0.15**	ug/L	1.0	0.15	1		09/29/10 04:00	95-47-6	
p-Isopropyltoluene	**<0.074**	ug/L	1.0	0.074	1		09/29/10 04:00	99-87-6	
sec-Butylbenzene	**<0.10**	ug/L	1.0	0.10	1		09/29/10 04:00	135-98-8	
tert-Butylbenzene	**<0.11**	ug/L	1.0	0.11	1		09/29/10 04:00	98-06-6	
trans-1,2-Dichloroethene	**<0.22**	ug/L	1.0	0.22	1		09/29/10 04:00	156-60-5	
trans-1,3-Dichloropropene	**<0.16**	ug/L	1.0	0.16	1		09/29/10 04:00	10061-02-6	
4-Bromofluorobenzene (S)	102	%	80-120		1		09/29/10 04:00	460-00-4	
Dibromofluoromethane (S)	98	%	80-122		1		09/29/10 04:00	1868-53-7	
1,2-Dichloroethane-d4 (S)	91	%	80-124		1		09/29/10 04:00	17060-07-0	
Toluene-d8 (S)	101	%	80-123		1		09/29/10 04:00	2037-26-5	
2540D Total Suspended Solids	Analytical Method: SM 2540D								
Total Suspended Solids	**<2000**	ug/L	2000	2000	1		09/27/10 16:30		
Total Organic Carbon	Analytical Method: EPA 9060								
Mean Total Organic Carbon	**1.4**	mg/L	1.0	0.080	1		09/28/10 19:00	7440-44-0	

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ANALYTICAL RESULTS

Project: Sep GWM (922) 212302370
Pace Project No.: 255046

Sample: U-21 **Lab ID: 255046007** Collected: 09/21/10 11:30 Received: 09/22/10 08:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB	Analytical Method: EPA 8082								
PCB-1016 (Aroclor 1016)	**<0.32**	ug/L	1.0	0.32	10	09/24/10 11:20	10/04/10 13:49	12674-11-2	
PCB-1221 (Aroclor 1221)	**<0.45**	ug/L	1.0	0.45	10	09/24/10 11:20	10/04/10 13:49	11104-28-2	
PCB-1232 (Aroclor 1232)	**<0.38**	ug/L	1.0	0.38	10	09/24/10 11:20	10/04/10 13:49	11141-16-5	
PCB-1242 (Aroclor 1242)	**<0.12**	ug/L	1.0	0.12	10	09/24/10 11:20	10/04/10 13:49	53469-21-9	
PCB-1248 (Aroclor 1248)	**<0.38**	ug/L	1.0	0.38	10	09/24/10 11:20	10/04/10 13:49	12672-29-6	
PCB-1254 (Aroclor 1254)	**<0.24**	ug/L	1.0	0.24	10	09/24/10 11:20	10/04/10 13:49	11097-69-1	
PCB-1260 (Aroclor 1260)	**<0.30**	ug/L	1.0	0.30	10	09/24/10 11:20	10/04/10 13:49	11096-82-5	
PCB-1262 (Aroclor 1262)	**<0.15**	ug/L	1.0	0.15	10	09/24/10 11:20	10/04/10 13:49	37324-23-5	
PCB-1268 (Aroclor 1268)	**<0.41**	ug/L	1.0	0.41	10	09/24/10 11:20	10/04/10 13:49	11100-14-4	
Tetrachloro-m-xylene (S)	95	%	30-145		10	09/24/10 11:20	10/04/10 13:49	877-09-8	D3
Decachlorobiphenyl (S)	88	%	30-150		10	09/24/10 11:20	10/04/10 13:49	2051-24-3	
NWTPH-Dx GCS SG	Analytical Method: NWTPH-Dx Preparation Method: EPA 3510								
Diesel Range SG	**273**	ug/L	77.7	35.9	1	09/30/10 13:50	10/02/10 08:23		
Motor Oil Range SG	**<59.2**	ug/L	388	59.2	1	09/30/10 13:50	10/02/10 08:23	64742-65-0	
n-Octacosane (S) SG	125	%	50-150		1	09/30/10 13:50	10/02/10 08:23	630-02-4	
o-Terphenyl (S) SG	96	%	50-150		1	09/30/10 13:50	10/02/10 08:23	84-15-1	
NWTPH-Gx GCV	Analytical Method: NWTPH-Gx								
Gasoline Range Organics	**279**	ug/L	50.0	13.4	1		09/29/10 22:42		
a,a,a-Trifluorotoluene (S)	98	%	50-150		1		09/29/10 22:42	98-08-8	
4-Bromofluorobenzene (S)	95	%	50-150		1		09/29/10 22:42	460-00-4	
6020 MET ICPMS	Analytical Method: EPA 6020								
Arsenic	**71.4**	ug/L	0.50	0.062	1	10/01/10 17:44	10/03/10 12:08	7440-38-2	
Barium	**65.3**	ug/L	0.30	0.043	1	10/01/10 17:44	10/03/10 12:08	7440-39-3	B
Cadmium	**<0.020**	ug/L	0.080	0.020	1	10/01/10 17:44	10/03/10 12:08	7440-43-9	
Chromium	**<0.24**	ug/L	0.50	0.24	1	10/01/10 17:44	10/03/10 12:08	7440-47-3	
Copper	**<0.20**	ug/L	0.50	0.20	1	10/01/10 17:44	10/03/10 12:08	7440-50-8	
Lead	**0.28**	ug/L	0.10	0.020	1	10/01/10 17:44	10/03/10 12:08	7439-92-1	B
Manganese	**8400**	ug/L	0.50	0.050	1	10/01/10 17:44	10/03/10 12:08	7439-96-5	B
Selenium	**<0.10**	ug/L	0.50	0.10	1	10/01/10 17:44	10/03/10 12:08	7782-49-2	
Silver	**<0.071**	ug/L	0.50	0.071	1	10/01/10 17:44	10/03/10 12:08	7440-22-4	
Zinc	**2.0J**	ug/L	5.0	1.3	1	10/01/10 17:44	10/03/10 12:08	7440-66-6	B
6020 MET ICPMS, Dissolved	Analytical Method: EPA 6020								
Arsenic, Dissolved	**8.3**	ug/L	0.50	0.062	1	10/01/10 17:51	10/05/10 04:32	7440-38-2	
Barium, Dissolved	**26.9**	ug/L	0.30	0.043	1	10/01/10 17:51	10/05/10 04:32	7440-39-3	B
Cadmium, Dissolved	**<0.020**	ug/L	0.080	0.020	1	10/01/10 17:51	10/05/10 04:32	7440-43-9	
Chromium, Dissolved	**<0.24**	ug/L	0.50	0.24	1	10/01/10 17:51	10/05/10 04:32	7440-47-3	
Copper, Dissolved	**<0.20**	ug/L	0.50	0.20	1	10/01/10 17:51	10/05/10 04:32	7440-50-8	
Lead, Dissolved	**0.082J**	ug/L	0.10	0.020	1	10/01/10 17:51	10/05/10 04:32	7439-92-1	
Manganese, Dissolved	**8180**	ug/L	25.0	2.5	50	10/01/10 17:51	10/05/10 14:53	7439-96-5	B
Selenium, Dissolved	**<0.10**	ug/L	0.50	0.10	1	10/01/10 17:51	10/05/10 04:32	7782-49-2	
Silver, Dissolved	**<0.071**	ug/L	0.50	0.071	1	10/01/10 17:51	10/05/10 04:32	7440-22-4	

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940 South Harney
Seattle, WA 98108
(206)767-5060

ANALYTICAL RESULTS

Project: Sep GWM (922) 212302370
Pace Project No.: 255046

Sample: U-21 **Lab ID: 255046007** Collected: 09/21/10 11:30 Received: 09/22/10 08:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS, Dissolved	Analytical Method: EPA 6020								
Zinc, Dissolved	**3.1J**	ug/L	5.0	1.3	1	10/01/10 17:51	10/05/10 04:32	7440-66-6	B
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470								
Mercury	**<0.011**	ug/L	0.20	0.011	1	10/01/10 11:05	10/01/10 15:37	7439-97-6	
7470 Mercury, Dissolved	Analytical Method: EPA 7470 Preparation Method: EPA 7470								
Mercury, Dissolved	**<0.072**	ug/L	0.20	0.072	1	10/01/10 11:05	10/01/10 16:38	7439-97-6	
8270 MSSV Low Level PAH SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
1-Methylnaphthalene	**<0.0062**	ug/L	0.015	0.0062	1	09/27/10 08:45	10/04/10 19:10	90-12-0	
2-Methylnaphthalene	**<0.012**	ug/L	0.015	0.012	1	09/27/10 08:45	10/04/10 19:10	91-57-6	
Acenaphthene	**1.1**	ug/L	0.015	0.00069	1	09/27/10 08:45	10/04/10 19:10	83-32-9	
Acenaphthylene	**0.30**	ug/L	0.015	0.00070	1	09/27/10 08:45	10/04/10 19:10	208-96-8	
Anthracene	**0.12**	ug/L	0.015	0.0013	1	09/27/10 08:45	10/04/10 19:10	120-12-7	
Benzo(a)anthracene	**<0.0018**	ug/L	0.015	0.0018	1	09/27/10 08:45	10/04/10 19:10	56-55-3	
Benzo(a)pyrene	**<0.00069**	ug/L	0.015	0.00069	1	09/27/10 08:45	10/04/10 19:10	50-32-8	
Benzo(b)fluoranthene	**<0.0020**	ug/L	0.015	0.0020	1	09/27/10 08:45	10/04/10 19:10	205-99-2	
Benzo(g,h,i)perylene	**<0.0017**	ug/L	0.015	0.0017	1	09/27/10 08:45	10/04/10 19:10	191-24-2	
Benzo(k)fluoranthene	**<0.00069**	ug/L	0.015	0.00069	1	09/27/10 08:45	10/04/10 19:10	207-08-9	
Chrysene	**<0.0018**	ug/L	0.015	0.0018	1	09/27/10 08:45	10/04/10 19:10	218-01-9	
Dibenz(a,h)anthracene	**<0.0018**	ug/L	0.015	0.0018	1	09/27/10 08:45	10/04/10 19:10	53-70-3	
Fluoranthene	**0.0098J**	ug/L	0.015	0.0019	1	09/27/10 08:45	10/04/10 19:10	206-44-0	
Fluorene	**2.5**	ug/L	0.015	0.0037	1	09/27/10 08:45	10/04/10 19:10	86-73-7	
Indeno(1,2,3-cd)pyrene	**<0.0015**	ug/L	0.015	0.0015	1	09/27/10 08:45	10/04/10 19:10	193-39-5	
Naphthalene	**0.50**	ug/L	0.015	0.0014	1	09/27/10 08:45	10/04/10 19:10	91-20-3	
Phenanthrene	**2.2**	ug/L	0.015	0.0037	1	09/27/10 08:45	10/04/10 19:10	85-01-8	
Pyrene	**0.032**	ug/L	0.015	0.0020	1	09/27/10 08:45	10/04/10 19:10	129-00-0	
2-Fluorobiphenyl (S)	74	%	40-106		1	09/27/10 08:45	10/04/10 19:10	321-60-8	
Terphenyl-d14 (S)	81	%	55-146		1	09/27/10 08:45	10/04/10 19:10	1718-51-0	
8260 MSV	Analytical Method: EPA 5030B/8260								
1,1,1,2-Tetrachloroethane	**<0.15**	ug/L	1.0	0.15	1		09/29/10 04:41	630-20-6	
1,1,1-Trichloroethane	**<0.20**	ug/L	1.0	0.20	1		09/29/10 04:41	71-55-6	
1,1,2,2-Tetrachloroethane	**<0.22**	ug/L	1.0	0.22	1		09/29/10 04:41	79-34-5	
1,1,2-Trichloroethane	**<0.19**	ug/L	1.0	0.19	1		09/29/10 04:41	79-00-5	
1,1-Dichloroethane	**<0.23**	ug/L	1.0	0.23	1		09/29/10 04:41	75-34-3	
1,1-Dichloroethene	**<0.12**	ug/L	1.0	0.12	1		09/29/10 04:41	75-35-4	
1,1-Dichloropropene	**<0.094**	ug/L	1.0	0.094	1		09/29/10 04:41	563-58-6	
1,2,3-Trichlorobenzene	**<0.11**	ug/L	1.0	0.11	1		09/29/10 04:41	87-61-6	
1,2,3-Trichloropropane	**<0.37**	ug/L	1.0	0.37	1		09/29/10 04:41	96-18-4	
1,2,4-Trichlorobenzene	**<0.15**	ug/L	1.0	0.15	1		09/29/10 04:41	120-82-1	
1,2,4-Trimethylbenzene	**<0.086**	ug/L	1.0	0.086	1		09/29/10 04:41	95-63-6	
1,2-Dibromo-3-chloropropane	**<0.79**	ug/L	1.0	0.79	1		09/29/10 04:41	96-12-8	
1,2-Dibromoethane (EDB)	**<0.20**	ug/L	1.0	0.20	1		09/29/10 04:41	106-93-4	
1,2-Dichlorobenzene	**<0.25**	ug/L	1.0	0.25	1		09/29/10 04:41	95-50-1	

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940 South Harney
Seattle, WA 98108
(206)767-5060

ANALYTICAL RESULTS

Project: Sep GWM (922) 212302370
Pace Project No.: 255046

Sample: U-21 **Lab ID: 255046007** Collected: 09/21/10 11:30 Received: 09/22/10 08:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
1,2-Dichloroethane	**<0.074**	ug/L	1.0	0.074	1		09/29/10 04:41	107-06-2	
1,2-Dichloroethene (Total)	**<0.50**	ug/L	2.0	0.50	1		09/29/10 04:41	540-59-0	
1,2-Dichloropropane	**<0.16**	ug/L	1.0	0.16	1		09/29/10 04:41	78-87-5	
1,3,5-Trimethylbenzene	**<0.16**	ug/L	1.0	0.16	1		09/29/10 04:41	108-67-8	
1,3-Dichlorobenzene	**<0.16**	ug/L	1.0	0.16	1		09/29/10 04:41	541-73-1	
1,3-Dichloropropane	**<0.22**	ug/L	1.0	0.22	1		09/29/10 04:41	142-28-9	
1,4-Dichlorobenzene	**<0.20**	ug/L	1.0	0.20	1		09/29/10 04:41	106-46-7	
2,2-Dichloropropane	**<0.27**	ug/L	1.0	0.27	1		09/29/10 04:41	594-20-7	
2-Butanone (MEK)	**<1.6**	ug/L	5.0	1.6	1		09/29/10 04:41	78-93-3	
2-Chlorotoluene	**<0.098**	ug/L	1.0	0.098	1		09/29/10 04:41	95-49-8	
2-Hexanone	**<0.57**	ug/L	5.0	0.57	1		09/29/10 04:41	591-78-6	
4-Chlorotoluene	**<0.13**	ug/L	1.0	0.13	1		09/29/10 04:41	106-43-4	
4-Methyl-2-pentanone (MIBK)	**<0.32**	ug/L	5.0	0.32	1		09/29/10 04:41	108-10-1	
Acetone	**<0.75**	ug/L	5.0	0.75	1		09/29/10 04:41	67-64-1	
Benzene	**<0.12**	ug/L	1.0	0.12	1		09/29/10 04:41	71-43-2	
Bromobenzene	**<0.16**	ug/L	1.0	0.16	1		09/29/10 04:41	108-86-1	
Bromochloromethane	**<0.34**	ug/L	1.0	0.34	1		09/29/10 04:41	74-97-5	
Bromodichloromethane	**<0.11**	ug/L	1.0	0.11	1		09/29/10 04:41	75-27-4	
Bromoform	**<0.23**	ug/L	1.0	0.23	1		09/29/10 04:41	75-25-2	
Bromomethane	**<0.072**	ug/L	1.0	0.072	1		09/29/10 04:41	74-83-9	
Carbon disulfide	**<0.16**	ug/L	1.0	0.16	1		09/29/10 04:41	75-15-0	
Carbon tetrachloride	**<0.25**	ug/L	1.0	0.25	1		09/29/10 04:41	56-23-5	
Chlorobenzene	**<0.12**	ug/L	1.0	0.12	1		09/29/10 04:41	108-90-7	
Chloroethane	**<0.27**	ug/L	1.0	0.27	1		09/29/10 04:41	75-00-3	
Chloroform	**<0.15**	ug/L	1.0	0.15	1		09/29/10 04:41	67-66-3	
Chloromethane	**<0.20**	ug/L	1.0	0.20	1		09/29/10 04:41	74-87-3	
Dibromochloromethane	**<0.12**	ug/L	1.0	0.12	1		09/29/10 04:41	124-48-1	
Dibromomethane	**<0.18**	ug/L	1.0	0.18	1		09/29/10 04:41	74-95-3	
Dichlorodifluoromethane	**<0.19**	ug/L	1.0	0.19	1		09/29/10 04:41	75-71-8	
Ethylbenzene	**<0.20**	ug/L	1.0	0.20	1		09/29/10 04:41	100-41-4	
Hexachloro-1,3-butadiene	**<0.27**	ug/L	1.0	0.27	1		09/29/10 04:41	87-68-3	
Isopropylbenzene (Cumene)	**1.5**	ug/L	1.0	0.11	1		09/29/10 04:41	98-82-8	
Methyl-tert-butyl ether	**5.6**	ug/L	1.0	0.16	1		09/29/10 04:41	1634-04-4	
Methylene chloride	**<0.26**	ug/L	4.0	0.26	1		09/29/10 04:41	75-09-2	
Naphthalene	**<0.10**	ug/L	1.0	0.10	1		09/29/10 04:41	91-20-3	
Styrene	**<0.074**	ug/L	1.0	0.074	1		09/29/10 04:41	100-42-5	
Tetrachloroethene	**<0.10**	ug/L	1.0	0.10	1		09/29/10 04:41	127-18-4	
Toluene	**<0.21**	ug/L	1.0	0.21	1		09/29/10 04:41	108-88-3	
Trichloroethene	**<0.060**	ug/L	1.0	0.060	1		09/29/10 04:41	79-01-6	
Trichlorofluoromethane	**<0.24**	ug/L	1.0	0.24	1		09/29/10 04:41	75-69-4	
Vinyl chloride	**<0.050**	ug/L	1.0	0.050	1		09/29/10 04:41	75-01-4	
Xylene (Total)	**<0.42**	ug/L	3.0	0.42	1		09/29/10 04:41	1330-20-7	
cis-1,2-Dichloroethene	**<0.32**	ug/L	1.0	0.32	1		09/29/10 04:41	156-59-2	
cis-1,3-Dichloropropene	**<0.086**	ug/L	1.0	0.086	1		09/29/10 04:41	10061-01-5	
m&p-Xylene	**<0.27**	ug/L	2.0	0.27	1		09/29/10 04:41	179601-23-1	
n-Butylbenzene	**1.3**	ug/L	1.0	0.10	1		09/29/10 04:41	104-51-8	

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ANALYTICAL RESULTS

Project: Sep GWM (922) 212302370
Pace Project No.: 255046

Sample: U-21 **Lab ID: 255046007** Collected: 09/21/10 11:30 Received: 09/22/10 08:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
n-Propylbenzene	**<0.16**	ug/L	1.0	0.16	1		09/29/10 04:41	103-65-1	
o-Xylene	**<0.15**	ug/L	1.0	0.15	1		09/29/10 04:41	95-47-6	
p-Isopropyltoluene	**<0.074**	ug/L	1.0	0.074	1		09/29/10 04:41	99-87-6	
sec-Butylbenzene	**1.9**	ug/L	1.0	0.10	1		09/29/10 04:41	135-98-8	
tert-Butylbenzene	**<0.11**	ug/L	1.0	0.11	1		09/29/10 04:41	98-06-6	
trans-1,2-Dichloroethene	**<0.22**	ug/L	1.0	0.22	1		09/29/10 04:41	156-60-5	
trans-1,3-Dichloropropene	**<0.16**	ug/L	1.0	0.16	1		09/29/10 04:41	10061-02-6	
4-Bromofluorobenzene (S)	101	%	80-120		1		09/29/10 04:41	460-00-4	
Dibromofluoromethane (S)	97	%	80-122		1		09/29/10 04:41	1868-53-7	
1,2-Dichloroethane-d4 (S)	95	%	80-124		1		09/29/10 04:41	17060-07-0	
Toluene-d8 (S)	100	%	80-123		1		09/29/10 04:41	2037-26-5	
2540D Total Suspended Solids	Analytical Method: SM 2540D								
Total Suspended Solids	**58000**	ug/L	4000	4000	1		09/27/10 16:30		
Total Organic Carbon	Analytical Method: EPA 9060								
Mean Total Organic Carbon	**5.0**	mg/L	1.0	0.080	1		09/28/10 19:00	7440-44-0	

Sample: U-18 **Lab ID: 255046008** Collected: 09/21/10 08:30 Received: 09/22/10 08:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB	Analytical Method: EPA 8082								
PCB-1016 (Aroclor 1016)	**<0.032**	ug/L	0.10	0.032	1	09/27/10 14:28	10/01/10 20:58	12674-11-2	
PCB-1221 (Aroclor 1221)	**<0.045**	ug/L	0.10	0.045	1	09/27/10 14:28	10/01/10 20:58	11104-28-2	
PCB-1232 (Aroclor 1232)	**<0.038**	ug/L	0.10	0.038	1	09/27/10 14:28	10/01/10 20:58	11141-16-5	
PCB-1242 (Aroclor 1242)	**<0.012**	ug/L	0.10	0.012	1	09/27/10 14:28	10/01/10 20:58	53469-21-9	
PCB-1248 (Aroclor 1248)	**<0.038**	ug/L	0.10	0.038	1	09/27/10 14:28	10/01/10 20:58	12672-29-6	
PCB-1254 (Aroclor 1254)	**<0.024**	ug/L	0.10	0.024	1	09/27/10 14:28	10/01/10 20:58	11097-69-1	
PCB-1260 (Aroclor 1260)	**<0.030**	ug/L	0.10	0.030	1	09/27/10 14:28	10/01/10 20:58	11096-82-5	
PCB-1262 (Aroclor 1262)	**<0.015**	ug/L	0.10	0.015	1	09/27/10 14:28	10/01/10 20:58	37324-23-5	
PCB-1268 (Aroclor 1268)	**<0.041**	ug/L	0.10	0.041	1	09/27/10 14:28	10/01/10 20:58	11100-14-4	
Tetrachloro-m-xylene (S)	64	%	30-145		1	09/27/10 14:28	10/01/10 20:58	877-09-8	
Decachlorobiphenyl (S)	65	%	30-150		1	09/27/10 14:28	10/01/10 20:58	2051-24-3	
NWTPH-Dx GCS SG	Analytical Method: NWTPH-Dx Preparation Method: EPA 3510								
Diesel Range SG	**332**	ug/L	76.9	35.6	1	09/30/10 13:50	10/02/10 08:44		
Motor Oil Range SG	**<58.7**	ug/L	385	58.7	1	09/30/10 13:50	10/02/10 08:44	64742-65-0	
n-Octacosane (S) SG	128	%	50-150		1	09/30/10 13:50	10/02/10 08:44	630-02-4	
o-Terphenyl (S) SG	105	%	50-150		1	09/30/10 13:50	10/02/10 08:44	84-15-1	
NWTPH-Gx GCV	Analytical Method: NWTPH-Gx								
Gasoline Range Organics	**259**	ug/L	50.0	13.4	1		09/29/10 22:18		
a,a,a-Trifluorotoluene (S)	85	%	50-150		1		09/29/10 22:18	98-08-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Sep GWM (922) 212302370
Pace Project No.: 255046

Sample: U-18 **Lab ID: 255046008** Collected: 09/21/10 08:30 Received: 09/22/10 08:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Gx GCV	Analytical Method: NWTPH-Gx								
4-Bromofluorobenzene (S)	74	%	50-150		1		09/29/10 22:18	460-00-4	
6020 MET ICPMS	Analytical Method: EPA 6020								
Arsenic	**50.1**	ug/L	0.50	0.062	1	10/04/10 13:37	10/05/10 16:55	7440-38-2	
Barium	**40.5**	ug/L	0.30	0.043	1	10/04/10 13:37	10/05/10 16:55	7440-39-3	B
Cadmium	**<0.020**	ug/L	0.080	0.020	1	10/04/10 13:37	10/05/10 16:55	7440-43-9	
Chromium	**0.29J**	ug/L	0.50	0.24	1	10/04/10 13:37	10/05/10 16:55	7440-47-3	
Copper	**0.51**	ug/L	0.50	0.20	1	10/04/10 13:37	10/05/10 16:55	7440-50-8	
Lead	**0.18**	ug/L	0.10	0.020	1	10/04/10 13:37	10/05/10 16:55	7439-92-1	
Manganese	**1850**	ug/L	5.0	0.50	10	10/04/10 13:37	10/06/10 13:20	7439-96-5	B
Selenium	**<0.10**	ug/L	0.50	0.10	1	10/04/10 13:37	10/05/10 16:55	7782-49-2	
Silver	**0.096J**	ug/L	0.50	0.071	1	10/04/10 13:37	10/05/10 16:55	7440-22-4	B
Zinc	**3.2J**	ug/L	5.0	1.3	1	10/04/10 13:37	10/05/10 16:55	7440-66-6	B
6020 MET ICPMS, Dissolved	Analytical Method: EPA 6020								
Arsenic, Dissolved	**0.74**	ug/L	0.50	0.062	1	10/01/10 17:51	10/05/10 04:37	7440-38-2	
Barium, Dissolved	**17.6**	ug/L	0.30	0.043	1	10/01/10 17:51	10/05/10 04:37	7440-39-3	B
Cadmium, Dissolved	**<0.020**	ug/L	0.080	0.020	1	10/01/10 17:51	10/05/10 04:37	7440-43-9	
Chromium, Dissolved	**<0.24**	ug/L	0.50	0.24	1	10/01/10 17:51	10/05/10 04:37	7440-47-3	
Copper, Dissolved	**0.39J**	ug/L	0.50	0.20	1	10/01/10 17:51	10/05/10 04:37	7440-50-8	
Lead, Dissolved	**0.065J**	ug/L	0.10	0.020	1	10/01/10 17:51	10/05/10 04:37	7439-92-1	
Manganese, Dissolved	**1660**	ug/L	5.0	0.50	10	10/01/10 17:51	10/05/10 14:58	7439-96-5	B
Selenium, Dissolved	**0.11J**	ug/L	0.50	0.10	1	10/01/10 17:51	10/05/10 04:37	7782-49-2	
Silver, Dissolved	**<0.071**	ug/L	0.50	0.071	1	10/01/10 17:51	10/05/10 04:37	7440-22-4	
Zinc, Dissolved	**6.3**	ug/L	5.0	1.3	1	10/01/10 17:51	10/05/10 04:37	7440-66-6	B
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470								
Mercury	**<0.011**	ug/L	0.20	0.011	1	10/01/10 11:05	10/01/10 15:39	7439-97-6	
7470 Mercury, Dissolved	Analytical Method: EPA 7470 Preparation Method: EPA 7470								
Mercury, Dissolved	**<0.072**	ug/L	0.20	0.072	1	10/01/10 11:05	10/01/10 16:40	7439-97-6	
8270 MSSV Low Level PAH SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
1-Methylnaphthalene	**8.1**	ug/L	0.014	0.0060	1	09/27/10 08:45	10/04/10 19:27	90-12-0	
2-Methylnaphthalene	**0.086**	ug/L	0.014	0.012	1	09/27/10 08:45	10/04/10 19:27	91-57-6	
Acenaphthene	**1.0**	ug/L	0.014	0.00066	1	09/27/10 08:45	10/04/10 19:27	83-32-9	
Acenaphthylene	**0.23**	ug/L	0.014	0.00067	1	09/27/10 08:45	10/04/10 19:27	208-96-8	
Anthracene	**0.11**	ug/L	0.014	0.0012	1	09/27/10 08:45	10/04/10 19:27	120-12-7	
Benzo(a)anthracene	**<0.0017**	ug/L	0.014	0.0017	1	09/27/10 08:45	10/04/10 19:27	56-55-3	
Benzo(a)pyrene	**<0.00066**	ug/L	0.014	0.00066	1	09/27/10 08:45	10/04/10 19:27	50-32-8	
Benzo(b)fluoranthene	**<0.0019**	ug/L	0.014	0.0019	1	09/27/10 08:45	10/04/10 19:27	205-99-2	
Benzo(g,h,i)perylene	**<0.0016**	ug/L	0.014	0.0016	1	09/27/10 08:45	10/04/10 19:27	191-24-2	
Benzo(k)fluoranthene	**<0.00066**	ug/L	0.014	0.00066	1	09/27/10 08:45	10/04/10 19:27	207-08-9	
Chrysene	**<0.0017**	ug/L	0.014	0.0017	1	09/27/10 08:45	10/04/10 19:27	218-01-9	
Dibenz(a,h)anthracene	**<0.0017**	ug/L	0.014	0.0017	1	09/27/10 08:45	10/04/10 19:27	53-70-3	

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(206)767-5060

ANALYTICAL RESULTS

Project: Sep GWM (922) 212302370
Pace Project No.: 255046

Sample: U-18 **Lab ID: 255046008** Collected: 09/21/10 08:30 Received: 09/22/10 08:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Low Level PAH SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510								
Fluoranthene	**0.039**	ug/L	0.014	0.0018	1	09/27/10 08:45	10/04/10 19:27	206-44-0	
Fluorene	**5.8**	ug/L	0.014	0.0036	1	09/27/10 08:45	10/04/10 19:27	86-73-7	
Indeno(1,2,3-cd)pyrene	**<0.0014**	ug/L	0.014	0.0014	1	09/27/10 08:45	10/04/10 19:27	193-39-5	
Naphthalene	**1.2**	ug/L	0.014	0.0014	1	09/27/10 08:45	10/04/10 19:27	91-20-3	
Phenanthrene	**1.5**	ug/L	0.014	0.0036	1	09/27/10 08:45	10/04/10 19:27	85-01-8	
Pyrene	**0.045**	ug/L	0.014	0.0019	1	09/27/10 08:45	10/04/10 19:27	129-00-0	
2-Fluorobiphenyl (S)	69	%	40-106		1	09/27/10 08:45	10/04/10 19:27	321-60-8	
Terphenyl-d14 (S)	85	%	55-146		1	09/27/10 08:45	10/04/10 19:27	1718-51-0	
8260 MSV	Analytical Method: EPA 5030B/8260								
1,1,1,2-Tetrachloroethane	**<0.15**	ug/L	1.0	0.15	1		09/29/10 04:21	630-20-6	
1,1,1-Trichloroethane	**<0.20**	ug/L	1.0	0.20	1		09/29/10 04:21	71-55-6	
1,1,2,2-Tetrachloroethane	**<0.22**	ug/L	1.0	0.22	1		09/29/10 04:21	79-34-5	
1,1,2-Trichloroethane	**<0.19**	ug/L	1.0	0.19	1		09/29/10 04:21	79-00-5	
1,1-Dichloroethane	**<0.23**	ug/L	1.0	0.23	1		09/29/10 04:21	75-34-3	
1,1-Dichloroethene	**<0.12**	ug/L	1.0	0.12	1		09/29/10 04:21	75-35-4	
1,1-Dichloropropene	**<0.094**	ug/L	1.0	0.094	1		09/29/10 04:21	563-58-6	
1,2,3-Trichlorobenzene	**<0.11**	ug/L	1.0	0.11	1		09/29/10 04:21	87-61-6	
1,2,3-Trichloropropane	**<0.37**	ug/L	1.0	0.37	1		09/29/10 04:21	96-18-4	
1,2,4-Trichlorobenzene	**<0.15**	ug/L	1.0	0.15	1		09/29/10 04:21	120-82-1	
1,2,4-Trimethylbenzene	**<0.086**	ug/L	1.0	0.086	1		09/29/10 04:21	95-63-6	
1,2-Dibromo-3-chloropropane	**<0.79**	ug/L	1.0	0.79	1		09/29/10 04:21	96-12-8	
1,2-Dibromoethane (EDB)	**<0.20**	ug/L	1.0	0.20	1		09/29/10 04:21	106-93-4	
1,2-Dichlorobenzene	**<0.25**	ug/L	1.0	0.25	1		09/29/10 04:21	95-50-1	
1,2-Dichloroethane	**<0.074**	ug/L	1.0	0.074	1		09/29/10 04:21	107-06-2	
1,2-Dichloroethene (Total)	**<0.50**	ug/L	2.0	0.50	1		09/29/10 04:21	540-59-0	
1,2-Dichloropropane	**<0.16**	ug/L	1.0	0.16	1		09/29/10 04:21	78-87-5	
1,3,5-Trimethylbenzene	**<0.16**	ug/L	1.0	0.16	1		09/29/10 04:21	108-67-8	
1,3-Dichlorobenzene	**<0.16**	ug/L	1.0	0.16	1		09/29/10 04:21	541-73-1	
1,3-Dichloropropane	**<0.22**	ug/L	1.0	0.22	1		09/29/10 04:21	142-28-9	
1,4-Dichlorobenzene	**<0.20**	ug/L	1.0	0.20	1		09/29/10 04:21	106-46-7	
2,2-Dichloropropane	**<0.27**	ug/L	1.0	0.27	1		09/29/10 04:21	594-20-7	
2-Butanone (MEK)	**<1.6**	ug/L	5.0	1.6	1		09/29/10 04:21	78-93-3	
2-Chlorotoluene	**0.86J**	ug/L	1.0	0.098	1		09/29/10 04:21	95-49-8	
2-Hexanone	**<0.57**	ug/L	5.0	0.57	1		09/29/10 04:21	591-78-6	
4-Chlorotoluene	**<0.13**	ug/L	1.0	0.13	1		09/29/10 04:21	106-43-4	
4-Methyl-2-pentanone (MIBK)	**<0.32**	ug/L	5.0	0.32	1		09/29/10 04:21	108-10-1	
Acetone	**<0.75**	ug/L	5.0	0.75	1		09/29/10 04:21	67-64-1	
Benzene	**<0.12**	ug/L	1.0	0.12	1		09/29/10 04:21	71-43-2	
Bromobenzene	**<0.16**	ug/L	1.0	0.16	1		09/29/10 04:21	108-86-1	
Bromochloromethane	**<0.34**	ug/L	1.0	0.34	1		09/29/10 04:21	74-97-5	
Bromodichloromethane	**<0.11**	ug/L	1.0	0.11	1		09/29/10 04:21	75-27-4	
Bromoform	**<0.23**	ug/L	1.0	0.23	1		09/29/10 04:21	75-25-2	
Bromomethane	**<0.072**	ug/L	1.0	0.072	1		09/29/10 04:21	74-83-9	
Carbon disulfide	**<0.16**	ug/L	1.0	0.16	1		09/29/10 04:21	75-15-0	
Carbon tetrachloride	**<0.25**	ug/L	1.0	0.25	1		09/29/10 04:21	56-23-5	

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ANALYTICAL RESULTS

Project: Sep GWM (922) 212302370
Pace Project No.: 255046

Sample: U-18 **Lab ID: 255046008** Collected: 09/21/10 08:30 Received: 09/22/10 08:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Chlorobenzene	**<0.12**	ug/L	1.0	0.12	1		09/29/10 04:21	108-90-7	
Chloroethane	**<0.27**	ug/L	1.0	0.27	1		09/29/10 04:21	75-00-3	
Chloroform	**<0.15**	ug/L	1.0	0.15	1		09/29/10 04:21	67-66-3	
Chloromethane	**<0.20**	ug/L	1.0	0.20	1		09/29/10 04:21	74-87-3	
Dibromochloromethane	**<0.12**	ug/L	1.0	0.12	1		09/29/10 04:21	124-48-1	
Dibromomethane	**<0.18**	ug/L	1.0	0.18	1		09/29/10 04:21	74-95-3	
Dichlorodifluoromethane	**<0.19**	ug/L	1.0	0.19	1		09/29/10 04:21	75-71-8	
Ethylbenzene	**<0.20**	ug/L	1.0	0.20	1		09/29/10 04:21	100-41-4	
Hexachloro-1,3-butadiene	**<0.27**	ug/L	1.0	0.27	1		09/29/10 04:21	87-68-3	
Isopropylbenzene (Cumene)	**4.7**	ug/L	1.0	0.11	1		09/29/10 04:21	98-82-8	
Methyl-tert-butyl ether	**<0.16**	ug/L	1.0	0.16	1		09/29/10 04:21	1634-04-4	
Methylene chloride	**<0.26**	ug/L	4.0	0.26	1		09/29/10 04:21	75-09-2	
Naphthalene	**1.9**	ug/L	1.0	0.10	1		09/29/10 04:21	91-20-3	
Styrene	**<0.074**	ug/L	1.0	0.074	1		09/29/10 04:21	100-42-5	
Tetrachloroethene	**<0.10**	ug/L	1.0	0.10	1		09/29/10 04:21	127-18-4	
Toluene	**1.1**	ug/L	1.0	0.21	1		09/29/10 04:21	108-88-3	
Trichloroethene	**<0.060**	ug/L	1.0	0.060	1		09/29/10 04:21	79-01-6	
Trichlorofluoromethane	**1.6**	ug/L	1.0	0.24	1		09/29/10 04:21	75-69-4	
Vinyl chloride	**<0.050**	ug/L	1.0	0.050	1		09/29/10 04:21	75-01-4	
Xylene (Total)	**<0.42**	ug/L	3.0	0.42	1		09/29/10 04:21	1330-20-7	
cis-1,2-Dichloroethene	**<0.32**	ug/L	1.0	0.32	1		09/29/10 04:21	156-59-2	
cis-1,3-Dichloropropene	**<0.086**	ug/L	1.0	0.086	1		09/29/10 04:21	10061-01-5	
m&p-Xylene	**<0.27**	ug/L	2.0	0.27	1		09/29/10 04:21	179601-23-1	
n-Butylbenzene	**<0.10**	ug/L	1.0	0.10	1		09/29/10 04:21	104-51-8	
n-Propylbenzene	**4.3**	ug/L	1.0	0.16	1		09/29/10 04:21	103-65-1	
o-Xylene	**<0.15**	ug/L	1.0	0.15	1		09/29/10 04:21	95-47-6	
p-Isopropyltoluene	**<0.074**	ug/L	1.0	0.074	1		09/29/10 04:21	99-87-6	
sec-Butylbenzene	**2.9**	ug/L	1.0	0.10	1		09/29/10 04:21	135-98-8	
tert-Butylbenzene	**<0.11**	ug/L	1.0	0.11	1		09/29/10 04:21	98-06-6	
trans-1,2-Dichloroethene	**<0.22**	ug/L	1.0	0.22	1		09/29/10 04:21	156-60-5	
trans-1,3-Dichloropropene	**<0.16**	ug/L	1.0	0.16	1		09/29/10 04:21	10061-02-6	
4-Bromofluorobenzene (S)	101	%	80-120		1		09/29/10 04:21	460-00-4	
Dibromofluoromethane (S)	95	%	80-122		1		09/29/10 04:21	1868-53-7	
1,2-Dichloroethane-d4 (S)	93	%	80-124		1		09/29/10 04:21	17060-07-0	
Toluene-d8 (S)	99	%	80-123		1		09/29/10 04:21	2037-26-5	
2540D Total Suspended Solids	Analytical Method: SM 2540D								
Total Suspended Solids	**64000**	ug/L	4000	4000	1		09/27/10 16:30		
Total Organic Carbon	Analytical Method: EPA 9060								
Mean Total Organic Carbon	**9.6**	mg/L	1.0	0.080	1		09/28/10 19:00	7440-44-0	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Sep GWM (922) 212302370
Pace Project No.: 255046

Sample: TB **Lab ID: 255046009** Collected: 09/21/10 00:00 Received: 09/22/10 08:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Gx GCV	Analytical Method: NWTPH-Gx								
Gasoline Range Organics	**<13.4**	ug/L	50.0	13.4	1		09/29/10 15:04		
a,a,a-Trifluorotoluene (S)	102	%	50-150		1		09/29/10 15:04	98-08-8	
4-Bromofluorobenzene (S)	89	%	50-150		1		09/29/10 15:04	460-00-4	
8260 MSV	Analytical Method: EPA 5030B/8260								
1,1,1,2-Tetrachloroethane	**<0.15**	ug/L	1.0	0.15	1		09/28/10 22:15	630-20-6	
1,1,1-Trichloroethane	**<0.20**	ug/L	1.0	0.20	1		09/28/10 22:15	71-55-6	
1,1,2,2-Tetrachloroethane	**<0.22**	ug/L	1.0	0.22	1		09/28/10 22:15	79-34-5	
1,1,2-Trichloroethane	**<0.19**	ug/L	1.0	0.19	1		09/28/10 22:15	79-00-5	
1,1-Dichloroethane	**<0.23**	ug/L	1.0	0.23	1		09/28/10 22:15	75-34-3	
1,1-Dichloroethene	**<0.12**	ug/L	1.0	0.12	1		09/28/10 22:15	75-35-4	
1,1-Dichloropropene	**<0.094**	ug/L	1.0	0.094	1		09/28/10 22:15	563-58-6	
1,2,3-Trichlorobenzene	**<0.11**	ug/L	1.0	0.11	1		09/28/10 22:15	87-61-6	
1,2,3-Trichloropropane	**<0.37**	ug/L	1.0	0.37	1		09/28/10 22:15	96-18-4	
1,2,4-Trichlorobenzene	**<0.15**	ug/L	1.0	0.15	1		09/28/10 22:15	120-82-1	
1,2,4-Trimethylbenzene	**<0.086**	ug/L	1.0	0.086	1		09/28/10 22:15	95-63-6	
1,2-Dibromo-3-chloropropane	**<0.79**	ug/L	1.0	0.79	1		09/28/10 22:15	96-12-8	
1,2-Dibromoethane (EDB)	**<0.20**	ug/L	1.0	0.20	1		09/28/10 22:15	106-93-4	
1,2-Dichlorobenzene	**<0.25**	ug/L	1.0	0.25	1		09/28/10 22:15	95-50-1	
1,2-Dichloroethane	**<0.074**	ug/L	1.0	0.074	1		09/28/10 22:15	107-06-2	
1,2-Dichloroethene (Total)	**<0.50**	ug/L	2.0	0.50	1		09/28/10 22:15	540-59-0	
1,2-Dichloropropane	**<0.16**	ug/L	1.0	0.16	1		09/28/10 22:15	78-87-5	
1,3,5-Trimethylbenzene	**<0.16**	ug/L	1.0	0.16	1		09/28/10 22:15	108-67-8	
1,3-Dichlorobenzene	**<0.16**	ug/L	1.0	0.16	1		09/28/10 22:15	541-73-1	
1,3-Dichloropropane	**<0.22**	ug/L	1.0	0.22	1		09/28/10 22:15	142-28-9	
1,4-Dichlorobenzene	**<0.20**	ug/L	1.0	0.20	1		09/28/10 22:15	106-46-7	
2,2-Dichloropropane	**<0.27**	ug/L	1.0	0.27	1		09/28/10 22:15	594-20-7	
2-Butanone (MEK)	**<1.6**	ug/L	5.0	1.6	1		09/28/10 22:15	78-93-3	
2-Chlorotoluene	**<0.098**	ug/L	1.0	0.098	1		09/28/10 22:15	95-49-8	
2-Hexanone	**<0.57**	ug/L	5.0	0.57	1		09/28/10 22:15	591-78-6	
4-Chlorotoluene	**<0.13**	ug/L	1.0	0.13	1		09/28/10 22:15	106-43-4	
4-Methyl-2-pentanone (MIBK)	**<0.32**	ug/L	5.0	0.32	1		09/28/10 22:15	108-10-1	
Acetone	**<0.75**	ug/L	5.0	0.75	1		09/28/10 22:15	67-64-1	
Benzene	**<0.12**	ug/L	1.0	0.12	1		09/28/10 22:15	71-43-2	
Bromobenzene	**<0.16**	ug/L	1.0	0.16	1		09/28/10 22:15	108-86-1	
Bromochloromethane	**<0.34**	ug/L	1.0	0.34	1		09/28/10 22:15	74-97-5	
Bromodichloromethane	**<0.11**	ug/L	1.0	0.11	1		09/28/10 22:15	75-27-4	
Bromoform	**<0.23**	ug/L	1.0	0.23	1		09/28/10 22:15	75-25-2	
Bromomethane	**<0.072**	ug/L	1.0	0.072	1		09/28/10 22:15	74-83-9	
Carbon disulfide	**<0.16**	ug/L	1.0	0.16	1		09/28/10 22:15	75-15-0	
Carbon tetrachloride	**<0.25**	ug/L	1.0	0.25	1		09/28/10 22:15	56-23-5	
Chlorobenzene	**<0.12**	ug/L	1.0	0.12	1		09/28/10 22:15	108-90-7	
Chloroethane	**<0.27**	ug/L	1.0	0.27	1		09/28/10 22:15	75-00-3	
Chloroform	**<0.15**	ug/L	1.0	0.15	1		09/28/10 22:15	67-66-3	
Chloromethane	**<0.20**	ug/L	1.0	0.20	1		09/28/10 22:15	74-87-3	
Dibromochloromethane	**<0.12**	ug/L	1.0	0.12	1		09/28/10 22:15	124-48-1	

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ANALYTICAL RESULTS

Project: Sep GWM (922) 212302370
Pace Project No.: 255046

Sample: TB **Lab ID: 255046009** Collected: 09/21/10 00:00 Received: 09/22/10 08:35 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Dibromomethane	**<0.18**	ug/L	1.0	0.18	1		09/28/10 22:15	74-95-3	
Dichlorodifluoromethane	**<0.19**	ug/L	1.0	0.19	1		09/28/10 22:15	75-71-8	
Ethylbenzene	**<0.20**	ug/L	1.0	0.20	1		09/28/10 22:15	100-41-4	
Hexachloro-1,3-butadiene	**<0.27**	ug/L	1.0	0.27	1		09/28/10 22:15	87-68-3	
Isopropylbenzene (Cumene)	**<0.11**	ug/L	1.0	0.11	1		09/28/10 22:15	98-82-8	
Methyl-tert-butyl ether	**<0.16**	ug/L	1.0	0.16	1		09/28/10 22:15	1634-04-4	
Methylene chloride	**1.7J**	ug/L	4.0	0.26	1		09/28/10 22:15	75-09-2	
Naphthalene	**<0.10**	ug/L	1.0	0.10	1		09/28/10 22:15	91-20-3	
Styrene	**<0.074**	ug/L	1.0	0.074	1		09/28/10 22:15	100-42-5	
Tetrachloroethene	**<0.10**	ug/L	1.0	0.10	1		09/28/10 22:15	127-18-4	
Toluene	**<0.21**	ug/L	1.0	0.21	1		09/28/10 22:15	108-88-3	
Trichloroethene	**<0.060**	ug/L	1.0	0.060	1		09/28/10 22:15	79-01-6	
Trichlorofluoromethane	**<0.24**	ug/L	1.0	0.24	1		09/28/10 22:15	75-69-4	
Vinyl chloride	**<0.050**	ug/L	1.0	0.050	1		09/28/10 22:15	75-01-4	
Xylene (Total)	**<0.42**	ug/L	3.0	0.42	1		09/28/10 22:15	1330-20-7	
cis-1,2-Dichloroethene	**<0.32**	ug/L	1.0	0.32	1		09/28/10 22:15	156-59-2	
cis-1,3-Dichloropropene	**<0.086**	ug/L	1.0	0.086	1		09/28/10 22:15	10061-01-5	
m&p-Xylene	**<0.27**	ug/L	2.0	0.27	1		09/28/10 22:15	179601-23-1	
n-Butylbenzene	**<0.10**	ug/L	1.0	0.10	1		09/28/10 22:15	104-51-8	
n-Propylbenzene	**<0.16**	ug/L	1.0	0.16	1		09/28/10 22:15	103-65-1	
o-Xylene	**<0.15**	ug/L	1.0	0.15	1		09/28/10 22:15	95-47-6	
p-Isopropyltoluene	**<0.074**	ug/L	1.0	0.074	1		09/28/10 22:15	99-87-6	
sec-Butylbenzene	**<0.10**	ug/L	1.0	0.10	1		09/28/10 22:15	135-98-8	
tert-Butylbenzene	**<0.11**	ug/L	1.0	0.11	1		09/28/10 22:15	98-06-6	
trans-1,2-Dichloroethene	**<0.22**	ug/L	1.0	0.22	1		09/28/10 22:15	156-60-5	
trans-1,3-Dichloropropene	**<0.16**	ug/L	1.0	0.16	1		09/28/10 22:15	10061-02-6	
4-Bromofluorobenzene (S)	99	%	80-120		1		09/28/10 22:15	460-00-4	
Dibromofluoromethane (S)	101	%	80-122		1		09/28/10 22:15	1868-53-7	
1,2-Dichloroethane-d4 (S)	97	%	80-124		1		09/28/10 22:15	17060-07-0	
Toluene-d8 (S)	99	%	80-123		1		09/28/10 22:15	2037-26-5	

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QUALITY CONTROL DATA

Project: Sep GWM (922) 212302370
Pace Project No.: 255046

QC Batch: GCSV/13876 Analysis Method: EPA 8082
QC Batch Method: EPA 8082 Analysis Description: 8082 GCS PCB
Associated Lab Samples: 255046002, 255046003, 255046004, 255046007

METHOD BLANK: 859527 Matrix: Water
Associated Lab Samples: 255046002, 255046003, 255046004, 255046007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
PCB-1016 (Aroclor 1016)	ug/L	<0.032	0.10	10/01/10 16:44	
PCB-1221 (Aroclor 1221)	ug/L	<0.045	0.10	10/01/10 16:44	
PCB-1232 (Aroclor 1232)	ug/L	<0.038	0.10	10/01/10 16:44	
PCB-1242 (Aroclor 1242)	ug/L	<0.012	0.10	10/01/10 16:44	
PCB-1248 (Aroclor 1248)	ug/L	<0.038	0.10	10/01/10 16:44	
PCB-1254 (Aroclor 1254)	ug/L	<0.024	0.10	10/01/10 16:44	
PCB-1260 (Aroclor 1260)	ug/L	<0.030	0.10	10/01/10 16:44	
PCB-1262 (Aroclor 1262)	ug/L	<0.015	0.10	10/01/10 16:44	
PCB-1268 (Aroclor 1268)	ug/L	<0.041	0.10	10/01/10 16:44	
Decachlorobiphenyl (S)	%	79	30-150	10/01/10 16:44	
Tetrachloro-m-xylene (S)	%	67	30-145	10/01/10 16:44	

LABORATORY CONTROL SAMPLE & LCSD: 859528 859529

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
PCB-1016 (Aroclor 1016)	ug/L	2	1.6	1.6	81	81	60-125	.2	20	
PCB-1260 (Aroclor 1260)	ug/L	2	1.6	1.7	82	84	53-125	2	20	
Decachlorobiphenyl (S)	%				81	84	30-150			
Tetrachloro-m-xylene (S)	%				66	62	30-145			

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QUALITY CONTROL DATA

Project: Sep GWM (922) 212302370
Pace Project No.: 255046

QC Batch: GCSV/13886 Analysis Method: EPA 8082
QC Batch Method: EPA 8082 Analysis Description: 8082 GCS PCB
Associated Lab Samples: 255046001, 255046005, 255046006, 255046008

METHOD BLANK: 861115 Matrix: Water
Associated Lab Samples: 255046001, 255046005, 255046006, 255046008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
PCB-1016 (Aroclor 1016)	ug/L	<0.032	0.10	10/01/10 19:39	
PCB-1221 (Aroclor 1221)	ug/L	<0.045	0.10	10/01/10 19:39	
PCB-1232 (Aroclor 1232)	ug/L	<0.038	0.10	10/01/10 19:39	
PCB-1242 (Aroclor 1242)	ug/L	<0.012	0.10	10/01/10 19:39	
PCB-1248 (Aroclor 1248)	ug/L	<0.038	0.10	10/01/10 19:39	
PCB-1254 (Aroclor 1254)	ug/L	<0.024	0.10	10/01/10 19:39	
PCB-1260 (Aroclor 1260)	ug/L	<0.030	0.10	10/01/10 19:39	
PCB-1262 (Aroclor 1262)	ug/L	<0.015	0.10	10/01/10 19:39	
PCB-1268 (Aroclor 1268)	ug/L	<0.041	0.10	10/01/10 19:39	
Decachlorobiphenyl (S)	%	66	30-150	10/01/10 19:39	
Tetrachloro-m-xylene (S)	%	63	30-145	10/01/10 19:39	

LABORATORY CONTROL SAMPLE & LCSD: 861116 861117

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
PCB-1016 (Aroclor 1016)	ug/L	2	1.4	1.5	72	75	60-125	4	20	
PCB-1260 (Aroclor 1260)	ug/L	2	1.6	1.7	79	83	53-125	4	20	
Decachlorobiphenyl (S)	%				83	84	30-150			
Tetrachloro-m-xylene (S)	%				54	56	30-145			

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QUALITY CONTROL DATA

Project: Sep GWM (922) 212302370
Pace Project No.: 255046

QC Batch: OEXT/2747 Analysis Method: NWTPH-Dx
QC Batch Method: EPA 3510 Analysis Description: NWTPH-Dx GCS
Associated Lab Samples: 255046001, 255046002, 255046003, 255046004, 255046005, 255046006, 255046007, 255046008

METHOD BLANK: 42688 Matrix: Water
Associated Lab Samples: 255046001, 255046002, 255046003, 255046004, 255046005, 255046006, 255046007, 255046008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Diesel Range SG	ug/L	<37.0	80.0	10/02/10 00:27	
Motor Oil Range SG	ug/L	<61.0	400	10/02/10 00:27	
n-Octacosane (S) SG	%	121	50-150	10/02/10 00:27	
o-Terphenyl (S) SG	%	94	50-150	10/02/10 00:27	

LABORATORY CONTROL SAMPLE & LCSD: 42689 42690

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Diesel Range SG	ug/L	5000	4470	4430	89	89	51-147	.8	30	
Motor Oil Range SG	ug/L	5000	5290	5500	106	110	20-160	4	30	
n-Octacosane (S) SG	%				119	120	50-150			
o-Terphenyl (S) SG	%				110	107	50-150			

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QUALITY CONTROL DATA

Project: Sep GWM (922) 212302370
Pace Project No.: 255046

QC Batch: GCV/1915 Analysis Method: NWTPH-Gx
QC Batch Method: NWTPH-Gx Analysis Description: NWTPH-Gx GCV Water
Associated Lab Samples: 255046005, 255046006, 255046007, 255046008, 255046009

METHOD BLANK: 42553 Matrix: Water
Associated Lab Samples: 255046005, 255046006, 255046007, 255046008, 255046009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Gasoline Range Organics	ug/L	<13.4	50.0	09/29/10 13:28	
4-Bromofluorobenzene (S)	%	81	50-150	09/29/10 13:28	
a,a,a-Trifluorotoluene (S)	%	101	50-150	09/29/10 13:28	

LABORATORY CONTROL SAMPLE: 42554

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Gasoline Range Organics	ug/L	250	228	91	50-163	
4-Bromofluorobenzene (S)	%			93	50-150	
a,a,a-Trifluorotoluene (S)	%			109	50-150	

SAMPLE DUPLICATE: 42886

Parameter	Units	254988004 Result	Dup Result	RPD	Max RPD	Qualifiers
Gasoline Range Organics	ug/L	56.5	60.9	7	30	
4-Bromofluorobenzene (S)	%	90	81	10		
a,a,a-Trifluorotoluene (S)	%	108	96	12		

SAMPLE DUPLICATE: 42887

Parameter	Units	255026002 Result	Dup Result	RPD	Max RPD	Qualifiers
Gasoline Range Organics	ug/L	1410	1340	4	30	
4-Bromofluorobenzene (S)	%	102	105	3		
a,a,a-Trifluorotoluene (S)	%	100	107	7		

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QUALITY CONTROL DATA

Project: Sep GWM (922) 212302370
Pace Project No.: 255046

QC Batch: GCV/7443 Analysis Method: NWTPH-Gx/8021
QC Batch Method: NWTPH-Gx/8021 Analysis Description: NWTPH-Gx/8021B Water
Associated Lab Samples: 255046001, 255046002, 255046003, 255046004

METHOD BLANK: 863039 Matrix: Water
Associated Lab Samples: 255046001, 255046002, 255046003, 255046004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
TPH as Gas	ug/L	15.6J	100	09/30/10 20:00	
a,a,a-Trifluorotoluene (S)	%	112	70-130	09/30/10 20:00	

LABORATORY CONTROL SAMPLE & LCSD: 863040 863041

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
TPH as Gas	ug/L	1000	1100	1010	110	101	70-130	8	20	
a,a,a-Trifluorotoluene (S)	%				112	110	70-130			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 863042 863043

Parameter	Units	255033004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
TPH as Gas	ug/L	276	1000	1000	1370	1360	109	108	70-130	.8	30	
a,a,a-Trifluorotoluene (S)	%						112	113	70-130			

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QUALITY CONTROL DATA

Project: Sep GWM (922) 212302370
Pace Project No.: 255046

QC Batch: ICPM/22599 Analysis Method: EPA 6020
QC Batch Method: EPA 6020 Analysis Description: 6020 MET
Associated Lab Samples: 255046001, 255046003, 255046005, 255046007

METHOD BLANK: 862138 Matrix: Water
Associated Lab Samples: 255046001, 255046003, 255046005, 255046007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	ug/L	<0.062	0.50	10/03/10 11:14	
Barium	ug/L	0.14J	0.30	10/03/10 11:14	
Cadmium	ug/L	<0.020	0.080	10/03/10 11:14	
Chromium	ug/L	<0.24	0.50	10/03/10 11:14	
Copper	ug/L	1.1	0.50	10/03/10 11:14	P8
Lead	ug/L	0.082J	0.10	10/03/10 11:14	
Manganese	ug/L	0.45J	0.50	10/03/10 11:14	
Selenium	ug/L	<0.10	0.50	10/03/10 11:14	
Silver	ug/L	<0.071	0.50	10/03/10 11:14	
Zinc	ug/L	4.2J	5.0	10/03/10 11:14	

LABORATORY CONTROL SAMPLE: 862139

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	ug/L	80	88.2	110	80-120	
Barium	ug/L	80	78.3	98	80-120	
Cadmium	ug/L	80	84.1	105	80-120	
Chromium	ug/L	80	85.9	107	80-120	
Copper	ug/L	80	87.8	110	80-120	
Lead	ug/L	80	87.9	110	80-120	
Manganese	ug/L	80	84.9	106	80-120	
Selenium	ug/L	80	88.7	111	80-120	
Silver	ug/L	80	81.2	101	80-120	
Zinc	ug/L	80	90.6	113	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 862140 862141

Parameter	Units	255048002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	ug/L	17.3	80	80	104	131	109	142	75-125	23	20	D6,M1
Barium	ug/L	6.2	80	80	84.3	108	98	127	75-125	24	20	D6,M1
Cadmium	ug/L	0.43	80	80	84.0	107	105	133	75-125	24	20	D6,M1
Chromium	ug/L	2.1	80	80	86.4	112	105	137	75-125	25	20	D6,M1
Copper	ug/L	12.7	80	80	100	126	110	141	75-125	22	20	D6,M1
Lead	ug/L	9.3	80	80	95.6	122	108	141	75-125	24	20	D6,M1
Manganese	ug/L	1040	80	80	1090	1370	59	416	75-125	23	20	D6,M1
Selenium	ug/L	ND	80	80	91.6	111	114	138	75-125	19	20	M1
Silver	ug/L	0.89	80	80	75.4	97.0	93	120	75-125	25	20	D6
Zinc	ug/L	54.2	80	80	156	186	127	165	75-125	18	20	M1

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QUALITY CONTROL DATA

Project: Sep GWM (922) 212302370
Pace Project No.: 255046

MATRIX SPIKE SAMPLE: 862142

Parameter	Units	5041699010 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Arsenic	ug/L	ND	80	89.8	111	75-125	
Barium	ug/L	60.1	80	139	99	75-125	
Cadmium	ug/L	ND	80	85.0	106	75-125	
Chromium	ug/L	ND	80	85.8	107	75-125	
Copper	ug/L	0.51	80	88.0	109	75-125	
Lead	ug/L	0.40	80	88.0	109	75-125	
Manganese	ug/L	584	80	644	74	75-125	M1
Selenium	ug/L	ND	80	90.8	113	75-125	
Silver	ug/L	ND	80	25.5	32	75-125	M1
Zinc	ug/L	ND	80	98.6	118	75-125	

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QUALITY CONTROL DATA

Project: Sep GWM (922) 212302370
Pace Project No.: 255046

QC Batch: ICPM/22687 Analysis Method: EPA 6020
QC Batch Method: EPA 6020 Analysis Description: 6020 MET
Associated Lab Samples: 255046002, 255046004, 255046006, 255046008

METHOD BLANK: 864864 Matrix: Water
Associated Lab Samples: 255046002, 255046004, 255046006, 255046008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	ug/L	<0.062	0.50	10/05/10 16:17	
Barium	ug/L	0.063J	0.30	10/05/10 16:17	
Cadmium	ug/L	<0.020	0.080	10/05/10 16:17	
Chromium	ug/L	<0.24	0.50	10/05/10 16:17	
Copper	ug/L	<0.20	0.50	10/05/10 16:17	
Lead	ug/L	<0.020	0.10	10/05/10 16:17	
Manganese	ug/L	0.32J	0.50	10/05/10 16:17	
Selenium	ug/L	<0.10	0.50	10/05/10 16:17	
Silver	ug/L	0.20J	0.50	10/05/10 16:17	
Zinc	ug/L	1.7J	5.0	10/05/10 16:17	

LABORATORY CONTROL SAMPLE: 864865

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	ug/L	80	79.6	99	80-120	
Barium	ug/L	80	85.6	107	80-120	
Cadmium	ug/L	80	81.1	101	80-120	
Chromium	ug/L	80	81.4	102	80-120	
Copper	ug/L	80	87.2	109	80-120	
Lead	ug/L	80	83.6	105	80-120	
Manganese	ug/L	80	85.2	106	80-120	
Selenium	ug/L	80	81.4	102	80-120	
Silver	ug/L	80	80.2	100	80-120	
Zinc	ug/L	80	84.2	105	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 864866 864867

Parameter	Units	255046002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	ug/L	16.8	80	80	107	105	113	111	75-125	2	20	
Barium	ug/L	22.5	80	80	117	115	118	116	75-125	2	20	
Cadmium	ug/L	<0.020	80	80	90.6	88.4	113	110	75-125	2	20	
Chromium	ug/L	0.51	80	80	91.6	89.4	114	111	75-125	2	20	
Copper	ug/L	0.20J	80	80	95.8	93.2	120	116	75-125	3	20	
Lead	ug/L	0.057J	80	80	92.2	90.2	115	113	75-125	2	20	
Manganese	ug/L	1920	80	80	2020	1990	133	88	75-125	2	20	M1
Selenium	ug/L	<0.10	80	80	94.2	89.8	118	112	75-125	5	20	
Silver	ug/L	2.1	80	80	79.4	82.8	97	101	75-125	4	20	
Zinc	ug/L	2.1J	80	80	98.0	94.4	120	115	75-125	4	20	

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QUALITY CONTROL DATA

Project: Sep GWM (922) 212302370
Pace Project No.: 255046

QC Batch: ICPM/22574 Analysis Method: EPA 6020
QC Batch Method: EPA 6020 Analysis Description: 6020 MET Dissolved
Associated Lab Samples: 255046001, 255046002, 255046003, 255046004, 255046005, 255046006, 255046007, 255046008

METHOD BLANK: 861316 Matrix: Water
Associated Lab Samples: 255046001, 255046002, 255046003, 255046004, 255046005, 255046006, 255046007, 255046008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic, Dissolved	ug/L	<0.062	0.50	10/05/10 14:21	
Barium, Dissolved	ug/L	0.070J	0.30	10/05/10 14:21	
Cadmium, Dissolved	ug/L	<0.020	0.080	10/05/10 14:21	
Chromium, Dissolved	ug/L	<0.24	0.50	10/05/10 14:21	
Copper, Dissolved	ug/L	<0.20	0.50	10/05/10 14:21	
Lead, Dissolved	ug/L	<0.020	0.10	10/05/10 14:21	
Manganese, Dissolved	ug/L	0.27J	0.50	10/05/10 14:21	
Selenium, Dissolved	ug/L	<0.10	0.50	10/05/10 14:21	
Silver, Dissolved	ug/L	0.16J	0.50	10/05/10 14:21	
Zinc, Dissolved	ug/L	1.8J	5.0	10/05/10 14:21	

LABORATORY CONTROL SAMPLE: 861317

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic, Dissolved	ug/L	80	77.6	97	85-115	
Barium, Dissolved	ug/L	80	79.0	99	85-115	
Cadmium, Dissolved	ug/L	80	78.8	99	85-115	
Chromium, Dissolved	ug/L	80	76.3	95	85-115	
Copper, Dissolved	ug/L	80	80.9	101	85-115	
Lead, Dissolved	ug/L	80	77.8	97	85-115	
Manganese, Dissolved	ug/L	80	79.2	99	85-115	
Selenium, Dissolved	ug/L	80	84.8	106	85-115	
Silver, Dissolved	ug/L	80	76.9	96	85-115	
Zinc, Dissolved	ug/L	80	82.7	103	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 861318 861319

Parameter	Units	4037424023 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic, Dissolved	ug/L	0.29J	80	80	90.4	87.9	113	110	70-130	3	20	
Barium, Dissolved	ug/L	45.0	80	80	140	135	119	113	70-130	3	20	
Cadmium, Dissolved	ug/L	0.021J	80	80	92.0	90.3	115	113	70-130	2	20	
Chromium, Dissolved	ug/L	0.82	80	80	89.4	87.8	111	109	70-130	2	20	
Copper, Dissolved	ug/L	0.50	80	80	90.8	87.1	113	108	70-130	4	20	
Lead, Dissolved	ug/L	0.068J	80	80	90.6	89.2	113	111	70-130	2	20	
Manganese, Dissolved	ug/L	0.51	80	80	89.3	88.6	111	110	70-130	.8	20	
Selenium, Dissolved	ug/L	0.35J	80	80	88.6	88.4	110	110	70-130	.3	20	
Silver, Dissolved	ug/L	1.3	80	80	79.8	80.8	98	99	70-130	1	20	
Zinc, Dissolved	ug/L	3.0J	80	80	97.6	89.6	118	108	70-130	8	20	

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QUALITY CONTROL DATA

Project: Sep GWM (922) 212302370
Pace Project No.: 255046

MATRIX SPIKE SAMPLE: 861320

Parameter	Units	255046004 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Arsenic, Dissolved	ug/L	1.9	80	92.5	113	70-130	
Barium, Dissolved	ug/L	3.4	80	91.4	110	70-130	
Cadmium, Dissolved	ug/L	<0.020	80	89.2	111	70-130	
Chromium, Dissolved	ug/L	<0.24	80	89.2	111	70-130	
Copper, Dissolved	ug/L	0.32J	80	90.0	112	70-130	
Lead, Dissolved	ug/L	0.060J	80	90.4	113	70-130	
Manganese, Dissolved	ug/L	2860	80	3270	506	70-130	E,M1
Selenium, Dissolved	ug/L	<0.10	80	88.9	111	70-130	
Silver, Dissolved	ug/L	<0.071	80	75.4	94	70-130	
Zinc, Dissolved	ug/L	6.3	80	101	118	70-130	

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QUALITY CONTROL DATA

Project: Sep GWM (922) 212302370
Pace Project No.: 255046

QC Batch: MERP/1277 Analysis Method: EPA 7470
QC Batch Method: EPA 7470 Analysis Description: 7470 Mercury
Associated Lab Samples: 255046001, 255046002, 255046003, 255046004, 255046005, 255046006, 255046007, 255046008

METHOD BLANK: 42986 Matrix: Water
Associated Lab Samples: 255046001, 255046002, 255046003, 255046004, 255046005, 255046006, 255046007, 255046008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ug/L	<0.011	0.20	10/01/10 15:12	

LABORATORY CONTROL SAMPLE: 42987

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	5	4.9	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 42988 42989

Parameter	Units	255046001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ug/L	<0.011	5	5	4.5	4.5	90	91	75-125	.08	20	

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QUALITY CONTROL DATA

Project: Sep GWM (922) 212302370
Pace Project No.: 255046

QC Batch: MERP/1278 Analysis Method: EPA 7470
QC Batch Method: EPA 7470 Analysis Description: 7470 Mercury ,Dissolved
Associated Lab Samples: 255046001, 255046002, 255046003, 255046004, 255046005, 255046006, 255046007, 255046008

METHOD BLANK: 42990 Matrix: Water
Associated Lab Samples: 255046001, 255046002, 255046003, 255046004, 255046005, 255046006, 255046007, 255046008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury, Dissolved	ug/L	<0.072	0.20	10/01/10 16:13	

LABORATORY CONTROL SAMPLE: 42991

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury, Dissolved	ug/L	5	5.0	100	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 42992 42993

Parameter	Units	255046001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury, Dissolved	ug/L	<0.072	5	5	4.7	4.6	94	92	85-115	3	20	

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QUALITY CONTROL DATA

Project: Sep GWM (922) 212302370
Pace Project No.: 255046

QC Batch: OEXT/2720 Analysis Method: EPA 8270 by SIM
QC Batch Method: EPA 3510 Analysis Description: 8270 Low Level PAH SIM
Associated Lab Samples: 255046001, 255046002, 255046003, 255046004, 255046005, 255046006, 255046007, 255046008

METHOD BLANK: 42060 Matrix: Water
Associated Lab Samples: 255046001, 255046002, 255046003, 255046004, 255046005, 255046006, 255046007, 255046008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1-Methylnaphthalene	ug/L	<0.0063	0.015	09/28/10 19:08	
2-Methylnaphthalene	ug/L	<0.012	0.015	09/28/10 19:08	
Acenaphthene	ug/L	<0.00070	0.015	09/28/10 19:08	
Acenaphthylene	ug/L	<0.00071	0.015	09/28/10 19:08	
Anthracene	ug/L	<0.0013	0.015	09/28/10 19:08	
Benzo(a)anthracene	ug/L	<0.0018	0.015	09/28/10 19:08	
Benzo(a)pyrene	ug/L	<0.00070	0.015	09/28/10 19:08	
Benzo(b)fluoranthene	ug/L	<0.0020	0.015	09/28/10 19:08	
Benzo(g,h,i)perylene	ug/L	<0.0017	0.015	09/28/10 19:08	
Benzo(k)fluoranthene	ug/L	<0.00070	0.015	09/28/10 19:08	
Chrysene	ug/L	<0.0018	0.015	09/28/10 19:08	
Dibenz(a,h)anthracene	ug/L	<0.0018	0.015	09/28/10 19:08	
Fluoranthene	ug/L	<0.0019	0.015	09/28/10 19:08	
Fluorene	ug/L	<0.0038	0.015	09/28/10 19:08	
Indeno(1,2,3-cd)pyrene	ug/L	<0.0015	0.015	09/28/10 19:08	
Naphthalene	ug/L	<0.0014	0.015	09/28/10 19:08	
Phenanthrene	ug/L	<0.0038	0.015	09/28/10 19:08	
Pyrene	ug/L	<0.0020	0.015	09/28/10 19:08	
2-Fluorobiphenyl (S)	%	96	40-106	09/28/10 19:08	
Terphenyl-d14 (S)	%	89	55-146	09/28/10 19:08	

LABORATORY CONTROL SAMPLE & LCSD: 42061 42062

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1-Methylnaphthalene	ug/L	2	1.3	1.4	67	69	14-126	3	30	
2-Methylnaphthalene	ug/L	2	1.3	1.3	67	66	30-121	.5	30	
Acenaphthene	ug/L	2	1.5	1.6	74	78	32-124	5	30	
Acenaphthylene	ug/L	2	1.9	2.0	96	99	34-128	3	30	
Anthracene	ug/L	2	1.5	1.6	75	78	50-129	4	30	
Benzo(a)anthracene	ug/L	2	1.5	1.6	76	78	58-161	2	30	
Benzo(a)pyrene	ug/L	2	1.8	1.8	91	91	52-156	.04	30	
Benzo(b)fluoranthene	ug/L	2	1.7	1.4	86	72	61-167	18	30	
Benzo(g,h,i)perylene	ug/L	2	1.6	1.6	81	82	56-167	.7	30	
Benzo(k)fluoranthene	ug/L	2	1.7	2.0	87	101	60-149	15	30	
Chrysene	ug/L	2	1.8	1.8	92	91	61-141	1	30	
Dibenz(a,h)anthracene	ug/L	2	1.7	1.7	83	83	60-176	.01	30	
Fluoranthene	ug/L	2	1.6	1.7	79	84	63-155	6	30	
Fluorene	ug/L	2	1.9	1.9	93	94	44-129	.9	30	
Indeno(1,2,3-cd)pyrene	ug/L	2	1.7	1.7	83	83	51-159	.5	30	
Naphthalene	ug/L	2	1.5	1.5	74	76	29-120	3	30	
Phenanthrene	ug/L	2	1.5	1.6	73	79	56-136	8	30	

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QUALITY CONTROL DATA

Project: Sep GWM (922) 212302370
Pace Project No.: 255046

LABORATORY CONTROL SAMPLE & LCSD: 42061 42062

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Pyrene	ug/L	2	1.6	1.6	82	82	61-143	.6	30	
2-Fluorobiphenyl (S)	%				80	78	40-106			
Terphenyl-d14 (S)	%				86	79	55-146			

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QUALITY CONTROL DATA

Project: Sep GWM (922) 212302370
Pace Project No.: 255046

QC Batch: MSV/3186 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 255046001, 255046002, 255046003, 255046004, 255046005, 255046006, 255046007, 255046008, 255046009

METHOD BLANK: 42490 Matrix: Water
Associated Lab Samples: 255046001, 255046002, 255046003, 255046004, 255046005, 255046006, 255046007, 255046008, 255046009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<0.15	1.0	09/28/10 21:54	
1,1,1-Trichloroethane	ug/L	<0.20	1.0	09/28/10 21:54	
1,1,2,2-Tetrachloroethane	ug/L	<0.22	1.0	09/28/10 21:54	
1,1,2-Trichloroethane	ug/L	<0.19	1.0	09/28/10 21:54	
1,1-Dichloroethane	ug/L	<0.23	1.0	09/28/10 21:54	
1,1-Dichloroethene	ug/L	<0.12	1.0	09/28/10 21:54	
1,1-Dichloropropene	ug/L	<0.094	1.0	09/28/10 21:54	
1,2,3-Trichlorobenzene	ug/L	0.20J	1.0	09/28/10 21:54	
1,2,3-Trichloropropane	ug/L	<0.37	1.0	09/28/10 21:54	
1,2,4-Trichlorobenzene	ug/L	<0.15	1.0	09/28/10 21:54	
1,2,4-Trimethylbenzene	ug/L	<0.086	1.0	09/28/10 21:54	
1,2-Dibromo-3-chloropropane	ug/L	<0.79	1.0	09/28/10 21:54	
1,2-Dibromoethane (EDB)	ug/L	<0.20	1.0	09/28/10 21:54	
1,2-Dichlorobenzene	ug/L	<0.25	1.0	09/28/10 21:54	
1,2-Dichloroethane	ug/L	<0.074	1.0	09/28/10 21:54	
1,2-Dichloroethene (Total)	ug/L	<0.50	2.0	09/28/10 21:54	
1,2-Dichloropropane	ug/L	<0.16	1.0	09/28/10 21:54	
1,3,5-Trimethylbenzene	ug/L	<0.16	1.0	09/28/10 21:54	
1,3-Dichlorobenzene	ug/L	<0.16	1.0	09/28/10 21:54	
1,3-Dichloropropane	ug/L	<0.22	1.0	09/28/10 21:54	
1,4-Dichlorobenzene	ug/L	<0.20	1.0	09/28/10 21:54	
2,2-Dichloropropane	ug/L	<0.27	1.0	09/28/10 21:54	
2-Butanone (MEK)	ug/L	<1.6	5.0	09/28/10 21:54	
2-Chlorotoluene	ug/L	<0.098	1.0	09/28/10 21:54	
2-Hexanone	ug/L	<0.57	5.0	09/28/10 21:54	
4-Chlorotoluene	ug/L	<0.13	1.0	09/28/10 21:54	
4-Methyl-2-pentanone (MIBK)	ug/L	<0.32	5.0	09/28/10 21:54	
Acetone	ug/L	<0.75	5.0	09/28/10 21:54	
Benzene	ug/L	<0.12	1.0	09/28/10 21:54	
Bromobenzene	ug/L	<0.16	1.0	09/28/10 21:54	
Bromochloromethane	ug/L	<0.34	1.0	09/28/10 21:54	
Bromodichloromethane	ug/L	<0.11	1.0	09/28/10 21:54	
Bromoform	ug/L	<0.23	1.0	09/28/10 21:54	
Bromomethane	ug/L	<0.072	1.0	09/28/10 21:54	
Carbon disulfide	ug/L	<0.16	1.0	09/28/10 21:54	
Carbon tetrachloride	ug/L	<0.25	1.0	09/28/10 21:54	
Chlorobenzene	ug/L	<0.12	1.0	09/28/10 21:54	
Chloroethane	ug/L	<0.27	1.0	09/28/10 21:54	
Chloroform	ug/L	<0.15	1.0	09/28/10 21:54	
Chloromethane	ug/L	<0.20	1.0	09/28/10 21:54	
cis-1,2-Dichloroethene	ug/L	<0.32	1.0	09/28/10 21:54	
cis-1,3-Dichloropropene	ug/L	<0.086	1.0	09/28/10 21:54	
Dibromochloromethane	ug/L	<0.12	1.0	09/28/10 21:54	

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QUALITY CONTROL DATA

Project: Sep GWM (922) 212302370
Pace Project No.: 255046

METHOD BLANK: 42490 Matrix: Water

Associated Lab Samples: 255046001, 255046002, 255046003, 255046004, 255046005, 255046006, 255046007, 255046008, 255046009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Dibromomethane	ug/L	<0.18	1.0	09/28/10 21:54	
Dichlorodifluoromethane	ug/L	<0.19	1.0	09/28/10 21:54	
Ethylbenzene	ug/L	<0.20	1.0	09/28/10 21:54	
Hexachloro-1,3-butadiene	ug/L	0.38J	1.0	09/28/10 21:54	
Isopropylbenzene (Cumene)	ug/L	<0.11	1.0	09/28/10 21:54	
m&p-Xylene	ug/L	<0.27	2.0	09/28/10 21:54	
Methyl-tert-butyl ether	ug/L	<0.16	1.0	09/28/10 21:54	
Methylene chloride	ug/L	<0.26	4.0	09/28/10 21:54	
n-Butylbenzene	ug/L	<0.10	1.0	09/28/10 21:54	
n-Propylbenzene	ug/L	<0.16	1.0	09/28/10 21:54	
Naphthalene	ug/L	<0.10	1.0	09/28/10 21:54	
o-Xylene	ug/L	<0.15	1.0	09/28/10 21:54	
p-Isopropyltoluene	ug/L	<0.074	1.0	09/28/10 21:54	
sec-Butylbenzene	ug/L	<0.10	1.0	09/28/10 21:54	
Styrene	ug/L	<0.074	1.0	09/28/10 21:54	
tert-Butylbenzene	ug/L	<0.11	1.0	09/28/10 21:54	
Tetrachloroethene	ug/L	<0.10	1.0	09/28/10 21:54	
Toluene	ug/L	<0.21	1.0	09/28/10 21:54	
trans-1,2-Dichloroethene	ug/L	<0.22	1.0	09/28/10 21:54	
trans-1,3-Dichloropropene	ug/L	<0.16	1.0	09/28/10 21:54	
Trichloroethene	ug/L	<0.060	1.0	09/28/10 21:54	
Trichlorofluoromethane	ug/L	<0.24	1.0	09/28/10 21:54	
Vinyl chloride	ug/L	<0.050	1.0	09/28/10 21:54	
Xylene (Total)	ug/L	<0.42	3.0	09/28/10 21:54	
1,2-Dichloroethane-d4 (S)	%	97	80-124	09/28/10 21:54	
4-Bromofluorobenzene (S)	%	102	80-120	09/28/10 21:54	
Dibromofluoromethane (S)	%	101	80-122	09/28/10 21:54	
Toluene-d8 (S)	%	101	80-123	09/28/10 21:54	

LABORATORY CONTROL SAMPLE & LCSD: 42491 42492

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	20	16.1	15.5	80	78	68-131	3	30	
1,1,1-Trichloroethane	ug/L	20	17.6	17.6	88	88	74-137	0	30	
1,1,2,2-Tetrachloroethane	ug/L	20	18.7	18.3	93	91	72-126	2	30	
1,1,2-Trichloroethane	ug/L	20	18.1	17.7	90	88	76-120	2	30	
1,1-Dichloroethane	ug/L	20	17.9	17.6	90	88	76-131	2	30	
1,1-Dichloroethene	ug/L	20	18.6	17.9	93	89	68-150	4	30	
1,1-Dichloropropene	ug/L	20	17.5	17.2	88	86	74-138	2	30	
1,2,3-Trichlorobenzene	ug/L	20	20.8	18.7	104	94	60-136	10	30	
1,2,3-Trichloropropane	ug/L	20	18.3	18.1	92	90	62-135	1	30	
1,2,4-Trichlorobenzene	ug/L	20	16.5	15.7	83	79	62-136	5	30	
1,2,4-Trimethylbenzene	ug/L	20	16.1	15.6	81	78	66-132	3	30	
1,2-Dibromo-3-chloropropane	ug/L	20	16.5	16.3	83	82	60-123	1	30	
1,2-Dibromoethane (EDB)	ug/L	20	16.1	15.8	80	79	73-124	2	30	

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QUALITY CONTROL DATA

Project: Sep GWM (922) 212302370
Pace Project No.: 255046

LABORATORY CONTROL SAMPLE & LCSD: 42491 42492

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,2-Dichlorobenzene	ug/L	20	18.2	17.8	91	89	75-122	2	30	
1,2-Dichloroethane	ug/L	20	17.1	17.3	85	87	78-125	1	30	
1,2-Dichloroethene (Total)	ug/L	40	38.1	37.4	95	93	77-136	2	30	
1,2-Dichloropropane	ug/L	20	17.5	17.4	88	87	76-121	.8	30	
1,3,5-Trimethylbenzene	ug/L	20	15.6	14.9	78	75	69-130	4	30	
1,3-Dichlorobenzene	ug/L	20	17.9	17.7	90	89	75-122	1	30	
1,3-Dichloropropane	ug/L	20	17.7	17.5	88	88	77-120	.7	30	
1,4-Dichlorobenzene	ug/L	20	17.6	17.3	88	86	78-120	2	30	
2,2-Dichloropropane	ug/L	20	18.4	17.9	92	89	46-168	3	30	
2-Butanone (MEK)	ug/L	40	38.7	38.8	97	97	55-146	.1	30	
2-Chlorotoluene	ug/L	20	15.9	15.2	79	76	67-129	4	30	
2-Hexanone	ug/L	40	38.4	39.9	96	100	58-136	4	30	
4-Chlorotoluene	ug/L	20	16.0	15.5	80	78	75-126	3	30	
4-Methyl-2-pentanone (MIBK)	ug/L	40	37.8	38.1	94	95	62-137	.8	30	
Acetone	ug/L	40	55.1	49.9	138	125	30-180	10	30	
Benzene	ug/L	20	17.5	17.2	88	86	76-127	2	30	
Bromobenzene	ug/L	20	15.8	15.5	79	78	74-120	2	30	
Bromochloromethane	ug/L	20	18.6	18.2	93	91	73-132	2	30	
Bromodichloromethane	ug/L	20	15.5	15.6	78	78	74-126	.5	30	
Bromoform	ug/L	20	15.0	15.4	75	77	64-129	2	30	
Bromomethane	ug/L	20	17.5	17.9	87	90	40-164	3	30	
Carbon disulfide	ug/L	20	18.6	18.0	93	90	32-158	4	30	
Carbon tetrachloride	ug/L	20	19.2	19.1	96	96	68-142	.2	30	
Chlorobenzene	ug/L	20	17.0	16.8	85	84	78-121	1	30	
Chloroethane	ug/L	20	17.2	17.1	86	85	58-151	.7	30	
Chloroform	ug/L	20	17.5	17.4	88	87	80-125	.6	30	
Chloromethane	ug/L	20	16.5	16.3	82	82	50-152	.9	30	
cis-1,2-Dichloroethene	ug/L	20	19.7	19.4	98	97	80-135	1	30	
cis-1,3-Dichloropropene	ug/L	20	14.9	14.9	74	74	65-134	.1	30	
Dibromochloromethane	ug/L	20	15.2	15.1	76	75	71-126	.6	30	
Dibromomethane	ug/L	20	18.3	18.4	91	92	78-126	.6	30	
Dichlorodifluoromethane	ug/L	20	15.5	14.7	77	73	18-180	5	30	
Ethylbenzene	ug/L	20	18.7	18.2	93	91	72-125	3	30	
Hexachloro-1,3-butadiene	ug/L	20	18.1	16.5	90	82	60-138	9	30	
Isopropylbenzene (Cumene)	ug/L	20	15.4	15.0	77	75	69-135	3	30	
m&p-Xylene	ug/L	40	31.6	30.8	79	77	73-126	3	30	
Methyl-tert-butyl ether	ug/L	20	20.1	19.8	101	99	58-145	1	30	
Methylene chloride	ug/L	20	15.8	15.7	79	78	65-144	.9	30	
n-Butylbenzene	ug/L	20	15.3	14.7	77	74	66-132	4	30	
n-Propylbenzene	ug/L	20	15.7	14.9	78	75	69-131	5	30	
Naphthalene	ug/L	20	18.4	16.9	92	85	51-142	8	30	
o-Xylene	ug/L	20	16.1	15.8	80	79	73-123	2	30	
p-Isopropyltoluene	ug/L	20	15.5	15.0	77	75	67-133	3	30	
sec-Butylbenzene	ug/L	20	15.6	14.9	78	75	65-136	4	30	
Styrene	ug/L	20	16.1	15.9	80	79	72-128	1	30	
tert-Butylbenzene	ug/L	20	13.9	13.3	70	67	61-133	4	30	
Tetrachloroethene	ug/L	20	12.0	11.6	60	58	40-164	3	30	
Toluene	ug/L	20	17.5	16.7	87	84	69-125	4	30	

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940 South Harney
Seattle, WA 98108
(206)767-5060

QUALITY CONTROL DATA

Project: Sep GWM (922) 212302370
Pace Project No.: 255046

LABORATORY CONTROL SAMPLE & LCSD: 42491 42492

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
trans-1,2-Dichloroethene	ug/L	20	18.4	17.9	92	90	73-139	3	30	
trans-1,3-Dichloropropene	ug/L	20	13.2	13.2	66	66	56-122	.4	30	
Trichloroethene	ug/L	20	17.2	16.8	86	84	74-127	2	30	
Trichlorofluoromethane	ug/L	20	18.2	18.4	91	92	64-154	1	30	
Vinyl chloride	ug/L	20	16.3	16.0	82	80	57-147	2	30	
Xylene (Total)	ug/L	60	47.6	46.5	79	78	74-124	2	30	
1,2-Dichloroethane-d4 (S)	%				93	92	80-124			
4-Bromofluorobenzene (S)	%				103	103	80-120			
Dibromofluoromethane (S)	%				101	99	80-122			
Toluene-d8 (S)	%				102	101	80-123			

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QUALITY CONTROL DATA

Project: Sep GWM (922) 212302370
Pace Project No.: 255046

QC Batch: WET/2280 Analysis Method: SM 2540D
QC Batch Method: SM 2540D Analysis Description: 2540D Total Suspended Solids
Associated Lab Samples: 255046001, 255046002, 255046003, 255046004, 255046005, 255046006, 255046007, 255046008

METHOD BLANK: 42323 Matrix: Water
Associated Lab Samples: 255046001, 255046002, 255046003, 255046004, 255046005, 255046006, 255046007, 255046008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Suspended Solids	ug/L	<2000	2000	09/27/10 16:30	

SAMPLE DUPLICATE: 42324

Parameter	Units	255046001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Suspended Solids	ug/L	66000	76000	14	20	

SAMPLE DUPLICATE: 42325

Parameter	Units	255061001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Suspended Solids	ug/L	727 mg/L	777000	7	20	

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QUALITY CONTROL DATA

Project: Sep GWM (922) 212302370
Pace Project No.: 255046

QC Batch: WETA/1711 Analysis Method: EPA 9060
QC Batch Method: EPA 9060 Analysis Description: 9060 TOC
Associated Lab Samples: 255046001, 255046002, 255046003, 255046004, 255046005, 255046006, 255046007, 255046008

METHOD BLANK: 42476 Matrix: Water
Associated Lab Samples: 255046001, 255046002, 255046003, 255046004, 255046005, 255046006, 255046007, 255046008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mean Total Organic Carbon	mg/L	0.22J	1.0	09/28/10 19:00	

LABORATORY CONTROL SAMPLE: 42477

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mean Total Organic Carbon	mg/L	10	9.1	91	70-119	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 42478 42479

Parameter	Units	255046004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mean Total Organic Carbon	mg/L	4.1	10	10	11.4	11.5	74	74	70-119	.06	20	

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QUALIFIERS

Project: Sep GWM (922) 212302370
Pace Project No.: 255046

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is NELAP accredited. Contact your Pace PM for the current list of accredited analytes.

LABORATORIES

PASI-M	Pace Analytical Services - Minneapolis
PASI-S	Pace Analytical Services - Seattle

BATCH QUALIFIERS

Batch: GCSV/1949

[1] A sample duplicate was not performed for this batch due to insufficient sample volume.

Batch: GCSV/7278

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: GCSV/7279

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

B	Analyte was detected in the associated method blank.
D3	Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.
D6	The relative percent difference (RPD) between the sample and sample duplicate exceeded laboratory control limits.
E	Analyte concentration exceeded the calibration range. The reported result is estimated.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
P8	Analyte was detected in the method blank. All associated samples had concentrations of at least ten times greater than the blank or were below the reporting limit.
S4	Surrogate recovery not evaluated against control limits due to sample dilution.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Sep GWM (922) 212302370
Pace Project No.: 255046

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
255046001	U-16	EPA 8082	GCSV/13886	EPA 8082	GCSV/7279
255046002	U-17	EPA 8082	GCSV/13876	EPA 8082	GCSV/7278
255046003	U-15	EPA 8082	GCSV/13876	EPA 8082	GCSV/7278
255046004	U-2	EPA 8082	GCSV/13876	EPA 8082	GCSV/7278
255046005	U-20	EPA 8082	GCSV/13886	EPA 8082	GCSV/7279
255046006	U-14	EPA 8082	GCSV/13886	EPA 8082	GCSV/7279
255046007	U-21	EPA 8082	GCSV/13876	EPA 8082	GCSV/7278
255046008	U-18	EPA 8082	GCSV/13886	EPA 8082	GCSV/7279
255046001	U-16	EPA 3510	OEXT/2747	NWTPH-Dx	GCSV/1949
255046002	U-17	EPA 3510	OEXT/2747	NWTPH-Dx	GCSV/1949
255046003	U-15	EPA 3510	OEXT/2747	NWTPH-Dx	GCSV/1949
255046004	U-2	EPA 3510	OEXT/2747	NWTPH-Dx	GCSV/1949
255046005	U-20	EPA 3510	OEXT/2747	NWTPH-Dx	GCSV/1949
255046006	U-14	EPA 3510	OEXT/2747	NWTPH-Dx	GCSV/1949
255046007	U-21	EPA 3510	OEXT/2747	NWTPH-Dx	GCSV/1949
255046008	U-18	EPA 3510	OEXT/2747	NWTPH-Dx	GCSV/1949
255046001	U-16	NWTPH-Gx/8021	GCV/7443		
255046002	U-17	NWTPH-Gx/8021	GCV/7443		
255046003	U-15	NWTPH-Gx/8021	GCV/7443		
255046004	U-2	NWTPH-Gx/8021	GCV/7443		
255046005	U-20	NWTPH-Gx	GCV/1915		
255046006	U-14	NWTPH-Gx	GCV/1915		
255046007	U-21	NWTPH-Gx	GCV/1915		
255046008	U-18	NWTPH-Gx	GCV/1915		
255046009	TB	NWTPH-Gx	GCV/1915		
255046001	U-16	EPA 6020	ICPM/22599	EPA 6020	ICPM/9229
255046002	U-17	EPA 6020	ICPM/22687	EPA 6020	ICPM/9241
255046003	U-15	EPA 6020	ICPM/22599	EPA 6020	ICPM/9229
255046004	U-2	EPA 6020	ICPM/22687	EPA 6020	ICPM/9241
255046005	U-20	EPA 6020	ICPM/22599	EPA 6020	ICPM/9229
255046006	U-14	EPA 6020	ICPM/22687	EPA 6020	ICPM/9241
255046007	U-21	EPA 6020	ICPM/22599	EPA 6020	ICPM/9229
255046008	U-18	EPA 6020	ICPM/22687	EPA 6020	ICPM/9241
255046001	U-16	EPA 6020	ICPM/22574	EPA 6020	ICPM/9228
255046002	U-17	EPA 6020	ICPM/22574	EPA 6020	ICPM/9228
255046003	U-15	EPA 6020	ICPM/22574	EPA 6020	ICPM/9228
255046004	U-2	EPA 6020	ICPM/22574	EPA 6020	ICPM/9228
255046005	U-20	EPA 6020	ICPM/22574	EPA 6020	ICPM/9228
255046006	U-14	EPA 6020	ICPM/22574	EPA 6020	ICPM/9228
255046007	U-21	EPA 6020	ICPM/22574	EPA 6020	ICPM/9228
255046008	U-18	EPA 6020	ICPM/22574	EPA 6020	ICPM/9228

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Sep GWM (922) 212302370
Pace Project No.: 255046

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
255046001	U-16	EPA 7470	MERP/1277	EPA 7470	MERC/1292
255046002	U-17	EPA 7470	MERP/1277	EPA 7470	MERC/1292
255046003	U-15	EPA 7470	MERP/1277	EPA 7470	MERC/1292
255046004	U-2	EPA 7470	MERP/1277	EPA 7470	MERC/1292
255046005	U-20	EPA 7470	MERP/1277	EPA 7470	MERC/1292
255046006	U-14	EPA 7470	MERP/1277	EPA 7470	MERC/1292
255046007	U-21	EPA 7470	MERP/1277	EPA 7470	MERC/1292
255046008	U-18	EPA 7470	MERP/1277	EPA 7470	MERC/1292
255046001	U-16	EPA 7470	MERP/1278	EPA 7470	MERC/1293
255046002	U-17	EPA 7470	MERP/1278	EPA 7470	MERC/1293
255046003	U-15	EPA 7470	MERP/1278	EPA 7470	MERC/1293
255046004	U-2	EPA 7470	MERP/1278	EPA 7470	MERC/1293
255046005	U-20	EPA 7470	MERP/1278	EPA 7470	MERC/1293
255046006	U-14	EPA 7470	MERP/1278	EPA 7470	MERC/1293
255046007	U-21	EPA 7470	MERP/1278	EPA 7470	MERC/1293
255046008	U-18	EPA 7470	MERP/1278	EPA 7470	MERC/1293
255046001	U-16	EPA 3510	OEXT/2720	EPA 8270 by SIM	MSSV/1394
255046002	U-17	EPA 3510	OEXT/2720	EPA 8270 by SIM	MSSV/1394
255046003	U-15	EPA 3510	OEXT/2720	EPA 8270 by SIM	MSSV/1394
255046004	U-2	EPA 3510	OEXT/2720	EPA 8270 by SIM	MSSV/1394
255046005	U-20	EPA 3510	OEXT/2720	EPA 8270 by SIM	MSSV/1394
255046006	U-14	EPA 3510	OEXT/2720	EPA 8270 by SIM	MSSV/1394
255046007	U-21	EPA 3510	OEXT/2720	EPA 8270 by SIM	MSSV/1394
255046008	U-18	EPA 3510	OEXT/2720	EPA 8270 by SIM	MSSV/1394
255046001	U-16	EPA 5030B/8260	MSV/3186		
255046002	U-17	EPA 5030B/8260	MSV/3186		
255046003	U-15	EPA 5030B/8260	MSV/3186		
255046004	U-2	EPA 5030B/8260	MSV/3186		
255046005	U-20	EPA 5030B/8260	MSV/3186		
255046006	U-14	EPA 5030B/8260	MSV/3186		
255046007	U-21	EPA 5030B/8260	MSV/3186		
255046008	U-18	EPA 5030B/8260	MSV/3186		
255046009	TB	EPA 5030B/8260	MSV/3186		
255046001	U-16	SM 2540D	WET/2280		
255046002	U-17	SM 2540D	WET/2280		
255046003	U-15	SM 2540D	WET/2280		
255046004	U-2	SM 2540D	WET/2280		
255046005	U-20	SM 2540D	WET/2280		
255046006	U-14	SM 2540D	WET/2280		
255046007	U-21	SM 2540D	WET/2280		
255046008	U-18	SM 2540D	WET/2280		
255046001	U-16	EPA 9060	WETA/1711		
255046002	U-17	EPA 9060	WETA/1711		
255046003	U-15	EPA 9060	WETA/1711		
255046004	U-2	EPA 9060	WETA/1711		
255046005	U-20	EPA 9060	WETA/1711		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Sep GWM (922) 212302370
Pace Project No.: 255046

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
255046006	**U-14**	EPA 9060	WETA/1711		
255046007	**U-21**	EPA 9060	WETA/1711		
255046008	**U-18**	EPA 9060	WETA/1711		

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TestAmerica
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PORTLAND, OR 9405 S.W. NIMBUS AVENUE
BEAVERTON, OR 97008-7132
ph: (503) 906.9200 fax: (503) 906.9210

ORELAP#: OR100021

October 11, 2010

Tim Browning
Delta Consultants - Portland
4640 SW Macadam Avenue, Suite 110
Portland, OR 97239

RE: Kinder Morgan - Willbridge

Enclosed are the results of analyses for samples received by the laboratory on 09/21/10 14:30. The following list is a summary of the Work Orders contained in this report, generated on 10/11/10 16:30.

If you have any questions concerning this report, please feel free to contact me.

Work Order	Project	ProjectNumber
PTI0693	Kinder Morgan - Willbridge	KMWB 10 01

TestAmerica Portland

Estella K Rieben

Estella Rieben, Project Manager

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BEAVERTON, OR 97008-7132
ph: (503) 906.9200 fax: (503) 906.9210

Delta Consultants - Portland	Project Name:	**Kinder Morgan - Willbridge**	
4640 SW Macadam Avenue, Suite 110	Project Number:	KMWB 10 01	Report Created:
Portland, OR 97239	Project Manager:	Tim Browning	10/11/10 16:30

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW 8	PTI0693-01	Water	09/20/10 14:55	09/21/10 14:30
MW 25	PTI0693-02	Water	09/20/10 15:25	09/21/10 14:30
MW 26	PTI0693-03	Water	09/20/10 15:00	09/21/10 14:30
MW 33	PTI0693-04	Water	09/20/10 12:45	09/21/10 14:30
MW 34	PTI0693-05	Water	09/20/10 12:15	09/21/10 14:30
MW 36	PTI0693-06	Water	09/20/10 11:30	09/21/10 14:30
MW 37	PTI0693-07	Water	09/20/10 13:15	09/21/10 14:30
MW 40	PTI0693-08	Water	09/20/10 11:55	09/21/10 14:30
Dup 1	PTI0693-09	Water	09/20/10 00:00	09/21/10 14:30
TB	PTI0693-10	Water	09/14/10 00:00	09/21/10 14:30

TestAmerica Portland

Estella K Rieben

Estella Rieben, Project Manager

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BEAVERTON, OR 97008-7132
ph: (503) 906.9200 fax: (503) 906.9210

Delta Consultants - Portland	Project Name:	**Kinder Morgan - Willbridge**	
4640 SW Macadam Avenue, Suite 110	Project Number:	KMWB 10 01	Report Created:
Portland, OR 97239	Project Manager:	Tim Browning	10/11/10 16:30

Analytical Case Narrative

TestAmerica - Portland, OR

PTI0693

10/11/10:

Sample extraction/analysis note for 8270 PAH-SIM:

The sample volume for the Low Level 8270 PAH-SIMs is two 1L ambers, unpreserved. Due to a bottle prep error at the lab level, the client did not receive an adequate number of unpreserved amber 1L bottles. Therefore, the volume available for analysis was one 1L. The samples were prepared and analyzed using the lesser volume. The data included in this report is reported at an MRL less than the standard 8270 PAH-SIM method and higher than the Low Level 8270 PAH-SIM typically used for JSC sample data.

TestAmerica Portland

Estella K Rieben

Estella Rieben, Project Manager

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PORTLAND, OR 9405 S.W. NIMBUS AVENUE
BEAVERTON, OR 97008-7132
ph: (503) 906.9200 fax: (503) 906.9210

Delta Consultants - Portland	Project Name:	**Kinder Morgan - Willbridge**	
4640 SW Macadam Avenue, Suite 110	Project Number:	KMWB 10 01	Report Created:
Portland, OR 97239	Project Manager:	Tim Browning	10/11/10 16:30

Total Metals per EPA 200 Series Methods

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PTI0693-01 (MW 8)			Water			Sampled: 09/20/10 14:55				
Arsenic	EPA 200.8	**0.00350**	-----	0.00100	mg/l	1x	10I0698	09/23/10 08:34	09/24/10 18:38	
Barium	"	**0.0155**	-----	0.00100	"	"	"	"	"	
Cadmium	"	ND	-----	0.00100	"	"	"	"	09/26/10 18:46	
Chromium	"	ND	-----	0.00200	"	"	"	"	09/24/10 18:38	
Copper	"	ND	-----	0.00200	"	"	"	"	"	
Lead	"	ND	-----	0.00100	"	"	"	"	"	
Manganese	"	**0.901**	-----	0.00200	"	"	"	"	"	
Selenium	"	ND	-----	0.00100	"	"	"	"	09/26/10 18:46	
Silver	"	ND	-----	0.00100	"	"	"	"	09/24/10 18:38	
Zinc	"	ND	-----	0.0100	"	"	"	"	"	
PTI0693-02 (MW 25)			Water			Sampled: 09/20/10 15:25				
Arsenic	EPA 200.8	**0.0709**	-----	0.00500	mg/l	5x	10I0698	09/23/10 08:34	09/24/10 18:42	
Barium	"	**0.187**	-----	0.00500	"	"	"	"	"	
Cadmium	"	ND	-----	0.00500	"	"	"	"	09/26/10 18:50	**RL1**
Chromium	"	**0.0106**	-----	0.0100	"	"	"	"	09/24/10 18:42	
Copper	"	**0.0206**	-----	0.0100	"	"	"	"	"	
Lead	"	**0.0154**	-----	0.00500	"	"	"	"	"	
Manganese	"	**4.98**	-----	0.0100	"	"	"	"	"	
Selenium	"	ND	-----	0.00500	"	"	"	"	09/26/10 18:50	**RL1**
Silver	"	ND	-----	0.00500	"	"	"	"	09/24/10 18:42	**RL1**
Zinc	"	ND	-----	0.0500	"	"	"	"	"	**RL1**
PTI0693-03 (MW 26)			Water			Sampled: 09/20/10 15:00				
Arsenic	EPA 200.8	**0.0444**	-----	0.00500	mg/l	5x	10I0698	09/23/10 08:34	09/24/10 18:46	
Barium	"	**0.151**	-----	0.00500	"	"	"	"	"	
Cadmium	"	ND	-----	0.00500	"	"	"	"	09/26/10 18:54	**RL1**
Chromium	"	ND	-----	0.0100	"	"	"	"	09/24/10 18:46	**RL1**
Copper	"	ND	-----	0.0100	"	"	"	"	"	**RL1**
Lead	"	**0.0111**	-----	0.00500	"	"	"	"	"	
Manganese	"	**4.41**	-----	0.0100	"	"	"	"	"	
Selenium	"	ND	-----	0.00500	"	"	"	"	09/26/10 18:54	**RL1**
Silver	"	ND	-----	0.00500	"	"	"	"	09/24/10 18:46	**RL1**
Zinc	"	ND	-----	0.0500	"	"	"	"	"	**RL1**

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Estella K Rieben

Estella Rieben, Project Manager

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PORTLAND, OR 9405 S.W. NIMBUS AVENUE
BEAVERTON, OR 97008-7132
ph: (503) 906.9200 fax: (503) 906.9210

Delta Consultants - Portland	Project Name:	**Kinder Morgan - Willbridge**	
4640 SW Macadam Avenue, Suite 110	Project Number:	KMWB 10 01	Report Created:
Portland, OR 97239	Project Manager:	Tim Browning	10/11/10 16:30

Total Metals per EPA 200 Series Methods

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PTI0693-04 (MW 33)			Water			Sampled: 09/20/10 12:45				
Arsenic	EPA 200.8	**0.0203**	-----	0.00100	mg/l	1x	10I0698	09/23/10 08:34	09/24/10 18:50	
Barium	"	**0.259**	-----	0.00100	"	"	"	"	"	
Cadmium	"	ND	-----	0.00200	"	2x	"	"	09/26/10 18:58	
Chromium	"	ND	-----	0.00200	"	1x	"	"	09/24/10 18:50	
Copper	"	**0.00251**	-----	0.00200	"	"	"	"	"	
Lead	"	**0.00111**	-----	0.00100	"	"	"	"	"	
Manganese	"	**1.47**	-----	0.00400	"	2x	"	"	09/26/10 18:58	
Selenium	"	ND	-----	0.00200	"	"	"	"	"	
Silver	"	ND	-----	0.00100	"	1x	"	"	09/24/10 18:50	
Zinc	"	ND	-----	0.0100	"	"	"	"	"	
PTI0693-05 (MW 34)			Water			Sampled: 09/20/10 12:15				
Arsenic	EPA 200.8	**0.00490**	-----	0.00100	mg/l	1x	10I0698	09/23/10 08:34	09/24/10 18:53	
Barium	"	**0.0450**	-----	0.00100	"	"	"	"	"	
Cadmium	"	ND	-----	0.00200	"	2x	"	"	09/26/10 19:02	
Chromium	"	ND	-----	0.00200	"	1x	"	"	09/24/10 18:53	
Copper	"	ND	-----	0.00200	"	"	"	"	"	
Lead	"	ND	-----	0.00100	"	"	"	"	"	
Manganese	"	**1.25**	-----	0.00400	"	2x	"	"	09/26/10 19:02	
Selenium	"	ND	-----	0.00200	"	"	"	"	"	
Silver	"	ND	-----	0.00100	"	1x	"	"	09/24/10 18:53	
Zinc	"	ND	-----	0.0100	"	"	"	"	"	
PTI0693-06 (MW 36)			Water			Sampled: 09/20/10 11:30				
Arsenic	EPA 200.8	**0.0380**	-----	0.00100	mg/l	1x	10I0702	09/23/10 08:43	09/27/10 15:18	
Barium	"	**0.144**	-----	0.00100	"	"	"	"	"	
Cadmium	"	ND	-----	0.00100	"	"	"	"	"	
Chromium	"	ND	-----	0.00200	"	"	"	"	"	
Copper	"	**0.00287**	-----	0.00200	"	"	"	"	"	
Lead	"	**0.00134**	-----	0.00100	"	"	"	"	"	
Manganese	"	**7.55**	-----	0.0200	"	10x	"	"	09/27/10 19:24	
Selenium	"	ND	-----	0.0100	"	"	"	"	"	
Silver	"	ND	-----	0.00100	"	1x	"	"	09/27/10 15:18	
Zinc	"	ND	-----	0.0100	"	"	"	"	"	

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Estella K Rieben

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4640 SW Macadam Avenue, Suite 110	Project Number:	KMWB 10 01	Report Created:
Portland, OR 97239	Project Manager:	Tim Browning	10/11/10 16:30

Total Metals per EPA 200 Series Methods

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PTI0693-07 (MW 37)			Water			Sampled: 09/20/10 13:15				
Arsenic	EPA 200.8	**0.0157**	-----	0.00100	mg/l	1x	10I0702	09/23/10 08:43	09/27/10 15:22	
Barium	"	**0.0221**	-----	0.00100	"	"	"	"	"	
Cadmium	"	ND	-----	0.00100	"	"	"	"	"	
Chromium	"	ND	-----	0.00200	"	"	"	"	"	
Copper	"	ND	-----	0.00200	"	"	"	"	"	
Lead	"	**0.00311**	-----	0.00100	"	"	"	"	"	
Manganese	"	**2.07**	-----	0.0200	"	10x	"	"	09/27/10 19:28	
Selenium	"	ND	-----	0.0100	"	"	"	"	"	
Silver	"	ND	-----	0.00100	"	1x	"	"	09/27/10 15:22	
Zinc	"	ND	-----	0.0100	"	"	"	"	"	
PTI0693-08 (MW 40)			Water			Sampled: 09/20/10 11:55				
Arsenic	EPA 200.8	**0.0194**	-----	0.00100	mg/l	1x	10I0702	09/23/10 08:43	09/27/10 15:26	
Barium	"	**0.0887**	-----	0.00100	"	"	"	"	"	
Cadmium	"	ND	-----	0.00100	"	"	"	"	"	
Chromium	"	ND	-----	0.00200	"	"	"	"	"	
Copper	"	ND	-----	0.00200	"	"	"	"	"	
Lead	"	ND	-----	0.00100	"	"	"	"	"	
Manganese	"	**3.60**	-----	0.0200	"	10x	"	"	09/27/10 19:32	
Selenium	"	ND	-----	0.0100	"	"	"	"	"	
Silver	"	ND	-----	0.00100	"	1x	"	"	09/27/10 15:26	
Zinc	"	ND	-----	0.0100	"	"	"	"	"	
PTI0693-09 (Dup 1)			Water			Sampled: 09/20/10 00:00				
Arsenic	EPA 200.8	**0.0160**	-----	0.00100	mg/l	1x	10I0702	09/23/10 08:43	09/27/10 15:29	
Barium	"	**0.0225**	-----	0.00100	"	"	"	"	"	
Cadmium	"	ND	-----	0.00100	"	"	"	"	"	
Chromium	"	ND	-----	0.00200	"	"	"	"	"	
Copper	"	ND	-----	0.00200	"	"	"	"	"	
Lead	"	**0.00256**	-----	0.00100	"	"	"	"	"	
Manganese	"	**2.09**	-----	0.0200	"	10x	"	"	09/27/10 19:36	
Selenium	"	ND	-----	0.0100	"	"	"	"	"	
Silver	"	ND	-----	0.00100	"	1x	"	"	09/27/10 15:29	
Zinc	"	ND	-----	0.0100	"	"	"	"	"	

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Estella K Rieben

Estella Rieben, Project Manager

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4640 SW Macadam Avenue, Suite 110	Project Number:	KMWB 10 01	Report Created:
Portland, OR 97239	Project Manager:	Tim Browning	10/11/10 16:30

Mercury per EPA Method 1631E

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Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PTI0693-04 (MW 33)			**Water**			**Sampled: 09/20/10 12:45**				
Mercury	EPA 1631E	**0.0301**	-----	0.00250	ug/l	5x	10I0715	09/23/10 12:40	09/24/10 20:30	
PTI0693-05 (MW 34)			**Water**			**Sampled: 09/20/10 12:15**				
Mercury	EPA 1631E	**0.00590**	-----	0.000500	ug/l	1x	10I0715	09/23/10 12:40	09/24/10 19:11	
PTI0693-06 (MW 36)			**Water**			**Sampled: 09/20/10 11:30**				
Mercury	EPA 1631E	**0.00737**	-----	0.000500	ug/l	1x	10I0715	09/23/10 12:40	09/24/10 19:54	
PTI0693-07 (MW 37)			**Water**			**Sampled: 09/20/10 13:15**				
Mercury	EPA 1631E	**0.00171**	-----	0.000500	ug/l	1x	10I0715	09/23/10 12:40	09/24/10 20:03	
PTI0693-08 (MW 40)			**Water**			**Sampled: 09/20/10 11:55**				
Mercury	EPA 1631E	**0.00166**	-----	0.000500	ug/l	1x	10I0715	09/23/10 12:40	09/24/10 20:12	
PTI0693-09 (Dup 1)			**Water**			**Sampled: 09/20/10 00:00**				
Mercury	EPA 1631E	**0.00266**	-----	0.000500	ug/l	1x	10I0715	09/23/10 12:40	09/24/10 20:21	

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Delta Consultants - Portland	Project Name:	**Kinder Morgan - Willbridge**	
4640 SW Macadam Avenue, Suite 110	Project Number:	KMWB 10 01	Report Created:
Portland, OR 97239	Project Manager:	Tim Browning	10/11/10 16:30

Total Mercury per EPA Method 7470A

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PTI0693-01 (MW 8)			**Water**			**Sampled: 09/20/10 14:55**				
Mercury	EPA 7470A	ND	-----	0.000200	mg/l	1x	10I0907	09/29/10 17:44	09/30/10 17:37	
PTI0693-02 (MW 25)			**Water**			**Sampled: 09/20/10 15:25**				
Mercury	EPA 7470A	ND	-----	0.000200	mg/l	1x	10I0907	09/29/10 17:44	09/30/10 17:39	
PTI0693-03 (MW 26)			**Water**			**Sampled: 09/20/10 15:00**				
Mercury	EPA 7470A	ND	-----	0.000200	mg/l	1x	10I0907	09/29/10 17:44	09/30/10 17:42	

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Delta Consultants - Portland	Project Name:	**Kinder Morgan - Willbridge**	
4640 SW Macadam Avenue, Suite 110	Project Number:	KMWB 10 01	Report Created:
Portland, OR 97239	Project Manager:	Tim Browning	10/11/10 16:30

Selected Volatile Organic Compounds (Including BTEX) per EPA Method 8260B

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PTI0693-01 (MW 8)			**Water**			**Sampled: 09/20/10 14:55**				
Methyl tert-butyl ether	EPA 8260B	ND	-----	1.00	ug/l	1x	10I0701	09/23/10 06:41	09/23/10 18:12	
Benzene	"	**14.5**	-----	0.200	"	"	"	"	"	
Toluene	"	ND	-----	1.00	"	"	"	"	"	
Ethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
m,p-Xylene	"	ND	-----	2.00	"	"	"	"	"	
o-Xylene	"	ND	-----	1.00	"	"	"	"	"	
Surrogate(s):	*Dibromofluoromethane*			*98.8%*		*80 - 120%*	"			"
	1,2-DCA-d4			*99.8%*		*80 - 120%*	"			"
	Toluene-d8			*102%*		*80 - 120%*	"			"
	4-BFB			*97.6%*		*80 - 120%*	"			"
PTI0693-02 (MW 25)			**Water**			**Sampled: 09/20/10 15:25**				
Methyl tert-butyl ether	EPA 8260B	ND	-----	1.00	ug/l	1x	10I0701	09/23/10 06:41	09/23/10 17:45	
Benzene	"	ND	-----	0.200	"	"	"	"	"	
Toluene	"	ND	-----	1.00	"	"	"	"	"	
Ethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
m,p-Xylene	"	ND	-----	2.00	"	"	"	"	"	
o-Xylene	"	ND	-----	1.00	"	"	"	"	"	
Surrogate(s):	*Dibromofluoromethane*			*102%*		*80 - 120%*	"			"
	1,2-DCA-d4			*105%*		*80 - 120%*	"			"
	Toluene-d8			*103%*		*80 - 120%*	"			"
	4-BFB			*102%*		*80 - 120%*	"			"
PTI0693-03 (MW 26)			**Water**			**Sampled: 09/20/10 15:00**				
Methyl tert-butyl ether	EPA 8260B	ND	-----	1.00	ug/l	1x	10I0701	09/23/10 06:41	09/23/10 17:18	
Benzene	"	ND	-----	0.200	"	"	"	"	"	
Toluene	"	ND	-----	1.00	"	"	"	"	"	
Ethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
m,p-Xylene	"	ND	-----	2.00	"	"	"	"	"	
o-Xylene	"	ND	-----	1.00	"	"	"	"	"	
Surrogate(s):	*Dibromofluoromethane*			*106%*		*80 - 120%*	"			"
	1,2-DCA-d4			*108%*		*80 - 120%*	"			"
	Toluene-d8			*107%*		*80 - 120%*	"			"
	4-BFB			*97.8%*		*80 - 120%*	"			"

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4640 SW Macadam Avenue, Suite 110	Project Number:	KMWB 10 01	Report Created:
Portland, OR 97239	Project Manager:	Tim Browning	10/11/10 16:30

Selected Volatile Organic Compounds (Including BTEX) per EPA Method 8260B

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PTI0693-04 (MW 33)			**Water**			**Sampled: 09/20/10 12:45**				
Methyl tert-butyl ether	EPA 8260B	ND	-----	1.00	ug/l	1x	10I0701	09/23/10 06:41	09/23/10 16:51	
Benzene	"	ND	-----	0.200	"	"	"	"	"	
Toluene	"	ND	-----	1.00	"	"	"	"	"	
Ethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
m,p-Xylene	"	ND	-----	2.00	"	"	"	"	"	
o-Xylene	"	ND	-----	1.00	"	"	"	"	"	
Surrogate(s): *Dibromofluoromethane*				*104%*		*80 - 120%*	"			"
1,2-DCA-d4				*106%*		*80 - 120%*	"			"
Toluene-d8				*104%*		*80 - 120%*	"			"
4-BFB				*99.0%*		*80 - 120%*	"			"
PTI0693-05 (MW 34)			**Water**			**Sampled: 09/20/10 12:15**				
Methyl tert-butyl ether	EPA 8260B	ND	-----	1.00	ug/l	1x	10I0701	09/23/10 06:41	09/23/10 16:24	
Benzene	"	ND	-----	0.200	"	"	"	"	"	
Toluene	"	ND	-----	1.00	"	"	"	"	"	
Ethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
m,p-Xylene	"	ND	-----	2.00	"	"	"	"	"	
o-Xylene	"	ND	-----	1.00	"	"	"	"	"	
Surrogate(s): *Dibromofluoromethane*				*97.9%*		*80 - 120%*	"			"
1,2-DCA-d4				*102%*		*80 - 120%*	"			"
Toluene-d8				*101%*		*80 - 120%*	"			"
4-BFB				*98.4%*		*80 - 120%*	"			"
PTI0693-06 (MW 36)			**Water**			**Sampled: 09/20/10 11:30**				
Methyl tert-butyl ether	EPA 8260B	ND	-----	1.00	ug/l	1x	10I0701	09/23/10 06:41	09/23/10 15:57	
Benzene	"	ND	-----	0.200	"	"	"	"	"	
Toluene	"	ND	-----	1.00	"	"	"	"	"	
Ethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
m,p-Xylene	"	ND	-----	2.00	"	"	"	"	"	
o-Xylene	"	ND	-----	1.00	"	"	"	"	"	
Surrogate(s): *Dibromofluoromethane*				*99.0%*		*80 - 120%*	"			"
1,2-DCA-d4				*100%*		*80 - 120%*	"			"
Toluene-d8				*102%*		*80 - 120%*	"			"
4-BFB				*100%*		*80 - 120%*	"			"

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Portland, OR 97239	Project Manager:	Tim Browning	10/11/10 16:30

Selected Volatile Organic Compounds (Including BTEX) per EPA Method 8260B

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PTI0693-07 (MW 37)		**Water**				**Sampled: 09/20/10 13:15**				
Methyl tert-butyl ether	EPA 8260B	ND	-----	1.00	ug/l	1x	10I0701	09/23/10 06:41	09/23/10 15:30	
Benzene	"	ND	-----	0.200	"	"	"	"	"	
Toluene	"	ND	-----	1.00	"	"	"	"	"	
Ethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
m,p-Xylene	"	ND	-----	2.00	"	"	"	"	"	
o-Xylene	"	ND	-----	1.00	"	"	"	"	"	
Surrogate(s): *Dibromofluoromethane*				*99.8%*		*80 - 120%*	"			"
1,2-DCA-d4				*103%*		*80 - 120%*	"			"
Toluene-d8				*102%*		*80 - 120%*	"			"
4-BFB				*99.6%*		*80 - 120%*	"			"
PTI0693-08 (MW 40)		**Water**				**Sampled: 09/20/10 11:55**				
Methyl tert-butyl ether	EPA 8260B	ND	-----	1.00	ug/l	1x	10I0701	09/23/10 06:41	09/23/10 15:03	
Benzene	"	ND	-----	0.200	"	"	"	"	"	
Toluene	"	ND	-----	1.00	"	"	"	"	"	
Ethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
m,p-Xylene	"	ND	-----	2.00	"	"	"	"	"	
o-Xylene	"	ND	-----	1.00	"	"	"	"	"	
Surrogate(s): *Dibromofluoromethane*				*104%*		*80 - 120%*	"			"
1,2-DCA-d4				*108%*		*80 - 120%*	"			"
Toluene-d8				*105%*		*80 - 120%*	"			"
4-BFB				*103%*		*80 - 120%*	"			"
PTI0693-09 (Dup 1)		**Water**				**Sampled: 09/20/10 00:00**				
Methyl tert-butyl ether	EPA 8260B	ND	-----	1.00	ug/l	1x	10I0701	09/23/10 06:41	09/23/10 14:36	
Benzene	"	ND	-----	0.200	"	"	"	"	"	
Toluene	"	ND	-----	1.00	"	"	"	"	"	
Ethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
m,p-Xylene	"	ND	-----	2.00	"	"	"	"	"	
o-Xylene	"	ND	-----	1.00	"	"	"	"	"	
Surrogate(s): *Dibromofluoromethane*				*99.2%*		*80 - 120%*	"			"
1,2-DCA-d4				*102%*		*80 - 120%*	"			"
Toluene-d8				*99.6%*		*80 - 120%*	"			"
4-BFB				*96.9%*		*80 - 120%*	"			"

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Estella K Rieben

Estella Rieben, Project Manager

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PORTLAND, OR 9405 S.W. NIMBUS AVENUE
BEAVERTON, OR 97008-7132
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Delta Consultants - Portland	Project Name:	**Kinder Morgan - Willbridge**	
4640 SW Macadam Avenue, Suite 110	Project Number:	KMWB 10 01	Report Created:
Portland, OR 97239	Project Manager:	Tim Browning	10/11/10 16:30

Selected Volatile Organic Compounds (Including BTEX) per EPA Method 8260B

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PTI0693-10 (TB)			**Water**			**Sampled: 09/14/10 00:00**				
Methyl tert-butyl ether	EPA 8260B	ND	-----	1.00	ug/l	1x	10I0701	09/23/10 06:41	09/23/10 14:09	
Benzene	"	ND	-----	0.200	"	"	"	"	"	
Toluene	"	ND	-----	1.00	"	"	"	"	"	
Ethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
m,p-Xylene	"	ND	-----	2.00	"	"	"	"	"	
o-Xylene	"	ND	-----	1.00	"	"	"	"	"	
Surrogate(s): *Dibromofluoromethane*				*99.4%*		*80 - 120%*	"			"
1,2-DCA-d4				*104%*		*80 - 120%*	"			"
Toluene-d8				*102%*		*80 - 120%*	"			"
4-BFB				*99.5%*		*80 - 120%*	"			"

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Delta Consultants - Portland	Project Name:	**Kinder Morgan - Willbridge**	
4640 SW Macadam Avenue, Suite 110	Project Number:	KMWB 10 01	Report Created:
Portland, OR 97239	Project Manager:	Tim Browning	10/11/10 16:30

Polynuclear Aromatic Compounds per EPA 8270M-SIM

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PTI0693-01 (MW 8)			**Water**			**Sampled: 09/20/10 14:55**				**N1**
2-Methylnaphthalene	EPA 8270m	ND	-----	0.190	ug/l	1x	10I0722	09/23/10 17:35	10/08/10 15:42	
Acenaphthene	"	ND	-----	0.190	"	"	"	"	"	
Acenaphthylene	"	ND	-----	0.190	"	"	"	"	"	
Anthracene	"	ND	-----	0.190	"	"	"	"	"	
Benzo (a) anthracene	"	ND	-----	0.00952	"	"	"	"	"	
Benzo (a) pyrene	"	ND	-----	0.00952	"	"	"	"	"	
Benzo (b) fluoranthene	"	ND	-----	0.00952	"	"	"	"	"	
Benzo (ghi) perylene	"	ND	-----	0.190	"	"	"	"	"	
Benzo (k) fluoranthene	"	ND	-----	0.00952	"	"	"	"	"	
Chrysene	"	ND	-----	0.00952	"	"	"	"	"	
Dibenzo (a,h) anthracene	"	ND	-----	0.00952	"	"	"	"	"	
Fluoranthene	"	ND	-----	0.190	"	"	"	"	"	
Fluorene	"	ND	-----	0.190	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	"	ND	-----	0.00952	"	"	"	"	"	
Naphthalene	"	ND	-----	0.190	"	"	"	"	"	
Phenanthrene	"	ND	-----	0.190	"	"	"	"	"	
Pyrene	"	ND	-----	0.190	"	"	"	"	"	
Surrogate(s):	*Fluorene-d10*			*78.0%*		*25 - 125%*	"			"
	Pyrene-d10			*68.1%*		*23 - 150%*	"			"
	Benzo (a) pyrene-d12			*57.3%*		*10 - 125%*	"			"
PTI0693-02 (MW 25)			**Water**			**Sampled: 09/20/10 15:25**				**N1**
2-Methylnaphthalene	EPA 8270m	ND	-----	0.190	ug/l	1x	10I0722	09/23/10 17:35	10/06/10 12:11	
Acenaphthene	"	**0.366**	-----	0.190	"	"	"	"	"	
Acenaphthylene	"	ND	-----	0.190	"	"	"	"	"	
Anthracene	"	ND	-----	0.190	"	"	"	"	"	
Benzo (a) anthracene	"	ND	-----	0.00952	"	"	"	"	"	
Benzo (a) pyrene	"	ND	-----	0.00952	"	"	"	"	"	
Benzo (b) fluoranthene	"	ND	-----	0.00952	"	"	"	"	"	
Benzo (ghi) perylene	"	ND	-----	0.190	"	"	"	"	"	
Benzo (k) fluoranthene	"	ND	-----	0.00952	"	"	"	"	"	
Chrysene	"	ND	-----	0.00952	"	"	"	"	"	
Dibenzo (a,h) anthracene	"	ND	-----	0.00952	"	"	"	"	"	
Fluoranthene	"	ND	-----	0.190	"	"	"	"	"	
Fluorene	"	ND	-----	0.190	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	"	ND	-----	0.00952	"	"	"	"	"	

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Estella Rieben, Project Manager

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Delta Consultants - Portland	Project Name:	**Kinder Morgan - Willbridge**	
4640 SW Macadam Avenue, Suite 110	Project Number:	KMWB 10 01	Report Created:
Portland, OR 97239	Project Manager:	Tim Browning	10/11/10 16:30

Polynuclear Aromatic Compounds per EPA 8270M-SIM

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PTI0693-02 (MW 25)			**Water**			**Sampled: 09/20/10 15:25**				**N1**
Naphthalene	EPA 8270m	ND	-----	0.286	ug/l	1x	10I0722	09/23/10 17:35	10/06/10 12:11	**RL1**
Phenanthrene	"	ND	-----	0.190	"	"	"	"	"	
Pyrene	"	ND	-----	0.190	"	"	"	"	"	
Surrogate(s): Fluorene-d10				*75.1%*		*25 - 125 %*	"		"	
Pyrene-d10				*74.3%*		*23 - 150 %*	"		"	
Benzo (a) pyrene-d12				*69.7%*		*10 - 125 %*	"		"	
PTI0693-03 (MW 26)			**Water**			**Sampled: 09/20/10 15:00**				**N1**
2-Methylnaphthalene	EPA 8270m	**0.291**	-----	0.190	ug/l	1x	10I0722	09/23/10 17:35	10/06/10 09:54	
Acenaphthene	"	**1.41**	-----	0.190	"	"	"	"	"	
Acenaphthylene	"	ND	-----	0.190	"	"	"	"	"	
Anthracene	"	ND	-----	0.190	"	"	"	"	"	
Benzo (a) anthracene	"	**0.0561**	-----	0.00952	"	"	"	"	"	
Benzo (a) pyrene	"	**0.0222**	-----	0.00952	"	"	"	"	"	
Benzo (b) fluoranthene	"	**0.0161**	-----	0.00952	"	"	"	"	"	
Benzo (ghi) perylene	"	ND	-----	0.190	"	"	"	"	"	
Benzo (k) fluoranthene	"	**0.0102**	-----	0.00952	"	"	"	"	"	
Chrysene	"	**0.0727**	-----	0.00952	"	"	"	"	"	
Dibenzo (a,h) anthracene	"	**0.0106**	-----	0.00952	"	"	"	"	"	
Fluoranthene	"	**0.507**	-----	0.190	"	"	"	"	"	
Fluorene	"	**1.20**	-----	0.190	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	"	**0.0156**	-----	0.00952	"	"	"	"	"	
Naphthalene	"	ND	-----	0.524	"	"	"	"	"	**RL1**
Phenanthrene	"	**1.20**	-----	0.190	"	"	"	"	"	
Pyrene	"	**0.335**	-----	0.190	"	"	"	"	"	
Surrogate(s): Fluorene-d10				*74.3%*		*25 - 125 %*	"		"	
Pyrene-d10				*71.5%*		*23 - 150 %*	"		"	
Benzo (a) pyrene-d12				*67.0%*		*10 - 125 %*	"		"	
PTI0693-04 (MW 33)			**Water**			**Sampled: 09/20/10 12:45**				**N1**
2-Methylnaphthalene	EPA 8270m	ND	-----	0.190	ug/l	1x	10I0722	09/23/10 17:35	10/06/10 12:39	
Acenaphthene	"	ND	-----	0.190	"	"	"	"	"	
Acenaphthylene	"	ND	-----	0.190	"	"	"	"	"	
Anthracene	"	ND	-----	0.190	"	"	"	"	"	
Benzo (a) anthracene	"	ND	-----	0.00952	"	"	"	"	"	
Benzo (a) pyrene	"	ND	-----	0.00952	"	"	"	"	"	

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Estella Rieben, Project Manager

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Delta Consultants - Portland	Project Name:	**Kinder Morgan - Willbridge**	
4640 SW Macadam Avenue, Suite 110	Project Number:	KMWB 10 01	Report Created:
Portland, OR 97239	Project Manager:	Tim Browning	10/11/10 16:30

Polynuclear Aromatic Compounds per EPA 8270M-SIM

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PTI0693-04 (MW 33)			**Water**			**Sampled: 09/20/10 12:45**				**N1**
Benzo (b) fluoranthene	EPA 8270m	ND	-----	0.00952	ug/l	1x	10I0722	09/23/10 17:35	10/06/10 12:39	
Benzo (ghi) perylene	"	ND	-----	0.190	"	"	"	"	"	
Benzo (k) fluoranthene	"	ND	-----	0.00952	"	"	"	"	"	
Chrysene	"	ND	-----	0.00952	"	"	"	"	"	
Dibenzo (a,h) anthracene	"	ND	-----	0.00952	"	"	"	"	"	
Fluoranthene	"	ND	-----	0.190	"	"	"	"	"	
Fluorene	"	ND	-----	0.190	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	"	ND	-----	0.00952	"	"	"	"	"	
Naphthalene	"	ND	-----	0.190	"	"	"	"	"	
Phenanthrene	"	ND	-----	0.190	"	"	"	"	"	
Pyrene	"	ND	-----	0.190	"	"	"	"	"	
Surrogate(s):	*Fluorene-d10*			*79.6%*		*25 - 125 %*	"			"
	Pyrene-d10			*74.0%*		*23 - 150 %*	"			"
	Benzo (a) pyrene-d12			*63.8%*		*10 - 125 %*	"			"
PTI0693-05 (MW 34)			**Water**			**Sampled: 09/20/10 12:15**				**N1**
2-Methylnaphthalene	EPA 8270m	ND	-----	0.190	ug/l	1x	10I0722	09/23/10 17:35	10/06/10 13:06	
Acenaphthene	"	**0.206**	-----	0.190	"	"	"	"	"	
Acenaphthylene	"	ND	-----	0.190	"	"	"	"	"	
Anthracene	"	ND	-----	0.190	"	"	"	"	"	
Benzo (a) anthracene	"	ND	-----	0.00952	"	"	"	"	"	
Benzo (a) pyrene	"	ND	-----	0.00952	"	"	"	"	"	
Benzo (b) fluoranthene	"	ND	-----	0.00952	"	"	"	"	"	
Benzo (ghi) perylene	"	ND	-----	0.190	"	"	"	"	"	
Benzo (k) fluoranthene	"	ND	-----	0.00952	"	"	"	"	"	
Chrysene	"	ND	-----	0.00952	"	"	"	"	"	
Dibenzo (a,h) anthracene	"	ND	-----	0.00952	"	"	"	"	"	
Fluoranthene	"	ND	-----	0.190	"	"	"	"	"	
Fluorene	"	ND	-----	0.190	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	"	ND	-----	0.00952	"	"	"	"	"	
Naphthalene	"	ND	-----	0.190	"	"	"	"	"	
Phenanthrene	"	ND	-----	0.190	"	"	"	"	"	
Pyrene	"	ND	-----	0.190	"	"	"	"	"	
Surrogate(s):	*Fluorene-d10*			*80.9%*		*25 - 125 %*	"			"
	Pyrene-d10			*76.5%*		*23 - 150 %*	"			"
	Benzo (a) pyrene-d12			*72.7%*		*10 - 125 %*	"			"

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Estella K Rieben

Estella Rieben, Project Manager

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Delta Consultants - Portland	Project Name:	**Kinder Morgan - Willbridge**	
4640 SW Macadam Avenue, Suite 110	Project Number:	KMWB 10 01	Report Created:
Portland, OR 97239	Project Manager:	Tim Browning	10/11/10 16:30

Polynuclear Aromatic Compounds per EPA 8270M-SIM

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PTI0693-06 (MW 36)			**Water**			**Sampled: 09/20/10 11:30**				**N1**
2-Methylnaphthalene	EPA 8270m	ND	-----	0.190	ug/l	1x	10I0722	09/23/10 17:35	10/06/10 13:34	
Acenaphthene	"	**0.324**	-----	0.190	"	"	"	"	"	
Acenaphthylene	"	ND	-----	0.190	"	"	"	"	"	
Anthracene	"	ND	-----	0.190	"	"	"	"	"	
Benzo (a) anthracene	"	ND	-----	0.00952	"	"	"	"	"	
Benzo (a) pyrene	"	ND	-----	0.00952	"	"	"	"	"	
Benzo (b) fluoranthene	"	ND	-----	0.00952	"	"	"	"	"	
Benzo (ghi) perylene	"	ND	-----	0.190	"	"	"	"	"	
Benzo (k) fluoranthene	"	ND	-----	0.00952	"	"	"	"	"	
Chrysene	"	ND	-----	0.00952	"	"	"	"	"	
Dibenzo (a,h) anthracene	"	ND	-----	0.00952	"	"	"	"	"	
Fluoranthene	"	ND	-----	0.190	"	"	"	"	"	
Fluorene	"	ND	-----	0.190	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	"	ND	-----	0.00952	"	"	"	"	"	
Naphthalene	"	ND	-----	0.190	"	"	"	"	"	
Phenanthrene	"	ND	-----	0.190	"	"	"	"	"	
Pyrene	"	ND	-----	0.190	"	"	"	"	"	
Surrogate(s):	*Fluorene-d10*			*75.6%*		*25 - 125%*	"			"
	Pyrene-d10			*72.8%*		*23 - 150%*	"			"
	Benzo (a) pyrene-d12			*72.0%*		*10 - 125%*	"			"
PTI0693-07 (MW 37)			**Water**			**Sampled: 09/20/10 13:15**				**N1**
2-Methylnaphthalene	EPA 8270m	ND	-----	0.194	ug/l	1x	10I0722	09/23/10 17:35	10/06/10 14:01	
Acenaphthene	"	**0.375**	-----	0.194	"	"	"	"	"	
Acenaphthylene	"	ND	-----	0.194	"	"	"	"	"	
Anthracene	"	ND	-----	0.194	"	"	"	"	"	
Benzo (a) anthracene	"	ND	-----	0.00971	"	"	"	"	"	
Benzo (a) pyrene	"	ND	-----	0.00971	"	"	"	"	"	
Benzo (b) fluoranthene	"	ND	-----	0.00971	"	"	"	"	"	
Benzo (ghi) perylene	"	ND	-----	0.194	"	"	"	"	"	
Benzo (k) fluoranthene	"	ND	-----	0.00971	"	"	"	"	"	
Chrysene	"	ND	-----	0.00971	"	"	"	"	"	
Dibenzo (a,h) anthracene	"	ND	-----	0.00971	"	"	"	"	"	
Fluoranthene	"	ND	-----	0.194	"	"	"	"	"	
Fluorene	"	**0.338**	-----	0.194	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	"	**0.0112**	-----	0.00971	"	"	"	"	"	

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4640 SW Macadam Avenue, Suite 110	Project Number:	KMWB 10 01	Report Created:
Portland, OR 97239	Project Manager:	Tim Browning	10/11/10 16:30

Polynuclear Aromatic Compounds per EPA 8270M-SIM

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PTI0693-07 (MW 37)			**Water**			**Sampled: 09/20/10 13:15**				**N1**
Naphthalene	EPA 8270m	ND	-----	0.291	ug/l	1x	10I0722	09/23/10 17:35	10/06/10 14:01	**RL1**
Phenanthrene	"	ND	-----	0.194	"	"	"	"	"	
Pyrene	"	ND	-----	0.194	"	"	"	"	"	
Surrogate(s): Fluorene-d10				*61.6%*		*25 - 125 %*	"		"	
Pyrene-d10				*81.0%*		*23 - 150 %*	"		"	
Benzo (a) pyrene-d12				*77.7%*		*10 - 125 %*	"		"	
PTI0693-08 (MW 40)			**Water**			**Sampled: 09/20/10 11:55**				**N1**
2-Methylnaphthalene	EPA 8270m	ND	-----	0.192	ug/l	1x	10I0722	09/23/10 17:35	10/06/10 14:29	
Acenaphthene	"	ND	-----	0.192	"	"	"	"	"	
Acenaphthylene	"	ND	-----	0.192	"	"	"	"	"	
Anthracene	"	ND	-----	0.192	"	"	"	"	"	
Benzo (a) anthracene	"	ND	-----	0.00962	"	"	"	"	"	
Benzo (a) pyrene	"	ND	-----	0.00962	"	"	"	"	"	
Benzo (b) fluoranthene	"	ND	-----	0.00962	"	"	"	"	"	
Benzo (ghi) perylene	"	ND	-----	0.192	"	"	"	"	"	
Benzo (k) fluoranthene	"	ND	-----	0.00962	"	"	"	"	"	
Chrysene	"	ND	-----	0.00962	"	"	"	"	"	
Dibenzo (a,h) anthracene	"	ND	-----	0.00962	"	"	"	"	"	
Fluoranthene	"	ND	-----	0.192	"	"	"	"	"	
Fluorene	"	ND	-----	0.192	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	"	ND	-----	0.00962	"	"	"	"	"	
Naphthalene	"	ND	-----	0.192	"	"	"	"	"	
Phenanthrene	"	ND	-----	0.192	"	"	"	"	"	
Pyrene	"	ND	-----	0.192	"	"	"	"	"	
Surrogate(s): Fluorene-d10				*79.4%*		*25 - 125 %*	"		"	
Pyrene-d10				*75.8%*		*23 - 150 %*	"		"	
Benzo (a) pyrene-d12				*72.9%*		*10 - 125 %*	"		"	
PTI0693-09 (Dup 1)			**Water**			**Sampled: 09/20/10 00:00**				**N1**
2-Methylnaphthalene	EPA 8270m	ND	-----	0.194	ug/l	1x	10I0722	09/23/10 17:35	10/06/10 14:57	
Acenaphthene	"	**0.336**	-----	0.194	"	"	"	"	"	
Acenaphthylene	"	ND	-----	0.194	"	"	"	"	"	
Anthracene	"	ND	-----	0.194	"	"	"	"	"	
Benzo (a) anthracene	"	ND	-----	0.00971	"	"	"	"	"	
Benzo (a) pyrene	"	ND	-----	0.00971	"	"	"	"	"	

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Estella K Rieben

Estella Rieben, Project Manager

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PORTLAND, OR 9405 S.W. NIMBUS AVENUE
BEAVERTON, OR 97008-7132
ph: (503) 906.9200 fax: (503) 906.9210

Delta Consultants - Portland	Project Name:	**Kinder Morgan - Willbridge**	
4640 SW Macadam Avenue, Suite 110	Project Number:	KMWB 10 01	Report Created:
Portland, OR 97239	Project Manager:	Tim Browning	10/11/10 16:30

Polynuclear Aromatic Compounds per EPA 8270M-SIM

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PTI0693-09 (Dup 1)			**Water**			**Sampled: 09/20/10 00:00**				**N1**
Benzo (b) fluoranthene	EPA 8270m	ND	-----	0.00971	ug/l	1x	10I0722	09/23/10 17:35	10/06/10 14:57	
Benzo (ghi) perylene	"	ND	-----	0.194	"	"	"	"	"	
Benzo (k) fluoranthene	"	ND	-----	0.00971	"	"	"	"	"	
Chrysene	"	ND	-----	0.00971	"	"	"	"	"	
Dibenzo (a,h) anthracene	"	ND	-----	0.00971	"	"	"	"	"	
Fluoranthene	"	ND	-----	0.194	"	"	"	"	"	
Fluorene	"	**0.290**	-----	0.194	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	"	ND	-----	0.00971	"	"	"	"	"	
Naphthalene	"	ND	-----	0.291	"	"	"	"	"	**RL1**
Phenanthrene	"	ND	-----	0.194	"	"	"	"	"	
Pyrene	"	ND	-----	0.194	"	"	"	"	"	
Surrogate(s): *Fluorene-d10*				*61.2%*		*25 - 125%*	"		"	
Pyrene-d10				*73.4%*		*23 - 150%*	"		"	
Benzo (a) pyrene-d12				*70.8%*		*10 - 125%*	"		"	

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Portland, OR 97239	Project Manager:	Tim Browning	10/11/10 16:30

Total Metals per EPA 200 Series Methods - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 10I0698 **Water Preparation Method: EPA 200/3005**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (10I0698-BLK1)							**Extracted: 09/23/10 08:34**							
Arsenic	EPA 200.8	ND	---	0.00100	mg/l	1x	--	--	--	--	--	--	09/24/10 17:04	
Barium	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Cadmium	"	ND	---	0.00100	"	"	--	--	--	--	--	--	09/26/10 17:55	
Chromium	"	ND	---	0.00200	"	"	--	--	--	--	--	--	09/24/10 17:04	
Copper	"	ND	---	0.00200	"	"	--	--	--	--	--	--	"	
Lead	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Manganese	"	ND	---	0.00200	"	"	--	--	--	--	--	--	"	
Selenium	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Silver	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Zinc	"	ND	---	0.0100	"	"	--	--	--	--	--	--	"	
LCS (10I0698-BS1)							**Extracted: 09/23/10 08:34**							
Arsenic	EPA 200.8	0.0945	---	0.00100	mg/l	1x	--	0.100	94.5%	(85-115)	--	--	09/24/10 17:08	
Barium	"	0.0894	---	0.00100	"	"	--	"	89.4%	"	--	--	"	
Cadmium	"	0.0959	---	0.00100	"	"	--	"	95.9%	"	--	--	09/26/10 17:59	
Chromium	"	0.0947	---	0.00200	"	"	--	"	94.7%	"	--	--	09/24/10 17:08	
Copper	"	0.0949	---	0.00200	"	"	--	"	94.9%	"	--	--	"	
Lead	"	0.0901	---	0.00100	"	"	--	"	90.1%	"	--	--	"	
Manganese	"	0.0940	---	0.00200	"	"	--	"	94.0%	"	--	--	"	
Selenium	"	0.0862	---	0.00100	"	"	--	"	86.2%	"	--	--	"	
Silver	"	0.0439	---	0.00100	"	"	--	0.0500	87.8%	"	--	--	"	
Zinc	"	0.0882	---	0.0100	"	"	--	0.100	88.2%	"	--	--	"	
Duplicate (10I0698-DUP1)							**QC Source: PTI0592-33**			**Extracted: 09/23/10 08:34**				
Arsenic	EPA 200.8	ND	---	0.00100	mg/l	1x	ND	--	--	--	23.0%	(20)	09/24/10 17:16	R4
Barium	"	0.00542	---	0.00100	"	"	0.00549	--	--	--	1.28%	"	"	
Cadmium	"	ND	---	0.00100	"	"	ND	--	--	--	NR	"	09/26/10 18:08	
Chromium	"	ND	---	0.00200	"	"	ND	--	--	--	NR	"	09/24/10 17:16	
Copper	"	ND	---	0.00200	"	"	ND	--	--	--	NR	"	"	
Lead	"	ND	---	0.00100	"	"	ND	--	--	--	NR	"	"	
Manganese	"	0.232	---	0.00200	"	"	0.231	--	--	--	0.0864%	"	"	
Selenium	"	ND	---	0.00100	"	"	ND	--	--	--	NR	"	"	
Silver	"	ND	---	0.00100	"	"	ND	--	--	--	28.6%	"	"	R4
Zinc	"	ND	---	0.0100	"	"	ND	--	--	--	4.89%	"	"	

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Delta Consultants - Portland	Project Name:	**Kinder Morgan - Willbridge**	
4640 SW Macadam Avenue, Suite 110	Project Number:	KMWB 10 01	Report Created:
Portland, OR 97239	Project Manager:	Tim Browning	10/11/10 16:30

Total Metals per EPA 200 Series Methods - Laboratory Quality Control Results

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QC Batch: 10I0698 **Water Preparation Method: EPA 200/3005**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Matrix Spike (10I0698-MS1)					**QC Source: PTI0592-34**				**Extracted: 09/23/10 08:34**					
Arsenic	EPA 200.8	0.0924	---	0.00100	mg/l	1x	0.00176	0.100	90.6%	(70-130)	--	--	09/24/10 17:28	
Barium	"	0.110	---	0.00100	"	"	0.0221	"	88.3%	"	--	--	"	
Cadmium	"	0.0984	---	0.00100	"	"	ND	"	98.4%	"	--	--	09/26/10 18:19	
Chromium	"	0.0906	---	0.00200	"	"	0.00189	"	88.8%	(75-125)	--	--	09/24/10 17:28	
Copper	"	0.0897	---	0.00200	"	"	0.00107	"	88.6%	"	--	--	"	
Lead	"	0.0896	---	0.00100	"	"	ND	"	89.6%	"	--	--	"	
Manganese	"	0.0880	---	0.00200	"	"	ND	"	88.0%	(70-130)	--	--	"	
Selenium	"	0.0911	---	0.00100	"	"	0.000230	"	90.9%	"	--	--	"	
Silver	"	0.0441	---	0.00100	"	"	ND	0.0500	88.2%	"	--	--	"	
Zinc	"	0.125	---	0.0100	"	"	0.0389	0.100	86.3%	"	--	--	"	
Matrix Spike (10I0698-MS2)					**QC Source: PTI0687-02**				**Extracted: 09/23/10 08:34**					
Arsenic	EPA 200.8	0.0912	---	0.00100	mg/l	1x	0.000180	0.100	91.1%	(70-130)	--	--	09/24/10 18:14	
Barium	"	0.0925	---	0.00100	"	"	0.00301	"	89.5%	"	--	--	"	
Cadmium	"	0.0983	---	0.00100	"	"	ND	"	98.3%	"	--	--	09/26/10 18:43	
Chromium	"	0.0903	---	0.00200	"	"	ND	"	90.3%	(75-125)	--	--	09/24/10 18:14	
Copper	"	0.162	---	0.00200	"	"	0.0756	"	86.5%	"	--	--	"	
Lead	"	0.0902	---	0.00100	"	"	0.000320	"	89.9%	"	--	--	"	
Manganese	"	0.0898	---	0.00200	"	"	0.000650	"	89.2%	(70-130)	--	--	"	
Selenium	"	0.0970	---	0.00100	"	"	ND	"	97.0%	"	--	--	09/26/10 18:43	
Silver	"	0.0443	---	0.00100	"	"	0.0000700	0.0500	88.5%	"	--	--	09/24/10 18:14	
Zinc	"	0.0964	---	0.0100	"	"	0.00922	0.100	87.2%	"	--	--	"	

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4640 SW Macadam Avenue, Suite 110	Project Number:	KMWB 10 01	Report Created:
Portland, OR 97239	Project Manager:	Tim Browning	10/11/10 16:30

Total Metals per EPA 200 Series Methods - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 10I0702 **Water Preparation Method: EPA 200/3005**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (10I0702-BLK1)							**Extracted: 09/23/10 08:43**							
Arsenic	EPA 200.8	ND	---	0.00100	mg/l	1x	--	--	--	--	--	--	09/27/10 15:10	
Barium	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Cadmium	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Chromium	"	ND	---	0.00200	"	"	--	--	--	--	--	--	"	
Copper	"	ND	---	0.00200	"	"	--	--	--	--	--	--	"	
Lead	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Manganese	"	ND	---	0.00200	"	"	--	--	--	--	--	--	"	
Selenium	"	ND	---	0.00100	"	"	--	--	--	--	--	--	09/27/10 19:16	
Silver	"	ND	---	0.00100	"	"	--	--	--	--	--	--	09/27/10 15:10	
Zinc	"	ND	---	0.0100	"	"	--	--	--	--	--	--	"	
LCS (10I0702-BS1)							**Extracted: 09/23/10 08:43**							
Arsenic	EPA 200.8	0.0933	---	0.00100	mg/l	1x	--	0.100	93.3%	(85-115)	--	--	09/27/10 15:14	
Barium	"	0.0931	---	0.00100	"	"	--	"	93.1%	"	--	--	"	
Cadmium	"	0.0881	---	0.00100	"	"	--	"	88.1%	"	--	--	"	
Chromium	"	0.0954	---	0.00200	"	"	--	"	95.4%	"	--	--	"	
Copper	"	0.0953	---	0.00200	"	"	--	"	95.3%	"	--	--	"	
Lead	"	0.0990	---	0.00100	"	"	--	"	99.0%	"	--	--	"	
Manganese	"	0.0971	---	0.00200	"	"	--	"	97.1%	"	--	--	"	
Selenium	"	0.0916	---	0.00100	"	"	--	"	91.6%	"	--	--	09/27/10 19:20	
Silver	"	0.0481	---	0.00100	"	"	--	0.0500	96.2%	"	--	--	09/27/10 15:14	
Zinc	"	0.0892	---	0.0100	"	"	--	0.100	89.2%	"	--	--	"	
Matrix Spike (10I0702-MS1)						**QC Source: PTI0703-05**			**Extracted: 09/23/10 08:43**					
Arsenic	EPA 200.8	0.0927	---	0.00100	mg/l	1x	ND	0.100	92.7%	(70-130)	--	--	09/27/10 16:08	
Barium	"	0.104	---	0.00100	"	"	0.0116	"	92.1%	"	--	--	"	
Cadmium	"	0.0906	---	0.00100	"	"	ND	"	90.6%	"	--	--	"	
Chromium	"	0.0922	---	0.00200	"	"	ND	"	92.2%	(75-125)	--	--	"	
Copper	"	0.0924	---	0.00200	"	"	ND	"	92.4%	"	--	--	"	
Lead	"	0.0973	---	0.00100	"	"	ND	"	97.3%	"	--	--	"	
Manganese	"	0.0986	---	0.00200	"	"	0.00222	"	96.4%	(70-130)	--	--	09/27/10 20:11	
Selenium	"	0.0995	---	0.00100	"	"	ND	"	99.5%	"	--	--	"	
Silver	"	0.0477	---	0.00100	"	"	ND	0.0500	95.3%	"	--	--	09/27/10 16:08	
Zinc	"	0.0908	---	0.0100	"	"	ND	0.100	90.8%	"	--	--	"	

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Delta Consultants - Portland	Project Name:	**Kinder Morgan - Willbridge**	
4640 SW Macadam Avenue, Suite 110	Project Number:	KMWB 10 01	Report Created:
Portland, OR 97239	Project Manager:	Tim Browning	10/11/10 16:30

Total Metals per EPA 200 Series Methods - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 10I0702 **Water Preparation Method: EPA 200/3005**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Matrix Spike Dup (10I0702-MSD1)				**QC Source: PTI0703-05**					**Extracted: 09/23/10 08:43**					
Arsenic	EPA 200.8	0.0922	---	0.00100	mg/l	1x	ND	0.100	92.2%	(70-130)	0.508%	(20)	09/27/10 16:12	
Barium	"	0.101	---	0.00100	"	"	0.0116	"	89.4%	"	2.64%	"	"	
Cadmium	"	0.0890	---	0.00100	"	"	ND	"	89.0%	"	1.88%	"	"	
Chromium	"	0.0919	---	0.00200	"	"	ND	"	91.9%	(75-125)	0.315%	"	"	
Copper	"	0.0916	---	0.00200	"	"	ND	"	91.6%	"	0.892%	"	"	
Lead	"	0.0950	---	0.00100	"	"	ND	"	95.0%	"	2.37%	"	"	
Manganese	"	0.0965	---	0.00200	"	"	0.00222	"	94.3%	(70-130)	2.20%	"	09/27/10 20:15	
Selenium	"	0.0926	---	0.00100	"	"	ND	"	92.6%	"	7.17%	"	"	
Silver	"	0.0466	---	0.00100	"	"	ND	0.0500	93.2%	"	2.29%	"	09/27/10 16:12	
Zinc	"	0.0902	---	0.0100	"	"	ND	0.100	90.2%	"	0.663%	"	"	

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Portland, OR 97239	Project Manager:	Tim Browning	10/11/10 16:30

Mercury per EPA Method 1631E - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 10I0715 **Water Preparation Method: EPA 1631**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (10I0715-BLK1)								**Extracted: 09/23/10 12:40**						
Mercury	EPA 1631E	ND	---	0.000500	ug/l	1x	--	--	--	--	--	--	09/24/10 17:50	
Blank (10I0715-BLK2)								**Extracted: 09/23/10 12:40**						
Mercury	EPA 1631E	ND	---	0.000500	ug/l	1x	--	--	--	--	--	--	09/24/10 17:59	
Blank (10I0715-BLK3)								**Extracted: 09/23/10 12:40**						
Mercury	EPA 1631E	ND	---	0.000500	ug/l	1x	--	--	--	--	--	--	09/24/10 18:08	
LCS (10I0715-BS1)								**Extracted: 09/23/10 12:40**						
Mercury	EPA 1631E	0.00495	---	0.000500	ug/l	1x	--	0.00500	99.0%	(75-125)	--	--	09/24/10 18:17	
LCS Dup (10I0715-BSD1)								**Extracted: 09/23/10 12:40**						
Mercury	EPA 1631E	0.00495	---	0.000500	ug/l	1x	--	0.00500	99.0%	(75-125)	0.0657%	(20)	09/24/10 18:26	
Duplicate (10I0715-DUP1)							**QC Source: PTI0693-05**			**Extracted: 09/23/10 12:40**				
Mercury	EPA 1631E	0.00521	---	0.000500	ug/l	1x	0.00590	--	--	--	12.4%	(20)	09/24/10 18:35	
Matrix Spike (10I0715-MS1)							**QC Source: PTI0693-05**			**Extracted: 09/23/10 12:40**				
Mercury	EPA 1631E	0.0129	---	0.000500	ug/l	1x	0.00590	0.00500	139%	(75-125)	--	--	09/24/10 18:44	M7
Matrix Spike Dup (10I0715-MSD1)							**QC Source: PTI0693-05**			**Extracted: 09/23/10 12:40**				
Mercury	EPA 1631E	0.0137	---	0.000500	ug/l	1x	0.00590	0.00500	155%	(75-125)	6.03%	(20)	09/24/10 18:53	M7

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Estella K Rieben

Estella Rieben, Project Manager

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Delta Consultants - Portland	Project Name:	**Kinder Morgan - Willbridge**	
4640 SW Macadam Avenue, Suite 110	Project Number:	KMWB 10 01	Report Created:
Portland, OR 97239	Project Manager:	Tim Browning	10/11/10 16:30

Total Mercury per EPA Method 7470A - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 10I0907 **Water Preparation Method: EPA 7470A**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (10I0907-BLK1)								**Extracted: 09/29/10 17:44**						
Mercury	EPA 7470A	ND	---	0.000200	mg/l	1x	--	--	--	--	--	--	09/30/10 17:17	
LCS (10I0907-BS1)								**Extracted: 09/29/10 17:44**						
Mercury	EPA 7470A	0.00524	---	0.000200	mg/l	1x	--	0.00500	105%	(85-115)	--	--	09/30/10 17:19	
LCS Dup (10I0907-BSD1)								**Extracted: 09/29/10 17:44**						
Mercury	EPA 7470A	0.00528	---	0.000200	mg/l	1x	--	0.00500	106%	(85-115)	0.772%	(20)	09/30/10 17:23	
Duplicate (10I0907-DUP1)					**QC Source: PTI0693-01**			**Extracted: 09/29/10 17:44**						
Mercury	EPA 7470A	ND	---	0.000200	mg/l	1x	ND	--	--	--	NR	(20)	09/30/10 17:27	
Matrix Spike (10I0907-MS1)					**QC Source: PTI0693-01**			**Extracted: 09/29/10 17:44**						
Mercury	EPA 7470A	0.00511	---	0.000200	mg/l	1x	ND	0.00500	102%	(75-125)	--	--	09/30/10 17:29	
Matrix Spike Dup (10I0907-MSD1)					**QC Source: PTI0693-01**			**Extracted: 09/29/10 17:44**						
Mercury	EPA 7470A	0.00532	---	0.000200	mg/l	1x	ND	0.00500	106%	(75-125)	4.11%	(20)	09/30/10 17:33	

TestAmerica Portland

Estella K Rieben

Estella Rieben, Project Manager

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THE LEADER IN ENVIRONMENTAL TESTING

PORTLAND, OR 9405 S.W. NIMBUS AVENUE
BEAVERTON, OR 97008-7132
ph: (503) 906.9200 fax: (503) 906.9210

Delta Consultants - Portland	Project Name:	**Kinder Morgan - Willbridge**	
4640 SW Macadam Avenue, Suite 110	Project Number:	KMWB 10 01	Report Created:
Portland, OR 97239	Project Manager:	Tim Browning	10/11/10 16:30

Selected Volatile Organic Compounds (Including BTEX) per EPA Method 8260B - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 10I0701 **Water Preparation Method: EPA 5030B**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (10I0701-BLK1)									**Extracted: 09/23/10 06:41**					
Methyl tert-butyl ether	EPA 8260B	ND	---	1.00	ug/l	1x	--	--	--	--	--	--	09/23/10 10:24	
Benzene	"	ND	---	0.200	"	"	--	--	--	--	--	--	"	
1,2-Dichloroethane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Toluene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,2-Dibromoethane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Ethylbenzene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
m,p-Xylene	"	ND	---	2.00	"	"	--	--	--	--	--	--	"	
o-Xylene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Isopropylbenzene	"	ND	---	2.00	"	"	--	--	--	--	--	--	"	
n-Propylbenzene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,3,5-Trimethylbenzene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,2,4-Trimethylbenzene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Naphthalene	"	ND	---	2.00	"	"	--	--	--	--	--	--	"	
Surrogate(s):	*Dibromofluoromethane*	*Recovery:*	*105%*		*Limits:*	*80-120%*	"						*09/23/10 10:24*	
	1,2-DCA-d4		*108%*			*80-120%*	"						"	
	Toluene-d8		*106%*			*80-120%*	"						"	
	4-BFB		*105%*			*80-120%*	"						"	
LCS (10I0701-BS1)									**Extracted: 09/23/10 06:41**					
Methyl tert-butyl ether	EPA 8260B	19.4	---	1.00	ug/l	1x	--	20.0	97.0%	(80-129)	--	--	09/23/10 08:58	
Benzene	"	19.8	---	0.200	"	"	--	"	98.9%	(80-120)	--	--	"	
1,2-Dichloroethane	"	18.9	---	1.00	"	"	--	"	94.6%	(78-123)	--	--	"	
Toluene	"	20.0	---	1.00	"	"	--	"	99.8%	(80-124)	--	--	"	
1,2-Dibromoethane	"	20.4	---	1.00	"	"	--	"	102%	(80-122)	--	--	"	
Ethylbenzene	"	19.6	---	1.00	"	"	--	"	98.1%	(80-120)	--	--	"	
m,p-Xylene	"	41.4	---	2.00	"	"	--	40.0	104%	(72-127)	--	--	"	
o-Xylene	"	20.1	---	1.00	"	"	--	20.0	100%	(77-123)	--	--	"	
Isopropylbenzene	"	20.0	---	2.00	"	"	--	"	100%	(77-124)	--	--	"	
n-Propylbenzene	"	20.2	---	1.00	"	"	--	"	101%	(76-128)	--	--	"	
1,3,5-Trimethylbenzene	"	20.7	---	1.00	"	"	--	"	103%	(75-132)	--	--	"	
1,2,4-Trimethylbenzene	"	20.9	---	1.00	"	"	--	"	105%	(73-132)	--	--	"	
Naphthalene	"	19.3	---	2.00	"	"	--	"	96.6%	(72-149)	--	--	"	
Surrogate(s):	*Dibromofluoromethane*	*Recovery:*	*99.0%*		*Limits:*	*80-120%*	"						*09/23/10 08:58*	
	1,2-DCA-d4		*97.6%*			*80-120%*	"						"	
	Toluene-d8		*104%*			*80-120%*	"						"	
	4-BFB		*104%*			*80-120%*	"						"	

TestAmerica Portland

Estella K Rieben

Estella Rieben, Project Manager

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Delta Consultants - Portland	Project Name:	**Kinder Morgan - Willbridge**	
4640 SW Macadam Avenue, Suite 110	Project Number:	KMWB 10 01	Report Created:
Portland, OR 97239	Project Manager:	Tim Browning	10/11/10 16:30

Selected Volatile Organic Compounds (Including BTEX) per EPA Method 8260B - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 10I0701 **Water Preparation Method: EPA 5030B**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
LCS Dup (10I0701-BSD1)								**Extracted: 09/23/10 06:41**						
Methyl tert-butyl ether	EPA 8260B	19.2	---	1.00	ug/l	1x	--	20.0	96.0%	(80-129)	1.14%	(25)	09/23/10 09:30	
Benzene	"	19.3	---	0.200	"	"	--	"	96.4%	(80-120)	2.61%	"	"	
1,2-Dichloroethane	"	19.1	---	1.00	"	"	--	"	95.4%	(78-123)	0.737%	"	"	
Toluene	"	19.6	---	1.00	"	"	--	"	97.8%	(80-124)	2.07%	"	"	
1,2-Dibromoethane	"	20.2	---	1.00	"	"	--	"	101%	(80-122)	0.987%	"	"	
Ethylbenzene	"	18.7	---	1.00	"	"	--	"	93.4%	(80-120)	4.86%	"	"	
m,p-Xylene	"	39.5	---	2.00	"	"	--	40.0	98.8%	(72-127)	4.65%	"	"	
o-Xylene	"	19.3	---	1.00	"	"	--	20.0	96.6%	(77-123)	3.96%	"	"	
Isopropylbenzene	"	18.9	---	2.00	"	"	--	"	94.3%	(77-124)	6.02%	"	"	
n-Propylbenzene	"	18.9	---	1.00	"	"	--	"	94.6%	(76-128)	6.24%	"	"	
1,3,5-Trimethylbenzene	"	19.2	---	1.00	"	"	--	"	96.0%	(75-132)	7.42%	"	"	
1,2,4-Trimethylbenzene	"	19.7	---	1.00	"	"	--	"	98.7%	(73-132)	5.85%	"	"	
Naphthalene	"	19.1	---	2.00	"	"	--	"	95.4%	(72-149)	1.30%	"	"	

Surrogate(s):	*Dibromofluoromethane*	*Recovery:*	*102%*	*Limits:*	*80-120%*	*09/23/10 09:30*
	1,2-DCA-d4		*100%*		*80-120%*	"
	Toluene-d8		*106%*		*80-120%*	"
	4-BFB		*103%*		*80-120%*	"

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Estella K Rieben

Estella Rieben, Project Manager

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Delta Consultants - Portland	Project Name:	**Kinder Morgan - Willbridge**	
4640 SW Macadam Avenue, Suite 110	Project Number:	KMWB 10 01	Report Created:
Portland, OR 97239	Project Manager:	Tim Browning	10/11/10 16:30

Polynuclear Aromatic Compounds per EPA 8270M-SIM - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 10I0722 **Water Preparation Method: 3520B Liq-Liq**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (10I0722-BLK1)							**Extracted: 09/23/10 17:35**							
2-Methylnaphthalene	EPA 8270m	ND	---	0.200	ug/l	1x	--	--	--	--	--	--	10/06/10 10:21	
Acenaphthene	"	ND	---	0.200	"	"	--	--	--	--	--	--	"	
Acenaphthylene	"	ND	---	0.200	"	"	--	--	--	--	--	--	"	
Anthracene	"	ND	---	0.200	"	"	--	--	--	--	--	--	"	
Benzo (a) anthracene	"	ND	---	0.0100	"	"	--	--	--	--	--	--	"	
Benzo (a) pyrene	"	ND	---	0.0100	"	"	--	--	--	--	--	--	"	
Benzo (b) fluoranthene	"	ND	---	0.0100	"	"	--	--	--	--	--	--	"	
Benzo (ghi) perylene	"	ND	---	0.200	"	"	--	--	--	--	--	--	"	
Benzo (k) fluoranthene	"	ND	---	0.0100	"	"	--	--	--	--	--	--	"	
Chrysene	"	ND	---	0.0100	"	"	--	--	--	--	--	--	"	
Dibenzo (a,h) anthracene	"	ND	---	0.0100	"	"	--	--	--	--	--	--	"	
Fluoranthene	"	ND	---	0.200	"	"	--	--	--	--	--	--	"	
Fluorene	"	ND	---	0.200	"	"	--	--	--	--	--	--	"	
Indeno (1,2,3-cd) pyrene	"	ND	---	0.0100	"	"	--	--	--	--	--	--	"	
Naphthalene	"	ND	---	0.200	"	"	--	--	--	--	--	--	"	
Phenanthrene	"	ND	---	0.200	"	"	--	--	--	--	--	--	"	
Pyrene	"	ND	---	0.200	"	"	--	--	--	--	--	--	"	
Surrogate(s): Fluorene-d10		*Recovery: 74.9%*			*Limits: 25-125%*	"							*10/06/10 10:21*	
Pyrene-d10		*71.7%*			*23-150%*	"							"	
Benzo (a) pyrene-d12		*62.2%*			*10-125%*	"							"	
LCS (10I0722-BS1)							**Extracted: 09/23/10 17:35**							
Acenaphthene	EPA 8270m	1.97	---	0.200	ug/l	1x	--	2.50	79.0%	(26-135)	--	--	10/06/10 10:49	
Benzo (a) pyrene	"	1.84	---	0.0100	"	"	--	"	73.4%	(38-137)	--	--	"	
Pyrene	"	1.85	---	0.200	"	"	--	"	73.8%	(30-147)	--	--	"	
Surrogate(s): Fluorene-d10		*Recovery: 73.6%*			*Limits: 25-125%*	"							*10/06/10 10:49*	
Pyrene-d10		*68.5%*			*23-150%*	"							"	
Benzo (a) pyrene-d12		*71.8%*			*10-125%*	"							"	
LCS Dup (10I0722-BSD1)							**Extracted: 09/23/10 17:35**							
Acenaphthene	EPA 8270m	2.09	---	0.200	ug/l	1x	--	2.50	83.5%	(26-135)	5.55%	(50)	10/06/10 11:16	
Benzo (a) pyrene	"	1.87	---	0.0100	"	"	--	"	74.8%	(38-137)	1.91%	"	"	
Pyrene	"	1.92	---	0.200	"	"	--	"	76.7%	(30-147)	3.80%	"	"	
Surrogate(s): Fluorene-d10		*Recovery: 79.5%*			*Limits: 25-125%*	"							*10/06/10 11:16*	
Pyrene-d10		*70.5%*			*23-150%*	"							"	
Benzo (a) pyrene-d12		*71.8%*			*10-125%*	"							"	

TestAmerica Portland

Estella K Rieben

Estella Rieben, Project Manager

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Delta Consultants - Portland	Project Name:	**Kinder Morgan - Willbridge**	
4640 SW Macadam Avenue, Suite 110	Project Number:	KMWB 10 01	Report Created:
Portland, OR 97239	Project Manager:	Tim Browning	10/11/10 16:30

Notes and Definitions

Report Specific Notes:

M7	-	The MS and/or MSD were above the acceptance limits. See Blank Spike (LCS).
N1	-	See case narrative.
R4	-	Due to the low levels of analyte in the sample, the duplicate RPD calculation does not provide useful information.
RL1	-	Reporting limit raised due to sample matrix effects.

Laboratory Reporting Conventions:

DET	-	Analyte DETECTED at or above the Reporting Limit. Qualitative Analyses only.
ND	-	Analyte NOT DETECTED at or above the reporting limit (MDL or MRL, as appropriate).
NR/NA	-	Not Reported / Not Available
dry	-	Sample results reported on a Dry Weight Basis. Results and Reporting Limits have been corrected for Percent Dry Weight.
wet	-	Sample results and reporting limits reported on a Wet Weight Basis (as received). Results with neither 'wet' nor 'dry' are reported on a Wet Weight Basis.
RPD	-	RELATIVE PERCENT DIFFERENCE (RPDs calculated using Results, not Percent Recoveries).
MRL	-	METHOD REPORTING LIMIT. Reporting Level at, or above, the lowest level standard of the Calibration Table.
MDL*	-	METHOD DETECTION LIMIT. Reporting Level at, or above, the statistically derived limit based on 40CFR, Part 136, Appendix B. *MDLs are listed on the report only if the data has been evaluated below the MRL. Results between the MDL and MRL are reported as Estimated Results.
Dil	-	Dilutions are calculated based on deviations from the standard dilution performed for an analysis, and may not represent the dilution found on the analytical raw data.
Reporting Limits	-	Reporting limits (MDLs and MRLs) are adjusted based on variations in sample preparation amounts, analytical dilutions and percent solids, where applicable.
Electronic Signature	-	Electronic Signature added in accordance with TestAmerica's *Electronic Reporting and Electronic Signatures Policy.* Application of electronic signature indicates that the report has been reviewed and approved for release by the laboratory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

TestAmerica Portland

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CERTIFICATION SUMMARY

TestAmerica Portland

Method	Matrix	Oregon
EPA 1631E	Water	X
EPA 200.8	Water	X
EPA 7470A	Water	X
EPA 8260B	Water	X
EPA 8270m	Water	X

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11922 E. First Ave, Spokane, WA 99206-5302 509-924-9200 FAX 924-9290
9405 SW Nimbus Ave,Beaverton, OR 97008-7145 503-906-9200 FAX 906-9210 X
2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119 907-563-9200 FAX 563-9210

CHAIN OF CUSTODY REPORT

Work Order #: PT10693

CLIENT: Kinder Morgan / Delta

REPORT TO: Tim Browning

ADDRESS: Delta 4600 SW Macadam Ave 110, PDX, 97239

PHONE: FAX:

INVOICE TO: Kinder Morgan

P.O. NUMBER: KMWB 1001

PROJECT NAME: Kinder Morgan Willbridge

PROJECT NUMBER: KMWB 1001

SAMPLED BY: BVR / BDJ

TURNAROUND REQUEST in Business Days *

Organic & Inorganic Analyses: ~~10~~ STD. | 7 | 5 | 4 | 3 | 2 | 1 | <1

Petroleum Hydrocarbon Analyses: ~~5~~ STD. | 4 | 3 | 2 | 1 | <1

OTHER Specify:

* Turnaround Requests less than standard may incur Rush Charges.

PRESERVATIVE: HCL | NA | HNO_3 | NA

REQUESTED ANALYSES: BTEX 8260 | PAH 8270 SIM | RCRA Metals | LL Hg

	CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME	BTEX 8260	PAH 8270 SIM	RCRA Metals	LL Hg	MATRIX (W, S, O)	# OF CONT.	LOCATION/ COMMENTS	TA WO ID
1	MW 8	9/20/10 1455	X	X	X		W	5		
2	MW 25	" 1525	X	X	X			5		
3	MW 26	" 1500	X	X	X			5		
4	MW 33	" 1245	X	X	X	X		6		
5	MW 34	" 1215	X	X	X	X		6		
6	MW 36	" 1130	X	X	X	X		6		
7	MW 37	" 1315	X	X	X	X		6		
8	MW 40	" 1155	X	X	X	X		6		
9	DUP 1	9/20/10 —	X	X	X	X		6		
10	TB	— —	X				W	3		

RELEASED BY: Nolan Lewis Delta — DATE: — RECEIVED BY: Bob Farley — DATE: 9/21/10

PRINT NAME: — FIRM: Delta — TIME: — PRINT NAME: Bob F — FIRM: TAP — TIME: 1345

RELEASED BY: Bob Farley — DATE: 9/21/10 — RECEIVED BY: Jessica Nguyen — DATE: 9/21/10

PRINT NAME: Bob F — FIRM: TAP — TIME: 14:30 — PRINT NAME: — FIRM: TAP — TIME: 1430

ADDITIONAL REMARKS:

use Lower Level Willamette Harbor Detection Limits Add 1-methylnaphthalene & 2-methylnaphthalene to PAH's

include Copper and Zinc in metals

TEMP: 2-5 PAGE 1 OF 1

TAL-1000(0408)

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TestAmerica Portland

Sample Receiving Checklist

Work Order #: PT10693 Date/Time Received: 9/21/10 1430

Client Name and Project: Delta

Time Zone:
☐EDT/EST ☐CDT/CST ☐MDT/MST ☑PDT/PST ☐AK ☐OTHER

Unpacking Checks:

Cooler #(s): 1

Temperatures: 2-5

Digi #1 ☐ Digi #2 ☐ IR Gun ☑ (☐Plastic ☑Glass)

Temperature out of Range:

__Not enough or No Ice
__Ice Melted
__W/in 4 Hrs of collection
__Other:

Initials: JM

N/A	Yes	No	
☑	☐	☐	1. If ESI client, were temp blanks received? If no, document on NOD.
☑	☐	☐	2. Cooler Seals intact? (N/A if hand delivered) if no, document on NOD.
	☑	☐	3. Chain of Custody present? If no, document on NOD.
	☑	☐	4. Bottles received intact? If no, document on NOD.
	☑	☐	5. Sample is not multiphasic? If no, document on NOD.
	☑	☐	6. Proper Container and preservatives used? If no, document on NOD.
☐	☑	☐	7. pH of all samples checked and meet requirements? If no, document on NOD.
☑	☐	☐	8. Cyanide samples checked for sulfides and meet requirements? If no, notify PM.
☑	☐	☐	9. HF Dilution required?
JM	☐	☑	10. Sufficient volume provided for all analysis? If no, document on NOD and consult PM before proceeding. Only 1 amber per sample for LL PAH! JM
	☑	☐	11. Did chain of custody agree with samples received? If no, document on NOD.
	☑	☐	12. Is the "Sampled by" section of the COC completed?
☐	☑	☐	13. Were VOA/Oil Syringe samples without headspace?
☐	☑	☐	14. Were VOA vials preserved? ☑HCl ☐Sodium Thiosulfate ☐Ascorbic Acid
	☐	☑	15. Did samples require preservation with sodium thiosulfate?
☑	☐	☐	16. If yes to #15, was the residual chlorine test negative? If no, document on NOD.
☑	☐	☐	17. Are dissolved/field filtered metals bottles sediment-free? If no, document on NOD.
☑	☐	☐	18. Is sufficient volume provided for client requested MS/MSD or matrix duplicates? If no, document on NOD and contact PM before proceeding.
☑	☐	☐	19. Are analyses with short holding times received in hold?
	☑	☐	20. Was Standard Turn Around (TAT) requested?
	☑	☐	21. Receipt date(s) < 48 hours past the collection date(s)? If no, notify PM.

TB 9/14/10

TestAmerica Portland

Sample Receiving Checklist

Work Order #: PT10693

Login Checks:

Initials: JM

N/A	Yes	No	
	☑	☐	22. Sufficient volume provided for all analysis? If no, document on NOD & contact PM.
☑	☐	☐	23. Sufficient volume provided for client requested MS/MSD or matrix duplicates? If no, document on NOD and contact PM.
	☑	☐	24. Did the chain of custody include "received by" and "relinquished by" signatures, dates and times?
☐	☑	☐	25. Were special log in instructions read and followed?
	☑	☐	26. Were tests logged checked against the COC?
☑	☐	☐	27. Were rush notices printed and delivered?
☑	☐	☐	28. Were short hold notices printed and delivered?
☑	☐	☐	29. Were subcontract COCs printed?
☑	☐	☐	30. Was HF dilution logged?

Labeling and Storage Checks:

Initials: JM

N/A	Yes	No	
☑	☐	☐	31. Were the subcontracted samples/containers put in Sx fridge?
☑	☐	☐	32. Were sample bottles and COC double checked for dissolved/filtered metals?
	☑	☐	33. Did the sample ID, Date, and Time from label match what was logged?
☑	☐	☐	34. Were Foreign sample stickers affixed to each container and containers stored in foreign fridge?
☑	☐	☐	35. Were HF stickers affixed to each container, and containers stored in Sx fridge?
☑	☐	☐	36. Was an NOD for created for noted discrepancies and placed in folder?

Document any problems or discrepancies and the actions taken to resolve them on a Notice of Discrepancy form (NOD).