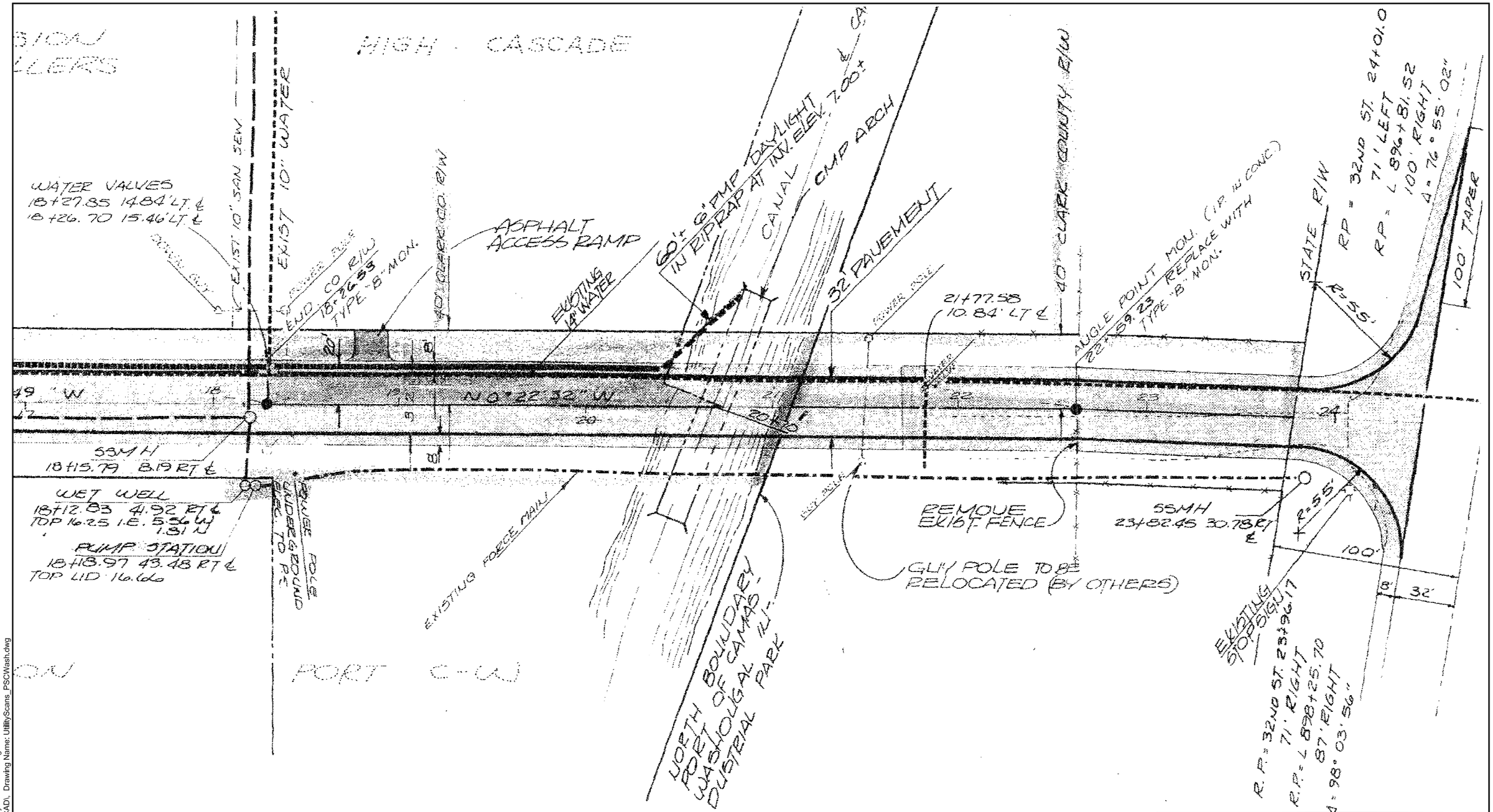
APPENDIX B

Underground Utility Drawings



PORT OF CAMAS
WASHOUGAL UTILITY MAPS FOR 32nd STREET
SHEET 1 of 4
PSC Washougal Facility
Washougal, Washington

By: APS	Date: 12/22/09	Project No. 9625
AMEC Geomatrix		Figure B-1

DRAWING COURTESY OF CITY OF WASHOUGAL

Plot Date: 12/22/09 - 12:05pm, Plotted by: adam.stenberg
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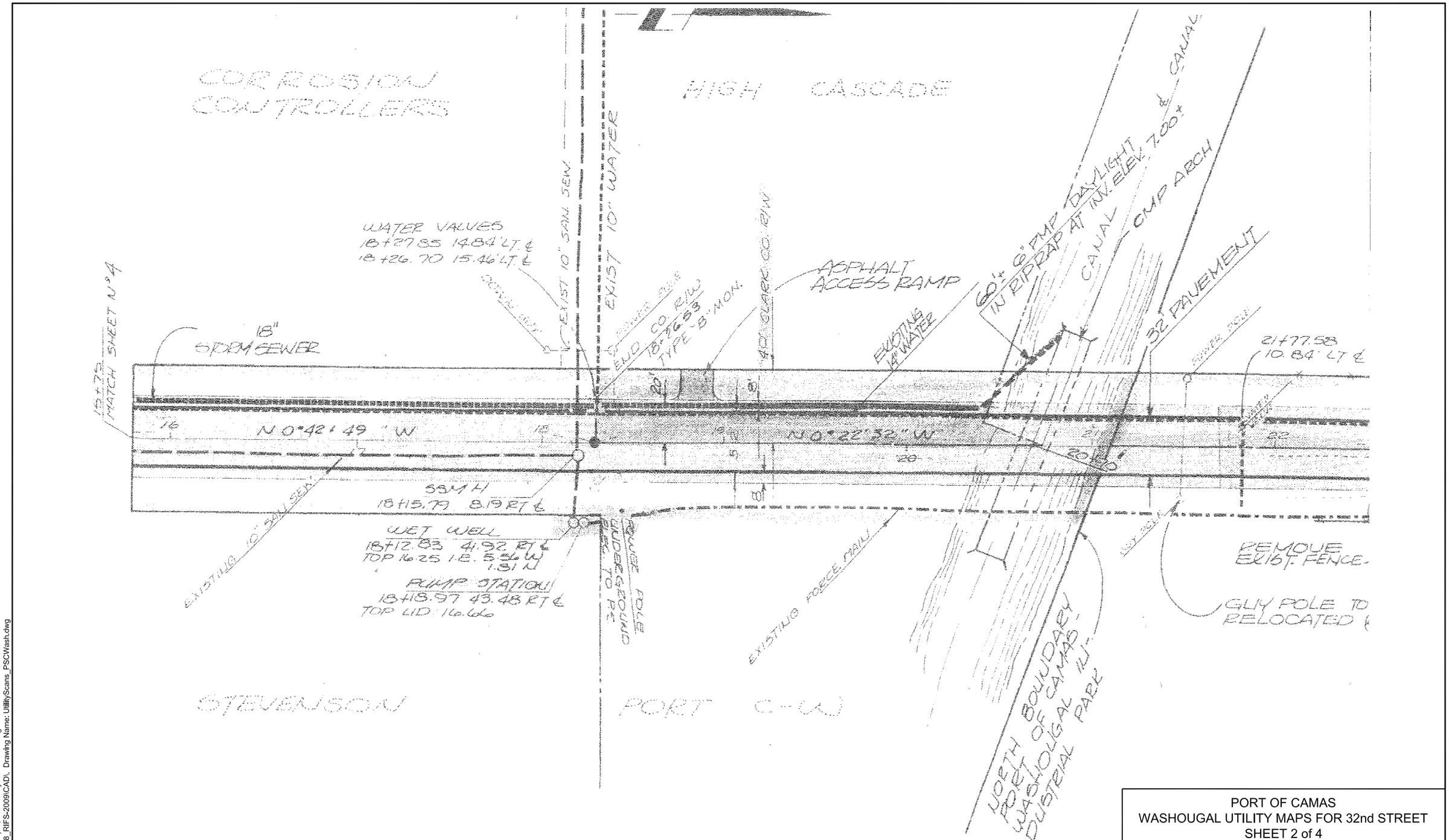

PORT OF CAMAS
WASHOUGAL UTILITY MAPS FOR 32nd STREET
SHEET 2 of 4
PSC Washougal Facility
Washougal, Washington

By: APS	Date: 12/22/09	Project No. 9625
AMEC Geomatrix		Figure B-1

DRAWING COURTESY OF CITY OF WASHOUGAL

Plot Date: 12/22/09 - 12:05pm, Plotted by: adam.stenberg
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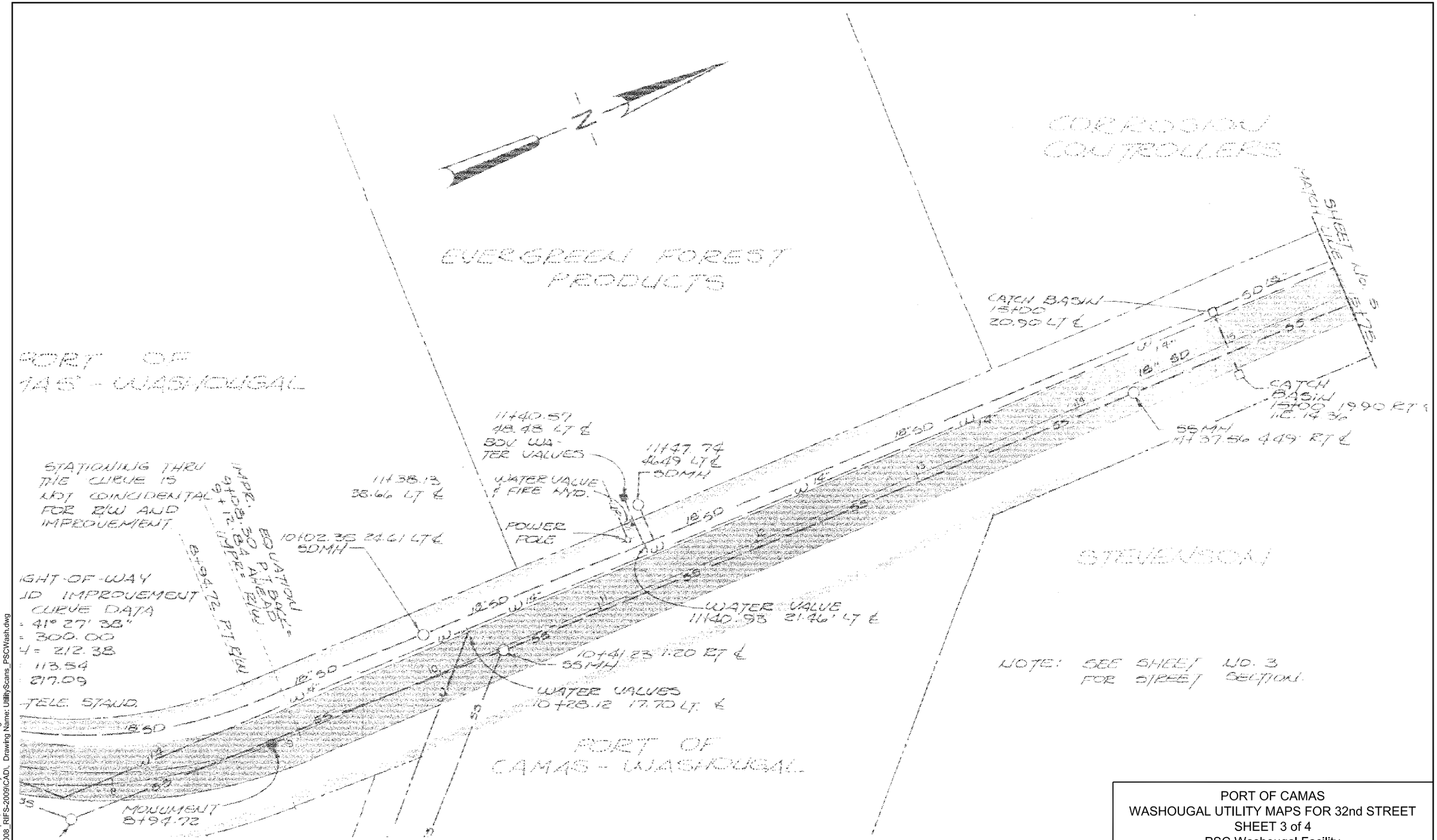

DRAWING COURTESY OF CITY OF WASHOUGAL

PORT OF CAMAS WASHOUGAL UTILITY MAPS FOR 32nd STREET SHEET 3 of 4 PSC Washougal Facility Washougal, Washington			
By: APS	Date: 12/22/09	Project No.	9625
AMEC Geomatrix		Figure	B-1

Plot Date: 12/22/09 - 12:06pm Plotted by: adam.stenberg
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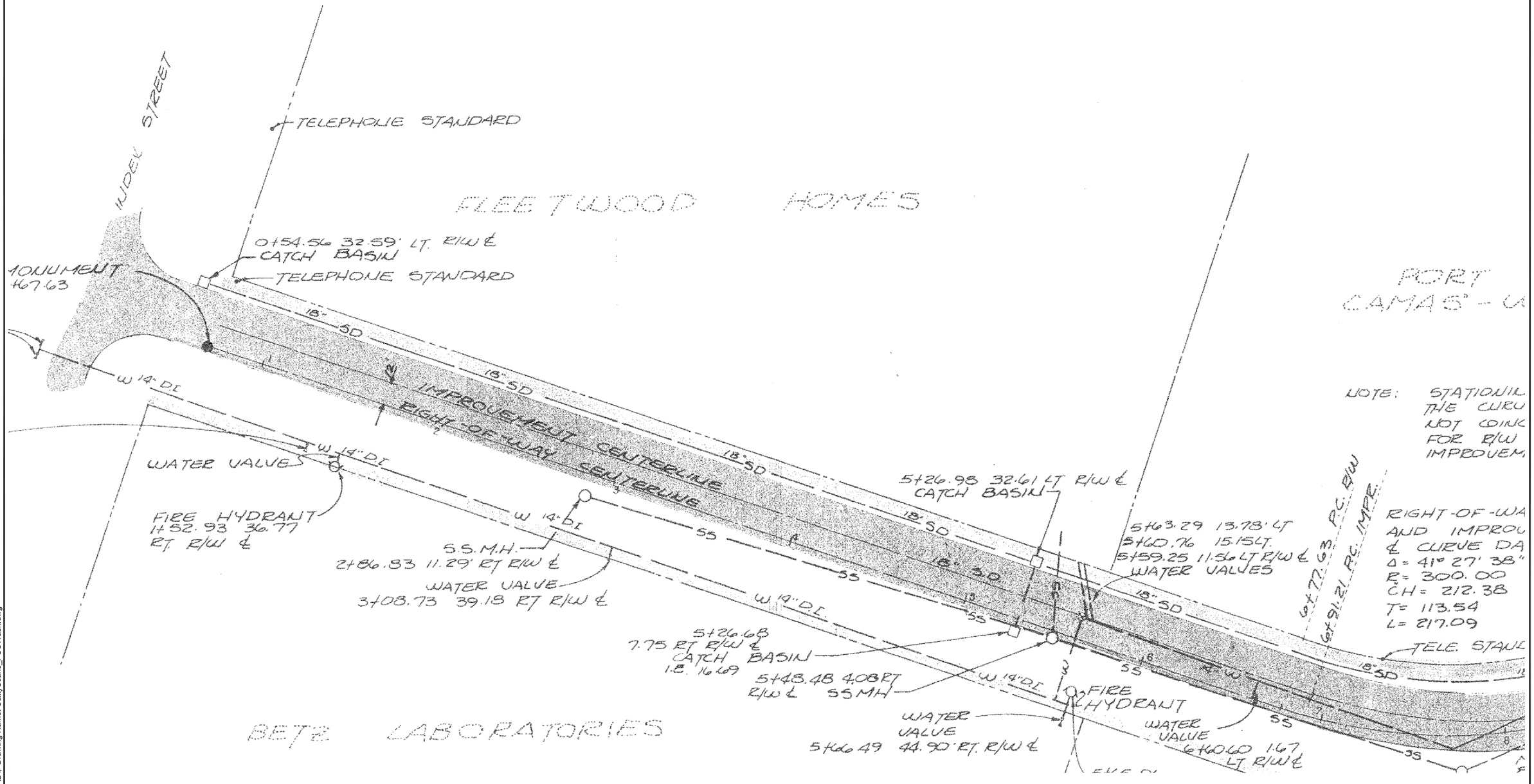

DRAWING COURTESY OF CITY OF WASHOUGAL

PORT OF CAMAS
WASHOUGAL UTILITY MAPS FOR 32nd STREET
SHEET 4 of 4
PSC Washougal Facility
Washougal, Washington

By: APS	Date: 12/22/09	Project No. 9625
AMEC Geomatrix		Figure B-1

Plot Date: 12/22/09 - 12:06pm, Plotted by: adam.stenberg
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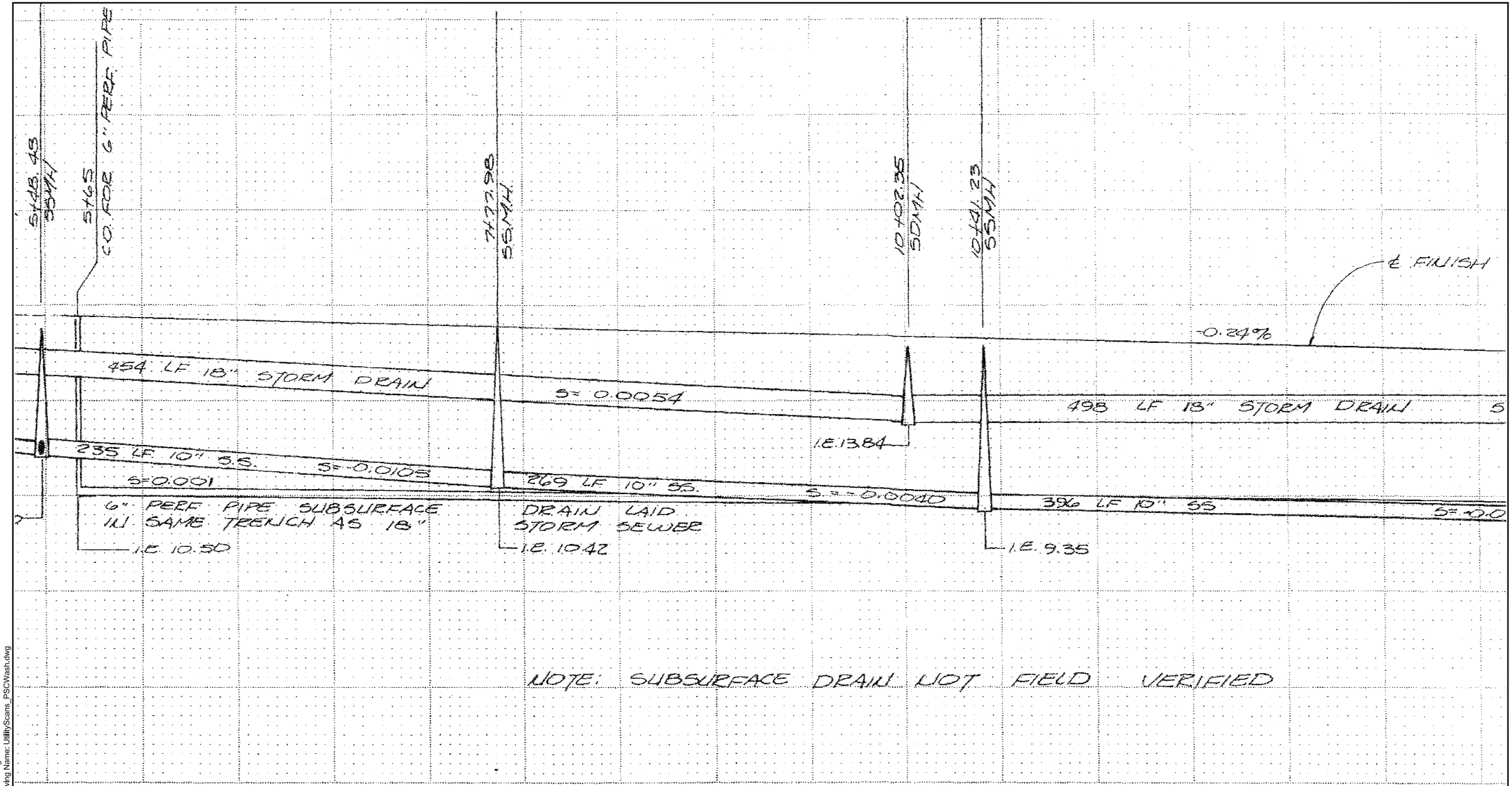

DRAWING COURTESY OF CITY OF WASHOUGAL

PORT OF CAMAS
WASHOUGAL 32nd STREET STORM SEWER
SHEET 1 of 4
PSC Washougal Facility
Washougal, Washington

By: APS	Date: 12/22/09	Project No. 9625
AMEC Geomatrix		Figure B-2

Plot Date: 12/22/09 - 12:07pm Plotted by: adam.stenberg
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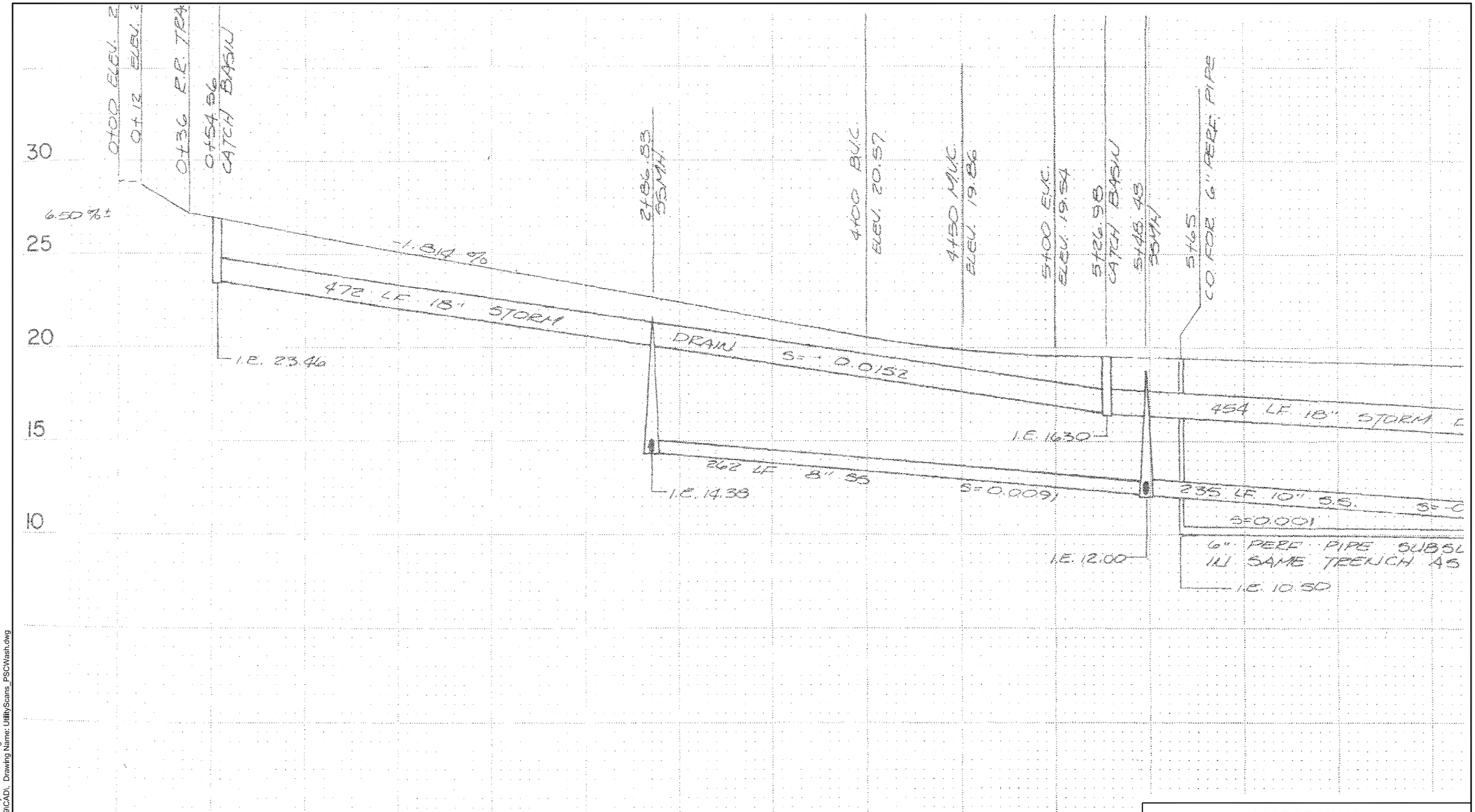

DRAWING COURTESY OF CITY OF WASHOUGAL

PORT OF CAMAS
WASHOUGAL 32nd STREET STORM SEWER
SHEET 2 of 4
PSC Washougal Facility
Washougal, Washington

By: APS	Date: 12/22/09	Project No. 9625
AMEC Geomatrix		Figure **B-2**

Plot Date: 12/22/09 - 12:07pm Plotted by: adam.stenberg
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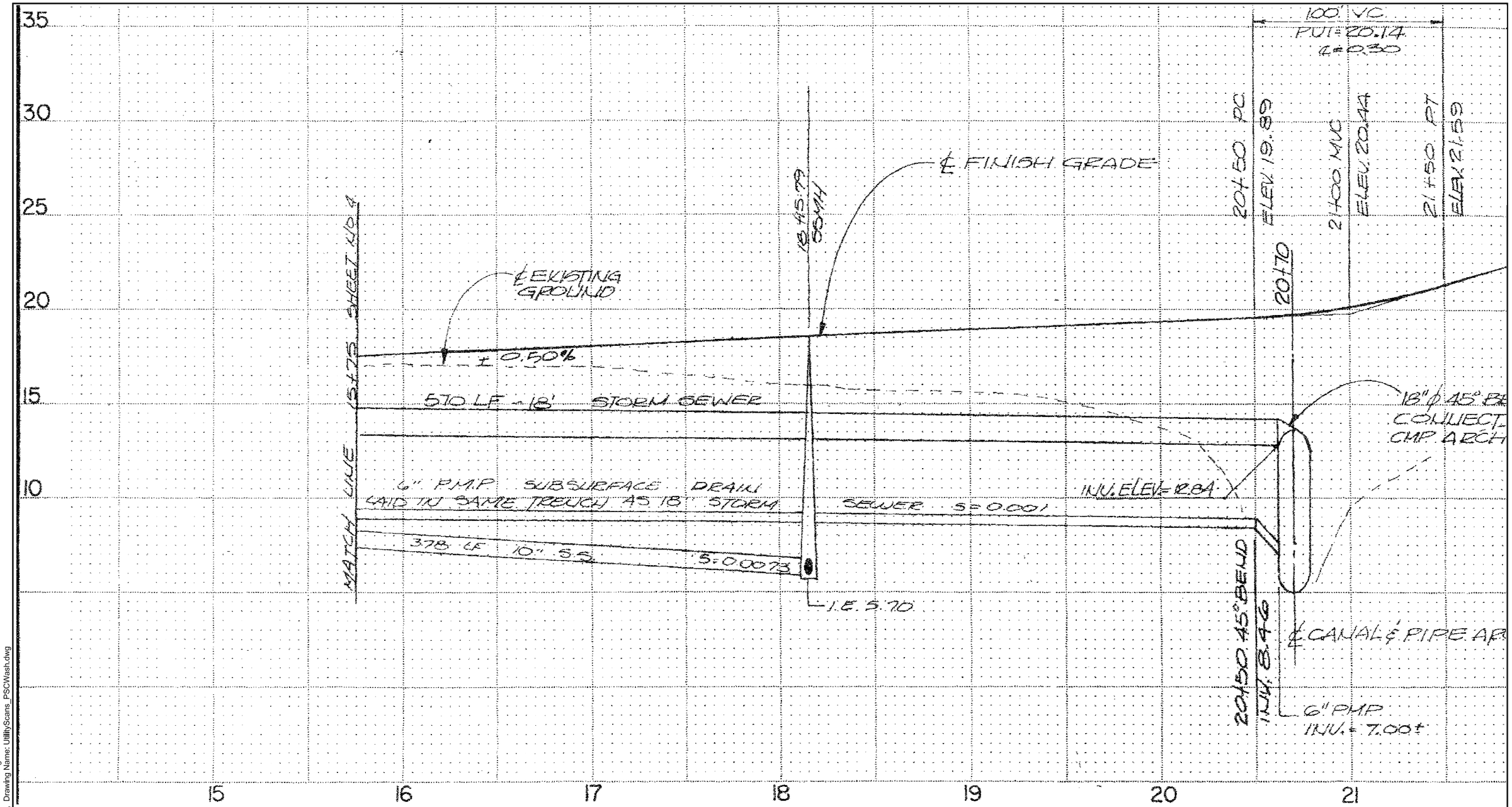

PORT OF CAMAS
WASHOUGAL 32nd STREET STORM SEWER
SHEET 3 OF 4
PSC Washougal Facility
Washougal, Washington

By: APS	Date: 12/22/09	Project No. 9625
AMEC Geomatrix		Figure B-2

DRAWING COURTESY OF CITY OF WASHOUGAL

Plot Date: 12/22/09 - 12:07pm, Plotted by: adam.stenberg
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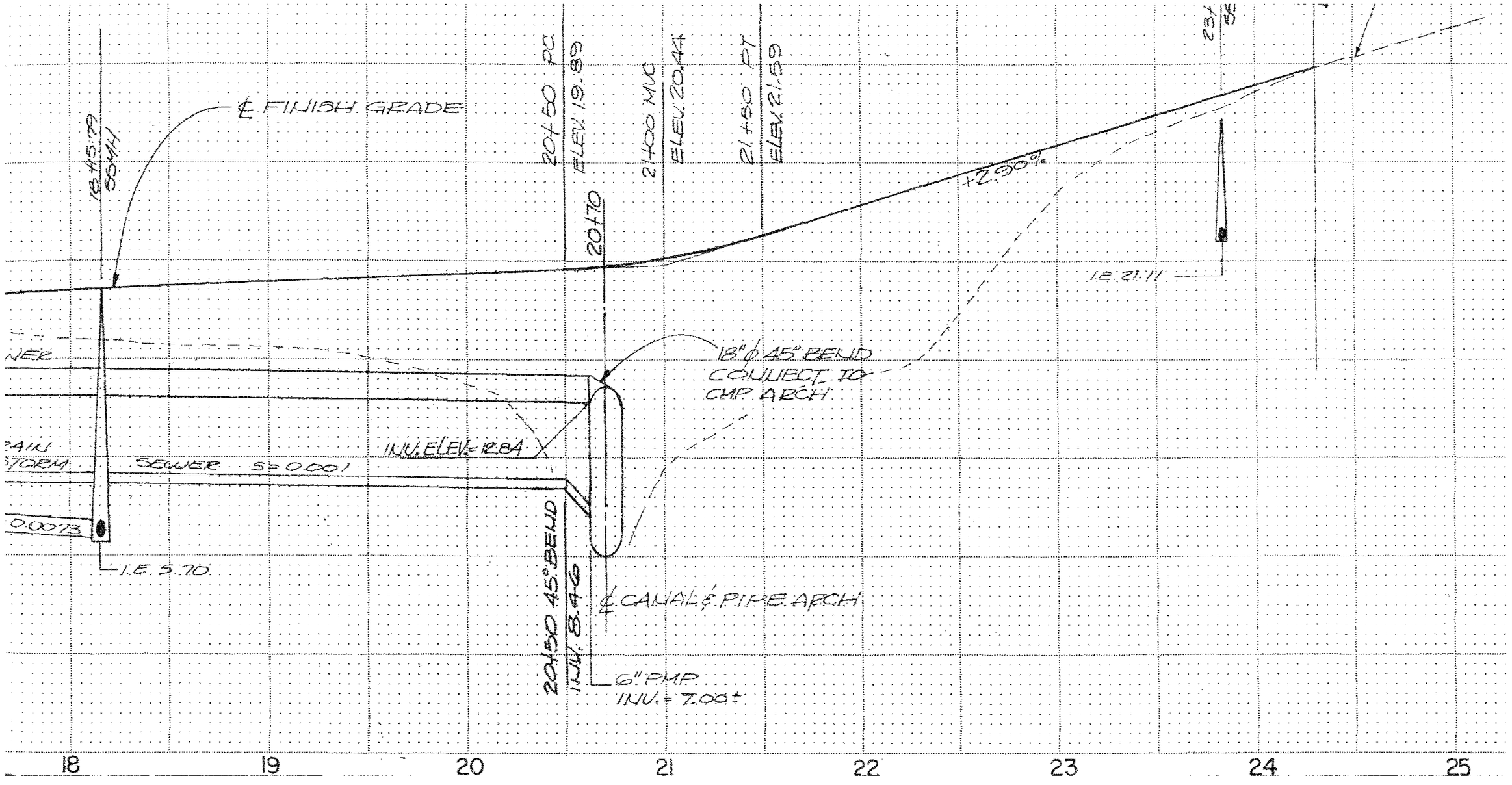

DRAWING COURTESY OF CITY OF WASHOUGAL

PORT OF CAMAS
WASHOUGAL 32nd STREET STORM SEWER
SHEET 4 of 4
PSC Washougal Facility
Washougal, Washington

By: APS	Date: 12/22/09	Project No. 9625
AMEC Geomatrix		Figure B-2

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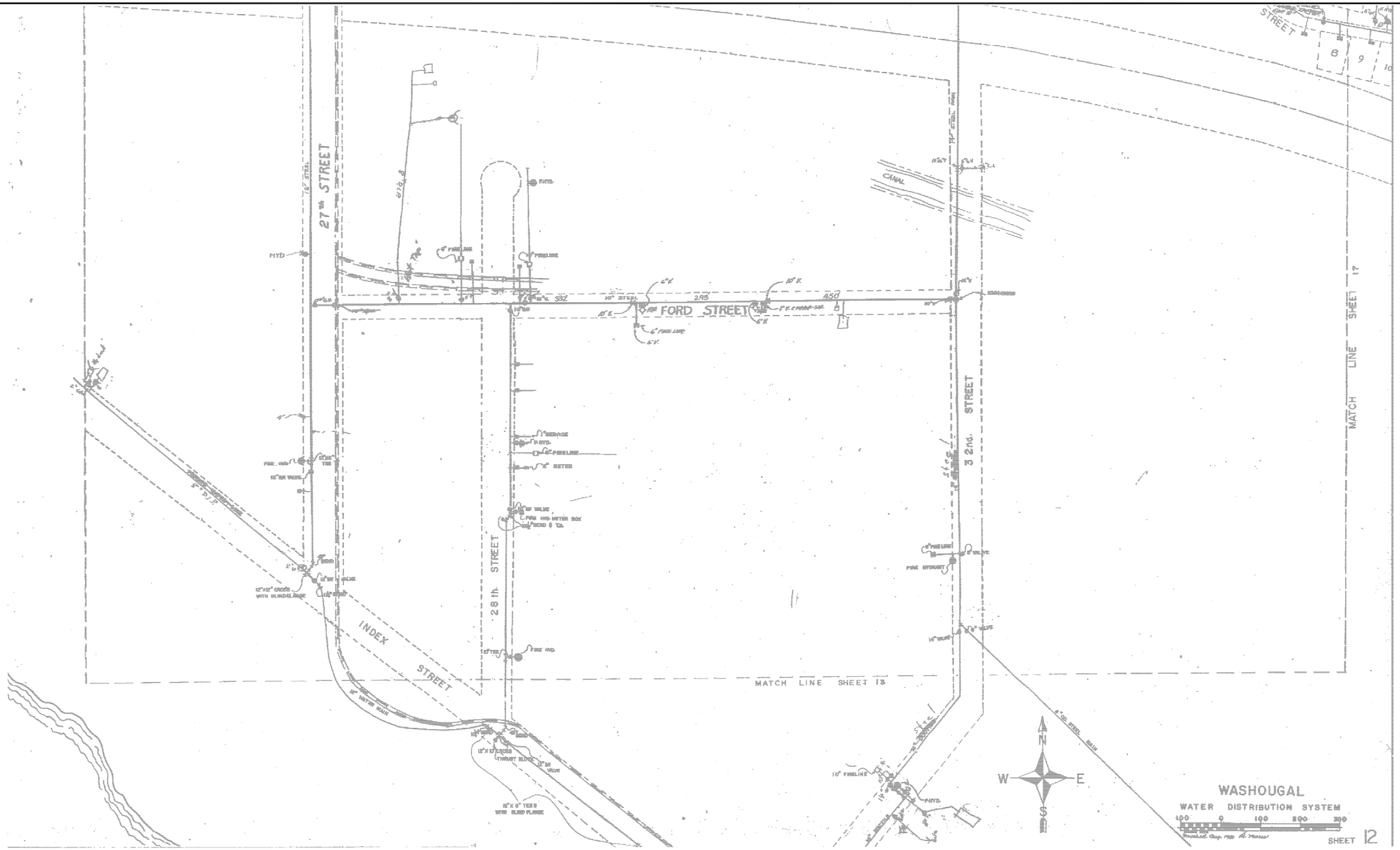

SOURCE: CITY OF WASHOUGAL WATER DEPARTMENT

WASHOUGAL WATER DEPARTMENT MAP
PSC Washougal Facility
Washougal, Washington

By: APS	Date: 12/22/09	Project No. 9625
AMEC Geomatrix		Figure **B-3**

Plot Date: 12/22/09 - 12:09pm, Plotted by: adam.stenberg
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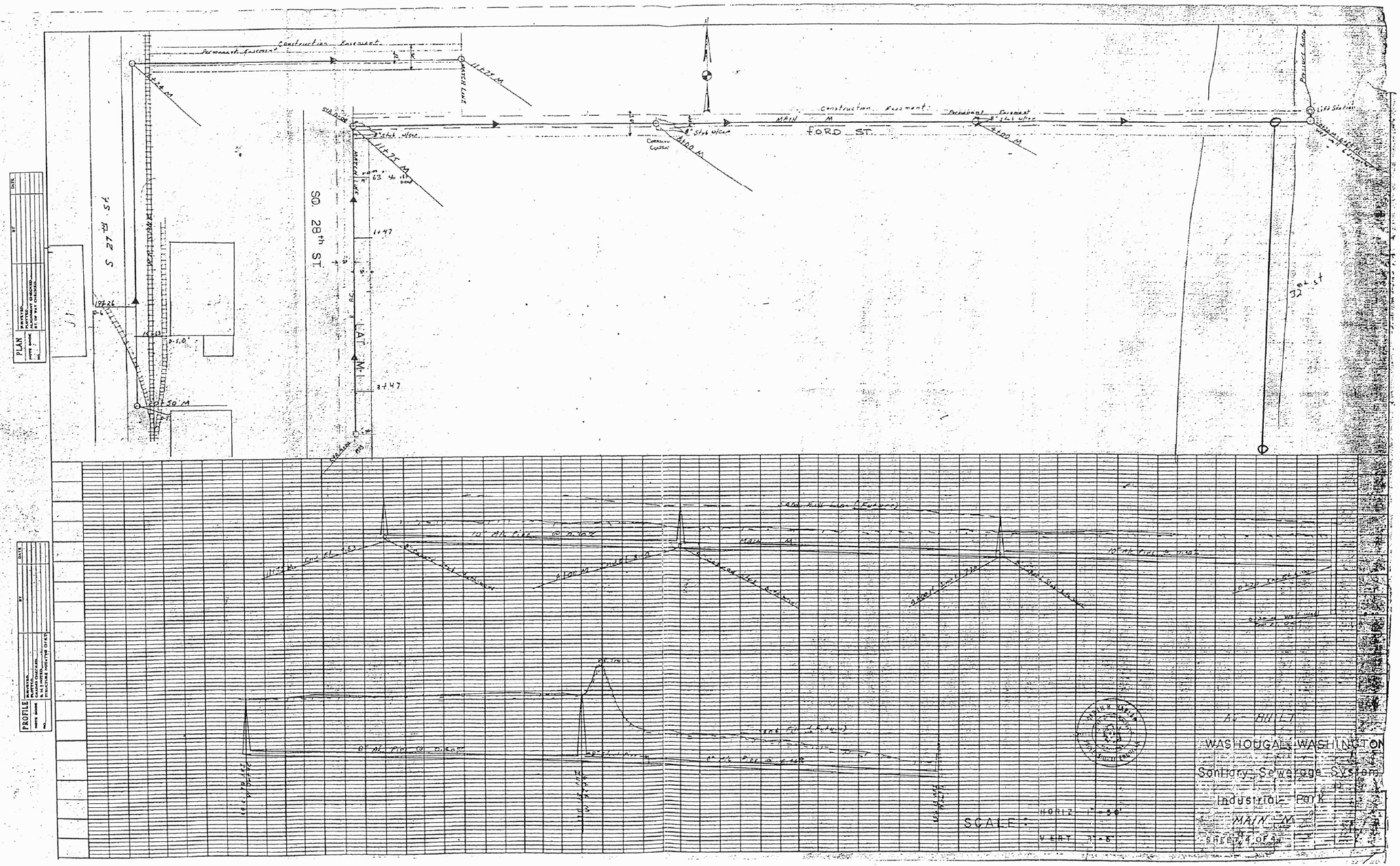

DRAWING COURTESY OF CITY OF WASHOUGAL

WASHOUGAL SANITARY SEWER SYSTEM
AS-BUILT
PSC Washougal Facility
Washougal, Washington

By: APS	Date: 12/22/09	Project No. 9625
AMEC Geomatrix		Figure **B-4**

Plot Date: 12/22/09 - 12:09pm Plotted by: adam.stenberg
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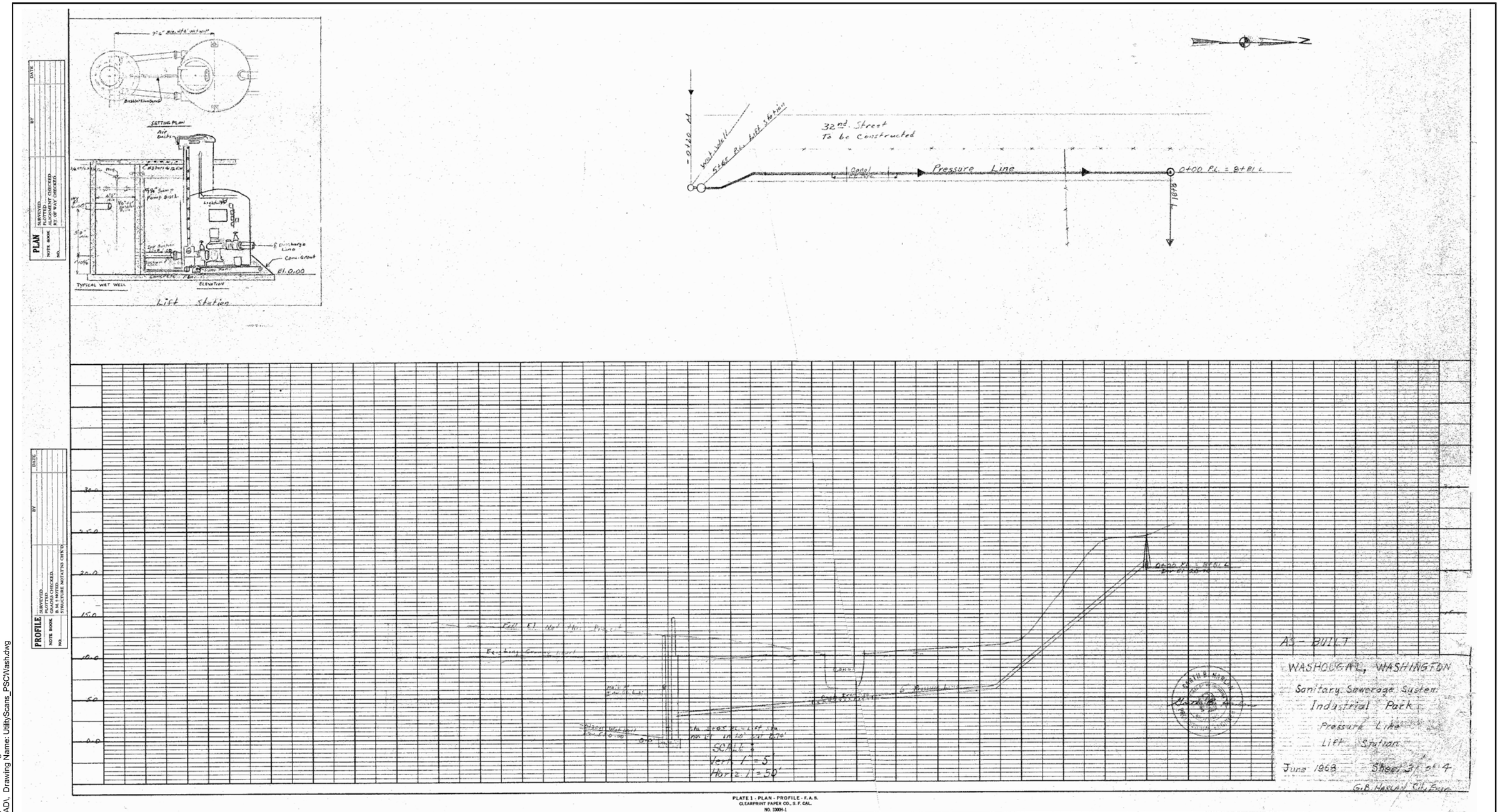

WASHOUGAL SANITARY SEWER SYSTEM
LIFT STATION
PSC Washougal Facility
Washougal, Washington

By: APS	Date: 12/22/09	Project No. 9625
AMEC Geomatrix		Figure B-5

DRAWING COURTESY OF CITY OF WASHOUGAL

Plot Date: 12/22/09 - 12:10pm, Plotted by: adam.stenberg
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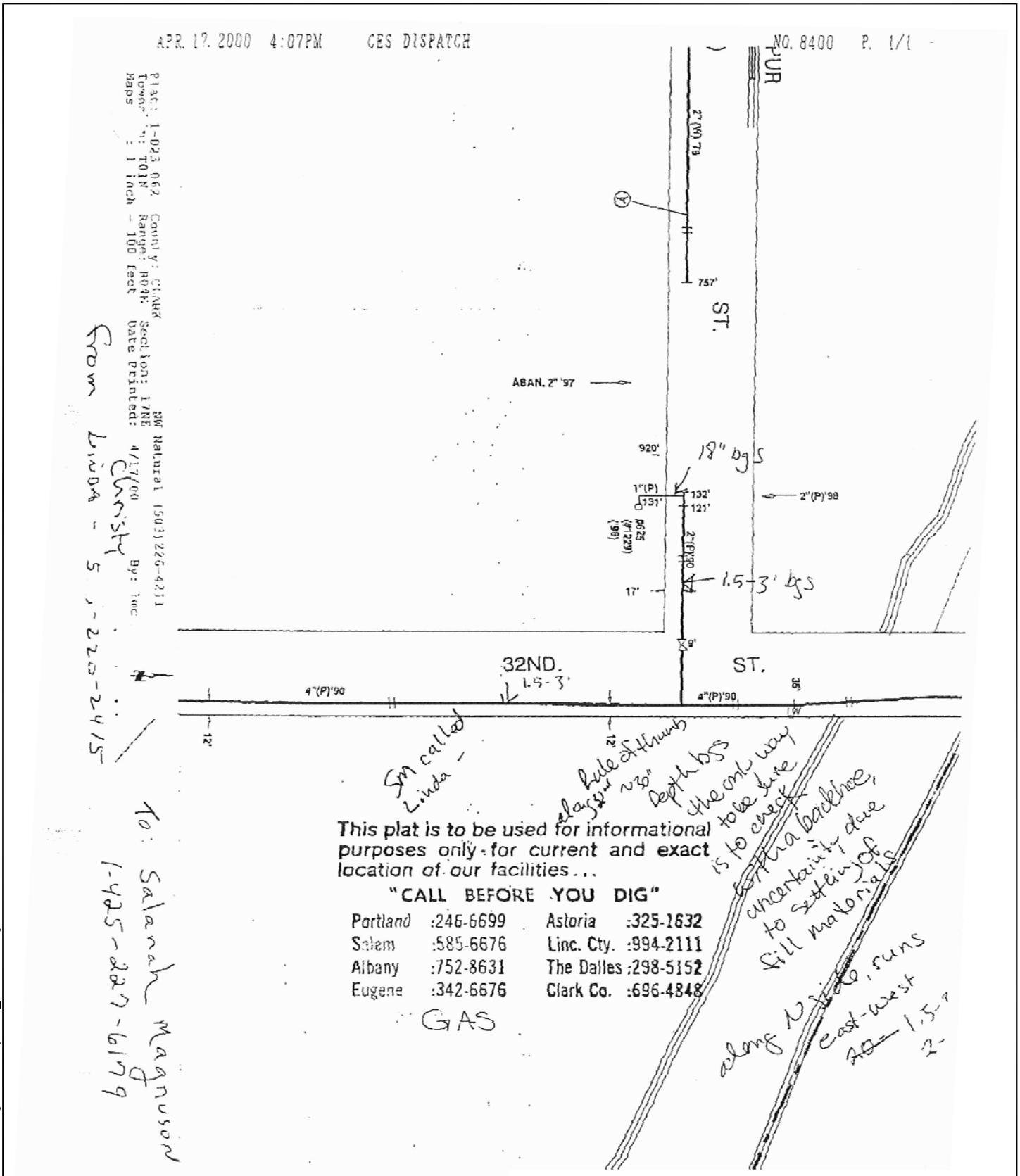

NORTHWEST NATURAL GAS MAP
PSC Washougal Facility
Washougal, Washington

By: APS	Date: 12/22/09	Project No. 9625
AMEC Geomatrix		Figure B-6

DRAWING COURTESY OF CITY OF WASHOUGAL

Plot Date: 12/22/09 - 12:11pm, Plotted by: adam.stenberg
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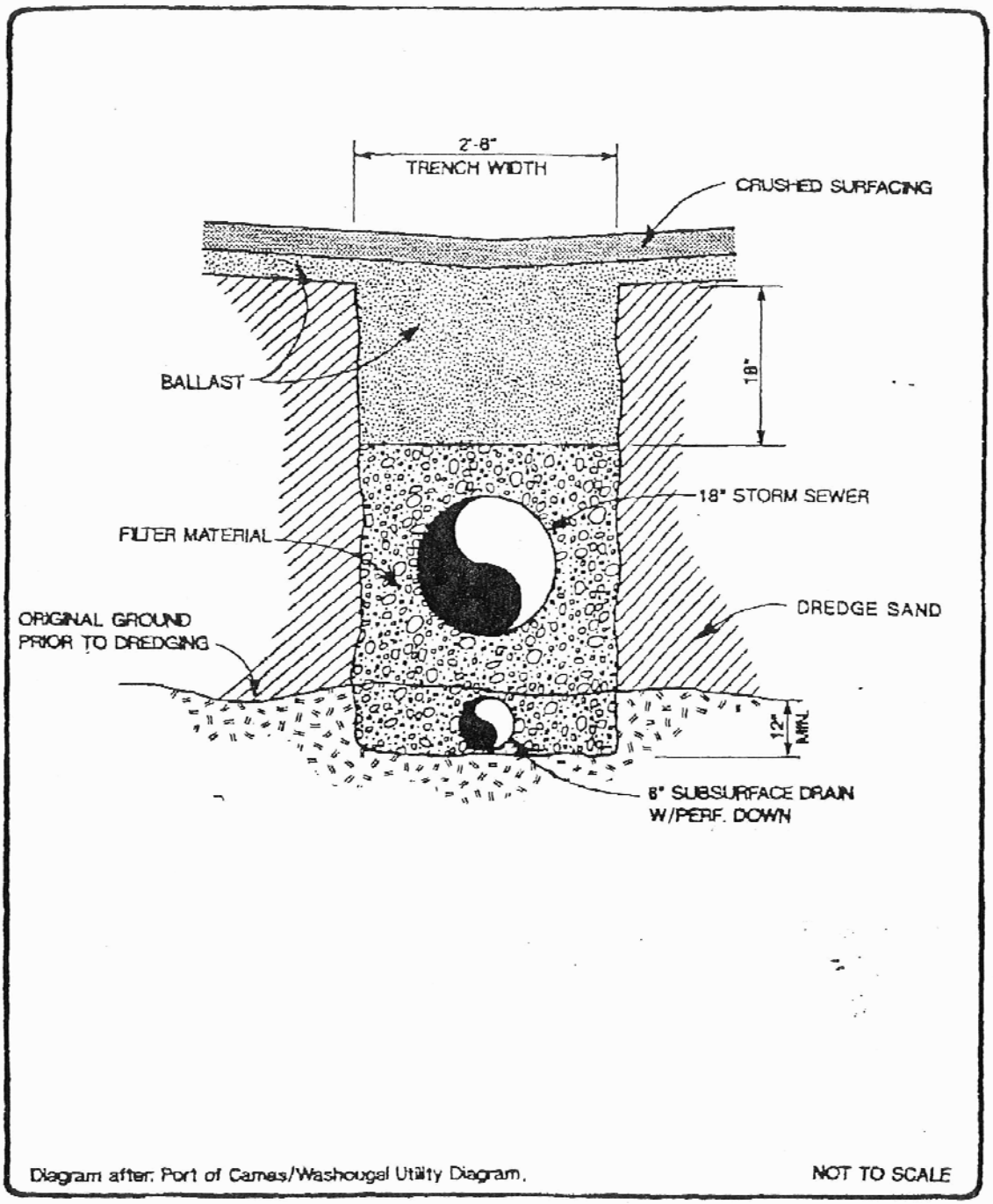

Sweet-Edwards
EMCON

DATE 5/91
DWN. JLG
APPR. DMJ
REVIS.
PROJECT NO. S9405.05

Figure 4.8
CHEMICAL PROCESSORS, INC.
WASHOUGAL RFI

STORM SEWER TRENCH SECTION

STORM SEWER TRENCH SECTION
PSC Washougal Facility
Washougal, Washington

By: APS	Date: 12/23/09	Project No. 9625
AMEC Geomatrix		Figure B-7

Plot Date: 12/23/09 - 11:50am, Plotted by: adam.stenberg
Drawing Path: S:\9625\008_RIFS-2009\CAD\, Drawing Name: UtilityScans_PSCWash.dwg

APPENDIX C

Stormwater Pollution Prevention Plan

WASHOUGAL FACILITY

STORMWATER POLLUTION PREVENTION PROGRAM

Stormwater Pollution Prevention Team Roster

Leader: Kris Iverson **Title:** Operations Manager
Office Phone: (360)-835-8594

Responsibilities: Signatory authority at facility. Coordinate plan implementation and administration, maintain training schedules, primary spill response coordinator.

Member: Paul Bourland **Title:** Environmental Specialist
Office Phone: (360)-835-8594

Responsibilities: Conduct or oversee required inspections, implement preventive maintenance program, maintain housekeeping to facility standards, secondary spill response coordinator.

Member: Patrick Hymas **Title**:Environmental Specialist
Office Phone: (360)-835-8594

Responsibilities: Backup assistance with facility inspections and maintenance, backup spill response coordinator.

Member: Thomas Nelson **Title:** Project Engineer
Office Phone: (425)-227-6122

Responsibilities: Assist with plan development and implementation, site assessment, inspection and certification for non-stormwater discharges.

Stormwater Pollution Prevention Plan

Overlaps with Other Plans

Philip Services maintains a Contingency Plan for the Washougal facility 10-day Dangerous Waste Transfer facility. The objectives of this plan are to minimize and prevent hazards to public health or the environment from fires, explosions, or spills. Updated copies of the plan are kept at the facility at all times and also provided to the appropriate public agencies, providers of emergency services, and the security company which monitors the facility. The contingency plan contains elements which overlap the stormwater pollution prevention plan, including:

- The primary and backup emergency coordinators for the contingency plan are the same as the spill response coordinators in the stormwater pollution prevention plan.
- Spill reporting, notification, and record-keeping requirements are the same as the spill response coordinators in the stormwater pollution prevention plan.
- Spill reporting, notification, and record-keeping requirements are the same for both plans and are outlined in the contingency plan.
- The contingency plan contains a listing of equipment and supplies kept on hand for responding to emergencies including spills. A map is also included providing the location of these items.
- Employee training for the contingency plan will be combined with training for the stormwater pollution prevention plan.

A copy of the contingency plan will be kept with the stormwater pollution prevention plan for cross-referencing.

Daily inspections for leaks and spills are conducted in the 10-day dangerous waste transfer area of the facility.

The Washougal facility is in the process of obtaining an interim solid waste handling permit from the Southwest Washington Health District. Upon approval of the permit, the Washougal facility will adopt the contingency plan, inspection schedules and programs for emergency equipment, containers, container storage areas and containment systems involved in moderate risk and solid waste activities. Moderate risk waste is hazardous waste from homeowners and conditionally exempt small quantity generators.

Stormwater Pollution Prevention Plan

Material Inventory

This facility operates as a transfer facility, temporarily storing containerized wastes until final transfer to treatment or disposal facilities. The facility also conducts monthly collections of homeowner and conditionally exempt small quantity generator wastes under temporary authorization of the Southwest Washington Health District. No treatment or processing of wastes occurs on site. No reagents, treatment chemicals, or industrial cleaners or degreasers are used or produced on site. Wastes are stored temporarily in transportation mode at the facility. Waste containers are exposed to precipitation and runoff only during collection events, truck unloading and loading operations.

Proposed solid waste handling operations include storage of solid and moderate risk wastes in building 2 and monthly collection events for MRW.

Waste volumes and types stored vary from week to week. Here, maximum average volumes are shown for each waste type in drum equivalents.

Waste Material	Average Drums
Aerosols	2
Flammable Liquids/ Paint Related Materials	80-100
Flammable solids	5
Oxidizers	5
Acids	5-10
Alkalines	5-10
Haz Waste Solids/Liquids	50
Non-RCRA Waste	25
Non-Regulated Waste	50
Asbestos	1
PCB's	1
Batteries	5

Stormwater Pollution Prevention

Site Assessment Inspection
October 5, 2001

Part 1. Existing Stormwater Practices

The facility has been operating under Stormwater Baseline General Permit for Industrial Activity number S03-003079, originally issued 09/19/97. Under permit number S03-003079 stormwater from paved areas of the facility drains into float switch activated blind sumps. Sumps are automatically pumped to stormwater tanks. Stormwater is visually inspected for contamination. If stormwater appears uncontaminated it will be discharged to Gibbons Creek. In the event that water appears visibly contaminated, stormwater will be analyzed to determine if carbon filtration treatment will be sufficient to comply with surface water quality standards. If carbon filtration is not a viable treatment technology for stormwater, material will be sent off-site for treatment. If the facility has a release of hazardous materials, all contact stormwater will be collected and shipped off-site.

Part 2. Evaluate the site for Pollutants

All hazardous waste processing and treatment operations at the facility ceased in October 1995. Industrial Activity at the site is now limited to ten-day dangerous waste transfer operations. Temporary authorization for MRW collection events has been authorized by the Southwest Washington Health District. All dangerous waste tanks have been removed from the site. Two used oil tanks remain onsite but have been closed and are no longer in service. Propane is the only fuel or petrochemical stored or dispensed on site. No reagents, treatment chemicals, or industrial cleaners or degreasers are used or produced on site.

Proposed operations at the facility include monthly collection events for Moderate Risk Waste and storage on-site for Moderate Risk Waste and industrial solid waste.

Part 3. Describe Existing Management Practices

Container Storage – Containers of waste are stored in transportation trailers for up to 10-days. No wastes are stored in Buildings 2 or 3. Containers of waste are exposed to precipitation only during collection events, and truck loading/unloading. The facility has spill response kits and employees are trained in their location and use. Transportation trailers are inspected daily for leaks as part of the daily log.

Bulk Liquid Storage – Tanks W01 and W02 have been closed to service. No bulk liquids are stored on site. Proposed solid waste activities include consolidation of non-dangerous waste waters. Proposed tanker loading operations will be conducted in accordance with written operational guidance. Drip pans and absorbent pads are used at hose connection points to prevent possible spillage.

Stormwater Pollution Prevention Plan

BMP's Implemented

A. Good Housekeeping

1. Spills are cleaned up immediately using absorbent materials as needed and brooms and shovels. Spills are not rinsed into stormwater sumps.
2. Litter is picked up and disposed of properly. Trash is collected regularly. The lid is closed on the trash dumpster when not in use.
3. Housekeeping procedures and policies are reinforced periodically at training sessions and safety meetings.

B. Preventive Maintenance

1. The stormwater system area is inspected daily. Deficiencies in equipment are noted and corrected. Sump pumps are inspected as part of containment area inspections and deficiencies are repaired or corrected as soon as possible.
2. Forklifts are periodically checked for fluid leakage and repaired as needed.

C. Inspections

1. The stormwater tank system is inspected daily. The daily inspection meets the requirements for the annual wet season and dry season inspections. Daily inspections ensure that the controls and procedures in place are complete and accurate, and that the system is functioning adequately. Transportation trailers are inspected daily for leaks and spills. All precipitation and liquid from paved portions of the facility drains to blind sumps. Daily visual inspections and the presence of blind sumps prevent non-stormwater discharges. Sample inspection forms are included with the Stormwater Pollution Prevention Plan.
2. Catch basins, discharge oil/water separator basin, optional treatment technology, and other stormwater handling equipment will be inspected annually. Basins will be cleaned out as needed.

D. Spill Prevention Response

1. Training in facility contingency plans and spill prevention/response occurs at least annually.
2. Emergency response equipment and supplies are inspected daily.

E. Sediment and Erosion Control

1. Paved areas are sloped to blind sumps to facilitate collection of stormwater and prevent runoff.

2. Stormwater collection sumps and discharge basin allow for particulates to settle out. Sediment and debris in collection sumps and discharge basin is routinely cleaned out.

F Management of Runoff

1. Oil/water separator is installed at discharge point
2. Paved areas are sloped inward to collection sumps to prevent runoff to pervious areas.

G. Activity Specific BMP
Container Storage of Wastes (IV-4.5 BMPS1.50)

1. Containers are stored in a designated area under cover.
2. Designated container storage areas are paved and surrounded by curb walls and berms to provide impervious containment and prevent stormwater run-in.
3. Loading and unloading of containers is performed by facility personnel trained in spill response and cleanup procedures.

H. Activity Specific BMP
Loading and Unloading Liquid Materials (IV 4.3 BMP S1.30)

1. The facility has on site written operational guidelines to train employees in proper loading and unloading procedures.
2. The facility has on site a written contingency plan to handle emergencies including spills and spill cleanup. Spill response equipment and supplies are stage throughout the facility.
3. Proposed non-hazardous waste bulk transfers take place in a paved area and conducted to contain spills and prevent stormwater run-in.
4. Drip pans and absorbent pads are used at hose connection points to contain spillage.

I. Additional BMP's
Optional Treatment Technology and Tankage

1. Particulate filter and carbon filtration canisters are available and piped in to stormwater discharge system. Operator can assess stormwater for excessive sediment or sheen due to vehicle traffic or fresh asphalt and, using valves in piping, send water through treatment loop prior to discharge. Water can be looped through treatment repeatedly if needed.
2. Operator has option to pump stormwater into water holding tanks for settling assessment or analysis prior to discharge.

APPENDIX D

PSC's Standard Operating Procedures

Collection and Handling of Sediment Samples

Written By:	Approved By:	Date:	QA Concurrence:	Date:
Carolyn Mayer	Carolyn Mayer	7/1/98	Laurel Muselwhite	7/1/98

This SOP Contains 8 Sections:

1.0 Purpose
2.0 Application
3.0 References
4.0 Associated SOPs
5.0 Equipment
6.0 Procedure
7.0 Chain of Custody Forms and Sample Labels
8.0 Measure of Proficiency

1.0 Purpose

The purpose of this SOP is provide a set of guidelines to filed sampling personnel responsible for the collection and handling of sediment samples.

2.0 Application

This SOP provides step by step guidelines to be followed by field personnel responsible for the collection and handling of sediment samples from rivers, streams and standing bodies of water.

3.0 References

A Compendium of Superfund Field Operations Methods, Office of Emergency and Remedial Response, Office of Waste Programs Enforcement, U.S. Environmental Protection Agency, EPA/540/P-87/001, December 1987.

Refer to specific Survey Plans or Quality Assurance/Work Plans for the scope of work associated with individual sediment sampling programs.

4.0 Associated SOPs

PSC-102
PSC-103
PSC-200
PSC-300
PSC-400
PSC-106

5.0 Equipment

The following equipment is required to perform the collection of sediment samples:

- stainless steel bowl and spoon
- stainless steel dredge
- stainless steel hand auger
- modified Van-Veen grab sampler
- a supply of disposable rope or line;
- chemical resistant gloves;
- water proof boots, hip waders, or chest waders;
- stainless steel knife
- position locationing equipment including, Brunton compass, stainless steel rods, wooden stakes, flagging, location bouys, a weighted measuring tape and a camera;
- decontamination equipment and supplies;

- coolers and duct tape to ship samples;
- bubble wrap, ziploc bags, and garbage bags to ship samples;
- all required documentation includine a sufficient supply of the appropriate field forms, field log books, a field sampling notebook, and chain of custody forms;
- a copy of the Field Operations Plan, including, at a minimum, the Field Sampling Plan, the Health and Safety Plan, and the Quality Assurance Plan; and

When collecting samples from a boat or barge, the following support equipment is required in addition to the equipment already listed:

- life jackets for all personnel;
- sufficient lighting and flagging, as needed, for compliance with US Coast Guard requirements;
- spare oars as emergency backup in the event of engine failure;
- radio communications with shoreline personnel; and,
- an anchor.

6.0 Procedure

6.1 Sampling Criteria

Certain criteria are to be met prior to the collection of sediment samples. Locations selected for sediment sampling will be within areas of deposition, i.e., slow moving or standing areas of water. Sediment will be collected to a depth of 12 inches below the sediment-water interface. All loose organic debris will be removed from the sediment surface prior to sampling. Any organic debris which is representative of the depositional environment (i.e., has been buried within the sediment) will remain as

part of the sample, within the approximate percent of organic material recorded on the sample log. Large stones are to be removed from the samples after the relative percent of the stones has been recorded.

All locations will be approached from a downstream direction to minimize turbidity within the water column; downstream locations will be collected before upstream locations. At locations where surface water samples are also schedule for collection, the corresponding surface water sample will be collected before the sediment sample.

All sampling equipment will be decontaminated prior to use following in the procedure outlined in SOP PSC-200.

All samples intended for volatile organic analyses will be collected as grab samples. All other analytes will be composited in a stainless steel bowl to increase homogeneity. Distribution of the composited sediment sample into the various analyte bottles will not occur until a volume of sediment sufficient to fill all analyte bottles from the location has been collected for composite.

6.2 Collection of Sediment in Shallow Water (0-4 feet)

Collection of samples in areas of shallow water will be conducted by wading to the sampling location. One member of the sampling team will remain in visual contact with the sampler from the shoreline. All sediment samples will be collected using the stainless steel dredge with the following exceptions:

- a stainless steel hand auger may be used for collection of compacted sediments
- a stainless steel spoon may used for sediment collection beneath a water column of less than six inches

Following collection and distribution, each sample container will be wiped dry and placed on ice in cooler for the remainder of the days' sampling activities. Following the collection of the sample, the location will be marked by driving a labeled stake into the adjacent bank or shoreline. The position of the sample location will be noted as a range and a bearing to the marked stake. All documentation regarding the sample collection will be made in the field notebook.

6.3 Collection of Sediment in Deep Water (greater than 4 feet)

Sampling will be conducted from a boat. The boat will be positioned on the sampling location and the water depth at the sample location will be determined using a weighted measuring tape. Sediment samples will be collected using a modified Van Veen grab

sampler. Sample handling, storage and sample location documentation will be performed as in described section 6.2 and 7.0.

7.0 Chain of Custody Forms and Sample Labels

SOP PSC-400 describes in detail the procedures for filling out sample labels and the Chain of Custody documentation. Sample containers should be prelabeled if possible and the corresponding Chain of Custody Form will be completed before the samples are shipped to the analytical laboratory.

8.0 Measure of Proficiency

Field staff will demonstrate proficiency on this SOP by successfully completing Sections 6.0 and 7.0 a minimum of twice under the direct supervision of the Corrective Actions Manager or his/her designee.

Collection and Handling of Surface Soil Samples

Written By:	Approved By:	Date:	QA Concurrence:	Date:
Carolyn Mayer	Carolyn Mayer	10/30/98	Chris Minton	11/1/98

This SOP Contains 8 Sections:

1.0 Purpose
2.0 Application
3.0 References
4.0 Associated SOPs
5.0 Equipment
6.0 Procedure
7.0 Chain of Custody Forms and Sample Labels
8.0 Measure of Proficiency

1.0 Purpose

The purpose of this SOP is provide a set of guidelines to filed sampling personnel responsible for the collection and handling of surface soil samples.

2.0 Application

This SOP provides step by step guidelines to be followed by field personnel responsible for the collection and handling of surface soil samples.

3.0 References

A Compendium of Superfund Field Operations Methods, Office of Emergency and Remedial Response, Office of Waste Programs Enforcement, U.S. Environmental Protection Agency, EPA/540/P-87/001, December 1987.

Refer to specific Survey Plans or Quality Assurance/Work Plans for the scope of work associated with individual surface soil sampling programs.

4.0 Associated SOPs

PSC-102
PSC-103
PSC-200
PSC-300
PSC-400
PSC-106

5.0 Equipment

The following equipment is required to perform the collection of sediment samples:

- stainless steel bowl and spoon
- stainless steel hand auger
- chemical resistant gloves;
- stainless steel knife
- position locationing equipment including, Brunton compass, stainless steel rods, wooden stakes, flagging, and a camera;
- decontamination equipment and supplies;

- coolers and duct tape to ship samples;
- bubble wrap, ziploc bags, and garbage bags to ship samples;
- all required documentation includine a sufficient supply of the appropriate field forms, field log books, a field sampling notebook, and chain of custody forms;
- a copy of the Field Operations Plan, including, at a minimum, the Field Sampling Plan, the Health and Safety Plan, and the Quality Assurance Plan; and

6.0 Procedure

6.1 Sampling Criteria

Surface soil samples will be collected from 0-4' below ground surface. All loose organic debris will be removed from the soil surface prior to sampling. Large stones are to be removed from the samples after the relative percent of the stones has been recorded.

All sampling equipment will be decontaminated prior to use following in the procedure outlined in SOP PSC-200.

Surface soil samples collected between 0-6" can be collected using a stainless steel spoon. Samples between 6" and 4' below ground surface should be collected using a stainless-steel hand auger.

All samples intended for volatile organic analyses will be collected as grab samples (i.e., directly from the sampling device). Soil for all other analyses will be homogenized in a stainless steel bowl. Distribution of the homogenized soil sample into the various sample bottles will not occur until a volume of soil sufficient to fill all bottles from the location has been collected.

Following collection and distribution, each sample container will be wiped dry and placed on ice in cooler for the remainder of the day's sampling activities.

The position of the sample location will be noted. All documentation regarding the sample collection will be made in the field notebook.

7.0 Chain of Custody Forms and Sample Labels

SOP PSC-400 describes in detail the procedures for filling out sample labels and the Chain of Custody documentation. Sample containers should be prelabeled if possible and the corresponding Chain of Custody Form will be completed before the samples are shipped to the analytical laboratory.

8.0 Measure of Proficiency

Field staff will demonstrate proficiency on this SOP by successfully completing Sections 6.0 and 7.0 a minimum of twice under the direct supervision of the Corrective Actions Manager or his/her designee.

Groundwater Monitoring Well Installation

Written By:	Approved By:	Date:	QA Concurrence:	Date:
Carolyn Mayer	Carolyn Mayer	7/1/98	Laurel Muselwhite	7/1/98

This SOP contains nine sections:

1.0 Purpose
1.0 Application
1.0 References
1.0 Associated SOPs
1.0 Installation Equipment and Materials
1.0 Monitoring Well Installation Procedure
1.0 Standard Surface Finishing Designs
1.0 Documentation
1.0 Measure of Proficiency

1.0 Purpose

The purpose of this SOP is to provide geotechnical field personnel with an outline of the specific information needed to install and construct monitoring wells in both unconsolidated and bedrock media. The required equipment and documentation are also outlined for each of these procedures. The recommended monitoring well design, as presented in this SOP, is based on the assumption that the objective of the program is to obtain representative ground water information and water quality samples from aquifers.

1.0 Application

Ground water monitoring wells are generally used as collection points for ground water samples and as measuring points for aquifer hydraulic properties.

This SOP provides a step-by-step guideline to be followed by the site geologist to design and install monitoring wells suited to these purposes.

1.0 References

ASTM Proposed Recommended Practice for Design and Installation of Ground Water Monitoring Wells in Aquifers (February 19, 1990).

U.S. EPA, Office of Solid Waste. 1992. RCRA Ground-Water Monitoring Draft Technical Guidance. November.

Driscoll, Fletcher G. 1986. Groundwater and Wells. Second Edition. Published by Johnson Filtration Systems, Inc., St. Paul Minnesota.

1.0 Associated SOPs

PSC-103
PSC-121
PSC-400

1.0 Installation Equipment and Materials

The following equipment should be provided and maintained by the site geologist:

- a calibrated photoionization detector; isobutylene span gas, regulator, and tedlar bag;
- a weighted fiberglass tape calibrated to .001 foot and of sufficient length to reach the bottom of the deepest bore hole;
- a wooden folding ruler calibrated to a .001 foot;
- an electric water level indicator, immiscible phase probe or chalked steel tape for obtaining water level measurement to an accuracy of .001 foot;
- a field notebook and calculator.
- a camera;

- a small file or saw to permanently mark a double notch at the top of the well casing/riser;
- permanent marker or paint pen to mark the identification of the well on the steel pipe finish;
- a sufficient supply of blank daily drilling reports and monitoring well construction field forms;
- a copy of the Field Operations Plan including, at a minimum, the Field Sampling Plan, the Health and Safety Plan and the Quality Assurance Project Plan
- all required personnel protective equipment as defined in the Health and Safety Plan;
- a sufficient amount of deionized water to hydrate the bentonite.
- A brass or hardened-steel security lock.

The drilling contractor is responsible for providing the following:

- well screen and riser components with flush joints with square profile threads to obtain water tight seals;
- machine slotted well screens (0.010 size);
- bentonite pellets or chips;
- "quick-set" additive (if necessary when cold weather conditions);
- filter sand;
- a steam cleaner;
- cement grout, mixer, tremie pipe;
- the project specific required surface finishing materials; and
- all required personnel protective equipment as defined in the Health and Safety Plan.

6.0 Monitoring Well Installation Procedure

Once a stable bore hole has been advanced to the desired depth in accordance with Standard Operating Procedure PSC-103, the installation of a well screen and riser will proceed as follows:

Materials Inspection and Cleaning

- decontaminate both inside and outside of the well screen, bottom plug and riser immediately prior to assembly and installation, using a water source of known chemistry and a mild non-phosphate detergent then rinse with deionized water; store decontaminated riser and screen in an area free of contaminants and cover with plastic sheeting;

- inspect all materials prior to assembly to insure material integrity.

Bore Hole Preparation

- if viscous drilling fluids were introduced to the borehole, then the borehole should be flushed with clean water of known chemistry. This is done to remove all viscous drill fluids from the bore hole which could prevent proper setting of well construction materials;

- record the volume of water introduce into the bore hole and recovered from the bore hole during flushing. The difference in there two volumes requires recovery during well development in addition to the calculated well volume to be removed PSC-121.

- check the total depth of the bore hole using a weighted fiberglass tape and a constant datum such as the ground surface. Bore holes that are partially obstructed by caved or blow-in sediments should be cleared in accordance with Standard Operating Procedure PSC-103 prior to initiating well installation;

- a 1.0 foot thick base layer of filter san should be placed at the base of the bore hole using a decontaminated, flush threaded, one inch internal diameter (minimum) tremie pipe. Alternatively, the filter sand may be added directly between the rise pipe and the auger or casing. Verify the depth of the top of the sand base;

Monitoring Well Pre-assembly

- pre-cut the uppermost section of the well riser so that when the well is in place, the top of the well riser will be approximately 4 to 6 inches below the ground surface for flush finished wells, or 3.0 feet above the ground surface for wells designed with a standpipe finish;

- permanently identify the survey and measuring point on the upper rim of the well riser by cutting a double notch into the rim (Figure 1);

Monitoring Well Installation

- quickly assemble the well within the bore hole by adding sections to the top of the column until the screened section is set at the desired depth. Care should be taken to prevent any materials from entering the well during down hole assembly;

- use of a geosock to prevent fines from entering the well should be discussed on an individual basis per project. If used, slip it on over the screened interval as the well is being assembled.

- cap the well riser to prevent materials from entering the well during construction;

- begin placing the chemically inert filter pack within the annular space surrounding the well screen while simultaneously removing the augers or casing;

- the filter pack should be added slowly in order to prevent bridging of the sand between the riser and the borehole or auger; when adding filter pack below the water table or to a deep well, a tremie pipe should be used;

- add the filter sand until it extends no more than 2.0 feet inside the auger or casing, then pull the casing upward allowing the filter sand to flow from the bottom, filling the resultant annular space. Frequent depth measurements should be taken using a weighted tape to verify the effectiveness of this procedure. The augers or casings should not be extracted in greater than 2.0 foot increments to minimize the potential for native sediments to cave or slump into the annular space;

- continue placing the filter pack until it extends above the screen for a distance equal to approximately 20% of the total screened interval, but not less than 2.0 feet above the top of the screen. Where there is a hydraulic connection between the zone to be monitored and the overlying strata, this upward extension of the filter pack should be minimized, subject to the construction described above, to prevent seepage from upper zones which may result in less than representative sampling;

- it is optional to place a secondary, finer filter pack directly above the first to prevent intrusion of the bentonite seal into the primary filter pack. This filter pack should be designed with a vertical thickness ranging between 0.5 and 2.0 feet. As with the primary filter pack, the secondary filter must not extend into an overlying hydrologic unit. The need for this filter pack should consider the gradation of the primary filter pack, the hydraulic heads between adjacent units, and the potential for grout intrusion into the primary filter pack;

- place an annular sealant seal directly above the filter pack(s) while continuing to remove the augers or casing in 2.0 foot increments. This seal consisting of bentonite pellets or chips, should extend a minimum of 3.0 feet above the top of the filter pack. Frequent depth measurements should be taken using a weighted tape to verify the efficiency of this procedure.

- pour water of a known chemistry over the bentonite pellets or ships if the seal is located in the vadose (unsaturated) zone (i.e., above the water table) to hydrate the bentonite. Record the amount of water added during this procedure for corrected well water removal during well development (PSC-121).

- fill the remaining annular space with a bentonite grount slurry continuing to remove the augers or casing in two foot increments. The slurry should extend to approximately 5.0 to 6.0 feet below ground surface and all augers or casing should be withdrawn. Allow 24 hours to settle and set;

- top-off the grouted column to 5.0 to 6.0 feet below the ground surface and allow to set overnight.

6.0 Standard Surface Finishing Designs

The following defined our standard "flush mount" and "stand pipe" monitoring well finishing procedures:

7.1 Standard Flush Mount Finish

This finishing design (Figure 2) is used when monitoring wells are installed in high traffic areas or other areas where a low profile design is needed. Flush mount wells are less preferable than stand pipe wells because there is a greater chance of surface water entering a flush mount well. The standard flush mount finish is constructed as follows:

- add filter sand to the annular space above the grouted column to a depth of approximately 3.5 feet below ground surface;
- center a 4.0 foot length of 4 or 5 inch diameter steel casing, with locking steel cap into the bore hole. This casing should be placed so that the locking lid rests approximately 2 inches above the top of the capped well riser, and is seated a minimum of 6 inches into the filter sand;
- place a bentonite seal using water of known chemistry;
- place filter sand in the annular space between the well riser and the steel casing to a depth of 1.0 foot below ground surface;
- center a 13 inch diameter, aluminum cast, manhole-type cover equipped with a water tight gasket and a 1.0 foot aluminum vertical extension, over the locking steel casing. The top of the aluminum cover should be approximately a ¼ inch above the ground surface;

- add grout to the excavated area, allowing the grout to flow into the annular spacing surrounding the steel casing. Fill the excavation evenly to a depth of approximately 8 inches below the ground surface and allow to settle and set (to shorten the setting time, the use of adding "quick-set" to the grout is acceptable). The bottom few inches of the aluminum cover should be seated in the cement;

- add cement to the excavated area surrounding the aluminum cover until the cement is flush with the ground surface. Gently grade and smooth the cement from the edge to the cover, so that runoff is away from the well and allow to set;

- permanently identify the well by labeling the cement pad, aluminum cover and lid to the locking steel casing; and

- secure well with an approved brass or hardened-steel lock.

7.2 Standard Stand Pipe Finish

This finishing design (Figure 3) is used when the flush finish design is not needed. The standard stand pipe finish is constructed as follows:

- add filter sand to the annular space above the grouted column to a depth of approximately 1.5 feet below ground surface;

- center a 5.0 foot length of 4 or 5 inch inside diameter steel casing, with locking steel cap into the bore hole. This casing should be placed so that the locking lid rests approximately 2 inches above the top of the capped well riser, and is seated a minimum of 6 inches into filter sand;

- place filter sand in the annular space between the well riser and the steel casing to ground surface;

- excavate a 2.5 foot square which measures approximately 6 inches deep around the edges and grades deeper with depth at a slope of approximately 45° toward the bore hole. Take care to minimize the deposition of soil into the annular space outside the steel casing;

- using 2' x 6' lumber, construct a 3.0 foot square wooden frame and insert the frame into the excavation. Situate the frame so that all edges are flush with the ground surface;

- place three 3.0 foot long steel bumper guards in the excavation to protect the stand pipe from damage resultant from vehicular traffic on the line;

- add cement to the excavated area, allowing the cement to flow into the annular spacing surrounding the steel casing, until the cement is flush with the ground surface. Gently grade and smooth the cement from the edge to the casing, so the runoff is away from the well, and allow to set (to shorten the setting tiem, the sue of adding "quick-set" to the cement is acceptable under cold weather conditions);

- permanently identify the well by labeling the cement pad, stand pipe and lid to the locking steel casing; and,

- secure well with an approved brass or hardened-steel lock and record key number in field log book.

8.0 Documentation

Documentation of all monitoring well installation activities including all geotechnical forms and the maintenance of a detailed field notebook will be recorded in accordance with Standard Operating Procedure PSC-400.

9.0 Measure of Proficiency

Field staff will demonstrate proficiency on this SOP by successfully completing Sections 6.0, 7.0 and 8.0 a minimum of twice under the direct supervision of the Corrective Actions Manager or a designee.

Measuring Water and NAPL Elevations, and Total Depths

SOP No. PSC-120
Origination Date: 4/28/98
Revision No. 3 10/29/02

Written By:	Approved By:	Date:	QA Concurrence:	Date:
Joe Depner	Carolyn Mayer	11/1/02	Tasya Gray	11/1/02
			Lou La Rosa	11·1·02

This standard operating procedure (SOP) contains the following sections:

1. Purpose
2. Application
3. References
4. Associated SOPs
5. Terminology
6. Equipment and Supplies
7. Procedures
   - 7.1 Simultaneity of Measurements
   - 7.2 Order of Completion
     - 7.2.1 Special Instructions for Wells with Dedicated Pumps
   - 7.3 Pre-Measurement Procedures
   - 7.4 General Measurement Procedures
   - 7.5 Measuring LNAPL Levels
   - 7.6 Measuring Water Levels
     - 7.6.1 Measuring Water Levels Using an Electric Oil/Water Interface Detector
     - 7.6.2 Measuring Water Levels Using an Electric Water-Level Indicator
   - 7.7 Measuring DNAPL Levels
   - 7.8 Measuring Well Total Depths
   - 7.9 Post-Measurement Procedures
8. Decontamination
9. Documentation
10. Measure of Proficiency

1 Purpose

The purpose of this SOP is to provide personnel with the specific information needed to collect and document consistent and representative data on liquid levels at, and total depths of, monitoring wells and piezometers.

2 Application

This SOP shall be followed by all personnel who measure liquid levels at, and total depths of, monitoring wells and piezometers at the following PSC facilities in Washington state: Seattle (Georgetown), Kent, Tacoma, Washougal.

3 References

Yeskis, D. and B. Zavala. May 2002. Ground-Water Sampling Guidelines for Superfund and RCRA Project Managers. EPA Office of Solid Waste and Emergency Response. EPA 542-S-02-001.

U.S. EPA. Nov 1992. RCRA Groundwater Monitoring: Draft Technical Guidance. Office of Solid Waste. EPA/530-R-93-001.

4 Associated SOPs

PSC-124 – Low-Flow Groundwater Sampling Procedure
PSC-200 – Equipment Decontamination Procedure
PSC-300 – Photoionization Detector Calibration and Operation
PSC-400 – Documentation Procedures

5 Terminology

The following terminology is used in this SOP:

"NAPL" means nonaqueous-phase liquid. "DNAPL" and "LNAPL" mean dense and light NAPL (described below), respectively.

"Wells" means groundwater-monitoring wells and piezometers.

"Liquid levels" means the elevations of fluid interfaces in wells. These include the following:

The "LNAPL level" is the elevation of the air/LNAPL interface, if floating LNAPL is present.

The "water level" is either (1) the elevation of the air/water interface if LNAPL is absent, or (2) the elevation of the LNAPL/water interface if LNAPL is present.

The "DNAPL level" is the elevation of the water/DNAPL interface, if DNAPL is present.

The level is measured as the depth of the interface, from the well's measuring point (MP).

6 Equipment and Supplies

The following equipment and supplies are necessary to properly measure liquid levels and total depths:

- Equipment required to open the well monuments (e.g., padlock keys, well keys, hand drill, socket set, Allen wrenches or other tools).
- A photoionization detector (PID) or similar instrument to monitor the well headspace.
- An electric water-level indicator and/or an electric oil/water interface detector. Each such instrument must have a chemically inert suspension line that is graduated in 0.01-foot increments and sufficiently long to reach the bottom of the well.
- Fully charged batteries for each battery-powered instrument.
- An accurate and reliable watch that has been properly set.
- Documentation materials as described in SOP PSC-400.
- Health-and-safety equipment and supplies (e.g., personal protective equipment [PPE]) as described in the relevant site health-and-safety plan (HSP).
- Decontamination equipment and supplies as specified in SOP PSC-200.

Although not essential, the following items are useful for verifying the correctness of field measurements:

- A construction (as-built) diagram for each well, showing the well's total depth and its screened interval.
- A table or graph (e.g., a well hydrograph) of field measurement results (liquid levels, total depth) from previous monitoring events, for each well.

7 Procedures

7.1 Simultaneity of Measurements

If liquid-level measurements are to be completed at a group of wells at a site, then complete the entire set of measurements for the group within a single business day. In addition, if any of the wells at a site are screened in tide-influenced hydrogeologic units, then complete the set of measurements corresponding to those wells within a single one-hour period. To facilitate compliance with this requirement, the water-level field form for each site shall identify those wells screened in tide-influenced units.

7.2 Order of Completion

At each well, complete the liquid-level and total-depth measurements in the following order:

1. LNAPL level
2. water level
3. DNAPL level
4. total depth

7.2.1 Special Instructions for Wells with Dedicated Pumps

The instrument access ports on some dedicated pumps will not accommodate some probes (e.g., most oil/water interface probes). If so, the pump must be removed from the well to measure the DNAPL level and the total depth. At wells with dedicated pumps, complete the measurements in the following order:

1. Measure the water level.
2. Remove the pump from the well and place it in a clean plastic bag.
3. Allow the liquid levels to stabilize.
4. Measure the DNAPL level.
5. Measure the total depth.

7.3 Pre-Measurement Procedures

On arrival at each well, complete the following steps in the order listed:

1. Don appropriate PPE as described in the site HSP.
2. Remove any debris (e.g., soil, vegetation, or refuse) and any standing water from the well opening, to prevent foreign matter from entering the well.
3. Open the well monument.
4. Vent the well by carefully removing the well cap. Record the time at which the well is initially vented to the atmosphere (i.e., the time at which the well cap is removed). If the gas in the well casing appears to have been over-pressurized or under-pressurized relative to the atmosphere, then note this in the field book.

Caution (1): Never put your face, head, or any other body part over the well when venting it. If possible, vent the well gradually, so the cap does not become airborne.

Caution (2): Handle monitoring wells with care at all times. If it is necessary to apply lift or torque to a well cap to remove it (e.g., if the casing is airtight and under a vacuum), then be extremely careful to prevent the well casing from being raised or rotated.

5. Immediately after removing the well cap, monitor the headspace within the well using the PID (see SOP PSC-300 for PID operation). Do this by placing the instrument probe at the opening of the well, and recording the reading in the field book and on the appropriate field forms.

6. Wait at least 20 minutes from the time the well is vented, to allow the liquid levels in the well to equilibrate to the current atmospheric pressure, before measuring liquid levels. At some wells it may be necessary to vent for longer periods.

7.4 General Measurement Procedures

Each liquid level measurement involves lowering an instrument probe into the well, until the instrument emits the appropriate response, indicating the probe has reached the desired fluid interface in the well. Depending on the type (manufacturer and model) of instrument, the response may be audible (e.g., a tone is steadily or intermittently emitted), visible (e.g., an indicator light is steadily or intermittently illuminated), or both. Consult the instrument's operating manual for details. The probe is attached to the body of the instrument by a flexible suspension line consisting of a graduated "tape" or coaxial cable that sheathes an electric conductor. After lowering the probe to the appropriate level in the well (see below), hold the upper end of the graduated tape against the well's MP and read the numeric value off the tape. Record all of the measurements to the nearest 0.01 foot below the well's MP. If the MP is not clearly marked (typically by a notch cut into the top of the well riser), then measure all levels from the top of the north side of the riser or dedicated pump.

Duplicate each liquid-level and total-depth measurement in the field to ensure that the reading is accurate. Record all results (times, measured values, etc.) both in the field book and on the water-level field form.

7.5 Measuring LNAPL Levels

LNAPLs are NAPLs that are less dense than water. In the subsurface, free-phase LNAPL tends to accumulate on the water table. Free-phase LNAPL that enters a well tends to accumulate on the air/water interface. Some wells routinely contain LNAPL. Typically, the thicknesses of the LNAPL layers in such wells are measured at the same time the water levels are measured.

Use an oil/water interface detector for the measurement. Turn the detector on. Then slowly lower the probe into the well. In some cases a very thin (~ 0.01 foot) layer of LNAPL may accumulate on the air/water interface in the well, so the probe must be lowered very slowly if the

LNAPL layer is to be detected and accurately measured. The oil/water interface detector emits one type of response to indicate that the probe has contacted NAPL, and a different type of response to indicate that the probe has contacted water. First, lower the probe until the air/LNAPL interface is detected. Measure the depth to the interface. Record the result. Record "sheen" if the instrument detects an LNAPL layer whose thickness is less than 0.01 foot.

7.6 Measuring Water Levels

Measure water levels using either an oil/water interface detector or, if no LNAPL is present, using an electric water-level indicator.

7.6.1 Measuring Water Levels Using the Oil/Water Interface Detector

After measuring the depth to LNAPL in the well, and before retrieving the probe from the well, slowly lower the probe further into the well. When the LNAPL/water (or air/water) interface is detected, measure the depth to the interface. Record the result.

7.6.2 Measuring Water Levels Using the Electric Water-Level Indicator

Turn the water-level indicator on. Manually adjust the sensitivity to a medium level. Slowly lower the indicator probe into the well until the indicator emits a short audible tone, indicating the probe has contacted the air-water interface. Measure the depth to the interface. Record the result.

7.7 Measuring DNAPL Levels

DNAPLs are NAPLs that are denser than water. In the subsurface, free-phase DNAPL tends to sink below the water table. Free-phase DNAPL that enters a well tends to sink to the bottom of the well. DNAPL levels are measured at some wells at the same time that the water levels are measured. Use an oil/water interface detector to measure the DNAPL level as described below.

If the well does *not* have a dedicated pump, then after measuring the water level in the well, and before retrieving the probe from the well, slowly lower the probe further into the well. If the well *does* have a dedicated pump, then after the pump has been removed from the well and the liquid levels in the well have been allowed to stabilize, slowly lower the probe into the well.

When (if) the water/DNAPL interface is detected, measure the depth to the interface. Record the result.

7.8 Measuring Well Total Depths

For measuring well total depths, complete the following steps in the order listed:

1. Lower the instrument (water-level indicator or oil/water interface detector) probe to the bottom of the well to measure the well's total depth.

2. Gently bounce the probe on the well bottom to determine when the probe is at the bottom of the well, and take up the slack on the suspension line.

3. Measure the total depth. Record the result.

7.9 Post-Measurement Procedures

After all of the measurements have been made at a well, and the results have been recorded, complete the following steps in the order listed:

1. Retrieve the instrument (water-level indicator and/or the oil/water interface detector) suspension line and probe from the well, and simultaneously decontaminate the instrument suspension line and probe (see below).

2. If the well has a dedicated pump that was removed to complete the measurements, replace the pump.

3. Close (seal) and secure the well.

4. Record any well integrity concerns in the field book and on the well maintenance form.

8 Decontamination

Decontaminate all equipment that may come in contact with the well water or NAPL, at the following times:

- prior to, or on, arrival at the site
- on moving from one well to another, on site
- immediately prior to exit from the site.

Follow the decontamination procedures given in SOP PSC-200.

9 Documentation

Record all measurement results (liquid levels, total depth, and time of measurement) on the appropriate field forms and field notebook. Follow the documentation procedures given in SOP PSC-400.

10 Measure of Proficiency

Field staff shall demonstrate proficiency on this SOP by successfully completing sections 7, 8, and 9 at least twice under the direct supervision of the Corrective Actions Manager or her/his designee.

Monitoring Well Development

Written By:	Edited by:	Approved By:	QA Concurrence:
Carolyn Mayer	Tasya Gray	Carolyn Mayer	Kevin McNeil
11/23/97	7/24/01	7/24/01	7/24/01

This SOP contains nine sections:

1.0 Purpose
2.0 Application
3.0 References
4.0 Associated SOPs
5.0 Equipment
6.0 Decontamination
7.0 Well Development Procedures
  7.1 New Well Development Procedure
  7.2 Existing Well Development Procedure
8.0 Documentation
9.0 Measure of Proficiency

1.0 Purpose

The purpose of this SOP is to provide field personnel with a set of guidelines to assure proper monitoring well development. According to EPA all monitoring wells should be developed to create an effective filter pack around the well screen, to rectify damage to the formation caused by drilling, to remove fine particulates from the formation near the borehole, and to assist in restoring the natural water quality of the aquifer in the vicinity of the well.

2.0 Application

This SOP provides a step-by-step guideline to be followed by the field sampling crew for performing or overseeing monitoring well development.

3.0 References

RCRA Groundwater Monitoring Draft Technical Guidance (Nov. 1992) EPA/530-R-93-001

4.0 Associated SOPs

PSC-200 – Equipment Decontamination Procedure
PSC-300 – Photo-ionization Detector Calibration and Operation
PSC-400 – Documentation Procedures

5.0 Equipment

The following equipment is necessary to properly develop a ground water monitoring well:

- A well key, hand drill, socket set, pad lock key, or other well access equipment.
- A calibrated photo-ionization detector (PID) to monitor and record the well headspace.
- An electric water meter and oil/water interface probe calibrated to a hundredth of a foot, and sufficiently long to reach the bottom of the well.
- Well purging equipment (e.g. bailer, silicone line, PVC pipe, plug, pump, tubing, power supply, and extension cord), as needed.
- A solid PVC surge block.
- A sufficient number of 55-gallon drums (including lids, gaskets, and fasteners) to contain all purge water, unless other water handling arrangements have been made.
- A calibrated water quality meter that measures temperature, pH, specific conductivity, dissolved oxygen, redox potential, and turbidity.
- All required documentation including sample labels, field books, sampling forms, and chains-of-custody.
- Personal protective equipment as described in the Site Health and Safety Plan.

- Decontamination equipment as specified in the Work Plan.

6.0 Decontamination

All equipment that will come in contact with the well water will be decontaminated prior to arrival on site, relocation on site, and site exit. Standard Operating Procedure PSC-200 shall be followed.

7.0 Well Development Procedures

Upon arrival at each well, the following procedures shall be followed:

- Suit up in appropriate personal protective equipment as described in the Site Health and Safety Plan.

- Brush any soil or vegetation and pump any standing water away from the well opening.

- Lay plastic sheeting around well to place equipment on and keep cords, tubing and pumps from touching the ground.

- Open the well cap.

- Monitor the headspace within the well using the PID (PSC-300 for PID operation). This is done by placing the instrument probe at the opening of the well, and recording the reading in the field book and on the appropriate field forms.

- Measure and record the depth to LNAPL, water, DNAPL, and total depth of the well using a decontaminated oil/water interface probe or water level indicator (depending on the historical presence of NAPLs in the well). All LNAPL and DNAPL measurements are to be made in accordance with PSC-120. Measurements are to be made to the nearest one hundredth of a foot and recorded in the field book and on the appropriate field form.

- Compute the unit purge volume using the following formula and the input values on the attached Well Volumes Sheet.

  1 well volume (including annular space) = [x(total well depth – water level)] + [y(total well depth – bottom of seal)]

where "x" is the Casing/Riser Volume per Unit Length, Internal (gal/ft) and "y" is the Annular Volume per Unit Length (gal/ft)

7.1 New Well Development Procedure

- If a submersible pump is to be used for well development, gently lower the pump to the well bottom. If a non-submersible pump is used, lower the tubing to the bottom of the well.

- Begin to purge the well at a rate sufficient to remove fines, slowly run the pump up and down the well over the length of the screen, and initiate physical water quality testing at least every 20% water removed for temperature, pH, conductivity, dissolved oxygen, and turbidity.

- A minimum of three and maximum of five well volumes (including annular space) will be removed. If this is the first time the well has been developed and water was used in the drilling process, the volume of water introduced into the formation during well formation must also be removed during development. *Purging is completed once the following has occurred:*
  - *the minimum purge volume has been removed and the water quality parameters have stabilized by the following screening requirements for three consecutive readings: Turbidity <5 NTU, specific conductivity within 10% of each other, and pH within 0.5 units; OR*
  - *the well runs dry; OR*
  - *five purge volumes and drilling process water volumes have been removed.*

- Measure total depth of well after development.

- Containerize all purge water in 55-gallon drums, unless other handling arrangements have been made.

- Record additional information such as unique odors or water color, and a description of the suspended particle content in the field notes and on appropriate field forms.

- Upon completion of development, both the well and the purge drums are to be properly sealed and secured.

- All drums are to be permanently labeled as follows:

Well ID
Facility Name
Drum Contents
Date
Drum Number

- Close the well appropriately and record any well integrity concerns in the field book and on the sampling form.

7.2 *Existing Well Development Procedure*

- Remove pump from well.
- Attach one length of twine to the surge block or use a drill rig or tripod and lower it to the bottom of the well.
- Vigorously begin moving the surge block up and down in the well creating a surging action across the screened interval. This action will bring the finer grained materials into suspension.
- Remove the surge block.
- Begin to purge the well at a sufficient rate to remove fines and initiate physical water quality testing at a minimum of every 20% water removed for turbidity.
- Repeat surging and purging to reduce silt presence in water and keep checking total depth measurements.
- A minimum of three and maximum of five well volumes (including annual space) will be removed. *Purging is completed once the following has occurred:*
  - *the minimum purge volume has been removed and the water quality parameters have stabilized by the following screening requirements for three consecutive readings: Turbidity <5 NTU, specific conductivity within 10% of each other, and pH within 0.5 units; OR*
  - *the well runs dry; OR*
  - *five purge volumes and drilling process water volumes have been removed.*
- Measure total depth of well after development.

- Containerize all purge water in 55-gallon drums, unless other handling arrangements have been made.

- Record additional information such as unique odors or water color, and a description of the suspended particle content in the field notes and on appropriate field forms.

- Upon completion of development, both the well and the purge drums are to be properly sealed and secured.

- All drums are to be permanently labeled as follows:
  Well ID
  Facility Name
  Drum Contents
  Date
  Drum Number

- Close the well appropriately and record any well integrity concerns in the field book and on the sampling form.

8.0 Documentation

Documentation of all monitoring well development activities including all field forms and the maintenance of a detailed field notebook are described in PSC-400.

9.0 Measure of Proficiency

Field staff will demonstrate proficiency on this SOP by successfully completing sections 6.0, 7.0, and 8.0 a minimum of twice under the direct supervision of the Corrective Actions Manager or her/his designee.

Low-Flow Groundwater Sampling Procedure
SOP No. PSC – 124
Origination Date: 11/23/97
Revision Date: 2/22/02
Revision No.4

Written By:	Edited by:	Approved By:	QA Concurrence:	Date:
Carolyn Mayer	Joe Depner	Tasya Gray	Tasya Gray	2/22/02

This SOP contains nine sections:

1 Purpose
2 Application
3 References
4 Associated SOPs
5 Equipment
6 Decontamination
7 Well Sampling Procedures
8 Documentation
9 Measure of Proficiency

1 Purpose

The purpose of this SOP is to provide personnel with the specific information needed to consistently collect and document representative groundwater samples for laboratory analyses from monitoring wells using a low-flow groundwater sampling technique.

The purpose of low-flow groundwater sampling is to collect a groundwater sample that is representative of actual site conditions. Therefore, the purge rate is designed to be low enough to simulate actual groundwater flow and to pull water from a discrete zone near the pump intake into the pump rather than pulling groundwater from a large area around the well or outside of the screened area of the well. A low purge rate is also intended to reduce the possibility of stripping volatile organic compounds from groundwater and to reduce the likelihood of mobilizing colloids in the subsurface that are immobile under natural flow conditions.

2 Application

This SOP applies to groundwater sampling of permanent monitoring wells at PSC facilities that are undergoing RCRA Corrective Action in Washington State.

The basis for choosing low-flow sampling methodology for these sites is that all of the sites have defined groundwater plumes and wells that are accurately screened in the known plume areas.

3 References

U.S. EPA. 1992. RCRA Groundwater Draft Technical Guidance.

U.S. EPA, Region I. 30 July 1996. SOP GW-0001, Low Stress (low flow) Purging and Sampling Procedure for the Collection of Groundwater Samples from Monitoring Wells.

Puls, R. and M. Barcelona. April 1996. Ground Water Issue: Low-Flow (Minimal Drawdown) Ground-Water Sampling Procedures. U.S. EPA. EPA/540/S-95/504.

Wilde, F.D., D.B. Radtke, J.Gibs and R.T. Iwatsubo, eds. 1998. *National Field Manual for the Collection of Water-Quality Data*; U.S. Geological Survey Techniques of Water-Resources Investigations, Book 9, Handbooks for Water-Resources Investigations, variously paginated.

Wilkin, R.T., M.S. McNeil, C.J. Adair and J.T. Wilson. 2001. Field Measurement of Dissolved Oxygen: A Comparison of Methods. *Ground Water Monitoring and Remediation*, Vol. 21, No. 4, pp. 124-132.

Phoenix Health and Safety, Inc. January 2001. Site Health and Safety Plan – Corrective Actions Group.

PSC, 2002. Groundwater Sampling Field Manual. (Updated Annually)

4 Associated SOPs

PSC-120 – Measuring Water, LNAPL, and DNAPL Elevations
PSC-200 – Equipment Decontamination Procedure

PSC-300 – Photoionization Detector Calibration and Operation
PSC-301 – YSI Calibration and Operation
PSC-302 - Hach Digital Titrator and Colorimeter Procedures
PSC-303 – Turbidimeter DRT-15CE Calibration and Operation
PSC-304 – HORIBA Calibration and Operation
PSC-400 – Documentation Procedures

5 Equipment

The following equipment is recommended for properly sampling a groundwater monitoring well:

- A Groundwater Sampling Field Manual that includes a map of well locations, sampling plan, appropriate SOPs and well construction information.
- A well key, hand drill, socket set, padlock key, or other well access equipment.
- A calibrated photoionization detector (PID) or similar device (and calibration gases), to monitor volatile constituents in the well headspace and breathing zone.
- An electric water-level indicator and/or oil/water interface detector calibrated to 0.01 foot, and sufficiently long to reach the bottom of the well.
- A weighted tape measure for determining total depths of wells, when this is required.
- Well purging equipment (e.g.; pump, converter, tubing, power supply and extension cord).
- A sufficient number of containers (e.g., 55-gallon drums with lids, labels, gaskets, and fasteners) to store all purge water, unless other water handling arrangements have been made.
- A calibrated flow-through water-quality meter(s) and calibration solutions to measure temperature, pH, specific conductivity, dissolved oxygen (DO) and oxidation-reduction potential (ORP).
- An instrument and calibration solutions to measure turbidity.

- In-line disposable filters, if necessary, for metals analyses.
- A sufficient number of sampling containers, including containers for regular samples and quality control samples (e.g., field blanks, equipment blanks, duplicates, trip blanks, and matrix spike/matrix spike duplicates).
- All required documentation including sample labels, field books, sampling forms, chain-of-custody (COC) forms, pens and paper for sampling forms, and COC seals.
- Personal protective equipment (PPE) described in the site health and safety plan.
- Decontamination equipment as specified in SOP PSC-200.
- Water flow-rate measurement equipment (e.g., flow meter, or graduated container and stopwatch).
- Sampling support equipment and supplies (e.g., sample coolers, ice/blue ice, bubble wrap and VOC bottle holders, tape, plastic locking bags, razor knives, garbage bags, paper towels, deionized water, nitrile gloves, five-gallon buckets, and protective plastic sheeting) as needed.

6 Decontamination

All reusable equipment that will contact the well and/or water samples will be decontaminated prior to its use, according to the procedures described in SOP PSC-200.

7 Well Sampling Procedures

7.1 Set Up

On arrival at each well, the following procedures shall be followed:

- Don appropriate PPE as described in the site health and safety plan.
- Remove any soil or vegetation, and standing water from the well monument casing. Check the well condition, making sure the flexible gasket seals are clean

and intact. If applicable, also check the condition of the dedicated pump cap. Record any problems in the field book and the appropriate field forms.

- Lay plastic sheeting on the ground around the well, and place the sampling equipment and bottles on the sheeting to keep them from touching the ground.

- Remove the well cap.

- Monitor the headspace within the well using a PID or similar instrument (see SOP PSC-300 for PID operation). Record the reading in the field book and on the appropriate field form(s).

- Set up the pump, converter, and flow-through cell and turbidity meter in preparation for purging. Connect the discharge line from the pump to a flow-through cell. A "T" connection is needed in the tubing between the pump discharge line and the flow-through cell to allow for the collection of water for the turbidity measurements, using a turbidimeter or similar instrument. The discharge line from the flow-through cell must be directed to a container to contain the purge water during the purging and sampling of the well.

- Record the depth of the pump intake on the sampling form and/or in the sampling field book. The Groundwater Sampling Field Manual should specify the pre-determined depths for the pump intakes. The pump intake is set at the interval within the screen where the contamination is known to exist. Check with the project manager if there is uncertainty regarding this issue. The pump should be lowered into the well alongside of a weighted measuring tape or water-level indicator to ensure that the intake of the pump is set at the appropriate depth.

- Measure and record the depth to water using a decontaminated water-level indicator or oil/water interface detector to the nearest 0.01 foot, in accordance with SOP PSC-120. Record the reading in the field book and on the appropriate field form(s). Calculate the volume of water in the casing and the screened interval. The following equation is used to calculate the well volume:

$$V = V_{casing} \text{ (well depth - static water depth)}$$

where:

V_{casing} = casing volume per unit length
(e.g., ~ 0.17 gal/ft for two-inch casing)

(The Groundwater Sampling Field Manual includes all well specifications necessary for this calculation.)

- Before purging, adjust the pumping rate to its lowest setting, and set the data logger in the flow-through cell to record readings every three minutes.

7.2 Purging Monitoring Wells

7.2.1 Purging Procedure

Measure the initial (static) water level in the well and record the reading on the field form(s). All wells have dedicated tubing that will be used for both purging and sampling.

Start the pump at a flow rate of 200 to 500 mL/min. Maintain a steady flow rate while maintaining a drawdown of less than 0.33 foot. The flow rate can be measured using a graduated cup and a stop watch.

To determine water-level stability, subtract the second water-level reading (not the static water-level reading) from the current water-level reading to determine the current drawdown.

After the flow rate is stable, record the water level and the flow rate every three to five minutes. Record water levels more frequently if the rate is being adjusted. A drawdown less than 0.33 foot is preferred but may not always be possible. If the drawdown exceeds 0.33 foot at low flow rates (≤ 500 mL/min), lower the flow rate as practical (not to drop below 100 mL/min) to reduce the drawdown.[1]

Begin recording water-quality parameters after all water has been purged from the sample tubing, pump, and flow-through cell. Initiate water-quality testing for temperature, pH, specific conductivity, DO, ORP and turbidity. Record water-quality parameters every three to five minutes.

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[1] *The 0.33-foot drawdown goal may be difficult to achieve under some circumstances due to geologic heterogeneities within the screened interval, and may require adjustment based on site-specific conditions and personal experience. The water levels in water-table wells should not be allowed to drop below the pump intake. In all other cases, the water level should not be allowed to drop below the top of the well screen. If the water table drops below one of these minimum values, the pump should be turned off and the water level should be allowed to recover. See section 7.2.2, fifth bullet for more information.*

7.2.2 Purging Requirements

Sampling cannot begin until the drawdown is no greater than 0.33 foot, and all water-quality parameters are stable. Each water-quality parameter is considered stable when it satisfies the corresponding stability criterion specified in the table below.

Water-Quality Parameter	Stability Criterion
Turbidity	{X} < 5 NTU or RPD < 10 % for values {X} > 5 NTU
Dissolved Oxygen	$\Delta \leq 0.3$ mg/L
Specific Conductivity	RPD ≤ 3 %
ORP	$\Delta < 10$ mV
pH	$\Delta < 0.1$ unit

Where: {X} = the last three water-quality readings

$$m = \text{mean} = \frac{\text{Max}\{X\} + \text{Min}\{X\}}{2}$$

$$\Delta = \text{Max}\{X\} - \text{Min}\{X\}$$

$$\text{RPD} = \frac{\Delta}{m} \times 100\%$$

In some circumstances, the well may not stabilize according to the above criteria, but the well can be sampled if one of the following conditions occurs:

- Wells are unable to meet stability criteria due to equipment accuracy. The accuracy of the instruments will often limit the ability to achieve stabilization on a percentage basis. For example, if the ORP is consistently fluctuating between 1 and 15 mV, then Δ = 14 mV, which is not within the requirements for stability. However, the accuracy of the instrument currently used is +/- 20 mV. Therefore, in this case the stability criterion would be considered satisfied within the range of accuracy of the equipment. This is particularly important when the water-quality parameter values are low. Examples of accuracy limits for the equipment that is currently used (e.g.; YSI and Horiba flow-through cells, and the HF Scientific Turbidimeter) are provided here for reference. However, if another instrument is used, field personnel must consult the instrument's manual to determine its accuracy.

Water-Quality Parameter	Equipment Accuracy
Turbidity	+/- 0.02 NTU
Dissolved Oxygen[2]	+/- 0.2 mg/L
Specific Conductivity	+/- 0.001 mS/cm
ORP[2]	+/- 20 mV
pH	+/- 0.2 unit

- Wells for which all water-quality parameters have stabilized may be sampled if it is clear that the drawdown will not stabilize before the water level drops below the minimum allowable value (i.e., pump intake, or top of screen if aquifer is confined).

- If collecting metals samples and all water-quality parameters except turbidity stabilize, it is acceptable to collect filtered and unfiltered metals samples without waiting for turbidity to stabilize or for one well volume to be purged. A filtered sample should be collected using a disposable in-line filter. If there are no directions on the filter for rinsing, then a minimum of 0.5 liter of groundwater from the well should be run through the filter prior to collecting the sample.

- Water-quality parameters are not stable, but at least one well volume of water has been removed from the well. See the equation in Section 7.1.

- The water level drops below the minimum value (i.e., the pump intake, or the top of the screen if the aquifer is confined) during purging. In this case, the pump should be turned off and the well should be allowed to recover. As long as a minimum of two tubing volumes (including the tubing and pump) has been removed from the well, then the well should be sampled as soon as the water level has recovered sufficiently to collect volume of groundwater necessary for all samples. Use the following equations to determine the minimum volume of groundwater to be removed prior to sampling when this problem occurs:

  Minimum purge volume = 2 [500 mL + M (length of tubing in feet)]
  where M is the volume (in mL) contained in a one-foot length of tubing

[2] If the final dissolved oxygen measurement is less than 1 mg/L, a sample should be collected and analyzed by the spectrometric, colorimetric or Winkler titration methods.
[3] ORP may not always be an appropriate stabilization parameter, depending on site conditions. The project manager may designate wells in the Groundwater Sampling Field Manual that will not require ORP measurements.

For tubing of various inner diameters, M is equal to:

Inner Diameter	M
1/8"	2.4
¼"	9.7
½"	39

This is acceptable even though the water-quality parameters have not stabilized and one well volume has not been removed.

Record in the field book and field form if any monitoring wells did not meet the stabilization and drawdown criteria and describe the rationale for sampling the well at the time it was sampled.

7.3 Sampling Procedure

Do not stop pumping after the purging requirements have been met. Don clean nitrile gloves. Disconnect the sampling tube from the T-fitting. All wells have dedicated tubing that will be used for both purging and sampling. Collect each sample directly from the dedicated tubing. Minimize the turbulence by allowing the groundwater to flow from the tubing gently down the inside of the container.

The sampling flow rate may remain at the established purge rate or may be adjusted slightly to minimize aeration, bubble formation, turbulent filling of sample bottles, or loss of volatiles due to extended residence time in tubing. Typically, flow rates less than 500 mL/min are appropriate.

When collecting the dissolved gas samples (e.g. volatile organic compounds, total petroleum hydrocarbons – gasoline range, or methane/ethane/ethane) the following procedures should be followed:

- The tubing should be completely filled with water to prevent the groundwater from being aerated as it flows through the tubing.
- A meniscus must be formed over the mouth of the vial to eliminate the formation of air bubbles and headspace prior to capping.

Samples do not have to be collected in a particular order unless unfiltered metals samples

are collected, in which case they should be collected last.

7.4 Post-Sampling Procedures

After all of the samples have been collected in containers that are labeled and appropriately treated with preservatives, the following tasks should be completed:

- Measure and record the depth to water to determine total drawdown. Record the estimated total volume of water purged from the well.
- If dedicated equipment is in place at the well, disconnect aboveground tubing and properly seal the well.
- If non-dedicated equipment is used, then remove the equipment. Discard disposable items and decontaminate reusable items according to PSC SOP-200.
- Close and secure the well, and record any well integrity concerns (bolt tightness, etc) in the field book and on the sampling form.
- Rinse the water-quality meters with deionized water between wells.
- Report if any monitoring wells did not meet the stabilization and drawdown criteria with recommendation on how to conduct the sampling for the next sampling event.

8 Documentation

SOP PSC-400 describes the documentation of all monitoring well sampling activities, including all field forms, and the maintenance of a detailed field notebook.

9 Measure of Proficiency

Field staff will demonstrate proficiency on this SOP by properly completing sections 6, 7 and 8 at least twice under the direct supervision of the project manager or her/his designee.

Documentation Procedures

Written By:	Approved By:	Date:	QA Concurrence:	Date:
Carolyn Mayer	Carolyn Mayer	11/23/97	Laurel Muselwhite	11/23/97

This SOP contains seven sections.

1.0 Purpose
2.0 Application
3.0 References
4.0 Associated SOPs
5.0 Field Books
6.0 Field Forms
7.0 Measure of Proficiency

1.0 Purpose

The purpose of this SOP is to outline, in detail, the required documentation needed to maintain accurate logs and files of all field procedures conducted by Philip Services Corporation (PSC).

2.0 Application

This SOP provides documentation guidelines, including examples, required for all geotechnical exploratory and sampling procedures conducted or overseen by PSC personnel (see Table 1).

3.0 References

None

4.0 Associated SOPs

PSC-100	PSC-101	PSC-102	PSC-103
PSC-104	PSC-110	PSC-111	PSC-120
PSC-121	PSC-122	PSC-123	PSC-124
PSC-125	PSC-126	PSC-127	PSC-200
PSC-201	PSC-202	PSC-300	PSC-301
PSC-302			

5.0 Field Books

All field books should be pocket size "Rite in the Rain" or equivalent and should have non-removable pages. These field books are to be dedicated to a project, and the corrective actions' project manager is responsible for maintaining a field book inventory. This inventory should include a numbering and tracking mechanism for each field book assigned to a particular case.

Each field book is to be maintained as follows:

- Label the outside front cover with the following information: Burlington Environmental dba Philip Services Corporation, Facility Name, Dates Included, and Book Number. The inside cover should include: Burlington Environmental d.b.a. Philip Services Corporation, Project Manager's Name, 955 Powell Avenue, Renton, WA 98155, (206) 227-XXXX, Dates Included, and Book Number.
- Inside the cover, list the full names and initials of each person working on the project that will be referred to in the field book.
- Maintain all field notes directly in the field books (i.e. notes are not to be taken then transferred to the field books at a later time).
- Record all field notes in permanent ink (sharpie markers)
- Initial, date, and number each page upon completion.
- Correction of mistakes are made with a single line and initialing the correction.
- Avoid blank spaces within the notes. Unavoidable blank spaces are to be struck with a single line.

Examples of information required in the field book include:

- The date of entry
- Time of entry for specific events (in military time)
- A meteorological description of daily changes
- Personnel present including arrival and departure times and affiliations
- Make, model and condition of equipment used
- The time interval and reasons for delays including a detailed description of corrective actions taken by the field crew.
- A detailed description and rationale for any deviations for the Work Plan, Sampling Plan, or Health and Safety Plan.

6.0 Field Forms

The field forms have been designed to detail all steps, actions, and readings associated with specific field procedures. These forms are to be completed in full. No sections are to be left blank, if a section is "not applicable", it is to be indicated as such. All forms, including location diagrams, are to be completed in the field with permanent ink. Refer to Table 1 to see which forms are required for specific field procedures. Examples of each form are also attached.

7.0 Measure of Proficiency

Proficiency assessment for documentation is associated with specific procedural proficiency, therefore, no separate proficiency measures for documentation are needed.

Standard Operating Procedures

Porewater Sampling Using a Mini-Piezometer

Prepared by:

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April 25, 2007

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STANDARD OPERATING PROCEDURES
Porewater Sampling Using a Mini-Piezometer

1.0 GENERAL

This standard operating procedure (SOP) outlines the methods and procedures for sampling interstitial porewater from the transition zone of permeable sediments using a mini-piezometer device. The detailed procedures are based on the use of the PushPoint sampler designed by MHE Products (http://www-personal.engin.umich.edu/~markhen/downloads.html); however, the procedures outlined are applicable to similar piezometer sampling devices.

The PushPoint sampler consists of a small diameter Type 316 stainless steel tube screened at one end and with a sampling port at the other end. The screened area consists of a series of machine cut slots presenting approximately 20% open area. The screened area is limited to the section near the tip. A guard rod provides structural support to the sampler and prevents the sampler from being plugged or bent by the sediment or debris on insertion. Following insertion of the sampler to the desired depth the guard rod is removed and suction is applied to the sample port to develop porewater flow and for sampling.

2.0 SAMPLER INSTALLATION METHODS

This section outlines detailed procedures for installing the samplers in the transition zone of the target sediments. Additional details on the collection procedures (including the sampling location, sampling depths, and proposed analyte list) are presented in the Quality Assurance Project Plan.

The PushPoint sampler is a reusable device provided the interior bore of the sampler is kept clean and the body of the sampler is protected from being bent. The screened area near the tip is easily deformed if the guard rod is not inserted before inserting the device into the sediment. or removing the device. The machined tolerances between the sampling tube and the guard rod can be excessively worn if grit is trapped in the bore. The guard rod may also become jammed if silt is trapped in the damaged bore.

Sampling in marine or tidally influenced systems is usually conducted on a falling tide before the low tide when groundwater discharge is expected to be the greatest. Sampling in non-tidal systems is usually scheduled during periods of peak groundwater flow.

In shallow water the samplers can be deployed from a boat or by wadding. In deeper water the samplers can be deployed by a diver.

Insertion of the PushPoint sampler into the sediment should only be done with the guard rod fully inserted into the bore. The sampler is inserted into the sediment with a twisting motion until the specified sampling depth (e.g., 1 ft or 30 cm) is reached or until refusal. If samples are collected at multiple depths in a single hole the samples should be collected from the deepest to the shallowest to eliminate the necessity to insert the sampler deeper into the sediment once the guard rod is removed. If multiple samples are taken at one hole or if lateral movement will enlarge the sampler hole then the use of a large flat sampling plate with a supporting hole through the center can be used to stabilize the sample tube.

Once the sampler is inserted to the specified depth the guard rod is removed and the piezometer is developed. Tubing is attached to the sampling port at the top of the sampler and a gentle suction is applied using either a syringe or a peristaltic pump. Water is withdrawn from the sampler at a low flow rate (recommended: 50-200 ml/min). The initial volume of turbid water is usually 20- 50 ml depending on the size of the sampler and the sediment type. Once the water clears representative samples of the porewater may be collected. If the sampler is

plugged flow rates may be insufficient for sampling. A syringe can be used to apply a vacuum that is rapidly released sending a pressure pulse through the sampler and increasing flow rates.

The establishment of proper porewater flow through the sampler can be confirmed by monitoring various water quality parameters such as turbidity, temperature, conductivity, pH, and dissolved oxygen. These water quality parameters should be monitored over time until they stabilize. In addition, surface and near bottom water (just above the sediment surface) samples should be monitored and compared to the porewater parameters.

3.0 SAMPLE COLLECTION METHODS

This section describes procedures for sample collection, handling, and processing. Additional details on the sample collection procedures (including the sample ID numbers, analyte list, sample container, required sample volume, preservation method, and holding time) are presented in the Quality Assurance Project Plan.

Collection of representative samples of the porewater requires the proper development of porewater flow through the piezometer. Sampling flow rates during development should be low enough that turbidity is minimal and that overlying surface water is not drawn into the sampler.

Discrete water samples can be collected using a syringe. Porewater samples collected in syringes can be labeled and placed on ice for later transfer to appropriate sample containers. Porewater samples can also be collected using a peristaltic pump. Samples from a peristaltic pump can be transferred directly into appropriate sample containers. All sample containers must be labeled with the collection site, appropriate collection information, and include the proposed analyte list.

Syringes used for collection of porewater for volatile organic carbon (VOC) analysis should be constructed of 100% polyethylene/ polypropylene. Samples for VOC analysis should have minimum exposure to the air. Transfer of the porewater from the syringe to the sample containers requires using a piece of tubing to overfill the container from the bottom of the container with a minimum of splashing. Sample bottles may also be filled with the peristaltic pump by overfilling the container with the tubing under the water surface in the container to displace all the air.

4.0 EQUIPMENT CLEANING, DECONTAMINATION

Sample containers, instruments, working surfaces, technician protective gear, and other items that may come into contact with sediment sample material must meet high standards of cleanliness. Sample containers will be provided by ARI and are pre-cleaned, certified, and individually labeled with a lot number traceable to a Certificate of Analysis.

All samplers and sample collection equipment will be cleaned and decontaminated prior to arrival at the site. The Geomatrix standard decontamination procedure for the PushPoint sampler, tubing, pumps, and other sample handling equipment is modeled after Puget Sound Estuary Program (PSEP) protocols (PSEP, 1997); however, the decontamination procedure will not use any acid or solvent rinses (the final rinse will use distilled water). The decontamination procedure is as follows:

1. Prewash rinse with tap water.

2. First wash with solution of tap water and Alconox soap (brush).

3. Second rinse with tap water.

4. Second wash with solution of tap water and Alconox soap (brush).

5. Final rinse with tap water.

6. Final rinse with distilled water.

7. Coverage (no contact) of all decontaminated items with aluminum foil.

8. Storage in clean, closed container prior to use.

Decontamination procedures used in the field between sampling stations may use site water for the rinse steps. All wash and rinse solutions will be collected and disposed of properly.

5.0 SAMPLE DESIGNATIONS

All samples will be assigned a unique identification code.

Samples will be designated by a hyphenated alphanumeric code consisting of a media code, a location code, and sample type (e.g., PW-DUW191PZ). The scheme is as follows:

- Media code will be "PW" for porewater sample.
- Location code will be "DUWsss" for Duwamish Waterway location. The "sss" is a continuation of the sequential number series started during previous investigations at the site.
- Sample type code for piezometer samples will be "PZ".
- Field duplicate samples will be identified with a "D" appended to the sample identification (e.g., PW-DUW191PZD).

6.0 SAMPLE HANDLING

Porewater samples will be kept in sight of the sampling crew or in a secure, locked vehicle at all times. Samples will be transported to the office at the end of the day for storage (samples will be placed in coolers with "blue ice" or in a refrigerator) until transferred to the testing laboratories. Transfer of samples from the field crew custody to the laboratory custody will be documented using chain-of-custody procedures. If someone other than the sample collector transports samples to the laboratory, the collector will sign and date the chain-of-custody form and insert the name of the person or firm transporting the samples under "transported by" before sealing the container with a Custody Seal.

Samples not scheduled for the initial analysis round will be archived and stored at the analytical laboratory in a secure area. Storage requirements for all archived samples may include storage of the samples in a temperature-monitored refrigerator or freezer in compliance with the applicable Quality Assurance Project Plan for the project.

7.0 FIELD QUALITY CONTROL REQUIREMENTS

Data and log forms produced in the field will be reviewed daily by the person recording the data, so that any errors or omissions can be corrected. All completed data sheets will be removed daily from the field clipboard and photocopied; the original data sheets will be filed in a fireproof file cabinet and the photocopies stored in the project file. All data transcribed from field forms into electronic forms and tables will be 100 percent verified for accuracy and freedom from transcription errors. Field quality control samples will be collected at the frequency specified in the Quality Assurance Project Plan.

8.0 WASTE MANAGEMENT

All waste derived during this investigation will be placed in proper containers, labeled, characterized, and disposed of in accordance with the appropriate regulations.

9.0 REFERENCE

PSEP (Puget Sound Estuary Program), 1997, Recommended Guidelines for Sampling Marine Sediment, Water Column, and Tissue in Puget Sound: Prepared for the U.S. Environmental Protection Agency and Puget Sound Water Quality Action Team.

PROTOCOL

DRILLING AND DESTRUCTION OF SOIL BORINGS

1.0 INTRODUCTION

This protocol describes the procedures to be followed during drilling and destruction of soil borings. The soil borings will provide information about geologic conditions, soil engineering properties, and/or soil quality. If the soil boring is utilized for well installation, the well will be installed in accordance with the protocol INSTALLATION OF WELLS.

The procedures presented herein are intended to be of general use and may be supplemented by a work plan and/or health and safety plan. As the work progresses and if warranted, appropriate revisions may be made by the project manager. Detailed procedures in this protocol may be superseded by applicable regulatory requirements.

If required, permits for drilling of soil borings will be acquired from the appropriate agency(s) before drilling is initiated, and an underground utility check will be conducted before drilling begins. An underground utility check will, at a minimum, consist of contacting a local utility alert service, if available.

2.0 DRILLING

A DAILY FIELD RECORD will be completed for each day of fieldwork, and the original will be kept in the project files.

The soil borings will be drilled using rotary, hollow stem auger, direct-push, or other appropriate method. In all rotary borings, compressed air will be filtered to remove oils before being circulated into the borehole. In mud rotary borings, appropriate drilling fluid additives, such as bentonite, will be used to maintain an open hole and to carry cuttings to the surface. However, organic drilling fluid additives will only be used with prior project manager approval. The drilling mud will be circulated into a settling tank or basin located near the boring. The viscosity of the drilling fluid will be assessed periodically by the driller and will be controlled throughout the drilling operation to achieve the required results (hole stability, sample return, and mud cake thickness along borehole wall). Only potable water will be used as makeup water for drilling fluid. Exploratory borings drilled using the hollow stem auger method

generally do not require the use of drilling fluid. If required, potable water from a municipal supply will be used to maintain boring stability.

The planned depth of each soil boring will be determined by the project manager before drilling. The Geomatrix field geologist/engineer will specify to the drill rig operator the depth of soil sample collection, method of sample retrieval, and other matters pertaining to the satisfactory completion of the borings. Geomatrix staff will observe the volume of drill cuttings returned to assess whether significant cavitation has occurred. Drill cuttings, unused soil samples, and drilling fluids generated during drilling of soil borings will be stored properly for future disposal by the client, unless other arrangements have been made.

The drill rods, augers, hoses, bits, and other components that fluids and cuttings contact will be steam-cleaned before drilling each boring, as well as at the beginning of each project and at the completion of field activities. Drive samplers will be cleaned with Alconox and water or steam-cleaned before each sampling event. Only potable water from a municipal supply will be used for decontamination of drilling equipment. Decontamination rinsate will be collected and stored properly for future disposal by the client, unless other arrangements have been made.

3.0 SAMPLING AND LOGGING

3.1 OBTAINING SAMPLES

Borings will be continuously cored or sampled at depth intervals specified by the project manager, based on the intended use of the boring. Continuous sampling is recommended; however, samples and/or cuttings will be obtained for logging purposes at least every 5 feet for all borings. Drive samples will be used to log hollow stem auger borings if continuous cores are not collected. The samples and/or drill cuttings will be collected and described. A lithologic log of these samples will be made. Samples for chemical analysis will be collected in accordance with the protocol SOIL SAMPLING FOR CHEMICAL ANALYSIS.

3.1.1 Discrete Sampling

For discrete sampling of mud rotary or auger borings, sampling will be accomplished by driving or pushing a split-barrel sampler or Shelby tube. The field geologist/engineer will record information on the BORING LOG pertaining to the sampling, such as rate of penetration, hydraulic ram pressure or drive-hammer blow count, coring smoothness, and sample recovery.

In general, the split-barrel sampler will be opened for observation and logging of the retrieved core.

At selected depth intervals, the split-barrel sampler may be fitted with brass or stainless steel liners for collection of soil samples for possible subsequent chemical or physical testing. Samples may be retained for future review and/or preserved for chemical or physical testing, as specified by the project manager. The samples will be stored and labeled to show project number, boring number, and cored interval denoted either by depth or a sequential numbering system. Procedures for preservation and transport of soil samples retained for chemical analysis are presented in the protocol SOIL SAMPLING FOR CHEMICAL ANALYSIS.

3.1.2 Collecting Drill Cuttings

The field geologist/engineer may observe drill cuttings from the drilling fluid return for lithologic information to supplement discrete sampling. Sampling and logging cuttings will be performed as follows:

1. The height of the drilling table above ground surface, lengths of the drill bit, sub and drill collars, and length of drill rods should be taken into account in calculating the depth of penetration.

2. In mud rotary drilling, a small-diameter, fine mesh hand screen will be used to obtain a sample of the cuttings from the borings by holding the screen directly in the flow of the drill fluid return line. In air rotary drilling, cuttings will be collected after discharge from the cyclone.

3. In rotary drilling, a composite sample may be obtained from the return line by leaving the screen in place during the time it takes the driller to advance the boring to a preselected depth.

4. In rotary drilling, the travel time for cuttings to reach the surface may be estimated each time the driller adds a new length of drill rod by timing the first arrival of cuttings after circulation is resumed. This travel time can be used along with the depth of penetration to estimate the start and finish of each 5-foot sampling interval.

3.2 LOGGING OF EXPLORATORY BORINGS

The observations of the field geologist/engineer will be recorded on a BORING LOG OR WELL LOG at the time of drilling. The drill rig operator and the field geologist/engineer will discuss significant changes in material penetrated, drilling conditions, hydraulic pressure, drilling action, and drilling fluid circulation rate. The field geologist/engineer will be present during drilling of soil borings and will observe and record such changes by time and depth.

Drill cuttings and core samples will be observed in the field. A lithologic description will be recorded on the BORING LOG using the Unified Soil Classification System (USCS) as described in the American Society of Testing and Materials (ASTM) Standard D 2488-90. This description will include the USCS soil type, grain sizes and estimated percentages of each, moisture content, color according to the Munsell color charts (Kollmorgen Instruments Corp.), plasticity for fine-grained materials, consistency, and other pertinent information, such as degree of induration, calcareous content, presence of fossils and other distinctive materials.

The original field logs will be retained by the Geomatrix office for review by the responsible professional and for storage in the project files.

4.0 GEOPHYSICAL LOGS

Following completion of drilling, downhole geophysical logs may be performed after the drilling fluid has been circulated to decrease the amount of suspended sediment in the return fluid. Geophysical methods and equipment will be selected to provide stratigraphic or hydrogeologic data appropriate for the project. Geophysical logging will be done as quickly and promply after drilling as feasible, while the boring sidewall is still in stable condition, to reduce the possibility of bridging. Instruments on the logging unit will be adjusted to try to give the maximum definition of strata boundaries. All downhole geophysical equipment will be cleaned before and after use in each borehole.

5.0 FIELD SCREENING

Soil samples collected from the borings may be screened using a portable meter such as a photoionization detector (PID), a flame ionization detector (FID), a lower explosion limit (LEL) meter or other organic vapor meter. The meter may be used to assess the presence of volatile organic compounds (VOCs) or other gases in soil samples. Additional field screening techniques for chemical characterization of soils may include x-ray fluorescence (XRF) and thin-layer chromatography (TLC). Procedures for field screening are described in the protocol SOIL SAMPLING FOR CHEMICAL ANALYSIS.

6.0 DESTROYING SOIL BORINGS

Soil borings that are not completed as monitoring wells will be destroyed by filling the holes with a neat cement grout, cement/sand grout, or cement/bentonite grout. A high-solids bentonite grout may be used if appropriate. Geomatrix field staff will calculate the borehole volume and compare it to the volume of grout used to evaluate whether bridging has occurred. These

calculations and the actual volume emplaced will be noted on the BORING LOG. The grout will be placed in continuous lifts from the bottom of the boring to a depth of 20 feet above the water table. The grout will be emplaced by pumping it through the hollow stem augers, drill pipe, tremie pipe, or flexible hose initially lowered to the bottom of the borings and raised incrementally as placement proceeds. If hollow stem augers are used, the augers should be raised incrementally as grout emplacement proceeds. Augers will not be raised in increments greater than 20 feet or greater than allowed by borehole stability. Borings that are terminated above the water table and not greater than 20 feet deep may be destroyed by continuous lifts originating at the ground surface. The grout will be pumped or poured until a return of fresh grout is visible at the surface. Additional grout may need to be added to the soil boring if significant settlement has occurred after the grout has set.

Attachments: Daily Field Record
Boring Log
Well Log

APPENDIX E

Survey Data

W&H PACIFIC
8405 S.W. NIMBUS AVENUE
P.O. BOX 80040
PORTLAND, OR 97280

Date: 04-06-92
Time: 12:18:02
Page: 1

Coordinate File: 07310102.CRD
List of Coordinate Points
* Denotes Contouring Masspoint

Point ID	NORTH	EAST	ELEV	Descriptor
1	4994.02870	5137.21050	18.95000	~~5/8"IR, NE PROP. COR~~
2	4984.09960	5000.58080	17.82000	T-2, PK/SHINER
3	4921.78570	4733.99700	17.95000	H&T
4	4823.09140	5106.42160	16.98000	PK/SHINER SET
5	4768.86740	5000.15560	17.43000	PK/SHINER SET
6	**	**	**	
7	4907.79490	5054.28680	17.17000	PK/SHINER
8	4897.55170	5068.31510	22.00000	CL TANK CSI
9	4887.38450	5066.72150	27.53000	CL TANK CS
11	5000.05450	5219.37670	18.93000	5/8" IR NE PROP. COR.
12	4789.58960	4914.85370	21.30000	NE COR, TOP CONC. WA
16	4628.95040	5207.28770	16.49000	T-6, H&T
6000	4946.76820	5132.38600	17.30000	NE COR. BLDG. #1
6001	4946.67760	5082.10180	17.77000	NW COR. BLDG. #1
6002	4946.67030	5057.11290	19.70000	NE COR. BLDG. #1
6003	4946.74580	4982.45370	19.59000	NW COR
6004	4944.24090	5204.49170	19.02000	MW-5
6005	4979.55970	5204.57030	19.37000	MW-4
6006	4980.89060	5200.12500	19.56000	MW-MC13
6007	4995.36570	5198.47040	20.77000	MW-MC13D
6008	4982.73100	5145.29440	19.52000	MW-3
6009	4984.11360	5105.66080	19.00000	MW-MC2
6010	4987.97400	5069.70240	19.41000	MW-MC8
6011	4982.57810	5070.83440	19.44000	MW-MC8D
6012	4985.04520	5063.82380	19.10000	MW-MC8S
6013	4979.66020	5066.44140	19.03000	MW-1
6014	4985.91470	5020.69910	17.65000	MW-MC18
6015	4920.89800	4942.91720	17.48000	MW-MC7
6016	4993.39140	5078.36790	17.57000	FH
6017	5001.09100	4842.33170	17.81000	1/2" IR,YPC 9579
6018	5001.38440	4726.29940	17.68000	1/2" IR,YPC 9579
6019	4998.76060	4791.71370	17.44000	FH
6020	4969.78030	4847.82220	19.85000	MW-MC12D
6021	4978.08330	4839.11010	19.19000	MW-MC12
6022	4875.30620	4839.04350	17.11000	MW-MC11
6023	4912.29170	4834.72050	17.43000	PP2592
6024	4902.67260	4822.17940	17.70000	GUY
6025	4990.31920	4900.01780	17.39000	MANHOLE
6026	4999.60480	4919.33240	17.81000	A/C
6027	5000.61930	4917.92430	17.19000	6' CYCLONE F.
6028	5000.58400	4857.82050	17.03000	6' CYCLONE F.
6029	5000.07630	4804.29510	17.14000	6' CYCLONE F.
6030	4994.75080	4794.83350	17.35000	6' CYCLONE F.
6031	4994.65730	4788.73480	17.38000	6' CYCLONE F.
6032	5000.33530	4787.21510	17.72000	6' CYCLONE F.

Page: 2

Point ID	NORTH	EAST	ELEV	Descriptor
6033	5000.21890	4727.28360	17.66000	6' CYCLONE F.
6034	4945.43030	4726.95820	17.74000	6' CYCLONE F.
6035	4894.83440	4726.86120	18.27000	6' CYCLONE F.
6036	4838.96590	4726.82200	18.31000	6' CYCLONE F.
6037	4788.56500	4726.89340	18.36000	6' CYCLONE F
6038	4739.41860	4726.77600	18.63000	6' CYCLONE F
6039	4739.29980	4775.11080	18.67000	GRD
6040	4789.01230	4777.02030	18.16000	GRD
6041	4840.05040	4779.19540	18.15000	GRD
6042	4895.15640	4781.25010	17.48000	GRD
6043	4949.41800	4784.71850	17.70000	GRD
6044	4945.64540	4854.10080	17.40000	GRD
6045	4895.89300	4853.83150	17.60000	GRD
6046	4834.63460	4852.74870	17.62000	GRD
6047	4833.55710	4915.37670	18.19000	EP
6048	4894.38770	4916.07720	18.03000	EP
6049	4941.95500	4917.64270	17.59000	EP
6050	4812.21484	4900.40033	21.30000	NE COR, TOP CONC. WALL
6051	4790.13940	4852.26630	21.40000	NW COR
6052	4754.68630	4851.84070	21.40000	TBM=21.42
6053	4799.76440	4908.77680	18.45000	LT POLE
6054	4790.00140	4914.64670	19.35000	EP
6055	4791.82740	4852.49210	17.85000	GRD
6056	4740.42330	4851.66510	18.19000	GRD
6057	4791.19350	4913.89400	18.96000	GUY
6058	4910.10680	5017.07610	17.31000	CL TANK C
6059	4889.22390	5001.72410	34.55000	CL TANK 4
6060	4921.65130	5003.34690	18.92000	MW/PUMP
6061	4543.10100	4841.02910	18.14000	1/2" IR/YPC9579
6062	4543.97130	4725.05540	18.33000	1/2" IR/YPC9579
6063	4783.98520	5009.90710	17.64000	MW-MC2
6064	4783.93930	5016.05800	17.61000	MW-MC20
6065	4754.33660	4914.35740	21.34000	TOP BANK
6066	4795.87650	4990.15820	17.81000	BUILDING
6067	4765.15340	5032.09040	18.01000	BUILDING
6068	4765.99250	5132.08250	17.92000	BUILDING
6069	4796.65140	5088.62770	12.95000	BUILDING
6070	4821.65470	5088.36870	17.68000	BUILDING
6071	4820.75800	4989.90490	18.00000	BUILDING
6072	4852.53420	4982.26490	19.65000	TOP BANK
6073	4852.37450	5056.97160	19.62000	TOP BANK
6074	4866.51950	5081.94670	17.19000	BUILDING
6075	4866.33610	5132.09220	17.12000	BUILDING
6076	4854.34750	5084.91580	17.65000	MW-MC1
6077	4909.92740	5203.40790	18.70000	MW-MC14
6078	4908.13620	5204.83690	18.37000	MW-6
6079	4874.26170	5205.00220	28.21000	MW-7
6080	4839.12440	5204.81390	17.94000	MW-8
6081	4820.91080	5204.82740	17.91000	MW-MC15
6082	4815.27040	5204.30970	17.76000	MW-MC15D
6083	4748.82040	5205.81810	18.01000	MW-MC16
6084	4671.25420	5206.22320	17.94000	MW-MC17
6085	4764.89630	5154.81900	16.87000	FH
6086	4706.02000	5132.51650	16.95000	BUILDING
6087	4705.14360	5032.54680	22.00000	BUILDING

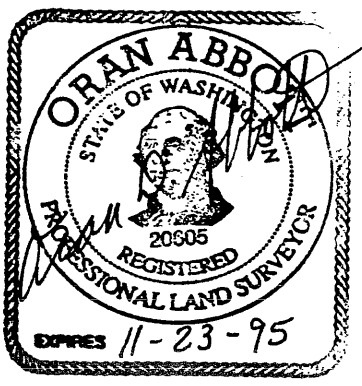
Page: 3

Point ID	NORTH	EAST	ELEV	Descriptor
6088	4542.10090	5225.11320	16.81000	1/2" IR PYC 9579
6089	5000.32610	4781.27070	17.54000	EP
6090	4992.75530	4774.04610	17.64000	EP
6091	4981.96510	4776.09060	17.95000	EP
6092	4982.06040	4727.35080	17.92000	EP
6093	4990.58250	4750.24750	17.87000	A/C

Chempro - Washougal
Monitor Well Data

May 3, 1994

Well	North	East	Ground Elevation	Casing Elevation	Top P.V.C.	Comments
MC-1	4854.3	5084.9	17.7	17.69	* 17.46	* Top Power Access Port
MC-2	4784.0	5009.9	17.6	17.64	* 17.40	* Top Power Access Port
MC-2D	4783.9	5016.1	17.6	17.62	* 17.29	* Top Power Access Port
MC-7	4920.9	4942.3	* 17.4	17.47	17.04	* Top Asphalt
MC-8	4988.0	5069.7	17.7	19.37	19.11	
MC-8D	4982.6	5070.8	17.7	19.40	19.21	
MC-8S	4985.0	5063.8	17.6	19.06	18.98	
MC-12	4978.1	4839.1	17.7	19.21	18.97	Good
MC-12D	4969.8	4847.8	17.7	19.85	* 19.52	Top Power Access Port
MC-13	4980.9	5200.1	* 18.0	19.57	19.21	* Top Concrete Base
MC-13D	4995.4	5198.5	18.3	20.74	* 20.42	* Top Power Access Port
MC-14	4909.9	5203.4	17.0	18.69	18.47	
MC-15	4820.9	5204.8	* 16.4	17.88	17.52	* Top Concrete Base
MC-15D	4815.3	5204.3	16.2	17.74	* 17.65	* Top Power Access Port
MC-16	4748.8	5205.8	16.4	17.98	17.73	
MC-17	4671.2	5206.2	16.4	17.92	17.63	
MC-18	4985.9	5020.7	17.6	17.63	* 17.41	* Top Power Access Port
Property Corner						
N.E.	5000.05	5219.38				
S.E.	4542.10	5225.11				
N.W.	5001.38	4726.30				
S.W.	4543.37	4725.06				



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HAGEDORN, INC.

Registered Land Surveyors • *Oregon Washington California*

1924 Broadway, Suite B • Vancouver, WA 98663 • (360) 696-4428 • (503) 283-6778

August 25, 1999

PHILIP SERVICES

Washougal Monitoring Well Data

X = Northing, Y = Easting, Z = Ground Elev., Z^1 = Measuring Point Elev.

Well	X	Y	Z	Z^1
MC-1	-	-	-	17.14
MC-2	-	-	-	17.00
MC-2D	-	-	-	17.10
MC-8	-	-	-	19.05
MC-12	-	-	-	18.91
MC-12D	-	-	-	19.25
MC-13	-	-	-	19.14
MC-13D	-	-	-	20.13
MC-14	-	-	-	18.41
MC-15	-	-	-	17.46
MC-15D	-	-	-	17.37
MC-16	-	-	-	17.67
MC-17	-	-	-	17.57
MC-17D	4649.3	5197.4	17.1	19.92
MC-10D	4678.4	4742.5	18.5	21.04
MC-19D	4562.7	5034.8	18.0	20.78
MC-107	4925.1	4899.2	17.3	20.13
MC-118	4983.6	5010.2	17.7	17.28
GP-27	4895.7	5165.1	-	-
GP-28	4911.5	5167.5	-	-
GP-29	4909.9	5232.8	-	-
GP-30	4909.9	5241.1	-	-
GP-31	4909.1	5264.7	-	-
GP-32	4908.3	5271.3	-	-
GP-33	4933.0	5288.4	-	-
GP-34	4908.2	5289.4	-	-
GP-35	4881.2	5288.6	-	-

NOTE: GP-27 through GP-35 are future well locations.

HAGEDORN, INC.

Registered Land Surveyors • *Oregon Washington*

1924 Broadway, Suite B • Vancouver, WA 98663 • (360) 696-4428 • (503) 283-6778 • Fax (360) 694-893

March 15, 2000

PHILIP SERVICES

Washougal Monitoring Well Data

X = Northing, Y = Easting, Z = Ground Elev., Z^1 = Measuring Point Elev. (top of PVC casing)

Well	X	Y	Z	Z^1
MC-20	4909.1	5288.6	17.8	19.70
MC-21	4909.6	5166.8	17.1	16.79

C:\WORD\Washougal Mon Well 20 and 21.doc

HAGEDORN, INC.

Registered Land Surveyors • Oregon Washington

1924 Broadway, Suite B • Vancouver, WA 98663 • (360) 696-4428 • (503) 283-6778 • Fax (360) 694-8934

May 1, 2000

PHILIP SERVICES

Washougal Monitoring Well Data

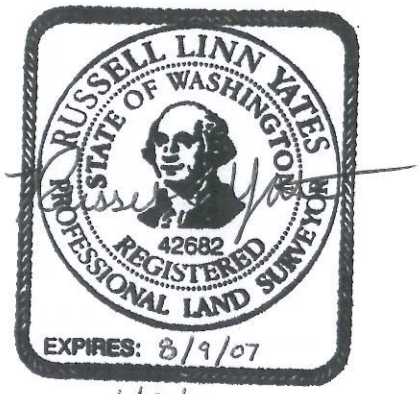
X = Northing, Y = Easting, Z = Ground Elev., Z^1 = Measuring Point Elev.

Well	X	Y	Z	Z^1
MC-1	-	-	-	17.14
MC-2	-	-	-	17.00
MC-2D	-	-	-	17.10
MC-8	-	-	-	19.05
MC-12	-	-	-	18.91
MC-12D	-	-	-	19.25
MC-13	-	-	-	19.14
MC-13D	-	-	-	20.13
MC-14	-	-	-	18.41
MC-15	-	-	-	17.46
MC-15D	-	-	-	17.37
MC-16	-	-	-	17.67
MC-17	-	-	-	17.57
MC-17D	4649.3	5197.4	17.1	19.92
MC-10D	4678.4	4742.5	18.5	21.04
MC-19D	4562.7	5034.8	18.0	20.78
MC-107	4925.1	4899.2	17.3	20.13
MC-118	4983.6	5010.2	17.7	17.28
GP-27	4895.7	5165.1	17.0	-
GP-28	4911.5	5167.5	17.1	-
GP-29	4909.9	5232.8	17.4	-
GP-30	4909.9	5241.1	18.0	-
GP-31	4909.1	5264.7	18.1	-
GP-32	4908.3	5271.3	17.9	-
GP-33	4933.0	5288.4	17.5	-
GP-34	4908.2	5289.4	17.2	-
GP-35	4881.2	5288.6	17.3	-

NOTE: GP-27 through GP-35 are future well locations.

HAGEDORN, INC.

SURVEYORS AND ENGINEERS



1/8/07

PHILIP SERVICES
WASHOUGAL, WA FACILITY
MONITORING WELL SURVEY DATA

HAGEDORN INC. FILE: 99-211.xls
WASHINGTON STATE PLANE COORDINATE SYSTEM
SOUTH ZONE, NAD 83/91 ; COMBINED SCALE FACTOR: 1.00007279
ELEVATION DATUM: NGVD29(47)
REPORT DATE: 01-04-07

SURVEY NARRATIVE: HAGEDORN, INC. WAS HIRED BY PHILIP SERVICES IN JULY, 1999 TO SURVEY VARIOUS MONITORING WELLS AND FUTURE WELL LOCATIONS AT THEIR WASHOUGAL, WA. FACILITY. ADDITIONAL WELLS WERE ADDED BY PHILIP SERVICES AND SURVEYED BY HAGEDORN, INC. IN MARCH, 2000, OCTOBER AND DECEMBER, 2001 AND DECEMBER, 2006.THE HORIZONTAL COORDINATE SYSTEM UTILIZED DURING THE SURVEYING OF THESE WELLS WAS BASED ON A LOCAL ASSUMED SYSTEM PREVIOUSLY ESTABLISHED BY ORAN ABBOT, PLS, IN MAY, 1994. IN DECEMBER, 2006 HAGEDORN, INC. WAS HIRED BY PHILIP SERVICES TO CONVERT THE LOCAL COORDINATES TO WASHINGTON STATE PLANE, SOUTH ZONE COORDINATES (NAD 83/91). ON DECEMBER 28, 2006 A HAGEDORN, INC. SURVEY CREW OBSERVED THREE PREVIOUSLY SURVEYED POINTS AT THE WASHOUGAL FACILITY AS WELL AS CLARK COUNTY PUBLISHED GPS CONTROL POINTS NUMBERED 1253 AND 1277. EQUIPMENT USED FOR THESE OBSERVATIONS WAS A TRIMBLE 5700 RTK GPS BASE RECEIVER WITH ROVER. THE LOCAL COORDINATES WERE THEN TRANSLATED TO NAD 83/91 WASHINGTON SOUTH ZONE COORDINATES AS SHOWN HEREON BASED ON THE TIES TO THE COUNTY GPS POINTS.
THE ELEVATIONS SHOWN HERON WERE ESTABLISHED BY CLOSED DIFFERENTIAL LEVEL LOOPS UTILIZING CLARK COUNTY BENCHMARKS NUMBERED 25 AND 26 FROM THE "LACAMAS" PRECISE LEVEL CIRCUIT. THE EVEVATION DATUM IS NGVD 29/47.

OREGON • WASHINGTON • MONTANA
1924 Broadway, Suite B • Vancouver, WA 98663 • Tel. (360) 696-4428 • Toll Free (866) 696-4428 • Fax (360) 694-8934
www.hagedornse.com

PHILIP SERVICES

WASHOUGAL MONITORING WELL DATA

X = Northing, Y = Easting, Z = Ground Elev., Z^1 = Measuring Point Elev.
* = X, Y, Z values established by Oran Abbott survey, Z^1 values established by H.I.

WELL	X	Y	Z	Z^1
GP-27	92629.9	1169913.7	17.0	Well is not installed
GP-28	92645.5	1169916.6	17.1	Well is not installed
GP-29	92642.5	1169981.8	17.4	Well is not installed
GP-30	92642.1	1169990.0	18.0	Well is not installed
GP-31	92640.6	1170013.7	18.1	Well is not installed
GP-32	92639.7	1170020.2	17.9	Well is not installed
GP-33	92664.0	1170038.0	17.5	Well is not installed
GP-34	92639.2	1170038.6	17.2	Well is not installed
GP-35	92612.1	1170037.1	17.3	Well is not installed
GP-36	92675.0	1169836.3	17.8	
GP-37	92652.2	1169835.7	17.7	
GP-38	92632.8	1169835.5	17.7	
GP-39	92608.5	1169831.6	17.7	
GP-40	92614.1	1169843.4	17.8	
GP-41	92616.5	1169872.6	17.8	
GP-42	92581.9	1169829.5	17.7	
GP-43	92609.2	1169820.4	17.7	
GP-44	92675.0	1169911.6	17.3	
GP-45	92659.2	1169909.7	17.3	
GP-46	92642.7	1169907.1	17.1	
GP-47	92621.9	1169905.3	16.9	
GP-48	92683.9	1169848.1	17.5	
GP-49	92683.6	1169869.9	17.5	
GP-50	92657.7	1169923.1	17.2	
GP-51	92716.0	1169482.6	17.7	
GP-52	92529.8	1169475.7	18.2	
GP-53	92401.3	1169473.8	18.3	
GP-54	92307.8	1169472.9	18.2	
GP-55	92663.7	1168884.4	17.9	
GP-56	92427.8	1168877.1	19.4	
GP-57	92126.6	1168856.9	20.3	
GP-58	92301.1	1169969.2	16.9	
GP-59	91933.5	1170037.5	18.1	
GP-60	91362.9	1169656.4	22.3	

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WASHOUGAL MONITORING WELL DATA

X = Northing, Y = Easting, Z = Ground Elev., Z^1 = Measuring Point Elev.
* = X, Y, Z values established by Oran Abbott survey, Z^1 values established by H.I.

WELL	X	Y	Z	Z^1
GP-61	92454.9	1169819.3	17.5	
GP-62	92454.4	1169823.6	17.5	
GP-63	92447.2	1169819.1	17.5	
GP-64	92447.0	1169823.2	17.5	
GP-65	92597.2	1169890.6	17.0	
GP-66	92638.4	1169919.9	17.0	
GP-67	92621.7	1169917.9	16.9	
GP-68	92593.9	1169913.0	16.7	
GP-69	92636.0	1169957.2	17.0	
GP-70	92618.5	1169957.2	16.8	
GP-71	92450.9	1169822.3	17.5	
GP-72	92579.4	1169852.0	17.2	
GP-73	92578.3	1169797.9	17.7	
GP-74	92580.3	1169765.7	17.8	
GP-75	92603.0	1169703.1	17.7	
GP-76	92649.2	1169702.8	17.5	
GP-77	92687.7	1169702.6	17.4	
GP-78	92922.3	1168831.8	17.3	
GP-79	91800.7	1168805.2	24.3	
GP-80	91154.4	1169354.4	28.0	
GP-81	91464.2	1169029.6	26.0	
GP-82	91619.2	1168861.8	26.0	
GP-83	91936.4	1168572.2	24.3	
GP-84	92228.9	1168360.3	22.3	
GP-85	92652.2	1168362.2	22.3	
GP-86	92818.6	1168370.9	21.2	
GP-87	93326.0	1168384.1	22.1	
GP-88	92294.9	1169620.8	17.4	
GP-89	92284.8	1169742.5	17.6	
GP-90	92280.9	1169905.3	16.3	
*MC-1	92590.6	1169832.4	17.7	17.14
*MC-2	92522.3	1169755.6	17.6	17.00

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WASHOUGAL MONITORING WELL DATA

X = Northing, Y = Easting, Z = Ground Elev., Z^1 = Measuring Point Elev.
* = X, Y, Z values established by Oran Abbott survey, Z^1 values established by H.I.

WELL	X	Y	Z	Z^1
*MC-2D	92522	1169761.8	17.6	17.10
*MC-8	92724.6	1169820.7	17.7	19.05
MC-10D	92423.7	1169485.5	18.5	21.04
*MC-12	92720.8	1169589.9	17.7	18.91
*MC-12D	92712.3	1169598.4	17.7	19.25
*MC-13	92714.1	1169950.9	18.0	19.14
*MC-13D	92728.7	1169949.7	18.3	20.13
*MC-14	92643.1	1169952.4	17.0	18.41
*MC-15	92554.0	1169951.4	16.4	17.46
*MC-15D	92548.5	1169950.8	16.2	17.37
*MC-16	92481.9	1169950.5	16.4	17.67
*MC-17	92404.4	1169948.9	16.4	17.57
MC-17D	92382.7	1169939.5	17.1	19.92
MC-19D	92300.3	1169774.4	18.2	18.05
MC-20	92640.1	1170037.5	17.8	19.70
MC-21	92643.7	1169915.8	17.1	16.79
MC-22	92713.7	1170038.6	18.0	20.87
MC-23	92600.7	1170036.2	17.5	19.99
MC-107	92666.3	1169648.6	17.3	20.13
MC-118	92721.8	1169761.1	17.7	17.28
MC-122	92681.1	1170038.9	17.6	19.95
MW-123	92585.5	1170035.7	17.2	19.91
PZU1	92638.9	1170022.9	17.8	17.44
PZU2	92640.0	1170007.9	18.1	17.74
PZU3	92638.1	1169988.3	17.7	17.03
PZU4	92640.0	1169969.7	17.6	Well is not installed
UTST1	92810.1	1169990.3	19.4	19.25
UTST2	92427.2	1169985.0	17.0	

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WASHOUGAL, WA FACILITY
MONITORING WELL SURVEY DATA
FIELD SURVEY DATE: 10/25/07
PAGE 2

MARSH SAMPLE	X	Y	Z	
SM-1	92683.7	1170056.3	11.4	
SM-2	92654.8	1170055.9	11.4	
SM-3	92582.2	1170053.5	10.9	

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10-25-07

PHILIP SERVICES
WASHOUGAL, WA FACILITY
MONITORING WELL SURVEY DATA

WASHINGTON STATE PLANE COORDINATE SYSTEM
SOUTH ZONE, NAD 83/91 ; COMBINED SCALE FACTOR: 1.00007279
ELEVATION DATUM: NGVD29(47)
REPORT DATE: 10/25/07
FIELD SURVEY DATE: 10/24/07

X = Northing, Y = Easting, Z = Ground Elev., Z^1 = Measuring Point Elev.

NEW WELL	X	Y	Z	Z^1
PZU4	92762.9	1169987.7	18.8	18.58
PZU5	92760.2	1170039.3	18.7	18.34
MC-14D	92652.8	1169943.3	17.2	19.33
MC-20D	92628.7	1170036.4	17.8	20.18
MC-24	92595.5	1169765.0	16.8	19.49
MC-24D	92592.1	1169771.4	16.9	19.03
MC-25	92688.2	1169758.3	17.4	16.97
MC-25D	92684.9	1169763.9	17.0	16.71

EXISTING WELL	X	Y	Z	Z^1
MC-122	92681.0	1170038.9	17.5	19.95
MC-123	92585.4	1170035.8	17.4	19.91

X = Northing, Y = Easting, Z = Ground Elev.

PUSH PROBE	X	Y	Z	
GP-91	92537.4	1169623.7	17.7	
GP-92	92488.3	1169625.4	18.5	
GP-93	92516.2	1169589.5	17.9	
GP-94	92510.5	1169669.6	18.6	
GP-95	92712.5	1169687.2	17.3	
GP-96	92772.1	1169739.0	17.5	
GP-97	92717.6	1169814.2	17.6	
GP-98	92777.3	1169761.3	17.7	
GP-99	92778.7	1169786.9	17.8	
GP-100	92692.5	1169762.9	17.2	
GP-101	92649.2	1169952.1	17.1	
GP-102	92673.4	1170038.5	17.5	
GP-103	92576.8	1170035.6	17.3	

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WASHOUGAL, WA FACILITY
MONITORING WELL SURVEY DATA
FIELD SURVEY DATE: 10/25/07
PAGE 2

MARSH SAMPLE	X	Y	Z	
SM-1	92683.7	1170056.3	11.4	
SM-2	92654.8	1170055.9	11.4	
SM-3	92582.2	1170053.5	10.9	

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WASHOUGAL WA FACILITY
MONITORING WELL SURVEY DATA

WASHINGTON STATE PLANE COORDINATE SYSTEM
SOUTH ZONE, NAD 83/901, COMBINED SCALE FACTOR: 1.00007279
ELEVATION DATUM: NGVD29(47)
REPORT DATE: 12/10/2008
FIELD SURVEY DATE: 12/9/2008

X = Northing, Y = Easting, Z = Ground Elev., Z^1 = Measuring Point Elev.

NEW WELL	X	Y	Z	Z^1
MC-25D2	92689.5	1169763.4	17.2	16.68
MC-26D2	92722.4	1169811.7	17.6	20.07
MC-30	92633.0	1169485.6	18.2	20.32
MC-30D	92628.9	1169484.9	18.2	20.77
MC-31	92299.7	1169514.9	17.9	21.03
MC-118D2	92721.7	1169765.7	17.6	17.26

PUSH PROBE	X	Y	Z	
GP-107	92521.8	1169708.6	17.6	
GP-108	92480.6	1169703.7	17.9	
GP-109	92540.4	1169591.9	18.0	
GP-110	92517.8	1169564.5	18.0	
GP-111	92478.1	1169587.7	17.9	
GP-112	92722.0	1169836.3	17.6	
GP-113	92702.5	1169836.4	17.3	
GP-114	92547.1	1169705.0	17.7	

MARSH SAMPLE	X	Y	Z	
SM-4	92677.8	1170108.4	9.9	
SM-5	92643.2	1170095.4	9.8	
SM-6	92577.2	1170082.1	9.7	

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WASHINGTON STATE PLANE COORDINATE SYSTEM
SOUTH ZONE, NAD 83/901, COMBINED SCALE FACTOR: 1.00007279
ELEVATION DATUM: NGVD29(47)
REPORT DATE: 5/15/2009
FIELD SURVEY DATE: 5/13/2009

X = Northing, Y = Easting, Z = Ground Elev., Z^1 = Measuring Point Elev.

NEW WELL	X	Y	Z	Z^1
MC-24D2	92603.5	1169771.2	16.4	18.21
MC-27D	92773.1	1169760.4	17.8	17.52
MC-28D	92775.1	1169859.9	18.1	17.79
MC-32	92481.1	1170033.6	17.4	20.30
MC-33	92536.1	1169635.7	17.9	20.87

PUSH PROBE	X	Y	Z	
GP-104	92764.6	1169761.0	17.7	
GP-105	92774.9	1169861.7	18.1	
GP-108	92479.3	1169703.9	17.9	
GP-115	92443.8	1169704.7	17.9	

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WASHINGTON STATE PLANE COORDINATE SYSTEM
SOUTH ZONE, NAD 83/91, COMBINED SCALE FACTOR: 1.00007279
ELEVATION DATUM: NGVD29(47)
REPORT DATE: 9/29/11
FIELD SURVEY DATE: 9/26/11

X = Northing, Y = Easting, Z = Ground Elev.

PUSH PROBE	X	Y	Z
GP-116	92701.6	1169793.6	17.1
GP-117	92677.2	1169716.7	17.4
GP-118	92672.1	1169762.4	16.6
GP-119	92673.6	1169816.5	16.7
GP-120	92637.9	1169726.3	17.3
GP-121	92641.0	1169760.2	16.5
GP-122	92642.0	1169788.2	16.3
GP-123	92594.9	1169733.5	16.9
GP-124	92595.9	1169784.4	16.6
GP-125	92593.8	1169821.7	16.7

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APPENDIX F

Boring Logs and Well Construction Diagrams

PROJECT: Remedial Investigation PSC Washougal		**Log of Well No. Explanation**	
BORING LOCATION:		TOP OF CASING ELEVATION AND DATUM:	
DRILLING CONTRACTOR:		DATE STARTED:	DATE FINISHED:
DRILLING METHOD:		TOTAL DEPTH (ft.): 15.0	SCREEN INTERVAL (ft.):
DRILLING EQUIPMENT:		DEPTH TO WATER (ft.): FIRST / COMPL.	CASING:
SAMPLING METHOD:		LOGGED BY:	
HAMMER WEIGHT:	DROP:	RESPONSIBLE PROFESSIONAL:	REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
1–15	GP-91-9.5-1007				Notes 1. Soil descriptions are in accordance with the USCS as set forth by ASTM D2488-90 "Standard Practice for Description and Identification of Soils (Visual-Manual Procedure)." 2. Soil color described according to Munsell Color Chart. 3. Dashed lines separating soil strata represent inferred boundaries between sampled intervals that may be abrupt or gradual transitions. 4. Solid lines represent approximate boundaries observed within sample intervals. 5. OVM = organic vapor meter, reading in volumetric parts per million. Reading collected from soil core/baggie headspace. 6. Odor, if noted is subjective and not necessarily indicative of specific compounds or concentrations. 7. NA = Not applicable. 8. ND = No data. Interval of soil sampled for chemical or geotechnical analysis. Interval of recovered soil collected with split spoon sampler. Interval of recovered soil collected with direct push or sonic rig. Interval of no recovery.	

OAKWELLV_TOC(REV. 9/00)

PROJECT: Remedial Investigation PSC Washougal	**Log of Well No. GP-27**
BORING LOCATION:	TOP OF CASING ELEVATION AND DATUM:
DRILLING CONTRACTOR: PSC	DATE STARTED: 7/30/99 / DATE FINISHED: 7/30/99
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 12.0 / SCREEN INTERVAL (ft.):
DRILLING EQUIPMENT:	DEPTH TO WATER (ft.): FIRST 4.9 / COMPL. / CASING:
SAMPLING METHOD: Geoprobe macro-core sampler [4' x 1.75"]	LOGGED BY: C. Minton/T. Gray
HAMMER WEIGHT: / DROP:	RESPONSIBLE PROFESSIONAL: / REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
0					ASPHALT	
1					POORLY GRADED SAND (SP): dark yellowish brown, moist, fine to medium sands, loose	
2				0		
3						
4						
5					wet, medium dense	
6				0	dark gray	
7	GP-27-6-8					
8					OL: very fine silt and clay, olive black, moist, medium stiff	
9				0	SM: fine to medium silty sand, soupy, soft, moderately sorted, olive gray	
10					ORGANIC SOIL (OL): olive black, moist, very fine silt and clay, medium stiff	
11						
12					Bottom of boring at 12.0 feet	
13						
14						
15						

PROJECT: Remedial Investigation PSC Washougal	**Log of Well No. GP-28**
BORING LOCATION:	TOP OF CASING ELEVATION AND DATUM:
DRILLING CONTRACTOR: PSC	DATE STARTED: 7/30/99 / DATE FINISHED: 7/30/99
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 12.0 / SCREEN INTERVAL (ft.):
DRILLING EQUIPMENT:	DEPTH TO WATER (ft.): FIRST 4.3 / COMPL. / CASING:
SAMPLING METHOD: Geoprobe macro-core sampler [4' x 1.75"]	LOGGED BY: C. Minton/T. Gray
HAMMER WEIGHT: / DROP:	RESPONSIBLE PROFESSIONAL: / REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
0					ASPHALT	
1					POORLY GRADED SAND (SP): dark yellowish brown, moist, fine to medium sands, loose	
2						
3						
4					wet, medium dense	
5					dark gray	
6						
7	GP-28-7-8					
8						
9	GP-28-8-10					
10					ORGANIC SOIL (OL): olive black, wet, very fine silt and clay, well sorted, medium stiff	
11						
12					Bottom of boring at 12.0 feet	
13						
14						
15						

OAKWELLV_TOC(REV. 9/00)

PROJECT: Remedial Investigation PSC Washougal	**Log of Well No. GP-29**
BORING LOCATION:	TOP OF CASING ELEVATION AND DATUM:
DRILLING CONTRACTOR: PSC	DATE STARTED: 7/29/99 / DATE FINISHED: 7/29/99
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 10.0 / SCREEN INTERVAL (ft.):
DRILLING EQUIPMENT:	DEPTH TO WATER (ft.): FIRST 6.1 / COMPL. / CASING:
SAMPLING METHOD: Geoprobe macro-core sampler [4' x 1.75"]	LOGGED BY: C. Minton/T. Gray
HAMMER WEIGHT: / DROP:	RESPONSIBLE PROFESSIONAL: / REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
0					POORLY GRADED SAND (SP): moderate yellowish brown, dry, fine to medium sands, loose	
1					some fine to coarse gravel	
				0	medium dense, moist	
2						
3						
4						
5				0		
6	GP-29-5.9-7.9				wet, medium dark gray	
7					OL: very fine clay and silt, medium stiff, moist, olive gray, some wood debris	
8						
9				0		
					ORGANIC SOIL (OL): olive gray, moist, very fine clay and silt, some wood debris, stiff	
10					Bottom of boring at 10.0 feet	
11						
12						
13						
14						
15						

OAKWELLV_TOC(REV. 9/00)

PROJECT: Remedial Investigation PSC Washougal	**Log of Well No. GP-30**
BORING LOCATION:	TOP OF CASING ELEVATION AND DATUM:
DRILLING CONTRACTOR: PSC	DATE STARTED: 7/29/99 / DATE FINISHED: 7/29/99
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 14.0 / SCREEN INTERVAL (ft.):
DRILLING EQUIPMENT:	DEPTH TO WATER (ft.): FIRST 7.5, COMPL. / CASING:
SAMPLING METHOD: Geoprobe macro-core sampler [4' x 1.75"]	LOGGED BY: C. Minton/T. Gray
HAMMER WEIGHT: / DROP:	RESPONSIBLE PROFESSIONAL: / REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
1				0	POORLY GRADED SAND (SP): dusky yellowish brown, slightly moist, fine to coarse sand, some silt, fine to coarse gravel, loose	
2					fine to medium sand, moist, medium dense, dark yellowish brown	
3						
4				0	SILTY GRAVEL (GM): olive black, wet, fine sand and silt and fine to coarse gravel, poorly sorted, very coarse, loose	
5						
6						
7					POORLY GRADED SAND (SP): medium dark gray, wet, fine to medium sand, medium dense	
8						
9	GP-30-8.5-9.5			0		
10						
11					ORGANIC SOIL (OL): olive gray, wet, very fine silt and clay, medium stiff, well sorted except for a few coarse gravel pieces (may be slough from above)	
12	GP-30-12-14			0		
13						
14					Bottom of boring at 14.0 feet	
15						

OAKWELLV_TOC(REV. 9/00)

PROJECT: Remedial Investigation PSC Washougal	**Log of Well No. GP-31**
BORING LOCATION:	TOP OF CASING ELEVATION AND DATUM:
DRILLING CONTRACTOR: PSC	DATE STARTED: 7/29/99 / DATE FINISHED: 7/29/99
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 16.0 / SCREEN INTERVAL (ft.):
DRILLING EQUIPMENT:	DEPTH TO WATER (ft.): FIRST 7.4 / COMPL. / CASING:
SAMPLING METHOD: Geoprobe macro-core sampler [4' x 1.75"]	LOGGED BY: C. Minton
HAMMER WEIGHT: / DROP:	RESPONSIBLE PROFESSIONAL: / REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
0					ASPHALT	
1				0	POORLY GRADED SAND (SP): medium gray, dry, fine to medium sand, some silt, some fine gravel, loose	
2					moderate yellowish brown, moist, medium dense OL: very fine silt, well sorted, moist, dark yellowish brown with red tint, stiff	
3						
4						
5				0		
6						
7					wet, medium dark gray	
8						
9						
10	GP-31-9.5-11.5			0		
11					ORGANIC SOIL (OL): olive gray, moist, very fine silt and clay, well sorted, medium stiff	
12					No geologic description available.	
13						
14						
15						

OAKWELLV_TOC(REV. 9/00)

PROJECT: Remedial Investigation
PSC Washougal

Log of Well No. GP-31 (cont'd)

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
16	GP-31-14-16				ORGANIC SOIL (OL): (continued) Bottom of boring at 16.0 feet	
17						
18						
19						
20						
21						
22						
23						
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25						
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29						
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31						
32						
33						

PROJECT: Remedial Investigation PSC Washougal	**Log of Well No. GP-32**
BORING LOCATION:	TOP OF CASING ELEVATION AND DATUM:
DRILLING CONTRACTOR: PSC	DATE STARTED: 7/29/99 / DATE FINISHED: 7/29/99
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 12.0 / SCREEN INTERVAL (ft.):
DRILLING EQUIPMENT:	DEPTH TO WATER (ft.): FIRST 7.1 / COMPL. / CASING:
SAMPLING METHOD: Geoprobe macro-core sampler [4' x 1.75"]	LOGGED BY: C. Minton
HAMMER WEIGHT: / DROP:	RESPONSIBLE PROFESSIONAL: / REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
0					ASPHALT	
1				0	POORLY GRADED SAND (SP): dark yellowish brown, dry, fine to coarse sand and fine gravel, loose	
2					moist, finer, medium dense OL: dark yellowish brown with red tint, very fine silt, well sorted, dense, moist	
3						
4						
5				0		
6						
7					wet	
8						
9					dark gray	
10	GP-32-10-12			0	ORGANIC SOIL (OL): olive black, moist, very fine silt and clay, well sorted, medium dense	
11						
12					Bottom of boring at 12.0 feet	
13						
14						
15						

PROJECT: Remedial Investigation PSC Washougal	**Log of Well No. GP-33**
BORING LOCATION:	TOP OF CASING ELEVATION AND DATUM:
DRILLING CONTRACTOR: PSC	DATE STARTED: 7/29/99 / DATE FINISHED: 7/29/99
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 16.0 / SCREEN INTERVAL (ft.):
DRILLING EQUIPMENT:	DEPTH TO WATER (ft.): FIRST 9.5 / COMPL. / CASING:
SAMPLING METHOD: Geoprobe macro-core sampler [4' x 1.75"]	LOGGED BY: C. Minton
HAMMER WEIGHT: / DROP:	RESPONSIBLE PROFESSIONAL: / REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
1				0	POORLY GRADED SAND (SP): dark yellowish brown, moist, fine to medium sand and fine gravel, medium dense	
2						
3						
4						
5						
6				0		
7					ORGANIC SOIL (OL): olive gray with orange tint, moist, very fine silt and clay, medium stiff, well sorted	
8					no orange tint	
9	GP-33-8-10					
10				0	wet	
11						
12					CL: fine sand and very fine silt and clay, wet, soupy, soft, moderately sorted, olive gray	
13					stiff, with brown tint	
14				0		
15					medium stiff	

OAKWELLV_TOC(REV 9/00)

PROJECT: Remedial Investigation
PSC Washougal

Log of Well No. GP-33 (cont'd)

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
16		X			ORGANIC SOIL (OL): (continued) Bottom of boring at 16.0 feet	
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						
32						
33						

PROJECT: Remedial Investigation PSC Washougal	**Log of Well No. GP-34**
BORING LOCATION:	TOP OF CASING ELEVATION AND DATUM:
DRILLING CONTRACTOR: PSC	DATE STARTED: 7/29/99 / DATE FINISHED: 7/29/99
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 16.0 / SCREEN INTERVAL (ft.):
DRILLING EQUIPMENT:	DEPTH TO WATER (ft.): FIRST 10 / COMPL. / CASING:
SAMPLING METHOD: Geoprobe macro-core sampler [4' x 1.75"]	LOGGED BY: C. Minton
HAMMER WEIGHT: / DROP:	RESPONSIBLE PROFESSIONAL: / REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
1				0	SILTY GRAVEL (GM): fine to coarse sand, fine gravel, dry, loose, poorly sorted, with woody debris at bottom	
					POORLY GRADED SAND (SP): moist, fine to medium sand, medium dense	
5				0		
					ORGANIC SOIL (OL): moist, very fine silt and clay, medium dense, well sorted	
7					POORLY GRADED SAND (SP): moist, fine to medium sand, medium dense	
9				0	ORGANIC SOIL (OL): wet, very fine silt and clay, medium dense, well sorted, some woody debris	
10	GP-34-10-12					
12				0		
15						

PROJECT: Remedial Investigation
PSC Washougal

Log of Well No. GP-34 (cont'd)

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
16	GP-34-14-16				ORGANIC SOIL (OL): (continued) Bottom of boring at 16.0 feet	
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						
32						
33						

PROJECT: Remedial Investigation PSC Washougal	**Log of Well No. GP-35**
BORING LOCATION:	TOP OF CASING ELEVATION AND DATUM:
DRILLING CONTRACTOR: PSC	DATE STARTED: 7/29/99 / DATE FINISHED: 7/29/99
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 16.0 / SCREEN INTERVAL (ft.):
DRILLING EQUIPMENT:	DEPTH TO WATER (ft.): FIRST 12 / COMPL. / CASING:
SAMPLING METHOD: Geoprobe macro-core sampler [4' x 1.75"]	LOGGED BY: C. Minton
HAMMER WEIGHT: / DROP:	RESPONSIBLE PROFESSIONAL: / REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
1				0	POORLY GRADED SAND (SP): moderate yellowish brown, moist, fine to medium sands, medium dense	
2					some fine gravel	
3						
4						
5				0		
6					ORGANIC SOIL (OL): grayish brown, moist, very fine silt and clay, well sorted, medium dense	
7				0	olive black	
8						
9				0		
10						
11	GP-35-10-12			0	wet	
12					CL: wet, fine to medium sand and silt, fine gravel, poorly sorted, soft, olive gray with orange tint	
13						
14				0		
15						

PROJECT: Remedial Investigation
PSC Washougal

Log of Well No. GP-35 (cont'd)

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
16		⊠			POORLY GRADED SAND (SP): (continued) Bottom of boring at 16.0 feet	
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						
32						
33						

PROJECT: Supplemental RI PSC Washougal	**Log of Well No. GP-36**
BORING LOCATION:	TOP OF CASING ELEVATION AND DATUM:
DRILLING CONTRACTOR: PSC	DATE STARTED: 9/22/01 / DATE FINISHED: 9/22/01
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 8.0 / SCREEN INTERVAL (ft.):
DRILLING EQUIPMENT:	DEPTH TO WATER (ft.): FIRST 5.5 / COMPL. / CASING:
SAMPLING METHOD: Geoprobe macro-core piston rod sampler [2' x 1"]	LOGGED BY: T. Gray
HAMMER WEIGHT: / DROP:	RESPONSIBLE PROFESSIONAL: / REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
1				1	WELL GRADED GRAVEL with SAND (GW): medium brown to dark yellowish brown, dry, fill material, sandy gravel, gravel and sand are fine to medium, loose	
2	GP-36-S-2-4-0901				POORLY GRADED SAND (SP): dark yellowish brown, dry to slightly moist, moderately well sorted fine sand, few medium grains, loose	
3				3.6		
4						
5	GP-36-S-5-6-0901			399		
6					wet, olive black, red and white specks	
7	GP-36-S-6-8-0901			1.7		
8					ORGANIC SOIL (OL): olive gray, moist, medium stiff, very will sorted, little to no sand, slight plasticity, root debris Bottom of boring at 8.0 feet	
9						
10						
11						
12						
13						
14						
15						

PROJECT: Supplemental RI PSC Washougal	**Log of Well No. GP-37**
BORING LOCATION:	TOP OF CASING ELEVATION AND DATUM:
DRILLING CONTRACTOR: PSC	DATE STARTED: 9/22/01 / DATE FINISHED: 9/22/01
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 8.0 / SCREEN INTERVAL (ft.):
DRILLING EQUIPMENT:	DEPTH TO WATER (ft.): FIRST 5.5 / COMPL. / CASING:
SAMPLING METHOD: Geoprobe macro-core piston rod sampler [2' x 1"]	LOGGED BY: T. Gray
HAMMER WEIGHT: / DROP:	RESPONSIBLE PROFESSIONAL: / REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
1				43	WELL GRADED GRAVEL with SAND (GW): dark yellowish brown, dry to moist, sandy gravel, fine gravel and medium to coarse sand, loose	
2	GP-37-S-2-4-0901				POORLY GRADED SAND (SP): dark yellowish brown, dry, moderately well sorted, fine with few medium grains, loose	
3				34		
4	GP-37-S-4-6-0901				moist	
5				13.7	olive black with mica, red and white specks, wet	
6	GP-37-S-7-8-0901					
7				32.9		
8					ORGANIC SOIL (OL): olive gray, moist to wet, medium stiff, root debris, slight plasticity, very well sorted, little to no sand Bottom of boring at 8.0 feet	
9						
10						
11						
12						
13						
14						
15						

PROJECT: Monitoring Well Replacement PSC Washougal	**Log of Boring No. GP-38**
BORING LOCATION:	ELEVATION AND DATUM:
DRILLING CONTRACTOR: PSC	DATE STARTED: 9/22/01 / DATE FINISHED: 9/22/01
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 8.0 / MEASURING POINT:
DRILLING EQUIPMENT:	DEPTH TO WATER (ft.) FIRST: 4.5 / COMPL.
SAMPLING METHOD: Geoprobe macro-core piston rod sampler [2' x 1"]	LOGGED BY: T. Gray
HAMMER WEIGHT: / DROP:	RESPONSIBLE PROFESSIONAL: / REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Recovery	SAMPLES: Blows/ Foot	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	REMARKS
0						
1	GP-38-S-0-2-0901			14.2	WELL GRADED GRAVEL with SAND (GW): dark yellowish brown, dry, sandy gravel, fine gravel and medium to coarse sand, loose	
					POORLY GRADED SAND (SP): dark yellowish brown, dry, moderately well sorted, fine with few medium grains, loose	
2					moist	
3				12.2		
4						
5	GP-38-S-4-6-0901			10.3	wet olive black with red and white specks, and mica	
6						
7	GP-38-S-7-8-0901 / GP-38-S-6-8-0901			17.3		
				21.5	ORGANIC SOIL (OL): olive gray, moist, very well sorted, medium plasticity, root debris, little or no sand, medium stiff	
8					Bottom of boring at 8.0 feet	Grab groundwater sample GP-38-W-8-0901 collected
9						
10						
11						
12						
13						
14						
15						

OAKBOREV (REV. 8/2007)

PROJECT: Monitoring Well Replacement PSC Washougal	**Log of Boring No. GP-39**
BORING LOCATION:	ELEVATION AND DATUM:
DRILLING CONTRACTOR: PSC	DATE STARTED: 9/22/01 / DATE FINISHED: 9/22/01
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 8.0 / MEASURING POINT:
DRILLING EQUIPMENT:	DEPTH TO WATER (ft.) FIRST: 4.5 / COMPL.
SAMPLING METHOD: Geoprobe macro-core piston rod sampler [2' x 1"]	LOGGED BY: T. Gray
HAMMER WEIGHT: / DROP:	RESPONSIBLE PROFESSIONAL: / REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Recovery	SAMPLES: Blows/ Foot	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	REMARKS
0					WELL GRADED GRAVEL with SAND (GW): dark yellowish brown, dry, fine gravel and medium to coarse sand, loose	
				5.4		
1					POORLY GRADED SAND (SP): dark yellowish brown, dry to moist, moderately well sorted, fine with few medium grains, loose	
2	GP-39-S-2-4-0901					
				8.1		
3						
4	GP-39-S-4-6-0901					
				4.5	wet	
5					olive black, red and white specks and mica	
6	GP-39-S-6-8-0901					
				3.4		
7				12.0	ORGANIC SOIL (OL): olive gray, moist, very well sorted, little to no sand, slight plasticity, medium stiff, root debris	
8					Bottom of boring at 8.0 feet	Grab groundwater sample GP-39-W-8-0901 collected
9						
10						
11						
12						
13						
14						
15						

OAKBOREV (REV. 8/2007)

PROJECT: Supplemental RI PSC Washougal	**Log of Well No. GP-40**
BORING LOCATION:	TOP OF CASING ELEVATION AND DATUM:
DRILLING CONTRACTOR: PSC	DATE STARTED: 9/24/01 / DATE FINISHED: 9/24/01
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 8.0 / SCREEN INTERVAL (ft.):
DRILLING EQUIPMENT:	DEPTH TO WATER (ft.): FIRST 5.0 / COMPL. / CASING:
SAMPLING METHOD: Geoprobe macro-core piston rod sampler [2' x 1"]	LOGGED BY: T. Gray
HAMMER WEIGHT: / DROP:	RESPONSIBLE PROFESSIONAL: / REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
1	GP-40-S-2-4-0901			3.3	WELL GRADED GRAVEL with SAND (GW): dark yellowish brown, dry, fine gravel, fine to coarse sand, loose	
2						
3				4.0		
4	GP-40-S-4-6-0901				reddish tint	
5				456 in water	olive black, moist wet	
6	GP-40-S-6-8-0901				medium dense, mica, red and white specks	
7				0.9	ORGANIC SOIL (OL): olive gray, moist, very well sorted, little to no sand, root debris, stiff	
8					Bottom of boring at 8.0 feet	
9						
10						
11						
12						
13						
14						
15						

PROJECT: Monitoring Well Replacement PSC Washougal	**Log of Boring No. GP-41**
BORING LOCATION:	ELEVATION AND DATUM:
DRILLING CONTRACTOR: PSC	DATE STARTED: 9/24/01 / DATE FINISHED: 9/24/01
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 8.0 / MEASURING POINT:
DRILLING EQUIPMENT:	DEPTH TO WATER (ft.) FIRST: 5.0 / COMPL.
SAMPLING METHOD: Geoprobe macro-core piston rod sampler [2' x 1"]	LOGGED BY: T. Gray
HAMMER WEIGHT: / DROP:	RESPONSIBLE PROFESSIONAL: / REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	Recovery	Blows/ Foot	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	REMARKS
1	GP-41-S-0-2-0901			22.7	WELL GRADED GRAVEL with SAND (GW): dark yellowish brown, dry to slightly moist, fine gravel, fine to coarse sand, loose	
2					POORLY GRADED SAND (SP): dark yellowish brown, dry to moist, moderately well sorted, fine with few medium grains, loose	
3	GP-41-S-2-4-0901			31.6	reddish tint	
4						
5	GP-41-S-4-6-0901			14.3	olive black, wet, red and white specks, mica	
6						
7	GP-41-S-6-8-0901 GP-41-S-7-8-0906			1.9 7.2	ORGANIC SOIL (OL): olive gray, moist, very well sorted, little to no sand, root debris, stiff	
8					Bottom of boring at 8.0 feet	Grab groundwater sample GP-41-W-8-0901 collected
9						
10						
11						
12						
13						
14						
15						

OAKBOREV (REV. 8/2007)

PROJECT: Monitoring Well Replacement PSC Washougal	**Log of Boring No. GP-42**
BORING LOCATION:	ELEVATION AND DATUM:
DRILLING CONTRACTOR: PSC	DATE STARTED: 9/22/01 / DATE FINISHED: 9/22/01
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 8.0 / MEASURING POINT:
DRILLING EQUIPMENT:	DEPTH TO WATER (ft.) FIRST: 4.5 / COMPL.
SAMPLING METHOD: Geoprobe macro-core piston rod sampler [2' x 1"]	LOGGED BY: T. Gray
HAMMER WEIGHT: / DROP:	RESPONSIBLE PROFESSIONAL: / REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Recovery	SAMPLES: Blows/ Foot	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	REMARKS
0						
1	GP-42-S-0-2-0901			0.6	WELL GRADED GRAVEL with SAND (GW): dark yellowish brown, dry, fine gravel, medium to coarse sand, loose	
2					POORLY GRADED SAND (SP): dark yellowish brown, dry to moist, moderately well sorted, fine with few medium grains, loose	
3				0.3		
4						
5	GP-42-S-4-6-0901			1.4	wet olive black	
6	GP-42-S-6-8-0901			4.1		
7					ORGANIC SOIL (OL): olive gray, moist, very well sorted, little to no sand, low plasticity, root debris, stiff	
8					Bottom of boring at 8.0 feet	Grab groundwater sample GP-42-W-8-0901 collected
9						
10						
11						
12						
13						
14						
15						

OAKBOREV (REV. 8/2007)

PROJECT: Supplemental RI PSC Washougal	**Log of Well No. GP-43**
BORING LOCATION:	TOP OF CASING ELEVATION AND DATUM:
DRILLING CONTRACTOR: PSC	DATE STARTED: 9/24/01 / DATE FINISHED: 9/24/01
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 8.0 / SCREEN INTERVAL (ft.):
DRILLING EQUIPMENT:	DEPTH TO WATER (ft.): FIRST 5.5 / COMPL. / CASING:
SAMPLING METHOD: Geoprobe macro-core piston rod sampler [2' x 1"]	LOGGED BY: T. Gray
HAMMER WEIGHT: / DROP:	RESPONSIBLE PROFESSIONAL: / REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
0					WELL GRADED GRAVEL with SAND (GW): dark yellowish brown, dry, fine gravel, fine to coarse sand, loose	
1				0		
2	GP-43-S-2-4-0901				POORLY GRADED SAND (SP): dark yellowish brown, dry to moist, moderately well sorted, fine with few medium grains, loose	
3				0		
4	GP-43-S-4-6-0901					
5				0	wet, olive black, red and white specks, mica	
6	GP-43-S-6-8-0901					
7				32.8	ORGANIC SOIL (OL): olive gray, moist, very well sorted, little to no sand, low plasticity, root debris, stiff	
8					Bottom of boring at 8.0 feet	
9						
10						
11						
12						
13						
14						
15						

PROJECT: Supplemental RI PSC Washougal	**Log of Well No. GP-44**
BORING LOCATION:	TOP OF CASING ELEVATION AND DATUM:
DRILLING CONTRACTOR: PSC	DATE STARTED: 9/26/01 / DATE FINISHED: 9/26/01
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 8.0 / SCREEN INTERVAL (ft.):
DRILLING EQUIPMENT:	DEPTH TO WATER (ft.): FIRST 5.5 / COMPL. / CASING:
SAMPLING METHOD: Geoprobe macro-core piston rod sampler [2' x 1"]	LOGGED BY: T. Gray
HAMMER WEIGHT: / DROP:	RESPONSIBLE PROFESSIONAL: / REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
0					Surface debris, asphalt, gravel	
1	GP-44-S-4-6-0901			0	POORLY GRADED SAND (SP): dark yellowish brown, dry to moist, moderately well sorted, fine with few medium grains, loose	
2					moist, more grayish tone to sand color	
3				0		
4						
5				0	wet, olive black, red and white specks, mica	
6	GP-44-S-6-8-0901					
7				0	ORGANIC SOIL (OL): olive gray, moist, very well sorted, little to no sand, root debris, very stiff	
8					Bottom of boring at 8.0 feet	
9						
10						
11						
12						
13						
14						
15						

PROJECT: Monitoring Well Replacement PSC Washougal	**Log of Boring No. GP-45**
BORING LOCATION:	ELEVATION AND DATUM:
DRILLING CONTRACTOR: PSC	DATE STARTED: 9/26/01 / DATE FINISHED: 9/26/01
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 8.0 / MEASURING POINT:
DRILLING EQUIPMENT:	DEPTH TO WATER (ft.) FIRST: 5.5 / COMPL.
SAMPLING METHOD: Geoprobe macro-core piston rod sampler [2' x 1"]	LOGGED BY: T. Gray
HAMMER WEIGHT: / DROP:	RESPONSIBLE PROFESSIONAL: / REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Recovery	SAMPLES: Blows/ Foot	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.	REMARKS
					Surface Elevation:	
1	Geotechnical sample				Unable to log soil	
2					POORLY GRADED SAND (SP): dark yellowish brown, dry, moderately well sorted, fine with few medium grains, loose	
3				0		
4					moist	
5	GP-45-S-4-6-0901			0		
6	GP-45-S-6-8-0901				wet, olive black, red and white specks, mica	
7				2.1	ORGANIC SOIL (OL): olive gray, moist, very well sorted, little to no sand, very low plasticity, root debris, very stiff	
8					Bottom of boring at 8.0 feet	Grab groundwater sample GP-45-W-8-0901 collected
9						
10						
11						
12						
13						
14						
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OAKBOREV (REV. 8/2007)

PROJECT: Monitoring Well Replacement PSC Washougal		**Log of Boring No. GP-46**	
BORING LOCATION:		ELEVATION AND DATUM:	
DRILLING CONTRACTOR: PSC		DATE STARTED: 9/26/01	DATE FINISHED: 9/26/01
DRILLING METHOD: Direct push		TOTAL DEPTH (ft.): 8.0	MEASURING POINT:
DRILLING EQUIPMENT:		DEPTH TO WATER (ft.) FIRST 5.5	COMPL.
SAMPLING METHOD: Geoprobe macro-core piston rod sampler [2' x 1"]		LOGGED BY: T. Gray	
HAMMER WEIGHT:	DROP:	RESPONSIBLE PROFESSIONAL:	REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Recovery	SAMPLES: Blows/ Foot	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	REMARKS
0					Asphalt, gravel, surface soil	
1				0	POORLY GRADED SAND (SP): dark yellowish brown, dry to moist, moderately well sorted, fine with few medium grains, loose	
2						
3				0		
4						
5	GP-46-S-4-6-0901			0	wet, olive black, red and white specks, mica	
6	GP-46-S-6-8-0901					
7				0	ORGANIC SOIL (OL): olive gray, moist, very well sorted, little to no sand, root debris, low plasticity, very stiff	
8					Bottom of boring at 8.0 feet	Grab groundwater sample GP-46-W-8-0901 collected
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OAKBOREV (REV. 8/2007)

PROJECT: Monitoring Well Replacement PSC Washougal	**Log of Boring No. GP-47**
BORING LOCATION:	ELEVATION AND DATUM:
DRILLING CONTRACTOR: PSC	DATE STARTED: 9/26/01 / DATE FINISHED: 9/26/01
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 8.0 / MEASURING POINT:
DRILLING EQUIPMENT:	DEPTH TO WATER (ft.) FIRST: 5.4 / COMPL.
SAMPLING METHOD: Geoprobe macro-core piston rod sampler [2' x 1"]	LOGGED BY: T. Gray
HAMMER WEIGHT: / DROP:	RESPONSIBLE PROFESSIONAL: / REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Recovery	SAMPLES: Blows/ Foot	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	REMARKS
1	Geotechnical Sample				Unable to log soil	
2					POORLY GRADED SAND (SP): dark yellowish brown, dry to moist, moderately well sorted, fine with few medium grains, loose	
3				0		
4						
5	GP-47-S-4-6-0901			0	wet olive black, red and white specks, mica	
6	GP-47-S-6-8-0901					
7				13	ORGANIC SOIL (OL): olive gray, moist, very well sorted, little to no sand, low plasticity, root debris, medium stiff	
8					Bottom of boring at 8.0 feet	Grab groundwater sample GP-47-W-8-0901 collected
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14						
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OAKBOREV (REV. 8/2007)

PROJECT: Monitoring Well Replacement PSC Washougal	**Log of Boring No. GP-48**
BORING LOCATION:	ELEVATION AND DATUM:
DRILLING CONTRACTOR: PSC	DATE STARTED: 9/24/01 / DATE FINISHED: 9/24/01
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 9.0 / MEASURING POINT:
DRILLING EQUIPMENT:	DEPTH TO WATER (ft.) FIRST / COMPL.
SAMPLING METHOD: Geoprobe macro-core piston rod sampler [2' x 1"]	LOGGED BY: T. Gray
HAMMER WEIGHT: / DROP:	RESPONSIBLE PROFESSIONAL: / REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Recovery	SAMPLES: Blows/ Foot	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	REMARKS
0					WELL GRADED GRAVEL with SAND (GW): dark yellowish brown, dry, fine gravel, fine to coarse sand, loose	
1				0	POORLY GRADED SAND (SP): dark yellowish brown, dry to moist, moderately well sorted, fine with few medium grains, loose	
2						
3				0		
4	GP-48-S-4-6-0901				slightly more reddish	
5				289	moist, olive black, red and white specks, mica	
6	GP-48-S-6-8-0901			60		
7					ORGANIC SOIL (OL): olive gray, moist, very well sorted, little to no sand, root debris, very stiff	
8	GP-48-S-8-9-0901			0	some sand	Grab groundwater sample GP-48-W-8-0901 collected
9					Bottom of boring at 9.0 feet	
10						
11						
12						
13						
14						
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OAKBOREV (REV. 8/2007)

PROJECT: Supplemental RI PSC Washougal	**Log of Well No. GP-49**
BORING LOCATION:	TOP OF CASING ELEVATION AND DATUM:
DRILLING CONTRACTOR: PSC	DATE STARTED: 9/24/01 / DATE FINISHED: 9/24/01
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 9.0 / SCREEN INTERVAL (ft.):
DRILLING EQUIPMENT:	DEPTH TO WATER (ft.): FIRST 5.0 / COMPL. / CASING:
SAMPLING METHOD: Geoprobe macro-core piston rod sampler [2' x 1"]	LOGGED BY: T. Gray
HAMMER WEIGHT: / DROP:	RESPONSIBLE PROFESSIONAL: / REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
1				0	WELL GRADED GRAVEL with SAND (GW): dark yellowish brown, dry, fine gravel, fine to coarse sand, loose	
2	GP-49-S-2-4-0901				POORLY GRADED SAND (SP): dark yellowish brown, dry, moderately well sorted, fine with few medium grains, loose moist	
3				0.1		
4	GP-49-S-4-6-0901					
5				126	wet	
6	GP-49-S-6-8-0901				olive black, moderately sorted, medium dense, red and white specks, mica	
7				1.8		
8				0		
9					silt is smeared on sampler shoe Bottom of boring at 9.0 feet	
10						
11						
12						
13						
14						
15						

OAKWELLV_TOC(REV. 9/00)

PROJECT: Monitoring Well Replacement PSC Washougal	**Log of Boring No. GP-50**
BORING LOCATION:	ELEVATION AND DATUM:
DRILLING CONTRACTOR: PSC	DATE STARTED: 9/25/01 / DATE FINISHED: 9/25/01
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 8.0 / MEASURING POINT:
DRILLING EQUIPMENT:	DEPTH TO WATER (ft.) FIRST / COMPL.
SAMPLING METHOD: Geoprobe macro-core piston rod sampler [2' x 1"]	LOGGED BY: T. Gray
HAMMER WEIGHT: / DROP:	RESPONSIBLE PROFESSIONAL: / REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Recovery	SAMPLES: Blows/ Foot	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	REMARKS
0					WELL GRADED GRAVEL with SAND (GW): dark yellowish brown, dry, angular fine to medium gravel, fine to coarse sand	
1				43.8	POORLY GRADED SAND (SP): dark yellowish brown, dry, moderately well sorted, fine with few medium grains, loose	
2	GP-50-S-2-4-0901				moist	
3				909		
4	GP-50-S-4-6-0901			600	moderate brown	
5					wet	
6	GP-50-S-6-8-0901			0.0	olive black, wet, moderately sorted, red and white specks, mica	
7	GP-50-S-7-8-0901				ORGANIC SOIL (OL): olive gray, moist, very well sorted, little to no sand, root debris, stiff	
8					Bottom of boring at 8.0 feet	Grab groundwater sample GP-50-W-8-0901 collected
9						
10						
11						
12						
13						
14						
15						

OAKBOREV (REV. 8/2007)

PROJECT: Monitoring Well Replacement PSC Washougal		**Log of Boring No. GP-51**	
BORING LOCATION:		ELEVATION AND DATUM:	
DRILLING CONTRACTOR: PSC		DATE STARTED: 9/20/01	DATE FINISHED: 9/20/01
DRILLING METHOD: Direct push		TOTAL DEPTH (ft.): 8.0	MEASURING POINT:
DRILLING EQUIPMENT:		DEPTH TO WATER (ft.) FIRST: 3.5	COMPL.
SAMPLING METHOD: Geoprobe macro-core piston rod sampler [2' x 1"]		LOGGED BY: T. Gray	
HAMMER WEIGHT:	DROP:	RESPONSIBLE PROFESSIONAL:	REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Recovery	SAMPLES: Blows/ Foot	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	REMARKS
0					POORLY GRADED SAND (SP): light yellowish brown, dry, fine sandy soil from surface, getting sandier, loose	
1	GP-51-S-0-2-0901				moist, dark yellowish brown, fine to medium grained, moderately well sorted	
2						
3	GP-51-S-2-4-0901				wet	
4					olive black, with red and white specks, and mica	
5						
6						
7						
8					SILT (ML): olive gray, moist, very well sorted, no sand, organic (root) material, stiff Bottom of boring at 8.0 feet	Grab groundwater sample GP-51-W-8-0901 collected
9						
10						
11						
12						
13						
14						
15						

OAKBOREV (REV. 8/2007)

PROJECT: Supplemental RI PSC Washougal	**Log of Well No. GP-52**
BORING LOCATION:	TOP OF CASING ELEVATION AND DATUM:
DRILLING CONTRACTOR: PSC	DATE STARTED: 9/20/01 / DATE FINISHED: 9/20/01
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 10.0 / SCREEN INTERVAL (ft.):
DRILLING EQUIPMENT:	DEPTH TO WATER (ft.): FIRST 3.5 / COMPL. / CASING:
SAMPLING METHOD: Geoprobe macro-core piston rod sampler [2' x 1"]	LOGGED BY: T. Gray
HAMMER WEIGHT: / DROP:	RESPONSIBLE PROFESSIONAL: / REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
0–3	GP-52-S-2-4-0901				POORLY GRADED SAND (SP): dark yellowish brown, moist, moderately well sorted, mostly fine with medium sand grains, loose	
3					wet	
3–5	GP-52-S-4-6-0901				olive black, with red and white specks, and mica	
5–8						
8–10					SILT (ML): olive gray, moist, well sorted, little to no sand, medium stiff, low plasticity, organic (root) debris	
9					getting silty	
10					Bottom of boring at 10.0 feet	
11–15						

OAKWELLV_TOC(REV 9/00)

PROJECT: Supplemental RI PSC Washougal	**Log of Well No. GP-53**
BORING LOCATION:	TOP OF CASING ELEVATION AND DATUM:
DRILLING CONTRACTOR: PSC	DATE STARTED: 9/20/01 / DATE FINISHED: 9/20/01
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 10.0 / SCREEN INTERVAL (ft.):
DRILLING EQUIPMENT:	DEPTH TO WATER (ft.): FIRST 3.75 / COMPL. / CASING:
SAMPLING METHOD: Geoprobe macro-core piston rod sampler [2' x 1"]	LOGGED BY: T. Gray
HAMMER WEIGHT: / DROP:	RESPONSIBLE PROFESSIONAL: / REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
0					POORLY GRADED SAND (SP): dark yellowish brown, moist, moderately well sorted, fine with medium sand grains, loose	
1						
2	GP-53-S-2-4-0901					
3						
4					wet	
4	GP-53-S-4-6-0901				olive black, with red and white specks, and mica	
5						
6						
7						
8					SILT (ML): olive gray, moist, very well sorted, little to no sand, medium stiff to stiff, slight plasticity, some organic (root) debris	
9						
10					Bottom of boring at 10.0 feet	
11						
12						
13						
14						
15						

PROJECT: Supplemental RI PSC Washougal	**Log of Well No. GP-54**
BORING LOCATION:	TOP OF CASING ELEVATION AND DATUM:
DRILLING CONTRACTOR: PSC	DATE STARTED: 9/20/01 / DATE FINISHED: 9/20/01
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 10.0 / SCREEN INTERVAL (ft.):
DRILLING EQUIPMENT:	DEPTH TO WATER (ft.): FIRST 3.8 / COMPL. / CASING:
SAMPLING METHOD: Geoprobe macro-core piston rod sampler [2' x 1"]	LOGGED BY: T. Gray
HAMMER WEIGHT: / DROP:	RESPONSIBLE PROFESSIONAL: / REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
1	GP-54-S-2-4-0901				POORLY GRADED SAND (SP): dark yellowish brown, moist, moderately well sorted, fine with medium sand grains, loose	
2					more fine	
3						
4	GP-54-S-4-6-0901				wet olive black, with red and white specks, and mica	
5						
6						
7						
8					SILT (ML): olive gray, wet, well sorted, little to no sand, medium stiff, low plasticity, some organic (root) debris	
9						
10					Bottom of boring at 10.0 feet	
11						
12						
13						
14						
15						

PROJECT: Supplemental RI PSC Washougal	**Log of Well No. GP-55**
BORING LOCATION:	TOP OF CASING ELEVATION AND DATUM:
DRILLING CONTRACTOR: PSC	DATE STARTED: 9/18/01 / DATE FINISHED: 9/18/01
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 7.0 / SCREEN INTERVAL (ft.):
DRILLING EQUIPMENT:	DEPTH TO WATER (ft.): FIRST 4.0 / COMPL. / CASING:
SAMPLING METHOD: Geoprobe macro-core piston rod sampler [2' x 1"]	LOGGED BY: T. Gray
HAMMER WEIGHT: / DROP:	RESPONSIBLE PROFESSIONAL: / REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
0					No soil logged	
1	GP-55-S-1-3-0901				POORLY GRADED SAND (SP): dark yellowish brown, dry, moderately sorted, fine to medium sand grains, loose	
2						
3	GP-55-S-3-5-0901					
4					wet olive black, with red and white specks, and mica	
5					Reddish brown, sandy wood debris	
6					ORGANIC SOIL (OL): olive gray, moist, well sorted, little to no sand, woody debris at top, some organic (root) debris	
7					Bottom of boring at 7.0 feet	
8						
9						
10						
11						
12						
13						
14						
15						

PROJECT: Supplemental RI PSC Washougal	**Log of Well No. GP-56**
BORING LOCATION:	TOP OF CASING ELEVATION AND DATUM:
DRILLING CONTRACTOR: PSC	DATE STARTED: 9/18/01 / DATE FINISHED: 9/18/01
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 9.0 / SCREEN INTERVAL (ft.):
DRILLING EQUIPMENT:	DEPTH TO WATER (ft.): FIRST 6.0 / COMPL. / CASING:
SAMPLING METHOD: Geoprobe macro-core piston rod sampler [2' x 1"]	LOGGED BY: T. Gray
HAMMER WEIGHT: / DROP:	RESPONSIBLE PROFESSIONAL: / REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
1					No soil logged	
2						
3	GP-56-S-3-5-0901				POORLY GRADED SAND (SP): dark yellowish brown, dry, poorly sorted, fine to medium sand grains with a little fine gravel, loose	
4						
5					no gravel, moderately well sorted, wet	
6					olive black, with red and white specks, and mica	
7	GP-56-S-7-9-0901					
8					ORGANIC SOIL (OL): olive gray, moist, well sorted, little to no sand, very stiff, small amount of organic debris	
9					Bottom of boring at 9.0 feet	
10						
11						
12						
13						
14						
15						

OAKWELLV_TOC(REV. 9/00)

PROJECT: Supplemental RI PSC Washougal	**Log of Well No. GP-57**
BORING LOCATION:	TOP OF CASING ELEVATION AND DATUM:
DRILLING CONTRACTOR: PSC	DATE STARTED: 9/18/01 / DATE FINISHED: 9/18/01
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 5.0 / SCREEN INTERVAL (ft.):
DRILLING EQUIPMENT:	DEPTH TO WATER (ft.): FIRST / COMPL. / CASING:
SAMPLING METHOD: Geoprobe macro-core piston rod sampler [2' x 1"]	LOGGED BY: T. Gray
HAMMER WEIGHT: / DROP:	RESPONSIBLE PROFESSIONAL: / REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
0					No soil logged	
1	GP-57-S-1-3-0901				POORLY GRADED SAND (SP): dark yellowish brown, slightly moist, moderately sorted fine to medium sand, some silt, loose	
2						
3						
4					black plastic chunk of storm sewer line	
5					Bottom of boring at 5.0 feet	
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						

PROJECT: Supplemental RI PSC Washougal	**Log of Well No. GP-58**
BORING LOCATION:	TOP OF CASING ELEVATION AND DATUM:
DRILLING CONTRACTOR: PSC	DATE STARTED: 9/17/01 / DATE FINISHED: 9/17/01
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 10.0 / SCREEN INTERVAL (ft.):
DRILLING EQUIPMENT:	DEPTH TO WATER (ft.): FIRST 6.0 / COMPL. / CASING:
SAMPLING METHOD: Geoprobe macro-core piston rod sampler [2' x 1"]	LOGGED BY: T. Gray
HAMMER WEIGHT: / DROP:	RESPONSIBLE PROFESSIONAL: / REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
0	GP-58-S-0-2-0901				WELL GRADED GRAVEL (GW): gray and brown, dry, surface gravel and dirt, fine to coarse, loose	
1					POORLY GRADED SAND (SP): dark yellowish brown, dry, well sorted, medium sand grains with a little fine gravel, loose	
2						
3						
4						
5	GP-58-S-6-7-0901				medium dense to loose, moist	
6					olive black, with red and white specks, and mica, wet, moderately well sorted, fine to medium grained	
7						
8					some evidence of silt smearing	
9						
10					Bottom of boring at 10.0 feet	
11						
12						
13						
14						
15						

PROJECT: Supplemental RI PSC Washougal	**Log of Well No. GP-59**
BORING LOCATION:	TOP OF CASING ELEVATION AND DATUM:
DRILLING CONTRACTOR: PSC	DATE STARTED: 9/17/01 / DATE FINISHED: 9/17/01
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 12.0 / SCREEN INTERVAL (ft.):
DRILLING EQUIPMENT:	DEPTH TO WATER (ft.): FIRST 5.0 / COMPL. / CASING:
SAMPLING METHOD: Geoprobe macro-core piston rod sampler [2' x 1"]	LOGGED BY: T. Gray
HAMMER WEIGHT: / DROP:	RESPONSIBLE PROFESSIONAL: / REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
1	GP-59-S-0-2-0901				WELL GRADED GRAVEL (GW): gray and brown, dry, fine to coarse, loose	
2						
3					POORLY GRADED SAND (SP): dark yellowish brown, moist to wet, moderately well sorted, mostly medium sand grains, loose	
4						
5	GP-59-S-5-6-0901					
6					wet, some mica flakes olive black, with red and white specks, and mica, medium dense	
7						
8						
9						
10					ORGANIC SOIL (OL): olive gray, moist, soft to medium stiff, well sorted, no sand, low plasticity	
11						
12					Bottom of boring at 12.0 feet	
13						
14						
15						

PROJECT: Supplemental RI PSC Washougal	**Log of Well No. GP-60**
BORING LOCATION:	TOP OF CASING ELEVATION AND DATUM:
DRILLING CONTRACTOR: PSC	DATE STARTED: 9/17/01 / DATE FINISHED: 9/17/01
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 10.0 / SCREEN INTERVAL (ft.):
DRILLING EQUIPMENT:	DEPTH TO WATER (ft.): FIRST 6.0 / COMPL. / CASING:
SAMPLING METHOD: Geoprobe macro-core piston rod sampler [2' x 1"]	LOGGED BY: T. Gray
HAMMER WEIGHT: / DROP:	RESPONSIBLE PROFESSIONAL: / REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
1					WELL GRADED GRAVEL (GW): brown and gray, dry, fine to coarse gravel, loose	
2	GP-60-S-2-4-0901					
3					POORLY GRADED SAND (SP): dark yellowish brown, dry, moderately well sorted, mostly medium grained, loose	
4						
5					moist	
6					wet, medium dense, olive black with mica specks and some red and white specks	
7	GP-60-S-6-8-0901				ORGANIC SOIL (OL): olive gray, moist, well sorted, no sand, low plasticity (cracks), some organic debris (roots), medium stiff	
8						
9						
10					Bottom of boring at 10.0 feet	
11						
12						
13						
14						
15						

OAKWELLV_TOC(REV 9/00)

PROJECT: Monitoring Well Replacement PSC Washougal	**Log of Boring No. GP-61**
BORING LOCATION:	ELEVATION AND DATUM:
DRILLING CONTRACTOR: PSC	DATE STARTED: 9/19/01 / DATE FINISHED: 9/19/01
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 9.0 / MEASURING POINT:
DRILLING EQUIPMENT:	DEPTH TO WATER (ft.) FIRST: 5.0 / COMPL.
SAMPLING METHOD: Geoprobe macro-core piston rod sampler [2' x 1"]	LOGGED BY: T. Gray
HAMMER WEIGHT: / DROP:	RESPONSIBLE PROFESSIONAL: / REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Recovery	SAMPLES: Blows/ Foot	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	REMARKS
0	GP-61-S-0-1-0901				POORLY GRADED SAND (SP): dark yellowish brown, moist, moderately sorted, fine to medium grained, loose	
1						
2	GP-61-S-1-2-0901					
3						
4						
5					wet, olive black with mica specks, red and white specks, medium dense	
6						
7						
8					ORGANIC SOIL (OL): olive gray, moist, very well sorted, little to no sand, slight plasticity, organic (root) debris, stiff, but gets softer towards bottom	
9					Bottom of boring at 9.0 feet	Grab groundwater sample GP-61-W-9-0901 collected
10						
11						
12						
13						
14						
15						

OAKBOREV (REV. 8/2007)

PROJECT: PSC Washougal Washougal, WA	**Log of Boring No. GP-62**	
BORING LOCATION: S. 32nd St., Washougal, WA	ELEVATION AND DATUM:	
DRILLING CONTRACTOR:	DATE STARTED: 9/19/01	DATE FINISHED: 9/19/01
DRILLING METHOD:	TOTAL DEPTH (ft.): 9.0	MEASURING POINT:
DRILLING EQUIPMENT:	DEPTH TO WATER (ft.)	FIRST / COMPL.
SAMPLING METHOD:	LOGGED BY:	
HAMMER WEIGHT: / DROP:	RESPONSIBLE PROFESSIONAL:	REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/Foot	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	REMARKS
1					Boring Not Logged Refer to Supplemental RI, PSC, 2002	
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PROJECT: PSC Washougal Washougal, WA	**Log of Boring No. GP-63**	
BORING LOCATION: S. 32nd St., Washougal, WA	ELEVATION AND DATUM:	
DRILLING CONTRACTOR:	DATE STARTED: 9/19/01	DATE FINISHED: 9/19/01
DRILLING METHOD:	TOTAL DEPTH (ft.): 9.0	MEASURING POINT:
DRILLING EQUIPMENT:	DEPTH TO WATER (ft.)	FIRST / COMPL.
SAMPLING METHOD:	LOGGED BY:	
HAMMER WEIGHT: / DROP:	RESPONSIBLE PROFESSIONAL:	REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:		REMARKS
1					Boring Not Logged Refer to Supplemental RI, PSC, 2002		
2							
3							
4							
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PROJECT: PSC Washougal Washougal, WA	**Log of Boring No. GP-64**
BORING LOCATION: S. 32nd St., Washougal, WA	ELEVATION AND DATUM:
DRILLING CONTRACTOR:	DATE STARTED: 9/19/01 / DATE FINISHED: 9/19/01
DRILLING METHOD:	TOTAL DEPTH (ft.): 9.0 / MEASURING POINT:
DRILLING EQUIPMENT:	DEPTH TO WATER (ft.) FIRST / COMPL.
SAMPLING METHOD:	LOGGED BY:
HAMMER WEIGHT: / DROP:	RESPONSIBLE PROFESSIONAL: / REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	REMARKS
1					Boring Not Logged Refer to Supplemental RI, PSC, 2002	
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PROJECT: Monitoring Well Replacement PSC Washougal	**Log of Boring No. GP-65**
BORING LOCATION:	ELEVATION AND DATUM:
DRILLING CONTRACTOR: PSC	DATE STARTED: 9/26/01 / DATE FINISHED: 9/26/01
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 8.0 / MEASURING POINT:
DRILLING EQUIPMENT:	DEPTH TO WATER (ft.) FIRST: 5.5 / COMPL.
SAMPLING METHOD: Geoprobe macro-core piston rod sampler [2' x 1"]	LOGGED BY: T. Gray
HAMMER WEIGHT: / DROP:	RESPONSIBLE PROFESSIONAL: / REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	Recovery	Blows/ Foot	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	REMARKS
1	GP-65-S-0-2-0901			709	POORLY GRADED SAND (SP): dark yellowish brown, dry, moderately well sorted, mostly fine with few medium grains, loose	
2						
3				174		
4	GP-65-S-4-6-0901				▼ moist	
5				66.4	▼ wet, fine with few medium grains, olive black with mica specks, red and white specks, loose	
6	GP-65-S-6-8-0901					
7	GP-65-S-7-8-0901			322	ORGANIC SOIL (OL): olive gray, moist, very well sorted, little to no sand, slight plasticity, organic (root) debris, medium stiff	
8					Bottom of boring at 8.0 feet	Grab groundwater sample GP-65-W-8-0901 collected
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OAKBOREV (REV. 8/2007)

PROJECT: Monitoring Well Replacement PSC Washougal	**Log of Boring No. GP-66**
BORING LOCATION:	ELEVATION AND DATUM:
DRILLING CONTRACTOR: PSC	DATE STARTED: 9/25/01 / DATE FINISHED: 9/25/01
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 8.0 / MEASURING POINT:
DRILLING EQUIPMENT:	DEPTH TO WATER (ft.) FIRST: 4.5 / COMPL.
SAMPLING METHOD: Geoprobe macro-core piston rod sampler [2' x 1"]	LOGGED BY: T. Gray
HAMMER WEIGHT: / DROP:	RESPONSIBLE PROFESSIONAL: / REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Recovery	SAMPLES: Blows/ Foot	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	REMARKS
0					WELL GRADED GRAVEL with SAND (GW): brown and gray, dry, fill material, fine to coarse sand, fine to medium angular gravel, loose	
1				15	POORLY GRADED SAND (SP): dark yellowish brown, dry, moderately well sorted, fine with few medium grains, loose	
2	GP-66-S-2-4-0901				slight reddish tint	
3				256		
4					moist	
5	GP-66-S-4-6-0901			65.4	wet, olive black with mica specks and some red and white specks	
6	GP-66-S-6-8-0901			36.4		
7	GP-66-S-7-8-0901				ORGANIC SOIL (OL): olive gray, moist, very well sorted, little to no sand, some organic debris (roots), stiff	
8					Bottom of boring at 8.0 feet	Grab groundwater sample GP-66-W-8-0901 collected
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OAKBOREV (REV. 8/2007)

PROJECT: Monitoring Well Replacement PSC Washougal		**Log of Boring No. GP-67**	
BORING LOCATION:		ELEVATION AND DATUM:	
DRILLING CONTRACTOR: PSC		DATE STARTED: 9/27/01	DATE FINISHED: 9/27/01
DRILLING METHOD: Direct push		TOTAL DEPTH (ft.): 8.0	MEASURING POINT:
DRILLING EQUIPMENT:		DEPTH TO WATER (ft.) FIRST 5.0	COMPL.
SAMPLING METHOD: Geoprobe macro-core piston rod sampler [2' x 1"]		LOGGED BY: T. Gray	
HAMMER WEIGHT:	DROP:	RESPONSIBLE PROFESSIONAL:	REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Recovery	SAMPLES: Blows/ Foot	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.	REMARKS
					Surface Elevation:	
					Gravelly surface material	
1					POORLY GRADED SAND (SP): dark yellowish brown, dry, moderately sorted, fine with some medium grains, loose	
2						
3						
4	GP-67-S-4-5-0901				moist	
5	GP-67-S-5-6-0901				wet, olive black with mica specks and some red and white specks	
6	GP-67-S-6-8-0901					
7					ORGANIC SOIL (OL): olive gray, moist, very well sorted, little to no sand, organic debris (roots), stiff	
8					Bottom of boring at 8.0 feet	Grab groundwater sample GP-67-W-8-0901 collected
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OAKBOREV (REV. 8/2007)

PROJECT: Monitoring Well Replacement PSC Washougal	**Log of Boring No. GP-68**
BORING LOCATION:	ELEVATION AND DATUM:
DRILLING CONTRACTOR: PSC	DATE STARTED: 9/27/01 / DATE FINISHED: 9/27/01
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 9.0 / MEASURING POINT:
DRILLING EQUIPMENT:	DEPTH TO WATER (ft.) FIRST: 5.0 / COMPL.
SAMPLING METHOD: Geoprobe macro-core piston rod sampler [2' x 1"]	LOGGED BY: T. Gray/C. Johnson
HAMMER WEIGHT: / DROP:	RESPONSIBLE PROFESSIONAL: / REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Recovery	SAMPLES: Blows/ Foot	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	REMARKS
0					Gravel, surface debris	
1				0	POORLY GRADED SAND (SP): dark yellowish brown, dry, moderately well sorted, fine with few medium grains, loose	
2						
3				0		
4	GP-68-S-4-5-0901					
5	GP-68-S-5-6-0901			0	wet, moderately sorted, olive black with mica specks and some red and white specks	
6				0		
7					ORGANIC SOIL (OL): olive gray, wet, very well sorted, little to no sand, slightly plastic, organic debris (roots), medium stiff	
8				0		Grab groundwater sample GP-68-W-8-0901 collected
9					Bottom of boring at 9.0 feet	
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13						
14						
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PROJECT: Monitoring Well Replacement PSC Washougal	**Log of Boring No. GP-69**
BORING LOCATION:	ELEVATION AND DATUM:
DRILLING CONTRACTOR: PSC	DATE STARTED: 9/26/01 / DATE FINISHED: 9/26/01
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 8.0 / MEASURING POINT:
DRILLING EQUIPMENT:	DEPTH TO WATER (ft.) FIRST: 5.5 / COMPL.
SAMPLING METHOD: Geoprobe macro-core piston rod sampler [2' x 1"]	LOGGED BY: T. Gray
HAMMER WEIGHT: / DROP:	RESPONSIBLE PROFESSIONAL: / REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Recovery	SAMPLES: Blows/ Foot	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	REMARKS
0					Gravel from surface	
1				17.1	POORLY GRADED SAND (SP): dark yellowish brown, dry, moderately well sorted, fine with few medium grains, loose	
2						
3				9.0		
4	GP-69-S-4-6-0901				moist	
5				30.3	wet olive black with mica specks and some red and white specks	
6	GP-69-S-6-8-0901					
7	GP-69-S-7-8-0901			14.9	ORGANIC SOIL (OL): olive gray, wet, very well sorted, little to no sand, organic debris (roots), very stiff	
8					Bottom of boring at 8.0 feet	Grab groundwater sample GP-69-W-8-0901 collected
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OAKBOREV (REV. 8/2007)

PROJECT: Monitoring Well Replacement PSC Washougal	**Log of Boring No. GP-70**
BORING LOCATION:	ELEVATION AND DATUM:
DRILLING CONTRACTOR: PSC	DATE STARTED: 9/27/01 / DATE FINISHED: 9/27/01
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 8.0 / MEASURING POINT:
DRILLING EQUIPMENT:	DEPTH TO WATER (ft.) FIRST: 5.0 / COMPL.
SAMPLING METHOD: Geoprobe macro-core piston rod sampler [2' x 1"]	LOGGED BY: T. Gray
HAMMER WEIGHT: / DROP:	RESPONSIBLE PROFESSIONAL: / REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	Recovery	Blows/ Foot	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.	REMARKS
					Surface Elevation:	
0					Gravelly surface soil	
1				0	POORLY GRADED SAND (SP): dark yellowish brown, moist to dry, moderately sorted, fine with some medium grains, loose	
2						
3				0		
4	GP-70-S-4-5-0901				moist	
5	GP-70-S-5-6-0901			0	wet olive black with mica specks and some red and white specks	
6	GP-70-S-6-7-0901					
7	GP-70-S-7-8-0901			0	ORGANIC SOIL (OL): olive gray, moist, very well sorted, little to no sand, organic debris (roots), stiff	
8					Bottom of boring at 8.0 feet	Grab groundwater sample GP-70-W-8-0901 collected
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OAKBOREV (REV. 8/2007)

PROJECT: PSC Washougal Washougal, WA	**Log of Boring No. GP-71**	
BORING LOCATION: S. 32nd St., Washougal, WA	ELEVATION AND DATUM:	
DRILLING CONTRACTOR:	DATE STARTED: 9/19/01	DATE FINISHED: 9/19/01
DRILLING METHOD:	TOTAL DEPTH (ft.): 9.0	MEASURING POINT:
DRILLING EQUIPMENT:	DEPTH TO WATER (ft.)	FIRST / COMPL.
SAMPLING METHOD:	LOGGED BY:	
HAMMER WEIGHT: / DROP:	RESPONSIBLE PROFESSIONAL:	REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/Foot	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	REMARKS
1					Boring Not Logged Refer to Supplemental RI, PSC, 2002	
2						
3						
4						
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PROJECT: Supplemental RI PSC Washougal	**Log of Well No. GP-72**
BORING LOCATION:	TOP OF CASING ELEVATION AND DATUM:
DRILLING CONTRACTOR: PSC	DATE STARTED: 9/20/01 / DATE FINISHED: 9/20/01
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 8.0 / SCREEN INTERVAL (ft.):
DRILLING EQUIPMENT:	DEPTH TO WATER (ft.): FIRST 5.0 / COMPL. / CASING:
SAMPLING METHOD: Geoprobe macro-core piston rod sampler [2' x 1"]	LOGGED BY: T. Gray
HAMMER WEIGHT: / DROP:	RESPONSIBLE PROFESSIONAL: / REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
					Surface asphalt and gravel	
1				0	POORLY GRADED SAND (SP): dark yellowish brown, dry, moderately well sorted, fine with some medium grains, loose	
2	GP-72-S-2-4-0901					
3				0		
4					moist	
5	GP-72-S-4-6-0901			0	wet olive black with mica specks and some red and white specks	
6						
7	GP-72-S-6-8-0901			0	ORGANIC SOIL (OL): olive gray, moist, very well sorted, little to no sand, some organic debris (roots), medium stiff	
8					Bottom of boring at 8.0 feet	
9						
10						
11						
12						
13						
14						
15						

PROJECT: Supplemental RI PSC Washougal	**Log of Well No. GP-73**
BORING LOCATION:	TOP OF CASING ELEVATION AND DATUM:
DRILLING CONTRACTOR: PSC	DATE STARTED: 9/21/01 / DATE FINISHED: 9/21/01
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 8.0 / SCREEN INTERVAL (ft.):
DRILLING EQUIPMENT:	DEPTH TO WATER (ft.): FIRST 4.5 / COMPL. / CASING:
SAMPLING METHOD: Geoprobe macro-core piston rod sampler [2' x 1"]	LOGGED BY: T. Gray
HAMMER WEIGHT: / DROP:	RESPONSIBLE PROFESSIONAL: / REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
0					Surface debris, gravel	
1				4.2	POORLY GRADED SAND (SP): dark yellowish brown, dry, moderately sorted, fine with medium grains, loose	
2	GP-73-S-2-4-0901				moist	
3				4.6		
4	GP-73-S-4-6-0901					
5				128	wet olive black with mica specks and some red and white specks	
6	GP-73-S-6-8-0901					
7				346		
8					ORGANIC SOIL (OL): olive gray, moist, very well sorted, slight plasticity little to no sand, organic debris (roots), medium stiff Bottom of boring at 8.0 feet	
9						
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12						
13						
14						
15						

PROJECT: Monitoring Well Replacement PSC Washougal	**Log of Boring No. GP-74**
BORING LOCATION:	ELEVATION AND DATUM:
DRILLING CONTRACTOR: PSC	DATE STARTED: 9/21/01 / DATE FINISHED: 9/21/01
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 8.0 / MEASURING POINT:
DRILLING EQUIPMENT:	DEPTH TO WATER (ft.) FIRST: 3.9 / COMPL.
SAMPLING METHOD: Geoprobe macro-core piston rod sampler [2' x 1"]	LOGGED BY: T. Gray
HAMMER WEIGHT: / DROP:	RESPONSIBLE PROFESSIONAL: / REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Recovery	SAMPLES: Blows/ Foot	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	REMARKS
0					Surface material	
1	GP-74-S-0-2-0901			313	POORLY GRADED SAND (SP): dark yellowish brown, dry, moderately sorted, fine with some medium grains, loose, highest hits near center of sample	
2					moist	
3				53.5	wet	
4						
5	GP-74-S-4-6-0901			208	olive black with mica specks and some red and white specks	
6	GP-74-S-6-8-0901			218		
7	GP-74-S-7-8-0901				ORGANIC SOIL (OL): olive gray, moist, very well sorted, little to no sand, organic debris (roots), medium stiff	
8					Bottom of boring at 8.0 feet	Grab groundwater sample GP-74-W-8-0901 collected
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OAKBOREV (REV. 8/2007)

PROJECT: Supplemental RI PSC Washougal	**Log of Well No. GP-75**
BORING LOCATION:	TOP OF CASING ELEVATION AND DATUM:
DRILLING CONTRACTOR: PSC	DATE STARTED: 9/21/01 / DATE FINISHED: 9/21/01
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 8.0 / SCREEN INTERVAL (ft.):
DRILLING EQUIPMENT:	DEPTH TO WATER (ft.): FIRST / COMPL. / CASING:
SAMPLING METHOD: Geoprobe macro-core piston rod sampler [2' x 1"]	LOGGED BY: T. Gray
HAMMER WEIGHT: / DROP:	RESPONSIBLE PROFESSIONAL: / REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
1	GP-75-S-0-2-0901			15.4	POORLY GRADED SAND (SP): dark yellowish brown, dry, moderately well sorted, fine with few medium grains, loose	
2						
3				5.6		
4	GP-75-S-4-6-0901				moist wet	
5				1.5	olive black with mica specks and some red and white specks, moderately sorted, fine to medium grains	
6	GP-75-S-6-8-0901			2.0	few fine gravel	
7					ORGANIC SOIL (OL): olive gray, moist, well sorted, little to no sand, slight plasticity, organic debris (roots), medium stiff	
8					Bottom of boring at 8.0 feet	
9						
10						
11						
12						
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14						
15						

PROJECT: Supplemental RI PSC Washougal	**Log of Well No. GP-76**
BORING LOCATION:	TOP OF CASING ELEVATION AND DATUM:
DRILLING CONTRACTOR: PSC	DATE STARTED: 9/21/01 / DATE FINISHED: 9/21/01
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 8.0 / SCREEN INTERVAL (ft.):
DRILLING EQUIPMENT:	DEPTH TO WATER (ft.): FIRST 4.0 / COMPL. / CASING:
SAMPLING METHOD: Geoprobe macro-core piston rod sampler [2' x 1"]	LOGGED BY: T. Gray
HAMMER WEIGHT: / DROP:	RESPONSIBLE PROFESSIONAL: / REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
0					Surface soil debris	
1	GP-76-S-0-2-0901			0.7	POORLY GRADED SAND (SP): dark yellowish brown, dry, moderately well sorted, fine with few medium grains, loose	
2					moist	
3				0.4		
4	GP-76-S-4-6-0901				wet	
5				0.6	olive black with mica specks and some red and white specks, fine to medium grains, moderately sorted	
6	GP-76-S-6-8-0901					
7				1.3	ORGANIC SOIL (OL): olive gray, moist, very well sorted, little to no sand, medium stiff to stiff	
8					Bottom of boring at 8.0 feet	
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12						
13						
14						
15						

PROJECT: Supplemental RI PSC Washougal	**Log of Well No. GP-77**
BORING LOCATION:	TOP OF CASING ELEVATION AND DATUM:
DRILLING CONTRACTOR: PSC	DATE STARTED: 9/21/01 / DATE FINISHED: 9/21/01
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 8.0 / SCREEN INTERVAL (ft.):
DRILLING EQUIPMENT:	DEPTH TO WATER (ft.): FIRST 3.9 / COMPL. / CASING:
SAMPLING METHOD: Geoprobe macro-core piston rod sampler [2' x 1"]	LOGGED BY: T. Gray
HAMMER WEIGHT: / DROP:	RESPONSIBLE PROFESSIONAL: / REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
1				0	POORLY GRADED SAND (SP): dark yellowish brown, dry, moderately well sorted, fine with few medium grains, loose	
2						
3				29.9	much redder, deeper in color	
4					wet, olive black with mica specks and some red and white specks fine to medium grained	
5				2.3		
6						
7				1.6	ORGANIC SOIL (OL): olive gray, moist, very well sorted, little to no sand, organic debris (roots), stiff becoming very stiff	
8					Bottom of boring at 8.0 feet	
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10						
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12						
13						
14						
15						

PROJECT: Monitoring Well Replacement PSC Washougal		**Log of Boring No. GP-78**	
BORING LOCATION:		ELEVATION AND DATUM:	
DRILLING CONTRACTOR: PSC		DATE STARTED: 9/18/01	DATE FINISHED: 9/18/01
DRILLING METHOD: Direct push		TOTAL DEPTH (ft.): 7.0	MEASURING POINT:
DRILLING EQUIPMENT:		DEPTH TO WATER (ft.) FIRST 3.5	COMPL.
SAMPLING METHOD: Geoprobe macro-core piston rod sampler [2' x 1"]		LOGGED BY: T. Gray	
HAMMER WEIGHT:	DROP:	RESPONSIBLE PROFESSIONAL:	REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Recovery	SAMPLES: Blows/ Foot	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	REMARKS
0					No soil logged	
1	GP-78-S-1-3-0901				POORLY GRADED SAND (SP): dark yellowish brown, dry, moderately well sorted, fine to medium grains, loose	
2						
3	GP-78-S-3-5-0901				moist	
4					wet olive black with mica specks and some red and white specks	
5					ORGANIC SOIL (OL): olive gray, moist, well sorted, little to no sand, organic debris (roots), low plasticity, medium stiff to very stiff	
6						
7					Bottom of boring at 7.0 feet	Grab groundwater sample GP-78-W-7-0901 collected
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12						
13						
14						
15						

OAKBOREV (REV. 8/2007)

PROJECT: Supplemental RI PSC Washougal	**Log of Well No. GP-79**
BORING LOCATION:	TOP OF CASING ELEVATION AND DATUM:
DRILLING CONTRACTOR: PSC	DATE STARTED: 9/18/01 / DATE FINISHED: 9/18/01
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 7.0 / SCREEN INTERVAL (ft.):
DRILLING EQUIPMENT:	DEPTH TO WATER (ft.): FIRST 5.0 / COMPL. / CASING:
SAMPLING METHOD: Geoprobe macro-core piston rod sampler [2' x 1"]	LOGGED BY: T. Gray
HAMMER WEIGHT: / DROP:	RESPONSIBLE PROFESSIONAL: / REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
0					No soil logged	
1	GP-79-S-1-3-0901				POORLY GRADED SAND (SP): dark yellowish brown, dry, moderately well sorted, mostly medium with some fine grains, loose	
2						
3					moist	
4					SILT (ML): olive gray, moist, medium stiff, well sorted, slight plasticity	
5	GP-79-S-5-7-0901				POORLY GRADED SAND with SILT (SP-SM): olive black, wet, medium dense, poorly sorted, red and white specks, mica	
6					ORGANIC SOIL (OL): olive gray, moist, little or no sand, well sorted, low plasticity, stiff	
7					Bottom of boring at 7.0 feet	
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13						
14						
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PROJECT: Supplemental RI PSC Washougal	**Log of Well No. GP-80**
BORING LOCATION:	TOP OF CASING ELEVATION AND DATUM:
DRILLING CONTRACTOR: PSC	DATE STARTED: 9/18/01 / DATE FINISHED: 9/18/01
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 5.0 / SCREEN INTERVAL (ft.):
DRILLING EQUIPMENT:	DEPTH TO WATER (ft.): FIRST / COMPL. / CASING:
SAMPLING METHOD: Geoprobe macro-core piston rod sampler [2' x 1"]	LOGGED BY: T. Gray
HAMMER WEIGHT: / DROP:	RESPONSIBLE PROFESSIONAL: / REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
1	GP-80-S-1-3-0901				No soil logged	
2					WELL GRADED GRAVEL (GW): gray and brown, dry, fine to medium gravel, loose	
3					POORLY GRADED SAND (SP): dark yellowish brown, dry, moderately well sorted, mostly medium grained with some fine sand, loose to medium dense, silty at bottom	
4					ORGANIC SOIL (OL): olive gray with some red/brown tint in areas, dry, very well sorted, low plasticity (crumbles), very stiff	
5					Bottom of boring at 5.0 feet	
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8						
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12						
13						
14						
15						

PROJECT: Supplemental RI PSC Washougal	**Log of Well No. GP-81**
BORING LOCATION:	TOP OF CASING ELEVATION AND DATUM:
DRILLING CONTRACTOR: PSC	DATE STARTED: 9/18/01 / DATE FINISHED: 9/18/01
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 3.0 / SCREEN INTERVAL (ft.):
DRILLING EQUIPMENT:	DEPTH TO WATER (ft.): FIRST / COMPL. / CASING:
SAMPLING METHOD: Geoprobe macro-core piston rod sampler [2' x 1"]	LOGGED BY: T. Gray
HAMMER WEIGHT: / DROP:	RESPONSIBLE PROFESSIONAL: / REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
0					No soil logged	
1	GP-81-S-1-3-0901				POORLY GRADED SAND (SP): dark yellowish brown, dry, moderately well sorted, mostly medium grained with some fine sand, loose	
2					ORGANIC SOIL (OL): olive gray, dry, well sorted, a little sand, very low plasticity, stiff, reddish brown at sand/silt interface	
3					Bottom of boring at 3.0 feet	
4						
5						
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PROJECT: Supplemental RI PSC Washougal	**Log of Well No. GP-82**
BORING LOCATION:	TOP OF CASING ELEVATION AND DATUM:
DRILLING CONTRACTOR: PSC	DATE STARTED: 9/18/01 / DATE FINISHED: 9/18/01
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 3.0 / SCREEN INTERVAL (ft.):
DRILLING EQUIPMENT:	DEPTH TO WATER (ft.): FIRST / COMPL. / CASING:
SAMPLING METHOD: Geoprobe macro-core piston rod sampler [2' x 1"]	LOGGED BY: T. Gray
HAMMER WEIGHT: / DROP:	RESPONSIBLE PROFESSIONAL: / REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
0					No soil logged	
1	GP-82-S-1-3-0901				POORLY GRADED SAND (SP): dark yellowish brown, dry to moist, moderately well sorted, fine to medium sand, loose to medium dense	
2					ORGANIC SOIL (OL): olive gray, dry to moist, well sorted, small amounts of sand, very stiff	
3					Bottom of boring at 3.0 feet	
4						
5						
6						
7						
8						
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11						
12						
13						
14						
15						

PROJECT: Supplemental RI PSC Washougal	**Log of Well No. GP-83**
BORING LOCATION:	TOP OF CASING ELEVATION AND DATUM:
DRILLING CONTRACTOR: PSC	DATE STARTED: 9/19/01 / DATE FINISHED: 9/19/01
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 4.0 / SCREEN INTERVAL (ft.):
DRILLING EQUIPMENT:	DEPTH TO WATER (ft.): FIRST / COMPL. / CASING:
SAMPLING METHOD: Geoprobe macro-core piston rod sampler [2' x 1"]	LOGGED BY: T. Gray
HAMMER WEIGHT: / DROP:	RESPONSIBLE PROFESSIONAL: / REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
0					WELL GRADED GRAVEL with SAND (GW): gray and brown, dry to moist, fine to coarse gravel, fine sands, fill material for road probably, loose	
1						
2	GP-83-S-2-3-0901				POORLY GRADED SAND (SP): dark yellowish brown, moist, moderately sorted, some silt, loose	
3					ORGANIC SOIL (OL): olive gray with reddish brown streaking, dry to moist, well sorted, little sand, organic debris (roots)	
4					more plastic, no streaking, little to no sand, getting drier at bottom Bottom of boring at 4.0 feet	
5						
6						
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13						
14						
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PROJECT: Supplemental RI PSC Washougal	**Log of Well No. GP-84**
BORING LOCATION:	TOP OF CASING ELEVATION AND DATUM:
DRILLING CONTRACTOR: PSC	DATE STARTED: 9/19/01 / DATE FINISHED: 9/19/01
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 3.0 / SCREEN INTERVAL (ft.):
DRILLING EQUIPMENT:	DEPTH TO WATER (ft.): FIRST / COMPL. / CASING:
SAMPLING METHOD: Geoprobe macro-core piston rod sampler [2' x 1"]	LOGGED BY: T. Gray
HAMMER WEIGHT: / DROP:	RESPONSIBLE PROFESSIONAL: / REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
0					Roots and soil	
1					ORGANIC SOIL (OL): olive gray with reddish brown tint, moist, well sorted, little to no sand, organic debris (roots), stiff	
2						
3					Bottom of boring at 3.0 feet	
4						
5						
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13						
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15						

PROJECT: Supplemental RI PSC Washougal	**Log of Well No. GP-85**
BORING LOCATION:	TOP OF CASING ELEVATION AND DATUM:
DRILLING CONTRACTOR: PSC	DATE STARTED: 9/19/01 / DATE FINISHED: 9/19/01
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 2.0 / SCREEN INTERVAL (ft.):
DRILLING EQUIPMENT:	DEPTH TO WATER (ft.): FIRST / COMPL. / CASING:
SAMPLING METHOD: Geoprobe macro-core piston rod sampler [2' x 1"]	LOGGED BY: T. Gray
HAMMER WEIGHT: / DROP:	RESPONSIBLE PROFESSIONAL: / REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
0					Gravel from surface	
1					SILTY SAND (SM): dark yellowish brown, dry, moderately well sorted, some fine sand	
2					ORGANIC SOIL (OL): olive gray, dry to moist, well sorted, little to no sand, low plasticity Bottom of boring at 2.0 feet	
3						
4						
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12						
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14						
15						

PROJECT: Supplemental RI PSC Washougal	**Log of Well No. GP-86**
BORING LOCATION:	TOP OF CASING ELEVATION AND DATUM:
DRILLING CONTRACTOR: PSC	DATE STARTED: 9/19/01 / DATE FINISHED: 9/19/01
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 4.0 / SCREEN INTERVAL (ft.):
DRILLING EQUIPMENT:	DEPTH TO WATER (ft.): FIRST / COMPL. / CASING:
SAMPLING METHOD: Geoprobe macro-core piston rod sampler [2' x 1"]	LOGGED BY: T. Gray
HAMMER WEIGHT: / DROP:	RESPONSIBLE PROFESSIONAL: / REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
0	GP-86-S-0-2-0901				Rooty surface soil	
1					POORLY GRADED SAND (SP): dark yellowish brown, dry, moderately sorted, mostly fine to medium grains, some root debris and silt-size soil, loose	
2					ORGANIC SOIL (OL): dark yellowish brown with olive gray streaking, dry, well sorted, some sand, organic debris (roots), stiff, not plastic	
3					olive gray, moist, very stiff	
4					Bottom of boring at 4.0 feet	
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						

PROJECT: Supplemental RI PSC Washougal	**Log of Well No. GP-87**
BORING LOCATION:	TOP OF CASING ELEVATION AND DATUM:
DRILLING CONTRACTOR: PSC	DATE STARTED: 9/19/01 / DATE FINISHED: 9/19/01
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 5.0 / SCREEN INTERVAL (ft.):
DRILLING EQUIPMENT:	DEPTH TO WATER (ft.): FIRST / COMPL. / CASING:
SAMPLING METHOD: Geoprobe macro-core piston rod sampler [2' x 1"]	LOGGED BY: T. Gray
HAMMER WEIGHT: / DROP:	RESPONSIBLE PROFESSIONAL: / REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
0					No soil logged	
1					WELL GRADED GRAVEL (GW): gray to reddish brown, dry, fine to medium gravel, loose	
2						
3					ORGANIC SOIL (OL): olive gray with reddish brown streaking, moist to dry, well sorted, little to no sand, organic debris (roots), very stiff	
4						
5					Bottom of boring at 5.0 feet	
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						

PROJECT: Supplemental RI PSC Washougal	**Log of Well No. GP-88**
BORING LOCATION:	TOP OF CASING ELEVATION AND DATUM:
DRILLING CONTRACTOR: PSC	DATE STARTED: 9/20/01 / DATE FINISHED: 9/20/01
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 8.0 / SCREEN INTERVAL (ft.):
DRILLING EQUIPMENT:	DEPTH TO WATER (ft.): FIRST / COMPL. / CASING:
SAMPLING METHOD: Geoprobe macro-core piston rod sampler [2' x 1"]	LOGGED BY: T. Gray
HAMMER WEIGHT: / DROP:	RESPONSIBLE PROFESSIONAL: / REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
0					Sandy soil	
1					POORLY GRADED SAND (SP): dark yellowish brown, dry, moderately well sorted, fine with some medium grains, loose	
2					moist	
3						
4					wet, olive black with mica specks and some red and white specks	
5						
6						
7					ORGANIC SOIL (OL): olive gray, moist, well sorted, little to no sand, organic debris (roots), slight plasticity, medium stiff	
8					stiff Bottom of boring at 8.0 feet	
9						
10						
11						
12						
13						
14						
15						

PROJECT: Supplemental RI PSC Washougal	**Log of Well No. GP-89**
BORING LOCATION:	TOP OF CASING ELEVATION AND DATUM:
DRILLING CONTRACTOR: PSC	DATE STARTED: 9/20/01 / DATE FINISHED: 9/20/01
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 9.0 / SCREEN INTERVAL (ft.):
DRILLING EQUIPMENT:	DEPTH TO WATER (ft.): FIRST 3.0 / COMPL. / CASING:
SAMPLING METHOD: Geoprobe macro-core piston rod sampler [2' x 1"]	LOGGED BY: T. Gray
HAMMER WEIGHT: / DROP:	RESPONSIBLE PROFESSIONAL: / REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
0					No soil logged	
1					POORLY GRADED SAND (SP): dark yellowish brown, moist, moderately sorted, fine to medium grains, loose	
2						
3					wet	
4					olive black with mica specks and some red and white specks	
5					few pieces of fine gravel	
6						
7						
8						
9					Bottom of boring at 9.0 feet	
10						
11						
12						
13						
14						
15						

PROJECT: Supplemental RI PSC Washougal	**Log of Well No. GP-90**
BORING LOCATION:	TOP OF CASING ELEVATION AND DATUM:
DRILLING CONTRACTOR: PSC	DATE STARTED: 9/19/01 / DATE FINISHED: 9/19/01
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 9.0 / SCREEN INTERVAL (ft.):
DRILLING EQUIPMENT:	DEPTH TO WATER (ft.): FIRST 4.0 / COMPL. / CASING:
SAMPLING METHOD: Geoprobe macro-core piston rod sampler [2' x 1"]	LOGGED BY: T. Gray
HAMMER WEIGHT: / DROP:	RESPONSIBLE PROFESSIONAL: / REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
0					No soil logged	
1	GP-90-S-1-3-0901				POORLY GRADED SAND (SP): dark yellowish brown, moist, moderately sorted, fine to medium grains, loose	
2						
3	GP-90-S-3-5-0901				wet	
4						
5					olive black with mica specks and some red and white specks	
6						
7					ORGANIC SOIL (OL): olive gray, moist, well sorted, little to no sand, slight plasticity, medium stiff to stiff	
8						
9					Bottom of boring at 9.0 feet	
10						
11						
12						
13						
14						
15						

PROJECT: Remedial Investigation PSC Washougal	**Boring No. GP-91**
BORING LOCATION: 92537.4 N, 1169623.7 E	ELEVATION AND DATUM: 17.7 feet MSL NGVD29(47)
DRILLING CONTRACTOR: Cascade Drilling, Inc.	DATE STARTED: 10/5/07 / DATE FINISHED: 10/5/07
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 12.0 / MEASURING POINT: Ground surface
DRILLING EQUIPMENT: Geoprobe 6600	DEPTH TO WATER (ft.) FIRST: 5.0 / COMPL.: NA
SAMPLING METHOD: Geoprobe macro-core sampler [5' x 1.5"]	LOGGED BY: Z. Satterwhite
HAMMER WEIGHT: NA / DROP: NA	RESPONSIBLE PROFESSIONAL: N. Gray / REG. NO.: L.G. 2557

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.	REMARKS
					Surface Elevation: 17.7	
0	GP-91-2-1007			0/0 (HS)	POORLY GRADED SAND with SILT (SP-SM): dark grayish brown (10YR 4/2), moist, 90% fine to coarse sand, 10% low plasticity fines	
1						
2	GP-91-3-1007			0/0 (HS) 0		
3						
4						OVM = miniRAE 2000 PID calibrated with 100 ppm isobutylene standard. (HS) indicates reading from head space in baggie.
5				0/0 (HS)	very dark gray (N 3/), wet	
6						
7				0/0 (HS)		
8					wet, 85% fine to medium sand, 15% low plasticity fines	Shallow zone groundwater sample GP-91-8-1007 collected from 4.0' to 8.0' bgs through 1.25" OD stainless steel temporary well screen (0.04" slot).
9						
10				0/0 (HS)		
11						
12				0/1 (HS)	SILT (ML): very dark gray (N 3/), moist, 90% fines, 10% fine sand, low plasticity, soft, organic content (rootlets) Bottom of boring at 12.0 feet. Backfilled with bentonite chips to ground surface.	
13						
14						
15						

PROJECT: Remedial Investigation PSC Washougal	**Boring No. GP-92**
BORING LOCATION: 92488.3 N, 1169625.4 E	ELEVATION AND DATUM: 18.5 feet MSL NGVD29(47)
DRILLING CONTRACTOR: Cascade Drilling, Inc.	DATE STARTED: 10/3/07 / DATE FINISHED: 10/3/07
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 15.0 / MEASURING POINT: Ground surface
DRILLING EQUIPMENT: Geoprobe 6600	DEPTH TO WATER (ft.) FIRST ~4.5 / COMPL. NA
SAMPLING METHOD: Geoprobe macro-core sampler [5' x 1.5"]	LOGGED BY: Z. Satterwhite
HAMMER WEIGHT: NA / DROP: NA	RESPONSIBLE PROFESSIONAL: N. Gray / REG. NO. L.G. 2557

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/Foot	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.	REMARKS
					Surface Elevation: 18.5	
0	GP-92-3.0-1007	GP-92-2.0-1007		0/1 (HS)	POORLY GRADED GRAVEL with SILT and SAND (GP-GM): very dark grayish brown (10YR 3/2), moist, 50% coarse and fine gravel, 40% fine to coarse sand, 10% low plasticity fines	
1					POORLY GRADED SAND with SILT (SP-SM): dark grayish brown (10YR 4/2), moist, 90% fine to medium sand, 10% low plasticity fines	
2				0/1 (HS)		
3						
4						OVM=miniRAE 2000 PID calibrated with 100 ppm isobutylene standard. (HS) indicates readings taken from head space in baggie.
5					wet	
6					dark gray (10YR 4/1); wet	
7						
8						Shallow zone groundwater samples GP-92-8-1007 and GP-92-9-8-1007 (field duplicate) collected from 4.0' to 8.0' bgs through 1.25" OD temporary stainless steel well screen (0.04" slot).
9				1 (HS)		
10						
11						
12					SILT (ML): very dark greenish gray (10Y 3/1), moist, 90% fines, 10% fine sand, low plasticity, soft, scattered organic matter	
13				1 (HS)		
14						
15				1 (HS)		

PROJECT: Remedial Investigation
PSC Washougal

Boring No. GP-92 (cont'd)

ELEVATION (feet above MSL)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.		REMARKS
					Bottom of boring at 15.0 feet. Backfilled with bentonite chips to ground surface.		
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							
31							
32							
33							

PROJECT: Remedial Investigation PSC Washougal	**Boring No. GP-93**
BORING LOCATION: 92516.2 N, 1169589.5 E	ELEVATION AND DATUM: 17.9 feet MSL NGVD29(47)
DRILLING CONTRACTOR: Cascade Drilling, Inc.	DATE STARTED: 10/3/07 / DATE FINISHED: 10/3/07
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 10.0 / MEASURING POINT: Ground surface
DRILLING EQUIPMENT: Geoprobe 6600	DEPTH TO WATER (ft.) FIRST: 5.5 / COMPL.: NA
SAMPLING METHOD: Geoprobe macro-core sampler [5' x 1.5"]	LOGGED BY: Z. Satterwhite
HAMMER WEIGHT: NA / DROP: NA	RESPONSIBLE PROFESSIONAL: N. Gray / REG. NO.: L.G. 2557

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.	REMARKS
					Surface Elevation: 17.9	
0				0/0 (HS)	POORLY GRADED SAND with SILT (SP-SM): brown (10YR 4/3), moist, 90% fine to medium sand, 10% low plasticity fines	
1						
2	GP-93-1.5-1007			0/0 (HS)		
3						
4						OVM = miniRAE 2000 PID calibrated with 100 ppm isobutylene standard. (HS) indicates readings taken from head space in baggie.
5	GP-93-5.5-1007			0/1 (HS)	very dark gray (10YR 3/1); wet	
6						
7				0/0 (HS)		
8					SILT (ML): very dark gray (N 3/), moist, 90% fines, 10% fine sand, low plasticity, soft, rootlets	Shallow zone ground water sample GP-93-8-1007 collected from 4.0' to 8.0' bgs through 1.25" OD stainless steel temporary well screen (0.04" slot).
9				0/0 (HS)		
10					Bottom of boring at 10.0 feet. Backfilled with bentonite chips to surface.	
11						
12						
13						
14						
15						

PROJECT: Remedial Investigation PSC Washougal	**Boring No. GP-94**
BORING LOCATION: 92510.5 N, 1169669.6 E	ELEVATION AND DATUM: 18.6 feet MSL NGVD29(47)
DRILLING CONTRACTOR: Cascade Drilling, Inc.	DATE STARTED: 10/4/07 / DATE FINISHED: 10/4/07
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 13.0 / MEASURING POINT: Ground surface
DRILLING EQUIPMENT: Geoprobe 6600	DEPTH TO WATER (ft.) FIRST: 6.5 / COMPL.: NA
SAMPLING METHOD: Geoprobe macro-core sampler [5' x 1.5"]	LOGGED BY: Z. Satterwhite
HAMMER WEIGHT: NA / DROP: NA	RESPONSIBLE PROFESSIONAL: N. Gray / REG. NO. L.G. 2557

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/Foot	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.	REMARKS
					Surface Elevation: 18.6	
0					CONCRETE	
1	GP-94-3.0-1007			0/0 (HS)	POORLY GRADED SAND (SP): light brownish gray (10YR 6/2), moist, 95% fine to coarse sand, 5% fines	
2						
3				0/0 (HS)		
4	GP-94-5.5-1007					OVM = miniRAE 2000 PID calibrated with 100 ppm isobutylene standard. (HS) indicates readings taken from head space in baggie.
5						
6				0/0 (HS)	very dark gray (10YR 3/1), wet	
7						
8				0/1 (HS)	SILT with SAND (ML): very dark gray (10YR 3/1), moist, 80% fines, 20% fine sand, low plasticity	Shallow zone ground water sample GP-94-8-1007 collected from 4.0' to 8.0' bgs through 1.25" OD stainless steel temporary well screen (0.04" slot).
9						
10						
11						
12						Silt zone ground water sample GP-94-1007 collected from 7.5' to 11.5' bgs from 1.25" OD stainless steel temporary well screen (0.04" slot).
13					Bottom of boring at 13.0 feet. Backfilled with bentonite chips to 1.0' bgs, then concrete to ground surface.	
14						
15						

PROJECT: Remedial Investigation PSC Washougal	**Boring No. GP-95**	
BORING LOCATION: 92712.5 N, 1169687.2 E	ELEVATION AND DATUM: 17.3 feet MSL NGVD29(47)	
DRILLING CONTRACTOR: Cascade Drilling, Inc.	DATE STARTED: 10/1/07	DATE FINISHED: 10/1/07
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 25.0	MEASURING POINT: Ground surface
DRILLING EQUIPMENT: Geoprobe 6600	DEPTH TO WATER (ft.) FIRST: ~4.5	COMPL.: NA
SAMPLING METHOD: Geoprobe macro-core sampler [5' x 1.5"]	LOGGED BY: Z. Satterwhite	
HAMMER WEIGHT: NA / DROP: NA	RESPONSIBLE PROFESSIONAL: N. Gray	REG. NO. L.G. 2557

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation: 17.3	REMARKS
0				0/0 (HS)	very dark brown moist, silty fine to coarse subangular to angular gravel	
1	GP-95-2.5-1007				POORLY GRADED SAND with SILT (SP-SM): dark grayish brown (10YR 4/2), moist, 90% fine to medium sand, 10% low plasticity fines	
2				0/0 (HS)		Case to 10' to seal off shallow groundwater zone.
3	GP-95-4.0-1007					
4				0/0 (HS)	dark gray (10YR 3/1)	OVM = miniRAE 2000 PID calibrated with 100 ppm isobutylene standard. (HS) indicates readings taken from head space in baggie.
5				0/0 (HS)	wet	
6						
7				0/0 (HS)		
8					SILT (ML): dark gray (10YR 3/1), moist, 90% low plasticity silt, 10% fine sand, woody/peaty inclusions, firm, low plasticity (organic fibers)	
9				0		
10				0/1 (HS)	no woody/peaty matter, small fibers remain	
11						
12				0/0 (HS) 0		
13				0/0 (HS)	yellowish-brown iron oxide mottling	
14						
15						

PROJECT: Remedial Investigation
PSC Washougal

Boring No. GP-95 (cont'd)

ELEVATION (feet above MSL)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.		REMARKS
16					SILT (ML): (cont'd)		
17					POORLY GRADED GRAVEL with SILT (GP-GM): very dark gray (10YR 3/1), wet, 75% fine and coarse gravel (subangular to angular, broken), 15% medium to coarse sand, 10% low plasticity fines.		
18							
19							
20							Lower aquifer shallow sample GP-95-20-1007 collected from 16.0' to 20.0' bgs through 1.25" OD stainless steel temporary well screen (0.04" slot).
21							
22							
23							
24							
25					Bottom of boring at 25.0 feet		Lower aquifer deep sample GP-95-25-1007 collected from 21.0' to 25.0' bgs through 1.25" OD stainless steel temporary well screen (0.04" slot).
26							
27							
28							First attempt to collect water at location hit refusal at 17' bgs, backfilled with bentonite chips and grout, moved boring 1.5' South, redrive to 25' bgs.
29							
30							
31							
32							
33							

OAKBOREV (REV. 3/00)

PROJECT: Remedial Investigation PSC Washougal	**Boring No. GP-96**
BORING LOCATION: 92772.1 N, 1169739.0 E	ELEVATION AND DATUM: 17.5 feet MSL NGVD29(47)
DRILLING CONTRACTOR: Cascade Drilling, Inc.	DATE STARTED: 10/3/07 / DATE FINISHED: 10/3/07
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 18.0 / MEASURING POINT: Ground surface
DRILLING EQUIPMENT: Geoprobe 6600	DEPTH TO WATER (ft.) FIRST ~5.0 / COMPL. NA
SAMPLING METHOD: Geoprobe macro-core sampler [5' x 1.5"]	LOGGED BY: Z. Satterwhite
HAMMER WEIGHT: NA / DROP: NA	RESPONSIBLE PROFESSIONAL: N. Gray / REG. NO. L.G. 2557

DEPTH (feet)	SAMPLES Sample No.	SAMPLES Sample	SAMPLES Blows/ Foot	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation: 17.5	REMARKS
0				0/1 (HS)	gravelly fibrous organic, topsoil.	
1	GP-96-2.0-1007				POORLY GRADED SAND with SILT (SP-SM): dark grayish brown (10YR 4/2), moist, 90% fine to medium sand, 10% non-plastic fines	
2				0/1 (HS)		Case to 10' to seal off shallow groundwater zone.
3	GP-96-3.5-1007			0/1 (HS)		
4						OVM = miniRAE 2000 PID calibrated with 100 ppm isobutylene standard. (HS) indicates readings taken from head space in baggie.
5				0/1 (HS)	wet	
6					very dark gray (10YR 3/1)	
7				0/1 (HS)		
8					SILT (ML): very dark gray (N 3/), moist, 90% fines, 10% fine sand, low plasticity, firm	
9				0/1 (HS)	rootlets/organic matter	
10				0		
11						
12				0/1 (HS)	soft; orange iron oxide mottling	
13						
14				0/2 (HS)		
15					SILTY GRAVEL (GM): dark greenish gray (10Y 4/1), moist, 50% fine and coarse subangular to angular gravel, 30% low plasticity fines, 20% fine to coarse sand	

PROJECT: Remedial Investigation
PSC Washougal

Boring No. GP-96 (cont'd)

ELEVATION (feet above MSL)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.		REMARKS
16				1 (HS)	SILTY GRAVEL (GM): Cont.		Driller indicates gravel from rough drilling action.
17				1 (HS)			
18					Bottom of boring at 18.0 feet bgs.		Lower aquifer shallow groundwater sample GP-96-18-1007 collected from 14.0' to 18.0' bgs through 1.25" OD stainless steel temporary well screen (0.04" slot). Two attempts to collect lower aquifer deep sample fail.
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							
31							
32							
33							

PROJECT: Remedial Investigation PSC Washougal	**Boring No. GP-97**
BORING LOCATION: 92717.6 N, 1169814.2 E	ELEVATION AND DATUM: 17.6 feet MSL NGVD29(47)
DRILLING CONTRACTOR: Cascade Drilling, Inc.	DATE STARTED: 10/5/07 / DATE FINISHED: 10/5/07
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 20.0 / MEASURING POINT: Ground surface
DRILLING EQUIPMENT: Geoprobe 6600	DEPTH TO WATER (ft.) FIRST: 5.5 / COMPL.: NA
SAMPLING METHOD: Geoprobe macro-core sampler [5' x 1.5"]	LOGGED BY: Z. Satterwhite
HAMMER WEIGHT: NA / DROP: NA	RESPONSIBLE PROFESSIONAL: N. Gray / REG. NO.: L.G. 2557

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation: 17.6	REMARKS
1	GP-97-2.5-1007			0/2 (HS)	POORLY GRADED SAND with SILT (SP-SM): dark grayish brown (10YR 4/2), moist, 90% fine to medium sand, 10% low plasticity fines	
2				0/1 (HS)	iron oxide mottling	Case to 11' to seal off shallow groundwater zone.
3						
4	GP-97-5.5-1007					OVM = miniRAE 2000 PID calibrated with 100 ppm isobutylene standard. (HS) indicates readings taken from head space in baggie.
5				118/27 (HS)		
6	GP-97-8.0-1007				wet, rainbow sheen from 6-8', petroleum like odor dark gray (N 3/)	
7				11/14 (HS)		
8				21/440 (HS)	SILT (ML): dark gray (N 3/), moist, 90% fines, 10% fine sand, low plasticity, firm. Top 6" contains intermixed organics.	
9				58/8 (HS)		
10						
11						
12						Silt groundwater sample GP-97-12-1007 collected from 8'-12' bgs through 1.25" OD stainless steel temporary well screen (0.04" slot).
13						
14						
15						

PROJECT: Remedial Investigation
PSC Washougal

Boring No. GP-97 (cont'd)

ELEVATION (feet above MSL)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.		REMARKS
16							Stopped logging after 15.0' to reduce possibility of breaking seal from upper and lower aquifers.
17					Gravel		Not logged, but indicated by drilling action.
18							
19							
20					Bottom of boring at 20.0 feet.		Lower aquifer shallow ground water sample GP-97-19.8-1007 collected from 15.8' to 19.8' bgs through 1.25" OD stainless steel temporary well screen (0.04" slot).
21							
22							
23							
24							
25							
26							Two attempts to reach 22'-26' bgs for lower aquifer deep sample failed due to refusal from drill rig. Pressure grout both attempts using a tremie.
27							
28							
29							
30							
31							
32							
33							

PROJECT: Remedial Investigation PSC Washougal	**Log of Boring No. GP-98**
BORING LOCATION: 92777.3 N, 1169761.3 E	ELEVATION AND DATUM: 17.7 feet MSL NGVD29(47)
DRILLING CONTRACTOR: Cascade Drilling, Inc.	DATE STARTED: 10/4/07 / DATE FINISHED: 10/4/07
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 16.5 / MEASURING POINT: Ground surface
DRILLING EQUIPMENT: Geoprobe 6600	DEPTH TO WATER (ft.) FIRST: ~4.5 / COMPL.: NA
SAMPLING METHOD: Geoprobe macro-core sampler [5' x 1.5"]	LOGGED BY: Z. Satterwhite
HAMMER WEIGHT: NA / DROP: NA	RESPONSIBLE PROFESSIONAL: N. Gray / REG. NO.: L.G. 2557

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Recovery	SAMPLES: Blows/ Foot	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.	REMARKS
					Surface Elevation: 17.7	
0	GP-98-1.5-1007			0/1 (HS)	POORLY GRADED SAND with SILT (SP-SM): dark grayish brown (10YR 4/2), moist, 90% fine to medium sand, 10% low plasticity fines	
1						
2	GP-98-2.5-1007			0/0 (HS)		Case to 10' to seal off shallow groundwater zone.
3						
4					wet	OVM = miniRAE 2000 PID calibrated with 100 ppm isobutylene standard. (HS) indicates readings taken from head space in baggie.
5				0/0 (HS)	very dark gray (10YR 3/1)	
6						
7				0/1 (HS)	SILT (ML): dark greenish gray (10Y 4/1), moist, 90% fines, 10% fine sand, low plasticity, soft	
8						
9						
10				0/1 (HS)		
11						
12				0/0 (HS)	dark gray (10YR 4/1), with iron oxide, yellowish brown mottling	
13						
14				0		
15				0/1 (HS)	SILTY GRAVEL with SAND (GM): weak red (10R 5/2), moist, 50% fine and coarse subangular to angular gravel, 30% low plasticity fines, 20% fine to coarse sand; iron oxide mottling below upper 4"	

PROJECT: Remedial Investigation
PSC Washougal

Log of Boring No. GP-98 (cont'd)

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Recovery	SAMPLES: Blows/ Foot	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.	REMARKS
16		X				
					Bottom of boring at 16.5 feet.	Lower aquifer-shallow ground water sample GP-98-16.5-1007 collected from 12.5' to 16.5' bgs through 1.25" OD stainless steel temporary well screen (0.04" slot).
17						
18						
19						
20						Second attempt to collect lower aquifer-deep ground water sample hit refusal at 13.5' bgs. Both attempts backfilled with pressure grout.
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						
32						
33						

OAKBOREV (REV. 8/2007)

PROJECT: Remedial Investigation PSC Washougal	**Log of Boring No. GP-99**
BORING LOCATION: 92778.7 N, 1169186.9 E	ELEVATION AND DATUM: 17.8 feet MSL NGVD29(47)
DRILLING CONTRACTOR: Cascade Drilling, Inc.	DATE STARTED: 10/4/07 / DATE FINISHED: 10/4/07
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 15.5 / MEASURING POINT: Ground surface
DRILLING EQUIPMENT: Geoprobe 6600	DEPTH TO WATER (ft.) FIRST: ~4.5 / COMPL.: NA
SAMPLING METHOD: Geoprobe macro-core sampler [5' x 1.5"]	LOGGED BY: Z. Satterwhite
HAMMER WEIGHT: NA / DROP: NA	RESPONSIBLE PROFESSIONAL: N. Gray / REG. NO.: L.G. 2557

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Recovery	SAMPLES: Blows/ Foot	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.	REMARKS
					Surface Elevation: 17.8	
0				0/0 (HS)	POORLY GRADED SAND with SILT (SP-SM): dark grayish brown (10YR 4/2), moist, 90% fine to medium sand, 10% low plasticity fines organic matter	
1	GP-99-1.5-1007			0/1 (HS)		
2	GP-99-2.5-1007					Case to 10' to seal off shallow groundwater zone.
3						
4						
5				0/0 (HS)	wet	OVM=miniRAE 2000 PID calibrated with 100 ppm isobutylene standard. (HS) indicates readings taken from head space in baggie.
6					very dark gray (10YR 3/1)	
7				0/0 (HS)		
8					SILT (ML): very dark gray (10YR 3/1), moist, 90% fines, 10% fine sand, low plasticity, soft, organic rootlets	
9				0/2 (HS)		
10				0/2 (HS)		
11						
12						
13				0/2 (HS)	iron oxide mottling	
14					SILT with SAND (ML): very dark gray (10YR 3/1), moist, 80% fines, 20% fine sand, low plasticity, soft	
15						

PROJECT: Remedial Investigation
PSC Washougal

Log of Boring No. GP-99 (cont'd)

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Recovery	SAMPLES: Blows/ Foot	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.	REMARKS
16				0/2 (HS) 0/1 (HS)	SILTY GRAVEL with SAND (GM): dark greenish gray (10Y 4/1), moist, 50% coarse and fine gravel, 30% low plasticity fines, 20% fine to coarse sand Bottom of boring at 15.5 feet.	Lower aquifer shallow ground water sample GP-99-15.5-1007 collected from 11.0' to 15.0' bgs through 1.25" OD stainless steel temporary well screen (0.04" slot).
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23						
24						
25						
26						
27						
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29						
30						
31						
32						
33						

OAKBOREV (REV. 8/2007)

PROJECT: Remedial Investigation PSC Washougal			**Log of Boring No. GP-100**
BORING LOCATION: 92692.5 N, 1169762.9 E			ELEVATION AND DATUM: 17.2 feet MSL NGVD29(47)
DRILLING CONTRACTOR: Cascade Drilling, Inc.			DATE STARTED: 10/3/07 / DATE FINISHED: 10/3/07
DRILLING METHOD: Direct push			TOTAL DEPTH (ft.): 15.0 / MEASURING POINT: Ground surface
DRILLING EQUIPMENT: Geoprobe 6600			DEPTH TO WATER (ft.) / FIRST: ~4.5 / COMPL.: NA
SAMPLING METHOD: Geoprobe macro-core sampler [5' x 1.5"]			LOGGED BY: Z. Satterwhite
HAMMER WEIGHT: NA	DROP: NA		RESPONSIBLE PROFESSIONAL: N. Gray / REG. NO.: L.G. 2557

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Recovery	SAMPLES: Blows/ Foot	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation: 17.2	REMARKS
1–15					See log of MC-25 or MC-25D for lithologic description	Silt ground water zone sample GP-100-12-1007 collected from 8.0' to 12.0' bgs through 1.25" OD stainless steel temporary well screen (0.04" slot).

PROJECT: Remedial Investigation
PSC Washougal

Log of Boring No. GP-100 (cont'd)

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Recovery	SAMPLES: Blows/ Foot	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.		REMARKS
					Bottom of boring at 15.0 feet. Backfilled with granular bentonite.		

16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33

OAKBOREV (REV. 8/2007)
OAKBOREV (REV. 8/2007)

PROJECT: Remedial Investigation PSC Washougal	**Log of Boring No. GP-101**
BORING LOCATION: 92649.2 N, 1169952.1 E	ELEVATION AND DATUM: 17.1 feet MSL NGVD29(47)
DRILLING CONTRACTOR: Cascade Drilling, Inc.	DATE STARTED: 10/2/07 / DATE FINISHED: 10/2/07
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 12.0 / MEASURING POINT: Ground surface
DRILLING EQUIPMENT: Geoprobe 6600	DEPTH TO WATER (ft.) FIRST: 5.5 / COMPL.: NA
SAMPLING METHOD: Geoprobe macro-core sampler [5' x 1.5"]	LOGGED BY: Z. Satterwhite
HAMMER WEIGHT: NA / DROP: NA	RESPONSIBLE PROFESSIONAL: N. Gray / REG. NO.: L.G. 2557

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Recovery	SAMPLES: Blows/ Foot	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.	REMARKS
					Surface Elevation: 17.1	
1–15					See log of MC-14 or MC-14D for lithologic description.	
12					Bottom of boring at 12.0 feet. Backfilled with granular bentonite.	Silt groundwater zone sample GP-101-11-1007 collected from 7.0' to 11.0' bgs through 1.25" OD stainless steel temporary well screen (0.04" slot).

OAKBOREV (REV. 8/2007)

PROJECT: Remedial Investigation PSC Washougal	**Log of Boring No. GP-102**
BORING LOCATION: 92673.4 N, 1170038.5 E	ELEVATION AND DATUM: 17.5 feet MSL NGVD29(47)
DRILLING CONTRACTOR: Cascade Drilling, Inc.	DATE STARTED: 10/2/07 / DATE FINISHED: 10/2/07
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 10.0 / MEASURING POINT: Ground surface
DRILLING EQUIPMENT: Geoprobe 6600	DEPTH TO WATER (ft.) FIRST / COMPL. NA
SAMPLING METHOD: Geoprobe macro-core sampler [5' x 1.5"]	LOGGED BY: Z. Satterwhite
HAMMER WEIGHT: NA / DROP: NA	RESPONSIBLE PROFESSIONAL: N. Gray / REG. NO. L.G. 2557

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Recovery	SAMPLES: Blows/ Foot	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.	REMARKS
					Surface Elevation: 17.5	
1–15	GP-102-10.0-1007				See log of MC-122 for lithologic description. Bottom of boring at 10.0 feet. Backfilled with bentonite chips.	

OAKBOREV (REV. 8/2007)

PROJECT: Remedial Investigation PSC Washougal	**Log of Boring No. GP-103**
BORING LOCATION: 92576.8 N, 1170035.6 E	ELEVATION AND DATUM: 17.3 feet MSL NGVD29(47)
DRILLING CONTRACTOR: Cascade Drilling, Inc.	DATE STARTED: 10/2/07 / DATE FINISHED: 10/2/07
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 10.0 / MEASURING POINT: Ground surface
DRILLING EQUIPMENT: Geoprobe 6600	DEPTH TO WATER (ft.) FIRST / COMPL. NA
SAMPLING METHOD: Geoprobe macro-core sampler [5' x 1.5"]	LOGGED BY: Z. Satterwhite
HAMMER WEIGHT: NA / DROP: NA	RESPONSIBLE PROFESSIONAL: N. Gray / REG. NO. L.G. 2557

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Recovery	SAMPLES: Blows/ Foot	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.	REMARKS
					Surface Elevation: 17.3	
1–15	GP-103-7.5-1007 GP-103-10.0-1007				See log of MC-23 or MC-123 for lithologic description. Bottom of boring at 10.0 feet. Backfilled with bentonite chips.	

OAKBOREV (REV. 8/2007)

PROJECT: Remedial Investigation PSC Washougal	**Log of Boring No. GP-104**
BORING LOCATION: 92764.6 N, 1169761.0 E	ELEVATION AND DATUM: 17.7 feet
DRILLING CONTRACTOR: Cascade Drilling, Inc.	DATE STARTED: 5/5/09 / DATE FINISHED: 5/5/09
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 10.0 / MEASURING POINT: 17.7' MSL NGVD29(47)
DRILLING EQUIPMENT: Geoprobe 7730 DT	DEPTH TO WATER (ft.) FIRST: 5.0 / COMPL.: NA
SAMPLING METHOD: Geoprobe macro-core sampler [5' x 1.5"]	LOGGED BY: C. Brown
HAMMER WEIGHT: NA / DROP: NA	RESPONSIBLE PROFESSIONAL: N. Gray / REG. NO. L.G. 2557

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ 6 inches	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.	REMARKS
					Surface Elevation: 17.7	
0				0 (HS)	POORLY GRADED SAND (SP): dark grayish brown (10YR 4/2), moist, 95% fine to medium sand, 5% non-plastic fines	
1						Groundwater sample, GP-104-0509 collected from temporary stainless steel well screened from 5 to 9 feet bgs.
2						
3				0 (HS)		Photovac 2020 PID calibrated with 100 ppm Isobutylene. PID readings collected from headspace in baggie (HS).
4						
5				0 (HS)	wet	
6					very dark grayish brown (10YR 3/2)	
7					scattered fine gravel, trace shell fragments	
8					very dark greenish gray (N 3/)	
9					trace rooty organics on contact	
10					SILT (MH): very dark greenish gray (N 3/), moist, 95% fines, 5% fine sand, medium plasticity, stiff	
11					Bottom of boring at 10.0 feet. Boring abandoned with granular bentonite.	
12						
13						
14						
15						

OAKBOREV (REV. 8/2007)

PROJECT: Remedial Investigation PSC Washougal	**Log of Boring No. GP-105**
BORING LOCATION: 92774.9 N, 1169703.9 E	ELEVATION AND DATUM: 18.1 feet
DRILLING CONTRACTOR: Cascade Drilling, Inc.	DATE STARTED: 5/5/09 / DATE FINISHED: 5/5/09
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 11.0 / MEASURING POINT: 18.1 MSL NGVD29(47)
DRILLING EQUIPMENT: Geoprobe 7730 DT	DEPTH TO WATER (ft.) FIRST: 4.0 / COMPL.: NA
SAMPLING METHOD: Geoprobe macro-core sampler [5' x 1.5"]	LOGGED BY: C. Brown
HAMMER WEIGHT: NA / DROP: NA	RESPONSIBLE PROFESSIONAL: N. Gray / REG. NO. L.G. 2557

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ 6 inches	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.	REMARKS
					Surface Elevation: 18.1	
1					POORLY GRADED SAND (SP): brown (10YR 4/3), moist, 95% fine to medium sand, 5% non-plastic fines	
				0 (HS)		Groundwater sample, GP-105-0509 collected from temporary stainless steel well screened from 6 to 10 feet bgs.
2	GP-105-4-0509					
3				0 (HS)		Photovac 2020 PID calibrated with 100 ppm Isobutylene. PID readings collected from headspace in baggie (HS).
4					wet	
5					(SP-SM)	
6						
7				0 (HS)		
8					very dark greenish gray (10GY 3/1)	
9						
10					ELASTIC SILT (MH): very dark greenish gray (10GY 3/1), wet, 95% fines, 5% fine sand, medium to high plasticity, soft	
11					Bottom of boring at 11.0 feet. Boring abandoned with granular bentonite.	
12						
13						
14						
15						

OAKBOREV (REV. 8/2007)

PROJECT: Remedial Investigation PSC Washougal	**Log of Boring No. GP-107**
BORING LOCATION: 92521.8 N, 1169708.6 E	ELEVATION AND DATUM: 17.6 feet
DRILLING CONTRACTOR: Cascade Drilling, Inc.	DATE STARTED: 9/3/08 / DATE FINISHED: 9/3/08
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 8.0 / MEASURING POINT: 17.6 MSL NGVD29(47)
DRILLING EQUIPMENT: Geoprobe 7730 DT	DEPTH TO WATER (ft.) FIRST: 3.5 / COMPL.: NA
SAMPLING METHOD: Geoprobe macro-core sampler [5' x 1.5"]	LOGGED BY: C. Brown
HAMMER WEIGHT: NA / DROP: NA	RESPONSIBLE PROFESSIONAL: N. Gray / REG. NO. L.G. 2557

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Recovery	SAMPLES: Blows/ Foot	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation: 17.6	REMARKS
0	GP-107-1-0908			0/2.6 (HS)	ASPHALT	
1					POORLY GRADED SAND (SP): brown (10YR 4/3), moist, 95% fine to medium sand, 5% fines	OVM = Photovac 2020 PID calibrated with 100 ppm isobutylene standard. Headspace (HS) readings collected from baggie.
2				0/7.4 (HS)		
3	GP-107-3-0908					
4				0	▼ wet	
5				0	POORLY GRADED SAND with SILT (SP-SM): dark greenish gray (10Y 4/1), wet, 90% fine to medium sand, 10% non-plastic fines	
6						
7						
8					Bottom of boring at 8.0 feet. Abandoned with granular bentonite	Water sample, GP-107-7.5-0908 collected from 3.5'-7.5'. Sample collected from 1" diameter stainless steel temporary well screen.
9						
10						
11						
12						
13						
14						
15						

OAKBOREV (REV. 8/2007)

PROJECT: Remedial Investigation PSC Washougal	**Log of Boring No. GP-108**
BORING LOCATION: 92480.6 N, 1169703.7 E	ELEVATION AND DATUM: 17.9 feet
DRILLING CONTRACTOR: Cascade Drilling, Inc.	DATE STARTED: 9/3/08 / DATE FINISHED: 9/3/08
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 9.0 / MEASURING POINT: 17.9 MSL NGVD29(47)
DRILLING EQUIPMENT: Geoprobe 7730 DT	DEPTH TO WATER (ft.) FIRST: 4.5 / COMPL.: NA
SAMPLING METHOD: Geoprobe macro-core sampler [5' x 1.5"]	LOGGED BY: C. Brown
HAMMER WEIGHT: NA / DROP: NA	RESPONSIBLE PROFESSIONAL: N. Gray / REG. NO. L.G. 2557

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Recovery	SAMPLES: Blows/ Foot	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.	REMARKS
					Surface Elevation: 17.9	
1	GP-108-1-0908			0	POORLY GRADED SAND (SP): brown (10YR 4/3), moist, 95% fine to medium sand, 5% fines	OVM = Photovac 2020 PID calibrated with 100 ppm isobutylene standard. Headspace (HS) readings collected from baggie.
2				0/0 HS		
3						
4	GP-108-4-0908			0/0 HS		
5					wet dark greenish gray (10Y 4/1)	
6						
7				0		
8					SILT (ML): very dark greenish gray (10Y 3/1), moist, 95% fines, 5% fine sand, low plasticity, soft, scattered organics	Water sample (GP-108-7.5-0908) collected from 3.5 to 7.5 feet. Sample collected with a 1" diameter stainless steel temporary well screen.
9					Bottom of boring at 9.0 feet. Abandoned with granular bentonite	
10						
11						
12						
13						
14						
15						

OAKBOREV (REV. 8/2007)

PROJECT: Remedial Investigation PSC Washougal	**Log of Boring No. GP-109**
BORING LOCATION: 92540.4 N, 1169591.9 E	ELEVATION AND DATUM: 18.0 feet
DRILLING CONTRACTOR: Cascade Drilling, Inc.	DATE STARTED: 9/2/08 / DATE FINISHED: 9/2/08
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 8.0 / MEASURING POINT: 18.0 MSL NGVD29(47)
DRILLING EQUIPMENT: Geoprobe 7730 DT	DEPTH TO WATER (ft.) FIRST: 4.0 / COMPL.: NA
SAMPLING METHOD: Geoprobe macro-core sampler [5' x 1.5"]	LOGGED BY: C. Brown
HAMMER WEIGHT: NA / DROP: NA	RESPONSIBLE PROFESSIONAL: N. Gray / REG. NO. L.G. 2557

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Recovery	SAMPLES: Blows/ Foot	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.	REMARKS
					Surface Elevation: 18.0	
0				0	POORLY GRADED SAND (SP): light brownish gray (10YR 6/2), moist, 95% fine to medium sand, 5% fines	
1	GP-109-3-0908			0/0 HS	trace organics (rootlets)	OVM = Photovac 2020 PID calibrated with 100 ppm isobutylene standard. Headspace (HS) readings collected from baggie.
2				0		
3	GP-109-4-0908			0		
4					dark greenish gray (10Y 4/1), wet	
5				0/0 HS		
6						
7						
8					Bottom of boring at 8.0 feet. Abandoned with granular bentonite	
9						
10						
11						
12						
13						
14						
15						

OAKBOREV (REV. 8/2007)

PROJECT: Remedial Investigation PSC Washougal	**Log of Boring No. GP-110**
BORING LOCATION: 92517.8 N, 1169564.5 E	ELEVATION AND DATUM: 18.0 feet
DRILLING CONTRACTOR: Cascade Drilling, Inc.	DATE STARTED: 9/2/08 / DATE FINISHED: 9/2/08
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 8.0 / MEASURING POINT: 18.0 MSL NGVD29(47)
DRILLING EQUIPMENT: Geoprobe 7730 DT	DEPTH TO WATER (ft.) FIRST: 3.5 / COMPL.: NA
SAMPLING METHOD: Geoprobe macro-core sampler [5' x 1.5"]	LOGGED BY: C. Brown
HAMMER WEIGHT: NA / DROP: NA	RESPONSIBLE PROFESSIONAL: N. Gray / REG. NO. L.G. 2557

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Recovery	SAMPLES: Blows/ Foot	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.	REMARKS
					Surface Elevation: 18.0	
1	GP-110-1-0908 GP-9-110-1-0908			0	POORLY GRADED SAND (SP): grayish brown (10YR 5/2), moist, 95% fine to medium sand, 5%fines	OVM = Photovac 2020 PID calibrated with 100 ppm isobutylene standard. Headspace (HS) readings collected from baggie.
2						
3	GP-110-3-0908					
4				0	wet	
5					dark greenish gray (10Y 4/1)	
6						
7						Groundwater sample GP-110-7-0908 collected from 3.0 to 7.0 feet. Sample collected with 1.0" diameter stainless steel temporary well screen.
8					Bottom of boring 8.0 feet. Abandoned with granular bentonite	
9						
10						
11						
12						
13						
14						
15						

OAKBOREV (REV. 8/2007)

PROJECT: Remedial Investigation PSC Washougal	**Log of Boring No. GP-111**
BORING LOCATION: 92478.1 N, 1169587.7 E	ELEVATION AND DATUM: 17.9 feet
DRILLING CONTRACTOR: Cascade Drilling, Inc.	DATE STARTED: 9/2/08 / DATE FINISHED: 9/2/08
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 8.0 / MEASURING POINT: 17.9 MSL NGVD29(47)
DRILLING EQUIPMENT: Geoprobe 7730 DT	DEPTH TO WATER (ft.) FIRST: 4.5 / COMPL.: NA
SAMPLING METHOD: Geoprobe macro-core sampler [5' x 1.5"]	LOGGED BY: C. Brown
HAMMER WEIGHT: NA / DROP: NA	RESPONSIBLE PROFESSIONAL: N. Gray / REG. NO. L.G. 2557

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Recovery	SAMPLES: Blows/ Foot	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.	REMARKS
					Surface Elevation: 17.9	
1	GP-111-1-0908			0/0 HS	POORLY GRADED SAND (SP): very dark grayish brown (10YR 3/2), moist, 95% fine to medium sand, 5% fines	OVM = Photovac 2020 PID calibrated with 100 ppm isobutylene standard. Headspace (HS) readings collected from baggie.
2				0		
3						
4	GP-111-4-0908			0/0 HS		
					▼ wet	
5				0	POORLY GRADED SAND with SILT (SP-SM): very dark gray (N 3/), wet, 90% fine to medium sand, 10% low plasticity fines	
6						
7						
8					Bottom of boring 8.0 feet. Abandoned with granular bentonite	
9						
10						
11						
12						
13						
14						
15						

OAKBOREV (REV. 8/2007)

PROJECT: Remedial Investigation PSC Washougal	**Log of Boring No. GP-112**
BORING LOCATION: 92722.0 N, 1169836.3 E	ELEVATION AND DATUM: 17.6 feet
DRILLING CONTRACTOR: Cascade Drilling, Inc.	DATE STARTED: 9/4/08 / DATE FINISHED: 9/4/08
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 9.0 / MEASURING POINT: 17.6 MSL NGVD29(47)
DRILLING EQUIPMENT: Geoprobe 7730 DT	DEPTH TO WATER (ft.) FIRST: 5.2 / COMPL.: NA
SAMPLING METHOD: Geoprobe macro-core sampler [5' x 1.5"]	LOGGED BY: C. Brown
HAMMER WEIGHT: NA / DROP: NA	RESPONSIBLE PROFESSIONAL: N. Gray / REG. NO. L.G. 2557

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Recovery	SAMPLES: Blows/ Foot	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.	REMARKS
					Surface Elevation: 17.6	
1	GP-112-1-0908			0/0 HS	POORLY GRADED SAND (SP): dark yellowish brown (10YR 4/4), moist, 95% fine to medium sand, 5% non-plastic fines	OVM = Photovac 2020 PID calibrated with 100 ppm isobutylene standard. Headspace (HS) readings collected from baggie.
2				0/0 HS		
3						
4	GP-112-4-0908			0/0 HS		
5					dark brown (10YR 3/3), wet greenish black (5GY 2.5/1)	
6				0	ELASTIC SILT (MH): very dark greenish gray (10Y 3/1), moist, 100% fines, medium plasticity, soft	
7						
8						Collect water sample (GP-112-8-0908) with screen set at 4.0'-8.0'. Sample collected with 1.0" diameter stainless steel temporary well screen.
9					Bottom of boring 9.0 feet. Abandoned with granular bentonite	
10						
11						
12						
13						
14						
15						

OAKBOREV (REV. 8/2007)

PROJECT: Remedial Investigation PSC Washougal	**Log of Boring No. GP-113**
BORING LOCATION: 92702.5 N, 1169836.4 E	ELEVATION AND DATUM: 17.3 feet
DRILLING CONTRACTOR: Cascade Drilling, Inc.	DATE STARTED: 9/3/08 / DATE FINISHED: 9/3/08
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 9.0 / MEASURING POINT: Ground Surface
DRILLING EQUIPMENT: Geoprobe 7730 DT	DEPTH TO WATER (ft.) FIRST: 4.25 / COMPL.: NA
SAMPLING METHOD: Geoprobe macro-core sampler [5' x 1.5"]	LOGGED BY: C. Brown
HAMMER WEIGHT: NA / DROP: NA	RESPONSIBLE PROFESSIONAL: N. Gray / REG. NO.: L.G. 2557

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Recovery	SAMPLES: Blows/ Foot	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.	REMARKS
					Surface Elevation: 17.3	
0	GP-113-1-0908			0/0 HS	POORLY GRADED SAND (SP): brown (10YR 4/3), moist, 95% fine to medium sand, 5% fines	
1						OVM = Photovac 2020 PID calibrated with 100 ppm isobutylene standard. Headspace (HS) readings collected from baggie.
2				0/0 HS		
3						
4	GP-113-4-0908				▼ wet	
5				0		
6				0	▼ very dark gray (N 3/), grading to finer grain	
7						
8						Collect water sample (GP-113-7.5-0908) with screen at 3.5 to 7.5 feet. Sample collected with 1.0" diameter stainless steel temporary well screen.
9					Bottom of boring at 9.0 feet. Abandoned with granular bentonite	
10						
11						
12						
13						
14						
15						

OAKBOREV (REV. 8/2007)

PROJECT: Remedial Investigation PSC Washougal	**Log of Boring No. GP-114**
BORING LOCATION: 92547.1 N, 1169705.0 E	ELEVATION AND DATUM: 17.7 feet
DRILLING CONTRACTOR: Cascade Drilling, Inc.	DATE STARTED: 9/3/08 / DATE FINISHED: 9/3/08
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 8.0 / MEASURING POINT: Ground Surface
DRILLING EQUIPMENT: Geoprobe 7730 DT	DEPTH TO WATER (ft.) FIRST: 4.25 / COMPL.: NA
SAMPLING METHOD: Geoprobe macro-core sampler [5' x 1.5"]	LOGGED BY: C. Brown
HAMMER WEIGHT: NA / DROP: NA	RESPONSIBLE PROFESSIONAL: N. Gray / REG. NO.: L.G. 2557

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Recovery	SAMPLES: Blows/ Foot	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.	REMARKS
					Surface Elevation: 17.7	
0	GP-114-1-0908			.9	ASPHALT POORLY GRADED SAND (SP): dark grayish brown (10YR 4/2), moist, 95% fine to medium sand, 5% non-plastic fines	OVM = Photovac 2020 PID calibrated with 100 ppm isobutylene standard. Headspace (HS) readings collected from baggie.
2				0/0 HS		
3	GP-114-3-0908			0	light brownish gray (10YR 6/2)	
4					greenish gray (5GY 5/1), wet	
5				0/0 HS		
6						
7						Water sample collected (GP-114-7-0908) from screen at 3.0 to 7.0 feet. Sample collected with 1.0" diameter stainless steel temporary well screen.
8					Bottom of boring at 8.0 feet. Abandoned with granular bentonite	
9						
10						
11						
12						
13						
14						
15						

PROJECT: Remedial Investigation PSC Washougal	**Log of Boring No. GP-115**
BORING LOCATION: 92443.8 N, 1169704.7 E	ELEVATION AND DATUM: 17.9 feet
DRILLING CONTRACTOR: Cascade Drilling, Inc.	DATE STARTED: 5/5/09 / DATE FINISHED: 5/5/09
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 3.5 / MEASURING POINT: 17.9 MSL NGVD29(47)
DRILLING EQUIPMENT: Geoprobe 7730 DT	DEPTH TO WATER (ft.) FIRST: NA / COMPL.: NA
SAMPLING METHOD: Geoprobe macro-core sampler [5' x 1.5"]	LOGGED BY: C. Brown
HAMMER WEIGHT: NA / DROP: NA	RESPONSIBLE PROFESSIONAL: N. Gray / REG. NO. L.G. 2557

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ 6 inches	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.	REMARKS
					Surface Elevation: 17.9	
1	GP-115-3.5-0509			0 (HS)	POORLY GRADED SAND (SP): brown (10YR 4/3), moist, 95% fine to medium sand, 5% fines	
2						
3						
4					Bottom of boring at 3.5 feet. Boring abandoned with granular bentonite.	
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						

OAKBOREV (REV. 8/2007)

Sweet, Edwards & Associates, Inc.

BORING LOG

PROJECT McClary-Columbia

Location McClary-Columbia Tank Farm

Boring No. MC-R

Surface Elevation

Drilling Method Driving

Total Depth 9.7 feet

Drilled By Sweet, Edwards & Assoc., Inc.

Date Completed 12-23-86

Logged By SRH

WELL DETAILS	PENETRATION TIME / RATE	DEPTH (FEET)	SAMPLE NO.	SAMPLE TYPE	PERMEABILITY TESTING	SYMBOL	LITHOLOGIC DESCRIPTION	WATER QUALITY
Cap; 4" Stainless Steel Riser; Dredge Spoils; DNAPL Cup; 4" Stainless Steel Screen w/0.010" Slots; Native Silt; Drive Point		0 2 4 6 8 10 12					0-8.0' Sand, medium gray, clean, poorly graded, some organics, "Dredge Spoils". 8.0-? Silt, gray-black, abundant organic vegetal matter.	

Sweet, Edwards & Associates, Inc.

BORING LOG

PROJECT Mc Clary Columbia

Location Area 1

Boring No. MC-1

Surface Elevation Top of PVC 17.41 ft.

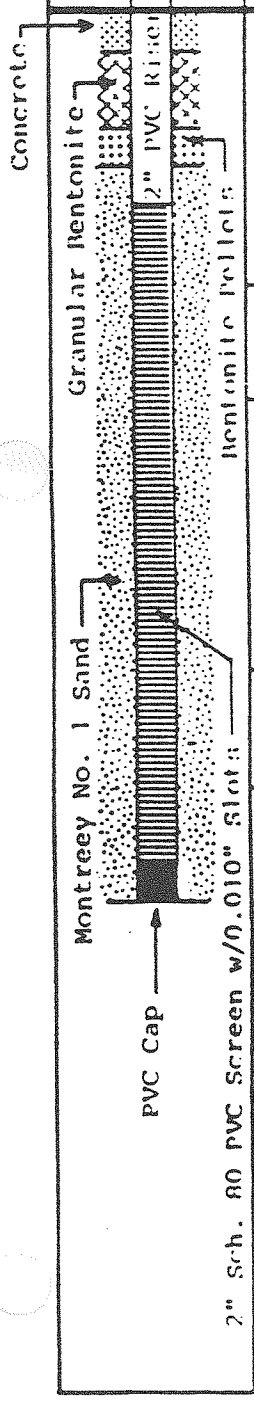
Drilling Method 6-in I.D. Hollow Stem Auger

Total Depth 11.5 ft.

Drilled By Geo-Tech Explorations, Inc.

Date Completed 3/22/85

Logged By J. Maul



PENETRATION TIME/RATE	DEPTH (FEET)	SAMPLE NO.	SAMPLE TYPE	PERMEABILITY TESTING	SYMBOL	LITHOLOGIC DESCRIPTION	WATER QUALITY
	0						
6/9/11		S1	SS		SP	3.5-5.0' Sand, gray, clean, medium grained, saturated.	HNU: BG 0.8 DH 2
	5						
1/1/2						8.5-10.0' Zero retention. Oily sheen on spoon.	
	10					10.0-11.5' Zero retention, oily sheen on spoon.	
1/2/2					ML	11.5-13.0' Silt, green to tan, oxidized fractures changing color to orange. Slightly brittle.	
	15						

Sweet, Edwards & Associates, Inc.

BORING LOG

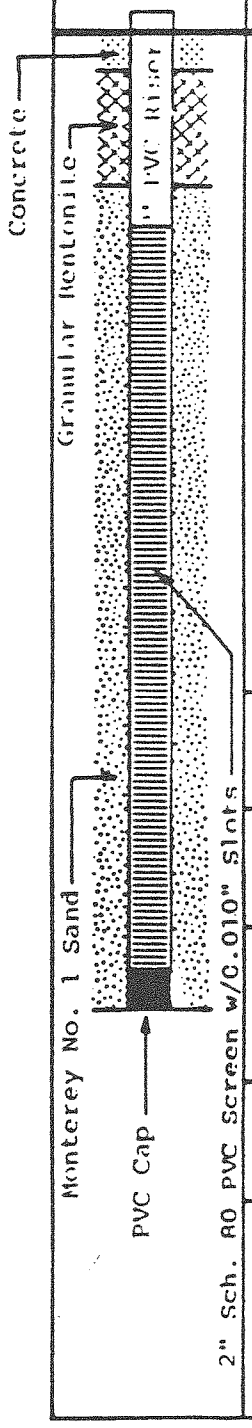
PROJECT Mc Clary Columbia **Page** 1 **of** 1

Location South of ~~Dryer~~ Storage Shed **Boring No.** MC-2
Top of PVC

Surface Elevation 19.22 ft. **Drilling Method** 6-in I.D. Hollow Stem Auger

Total Depth 13.5 ft. **Drilled By** Geo-Tech Explorations, Inc.

Date Completed 3/21/85 **Logged By** J. Maul



PENE-TRATION TIME/ RATE	DEPTH (FEET)	SAMPLE NO.	SAMPLE TYPE	PERME-ABILITY TESTING	SYMBOL	LITHOLOGIC DESCRIPTION	WATER QUALITY
	0					0-6.0' See soils log from Area 2 soils investigation.	
	2.0						
	2.5						
	3.0						
	4						
	5						
		S1	SS		SP	8.5-10.0' Sand, gray with light felsic grains, medium grained, clean, saturated, 1-in gray silt in tip of spoon. Sampler sunk under weight of hammer.	
	10						
3/2/2		S2	SS		ML		
	11.5					10.0-11.5' Silt and Clayey Silt, gray, cohesive, sticky. Trace of very fine sand. Some oxidation in fractures to tan. Some root stems.	
	12.0						
	12.5						
	13.5						
		S3	SS		ML	13.5-15.0' Silt, gray to green, massive. Traces of organic vegetal matter.	
	15						

SEA-300-02a

LOG OF EXPLORATORY BORING

PROJECT NAME	CHEMPRO	BORING NO.	MC- 2D
LOCATION	Washougal, Washington	PAGE	1 OF 3
DRILLED BY	Onwego Drilling Co.	REFERENCE ELEV.	17.21'
DRILL METHOD	Cable Tool	TOTAL DEPTH	33.00'
LOGGED BY	R. Fredricksen	DATE COMPLETED	6/15/90

SAMPLE NUMBER (SAMPLE TYPE)	RECOVERY PERCENT	BLOW COUNTS	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
#1 (G)	100%	N/A	▼ 2.44'					**0.0-0.3' ASPHALT.**
	0%	1-2-6	▼ Water added below 4.0'	5				**0.3-6.5' SAND (SP),** grayish brown, medium to coarse, non-plastic, loose to medium density, trace amounts of rounded to sub-rounded, gravels approximately 0.25-0.75 inches; 1% gravels, 9% silt, 90% sand. (FILL)
#2 A-B-C 3"(SS)	93%	8-20-20						**6.5-9.5' SILTY SAND (SP-SM),** medium to fine, non-plastic, slightly moldable, medium density, moist; 5-15% silt, 85% sand. (ALLUVIUM)
#3 (SS)	100%	N/A		10				**9.5-18.0' SILT (ML),** dark gray, plastic, damp, soft to stiff, trace of mottling and orange stain (2-5%), woody debris and sub-vertical root structures; 10% sand, 90% silt. (ALLUVIUM)
	0%	N/A						
#4 (SS)	86%	1-1-1						
				15				

REMARKS
(SS) = Split spoon sampler. (G) = Grab sample. A-B-C sample number with sleeve identifier, sleeve A is lower most.
Reference elevation is top of PVC pipe. Blow counts not representative of standard penetration test.

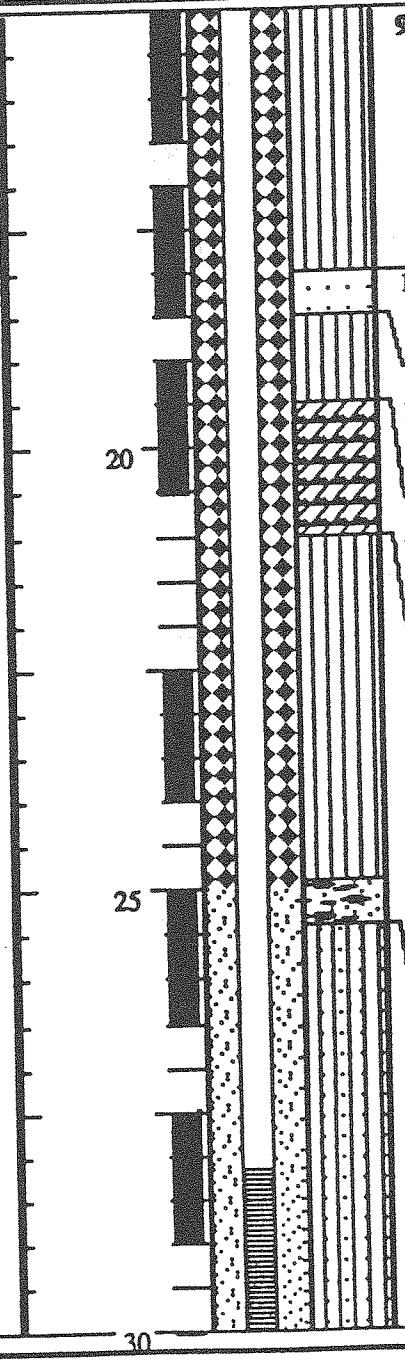
LOG OF EXPLORATORY BORING

PROJECT NAME CHEMPRO
LOCATION Washougal, Washington
DRILLED BY Onwego Drilling Co.
DRILL METHOD Cable Tool
LOGGED BY R. Fredricksen

BORING NO. MC-2D
PAGE 2 OF 3
REFERENCE ELEV. 17.21'
TOTAL DEPTH 33.00'
DATE COMPLETED 6/15/90

SAMPLE NUMBER (SAMPLE TYPE)	RECOVERY PERCENT	BLOW COUNTS	LITHOLOGIC DESCRIPTION
	0%	1-2-4	9.5-18.0' SILT (ML); continued from previous page.
#5 (SS)	N/A	N/A	
			18-18.5' SAND (SP), greenish tan, medium grain, loose, non-plastic, wet; 5% silt, 95% sand. (ALLUVIUM)
#6 A-B-C 3"(SS)	N/A	N/A	18.5-19.5' SILT (ML), greenish gray, plastic, soft, moist, abundant woody debris; 10-15% sand, 85-90% silt. (ALLUVIUM)
			19.5-21.0' CLAY (OH), black, medium plasticity, moist, soft; 1-5% sand, 95% clay textured fabric. (ALLUVIUM)
#7 (SS)	73%	2-2-3	21.0-25.0 SILT (ML), greenish gray, plastic, soft, damp to slightly moist, some mottling and trace of orange stain, some woody debris. (ALLUVIUM)
#8 (SS)	50%	4-4-6	25.0-25.4' SANDY GRAVEL (GW), orange brown, loose, wet; gravels are various lithologies, rounded to sub-rounded 0.25 to 1.25 inches; 25% sand, 75% gravel. (ALLUVIUM)
			25.4-33.0' SILTY SAND (SM), orange brown, medium grained, non-plastic, wet, loose to intermittently dense; 15-20% silt, 80-85% sand. (ALLUVIUM)
#9 A-B-C 3"(SS)	100%	23-33-50	

GROUND WATER LEVELS
DEPTH IN FT.
SAMPLES
WELL DETAILS
LITHOLOGIC COLUMN



REMARKS
(SS) = Split spoon sampler. (G) = Grab sample. A-B-C sample number with sleeve identifier, sleeve A is lower most.
Reference elevation is top of PVC pipe. Blow counts not representative of standard penetration test.

LOG OF EXPLORATORY BORING

PROJECT NAME	CHEMPRO	BORING NO.	MC-2D
LOCATION	Washougal, Washington	PAGE	3 OF 3
DRILLED BY	Onwego Drilling Co.	REFERENCE ELEV.	17.21'
DRILL METHOD	Cable Tool	TOTAL DEPTH	33.00'
LOGGED BY	R. Fredricksen	DATE COMPLETED	6/15/90

SAMPLE NUMBER (SAMPLE TYPE)	RECOVERY PERCENT	BLOW COUNTS	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
#10 (SS)	100%	4-6-8		35				25.4-33.0' SILTY SAND (SM): continued from previous page.
				40				Bottom of boring at 33.0 feet.
				45				

REMARKS
(SS) = Split spoon sampler. (G) = Grab sample. A-B-C sample number with sleeve identifier, sleeve A is lower most.
Reference elevation is top of PVC pipe. Blow counts not representative of standard penetration test.

SWEET-EDWARDS/EMCON

S9405.05.CHEMP.062790.MP2

Sweet, Edwards & Associates, Inc.

BORING LOG

PROJECT Mc Clary Columbia

Location East of Area 7

Boring No. MC-7

Surface Elevation 17.28 ft.

Drilling Method 6-in I.D. Hollow Stem Auger

Total Depth 10 ft.

Drilled By Geo-Tech Explorations, Inc.

Date Completed 3/22/85

Logged By J. Maul

WELL DETAILS	PENETRATION TIME/ RATE	DEPTH (FEET)	SAMPLE NO.	SAMPLE TYPE	PERMEABILITY TESTING	SYMBOL	LITHOLOGIC DESCRIPTION	WATER QUALITY
Concrete; Granular Bentonite; 2" PVC Riser; Bentonite Pellets; 2" Sch. 80 PVC Screen w/0.010" Slots; Monterey No. 1 Sand; PVC Cap		0					Ground surface (asphalt). Unsaturated auger cuttings have some odor.	
	7/12/13		S1	SS		SP	3.5-5.0' Sand, gray, medium grained, clean, saturated.	HNU: BG 1.5 DH 200-230
		5						
	2/2/3					ML	8.5-10.0' Silt, gray, abundant organic vegetal material especially at 9 ft. May be contact with fill. Some sand above, has oily sheen, with some odor	HNU: DH 50
		10						

Figure 1

Sweet, Edwards & Associates, Inc.

BORING LOG

PROJECT Mc Clary Columbia **Page** 1 **of** 1

Location _____ **Boring No.** MC-8

Surface Elevation Top of PVC 19.04 ft. **Drilling Method** 6-in I.D. Hollow Stem Auger

Total Depth 11.5 ft. **Drilled By** Geo-Tech Explorations, Inc.

Date Completed 3/22/85 **Logged By** J. Maul

WELL DETAILS	PENETRATION TIME/RATE	DEPTH (FEET)	SAMPLE NO.	SAMPLE TYPE	PERMEABILITY TESTING	SYMBOL	LITHOLOGIC DESCRIPTION	WATER QUALITY
Concrete; Granular Bentonite; 2" PVC Riser; Bentonite Pellets; 2" Sch. 80 PVC Screen w/0.010" Slots; Monterey No. 1 Sand; PVC Cap		0					0-8.5' For complete lithology see boring log for Area 8.	HNU: BG 7 HNU at 3.5':20
	7/5/5	5				ML	8.5-10.0' Silt, gray-green, some oxidized zones Some roots and vegetation, saturated.	HNU at 8.5': 13
	7/6/6	10				ML	10.0-11.5' Same as above.	
		15						

SEA-300-02a

Sweet, Edwards & Associates, Inc.

BORING LOG

PROJECT Mc Clary Columbia **Page** 1 **of** 1

Location Area 8 **Boring No.** MC-8D

Surface Elevation 18.89 ft. **Drilling Method** 6-in I.D. Hollow Stem Auger

Total Depth 8.5 ft. **Drilled By** Geo-Tech Explorations, Inc.

Date Completed 3/25/85 **Logged By** J. Maul

WELL DETAILS	PENE-TRATION TIME/ RATE	DEPTH (FEET)	SAMPLE NO.	SAMPLE TYPE	PERME-ABILITY TESTING	SYMBOL	LITHOLOGIC DESCRIPTION	WATER QUALITY
Concrete; Granular Bentonite; 2" Sch. 80 PVC Riser; Bentonite Pellets		0						
		5						
	3/8/8	6.5				SP	6.0-7.5' Sand, 10% recovery.	
		7.5					7.5-9.0' Silt, gray, roots, transition with silty sand 3" at 8.5 ft.	
	4/13/16	8.5						
Monterey No. 1 Sand; PVC Cap; 2" Sch. 80 PVC Screen w/0.010" Slots		10						

Sweet, Edwards & Associates, Inc.

BORING LOG

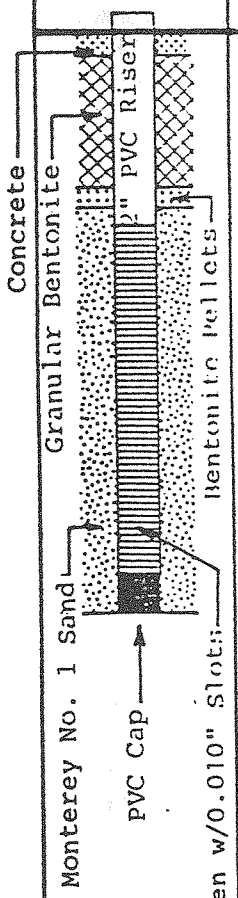
PROJECT Mc Clary Columbia — **Page** 1 **of** 1

Location Area 8 — **Boring No.** MC-8S

Surface Elevation 19.10 ft. — **Drilling Method** 6-in I.D. Hollow Stem Auge

Total Depth 7.5 ft. — **Drilled By** Geo-Tech Explorations, Inc.

Date Completed 3/25/85 — **Logged By** J. Maul

WELL DETAILS	PENE-TRATION TIME/ RATE	DEPTH (FEET)	SAMPLE NO.	SAMPLE TYPE	PERME-ABILITY TESTING	SYMBOL	LITHOLOGIC DESCRIPTION	WATER QUALITY
		0					See description for soils boring from Area 8 and MC-8.	
		5						
		10						

Sweet, Edwards & Associates, Inc.

BORING LOG

PROJECT McCLARY - COLUMBIA

Location Offsite-south of the SW McClary fence corner

Surface Elevation 21.03 ft.

Total Depth 11.0 ft.

Date Completed 6/6/85

Boring No. MC-10

Drilling Method 6" I.D. Hollow Stem Auger

Drilled By Geo-Tech Explortation, Inc.

Logged By S. Henshaw

WELL DETAILS	PENETRATION TIME/ RATE	DEPTH (FEET)	SAMPLE NO.	SAMPLE TYPE	PERMEABILITY TESTING	SYMBOL	LITHOLOGIC DESCRIPTION	WATER QUALITY
		0						
	5/4/4	5	S1	SS		SP	5.0-6.5' SAND, gray, medium grained, clean, poorly graded, some organics "Dredge Spoils", saturated	
	3/3/4		S2	SS		SP	8.0-9.5' SAND, same as above. SILT, in bottom 2" of sample.	
	2/2/2	10	S3	SS		ML	9.5-11.0' SILT, gray-black abundant organic vegetal matter.	
		15						

Cement

Bentonite Powder

2" PVC Riser

Bentonite Pellets

Monterey No. 6 Sand

PVC Cap

2" sch. 80 PVC screen with 0.010" slots

PROJECT: Remedial Investigation PSC Washougal	**Log of Well No. MC-10D**
BORING LOCATION:	GROUND SURFACE ELEVATION AND DATUM:
DRILLING CONTRACTOR: Cascade Drilling, Inc.	DATE STARTED: 7/26/99 / DATE FINISHED: 7/27/99
DRILLING METHOD: Hollow-stem auger	TOTAL DEPTH (ft.): 36.0 / SCREEN INTERVAL (ft.): 25.0 to 35.0
DRILLING EQUIPMENT:	DEPTH TO WATER: FIRST 3.2 / COMPL. / CASING: 2" Sched. 40 PVC
SAMPLING METHOD: SPT split spoon drive sampler [18" x 2.5"]	LOGGED BY: C. Minton/T. Gray
HAMMER WEIGHT: / DROP:	RESPONSIBLE PROFESSIONAL: / REG. NO.

DEPTH (feet)	SAMPLES Sample No.	SAMPLES Sample	SAMPLES Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
0			7 14 18	0	POORLY GRADED SAND (SP): moderate yellowish brown, dry, medium to fine, loose	Quickrete concrete
1						
2			14 21 28	0	dark yellowish brown with white specks, moist, medium dense	
3			13 26 26	0	wet	15" diameter borehole
4						2" diameter Schedule 40 PVC casing
5			14 17 25	0	grayish black	
6			8 14 16	0		
7						Annular Seal (3/8 Bardid holeplug bentonite chips)
8			7 7 8	0	dense	
9			4 6	0	SILT (ML): greenish black, moist, well sorted, medium stiff	
10			8 7 7	0	ORGANIC SOIL (OL): greenish black, moist, very well sorted, medium stiff	
11						8.75" diameter borehole
12			4 5 6	0		
13			4 7 8	0	denser, with orange streaking	Quikgrout bentonite powder
14			4 4			
15						

OAKWELLV (REV. 9/2007)

PROJECT: Remedial Investigation
PSC Washougal

Log of Well No. MC-10D (cont'd)

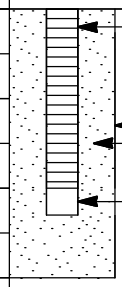
DEPTH (feet)	SAMPLES Sample No.	SAMPLES Sample	SAMPLES Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
15			4	0	ORGANIC SOIL (OL): (continued)	
16			4 5 7			Quikgrout bentonite powder
17				0		
18			4 5 7	0		
19			3 4 5			2" diameter Schedule 40 PVC casing
20				0		
21			6 6 7	0		
22			4 9 11			Annular Seal (3/8 Bardid holeplug bentonite chips)
23				0	CLAY (CL): greenish black, moist, moderately sorted, medium stiff	
24			5 8 14	0	ORGANIC SOIL (OL): greenish black, moist, very well sorted, medium stiff	10/20 Colorado silica sand
25			50/5"	0		
26						8.75" diameter borehole
27			50/5"	0	SILTY GRAVEL (GM): greenish brown with orange stain around gravel, wet, coarse gravel, poorly sorted, dense	
28			50/5"	0		
29						
30			50/5"	0	siltier	2" diameter Schedule 40 PVC well screen with 0.010-inch slot
31			50/3"	0	very wet, soupy	
32						
33			50/3"	0		

OAKWELLV (REV. 9/2007)

PROJECT: Remedial Investigation
PSC Washougal

Log of Well No. MC-10D (cont'd)

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
33					SILTY GRAVEL (GM): (continued)	
34			50/6"	0		
35			50/6"	0		
36					Bottom of boring at 36.0 feet	
37						
38						
39						
40						
41						
42						
43						
44						
45						
46						
47						
48						
49						
50						
51						



2" diameter Schedule 40 PVC well screen with 0.010-inch slot

8.75" diameter borehole

10/20 Colorado silica sand

2" diameter Schedule 40 PVC end cap

*Finished with steel 6.5" diameter surface casing

*We were unable to collect a shelby tube in the screened portion of the well as per the Work Plan due to the lithology of the screened interval.

OAKWELLV (REV. 9/2007)

Sweet, Edwards & Associates, Inc.

BORING LOG

PROJECT McCLARY - COLUMBIA

Location Westside of McClary fence

Boring No. MC-11

Surface Elevation 19.28 ft.

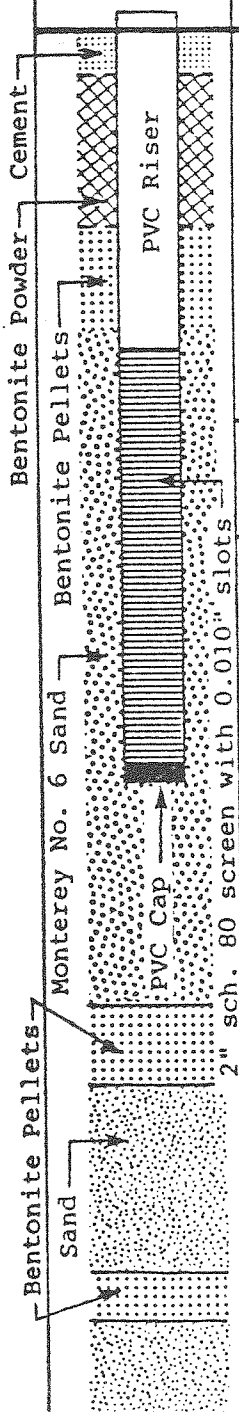
Drilling Method 6" I.D. Hollow Stem Auger

Total Depth 9.5 ft.

Drilled By Geo-Tech Exploration, Inc.

Date Completed 6/7/85

Logged By S. Henshaw



PENE-TRATION TIME/ RATE	DEPTH (FEET)	SAMPLE NO.	SAMPLE TYPE	PERME-ABILITY TESTING	SYMBOL	LITHOLOGIC DESCRIPTION	WATER QUALITY
	0						
	5						
3/4/3		1	SS		SP	5.0-6.5' SAND, gray, medium grained, clean, poorly graded, some organics, "Dredge Spoils", saturated	
1/1/3		2	SS		SP	8.0-9.5' SAND, same as above. SILT, at bottom 2"	
3/6/5	10	3	SS		ML	9.5-11.0' SILT, gray-black abundant organic vegetal matter.	
		4	SS		ML	11.0-12.5' SILT, gray at top, brown near bottom, slightly mottled orange.	
		5	Shelby Tube		ML	12.5-14.5' SILT, same as above.	
3/4/3	15	6	SS		ML	14.5-16.0' SILT, gray-green, slightly mottled orange, abundant vegetal matter.	
		7	SS		ML	16.0-17.5' SILT, same as above.	

Sweet, Edwards & Associates, Inc.

BORING LOG

PROJECT McCLARY - COLUMBIA

Boring No. MC-11

WELL DETAILS	PENETRATION TIME/RATE	DEPTH (FEET)	SAMPLE NO.	SAMPLE TYPE	PERMEABILITY TESTING	SYMBOL	LITHOLOGIC DESCRIPTION	WATER QUALITY
Sand; Bentonite Pellets	3/4/3	15	6	SS		ML	14.5-16.0' SILT, same as above. See previous page for description.	
			7	SS		ML	16.0-17.5' SILT, same as above. See previous page for description.	
			8	Shelby Tube		ML	17.5-19.5' SILT, same as above. See previous page for description.	
	4/5/8	20	9	SS		ML / SP	19.5-21.0' SILT, same as above. 19.5-20.5' SAND, yellow-brown, tightly compacted, poorly graded, slighty mottled.	
			10	SS		SP	21.0-22.5' SAND, yellow-brown, tightly compacted, slightly mottled, silt stringer .15', bottom .5 is fine grained.	
Bentonite Pellets	6/4/4		11	SS		SP	22.5-24.0' SAND, yellow-brown, tightly compacted, mottled, micaceous.	
		25						

Sweet, Edwards & Associates, Inc.

BORING LOG

PROJECT McCLARY - COLUMBIA

Location NW McClary fence corner

Boring No. MC-12

Surface Elevation 18.90 ft. Top of PVC

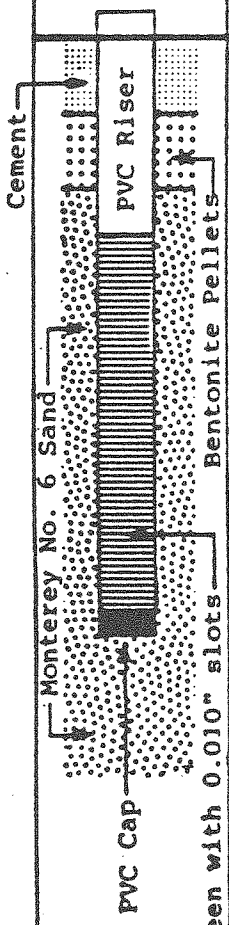
Drilling Method 6" I.D. Hollow Stem Auger

Total Depth 9.5 ft.

Drilled By Geo-Tech Exploration, Inc.

Date Completed 6/7/85

Logged By S. Henshaw



PENETRATION TIME/RATE	DEPTH (FEET)	SAMPLE NO.	SAMPLE TYPE	PERMEABILITY TESTING	SYMBOL	LITHOLOGIC DESCRIPTION	WATER QUALITY
	0						
	5						
3/4/4		1	SS		SP	5.0-6.5' SAND, gray, medium grained, clean, poorly graded, some organics, "Dredge Spoils" saturated.	
4/8/5		2	SS		SP / ML	6.5-8.0' SAND, same as above. 6.5-7.5' SILT, gray-black, abundant organic vegetal matter.	
5/6/5		3	SS		ML	8.0-9.5' SILT, same as above.	
	10						
	15						

LOG OF EXPLORATORY BORING

PROJECT NAME	CHEMPRO	BORING NO.	MC-12D
LOCATION	Washougal, Washington	PAGE	1 OF 2
DRILLED BY	Stoco Well Services	REFERENCE ELEV.	19.25'
DRILL METHOD	Cable Tool	TOTAL DEPTH	22.50'
LOGGED BY	R. Fredrickson	DATE COMPLETED	2/8/91

SAMPLE NUMBER (SAMPLE TYPE)	RECOVERY PERCENT	BLOW COUNTS (N COMP)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
								0-6.5' SAND (SP); light gray, medium to coarse grained, trace silt (5%), trace gravels (2-5%), rounded to 1-inch and of various lithologies, wet, loose. (fill)
#1 (SS)	73%	2-7-11 (18)	▽ 3.5'					
				5				
#2 (SS)	100%	6-5-6 (11)						
								6.5-8.5' SILTY SAND (SM); dark gray, 20-25% silt, 75-80% fine to medium grained sand, wet, loose. (FILL)
#3 (SS)	80%	2-3-2 (5)						8.5-15.0' SILT (ML); dark gray, trace very fine sand, medium plasticity, wet, soft. (ALLUVIUM)
				10				@ 10-11.5 feet: SANDY SILT (ML); dark gray, 25-30% very fine sand, 70-75% silt, low plasticity, wet, soft, some visible micaceous grains. (ALLUVIUM)
#4 (SS)	100%	1-2-4 (6)						
#5 (SS)	100%	2-2-3 (5)						
				15				

REMARKS

SS=Split spoon sample; sampler driven using a 300lb hammer with a 24-inch stroke. Blow counts may not be representative. Vegetable oil occasionally used for thread lubricant. Approximately 100 gallons of potable water added. 2.2 feet of stick-up, total well assembly 24.7 feet. Reference elevation is top of PVC.

SWEET-EDWARDS/EMCON

LOG OF EXPLORATORY BORING

PROJECT NAME	CHEMPRO	BORING NO.	MC-12D
LOCATION	Washougal, Washington	PAGE	2 OF 2
DRILLED BY	Staco Well Services	REFERENCE ELEV.	19.2'
DRILL METHOD	Cable Tool	TOTAL DEPTH	22.5
LOGGED BY	R. Fredrickson	DATE COMPLETED	2/8/91

SAMPLE NUMBER (SAMPLE TYPE)	RECOVERY PERCENT	BLOW COUNTS (N COMP)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
#6 (SS)	80%	2-4-10 (14)						15-18.5' SAND (SM); gray brown, trace silt (10-15%), 85-90% very fine to fine sand, wet, soft. (ALLUVIUM) @ 16 feet: cobble.
#7 (SS)	0%	50 (50)						
#8 (SS)	67%	100-100-100 (300)		20				18.5-22.5' SANDY SILTY GRAVEL (GW-GM); greenish brown with orange stain around gravel fringe, 10-15% very fine sand, 10-20% silt, 65-75% gravels (angular to subangular to 2-inch, various lithologies but primarily basalt). (ALLUVIUM)
#9 (SS)	0%	50 (50)		25				Bottom of boring at 22.5 feet.
				30				

REMARKS

SS=Split spoon sample; sampler driven using a 300lb hammer with a 24-inch stroke. Blow counts may not be representative. Vegetable oil occasionally used for thread lubricant. Approximately 100 gallons of potable water added. 2.2 feet of stick-up, total well assembly 24.7 feet. Reference elevation is top of PVC.

SWEET-EDWARDS/EMCON

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Sweet, Edwards & Associates, Inc.

BORING LOG

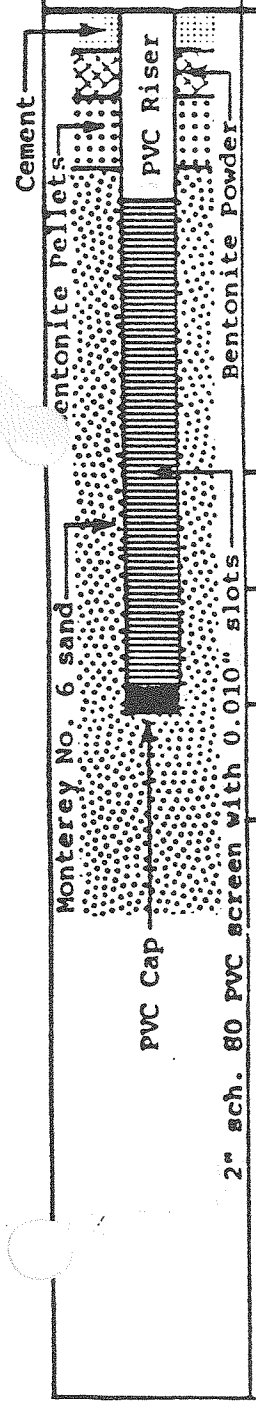
PROJECT McCLARY - COLUMBIA — **Page** 1 **of** 1

Location NE McClary fence corner — **Boring No.** MC-13

Surface Elevation Top of PVC 18.91 ft. — **Drilling Method** 6" I.D. Hollow Stem Auger

Total Depth 12.0 ft. — **Drilled By** Geo-Tech Exploration, Inc.

Date Completed 6/7/85 — **Logged By** S. Henshaw



PENETRATION TIME/RATE	DEPTH (FEET)	SAMPLE NO.	SAMPLE TYPE	PERMEABILITY TESTING	SYMBOL	LITHOLOGIC DESCRIPTION	WATER QUALITY
	0						
	2.5						
	5						
6/7/7		1	SS		SP	6.0-7.5' SAND, gray, medium grained, clean, poorly graded, some organics, "Dredge Spoils" saturated, odor.	
6/8/5	8.8	2	SS		SP	7.5-9.0' SAND, same as above.	
2/6/10	10	3	SS		ML	9.0-10.5' SILT, gray-black, abundant organic vegetal matter.	
	15						

SEA-300-02a

LOG OF EXPLORATORY BORING

PROJECT NAME	CHEMPRO	BORING NO.	MC-13D
LOCATION	Washougal, Washington	PAGE	1 OF 2
DRILLED BY	Staco Well Services	REFERENCE ELEV.	20.16'
DRILL METHOD	Cable Tool	TOTAL DEPTH	23.50'
LOGGED BY	R. Fredricksen	DATE COMPLETED	2/12/91

SAMPLE NUMBER (SAMPLE TYPE)	RECOVERY PERCENT	BLOW COUNTS (N COMP)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
#1 (G)	100%	N/A						**0-8.5' SAND (SP);** light gray, medium-coarse grained, trace silt (5%), moist to wet, loose. (FILL)
#2 (SS)	100%	6-5-11 (16)		5				
#3 (SS)	87%	6-9-14 (23)	▽ 6.9'					**8.5-10.0' SILTY SAND (SM);** dark gray, 20-25% silt, 75-80% fine to medium grained sand, wet, loose. (FILL)
#4 (SS)	87%	3-4-4 (8)		10				**10.0-16.0' SILT (ML);** dark gray, trace of very fine sand, medium plasticity, wet, soft. (ALLUVIUM)
#5 (SS)	100%	2-4-6 (10)						@ 14-16 feet: SANDY SILT (ML); dark gray, 25-30% very fine sand, 70-75% silt, low plasticity, wet, soft. (ALLUVIUM)
				15				

REMARKS

G=Grab sample. SS=Split spoon sample; sampler driven using a 300lb hammer with a 24-inch stroke. Blow counts may not be representative. Vegetable oil occasionaly used for thread lubricant. Approximately 100 gallons of potable water added. 1.46 feet of stick-up, total well assembly 24.9 feet. Reference elevation is top of PVC.

LOG OF EXPLORATORY BORING

PROJECT NAME	CHEMPRO	BORING NO.	MC-13D
LOCATION	Washougal, Washington	PAGE	2 OF 2
DRILLED BY	Staco Well Services	REFERENCE ELEV.	20.16'
DRILL METHOD	Cable Tool	TOTAL DEPTH	23.50'
LOGGED BY	R. Fredricksen	DATE COMPLETED	2/12/91

SAMPLE NUMBER (SAMPLE TYPE)	RECOVERY PERCENT	BLOW COUNTS (N COMP)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
#6 (SS)	N/A	6-27-50 (77)						10.0-16.0' SILT (CL); lithologic description continued from previous page.
#7 (SS)	60%	50 (50)						16-23.5' SANDY SILTY GRAVEL (GW-GM); greenish brown with orange stain around gravel fringe, 10-15% gravels angular to subangular to 2-inch, various lithologies but primarily basalt. (ALLUVIUM)
#8 (SS)	40%	50 (50)		20				
#9 (SS)	0%	50 (50)						Bottom of boring at 23.5 feet.
				25				
				30				

REMARKS

G=Grab sample. SS=Split spoon sample; sampler driven using a 300lb hammer with a 24-inch stroke. Blow counts may not be representative. Vegetable oil occasionaly used for thread lubricant. Approximately 100 gallons of potable water added. 1.46 feet of stick-up, total well assembly 24.9 feet. Reference elevation is top of PVC.

Sweet, Edwards & Associates, Inc.

BORING LOG

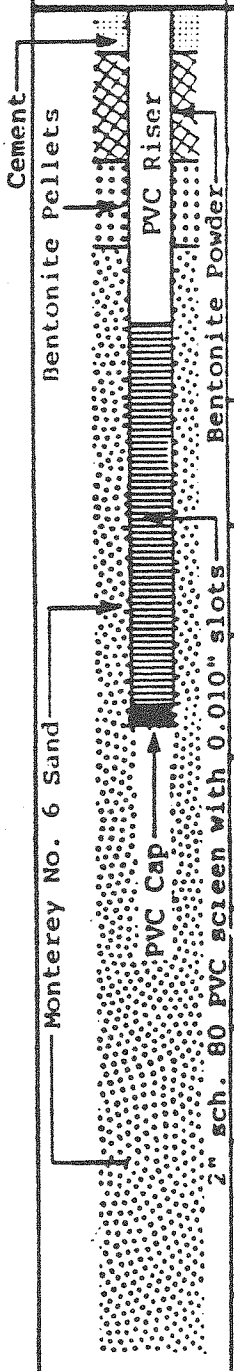
PROJECT McCLARY - COLUMBIA — **Page** 1 **of** 1

Location East side of fence in McClary yard — **Boring No.** MC-14

Surface Elevation Top of PVC 18.38 ft. — **Drilling Method** 6" I.D. Hollow Stem Auger

Total Depth 16.5 ft. — **Drilled By** Geo-Tech Exploration, Inc.

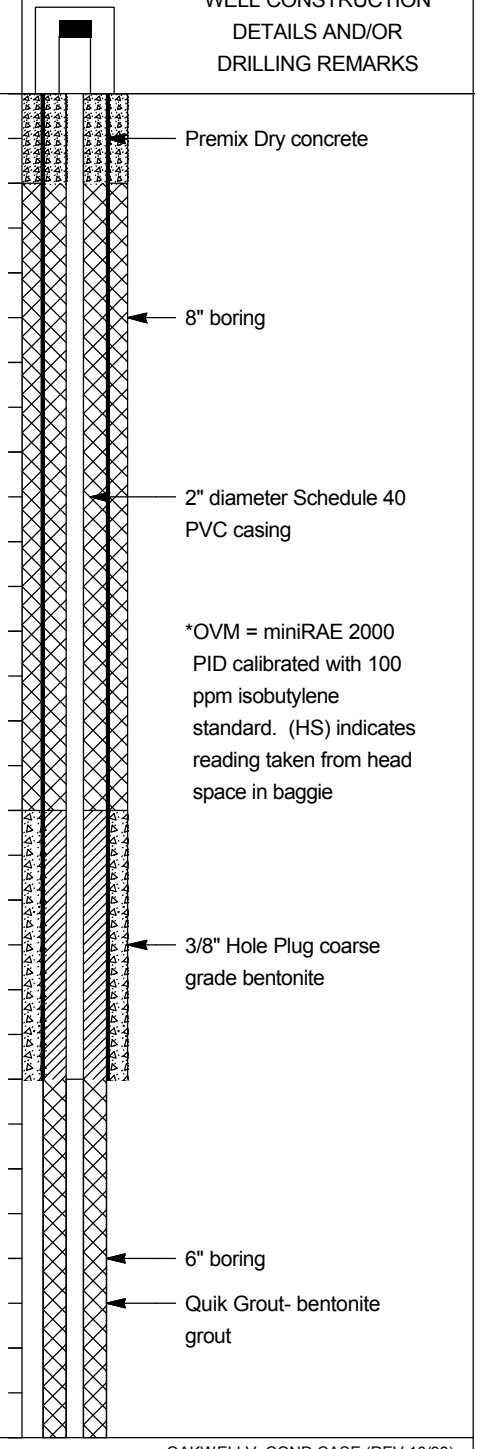
Date Completed 6/7/85 — **Logged By** S. Henshaw



PENETRATION TIME/RATE	DEPTH (FEET)	SAMPLE NO.	SAMPLE TYPE	PERMEABILITY TESTING	SYMBOL	LITHOLOGIC DESCRIPTION	WATER QUALITY
	0						
6/5/5	5	1	SS		SP	5.0-6.5' SAND, gray, medium grained, clean, poorly graded, some organics, "Dredge Spoils", saturated.	
2/4/2		2	SS		SP	6.5-8.0' SAND, gray, same as above.	
1/1/2		3	SS		SP / ML	8.0-9.5' SAND, same as above. 8.0-9.0' SILT, gray-black to green, abundant vegetal matter, SAND/SILT contact at 9.0'	
	10	4	Shelby Tube		ML	9.5-11.5' SILT, same as above, slightly mottled.	
4/4/5		5	SS		ML	11.5-13.0' SILT, same as above, mottled orange.	
2/3/4		6	SS		ML	13.0-14.5' SILT, same as above.	
	15	7	Shelby Tube		ML	14.5-16.5' SILT, same as above.	

PROJECT: Remedial Investigation PSC Washougal	**Log of Well No. MC-14D**
BORING LOCATION: 92652.8 N, 1169943.3 E	GROUND SURFACE ELEVATION AND DATUM: 17.2' MSL NGVD29(47)
DRILLING CONTRACTOR: Cascade Drilling, Inc.	DATE STARTED: 9/28/07 / DATE FINISHED: 9/28/07
DRILLING METHOD: Sonic drilling	TOTAL DEPTH (ft.): 34.0 / SCREEN INTERVAL (ft.): 22.0 to 31.4
DRILLING EQUIPMENT: Prosonic	DEPTH TO WATER: FIRST ~6.0 / COMPL. NA / CASING: 2" Sched. 40 PVC
SAMPLING METHOD: Continuous core [10' x 6"]	LOGGED BY: N. Gray
HAMMER WEIGHT: NA / DROP: NA	RESPONSIBLE PROFESSIONAL: N. Gray / REG. NO. L.G. 2557

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. TOC Elevation: 19.33 feet
0					POORLY GRADED GRAVEL with SILT and SAND (SP-SM): surface gravel POORLY GRADED SAND (SP): brown (10YR 5/3), dry, 95% fine to medium sand, 5% fines
2	MC-14D-2-0907			0/0 (HS)	
3					POORLY GRADED SAND with SILT (SP-SM): brown (10YR 5/3), dry, 80% fine to medium sand, 10% fine gravel, 10% non-plastic fines
4	MC-14D-4-0907 and MC-14D-9-4-0907			0/0 (HS)	
6					wet
7				1/1 (HS)	dark greenish gray, 10GY 4/1
8					ELASTIC SILT (MH): dark greenish gray (10GY 4/1), moist, 95% fines, 5% fine sand, medium plasticity, soft, occasional organics (roots, wood)
10				0/1 (HS)	
12				2	
14				6	



WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS

PROJECT: Remedial Investigation
PSC Washougal

Log of Well No. MC-14D (cont'd)

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
16				1		
17					SILT (ML): grayish brown (10YR 5/2), wet, 90% fines, 10% fine sand, non-plastic, very soft	3/8" Hole Plug coarse grade bentonite
18					SILT (ML): Cont'd	
19				1	WELL GRADED SAND with SILT and GRAVEL (SW-SM): dark grayish brown (10YR 4/2), wet, 50% fine to coarse sand, 30% fine and coarse gravel, 20% non-plastic fines, cobbles up to 6" in diameter	3/8" Hole Plug coarse grade bentonite
20					50% fine to coarse sand, 40% fine and coarse gravel, 10% non-plastic fines	
21						#10/20 filter pack sand
22				0	Dark gray (10Y 4/1)	
23						
24				0		
25						
26						2" diameter, 0.010" slot, Schedule 40 PVC screen
27						
28						
29					SILT (ML)	
30						
31						
32						2" diameter Schedule 40 PVC end cap
33						

OAKWELLV_COND CASE (REV 10/99)

PROJECT: Remedial Investigation
PSC Washougal

Log of Well No. MC-14D (cont'd)

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
34					WELL GRADED GRAVEL with SAND (GW): greenish black (10Y 2.5/1), wet, 80% fine and coarse gravel, 15% fine to coarse sand, 5% fines	Native slough
					Bottom of boring at 34.0 feet. Ecology well ID = BAN152.	
35						
36						
37						
38						
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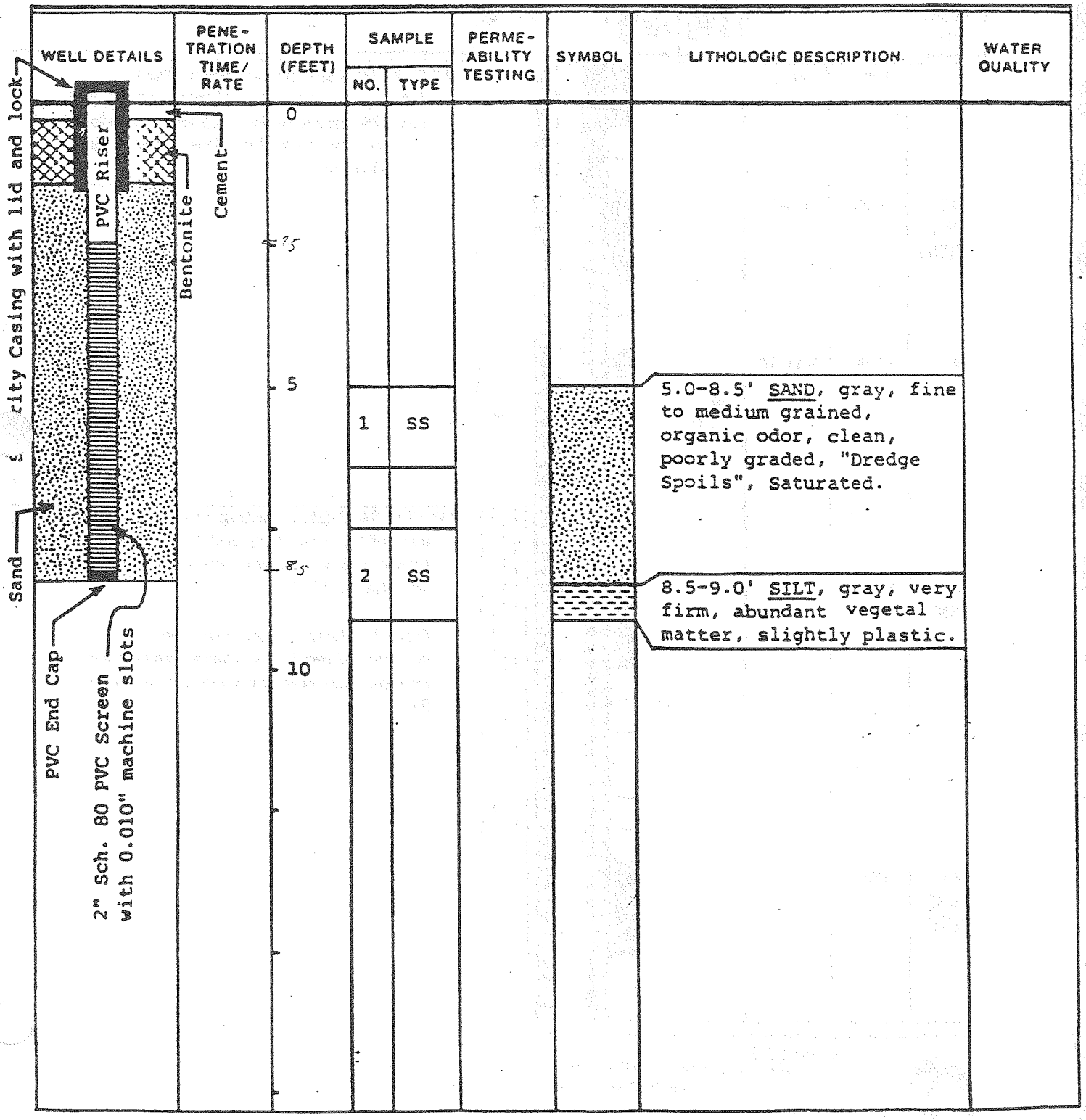
OAKWELLV_COND CASE (REV 10/99)

Sweet, Edwards & Associates, Inc.

BORING LOG

PROJECT McCLARY - COLUMBIA/CHEMICAL PROCESSORS

Location See Map.
Boring No. MC-15
Surface Elevation Top of PVC 17.46' feet
Drilling Method 6" I.D. Hollow Stem Auger
Total Depth 8.5 feet
Drilled By Geo-Tech Explorations, Inc.
Date Completed 9/19/85
Logged By S. Henshaw



SEA-300-02a

LOG OF EXPLORATORY BORING

PROJECT NAME	CHEMPRO	BORING NO.	MC-15D
LOCATION	Washougal, Washington	PAGE	1 OF 2
DRILLED BY	Onwego Drilling Co.	REFERENCE ELEV.	17.46'
DRILL METHOD	Cable Tool	TOTAL DEPTH	26.20'
LOGGED BY	Fredricksen/Udaloy	DATE COMPLETED	6/8/90

SAMPLE NUMBER (SAMPLE TYPE)	RECOVERY PERCENT	BLOW COUNTS (N COMP)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
#1 (G)	100%	N/A						0-7.0' SAND (SP), grayish brown, fine to coarse grain with a trace of coarse gravel; 98% sand, 2% gravel; moist to 5.5 feet, wet below 5.5 feet, loose to medium dense; trace of fine to medium roots. (FILL)
#2 A-B-C 3"(SS)	100%	6-6-7	▼ 3.07'					
#3 (SS)	100%	13-11-10	▽ 5.30'	5				
#4 (SS)	100%	1-1		10				7.0-15.9' SILT (ML), medium olive gray with a trace of fine sand; 10% sand, 90% silt, low plasticity, low dilatancy, very soft to firm, wet. (ALLUVIUM) From 7.5-9.0 feet: trace roots, common sub-vertical root holes to 5mm diameter with brown-orange coatings; sandy silt interbed at 8.0-8.1 feet.
#5 A-B-C 3"(SS)	100%	1-1-1						
				15				

REMARKS

(SS) = Split spoon sampler. (G) = Grab sample. A-B-C sample number with sleeve identifier sleeve A is lower most. Reference elevation is top of PVC pipe. Blow counts not reprrsentative of standard penetration test. Above ground monument installed over well w/1.2' of casing stick-up.

LOG OF EXPLORATORY BORING

PROJECT NAME	CHEMPRO	BORING NO.	MC-15D
LOCATION	Washougal, Washington	PAGE	2 OF 2
DRILLED BY	Onwego Drilling Co.	REFERENCE ELEV.	17.46'
DRILL METHOD	Cable Tool	TOTAL DEPTH	26.20'
LOGGED BY	Fredricksen/Udaloy	DATE COMPLETED	6/8/90

SAMPLE NUMBER (SAMPLE TYPE)	RECOVERY PERCENT	BLOW COUNTS (N COMP)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
#6 (SS)	100%	1-1-2						7.0-15.9' SILT (ML); continued from previous page.
								15.9-18.3' SANDY SILT (ML), moderate gray brown, fine to medium sand, very soft, wet; orange mottles below 17.5 feet. (ALLUVIUM)
#7 (SS)	100%	1-3-17						@ 17.7-18.0 feet: SAND (SP), orange brown, fine to medium.
								18.3-20.0' GRAVEL (GW), orange brown, fine to coarse, subangular to subrounded, some fine to coarse sand; 95% gravel, 5% sand; dense, wet. (ALLUVIUM)
#8 (SS)	100%	12-38-50		20				20.0-26.2' SANDY GRAVEL (GW-GM), reddish brown, fine to coarse, subangular to subrounded with fine to coarse sand; 85% gravel, 15% sand; trace of cobbles, dense to very dense, wet. (ALLUVIUM)
#9 (SS)	100%	50						
#10 (SS)	100%	50		25				
								Bottom of boring at 26.2 feet.
				30				

REMARKS

(SS) = Split spoon sampler. (G) = Grab sample. A-B-C sample number with sleeve identifier sleeve A is lower most. Reference elevation is top of PVC pipe. Blow counts not reprrsentative of standard penetration test. Above ground monument installed over well w/1.2' of casing stick-up.

Sweet, Edwards & Associates, Inc.

BORING LOG

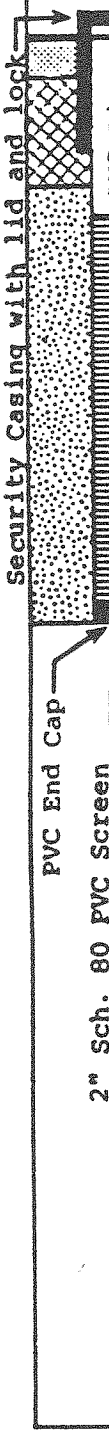
PROJECT McCLARY - COLUMBIA/CHEMICAL REXCESSORS **Page** 1 **of** 1

Location See Map **Boring No.** MC-16

Surface Elevation Top of PVC 17.67 feet **Drilling Method** 6" I.D. Hollow Stem Auger

Total Depth 7.5 feet **Drilled By** Geo-Tech Exploration, Inc.

Date Completed 9/19/85 **Logged By** S. Henshaw



WELL DETAILS	PENETRATION TIME/RATE	DEPTH (FEET)	SAMPLE NO.	SAMPLE TYPE	PERMEABILITY TESTING	SYMBOL	LITHOLOGIC DESCRIPTION	WATER QUALITY
		0						
		5	1	SS		SAND	5.0-7.5' SAND, gray, fine to medium grained, some pebbles, poorly graded, "Dredge Spoils", Saturated.	
			2	SS				
							7.5-8.0' SILT, gray, very firm, abundant vegetal matter, slightly plastic.	
		10						

SEA-300-02a

Sweet, Edwards & Associates, Inc.

BORING LOG

PROJECT McCLARY - COLUMBIA/CHEMICAL PROCESSORS

Location See Map
Boring No. MC-17
Surface Elevation 17.54 feet Top of PVC
Drilling Method 6" I.D. Hollow Stem Auger
Total Depth 7.5 feet
Drilled By Geo-Tech Exploration, Inc.
Date Completed 9/19/85
Logged By S. Henshaw

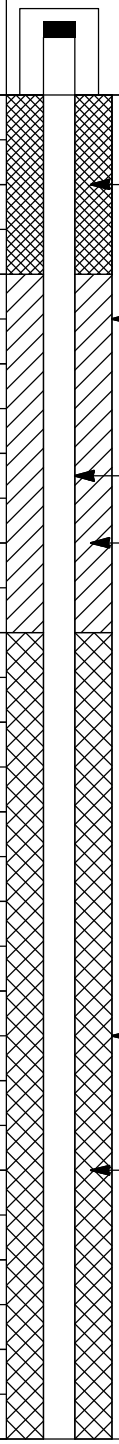
DEPTH (FEET)	SAMPLE NO.	SAMPLE TYPE	PERMEABILITY TESTING	SYMBOL	LITHOLOGIC DESCRIPTION	WATER QUALITY
0						
2.5						
5	1	SS			5.0-7.5' SAND, gray, fine to medium grained, poorly graded, "Dredge Spoils" saturated.	
7.5	2	SS			7.5-8.0 SILT, gray, very firm, abundant vegetal matter, slightly plastic.	
10						

SEA-300-02a

PROJECT: Remedial Investigation PSC Washougal			**Log of Well No. MC-17D**	
BORING LOCATION:			GROUND SURFACE ELEVATION AND DATUM:	
DRILLING CONTRACTOR: Cascade Drilling, Inc.			DATE STARTED: 7/27/99	DATE FINISHED: 7/28/99
DRILLING METHOD: Hollow-stem auger			TOTAL DEPTH (ft.): 33.0	SCREEN INTERVAL (ft.): 22.0 to 32.0
DRILLING EQUIPMENT:			DEPTH TO WATER: FIRST 4.0 / COMPL.	CASING: 2" Sched. 40 PVC
SAMPLING METHOD: SPT split spoon drive sampler [18" x 2.5"] and shelby tube			LOGGED BY: C. Minton/T. Gray	
HAMMER WEIGHT:	DROP:		RESPONSIBLE PROFESSIONAL:	REG. NO.

DEPTH (feet)	SAMPLES Sample No.	SAMPLES Sample	SAMPLES Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:
0			13 50/6"	0	POORLY GRADED GRAVEL (GP): moderate yellowish brown, dry, fine sands to coarse gravel, loose
1			13 39 25	32.4	POORLY GRADED SAND (SP): dark yellowish brown, dry, fine to medium sand with small amounts of fine gravel, loose
2					
3			24 26 13	0	moist
4			17 13 17	0	
5					
6			8 9 5	0	
7					wet, slightly coarser, greenish black
8	MC-17D-7.5-9.5	S			
9					
10			7 7 8	0	
11					CLAY (CL): greenish black, moist, well sorted, medium stiff
12			4 8 10	0	ORGANIC SOIL (OL): dark greenish gray, moist, well sorted, medium stiff
13			5 4 5	0	
14					
15			3 3		softer

WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS



PROJECT: Remedial Investigation
PSC Washougal

Log of Well No. MC-17D (cont'd)

DEPTH (feet)	SAMPLES Sample No.	SAMPLES Sample	SAMPLES Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
15			5	0	ORGANIC SOIL (OL): (continued)	
16			3 6 10			
				0	CLAY (CL): dark greenish gray, wet, very fine to fine sands, sandy silt, soft, well sorted	
17						Quikgrout bentonite powder
			5 8 30			
18				0		
19			4 7 10			8.75" diameter borehole
20				0		
			10 50/5"		higher sand content	
21				0		
22			50/3"	0	SILTY GRAVEL (GM): moderate yellowish brown, very wet, fine silt to fine gravel, poorly sorted, loose	
23					CLAY (CL): moderate yellowish brown, moist, clayey sand, well sorted, dense sand, fine clay, silt, and sand	
			17 50/5"			
24				0		10/20 Colorado silica sand
25			50/5"	0		
				0		
26					CLAYEY SAND (SC): moderate yellowish brown with orange tint, moist, fine clay and sand, well sorted, soft	
			12 50/6"			
27						2" diameter Schedule 40 PVC well screen with 0.010-inch slot
28			50/6"			
				0		
29			50/5"			
30				0		
31			50/6"			
				0		
32						2" diameter Schedule 40 PVC end cap
33						

OAKWELLV (REV. 9/2007)

PROJECT: Remedial Investigation
PSC Washougal

Log of Well No. MC-17D (cont'd)

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
33					Bottom of boring at 33.0 feet	Finished with steel 6.5" diameter surface casing
34						
35						
36						
37						
38						
39						
40						
41						
42						
43						
44						
45						
46						
47						
48						
49						
50						
51						

OAKWELLV (REV. 9/2007)

LOG OF EXPLORATORY BORING

PROJECT NAME	CHEMPRO	BORING NO.	MC-18
LOCATION	Washougal, Washington	PAGE	1 OF 2
DRILLED BY	Onwego Drilling Co	REFERENCE ELEV.	17.33'
DRILL METHOD	Cable Tool	TOTAL DEPTH	25.30'
LOGGED BY	R. Fredricksen	DATE COMPLETED	6/13/90

SAMPLE NUMBER (SAMPLE TYPE)	RECOVERY PERCENT	BLOW COUNTS (N COMP)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
#1 (G)	100%	N/A						0.0-0.3' ASPHALT.
#2 A-B-C 3"(SS)	93%	10-12-14	3.35' ▽ Water added below 3.5'	5				0.3-5.2' SAND (SP); grayish brown, medium to coarse, nonplastic, loose with trace amounts of rounded to subrounded gravels approximately .25 to .75 inches; 1% gravels, 9% silt, 90% sand; damp to moist below 5.0 feet. (FILL)
#3 (SS)	68%	5-7-10						5.2-8.5' SILTY SAND (SP-SM); gray, medium to fine grain, nonplastic (just below plastic limit), slightly moldable, loose, moist, 5-15% silt, 85% sand. (ALLUVIUM)
#4 (SS)	53%	2-2-3						At 7.7 feet color becomes dark gray and more compact with less moisture.
#5 (SS)	60%	2-2-3		10				8.5-14.5' SILT (ML); dark gray, plastic, damp, soft to stiff, mottled with minor orange stain (approximately 2-5%), woody debris, sub-vertical root structures; 10% sand, 90% silt. (ALLUVIUM)
#6 A-B-C 3"(SS)	66%	1-2-4						
#7 (SS)	100%	2-2-8		15				14.5-15.1' SANDY SILT (SM); greenish brown, nonplastic, damp, soft to firm, brown mottling and minor orange stain; 40% sand, 60% silt. (ALLUVIUM)

REMARKS

(SS) = Split spoon sampler. (G) = Grab sample. A-B-C sample number with sleeve identifier sleeve A is lower most.
Reference elevation is top of PVC pipe. Blow counts not representative of standard penetration test.

SWEET-EDWARDS/EMCON

Figure 2

LOG OF EXPLORATORY BORING

PROJECT NAME	CHEMPRO	BORING NO.	MC-18
LOCATION	Washougal, Washington	PAGE	2 OF 2
DRILLED BY	Onwego Drilling Co	REFERENCE ELEV.	17.33'
DRILL METHOD	Cable Tool	TOTAL DEPTH	25.30'
LOGGED BY	R. Fredricksen	DATE COMPLETED	6/13/90

SAMPLE NUMBER (SAMPLE TYPE)	RECOVERY PERCENT	BLOW COUNTS (N COMP)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	WELL DETAILS	LITHO-LOGIC COLUMN	LITHOLOGIC DESCRIPTION
#8 A-B-C 3"(SS)	86%	2-4-15						15.1-16.0' SILT (ML); dark gray, plastic, damp, stiff to firm, some mottling and orange stain; 10% sand, 90% silt. (ALLUVIUM)
								16.0-17.0' SANDY SILT (SM); greenish brown, nonplastic, damp, soft to firm, brown mottling and minor orange stain; 1% gravel, 30% sand, 60% silt. (ALLUVIUM)
#9 (SS)	78%	20-40-50						17.0-25.0' SANDY GRAVEL (GW-GM); brown to reddish brown, nonplastic, subangular to subrounded .25 to .75 inch gravels, various lithologies, with trace of decomposing volcanics (Tuff), dense, wet, matrix consists of silty sand, 30% silt, 70% sand; overall 35% matrix, 65% gravels. (ALLUVIUM)
				20				
#10 (SS)	100%	50						
				25				Bottom of boring at 25.0 feet.
#11 (SS)	100%	50						
				30				

REMARKS

(SS) = Split spoon sampler. (G) = Grab sample. A-B-C sample number with sleeve identifier sleeve A is lower most.
Reference elevation is top of PVC pipe. Blow counts not representative of standard penetration test.

SWEET-EDWARDS/EMCON

S9405.05.CHEMP.062790.MMM

PROJECT: Remedial Investigation PSC Washougal			**Log of Well No. MC-19D**	
BORING LOCATION:			GROUND SURFACE ELEVATION AND DATUM:	
DRILLING CONTRACTOR: Cascade Drilling, Inc.			DATE STARTED: 7/26/99	DATE FINISHED: 7/28/99
DRILLING METHOD: Hollow-stem auger			TOTAL DEPTH (ft.): 39.0	SCREEN INTERVAL (ft.): 28.0 to 38.0
DRILLING EQUIPMENT:			DEPTH TO WATER: FIRST 5.0 / COMPL.	CASING: 2" Sched. 40 PVC
SAMPLING METHOD: SPT split spoon drive sampler [18" x 2.5"] and Shelby			LOGGED BY: C. Minton/T. Gray	
HAMMER WEIGHT:	DROP:		RESPONSIBLE PROFESSIONAL:	REG. NO.

DEPTH (feet)	SAMPLES Sample No.	SAMPLES Sample	SAMPLES Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
0					Debris, wood, scrap metals, dirt	
				0		
1					POORLY GRADED SAND (SP): moderate yellowish brown, dry to moist, fine to medium sand, loose	Quickrete concrete
			50/5"	0		
2						
3			8 16 12	0		15" diameter borehole
4						2" diameter Schedule 40 PVC casing
			10 15 16			
5				0	wet, dark gray	Annular Seal (3/8 Bardid holeplug bentonite chips)
6			5 6 6			
				0	woody debris	
7			6 7 8			
8				0		
					ORGANIC SOIL (OL): greenish black, moist, well sorted, very fine, medium dense, trace wood debris	
9			6 6			
				0		
10			4 5 6			
				1.1		
11						8.75" diameter borehole
			5 4 6		CLAY (CL): soft, moist, with some sand with some mica	
12				2.9		
13			6 6 6		very soft and soupy	
				2.6		
14						
			3 4			
15						

OAKWELLV (REV. 9/2007)

PROJECT: Remedial Investigation
PSC Washougal

Log of Well No. MC-19D (cont'd)

DEPTH (feet)	SAMPLES Sample No.	SAMPLES Sample	SAMPLES Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
15			5	2.0	CLAY (CL): (continued)	
16			3 3 4	0.5	medium stiff	
17			3 3 3		soft	
18				1.4	medium stiff	8.75" diameter borehole
19			4 4 5		soft	
20				0.1	medium stiff	Annular Seal (3/8 Bardid holeplug bentonite chips)
21			3 4 7	0.2		
22			4 5 7		CLAY (CL): greenish black, moist, well sorted, medium stiff, with some sand	
23				0.6		
24			7 8 13		soft	
25			10 12 12	0.1	medium stiff, orange tint	
26				0.5	stiff	
27			10 50/3"		moderate yellowish brown, soft	10/20 Colorado silica sand
28			50/5"	0	stiff	
29				0	CLAYEY GRAVEL (GC): moderate brown, wet, fine to medium, fine clays, fine to coarse sands, poorly sorted, medium dense	
30			50/4"	0	POORLY GRADED GRAVEL (GP): moderate brown, wet, fine sand, coarse gravel, little or no clay, medium dense	2" diameter Schedule 40 PVC well screen with 0.010-inch slot
31			50/6"	0		
32			50/5"			
33						

OAKWELLV (REV. 9/2007)

PROJECT: Remedial Investigation
PSC Washougal

Log of Well No. MC-19D (cont'd)

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
33				0	POORLY GRADED GRAVEL (GP): (continued)	
34			50/6"	0	increased sand content	
35						
36			50/5"	0	SILTY SAND (SM): dark yellowish brown, wet, sands and some silts, fine gravel, fine sand, medium dense, poorly sorted	
37			50/6"	0.1		
38	MC-19D-38.5-39	S				
39					Bottom of boring at 39.0 feet	
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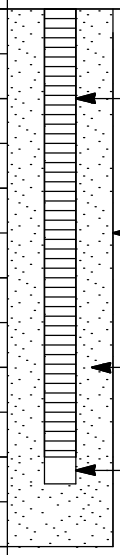


2" diameter Schedule 40 PVC well screen with 0.010-inch slot

8.75" diameter borehole

10/20 Colorado silica sand

2" diameter Schedule 40 PVC end cap

Finished with steel 6.5" diameter surface casing

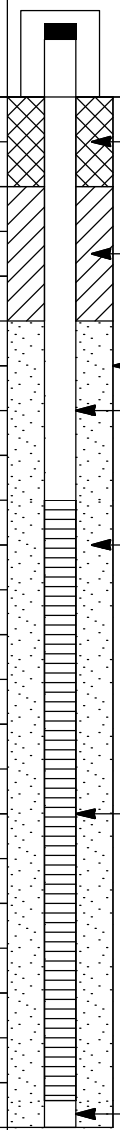
*Attempt to take a shelby tube at 38.5 feet. We were only able to drive it 6" - 0930 collect sample MC-19D-39.5 to 39. No geological description.

OAKWELLV (REV. 9/2007)

PROJECT: Remedial Investigation PSC Washougal	**Log of Well No. MC-20**
BORING LOCATION:	GROUND SURFACE ELEVATION AND DATUM: 19.70 feet
DRILLING CONTRACTOR: Cascade Drilling, Inc.	DATE STARTED: 3/13/00 / DATE FINISHED: 3/13/00
DRILLING METHOD: Hollow-stem auger	TOTAL DEPTH (ft.): 11.5 / SCREEN INTERVAL (ft.): 4.4 to 11.4
DRILLING EQUIPMENT:	DEPTH TO WATER: FIRST 5.3 / COMPL. / CASING: 2" Sched. 40 PVC
SAMPLING METHOD: SPT split spoon drive sampler [18" x 2.5"] and Shelby	LOGGED BY: T. Gray/S. Magnuson
HAMMER WEIGHT: / DROP:	RESPONSIBLE PROFESSIONAL: / REG. NO.

DEPTH (feet)	Sample No.	Sample	Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation: 19.70 feet
0					ASPHALT
1			3 2 3	0	POORLY GRADED SAND (SP): dark yellowish brown, dry, loose
2					with coarse gravel; orange spots
3			3 3 2	0	
4			4 3 4	0	wet
5					
6			3 3 4	0	
7					
8		S			
9			1 4 12	0	woody debris
10			1 1		ORGANIC SOIL (OL): dark gray, wet, with fine sand, medium stiff
11				0	CLAYEY SAND (SC): silt/sand mixture, soft
12					Bottom of boring at 11.5 feet
13					
14					
15					

WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS



- Grout (JetSet complete Concrete)
- Annular Seal (3/8, holeplug coarse grade bentonite)
- 8.75" diameter borehole
- 2" diameter Schedule 40 PVC casing
- 10/20 Colorado silica sand
- 2" diameter Schedule 40 PVC well screen with 0.010-inch slot
- 2" diameter Schedule 40 PVC end cap
- Finished with three posts and stick-up monument.

OAKWELLV (REV. 9/2007)

PROJECT: Remedial Investigation PSC Washougal	**Log of Well No. MC-20D**
BORING LOCATION: 92628.7 N, 1170036.4 E	GROUND SURFACE ELEVATION AND DATUM: 17.8' MSL NGVD29(47)
DRILLING CONTRACTOR: Cascade Drilling, Inc.	DATE STARTED: 9/27/07 / DATE FINISHED: 9/27/07
DRILLING METHOD: Sonic drilling	TOTAL DEPTH (ft.): 37.0 / SCREEN INTERVAL (ft.): 25.5 to 35.0
DRILLING EQUIPMENT: Prosonic	DEPTH TO WATER: FIRST ~6.0 / COMPL. NA / CASING: 2" Sched. 40 PVC
SAMPLING METHOD: Continuous core [10' x 6"]	LOGGED BY: C. Brown
HAMMER WEIGHT: NA / DROP: NA	RESPONSIBLE PROFESSIONAL: N. Gray / REG. NO. L.G. 2557

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
					TOC Elevation: 20.18 feet	
0					POORLY GRADED SAND with SILT (SP-SM): brown (7.5YR 5/2), dry, 80% fine to coarse sand, 10% fine gravel, 10% non-plastic fines	Premix Dry concrete
2	MC-20D-2-0907			0/1 (HS)	scattered gravel	8" boring
4	MC-20D-4-0907			0/1 (HS)		2" diameter Schedule 40 PVC casing
6					scattered organics (roots)	Quik Grout- bentonite grout
7				0/1 (HS)	orange mottling	
8					ELASTIC SILT (MH): very dark gray (N 3/), moist, 95% fines, 5% fine sand, medium to high plasticity, very soft	
10				0/1 (HS)		3/8" Hole Plug coarse grade bentonite
11					SILT (ML): very dark gray (N 3/)	
13				0/0 (HS)		6" boring
14						*OVM = miniRAE 2000 PID calibrated with 100 ppm isobutylene
15				0/1		

OAKWELLV_COND CASE (REV 10/99)

PROJECT: Remedial Investigation
PSC Washougal

Log of Well No. MC-20D (cont'd)

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
16				(HS)		standard. (HS) indicates reading taken from head space in baggie
17				0/1 (HS)	SILT with SAND (ML): light greenish gray (10GY 7/1), moist, 75% fines, 25% fine to medium sand, low plasticity, hard	
18					SILT with SAND (ML): cont'd	
19				0/0 (HS)		Quik Grout- bentonite grout
20				0/1 (HS)		
21					WELL GRADED SAND with SILT (SW-SM): very dark greenish gray (10BG 3/1), wet, 65% fine to coarse sand, 35% fine and coarse gravel, 10% nonplastic fines	
22						3/8" Hole Plug coarse grade bentonite
23				0/1 (HS)		
24				0/1 (HS)		
25						#10/20 filter pack sand
26						
27						2" diameter, 0.010" slot, Schedule 40 PVC screen
28				0/0 (HS)		
29					SILTY SAND with GRAVEL (SM): very dark greenish gray (10BG 3/1), wet, 55% fine to coarse sand, 25% fine and coarse gravel, 20% non-plastic fines	
30				0/0 (HS)		
31				0/0 (HS)		
32						
33						

OAKWELLV_COND CASE (REV 10/99)

PROJECT: Remedial Investigation
PSC Washougal

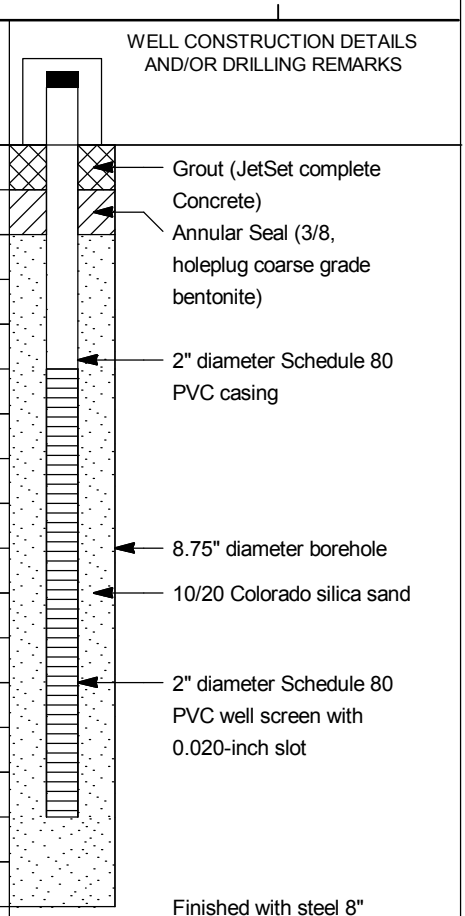
Log of Well No. MC-20D (cont'd)

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
34				0/1 (HS)		
				0/1 (HS)		
35						2" diameter Schedule 40 PVC end cap
36				0/0 (HS)		
37					Bottom of boring at 37.0 feet. Ecology well ID = BAN151.	
38						
39						
40						
41						
42						
43						
44						
45						
46						
47						
48						
49						
50						
51						

OAKWELLV_COND CASE (REV 10/99)

PROJECT: Remedial Investigation PSC Washougal	**Log of Well No. MC-21**
BORING LOCATION:	GROUND SURFACE ELEVATION AND DATUM: 16.79 feet
DRILLING CONTRACTOR: Cascade Drilling, Inc.	DATE STARTED: 3/13/00 / DATE FINISHED: 3/13/00
DRILLING METHOD: Hollow-stem auger	TOTAL DEPTH (ft.): 8.5 / SCREEN INTERVAL (ft.): 2.5 to 7.5
DRILLING EQUIPMENT:	DEPTH TO WATER: FIRST 4.5 / COMPL. / CASING: 2" Sched. 80 PVC
SAMPLING METHOD: SPT split spoon drive sampler [18" x 2.5"]	LOGGED BY: T. Gray/S. Magnuson
HAMMER WEIGHT: / DROP:	RESPONSIBLE PROFESSIONAL: / REG. NO.

DEPTH (feet)	SAMPLES Sample No.	SAMPLES Sample	SAMPLES Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation: 16.79 feet
0					ASPHALT
1			9 10 17	0	POORLY GRADED SAND (SP): dark yellowish brown, dry, no fines, medium grain, loose
2					
3			4 8 10	0	with fine gravel 3/4"
4			4 4	0	wet
5					
6		S			
7			1 2 2	14.5	SILT (ML): olive gray, wet, no organics, stiff
8					CLAY (CL): olive gray, wet, with fine sand, medium stiff
9					Bottom of boring at 8.5 feet.
10					
11					
12					
13					
14					
15					



WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS

OAKWELLV (REV. 9/2007)

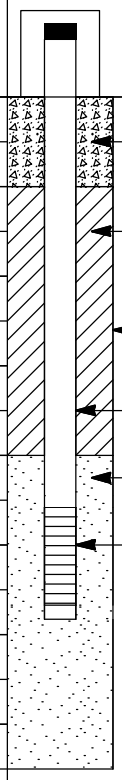
PROJECT: Monitoring Well Replacement PSC Washougal	**Log of Well No. MC-22**
BORING LOCATION:	GROUND SURFACE ELEVATION AND DATUM:
DRILLING CONTRACTOR: Cascade Drilling, Inc.	DATE STARTED: 9/27/01 / DATE FINISHED: 9/27/01
DRILLING METHOD: Hollow-stem auger	TOTAL DEPTH (ft.): 7.5 / SCREEN INTERVAL (ft.): 4.5 to 7.0
DRILLING EQUIPMENT: CME-75	DEPTH TO WATER: / FIRST / COMPL. / CASING: 2" Sched. 40 PVC
SAMPLING METHOD: SPT split spoon drive sampler [18" x 1.5"]	LOGGED BY: C. Johnson/T. Gray
HAMMER WEIGHT: 140 lb / DROP: 30 inches	RESPONSIBLE PROFESSIONAL: / REG. NO.

DEPTH (feet)	SAMPLES Sample No.	SAMPLES Sample	SAMPLES Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
0			37 17 25	0	WELL GRADED GRAVEL (GW): grayish brown, dry, road bed material, loose, gravel with coarse sand	Surface Seal (Concrete/JetSet)
1			10 13 16	0	POORLY GRADED SAND (SP): dark yellowish brown, dry, moderately sorted, fine sand, loose	Annular Seal (3/8, holeplug coarse grade Wyoming bentonite)
2						8.75" diameter borehole
3			8 10 10	0	with interbedded pieces of silt	2" diameter Schedule 40 PVC casing
4			8 5 4	0		2/12 Lapis Lustre Monterey silica sand
5					moist	
6			11 10 11			2" diameter Schedule 40 PVC well screen with 0.010-inch slot
7					ORGANIC SOIL (OL): light olive gray with pale yellowish brown tones, moist, well sorted, very stiff, no plasticity, little light brown woody debris in few places	
8					Bottom of boring at 7.5 feet	Completed with steel 5-foot stand-up casing (6.5" diameter)
9						
10						
11						
12						
13						
14						
15						

OAKWELLV (REV. 9/2007)

PROJECT: Monitoring Well Replacement PSC Washougal	**Log of Well No. MC-23**
BORING LOCATION:	GROUND SURFACE ELEVATION AND DATUM:
DRILLING CONTRACTOR: Cascade Drilling, Inc.	DATE STARTED: 9/27/01 / DATE FINISHED: 10/3/01
DRILLING METHOD: Hollow-stem auger	TOTAL DEPTH (ft.): 7.5 / SCREEN INTERVAL (ft.): 4.6 to 5.7
DRILLING EQUIPMENT: CME-75	DEPTH TO WATER: / FIRST: / COMPL.: / CASING: 2" Sched. 40 PVC
SAMPLING METHOD: SPT split spoon drive sampler [18" x 1.5"]	LOGGED BY: C. Johnson/T. Gray
HAMMER WEIGHT: 140 lb / DROP: 30 inch	RESPONSIBLE PROFESSIONAL: / REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:
0			7 30 50/6"	0	POORLY GRADED GRAVEL (GP): grayish brown, very dry, road bed material, loose, gravelly sand
1					
2			11 12 13	6.6	POORLY GRADED SAND (SP): dark yellowish brown, dry, fine with some medium fine sands, moderately well sorted, loose
3			5 14 20		
4				0	ORGANIC SOIL (OL): light olive gray, very dry, well sorted, no plasticity, light brown woody debris throughout, with pale yellowish brown tones, very stiff
5			12 14 26	0	
6			5 8 10		
7				0	moist stiff Bottom of boring at 7.5 feet
8					
9					
10					
11					
12					
13					
14					
15					



WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS

- Surface Seal (Concrete/JetSet)
- Annular Seal (3/8, holeplug coarse grade Wyoming bentonite)
- 6.25" diameter borehole
- 2" diameter Schedule 40 PVC casing
- 2/12 Lapis Lustre Monterey silica sand
- 2" diameter Schedule 40 PVC well screen with 0.010-inch slot

Completed with steel 5-foot stand-up casing (6.5" diameter)

OAKWELLV (REV. 9/2007)

PROJECT: Remedial Investigation
PSC Washougal

Log of Well No. MC-24

BORING LOCATION: 92595.5 N, 1169765.0 E

GROUND SURFACE ELEVATION AND DATUM: 16.8' MSL NGVD29(47)

DRILLING CONTRACTOR: Cascade Drilling, Inc.

DATE STARTED: 9/24/07

DATE FINISHED: 9/24/07

DRILLING METHOD: Hollow-stem auger

TOTAL DEPTH (ft.): 9.2

SCREEN INTERVAL (ft.): 4.1 to 8.9

DRILLING EQUIPMENT: CME-75

DEPTH TO WATER: FIRST 6.0 COMPL. NA

CASING: 2" Sched. 40 PVC

SAMPLING METHOD: SPT split spoon drive sampler [18" x 1.5"]

LOGGED BY: C. Brown

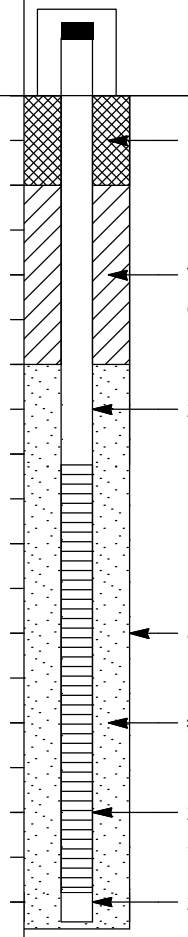
HAMMER WEIGHT: 300 lb

DROP: 30 inches

RESPONSIBLE PROFESSIONAL: N. Gray

REG. NO. L.G. 2557

DEPTH (feet)	Sample No.	Sample	Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.
					Surface Elevation: 19.49 feet
1	MC-24-1.5-0907		32	0/0 (HS)	POORLY GRADED SAND with SILT (SP-SM): grayish brown (10YR 5/2), dry, 80% fine to coarse sand, 10% fine gravel, 10% nonplastic fines
2			27	0/2 (HS)	
3	MC-24-3-0907				
4	MC-24-4.5-0907		7	0/2 (HS)	POORLY GRADED SAND with SILT and GRAVEL (SP-SM): very dark grayish brown (10YR 3/2), moist, 75% fine to coarse sand, 15% fine gravel, 10% nonplastic fines
5			9	0/2 (HS)	wood fragments
6					
7			5	0/2 (HS)	POORLY GRADED SAND with SILT (SP-SM): very dark gray (N 3/), wet, 90% fine to medium sand, 10% nonplastic fines SILT (ML): medium plasticity
8			4	0/2 (HS)	ELASTIC SILT (MH): very dark gray (N 3/), moist, 95% fines, 5% fine sand, medium plasticity, firm
9					Bottom of boring at 9.3 feet. Ecology well ID = APS714.
10					
11					
12					
13					
14					
15					



WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS

*OVM = miniRAE 2000 calibrated with 100 ppm isobutylene standard. (HS) indicates reading taken from head space in baggie

PROJECT: Remedial Investigation PSC Washougal	**Log of Well No. MC-24D**
BORING LOCATION: 92592.1 N, 1169771.4 E	GROUND SURFACE ELEVATION AND DATUM: 16.9' MSL NGVD29(47)
DRILLING CONTRACTOR: Boart Longyear	DATE STARTED: 10/1/07 / DATE FINISHED: 10/1/07
DRILLING METHOD: Sonic drilling	TOTAL DEPTH (ft.): 33.0 / SCREEN INTERVAL (ft.): 22.0 to 32.0
DRILLING EQUIPMENT: Prosonic	DEPTH TO WATER: FIRST ~0.0 / COMPL. NA / CASING: 2" Sched. 40 PVC
SAMPLING METHOD: Continuous core [10' x 6"]	LOGGED BY: N. Gray
HAMMER WEIGHT: NA / DROP: NA	RESPONSIBLE PROFESSIONAL: N. Gray / REG. NO. L.G. 2557

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation: 19.03 feet	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
0					POORLY GRADED SAND with SILT and GRAVEL (SP-SM): brown (10YR 4/3), wet, 50% fine to coarse sand, 40% fine gravel, 10% non-plastic fines	premix dry concrete
1	MC-24D-1.5-1007			0 (HS)		*OVM = miniRAE 2000 PID calibrated with 100 ppm isobutylene standard. (HS) indicates reading taken from head space in baggie
2					60% sand, 30% fine gravel, 10% fines	
3					POORLY GRADED SAND (SP): brown (10YR 4/3), wet, 95% fine to coarse sand, 5% fines	
4	MC-24D-4-1007			0 (HS)		8" boring
5					dark greenish gray (10Y 4/1)	2" diameter Schedule 40 PVC casing
6				0 (HS)		Quik Grout- bentonite grout
7				0 (HS)		
8					ELASTIC SILT (MH): dark greenish gray (10Y 4/1), wet, 95% fines, 5% fine sand, medium plasticity, very soft, organic matter throughout	
9				0 (HS)		3/8" Hole Plug coarse grade bentonite
10					less organic matter, moist	
11						
12						Quik Grout- bentonite grout
13						6" boring
14					orange mottling	
15						

OAKWELLV (REV. 9/2007)

PROJECT: Remedial Investigation
PSC Washougal

Log of Well No. MC-24D (cont'd)

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
15					greenish mottling	
16						
17					low plasticity	
18				0 (HS)	ELASTIC SILT (MH): Cont'd	
19					90% fines, 10% fine sand	
20				0 (HS)	SILTY GRAVEL with SAND (GM): dark yellowish brown (10YR 4/4), wet, 55% fine and coarse well graded gravel, 30% fine to coarse sand, 15% medium plasticity fines	3/8" Hole Plug coarse grade bentonite
21						#10/20 filter pack sand
22				0 (HS)		
23						
24				0 (HS)		
25						
26						2" diameter, 0.010" slot, Schedule 40 PVC screen
27				0 (HS)		
28						
29						
30				0 (HS)	POORLY GRADED SAND (SP): dark yellowish brown (10YR 4/4), wet, 95% fine to coarse sand, 5% fines	
31						
32					dark orange black	2" diameter Schedule 40 PVC end cap
33						

OAKWELLV (REV. 9/2007)

PROJECT: Remedial Investigation
PSC Washougal

Log of Well No. MC-24D (cont'd)

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
33					Bottom of boring at 33.0 feet. Ecology well ID = BAN153.	
34						
35						
36						
37						
38						
39						
40						
41						
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51						

OAKWELLV (REV. 9/2007)

PROJECT: Remedial Investigation PSC Washougal	**Log of Well No. MC-24D2**
BORING LOCATION: 92603.5 N, 1169771.2 E	GROUND SURFACE ELEVATION AND DATUM: 16.4' MSL NGVD29(47)
DRILLING CONTRACTOR: Cascade Drilling, Inc.	DATE STARTED: 5/8/09 / DATE FINISHED: 5/8/09
DRILLING METHOD: Sonic drilling	TOTAL DEPTH (ft.): 46.0 / SCREEN INTERVAL (ft.): 34.8 to 44.6
DRILLING EQUIPMENT: Sonicor 50k	DEPTH TO WATER: FIRST 3.0, COMPL. 4.35 / CASING: 2" Sched. 40 PVC
SAMPLING METHOD: Continuous core [10' x 6"]	LOGGED BY: C. Brown
HAMMER WEIGHT: NA / DROP: NA	RESPONSIBLE PROFESSIONAL: N. Gray / REG. NO. L.G. 2557

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
					Surface Elevation: 16.4 feet	
0					POORLY GRADED SAND with SILT and GRAVEL (SP-SM): brown (10YR 4/3), wet, 50% fine to coarse sand, 40% fine gravel, 10% non-plastic fines	Quikrete concrete
1						
2					60% sand, 30% fine gravel, 10% fines	8" boring
3					POORLY GRADED SAND (SP): brown (10YR 4/3), wet, 95% fine to coarse sand, 5% fines	
4						2" diameter Schedule 40 PVC casing
5					dark greenish gray (10Y 4/1)	
6						Volclay Grout
7					ELASTIC SILT (MH): dark greenish gray (10Y 4/1), wet, 95% fines, 5% fine sand, medium plasticity, very soft, organic matter throughout	
8						
9					less organic matter, moist	
10						3/8" HydroPlug bentonite chips
11						
12						
13						
14					orange mottling	6" boring
15						

OAKWELLV (REV. 9/2007)

PROJECT: Remedial Investigation
PSC Washougal

Log of Well No. MC-24D2 (cont'd)

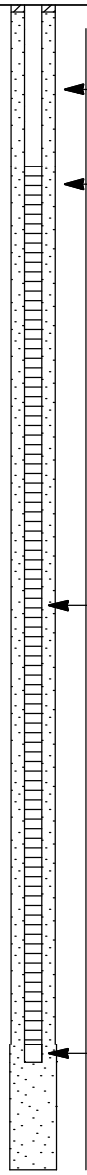
DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
15					greenish mottling	6" boring
16					(MH) cont.	
17					low plasticity	2" diameter Schedule 40 PVC casing
18						
19					90% fines, 10% fine sand	
20					SILTY GRAVEL with SAND (GM): dark yellowish brown (10YR 4/4), wet, 55% fine and coarse well graded gravel, 30% fine to coarse sand, 15% medium plasticity fines	Volclay Grout
21						
22						
23						
24						
25						
26						
27						
28						
29						
30					POORLY GRADED SAND with SILT and GRAVEL (SP-SM): dark yellowish brown (10YR 3/4), wet, 75% fine to coarse sand, 15% rounded fine gravel, 10% fines	
31						
32					dark orange black	3/8" HydroPlug bentonite chips
33						

OAKWELLV (REV. 9/2007)

PROJECT: Remedial Investigation
PSC Washougal

Log of Well No. MC-24D2 (cont'd)

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
33					(SP-SM) cont.	
34						Cemex Lapis Lustre #10/20 filter sand
35						6" boring
36						
37					dark grayish brown (10YR 4/2)	
38						
39					POORLY GRADED SAND with SILT (SP-SM): dark grayish brown (10YR 4/2), wet, 90% fine to medium sand, 10% low plasticity fines	2" diameter, 0.010" slot, Schedule 40 PVC screen
40						
41						
42						
43						
44						
45						2" diameter Schedule 40 PVC end cap
46					Bottom of boring at 46.0 feet. Ecology well tag number: BBA-758.	
47						
48						
49						
50						
51						



OAKWELLV (REV. 9/2007)

PROJECT: Remedial Investigation
PSC Washougal

Log of Well No. MC-25

BORING LOCATION: 92688.2 N, 1169758.3 E

GROUND SURFACE ELEVATION AND DATUM: 17.4' MSL NGVD29(47)

DRILLING CONTRACTOR: Cascade Drilling, Inc.

DATE STARTED: 9/24/07

DATE FINISHED: 9/24/07

DRILLING METHOD: Hollow-stem auger

TOTAL DEPTH (ft.): 9.8

SCREEN INTERVAL (ft.): 4.0 to 8.8

DRILLING EQUIPMENT: CME-75

DEPTH TO WATER: FIRST 3.8 | COMPL. NA

CASING: 2" Sched. 40 PVC

SAMPLING METHOD: SPT split spoon drive sampler [18" x 1.5"]

LOGGED BY: N. Gray

HAMMER WEIGHT: 300 lb

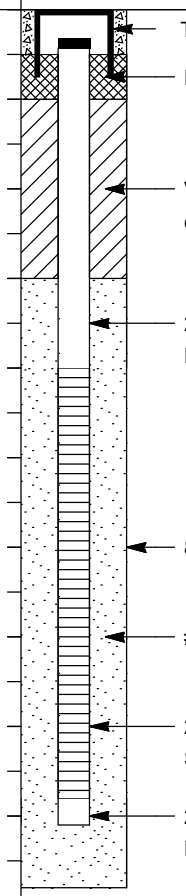
DROP: 30 inches

RESPONSIBLE PROFESSIONAL: N. Gray

REG. NO. L.G. 2557

DEPTH (feet)	SAMPLES Sample No.	SAMPLES Sample	SAMPLES Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.
					Surface Elevation: 16.97 feet
0	MC-25-1.5-0907		24	0/0 (HS)	POORLY GRADED SAND (SP): light olive brown (2.5Y 5/3), dry, 90% fine to coarse sand, 5% fine gravel, 5% fines
1				0/0 (HS)	olive brown (2.5Y 4/3), 95% fine to coarse sand, 5% fines
2	MC-25-3-0907		25		small wood fragment
3				0/1 (HS)	
4	MC-25-4-0907		19		gray (2.5Y 5/1), banded coloring, wet
5				0/1 (HS)	
6			18		very dark gray (N 4/)
7			7	0/1 (HS)	
8			2	0/2 (HS)	ELASTIC SILT (MH): dark greenish gray (10Y 4/1), moist, 95% fines, 5% fine sand, medium plasticity, firm
9					
10					Bottom of boring at 9.8 feet. Ecology well ID = APS715.
11					
12					
13					
14					
15					

WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS



*OVM = miniRAE 2000 PID calibrated with 100 ppm isobutylene standard. (HS) indicates reading taken from head space in baggie

OAKWELLV (REV. 4/00)

PROJECT: Remedial Investigation PSC Washougal	**Log of Well No. MC-25D**
BORING LOCATION: 92684.9 N, 1169763.9 E	GROUND SURFACE ELEVATION AND DATUM: 17.0' MSL NGVD29(47)
DRILLING CONTRACTOR: Cascade Drilling, Inc.	DATE STARTED: 10/2/07 / DATE FINISHED: 10/2/07
DRILLING METHOD: Sonic drilling	TOTAL DEPTH (ft.): 34.0 / SCREEN INTERVAL (ft.): 23.0 to 32.5
DRILLING EQUIPMENT: Prosonic	DEPTH TO WATER: FIRST ~3.0 / COMPL. NA / CASING: 2" Sched. 40 PVC
SAMPLING METHOD: Continuous core [10' x 6"]	LOGGED BY: N. Gray
HAMMER WEIGHT: NA / DROP: NA	RESPONSIBLE PROFESSIONAL: N. Gray / REG. NO. L.G. 2557

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
					TOC Elevation: 16.71 feet	
1	MC-25D-1.5-1007			0/0 (HS)	POORLY GRADED SAND with SILT and GRAVEL (SP-SM): brown (10YR 4/3), wet, 50% fine to coarse sand, 40% fine gravel, 10% non-plastic fines	Traffic Box Premix Dry concrete
2						
3						8" boring
4	MC-25D-4-1007					2" diameter Schedule 40 PVC casing
5				0/0 (HS)	POORLY GRADED SAND (SP): brown (10YR 4/3), wet, 95% fine to coarse sand, 5% fines	
6						Quik Grout- bentonite grout
7					POORLY GRADED SAND with SILT (SP-SM): dark greenish gray (10Y 4/1), wet, 90% fine to medium sand, 10% non-plastic fines	
8				0/1 (HS)		
9					ELASTIC SILT (MH): dark greenish gray (10Y 4/1), moist, 95% fines, 5% fine sand, medium plasticity, soft, organic matter throughout	3/8" Hole Plug coarse grade bentonite
10				0/1 (HS)	very soft	
11					greenish mottling, no organic matter	
12						
13				3/16 (HS)	low plasticity	6" boring
14						
15						

*OVM = miniRAE 2000 PID calibrated with 100

PROJECT: Remedial Investigation
PSC Washougal

Log of Well No. MC-25D (cont'd)

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
16				1/45 (HS)		ppm isobutylene standard. (HS) indicates reading taken from head space in baggie
17						
18				0	SILTY GRAVEL (GM): dark grayish brown (10YR4/2), moist, 60% fine and coarse gravel, 30% low plasticity fines, 10% fine to medium sand	
19					rock, cored through	3/8" Hole Plug coarse grade bentonite
20						
21				0	rock, cored through	
22					POORLY GRADED GRAVEL with SILT and SAND (GP-GM): dark grayish brown (10YR 4/2), wet, 55% fine and coarse rounded gravel, 35% fine to coarse sand, 10% non-plastic fines, cobbles 6" and greater	#10/20 filter pack sand
23						
24						
25				0		
26						2" diameter, 0.010" slot, Schedule 40 PVC screen
27				0		
28						
29						
30				0		
31						
32					rock	
33						2" diameter Schedule 40

OAKWELLV_COND CASE (REV 10/99)

PROJECT: Remedial Investigation
PSC Washougal

Log of Well No. MC-25D (cont'd)

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
34				0	Bottom of boring at 34.0 feet. Ecology well ID = BAN154.	PVC end cap
35						
36						
37						
38						
39						
40						
41						
42						
43						
44						
45						
46						
47						
48						
49						
50						
51						

OAKWELLV_COND CASE (REV 10/99)

PROJECT: Remedial Investigation PSC Washougal	**Log of Well No. MC-25D2**
BORING LOCATION: 92689.5 N, 1169763.4 E	GROUND SURFACE ELEVATION AND DATUM: 16.68 MSL NGVD29(47)
DRILLING CONTRACTOR: Cascade Drilling, Inc.	DATE STARTED: 9/8/08 / DATE FINISHED: 9/8/08
DRILLING METHOD: Sonic drilling	TOTAL DEPTH (ft.): 46.5 / SCREEN INTERVAL (ft.): 35.6 to 45.3
DRILLING EQUIPMENT: Sonicor 50k	DEPTH TO WATER: FIRST 4.5 / COMPL. NA / CASING: 2" Sched. 40 PVC
SAMPLING METHOD: Continuous core [10' x 6"]	LOGGED BY: C. Brown
HAMMER WEIGHT: NA / DROP: NA	RESPONSIBLE PROFESSIONAL: N. Gray / REG. NO. L.G. 2557

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. TOC Elevation: 17.2 feet	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
1					*See log of MC-25D	Traffic Box Quickrete dry concrete *OVM = Photovac 2020 PID calibrated with 100 ppm isobutylene standard.
2				0/0 HS		8" boring
3						
4						2" diameter Schedule 40 PVC casing
5						
6						Volclay High Solids Bentonite Grout
7				0		
8						
9						PureGold Medium Bentonite Chips
10						
11						
12				0		Volclay High Solids Bentonite Grout
13						6" boring
14						
15						

OAKWELLV_COND CASE (REV 10/99)

PROJECT: Remedial Investigation
PSC Washougal

Log of Well No. MC-25D2 (cont'd)

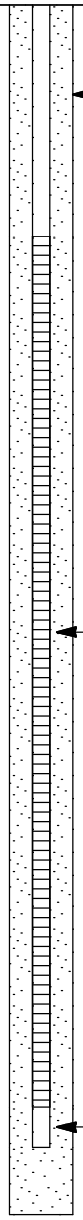
DEPTH (feet)	SAMPLES Sample No.	SAMPLES Sample	SAMPLES Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
16				0/0 HS	*See log of MC-25D	Volclay High Solids Bentonite Grout
17						2" diameter Schedule 40 PVC casing
18						
19				0		
20						
21						
22						
23						
24				0		
25						
26						
27				0		
28						
29						
30						PureGold Medium Bentonite Chips
31						
32				0/0 HS		Oglebay Norton Colorado Silica #10/20 filter pack
33						

OAKWELLV_COND CASE (REV 10/99)

PROJECT: Remedial Investigation
PSC Washougal

Log of Well No. MC-25D2 (cont'd)

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
34						sand Oglebay Norton Colorado Silica #10/20 filter pack sand
35						
36				0	POORLY GRADED SAND (SP): dark yellowish brown (10YR 3/4), moist, 95% fine to medium sand, <5% fines, iron oxide mottling	
37						
38						
39						
40						2" diameter, 0.010" slot, Schedule 40 PVC screen
41						
42				0		
43						
44						
45						
46					POORLY GRADED SAND with SILT (SP-SM): dark gray (10YR 4/1), moist, 90% fine to medium sand, 10% non-plastic fines	2" diameter Schedule 40 PVC end cap
47					Bottom of boring at 46.5 feet.	
48						
49						
50						
51						



OAKWELLV_COND CASE (REV 10/99)

PROJECT: Remedial Investigation PSC Washougal	**Log of Well No. MC-26D2**
BORING LOCATION: 92722.4 N, 1169811.7 E	GROUND SURFACE ELEVATION AND DATUM: 20.07 MSL NGVD29(47)
DRILLING CONTRACTOR: Cascade Drilling, Inc.	DATE STARTED: 9/9/08 / DATE FINISHED: 9/10/08
DRILLING METHOD: Sonic drilling	TOTAL DEPTH (ft.): 41.0 / SCREEN INTERVAL (ft.): 30.6 to 40.2
DRILLING EQUIPMENT: Sonicor 50k	DEPTH TO WATER: FIRST 5.5 / COMPL. NA / CASING: 2" Sched. 40 PVC
SAMPLING METHOD: Continuous core [10' x 6"]	LOGGED BY: C. Brown
HAMMER WEIGHT: NA / DROP: NA	RESPONSIBLE PROFESSIONAL: N. Gray / REG. NO. L.G. 2557

DEPTH (feet)	SAMPLES Sample No.	SAMPLES Sample	SAMPLES Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. TOC Elevation: 17.6 feet	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
1					*See Log of GP-97	Quickrete dry concrete
2				0/0 HS		PureGold Medium Bentonite Chips
3						8" boring
4				10/12 HS	odor noted	*OVM = Photovac 2020 PID calibrated with 100 ppm isobutylene standard.
5						2" diameter Schedule 40 PVC casing
6						Volclay High Solids Bentonite Grout
7				2		
8						
9						
10						PureGold Medium Bentonite Chips
11						
12				0		Volclay High Solids Bentonite Grout
13						6" boring
14						
15						

PROJECT: Remedial Investigation
PSC Washougal

Log of Well No. MC-26D2 (cont'd)

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
16				0/0 HS	*See log of GP-97	Volclay High Solids Bentonite Grout
17					SILTY GRAVEL (GM): dark grayish brown (10YR 4/2), moist, 60% fine and coarse gravel, 30% low plasticity fines, 10% fine to coarse sand	6" boring
18						2" diameter Schedule 40 PVC casing
19					solid rock cored	
20				0		
21					fractured rock	
22						
23						
24				0		
25						PureGold Medium Bentonite Chips
26					POORLY GRADED GRAVEL with SILT and SAND (GP-GM): dark grayish brown (10YR 4/2), wet, 50% fine and coarse gravel, 40% fine to coarse sand, 10% non-plastic fines	
27						
28				0		
29						Oglebay Norton Colorado Silica #10/20 filter pack sand
30						
31						2" diameter, 0.010" slot, Schedule 40 PVC screen
32						
33						

OAKWELLV_COND CASE (REV 10/99)

PROJECT: Remedial Investigation
PSC Washougal

Log of Well No. MC-26D2 (cont'd)

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
34				0/0 HS	(GP-GM) cont.	6" boring Oglebay Norton Colorado Silica #10/20 filter pack sand
35						2" diameter, 0.010" slot, Schedule 40 PVC screen
36				0	solid rock	
37						
38						
39				0		
40					fractured rock	2" diameter Schedule 40 PVC end cap
41					Bottom of boring at 41.0 feet.	
42						
43						
44						
45						
46						
47						
48						
49						
50						
51						

OAKWELLV_COND CASE (REV 10/99)

PROJECT: Remedial Investigation PSC Washougal	**Log of Well No. MC-27D**
BORING LOCATION: 92773.1 N, 1169760.4 E	GROUND SURFACE ELEVATION AND DATUM: 17.8' MSL NGVD29(47)
DRILLING CONTRACTOR: Cascade Drilling, Inc.	DATE STARTED: 5/6/09 / DATE FINISHED: 5/6/09
DRILLING METHOD: Sonic drilling	TOTAL DEPTH (ft.): 36.0 / SCREEN INTERVAL (ft.): 25.2 to 35.1
DRILLING EQUIPMENT: Sonicor 50k	DEPTH TO WATER: FIRST 4.5, COMPL. 4.03 / CASING: 2" Sched. 40 PVC
SAMPLING METHOD: Continuous core [10' x 6"]	LOGGED BY: C. Brown
HAMMER WEIGHT: NA / DROP: NA	RESPONSIBLE PROFESSIONAL: N. Gray / REG. NO. L.G. 2557

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
					Surface Elevation: 17.8 feet	
0					POORLY GRADED SAND (SP): dark grayish brown (10YR 4/2), moist, 95% fine to coarse sand, 5% non-plastic fines	Traffic Box Quikrete concrete
1						
2						8" boring
3						
4						2" diameter Schedule 40 PVC casing
5					POORLY GRADED SAND with SILT (SP-SM): dark grayish brown (10YR 4/2), moist, 90% fine to coarse sand, 10% low-plasticity fines	
6					POORLY GRADED SAND (SP): dark grayish brown (10YR 4/2), moist, 95% fine to coarse sand, 5% non-plastic fines	Volclay Grout
7						
8					greenish black (5GY 2.5/1)	
9						3/8" HydroPlug bentonite chips
10					organics SILT (ML): greenish black (5GY 2.5/1), moist, 95% fines, 5% fine sand, medium plasticity, stiff, iron oxide mottling	
11						
12						
13					wet	6" boring
14						
15						

OAKWELLV (REV. 9/2007)

PROJECT: Remedial Investigation
PSC Washougal

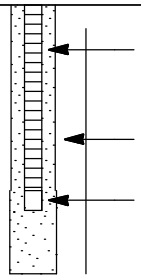
Log of Well No. MC-27D (cont'd)

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
15					(ML) cont.	
16						Volclay Grout
					fractured rock	
17					POORLY GRADED SAND with SILT and GRAVEL (SP-SM): light gray (2.5Y 7/1), moist, 65% fine to coarse sand, 25% fine and coarse sub-rounded gravel, 10% low plasticity fines	2" diameter Schedule 40 PVC casing
18						6" boring
19					SILTY SAND with GRAVEL (SM): very dark gray (N 3/), moist, 40% fine to coarse sand, 35% low plasticity fines, 25% fine and coarse gravels, cored cobbles in places	
20						
21						3/8" HydroPlug bentonite chips
22					SILTY GRAVEL with SAND (GM): very dark gray (N 3/), wet, 40% fine and coarse gravel, 30% fine to coarse sand, 20% low plasticity fines, round to sub-round gravels to 4-6"	
23						Cemex Lapis Lustre #10/20 filter sand
24						
25					40% fine and coarse gravel, 30% fine to coarse sand, 20% low-plasticity fines	
26					dark brown sand, with gray silt	2" diameter, 0.010" slot, Schedule 40 PVC screen
27						
28						
29						
30						
31						
32						
33						

OAKWELLV (REV. 9/2007)

PROJECT: Remedial Investigation
PSC Washougal

Log of Well No. MC-27D (cont'd)

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
33					(GM) cont.	 Cemex Lapis Lustre #10/20 filter sand; 6" boring; 2" diameter Schedule 40 PVC end cap
34						
35						
36					Bottom of boring at 36.0 feet. Ecology well tag number BAL-141.	
37						
38						
39						
40						
41						
42						
43						
44						
45						
46						
47						
48						
49						
50						
51						

OAKWELLV (REV. 9/2007)

PROJECT: Remedial Investigation PSC Washougal	**Log of Well No. MC-28D**
BORING LOCATION: 92775.1 N, 1169859.9 E	GROUND SURFACE ELEVATION AND DATUM: 18.1' MSL NGVD29(47)
DRILLING CONTRACTOR: Cascade Drilling, Inc.	DATE STARTED: 5/7/09 / DATE FINISHED: 5/7/09
DRILLING METHOD: Sonic drilling	TOTAL DEPTH (ft.): 37.0 / SCREEN INTERVAL (ft.): 25.9 to 35.6
DRILLING EQUIPMENT: Sonicor 50k	DEPTH TO WATER: FIRST 5.0, COMPL. 4.34 / CASING: 2" Sched. 40 PVC
SAMPLING METHOD: Continuous core [10' x 6"]	LOGGED BY: C. Brown
HAMMER WEIGHT: NA / DROP: NA	RESPONSIBLE PROFESSIONAL: N. Gray / REG. NO. L.G. 2557

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
					Surface Elevation: 18.1 feet	
0					WELL GRADED SAND (SW): very dark gray (10YR 3/1), moist, 95% fine to coarse sand, 5% non-plastic fines	Traffic Box Quikrete concrete
1						
2						8" boring
3						
4						2" diameter Schedule 40 PVC casing
5					wet	
6						Volclay Grout
7						
8					slightly siltier	
9						
10					organics, roots, wood waste	
11					SILT (ML): very dark gray (N 3/), moist, 95% fines, 5% fine sand, medium plasticity, soft	3/8" HydroPlug bentonite chips
12						
13					GRAVELLY SILT (ML): very dark gray (N 3/), wet, 55% fines, 35% fine gravel, 10% fine to coarse sand, low plasticity, medium stiff	6" boring
14						
15						

OAKWELLV (REV. 9/2007)

PROJECT: Remedial Investigation
PSC Washougal

Log of Well No. MC-28D (cont'd)

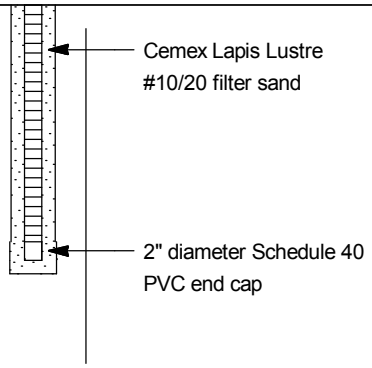
DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
15					(ML) cont.	
16						Volclay Grout
17					SILTY GRAVEL with SAND (GM): very dark gray (N 3/), wet, 50% fine and coarse gravel, 30% low plasticity fines, 20% fine to coarse sand, sub-rounded gravel	2" diameter Schedule 40 PVC casing
18						
19					fractured, crushed rock	
20						
21					rounded gravel, medium to coarse sand	
22						3/8" HydroPlug bentonite chips
23						
24					SILTY SAND with GRAVEL (SM): very dark gray (N 3/), wet, 50% fine to coarse sand, 35% fine and coarse, sub-rounded gravel, 15% low plasticity fines, sand is dark brown with very dark gray silt	Cemex Lapis Lustre #10/20 filter sand
25						
26						2" diameter, 0.010" slot, Schedule 40 PVC screen
27					solid rock in shoe	
28					fractured, ground rock	
29					solid rock in shoe	
30					less coarse gravel, iron oxide mottling	
31						
32					45% fine to coarse sand, 35% fine and coarse gravel, 20% low plasticity fines	
33						

OAKWELLV (REV. 9/2007)

PROJECT: Remedial Investigation
PSC Washougal

Log of Well No. MC-28D (cont'd)

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
33					(SM) cont.	
34					45% fine and coarse gravel, 40% medium to coarse sand, 15% low plasticity fines	
35						
36						
37					Bottom of boring at 37.0 feet. Ecology well tag number BBA-757.	
38						
39						
40						
41						
42						
43						
44						
45						
46						
47						
48						
49						
50						
51						



OAKWELLV (REV. 9/2007)

PROJECT: Remedial Investigation
PSC Washougal

Log of Well No. MC-30

BORING LOCATION: 92633.0 N, 1169485.6 E

GROUND SURFACE ELEVATION AND DATUM: 20.32 MSL NGVD29(47)

DRILLING CONTRACTOR: Cascade Drilling, Inc.

DATE STARTED: 9/4/08 | DATE FINISHED: 9/4/08

DRILLING METHOD: Direct push

TOTAL DEPTH (ft.): 9.0 | SCREEN INTERVAL (ft.): 4.5 to 9.2

DRILLING EQUIPMENT: Geoprobe 7730 DT

DEPTH TO WATER: FIRST 4.5 | COMPL. NA | CASING: 2" Sched. 40 PVC

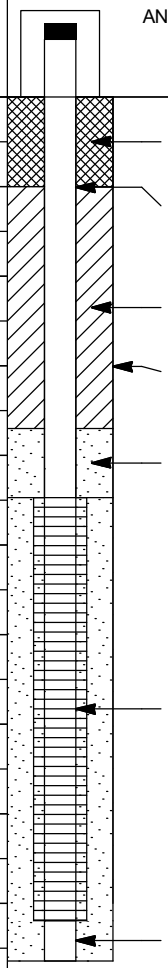
SAMPLING METHOD: Geoprobe macro-core sampler [5' x 1.5"]

LOGGED BY: C. Brown

HAMMER WEIGHT: NA | DROP: NA

RESPONSIBLE PROFESSIONAL: N. Gray | REG. NO. L.G. 2557

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading	DESCRIPTION: NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.
					Surface Elevation: 18.2 feet
0				0	POORLY GRADED SAND (SP): dark grayish brown (10YR 4/2), moist, 95% fine to coarse sand, 5% fines
1	MC-30-2.0-0908				
2				0	
3					
4					very dark greenish gray (10Y 3/1)
				0	wet
5					
6					
7				0	
8					ELASTIC SILT (MH): very dark greenish gray (10Y 3/1), moist, 100% fines, firm, medium plasticity
9					Bottom of boring at 9.0 feet
10					
11					
12					
13					
14					
15					



WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS

- Quikrete fast setting concrete
- Schedule 40 2" PVC
- Cetco C/S granular bentonite
- 3.5" diameter borehole
- Oglebay Norton Colorado Silica Sand #10/20
- 2" diameter, stainless steel wrapped prepacked Schedule 40 PVC, Oglebay Norton 10/20 silica filter sand, 0.010" slot well screen
- 2" diameter Schedule 40 PVC end cap

*OVM = Photovac 2020 Pro calibrated with 100 ppm isobutylene standard.

OAKWELLV (REV. 9/2007)

PROJECT: Remedial Investigation PSC Washougal	**Log of Well No. MC-30D**
BORING LOCATION: 92628.9 N, 1169484.9 E	GROUND SURFACE ELEVATION AND DATUM: 20.77 MSL NGVD29(47)
DRILLING CONTRACTOR: Cascade Drilling, Inc.	DATE STARTED: 9/9/08 / DATE FINISHED: 9/9/08
DRILLING METHOD: Sonic drilling	TOTAL DEPTH (ft.): 37.0 / SCREEN INTERVAL (ft.): 25.5 to 35.2
DRILLING EQUIPMENT: Sonicor 50k	DEPTH TO WATER: FIRST 4.25 / COMPL. NA / CASING: 2" Sched. 40 PVC
SAMPLING METHOD: Continuous core [10' x 6"]	LOGGED BY: C. Brown
HAMMER WEIGHT: NA / DROP: NA	RESPONSIBLE PROFESSIONAL: N. Gray / REG. NO. L.G. 2557

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. TOC Elevation: 18.2 feet	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
1					POORLY GRADED SAND (SP): dark grayish brown (10YR 4/2), moist, 95% fine to coarse sand, 5% non-plastic fines	Quickrete concrete *OVM = Photovac 2020 PID calibrated with 100 ppm isobutylene standard.
2				0/0 HS		8" boring
3						
4					very dark greenish gray (10Y 3/1), wet	2" diameter Schedule 40 PVC casing
5						
6				0		Volclay high solids bentonite grout
7					ELASTIC SILT (MH): very dark greenish gray (10Y 3/1), moist, 100% medium plastic silt, medium stiff	
8						
9						PureGold medium bentonite chips
10				0		
11						
12						
13					very dark gray (10YR 3/1)	6" boring
14						
15						

OAKWELLV_COND CASE (REV 10/99)

PROJECT: Remedial Investigation
PSC Washougal

Log of Well No. MC-30D (cont'd)

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
16				0/0 HS	(MH) cont.	6" boring
17						
18						
19						
20				0	SILTY GRAVEL (GM): very dark gray (10YR 3/1), moist, 60% fine and coarse gravel, 30% non-plastic fines, 10% fine to coarse sand fractured rock (cored)	PureGold medium bentonite chips
21						
22				8.1/9 HS	rounded fine and coarse gravel, some larger than 4", 30% fine gravel	Oglebay Norton Colorado Silica sand #10/20 filter pack sand
23						
24						
25						
26				13	SILTY SAND (SM): brown (10YR 4/3), moist, 80% fine to medium sand, 20% low plasticity fines	2" diameter, 0.010" slot, Schedule 40 PVC screen
27						
28						
29						
30						
31					POORLY GRADED SAND with SILT (SP-SM): dark yellowish brown (10YR 4/4), moist, 90% fine to coarse sand, 10% low plasticity fines, rust colored mottling	
32						
33						

OAKWELLV_COND CASE (REV 10/99)

PROJECT: Remedial Investigation
PSC Washougal

Log of Well No. MC-30D (cont'd)

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
34				0	(SP-SM) cont.	2" diameter, 0.010" slot, Schedule 40 PVC screen
35						
36						2" diameter Schedule 40 PVC end cap
37					Bottom of boring 37.0 feet.	Oglebay Norton Colorado Silica sand #10/20 filter pack sand
38						
39						
40						
41						
42						
43						
44						
45						
46						
47						
48						
49						
50						
51						

PROJECT: Remedial Investigation
PSC Washougal

Log of Well No. MC-31

BORING LOCATION: 92299.7 N, 1169514.9 E

GROUND SURFACE ELEVATION AND DATUM: 21.03 MSL NGVD29(47)

DRILLING CONTRACTOR: Cascade Drilling, Inc.

DATE STARTED: 9/4/08

DATE FINISHED: 9/4/08

DRILLING METHOD: Direct push

TOTAL DEPTH (ft.): 9.0

SCREEN INTERVAL (ft.): 4.4 to 9.2

DRILLING EQUIPMENT: Geoprobe 7730 DT

DEPTH TO WATER: FIRST 4.0 COMPL. NA

CASING: 2" Sched. 40 PVC

SAMPLING METHOD: Geoprobe macro-core sampler [5' x 1.5"]

LOGGED BY: C. Brown

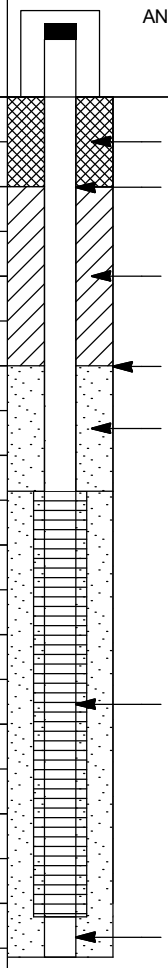
HAMMER WEIGHT: NA

DROP: NA

RESPONSIBLE PROFESSIONAL: N. Gray

REG. NO. L.G. 2557

DEPTH (feet)	SAMPLES Sample No.	SAMPLES Sample	SAMPLES Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.
					Surface Elevation: 17.9 feet
0	MC-31-1-0908			0	POORLY GRADED SAND (SP): dark brown (10YR 3/3), moist, 95% fine to medium sand, 5% fines
1					
2				0	
3					
4					wet
				0	very dark greenish gray (10Y 3/1)
5					
6					
				0	
7					
8					ELASTIC SILT (MH): dark greenish gray (10Y 4/1), moist, 100% fines, firm, medium plasticity
9					Bottom of boring at 9.0 feet
10					
11					
12					
13					
14					
15					



WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS

- Quikset concrete
- Schedule 40 2" PVC
- Cetco C/S granular bentonite
- 3.5" diameter borehole
- Oglebay Norton Colorado Silica Sand #10/20
- 2" diameter, stainless steel wrapped prepacked with Oglebay Norton 10/20 silica filter sand, Schedule 40 PVC, 0.010" slot well screen
- 2" diameter Schedule 40 PVC end cap

*OVM = Photovac 2020 Pro calibrated with 100 ppm isobutylene standard.

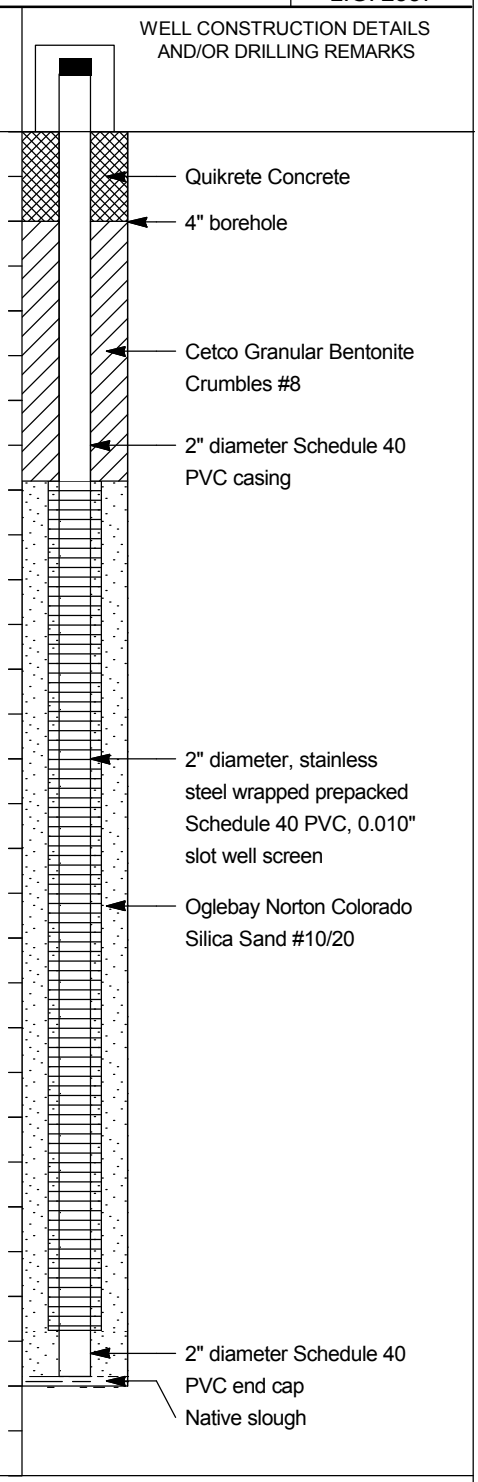
OAKWELLV (REV. 9/2007)

PROJECT: Remedial Investigation
PSC Washougal

Log of Well No. MC-32

BORING LOCATION: 92481.1 N, 1170033.6 E	GROUND SURFACE ELEVATION AND DATUM: 17.4' MSL NGVD29(47)			
DRILLING CONTRACTOR: Cascade Drilling, Inc.	DATE STARTED: 5/11/09			DATE FINISHED: 5/11/09
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 14.0			SCREEN INTERVAL (ft.): 3.9 to 13.4
DRILLING EQUIPMENT: Geoprobe 7730 DT	DEPTH TO WATER:	FIRST 8.5	COMPL. 10.15	CASING: 2" Sched. 40 PVC
SAMPLING METHOD: Geoprobe macro-core sampler [5' x 1.5"]	LOGGED BY: C. Brown			
HAMMER WEIGHT: NA / DROP: NA	RESPONSIBLE PROFESSIONAL: N. Gray			REG. NO. L.G. 2557

DEPTH (feet)	SAMPLES Sample No.	SAMPLES Sample	SAMPLES Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.
					Surface Elevation: 17.4 feet
0					WELL GRADED SAND (SW): dark grayish brown (10YR 4/2), moist, 95% fine to coarse sand, 5% non-plastic fines
5					SILT (ML): very dark grayish brown (10YR 3/2), moist, 90% fines, 10% fine sand, medium stiff, dark orange mottling, scattered organics
6	MC-32-7-0509				
8					wet, very few organics
9					no organics
13					stiff, moist
14					Bottom of boring at 14.0 feet.

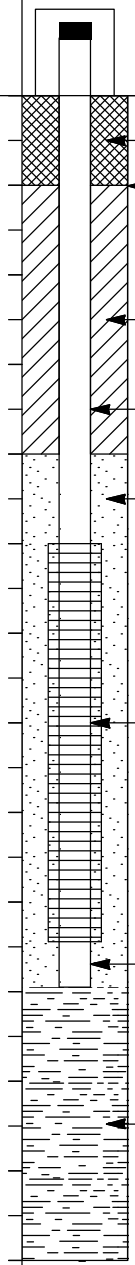


OAKWELLV (REV. 9/2007)

PROJECT: Remedial Investigation PSC Washougal	**Log of Well No. MC-33**
BORING LOCATION: 92536.1 N, 1169635.7 E	GROUND SURFACE ELEVATION AND DATUM: 17.9' MSL NGVD29(47)
DRILLING CONTRACTOR: Cascade Drilling, Inc.	DATE STARTED: 5/11/09 / DATE FINISHED: 5/11/09
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 13.0 / SCREEN INTERVAL (ft.): 5.0 to 9.4
DRILLING EQUIPMENT: Geoprobe 7730 DT	DEPTH TO WATER: FIRST 4.5, COMPL. 4.81 / CASING: 2" Sched. 40 PVC
SAMPLING METHOD: Geoprobe macro-core sampler [5' x 1.5"]	LOGGED BY: C. Brown
HAMMER WEIGHT: NA / DROP: NA	RESPONSIBLE PROFESSIONAL: N. Gray / REG. NO. L.G. 2557

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading	DESCRIPTION: NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.
					Surface Elevation: 17.9 feet
0					WELL GRADED SAND (SW): very dark gray (10YR 3/1), moist, 95% fine to coarse sand, 5% non-plastic fines
4.5					wet
6.5					WELL GRADED SAND with SILT (SW-SM): greenish black (10GY 2.5/1), wet, 90% fine to coarse sand, 10% non-plastic fines
11					ELASTIC SILT (MH): dark greenish gray (10Y 4/1), wet, 95% fines, 5% fine sand, medium to high plasticity, soft
13					Bottom of boring at 13.0 feet.

WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS



OAKWELLV (REV. 9/2007)

PROJECT: Remedial Investigation PSC Washougal	**Log of Well No. MC-107**
BORING LOCATION: 92666.3 N, 1169648.6 E	GROUND SURFACE ELEVATION AND DATUM: 20.13 MSL NGVD29(47)
DRILLING CONTRACTOR: Cascade Drilling, Inc.	DATE STARTED: 7/27/99 / DATE FINISHED: 7/27/99
DRILLING METHOD: Hollow-stem auger	TOTAL DEPTH (ft.): 10.0 / SCREEN INTERVAL (ft.): 4.0 to 10.0
DRILLING EQUIPMENT:	DEPTH TO WATER: FIRST 2.2 / COMPL. / CASING: 2" Sched. 40 PVC
SAMPLING METHOD: SPT split spoon drive sampler [18" x 2.5"] and Shelby	LOGGED BY: C. Minton/T. Gray
HAMMER WEIGHT: / DROP:	RESPONSIBLE PROFESSIONAL: / REG. NO.

DEPTH (feet)	SAMPLES Sample No.	SAMPLES Sample	SAMPLES Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
					Surface Elevation: 17.3 feet	
0			23 25 20	0	POORLY GRADED SAND (SP): moderate yellowish brown, dry, fine to medium sand, loose, roots in top 4 inches	
1						
2			10 18 22	0	moist	Annular Seal (3/8, holeplug coarse grade bentonite)
3			9 12 15		medium dense, brownish black	8.75" diameter borehole
4				0		2" diameter Schedule 40 PVC casing
5			10 13 15	0		10/20 Colorado silica sand
6						*Failed attempt to to collect shelby tube sample. Sediment in tube fell through.
7						
8						2" diameter Schedule 40 PVC well screen with 0.010-inch slot
9	MC-107-8-10	S				
10					silt in bottom of shelby tube Bottom of boring at 10.0 feet.	2" diameter Schedule 40 PVC end cap Finished with steel 6.5" diameter surface casing
11						
12						
13						
14						
15						

OAKWELLV (REV. 9/2007)

PROJECT: Remedial Investigation PSC Washougal	**Log of Well No. MC-118D**
BORING LOCATION: 92721.8 N, 1169761.1 E	GROUND SURFACE ELEVATION AND DATUM: 17.28 MSL NGVD29(47)
DRILLING CONTRACTOR: Cascade Drilling, Inc.	DATE STARTED: 7/28/99 / DATE FINISHED: 7/28/99
DRILLING METHOD: Hollow-stem auger	TOTAL DEPTH (ft.): 22.5 / SCREEN INTERVAL (ft.): 15.5 to 22.5
DRILLING EQUIPMENT:	DEPTH TO WATER: FIRST 3.0 / COMPL. / CASING: 2" Sched. 40 PVC
SAMPLING METHOD: SPT split spoon drive sampler [18" x 2.5"] and Shelby	LOGGED BY: C. Minton/T. Gray
HAMMER WEIGHT: / DROP:	RESPONSIBLE PROFESSIONAL: / REG. NO.

DEPTH (feet)	SAMPLES Sample No.	SAMPLES Sample	SAMPLES Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
					Surface Elevation: 17.7 feet	
0			20 25 28	0.3	ASPHALT POORLY GRADED SAND (SP): dark yellowish brown, dry, fine to coarse sand, some fine gravel, loose	
1			5 16 24			Quickrete concrete
2				0.5		
3			14 23 25		moist, no gravel	15" diameter borehole
4				0		2" diameter Schedule 40 PVC casing
5			14 16 24		medium dense	
6			10 14 9	0	fine to medium sand, grayish black wet	
7			7 10 17	0		Annular Seal (3/8 Bardid holeplug bentonite chips)
8				0		
9	MC-118D-9-11	S			SILTY SAND (SM): olive black, moist, sandy silt, some coarse gravel, stiff, well sorted	
10						
11						
12			27 9 10	0	SILT (ML): greenish black, moist, very fine silts, some fine sands, well sorted, medium stiff	8.75" diameter borehole
13			4 4 5	0	CLAY (CL): dark greenish gray, moist, well sorted, some silt and sand, medium stiff	
14			4 5		wet and soft	10/20 Colorado silica sand
15						

OAKWELLV (REV. 9/2007)

PROJECT: Remedial Investigation
PSC Washougal

Log of Well No. MC-118D (cont'd)

DEPTH (feet)	SAMPLES Sample No.	SAMPLES Sample	SAMPLES Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
15			8	0	CLAY (CL): (continued)	
16			8 12 21		stiff	10/20 Colorado silica sand
17				0	CLAYEY GRAVEL (GC): moderate brown, wet, fine clay and silt to fine gravel, poorly sorted, medium dense	
18			50/3"	0	clayier, soft, dark greenish gray	8.75" diameter borehole
19			50/3"	0	gravel is possibly basalt (2" diameter)	2" diameter Schedule 40 PVC well screen with 0.010-inch slot
20						
21			50/2"	0		
22			50/3"	0	one large rock (3" x 2") in sampler	2" diameter Schedule 40 PVC end cap
					Bottom of boring at 22.5 feet	Finished with steel 6.5" diameter surface casing
23						
24						
25						
26						
27						
28						
29						
30						
31						
32						
33						

OAKWELLV (REV. 9/2007)

PROJECT: Remedial Investigation PSC Washougal	**Log of Well No. MC-118D2**	
BORING LOCATION: 92721.7 N, 1169765.7 E	GROUND SURFACE ELEVATION AND DATUM: 17.26 MSL NGVD29(47)	
DRILLING CONTRACTOR: Cascade Drilling, Inc.	DATE STARTED: 9/10/08	DATE FINISHED: 9/11/08
DRILLING METHOD: Sonic drilling	TOTAL DEPTH (ft.): 37.0	SCREEN INTERVAL (ft.): 25.0 to 34.7
DRILLING EQUIPMENT: Sonicor 50k	DEPTH TO WATER: FIRST ~4.0 / COMPL. NA	CASING: 2" Sched. 40 PVC
SAMPLING METHOD: Continuous core [10' x 6"]	LOGGED BY: C. Brown	
HAMMER WEIGHT: NA / DROP: NA	RESPONSIBLE PROFESSIONAL: N. Gray	REG. NO. L.G. 2557

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. TOC Elevation: 17.6 feet	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
1					POORLY GRADED SAND (SP): dark brown (10YR 3/3), moist, 95% fine to coarse sand, 5% fines	Traffic Box Quickrete concrete
2				0.5		*OVM = Photovac 2020 PID calibrated with 100 ppm isobutylene standard.
3				0/0 HS		8" boring
4					very dark greenish gray (10Y 3/1), wet	
5						2" diameter Schedule 40 PVC casing
6				0		Volclay high solids bentonite grout
7					ELASTIC SILT (MH): greenish black (10Y 2.5/1), moist, 100% fines, firm, medium plasticity, scattered organics at top of contact	
8						
9				0		
10						PureGold medium bentonite chips
11					rust colored mottling, firm	
12				0/0 HS		
13						6" boring
14						
15						

OAKWELLV_COND CASE (REV 10/99)

PROJECT: Remedial Investigation
PSC Washougal

Log of Well No. MC-118D2 (cont'd)

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
16				1.8	(MH) cont.	
17					SILTY GRAVEL with SAND (GM): dark yellowish brown (10YR 4/4), moist, 50% fine and coarse gravel, 30% low plasticity fines, 20% fine to coarse sand, some gravel greater than 4", rounded to sub-rounded	Volclay high solids bentonite grout
18						6" boring
19				0	dark greenish gray (10Y 4/1)	
20						2" diameter Schedule 40 PVC casing
21						PureGold medium bentonite chips
22				0		
23					POORLY GRADED GRAVEL with SILT and SAND (GP-GM): very dark grayish brown (10YR 3/2), wet, 60% fine and coarse gravel, 30% fine to coarse sand, 10% low plasticity fines	
24						Oglebay Norton Colorado Silica sand #10/20 filter pack sand
25				0/0 HS		
26						2" diameter, 0.010" slot, Schedule 40 PVC screen
27					solid rock cored	
28						
29					very dark greenish gray (10Y 3/1)	
30				0		
31						
32						
33				0		

OAKWELLV_COND CASE (REV 10/99)

PROJECT: Remedial Investigation
PSC Washougal

Log of Well No. MC-118D2 (cont'd)

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
34				0	(GP-GM) cont.	2" diameter, 0.010" slot, Schedule 40 PVC screen
35						2" diameter Schedule 40 PVC end cap
36						Oglebay Norton Colorado Silica sand #10/20 filter pack sand
37					Bottom of boring at 37.0 feet.	
38						
39						
40						
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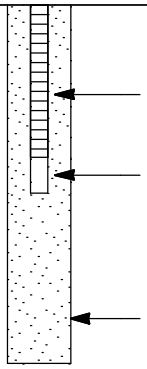
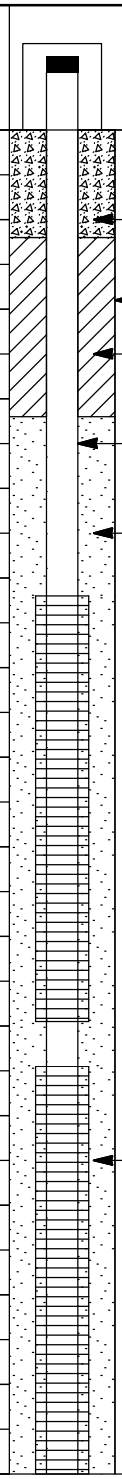
51						



OAKWELLV_COND CASE (REV 10/99)

PROJECT: Monitoring Well Replacement PSC Washougal	**Log of Well No. MC-122**
BORING LOCATION: 92681.1 N, 1170038.9 E	TOP OF CASING ELEVATION AND DATUM: 19.95 NGVD29(47)
DRILLING CONTRACTOR: Cascade Drilling, Inc.	DATE STARTED: 12/1/06 / DATE FINISHED: 12/1/06
DRILLING METHOD: Hollow-stem auger	TOTAL DEPTH (ft.): 16.0 / SCREEN INTERVAL (ft.): 5.2 to 15.2
DRILLING EQUIPMENT: CME-75	DEPTH TO WATER (ft.): FIRST ~10.5 / COMPL. NA / CASING: 2" Sched. 40 PVC
SAMPLING METHOD: SPT split spoon drive sampler [18" x 1.5"]	LOGGED BY: N. Bacher
HAMMER WEIGHT: 300 lb / DROP: 30 inch	RESPONSIBLE PROFESSIONAL: N. Bacher / REG. NO. L.G. 2528

DEPTH (feet)	SAMPLES Sample No.	SAMPLES Sample	SAMPLES Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation: 17.6 feet
0			3 4 15 N=19	0	POORLY GRADED SAND (SP): brown (7.5YR 4/2), dry, 95% fine to medium sand, 5% fines, trace roots, loose
1			5 3 1 N=8	0	no roots
2			2 2 2 N=4	0	
3			3 2 1 N=3	0	trace orange 1/16" material (1 to 3 pieces), brick fragments
4			2 1 1 N=2	0	
5			1 1 2 N=3	0	SILTY CLAY (CL): olive gray with orange mottling (5Y 5/2), dry to moist, 100% fines, low to medium plasticity, soft, trace twigs, trace decomposing organic material
6			1 2 4 N=6	0	SILT (ML): gray (2.5Y 5/1), moist, 100% fines, nonplastic to low plasticity, soft, trace fine sand stringers, blocky texture
7			2 4 5 N=9	0	no sand stringers
8			2 4 5 N=9	0	low plasticity
9			13 16 16 N=32	0	
10					angular, orange cobble pieces, moist
11					
12					
13					
14					
15					



WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS

*OVM = ThermoEnvironmental 580B PID calibrated with 100 ppm isobutylene standard.

*PID won't start after 5-6.5 foot sample, moisture in the air. All remaining PID readings were collected from ziploc bagged samples later in the day.

OAKWELLV_TOC(REV. 9/00)

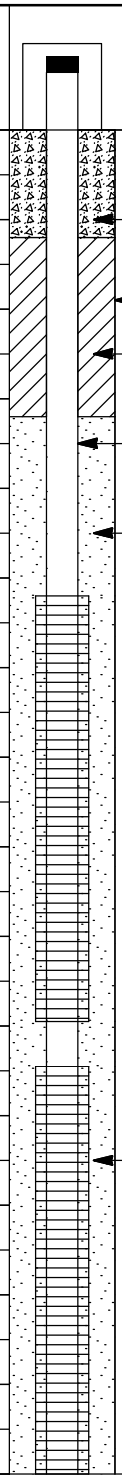
PROJECT: Monitoring Well Replacement
PSC Washougal

Log of Well No. MC-122 (cont'd)

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
16					Bottom of boring at 16.0 feet.	Schedule 40 PVC end cap
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						
32						
33						

PROJECT: Monitoring Well Replacement PSC Washougal	**Log of Well No. MC-123**
BORING LOCATION: 92585.5 N, 1170035.7 E	TOP OF CASING ELEVATION AND DATUM: 19.91 NGVD29(47)
DRILLING CONTRACTOR: Cascade Drilling, Inc.	DATE STARTED: 12/1/06 / DATE FINISHED: 12/1/06
DRILLING METHOD: Hollow-stem auger	TOTAL DEPTH (ft.): 16.0 / SCREEN INTERVAL (ft.): 5.2 to 15.2
DRILLING EQUIPMENT: CME-75	DEPTH TO WATER (ft.): FIRST ~10.5 / COMPL. NA / CASING: 2" Sched. 40 PVC
SAMPLING METHOD: SPT split spoon drive sampler [18" x 1.5"]	LOGGED BY: N. Bacher
HAMMER WEIGHT: 300 lb / DROP: 30 inch	RESPONSIBLE PROFESSIONAL: N. Bacher / REG. NO. L.G. 2528

DEPTH (feet)	SAMPLES Sample No.	SAMPLES Sample	SAMPLES Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation: 17.2 feet
0			2 15 19 N=34	0	POORLY GRADED SAND with GRAVEL (SP): brown (7.5YR 4/2), dry, 75% medium sand, 25% fine gravel, loose
1			3 4 5 N=9	0	POORLY GRADED SAND (SP): brown (7.5YR 4/2), dry, 100% fine to medium sand, loose
2			2 1 1 N=2	0	
3			2 6 9 N=15	0	SILT (ML): olive gray (5Y 5/2), dry to moist, 100% fines, non plastic, trace orange mottling, trace decomposing organic material
4			1 1 1 N=2	0	soft
5			1 1 1 N=2	0	
6			2 3 5 N=8	0	gray (2.5Y 5/1), blocky texture, trace fine sand (5%)
7			2 1 1 N=2	0	moist to wet, trace clay, trace decomposing organic material, blocky texture
8			2 1 1 N=2	0	(Interval 12-13.5' bgs not visually observed)
9			3 6 6 N=12	0	sand stringers
10					
11					
12					
13					
14					
15					



WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS

*OVM = ThermoEnvironmental 580B PID calibrated with 100 ppm isobutylene standard.

*All PID readings were collected from ziploc bagged samples later in the day.

PROJECT: Monitoring Well Replacement
PSC Washougal

Log of Well No. MC-123 (cont'd)

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
16					Bottom of boring at 16.0 feet.	Schedule 40 PVC end cap
17						
18						
19						
20						
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22						
23						
24						
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32						
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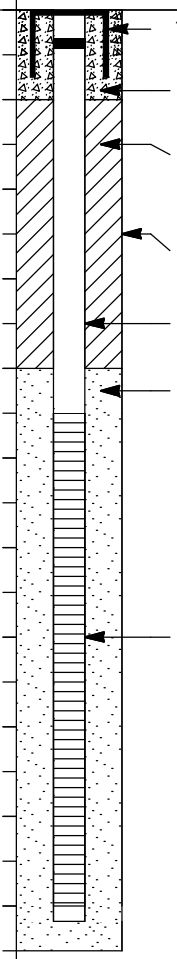
PROJECT: Monitoring Well Replacement PSC Washougal	**Log of Well No. PZU-1**
BORING LOCATION:	GROUND SURFACE ELEVATION AND DATUM:
DRILLING CONTRACTOR: Cascade Drilling, Inc.	DATE STARTED: 9/27/01 / DATE FINISHED: 9/27/01
DRILLING METHOD: Hollow-stem auger	TOTAL DEPTH (ft.): 10.5 / SCREEN INTERVAL (ft.): 4.5 to 10.0
DRILLING EQUIPMENT: CME-75	DEPTH TO WATER: / FIRST / COMPL. / CASING: 2" Sched. 40 PVC
SAMPLING METHOD: SPT split spoon drive sampler [18" x 1.5"]	LOGGED BY: C. Johnson/T. Gray
HAMMER WEIGHT: 140 lb / DROP: 30 inch	RESPONSIBLE PROFESSIONAL: / REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:
0			38 50/1"	0	POORLY GRADED GRAVEL (GP): grayish brown, very dry, gravelly sands, poorly sorted, road bed material, loose
1			13 35 43	0	POORLY GRADED SAND (SP): dark yellowish brown, dry, moderately well sorted, loose, medium sand
2					
3			15 19 20	0	white specks throughout
4			14 15 20	0	moist
5					
6			10 10 13	0	
7			9 5 9	0	wet olive black, fine with medium sand
8					
9			3 3 5	0	dark yellowish brown, fine with few medium grains olive black
10					ORGANIC SOIL (OL): olive gray, moist, very well sorted, medium stiff, slight plasticity, no sand Bottom of boring at 10.5 feet
11					
12					
13					
14					
15					



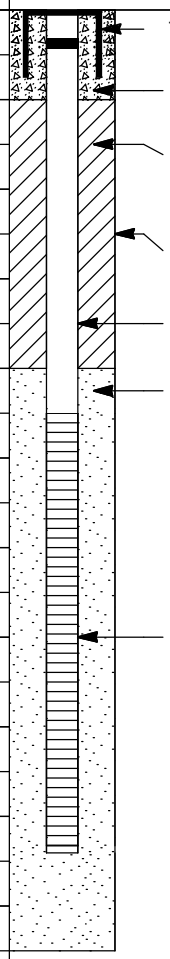
WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS

- Traffic Box
- Surface Seal (Concrete/JetSet)
- Annular Seal (3/8, holeplug coarse grade Wyoming bentonite)
- 8.75" diameter borehole
- 2" diameter Schedule 40 PVC casing
- 2/12 Lapis Lustre Monterey silica sand
- 2" diameter Schedule 40 PVC well screen with 0.010-inch slot
- Completed with flush mount steel monument (8" diameter)

OAKWELLV (REV. 9/2007)

PROJECT: Monitoring Well Replacement PSC Washougal	**Log of Well No. PZU-2**
BORING LOCATION:	GROUND SURFACE ELEVATION AND DATUM:
DRILLING CONTRACTOR: Cascade Drilling, Inc.	DATE STARTED: 9/27/01 / DATE FINISHED: 9/27/01
DRILLING METHOD: Hollow-stem auger	TOTAL DEPTH (ft.): 10.5 / SCREEN INTERVAL (ft.): 4.5 to 9.3
DRILLING EQUIPMENT: CME-75	DEPTH TO WATER: / FIRST / COMPL. / CASING: 2" Sched. 40 PVC
SAMPLING METHOD: SPT split spoon drive sampler [18" x 1.5" and 18" x 2"]	LOGGED BY: C. Johnson/T. Gray
HAMMER WEIGHT: 140 lb / DROP: 30 inch	RESPONSIBLE PROFESSIONAL: / REG. NO.

DEPTH (feet)	SAMPLES Sample No.	SAMPLES Sample	SAMPLES Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:
0			50 50/2"	0	WELL GRADED GRAVEL (GW): grayish brown, very dry, poorly sorted, road bed material, loose
1					
2			15 48 50/4"	0	
3			44 42 39	5.1	SILT (ML): olive gray, dry, medium stiff
4					
5			20 30 28	4.2	
6			15 24 32	3.8	
7					wet
8			20 22 12		olive black
9			5 7		ORGANIC SOIL (OL): olive gray, moist, well sorted, slightly plastic, stiff, wood debris, little sand, red and white specks throughout
10					medium stiff, low to medium plasticity
11					Bottom of boring at 10.5 feet
12					
13					
14					
15					



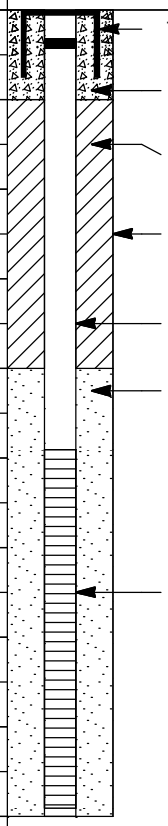
WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS

- Traffic Box
- Surface Seal (Concrete/JetSet)
- Annular Seal (3/8, holeplug coarse grade Wyoming bentonite)
- 8.75" diameter borehole
- 2" diameter Schedule 40 PVC casing
- 2/12 Lapis Lustre Monterey silica sand
- 2" diameter Schedule 40 PVC well screen with 0.010-inch slot
- Completed with flush mount steel monument (8" diameter)

PROJECT: Monitoring Well Replacement PSC Washougal	**Log of Well No. PZU-3**
BORING LOCATION:	GROUND SURFACE ELEVATION AND DATUM:
DRILLING CONTRACTOR: Cascade Drilling, Inc.	DATE STARTED: 10/25/01 / DATE FINISHED: 10/25/01
DRILLING METHOD: Hollow-stem auger	TOTAL DEPTH (ft.): 9.0 / SCREEN INTERVAL (ft.): 4.9 to 8.9
DRILLING EQUIPMENT: Limited Access Rig	DEPTH TO WATER: / FIRST / COMPL. / CASING: 2" Sched. 40 PVC
SAMPLING METHOD: SPT split spoon drive sampler [18" x 2.5"]	LOGGED BY: T. Gray
HAMMER WEIGHT: 140 lb / DROP: 30 inch	RESPONSIBLE PROFESSIONAL: / REG. NO.

DEPTH (feet)	SAMPLES Sample No.	SAMPLES Sample	SAMPLES Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:
0					
1					
2					
3			19 21 22	0	POORLY GRADED SAND (SP): dark yellowish brown, moist, loose to medium dense, moderately sorted, fine sand with few medium grains, few mica flakes
4					
5					
6			8 7 7	0	
7					
8			9 8 10	0	
9					ORGANIC SOIL (OL): olive gray, moist, very stiff, root debris, little to no sand, well sorted, low plasticity, cracks, not molds
10					Bottom of boring at 9.0 feet
11					
12					
13					
14					
15					

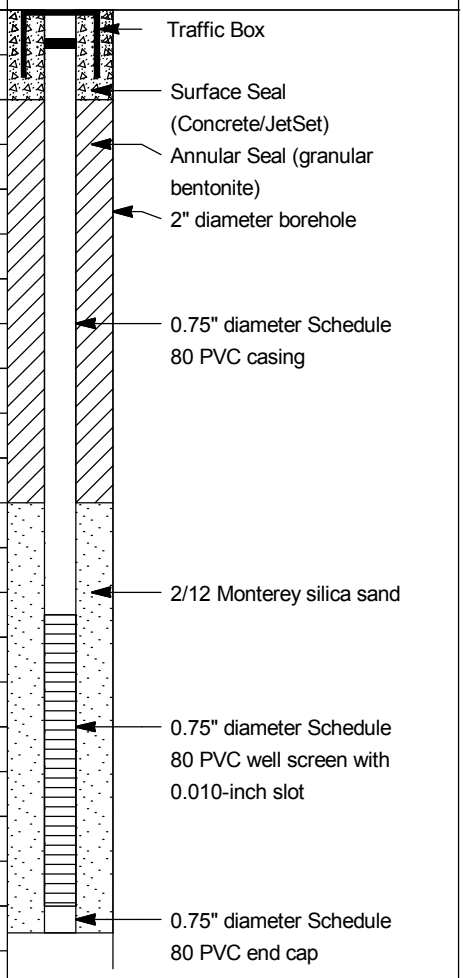
WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS



OAKWELLV (REV. 9/2007)

PROJECT: Monitoring Well Replacement PSC Washougal	**Log of Well No. UT-ST-1**
BORING LOCATION:	GROUND SURFACE ELEVATION AND DATUM:
DRILLING CONTRACTOR: Cascade Drilling, Inc.	DATE STARTED: 10/25/01 / DATE FINISHED: 10/25/01
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 10.7 / SCREEN INTERVAL (ft.): 6.8 to 10.0
DRILLING EQUIPMENT: Limited Access Rig	DEPTH TO WATER: / FIRST: / COMPL.: / CASING: 3/4" Sched. 80 PVC
SAMPLING METHOD: NA	LOGGED BY: T. Gray
HAMMER WEIGHT: NA / DROP: NA	RESPONSIBLE PROFESSIONAL: / REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
0–15						



PROJECT: PSC Washougal 2011 Data Gaps Investigation Washougal, WA	**Log of Boring No. GP-116**
BORING LOCATION: 92701.6 N, 1169793.6 E, NAD83 WASP South Zone	ELEVATION AND DATUM: 17.1 feet MSL NGVD29(47)
DRILLING CONTRACTOR: Cascade Drilling, Inc.	DATE STARTED: 8/10/11 / DATE FINISHED: 8/10/11
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 17.0 / MEASURING POINT: Ground
DRILLING EQUIPMENT: Geoprobe 6600	DEPTH TO WATER (ft.) FIRST: 5.5 / COMPL.: NM
SAMPLING METHOD: Geoprobe macro-core sampler [5' x 2.25"]	LOGGED BY: N. Bachér
HAMMER WEIGHT: NA / DROP: NA	RESPONSIBLE PROFESSIONAL: N. Bachér / REG. NO.: LG 2528

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ 6 inches	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.	REMARKS
					Surface Elevation:	
1					SILTY SAND with GRAVEL (SM): dark grayish brown (10YR 4/2), dry, 65% fine-medium sand, 20% low plasticity fines, 15% fine gravel	
2						
3					moist	
4						
5				0.0 (HS)		OVM = Photovac 2020 PID calibrated daily with 100 ppm isobutylene gas. Headspace (HS) readings collected from ziploc bags filled with soil.
6				0.0 (HS)	wet	
7					POORLY GRADED SAND (SP): greenish black (5G 2.5/1), wet, 95% fine-medium sand, 5% non-plastic fines	
8				0.0 (HS)		
9					SILT (ML): very dark greenish gray (5G 3/1), moist, very stiff, 95% low-moderate plasticity fines, 5% fine sand, contains micaceous flecks	
10				0.0 (HS)		
11				0.0 (HS)		
12						Sheen test @ 12' negative.
13				0.0 (HS)		
14						Sheen test @ 14' negative.
15						

PROJECT: PSC Washougal 2011 Data Gaps Investigation
Washougal, WA

Log of Boring No. GP-116 (cont'd)

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ 6 inches	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.		REMARKS
16	GP-116-16-0811			0.0 (HS)			Sheen test @ 16' negative. Collected GP-116-16-0811 (2x40 mL sodium bisulfate preserved vials and 1x40 mL methanol preserved vial for VOCs analysis and 1x4 ounce jar for 1,4-dioxane and total arsenic analysis).
17				0.0 (HS)	Bottom of boring at 17'. Boring abandoned with hydrated 3/8" bentonite chips.		
18							
19							
20							Collected GP-116-0811 (3x40 mL HCl preserved for VOCs analysis, 1x250 mL amber bottle for 1,4-dioxane analysis and 1x500 mL HNO3 preserved poly bottle for total arsenic analysis) through 3/4" Sch. 4 PVC 0.020-slot temporary well screen set at 12-17' bgs.
21							
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26							
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30							
31							
32							
33							

PROJECT: PSC Washougal 2011 Data Gaps Investigation Washougal, WA	**Log of Boring No. GP-117**
BORING LOCATION: 92677.2 N, 1169716.7 E, NAD83 WASP South Zone	ELEVATION AND DATUM: 17.4 feet MSL NGVD29(47)
DRILLING CONTRACTOR: Cascade Drilling, Inc.	DATE STARTED: 8/10/11 / DATE FINISHED: 8/10/11
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 16.0 / MEASURING POINT: Ground
DRILLING EQUIPMENT: Geoprobe 6600	DEPTH TO WATER (ft.) FIRST: 5.5 / COMPL.: NM
SAMPLING METHOD: Geoprobe macro-core sampler [5' x 2.25"]	LOGGED BY: N. Bachér
HAMMER WEIGHT: NA / DROP: NA	RESPONSIBLE PROFESSIONAL: N. Bachér / REG. NO. LG 2528

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ 6 inches	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	REMARKS
1					SILTY SAND with GRAVEL (SM): dark brown (7.5YR 3/4), dry, 65% fine-medium sand, 20% low-plasticity fines, 15% fine gravel	
2					moist	
3						
4						
5				0.0 (HS)		OVM = Photovac 2020 PID calibrated daily with 100 ppm isobutylene gas. Headspace (HS) readings collected from ziploc bags filled with soil.
6				0.0 (HS)	wet POORLY GRADED SAND (SP): very dark greenish gray (5BG 3/1), wet, 95% fine-medium sand, 5% non-plastic fines, contains red and micaceous flecks	
7						
8				0.0 (HS)		
9						
10	GP-117-11.5-0811			0.0 (HS)	SILT (ML): greenish black (5BG 2.5/1), moist, stiff, 95% low-moderate plasticity fines, 5% fine sand, contains micaceous flecks.	Collected GP-117-11.5-0811 (2x40 mL sodium bisulfate preserved vials and 1x40 mL methanol preserved vial for VOCs analysis, 1x8 ounce jar for grain size and 1x4 ounce jar for 1,4-dioxane and total arsenic analysis) Sheen test @ 12' negative.
11				0.0 (HS)		
12				0.0 (HS)	strong brown (7.5YR 4/6) mottling and decomposing organic material	
13						
14						Sheen test @ 14' negative.
15						

PROJECT: PSC Washougal 2011 Data Gaps Investigation
Washougal, WA

Log of Boring No. GP-117 (cont'd)

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ 6 inches	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.		REMARKS
				0.0 (HS)			Collected GP-117-0811 (12x40 mL HCl preserved for VOCs analysis, 4x250 mL amber bottle for 1,4-dioxane analysis and 1x500 mL HNO3 preserved poly bottle for total arsenic analysis) through 3/4" Sch. 4 PVC 0.020-slot temporary well screen set at 11-16' bgs. Sheen test @ 16' negative.
16					Bottom of boring at 16'. Boring abandoned with hydrated 3/8" bentonite chips.		
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PROJECT: PSC Washougal 2011 Data Gaps Investigation Washougal, WA	**Log of Boring No. GP-118**	
BORING LOCATION: 92672.1 N, 1169762.4 E, NAD83 WASP South Zone	ELEVATION AND DATUM: 16.6 feet MSL NGVD29(47)	
DRILLING CONTRACTOR: Cascade Drilling, Inc.	DATE STARTED: 8/10/11	DATE FINISHED: 8/10/11
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 19.0	MEASURING POINT: Ground
DRILLING EQUIPMENT: Geoprobe 6600	DEPTH TO WATER (ft.) FIRST: 5.5	COMPL.: NM
SAMPLING METHOD: Geoprobe macro-core sampler [5' x 2.25"]	LOGGED BY: N. Bachér	
HAMMER WEIGHT: NA / DROP: NA	RESPONSIBLE PROFESSIONAL: N. Bachér	REG. NO. LG 2528

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ 6 inches	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	REMARKS
1					SILTY SAND (SM): very dark gray (7.5YR 3/1), dry, 70% fine-medium sand, 20% low-plasticity fines, 10% fine gravel	
2					moist	
3						
4						
5				0.0 (HS)		OVM = Photovac 2020 PID calibrated daily with 100 ppm isobutylene gas. Headspace (HS) readings collected from ziploc bags filled with soil.
6				0.0 (HS)	wet	
7					POORLY GRADED SAND (SP): greenish black (5BG 2.5/1), wet, 95% fine-medium sand, 5% non-plastic fines, contains red and micaceous flecks	
8				0.0 (HS)		
9					SILT (ML): very dark greenish gray (5BG 3/1), moist, stiff, 100% moderate plasticity fines, contains micaceous flecks and deomposing organic material	
10				0.0 (HS)		Collected GP-118-0811 and dupe GP-9-118-0811 (6x40 mL HCl preserved for VOCs analysis, 2x250 mL amber bottle for 1,4-dioxane analysis and 2x500 mL HNO3 preserved poly bottle for total arsenic analysis) through 3/4" Sch. 4 PVC 0.020-slot temporary well screen set at 14-19' bgs.
11						
12				0.0 (HS)		
13						
14				0.0 (HS)		Sheen test @ 14' negative.
15						

PROJECT: PSC Washougal 2011 Data Gaps Investigation
Washougal, WA

Log of Boring No. GP-118 (cont'd)

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ 6 inches	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.	REMARKS
16	GP-118-17-0811			0.0 (HS)	5% fine sand	Sheen test @ 16' negative.
17						Collected GP-118-17-0811 (2x40 mL sodium bisulfate preserved vials and 1x40 mL methanol preserved vial for VOCs analysis and 1x4 ounce jar for 1,4-dioxane and total arsenic analysis).
18				0.0 (HS)		Sheen test @ 18' negative.
19					Bottom of boring at 19'. Abandoned with hydrated 3/8" bentonite chips.	
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OAKBOREV (REV. 8/2007)

PROJECT: PSC Washougal 2011 Data Gaps Investigation Washougal, WA	**Log of Boring No. GP-119**	
BORING LOCATION: 92673.6 N, 1169816.5 E, NAD83 WASP South Zone	ELEVATION AND DATUM: 16.7 feet MSL NGVD29(47)	
DRILLING CONTRACTOR: Cascade Drilling, Inc.	DATE STARTED: 8/11/11	DATE FINISHED: 8/11/11
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 18.0	MEASURING POINT: Ground
DRILLING EQUIPMENT: Geoprobe 6600	DEPTH TO WATER (ft.) FIRST: 4.5	COMPL.: NM
SAMPLING METHOD: Geoprobe macro-core sampler [5' x 2.25"]	LOGGED BY: D. O'Reilly	
HAMMER WEIGHT: NA / DROP: NA	RESPONSIBLE PROFESSIONAL: N. Bachér	REG. NO. LG 2528

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ 6 inches	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	REMARKS
1					SILTY SAND (SM): reddish brown (5YR 4/3), dry, 80% fine to medium sand, 15% low plasticity fines, 5% gravel moist	
2						
3						
4					wet	
5				0.0 (HS)		OVM = Photovac 2020 PID calibrated daily with 100 ppm isobutylene gas. Headspace (HS) readings collected from ziploc bags filled with soil.
6					POORLY GRADED SAND with SILT (SP-SM): dark bluish gray (5B 4/1), wet, 90% fine to medium sand, 10% low plasticity fines, micaceous	
7				0.0 (HS)		
8					SILT (ML): greenish gray (10BG 4/1), moist, 100% moderate plasticity fines	
9				0.0 (HS)		
10						
11				0.0 (HS)		
12						
13				0.0 (HS)		
14						Sheen test @ 14' negative.
15						

PROJECT: PSC Washougal 2011 Data Gaps Investigation
Washougal, WA

Log of Boring No. GP-119 (cont'd)

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ 6 inches	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.		REMARKS
16	GP-119-16-0811 and GP-9-119-16-0811			0.0 (HS)	yellowish red (5YR 4/6) mottling		Collected GP-119-16-0811 and dupe GP-9-119-16-0811 (4x40 mL sodium bisulfate preserved vials and 2x40 mL methanol preserved vials for VOCs analysis, 1x8 ounce jar for grain size analysis and 2x4 ounce jar for 1,4-dioxane and total arsenic analysis). Sheen test @ 16' negative. Sheen test @ 18' negative.
17				0.0 (HS)	yellowish red (5YR 4/6)		
18					Bottom of boring at 18'. Abandoned with hydrated 3/8" bentonite chips.		
19							
20							
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PROJECT: PSC Washougal 2011 Data Gaps Investigation Washougal, WA	**Log of Boring No. GP-120**
BORING LOCATION: 92637.9 N, 1169726.3 E, NAD83 WASP South Zone	ELEVATION AND DATUM: 17.3 feet MSL NGVD29(47)
DRILLING CONTRACTOR: Cascade Drilling, Inc.	DATE STARTED: 8/11/11 / DATE FINISHED: 8/11/11
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 18.0 / MEASURING POINT: Ground
DRILLING EQUIPMENT: Geoprobe 6600	DEPTH TO WATER (ft.) FIRST: 5.5 / COMPL.: NM
SAMPLING METHOD: Geoprobe macro-core sampler [5' x 2.25"]	LOGGED BY: N. Bachér
HAMMER WEIGHT: NA / DROP: NA	RESPONSIBLE PROFESSIONAL: N. Bachér / REG. NO.: LG 2528

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ 6 inches	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	REMARKS
1					SILTY SAND with GRAVEL (SM): dark brown (7.5YR 3/2), dry, 65% fine to medium sand, 20% low plasticity fines, 15% fine gravel	
2						
3					moist	
4						
5				0.0 (HS)		OVM = Photovac 2020 PID calibrated daily with 100 ppm isobutylene gas. Headspace (HS) readings collected from ziploc bags filled with soil.
6					wet	
7					POORLY GRADED SAND (SP): very dark greenish gray (5BG 3/1), wet, 95% fine to medium sand, 5% non-plastic fines, contains red and micaceous flecks	
8				0.0 (HS)		
9						
10				0.0 (HS)		
11					SILT (ML): very dark greenish gray (5BG 3/1), moist, firm, 100% moderate plasticity fines, contains micaceous flecks.	
12						
13				0.0 (HS)		
14					strong brown (7.5YR 5/6) mottling	Sheen test @ 14' negative.
15						

PROJECT: PSC Washougal 2011 Data Gaps Investigation
Washougal, WA

Log of Boring No. GP-120 (cont'd)

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ 6 inches	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.		REMARKS
16	GP-120-17.5-0811			0.0 (HS)			Collected GP-120-17.5-0811 (8x40 mL sodium bisulfate preserved vials and 4x40 mL methanol preserved vial for VOCs analysis and 4x4 ounce jar for 1,4-dioxane and total arsenic analysis).Extra volume for MS/MSDs. Sheen test @ 16' negative. Sheen test @ 18' negative.
				0.0 (HS)	10% fine sand with micaceous flecks.		
17							
18				0.0 (HS)	Bottom of boring at 18'. Abandoned with hydrated 3/8" bentonite chips.		
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							
31							
32							
33							

PROJECT: PSC Washougal 2011 Data Gaps Investigation Washougal, WA	**Log of Boring No. GP-121**	
BORING LOCATION: 92641.0 N, 1169760.2 E, NAD83 WASP South Zone	ELEVATION AND DATUM: 16.5 feet MSL NGVD29(47)	
DRILLING CONTRACTOR: Cascade Drilling, Inc.	DATE STARTED: 8/11/11	DATE FINISHED: 8/11/11
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 18.0	MEASURING POINT: Ground
DRILLING EQUIPMENT: Geoprobe 6600	DEPTH TO WATER (ft.) FIRST: 5.5	COMPL.: NM
SAMPLING METHOD: Geoprobe macro-core sampler [5' x 2.25"]	LOGGED BY: D. O'Reilly	
HAMMER WEIGHT: NA / DROP: NA	RESPONSIBLE PROFESSIONAL: N. Bachér	REG. NO. LG 2528

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ 6 inches	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	REMARKS
0					SILTY SAND with GRAVEL (SM): reddish brown (5YR 4/3), dry, 70% fine to medium sand, 15% low plasticity fines, 15% gravel	
1					moist	
2						
3						
4						
5				0.0 (HS)		OVM = Photovac 2020 PID calibrated daily with 100 ppm isobutylene gas. Headspace (HS) readings collected from ziploc bags filled with soil.
6					wet	
7				0.0 (HS)	POORLY GRADED SAND with SILT (SP-SM): very dark bluish gray (10B 3/1), wet, 90% fine to medium sand, 10% low plasticity fines	
8					SILT (ML): greenish black (5BG 2.5/1), moist, 100% moderate plasticity fines, with reddish brown (5YR 4/3) mottling from 8'-11'	
9				0.0 (HS)		
10						
11				0.0 (HS)	mottling ends	
12						
13				0.0 (HS)		
14						Sheen test @ 14' negative.
15						

PROJECT: PSC Washougal 2011 Data Gaps Investigation
Washougal, WA

Log of Boring No. GP-121 (cont'd)

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ 6 inches	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.		REMARKS
16	GP-121-16-0811			0.0 (HS)			Collected GP-121-16-0811 (2x40 mL sodium bisulfate preserved vials and 1x40 mL methanol preserved vial for VOCs analysis, 1x8 ounce jar for grain size analysis and 1x4 ounce jar for 1,4-dioxane and total arsenic analysis). Sheen test @ 16' negative. Sheen test @ 18' negative.
17				0.0 (HS)			
18					yellowish red (5YR 4/6) Bottom of boring at 18'. Abandoned with hydrated 3/8" bentonite chips.		
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							
31							
32							
33							

PROJECT: PSC Washougal 2011 Data Gaps Investigation Washougal, WA	**Log of Boring No. GP-122**
BORING LOCATION: 92642.0 N, 1169788.2 E, NAD83 WASP South Zone	ELEVATION AND DATUM: 16.3 feet MSL NGVD29(47)
DRILLING CONTRACTOR: Cascade Drilling, Inc.	DATE STARTED: 8/10/11 / DATE FINISHED: 8/10/11
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 18.0 / MEASURING POINT: Ground
DRILLING EQUIPMENT: Geoprobe 6600	DEPTH TO WATER (ft.) FIRST: 6.0 / COMPL.: NM
SAMPLING METHOD: Geoprobe macro-core sampler [5' x 2.25"]	LOGGED BY: N. Bachér
HAMMER WEIGHT: NA / DROP: NA	RESPONSIBLE PROFESSIONAL: N. Bachér / REG. NO.: LG 2528

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ 6 inches	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	REMARKS
1					SILTY SAND with GRAVEL (SM): very dark grayish brown (2.5Y 3/2), dry, 65% fine to medium sand, 20% low plasticity fines, 15% fine gravel	
2						
3					moist	
4						
5				0.0 (HS)		OVM = Photovac 2020 PID calibrated daily with 100 ppm isobutylene gas. Headspace (HS) readings collected from ziploc bags filled with soil.
6				0.0 (HS)	wet	
7					POORLY GRADED SAND (SP): greenish black (10G 2.5/1), wet, 95% fine to medium sand, 5% non-plastic fines SILT (ML): very dark greenish gray (10G 3/1), moist, stiff, 100% low to moderate plasticity fines, containts remnant black organic material to 10'.	
8	GP-122-8.5-0811			0.0 (HS)		Collected GP-122-8.5-0811 (2x40 mL sodium bisulfate preserved vials and 1x40 mL methanol preserved vial for VOCs analysis and 1x4 ounce jar for 1,4-dioxane and total arsenic analysis).
9						
10					strong brown (7.5YR 4/6) mottling	
11				0.0 (HS)		
12						Collected GP-122-0811 (3x40 mL HCl preserved for VOCs analysis, 1x250 mL amber bottle for 1,4-dioxane analysis and 1x500 mL HNO3 preserved poly bottle for total arsenic analysis) through 3/4" Sch. 4 PVC 0.020-slot temporary well screen set at 13-18' bgs.
13				0.0 (HS)		
14						
15						

PROJECT: PSC Washougal 2011 Data Gaps Investigation
Washougal, WA

Log of Boring No. GP-122 (cont'd)

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ 6 inches	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.		REMARKS
				0.0 (HS)			Sheen test @ 12' negative. Sheen test @ 14' negative.
16				0.0 (HS)	micaceous flecks and 10% fine sand		Sheen test @ 16' negative.
17							
18				0.0 (HS)	Bottom of boring at 18'. Abandoned with hydrated 3/8" bentonite chips.		
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							
31							
32							
33							

PROJECT: PSC Washougal 2011 Data Gaps Investigation Washougal, WA	**Log of Boring No. GP-123**
BORING LOCATION: 92594.9 N, 1169733.5 E, NAD83 WASP South Zone	ELEVATION AND DATUM: 16.9 feet MSL NGVD29(47)
DRILLING CONTRACTOR: Cascade Drilling, Inc.	DATE STARTED: 8/11/11 / DATE FINISHED: 8/11/11
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 15.0 / MEASURING POINT: Ground
DRILLING EQUIPMENT: Geoprobe 6600	DEPTH TO WATER (ft.) FIRST: 5 / COMPL.: NM
SAMPLING METHOD: Geoprobe macro-core sampler [5' x 2.25"]	LOGGED BY: D. O'Reilly
HAMMER WEIGHT: NA / DROP: NA	RESPONSIBLE PROFESSIONAL: N. Bachér / REG. NO.: LG 2528

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ 6 inches	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	REMARKS
1					SILTY SAND (SM): brown (7.5YR 4/2), dry, 70% fine to medium sand, 20% low plasticity fines, 10% gravel	
2					moist	
3						
4						
5				0.0 (HS)	wet	OVM = Photovac 2020 PID calibrated daily with 100 ppm isobutylene gas. Headspace (HS) readings collected from ziploc bags filled with soil.
6					POORLY GRADED SAND (SP): greenish black (5GY 2.5/1), wet, 95% fine to medium sand, 5% low plasticity fines	
7				0.0 (HS)	SILT (ML): very dark bluish gray (10B 3/1), moist, firm, 100% moderate plasticity fines, contains micaceous flecks	
8						
9	GP-123-9-0811					Collected GP-123-9-0811 (2x40 mL sodium bisulfate preserved vials and 1x40 mL methanol preserved vial for VOCs analysis and 1x4 ounce jar for 1,4-dioxane and total arsenic analysis). Sheen test @ 10' negative.
10				0.0 (HS)		
11				0.0 (HS)		
12						Sheen test @ 12' negative.
13				0.0 (HS)	dark reddish brown (5YR 3/4) mottling	
14					Bottom of boring at 15'. Abandoned with hydrated 3/8" bentonite chips.	Sheen test @ 14' negative.
15				0.0 (HS)		

OAKBOREV (REV. 8/2007)

PROJECT: PSC Washougal 2011 Data Gaps Investigation Washougal, WA	**Log of Boring No. GP-124**
BORING LOCATION: 92595.9 N, 1169784.4 E, NAD83 WASP South Zone	ELEVATION AND DATUM: 16.6 feet MSL NGVD29(47)
DRILLING CONTRACTOR: Cascade Drilling, Inc.	DATE STARTED: 8/10/11 / DATE FINISHED: 8/10/11
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 19.0 / MEASURING POINT: Ground
DRILLING EQUIPMENT: Geoprobe 6600	DEPTH TO WATER (ft.) FIRST: 5 / COMPL.: NM
SAMPLING METHOD: Geoprobe macro-core sampler [5' x 2.25"]	LOGGED BY: N. Bachér
HAMMER WEIGHT: NA / DROP: NA	RESPONSIBLE PROFESSIONAL: N. Bachér / REG. NO.: LG 2528

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ 6 inches	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	REMARKS
1					SILTY SAND with GRAVEL (SM): dark brown (7.5YR 3/3), dry, 65% fine to medium sand, 20% low plasticity fines, 15% fine gravel	
2						
3					moist	
4				0.0 (HS)		
5					wet	OVM = Photovac 2020 PID calibrated daily with 100 ppm isobutylene gas. Headspace (HS) readings collected from ziploc bags filled with soil.
6					POORLY GRADED SAND (SP): dark brown (7.5YR 3/2), wet, 95% fine to medium sand, 5% non-plastic fines	
7				0.0 (HS)		
8						
9				0.0 (HS)	SILT (ML): very dark greenish gray (10G 3/1), moist, stiff, 100% moderate plasticity fines, contains remnant black organic material from 8.5'-10'.	
10						
11				0.0 (HS)		
12						
13				0.0 (HS)	strong brown (7.5YR 4/6) mottling	
14						
15						

PROJECT: PSC Washougal 2011 Data Gaps Investigation
Washougal, WA

Log of Boring No. GP-124 (cont'd)

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ 6 inches	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.		REMARKS
16				0.0 (HS)	micaceous flecks and 10% fine sand		Sheen test @ 15' negative.
17	GP-124-18-0811			0.0 (HS)			Sheen test @ 17' negative.
18				0.0 (HS)			Collected GP-124-18-0811 (2x40 mL sodium bisulfate preserved vials and 1x40 mL methanol preserved vial for VOCs analysis and 1x4 ounce jar for 1,4-dioxane and total arsenic analysis). Sheen test @ 19' negative.
19					Bottom of boring at 19'. Abandoned with hydrated 3/8" bentonite chips.		
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							
31							
32							
33							

PROJECT: PSC Washougal 2011 Data Gaps Investigation Washougal, WA	**Log of Boring No. GP-125**	
BORING LOCATION: 92593.8 N, 1169821.7 E, NAD83 WASP South Zone	ELEVATION AND DATUM: 16.7 feet MSL NGVD29(47)	
DRILLING CONTRACTOR: Cascade Drilling, Inc.	DATE STARTED: 8/10/11	DATE FINISHED: 8/10/11
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 19.0	MEASURING POINT: Ground
DRILLING EQUIPMENT: Geoprobe 6600	DEPTH TO WATER (ft.) FIRST: 5.5	COMPL.: NM
SAMPLING METHOD: Geoprobe macro-core sampler [5' x 2.25"]	LOGGED BY: N. Bachér	
HAMMER WEIGHT: NA / DROP: NA	RESPONSIBLE PROFESSIONAL: N. Bachér	REG. NO. LG 2528

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ 6 inches	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	REMARKS
1					SILTY SAND with GRAVEL (SM): very dark gray (7.5YR 3/1), dry, 65% sand, 20% low plasticity fines, 15% fine gravel	
2						
3					moist	
4						
5				0.0 (HS)	wet	OVM = Photovac 2020 PID calibrated daily with 100 ppm isobutylene gas. Headspace (HS) readings collected from ziploc bags filled with soil.
6				0.0 (HS)	POORLY GRADED SAND (SP): greenish black (10G 2.5/1), wet, 95% fine to medium sand, 5% non-plastic fines, contains micaceous flecks	
7						
8				0.0 (HS)	LEAN CLAY (CL): greenish black (10G 2.5/1), moist, soft, 100% moderate plasticity fines, contains micaceous flecks	
9						
10				0.0 (HS)		
11				0.0 (HS)		
12						
13				0.0 (HS)	SILT (ML): dark greenish gray (10G 4/1), moist, firm or stiff, 100% low to moderate plasticity fines, contains scattered oxidized dark yellowish brown (10YR 4/6) organic material	
14						Sheen test @ 14' negative.
15						

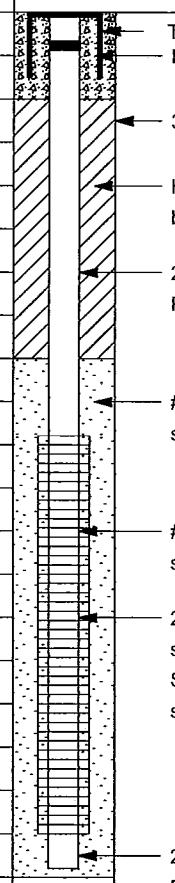
PROJECT: PSC Washougal 2011 Data Gaps Investigation
Washougal, WA

Log of Boring No. GP-125 (cont'd)

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ 6 inches	OVM READING (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.		REMARKS
16				0.0 (HS)			Sheen test @ 16' negative.
17				0.0 (HS)			
18	GP-125-18-0811			0.0 (HS)	micaceous flecks		Sheen test @ 18' negative. Collected GP-125-18-0811 (2x40 mL sodium bisulfate preserved vials and 1x40 mL methanol preserved vial for VOCs analysis and 1x4 ounce jar for 1,4-dioxane and total arsenic analysis).
19					SANDY SILT (ML): dark greenish gray (10G 4/1), moist, stiff, 75% low plasticity fines, 25% fine sand		
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							
31							
32							
33							

PROJECT: Remedial Investigation PSC Washougal	**Log of Well No. PZU-4**
BORING LOCATION:	GROUND SURFACE ELEVATION AND DATUM:
DRILLING CONTRACTOR: Cascade Drilling, Inc.	DATE STARTED: 10/2/07 / DATE FINISHED: 10/2/07
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 13.6 / SCREEN INTERVAL (ft.): 4.9 to 9.5
DRILLING EQUIPMENT: Geoprobe 6600	DEPTH TO WATER: FIRST 6.0, COMPL. NA / CASING: 2" Sched. 40 PVC
SAMPLING METHOD: Geoprobe macro-core sampler [5' x 1.5"]	LOGGED BY: Z. Satterwhite
HAMMER WEIGHT: NA / DROP: NA	RESPONSIBLE PROFESSIONAL: N. Gray / REG. NO. L.G. 2557

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:
1	dug out			0/0 (HS)	POORLY GRADED SAND with GRAVEL (GP): dark brown (10YR 3/3), moist, 55% fine to coarse sand, 40% fine gravel, 5% fines
2	PZU-4-3.0-1007				POORLY GRADED SAND with SILT (SP-SM): dark grayish brown (10YR 4/2), moist, 90% fine to medium sand, 10% non plastic fines
3					silt inclusions (1-2")
4					
5				0/1 (HS)	iron oxide mottling
6	PZU-4-6.0-1007				very dark gray (10YR 3/1), wet
7					SILT (ML): very dark gray (10YR 3/1), wet, 90% fines, 10% fine sand, low plasticity, firm, scattered organic matter.
8					
9					
10				0/0 (HS)	
11					SILTY GRAVEL (GM)
12					
13					
14					Bottom of boring at 13.6 feet (first attempt). Ecology well ID = BAL102.
15					



WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS

- Traffic Box
- PreMix Dry concrete
- 3.5" diameter borehole
- Hole Plug granular bentonite
- 2" diameter Schedule 40 PVC casing
- #10/20 Silica filter pack sand
- #20/40 Silica filter pack sand
- 2" diameter, stainless steel wrapped prepacked Schedule 40 PVC, 0.010" slot well screen
- 2" diameter Schedule 40 PVC end cap

*Piezometer installed on second attempt of boring to 10.0 feet.

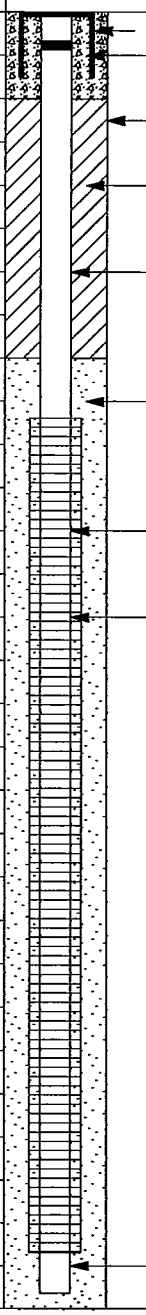
*OVM = miniRAE 2000 calibrated with 100 ppm isobutylene standard. (HS) indicates reading taken from head space in baggie.

*Driller: hit something hard at 14.0 feet.

OAKWELLV (REV. 4/00)

PROJECT: Remedial Investigation PSC Washougal	**Log of Well No. PZU-5**
BORING LOCATION:	GROUND SURFACE ELEVATION AND DATUM:
DRILLING CONTRACTOR: Cascade Drilling, Inc.	DATE STARTED: 10/2/07 / DATE FINISHED: 10/2/07
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 15.0 / SCREEN INTERVAL (ft.): 4.7 to 14.4
DRILLING EQUIPMENT: Geoprobe 6600	DEPTH TO WATER: FIRST 10.0 / COMPL. NA / CASING: 2" Sched. 40 PVC
SAMPLING METHOD: Geoprobe macro-core sampler [5' x 1.5"]	LOGGED BY: Z. Satterwhite
HAMMER WEIGHT: NA / DROP: NA	RESPONSIBLE PROFESSIONAL: N. Gray / REG. NO. L.G. 2557

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:
1	dug out			0	POORLY GRADED SAND with GRAVEL (SP): dark brown (10YR 3/3), moist, 55% fine to coarse sand, 40% fine gravel, 5% fines
2	PZU-5-3.5-1007			0 (HS)	POORLY GRADED SAND with SILT (SP-SM): dark grayish brown (10YR 4/2), moist, 90% fine to medium sand, 10% low plasticity fines
3				0	dry
4					
5				0	moist
6	PZU-5-8.0-1007			0	
7				0 (HS)	
8				0	dark yellowish brown (10YR 3/4), iron oxide mottling very dark gray (10YR 3/1)
9					
10				0	wet
11					SILT (ML): very dark gray (10YR 3/1), moist, 90% fines, 10% fine sand, low plasticity, firm
12				0/0 (HS)	
13				0/0 (HS)	POORLY GRADED GRAVEL (GP): angular, fine and coarse SANDY SILT (ML): dark yellowish brown (10YR 4/4), moist, 80% fines, 20% fine to coarse sand, low plasticity, firm
14					
15					



WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS

- Traffic Box
- Pre-mix Dry Concrete
- 3.5" diameter borehole
- Hole Plug granular bentonite
- 2" diameter Schedule 40 PVC casing
- #10/20 Silica filter pack sand
- #20/40 Silica filter pack sand
- 2" diameter, stainless steel wrapped prepacked Schedule 40 PVC, 0.010" slot well screen
- 2" diameter Schedule 40 PVC end cap

*OVM = miniRAE 2000 calibrated with 100 ppm isobutylene standard. (HS) indicates reading taken from head space in baggie.

PROJECT: Remedial Investigation
PSC Washougal

Log of Well No. PZU-5 (cont'd)

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
16					Bottom of boring at 15.0 feet. Ecology well ID = BAL101.	
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						
32						
33						

OAKWELLV (REV. 4/00)

PROJECT: PSC Washougal Washougal, WA	**Log of Well No. PZU-5R**
BORING LOCATION: S. 32nd St., Washougal, WA	TOP OF CASING ELEVATION AND DATUM:
DRILLING CONTRACTOR: Cascade Drilling, Inc.	DATE STARTED: 6/10/13 / DATE FINISHED: 6/10/13
DRILLING METHOD: Direct push	TOTAL DEPTH (ft.): 15.0 / SCREEN INTERVAL (ft.): 4.5 - 14.2
DRILLING EQUIPMENT: Geoprobe 7700 track LAR	DEPTH TO WATER (ft.): FIRST 6.1 / COMPL. / CASING: PVC
SAMPLING METHOD: Geoprobe macro-core sampler [5' x 1.75"]	LOGGED BY: N. Moxley
HAMMER WEIGHT: NA / DROP: NA	RESPONSIBLE PROFESSIONAL: N. Gray / REG. NO. L. G. 2557

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter.	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
					Surface Elevation:	
1					POORLY-GRADED SAND with GRAVEL (SP): brown, moist, 60% fine to medium SAND, 30% rounded gravel, 10% non plastic fines (Roadbase)	Traffic Rated Well Box concrete
2					POORLY-GRADED SAND with SILT (SP-SM): grayish brown, moist, 90% fine to medium SAND, 10% non plastic fines, with plant roots	3.5" diameter borehole granular bentonite
3						2" diameter, schedule 40 PVC casing
4						#10/12 filter pack sand
5					silt content decreases	
6					SILTY SAND (SM): brown with orange mottles, wet, 70% fine to medium SAND, 30% low plastic fines	#20/40 prepacked filter sand
7					POORLY-GRADED SAND with SILT (SP-SM): gray, wet, 85% fine to medium SAND, 15% low plastic fines, with plant roots	2" diameter, stainless steel wrapped, prepacked schedule 40 PVC, 0.010" slot well screen
8						
9						
10						
11					silt content decreases	
12					GRAVELLY SILT (ML): yellowish brown, wet, 70% organic low plastic fines, 20% fine angular gravel, 10% fine to medium sand, soft	
13						
14						2" diameter schedule 40 PVC end cap native sand
15					boring terminated at 15 ft. Ecology Well Tag ID = BHL220	
16						

Maul Foster & Alongi, Inc.

Geologic Borehole Log/Well Construction

Project Number	Well Number	Sheet
9009.01.12	**GP-28**	**1 of 1**

Project Name	**TrueGuard, LLC**	TOC Elevation (feet)	
Project Location	**725 South 32nd Street, Washougal, Washington 98671-2519**	Surface Elevation (feet)	**21.3**
Start/End Date	**05/05/09 to 05/05/09**	Northing	
Driller/Equipment	**Cascade Drilling, Inc./Geoprobe**	Easting	
Geologist/Engineer	**T. Silva**	Hole Depth	**12.0-feet**
Sample Method	**Geoprobe**	Outer Hole Diam	**4-inch**

Depth (feet, BGS)	Well Details	Sample Data: Interval	Percent Recovery	Collection Method	Number	Name (Type)	Blows/6"	Lithologic Column	Soil Description
1			**100%**	**GP**	**1**				*0.0 to 0.5 feet: Concrete.*
									0.5 to 2.0 feet: SAND (SP); light brown; 100% sand, medium; moist.
2									
									2.0 to 7.5 feet: SAND (SP); gray; 100% sand, medium; micaceous; moist.
3									
4			**100%**	**GP**	**2**				
5	▽								*@ 5.0 feet: Wet.*
6									
7									
8			**100%**	**GP**	**3**				*7.5 to 8.0 feet: SILT (ML); gray; 100% fines, medium plasticity; organic debris; moist.*
									8.0 to 9.5 feet: SAND (SP); gray; wet. Sample is loose from saturation and drilling action. Possible sluff from sands above.
9									
10									*9.5 to 12.0 feet: SILT (ML); gray; 100% fines, medium plasticity; organic debris; moist.*
11									
12									

Total Depth = 12.0 feet below ground surface.

Boring Completion Details
0.0 to 12.0 feet: 4-inch boring.
0.0 to 0.5 feet: concrete patch.
0.5 to 12.0 feet: bentonite chips hydrated with potable water.

NOTES: *1) The boring is centered between injection locations A-2 and A-3 and is 4.3 feet south of monitoring well MW-11. 2) GP = Geoprobe. 3) Collected soil material from approximately 2.5 to 10.5 feet below ground surface to composite into one soil sample.*

▽ ***Water level observed while drilling.***

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Maul Foster & Alongi, Inc.

Geologic Borehole Log/Well Construction

Project Number	Well Number	Sheet
9009.01.12	**GP-29**	**1 of 1**

Project Name	**TrueGuard, LLC**	TOC Elevation (feet)	
Project Location	**725 South 32nd Street, Washougal, Washington 98671-2519**	Surface Elevation (feet)	**21.9**
Start/End Date	**05/05/09 to 05/05/09**	Northing	
Driller/Equipment	**Cascade Drilling, Inc./Geoprobe**	Easting	
Geologist/Engineer	**T. Silva**	Hole Depth	**20.0-feet**
Sample Method	**Geoprobe**	Outer Hole Diam	**4-inch**

Depth (feet, BGS)	Well Details	Sample Data: Interval	Percent Recovery	Collection Method	Number	Name (Type)	Blows/6"	Lithologic Column	Soil Description
1			90%	GP	1				0.0 to 0.5 feet: ASPHALT.
									0.5 to 1.5 feet: GRAVEL (GP); light brown; moist. (FILL)
2									1.5 to 5.5 feet: SAND (SP); light brown; 100% sand, medium, micaceous; moist.
3									
4		▽	100%	GP	2				@ 4.0 feet: Wet.
5									
6									5.5 to 18.0 feet: SAND (SP); gray grading to dark gray with depth; 100% sand, medium; micaceous; wet.
7									
8			100%	GP	3				
9									
10									
11									
12			100%	GP	4				
13									
14									Boring Completion Details 0.0 to 20.0 feet: 4-inch boring. 0.0 to 0.5 feet: concrete patch. 0.5 to 20.0 feet: bentonite chips hydrated with potable water.
15									
16			100%	GP	5				
17									
18									
19									18.0 to 20.0 feet: SILT (ML); gray; 100% fines, medium plasticity; trace organic debris; moist.
20									Total Depth = 20.0 feet below ground surface.

NOTES: *1) The boring is located between monitoring well MW-3 and injection location B-1. The boring is 3.7 feet west and 2.8 feet south of MW-3. 2) GP = Geoprobe. 3) Collected soil material from approximately 4.0 to 18.0 feet below ground surface to composite into one soil sample.*

▽ ***Water level observed while drilling.***

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Maul Foster & Alongi, Inc.

Geologic Borehole Log/Well Construction

Project Number	Well Number	Sheet
9009.01.12	**MW-16**	**1 of 1**

Project Name	**TrueGuard, LLC**	TOC Elevation (feet)	**21.331**
Project Location	**725 South 32nd Street, Washougal, Washington 98671-2519**	Surface Elevation (feet)	**21.6**
Start/End Date	**05/05/09 to 05/05/09**	Northing	**92119.4**
Driller/Equipment	**Cascade Drilling, Inc./Geoprobe**	Easting	**1169533.0**
Geologist/Engineer	**T. Silva**	Hole Depth	**15.0-feet**
Sample Method	**Geoprobe**	Outer Hole Diam	**4-inch**

Depth (feet, BGS)	Well Details	Sample Data: Interval	Percent Recovery	Collection Method	Number	Name (Type)	Blows/6"	Lithologic Column	Soil Description
1			100%	GP	1				0.0 to 0.5 feet: CONCRETE.
									0.5 to 1.0 foot: SILTY GRAVEL (GM); grayish brown. Hand dug by driller. (FILL)
2									1.0 to 1.5 feet: SAND (SP), brown. Hand dug by driller.
									1.5 to 5.0 feet: SAND (SP); dark brown; 100% sand, medium; micaceous; moist.
3									
4									
5	▽		100%	GP	2				5.0 to 14.0 feet: SAND (SP); gray; 100% sand, medium; micaceous, wet.
6									
7									
8									
9									
10			100%	GP	3				
11									
12									
13									
14									14.0 to 15.0 feet: SILT (ML); gray; 100% fines, medium plasticity; micaceous; trace organic debris at the top of the silt; moist.
15									

Total Depth = 15.0 feet below ground surface.

<u>Boring Completion Details</u>
0.0 to 15.0 feet: 4-inch boring.
0.0 to 1.0 feet: concrete.
1.0 to 3.0 feet: bentonite chips hydrated with potable water.
3.0 to 15.0 feet: 10X20 silica sand.

<u>Monitoring Well Completion Details</u>
Flush-mount-up completion.
0.2 to 4.0 feet: 2-inch, schedule 40, polyvinyl chloride, riser pipe.
4.0 to 14.0 feet: 2-inch, schedule 40, polyvinyl chloride, 0.010-inch, machine slot, prepacked, well screen.
4.4 to 14.7 feet: 2-inch, schedule 40, polyvinyl chloride pipe end cap.

NOTES: *1) GP = Geoprobe.*

▽ ***Water level observed while drilling.***

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APPENDIX G

Analytical Results for Soil

TABLE G-1

SOIL ANALYTICAL RESULTS FOR VOLATILE ORGANIC COMPOUNDS (1996-2009)[1]

PSC Washougal Facility
Washougal, Washington

Concentrations in micrograms per kilogram (µg/kg)

Site ID	B-1	B-10	B-11	B-12	B-13	B-14	B-15	B-16	B-17	B-18	B-19	B-2	B-20	B-21	B-22	B-3	B-4	B-5	B-6	B-7	B-8
Depth (in feet)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Analyte / Sample Date	8/19/1999	8/20/1999	8/20/1999	8/20/1999	8/20/1999	8/19/1999	8/20/1999	8/20/1999	8/19/1999	8/19/1999	8/19/1999	8/19/1999	8/19/1999	8/19/1999	8/20/1999	8/19/1999	8/20/1999	8/20/1999	8/20/1999	8/20/1999	8/20/1999
1,1,1,2-Tetrachloroethane	--	--	--	--	--	3 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,2,2-Tetrachloroethane	13 U	25 U	25 U	15 U	13 U	15 U	25 U	25 U	3 U	15 U	15 U	15 U	15 U	15 U	25 U	15 U	25 U	25 U	25 U	25 U	25 U
1,1,1-Trichloroethane	4.2 U	8.3 U	8.3 U	5 U	4.2 U	5 U	8.3 U	8.3 U	1 U	5 U	5 U	5 U	5 U	5 U	8.3 U	5 U	8.3 U	8.3 U	8.3 U	8.3 U	8.3 U
1,1,2-Trichloroethane	4.2 U	8.3 U	8.3 U	5 U	4.2 U	5 U	8.3 U	8.3 U	1 U	5 U	5 U	5 U	5 U	5 U	8.3 U	5 U	8.3 U	8.3 U	8.3 U	8.3 U	8.3 U
1,1,2-Trichlorotrifluoroethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloro-1,2,2-trifluoroethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,2-Dichloro-1,1,1-trifluoroethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloroethane	4.2 U	8.3 U	8.3 U	5 U	4.2 U	5 U	8.3 U	8.3 U	1 U	5 U	5 U	5 U	5 U	5 U	8.3 U	5 U	8.3 U	8.3 U	8.3 U	8.3 U	8.3 U
1,2-Dichloroethane	4.2 U	8.3 U	8.3 U	5 U	4.2 U	5 U	8.3 U	8.3 U	1 U	5 U	5 U	5 U	5 U	5 U	8.3 U	5 U	8.3 U	8.3 U	8.3 U	8.3 U	8.3 U
1,1-Dichloroethene	4.2 U	8.3 U	8.3 U	5 U	4.2 U	5 U	8.3 U	8.3 U	1 U	5 U	5 U	5 U	5 U	5 U	8.3 U	5 U	8.3 U	8.3 U	8.3 U	8.3 U	8.3 U
1,2-Dichlorobenzene	4.2 U	8.3 U	8.3 U	5 U	4.2 U	5 U	8.3 U	8.3 U	1 U	5 U	5 U	5 U	5 U	5 U	8.3 U	5 U	8.3 U	8.3 U	8.3 U	8.3 U	8.3 U
1,3-Dichlorobenzene	4.2 U	8.3 U	8.3 U	5 U	4.2 U	5 U	8.3 U	8.3 U	1 U	5 U	5 U	5 U	5 U	5 U	8.3 U	5 U	8.3 U	8.3 U	8.3 U	8.3 U	8.3 U
1,4-Dichlorobenzene	4.2 U	8.3 U	8.3 U	5 U	4.2 U	5 U	8.3 U	8.3 U	1 U	5 U	5 U	5 U	5 U	5 U	8.3 U	5 U	8.3 U	8.3 U	8.3 U	8.3 U	8.3 U
1,2-Dichloropropane	4.2 U	8.3 U	8.3 U	5 U	4.2 U	5 U	8.3 U	8.3 U	1 U	5 U	5 U	5 U	5 U	5 U	8.3 U	5 U	8.3 U	8.3 U	8.3 U	8.3 U	8.3 U
1,3-Dichloropropane	4.2 U	8.3 U	8.3 U	5 U	4.2 U	5 U	8.3 U	8.3 U	1 U	5 U	5 U	5 U	5 U	5 U	8.3 U	5 U	8.3 U	8.3 U	8.3 U	8.3 U	8.3 U
2,2-Dichloropropane	4.2 U	8.3 U	8.3 U	5 U	4.2 U	5 U	8.3 U	8.3 U	1 U	5 U	5 U	5 U	5 U	5 U	8.3 U	5 U	8.3 U	8.3 U	8.3 U	8.3 U	8.3 U
1,1-Dichloropropene	4.2 U	8.3 U	8.3 U	5 U	4.2 U	5 U	8.3 U	8.3 U	1 U	5 U	5 U	5 U	5 U	5 U	8.3 U	5 U	8.3 U	8.3 U	8.3 U	8.3 U	8.3 U
1,1-DichloroTrifluoroethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichlorobenzene	4.2 U	8.3 U	8.3 U	5 U	4.2 U	5 U	8.3 U	8.3 U	1 U	5 U	5 U	5 U	5 U	5 U	8.3 U	5 U	8.3 U	8.3 U	8.3 U	8.3 U	8.3 U
1,2,3-Trichloropropane	4.2 U	8.3 U	8.3 U	5 U	4.2 U	5 U	8.3 U	8.3 U	1 U	5 U	5 U	5 U	5 U	5 U	8.3 U	5 U	8.3 U	8.3 U	48	8.3 U	8.3 U
1,2,4-Trichlorobenzene	4.2 U	8.3 U	8.3 U	5 U	4.2 U	5 U	8.3 U	8.3 U	1 U	5 U	5 U	5 U	5 U	5 U	8.3 U	5 U	8.3 U	8.3 U	8.3 U	8.3 U	8.3 U
1,2,4-Trimethylbenzene	890	8.3 U	8.3 U	5 U	4.2 U	5 U	8.3 U	8.3 U	1 U	6.9	5 U	5 U	10	5 U	8.3 U	5 U	8.3 U	8.3 U	8.3 U	8.3 U	8.3 U
1,2-Dibromo-3-chloropropane	21 U	42 U	42 U	25 U	21 U	25 U	42 U	42 U	5 U	25 U	25 U	25 U	25 U	25 U	42 U	25 U	42 U	42 U	42 U	42 U	42 U
1,2-Dibromoethane	4.2 U	8.3 U	8.3 U	5 U	4.2 U	5 U	8.3 U	8.3 U	1 U	5 U	5 U	5 U	5 U	5 U	8.3 U	5 U	8.3 U	8.3 U	8.3 U	8.3 U	8.3 U
1,3,5-Trimethylbenzene	280	8.3 U	8.3 U	5 U	4.2 U	5 U	8.3 U	8.3 U	1 U	5 U	5 U	5 U	5 U	5 U	8.3 U	5 U	8.3 U	8.3 U	8.3 U	8.3 U	8.3 U
2-Butanone (MEK)	21 U	42 U	42 U	25 U	21 U	54	42 U	42 U	5 U	25 U	25 U	25 U	25 U	25 U	42 U	25 U	42 U	42 U	42 U	42 U	42 U
2-Chloroethylvinylether	4.2 U	8.3 U	8.3 U	5 U	4.2 U	5 U	8.3 U	8.3 U	1 U	5 U	5 U	5 U	5 U	5 U	8.3 U	5 U	8.3 U	8.3 U	8.3 U	8.3 U	8.3 U
2-Chlorotoluene	4.2 U	8.3 U	8.3 U	5 U	4.2 U	5 U	8.3 U	8.3 U	1 U	5 U	5 U	5 U	5 U	5 U	8.3 U	5 U	8.3 U	8.3 U	8.3 U	8.3 U	8.3 U
2-Hexanone	21 U	42 U	42 U	25 U	21 U	25 U	42 U	42 U	5 U	25 U	25 U	25 U	25 U	25 U	42 U	25 U	42 U	42 U	42 U	42 U	42 U
2-methylpentane	21 U	42 U	42 U	25 U	21 U	25 U	42 U	42 U	5 U	25 U	25 U	25 U	25 U	25 U	42 U	25 U	42 U	42 U	42 U	42 U	42 U
3-Methylpentane	21 U	42 U	42 U	25 U	21 U	25 U	42 U	42 U	5 U	25 U	25 U	25 U	25 U	25 U	42 U	25 U	42 U	42 U	42 U	42 U	42 U
4-Chlorotoluene	4.2 U	8.3 U	8.3 U	5 U	4.2 U	5 U	8.3 U	8.3 U	1 U	5 U	5 U	5 U	5 U	5 U	8.3 U	5 U	8.3 U	8.3 U	8.3 U	8.3 U	8.3 U
4-Methyl-2-pentanone (MIBK)	21 U	42 U	42 U	5 U	21 U	25 U	42 U	42 U	5 U	25 U	25 U	25 U	25 U	25 U	42 U	25 U	42 U	42 U	42 U	42 U	42 U
Acetone	53	42 U	42 U	25 U	21 U	360	42 U	42 U	5 U	25 U	25 U	25 U	25 U	25 U	42 U	25 U	42 U	42 U	42 U	42 U	42 U
Acrolein	84 U	170 U	170 U	100 U	84 U	100 U	170 U	170 U	20 U	100 U	100 U	100 U	100 U	100 U	170 U	100 U	170 U	170 U	170 U	170 U	170 U
Acrylonitrile	21 U	42 U	42 U	25 U	21 U	25 U	42 U	42 U	5 U	25 U	25 U	25 U	25 U	25 U	42 U	25 U	42 U	42 U	42 U	42 U	42 U
Benzene	4.2 U	8.3 U	8.3 U	5 U	4.2 U	5 U	8.3 U	8.3 U	1 U	5 U	5 U	5 U	5 U	5 U	8.3 U	5 U	8.3 U	8.3 U	8.3 U	8.3 U	8.3 U
Bromobenzene	4.2 U	8.3 U	8.3 U	5 U	4.2 U	5 U	8.3 U	8.3 U	1 U	5 U	5 U	5 U	5 U	5 U	8.3 U	5 U	8.3 U	8.3 U	8.3 U	8.3 U	8.3 U
Bromochloromethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromodichloromethane	4.2 U	8.3 U	8.3 U	5 U	4.2 U	5 U	8.3 U	8.3 U	1 U	5 U	5 U	5 U	5 U	5 U	8.3 U	5 U	8.3 U	8.3 U	8.3 U	8.3 U	8.3 U
Bromoform	4.2 U	8.3 U	8.3 U	5 U	4.2 U	5 U	8.3 U	8.3 U	1 U	5 U	5 U	5 U	5 U	5 U	8.3 U	5 U	8.3 U	8.3 U	8.3 U	8.3 U	8.3 U
Bromomethane	4.2 U	8.3 U	8.3 U	5 U	4.2 U	5 U	8.3 U	8.3 U	1 U	5 U	5 U	5 U	5 U	5 U	8.3 U	5 U	8.3 U	8.3 U	8.3 U	8.3 U	8.3 U
Carbon disulfide	4.2 U	8.3 U	8.3 U	5 U	4.2 U	5 U	8.3 U	8.3 U	1 U	7.6	14	11	5 U	5 U	8.3 U	5 U	8.3 U	8.3 U	8.3 U	19	8.3 U
Carbon tetrachloride	4.2 U	8.3 U	8.3 U	5 U	4.2 U	5 U	8.3 U	8.3 U	1 U	5 U	5 U	5 U	5 U	5 U	8.3 U	5 U	8.3 U	8.3 U	8.3 U	8.3 U	8.3 U
Chlorobenzene	4.2 U	8.3 U	8.3 U	5 U	4.2 U	5 U	8.3 U	8.3 U	1 U	5 U	5 U	5 U	5 U	5 U	8.3 U	5 U	8.3 U	8.3 U	8.3 U	8.3 U	8.3 U
Chlorobromo-methane	4.2 U	8.3 U	8.3 U	5 U	4.2 U	5 U	8.3 U	8.3 U	1 U	5 U	5 U	5 U	5 U	5 U	8.3 U	5 U	8.3 U	8.3 U	8.3 U	8.3 U	8.3 U
Chloroethane	4.2 U	8.3 U	8.3 U	5 U	4.2 U	5 U	8.3 U	8.3 U	1 U	5 U	5 U	5 U	5 U	5 U	8.3 U	5 U	8.3 U	8.3 U	8.3 U	8.3 U	8.3 U
Chloroform	4.2 U	8.3 U	8.3 U	5 U	4.2 U	5 U	8.3 U	8.3 U	1 U	5 U	5 U	5 U	5 U	5 U	8.3 U	5 U	8.3 U	8.3 U	8.3 U	8.3 U	8.3 U
Chloromethane	4.2 U	8.3 U	8.3 U	5 U	4.2 U	5 U	8.3 U	8.3 U	1 U	5 U	5 U	5 U	5 U	5 U	8.3 U	5 U	8.3 U	8.3 U	8.3 U	8.3 U	8.3 U
cis-1,2-Dichloroethene	4.2 U	8.3 U	8.3 U	5 U	6	5 U	8.3 U	8.3 U	1 U	11	5 U	5 U	5 U	5 U	8.3 U	5 U	8.3 U	8.3 U	8.3 U	8.3 U	8.3 U
cis-1,3-Dichloropropene	4.2 U	8.3 U	8.3 U	5 U	4.2 U	5 U	8.3 U	8.3 U	1 U	5 U	5 U	5 U	5 U	5 U	8.3 U	5 U	8.3 U	8.3 U	8.3 U	8.3 U	8.3 U
Dibromochloromethane	4.2 U	8.3 U	8.3 U	5 U	4.2 U	5 U	8.3 U	8.3 U	1 U	5 U	5 U	5 U	5 U	5 U	8.3 U	5 U	8.3 U	8.3 U	8.3 U	8.3 U	8.3 U
Dibromomethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE G-1

SOIL ANALYTICAL RESULTS FOR VOLATILE ORGANIC COMPOUNDS (1996-2009)[1]

PSC Washougal Facility
Washougal, Washington

Concentrations in micrograms per kilogram (µg/kg)

Site ID	B-1	B-10	B-11	B-12	B-13	B-14	B-15	B-16	B-17	B-18	B-19	B-2	B-20	B-21	B-22	B-3	B-4	B-5	B-6	B-7	B-8
Depth (in feet)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Analyte / Sample Date	8/19/1999	8/20/1999	8/20/1999	8/20/1999	8/20/1999	8/19/1999	8/20/1999	8/20/1999	8/19/1999	8/19/1999	8/19/1999	8/19/1999	8/19/1999	8/19/1999	8/20/1999	8/19/1999	8/20/1999	8/20/1999	8/20/1999	8/20/1999	8/20/1999
Dichlorodifluoromethane	4.2 U	8.3 U	8.3 U	5 U	4.2 U	5 U	8.3 U	8.3 U	1 U	5 U	5 U	5 U	5 U	5 U	8.3 U	5 U	8.3 U	8.3 U	8.3 U	8.3 U	8.3 U
Dichlorotrifluoroethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Diethyl ether	21 U	8.3 U	8.3 U	25 U	4.2 U	25 U	8.3 U	8.3 U	1 U	25 U	25 U	25 U	25 U	25 U	8.3 U	25 U	8.3 U	8.3 U	8.3 U	8.3 U	8.3 U
Ethylbenzene	17	8.3 U	8.3 U	5 U	10	5 U	8.3 U	8.3 U	1 U	17	5 U	5 U	5 U	5 U	48	5 U	8.3 U	8.3 U	22	8.3 U	8.3 U
Hexachlorobutadiene	4.2 U	8.3 U	8.3 U	5 U	4.2 U	5 U	8.3 U	8.3 U	1 U	5 U	5 U	5 U	5 U	5 U	8.3 U	5 U	8.3 U	8.3 U	8.3 U	8.3 U	8.3 U
Isopropylbenzene	4.2 U	8.3 U	8.3 U	5 U	4.2 U	5 U	8.3 U	8.3 U	1 U	5 U	5 U	5 U	5 U	5 U	8.3 U	5 U	8.3 U	8.3 U	8.3 U	8.3 U	8.3 U
m,p-Xylene	57	8.3 U	8.3 U	5 U	31	5 U	8.3 U	8.3 U	1 U	61	5 U	5 U	5 U	5 U	9.8	5 U	8.3 U	8.3 U	24	18	18
methylcyclopentane	4.2 U	8.3 U	8.3 U	5 U	4.2 U	5 U	8.3 U	8.3 U	1 U	5 U	5 U	5 U	5 U	5 U	8.3 U	5 U	8.3 U	8.3 U	8.3 U	8.3 U	8.3 U
Methylene bromide	4.2 U	8.3 U	8.3 U	5 U	4.2 U	5 U	8.3 U	8.3 U	1 U	5 U	5 U	5 U	5 U	5 U	8.3 U	5 U	8.3 U	8.3 U	8.3 U	8.3 U	8.3 U
Methylene chloride	21 U	42 U	42 U	25 U	21 U	25 U	42 U	42 U	5 U	25 U	25 U	25 U	25 U	25 U	42 U	25 U	42 U	42 U	42 U	42 U	42 U
Naphthalene	810	42 U	42 U	25 U	21 U	25 U	42 U	42 U	5 U	25 U	25 U	25 U	25 U	25 U	42 U	25 U	42 U	42 U	42 U	42 U	42 U
n-Butylbenzene	4.2 U	8.3 U	8.3 U	5 U	4.2 U	5 U	8.3 U	8.3 U	1 U	5 U	5 U	5 U	5 U	5 U	8.3 U	5 U	8.3 U	8.3 U	8.3 U	8.3 U	8.3 U
n-Propylbenzene	4.2 U	8.3 U	8.3 U	5 U	4.2 U	5 U	8.3 U	8.3 U	1 U	5 U	5 U	5 U	5 U	5 U	8.3 U	5 U	8.3 U	8.3 U	8.3 U	8.3 U	8.3 U
o-Xylene	140	8.3 U	8.3 U	5 U	5	5 U	8.3 U	8.3 U	1 U	8.7	5 U	5 U	5 U	5 U	11	5 U	8.3 U	8.3 U	8.3 U	8.3 U	8.3 U
p-Cymene	4.2 U	8.3 U	8.3 U	5 U	4.2 U	5 U	8.3 U	8.3 U	1 U	5 U	5 U	5 U	5 U	5 U	8.3 U	5 U	8.3 U	8.3 U	8.3 U	8.3 U	8.3 U
p-isopropyltoluene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
sec-Butylbenzene	4.2 U	8.3 U	8.3 U	5 U	4.2 U	5 U	8.3 U	8.3 U	1 U	5 U	5 U	5 U	5 U	5 U	8.3 U	5 U	8.3 U	8.3 U	8.3 U	8.3 U	8.3 U
Styrene	4.2 U	8.3 U	8.3 U	5 U	4.2 U	5 U	8.3 U	8.3 U	1 U	5 U	5 U	5 U	5 U	5 U	8.3 U	5 U	8.3 U	8.3 U	8.3 U	8.3 U	8.3 U
tert-Butylbenzene	4.2 U	8.3 U	8.3 U	5 U	4.2 U	5 U	8.3 U	8.3 U	1 U	5 U	5 U	5 U	5 U	5 U	8.3 U	5 U	8.3 U	8.3 U	8.3 U	8.3 U	8.3 U
Tetrachloroethene	220	8.3 U	8.3 U	32	4.2 U	20	8.3 U	8.3 U	1 U	5 U	5 U	5 U	5 U	14	8.3 U	5 U	8.3 U	8.3 U	8.3 U	8.3 U	8.3 U
Toluene	8.4 U	17 U	17 U	10 U	100	18	17 U	17 U	2 U	210	10 U	10 U	10 U	10 U	19	17	17 U	17 U	17 U	17 U	71
trans-1,2-Dichloroethene	4.2 U	8.3 U	8.3 U	5 U	4.2 U	5 U	8.3 U	8.3 U	1 U	5 U	5 U	5 U	5 U	5 U	8.3 U	5 U	8.3 U	8.3 U	8.3 U	8.3 U	8.3 U
trans-1,3-Dichloropropene	4.2 U	8.3 U	8.3 U	5 U	4.2 U	5 U	8.3 U	8.3 U	1 U	5 U	5 U	5 U	5 U	5 U	8.3 U	5 U	8.3 U	8.3 U	8.3 U	8.3 U	8.3 U
Trichloroethene	40	17 U	76	10 U	8.4 U	10 U	17 U	17 U	2 U	10 U	10 U	10 U	10 U	10 U	17 U	10 U	17 U	17 U	37	17 U	17 U
Trichlorofluoromethane	4.2 U	8.3 U	8.3 U	5 U	4.2 U	5 U	8.3 U	8.3 U	1 U	5 U	5 U	5 U	5 U	5 U	8.3 U	5 U	8.3 U	8.3 U	8.3 U	8.3 U	8.3 U
Vinyl acetate	4.2 U	8.3 U	8.3 U	5 U	4.2 U	5 U	8.3 U	8.3 U	1 U	5 U	5 U	5 U	5 U	5 U	8.3 U	5 U	8.3 U	8.3 U	8.3 U	8.3 U	8.3 U
Vinyl chloride	4.2 U	8.3 U	8.3 U	5 U	4.2 U	5 U	8.3 U	8.3 U	1 U	5 U	5 U	5 U	5 U	5 U	8.3 U	5 U	8.3 U	8.3 U	8.3 U	8.3 U	8.3 U

TABLE G-1

SOIL ANALYTICAL RESULTS FOR VOLATILE ORGANIC COMPOUNDS (1996-2009)[1]

PSC Washougal Facility
Washougal, Washington

Concentrations in micrograms per kilogram (µg/kg)

Site ID	B-9	CIA-01	CIA-02	CIA-03	CIA-04	CIA-06	CIA-07	CIA-08	CIA-09	CIA-1	CIA-1	CIA-10	CIA-11	CIA-13	CIA-15	CIA-2	CIA-23	CIA-3	CIA-3	CIA-4	CIA-5
Depth (in feet)	0	4	4	4	4	4	4	4	4	4	6	6	6	6	6	4	6	4	6	4	6
Analyte / Sample Date	8/20/1999	9/19/1997	9/19/1997	9/19/1997	9/19/1997	9/19/1997	9/19/1997	9/19/1997	9/19/1997	9/19/1997	9/24/1997	9/19/1997	9/24/1997	9/24/1997	9/24/1997	9/19/1997	9/30/1997	9/19/1997	9/24/1997	9/19/1997	9/19/1997
1,1,1,2-Tetrachloroethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,2,2-Tetrachloroethane	25 U	--	--	--	--	--	--	--	--	30 U	5 U	30 U	6 U	7 U	6 U	30 U	4 U	30 U	6 U	30 U	30 U
1,1,1-Trichloroethane	8.3 U	--	1920	5280	6100	643	369	1610	46	10 U	5.52	125	35.2	88.5	15.3	--	1 U	--	9.11	--	276
1,1,2-Trichloroethane	8.3 U	--	--	--	--	--	--	--	--	10 U	2 U	10 U	2 U	2 U	2.6	10 U	1 U	10 U	2 U	10 U	10 U
1,1,2-Trichlorotrifluoroethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloro-1,2,2-trifluoroethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,2-Dichloro-1,1,1-trifluoroethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloroethane	8.3 U	--	24.6	291	190	--	--	33.3	34.8	10 U	2 U	10 U	3.53	4.74	8.98	--	1 U	--	2 U	--	47.4
1,2-Dichloroethane	8.3 U	--	--	--	--	--	--	--	--	10 U	2 U	10 U	2 U	2 U	2 U	10 U	1 U	10 U	2 U	10 U	10 U
1,1-Dichloroethene	8.3 U	--	--	--	--	--	--	--	--	10 U	2 U	10 U	2 U	2 U	2 U	10 U	1 U	10 U	2 U	10 U	10 U
1,2-Dichlorobenzene	8.3 U	273	1470	2880	919	1050	476	810	36.7	--	2 U	10 U	8.14	26.9	13.7	--	1 U	--	13.6	--	54.4
1,3-Dichlorobenzene	8.3 U	59.4	34.2	116	160	49.5	23.8	42	--	--	2 U	10 U	3.12	2 U	2 U	--	1 U	--	2 U	--	10 U
1,4-Dichlorobenzene	8.3 U	95.4	90.7	116	208	94.1	40.5	92.4	--	--	2 U	10 U	3.23	2.77	2 U	--	1 U	--	2 U	--	10 U
1,2-Dichloropropane	8.3 U	--	--	--	--	--	--	--	--	10 U	2 U	10 U	4.87	2 U	2 U	10 U	1 U	10 U	2 U	10 U	10 U
1,3-Dichloropropane	8.3 U	--	--	--	--	--	--	--	--	10 U	2 U	10 U	2 U	2 U	2 U	10 U	1 U	10 U	2 U	10 U	10 U
2,2-Dichloropropane	8.3 U	--	--	--	--	--	--	--	--	10 U	2 U	10 U	2 U	2 U	2 U	10 U	1 U	10 U	2 U	10 U	10 U
1,1-Dichloropropene	8.3 U	--	--	--	--	--	--	--	--	10 U	2 U	10 U	2 U	2 U	2 U	10 U	1 U	10 U	2 U	10 U	10 U
1,1-DichloroTrifluoroethane	--	--	--	--	--	--	--	--	--	50 U	9 U	50 U	10 U	11 U	11 U	50 U	7 U	50 U	9 U	50 U	50 U
1,2,3-Trichlorobenzene	8.3 U	--	--	--	--	--	--	--	--	10 U	2 U	10 U	2.41	2 U	2 U	10 U	1 U	10 U	2 U	10 U	10 U
1,2,3-Trichloropropane	8.3 U	--	--	--	--	--	--	--	--	10 U	2 U	10 U	2 U	2 U	2 U	10 U	1 U	10 U	2 U	10 U	10 U
1,2,4-Trichlorobenzene	8.3 U	--	--	--	10.2	--	--	--	--	10 U	2 U	10 U	2 U	2 U	2 U	10 U	1 U	10 U	2 U	--	10 U
1,2,4-Trimethylbenzene	8.3 U	23600	17200	30300	23500	16600	8200	14800	483	--	2 U	101	38.4	25.8	40.1	--	1.97	--	42	--	1610
1,2-Dibromo-3-chloropropane	42 U	--	--	--	--	--	--	--	--	10 U	9 U	50 U	10 U	7 U	11 U	50 U	7 U	50 U	9 U	50 U	50 U
1,2-Dibromoethane	8.3 U	--	--	--	--	--	--	--	--	10 U	2 U	10 U	2 U	2 U	2 U	10 U	1 U	10 U	2 U	10 U	10 U
1,3,5-Trimethylbenzene	8.3 U	8800	6360	11500	9180	6280	3290	2390	102	--	2.19	30.9	385	198	69.3	--	1 U	--	56.5	--	588
2-Butanone (MEK)	42 U	--	--	--	9470	--	--	--	--	10 U	9 U	50 U	10 U	11 U	11 U	50 U	7 U	50 U	9 U		50 U
2-Chloroethylvinylether	8.3 U	--	--	--	--	--	--	--	--	10 U	2 U	10 U	2 U	2 U	2 U	10 U	1 U	10 U	2 U	10 U	10 U
2-Chlorotoluene	8.3 U	--	--	--	--	--	--	--	--	10 U	2 U	10 U	2 U	2 U	2 U	10 U	1 U	10 U	2 U	10 U	10 U
2-Hexanone	42 U	--	--	--	--	--	--	--	--	50 U	9 U	50 U	10 U	54.8	11 U	50 U	7 U	50 U	9 U	50 U	50 U
2-methylpentane	42 U	114	300	333	1600	351	73.5	278	--	--	9 U	50 U	13.6	31.8	11 U	--	7 U	--	9 U	--	50 U
3-Methylpentane	42 U	109	292	265	1220	361	69.6	142	--	--	9 U	50 U	9.68	21.4	11 U	--	7 U	--	9 U	--	50 U
4-Chlorotoluene	8.3 U	--	--	--	--	71.4	--	--	--	10 U	2 U	10 U	2 U	2 U	2 U	10 U	1 U	10 U	2 U	10 U	10 U
4-Methyl-2-pentanone (MIBK)	42 U	--	--	--	--	--	--	--	--	50 U	9 U	50 U	10 U	11 U	11 U	50 U	7 U	50 U	9 U	50 U	50 U
Acetone	42 U	188	--	--	1830	1570	159	--	--	--	39.8	50 U	29	83.3	14	50 U	55.2	50 U	26.8	--	50 U
Acrolein	170 U	--	--	--	--	--	--	--	--	10 U	35 U	200 U	39 U	45 U	43 U	200 U	29 U	200 U	38 U	200 U	200 U
Acrylonitrile	42 U	--	--	--	--	--	--	--	--	50 U	9 U	50 U	10 U	11 U	11 U	10 U	7 U	50 U	9 U	50 U	50 U
Benzene	8.3 U	--	--	546	--	--	--	--	--	10 U	2 U	10 U	2 U	2 U	2 U	10 U	1 U	--	2 U	10 U	10 U
Bromobenzene	8.3 U	--	--	--	--	--	--	--	--	10 U	2 U	10 U	2 U	2 U	2 U	10 U	1 U	10 U	2 U	10 U	10 U
Bromochloromethane	--	--	--	--	--	--	--	--	--	10 U	2 U	10 U	2 U	2 U	2 U	10 U	1 U	10 U	2 U	10 U	10 U
Bromodichloromethane	8.3 U	--	--	--	--	--	--	--	--	10 U	2 U	10 U	2 U	2 U	2 U	10 U	1 U	10 U	2 U	10 U	10 U
Bromoform	8.3 U	--	--	--	--	--	--	--	--	10 U	2 U	10 U	2 U	2 U	2 U	10 U	1 U	10 U	2 U	10 U	10 U
Bromomethane	8.3 U	--	--	--	--	--	--	--	--	10 U	2 U	10 U	2 U	2 U	2 U	10 U	1 U	10 U	2 U	10 U	10 U
Carbon disulfide	8.3 U	106	--	--	--	--	--	--	--	--	2 U	10 U	2 U	2 U	2 U	10 U	1 U	10 U	2 U	10 U	10 U
Carbon tetrachloride	8.3 U	--	--	--	--	--	--	--	--	10 U	2 U	10 U	2 U	2 U	2 U	10 U	1 U	10 U	2 U	10 U	10 U
Chlorobenzene	8.3 U	--	--	--	--	--	--	--	--	10 U	2 U	10 U	2 U	2 U	2 U	10 U	1 U	10 U	2 U	10 U	10 U
Chlorobromo-methane	8.3 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloroethane	8.3 U	--	--	--	--	--	--	--	--	10 U	2 U	10 U	2 U	2 U	2 U	10 U	1 U	10 U	2 U	10 U	10 U
Chloroform	8.3 U	--	--	--	--	--	--	--	--	10 U	2 U	10 U	2 U	2 U	--	10 U	1 U	10 U	2 U	10 U	10 U
Chloromethane	8.3 U	--	--	--	--	--	--	--	--	10 U	2 U	10 U	2 U	2 U	2 U	10 U	1 U	10 U	2 U	10 U	10 U
cis-1,2-Dichloroethene	8.3 U	--	484	499	593	125	17.4	506	62.3	10 U	3.03	15.6	16.4	37.4	37.3	--	1 U	--	4.04	--	202
cis-1,3-Dichloropropene	8.3 U	--	--	--	--	--	--	--	--	10 U	2 U	10 U	2 U	2 U	2 U	10 U	1 U	10 U	2 U	10 U	10 U
Dibromochloromethane	8.3 U	--	--	--	--	--	--	--	--	10 U	2 U	10 U	2 U	2 U	2 U	10 U	1 U	10 U	2 U	10 U	10 U
Dibromomethane	--	--	--	--	--	--	--	--	--	10 U	2 U	10 U	2 U	2 U	2 U	10 U	1 U	10 U	2 U	10 U	10 U

TABLE G-1

SOIL ANALYTICAL RESULTS FOR VOLATILE ORGANIC COMPOUNDS (1996-2009)[1]
PSC Washougal Facility
Washougal, Washington

Concentrations in micrograms per kilogram (µg/kg)

Site ID	B-9	CIA-01	CIA-02	CIA-03	CIA-04	CIA-06	CIA-07	CIA-08	CIA-09	CIA-1	CIA-1	CIA-10	CIA-11	CIA-13	CIA-15	CIA-2	CIA-23	CIA-3	CIA-3	CIA-4	CIA-5
Depth (in feet)	0	4	4	4	4	4	4	4	4	4	6	6	6	6	6	4	6	4	6	4	6
Analyte / Sample Date	8/20/1999	9/19/1997	9/19/1997	9/19/1997	9/19/1997	9/19/1997	9/19/1997	9/19/1997	9/19/1997	9/19/1997	9/24/1997	9/19/1997	9/24/1997	9/24/1997	9/24/1997	9/19/1997	9/30/1997	9/19/1997	9/24/1997	9/19/1997	9/19/1997
Dichlorodifluoromethane	8.3 U	--	--	--	--	--	--	--	--	10 U	2 U	10 U	2 U	2 U	2 U	10 U	1 U	10 U	2 U	10 U	10 U
Dichlorotrifluoroethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Diethyl ether	8.3 U	--	--	--	--	--	--	--	--	50 U	9 U	50 U	10 U	11 U	11 U	50 U	7 U	50 U	9 U	50 U	50 U
Ethylbenzene	8.3 U	--	5530	14000	7470	4140	2480	4420	90.8	10 U	2 U	33.8	7.18	128	40.4	--	1 U	--	16.2	--	383
Hexachlorobutadiene	8.3 U	--	--	--	--	--	--	--	--	10 U	2 U	10 U	2 U	2 U	2 U	10 U	1 U	10 U	2 U	10 U	10 U
Isopropylbenzene	8.3 U	--	667	1500	1350	797	433	594	19.1	10 U	2 U	10 U	11	19.4	4.24	--	1 U	--	5.38	--	84.2
m,p-Xylene	8.3 U	--	14400	29800	16300	11400	6680	11100	403	10 U	2.24	161	17.6	135	236	--	5.21	--	60.3	--	1730
methylcyclopentane	8.3 U	255	970	930	2020	1120	308	736	--	--	2 U	10 U	7.05	43.7	9.01	--	1 U	--	2 U	--	21.2
Methylene bromide	8.3 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methylene chloride	42 U	--	--	--	--	--	--	--	--	50 U	9 U	50 U	10 U	11 U	11 U	50 U	7 U	10 U	9 U	50 U	50 U
Naphthalene	42 U	219	12700	19800	14100	9780	3190	7710	144	--	9 U	50 U	10 U	13.1	31.1	--	7 U	--	18.3	--	441
n-Butylbenzene	8.3 U	2870	1830	2150	1990	1380	832	1170	35.1	--	2 U	10 U	60.5	40	2 U	--	1 U	--	8.64	--	106
n-Propylbenzene	8.3 U	7060	5530	12000	10800	5970	2750	2240	44.2	--	2 U	15.7	58.4	36.7	7.37	--	1 U	--	14.6	--	304
o-Xylene	8.3 U	--	7420	14700	7970	5320	3150	1040	48.7	10 U	2.74	32.1	56.3	437	184	--	1 U	--	67	--	748
p-Cymene	8.3 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
p-isopropyltoluene	--	2110	1490	2460	2100	1380	697	770	15.5	--	2 U	10 U	73.4	20.5	5.01	--	1 U	--	6.63	--	61.8
sec-Butylbenzene	8.3 U	2030	1450	2710	2400	1370	647	979	14.2	--	2 U	10 U	48.7	13.6	2 U	--	1 U	--	2 U	--	10 U
Styrene	8.3 U	--	--	--	--	--	--	--	--	10 U	2 U	10 U	2 U	2 U	2 U	10 U	1 U	10 U	2 U	10 U	10 U
tert-Butylbenzene	8.3 U	--	--	--	--	--	--	--	--	10 U	2 U	10 U	2 U	2 U	2 U	10 U	1 U	10 U	2 U	10 U	10 U
Tetrachloroethene	8.3 U	2030	5770	4470	1340	5960	4280	3170	--	--	9.19	19.6	202	438	11.9	--	1 U	--	42	--	40.5
Toluene	17 U	--	585	2070	1960	161	474	1010	--	20 U	3 U	27.2	4 U	33.4	33.3	--	3 U	--	4 U	--	94.3
trans-1,2-Dichloroethene	8.3 U	--	--	21.5	39.1	--	--	16	--	10 U	2 U	10 U	2 U	2 U	2 U	10 U	1 U	--	2 U	--	10 U
trans-1,3-Dichloropropene	8.3 U	--	--	--	--	--	--	--	--	10 U	2 U	10 U	2 U	2 U	2 U	10 U	1 U	10 U	2 U	10 U	10 U
Trichloroethene	17 U	54.9	362	1330	264	184	64.3	139	--	--	3 U	20 U	8.7	18.5	4 U	--	3 U	--	4 U	--	20.1
Trichlorofluoromethane	8.3 U	--	--	--	--	--	--	--	--	10 U	2 U	10 U	2 U	2 U	2 U	10 U	1 U	10 U	2 U	10 U	10 U
Vinyl acetate	8.3 U	--	--	--	--	--	--	--	--	10 U	2 U	10 U	2 U	2 U	2 U	10 U	1 U	10 U	2 U	10 U	10 U
Vinyl chloride	8.3 U	--	--	--	--	--	--	--	--	10 U	2 U	10 U	2 U	2.4	5.07	10 U	1 U	10 U	2 U	10 U	10 U

TABLE G-1

SOIL ANALYTICAL RESULTS FOR VOLATILE ORGANIC COMPOUNDS (1996-2009)[1]

PSC Washougal Facility
Washougal, Washington

Concentrations in micrograms per kilogram (µg/kg)

Site ID	CIA-6	CIA-6	CIA-7	CIA-8	CIA-8	CIA-9	GP-07	GP-07	GP-07	GP-07	GP-08	GP-09	GP-09	GP-09	GP-09	GP-10	GP-10	GP-10	GP-10	GP-11	GP-12
Depth (in feet)	4	6	4	4	6	4	2	4	6	7	8	2	4	6	7	2	4	6	7	7.5	2
Analyte / Sample Date	9/19/1997	9/24/1997	9/19/1997	9/19/1997	9/24/1997	9/19/1997	7/11/1996	7/11/1996	7/11/1996	7/11/1996	7/11/1996	7/11/1996	7/11/1996	7/11/1996	7/11/1996	7/11/1996	7/11/1996	7/11/1996	7/11/1996	7/11/1996	7/11/1996
1,1,1,2-Tetrachloroethane	--	--	--	--	--	--	3 U	714 U	8 U	3 UJ	3 U	3 U	3 U	3 U	3 U	3 U	963 U	7 U	3 U	3 U	3 U
1,1,2,2-Tetrachloroethane	30 U	11 U	30 U	30 U	6 U	30 U	3 U	990	8 U	3 UJ	3 U	3 U	3 U	3 U	3 U	3 U	1700	7 U	3 U	3 U	3 U
1,1,1-Trichloroethane	--	4 U	--	--	20.6	--	4.9	238 U	3 U	1 UJ	1 U	1 U	1 U	3	1 U	1 U	460	2 U	1 U	18	19
1,1,2-Trichloroethane	10 U	4 U	10 U	10 U	2 U	10 U	1 U	238 U	3 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	990	2 U	1 U	1 U	1 U
1,1,2-Trichlorotrifluoroethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloro-1,2,2-trifluoroethane	--	--	--	--	--	--	5 U	1190 U	13 U	5 UJ	5 U	5 U	4 U	5 U	5 U	5 U	1605 U	11 U	5 U	5 U	5 U
2,2-Dichloro-1,1,1-trifluoroethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloroethane	10 U	4 U	10 U		2 U		1 U	238 U	3 U	5.4 J	1 U	1 U	1 U	1 U	1.5	1 U	321 U	2 U	3.5	4.8	1 U
1,2-Dichloroethane	10 U	4 U	10 U	10 U	2 U	10 U	1 U	238 U	3 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	321 U	2 U	1 U	1 U	1 U
1,1-Dichloroethene	10 U	4 U	10 U	10 U	2 U	10 U	1 U	238 U	3 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	321 U	2 U	1 U	1 U	1 U
1,2-Dichlorobenzene	--	4 U	--	--	4.95	--	1 U	580	6.1	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	2600	2 U	2.4	1 U	1 U
1,3-Dichlorobenzene	--	4 U	--	--	2 U	10 U	1 U	238 U	3 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	321 U	2 U	1 U	1 U	1 U
1,4-Dichlorobenzene	--	4 U	--	--	2 U	10 U	1 U	238 U	3 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	321 U	2 U	1 U	1 U	1 U
1,2-Dichloropropane	10 U	4 U	10 U	10 U	2 U	10 U	1 U	238 U	3 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	321 U	2 U	1 U	1 U	1 U
1,3-Dichloropropane	10 U	4 U	10 U	10 U	2 U	10 U	1 U	238 U	3 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	321 U	2 U	1 U	1 U	1 U
2,2-Dichloropropane	10 U	4 U	10 U	10 U	2 U	10 U	1 U	238 U	3 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	321 U	2 U	1 U	1 U	1 U
1,1-Dichloropropene	10 U	4 U	10 U	10 U	2 U	10 U	1 U	238 U	3 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	321 U	2 U	1 U	1 U	1 U
1,1-DichloroTrifluoroethane	50 U	19 U	50 U	50 U	10 U	50 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichlorobenzene	10 U	4 U	10 U	10 U	2 U	10 U	1 U	238 U	3 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	321 U	2 U	1 U	1 U	1 U
1,2,3-Trichloropropane	10 U	4 U	10 U	10 U	2 U	10 U	1 U	238 U	3 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	321 U	2 U	1 U	1 U	1 U
1,2,4-Trichlorobenzene	10 U	4 U	10 U	10 U	2 U	10 U	1 U	238 U	3 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	321 U	2 U	1 U	1 U	1 U
1,2,4-Trimethylbenzene	--	277	--	--	6.3	--	1 U	38000	330	15 J	1 U	1 U	1 U	1 U	1 U	2.3	54000	2 U	81	1 U	1 U
1,2-Dibromo-3-chloropropane	50 U	19 U	50 U	50 U	10 U	50 U	5 U	1190 U	13 U	5 UJ	5 U	5 U	4 U	5 U	5 U	5 U	1605 U	11 U	5 U	5 U	5 U
1,2-Dibromoethane	10 U	4 U	10 U	10 U	2 U	10 U	1 U	238 U	3 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	321 U	2 U	1 U	1 U	1 U
1,3,5-Trimethylbenzene	--	117	--	--	60.1	--	1 U	13000	110	5.9 J	1 U	1 U	1 U	1 U	1 U	1 U	20000	2 U	24	1 U	1 U
2-Butanone (MEK)	50 U	19 U	50 U	50 U	10 U	50 U	5 U	1190 U	13 U	31 J	12	5 U	4 U	5 U	5 U	5 U	1605 U	11 U	5 U	5 U	5 U
2-Chloroethylvinylether	10 U	4 U	10 U	10 U	2 U	10 U	1 U	238 U	3 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	321 U	2 U	1 U	1 U	1 U
2-Chlorotoluene	10 U	4 U	10 U	10 U	2 U	10 U	1 U	1800	3 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	3500	2 U	1 U	1 U	1 U
2-Hexanone	50 U	19 U	50 U	50 U	10 U	50 U	5 U	1190 U	13 U	5 UJ	5 U	5 U	4 U	5 U	5 U	5 U	5400	11 U	5 U	5 U	5 U
2-methylpentane	--	19 U	--	--	10 U	50 U	5 U	1190 U	13 U	5 UJ	5 U	5 U	4 U	5 U	5 U	5 U	1605 U	11 U	5 U	5 U	5 U
3-Methylpentane	--	19 U	--	--	10 U	50 U	5 U	1190 U	13 U	5 UJ	5 U	5 U	4 U	5 U	5 U	5 U	1605 U	11 U	5 U	5 U	5 U
4-Chlorotoluene	--	4 U	10 U	10 U	2 U	10 U	1 U	238 U	3 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	321 U	2 U	1 U	1 U	1 U
4-Methyl-2-pentanone (MIBK)	50 U	19 U	50 U	50 U	10 U	50 U	5 U	87000	13 U	5 UJ	5 U	5 U	4 U	5 U	5 U	5 U	1605 U	11 U	5 U	5 U	5 U
Acetone	--	35.5	--	50 U	21.3	50 U	5 U	890000	340	79 J	51	5 U	4 U	10	25	5 U	1605 U	11 U	57	55	5 U
Acrolein	200 U	74 U	200 U	200 U	42 U	200 U	20 U	4760 U	53 U	19 UJ	20 U	19 U	18 U	21 U	19 U	20 U	6420 U	45 U	21 U	19 U	19 U
Acrylonitrile	50 U	19 U	50 U	50 U	10 U	50 U	5 U	1190 U	13 U	5 UJ	5 U	5 U	4 U	5 U	5 U	5 U	1605 U	11 U	5 U	5 U	5 U
Benzene	10 U	4 U	10 U	10 U	3.12	10 U	1 U	238 U	3 U	1.7 J	1 U	1 U	1 U	1 U	1 U	1 U	321 U	2 U	1 U	1 U	1 U
Bromobenzene	10 U	4 U	10 U	10 U	2 U	10 U	1 U	238 U	3 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	321 U	2 U	1 U	1 U	1 U
Bromochloromethane	10 U	4 U	10 U	10 U	2 U	10 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromodichloromethane	10 U	4 U	10 U	10 U	2 U	10 U	1 U	238 U	3 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	321 U	2 U	1 U	1 U	1 U
Bromoform	10 U	4 U	10 U	10 U	2 U	10 U	1 U	238 U	3 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	321 U	2 U	1 U	1 U	1 U
Bromomethane	10 U	4 U	10 U	10 U	2 U	10 U	1 U	238 U	3 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	321 U	2 U	1 U	1 U	1 U
Carbon disulfide	10 U	4 U	10 U	10 U	2 U	10 U	1 U	238 U	3 U	3.8 J	1.3	1 U	1 U	1 U	1 U	1 U	321 U	2 U	1 U	1.3	1 U
Carbon tetrachloride	10 U	4 U	10 U	10 U	2 U	10 U	1 U	238 U	3 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	321 U	2 U	1 U	1 U	1 U
Chlorobenzene	10 U	4 U	10 U	10 U	2 U	10 U	1 U	238 U	3 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	321 U	2 U	1 U	1 U	1 U
Chlorobromo-methane	--	--	--	--	--	--	1 U	238 U	3 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	321 U	2 U	1 U	1 U	1 U
Chloroethane	10 U	4 U	10 U	10 U	2 U	10 U	1 U	238 U	3 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	321 U	2 U	10	1 U	1 U
Chloroform	10 U	4 U	10 U	10 U		10 U	1 U	238 U	2.9 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	321 U	2 U	1 U	1 U	1 U
Chloromethane	10 U	4 U	10 U	10 U	2 U	10 U	1 U	238 U	3 U	1 UJ	1 U	1 U	1 U	1 U	1 U	17	321 U	2 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	--	4 U	--	--	18.1	--	1 U	238 U	3 U	39 J	1 U	1 U	1 U	1 U	1 U	1 U	321 U	2 U	1 U	1.1	1 U
cis-1,3-Dichloropropene	10 U	4 U	10 U	10 U	2 U	10 U	1 U	238 U	3 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	321 U	2 U	1 U	1 U	1 U
Dibromochloromethane	10 U	4 U	10 U	10 U	2 U	10 U	1 U	238 U	3 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	321 U	2 U	1 U	1 U	1 U
Dibromomethane	10 U	4 U	10 U	10 U	2 U	10 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE G-1

SOIL ANALYTICAL RESULTS FOR VOLATILE ORGANIC COMPOUNDS (1996-2009)[1]

PSC Washougal Facility
Washougal, Washington

Concentrations in micrograms per kilogram (µg/kg)

Site ID	CIA-6	CIA-6	CIA-7	CIA-8	CIA-8	CIA-9	GP-07	GP-07	GP-07	GP-07	GP-08	GP-09	GP-09	GP-09	GP-09	GP-10	GP-10	GP-10	GP-10	GP-11	GP-12
Depth (in feet)	4	6	4	4	6	4	2	4	6	7	8	2	4	6	7	2	4	6	7	7.5	2
Analyte / Sample Date	9/19/1997	9/24/1997	9/19/1997	9/19/1997	9/24/1997	9/19/1997	7/11/1996	7/11/1996	7/11/1996	7/11/1996	7/11/1996	7/11/1996	7/11/1996	7/11/1996	7/11/1996	7/11/1996	7/11/1996	7/11/1996	7/11/1996	7/11/1996	7/11/1996
Dichlorodifluoromethane	10 U	4 U	10 U	10 U	20.2	10 U	1 U	238 U	3 U	9.4 J	1 U	1 U	1 U	1 U	1 U	1 U	321 U	2 U	1 U	1 U	1 U
Dichlorotrifluoroethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Diethyl ether	50 U	19 U	50 U	50 U	10 U	50 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethylbenzene	--	6.39	--	--	6.36	--	1 U	2500	14	34 J	1 U	1 U	1 U	1 U	3.6	1.4	2500	2 U	89	1 U	1 U
Hexachlorobutadiene	10 U	4 U	10 U	10 U	2 U	10 U	1 U	238 U	3 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	321 U	2 U	1 U	1 U	1 U
Isopropylbenzene	--	9.66	--	--	2 U	--	1 U	1600	11	1.7 J	1 U	1 U	1 U	1 U	1 U	1 U	2800	2 U	6.5	1 U	1 U
m,p-Xylene	--	42.3	--	--	14.5	--	1 U	18000	120	77 J	1.9	1.1	1 U	2.9	4.8	6.6	53000	2 U	350	1.8	2.2
methylcyclopentane	--	4 U	--	--	2 U	10 U	1 U	238 U	3 U	2.3 J	1 U	1 U	1 U	1 U	1 U	1 U	321 U	2 U	3.3	1 U	1 U
Methylene bromide	--	--	--	--	--	--	1 U	238 U	3 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	321 U	2 U	1 U	1 U	1 U
Methylene chloride	50 U	19 U	50 U	50 U	10 U	50 U	5 U	2100	130	5 UJ	5 U	5 U	4 U	5 U	5 U	5 U	1605 U	11 U	5 U	5 U	5 U
Naphthalene	--	20.1	--	--	10 U	--	5 U	5200	39	5 UJ	5 U	5 U	4 U	5 U	5 U	5 U	14000	11 U	5 U	5 U	5 U
n-Butylbenzene	--	53.2	--	--	8.65	--	1 U	3400	27	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	4900	2 U	1 U	1 U	1 U
n-Propylbenzene	--	48.8	--	--	6.55	--	1 U	5000	37	2.8 J	1 U	1 U	1 U	1 U	1 U	1 U	4600	2 U	13	1 U	1 U
o-Xylene	--	17.5	--	--	51	--	1 U	6100	41	22 J	1 U	1 U	1 U	1 U	2.2	2.1	30000	2 U	57	1 U	1 U
p-Cymene	--	--	--	--	--	--	1 U	2200	16	1.1 J	1 U	1 U	1 U	1 U	1 U	1 U	3300	2 U	4	1 U	1 U
p-isopropyltoluene	--	20.4	--	--	7.36	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
sec-Butylbenzene	--	24.6	--	--	5.15	--	1 U	2000	3 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	3200	2 U	1 U	1 U	1 U
Styrene	10 U	4 U	10 U	10 U	2 U	10 U	1 U	238 U	3 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	850	2 U	1 U	1 U	1 U
tert-Butylbenzene	10 U	4 U	10 U	10 U	2 U	10 U	1 U	4800	3 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	6900	2 U	1 U	1 U	1 U
Tetrachloroethene	--	40.6	--	--	20.6	10 U	2	5200	40	6.1 J	1 U	1.5	1.7	1 U	1 U	1	5600	2 U	1 U	1.5	9
Toluene	--	7 U	--	--	14.2	20 U	2 U	8300	5 U	83 J	2 U	2 U	2 U	2 U	2 U	2 U	2400	4 U	10	2.6	2
trans-1,2-Dichloroethene	10 U	4 U	10 U	--	2 U	10 U	1 U	238 U	3 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	321 U	2 U	1 U	1 U	1 U
trans-1,3-Dichloropropene	10 U	4 U	10 U	10 U	2 U	10 U	1 U	238 U	3 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	321 U	2 U	1 U	1 U	1 U
Trichloroethene	--	7 U	--	--	4 U	20 U	2 U	476 U	5 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	642 U	4 U	2 U	3.4	3.5
Trichlorofluoromethane	10 U	4 U	10 U	10 U	2 U	10 U	1 U	238 U	3 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	321 U	2 U	1 U	1 U	1 U
Vinyl acetate	10 U	4 U	10 U	10 U	2 U	10 U	1 U	238 U	3 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	321 U	2 U	1 U	1 U	1 U
Vinyl chloride	10 U	4 U	10 U	10 U	2.58	10 U	1 U	238 U	3 U	8.1 J	1 U	1 U	1 U	1 U	1 U	1 U	321 U	2 U	1 U	1 U	1 U

TABLE G-1

SOIL ANALYTICAL RESULTS FOR VOLATILE ORGANIC COMPOUNDS (1996-2009)[1]

PSC Washougal Facility
Washougal, Washington

Concentrations in micrograms per kilogram (µg/kg)

Site ID	GP-12	GP-12	GP-12	GP-13	GP-14	GP-14	GP-14	GP-14	GP-15	GP-15	GP-15	GP-15	GP-16	GP-17	GP-18	GP-20	GP-21	GP-25	GP-27	GP-28	GP-29
Depth (in feet)	4	6	7	7.5	2	4	6	7	2	4	6	7	8	8	7.7	9	10	9	6	8	5.9
Analyte / Sample Date	7/11/1996	7/11/1996	7/11/1996	7/11/1996	7/11/1996	7/11/1996	7/11/1996	7/11/1996	7/11/1996	7/11/1996	7/11/1996	7/11/1996	7/11/1996	7/10/1996	7/10/1996	7/10/1996	7/10/1996	7/10/1996	7/30/1999	7/30/1999	7/29/1999
1,1,1,2-Tetrachloroethane	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	6 U	993 U	3 U	3 U	3 U	3 U	5 U	3 U	3 U	3 U	--	--	--
1,1,2,2-Tetrachloroethane	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	94	1700	3 U	3 U	3 U	3 U	5 U	3 U	3 U	3 U	--	--	--
1,1,1-Trichloroethane	8.7	26	1 U	7.6	1 U	1 U	46	10	2 U	13000	5.7	20	3.5	1 U	6.7	1 U	3.8	10	3.1 UJ	3.6 UJ	3.1 UJ
1,1,2-Trichloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	39	1800	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	--	--	--
1,1,2-Trichlorotrifluoroethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	15.5 UJ	18 UJ	15.5 UJ
1,1-Dichloro-1,2,2-trifluoroethane	5 U	5 U	6 U	5 U	6 U	5 U	5 U	5 U	10 U	1655 U	5 U	5 U	5 U	5 U	9 U	5 U	5 U	5 U	--	--	--
2,2-Dichloro-1,1,1-trifluoroethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloroethane	1 U	2.1	5.6	2.4	1 U	1 U	6.1	6.5	2 U	331 U	1 U	8.4	3	4.6	2 U	2.1	5.5	6.4	3.1 UJ	3.6 UJ	3.1 UJ
1,2-Dichloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	331 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	3.1 UJ	3.6 UJ	3.1 UJ
1,1-Dichloroethene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	331 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	3.1 UJ	3.6 UJ	3.1 UJ
1,2-Dichlorobenzene	1.2	4.8	1 U	1 U	1 U	1 U	1.2	1 U	85	1500	1 U	31	1 U	9	52	1 U	2.2	50	3.1 UJ	3.6 UJ	3.1 UJ
1,3-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	24	331 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	2.7	--	--	--
1,4-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	15	350	1 U	1 U	1 U	1 U	2 U	1 U	1 U	4.7	--	--	--
1,2-Dichloropropane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	331 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	--	--	--
1,3-Dichloropropane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	331 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	--	--	--
2,2-Dichloropropane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	331 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	--	--	--
1,1-Dichloropropene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	331 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	--	--	--
1,1-DichloroTrifluoroethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	18	331 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	--	--	--
1,2,3-Trichloropropane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	331 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	--	--	--
1,2,4-Trichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	9.3	331 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	--	--	--
1,2,4-Trimethylbenzene	8.7	28	14	3.2	1 U	1 U	100	13	1900	63000	1 U	350	1.6	110	840	5.1	22	560	--	--	--
1,2-Dibromo-3-chloropropane	5 U	5 U	6 U	5 U	6 U	5 U	5 U	5 U	12	1655 U	5 U	5 U	5 U	5 U	9 U	5 U	5 U	5 U	15.5 UJ	18 UJ	15.5 UJ
1,2-Dibromoethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	331 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	--	--	--
1,3,5-Trimethylbenzene	1.9	6.7	4.9	1 U	1 U	1 U	1 U	5.6	950	23000	1 U	100	1 U	35	290	3	9.5	220	--	--	--
2-Butanone (MEK)	5 U	5 U	6 U	5 U	6 U	5 U	5 U	5 U	10 U	1655 U	5 U	5 U	5 U	11	9 U	5 U	5 U	5 U	15.5 UJ	18 UJ	15.5 UJ
2-Chloroethylvinylether	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	331 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	--	--	--
2-Chlorotoluene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	160	4400	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	--	--	--
2-Hexanone	5 U	5 U	6 U	5 U	6 U	5 U	5 U	5 U	370	8400	5 U	5 U	5 U	5 U	9 U	5 U	5 U	5 U	--	--	--
2-methylpentane	5 U	5 U	6 U	5 U	6 U	5 U	5 U	5 U	10 U	1655 U	5 U	5 U	5 U	5 U	9 U	5 U	5 U	5 U	15.5 UJ	18 UJ	15.5 UJ
3-Methylpentane	5 U	5 U	6 U	5 U	6 U	5 U	5 U	5 U	10 U	1655 U	5 U	5 U	5 U	5 U	9 U	5 U	5 U	5 U	15.5 UJ	18 UJ	15.5 UJ
4-Chlorotoluene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	6	331 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	--	--	--
4-Methyl-2-pentanone (MIBK)	5 U	5 U	6 U	5 U	6 U	5 U	5 U	5 U	18	1655 U	5 U	5 U	5 U	5 U	9 U	5 U	5 U	5 U	--	--	--
Acetone	5 U	21	50	49	6 U	5 U	17	16	26	3300	5 U	52	19	61	60	17	16	36	15.5 UJ	18 UJ	15.5 UJ
Acrolein	20 U	19 U	22 U	21 U	23 U	21 U	20 U	18 U	41 U	6620 U	21 U	20 U	18 U	19 U	35 U	20 U	18 U	20 U	--	--	--
Acrylonitrile	5 U	5 U	6 U	5 U	6 U	5 U	5 U	5 U	10 U	1655 U	5 U	5 U	5 U	5 U	9 U	5 U	5 U	5 U	--	--	--
Benzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	331 U	1 U	9.6	1 U	7.5	2 U	1 U	1 U	1.4	3.1 UJ	3.6 UJ	3.1 UJ
Bromobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.3	331 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	--	--	--
Bromochloromethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromodichloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	331 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	--	--	--
Bromoform	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	331 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	--	--	--
Bromomethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	331 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	--	--	--
Carbon disulfide	1 U	1 U	1 U	2.5	1 U	1 U	1 U	2.4	2 U	331 U	1 U	1 U	1 U	1.4	2	1 U	1 U	1.1	3.1 UJ	31 J	3.1 UJ
Carbon tetrachloride	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	331 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	3.1 UJ	3.6 UJ	3.1 UJ
Chlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	331 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	3.1 UJ	3.6 UJ	3.1 UJ
Chlorobromo-methane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	331 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	--	--	--
Chloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2	2 U	331 U	1 U	14	1 U	3.8	2 U	1 U	3.3	6.8	--	--	--
Chloroform	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.1	331 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	3.1 UJ	3.6 UJ	3.1 UJ
Chloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	331 U	1 U	1 U	1 U	1 U	25	1 U	1 U	1 U	--	--	--
cis-1,2-Dichloroethene	4.1	4.5	3	1 U	1 U	1 U	110	35	2 U	331 U	1.8	9.2	1 U	1 U	2 U	12	1.2	2.2	3.1 UJ	3.6 UJ	3.1 UJ
cis-1,3-Dichloropropene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	331 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	--	--	--
Dibromochloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	331 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	--	--	--
Dibromomethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE G-1

SOIL ANALYTICAL RESULTS FOR VOLATILE ORGANIC COMPOUNDS (1996-2009)[1]

PSC Washougal Facility
Washougal, Washington

Concentrations in micrograms per kilogram (µg/kg)

Site ID	GP-12	GP-12	GP-12	GP-13	GP-14	GP-14	GP-14	GP-14	GP-15	GP-15	GP-15	GP-15	GP-16	GP-17	GP-18	GP-20	GP-21	GP-25	GP-27	GP-28	GP-29
Depth (in feet)	4	6	7	7.5	2	4	6	7	2	4	6	7	8	8	7.7	9	10	9	6	8	5.9
Analyte / Sample Date	7/11/1996	7/11/1996	7/11/1996	7/11/1996	7/11/1996	7/11/1996	7/11/1996	7/11/1996	7/11/1996	7/11/1996	7/11/1996	7/11/1996	7/11/1996	7/10/1996	7/10/1996	7/10/1996	7/10/1996	7/10/1996	7/30/1999	7/30/1999	7/29/1999
Dichlorodifluoromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.3	2 U	331 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	--	--	--
Dichlorotrifluoroethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.1 UJ	3.6 UJ	3.1 UJ
Diethyl ether	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethylbenzene	1.3	5.4	8.7	1.2	1 U	1 U	230	43	2.3	18000	1 U	220	1 U	29	49	8.5	52	150	3.1 UJ	13 J	3.1 UJ
Hexachlorobutadiene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	331 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	--	--	--
Isopropylbenzene	1 U	1 U	1 U	1 U	1 U	1 U	13	1.5	2 U	3900	1 U	24	1 U	4.3	22	1 U	3.2	26	--	--	--
m,p-Xylene	5.6	40	36	4.6	1 U	1.4	500	170	450	78000	2.8	660	3.5	200	530	29	200	500	3.1 UJ	49 J	3.1 UJ
methylcyclopentane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	331 U	1 U	13	1 U	3	2 U	1 U	2.9	5.9	3.1 UJ	3.6 UJ	3.1 UJ
Methylene bromide	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	331 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	--	--	--
Methylene chloride	5 U	5 U	6 U	5 U	6 U	5 U	5 U	5 U	10 U	1655 U	5 U	5 U	5 U	5 U	9 U	5 U	5 U	5 U	15.5 UJ	18 UJ	15.5 UJ
Naphthalene	9.4	15	6 U	5 U	6 U	5 U	30	5 U	1200	12000	5 U	84	5 U	18	300	5 U	5 U	130	--	--	--
n-Butylbenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	14	5800	1 U	1 U	1 U	1 U	83	1 U	1 U	57	--	--	--
n-Propylbenzene	1 U	1.5	1.9	1 U	1 U	1 U	16	2.7	9.1	11000	1 U	61	1 U	14	89	1.4	5.8	150	--	--	--
o-Xylene	5.3	19	9	1.5	1 U	1 U	320	38	320	42000	1	310	1.5	45	270	9.3	56	260	3.1 UJ	14 J	3.1 UJ
p-Cymene	1 U	1 U	1 U	1 U	1 U	1 U	3.2	1 U	190	3300	1 U	12	1 U	2.9	50	1 U	1.8	38	--	--	--
p-isopropyltoluene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
sec-Butylbenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	7	3600	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	--	--	--
Styrene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	9.6	1400	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	--	--	--
tert-Butylbenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	240	8100	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	--	--	--
Tetrachloroethene	2.1	1.5	2.8	1 U	3.7	5.7	240	15	610	74000	4	14	4	1 U	45	3.7	2.7	54	3.1 UJ	3.6 UJ	3.1 UJ
Toluene	2 U	2.5	14	2.8	2 U	2 U	2.2	7	4 U	21000	2 U	58	2 U	6.8	29	5.4	32	81	6.2 UJ	17 J	6.2 UJ
trans-1,2-Dichloroethene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	331 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	3.1 UJ	3.6 UJ	3.1 UJ
trans-1,3-Dichloropropene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	331 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	--	--	--
Trichloroethene	2 U	3.5	2 U	2 U	2 U	2 U	56	2 U	4 U	8400	2 U	4.9	2 U	2 U	3.9 UJ	2 U	2 U	4.7	6.2 UJ	7.2 UJ	6.2 UJ
Trichlorofluoromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	331 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	3.1 UJ	3.6 UJ	3.1 UJ
Vinyl acetate	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	331 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	--	--	--
Vinyl chloride	1 U	1 U	1.2	1 U	1 U	1 U	1 U	1 U	2 U	331 U	1 U	1.3	1 U	1 U	2 U	1 U	1 U	1 U	3.1 UJ	3.6 UJ	3.1 UJ

TABLE G-1

SOIL ANALYTICAL RESULTS FOR VOLATILE ORGANIC COMPOUNDS (1996-2009)[1]

PSC Washougal Facility
Washougal, Washington

Concentrations in micrograms per kilogram (µg/kg)

Site ID	GP-30	GP-31	GP-32	GP-33	GP-34	GP-35	GP-36	GP-36	GP-36	GP-37	GP-37	GP-37	GP-37	GP-38	GP-38	GP-38	GP-38	GP-39	GP-39	GP-39	GP-40
Depth (in feet)	8.5	9.5	10	8	10	10	4	6	8	4	6	7	8	2	6	7	8	4	6	8	4
Analyte Sample Date	7/29/1999	7/29/1999	7/29/1999	7/29/1999	7/29/1999	7/29/1999	9/22/2001	9/22/2001	9/22/2001	9/22/2001	9/22/2001	9/22/2001	9/22/2001	9/22/2001	9/22/2001	9/22/2001	9/22/2001	9/22/2001	9/22/2001	9/22/2001	9/24/2001
1,1,1,2-Tetrachloroethane	--	--	--	--	--	--	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD
1,1,2,2-Tetrachloroethane	--	--	--	--	--	--	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD
1,1,1-Trichloroethane	3.3 U	3.3 UJ	3.3 UJ	2.9 UJ	1 UJ	3.6 UJ	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD
1,1,2-Trichloroethane	--	--	--	--	--	--	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD
1,1,2-Trichlorotrifluoroethane	16.5 U	27 J	16.5 UJ	14.5 UJ	5 UJ	18 UJ	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD
1,1-Dichloro-1,2,2-trifluoroethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,2-Dichloro-1,1,1-trifluoroethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloroethane	3.3 U	3.3 UJ	3.3 UJ	2.9 UJ	1 UJ	3.6 UJ	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	54.1 D	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD
1,2-Dichloroethane	3.3 U	3.3 UJ	3.3 UJ	2.9 UJ	1 UJ	3.6 UJ	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD
1,1-Dichloroethene	3.3 U	3.3 UJ	3.3 UJ	2.9 UJ	1 UJ	3.6 UJ	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD
1,2-Dichlorobenzene	5.3	3.3 UJ	3.3 UJ	2.9 UJ	1 UJ	3.6 UJ	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	51 D	50 UD	50 UD	50 UD	65.1 D	50 UD	50 UD	50 UD	50 UD
1,3-Dichlorobenzene	--	--	--	--	--	--	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD
1,4-Dichlorobenzene	--	--	--	--	--	--	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD
1,2-Dichloropropane	--	--	--	--	--	--	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD
1,3-Dichloropropane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,2-Dichloropropane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloropropene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-DichloroTrifluoroethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichlorobenzene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichloropropane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trimethylbenzene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromo-3-chloropropane	16.5 U	16.5 UJ	16.5 UJ	14.5 UJ	5 UJ	18 UJ	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromoethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3,5-Trimethylbenzene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Butanone (MEK)	16.5 U	16.5 UJ	16.5 UJ	14.5 UJ	5 UJ	18 UJ	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD
2-Chloroethylvinylether	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chlorotoluene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Hexanone	--	--	--	--	--	--	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD
2-methylpentane	16.5 U	16.5 UJ	16.5 UJ	14.5 UJ	5 UJ	18 UJ	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3-Methylpentane	16.5 U	16.5 UJ	16.5 UJ	14.5 UJ	5 UJ	18 UJ	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorotoluene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Methyl-2-pentanone (MIBK)	--	--	--	--	--	--	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD
Acetone	16.5 U	16.5 UJ	810 J	14.5 UJ	5 UJ	18 UJ	2500 UD	2500 UD	2500 UD	2500 UD	2500 UD	2500 UD	2500 UD	2500 UD	2500 UD	2500 UD	2500 UD	2500 UD	2500 UD	2500 UD	2500 UD
Acrolein	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acrylonitrile	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzene	3.3 U	3.3 UJ	22 J	2.9 UJ	1 UJ	3.6 UJ	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD
Bromobenzene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromochloromethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromodichloromethane	--	--	--	--	--	--	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD
Bromoform	--	--	--	--	--	--	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD
Bromomethane	--	--	--	--	--	--	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD
Carbon disulfide	3.3 U	3.3 UJ	3.3 UJ	2.9 UJ	1 UJ	3.6 UJ	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD
Carbon tetrachloride	3.3 U	3.3 UJ	3.3 UJ	2.9 UJ	1 UJ	3.6 UJ	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD
Chlorobenzene	3.3 U	3.3 UJ	3.3 UJ	2.9 UJ	1 UJ	3.6 UJ	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD
Chlorobromo-methane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloroethane	--	--	--	--	--	--	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD
Chloroform	3.3 U	3.3 UJ	3.3 UJ	2.9 UJ	1 UJ	3.6 UJ	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD
Chloromethane	--	--	--	--	--	--	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD
cis-1,2-Dichloroethene	3.3 U	3.3 UJ	3.3 UJ	2.9 UJ	1 UJ	15 J	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD
cis-1,3-Dichloropropene	--	--	--	--	--	--	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD
Dibromochloromethane	--	--	--	--	--	--	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD
Dibromomethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE G-1

SOIL ANALYTICAL RESULTS FOR VOLATILE ORGANIC COMPOUNDS (1996-2009)[1]
PSC Washougal Facility
Washougal, Washington

Concentrations in micrograms per kilogram (µg/kg)

Site ID	GP-30	GP-31	GP-32	GP-33	GP-34	GP-35	GP-36	GP-36	GP-36	GP-37	GP-37	GP-37	GP-37	GP-38	GP-38	GP-38	GP-38	GP-39	GP-39	GP-39	GP-40
Depth (in feet)	8.5	9.5	10	8	10	10	4	6	8	4	6	7	8	2	6	7	8	4	6	8	4
Analyte / Sample Date	7/29/1999	7/29/1999	7/29/1999	7/29/1999	7/29/1999	7/29/1999	9/22/2001	9/22/2001	9/22/2001	9/22/2001	9/22/2001	9/22/2001	9/22/2001	9/22/2001	9/22/2001	9/22/2001	9/22/2001	9/22/2001	9/22/2001	9/22/2001	9/24/2001
Dichlorodifluoromethane	--	--	--	--	--	--	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD
Dichlorotrifluoroethane	3.3 U	3.3 UJ	3.3 UJ	2.9 UJ	1 UJ	3.6 UJ	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Diethyl ether	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethylbenzene	3.3 U	3.3 UJ	3.3 UJ	2.9 UJ	1 UJ	3.6 UJ	61.8 D	50 UD	50 UD	50 UD	50 UD	50 UD	1930 D	50 UD	50 UD	50 UD	374 D	50 UD	50 UD	50 UD	50 UD
Hexachlorobutadiene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropylbenzene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
m,p-Xylene	3.3 U	3.3 UJ	3.3 UJ	2.9 UJ	1 UJ	3.6 UJ	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	9100 D	100 UD	100 UD	100 UD	2170 D	100 UD	100 UD	100 UD	100 UD
methylcyclopentane	3.3 U	3.3 UJ	3.3 UJ	2.9 UJ	1 UJ	3.6 UJ	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methylene bromide	--	--	--	--	--	--	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD
Methylene chloride	16.5 U	16.5 UJ	16.5 UJ	14.5 UJ	5 UJ	18 UJ	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD
Naphthalene	--	--	--	--	--	--	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	464 D	200 UD	200 UD	200 UD	200 UD
n-Butylbenzene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
n-Propylbenzene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
o-Xylene	19	6.2 J	65 J	2.9 UJ	1 UJ	3.6 UJ	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
p-Cymene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
p-isopropyltoluene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
sec-Butylbenzene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Styrene	--	--	--	--	--	--	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD
tert-Butylbenzene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tetrachloroethene	3.3 U	3.3 UJ	3.3 UJ	2.9 UJ	1 UJ	3.6 UJ	50 UD	50 UD	50 UD	50.7 D	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD
Toluene	6.6 U	6.6 UJ	6.6 UJ	9.6 UJ	14 J	7.2 UJ	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	2560 D	50 UD	50 UD	50 UD	101 D	50 UD	50 UD	50 UD	50 UD
trans-1,2-Dichloroethene	3.3 U	3.3 UJ	3.3 UJ	2.9 UJ	1 UJ	3.6 UJ	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD
trans-1,3-Dichloropropene	--	--	--	--	--	--	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD
Trichloroethene	6.6 U	6.6 UJ	97 J	9.6 UJ	9.7 J	7.2 UJ	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD
Trichlorofluoromethane	3.3 U	3.3 UJ	3.3 UJ	2.9 UJ	1 UJ	3.6 UJ	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD
Vinyl acetate	--	--	--	--	--	--	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD
Vinyl chloride	3.3 U	3.3 UJ	3.3 UJ	2.9 UJ	1 UJ	3.6 UJ	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD

TABLE G-1

SOIL ANALYTICAL RESULTS FOR VOLATILE ORGANIC COMPOUNDS (1996-2009)[1]

PSC Washougal Facility
Washougal, Washington

Concentrations in micrograms per kilogram (µg/kg)

Site ID	GP-40	GP-40	GP-41	GP-41	GP-41	GP-41	GP-41	GP-42	GP-42	GP-42	GP-43	GP-43	GP-43	GP-44	GP-44	GP-45	GP-45	GP-46	GP-46	GP-47	GP-47
Depth (in feet)	6	8	2	4	6	7	8	2	6	8	4	6	8	6	8	6	8	6	8	6	8
Analyte / Sample Date	9/24/2001	9/24/2001	9/24/2001	9/24/2001	9/24/2001	9/24/2001	9/24/2001	9/22/2001	9/22/2001	9/22/2001	9/24/2001	9/24/2001	9/24/2001	9/26/2001	9/26/2001	9/26/2001	9/26/2001	9/26/2001	9/26/2001	9/26/2001	9/26/2001
1,1,1,2-Tetrachloroethane	100 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD
1,1,2,2-Tetrachloroethane	200 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD
1,1,1-Trichloroethane	141 D	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD
1,1,2-Trichloroethane	200 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD
1,1,2-Trichlorotrifluoroethane	400 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD
1,1-Dichloro-1,2,2-trifluoroethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,2-Dichloro-1,1,1-trifluoroethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloroethane	100 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD
1,2-Dichloroethane	100 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD
1,1-Dichloroethene	100 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD
1,2-Dichlorobenzene	301 D	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD
1,3-Dichlorobenzene	100 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD
1,4-Dichlorobenzene	110 D	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD
1,2-Dichloropropane	100 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD
1,3-Dichloropropane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,2-Dichloropropane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloropropene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-DichloroTrifluoroethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichlorobenzene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichloropropane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trimethylbenzene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromo-3-chloropropane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromoethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3,5-Trimethylbenzene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Butanone (MEK)	2000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD
2-Chloroethylvinylether	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chlorotoluene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Hexanone	2000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD
2-methylpentane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3-Methylpentane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorotoluene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Methyl-2-pentanone (MIBK)	1000 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD
Acetone	5000 UD	2500 UD	2500 UD	2500 UD	2500 UD	2500 UD	2500 UD	2500 UD	2500 UD	2500 UD	2500 UD	2500 UD	2500 UD	2500 UD	2500 UD	2500 UD	2500 UD	2500 UD	2500 UD	2500 UD	2500 UD
Acrolein	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acrylonitrile	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzene	100 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD
Bromobenzene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromochloromethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromodichloromethane	100 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD
Bromoform	200 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD
Bromomethane	1000 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD
Carbon disulfide	2000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD
Carbon tetrachloride	100 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD
Chlorobenzene	100 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD
Chlorobromo-methane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloroethane	200 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD
Chloroform	100 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD
Chloromethane	1000 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD
cis-1,2-Dichloroethene	100 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD
cis-1,3-Dichloropropene	100 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD
Dibromochloromethane	200 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD
Dibromomethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE G-1

SOIL ANALYTICAL RESULTS FOR VOLATILE ORGANIC COMPOUNDS (1996-2009)[1]

PSC Washougal Facility
Washougal, Washington

Concentrations in micrograms per kilogram (µg/kg)

Site ID	GP-40	GP-40	GP-41	GP-41	GP-41	GP-41	GP-41	GP-42	GP-42	GP-42	GP-43	GP-43	GP-43	GP-44	GP-44	GP-45	GP-45	GP-46	GP-46	GP-47	GP-47
Depth (in feet)	6	8	2	4	6	7	8	2	6	8	4	6	8	6	8	6	8	6	8	6	8
Analyte / Sample Date	9/24/2001	9/24/2001	9/24/2001	9/24/2001	9/24/2001	9/24/2001	9/24/2001	9/22/2001	9/22/2001	9/22/2001	9/24/2001	9/24/2001	9/24/2001	9/26/2001	9/26/2001	9/26/2001	9/26/2001	9/26/2001	9/26/2001	9/26/2001	9/26/2001
Dichlorodifluoromethane	1000 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD
Dichlorotrifluoroethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Diethyl ether	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethylbenzene	1170 D	50 UD	50 UD	50 UD	50 UD	50 UD	119 D	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD
Hexachlorobutadiene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropylbenzene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
m,p-Xylene	13100 D	100 UD	100 UD	100 UD	100 UD	100 UD	831 D	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD
methylcyclopentane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methylene bromide	100 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD
Methylene chloride	1000 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD
Naphthalene	2660 D	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD
n-Butylbenzene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
n-Propylbenzene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
o-Xylene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
p-Cymene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
p-isopropyltoluene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
sec-Butylbenzene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Styrene	100 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD
tert-Butylbenzene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tetrachloroethene	629 D	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD
Toluene	100 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD
trans-1,2-Dichloroethene	100 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD
trans-1,3-Dichloropropene	100 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD
Trichloroethene	100 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD
Trichlorofluoromethane	400 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD
Vinyl acetate	1000 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD
Vinyl chloride	100 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD

TABLE G-1

SOIL ANALYTICAL RESULTS FOR VOLATILE ORGANIC COMPOUNDS (1996-2009)[1]

PSC Washougal Facility
Washougal, Washington

Concentrations in micrograms per kilogram (µg/kg)

Site ID	GP-48	GP-48	GP-48	GP-49	GP-49	GP-49	GP-50	GP-50	GP-50	GP-50	GP-65	GP-65	GP-65	GP-65	GP-65	GP-66	GP-66	GP-66	GP-66	GP-67	GP-67
Depth (in feet)	6	8	9	4	6	8	4	6	7	8	2	4	6	7	8	4	6	7	8	5	6
Analyte / Sample Date	9/24/2001	9/24/2001	9/24/2001	9/24/2001	9/24/2001	9/24/2001	9/25/2001	9/25/2001	9/25/2001	9/25/2001	9/26/2001	9/26/2001	9/26/2001	9/26/2001	9/26/2001	9/25/2001	9/25/2001	9/25/2001	9/25/2001	9/27/2001	9/27/2001
1,1,1,2-Tetrachloroethane	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD
1,1,2,2-Tetrachloroethane	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD
1,1,1-Trichloroethane	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD
1,1,2-Trichloroethane	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD
1,1,2-Trichlorotrifluoroethane	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD
1,1-Dichloro-1,2,2-trifluoroethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,2-Dichloro-1,1,1-trifluoroethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloroethane	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD
1,2-Dichloroethane	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD
1,1-Dichloroethene	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD
1,2-Dichlorobenzene	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD
1,3-Dichlorobenzene	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD
1,4-Dichlorobenzene	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD
1,2-Dichloropropane	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD
1,3-Dichloropropane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,2-Dichloropropane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloropropene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-DichloroTrifluoroethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichlorobenzene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichloropropane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trimethylbenzene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromo-3-chloropropane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromoethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3,5-Trimethylbenzene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Butanone (MEK)	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD
2-Chloroethylvinylether	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chlorotoluene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Hexanone	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD
2-methylpentane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3-Methylpentane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorotoluene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Methyl-2-pentanone (MIBK)	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD
Acetone	2500 UD	2500 UD	2500 UD	2500 UD	2500 UD	2500 UD	2500 UD	2500 UD	2500 UD	2500 UD	2500 UD	2500 UD	2500 UD	2500 UD	2500 UD	2500 UD	2500 UD	2500 UD	2500 UD	2500 UD	2500 UD
Acrolein	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acrylonitrile	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzene	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD
Bromobenzene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromochloromethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromodichloromethane	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD
Bromoform	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD
Bromomethane	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD
Carbon disulfide	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD
Carbon tetrachloride	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD
Chlorobenzene	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD
Chlorobromo-methane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloroethane	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD
Chloroform	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD
Chloromethane	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD
cis-1,2-Dichloroethene	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD
cis-1,3-Dichloropropene	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD
Dibromochloromethane	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD
Dibromomethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE G-1

SOIL ANALYTICAL RESULTS FOR VOLATILE ORGANIC COMPOUNDS (1996-2009)[1]

PSC Washougal Facility
Washougal, Washington

Concentrations in micrograms per kilogram (µg/kg)

Site ID	GP-48	GP-48	GP-48	GP-49	GP-49	GP-49	GP-50	GP-50	GP-50	GP-50	GP-65	GP-65	GP-65	GP-65	GP-65	GP-66	GP-66	GP-66	GP-66	GP-67	GP-67
Depth (in feet)	6	8	9	4	6	8	4	6	7	8	2	4	6	7	8	4	6	7	8	5	6
Analyte / Sample Date	9/24/2001	9/24/2001	9/24/2001	9/24/2001	9/24/2001	9/24/2001	9/25/2001	9/25/2001	9/25/2001	9/25/2001	9/26/2001	9/26/2001	9/26/2001	9/26/2001	9/26/2001	9/25/2001	9/25/2001	9/25/2001	9/25/2001	9/27/2001	9/27/2001
Dichlorodifluoromethane	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD
Dichlorotrifluoroethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Diethyl ether	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethylbenzene	50 UD	50 UD	92 D	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	1080 D	50 UD	50 UD	50 UD	50 UD	86.9 D	50 UD	50 UD	50 UD	482 D	50 UD	50 UD
Hexachlorobutadiene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropylbenzene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
m,p-Xylene	100 UD	100 UD	307 D	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	5050 D	100 UD	100 UD	100 UD	100 UD	406 D	100 UD	100 UD	100 UD	2470 D	100 UD	100 UD
methylcyclopentane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methylene bromide	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD
Methylene chloride	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD
Naphthalene	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD
n-Butylbenzene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
n-Propylbenzene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
o-Xylene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
p-Cymene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
p-isopropyltoluene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
sec-Butylbenzene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Styrene	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD
tert-Butylbenzene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tetrachloroethene	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	57.5 D	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD
Toluene	50 UD	50 UD	145 D	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	1190 D	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	98.1 D	50 UD	50 UD
trans-1,2-Dichloroethene	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD
trans-1,3-Dichloropropene	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD
Trichloroethene	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD
Trichlorofluoromethane	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD
Vinyl acetate	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD
Vinyl chloride	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD

TABLE G-1

SOIL ANALYTICAL RESULTS FOR VOLATILE ORGANIC COMPOUNDS (1996-2009)[1]

PSC Washougal Facility
Washougal, Washington

Concentrations in micrograms per kilogram (µg/kg)

Site ID	GP-67	GP-68	GP-68	GP-69	GP-69	GP-69	GP-70	GP-70	GP-70	GP-70	GP-72	GP-72	GP-72	GP-73	GP-73	GP-73	GP-74	GP-74	GP-74	GP-74	GP-75
Depth (in feet)	8	5	6	6	7	8	5	6	7	8	4	6	8	4	6	8	2	6	7	8	2
Analyte / Sample Date	9/27/2001	9/27/2001	9/27/2001	9/26/2001	9/26/2001	9/26/2001	9/27/2001	9/27/2001	9/27/2001	9/27/2001	9/20/2001	9/20/2001	9/20/2001	9/21/2001	9/21/2001	9/21/2001	9/21/2001	9/21/2001	9/21/2001	9/21/2001	9/21/2001
1,1,1,2-Tetrachloroethane	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD
1,1,2,2-Tetrachloroethane	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD
1,1,1-Trichloroethane	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD
1,1,2-Trichloroethane	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD
1,1,2-Trichlorotrifluoroethane	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD
1,1-Dichloro-1,2,2-trifluoroethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,2-Dichloro-1,1,1-trifluoroethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloroethane	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD
1,2-Dichloroethane	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD
1,1-Dichloroethene	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD
1,2-Dichlorobenzene	50 UD	50 UD	50 UD	50 UD	99.4 D	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD
1,3-Dichlorobenzene	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD
1,4-Dichlorobenzene	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD
1,2-Dichloropropane	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD
1,3-Dichloropropane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,2-Dichloropropane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloropropene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-DichloroTrifluoroethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichlorobenzene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichloropropane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trimethylbenzene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromo-3-chloropropane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromoethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3,5-Trimethylbenzene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Butanone (MEK)	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD
2-Chloroethylvinylether	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chlorotoluene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Hexanone	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD
2-methylpentane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3-Methylpentane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorotoluene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Methyl-2-pentanone (MIBK)	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD
Acetone	2500 UD	2500 UD	2500 UD	2500 UD	2500 UD	2500 UD	2500 UD	2500 UD	2500 UD	2500 UD	2500 UD	2500 UD	2500 UD	2500 UD	2500 UD	2500 UD	2500 UD	2500 UD	2500 UD	2500 UD	2500 UD
Acrolein	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acrylonitrile	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzene	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD
Bromobenzene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromochloromethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromodichloromethane	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD
Bromoform	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD
Bromomethane	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD
Carbon disulfide	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD
Carbon tetrachloride	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD
Chlorobenzene	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD
Chlorobromo-methane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloroethane	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD
Chloroform	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD
Chloromethane	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD
cis-1,2-Dichloroethene	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD
cis-1,3-Dichloropropene	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD
Dibromochloromethane	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD
Dibromomethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE G-1

SOIL ANALYTICAL RESULTS FOR VOLATILE ORGANIC COMPOUNDS (1996-2009)[1]

PSC Washougal Facility
Washougal, Washington

Concentrations in micrograms per kilogram (µg/kg)

Site ID	GP-67	GP-68	GP-68	GP-69	GP-69	GP-69	GP-70	GP-70	GP-70	GP-70	GP-72	GP-72	GP-72	GP-73	GP-73	GP-73	GP-74	GP-74	GP-74	GP-74	GP-75
Depth (in feet)	8	5	6	6	7	8	5	6	7	8	4	6	8	4	6	8	2	6	7	8	2
Analyte / Sample Date	9/27/2001	9/27/2001	9/27/2001	9/26/2001	9/26/2001	9/26/2001	9/27/2001	9/27/2001	9/27/2001	9/27/2001	9/20/2001	9/20/2001	9/20/2001	9/21/2001	9/21/2001	9/21/2001	9/21/2001	9/21/2001	9/21/2001	9/21/2001	9/21/2001
Dichlorodifluoromethane	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD
Dichlorotrifluoroethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Diethyl ether	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethylbenzene	50 UD	50 UD	50 UD	50 UD	270 D	220 D	50 UD	50 UD	50 UD	58.8 D	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD
Hexachlorobutadiene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropylbenzene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
m,p-Xylene	100 UD	100 UD	100 UD	100 UD	1690 D	1580 D	100 UD	100 UD	100 UD	625 D	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD
methylcyclopentane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methylene bromide	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD
Methylene chloride	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD
Naphthalene	200 UD	200 UD	200 UD	200 UD	699 D	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD
n-Butylbenzene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
n-Propylbenzene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
o-Xylene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
p-Cymene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
p-isopropyltoluene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
sec-Butylbenzene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Styrene	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD
tert-Butylbenzene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tetrachloroethene	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD
Toluene	50 UD	50 UD	50 UD	50 UD	126 D	97.6 D	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD
trans-1,2-Dichloroethene	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD
trans-1,3-Dichloropropene	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD
Trichloroethene	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD
Trichlorofluoromethane	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD
Vinyl acetate	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD
Vinyl chloride	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD

TABLE G-1

SOIL ANALYTICAL RESULTS FOR VOLATILE ORGANIC COMPOUNDS (1996-2009)[1]

PSC Washougal Facility
Washougal, Washington

Concentrations in micrograms per kilogram (µg/kg)

Site ID	GP-75	GP-75	GP-76	GP-76	GP-76	GP-77	GP-77	GP-77	GP-77A	GP-77B	GP-77C	GP-77D	GP-77E	GP-91	GP-91	GP-92	GP-92	GP-93	GP-93	GP-94	GP-94
Depth (in feet)	6	8	2	6	8	4	6	8	5	5	5	5	5	2	3	2	3	1.5	5.5	3	5.5
Analyte / Sample Date	9/21/2001	9/21/2001	9/21/2001	9/21/2001	9/21/2001	9/21/2001	9/21/2001	9/21/2001	9/21/2001	9/21/2001	9/21/2001	9/21/2001	9/21/2001	10/5/2007	10/5/2007	10/3/2007	10/3/2007	10/3/2007	10/3/2007	10/4/2007	10/4/2007
1,1,1,2-Tetrachloroethane	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	500 UD	50 UD	50 UD	--	--	--	--	--	--	--	--
1,1,2,2-Tetrachloroethane	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	1000 UD	100 UD	100 UD	--	--	--	--	--	--	--	--
1,1,1-Trichloroethane	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	500 UD	50 UD	50 UD	0.084 U	0.08 U	0.073 U	0.075 U	0.51 J	5 J	0.072 U	0.082 U
1,1,2-Trichloroethane	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	1000 UD	100 UD	100 UD	--	--	--	--	--	--	--	--
1,1,2-Trichlorotrifluoroethane	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	2000 UD	200 UD	200 UD	0.18 U	0.17 U	0.16 U	0.16 U	0.16 U	1.7 J	0.16 U	0.18 U
1,1-Dichloro-1,2,2-trifluoroethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,2-Dichloro-1,1,1-trifluoroethane	--	--	--	--	--	--	--	--	--	--	--	--	--	6.4 UNJ	6 UNJ	5.5 UNJ	5.6 UNJ	5.6 UNJ	5.3 UNJ	5.4 UNJ	6.2 UNJ
1,1-Dichloroethane	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	500 UD	50 UD	50 UD	0.087 U	0.082 U	0.075 U	0.077 U	0.076 U	0.22 J	0.074 U	0.084 U
1,2-Dichloroethane	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	500 UD	50 UD	50 UD	0.073 U	0.069 U	0.063 U	0.065 U	0.064 U	0.064 U	0.062 U	0.071 U
1,1-Dichloroethene	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	500 UD	50 UD	50 UD	0.073 U	0.069 U	0.063 U	0.065 U	0.064 U	0.064 U	0.062 U	0.071 U
1,2-Dichlorobenzene	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	500 UD	50 UD	154 D	0.083 U	0.079 U	0.072 U	0.074 U	0.073 U	3.7 J	0.071 U	0.081 U
1,3-Dichlorobenzene	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	500 UD	50 UD	50 UD	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	500 UD	50 UD	50 UD	--	--	--	--	--	--	--	--
1,2-Dichloropropane	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	500 UD	50 UD	50 UD	--	--	--	--	--	--	--	--
1,3-Dichloropropane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,2-Dichloropropane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloropropene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-DichloroTrifluoroethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichlorobenzene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichloropropane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trimethylbenzene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromo-3-chloropropane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromoethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3,5-Trimethylbenzene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Butanone (MEK)	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	10000 UD	1000 UD	1000 UD	1.4 U	1.4 U	1.3 U	1.3 U	21 J	1.3 U	1.2 U	1.4 U
2-Chloroethylvinylether	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chlorotoluene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Hexanone	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	10000 UD	1000 UD	1000 UD	--	--	--	--	--	--	--	--
2-methylpentane	--	--	--	--	--	--	--	--	--	--	--	--	--	6.4 UNJ	6 UNJ	5.5 UNJ	5.6 UNJ	5.6 UNJ	5.3 UNJ	5.4 UNJ	6.2 UNJ
3-Methylpentane	--	--	--	--	--	--	--	--	--	--	--	--	--	6.4 UNJ	6 UNJ	5.5 UNJ	5.6 UNJ	5.6 UNJ	5.3 UNJ	5.4 UNJ	6.2 UNJ
4-Chlorotoluene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Methyl-2-pentanone (MIBK)	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	5000 UD	500 UD	500 UD	--	--	--	--	--	--	--	--
Acetone	2500 UD	2500 UD	2500 UD	2500 UD	2500 UD	2500 UD	2500 UD	2500 UD	2500 UD	2500 UD	25000 UD	2500 UD	2500 UD	11 UJ	5.2 UJ	11 UJ	8 UJ	85	21 UJ	7.7 UJ	8.2 UJ
Acrolein	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acrylonitrile	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzene	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	500 UD	50 UD	50 UD	0.11 U	0.095 U	0.087 U	0.089 U	0.089 U	0.089 U	0.086 U	0.098 U
Bromobenzene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromochloromethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromodichloromethane	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	500 UD	50 UD	50 UD	--	--	--	--	--	--	--	--
Bromoform	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	1000 UD	100 UD	100 UD	--	--	--	--	--	--	--	--
Bromomethane	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	5000 UD	500 UD	500 UD	--	--	--	--	--	--	--	--
Carbon disulfide	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	1000 UD	10000 UD	1000 UD	1000 UD	0.15 J	0.069 U	0.063 U	0.065 U	0.19 J	0.83 J	0.097 J	0.14 J
Carbon tetrachloride	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	500 UD	50 UD	50 UD	0.092 U	0.087 U	0.079 U	0.081 U	0.081 U	0.081 U	0.078 U	0.089 U
Chlorobenzene	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	500 UD	50 UD	50 UD	0.065 U	0.062 U	0.056 U	0.058 U	0.057 U	0.058 U	0.055 U	0.063 U
Chlorobromo-methane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloroethane	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	1000 UD	100 UD	100 UD	0.31 U	0.29 U	0.27 U	0.27 U	0.27 U	0.27 U	0.26 U	0.3 U
Chloroform	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	500 UD	50 UD	50 UD	0.081 U	0.076 U	0.069 U	0.071 U	0.071 U	0.071 U	0.068 U	0.078 U
Chloromethane	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	5000 UD	500 UD	500 UD	0.14 U	0.14 U	0.13 U	0.13 U	0.13 U	0.13 U	0.12 U	0.14 U
cis-1,2-Dichloroethene	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	500 UD	50 UD	50 UD	0.13 U	0.13 U	0.11 U	0.12 U	0.12 U	0.12 U	0.11 U	0.13 U
cis-1,3-Dichloropropene	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	500 UD	50 UD	50 UD	--	--	--	--	--	--	--	--
Dibromochloromethane	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	1000 UD	100 UD	100 UD	--	--	--	--	--	--	--	--
Dibromomethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE G-1

SOIL ANALYTICAL RESULTS FOR VOLATILE ORGANIC COMPOUNDS (1996-2009)[1]

PSC Washougal Facility
Washougal, Washington

Concentrations in micrograms per kilogram (µg/kg)

Site ID	GP-75	GP-75	GP-76	GP-76	GP-76	GP-77	GP-77	GP-77	GP-77A	GP-77B	GP-77C	GP-77D	GP-77E	GP-91	GP-91	GP-92	GP-92	GP-93	GP-93	GP-94	GP-94
Depth (in feet)	6	8	2	6	8	4	6	8	5	5	5	5	5	2	3	2	3	1.5	5.5	3	5.5
Analyte / Sample Date	9/21/2001	9/21/2001	9/21/2001	9/21/2001	9/21/2001	9/21/2001	9/21/2001	9/21/2001	9/21/2001	9/21/2001	9/21/2001	9/21/2001	9/21/2001	10/5/2007	10/5/2007	10/3/2007	10/3/2007	10/3/2007	10/3/2007	10/4/2007	10/4/2007
Dichlorodifluoromethane	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	5000 UD	500 UD	500 UD	0.084 U	0.08 U	0.073 U	0.075 U	0.074 U	0.074 U	0.072 U	0.082 U
Dichlorotrifluoroethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Diethyl ether	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethylbenzene	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	500 UD	50 UD	12200 D	0.083 U	0.079 U	0.072 U	0.074 U	1.1 J	9.5	0.071 U	0.081 U
Hexachlorobutadiene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropylbenzene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
m,p-Xylene	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	100 UD	1000 UD	100 UD	24000 D	0.2 U	0.19 U	0.17 U	0.17 U	8.3	80	0.17 U	0.19 U
methylcyclopentane	--	--	--	--	--	--	--	--	--	--	--	--	--	6.4 UNJ	6 UNJ	5.5 UNJ	5.6 UNJ	5.6 UNJ	5.3 UNJ	5.4 UNJ	6.2 UNJ
Methylene bromide	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	500 UD	50 UD	50 UD	--	--	--	--	--	--	--	--
Methylene chloride	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	5000 UD	500 UD	500 UD	3 UJ	0.17 U	3 UJ	3 UJ	3 UJ	3 UJ	0.16 U	0.18 U
Naphthalene	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	2000 UD	200 UD	1000 D	--	--	--	--	--	--	--	--
n-Butylbenzene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
n-Propylbenzene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
o-Xylene	--	--	--	--	--	--	--	--	--	--	--	--	--	0.073 U	0.069 U	0.063 U	0.065 U	3 J	36	0.062 U	0.071 U
p-Cymene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
p-isopropyltoluene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
sec-Butylbenzene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Styrene	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	500 UD	50 UD	50 UD	--	--	--	--	--	--	--	--
tert-Butylbenzene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tetrachloroethene	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	500 UD	50 UD	50 UD	0.097 U	0.092 U	0.084 U	0.086 U	1.2 J	6.1	0.082 U	0.094 U
Toluene	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	500 UD	50 UD	833 D	0.71 J	0.81 J	0.35 J	0.37 J	7	29	0.43 J	1 J
trans-1,2-Dichloroethene	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	500 UD	50 UD	50 UD	0.11 U	0.11 U	0.092 U	0.095 U	0.094 U	0.095 U	0.091 U	0.11 U
trans-1,3-Dichloropropene	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	500 UD	50 UD	50 UD	--	--	--	--	--	--	--	--
Trichloroethene	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	500 UD	50 UD	50 UD	0.09 U	0.085 U	0.077 U	0.079 U	0.89 J	1.9 J	0.076 U	0.087 U
Trichlorofluoromethane	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	200 UD	2000 UD	200 UD	200 UD	0.14 U	0.14 U	0.13 U	0.13 U	0.13 U	0.13 U	0.12 U	0.14 U
Vinyl acetate	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	500 UD	5000 UD	500 UD	500 UD	--	--	--	--	--	--	--	--
Vinyl chloride	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	50 UD	500 UD	50 UD	50 UD	0.12 U	0.12 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.12 U

TABLE G-1

SOIL ANALYTICAL RESULTS FOR VOLATILE ORGANIC COMPOUNDS (1996-2009)[1]

PSC Washougal Facility
Washougal, Washington

Concentrations in micrograms per kilogram (µg/kg)

Site ID	GP-95	GP-95	GP-96	GP-96	GP-97	GP-97	GP-97	GP-98	GP-98	GP-99	GP-99	GP-105	GP-107	GP-107	GP-108	GP-108	GP-109	GP-109	GP-110	GP-110	GP-111
Depth (in feet)	2.5	4	2	3.5	2.5	5.5	8	1.5	2.5	1.5	2.5	2	1	3	1	4	3	4	1	3	1
Analyte / Sample Date	10/1/2007	10/1/2007	10/3/2007	10/3/2007	10/5/2007	10/5/2007	10/5/2007	10/4/2007	10/4/2007	10/4/2007	10/4/2007	5/5/2009	9/3/2008	9/3/2008	9/3/2008	9/3/2008	9/2/2008	9/2/2008	9/2/2008	9/2/2008	9/2/2008
1,1,1,2-Tetrachloroethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,2,2-Tetrachloroethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,1-Trichloroethane	0.092 U	0.075 U	0.076 U	0.073 U	0.087 U	0.073 U	0.085 U	0.081 U	0.084 U	0.077 U	0.074 U	8.4 U	0.17 U	0.31 J	0.17 U	0.18 UJ	0.18 U	0.18 UJ	0.19 U	0.17 U	0.17 U
1,1,2-Trichloroethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,2-Trichlorotrifluoroethane	0.2 U	0.16 U	0.16 U	0.16 U	1 J	0.16 U	0.18 U	0.18 U	0.18 U	0.17 U	0.16 U	8.4 U	0.11 U	0.12 U	0.11 U	0.12 UJ	0.12 U	0.12 UJ	0.12 U	0.11 U	0.11 U
1,1-Dichloro-1,2,2-trifluoroethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,2-Dichloro-1,1,1-trifluoroethane	6.9 UNJ	5.2 UNJ	5.7 UNJ	5.3 UNJ	6.6 UNJ	5.1 UNJ	5.9 UNJ	6.1 UNJ	6.3 UNJ	5.8 UNJ	5.6 UNJ	8.3 U	5.5 U	5.9 U	5.4 U	5.7 U	5.7 U	5.8 U	6.2 U	5.5 U	5.6 U
1,1-Dichloroethane	0.095 U	0.078 U	0.078 U	0.075 U	0.09 U	0.075 U	0.087 U	0.083 U	0.086 U	0.079 U	0.076 U	8.4 U	0.053 U	0.057 U	0.052 U	0.056 UJ	0.055 U	0.056 UJ	0.06 U	0.054 U	0.055 U
1,2-Dichloroethane	0.079 U	0.065 U	0.066 U	0.063 U	0.075 U	0.063 U	0.073 U	0.07 U	0.072 U	0.067 U	0.064 U	8.4 U	0.06 U	0.065 U	0.058 U	0.063 UJ	0.062 U	0.063 UJ	0.067 U	0.06 U	0.061 U
1,1-Dichloroethene	0.079 U	0.065 U	0.066 U	0.063 U	0.075 U	0.063 U	0.073 U	0.07 U	0.072 U	0.067 U	0.064 U	8.4 U	0.077 U	0.084 U	0.076 U	0.081 UJ	0.081 U	0.082 UJ	0.087 U	0.078 U	0.079 U
1,2-Dichlorobenzene	0.091 U	0.074 U	0.075 U	0.072 U	0.086 U	0.072 U	0.084 U	0.08 U	0.082 U	0.076 U	0.073 U	8.4 U	0.07 U	0.075 U	0.068 U	0.073 UJ	0.073 U	0.073 UJ	0.079 U	0.07 U	0.071 U
1,3-Dichlorobenzene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloropropane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichloropropane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,2-Dichloropropane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloropropene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-DichloroTrifluoroethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichlorobenzene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichloropropane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trimethylbenzene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromo-3-chloropropane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromoethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3,5-Trimethylbenzene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Butanone (MEK)	1.6 U	1.3 U	1.3 U	1.3 U	1.5 U	1.3 U	1.5 U	1.4 U	1.4 U	1.3 U	1.3 U	34 U	1.8 U	1.9 U	1.8 U	1.9 UJ	1.9 U	1.9 UJ	2 U	1.8 U	1.9 U
2-Chloroethylvinylether	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Chlorotoluene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Hexanone	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-methylpentane	6.9 UNJ	5.2 UNJ	5.7 UNJ	5.3 UNJ	6.6 UNJ	5.1 UNJ	5.9 UNJ	6.1 UNJ	6.3 UNJ	5.8 UNJ	5.6 UNJ	8.3 U	5.5 U	5.9 U	5.4 U	5.7 U	5.7 U	5.8 U	6.2 U	5.5 U	5.6 U
3-Methylpentane	6.9 UNJ	5.2 UNJ	5.7 UNJ	5.3 UNJ	6.6 UNJ	5.1 UNJ	5.9 UNJ	6.1 UNJ	6.3 UNJ	5.8 UNJ	5.6 UNJ	8.3 U	5.5 U	5.9 U	5.4 U	5.7 U	5.7 U	5.8 U	6.2 U	5.5 U	5.6 U
4-Chlorotoluene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Methyl-2-pentanone (MIBK)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acetone	12 J	4.6 UJ	24 U	11 UJ	13 UJ	24 U	10 UJ	22 UJ	10 UJ	12 UJ	12 UJ	34 UJ	9.9 UJ	5.3 UJ	6.2 UJ	3.8 UJ	7.3 UJ	22 UJ	8.4 UJ	7 UJ	3.3 U
Acrolein	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acrylonitrile	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzene	2.4 J	0.09 U	0.091 U	0.087 U	0.11 U	0.088 U	0.11 U	0.097 U	0.1 U	0.092 U	0.089 U	8.4 U	0.16 U	0.17 U	0.16 U	0.17 UJ	0.17 U	0.17 UJ	0.18 U	0.16 U	0.16 U
Bromobenzene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromochloromethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromodichloromethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromoform	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromomethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbon disulfide	0.079 U	0.065 U	0.63 J	0.063 U	0.16 J	0.21 J	0.99 J	0.26 J	0.29 J	0.22 J	0.11 J	8.4 U	0.14 J	0.063 U	0.057 U	0.061 UJ	0.21 UJ	0.82 UJ	0.3 UJ	0.21 UJ	0.06 U
Carbon tetrachloride	0.1 U	0.082 U	0.083 U	0.079 U	0.095 U	0.08 U	0.092 U	0.088 U	0.091 U	0.084 U	0.081 U	8.4 U	0.086 U	0.093 U	0.084 U	0.09 UJ	0.09 U	0.091 UJ	0.097 U	0.087 U	0.088 U
Chlorobenzene	0.071 U	0.058 U	0.059 U	0.056 U	0.068 U	0.057 U	0.066 U	0.063 U	0.065 U	0.06 U	0.057 U	8.4 U	0.06 U	0.065 U	0.058 U	0.063 UJ	0.062 U	0.063 UJ	0.067 U	0.06 U	0.061 U
Chlorobromo-methane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloroethane	0.34 U	0.28 U	0.28 U	0.27 U	0.32 U	0.27 U	0.31 U	0.3 U	0.31 U	0.28 U	0.27 U	8.4 U	0.33 U	0.36 U	0.33 U	0.35 UJ	0.35 U	0.35 UJ	0.35 U	0.34 U	0.34 U
Chloroform	0.088 U	0.072 U	0.072 U	0.07 U	0.083 U	0.07 U	0.081 U	0.077 U	0.08 U	0.074 U	0.071 U	8.4 U	0.053 U	0.057 U	0.052 U	0.056 UJ	0.055 U	0.056 UJ	0.06 U	0.054 U	0.055 U
Chloromethane	0.16 U	0.13 U	0.13 U	0.13 U	0.15 U	0.13 U	0.15 U	0.14 U	0.14 U	0.13 U	0.13 U	8.4 U	0.063 U	0.18 J	0.21 J	0.066 UJ	0.17 J	0.067 UJ	0.066 U	0.063 U	0.065 U
cis-1,2-Dichloroethene	0.14 U	0.12 U	0.12 U	0.11 U	0.14 U	0.12 U	0.48 J	0.13 U	0.13 U	0.12 U	0.12 U	8.4 U	0.089 U	0.097 U	0.087 U	0.094 UJ	0.093 U	0.094 UJ	0.11 U	0.09 U	0.092 U
cis-1,3-Dichloropropene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibromochloromethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibromomethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE G-1

SOIL ANALYTICAL RESULTS FOR VOLATILE ORGANIC COMPOUNDS (1996-2009)[1]

PSC Washougal Facility
Washougal, Washington

Concentrations in micrograms per kilogram (µg/kg)

Site ID	GP-95	GP-95	GP-96	GP-96	GP-97	GP-97	GP-97	GP-98	GP-98	GP-99	GP-99	GP-105	GP-107	GP-107	GP-108	GP-108	GP-109	GP-109	GP-110	GP-110	GP-111
Depth (in feet)	2.5	4	2	3.5	2.5	5.5	8	1.5	2.5	1.5	2.5	2	1	3	1	4	3	4	1	3	1
Analyte / Sample Date	10/1/2007	10/1/2007	10/3/2007	10/3/2007	10/5/2007	10/5/2007	10/5/2007	10/4/2007	10/4/2007	10/4/2007	10/4/2007	5/5/2009	9/3/2008	9/3/2008	9/3/2008	9/3/2008	9/2/2008	9/2/2008	9/2/2008	9/2/2008	9/2/2008
Dichlorodifluoromethane	0.092 U	0.075 U	0.076 U	0.073 U	0.087 U	0.073 U	0.085 U	0.081 U	0.084 U	0.077 U	0.074 U	8.4 U	0.079 U	0.086 U	0.078 U	0.083 UJ	0.083 U	0.084 UJ	1.6 J	0.32 J	0.082 U
Dichlorotrifluoroethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Diethyl ether	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethylbenzene	0.091 U	0.074 U	0.075 U	0.072 U	0.086 U	0.072 U	0.084 U	0.08 U	0.082 U	0.076 U	0.073 U	8.4 U	0.045 U	0.49 J	0.045 U	0.048 UJ	0.047 U	4 J	0.25 J	0.046 U	0.047 U
Hexachlorobutadiene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Isopropylbenzene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
m,p-Xylene	0.55 J	0.18 U	0.18 U	0.17 U	0.2 U	0.36 J	0.72 J	0.54 J	0.2 J	0.18 U	0.17 U	0.25 J	0.11 U	1.1 J	0.1 U	0.11 UJ	0.11 U	12 J	0.69 J	0.11 U	0.66 J
methylcyclopentane	6.9 UNJ	5.2 UNJ	5.7 UNJ	5.3 UNJ	6.6 UNJ	5.1 UNJ	5.9 UNJ	6.1 UNJ	6.3 UNJ	5.8 UNJ	5.6 UNJ	8.3 U	5.5 U	5.9 U	5.4 U	5.7 U	5.7 U	5.8 U	6.2 U	5.5 U	5.6 U
Methylene bromide	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methylene chloride	3 UJ	0.16 U	3 UJ	3 UJ	3 UJ	3 UJ	3 UJ	3.2 UJ	3.3 UJ	0.17 U	3 UJ	17 UJ	0.59 J	1.9 J	0.16 U	0.17 UJ	0.17 U	0.17 UJ	0.16 U	0.16 U	0.16 U
Naphthalene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
n-Butylbenzene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
n-Propylbenzene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
o-Xylene	0.079 U	0.065 U	0.066 U	0.063 U	0.075 U	0.063 U	0.073 U	0.23 J	0.072 U	0.067 U	0.064 U	8.4 U	0.065 U	0.34 J	0.064 U	0.068 UJ	0.068 U	5.4 J	0.31 J	0.066 U	0.26 J
p-Cymene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
p-isopropyltoluene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
sec-Butylbenzene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Styrene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
tert-Butylbenzene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tetrachloroethene	0.11 U	0.087 U	0.087 U	0.084 UJ	0.49 J	1.5 J	0.098 U	0.093 U	0.096 U	0.089 U	0.085 U	8.4 U	0.14 U	1.5 J	0.13 U	0.14 UJ	0.14 U	4.5 J	0.15 U	0.14 U	0.14 U
Toluene	2.3 J	0.36 J	0.42 J	0.58 J	0.68 J	1.7 J	1.2 J	1.2 J	0.86 J	0.63 J	0.3 J	0.45 J	0.33 UJ	2.5 J	0.43 UJ	0.47 UJ	0.4 UJ	6.3 J	0.61 UJ	0.34 J	0.51 UJ
trans-1,2-Dichloroethene	0.12 U	0.096 U	0.096 U	0.093 U	0.12 U	0.093 U	0.11 U	0.11 U	0.11 U	0.098 U	0.094 U	8.4 U	0.053 U	0.057 U	0.052 U	0.056 UJ	0.055 U	0.056 UJ	0.055 U	0.054 U	0.055 U
trans-1,3-Dichloropropene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Trichloroethene	0.097 U	0.08 U	0.08 U	0.077 U	0.093 U	0.078 U	0.09 U	0.086 U	0.089 U	0.082 U	0.079 U	8.4 U	0.15 U	0.42 J	0.14 U	0.15 UJ	0.15 U	0.16 UJ	0.17 U	0.15 U	0.15 U
Trichlorofluoromethane	0.16 U	0.13 U	0.13 U	0.13 U	0.15 U	0.13 U	0.15 U	0.14 U	0.14 U	0.13 U	0.13 U	8.4 U	0.06 U	0.065 U	0.058 U	0.063 UJ	0.062 U	0.063 UJ	0.067 U	0.06 U	0.061 U
Vinyl acetate	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vinyl chloride	0.14 U	0.11 U	0.11 U	0.11 U	0.13 U	0.11 U	0.13 U	0.12 U	0.12 U	0.11 U	0.11 U	8.4 U	0.063 U	0.068 U	0.062 U	0.066 UJ	0.066 U	0.067 UJ	0.071 U	0.063 U	0.065 U

TABLE G-1

SOIL ANALYTICAL RESULTS FOR VOLATILE ORGANIC COMPOUNDS (1996-2009)[1]

PSC Washougal Facility
Washougal, Washington

Concentrations in micrograms per kilogram (µg/kg)

Site ID	GP-111	GP-112	GP-112	GP-113	GP-113	GP-114	GP-114	IAB-01	IAB-01	IAB-01	IAB-02	IAB-02	IAB-02	IAB-02	IAB-03	IAB-03	IAB-03	IAB-04	IAB-04	IAB-04	IAB-05
Depth (in feet)	4	1	4	1	4	1	3	2	4	6	2	4	6	8	2	4	6	2	4	6	2
Analyte / Sample Date	9/2/2008	9/4/2008	9/4/2008	9/3/2008	9/3/2008	9/3/2008	9/3/2008	9/15/1997	9/15/1997	9/15/1997	9/15/1997	9/15/1997	9/15/1997	9/15/1997	9/15/1997	9/15/1997	9/15/1997	9/15/1997	9/15/1997	9/15/1997	9/15/1997	9/15/1997
1,1,1,2-Tetrachloroethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,2,2-Tetrachloroethane	--	--	--	--	--	--	--	10 U	10 U	7 U	13 U	7 U	7 U	8 U	3 U	9.93 U	8 U	7 U	6 U	5 U	8 U
1,1,1-Trichloroethane	0.18 U	0.21 J	0.17 UJ	0.17 U	0.33 J	0.17 U	0.17 U	3 U	3 U	2 U	16.5	2 U	2 U	3 U	1 U	3.31 U	3 U	3 U	2 U	2 U	3 U
1,1,2-Trichloroethane	--	--	--	--	--	--	--	3 U	3 U	2 U	4 U	2 U	2 U	3 U	1 U	3.31 U	3 U	3 U	2 U	2 U	3 U
1,1,2-Trichlorotrifluoroethane	0.12 U	0.36 J	0.11 UJ	0.11 U	0.12 U	0.11 U	0.11 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloro-1,2,2-trifluoroethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,2-Dichloro-1,1,1-trifluoroethane	5.7 U	5.8 U	5.7 U	5.5 U	5.7 U	5.3 U	5.3 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-Dichloroethane	0.055 U	0.056 U	0.055 UJ	0.053 U	0.055 U	0.052 U	0.052 U	3 U	3 U	2 U	4 U	2 U	2 U	3 U	1 U	3.31 U	3 U	3 U	2 U	2 U	3 U
1,2-Dichloroethane	0.062 U	0.063 U	0.062 UJ	0.06 U	0.062 U	0.058 U	0.058 U	3 U	3 U	2 U	4 U	2 U	2 U	3 U	1 U	3.31 U	3 U	3 U	2 U	2 U	3 U
1,1-Dichloroethene	0.08 U	0.081 U	0.08 UJ	0.077 U	0.08 U	0.075 U	0.075 U	3 U	3 U	2 U	4 U	2 U	2 U	3 U	1 U	3.31 U	3 U	3 U	2 U	2 U	3 U
1,2-Dichlorobenzene	0.072 U	0.073 U	0.072 UJ	0.07 U	0.072 UJ	0.068 U	0.068 U	3 U	3 U	2 U	4 U	2 U	2 U	3.26	1 U	3.31 U	3 U	3 U	2 U	2 U	3 U
1,3-Dichlorobenzene	--	--	--	--	--	--	--	3 U	3 U	2 U	4 U	2 U	2 U	3 U	1 U	3.31 U	3 U	3 U	2 U	2 U	3 U
1,4-Dichlorobenzene	--	--	--	--	--	--	--	3 U	3 U	2 U	4 U	2 U	2 U	3 U	1 U	3.31 U	3 U	3 U	2 U	2 U	3 U
1,2-Dichloropropane	--	--	--	--	--	--	--	3 U	3 U	2 U	4 U	2 U	2 U	3 U	1 U	3.31 U	3 U	3 U	2 U	2 U	3 U
1,3-Dichloropropane	--	--	--	--	--	--	--	3 U	3 U	2 U	4 U	2 U	2 U	3 U	1 U	3.31 U	3 U	3 U	2 U	2 U	3 U
2,2-Dichloropropane	--	--	--	--	--	--	--	3 U	3 U	2 U	4 U	2 U	2 U	3 U	1 U	3.31 U	3 U	3 U	2 U	2 U	3 U
1,1-Dichloropropene	--	--	--	--	--	--	--	3 U	3 U	2 U	4 U	2 U	2 U	3 U	1 U	3.31 U	3 U	3 U	2 U	2 U	3 U
1,1-DichloroTrifluoroethane	--	--	--	--	--	--	--	17 U	16 U	11 U	22 U	12 U	11 U	14 U	6 U	16.5 U	13 U	13 U	10 U	9 U	13 U
1,2,3-Trichlorobenzene	--	--	--	--	--	--	--	3 U	3 U	2 U	4 U	2 U	2 U	3 U	1 U	3.31 U	3 U	3 U	2 U	2 U	3 U
1,2,3-Trichloropropane	--	--	--	--	--	--	--	3 U	3 U	2 U	4 U	2 U	2 U	3 U	1 U	3.31 U	3 U	3 U	2 U	2 U	3 U
1,2,4-Trichlorobenzene	--	--	--	--	--	--	--	3 U	3 U	2 U	4 U	2 U	2 U	3 U	1 U	3.31 U	3 U	3 U	2 U	2 U	3 U
1,2,4-Trimethylbenzene	--	--	--	--	--	--	--	3 U	3 U	2 U	4 U	4.71	2 U	3 U	1 U	3.31 U	3 U	3 U	2 U	2 U	3 U
1,2-Dibromo-3-chloropropane	--	--	--	--	--	--	--	17 U	16 U	11 U	22 U	12 U	11 U	14 U	6 U	16.5 U	13 U	13 U	10 U	9 U	13 U
1,2-Dibromoethane	--	--	--	--	--	--	--	3 U	3 U	2 U	4 U	2 U	2 U	3 U	1 U	3.31 U	3 U	3 U	2 U	2 U	3 U
1,3,5-Trimethylbenzene	--	--	--	--	--	--	--	3 U	3 U	2 U	4 U	2 U	2 U	3 U	1 U	3.31 U	3 U	3 U	2 U	2 U	3 U
2-Butanone (MEK)	1.9 U	2.7 J	1.9 UJ	1.8 U	1.9 U	1.8 U	1.8 U	17 U	16 U	11 U	22 U	12 U	11 U	14 U	6 U	16.5 U	13 U	13 U	10 U	9 U	13 U
2-Chloroethylvinylether	--	--	--	--	--	--	--	3 U	3 U	2 U	4 U	2 U	2 U	3 U	1 U	3.31 U	3 U	3 U	2 U	2 U	3 U
2-Chlorotoluene	--	--	--	--	--	--	--	3 U	3 U	2 U	4 U	2 U	2 U	3 U	1 U	3.31 U	3 U	3 U	2 U	2 U	3 U
2-Hexanone	--	--	--	--	--	--	--	17 U	16 U	11 U	22 U	12 U	11 U	14 U	6 U	16.5 U	13 U	13 U	10 U	9 U	13 U
2-methylpentane	5.7 U	5.8 U	5.7 U	5.5 U	5.7 U	5.3 U	5.3 U	17 U	16 U	11 U	22 U	12 U	11 U	14 U	6 U	16.5 U	13 U	13 U	10 U	9 U	13 U
3-Methylpentane	5.7 U	5.8 U	5.7 U	5.5 U	5.7 U	5.3 U	5.3 U	17 U	16 U	11 U	22 U	12 U	11 U	14 U	6 U	16.5 U	13 U	13 U	10 U	9 U	13 U
4-Chlorotoluene	--	--	--	--	--	--	--	3 U	3 U	2 U	4 U	2 U	2 U	3 U	1 U	3.31 U	3 U	3 U	2 U	2 U	3 U
4-Methyl-2-pentanone (MIBK)	--	--	--	--	--	--	--	17 U	16 U	11 U	22 U	12 U	11 U	14 U	6 U	16.5 U	13 U	13 U	10 U	9 U	13 U
Acetone	4.6 UJ	16 UJ	36 UJ	5.6 UJ	6.3 UJ	9.2 UJ	5.3 UJ	17 U	16 U	27.3	22 U	12 U	24.4	69.6	6 U	--	--	13 U	10 U	--	--
Acrolein	--	--	--	--	--	--	--	67 U	65 U	45 U	87 U	46 U	45 U	56 U	23 U	66.2 U	52 U	52 U	38 U	34 U	51 U
Acrylonitrile	--	--	--	--	--	--	--	17 U	16 U	11 U	22 U	12 U	11 U	14 U	6 U	16.5 U	13 U	13 U	10 U	9 U	13 U
Benzene	0.16 U	0.17 U	0.16 UJ	0.16 U	0.16 U	0.15 U	0.15 U	3 U	3 U	2 U	4 U	2 U	2 U	3 U	1 U	3.31 U	3 U	3 U	2 U	2 U	3 U
Bromobenzene	--	--	--	--	--	--	--	3 U	3 U	2 U	4 U	2 U	2 U	3 U	1 U	3.31 U	3 U	3 U	2 U	2 U	3 U
Bromochloromethane	--	--	--	--	--	--	--	3 U	3 U	2 U	4 U	2 U	2 U	3 U	1 U	3.31 U	3 U	3 U	2 U	2 U	3 U
Bromodichloromethane	--	--	--	--	--	--	--	3 U	3 U	2 U	4 U	2 U	2 U	3 U	1 U	3.31 U	3 U	3 U	2 U	2 U	3 U
Bromoform	--	--	--	--	--	--	--	3 U	3 U	2 U	4 U	2 U	2 U	3 U	1 U	3.31 U	3 U	3 U	2 U	2 U	3 U
Bromomethane	--	--	--	--	--	--	--	3 U	3 U	2 U	4 U	2 U	2 U	3 U	1 U	3.31 U	3 U	3 U	2 U	2 U	3 U
Carbon disulfide	0.061 U	0.29 J	0.06 UJ	0.059 U	1.7 J	0.057 U	0.057 U	3 U	3 U	2 U	4 U	2 U	2 U	3 U	1 U	3.31 U	3 U	3 U	2 U	2 U	3 U
Carbon tetrachloride	0.09 U	0.09 U	0.089 UJ	0.086 U	0.089 U	0.084 U	0.084 U	3 U	3 U	2 U	4 U	2 U	2 U	3 U	1 U	3.31 U	3 U	3 U	2 U	2 U	3 U
Chlorobenzene	0.062 U	0.063 U	0.062 UJ	0.06 U	0.062 U	0.058 U	0.058 U	3 U	3 U	2 U	4 U	2 U	2 U	3 U	1 U	3.31 U	3 U	3 U	2 U	2 U	3 U
Chlorobromo-methane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloroethane	0.35 U	0.35 U	0.34 UJ	0.33 U	0.35 U	0.33 U	0.33 U	3 U	3 U	2 U	4 U	2 U	2 U	3 U	1 U	3.31 U	3 U	3 U	2 U	2 U	3 U
Chloroform	0.055 U	0.056 U	0.055 UJ	0.053 U	0.055 U	0.052 U	0.052 U	3 U	3 U	2 U	4 U	2 U	2 U	3 U	1 U	3.31 U	3 U	3 U	2 U	2 U	3 U
Chloromethane	0.066 U	0.066 U	0.065 UJ	0.063 U	0.065 U	0.061 U	0.061 U	3 U	3 U	2 U	4 U	2 U	2 U	3 U	1 U	3.31 U	3 U	3 U	2 U	2 U	3 U
cis-1,2-Dichloroethene	0.093 U	0.094 U	0.092 UJ	0.089 U	0.092 U	0.087 U	0.087 U	3 U	3 U	2 U	4 U	2 U	2 U	3 U	1 U		3 U	3 U	2 U	2 U	3 U
cis-1,3-Dichloropropene	--	--	--	--	--	--	--	3 U	3 U	2 U	4 U	2 U	2 U	3 U	1 U	3.31 U	3 U	3 U	2 U	2 U	3 U
Dibromochloromethane	--	--	--	--	--	--	--	3 U	3 U	2 U	4 U	2 U	2 U	3 U	1 U	3.31 U	3 U	3 U	2 U	2 U	3 U
Dibromomethane	--	--	--	--	--	--	--	3 U	3 U	2 U	4 U	2 U	2 U	3 U	1 U	3.31 U	3 U	3 U	2 U	2 U	3 U

TABLE G-1

SOIL ANALYTICAL RESULTS FOR VOLATILE ORGANIC COMPOUNDS (1996-2009)[1]
PSC Washougal Facility
Washougal, Washington

Concentrations in micrograms per kilogram (µg/kg)

Site ID	GP-111	GP-112	GP-112	GP-113	GP-113	GP-114	GP-114	IAB-01	IAB-01	IAB-01	IAB-02	IAB-02	IAB-02	IAB-02	IAB-03	IAB-03	IAB-03	IAB-04	IAB-04	IAB-04	IAB-05
Depth (in feet)	4	1	4	1	4	1	3	2	4	6	2	4	6	8	2	4	6	2	4	6	2
Analyte / Sample Date	9/2/2008	9/4/2008	9/4/2008	9/3/2008	9/3/2008	9/3/2008	9/3/2008	9/15/1997	9/15/1997	9/15/1997	9/15/1997	9/15/1997	9/15/1997	9/15/1997	9/15/1997	9/15/1997	9/15/1997	9/15/1997	9/15/1997	9/15/1997	9/15/1997	9/15/1997
Dichlorodifluoromethane	0.083 U	0.083 U	0.082 UJ	0.08 U	0.082 U	0.077 U	0.077 U	3 U	3 U	2 U	4 U	2 U	2 U	3 U	1 U	3.31 U	3 U	3 U	2 U	2 U	3 U
Dichlorotrifluoroethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Diethyl ether	--	--	--	--	--	--	--	17 U	16 U	11 U	22 U	12 U	11 U	14 U	6 U	16.5 U	13 U	13 U	10 U	9 U	13 U
Ethylbenzene	0.31 J	0.4 J	0.047 UJ	0.046 U	0.67 J	0.044 U	0.044 U	3 U	3 U	2 U	4 U	2 U	2 U	3 U	1 U		3 U	3 U	2 U	2 U	3 U
Hexachlorobutadiene	--	--	--	--	--	--	--	3 U	3 U	2 U	4 U	2 U	2 U	3 U	1 U	3.31 U	3 U	3 U	2 U	2 U	3 U
Isopropylbenzene	--	--	--	--	--	--	--	3 U	3 U	2 U	4 U	2 U	2 U	3 U	1 U	3.31 U	3 U	3 U	2 U	2 U	3 U
m,p-Xylene	0.78 J	0.95 J	5.3 J	0.11 U	1.4 J	0.1 U	0.1 U	3 U	3 U	2 U	4 U	2 U	2 U	3.68	1 U	--	3 U	3 U	--	2 U	3 U
methylcyclopentane	5.7 U	5.8 U	5.7 U	5.5 U	5.7 U	5.3 U	5.3 U	3 U	3 U	2 U	4 U	2 U	2 U	3 U	1 U	3.31 U	3 U	3 U	2 U	2 U	3 U
Methylene bromide	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methylene chloride	0.16 U	0.25 J	0.16 UJ	0.16 U	0.16 U	0.15 U	0.15 U	17 U	16 U	11 U	22 U	12 U	11 U	14 U	6 U	16.5 U	13 U	--	10 U	9 U	13 U
Naphthalene	--	--	--	--	--	--	--	17 U	16 U	11 U	22 U	12 U	11 U	14 U	6 U	16.5 U	13 U	13 U	10 U	9 U	13 U
n-Butylbenzene	--	--	--	--	--	--	--	3 U	3 U	2 U	4 U	2 U	2 U	3 U	1 U	3.31 U	3 U	3 U	2 U	2 U	3 U
n-Propylbenzene	--	--	--	--	--	--	--	3 U	3 U	2 U	4 U	2 U	2 U	3 U	1 U	3.31 U	3 U	3 U	2 U	2 U	3 U
o-Xylene	0.31 J	0.32 J	0.067 UJ	0.065 U	0.47 J	0.064 U	0.064 U	3 U	3 U	2 U	4 U	2 U	2 U	3 U	1 U	--	3 U	3 U	2 U	2 U	3 U
p-Cymene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
p-isopropyltoluene	--	--	--	--	--	--	--	3 U	3 U	2 U	4 U	2 U	2 U	3 U	1 U	3.31 U	3 U	3 U	2 U	2 U	3 U
sec-Butylbenzene	--	--	--	--	--	--	--	3 U	3 U	2 U	4 U	2 U	2 U	3 U	1 U	3.31 U	3 U	3 U	2 U	2 U	3 U
Styrene	--	--	--	--	--	--	--	3 U	3 U	2 U	4 U	2 U	2 U	3 U	1 U	3.31 U	3 U	3 U	2 U	2 U	3 U
tert-Butylbenzene	--	--	--	--	--	--	--	3 U	3 U	2 U	4 U	2 U	2 U	3 U	1 U	3.31 U	3 U	3 U	2 U	2 U	3 U
Tetrachloroethene	0.14 U	1 J	7.4 J	0.14 U	2.4 J	0.13 U	0.13 U	3 U	3 U	2 U	4 U	2 U	2 U	2.85	5.18	3.31 U	3 U	3 U	--	2 U	3 U
Toluene	0.63 UJ	1.8 J	10 J	0.42 UJ	3 J	0.32 UJ	0.42 UJ	7 U	7 U	5 U	9 U	5 U	4 U	44.7	2 U	6.62 U	--	--	--	3 U	5 U
trans-1,2-Dichloroethene	0.055 U	0.056 U	0.055 UJ	0.053 U	0.055 U	0.052 U	0.052 U	3 U	3 U	2 U	4 U	2 U	2 U	3 U	1 U	3.31 U	3 U	3 U	2 U	2 U	3 U
trans-1,3-Dichloropropene	--	--	--	--	--	--	--	3 U	3 U	2 U	4 U	2 U	2 U	3 U	1 U	3.31 U	3 U	3 U	2 U	2 U	3 U
Trichloroethene	0.15 U	0.3 J	0.15 UJ	0.15 U	0.59 J	0.14 U	0.14 U	7 U	11.3	5 U	9 U	5 U	5 U	6 U	2 U	6.62 U	5 U	5 U	4 U	3 U	5 U
Trichlorofluoromethane	0.062 U	0.063 U	0.062 UJ	0.06 U	0.062 U	0.058 U	0.058 U	3 U	3 U	2 U	4 U	2 U	2 U	3 U	1 U	3.31 U	3 U	3 U	2 U	2 U	3 U
Vinyl acetate	--	--	--	--	--	--	--	3 U	3 U	2 U	4 U	2 U	2 U	3 U	1 U	3.31 U	3 U	3 U	2 U	2 U	3 U
Vinyl chloride	0.066 U	0.066 U	0.065 UJ	0.063 U	0.065 U	0.061 U	0.061 U	3 U	3 U	2 U	4 U	2 U	2 U	3 U	1 U	3.31 U	3 U	3 U	2 U	2 U	3 U

TABLE G-1

SOIL ANALYTICAL RESULTS FOR VOLATILE ORGANIC COMPOUNDS (1996-2009)[1]

PSC Washougal Facility
Washougal, Washington

Concentrations in micrograms per kilogram (µg/kg)

Site ID	IAB-05	IAB-05	IAB-06	IAB-06	IAB-06	IAB-07	IAB-07	IAB-07	IAB-08	IAB-08	IAB-08	MC-10D	MC-14D	MC-14D	MC-17D	MC-19D	MC-20D	MC-20D	MC-24	MC-24
Depth (in feet)	4	6	2	4	6	2	4	6	2	4	6	1.5	2	4	1.5	3	2.5	4.5	1.5	4.5
Analyte / Sample Date	9/15/1997	9/15/1997	9/15/1997	9/15/1997	9/15/1997	9/15/1997	9/15/1997	9/15/1997	9/15/1997	9/15/1997	9/15/1997	7/26/1999	9/28/2007	9/28/2007	7/27/1999	7/26/1999	9/27/2007	9/27/2007	9/24/2007	9/24/2007
1,1,1,2-Tetrachloroethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,2,2-Tetrachloroethane	7 U	5 U	9 U	6 U	6 U	10 U	9 U	6 U	7 U	7 U	6 U	--	--	--	--	--	--	--	--	--
1,1,1-Trichloroethane	2 U	2 U	3 U	2 U	2 U	3 U	3 U	2 U	2 U	2 U	2 U	2.5 U	0.078 U	0.078 U	1 UJ	2.4 UJ	0.23 J	0.089 U	0.076 U	0.074 U
1,1,2-Trichloroethane	2 U	2 U	3 U	2 U	2 U	3 U	3 U	2 U	2 U	2 U	2 U	--	--	--	--	--	--	--	--	--
1,1,2-Trichlorotrifluoroethane	--	--	--	--	--	--	--	--	--	--	--	12.5 U	0.17 U	0.17 U	5 UJ	12 UJ	0.22 U	0.19 U	0.17 U	0.16 U
1,1-Dichloro-1,2,2-trifluoroethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,2-Dichloro-1,1,1-trifluoroethane	--	--	--	--	--	--	--	--	--	--	--	--	5.9 UNJ	5.9 UNJ	--	--	7.5 UNJ	6.7 UNJ	5.7 UNJ	5.3 UNJ
1,1-Dichloroethane	2 U	2 U	3 U	2 U	2 U	3 U	3 U	2 U	2 U	2 U	2 U	2.5 U	0.081 U	0.081 U	1 UJ	2.4 UJ	0.11 U	0.092 U	0.079 U	0.076 U
1,2-Dichloroethane	2 U	2 U	3 U	2 U	2 U	3 U	3 U	2 U	2 U	2 U	2 U	2.5 U	0.068 U	0.068 U	1 UJ	2.4 UJ	0.087 U	0.077 U	0.066 U	0.064 U
1,1-Dichloroethene	2 U	2 U	3 U	2 U	2 U	3 U	3 U	2 U	2 U	2 U	2 U	2.5 U	0.068 U	0.068 U	1 UJ	2.4 UJ	0.087 U	0.077 U	0.066 U	0.064 U
1,2-Dichlorobenzene	2 U	2 U	3 U	2 U	2 U	3 U	3 U	2 U	2 U	2 U	2 U	2.5 U	0.077 U	0.077 U	1 UJ	2.4 UJ	0.099 U	0.088 U	0.075 U	0.073 U
1,3-Dichlorobenzene	2 U	2 U	3 U	2 U	2 U	3 U	3 U	2 U	2 U	2 U	2 U	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	2 U	2 U	3 U	2 U	2 U	3 U	3 U	2 U	2 U	2 U	2 U	--	--	--	--	--	--	--	--	--
1,2-Dichloropropane	2 U	2 U	3 U	2 U	2 U	3 U	3 U	2 U	2 U	2 U	2 U	--	--	--	--	--	--	--	--	--
1,3-Dichloropropane	2 U	2 U	3 U	2 U	2 U	3 U	3 U	2 U	2 U	2 U	2 U	--	--	--	--	--	--	--	--	--
2,2-Dichloropropane	2 U	2 U	3 U	2 U	2 U	3 U	3 U	2 U	2 U	2 U	2 U	--	--	--	--	--	--	--	--	--
1,1-Dichloropropene	2 U	2 U	3 U	2 U	2 U	3 U	3 U	2 U	2 U	2 U	2 U	--	--	--	--	--	--	--	--	--
1,1-DichloroTrifluoroethane	12 U	9 U	14 U	10 U	10 U	17 U	15 U	9 U	11 U	12 U	11 U	--	--	--	--	--	--	--	--	--
1,2,3-Trichlorobenzene	2 U	2 U	3 U	2 U	2 U	3 U	3 U	2 U	2 U	2 U	2 U	--	--	--	--	--	--	--	--	--
1,2,3-Trichloropropane	2 U	2 U	3 U	2 U	2 U	3 U	3 U	2 U	2 U	2 U	2 U	--	--	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene	2 U	2 U	3 U	2 U	2 U	3 U	3 U	2 U	2 U	2 U	2 U	--	--	--	--	--	--	--	--	--
1,2,4-Trimethylbenzene	2 U	2 U	3 U	2 U	2 U	3 U	3 U	2 U	2 U	2 U	3.45	--	--	--	--	--	--	--	--	--
1,2-Dibromo-3-chloropropane	12 U	9 U	14 U	7 U	7 U	17 U	15 U	9 U	11 U	12 U	11 U	12.5 U	--	--	5 UJ	12 UJ	--	--	--	--
1,2-Dibromoethane	2 U	2 U	3 U	2 U	2 U	3 U	3 U	2 U	2 U	2 U	2 U	--	--	--	--	--	--	--	--	--
1,3,5-Trimethylbenzene	2 U	2 U	3 U	2 U	2 U	3 U	3 U	2 U	2 U	2 U	2 U	--	--	--	--	--	--	--	--	--
2-Butanone (MEK)	12 U	9 U	14 U	10 U	10 U	17 U	15 U	10	11 U	12 U	11 U	12.5 U	1.3 U	1.3 U	5 UJ	12 UJ	1.7 U	1.5 U	1.3 U	1.3 U
2-Chloroethylvinylether	2 U	2 U	3 U	2 U	2 U	3 U	3 U	2 U	2 U	2 U	2 U	--	--	--	--	--	--	--	--	--
2-Chlorotoluene	2 U	2 U	3 U	2 U	2 U	3 U	3 U	2 U	2 U	2 U	2 U	--	--	--	--	--	--	--	--	--
2-Hexanone	12 U	9 U	14 U	10 U	10 U	17 U	15 U	9 U	11 U	12 U	11 U	--	--	--	--	--	--	--	--	--
2-methylpentane	12 U	9 U	14 U	10 U	10 U	17 U	15 U	9 U	11 U	12 U	11 U	12.5 U	5.9 UNJ	5.9 UNJ	5 UJ	12 UJ	7.5 UNJ	6.7 UNJ	5.7 UNJ	5.3 UNJ
3-Methylpentane	12 U	9 U	14 U	10 U	10 U	17 U	15 U	9 U	11 U	12 U	11 U	12.5 U	5.9 UNJ	5.9 UNJ	5 UJ	12 UJ	7.5 UNJ	6.7 UNJ	5.7 UNJ	5.3 UNJ
4-Chlorotoluene	2 U	2 U	3 U	2 U	2 U	3 U	3 U	2 U	2 U	2 U	2 U	--	--	--	--	--	--	--	--	--
4-Methyl-2-pentanone (MIBK)	12 U	9 U	14 U	10 U	10 U	17 U	15 U	9 U	11 U	12 U	11 U	--	--	--	--	--	--	--	--	--
Acetone	--	--	14 U	10.9	36.5	17 U	107	79.5	--	15.3	42.8	12.5 U	12 UJ	10 UJ	5 UJ	12 UJ	39	14 UJ	12 J	7.5 J
Acrolein	49 U	35 U	57 U	41 U	41 U	67 U	59 U	38 U	45 U	48 U	42 U	--	--	--	--	--	--	--	--	--
Acrylonitrile	12 U	9 U	14 U	10 U	10 U	17 U	15 U	9 U	11 U	12 U	11 U	--	--	--	--	--	--	--	--	--
Benzene	2 U	2 U	3 U	2 U	2 U	3 U	3 U	2 U	2 U	2 U	2 U	2.5 U	0.093 U	0.094 U	1 UJ	2.4 UJ	0.12 U	0.11 U	0.091 U	0.088 U
Bromobenzene	2 U	2 U	3 U	2 U	2 U	3 U	3 U	2 U	2 U	2 U	2 U	--	--	--	--	--	--	--	--	--
Bromochloromethane	2 U	2 U	3 U	2 U	2 U	3 U	3 U	2 U	2 U	2 U	2 U	--	--	--	--	--	--	--	--	--
Bromodichloromethane	2 U	2 U	3 U	2 U	2 U	3 U	3 U	2 U	2 U	2 U	2 U	--	--	--	--	--	--	--	--	--
Bromoform	2 U	2 U	3 U	2 U	2 U	3 U	3 U	2 U	2 U	2 U	2 U	--	--	--	--	--	--	--	--	--
Bromomethane	2 U	2 U	3 U	2 U	2 U	3 U	3 U	2 U	2 U	2 U	2 U	--	--	--	--	--	--	--	--	--
Carbon disulfide	2 U	2 U	3 U	2 U	2 U	3 U	3 U	2 U		2 U	2 U	2.5 U	0.31 J	0.11 U	1 UJ	9.7 J	0.3 J	0.077 U	0.26 J	0.2 J
Carbon tetrachloride	2 U	2 U	3 U	2 U	2 U	3 U	3 U	2 U	2 U	2 U	2 U	2.5 U	0.085 U	0.085 U	1 UJ	2.4 UJ	0.11 U	0.097 U	0.083 U	0.08 U
Chlorobenzene	2 U	2 U	3 U	2 U	2 U	3 U	3 U	2 U	2 U	2 U	2 U	2.5 U	0.061 U	0.061 U	1 UJ	2.4 UJ	0.077 U	0.069 U	0.059 U	0.057 U
Chlorobromo-methane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloroethane	2 U	2 U	3 U	2 U	2 U	3 U	3 U	2 U	2 U	2 U	2 U		0.29 U	0.29 U			0.37 U	0.33 U	0.28 U	0.27 U
Chloroform	2 U	2 U	3 U	2 U	2 U	3 U	3 U	2 U	2 U	2 U	2 U	2.5 U	0.075 U	0.075 U	1 UJ	2.4 UJ	0.096 U	0.085 U	0.073 U	0.07 U
Chloromethane	2 U	2 U	3 U	2 U	2 U	3 U	3 U	2 U	2 U	2 U	2 U	--	0.13 U	0.13 U	--	--	0.17 U	0.15 U	0.13 U	0.13 U
cis-1,2-Dichloroethene	2 U	2 U	3 U	2 U	2 U	3 U	3 U	2 U	2 U	2 U	2 U	2.5 U	0.12 U	0.18 U	1 UJ	2.4 UJ	0.16 U	0.14 U	0.12 U	0.12 U
cis-1,3-Dichloropropene	2 U	2 U	3 U	2 U	2 U	3 U	3 U	2 U	2 U	2 U	2 U	--	--	--	--	--	--	--	--	--
Dibromochloromethane	2 U	2 U	3 U	2 U	2 U	3 U	3 U	2 U	2 U	2 U	2 U	--	--	--	--	--	--	--	--	--
Dibromomethane	2 U	2 U	3 U	2 U	2 U	3 U	3 U	2 U	2 U	2 U	2 U	--	--	--	--	--	--	--	--	--

TABLE G-1

SOIL ANALYTICAL RESULTS FOR VOLATILE ORGANIC COMPOUNDS (1996-2009)[1]

PSC Washougal Facility
Washougal, Washington

Concentrations in micrograms per kilogram (µg/kg)

Site ID	IAB-05	IAB-05	IAB-06	IAB-06	IAB-06	IAB-07	IAB-07	IAB-07	IAB-08	IAB-08	IAB-08	MC-10D	MC-14D	MC-14D	MC-17D	MC-19D	MC-20D	MC-20D	MC-24	MC-24
Depth (in feet)	4	6	2	4	6	2	4	6	2	4	6	1.5	2	4	1.5	3	2.5	4.5	1.5	4.5
Analyte / Sample Date	9/15/1997	9/15/1997	9/15/1997	9/15/1997	9/15/1997	9/15/1997	9/15/1997	9/15/1997	9/15/1997	9/15/1997	9/15/1997	7/26/1999	9/28/2007	9/28/2007	7/27/1999	7/26/1999	9/27/2007	9/27/2007	9/24/2007	9/24/2007
Dichlorodifluoromethane	2 U	2 U	3 U	2 U	2 U	3 U	3 U	2 U	2 U	2 U	2 U	--	0.078 U	0.078 U	--	--	0.1 U	0.089 U	0.076 U	0.074 U
Dichlorotrifluoroethane	--	--	--	--	--	--	--	--	--	--	--	2.5 U	--	--	1 UJ	2.4 UJ	--	--	--	--
Diethyl ether	12 U	9 U	14 U	10 U	10 U	17 U	15 U	9 U	11 U	12 U	11 U	--	--	--	--	--	--	--	--	--
Ethylbenzene	2 U	2 U	3 U	2 U	2 U	3 U	3 U	2 U	2 U	2 U	18.2	2.5 U	0.077 U	0.077 U	1 UJ	2.4 UJ	0.099 U	0.088 U	0.075 U	0.073 U
Hexachlorobutadiene	2 U	2 U	3 U	2 U	2 U	3 U	3 U	2 U	2 U	2 U	2 U	--	--	--	--	--	--	--	--	--
Isopropylbenzene	2 U	2 U	3 U	2 U	2 U	3 U	3 U	2 U	2 U	2 U	2 U	--	--	--	--	--	--	--	--	--
m,p-Xylene	2 U		3.81	2 U	2 U	3 U	3 U	2 U	2 U	2 U	54.9	2.5 U	0.18 U	0.27 U	1 UJ	2.4 UJ	0.23 U	0.21 U	0.18 U	0.17 U
methylcyclopentane	2 U	2 U	3 U	2 U	2 U	3 U	3 U	2 U	2 U	2 U	2 U	2.5 U	5.9 UNJ	5.9 UNJ	1 UJ	2.4 UJ	7.5 UNJ	6.7 UNJ	5.7 UNJ	5.3 UNJ
Methylene bromide	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methylene chloride	12 U		14 U	10 U	10 U	17 U	15 U	9 U	11 U	12 U	11 U	12.5 U	3 UJ	3 UJ	5 UJ	12 UJ	3 UJ	3 UJ	0.17 U	0.16 U
Naphthalene	12 U	9 U	14 U	10 U	10 U	17 U	15 U	9 U	11 U	12 U	11 U	--	--	--	--	--	--	--	--	--
n-Butylbenzene	2 U	2 U	3 U	2 U	2 U	3 U	3 U	2 U	2 U	2 U	2 U	--	--	--	--	--	--	--	--	--
n-Propylbenzene	2 U	2 U	3 U	2 U	2 U	3 U	3 U	2 U	2 U	2 U	2 U	--	--	--	--	--	--	--	--	--
o-Xylene	2 U	2 U	3 U	2 U	2 U	3 U	3 U	2 U	2 U	2 U	10.4	2.5 U	0.068 U	0.068 U	1 UJ	2.4 UJ	0.087 U	0.077 U	0.066 U	0.064 U
p-Cymene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
p-isopropyltoluene	2 U	2 U	3 U	2 U	2 U	3 U	3 U	2 U	2 U	2 U	2 U	--	--	--	--	--	--	--	--	--
sec-Butylbenzene	2 U	2 U	3 U	2 U	2 U	3 U	3 U	2 U	2 U	2 U	2 U	--	--	--	--	--	--	--	--	--
Styrene	2 U	2 U	3 U	2 U	2 U	3 U	3 U	2 U	2 U	2 U	2 U	--	--	--	--	--	--	--	--	--
tert-Butylbenzene	2 U	2 U	3 U	2 U	2 U	3 U	3 U	2 U	2 U	2 U	2 U	--	--	--	--	--	--	--	--	--
Tetrachloroethene		2 U	3 U	2 U	2 U	3 U	3 U	2 U	2 U	2 U	2.63	2.5 U	0.09 U	0.09 U	1 UJ	2.4 UJ	0.62 J	0.11 U	0.088 U	0.085 U
Toluene	5 U		6 U	4 U	4 U	7 U	6 U	4 U	5 U	5 U	13	5 U	0.66 J	1.1 J	2 UJ	4.8 UJ	0.57 J	0.81 J	0.63 J	0.74 J
trans-1,2-Dichloroethene	2 U	2 U	3 U	2 U	2 U	3 U	3 U	2 U	2 U	2 U	2 U	2.5 U	0.099 U	0.099 U	1 UJ	2.4 UJ	0.13 U	0.12 U	0.097 U	0.094 U
trans-1,3-Dichloropropene	2 U	2 U	3 U	2 U	2 U	3 U	3 U	2 U	2 U	2 U	2 U	--	--	--	--	--	--	--	--	--
Trichloroethene	5 U	4 U	6 U	4 U	4 U	7 U	6 U	4 U	5 U	5 U	4 U	5 U	0.083 U	0.083 U	2 UJ	4.8 UJ	0.11 U	0.094 U	0.081 U	0.078 U
Trichlorofluoromethane	2 U	2 U	3 U	2 U	2 U	3 U	3 U	2 U	2 U	2 U	2 U	2.5 U	0.13 U	0.13 U	1 UJ	2.4 UJ	0.17 U	0.15 U	0.13 U	0.13 U
Vinyl acetate	2 U	2 U	3 U	2 U	2 U	3 U	3 U	2 U	2 U	2 U	2 U	--	--	--	--	--	--	--	--	--
Vinyl chloride	2 U	2 U	3 U	2 U	2 U	3 U	3 U	2 U	2 U	2 U	2 U	2.5 U	0.12 U	0.12 U	1 UJ	2.4 UJ	0.15 U	0.13 U	0.11 U	0.11 U

TABLE G-1

SOIL ANALYTICAL RESULTS FOR VOLATILE ORGANIC COMPOUNDS (1996-2009)[1]
PSC Washougal Facility
Washougal, Washington

Concentrations in micrograms per kilogram (µg/kg)

Site ID	MC-25	MC-25	MC-30	MC-30	MC-31	MC-107	MC-118D	PZU-4	PZU-4	PZU-5	PZU-5	R-1	R-10	R-2	R-3	R-4	R-5	R-6	R-7	R-8	R-9
Depth (in feet)	1.5	4.5	0	2	1	0	1.5	3	6	3.5	8	0	0	0	0	0	0	0	0	0	0
Analyte / Sample Date	9/24/2007	9/24/2007	9/4/2008	9/4/2008	9/4/2008	7/27/1999	7/28/1999	10/2/2007	10/2/2007	10/2/2007	10/2/2007	8/19/1999	8/20/1999	8/20/1999	8/20/1999	8/19/1999	8/19/1999	8/19/1999	8/19/1999	8/20/1999	8/20/1999
1,1,1,2-Tetrachloroethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,2,2-Tetrachloroethane	--	--	--	--	--	--	--	--	--	--	--	15 U	25 U	3 U	25 U	15 U	15 U	15 U	15 U	25 U	20 U
1,1,1-Trichloroethane	0.069 U	0.082 U	0.29 J	0.33 J	0.23 J	1 UJ	2.2 UJ	0.072 U	0.08 U	0.072 U	0.077 U	5 U	8.3 U	1 U	8.3 U	5 U	5 U	5 U	5 U	8.3 U	8 U
1,1,2-Trichloroethane	--	--	--	--	--	--	--	--	--	--	--	5 U	8.3 U	1 U	8.3 U	5 U	5 U	5 U	5 U	8.3 U	8 U
1,1,2-Trichlorotrifluoroethane	0.15 U	0.18 U	0.11 U	0.12 U	0.12 U	5 UJ	11 UJ	0.16 U	0.17 U	0.16 U	0.17 U	--	--	--	--	--	--	--	--	--	--
1,1-Dichloro-1,2,2-trifluoroethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,2-Dichloro-1,1,1-trifluoroethane	4.1 UNJ	5.8 UNJ		5.8 U	5.8 U	--	--	5.4 UNJ	5.7 UNJ	5.5 UNJ	5.8 UNJ	--	--	--	--	--	--	--	--	--	--
1,1-Dichloroethane	0.071 U	0.085 U	0.054 U	0.056 U	0.057 U	1 UJ	2.2 UJ	0.074 U	0.082 U	0.075 U	0.079 U	5 U	8.3 U	1 U	8.3 U	5 U	5 U	5 U	5 U	8.3 U	8 U
1,2-Dichloroethane	0.06 U	0.071 U		0.063 U	0.064 U	1 UJ	2.2 UJ	0.062 U	0.069 U	0.063 U	0.066 U	5 U	8.3 U	1 U	8.3 U	5 U	5 U	5 U	5 U	8.3 U	8 U
1,1-Dichloroethene	0.06 U	0.071 U	0.079 U	0.081 U	0.082 U	1 UJ	2.2 UJ	0.062 U	0.069 U	0.063 U	0.066 U	5 U	8.3 U	1 U	8.3 U	5 U	5 U	5 U	5 U	8.3 U	8 U
1,2-Dichlorobenzene	0.068 U	0.081 U		0.073 U	0.074 U	1 UJ	2.2 UJ	0.071 U	0.078 U	0.071 U	0.076 U	5 U	8.3 U	1 U	8.3 U	5 U	5 U	5 U	5 U	8.3 U	8 U
1,3-Dichlorobenzene	--	--	--	--	--	--	--	--	--	--	--	5 U	8.3 U	1 U	8.3 U	5 U	5 U	5 U	5 U	8.3 U	8 U
1,4-Dichlorobenzene	--	--	--	--	--	--	--	--	--	--	--	5 U	8.3 U	1 U	8.3 U	5 U	5 U	5 U	5 U	8.3 U	8 U
1,2-Dichloropropane	--	--	--	--	--	--	--	--	--	--	--	5 U	8.3 U	1 U	8.3 U	5 U	5 U	5 U	5 U	8.3 U	8 U
1,3-Dichloropropane	--	--	--	--	--	--	--	--	--	--	--	5 U	8.3 U	1 U	8.3 U	5 U	5 U	5 U	5 U	8.3 U	8 U
2,2-Dichloropropane	--	--	--	--	--	--	--	--	--	--	--	5 U	8.3 U	1 U	8.3 U	5 U	5 U	5 U	5 U	8.3 U	8 U
1,1-Dichloropropene	--	--	--	--	--	--	--	--	--	--	--	5 U	8.3 U	1 U	8.3 U	5 U	5 U	5 U	5 U	8.3 U	8 U
1,1-DichloroTrifluoroethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3-Trichlorobenzene	--	--	--	--	--	--	--	--	--	--	--	5 U	8.3 U	1 U	8.3 U	5 U	5 U	5 U	5 U	8.3 U	8 U
1,2,3-Trichloropropane	--	--	--	--	--	--	--	--	--	--	--	5 U	8.3 U	1 U	8.3 U	5 U	5 U	5 U	5 U	8.3 U	8 U
1,2,4-Trichlorobenzene	--	--	--	--	--	--	--	--	--	--	--	5 U	8.3 U	1 U	8.3 U	5 U	5 U	5 U	5 U	8.3 U	8 U
1,2,4-Trimethylbenzene	--	--	--	--	--	--	--	--	--	--	--	5 U	8.3 U	1 U	8.3 U	5 U	5 U	5 U	5 U	8.3 U	8 U
1,2-Dibromo-3-chloropropane	--	--	--	--	--	5 UJ	11 UJ	--	--	--	--	25 U	42 U	5 U	42 U	25 U	25 U	25 U	25 U	42 U	40 U
1,2-Dibromoethane	--	--	--	--	--	--	--	--	--	--	--	5 U	8.3 U	1 U	8.3 U	5 U	5 U	5 U	5 U	8.3 U	8 U
1,3,5-Trimethylbenzene	--	--	--	--	--	--	--	--	--	--	--	5 U	8.3 U	1 U	8.3 U	5 U	5 U	5 U	5 U	8.3 U	8 U
2-Butanone (MEK)	1.2 U	1.4 U	1.8 U	1.9 U	1.9 U	5 UJ	11 UJ	1.2 U	1.4 U	1.2 U	1.3 U	25 U	42 U	5 U	42 U	25 U	25 U	25 U	25 U	42 U	40 U
2-Chloroethylvinylether	--	--	--	--	--	--	--	--	--	--	--	5 U	8.3 U	1 U	8.3 U	5 U	5 U	5 U	5 U	8.3 U	8 U
2-Chlorotoluene	--	--	--	--	--	--	--	--	--	--	--	5 U	8.3 U	1 U	8.3 U	5 U	5 U	5 U	5 U	8.3 U	8 U
2-Hexanone	--	--	--	--	--	--	--	--	--	--	--	25 U	42 U	5 U	42 U	25 U	25 U	25 U	25 U	42 U	40 U
2-methylpentane	4.1 UNJ	5.8 UNJ	--	5.8 U	5.8 U	5 UJ	11 UJ	5.4 UNJ	5.7 UNJ	5.5 UNJ	5.8 UNJ	25 U	42 U	5 U	42 U	25 U	25 U	25 U	25 U	42 U	40 U
3-Methylpentane	4.1 UNJ	5.8 UNJ	--	5.8 U	5.8 U	5 UJ	11 UJ	5.4 UNJ	5.7 UNJ	5.5 UNJ	5.8 UNJ	25 U	42 U	5 U	42 U	25 U	25 U	25 U	25 U	42 U	40 U
4-Chlorotoluene	--	--	--	--	--	--	--	--	--	--	--	5 U	8.3 U	1 U	8.3 U	5 U	5 U	5 U	5 U	8.3 U	8 U
4-Methyl-2-pentanone (MIBK)	--	--	--	--	--	--	--	--	--	--	--	25 U	42 U	5 U	42 U	25 U	25 U	25 U	25 U	42 U	40 U
Acetone	2.9 UJ	14 UJ	8.2 UJ	8.3 UJ	12 UJ	5 UJ	11 UJ	6.1 UJ	15 UJ	9.4 UJ	8.1 UJ	25 U	42 U	5 U	42 U	25 U	25 U	25 U	25 U	42 U	40 U
Acrolein	--	--	--	--	--	--	--	--	--	--	--	100 U	170 U	20 U	170 U	100 U	100 U	100 U	100 U	170 U	170 U
Acrylonitrile	--	--	--	--	--	--	--	--	--	--	--	25 U	42 U	5 U	42 U	25 U	25 U	25 U	25 U	42 U	40 U
Benzene	0.083 U	0.099 U	--	0.17 U	0.17 U	1 UJ	2.2 UJ	0.086 U	0.095 U	0.087 U	0.092 U	5 U	8.3 U	1 U	8.3 U	5 U	5 U	5 U	5 U	8.3 U	8 U
Bromobenzene	--	--	--	--	--	--	--	--	--	--	--	5 U	8.3 U	1 U	8.3 U	5 U	5 U	5 U	5 U	8.3 U	8 U
Bromochloromethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromodichloromethane	--	--	--	--	--	--	--	--	--	--	--	5 U	8.3 U	1 U	8.3 U	5 U	5 U	5 U	5 U	8.3 U	8 U
Bromoform	--	--	--	--	--	--	--	--	--	--	--	5 U	8.3 U	1 U	8.3 U	5 U	5 U	5 U	5 U	8.3 U	8 U
Bromomethane	--	--	--	--	--	--	--	--	--	--	--	5 U	8.3 U	1 U	8.3 U	5 U	5 U	5 U	5 U	8.3 U	8 U
Carbon disulfide	0.06 U	0.13 J	0.16 J	0.99 J	0.15 J	1 UJ	21 J	0.062 U	0.16 J	0.063 U	0.066 U	5 U	8.3 U	1 U	8.3 U	5 U	17	5 U	12	8.3 U	8 U
Carbon tetrachloride	0.076 U	0.09 U	--	0.09 U	0.092 U	1 UJ	2.2 UJ	0.079 U	0.087 U	0.079 U	0.084 U	5 U	8.3 U	1 U	8.3 U	5 U	5 U	5 U	5 U	8.3 U	8 U
Chlorobenzene	0.054 U	0.064 U	--	0.063 U	0.064 U	1 UJ	2.2 UJ	0.056 U	0.062 U	0.056 U	0.059 U	5 U	8.3 U	1 U	8.3 U	5 U	5 U	5 U	5 U	8.3 U	8 U
Chlorobromo-methane	--	--	--	--	--	--	--	--	--	--	--	5 U	8.3 U	1 U	8.3 U	5 U	5 U	5 U	5 U	8.3 U	8 U
Chloroethane	0.26 U	0.3 U	0.34 U	0.35 U	0.36 U			0.27 U	0.29 U	0.27 U	0.28 U	5 U	8.3 U	1 U	8.3 U	5 U	5 U	5 U	5 U	8.3 U	8 U
Chloroform	0.066 U	0.079 U	0.054 U	0.056 U	0.057 U	1 UJ	2.2 UJ	0.069 U	0.076 U	0.069 U	0.073 U	5 U	8.3 U	1 U	8.3 U	5 U	5 U	5 U	5 U	8.3 U	8 U
Chloromethane	0.12 U	0.14 U	--	0.24 J	0.067 U	--	--	0.12 U	0.14 U	0.12 U	0.13 U	5 U	8.3 U	1 U	8.3 U	5 U	5 U	5 U	5 U	8.3 U	8 U
cis-1,2-Dichloroethene	0.11 U	0.13 U	0.092 U	0.094 U	0.095 U	1 UJ	2.2 UJ	0.11 U	0.12 U	0.11 U	0.12 U	9.6	8.3 U	1 U	8.3 U	5 U	5 U	5 U	5.9	8.3 U	8 U
cis-1,3-Dichloropropene	--	--	--	--	--	--	--	--	--	--	--	5 U	8.3 U	1 U	8.3 U	5 U	5 U	5 U	5 U	8.3 U	8 U
Dibromochloromethane	--	--	--	--	--	--	--	--	--	--	--	5 U	8.3 U	1 U	8.3 U	5 U	5 U	5 U	5 U	8.3 U	8 U
Dibromomethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE G-1

SOIL ANALYTICAL RESULTS FOR VOLATILE ORGANIC COMPOUNDS (1996-2009)[1]
PSC Washougal Facility
Washougal, Washington

Concentrations in micrograms per kilogram (µg/kg)

Site ID	MC-25	MC-25	MC-30	MC-30	MC-31	MC-107	MC-118D	PZU-4	PZU-4	PZU-5	PZU-5	R-1	R-10	R-2	R-3	R-4	R-5	R-6	R-7	R-8	R-9
Depth (in feet)	1.5	4.5	0	2	1	0	1.5	3	6	3.5	8	0	0	0	0	0	0	0	0	0	0
Analyte / Sample Date	9/24/2007	9/24/2007	9/4/2008	9/4/2008	9/4/2008	7/27/1999	7/28/1999	10/2/2007	10/2/2007	10/2/2007	10/2/2007	8/19/1999	8/20/1999	8/20/1999	8/20/1999	8/19/1999	8/19/1999	8/19/1999	8/19/1999	8/20/1999	8/20/1999
Dichlorodifluoromethane	0.069 U	0.082 U	--	0.083 U	0.085 U	--	--	0.072 U	0.08 U	0.072 U	0.077 U	5 U	8.3 U	1 U	8.3 U	5 U	5 U	5 U	5 U	8.3 U	8 U
Dichlorotrifluoroethane	--	--	--	--	--	1 UJ	2.2 UJ	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Diethyl ether	--	--	--	--	--	--	--	--	--	--	--	25 U	8.3 U	1 U	8.3 U	25 U	25 U	25 U	25 U	8.3 U	8 U
Ethylbenzene	0.068 U	0.081 U	--	0.52 J	0.39 J	1 UJ	2.2 UJ	0.071 U	0.078 U	0.071 U	0.076 U	35	8.3 U	1 U	8.3 U	5 U	6.3	5 U	5 U	8.3 U	8 U
Hexachlorobutadiene	--	--	--	--	--	--	--	--	--	--	--	5 U	8.3 U	1 U	8.3 U	5 U	5 U	5 U	5 U	8.3 U	8 U
Isopropylbenzene	--	--	--	--	--	--	--	--	--	--	--	5 U	8.3 U	1 U	8.3 U	5 U	5 U	5 U	5 U	8.3 U	8 U
m,p-Xylene	0.16 U	0.19 U	--	1.2 J	0.88 J	1 UJ	2.2 UJ	0.17 U	0.24 J	0.17 J	0.18 U	34	8.3 U	1 U	8.3 U	5 U	9.8	18	9.1	8.3 U	8 U
methylcyclopentane	4.1 UNJ	5.8 UNJ	--	5.8 U	5.8 U	1 UJ	2.2 UJ	5.4 UNJ	5.7 UNJ	5.5 UNJ	5.8 UNJ	5 U	8.3 U	1 U	8.3 U	5 U	5 U	5 U	5 U	8.3 U	8 U
Methylene bromide	--	--	--	--	--	--	--	--	--	--	--	5 U	8.3 U	1 U	8.3 U	5 U	5 U	5 U	5 U	8.3 U	8 U
Methylene chloride	0.15 U	0.24 UJ	1.2 J	0.21 J	0.25 J	5 UJ	11 UJ	0.16 U	3 UJ	0.16 U	0.17 U	25 U	42 U	5 U	42 U	25 U	25 U	25 U	25 U	42 U	40 U
Naphthalene	--	--	--	--	--	--	--	--	--	--	--	25 U	42 U	5 U	42 U	25 U	25 U	25 U	25 U	42 U	40 U
n-Butylbenzene	--	--	--	--	--	--	--	--	--	--	--	5 U	8.3 U	1 U	8.3 U	5 U	5 U	5 U	5 U	8.3 U	8 U
n-Propylbenzene	--	--	--	--	--	--	--	--	--	--	--	5 U	8.3 U	1 U	8.3 U	5 U	5 U	5 U	5 U	8.3 U	8 U
o-Xylene	0.06 U	0.071 U	--	0.39 J	0.32 J	1 UJ	2.2 UJ	0.062 U	0.069 U	0.063 U	0.066 U	5.3	8.3 U	1 U	8.3 U	5 U	5 U	5 U	5 U	8.3 U	8 U
p-Cymene	--	--	--	--	--	--	--	--	--	--	--	5 U	8.3 U	1 U	8.3 U	5 U	5 U	5 U	5 U	8.3 U	8 U
p-isopropyltoluene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
sec-Butylbenzene	--	--	--	--	--	--	--	--	--	--	--	5 U	8.3 U	1 U	8.3 U	5 U	5 U	5 U	5 U	8.3 U	8 U
Styrene	--	--	--	--	--	--	--	--	--	--	--	5 U	8.3 U	1 U	8.3 U	5 U	5 U	5 U	5 U	8.3 U	8 U
tert-Butylbenzene	--	--	--	--	--	--	--	--	--	--	--	5 U	8.3 U	1 U	8.3 U	5 U	5 U	5 U	5 U	8.3 U	8 U
Tetrachloroethene	0.08 U	0.62 J	--	1.6 J	1.1 J	1 UJ	2.2 UJ	0.083 U	0.53 J	0.083 U	0.088 U	5 U	8.3 U	1 U	8.3 U	5 U	5 U	5 U	5 U	8.3 U	8 U
Toluene	0.31 J	0.35 J	--	2.9 J	2.1 J	2 UJ	4.4 UJ	0.45 J	0.99 J	0.15 U	0.68 J	74	17 U	2 U	17 U	10 U	15	62	10 U	17 U	20 U
trans-1,2-Dichloroethene	0.088 U	0.11 U	0.054 U	0.056 U	0.057 U	1 UJ	2.2 UJ	0.092 U	0.11 U	0.092 U	0.097 U	5 U	8.3 U	1 U	8.3 U	5 U	5 U	5 U	5 U	8.3 U	8 U
trans-1,3-Dichloropropene	--	--	--	--	--	--	--	--	--	--	--	5 U	8.3 U	1 U	8.3 U	5 U	5 U	5 U	5 U	8.3 U	8 U
Trichloroethene	0.074 U	0.087 U	--	0.56 J	0.34 J	2 UJ	4.4 UJ	0.077 U	0.084 U	0.077 U	0.081 U	10 U	17 U	2 U	17 U	10 U	10 U	10 U	150	49	20 U
Trichlorofluoromethane	0.12 U	0.14 U	--	0.063 U	0.064 U	1 UJ	2.2 UJ	0.12 U	0.14 U	0.12 U	0.13 U	5 U	8.3 U	1 U	8.3 U	5 U	5 U	5 U	5 U	8.3 U	8 U
Vinyl acetate	--	--	--	--	--	--	--	--	--	--	--	5 U	8.3 U	1 U	8.3 U	5 U	5 U	5 U	5 U	8.3 U	8 U
Vinyl chloride	0.099 U	0.12 U	--	0.066 U	0.067 U	1 UJ	2.2 UJ	0.11 U	0.12 U	0.11 U	0.11 U	5 U	8.3 U	1 U	8.3 U	5 U	5 U	5 U	5 U	8.3 U	8 U

Notes
1. Laboratory Data flags are as follows:
J = value is an estimate.
U = not detected at reporting limit listed.
UD = value not detected at the reporting limit listed, dilution required.
UJ = Value is an estimate at reporting limit listed.
UNJ = nondetected value is a tenatively identified estimate.

Abbreviations
-- = not available

TABLE G-2

SOIL ANALYTICAL RESULTS FOR SEMIVOLATILE ORGANIC COMPOUNDS (1996-2009)[1]
PSC Washougal Facility
Washougal, Washington

Concentrations in micrograms per kilogram (µg/kg)

Site ID	B-1	B-10	B-11	B-12	B-13	B-14	B-15	B-16	B-17	B-18	B-19	B-2	B-20	B-21	B-22	B-3	B-4	B-5	B-6	B-7	B-8	B-9	CIA-1
Depth (in feet)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Analyte Sample Date	8/19/1999	8/20/1999	8/20/1999	8/20/1999	8/20/1999	8/19/1999	8/20/1999	8/20/1999	8/19/1999	8/19/1999	8/19/1999	8/19/1999	8/19/1999	8/19/1999	8/20/1999	8/19/1999	8/20/1999	8/20/1999	8/20/1999	8/20/1999	8/20/1999	8/20/1999	9/24/1997
1,2,4-Trichlorobenzene	33 U	33 U	1100 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	330 U
1,2-Dichlorobenzene	33 U	33 U	1100 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	330 U
1,3-Dichlorobenzene	33 U	33 U	1100 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	330 U
1,4-Dichlorobenzene	33 U	33 U	1100 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	330 U
1,4-Dioxane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1-Methylnaphthalene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2.6 J
2,4,5-Trichlorophenol	33 U	33 U	1100 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	330 U
2,4,6-Trichlorophenol	33 U	33 U	1100 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	330 U
2,4-Dichlorophenol	33 U	33 U	1100 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	420	33 U	33 U	33 U	33 U	33 U	33 U	330 U
2,4-Dimethylphenol	33 U	33 U	1100 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	330 U
2,4-Dinitrophenol	167 U	167 U	5600 U	167 U	167 U	167 U	170 U	170 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	1700 U
2,4-Dinitrotoluene	33 U	33 U	1100 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	330 U
2,6-Dinitrotoluene	33 U	33 U	1100 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	330 U
2-Chloronaphthalene	33 U	33 U	1100 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	330 U
2-Chlorophenol	33 U	33 U	1100 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	330 U
2-Methyl-4,6-Dinitrophenol	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylnaphthalene	33 U	33 U	1100 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	330 U
2-Methylphenol	33 U	33 U	1100 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	330 U
2-Nitroaniline	67 U	67 U	2200 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	670 U
2-Nitrophenol	33 U	33 U	1100 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	330 U
3,3'-Dichlorobenzidine	33 U	33 U	1100 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	330 U
3-Nitroaniline	167 U	167 U	5600 U	167 U	167 U	167 U	170 U	170 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	1700 U
4,6-Dinitro-2-methylphenol	167 U	167 U	5600 U	167 U	167 U	167 U	170 U	170 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	1700 U
4-Bromophenyl phenyl ether	33 U	33 U	1100 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	330 U
4-Chloro-3-methylphenol	67 U	67 U	2200 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	670 U
4-Chloroaniline	67 U	67 U	2200 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	670 U
4-Chlorophenyl phenyl ether	33 U	33 U	1100 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	330 U
4-Methylphenol	33 U	33 U	1100 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	330 U
4-Nitroaniline	167 U	167 U	5600 U	167 U	167 U	167 U	170 U	170 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	1700 U
4-Nitrophenol	33 U	33 U	1100 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	330 U
Acenaphthene	33 U	33 U	1100 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	330 U
Acenaphthylene	33 U	33 U	1100 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	330 U
Acetone	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acetophenone	167 U	167 U	5600 U	167 U	167 U	167 U	170 U	170 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	1700 U
Aniline	167 U	167 U	5600 U	167 U	167 U	167 U	170 U	170 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	1700 U
Anthracene	33 U	33 U	1100 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	330 U
Azobenzene	33 U	33 U	1100 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	330 U
Benz(a)anthracene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzidine	33 U	33 U	1100 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	330 U
Benzo(a)anthracene	67 U	67 U	2200 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	670 U
Benzo(a)pyrene	33 U	33 U	1100 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	330 U
Benzo(b)fluoranthene	33 U	33 U	1100 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	330 U
Benzo(g,h,i)perylene	33 U	33 U	1100 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	330 U
Benzo(k)fluoranthene	33 U	33 U	1100 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	330 U
Benzoic acid	167 U	167 U	5600 U	167 U	167 U	167 U	170 U	170 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	1700 U
Benzyl alcohol	67 U	67 U	2200 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	71.51	67 U	67 U	67 U	67 U	670 U
Bis(2-chloroethoxy)methane	33 U	33 U	1100 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	330 U
Bis(2-chloroethyl) Ether	33 U	33 U	1100 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	330 U
Bis(2-chloroisopropyl)ether	33 U	33 U	1100 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	330 U
Bis(2-ethylhexyl)phthalate	167 U	167 U	5600 U	167 U	167 U	167 U	170 U	170 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	1700 U
Butylbenzylphthalate	33 U	33 U	1100 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	330 U
Carbon disulfide	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE G-2

SOIL ANALYTICAL RESULTS FOR SEMIVOLATILE ORGANIC COMPOUNDS (1996-2009)[1]
PSC Washougal Facility
Washougal, Washington

Concentrations in micrograms per kilogram (µg/kg)

Site ID	B-1	B-10	B-11	B-12	B-13	B-14	B-15	B-16	B-17	B-18	B-19	B-2	B-20	B-21	B-22	B-3	B-4	B-5	B-6	B-7	B-8	B-9	CIA-1
Depth (in feet)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Analyte Sample Date	8/19/1999	8/20/1999	8/20/1999	8/20/1999	8/20/1999	8/19/1999	8/20/1999	8/20/1999	8/19/1999	8/19/1999	8/19/1999	8/19/1999	8/19/1999	8/19/1999	8/20/1999	8/19/1999	8/20/1999	8/20/1999	8/20/1999	8/20/1999	8/20/1999	8/20/1999	9/24/1997
Chrysene	33 U	33 U	1100 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	330 U
Dibenz(a,h)anthracene	33 U	33 U	1100 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	330 U
Dibenzofuran	167 U	167 U	5600 U	167 U	167 U	167 U	170 U	170 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	1700 U
Diethyl phthalate	33 U	33 U	1100 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	330 U
Dimethyl phthalate	33 U	33 U	1100 U	33 U	33 U	51	62.1	60.43	51.77	33 U	33 U	33 U	54.65	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	330 U
Di-n-butylphthalate	33 U	33 U	1100 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	1523	33 U	33 U	33 U	33 U	33 U	33 U	330 U
Di-n-octylphthalate	33 U	33 U	1100 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	36.79	33 U	33 U	33 U	33 U	33 U	33 U	196.43	330 U
Fluoranthene	33 U	33 U	1100 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	330 U
Fluorene	33 U	33 U	1100 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	330 U
Hexachlorobenzene	33 U	33 U	1100 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	330 U
Hexachlorobutadiene	33 U	33 U	1100 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	330 U
Hexachlorocyclopentadiene	33 U	33 U	1100 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	330 U
Hexachloroethane	33 U	33 U	1100 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	330 U
Indeno(1,2,3-cd)pyrene	33 U	33 U	1100 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	330 U
Isophorone	33 U	33 U	1100 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	330 U
Naphthalene	33 U	33 U	1100 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	330 U
Nitrobenzene	33 U	33 U	1100 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	330 U
N-Nitroso-di-n-propylamine	33 U	33 U	1100 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	330 U
N-Nitrosodiphenylamine	33 U	33 U	1100 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	330 U
Pentachlorophenol	167 U	167 U	5600 U	167 U	167 U	167 U	170 U	170 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	1700 U
Phenanthrene	33 U	33 U	1100 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	330 U
Phenol	33 U	33 U	1100 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	330 U
Pyrene	33 U	33 U	1100 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	330 U

TABLE G-2

SOIL ANALYTICAL RESULTS FOR SEMIVOLATILE ORGANIC COMPOUNDS (1996-2009)[1]
PSC Washougal Facility
Washougal, Washington

Concentrations in micrograms per kilogram (µg/kg)

Site ID	CIA-10	CIA-11	CIA-13	CIA-15	CIA-23	CIA-3	CIA-6	CIA-8	GP-07	GP-07	GP-07	GP-07	GP-09	GP-09	GP-09	GP-09	GP-107	GP-107	GP-108	GP-108	GP-112	GP-112
Depth (in feet)	6	6	6	6	6	6	6	6	2	4	6	7	2	4	6	7	1	3	1	4	1	4
Analyte / Sample Date	9/19/1997	9/24/1997	9/24/1997	9/24/1997	9/30/1997	9/24/1997	9/24/1997	9/24/1997	7/11/1996	7/11/1996	7/11/1996	7/11/1996	7/11/1996	7/11/1996	7/11/1996	7/11/1996	9/3/2008	9/3/2008	9/3/2008	9/3/2008	9/4/2008	9/4/2008
1,2,4-Trichlorobenzene	100 U	330 U	330 U	330 U	33 U	330 U	330 U	330 U	33 U	33 U	33 U	165 UJ	33 U	33 U	33 U	33 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U
1,2-Dichlorobenzene	100 U	330 U	330 U	330 U	33 U	330 U	330 U	330 U	33 U	33 U	33 U	165 UJ	33 U	33 U	33 U	33 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U
1,3-Dichlorobenzene	100 U	330 U	330 U	330 U	33 U	330 U	330 U	330 U	33 U	33 U	33 U	165 UJ	33 U	33 U	33 U	33 U	3 U	3 U	3 U	3 U	3 U	3 U
1,4-Dichlorobenzene	100 U	330 U	330 U	330 U	33 U	330 U	330 U	330 U	33 U	33 U	33 U	165 UJ	33 U	33 U	33 U	33 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U
1,4-Dioxane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.45 U	--	--	--	--
1-Methylnaphthalene	--	--	--	--	--	--	--	18	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,5-Trichlorophenol	500 U	330 U	330 U	330 U	33 U	330 U	330 U	330 U	33 U	33 U	33 U	165 UJ	33 U	33 U	33 U	33 UJ	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
2,4,6-Trichlorophenol	100 U	330 U	330 U	330 U	33 U	330 U	330 U	330 U	33 U	33 U	33 U	165 UJ	33 U	33 U	33 U	33 UJ	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
2,4-Dichlorophenol	100 U	330 U	330 U	330 U	33 U	330 U	330 U	330 U	33 U	33 U	33 U	165 UJ	33 U	33 U	33 U	33 UJ	1 U	1 U	1 U	1 U	1 U	1 U
2,4-Dimethylphenol	100 U	330 U	330 U	330 U	33 U	330 U	330 U	330 U	33 U	33 U	33 U	165 UJ	33 U	33 U	33 U	33 UJ	5.5 U	5.5 U	5.5 U	5.5 U	5.5 U	5.5 U
2,4-Dinitrophenol	500 U	1700 U	1700 U	1700 U	167 U	1700 U	1700 U	1700 U	167 U	167 U	167 U	835 UJ	167 U	167 U	167 U	167 UJ	17 U	17 U	17 U	17 U	17 U	17 U
2,4-Dinitrotoluene	100 U	330 U	330 U	330 U	33 U	330 U	330 U	330 U	33 U	33 U	33 U	165 UJ	33 U	33 U	33 U	33 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
2,6-Dinitrotoluene	100 U	330 U	330 U	330 U	33 U	330 U	330 U	330 U	33 U	33 U	33 U	165 UJ	33 U	33 U	33 U	33 U	2 U	2 U	2 U	2 U	2 U	2 U
2-Chloronaphthalene	100 U	330 U	330 U	330 U	33 U	330 U	330 U	330 U	33 U	33 U	33 U	165 UJ	33 U	33 U	33 U	33 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
2-Chlorophenol	100 U	330 U	330 U	330 U	33 U	330 U	330 U	330 U	33 U	33 U	33 U	165 UJ	33 U	33 U	33 U	33 UJ	2 U	2 U	2 U	2 U	2 U	2 U
2-Methyl-4,6-Dinitrophenol	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
2-Methylnaphthalene	100 U	330 U	360	330 U	33 U	330 U	330 U	32	33 U	33 U	33 U	165 UJ	33 U	33 U	33 U	33 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U
2-Methylphenol	100 U	330 U	330 U	330 U	33 U	330 U	330 U	330 U	33 U	33 U	33 U	165 UJ	33 U	33 U	33 U	33 UJ	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
2-Nitroaniline	500 U	670 U	670 U	670 U	67 U	670 U	670 U	670 U	67 U	67 U	67 U	335 UJ	67 U	67 U	67 U	67 U	3.2 U	3.2 U	3.2 U	3.2 U	3.2 U	3.2 U
2-Nitrophenol	100 U	330 U	330 U	330 U	33 U	330 U	330 U	330 U	33 U	33 U	33 U	165 UJ	33 U	33 U	33 U	33 UJ	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
3,3'-Dichlorobenzidine	5000 U	330 U	330 U	330 U	33 U	330 U	330 U	330 U	33 U	33 U	33 U	165 UJ	33 U	33 U	33 U	33 U	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U
3-Nitroaniline	500 U	1700 U	1700 U	1700 U	167 U	1700 U	1700 U	1700 U	167 U	167 U	167 U	835 UJ	167 U	167 U	167 U	167 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
4,6-Dinitro-2-methylphenol	500 U	1700 U	1700 U	1700 U	167 U	1700 U	1700 U	1700 U	167 U	167 U	167 U	835 UJ	167 U	167 U	167 U	167 UJ	--	--	--	--	--	--
4-Bromophenyl phenyl ether	100 U	330 U	330 U	330 U	33 U	330 U	330 U	330 U	33 U	33 U	33 U	165 UJ	33 U	33 U	33 U	33 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
4-Chloro-3-methylphenol	100 U	670 U	670 U	670 U	67 U	670 U	670 U	670 U	67 U	67 U	67 U	335 UJ	67 U	67 U	67 U	67 UJ	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
4-Chloroaniline	100 U	670 U	670 U	670 U	67 U	670 U	670 U	670 U	67 U	67 U	67 U	335 UJ	67 U	67 U	67 U	67 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
4-Chlorophenyl phenyl ether	100 U	330 U	330 U	330 U	33 U	330 U	330 U	330 U	33 U	33 U	33 U	165 UJ	33 U	33 U	33 U	33 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
4-Methylphenol	100 U	330 U	330 U	330 U	33 U	330 U	330 U	330 U	33 U	33 U	33 U	165 UJ	33 U	33 U	33 U	33 UJ	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
4-Nitroaniline	500 U	1700 U	1700 U	1700 U	167 U	1700 U	1700 U	1700 U	167 U	167 U	167 U	835 UJ	167 U	167 U	167 U	167 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U
4-Nitrophenol	500 U	330 U	330 U	330 U	33 U	330 U	330 U	330 U	33 U	33 U	33 U	165 UJ	33 U	33 U	33 U	33 UJ	18 U	18 U	18 U	18 U	18 U	18 U
Acenaphthene	100 U	330 U	330 U	330 U	33 U	330 U	330 U	330 U	33 U	33 U	33 U	165 UJ	33 U	33 U	33 U	33 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
Acenaphthylene	100 U	330 U	330 U	330 U	33 U	330 U	330 U	330 U	33 U	33 U	33 U	165 UJ	33 U	33 U	33 U	33 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
Acetone	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acetophenone	500 U	1700 U	1700 U	1700 U	167 U	1700 U	1700 U	1700 U	167 U	167 U	167 U	835 UJ	167 U	167 U	167 U	167 U	--	--	--	--	--	--
Aniline	100 U	1700 U	1700 U	1700 U	167 U	1700 U	1700 U	1700 U	167 U	167 U	167 U	835 UJ	167 U	167 U	167 U	167 U	--	--	--	--	--	--
Anthracene	100 U	330 U	330 U	330 U	33 U	330 U	330 U	330 U	33 U	33 U	33 U	165 UJ	33 U	33 U	33 U	33 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
Azobenzene	100 U	330 U	330 U	330 U	33 U	330 U	330 U	330 U	33 U	33 U	33 U	165 UJ	33 U	33 U	33 U	33 U	--	--	--			
Benz(a)anthracene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
Benzidine	100 U	330 U	330 U	330 U	33 U	330 U	330 U	330 U	33 U	33 U	33 U	165 UJ	33 U	33 U	33 U	33 U	--	--	--	--	--	--
Benzo(a)anthracene	100 U	670 U	670 U	670 U	67 U	670 U	670 U	670 U	67 U	67 U	67 U	335 UJ	67 U	67 U	67 U	67 U	--	--	--	--	--	--
Benzo(a)pyrene	100 U	330 U	330 U	330 U	33 U	330 U	330 U	330 U	33 U	33 U	33 U	165 UJ	33 U	33 U	33 U	33 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
Benzo(b)fluoranthene	100 U	330 U	330 U	330 U	33 U	330 U	330 U	330 U	33 U	33 U	33 U	165 UJ	33 U	33 U	33 U	33 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
Benzo(g,h,i)perylene	100 U	330 U	330 U	330 U	33 U	330 U	330 U	330 U	33 U	33 U	33 U	165 UJ	33 U	33 U	33 U	33 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
Benzo(k)fluoranthene	100 U	330 U	330 U	330 U	33 U	330 U	330 U	330 U	33 U	33 U	33 U	165 UJ	33 U	33 U	33 U	33 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
Benzoic acid	500 U	1700 U	1700 U	1700 U	167 U	1700 U	1700 U	1700 U	167 U	167 U	167 U	835 UJ	167 U	167 U	167 U	167 U	96 U	96 U	96 U	96 U	100 J	96 U
Benzyl alcohol	100 U	670 U	670 U	670 U	67 U	670 U	670 U	670 U	67 U	67 U	67 U	335 UJ	67 U	67 U	67 U	67 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U
Bis(2-chloroethoxy)methane	100 U	330 U	330 U	330 U	33 U	330 U	330 U	330 U	33 U	33 U	33 U	165 UJ	33 U	33 U	33 U	33 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
Bis(2-chloroethyl) Ether	100 U	330 U	330 U	330 U	33 U	330 U	330 U	330 U	33 U	33 U	33 U	165 UJ	33 U	33 U	33 U	33 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Bis(2-chloroisopropyl)ether	100 U	330 U	330 U	330 U	33 U	330 U	330 U	330 U	33 U	33 U	33 U	165 UJ	33 U	33 U	33 U	33 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U
Bis(2-ethylhexyl)phthalate	500 U	1700 U	1700 U	1700 U	167 U	1700 U	1700 U	1700 U	1400	167 U	167 U	835 UJ	167 U	167 U	167 U	167 U	7 U	7 U	7.3 J	13 J	58 J	100
Butylbenzylphthalate	100 U	330 U	330 U	330 U	33 U	330 U	330 U	330 U	33 U	33 U	33 U	165 UJ	33 U	33 U	33 U	33 U	3.2 U	3.2 U	3.2 U	3.2 U	3.2 U	49
Carbon disulfide	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		--	--	--

TABLE G-2

SOIL ANALYTICAL RESULTS FOR SEMIVOLATILE ORGANIC COMPOUNDS (1996-2009)[1]
PSC Washougal Facility
Washougal, Washington

Concentrations in micrograms per kilogram (µg/kg)

Site ID	CIA-10	CIA-11	CIA-13	CIA-15	CIA-23	CIA-3	CIA-6	CIA-8	GP-07	GP-07	GP-07	GP-07	GP-09	GP-09	GP-09	GP-09	GP-107	GP-107	GP-108	GP-108	GP-112	GP-112
Depth (in feet)	6	6	6	6	6	6	6	6	2	4	6	7	2	4	6	7	1	3	1	4	1	4
Analyte / Sample Date	9/19/1997	9/24/1997	9/24/1997	9/24/1997	9/30/1997	9/24/1997	9/24/1997	9/24/1997	7/11/1996	7/11/1996	7/11/1996	7/11/1996	7/11/1996	7/11/1996	7/11/1996	7/11/1996	9/3/2008	9/3/2008	9/3/2008	9/3/2008	9/4/2008	9/4/2008
Chrysene	100 U	330 U	330 U	330 U	33 U	330 U	330 U	330 U	33 U	33 U	33 U	165 UJ	33 U	33 U	33 U	33 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
Dibenz(a,h)anthracene	100 U	330 U	330 U	330 U	33 U	330 U	330 U	330 U	--	--	--	--	--	--	--	--	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
Dibenzofuran	100 U	1700 U	1700 U	1700 U	167 U	1700 U	1700 U	1700 U	167 U	167 U	167 U	835 UJ	167 U	167 U	167 U	167 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
Diethyl phthalate	100 U	330 U	330 U	330 U	33 U	330 U	330 U	330 U	33 U	33 U	33 U	165 UJ	33 U	33 U	33 U	33 U	2.3 J	1.5 J	1.3 U	1.3 U	1.3 U	1.3 U
Dimethyl phthalate	100 U	330 U	330 U	330 U	33 U	330 U	330 U	330 U	33 U	33 U	33 U	165 UJ	33 U	33 U	33 U	33 U	1 U	1 U	1 U	1 U	4.6 J	7.5 J
Di-n-butylphthalate	500 U	330 U	330 U	330 U	--	330 U	330 U	330 U	51	33 U	33 U	165 UJ	33 U	33 U	33 U	33 U	10 J	9.7 J	10 J	9.1 J	140	7.9 U
Di-n-octylphthalate	500 U	330 U	330 U	330 U	33 U	330 U	330 U	330 U	33 U	33 U	33 U	165 UJ	33 U	33 U	33 U	33 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
Fluoranthene	100 U	330 U	330 U	330 U	33 U	330 U	330 U	330 U	33 U	33 U	33 U	165 UJ	33 U	33 U	33 U	33 U	4.2 UJ	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
Fluorene	100 U	330 U	330 U	330 U	33 U	330 U	330 U	330 U	33 U	33 U	33 U	165 UJ	33 U	33 U	33 U	33 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
Hexachlorobenzene	100 U	330 U	330 U	330 U	33 U	330 U	330 U	330 U	33 U	33 U	33 U	165 UJ	33 U	33 U	33 U	33 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
Hexachlorobutadiene	100 U	330 U	330 U	330 U	33 U	330 U	330 U	330 U	33 U	33 U	33 U	165 UJ	33 U	33 U	33 U	33 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Hexachlorocyclopentadiene	100 U	330 U	330 U	330 U	33 U	330 U	330 U	330 U	33 U	33 U	33 U	165 UJ	33 U	33 U	33 U	33 U	29 U	29 U	29 U	29 U	29 U	29 U
Hexachloroethane	100 U	330 U	330 U	330 U	33 U	330 U	330 U	330 U	33 U	33 U	33 U	165 UJ	33 U	33 U	33 U	33 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U
Indeno(1,2,3-cd)pyrene	100 U	330 U	330 U	330 U	33 U	330 U	330 U	330 U	33 U	33 U	33 U	165 UJ	33 U	33 U	33 U	33 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
Isophorone	500 U	330 U	330 U	330 U	33 U	330 U	330 U	330 U	33 U	33 U	33 U	165 UJ	33 U	33 U	33 U	33 U	1 U	1 U	1 U	1 U	1 U	1 U
Naphthalene	100 U	330 U	330 U	330 U	33 U	330 U	330 U	--	33 U	100	33 U	165 UJ	33 U	33 U	33 U	33 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U
Nitrobenzene	100 U	330 U	330 U	330 U	33 U	330 U	330 U	330 U	33 U	44	33 U	165 UJ	33 U	33 U	33 U	33 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U
N-Nitroso-di-n-propylamine	100 U	330 U	330 U	330 U	33 U	330 U	330 U	330 U	33 U	33 U	33 U	165 UJ	33 U	33 U	33 U	33 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
N-Nitrosodiphenylamine	200 U	330 U	330 U	330 U	33 U	330 U	330 U	330 U	33 U	33 U	33 U	165 UJ	33 U	33 U	33 U	33 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
Pentachlorophenol	500 U	1700 U	1700 U	1700 U	167 U	1700 U	1700 U	1700 U	167 U	167 U	167 U	835 UJ	167 U	167 U	167 U	167 UJ	20 U	20 U	20 U	20 U	20 U	20 U
Phenanthrene	100 U	330 U	330 U	330 U	33 U	330 U	330 U	330 U	33 U	33 U	33 U	165 UJ	33 U	33 U	33 U	33 U	1.9 UJ	1.4 U	1.4 U	1.4 U	4.4 UJ	4.7 UJ
Phenol	100 U	330 U	330 U	330 U	33 U	330 U	330 U	330 U	33 U	33 U	33 U	165 UJ	33 U	33 U	33 U	33 UJ	2 U	2 U	2 U	2 U	2 U	2 U
Pyrene	100 U	330 U	330 U	330 U	33 U	330 U	330 U	330 U	33 U	33 U	33 U	165 UJ	33 U	33 U	33 U	33 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U

TABLE G-2

SOIL ANALYTICAL RESULTS FOR SEMIVOLATILE ORGANIC COMPOUNDS (1996-2009)[1]
PSC Washougal Facility
Washougal, Washington

Concentrations in micrograms per kilogram (µg/kg)

Site ID	GP-113	GP-113	GP-114	GP-114	GP-12	GP-12	GP-12	GP-12	GP-16	GP-17	GP-27	GP-28	GP-29	GP-31	GP-32	GP-33	GP-34	GP-35	GP-91	GP-91	GP-92	GP-92	GP-93	GP-93	GP-94
Depth (in feet)	1	4	1	3	2	4	6	7	8	8	6	8	5.9	9.5	10	8	10	10	2	3	2	3	1.5	5.5	3
Analyte Sample Date	9/3/2008	9/3/2008	9/3/2008	9/3/2008	7/11/1996	7/11/1996	7/11/1996	7/11/1996	7/11/1996	7/10/1996	7/30/1999	7/30/1999	7/29/1999	7/29/1999	7/29/1999	7/29/1999	7/29/1999	7/29/1999	10/5/2007	10/5/2007	10/3/2007	10/3/2007	10/3/2007	10/3/2007	10/4/2007
1,2,4-Trichlorobenzene	2.6 U	2.6 U	2.6 U	13 U	33 U	33 U	33 U	33 U	33 U	33 U	--	--	--	--	--	--	--	--	2.8 U	3.1 U	2.8 U	2.8 U	2.9 U	3 U	2.8 U
1,2-Dichlorobenzene	2.9 U	2.9 U	2.9 U	15 U	33 U	33 U	33 U	33 U	33 U	33 U	--	--	--	--	--	--	--	--	3.2 U	3.4 U	3.2 U	3.1 U	3.2 U	3.3 U	3.1 U
1,3-Dichlorobenzene	3 U	3 U	3 U	15 U	33 U	33 U	33 U	33 U	33 U	33 U	--	--	--	--	--	--	--	--	3.3 U	3.5 U	3.3 U	3.3 U	3.3 U	3.4 U	3.2 U
1,4-Dichlorobenzene	2.9 U	2.9 U	2.9 U	15 U	33 U	33 U	33 U	33 U	33 U	33 U	--	--	--	--	--	--	--	--	3.2 U	3.4 U	3.2 U	3.1 U	3.2 U	3.3 U	3.1 U
1,4-Dioxane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.49 U	0.53 U	0.49 U	0.49 U	0.49 U	0.51 U	0.48 U
1-Methylnaphthalene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,5-Trichlorophenol	1.5 U	1.5 U	1.5 U	7.5 U	33 U	33 U	33 U	33 U	33 UJ	33 UJ	--	--	--	--	--	--	--	--	1.7 U	1.8 U	1.7 U	1.7 U	1.7 U	1.7 U	1.6 U
2,4,6-Trichlorophenol	1.4 U	1.4 U	1.4 U	7 U	33 U	33 U	33 U	33 U	33 UJ	33 UJ	--	--	--	--	--	--	--	--	1.6 U	1.7 U	1.6 U	1.5 U	1.6 U	1.6 U	1.5 U
2,4-Dichlorophenol	1 U	1 U	1 U	5 U	33 U	33 U	33 U	33 U	33 UJ	33 UJ	--	--	--	--	--	--	--	--	1.1 U	1.2 U	1.1 U	1.1 U	1.1 U	1.2 U	1.1 U
2,4-Dimethylphenol	5.5 U	5.5 U	5.5 U	28 U	33 U	33 U	33 U	33 U	33 UJ	33 UJ	33 U	33 UJ	33 U	33 U	33 U	33 U	33 U	33 U	--	--	--	--	--	--	--
2,4-Dinitrophenol	17 U	17 U	17 U	85 U	167 U	167 U	167 U	167 U	167 UJ	167 UJ	--	--	--	--	--	--	--	--	19 U	20 U	19 U	19 U	19 U	20 U	18 U
2,4-Dinitrotoluene	1.5 U	1.5 U	1.5 U	7.5 U	33 U	33 U	33 U	33 U	33 U	33 U	--	--	--	--	--	--	--	--	1.7 U	1.8 U	1.7 U	1.7 U	1.7 U	1.7 U	1.6 U
2,6-Dinitrotoluene	2 U	2 U	2 U	10 U	33 U	33 U	33 U	33 U	33 U	33 U	--	--	--	--	--	--	--	--	2.2 U	2.4 U	2.2 U	2.2 U	2.2 U	2.3 U	2.1 U
2-Chloronaphthalene	1.6 U	1.6 U	1.6 U	8 U	33 U	33 U	33 U	33 U	33 U	33 U	--	--	--	--	--	--	--	--	1.8 U	1.9 U	1.8 U	1.8 U	1.8 U	1.8 U	1.7 U
2-Chlorophenol	2 U	2 U	2 U	10 U	33 U	33 U	33 U	33 U	33 UJ	33 UJ	--	--	--	--	--	--	--	--	2.2 U	2.4 U	2.2 U	2.2 U	2.2 U	2.3 U	2.1 U
2-Methyl-4,6-Dinitrophenol	1.4 U	1.4 U	1.4 U	7 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.6 U	1.7 U	1.6 U	1.5 U	1.6 U	1.6 U	1.5 U
2-Methylnaphthalene	2.2 U	2.2 U	2.2 U	33	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	2.4 U	2.6 U	2.4 U	2.4 U	190 J	34	2.4 U
2-Methylphenol	1.5 U	1.5 U	1.5 U	7.5 U	33 U	33 U	33 U	33 U	33 UJ	33 UJ	33 U	33 UJ	33 U	33 U	33 U	33 U	33 U	33 U	1.7 U	1.8 U	1.7 U	1.7 U	1.7 U	1.7 U	1.6 U
2-Nitroaniline	3.2 U	3.2 U	3.2 U	16 U	67 U	67 U	67 U	67 U	67 U	67 U	--	--	--	--	--	--	--	--	3.5 U	3.8 U	3.5 U	3.5 U	3.5 U	3.6 U	3.4 U
2-Nitrophenol	1.5 U	1.5 U	1.5 U	7.5 U	33 U	33 U	33 U	33 U	33 UJ	33 UJ	--	--	--	--	--	--	--	--	1.7 U	1.8 U	1.7 U	1.7 U	1.7 U	1.7 U	1.6 U
3,3'-Dichlorobenzidine	3.7 U	3.7 U	3.7 U	19 U	33 U	33 U	33 U	33 U	33 U	33 U	--	--	--	--	--	--	--	--	--	--	4 U	4 U	4.1 U	4.2 U	--
3-Nitroaniline	2.5 U	2.5 U	2.5 U	13 U	167 U	167 U	167 U	167 U	167 U	167 U	--	--	--	--	--	--	--	--	2.7 U	3 U	2.7 U	2.7 U	2.8 U	2.8 U	2.7 U
4,6-Dinitro-2-methylphenol	--	--	--	--	167 U	167 U	167 U	167 U	167 UJ	167 UJ	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Bromophenyl phenyl ether	1.6 U	1.6 U	1.6 U	8 U	33 U	33 U	33 U	33 U	33 U	33 U	--	--	--	--	--	--	--	--	1.8 U	1.9 U	1.8 U	1.8 U	1.8 U	1.8 U	1.7 U
4-Chloro-3-methylphenol	1.4 U	1.4 U	1.4 U	7 U	67 U	67 U	67 U	67 U	67 UJ	67 UJ	--	--	--	--	--	--	--	--	1.6 U	1.7 U	1.6 U	1.5 U	1.6 U	1.6 U	1.5 U
4-Chloroaniline	1.9 U	1.9 U	1.9 U	9.5 U	67 U	67 U	67 U	67 U	67 U	67 U	--	--	--	--	--	--	--	--	--	--	2.1 U	2.1 U	2.1 U	2.2 U	--
4-Chlorophenyl phenyl ether	1.4 U	1.4 U	1.4 U	7 U	33 U	33 U	33 U	33 U	33 U	33 U	--	--	--	--	--	--	--	--	1.6 U	1.7 U	1.6 U	1.5 U	1.6 U	1.6 U	1.5 U
4-Methylphenol	1.5 U	1.5 U	1.5 U	7.5 U	33 U	33 U	33 U	33 U	33 UJ	33 UJ	--	--	--	--	--	--	--	--	1.7 U	1.8 U	1.7 U	1.7 U	1.7 U	1.7 U	1.6 U
4-Nitroaniline	1.8 U	1.8 U	1.8 U	9 U	167 U	167 U	167 U	167 U	167 U	167 U	--	--	--	--	--	--	--	--	2 U	2.1 U	2 U	2 U	2 U	2.1 U	1.9 U
4-Nitrophenol	18 U	18 U	18 U	90 U	33 U	33 U	33 U	33 U	33 UJ	33 UJ	--	--	--	--	--	--	--	--	20 U	21 U	20 U	20 U	20 U	21 U	19 U
Acenaphthene	1.4 U	1.4 U	1.4 U	7 U	33 U	33 U	33 U	33 U	33 U	33 U	--	--	--	--	--	--	--	--	1.6 U	1.7 U	1.6 U	1.5 U	1.6 U	1.6 U	1.5 U
Acenaphthylene	1.2 U	1.2 U	1.2 U	6 U	33 U	33 U	33 U	33 U	33 U	33 U	--	--	--	--	--	--	--	--	1.3 U	1.4 U	1.3 U	1.3 U	1.4 U	1.4 U	1.3 U
Acetone	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acetophenone	--	--	--	--	167 U	167 U	167 U	167 U	167 U	167 U	165 U	165 U	165 U	165 U	165 U	165 U	165 U	165 U	--	--	--	--	--	--	--
Aniline	--	--	--	--	167 U	167 U	167 U	167 U	167 U	167 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Anthracene	1.6 U	1.6 U	1.6 U	8 U	33 U	33 U	33 U	33 U	33 U	33 U	--	--	--	--	--	--	--	--	1.8 U	1.9 U	1.8 U	1.8 U	1.8 U	1.8 U	1.7 U
Azobenzene					33 U	33 U	33 U	33 U	33 U	33 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benz(a)anthracene	1.7 U	1.7 U	1.7 U	8.5 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzidine	--	--	--	--	33 U	33 U	33 U	33 U	33 U	33 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)anthracene	--	--	--	--	67 U	67 U	67 U	67 U	67 U	67 U	--	--	--	--	--	--	--	--	1.9 U	2 U	1.9 U	1.9 U	1.9 U	2 U	1.8 U
Benzo(a)pyrene	1.7 U	1.7 U	1.7 U	8.5 U	33 U	33 U	33 U	33 U	33 U	33 U	--	--	--	--	--	--	--	--	1.9 U	2 U	1.9 U	1.9 U	1.9 U	2 U	1.8 U
Benzo(b)fluoranthene	1.2 U	1.2 U	1.2 U	6 U	33 U	33 U	33 U	33 U	33 U	33 U	--	--	--	--	--	--	--	--	1.3 U	1.4 U	1.3 U	1.3 U	1.4 U	1.4 U	1.3 U
Benzo(g,h,i)perylene	1.5 U	1.5 U	1.5 U	7.5 U	33 U	33 U	33 U	33 U	33 U	33 U	--	--	--	--	--	--	--	--	1.7 U	1.8 U	1.7 U	1.7 U	1.7 U	1.7 U	1.6 U
Benzo(k)fluoranthene	1.4 U	1.4 U	1.4 U	7 U	33 U	33 U	33 U	33 U	33 U	33 U	--	--	--	--	--	--	--	--	1.6 U	1.7 U	1.6 U	1.5 U	1.6 U	1.6 U	1.5 U
Benzoic acid	96 U	96 U	96 U	480 U	167 U	167 U	167 U	167 U	167 UJ	167 U	--	--	--	--	--	--	--	--	110 U	120 U	110 U	110 U	190 J	120 J	110 U
Benzyl alcohol	2.1 U	2.1 U	2.1 U	11 U	67 U	67 U	67 U	67 U	67 U	67 U	--	--	--	--	--	--	--	--	2.3 U	2.5 U	2.3 U	2.3 U	2.3 U	2.4 U	2.3 U
Bis(2-chloroethoxy)methane	1.5 U	1.5 U	1.5 U	7.5 U	33 U	33 U	33 U	33 U	33 U	33 U	--	--	--	--	--	--	--	--	1.7 U	1.8 U	1.7 U	1.7 U	1.7 U	1.7 U	1.6 U
Bis(2-chloroethyl) Ether	1.9 U	1.9 U	1.9 U	9.5 U	33 U	33 U	33 U	33 U	33 U	33 U	--	--	--	--	--	--	--	--	2.1 U	2.3 U	2.1 U	2.1 U	2.1 U	2.2 U	2 U
Bis(2-chloroisopropyl)ether	2.6 U	2.6 U	2.6 U	13 U	33 U	33 U	33 U	33 U	33 U	33 U	--	--	--	--	--	--	--	--	2.8 U	3.1 U	2.8 U	2.8 U	2.9 U	3 U	2.8 U
Bis(2-ethylhexyl)phthalate	99 J	7 U	7 U	180 J	167 U	167 U	167 U	167 U	167 U	167 U	--	--	--	--	--	--	--	--	7.6 U	8.2 U	7.6 U	7.5 U	510	200	7.4 U
Butylbenzylphthalate	3.2 U	3.2 U	3.2 U	16 U	33 U	33 U	33 U	33 U	33 U	33 U	--	--	--	--	--	--	--	--	3.5 U	3.8 U	3.5 U	3.5 U	980	14	3.4 U
Carbon disulfide	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE G-2

SOIL ANALYTICAL RESULTS FOR SEMIVOLATILE ORGANIC COMPOUNDS (1996-2009)[1]
PSC Washougal Facility
Washougal, Washington

Concentrations in micrograms per kilogram (µg/kg)

Site ID	GP-113	GP-113	GP-114	GP-114	GP-12	GP-12	GP-12	GP-12	GP-16	GP-17	GP-27	GP-28	GP-29	GP-31	GP-32	GP-33	GP-34	GP-35	GP-91	GP-91	GP-92	GP-92	GP-93	GP-93	GP-94
Depth (in feet)	1	4	1	3	2	4	6	7	8	8	6	8	5.9	9.5	10	8	10	10	2	3	2	3	1.5	5.5	3
Analyte Sample Date	9/3/2008	9/3/2008	9/3/2008	9/3/2008	7/11/1996	7/11/1996	7/11/1996	7/11/1996	7/11/1996	7/10/1996	7/30/1999	7/30/1999	7/29/1999	7/29/1999	7/29/1999	7/29/1999	7/29/1999	7/29/1999	10/5/2007	10/5/2007	10/3/2007	10/3/2007	10/3/2007	10/3/2007	10/4/2007
Chrysene	1.5 U	1.5 U	1.5 U	32	33 U	33 U	33 U	33 U	33 U	33 U	--	--	--	--	--	--	--	--	1.7 U	1.8 U	1.7 U	1.7 U	1.7 U	1.7 U	1.6 U
Dibenz(a,h)anthracene	1.5 U	1.5 U	1.5 U	7.5 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.7 U	1.8 U	1.7 U	1.7 U	1.7 U	1.7 U	1.6 U
Dibenzofuran	1.2 U	1.2 U	1.2 U	6 U	167 U	167 U	167 U	167 U	167 U	167 U	--	--	--	--	--	--	--	--	1.3 U	1.4 U	1.3 U	1.3 U	5 J	1.4 U	1.3 U
Diethyl phthalate	7.5 J	1.3 J	2.2 UJ	13 UJ	33 U	33 U	33 U	33 U	33 U	33 U	--	--	--	--	--	--	--	--	4.1 UJ	1.6 U	2 UJ	1.4 U	2.3 UJ	2.6 UJ	1.4 U
Dimethyl phthalate	1 U	1 U	1 U	5 U	33 U	33 U	33 U	33 U	33 U	33 U	--	--	--	--	--	--	--	--	6.5 J	1.2 U	1.1 U	1.1 U	6.2 J	10 J	1.1 U
Di-n-butylphthalate	11 J	10 J	8.6 J	40 U	49	39	52	52	100	33 U	--	--	--	--	--	--	--	--	8.5 U	9.2 U	8.6 U	8.5 U	10 J	8.9 U	8.3 U
Di-n-octylphthalate	1.7 U	1.7 U	1.7 U	8.5 U	33 U	33 U	33 U	33 U	33 U	33 U	--	--	--	--	--	--	--	--	1.9 U	2 U	1.9 U	1.9 U	1.9 U	2 U	1.8 U
Fluoranthene	1.6 U	1.6 U	1.6 U	9.6 J	33 U	33 U	33 U	33 U	33 U	33 U	--	--	--	--	--	--	--	--	1.8 U	1.9 U	1.8 U	1.8 U	1.8 U	1.8 U	1.7 U
Fluorene	1.1 U	1.1 U	1.1 U	5.5 U	33 U	33 U	33 U	33 U	33 U	33 U	--	--	--	--	--	--	--	--	1.2 U	1.3 U	1.2 U	1.2 U	1.2 U	1.3 U	1.2 U
Hexachlorobenzene	1.2 U	1.2 U	1.2 U	6 U	33 U	33 U	33 U	33 U	33 U	33 U	--	--	--	--	--	--	--	--	1.3 U	1.4 U	1.3 U	1.3 U	1.4 U	1.4 U	1.3 U
Hexachlorobutadiene	2.5 U	2.5 U	2.5 U	13 U	33 U	33 U	33 U	33 U	33 U	33 U	--	--	--	--	--	--	--	--	2.7 U	3 U	2.7 U	2.7 U	2.8 U	2.8 U	2.7 U
Hexachlorocyclopentadiene	29 U	29 U	29 U	150 U	33 U	33 U	33 U	33 U	33 U	33 U	--	--	--	--	--	--	--	--	32 U	34 U	32 U	31 U	32 U	33 U	31 U
Hexachloroethane	3.1 U	3.1 U	3.1 U	16 U	33 U	33 U	33 U	33 U	33 U	33 U	--	--	--	--	--	--	--	--	3.4 U	3.6 U	3.4 U	3.4 U	3.4 U	3.5 U	3.3 U
Indeno(1,2,3-cd)pyrene	1.5 U	1.5 U	1.5 U	7.5 U	33 U	33 U	33 U	33 U	33 U	33 U	--	--	--	--	--	--	--	--	1.7 U	1.8 U	1.7 U	1.7 U	1.7 U	1.7 U	1.6 U
Isophorone	1 U	1 U	1 U	5 U	33 U	33 U	33 U	33 U	33 U	33 U	--	--	--	--	--	--	--	--	1.1 U	1.2 U	1.1 U	1.1 U	1.1 U	1.2 U	1.1 U
Naphthalene	2.3 U	2.3 U	2.3 U	12 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	2.5 U	2.7 U	2.5 U	2.5 U	44	9.9 J	2.5 U
Nitrobenzene	2.2 U	2.2 U	2.2 U	11 U	33 U	33 U	33 U	33 U	33 U	33 U	--	--	--	--	--	--	--	--	2.4 U	2.6 U	2.4 U	2.4 U	2.4 U	2.5 U	2.4 U
N-Nitroso-di-n-propylamine	2.4 U	2.4 U	2.4 U	12 U	33 U	33 U	33 U	33 U	33 U	33 U	--	--	--	--	--	--	--	--	2.6 U	2.8 U	2.6 U	2.6 U	2.7 U	2.7 U	2.6 U
N-Nitrosodiphenylamine	1.6 U	1.6 U	1.6 U	8 U	33 U	33 U	33 U	33 U	33 U	33 U	--	--	--	--	--	--	--	--	1.8 UJ	1.9 UJ	1.8 U	1.8 U	1.8 U	1.8 U	1.7 UJ
Pentachlorophenol	20 U	20 U	20 U	100 U	167 U	167 U	167 U	167 U	167 UJ	167 UJ	--	--	--	--	--	--	--	--	22 U	24 U	22 U	22 U	22 U	23 U	21 U
Phenanthrene	1.4 U	1.4 U	1.4 U	11 J	33 U	33 U	33 U	33 U	33 U	33 U	--	--	--	--	--	--	--	--	1.6 U	1.7 U	1.6 U	1.5 U	16	4.4 J	1.5 U
Phenol	2 U	2 U	2 U	10 U	33 U	33 U	33 U	33 U	33 UJ	33 UJ	33 U	33 UJ	33 U	33 U	33 U	33 U	33 U	33 U	13 J	18 J	72 U	72 U	96 U	78 U	12 J
Pyrene	1.5 U	1.5 U	1.5 U	15 J	33 U	33 U	33 U	33 U	33 U	33 U	--	--	--	--	--	--	--	--	1.7 J	1.8 U	1.7 U	1.7 U	4 J	1.7 U	1.6 U

TABLE G-2

SOIL ANALYTICAL RESULTS FOR SEMIVOLATILE ORGANIC COMPOUNDS (1996-2009)[1]
PSC Washougal Facility
Washougal, Washington

Concentrations in micrograms per kilogram (µg/kg)

Site ID	GP-94	GP-95	GP-95	GP-96	GP-96	GP-97	GP-97	GP-97	GP-98	GP-98	GP-99	GP-99	IAB-01	IAB-01	IAB-01	IAB-02	IAB-02	IAB-02	IAB-03	IAB-03	IAB-03
Depth (in feet)	5.5	2.5	4	2	3.5	2.5	5.5	8	1.5	2.5	1.5	2.5	2	4	6	2	4	8	2	4	6
Analyte / Sample Date	10/4/2007	10/1/2007	10/1/2007	10/3/2007	10/3/2007	10/5/2007	10/5/2007	10/5/2007	10/4/2007	10/4/2007	10/4/2007	10/4/2007	9/15/1997	9/15/1997	9/15/1997	9/15/1997	9/15/1997	9/15/1997	9/15/1997	9/15/1997	9/15/1997
1,2,4-Trichlorobenzene	2.9 U	2.8 U	3 U	2.9 U	2.9 U	29 U	2.9 U	17 U	3 U	2.9 U	2.9 U	2.9 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
1,2-Dichlorobenzene	3.3 U	3.2 U	3.3 U	3.2 U	3.2 U	32 U	3.2 U	19 U	3.3 U	3.3 U	3.2 U	3.3 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
1,3-Dichlorobenzene	3.4 U	3.3 U	3.5 U	3.3 U	3.3 U	33 U	3.4 U	20 U	3.4 U	3.4 U	3.4 U	3.4 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
1,4-Dichlorobenzene	3.3 U	3.2 U	3.3 U	3.2 U	3.2 U	32 U	3.2 U	19 U	3.3 U	3.3 U	3.2 U	3.3 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
1,4-Dioxane	0.5 U	0.49 U	0.52 U	0.49 U	0.5 U	2.5 U	0.5 U	0.85 J	0.51 U	0.5 U	0.5 U	0.5 U	--	--	--	--	--	--	--	--	--
1-Methylnaphthalene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,5-Trichlorophenol	1.7 UJ	1.7 U	1.8 U	1.7 U	1.7 U	--	1.7 UJ	9.6 U	1.7 U	1.7 U	1.7 U	1.7 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
2,4,6-Trichlorophenol	1.6 UJ	1.6 U	1.6 U	1.6 U	1.6 U	--	1.6 UJ	9 U	1.6 U	1.6 U	1.6 U	1.6 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
2,4-Dichlorophenol	1.2 U	1.1 U	1.2 U	1.1 U	1.1 U	--	1.2 UJ	6.4 U	1.2 U	1.2 U	1.2 U	1.2 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
2,4-Dimethylphenol	--	--	--	--	--	--	--	--	--	--	--	--	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
2,4-Dinitrophenol	19 UJ	19 U	20 U	19 U	19 U	--	19 UJ	110 U	20 U	19 U	19 U	19 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U
2,4-Dinitrotoluene	1.7 UJ	1.7 U	1.8 U	1.7 U	1.7 U	17 U	1.7 U	9.6 U	1.7 U	1.7 U	1.7 U	1.7 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
2,6-Dinitrotoluene	2.3 UJ	2.2 U	2.3 U	2.2 U	2.2 U	22 U	2.3 U	13 U	2.3 U	2.3 U	2.3 U	2.3 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
2-Chloronaphthalene	1.8 UJ	1.8 U	1.9 U	1.8 U	1.8 U	18 U	1.8 U	11 U	1.8 U	1.8 U	1.8 U	1.8 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
2-Chlorophenol	2.3 U	2.2 U	2.3 U	2.2 U	2.2 U	--	2.3 UJ	13 U	2.3 U	2.3 U	2.3 U	2.3 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
2-Methyl-4,6-Dinitrophenol	1.6 UJ	1.6 U	1.6 U	1.6 U	1.6 U	--	1.6 UJ	9 U	1.6 U	1.6 U	1.6 U	1.6 U	--	--	--	--	--	--	--	--	--
2-Methylnaphthalene	2.5 U	2.4 U	2.5 U	2.4 U	2.5 U	55 J	2.5 U	15 U	2.5 U	2.5 U	2.5 U	2.5 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
2-Methylphenol	1.7 U	1.7 U	1.8 U	1.7 U	1.7 U	--	1.7 UJ	9.6 U	1.7 U	1.7 U	1.7 U	1.7 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
2-Nitroaniline	3.6 UJ	3.5 U	3.7 U	3.5 U	3.6 U	35 U	3.6 U	21 U	3.6 U	3.6 U	3.6 U	3.6 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U
2-Nitrophenol	1.7 U	1.7 U	1.8 U	1.7 U	1.7 U	--	1.7 UJ	9.6 U	1.7 U	1.7 U	1.7 U	1.7 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
3,3'-Dichlorobenzidine	--	4 U	4.2 U	4 U	4.1 U	--	--	--	--	--	--	--	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
3-Nitroaniline	2.8 UJ	2.7 U	2.9 U	2.7 U	2.8 U	28 U	2.8 U	16 U	2.9 U	2.8 U	2.8 U	2.8 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U
4,6-Dinitro-2-methylphenol	--	--	--	--	--	--	--	--	--	--	--	--	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U
4-Bromophenyl phenyl ether	1.8 U	1.8 U	1.9 U	1.8 U	1.8 U	18 U	1.8 U	11 U	1.8 U	1.8 U	1.8 U	1.8 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
4-Chloro-3-methylphenol	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	--	1.6 UJ	9 U	1.6 U	1.6 U	1.6 U	1.6 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U
4-Chloroaniline	--	2.1 U	2.2 U	2.1 U	2.1 U	--	--	--	--	--	--	--	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U
4-Chlorophenyl phenyl ether	1.6 UJ	1.6 U	1.6 U	1.6 U	1.6 U	16 U	1.6 U	9 U	1.6 U	1.6 U	1.6 U	1.6 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
4-Methylphenol	1.7 U	1.7 U	1.8 U	1.7 U	1.7 U		1.7 UJ	9.6 U	1.7 U	1.7 U	1.7 U	1.7 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
4-Nitroaniline	2 UJ	2 U	2.1 U	2 U	2 U	20 U	2 U	12 U	2.1 U	2 U	2 U	2 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U
4-Nitrophenol	20 UJ	20 U	21 U	20 U	20 U	--	20 UJ	120 U	21 U	20 U	20 U	20 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
Acenaphthene	1.6 UJ	1.6 U	1.6 U	1.6 U	1.6 U	16 U	1.6 U	9 U	1.6 U	1.6 U	1.6 U	1.6 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
Acenaphthylene	1.4 UJ	1.3 U	1.4 U	1.3 U	1.4 U	14 U	1.4 U	7.7 U	1.4 U	1.4 U	1.4 U	1.4 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
Acetone	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acetophenone	--	--	--	--	--	--	--	--	--	--	--	--	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U
Aniline	--	--	--	--	--	--	--	--	--	--	--	--	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U
Anthracene	1.8 U	1.8 U	1.9 U	1.8 U	1.8 U	18 U	1.8 U	11 U	1.8 U	1.8 U	1.8 U	1.8 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
Azobenzene	--	--	--	--	--	--	--	--	--	--	--	--	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
Benz(a)anthracene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzidine	--	--	--	--	--	--	--	--	--	--	--	--	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
Benzo(a)anthracene	1.9 U	1.9 U	2 U	1.9 U	1.9 U	19 U	1.9 U	11 U	2 U	1.9 U	1.9 U	1.9 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U
Benzo(a)pyrene	1.9 U	1.9 U	2 U	1.9 U	1.9 U	19 U	1.9 U	11 U	2 U	1.9 U	1.9 U	1.9 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
Benzo(b)fluoranthene	1.4 U	1.3 U	1.4 U	1.3 U	1.4 U	14 U	1.4 U	7.7 U	1.4 U	1.4 U	1.4 U	1.4 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
Benzo(g,h,i)perylene	1.7 U	1.7 U	1.8 U	1.7 U	1.7 U	31 J	1.7 U	9.6 U	1.7 U	1.7 U	1.7 U	1.7 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
Benzo(k)fluoranthene	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	16 U	1.6 U	9 U	1.6 U	1.6 U	1.6 U	1.6 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
Benzoic acid	110 U	110 U	110 U	150 J	270		110 UJ	620 U	110 U	110 U	110 U	110 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U
Benzyl alcohol	2.4 U	2.3 U	3.3 J	2.3 U	2.4 U	23 U	2.4 U	14 U	2.4 U	2.4 U	2.4 U	2.4 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U
Bis(2-chloroethoxy)methane	1.7 U	1.7 U	1.8 U	1.7 U	1.7 U	17 U	1.7 U	9.6 U	1.7 U	1.7 U	1.7 U	1.7 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
Bis(2-chloroethyl) Ether	2.1 U	2.1 U	2.2 U	2.1 U	2.1 U	21 U	2.1 U	13 U	2.2 U	2.2 U	2.1 U	2.2 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
Bis(2-chloroisopropyl)ether	2.9 U	2.8 U	3 U	2.9 U	2.9 U	29 U	2.9 U	17 U	3 U	2.9 U	2.9 U	2.9 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
Bis(2-ethylhexyl)phthalate	21 UJ	9.9 J	14 J	7.6 U	7.7 U	82 UJ	15 UJ	470 J	7.9 U	7.8 U	7.8 U	7.8 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U
Butylbenzylphthalate	4.7 J	3.5 U	3.7 U	3.5 U	3.6 U	110	17	21 U	3.6 U	3.6 U	4.2 J	3.6 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
Carbon disulfide	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE G-2

SOIL ANALYTICAL RESULTS FOR SEMIVOLATILE ORGANIC COMPOUNDS (1996-2009)[1]
PSC Washougal Facility
Washougal, Washington

Concentrations in micrograms per kilogram (µg/kg)

Site ID	GP-94	GP-95	GP-95	GP-96	GP-96	GP-97	GP-97	GP-97	GP-98	GP-98	GP-99	GP-99	IAB-01	IAB-01	IAB-01	IAB-02	IAB-02	IAB-02	IAB-03	IAB-03	IAB-03
Depth (in feet)	5.5	2.5	4	2	3.5	2.5	5.5	8	1.5	2.5	1.5	2.5	2	4	6	2	4	8	2	4	6
Analyte / Sample Date	10/4/2007	10/1/2007	10/1/2007	10/3/2007	10/3/2007	10/5/2007	10/5/2007	10/5/2007	10/4/2007	10/4/2007	10/4/2007	10/4/2007	9/15/1997	9/15/1997	9/15/1997	9/15/1997	9/15/1997	9/15/1997	9/15/1997	9/15/1997	9/15/1997
Chrysene	1.7 U	1.7 U	1.8 U	1.7 U	1.7 U	17 U	1.7 U	9.6 U	1.7 U	1.7 U	1.7 U	1.7 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
Dibenz(a,h)anthracene	1.7 U	1.7 U	1.8 U	1.7 U	1.7 U	17 U	1.7 U	9.6 U	1.7 U	1.7 U	1.7 U	1.7 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
Dibenzofuran	1.4 UJ	1.3 U	1.4 U	1.3 U	1.4 U	14 U	1.4 U	7.7 U	1.4 U	1.4 U	1.4 U	1.4 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U
Diethyl phthalate	5.6 UJ	5 UJ	6 UJ	1.7 UJ	1.5 U	15 U	3.8 UJ	8.4 U	3.8 UJ	1.5 U	1.5 U	2.2 J	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
Dimethyl phthalate	1.2 UJ	1.1 U	1.2 U	1.1 U	1.1 U	11 U	1.2 U	6.4 U	1.2 U	1.2 U	1.2 U	1.2 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
Di-n-butylphthalate	9.3 J	8.5 U	9 U	8.6 U	8.7 U	87 U	8.8 U	51 U	8.9 U	8.8 U	8.8 U	8.8 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
Di-n-octylphthalate	1.9 U	1.9 U	2 U	1.9 U	1.9 U	19 U	1.9 U	11 U	2 U	1.9 U	1.9 U	1.9 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
Fluoranthene	2.7 J	1.8 U	1.9 U	1.8 U	1.8 U	18 U	1.8 U	11 U	1.8 U	1.8 U	1.8 U	1.8 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
Fluorene	1.3 UJ	1.2 U	1.3 U	1.2 U	1.3 U	12 U	1.3 U	7.1 U	1.3 U	1.3 U	1.3 U	1.3 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
Hexachlorobenzene	1.4 U	1.3 U	1.4 U	1.3 U	1.4 U	14 U	1.4 U	7.7 U	1.4 U	1.4 U	1.4 U	1.4 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
Hexachlorobutadiene	2.8 U	2.7 U	2.9 U	2.7 U	2.8 U	28 U	2.8 U	16 U	2.9 U	2.8 U	2.8 U	2.8 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
Hexachlorocyclopentadiene	33 UJ	32 U	33 U	32 U	32 U	320 U	32 U	190 U	33 U	33 U	32 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
Hexachloroethane	3.5 U	3.4 U	3.6 U	3.4 U	3.4 U	34 U	3.5 U	20 U	3.5 U	3.5 U	3.5 U	3.5 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
Indeno(1,2,3-cd)pyrene	1.7 U	1.7 U	1.8 U	1.7 U	1.7 U	17 U	1.7 U	9.6 U	1.7 U	1.7 U	1.7 U	1.7 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
Isophorone	1.2 U	1.1 U	1.2 U	1.1 U	1.1 U	11 U	1.2 U	6.4 U	1.2 U	1.2 U	1.2 U	1.2 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
Naphthalene	2.6 U	2.5 U	2.7 U	2.5 U	2.6 U	27 J	2.6 U	15 U	2.6 U	2.6 U	2.6 U	2.6 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
Nitrobenzene	2.5 U	2.4 U	2.5 U	2.4 U	2.5 U	24 U	2.5 U	15 U	2.5 U	2.5 U	2.5 U	2.5 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
N-Nitroso-di-n-propylamine	2.7 U	2.6 U	2.8 U	2.6 U	2.7 U	27 U	2.7 U	16 U	2.7 U	2.7 U	2.7 U	2.7 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
N-Nitrosodiphenylamine	1.8 UJ	1.8 U	1.9 U	1.8 U	1.8 U	18 UJ	1.8 UJ	11 UJ	1.8 UJ	1.8 UJ	1.8 UJ	1.8 UJ	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
Pentachlorophenol	23 U	22 U	23 U	22 U	22 U		23 UJ	130 U	23 U	23 U	23 U	23 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U
Phenanthrene	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	17 J	1.6 U	9 U	1.6 U	1.6 U	1.6 U	1.6 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
Phenol	18 J	62 U	79 U	110 U	130 U	51 J	4.9 J	13 U	13 J	18 J	14 J	17 J	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
Pyrene	1.7 U	1.7 U	1.8 U	1.7 U	1.7 U	18 J	1.7 U	9.6 U	1.7 U	1.7 U	1.7 U	1.7 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U

TABLE G-2

SOIL ANALYTICAL RESULTS FOR SEMIVOLATILE ORGANIC COMPOUNDS (1996-2009)[1]
PSC Washougal Facility
Washougal, Washington

Concentrations in micrograms per kilogram (µg/kg)

Site ID	IAB-04	IAB-04	IAB-04	IAB-05	IAB-05	IAB-05	IAB-06	IAB-06	IAB-06	IAB-07	IAB-07	IAB-07	IAB-08	IAB-08	IAB-08	MC-107	MC-10D	MC-118D	MC-14D	MC-14D	MC-17D	MC-19D	MC-20D
Depth (in feet)	2	4	6	2	4	6	2	4	6	2	4	6	2	4	6	0	1.5	1.5	2	4	1.5	3	2.5
Analyte / Sample Date	9/15/1997	9/15/1997	9/15/1997	9/15/1997	9/15/1997	9/15/1997	9/15/1997	9/15/1997	9/15/1997	9/15/1997	9/15/1997	9/15/1997	9/15/1997	9/15/1997	9/15/1997	7/27/1999	7/26/1999	7/28/1999	9/28/2007	9/28/2007	7/27/1999	7/26/1999	9/27/2007
1,2,4-Trichlorobenzene	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	--	--	--	2.8 U	2.8 U	--	--	2.8 U
1,2-Dichlorobenzene	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	--	--	--	3.1 U	3.1 U	--	--	3.1 U
1,3-Dichlorobenzene	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	--	--	--	3.2 U	3.2 U	--	--	3.2 U
1,4-Dichlorobenzene	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	--	--	--	3.1 U	3.1 U	--	--	3.1 U
1,4-Dioxane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.47 U	0.47 U	--	--	0.48 U
1-Methylnaphthalene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,5-Trichlorophenol	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	--	--	--	1.6 U	1.6 U	--	--	1.6 U
2,4,6-Trichlorophenol	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	--	--	--	1.5 U	1.5 U	--	--	1.5 U
2,4-Dichlorophenol	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	--	--	--	1.1 U	1.1 U	--	--	1.1 U
2,4-Dimethylphenol	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	330 UJ	33 U	1700 U	--	--	33 UJ	33 U	
2,4-Dinitrophenol	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	--	--	--	18 U	18 U	--	--	18 U
2,4-Dinitrotoluene	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	--	--	--	1.6 U	1.6 U	--	--	1.6 U
2,6-Dinitrotoluene	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	--	--	--	2.1 U	2.1 U	--	--	2.2 U
2-Chloronaphthalene	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	--	--	--	1.7 U	1.7 U	--	--	1.7 U
2-Chlorophenol	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	--	--	--	2.1 U	2.1 U	--	--	2.2 U
2-Methyl-4,6-Dinitrophenol	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.5 U	1.5 U	--	--	1.5 U
2-Methylnaphthalene	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	330 U	33 U	1700 U	2.3 U	2.3 U	33 UJ	33 U	2.4 U
2-Methylphenol	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	330 UJ	33 U	1700 U	1.6 U	1.6 U	33 UJ	33 U	1.6 U
2-Nitroaniline	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	--	--	--	3.4 U	3.4 U	--	--	3.4 U
2-Nitrophenol	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	--	--	--	1.6 U	1.6 U	--	--	1.6 U
3,3'-Dichlorobenzidine	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	--	--	--	3.9 U	3.9 U	--	--	4 U
3-Nitroaniline	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	--	--	--	2.7 U	2.7 U	--	--	2.7 U
4,6-Dinitro-2-methylphenol	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	--	--	--	--	--	--	--	
4-Bromophenyl phenyl ether	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	73	33 U	33 U	33 U	--	--	--	1.7 U	1.7 U	--	--	1.7 U
4-Chloro-3-methylphenol	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	--	--	--	1.5 U	1.5 U	--	--	1.5 U
4-Chloroaniline	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	--	--	--	2 U	2 U	--	--	2.1 U
4-Chlorophenyl phenyl ether	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	--	--	--	1.5 U	1.5 U	--	--	1.5 U
4-Methylphenol	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	--	--	--	1.6 U	1.6 U	--	--	1.6 U
4-Nitroaniline	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	--	--	--	1.9 U	1.9 U	--	--	2 U
4-Nitrophenol	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	--	--	--	19 U	19 U	--	--	20 U
Acenaphthene	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	--	--	--	1.5 U	1.5 U	--	--	1.5 U
Acenaphthylene	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	--	--	--	1.3 U	1.3 U	--	--	1.3 U
Acetone	--	--	--	--	--	--	--	--	--	--	--	--	12	--	--	--	--	--	--	--	--	--	--
Acetophenone	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	1700 U	165 U	8300 U	--	--	165 UJ	165 U	
Aniline	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	--	--	--	--	--	--	--	
Anthracene	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	--	--	--	1.7 U	1.7 U	--	--	1.7 U
Azobenzene	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	--	--	--			--	--	
Benz(a)anthracene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzidine	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	--	--	--	--	--	--	--	--
Benzo(a)anthracene	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	--	--	--	1.8 U	1.8 U	--	--	1.8 J
Benzo(a)pyrene	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	--	--	--	1.8 U	1.8 U	--	--	7 J
Benzo(b)fluoranthene	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	--	--	--	1.3 U	1.3 U	--	--	4.6 J
Benzo(g,h,i)perylene	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	--	--	--	1.6 U	1.6 U	--	--	4.7 J
Benzo(k)fluoranthene	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	--	--	--	1.5 U	1.5 U	--	--	2.9 J
Benzoic acid	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	--	--	--	100 U	100 U	--	--	110 U
Benzyl alcohol	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	--	--	--	2.2 U	2.2 U	--	--	3.5 J
Bis(2-chloroethoxy)methane	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	--	--	--	1.6 U	1.6 U	--	--	1.6 U
Bis(2-chloroethyl) Ether	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	--	--	--	2 U	2 U	--	--	2.1 U
Bis(2-chloroisopropyl)ether	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	--	--	--	2.8 U	2.8 U	--	--	2.8 U
Bis(2-ethylhexyl)phthalate	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	--	--	--	9.5 J	7.3 U	--	--	13 J
Butylbenzylphthalate	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	--	--	--	3.4 U	3.4 U	--	--	3.4 U
Carbon disulfide	--	--	--	--	--	--	--	--	--	--	--	--	4.32	--	--	--	--	--	--	--	--	--	--

TABLE G-2

SOIL ANALYTICAL RESULTS FOR SEMIVOLATILE ORGANIC COMPOUNDS (1996-2009)[1]
PSC Washougal Facility
Washougal, Washington

Concentrations in micrograms per kilogram (µg/kg)

Site ID	IAB-04	IAB-04	IAB-04	IAB-05	IAB-05	IAB-05	IAB-06	IAB-06	IAB-06	IAB-07	IAB-07	IAB-07	IAB-08	IAB-08	IAB-08	MC-107	MC-10D	MC-118D	MC-14D	MC-14D	MC-17D	MC-19D	MC-20D
Depth (in feet)	2	4	6	2	4	6	2	4	6	2	4	6	2	4	6	0	1.5	1.5	2	4	1.5	3	2.5
Analyte / Sample Date	9/15/1997	9/15/1997	9/15/1997	9/15/1997	9/15/1997	9/15/1997	9/15/1997	9/15/1997	9/15/1997	9/15/1997	9/15/1997	9/15/1997	9/15/1997	9/15/1997	9/15/1997	7/27/1999	7/26/1999	7/28/1999	9/28/2007	9/28/2007	7/27/1999	7/26/1999	9/27/2007
Chrysene	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	--	--	--	1.6 U	1.6 U	--	--	4 J
Dibenz(a,h)anthracene	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	--	--	--	1.6 U	1.6 U	--	--	1.6 U
Dibenzofuran	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	--	--	--	1.3 U	1.3 U	--	--	1.3 U
Diethyl phthalate	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	--	--	--	1.4 U	1.8 UJ	--	--	3.7 UJ
Dimethyl phthalate	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	--	--	--	1.1 U	1.1 U	--	--	4 J
Di-n-butylphthalate	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	--	--	--	8.3 U	8.3 U	--	--	8.4 U
Di-n-octylphthalate	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	--	--	--	1.8 U	1.8 U	--	--	1.8 U
Fluoranthene	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	--	--	--	1.7 U	1.7 U	--	--	4.1 J
Fluorene	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	--	--	--	1.2 U	1.2 U	--	--	1.2 U
Hexachlorobenzene	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	--	--	--	1.3 U	1.3 U	--	--	1.3 U
Hexachlorobutadiene	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	--	--	--	2.7 U	2.7 U	--	--	2.7 U
Hexachlorocyclopentadiene	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	--	--	--	31 U	31 U	--	--	31 U
Hexachloroethane	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	--	--	--	3.3 U	3.3 U	--	--	3.3 U
Indeno(1,2,3-cd)pyrene	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	--	--	--	1.6 U	1.6 U	--	--	8.6 J
Isophorone	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	--	--	--	1.1 U	1.1 U	--	--	1.1 U
Naphthalene	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	330 U	33 U	1700 U	2.9 J	2.5 U	33 UJ	33 U	2.5 U
Nitrobenzene	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	--	--	--	2.3 U	2.3 U	--	--	2.4 U
N-Nitroso-di-n-propylamine	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	--	--	--	2.5 U	2.5 U	--	--	2.6 U
N-Nitrosodiphenylamine	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	--	--	--	1.7 U	1.7 U	--	--	1.7 U
Pentachlorophenol	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	167 U	--	--	--	21 U	21 U	--	--	22 U
Phenanthrene	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	--	--	--	1.5 U	1.5 U	--	--	1.8 J
Phenol	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	330 UJ	33 U	1700 U	61 U	59 U	33 UJ	33 U	27 UJ
Pyrene	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	--	--	--	1.6 U	1.6 U	--	--	3.8 J

TABLE G-2

SOIL ANALYTICAL RESULTS FOR SEMIVOLATILE ORGANIC COMPOUNDS (1996-2009)[1]
PSC Washougal Facility
Washougal, Washington

Concentrations in micrograms per kilogram (µg/kg)

Site ID	MC-20D	MC-24	MC-24	MC-25	MC-25	MC-30	MC-30	MC-31	PZU-4	PZU-4	PZU-5	PZU-5	R-1	R-10	R-2	R-3	R-4	R-5	R-6	R-7	R-8	R-9
Depth (in feet)	4.5	3	4.5	3	4.5	0	2	1	3	6	3.5	8	0	0	0	0	0	0	0	0	0	0
Analyte Sample Date	9/27/2007	9/24/2007	9/24/2007	9/24/2007	9/24/2007	9/4/2008	9/4/2008	9/4/2008	10/2/2007	10/2/2007	10/2/2007	10/2/2007	8/19/1999	8/20/1999	8/20/1999	8/20/1999	8/19/1999	8/19/1999	8/19/1999	8/19/1999	8/20/1999	8/20/1999
1,2,4-Trichlorobenzene	2.7 U	2.8 U	2.9 U	2.8 U	3.3 U	2.6 U	2.6 U	2.6 U	2.9 U	3.2 U	2.8 U	2.8 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
1,2-Dichlorobenzene	3 U	3.1 U	3.3 U	3.1 U	3.7 U	2.9 U	2.9 U	2.9 U	3.2 U	3.5 U	3.1 U	3.1 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
1,3-Dichlorobenzene	3.1 U	3.2 U	3.4 U	3.2 U	3.8 U	3 U	3 U	3 U	3.3 U	3.6 U	3.2 U	3.2 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
1,4-Dichlorobenzene	3 U	3.1 U	3.3 U	3.1 U	3.7 U	2.9 U	2.9 U	2.9 U	3.2 U	3.5 U	3.1 U	3.1 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
1,4-Dioxane	0.47 U	0.47 U	0.5 U	0.48 U	0.56 U	--	--	--	0.49 U	0.54 U	0.48 U	0.48 U	--	--	--	--	--	--	--	--	--	--
1-Methylnaphthalene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,5-Trichlorophenol	1.6 U	1.6 U	1.7 U	1.6 U	1.9 U	1.5 U	1.5 U	1.5 U	1.7 U	1.8 U	1.6 U	1.6 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
2,4,6-Trichlorophenol	1.5 U	1.5 U	1.6 U	1.5 U	1.8 U	1.4 U	1.4 U	1.4 U	1.6 U	1.7 U	1.5 U	1.5 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
2,4-Dichlorophenol	1.1 U	1.1 U	1.2 U	1.1 U	1.3 U	1 U	1 U	1 U	1.1 U	1.2 U	1.1 U	1.1 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
2,4-Dimethylphenol		5.8 U	6.1 U	5.9 U	6.9 U	5.5 U	5.5 U	5.5 U					33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
2,4-Dinitrophenol	18 U	18 U	19 U	18 U	22 U	17 U	17 U	17 U	19 U	21 U	19 U	18 U	167 U	167 U	170 U	170 U	167 U	167 U	167 U	167 U	167 U	167 U
2,4-Dinitrotoluene	1.6 U	1.6 U	1.7 U	1.6 U	1.9 U	1.5 U	1.5 U	1.5 U	1.7 U	1.8 U	1.6 U	1.6 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
2,6-Dinitrotoluene	2.1 U	2.1 U	2.3 U	2.2 U	2.5 U	2 U	2 U	2 U	2.2 U	2.4 U	2.2 U	2.2 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
2-Chloronaphthalene	1.7 U	1.7 U	1.8 U	1.7 U	2 U	1.6 U	1.6 U	1.6 U	1.8 U	2 U	1.8 U	1.7 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
2-Chlorophenol	2.1 U	2.1 U	2.3 U	2.2 U	2.5 U	2 U	2 U	2 U	2.2 U	2.4 U	2.2 U	2.2 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
2-Methyl-4,6-Dinitrophenol	1.5 U	1.5 U	1.6 U	1.5 U	1.8 U	1.4 U	1.4 U	1.4 U	1.6 U	1.7 U	1.5 U	1.5 U	--	--	--	--	--	--	--	--	--	--
2-Methylnaphthalene	2.3 U	2.3 U	2.5 U	2.4 U	2.8 U	2.2 U	2.2 U	2.2 U	2.4 U	2.7 U	2.4 U	2.4 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
2-Methylphenol	1.6 U	1.6 U	1.7 U	1.6 U	1.9 U	1.5 U	1.5 U	1.5 U	1.7 U	1.8 U	1.6 U	1.6 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
2-Nitroaniline	3.4 U	3.4 U	3.6 U	3.4 U	4 U	3.2 U	3.2 U	3.2 U	3.5 U	3.9 U	3.5 U	3.4 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U
2-Nitrophenol	1.6 U	1.6 U	1.7 U	1.6 U	1.9 U	1.5 U	1.5 U	1.5 U	1.7 U	1.8 U	1.6 U	1.6 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
3,3'-Dichlorobenzidine	3.9 U	3.9 U	4.2 U	4 U	4.6 U	3.7 U	3.7 U	3.7 U	4.1 U	4.5 U	4 U	3.9 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
3-Nitroaniline	2.6 U	2.6 U	2.8 U	2.7 U	3.2 U	2.5 U	2.5 U	2.5 U	2.8 U	3 U	2.7 U	2.7 U	167 U	167 U	170 U	170 U	167 U	167 U	167 U	167 U	167 U	167 U
4,6-Dinitro-2-methylphenol									--	--	--	--	167 U	167 U	170 U	170 U	167 U	167 U	167 U	167 U	167 U	167 U
4-Bromophenyl phenyl ether	1.7 U	1.7 U	1.8 U	1.7 U	2 U	1.6 U	1.6 U	1.6 U	1.8 U	2 U	1.8 U	1.7 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
4-Chloro-3-methylphenol	1.5 U	1.5 U	1.6 U	1.5 U	1.8 U	1.4 U	1.4 U	1.4 U	1.6 U	1.7 U	1.5 U	1.5 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U
4-Chloroaniline	2 U	2 U	2.2 U	2.1 U	2.4 U	1.9 U	1.9 U	1.9 U	2.1 U	2.3 U	2.1 U	2 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U
4-Chlorophenyl phenyl ether	1.5 U	1.5 U	1.6 U	1.5 U	1.8 U	1.4 U	1.4 U	1.4 U	1.6 U	1.7 U	1.5 U	1.5 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
4-Methylphenol	1.6 U	1.6 U	1.7 U	1.6 U	1.9 U	1.5 U	1.5 U	1.5 U	1.7 U	1.8 U	1.6 U	1.6 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
4-Nitroaniline	1.9 U	1.9 U	2 U	1.9 U	2.3 U	1.8 U	1.8 U	1.8 U	2 U	2.2 U	2 U	1.9 U	167 U	167 U	170 U	170 U	167 U	167 U	167 U	167 U	167 U	167 U
4-Nitrophenol	19 U	19 U	20 U	19 U	23 U	18 U	18 U	18 U	20 U	22 U	20 U	19 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
Acenaphthene	1.5 U	1.5 U	1.6 U	1.5 U	1.8 U	1.4 U	1.4 U	1.4 U	1.6 U	1.7 U	1.5 U	1.5 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
Acenaphthylene	1.3 U	1.3 U	1.4 U	1.3 U	1.5 U	1.2 U	1.2 U	1.2 U	1.4 U	1.5 U	1.3 U	1.3 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
Acetone	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
Acetophenone									--	--	--	--	167 U	167 U	170 U	170 U	167 U	167 U	167 U	167 U	167 U	167 U
Aniline									--	--	--	--	167 U	167 U	170 U	170 U	167 U	167 U	167 U	167 U	167 U	167 U
Anthracene	1.7 U	1.7 U	1.8 U	1.7 U	2 U	1.6 U	1.6 U	1.6 U	1.8 U	2 U	1.8 U	1.7 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
Azobenzene									--	--	--	--	--	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
Benz(a)anthracene	--	--	--	--	--	1.7 U	1.7 U	2.9 UJ	--	--	--	--	--	--	--	--	--	--	--			
Benzidine	--	--	--	--	--	--	--	--	--	--	--	--	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
Benzo(a)anthracene	1.8 U	1.8 U	1.9 U	1.8 U	2.2 U	--	--	--	1.9 U	2.1 U	1.9 U	1.8 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U
Benzo(a)pyrene	1.8 U	1.8 U	1.9 U	1.8 U	2.2 U	1.7 U	1.7 U	1.7 U	1.9 U	2.1 U	1.9 U	1.8 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
Benzo(b)fluoranthene	1.3 U	1.3 U	1.4 U	1.3 U	1.5 U	1.2 U	1.2 U	1.2 U	1.4 U	1.5 U	1.3 U	1.3 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
Benzo(g,h,i)perylene	1.6 U	1.6 U	1.7 U	1.6 U	1.9 U	1.5 U	1.5 U	4.2 J	1.7 U	1.8 U	1.6 U	1.6 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
Benzo(k)fluoranthene	1.5 U	1.5 U	1.6 U	1.5 U	1.8 U	1.4 U	1.4 U	1.4 U	1.6 U	1.7 U	1.5 U	1.5 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
Benzoic acid	100 U	--	--	--	--	96 U	96 U	96 U	110 U	120 U	110 U	110 U	167 U	167 U	170 U	170 U	167 U	167 U	167 U	167 U	167 U	167 U
Benzyl alcohol	2.2 U	2.2 U	3 J	2.4 J	3.2 J	2.1 U	2.1 U	2.1 U	2.3 U	2.6 U	2.3 U	2.8 J	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U
Bis(2-chloroethoxy)methane	1.6 U	1.6 U	1.7 U	1.6 U	1.9 U	1.5 U	1.5 U	1.5 U	1.7 U	1.8 U	1.6 U	1.6 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
Bis(2-chloroethyl) Ether	2 U	2 U	2.2 U	2.1 U	2.4 U	1.9 U	1.9 U	1.9 U	2.1 U	2.3 U	2.1 U	2 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
Bis(2-chloroisopropyl)ether	2.7 U	2.8 U	2.9 U	2.8 U	3.3 U	2.6 U	2.6 U	2.6 U	2.9 U	3.2 U	2.8 U	2.8 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
Bis(2-ethylhexyl)phthalate	7.3 U	140	130	370	750	7 U	7 U	8.6 J	7.7 U	8.4 U	7.5 U	7.4 U	167 U	167 U	170 U	170 U	167 U	167 U	167 U	167 U	167 U	167 U
Butylbenzylphthalate	3.4 U	3.4 U	3.6 U	3.4 U	4 U	3.2 U	3.2 U	3.2 U	3.5 U	3.9 U	3.5 U	3.4 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
Carbon disulfide	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE G-2

SOIL ANALYTICAL RESULTS FOR SEMIVOLATILE ORGANIC COMPOUNDS (1996-2009)[1]
PSC Washougal Facility
Washougal, Washington

Concentrations in micrograms per kilogram (µg/kg)

Site ID	MC-20D	MC-24	MC-24	MC-25	MC-25	MC-30	MC-30	MC-31	PZU-4	PZU-4	PZU-5	PZU-5	R-1	R-10	R-2	R-3	R-4	R-5	R-6	R-7	R-8	R-9
Depth (in feet)	4.5	3	4.5	3	4.5	0	2	1	3	6	3.5	8	0	0	0	0	0	0	0	0	0	0
Analyte Sample Date	9/27/2007	9/24/2007	9/24/2007	9/24/2007	9/24/2007	9/4/2008	9/4/2008	9/4/2008	10/2/2007	10/2/2007	10/2/2007	10/2/2007	8/19/1999	8/20/1999	8/20/1999	8/20/1999	8/19/1999	8/19/1999	8/19/1999	8/19/1999	8/20/1999	8/20/1999
Chrysene	1.6 U	1.6 U	1.7 U	1.6 U	1.9 U	1.5 U	1.5 U	3.5 UJ	1.7 U	1.8 U	1.6 U	1.6 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
Dibenz(a,h)anthracene	1.6 U	1.6 U	1.7 U	1.6 U	1.9 U	1.5 U	1.5 U	1.5 U	1.7 U	1.8 U	1.6 U	1.6 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
Dibenzofuran	1.3 U	1.3 U	1.4 U	1.3 U	1.5 U	1.2 U	1.2 U	1.2 U	1.4 U	1.5 U	1.3 U	1.3 U	167 U	167 U	170 U	170 U	167 U	167 U	167 U	167 U	167 U	167 U
Diethyl phthalate	1.5 UJ	1.4 U	1.5 U	1.4 U	6.7 J	1.9 J	1.3 U	2.1 J	1.5 U	1.6 U	2 UJ	1.4 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
Dimethyl phthalate	1.1 U	8.1	2.7 J	1.1 U	1.3 U	1 U	1 U	13	1.1 U	1.2 U	1.1 U	1.1 U	193.83	33 U	37.66	45.33	33 U	53.87	33 U	33 U	33 U	33 U
Di-n-butylphthalate	8.2 U	17	15 J	37	46	11 J	11 J	11 J	8.6 U	9.5 U	8.5 U	8.3 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
Di-n-octylphthalate	1.8 U	1.8 U	1.9 U	1.8 U	2.2 U	1.7 U	1.7 U	1.7 U	1.9 U	2.1 U	1.9 U	1.8 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
Fluoranthene	1.7 U	1.7 U	1.8 U	1.7 U	3.4 J	1.6 U	1.6 U	4.2 UJ	1.8 U	2 U	1.8 U	1.7 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
Fluorene	1.2 U	1.2 U	1.3 U	1.2 U	1.4 U	1.1 U	1.1 U	1.1 U	1.2 U	1.4 U	1.2 U	1.2 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
Hexachlorobenzene	1.3 U	1.3 U	1.4 U	1.3 U	1.5 U	1.2 U	1.2 U	1.2 U	1.4 U	1.5 U	1.3 U	1.3 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
Hexachlorobutadiene	2.6 U	2.6 U	2.8 U	2.7 U	3.2 U	2.5 U	2.5 U	2.5 U	2.8 U	3 U	2.7 U	2.7 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
Hexachlorocyclopentadiene	30 U	31 U	33 U	31 U	37 U	29 U	29 U	29 U	32 U	35 U	31 U	31 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
Hexachloroethane	3.2 U	3.3 U	3.5 U	3.3 U	3.9 U	3.1 U	3.1 U	3.1 U	3.4 U	3.8 U	3.3 U	3.3 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
Indeno(1,2,3-cd)pyrene	1.6 U	1.6 U	1.7 U	1.6 U	1.9 U	1.5 U	1.5 U	1.5 U	1.7 U	1.8 U	1.6 U	1.6 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
Isophorone	1.1 U	1.1 U	1.2 U	1.5 J	1.3 U	1 U	1 U	1 U	1.1 U	1.2 U	1.1 U	1.1 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
Naphthalene	2.8 J	2.4 U	2.6 U	2.5 U	2.9 U	2.3 U	2.3 U	2.3 U	2.5 U	2.8 U	2.5 U	2.6 J	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
Nitrobenzene	2.3 U	2.3 U	2.5 U	2.4 U	2.8 U	2.2 U	2.2 U	2.2 U	2.4 U	2.7 U	2.4 U	2.4 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
N-Nitroso-di-n-propylamine	2.5 U	2.5 U	2.7 U	2.6 U	3 U	2.4 U	2.4 U	2.4 U	2.7 U	2.9 U	2.6 U	2.6 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
N-Nitrosodiphenylamine	1.7 U	1.7 U	1.8 U	1.7 U	2 U	1.6 U	1.6 U	1.6 U	1.8 U	2 U	1.8 U	1.7 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
Pentachlorophenol	21 U	21 U	23 U	22 U	25 U	20 U	20 U	20 U	22 U	24 U	22 U	22 U	167 U	167 U	170 U	170 U	167 U	167 U	167 U	167 U	167 U	167 U
Phenanthrene	1.5 U	1.5 U	1.6 U	1.5 U	3.2 J	1.4 U	1.4 U	1.5 UJ	1.6 U	1.7 U	1.5 U	1.5 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
Phenol	39 U	7.5 UJ	16 UJ	24 UJ	22 UJ	2 U	2 U	2 U	78 U	74 U	63 U	67 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U
Pyrene	1.6 U	1.6 U	1.7 U	1.6 U	3.1 J	1.5 U	1.5 U	5.4 UJ	1.7 U	1.8 U	1.6 U	1.6 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U	33 U

Notes
1. Laboratory Data flags are as follows:
J = value is an estimate.
U = not detected at reporting limit listed.
UJ = Value is an estimate at reporting limit listed.

Abbreviations
-- = not available

TABLE G-3

SOIL ANALYTICAL RESULTS FOR PESTICIDES AND POLYCHLORINATED BIPHENYLS (1996-2009)[1]

PSC Washougal Facility
Washougal, Washington

Concentrations in micrograms per kilogram (µg/kg)

Site ID	B-1	B-10	B-11	B-12	B-13	B-14	B-15	B-16	B-17	B-18	B-19	B-2	B-20	B-21
Depth (in feet)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Analyte / Sample Date	8/19/1999	8/20/1999	8/20/1999	8/20/1999	8/20/1999	8/19/1999	8/20/1999	8/20/1999	8/19/1999	8/19/1999	8/19/1999	8/19/1999	8/19/1999	8/19/1999
4,4'-DDD	0.0289 U	0.0277 U	0.0283 U	0.0284 U	0.0283 U	0.0289 U	0.0285 U	0.0283 U	2.22	0.0286 U	0.0282 U	0.0297 U	0.0287 U	0.0266 U
4,4'-DDE	0.0289 U	0.0277 U	0.0283 U	0.0284 U	0.6184	0.0289 U	0.0285 U	0.0283 U	0.371	0.0286 U	0.0282 U	0.0297 U	0.0287 U	0.0266 U
4,4'-DDT	0.0289 U	0.0277 U	0.0283 U	0.0284 U	0.0283 U	0.0289 U	0.0285 U	0.0283 U	0.0283 U	0.0286 U	0.0282 U	0.0297 U	0.0287 U	0.0266 U
Aldrin	0.0145 U	0.0138 U	0.0141 U	0.0142 U	0.0141 U	0.0145 U	0.0143 U	0.0142 U	0.0142 U	0.0143 U	0.0141 U	0.0149 U	0.0142 U	0.1436 U
alpha-BHC	0.0145 U	0.0138 U	0.0141 U	0.0142 U	0.0141 U	0.0145 U	0.0143 U	0.0142 U	0.0142 U	0.0143 U	0.0141 U	0.0149 U	0.0142 U	0.1436 U
alpha-Chlordane	0.0145 U	0.0138 U	0.0141 U	5.9	0.0141 U	0.0145 U	0.0143 U	0.0142 U	0.0142 U	0.0143 U	0.0141 U	0.0149 U	0.0142 U	0.1436 U
Aroclor 1016	1072 U	513 U	518 U	517 U	511 U	596 U	519 U	515 U	509 U	498 U	523 U	548 U	792 U	518 U
Aroclor 1221	1072 U	513 U	518 U	517 U	511 U	596 U	519 U	515 U	509 U	498 U	523 U	548 U	792 U	518 U
Aroclor 1232	1072 U	513 U	518 U	517 U	511 U	596 U	519 U	515 U	509 U	498 U	523 U	548 U	792 U	518 U
Aroclor 1242	1072 U	513 U	518 U	517 U	511 U	596 U	519 U	515 U	509 U	498 U	523 U	548 U	792 U	518 U
Aroclor 1248	1072 U	513 U	518 U	517 U	511 U	596 U	519 U	515 U	509 U	498 U	523 U	548 U	792 U	518 U
Aroclor 1254	1072 U	513 U	518 U	517 U	511 U	596 U	519 U	515 U	509 U	498 U	523 U	548 U	792 U	518 U
Aroclor 1260	1072 U	513 U	518 U	517 U	511 U	596 U	519 U	515 U	509 U	498 U	523 U	548 U	792 U	518 U
beta-BHC	0.0145 U	0.0138 U	0.0141 U	0.0142 U	0.0141 U	0.0145 U	0.0143 U	0.0142 U	0.0142 U	0.0143 U	0.0141 U	0.0149 U	0.0142 U	0.1436 U
delta-BHC	0.0145 U	0.0138 U	0.0141 U	0.766	0.0141 U	0.0145 U	0.0143 U	0.0142 U	0.291	0.0143 U	0.0141 U	0.0149 U	0.0142 U	0.1436 U
Dieldrin	1.12	0.0277 U	0.0283 U	13.53	2.8	0.0289 U	0.0285 U	0.0283 U	0.0283 U	0.0286 U	0.0282 U	0.0297 U	0.0287 U	0.0266 U
Endosulfan I	0.0145 U	0.0138 U	0.0141 U	0.0142 U	0.0141 U	0.0145 U	0.0143 U	0.0142 U	0.0142 U	0.0143 U	0.0141 U	2.009	0.0142 U	0.1436 U
Endosulfan II	0.0289 U	0.0277 U	0.0283 U	2.87	0.0283 U	0.0289 U	0.0285 U	0.0283 U	0.0283 U	0.0286 U	0.0282 U	0.0297 U	0.0287 U	0.0266 U
Endosulfan sulfate	0.0289 U	0.0277 U	0.0283 U	0.0284 U	9.389	0.0289 U	0.0285 U	0.0283 U	0.0283 U	0.0286 U	0.0282 U	0.0297 U	0.0287 U	0.0266 U
Endrin	0.0289 U	0.0277 U	0.0283 U	0.0284 U	0.0283 U	0.0289 U	0.0285 U	0.0283 U	0.0283 U	0.0286 U	0.0282 U	1.7	0.0287 U	0.0266 U
Endrin aldehyde	0.0289 U	0.0138 U	0.0141 U	0.0142 U	0.0141 U	0.0289 U	0.0143 U	0.0142 U	0.0142 U	0.0143 U	0.0141 U	0.0149 U	0.0142 U	0.1436 U
Endrin ketone	0.0289 U	0.0277 U	0.0283 U	0.0284 U	0.0283 U	0.0289 U	0.0285 U	0.0283 U	0.0283 U	0.0286 U	0.0282 U	1.58	0.0287 U	0.0287 U
gamma-BHC	--	--	--	--	--	--	--	--	--	--	--	--	--	--
gamma-Chlordane	0.0145 U	0.0138 U	0.0141 U	0.0142 U	0.0141 U	0.0145 U	0.0143 U	0.0142 U	0.0142 U	0.0143 U	0.0141 U	0.0149 U	0.0142 U	0.1436 U
Heptachlor	0.0145 U	0.0138 U	0.0141 U	0.0142 U	0.0141 U	0.0145 U	0.0143 U	0.0142 U	0.0142 U	0.0143 U	0.0141 U	0.0149 U	0.0142 U	0.1436 U
Heptachlor epoxide	0.0145 U	0.0138 U	0.0141 U	0.0142 U	0.0141 U	0.0145 U	0.0143 U	0.0142 U	0.0142 U	0.0143 U	0.0141 U	0.0149 U	0.0142 U	0.1436 U
Lindane	0.0145 U	0.0138 U	0.0141 U	0.0142 U	0.0141 U	0.0145 U	0.0143 U	0.343	0.364	0.0143 U	0.0141 U	0.0149 U	0.0142 U	0.1436 U
Methoxychlor	0.157 U	0.138 U	0.141 U	0.0153 U	0.141 U	0.1451 U	0.143 U	0.142 U	4.81	0.143 U	0.141 U	0.148 U	0.142 U	0.1436 U
Toxaphene	0.0325 U	0.0311 U	0.0318 U	0.0319 U	0.0317 U	0.0325 U	0.0322 U	0.0319 U	0.0318 U	0.0322 U	0.0317 U	0.033 U	0.0321 U	0.0324 U

TABLE G-3

SOIL ANALYTICAL RESULTS FOR PESTICIDES AND POLYCHLORINATED BIPHENYLS (1996-2009)[1]

PSC Washougal Facility
Washougal, Washington

Concentrations in micrograms per kilogram (µg/kg)

Site ID	B-22	B-3	B-4	B-5	B-6	B-7	B-8	B-9	GP-91	GP-91	GP-92	GP-92	GP-93	GP-93
Depth (in feet)	0	0	0	0	0	0	0	0	2	3	2	3	1.5	5.5
Analyte / Sample Date	8/20/1999	8/19/1999	8/20/1999	8/20/1999	8/20/1999	8/20/1999	8/20/1999	8/20/1999	10/5/2007	10/5/2007	10/3/2007	10/3/2007	10/3/2007	10/3/2007
4,4'-DDD	0.0287 U	29.26	0.0278 U	0.0283 U	0.0278 U	0.0285 U	0.0279 U	0.028 U	0.13 U	0.14 U	0.12 U	0.12 U	0.12 U	0.12 U
4,4'-DDE	0.0287 U	4.77	0.0278 U	0.0283 U	0.0278 U	0.0285 U	0.0279 U	0.028 U	0.11 U	0.12 U	0.096 U	0.093 U	0.097 U	0.097 U
4,4'-DDT	0.0287 U	11.09	0.0278 U	0.0283 U	0.0278 U	0.0285 U	0.0279 U	0.028 U	0.37 J	0.075 U	0.061 U	0.11 U	0.47 U	0.26 U
Aldrin	0.0142 U	0.014 U	0.0139 U	0.0142 U	0.0139 U	0.0142 U	0.0139 U	0.0141 U	0.17 U	0.18 U	0.15 U	0.14 U	0.15 U	0.15 U
alpha-BHC	0.0142 U	0.014 U	0.0139 U	0.0142 U	0.0139 U	0.0142 U	0.0139 U	0.0141 U	0.28 U	0.31 U	0.25 U	0.25 U	0.25 U	0.25 U
alpha-Chlordane	0.0142 U	0.014 U	0.0139 U	0.0142 U	0.0139 U	0.0142 U	0.0139 U	0.0141 U	0.25 U	0.27 U	0.22 U	0.98 U	0.23 U	0.23 U
Aroclor 1016	524 U	509 U	504 U	518 U	511 U	516 U	519 U	523 U	1.9 U	2 U	1.9 U	1.9 U	1.9 U	2 U
Aroclor 1221	524 U	509 U	504 U	518 U	511 U	516 U	519 U	523 U	1.9 U	2 U	1.9 U	6.7 U	1.9 U	2 U
Aroclor 1232	524 U	509 U	504 U	518 U	511 U	516 U	519 U	523 U	1.9 U	2 U	1.9 U	4.6 U	1.9 U	2 U
Aroclor 1242	524 U	509 U	504 U	518 U	511 U	516 U	519 U	523 U	1.9 U	2 U	1.9 U	1.9 U	1.9 U	2 U
Aroclor 1248	524 U	509 U	504 U	518 U	511 U	516 U	519 U	523 U	1.9 U	2 U	1.9 U	1.9 U	1.9 U	2 U
Aroclor 1254	524 U	509 U	504 U	518 U	511 U	516 U	519 U	523 U	1.9 U	2 U	1.9 U	1.9 U	1.9 U	2 U
Aroclor 1260	524 U	509 U	504 U	518 U	511 U	516 U	519 U	523 U	1.9 U	2 U	1.9 U	1.9 U	1.9 U	2 U
beta-BHC	0.0142 U	0.014 U	0.0139 U	0.0142 U	0.0139 U	0.0142 U	0.0139 U	0.0141 U	0.33 U	0.35 U	0.29 U	1.8 J	0.29 U	0.29 U
delta-BHC	0.0142 U	0.014 U	0.0139 U	0.0142 U	0.0139 U	0.0142 U	0.0139 U	0.0141 U	0.06 U	0.064 U	0.053 U	0.051 U	0.053 U	0.75 U
Dieldrin	0.0287 U	1.35	0.0278 U	0.0283 U	0.0278 U	0.0285 U	0.0279 U	0.028 U	0.32 U	0.34 U	0.28 U	0.27 U	0.28 U	0.28 U
Endosulfan I	0.0142 U	0.014 U	0.0139 U	0.0142 U	0.0139 U	0.0142 U	0.0139 U	0.0141 U	0.19 U	0.2 U	0.17 U	0.16 U	0.17 U	0.17 U
Endosulfan II	0.0287 U	0.027 U	0.0278 U	0.0283 U	0.0278 U	0.0285 U	0.0279 U	0.028 U	0.21 U	0.23 U	0.19 U	0.18 U	0.19 U	0.19 U
Endosulfan sulfate	0.0287 U	0.027 U	0.0278 U	0.0283 U	0.0278 U	0.0285 U	0.0279 U	0.028 U	0.085 U	0.092 U	0.076 U	0.074 U	0.77 U	0.076 U
Endrin	0.0287 U	0.027 U	0.0278 U	0.0283 U	0.0278 U	0.0285 U	0.0279 U	0.028 U	0.22 U	0.24 U	0.2 U	0.48 U	0.2 U	0.2 U
Endrin aldehyde	0.0142 U	0.014 U	0.0139 U	0.0142 U	0.0139 U	0.0142 U	0.0139 U	0.0141 U	0.057 U	0.062 U	0.051 U	0.05 U	0.3 U	0.081 U
Endrin ketone	0.0287 U	0.027 U	0.0278 U	0.0283 U	0.0278 U	0.0285 U	0.0279 U	0.028 U	0.088 U	0.096 U	0.079 U	0.076 U	1.3 U	0.18 U
gamma-BHC	--	--	--	--	--	--	--	--	0.17 U	0.18 U	0.15 U	0.14 U	0.3 U	0.15 U
gamma-Chlordane	0.0142 U	0.014 U	0.0139 U	0.0142 U	0.0139 U	0.0142 U	0.0139 U	0.0141 U	0.069 U	0.075 U	0.061 U	0.95 U	0.16 U	0.49 U
Heptachlor	0.0142 U	0.014 U	0.0139 U	0.0142 U	0.0139 U	0.0142 U	0.0132 U	0.0141 U	0.086 U	0.093 U	0.077 U	0.075 U	0.26 U	0.077 U
Heptachlor epoxide	0.0142 U	0.014 U	0.0139 U	0.0142 U	0.0139 U	0.0142 U	0.0139 U	0.0141 U	0.14 U	0.16 U	0.33 U	2.8 J	0.62 J	0.48 U
Lindane	0.0142 U	0.014 U	0.0139 U	0.0142 U	0.0139 U	0.0142 U	0.0139 U	0.0141 U	--	--	--	--	--	--
Methoxychlor	0.143 U	0.137 U	0.139 U	0.142 U	0.139 U	0.142 U	0.139 U	0.141 U	0.11 U	0.12 U	0.096 U	0.093 U	0.66 U	0.14 U
Toxaphene	0.0323 U	0.031 U	0.0313 U	0.0319 U	0.0313 U	0.032 U	0.0314 U	0.0315 U	9.7 U	11 U	8.6 U	11 U	20 U	14 U

TABLE G-3

SOIL ANALYTICAL RESULTS FOR PESTICIDES AND POLYCHLORINATED BIPHENYLS (1996-2009)[1]

PSC Washougal Facility
Washougal, Washington

Concentrations in micrograms per kilogram (µg/kg)

Site ID	GP-94	GP-94	GP-95	GP-95	GP-96	GP-96	GP-97	GP-97	GP-97	GP-98	GP-98	GP-99
Depth (in feet)	3	5.5	2.5	4	2	3.5	2.5	5.5	8	1.5	2.5	1.5
Analyte / Sample Date	10/4/2007	10/4/2007	10/1/2007	10/1/2007	10/3/2007	10/3/2007	10/5/2007	10/5/2007	10/5/2007	10/4/2007	10/4/2007	10/4/2007
4,4'-DDD	0.13 U	0.14 U	0.12 U	0.12 U	0.12 U	0.12 U	0.87 U	0.28 J	1.1 U	0.12 U	0.12 U	0.12 U
4,4'-DDE	0.29 U	0.12 U	0.095 U	0.098 U	0.095 U	0.097 U	0.15 U	0.12 U	0.13 U	0.1 U	0.099 U	0.098 U
4,4'-DDT	0.068 U	0.071 U	0.061 U	0.063 U	0.061 U	0.062 U	2.2 U	0.89 U	0.39 U	0.064 U	0.063 U	0.2 J
Aldrin	0.16 U	0.17 U	0.15 U	0.15 U	0.15 U	0.15 U	0.17 U	0.17 U	0.2 U	0.15 U	0.15 U	0.15 U
alpha-BHC	0.28 U	0.29 U	0.25 U	0.26 U	0.25 U	0.25 U	0.29 U	0.29 U	0.34 U	0.26 U	0.26 U	0.26 U
alpha-Chlordane	0.25 U	0.26 U	0.22 U	0.27 U	0.22 U	0.23 U	0.26 U	0.26 U	0.3 U	0.23 U	0.23 U	0.23 U
Aroclor 1016	1.8 U	1.9 U	--	2 U	--	1.9 U	--	4.5 U	11 U	--	1.9 U	--
Aroclor 1221	1.8 U	1.9 U	--	2 U	--	1.9 U	--	1.9 U	30 U	--	1.9 U	--
Aroclor 1232	1.8 U	1.9 U	--	2 U	--	1.9 U	--	5.3 U	23 U	--	1.9 U	--
Aroclor 1242	1.8 U	1.9 U	--	2 U	--	1.9 U	--	4.4 U	11 U	--	1.9 U	--
Aroclor 1248	1.8 U	1.9 U	--	2 U	--	1.9 U	--	1.9 U	4.9 U	--	1.9 U	--
Aroclor 1254	1.8 U	1.9 U	--	2 U	--	1.9 U	--	1.9 U	7.3 U	--	1.9 U	--
Aroclor 1260	1.8 U	1.9 U	--	2 U	--	1.9 U	--	3.3 J	4.5 U	--	1.9 U	--
beta-BHC	0.32 U	0.34 U	0.29 U	0.3 U	0.29 U	0.29 U	0.33 U	1.4 U	1.1 U	0.3 U	0.72 U	0.3 U
delta-BHC	0.058 U	0.061 U	0.052 U	0.054 U	0.052 U	0.057 U	0.06 U	0.061 U	0.071 U	0.055 U	0.054 U	0.054 U
Dieldrin	0.31 U	0.33 U	0.28 U	0.29 U	0.28 U	0.28 U	0.32 U	0.32 U	0.38 U	0.29 U	0.29 U	0.29 U
Endosulfan I	0.18 U	0.19 U	0.17 U	0.17 U	0.17 U	0.17 U	0.19 U	0.19 U	0.27 J	0.17 U	0.17 U	0.17 U
Endosulfan II	0.2 U	0.21 U	0.18 U	0.19 U	0.18 U	0.19 U	0.21 U	0.21 U	0.25 U	0.19 U	0.19 U	0.19 U
Endosulfan sulfate	0.083 U	0.088 U	0.11 U	0.077 U	0.075 U	0.076 U	0.26 J	0.46 J	0.11 U	0.079 U	0.078 U	0.077 U
Endrin	0.21 U	0.23 U	0.19 U	0.2 U	0.19 U	0.2 U	0.22 U	0.23 U	0.26 U	0.2 U	0.2 U	0.2 U
Endrin aldehyde	0.056 U	0.059 U	0.11 U	0.052 U	0.05 U	0.051 U	0.44 J	0.2 U	0.068 U	0.053 U	0.052 U	0.052 U
Endrin ketone	0.086 U	0.091 U	0.53 U	0.08 U	0.078 U	0.079 U	0.87 U	0.89 U	0.53 U	0.082 U	0.081 U	0.08 U
gamma-BHC	0.18 J	0.17 U	0.15 U	0.15 U	0.15 U	0.15 U	0.17 U	0.17 U	0.2 U	0.15 U	0.15 U	0.15 U
gamma-Chlordane	0.43 U	0.88 U	0.11 J	0.24 U	0.061 U	0.062 U	0.87 U	0.071 U	0.68 U	0.064 U	0.063 U	0.063 U
Heptachlor	0.084 U	0.089 U	0.076 U	0.078 U	0.076 U	0.077 U	0.22 U	0.089 U	1.1 U	0.08 U	0.12 U	0.078 U
Heptachlor epoxide	0.31 J	0.15 U	0.13 U	0.13 U	1 J	0.13 U	0.15 U	0.15 U	0.17 U	0.44 U	0.13 U	0.13 U
Lindane	--	--	--	--	--	--	--	--	--	--	--	--
Methoxychlor	0.11 U	0.12 U	0.67 U	0.11 U	0.095 U	0.097 U	0.87 U	0.13 U	0.13 U	0.1 U	0.099 U	0.098 U
Toxaphene	9.5 U	10 U	14 U	8.8 U	8.5 U	8.7 U	82 U	21 U	55 U	9 U	8.9 U	8.8 U

TABLE G-3

SOIL ANALYTICAL RESULTS FOR PESTICIDES AND POLYCHLORINATED BIPHENYLS (1996-2009)[1]

PSC Washougal Facility
Washougal, Washington

Concentrations in micrograms per kilogram (µg/kg)

Site ID	GP-99	MC-14D	MC-14D	MC-20D	MC-20D	MC-24	MC-24	MC-25	MC-25	PZU-4	PZU-4	PZU-5	PZU-5	R-1
Depth (in feet)	2.5	2	4	2.5	4.5	3	4.5	3	4.5	3	6	3.5	8	0
Analyte / Sample Date	10/4/2007	9/28/2007	9/28/2007	9/27/2007	9/27/2007	9/24/2007	9/24/2007	9/24/2007	9/24/2007	10/2/2007	10/2/2007	10/2/2007	10/2/2007	8/19/1999
4,4'-DDD	0.14 U	0.12 U	0.11 U	0.12 U	0.11 U	0.13 U	0.14 U	0.13 U	0.15 U	0.12 U	0.13 U	0.12 U	0.12 U	0.0274 U
4,4'-DDE	0.89 U	0.093 U	0.091 U	0.092 U	0.091 U	0.11 U	0.12 U	0.11 U	0.13 U	0.095 U	0.11 U	0.093 U	0.092 U	0.0274 U
4,4'-DDT	0.071 U	0.06 U	0.059 U	0.3 J	0.059 U	0.66 J	0.59 U	0.068 U	0.08 U	0.061 U	0.068 U	0.06 U	0.059 U	0.0274 U
Aldrin	0.17 U	0.14 U	0.14 U	0.14 U	0.14 U	0.16 U	0.17 U	0.16 U	0.19 U	0.15 U	0.16 U	0.14 U	0.14 U	0.0137 U
alpha-BHC	0.29 U	0.25 U	0.24 U	0.24 U	0.24 U	0.28 U	0.29 U	0.28 U	0.33 U	0.25 U	0.28 U	0.25 U	0.24 U	0.0137 U
alpha-Chlordane	0.26 U	0.22 U	0.21 U	0.22 U	0.21 U	0.24 U	0.26 U	0.25 U	0.29 U	0.22 U	0.25 U	0.22 U	0.22 U	0.0137 U
Aroclor 1016	1.9 U	--	1.8 U	--	1.8 U	--	1.9 U	--	2.2 U	--	2.1 U	--	1.8 U	517 U
Aroclor 1221	1.9 U	--	1.8 U	--	1.8 U	--	1.9 U	--	2.2 U	--	2.1 U	--	1.8 U	517 U
Aroclor 1232	1.9 U	--	1.8 U	--	1.8 U	--	1.9 U	--	2.2 U	--	2.1 U	--	1.8 U	517 U
Aroclor 1242	1.9 U	--	1.8 U	--	1.8 U	--	1.9 U	--	2.2 U	--	2.1 U	--	1.8 U	517 U
Aroclor 1248	1.9 U	--	1.8 U	--	1.8 U	--	1.9 U	--	2.2 U	--	2.1 U	--	1.8 U	517 U
Aroclor 1254	1.9 U	--	1.8 U	--	1.8 U	--	1.9 U	--	2.2 U	--	2.1 U	--	1.8 U	517 U
Aroclor 1260	1.9 U	--	1.8 U	--	1.8 U	--	1.9 U	--	2.2 U	--	2.1 U	--	1.8 U	517 U
beta-BHC	0.34 U	0.28 U	0.28 U	0.28 U	0.28 U	0.32 U	0.34 U	0.32 U	0.55 J	0.29 U	0.32 U	0.34 U	0.58 U	0.0137 U
delta-BHC	0.31 U	0.051 U	0.05 U	0.1 J	0.05 U	0.058 U	0.061 U	0.19 U	0.31 J	0.052 U	0.059 U	0.058 U	0.051 U	0.0137 U
Dieldrin	0.33 U	0.27 U	0.27 U	0.27 U	0.27 U	0.31 U	0.33 U	0.31 U	0.37 U	0.28 U	0.31 U	0.27 U	0.27 U	0.0274 U
Endosulfan I	0.19 U	0.16 U	0.16 U	0.16 U	0.16 U	0.18 U	0.19 U	0.18 U	0.22 U	0.17 U	0.18 U	0.16 U	0.16 U	0.0137 U
Endosulfan II	0.22 U	0.18 U	0.18 U	0.18 U	0.18 U	0.2 U	0.22 U	0.21 U	0.24 U	0.18 U	0.21 U	0.18 U	0.18 U	0.0274 U
Endosulfan sulfate	0.088 U	0.074 U	0.072 U	0.073 U	0.072 U	0.083 U	0.088 U	0.084 U	0.099 U	0.075 U	0.084 U	0.074 U	0.073 U	0.0274 U
Endrin	0.23 U	0.19 U	0.19 U	0.19 U	0.19 U	0.21 U	0.23 U	0.22 U	0.25 U	0.19 U	0.22 U	0.19 U	0.19 U	0.0274 U
Endrin aldehyde	0.059 U	0.05 U	0.049 U	0.049 U	0.049 U	0.056 U	0.059 U	0.056 U	0.066 U	0.05 U	0.057 U	0.05 U	0.049 U	0.0137 U
Endrin ketone	0.091 U	0.076 U	0.075 U	0.076 U	0.075 U	0.086 U	0.091 U	0.087 U	0.11 U	0.078 U	0.087 U	0.076 U	0.076 U	0.614
gamma-BHC	0.17 U	0.14 U	0.14 U	0.14 U	0.14 U	0.16 U	0.17 U	0.16 U	0.19 U	0.15 U	0.16 U	0.14 U	0.14 U	--
gamma-Chlordane	0.071 U	0.06 U	0.059 U	0.24 U	0.059 U	0.067 U	0.071 U	0.068 U	0.08 U	0.061 U	0.068 U	0.06 U	0.059 U	0.0137 U
Heptachlor	0.089 U	0.075 U	0.073 U	0.074 U	0.073 U	0.084 U	0.089 U	0.085 U	0.1 U	0.076 U	0.085 U	0.075 U	0.074 U	0.0137 U
Heptachlor epoxide	0.15 U	0.13 U	0.12 U	0.15 U	0.62 U	0.14 U	0.15 U	0.14 U	0.17 U	0.13 U	0.14 U	0.13 U	0.12 U	0.0137 U
Lindane	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0137 U
Methoxychlor	0.12 U	0.093 U	0.091 U	0.12 U	0.091 U	0.11 U	0.12 U	0.11 U	0.13 U	0.095 U	0.11 U	0.093 U	0.092 U	0.132 U
Toxaphene	10 U	8.4 U	8.2 U	8.3 U	8.2 U	9.4 U	10 U	9.5 U	12 U	8.5 U	9.6 U	8.4 U	8.3 U	0.0309 U

TABLE G-3

SOIL ANALYTICAL RESULTS FOR PESTICIDES AND POLYCHLORINATED BIPHENYLS (1996-2009)[1]

PSC Washougal Facility
Washougal, Washington

Concentrations in micrograms per kilogram (µg/kg)

Site ID	R-10	R-2	R-3	R-4	R-5	R-6	R-7	R-8	R-9
Depth (in feet)	0	0	0	0	0	0	0	0	0
Analyte / Sample Date	8/20/1999	8/20/1999	8/20/1999	8/19/1999	8/19/1999	8/19/1999	8/19/1999	8/20/1999	8/20/1999
4,4'-DDD	0.0281 U	0.0274 U	0.0282 U	0.0283 U	0.0278 U	0.028 U	0.0276 U	0.0278 U	0.0278 U
4,4'-DDE	0.0281 U	0.0274 U	0.0282 U	0.0283 U	0.0278 U	0.028 U	0.0276 U	0.0278 U	0.0278 U
4,4'-DDT	0.0281 U	0.0274 U	0.0282 U	0.0283 U	0.0278 U	0.028 U	0.0276 U	0.0278 U	0.0278 U
Aldrin	0.014 U	0.014 U	0.0141 U	0.0141 U	0.0139 U	0.014 U	0.0138 U	0.0138 U	0.014 U
alpha-BHC	0.014 U	0.014 U	0.0141 U	0.0141 U	0.0139 U	0.014 U	0.0138 U	0.0138 U	0.014 U
alpha-Chlordane	0.014 U	0.014 U	0.0141 U	0.0141 U	0.0139 U	0.014 U	0.0138 U	0.0138 U	0.014 U
Aroclor 1016	518 U	503 U	519 U	509 U	127 U	496 U	522 U	483 U	492 U
Aroclor 1221	518 U	503 U	519 U	509 U	127 U	496 U	522 U	483 U	492 U
Aroclor 1232	518 U	503 U	519 U	509 U	127 U	496 U	522 U	483 U	492 U
Aroclor 1242	518 U	503 U	519 U	509 U	127 U	496 U	522 U	483 U	492 U
Aroclor 1248	518 U	503 U	519 U	509 U	127 U	496 U	522 U	483 U	492 U
Aroclor 1254	518 U	503 U	519 U	509 U	127 U	496 U	522 U	483 U	492 U
Aroclor 1260	518 U	503 U	519 U	509 U	127 U	496 U	522 U	483 U	492 U
beta-BHC	0.014 U	0.014 U	0.0141 U	0.0141 U	0.0139 U	0.014 U	0.0138 U	0.0138 U	0.014 U
delta-BHC	0.014 U	0.014 U	0.0141 U	0.0141 U	0.0139 U	0.014 U	0.0132 U	0.0138 U	0.014 U
Dieldrin	0.0281 U	0.0274 U	0.0282 U	0.0283 U	0.0278 U	0.028 U	0.0276 U	0.0278 U	0.0278 U
Endosulfan I	0.014 U	0.014 U	0.0141 U	0.0141 U	0.0139 U	0.014 U	0.0138 U	0.0138 U	0.014 U
Endosulfan II	0.0281 U	0.0274 U	0.0282 U	0.0283 U	0.0278 U	0.028 U	0.0276 U	0.0278 U	0.0278 U
Endosulfan sulfate	0.0281 U	0.0274 U	0.0282 U	0.0283 U	0.0278 U	0.028 U	0.0276 U	0.0278 U	0.0278 U
Endrin	0.0281 U	0.0274 U	0.0282 U	0.0283 U	0.0278 U	0.028 U	0.0276 U	0.0278 U	0.0278 U
Endrin aldehyde	0.014 U	0.014 U	0.0141 U	0.0141 U	0.0139 U	0.014 U	0.0138 U	0.0138 U	0.014 U
Endrin ketone	0.0281 U	0.0274 U	0.0282 U	0.0283 U	0.0278 U	0.028 U	0.0276 U	0.0278 U	0.0278 U
gamma-BHC	--	--	--	--	--	--	--	--	--
gamma-Chlordane	0.014 U	0.014 U	0.0141 U	0.0141 U	0.0139 U	0.014 U	0.0138 U	0.0138 U	0.014 U
Heptachlor	0.014 U	0.014 U	0.0141 U	0.0141 U	0.0139 U	0.014 U	0.0138 U	0.0132 U	0.014 U
Heptachlor epoxide	0.014 U	0.013 U	0.0141 U	0.0141 U	0.0139 U	0.014 U	0.0138 U	0.0138 U	0.014 U
Lindane	0.014 U	0.014 U	0.0141 U	0.0141 U	0.0139 U	0.014 U	0.0138 U	0.0138 U	0.014 U
Methoxychlor	0.14 U	0.136 U	0.141 U	0.141 U	0.139 U	0.14 U	0.138 U	0.138 U	0.14 U
Toxaphene	0.0312 U	0.0308 U	0.0317 U	0.0318 U	0.0313 U	0.0315 U	0.031 U	0.0312 U	0.0314 U

Notes
1. Laboratory Data flags are as follows:
J = value is an estimate.
U = not detected at reporting limit listed.

Abbreviations
-- = not available

TABLE G-4

SOIL ANALYTICAL RESULTS FOR CONVENTIONALS METALS (1996-2009)[1]
PSC Washougal Facility
Washougal, Washington

Site ID	B-1	B-10	B-11	B-12	B-13	B-14	B-15	B-16	B-17	B-18	B-19	B-2	B-20	B-21	B-22
Depth (in feet)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Analyte Sample Date	8/19/1999	8/20/1999	8/20/1999	8/20/1999	8/20/1999	8/19/1999	8/20/1999	8/20/1999	8/19/1999	8/19/1999	8/19/1999	8/19/1999	8/19/1999	8/19/1999	8/20/1999
Conventionals (µg/kg)															
Carbon, Total Organic	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
pH	6.15	9.31	9.03	8.05	7.78	7.58	8.89	8.25	8.98	9.24	8.07	8.79	8.31	8.32	9.31
Sulfide	5000 U	327000	5000 U	170770	257040	5000 U	84570	1012250	758750	950530	757530	90480	255920	690060	171010
Metals (mg/kg)															
Antimony	1.42 U	1.46 U	1.53 U	1.46 U	1.37 U	1.56 U	1.55 U	1.53 U	1.43 U	1.45 U	1.41 U	1.46 U	1.36 U	1.41 U	1.5 U
Arsenic	1.727	2.115	1.961	2.436	2.682	2.139	2.08	2.168	2.017	2.916	2.135	1.503	1.944	1.959	1.74
Barium	79.7	63.3	67.1	160	62.6	69	66.9	64.5	67.4	70	78.7	63	62.5	65.4	71.2
Beryllium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium	0.261	0.296	0.327	2.12	0.365	0.448	0.318	0.316	0.461	0.526	0.397	0.315	0.336	0.336	0.348
Chromium	7.26	8.58	8.45	15.8	5.9	13.9	7.43	9.28	8.02	8.71	7.31	8.36	7.54	7.28	7.79
Chromium (Hexavalent)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cobalt	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Copper	7.38	8.01	7.67	22.3	7.2	15.7	7.82	8.42	9.31	11.2	10.5	8.2	8.28	12	7.85
Cyanide	1890	10330	8640	8820	48 U	48 U	6130	10020	2590	2160	13000	3840	4670	2310	19050
Iron	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead	3.3	3.27	2.56	46.8	3.23	4.96	5.56	5.35	4.39	3.22	2.83	2.59	3.66	3.62	2.73
Manganese	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Mercury	0.0215 U	0.0209 U	0.0215 U	0.0998	0.0213 U	0.0222 U	0.0213	0.0903	0.0736	0.0207 U	0.02 U	0.0232 U	0.0216 U	0.0218 U	0.0219 U
Nickel	8.98	9.07	9.52	7.66	8.66	9.29	8.79	102	10.7	11.1	9.5	9.57	10.1	8.75	9.27
Potassium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Selenium	117 U	119 U	122 U	115 U	121 U	127 U	131 U	129 U	122 U	120 U	117 U	124 U	113 U	127 U	129 U
Silver	0.237 U	0.243 U	0.255 U	0.244 U	0.228 U	0.261 U	0.259 U	0.255 U	0.238 U	0.241 U	0.235 U	0.243 U	0.227 U	0.235 U	0.251 U
Thallium	4.75 U	4.86 U	5.1 U	4.88 U	4.56 U	5.21 U	5.17 U	5.1 U	4.75 U	4.82 U	4.7 U	4.85 U	4.54 U	4.7 U	5.01 U
Vanadium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Zinc	53.9	32.2	33.9	108	34.2	47.5	33.5	42.1	38.1	37.4	34.4	44.7	33.2	40.9	35.9

TABLE G-4

SOIL ANALYTICAL RESULTS FOR CONVENTIONALS METALS (1996-2009)[1]
PSC Washougal Facility
Washougal, Washington

Site ID	B-3	B-4	B-5	B-6	B-7	B-8	B-9	GP-102	GP-102	GP-103	GP-103	GP-105	GP-107	GP-107
Depth (in feet)	0	0	0	0	0	0	0	10	9	10	7.5	2	1	3
Analyte Sample Date	8/19/1999	8/20/1999	8/20/1999	8/20/1999	8/20/1999	8/20/1999	8/20/1999	10/2/2007	10/2/2007	10/2/2007	10/2/2007	5/5/2009	9/3/2008	9/3/2008
Conventionals (µg/kg)														
Carbon, Total Organic	--	--	--	--	--	--	--	1.33	0.08	1.32	0.07	--	--	--
pH	8.26	9.1	9.05	9.13	9.43	8.61	9.32	--	--	--	--	--	--	--
Sulfide	5000 U	250110	169460	249160	171180	5000 U	166000	--	--	--	--	--	--	--
Metals (mg/kg)														
Antimony	1.45 U	1.47 U	1.49 U	1.47 U	1.51 U	1.41 U	1.5 U	--	--	--	--	--	--	--
Arsenic	2.385	1.815	1.646	2.007	1.961	2.675	2.376	--	--	--	--	--	2.03	1.37
Barium	76.8	64.3	56.9	71.3	75.5	85.3	74.4	--	--	--	--	88.2	81.8	69.2
Beryllium	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium	0.344	0.334	0.28	0.337	0.311	0.369	0.394	--	--	--	--	0.102	0.134	0.105
Chromium	7.1	8.07	7.75	7.71	8.44	7.35	7.96	--	--	--	--	6.13	7.61	5.63
Chromium (Hexavalent)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cobalt	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Copper	7.02	6.99	6.36	7.8	7.06	7.93	10.3	--	--	--	--	5.97	6.62	5.02
Cyanide	48 U	194410	66720	6350	19470	150720	81100	--	--	--	--	--	--	--
Iron	--	--	--	--	--	--	--	--	--	--	--	15500	14600	11500
Lead	4.15	3.76	2.47	2.98	2	2.78	3.66	--	--	--	--	--	--	--
Manganese	--	--	--	--	--	--	--	--	--	--	--	211	216	168
Mercury	0.0248	0.0208 U	0.0215 U	0.0203 U	0.021 U	0.0215 U	0.0201 U	--	--	--	--	--	0.02	0.01
Nickel	8.22	9.47	8.88	9.14	9.64	9.05	9.38	--	--	--	--	8.65	10.3	7.34
Potassium	--	--	--	--	--	--	--	--	--	--	--	562	571	556
Selenium	120 U	126 U	127 U	120 U	119 U	121 U	125 U	--	--	--	--	--	--	--
Silver	0.242 U	0.246 U	0.248 U	0.246 U	0.251 U	0.235 U	0.249 U	--	--	--	--	0.053	0.04	0.02 U
Thallium	4.85 U	4.91 U	4.96 U	4.91 U	5.02 U	4.7 U	4.99 U	--	--	--	--	--	--	--
Vanadium	--	--	--	--	--	--	--	--	--	--	--	40.1	33.2	22.5
Zinc	33.2	36.3	30.4	32.9	33.5	33.3	39.5	--	--	--	--	34.2	37.3	30.4

TABLE G-4

SOIL ANALYTICAL RESULTS FOR CONVENTIONALS METALS (1996-2009)[1]
PSC Washougal Facility
Washougal, Washington

Site ID	GP-108	GP-108	GP-108	GP-112	GP-112	GP-113	GP-113	GP-114	GP-114	GP-115	GP-27	GP-28	GP-29	GP-30	GP-31
Depth (in feet)	1	4	1	1	4	1	4	1	3	1	6	8	5.9	8.5	9.5
Analyte Sample Date	9/3/2008	9/3/2008	5/5/2009	9/4/2008	9/4/2008	9/3/2008	9/3/2008	9/3/2008	9/3/2008	5/5/2009	7/30/1999	7/30/1999	7/29/1999	7/29/1999	7/29/1999
Conventionals (µg/kg)															
Carbon, Total Organic	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
pH	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Metals (mg/kg)															
Antimony	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Arsenic	1.59	1.63	--	1.49	1.57	1.59	1.65	1.82	1.82	--	1.676	4.28	2.264	2.492	1.765
Barium	75.8	123	--	96	93.5	95.6	76	85.8	99.6	--	83.6 J	104 J	107 J	66.7 J	85.3 J
Beryllium	--	--	--	--	--	--	--	--	--	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Cadmium	0.1	0.112	--	0.111	0.115	0.17	0.059	0.074 J	0.108	--	--	--	--	--	--
Chromium	6.7	7.12	--	7.44	8.01	8.28	7.03	8.27	9.56	--	--	--	--	--	--
Chromium (Hexavalent)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cobalt	--	--	--	--	--	--	--	--	--	--	6.94 J	7.73 J	7.53 J	6.25 J	6.49 J
Copper	6.09	6.28	--	7.18	6.63	6.62	5.62	6.5	7.18	--	9.56 J	12.6 J	9.2 J	8.26 J	9.02 J
Cyanide	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	15100	15300	--	16300	14400	14600	13300	15600	14300	--	--	--	--	--	--
Lead	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese	232	220	--	204	190	214	186	215	195	--	--	--	--	--	--
Mercury	1.52	0.013	0.011	0.019	0.015	0.022	0.015	--	--	0.012	--	--	--	--	--
Nickel	8.77	9.45	--	9.66	8.74	11.6	8.96	10.2	11.6	--	10.5	11.1	10.4	6.85	9.81
Potassium	579	661	--	730	693	793	733	586	658	--	--	--	--	--	--
Selenium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Silver	0.02 U	0.03	--	0.03	0.02	0.02 U	0.02 U	0.02 U	0.02 U	--	--	--	--	--	--
Thallium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vanadium	26.7	31	--	32.5	30.8	28.9	28.3	28.5	27.3	--	--	--	--	--	--
Zinc	38.2	38.5	--	48.3	55.4	47.6	39.1	35	46.8	--	38.7	53.1	38.6	39.1	36.1

TABLE G-4

SOIL ANALYTICAL RESULTS FOR CONVENTIONALS METALS (1996-2009)[1]
PSC Washougal Facility
Washougal, Washington

Site ID	GP-32	GP-33	GP-34	GP-35	GP-36	GP-37	GP-43	GP-51	GP-51	GP-52	GP-52	GP-53	GP-53	GP-54	GP-54
Depth (in feet)	10	8	10	10	4	7	4	2	4	4	6	4	6	4	6
Analyte Sample Date	7/29/1999	7/29/1999	7/29/1999	7/29/1999	9/22/2001	9/22/2001	9/24/2001	9/20/2001	9/20/2001	9/20/2001	9/20/2001	9/20/2001	9/20/2001	9/20/2001	9/20/2001
Conventionals (µg/kg)															
Carbon, Total Organic	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
pH	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Metals (mg/kg)															
Antimony	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Arsenic	5.634	6.138	5.507	3.681	1.74 D	1.51 D	2.41 D	1.9 D	1.97 D	1.78 D	1.78 D	2.33 D	1.86 D	3.01 D	2.24 D
Barium	162 J	159 J	148 J	15.3 J				--	--	--	--	--	--	--	--
Beryllium	0.01 U	0.01 U	0.01 U	0.01 U	0.5 UD	0.5 UD	0.5 UD	--	--	--	--	--	--	--	--
Cadmium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium (Hexavalent)	--	--	--	2 U	--	--	--	--	--	--	--	--	--	--	--
Cobalt	12 J	12.3 J	11.6 J	11.9 J	--	--	--	--	--	--	--	--	--	--	--
Copper	39.4 J	38.7 J	35.4 J	29.3 J	--	--	--	--	--	--	--	--	--	--	--
Cyanide	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Mercury	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nickel	17.4	16.8	16.5	17.7	--	--	--	--	--	--	--	--	--	--	--
Potassium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Selenium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Silver	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Thallium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vanadium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Zinc	134	130	154	61.1	--	--	--	--	--	--	--	--	--	--	--

TABLE G-4

SOIL ANALYTICAL RESULTS FOR CONVENTIONALS METALS (1996-2009)[1]
PSC Washougal Facility
Washougal, Washington

Site ID	GP-55	GP-55	GP-56	GP-56	GP-57	GP-58	GP-58	GP-59	GP-59	GP-60	GP-60	GP-61	GP-61	GP-62	GP-62
Depth (in feet)	3	5	5	9	3	2	7	2	6	4	8	1	2	1	2
Analyte Sample Date	9/18/2001	9/18/2001	9/18/2001	9/18/2001	9/18/2001	9/17/2001	9/17/2001	9/17/2001	9/17/2001	9/17/2001	9/17/2001	9/19/2001	9/19/2001	9/19/2001	9/19/2001
Conventionals (µg/kg)															
Carbon, Total Organic	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
pH	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Metals (mg/kg)															
Antimony	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Arsenic	2.74 D	2.06 D	3.24 D	3.13 D	4.97 D	2.08 D	1.16 D	1.56 D	2.12 D	1.4 D	1.68 D	1.93 D	1.75 D	1.67 D	1.52 D
Barium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Beryllium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium	14.7 D	13 D	16.9 D	16.7 D	17.7 D	10.3 D	11.8 D	7.75 D	10.9 D	8.57 D	19.5 D	--	--	--	--
Chromium (Hexavalent)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cobalt	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Copper	11.4 D	10.7 D	16.2 D	15.3 D	21.9 D	9.58 D	9.23 D	39.2 D	8.52 D	8.07 D	11.4 D	--	--	--	--
Cyanide	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Mercury	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nickel	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Potassium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Selenium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Silver	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Thallium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vanadium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Zinc	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE G-4

SOIL ANALYTICAL RESULTS FOR CONVENTIONALS METALS (1996-2009)[1]
PSC Washougal Facility
Washougal, Washington

Site ID	GP-63	GP-63	GP-64	GP-64	GP-71	GP-71	GP-72	GP-72	GP-72	GP-73	GP-73	GP-73	GP-74	GP-74	GP-74
Depth (in feet)	1	2	1	2	1	2	4	6	8	4	6	8	2	6	7
Analyte Sample Date	9/19/2001	9/19/2001	9/19/2001	9/19/2001	9/19/2001	9/19/2001	9/20/2001	9/20/2001	9/20/2001	9/21/2001	9/21/2001	9/21/2001	9/21/2001	9/21/2001	9/21/2001
Conventionals (µg/kg)															
Carbon, Total Organic	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
pH	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Metals (mg/kg)															
Antimony	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Arsenic	2.01 D	1.89 D	2.42 D	2.4 D	2.05 D	2.18 D	2.09 D	1.95 D	1.95 D	2.25 D	2.02 D	1.93 D	2.03 D	1.91 D	1.89 D
Barium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Beryllium	--	--	--	--	--	--	0.5 UD	0.5 UD	0.5 UD	0.5 UD	0.455 UD	0.5 UD	0.5 UD	0.5 UD	0.5 UD
Cadmium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium (Hexavalent)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cobalt	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Copper	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cyanide	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Mercury	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nickel	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Potassium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Selenium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Silver	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Thallium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vanadium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Zinc	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE G-4

SOIL ANALYTICAL RESULTS FOR CONVENTIONALS METALS (1996-2009)[1]
PSC Washougal Facility
Washougal, Washington

Site ID	GP-75	GP-75	GP-76	GP-77A	GP-77B	GP-77C	GP-77D	GP-77E	GP-78	GP-78	GP-79	GP-79	GP-80	GP-81	GP-82
Depth (in feet)	2	6	2	5	5	5	5	5	3	5	3	7	3	3	3
Analyte Sample Date	9/21/2001	9/21/2001	9/21/2001	9/21/2001	9/21/2001	9/21/2001	9/21/2001	9/21/2001	9/18/2001	9/18/2001	9/18/2001	9/18/2001	9/18/2001	9/18/2001	9/18/2001
Conventionals (µg/kg)															
Carbon, Total Organic	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
pH	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Metals (mg/kg)															
Antimony	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Arsenic	2.3 D	2.92 D	2.31 D	2.21 D	1.82 D	1.65 D	3.72 D	1.68 D	2.65 D	2.4 D	2.19 D	9.88 D	1.79 D	7.78 D	2.03 D
Barium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Beryllium	0.5 UD	0.5 UD	0.5 UD	0.5 UD	0.5 UD	0.5 UD	0.5 UD	0.5 UD	--	--	--	--	--	--	--
Cadmium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium	--	--	--	--	--	--	--	--	13.3 D	13.3 D	12.3 D	27.3 D	11.4 D	14.3 D	12.3 D
Chromium (Hexavalent)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cobalt	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Copper	--	--	--	--	--	--	--	--	10.4 D	10.1 D	10.5 D	44.9 D	8.41 D	10.5 D	9.62 D
Cyanide	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Mercury	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nickel	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Potassium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Selenium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Silver	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Thallium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vanadium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Zinc	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE G-4

SOIL ANALYTICAL RESULTS FOR CONVENTIONALS METALS (1996-2009)[1]
PSC Washougal Facility
Washougal, Washington

Site ID	GP-83	GP-86	GP-88	GP-88	GP-89	GP-89	GP-90	GP-90	GP-91	GP-91	GP-92	GP-92	GP-93	GP-93	GP-94
Depth (in feet)	3	2	2	6	3	5	3	5	2	3	2	3	1.5	5.5	3
Analyte Sample Date	9/19/2001	9/19/2001	9/20/2001	9/20/2001	9/20/2001	9/20/2001	9/19/2001	9/19/2001	10/5/2007	10/5/2007	10/3/2007	10/3/2007	10/3/2007	10/3/2007	10/4/2007
Conventionals (µg/kg)															
Carbon, Total Organic	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
pH	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Metals (mg/kg)															
Antimony	--	--	--	--	--	--	--	--	0.04	0.03 U	0.1	0.04	0.09	0.05	0.04
Arsenic	2.42 D	3.29 D	2.43 D	2.23 D	2.56 D	2.83 D	2.03 D	1.61 D	1.9	1.8	1.9	1.7	2	1.4	1.7
Barium	--	--	--	--	--	--	--	--	70.1	77.7	97.5	80.3	86.2	72.7	78.4
Beryllium	--	--	--	--	--	--	--	--	0.197	0.188	0.189	0.17	0.204	0.181	0.186
Cadmium	--	--	--	--	--	--	--	--	0.119	0.108	0.108	0.097	0.129	0.117	0.102
Chromium	16.3 D	13.7 D	--	--	--	--	--	--	8.9	10.7	10.9	10.4	13	11.7	10.1
Chromium (Hexavalent)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cobalt	--	--	--	--	--	--	--	--	5.21	5.34	5.2	5.03	5.32	4.84	5.09
Copper	33.8 D	13.8 D	--	--	--	--	--	--	8.28	6.85	6.7	6.72	8.45	7.71	8.65
Cyanide	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead	--	--	--	--	--	--	--	--	3.43	2.95	2.85	2.9	7.15	3.48	3.04
Manganese	--	--	--	--	--	--	--	--	181	188	210	196	236	190	210
Mercury	--	--	--	--	--	--	--	--	0.02	0.023	0.017	0.027	0.033	0.014	0.011
Nickel	--	--	--	--	--	--	--	--	9.73	9.41	8.81 J	9.24 J	9.65 J	8.44	9.38
Potassium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Selenium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Silver	--	--	--	--	--	--	--	--	0.023	0.022	0.026	0.025	0.03	0.027	0.026
Thallium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vanadium	--	--	--	--	--	--	--	--	31	32.9	39.9	36.6	46.2	33.7	37.7
Zinc	--	--	--	--	--	--	--	--	37.3	37.1	41.1	36	57.8	40.6	42.1

TABLE G-4

SOIL ANALYTICAL RESULTS FOR CONVENTIONALS METALS (1996-2009)[1]
PSC Washougal Facility
Washougal, Washington

Site ID	GP-94	GP-95	GP-95	GP-96	GP-96	GP-97	GP-97	GP-97	GP-98	GP-98	GP-99	GP-99	MC-107	MC-10D	MC-118D
Depth (in feet)	5.5	2.5	4	2	3.5	2.5	5.5	8	1.5	2.5	1.5	2.5	0	1.5	1.5
Analyte Sample Date	10/4/2007	10/1/2007	10/1/2007	10/3/2007	10/3/2007	10/5/2007	10/5/2007	10/5/2007	10/4/2007	10/4/2007	10/4/2007	10/4/2007	7/27/1999	7/26/1999	7/28/1999
Conventionals (µg/kg)															
Carbon, Total Organic	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
pH	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Metals (mg/kg)															
Antimony	0.03	0.04	0.03 U	0.04	0.03 U	0.19	0.04	0.04 U	0.08	0.04	0.04	0.03 U	--	--	--
Arsenic	1.9	1.9	1.3	2.5	1.8	1.7	2	1.4	2.4	1.6	1.6	1.8	2.856	2.22	3.072
Barium	94.2	110	85.3	76.6	78	78.8	79.7	74.8	76.1	74.4	73.3	68.6	74 J	84.1 J	82.2
Beryllium	0.221	0.228	0.199	0.225	0.201	0.179	0.227	0.194	0.209	0.171	0.187	0.184	0.238	0.111	0.01 U
Cadmium	0.124	0.145	0.13	0.127	0.14	0.203	0.08	0.115	0.144	0.109	0.119	0.113	--	--	--
Chromium	10.9	12.7	15	11.4	11.4	12.2	10.5	10.7	9.5	9.6	10	11.6	--	--	--
Chromium (Hexavalent)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cobalt	5.79	5.91	5.4	6.16	5.49	4.41	5.05	5.7	6.2	4.9	5.01	5.28	6.26 J	6.99 J	6.8 J
Copper	7.35	7.38	6.36	7.24	6.64	8.45	7.2	6.83	7.5	6.04	5.86	6.51	10.5 J	8.94 J	8.34 J
Cyanide	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead	3.19	4.4	2.97	3.29	3.1	14	5.11	2.88	3.09	2.92	3	2.98	--	--	--
Manganese	204	218	183	198	197	143	136	161	195	186	205	189	--	--	--
Mercury	0.028	0.014	0.012	0.02	0.028	0.019	0.02	0.015	0.017	0.015	0.014	0.02	--	--	--
Nickel	10.4	10.6 J	10.2 J	11.3 J	9.81 J	8.35	9.28	10.4	9.56	9.08	8.92	9.43	10.2	11.3	9.66
Potassium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Selenium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Silver	0.025	0.026	0.022	0.026	0.023	0.127	0.03	0.024	0.023	0.024	0.026	0.021	--	--	--
Thallium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vanadium	34.7	40.6	39.1	43.4	38.3	32.6	31	32.4	33.4	30.2	35.5	37	--	--	--
Zinc	41.3	50	46.2	44.7	45.4	123	45.1	40	39.9	41.2	42.8	41.3	41.1	45.9	38.2

TABLE G-4

SOIL ANALYTICAL RESULTS FOR CONVENTIONALS METALS (1996-2009)[1]
PSC Washougal Facility
Washougal, Washington

Site ID	MC-14D	MC-14D	MC-17D	MC-19D	MC-20D	MC-20D	MC-24	MC-24	MC-25	MC-25	MC-30	MC-31	PZU-4	PZU-4	PZU-5
Depth (in feet)	2	4	1.5	3	2.5	4.5	3	4.5	3	4.5	2	1	3	6	3.5
Analyte Sample Date	9/28/2007	9/28/2007	7/27/1999	7/26/1999	9/27/2007	9/27/2007	9/24/2007	9/24/2007	9/24/2007	9/24/2007	9/4/2008	9/4/2008	10/2/2007	10/2/2007	10/2/2007
Conventionals (µg/kg)															
Carbon, Total Organic	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
pH	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Metals (mg/kg)															
Antimony	0.03	0.04	--	--	0.08	0.06	0.06	0.04	0.04	0.06			0.04	0.04	0.05
Arsenic	3.7	2.4	2.436 J	2.041	2.3	1.8	0.9	0.7	2.2	1.4	2.16	1.79	1.9	5.6	2
Barium	106	86.2	56.3 J	58.7 J	82.5	88.4	121	97.2	78	104	91.2	90.3	85.6	93.1	97.6
Beryllium	0.259	0.206	0.238 J	0.23	0.332	0.224	0.403	0.37	0.232	0.233			0.2	0.22	0.2
Cadmium	0.115	0.103	--	--	0.129	0.129	0.122	0.074	0.135	0.153	0.129	0.097	0.113	0.09	0.128
Chromium	10.6	11.1	--	--	12.6	10.3	6.48	7.88	6.71	9.62	6.84	7.45	11.3	11.2	12.1
Chromium (Hexavalent)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cobalt	6.38	5.57	5.25 J	6.99 J	8.56	5.66	9.37 J	7.16 J	5.81 J	5.93 J	--	--	5.59	5.36	5.24
Copper	8.54	7.52	6.26 J	6.96 J	14	6.94	25.6 J	23.6 J	8.4 J	9.38 J	6.83	6.07	6.69	6.33	6.73
Cyanide	--	--	--	--	--	--	--	--	--		--	--	--	--	--
Iron	--	--	--	--	--	--	--	--	--		16900	13900	--	--	--
Lead	2.88	2.41	--	--	6.25	3.05	4.32	3.05	3.23	3.55	--	--	3.1	2.93	3.19
Manganese	325	241	--	--	304	211	428	477	250	221	234	198	214	194	211
Mercury	0.024	0.012	--	--	0.019	0.025	0.013	0.007	0.02	0.017	0.018	0.019	0.013	0.01	0.013
Nickel	9.85 J	8.12 J	9.08 J	7.22	8.83 J	9.82 J	9.92	7.21	8.99	11.1	11	9.49	9.5 J	9.63 J	8.99 J
Potassium	--	--	--	--	--	--	--	--	--	--	547	561	--	--	--
Selenium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Silver	0.022	0.02	--	--	0.035	0.028	0.04	0.032	0.019	0.028	0.02 U	0.09	0.028	0.027	0.024
Thallium			--	--	--	--	--	--	--	--	--	--	--	--	--
Vanadium	55.4	45.9	--	--	62.8	32.7	46	41.5	28.4	23.1	32.3	30.1	40.7	36.5	39.1
Zinc	45.7	43.7	37.3 J	32.5	53.2	40.1	61.2	62.5	50.3	50.2	39.7	35	43.6	41.7	44.8

TABLE G-4

SOIL ANALYTICAL RESULTS FOR CONVENTIONALS METALS (1996-2009)[1]
PSC Washougal Facility
Washougal, Washington

Site ID	PZU-5	R-1	R-10	R-2	R-3	R-4	R-5	R-6	R-7	R-8	R-9
Depth (in feet)	8	0	0	0	0	0	0	0	0	0	0
Analyte Sample Date	10/2/2007	8/19/1999	8/20/1999	8/20/1999	8/20/1999	8/19/1999	8/19/1999	8/19/1999	8/19/1999	8/20/1999	8/20/1999
Conventionals (µg/kg)											
Carbon, Total Organic	--	--	--	--	--	--	--	--	--	--	--
pH	--	8.82	8.95	9.38	7.66	9.55	8.45	9.12	8.27	7.96	8.63
Sulfide	--	164220	336240	417320	84310	1009240	1080120	753960	335250	4790860	5000 U
Metals (mg/kg)											
Antimony	0.03	1.44 U	1.5 U	1.73	1.55	1.33 U	1.42 U	1.43 U	1.29 U	1.49 U	1.47 U
Arsenic	1.6	2.08	2.468	2.058	2.195	2.005	2.254	2.601	2.016	1.726	2.203
Barium	81.3	49.8	93	76.2	67.2	71.9	69.5	85	72	72.7	74.2
Beryllium	0.184	--	--	--	--	--	--	--	--	--	--
Cadmium	0.104	0.412	0.37	0.396	0.347	0.369	0.346	0.423	0.33	0.308	0.35
Chromium	10.2	7.15	8.22	7.8	7.62	7.64	6.47	7.37	6.52	7.4	7.76
Chromium (Hexavalent)	--	--	--	--	--	--	--	--	--	--	--
Cobalt	5.03	--	--	--	--	--	--	--	--	--	--
Copper	6	11.6	8.6	9.52	7.75	11.1	6.93	11.7	7.26	7.44	7.94
Cyanide	--	1410	2110	17930	16190	4730	571 U	6700	13410	2830	12170
Iron	--	--	--	--	--	--	--	--	--	--	--
Lead	2.76	4.18	3.27	6.22	4.67	3.51	4.44	3.69	3.21	2.8	2.51
Manganese	199	--	--	--	--	--	--	--	--	--	--
Mercury	0.043	0.0208 U	0.0213 U	0.0357	0.0216 U	0.0293	0.0208 U	0.0294	0.0207 U	0.0208 U	0.0208 U
Nickel	9.01 J	9.46	9.68	9.62	9.2	9.78	8.81	9.94	8.38	8.99	9.18
Potassium	--	--	--	--	--	--	--	--	--	--	--
Selenium	--	113 U	128 U	125 U	126 U	125 U	112 U	117 U	112 U	124 U	123 U
Silver	0.023	0.24 U	0.25 U	0.243 U	0.251 U	0.222 U	0.237 U	0.238 U	0.215 U	0.248 U	0.245 U
Thallium	--	4.79 U	5 U	4.85 U	5.03 U	4.44 U	4.74 U	4.75 U	4.29 U	4.96 U	4.9 U
Vanadium	33	--	--	--	--	--	--	--	--	--	--
Zinc	37.4	47.4	36.7	44	34.8	38.9	41.8	38.7	8.56	33.2	36.3

Notes
1. Laboratory Data flags are as follows:
J = value is an estimate.
U = not detected at reporting limit listed.
UD = value not detected at the reporting limit listed, dilution required.

Abbreviations
-- = not available
µg/L = micrograms per liter
mg/kg = milligrams per kilogram

TABLE G-5

SOIL ANALYTICAL RESULTS FOR TOTAL PETROLEUM HYDROCARBONS (1996-2009)[1]

PSC Washougal Facility
Washougal, Washington

Concentrations in milligrams per kilogram (mg/kg)

Analyte	Site ID	GP-105	GP-107	GP-107	GP-108	GP-108	GP-112	GP-112	GP-113	GP-113	GP-114	GP-114
	Depth (in feet)	2	1	3	1	4	1	4	1	4	1	3
	Sample Date	5/5/2009	9/3/2008	9/3/2008	9/3/2008	9/3/2008	9/4/2008	9/4/2008	9/3/2008	9/3/2008	9/3/2008	9/3/2008
Diesel Range Hydrocarbons		27 U	1.3 U	1.3 U	1.3 U	1.3 U	32 J	1.3 U	1.3 U	1.3 U	26 U	99 J
Lube Oil Range Hydrocarbons		110 U	3.1 U	3.1 U	3.1 U	3.2 U	200 J	3.2 U	3.1 U	3.1 U	110 U	500 J
TPH(as gasoline)		5.5 U	1.8 U	1.7 U	1.8 U	2 U	2 U	1.8 U	1.9 U	1.9 U	5.9 U	6.1 U

Analyte	Site ID	GP-77	GP-91	GP-91	GP-92	GP-92	GP-93	GP-93	GP-94	GP-94	GP-95	GP-95
	Depth	5	2	3	2	3	1.5	5.5	3	5.5	2.5	4
	Sample Date	9/21/2001	10/5/2007	10/5/2007	10/3/2007	10/3/2007	10/3/2007	10/3/2007	10/4/2007	10/4/2007	10/1/2007	10/1/2007
Diesel Range Hydrocarbons		--	1.3 U	1.4 U	1.3 U	1.3 U	49 J	1.4 U	1.3 U	1.4 U	1.3 U	1.4 U
Lube Oil Range Hydrocarbons		--	3.2 U	3.4 U	3.2 U	3.1 U	3.2 U	3.3 U	3.1 U	3.3 U	3.2 U	3.3 U
TPH(as gasoline)		9.09 D	0.64 U	0.69 U	0.64 U	0.63 U	0.65 U	9.7 J	0.62 U	0.66 U	0.64 U	0.67 U

Analyte	Site ID	GP-96	GP-96	GP-97	GP-97	GP-97	GP-98	GP-98	GP-99	GP-99	MC-14D	MC-14D
	Depth	2	3.5	2.5	5.5	8	1.5	2.5	1.5	2.5	2	4
	Sample Date	10/3/2007	10/3/2007	10/5/2007	10/5/2007	10/5/2007	10/4/2007	10/4/2007	10/4/2007	10/4/2007	9/28/2007	9/28/2007
Diesel Range Hydrocarbons		1.3 U	1.4 U	85 J	33 J	860 J	1.4 U	1.4 U	1.4 U	1.4 U	1.3 U	1.3 U
Lube Oil Range Hydrocarbons		3.2 U	3.2 U	120 J	3.2 U	330 J	3.3 U	3.3 U	3.2 U	3.3 U	3.1 U	3.1 U
TPH(as gasoline)		0.64 U	0.65 U	7.3 J	6.9 J	120 J	0.67 U	0.66 U	0.66 U	0.66 U	0.62 U	0.62 U

Analyte	Site ID	MC-20D	MC-20D	MC-24	MC-24	MC-24	MC-25	MC-25	MC-25	MC-30	MC-30	MC-31
	Depth	2.5	4.5	1.5	3	4.5	1.5	3	4.5	0	2	1
	Sample Date	9/27/2007	9/27/2007	9/24/2007	9/24/2007	9/24/2007	9/24/2007	9/24/2007	9/24/2007	9/4/2008	9/4/2008	9/4/2008
Diesel Range Hydrocarbons		1.3 U	1.3 U	27 U	--	28 U	26 U	--	31 U	1.3 U	1.3 U	1.3 U
Lube Oil Range Hydrocarbons		3.1 U	3 U	110 U	--	120 U	110 U	--	130 U	3 U	3.1 U	3 U
TPH(as gasoline)		0.63 U	0.61 U	5.2 U	5.2 U	5.6 U	5.2 U	5.3 U	6.2 U	1.9 U	2.5 U	2 U

Analyte	Site ID	PZU-4	PZU-4	PZU-5	PZU-5
	Depth	3	6	3.5	8
	Sample Date	10/2/2007	10/2/2007	10/2/2007	10/2/2007
Diesel Range Hydrocarbons		1.4 U	1.5 U	1.3 U	1.3 U
Lube Oil Range Hydrocarbons		3.2 U	3.5 U	3.1 U	3.1 U
TPH(as gasoline)		0.65 U	0.71 U	0.63 U	0.62 U

Notes

1. Laboratory Data flags are as follows:
   J = value is an estimate.
   U = not detected at reporting limit listed.
   UD = value not detected at the reporting limit listed, dilution required.

Abbreviations

-- = not available

TABLE G-6

SOIL ANALTYICAL RESULTS (AUGUST 2011) [1,2]
PSC Washougal Facility
Washougal, Washington

Sample ID	Preliminary Cleanup Level	GP-116	GP-117	GP-118	GP-119	GP-119 Field Dup.	GP-120	GP-121	GP-122	GP-123	GP-124	GP-125
Depth (ft bgs)		16	11.5	17	16	16	17.5	16	8.5	9	18	18
Sample Date		8/10/2011	8/10/2011	8/10/2011	8/11/2011	8/11/2011	8/11/2011	8/11/2011	8/10/2011	8/11/2011	8/10/2011	8/10/2011
Metals (mg/kg)												
Arsenic	6	3.19 J	**10 J**	3.39 J	2.18 J	4.05 J	**6.16 J**	2.99 J	**6.71 J**	**12.6 J**	2.53 J	3.46 J
SVOCs (µg/kg)												
1,4-Dioxane	16	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	1.9 J	5.0 UJ	5.0 UJ	1.0 J	5.1 UJ
VOCs (µg/kg)												
1,1,1-Trichloroethane	1,610	6.9 U	7.2 U	110 U	100 U	110 U	8.2 U	9.5 U	7.2 U	6.6 U	9.3 U	13 U
1,1,2-Trichlorotrifluoroethane	10,941,000	6.9 U	7.2 U	110 U	4200	4,900	8.2 U	9.5 U	7.2 U	6.6 U	9.3 U	13 U
1,1-Dichloroethane	1,710	6.9 U	7.2 U	**3,600**	270	270	8.2 U	61	0.34 J	6.6 U	9.3 U	13 U
1,1-Dichloroethene	5	6.9 U	7.2 U	110 U	100 U	110 U	8.2 U	2.7 J	7.2 U	6.6 U	9.3 U	13 U
1,2-Dichlorobenzene	3,070	6.9 U	7.2 U	110 U	100 U	110 U	8.2 U	9.5 U	7.2 U	6.6 U	9.3 U	13 U
1,2-Dichloroethane	2	6.9 U	7.2 U	110 U	100 U	110 U	8.2 U	9.5 U	7.2 U	6.6 U	9.3 U	13 U
2,2-Dichloro-1,1,1-trifluoroethane	NE	6.9 UN	7.2 UN	210 U	200 U	210 U	8.2 UN	9.5 UN	7.2 UN	6.6 UN	9.3 UN	13 UN
2-Butanone	19,700	28 U	5.0 J	4,200 U	4,000 U	4,100 U	7.9 J	10 J	3.7 J	3.7 J	9.1 J	18 J
2-Methylpentane	NE	6.9 UN	7.2 UN	210 U	200 U	210 U	8.2 UN	9.5 UN	7.2 UN	6.6 UN	9.3 UN	13 UN
3-Methylpentane	NE	6.9 UN	7.2 UN	210 U	200 U	210 U	8.2 UN	9.5 UN	7.2 UN	6.6 UN	9.3 UN	13 UN
Acetone	3,210	28 U	34 U	4,200 U	4,000 U	4,100 U	50 U	63 U	30 U	27 U	60 U	110
Benzene	5	0.55 J	1.3 J	110 U	100 U	110 U	0.34 J	**6.0 J**	**5.4 J**	1.0 J	0.41 J	0.57 J
Carbon Disulfide	297	0.22 J	0.30 J	110 U	100 U	110 U	1.6 J	1.4 J	0.33 J	0.33 J	1.3 J	1.8 J
Carbon Tetrachloride	5	6.9 U	7.2 U	110 U	100 U	110 U	8.2 U	9.5 U	7.2 U	6.6 U	9.3 U	13 U
Chlorobenzene	5	6.9 U	7.2 U	110 U	100 U	110 U	8.2 U	9.5 U	7.2 U	6.6 U	9.3 U	13 U
Chloroethane	17	6.9 U	7.2 U	110 U	100 U	110 U	8.2 U	9.5 U	7.2 U	6.6 U	9.3 U	13 U
Chloroform	0.005	6.9 U	7.2 U	110 U	100 U	110 U	8.2 U	9.5 U	7.2 U	6.6 U	9.3 U	13 U
Chloromethane	10	6.9 U	7.2 U	110 U	100 U	110 U	8.2 U	9.5 U	7.2 U	6.6 U	9.3 U	13 U
cis-1,2-Dichloroethene	111	6.9 U	7.2 U	**9,200**	**6,000**	**6,200**	8.2 U	1.4	7.2 U	6.6 U	9.3 U	13 U
Dichlorodifluoromethane	50	6.9 U	0.60 J	110 U	100 U	110 U	9.4	9.5 U	7.2 U	6.6 U	9.3 U	13 U
Ethylbenzene	3,290	6.9 U	42	110 U	100 U	110 U	8.2 U	23	1.1 J	6.6 U	9.3 U	13 U
m,p-Xylene	333	6.9 U	25	110 U	100 U	110 U	8.2 U	61	9.4	6.6 U	9.3 U	13 U
Methylcyclopentane	NE	6.9 UN	7.2 UN	210 U	200 U	210 U	8.2 UN	9.5 UN	7.2 UN	6.6 UN	9.3 UN	13 UN
Methylene Chloride	20	14 U	15 U	420 U	400 U	410 U	17 U	19 U	15 U	14 U	19 U	25 U
o-Xylene	147,000	6.9 U	6.5 J	110 U	160	200	8.2 U	30	5.9 J	6.6 U	9.3 U	13 U
Tetrachloroethene	3	6.9 U	7.2 U	110 U	**3,200**	**4,100**	8.2 U	**29**	7.2 U	6.6 U	9.3 U	13 U
Toluene	4,650	6.9 U	17	990	74 J	57 J	0.95 J	170	3.5 J	0.68 J	9.3 U	13 U
trans-1,2-Dichloroethene	104	6.9 U	7.2 U	110 U	100 U	110 U	8.2 U	2.6 J	7.2 U	6.6 U	9.3 U	13 U
Trichloroethene	3	6.9 U	7.2 U	110 U	**120**	**150**	8.2 U	**4.6 J**	7.2 U	6.6 U	9.3 U	13 U
Trichlorofluoromethane	2,000,000	6.9 U	7.2 U	110 U	100 U	110 U	8.2 U	9.5 U	7.2 U	6.6 U	9.3 U	13 U
Vinyl Chloride	5	6.9 U	1.6 J	110 U	**44 J**	**45 J**	8.2 U	**37**	7.2 U	6.6 U	9.3 U	13 U

Notes
1. Data flags are as follows:
   J = concentration shown is an estimate.
   U = analyte not detected at or above laboratory reporting limit indicated.
   UJ = analyte not detected at or above estimated laboratory reporting limit indicated.
   UN = analyte is tentatively indentified and not detected at or above laboratory reporting limit indicated.
2. **Bold** values exceed preliminary cleanup levels obtained from Table 9-4 of the RI/FS.

Abbreviations
µg/kg = micrograms per kilogram
ft bgs = feet below ground surface
mg/kg = milligrams per kilogram
NE = not established
SVOCs = semivolatile organic compounds
VOCs = volatile organic compounds

APPENDIX H

Water Quality Parameters

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
		HHMMSS	Units	mg/l	øC	mV	mS/cm	NTUs	ml/min	Hz or cpm	minutes	(0.01 ft)	
MC-1	3/23/04	65212	4.99	6.73	10.8	385	0.0406	47.3	400	58 Hz	33	0.30	All parameters were stable when the sample was collected.
MC-1	3/23/04	65507	5.21	6.7	12.38	390	0.0399	14.2	400	58 Hz			Turbidity < 5 NTU.
MC-1	3/23/04	65832	5.51	5.65	13.67	390	0.0404	7.16	400	58 Hz			DO > 0.2 mg/L
MC-1	3/23/04	70107	5.44	5.28	13.76	400	0.0409	6.31	400	58 Hz			Ferrous iron field test = 0.00 mg/L
MC-1	3/23/04	70406	5.52	4.59	14.04	403	0.0423	5.96	400	58 Hz			
MC-1	3/23/04	70708	5.58	4.07	14.18	406	0.0435	6.86	400	58 Hz			
MC-1	3/23/04	71008	5.57	3.75	14.14	410	0.0443	5.93	400	58 Hz			
MC-1	3/23/04	71313	5.58	3.49	14.23	412	0.0452	5.71	400	58 Hz			
MC-1	3/23/04	71608	5.7	3.28	14.13	414	0.0461	6.13	400	58 Hz			
MC-1	3/23/04	71857	5.63	3.08	14.24	417	0.0467	6.12	400	58 Hz			
MC-1	3/23/04	72207	5.64	2.93	14.1	422	0.0473	6.21	400	58 Hz			
MC-12	3/23/04	80610	6.07	2.58	11.43	509	0.1002	6.04	400	3.0 cpm	23	0.00	All parameters were stable when the sample was collected.
MC-12	3/23/04	80906	6.2	2.11	11.14	492	0.103	1.54	400	3.0 cpm			Turbidity < 5 NTU.
MC-12	3/23/04	81218	6.32	1.97	11.04	480	0.1055	0.31	400	3.0 cpm			DO > 0.2 mg/L
MC-12	3/23/04	81507	6.41	1.86	11.03	471	0.107	0.26	400	3.0 cpm			Ferrous iron field test = 0.07 mg/L
MC-12	3/23/04	81808	6.5	1.81	11.02	464	0.1075	0.11	400	3.0 cpm			
MC-12	3/23/04	82105	6.56	1.79	11.02	458	0.1078	0.16	400	3.0 cpm			
MC-12	3/23/04	82410	6.61	1.76	11.07	453	0.1083	0.09	400	3.0 cpm			
MC-12	3/23/04	82705	6.65	1.72	11.08	448	0.1087	0.06	400	3.0 cpm			
MC-14	3/23/04	92307	6.51	3.19	12.69	481	0.4454	8.96	100	0.2 cpm	34	2.27	All parameters were stable when the sample was collected.
MC-14	3/23/04	92606	6.55	2.5	12.47	470	0.4308	9.43	100	0.2 cpm			Turbidity < 5 NTU.
MC-14	3/23/04	92906	6.59	2.06	12.34	462	0.4188	11	100	0.2 cpm			DO > 0.2 mg/L
MC-14	3/23/04	93205	6.62	1.7	12.38	456	0.4117	8.96	100	0.2 cpm			Ferrous iron field test = 1.76 mg/L
MC-14	3/23/04	93506	6.67	1.42	12.41	451	0.4053	7.12	100	0.2 cpm			
MC-14	3/23/04	93809	6.72	1.25	12.29	447	0.3969	4.86	100	0.2 cpm			
MC-14	3/23/04	94108	6.63	1.09	12.19	443	0.3902	3.66	100	0.2 cpm			
MC-14	3/23/04	94408	6.63	0.94	12.09	440	0.3845	2.31	100	0.2 cpm			
MC-14	3/23/04	94707	6.65	0.86	12.05	437	0.3805	1.86	100	0.2 cpm			
MC-14	3/23/04	95007	6.63	0.78	12.06	434	0.3776	1.61	100	0.2 cpm			
MC-21	3/23/04	110720	6.99	3.27	13.59	469	0.0908	20.6	300	2.0 cpm	15	0.16	All parameters were stable when the sample was collected.
MC-21	3/23/04	111008	6.75	2.42	13.35	465	0.0866	9.62	300	2.0 cpm			Turbidity < 5 NTU.
MC-21	3/23/04	111315	6.74	2.08	13.26	459	0.0857	4.96	300	2.0 cpm			DO > 0.2 mg/L
MC-21	3/23/04	111606	6.71	1.94	13.3	453	0.0861	3.82	300	2.0 cpm			Ferrous iron field test = 1.40 mg/L
MC-21	3/23/04	111907	6.67	1.8	13.35	450	0.0857	2.06	300	2.0 cpm			
MC-20	3/23/04	121606	6.6	3.28	15.53	485	0.2394	12.46	100	0.2 cpm	25	0.14	All parameters were stable when the sample was collected.
MC-20	3/23/04	121911	6.37	2.77	15.13	479	0.2335	8.61	100	0.2 cpm			Turbidity < 5 NTU.
MC-20	3/23/04	122206	6.33	2.42	14.84	473	0.2296	6.13	100	0.2 cpm			DO > 0.2 mg/L
MC-20	3/23/04	122511	6.26	2.17	14.65	469	0.2271	4.62	100	0.2 cpm			Ferrous iron field test = 2.57 mg/L
MC-20	3/23/04	122809	6.23	1.96	14.54	465	0.2259	3.36	100	0.2 cpm			
MC-20	3/23/04	123109	6.22	1.87	14.49	462	0.2258	2.62	100	0.2 cpm			
MC-20	3/23/04	123416	6.17	1.8	14.51	459	0.2263	2.06	100	0.2 cpm			
MC-13	3/23/04	140609	6.09	0.84	13.14	471	0.1564	6.06	300	1.0 cpm	14	0.04	All parameters were stable when the sample was collected.
MC-13	3/23/04	140908	6.17	0.76	12.91	467	0.1575	4.61	300	1.0 cpm			Turbidity < 5 NTU.
MC-13	3/23/04	141208	6.1	0.71	12.81	461	0.1586	2.78	300	1.0 cpm			DO > 0.2 mg/L
MC-13	3/23/04	141506	6.21	0.64	12.93	460	0.1597	1.61	300	1.0 cpm			
MC-13	3/23/04	141807	6.1	0.57	12.96	455	0.161	1.3	300	1.0 cpm			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
		HHMMSS	Units	mg/l	øC	mV	mS/cm	NTUs	ml/min	Hz or cpm	minutes	(0.01 ft)	
MC-13D	3/23/04	145608	6.29	2.47	15.68	497	0.1608	4.06	300	2.0 cpm	30	1.26	All parameters were stable when the sample was collected.
MC-13D	3/23/04	145906	6.45	1.81	14.78	486	0.1605	2.68	300	2.0 cpm			Turbidity < 5 NTU.
MC-13D	3/23/04	150208	6.42	1.59	14.63	477	0.1605	1.58	300	2.0 cpm			DO > 0.2 mg/L
MC-13D	3/23/04	150507	6.62	1.38	14.46	471	0.1606	1.46	300	2.0 cpm			
MC-13D	3/23/04	150807	6.74	1.26	14.35	466	0.1609	0.96	300	2.0 cpm			
MC-13D	3/23/04	151108	6.55	1.22	14.35	462	0.1613	0.81	300	2.0 cpm			
MC-13D	3/23/04	151406	6.76	1.09	14.39	458	0.1604	0.46	300	2.0 cpm			
MC-13D	3/23/04	151710	6.57	1	14.44	455	0.1615	0.21	300	2.0 cpm			
MC-13D	3/23/04	152005	6.61	0.98	14.4	454	0.1612	0.11	300	2.0 cpm			
MC-13D	3/23/04	152310	6.67	0.93	14.35	451	0.1612	0.06	300	2.0 cpm			
MC-8	3/24/04	65906	6.02	6.04	10.09	528	0.0652	34.6	400	3.0 cpm	14	0.32	All parameters were stable when the sample was collected.
MC-8	3/24/04	70208	5.89	5.73	10.02	528	0.0651	30.4	350	2.5 cpm			Turbidity > 5 NTU but stable.
MC-8	3/24/04	70506	5.87	5.5	10.02	529	0.0653	24.3	350	2.5 cpm			DO > 0.2 mg/L
MC-8	3/24/04	70805	5.76	5.26	10	530	0.0653	23.2	350	2.5 cpm			
MC-8	3/24/04	71107	5.79	4.95	10	529	0.0653	21.8	350	2.5 cpm			
MC-118D	3/24/04	80208	6.52	1.03	15.39	509	0.4079	24.6	350	72 Hz	21	2.21	All parameters were stable when the sample was collected.
MC-118D	3/24/04	80509	6.59	0.81	16.74	500	0.4403	16.1	350	72 Hz			Turbidity < 5 NTU.
MC-118D	3/24/04	80806	6.62	0.69	17.41	493	0.4584	10.3	350	72 Hz			DO > 0.2 mg/L
MC-118D	3/24/04	81108	6.62	0.59	17.71	489	0.467	8.61	350	72 Hz			
MC-118D	3/24/04	81407	6.62	0.49	17.93	484	0.472	4.62	350	72 Hz			
MC-118D	3/24/04	81705	6.63	0.41	18.09	480	0.4749	3.82	350	72 Hz			
MC-118D	3/24/04	82010	6.62	0.38	18.16	477	0.4743	3.41	350	72 Hz			
MC-12D	3/24/04	90805	6.74	0.62	16.9	458	0.4211	12.6	400	61 Hz	35	0.56	All parameters were stable when the sample was collected.
MC-12D	3/24/04	91110	6.71	0.55	17.28	455	0.4222	10.6	400	61 Hz			Turbidity < 5 NTU.
MC-12D	3/24/04	91407	6.69	0.48	17.44	453	0.4205	10.8	400	61 Hz			DO > 0.2 mg/L
MC-12D	3/24/04	91709	6.67	0.41	17.5	451	0.4181	8.61	400	61 Hz			
MC-12D	3/24/04	92007	6.67	0.37	17.56	450	0.4155	10.1	400	61 Hz			
MC-12D	3/24/04	92310	6.67	0.32	17.7	448	0.415	8.43	400	61 Hz			
MC-12D	3/24/04	92607	6.66	0.3	17.74	446	0.413	6.51	400	61 Hz			
MC-12D	3/24/04	92908	6.66	0.28	17.86	445	0.4128	5.32	400	61 Hz			
MC-12D	3/24/04	93214	6.66	0.27	17.92	443	0.4117	4.36	400	61 Hz			
MC-12D	3/24/04	93507	6.66	0.25	18	442	0.4104	4.06	400	61 Hz			
MC-12D	3/24/04	93813	6.66	0.24	18	440	0.4092	3.82	400	61 Hz			
MC-10D	3/24/04	102712	7.05	1.06	14.38	449	0.3141	46.2	400	78 Hz	32	0.84	All parameters were stable when the sample was collected.
MC-10D	3/24/04	103007	7.02	2.57	14.68	444	0.315	20.6	400	78 Hz			Turbidity < 5 NTU.
MC-10D	3/24/04	103306	6.96	2.64	15.17	442	0.3186	12.8	400	78 Hz			DO > 0.2 mg/L
MC-10D	3/24/04	103606	6.95	2.25	16.23	439	0.3306	6.82	400	78 Hz			
MC-10D	3/24/04	103910	6.92	1.85	16.78	436	0.3359	7.12	400	78 Hz			
MC-10D	3/24/04	104208	6.9	1.56	16.9	435	0.3355	8.62	400	78 Hz			
MC-10D	3/24/04	104508	6.89	1.23	17.16	433	0.3373	6.41	400	78 Hz			
MC-10D	3/24/04	104806	6.88	1.05	17.18	431	0.3357	5.24	400	78 Hz			
MC-10D	3/24/04	105111	6.87	0.9	17.34	429	0.3354	3.42	400	78 Hz			
MC-10D	3/24/04	105406	6.86	0.81	17.42	428	0.3356	2.86	400	78 Hz			
MC-10D	3/24/04	105707	6.86	0.7	17.51	426	0.3353	2.64	400	78 Hz			
MC-19D	3/24/04	113005	7.19	0.86	15.16	418	0.1413	60.4	400	67 Hz	31	0.03	All parameters were stable when the sample was collected.
MC-19D	3/24/04	113313	7.25	0.77	15.32	412	0.1414	14.3	400	67 Hz			Turbidity < 5 NTU.
MC-19D	3/24/04	113605	7.22	0.64	15.99	411	0.1424	8.96	400	67 Hz			DO > 0.2 mg/L
MC-19D	3/24/04	113905	7.19	0.56	16.22	411	0.1429	7.62	400	67 Hz			
MC-19D	3/24/04	114207	7.12	0.51	16.22	411	0.143	6.83	400	67 Hz			
MC-19D	3/24/04	114508	7.13	0.46	16.48	410	0.1436	6.61	400	67 Hz			
MC-19D	3/24/04	114813	7.07	0.41	16.63	410	0.1437	11.3	400	67 Hz			
MC-19D	3/24/04	115107	7.08	0.39	16.63	410	0.144	3.21	400	67 Hz			
MC-19D	3/24/04	115406	7.07	0.39	16.62	409	0.1443	2.06	400	67 Hz			
MC-19D	3/24/04	115706	7.06	0.38	16.63	409	0.1443	3.13	400	67 Hz			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
		HHMMSS	Units	mg/l	øC	mV	mS/cm	NTUs	ml/min	Hz or cpm	minutes	(0.01 ft)	
MC-2	3/24/04	125610	6.63	0.85	14.41	457	0.1329	10.8	400	50 Hz	21	0.40	All parameters were stable when the sample was collected.
MC-2	3/24/04	125907	6.68	0.7	15.54	448	0.1338	5.31	400	50 Hz			Turbidity < 5 NTU.
MC-2	3/24/04	130207	6.69	0.62	16.48	442	0.1373	4.86	400	50 Hz			DO > 0.2 mg/L
MC-2	3/24/04	130507	6.66	0.56	16.94	439	0.1395	2.04	400	50 Hz			
MC-2	3/24/04	130806	6.64	0.47	17.27	436	0.1402	1.46	400	50 Hz			
MC-2	3/24/04	131105	6.63	0.38	17.31	434	0.1421	1.2	400	50 Hz			
MC-2D	3/24/04	134906	6.72	1.93	14.93	455	0.2385	2.86	400	64 Hz	20	1.21	All parameters were stable when the sample was collected.
MC-2D	3/24/04	135210	6.82	1.2	16.03	446	0.2456	0.61	400	64 Hz			Turbidity < 5 NTU.
MC-2D	3/24/04	135508	6.9	0.91	17.17	439	0.2517	0.36	400	64 Hz			DO > 0.2 mg/L
MC-2D	3/24/04	135819	6.95	1.08	17.84	434	0.2523	0.11	400	64 Hz			
MC-2D	3/24/04	140113	6.97	1.22	18.07	431	0.253	0.06	400	64 Hz			
MC-2D	3/24/04	140409	6.96	1.18	17.97	430	0.2529	0.04	400	64 Hz			
MC-17D	3/25/04	72026	6.83	1.83	13.13	468	0.145	26.4	400	63 Hz	21	0.45	All parameters were stable when the sample was collected.
MC-17D	3/25/04	72310	6.96	1.62	14.66	458	0.147	5.86	400	63 Hz			Turbidity < 5 NTU.
MC-17D	3/25/04	72618	6.97	1.51	15.55	453	0.1483	1.68	400	63 Hz			DO > 0.2 mg/L
MC-17D	3/25/04	72907	6.93	1.37	15.89	453	0.1489	1.06	400	63 Hz			
MC-17D	3/25/04	73207	6.91	1.25	16.14	452	0.1495	0.86	400	63 Hz			
MC-17D	3/25/04	73510	6.82	1.17	16.24	450	0.1495	0.61	400	63 Hz			
MC-17D	3/25/04	73806	6.86	1.15	16.19	450	0.1496	0.96	400	63 Hz			
MC-17	3/25/04	84309	7.18	1.61	10.3	479	0.1249	12.6	400	3.0 cpm	21	0.15	All parameters were stable when the sample was collected.
MC-17	3/25/04	84608	7.03	1.31	10.37	476	0.1352	7.16	250	1.0 cpm			Turbidity < 5 NTU.
MC-17	3/25/04	84910	6.95	1.14	10.4	472	0.1608	3.62	250	1.0 cpm			DO > 0.2 mg/L
MC-17	3/25/04	85206	6.87	1	10.42	469	0.1917	1.06	250	1.0 cpm			
MC-17	3/25/04	85514	6.85	0.87	10.41	466	0.2095	0.62	250	1.0 cpm			
MC-17	3/25/04	85810	6.85	0.78	10.42	463	0.2113	0.61	250	1.0 cpm			
MC-17	3/25/04	90111	6.84	0.71	10.42	460	0.2051	0.36	250	1.0 cpm			
MC-16	3/25/04	94107	6.76	1.41	10.01	469	0.2101	52.6	200	1.0 cpm	22	0.32	All parameters were stable when the sample was collected.
MC-16	3/25/04	94306	6.79	1.17	10.01	465	0.207	24.1	200	1.0 cpm			Turbidity < 5 NTU.
MC-16	3/25/04	94606	6.8	0.97	10.04	461	0.2024	9.61	200	1.0 cpm			DO > 0.2 mg/L
MC-16	3/25/04	94912	6.81	0.83	10.03	458	0.1994	5.16	200	1.0 cpm			
MC-16	3/25/04	95207	6.81	0.73	10.03	455	0.1944	2.81	200	1.0 cpm			
MC-16	3/25/04	95528	6.81	0.63	10.04	453	0.1959	1.62	200	1.0 cpm			
MC-16	3/25/04	95807	6.82	0.58	10.02	451	0.1949	1.51	200	1.0 cpm			
MC-15D	3/25/04	103305	6.81	1.05	13.47	454	0.2336	2.67	400	58 Hz	20	0.69	All parameters were stable when the sample was collected.
MC-15D	3/25/04	103606	6.85	0.88	14.08	450	0.2443	0.51	400	58 Hz			Turbidity < 5 NTU.
MC-15D	3/25/04	103907	6.83	0.73	15.05	447	0.2583	0.16	400	58 Hz			DO > 0.2 mg/L
MC-15D	3/25/04	104207	6.84	0.65	16.05	444	0.2716	0.11	400	58 Hz			
MC-15D	3/25/04	104507	6.83	0.53	16.57	442	0.28	0.09	400	58 Hz			
MC-15D	3/25/04	104807	6.81	0.47	16.91	441	0.2859	0.11	400	58 Hz			
MC-15D	3/25/04	105107	6.81	0.42	17.08	439	0.2877	0.07	400	58 Hz			
MC-15	3/25/04	112009	6.46	1.33	10.46	472	0.1955	5.32	300	2.0 cpm	23	0.59	All parameters were stable when the sample was collected.
MC-15	3/25/04	112306	6.41	1.06	10.45	467	0.2047	1.86	250	1.5 cpm			Turbidity < 5 NTU.
MC-15	3/25/04	112607	6.43	0.96	10.43	461	0.168	0.81	250	1.5 cpm			DO > 0.2 mg/L
MC-15	3/25/04	112907	6.45	0.84	10.41	457	0.148	0.62	250	1.5 cpm			
MC-15	3/25/04	113206	6.48	0.74	10.44	453	0.1353	0.64	250	1.5 cpm			
MC-15	3/25/04	113508	6.51	0.64	10.46	450	0.1295	0.41	250	1.5 cpm			
MC-15	3/25/04	113812	6.53	0.56	10.47	447	0.1269	0.36	250	1.5 cpm			
MC-15	3/25/04	114108	6.54	0.51	10.47	445	0.1259	0.62	250	1.5 cpm			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
		HHMMSS	Units	mg/l	øC	mV	mS/cm	NTUs	ml/min	Hz or cpm	minutes	(0.01 ft)	
MC-107	3/25/04	123606	6.86	1.97	10.75	461	0.0797	3.84	400	3.0 cpm	20	0.22	All parameters were stable when the sample was collected.
MC-107	3/25/04	123911	6.83	1.23	10.68	457	0.0787	2.91	400	3.0 cpm			Turbidity < 5 NTU.
MC-107	3/25/04	124210	6.85	1.07	10.64	452	0.0759	2.71	400	3.0 cpm			DO > 0.2 mg/L
MC-107	3/25/04	124507	6.89	1.3	10.61	447	0.0722	1.62	400	3.0 cpm			
MC-107	3/25/04	124822	6.88	1.48	10.61	445	0.0712	1.73	400	3.0 cpm			
MC-107	3/25/04	125107	6.91	1.5	10.61	443	0.0717	1.61	400	3.0 cpm			
MC-107	3/25/04	125408	6.91	1.49	10.59	441	0.071	1.24	400	3.0 cpm			
MC-14	3/29/04	103206	6.06	1.28	14.79	438	0.6154	3.62	100	0.2 cpm	28	1.31	All parameters were stable when the sample was collected.
MC-14	3/29/04	103506	6.14	1.02	14.52	430	0.575	2.06	100	0.2 cpm			Turbidity < 5 NTU.
MC-14	3/29/04	103806	6.22	0.87	14.42	424	0.5438	1.41	100	0.2 cpm			DO > 0.2 mg/L
MC-14	3/29/04	104106	6.2	0.75	14.35	423	0.5236	1.36	100	0.2 cpm			
MC-14	3/29/04	104406	6.24	0.65	14.38	418	0.5089	1.46	100	0.2 cpm			
MC-14	3/29/04	104746	6.29	0.6	14.38	415	0.4968	1.31	100	0.2 cpm			
MC-14	3/29/04	105005	6.3	0.56	14.38	413	0.4903	1.26	100	0.2 cpm			
MC-14	3/29/04	105319	6.3	0.53	14.35	412	0.484	1.11	100	0.2 cpm			

Second Quarter 2004

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
		HHMMSS	Units	mg/l	øC	mV	mS/cm	NTUs	ml/min	Hz or cpm	minutes	(0.01 ft.)	
MC-14	6/15/04	74509	9.22	1.48	14.72	357	1.705	5.89	100	0.2 cpm	47	2.94	Sample was collected after one well volume was removed from well
MC-14	6/15/04	74803	8.61	1.27	14.86	356	1.48	5.82	100	0.2 cpm			All parameters stable except pH > 0.1 units and Conductivity > 3%
MC-14	6/15/04	75110	8.22	1.29	15.02	360	1.001	5.37	100	0.2 cpm			Turbidity < 5 NTU.
MC-14	6/15/04	75407	7.96	1.21	15.11	365	0.8424	6.01	100	0.2 cpm			DO > 0.2 mg/L.
MC-14	6/15/04	75708	7.76	1.14	15.25	367	0.7492	5.96	100	0.2 cpm			Ferrous iron field test= 1.02 mg/L
MC-14	6/15/04	80001	7.63	1.05	15.37	365	0.6747	5.52	100	0.2 cpm			
MC-14	6/15/04	80310	7.5	0.96	15.4	366	0.6099	5.76	100	0.2 cpm			
MC-14	6/15/04	80602	7.44	0.89	15.47	367	0.5709	5.38	100	0.2 cpm			
MC-14	6/15/04	80904	7.34	0.82	15.53	368	0.5379	5.21	100	0.2 cpm			
MC-14	6/15/04	81207	7.22	0.75	15.63	368	0.5041	5.12	100	0.2 cpm			
MC-14	6/15/04	81511	7.1	0.69	15.68	368	0.4776	3.75	100	0.2 cpm			
MC-14	6/15/04	81806	7.08	0.65	15.68	368	0.4591	3.32	100	0.2 cpm			
MC-14	6/15/04	82103	7.01	0.61	15.62	370	0.4401	3.22	100	0.2 cpm			
MC-14	6/15/04	82405	6.95	0.57	15.53	371	0.4261	3.15	100	0.2 cpm			
MC-14	6/15/04	82703	6.86	0.55	15.5	370	0.4095	3.26	100	0.2 cpm			
MC-21	6/15/04	100402	7.08	1.91	17.75	364	0.1061	8.89	300	4.0 cpm	19	0.06	All parameters stable when sample was collected
MC-21	6/15/04	100706	6.8	1.34	17.11	368	0.1026	4.98	300	4.0 cpm			Turbidity < 5 NTU.
MC-21	6/15/04	101012	6.76	1.1	16.79	369	0.0991	3.43	300	4.0 cpm			DO > 0.2 mg/L.
MC-21	6/15/04	101306	6.74	0.98	16.63	367	0.0969	2.78	300	4.0 cpm			Ferrous iron field test= 1.57 mg/L
MC-21	6/15/04	101610	6.75	0.85	16.62	363	0.0959	1.67	300	4.0 cpm			
MC-21	6/15/04	101903	6.69	0.78	16.57	357	0.095	1.77	300	4.0 cpm			
MC-1	6/15/04	112021	7.09	2.24	15.92	396	0.0957	3.23	400	60 Hz	26	0.57	All parameters stable when sample was collected
MC-1	6/15/04	112308	6.88	2.18	17.37	396	0.0874	2.94	400	60 Hz			Turbidity < 5 NTU.
MC-1	6/15/04	112606	6.93	1.57	18.69	386	0.0932	2.13	400	60 Hz			DO > 0.2 mg/L.
MC-1	6/15/04	112906	6.96	1.28	19.39	375	0.0942	2.26	400	60 Hz			Ferrous iron field test= 0.68 mg/L
MC-1	6/15/04	113208	6.88	1.26	19.69	374	0.0926	2.28	400	60 Hz			
MC-1	6/15/04	113506	6.75	1.06	19.85	374	0.0954	2.15	400	60 Hz			
MC-1	6/15/04	113807	6.63	0.9	19.91	374	0.0959	2.22	400	60 Hz			
MC-1	6/15/04	114107	6.56	0.77	20	373	0.0962	2.02	400	60 Hz			
MC-1	6/15/04	114407	6.56	0.67	20.03	371	0.0964	1.98	400	60 Hz			
MC-12	6/15/04	122010	6.77	1.66	17.7	414	0.101	3.14	350	4.0 cpm	27	0.08	All parameters stable when sample was collected
MC-12	6/15/04	122310	6.54	1.01	17.09	416	0.0902	1.7	350	4.0 cpm			Turbidity < 5 NTU.
MC-12	6/15/04	122611	6.6	0.83	16.78	408	0.0876	1.51	350	4.0 cpm			DO > 0.2 mg/L.
MC-12	6/15/04	122907	6.67	0.77	16.66	400	0.0866	1.27	350	4.0 cpm			Ferrous iron field test= 1.07 mg/L
MC-12	6/15/04	123209	6.73	0.74	16.64	392	0.0861	1.32	350	4.0 cpm			
MC-12	6/15/04	123506	6.84	0.7	16.64	387	0.0857	1.18	350	4.0 cpm			
MC-12	6/15/04	123808	6.81	0.7	16.62	382	0.0856	1.09	350	4.0 cpm			
MC-12	6/15/04	124107	6.83	0.66	16.64	380	0.0853	1.13	350	4.0 cpm			
MC-12	6/15/04	124407	6.86	0.63	16.66	375	0.0851	1.14	350	4.0 cpm			
MC-20	6/15/04	134210	6.29	1.43	17.66	440	0.2008	20.9	100	0.2 cpm	31	2.2	All parameters stable when sample was collected
MC-20	6/15/04	134510	6.08	1.2	17.77	439	0.1869	18.5	100	0.2 cpm			Turbidity < 5 NTU.
MC-20	6/15/04	134807	6.17	1.03	17.87	429	0.1813	11.9	100	0.2 cpm			DO > 0.2 mg/L.
MC-20	6/15/04	135110	6.2	0.9	17.95	422	0.1778	8.26	100	0.2 cpm			Ferrous iron field test= 2.08 mg/L
MC-20	6/15/04	135406	6.28	0.79	18.08	416	0.1758	6.78	100	0.2 cpm			
MC-20	6/15/04	135716	6.18	0.72	18.09	412	0.1746	5.02	100	0.2 cpm			
MC-20	6/15/04	140007	6.22	0.64	18.15	407	0.1729	4.61	100	0.2 cpm			
MC-20	6/15/04	140308	6.22	0.57	18.03	405	0.1717	4.19	100	0.2 cpm			
MC-20	6/15/04	140610	6.15	0.55	18.17	403	0.1691	3.91	100	0.2 cpm			
MC-20	6/15/04	140905	6.12	0.48	18.11	400	0.1688	3.85	100	0.2 cpm			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
		HHMMSS	Units	mg/l	øC	mV	mS/cm	NTUs	ml/min	Hz or cpm	minutes	(0.01 ft.)	
MC-2D	6/16/04	70607	6.85	1.55	14.88	459	0.1938	1.82	400	63 Hz	17	0.26	All parameters stable when sample was collected
MC-2D	6/16/04	70907	6.88	1.12	15.66	451	0.1972	0.29	400	63 Hz			Turbidity < 5 NTU.
MC-2D	6/16/04	71210	6.9	0.89	16.99	445	0.2074	0.25	400	63 Hz			DO > 0.2 mg/L.
MC-2D	6/16/04	71509	6.98	0.76	17.64	437	0.2098	0.19	400	63 Hz			
MC-2D	6/16/04	71816	6.96	0.66	18.17	433	0.2099	0.16	400	63 Hz			
MC-2D	6/16/04	72108	6.93	0.64	18.33	431	0.2084	0.13	400	63 Hz			
MC-2	6/16/04	75707	6.5	0.57	18.96	471	0.205	8.77	300	56 Hz	15	0.29	All parameters stable when sample was collected
MC-2	6/16/04	80008	6.49	0.51	20.23	457	0.2049	3.32	300	56 Hz			Turbidity < 5 NTU.
MC-2	6/16/04	80309	6.58	0.44	20.97	444	0.2006	2.23	300	56 Hz			DO > 0.2 mg/L.
MC-2	6/16/04	80608	6.54	0.37	21.4	439	0.1972	1.46	300	56 Hz			
MC-2	6/16/04	80910	6.5	0.31	21.62	435	0.1949	0.79	300	56 Hz			
MC-10D	6/16/04	90806	6.64	1.17	15.13	458	0.177	2.11	400	56 Hz	27	1.23	All parameters stable when sample was collected
MC-10D	6/16/04	91105	6.67	0.89	15.97	449	0.1874	1.74	400	56 Hz			Turbidity < 5 NTU.
MC-10D	6/16/04	91411	6.74	0.74	16.46	439	0.1935	0.98	400	56 Hz			DO > 0.2 mg/L.
MC-10D	6/16/04	91706	6.76	0.65	16.59	434	0.1961	0.54	400	56 Hz			
MC-10D	6/16/04	92006	6.75	0.57	16.67	432	0.1966	0.44	400	56 Hz			
MC-19D	6/16/04	95709	7.09	0.88	14.17	413	0.1219	0.24	400	71 Hz	15	0.03	All parameters stable when sample was collected
MC-19D	6/16/04	100006	7.01	0.56	14.85	414	0.1239	0.28	400	71 Hz			Turbidity < 5 NTU.
MC-19D	6/16/04	100308	7.04	0.48	15.22	411	0.1252	0.21	400	71 Hz			DO > 0.2 mg/L.
MC-19D	6/16/04	100607	7.04	0.42	15.32	409	0.126	0.21	400	71 Hz			
MC-19D	6/16/04	100927	7.02	0.36	15.42	408	0.1263	0.36	400	71 Hz			
MC-12D	6/16/04	110106	6.64	0.91	15.06	446	0.2031	17.1	400	63 Hz	21	0.63	All parameters stable when sample was collected
MC-12D	6/16/04	110325	6.65	0.74	16.21	440	0.2105	6.68	400	63 Hz			Turbidity < 5 NTU.
MC-12D	6/16/04	110610	6.68	0.7	17.25	434	0.2214	3.49	400	63 Hz			DO > 0.2 mg/L.
MC-12D	6/16/04	110907	6.67	0.64	17.93	431	0.2278	2.95	400	63 Hz			
MC-12D	6/16/04	111207	6.66	0.55	18.62	427	0.2349	2.01	400	63 Hz			
MC-12D	6/16/04	111507	6.62	0.48	18.83	425	0.2365	1.41	400	63 Hz			
MC-12D	6/16/04	111808	6.63	0.42	18.99	423	0.2378	0.83	400	63 Hz			
MC-15D	6/16/04	120005	7.11	1.08	15.8	426	0.1706	1.39	300	58 Hz	15	0.34	All parameters stable when sample was collected
MC-15D	6/16/04	120310	7	0.79	17.11	424	0.178	0.15	300	58 Hz			Turbidity < 5 NTU.
MC-15D	6/16/04	120607	7.11	0.66	17.63	416	0.1825	0.07	300	58 Hz			DO > 0.2 mg/L.
MC-15D	6/16/04	120906	7.14	0.58	17.91	414	0.1834	0.08	300	58 Hz			
MC-15D	6/16/04	121205	7.06	0.49	18.1	412	0.1847	0.06	300	58 Hz			
MC-13-D	6/16/04	125709	6.96	1.38	16.32	445	0.126	1.68	300	2.0 cpm	19	1.12	All parameters stable when sample was collected
MC-13-D	6/16/04	130015	6.9	0.95	15.9	442	0.1242	1.42	300	2.0 cpm			Turbidity < 5 NTU.
MC-13-D	6/16/04	130307	6.9	0.79	15.85	436	0.1237	1.83	250	1.5 cpm			DO > 0.2 mg/L.
MC-13-D	6/16/04	130609	6.99	0.72	16.07	428	0.1243	0.78	250	1.5 cpm			
MC-13-D	6/16/04	130907	7.04	0.67	16.04	424	0.1243	0.59	250	1.5 cpm			
MC-13-D	6/16/04	131219	7.04	0.63	16.14	420	0.1243	0.42	250	1.5 cpm			
MC-13	6/16/04	134707	6.95	1.17	18.74	448	0.0714	3.95	400	4.0 cpm	21	0.06	All parameters stable when sample was collected
MC-13	6/16/04	135011	6.52	0.62	17.08	455	0.0709	3.38	400	4.0 cpm			Turbidity < 5 NTU.
MC-13	6/16/04	135306	6.59	0.42	16.68	452	0.0728	2.89	400	4.0 cpm			DO > 0.2 mg/L.
MC-13	6/16/04	135606	6.68	0.32	16.56	446	0.0755	1.81	400	4.0 cpm			
MC-13	6/16/04	135914	6.64	0.25	16.55	439	0.0771	1.36	400	4.0 cpm			
MC-13	6/16/04	140218	6.7	0.23	16.56	434	0.0772	1.33	400	4.0 cpm			
MC-13	6/16/04	140508	6.61	0.22	16.54	429	0.0776	1.1	400	4.0 cpm			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
		HHMMSS	Units	mg/l	øC	mV	mS/cm	NTUs	ml/min	Hz or cpm	minutes	(0.01 ft.)	
MC-17D	6/17/04	71707	6.57	2.09	14.65	466	0.1213	2.37	400	61 Hz	27	0.15	All parameters stable when sample was collected
MC-17D	6/17/04	72006	6.58	1.53	15.05	460	0.121	1.07	400	61 Hz			Turbidity < 5 NTU.
MC-17D	6/17/04	72305	6.69	1.33	16.38	450	0.1231	0.62	400	61 Hz			DO > 0.2 mg/L.
MC-17D	6/17/04	72607	6.81	1.2	17.27	443	0.125	0.42	400	61 Hz			
MC-17D	6/17/04	72909	6.85	1.11	17.76	435	0.1258	0.38	400	61 Hz			
MC-17D	6/17/04	73206	6.84	1.01	18.04	434	0.1264	0.31	400	61 Hz			
MC-17D	6/17/04	73508	6.84	0.95	18.12	432	0.1268	0.27	400	61 Hz			
MC-17D	6/17/04	73806	6.81	0.9	18.19	431	0.1268	0.2	400	61 Hz			
MC-17D	6/17/04	74106	6.78	0.84	18.21	431	0.1266	0.22	400	61 Hz			
MC-17	6/17/04	82708	6.53	1.32	16.54	473	0.1829	2.42	400	2.0 cpm	19	0.1	All parameters stable when sample was collected
MC-17	6/17/04	83015	6.52	0.9	16.18	468	0.1706	1.66	400	2.0 cpm			Turbidity < 5 NTU.
MC-17	6/17/04	83305	6.48	0.75	16.05	461	0.1653	0.77	400	2.0 cpm			DO > 0.2 mg/L.
MC-17	6/17/04	83607	6.49	0.63	16.02	454	0.1628	0.65	400	2.0 cpm			
MC-17	6/17/04	83905	6.56	0.57	16.03	449	0.1621	0.47	400	2.0 cpm			
MC-17	6/17/04	84207	6.57	0.48	16.05	444	0.164	0.37	400	2.0 cpm			
MC-16	6/17/04	93108	6.36	1.27	17.09	465	0.1674	6.34	200	1.0 cpm	16	0.24	All parameters stable when sample was collected
MC-16	6/17/04	93410	6.35	1.02	16.88	457	0.1634	3.75	200	1.0 cpm			Turbidity < 5 NTU.
MC-16	6/17/04	93710	6.4	0.86	16.79	449	0.1606	2.35	200	1.0 cpm			DO > 0.2 mg/L.
MC-16	6/17/04	94007	6.4	0.76	16.75	443	0.1589	1.78	200	1.0 cpm			
MC-16	6/17/04	94310	6.5	0.66	16.77	439	0.1579	1.44	200	1.0 cpm			
MC-15	6/17/04	103406	6.47	0.64	16.94	442	0.1622	3.21	300	2.0 cpm	15	0.18	All parameters stable when sample was collected
MC-15	6/17/04	103710	6.48	0.54	16.9	436	0.1609	3.08	300	2.0 cpm			Turbidity < 5 NTU.
MC-15	6/17/04	104046	6.45	0.45	16.91	430	0.1608	1.39	300	2.0 cpm			DO > 0.2 mg/L.
MC-15	6/17/04	104307	6.51	0.41	16.9	427	0.16	1.23	300	2.0 cpm			
MC-15	6/17/04	104613	6.5	0.36	16.94	424	0.1596	1.27	300	2.0 cpm			
MC-118D	6/17/04	113808	6.36	1.19	17.95	443	0.2292	15.5	400	73 Hz	17	1.73	All parameters stable when sample was collected
MC-118D	6/17/04	114106	6.43	0.83	19.26	435	0.2445	11.2	400	73 Hz			Turbidity < 5 NTU.
MC-118D	6/17/04	114408	6.53	0.7	20.51	426	0.264	8.63	400	73 Hz			DO > 0.2 mg/L.
MC-118D	6/17/04	114707	6.53	0.61	21.18	422	0.2741	4.12	400	73 Hz			
MC-118D	6/17/04	115007	6.55	0.53	21.56	418	0.2801	2.16	400	73 Hz			
MC-118D	6/17/04	115308	6.55	0.47	21.61	415	0.282	1.72	400	73 Hz			
MC-8	6/17/04	124106	6.99	2.71	17.63	416	0.0544	24.4	400	3.0 cpm	46	0.33	All parameters stable when sample was collected
MC-8	6/17/04	124406	6.8	3.18	16.8	425	0.0492	18.9	400	3.0 cpm			Turbidity > 5 NTU but stable.
MC-8	6/17/04	124706	6.62	2.79	16.59	426	0.0486	13.3	400	3.0 cpm			DO > 0.2 mg/L.
MC-8	6/17/04	125015	6.6	2.11	16.43	427	0.0484	10.7	400	3.0 cpm			
MC-8	6/17/04	125306	6.54	1.66	16.46	427	0.0488	10.6	400	3.0 cpm			
MC-8	6/17/04	125607	6.57	1.32	16.34	425	0.0495	10.8	400	3.0 cpm			
MC-8	6/17/04	125908	6.47	1.08	16.38	425	0.0504	10.5	400	3.0 cpm			
MC-8	6/17/04	130207	6.52	0.92	16.32	422	0.0515	10.3	400	3.0 cpm			
MC-8	6/17/04	130530	6.52	0.75	16.29	420	0.0525	9.89	400	3.0 cpm			
MC-8	6/17/04	130806	6.48	0.64	16.33	419	0.0538	8.98	400	3.0 cpm			
MC-8	6/17/04	131107	6.45	0.54	16.32	416	0.0551	8.72	400	3.0 cpm			
MC-8	6/17/04	131406	6.43	0.48	16.28	415	0.057	8.6	400	3.0 cpm			
MC-8	6/17/04	131706	6.47	0.42	16.26	411	0.0583	7.9	400	3.0 cpm			
MC-8	6/17/04	132007	6.36	0.37	16.33	409	0.0597	7.71	400	3.0 cpm			
MC-8	6/17/04	132307	6.48	0.34	16.31	407	0.0612	7.11	400	3.0 cpm			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
		HHMMSS	Units	mg/l	øC	mV	mS/cm	NTUs	ml/min	Hz or cpm	minutes	(0.01 ft.)	
MC-107	6/17/04	141206	6.61	1.71	18.88	449	0.0797	7.25	400	3.0 cpm	22	0.08	All parameters stable when sample was collected
MC-107	6/17/04	141508	6.31	0.94	18.05	457	0.0732	3.26	400	3.0 cpm			Turbidity < 5 NTU.
MC-107	6/17/04	141806	6.38	0.84	17.9	451	0.0731	2.88	400	3.0 cpm			DO > 0.2 mg/L.
MC-107	6/17/04	142109	6.49	0.84	18	441	0.0751	1.81	400	3.0 cpm			
MC-107	6/17/04	142408	6.5	0.9	17.93	435	0.0736	1.47	400	3.0 cpm			
MC-107	6/17/04	142707	6.58	0.81	17.91	430	0.0756	1.39	400	3.0 cpm			
MC-107	6/17/04	143007	6.57	0.74	17.98	426	0.0756	1.08	400	3.0 cpm			

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Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
		hhmmss		mg/L	C	mV	mS/cm	NTU	ml/min	Hz or cpm	minutes	0.01 ft.	
MC-2D	9/14/04	71224	6.93	0.77	16.55	461	0.1032	3.69	400	70 Hz	24	0.95	All parameters stable when sample was collected.
MC-2D	9/14/04	71509	6.69	0.56	17.08	471	0.1018	1.86	400	70 Hz			Turbidity < 5 NTU's
MC-2D	9/14/04	71808	7.00	0.46	18.30	451	0.1068	1.78	400	70 Hz			DO > 0.20 mg/L
MC-2D	9/14/04	72106	7.04	0.40	18.90	445	0.1099	0.64	400	70 Hz			
MC-2D	9/14/04	72406	6.67	0.37	19.08	445	0.1109	0.64	400	70 Hz			
MC-2D	9/14/04	72708	6.89	0.34	19.21	445	0.1106	0.57	400	70 Hz			
MC-2D	9/14/04	73008	6.83	0.32	19.22	446	0.1104	0.37	400	70 Hz			
MC-2D	9/14/04	73306	6.82	0.30	19.36	444	0.1103	0.51	400	70 Hz			
MC-2	9/14/04	81206	7.01	0.57	20.64	447	0.0803	17.40	400	62 Hz	27	0.58	All parameters stable when sample was collected.
MC-2	9/14/04	81506	6.90	0.39	22.54	451	0.0824	8.74	400	62 Hz			Turbidity < 5 NTU's
MC-2	9/14/04	81807	6.87	0.32	24.07	449	0.0857	5.44	400	62 Hz			DO < 0.20 mg/L
MC-2	9/14/04	82107	6.77	0.28	25.05	439	0.0882	4.62	400	62 Hz			DO Test Kit Reading - 0.28 mg/L
MC-2	9/14/04	82407	6.69	0.25	25.96	437	0.0896	3.99	400	62 Hz			
MC-2	9/14/04	82706	6.65	0.23	26.21	434	0.0898	2.48	400	62 Hz			
MC-2	9/14/04	83006	6.52	0.21	26.56	436	0.0899	2.83	400	62 Hz			
MC-2	9/14/04	83336	6.47	0.19	26.77	433	0.0895	1.96	400	62 Hz			
MC-2	9/14/04	83624	6.52	0.17	26.98	428	0.0896	1.92	400	62 Hz			
MC-8	9/14/04	93207	5.90	0.56	19.59	480	0.0634	5.64	400	3.0 cpm	24	0.38	All parameters stable when sample was collected.
MC-8	9/14/04	93506	6.08	0.44	19.75	466	0.0638	4.35	400	3.0 cpm			Turbidity < 5 NTU's
MC-8	9/14/04	93806	6.17	0.36	19.77	458	0.0640	4.11	350	2.5 cpm			DO > 0.20 mg/L
MC-8	9/14/04	94105	6.15	0.33	19.79	455	0.0640	3.75	350	2.5 cpm			
MC-8	9/14/04	94405	6.18	0.29	19.77	452	0.0665	3.49	350	2.5 cpm			
MC-8	9/14/04	94705	6.29	0.27	19.76	443	0.0670	2.46	350	2.5 cpm			
MC-8	9/14/04	95006	6.33	0.24	19.74	440	0.0680	2.27	350	2.5 cpm			
MC-8	9/14/04	95306	6.35	0.22	19.74	436	0.0672	2.13	350	2.5 cpm			
MC-12D	9/14/04	103607	6.37	1.56	16.26	474	0.0891	29.60	400	66 Hz	21	0.41	All parameters stable when sample was collected.
MC-12D	9/14/04	103906	6.41	0.66	15.61	466	0.0964	7.93	400	66 Hz			Turbidity < 5 NTU's
MC-12D	9/14/04	104206	6.55	0.46	17.57	456	0.1055	1.47	400	66 Hz			DO > 0.20 mg/L
MC-12D	9/14/04	104507	6.76	0.38	18.41	443	0.1132	1.69	400	66 Hz			
MC-12D	9/14/04	104805	6.78	0.34	18.82	438	0.1162	1.66	400	66 Hz			
MC-12D	9/14/04	105107	6.79	0.31	18.99	435	0.1179	0.97	400	66 Hz			
MC-12D	9/14/04	105408	6.73	0.29	19.05	435	0.1179	1.35	400	66 Hz			
MC-10D	9/14/04	113406	6.73	0.79	16.15	437	0.0903	7.34	400	80 Hz	15	1.34	All parameters stable when sample was collected.
MC-10D	9/14/04	113707	6.87	0.47	17.13	428	0.0950	4.31	400	80 Hz			Turbidity < 5 NTU's
MC-10D	9/14/04	114005	7.01	0.39	17.53	419	0.0974	4.15	400	80 Hz			DO > 0.20 mg/L
MC-10D	9/14/04	114311	7.02	0.33	17.64	417	0.0983	2.68	400	80 Hz			
MC-10D	9/14/04	114606	6.99	0.30	17.70	416	0.0981	2.11	400	80 Hz			
MC-13	9/14/04	123508	7.39	1.06	20.04	409	0.0588	4.32	400	3.0 cpm	18	0.10	All parameters stable when sample was collected.
MC-13	9/14/04	123807	6.31	0.40	19.77	454	0.0610	3.52	400	3.0 cpm			Turbidity < 5 NTU's
MC-13	9/14/04	124106	6.33	0.26	19.69	446	0.0613	2.51	400	3.0 cpm			DO < 0.20 mg/L
MC-13	9/14/04	124412	6.52	0.21	19.68	435	0.0608	1.84	400	3.0 cpm			DO Test Kit Reading -0.37 mg/L
MC-13	9/14/04	124708	6.61	0.18	19.72	427	0.0605	1.61	400	3.0 cpm			
MC-13	9/14/04	125007	6.68	0.15	19.69	425	0.0604	1.48	400	3.0 cpm			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
		hhmmss		mg/L	C	mV	mS/cm	NTU	ml/min	Hz or cpm	minutes	0.01 ft.	
MC-13D	9/14/04	131807	6.70	1.59	17.78	436	0.0723	2.35	300	2.0 cpm	21	1.30	All parameters stable when sample was collected.
MC-13D	9/14/04	132113	6.32	0.77	16.53	450	0.0705	2.46	300	2.0 cpm			Turbidity < 5 NTU's
MC-13D	9/14/04	132407	6.41	0.60	15.96	444	0.0699	2.34	300	2.0 cpm			DO > 0.20 mg/L
MC-13D	9/14/04	132707	6.49	0.53	15.69	437	0.0698	2.25	300	2.0 cpm			
MC-13D	9/14/04	133006	6.65	0.49	15.59	431	0.0700	2.29	300	2.0 cpm			
MC-13D	9/14/04	133312	6.76	0.44	15.48	423	0.0697	1.37	300	2.0 cpm			
MC-13D	9/14/04	133606	6.76	0.43	15.45	421	0.0699	1.36	300	2.0 cpm			
MC-13D	9/14/04	133907	6.85	0.40	15.43	416	0.0701	1.30	300	2.0 cpm			
MC-15D	9/14/04	143112	6.70	0.62	19.03	436	0.0878	1.20	300	64 Hz	15	0.89	All parameters stable when sample was collected.
MC-15D	9/14/04	143407	6.97	0.51	20.30	420	0.0945	1.01	300	64 Hz			Turbidity < 5 NTU's
MC-15D	9/14/04	143719	7.08	0.46	21.25	413	0.0988	1.61	300	64 Hz			DO > 0.20 mg/L
MC-15D	9/14/04	144010	7.05	0.42	21.76	411	0.1006	1.42	300	64 Hz			
MC-15D	9/14/04	144306	6.96	0.40	21.86	414	0.1028	0.99	300	64 Hz			
MC-15D	9/14/04	144606	6.95	0.38	22.24	413	0.1038	0.93	300	64 Hz			
MC-16	9/15/04	72505	6.05	1.21	18.24	324	0.0769	11.30	200	1.0 cpm	15	0.28	All parameters stable when sample was collected.
MC-16	9/15/04	72806	6.46	0.85	18.54	314	0.0740	4.72	200	1.0 cpm			Turbidity < 5 NTU's
MC-16	9/15/04	73107	6.60	0.64	18.70	320	0.0737	2.98	200	1.0 cpm			DO > 0.20 mg/L
MC-16	9/15/04	73406	6.66	0.54	18.77	324	0.0739	1.61	200	1.0 cpm			
MC-16	9/15/04	73706	6.63	0.47	18.85	330	0.0743	1.56	200	1.0 cpm			
MC-15	9/15/04	82808	7.09	0.73	19.10	365	0.0758	7.37	300	2.0 cpm	18	0.38	All parameters stable when sample was collected.
MC-15	9/15/04	83114	7.00	0.53	19.32	366	0.0760	3.51	300	2.0 cpm			Turbidity < 5 NTU's
MC-15	9/15/04	83405	6.87	0.45	19.45	369	0.0763	2.80	300	2.0 cpm			DO > 0.20 mg/L
MC-15	9/15/04	83707	6.79	0.39	19.53	372	0.0764	2.72	300	2.0 cpm			
MC-15	9/15/04	84006	6.71	0.35	19.50	373	0.0762	2.38	300	2.0 cpm			
MC-15	9/15/04	84307	6.71	0.32	19.56	373	0.0764	1.93	300	2.0 cpm			
MC-17D	9/15/04	91308	6.83	1.73	16.14	403	0.0621	5.69	400	68 Hz	27	0.10	All parameters stable when sample was collected.
MC-17D	9/15/04	91605	6.56	0.84	15.57	411	0.0619	4.78	400	68 Hz			Turbidity < 5 NTU's
MC-17D	9/15/04	91909	6.61	0.64	15.61	405	0.0623	2.32	400	68 Hz			DO > 0.20 mg/L
MC-17D	9/15/04	92206	6.73	0.55	16.22	397	0.0637	1.68	400	68 Hz			
MC-17D	9/15/04	92506	7.03	0.49	17.16	382	0.0658	1.78	400	68 Hz			
MC-17D	9/15/04	92807	7.18	0.46	18.01	373	0.0674	1.47	400	68 Hz			
MC-17D	9/15/04	93107	7.21	0.43	18.65	371	0.0688	1.15	400	68 Hz			
MC-17D	9/15/04	93408	7.17	0.40	19.16	371	0.0698	1.12	400	68 Hz			
MC-17D	9/15/04	93706	7.13	0.38	19.45	375	0.0703	1.19	400	68 Hz			
MC-17D	9/15/04	94006	7.13	0.37	19.69	372	0.0708	1.53	400	68 Hz			
MC-17	9/15/04	103505	6.83	0.84	19.86	422	0.0935	9.46	200	1.0 cpm	25	0.10	All parameters stable when sample was collected.
MC-17	9/15/04	103806	6.86	0.61	20.02	415	0.0915	5.26	200	1.0 cpm			Turbidity < 5 NTU's
MC-17	9/15/04	104108	6.89	0.49	20.13	409	0.0886	3.61	200	1.0 cpm			DO > 0.20 mg/L
MC-17	9/15/04	104408	6.85	0.42	20.12	408	0.0854	2.65	200	1.0 cpm			
MC-17	9/15/04	104706	6.82	0.37	20.14	405	0.0824	2.51	200	1.0 cpm			
MC-17	9/15/04	105007	6.81	0.33	20.13	403	0.0805	2.54	200	1.0 cpm			
MC-17	9/15/04	105306	6.80	0.30	20.18	402	0.0790	2.63	200	1.0 cpm			
MC-17	9/15/04	105606	6.82	0.27	20.20	398	0.0779	2.61	200	1.0 cpm			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
		hhmmss		mg/L	C	mV	mS/cm	NTU	ml/min	Hz or cpm	minutes	0.01 ft.	
MC-118D	9/15/04	114309	6.54	0.84	17.38	432	0.0893	26.90	400	74 Hz	18	0.75	All parameters stable when sample was collected.
MC-118D	9/15/04	114606	6.55	0.52	18.16	426	0.0941	8.81	400	74 Hz			Turbidity < 5 NTU's
MC-118D	9/15/04	114911	6.79	0.39	19.80	411	0.1046	4.04	400	74 Hz			DO > 0.20 mg/L
MC-118D	9/15/04	115206	6.88	0.34	20.57	403	0.1105	2.69	400	74 Hz			
MC-118D	9/15/04	115506	6.88	0.31	20.99	401	0.1138	3.76	400	74 Hz			
MC-118D	9/15/04	115806	6.85	0.28	21.09	400	0.1155	3.01	400	74 Hz			
MC-118D	9/15/04	120106	6.83	0.26	21.30	399	0.1168	2.92	400	74 Hz			
MC-107	9/15/04	124706	7.52	1.03	19.36	373	0.0461	3.89	300	2.5 cpm	16	0.05	All parameters stable when sample was collected.
MC-107	9/15/04	125007	6.97	0.60	19.43	393	0.0448	4.01	300	2.5 cpm			Turbidity < 5 NTU's
MC-107	9/15/04	125306	7.05	0.47	19.52	387	0.0446	4.39	300	2.5 cpm			DO > 0.20 mg/L
MC-107	9/15/04	125612	7.03	0.42	19.45	386	0.0447	4.86	300	2.5 cpm			
MC-107	9/15/04	125909	7.09	0.40	19.49	381	0.0449	3.30	300	2.5 cpm			
MC19D	9/15/04	133807	6.98	0.68	15.19	408	0.0602	8.67	400	75 Hz	21	0.12	All parameters stable when sample was collected.
MC19D	9/15/04	134109	6.98	0.53	15.25	404	0.0594	9.68	400	75 Hz			Turbidity < 5 NTU's
MC19D	9/15/04	134417	7.08	0.43	15.94	397	0.0599	5.86	400	75 Hz			DO > 0.20 mg/L
MC19D	9/15/04	134705	7.33	0.37	17.05	384	0.0618	4.78	400	75 Hz			
MC19D	9/15/04	135010	7.48	0.33	17.91	374	0.0634	3.74	400	75 Hz			
MC19D	9/15/04	135307	7.49	0.30	18.29	372	0.0642	2.45	400	75 Hz			
MC19D	9/15/04	135605	7.48	0.26	18.55	371	0.0647	2.54	400	75 Hz			
MC-14	9/16/04	71408	6.79	0.91	18.18	437	0.0934	4.86	100	0.2 cpm	18	2.08	All parameters stable when sample was collected.
MC-14	9/16/04	71708	6.75	0.77	18.22	436	0.0937	3.52	100	0.2 cpm			Turbidity < 5 NTU's
MC-14	9/16/04	72007	6.73	0.70	18.30	436	0.0918	3.46	100	0.2 cpm			DO > 0.20 mg/L
MC-14	9/16/04	72306	6.72	0.66	18.34	434	0.0903	3.20	100	0.2 cpm			Fe Field Test Kit Reading - 1.06 mg/L
MC-14	9/16/04	72608	6.65	0.61	18.39	435	0.0883	3.18	100	0.2 cpm			
MC-14	9/16/04	72907	6.67	0.57	18.41	433	0.0875	2.82	100	0.2 cpm			
MC-21	9/16/04	82706	7.27	0.67	17.87	406	0.0739	7.28	200	0.5 cpm	27	0.05	All parameters stable when sample was collected.
MC-21	9/16/04	83006	7.16	0.51	18.03	406	0.0759	3.68	200	0.5 cpm			Turbidity < 5 NTU's
MC-21	9/16/04	83305	7.07	0.42	18.15	409	0.0766	1.74	200	0.5 cpm			DO > 0.20 mg/L
MC-21	9/16/04	83606	6.98	0.36	18.24	411	0.0766	0.82	200	0.5 cpm			Fe Field Test Kit Reading - 1.75 mg/L
MC-21	9/16/04	83907	6.92	0.33	18.30	411	0.0763	0.64	200	0.5 cpm			
MC-21	9/16/04	84105	6.88	0.32	18.33	412	0.0762	0.47	200	0.5 cpm			
MC-12	9/16/04	95806	7.07	0.95	19.27	416	0.0671	1.36	300	2.0 cpm	21	0.03	All parameters stable when sample was collected.
MC-12	9/16/04	100106	7.23	0.59	19.45	405	0.0653	1.31	300	2.0 cpm			Turbidity < 5 NTU's
MC-12	9/16/04	100406	7.31	0.48	19.72	398	0.0645	0.84	300	2.0 cpm			DO > 0.20 mg/L
MC-12	9/16/04	100729	7.28	0.40	19.78	394	0.0641	0.85	300	2.0 cpm			Fe Field Test Kit Reading - 1.13 mg/L
MC-12	9/16/04	101006	7.18	0.36	19.79	398	0.0640	0.79	300	2.0 cpm			
MC-12	9/16/04	101307	7.11	0.32	19.88	399	0.0638	0.63	300	2.0 cpm			
MC-12	9/16/04	101606	7.17	0.29	19.93	393	0.0637	0.49	300	2.0 cpm			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
		hhmmss		mg/L	C	mV	mS/cm	NTU	ml/min	Hz or cpm	minutes	0.01 ft.	
MC-1	9/16/04	112507	6.66	0.39	19.53	433	0.0478	4.80	400	61 Hz	30	0.41	All parameters stable when sample was collected.
MC-1	9/16/04	112806	6.66	0.30	21.47	428	0.0478	4.06	400	61 Hz			Turbidity < 5 NTU's
MC-1	9/16/04	113108	7.10	0.26	23.23	402	0.0506	2.73	400	61 Hz			DO > 0.20 mg/L
MC-1	9/16/04	113407	7.02	0.24	24.27	399	0.0508	2.51	400	61 Hz			Fe Field Test Kit Reading-1.58 mg/L
MC-1	9/16/04	113706	6.95	0.22	24.81	398	0.0524	2.64	400	61 Hz			DO Test Kit Reading - 0.28 mg/L
MC-1	9/16/04	114006	6.84	0.20	25.09	401	0.0547	2.63	400	61 Hz			
MC-1	9/16/04	114307	6.72	0.19	25.10	401	0.0558	2.60	400	61 Hz			
MC-1	9/16/04	114605	6.59	0.17	25.12	403	0.0567	2.35	400	61 Hz			
MC-1	9/16/04	114911	6.56	0.15	25.20	401	0.0573	2.14	400	61 Hz			
MC-1	9/16/04	115213	6.56	0.14	25.29	398	0.0576	2.49	400	61 Hz			

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Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
		HHMMSS		mg/l	C	mV	mS/cm	NTU	mL/min.	Hz or cpm	minutes	(0.01) ft.	
MC-2D	12/14/04	80524	4.60	1.80	14.32	653	0.2138	19.10	400	70 Hz	27	0.93	All parameters were stable when sample was collected.
MC-2D	12/14/04	80806	5.80	1.04	15.07	624	0.2149	7.49	400	70 Hz			Turbidity < 5 NTU's
MC-2D	12/14/04	81106	6.28	0.74	16.53	603	0.2187	3.79	400	70 Hz			DO > 0.20 mg/L
MC-2D	12/14/04	81405	6.46	0.60	17.36	592	0.2201	2.64	400	70 Hz			
MC-2D	12/14/04	81705	6.56	0.51	17.83	579	0.2198	2.34	400	70 Hz			
MC-2D	12/14/04	82005	6.60	0.43	18.16	571	0.2179	1.70	400	70 Hz			
MC-2D	12/14/04	82306	6.61	0.37	18.30	562	0.2165	2.32	400	70 Hz			
MC-2D	12/14/04	82605	6.63	0.32	18.41	557	0.2151	2.62	400	70 Hz			
MC-2D	12/14/04	82907	6.65	0.28	18.51	552	0.2140	1.41	400	70 Hz			
MC-2	12/14/04	90212	6.57	0.71	18.51	526	0.1532	48.80	400	66 Hz	25	0.34	All parameters were stable when sample was collected.
MC-2	12/14/04	90510	6.57	0.41	19.74	520	0.1560	19.30	400	66 Hz			Turbidity < 5 NTU's
MC-2	12/14/04	90805	6.54	0.32	20.09	517	0.1544	11.10	400	66 Hz			DO > 0.20 mg/L
MC-2	12/14/04	91106	6.50	0.27	19.96	516	0.1516	6.73	400	66 Hz			
MC-2	12/14/04	91405	6.49	0.24	20.24	513	0.1503	5.74	400	66 Hz			
MC-2	12/14/04	91705	6.49	0.23	20.40	510	0.1486	4.78	400	66 Hz			
MC-2	12/14/04	92005	6.47	0.23	20.54	509	0.1470	3.87	400	66 Hz			
MC-2	12/14/04	92305	6.46	0.23	20.41	507	0.1454	2.83	400	66 Hz			
MC-8	12/14/04	100605	6.59	6.62	13.70	534	0.0505	15.40	350	2.5 cpm	16	0.27	All parameters were stable when sample was collected.
MC-8	12/14/04	100905	6.44	6.62	13.60	535	0.0496	14.90	300	2.0 cpm			Turbidity > 5 NTU's but stable.
MC-8	12/14/04	101205	6.41	6.44	13.50	533	0.0489	14.20	300	2.0 cpm			DO > 0.20 mg/L
MC-8	12/14/04	101505	6.35	6.30	13.47	533	0.0485	13.30	300	2.0 cpm			
MC-8	12/14/04	101805	6.31	6.02	13.48	533	0.0480	13.10	300	2.0 cpm			
MC-118D	12/14/04	110306	6.57	1.89	15.36	556	0.1645	13.40	400	63 Hz	24	2.05	All parameters were stable when sample was collected.
MC-118D	12/14/04	110605	6.55	1.12	16.99	552	0.1843	7.36	400	63 Hz			Turbidity < 5 NTU's
MC-118D	12/14/04	110905	6.56	1.04	18.39	545	0.2036	10.30	400	63 Hz			DO > 0.20 mg/L
MC-118D	12/14/04	111205	6.56	1.06	19.00	541	0.2143	7.54	400	63 Hz			
MC-118D	12/14/04	111505	6.55	1.03	19.21	536	0.2199	5.82	400	63 Hz			
MC-118D	12/14/04	111805	6.55	0.96	19.56	533	0.2251	4.93	400	63 Hz			
MC-118D	12/14/04	112105	6.55	0.92	19.74	529	0.2278	4.92	400	63 Hz			
MC-118D	12/14/04	112405	6.55	0.89	19.94	526	0.2310	4.87	400	63 Hz			
MC-12D	12/14/04	115205	6.49	1.23	14.94	523	0.1815	7.58	400	67 Hz	18	0.80	All parameters were stable when sample was collected.
MC-12D	12/14/04	115506	6.49	0.82	16.07	520	0.1882	2.64	400	67 Hz			Turbidity < 5 NTU's
MC-12D	12/14/04	115805	6.53	0.66	17.23	515	0.1997	2.47	400	67 Hz			DO > 0.20 mg/L
MC-12D	12/14/04	120106	6.54	0.56	17.66	512	0.2041	1.95	400	67 Hz			
MC-12D	12/14/04	120405	6.54	0.51	17.91	510	0.2058	1.84	400	67 Hz			
MC-12D	12/14/04	120705	6.54	0.45	18.02	509	0.2062	1.36	400	67 Hz			
MC-10D	12/14/04	123406	6.75	1.15	13.79	503	0.1532	7.44	400	80 Hz	18	0.97	All parameters were stable when sample was collected.
MC-10D	12/14/04	123705	6.73	0.85	15.18	499	0.1601	2.64	400	80 Hz			Turbidity < 5 NTU's
MC-10D	12/14/04	124006	6.74	0.72	16.23	496	0.1693	1.98	400	80 Hz			DO > 0.20 mg/L
MC-10D	12/14/04	124305	6.74	0.62	16.80	494	0.1749	0.99	400	80 Hz			
MC-10D	12/14/04	124605	6.73	0.52	17.09	493	0.1770	0.90	400	80 Hz			
MC-10D	12/14/04	124905	6.72	0.45	17.26	492	0.1781	1.36	400	80 Hz			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
		HHMMSS		mg/l	C	mV	mS/cm	NTU	mL/min.	Hz or cpm	minutes	(0.01) ft.	
MC-19D	12/14/04	132805	7.32	0.94	14.72	473	0.1030	4.79	400	77 Hz	18	0.08	All parameters were stable when sample was collected.
MC-19D	12/14/04	133106	7.30	0.62	16.00	468	0.1056	2.30	400	77 Hz			Turbidity < 5 NTU's
MC-19D	12/14/04	133407	7.25	0.50	16.74	465	0.1075	1.64	400	77 Hz			DO > 0.20 mg/L
MC-19D	12/14/04	133705	7.18	0.41	17.07	467	0.1082	1.29	400	77 Hz			
MC-19D	12/14/04	134006	7.13	0.35	17.23	466	0.1085	0.66	400	77 Hz			
MC-19D	12/14/04	134305	7.12	0.29	17.32	465	0.1087	1.08	400	77 Hz			
MC-15D	12/14/04	140906	6.90	2.92	14.16	495	0.1402	2.25	300	67 Hz	24	0.43	All parameters were stable when sample was collected.
MC-15D	12/14/04	141206	6.86	1.53	14.85	492	0.1414	1.76	300	67 Hz			Turbidity < 5 NTU's
MC-15D	12/14/04	141505	6.87	1.20	16.32	486	0.1498	1.21	300	67 Hz			DO > 0.20 mg/L
MC-15D	12/14/04	141805	6.84	1.20	17.31	484	0.1583	1.09	300	67 Hz			
MC-15D	12/14/04	142106	6.84	1.14	17.75	486	0.1620	0.98	300	67 Hz			
MC-15D	12/14/04	142406	6.81	0.99	18.17	487	0.1646	0.91	300	67 Hz			
MC-15D	12/14/04	142705	6.82	0.90	18.42	481	0.1671	0.90	300	67 Hz			
MC-15D	12/14/04	143005	6.81	0.82	18.65	483	0.1677	0.88	300	67 Hz			
MC-15	12/15/04	74305	7.21	1.68	11.13	500	0.0653	4.94	300	2.0 cpm	27	0.80	All parameters were stable when sample was collected.
MC-15	12/15/04	74605	7.05	1.40	11.32	495	0.0525	3.63	300	2.0 cpm			Turbidity < 5 NTU's
MC-15	12/15/04	74905	6.97	1.21	11.42	494	0.0472	2.62	300	2.0 cpm			DO > 0.20 mg/L
MC-15	12/15/04	75206	6.84	1.05	11.34	494	0.0450	1.92	300	2.0 cpm			
MC-15	12/15/04	75506	6.78	0.91	11.41	495	0.0459	1.12	300	2.0 cpm			
MC-15	12/15/04	75805	6.76	0.81	11.42	496	0.0467	0.94	300	2.0 cpm			
MC-15	12/15/04	80105	6.73	0.73	11.44	497	0.0478	0.87	300	2.0 cpm			
MC-15	12/15/04	80416	6.70	0.69	11.41	501	0.0488	0.86	300	2.0 cpm			
MC-15	12/15/04	80705	6.68	0.61	11.33	498	0.0494	0.01	300	2.0 cpm			
MC-16	12/15/04	84206	6.67	1.01	11.05	516	0.0879	30.60	200	1.0 cpm	21	0.19	All parameters were stable when sample was collected.
MC-16	12/15/04	84505	6.68	0.72	11.42	511	0.0888	16.40	200	1.0 cpm			Turbidity < 5 NTU's
MC-16	12/15/04	84805	6.69	0.54	11.60	510	0.0895	10.60	200	1.0 cpm			DO > 0.20 mg/L
MC-16	12/15/04	85105	6.68	0.47	11.56	508	0.0890	5.24	200	1.0 cpm			
MC-16	12/15/04	85412	6.71	0.41	11.61	510	0.0885	3.73	200	1.0 cpm			
MC-16	12/15/04	85705	6.71	0.38	11.64	505	0.0881	0.39	200	1.0 cpm			
MC-16	12/15/04	90005	6.71	0.35	11.69	505	0.0878	0.44	200	1.0 cpm			
MC-17	12/15/04	93905	6.81	1.25	12.02	503	0.0885	4.71	200	1.0 cpm	15	0.08	All parameters were stable when sample was collected.
MC-17	12/15/04	94205	6.79	0.98	12.09	504	0.0890	4.14	200	1.0 cpm			Turbidity < 5 NTU's
MC-17	12/15/04	94505	6.77	0.82	12.14	503	0.0891	2.94	200	1.0 cpm			DO > 0.20 mg/L
MC-17	12/15/04	94805	6.77	0.68	12.09	503	0.0887	1.63	200	1.0 cpm			
MC-17	12/15/04	95105	6.77	0.59	12.10	502	0.0880	1.20	200	1.0 cpm			
MC-17D	12/15/04	103109	7.16	4.97	13.27	499	0.0897	1.14	400	72 Hz	21	0.11	All parameters were stable when sample was collected.
MC-17D	12/15/04	103405	7.11	1.46	14.23	498	0.0928	0.94	400	72 Hz			Turbidity < 5 NTU's
MC-17D	12/15/04	103712	7.07	1.15	15.86	498	0.0979	0.72	400	72 Hz			DO > 0.20 mg/L
MC-17D	12/15/04	104006	7.02	1.01	16.72	500	0.1009	0.64	400	72 Hz			
MC-17D	12/15/04	104305	7.00	0.90	17.13	494	0.1026	0.61	400	72 Hz			
MC-17D	12/15/04	104606	6.96	0.80	17.42	492	0.1038	0.61	400	72 Hz			
MC-17D	12/15/04	104906	6.95	0.75	17.76	491	0.1049	0.59	400	72 Hz			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
		HHMMSS		mg/l	C	mV	mS/cm	NTU	mL/min.	Hz or cpm	minutes	(0.01) ft.	
MC-107	12/15/04	121023	7.16	2.59	12.43	500	0.0587	1.88	300	2.5 cpm	30	0.05	All parameters were stable when sample was collected.
MC-107	12/15/04	121312	7.15	2.04	12.63	498	0.0592	2.15	300	2.5 cpm			Turbidity < 5 NTU's
MC-107	12/15/04	121606	7.09	1.80	12.73	496	0.0596	1.79	300	2.5 cpm			DO > 0.20 mg/L
MC-107	12/15/04	121906	7.04	1.53	12.85	494	0.0601	1.24	300	2.5 cpm			
MC-107	12/15/04	122205	7.01	1.28	12.85	495	0.0606	1.34	300	2.5 cpm			
MC-107	12/15/04	122506	6.97	1.15	12.88	495	0.0607	1.57	300	2.5 cpm			
MC-107	12/15/04	122805	6.95	1.01	12.84	493	0.0610	1.32	300	2.5 cpm			
MC-107	12/15/04	123119	6.96	0.90	12.84	492	0.0611	1.41	300	2.5 cpm			
MC-107	12/15/04	123406	6.95	0.83	12.89	491	0.0610	1.32	300	2.5 cpm			
MC-107	12/15/04	123705	6.96	0.79	12.91	490	0.0608	1.09	300	2.5 cpm			
MC-13	12/15/04	132109	6.69	1.11	14.08	513	0.0795	2.34	400	3.0 cpm	15	0.09	All parameters were stable when sample was collected.
MC-13	12/15/04	132405	6.62	0.80	14.16	513	0.0810	1.87	400	3.0 cpm			Turbidity < 5 NTU's
MC-13	12/15/04	132705	6.58	0.66	14.18	513	0.0810	1.22	400	3.0 cpm			DO > 0.20 mg/L
MC-13	12/15/04	133005	6.57	0.56	14.14	511	0.0803	1.24	400	3.0 cpm			
MC-13	12/15/04	133305	6.57	0.46	14.13	510	0.0796	0.70	400	3.0 cpm			
MC-13D	12/15/04	140306	6.93	1.56	13.90	513	0.0955	1.27	200	1.0 cpm	15	1.04	All parameters were stable when sample was collected.
MC-13D	12/15/04	140605	6.88	1.38	13.93	510	0.0960	0.65	200	1.0 cpm			Turbidity < 5 NTU's
MC-13D	12/15/04	140905	6.88	1.26	13.98	509	0.0966	0.67	200	1.0 cpm			DO > 0.20 mg/L
MC-13D	12/15/04	141206	6.87	1.18	14.01	508	0.0971	0.44	200	1.0 cpm			
MC-13D	12/15/04	141507	6.90	1.07	14.02	506	0.0975	0.38	200	1.0 cpm			
MC-20	12/16/04	81405	6.40	2.07	10.48	576	0.1040	9.76	100	1.0 cpm	20	1.24	All parameters were stable when sample was collected.
MC-20	12/16/04	81706	6.43	1.74	11.00	574	0.1089	7.97	100	1.0 cpm			Turbidity < 5 NTU's
MC-20	12/16/04	82006	6.43	1.55	11.23	570	0.1110	6.46	100	1.0 cpm			DO > 0.20 mg/L
MC-20	12/16/04	82305	6.43	1.48	11.38	567	0.1107	4.87	100	1.0 cpm			Fe Field Test Reading - 3.30 mg/L Upper Limit
MC-20	12/16/04	82605	6.41	1.46	11.41	567	0.1090	4.56	100	1.0 cpm			
MC-20	12/16/04	82905	6.42	1.48	11.57	563	0.1070	3.85	100	1.0 cpm			
MC-14	12/16/04	100205	6.55	1.51	12.21	562	0.1217	14.40	100	0.1 cpm	40	1.91	All parameters were stable when sample was collected.
MC-14	12/16/04	100512	6.55	1.37	12.14	556	0.1207	13.00	100	0.1 cpm			Turbidity > 5 NTU's but stable.
MC-14	12/16/04	100806	6.55	1.20	12.06	560	0.1185	13.30	100	0.1 cpm			DO > 0.20 mg/L
MC-14	12/16/04	101105	6.55	1.11	11.96	552	0.1153	11.80	100	0.1 cpm			Fe Field Test Reading - 3.30 mg/L Upper Limit
MC-14	12/16/04	101405	6.55	0.99	11.87	548	0.1123	11.40	100	0.1 cpm			
MC-14	12/16/04	101706	6.54	0.97	11.76	549	0.1095	10.80	100	0.1 cpm			
MC-14	12/16/04	102005	6.54	0.99	11.66	544	0.1071	9.14	100	0.1 cpm			
MC-14	12/16/04	102305	6.52	0.93	11.57	544	0.1050	7.52	100	0.1 cpm			
MC-14	12/16/04	102605	6.52	0.86	11.50	542	0.1030	6.85	100	0.1 cpm			
MC-14	12/16/04	102905	6.51	0.83	11.47	541	0.1016	6.61	100	0.1 cpm			
MC-14	12/16/04	103205	6.51	0.77	11.46	543	0.1006	5.92	100	0.1 cpm			
MC-14	12/16/04	103506	6.50	0.75	11.46	540	0.0997	5.56	100	0.1 cpm			
MC-14	12/16/04	103816	6.49	0.71	11.48	545	0.0992	5.53	100	0.1 cpm			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
		HHMMSS		mg/l	C	mV	mS/cm	NTU	mL/min.	Hz or cpm	minutes	(0.01) ft.	
MC-21	12/16/04	120605	6.60	2.51	13.16	530	0.0808	19.60	200	0.5 cpm	29	0.03	All parameters were stable when sample was collected.
MC-21	12/16/04	120905	6.53	2.13	13.18	523	0.0853	8.76	200	0.5 cpm			Turbidity < 5 NTU's
MC-21	12/16/04	121205	6.52	1.80	13.07	524	0.0906	5.36	200	0.5 cpm			DO > 0.20 mg/L
MC-21	12/16/04	121506	6.51	1.62	13.09	524	0.0921	3.45	200	0.5 cpm			Fe Field Test Reading - 3.10 mg/L
MC-21	12/16/04	121805	6.51	1.42	13.08	527	0.0901	2.55	200	0.5 cpm			
MC-21	12/16/04	122105	6.51	1.31	13.08	522	0.0887	1.34	200	0.5 cpm			
MC-21	12/16/04	122406	6.55	1.21	13.04	523	0.0879	0.84	200	0.5 cpm			
MC-21	12/16/04	122706	6.53	1.15	12.97	520	0.0871	0.97	200	0.5 cpm			
MC-12	12/16/04	131905	6.92	3.10	12.50	515	0.0636	8.45	300	2.0 cpm	21	0.05	All parameters were stable when sample was collected.
MC-12	12/16/04	132205	6.98	2.21	12.56	511	0.0665	5.42	300	2.0 cpm			Turbidity < 5 NTU's
MC-12	12/16/04	132515	6.98	1.61	12.68	509	0.0691	3.29	300	2.0 cpm			DO > 0.20 mg/L
MC-12	12/16/04	132805	7.01	1.37	12.71	509	0.0699	1.81	300	2.0 cpm			Fe Field Test Reading - 0.96 mg/L
MC-12	12/16/04	133110	7.00	1.18	12.71	506	0.0704	1.04	300	2.0 cpm			
MC-12	12/16/04	133405	7.03	1.17	12.77	503	0.0709	0.84	300	2.0 cpm			
MC-12	12/16/04	133705	7.01	1.11	12.77	503	0.0709	0.69	300	2.0 cpm			
MC-1	12/16/04	142221	6.81	6.25	13.16	508	0.0195	16.80	400	71 Hz	21	0.99	All parameters were stable when sample was collected.
MC-1	12/16/04	142505	6.75	6.10	14.64	505	0.0200	14.50	400	71 Hz			Turbidity > 5 NTU's but stable.
MC-1	12/16/04	142805	6.65	5.82	15.71	506	0.0204	14.00	400	71 Hz			DO > 0.20 mg/L
MC-1	12/16/04	143108	6.57	5.52	16.30	510	0.0209	13.80	400	71 Hz			Fe Field Test Reading - 0.13 mg/L
MC-1	12/16/04	143408	6.49	5.17	16.44	514	0.0214	13.50	400	71 Hz			
MC-1	12/16/04	143706	6.44	4.95	16.51	514	0.0218	13.60	400	71 Hz			
MC-1	12/16/04	144005	6.39	4.69	16.64	515	0.0220	13.30	400	71 Hz			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
		HHMMSS	Units	mg/l	øC	mV	mS/cm	NTUs	ml/min	hz or cpm	minutes	0.01 feet	
MC-8	3/15/05	90309	6.39	1.02	11.23	462	0.0913	22	300	4.0 cpm	21	0.43	All parameters stable when the sample was collected
MC-8	3/15/05	90605	6.36	0.87	11.22	461	0.0919	16	300	4.0 cpm			Turbidity > 5 NTU but stable
MC-8	3/15/05	90905	6.26	0.74	11.26	457	0.0936	11.2	300	4.0 cpm			DO > 0.20 mg/l
MC-8	3/15/05	91238	6.21	0.63	11.23	458	0.0948	8.1	300	4.0 cpm			
MC-8	3/15/05	91509	6.22	0.58	11.22	454	0.0957	6.21	300	4.0 cpm			
MC-8	3/15/05	91820	6.29	0.53	11.31	454	0.0969	6.1	300	4.0 cpm			
MC-8	3/15/05	92105	6.24	0.49	11.41	449	0.097	5.93	300	4.0 cpm			
MC-118D	3/15/05	101005	6.4	0.89	15.13	497	0.9991	8.05	400	73 Hz	15	2	All parameters stable when the sample was collected
MC-118D	3/15/05	101305	6.52	0.55	17.18	489	1.054	2.22	400	73 Hz			Turbidity < 5 NTU
MC-118D	3/15/05	101605	6.59	0.43	18.48	482	1.073	1.08	400	73 Hz			DO > 0.20 mg/l
MC-118D	3/15/05	101905	6.6	0.37	18.94	477	1.069	0.73	400	73 Hz			
MC-118D	3/15/05	102205	6.61	0.32	18.99	474	1.049	0.57	400	73 Hz			
MC-107	3/15/05	110106	7.19	1.14	12.1	448	0.0974	6.27	300	2.5 cpm	24	0.04	All parameters stable when the sample was collected
MC-107	3/15/05	110405	7.09	0.95	11.76	447	0.0981	5.87	300	2.5 cpm			Turbidity < 5 NTU
MC-107	3/15/05	110705	7.05	0.84	11.64	444	0.1033	5.29	300	2.5 cpm			DO > 0.20 mg/l
MC-107	3/15/05	111005	7.08	0.76	11.58	442	0.1089	3.87	300	2.5 cpm			
MC-107	3/15/05	111305	7.06	0.69	11.61	438	0.1143	3.08	300	2.5 cpm			
MC-107	3/15/05	111605	7.06	0.63	11.57	434	0.1182	2.89	300	2.5 cpm			
MC-107	3/15/05	111906	7	0.57	11.58	434	0.1203	2.12	300	2.5 cpm			
MC-107	3/15/05	112205	7.03	0.53	11.54	432	0.1219	1.88	300	2.5 cpm			
MC-12D	3/15/05	115505	6.69	0.77	14.46	471	0.6926	31.2	400	66 Hz	18	0.65	All parameters stable when the sample was collected
MC-12D	3/15/05	115813	6.65	0.54	15.53	472	0.72	7.89	400	66 Hz			Turbidity < 5 NTU
MC-12D	3/15/05	120105	6.69	0.45	16.81	466	0.7538	2.95	400	66 Hz			DO > 0.20 mg/l
MC-12D	3/15/05	120405	6.7	0.39	17.71	461	0.7742	1.79	400	66 Hz			
MC-12D	3/15/05	120712	6.68	0.34	18.04	457	0.7754	1.21	400	66 Hz			
MC-12D	3/15/05	121005	6.68	0.32	18.21	455	0.7705	1.09	400	66 Hz			
MC-10D	3/15/05	124305	7.34	0.71	14.62	455	0.6187	63.7	400	77 Hz	18	1.47	All parameters stable when the sample was collected
MC-10D	3/15/05	124606	7.11	0.48	15.12	455	0.607	8.97	400	77 Hz			Turbidity < 5 NTU
MC-10D	3/15/05	124905	6.97	0.39	16.58	452	0.6325	1.83	400	77 Hz			DO > 0.20 mg/l
MC-10D	3/15/05	125205	6.94	0.34	17.43	447	0.6488	0.63	400	77 Hz			
MC-10D	3/15/05	125506	6.9	0.31	17.82	444	0.6523	0.54	400	77 Hz			
MC-10D	3/15/05	125805	6.86	0.28	17.96	442	0.6475	0.49	400	77 Hz			
MC-19D	3/15/05	133609	7.69	1.48	15.22	431	0.1882	3.06	400	72 Hz	23	0.06	All parameters stable when the sample was collected
MC-19D	3/15/05	133906	7.5	0.73	14.89	440	0.1854	1.72	400	72 Hz			Turbidity < 5 NTU
MC-19D	3/15/05	134205	7.48	0.51	15.51	437	0.1856	0.95	400	72 Hz			DO > 0.20 mg/l
MC-19D	3/15/05	134505	7.48	0.42	16.55	432	0.1875	0.53	400	72 Hz			
MC-19D	3/15/05	134808	7.54	0.38	17.33	424	0.1891	0.49	400	72 Hz			
MC-19D	3/15/05	135107	7.5	0.38	17.72	421	0.1896	0.46	400	72 Hz			
MC-19D	3/15/05	135405	7.45	0.38	17.85	420	0.1895	0.45	400	72 Hz			
MC-2	3/15/05	142506	6.94	0.44	15.97	438	0.2143	38.8	400	59 Hz	18	0.71	All parameters stable when the sample was collected
MC-2	3/15/05	142805	6.88	0.36	17.54	434	0.2227	11.6	400	59 Hz			Turbidity < 5 NTU
MC-2	3/15/05	143117	6.94	0.3	18.73	423	0.2299	3.63	400	59 Hz			DO > 0.20 mg/l
MC-2	3/15/05	143405	6.91	0.26	19.32	420	0.2325	2.01	400	59 Hz			
MC-2	3/15/05	143706	6.86	0.23	19.71	418	0.2339	1.49	400	59 Hz			
MC-2	3/15/05	144008	6.82	0.2	19.94	417	0.2341	1.32	400	59 Hz			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
		HHMMSS	Units	mg/l	øC	mV	mS/cm	NTUs	ml/min	hz or cpm	minutes	0.01 feet	
MC-2D	3/15/05	151105	6.87	1.14	16.17	444	0.312	3.62	400	70 Hz	18	1.3	All parameters stable when the sample was collected
MC-2D	3/15/05	151405	6.87	0.58	16.12	445	0.3147	1.96	400	70 Hz			Turbidity < 5 NTU
MC-2D	3/15/05	151707	6.89	0.41	17.4	442	0.3278	0.83	400	70 Hz			DO > 0.20 mg/l
MC-2D	3/15/05	152005	6.97	0.33	18.33	434	0.3337	0.79	400	70 Hz			
MC-2D	3/15/05	152312	6.99	0.31	18.68	430	0.3353	0.67	400	70 Hz			
MC-2D	3/15/05	152606	6.97	0.32	18.75	429	0.3347	0.63	400	70 Hz			
MC-17D	3/16/05	81733	7.45	1.11	12.77	473	0.1836	0.46	400	70 Hz	21	0.4	All parameters stable when the sample was collected
MC-17D	3/16/05	82026	7.47	0.9	13.98	467	0.1885	0.52	400	70 Hz			Turbidity < 5 NTU
MC-17D	3/16/05	82307	7.43	0.79	15.36	462	0.1917	0.48	400	70 Hz			DO > 0.20 mg/l
MC-17D	3/16/05	82612	7.37	0.71	16.48	460	0.1936	0.45	400	70 Hz			
MC-17D	3/16/05	82906	7.31	0.66	17.09	457	0.1953	0.47	400	70 Hz			
MC-17D	3/16/05	83205	7.25	0.63	17.43	456	0.1959	0.43	400	70 Hz			
MC-17D	3/16/05	83505	7.22	0.57	17.63	456	0.1961	0.51	400	70 Hz			
MC-17	3/16/05	92815	6.94	0.74	11.16	472	0.3025	1.3	200	1.0 cpm	33	0.12	All parameters stable when the sample was collected
MC-17	3/16/05	93105	6.95	0.64	11.17	468	0.2893	1.21	200	1.0 cpm			Turbidity < 5 NTU
MC-17	3/16/05	93405	6.93	0.54	11.18	464	0.2781	0.82	200	1.0 cpm			DO > 0.20 mg/l
MC-17	3/16/05	93705	6.95	0.39	11.2	460	0.2694	0.67	200	1.0 cpm			
MC-17	3/16/05	94005	6.94	0.3	11.21	455	0.2571	0.89	200	1.0 cpm			
MC-17	3/16/05	94307	6.98	0.26	11.21	452	0.2354	0.75	200	1.0 cpm			
MC-17	3/16/05	94605	6.96	0.24	11.22	451	0.2192	0.69	200	1.0 cpm			
MC-17	3/16/05	94907	6.95	0.24	11.23	449	0.2073	0.65	200	1.0 cpm			
MC-17	3/16/05	95205	6.95	0.21	11.27	447	0.1982	0.6	200	1.0 cpm			
MC-17	3/16/05	95511	6.98	0.22	11.33	445	0.1947	0.56	200	1.0 cpm			
MC-17	3/16/05	95808	6.94	0.27	11.34	444	0.1929	0.5	200	1.0 cpm			
MC-16	3/16/05	103006	7.04	0.66	11.13	450	0.2492	9.72	200	1.0 cpm	18	0.33	All parameters stable when the sample was collected
MC-16	3/16/05	103305	6.93	0.45	11.06	451	0.2423	1.98	200	1.0 cpm			Turbidity < 5 NTU
MC-16	3/16/05	103605	6.93	0.31	11.03	448	0.2319	1.22	200	1.0 cpm			DO > 0.20 mg/l
MC-16	3/16/05	103906	6.83	0.23	11.02	447	0.2082	1.25	200	1.0 cpm			
MC-16	3/16/05	104218	6.84	0.27	11	444	0.2049	1.19	200	1.0 cpm			
MC-16	3/16/05	104505	6.91	0.23	10.98	442	0.202	1.02	200	1.0 cpm			
MC-15D	3/16/05	111728	6.91	0.5	13.49	450	0.2743	1.77	300	64 Hz	18	0.54	All parameters stable when the sample was collected
MC-15D	3/16/05	112016	6.91	0.39	14.35	450	0.286	1.01	300	64 Hz			Turbidity < 5 NTU
MC-15D	3/16/05	112305	6.96	0.31	16.14	446	0.299	0.89	300	64 Hz			DO > 0.20 mg/l
MC-15D	3/16/05	112613	6.97	0.26	17.15	444	0.3082	0.73	300	64 Hz			
MC-15D	3/16/05	112927	6.94	0.25	17.62	443	0.3128	0.69	300	64 Hz			
MC-15D	3/16/05	113215	6.93	0.22	17.73	442	0.3138	0.61	300	64 Hz			
MC-15	3/16/05	120505	7.15	0.52	11.73	450	0.147	8.63	300	2.0 cpm	15	0.57	All parameters stable when the sample was collected
MC-15	3/16/05	120820	6.98	0.39	11.57	447	0.1552	2.72	300	2.0 cpm			Turbidity < 5 NTU
MC-15	3/16/05	121105	6.92	0.31	11.52	446	0.1577	1.5	300	2.0 cpm			DO > 0.20 mg/l
MC-15	3/16/05	121413	6.88	0.27	11.5	444	0.1591	1.1	300	2.0 cpm			
MC-15	3/16/05	121712	6.91	0.22	11.49	443	0.1589	0.92	300	2.0 cpm			
MC-13	3/16/05	125806	6.91	0.54	11.81	436	0.1139	2.21	400	3.0 cpm	15	0.13	All parameters stable when the sample was collected
MC-13	3/16/05	130116	6.82	0.42	11.76	436	0.1216	1.44	400	3.0 cpm			Turbidity < 5 NTU
MC-13	3/16/05	130405	6.86	0.33	11.75	436	0.1243	0.85	400	3.0 cpm			DO > 0.20 mg/l
MC-13	3/16/05	130705	6.78	0.28	11.74	434	0.1249	0.79	400	3.0 cpm			
MC-13	3/16/05	131006	6.82	0.27	11.73	433	0.1245	0.78	400	3.0 cpm			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
		HHMMSS	Units	mg/l	øC	mV	mS/cm	NTUs	ml/min	hz or cpm	minutes	0.01 feet	
MC-13D	3/16/05	133905	6.97	0.94	12.97	434	0.1666	0.98	200	1.0 cpm	15	1.21	All parameters stable when the sample was collected
MC-13D	3/16/05	134206	7	0.74	13.04	435	0.1683	0.77	200	1.0 cpm			Turbidity < 5 NTU
MC-13D	3/16/05	134505	7.07	0.64	13.19	435	0.1689	0.51	200	1.0 cpm			DO > 0.20 mg/l
MC-13D	3/16/05	134807	6.99	0.58	13.22	435	0.1696	0.65	200	1.0 cpm			
MC-13D	3/16/05	135105	7.07	0.52	13.17	435	0.1696	0.52	200	1.0 cpm			
MC-14	3/17/05	80306	6.79	1.15	10.05	498	0.2258	9.91	100	0.1 cpm	24	2.11	All parameters stable when the sample was collected
MC-14	3/17/05	80605	6.76	0.98	10.07	494	0.2231	7.43	100	0.1 cpm			Turbidity < 5 NTU
MC-14	3/17/05	80905	6.74	0.91	10.15	491	0.2218	6.52	100	0.1 cpm			DO > 0.20 mg/l
MC-14	3/17/05	81205	6.72	0.85	10.19	489	0.2201	5.89	100	0.1 cpm			Fe Test Kit Reading 2.51 mg/l
MC-14	3/17/05	81505	6.71	0.78	10.27	486	0.2192	5.1	100	0.1 cpm			
MC-14	3/17/05	81805	6.69	0.74	10.34	485	0.2184	4.75	100	0.1 cpm			
MC-14	3/17/05	82105	6.67	0.69	10.45	483	0.2171	4.02	100	0.1 cpm			
MC-14	3/17/05	82405	6.66	0.65	10.48	482	0.2169	3.47	100	0.1 cpm			
MC-20	3/17/05	95305	6.96	0.81	11.57	483	0.246	38.2	100	0.1 cpm	27	2.83	All parameters stable when the sample was collected
MC-20	3/17/05	95605	6.85	0.74	11.53	479	0.2479	30.3	100	0.1 cpm			Turbidity > 5 NTU but stable
MC-20	3/17/05	95934	6.78	0.68	11.57	477	0.2493	20.7	100	0.1 cpm			DO > 0.20 mg/l
MC-20	3/17/05	100205	6.64	0.65	11.57	476	0.2489	15.1	100	0.1 cpm			Fe Test Kit Reading 2.81 mg/l
MC-20	3/17/05	100508	6.66	0.62	11.57	475	0.2464	12	100	0.1 cpm			
MC-20	3/17/05	100806	6.61	0.59	11.62	474	0.2448	11	100	0.1 cpm			
MC-20	3/17/05	101108	6.63	0.55	11.67	473	0.243	6.83	100	0.1 cpm			
MC-20	3/17/05	101410	6.47	0.53	11.71	472	0.2415	6.57	100	0.1 cpm			
MC-20	3/17/05	101705	6.57	0.5	11.74	471	0.2403	6.22	100	0.1 cpm			
MC-21	3/17/05	114805	7.54	0.69	13.15	454	0.131	15.8	200	0.5 cpm	15	0.03	All parameters stable when the sample was collected
MC-21	3/17/05	115105	7.39	0.57	13.18	454	0.1322	9.78	200	0.5 cpm			Turbidity < 5 NTU
MC-21	3/17/05	115405	7.31	0.5	13.29	453	0.1331	4.69	200	0.5 cpm			DO > 0.20 mg/l
MC-21	3/17/05	115707	7.27	0.45	13.34	446	0.1329	3.03	200	0.5 cpm			Fe Test Kit Reading 3.30 mg/l (upper limit)
MC-21	3/17/05	120012	7.23	0.41	13.41	444	0.1327	1.82	200	0.5 cpm			
MC-12	3/17/05	133307	7.6	1.77	11.58	447	0.1135	1.82	300	2.0 cpm	15	0.06	All parameters stable when the sample was collected
MC-12	3/17/05	133605	7.53	0.86	11.36	443	0.1067	0.97	300	2.0 cpm			Turbidity < 5 NTU
MC-12	3/17/05	133905	7.46	0.75	11.21	440	0.104	0.72	300	2.0 cpm			DO > 0.20 mg/l
MC-12	3/17/05	134205	7.49	0.7	11.1	437	0.1021	0.63	300	2.0 cpm			Fe Test Kit Reading 1.02 mg/l
MC-12	3/17/05	134507	7.48	0.66	11.09	435	0.1016	0.59	300	2.0 cpm			
MC-1	3/17/05	143106	7.02	0.73	11.68	454	0.0619	4.69	400	62 Hz	21	0.81	All parameters stable when the sample was collected
MC-1	3/17/05	143405	6.94	0.52	12.93	452	0.0586	3.72	400	62 Hz			Turbidity < 5 NTU
MC-1	3/17/05	143705	7.11	0.42	14.69	434	0.0568	3.89	400	62 Hz			DO > 0.20 mg/l
MC-1	3/17/05	144005	7.06	0.37	15.71	429	0.0578	3.51	400	62 Hz			Fe Test Kit Reading 0.08 mg/l
MC-1	3/17/05	144306	7.04	0.35	16.25	429	0.0611	3.02	400	62 Hz			
MC-1	3/17/05	144606	7	0.33	16.54	429	0.0636	2.79	400	62 Hz			
MC-1	3/17/05	144905	7.01	0.32	16.68	428	0.0665	2.65	400	62 Hz			

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Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
		HHMMSS	Units	mg/l	øC	mV	mS/cm	NTUs	ml/min	hz or cpm	minutes	0.01 feet	
MC-15	6/7/05	82233	6.58	0.98	14.36	505	0.1866	3.83	300	2.0 cpm	33	0.58	All parameters stable when the sample was collected.
MC-15	6/7/05	82506	6.58	0.81	14.28	501	0.1947	2.86	300	2.0 cpm			Turbidity < 5NTU.
MC-15	6/7/05	82805	6.58	0.72	14.22	496	0.1929	2.04	300	2.0 cpm			DO > 0.20 mg/L
MC-15	6/7/05	83112	6.58	0.65	14.24	497	0.1876	1.8	300	2.0 cpm			
MC-15	6/7/05	83405	6.61	0.59	14.2	492	0.1801	1.31	300	2.0 cpm			
MC-15	6/7/05	83707	6.58	0.55	14.17	489	0.1751	1	300	2.0 cpm			
MC-15	6/7/05	84005	6.62	0.5	14.21	485	0.1708	0.91	300	2.0 cpm			
MC-15	6/7/05	84308	6.68	0.43	14.24	475	0.1679	0.83	300	2.0 cpm			
MC-15	6/7/05	84605	6.7	0.37	14.25	465	0.1665	0.8	300	2.0 cpm			
MC-15	6/7/05	84931	6.74	0.33	14.26	456	0.1665	0.64	300	2.0 cpm			
MC-15	6/7/05	85205	6.74	0.31	14.26	455	0.1667	0.64	300	2.0 cpm			
MC-15	6/7/05	95405	6.85	0.97	16.42	503	0.3921	1.11	400	56 hz	18	0.82	All parameters stable when the sample was collected.
MC-15	6/7/05	95713	6.85	0.62	17.39	496	0.411	0.44	400	56 hz			Turbidity < 5NTU.
MC-15	6/7/05	100005	6.84	0.5	17.82	491	0.4233	0.38	400	56 hz			DO > 0.20 mg/L
MC-15	6/7/05	100305	6.83	0.4	18.09	486	0.4312	0.3	400	56 hz			
MC-15	6/7/05	100605	6.83	0.34	18.27	482	0.4362	0.35	400	56 hz			
MC-15	6/7/05	100906	6.82	0.29	18.36	479	0.4402	0.32	400	56 hz			
MC-16	6/7/05	104117	6.81	1.17	14.61	459	0.386	9.07	200	1.0 cpm	24	0.22	All parameters stable when the sample was collected.
MC-16	6/7/05	104405	6.87	0.86	14.67	316	0.3688	8.26	200	1.0 cpm			Turbidity < 5NTU.
MC-16	6/7/05	104705	6.83	0.71	14.65	239	0.3545	5.7	200	1.0 cpm			DO > 0.20 mg/L
MC-16	6/7/05	105005	6.85	0.56	14.6	204	0.3418	4.28	200	1.0 cpm			
MC-16	6/7/05	105312	6.85	0.48	14.64	188	0.3342	3.77	200	1.0 cpm			
MC-16	6/7/05	105605	6.85	0.4	14.65	178	0.3283	2.61	200	1.0 cpm			
MC-16	6/7/05	105907	6.94	0.34	14.69	171	0.3241	2.54	200	1.0 cpm			
MC-16	6/7/05	110205	6.86	0.3	14.75	166	0.321	2.55	200	1.0 cpm			
MC-17	6/7/05	114015	6.99	0.94	14.88	318	0.3172	1.61	200	1.0 cpm	28	0.07	All parameters stable when the sample was collected.
MC-17	6/7/05	114309	6.95	0.79	14.79	271	0.3202	1.44	200	1.0 cpm			Turbidity < 5NTU.
MC-17	6/7/05	114605	6.91	0.67	14.75	232	0.3197	1.13	200	1.0 cpm			DO > 0.20 mg/L
MC-17	6/7/05	114905	6.91	0.57	14.72	208	0.3162	0.96	200	1.0 cpm			
MC-17	6/7/05	115205	6.92	0.48	14.71	192	0.3107	0.83	200	1.0 cpm			
MC-17	6/7/05	115505	6.92	0.41	14.71	182	0.3053	0.52	200	1.0 cpm			
MC-17	6/7/05	115820	6.91	0.35	14.65	176	0.2992	0.51	200	1.0 cpm			
MC-17	6/7/05	120105	6.93	0.3	14.59	172	0.2944	0.38	200	1.0 cpm			
MC-17	6/7/05	120406	6.91	0.26	14.57	168	0.2906	0.33	200	1.0 cpm			
MC-10D	6/7/05	125621	6.85	0.87	14.01	409	0.3494	23.6	400	69 hz	30	1.39	All parameters stable when the sample was collected.
MC-10D	6/7/05	125906	6.87	0.65	14.83	387	0.3625	6.81	400	69 hz			Turbidity < 5NTU.
MC-10D	6/7/05	130205	6.9	0.58	16.1	338	0.3859	3.11	400	69 hz			DO > 0.20 mg/L
MC-10D	6/7/05	130505	6.9	0.5	16.7	275	0.4026	1.26	400	69 hz			
MC-10D	6/7/05	130810	6.9	0.46	16.88	225	0.4127	1.18	400	69 hz			
MC-10D	6/7/05	131106	6.9	0.42	17.03	197	0.417	0.96	400	69 hz			
MC-10D	6/7/05	131405	6.89	0.41	16.93	181	0.417	0.84	400	69 hz			
MC-10D	6/7/05	131717	6.88	0.37	16.86	171	0.4169	0.3	400	69 hz			
MC-10D	6/7/05	132005	6.88	0.34	16.94	165	0.4175	0.2	400	69 hz			
MC-10D	6/7/05	132306	6.87	0.32	17.04	160	0.4199	0.25	400	69 hz			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
		HHMMSS	Units	mg/l	øC	mV	mS/cm	NTUs	ml/min	hz or cpm	minutes	0.01 feet	
MC-19D	6/7/05	135108	7.3	0.9	13.65	180	0.1768	3.38	400	72 hz	18	0.07	All parameters stable when the sample was collected.
MC-19D	6/7/05	135406	7.25	0.5	14.35	181	0.1799	2.48	400	72 hz			Turbidity < 5NTU.
MC-19D	6/7/05	135709	7.32	0.38	15.59	177	0.1834	1.09	400	72 hz			DO > 0.20 mg/L
MC-19D	6/7/05	140005	7.31	0.32	16.19	178	0.1856	0.83	400	72 hz			
MC-19D	6/7/05	140307	7.28	0.28	16.58	181	0.1872	0.56	400	72 hz			
MC-19D	6/7/05	140605	7.25	0.25	16.68	184	0.1884	0.41	400	72 hz			
MC-14	6/8/05	73124	6.63	1.58	14.59	557	0.4	22	100	0.1 cpm	45	2.15	All parameters stable when the sample was collected.
MC-14	6/8/05	73424	6.66	1.31	14.65	508	0.3952	19.8	100	0.1 cpm			Turbidity < 5NTU.
MC-14	6/8/05	73714	6.66	1.16	14.73	433	0.3885	18.8	100	0.1 cpm			DO > 0.20 mg/L
MC-14	6/8/05	74006	6.7	1.06	14.83	365	0.3814	17	100	0.1 cpm			Fe field test kit reading 2.44 mg/l
MC-14	6/8/05	74305	6.66	0.96	14.96	323	0.3749	16.5	100	0.1 cpm			
MC-14	6/8/05	74618	6.72	0.88	15.04	274	0.369	14.7	100	0.1 cpm			
MC-14	6/8/05	74912	6.68	0.82	15.09	248	0.3638	12.3	100	0.1 cpm			
MC-14	6/8/05	75205	6.67	0.76	15.11	229	0.3598	11.2	100	0.1 cpm			
MC-14	6/8/05	75514	6.69	0.72	15.07	214	0.3552	8.5	100	0.1 cpm			
MC-14	6/8/05	75809	6.71	0.67	15.03	202	0.3512	7.28	100	0.1 cpm			
MC-14	6/8/05	80105	6.71	0.62	14.99	193	0.3474	5.96	100	0.1 cpm			
MC-14	6/8/05	80405	6.65	0.59	14.99	185	0.3443	5.49	100	0.1 cpm			
MC-14	6/8/05	80705	6.73	0.57	14.99	178	0.3428	4.98	100	0.1 cpm			
MC-14	6/8/05	81005	6.69	0.55	15	173	0.3422	4.45	100	0.1 cpm			
MC-14	6/8/05	81306	6.7	0.52	15.01	169	0.3411	4.37	100	0.1 cpm			
MC-21	6/8/05	95616	7.04	1.32	16.52	413	0.1411	8.32	200	1.0 cpm	15	0.04	All parameters stable when the sample was collected.
MC-21	6/8/05	95906	6.83	1.04	16.42	410	0.1363	4.74	200	1.0 cpm			Turbidity < 5NTU.
MC-21	6/8/05	100206	6.78	0.92	16.32	405	0.1334	2.94	200	1.0 cpm			DO > 0.20 mg/L
MC-21	6/8/05	100507	6.84	0.84	16.29	405	0.1313	2.2	200	1.0 cpm			Fe field test kit reading 2.90 mg/l
MC-21	6/8/05	100805	6.77	0.8	16.3	396	0.1299	1.74	200	1.0 cpm			
MC-1	6/8/05	110724	6.64	1.85	15.1	468	0.0692	23.2	400	58 hz	29	0.6	All parameters stable when the sample was collected.
MC-1	6/8/05	111006	6.49	1.62	16.08	467	0.062	11.6	400	58 hz			Turbidity < 5NTU.
MC-1	6/8/05	111305	6.56	1.61	18.16	459	0.0655	5.82	400	58 hz			DO > 0.20 mg/L
MC-1	6/8/05	111612	6.55	1.45	19.24	458	0.0653	4.04	400	58 hz			Fe field test kit reading 0.08 mg/l
MC-1	6/8/05	111907	6.5	1.34	20.07	458	0.0648	3.27	400	58 hz			
MC-1	6/8/05	112207	6.46	1.19	20.49	459	0.0643	3.35	400	58 hz			
MC-1	6/8/05	112505	6.42	1.07	20.82	458	0.0646	3.12	400	58 hz			
MC-1	6/8/05	112807	6.4	0.94	20.88	458	0.065	3.19	400	58 hz			
MC-1	6/8/05	113120	6.36	0.87	21.12	457	0.0661	3.49	400	58 hz			
MC-1	6/8/05	113409	6.35	0.8	21.19	457	0.0669	4.18	400	58 hz			
MC-8	6/8/05	122505	6.41	1.99	17.2	532	0.0916	12.7	300	2.0 cpm	27	0.28	All parameters stable when the sample was collected.
MC-8	6/8/05	122805	6.32	1.8	16.97	533	0.0889	8.56	300	2.0 cpm			Turbidity < 5NTU.
MC-8	6/8/05	123105	6.22	1.64	16.98	533	0.0881	6.06	300	2.0 cpm			DO > 0.20 mg/L
MC-8	6/8/05	123405	6.19	1.52	16.96	533	0.0881	5.26	300	2.0 cpm			
MC-8	6/8/05	123705	6.14	1.38	16.97	531	0.0873	4.67	300	2.0 cpm			
MC-8	6/8/05	124006	6.21	1.24	16.97	527	0.0873	4.19	300	2.0 cpm			
MC-8	6/8/05	124305	6.2	1.13	16.92	524	0.0875	4	300	2.0 cpm			
MC-8	6/8/05	124605	6.23	1.05	16.91	523	0.0875	3.93	300	2.0 cpm			
MC-8	6/8/05	124904	6.21	1.08	16.88	520	0.0876	3.74	300	2.0 cpm			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
		HHMMSS	Units	mg/l	øC	mV	mS/cm	NTUs	ml/min	hz or cpm	minutes	0.01 feet	
MC-118D	6/8/05	133505	6.52	1.19	17.33	551	0.2781	22.8	400	67 hz	39	3.1	All parameters stable when the sample was collected.
MC-118D	6/8/05	133805	6.56	0.69	18.66	536	0.3098	8.97	400	67 hz			Turbidity < 5NTU.
MC-118D	6/8/05	134106	6.62	0.61	19.55	487	0.3398	4.48	400	67 hz			DO > 0.20 mg/L
MC-118D	6/8/05	134407	6.65	0.55	20.09	405	0.3636	3.34	400	67 hz			
MC-118D	6/8/05	134705	6.67	0.52	20.47	325	0.3812	2.76	400	67 hz			
MC-118D	6/8/05	135015	6.68	0.45	20.85	261	0.3979	1.62	400	67 hz			
MC-118D	6/8/05	135305	6.68	0.41	21.04	223	0.4099	1.16	400	67 hz			
MC-118D	6/8/05	135605	6.7	0.38	21.14	198	0.4188	1.17	400	67 hz			
MC-118D	6/8/05	135905	6.69	0.35	21.2	183	0.4263	1.03	400	67 hz			
MC-118D	6/8/05	140205	6.7	0.33	21.25	173	0.4324	0.88	400	67 hz			
MC-118D	6/8/05	140507	6.7	0.3	21.31	163	0.437	1	400	67 hz			
MC-118D	6/8/05	140812	6.7	0.29	21.32	157	0.4407	0.94	400	67 hz			
MC-118D	6/8/05	141105	6.7	0.28	21.38	154	0.4453	0.89	400	67 hz			
MC-13	6/8/05	145003	6.92	0.63	15.65	236	0.1199	2.93	400	3.0 cpm	21	0.09	All parameters stable when the sample was collected.
MC-13	6/8/05	145314	6.85	0.44	15.29	215	0.117	1.73	400	3.0 cpm			Turbidity < 5NTU.
MC-13	6/8/05	145606	6.75	0.36	15.19	198	0.116	1.64	400	3.0 cpm			DO > 0.20 mg/L
MC-13	6/8/05	145906	6.77	0.41	15.2	184	0.116	1.45	400	3.0 cpm			
MC-13	6/8/05	150205	6.93	0.35	15.17	176	0.1162	1.47	400	3.0 cpm			
MC-13	6/8/05	150505	6.91	0.3	15.17	171	0.1162	1.4	400	3.0 cpm			
MC-13	6/8/05	150806	6.86	0.27	15.22	167	0.116	1.35	400	3.0 cpm			
MC-13D	6/9/05	84706	7.22	1.26	14.21	486	0.1813	1.85	200	1.0 cpm	15	0.95	All parameters stable when the sample was collected.
MC-13D	6/9/05	85006	7.19	0.95	14.11	487	0.1807	1.46	200	1.0 cpm			Turbidity < 5NTU.
MC-13D	6/9/05	85305	7.26	0.81	14.06	480	0.1805	1.36	200	1.0 cpm			DO > 0.20 mg/L
MC-13D	6/9/05	85606	7.23	0.76	14.01	482	0.1805	1.18	200	1.0 cpm			
MC-13D	6/9/05	85905	7.18	0.68	13.97	494	0.1807	1.17	200	1.0 cpm			
MC-12D	6/9/05	95811	6.68	0.82	15.92	528	0.3179	4.77	400	62 hz	48	0.84	All parameters stable when the sample was collected.
MC-12D	6/9/05	100109	6.71	0.77	17.38	518	0.3406	2.66	400	62 hz			Turbidity < 5NTU.
MC-12D	6/9/05	100405	6.71	0.68	18.03	506	0.3546	2.6	400	62 hz			DO > 0.20 mg/L
MC-12D	6/9/05	100705	6.7	0.62	18.24	484	0.3599	2.15	400	62 hz			
MC-12D	6/9/05	101005	6.7	0.56	18.32	458	0.3614	1.7	400	62 hz			
MC-12D	6/9/05	101312	6.69	0.51	18.39	431	0.3616	0.9	400	62 hz			
MC-12D	6/9/05	101605	6.69	0.48	18.38	409	0.362	1.19	400	62 hz			
MC-12D	6/9/05	101906	6.69	0.44	18.46	390	0.3621	1.56	400	62 hz			
MC-12D	6/9/05	102206	6.69	0.41	18.54	375	0.3616	1.73	400	62 hz			
MC-12D	6/9/05	102506	6.69	0.37	18.54	361	0.3612	1.79	400	62 hz			
MC-12D	6/9/05	102811	6.69	0.36	18.54	349	0.3614	1.73	400	62 hz			
MC-12D	6/9/05	103105	6.69	0.34	18.59	338	0.3616	1.49	400	62 hz			
MC-12D	6/9/05	103406	6.69	0.31	18.65	328	0.3608	1.6	400	62 hz			
MC-12D	6/9/05	103705	6.69	0.29	18.73	319	0.3614	1.58	400	62 hz			
MC-12D	6/9/05	104005	6.69	0.27	18.73	312	0.3606	1.73	400	62 hz			
MC-12D	6/9/05	104305	6.69	0.26	18.69	305	0.3604	1.61	400	62 hz			
MC-12	6/9/05	111011	7.43	0.8	17.2	216	0.1569	3.89	350	2.5 cpm	15	0.07	All parameters stable when the sample was collected.
MC-12	6/9/05	111306	7.41	0.52	16.58	142	0.1277	3.64	350	2.5 cpm			Turbidity < 5NTU.
MC-12	6/9/05	111605	7.35	0.47	16.38	128	0.1169	3.76	350	2.5 cpm			DO > 0.20 mg/L
MC-12	6/9/05	111906	7.39	0.45	16.37	123	0.114	3.56	350	2.5 cpm			Fe field test kit reading 1.09 mg/l
MC-12	6/9/05	112206	7.37	0.43	16.37	122	0.1135	3.41	350	2.5 cpm			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
		HHMMSS	Units	mg/l	øC	mV	mS/cm	NTUs	ml/min	hz or cpm	minutes	0.01 feet	
MC-107	6/9/05	120420	6.98	1.33	17.69	345	0.0656	3.14	300	2.5 cpm	15	0.06	All parameters stable when the sample was collected.
MC-107	6/9/05	120705	6.83	1.09	17.28	352	0.0665	2.37	300	2.5 cpm			Turbidity < 5NTU.
MC-107	6/9/05	121008	6.74	0.94	17.14	352	0.0671	1.6	300	2.5 cpm			DO > 0.20 mg/L
MC-107	6/9/05	121307	6.81	0.83	17.09	349	0.0674	1.57	300	2.5 cpm			
MC-107	6/9/05	121606	6.83	0.74	17.08	348	0.0682	1.52	300	2.5 cpm			
MC-2	6/9/05	130007	6.45	0.98	19.12	451	0.2148	15.3	400	54 hz	48	0.52	All parameters stable when the sample was collected.
MC-2	6/9/05	130306	6.47	0.42	20.15	441	0.2167	11.5	400	54 hz			Turbidity < 5NTU.
MC-2	6/9/05	130605	6.59	0.33	21.41	422	0.2174	5.6	400	54 hz			DO > 0.20 mg/L
MC-2	6/9/05	130941	6.69	1.01	22.54	412	0.2185	5.1	400	54 hz			DO field test kit reading 0.22 mg/l
MC-2	6/9/05	131207	6.7	0.29	22.94	388	0.2169	4.39	400	54 hz			
MC-2	6/9/05	131506	6.68	0.22	23.06	361	0.2139	2.24	400	54 hz			
MC-2	6/9/05	131805	6.68	0.2	23.12	334	0.2124	1.35	400	54 hz			
MC-2	6/9/05	132111	6.68	0.18	23.27	306	0.2096	1.21	400	54 hz			
MC-2	6/9/05	132406	6.68	0.16	23.45	283	0.2087	1.95	400	54 hz			
MC-2	6/9/05	132705	6.69	0.13	23.55	262	0.2084	0.95	400	54 hz			
MC-2	6/9/05	133005	6.69	0.11	23.46	245	0.2058	0.88	400	54 hz			
MC-2	6/9/05	133305	6.69	0.11	23.65	231	0.2064	0.74	400	54 hz			
MC-2	6/9/05	133607	6.69	0.09	23.58	221	0.2045	0.65	400	54 hz			
MC-2	6/9/05	133905	6.69	0.08	23.55	211	0.2051	0.89	400	54 hz			
MC-2	6/9/05	134205	6.68	0.07	23.77	205	0.2068	0.96	400	54 hz			
MC-2	6/9/05	134507	6.7	0.06	23.74	202	0.2028	1.27	400	54 hz			
MC-2D	6/9/05	142018	6.72	0.99	18.39	401	0.2152	2.38	400	61 hz	27	0.92	All parameters stable when the sample was collected.
MC-2D	6/9/05	142305	6.69	0.64	18.49	394	0.2207	1.24	400	61 hz			Turbidity < 5NTU.
MC-2D	6/9/05	142606	6.74	0.5	19.34	384	0.2344	0.66	400	61 hz			DO > 0.20 mg/L
MC-2D	6/9/05	142905	6.81	0.43	20.1	373	0.2463	0.43	400	61 hz			
MC-2D	6/9/05	143211	6.83	0.41	20.42	367	0.2547	0.64	400	61 hz			
MC-2D	6/9/05	143505	6.84	0.44	20.44	363	0.26	0.41	400	61 hz			
MC-2D	6/9/05	143805	6.84	0.43	20.63	362	0.2641	0.47	400	61 hz			
MC-2D	6/9/05	144105	6.85	0.4	20.77	360	0.2689	0.35	400	61 hz			
MC-2D	6/9/05	144406	6.86	0.35	20.78	358	0.2721	0.63	400	61 hz			
MC-20	6/9/05	152105	6.59	1.79	18.23	470	0.2833	22.4	100	0.2 cpm	44	0.73	All parameters stable when the sample was collected.
MC-20	6/9/05	152418	6.44	0.89	17.86	447	0.26	17.6	100	0.2 cpm			Turbidity < 5NTU.
MC-20	6/9/05	152716	6.41	0.73	17.61	387	0.2487	11.8	100	0.2 cpm			DO > 0.20 mg/L
MC-20	6/9/05	153006	6.33	0.64	17.67	334	0.2373	8.67	100	0.2 cpm			Fe field test kit reading 2.63 mg/l
MC-20	6/9/05	153306	6.4	0.58	17.68	295	0.2284	5.85	100	0.2 cpm			
MC-20	6/9/05	153636	6.35	0.52	17.73	264	0.2179	4.77	100	0.2 cpm			
MC-20	6/9/05	153907	6.37	0.48	18.03	250	0.2131	4.23	100	0.2 cpm			
MC-20	6/9/05	154207	6.28	0.45	17.63	239	0.209	3.21	100	0.2 cpm			
MC-20	6/9/05	154512	6.32	0.41	17.51	229	0.2029	3.17	100	0.2 cpm			
MC-20	6/9/05	154809	6.34	0.38	17.69	222	0.1976	2.37	100	0.2 cpm			
MC-20	6/9/05	155105	6.29	0.36	17.38	216	0.1959	1.82	100	0.2 cpm			
MC-20	6/9/05	155406	6.36	0.32	17.92	209	0.1936	1.39	100	0.2 cpm			
MC-20	6/9/05	155708	6.37	0.31	17.99	203	0.192	1.53	100	0.2 cpm			
MC-20	6/9/05	160005	6.38	0.3	18.08	200	0.1912	1.33	100	0.2 cpm			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
		HHMMSS	Units	mg/l	øC	mV	mS/cm	NTUs	ml/min	hz or cpm	minutes	0.01 feet	
MC-17D	6/10/05	80205	7.2	0.91	14.16	484	0.1497	1.36	400	59 hz	21	0.29	All parameters stable when the sample was collected.
MC-17D	6/10/05	80505	7.18	0.7	14.84	482	0.1543	0.58	400	59 hz			Turbidity < 5NTU.
MC-17D	6/10/05	80805	7.18	0.58	16.07	479	0.1628	0.53	400	59 hz			DO > 0.20 mg/L
MC-17D	6/10/05	81105	7.17	0.5	16.95	477	0.1661	0.35	400	59 hz			
MC-17D	6/10/05	81405	7.15	0.44	17.38	476	0.1679	0.31	400	59 hz			
MC-17D	6/10/05	81705	7.13	0.39	17.66	475	0.1697	0.4	400	59 hz			
MC-17D	6/10/05	82006	7.11	0.35	17.85	475	0.171	0.42	400	59 hz			

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Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	DrawDown	Comments
		HHMMSS	Units	mg/l	øC	mV	mS/cm	NTUs	ml/min.	Hz or cpm	Minutes	(0.01) ft.	
MW-2D	9/13/05	65114	6.62	1.12	16.60	559	0.3752	0.43	400	72 Hz	15	2.10	All parameters stable when sample was collected.
MW-2D	9/13/05	65407	6.64	0.96	17.49	555	0.3832	0.29	400	72 Hz			Turbidity < 5 NTU's
MW-2D	9/13/05	65704	6.70	0.84	18.46	549	0.3843	0.24	400	72 Hz			DO > 0.20 mg\L
MW-2D	9/13/05	70005	6.71	0.79	18.86	545	0.3832	0.24	400	72 Hz			
MW-2D	9/13/05	70305	6.72	0.77	19.01	543	0.3812	0.29	400	72 Hz			
MW-2	9/13/05	72926	6.80	1.32	19.56	542	0.1599	19.1	400	61 Hz	24	1.00	All parameters stable when sample was collected.
MW-2	9/13/05	73204	6.68	0.93	21.19	540	0.1641	12.3	400	61 Hz			Turbidity < 5 NTU's
MW-2	9/13/05	73506	6.63	0.75	23.27	537	0.1792	5.32	400	61 Hz			DO > 0.20 mg\L
MW-2	9/13/05	73804	6.56	0.65	24.76	534	0.1909	3.66	400	61 Hz			
MW-2	9/13/05	74104	6.52	0.57	25.66	532	0.1997	2.33	400	61 Hz			
MW-2	9/13/05	74416	6.49	0.49	26.21	529	0.2056	1.97	400	61 Hz			
MW-2	9/13/05	74704	6.47	0.47	26.44	526	0.2083	1.59	400	61 Hz			
MW-2	9/13/05	75004	6.48	0.45	26.83	522	0.2113	1.47	400	61 Hz			
MC-10D	9/13/05	83205	6.40	1.35	14.30	544	0.4875	19.4	400	82 Hz	21	1.13	All parameters stable when sample was collected.
MC-10D	9/13/05	83504	6.47	0.95	15.07	538	0.4932	4.66	400	82 Hz			Turbidity < 5 NTU's
MC-10D	9/13/05	83804	6.57	0.83	16.53	531	0.5296	1.46	400	82 Hz			DO > 0.20 mg\L
MC-10D	9/13/05	84104	6.64	0.71	17.36	524	0.5513	0.98	400	82 Hz			
MC-10D	9/13/05	84404	6.65	0.63	17.66	521	0.5625	0.90	400	82 Hz			
MC-10D	9/13/05	84705	6.64	0.61	17.83	519	0.5688	1.02	400	82 Hz			
MC-10D	9/13/05	85029	6.64	0.57	17.93	517	0.5727	0.97	400	82 Hz			
MC-19D	9/13/05	92725	7.03	0.83	15.60	441	0.1862	1.31	400	79 Hz	16	0.09	All parameters stable when sample was collected.
MC-19D	9/13/05	93009	7.10	0.68	17.15	431	0.1892	0.82	400	79 Hz			Turbidity < 5 NTU's
MC-19D	9/13/05	93304	7.11	0.59	17.84	423	0.1905	0.67	400	79 Hz			DO > 0.20 mg\L
MC-19D	9/13/05	93604	7.07	0.57	18.05	419	0.1910	0.54	400	79 Hz			
MC-19D	9/13/05	93905	7.07	0.55	18.28	414	0.1915	0.74	400	79 Hz			
MC-8	9/13/05	101806	6.44	1.41	20.23	461	0.1999	2.10	300	1.0 cpm	19	0.36	All parameters stable when sample was collected.
MC-8	9/13/05	102105	6.48	1.21	20.27	451	0.1922	2.65	300	1.0 cpm			Turbidity < 5 NTU's
MC-8	9/13/05	102405	6.48	1.10	20.28	449	0.1912	1.51	300	1.0 cpm			DO > 0.20 mg\L
MC-8	9/13/05	102704	6.46	0.99	20.32	447	0.1917	1.36	275	0.75 cpm			
MC-8	9/13/05	103005	6.44	0.98	20.46	447	0.1916	1.30	275	0.75 cpm			
MC-8	9/13/05	103305	6.42	0.94	20.58	446	0.1913	0.92	275	0.75 cpm			
MC-107	9/13/05	111905	6.61	1.60	19.57	505	0.1111	1.30	200	0.50 cpm	15	0.04	All parameters stable when sample was collected.
MC-107	9/13/05	112204	6.57	1.18	19.62	500	0.1097	0.89	250	0.75 cpm			Turbidity < 5 NTU's
MC-107	9/13/05	112505	6.65	0.95	19.70	490	0.1111	1.35	250	0.75 cpm			DO > 0.20 mg\L
MC-107	9/13/05	112805	6.71	0.91	19.80	486	0.1126	0.87	250	0.75 cpm			
MC-107	9/13/05	113104	6.66	0.86	19.89	481	0.1138	0.96	250	0.75 cpm			
MC-12D	9/13/05	121112	6.31	1.35	16.98	526	0.5044	1.99	400	72 Hz	18	0.80	All parameters stable when sample was collected.
MC-12D	9/13/05	121404	6.37	1.08	18.29	519	0.5361	0.57	400	72 Hz			Turbidity < 5 NTU's
MC-12D	9/13/05	121706	6.46	0.94	19.30	510	0.5647	0.29	400	72 Hz			DO > 0.20 mg\L
MC-12D	9/13/05	122004	6.49	0.84	19.79	504	0.5833	0.16	400	72 Hz			
MC-12D	9/13/05	122306	6.50	0.81	20.01	499	0.5918	0.24	400	72 Hz			
MC-12D	9/13/05	122607	6.51	0.79	20.18	494	0.5958	0.19	400	72 Hz			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	DrawDown	Comments
		HHMMSS	Units	mg/l	øC	mV	mS/cm	NTUs	ml/min.	Hz or cpm	Minutes	(0.01) ft.	
MC-17	9/14/05	72805	6.82	1.93	18.24	504	0.4527	3.71	200	1.0 cpm	39	0.09	All parameters stable when sample was collected.
MC-17	9/14/05	73104	6.75	1.58	18.30	498	0.4366	1.31	200	1.0 cpm			Turbidity < 5 NTU's
MC-17	9/14/05	73405	6.72	1.30	18.31	493	0.4165	0.67	200	1.0 cpm			DO > 0.20 mg\L
MC-17	9/14/05	73705	6.76	1.11	18.41	490	0.3698	0.49	200	1.0 cpm			
MC-17	9/14/05	74005	6.74	1.00	18.50	487	0.3241	0.38	200	1.0 cpm			
MC-17	9/14/05	74307	6.78	0.92	18.60	484	0.2898	0.31	200	1.0 cpm			
MC-17	9/14/05	74605	6.76	0.85	18.66	481	0.2672	0.38	200	1.0 cpm			
MC-17	9/14/05	74905	6.78	0.80	18.62	481	0.2505	0.26	200	1.0 cpm			
MC-17	9/14/05	75205	6.82	0.76	18.71	478	0.2398	0.27	200	1.0 cpm			
MC-17	9/14/05	75504	6.78	0.71	18.67	476	0.2319	0.36	200	1.0 cpm			
MC-17	9/14/05	75818	6.79	0.66	18.69	473	0.2263	0.27	200	1.0 cpm			
MC-17	9/14/05	80104	6.80	0.63	18.63	472	0.2226	0.33	200	1.0 cpm			
MC-17	9/14/05	80404	6.81	0.59	18.62	471	0.2195	0.39	200	1.0 cpm			
MC-16	9/14/05	83605	6.66	1.46	18.70	464	0.3018	2.63	200	1.0 cpm	27	0.27	All parameters stable when sample was collected.
MC-16	9/14/05	83904	6.62	1.18	18.81	456	0.2546	1.74	200	1.0 cpm			Turbidity < 5 NTU's
MC-16	9/14/05	84204	6.60	0.94	18.79	449	0.2288	1.56	200	1.0 cpm			DO > 0.20 mg\L
MC-16	9/14/05	84504	6.68	0.81	18.82	444	0.2136	0.63	200	1.0 cpm			
MC-16	9/14/05	84804	6.69	0.73	18.85	431	0.2031	0.46	200	1.0 cpm			
MC-16	9/14/05	85107	6.70	0.64	18.85	425	0.1963	0.63	200	1.0 cpm			
MC-16	9/14/05	85405	6.78	0.58	18.90	416	0.1927	0.39	200	1.0 cpm			
MC-16	9/14/05	85712	6.76	0.56	18.92	410	0.1898	0.37	200	1.0 cpm			
MC-16	9/14/05	90004	6.78	0.54	18.89	407	0.1882	0.31	200	1.0 cpm			
MC-15D	9/14/05	93405	6.70	1.05	16.02	397	0.3100	0.26	400	70 Hz	15	1.03	All parameters stable when sample was collected.
MC-15D	9/14/05	93704	6.82	0.78	17.45	383	0.3337	0.22	400	70 Hz			Turbidity < 5 NTU's
MC-15D	9/14/05	94004	6.84	0.62	18.30	374	0.3432	0.27	400	70 Hz			DO > 0.20 mg\L
MC-15D	9/14/05	94305	6.84	0.61	18.58	368	0.3465	0.21	400	70 Hz			
MC-15D	9/14/05	94604	6.84	0.59	18.78	365	0.3490	0.19	400	70 Hz			
MC-15	9/14/05	101105	6.72	1.72	18.82	387	0.2425	3.22	200	0.5 cpm	18	0.42	All parameters stable when sample was collected.
MC-15	9/14/05	101412	6.74	1.09	18.86	384	0.2466	1.90	200	0.5 cpm			Turbidity < 5 NTU's
MC-15	9/14/05	101704	6.82	0.91	18.98	372	0.2483	1.37	200	0.5 cpm			DO > 0.20 mg\L
MC-15	9/14/05	102004	6.78	0.72	19.05	365	0.2473	0.91	200	0.5 cpm			
MC-15	9/14/05	102307	6.83	0.68	19.02	360	0.2449	0.70	200	0.5 cpm			
MC-15	9/14/05	102605	6.80	0.66	19.05	355	0.2421	0.71	200	0.5 cpm			
MC-13D	9/14/05	110204	6.98	2.75	15.16	359	0.1884	0.68	200	0.5 cpm	18	1.18	All parameters stable when sample was collected.
MC-13D	9/14/05	110504	6.91	2.16	14.95	355	0.1888	0.64	200	0.5 cpm			Turbidity < 5 NTU's
MC-13D	9/14/05	110804	6.87	1.90	14.85	350	0.1888	0.46	200	0.5 cpm			DO > 0.20 mg\L
MC-13D	9/14/05	111109	6.79	1.72	14.80	347	0.1892	0.45	200	0.5 cpm			
MC-13D	9/14/05	111414	6.86	1.67	14.79	343	0.1894	0.46	200	0.5 cpm			
MC-13D	9/14/05	111704	6.89	1.57	14.81	341	0.1902	0.59	200	0.5 cpm			
MC-13	9/14/05	121405	6.45	1.55	20.21	390	0.1201	0.63	400	2.0 cpm	15	0.12	All parameters stable when sample was collected.
MC-13	9/14/05	121705	6.45	1.02	19.54	385	0.1256	0.62	400	2.0 cpm			Turbidity < 5 NTU's
MC-13	9/14/05	122005	6.57	0.80	19.40	376	0.1270	0.47	400	2.0 cpm			DO > 0.20 mg\L
MC-13	9/14/05	122305	6.60	0.77	19.36	370	0.1266	0.47	400	2.0 cpm			
MC-13	9/14/05	122604	6.57	0.76	19.33	366	0.1263	0.48	400	2.0 cpm			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	DrawDown	Comments
		HHMMSS	Units	mg/l	øC	mV	mS/cm	NTUs	ml/min.	Hz or cpm	Minutes	(0.01) ft.	
MC-118D	9/14/05	131105	6.36	1.22	18.23	473	0.4065	1.90	400	79 Hz	72	2.27	All parameters stable when sample was collected.
MC-118D	9/14/05	131407	6.42	0.93	19.86	462	0.4348	1.30	400	79 Hz			Turbidity < 5 NTU's
MC-118D	9/14/05	131706	6.50	0.82	21.02	450	0.4702	0.66	400	79 Hz			DO > 0.20 mg\L
MC-118D	9/14/05	132006	6.53	0.71	21.54	442	0.4908	0.91	400	79 Hz			
MC-118D	9/14/05	132307	6.55	0.61	21.84	434	0.5063	0.60	400	79 Hz			
MC-118D	9/14/05	132606	6.56	0.54	22.04	427	0.5171	0.57	400	79 Hz			
MC-118D	9/14/05	132904	6.58	0.48	22.18	420	0.5250	0.43	400	79 Hz			
MC-118D	9/14/05	133204	6.58	0.44	22.18	412	0.5299	0.41	400	79 Hz			
MC-118D	9/14/05	133510	6.59	0.42	22.23	402	0.5336	0.65	400	79 Hz			
MC-118D	9/14/05	133816	6.63	0.41	22.30	388	0.5383	0.35	400	79 Hz			
MC-118D	9/14/05	134112	6.62	0.39	22.07	376	0.5366	0.33	400	79 Hz			
MC-118D	9/14/05	134409	6.61	0.40	21.91	362	0.5343	0.41	400	79 Hz			
MC-118D	9/14/05	134715	6.62	0.40	21.88	345	0.5334	0.43	400	79 Hz			
MC-118D	9/14/05	135009	6.63	0.40	21.91	330	0.5349	0.57	400	79 Hz			
MC-118D	9/14/05	135306	6.74	0.41	21.88	314	0.5346	0.73	400	79 Hz			
MC-118D	9/14/05	135606	6.66	0.40	21.91	300	0.5357	0.75	400	79 Hz			
MC-118D	9/14/05	135912	6.66	0.39	21.87	286	0.5358	0.72	400	79 Hz			
MC-118D	9/14/05	140211	6.66	0.39	21.89	273	0.5359	0.78	400	79 Hz			
MC-118D	9/14/05	140517	6.69	0.40	21.94	261	0.5364	0.85	400	79 Hz			
MC-118D	9/14/05	140805	6.69	0.41	21.93	250	0.5366	0.93	400	79 Hz			
MC-118D	9/14/05	141107	6.69	0.41	21.95	240	0.5375	0.96	400	79 Hz			
MC-118D	9/14/05	141411	6.69	0.41	21.99	229	0.5384	1.05	400	79 Hz			
MC-118D	9/14/05	141705	6.70	0.41	22.00	225	0.5378	1.21	400	79 Hz			
MC-118D	9/14/05	142006	6.71	0.42	21.98	220	0.5382	1.25	400	79 Hz			
MC-14	9/15/05	71522	6.43	2.03	17.91	553	0.3411	13.2	100	0.2 cpm	33	2.09	All parameters stable when sample was collected.
MC-14	9/15/05	71804	6.44	1.82	17.87	551	0.3306	3.33	100	0.2 cpm			Turbidity < 5 NTU's
MC-14	9/15/05	72105	6.44	1.66	17.80	546	0.3190	2.53	100	0.2 cpm			DO > 0.20 mg\L
MC-14	9/15/05	72404	6.40	1.54	17.78	544	0.3077	2.14	100	0.2 cpm			Fe Field Test Kit Reading - 2.24 mg/L
MC-14	9/15/05	72704	6.43	1.42	17.76	539	0.2974	1.75	100	0.2 cpm			
MC-14	9/15/05	73004	6.47	1.25	17.78	536	0.2894	1.43	100	0.2 cpm			
MC-14	9/15/05	73304	6.50	1.17	17.79	533	0.2833	1.28	100	0.2 cpm			
MC-14	9/15/05	73604	6.51	1.09	17.81	533	0.2787	1.05	100	0.2 cpm			
MC-14	9/15/05	73906	6.51	0.99	17.89	530	0.2760	0.94	100	0.2 cpm			
MC-14	9/15/05	74206	6.48	0.96	17.91	529	0.2790	0.62	100	0.2 cpm			
MC-14	9/15/05	74509	6.45	0.97	17.90	527	0.2814	0.68	100	0.2 cpm			
MC-21	9/15/05	90605	6.79	1.29	18.29	513	0.1959	4.97	225	1.0 cpm	15	0.05	All parameters stable when sample was collected.
MC-21	9/15/05	90904	6.76	0.98	18.31	508	0.1963	2.67	225	1.0 cpm			Turbidity < 5 NTU's
MC-21	9/15/05	91204	6.73	0.89	18.35	505	0.1962	1.86	225	1.0 cpm			DO > 0.20 mg\L
MC-21	9/15/05	91505	6.73	0.85	18.41	500	0.1956	0.75	225	1.0 cpm			Fe Field Test Kit Reading - 2.74 mg/L
MC-21	9/15/05	91804	6.68	0.84	18.39	500	0.1942	0.59	225	1.0 cpm			
MC-12	9/15/05	101104	7.00	0.89	19.60	467	0.1297	0.61	300	2.0 cpm	15	0.05	All parameters stable when sample was collected.
MC-12	9/15/05	101404	6.99	0.74	19.64	462	0.1249	0.56	300	2.0 cpm			Turbidity < 5 NTU's
MC-12	9/15/05	101704	7.04	0.66	19.66	456	0.1231	0.41	300	2.0 cpm			DO > 0.20 mg\L
MC-12	9/15/05	102004	7.04	0.64	19.66	449	0.1239	0.50	300	2.0 cpm			Fe Field Test Kit Reading - 1.00 mg/L
MC-12	9/15/05	102304	7.09	0.64	19.57	448	0.1218	0.35	300	2.0 cpm			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	DrawDown	Comments
		HHMMSS	Units	mg/l	øC	mV	mS/cm	NTUs	ml/min.	Hz or cpm	Minutes	(0.01) ft.	
MC-1	9/15/05	110414	6.55	1.21	19.36	471	0.1247	5.05	400	65 Hz	21	0.70	All parameters stable when sample was collected.
MC-1	9/15/05	110704	6.42	0.84	20.70	466	0.1265	5.39	400	65 Hz			Turbidity < 5 NTU's
MC-1	9/15/05	111005	6.51	0.67	22.50	455	0.1358	2.62	400	65 Hz			DO > 0.20 mg\L
MC-1	9/15/05	111304	6.52	0.55	23.54	449	0.1400	2.30	400	65 Hz			Fe Field Test Kit Reading - 1.84 mg/L
MC-1	9/15/05	111605	6.51	0.51	24.09	444	0.1455	2.18	400	65 Hz			
MC-1	9/15/05	111904	6.51	0.49	24.12	441	0.1470	2.54	400	65 Hz			
MC-1	9/15/05	112204	6.51	0.47	24.24	438	0.1490	2.65	400	65 Hz			
MC-17D	9/15/05	120011	6.85	2.17	16.06	505	0.1511	2.28	400	75 Hz	21	0.43	All parameters stable when sample was collected.
MC-17D	9/15/05	120307	6.68	1.40	15.88	505	0.1505	0.85	400	75 Hz			Turbidity < 5 NTU's
MC-17D	9/15/05	120615	6.73	1.12	17.12	497	0.1582	0.42	400	75 Hz			DO > 0.20 mg\L
MC-17D	9/15/05	120905	6.87	1.03	18.16	484	0.1634	0.57	400	75 Hz			
MC-17D	9/15/05	121208	6.89	0.93	18.70	478	0.1665	0.41	400	75 Hz			
MC-17D	9/15/05	121505	6.89	0.88	19.10	474	0.1689	0.34	400	75 Hz			
MC-17D	9/15/05	121804	6.86	0.85	19.18	472	0.1698	0.45	400	75 Hz			

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Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turb	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	mm/dd/yy	HHMMSS	Units	mg/l	øC	mV	mS/cm	NTUs	ml/min.	Hz or cpm	Minutes	(0.01) ft.	
MC-2	11/29/05	83207	6.74	0.59	17.42	494	0.1524	2.54	400	53 Hz	18	0.50	All parameters stable when sample was collected.
MC-2	11/29/05	83530	6.75	0.42	18.62	492	0.1536	1.54	400	53 Hz			Turbidity < 5 NTU
MC-2	11/29/05	83805	6.77	0.37	19.23	489	0.1535	0.96	400	53 Hz			Do > 0.20 mg/L
MC-2	11/29/05	84107	6.80	0.31	19.26	486	0.1537	0.64	400	53 Hz			
MC-2	11/29/05	84405	6.81	0.29	19.47	483	0.1532	0.37	400	53 Hz			
MC-2	11/29/05	84708	6.81	0.29	19.47	482	0.1532	0.22	400	53 Hz			
MC-2D	11/29/05	90906	7.01	3.26	14.32	512	0.2729	0.56	400	70 Hz	18	1.14	All parameters stable when sample was collected.
MC-2D	11/29/05	91209	6.92	0.74	14.95	510	0.2813	0.35	400	70 Hz			Turbidity < 5 NTU
MC-2D	11/29/05	91506	7.00	0.43	16.27	501	0.2858	0.36	400	70 Hz			Do > 0.20 mg/L
MC-2D	11/29/05	91806	7.02	0.30	16.90	498	0.2859	0.25	400	70 Hz			
MC-2D	11/29/05	92105	7.03	0.28	17.14	495	0.2848	0.35	400	70 Hz			
MC-2D	11/29/05	92405	7.04	0.27	17.33	493	0.2829	0.27	400	70 Hz			
MC-12D	11/29/05	95911	6.70	0.77	14.44	521	1.218	0.68	400	66 Hz	15	0.88	All parameters stable when sample was collected.
MC-12D	11/29/05	100205	6.75	0.48	15.64	515	1.181	0.51	400	66 Hz			Turbidity < 5 NTU
MC-12D	11/29/05	100505	6.78	0.37	16.39	511	1.147	0.48	400	66 Hz			Do > 0.20 mg/L
MC-12D	11/29/05	100810	6.79	0.35	16.74	507	1.125	0.44	400	66 Hz			
MC-12D	11/29/05	101105	6.80	0.34	16.84	505	1.118	0.41	400	66 Hz			
MC-10D	11/29/05	104105	7.04	1.36	12.18	503	0.7814	6.28	400	76Hz	18	1.36	All parameters stable when sample was collected.
MC-10D	11/29/05	104412	6.97	0.56	13.47	498	0.7902	1.48	400	76Hz			Turbidity < 5 NTU
MC-10D	11/29/05	104706	6.98	0.41	14.87	493	0.7956	0.60	400	76Hz			Do > 0.20 mg/L
MC-10D	11/29/05	105005	6.98	0.33	15.58	490	0.8004	0.49	400	76Hz			
MC-10D	11/29/05	105306	6.98	0.31	15.92	486	0.8016	0.36	400	76Hz			
MC-10D	11/29/05	105612	6.98	0.30	15.89	484	0.8019	0.33	400	76Hz			
MC-19D	11/29/05	112922	7.82	3.50	12.59	424	0.1492	1.54	400	73Hz	21	0.05	All parameters stable when sample was collected.
MC-19D	11/29/05	113206	7.64	1.04	12.18	424	0.1463	1.24	400	73Hz			Turbidity < 5 NTU
MC-19D	11/29/05	113505	7.53	0.57	12.77	422	0.1457	0.80	400	73Hz			Do > 0.20 mg/L
MC-19D	11/29/05	113805	7.49	0.44	14.09	418	0.1464	0.83	400	73Hz			
MC-19D	11/29/05	114113	7.46	0.35	15.14	414	0.1464	0.52	400	73Hz			
MC-19D	11/29/05	114406	7.44	0.34	15.54	412	0.1471	0.65	400	73Hz			
MC-19D	11/29/05	114710	7.41	0.33	15.53	410	0.1472	0.47	400	73Hz			
MC-13	11/29/05	130212	7.12	1.53	14.45	440	0.1227	0.70	400	3.0 cpm	15	0.11	All parameters stable when sample was collected.
MC-13	11/29/05	130505	7.03	0.50	14.75	440	0.1271	0.36	400	3.0 cpm			Turbidity < 5 NTU
MC-13	11/29/05	130805	6.98	0.36	14.83	440	0.1293	0.34	400	3.0 cpm			Do > 0.20 mg/L
MC-13	11/29/05	131105	6.94	0.33	14.64	439	0.1288	0.28	400	3.0 cpm			
MC-13	11/29/05	131406	6.94	0.34	14.53	438	0.1289	0.29	400	3.0 cpm			
MC-13D	11/29/05	134207	7.20	2.86	12.13	453	0.1727	0.27	200	0.2 cpm	18	1.08	All parameters stable when sample was collected.
MC-13D	11/29/05	134506	7.16	2.14	12.26	452	0.1730	0.19	200	0.2 cpm			Turbidity < 5 NTU
MC-13D	11/29/05	134806	7.21	1.78	12.26	451	0.1727	0.12	200	0.2 cpm			Do > 0.20 mg/L
MC-13D	11/29/05	135106	7.20	1.58	12.21	449	0.1726	0.11	200	0.2 cpm			
MC-13D	11/29/05	135411	7.17	1.49	12.07	448	0.1724	0.16	200	0.2 cpm			
MC-13D	11/29/05	135707	7.15	1.45	11.99	447	0.1724	0.18	200	0.2 cpm			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turb	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	mm/dd/yy	HHMMSS	Units	mg/l	øC	mV	mS/cm	NTUs	ml/min.	Hz or cpm	Minutes	(0.01) ft.	
MC-8	11/30/05	71227	7.13	7.21	12.65	494	0.0939	2.71	200	0.2 cpm	15	0.24	All parameters stable when sample was collected.
MC-8	11/30/05	71548	6.89	6.67	13.08	498	0.0937	2.36	200	0.2 cpm			Turbidity < 5 NTU
MC-8	11/30/05	71814	6.78	6.48	13.30	500	0.0936	2.69	200	0.2 cpm			Do > 0.20 mg/L
MC-8	11/30/05	72105	6.70	6.34	13.32	503	0.0934	2.37	200	0.2 cpm			
MC-8	11/30/05	72411	6.69	6.30	13.37	504	0.0936	2.25	200	0.2 cpm			
MC-118D	11/30/05	81620	6.78	0.72	16.61	523	1.011	2.88	400	72 Hz	15	2.21	All parameters stable when sample was collected.
MC-118D	11/30/05	81905	6.80	0.51	18.10	518	1.018	1.56	400	72 Hz			Turbidity < 5 NTU
MC-118D	11/30/05	82205	6.81	0.42	18.97	513	1.026	1.02	400	72 Hz			Do > 0.20 mg/L
MC-118D	11/30/05	82505	6.81	0.42	19.16	509	1.026	0.95	400	72 Hz			
MC-118D	11/30/05	82827	6.81	0.38	19.39	506	1.027	0.93	400	72 Hz			
MC-107	11/30/05	90706	7.51	1.92	12.72	455	0.0707	2.36	400	3.0 cpm	21	0.05	All parameters stable when sample was collected.
MC-107	11/30/05	91005	7.37	1.62	12.84	454	0.0726	1.86	400	3.0 cpm			Turbidity < 5 NTU
MC-107	11/30/05	91305	7.34	1.42	12.89	454	0.0746	1.51	400	3.0 cpm			Do > 0.20 mg/L
MC-107	11/30/05	91605	7.25	1.30	12.88	455	0.0768	1.06	400	3.0 cpm			
MC-107	11/30/05	91905	7.23	1.17	12.87	454	0.0782	1.04	400	3.0 cpm			
MC-107	11/30/05	92205	7.14	1.09	12.79	453	0.0791	0.93	400	3.0 cpm			
MC-107	11/30/05	92549	7.19	1.06	12.80	452	0.0798	0.96	400	3.0 cpm			
MC-15	11/30/05	100511	6.92	1.06	11.38	462	0.0932	1.66	200	0.2 cpm	21	0.41	All parameters stable when sample was collected.
MC-15	11/30/05	100806	6.85	0.77	11.47	464	0.0957	1.37	200	0.2 cpm			Turbidity < 5 NTU
MC-15	11/30/05	101102	6.79	0.58	11.53	464	0.0957	1.30	200	0.2 cpm			Do > 0.20 mg/L
MC-15	11/30/05	101405	6.80	0.51	11.52	464	0.0954	1.24	200	0.2 cpm			
MC-15	11/30/05	101705	6.80	0.45	11.52	463	0.0955	1.19	200	0.2 cpm			
MC-15	11/30/05	102005	6.76	0.41	11.43	462	0.0969	1.17	200	0.2 cpm			
MC-15	11/30/05	102305	6.69	0.42	11.42	462	0.0956	1.11	200	0.2 cpm			
MC-15D	11/30/05	105531	7.09	3.67	12.84	483	0.2824	1.12	400	62 Hz	21	0.73	All parameters stable when sample was collected.
MC-15D	11/30/05	105805	7.09	1.19	13.66	480	0.2782	0.92	400	62 Hz			Turbidity < 5 NTU
MC-15D	11/30/05	110106	7.09	0.63	15.52	475	0.2783	0.63	400	62 Hz			Do > 0.20 mg/L
MC-15D	11/30/05	110405	7.10	0.48	16.51	471	0.2804	0.61	400	62 Hz			
MC-15D	11/30/05	110705	7.10	0.41	17.42	467	0.2796	0.65	400	62 Hz			
MC-15D	11/30/05	111005	7.09	0.44	17.53	465	0.2810	0.51	400	62 Hz			
MC-15D	11/30/05	111305	7.11	0.40	17.82	463	0.2791	0.48	400	62 Hz			
MC-16	11/30/05	125129	7.23	2.25	12.44	477	0.2119	8.05	100	0.2	24	0.17	All parameters stable when sample was collected.
MC-16	11/30/05	125405	7.13	1.53	12.89	475	0.1967	6.64	100	0.2			Turbidity < 5 NTU
MC-16	11/30/05	125706	7.07	1.02	13.29	472	0.1718	4.73	100	0.2			Do > 0.20 mg/L
MC-16	11/30/05	130005	7.06	0.78	13.61	469	0.1523	3.93	100	0.2			
MC-16	11/30/05	130305	7.04	0.63	13.81	468	0.1519	2.83	100	0.2			
MC-16	11/30/05	130605	7.02	0.53	13.82	467	0.1488	2.35	100	0.2			
MC-16	11/30/05	130905	7.00	0.50	13.78	465	0.1494	1.73	100	0.2			
MC-16	11/30/05	131205	6.98	0.51	13.66	465	0.1518	1.39	100	0.2			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turb	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	mm/dd/yy	HHMMSS	Units	mg/l	øC	mV	mS/cm	NTUs	ml/min.	Hz or cpm	Minutes	(0.01) ft.	
MC-17	11/30/05	135106	7.04	3.55	13.36	468	0.1413	5.08	200	1.0 cpm	66	0.07	All parameters stable when sample was collected.
MC-17	11/30/05	135406	7.02	2.51	13.36	470	0.1621	4.33	200	1.0 cpm			Turbidity < 5 NTU
MC-17	11/30/05	135715	6.82	1.97	13.47	482	0.2219	3.01	200	1.0 cpm			Do > 0.20 mg/L
MC-17	11/30/05	140005	6.91	1.50	13.54	470	0.2602	1.92	200	1.0 cpm			
MC-17	11/30/05	140306	6.92	1.08	13.39	470	0.2797	1.36	200	1.0 cpm			
MC-17	11/30/05	140605	6.94	0.83	13.37	468	0.2848	1.02	200	1.0 cpm			
MC-17	11/30/05	140911	6.99	0.71	13.45	464	0.2883	0.77	200	1.0 cpm			
MC-17	11/30/05	141206	6.99	0.62	13.47	462	0.2830	0.65	200	1.0 cpm			
MC-17	11/30/05	141514	6.98	0.54	13.54	461	0.2759	0.56	200	1.0 cpm			
MC-17	11/30/05	141806	6.98	0.52	13.58	459	0.2700	0.50	200	1.0 cpm			
MC-17	11/30/05	142106	7.01	0.49	13.57	457	0.2635	0.50	200	1.0 cpm			
MC-17	11/30/05	142405	7.01	0.49	13.54	455	0.2512	0.62	200	1.0 cpm			
MC-17	11/30/05	142713	7.02	0.49	13.66	453	0.2385	0.80	200	1.0 cpm			
MC-17	11/30/05	143013	7.05	0.49	13.69	449	0.2319	0.77	200	1.0 cpm			
MC-17	11/30/05	143311	7.04	0.49	13.84	448	0.2252	0.78	200	1.0 cpm			
MC-17	11/30/05	143617	7.05	0.50	13.98	446	0.2160	0.80	200	1.0 cpm			
MC-17	11/30/05	143905	7.05	0.50	13.95	444	0.2101	0.84	200	1.0 cpm			
MC-17	11/30/05	144209	7.06	0.50	13.95	441	0.2026	0.82	200	1.0 cpm			
MC-17	11/30/05	144509	7.06	0.49	13.95	439	0.1994	0.79	200	1.0 cpm			
MC-17	11/30/05	144810	7.05	0.50	13.97	437	0.1950	0.77	200	1.0 cpm			
MC-17	11/30/05	145105	7.07	0.50	14.01	434	0.1914	0.81	200	1.0 cpm			
MC-17	11/30/05	145407	7.08	0.48	14.08	431	0.1895	0.83	200	1.0 cpm			
MC-14	12/1/05	74415	6.74	1.55	10.22	520	1.034	1.76	100	0.2 cpm	30	1.98	All parameters stable when sample was collected.
MC-14	12/1/05	74716	6.74	1.23	10.25	516	0.9398	1.43	100	0.2 cpm			Turbidity < 5 NTU
MC-14	12/1/05	75008	6.73	1.06	10.24	513	0.8555	1.46	100	0.2 cpm			Do > 0.20 mg/L
MC-14	12/1/05	75305	6.70	0.98	10.30	511	0.7833	1.43	100	0.2 cpm			Fe Field Test Kit Reading - 3.30 mg/L Upper Limit
MC-14	12/1/05	75605	6.73	0.88	10.20	508	0.7194	1.41	100	0.2 cpm			
MC-14	12/1/05	75906	6.73	0.74	10.14	507	0.6793	1.36	100	0.2 cpm			
MC-14	12/1/05	80205	6.71	0.71	10.09	506	0.6510	1.41	100	0.2 cpm			
MC-14	12/1/05	80505	6.73	0.66	10.09	504	0.6282	1.29	100	0.2 cpm			
MC-14	12/1/05	80805	6.70	0.69	10.11	503	0.6268	1.34	100	0.2 cpm			
MC-14	12/1/05	81105	6.66	0.63	10.03	502	0.6331	1.29	100	0.2 cpm			
MC-20	12/1/05	94511	6.59	1.70	9.94	514	0.8674	22.4	100	0.2 cpm	27	2.09	All parameters stable when sample was collected.
MC-20	12/1/05	94810	6.55	1.37	10.32	512	0.8607	20.2	100	0.2 cpm			Turbidity < 5 NTU
MC-20	12/1/05	95105	6.55	1.24	10.34	510	0.8575	16.7	100	0.2 cpm			Do > 0.20 mg/L
MC-20	12/1/05	95407	6.53	1.09	10.62	508	0.8448	9.26	100	0.2 cpm			Fe Field Test Kit Reading - 3.30 mg/L Upper Limit
MC-20	12/1/05	95706	6.52	0.99	10.75	507	0.8037	6.29	100	0.2 cpm			
MC-20	12/1/05	100005	6.50	0.90	10.85	506	0.7551	5.43	100	0.2 cpm			
MC-20	12/1/05	100305	6.47	0.87	10.89	505	0.7101	4.27	100	0.2 cpm			
MC-20	12/1/05	100606	6.43	0.88	10.94	504	0.6980	3.42	100	0.2 cpm			
MC-20	12/1/05	100921	6.41	0.86	11.00	503	0.6962	2.88	100	0.2 cpm			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turb	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	mm/dd/yy	HHMMSS	Units	mg/l	øC	mV	mS/cm	NTUs	ml/min.	Hz or cpm	Minutes	(0.01) ft.	
MC-21	12/1/05	112305	7.27	2.07	11.62	476	0.1089	7.20	350	1.0 cpm	15	0.08	All parameters stable when sample was collected.
MC-21	12/1/05	112605	7.10	1.50	12.14	477	0.1176	2.99	350	1.0 cpm			Turbidity < 5 NTU
MC-21	12/1/05	112909	7.02	1.31	12.37	476	0.1208	1.10	350	1.0 cpm			Do > 0.20 mg/L
MC-21	12/1/05	113205	6.97	1.22	12.50	475	0.1239	1.22	350	1.0 cpm			Fe Field Test Kit Reading - 3.30 mg/L Upper Limit
MC-21	12/1/05	113505	6.96	1.20	12.60	474	0.1256	1.20	350	1.0 cpm			
MC-12	12/1/05	121618	7.39	2.35	11.52	465	0.1165	1.62	300	2.0 cpm	15	0.06	All parameters stable when sample was collected.
MC-12	12/1/05	121905	7.36	1.52	11.77	462	0.1193	1.06	300	2.0 cpm			Turbidity < 5 NTU
MC-12	12/1/05	122209	7.35	1.23	11.84	461	0.1211	0.70	300	2.0 cpm			Do > 0.20 mg/L
MC-12	12/1/05	122509	7.35	1.20	11.88	459	0.1204	0.53	300	2.0 cpm			Fe Field Test Kit Reading - 0.80 mg/L
MC-12	12/1/05	122807	7.33	1.21	11.83	458	0.1215	0.41	300	2.0 cpm			
MC-1	12/1/05	130706	7.30	6.80	10.91	463	0.0339	1.98	400	65 Hz	21	0.73	All parameters stable when sample was collected.
MC-1	12/1/05	131008	7.03	6.33	11.71	469	0.0341	1.74	400	65 Hz			Turbidity < 5 NTU
MC-1	12/1/05	131305	6.96	6.26	13.35	470	0.0347	1.82	400	65 Hz			Do > 0.20 mg/L
MC-1	12/1/05	131605	6.88	6.01	14.84	471	0.0349	1.92	400	65 Hz			Fe Field Test Kit Reading - 0.08 mg/L
MC-1	12/1/05	131905	6.83	5.70	15.86	472	0.0359	1.70	400	65 Hz			
MC-1	12/1/05	132205	6.78	5.48	16.31	473	0.0363	1.63	400	65 Hz			
MC-1	12/1/05	132511	6.75	5.21	16.20	474	0.0369	1.41	400	65 Hz			
MC-17D	12/1/05	140106	6.61	2.19	12.14	502	0.162	0.42	400	75 Hz	18	0.32	All parameters stable when sample was collected.
MC-17D	12/1/05	140406	6.86	1.06	12.90	495	0.1645	0.22	400	75 Hz			Turbidity < 5 NTU
MC-17D	12/1/05	140705	7.10	0.86	14.79	480	0.1661	0.22	400	75 Hz			Do > 0.20 mg/L
MC-17D	12/1/05	141007	7.14	0.69	16.87	475	0.1673	0.13	400	75 Hz			
MC-17D	12/1/05	141305	7.14	0.68	16.51	473	0.1671	0.20	400	75 Hz			
MC-17D	12/1/05	141605	7.13	0.66	16.37	471	0.1677	0.18	400	75 Hz			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	øC	mV	mS/cm	NTUs	ml/min.	Hz or cpm	Minutes	(0.01) ft.	
MC-2	3/7/06	71218	6.86	1.30	11.66	457	0.1159	3.23	400	48 Hz	18	0.38	All parameters stable when sample was collected.
MC-2	3/7/06	71505	6.87	0.89	12.56	454	0.1155	1.28	400	48 Hz			Turbidity < 5 NTU
MC-2	3/7/06	71805	6.89	0.59	13.53	453	0.1164	0.65	400	48 Hz			DO > 0.20 mg/L
MC-2	3/7/06	72119	6.89	0.47	14.03	451	0.1170	0.36	400	48 Hz			
MC-2	3/7/06	72411	6.87	0.45	14.39	449	0.1185	0.23	400	48 Hz			
MC-2	3/7/06	72706	6.87	0.43	14.47	448	0.1200	0.17	400	48 Hz			
MC-2D	3/7/06	75105	6.13	10.71	11.20	506	0.3041	0.26	400	66 Hz	21	1.90	All parameters stable when sample was collected.
MC-2D	3/7/06	75414	6.62	3.43	14.90	492	0.3055	0.21	400	66 Hz			Turbidity < 5 NTU
MC-2D	3/7/06	75705	6.74	2.16	14.98	488	0.3024	0.17	400	66 Hz			DO > 0.20 mg/L
MC-2D	3/7/06	80005	6.82	1.44	15.98	483	0.3003	0.14	400	66 Hz			
MC-2D	3/7/06	80307	6.94	1.18	16.39	475	0.2988	0.13	400	66 Hz			
MC-2D	3/7/06	80605	7.01	1.09	16.73	470	0.2958	0.09	400	66 Hz			
MC-2D	3/7/06	80906	7.02	1.07	16.79	467	0.2921	0.11	400	66 Hz			
MC-13D	3/7/06	83725	7.42	1.69	11.50	470	0.1627	0.23	200	0.2 cpm	18	0.86	All parameters stable when sample was collected.
MC-13D	3/7/06	84005	7.26	1.50	11.39	471	0.1620	0.20	200	0.2 cpm			Turbidity < 5 NTU
MC-13D	3/7/06	84312	7.15	1.34	11.40	472	0.1614	0.16	200	0.2 cpm			DO > 0.20 mg/L
MC-13D	3/7/06	84606	7.11	1.15	11.40	472	0.1614	0.11	200	0.2 cpm			
MC-13D	3/7/06	84917	7.16	1.11	11.44	470	0.1610	0.09	200	0.2 cpm			
MC-13D	3/7/06	85205	7.18	1.08	11.47	469	0.1612	0.13	200	0.2 cpm			
MC-13	3/7/06	90905	6.90	1.23	10.42	476	0.0603	25.5	400	3.0 cpm	24	1.09	All parameters stable when sample was collected.
MC-13	3/7/06	91207	6.84	0.60	10.43	473	0.0618	11.5	400	3.0 cpm			Turbidity < 5 NTU
MC-13	3/7/06	91506	6.73	0.43	10.42	472	0.0655	4.43	400	3.0 cpm			DO > 0.20 mg/L
MC-13	3/7/06	91811	6.72	0.34	10.38	473	0.0700	2.20	400	3.0 cpm			
MC-13	3/7/06	92129	6.66	0.29	10.36	470	0.0734	1.45	400	3.0 cpm			
MC-13	3/7/06	92404	6.67	0.28	10.36	468	0.0754	1.35	400	3.0 cpm			
MC-13	3/7/06	92706	6.68	0.27	10.36	467	0.0766	1.27	400	3.0 cpm			
MC-13	3/7/06	93006	6.74	0.28	10.38	464	0.0773	1.20	400	3.0 cpm			
MC-8	3/7/06	95910	7.23	6.75	9.92	457	0.0610	9.32	200	0.2 cpm	18	0.22	All parameters stable when sample was collected.
MC-8	3/7/06	100205	7.10	6.67	9.82	459	0.0611	9.55	200	0.2 cpm			Turbidity > 5 NTU but stable.
MC-8	3/7/06	100505	7.02	6.55	9.79	461	0.0610	10.6	200	0.2 cpm			DO > 0.20 mg/L
MC-8	3/7/06	100806	6.89	6.61	9.75	464	0.0610	11.2	200	0.2 cpm			
MC-8	3/7/06	101118	6.82	6.52	9.74	466	0.0606	11.6	200	0.2 cpm			
MC-8	3/7/06	101406	6.79	6.52	9.75	468	0.0607	11.8	200	0.2 cpm			
MC-12D	3/7/06	105008	6.64	0.38	12.67	513	1.173	20.5	400	61 Hz	18	0.76	All parameters stable when sample was collected.
MC-12D	3/7/06	105306	6.76	0.26	14.08	504	1.154	11.0	400	61 Hz			Turbidity < 5 NTU
MC-12D	3/7/06	105605	6.78	0.22	15.50	499	1.142	4.74	400	61 Hz			DO < 0.20 mg/L but stable.
MC-12D	3/7/06	105905	6.80	0.16	16.38	494	1.132	3.85	400	61 Hz			DO Test Kit Reading - 0.24 mg/L
MC-12D	3/7/06	110205	6.78	0.17	16.68	491	1.125	3.31	400	61 Hz			
MC-12D	3/7/06	110507	6.81	0.16	16.83	488	1.121	3.24	400	61 Hz			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	øC	mV	mS/cm	NTUs	ml/min.	Hz or cpm	Minutes	(0.01) ft.	
MC-10D	3/7/06	113905	7.02	1.44	12.49	484	0.7664	9.57	400	69 Hz	21	1.03	All parameters stable when sample was collected.
MC-10D	3/7/06	114212	6.92	0.84	13.63	483	0.7702	2.37	400	69 Hz			Turbidity < 5 NTU
MC-10D	3/7/06	114505	6.96	0.66	14.84	477	0.7741	0.83	400	69 Hz			DO > 0.20 mg/L
MC-10D	3/7/06	114805	6.97	0.62	15.72	474	0.7780	1.26	400	69 Hz			
MC-10D	3/7/06	115106	6.97	0.45	16.20	472	0.7794	2.22	400	69 Hz			
MC-10D	3/7/06	115405	6.97	0.43	16.27	470	0.7775	1.63	400	69 Hz			
MC-10D	3/7/06	115705	6.96	0.41	16.49	470	0.7783	1.00	400	69 Hz			
MC-17D	3/7/06	132109	7.45	2.39	12.03	468	0.1655	0.31	400	67 Hz	27	0.51	All parameters stable when sample was collected.
MC-17D	3/7/06	132405	7.34	2.06	12.87	470	0.1696	0.24	400	67 Hz			Turbidity < 5 NTU
MC-17D	3/7/06	132706	7.36	1.65	14.54	461	0.1709	0.19	400	67 Hz			DO > 0.20 mg/L
MC-17D	3/7/06	133005	7.37	1.39	15.71	459	0.1707	0.13	400	67 Hz			
MC-17D	3/7/06	133324	7.28	1.12	16.05	458	0.1709	0.09	400	67 Hz			
MC-17D	3/7/06	133605	7.24	1.01	16.33	458	0.1717	0.12	400	67 Hz			
MC-17D	3/7/06	133924	7.22	0.81	16.88	456	0.1718	0.13	400	67 Hz			
MC-17D	3/7/06	134205	7.24	0.77	17.21	455	0.1713	0.16	400	67 Hz			
MC-17D	3/7/06	134505	7.21	0.74	17.28	454	0.1714	0.11	400	67 Hz			
MC-17	3/7/06	143005	6.83	0.90	10.13	484	0.3420	3.63	200	0.3 cpm	36	0.10	All parameters stable when sample was collected.
MC-17	3/7/06	143310	6.76	0.72	9.41	479	0.3104	4.78	200	0.3 cpm			Turbidity < 5 NTU
MC-17	3/7/06	143605	6.74	0.62	8.84	479	0.2921	4.33	200	0.3 cpm			DO > 0.20 mg/L
MC-17	3/7/06	143912	6.71	0.57	8.46	479	0.2848	4.08	200	0.3 cpm			
MC-17	3/7/06	144205	6.70	0.51	8.43	477	0.2719	3.89	200	0.3 cpm			
MC-17	3/7/06	144518	6.72	0.48	8.41	476	0.2746	3.69	200	0.3 cpm			
MC-17	3/7/06	144806	6.73	0.50	8.47	474	0.2584	4.84	200	0.3 cpm			
MC-17	3/7/06	145119	6.76	0.58	8.55	471	0.2397	4.70	200	0.3 cpm			
MC-17	3/7/06	145411	6.77	0.63	8.62	469	0.2211	4.64	200	0.3 cpm			
MC-17	3/7/06	145705	6.80	0.62	8.74	466	0.2116	4.33	200	0.3 cpm			
MC-17	3/7/06	150008	6.80	0.61	8.82	466	0.2113	4.38	200	0.3 cpm			
MC-17	3/7/06	150305	6.82	0.61	8.88	464	0.2075	4.24	200	0.3 cpm			
MC-16	3/8/06	83506	7.11	1.58	8.51	487	0.2466	42.6	200	0.3 cpm	24	0.17	All parameters stable when sample was collected.
MC-16	3/8/06	83806	7.02	0.99	8.56	487	0.2555	33.2	200	0.3 cpm			Turbidity < 5 NTU
MC-16	3/8/06	84105	7.01	0.75	8.53	486	0.2510	18.2	200	0.3 cpm			DO > 0.20 mg/L
MC-16	3/8/06	84408	6.96	0.62	8.47	486	0.2365	16.9	200	0.3 cpm			
MC-16	3/8/06	84705	6.88	0.54	8.45	487	0.2310	12.4	200	0.3 cpm			
MC-16	3/8/06	85006	6.91	0.49	8.42	487	0.2280	4.63	200	0.3 cpm			
MC-16	3/8/06	85305	6.92	0.46	8.36	484	0.2262	4.40	200	0.3 cpm			
MC-16	3/8/06	85605	6.89	0.45	8.36	486	0.2241	3.43	200	0.3 cpm			
MC-15D	3/8/06	92821	7.02	1.29	11.14	491	0.3460	0.25	400	56 Hz	18	0.89	All parameters stable when sample was collected.
MC-15D	3/8/06	93105	7.01	0.54	12.30	489	0.3645	0.17	400	56 Hz			Turbidity < 5 NTU
MC-15D	3/8/06	93405	7.03	0.37	14.13	486	0.3694	0.13	400	56 Hz			DO > 0.20 mg/L
MC-15D	3/8/06	93705	7.04	0.35	15.38	484	0.3723	0.09	400	56 Hz			
MC-15D	3/8/06	94009	7.03	0.32	15.79	482	0.3734	0.10	400	56 Hz			
MC-15D	3/8/06	94305	7.03	0.33	15.85	480	0.3744	0.08	400	56 Hz			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	øC	mV	mS/cm	NTUs	ml/min.	Hz or cpm	Minutes	(0.01) ft.	
MC-15	3/8/06	100805	6.98	1.34	8.96	484	0.0955	0.87	200	0.3 cpm	18	0.54	All parameters stable when sample was collected.
MC-15	3/8/06	101105	6.69	0.89	8.81	492	0.1227	0.79	200	0.3 cpm			Turbidity < 5 NTU
MC-15	3/8/06	101405	6.85	0.68	8.70	477	0.1353	0.57	200	0.3 cpm			DO > 0.20 mg/L
MC-15	3/8/06	101707	6.77	0.65	8.60	476	0.1396	0.53	200	0.3 cpm			
MC-15	3/8/06	102007	6.63	0.65	8.56	477	0.1388	0.48	200	0.3 cpm			
MC-15	3/8/06	102307	6.68	0.68	8.51	478	0.1380	0.43	200	0.3 cpm			
MC-118D	3/8/06	105805	6.61	0.29	11.73	512	1.030	75.5	400	69 Hz	15	1.94	All parameters stable when sample was collected.
MC-118D	3/8/06	110105	6.75	0.24	15.15	504	1.045	21.2	400	69 Hz			Turbidity < 5 NTU
MC-118D	3/8/06	110405	6.80	0.25	16.18	500	1.030	4.09	400	69 Hz			DO > 0.20 mg/L
MC-118D	3/8/06	110705	6.84	0.23	16.58	496	1.020	1.77	400	69 Hz			
MC-118D	3/8/06	111011	6.85	0.24	16.65	494	1.013	1.03	400	69 Hz			
MC-107	3/8/06	113815	7.54	1.86	8.96	464	0.0751	1.57	400	3.0 cpm	15	0.07	All parameters stable when sample was collected.
MC-107	3/8/06	114105	7.38	1.72	8.91	464	0.0771	1.44	400	3.0 cpm			Turbidity < 5 NTU
MC-107	3/8/06	114405	7.28	1.66	8.87	463	0.0785	0.85	400	3.0 cpm			DO > 0.20 mg/L
MC-107	3/8/06	114705	7.24	1.60	8.85	463	0.0797	0.52	400	3.0 cpm			
MC-107	3/8/06	115005	7.20	1.62	8.81	462	0.0806	0.39	400	3.0 cpm			
MC-19D	3/8/06	122207	7.38	1.01	11.61	467	0.1417	1.78	400	68 Hz	18	0.00	All parameters stable when sample was collected.
MC-19D	3/8/06	122522	7.38	0.56	12.44	466	0.1422	1.30	400	68 Hz			Turbidity < 5 NTU
MC-19D	3/8/06	122805	7.37	0.42	13.69	464	0.1430	0.63	400	68 Hz			DO > 0.20 mg/L
MC-19D	3/8/06	123113	7.37	0.38	14.80	462	0.1438	0.48	400	68 Hz			
MC-19D	3/8/06	123406	7.37	0.35	15.03	460	0.1440	0.44	400	68 Hz			
MC-19D	3/8/06	123705	7.36	0.36	15.22	459	0.1445	0.38	400	68 Hz			
MC-14	3/9/06	81606	6.79	1.85	8.40	492	1.735	3.34	100	0.2 cpm	33	1.70	All parameters stable when sample was collected.
MC-14	3/9/06	81906	6.80	1.12	8.49	491	1.551	3.65	100	0.2 cpm			Turbidity < 5 NTU
MC-14	3/9/06	82205	6.82	0.76	8.50	487	1.390	3.34	100	0.2 cpm			DO > 0.20 mg/L
MC-14	3/9/06	82505	6.80	0.65	8.47	486	1.325	3.12	100	0.2 cpm			Fe Field Test Kit Reading - 3.18 mg/L
MC-14	3/9/06	82805	6.83	0.69	8.45	484	1.276	3.00	100	0.2 cpm			
MC-14	3/9/06	83105	6.82	0.65	8.42	483	1.226	3.27	100	0.2 cpm			
MC-14	3/9/06	83405	6.82	0.63	8.43	482	1.186	2.78	100	0.2 cpm			
MC-14	3/9/06	83705	6.82	0.58	8.50	481	1.147	2.33	100	0.2 cpm			
MC-14	3/9/06	84005	6.81	0.56	8.48	480	1.122	2.47	100	0.2 cpm			
MC-14	3/9/06	84305	6.81	0.54	8.53	480	1.103	2.40	100	0.2 cpm			
MC-14	3/9/06	84605	6.81	0.57	8.48	479	1.093	2.26	100	0.2 cpm			
MC-21	3/9/06	95415	7.69	1.72	9.87	438	0.0618	38.6	350	2.0 cpm	18	0.04	All parameters stable when sample was collected.
MC-21	3/9/06	95707	7.58	1.87	10.17	441	0.0620	20.1	350	2.0 cpm			Turbidity < 5 NTU
MC-21	3/9/06	100006	7.47	1.94	10.30	442	0.0622	6.64	350	2.0 cpm			DO > 0.20 mg/L
MC-21	3/9/06	100306	7.41	2.12	10.41	443	0.0636	3.53	350	2.0 cpm			Fe Field Test Kit Reading - 1.56 mg/L
MC-21	3/9/06	100605	7.35	2.20	10.53	444	0.0641	3.56	350	2.0 cpm			
MC-21	3/9/06	100905	7.31	2.23	10.57	445	0.0649	3.55	350	2.0 cpm			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	øC	mV	mS/cm	NTUs	ml/min.	Hz or cpm	Minutes	(0.01) ft.	
MC-12	3/9/06	105308	6.98	1.97	8.50	469	0.1202	1.60	300	2.0 cpm	15	0.08	All parameters stable when sample was collected.
MC-12	3/9/06	105605	6.99	1.20	8.64	466	0.1229	1.36	300	2.0 cpm			Turbidity < 5 NTU
MC-12	3/9/06	105906	7.01	0.99	8.67	464	0.1236	1.39	300	2.0 cpm			DO > 0.20 mg/L
MC-12	3/9/06	110205	7.03	0.99	8.74	463	0.1234	1.21	300	2.0 cpm			Fe Field Test Kit Reading - 0.58 mg/L
MC-12	3/9/06	110505	7.04	1.05	8.75	463	0.1241	1.16	300	2.0 cpm			
MC-20	3/9/06	121805	7.45	2.48	9.15	471	0.2035	20.3	100	0.2 cpm	21	0.15	All parameters stable when sample was collected.
MC-20	3/9/06	122128	7.07	1.63	9.87	475	0.1764	15.9	100	0.2 cpm			Turbidity < 5 NTU
MC-20	3/9/06	122422	7.03	1.50	10.08	463	0.1631	9.03	100	0.2 cpm			DO > 0.20 mg/L
MC-20	3/9/06	122751	6.98	1.49	10.23	461	0.1557	5.75	100	0.2 cpm			Fe Field Test Kit Reading - 2.34 mg/L
MC-20	3/9/06	123046	6.92	1.43	10.24	460	0.1532	4.59	100	0.2 cpm			
MC-20	3/9/06	123308	6.88	1.42	10.30	461	0.1526	4.39	100	0.2 cpm			
MC-20	3/9/06	123608	6.92	1.34	10.29	461	0.1529	2.76	100	0.2 cpm			
MC-1	3/9/06	132106	7.67	9.14	7.68	455	0.0344	11.7	400	53 Hz	24	0.20	All parameters stable when sample was collected.
MC-1	3/9/06	132406	7.65	8.69	8.49	446	0.0340	11.5	400	53 Hz			Turbidity > 5 NTU but stable.
MC-1	3/9/06	132716	7.49	8.48	10.32	444	0.0339	11.1	400	53 Hz			DO > 0.20 mg/L
MC-1	3/9/06	133006	7.49	8.43	11.32	443	0.0340	10.9	400	53 Hz			Fe Field Test Kit Reading - 0.21 mg/L
MC-1	3/9/06	133322	7.40	8.38	11.92	443	0.0336	10.5	400	53 Hz			
MC-1	3/9/06	133605	7.33	8.25	12.05	444	0.0338	10.2	400	53 Hz			
MC-1	3/9/06	133906	7.24	8.01	12.19	446	0.0337	9.93	400	53 Hz			
MC-1	3/9/06	134205	7.23	8.01	12.33	453	0.0336	9.76	400	53 Hz			

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Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS	Units	mg/l	øC	mV	mS/cm	NTUs	ml/min.	Hz or cpm	Minutes	(0.01) ft	
MC-2	6/6/06	71206	6.37	0.88	16.20	124	1.154	19.8	400	51 Hz	48	0.26	All parameters stable when sample was collected.
MC-2	6/6/06	71505	6.52	0.32	18.06	100	1.141	22.0	400	51 Hz			Turbidity < 5 NTUs
MC-2	6/6/06	71815	6.62	0.22	19.57	87	1.117	15.3	400	51 Hz			DO < 0.20 mg\L but stable.
MC-2	6/6/06	72107	6.63	0.17	20.39	81	1.049	9.23	400	51 Hz			DO Test Kit Reading - 0.26 mg/L
MC-2	6/6/06	72407	6.64	0.12	21.14	78	0.9520	3.87	400	51 Hz			
MC-2	6/6/06	72750	6.64	0.12	21.49	78	0.8338	3.05	400	51 Hz			
MC-2	6/6/06	73006	6.64	0.11	21.62	77	0.7595	2.68	400	51 Hz			
MC-2	6/6/06	73306	6.64	0.09	21.67	78	0.6910	1.61	400	51 Hz			
MC-2	6/6/06	73605	6.64	0.09	21.93	78	0.6568	1.42	400	51 Hz			
MC-2	6/6/06	73905	6.64	0.06	22.24	78	0.6227	1.34	400	51 Hz			
MC-2	6/6/06	74206	6.64	0.07	22.04	78	0.5780	1.22	400	51 Hz			
MC-2	6/6/06	74506	6.63	0.04	22.20	78	0.5610	1.27	400	51 Hz			
MC-2	6/6/06	74806	6.63	0.05	22.11	79	0.5290	1.28	400	51 Hz			
MC-2	6/6/06	75126	6.64	0.03	22.35	79	0.5105	1.29	400	51 Hz			
MC-2	6/6/06	75406	6.64	0.02	22.27	79	0.5060	1.38	400	51 Hz			
MC-2	6/6/06	75711	6.63	0.03	22.45	79	0.4982	1.30	400	51 Hz			
MC-2D	6/6/06	84006	6.81	1.71	15.82	262	0.2763	13.9	400	54 Hz	21	1.37	All parameters stable when sample was collected.
MC-2D	6/6/06	84305	6.84	0.69	16.21	249	0.2685	6.29	400	54 Hz			Turbidity < 5 NTUs
MC-2D	6/6/06	84606	6.85	0.41	17.34	239	0.2568	2.41	400	54 Hz			DO > 0.20 mg\L
MC-2D	6/6/06	84905	6.86	0.29	17.81	231	0.2553	1.53	400	54 Hz			
MC-2D	6/6/06	85205	6.89	0.25	18.02	225	0.2546	1.38	400	54 Hz			
MC-2D	6/6/06	85507	6.90	0.23	18.11	221	0.2547	0.79	400	54 Hz			
MC-2D	6/6/06	85805	6.91	0.23	18.20	218	0.2551	0.63	400	54 Hz			
MC-19D	6/6/06	95207	6.89	1.37	14.98	354	0.1789	4.17	400	50 Hz	21	0.00	All parameters stable when sample was collected.
MC-19D	6/6/06	95507	6.84	0.64	15.31	346	0.1919	1.63	400	50 Hz			Turbidity < 5 NTUs
MC-19D	6/6/06	95808	6.85	0.40	16.12	337	0.1961	1.77	400	50 Hz			DO > 0.20 mg\L
MC-19D	6/6/06	100105	6.84	0.30	16.59	330	0.1969	1.07	400	50 Hz			
MC-19D	6/6/06	100405	6.86	0.25	16.85	324	0.1973	0.87	400	50 Hz			
MC-19D	6/6/06	100707	6.88	0.24	17.03	319	0.1974	0.81	400	50 Hz			
MC-19D	6/6/06	101022	6.90	0.23	17.17	315	0.1974	0.76	400	50 Hz			
MC-12D	6/6/06	104807	6.52	1.57	15.02	340	1.009	99.00	400	56 Hz	24	0.74	All parameters stable when sample was collected.
MC-12D	6/6/06	105141	6.49	0.53	16.24	310	1.023	13.30	400	56 Hz			Turbidity < 5 NTUs
MC-12D	6/6/06	105516	6.51	0.39	16.90	288	1.040	7.74	400	56 Hz			DO > 0.20 mg\L
MC-12D	6/6/06	105738	6.51	0.35	17.09	276	1.041	7.51	400	56 Hz			
MC-12D	6/6/06	110006	6.52	0.33	17.15	266	1.039	4.88	400	56 Hz			
MC-12D	6/6/06	110305	6.53	0.31	17.29	263	1.039	4.35	400	56 Hz			
MC-12D	6/6/06	110611	6.55	0.30	17.44	260	1.036	4.00	400	56 Hz			
MC-12D	6/6/06	110905	6.56	0.28	17.58	255	1.038	3.72	400	56 Hz			
MC-10D	6/6/06	120018	7.25	0.54	15.46	104	0.8210	112.0	400	58 Hz	21	1.23	All parameters stable when sample was collected.
MC-10D	6/6/06	120306	6.98	0.24	16.08	99	0.8219	29.8	400	58 Hz			Turbidity < 5 NTUs
MC-10D	6/6/06	120610	6.94	0.20	17.22	95	0.8213	19.7	400	58 Hz			DO < 0.20 mg\L but stable.
MC-10D	6/6/06	120905	6.90	0.15	17.54	92	0.8213	10.6	400	58 Hz			DO Test Kit Reading - 0.38 mg/L
MC-10D	6/6/06	121206	6.88	0.13	17.77	89	0.8204	4.65	400	58 Hz			
MC-10D	6/6/06	121506	6.87	0.12	17.83	88	0.8169	2.78	400	58 Hz			
MC-10D	6/6/06	121820	6.86	0.12	17.95	87	0.8175	2.64	400	58 Hz			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS	Units	mg/l	øC	mV	mS/cm	NTUs	ml/min.	Hz or cpm	Minutes	(0.01) ft	
MC-15D	6/6/06	134305	7.38	0.46	15.56	307	0.3224	2.78	400	48 Hz	24	0.74	All parameters stable when sample was collected.
MC-15D	6/6/06	134609	7.15	0.32	16.77	304	0.3198	1.06	400	48 Hz			Turbidity < 5 NTUs
MC-15D	6/6/06	134942	7.02	0.29	17.62	301	0.3190	0.88	400	48 Hz			DO < 0.20 mg\L but stable.
MC-15D	6/6/06	135206	6.95	0.22	17.88	299	0.3184	0.76	400	48 Hz			DO Test Kit Reading - 0.29 mg/L
MC-15D	6/6/06	135508	6.88	0.19	18.13	298	0.3178	0.71	400	48 Hz			
MC-15D	6/6/06	135807	6.84	0.18	18.25	296	0.3164	0.78	400	48 Hz			
MC-15D	6/6/06	140106	6.81	0.17	18.33	295	0.3164	0.69	400	48 Hz			
MC-15D	6/6/06	140405	6.80	0.18	18.42	293	0.3159	0.67	400	48 Hz			
MC-15	6/6/06	144408	6.92	0.96	17.91	227	0.2316	2.85	200	1.0 cpm	21	0.60	All parameters stable when sample was collected.
MC-15	6/6/06	144706	6.80	0.78	17.47	189	0.2446	2.62	200	1.0 cpm			Turbidity < 5 NTUs
MC-15	6/6/06	145016	6.76	0.59	17.26	167	0.2461	2.41	200	1.0 cpm			DO > 0.20 mg\L
MC-15	6/6/06	145329	6.74	0.47	17.27	153	0.2449	2.27	200	1.0 cpm			
MC-15	6/6/06	145605	6.77	0.34	17.27	142	0.2417	1.88	200	1.0 cpm			
MC-15	6/6/06	145916	6.80	0.33	17.29	138	0.2404	1.57	200	1.0 cpm			
MC-15	6/6/06	150209	6.77	0.31	17.29	133	0.2391	1.21	200	1.0 cpm			
MC-107	6/7/06	72006	6.94	1.07	14.38	439	0.1067	2.62	400	3.0 cpm	36	0.06	All parameters stable when sample was collected.
MC-107	6/7/06	72305	6.89	0.59	14.51	409	0.1082	2.06	400	3.0 cpm			Turbidity < 5 NTUs
MC-107	6/7/06	72610	6.86	0.46	14.67	371	0.1069	1.47	400	3.0 cpm			DO > 0.20 mg\L
MC-107	6/7/06	72936	6.89	0.42	14.85	335	0.1063	0.95	400	3.0 cpm			
MC-107	6/7/06	73205	6.92	0.43	14.98	315	0.1057	0.84	400	3.0 cpm			
MC-107	6/7/06	73505	6.91	0.42	15.07	293	0.1051	0.68	400	3.0 cpm			
MC-107	6/7/06	73805	6.93	0.40	15.09	273	0.1043	0.44	400	3.0 cpm			
MC-107	6/7/06	74112	6.93	0.41	15.08	255	0.1047	0.35	400	3.0 cpm			
MC-107	6/7/06	74408	6.94	0.40	15.00	241	0.1047	0.33	400	3.0 cpm			
MC-107	6/7/06	74708	6.90	0.38	14.92	226	0.1047	0.31	400	3.0 cpm			
MC-107	6/7/06	75005	6.90	0.37	14.89	221	0.1044	0.28	400	3.0 cpm			
MC-107	6/7/06	75331	6.93	0.37	14.87	218	0.1047	0.25	400	3.0 cpm			
MC-118D	6/7/06	84217	6.70	0.62	15.32	245	0.7513	32.7	400	62 Hz	24	1.94	All parameters stable when sample was collected.
MC-118D	6/7/06	84506	6.79	0.20	16.80	169	0.7701	12.9	400	62 Hz			Turbidity < 5 NTUs
MC-118D	6/7/06	84806	6.82	0.07	18.09	138	0.7981	6.87	400	62 Hz			DO < 0.20 mg\L but stable.
MC-118D	6/7/06	85105	6.82	0.14	18.53	123	0.8090	3.12	400	62 Hz			DO Test Kit Reading - 0.20 mg/L
MC-118D	6/7/06	85405	6.84	0.13	18.88	113	0.8144	2.96	400	62 Hz			
MC-118D	6/7/06	85745	6.84	0.12	19.19	105	0.8191	2.54	400	62 Hz			
MC-118D	6/7/06	90031	6.83	0.11	19.27	100	0.8177	2.42	400	62 Hz			
MC-118D	6/7/06	90342	6.84	0.11	19.24	97	0.8139	2.13	400	62 Hz			
MC-8	6/7/06	93606	6.90	2.36	15.80	254	0.0851	18.6	200	0.5 cpm	24	0.22	All parameters stable when sample was collected.
MC-8	6/7/06	93942	6.58	2.00	15.82	270	0.0789	14.4	200	0.5 cpm			Turbidity < 5 NTUs
MC-8	6/7/06	94206	6.48	1.90	15.89	277	0.0773	8.94	200	0.5 cpm			DO > 0.20 mg\L
MC-8	6/7/06	94507	6.47	1.76	16.00	280	0.0769	7.23	200	0.5 cpm			
MC-8	6/7/06	94813	6.40	1.66	16.12	286	0.0766	5.19	200	0.5 cpm			
MC-8	6/7/06	95106	6.38	1.59	16.22	291	0.0768	4.66	200	0.5 cpm			
MC-8	6/7/06	95413	6.34	1.53	16.23	295	0.0768	4.10	200	0.5 cpm			
MC-8	6/7/06	95707	6.32	1.49	16.24	300	0.0769	4.00	200	0.5 cpm			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS	Units	mg/l	øC	mV	mS/cm	NTUs	ml/min.	Hz or cpm	Minutes	(0.01) ft	
MC-16	6/7/06	105406	6.89	1.60	17.78	137	0.2379	8.75	200	0.5 cpm	18	0.37	All parameters stable when sample was collected.
MC-16	6/7/06	105705	6.84	1.10	16.73	116	0.2396	7.90	200	0.5 cpm			Turbidity < 5 NTUs
MC-16	6/7/06	110005	6.85	0.88	16.22	103	0.2516	5.74	200	0.5 cpm			DO > 0.20 mg\L
MC-16	6/7/06	110305	6.84	0.66	16.08	99	0.2687	4.46	200	0.5 cpm			
MC-16	6/7/06	110608	6.83	0.64	15.96	96	0.2740	4.01	200	0.5 cpm			
MC-16	6/7/06	110914	6.83	0.61	15.81	93	0.2757	3.52	200	0.5 cpm			
MC-17	6/7/06	115207	6.93	1.41	17.07	208	0.1662	3.66	200	0.5 cpm	18	0.12	All parameters stable when sample was collected.
MC-17	6/7/06	115517	6.88	0.82	16.83	163	0.1806	2.38	200	0.5 cpm			Turbidity < 5 NTUs
MC-17	6/7/06	115827	6.83	0.56	16.58	147	0.2045	1.91	200	0.5 cpm			DO > 0.20 mg\L
MC-17	6/7/06	120116	6.80	0.51	16.46	140	0.2099	1.54	200	0.5 cpm			
MC-17	6/7/06	120406	6.82	0.49	16.43	136	0.2128	1.23	200	0.5 cpm			
MC-17	6/7/06	120707	6.79	0.47	16.35	133	0.2160	1.19	200	0.5 cpm			
MC-17D	6/7/06	123806	7.01	1.14	15.39	122	0.1573	2.50	400	48 Hz	15	0.50	All parameters stable when sample was collected.
MC-17D	6/7/06	124105	7.01	0.94	15.92	127	0.1554	1.17	400	48 Hz			Turbidity < 5 NTUs
MC-17D	6/7/06	124407	6.98	0.85	18.61	131	0.1551	0.62	400	48 Hz			DO > 0.20 mg\L
MC-17D	6/7/06	124706	7.03	0.81	18.80	131	0.1549	0.50	400	48 Hz			
MC-17D	6/7/06	125018	7.08	0.79	18.24	131	0.1551	0.46	400	48 Hz			
MC-13D	6/7/06	140306	7.20	0.96	15.93	306	0.1525	1.05	200	0.5 cpm	18	1.09	All parameters stable when sample was collected.
MC-13D	6/7/06	140605	7.04	0.60	15.70	307	0.1509	0.51	200	0.5 cpm			Turbidity < 5 NTUs
MC-13D	6/7/06	140923	6.96	0.41	15.61	305	0.1506	0.42	200	0.5 cpm			DO > 0.20 mg\L
MC-13D	6/7/06	141205	6.91	0.33	15.58	304	0.1503	0.37	200	0.5 cpm			
MC-13D	6/7/06	141532	6.82	0.31	15.65	302	0.1507	0.33	200	0.5 cpm			
MC-13D	6/7/06	141815	6.85	0.30	15.75	301	0.1507	0.30	200	0.5 cpm			
MC-13	6/7/06	144807	6.50	0.64	15.64	308	0.1096	5.80	400	3.0 cpm	15	0.10	All parameters stable when sample was collected.
MC-13	6/7/06	145118	6.54	0.38	15.46	256	0.1127	4.12	400	3.0 cpm			Turbidity < 5 NTUs
MC-13	6/7/06	145406	6.55	0.31	15.42	231	0.1129	2.80	400	3.0 cpm			DO > 0.20 mg\L
MC-13	6/7/06	145706	6.52	0.30	15.35	225	0.1138	1.69	400	3.0 cpm			
MC-13	6/7/06	150005	6.57	0.29	15.23	222	0.1142	1.47	400	3.0 cpm			
MC-14	6/8/06	71906	6.71	1.40	15.07	172	0.7212	16.8	100	0.1 cpm	30	1.82	All parameters stable when sample was collected.
MC-14	6/8/06	72206	6.81	1.11	15.15	129	0.7036	17.9	100	0.1 cpm			Turbidity > 5 NTUs but stable.
MC-14	6/8/06	72512	6.85	0.91	15.18	115	0.6755	17.3	100	0.1 cpm			DO > 0.20 mg\L
MC-14	6/8/06	72805	6.87	0.81	15.24	108	0.6544	14.9	100	0.1 cpm			Fe Field Test Kit Reading - 2.61 mg/L
MC-14	6/8/06	73105	6.86	0.70	15.27	102	0.6349	13.2	100	0.1 cpm			
MC-14	6/8/06	73410	6.84	0.72	15.28	99	0.6245	11.8	100	0.1 cpm			
MC-14	6/8/06	73706	6.84	0.65	15.29	97	0.6180	10.1	100	0.1 cpm			
MC-14	6/8/06	74007	6.85	0.58	15.29	95	0.6176	9.24	100	0.1 cpm			
MC-14	6/8/06	74305	6.84	0.58	15.29	94	0.6149	8.75	100	0.1 cpm			
MC-14	6/8/06	74608	6.84	0.53	15.26	92	0.6174	8.44	100	0.1 cpm			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS	Units	mg/l	øC	mV	mS/cm	NTUs	ml/min.	Hz or cpm	Minutes	(0.01) ft	
MC-21	6/8/06	85906	7.26	0.94	14.99	282	0.0956	12.2	350	2.0 cpm	21	0.06	All parameters stable when sample was collected.
MC-21	6/8/06	90207	7.13	0.66	14.96	252	0.0943	4.85	350	2.0 cpm			Turbidity < 5 NTUs
MC-21	6/8/06	90507	7.03	0.52	14.95	232	0.0941	2.63	350	2.0 cpm			DO > 0.20 mg\L
MC-21	6/8/06	90806	6.98	0.48	14.94	217	0.0940	1.35	350	2.0 cpm			Fe Field Test Kit Reading - 2.83 mg/L
MC-21	6/8/06	91112	6.85	0.51	14.95	209	0.0940	1.17	350	2.0 cpm			
MC-21	6/8/06	91417	6.84	0.51	14.96	200	0.0943	1.06	350	2.0 cpm			
MC-21	6/8/06	91707	6.89	0.49	14.95	200	0.0943	0.98	350	2.0 cpm			
MC-20	6/8/06	101308	6.49	1.43	15.61	317	0.2606	23.9	100	0.1 cpm	18	0.95	All parameters stable when sample was collected.
MC-20	6/8/06	101605	6.45	0.87	15.63	294	0.2590	19.3	100	0.1 cpm			Turbidity > 5 NTUs but stable.
MC-20	6/8/06	101905	6.45	0.74	15.59	271	0.2626	17.7	100	0.1 cpm			DO > 0.20 mg\L
MC-20	6/8/06	102212	6.48	0.68	15.58	268	0.2685	15.5	100	0.1 cpm			Fe Field Test Kit Reading - 3.30 mg/L Upper Limit
MC-20	6/8/06	102505	6.48	0.66	15.54	266	0.2738	14.8	100	0.1 cpm			
MC-20	6/8/06	102805	6.47	0.62	15.54	260	0.2763	14.1	100	0.1 cpm			
MC-12	6/8/06	114505	7.08	0.77	15.92	335	0.1157	2.80	400	3.0 cpm	15	0.09	All parameters stable when sample was collected.
MC-12	6/8/06	114805	7.03	0.55	15.77	318	0.1135	1.38	400	3.0 cpm			Turbidity < 5 NTUs
MC-12	6/8/06	115106	6.98	0.58	15.71	302	0.1139	1.25	400	3.0 cpm			DO > 0.20 mg\L
MC-12	6/8/06	115405	6.97	0.60	15.75	295	0.1150	0.81	400	3.0 cpm			Fe Field Test Kit Reading - 0.67 mg/L
MC-12	6/8/06	115705	6.98	0.62	15.77	293	0.1158	0.73	400	3.0 cpm			
MC-1	6/8/06	125000	6.61	1.42	14.73	373	0.0978	6.43	400	57 Hz	18	0.88	All parameters stable when sample was collected.
MC-1	6/8/06	125306	6.53	1.73	15.98	370	0.0737	5.36	400	57 Hz			Turbidity < 5 NTUs
MC-1	6/8/06	125605	6.45	1.37	17.92	366	0.0640	3.97	400	57 Hz			DO > 0.20 mg\L
MC-1	6/8/06	125908	6.53	0.89	19.81	353	0.0640	3.69	400	57 Hz			Fe Field Test Kit Reading - 0.03 mg/L
MC-1	6/8/06	130214	6.51	0.84	19.93	347	0.0655	3.02	400	57 Hz			
MC-1	6/8/06	130507	6.49	0.81	20.39	344	0.0641	2.75	400	57 Hz			

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Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	øC	mV	mS/cm	NTUs	ml/min.	Hz or cpm	Minutes	(0.01) ft.	
MC-14	9/12/06	73306	6.34	1.91	16.93	376	0.5357	2.60	100	0.2 cpm	23	1.82	All parameters stable when sample was collected.
MC-14	9/12/06	73611	6.34	1.40	17.27	373	0.4550	2.27	100	0.2 cpm			Turbidty < 5 NTU
MC-14	9/12/06	73910	6.30	1.17	17.59	371	0.4103	1.90	100	0.2 cpm			Do > 0.20 mg/L
MC-14	9/12/06	74209	6.34	0.96	17.78	368	0.3710	1.59	100	0.2 cpm			Fe Field Test Kit Reading - 2.42 mg/L
MC-14	9/12/06	74515	6.35	0.87	17.96	366	0.3465	1.36	100	0.2 cpm			
MC-14	9/12/06	74809	6.36	0.82	18.10	363	0.3374	1.11	100	0.2 cpm			
MC-14	9/12/06	75107	6.36	0.79	18.34	362	0.3388	0.96	100	0.2 cpm			
MC-21	9/12/06	92724	6.66	0.92	17.91	345	0.1615	3.19	300	2.0 cpm	24	0.06	All parameters stable when sample was collected.
MC-21	9/12/06	93005	6.81	0.63	17.99	339	0.1617	1.47	300	2.0 cpm			Turbidty < 5 NTU
MC-21	9/12/06	93305	6.83	0.48	18.04	331	0.1618	0.86	300	2.0 cpm			Do > 0.20 mg/L
MC-21	9/12/06	93605	6.90	0.42	18.07	324	0.1618	0.50	300	2.0 cpm			Fe Field Test Kit Reading - 3.30 mg/L Upper Limit
MC-21	9/12/06	93907	6.88	0.38	18.08	322	0.1618	0.41	300	2.0 cpm			
MC-21	9/12/06	94206	6.87	0.35	18.13	320	0.1620	0.51	300	2.0 cpm			
MC-21	9/12/06	94506	6.84	0.34	18.22	319	0.1621	0.74	300	2.0 cpm			
MC-21	9/12/06	94809	6.84	0.33	18.37	317	0.1623	0.72	300	2.0 cpm			
MC-13	9/12/06	103507	6.37	1.01	19.30	326	0.1202	4.34	400	3.0 cpm	18	0.13	All parameters stable when sample was collected.
MC-13	9/12/06	103806	6.26	0.54	18.86	325	0.1289	1.43	400	3.0 cpm			Turbidty < 5 NTU
MC-13	9/12/06	104105	6.28	0.40	18.72	323	0.1334	0.74	400	3.0 cpm			Do > 0.20 mg/L
MC-13	9/12/06	104405	6.32	0.32	18.69	320	0.1352	0.75	400	3.0 cpm			
MC-13	9/12/06	104705	6.28	0.30	18.68	316	0.1358	0.58	400	3.0 cpm			
MC-13	9/12/06	105013	6.28	0.30	18.67	314	0.1361	0.58	400	3.0 cpm			
MC-13D	9/12/06	112215	6.48	1.54	16.38	340	0.1510	1.07	200	0.3 cpm	18	1.06	All parameters stable when sample was collected.
MC-13D	9/12/06	112505	6.47	1.12	15.87	336	0.1524	0.74	200	0.3 cpm			Turbidty < 5 NTU
MC-13D	9/12/06	112805	6.46	0.84	15.55	333	0.1529	0.37	200	0.3 cpm			Do > 0.20 mg/L
MC-13D	9/12/06	113106	6.52	0.68	15.46	329	0.1531	0.38	200	0.3 cpm			
MC-13D	9/12/06	113405	6.53	0.66	15.44	326	0.1534	0.31	200	0.3 cpm			
MC-13D	9/12/06	113708	6.55	0.64	15.34	323	0.1533	0.27	200	0.3 cpm			
MC-8	9/12/06	122406	6.34	1.03	21.92	341	0.1441	3.22	275	2.5 cpm	18	0.53	All parameters stable when sample was collected.
MC-8	9/12/06	122706	6.31	0.71	21.92	336	0.1457	2.87	275	2.5 cpm			Turbidty < 5 NTU
MC-8	9/12/06	123006	6.30	0.60	21.92	332	0.1463	2.15	275	2.5 cpm			Do > 0.20 mg/L
MC-8	9/12/06	123311	6.26	0.52	21.99	329	0.1467	1.92	275	2.5 cpm			
MC-8	9/12/06	123606	6.25	0.50	22.07	326	0.1465	1.78	275	2.5 cpm			
MC-8	9/12/06	123906	6.26	0.48	22.10	323	0.1459	1.38	275	2.5 cpm			
MC-118D	9/12/06	132207	6.25	0.35	19.92	375	0.8917	8.26	400	78 Hz	15	1.82	All parameters stable when sample was collected.
MC-118D	9/12/06	132507	6.28	0.33	21.14	368	0.9323	4.87	400	78 Hz			Turbidty < 5 NTU
MC-118D	9/12/06	132807	6.35	0.28	22.26	360	0.9530	3.33	400	78 Hz			Do > 0.20 mg/L
MC-118D	9/12/06	133106	6.38	0.28	22.37	354	0.9524	1.95	400	78 Hz			
MC-118D	9/12/06	133406	6.42	0.26	22.66	350	0.9497	1.59	400	78 Hz			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	øC	mV	mS/cm	NTUs	ml/min.	Hz or cpm	Minutes	(0.01) ft.	
MC-12D	9/12/06	141714	6.14	0.66	17.58	324	0.8320	3.44	400	70 Hz	24	0.43	All parameters stable when sample was collected.
MC-12D	9/12/06	142008	6.13	0.48	18.48	322	0.8386	1.62	400	70 Hz			Turbidty < 5 NTU
MC-12D	9/12/06	142306	6.17	0.38	19.64	317	0.8488	0.39	400	70 Hz			Do > 0.20 mg/L
MC-12D	9/12/06	142606	6.23	0.32	20.48	312	0.8507	0.46	400	70 Hz			
MC-12D	9/12/06	142906	6.27	0.27	20.85	308	0.8439	0.72	400	70 Hz			
MC-12D	9/12/06	143206	6.27	0.24	21.13	306	0.8324	0.74	400	70 Hz			
MC-12D	9/12/06	143506	6.28	0.26	21.26	304	0.8223	0.79	400	70 Hz			
MC-12D	9/12/06	143806	6.29	0.25	21.41	301	0.8104	0.69	400	70 Hz			
MC-12	9/12/06	150805	7.02	0.66	22.29	263	0.1016	0.79	300	2.0 cpm	18	0.09	All parameters stable when sample was collected.
MC-12	9/12/06	151105	6.96	0.48	21.84	262	0.1007	0.59	300	2.0 cpm			Turbidty < 5 NTU
MC-12	9/12/06	151406	6.89	0.40	21.76	261	0.1004	0.46	300	2.0 cpm			Do > 0.20 mg/L
MC-12	9/12/06	151706	6.84	0.33	21.72	261	0.1005	0.36	300	2.0 cpm			Fe Field Test Kit Reading - 0.75 mg/L
MC-12	9/12/06	152005	6.84	0.31	21.60	259	0.1007	0.30	300	2.0 cpm			
MC-12	9/12/06	152307	6.82	0.30	21.62	257	0.1008	0.25	300	2.0 cpm			
MC-2	9/13/06	72612	6.24	1.07	22.76	360	0.1260	26.7	400	64 Hz	24	1.55	All parameters stable when sample was collected.
MC-2	9/13/06	72906	6.37	0.82	24.28	350	0.1372	19.2	400	64 Hz			Turbidty < 5 NTU
MC-2	9/13/06	73205	6.47	0.68	25.15	342	0.1439	8.99	400	64 Hz			Do > 0.20 mg/L
MC-2	9/13/06	73505	6.58	0.57	25.49	335	0.1473	4.08	400	64 Hz			
MC-2	9/13/06	73805	6.68	0.50	25.71	327	0.1490	2.55	400	64 Hz			
MC-2	9/13/06	74110	6.75	0.42	25.85	322	0.1496	1.71	400	64 Hz			
MC-2	9/13/06	74410	6.72	0.40	25.81	321	0.1505	1.17	400	64 Hz			
MC-2	9/13/06	74706	6.77	0.38	25.92	317	0.1507	1.00	400	64 Hz			
MC-2D	9/13/06	81106	6.56	0.86	17.04	359	0.2452	2.85	400	78 Hz	18	1.62	All parameters stable when sample was collected.
MC-2D	9/13/06	81406	6.59	0.36	17.05	353	0.2538	1.65	400	78 Hz			Turbidty < 5 NTU
MC-2D	9/13/06	81705	6.63	0.25	17.76	349	0.2647	0.79	400	78 Hz			Do < 0.20 mg/L but stable.
MC-2D	9/13/06	82006	6.67	0.19	18.20	344	0.2689	0.51	400	78 Hz			Do Test Kit Reading - 0.23 mg/L
MC-2D	9/13/06	82306	6.70	0.18	18.39	339	0.2682	0.44	400	78 Hz			
MC-2D	9/13/06	82606	6.73	0.18	18.45	335	0.2657	0.23	400	78 Hz			
MC-15	9/13/06	93023	6.67	1.22	18.83	343	0.2341	2.22	200	1.0 cpm	27	0.45	All parameters stable when sample was collected.
MC-15	9/13/06	93314	6.75	0.73	18.99	333	0.2405	1.94	200	1.0 cpm			Turbidty < 5 NTU
MC-15	9/13/06	93611	6.82	1.01	19.02	325	0.2428	0.79	200	1.0 cpm			Do > 0.20 mg/L
MC-15	9/13/06	93907	6.86	1.46	18.93	322	0.2445	0.82	200	1.0 cpm			
MC-15	9/13/06	94208	6.82	1.11	18.86	320	0.2461	0.50	200	1.0 cpm			
MC-15	9/13/06	94506	6.84	0.77	18.83	317	0.2438	0.44	200	1.0 cpm			
MC-15	9/13/06	94806	6.80	0.56	18.88	315	0.2410	0.45	200	1.0 cpm			
MC-15	9/13/06	95108	6.82	0.54	18.95	311	0.2385	0.49	200	1.0 cpm			
MC-15	9/13/06	95407	6.84	0.51	18.97	307	0.2369	0.52	200	1.0 cpm			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	øC	mV	mS/cm	NTUs	ml/min.	Hz or cpm	Minutes	(0.01) ft.	
MC-15D	9/13/06	102306	6.72	0.94	15.50	280	0.3042	0.61	400	69 Hz	20	1.03	All parameters stable when sample was collected.
MC-15D	9/13/06	102606	6.71	0.39	15.62	275	0.3088	0.33	400	69 Hz			Turbidty < 5 NTU
MC-15D	9/13/06	102906	6.76	0.27	17.03	268	0.3114	0.47	400	69 Hz			Do < 0.20 mg/L but stable.
MC-15D	9/13/06	103206	6.79	0.21	18.16	261	0.3124	0.39	400	69 Hz			Do Test Kit Reading - 0.27 mg/L
MC-15D	9/13/06	103506	6.84	0.19	18.72	255	0.3125	0.40	400	69 Hz			
MC-15D	9/13/06	103813	6.88	0.18	19.05	250	0.3121	0.28	400	69 Hz			
MC-15D	9/13/06	104108	6.89	0.19	19.09	247	0.3116	0.26	400	69 Hz			
MC-16	9/13/06	111321	6.69	1.14	18.88	268	0.1703	5.69	200	0.5 cpm	18	0.52	All parameters stable when sample was collected.
MC-16	9/13/06	111606	6.77	0.85	19.00	263	0.1857	3.67	200	0.5 cpm			Turbidty < 5 NTU
MC-16	9/13/06	111906	6.85	0.67	19.13	256	0.1999	2.09	200	0.5 cpm			Do > 0.20 mg/L
MC-16	9/13/06	112206	6.86	0.58	19.04	253	0.2041	1.38	200	0.5 cpm			
MC-16	9/13/06	112505	6.87	0.50	19.07	251	0.2032	0.96	200	0.5 cpm			
MC-16	9/13/06	112808	6.87	0.43	19.08	247	0.1986	0.98	200	0.5 cpm			
MC-19D	9/13/06	122007	6.83	0.51	16.62	256	0.1666	76.3	400	81 Hz	21	0.03	All parameters stable when sample was collected.
MC-19D	9/13/06	122312	6.84	0.35	17.38	250	0.1663	33.4	400	81 Hz			Turbidty < 5 NTU
MC-19D	9/13/06	122606	6.87	0.29	18.05	247	0.1668	13.9	400	81 Hz			Do > 0.20 mg/L
MC-19D	9/13/06	122906	6.91	0.25	18.55	242	0.1669	6.28	400	81 Hz			
MC-19D	9/13/06	123206	6.96	0.23	18.84	238	0.1673	3.02	400	81 Hz			
MC-19D	9/13/06	123506	6.99	0.21	18.99	235	0.1673	1.81	400	81 Hz			
MC-19D	9/13/06	123806	6.99	0.21	19.10	233	0.1675	1.34	400	81 Hz			
MC-10D	9/13/06	132814	6.62	0.69	17.04	301	0.4593	35.2	400	85 Hz	18	1.18	All parameters stable when sample was collected.
MC-10D	9/13/06	133107	6.56	0.37	16.86	300	0.4574	18.1	400	85 Hz			Turbidty < 5 NTU
MC-10D	9/13/06	133415	6.58	0.26	17.71	296	0.4686	5.22	400	85 Hz			Do > 0.20 mg/L
MC-10D	9/13/06	133705	6.60	0.25	18.15	292	0.4737	2.80	400	85 Hz			
MC-10D	9/13/06	134005	6.62	0.23	18.57	288	0.4776	1.64	400	85 Hz			
MC-10D	9/13/06	134306	6.64	0.23	18.70	285	0.4790	1.24	400	85 Hz			
MC-107	9/13/06	141242	6.96	0.64	20.20	237	0.1349	1.53	400	3.0 cpm	15	0.06	All parameters stable when sample was collected.
MC-107	9/13/06	141527	6.85	0.34	20.05	236	0.1405	2.78	400	3.0 cpm			Turbidty < 5 NTU
MC-107	9/13/06	141805	6.85	0.31	20.18	234	0.1425	1.46	400	3.0 cpm			Do > 0.20 mg/L
MC-107	9/13/06	142106	6.83	0.30	20.20	231	0.1428	0.95	400	3.0 cpm			
MC-107	9/13/06	142405	6.89	0.30	20.31	227	0.1432	0.51	400	3.0 cpm			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	øC	mV	mS/cm	NTUs	ml/min.	Hz or cpm	Minutes	(0.01) ft.	
MC-17	9/14/06	80710	6.53	2.12	17.67	367	0.4011	4.51	200	0.2 cpm	45	0.18	All parameters stable when sample was collected.
MC-17	9/14/06	81006	6.65	1.46	17.83	360	0.4156	2.84	200	0.2 cpm			Turbidty < 5 NTU
MC-17	9/14/06	81306	6.74	1.07	17.99	353	0.4064	1.92	200	0.2 cpm			Do > 0.20 mg/L
MC-17	9/14/06	81606	6.80	0.89	17.99	347	0.3932	0.95	200	0.2 cpm			
MC-17	9/14/06	81906	6.82	0.75	18.13	343	0.3795	0.77	200	0.2 cpm			
MC-17	9/14/06	82205	6.81	0.66	18.16	340	0.3636	0.54	200	0.2 cpm			
MC-17	9/14/06	82507	6.79	0.57	18.16	336	0.3168	0.61	200	0.2 cpm			
MC-17	9/14/06	82808	6.85	0.53	18.10	333	0.2841	0.48	200	0.2 cpm			
MC-17	9/14/06	83107	6.86	0.54	18.11	331	0.2629	0.51	200	0.2 cpm			
MC-17	9/14/06	83407	6.90	0.53	18.19	328	0.2436	0.46	200	0.2 cpm			
MC-17	9/14/06	83706	6.90	0.52	18.17	327	0.2317	0.34	200	0.2 cpm			
MC-17	9/14/06	84012	6.88	0.50	18.16	324	0.2236	0.31	200	0.2 cpm			
MC-17	9/14/06	84308	6.86	0.49	18.19	322	0.2176	0.29	200	0.2 cpm			
MC-17	9/14/06	84606	6.89	0.50	18.22	319	0.2145	0.33	200	0.2 cpm			
MC-17	9/14/06	84909	6.85	0.49	18.26	315	0.2118	0.27	200	0.2 cpm			
MC-17D	9/14/06	93607	6.67	1.36	14.47	289	0.1441	15.8	400	77 Hz	21	0.34	All parameters stable when sample was collected.
MC-17D	9/14/06	93908	6.68	0.72	14.65	283	0.1493	4.10	400	77 Hz			Turbidty < 5 NTU
MC-17D	9/14/06	94205	6.73	0.53	15.82	277	0.1534	1.50	400	77 Hz			Do > 0.20 mg/L
MC-17D	9/14/06	94507	6.80	0.47	16.61	271	0.1545	0.72	400	77 Hz			
MC-17D	9/14/06	94807	6.85	0.44	17.06	266	0.1548	0.52	400	77 Hz			
MC-17D	9/14/06	95106	6.91	0.42	17.24	261	0.1551	0.46	400	77 Hz			
MC-17D	9/14/06	95406	6.94	0.41	17.28	257	0.1557	0.39	400	77 Hz			
MC-1	9/14/06	110105	6.55	0.54	17.81	303	0.1365	9.38	400	67 Hz	36	0.71	All parameters stable when sample was collected.
MC-1	9/14/06	110405	6.54	0.36	19.14	295	0.1227	20.8	400	67 Hz			Turbidty < 5 NTU
MC-1	9/14/06	110706	6.67	0.29	21.03	285	0.1265	15.3	400	67 Hz			Do < 0.20 mg/L but stable.
MC-1	9/14/06	111006	6.76	0.26	22.30	278	0.1290	14.0	400	67 Hz			Do Test Kit Reading - 0.29 mg/L
MC-1	9/14/06	111306	6.79	0.24	23.02	274	0.1291	17.2	400	67 Hz			Fe Field Test Kit Reading - 1.87 mg/L
MC-1	9/14/06	111607	6.83	0.22	23.37	269	0.1309	14.8	400	67 Hz			
MC-1	9/14/06	111906	6.84	0.20	23.55	265	0.1325	11.6	400	67 Hz			
MC-1	9/14/06	112206	6.85	0.19	23.70	263	0.1334	7.37	400	67 Hz			
MC-1	9/14/06	112505	6.88	0.18	23.81	259	0.1347	5.70	400	67 Hz			
MC-1	9/14/06	112805	6.88	0.18	24.13	257	0.1350	4.22	400	67 Hz			
MC-1	9/14/06	113106	6.88	0.17	24.35	254	0.1349	3.22	400	67 Hz			
MC-1	9/14/06	113406	6.89	0.17	24.42	252	0.1355	2.86	400	67 Hz			

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Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	øC	mV	mS/cm	NTUs	ml/min.	Hz or cpm	Minutes	(0.01) ft.	
MC-123	12/19/06	75719	6.76	1.82	8.98	174	0.5145	5.50	100	0.2 cpm	21	0.52	All paramters stable when sample was collected.
MC-123	12/19/06	80006	6.73	1.59	9.69	176	0.4979	6.37	100	0.2 cpm			Turbidity < 5 NTU
MC-123	12/19/06	80305	6.74	1.50	10.09	176	0.4862	5.21	100	0.2 cpm			Do > 0.20 mg/L
MC-123	12/19/06	80612	6.75	1.26	10.43	176	0.4767	4.76	100	0.2 cpm			
MC-123	12/19/06	80906	6.73	1.08	10.62	177	0.4689	4.59	100	0.2 cpm			
MC-123	12/19/06	81205	6.74	1.03	10.75	177	0.4621	4.38	100	0.2 cpm			
MC-123	12/19/06	81507	6.74	1.02	10.85	177	0.4565	4.21	100	0.2 cpm			
MC-20	12/19/06	94505	6.98	2.76	9.41	176	0.3263	30.4	100	0.2 cpm	33	0.12	All paramters stable when sample was collected.
MC-20	12/19/06	94806	6.84	2.39	9.55	176	0.3108	25.2	100	0.2 cpm			Turbidity < 5 NTU
MC-20	12/19/06	95106	6.76	2.10	9.60	175	0.3004	19.7	100	0.2 cpm			Do > 0.20 mg/L
MC-20	12/19/06	95407	6.71	1.86	9.69	174	0.2926	13.7	100	0.2 cpm			Fe Field Test Kit Reading - 3.30 mg/L Upper Limit
MC-20	12/19/06	95709	6.65	1.72	9.76	172	0.2910	11.8	100	0.2 cpm			
MC-20	12/19/06	100017	6.64	1.59	9.75	172	0.2854	7.11	100	0.2 cpm			
MC-20	12/19/06	100306	6.57	1.51	9.82	172	0.2750	5.52	100	0.2 cpm			
MC-20	12/19/06	100606	6.57	1.47	9.91	172	0.2637	4.44	100	0.2 cpm			
MC-20	12/19/06	100912	6.57	1.43	10.04	171	0.2560	3.53	100	0.2 cpm			
MC-20	12/19/06	101213	6.55	1.38	10.09	170	0.2513	2.90	100	0.2 cpm			
MC-20	12/19/06	101507	6.53	1.29	10.16	171	0.2493	2.42	100	0.2 cpm			
MC-122	12/19/06	111905	7.23	1.38	10.85	172	0.2021	8.96	100	0.2 cpm	24	0.61	All paramters stable when sample was collected.
MC-122	12/19/06	112206	7.22	1.18	11.07	171	0.2025	7.48	100	0.2 cpm			Turbidity < 5 NTU
MC-122	12/19/06	112511	7.17	0.97	11.24	169	0.2030	6.29	100	0.2 cpm			Do > 0.20 mg/L
MC-122	12/19/06	112810	7.17	0.83	11.38	168	0.2033	5.38	100	0.2 cpm			
MC-122	12/19/06	113105	7.18	0.76	11.44	167	0.2034	4.51	100	0.2 cpm			
MC-122	12/19/06	113414	7.14	0.72	11.42	165	0.2034	4.28	100	0.2 cpm			
MC-122	12/19/06	113711	7.11	0.68	11.48	164	0.2038	4.31	100	0.2 cpm			
MC-122	12/19/06	114006	7.11	0.66	11.54	163	0.2043	4.02	100	0.2 cpm			
MC-14	12/19/06	125205	6.89	1.23	8.97	189	0.3087	4.03	100	0.2 cpm	15	1.98	All paramters stable when sample was collected.
MC-14	12/19/06	125525	6.93	1.00	9.20	186	0.3057	3.30	100	0.2 cpm			Turbidity < 5 NTU
MC-14	12/19/06	125805	6.91	0.95	9.35	183	0.3037	3.15	100	0.2 cpm			Do > 0.20 mg/L
MC-14	12/19/06	130105	6.94	0.89	9.43	179	0.3003	2.92	100	0.2 cpm			Fe Field Test Kit Reading - 3.30 mg/L Upper Limit
MC-14	12/19/06	130405	6.94	0.86	9.50	175	0.2975	2.36	100	0.2 cpm			
MC-21	12/19/06	135709	7.89	2.41	10.88	108	0.0950	13.8	400	3.0 cpm	15	0.06	All paramters stable when sample was collected.
MC-21	12/19/06	140006	7.64	2.09	11.24	110	0.1004	3.94	400	3.0 cpm			Turbidity < 5 NTU
MC-21	12/19/06	140305	7.50	1.92	11.44	112	0.1115	2.02	400	3.0 cpm			Do > 0.20 mg/L
MC-21	12/19/06	140606	7.48	1.84	11.48	117	0.1142	1.83	400	3.0 cpm			Fe Field Test Kit Reading - 1.89 mg/L
MC-21	12/19/06	140918	7.43	1.97	11.50	113	0.1132	1.71	400	3.0 cpm			
MC-13	12/19/06	145006	7.17	0.32	11.68	129	0.1462	4.87	400	3.0 cpm	15	0.09	All paramters stable when sample was collected.
MC-13	12/19/06	145305	7.17	0.27	11.70	128	0.1512	4.01	400	3.0 cpm			Turbidity < 5 NTU
MC-13	12/19/06	145606	7.09	0.27	11.66	127	0.1470	2.83	400	3.0 cpm			Do > 0.20 mg/L
MC-13	12/19/06	145906	7.03	0.26	11.65	127	0.1508	2.31	400	3.0 cpm			
MC-13	12/19/06	150208	7.04	0.26	11.69	125	0.1500	2.24	400	3.0 cpm			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	øC	mV	mS/cm	NTUs	ml/min.	Hz or cpm	Minutes	(0.01) ft.	
MC-13D	12/19/06	153517	7.29	1.92	10.53	142	0.2179	1.23	200	0.5 cpm	18	0.90	All paramters stable when sample was collected.
MC-13D	12/19/06	153808	7.36	1.53	10.76	140	0.2197	0.88	200	0.5 cpm			Turbidity < 5 NTU
MC-13D	12/19/06	154107	7.30	1.28	10.98	138	0.2197	0.72	200	0.5 cpm			Do > 0.20 mg/L
MC-13D	12/19/06	154405	7.37	1.11	11.04	136	0.2210	0.67	200	0.5 cpm			
MC-13D	12/19/06	154705	7.38	1.06	11.11	134	0.2211	0.58	200	0.5 cpm			
MC-13D	12/19/06	155005	7.39	1.01	11.09	133	0.2210	0.55	200	0.5 cpm			
MC-2	12/20/06	74106	7.30	0.56	13.68	184	0.2809	2.35	400	51 Hz	21	0.33	All paramters stable when sample was collected.
MC-2	12/20/06	74405	7.21	0.28	15.14	179	0.2765	1.46	400	51 Hz			Turbidity < 5 NTU
MC-2	12/20/06	74706	7.19	0.21	15.91	174	0.2626	0.82	400	51 Hz			Do < 0.20 mg/L but stable.
MC-2	12/20/06	75006	7.18	0.16	16.12	170	0.2533	0.53	400	51 Hz			Do Test Kit Reading - 0.28 mg/L
MC-2	12/20/06	75305	7.15	0.15	16.17	168	0.2466	0.36	400	51 Hz			
MC-2	12/20/06	75605	7.13	0.14	16.21	166	0.2445	0.42	400	51 Hz			
MC-2	12/20/06	75905	7.11	0.14	16.23	162	0.2428	0.40	400	51 Hz			
MC-2D	12/20/06	83017	7.25	1.39	13.83	164	0.2891	1.29	400	61 Hz	18	1.11	All paramters stable when sample was collected.
MC-2D	12/20/06	83326	7.28	0.59	15.08	159	0.3152	0.82	400	61 Hz			Turbidity < 5 NTU
MC-2D	12/20/06	83608	7.29	0.41	15.83	155	0.3314	0.66	400	61 Hz			Do > 0.20 mg/L
MC-2D	12/20/06	83905	7.29	0.31	16.08	151	0.3400	0.54	400	61 Hz			
MC-2D	12/20/06	84206	7.28	0.30	16.36	149	0.3472	0.42	400	61 Hz			
MC-2D	12/20/06	84508	7.28	0.28	16.47	147	0.3506	0.58	400	61 Hz			
MC-12	12/20/06	94606	7.78	1.65	9.30	153	0.1475	1.15	400	3.0 cpm	15	0.11	All paramters stable when sample was collected.
MC-12	12/20/06	94914	7.69	1.10	9.64	154	0.1477	0.68	400	3.0 cpm			Turbidity < 5 NTU
MC-12	12/20/06	95213	7.61	0.97	9.79	154	0.1482	0.53	400	3.0 cpm			Do > 0.20 mg/L
MC-12	12/20/06	95505	7.54	0.95	9.85	154	0.1491	0.49	400	3.0 cpm			Fe Field Test Kit Reading - 0.73 mg/L
MC-12	12/20/06	95807	7.57	0.91	9.93	153	0.1502	0.44	400	3.0 cpm			
MC-12D	12/20/06	103006	6.92	0.82	12.14	196	0.3209	1.98	400	57 Hz	15	0.56	All paramters stable when sample was collected.
MC-12D	12/20/06	103305	6.95	0.45	14.36	190	0.3579	1.65	400	57 Hz			Turbidity < 5 NTU
MC-12D	12/20/06	103612	6.96	0.36	15.26	184	0.3739	1.08	400	57 Hz			Do > 0.20 mg/L
MC-12D	12/20/06	103905	6.97	0.37	15.46	181	0.3724	0.85	400	57 Hz			
MC-12D	12/20/06	104207	6.97	0.35	15.58	178	0.3736	0.80	400	57 Hz			
MC-10D	12/20/06	112506	7.29	0.83	11.48	167	0.2909	3.53	400	66 Hz	21	0.99	All paramters stable when sample was collected.
MC-10D	12/20/06	112806	7.15	0.52	12.29	166	0.3010	0.98	400	66 Hz			Turbidity < 5 NTU
MC-10D	12/20/06	113112	7.16	0.43	13.57	161	0.3200	0.83	400	66 Hz			Do > 0.20 mg/L
MC-10D	12/20/06	113405	7.15	0.38	14.25	155	0.3276	0.69	400	66 Hz			
MC-10D	12/20/06	113705	7.15	0.32	14.70	144	0.3318	0.51	400	66 Hz			
MC-10D	12/20/06	114006	7.15	0.31	15.01	140	0.3375	0.63	400	66 Hz			
MC-10D	12/20/06	114311	7.15	0.29	15.12	136	0.3387	0.54	400	66 Hz			
MC-17D	12/20/06	122505	7.64	2.25	12.22	100	0.2193	1.30	400	57 Hz	15	0.40	All paramters stable when sample was collected.
MC-17D	12/20/06	122807	7.57	1.39	12.91	101	0.2221	0.52	400	57 Hz			Turbidity < 5 NTU
MC-17D	12/20/06	123108	7.57	0.93	14.01	99	0.2245	0.41	400	57 Hz			Do > 0.20 mg/L
MC-17D	12/20/06	123436	7.55	0.88	14.70	99	0.2266	0.38	400	57 Hz			
MC-17D	12/20/06	123711	7.49	0.91	14.97	100	0.2273	0.30	400	57 Hz			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	øC	mV	mS/cm	NTUs	ml/min.	Hz or cpm	Minutes	(0.01) ft.	
MC-17	12/20/06	132219	7.22	2.83	9.84	131	0.1632	3.64	350	1.0 cpm	15	0.12	All paramters stable when sample was collected.
MC-17	12/20/06	132506	7.23	2.49	9.73	131	0.1710	1.57	350	1.0 cpm			Turbidity < 5 NTU
MC-17	12/20/06	132806	7.11	2.86	9.58	132	0.1626	0.98	350	1.0 cpm			Do > 0.20 mg/L
MC-17	12/20/06	133105	7.08	3.10	9.50	134	0.1592	0.85	350	1.0 cpm			
MC-17	12/20/06	133405	7.09	3.16	9.44	135	0.1581	0.72	350	1.0 cpm			
MC-107	12/20/06	141508	7.30	6.08	9.40	155	0.1159	5.72	400	3.0 cpm	18	0.40	All paramters stable when sample was collected.
MC-107	12/20/06	141807	7.21	3.70	9.52	158	0.1150	3.70	400	3.0 cpm			Turbidity < 5 NTU
MC-107	12/20/06	142113	7.18	1.31	9.62	158	0.1152	2.20	400	3.0 cpm			Do > 0.20 mg/L
MC-107	12/20/06	142407	7.16	1.20	9.60	158	0.1142	1.82	400	3.0 cpm			
MC-107	12/20/06	142713	7.15	1.13	9.58	158	0.1144	1.53	400	3.0 cpm			
MC-107	12/20/06	143005	7.15	1.08	9.59	158	0.1150	1.28	400	3.0 cpm			
MC-15	12/21/06	94805	6.75	4.11	5.78	182	0.1031	1.22	200	0.5 cpm	37	1.43	All paramters stable when sample was collected.
MC-15	12/21/06	95106	6.72	4.07	5.76	182	0.0993	0.86	200	0.5 cpm			Turbidity < 5 NTU
MC-15	12/21/06	95430	6.70	3.98	5.74	183	0.0966	0.72	200	0.5 cpm			Do > 0.20 mg/L
MC-15	12/21/06	95727	6.70	3.86	5.72	183	0.0920	0.69	200	0.5 cpm			Temperature & Do, suspect false readings
MC-15	12/21/06	100009	6.67	3.68	5.76	184	0.0930	0.71	200	0.5 cpm			
MC-15	12/21/06	100306	6.67	3.61	5.77	184	0.0880	0.75	200	0.5 cpm			
MC-15	12/21/06	100613	6.68	3.84	5.70	185	0.0837	0.68	200	0.5 cpm			
MC-15	12/21/06	100905	6.68	3.97	5.67	185	0.0825	0.65	200	0.5 cpm			
MC-15	12/21/06	101206	6.67	3.99	5.64	185	0.0814	0.60	200	0.5 cpm			
MC-15D	12/21/06	114206	7.10	0.90	11.53	205	0.2351	0.88	400	52 Hz	18	0.75	All paramters stable when sample was collected.
MC-15D	12/21/06	114508	7.13	0.56	12.83	200	0.2576	0.80	400	52 Hz			Turbidity < 5 NTU
MC-15D	12/21/06	114805	7.15	0.42	14.06	196	0.2771	0.72	400	52 Hz			Do > 0.20 mg/L
MC-15D	12/21/06	115105	7.15	0.30	14.81	192	0.2904	0.67	400	52 Hz			
MC-15D	12/21/06	115407	7.14	0.30	14.83	190	0.2956	0.58	400	52 Hz			
MC-15D	12/21/06	115714	7.14	0.27	15.08	188	0.2988	0.45	400	52 Hz			
MC-16	12/21/06	122706	7.60	1.46	8.59	176	0.1261	24.7	250	0.5 cpm	18	0.23	All paramters stable when sample was collected.
MC-16	12/21/06	123006	7.32	0.81	8.78	183	0.1250	15.7	250	0.5 cpm			Turbidity < 5 NTU
MC-16	12/21/06	123305	7.22	0.63	8.74	182	0.1252	8.33	250	0.5 cpm			Do > 0.20 mg/L
MC-16	12/21/06	123611	7.15	0.78	8.61	180	0.1204	4.29	250	0.5 cpm			
MC-16	12/21/06	123906	7.12	0.83	8.62	180	0.1198	3.15	250	0.5 cpm			
MC-16	12/21/06	124205	7.10	0.84	8.65	179	0.1181	2.47	250	0.5 cpm			
MC-1	12/21/06	132524	7.12	7.29	9.93	186	0.0653	17.2	400	52 Hz	21	0.30	All paramters stable when sample was collected.
MC-1	12/21/06	132807	7.00	7.27	11.06	186	0.0647	15.1	400	52 Hz			Turbidity > 5 NTU but stable.
MC-1	12/21/06	133105	6.90	7.32	11.71	187	0.0636	15.4	400	52 Hz			Do > 0.20 mg/L
MC-1	12/21/06	133406	6.80	7.28	12.00	189	0.0626	14.8	400	52 Hz			Fe Field Test Kit Reading - 0.35 mg/L
MC-1	12/21/06	133705	6.74	7.13	12.13	191	0.0626	14.2	400	52 Hz			
MC-1	12/21/06	134006	6.68	6.97	12.09	193	0.0630	13.6	400	52 Hz			
MC-1	12/21/06	134307	6.66	6.86	12.28	194	0.0633	13.3	400	52 Hz			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	øC	mV	mS/cm	NTUs	ml/min.	Hz or cpm	Minutes	(0.01) ft.	
MC-118D	12/21/06	141705	6.91	0.80	12.77	215	0.2747	1.59	400	61 Hz	21	1.99	All paramters stable when sample was collected.
MC-118D	12/21/06	142005	6.94	0.51	14.49	210	0.3129	0.91	400	61 Hz			Turbidity < 5 NTU
MC-118D	12/21/06	142305	6.97	0.42	16.00	204	0.3463	0.76	400	61 Hz			Do > 0.20 mg/L
MC-118D	12/21/06	142608	6.99	0.39	16.59	200	0.3676	0.69	400	61 Hz			
MC-118D	12/21/06	142910	7.00	0.27	16.82	196	0.3814	0.52	400	61 Hz			
MC-118D	12/21/06	143226	7.01	0.27	16.95	191	0.3868	0.46	400	61 Hz			
MC-118D	12/21/06	143505	7.01	0.26	17.22	187	0.3930	0.43	400	61 Hz			
MC-8	12/21/06	150406	7.78	7.21	10.32	127	0.0938	6.84	325	1.0 cpm	18	0.16	All paramters stable when sample was collected.
MC-8	12/21/06	150705	7.46	7.10	10.09	132	0.0912	5.80	325	1.0 cpm			Turbidity < 5 NTU
MC-8	12/21/06	151005	7.38	7.10	9.91	134	0.0905	5.02	325	1.0 cpm			Do > 0.20 mg/L
MC-8	12/21/06	151306	7.31	7.17	9.73	135	0.0898	4.52	325	1.0 cpm			
MC-8	12/21/06	151647	7.25	7.15	9.49	140	0.0893	2.26	325	1.0 cpm			
MC-8	12/21/06	151905	7.21	7.10	9.46	141	0.0895	2.02	325	1.0 cpm			
MC-19D	12/21/06	161409	7.50	0.25	14.83	146	0.1998	9.45	400	64 Hz	15	0.03	All paramters stable when sample was collected.
MC-19D	12/21/06	161705	7.50	0.22	15.05	144	0.2019	5.91	400	64 Hz			Turbidity < 5 NTU
MC-19D	12/21/06	162005	7.45	0.19	15.14	142	0.2024	1.43	400	64 Hz			Do < 0.20 mg/L but stable.
MC-19D	12/21/06	162305	7.46	0.19	15.28	141	0.2038	1.28	400	64 Hz			Do Test Kit Reading - 0.26 mg/L
MC-19D	12/21/06	162612	7.46	0.19	15.48	139	0.2036	1.08	400	64 Hz			

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Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
		HHMMSS		mg/l	øC	mV	mS/cm	NTUs	ml/min	Hz or cpm	Minutes	(0.01) ft.	
MC-123	3/5/07	130307	6.85	0.99	14.08	141	0.6569	7.69	125	0.2 cpm	21	0.36	All parameters stable when sample was collected.
MC-123	3/5/07	130611	6.76	0.83	13.89	140	0.5874	7.06	125	0.2 cpm			Turbidity > 5 NTU's but stable.
MC-123	3/5/07	130905	6.67	0.60	13.85	139	0.5174	6.34	125	0.2 cpm			Do > 0.20 mg/L
MC-123	3/5/07	131230	6.64	0.61	13.81	137	0.4820	7.44	125	0.2 cpm			
MC-123	3/5/07	131506	6.68	0.58	13.96	135	0.4650	7.24	125	0.2 cpm			
MC-123	3/5/07	131819	6.66	0.58	14.15	132	0.4532	7.11	125	0.2 cpm			
MC-123	3/5/07	132105	6.68	0.60	14.06	132	0.4522	7.08	125	0.2 cpm			
MC-20	3/5/07	145018	6.89	1.68	13.91	153	0.2655	16.7	100	0.2 cpm	22	0.06	All parameters stable when sample was collected.
MC-20	3/5/07	145306	6.69	1.65	13.74	157	0.2696	11.0	100	0.2 cpm			Turbidity < 5 NTU's
MC-20	3/5/07	145605	6.60	1.53	13.42	157	0.2737	8.21	100	0.2 cpm			Do > 0.20 mg/L
MC-20	3/5/07	145907	6.53	1.43	13.25	156	0.2729	6.88	100	0.2 cpm			Fe Field Test Kit Reading - 3.30 mg/L
MC-20	3/5/07	150206	6.53	1.28	13.12	155	0.2771	4.77	100	0.2 cpm			
MC-20	3/5/07	150506	6.51	1.19	12.99	153	0.2811	3.17	100	0.2 cpm			
MC-20	3/5/07	150811	6.45	1.16	12.88	152	0.2841	2.49	100	0.2 cpm			
MC-122	3/6/07	70418	6.88	2.18	9.63	167	0.1494	65.5	100	0.2 cpm	28	0.99	All parameters stable when sample was collected.
MC-122	3/6/07	70705	6.91	2.01	9.99	168	0.1450	59.0	100	0.2 cpm			Turbidity > 5 NTU's but stable.
MC-122	3/6/07	71005	6.92	1.58	10.17	167	0.1453	51.3	100	0.2 cpm			Do > 0.20 mg/L
MC-122	3/6/07	71305	6.86	1.38	10.14	167	0.1452	42.4	100	0.2 cpm			
MC-122	3/6/07	71605	6.76	1.36	10.09	170	0.1451	33.2	100	0.2 cpm			
MC-122	3/6/07	71905	6.78	1.75	10.25	169	0.1446	31.7	100	0.2 cpm			
MC-122	3/6/07	72206	6.73	1.92	10.35	172	0.1444	31.2	100	0.2 cpm			
MC-122	3/6/07	72505	6.69	2.12	10.50	169	0.1450	28.8	100	0.2 cpm			
MC-122	3/6/07	72812	6.63	2.13	10.54	170	0.1450	28.1	100	0.2 cpm			
MC-14	3/6/07	83006	6.75	2.23	10.50	191	0.6524	7.13	100	0.2 cpm	45	0.96	All parameters stable when sample was collected.
MC-14	3/6/07	83305	6.80	1.69	10.44	186	0.6587	12.6	100	0.2 cpm			Turbidity > 5 NTU's but stable.
MC-14	3/6/07	83605	6.84	1.37	10.36	182	0.6447	7.37	100	0.2 cpm			Do > 0.20 mg/L
MC-14	3/6/07	83905	6.83	1.14	10.33	179	0.6291	7.57	100	0.2 cpm			Fe Field Test Kit Reading - 2.15 mg/L
MC-14	3/6/07	84205	6.84	1.01	10.35	176	0.6133	7.23	100	0.2 cpm			
MC-14	3/6/07	84507	6.85	0.96	10.32	174	0.5926	7.14	100	0.2 cpm			
MC-14	3/6/07	84817	6.86	0.87	10.30	171	0.5717	7.11	100	0.2 cpm			
MC-14	3/6/07	85106	6.88	0.75	10.30	169	0.5562	6.73	100	0.2 cpm			
MC-14	3/6/07	85405	6.90	0.74	10.27	167	0.5426	6.51	100	0.2 cpm			
MC-14	3/6/07	85725	6.91	0.66	10.32	165	0.5289	6.56	100	0.2 cpm			
MC-14	3/6/07	90010	6.90	0.58	10.37	164	0.5208	6.52	100	0.2 cpm			
MC-14	3/6/07	90315	6.91	0.61	10.42	163	0.5127	5.94	100	0.2 cpm			
MC-14	3/6/07	90605	6.92	0.58	10.52	162	0.5075	5.81	100	0.2 cpm			
MC-14	3/6/07	90905	6.92	0.56	10.56	161	0.5011	6.31	100	0.2 cpm			
MC-14	3/6/07	91211	6.92	0.54	10.64	160	0.4989	6.25	100	0.2 cpm			
MC-21	3/6/07	95906	7.33	1.21	12.01	158	0.1699	45.50	400	3.0 cpm	21	0.06	All parameters stable when sample was collected.
MC-21	3/6/07	100205	6.95	1.06	11.63	168	0.1645	15.80	400	3.0 cpm			Turbidity < 5 NTU's
MC-21	3/6/07	100506	6.85	0.99	11.53	168	0.1643	6.86	400	3.0 cpm			Do > 0.20 mg/L
MC-21	3/6/07	100806	6.82	0.98	11.48	166	0.1674	1.99	400	3.0 cpm			Fe Field Test Kit Reading - 2.79 mg/L
MC-21	3/6/07	101105	6.80	1.01	11.50	164	0.1774	2.29	400	3.0 cpm			
MC-21	3/6/07	101405	6.76	0.99	11.46	163	0.1784	1.58	400	3.0 cpm			
MC-21	3/6/07	101708	6.81	0.97	11.49	159	0.1805	1.24	400	3.0 cpm			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
		HHMMSS		mg/l	øC	mV	mS/cm	NTUs	ml/min	Hz or cpm	Minutes	(0.01) ft.	
MC-13	3/6/07	104806	6.78	0.79	11.54	165	0.0904	22.5	400	3.0 cpm	21	0.10	All parameters stable when sample was collected.
MC-13	3/6/07	105105	6.59	0.52	11.20	170	0.0949	4.47	400	3.0 cpm			Turbidity < 5 NTU's
MC-13	3/6/07	105406	6.60	0.44	11.19	169	0.0996	4.32	400	3.0 cpm			Do > 0.20 mg/L
MC-13	3/6/07	105706	6.67	0.49	11.12	165	0.1035	4.10	400	3.0 cpm			
MC-13	3/6/07	110007	6.70	0.48	11.10	161	0.1043	1.90	400	3.0 cpm			
MC-13	3/6/07	110305	6.75	0.53	11.14	157	0.1056	1.79	400	3.0 cpm			
MC-13	3/6/07	110613	6.76	0.50	11.16	156	0.1058	1.82	400	3.0 cpm			
MC-13D	3/6/07	113418	6.93	2.98	15.70	156	0.1592	2.20	100	0.2 cpm	25	0.64	All parameters stable when sample was collected.
MC-13D	3/6/07	113705	7.13	2.80	14.94	161	0.1613	2.17	100	0.2 cpm			Turbidity < 5 NTU's
MC-13D	3/6/07	114006	7.09	2.50	15.23	162	0.1595	2.20	100	0.2 cpm			Do > 0.20 mg/L
MC-13D	3/6/07	114306	7.09	2.03	15.34	161	0.1598	1.87	100	0.2 cpm			
MC-13D	3/6/07	114605	7.15	1.89	15.42	157	0.1590	1.73	100	0.2 cpm			
MC-13D	3/6/07	114906	7.12	1.62	15.42	156	0.1595	1.57	100	0.2 cpm			
MC-13D	3/6/07	115205	7.15	1.52	15.33	154	0.1598	1.56	100	0.2 cpm			
MC-13D	3/6/07	115506	7.11	1.48	15.38	153	0.1602	0.68	100	0.2 cpm			
MC-15	3/6/07	125506	6.44	6.19	12.97	182	0.0327	8.85	200	0.5 cpm	21	0.29	All parameters stable when sample was collected.
MC-15	3/6/07	125806	6.16	5.44	12.05	190	0.0372	5.63	200	0.5 cpm			Turbidity < 5 NTU's
MC-15	3/6/07	130105	5.97	4.50	11.61	194	0.0435	4.72	200	0.5 cpm			Do > 0.20 mg/L
MC-15	3/6/07	130405	5.89	3.91	11.52	195	0.0481	3.65	200	0.5 cpm			
MC-15	3/6/07	130705	5.85	3.38	11.42	193	0.0505	3.49	200	0.5 cpm			
MC-15	3/6/07	131005	5.86	3.16	11.36	188	0.0495	3.12	200	0.5 cpm			
MC-15	3/6/07	131322	5.92	3.10	11.47	184	0.0492	1.67	200	0.5 cpm			
MC-15D	3/6/07	141214	6.04	0.94	14.49	186	0.3829	1.75	400	56 Hz	25	0.90	All parameters stable when sample was collected.
MC-15D	3/6/07	141506	6.09	0.54	14.73	183	0.3911	1.08	400	56 Hz			Turbidity < 5 NTU's
MC-15D	3/6/07	141806	6.26	0.41	16.08	175	0.3958	0.75	400	56 Hz			Do > 0.20 mg/L
MC-15D	3/6/07	142106	6.45	0.36	16.99	166	0.3952	0.74	400	56 Hz			
MC-15D	3/6/07	142406	6.58	0.30	17.42	158	0.3974	0.68	400	56 Hz			
MC-15D	3/6/07	142712	6.62	0.26	17.71	154	0.3971	0.61	400	56 Hz			
MC-15D	3/6/07	143006	6.65	0.24	17.91	152	0.3973	0.61	400	56 Hz			
MC-15D	3/6/07	143306	6.66	0.25	18.06	151	0.3973	0.58	400	56 Hz			
MC-16	3/7/07	72912	6.60	1.57	8.37	139	0.1498	29.6	250	0.3 cpm	40	0.10	All parameters stable when sample was collected.
MC-16	3/7/07	73207	6.41	1.19	8.29	146	0.1510	29.2	250	0.3 cpm			Turbidity < 5 NTU's
MC-16	3/7/07	73506	6.34	0.94	8.23	147	0.1518	12.4	250	0.3 cpm			Do > 0.20 mg/L
MC-16	3/7/07	73807	6.35	0.76	8.19	145	0.1530	10.6	250	0.3 cpm			
MC-16	3/7/07	74106	6.37	0.65	8.17	144	0.1532	8.26	250	0.3 cpm			
MC-16	3/7/07	74406	6.39	0.62	8.14	142	0.1510	6.86	250	0.3 cpm			
MC-16	3/7/07	74706	6.41	0.56	8.12	140	0.1477	4.87	250	0.3 cpm			
MC-16	3/7/07	75005	6.43	0.56	8.11	138	0.1433	3.80	250	0.3 cpm			
MC-16	3/7/07	75306	6.45	0.52	8.10	137	0.1396	3.72	250	0.3 cpm			
MC-16	3/7/07	75606	6.44	0.50	8.10	136	0.1363	2.79	250	0.3 cpm			
MC-16	3/7/07	75907	6.46	0.49	8.11	135	0.1324	2.43	250	0.3 cpm			
MC-16	3/7/07	80206	6.47	0.49	8.11	133	0.1296	2.35	250	0.3 cpm			
MC-16	3/7/07	80511	6.46	0.51	8.12	133	0.1289	2.29	250	0.3 cpm			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
		HHMMSS		mg/l	øC	mV	mS/cm	NTUs	ml/min	Hz or cpm	Minutes	(0.01) ft.	
MC-19D	3/7/07	84319	6.88	0.55	12.59	137	0.1432	102.00	400	59 Hz	24	0.01	All parameters stable when sample was collected.
MC-19D	3/7/07	84605	6.95	0.36	13.20	134	0.1434	37.50	400	59 Hz			Turbidity < 5 NTU's
MC-19D	3/7/07	84905	7.07	0.27	14.22	132	0.1443	16.70	400	59 Hz			Do > 0.20 mg/L
MC-19D	3/7/07	85205	7.09	0.23	14.88	131	0.1449	8.40	400	59 Hz			
MC-19D	3/7/07	85506	7.10	0.20	15.10	130	0.1456	6.58	400	59 Hz			
MC-19D	3/7/07	85805	7.08	0.21	15.28	130	0.1461	3.78	400	59 Hz			
MC-19D	3/7/07	90105	7.09	0.21	15.54	128	0.1464	3.10	400	59 Hz			
MC-19D	3/7/07	90408	7.08	0.21	15.75	127	0.1466	2.88	400	59 Hz			
MC-10D	3/7/07	93817	6.69	0.99	11.92	163	0.4415	25.3	400	67 Hz	27	0.87	All parameters stable when sample was collected.
MC-10D	3/7/07	94108	6.78	0.51	12.27	156	0.4564	12.0	400	67 Hz			Turbidity > 5 NTU's but stable.
MC-10D	3/7/07	94405	6.81	0.37	13.13	154	0.4781	4.68	400	67 Hz			Do > 0.20 mg/L
MC-10D	3/7/07	94706	6.86	0.29	14.36	150	0.5036	4.89	400	67 Hz			
MC-10D	3/7/07	95013	6.90	0.24	15.27	147	0.5222	8.58	400	67 Hz			
MC-10D	3/7/07	95306	6.92	0.21	15.77	146	0.5320	13.6	400	67 Hz			
MC-10D	3/7/07	95605	6.93	0.22	16.01	144	0.5350	12.2	400	67 Hz			
MC-10D	3/7/07	95915	6.92	0.22	16.20	143	0.5357	11.6	400	67 Hz			
MC-10D	3/7/07	100206	6.92	0.21	16.31	141	0.5357	11.4	400	67 Hz			
MC-12	3/7/07	103508	7.17	2.10	9.58	132	0.1072	3.66	400	3.0 cpm	15	0.10	All parameters stable when sample was collected.
MC-12	3/7/07	103806	6.90	1.69	9.42	135	0.1087	2.41	400	3.0 cpm			Turbidity < 5 NTU's
MC-12	3/7/07	104111	6.83	1.58	9.37	133	0.1088	2.34	400	3.0 cpm			Do > 0.20 mg/L
MC-12	3/7/07	104406	6.84	1.56	9.33	131	0.1092	2.04	400	3.0 cpm			Fe Field Test Kit Reading - 0.36 mg/L
MC-12	3/7/07	104705	6.82	1.58	9.31	129	0.1091	1.99	400	3.0 cpm			
MC-12D	3/7/07	111906	6.43	0.63	12.84	164	0.4794	83.9	400	59 Hz	24	0.86	All parameters stable when sample was collected.
MC-12D	3/7/07	112211	6.56	0.39	14.40	160	0.5204	33.8	400	59 Hz			Turbidity > 5 NTU's but stable.
MC-12D	3/7/07	112505	6.61	0.30	15.55	156	0.5424	27.5	400	59 Hz			Do < 0.20 mg/L but stable.
MC-12D	3/7/07	112805	6.65	0.24	16.09	153	0.5516	24.8	400	59 Hz			Do Test Kit Reading - 0.27 mg/L
MC-12D	3/7/07	113106	6.72	0.21	16.37	151	0.5516	24.7	400	59 Hz			
MC-12D	3/7/07	113407	6.74	0.18	16.62	149	0.5513	20.8	400	59 Hz			
MC-12D	3/7/07	113705	6.73	0.18	16.72	148	0.5492	19.2	400	59 Hz			
MC-12D	3/7/07	114006	6.73	0.18	16.75	147	0.5463	18.9	400	59 Hz			
MC-107	3/7/07	121026	7.08	4.67	10.05	132	0.0724	11.50	400	3.0 cpm	24	0.10	All parameters stable when sample was collected.
MC-107	3/7/07	121305	6.90	3.75	9.78	135	0.0723	5.37	400	3.0 cpm			Turbidity < 5 NTU's
MC-107	3/7/07	121605	6.82	3.14	9.65	134	0.0738	3.60	400	3.0 cpm			Do > 0.20 mg/L
MC-107	3/7/07	121905	6.77	2.73	9.57	132	0.0749	3.18	400	3.0 cpm			
MC-107	3/7/07	122206	6.75	2.51	9.54	130	0.0758	3.03	400	3.0 cpm			
MC-107	3/7/07	122506	6.77	2.24	9.51	128	0.0770	3.33	400	3.0 cpm			
MC-107	3/7/07	122805	6.78	2.10	9.53	126	0.0774	2.93	400	3.0 cpm			
MC-107	3/7/07	123105	6.77	2.02	9.55	125	0.0779	3.12	400	3.0 cpm			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
		HHMMSS		mg/l	øC	mV	mS/cm	NTUs	ml/min	Hz or cpm	Minutes	(0.01) ft.	
MC-118D	3/7/07	130217	6.42	0.43	13.69	159	0.4279	67.1	400	65 Hz	21	2.00	All parameters stable when sample was collected.
MC-118D	3/7/07	130505	6.51	0.28	15.11	155	0.4566	28.7	400	65 Hz			Turbidity < 5 NTU's
MC-118D	3/7/07	130807	6.59	0.21	16.34	150	0.4856	12.5	400	65 Hz			Do < 0.20 mg/L but stable.
MC-118D	3/7/07	131106	6.65	0.17	17.06	147	0.5026	3.62	400	65 Hz			Do Test Kit Reading - 0.24 mg/L
MC-118D	3/7/07	131406	6.68	0.18	17.42	145	0.5119	2.44	400	65 Hz			
MC-118D	3/7/07	131706	6.70	0.17	17.64	142	0.5175	2.08	400	65 Hz			
MC-118D	3/7/07	132011	6.71	0.17	17.72	140	0.5200	1.99	400	65 Hz			
MC-8	3/8/07	75207	7.36	7.47	9.31	113	0.0479	28.9	400	3.0 cpm	18	0.17	All parameters stable when sample was collected.
MC-8	3/8/07	75505	7.13	7.39	9.14	121	0.0470	25.7	400	3.0 cpm			Turbidity > 5 NTU's but stable.
MC-8	3/8/07	75805	6.95	7.28	8.99	124	0.0473	24.1	400	3.0 cpm			Do > 0.20 mg/L
MC-8	3/8/07	80106	6.83	7.18	8.94	127	0.0473	24.6	400	3.0 cpm			
MC-8	3/8/07	80406	6.85	7.10	9.04	122	0.0474	24.4	400	3.0 cpm			
MC-8	3/8/07	80705	6.88	7.01	9.11	122	0.0475	24.1	400	3.0 cpm			
MC-2D	3/8/07	84407	6.97	2.25	14.41	140	0.2748	8.62	400	64 Hz	18	1.69	All parameters stable when sample was collected.
MC-2D	3/8/07	84705	6.98	1.31	15.46	138	0.2854	3.81	400	64 Hz			Turbidity < 5 NTU's
MC-2D	3/8/07	85006	7.05	0.86	16.35	136	0.2888	3.47	400	64 Hz			Do > 0.20 mg/L
MC-2D	3/8/07	85319	7.06	1.07	16.77	135	0.2863	3.25	400	64 Hz			
MC-2D	3/8/07	85606	7.07	1.08	17.00	134	0.2852	2.93	400	64 Hz			
MC-2D	3/8/07	85905	7.07	1.06	17.25	133	0.2837	2.88	400	64 Hz			
MC-2	3/8/07	92306	6.79	0.37	12.70	142	0.1568	16.10	400	58 Hz	18	0.51	All parameters stable when sample was collected.
MC-2	3/8/07	92606	6.64	0.24	13.67	139	0.1565	7.38	400	58 Hz			Turbidity < 5 NTU's
MC-2	3/8/07	92905	6.81	0.18	14.55	127	0.1518	4.89	400	58 Hz			Do < 0.20 mg/L but stable.
MC-2	3/8/07	93205	6.90	0.19	15.08	120	0.1486	4.48	400	58 Hz			Do Test Kit Reading - 0.27 mg/L
MC-2	3/8/07	93506	6.90	0.18	15.32	119	0.1466	4.19	400	58 Hz			
MC-2	3/8/07	93806	6.89	0.18	15.36	118	0.1458	3.67	400	58 Hz			
MC-17	3/8/07	101006	6.25	4.48	10.06	153	0.1512	4.63	400	3.0	18	0.13	All parameters stable when sample was collected.
MC-17	3/8/07	101306	6.22	3.91	9.74	153	0.1704	3.56	400	3.0			Turbidity < 5 NTU's
MC-17	3/8/07	101605	6.17	3.65	9.64	152	0.1783	2.90	400	3.0			Do > 0.20 mg/L
MC-17	3/8/07	101907	6.17	3.50	9.50	150	0.1839	2.42	400	3.0			
MC-17	3/8/07	102206	6.20	3.50	9.49	148	0.1847	1.98	400	3.0			
MC-17	3/8/07	102507	6.24	3.46	9.46	147	0.1889	1.55	400	3.0			
MC-17D	3/8/07	105106	6.74	2.34	12.69	139	0.1577	2.73	400	66 Hz	20	0.20	All parameters stable when sample was collected.
MC-17D	3/8/07	105406	6.81	1.92	13.56	137	0.1615	2.04	400	66 Hz			Turbidity < 5 NTU's
MC-17D	3/8/07	105706	6.91	1.64	14.84	134	0.1616	1.58	400	66 Hz			Do > 0.20 mg/L
MC-17D	3/8/07	110006	6.96	1.38	15.71	131	0.1630	1.51	400	66 Hz			
MC-17D	3/8/07	110305	7.00	1.18	16.14	129	0.1635	1.11	400	66 Hz			
MC-17D	3/8/07	110606	6.98	1.11	16.38	129	0.1639	1.23	400	66 Hz			
MC-17D	3/8/07	110905	7.00	1.07	16.53	127	0.1627	1.18	400	66 Hz			
MC-1	3/8/07	120205	6.46	2.73	10.25	155	0.2350	19.10	400	52 Hz	18	0.34	All parameters stable when sample was collected.
MC-1	3/8/07	120505	6.39	5.43	10.98	153	0.1322	9.30	400	52 Hz			Turbidity < 5 NTU's
MC-1	3/8/07	120808	6.45	6.08	12.26	147	0.1011	4.62	400	52 Hz			Do > 0.20 mg/L
MC-1	3/8/07	121106	6.48	6.27	12.92	145	0.0928	3.82	400	52 Hz			
MC-1	3/8/07	121408	6.44	6.21	13.32	146	0.0917	2.82	400	52 Hz			
MC-1	3/8/07	121705	6.38	6.24	13.30	148	0.0916	2.21	400	52 Hz			

Second Quarter 2007

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	øC	mV	mS/cm	NTUs	ml/min.	Hz or cpm	Minutes	(0.01) ft.	
MC-123	6/4/07	114029	6.16	0.75	17.09	223	0.5750	9.59	100	0.2 cpm	24	0.58	All parameters stable when sample was collected.
MC-123	6/4/07	114305	6.13	0.65	16.99	225	0.4851	6.98	100	0.2 cpm			Turbity < 5 NTU's
MC-123	6/4/07	114606	6.15	0.58	16.89	222	0.4206	4.53	100	0.2 cpm			Do > 0.20 mg/L
MC-123	6/4/07	114905	6.15	0.53	16.81	217	0.3834	3.06	100	0.2 cpm			
MC-123	6/4/07	115205	6.15	0.51	16.64	210	0.3588	2.43	100	0.2 cpm			
MC-123	6/4/07	115506	6.16	0.49	16.61	204	0.3453	1.32	100	0.2 cpm			
MC-123	6/4/07	115814	6.16	0.48	16.54	198	0.3391	1.20	100	0.2 cpm			
MC-123	6/4/07	120121	6.16	0.47	16.54	194	0.3363	0.98	100	0.2 cpm			
MC-20	6/4/07	131011	6.79	2.24	17.87	199	0.1501	5.02	100	0.2 cpm	30	0.10	All parameters stable when sample was collected.
MC-20	6/4/07	131311	6.46	1.87	17.51	207	0.1544	3.83	100	0.2 cpm			Turbity < 5 NTU's
MC-20	6/4/07	131600	6.24	1.84	17.50	214	0.1599	2.40	100	0.2 cpm			Do > 0.20 mg/L
MC-20	6/4/07	131905	6.21	1.57	17.46	213	0.1632	2.21	100	0.2 cpm			Fe Field Test Kit Reading - 3.30 mg/L Upper Limt
MC-20	6/4/07	132205	6.19	1.23	17.42	210	0.1675	2.03	100	0.2 cpm			
MC-20	6/4/07	132507	6.15	1.09	17.53	207	0.1699	1.82	100	0.2 cpm			
MC-20	6/4/07	132838	6.22	0.96	17.74	202	0.1705	1.53	100	0.2 cpm			
MC-20	6/4/07	133130	6.24	0.89	17.96	196	0.1723	1.41	100	0.2 cpm			
MC-20	6/4/07	133405	6.30	0.85	18.25	191	0.1733	1.22	100	0.2 cpm			
MC-20	6/4/07	133705	6.33	0.82	18.40	186	0.1736	1.04	100	0.2 cpm			
MC-122	6/5/07	71406	6.62	1.10	14.46	236	0.1457	10.2	100	0.2 cpm	21	1.56	All parameters stable when sample was collected.
MC-122	6/5/07	71715	6.60	0.94	14.31	232	0.1439	11.8	100	0.2 cpm			Turbity < 5 NTU's
MC-122	6/5/07	72015	6.55	0.82	14.24	230	0.1440	7.57	100	0.2 cpm			Do > 0.20 mg/L
MC-122	6/5/07	72305	6.53	0.72	14.19	227	0.1412	6.82	100	0.2 cpm			
MC-122	6/5/07	72605	6.53	0.64	14.15	223	0.1439	3.73	100	0.2 cpm			
MC-122	6/5/07	72907	6.50	0.61	14.12	221	0.1458	3.33	100	0.2 cpm			
MC-122	6/5/07	73215	6.47	0.61	14.11	218	0.1483	3.01	100	0.2 cpm			
MC-14	6/5/07	84807	6.45	2.11	14.63	225	0.6283	13.5	100	0.2 cpm	39	2.46	All parameters stable when sample was collected.
MC-14	6/5/07	85105	6.45	1.81	14.65	235	0.6163	10.3	100	0.2 cpm			Turbity < 5 NTU's
MC-14	6/5/07	85417	6.45	1.53	14.69	238	0.5909	6.45	100	0.2 cpm			Do > 0.20 mg/L
MC-14	6/5/07	85727	6.45	1.33	14.72	236	0.5638	6.01	100	0.2 cpm			Fe Field Test Kit Reading - 3.30 mg/L Upper Limt
MC-14	6/5/07	90010	6.45	1.11	14.78	231	0.5363	5.85	100	0.2 cpm			
MC-14	6/5/07	90307	6.45	1.04	14.82	227	0.5243	5.49	100	0.2 cpm			
MC-14	6/5/07	90605	6.45	0.94	14.85	222	0.5072	5.18	100	0.2 cpm			
MC-14	6/5/07	90933	6.46	0.85	14.89	216	0.4944	5.05	100	0.2 cpm			
MC-14	6/5/07	91206	6.46	0.81	14.91	212	0.4849	5.20	100	0.2 cpm			
MC-14	6/5/07	91506	6.46	0.74	14.91	208	0.4751	5.31	100	0.2 cpm			
MC-14	6/5/07	91811	6.45	0.61	14.87	204	0.4662	4.85	100	0.2 cpm			
MC-14	6/5/07	92122	6.44	0.60	14.81	200	0.4589	4.73	100	0.2 cpm			
MC-14	6/5/07	92408	6.45	0.58	14.75	198	0.4525	4.22	100	0.2 cpm			
MC-21	6/5/07	101205	6.78	0.51	15.60	172	0.2155	2.91	400	3.0 cpm	21	0.08	All parameters stable when sample was collected.
MC-21	6/5/07	101510	6.60	0.38	15.57	176	0.2027	0.87	400	3.0 cpm			Turbity < 5 NTU's
MC-21	6/5/07	101805	6.55	0.33	15.53	175	0.1999	0.36	400	3.0 cpm			Do > 0.20 mg/L
MC-21	6/5/07	102105	6.50	0.30	15.52	175	0.1947	0.34	400	3.0 cpm			Fe Field Test Kit Reading - 3.30 mg/L Upper Limt
MC-21	6/5/07	102415	6.47	0.27	15.53	174	0.1903	0.30	400	3.0 cpm			
MC-21	6/5/07	102715	6.45	0.27	15.52	173	0.1891	0.29	400	3.0 cpm			
MC-21	6/5/07	103006	6.45	0.25	15.54	171	0.1885	0.28	400	3.0 cpm			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	øC	mV	mS/cm	NTUs	ml/min.	Hz or cpm	Minutes	(0.01) ft.	
MC-15	6/5/07	112705	6.41	0.95	13.35	186	0.1923	2.11	200	0.5 cpm	15	0.85	All parameters stable when sample was collected.
MC-15	6/5/07	113007	6.32	0.69	13.57	185	0.2049	1.61	200	0.5 cpm			Turbity < 5 NTU's
MC-15	6/5/07	113305	6.30	0.62	13.52	186	0.2054	0.78	200	0.5 cpm			Do > 0.20 mg/L
MC-15	6/5/07	113605	6.30	0.58	13.50	186	0.2012	0.61	200	0.5 cpm			
MC-15	6/5/07	113929	6.33	0.58	13.43	187	0.2002	0.53	200	0.5 cpm			
MC-15D	6/5/07	124906	6.65	0.55	13.50	190	0.2964	1.58	400	54 Hz	27	0.88	All parameters stable when sample was collected.
MC-15D	6/5/07	125206	6.67	0.34	14.24	192	0.3146	1.33	400	54 Hz			Turbity < 5 NTU's
MC-15D	6/5/07	125506	6.69	0.24	15.59	194	0.3400	1.25	400	54 Hz			Do < 0.20 mg/L but stable.
MC-15D	6/5/07	125809	6.70	0.17	16.54	195	0.3572	1.20	400	54 Hz			Do Test Kit Reading - 0.22 mg/L
MC-15D	6/5/07	130131	6.70	0.13	17.05	196	0.3683	1.11	400	54 Hz			
MC-15D	6/5/07	130407	6.69	0.11	17.23	197	0.3732	1.29	400	54 Hz			
MC-15D	6/5/07	130705	6.67	0.10	17.39	198	0.3772	1.18	400	54 Hz			
MC-15D	6/5/07	131019	6.67	0.09	17.59	199	0.3803	1.16	400	54 Hz			
MC-15D	6/5/07	131305	6.66	0.09	17.69	199	0.3817	1.09	400	54 Hz			
MC-16	6/5/07	134805	6.69	0.92	14.95	196	0.1579	2.67	250	0.3 cpm	18	0.57	All parameters stable when sample was collected.
MC-16	6/5/07	135105	6.58	0.56	14.73	197	0.1436	2.42	250	0.3 cpm			Turbity < 5 NTU's
MC-16	6/5/07	135406	6.57	0.43	14.66	190	0.1379	1.64	250	0.3 cpm			Do > 0.20 mg/L
MC-16	6/5/07	135705	6.56	0.36	14.58	180	0.1376	1.42	250	0.3 cpm			
MC-16	6/5/07	140008	6.56	0.37	14.55	175	0.1396	1.21	250	0.3 cpm			
MC-16	6/5/07	140305	6.58	0.34	14.65	173	0.1398	1.08	250	0.3 cpm			
MC-12D	6/5/07	144205	6.44	0.67	14.42	166	0.3707	2.38	400	59 Hz	15	0.81	All parameters stable when sample was collected.
MC-12D	6/5/07	144505	6.45	0.44	14.78	182	0.3923	1.56	400	59 Hz			Turbity < 5 NTU's
MC-12D	6/5/07	144806	6.48	0.33	16.07	193	0.4156	1.43	400	59 Hz			Do > 0.20 mg/L
MC-12D	6/5/07	145114	6.50	0.32	16.25	200	0.4202	1.29	400	59 Hz			
MC-12D	6/5/07	145440	6.51	0.31	16.57	203	0.4243	1.03	400	59 Hz			
MC-12	6/6/07	73505	7.15	1.52	14.76	206	0.1039	2.75	400	3.0 cpm	18	0.13	All parameters stable when sample was collected.
MC-12	6/6/07	73806	7.10	1.33	14.75	206	0.1032	1.44	400	3.0 cpm			Turbity < 5 NTU's
MC-12	6/6/07	74105	6.95	1.28	14.78	209	0.1037	1.36	400	3.0 cpm			Do > 0.20 mg/L
MC-12	6/6/07	74408	6.85	1.25	14.77	211	0.1048	1.23	400	3.0 cpm			Fe Field Test Kit Reading -0.91 mg/L
MC-12	6/6/07	74707	6.84	1.22	14.75	211	0.1059	1.21	400	3.0 cpm			
MC-12	6/6/07	75010	6.79	1.19	14.62	210	0.1069	1.09	400	3.0 cpm			
MC-10D	6/6/07	83106	6.53	0.59	13.44	215	0.3127	2.62	400	66 Hz	21	0.96	All parameters stable when sample was collected.
MC-10D	6/6/07	83411	6.57	0.46	14.53	219	0.3317	1.33	400	66 Hz			Turbity < 5 NTU's
MC-10D	6/6/07	83713	6.61	0.38	15.72	218	0.3491	0.65	400	66 Hz			Do > 0.20 mg/L
MC-10D	6/6/07	84005	6.62	0.33	16.32	214	0.3609	0.62	400	66 Hz			
MC-10D	6/6/07	84331	6.63	0.30	16.63	207	0.3653	0.32	400	66 Hz			
MC-10D	6/6/07	84605	6.63	0.29	16.80	200	0.3658	0.27	400	66 Hz			
MC-10D	6/6/07	84906	6.63	0.28	16.95	199	0.3673	0.22	400	66 Hz			
MC-107	6/6/07	92911	7.17	0.73	14.55	160	0.1106	3.63	400	3.0 cpm	15	0.07	All parameters stable when sample was collected.
MC-107	6/6/07	93205	7.07	0.78	14.72	160	0.1112	2.78	400	3.0 cpm			Turbity < 5 NTU's
MC-107	6/6/07	93507	7.05	0.73	14.80	162	0.1283	2.35	400	3.0 cpm			Do > 0.20 mg/L
MC-107	6/6/07	93805	7.01	0.70	14.85	163	0.1292	2.01	400	3.0 cpm			
MC-107	6/6/07	94112	7.01	0.68	14.88	164	0.1300	2.00	400	3.0 cpm			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	øC	mV	mS/cm	NTUs	ml/min.	Hz or cpm	Minutes	(0.01) ft.	
MC-118D	6/6/07	103705	6.57	0.88	15.71	171	0.3407	9.29	400	64 Hz	18	1.54	All parameters stable when sample was collected.
MC-118D	6/6/07	104005	6.52	0.52	16.89	184	0.3651	4.83	400	64 Hz			Turbity < 5 NTU's
MC-118D	6/6/07	104306	6.53	0.38	17.88	190	0.3848	1.94	400	64 Hz			Do > 0.20 mg/L
MC-118D	6/6/07	104613	6.51	0.33	18.73	190	0.3978	0.77	400	64 Hz			
MC-118D	6/6/07	104905	6.56	0.31	19.00	188	0.4065	0.69	400	64 Hz			
MC-118D	6/6/07	105211	6.60	0.30	19.28	183	0.4098	0.62	400	64 Hz			
MC-8	6/6/07	113405	6.91	2.55	15.28	165	0.1863	6.15	225	0.5 cpm	18	0.22	All parameters stable when sample was collected.
MC-8	6/6/07	113705	6.53	2.59	15.17	175	0.1772	4.21	225	0.5 cpm			Turbity < 5 NTU's
MC-8	6/6/07	114006	6.39	2.66	15.15	178	0.1724	3.85	225	0.5 cpm			Do > 0.20 mg/L
MC-8	6/6/07	114305	6.32	2.63	15.24	178	0.1706	3.63	225	0.5 cpm			
MC-8	6/6/07	114605	6.28	2.49	15.31	179	0.1707	2.28	225	0.5 cpm			
MC-8	6/6/07	114907	6.28	2.38	15.41	180	0.1708	2.08	225	0.5 cpm			
MC-13D	6/6/07	123505	6.69	0.89	15.41	189	0.1453	1.95	200	0.5 cpm	21	0.84	All parameters stable when sample was collected.
MC-13D	6/6/07	123840	6.67	0.71	16.05	190	0.1445	1.52	200	0.5 cpm			Turbity < 5 NTU's
MC-13D	6/6/07	124109	6.61	0.89	16.05	194	0.1463	1.73	200	0.5 cpm			Do > 0.20 mg/L
MC-13D	6/6/07	124406	6.64	0.71	15.40	194	0.1454	1.34	200	0.5 cpm			
MC-13D	6/6/07	124713	6.60	0.58	14.90	194	0.1453	1.22	200	0.5 cpm			
MC-13D	6/6/07	125023	6.60	0.56	14.65	193	0.1452	1.08	200	0.5 cpm			
MC-13D	6/6/07	125345	6.63	0.54	14.43	192	0.1453	0.89	200	0.5 cpm			
MC-13	6/6/07	133612	6.62	0.71	14.90	196	0.1220	9.58	400	3.0 cpm	15	0.08	All parameters stable when sample was collected.
MC-13	6/6/07	133906	6.44	0.42	14.53	202	0.1220	6.23	400	3.0 cpm			Turbity < 5 NTU's
MC-13	6/6/07	134213	6.45	0.32	14.47	202	0.1216	4.44	400	3.0 cpm			Do > 0.20 mg/L
MC-13	6/6/07	134521	6.42	0.30	14.40	201	0.1212	3.38	400	3.0 cpm			
MC-13	6/6/07	134806	6.40	0.29	14.49	199	0.1201	2.27	400	3.0 cpm			
MC-2D	6/7/07	72607	6.79	0.93	14.94	219	0.2474	2.78	400	61 Hz	18	1.47	All parameters stable when sample was collected.
MC-2D	6/7/07	72905	6.79	0.53	15.83	217	0.2619	1.96	400	61 Hz			Turbity < 5 NTU's
MC-2D	6/7/07	73206	6.79	0.31	16.86	215	0.2691	0.56	400	61 Hz			Do > 0.20 mg/L
MC-2D	6/7/07	73505	6.79	0.29	17.44	214	0.2730	0.58	400	61 Hz			
MC-2D	6/7/07	73806	6.80	0.28	17.62	214	0.2748	0.54	400	61 Hz			
MC-2D	6/7/07	74105	6.77	0.27	17.78	215	0.2758	0.50	400	61 Hz			
MC-2	6/7/07	83906	6.42	0.47	16.58	220	0.2513	15.1	400	54 Hz	33	0.49	All parameters stable when sample was collected.
MC-2	6/7/07	84244	6.48	0.44	19.05	225	0.2636	7.23	400	54 Hz			Turbity < 5 NTU's
MC-2	6/7/07	84505	6.52	0.28	20.24	226	0.2674	3.08	400	54 Hz			Do < 0.20 mg/L but stable.
MC-2	6/7/07	84805	6.53	0.22	21.11	226	0.2682	1.40	400	54 Hz			Do Test Kit Reading - 0.23 mg/L
MC-2	6/7/07	85105	6.56	0.18	22.18	222	0.2723	1.32	400	54 Hz			
MC-2	6/7/07	85405	6.57	0.16	22.55	214	0.2701	0.78	400	54 Hz			
MC-2	6/7/07	85706	6.57	0.14	22.75	204	0.2685	0.70	400	54 Hz			
MC-2	6/7/07	90008	6.58	0.13	23.01	191	0.2685	0.65	400	54 Hz			
MC-2	6/7/07	90310	6.57	0.12	23.27	180	0.2669	0.63	400	54 Hz			
MC-2	6/7/07	90607	6.57	0.11	23.28	173	0.2650	0.60	400	54 Hz			
MC-2	6/7/07	90908	6.57	0.11	23.36	170	0.2632	0.58	400	54 Hz			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	øC	mV	mS/cm	NTUs	ml/min.	Hz or cpm	Minutes	(0.01) ft.	
MC-17	6/7/07	94805	6.63	1.81	15.08	162	0.177	2.87	200	0.5 cpm	24	0.15	All parameters stable when sample was collected.
MC-17	6/7/07	95106	6.58	1.34	14.87	165	0.1756	2.21	200	0.5 cpm			Turbity < 5 NTU's
MC-17	6/7/07	95412	6.51	0.99	14.76	165	0.1742	2.08	200	0.5 cpm			Do > 0.20 mg/L
MC-17	6/7/07	95719	6.52	0.78	14.69	163	0.1721	1.18	200	0.5 cpm			
MC-17	6/7/07	100009	6.53	0.64	14.67	160	0.1706	1.02	200	0.5 cpm			
MC-17	6/7/07	100314	6.51	0.56	14.64	157	0.1689	0.91	200	0.5 cpm			
MC-17	6/7/07	100608	6.49	0.53	14.57	155	0.1678	0.83	200	0.5 cpm			
MC-17	6/7/07	100905	6.50	0.51	14.57	153	0.1672	0.47	200	0.5 cpm			
MC-17D	6/7/07	105107	6.84	1.35	13.57	149	0.1429	2.18	400	58 Hz	15	0.29	All parameters stable when sample was collected.
MC-17D	6/7/07	105442	6.83	1.02	14.44	151	0.1418	1.48	400	58 Hz			Turbity < 5 NTU's
MC-17D	6/7/07	105716	6.89	0.93	15.99	149	0.1428	1.40	400	58 Hz			Do > 0.20 mg/L
MC-17D	6/7/07	110005	6.90	0.87	16.29	149	0.1442	1.38	400	58 Hz			
MC-17D	6/7/07	110305	6.90	0.84	16.42	148	0.1449	1.02	400	58 Hz			
MC-19D	6/7/07	130005	6.95	1.77	15.59	185	0.1522	15.3	400	63 Hz	21	0.01	All parameters stable when sample was collected.
MC-19D	6/7/07	130305	6.72	0.55	15.41	193	0.1707	8.35	400	63 Hz			Turbity < 5 NTU's
MC-19D	6/7/07	130606	6.72	0.29	16.03	194	0.1767	3.10	400	63 Hz			Do < 0.20 mg/L but stable.
MC-19D	6/7/07	130905	6.82	0.21	16.75	188	0.1795	1.36	400	63 Hz			Do Test Kit Reading - 0.24 mg/L
MC-19D	6/7/07	131207	6.87	0.17	17.12	185	0.1809	1.16	400	63 Hz			
MC-19D	6/7/07	131505	6.88	0.16	17.31	185	0.1815	1.03	400	63 Hz			
MC-19D	6/7/07	131807	6.87	0.16	17.44	185	0.1822	0.98	400	63 Hz			
MC-1	6/7/07	134611	6.63	0.62	14.56	190	0.2180	4.78	400	57 Hz	24	0.89	All parameters stable when sample was collected.
MC-1	6/7/07	134905	6.56	0.73	15.48	198	0.2062	2.52	400	57 Hz			Turbity < 5 NTU's
MC-1	6/7/07	135207	6.61	0.69	17.66	195	0.2082	1.82	400	57 Hz			Do > 0.20 mg/L
MC-1	6/7/07	135506	6.61	0.50	19.32	192	0.2140	1.51	400	57 Hz			Fe Field Test Kit Reading - 1.97 mg/L
MC-1	6/7/07	135805	6.61	0.40	20.42	188	0.2184	1.29	400	57 Hz			
MC-1	6/7/07	140105	6.60	0.39	21.22	185	0.2211	1.03	400	57 Hz			
MC-1	6/7/07	140410	6.59	0.38	21.57	181	0.2220	0.85	400	57 Hz			
MC-1	6/7/07	140706	6.58	0.36	21.80	177	0.2228	0.71	400	57 Hz			

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Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
		HHMMSS	Units	mg/l	øC	mV	mS/cm	NTUs	ml/min	Hz or cpm	minutes	0.01 feet	
MC-14	9/11/07	83044	6.58	1.33	18.01	164	1.912	11.0	100	0.2 cpm	21	1.64	All parameters stable when sample was collected
MC-14	9/11/07	83307	6.60	1.15	18.10	162	1.668	10.4	100	0.2 cpm			Turbidity < 5 NTU
MC-14	9/11/07	83609	6.60	1.02	18.20	157	1.236	4.12	100	0.2 cpm			DO > 0.20 mg/l
MC-14	9/11/07	83907	6.58	0.84	18.29	149	1.104	3.58	100	0.2 cpm			Fe field test kit reading 3.30 mg/l Upper Limit
MC-14	9/11/07	84218	6.55	0.73	18.35	147	1.013	2.30	100	0.2 cpm			
MC-14	9/11/07	84506	6.55	0.70	18.41	144	0.9845	2.08	100	0.2 cpm			
MC-14	9/11/07	84816	6.48	0.68	18.41	146	0.9802	1.76	100	0.2 cpm			
MC-21	9/11/07	94605	6.93	0.72	19.30	157	0.2654	3.23	400	3.0 cpm	18	0.02	All parameters stable when sample was collected
MC-21	9/11/07	94906	6.91	0.47	19.35	153	0.2649	1.89	400	3.0 cpm			Turbidity < 5 NTU
MC-21	9/11/07	95212	6.88	0.37	19.47	154	0.2660	1.37	400	3.0 cpm			DO > 0.20 mg/l
MC-21	9/11/07	95517	6.92	0.32	19.57	151	0.2671	1.18	400	3.0 cpm			Fe field test kit reading 3.30 mg/l Upper Limit
MC-21	9/11/07	95806	6.90	0.29	19.66	151	0.2678	1.06	400	3.0 cpm			
MC-21	9/11/07	100105	6.86	0.29	19.72	159	0.2676	0.85	400	3.0 cpm			
MC-13	9/11/07	104313	6.60	1.12	18.98	173	0.1320	3.25	400	3.0 cpm	18	0.14	All parameters stable when sample was collected
MC-13	9/11/07	104605	6.22	0.61	18.53	187	0.1404	3.00	400	3.0 cpm			Turbidity < 5 NTU
MC-13	9/11/07	104906	6.10	0.42	18.45	192	0.1461	2.89	400	3.0 cpm			DO > 0.20 mg/l
MC-13	9/11/07	105205	6.20	0.32	18.41	190	0.1483	2.50	400	3.0 cpm			
MC-13	9/11/07	105514	6.22	0.31	18.37	189	0.1493	2.38	400	3.0 cpm			
MC-13	9/11/07	105805	6.25	0.29	18.40	188	0.1505	2.21	400	3.0 cpm			
MC-13D	9/11/07	112106	6.69	1.61	17.24	179	0.2505	2.61	200	0.5 cpm	18	0.76	All parameters stable when sample was collected
MC-13D	9/11/07	112412	6.44	1.22	16.64	197	0.2518	2.28	200	0.5 cpm			Turbidity < 5 NTU
MC-13D	9/11/07	112739	6.41	0.97	16.20	201	0.2535	2.00	200	0.5 cpm			DO > 0.20 mg/l
MC-13D	9/11/07	113009	6.40	0.86	16.17	202	0.2525	1.28	200	0.5 cpm			
MC-13D	9/11/07	113305	6.44	0.84	16.22	200	0.2523	1.01	200	0.5 cpm			
MC-13D	9/11/07	113605	6.36	0.80	16.10	200	0.2525	1.24	200	0.5 cpm			
MC-15	9/11/07	120907	6.84	1.04	20.59	179	0.3263	5.28	200	0.5 cpm	15	0.43	All parameters stable when sample was collected
MC-15	9/11/07	121210	6.62	0.70	20.46	181	0.3290	3.30	200	0.5 cpm			Turbidity < 5 NTU
MC-15	9/11/07	121506	6.64	0.52	20.47	180	0.3296	2.57	200	0.5 cpm			DO > 0.20 mg/l
MC-15	9/11/07	121807	6.69	0.49	20.48	179	0.3308	2.21	200	0.5 cpm			
MC-15	9/11/07	122106	6.64	0.47	20.56	180	0.3323	2.04	200	0.5 cpm			
MC-15D	9/11/07	124506	6.41	0.95	17.15	203	0.4735	2.48	400	68 Hz	21	0.87	All parameters stable when sample was collected
MC-15D	9/11/07	124807	6.33	0.52	17.36	207	0.4841	1.41	400	68 Hz			Turbidity < 5 NTU
MC-15D	9/11/07	125105	6.39	0.36	18.76	205	0.5144	1.30	400	68 Hz			DO > 0.20 mg/l
MC-15D	9/11/07	125411	6.51	0.27	19.74	199	0.5373	1.12	400	68 Hz			
MC-15D	9/11/07	125706	6.63	0.24	20.26	192	0.5482	0.85	400	68 Hz			
MC-15D	9/11/07	130007	6.66	0.23	20.52	190	0.5548	0.72	400	68 Hz			
MC-15D	9/11/07	130324	6.68	0.22	20.71	189	0.5575	0.69	400	68 Hz			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
		HHMMSS	Units	mg/l	øC	mV	mS/cm	NTUs	ml/min	Hz or cpm	minutes	0.01 feet	
MC-16	9/11/07	133618	6.59	2.46	24.73	174	0.4279	3.28	200	0.5 cpm	24	0.52	All parameters stable when sample was collected
MC-16	9/11/07	133905	6.59	1.75	23.89	172	0.3519	3.03	200	0.5 cpm			Turbidity < 5 NTU
MC-16	9/11/07	134205	6.54	1.26	23.03	172	0.3259	1.89	200	0.5 cpm			DO > 0.20 mg/l
MC-16	9/11/07	134512	6.51	0.93	22.64	172	0.3151	1.62	200	0.5 cpm			
MC-16	9/11/07	134806	6.51	0.73	22.56	172	0.3050	1.31	200	0.5 cpm			
MC-16	9/11/07	135106	6.50	0.61	22.52	172	0.2958	1.22	200	0.5 cpm			
MC-16	9/11/07	135406	6.52	0.58	22.57	171	0.2913	1.08	200	0.5 cpm			
MC-16	9/11/07	135707	6.52	0.56	22.48	171	0.2869	0.83	200	0.5 cpm			
MC-19D	9/12/07	82112	6.61	0.77	14.99	149	0.2228	29.3	400	79 Hz	21	0	All parameters stable when sample was collected
MC-19D	9/12/07	82409	6.57	0.51	15.64	148	0.2215	12.8	400	79 Hz			Turbidity < 5 NTU
MC-19D	9/12/07	82706	6.68	0.41	16.72	141	0.2221	6.00	400	79 Hz			DO > 0.20 mg/l
MC-19D	9/12/07	83006	6.91	0.35	17.51	129	0.2226	3.58	400	79 Hz			
MC-19D	9/12/07	83305	6.96	0.30	17.94	126	0.2233	2.21	400	79 Hz			
MC-19D	9/12/07	83605	6.95	0.27	18.17	126	0.2238	2.08	400	79 Hz			
MC-19D	9/12/07	83906	6.91	0.28	18.34	128	0.2243	1.83	400	79 Hz			
MC-2D	9/12/07	90506	6.56	0.76	16.26	161	0.4337	1.28	400	78 Hz	18	2.22	All parameters stable when sample was collected
MC-2D	9/12/07	90806	6.52	0.34	16.54	161	0.4429	0.93	400	78 Hz			Turbidity < 5 NTU
MC-2D	9/12/07	91107	6.57	0.23	17.69	159	0.4669	0.56	400	78 Hz			DO = 0.20 mg/l
MC-2D	9/12/07	91406	6.72	0.22	18.25	150	0.4683	0.53	400	78 Hz			
MC-2D	9/12/07	91705	6.77	0.21	18.44	147	0.4630	0.50	400	78 Hz			
MC-2D	9/12/07	92010	6.77	0.20	18.52	147	0.4587	0.48	400	78 Hz			
MC-2	9/12/07	94812	6.55	0.27	25.26	137	0.2393	6.21	400	62 Hz	15	1.14	All parameters stable when sample was collected
MC-2	9/12/07	95106	6.51	0.24	25.94	137	0.2430	6.00	400	62 Hz			Turbidity < 5 NTU
MC-2	9/12/07	95408	6.51	0.22	26.23	137	0.2458	3.31	400	62 Hz			DO > 0.20 mg/l
MC-2	9/12/07	95714	6.49	0.21	26.67	137	0.2479	2.47	400	62 Hz			
MC-2	9/12/07	100006	6.49	0.20	26.89	137	0.2502	1.65	400	62 Hz			
MC-12	9/12/07	102905	6.68	0.83	19.77	152	0.2241	1.35	300	2.0 cpm	17	0.06	All parameters stable when sample was collected
MC-12	9/12/07	103205	6.59	0.51	19.63	154	0.2198	0.75	300	2.0 cpm			Turbidity < 5 NTU
MC-12	9/12/07	103505	6.56	0.40	19.55	156	0.2179	0.70	300	2.0 cpm			DO > 0.20 mg/l
MC-12	9/12/07	103807	6.55	0.33	19.50	157	0.2169	0.65	300	2.0 cpm			Fe field test kit reading 1.05 mg/l Upper Limit
MC-12	9/12/07	104109	6.56	0.31	19.52	157	0.2161	0.50	300	2.0 cpm			
MC-12	9/12/07	104415	6.54	0.30	19.57	155	0.2158	0.63	300	2.0 cpm			
MC-12D	9/12/07	111310	6.27	0.93	16.27	182	0.3944	1.70	400	71 Hz	18	0.71	All parameters stable when sample was collected
MC-12D	9/12/07	111605	6.33	0.61	17.03	180	0.4268	1.08	400	71 Hz			Turbidity < 5 NTU
MC-12D	9/12/07	111905	6.40	0.50	18.43	177	0.4630	1.13	400	71 Hz			DO > 0.20 mg/l
MC-12D	9/12/07	112206	6.48	0.44	19.26	173	0.4821	0.98	400	71 Hz			
MC-12D	9/12/07	112505	6.54	0.42	19.65	169	0.4906	0.90	400	71 Hz			
MC-12D	9/12/07	112809	6.57	0.40	19.84	168	0.4929	0.83	400	71 Hz			
MC-10D	9/12/07	120905	6.79	1.00	16.75	166	0.4072	3.77	400	82 Hz	14	1.47	All parameters stable when sample was collected
MC-10D	9/12/07	121205	6.60	0.54	16.48	171	0.3910	1.98	400	82 Hz			Turbidity < 5 NTU
MC-10D	9/12/07	121505	6.61	0.42	17.62	169	0.4086	1.52	400	82 Hz			DO > 0.20 mg/l
MC-10D	9/12/07	121805	6.62	0.40	18.11	167	0.4155	1.33	400	82 Hz			
MC-10D	9/12/07	122105	6.66	0.38	18.23	165	0.4171	1.21	400	82 Hz			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
		HHMMSS	Units	mg/l	øC	mV	mS/cm	NTUs	ml/min	Hz or cpm	minutes	0.01 feet	
MC-107	9/12/07	124705	7.26	1.28	20.62	135	0.1854	3.89	400	3.0 cpm	24	0.04	All parameters stable when sample was collected
MC-107	9/12/07	125005	7.12	0.58	20.27	139	0.1865	2.05	400	3.0 cpm			Turbidity < 5 NTU
MC-107	9/12/07	125306	7.03	0.44	20.23	142	0.1877	1.56	400	3.0 cpm			DO > 0.20 mg/l
MC-107	9/12/07	125607	6.95	0.37	20.22	145	0.1889	1.42	400	3.0 cpm			
MC-107	9/12/07	125908	6.99	0.30	20.25	142	0.1893	1.33	400	3.0 cpm			
MC-107	9/12/07	130217	6.97	0.26	20.28	143	0.1897	0.75	400	3.0 cpm			
MC-107	9/12/07	130508	6.93	0.25	20.26	143	0.1903	0.86	400	3.0 cpm			
MC-107	9/12/07	130806	6.98	0.24	20.31	140	0.1907	0.70	400	3.0 cpm			
MC-118D	9/13/07	80206	6.63	1.08	16.28	157	0.4038	8.28	400	76 Hz	21	1.76	All parameters stable when sample was collected
MC-118D	9/13/07	80505	6.59	0.71	17.15	157	0.4263	3.13	400	76 Hz			Turbidity < 5 NTU
MC-118D	9/13/07	80806	6.63	0.59	18.81	154	0.4625	1.85	400	76 Hz			DO > 0.20 mg/l
MC-118D	9/13/07	81114	6.64	0.52	19.82	154	0.4853	1.61	400	76 Hz			
MC-118D	9/13/07	81405	6.65	0.48	20.27	153	0.4955	1.32	400	76 Hz			
MC-118D	9/13/07	81710	6.65	0.45	20.64	153	0.5019	1.20	400	76 Hz			
MC-118D	9/13/07	82012	6.64	0.44	20.76	154	0.5014	1.13	400	76 Hz			
MC-8	9/13/07	84611	6.98	1.71	17.78	136	0.2114	4.38	150	0.2 cpm	21	0.3	All parameters stable when sample was collected
MC-8	9/13/07	84906	6.81	1.24	17.78	139	0.1999	2.72	150	0.2 cpm			Turbidity < 5 NTU
MC-8	9/13/07	85205	6.66	0.99	17.82	143	0.1944	1.89	150	0.2 cpm			DO > 0.20 mg/l
MC-8	9/13/07	85505	6.63	0.84	17.84	144	0.1916	1.54	150	0.2 cpm			
MC-8	9/13/07	85806	6.60	0.74	17.87	147	0.1888	1.45	150	0.2 cpm			
MC-8	9/13/07	90105	6.56	0.73	17.87	146	0.1880	1.27	150	0.2 cpm			
MC-8	9/13/07	90406	6.55	0.70	17.89	147	0.1872	0.98	150	0.2 cpm			
MC-1	9/13/07	94505	6.73	0.63	18.55	144	0.2188	7.84	400	63 Hz	30	0.86	All parameters stable when sample was collected
MC-1	9/13/07	94806	6.71	0.44	20.18	141	0.2198	13.1	400	63 Hz			Turbidity < 5 NTU
MC-1	9/13/07	95105	6.64	0.36	22.27	143	0.2263	12.4	400	63 Hz			DO < 0.20 mg/l
MC-1	9/13/07	95407	6.66	0.31	23.89	140	0.2262	8.86	400	63 Hz			DO test kit reading 0.25 mg/l
MC-1	9/13/07	95707	6.66	0.29	24.63	139	0.2267	8.00	400	63 Hz			Fe field test kit reading 3.30 mg/l Upper Limit
MC-1	9/13/07	100005	6.68	0.25	25.31	136	0.2298	6.08	400	63 Hz			
MC-1	9/13/07	100306	6.57	0.26	25.50	140	0.2293	5.23	400	63 Hz			
MC-1	9/13/07	100607	6.69	0.18	25.47	133	0.2255	4.61	400	63 Hz			
MC-1	9/13/07	100905	6.62	0.18	25.26	136	0.2297	4.38	400	63 Hz			
MC-1	9/13/07	101208	6.64	0.17	25.63	134	0.2317	4.01	400	63 Hz			
MC-17	9/13/07	104720	6.50	1.34	18.59	153	0.2858	4.63	200	0.5 cpm	15	0.48	All parameters stable when sample was collected
MC-17	9/13/07	105005	6.53	1.29	18.45	152	0.2948	2.71	200	0.5 cpm			Turbidity < 5 NTU
MC-17	9/13/07	105306	6.55	1.26	18.26	151	0.2994	1.75	200	0.5 cpm			DO > 0.20 mg/l
MC-17	9/13/07	105611	6.57	1.20	18.21	151	0.3020	1.43	200	0.5 cpm			
MC-17	9/13/07	105916	6.59	1.16	18.16	149	0.3002	1.08	200	0.5 cpm			
MC-17D	9/13/07	112230	6.77	1.30	14.70	149	0.2379	2.10	400	73 Hz	18	0.35	All parameters stable when sample was collected
MC-17D	9/13/07	112505	6.69	0.78	14.80	152	0.2426	1.38	400	73 Hz			Turbidity < 5 NTU
MC-17D	9/13/07	112807	6.70	0.58	15.93	150	0.2534	1.26	400	73 Hz			DO > 0.20 mg/l
MC-17D	9/13/07	113105	6.91	0.49	17.40	139	0.2564	1.19	400	73 Hz			
MC-17D	9/13/07	113411	6.92	0.46	17.81	132	0.2570	1.15	400	73 Hz			
MC-17D	9/13/07	113715	7.00	0.44	17.93	131	0.2576	1.10	400	73 Hz			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	øC	mV	mS/cm	NTUs	ml/min	hz or cpm	minutes	0.01 feet	
PZU-5	10/22/07	135907	7.35	1.69	19.06	212	0.3225	2.11	100	0.2 cpm	27	6.02	All parameters stable when sample was collected.
PZU-5	10/22/07	140215	7.31	1.58	19.09	214	0.3041	2.02	100	0.2 cpm			Turbidity < 5 NTU
PZU-5	10/22/07	140529	7.30	1.56	19.25	216	0.2847	1.76	100	0.2 cpm			Do > 0.20 mg/L
PZU-5	10/22/07	140807	7.28	1.54	19.29	218	0.2731	1.56	100	0.2 cpm			Fe Field Test Kit Reading - 3.30 mg/L Upper Limits
PZU-5	10/22/07	141105	7.26	1.57	19.35	220	0.2620	1.63	100	0.2 cpm			
PZU-5	10/22/07	141407	7.24	1.53	19.41	221	0.2526	1.72	100	0.2 cpm			
PZU-5	10/22/07	141706	7.24	1.51	19.55	222	0.2469	1.69	100	0.2 cpm			
PZU-5	10/22/07	142005	7.24	1.47	19.76	223	0.2456	1.65	100	0.2 cpm			
MC-123	10/23/07	91325	7.41	1.20	13.86	238	0.1530	42.0	100	0.2 cpm	20	0.49	All parameters stable when sample was collected.
MC-123	10/23/07	91605	7.36	1.07	14.04	241	0.1530	35.0	100	0.2 cpm			Turbidity > 5 NTU but stable.
MC-123	10/23/07	91905	7.34	0.91	14.20	245	0.1532	25.5	100	0.2 cpm			Do > 0.20 mg/L
MC-123	10/23/07	92205	7.34	0.84	14.35	248	0.1535	21.3	100	0.2 cpm			Fe Field Test Kit Reading - 3.30 mg/L Upper Limits
MC-123	10/23/07	92506	7.33	0.78	14.45	250	0.1542	20.8	100	0.2 cpm			
MC-123	10/23/07	92807	7.32	0.76	14.64	253	0.1535	20.1	100	0.2 cpm			
MC-20D	10/23/07	105306	8.82	3.24	15.01	209	0.1814	60.4	400	4.0 cpm	81	0.87	All parameters stable when sample was collected.
MC-20D	10/23/07	105606	8.91	1.73	14.85	205	0.1952	71.4	400	4.0 cpm			Turbidity > 5 NTU but stable.
MC-20D	10/23/07	105906	8.97	1.58	14.75	195	0.2119	73.4	400	4.0 cpm			Do > 0.20 mg/L
MC-20D	10/23/07	110206	8.94	1.15	14.72	183	0.2178	63.4	400	4.0 cpm			Fe Field Test Kit Reading -1.18 mg/L
MC-20D	10/23/07	110509	8.94	1.17	14.70	173	0.2297	57.5	400	4.0 cpm			
MC-20D	10/23/07	110806	8.91	0.93	14.69	164	0.2292	42.3	400	4.0 cpm			
MC-20D	10/23/07	111105	8.89	0.74	14.68	153	0.2306	39.8	400	4.0 cpm			
MC-20D	10/23/07	111405	8.86	0.96	14.69	144	0.2324	32.3	400	4.0 cpm			
MC-20D	10/23/07	111724	8.83	0.68	14.69	132	0.2340	28.1	400	4.0 cpm			
MC-20D	10/23/07	112006	8.82	0.79	14.69	121	0.2358	26.1	400	4.0 cpm			
MC-20D	10/23/07	112306	8.81	0.66	14.69	110	0.2369	24.8	400	4.0 cpm			
MC-20D	10/23/07	112606	8.80	0.59	14.72	98	0.2371	21.9	400	4.0 cpm			
MC-20D	10/23/07	112906	8.79	0.79	14.71	86	0.2380	58.7	400	4.0 cpm			
MC-20D	10/23/07	113206	8.78	0.65	14.69	74	0.2360	52.1	400	4.0 cpm			
MC-20D	10/23/07	113505	8.76	1.20	14.71	64	0.2389	54.2	400	4.0 cpm			
MC-20D	10/23/07	113806	8.78	0.64	14.70	54	0.2351	55.2	400	4.0 cpm			
MC-20D	10/23/07	114106	8.76	0.87	14.71	45	0.2362	51.3	400	4.0 cpm			
MC-20D	10/23/07	114415	8.76	0.53	14.71	35	0.2354	50.7	400	4.0 cpm			
MC-20D	10/23/07	114706	8.75	0.60	14.72	27	0.2308	57.6	400	4.0 cpm			
MC-20D	10/23/07	115006	8.78	0.71	14.74	18	0.2329	54.0	400	4.0 cpm			
MC-20D	10/23/07	115308	8.59	0.56	14.73	20	0.2297	56.2	400	4.0 cpm			
MC-20D	10/23/07	115607	8.74	0.50	14.75	9	0.2254	59.3	400	4.0 cpm			
MC-20D	10/23/07	115906	8.77	0.64	14.78	-4	0.2263	54.5	400	4.0 cpm			
MC-20D	10/23/07	120206	8.72	0.53	14.80	-10	0.2239	54.3	400	4.0 cpm			
MC-20D	10/23/07	120527	8.77	0.51	14.81	-16	0.2241	52.4	400	4.0 cpm			
MC-20D	10/23/07	120808	8.77	0.53	14.99	-20	0.2243	53.7	400	4.0 cpm			
MC-20D	10/23/07	121106	8.74	0.50	15.06	-26	0.2247	54.2	400	4.0 cpm			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	øC	mV	mS/cm	NTUs	ml/min	hz or cpm	minutes	0.01 feet	
MC-122	10/23/07	125605	8.30	1.10	18.54	63	0.2362	34.2	100	0.2 cpm	34	0.89	All parameters stable when sample was collected.
MC-122	10/23/07	125906	8.11	0.87	18.38	65	0.2137	26.8	100	0.2 cpm			Turbidity > 5 NTU but stable.
MC-122	10/23/07	130205	8.01	0.76	18.38	66	0.1990	20.9	100	0.2 cpm			Do > 0.20 mg/L
MC-122	10/23/07	130518	7.92	0.67	18.32	67	0.1882	21.0	100	0.2 cpm			Fe Field Test Kit Reading - 3.30 mg/L Upper Limits
MC-122	10/23/07	130806	7.88	0.63	18.39	68	0.1810	19.9	100	0.2 cpm			
MC-122	10/23/07	131110	7.83	0.57	18.30	69	0.1750	15.6	100	0.2 cpm			
MC-122	10/23/07	131415	7.78	0.53	18.32	70	0.1703	12.8	100	0.2 cpm			
MC-122	10/23/07	131705	7.76	0.51	18.39	71	0.1665	9.28	100	0.2 cpm			
MC-122	10/23/07	132008	7.73	0.49	18.39	73	0.1633	8.83	100	0.2 cpm			
MC-122	10/23/07	132305	7.66	0.48	18.39	74	0.1600	8.82	100	0.2 cpm			
MC-122	10/23/07	132607	7.63	0.47	18.44	76	0.1586	8.83	100	0.2 cpm			
MC-14D	10/24/07	80206	8.81	3.48	14.59	202	0.1661	24.0	400	4.0 cpm	24	2.01	All parameters stable when sample was collected.
MC-14D	10/24/07	80505	8.76	2.83	14.49	185	0.1715	18.3	400	4.0 cpm			Turbidity < 5 NTU
MC-14D	10/24/07	80806	8.63	1.38	14.33	174	0.1751	10.4	400	4.0 cpm			Do > 0.20 mg/L
MC-14D	10/24/07	81106	8.68	0.93	14.25	163	0.1765	7.07	400	4.0 cpm			Fe Field Test Kit Reading - 1.08 mg/L
MC-14D	10/24/07	81407	8.67	0.91	14.00	153	0.1796	6.84	400	4.0 cpm			
MC-14D	10/24/07	81706	8.67	0.79	14.21	145	0.1817	4.70	400	4.0 cpm			
MC-14D	10/24/07	82005	8.67	0.76	14.13	139	0.1823	4.41	400	4.0 cpm			
MC-14D	10/24/07	82333	8.64	0.74	14.28	137	0.1829	4.16	400	4.0 cpm			
MC-24D	10/24/07	91607	8.38	5.48	14.24	162	0.1897	4.84	400	4.0 cpm	24	0.35	All parameters stable when sample was collected.
MC-24D	10/24/07	91906	8.03	3.75	14.39	163	0.1790	8.89	400	4.0 cpm			Turbidity > 5 NTU but stable.
MC-24D	10/24/07	92205	7.91	1.70	14.46	170	0.1709	12.9	400	4.0 cpm			Do > 0.20 mg/L
MC-24D	10/24/07	92506	7.79	1.07	14.42	170	0.1641	13.0	400	4.0 cpm			Fe Field Test Kit Reading - 0.22 mg/L
MC-24D	10/24/07	92811	7.73	0.91	14.40	171	0.1596	14.3	400	4.0 cpm			
MC-24D	10/24/07	93106	7.68	0.70	14.43	174	0.1569	14.4	400	4.0 cpm			
MC-24D	10/24/07	93406	7.63	0.66	14.45	176	0.1542	14.1	400	4.0 cpm			
MC-24D	10/24/07	93706	7.62	0.70	14.45	177	0.1530	13.6	400	4.0 cpm			
MC-24	10/24/07	101927	8.95	6.60	13.70	165	0.0811	25.8	400	4.0 cpm	21	0.20	All parameters stable when sample was collected.
MC-24	10/24/07	102205	8.78	7.10	13.55	169	0.0703	23.4	400	4.0 cpm			Turbidity > 5 NTU but stable.
MC-24	10/24/07	102505	8.16	6.28	13.53	196	0.0788	22.3	400	4.0 cpm			Do > 0.20 mg/L
MC-24	10/24/07	102812	8.44	6.24	13.53	187	0.0716	21.2	400	4.0 cpm			Fe Field Test Kit Reading - 0.45 mg/L
MC-24	10/24/07	103105	8.38	6.31	13.52	170	0.0732	24.9	400	4.0 cpm			
MC-24	10/24/07	103405	8.34	6.33	13.50	170	0.0723	24.5	400	4.0 cpm			
MC-24	10/24/07	103705	8.31	6.33	13.50	169	0.0714	23.6	400	4.0 cpm			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	øC	mV	mS/cm	NTUs	ml/min	hz or cpm	minutes	0.01 feet	
MC-25D	10/24/07	113414	7.89	2.23	14.96	194	0.1515	118.0	400	4.0 cpm	60	0.83	All parameters stable when sample was collected.
MC-25D	10/24/07	113706	7.79	2.48	14.93	194	0.1515	121.4	400	4.0 cpm			Turbidity > 5 NTU but stable.
MC-25D	10/24/07	114005	7.74	0.93	14.93	192	0.1503	109.3	400	4.0 cpm			Do > 0.20 mg/L
MC-25D	10/24/07	114305	7.69	0.64	14.90	195	0.1488	96.7	400	4.0 cpm			Fe Field Test Kit Reading - 1.65 mg/L
MC-25D	10/24/07	114606	7.70	0.69	14.88	192	0.1501	84.2	400	4.0 cpm			
MC-25D	10/24/07	114905	7.67	0.57	14.90	192	0.1485	72.6	400	4.0 cpm			
MC-25D	10/24/07	115205	7.61	0.46	14.90	193	0.1485	68.8	400	4.0 cpm			
MC-25D	10/24/07	115506	7.68	0.54	14.89	191	0.1483	61.6	400	4.0 cpm			
MC-25D	10/24/07	115807	7.65	0.42	14.90	192	0.1474	54.1	400	4.0 cpm			
MC-25D	10/24/07	120106	7.67	0.48	14.90	191	0.1481	48.6	400	4.0 cpm			
MC-25D	10/24/07	120406	7.66	0.45	14.88	191	0.1474	43.3	400	4.0 cpm			
MC-25D	10/24/07	120705	7.64	0.38	14.87	191	0.1476	42.6	400	4.0 cpm			
MC-25D	10/24/07	121005	7.67	0.46	14.88	190	0.1476	40.1	400	4.0 cpm			
MC-25D	10/24/07	121315	7.66	0.44	14.88	191	0.1476	37.5	400	4.0 cpm			
MC-25D	10/24/07	121605	7.65	0.42	14.86	190	0.1476	34.6	400	4.0 cpm			
MC-25D	10/24/07	121906	7.65	0.40	14.86	190	0.1465	33.2	400	4.0 cpm			
MC-25D	10/24/07	122206	7.60	0.39	14.84	191	0.1468	31.8	400	4.0 cpm			
MC-25D	10/24/07	122506	7.67	0.39	14.84	189	0.1468	29.7	400	4.0 cpm			
MC-25D	10/24/07	122806	7.64	0.39	14.85	189	0.1461	28.8	400	4.0 cpm			
MC-25D	10/24/07	123105	7.66	0.39	14.84	188	0.1468	27.7	400	4.0 cpm			
MC-25	10/24/07	135907	9.25	6.41	16.76	177	0.1346	16.0	400	4.0 cpm	21	0.16	All parameters stable when sample was collected.
MC-25	10/24/07	140206	8.82	4.38	16.99	183	0.1365	15.2	400	4.0 cpm			Turbidity > 5 NTU but stable.
MC-25	10/24/07	140506	8.62	3.80	17.11	187	0.1385	12.1	400	4.0 cpm			Do > 0.20 mg/L
MC-25	10/24/07	140806	8.60	3.77	17.16	183	0.1403	9.26	400	4.0 cpm			Fe Field Test Kit Reading - 1.04 mg/L
MC-25	10/24/07	141106	8.45	3.40	17.20	184	0.1403	7.51	400	4.0 cpm			
MC-25	10/24/07	141405	8.38	3.75	17.26	182	0.1421	7.69	400	4.0 cpm			
MC-25	10/24/07	141706	8.36	3.22	17.27	183	0.1384	7.48	400	4.0 cpm			

Fourth Quarter 2007

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
		HHMMSS	Units	mg/l	øC	mV	mS/cm	NTUs	mL/min	hz or cpm	minutes	0.01 feet	
UT-ST-1	12/17/07	82429	7.96	3.97	11.58	228	0.1268	1.77	100	0.2 cpm	5	0.25	Collected one water quality reading
													Turbidity < 5 NTU
													D.O. > 0.20 mg/L
													Fe test kit reading- 0.00 mg/l Non-Detect
PZU-4	12/17/07	105709	7.51	1.71	9.07	240	0.1155	3.45	100	0.2 cpm	19	0.33	All parameters stable when sample was collected
PZU-4	12/17/07	110006	7.45	1.63	9.12	240	0.1148	1.42	100	0.2 cpm			Turbidity < 5 NTU
PZU-4	12/17/07	110307	7.41	1.53	9.16	239	0.1118	1.16	100	0.2 cpm			D.O. > 0.20 mg/L
PZU-4	12/17/07	110606	7.37	1.46	9.16	238	0.1106	0.99	100	0.2 cpm			Fe test kit reading- 3.30 mg/l
PZU-4	12/17/07	110906	7.34	1.42	9.1	236	0.1094	0.86	100	0.2 cpm			
PZU-5	12/17/07	132915	6.89	2.55	9.38	252	0.3005	15.5	100	0.2 cpm	25	0.88	All parameters stable when sample was collected
PZU-5	12/17/07	133205	6.84	2.25	9.45	253	0.2773	15.3	100	0.2 cpm			Turbidity < 5 NTU
PZU-5	12/17/07	133514	6.82	2.17	9.58	254	0.2596	14.1	100	0.2 cpm			D.O. > 0.20 mg/L
PZU-5	12/17/07	133806	6.8	2.13	9.65	254	0.2508	13.6	100	0.2 cpm			Fe test kit reading- 2.43 mg/l
PZU-5	12/17/07	134106	6.82	2.23	9.67	253	0.2435	13.8	100	0.2 cpm			
PZU-5	12/17/07	134407	6.78	1.99	9.77	254	0.2358	13.4	100	0.2 cpm			
PZU-5	12/17/07	134706	6.75	1.94	9.95	254	0.234	12.6	100	0.2 cpm			
PZU-5	12/17/07	135041	6.74	1.81	10.04	254	0.2322	12.2	100	0.2 cpm			
MC-123	12/18/07	83707	6.89	1.62	10.84	264	0.2771	23.3	100	0.2 cpm	27	0.69	All parameters stable when sample was collected
MC-123	12/18/07	84006	6.8	1.19	11	262	0.2507	22.7	100	0.2 cpm			Turbidity < 5 NTU
MC-123	12/18/07	84306	6.74	1.07	10.85	262	0.23	18.4	100	0.2 cpm			D.O. > 0.20 mg/L
MC-123	12/18/07	84605	6.69	1.04	10.62	262	0.2134	17.3	100	0.2 cpm			Fe test kit reading- 3.30 mg/l Upper Limit
MC-123	12/18/07	84907	6.65	1.02	10.34	261	0.2004	13.2	100	0.2 cpm			
MC-123	12/18/07	85206	6.66	1.02	10.08	261	0.1893	11.8	100	0.2 cpm			
MC-123	12/18/07	85506	6.61	0.97	10.09	260	0.1819	10.6	100	0.2 cpm			
MC-123	12/18/07	85806	6.57	0.95	10.57	259	0.1796	10.1	100	0.2 cpm			
MC-123	12/18/07	90106	6.52	0.91	10.89	258	0.1782	9.87	100	0.2 cpm			
MC-20D	12/18/07	100006	7.75	4.08	12.88	215	0.1975	8.73	400	4.0 cpm	15	1.6	All parameters stable when sample was collected
MC-20D	12/18/07	100306	7.71	0.8	12.8	216	0.1932	8.26	400	4.0 cpm			Turbidity < 5 NTU
MC-20D	12/18/07	100606	7.58	0.45	12.83	220	0.1932	4.93	400	4.0 cpm			D.O. > 0.20 mg/L
MC-20D	12/18/07	100906	7.68	0.42	12.93	214	0.1913	3.79	400	4.0 cpm			Fe test kit reading- 1.41 mg/l
MC-20D	12/18/07	101206	7.66	0.44	12.92	213	0.1915	3.24	400	4.0 cpm			
MC-122	12/18/07	104315	7.3	1.1	10.51	220	0.1699	16.3	100	0.2 cpm	20	0.57	All parameters stable when sample was collected
MC-122	12/18/07	104606	7.22	0.97	10.5	221	0.166	11.2	100	0.2 cpm			Turbidity < 5 NTU
MC-122	12/18/07	104913	7.2	0.89	10.43	221	0.163	8.91	100	0.2 cpm			D.O. > 0.20 mg/L
MC-122	12/18/07	105206	7.18	0.8	10.36	221	0.16	4.73	100	0.2 cpm			Fe test kit reading- 3.30 mg/l Upper Limit
MC-122	12/18/07	105506	7.18	0.76	10.39	221	0.1578	3.62	100	0.2 cpm			
MC-122	12/18/07	105806	7.16	0.72	10.36	221	0.1567	2.99	100	0.2 cpm			
MC-14D	12/18/07	114626	7.77	1.1	12.11	232	0.1766	3.81	400	4.0 cpm	15	1.4	All parameters stable when sample was collected
MC-14D	12/18/07	114906	7.8	0.66	12.8	214	0.1762	1.67	400	4.0 cpm			Turbidity < 5 NTU
MC-14D	12/18/07	115206	7.73	0.43	13.06	212	0.1789	1.23	400	4.0 cpm			D.O. > 0.20 mg/L
MC-14D	12/18/07	115507	7.81	0.4	13.1	212	0.1761	0.77	400	4.0 cpm			Fe test kit reading- 0.62 mg/l
MC-14D	12/18/07	115810	7.84	0.41	13.08	211	0.1767	0.53	400	4.0 cpm			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
		HHMMSS	Units	mg/l	øC	mV	mS/cm	NTUs	mL/min	hz or cpm	minutes	0.01 feet	
MC-24D	12/18/07	131707	6.86	1.15	12.87	239	0.1821	4.88	400	4.0 cpm	15	0.34	All parameters stable when sample was collected
MC-24D	12/18/07	132006	6.79	0.8	13.07	237	0.1771	3.62	400	4.0 cpm			Turbidity < 5 NTU
MC-24D	12/18/07	132308	6.74	0.62	13.14	237	0.1724	3.11	400	4.0 cpm			D.O. > 0.20 mg/L
MC-24D	12/18/07	132606	6.71	0.59	13.27	238	0.1699	2.92	400	4.0 cpm			Fe test kit reading- 0.26 mg/l
MC-24D	12/18/07	132909	6.68	0.57	13.29	237	0.1687	2.63	400	4.0 cpm			
MC-24	12/18/07	135510	8.17	9.36	7.79	209	0.0643	35.6	400	4.0 cpm	15	0.1	All parameters stable when sample was collected
MC-24	12/18/07	135806	7.78	7.96	7.7	209	0.0471	29.2	400	4.0 cpm			Turbidity > 5 NTU
MC-24	12/18/07	140106	7.72	7.77	7.61	210	0.0441	27	400	4.0 cpm			D.O. > 0.20 mg/L
MC-24	12/18/07	140407	7.59	7.64	7.58	213	0.0434	26.5	400	4.0 cpm			Fe test kit reading- 0.71 mg/l
MC-24	12/18/07	140706	7.46	7.62	7.57	214	0.0431	26.3	400	4.0 cpm			
MC-25D	12/18/07	144006	6.97	3.99	12.82	245	0.1628	5.67	400	4.0 cpm	18	0.44	All parameters stable when sample was collected
MC-25D	12/18/07	144306	6.88	1.43	13.53	245	0.164	7.29	400	4.0 cpm			Turbidity > 5 NTU
MC-25D	12/18/07	144606	6.82	0.87	13.71	245	0.1629	8.52	400	4.0 cpm			D.O. > 0.20 mg/L
MC-25D	12/18/07	144910	6.81	0.54	13.85	243	0.1614	8.96	400	4.0 cpm			Fe test kit reading- 2.15 mg/l
MC-25D	12/18/07	145210	6.75	0.56	13.9	244	0.1602	8.87	400	4.0 cpm			
MC-25D	12/18/07	145506	6.78	0.52	13.92	247	0.1584	8.82	400	4.0 cpm			
MC-25	12/19/07	80013	8.04	7.31	9.84	248	0.1505	18.6	250	4.0 cpm	21	0.11	All parameters stable when sample was collected
MC-25	12/19/07	80306	7.64	6.7	9.8	254	0.1421	12.65	250	4.0 cpm			Turbidity > 5 NTU
MC-25	12/19/07	80608	7.38	6.71	9.73	254	0.136	10.54	250	4.0 cpm			D.O. > 0.20 mg/L
MC-25	12/19/07	80907	7.25	6.42	9.75	255	0.1306	9.4	250	4.0 cpm			Fe test kit reading- 0.83 mg/l
MC-25	12/19/07	81216	7.13	6.36	9.77	257	0.1268	8.87	250	4.0 cpm			
MC-25	12/19/07	81505	7.05	6.34	9.8	263	0.1242	8.58	250	4.0 cpm			
MC-25	12/19/07	81808	7.01	6.36	9.81	258	0.12	8.23	250	4.0 cpm			
MC-20	12/19/07	90607	6.68	2.14	10.31	275	0.128	6.8	100	0.2 cpm	19	1.16	All parameters stable when sample was collected
MC-20	12/19/07	90908	6.63	1.86	10.43	274	0.1239	6.2	100	0.2 cpm			Turbidity < 5 NTU
MC-20	12/19/07	91207	6.6	1.65	10.47	273	0.1207	4.17	100	0.2 cpm			D.O. > 0.20 mg/L
MC-20	12/19/07	91510	6.58	1.47	10.45	273	0.118	3.97	100	0.2 cpm			Fe test kit reading- 3.30 mg/l Upper Limit
MC-20	12/19/07	91805	6.56	1.34	10.41	272	0.1155	3.73	100	0.2 cpm			
MC-20	12/19/07	92107	6.55	1.31	10.39	272	0.1147	3.68	100	0.2 cpm			
MC-14	12/19/07	101218	6.71	2.16	10.92	269	0.1227	8.88	100	0.2 cpm	19	1.27	All parameters stable when sample was collected
MC-14	12/19/07	101509	6.69	1.97	10.99	268	0.1211	8.15	100	0.2 cpm			Turbidity > 5 NTU
MC-14	12/19/07	101805	6.69	1.88	11.03	267	0.1193	7.82	100	0.2 cpm			D.O. > 0.20 mg/L
MC-14	12/19/07	102107	6.68	1.76	11.07	266	0.1178	6.52	100	0.2 cpm			Fe test kit reading- 3.30 mg/l Upper Limit
MC-14	12/19/07	102424	6.68	1.68	11.09	265	0.1164	6.32	100	0.2 cpm			
MC-14	12/19/07	102711	6.68	1.62	11.11	264	0.1154	6.11	100	0.2 cpm			
MC-21	12/19/07	111906	7.35	2.41	10.26	241	0.106	6.29	400	3.0 cpm	15	0.07	All parameters stable when sample was collected
MC-21	12/19/07	112209	7.17	1.97	10.29	243	0.1041	3.79	400	3.0 cpm			Turbidity < 5 NTU
MC-21	12/19/07	112507	7.1	1.95	10.3	244	0.1023	1.82	400	3.0 cpm			D.O. > 0.20 mg/L
MC-21	12/19/07	112805	7.01	1.89	10.32	245	0.1014	1.17	400	3.0 cpm			Fe test kit reading- 3.30 mg/l Upper Limit
MC-21	12/19/07	113107	6.98	1.84	10.34	245	0.1002	0.97	400	3.0 cpm			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
		HHMMSS	Units	mg/l	øC	mV	mS/cm	NTUs	mL/min	hz or cpm	minutes	0.01 feet	
MC-13	12/19/07	115424	7.19	1.55	10.59	237	0.0649	7.22	400	3.0 cpm	18	0.09	All parameters stable when sample was collected
MC-13	12/19/07	115705	7.06	0.61	11	239	0.064	3.39	400	3.0 cpm			Turbidity < 5 NTU
MC-13	12/19/07	120005	6.98	0.39	11.12	240	0.0658	1.66	400	3.0 cpm			D.O. > 0.20 mg/L
MC-13	12/19/07	120305	6.93	0.33	11.13	241	0.0675	1.25	400	3.0 cpm			
MC-13	12/19/07	120606	6.89	0.32	11.14	241	0.0683	1.12	400	3.0 cpm			
MC-13	12/19/07	120907	6.87	0.31	11.08	242	0.0693	1.09	400	3.0 cpm			
MC-13D	12/19/07	123107	6.99	2.5	10.54	247	0.0958	2.63	200	1.0 cpm	15	0.82	All parameters stable when sample was collected
MC-13D	12/19/07	123406	7.03	1.83	11	246	0.1004	2.02	200	1.0 cpm			Turbidity < 5 NTU
MC-13D	12/19/07	123705	7.04	1.43	11.34	245	0.1018	1.92	200	1.0 cpm			D.O. > 0.20 mg/L
MC-13D	12/19/07	124005	7.03	1.37	11.42	245	0.1029	1.76	200	1.0 cpm			
MC-13D	12/19/07	124305	7.03	1.31	11.5	244	0.1032	1.44	200	1.0 cpm			
MC-1	12/19/07	133608	6.63	4.54	11.9	251	0.056	20.8	400	55 hz	18	0.39	All parameters stable when sample was collected
MC-1	12/19/07	133907	6.51	4.63	13.29	251	0.0572	14.7	400	55 hz			Turbidity > 5 NTU
MC-1	12/19/07	134206	6.44	4.66	14.47	252	0.0578	11.42	400	55 hz			D.O. > 0.20 mg/L
MC-1	12/19/07	134506	6.37	4.68	15.12	253	0.0581	12.01	400	55 hz			Fe test kit reading- 0.71 mg/l
MC-1	12/19/07	134806	6.33	4.65	15.47	253	0.0585	11.88	400	55 hz			
MC-1	12/19/07	135106	6.29	4.63	15.86	254	0.0595	11.61	400	55 hz			
MC-15	12/20/07	90508	8.26	7.41	6.72	234	0.0324	10.78	200	1.0 cpm	20	0.07	All parameters stable when sample was collected
MC-15	12/20/07	90806	8.1	7.15	6.72	236	0.0295	10.25	200	1.0 cpm			Turbidity > 5 NTU
MC-15	12/20/07	91106	7.99	7.16	6.68	237	3	8.67	200	1.0 cpm			D.O. > 0.20 mg/L
MC-15	12/20/07	91405	7.83	7.1	6.58	237	0.0278	8.22	200	1.0 cpm			
MC-15	12/20/07	91705	7.81	7.2	6.52	239	0.0278	7.97	200	1.0 cpm			
MC-15D	12/20/07	94108	7.18	2.01	11.04	265	0.1191	0.73	400	61 hz	21	1	All parameters stable when sample was collected
MC-15D	12/20/07	94407	7.12	1.09	13.73	263	0.1396	0.51	400	61 hz			Turbidity < 5 NTU
MC-15D	12/20/07	94706	7.06	0.77	15.26	262	0.1507	0.47	400	61 hz			D.O. > 0.20 mg/L
MC-15D	12/20/07	95007	7.01	0.62	15.92	261	0.1544	0.5	400	61 hz			
MC-15D	12/20/07	95305	6.97	0.53	16.25	260	0.1568	0.43	400	61 hz			
MC-15D	12/20/07	95618	6.94	0.51	16.44	260	0.1575	0.45	400	61 hz			
MC-15D	12/20/07	95910	6.91	0.49	16.52	259	0.1579	0.4	400	61 hz			
MC-16	12/20/07	102006	7.36	2.27	8.59	254	0.0997	8.96	200	1.0 cpm	18	0.13	All parameters stable when sample was collected
MC-16	12/20/07	102306	7.14	1.79	8.47	258	0.0971	4.71	200	1.0 cpm			Turbidity < 5 NTU
MC-16	12/20/07	102605	7.04	1.65	8.51	258	0.0944	4.16	200	1.0 cpm			D.O. > 0.20 mg/L
MC-16	12/20/07	102906	6.99	1.74	8.53	257	0.0903	3.77	200	1.0 cpm			
MC-16	12/20/07	103206	6.95	1.82	8.55	256	0.0884	3.4	200	1.0 cpm			
MC-16	12/20/07	103506	6.92	1.9	8.55	256	0.0869	2.6	200	1.0 cpm			
MC-17	12/20/07	105714	6.98	2.64	9.55	259	0.095	1.6	200	1.0 cpm	15	0.06	All parameters stable when sample was collected
MC-17	12/20/07	110005	6.91	2.12	9.75	260	0.0956	1.37	200	1.0 cpm			Turbidity < 5 NTU
MC-17	12/20/07	110313	6.87	2.06	9.97	261	0.095	1.18	200	1.0 cpm			D.O. > 0.20 mg/L
MC-17	12/20/07	110607	6.85	2.14	10.1	261	0.0948	0.86	200	1.0 cpm			
MC-17	12/20/07	110914	6.82	2.16	10.26	261	0.0943	0.63	200	1.0 cpm			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
		HHMMSS	Units	mg/l	øC	mV	mS/cm	NTUs	mL/min	hz or cpm	minutes	0.01 feet	
MC-17D	12/20/07	112722	7.01	1.31	13.31	258	0.1148	3.48	400	69 hz	18	0.72	All parameters stable when sample was collected
MC-17D	12/20/07	113008	6.96	0.9	13.45	259	0.1157	2.11	400	69 hz			Turbidity < 5 NTU
MC-17D	12/20/07	113306	6.93	0.75	14.11	259	0.1202	1.64	400	69 hz			D.O. > 0.20 mg/L
MC-17D	12/20/07	113606	6.93	0.66	14.79	258	0.1246	1.12	400	69 hz			
MC-17D	12/20/07	113905	6.93	0.63	15.06	257	0.1266	0.88	400	69 hz			
MC-17D	12/20/07	114206	6.91	0.61	15.32	257	0.1274	0.76	400	69 hz			
MC-107	12/20/07	121920	7.43	4.39	9.28	244	0.0734	3.51	200	1.0 cpm	21	0.07	All parameters stable when sample was collected
MC-107	12/20/07	122209	7.28	3.84	9.51	249	0.0721	3.09	200	1.0 cpm			Turbidity < 5 NTU
MC-107	12/20/07	122506	7.14	3.57	9.75	250	0.0719	2.62	200	1.0 cpm			D.O. > 0.20 mg/L
MC-107	12/20/07	122806	7.08	3.2	9.98	251	0.0715	1.49	200	1.0 cpm			
MC-107	12/20/07	123106	7.02	3.06	10.28	251	0.0726	1.08	200	1.0 cpm			
MC-107	12/20/07	123420	6.99	2.96	10.58	252	0.0738	0.73	200	1.0 cpm			
MC-107	12/20/07	123707	6.96	2.84	10.86	253	0.0746	0.66	200	1.0 cpm			
MC-8	12/20/07	131308	7.03	5.68	10.6	254	0.0503	8.37	200	1.0 cpm	15	0.05	All parameters stable when sample was collected
MC-8	12/20/07	131605	6.91	5.62	10.38	256	0.049	8.02	200	1.0 cpm			Turbidity < 5 NTU
MC-8	12/20/07	131917	6.88	5.65	10.18	257	0.0484	7.82	200	1.0 cpm			D.O. > 0.20 mg/L
MC-8	12/20/07	132212	6.82	5.59	10.13	258	0.0481	7.5	200	1.0 cpm			
MC-8	12/20/07	132506	6.79	5.56	10.1	259	0.0479	7.25	200	1.0 cpm			
MC-19D	12/21/07	90306	7.65	0.98	12.91	258	0.1189	6.28	400	69 hz	18	0.02	All parameters stable when sample was collected
MC-19D	12/21/07	90606	7.49	0.55	14.49	257	0.1284	2.62	400	69 hz			Turbidity < 5 NTU
MC-19D	12/21/07	90906	7.38	0.4	15.4	257	0.1351	2.16	400	69 hz			D.O. > 0.20 mg/L
MC-19D	12/21/07	91206	7.31	0.3	15.99	257	0.1381	1.88	400	69 hz			
MC-19D	12/21/07	91505	7.25	0.28	16.17	258	0.1395	1.13	400	69 hz			
MC-19D	12/21/07	91806	7.21	0.29	16.34	257	0.1398	0.74	400	69 hz			
MC-2	12/21/07	94612	6.88	0.67	14.43	266	0.1187	2.91	400	51 hz	15	0.54	All parameters stable when sample was collected
MC-2	12/21/07	94912	6.82	0.4	15.75	264	0.1231	1.51	400	51 hz			Turbidity < 5 NTU
MC-2	12/21/07	95206	6.78	0.3	16.73	263	0.1272	1.25	400	51 hz			D.O. > 0.20 mg/L
MC-2	12/21/07	95507	6.74	0.3	17.4	263	0.1287	1.11	400	51 hz			
MC-2	12/21/07	95806	6.7	0.28	17.7	263	0.129	0.94	400	51 hz			
MC-2D	12/21/07	101306	6.8	1.24	14.25	272	0.1221	1.78	400	63 hz	18	1.12	All parameters stable when sample was collected
MC-2D	12/21/07	101606	6.76	0.61	13.88	274	0.1219	1.47	400	63 hz			Turbidity < 5 NTU
MC-2D	12/21/07	101906	6.81	0.47	14.95	271	0.1309	1.26	400	63 hz			D.O. > 0.20 mg/L
MC-2D	12/21/07	102206	6.83	0.4	16.12	268	0.1408	1.93	400	63 hz			
MC-2D	12/21/07	102505	6.83	0.37	16.8	267	0.1424	1.21	400	63 hz			
MC-2D	12/21/07	102805	6.82	0.37	17.05	266	0.144	0.88	400	63 hz			
MC-118D	12/21/07	110906	6.77	1.59	13.9	281	0.1414	44.2	400	67 hz	18	2.28	All parameters stable when sample was collected
MC-118D	12/21/07	111207	6.61	0.71	15.62	280	0.1547	14.2	400	67 hz			Turbidity < 5 NTU
MC-118D	12/21/07	111506	6.58	0.58	17.15	278	0.1677	4.37	400	67 hz			D.O. > 0.20 mg/L
MC-118D	12/21/07	111806	6.58	0.63	17.85	277	0.1755	3.3	400	67 hz			
MC-118D	12/21/07	112105	6.59	0.63	18.13	276	0.1798	1.08	400	67 hz			
MC-118D	12/21/07	112405	6.58	0.61	18.21	275	0.1813	0.7	400	67 hz			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
		HHMMSS	Units	mg/l	øC	mV	mS/cm	NTUs	mL/min	hz or cpm	minutes	0.01 feet	
MC-12	12/21/07	115006	7.6	2.73	10.16	258	0.1066	0.91	200	1.0 cpm	19	0.05	All parameters stable when sample was collected
MC-12	12/21/07	115307	7.46	2.41	9.71	254	0.101	0.64	200	1.0 cpm			Turbidity < 5 NTU
MC-12	12/21/07	115613	7.41	2.33	9.5	254	0.0986	0.54	200	1.0 cpm			D.O. > 0.20 mg/L
MC-12	12/21/07	115911	7.37	1.75	9.6	252	0.0974	0.49	200	1.0 cpm			Fe test kit reading- 1.42 mg/l
MC-12	12/21/07	120206	7.33	1.67	9.66	252	0.0972	0.4	200	1.0 cpm			
MC-12	12/21/07	120505	7.29	1.6	9.7	252	0.0965	0.36	200	1.0 cpm			
MC-12D	12/21/07	122530	6.56	1.44	12.86	279	0.1261	4.11	400	63 hz	15	1.03	All parameters stable when sample was collected
MC-12D	12/21/07	122806	6.56	0.61	14.02	277	0.1359	2.29	400	63 hz			Turbidity < 5 NTU
MC-12D	12/21/07	123106	6.58	0.43	15.61	274	0.1493	1.33	400	63 hz			D.O. > 0.20 mg/L
MC-12D	12/21/07	123405	6.58	0.41	16.33	272	0.1527	0.9	400	63 hz			
MC-12D	12/21/07	123721	6.58	0.39	16.75	270	0.1531	0.74	400	63 hz			
MC-10D	12/21/07	125615	6.86	0.93	12.25	270	0.1194	32.4	400	70 hz	21	0.89	All parameters stable when sample was collected
MC-10D	12/21/07	125907	6.79	0.57	12.5	269	0.1203	16.5	400	70 hz			Turbidity < 5 NTU
MC-10D	12/21/07	130206	6.77	0.47	13.41	267	0.1265	3.73	400	70 hz			D.O. > 0.20 mg/L
MC-10D	12/21/07	130505	6.76	0.4	14.47	265	0.1341	1.34	400	70 hz			
MC-10D	12/21/07	130805	6.74	0.37	15.22	264	0.1405	0.89	400	70 hz			
MC-10D	12/21/07	131106	6.72	0.35	15.88	263	0.1436	0.85	400	70 hz			
MC-10D	12/21/07	131406	6.7	0.34	15.91	262	0.1438	0.81	400	70 hz			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS	Units	mg/l	øC	mV	mS/cm	NTUs	mL/min	hz or cpm	minutes	0.01 feet	
UT-ST-1	3/10/08	94807	7.98	4.20	11.23	313	0.0482	1.53	100	0.2 cpm	18	0.29	All parameters stable when sample was collected
UT-ST-1	3/10/08	95103	7.79	4.15	11.23	312	0.0458	4.43	100	0.2 cpm			Turbidity < 5 NTU
UT-ST-1	3/10/08	95417	7.72	4.09	11.19	311	0.0445	4.39	100	0.2 cpm			D.O. > 0.20 mg/ L
UT-ST-1	3/10/08	95707	7.67	4.05	11.15	309	0.0434	3.23	100	0.2 cpm			Fe test kit reading 0.16 mg/L
UT-ST-1	3/10/08	100006	7.69	4.01	11.11	308	0.0439	2.65	100	0.2 cpm			
UT-ST-1	3/10/08	100308	7.64	3.94	11.10	308	0.0445	2.26	100	0.2 cpm			
PZU-4	3/10/08	122305	7.65	1.94	14.21	303	0.0488	13.0	100	0.2 cpm	27	0.36	All parameters stable when sample was collected
PZU-4	3/10/08	122617	7.45	1.78	13.87	304	0.0483	26.7	100	0.2 cpm			Turbidity < 5 NTU
PZU-4	3/10/08	122953	7.33	1.66	13.45	301	0.0484	9.83	100	0.2 cpm			D.O. > 0.20 mg/ L
PZU-4	3/10/08	123218	7.27	1.53	13.24	301	0.0486	8.19	100	0.2 cpm			Fe test kit reading 3.30 mg/L upper limit
PZU-4	3/10/08	123509	7.25	1.46	13.13	300	0.0489	6.00	100	0.2 cpm			
PZU-4	3/10/08	123807	7.20	1.39	13.23	299	0.0487	5.53	100	0.2 cpm			
PZU-4	3/10/08	124132	7.19	1.31	13.14	299	0.0487	4.43	100	0.2 cpm			
PZU-4	3/10/08	124428	7.19	1.27	13.17	298	0.0488	4.61	100	0.2 cpm			
PZU-4	3/10/08	124744	7.17	1.22	13.11	297	0.0492	4.34	100	0.2 cpm			
PZU-5	3/10/08	145806	7.31	1.50	15.32	314	0.2688	31.2	100	0.2 cpm	27	0.32	All parameters stable when sample was collected
PZU-5	3/10/08	150106	7.21	1.40	15.05	317	0.2694	33.6	100	0.2 cpm			Turbidity > 5 NTU but stable
PZU-5	3/10/08	150407	7.12	1.28	15.04	318	0.2683	28.6	100	0.2 cpm			D.O. > 0.20 mg/ L
PZU-5	3/10/08	150706	7.12	1.21	14.84	319	0.2683	27.8	100	0.2 cpm			Fe test kit reading 3.30 mg/L upper limit
PZU-5	3/10/08	151036	7.11	1.15	14.76	320	0.2684	26.7	100	0.2 cpm			
PZU-5	3/10/08	151308	7.06	1.05	14.77	319	0.2680	21.0	100	0.2 cpm			
PZU-5	3/10/08	151615	7.08	1.02	14.81	320	0.2656	17.9	100	0.2 cpm			
PZU-5	3/10/08	151959	7.08	1.04	14.87	319	0.2575	17.2	100	0.2 cpm			
PZU-5	3/10/08	152230	7.08	1.06	14.83	319	0.2588	16.8	100	0.2 cpm			
MC-123	3/11/08	80206	7.41	1.33	10.80	346	0.3105	94.9	100	0.2 cpm	27	0.39	All parameters stable when sample was collected
MC-123	3/11/08	80506	7.33	1.20	10.88	346	0.3063	62.0	100	0.2 cpm			Turbidity > 5 NTU but stable
MC-123	3/11/08	80808	7.18	1.04	11.08	346	0.3025	48.9	100	0.2 cpm			D.O. > 0.20 mg/ L
MC-123	3/11/08	81219	7.10	0.89	11.16	345	0.2995	32.2	100	0.2 cpm			Fe test kit reading 3.30 mg/L upper limit
MC-123	3/11/08	81405	7.11	0.84	11.18	345	0.2988	28.6	100	0.2 cpm			
MC-123	3/11/08	81734	7.06	0.80	11.15	344	0.2983	19.2	100	0.2 cpm			
MC-123	3/11/08	82018	7.03	0.78	11.12	343	0.2980	10.9	100	0.2 cpm			
MC-123	3/11/08	82305	7.01	0.75	11.09	342	0.2978	10.5	100	0.2 cpm			
MC-123	3/11/08	82606	7.00	0.72	11.07	340	0.2978	9.90	100	0.2 cpm			
MC-20D	3/11/08	93306	7.68	2.84	12.83	327	0.1026	19.7	400	4.0 cpm	24	1.06	All parameters stable when sample was collected
MC-20D	3/11/08	93605	7.67	1.27	13.03	332	0.1007	59.6	400	4.0 cpm			Turbidity > 5 NTU but stable
MC-20D	3/11/08	93905	7.83	0.82	13.17	331	0.0999	68.5	400	4.0 cpm			D.O. > 0.20 mg/ L
MC-20D	3/11/08	94240	7.74	0.61	13.18	330	0.0995	52.2	400	4.0 cpm			Fe test kit reading 1.63 mg/L
MC-20D	3/11/08	94505	7.84	0.53	13.19	322	0.0992	40.5	400	4.0 cpm			
MC-20D	3/11/08	94805	7.80	0.49	13.15	319	0.0992	35.8	400	4.0 cpm			
MC-20D	3/11/08	95109	7.81	0.45	13.00	317	0.0990	33.7	400	4.0 cpm			
MC-20D	3/11/08	95428	7.85	0.44	13.00	316	0.0989	32.9	400	4.0 cpm			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS	Units	mg/l	øC	mV	mS/cm	NTUs	mL/min	hz or cpm	minutes	0.01 feet	
MC-122	3/11/08	104643	7.57	1.20	11.60	323	0.0880	156.6	100	0.2 cpm	27	0.95	All parameters stable when sample was collected
MC-122	3/11/08	104906	7.56	1.10	11.59	323	0.0870	111.9	100	0.2 cpm			Turbidity > 5 NTU but stable
MC-122	3/11/08	105247	7.53	0.94	11.47	323	0.0861	74.1	100	0.2 cpm			D.O. > 0.20 mg/ L
MC-122	3/11/08	105547	7.51	0.84	11.42	323	0.0856	53.9	100	0.2 cpm			Fe test kit reading 2.97 mg/L
MC-122	3/11/08	105825	7.48	0.81	11.31	323	0.0857	42.8	100	0.2 cpm			
MC-122	3/11/08	110110	7.47	0.78	11.17	322	0.0857	34.7	100	0.2 cpm			
MC-122	3/11/08	110406	7.40	0.76	11.11	322	0.0861	33.8	100	0.2 cpm			
MC-122	3/11/08	110720	7.45	0.76	11.19	322	0.0869	33.7	100	0.2 cpm			
MC-14D	3/11/08	124312	8.10	1.53	13.46	324	0.0926	9.63	400	4.0 cpm	21	1.84	All parameters stable when sample was collected
MC-14D	3/11/08	124606	8.02	1.06	13.63	323	0.0926	7.26	400	4.0 cpm			Turbidity < 5 NTU
MC-14D	3/11/08	124912	8.02	0.83	13.69	320	0.0927	5.33	400	4.0 cpm			D.O. > 0.20 mg/ L
MC-14D	3/11/08	125223	8.00	0.66	13.76	323	0.0928	3.61	400	4.0 cpm			Fe test kit reading 0.87 mg/L
MC-14D	3/11/08	125505	8.00	0.55	13.71	318	0.0929	3.24	400	4.0 cpm			
MC-14D	3/11/08	125806	8.02	0.51	13.71	315	0.0931	3.01	400	4.0 cpm			
MC-14D	3/11/08	130106	7.94	0.50	13.87	320	0.0933	2.90	400	4.0 cpm			
MC-24D	3/11/08	140419	7.27	1.82	13.15	324	0.6833	796.0	400	4.0 cpm	42	0.16	All parameters stable when sample was collected
MC-24D	3/11/08	140741	7.14	0.94	13.41	332	0.6891	563.0	400	4.0 cpm			Turbidity > 5 NTU but stable
MC-24D	3/11/08	141035	7.12	0.81	13.42	334	0.6902	346.0	400	4.0 cpm			D.O. > 0.20 mg/ L
MC-24D	3/11/08	141305	7.08	0.68	13.43	338	0.6883	309.0	400	4.0 cpm			Fe test kit reading 0.76 mg/L
MC-24D	3/11/08	141617	7.09	0.89	13.48	344	0.6112	167.8	400	4.0 cpm			
MC-24D	3/11/08	141940	7.07	0.76	13.52	343	0.6884	87.2	400	4.0 cpm			
MC-24D	3/11/08	142206	7.06	0.93	13.61	346	0.6866	55.1	400	4.0 cpm			
MC-24D	3/11/08	142513	7.05	1.18	13.60	349	0.6876	34.7	400	4.0 cpm			
MC-24D	3/11/08	142806	7.05	1.00	13.66	351	0.6896	25.2	400	4.0 cpm			
MC-24D	3/11/08	143105	7.06	0.88	13.82	353	0.6909	19.3	400	4.0 cpm			
MC-24D	3/11/08	143405	6.98	0.78	13.94	359	0.6916	16.1	400	4.0 cpm			
MC-24D	3/11/08	143738	7.05	0.70	13.90	356	0.6915	13.8	400	4.0 cpm			
MC-24D	3/11/08	144016	7.04	0.69	13.96	357	0.6915	13.5	400	4.0 cpm			
MC-24D	3/11/08	144306	7.03	0.67	13.96	358	0.6916	12.9	400	4.0 cpm			
MC-24	3/12/08	82916	8.87	7.06	8.56	350	0.0271	29.5	400	4.0 cpm	24	0.06	All parameters stable when sample was collected
MC-24	3/12/08	83202	8.43	6.42	8.75	352	0.0298	26.3	400	4.0 cpm			Turbidity > 5 NTU but stable
MC-24	3/12/08	83505	8.45	6.31	8.75	378	0.0305	24.7	400	4.0 cpm			D.O. > 0.20 mg/ L
MC-24	3/12/08	83822	8.22	6.16	8.81	350	0.0309	20.2	400	4.0 cpm			Fe test kit reading 0.49 mg/L
MC-24	3/12/08	84114	8.25	6.04	8.79	348	0.0310	16.7	400	4.0 cpm			
MC-24	3/12/08	84448	5.05	6.00	8.80	349	0.0312	14.6	400	4.0 cpm			
MC-24	3/12/08	84705	8.05	5.97	8.79	347	0.0312	14.0	400	4.0 cpm			
MC-24	3/12/08	85006	8.00	5.91	8.81	347	0.0313	13.5	400	4.0 cpm			
MC-25D	3/12/08	93306	7.42	1.18	13.13	351	0.6061	157.6	400	4.0 cpm	24	0.47	All parameters stable when sample was collected
MC-25D	3/12/08	93606	7.32	0.74	13.40	354	0.6095	84.6	400	4.0 cpm			Turbidity > 5 NTU but stable
MC-25D	3/12/08	93905	7.33	0.60	13.46	356	0.6035	75.7	400	4.0 cpm			D.O. > 0.20 mg/ L
MC-25D	3/12/08	94219	7.31	0.51	13.51	359	0.5948	63.6	400	4.0 cpm			Fe test kit reading 1.91 mg/L
MC-25D	3/12/08	94507	7.31	0.46	13.58	360	0.5905	53.9	400	4.0 cpm			
MC-25D	3/12/08	94806	7.28	0.43	13.52	362	0.5876	41.8	400	4.0 cpm			
MC-25D	3/12/08	95106	7.28	0.40	13.54	364	0.5853	39.1	400	4.0 cpm			
MC-25D	3/12/08	95414	7.25	0.39	13.59	365	0.5842	38.2	400	4.0 cpm			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS	Units	mg/l	øC	mV	mS/cm	NTUs	mL/min	hz or cpm	minutes	0.01 feet	
MC-25	3/12/08	102006	7.88	6.54	10.31	360	0.0682	26.0	250	4.0 cpm	21	0.09	All parameters stable when sample was collected
MC-25	3/12/08	102355	7.64	6.10	10.11	361	0.0650	17.5	250	4.0 cpm			Turbidity > 5 NTU but stable
MC-25	3/12/08	102605	7.55	5.97	10.02	360	0.0650	13.9	250	4.0 cpm			D.O. > 0.20 mg/ L
MC-25	3/12/08	102905	7.44	5.85	10.01	360	0.0651	11.1	250	4.0 cpm			Fe test kit reading 0.55 mg/L
MC-25	3/12/08	103206	7.36	5.65	10.01	361	0.0656	8.57	250	4.0 cpm			
MC-25	3/12/08	103506	7.30	5.65	10.01	360	0.0657	8.06	250	4.0 cpm			
MC-25	3/12/08	103820	7.27	5.63	10.03	360	0.0658	7.91	250	4.0 cpm			
MC-13D	3/12/08	112606	7.82	2.69	11.85	358	0.1025	2.16	200	1.0 cpm	18	0.68	All parameters stable when sample was collected
MC-13D	3/12/08	112906	7.82	2.23	11.58	358	0.1011	0.64	200	1.0 cpm			Turbidity < 5 NTU
MC-13D	3/12/08	113205	7.71	1.95	11.40	359	0.1010	0.54	200	1.0 cpm			D.O. > 0.20 mg/ L
MC-13D	3/12/08	113505	7.77	1.63	11.37	356	0.1007	0.49	200	1.0 cpm			
MC-13D	3/12/08	113806	7.72	1.58	11.34	354	0.1008	0.47	200	1.0 cpm			
MC-13D	3/12/08	114105	7.70	1.50	11.28	353	0.1007	0.43	200	1.0 cpm			
MC-13	3/12/08	120511	7.86	1.38	11.07	147	0.0399	29.9	400	3.0 cpm	21	0.10	All parameters stable when sample was collected
MC-13	3/12/08	120806	7.66	0.76	10.93	90	0.0416	12.1	400	3.0 cpm			Turbidity < 5 NTU
MC-13	3/12/08	121106	7.66	0.42	10.91	55	0.0440	4.68	400	3.0 cpm			D.O. > 0.20 mg/ L
MC-13	3/12/08	121405	7.51	0.45	10.94	38	0.0452	3.31	400	3.0 cpm			
MC-13	3/12/08	121713	7.57	0.47	10.86	28	0.0458	2.83	400	3.0 cpm			
MC-13	3/12/08	122006	7.48	0.38	10.77	22	0.0464	2.51	400	3.0 cpm			
MC-13	3/12/08	122306	7.49	0.28	10.79	17	0.0466	2.03	400	3.0 cpm			
MC-15	3/12/08	124908	7.31	1.58	10.70	144	0.1043	5.42	200	1.0 cpm	21	0.56	All parameters stable when sample was collected
MC-15	3/12/08	125210	7.18	1.25	10.39	109	0.1218	4.19	200	1.0 cpm			Turbidity < 5 NTU
MC-15	3/12/08	125506	7.13	1.11	10.14	94	0.1281	3.98	200	1.0 cpm			D.O. > 0.20 mg/ L
MC-15	3/12/08	125806	7.16	1.06	10.01	90	0.1241	2.64	200	1.0 cpm			
MC-15	3/12/08	130107	7.06	1.01	9.94	94	0.1198	2.28	200	1.0 cpm			
MC-15	3/12/08	130423	7.09	0.96	9.90	102	0.1184	2.01	200	1.0 cpm			
MC-15	3/12/08	130705	7.03	0.91	9.91	101	0.1175	1.37	200	1.0 cpm			
MC-15D	3/12/08	133405	7.11	0.87	12.19	230	0.2334	1.38	400	64 hz	15	1.16	All parameters stable when sample was collected
MC-15D	3/12/08	133705	7.25	0.50	14.12	220	0.2472	0.53	400	64 hz			Turbidity < 5 NTU
MC-15D	3/12/08	134006	7.30	0.41	15.79	216	0.2482	0.35	400	64 hz			D.O. > 0.20 mg/ L
MC-15D	3/12/08	134310	7.31	0.39	16.08	214	0.2472	0.33	400	64 hz			
MC-15D	3/12/08	134646	7.30	0.38	16.20	213	0.2463	0.30	400	64 hz			
MC-16	3/12/08	141305	7.46	2.51	10.75	194	0.0843	10.7	200	1.0 cpm	27	0.42	All parameters stable when sample was collected
MC-16	3/12/08	141606	7.46	1.99	10.54	151	0.0862	7.19	200	1.0 cpm			Turbidity < 5 NTU
MC-16	3/12/08	142904	7.42	1.23	10.38	90	0.0887	7.00	200	1.0 cpm			D.O. > 0.20 mg/ L
MC-16	3/12/08	142258	7.42	0.84	10.34	51	0.0908	2.50	200	1.0 cpm			
MC-16	3/12/08	142524	7.33	0.74	10.32	17	0.0941	2.08	200	1.0 cpm			
MC-16	3/12/08	142806	7.36	0.75	10.32	5	0.0953	1.99	200	1.0 cpm			
MC-16	3/12/08	143106	7.34	0.68	10.30	-9	0.0971	1.47	200	1.0 cpm			
MC-16	3/12/08	143406	7.34	0.65	10.26	-16	0.0996	1.30	200	1.0 cpm			
MC-16	3/12/08	143706	7.39	0.65	10.21	-18	0.0979	1.08	200	1.0 cpm			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS	Units	mg/l	øC	mV	mS/cm	NTUs	mL/min	hz or cpm	minutes	0.01 feet	
MC-17	3/12/08	150906	7.47	1.08	11.34	-18	0.1899	3.80	200	1.0 cpm	21	0.11	All parameters stable when sample was collected
MC-17	3/12/08	151206	7.45	0.97	11.10	-11	0.1250	3.43	200	1.0 cpm			Turbidity < 5 NTU
MC-17	3/12/08	151505	7.39	0.69	10.92	5	0.0958	3.29	200	1.0 cpm			D.O. > 0.20 mg/ L
MC-17	3/12/08	151816	7.38	0.65	10.79	19	0.0815	1.78	200	1.0 cpm			
MC-17	3/12/08	152104	7.33	0.64	10.81	36	0.0736	1.08	200	1.0 cpm			
MC-17	3/12/08	152458	7.26	0.66	10.85	40	0.0724	0.75	200	1.0 cpm			
MC-17	3/12/08	152717	7.24	0.62	10.88	46	0.0718	0.71	200	1.0 cpm			
MC-17D	3/12/08	155219	7.34	0.98	13.30	187	0.1071	21.2	400	66 hz	15	0.20	All parameters stable when sample was collected
MC-17D	3/12/08	155506	7.37	0.58	13.57	178	0.1085	2.83	400	66 hz			Turbidity < 5 NTU
MC-17D	3/12/08	155816	7.43	0.47	14.66	169	0.1079	0.80	400	66 hz			D.O. > 0.20 mg/ L
MC-17D	3/12/08	160106	7.44	0.49	15.07	164	0.1084	0.55	400	66 hz			
MC-17D	3/12/08	160409	7.44	0.48	15.10	161	0.1088	0.52	400	66 hz			
MC-20	3/13/08	90006	7.58	1.78	10.01	252	0.1892	110.6	100	0.2 cpm	27	0.07	All parameters stable when sample was collected
MC-20	3/13/08	90306	7.35	1.52	9.96	237	0.1912	88.3	100	0.2 cpm			Turbidity > 5 NTU but stable
MC-20	3/13/08	90612	7.24	1.43	9.90	223	0.1942	72.1	100	0.2 cpm			D.O. > 0.20 mg/ L
MC-20	3/13/08	90912	7.16	1.26	9.85	210	0.1975	55.5	100	0.2 cpm			Fe test kit reading 3.30 mg/L Upper Limit
MC-20	3/13/08	91206	7.13	1.40	9.81	197	0.2007	43.8	100	0.2 cpm			
MC-20	3/13/08	91506	7.10	1.13	9.79	183	0.2042	34.2	100	0.2 cpm			
MC-20	3/13/08	91808	7.08	1.08	9.75	170	0.2070	26.8	100	0.2 cpm			
MC-20	3/13/08	92138	7.06	1.06	9.73	170	0.2097	25.3	100	0.2 cpm			
MC-20	3/13/08	92448	7.04	1.09	9.71	168	0.2112	24.2	100	0.2 cpm			
MC-14	3/13/08	100821	7.22	1.50	9.54	17	0.6765	12.3	100	0.2 cpm	27	1.32	All parameters stable when sample was collected
MC-14	3/13/08	101126	7.22	1.34	9.57	8	0.6486	15.4	100	0.2 cpm			Turbidity < 5 NTU
MC-14	3/13/08	101417	7.22	1.16	9.59	5	0.6332	15.0	100	0.2 cpm			D.O. > 0.20 mg/ L
MC-14	3/13/08	101705	7.21	1.12	9.61	2	0.6271	12.6	100	0.2 cpm			Fe test kit reading 3.30 mg/L Upper Limit
MC-14	3/13/08	102009	7.21	0.88	9.60	1	0.6265	12.2	100	0.2 cpm			
MC-14	3/13/08	102306	7.19	0.82	9.56	1	0.6289	11.3	100	0.2 cpm			
MC-14	3/13/08	102611	7.18	1.00	9.52	2	0.6280	2.02	100	0.2 cpm			
MC-14	3/13/08	102924	7.18	0.96	9.53	3	0.6270	1.35	100	0.2 cpm			
MC-14	3/13/08	103214	7.19	0.93	9.54	4	0.6263	1.08	100	0.2 cpm			
MC-21	3/13/08	113731	7.62	1.13	10.84	143	0.1263	0.79	400	3.0 cpm	21	0.05	All parameters stable when sample was collected
MC-21	3/13/08	114108	7.48	1.20	11.02	125	0.1165	0.70	400	3.0 cpm			Turbidity < 5 NTU
MC-21	3/13/08	114309	7.42	1.28	11.06	121	0.1144	0.63	400	3.0 cpm			D.O. > 0.20 mg/ L
MC-21	3/13/08	114606	7.36	1.19	11.08	114	0.1127	0.13	400	3.0 cpm			Fe test kit reading 3.30 mg/L Upper Limit
MC-21	3/13/08	114947	7.32	1.22	11.06	102	0.1105	0.08	400	3.0 cpm			
MC-21	3/13/08	115210	7.32	1.34	11.04	95	0.1088	0.06	400	3.0 cpm			
MC-21	3/13/08	115506	7.28	1.13	11.03	90	0.1084	0.10	400	3.0 cpm			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS	Units	mg/l	øC	mV	mS/cm	NTUs	mL/min	hz or cpm	minutes	0.01 feet	
MC-10D	3/13/08	123008	7.30	0.70	13.10	110	0.5486	20.00	400	71 hz	27	1.36	All parameters stable when sample was collected
MC-10D	3/13/08	123309	7.32	0.61	14.25	87	0.5534	59.90	400	71 hz			Turbidity > 5 NTU but stable
MC-10D	3/13/08	123610	7.33	0.60	14.93	68	0.5564	59.20	400	71 hz			D.O. > 0.20 mg/ L
MC-10D	3/13/08	123904	7.31	0.59	15.21	54	0.5609	42.50	400	71 hz			
MC-10D	3/13/08	124217	7.30	0.39	15.49	40	0.5671	28.10	400	71 hz			
MC-10D	3/13/08	124505	7.29	0.35	15.52	29	0.5727	24.30	400	71 hz			
MC-10D	3/13/08	124801	7.27	0.33	15.50	24	0.5780	17.60	400	71 hz			
MC-10D	3/13/08	125111	7.28	0.31	15.60	20	0.5808	16.70	400	71 hz			
MC-10D	3/13/08	125412	7.29	0.32	15.64	20	0.5822	16.30	400	71 hz			
MC-12D	3/13/08	131905	7.23	0.71	14.54	113	0.7252	16.50	400	62 hz	21	0.65	All parameters stable when sample was collected
MC-12D	3/13/08	132215	7.19	0.62	14.17	110	0.7109	6.49	400	62 hz			Turbidity > 5 NTU but stable
MC-12D	3/13/08	132507	7.18	0.46	15.11	106	0.7068	6.28	400	62 hz			D.O. > 0.20 mg/ L
MC-12D	3/13/08	132832	7.18	0.45	15.93	102	0.7078	14.90	400	62 hz			
MC-12D	3/13/08	133122	7.17	0.51	16.21	100	0.7049	16.40	400	62 hz			
MC-12D	3/13/08	133553	7.16	0.46	16.46	97	0.7028	17.10	400	62 hz			
MC-12D	3/13/08	133726	7.15	0.49	16.53	97	0.7005	16.20	400	62 hz			
MC-12	3/13/08	140423	8.04	2.58	9.55	169	0.0704	2.21	200	1.0 cpm	15	0.04	All parameters stable when sample was collected
MC-12	3/13/08	140706	7.98	1.74	9.43	167	0.0665	0.26	200	1.0 cpm			Turbidity < 5 NTU
MC-12	3/13/08	141006	7.94	1.26	9.39	162	0.0649	0.22	200	1.0 cpm			D.O. > 0.20 mg/ L
MC-12	3/13/08	141306	7.88	0.96	9.38	159	0.0642	0.21	200	1.0 cpm			Fe test kit reading 3.30 mg/L Upper Limit
MC-12	3/13/08	141605	7.85	0.98	9.41	156	0.0643	0.19	200	1.0 cpm			
MC-19D	3/14/08	85013	7.71	0.78	12.93	316	0.0883	10.00	400	71 hz	18	0.00	All parameters stable when sample was collected
MC-19D	3/14/08	85306	7.66	0.47	14.15	313	0.0888	3.93	400	71 hz			Turbidity < 5 NTU
MC-19D	3/14/08	85606	7.62	0.46	15.03	311	0.0894	3.28	400	71 hz			D.O. > 0.20 mg/ L
MC-19D	3/14/08	85906	7.60	0.37	15.42	309	0.0898	3.03	400	71 hz			
MC-19D	3/14/08	90207	7.59	0.45	15.81	308	0.0902	2.21	400	71 hz			
MC-19D	3/14/08	90508	7.56	0.31	15.86	307	0.0905	2.03	400	71 hz			
MC-8	3/14/08	93406	7.60	5.51	8.90	318	0.0623	3.17	200	1.0 cpm	21	0.16	All parameters stable when sample was collected
MC-8	3/14/08	93706	7.42	5.52	8.83	319	0.0628	2.62	200	1.0 cpm			Turbidity < 5 NTU
MC-8	3/14/08	94006	7.27	5.26	8.75	321	0.0629	2.43	200	1.0 cpm			D.O. > 0.20 mg/ L
MC-8	3/14/08	94305	7.17	5.27	8.68	321	0.0629	2.18	200	1.0 cpm			
MC-8	3/14/08	94648	7.05	5.38	8.65	325	0.0633	1.43	200	1.0 cpm			
MC-8	3/14/08	94906	7.00	5.33	8.60	326	0.0632	0.85	200	1.0 cpm			
MC-8	3/14/08	95212	6.97	5.18	8.60	326	0.0632	0.72	200	1.0 cpm			
MC-107	3/14/08	102006	7.44	3.47	8.77	324	0.0343	3.01	200	1.0 cpm	18	0.03	All parameters stable when sample was collected
MC-107	3/14/08	102306	7.40	3.09	8.72	323	0.0351	2.14	200	1.0 cpm			Turbidity < 5 NTU
MC-107	3/14/08	102642	7.40	2.62	8.61	322	0.0360	1.08	200	1.0 cpm			D.O. > 0.20 mg/ L
MC-107	3/14/08	102917	7.37	2.43	8.62	322	0.0365	1.00	200	1.0 cpm			
MC-107	3/14/08	103208	7.39	2.26	8.64	319	0.0367	0.72	200	1.0 cpm			
MC-107	3/14/08	103506	7.39	2.14	8.69	318	0.0363	0.61	200	1.0 cpm			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS	Units	mg/l	øC	mV	mS/cm	NTUs	mL/min	hz or cpm	minutes	0.01 feet	
MC-2D	3/14/08	111206	7.35	1.81	13.02	317	0.1950	5.13	400	64 hz	18	1.40	All parameters stable when sample was collected
MC-2D	3/14/08	111505	7.35	1.03	14.17	317	0.1987	2.84	400	64 hz			Turbidity < 5 NTU
MC-2D	3/14/08	111805	7.34	0.72	15.49	316	0.2017	0.52	400	64 hz			D.O. > 0.20 mg/ L
MC-2D	3/14/08	112106	7.34	0.88	16.11	316	0.2002	0.33	400	64 hz			
MC-2D	3/14/08	112412	7.32	0.86	16.42	316	0.1987	0.31	400	64 hz			
MC-2D	3/14/08	112710	7.33	0.95	16.69	316	0.1980	0.24	400	64 hz			
MC-2	3/14/08	115041	7.38	0.50	12.91	204	0.0648	6.64	400	51 hz	15	0.55	All parameters stable when sample was collected
MC-2	3/14/08	115305	7.41	0.39	14.00	183	0.0660	4.62	400	51 hz			Turbidity < 5 NTU
MC-2	3/14/08	115606	7.37	0.24	14.59	167	0.0674	2.18	400	51 hz			D.O. > 0.20 mg/ L
MC-2	3/14/08	115906	7.35	0.19	14.95	151	0.0670	1.54	400	51 hz			
MC-2	3/14/08	120206	7.30	0.25	15.17	137	0.0675	1.13	400	51 hz			
MC-1	3/14/08	122411	7.10	2.62	9.94	222	0.0337	7.44	400	55 hz	18	0.36	All parameters stable when sample was collected
MC-1	3/14/08	122706	7.00	2.90	10.72	223	0.0354	10.50	400	55 hz			Turbidity < 5 NTU
MC-1	3/14/08	123102	7.06	3.33	12.41	223	0.0342	7.18	400	55 hz			D.O. > 0.20 mg/ L
MC-1	3/14/08	123334	6.94	3.45	13.83	232	0.0339	4.85	400	55 hz			Fe test kit reading 0.67 mg/L
MC-1	3/14/08	123609	6.95	3.44	15.18	236	0.0337	4.32	400	55 hz			
MC-1	3/14/08	123921	6.95	3.33	15.10	241	0.0339	4.00	400	55 hz			
MC-118D	3/14/08	130821	7.05	1.01	12.24	223	0.6333	69.10	400	65 hz	27	1.58	All parameters stable when sample was collected
MC-118D	3/14/08	131106	7.04	0.67	14.05	170	0.6710	22.20	400	65 hz			Turbidity > 5 NTU but stable
MC-118D	3/14/08	131406	7.09	0.56	15.93	117	0.6794	17.70	400	65 hz			D.O. > 0.20 mg/ L
MC-118D	3/14/08	131711	7.10	0.61	16.52	78	0.6801	11.80	400	65 hz			
MC-118D	3/14/08	132006	7.11	0.48	17.38	48	0.6796	9.50	400	65 hz			
MC-118D	3/14/08	132334	7.11	0.53	17.67	19	0.6799	9.20	400	65 hz			
MC-118D	3/14/08	132616	7.12	0.45	17.84	2	0.6792	8.76	400	65 hz			
MC-118D	3/14/08	132909	7.12	0.42	18.29	-15	0.6774	8.18	400	65 hz			
MC-118D	3/14/08	133207	7.12	0.33	18.34	-30	0.6786	7.97	400	65 hz			

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Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	øC	mV	mS/cm	NTUs	ml/min	hz or cpm	minutes	0.01 feet	
UT-ST-1	6/9/08	95206	7.55	4.77	12.82	227	0.0673	1.24	100	0.2 cpm	18	0.88	All parameters stable when sample was collected.
UT-ST-1	6/9/08	95505	7.45	4.37	12.73	232	0.0648	0.89	100	0.2 cpm			Turbidity < 5 NTU
UT-ST-1	6/9/08	95808	7.39	4.09	12.64	236	0.0630	0.47	100	0.2 cpm			Do > 0.20 mg/L
UT-ST-1	6/9/08	100105	7.31	3.91	12.62	238	0.0622	0.42	100	0.2 cpm			Fe field test kit reading - 0.08 mg/L
UT-ST-1	6/9/08	100405	7.27	4.09	12.63	241	0.0610	0.38	100	0.2 cpm			
UT-ST-1	6/9/08	100708	7.24	4.27	12.61	243	0.0605	0.32	100	0.2 cpm			
PZU-4	6/9/08	120516	7.20	2.53	13.82	296	0.1443	11.4	100	0.2 cpm	21	0.34	All parameters stable when sample was collected.
PZU-4	6/9/08	120806	7.15	2.22	13.72	295	0.1381	10.0	100	0.2 cpm			Turbidity < 5 NTU
PZU-4	6/9/08	121113	7.08	1.94	13.70	294	0.1318	8.81	100	0.2 cpm			Do > 0.20 mg/L
PZU-4	6/9/08	121405	6.96	1.76	13.60	292	0.1273	6.58	100	0.2 cpm			Fe field test kit reading - 3.30 mg/L Upper Limit
PZU-4	6/9/08	121705	7.01	1.45	13.61	291	0.1175	4.86	100	0.2 cpm			
PZU-4	6/9/08	122006	7.03	1.39	13.65	289	0.1155	3.75	100	0.2 cpm			
PZU-4	6/9/08	122331	6.93	1.32	13.66	287	0.1142	2.80	100	0.2 cpm			
PZU-5	6/10/08	65605	7.12	2.40	10.36	321	0.4294	4.58	100	0.2 cpm	18	0.32	All parameters stable when sample was collected.
PZU-5	6/10/08	65905	7.04	2.00	10.58	321	0.4299	4.00	100	0.2 cpm			Turbidity < 5 NTU
PZU-5	6/10/08	70205	6.99	1.71	10.56	321	0.4334	3.25	100	0.2 cpm			Do > 0.20 mg/L
PZU-5	6/10/08	70506	6.98	1.47	10.66	321	0.4348	3.10	100	0.2 cpm			Fe field test kit reading - 2.66 mg/L
PZU-5	6/10/08	70806	6.94	1.42	10.69	320	0.4376	2.82	100	0.2 cpm			
PZU-5	6/10/08	71105	6.89	1.39	10.70	320	0.4376	3.00	100	0.2 cpm			
MC-123	6/10/08	92107	6.93	1.72	10.58	318	0.6456	31.80	100	0.2 cpm	27	0.39	All parameters stable when sample was collected.
MC-123	6/10/08	92405	6.84	1.25	11.04	318	0.6360	23.40	100	0.2 cpm			Turbidity < 5 NTU
MC-123	6/10/08	92709	6.82	1.04	11.02	318	0.6274	15.50	100	0.2 cpm			Do > 0.20 mg/L
MC-123	6/10/08	93009	6.79	0.93	11.02	317	0.6203	10.20	100	0.2 cpm			Fe field test kit reading - 3.30 mg/L Upper Limit
MC-123	6/10/08	93306	6.70	0.88	10.92	316	0.6154	7.18	100	0.2 cpm			
MC-123	6/10/08	93605	6.66	0.82	10.91	314	0.6090	5.28	100	0.2 cpm			
MC-123	6/10/08	93930	6.69	0.79	10.96	313	0.6014	3.15	100	0.2 cpm			
MC-123	6/10/08	94205	6.68	0.75	10.96	311	0.5971	2.30	100	0.2 cpm			
MC-123	6/10/08	94505	6.69	0.72	10.91	310	0.5914	1.43	100	0.2 cpm			
MC-20D	6/10/08	105113	7.54	1.39	13.33	199	0.1290	62.3	400	4.0 cpm	24	1.30	All parameters stable when sample was collected.
MC-20D	6/10/08	105405	7.65	0.94	13.25	196	0.1274	25.1	400	4.0 cpm			Turbidity < 5 NTU
MC-20D	6/10/08	105705	7.55	0.69	13.17	212	0.1281	10.8	400	4.0 cpm			Do > 0.20 mg/L
MC-20D	6/10/08	110005	7.64	0.52	13.27	190	0.1280	6.35	400	4.0 cpm			Fe field test kit reading - 1.13 mg/L
MC-20D	6/10/08	110305	7.47	0.60	13.47	180	0.1272	6.91	400	4.0 cpm			
MC-20D	6/10/08	110605	7.74	0.51	13.37	168	0.1278	3.78	400	4.0 cpm			
MC-20D	6/10/08	110906	7.72	0.49	13.13	163	0.1282	3.15	400	4.0 cpm			
MC-20D	6/10/08	111206	7.79	0.47	13.07	160	0.1284	1.75	400	4.0 cpm			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	øC	mV	mS/cm	NTUs	ml/min	hz or cpm	minutes	0.01 feet	
MC-122	6/10/08	114406	7.82	1.47	11.62	144	0.1113	35.5	100	0.2 cpm	33	1.08	All parameters stable when sample was collected.
MC-122	6/10/08	114706	7.75	1.11	11.70	142	0.1096	28.9	100	0.2 cpm			Turbidity < 5 NTU
MC-122	6/10/08	115005	7.67	0.89	11.66	140	0.1089	21.2	100	0.2 cpm			Do > 0.20 mg/L
MC-122	6/10/08	115305	7.64	0.75	11.67	137	0.1084	15.5	100	0.2 cpm			Fe field test kit reading - 0.83 mg/L
MC-122	6/10/08	115605	7.61	0.67	11.69	135	0.1079	10.3	100	0.2 cpm			
MC-122	6/10/08	115905	7.61	0.59	11.65	133	0.1077	8.42	100	0.2 cpm			
MC-122	6/10/08	120220	7.55	0.54	11.60	132	0.1074	6.48	100	0.2 cpm			
MC-122	6/10/08	120530	7.55	0.52	11.60	130	0.1074	5.05	100	0.2 cpm			
MC-122	6/10/08	120817	7.55	0.49	11.59	129	0.1071	4.51	100	0.2 cpm			
MC-122	6/10/08	121110	7.55	0.47	11.58	128	0.1071	4.28	100	0.2 cpm			
MC-122	6/10/08	121423	7.55	0.45	11.59	127	0.1069	3.75	100	0.2 cpm			
MC-14D	6/10/08	131606	7.53	3.58	13.00	189	0.1212	3.10	400	4.0 cpm	24	1.22	All parameters stable when sample was collected.
MC-14D	6/10/08	131906	7.91	1.51	13.24	186	0.1207	1.42	400	4.0 cpm			Turbidity < 5 NTU
MC-14D	6/10/08	132219	7.92	0.79	13.30	182	0.1204	0.76	400	4.0 cpm			Do > 0.20 mg/L
MC-14D	6/10/08	132505	7.94	0.52	13.35	180	0.1202	0.48	400	4.0 cpm			Fe field test kit reading - 1.14 mg/L
MC-14D	6/10/08	132806	7.91	0.37	13.40	176	0.1200	0.36	400	4.0 cpm			
MC-14D	6/10/08	133106	7.94	0.29	13.45	172	0.1200	0.28	400	4.0 cpm			
MC-14D	6/10/08	133405	7.92	0.28	13.48	167	0.1198	0.29	400	4.0 cpm			
MC-14D	6/10/08	133707	7.95	0.27	13.42	165	0.1209	0.27	400	4.0 cpm			
MC-24D	6/10/08	143405	7.18	0.77	13.62	161	0.6226	158.2	400	4.0 cpm	27	0.17	All parameters stable when sample was collected.
MC-24D	6/10/08	143713	7.33	0.46	13.54	157	0.6155	45.5	400	4.0 cpm			Turbidity < 5 NTU
MC-24D	6/10/08	144005	7.29	0.35	13.58	156	0.6115	24.2	400	4.0 cpm			Do < 0.20 mg/L but stable.
MC-24D	6/10/08	144310	7.24	0.30	13.59	155	0.6075	12.5	400	4.0 cpm			Do test kit reading - 0.22 mg/L
MC-24D	6/10/08	144605	7.23	0.27	13.58	154	0.6056	7.82	400	4.0 cpm			Fe field test kit reading - 0.68 mg/L
MC-24D	6/10/08	144905	7.08	0.20	13.57	156	0.6038	5.35	400	4.0 cpm			
MC-24D	6/10/08	145205	7.19	0.20	13.55	153	0.6016	4.31	400	4.0 cpm			
MC-24D	6/10/08	145513	7.17	0.19	13.58	154	0.6001	3.75	400	4.0 cpm			
MC-24D	6/10/08	145811	7.16	0.19	13.59	153	0.5987	2.91	400	4.0 cpm			
MC-24	6/11/08	75022	8.39	6.32	14.59	292	0.0484	10.0	400	4.0 cpm	15	0.06	All parameters stable when sample was collected.
MC-24	6/11/08	75306	7.98	5.82	14.79	292	0.0488	8.45	400	4.0 cpm			Turbidity > 5 NTU but stable.
MC-24	6/11/08	75605	7.80	5.57	14.90	294	0.0493	8.38	400	4.0 cpm			Do > 0.20 mg/L
MC-24	6/11/08	75906	7.84	5.52	14.95	294	0.0494	8.15	400	4.0 cpm			
MC-24	6/11/08	80205	7.75	5.41	14.97	294	0.0496	8.05	400	4.0 cpm			
MC-25D	6/11/08	84606	7.53	1.82	13.59	313	0.5723	6.75	400	4.0 cpm	21	0.42	All parameters stable when sample was collected.
MC-25D	6/11/08	84907	7.41	0.67	13.61	313	0.5655	4.22	400	4.0 cpm			Turbidity < 5 NTU
MC-25D	6/11/08	85205	7.27	0.32	13.67	315	0.5633	2.88	400	4.0 cpm			Do < 0.20 mg/L but stable.
MC-25D	6/11/08	85505	7.31	0.19	13.77	316	0.5622	2.30	400	4.0 cpm			Do test kit reading - 0.24 mg/L
MC-25D	6/11/08	85805	7.20	0.13	13.74	316	0.5601	2.15	400	4.0 cpm			Fe field test kit reading - 1.86 mg/L
MC-25D	6/11/08	90112	7.23	0.14	13.72	316	0.5583	2.20	400	4.0 cpm			
MC-25D	6/11/08	90407	7.25	0.13	13.72	316	0.5566	2.10	400	4.0 cpm			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	øC	mV	mS/cm	NTUs	ml/min	hz or cpm	minutes	0.01 feet	
MC-25	6/11/08	94206	8.11	5.33	15.15	301	0.0841	9.91	400	4.0 cpm	21	0.11	All parameters stable when sample was collected.
MC-25	6/11/08	94505	7.82	4.37	15.24	303	0.0879	8.95	400	4.0 cpm			Turbidity < 5 NTU
MC-25	6/11/08	94805	7.71	3.95	15.21	305	0.0892	7.35	400	4.0 cpm			Do > 0.20 mg/L
MC-25	6/11/08	95138	7.46	3.79	15.21	303	0.0889	5.28	400	4.0 cpm			Fe field test kit reading - 0.88 mg/L
MC-25	6/11/08	95421	7.41	3.80	15.16	302	0.0888	4.82	400	4.0 cpm			
MC-25	6/11/08	95705	7.40	3.78	15.14	301	0.0890	4.00	400	4.0 cpm			
MC-25	6/11/08	100007	7.42	3.73	15.11	299	0.0892	3.65	400	4.0 cpm			
MC-107	6/11/08	105611	7.96	2.31	13.59	295	0.0952	1.38	200	1.0 cpm	21	0.02	All parameters stable when sample was collected.
MC-107	6/11/08	105905	7.82	1.67	13.60	296	0.0967	0.97	200	1.0 cpm			Turbidity < 5 NTU
MC-107	6/11/08	110208	7.76	1.25	13.69	294	0.0972	0.83	200	1.0 cpm			Do > 0.20 mg/L
MC-107	6/11/08	110507	7.73	1.02	13.75	293	0.0968	0.80	200	1.0 cpm			
MC-107	6/11/08	110829	7.70	0.88	13.81	291	0.0965	0.76	200	1.0 cpm			
MC-107	6/11/08	111136	7.64	0.84	13.86	290	0.0965	0.72	200	1.0 cpm			
MC-107	6/11/08	111413	7.60	0.82	13.91	289	0.0962	0.68	200	1.0 cpm			
MC-8	6/11/08	114743	7.47	4.46	13.25	296	0.0922	2.93	200	1.0 cpm	15	0.21	All parameters stable when sample was collected.
MC-8	6/11/08	115009	7.42	4.20	13.15	296	0.0914	1.48	200	1.0 cpm			Turbidity < 5 NTU
MC-8	6/11/08	115312	7.50	4.15	13.11	296	0.0918	1.02	200	1.0 cpm			Do > 0.20 mg/L
MC-8	6/11/08	115624	7.46	3.90	13.05	296	0.0920	0.87	200	1.0 cpm			
MC-8	6/11/08	115905	7.43	3.79	13.02	296	0.0922	0.76	200	1.0 cpm			
MC-13	6/11/08	122705	7.42	1.08	13.05	299	0.1023	13.6	400	3.0 cpm	18	0.11	All parameters stable when sample was collected.
MC-13	6/11/08	123005	7.36	0.47	12.93	297	0.1007	2.88	400	3.0 cpm			Turbidity < 5 NTU
MC-13	6/11/08	123306	7.36	0.30	12.87	296	0.0993	0.95	400	3.0 cpm			Do > 0.20 mg/L
MC-13	6/11/08	123611	7.42	0.24	12.84	294	0.0983	0.61	400	3.0 cpm			
MC-13	6/11/08	123945	7.35	0.23	12.83	292	0.0971	0.45	400	3.0 cpm			
MC-13	6/11/08	124227	7.37	0.24	12.84	291	0.0964	0.41	400	3.0 cpm			
MC-13D	6/11/08	130605	7.41	1.07	13.02	287	0.1171	1.82	200	1.0 cpm	21	0.94	All parameters stable when sample was collected.
MC-13D	6/11/08	130905	7.56	0.75	13.04	285	0.1165	0.69	200	1.0 cpm			Turbidity < 5 NTU
MC-13D	6/11/08	131242	7.56	0.53	13.07	283	0.1162	0.64	200	1.0 cpm			Do > 0.20 mg/L
MC-13D	6/11/08	131509	7.63	0.45	13.17	281	0.1160	0.60	200	1.0 cpm			
MC-13D	6/11/08	131819	7.59	0.34	13.26	280	0.1162	0.55	200	1.0 cpm			
MC-13D	6/11/08	132112	7.57	0.37	13.34	278	0.1163	0.54	200	1.0 cpm			
MC-13D	6/11/08	132405	7.66	0.34	13.38	276	0.1165	0.53	200	1.0 cpm			
MC-15	6/11/08	135805	7.49	1.50	14.32	286	0.3757	2.78	200	1.0 cpm	18	1.19	All parameters stable when sample was collected.
MC-15	6/11/08	140109	7.45	0.70	14.16	284	0.3525	0.71	200	1.0 cpm			Turbidity < 5 NTU
MC-15	6/11/08	140405	7.38	0.45	14.16	282	0.3387	0.62	200	1.0 cpm			Do > 0.20 mg/L
MC-15	6/11/08	140709	7.35	0.33	14.11	280	0.3363	0.58	200	1.0 cpm			
MC-15	6/11/08	141006	7.31	0.32	14.06	279	0.3405	0.56	200	1.0 cpm			
MC-15	6/11/08	141319	7.27	0.32	13.97	276	0.3456	0.51	200	1.0 cpm			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	øC	mV	mS/cm	NTUs	ml/min	hz or cpm	minutes	0.01 feet	
MC-15D	6/12/08	83306	7.74	0.49	13.11	300	0.3034	1.22	400	61 Hz	18	1.39	All parameters stable when sample was collected.
MC-15D	6/12/08	83606	7.70	0.29	14.51	298	0.2992	1.08	400	61 Hz			Turbidity < 5 NTU
MC-15D	6/12/08	83905	7.69	0.23	15.38	297	0.2970	0.73	400	61 Hz			Do > 0.20 mg/L
MC-15D	6/12/08	84205	7.65	0.23	15.73	296	0.2961	0.64	400	61 Hz			
MC-15D	6/12/08	84505	7.60	0.22	15.92	296	0.2951	0.50	400	61 Hz			
MC-15D	6/12/08	84816	7.57	0.22	16.09	295	0.2948	0.42	400	61 Hz			
MC-16	6/12/08	91105	7.81	1.83	13.08	294	0.1627	0.85	200	1.0 cpm	24	0.46	All parameters stable when sample was collected.
MC-16	6/12/08	91405	7.74	1.29	12.95	292	0.1494	0.71	200	1.0 cpm			Turbidity < 5 NTU
MC-16	6/12/08	91705	7.72	0.97	12.91	291	0.1443	0.68	200	1.0 cpm			Do > 0.20 mg/L
MC-16	6/12/08	92005	7.67	0.80	12.90	289	0.1425	0.57	200	1.0 cpm			
MC-16	6/12/08	92308	7.64	0.67	12.90	287	0.1404	0.52	200	1.0 cpm			
MC-16	6/12/08	92612	7.57	0.55	12.89	285	0.1384	0.50	200	1.0 cpm			
MC-16	6/12/08	92905	7.58	0.52	12.90	282	0.1364	0.53	200	1.0 cpm			
MC-16	6/12/08	93218	7.59	0.51	12.94	278	0.1350	0.50	200	1.0 cpm			
MC-17	6/12/08	95805	7.66	1.16	13.56	216	0.1688	3.42	200	1.0 cpm	15	0.12	All parameters stable when sample was collected.
MC-17	6/12/08	100117	7.73	0.81	13.67	208	0.1458	2.08	200	1.0 cpm			Turbidity < 5 NTU
MC-17	6/12/08	100405	7.66	0.66	13.73	202	0.1377	0.97	200	1.0 cpm			Do > 0.20 mg/L
MC-17	6/12/08	100707	7.71	0.64	13.77	200	0.1339	0.82	200	1.0 cpm			
MC-17	6/12/08	101023	7.65	0.64	13.86	198	0.1341	0.75	200	1.0 cpm			
MC-17D	6/12/08	103406	7.77	1.54	13.66	150	0.1250	18.60	400	64 Hz	18	0.46	All parameters stable when sample was collected.
MC-17D	6/12/08	103705	7.79	0.96	14.01	145	0.1238	1.24	400	64 Hz			Turbidity < 5 NTU
MC-17D	6/12/08	104006	7.81	0.80	14.72	139	0.1238	1.20	400	64 Hz			Do > 0.20 mg/L
MC-17D	6/12/08	104305	7.82	0.74	15.20	134	0.1238	1.08	400	64 Hz			
MC-17D	6/12/08	104609	7.83	0.70	15.42	130	0.1240	0.82	400	64 Hz			
MC-17D	6/12/08	104922	7.83	0.68	15.60	127	0.1238	0.79	400	64 Hz			
MC-2D	6/12/08	112506	7.83	1.67	15.30	170	0.2339	1.08	400	51 Hz	18	1.45	All parameters stable when sample was collected.
MC-2D	6/12/08	112805	7.83	0.68	15.94	167	0.2237	0.86	400	51 Hz			Turbidity < 5 NTU
MC-2D	6/12/08	113105	7.85	0.40	16.92	163	0.2133	0.72	400	51 Hz			Do > 0.20 mg/L
MC-2D	6/12/08	113405	7.84	0.38	17.51	160	0.2123	0.63	400	51 Hz			
MC-2D	6/12/08	113710	7.83	0.36	17.76	158	0.2144	0.59	400	51 Hz			
MC-2D	6/12/08	114005	7.81	0.36	18.01	156	0.2163	0.51	400	51 Hz			
MC-2	6/12/08	115821	7.20	0.94	16.03	203	0.5790	2.25	400	53 Hz	27	0.43	All parameters stable when sample was collected.
MC-2	6/12/08	120105	7.16	0.52	17.04	199	0.5912	0.83	400	53 Hz			Turbidity < 5 NTU
MC-2	6/12/08	120405	7.18	0.41	18.47	194	0.5936	0.71	400	53 Hz			Do > 0.20 mg/L
MC-2	6/12/08	120705	7.19	0.36	19.82	187	0.5940	0.67	400	53 Hz			
MC-2	6/12/08	121006	7.21	0.35	20.29	173	0.5812	0.60	400	53 Hz			
MC-2	6/12/08	121305	7.22	0.33	20.75	147	0.5677	0.58	400	53 Hz			
MC-2	6/12/08	121609	7.24	0.31	21.41	106	0.5589	0.54	400	53 Hz			
MC-2	6/12/08	121905	7.25	0.30	21.64	100	0.5566	0.50	400	53 Hz			
MC-2	6/12/08	122206	7.27	0.29	21.63	97	0.5536	0.48	400	53 Hz			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	øC	mV	mS/cm	NTUs	ml/min	hz or cpm	minutes	0.01 feet	
MC-10D	6/12/08	124207	7.49	1.32	14.59	-4	0.4721	130.8	400	52 Hz	18	0.99	All parameters stable when sample was collected.
MC-10D	6/12/08	124512	7.46	0.70	14.53	-4	0.4709	18.9	400	52 Hz			Turbidity < 5 NTU
MC-10D	6/12/08	124842	7.45	0.49	15.58	-5	0.4797	2.38	400	52 Hz			Do > 0.20 mg/L
MC-10D	6/12/08	125105	7.45	0.42	16.22	-6	0.4851	1.07	400	52 Hz			
MC-10D	6/12/08	125406	7.46	0.40	16.64	-8	0.4870	0.62	400	52 Hz			
MC-10D	6/12/08	125705	7.46	0.38	16.72	-11	0.4878	0.60	400	52 Hz			
MC-12D	6/12/08	131607	7.45	1.09	14.99	-17	0.4945	3.82	400	48 Hz	18	0.65	All parameters stable when sample was collected.
MC-12D	6/12/08	131905	7.42	0.69	15.07	-17	0.4991	2.65	400	48 Hz			Turbidity < 5 NTU
MC-12D	6/12/08	132205	7.41	0.54	16.17	-18	0.5102	1.07	400	48 Hz			Do > 0.20 mg/L
MC-12D	6/12/08	132505	7.39	0.47	17.20	-18	0.5187	0.82	400	48 Hz			
MC-12D	6/12/08	132806	7.39	0.45	17.49	-18	0.5237	0.60	400	48 Hz			
MC-12D	6/12/08	133105	7.38	0.43	17.70	-18	0.5255	0.51	400	48 Hz			
MC-20	6/13/08	82412	7.94	1.43	13.86	287	0.1556	120.8	100	0.2 cpm	36	0.07	All parameters stable when sample was collected.
MC-20	6/13/08	82707	7.75	0.93	13.80	287	0.1548	100.1	100	0.2 cpm			Turbidity > 5 NTU but stable.
MC-20	6/13/08	83005	7.66	0.82	13.75	287	0.1532	92.4	100	0.2 cpm			Do > 0.20 mg/L
MC-20	6/13/08	83312	7.59	0.76	13.71	286	0.1406	84.3	100	0.2 cpm			Fe field test kit reading - 3.30 mg/L Upper Limit.
MC-20	6/13/08	83605	7.53	0.71	13.67	285	0.1380	83.8	100	0.2 cpm			
MC-20	6/13/08	83907	7.51	0.70	13.69	284	0.1383	96.4	100	0.2 cpm			
MC-20	6/13/08	84218	7.49	0.65	13.72	283	0.1382	90.2	100	0.2 cpm			
MC-20	6/13/08	84506	7.45	0.60	13.72	282	0.1386	62.1	100	0.2 cpm			
MC-20	6/13/08	84805	7.45	0.55	13.73	282	0.1389	53.7	100	0.2 cpm			
MC-20	6/13/08	85111	7.42	0.55	13.73	281	0.1392	42.8	100	0.2 cpm			
MC-20	6/13/08	85405	7.41	0.54	13.73	280	0.1395	40.0	100	0.2 cpm			
MC-20	6/13/08	85706	7.37	0.52	13.74	279	0.1399	38.7	100	0.2 cpm			
MC-14	6/13/08	100708	7.36	1.99	16.40	283	0.6389	13.0	100	0.2 cpm	30	1.57	All parameters stable when sample was collected.
MC-14	6/13/08	101009	7.39	1.60	16.37	278	0.6176	7.89	100	0.2 cpm			Turbidity < 5 NTU
MC-14	6/13/08	101306	7.42	1.27	16.45	268	0.5889	8.20	100	0.2 cpm			Do > 0.20 mg/L
MC-14	6/13/08	101644	7.43	1.24	16.53	246	0.5571	7.80	100	0.2 cpm			Fe field test kit reading - 3.30 mg/L Upper Limit.
MC-14	6/13/08	101916	7.44	0.93	16.66	227	0.5371	7.40	100	0.2 cpm			
MC-14	6/13/08	102205	7.43	0.86	16.77	202	0.5264	6.11	100	0.2 cpm			
MC-14	6/13/08	102505	7.41	0.77	16.84	177	0.5187	5.09	100	0.2 cpm			
MC-14	6/13/08	102806	7.41	0.73	17.00	170	0.5165	4.28	100	0.2 cpm			
MC-14	6/13/08	103107	7.42	0.72	17.20	165	0.5134	3.08	100	0.2 cpm			
MC-14	6/13/08	103405	7.41	0.70	17.28	163	0.5100	2.63	100	0.2 cpm			
MC-21	6/13/08	112213	8.56	1.26	17.67	-2	0.1034	7.00	400	3.0 cpm	15	0.06	All parameters stable when sample was collected.
MC-21	6/13/08	112505	8.38	0.70	16.59	2	0.0976	1.58	400	3.0 cpm			Turbidity < 5 NTU
MC-21	6/13/08	112815	8.14	0.48	16.16	3	0.0971	0.67	400	3.0 cpm			Do > 0.20 mg/L
MC-21	6/13/08	113106	8.19	0.45	16.10	3	0.0974	0.64	400	3.0 cpm			Fe field test kit reading - 3.30 mg/L Upper Limit.
MC-21	6/13/08	113420	8.10	0.45	16.09	2	0.0977	0.60	400	3.0 cpm			
MC-12	6/13/08	121207	8.29	2.06	18.45	-1	0.0814	0.85	200	1.0 cpm	15	0.04	All parameters stable when sample was collected.
MC-12	6/13/08	121513	8.30	1.81	17.84	-1	0.0760	0.80	200	1.0 cpm			Turbidity < 5 NTU
MC-12	6/13/08	121806	8.27	1.71	17.64	-2	0.0725	0.69	200	1.0 cpm			Do > 0.20 mg/L
MC-12	6/13/08	122105	8.24	1.64	17.82	-2	0.0708	0.51	200	1.0 cpm			Fe field test kit reading - 0.89 mg/L
MC-12	6/13/08	122406	8.23	1.61	17.75	-3	0.0706	0.48	200	1.0 cpm			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	øC	mV	mS/cm	NTUs	ml/min	hz or cpm	minutes	0.01 feet	
MC-118D	6/13/08	130007	7.50	1.04	17.94	54	0.4994	16.1	400	59 Hz	18	2.20	All parameters stable when sample was collected.
MC-118D	6/13/08	130312	7.45	0.54	18.53	52	0.5009	5.65	400	59 Hz			Turbidity < 5 NTU
MC-118D	6/13/08	130605	7.44	0.41	19.40	49	0.5046	1.35	400	59 Hz			Do > 0.20 mg/L
MC-118D	6/13/08	130908	7.43	0.35	19.83	45	0.5058	1.19	400	59 Hz			
MC-118D	6/13/08	131206	7.43	0.36	20.05	39	0.5049	0.82	400	59 Hz			
MC-118D	6/13/08	131505	7.43	0.34	20.10	36	0.5022	0.71	400	59 Hz			
MC-1	6/13/08	134105	8.22	0.67	16.86	-30	0.2179	1.28	400	64Hz	21	1.60	All parameters stable when sample was collected.
MC-1	6/13/08	134405	8.18	0.57	17.70	-32	0.1102	0.71	400	64Hz			Turbidity < 5 NTU
MC-1	6/13/08	134705	7.99	0.32	18.27	-30	0.1127	0.64	400	64Hz			Do > 0.20 mg/L
MC-1	6/13/08	135005	7.84	0.24	18.32	-30	0.1240	0.50	400	64Hz			Fe field test kit reading - 1.60 mg/L
MC-1	6/13/08	135306	7.76	0.23	18.54	-30	0.1297	0.52	400	64Hz			
MC-1	6/13/08	135606	7.71	0.23	18.62	-31	0.1295	0.48	400	64Hz			
MC-1	6/13/08	135906	7.68	0.24	18.66	-32	0.1263	0.51	400	64Hz			
MC-19D	6/13/08	142608	7.91	0.73	16.33	-16	0.1514	20.1	400	68 Hz	15	0.00	All parameters stable when sample was collected.
MC-19D	6/13/08	142905	7.91	0.27	16.20	-17	0.1643	1.80	400	68 Hz			Turbidity < 5 NTU
MC-19D	6/13/08	143205	7.92	0.14	16.51	-18	0.1656	0.89	400	68 Hz			Do < 0.20 mg/L but stable.
MC-19D	6/13/08	143506	7.92	0.13	16.62	-19	0.1662	0.85	400	68 Hz			Do test kit reading - 0.25 mg/L
MC-19D	6/13/08	143805	7.96	0.13	16.85	-20	0.1665	0.64	400	68 Hz			

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Well	Date	Time	pH	Do	Temp	ORP	SpCond	Turbidty	Flow Rate	Pump Speed	Total Purge Time	DrawDown	Comments
	MMDDYY	HHMMSS		mg/l	C	mV	mS/cm	NTUs	ml/min.	Hz or cpm	Minutes	(0.01) ft.	
MC-123	9/22/08	93808	5.70	1.15	15.27	20	0.3431	31.1	100	0.2 cpm	39	0.56	All Parameters Stable When Sample Was Collected.
MC-123	9/22/08	94105	5.68	1.01	15.31	7	0.3300	24.0	100	0.2 cpm			Turbidity < 5 NTU's
MC-123	9/22/08	94405	5.67	0.91	15.35	0	0.3206	19.2	100	0.2 cpm			Do > 0.20 mg/L
MC-123	9/22/08	94705	5.66	0.80	15.40	-6	0.3135	15.0	100	0.2 cpm			
MC-123	9/22/08	95008	5.67	0.74	15.67	-12	0.3094	12.9	100	0.2 cpm			
MC-123	9/22/08	95305	5.67	0.71	15.77	-18	0.3055	12.1	100	0.2 cpm			
MC-123	9/22/08	95605	5.65	0.67	15.73	-21	0.3001	8.78	100	0.2 cpm			
MC-123	9/22/08	95905	5.64	0.64	15.74	-25	0.2960	6.35	100	0.2 cpm			
MC-123	9/22/08	100207	5.64	0.59	15.88	-28	0.2926	6.22	100	0.2 cpm			
MC-123	9/22/08	100505	5.62	0.52	16.14	-31	0.2901	4.76	100	0.2 cpm			
MC-123	9/22/08	100805	5.62	0.51	16.38	-34	0.2895	4.77	100	0.2 cpm			
MC-123	9/22/08	101104	5.63	0.52	16.61	-36	0.2890	3.47	100	0.2 cpm			
MC-123	9/22/08	101405	5.62	0.51	16.89	-38	0.2873	3.70	100	0.2 cpm			
MC-20D	9/22/08	111006	6.88	1.00	14.38	0	0.1155	28.4	400	4.0 cpm	45	1.53	All Parameters Stable When Sample Was Collected.
MC-20D	9/22/08	111306	7.20	0.81	14.29	-29	0.1142	78.6	400	4.0 cpm			Turbidity < 5 NTU's
MC-20D	9/22/08	111607	6.85	0.82	14.27	-30	0.1144	55.1	400	4.0 cpm			Do = 0.20 mg/L
MC-20D	9/22/08	111907	7.10	0.58	14.21	-46	0.1138	51.9	400	4.0 cpm			
MC-20D	9/22/08	112206	7.07	0.48	14.25	-52	0.1139	52.6	400	4.0 cpm			
MC-20D	9/22/08	112507	7.04	0.42	14.25	-56	0.1140	51.8	400	4.0 cpm			
MC-20D	9/22/08	112808	6.98	0.38	14.30	-58	0.1138	65.3	400	4.0 cpm			
MC-20D	9/22/08	113106	6.87	0.38	14.27	-56	0.1141	52.7	400	4.0 cpm			
MC-20D	9/22/08	113409	6.98	0.32	14.28	-64	0.1138	42.9	400	4.0 cpm			
MC-20D	9/22/08	113705	6.95	0.28	14.33	-66	0.1137	17.5	400	4.0 cpm			
MC-20D	9/22/08	114007	6.94	0.24	14.25	-68	0.1140	10.23	400	4.0 cpm			
MC-20D	9/22/08	114306	6.92	0.21	14.24	-70	0.1140	7.31	400	4.0 cpm			
MC-20D	9/22/08	114607	6.91	0.21	14.24	-72	0.1142	4.92	400	4.0 cpm			
MC-20D	9/22/08	114906	6.91	0.21	14.22	-75	0.1139	4.05	400	4.0 cpm			
MC-20D	9/22/08	115205	6.88	0.20	14.26	-76	0.1140	3.30	400	4.0 cpm			
MC-20	9/22/08	123208	6.05	2.05	16.57	-6	0.2043	59.5	100	0.2 cpm	54	2.05	All Parameters Stable When Sample Was Collected.
MC-20	9/22/08	123505	5.83	1.99	16.60	-8	0.1996	62.3	100	0.2 cpm			Turbidity > 5 NTU's but stable
MC-20	9/22/08	123805	5.89	1.66	16.56	-12	0.1996	50.7	100	0.2 cpm			Do > 0.20 mg/L
MC-20	9/22/08	124107	5.83	1.66	16.51	-14	0.1971	37.9	100	0.2 cpm			Fe Field Test Kit Reading - 3.30 mg/L Upper Limit
MC-20	9/22/08	124409	5.72	1.54	16.46	-16	0.1959	25.7	100	0.2 cpm			Fe Field Test Kit Reading taken on 9-25-08 due to
MC-20	9/22/08	124706	5.78	1.44	16.44	-18	0.1947	20.4	100	0.2 cpm			well running dry while collecting samples on 9-22-08.
MC-20	9/22/08	125005	5.74	1.25	16.44	-18	0.1931	17.5	100	0.2 cpm			
MC-20	9/22/08	125308	5.71	1.21	16.48	-18	0.1922	10.26	100	0.2 cpm			
MC-20	9/22/08	125607	5.68	1.10	16.52	-18	0.1915	8.65	100	0.2 cpm			
MC-20	9/22/08	125909	5.67	1.05	16.52	-18	0.1906	8.05	100	0.2 cpm			
MC-20	9/22/08	130205	5.56	1.03	16.54	-19	0.1911	7.05	100	0.2 cpm			
MC-20	9/22/08	130504	5.62	1.02	16.51	-19	0.1910	4.41	100	0.2 cpm			
MC-20	9/22/08	130806	5.56	0.94	16.53	-19	0.1904	12.21	100	0.2 cpm			
MC-20	9/22/08	131107	5.61	0.92	16.56	-20	0.1900	9.74	100	0.2 cpm			
MC-20	9/22/08	131405	5.55	0.99	16.60	-18	0.1901	7.52	100	0.2 cpm			
MC-20	9/22/08	131708	5.60	0.91	16.58	-23	0.1883	7.99	100	0.2 cpm			
MC-20	9/22/08	132005	5.58	0.85	16.59	-22	0.1893	7.78	100	0.2 cpm			
MC-20	9/22/08	132306	5.63	0.85	16.64	-24	0.1897	7.90	100	0.2 cpm			

Well	Date	Time	pH	Do	Temp	ORP	SpCond	Turbidty	Flow Rate	Pump Speed	Total Purge Time	DrawDown	Comments
	MMDDYY	HHMMSS		mg/l	C	mV	mS/cm	NTUs	ml/min.	Hz or cpm	Minutes	(0.01) ft.	
MC-122	9/22/08	143405	6.51	0.85	15.90	50	0.0989	32.3	100	0.2 cpm	36	1.13	All Parameters Stable When Sample Was Collected.
MC-122	9/22/08	143706	6.44	0.87	15.93	44	0.0989	29.1	100	0.2 cpm			Turbidity > 5 NTU's but stable.
MC-122	9/22/08	144005	6.46	0.78	16.10	36	0.0984	26.7	100	0.2 cpm			Do > 0.20 mg/L
MC-122	9/22/08	144307	6.44	0.67	16.11	34	0.0981	24.8	100	0.2 cpm			
MC-122	9/22/08	144605	6.38	0.60	16.11	29	0.0981	20.8	100	0.2 cpm			
MC-122	9/22/08	144909	6.37	0.61	16.09	27	0.0979	18.2	100	0.2 cpm			
MC-122	9/22/08	145206	6.34	0.55	16.15	25	0.0975	15.3	100	0.2 cpm			
MC-122	9/22/08	145504	6.32	0.51	16.39	22	0.0976	14.1	100	0.2 cpm			
MC-122	9/22/08	145806	6.24	0.48	16.63	20	0.0973	11.4	100	0.2 cpm			
MC-122	9/22/08	150108	6.25	0.48	16.63	20	0.0978	9.41	100	0.2 cpm			
MC-122	9/22/08	150405	6.23	0.47	16.79	20	0.0980	8.72	100	0.2 cpm			
MC-122	9/22/08	150706	6.20	0.48	16.76	19	0.0984	8.53	100	0.2 cpm			
PZU-5	9/23/08	72308	6.81	1.70	12.79	209	0.1971	5.53	100	0.2 cpm	27	5.13	All Parameters Stable When Sample Was Collected.
PZU-5	9/23/08	72606	6.65	1.46	13.01	175	0.1890	4.57	100	0.2 cpm			Turbidity > 5 NTU's
PZU-5	9/23/08	72905	6.49	1.37	13.10	145	0.1849	4.66	100	0.2 cpm			Do > 0.20 mg/L
PZU-5	9/23/08	73205	6.41	1.24	13.31	120	0.1849	4.37	100	0.2 cpm			
PZU-5	9/23/08	73507	6.33	1.15	13.36	98	0.1818	5.10	100	0.2 cpm			
PZU-5	9/23/08	73809	6.25	1.07	13.36	79	0.1799	6.02	100	0.2 cpm			
PZU-5	9/23/08	74106	6.16	1.10	13.28	67	0.1781	7.73	100	0.2 cpm			
PZU-5	9/23/08	74404	6.12	1.08	13.20	64	0.1772	8.20	100	0.2 cpm			
PZU-5	9/23/08	74706	6.06	1.20	13.16	66	0.1749	8.34	100	0.2 cpm			
MC-15D	9/23/08	90307	6.40	0.43	14.00	59	0.2003	0.14	400	70 Hz	30	1.17	All Parameters Stable When Sample Was Collected.
MC-15D	9/23/08	90607	6.36	0.32	16.06	55	0.2077	0.04	400	70 Hz			Turbidity < 5 NTU's
MC-15D	9/23/08	90906	6.30	0.26	17.02	53	0.2115	0.04	400	70 Hz			Do > 0.20 mg/L
MC-15D	9/23/08	91204	6.24	0.23	17.31	52	0.2125	0.04	400	70 Hz			
MC-15D	9/23/08	91506	6.19	0.20	17.71	51	0.2126	0.02	400	70 Hz			
MC-15D	9/23/08	91810	6.16	0.22	17.87	49	0.2126	0.00	400	70 Hz			
MC-15D	9/23/08	92110	6.12	0.18	18.05	48	0.2086	0.07	400	70 Hz			
MC-15D	9/23/08	92407	6.09	0.21	18.11	48	0.2120	0.00	400	70 Hz			
MC-15D	9/23/08	92705	6.06	0.22	18.20	47	0.2120	0.00	400	70 Hz			
MC-15D	9/23/08	93005	6.05	0.22	18.32	48	0.2124	0.01	400	70 Hz			
MC-15	9/23/08	100008	6.12	0.90	16.26	154	0.1598	2.79	200	1.0 cpm	24	0.53	All Parameters Stable When Sample Was Collected.
MC-15	9/23/08	100305	6.09	0.65	16.58	97	0.1601	2.16	200	1.0 cpm			Turbidity < 5 NTU's
MC-15	9/23/08	100606	6.07	0.49	16.80	48	0.1623	1.89	200	1.0 cpm			Do > 0.20 mg/L
MC-15	9/23/08	100905	6.02	0.40	17.01	15	0.1635	1.08	200	1.0 cpm			
MC-15	9/23/08	101205	6.00	0.37	17.08	-5	0.1646	0.57	200	1.0 cpm			
MC-15	9/23/08	101505	5.96	0.34	17.09	-18	0.1646	1.21	200	1.0 cpm			
MC-15	9/23/08	101805	5.96	0.32	17.15	-26	0.1637	1.34	200	1.0 cpm			
MC-15	9/23/08	102105	5.93	0.32	17.09	-28	0.1626	1.19	200	1.0 cpm			

Well	Date	Time	pH	Do	Temp	ORP	SpCond	Turbidty	Flow Rate	Pump Speed	Total Purge Time	DrawDown	Comments
	MMDDYY	HHMMSS		mg/l	C	mV	mS/cm	NTUs	ml/min.	Hz or cpm	Minutes	(0.01) ft.	
MC-16	9/23/08	110606	6.03	1.37	16.09	24	0.1270	5.99	200	1.0 cpm	45	0.53	All Parameters Stable When Sample Was Collected.
MC-16	9/23/08	110905	5.96	1.11	16.27	20	0.1197	3.46	200	1.0 cpm			Turbidity < 5 NTU's
MC-16	9/23/08	111208	5.87	0.92	16.35	10	0.1196	2.91	200	1.0 cpm			Do > 0.20 mg/L
MC-16	9/23/08	111505	5.91	0.83	16.40	2	0.1273	1.98	200	1.0 cpm			
MC-16	9/23/08	111806	5.90	0.68	16.40	-7	0.1243	1.40	200	1.0 cpm			
MC-16	9/23/08	112106	5.86	0.60	16.43	-14	0.1176	1.40	200	1.0 cpm			
MC-16	9/23/08	112408	5.84	0.56	16.42	-20	0.1120	1.04	200	1.0 cpm			
MC-16	9/23/08	112705	5.87	0.55	16.43	-24	0.1075	1.03	200	1.0 cpm			
MC-16	9/23/08	113019	5.98	0.56	16.43	-27	0.1014	0.80	200	1.0 cpm			
MC-16	9/23/08	113321	5.83	0.56	16.43	-29	0.0973	0.90	200	1.0 cpm			
MC-16	9/23/08	113611	5.86	0.55	16.41	-31	0.0953	0.96	200	1.0 cpm			
MC-16	9/23/08	113911	5.85	0.52	16.40	-32	0.0914	0.82	200	1.0 cpm			
MC-16	9/23/08	114205	5.88	0.53	16.44	-33	0.0869	0.58	200	1.0 cpm			
MC-16	9/23/08	114507	5.84	0.55	16.47	-34	0.0844	1.04	200	1.0 cpm			
MC-16	9/23/08	114816	5.84	0.56	16.51	-35	0.0858	0.63	200	1.0 cpm			
MC-2D	9/23/08	123208	5.87	0.46	17.57	17	0.2140	1.23	400	70 Hz	18	1.27	All Parameters Stable When Sample Was Collected.
MC-2D	9/23/08	123505	5.91	0.30	18.38	13	0.2183	0.42	400	70 Hz			Turbidity < 5 NTU's
MC-2D	9/23/08	123805	5.96	0.29	19.58	8	0.2251	0.06	400	70 Hz			Do > 0.20 mg/L
MC-2D	9/23/08	124114	5.94	0.26	20.28	8	0.2282	0.35	400	70 Hz			
MC-2D	9/23/08	124406	5.93	0.24	20.46	8	0.2291	1.06	400	70 Hz			
MC-2D	9/23/08	124709	5.91	0.24	20.50	9	0.2275	0.47	400	70 Hz			
MC-2	9/23/08	134207	5.93	0.36	23.24	147	0.0731	30.0	400	62 Hz	33	0.90	All Parameters Stable When Sample Was Collected.
MC-2	9/23/08	134505	5.91	0.31	25.00	126	0.0783	10.64	400	62 Hz			Turbidity < 5 NTU's
MC-2	9/23/08	134805	6.08	0.28	26.46	99	0.0838	8.02	400	62 Hz			Do < 0.20 mg/L
MC-2	9/23/08	135105	5.99	0.25	27.30	85	0.0879	4.29	400	62 Hz			Do Test Kit Reading - 0.23 mg/L
MC-2	9/23/08	135407	5.88	0.23	27.70	73	0.0917	4.44	400	62 Hz			
MC-2	9/23/08	135738	5.81	0.22	27.96	58	0.0937	4.27	400	62 Hz			
MC-2	9/23/08	140006	5.76	0.21	28.05	48	0.0950	4.13	400	62 Hz			
MC-2	9/23/08	140305	5.76	0.20	28.20	36	0.0957	3.28	400	62 Hz			
MC-2	9/23/08	140606	5.72	0.20	28.15	27	0.0961	2.17	400	62 Hz			
MC-2	9/23/08	140905	5.71	0.18	28.44	19	0.0965	1.89	400	62 Hz			
MC-2	9/23/08	141205	5.70	0.19	28.40	17	0.0969	1.06	400	62 Hz			
MC-21	9/23/08	145028	5.71	0.68	20.40	121	0.1103	17.9	400	3.0cpm	24	0.11	All Parameters Stable When Sample Was Collected.
MC-21	9/23/08	145310	5.73	0.44	19.61	93	0.1111	3.43	400	3.0cpm			Turbidity < 5 NTU's
MC-21	9/23/08	145606	5.74	0.35	19.36	64	0.1117	2.62	400	3.0cpm			Do > 0.20 mg/L
MC-21	9/23/08	145905	5.74	0.30	19.23	36	0.1121	0.70	400	3.0cpm			Fe Field Test Kit Reading - 3.30 mg/L Upper Limit
MC-21	9/23/08	150209	5.74	0.28	19.30	17	0.1118	0.58	400	3.0cpm			
MC-21	9/23/08	150506	5.72	0.26	19.19	-9	0.1122	0.77	400	3.0cpm			
MC-21	9/23/08	150808	5.74	0.25	19.25	-6	0.1120	0.71	400	3.0cpm			
MC-21	9/23/08	151106	5.74	0.24	19.28	-14	0.1124	0.68	400	3.0cpm			

Well	Date	Time	pH	Do	Temp	ORP	SpCond	Turbidty	Flow Rate	Pump Speed	Total Purge Time	DrawDown	Comments
	MMDDYY	HHMMSS		mg/l	C	mV	mS/cm	NTUs	ml/min.	Hz or cpm	Minutes	(0.01) ft.	
MC-13D	9/24/08	75205	7.10	1.79	14.07	213	0.1149	1.74	200	1.0 cpm	21	0.94	All Parameters Stable When Sample Was Collected.
MC-13D	9/24/08	75505	6.93	1.15	13.95	215	0.1143	1.35	200	1.0 cpm			Turbidity < 5 NTU's
MC-13D	9/24/08	75805	6.87	0.85	13.89	217	0.1140	0.84	200	1.0 cpm			Do > 0.20 mg/L
MC-13D	9/24/08	80107	6.84	0.70	13.84	218	0.1137	0.55	200	1.0 cpm			
MC-13D	9/24/08	80405	6.78	0.70	13.82	219	0.1136	0.72	200	1.0 cpm			
MC-13D	9/24/08	80705	6.74	0.68	13.80	219	0.1133	0.51	200	1.0 cpm			
MC-13D	9/24/08	81005	6.77	0.65	13.79	216	0.1131	0.51	200	1.0 cpm			
MC-13	9/24/08	83905	6.42	0.61	16.86	223	0.0545	2.43	400	3.0 cpm	36	0.13	All Parameters Stable When Sample Was Collected.
MC-13	9/24/08	84205	6.26	0.43	16.98	209	0.0572	2.08	400	3.0 cpm			Turbidity < 5 NTU's
MC-13	9/24/08	84505	6.27	0.37	17.06	192	0.0591	1.76	400	3.0 cpm			Do > 0.20 mg/L
MC-13	9/24/08	84806	6.15	0.34	17.06	174	0.0602	1.62	400	3.0 cpm			
MC-13	9/24/08	85105	6.09	0.31	17.07	156	0.0609	1.53	400	3.0 cpm			
MC-13	9/24/08	85405	6.00	0.31	17.08	138	0.0617	1.40	400	3.0 cpm			
MC-13	9/24/08	85705	6.10	0.29	17.09	121	0.0620	1.40	400	3.0 cpm			
MC-13	9/24/08	90011	5.92	0.29	17.11	108	0.0624	1.40	400	3.0 cpm			
MC-13	9/24/08	90305	5.89	0.29	17.13	95	0.0626	1.26	400	3.0 cpm			
MC-13	9/24/08	90657	5.92	0.29	17.17	80	0.0627	1.24	400	3.0 cpm			
MC-13	9/24/08	90905	5.89	0.28	17.20	74	0.0628	1.23	400	3.0 cpm			
MC-13	9/24/08	91205	5.95	0.28	17.19	71	0.0629	1.11	400	3.0 cpm			
MC-14	9/24/08	94709	5.72	2.13	17.78	42	0.1997	2.37	100	0.2 cpm	24	1.38	All Parameters Stable When Sample Was Collected.
MC-14	9/24/08	95009	5.68	1.70	17.85	36	0.1945	2.96	100	0.2 cpm			Turbidity < 5 NTU's
MC-14	9/24/08	95305	5.68	1.54	17.86	32	0.1917	3.35	100	0.2 cpm			Do > 0.20 mg/L
MC-14	9/24/08	95605	5.66	1.44	17.85	28	0.1881	3.29	100	0.2 cpm			Fe Field Test Kit Reading - 3.30 mg/L Upper Limit
MC-14	9/24/08	95905	5.66	1.30	17.86	25	0.1849	3.37	100	0.2 cpm			
MC-14	9/24/08	100219	5.65	1.22	17.87	23	0.1819	3.34	100	0.2 cpm			
MC-14	9/24/08	100521	5.66	1.20	17.92	21	0.1797	3.21	100	0.2 cpm			
MC-14	9/24/08	100831	5.69	1.12	18.04	19	0.1776	3.65	100	0.2 cpm			
MC-14D	9/24/08	111106	6.68	1.03	15.65	37	0.1102	2.42	400	4.0 cpm	42	1.32	All Parameters Stable When Sample Was Collected.
MC-14D	9/24/08	111409	6.60	0.54	15.42	33	0.1102	1.30	400	4.0 cpm			Turbidity < 5 NTU's
MC-14D	9/24/08	111711	6.63	0.45	15.58	20	0.1097	1.33	400	4.0 cpm			Do < 0.20 mg/L but stable.
MC-14D	9/24/08	112008	6.65	0.36	15.59	11	0.1092	1.36	400	4.0 cpm			Do Test Kit Reading - 0.26 mg/L
MC-14D	9/24/08	112305	6.59	0.32	15.67	7	0.1096	1.33	400	4.0 cpm			
MC-14D	9/24/08	112605	6.66	0.29	15.60	-5	0.1097	0.86	400	4.0 cpm			
MC-14D	9/24/08	112905	6.66	0.27	15.65	-11	0.1097	0.96	400	4.0 cpm			
MC-14D	9/24/08	113205	6.62	0.25	15.57	-16	0.1092	0.92	400	4.0 cpm			
MC-14D	9/24/08	113509	6.62	0.21	15.37	-23	0.1096	0.92	400	4.0 cpm			
MC-14D	9/24/08	113805	6.57	0.19	15.28	-22	0.1095	1.24	400	4.0 cpm			
MC-14D	9/24/08	114109	6.65	0.18	15.25	-30	0.1097	1.98	400	4.0 cpm			
MC-14D	9/24/08	114406	6.66	0.17	15.26	-34	0.1096	1.28	400	4.0 cpm			
MC-14D	9/24/08	114705	6.62	0.16	15.25	-35	0.1097	1.28	400	4.0 cpm			
MC-14D	9/24/08	115005	6.66	0.16	15.21	-39	0.1097	1.28	400	4.0 cpm			

Well	Date	Time	pH	Do	Temp	ORP	SpCond	Turbidty	Flow Rate	Pump Speed	Total Purge Time	DrawDown	Comments
	MMDDYY	HHMMSS		mg/l	C	mV	mS/cm	NTUs	ml/min.	Hz or cpm	Minutes	(0.01) ft.	
MC-24D	9/24/08	122610	6.07	1.12	15.85	53	0.2362	8.08	400	4.0 cpm	30	0.33	All Parameters Stable When Sample Was Collected.
MC-24D	9/24/08	122912	5.98	0.78	15.81	56	0.2298	6.27	400	4.0 cpm			Turbidity < 5 NTU's
MC-24D	9/24/08	123205	5.81	0.58	15.73	58	0.2259	4.48	400	4.0 cpm			Do > 0.20 mg/L
MC-24D	9/24/08	123509	5.88	0.45	15.65	59	0.2227	3.52	400	4.0 cpm			Fe Field Test Kit Reading - 0.37 mg/l
MC-24D	9/24/08	123811	5.66	0.37	15.65	67	0.2206	2.94	400	4.0 cpm			
MC-24D	9/24/08	124105	5.64	0.32	15.67	65	0.2187	2.67	400	4.0 cpm			
MC-24D	9/24/08	124405	5.75	0.29	15.71	62	0.2176	2.67	400	4.0 cpm			
MC-24D	9/24/08	124709	5.79	0.26	15.76	65	0.2163	2.55	400	4.0 cpm			
MC-24D	9/24/08	125011	5.71	0.26	15.72	64	0.2150	2.44	400	4.0 cpm			
MC-24D	9/24/08	125311	5.70	0.24	15.76	68	0.2137	2.29	400	4.0 cpm			
MC-24	9/24/08	134306	6.51	2.22	20.99	108	0.0577	17.9	250	4.0 cpm	18	0.35	All Parameters Stable When Sample Was Collected.
MC-24	9/24/08	134607	6.43	1.81	20.89	109	0.0575	16.1	250	4.0 cpm			Turbidity > 5 NTU's but stable.
MC-24	9/24/08	134906	6.30	1.64	20.70	112	0.0575	15.6	250	4.0 cpm			Do > 0.20 mg/L
MC-24	9/24/08	135209	6.27	1.55	20.61	112	0.0572	15.3	250	4.0 cpm			
MC-24	9/24/08	135506	6.20	1.49	20.53	114	0.0573	15.3	250	4.0 cpm			
MC-24	9/24/08	135805	6.17	1.46	20.53	114	0.0571	14.4	250	4.0 cpm			
MC-17	9/25/08	73705	6.53	2.22	17.14	191	0.1994	4.35	200	1.0 cpm	63	0.34	All Parameters Stable When Sample Was Collected.
MC-17	9/25/08	74007	6.36	2.75	16.98	180	0.1968	4.50	200	1.0 cpm			Turbidity < 5 NTU's
MC-17	9/25/08	74309	6.42	2.31	17.18	176	0.2034	3.49	200	1.0 cpm			Do > 0.20 mg/L
MC-17	9/25/08	74608	6.15	1.96	17.26	167	0.1932	2.99	200	1.0 cpm			
MC-17	9/25/08	74906	6.29	1.67	17.33	156	0.1861	2.65	200	1.0 cpm			
MC-17	9/25/08	75206	6.18	1.48	17.34	145	0.1807	2.63	200	1.0 cpm			
MC-17	9/25/08	75505	6.23	1.32	17.37	132	0.1759	2.12	200	1.0 cpm			
MC-17	9/25/08	75804	6.05	1.26	17.43	120	0.1718	3.06	200	1.0 cpm			
MC-17	9/25/08	80107	6.11	0.93	17.40	88	0.1691	2.23	200	1.0 cpm			
MC-17	9/25/08	80409	6.12	0.73	17.42	63	0.1675	2.23	200	1.0 cpm			
MC-17	9/25/08	80706	6.14	0.60	17.45	43	0.1656	3.15	200	1.0 cpm			
MC-17	9/25/08	81005	6.09	0.54	17.44	28	0.1647	2.32	200	1.0 cpm			
MC-17	9/25/08	81305	5.99	0.51	17.42	16	0.1651	2.00	200	1.0 cpm			
MC-17	9/25/08	81605	6.10	0.52	17.46	8	0.1655	1.97	200	1.0 cpm			
MC-17	9/25/08	81909	6.03	0.46	17.47	-1	0.1622	1.56	200	1.0 cpm			
MC-17	9/25/08	82208	6.08	0.49	17.51	-9	0.1597	2.21	200	1.0 cpm			
MC-17	9/25/08	82548	5.96	0.50	17.50	-16	0.1525	2.08	200	1.0 cpm			
MC-17	9/25/08	82805	6.06	0.49	17.51	-21	0.1487	2.08	200	1.0 cpm			
MC-17	9/25/08	83105	5.88	0.48	17.54	-27	0.1454	2.65	200	1.0 cpm			
MC-17	9/25/08	83408	5.92	0.47	17.51	-30	0.1429	2.25	200	1.0 cpm			
MC-17	9/25/08	83713	5.98	0.46	17.54	-35	0.1416	2.25	200	1.0 cpm			
MC-17D	9/25/08	90905	5.94	0.46	14.97	-18	0.1232	4.00	400	71 Hz	27	0.37	All Parameters Stable When Sample Was Collected.
MC-17D	9/25/08	91205	6.07	0.39	15.71	-23	0.1247	4.07	400	71 Hz			Turbidity < 5 NTU's
MC-17D	9/25/08	91506	6.08	0.34	16.51	-23	0.1258	1.53	400	71 Hz			Do > 0.20 mg/L
MC-17D	9/25/08	91805	6.09	0.31	17.01	-23	0.1263	2.23	400	71 Hz			
MC-17D	9/25/08	92105	6.04	0.30	17.23	-19	0.1268	2.56	400	71 Hz			
MC-17D	9/25/08	92410	6.04	0.35	17.31	-18	0.1274	2.37	400	71 Hz			
MC-17D	9/25/08	92710	6.03	0.29	17.47	-16	0.1275	2.37	400	71 Hz			
MC-17D	9/25/08	93006	6.02	0.27	17.77	-15	0.1277	1.89	400	71 Hz			
MC-17D	9/25/08	93343	6.04	0.27	17.92	-14	0.1280	1.65	400	71 Hz			

Well	Date	Time	pH	Do	Temp	ORP	SpCond	Turbidty	Flow Rate	Pump Speed	Total Purge Time	DrawDown	Comments
	MMDDYY	HHMMSS		mg/l	C	mV	mS/cm	NTUs	ml/min.	Hz or cpm	Minutes	(0.01) ft.	
MC-107	9/25/08	104608	6.25	0.39	18.17	45	0.1047	2.31	400	0.3 cpm	18	0.06	All Parameters Stable When Sample Was Collected.
MC-107	9/25/08	104915	6.20	0.32	18.34	42	0.1033	2.39	400	0.3 cpm			Turbidity < 5 NTU's
MC-107	9/25/08	105205	6.16	0.31	18.44	39	0.1026	2.07	400	0.3 cpm			Do > 0.20 mg/L
MC-107	9/25/08	105505	6.11	0.32	18.55	34	0.1022	0.88	400	0.3 cpm			
MC-107	9/25/08	105805	6.09	0.31	18.62	30	0.1017	1.88	400	0.3 cpm			
MC-107	9/25/08	110118	6.10	0.32	18.74	24	0.1012	1.82	400	0.3 cpm			
MC-25	9/25/08	114105	6.07	3.44	20.22	44	0.0799	54.1	75	4.0 cpm	21	0.04	All Parameters Stable When Sample Was Collected.
MC-25	9/25/08	114405	6.02	3.21	20.34	47	0.0807	46.9	75	4.0 cpm			Turbidity > 5 NTU's but stable.
MC-25	9/25/08	114705	5.92	3.00	20.42	51	0.0813	42.5	75	4.0 cpm			Do > 0.20 mg/L
MC-25	9/25/08	115005	5.92	2.87	20.63	51	0.0818	34.4	75	4.0 cpm			
MC-25	9/25/08	115305	5.85	2.70	20.81	54	0.0824	29.4	75	4.0 cpm			
MC-25	9/25/08	115605	5.86	2.58	21.04	54	0.0828	29.2	75	4.0 cpm			
MC-25	9/25/08	115905	5.84	2.51	21.24	55	0.0833	29.1	75	4.0 cpm			
MC-25D	9/25/08	125205	5.74	0.80	15.14	124	0.2275	20.9	400	4.0 cpm	33	0.60	All Parameters Stable When Sample Was Collected.
MC-25D	9/25/08	125505	5.81	0.52	15.02	118	0.2239	16.5	400	4.0 cpm			Turbidity > 5 NTU's but stable.
MC-25D	9/25/08	125805	5.78	0.41	14.99	115	0.2210	14.5	400	4.0 cpm			Do > 0.20 mg/L
MC-25D	9/25/08	130105	5.77	0.35	14.98	112	0.2181	12.7	400	4.0 cpm			Fe Field Test Kit Reading - 0.65 mg/L
MC-25D	9/25/08	130405	5.78	0.31	14.96	108	0.2159	10.43	400	4.0 cpm			
MC-25D	9/25/08	130745	5.76	0.27	15.01	103	0.2129	9.65	400	4.0 cpm			
MC-25D	9/25/08	131005	5.73	0.26	15.01	102	0.2122	10.22	400	4.0 cpm			
MC-25D	9/25/08	131305	5.56	0.24	15.00	108	0.2104	8.44	400	4.0 cpm			
MC-25D	9/25/08	131606	5.75	0.23	14.98	96	0.2088	7.45	400	4.0 cpm			
MC-25D	9/25/08	131905	5.75	0.22	14.97	93	0.2072	7.21	400	4.0 cpm			
MC-25D	9/25/08	132205	5.76	0.22	14.93	90	0.2058	6.79	400	4.0 cpm			
MC-118D	9/25/08	141205	5.88	0.35	18.74	110	0.2159	4.73	400	80Hz	27	2.85	All Parameters Stable When Sample Was Collected.
MC-118D	9/25/08	141505	5.86	0.28	19.40	83	0.2174	3.11	400	80Hz			Turbidity < 5 NTU's
MC-118D	9/25/08	141805	5.79	0.25	19.74	57	0.2175	3.03	400	80Hz			Do < 0.20 mg/L but stable.
MC-118D	9/25/08	142105	5.75	0.23	19.89	37	0.2164	2.39	400	80Hz			Do Test Kit Reading - 0.25 mg/L
MC-118D	9/25/08	142416	5.76	0.21	19.86	22	0.2141	2.27	400	80Hz			Fe Field Test Kit Reading - 3.30 mg/LUpper Limit
MC-118D	9/25/08	142706	5.71	0.20	19.84	10	0.2125	2.27	400	80Hz			
MC-118D	9/25/08	143005	5.69	0.19	19.92	1	0.2113	2.30	400	80Hz			
MC-118D	9/25/08	143307	5.68	0.18	19.98	-6	0.2105	1.65	400	80Hz			
MC-118D	9/25/08	143605	5.68	0.18	19.99	-9	0.2097	1.40	400	80Hz			
MC-8	9/26/08	73905	7.27	1.84	15.76	211	0.0704	41.7	150	0.3 cpm	36	0.36	All Parameters Stable When Sample Was Collected.
MC-8	9/26/08	74205	7.01	1.48	15.95	213	0.0699	13.4	150	0.3 cpm			Turbidity < 5 NTU's
MC-8	9/26/08	74505	6.90	1.23	16.10	213	0.0691	7.41	150	0.3 cpm			Do > 0.20 mg/L
MC-8	9/26/08	74809	6.79	1.04	16.26	214	0.0698	4.78	150	0.3 cpm			
MC-8	9/26/08	75102	6.61	0.90	16.25	214	0.0693	4.57	150	0.3 cpm			
MC-8	9/26/08	75405	6.58	0.83	16.29	212	0.0691	4.99	150	0.3 cpm			
MC-8	9/26/08	75704	6.55	0.70	16.34	205	0.0691	4.61	150	0.3 cpm			
MC-8	9/26/08	80019	6.41	0.64	16.27	205	0.0690	3.95	150	0.3 cpm			
MC-8	9/26/08	80305	6.36	0.60	16.32	206	0.0688	4.62	150	0.3 cpm			
MC-8	9/26/08	80623	6.30	0.57	16.36	205	0.0689	4.28	150	0.3 cpm			
MC-8	9/26/08	80911	6.31	0.56	16.35	204	0.0690	3.60	150	0.3 cpm			
MC-8	9/26/08	81205	6.22	0.55	16.36	203	0.0689	3.37	150	0.3 cpm			

Well	Date	Time	pH	Do	Temp	ORP	SpCond	Turbidty	Flow Rate	Pump Speed	Total Purge Time	DrawDown	Comments
	MMDDYY	HHMMSS		mg/l	C	mV	mS/cm	NTUs	ml/min.	Hz or cpm	Minutes	(0.01) ft.	
MC-10D	9/26/08	91004	5.92	0.59	13.51	232	0.1788	5.08	400	81 Hz	36	1.15	All Parameters Stable When Sample Was Collected.
MC-10D	9/26/08	91307	5.94	0.47	14.58	199	0.1808	5.56	400	81 Hz			Turbidity < 5 NTU's
MC-10D	9/26/08	91605	5.99	0.39	15.99	158	0.1868	3.19	400	81 Hz			Do > 0.20 mg/L
MC-10D	9/26/08	91905	5.97	0.34	16.95	118	0.1899	1.65	400	81 Hz			Fe Field Test Kit Reading - 3.30 mg/L Upper Limit
MC-10D	9/26/08	92205	5.95	0.31	17.36	84	0.1902	2.79	400	81 Hz			
MC-10D	9/26/08	92505	5.93	0.28	17.67	55	0.1892	1.95	400	81 Hz			
MC-10D	9/26/08	92805	5.90	0.27	17.78	32	0.1869	1.90	400	81 Hz			
MC-10D	9/26/08	93105	5.89	0.25	17.91	14	0.1866	2.42	400	81 Hz			
MC-10D	9/26/08	93405	5.87	0.24	18.07	2	0.1857	1.52	400	81 Hz			
MC-10D	9/26/08	93705	5.85	0.22	18.05	-8	0.1846	1.44	400	81 Hz			
MC-10D	9/26/08	94037	5.84	0.22	18.18	-14	0.1843	2.49	400	81 Hz			
MC-10D	9/26/08	94305	5.83	0.21	18.28	-17	0.1839	1.37	400	81 Hz			
MC-12D	9/26/08	101110	5.77	0.49	15.24	6	0.1722	3.66	400	73 Hz	18	0.83	All Parameters Stable When Sample Was Collected.
MC-12D	9/26/08	101405	5.81	0.37	16.58	3	0.1776	3.79	400	73 Hz			Turbidity < 5 NTU's
MC-12D	9/26/08	101705	5.83	0.32	17.82	-1	0.1824	2.48	400	73 Hz			Do > 0.20 mg/L
MC-12D	9/26/08	102004	5.81	0.28	18.40	-3	0.1839	1.77	400	73 Hz			
MC-12D	9/26/08	102310	5.79	0.26	18.77	-4	0.1848	2.85	400	73 Hz			
MC-12D	9/26/08	102605	5.77	0.26	18.94	-5	0.1842	2.71	400	73 Hz			
MC-12	9/26/08	104709	6.53	0.61	19.39	-18	0.0976	3.70	300	2.0 cpm	15	0.07	All Parameters Stable When Sample Was Collected.
MC-12	9/26/08	105007	6.50	0.42	19.16	-30	0.0906	3.29	300	2.0 cpm			Turbidity < 5 NTU's
MC-12	9/26/08	105306	6.45	0.36	18.90	-36	0.0885	1.94	300	2.0 cpm			Do > 0.20 mg/L
MC-12	9/26/08	105605	6.41	0.37	18.88	-37	0.0879	1.90	300	2.0 cpm			
MC-12	9/26/08	105924	6.38	0.36	18.99	-38	0.0870	1.87	300	2.0 cpm			
MC-1	9/26/08	113004	5.93	0.44	19.12	17	0.1048	30.7	400	64 Hz	27	0.68	All Parameters Stable When Sample Was Collected.
MC-1	9/26/08	113306	5.95	0.32	20.67	11	0.1009	35.7	400	64 Hz			Turbidity > 5 NTU's but stable.
MC-1	9/26/08	113608	5.96	0.27	22.58	6	0.1035	31.7	400	64 Hz			Do > 0.20 mg/L
MC-1	9/26/08	113906	5.93	0.24	23.73	4	0.1062	24.7	400	64 Hz			Fe Field Test Kit Reading - 3.30 mg/L Upper Limit
MC-1	9/26/08	114209	5.87	0.22	24.46	3	0.1076	20.3	400	64 Hz			
MC-1	9/26/08	114506	5.83	0.21	24.85	2	0.1088	16.3	400	64 Hz			
MC-1	9/26/08	114805	5.82	0.20	25.24	-1	0.1098	15.1	400	64 Hz			
MC-1	9/26/08	115105	5.79	0.21	25.04	-3	0.1098	14.7	400	64 Hz			
MC-1	9/26/08	115412	5.81	0.21	26.02	-8	0.1101	14.2	400	64 Hz			
MC-19D	9/26/08	132505	6.24	0.39	16.05	125	0.1254	36.5	400	81 Hz	27	0.03	All Parameters Stable When Sample Was Collected.
MC-19D	9/26/08	132812	6.26	0.31	16.55	113	0.1241	15.5	400	81 Hz			Turbidity < 5 NTU's
MC-19D	9/26/08	133105	6.39	0.27	17.46	102	0.1247	8.96	400	81 Hz			Do < 0.20 mg/L but stable.
MC-19D	9/26/08	133405	6.44	0.23	18.34	97	0.1255	7.61	400	81 Hz			Do Test Kit Reading - 0.26 mg/L
MC-19D	9/26/08	133705	6.42	0.21	18.76	95	0.1257	6.91	400	81 Hz			
MC-19D	9/26/08	134005	6.37	0.19	19.06	95	0.1262	6.23	400	81 Hz			
MC-19D	9/26/08	134309	6.33	0.17	19.20	94	0.1266	4.77	400	81 Hz			
MC-19D	9/26/08	134619	6.27	0.17	19.24	95	0.1269	4.65	400	81 Hz			
MC-19D	9/26/08	134905	6.26	0.16	19.42	95	0.1272	4.40	400	81 Hz			

Well	Date	Time	pH	Do	Temp	ORP	SpCond	Turbidty	Flow Rate	Pump Speed	Total Purge Time	DrawDown	Comments
	MMDDYY	HHMMSS		mg/l	C	mV	mS/cm	NTUs	ml/min.	Hz or cpm	Minutes	(0.01) ft.	
MC-31	9/29/08	74905	8.62	1.99	16.91	169	0.1334	15.5	275	4.0 cpm	39	0.01	All Parameters Stable When Sample Was Collected.
MC-31	9/29/08	75209	8.49	0.88	16.87	157	0.1345	10.91	275	4.0 cpm			Turbidity < 5 NTU's
MC-31	9/29/08	75505	8.46	0.47	16.85	140	0.1399	8.49	275	4.0 cpm			Do > 0.20 mg/L
MC-31	9/29/08	75813	8.42	0.34	16.89	111	0.1458	7.04	275	4.0 cpm			Fe Field Test Kit Reading - 3.30 mg/L Upper Limit
MC-31	9/29/08	80106	8.34	0.32	16.91	87	0.1497	2.26	275	4.0 cpm			
MC-31	9/29/08	80405	8.21	0.41	16.94	66	0.1525	1.93	275	4.0 cpm			
MC-31	9/29/08	80705	8.23	0.31	16.95	41	0.1537	1.79	275	4.0 cpm			
MC-31	9/29/08	81005	8.11	0.90	17.02	24	0.1570	1.53	275	4.0 cpm			
MC-31	9/29/08	81305	8.14	0.36	17.04	6	0.1561	1.35	275	4.0 cpm			
MC-31	9/29/08	81605	8.13	0.30	17.10	-10	0.1576	1.09	275	4.0 cpm			
MC-31	9/29/08	81905	8.04	0.37	17.14	-22	0.1580	0.88	275	4.0 cpm			
MC-31	9/29/08	82205	8.08	0.39	17.18	-27	0.1599	0.67	275	4.0 cpm			
MC-31	9/29/08	82506	8.04	0.36	17.26	-30	0.1616	0.58	275	4.0 cpm			
MC-30D	9/29/08	90605	7.43	4.00	14.98	0	0.2818	13.3	400	3.0 cpm	27	0.17	All Parameters Stable When Sample Was Collected.
MC-30D	9/29/08	90905	7.36	1.91	14.72	0	0.2756	7.94	400	3.0 cpm			Turbidity > 5 NTU's but stable.
MC-30D	9/29/08	91205	7.31	1.33	14.66	-1	0.2705	10.1	400	3.0 cpm			Do > 0.20 mg/L
MC-30D	9/29/08	91505	7.30	0.91	14.56	-5	0.2670	12.5	400	3.0 cpm			Fe Field Test Kit Reading - 3.30 mg/L Upper Limit
MC-30D	9/29/08	91806	7.27	0.83	14.68	-9	0.2665	14.3	400	3.0 cpm			
MC-30D	9/29/08	92106	7.28	0.66	14.70	-16	0.2653	14.5	400	3.0 cpm			
MC-30D	9/29/08	92440	7.20	0.58	14.73	-18	0.2629	13.9	400	3.0 cpm			
MC-30D	9/29/08	92705	7.27	0.57	14.69	-22	0.2611	13.8	400	3.0 cpm			
MC-30D	9/29/08	93006	7.28	0.54	14.74	-26	0.2601	13.6	400	3.0 cpm			
MC-30	9/29/08	101005	8.41	1.09	17.64	-41	0.1472	16.2	350	4.0 cpm	21	0.17	All Parameters Stable When Sample Was Collected.
MC-30	9/29/08	101308	8.28	0.69	17.57	-35	0.1419	8.74	350	4.0 cpm			Turbidity < 5 NTU's
MC-30	9/29/08	101605	8.41	0.87	17.50	-41	0.1409	8.03	350	4.0 cpm			Do > 0.20 mg/L
MC-30	9/29/08	101905	8.36	0.43	17.55	-42	0.1391	4.62	350	4.0 cpm			Fe Field Test Kit Reading 0.98 mg/L
MC-30	9/29/08	102211	8.22	0.34	17.62	-46	0.1401	3.59	350	4.0 cpm			
MC-30	9/29/08	102505	8.30	0.33	17.66	-48	0.1395	2.84	350	4.0 cpm			
MC-30	9/29/08	102805	8.32	0.33	17.70	-45	0.1400	2.38	350	4.0 cpm			
MC-25D2	9/29/08	111405	8.63	1.71	16.58	-141	0.2470	50.2	400	4.0 cpm	42	1.68	All Parameters Stable When Sample Was Collected.
MC-25D2	9/29/08	111705	8.64	0.93	16.14	-162	0.2413	77.0	400	4.0 cpm			Turbidity > 5 NTU's but stable.
MC-25D2	9/29/08	112005	8.55	0.68	15.94	-163	0.2258	70.5	400	4.0 cpm			Do > 0.20 mg/L
MC-25D2	9/29/08	112307	8.59	0.47	15.91	-166	0.2194	64.5	400	4.0 cpm			
MC-25D2	9/29/08	112605	8.56	0.51	15.87	-165	0.2142	58.3	400	4.0 cpm			
MC-25D2	9/29/08	112905	8.52	0.36	15.77	-161	0.2060	51.8	400	4.0 cpm			
MC-25D2	9/29/08	113205	8.52	0.30	15.76	-159	0.2014	47.2	400	4.0 cpm			
MC-25D2	9/29/08	113505	8.41	0.31	15.63	-152	0.1986	43.0	400	4.0 cpm			
MC-25D2	9/29/08	113806	8.46	0.27	15.72	-154	0.1954	39.2	400	4.0 cpm			
MC-25D2	9/29/08	114115	8.46	0.27	15.69	-151	0.1931	29.6	400	4.0 cpm			
MC-25D2	9/29/08	114405	8.44	0.28	15.75	-148	0.1911	33.5	400	4.0 cpm			
MC-25D2	9/29/08	114705	8.45	0.26	15.73	-146	0.1897	31.2	400	4.0 cpm			
MC-25D2	9/29/08	115005	8.37	0.27	15.70	-142	0.1887	30.6	400	4.0 cpm			
MC-25D2	9/29/08	115310	8.36	0.35	15.76	-139	0.1880	30.3	400	4.0 cpm			

Well	Date	Time	pH	Do	Temp	ORP	SpCond	Turbidty	Flow Rate	Pump Speed	Total Purge Time	DrawDown	Comments
	MMDDYY	HHMMSS		mg/l	C	mV	mS/cm	NTUs	ml/min.	Hz or cpm	Minutes	(0.01) ft.	
MC-118D2	9/29/08	130006	8.45	2.57	17.62	-176	0.2568	19.40	400	4.0 cpm	33	1.72	All Parameters Stable When Sample Was Collected.
MC-118D2	9/29/08	130306	8.50	1.76	17.35	-200	0.2464	13.70	400	4.0 cpm			Turbidity < 5 NTU's
MC-118D2	9/29/08	130605	8.44	1.06	17.02	-209	0.2268	9.19	400	4.0 cpm			Do > 0.20 mg/L
MC-118D2	9/29/08	130913	8.40	0.62	16.93	-217	0.2186	8.34	400	4.0 cpm			
MC-118D2	9/29/08	131205	8.34	0.41	16.96	-220	0.2140	6.52	400	4.0 cpm			
MC-118D2	9/29/08	131505	8.36	0.26	16.89	-227	0.2138	5.71	400	4.0 cpm			
MC-118D2	9/29/08	131812	8.35	0.24	16.82	-231	0.2139	5.42	400	4.0 cpm			
MC-118D2	9/29/08	132110	8.34	0.22	16.81	-237	0.2190	4.89	400	4.0 cpm			
MC-118D2	9/29/08	132405	8.34	0.20	16.76	-240	0.2134	4.74	400	4.0 cpm			
MC-118D2	9/29/08	132709	8.31	0.18	16.76	-241	0.2141	4.54	400	4.0 cpm			
MC-118D2	9/29/08	133005	8.31	0.21	16.76	-242	0.2143	4.48	400	4.0 cpm			
MC-26D2	9/29/08	135405	8.54	2.40	17.98	-220	0.2354	76.8	400	4.0 cpm	131	1.69	All Parameters Stable When Sample Was Collected.
MC-26D2	9/29/08	135705	8.49	1.60	17.37	-239	0.2361	71.0	400	4.0 cpm			Turbidity > 5 NTU's but stable.
MC-26D2	9/29/08	140006	8.60	0.71	17.20	-257	0.2355	84.6	400	4.0 cpm			Do > 0.20 mg/L
MC-26D2	9/29/08	140310	8.57	0.57	17.09	-262	0.2317	104.5	400	4.0 cpm			
MC-26D2	9/29/08	140605	8.57	0.62	16.91	-265	0.2277	113.0	400	4.0 cpm			
MC-26D2	9/29/08	140932	8.58	0.57	16.82	-264	0.2237	132.0	400	4.0 cpm			
MC-26D2	9/29/08	141205	8.47	0.61	16.86	-254	0.2210	135.0	400	4.0 cpm			
MC-26D2	9/29/08	141505	8.55	0.63	16.89	-253	0.2189	144.0	400	4.0 cpm			
MC-26D2	9/29/08	141807	8.48	0.75	16.97	-243	0.2163	143.0	400	4.0 cpm			
MC-26D2	9/29/08	142105	8.50	0.81	16.86	-239	0.2143	160.0	400	4.0 cpm			
MC-26D2	9/29/08	142405	8.52	0.72	16.68	-236	0.2123	159.0	400	4.0 cpm			
MC-26D2	9/29/08	142705	8.43	0.81	16.61	-229	0.2122	156.0	400	4.0 cpm			
MC-26D2	9/29/08	143005	8.48	0.79	16.62	-228	0.2101	150.0	400	4.0 cpm			
MC-26D2	9/29/08	143305	8.37	1.67	16.70	-218	0.2090	148.0	400	4.0 cpm			
MC-26D2	9/29/08	143506	8.46	0.79	16.76	-222	0.2075	129.0	400	4.0 cpm			
MC-26D2	9/29/08	143805	8.23	1.07	16.81	-208	0.2072	119.0	400	4.0 cpm			
MC-26D2	9/29/08	144119	8.40	0.94	16.68	-215	0.2059	116.0	400	4.0 cpm			
MC-26D2	9/29/08	144405	8.42	0.79	16.83	-215	0.2059	112.0	400	4.0 cpm			
MC-26D2	9/29/08	144707	8.37	0.90	16.79	-213	0.2064	110.0	400	4.0 cpm			
MC-26D2	9/29/08	145007	8.38	0.85	16.73	-214	0.2062	107.0	400	4.0 cpm			
MC-26D2	9/29/08	145306	8.35	0.96	16.69	-210	0.2069	104.2	400	4.0 cpm			
MC-26D2	9/29/08	145611	8.37	0.87	16.89	-212	0.2076	100.8	400	4.0 cpm			
MC-26D2	9/29/08	145954	8.22	1.05	16.70	-205	0.2057	100.7	400	4.0 cpm			
MC-26D2	9/29/08	150242	8.34	0.99	16.81	-210	0.2064	98.4	400	4.0 cpm			
MC-26D2	9/29/08	150535	8.25	3.01	15.55	-191	0.2050	87.9	400	4.0 cpm			
MC-26D2	9/29/08	150808	8.20	1.25	16.44	-198	0.2137	85.1	400	4.0 cpm			
MC-26D2	9/29/08	151106	8.31	1.03	16.76	-203	0.2043	50.0	400	4.0 cpm			
MC-26D2	9/29/08	151414	8.26	1.19	16.69	-197	0.1995	59.9	400	4.0 cpm			
MC-26D2	9/29/08	151705	8.23	1.40	16.54	-193	0.2001	57.5	400	4.0 cpm			
MC-26D2	9/29/08	152024	8.29	1.04	16.57	-196	0.1988	56.7	400	4.0 cpm			
MC-26D2	9/29/08	152305	8.29	0.96	16.61	-196	0.1980	51.1	400	4.0 cpm			
MC-26D2	9/29/08	152624	8.26	1.08	16.57	-195	0.1983	63.9	400	4.0 cpm			
MC-26D2	9/29/08	152916	8.26	1.08	16.39	-194	0.1978	62.4	400	4.0 cpm			
MC-26D2	9/29/08	153205	8.18	1.10	16.67	-191	0.1975	61.2	400	4.0 cpm			
MC-26D2	9/29/08	153519	8.25	1.00	16.68	-194	0.1971	55.1	400	4.0 cpm			
MC-26D2	9/29/08	153807	8.15	1.05	16.72	-189	0.1974	52.7	400	4.0 cpm			
MC-26D2	9/29/08	154109	8.25	0.98	16.79	-195	0.1977	51.1	400	4.0 cpm			
MC-26D2	9/29/08	154405	8.24	0.96	16.76	-195	0.1977	49.0	400	4.0 cpm			
MC-26D2	9/29/08	154705	8.18	0.98	16.70	-190	0.1964	48.8	400	4.0 cpm			
MC-26D2	9/29/08	155005	8.22	1.10	16.68	-191	0.1956	47.7	400	4.0 cpm			
MC-26D2	9/29/08	155305	8.10	1.05	16.48	-187	0.1963	48.7	400	4.0 cpm			
MC-26D2	9/29/08	155604	8.20	1.02	16.58	-190	0.1960	48.4	400	4.0 cpm			
MC-26D2	9/29/08	155906	8.22	1.06	16.59	-190	0.1962	49.0	400	4.0 cpm			
MC-26D2	9/29/08	160218	8.18	1.02	16.57	-188	0.1957	48.6	400	4.0 cpm			

Fourth Quarter 2008

Well ID	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump speed	Total Purge Time	Drawdown	Comments:
	MMDDYY	HHMMSS		mg/l	øC	mV	mS/cm	NTUs	ml/min.	Hz or cpm	Minutes	(0.1) ft.	
UT-ST-1	12/1/08	85840	6.30	5.07	9.37	161	0.0698	6.91	100	0.2 cpm	15	1.07	All parameters stable when samle was collected.
UT-ST-1	12/1/08	90120	6.31	5.01	9.42	159	0.0696	5.87	100	0.2 cpm			Turbidity < 5 NTU's
UT-ST-1	12/1/08	90405	6.34	4.99	9.56	158	0.0688	4.98	100	0.2 cpm			Do > 0.20 mg/l
UT-ST-1	12/1/08	90705	6.33	5.04	9.76	158	0.0682	4.93	100	0.2 cpm			
UT-ST-1	12/1/08	91005	6.38	5.00	9.84	155	0.0675	4.74	100	0.2 cpm			
PZU-4	12/1/08	103605	6.51	2.05	11.95	141	0.0916	27.00	100	0.2 cpm	39	0.42	All parameters stable when samle was collected.
PZU-4	12/1/08	103925	6.44	1.88	12.02	139	0.0912	23.40	100	0.2 cpm			Turbidity < 5 NTU's
PZU-4	12/1/08	104205	6.46	1.63	12.09	134	0.0903	20.50	100	0.2 cpm			Do > 0.20 mg/l
PZU-4	12/1/08	104506	6.45	1.75	12.25	129	0.0873	16.30	100	0.2 cpm			
PZU-4	12/1/08	104805	6.47	1.80	12.32	121	0.0855	13.80	100	0.2 cpm			
PZU-4	12/1/08	105106	6.48	1.62	12.65	105	0.0794	10.73	100	0.2 cpm			
PZU-4	12/1/08	105406	6.45	1.32	12.82	98	0.0782	10.49	100	0.2 cpm			
PZU-4	12/1/08	105710	6.49	1.39	13.08	89	0.0757	10.11	100	0.2 cpm			
PZU-4	12/1/08	110005	6.50	1.32	13.23	80	0.0739	6.58	100	0.2 cpm			
PZU-4	12/1/08	110305	6.52	1.30	13.41	73	0.0732	6.06	100	0.2 cpm			
PZU-4	12/1/08	110639	6.53	1.31	13.52	65	0.0727	4.89	100	0.2 cpm			
PZU-4	12/1/08	110907	6.61	1.21	13.57	64	0.0706	4.59	100	0.2 cpm			
PZU-4	12/1/08	111205	6.62	1.18	13.62	61	0.0711	4.39	100	0.2 cpm			
MC-13	12/1/08	115902	6.48	0.63	14.96	66	0.0688	5.62	400	3.0 cpm	15	0.10	All parameters stable when samle was collected.
MC-13	12/1/08	120203	6.46	0.41	14.95	51	0.0714	3.92	400	3.0 cpm			Turbidity < 5 NTU's
MC-13	12/1/08	120502	6.53	0.40	14.95	49	0.0720	2.08	400	3.0 cpm			Do > 0.20 mg/l
MC-13	12/1/08	120806	6.51	0.35	14.94	43	0.0737	1.88	400	3.0 cpm			
MC-13	12/1/08	121105	6.53	0.36	14.94	39	0.0741	1.76	400	3.0 cpm			
MC-13D	12/1/08	123705	6.82	3.09	14.47	29	0.1199	1.02	200	1.0 cpm	18	0.79	All parameters stable when samle was collected.
MC-13D	12/1/08	124005	6.78	2.59	14.35	30	0.1197	0.99	200	1.0 cpm			Turbidity < 5 NTU's
MC-13D	12/1/08	124308	6.73	2.11	14.25	27	0.1197	0.88	200	1.0 cpm			Do > 0.20 mg/l
MC-13D	12/1/08	124605	6.78	1.55	14.24	23	0.1194	0.72	200	1.0 cpm			
MC-13D	12/1/08	124905	6.75	1.40	14.23	22	0.1194	0.69	200	1.0 cpm			
MC-13D	12/1/08	125205	6.81	1.43	14.22	21	0.1192	0.63	200	1.0 cpm			
MC-21	12/1/08	132005	6.64	0.64	14.40	46	0.1122	0.63	400	3.0 cpm	15	0.06	All parameters stable when samle was collected.
MC-21	12/1/08	132305	6.65	0.63	14.49	38	0.1123	0.63	400	3.0 cpm			Turbidity < 5 NTU's
MC-21	12/1/08	132605	6.62	0.59	14.57	31	0.1122	0.58	400	3.0 cpm			Do > 0.20 mg/l
MC-21	12/1/08	132905	6.65	0.54	14.63	22	0.1125	0.54	400	3.0 cpm			
MC-21	12/1/08	133211	6.65	0.54	14.65	21	0.1123	0.56	400	3.0 cpm			
MC-14D	12/1/08	135602	7.30	1.12	14.49	-34	0.1066	1.12	400	4.0 cpm	18	2.03	All parameters stable when samle was collected.
MC-14D	12/1/08	135901	7.27	1.16	14.46	-39	0.1066	1.12	400	4.0 cpm			Turbidity < 5 NTU's
MC-14D	12/1/08	140205	7.30	1.19	14.46	-42	0.1068	0.77	400	4.0 cpm			Do > 0.20 mg/l
MC-14D	12/1/08	140505	7.32	1.01	14.46	-48	0.1074	0.68	400	4.0 cpm			
MC-14D	12/1/08	140813	7.28	1.09	14.45	-46	0.1073	0.59	400	4.0 cpm			
MC-14D	12/1/08	141105	7.25	1.09	14.42	-51	0.1078	0.47	400	4.0 cpm			

Well ID	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump speed	Total Purge Time	Drawdown	Comments:
	MMDDYY	HHMMSS		mg/l	øC	mV	mS/cm	NTUs	ml/min.	Hz or cpm	Minutes	(0.1) ft.	
MC-14	12/1/08	144305	6.49	2.06	14.25	18	0.4857	5.33	100	0.2 cpm	21	0.74	All parameters stable when samle was collected.
MC-14	12/1/08	144615	6.49	1.77	14.28	8	0.4552	4.73	100	0.2 cpm			Turbidity < 5 NTU's
MC-14	12/1/08	144916	6.48	1.56	14.33	2	0.4379	4.47	100	0.2 cpm			Do > 0.20 mg/l
MC-14	12/1/08	145205	6.49	1.40	14.37	-1	0.4271	4.05	100	0.2 cpm			
MC-14	12/1/08	145524	6.46	1.25	14.41	-5	0.4201	3.98	100	0.2 cpm			
MC-14	12/1/08	145815	6.47	1.16	14.43	-7	0.4162	3.46	100	0.2 cpm			
MC-14	12/1/08	150105	6.47	1.16	14.45	-9	0.4164	3.37	100	0.2 cpm			
MC-123	12/2/08	75602	6.55	1.13	13.54	-56	1.406	15.5	100	0.2 cpm	21	0.40	All parameters stable when samle was collected.
MC-123	12/2/08	75924	6.54	1.01	13.55	-41	1.405	18.9	100	0.2 cpm			Turbidity > 5 NTU's but stable.
MC-123	12/2/08	80205	6.52	0.88	13.64	-55	1.402	23.9	100	0.2 cpm			Do > 0.20 mg/l
MC-123	12/2/08	80526	6.52	0.83	13.65	-65	1.405	25.1	100	0.2 cpm			
MC-123	12/2/08	80806	6.51	0.74	13.76	-73	1.401	23.8	100	0.2 cpm			
MC-123	12/2/08	81105	6.51	0.71	13.78	-79	1.399	22.3	100	0.2 cpm			
MC-123	12/2/08	81405	6.52	0.68	13.81	-83	1.396	21.7	100	0.2 cpm			
MC-20D	12/2/08	90210	7.33	2.28	13.42	-70	0.1168	16.80	400	4.0 cpm	15	1.31	All parameters stable when samle was collected.
MC-20D	12/2/08	90543	7.36	1.77	13.56	-76	0.1154	7.21	400	4.0 cpm			Turbidity < 5 NTU's
MC-20D	12/2/08	90829	7.36	1.31	13.55	-75	0.1164	5.00	400	4.0 cpm			Do > 0.20 mg/l
MC-20D	12/2/08	91105	7.42	1.27	13.55	-84	0.1152	3.14	400	4.0 cpm			
MC-20D	12/2/08	91406	7.32	1.22	13.55	-81	0.1148	3.01	400	4.0 cpm			
MC-20	12/2/08	95505	6.33	1.77	13.35	294	0.5743	11.9	100	0.2 cpm	15	1.53	All parameters stable when samle was collected.
MC-20	12/2/08	95805	6.31	1.55	13.46	288	0.5765	13.0	100	0.2 cpm			Turbidity > 5 NTU's but stable.
MC-20	12/2/08	100122	6.29	1.22	13.54	282	0.5759	12.9	100	0.2 cpm			Do > 0.20 mg/l
MC-20	12/2/08	100404	6.27	1.19	13.62	278	0.5754	12.6	100	0.2 cpm			
MC-20	12/2/08	100706	6.21	1.11	13.67	277	0.5739	12.1	100	0.2 cpm			
MC-122	12/2/08	105905	6.60	1.01	13.81	303	0.1471	54.8	100	0.2 cpm	21	0.68	All parameters stable when samle was collected.
MC-122	12/2/08	110205	6.59	0.88	13.88	304	0.1472	43.2	100	0.2 cpm			Turbidity > 5 NTU's but stable.
MC-122	12/2/08	110505	6.57	0.74	13.91	302	0.1476	32.3	100	0.2 cpm			Do > 0.20 mg/l
MC-122	12/2/08	110805	6.53	0.66	13.97	300	0.1491	22.4	100	0.2 cpm			
MC-122	12/2/08	111111	6.52	0.62	14.03	297	0.1527	14.8	100	0.2 cpm			
MC-122	12/2/08	111415	6.51	0.58	14.08	293	0.1547	14.1	100	0.2 cpm			
MC-122	12/2/08	111719	6.49	0.56	14.12	292	0.1569	14.1	100	0.2 cpm			
PZU-5	12/2/08	120905	6.24	2.34	14.10	333	0.2309	15.50	100	0.2 cpm	21	2.87	All parameters stable when samle was collected.
PZU-5	12/2/08	121207	6.28	2.23	14.07	330	0.2282	11.70	100	0.2 cpm			Turbidity > 5 NTU's but stable.
PZU-5	12/2/08	121506	6.42	1.95	14.13	321	0.2284	11.40	100	0.2 cpm			Do > 0.20 mg/l
PZU-5	12/2/08	121806	6.33	1.89	14.20	326	0.2288	10.63	100	0.2 cpm			
PZU-5	12/2/08	122106	6.35	1.73	14.20	323	0.2265	8.23	100	0.2 cpm			
PZU-5	12/2/08	122421	6.34	1.67	14.18	323	0.2254	8.23	100	0.2 cpm			
PZU-5	12/2/08	122705	6.37	1.56	14.16	321	0.2251	8.23	100	0.2 cpm			

Well ID	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump speed	Total Purge Time	Drawdown	Comments:
	MMDDYY	HHMMSS		mg/l	øC	mV	mS/cm	NTUs	ml/min.	Hz or cpm	Minutes	(0.1) ft.	
MC-15	12/2/08	133406	6.63	2.32	12.75	323	0.0680	6.92	200	2.0 cpm	21	0.67	All parameters stable when samle was collected.
MC-15	12/2/08	133705	6.49	1.14	12.74	332	0.0636	4.46	200	2.0 cpm			Turbidity < 5 NTU's
MC-15	12/2/08	134005	6.47	1.10	12.74	331	0.0573	3.12	200	2.0 cpm			Do > 0.20 mg/l
MC-15	12/2/08	134305	6.37	3.36	12.78	222	0.0650	3.18	200	2.0 cpm			
MC-15	12/2/08	134605	6.47	2.33	12.77	223	0.0487	2.17	200	2.0 cpm			
MC-15	12/2/08	134905	6.43	2.20	12.75	223	0.0474	2.07	200	2.0 cpm			
MC-15	12/2/08	135205	6.43	2.13	12.73	223	0.0457	1.59	200	2.0 cpm			
MC-15D	12/2/08	141105	6.61	0.87	13.77	218	0.2450	1.28	400	65 Hz	18	1.21	All parameters stable when samle was collected.
MC-15D	12/2/08	141407	6.71	0.42	15.40	208	0.2431	0.32	400	65 Hz			Turbidity < 5 NTU's
MC-15D	12/2/08	141705	6.73	0.32	16.78	203	0.2416	0.41	400	65 Hz			Do > 0.20 mg/l
MC-15D	12/2/08	142012	6.72	0.28	17.37	200	0.2408	0.43	400	65 Hz			
MC-15D	12/2/08	142305	6.70	0.30	17.69	198	0.2399	0.41	400	65 Hz			
MC-15D	12/2/08	142605	6.68	0.31	17.89	197	0.2394	0.39	400	65 Hz			
MC-17D	12/2/08	145705	6.87	1.31	13.90	217	0.1254	12.90	400	67 Hz	21	0.29	All parameters stable when samle was collected.
MC-17D	12/2/08	150010	6.74	0.69	14.00	219	0.1261	12.40	400	67 Hz			Turbidity < 5 NTU's
MC-17D	12/2/08	150306	6.78	0.54	14.28	214	0.1267	3.50	400	67 Hz			Do > 0.20 mg/l
MC-17D	12/2/08	150605	6.81	0.48	14.78	210	0.1269	1.05	400	67 Hz			
MC-17D	12/2/08	150922	6.82	0.44	15.69	208	0.1274	1.00	400	67 Hz			
MC-17D	12/2/08	151204	6.81	0.42	15.73	208	0.1277	0.92	400	67 Hz			
MC-17D	12/2/08	151505	6.82	0.40	16.12	207	0.1279	0.83	400	67 Hz			
MC-17	12/3/08	80006	6.99	1.87	12.85	303	0.1250	4.07	200	2.0 cpm	18	0.24	All parameters stable when samle was collected.
MC-17	12/3/08	80316	6.62	1.79	13.03	312	0.1191	3.98	200	2.0 cpm			Turbidity < 5 NTU's
MC-17	12/3/08	80606	6.52	1.04	13.09	312	0.1185	1.34	200	2.0 cpm			Do > 0.20 mg/l
MC-17	12/3/08	80905	6.50	0.76	13.18	310	0.1181	1.06	200	2.0 cpm			
MC-17	12/3/08	81205	6.48	0.75	13.18	309	0.1176	0.98	200	2.0 cpm			
MC-17	12/3/08	81507	6.45	0.69	13.21	309	0.1191	0.91	200	2.0 cpm			
MC-16	12/3/08	84205	6.44	1.99	12.17	280	0.0633	16.70	200	2.0 cpm	24	0.76	All parameters stable when samle was collected.
MC-16	12/3/08	84505	6.44	1.53	12.21	279	0.0642	6.19	200	2.0 cpm			Turbidity < 5 NTU's
MC-16	12/3/08	84805	6.29	1.07	12.22	280	0.0666	3.96	200	2.0 cpm			Do > 0.20 mg/l
MC-16	12/3/08	85105	6.28	0.79	12.22	277	0.0687	3.33	200	2.0 cpm			
MC-16	12/3/08	85405	6.27	0.67	12.20	274	0.0712	1.82	200	2.0 cpm			
MC-16	12/3/08	85705	6.33	0.56	12.25	273	0.0779	1.72	200	2.0 cpm			
MC-16	12/3/08	90005	6.27	0.51	12.27	271	0.0787	1.39	200	2.0 cpm			
MC-16	12/3/08	90305	6.35	0.51	12.28	264	0.0798	1.27	200	2.0 cpm			
MC-2	12/3/08	93205	6.54	0.58	15.80	243	0.1102	7.69	400	55 Hz	21	0.47	All parameters stable when samle was collected.
MC-2	12/3/08	93508	6.48	0.39	17.04	240	0.1123	5.33	400	55 Hz			Turbidity < 5 NTU's
MC-2	12/3/08	93840	6.48	0.34	18.90	236	0.1129	2.53	400	55 Hz			Do > 0.20 mg/l
MC-2	12/3/08	94105	6.46	0.33	19.76	233	0.1131	2.31	400	55 Hz			
MC-2	12/3/08	94408	6.44	0.30	20.47	230	0.1124	1.64	400	55 Hz			
MC-2	12/3/08	94705	6.41	0.30	20.46	227	0.1118	1.20	400	55 Hz			
MC-2	12/3/08	95005	6.41	0.31	20.55	223	0.1119	1.07	400	55 Hz			

Well ID	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump speed	Total Purge Time	Drawdown	Comments:
	MMDDYY	HHMMSS		mg/l	øC	mV	mS/cm	NTUs	ml/min.	Hz or cpm	Minutes	(0.1) ft.	
MC-2D	12/3/08	101207	6.29	1.07	16.30	239	0.2281	1.26	400	68 Hz	18	1.20	All parameters stable when samle was collected.
MC-2D	12/3/08	101513	6.26	0.51	16.43	236	0.2298	0.56	400	68 Hz			Turbidity < 5 NTU's
MC-2D	12/3/08	101805	6.47	0.37	17.32	221	0.2328	0.41	400	68 Hz			Do > 0.20 mg/l
MC-2D	12/3/08	102105	6.57	0.31	17.88	213	0.2345	0.38	400	68 Hz			
MC-2D	12/3/08	102404	6.60	0.29	18.25	209	0.2346	0.29	400	68 Hz			
MC-2D	12/3/08	102705	6.59	0.28	18.34	208	0.2335	0.20	400	68 Hz			
MC-1	12/3/08	110506	6.12	0.64	15.13	273	0.0808	18.50	400	61 Hz	18	0.69	All parameters stable when samle was collected.
MC-1	12/3/08	110806	6.17	0.42	16.38	265	0.0821	6.72	400	61 Hz			Turbidity < 5 NTU's
MC-1	12/3/08	111105	6.24	0.37	17.91	259	0.0843	3.42	400	61 Hz			Do > 0.20 mg/l
MC-1	12/3/08	111405	6.26	0.35	18.73	258	0.0854	2.42	400	61 Hz			
MC-1	12/3/08	111705	6.24	0.32	19.06	259	0.0870	1.90	400	61 Hz			
MC-1	12/3/08	112005	6.22	0.32	19.26	260	0.0880	1.63	400	61 Hz			
MC-24D	12/3/08	115809	6.43	1.88	14.11	263	0.7359	3.07	400	4.0 cpm	15	0.27	All parameters stable when samle was collected.
MC-24D	12/3/08	120105	6.44	1.08	14.10	259	0.7383	2.82	400	4.0 cpm			Turbidity < 5 NTU's
MC-24D	12/3/08	120405	6.38	1.13	14.08	260	0.7397	2.63	400	4.0 cpm			Do > 0.20 mg/l
MC-24D	12/3/08	120705	6.33	1.12	14.05	254	0.7406	2.14	400	4.0 cpm			
MC-24D	12/3/08	121005	6.29	1.18	14.06	260	0.7410	1.88	400	4.0 cpm			
MC-24	12/3/08	123805	7.47	7.22	12.61	208	0.0449	12.4	300	4.0 cpm	15	0.08	All parameters stable when samle was collected.
MC-24	12/3/08	124105	6.90	9.11	12.36	244	0.0371	13.3	300	4.0 cpm			Turbidity > 5 NTU's but stable.
MC-24	12/3/08	124405	6.88	7.41	12.23	247	0.0352	13.5	300	4.0 cpm			Do > 0.20 mg/l
MC-24	12/3/08	124705	6.83	7.46	12.16	253	0.0348	13.1	300	4.0 cpm			
MC-24	12/3/08	125005	6.79	7.77	12.10	255	0.0344	13.0	300	4.0 cpm			
MC-26D2	12/3/08	132511	7.82	1.91	13.64	202	0.1163	7.24	400	4.0 cpm	15	1.62	All parameters stable when samle was collected.
MC-26D2	12/3/08	132805	7.76	0.91	13.69	204	0.1176	13.8	400	4.0 cpm			Turbidity > 5 NTU's but stable.
MC-26D2	12/3/08	133105	7.40	0.97	13.72	218	0.1185	13.0	400	4.0 cpm			Do > 0.20 mg/l
MC-26D2	12/3/08	133405	7.47	0.93	13.67	219	0.1182	12.5	400	4.0 cpm			
MC-26D2	12/3/08	133718	7.44	0.99	13.63	221	0.1173	11.9	400	4.0 cpm			
MC-8	12/4/08	85105	7.42	4.86	10.56	314	0.0866	11.40	150	0.3 cpm	15	0.25	All parameters stable when samle was collected.
MC-8	12/4/08	85406	7.25	4.73	10.96	318	0.0868	10.47	150	0.3 cpm			Turbidity > 5 NTU's but stable.
MC-8	12/4/08	85705	7.02	4.55	11.22	322	0.0867	10.39	150	0.3 cpm			Do > 0.20 mg/l
MC-8	12/4/08	90005	7.02	4.53	11.17	326	0.0869	10.32	150	0.3 cpm			
MC-8	12/4/08	90325	6.99	4.39	11.23	329	0.0866	9.78	150	0.3 cpm			
MC-118D2	12/4/08	94405	6.78	2.13	13.42	336	0.4672	11.30	400	4.0 cpm	27	1.15	All parameters stable when samle was collected.
MC-118D2	12/4/08	94705	6.69	1.91	13.53	340	0.4924	13.40	400	4.0 cpm			Turbidity > 5 NTU's but stable.
MC-118D2	12/4/08	95006	6.86	0.89	13.54	322	0.4669	12.70	400	4.0 cpm			Do > 0.20 mg/l
MC-118D2	12/4/08	95306	6.93	0.61	13.56	283	0.4436	10.36	400	4.0 cpm			
MC-118D2	12/4/08	95605	6.80	0.95	13.61	226	0.4238	9.55	400	4.0 cpm			
MC-118D2	12/4/08	95905	6.92	0.48	13.64	175	0.4142	9.51	400	4.0 cpm			
MC-118D2	12/4/08	100211	6.90	0.49	13.66	153	0.3987	9.48	400	4.0 cpm			
MC-118D2	12/4/08	100513	6.85	0.48	13.67	150	0.3940	9.37	400	4.0 cpm			
MC-118D2	12/4/08	100809	6.81	0.51	13.62	143	0.3875	9.74	400	4.0 cpm			

Well ID	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump speed	Total Purge Time	Drawdown	Comments:
	MMDDYY	HHMMSS		mg/l	øC	mV	mS/cm	NTUs	ml/min.	Hz or cpm	Minutes	(0.1) ft.	
MC-118D	12/4/08	103702	6.74	1.72	14.23	274	0.6754	28.50	400	69 Hz	21	1.49	All parameters stable when samle was collected.
MC-118D	12/4/08	104001	6.58	0.79	14.52	268	0.6860	15.30	400	69 Hz			Turbidity < 5 NTU's
MC-118D	12/4/08	104305	6.49	0.56	15.32	265	0.6987	4.90	400	69 Hz			Do > 0.20 mg/l
MC-118D	12/4/08	104602	6.52	0.50	17.54	260	0.6965	3.10	400	69 Hz			
MC-118D	12/4/08	104902	6.55	0.43	18.34	249	0.6874	3.04	400	69 Hz			
MC-118D	12/4/08	105203	6.58	0.42	18.62	247	0.6847	2.97	400	69 Hz			
MC-118D	12/4/08	105505	5.57	0.39	18.84	241	0.6832	1.57	400	69 Hz			
MC-25D	12/4/08	112505	6.57	4.43	13.84	275	0.7224	6.09	400	4.0 cpm	15	0.42	All parameters stable when samle was collected.
MC-25D	12/4/08	112806	6.55	1.58	13.88	268	0.7235	5.40	400	4.0 cpm			Turbidity < 5 NTU's
MC-25D	12/4/08	113105	6.51	1.63	13.86	275	0.7249	4.42	400	4.0 cpm			Do > 0.20 mg/l
MC-25D	12/4/08	113409	6.53	1.69	13.82	268	0.7307	3.92	400	4.0 cpm			
MC-25D	12/4/08	113705	6.51	1.54	13.81	269	0.7321	3.85	400	4.0 cpm			
MC-25D2	12/4/08	120206	7.25	4.05	13.16	264	0.1688	10.57	400	4.0 cpm	15	1.00	All parameters stable when samle was collected.
MC-25D2	12/4/08	120506	7.30	1.77	13.35	251	0.1932	7.59	400	4.0 cpm			Turbidity > 5 NTU's but stable.
MC-25D2	12/4/08	120805	7.25	1.04	13.37	265	0.1967	8.29	400	4.0 cpm			Do > 0.20 mg/l
MC-25D2	12/4/08	121105	7.18	1.01	13.38	262	0.1910	7.98	400	4.0 cpm			
MC-25D2	12/4/08	121420	7.25	0.97	13.39	264	0.1909	7.61	400	4.0 cpm			
MC-25	12/4/08	124005	7.22	6.17	12.38	271	0.0562	21.6	200	4.0 cpm	18	0.08	All parameters stable when samle was collected.
MC-25	12/4/08	124310	6.76	6.76	12.52	297	0.0528	22.3	200	4.0 cpm			Turbidity > 5 NTU's but stable.
MC-25	12/4/08	124605	6.81	6.08	12.58	294	0.0522	21.7	200	4.0 cpm			Do > 0.20 mg/l
MC-25	12/4/08	124912	6.81	5.71	12.68	304	0.0520	21.7	200	4.0 cpm			
MC-25	12/4/08	125253	6.72	5.81	12.73	313	0.0518	21.6	200	4.0 cpm			
MC-25	12/4/08	125505	6.71	5.30	12.69	305	0.0518	21.3	200	4.0 cpm			
MC-107	12/4/08	133905	7.03	2.87	13.78	308	0.0389	11.60	200	2.0 cpm	18	0.01	All parameters stable when samle was collected.
MC-107	12/4/08	134205	6.98	2.54	13.76	316	0.0396	11.50	200	2.0 cpm			Turbidity < 5 NTU's
MC-107	12/4/08	134536	6.74	2.46	13.85	323	0.0409	7.90	200	2.0 cpm			Do > 0.20 mg/l
MC-107	12/4/08	134805	6.68	2.32	13.79	319	0.0421	4.98	200	2.0 cpm			
MC-107	12/4/08	135109	6.73	2.10	13.74	320	0.0422	4.54	200	2.0 cpm			
MC-107	12/4/08	135413	6.69	2.09	13.66	324	0.0427	4.39	200	2.0 cpm			
MC-12	12/5/08	80905	7.16	2.24	9.21	378	0.0816	12.30	200	2.0 cpm	15	0.02	All parameters stable when samle was collected.
MC-12	12/5/08	81206	7.04	1.50	10.09	385	0.0790	5.35	200	2.0 cpm			Turbidity < 5 NTU's
MC-12	12/5/08	81506	6.94	1.17	10.68	388	0.0784	2.65	200	2.0 cpm			Do > 0.20 mg/l
MC-12	12/5/08	81805	6.93	1.09	10.99	388	0.0790	2.59	200	2.0 cpm			
MC-12	12/5/08	82105	6.88	1.06	11.06	388	0.0796	2.13	200	2.0 cpm			
MC-12D	12/5/08	84105	6.54	1.52	11.56	408	0.7718	3.64	400	63 Hz	27	0.56	All parameters stable when samle was collected.
MC-12D	12/5/08	84419	6.50	0.73	12.60	405	0.7950	1.32	400	63 Hz			Turbidity < 5 NTU's
MC-12D	12/5/08	84706	6.51	0.56	14.27	402	0.7939	0.59	400	63 Hz			Do > 0.20 mg/l
MC-12D	12/5/08	85005	6.51	0.46	15.43	399	0.7860	0.45	400	63 Hz			
MC-12D	12/5/08	85305	6.50	0.39	15.93	394	0.7794	0.37	400	63 Hz			
MC-12D	12/5/08	85605	6.48	0.35	16.35	383	0.7759	0.24	400	63 Hz			
MC-12D	12/5/08	85905	6.47	0.32	16.74	373	0.7704	0.13	400	63 Hz			
MC-12D	12/5/08	90206	6.46	0.30	16.84	368	0.7678	0.18	400	63 Hz			
MC-12D	12/5/08	90505	6.45	0.29	17.10	365	0.7642	0.11	400	63 Hz			

Well ID	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump speed	Total Purge Time	Drawdown	Comments:
	MMDDYY	HHMMSS		mg/l	øC	mV	mS/cm	NTUs	ml/min.	Hz or cpm	Minutes	(0.1) ft.	
MC-30	12/5/08	94205	7.27	2.21	12.39	266	0.1332	6.07	400	4.0 cpm	15	0.21	All parameters stable when samle was collected.
MC-30	12/5/08	94505	7.42	0.79	12.50	253	0.1349	4.90	400	4.0 cpm			Turbidity < 5 NTU's
MC-30	12/5/08	94832	7.33	0.48	12.52	251	0.1326	4.88	400	4.0 cpm			Do > 0.20 mg/l
MC-30	12/5/08	95105	7.26	0.46	12.59	256	0.1310	4.82	400	4.0 cpm			
MC-30	12/5/08	95412	7.25	0.47	12.70	261	0.1286	4.78	400	4.0 cpm			
MC-30D	12/5/08	101327	6.35	4.00	11.80	316	0.8984	5.07	400	4.0 cpm	18	0.28	All parameters stable when samle was collected.
MC-30D	12/5/08	101606	6.18	2.21	12.34	319	0.9835	3.16	400	4.0 cpm			Turbidity < 5 NTU's
MC-30D	12/5/08	101905	6.32	1.11	12.65	309	1.007	2.38	400	4.0 cpm			Do > 0.20 mg/l
MC-30D	12/5/08	102209	6.22	0.78	12.70	314	1.018	2.45	400	4.0 cpm			
MC-30D	12/5/08	102505	6.27	0.73	12.55	310	1.020	2.36	400	4.0 cpm			
MC-30D	12/5/08	102808	6.19	0.71	12.51	318	1.020	2.28	400	4.0 cpm			
MC-10D	12/5/08	110010	6.73	2.06	12.68	274	0.6397	2.95	400	76 Hz	21	1.09	All parameters stable when samle was collected.
MC-10D	12/5/08	110308	6.65	0.69	13.31	270	0.6421	1.15	400	76 Hz			Turbidity < 5 NTU's
MC-10D	12/5/08	110606	6.64	0.43	14.66	259	0.6455	0.60	400	76 Hz			Do > 0.20 mg/l
MC-10D	12/5/08	110905	6.62	0.35	15.83	245	0.6474	0.08	400	76 Hz			
MC-10D	12/5/08	111206	6.59	0.31	16.84	234	0.6496	0.08	400	76 Hz			
MC-10D	12/5/08	111507	6.58	0.28	16.92	225	0.6501	0.00	400	76 Hz			
MC-10D	12/5/08	111809	6.56	0.29	17.28	225	0.6513	0.00	400	76 Hz			
MC-31	12/5/08	114907	6.78	1.95	12.37	275	0.0975	0.65	350	4.0 cpm	15	0.02	All parameters stable when samle was collected.
MC-31	12/5/08	115206	6.91	0.80	12.30	252	0.0961	0.65	350	4.0 cpm			Turbidity < 5 NTU's
MC-31	12/5/08	115510	6.85	0.46	12.23	237	0.0952	0.49	350	4.0 cpm			Do > 0.20 mg/l
MC-31	12/5/08	115806	6.83	0.45	12.14	240	0.0955	0.50	350	4.0 cpm			
MC-31	12/5/08	120105	6.90	0.45	12.16	241	0.0965	0.47	350	4.0 cpm			
MC-19D	12/5/08	123205	7.31	2.44	13.88	233	0.1170	87.3	400	74 Hz	21	0.01	All parameters stable when samle was collected.
MC-19D	12/5/08	123505	7.18	1.21	14.10	233	0.1085	56.8	400	74 Hz			Turbidity > 5 NTU's but stable.
MC-19D	12/5/08	123805	7.07	0.68	14.97	233	0.1066	37.3	400	74 Hz			Do > 0.20 mg/l
MC-19D	12/5/08	124112	7.06	0.47	16.00	233	0.1054	20.5	400	74 Hz			
MC-19D	12/5/08	124425	7.02	0.35	16.97	233	0.1054	14.6	400	74 Hz			
MC-19D	12/5/08	124707	6.99	0.34	17.11	234	0.1049	14.3	400	74 Hz			
MC-19D	12/5/08	125005	6.96	0.32	17.43	235	0.1048	14.6	400	74 Hz			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidty	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	C	mV	mS/cm	NTUs	ml/min	Hz or cpm	Minutes	(0.01) ft.	
UT-ST-1	3/23/09	81309	7.27	4.01	6.06	162	0.0604	6.02	100	0.2 cpm	15	0.54	All parameters stable when sample was collected.
UT-ST-1	3/23/09	81602	7.25	3.98	6.12	163	0.0594	5.15	100	0.2 cpm			Turbidity < 5 NTU's
UT-ST-1	3/23/09	81909	7.22	3.84	6.23	163	0.0590	4.39	100	0.2 cpm			Do > 0.20 mg/L
UT-ST-1	3/23/09	82205	7.20	3.80	6.28	163	0.0588	4.08	100	0.2 cpm			
UT-ST-1	3/23/09	82505	7.20	3.81	6.30	163	0.0586	3.97	100	0.2 cpm			
PZU-4	3/23/09	90805	7.39	5.48	7.28	168	0.0434	15.7	100	0.2 cpm	51	0.59	All parameters stable when sample was collected.
PZU-4	3/23/09	91120	7.26	6.03	7.45	174	0.0457	16.5	100	0.2 cpm			Turbidity < 5 NTU's
PZU-4	3/23/09	91408	7.19	7.15	7.56	175	0.0470	16.4	100	0.2 cpm			Do > 0.20 mg/L
PZU-4	3/23/09	91707	7.12	6.76	7.72	176	0.0482	17.6	100	0.2 cpm			
PZU-4	3/23/09	92005	7.09	6.44	7.89	177	0.0491	13.5	100	0.2 cpm			
PZU-4	3/23/09	92305	7.03	6.05	8.03	177	0.0502	13.4	100	0.2 cpm			
PZU-4	3/23/09	92605	7.03	5.67	8.06	176	0.0512	12.7	100	0.2 cpm			
PZU-4	3/23/09	92905	7.01	5.33	8.22	175	0.0522	12.6	100	0.2 cpm			
PZU-4	3/23/09	93215	7.00	5.05	8.33	174	0.0528	9.91	100	0.2 cpm			
PZU-4	3/23/09	93505	6.98	4.76	8.35	173	0.0535	8.99	100	0.2 cpm			
PZU-4	3/23/09	93854	6.98	4.29	8.37	169	0.0541	8.53	100	0.2 cpm			
PZU-4	3/23/09	94108	6.99	3.99	8.42	167	0.0543	6.57	100	0.2 cpm			
PZU-4	3/23/09	94405	6.97	3.67	8.49	164	0.0548	6.33	100	0.2 cpm			
PZU-4	3/23/09	94705	6.96	3.31	8.55	161	0.0553	5.02	100	0.2 cpm			
PZU-4	3/23/09	95006	6.98	2.96	8.69	155	0.0558	4.42	100	0.2 cpm			
PZU-4	3/23/09	95305	6.97	2.73	8.77	150	0.0564	4.33	100	0.2 cpm			
PZU-4	3/23/09	95605	6.97	2.71	8.92	145	0.0567	4.27	100	0.2 cpm			
PZU-5	3/23/09	103905	6.87	2.24	11.65	146	0.2877	33.5	100	0.2 cpm	45	1.25	All parameters stable when sample was collected.
PZU-5	3/23/09	104212	6.84	1.92	11.78	142	0.2887	32.5	100	0.2 cpm			Turbidity > 5 NTU's but stable.
PZU-5	3/23/09	104506	6.80	1.68	11.74	140	0.2894	28.1	100	0.2 cpm			Do > 0.20 mg/L
PZU-5	3/23/09	104805	6.80	1.51	11.78	138	0.2899	26.3	100	0.2 cpm			
PZU-5	3/23/09	105105	6.78	1.43	11.81	136	0.2898	24.6	100	0.2 cpm			
PZU-5	3/23/09	105405	6.77	1.51	11.80	136	0.2902	22.7	100	0.2 cpm			
PZU-5	3/23/09	105706	6.75	1.47	11.76	135	0.2902	21.8	100	0.2 cpm			
PZU-5	3/23/09	110010	6.75	1.53	11.74	134	0.2906	19.1	100	0.2 cpm			
PZU-5	3/23/09	110305	6.73	1.55	11.69	133	0.2907	18.9	100	0.2 cpm			
PZU-5	3/23/09	110608	6.74	1.59	11.57	133	0.2904	15.8	100	0.2 cpm			
PZU-5	3/23/09	110906	6.71	1.57	11.47	133	0.2908	14.6	100	0.2 cpm			
PZU-5	3/23/09	111206	6.73	1.69	11.43	132	0.2907	14.6	100	0.2 cpm			
PZU-5	3/23/09	111509	6.72	1.75	11.40	132	0.2909	11.9	100	0.2 cpm			
PZU-5	3/23/09	111805	6.72	1.82	11.46	131	0.2906	11.8	100	0.2 cpm			
PZU-5	3/23/09	112106	6.71	1.91	11.50	131	0.2903	11.2	100	0.2 cpm			
MC-123	3/23/09	121305	6.76	2.07	10.99	126	0.3129	13.9	100	0.2 cpm	30	0.44	All parameters stable when sample was collected.
MC-123	3/23/09	121616	6.78	1.78	11.00	124	0.3029	10.35	100	0.2 cpm			Turbidity > 5 NTU's but stable.
MC-123	3/23/09	121910	6.70	1.48	11.13	122	0.2954	9.31	100	0.2 cpm			Do > 0.20 mg/L
MC-123	3/23/09	122205	6.80	1.36	11.22	121	0.2897	8.30	100	0.2 cpm			
MC-123	3/23/09	122505	6.82	1.23	11.28	120	0.2859	7.99	100	0.2 cpm			
MC-123	3/23/09	122808	6.79	1.10	11.33	118	0.2812	8.83	100	0.2 cpm			
MC-123	3/23/09	123110	6.68	1.01	11.37	117	0.2772	10.12	100	0.2 cpm			
MC-123	3/23/09	123436	6.68	0.94	11.42	116	0.2729	9.55	100	0.2 cpm			
MC-123	3/23/09	123732	6.66	0.88	11.42	115	0.2699	9.05	100	0.2 cpm			
MC-123	3/23/09	124010	6.65	0.87	11.41	114	0.2665	8.75	100	0.2 cpm			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidty	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	C	mV	mS/cm	NTUs	ml/min	Hz or cpm	Minutes	(0.01) ft.	
MC-20D	3/23/09	131205	8.03	3.51	12.48	81	0.1187	16.9	400	4.0 cpm	36	1.38	All parameters stable when sample was collected.
MC-20D	3/23/09	131508	7.94	1.54	12.86	77	0.1200	30.6	400	4.0 cpm			Turbidity > 5 NTU's but stable.
MC-20D	3/23/09	131805	7.95	0.90	12.99	71	0.1183	63.0	400	4.0 cpm			Do > 0.20 mg/L
MC-20D	3/23/09	132105	7.92	0.87	13.02	68	0.1184	34.5	400	4.0 cpm			
MC-20D	3/23/09	132407	7.89	1.07	13.09	66	0.1179	22.6	400	4.0 cpm			
MC-20D	3/23/09	132705	7.81	1.20	13.09	64	0.1182	15.5	400	4.0 cpm			
MC-20D	3/23/09	133006	7.87	1.28	13.14	62	0.1181	12.6	400	4.0 cpm			
MC-20D	3/23/09	133305	7.87	1.31	13.12	60	0.1180	10.69	400	4.0 cpm			
MC-20D	3/23/09	133605	7.86	1.33	13.06	57	0.1182	9.12	400	4.0 cpm			
MC-20D	3/23/09	133918	7.85	1.28	13.09	55	0.1183	8.54	400	4.0 cpm			
MC-20D	3/23/09	134205	7.86	1.20	13.10	52	0.1186	8.34	400	4.0 cpm			
MC-20D	3/23/09	134505	7.88	1.17	13.07	59	0.1198	7.85	400	4.0 cpm			
MC-20	3/23/09	141206	6.92	2.53	9.56	89	0.1234	27.7	100	0.2 cpm	27	0.15	All parameters stable when sample was collected.
MC-20	3/23/09	141505	6.80	2.25	9.34	91	0.1188	23.9	100	0.2 cpm			Turbidity > 5 NTU's but stable.
MC-20	3/23/09	141805	6.74	1.97	9.17	92	0.1156	23.3	100	0.2 cpm			Do > 0.20 mg/L
MC-20	3/23/09	142107	6.67	1.82	9.02	93	0.1131	18.6	100	0.2 cpm			Fe Field Test Kit Reading - 1.60 mg/L.
MC-20	3/23/09	142427	6.63	1.70	8.82	93	0.1104	17.8	100	0.2 cpm			
MC-20	3/23/09	142731	6.61	1.67	8.67	93	0.1106	12.6	100	0.2 cpm			
MC-20	3/23/09	143007	6.57	1.58	8.60	94	0.1105	11.3	100	0.2 cpm			
MC-20	3/23/09	143340	6.58	1.44	8.56	93	0.1090	10.92	100	0.2 cpm			
MC-20	3/23/09	143642	6.57	1.45	8.53	92	0.1085	10.38	100	0.2 cpm			
MC-122	3/23/09	154310	7.10	0.84	10.39	68	0.1152	225.00	100	0.2 cpm	36	0.65	All parameters stable when sample was collected.
MC-122	3/23/09	154605	7.02	0.67	10.27	69	0.1140	168.00	100	0.2 cpm			Turbidity > 5 NTU's but stable.
MC-122	3/23/09	154905	6.97	0.63	10.20	71	0.1133	145.00	100	0.2 cpm			Do > 0.20 mg/L
MC-122	3/23/09	155205	6.92	0.59	10.16	72	0.1144	118.00	100	0.2 cpm			
MC-122	3/23/09	155506	6.88	0.56	10.16	74	0.1162	69.30	100	0.2 cpm			
MC-122	3/23/09	155805	6.84	0.52	10.18	75	0.1182	56.20	100	0.2 cpm			
MC-122	3/23/09	160105	6.79	0.52	10.12	76	0.1225	42.20	100	0.2 cpm			
MC-122	3/23/09	160405	6.72	0.46	10.16	79	0.1278	34.30	100	0.2 cpm			
MC-122	3/23/09	160705	6.68	0.49	10.16	80	0.1325	27.00	100	0.2 cpm			
MC-122	3/23/09	161005	6.66	0.48	10.15	81	0.1378	23.10	100	0.2 cpm			
MC-122	3/23/09	161318	6.61	0.48	10.06	83	0.1431	22.30	100	0.2 cpm			
MC-122	3/23/09	161630	6.60	0.49	10.02	83	0.1420	21.40	100	0.2 cpm			
MC-14	3/24/09	80906	7.08	2.61	8.83	134	0.2430	12.70	100	0.2 cpm	36	1.36	All parameters stable when sample was collected.
MC-14	3/24/09	81205	7.06	2.17	8.94	133	0.2303	12.40	100	0.2 cpm			Turbidity < 5 NTU's
MC-14	3/24/09	81505	7.05	1.82	9.01	131	0.2189	12.10	100	0.2 cpm			Do > 0.20 mg/L
MC-14	3/24/09	81805	7.02	1.57	9.07	129	0.2106	11.60	100	0.2 cpm			Fe Field Test Kit Reading - 1.28 mg/L.
MC-14	3/24/09	82105	7.02	1.40	9.16	127	0.2041	10.61	100	0.2 cpm			
MC-14	3/24/09	82415	7.00	1.29	9.23	126	0.1990	8.99	100	0.2 cpm			
MC-14	3/24/09	82707	6.97	1.16	9.30	124	0.1957	8.05	100	0.2 cpm			
MC-14	3/24/09	83005	6.99	1.08	9.34	123	0.1923	8.00	100	0.2 cpm			
MC-14	3/24/09	83305	6.97	0.99	9.38	122	0.1906	6.57	100	0.2 cpm			
MC-14	3/24/09	83606	6.95	0.95	9.41	121	0.1899	4.96	100	0.2 cpm			
MC-14	3/24/09	83908	6.96	0.90	9.43	120	0.1889	4.53	100	0.2 cpm			
MC-14	3/24/09	84209	6.92	0.87	9.43	119	0.1883	4.27	100	0.2 cpm			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidty	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	C	mV	mS/cm	NTUs	ml/min	Hz or cpm	Minutes	(0.01) ft.	
MC-14D	3/24/09	93307	7.92	2.46	12.10	92	0.1119	18.90	400	4.0 cpm	27	1.52	All parameters stable when sample was collected.
MC-14D	3/24/09	93605	7.92	1.66	12.11	88	0.1096	19.10	400	4.0 cpm			Turbidity < 5 NTU's
MC-14D	3/24/09	93906	7.96	1.07	12.35	84	0.1080	13.90	400	4.0 cpm			Do > 0.20 mg/L
MC-14D	3/24/09	94212	7.84	0.66	12.95	84	0.1082	10.07	400	4.0 cpm			
MC-14D	3/24/09	94505	7.82	0.68	12.68	84	0.1080	7.57	400	4.0 cpm			
MC-14D	3/24/09	94805	7.81	0.62	12.46	82	0.1083	5.72	400	4.0 cpm			
MC-14D	3/24/09	95105	7.88	0.46	12.91	76	0.1083	3.82	400	4.0 cpm			
MC-14D	3/24/09	95405	7.93	0.48	12.79	72	0.1090	2.71	400	4.0 cpm			
MC-14D	3/24/09	95706	7.83	0.44	13.14	75	0.1092	2.66	400	4.0 cpm			
MC-21	3/24/09	102105	7.33	0.90	10.66	99	0.1335	43.30	400	3.0 cpm	24	0.06	All parameters stable when sample was collected.
MC-21	3/24/09	102405	7.15	0.94	10.70	105	0.1448	20.80	400	3.0 cpm			Turbidity < 5 NTU's
MC-21	3/24/09	102706	7.09	0.89	10.76	106	0.1437	34.30	400	3.0 cpm			Do > 0.20 mg/L
MC-21	3/24/09	103005	7.00	0.92	10.76	107	0.1506	13.30	400	3.0 cpm			Fe Field Test Kit Reading - 1.56 mg/L.
MC-21	3/24/09	103306	6.87	0.96	10.79	108	0.1513	6.07	400	3.0 cpm			
MC-21	3/24/09	103616	6.94	1.08	10.75	108	0.1519	3.26	400	3.0 cpm			
MC-21	3/24/09	103905	6.85	1.12	10.74	108	0.1530	3.07	400	3.0 cpm			
MC-21	3/24/09	104240	6.85	1.19	10.75	107	0.1525	2.94	400	3.0 cpm			
MC-15	3/24/09	112005	6.95	1.54	8.86	113	0.0705	6.01	200	1.0 cpm	18	0.50	All parameters stable when sample was collected.
MC-15	3/24/09	112306	6.88	1.20	8.83	114	0.0716	4.29	200	1.0 cpm			Turbidity < 5 NTU's
MC-15	3/24/09	112605	6.77	1.07	8.81	114	0.0711	3.78	200	1.0 cpm			Do > 0.20 mg/L
MC-15	3/24/09	112905	6.71	1.01	8.81	114	0.0747	3.43	200	1.0 cpm			
MC-15	3/24/09	113209	6.74	0.98	8.83	114	0.0783	2.46	200	1.0 cpm			
MC-15	3/24/09	113506	6.65	0.92	8.82	112	0.0791	2.40	200	1.0 cpm			
MC-15D	3/24/09	120006	6.98	0.57	11.84	102	0.2087	4.35	400	59 Hz	21	0.93	All parameters stable when sample was collected.
MC-15D	3/24/09	120305	7.04	0.36	13.32	95	0.2179	3.30	400	59 Hz			Turbidity < 5 NTU's
MC-15D	3/24/09	120606	7.08	0.28	14.84	91	0.2284	1.08	400	59 Hz			Do > 0.20 mg/L
MC-15D	3/24/09	120905	7.07	0.28	15.69	89	0.2343	0.77	400	59 Hz			
MC-15D	3/24/09	121205	7.06	0.22	15.98	87	0.2366	0.52	400	59 Hz			
MC-15D	3/24/09	121505	7.06	0.23	16.15	85	0.2369	0.49	400	59 Hz			
MC-15D	3/24/09	121805	7.06	0.21	16.43	84	0.2389	0.37	400	59 Hz			
MC-16	3/24/09	124205	7.40	1.10	9.60	85	0.0964	22.2	200	1.0 cpm	21	0.36	All parameters stable when sample was collected.
MC-16	3/24/09	124505	7.32	0.81	9.41	85	0.0925	14.3	200	1.0 cpm			Turbidity < 5 NTU's
MC-16	3/24/09	124805	7.26	0.61	9.29	83	0.0880	9.04	200	1.0 cpm			Do > 0.20 mg/L
MC-16	3/24/09	125105	7.21	0.56	9.23	83	0.0849	6.84	200	1.0 cpm			
MC-16	3/24/09	125405	7.20	0.46	9.23	82	0.0834	4.77	200	1.0 cpm			
MC-16	3/24/09	125705	7.18	0.44	9.28	80	0.0832	4.40	200	1.0 cpm			
MC-16	3/24/09	130005	7.15	0.44	9.26	79	0.0836	4.23	200	1.0 cpm			
MC-17	3/24/09	132705	7.30	1.42	10.07	86	0.1056	15.0	200	1.0 cpm	15	0.18	All parameters stable when sample was collected.
MC-17	3/24/09	133005	7.13	0.95	10.01	87	0.1045	8.54	200	1.0 cpm			Turbidity < 5 NTU's
MC-17	3/24/09	133326	7.11	0.75	9.96	88	0.1085	4.74	200	1.0 cpm			Do > 0.20 mg/L
MC-17	3/24/09	133633	7.04	0.70	9.91	88	0.1093	4.32	200	1.0 cpm			
MC-17	3/24/09	133914	7.06	0.69	9.88	88	0.1119	3.85	200	1.0 cpm			
MC-17D	3/24/09	140205	7.29	1.46	12.23	82	0.1305	22.4	400	66 Hz	18	0.55	All parameters stable when sample was collected.
MC-17D	3/24/09	140505	7.26	1.01	12.92	80	0.1345	9.35	400	66 Hz			Turbidity < 5 NTU's
MC-17D	3/24/09	140805	7.26	0.82	14.11	78	0.1360	3.44	400	66 Hz			Do > 0.20 mg/L
MC-17D	3/24/09	141111	7.24	0.77	15.31	76	0.1368	3.36	400	66 Hz			
MC-17D	3/24/09	141405	7.22	0.72	15.43	75	0.1375	2.76	400	66 Hz			
MC-17D	3/24/09	141705	7.20	0.71	15.74	75	0.1377	2.42	400	66 Hz			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidty	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	C	mV	mS/cm	NTUs	ml/min	Hz or cpm	Minutes	(0.01) ft.	
MC-19D	3/25/09	82405	8.41	0.24	13.49	83	0.1052	48.8	400	71 Hz	27	0.07	All parameters stable when sample was collected.
MC-19D	3/25/09	82705	8.19	0.18	14.23	89	0.1056	54.5	400	71 Hz			Turbidity > 5 NTU's but stable.
MC-19D	3/25/09	83005	8.01	0.12	14.66	94	0.1063	49.2	400	71 Hz			Do < 0.20 mg/L but stable.
MC-19D	3/25/09	83305	7.87	0.11	15.01	98	0.1063	43.9	400	71 Hz			Do Field Test Kit Reading - 0.22 mg/L.
MC-19D	3/25/09	83605	7.75	0.08	15.12	101	0.1069	35.1	400	71 Hz			
MC-19D	3/25/09	83933	7.66	0.09	15.11	104	0.1073	21.8	400	71 Hz			
MC-19D	3/25/09	84205	7.61	0.05	15.10	105	0.1079	14.3	400	71 Hz			
MC-19D	3/25/09	84505	7.57	0.05	15.23	107	0.1082	13.7	400	71 Hz			
MC-19D	3/25/09	84805	7.52	0.05	15.43	108	0.1089	13.1	400	71 Hz			
MC-31	3/25/09	92906	7.83	0.95	8.40	109	0.0635	22.00	400	4.0 cpm	24	0.02	All parameters stable when sample was collected.
MC-31	3/25/09	93206	7.81	0.56	8.32	104	0.0619	12.30	400	4.0 cpm			Turbidity < 5 NTU's
MC-31	3/25/09	93507	7.61	0.39	8.30	105	0.0620	7.94	400	4.0 cpm			Do > 0.20 mg/L
MC-31	3/25/09	93807	7.68	0.41	8.14	97	0.0631	7.82	400	4.0 cpm			Fe Field Test Kit Reading - 1.49 mg/L.
MC-31	3/25/09	94111	7.65	0.37	8.16	94	0.0631	7.04	400	4.0 cpm			
MC-31	3/25/09	94405	7.54	0.29	8.32	96	0.0637	4.90	400	4.0 cpm			
MC-31	3/25/09	94705	7.57	0.31	8.20	91	0.0643	4.67	400	4.0 cpm			
MC-31	3/25/09	95011	7.59	0.28	8.36	88	0.0657	4.06	400	4.0 cpm			
MC-10D	3/25/09	105206	7.27	0.66	14.34	102	0.2213	52.6	400	72 Hz	24	1.45	All parameters stable when sample was collected.
MC-10D	3/25/09	105508	7.14	0.37	14.52	106	0.2239	18.0	400	72 Hz			Turbidity < 5 NTU's
MC-10D	3/25/09	105805	7.09	0.32	14.98	106	0.2252	8.75	400	72 Hz			Do > 0.20 mg/L
MC-10D	3/25/09	110105	7.06	0.28	15.77	104	0.2307	6.02	400	72 Hz			Fe Field Test Kit Reading - 2.33 mg/L.
MC-10D	3/25/09	110405	7.04	0.26	15.93	103	0.2315	5.71	400	72 Hz			
MC-10D	3/25/09	110706	7.01	0.22	15.89	102	0.2302	4.54	400	72 Hz			
MC-10D	3/25/09	111008	7.00	0.20	15.96	101	0.2297	2.55	400	72 Hz			
MC-10D	3/25/09	111305	6.99	0.21	15.88	100	0.2283	2.23	400	72 Hz			
MC-30D	3/25/09	113918	6.97	2.08	11.83	110	0.2165	13.9	400	4.0 cpm	21	0.16	All parameters stable when sample was collected.
MC-30D	3/25/09	114211	6.86	1.60	11.68	111	0.2161	9.69	400	4.0 cpm			Turbidity < 5 NTU's
MC-30D	3/25/09	114505	6.80	1.17	11.54	110	0.2155	6.53	400	4.0 cpm			Do > 0.20 mg/L
MC-30D	3/25/09	114811	6.79	0.92	11.73	108	0.2170	5.62	400	4.0 cpm			Fe Field Test Kit Reading - 1.66 mg/L.
MC-30D	3/25/09	115105	6.75	0.71	12.08	108	0.2192	4.64	400	4.0 cpm			
MC-30D	3/25/09	115405	6.70	0.66	12.16	108	0.2213	4.38	400	4.0 cpm			
MC-30D	3/25/09	115706	6.76	0.65	12.44	103	0.2236	4.19	400	4.0 cpm			
MC-30	3/25/09	123205	8.14	4.80	9.25	61	0.1028	25.7	400	4.0 cpm	21	0.12	All parameters stable when sample was collected.
MC-30	3/25/09	123507	8.02	3.59	9.15	58	0.1013	25.3	400	4.0 cpm			Turbidity > 5 NTU's but stable.
MC-30	3/25/09	123807	7.95	2.60	9.08	60	0.1000	20.8	400	4.0 cpm			Do > 0.20 mg/L
MC-30	3/25/09	124105	7.79	2.08	9.05	66	0.0997	17.1	400	4.0 cpm			Fe Field Test Kit Reading - 0.00 mg/L non detect.
MC-30	3/25/09	124406	7.96	1.79	9.05	54	0.0984	13.8	400	4.0 cpm			
MC-30	3/25/09	124705	7.95	1.72	9.04	53	0.0979	12.9	400	4.0 cpm			
MC-30	3/25/09	125005	7.92	1.70	9.02	51	0.0973	12.7	400	4.0 cpm			
MC-12	3/25/09	132405	7.89	1.88	9.00	57	0.0761	8.42	200	1.0 cpm	15	0.06	All parameters stable when sample was collected.
MC-12	3/25/09	132705	7.78	1.63	9.05	60	0.0764	5.82	200	1.0 cpm			Turbidity < 5 NTU's
MC-12	3/25/09	133001	7.67	1.36	9.08	60	0.0777	3.92	200	1.0 cpm			Do > 0.20 mg/L
MC-12	3/25/09	133320	7.62	1.30	9.11	60	0.0782	3.24	200	1.0 cpm			
MC-12	3/25/09	133641	7.58	1.23	9.15	59	0.0788	2.98	200	1.0 cpm			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidty	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	C	mV	mS/cm	NTUs	ml/min	Hz or cpm	Minutes	(0.01) ft.	
MC-12D	3/25/09	140106	7.00	0.45	13.43	83	0.2306	49.4	400	62 Hz	21	0.54	All parameters stable when sample was collected.
MC-12D	3/25/09	140425	6.98	0.33	14.99	80	0.2398	34.6	400	62 Hz			Turbidity > 5 NTU's but stable.
MC-12D	3/25/09	140733	6.97	0.29	15.55	78	0.2429	27.3	400	62 Hz			Do > 0.20 mg/L
MC-12D	3/25/09	141005	6.95	0.26	15.85	77	0.2430	22.9	400	62 Hz			
MC-12D	3/25/09	141305	6.94	0.24	16.14	75	0.2434	25.1	400	62 Hz			
MC-12D	3/25/09	141605	6.93	0.22	16.33	74	0.2433	24.3	400	62 Hz			
MC-12D	3/25/09	141917	6.91	0.22	16.50	73	0.2429	23.0	400	62 Hz			
MC-107	3/25/09	144705	8.60	2.54	9.76	31	0.0386	27.0	200	1.0 cpm	18	0.07	All parameters stable when sample was collected.
MC-107	3/25/09	145005	8.46	2.10	9.52	35	0.0388	19.4	200	1.0 cpm			Turbidity < 5 NTU's
MC-107	3/25/09	145307	8.33	1.70	9.36	38	0.0398	5.24	200	1.0 cpm			Do > 0.20 mg/L
MC-107	3/25/09	145605	8.27	1.43	9.25	41	0.0409	3.98	200	1.0 cpm			
MC-107	3/25/09	145905	8.19	1.29	9.20	42	0.0406	2.90	200	1.0 cpm			
MC-107	3/25/09	150202	8.18	1.29	9.18	43	0.0400	2.73	200	1.0 cpm			
MC-8	3/26/09	81905	9.00	7.40	7.73	118	0.0533	8.24	200	1.0 cpm	18	0.15	All parameters stable when sample was collected.
MC-8	3/26/09	82205	8.80	7.24	7.91	124	0.0545	5.97	200	1.0 cpm			Turbidity < 5 NTU's
MC-8	3/26/09	82505	8.59	7.16	7.98	130	0.0545	5.80	200	1.0 cpm			Do > 0.20 mg/L
MC-8	3/26/09	82805	8.43	7.08	7.98	134	0.0553	4.96	200	1.0 cpm			
MC-8	3/26/09	83105	8.37	7.06	7.99	138	0.0553	4.48	200	1.0 cpm			
MC-8	3/26/09	83424	8.35	7.03	7.98	141	0.0556	4.21	200	1.0 cpm			
MC-26D2	3/26/09	85705	7.87	1.71	11.97	135	0.1101	5.83	400	4.0 cpm	27	1.49	All parameters stable when sample was collected.
MC-26D2	3/26/09	90005	7.85	1.64	12.00	138	0.1102	10.66	400	4.0 cpm			Turbidity > 5 NTU's but stable.
MC-26D2	3/26/09	90309	7.82	0.86	12.11	132	0.1106	10.15	400	4.0 cpm			Do > 0.20 mg/L
MC-26D2	3/26/09	90606	7.82	0.74	12.27	129	0.1107	13.1	400	4.0 cpm			
MC-26D2	3/26/09	90905	7.80	0.78	12.40	127	0.1107	13.5	400	4.0 cpm			
MC-26D2	3/26/09	91205	7.77	0.88	12.55	127	0.1111	14.4	400	4.0 cpm			
MC-26D2	3/26/09	91504	7.76	0.78	12.65	125	0.1116	11.4	400	4.0 cpm			
MC-26D2	3/26/09	91847	7.74	0.75	12.43	125	0.1116	11.1	400	4.0 cpm			
MC-26D2	3/26/09	92105	7.75	0.83	12.55	124	0.1114	10.91	400	4.0 cpm			
MC-118D2	3/26/09	101105	7.82	3.59	12.70	140	0.2164	13.8	400	4.0 cpm	30	1.69	All parameters stable when sample was collected.
MC-118D2	3/26/09	101418	7.47	2.11	12.84	145	0.2208	10.25	400	4.0 cpm			Turbidity < 5 NTU's
MC-118D2	3/26/09	101705	7.34	1.69	12.71	147	0.2212	8.25	400	4.0 cpm			Do > 0.20 mg/L
MC-118D2	3/26/09	102005	7.24	1.15	12.88	142	0.2212	6.70	400	4.0 cpm			
MC-118D2	3/26/09	102306	7.20	0.98	12.85	140	0.2195	4.88	400	4.0 cpm			
MC-118D2	3/26/09	102606	7.16	0.66	13.07	137	0.2186	4.41	400	4.0 cpm			
MC-118D2	3/26/09	102910	7.14	0.57	13.04	135	0.2159	4.12	400	4.0 cpm			
MC-118D2	3/26/09	103206	7.15	0.50	13.05	131	0.2139	3.88	400	4.0 cpm			
MC-118D2	3/26/09	103505	7.17	0.49	12.91	128	0.2120	3.77	400	4.0 cpm			
MC-118D2	3/26/09	103805	7.16	0.46	13.13	126	0.2124	3.48	400	4.0 cpm			
MC-118D	3/26/09	110905	6.91	0.29	16.95	127	0.2475	13.9	400	67 Hz	18	1.99	All parameters stable when sample was collected.
MC-118D	3/26/09	111205	6.90	0.26	17.30	124	0.2479	8.96	400	67 Hz			Turbidity < 5 NTU's
MC-118D	3/26/09	111505	6.91	0.26	17.49	122	0.2477	4.86	400	67 Hz			Do > 0.20 mg/L
MC-118D	3/26/09	111805	6.90	0.22	18.10	119	0.2517	2.78	400	67 Hz			Fe Field Test Kit Reading - 2.19 mg/L.
MC-118D	3/26/09	112105	6.90	0.22	18.48	117	0.2552	2.75	400	67 Hz			
MC-118D	3/26/09	112405	6.89	0.21	18.65	115	0.2555	2.49	400	67 Hz			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidty	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	C	mV	mS/cm	NTUs	ml/min	Hz or cpm	Minutes	(0.01) ft.	
MC-25	3/26/09	121205	8.12	6.68	11.50	69	0.0550	20.5	400	4.0 cpm	30	0.05	All parameters stable when sample was collected.
MC-25	3/26/09	121505	7.79	5.94	11.54	84	0.0543	16.9	400	4.0 cpm			Turbidity > 5 NTU's but stable.
MC-25	3/26/09	121805	7.85	6.95	11.03	78	0.0534	15.1	400	4.0 cpm			Do > 0.20 mg/L
MC-25	3/26/09	122105	7.82	6.73	10.88	78	0.0531	13.0	400	4.0 cpm			
MC-25	3/26/09	122405	7.73	5.69	11.06	80	0.0536	12.8	400	4.0 cpm			
MC-25	3/26/09	122712	7.71	6.49	11.08	83	0.0534	11.5	400	4.0 cpm			
MC-25	3/26/09	123005	7.65	7.00	10.42	85	0.0531	11.1	400	4.0 cpm			
MC-25	3/26/09	123305	7.59	7.03	9.90	87	0.0532	10.47	400	4.0 cpm			
MC-25	3/26/09	123605	7.55	6.87	10.05	91	0.0539	10.17	400	4.0 cpm			
MC-25	3/26/09	123911	7.50	6.37	10.13	90	0.0535	10.08	400	4.0 cpm			
MC-25D2	3/26/09	130606	7.47	1.64	13.94	84	0.2031	10.19	400	4.0 cpm	24	0.96	All parameters stable when sample was collected.
MC-25D2	3/26/09	130933	7.54	0.98	13.96	75	0.2119	7.36	400	4.0 cpm			Turbidity > 5 NTU's but stable.
MC-25D2	3/26/09	131245	7.58	0.50	13.84	67	0.2107	6.62	400	4.0 cpm			Do > 0.20 mg/L
MC-25D2	3/26/09	131506	7.49	0.37	13.92	70	0.2086	6.43	400	4.0 cpm			
MC-25D2	3/26/09	131806	7.67	0.30	13.79	59	0.2081	5.72	400	4.0 cpm			
MC-25D2	3/26/09	132114	7.68	0.26	13.86	57	0.2079	6.34	400	4.0 cpm			
MC-25D2	3/26/09	132411	7.69	0.27	13.94	54	0.2081	6.17	400	4.0 cpm			
MC-25D2	3/26/09	132714	7.71	0.28	14.04	52	0.2042	6.06	400	4.0 cpm			
MC-25D	3/26/09	140105	7.03	0.59	14.05	80	0.2349	39.4	400	4.0 cpm	24	0.37	All parameters stable when sample was collected.
MC-25D	3/26/09	140414	7.03	0.58	14.16	79	0.2357	30.1	400	4.0 cpm			Turbidity > 5 NTU's but stable.
MC-25D	3/26/09	140707	7.01	0.57	14.20	79	0.2342	28.8	400	4.0 cpm			Do > 0.20 mg/L
MC-25D	3/26/09	141005	7.03	0.57	14.05	78	0.2328	26.8	400	4.0 cpm			Fe Field Test Kit Reading - 0.00 mg/L non detect.
MC-25D	3/26/09	141320	7.03	0.55	14.14	77	0.2332	19.6	400	4.0 cpm			
MC-25D	3/26/09	141605	7.00	0.49	14.16	78	0.2321	15.3	400	4.0 cpm			
MC-25D	3/26/09	141905	7.02	0.48	14.08	76	0.2314	15.0	400	4.0 cpm			
MC-25D	3/26/09	142205	7.00	0.45	14.20	76	0.2314	14.7	400	4.0 cpm			
MC-2	3/27/09	82917	7.87	0.21	13.06	135	0.0792	3.89	400	51 Hz	21	0.52	All parameters stable when sample was collected.
MC-2	3/27/09	83206	7.77	0.16	14.13	133	0.0794	2.65	400	51 Hz			Turbidity < 5 NTU's
MC-2	3/27/09	83506	7.66	0.14	14.99	132	0.0798	1.88	400	51 Hz			Do < 0.20 mg/L but stable.
MC-2	3/27/09	83807	7.59	0.11	15.38	131	0.0798	1.32	400	51 Hz			Do Field Test Kit Reading - 0.25 mg/L.
MC-2	3/27/09	84124	7.51	0.08	15.21	130	0.0811	1.32	400	51 Hz			
MC-2	3/27/09	84417	7.46	0.07	15.63	129	0.0821	1.13	400	51 Hz			
MC-2	3/27/09	84706	7.43	0.07	15.64	127	0.0821	1.14	400	51 Hz			
MC-2D	3/27/09	91222	7.38	1.09	14.40	131	0.1825	1.71	400	64 Hz	21	1.62	All parameters stable when sample was collected.
MC-2D	3/27/09	91511	7.35	0.88	15.35	132	0.1884	0.80	400	64 Hz			Turbidity < 5 NTU's
MC-2D	3/27/09	91805	7.32	0.45	16.21	132	0.1936	0.38	400	64 Hz			Do > 0.20 mg/L
MC-2D	3/27/09	92105	7.29	0.62	16.73	131	0.1967	0.33	400	64 Hz			
MC-2D	3/27/09	92406	7.28	0.72	16.97	131	0.1982	0.07	400	64 Hz			
MC-2D	3/27/09	92709	7.26	0.66	17.09	131	0.1990	0.22	400	64 Hz			
MC-2D	3/27/09	93005	7.26	0.65	17.29	130	0.2001	0.10	400	64 Hz			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidty	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	C	mV	mS/cm	NTUs	ml/min	Hz or cpm	Minutes	(0.01) ft.	
MC-1	3/27/09	100305	7.84	4.88	10.39	129	0.0310	55.1	400	56 Hz	33	0.32	All parameters stable when sample was collected.
MC-1	3/27/09	100605	7.69	5.08	11.59	134	0.0313	26.1	400	56 Hz			Turbidity > 5 NTU's but stable.
MC-1	3/27/09	100905	7.63	4.89	12.78	133	0.0303	12.6	400	56 Hz			Do > 0.20 mg/L
MC-1	3/27/09	101205	7.47	4.43	13.71	136	0.0316	9.85	400	56 Hz			Fe Field Test Kit Reading - 0.70 mg/L.
MC-1	3/27/09	101505	7.33	4.16	14.11	139	0.0323	8.74	400	56 Hz			
MC-1	3/27/09	101807	7.22	3.92	14.25	140	0.0331	7.83	400	56 Hz			
MC-1	3/27/09	102125	7.11	3.70	14.28	141	0.0337	7.39	400	56 Hz			
MC-1	3/27/09	102414	7.05	3.61	14.42	141	0.0342	6.65	400	56 Hz			
MC-1	3/27/09	102706	7.00	3.56	14.47	141	0.0343	6.40	400	56 Hz			
MC-1	3/27/09	103006	6.95	3.49	14.51	142	0.0345	6.28	400	56 Hz			
MC-1	3/27/09	103305	6.90	3.42	14.24	142	0.0348	6.18	400	56 Hz			
MC-24D	3/27/09	111724	6.90	0.68	12.96	142	0.2304	178.0	400	4.0 cpm	36	0.29	All parameters stable when sample was collected.
MC-24D	3/27/09	112005	6.96	0.55	13.37	137	0.2306	141.0	400	4.0 cpm			Turbidity < 5 NTU's
MC-24D	3/27/09	112305	6.95	0.54	13.23	136	0.2291	75.9	400	4.0 cpm			Do > 0.20 mg/L
MC-24D	3/27/09	112606	6.90	0.60	13.13	138	0.2255	59.0	400	4.0 cpm			Fe Field Test Kit Reading - 0.32 mg/L.
MC-24D	3/27/09	112905	6.95	0.47	13.05	135	0.2210	20.6	400	4.0 cpm			
MC-24D	3/27/09	113205	6.93	0.51	12.90	135	0.2172	12.9	400	4.0 cpm			
MC-24D	3/27/09	113505	6.95	0.49	13.05	133	0.2176	9.28	400	4.0 cpm			
MC-24D	3/27/09	113810	6.96	0.47	13.19	132	0.2186	5.84	400	4.0 cpm			
MC-24D	3/27/09	114105	6.95	0.57	13.23	131	0.2194	5.41	400	4.0 cpm			
MC-24D	3/27/09	114405	6.91	0.47	13.18	132	0.2199	4.82	400	4.0 cpm			
MC-24D	3/27/09	114705	6.93	0.43	13.25	131	0.2191	4.79	400	4.0 cpm			
MC-24D	3/27/09	115008	6.93	0.43	13.20	130	0.2178	4.65	400	4.0 cpm			
MC-24	3/27/09	122228	7.96	8.52	9.56	107	0.0399	11.5	400	4.0 cpm	18	0.06	All parameters stable when sample was collected.
MC-24	3/27/09	122506	7.90	8.19	9.67	109	0.0396	10.91	400	4.0 cpm			Turbidity > 5 NTU's but stable.
MC-24	3/27/09	122805	7.77	8.13	9.48	113	0.0390	9.52	400	4.0 cpm			Do > 0.20 mg/L
MC-24	3/27/09	123106	7.52	8.14	9.28	124	0.0384	8.80	400	4.0 cpm			
MC-24	3/27/09	123406	7.58	8.05	9.22	121	0.0385	8.33	400	4.0 cpm			
MC-24	3/27/09	123705	7.42	8.28	9.30	131	0.0388	8.04	400	4.0 cpm			
MC-13	3/27/09	130706	7.31	0.59	10.05	129	0.0460	16.4	400	3.0 cpm	18	0.12	All parameters stable when sample was collected.
MC-13	3/27/09	131008	7.25	0.41	10.04	124	0.0465	13.1	400	3.0 cpm			Turbidity > 5 NTU's but stable.
MC-13	3/27/09	131305	7.29	0.36	10.03	121	0.0475	11.7	400	3.0 cpm			Do > 0.20 mg/L
MC-13	3/27/09	131606	7.28	0.31	10.02	117	0.0481	10.3	400	3.0 cpm			
MC-13	3/27/09	131907	7.20	0.30	10.02	115	0.0494	10.02	400	3.0 cpm			
MC-13	3/27/09	132205	7.25	0.29	9.99	112	0.0479	9.85	400	3.0 cpm			
MC-13D	3/27/09	134605	7.37	2.56	11.07	105	0.1166	3.15	200	1.0 cpm	21	0.95	All parameters stable when sample was collected.
MC-13D	3/27/09	134911	7.39	2.03	11.22	104	0.1170	2.68	200	1.0 cpm			Turbidity < 5 NTU's
MC-13D	3/27/09	135207	7.38	1.69	11.28	103	0.1171	2.29	200	1.0 cpm			Do > 0.20 mg/L
MC-13D	3/27/09	135505	7.41	1.46	11.33	103	0.1172	1.82	200	1.0 cpm			
MC-13D	3/27/09	135811	7.41	1.26	11.46	102	0.1171	1.82	200	1.0 cpm			
MC-13D	3/27/09	140114	7.42	1.18	11.54	102	0.1172	1.59	200	1.0 cpm			
MC-13D	3/27/09	140410	7.41	1.16	11.57	102	0.1174	1.25	200	1.0 cpm			

Second Quarter 2009

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	C	mV	mS/cm	NTUs	ml/min	Hz or cpm	Minutes	(0.01) ft.	
UT-ST-1	6/22/09	111101	6.62	2.91	17.84	136	0.0703	8.04	100	0.2 cpm	30	0.71	All parameters stable when sample was collected.
UT-ST-1	6/22/09	111414	6.72	2.99	17.71	131	0.0692	8.01	100	0.2 cpm			Turbidity < 5 NTU's
UT-ST-1	6/22/09	111721	6.63	2.94	17.33	133	0.0989	4.85	100	0.2 cpm			Do > 0.20 mg/L
UT-ST-1	6/22/09	112010	6.73	3.02	17.17	131	0.0898	4.12	100	0.2 cpm			
UT-ST-1	6/22/09	112311	6.72	2.92	17.02	132	0.0825	2.95	100	0.2 cpm			
UT-ST-1	6/22/09	112601	6.75	2.81	16.95	132	0.0811	2.24	100	0.2 cpm			
UT-ST-1	6/22/09	112901	6.72	2.73	16.31	123	0.0716	1.98	100	0.2 cpm			
UT-ST-1	6/22/09	113201	6.83	2.76	16.09	127	0.0702	1.17	100	0.2 cpm			
UT-ST-1	6/22/09	113525	6.74	2.75	16.11	128	0.0699	0.72	100	0.2 cpm			
UT-ST-1	6/22/09	113805	6.82	2.73	16.12	129	0.0699	0.49	100	0.2 cpm			
PZU-4	6/22/09	123201	6.53	1.49	18.03	145	0.1042	3.98	100	0.2 cpm	18	0.32	All parameters stable when sample was collected.
PZU-4	6/22/09	123502	6.57	1.40	17.59	134	0.1025	4.01	100	0.2 cpm			Turbidity < 5 NTU's
PZU-4	6/22/09	123811	6.80	1.38	17.29	123	0.1006	3.62	100	0.2 cpm			Do > 0.20 mg/L
PZU-4	6/22/09	124101	6.70	1.23	17.34	126	0.0987	3.26	100	0.2 cpm			
PZU-4	6/22/09	124401	6.75	1.15	17.20	121	0.0965	3.18	100	0.2 cpm			
PZU-4	6/22/09	124702	6.70	1.15	17.18	118	0.0966	2.02	100	0.2 cpm			
PZU-5	6/22/09	134302	6.72	1.92	20.37	123	0.4334	28.5	100	0.2 cpm	27	1.02	All parameters stable when sample was collected.
PZU-5	6/22/09	134602	6.77	1.89	20.00	118	0.4334	27.6	100	0.2 cpm			Turbidity > 5 NTU's But stable.
PZU-5	6/22/09	134902	6.82	1.79	19.88	114	0.4325	26.9	100	0.2 cpm			Do > 0.20 mg/L
PZU-5	6/22/09	135201	6.82	1.79	20.07	112	0.4261	26.7	100	0.2 cpm			
PZU-5	6/22/09	135503	6.82	1.79	20.42	110	0.4197	25.3	100	0.2 cpm			
PZU-5	6/22/09	135804	6.86	1.77	20.58	108	0.4147	20.8	100	0.2 cpm			
PZU-5	6/22/09	140105	6.87	1.61	20.48	108	0.4105	21.4	100	0.2 cpm			
PZU-5	6/22/09	140402	6.86	1.52	20.62	107	0.4028	21.3	100	0.2 cpm			
PZU-5	6/22/09	140703	6.86	1.51	20.68	107	0.3988	21.0	100	0.2 cpm			
MC-123	6/23/09	80602	6.91	1.07	14.21	160	1.052	22.4	100	0.2 cpm	30	0.44	All parameters stable when sample was collected.
MC-123	6/23/09	80902	6.85	0.92	14.20	159	1.053	17.7	100	0.2 cpm			Turbidity < 5 NTU's
MC-123	6/23/09	81212	6.88	0.84	14.21	155	1.053	14.4	100	0.2 cpm			Do > 0.20 mg/L
MC-123	6/23/09	81502	6.82	0.81	14.33	155	1.055	10.96	100	0.2 cpm			
MC-123	6/23/09	81806	6.87	0.77	14.38	156	1.053	8.74	100	0.2 cpm			
MC-123	6/23/09	82109	6.84	0.74	14.52	155	1.054	6.86	100	0.2 cpm			
MC-123	6/23/09	82402	6.91	0.68	14.81	152	1.054	5.14	100	0.2 cpm			
MC-123	6/23/09	82707	6.86	0.66	15.02	152	1.050	4.93	100	0.2 cpm			
MC-123	6/23/09	83000	6.81	0.63	15.09	152	1.054	4.24	100	0.2 cpm			
MC-123	6/23/09	83302	6.91	0.61	15.09	153	1.055	4.03	100	0.2 cpm			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	C	mV	mS/cm	NTUs	ml/min	Hz or cpm	Minutes	(0.01) ft.	
MC-20D	6/23/09	90602	8.01	1.26	14.40	106	0.1357	43.7	400	4.0 cpm	48	0.96	All parameters stable when sample was collected.
MC-20D	6/23/09	90902	7.92	1.01	14.23	1123	0.1351	119	400	4.0 cpm			Turbidity < 5 NTU's
MC-20D	6/23/09	91204	7.80	0.85	14.15	105	0.1342	93.3	400	4.0 cpm			Do > 0.20 mg/L
MC-20D	6/23/09	91511	7.97	0.76	14.08	104	0.1340	62.1	400	4.0 cpm			
MC-20D	6/23/09	91801	7.97	0.71	14.04	113	0.1337	37.2	400	4.0 cpm			
MC-20D	6/23/09	92100	7.92	0.70	14.03	103	0.1336	27.4	400	4.0 cpm			
MC-20D	6/23/09	92421	7.92	0.70	14.04	104	0.1332	19.3	400	4.0 cpm			
MC-20D	6/23/09	92704	7.82	0.68	14.05	103	0.1331	13.7	400	4.0 cpm			
MC-20D	6/23/09	93001	7.90	0.66	14.01	102	0.1331	10.76	400	4.0 cpm			
MC-20D	6/23/09	93302	7.80	0.65	14.04	11	0.1331	9.10	400	4.0 cpm			
MC-20D	6/23/09	93602	7.75	0.62	14.06	102	0.1331	7.53	400	4.0 cpm			
MC-20D	6/23/09	93902	7.86	0.63	14.08	100	0.1333	5.50	400	4.0 cpm			
MC-20D	6/23/09	94203	7.76	0.60	14.11	102	0.1326	5.00	400	4.0 cpm			
MC-20D	6/23/09	94502	7.84	0.62	14.11	107	0.1325	5.00	400	4.0 cpm			
MC-20D	6/23/09	94802	7.74	0.63	14.17	99	0.1331	4.87	400	4.0 cpm			
MC-20D	6/23/09	95100	7.77	0.60	14.20	101	0.1332	4.67	400	4.0 cpm			
MC-20	6/23/09	101762	6.98	1.20	16.80	138	0.2400	24.8	100	0.2 cpm	21	0.53	All parameters stable when sample was collected.
MC-20	6/23/09	102003	6.94	1.12	16.76	140	0.2412	21.6	100	0.2 cpm			Turbidity > 5 NTU's But stable.
MC-20	6/23/09	102303	6.85	1.03	17.07	140	0.2411	13.0	100	0.2 cpm			Do > 0.20 mg/L
MC-20	6/23/09	102606	6.85	1.00	17.12	139	0.2429	11.8	100	0.2 cpm			
MC-20	6/23/09	102906	6.82	0.94	17.47	139	0.2418	9.97	100	0.2 cpm			
MC-20	6/23/09	103201	6.79	0.92	17.54	139	0.2433	9.94	100	0.2 cpm			
MC-20	6/23/09	103502	6.76	0.89	17.74	139	0.2425	9.10	100	0.2 cpm			
MC-122	6/23/09	112606	7.30	1.09	18.12	139	0.1212	34.5	100	0.2 cpm	27	0.66	All parameters stable when sample was collected.
MC-122	6/23/09	112925	7.28	0.90	17.54	138	0.1198	30.0	100	0.2 cpm			Turbidity > 5 NTU's But stable.
MC-122	6/23/09	113205	7.22	0.81	17.25	133	0.1191	24.3	100	0.2 cpm			Do > 0.20 mg/L
MC-122	6/23/09	113524	7.26	0.76	17.04	128	0.1178	19.4	100	0.2 cpm			
MC-122	6/23/09	113821	7.23	0.73	17.01	125	0.1175	17.3	100	0.2 cpm			
MC-122	6/23/09	114106	7.26	0.67	16.97	123	0.1173	13.1	100	0.2 cpm			
MC-122	6/23/09	114421	7.30	0.67	16.94	121	0.1167	12.1	100	0.2 cpm			
MC-122	6/23/09	114705	7.29	0.65	17.00	120	0.1164	11.5	100	0.2 cpm			
MC-122	6/23/09	115014	7.36	0.65	17.15	119	0.1162	11.5	100	0.2 cpm			
MC-13D	6/23/09	124205	7.48	1.05	16.50	124	0.1233	1.76	200	1.0 cpm	15	0.95	All parameters stable when sample was collected.
MC-13D	6/23/09	124505	7.42	0.75	16.16	123	0.1224	1.35	200	1.0 cpm			Turbidity < 5 NTU's
MC-13D	6/23/09	124805	7.54	0.60	16.03	121	0.1219	0.80	200	1.0 cpm			Do > 0.20 mg/L
MC-13D	6/23/09	125106	7.46	0.54	15.98	117	0.1220	0.52	200	1.0 cpm			
MC-13D	6/23/09	125405	7.48	0.57	16.05	117	0.1222	0.49	200	1.0 cpm			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	C	mV	mS/cm	NTUs	ml/min	Hz or cpm	Minutes	(0.01) ft.	
MC-13	6/23/09	131705	6.98	0.46	16.36	142	0.0806	7.32	400	3.0 cpm	15	0.12	All parameters stable when sample was collected.
MC-13	6/23/09	132005	6.88	0.37	15.87	140	0.0838	4.39	400	3.0 cpm			Turbidity < 5 NTU's
MC-13	6/23/09	132305	6.97	0.33	15.95	137	0.0839	3.62	400	3.0 cpm			Do > 0.20 mg/L
MC-13	6/23/09	132634	6.99	0.30	15.84	133	0.0837	2.57	400	3.0 cpm			
MC-13	6/23/09	132906	6.97	0.30	15.92	130	0.0834	2.48	400	3.0 cpm			
MC-14D	6/23/09	140005	7.52	2.41	19.15	112	0.1240	1.87	400	4.0 cpm	21	1.44	All parameters stable when sample was collected.
MC-14D	6/23/09	140305	7.66	1.44	17.34	103	0.1227	1.21	400	4.0 cpm			Turbidity < 5 NTU's
MC-14D	6/23/09	140606	7.59	0.81	16.61	105	0.1225	0.53	400	4.0 cpm			Do > 0.20 mg/L
MC-14D	6/23/09	140906	7.69	0.57	16.53	99	0.1218	0.40	400	4.0 cpm			
MC-14D	6/23/09	141205	7.70	0.43	16.56	103	0.1222	0.28	400	4.0 cpm			
MC-14D	6/23/09	141506	7.69	0.40	16.55	96	0.1219	0.13	400	4.0 cpm			
MC-14D	6/23/09	141805	7.74	0.39	16.68	94	0.1223	0.10	400	4.0 cpm			
MC-14	6/24/09	74605	6.94	1.76	16.08	160	1.4800	24.5	100	0.2 cpm	54	2.54	All parameters stable when sample was collected.
MC-14	6/24/09	74905	6.98	1.09	16.24	157	1.4840	27.1	100	0.2 cpm			Turbidity > 5 NTU's But stable.
MC-14	6/24/09	75205	6.96	1.01	16.53	154	1.4410	27.1	100	0.2 cpm			Do > 0.20 mg/L
MC-14	6/24/09	75512	7.01	0.94	17.05	150	1.3720	29.6	100	0.2 cpm			
MC-14	6/24/09	75831	7.04	0.89	17.09	148	1.2850	26.1	100	0.2 cpm			
MC-14	6/24/09	80106	7.02	1.24	17.16	147	1.2700	29.9	100	0.2 cpm			
MC-14	6/24/09	80405	7.01	1.27	17.43	144	1.2300	29.1	100	0.2 cpm			
MC-14	6/24/09	80705	7.00	1.29	17.69	144	1.2640	28.3	100	0.2 cpm			
MC-14	6/24/09	81005	7.01	1.31	17.69	142	1.2870	26.6	100	0.2 cpm			
MC-14	6/24/09	81305	7.01	1.28	17.73	140	1.2410	25.4	100	0.2 cpm			
MC-14	6/24/09	81612	6.96	1.37	17.72	138	1.1900	25.3	100	0.2 cpm			
MC-14	6/24/09	81905	7.00	1.38	17.70	136	1.1500	25.1	100	0.2 cpm			
MC-14	6/24/09	82206	6.94	1.38	17.63	135	1.1250	22.4	100	0.2 cpm			
MC-14	6/24/09	82505	6.96	1.39	17.42	133	1.0640	19.2	100	0.2 cpm			
MC-14	6/24/09	82810	6.97	1.32	17.21	132	1.0040	18.3	100	0.2 cpm			
MC-14	6/24/09	83123	6.99	1.29	17.05	130	0.9676	16.0	100	0.2 cpm			
MC-14	6/24/09	83443	7.01	1.26	16.98	128	0.9521	15.1	100	0.2 cpm			
MC-14	6/24/09	83710	6.99	1.21	17.00	126	0.9490	14.8	100	0.2 cpm			
MC-15	6/24/09	122407	6.91	1.35	18.75	144	0.2026	6.80	200	1.0 cpm	18	0.53	All parameters stable when sample was collected.
MC-15	6/24/09	122705	7.01	0.99	18.20	139	0.1931	2.57	200	1.0 cpm			Turbidity < 5 NTU's
MC-15	6/24/09	123005	6.98	0.80	18.24	135	0.1867	1.63	200	1.0 cpm			Do > 0.20 mg/L
MC-15	6/24/09	123305	7.03	0.70	18.27	130	0.1865	1.01	200	1.0 cpm			
MC-15	6/24/09	123605	7.02	0.63	18.35	129	0.1846	0.83	200	1.0 cpm			
MC-15	6/24/09	123906	6.98	0.64	18.39	127	0.1843	0.76	200	1.0 cpm			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	C	mV	mS/cm	NTUs	ml/min	Hz or cpm	Minutes	(0.01) ft.	
MC-15D	6/24/09	130605	7.00	0.53	16.61	133	0.3243	0.75	400	54 Hz	18	0.98	All parameters stable when sample was collected.
MC-15D	6/24/09	130905	7.07	0.37	17.35	127	0.3283	0.74	400	54 Hz			Turbidity < 5 NTU's
MC-15D	6/24/09	131205	7.19	0.30	18.20	120	0.3292	0.34	400	54 Hz			Do > 0.20 mg/L
MC-15D	6/24/09	131507	7.19	0.25	18.72	118	0.3297	0.25	400	54 Hz			
MC-15D	6/24/09	131808	7.17	0.24	19.08	117	0.3294	0.25	400	54 Hz			
MC-15D	6/24/09	132106	7.16	0.23	19.16	116	0.3298	0.23	400	54 Hz			
MC-16	6/24/09	140705	7.10	0.98	19.68	122	0.1115	4.10	200	1.0 cpm	27	0.58	All parameters stable when sample was collected.
MC-16	6/24/09	141005	7.10	0.77	18.73	123	0.1093	2.82	200	1.0 cpm			Turbidity < 5 NTU's
MC-16	6/24/09	141305	7.11	0.66	18.25	122	0.1106	2.29	200	1.0 cpm			Do > 0.20 mg/L
MC-16	6/24/09	141611	7.12	0.55	18.25	120	0.1127	1.34	200	1.0 cpm			
MC-16	6/24/09	141905	7.19	0.52	18.47	116	0.1152	1.23	200	1.0 cpm			
MC-16	6/24/09	142205	7.24	0.47	18.49	116	0.1182	0.87	200	1.0 cpm			
MC-16	6/24/09	142505	7.12	0.44	18.57	114	0.1205	0.83	200	1.0 cpm			
MC-16	6/24/09	142816	7.08	0.43	18.76	113	0.1217	0.76	200	1.0 cpm			
MC-16	6/24/09	143106	7.16	0.41	18.71	113	0.1213	0.75	200	1.0 cpm			
MC-32	6/25/09	80705	7.49	2.45	15.09	137	0.9409	19.5	50	4.0 cpm	12	N/A	Well ran dry before it could stabilize. Need multiable re
MC-32	6/25/09	81005	7.38	2.61	15.10	139	0.9475	19.3	50	4.0 cpm			to collect samples.
MC-32	6/25/09	81339	7.24	2.77	15.20	142	0.9501	18.7	50	4.0 cpm			Collected samples after recharge on 6-26-09 and 6-29
MC-32	6/25/09	81607	7.24	2.75	15.20	141	0.9506	18.6	50	4.0 cpm			
MC-33	6/25/09	85206	7.62	1.12	14.40	122	0.1573	25.8	400	4.0 cpm	36	0.49	All parameters stable when sample was collected.
MC-33	6/25/09	85505	7.53	0.49	14.42	123	0.1472	19.9	400	4.0 cpm			Turbidity < 5 NTU's
MC-33	6/25/09	85805	7.39	0.35	14.43	125	0.1350	15.0	400	4.0 cpm			Do > 0.20 mg/L
MC-33	6/25/09	90106	7.44	0.31	14.45	120	0.1277	10.68	400	4.0 cpm			
MC-33	6/25/09	90429	7.41	0.29	14.49	118	0.1224	9.73	400	4.0 cpm			
MC-33	6/25/09	90706	7.37	0.29	14.52	117	0.1182	9.20	400	4.0 cpm			
MC-33	6/25/09	91020	7.38	0.37	14.55	113	0.1134	7.77	400	4.0 cpm			
MC-33	6/25/09	91306	7.25	0.30	14.57	117	0.1089	7.14	400	4.0 cpm			
MC-33	6/25/09	91605	7.37	0.29	14.56	110	0.1061	6.26	400	4.0 cpm			
MC-33	6/25/09	91905	7.40	0.28	14.60	106	0.1031	4.97	400	4.0 cpm			
MC-33	6/25/09	92205	7.33	0.27	14.59	107	0.1009	4.50	400	4.0 cpm			
MC-33	6/25/09	92546	7.37	0.28	14.60	104	0.1004	4.49	400	4.0 cpm			
MC-107	6/25/09	95305	7.44	1.05	16.49	102	0.0840	3.03	200	1.0 cpm	18	0.03	All parameters stable when sample was collected.
MC-107	6/25/09	95605	7.40	0.77	16.39	101	0.0850	3.21	200	1.0 cpm			Turbidity < 5 NTU's
MC-107	6/25/09	95907	7.40	0.63	16.38	101	0.0850	1.80	200	1.0 cpm			Do > 0.20 mg/L
MC-107	6/25/09	100207	7.36	0.57	16.34	101	0.0843	1.79	200	1.0 cpm			
MC-107	6/25/09	100506	7.41	0.53	16.31	98	0.0840	1.69	200	1.0 cpm			
MC-107	6/25/09	100807	7.40	0.52	16.31	97	0.0836	1.57	200	1.0 cpm			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	C	mV	mS/cm	NTUs	ml/min	Hz or cpm	Minutes	(0.01) ft.	
MC-27D	6/25/09	105806	7.29	2.30	14.12	108	0.3523	12.5	400	4.0 cpm	66	0.72	All parameters stable when sample was collected.
MC-27D	6/25/09	110106	7.40	1.43	13.89	97	0.3521	37.6	400	4.0 cpm			Turbidity > 5 NTU's But stable.
MC-27D	6/25/09	110406	7.36	0.98	13.72	89	0.3517	51.8	400	4.0 cpm			Do > 0.20 mg/L
MC-27D	6/25/09	110710	7.46	0.72	13.75	77	0.3523	67.2	400	4.0 cpm			
MC-27D	6/25/09	111034	7.49	0.55	13.73	66	0.3537	86.5	400	4.0 cpm			
MC-27D	6/25/09	111306	7.46	0.46	13.73	61	0.3546	75.3	400	4.0 cpm			
MC-27D	6/25/09	111620	7.52	0.39	13.79	51	0.3559	72.4	400	4.0 cpm			
MC-27D	6/25/09	111906	7.44	0.36	13.80	49	0.3542	68.2	400	4.0 cpm			
MC-27D	6/25/09	112205	7.50	0.35	13.85	40	0.3547	70.3	400	4.0 cpm			
MC-27D	6/25/09	112516	7.51	0.31	13.85	34	0.3559	60.1	400	4.0 cpm			
MC-27D	6/25/09	112813	7.53	0.28	13.87	29	0.3565	65.0	400	4.0 cpm			
MC-27D	6/25/09	113107	7.54	0.24	13.86	25	0.3539	55.3	400	4.0 cpm			
MC-27D	6/25/09	113415	7.55	0.20	13.84	20	0.3539	54.7	400	4.0 cpm			
MC-27D	6/25/09	113717	7.38	0.20	13.86	22	0.3569	50.1	400	4.0 cpm			
MC-27D	6/25/09	114029	7.52	0.20	13.89	13	0.3552	56.2	400	4.0 cpm			
MC-27D	6/25/09	114305	7.51	0.22	13.93	11	0.3584	53.1	400	4.0 cpm			
MC-27D	6/25/09	114616	7.53	0.22	13.90	8	0.3599	48.2	400	4.0 cpm			
MC-27D	6/25/09	114906	7.46	0.20	13.85	9	0.3609	48.1	400	4.0 cpm			
MC-27D	6/25/09	115206	7.55	0.15	13.88	2	0.3607	42.7	400	4.0 cpm			
MC-27D	6/25/09	115508	7.55	0.20	13.83	3	0.3596	41.8	400	4.0 cpm			
MC-27D	6/25/09	115812	7.56	0.22	13.75	-3	0.3593	38.7	400	4.0 cpm			
MC-27D	6/25/09	120106	7.57	0.21	13.81	-6	0.3581	37.9	400	4.0 cpm			
MC-28D	6/25/09	123021	8.03	2.03	14.25	21	0.1625	11.4	400	4.0 cpm	30	1.88	All parameters stable when sample was collected.
MC-28D	6/25/09	123306	7.79	1.16	14.07	31	0.1617	10.73	400	4.0 cpm			Turbidity > 5 NTU's But stable.
MC-28D	6/25/09	123606	8.07	0.75	14.03	17	0.1609	9.72	400	4.0 cpm			Do > 0.20 mg/L
MC-28D	6/25/09	123905	8.12	0.60	14.04	15	0.1601	10.73	400	4.0 cpm			
MC-28D	6/25/09	124208	8.09	0.58	14.02	15	0.1592	9.74	400	4.0 cpm			
MC-28D	6/25/09	124506	8.11	0.62	14.07	14	0.1585	7.27	400	4.0 cpm			
MC-28D	6/25/09	124812	8.03	0.72	14.02	17	0.1577	14.2	400	4.0 cpm			
MC-28D	6/25/09	125105	8.03	0.87	14.10	17	0.1570	10.42	400	4.0 cpm			
MC-28D	6/25/09	125406	8.05	0.93	14.12	15	0.1567	10.41	400	4.0 cpm			
MC-28D	6/25/09	125703	8.03	0.96	14.08	14	0.1563	10.12	400	4.0 cpm			
MC-21	6/25/09	134006	7.61	0.86	18.35	72	0.0921	28.9	200	1.0 cpm	18	0.03	All parameters stable when sample was collected.
MC-21	6/25/09	134306	7.42	0.73	18.12	78	0.0933	14.9	200	1.0 cpm			Turbidity < 5 NTU's
MC-21	6/25/09	134605	7.32	0.70	17.99	80	0.0948	8.23	200	1.0 cpm			Do > 0.20 mg/L
MC-21	6/25/09	134928	7.18	0.65	17.86	84	0.0959	4.48	200	1.0 cpm			
MC-21	6/25/09	135205	7.14	0.63	17.84	84	0.0970	4.30	200	1.0 cpm			
MC-21	6/25/09	135506	7.10	0.65	17.76	86	0.0977	4.07	200	1.0 cpm			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	C	mV	mS/cm	NTUs	ml/min	Hz or cpm	Minutes	(0.01) ft.	
MC-17	6/25/09	142105	6.93	0.91	17.29	97	0.1760	8.20	200	1.0 cpm	24	0.25	All parameters stable when sample was collected.
MC-17	6/25/09	142406	6.96	0.72	16.99	93	0.1897	4.22	200	1.0 cpm			Turbidity < 5 NTU's
MC-17	6/25/09	142726	7.00	0.58	16.82	90	0.2269	4.01	200	1.0 cpm			Do > 0.20 mg/L
MC-17	6/25/09	143033	7.01	0.54	16.70	89	0.2630	3.29	200	1.0 cpm			
MC-17	6/25/09	143306	7.08	0.56	16.64	87	0.2827	3.01	200	1.0 cpm			
MC-17	6/25/09	143607	7.07	0.50	16.61	86	0.3005	2.65	200	1.0 cpm			
MC-17	6/25/09	143909	7.13	0.45	16.53	84	0.3079	0.97	200	1.0 cpm			
MC-17	6/25/09	144213	7.10	0.45	16.54	83	0.3027	0.96	200	1.0 cpm			
MC-17D	6/26/09	81314	8.81	1.40	14.01	102	0.1300	3.35	400	58 Hz	18	0.21	All parameters stable when sample was collected.
MC-17D	6/26/09	81604	8.61	1.02	15.04	104	0.1284	0.78	400	58 Hz			Turbidity < 5 NTU's
MC-17D	6/26/09	81905	8.41	0.92	15.90	108	0.1280	0.24	400	58 Hz			Do > 0.20 mg/L
MC-17D	6/26/09	82206	8.21	0.78	16.29	114	0.1279	0.08	400	58 Hz			
MC-17D	6/26/09	82505	8.20	0.79	16.49	119	0.1274	0.00	400	58 Hz			
MC-17D	6/26/09	82805	8.22	0.77	16.62	123	0.1274	0.00	400	58 Hz			
MC-24D	6/26/09	90906	7.32	2.35	14.51	150	0.8288	71.1	400	4.0 cpm	66	0.34	All parameters stable when sample was collected.
MC-24D	6/26/09	91206	7.24	1.12	14.46	150	0.8501	114	400	4.0 cpm			Turbidity > 5 NTU's But stable.
MC-24D	6/26/09	91524	7.15	0.58	14.46	151	0.8783	146	400	4.0 cpm			Do > 0.20 mg/L
MC-24D	6/26/09	91833	7.04	0.33	14.47	154	0.8821	171	400	4.0 cpm			
MC-24D	6/26/09	92106	7.07	0.34	14.43	152	0.8822	151	400	4.0 cpm			
MC-24D	6/26/09	92405	7.07	0.22	14.45	151	0.8816	146	400	4.0 cpm			
MC-24D	6/26/09	92707	7.09	0.19	14.46	149	0.8810	137	400	4.0 cpm			
MC-24D	6/26/09	93005	7.04	0.14	14.48	150	0.8817	116	400	4.0 cpm			
MC-24D	6/26/09	93306	7.07	0.16	14.56	148	0.8817	92.6	400	4.0 cpm			
MC-24D	6/26/09	93605	7.07	0.19	14.56	148	0.8822	79.8	400	4.0 cpm			
MC-24D	6/26/09	93906	7.05	0.11	14.53	149	0.8818	74.2	400	4.0 cpm			
MC-24D	6/26/09	94205	7.06	0.14	14.43	148	0.8812	73.0	400	4.0 cpm			
MC-24D	6/26/09	94523	7.03	0.18	14.34	149	0.8810	62.7	400	4.0 cpm			
MC-24D	6/26/09	94805	7.05	0.13	14.29	148	0.8806	51.9	400	4.0 cpm			
MC-24D	6/26/09	95106	7.00	0.20	14.25	150	0.8808	46.7	400	4.0 cpm			
MC-24D	6/26/09	95406	7.05	0.14	14.27	147	0.8814	43.4	400	4.0 cpm			
MC-24D	6/26/09	95706	7.06	0.13	14.47	146	0.8829	42.5	400	4.0 cpm			
MC-24D	6/26/09	100005	7.00	0.15	14.54	148	0.8837	40.1	400	4.0 cpm			
MC-24D	6/26/09	100351	7.03	0.41	14.74	147	0.8858	38.6	400	4.0 cpm			
MC-24D	6/26/09	100606	7.01	0.29	14.61	148	0.8863	38.7	400	4.0 cpm			
MC-24D	6/26/09	100905	7.03	0.27	14.44	146	0.8878	36.7	400	4.0 cpm			
MC-24D	6/26/09	101205	7.03	0.27	14.42	146	0.8874	35.9	400	4.0 cpm			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	C	mV	mS/cm	NTUs	ml/min	Hz or cpm	Minutes	(0.01) ft.	
MC-24	6/26/09	102910	7.84	2.85	18.39	116	0.0494	24.2	400	4.0 cpm	30	0.08	All parameters stable when sample was collected.
MC-24	6/26/09	103210	7.88	2.21	18.66	114	0.0478	24.7	400	4.0 cpm			Turbidity > 5 NTU's But stable.
MC-24	6/26/09	103511	7.79	2.09	18.80	117	0.0477	22.5	400	4.0 cpm			Do > 0.20 mg/L
MC-24	6/26/09	103805	7.68	2.22	18.93	122	0.0476	24.3	400	4.0 cpm			
MC-24	6/26/09	104111	7.55	2.73	18.96	127	0.0466	25.3	400	4.0 cpm			
MC-24	6/26/09	104406	7.45	2.89	19.06	131	0.0457	27.8	400	4.0 cpm			
MC-24	6/26/09	104745	7.43	2.92	19.15	132	0.0452	29.6	400	4.0 cpm			
MC-24	6/26/09	105005	7.37	2.91	19.10	134	0.0455	28.3	400	4.0 cpm			
MC-24	6/26/09	105306	7.32	3.10	19.09	136	0.0452	28.2	400	4.0 cpm			
MC-24	6/26/09	105605	7.36	3.13	19.12	142	0.0454	27.8	400	4.0 cpm			
MC-24D2	6/26/09	111905	7.34	2.43	15.83	140	0.1192	13.2	400	4.0 cpm	39	0.02	All parameters stable when sample was collected.
MC-24D2	6/26/09	112206	7.34	1.74	15.80	138	0.1198	23.0	400	4.0 cpm			Turbidity > 5 NTU's But stable.
MC-24D2	6/26/09	112511	7.42	1.17	15.52	133	0.1203	30.7	400	4.0 cpm			Do > 0.20 mg/L
MC-24D2	6/26/09	112807	7.46	0.89	15.47	131	0.1213	37.0	400	4.0 cpm			
MC-24D2	6/26/09	113105	7.50	0.73	15.33	129	0.1224	37.0	400	4.0 cpm			
MC-24D2	6/26/09	113405	7.46	0.60	15.36	129	0.1229	34.8	400	4.0 cpm			
MC-24D2	6/26/09	113704	7.47	0.57	15.34	129	0.1229	30.6	400	4.0 cpm			
MC-24D2	6/26/09	114004	7.38	0.52	15.53	132	0.1232	29.5	400	4.0 cpm			
MC-24D2	6/26/09	114307	7.51	0.51	15.60	125	0.1233	21.9	400	4.0 cpm			
MC-24D2	6/26/09	114621	7.56	0.50	15.75	125	0.1237	18.1	400	4.0 cpm			
MC-24D2	6/26/09	114909	7.46	0.45	15.72	125	0.1233	13.4	400	4.0 cpm			
MC-24D2	6/26/09	115224	7.37	0.44	15.60	132	0.1241	13.1	400	4.0 cpm			
MC-24D2	6/26/09	115538	7.47	0.41	15.54	126	0.1236	12.2	400	4.0 cpm			
MC-25D2	6/26/09	123205	7.68	1.72	15.97	121	0.1587	8.27	400	4.0 cpm	21	0.82	All parameters stable when sample was collected.
MC-25D2	6/26/09	123518	7.75	1.02	15.92	117	0.1467	9.91	400	4.0 cpm			Turbidity > 5 NTU's But stable.
MC-25D2	6/26/09	123843	7.66	0.72	15.78	122	0.1388	9.53	400	4.0 cpm			Do > 0.20 mg/L
MC-25D2	6/26/09	124106	7.68	0.68	15.68	121	0.1352	9.09	400	4.0 cpm			
MC-25D2	6/26/09	124426	7.69	0.54	15.69	120	0.1325	9.09	400	4.0 cpm			
MC-25D2	6/26/09	124726	7.69	0.50	15.67	119	0.1322	8.80	400	4.0 cpm			
MC-25D2	6/26/09	125049	7.67	0.50	15.79	119	0.1326	8.24	400	4.0 cpm			
MC-25D	6/26/09	133111	7.28	1.73	19.33	146	0.8265	10.34	400	4.0 cpm	23	0.23	All parameters stable when sample was collected.
MC-25D	6/26/09	133406	7.21	1.17	17.33	147	0.8078	9.48	400	4.0 cpm			Turbidity < 5 NTU's
MC-25D	6/26/09	133705	7.24	0.71	16.72	146	0.7941	7.24	400	4.0 cpm			Do > 0.20 mg/L
MC-25D	6/26/09	134006	7.25	0.46	16.61	144	0.7884	6.25	400	4.0 cpm			
MC-25D	6/26/09	134305	7.21	0.33	16.55	145	0.7862	4.95	400	4.0 cpm			
MC-25D	6/26/09	134611	7.21	0.33	16.48	144	0.7864	4.83	400	4.0 cpm			
MC-25D	6/26/09	134908	7.16	0.32	16.44	145	0.7863	4.79	400	4.0 cpm			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	C	mV	mS/cm	NTUs	ml/min	Hz or cpm	Minutes	(0.01) ft.	
MC-25	6/29/09	73002	8.62	4.12	19.91	122	0.0940	18.1	300	4.0 cpm	21	0.08	All parameters stable when sample was collected.
MC-25	6/29/09	73302	8.19	3.84	20.05	124	0.0980	11.3	300	4.0 cpm			Turbidity < 5 NTU's
MC-25	6/29/09	73605	7.75	3.61	20.12	138	0.1000	7.63	300	4.0 cpm			Do > 0.20 mg/L
MC-25	6/29/09	73906	7.68	3.49	20.19	148	0.1004	6.22	300	4.0 cpm			
MC-25	6/29/09	74204	7.37	3.51	20.15	155	0.1001	4.39	300	4.0 cpm			
MC-25	6/29/09	74502	7.29	3.48	20.00	162	0.1002	4.36	300	4.0 cpm			
MC-25	6/29/09	74806	7.27	3.45	20.20	164	0.1001	4.35	300	4.0 cpm			
MC-2	6/29/09	84606	6.78	0.36	18.76	164	0.8084	48.4	400	56 Hz	27	0.55	All parameters stable when sample was collected.
MC-2	6/29/09	84905	6.89	0.26	21.13	148	0.7320	30.2	400	56 Hz			Turbidity < 5 NTU's
MC-2	6/29/09	85206	6.91	0.19	22.46	140	0.6621	16.6	400	56 Hz			Do < 0.20 mg/L but stable.
MC-2	6/29/09	85506	6.90	0.17	23.14	135	0.5900	9.92	400	56 Hz			Do Test Kit Reading - 0.26 mg/L.
MC-2	6/29/09	85808	6.89	0.17	23.65	132	0.5211	4.47	400	56 Hz			
MC-2	6/29/09	90120	6.89	0.15	23.84	128	0.4459	2.18	400	56 Hz			
MC-2	6/29/09	90405	6.86	0.15	24.08	127	0.4282	2.17	400	56 Hz			
MC-2	6/29/09	90713	6.86	0.14	24.44	124	0.4218	2.05	400	56 Hz			
MC-2	6/29/09	91013	6.84	0.14	24.39	123	0.4161	0.86	400	56 Hz			
MC-2D	6/29/09	92805	7.01	0.36	17.00	120	0.2585	0.99	400	63 Hz	15	1.65	All parameters stable when sample was collected.
MC-2D	6/29/09	93105	7.13	0.27	18.04	114	0.2582	0.21	400	63 Hz			Turbidity < 5 NTU's
MC-2D	6/29/09	93437	7.24	0.23	18.80	108	0.2598	0.00	400	63 Hz			Do > 0.20 mg/L
MC-2D	6/29/09	93708	7.24	0.22	18.99	108	0.2617	0.00	400	63 Hz			
MC-2D	6/29/09	94012	7.23	0.23	19.12	108	0.2651	0.00	400	63 Hz			
MC-31	6/29/09	101705	7.91	1.17	15.53	86	0.0830	2.75	400	4.0 cpm	15	0.03	All parameters stable when sample was collected.
MC-31	6/29/09	102005	7.67	0.45	14.94	98	0.0892	1.92	400	4.0 cpm			Turbidity < 5 NTU's
MC-31	6/29/09	102312	7.71	0.29	14.75	96	0.0982	0.79	400	4.0 cpm			Do > 0.20 mg/L
MC-31	6/29/09	102610	7.65	0.28	14.78	104	0.1009	0.63	400	4.0 cpm			
MC-31	6/29/09	102911	7.63	0.28	14.79	98	0.1009	0.57	400	4.0 cpm			
MC-10D	6/29/09	104806	7.03	1.15	16.02	133	0.6252	15.4	400	67 Hz	18	1.22	All parameters stable when sample was collected.
MC-10D	6/29/09	105105	7.01	0.57	16.16	130	0.6330	5.39	400	67 Hz			Turbidity < 5 NTU's
MC-10D	6/29/09	105405	7.07	0.44	17.19	125	0.6446	1.06	400	67 Hz			Do > 0.20 mg/L
MC-10D	6/29/09	105706	7.10	0.37	18.07	121	0.6483	0.97	400	67 Hz			
MC-10D	6/29/09	110005	7.10	0.35	18.29	120	0.6484	0.11	400	67 Hz			
MC-10D	6/29/09	110305	7.09	0.36	18.58	120	0.6451	0.00	400	67 Hz			
MC-30D	6/29/09	114911	7.48	2.12	15.84	118	0.7867	3.99	400	4.0 cpm	15	0.09	All parameters stable when sample was collected.
MC-30D	6/29/09	115206	7.32	1.17	15.28	122	0.8490	2.62	400	4.0 cpm			Turbidity < 5 NTU's
MC-30D	6/29/09	115507	7.22	0.56	15.20	123	0.8887	2.47	400	4.0 cpm			Do > 0.20 mg/L
MC-30D	6/29/09	115805	7.13	0.53	15.20	125	0.9007	2.02	400	4.0 cpm			
MC-30D	6/29/09	120109	7.13	0.55	15.11	123	0.9110	1.87	400	4.0 cpm			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	C	mV	mS/cm	NTUs	ml/min	Hz or cpm	Minutes	(0.01) ft.	
MC-30	6/29/09	121706	8.07	1.39	16.47	82	0.0765	4.86	400	4.0 cpm	15	0.32	All parameters stable when sample was collected.
MC-30	6/29/09	122006	8.09	0.52	15.83	81	0.0778	3.04	400	4.0 cpm			Turbidity < 5 NTU's
MC-30	6/29/09	122305	8.04	0.37	15.64	86	0.0837	2.59	400	4.0 cpm			Do > 0.20 mg/L
MC-30	6/29/09	122605	7.95	0.40	15.62	89	0.0849	2.38	400	4.0 cpm			
MC-30	6/29/09	122907	7.99	0.39	15.72	95	0.0862	2.38	400	4.0 cpm			
MC-12	6/29/09	125253	7.70	0.79	19.30	99	0.0973	1.77	200	4.0 cpm	15	0.04	All parameters stable when sample was collected.
MC-12	6/29/09	125604	7.66	0.69	19.09	98	0.0924	1.13	200	4.0 cpm			Turbidity < 5 NTU's
MC-12	6/29/09	125805	7.62	0.68	19.09	95	0.0907	1.13	200	4.0 cpm			Do > 0.20 mg/L
MC-12	6/29/09	130120	7.65	0.71	19.02	93	0.0885	1.05	200	4.0 cpm			
MC-12	6/29/09	130406	7.56	0.71	18.93	95	0.0888	1.01	200	4.0 cpm			
MC-12D	6/29/09	132207	6.89	0.56	17.03	127	0.7520	2.10	400	4.0 cpm	15	0.96	All parameters stable when sample was collected.
MC-12D	6/29/09	132518	7.00	0.40	17.23	119	0.7212	1.37	400	4.0 cpm			Turbidity < 5 NTU's
MC-12D	6/29/09	132805	7.05	0.35	18.86	115	0.7165	1.16	400	4.0 cpm			Do > 0.20 mg/L
MC-12D	6/29/09	133109	7.06	0.34	18.83	113	0.7198	0.97	400	4.0 cpm			
MC-12D	6/29/09	133413	7.07	0.33	18.89	111	0.7223	0.88	400	4.0 cpm			
MC-19D	6/30/09	73712	8.68	0.37	14.68	83	0.1673	78.0	400	66 Hz	27	0.08	All parameters stable when sample was collected.
MC-19D	6/30/09	74005	8.57	0.28	15.56	84	0.1712	15.4	400	66 Hz			Turbidity < 5 NTU's
MC-19D	6/30/09	74315	8.45	0.23	16.38	85	0.1732	7.55	400	66 Hz			Do < 0.20 mg/L but stable.
MC-19D	6/30/09	74605	8.32	0.20	16.92	90	0.1740	8.51	400	66 Hz			Do Test Kit Reading - 0.22 mg/L.
MC-19D	6/30/09	74908	8.19	0.18	17.15	93	0.1746	15.1	400	66 Hz			
MC-19D	6/30/09	75211	8.05	0.16	17.28	98	0.1750	8.38	400	66 Hz			
MC-19D	6/30/09	75530	7.95	0.15	17.50	102	0.1754	4.97	400	66 Hz			
MC-19D	6/30/09	75807	7.88	0.14	17.61	104	0.1762	3.39	400	66 Hz			
MC-19D	6/30/09	80103	7.87	0.14	17.66	103	0.1762	3.12	400	66 Hz			
MC-118D	6/30/09	83105	7.22	0.43	16.23	144	0.6234	27.5	400	69 Hz	15	2.15	All parameters stable when sample was collected.
MC-118D	6/30/09	83413	7.21	0.39	17.77	142	0.6365	9.90	400	69 Hz			Turbidity < 5 NTU's
MC-118D	6/30/09	83705	7.16	0.35	18.59	142	0.6390	4.60	400	69 Hz			Do > 0.20 mg/L
MC-118D	6/30/09	84015	7.12	0.32	18.76	142	0.6381	4.12	400	69 Hz			
MC-118D	6/30/09	84316	7.09	0.33	19.14	141	0.6360	4.02	400	69 Hz			
MC-118D2	6/30/09	90405	7.44	1.26	16.12	125	0.4721	5.76	225	4.0 cpm	15	0.36	All parameters stable when sample was collected.
MC-118D2	6/30/09	90722	7.45	0.99	16.20	124	0.4664	4.12	225	4.0 cpm			Turbidity < 5 NTU's
MC-118D2	6/30/09	91005	7.42	0.86	16.22	125	0.4623	3.83	225	4.0 cpm			Do > 0.20 mg/L
MC-118D2	6/30/09	91305	7.45	0.79	16.21	123	0.4563	3.35	225	4.0 cpm			
MC-118D2	6/30/09	91605	7.45	0.79	16.23	122	0.4535	1.27	225	4.0 cpm			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	C	mV	mS/cm	NTUs	ml/min	Hz or cpm	Minutes	(0.01) ft.	
MC-26D2	6/30/09	94805	8.18	2.66	16.39	103	0.1279	5.55	400	4.0 cpm	15	1.30	All parameters stable when sample was collected.
MC-26D2	6/30/09	95105	8.20	1.49	15.40	102	0.1256	4.31	400	4.0 cpm			Turbidity < 5 NTU's
MC-26D2	6/30/09	95405	8.06	1.06	15.07	108	0.1253	3.34	400	4.0 cpm			Do > 0.20 mg/L
MC-26D2	6/30/09	95705	8.12	1.02	14.96	104	0.1254	1.57	400	4.0 cpm			
MC-26D2	6/30/09	10009	8.09	0.98	14.97	105	0.1253	1.10	400	4.0 cpm			
MC-8	6/30/09	103005	7.69	3.23	19.02	119	0.1017	4.98	200	1.0 cpm	15	0.25	All parameters stable when sample was collected.
MC-8	6/30/09	103311	7.68	3.10	18.70	123	0.1019	4.96	200	1.0 cpm			Turbidity < 5 NTU's
MC-8	6/30/09	103605	7.55	3.14	18.59	129	0.1026	4.07	200	1.0 cpm			Do > 0.20 mg/L
MC-8	6/30/09	103907	7.49	3.02	18.62	131	0.1022	3.47	200	1.0 cpm			
MC-8	6/30/09	104206	7.47	2.92	18.65	134	0.1023	3.32	200	1.0 cpm			
MC-1	6/30/09	111005	7.11	0.35	16.89	154	0.2616	6.88	400	60 Hz	15	0.79	All parameters stable when sample was collected.
MC-1	6/30/09	111305	7.16	0.28	18.73	146	0.1643	4.57	400	60 Hz			Turbidity < 5 NTU's
MC-1	6/30/09	111605	7.24	0.20	20.57	137	0.1568	2.84	400	60 Hz			Do > 0.20 mg/L
MC-1	6/30/09	111906	7.15	0.20	20.95	137	0.1544	2.42	400	60 Hz			
MC-1	6/30/09	112206	7.07	0.21	21.07	138	0.1548	2.01	400	60 Hz			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	C	mV	mS/cm	NTUs	ml/min	Hz or cpm	Minutes	(0.01) ft.	
PZU-4	9/21/2009	130213	6.42	4.15	22.98	129	0.1053	8.96	100	0.2 cpm	15	0.50	All parameters stable when sample was collected.
PZU-4	9/21/2009	130506	6.40	4.24	22.98	127	0.1041	4.66	100	0.2 cpm			Turbidity < 5 NTU
PZU-4	9/21/2009	130806	6.52	4.26	23.06	118	0.1026	4.32	100	0.2 cpm			Do > 0.20 mg/L
PZU-4	9/21/2009	131106	6.45	4.26	23.10	119	0.1013	4.09	100	0.2 cpm			
PZU-4	9/21/2009	131406	6.53	4.34	23.04	114	0.0998	3.89	100	0.2 cpm			
PZU-5	9/21/2009	140217	6.56	1.95	28.31	112	0.3076	4.17	100	0.2 cpm	27	2.51	All parameters stable when sample was collected.
PZU-5	9/21/2009	140506	6.57	1.86	26.87	109	0.3061	3.60	100	0.2 cpm			Turbidity < 5 NTU
PZU-5	9/21/2009	140806	6.63	1.73	26.00	103	0.3090	3.03	100	0.2 cpm			Do > 0.20 mg/L
PZU-5	9/21/2009	141106	6.66	1.98	25.62	99	0.3073	3.08	100	0.2 cpm			
PZU-5	9/21/2009	141417	6.72	1.97	25.41	95	0.3064	3.01	100	0.2 cpm			
PZU-5	9/21/2009	141714	6.76	1.69	25.40	93	0.3050	2.80	100	0.2 cpm			
PZU-5	9/21/2009	142006	6.79	1.59	25.33	90	0.3020	3.23	100	0.2 cpm			
PZU-5	9/21/2009	142307	6.83	1.63	25.51	87	0.2980	3.16	100	0.2 cpm			
PZU-5	9/21/2009	142606	6.83	1.60	25.54	85	0.2970	3.14	100	0.2 cpm			
MC-14	9/22/2009	63506	7.58	2.47	18.90	102	0.3528	3.39	100	0.2 cpm	24	0.68	All parameters stable when sample was collected.
MC-14	9/22/2009	63806	7.50	2.39	18.78	103	0.3163	2.69	100	0.2 cpm			Turbidity < 5 NTU
MC-14	9/22/2009	64106	7.51	2.30	18.75	100	0.2900	2.62	100	0.2 cpm			Do > 0.20 mg/L
MC-14	9/22/2009	64406	7.38	2.08	18.70	103	0.2683	2.65	100	0.2 cpm			Fe Field Test Kit Reading - 1.15 mg/L
MC-14	9/22/2009	64706	7.28	1.97	18.68	106	0.2585	2.68	100	0.2 cpm			
MC-14	9/22/2009	65006	7.30	1.97	18.66	104	0.2478	2.44	100	0.2 cpm			
MC-14	9/22/2009	65307	7.30	1.93	18.64	102	0.2415	2.17	100	0.2 cpm			
MC-14	9/22/2009	65607	7.29	1.84	18.62	101	0.2406	2.15	100	0.2 cpm			
MC-14D	9/22/2009	81706	7.87	1.93	15.82	89	0.1327	1.00	400	4.0 cpm	21	2.03	All parameters stable when sample was collected.
MC-14D	9/22/2009	82007	7.80	1.19	15.41	90	0.1337	0.64	400	4.0 cpm			Turbidity < 5 NTU
MC-14D	9/22/2009	82307	7.91	0.77	15.32	83	0.1334	0.67	400	4.0 cpm			Do > 0.20 mg/L
MC-14D	9/22/2009	82606	7.74	0.58	15.26	89	0.1334	0.38	400	4.0 cpm			
MC-14D	9/22/2009	82911	7.91	0.47	15.25	79	0.1331	0.38	400	4.0 cpm			
MC-14D	9/22/2009	83208	7.89	0.43	15.25	78	0.1334	0.20	400	4.0 cpm			
MC-14D	9/22/2009	83513	7.93	0.44	15.27	75	0.1330	0.19	400	4.0 cpm			
MC-13D	9/22/2009	90406	7.64	1.05	15.67	90	0.1395	0.48	200	1.0 cpm	21	1.05	All parameters stable when sample was collected.
MC-13D	9/22/2009	90706	7.61	0.88	15.56	89	0.1398	0.42	200	1.0 cpm			Turbidity < 5 NTU
MC-13D	9/22/2009	91006	7.51	0.79	15.58	89	0.1400	0.27	200	1.0 cpm			Do > 0.20 mg/L
MC-13D	9/22/2009	91306	7.49	0.71	15.52	89	0.1399	0.24	200	1.0 cpm			
MC-13D	9/22/2009	91634	7.62	0.67	15.50	89	0.1400	0.22	200	1.0 cpm			
MC-13D	9/22/2009	91920	7.54	0.63	15.47	89	0.1399	0.17	200	1.0 cpm			
MC-13D	9/22/2009	92238	7.58	0.61	15.42	89	0.1399	0.16	200	1.0 cpm			
MC-13	9/22/2009	94606	7.53	0.86	18.55	85	0.0659	6.26	400	4.0 cpm	18	0.11	All parameters stable when sample was collected.
MC-13	9/22/2009	94906	7.45	0.55	18.39	92	0.0704	4.37	400	4.0 cpm			Turbidity < 5 NTU
MC-13	9/22/2009	95207	7.43	0.45	18.40	91	0.0730	2.13	400	4.0 cpm			Do > 0.20 mg/L
MC-13	9/22/2009	95506	7.31	0.41	18.47	91	0.0735	2.45	400	4.0 cpm			
MC-13	9/22/2009	95807	7.26	0.38	18.48	93	0.0735	1.87	400	4.0 cpm			
MC-13	9/22/2009	100106	7.31	0.37	18.44	92	0.0742	1.45	400	4.0 cpm			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	C	mV	mS/cm	NTUs	ml/min	Hz or cpm	Minutes	(0.01) ft.	
MC-32	9/22/2009	112006	7.07	1.89	27.29	95	0.8788	18.2	100	4.0cpm	21	0.09	All parameters stable when sample was collected.
MC-32	9/22/2009	112306	7.07	1.56	26.49	94	0.9057	14.8	100	4.0cpm			Turbidity > 5 NTU but stable.
MC-32	9/22/2009	112607	7.10	1.33	26.25	93	0.9127	11.9	100	4.0cpm			Do > 0.20 mg/L
MC-32	9/22/2009	112906	7.09	1.27	26.30	91	0.9165	10.23	100	4.0cpm			
MC-32	9/22/2009	113206	7.08	1.16	26.06	91	0.9263	9.62	100	4.0cpm			
MC-32	9/22/2009	113506	7.09	1.08	26.02	90	0.9308	9.36	100	4.0cpm			
MC-32	9/22/2009	113806	7.10	1.08	26.14	89	0.9327	9.24	100	4.0cpm			
MC-123	9/22/2009	122811	7.19	1.12	23.14	92	1.196	31.7	100	0.2 cpm	48	0.65	All parameters stable when sample was collected.
MC-123	9/22/2009	123118	7.20	1.03	23.48	90	1.194	29.9	100	0.2 cpm			Turbidity < 5 NTU
MC-123	9/22/2009	123405	7.16	1.02	23.50	89	1.196	25.3	100	0.2 cpm			Do > 0.20 mg/L
MC-123	9/22/2009	123708	7.13	0.97	23.78	88	1.198	23.8	100	0.2 cpm			
MC-123	9/22/2009	124006	7.12	0.65	23.19	88	1.191	32.4	100	0.2 cpm			
MC-123	9/22/2009	124320	7.10	0.52	22.23	88	1.188	27.7	100	0.2 cpm			
MC-123	9/22/2009	124606	7.07	0.45	21.82	87	1.182	22.8	100	0.2 cpm			
MC-123	9/22/2009	124906	7.10	0.39	21.97	85	1.180	15.8	100	0.2 cpm			
MC-123	9/22/2009	125206	7.07	0.40	21.90	84	1.183	12.8	100	0.2 cpm			
MC-123	9/22/2009	125506	7.09	0.38	22.04	83	1.177	10.48	100	0.2 cpm			
MC-123	9/22/2009	125807	7.18	0.38	21.99	82	1.178	8.45	100	0.2 cpm			
MC-123	9/22/2009	130106	7.07	0.38	22.12	82	1.172	6.78	100	0.2 cpm			
MC-123	9/22/2009	130406	7.07	0.39	22.02	81	1.176	5.74	100	0.2 cpm			
MC-123	9/22/2009	130706	7.08	0.40	22.17	80	1.172	4.83	100	0.2 cpm			
MC-123	9/22/2009	131007	7.06	0.41	22.27	79	1.174	4.57	100	0.2 cpm			
MC-123	9/22/2009	131306	7.07	0.38	22.21	78	1.173	4.54	100	0.2 cpm			
MC-20D	9/22/2009	134606	7.77	2.14	18.38	54	0.1422	13.1	400	4.0 cpm	39	1.70	All parameters stable when sample was collected.
MC-20D	9/22/2009	134906	8.13	1.01	16.69	35	0.1366	41.5	400	4.0 cpm			Turbidity < 5 NTU
MC-20D	9/22/2009	135206	8.24	0.81	16.48	27	0.1353	24.9	400	4.0 cpm			Do > 0.20 mg/L
MC-20D	9/22/2009	135506	8.06	0.75	16.34	35	0.1353	17.4	400	4.0 cpm			
MC-20D	9/22/2009	135806	8.24	0.65	16.26	24	0.1348	13.6	400	4.0 cpm			
MC-20D	9/22/2009	140106	7.98	0.55	16.02	38	0.1351	10.55	400	4.0 cpm			
MC-20D	9/22/2009	140408	8.16	0.48	16.22	23	0.1351	8.47	400	4.0 cpm			
MC-20D	9/22/2009	140706	8.18	0.42	16.29	21	0.1351	7.48	400	4.0 cpm			
MC-20D	9/22/2009	141006	8.04	0.39	16.15	26	0.1355	5.82	400	4.0 cpm			
MC-20D	9/22/2009	141307	8.15	0.36	16.20	19	0.1354	5.02	400	4.0 cpm			
MC-20D	9/22/2009	141606	8.13	0.33	16.10	20	0.1355	4.60	400	4.0 cpm			
MC-20D	9/22/2009	141911	8.16	0.32	16.22	16	0.1355	4.49	400	4.0 cpm			
MC-20D	9/22/2009	142206	8.16	0.31	16.11	14	0.1356	4.35	400	4.0 cpm			
MC-21	9/23/2009	61812	7.32	1.19	18.18	144	0.1326	12.8	200	1.0 cpm	18	0.03	All parameters stable when sample was collected.
MC-21	9/23/2009	62106	7.28	0.96	18.09	133	0.1337	8.29	200	1.0 cpm			Turbidity < 5 NTU
MC-21	9/23/2009	62406	7.28	0.81	17.99	123	0.1350	4.92	200	1.0 cpm			Do > 0.20 mg/L
MC-21	9/23/2009	62706	7.25	0.75	17.94	116	0.1363	2.99	200	1.0 cpm			Fe Field Test Kit Reading - 2.16 mg/L
MC-21	9/23/2009	63006	7.26	0.71	17.91	109	0.1374	2.89	200	1.0 cpm			
MC-21	9/23/2009	63306	7.18	0.69	17.87	108	0.1386	1.71	200	1.0 cpm			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	C	mV	mS/cm	NTUs	ml/min	Hz or cpm	Minutes	(0.01) ft.	
MC-15	9/23/2009	72407	7.14	1.13	17.44	101	0.1787	6.16	200	1.0 cpm	27	0.73	All parameters stable when sample was collected.
MC-15	9/23/2009	72706	7.20	0.84	17.70	100	0.1809	4.03	200	1.0 cpm			Turbidity < 5 NTU
MC-15	9/23/2009	73008	7.15	0.68	17.81	98	0.1830	3.09	200	1.0 cpm			Do > 0.20 mg/L
MC-15	9/23/2009	73307	7.17	0.59	17.94	94	0.1838	2.15	200	1.0 cpm			
MC-15	9/23/2009	73606	7.13	0.53	18.03	93	0.1846	1.40	200	1.0 cpm			
MC-15	9/23/2009	73913	7.13	0.50	18.03	93	0.1843	1.27	200	1.0 cpm			
MC-15	9/23/2009	74213	7.21	0.47	18.08	85	0.1845	1.24	200	1.0 cpm			
MC-15	9/23/2009	74525	7.20	0.45	18.11	85	0.1810	1.14	200	1.0 cpm			
MC-15	9/23/2009	74807	7.24	0.45	18.16	85	0.1797	1.15	200	1.0 cpm			
MC-15D	9/23/2009	81106	7.09	0.52	14.78	95	0.3393	2.63	400	68 Hz	18	1.14	All parameters stable when sample was collected.
MC-15D	9/23/2009	81424	7.22	0.36	16.47	88	0.3397	1.52	400	68 Hz			Turbidity < 5 NTU
MC-15D	9/23/2009	81706	7.31	0.31	17.63	83	0.3373	1.08	400	68 Hz			Do > 0.20 mg/L
MC-15D	9/23/2009	82009	7.31	0.28	18.14	82	0.3370	1.06	400	68 Hz			
MC-15D	9/23/2009	82306	7.30	0.26	18.41	82	0.3361	0.64	400	68 Hz			
MC-15D	9/23/2009	82606	7.28	0.26	18.58	83	0.3352	0.64	400	68 Hz			
MC-16	9/23/2009	90415	7.51	1.79	17.94	92	0.0738	3.98	200	1.0 cpm	45	0.69	All parameters stable when sample was collected.
MC-16	9/23/2009	90706	7.57	2.59	17.95	86	0.1061	3.15	200	1.0 cpm			Turbidity < 5 NTU
MC-16	9/23/2009	91007	7.33	1.69	17.93	96	0.1308	2.95	200	1.0 cpm			Do > 0.20 mg/L
MC-16	9/23/2009	91306	7.27	1.14	17.93	96	0.1308	1.78	200	1.0 cpm			
MC-16	9/23/2009	91606	7.29	0.86	17.97	94	0.1296	1.71	200	1.0 cpm			
MC-16	9/23/2009	91906	7.24	0.76	18.01	95	0.1242	1.36	200	1.0 cpm			
MC-16	9/23/2009	92229	7.27	0.68	18.07	93	0.1202	1.25	200	1.0 cpm			
MC-16	9/23/2009	92506	7.17	0.65	18.13	92	0.1154	1.05	200	1.0 cpm			
MC-16	9/23/2009	92806	7.22	0.60	18.24	90	0.1079	0.98	200	1.0 cpm			
MC-16	9/23/2009	93106	7.23	0.60	18.37	91	0.1014	1.05	200	1.0 cpm			
MC-16	9/23/2009	93406	7.22	0.59	18.48	87	0.1050	1.03	200	1.0 cpm			
MC-16	9/23/2009	93706	7.21	0.59	18.59	89	0.0986	1.04	200	1.0 cpm			
MC-16	9/23/2009	94006	7.11	0.52	18.58	89	0.1011	1.00	200	1.0 cpm			
MC-16	9/23/2009	94306	7.13	0.50	18.65	87	0.1007	0.95	200	1.0 cpm			
MC-16	9/23/2009	94606	7.12	0.49	18.69	88	0.0998	0.93	200	1.0 cpm			
MC-2D	9/23/2009	103206	6.96	0.85	19.37	103	0.2838	2.01	400	76 Hz	18	1.62	All parameters stable when sample was collected.
MC-2D	9/23/2009	103510	7.03	0.40	19.13	97	0.2886	1.12	400	76 Hz			Turbidity < 5 NTU
MC-2D	9/23/2009	103806	7.15	0.30	19.88	89	0.2955	1.09	400	76 Hz			Do > 0.20 mg/L
MC-2D	9/23/2009	104106	7.25	0.25	20.32	82	0.2982	0.92	400	76 Hz			
MC-2D	9/23/2009	104406	7.27	0.23	20.50	81	0.2984	0.92	400	76 Hz			
MC-2D	9/23/2009	104712	7.27	0.24	20.60	80	0.2983	0.91	400	76 Hz			
MC-2	9/23/2009	110806	7.22	0.37	23.21	86	0.1030	16.7	400	61 Hz	21	0.78	All parameters stable when sample was collected.
MC-2	9/23/2009	111106	7.33	0.35	25.17	77	0.1145	8.62	400	61 Hz			Turbidity < 5 NTU
MC-2	9/23/2009	111406	7.22	0.33	26.98	79	0.1202	6.57	400	61 Hz			Do > 0.20 mg/L
MC-2	9/23/2009	111705	7.10	0.31	27.85	82	0.1226	4.84	400	61 Hz			
MC-2	9/23/2009	112005	7.02	0.29	28.41	84	0.1238	4.13	400	61 Hz			
MC-2	9/23/2009	112309	6.96	0.27	28.78	85	0.1248	3.68	400	61 Hz			
MC-2	9/23/2009	112606	6.92	0.27	29.01	85	0.1249	3.08	400	61 Hz			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	C	mV	mS/cm	NTUs	ml/min	Hz or cpm	Minutes	(0.01) ft.	
MC-33	9/23/2009	115507	6.95	0.78	19.51	91	0.1749	10.72	350	4.0 cpm	36	0.45	All parameters stable when sample was collected.
MC-33	9/23/2009	115806	7.04	0.47	19.05	85	0.1662	10.12	350	4.0 cpm			Turbidity < 5 NTU
MC-33	9/23/2009	120108	7.09	0.40	18.91	81	0.1569	9.00	350	4.0 cpm			Do > 0.20 mg/L
MC-33	9/23/2009	120406	6.91	0.36	18.95	89	0.1459	6.42	350	4.0 cpm			
MC-33	9/23/2009	120706	7.21	0.35	18.92	73	0.1397	4.84	350	4.0 cpm			
MC-33	9/23/2009	121006	7.20	0.35	18.92	73	0.1324	3.75	350	4.0 cpm			
MC-33	9/23/2009	121323	7.19	0.35	18.88	72	0.1257	2.57	350	4.0 cpm			
MC-33	9/23/2009	121606	7.09	0.35	18.88	76	0.1212	1.93	350	4.0 cpm			
MC-33	9/23/2009	121909	7.14	0.35	18.90	73	0.1178	1.83	350	4.0 cpm			
MC-33	9/23/2009	122206	7.28	0.36	18.99	65	0.1153	1.55	350	4.0 cpm			
MC-33	9/23/2009	122506	7.26	0.36	18.95	66	0.1139	1.38	350	4.0 cpm			
MC-33	9/23/2009	122806	7.20	0.36	18.98	68	0.1121	1.40	350	4.0 cpm			
MC-122	9/23/2009	130909	7.00	1.00	20.70	85	0.1246	33.8	100	0.2 cpm	15	0.99	All parameters stable when sample was collected.
MC-122	9/23/2009	131206	7.18	0.94	20.74	75	0.1243	14.4	100	0.2 cpm			Turbidity > 5 NTU but stable.
MC-122	9/23/2009	131506	7.20	1.04	20.79	68	0.1244	10.82	100	0.2 cpm			Do > 0.20 mg/L
MC-122	9/23/2009	131818	7.27	0.96	20.84	62	0.1239	11.00	100	0.2 cpm			
MC-122	9/23/2009	132106	7.25	1.05	20.88	62	0.1238	10.15	100	0.2 cpm			
MC-31	9/24/2009	80105	7.70	1.45	16.36	101	0.0854	5.23	275	4.0 cpm	27	0.02	All parameters stable when sample was collected.
MC-31	9/24/2009	80406	7.52	0.76	16.38	108	0.0849	2.72	275	4.0 cpm			Turbidity < 5 NTU
MC-31	9/24/2009	80706	7.59	0.55	16.41	102	0.0871	2.05	275	4.0 cpm			Do > 0.20 mg/L
MC-31	9/24/2009	81006	7.39	0.46	16.44	110	0.0912	1.46	275	4.0 cpm			Fe Field Test Kit Reading - 1.68 mg/L
MC-31	9/24/2009	81306	7.49	0.45	16.45	102	0.0947	1.33	275	4.0 cpm			
MC-31	9/24/2009	81606	7.52	0.43	16.47	103	0.0978	0.94	275	4.0 cpm			
MC-31	9/24/2009	81906	7.49	0.43	16.49	97	0.1002	0.62	275	4.0 cpm			
MC-31	9/24/2009	82205	7.46	0.43	16.49	96	0.1019	0.57	275	4.0 cpm			
MC-31	9/24/2009	82506	7.46	0.42	16.47	95	0.1027	0.59	275	4.0 cpm			
MC-10D	9/24/2009	90006	7.10	0.58	14.48	113	0.6220	2.69	400	81 Hz	21	0.74	All parameters stable when sample was collected.
MC-10D	9/24/2009	90306	7.17	0.45	15.37	108	0.6330	1.15	400	81 Hz			Turbidity < 5 NTU
MC-10D	9/24/2009	90607	7.23	0.39	16.55	103	0.6533	0.70	400	81 Hz			Do > 0.20 mg/L
MC-10D	9/24/2009	90906	7.25	0.36	17.35	100	0.6603	0.43	400	81 Hz			Fe Field Test Kit Reading - 3.30 mg/L Upper Limit
MC-10D	9/24/2009	91206	7.25	0.34	17.83	99	0.6603	0.35	400	81 Hz			
MC-10D	9/24/2009	91506	7.24	0.33	18.17	98	0.6618	0.29	400	81 Hz			
MC-10D	9/24/2009	91806	7.24	0.32	18.36	97	0.6583	0.30	400	81 Hz			
MC-30D	9/24/2009	95006	7.39	2.20	14.71	109	0.8372	1.59	400	4.0 cpm	33	0.32	All parameters stable when sample was collected.
MC-30D	9/24/2009	95327	7.28	0.97	14.21	113	0.9118	1.53	400	4.0 cpm			Turbidity < 5 NTU
MC-30D	9/24/2009	95606	7.25	0.69	14.12	113	0.9445	1.22	400	4.0 cpm			Do < 0.20 mg/L but stable.
MC-30D	9/24/2009	95908	7.24	0.52	14.12	112	0.9718	1.22	400	4.0 cpm			Do Test Kit Reading - 0.29 mg/L
MC-30D	9/24/2009	100206	7.17	0.39	14.07	114	0.9998	1.06	400	4.0 cpm			Fe Field Test Kit Reading - 2.05 mg/L
MC-30D	9/24/2009	100506	7.19	0.32	14.05	112	1.017	0.92	400	4.0 cpm			
MC-30D	9/24/2009	100809	7.13	0.25	14.04	114	1.034	0.87	400	4.0 cpm			
MC-30D	9/24/2009	101115	7.19	0.22	14.08	110	1.038	0.75	400	4.0 cpm			
MC-30D	9/24/2009	101406	7.17	0.17	14.09	110	1.041	0.86	400	4.0 cpm			
MC-30D	9/24/2009	101715	7.17	0.16	14.09	110	1.042	0.91	400	4.0 cpm			
MC-30D	9/24/2009	102006	7.15	0.16	14.09	110	1.044	0.90	400	4.0 cpm			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	C	mV	mS/cm	NTUs	ml/min	Hz or cpm	Minutes	(0.01) ft.	
MC-30	9/24/2009	105106	8.19	1.55	17.27	67	0.0997	4.35	375	4.0 cpm	15	0.18	All parameters stable when sample was collected.
MC-30	9/24/2009	105406	8.12	0.61	17.24	70	0.0973	2.66	375	4.0 cpm			Turbidity < 5 NTU
MC-30	9/24/2009	105706	8.14	0.43	17.24	85	0.0982	1.50	375	4.0 cpm			Do > 0.20 mg/L
MC-30	9/24/2009	110006	8.10	0.41	17.26	83	0.0993	1.27	375	4.0 cpm			Fe Field Test Kit Reading - 0.05 mg/L
MC-30	9/24/2009	110307	8.05	0.42	17.30	83	0.0998	0.92	375	4.0 cpm			
MC-12	9/24/2009	114106	7.70	0.61	18.87	86	0.1140	1.60	300	2.0 cpm	15	0.05	All parameters stable when sample was collected.
MC-12	9/24/2009	114406	7.71	0.45	18.77	86	0.1076	0.68	300	2.0 cpm			Turbidity < 5 NTU
MC-12	9/24/2009	114705	7.69	0.37	18.74	84	0.1051	0.48	300	2.0 cpm			Do > 0.20 mg/L
MC-12	9/24/2009	115006	7.65	0.34	18.72	85	0.1038	0.40	300	2.0 cpm			
MC-12	9/24/2009	115309	7.65	0.35	18.68	84	0.1031	0.31	300	2.0 cpm			
MC-12D	9/24/2009	121017	7.05	0.84	15.87	113	0.8770	0.27	400	72 Hz	18	1.73	All parameters stable when sample was collected.
MC-12D	9/24/2009	121318	7.11	0.41	16.47	108	0.8512	0.19	400	72 Hz			Turbidity < 5 NTU
MC-12D	9/24/2009	121608	7.19	0.31	17.85	103	0.8417	0.13	400	72 Hz			Do > 0.20 mg/L
MC-12D	9/24/2009	121906	7.21	0.26	18.73	101	0.8345	0.14	400	72 Hz			
MC-12D	9/24/2009	122206	7.20	0.25	19.10	101	0.8271	0.14	400	72 Hz			
MC-12D	9/24/2009	122519	7.19	0.24	19.27	100	0.8203	0.06	400	72 Hz			
MC-107	9/24/2009	125306	7.79	1.42	19.70	77	0.1188	3.89	200	1.0 cpm	18	0.03	All parameters stable when sample was collected.
MC-107	9/24/2009	125606	7.70	0.99	19.66	79	0.1184	1.40	200	1.0 cpm			Turbidity < 5 NTU
MC-107	9/24/2009	125906	7.72	0.74	19.57	79	0.1186	1.03	200	1.0 cpm			Do > 0.20 mg/L
MC-107	9/24/2009	130206	7.65	0.63	19.60	79	0.1186	0.89	200	1.0 cpm			
MC-107	9/24/2009	130505	7.60	0.58	19.58	79	0.1190	0.62	200	1.0 cpm			
MC-107	9/24/2009	130806	7.60	0.57	19.62	78	0.1189	0.60	200	1.0 cpm			
MC-17D	9/24/2009	134723	7.48	0.45	16.27	85	0.1679	4.81	400	73 Hz	21	0.33	All parameters stable when sample was collected.
MC-17D	9/24/2009	135014	7.61	0.42	16.87	78	0.1690	1.81	400	73 Hz			Turbidity < 5 NTU
MC-17D	9/24/2009	135307	7.69	0.40	17.59	73	0.1687	0.96	400	73 Hz			Do > 0.20 mg/L
MC-17D	9/24/2009	135606	7.66	0.37	18.08	73	0.1681	0.63	400	73 Hz			
MC-17D	9/24/2009	135906	7.66	0.35	18.43	72	0.1684	0.69	400	73 Hz			
MC-17D	9/24/2009	140207	7.63	0.33	18.70	73	0.1684	0.42	400	73 Hz			
MC-17D	9/24/2009	140506	7.61	0.32	18.91	73	0.1684	0.29	400	73 Hz			
MC-27D	9/25/2009	70407	8.65	1.07	13.45	80	0.5641	26.8	400	4.0 cpm	24	0.82	All parameters stable when sample was collected.
MC-27D	9/25/2009	70706	8.46	0.67	13.30	87	0.5720	32.6	400	4.0 cpm			Turbidity > 5 NTU but stable.
MC-27D	9/25/2009	71015	8.38	0.52	13.24	87	0.5576	31.7	400	4.0 cpm			Do > 0.20 mg/L
MC-27D	9/25/2009	71306	8.31	0.41	13.20	88	0.5453	23.3	400	4.0 cpm			
MC-27D	9/25/2009	71606	8.21	0.34	13.16	90	0.5414	21.7	400	4.0 cpm			
MC-27D	9/25/2009	71906	8.00	0.28	13.13	92	0.5386	21.4	400	4.0 cpm			
MC-27D	9/25/2009	72206	8.00	0.27	13.12	95	0.5374	20.6	400	4.0 cpm			
MC-27D	9/25/2009	72506	8.01	0.26	13.10	98	0.5351	19.9	400	4.0 cpm			
MC-28D	9/25/2009	75419	8.06	1.70	13.71	86	0.3064	10.91	400	4.0 cpm	18	2.17	All parameters stable when sample was collected.
MC-28D	9/25/2009	75709	7.97	0.87	13.50	91	0.3255	5.63	400	4.0 cpm			Turbidity < 5 NTU
MC-28D	9/25/2009	80006	8.09	0.54	13.43	83	0.3213	3.55	400	4.0 cpm			Do > 0.20 mg/L
MC-28D	9/25/2009	80305	8.07	0.40	13.37	83	0.3102	3.55	400	4.0 cpm			
MC-28D	9/25/2009	80605	8.00	0.38	13.35	85	0.2989	2.96	400	4.0 cpm			
MC-28D	9/25/2009	80906	7.98	0.39	13.34	89	0.2870	2.31	400	4.0 cpm			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	C	mV	mS/cm	NTUs	ml/min	Hz or cpm	Minutes	(0.01) ft.	
MC-17	9/25/2009	85406	7.84	1.03	17.23	90	0.4598	1.73	200	1.0 cpm	45	0.30	All parameters stable when sample was collected.
MC-17	9/25/2009	85706	7.67	0.80	17.38	97	0.4974	0.92	200	1.0 cpm			Turbidity < 5 NTU
MC-17	9/25/2009	90006	7.56	0.65	17.57	100	0.4863	0.42	200	1.0 cpm			Do > 0.20 mg/L
MC-17	9/25/2009	90306	7.47	0.57	17.70	100	0.4282	0.40	200	1.0 cpm			
MC-17	9/25/2009	90606	7.43	0.52	17.74	99	0.3702	0.21	200	1.0 cpm			
MC-17	9/25/2009	90906	7.45	0.51	17.81	96	0.3127	0.13	200	1.0 cpm			
MC-17	9/25/2009	91213	7.44	0.51	17.83	95	0.2722	0.13	200	1.0 cpm			
MC-17	9/25/2009	91507	7.44	0.51	17.83	94	0.2430	0.08	200	1.0 cpm			
MC-17	9/25/2009	91806	7.40	0.52	17.88	93	0.2195	0.13	200	1.0 cpm			
MC-17	9/25/2009	92106	7.44	0.51	17.87	91	0.2041	0.13	200	1.0 cpm			
MC-17	9/25/2009	92407	7.40	0.51	17.89	91	0.1932	0.53	200	1.0 cpm			
MC-17	9/25/2009	92706	7.41	0.51	17.93	89	0.1850	0.32	200	1.0 cpm			
MC-17	9/25/2009	93007	7.36	0.52	17.89	90	0.1762	0.14	200	1.0 cpm			
MC-17	9/25/2009	93306	7.34	0.50	17.92	89	0.1757	0.12	200	1.0 cpm			
MC-17	9/25/2009	93606	7.35	0.50	17.90	88	0.1724	0.06	200	1.0 cpm			
MC-118D	9/25/2009	100406	6.97	0.52	16.31	103	0.5668	22.6	400	76 Hz	18	1.82	All parameters stable when sample was collected.
MC-118D	9/25/2009	100706	7.05	0.42	17.90	96	0.5745	10.42	400	76 Hz			Turbidity < 5 NTU
MC-118D	9/25/2009	101006	7.12	0.37	19.17	91	0.5862	4.59	400	76 Hz			Do > 0.20 mg/L
MC-118D	9/25/2009	101306	7.12	0.31	20.01	90	0.5889	3.00	400	76 Hz			Fe Field Test Kit Reading - 2.98 mg/L
MC-118D	9/25/2009	101623	7.11	0.30	20.40	89	0.5910	2.15	400	76 Hz			
MC-118D	9/25/2009	101906	7.10	0.28	20.63	88	0.5860	1.34	400	76 Hz			
MC-118D2	9/25/2009	104406	7.43	2.03	16.35	74	0.4732	6.54	400	4.0 cpm	18	1.41	All parameters stable when sample was collected.
MC-118D2	9/25/2009	104706	7.46	0.97	15.28	74	0.4683	3.43	400	4.0 cpm			Turbidity < 5 NTU
MC-118D2	9/25/2009	105009	7.42	0.54	14.97	76	0.4567	2.07	400	4.0 cpm			Do > 0.20 mg/L
MC-118D2	9/25/2009	105307	7.46	0.36	14.88	75	0.4501	1.15	400	4.0 cpm			
MC-118D2	9/25/2009	105616	7.47	0.34	14.80	74	0.4436	1.01	400	4.0 cpm			
MC-118D2	9/25/2009	105911	7.47	0.34	14.76	73	0.4406	0.93	400	4.0 cpm			
MC-8	9/28/2009	80606	6.35	1.40	16.34	89	0.0888	2.68	100	0.2 cpm	18	0.37	All parameters stable when sample was collected.
MC-8	9/28/2009	80906	6.32	1.19	16.63	92	0.0889	1.87	100	0.2 cpm			Turbidity < 5 NTU
MC-8	9/28/2009	81206	6.29	1.06	16.85	93	0.0890	1.75	100	0.2 cpm			Do > 0.20 mg/L
MC-8	9/28/2009	81542	6.30	0.96	17.19	93	0.0890	2.09	100	0.2 cpm			
MC-8	9/28/2009	81806	6.29	0.94	17.37	94	0.0892	1.34	100	0.2 cpm			
MC-8	9/28/2009	82107	6.28	0.90	17.72	94	0.0891	1.12	100	0.2 cpm			
MC-26D2	9/28/2009	84706	6.45	1.58	14.52	88	0.1376	2.01	400	4.0 cpm	15	1.21	All parameters stable when sample was collected.
MC-26D2	9/28/2009	85006	6.48	0.88	14.22	85	0.1402	1.68	400	4.0 cpm			Turbidity < 5 NTU
MC-26D2	9/28/2009	85305	6.57	0.57	14.13	87	0.1423	1.62	400	4.0 cpm			Do > 0.20 mg/L
MC-26D2	9/28/2009	85606	6.60	0.54	14.08	86	0.1418	1.46	400	4.0 cpm			
MC-26D2	9/28/2009	85919	6.58	0.56	14.08	80	0.1392	1.40	400	4.0 cpm			
MC-25	9/28/2009	94224	6.70	3.94	19.06	78	0.0865	14.0	100	4.0 cpm	15	0.04	All parameters stable when sample was collected.
MC-25	9/28/2009	94506	6.60	3.68	19.09	81	0.0868	13.8	100	4.0 cpm			Turbidity > 5 NTU but stable.
MC-25	9/28/2009	94806	6.50	3.38	19.04	85	0.0869	13.0	100	4.0 cpm			Do > 0.20 mg/L
MC-25	9/28/2009	95106	6.52	3.13	18.91	89	0.0870	12.6	100	4.0 cpm			
MC-25	9/28/2009	95424	6.52	3.05	18.87	90	0.0867	12.2	100	4.0 cpm			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	C	mV	mS/cm	NTUs	ml/min	Hz or cpm	Minutes	(0.01) ft.	
MC-25D2	9/28/2009	103608	6.45	1.30	15.19	87	0.2943	5.49	400	4.0 cpm	36	0.92	All parameters stable when sample was collected.
MC-25D2	9/28/2009	103906	6.40	0.78	15.04	86	0.3153	4.80	400	4.0 cpm			Turbidity < 5 NTU
MC-25D2	9/28/2009	104206	6.61	0.56	14.96	73	0.3084	4.80	400	4.0 cpm			Do > 0.20 mg/L
MC-25D2	9/28/2009	104506	6.62	0.46	14.90	73	0.2942	3.56	400	4.0 cpm			
MC-25D2	9/28/2009	104812	6.72	0.43	14.87	63	0.2775	3.39	400	4.0 cpm			
MC-25D2	9/28/2009	105106	6.78	0.41	14.86	60	0.2660	3.49	400	4.0 cpm			
MC-25D2	9/28/2009	105409	6.70	0.40	14.86	62	0.2564	3.54	400	4.0 cpm			
MC-25D2	9/28/2009	105706	6.83	0.40	14.87	55	0.2457	3.53	400	4.0 cpm			
MC-25D2	9/28/2009	110006	6.85	0.41	14.90	52	0.2366	3.47	400	4.0 cpm			
MC-25D2	9/28/2009	110311	6.89	0.43	14.95	49	0.2270	3.29	400	4.0 cpm			
MC-25D2	9/28/2009	110609	6.89	0.43	14.98	48	0.2230	3.36	400	4.0 cpm			
MC-25D2	9/28/2009	110906	6.87	0.43	15.12	54	0.2210	3.34	400	4.0 cpm			
MC-24	9/28/2009	121016	6.99	2.05	19.66	53	0.0605	11.7	250	4.0 cpm	18	0.39	All parameters stable when sample was collected.
MC-24	9/28/2009	121306	7.14	1.27	19.82	46	0.0614	11.7	250	4.0 cpm			Turbidity > 5 NTU but stable.
MC-24	9/28/2009	121606	6.81	0.93	19.89	62	0.0620	11.1	250	4.0 cpm			Do > 0.20 mg/L
MC-24	9/28/2009	121906	6.77	0.79	19.87	70	0.0621	10.21	250	4.0 cpm			
MC-24	9/28/2009	122206	6.83	0.76	19.82	73	0.0622	10.21	250	4.0 cpm			
MC-24	9/28/2009	122505	6.76	0.74	19.80	68	0.0623	10.00	250	4.0 cpm			
MC-24D2	9/28/2009	124606	6.52	2.69	16.45	77	0.1254	4.99	400	4.0 cpm	21	0.10	All parameters stable when sample was collected.
MC-24D2	9/28/2009	124906	6.51	1.75	15.59	77	0.1258	2.57	400	4.0 cpm			Turbidity < 5 NTU
MC-24D2	9/28/2009	125207	6.57	1.28	15.32	75	0.1257	2.70	400	4.0 cpm			Do > 0.20 mg/L
MC-24D2	9/28/2009	125507	6.81	1.08	15.21	60	0.1255	3.91	400	4.0 cpm			
MC-24D2	9/28/2009	125806	6.81	0.97	15.13	60	0.1258	3.98	400	4.0 cpm			
MC-24D2	9/28/2009	130105	6.75	0.91	15.10	63	0.1258	3.82	400	4.0 cpm			
MC-24D2	9/28/2009	130410	6.84	0.90	15.12	57	0.1254	3.73	400	4.0 cpm			
MC-24D	9/28/2009	132108	6.49	1.60	15.32	75	0.5609	15.8	400	4.0 cpm	21	0.33	All parameters stable when sample was collected.
MC-24D	9/28/2009	132406	6.46	0.83	14.97	76	0.5483	12.8	400	4.0 cpm			Turbidity > 5 NTU but stable.
MC-24D	9/28/2009	132706	6.44	0.53	14.93	76	0.5413	11.3	400	4.0 cpm			Do > 0.20 mg/L
MC-24D	9/28/2009	133006	6.49	0.39	15.05	73	0.5386	9.00	400	4.0 cpm			Fe Field Test Kit Reading - 0.38 mg/L
MC-24D	9/28/2009	133306	6.50	0.33	14.98	72	0.5362	8.15	400	4.0 cpm			
MC-24D	9/28/2009	133606	6.49	0.31	14.94	72	0.5324	7.42	400	4.0 cpm			
MC-24D	9/28/2009	133906	6.48	0.30	14.93	72	0.5305	7.40	400	4.0 cpm			
MC-25D	9/28/2009	140707	6.78	2.34	16.33	60	0.5490	7.76	400	4.0 cpm	21	0.49	All parameters stable when sample was collected.
MC-25D	9/28/2009	141006	6.70	1.17	15.56	65	0.5400	7.06	400	4.0 cpm			Turbidity < 5 NTU
MC-25D	9/28/2009	141306	6.66	0.68	15.32	67	0.5363	5.52	400	4.0 cpm			Do > 0.20 mg/L
MC-25D	9/28/2009	141605	6.62	0.45	15.23	69	0.5359	4.95	400	4.0 cpm			Fe Field Test Kit Reading - 0.45 mg/L
MC-25D	9/28/2009	141905	6.60	0.32	15.21	71	0.5364	4.42	400	4.0 cpm			
MC-25D	9/28/2009	142206	6.64	0.31	15.22	67	0.5366	4.00	400	4.0 cpm			
MC-25D	9/28/2009	142518	6.61	0.30	15.19	68	0.5377	3.28	400	4.0 cpm			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	C	mV	mS/cm	NTUs	ml/min	Hz or cpm	Minutes	(0.01) ft.	
MC-1	9/29/2009	61806	7.71	0.54	19.83	53	0.1223	11.5	400	66 Hz	27	2.91	All parameters stable when sample was collected.
MC-1	9/29/2009	62128	7.39	0.40	21.65	59	0.1316	91.5	400	66 Hz			Turbidity < 5 NTU
MC-1	9/29/2009	62420	7.17	0.34	22.33	63	0.1353	46.0	400	66 Hz			Do > 0.20 mg/L
MC-1	9/29/2009	62706	7.00	0.30	22.72	65	0.1357	24.1	400	66 Hz			Fe Field Test Kit Reading - 3.22 mg/L
MC-1	9/29/2009	63006	6.85	0.27	22.91	67	0.1351	11.1	400	66 Hz			
MC-1	9/29/2009	63306	6.73	0.26	22.87	68	0.1343	6.38	400	66 Hz			
MC-1	9/29/2009	63606	6.64	0.25	22.92	68	0.1339	3.77	400	66 Hz			
MC-1	9/29/2009	63906	6.61	0.24	23.04	66	0.1321	2.43	400	66 Hz			
MC-1	9/29/2009	64206	6.57	0.24	23.15	65	0.1309	1.96	400	66 Hz			
MC-19D	9/29/2009	72506	6.92	0.73	15.96	47	0.1216	27.7	400	81 Hz	24	0.07	All parameters stable when sample was collected.
MC-19D	9/29/2009	72809	6.82	0.43	16.51	51	0.1221	20.3	400	81 Hz			Turbidity < 5 NTU
MC-19D	9/29/2009	73109	6.92	0.34	17.69	44	0.1231	14.5	400	81 Hz			Do > 0.20 mg/L
MC-19D	9/29/2009	73406	6.89	0.31	17.98	45	0.1233	8.89	400	81 Hz			
MC-19D	9/29/2009	73706	6.83	0.29	17.97	48	0.1236	5.75	400	81 Hz			
MC-19D	9/29/2009	74030	6.80	0.27	18.09	49	0.1244	3.68	400	81 Hz			
MC-19D	9/29/2009	74313	6.82	0.27	18.24	47	0.1247	3.25	400	81 Hz			
MC-19D	9/29/2009	74606	6.81	0.26	18.30	47	0.1251	3.16	400	81 Hz			

Well ID	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	øC	mV	mS/cm	NTUs	ml/min.	Hz or cpm	Minutes	(0.1) ft.	
UT-ST-1	12/15/2009	70900	6.21	3.72	9.60	257	11.70	12.8	100	2.0 cpm	30	1.36	All parameters stable when samle was collected.
UT-ST-1	12/15/2009	71200	6.18	3.57	9.30	190	11.20	12.4	100	2.0 cpm			Turbidity > 5 NTU's but stable.
UT-ST-1	12/15/2009	71500	6.25	2.37	9.60	134	10.00	10.5	100	2.0 cpm			Do > 0.20 mg/L
UT-ST-1	12/15/2009	71800	6.14	4.34	9.20	137	11.30	11.3	100	2.0 cpm			
UT-ST-1	12/15/2009	72100	6.19	4.81	9.10	135	11.20	11.5	100	2.0 cpm			
UT-ST-1	12/15/2009	72400	6.22	4.90	9.10	132	10.70	11.3	100	2.0 cpm			
UT-ST-1	12/15/2009	72700	6.29	4.83	9.00	129	9.90	11.2	100	2.0 cpm			
UT-ST-1	12/15/2009	73000	6.30	4.63	8.90	127	10.00	11.2	100	2.0 cpm			
UT-ST-1	12/15/2009	73300	6.27	4.20	8.80	126	10.20	11.2	100	2.0 cpm			
UT-ST-1	12/15/2009	73600	6.28	4.52	8.70	126	10.00	11.4	100	2.0 cpm			
PZU-4	12/15/2009	84300	6.32	0.00	9.70	78	11.40	28.5	100	2.0 cpm	18	0.53	All parameters stable when samle was collected.
PZU-4	12/15/2009	84600	6.66	0.00	9.70	38	11.70	21.8	100	2.0 cpm			Turbidity > 5 NTU's
PZU-4	12/15/2009	84900	6.79	0.00	9.40	11	11.90	18.1	100	2.0 cpm			Do < 0.20 mg/l but stable.
PZU-4	12/15/2009	85200	6.86	0.00	8.90	-2	12.10	13.3	100	2.0 cpm			Do Test Kit Reading - 0.28 mg/L
PZU-4	12/15/2009	85500	6.90	0.00	8.90	-8	12.10	12.3	100	2.0 cpm			
PZU-4	12/15/2009	85800	6.91	0.00	8.90	-10	12.00	12.0	100	2.0 cpm			
MC-32	12/15/2009	102100	6.96	1.13	8.40	-111	0.1530	98.8	100	4.0 cpm	30	1.93	All parameters stable when samle was collected.
MC-32	12/15/2009	102400	7.01	0.00	8.00	-116	0.1530	58.9	100	4.0 cpm			Turbidity > 5 NTU's
MC-32	12/15/2009	102700	7.02	0.00	7.80	-120	0.1540	48.1	100	4.0 cpm			Do < 0.20 mg/l but stable.
MC-32	12/15/2009	103000	7.03	0.00	7.70	-122	0.1540	38.5	100	4.0 cpm			Do Test Kit Reading - 0.29 mg/L
MC-32	12/15/2009	103300	7.01	0.00	7.60	-119	0.1530	30.9	100	4.0 cpm			
MC-32	12/15/2009	103600	7.00	0.00	7.60	-118	0.1530	26.8	100	4.0 cpm			
MC-32	12/15/2009	103900	6.99	0.00	7.50	-119	0.1530	22.6	100	4.0 cpm			
MC-32	12/15/2009	104200	6.99	0.00	6.70	-117	0.1530	21.2	100	4.0 cpm			
MC-32	12/15/2009	104500	6.99	0.00	6.70	-115	0.1520	20.8	100	4.0 cpm			
MC-32	12/15/2009	104800	6.97	0.00	6.60	-110	0.1530	20.3	100	4.0 cpm			
MC-123	12/15/2009	113700	6.91	0.74	10.90	-115	0.2210	12.4	100	0.2 cpm	18	0.46	All parameters stable when samle was collected.
MC-123	12/15/2009	114000	6.91	0.00	11.30	-124	0.2300	8.57	100	0.2 cpm			Turbidity < 5 NTU's
MC-123	12/15/2009	114300	6.91	0.00	11.40	-126	0.2300	6.24	100	0.2 cpm			Do < 0.20 mg/l but stable.
MC-123	12/15/2009	114600	6.90	0.00	11.40	-129	0.2300	4.88	100	0.2 cpm			Do Test Kit Reading - 0.30 mg/L
MC-123	12/15/2009	114900	6.90	0.00	11.40	-130	0.2300	3.87	100	0.2 cpm			
MC-123	12/15/2009	115200	6.90	0.00	11.30	-131	0.2310	3.64	100	0.2 cpm			
MC-20D	12/15/2009	123300	7.85	0.00	12.40	-125	16.00	8.23	400	0.2 cpm	27	0.89	All parameters stable when samle was collected.
MC-20D	12/15/2009	123600	7.90	0.00	12.40	-136	15.80	18.3	400	0.2 cpm			Turbidity < 5 NTU's
MC-20D	12/15/2009	123900	7.89	0.00	12.40	-134	15.70	26.4	400	0.2 cpm			Do < 0.20 mg/l but stable.
MC-20D	12/15/2009	124200	7.85	0.00	12.40	-130	15.60	11.1	400	0.2 cpm			Do Test Kit Reading - 0.24 mg/L
MC-20D	12/15/2009	124500	7.81	0.00	12.30	-127	15.60	8.26	400	0.2 cpm			
MC-20D	12/15/2009	124800	7.79	0.00	12.40	-125	15.50	6.51	400	0.2 cpm			
MC-20D	12/15/2009	125100	7.76	0.00	12.40	-123	15.00	4.98	400	0.2 cpm			
MC-20D	12/15/2009	125400	7.76	0.00	12.40	-123	15.00	3.92	400	0.2 cpm			
MC-20D	12/15/2009	125700	7.75	0.00	12.30	-123	15.00	3.74	400	0.2 cpm			

Well ID	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	øC	mV	mS/cm	NTUs	ml/min.	Hz or cpm	Minutes	(0.1) ft.	
MC-122	12/15/2009	132300	6.79	0.00	9.70	-27	27.70	10.14	100	0.2 cpm	42	0.86	All parameters stable when samle was collected.
MC-122	12/15/2009	132600	6.76	0.00	9.60	-34	28.10	14.4	100	0.2 cpm			Turbidity > 5 NTU's but stable.
MC-122	12/15/2009	132900	6.77	0.00	9.80	-40	27.70	13.3	100	0.2 cpm			Do < 0.20 mg/l but stable.
MC-122	12/15/2009	133200	6.77	0.00	10.10	-44	27.80	12.7	100	0.2 cpm			Do Test Kit Reading - 0.27 mg/L
MC-122	12/15/2009	133500	6.78	0.00	10.30	-47	28.80	11.5	100	0.2 cpm			
MC-122	12/15/2009	133800	6.77	0.00	10.60	-49	28.50	11.5	100	0.2 cpm			
MC-122	12/15/2009	134100	6.77	0.00	10.70	-50	28.80	10.01	100	0.2 cpm			
MC-122	12/15/2009	134400	6.78	0.00	10.80	-51	29.10	10.82	100	0.2 cpm			
MC-122	12/15/2009	134700	6.75	0.00	10.80	-52	29.90	10.51	100	0.2 cpm			
MC-122	12/15/2009	135000	6.76	0.00	10.80	-52	30.70	10.70	100	0.2 cpm			
MC-122	12/15/2009	135300	6.75	0.00	10.70	-50	32.00	9.02	100	0.2 cpm			
MC-122	12/15/2009	135600	6.72	0.00	10.70	-48	33.20	9.74	100	0.2 cpm			
MC-122	12/15/2009	135900	6.71	0.00	10.70	-47	33.30	9.60	100	0.2 cpm			
MC-122	12/15/2009	140200	6.69	0.00	10.80	-46	33.80	9.16	100	0.2 cpm			
PZU-5	12/15/2009	150000	6.79	0.00	10.50	19	32.30	38.2	100	0.2 cpm	24	3.85	All parameters stable when samle was collected.
PZU-5	12/15/2009	150300	6.85	0.00	10.80	11	32.40	37.8	100	0.2 cpm			Turbidity > 5 NTU's but stable.
PZU-5	12/15/2009	150600	6.84	0.00	10.30	11	32.50	34.4	100	0.2 cpm			Do < 0.20 mg/l but stable.
PZU-5	12/15/2009	150900	6.85	0.00	10.60	8	32.40	31.8	100	0.2 cpm			Do Test Kit Reading - 0.21 mg/L
PZU-5	12/15/2009	151200	6.86	0.00	10.20	-2	32.80	29.4	100	0.2 cpm			
PZU-5	12/15/2009	151500	6.86	0.00	10.00	-7	32.80	23.7	100	0.2 cpm			
PZU-5	12/15/2009	151800	6.86	0.00	9.80	-12	32.60	24.0	100	0.2 cpm			
PZU-5	12/15/2009	152100	6.86	0.00	10.00	-13	32.60	23.4	100	0.2 cpm			
MC-27D	12/16/2009	80600	6.99	0.00	12.60	7	57.50	20.3	400	4.0 cpm	21	0.80	All parameters stable when samle was collected.
MC-27D	12/16/2009	80900	7.00	0.00	12.60	-13	56.40	15.9	400	4.0 cpm			Turbidity > 5 NTU's but stable.
MC-27D	12/16/2009	81200	7.04	0.00	12.60	-24	56.10	12.5	400	4.0 cpm			Do < 0.20 mg/l but stable.
MC-27D	12/16/2009	81500	7.08	0.00	12.70	-32	55.80	10.40	400	4.0 cpm			Do Test Kit Reading - 0.22 mg/L
MC-27D	12/16/2009	81800	7.14	0.00	12.60	-40	55.90	9.09	400	4.0 cpm			
MC-27D	12/16/2009	82100	7.19	0.00	12.60	-46	55.60	8.45	400	4.0 cpm			
MC-27D	12/16/2009	82400	7.22	0.00	12.40	-49	55.60	8.27	400	4.0 cpm			
MC-28D	12/16/2009	85700	8.00	0.00	12.50	-64	21.50	3.73	400	4.0 cpm	21	1.58	All parameters stable when samle was collected.
MC-28D	12/16/2009	90000	8.12	0.00	12.50	-89	20.90	2.61	400	4.0 cpm			Turbidity < 5 NTU's
MC-28D	12/16/2009	90300	8.11	0.00	12.50	-94	20.50	2.29	400	4.0 cpm			Do < 0.20 mg/l but stable.
MC-28D	12/16/2009	90600	8.07	0.00	12.60	-94	20.00	2.47	400	4.0 cpm			Do Test Kit Reading - 0.26 mg/L
MC-28D	12/16/2009	90900	8.05	0.00	12.60	-85	19.60	2.49	400	4.0 cpm			
MC-28D	12/16/2009	91200	8.02	0.00	12.60	-80	19.40	2.05	400	4.0 cpm			
MC-28D	12/16/2009	91500	8.00	0.00	12.70	-81	19.20	1.93	400	4.0 cpm			
MC-13D	12/16/2009	94800	7.61	0.00	11.00	121	16.20	1.32	200	1.0 cpm	15	0.90	All parameters stable when samle was collected.
MC-13D	12/16/2009	95100	7.53	0.00	11.40	120	16.10	1.30	200	1.0 cpm			Turbidity < 5 NTU's
MC-13D	12/16/2009	95400	7.50	0.00	11.40	120	16.00	1.07	200	1.0 cpm			Do < 0.20 mg/l but stable.
MC-13D	12/16/2009	95700	7.47	0.00	11.50	121	16.00	0.59	200	1.0 cpm			Do Test Kit Reading - 0.24 mg/L
MC-13D	12/16/2009	100000	7.45	0.00	11.40	123	16.00	0.56	200	1.0 cpm			

Well ID	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	øC	mV	mS/cm	NTUs	ml/min.	Hz or cpm	Minutes	(0.1) ft.	
MC-13	12/16/2009	103100	7.16	0.00	13.10	-44	9.90	2.86	400	4.0 cpm	15	0.12	All parameters stable when samle was collected.
MC-13	12/16/2009	103400	7.16	0.00	13.20	-54	9.90	2.62	400	4.0 cpm			Turbidity < 5 NTU's
MC-13	12/16/2009	103700	7.16	0.00	13.20	-59	9.80	2.39	400	4.0 cpm			Do < 0.20 mg/l but stable.
MC-13	12/16/2009	104000	7.16	0.00	13.20	-57	9.70	2.42	400	4.0 cpm			Do Test Kit Reading - 0.21 mg/L
MC-13	12/16/2009	104300	7.14	0.00	13.20	-57	9.70	2.04	400	4.0 cpm			
MC-14D	12/16/2009	110800	7.33	0.00	13.20	-81	14.20	1.47	400	4.0 cpm	15	1.80	All parameters stable when samle was collected.
MC-14D	12/16/2009	111100	7.67	0.00	13.30	-108	14.10	1.15	400	4.0 cpm			Turbidity < 5 NTU's
MC-14D	12/16/2009	111400	7.76	0.00	13.30	-114	14.10	0.92	400	4.0 cpm			Do < 0.20 mg/l but stable.
MC-14D	12/16/2009	111700	7.74	0.00	13.20	-117	14.10	0.51	400	4.0 cpm			Do Test Kit Reading - 0.25 mg/L
MC-14D	12/16/2009	112000	7.81	0.00	13.10	-120	14.10	0.36	400	4.0 cpm			
MC-14	12/16/2009	115900	7.01	0.96	8.50	-96	90.10	5.51	100	0.2 cpm	36	0.92	All parameters stable when samle was collected.
MC-14	12/16/2009	120200	7.02	0.18	9.60	-93	87.80	5.96	100	0.2 cpm			Turbidity < 5 NTU's
MC-14	12/16/2009	120500	7.03	0.00	9.80	-89	79.50	6.81	100	0.2 cpm			Do < 0.20 mg/l but stable.
MC-14	12/16/2009	120800	7.05	0.00	10.00	-81	71.60	6.28	100	0.2 cpm			Do Test Kit Reading - 0.24 mg/L
MC-14	12/16/2009	121100	7.06	0.00	10.00	-75	60.70	6.08	100	0.2 cpm			
MC-14	12/16/2009	121400	7.05	0.00	10.10	-69	54.20	10.39	100	0.2 cpm			
MC-14	12/16/2009	121700	7.06	0.00	10.20	-68	49.70	7.35	100	0.2 cpm			
MC-14	12/16/2009	122000	7.04	0.00	10.30	-64	45.70	6.79	100	0.2 cpm			
MC-14	12/16/2009	122300	7.02	0.00	10.20	-56	43.10	6.14	100	0.2 cpm			
MC-14	12/16/2009	122600	7.00	0.00	10.00	-53	42.20	4.59	100	0.2 cpm			
MC-14	12/16/2009	122900	6.98	0.00	9.90	-52	42.00	3.83	100	0.2 cpm			
MC-14	12/16/2009	123200	6.98	0.00	9.70	-52	41.50	3.69	100	0.2 cpm			
MC-21	12/16/2009	130800	7.36	0.00	11.60	-84	15.40	7.44	400	4.0 cpm	15	0.04	All parameters stable when samle was collected.
MC-21	12/16/2009	131100	7.32	0.00	11.70	-85	15.30	2.94	400	4.0 cpm			Turbidity < 5 NTU's
MC-21	12/16/2009	131400	7.31	0.00	11.60	-86	15.00	1.84	400	4.0 cpm			Do < 0.20 mg/l but stable.
MC-21	12/16/2009	131700	7.30	0.00	11.60	-84	14.90	1.71	400	4.0 cpm			Do Test Kit Reading - 0.22 mg/L
MC-21	12/16/2009	132000	7.28	0.00	11.70	-84	14.90	0.98	400	4.0 cpm			
MC-15	12/16/2009	144200	6.93	1.74	8.40	137	8.80	11.3	200	2.0 cpm	51	0.52	All parameters stable when samle was collected.
MC-15	12/16/2009	144500	6.85	1.76	8.30	126	8.60	7.95	200	2.0 cpm			Turbidity < 5 NTU's
MC-15	12/16/2009	144800	6.80	1.40	8.60	125	8.50	5.32	200	2.0 cpm			Do < 0.20 mg/l but stable.
MC-15	12/16/2009	145100	6.80	0.92	8.60	116	8.60	4.00	200	2.0 cpm			Do Test Kit Reading - 0.21 mg/L
MC-15	12/16/2009	145400	6.83	0.01	8.60	96	8.70	3.73	200	2.0 cpm			
MC-15	12/16/2009	145700	6.85	0.00	8.70	82	8.80	3.24	200	2.0 cpm			
MC-15	12/16/2009	150000	6.87	0.00	8.80	70	9.00	3.13	200	2.0 cpm			
MC-15	12/16/2009	150300	6.88	0.00	8.90	56	9.10	2.75	200	2.0 cpm			
MC-15	12/16/2009	150600	6.91	0.00	8.90	38	9.60	2.55	200	2.0 cpm			
MC-15	12/16/2009	150900	6.91	0.00	8.90	31	9.90	2.44	200	2.0 cpm			
MC-15	12/16/2009	151200	6.95	0.00	8.90	16	10.40	2.02	200	2.0 cpm			
MC-15	12/16/2009	151500	6.98	0.00	8.90	6	10.80	1.80	200	2.0 cpm			
MC-15	12/16/2009	151800	6.99	0.00	8.90	2	11.10	2.04	200	2.0 cpm			
MC-15	12/16/2009	152100	6.99	0.00	8.80	-1	11.40	1.79	200	2.0 cpm			
MC-15	12/16/2009	152400	7.00	0.00	8.90	-4	11.80	1.79	200	2.0 cpm			
MC-15	12/16/2009	152700	7.00	0.00	9.00	-9	11.90	1.66	200	2.0 cpm			
MC-15	12/16/2009	153000	7.01	0.00	9.10	-13	12.10	1.53	200	2.0 cpm			

Well ID	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	øC	mV	mS/cm	NTUs	ml/min.	Hz or cpm	Minutes	(0.1) ft.	
MC-15D	12/16/2009	155300	7.28	0.00	13.20	13	33.10	3.24	400	59 Hz	24	0.76	All parameters stable when samle was collected.
MC-15D	12/16/2009	155600	7.24	0.00	15.30	26	32.50	1.63	400	59 Hz			Turbidity < 5 NTU's
MC-15D	12/16/2009	155900	7.22	0.00	16.20	34	32.40	1.31	400	59 Hz			Do < 0.20 mg/l but stable.
MC-15D	12/16/2009	160200	7.21	0.00	16.40	44	32.60	0.87	400	59 Hz			Do Test Kit Reading - 0.23 mg/L
MC-15D	12/16/2009	160500	7.19	0.00	16.60	52	32.50	0.99	400	59 Hz			
MC-15D	12/16/2009	160800	7.18	0.00	16.90	59	32.30	1.00	400	59 Hz			
MC-15D	12/16/2009	161100	7.18	0.00	17.10	65	32.20	1.00	400	59 Hz			
MC-15D	12/16/2009	161400	7.17	0.00	17.10	69	32.40	0.71	400	59 Hz			
MC-16	12/16/2009	165300	6.59	0.00	10.10	76	12.50	4.22	200	2.0 cpm	27	0.38	All parameters stable when samle was collected.
MC-16	12/16/2009	165600	6.57	0.00	10.10	45	12.70	3.16	200	2.0 cpm			Turbidity < 5 NTU's
MC-16	12/16/2009	165900	6.65	0.00	10.20	23	12.60	2.93	200	2.0 cpm			Do < 0.20 mg/l but stable.
MC-16	12/16/2009	170200	6.74	0.00	10.30	5	12.50	2.09	200	2.0 cpm			Do Test Kit Reading - 0.26 mg/L
MC-16	12/16/2009	170500	6.84	0.00	10.30	-3	12.20	1.64	200	2.0 cpm			
MC-16	12/16/2009	170800	6.90	0.00	10.30	-10	12.10	1.55	200	2.0 cpm			
MC-16	12/16/2009	171100	6.99	0.00	10.20	-21	12.20	1.77	200	2.0 cpm			
MC-16	12/16/2009	171400	7.03	0.00	10.20	-25	12.20	1.13	200	2.0 cpm			
MC-16	12/16/2009	171700	7.02	0.00	10.20	-24	12.00	0.91	200	2.0 cpm			
MC-31	12/17/2009	82200	6.74	0.00	11.90	-51	12.60	24.00	350	4.0 cpm	27	0.07	All parameters stable when samle was collected.
MC-31	12/17/2009	82500	6.70	0.00	11.80	-59	12.90	8.97	350	4.0 cpm			Turbidity < 5 NTU's
MC-31	12/17/2009	82800	6.74	0.00	11.70	-68	13.10	4.85	350	4.0 cpm			Do < 0.20 mg/l but stable.
MC-31	12/17/2009	83100	6.85	0.00	11.80	-78	13.10	3.34	350	4.0 cpm			Do Test Kit Reading - 0.35 mg/L
MC-31	12/17/2009	83400	6.95	0.00	11.70	-87	13.10	3.07	350	4.0 cpm			
MC-31	12/17/2009	83700	7.05	0.00	11.80	-95	13.30	2.25	350	4.0 cpm			
MC-31	12/17/2009	84000	7.20	0.00	11.70	-102	13.40	2.13	350	4.0 cpm			
MC-31	12/17/2009	84300	7.24	0.00	11.80	-108	13.50	1.90	350	4.0 cpm			
MC-31	12/17/2009	84600	7.30	0.00	11.70	-112	13.30	1.74	350	4.0 cpm			
MC-10D	12/17/2009	92500	7.13	0.00	12.10	-87	86.00	2.22	400	69 Hz	24	1.09	All parameters stable when samle was collected.
MC-10D	12/17/2009	92800	7.14	0.00	13.40	-97	86.70	0.86	400	69 Hz			Turbidity < 5 NTU's
MC-10D	12/17/2009	93100	7.14	0.00	14.60	-103	87.20	0.62	400	69 Hz			Do < 0.20 mg/l but stable.
MC-10D	12/17/2009	93400	7.11	0.00	15.30	-104	87.10	0.43	400	69 Hz			Do Test Kit Reading - 0.29 mg/L
MC-10D	12/17/2009	93700	7.10	0.00	15.60	-105	87.10	0.67	400	69 Hz			
MC-10D	12/17/2009	94000	7.08	0.00	15.80	-105	87.30	0.75	400	69 Hz			
MC-10D	12/17/2009	94300	7.07	0.00	15.80	-105	87.40	0.73	400	69 Hz			
MC-10D	12/17/2009	94600	7.06	0.00	16.00	-105	87.60	0.67	400	69 Hz			
MC-30D	12/17/2009	101700	6.78	0.00	12.90	27	0.1440	1.48	400	4.0 cpm	15	0.20	All parameters stable when samle was collected.
MC-30D	12/17/2009	102000	6.78	0.00	12.90	15	0.1450	1.83	400	4.0 cpm			Turbidity < 5 NTU's
MC-30D	12/17/2009	102300	6.79	0.00	13.00	7	0.1440	2.37	400	4.0 cpm			Do < 0.20 mg/l but stable.
MC-30D	12/17/2009	102600	6.81	0.00	13.00	3	0.1440	2.20	400	4.0 cpm			Do Test Kit Reading - 0.29 mg/L
MC-30D	12/17/2009	102900	6.82	0.00	13.10	0	0.1430	2.20	400	4.0 cpm			

Well ID	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	øC	mV	mS/cm	NTUs	ml/min.	Hz or cpm	Minutes	(0.1) ft.	
MC-30	12/17/2009	105100	7.65	0.09	11.50	40	11.50	8.84	400	4.0 cpm	30	0.27	All parameters stable when samle was collected.
MC-30	12/17/2009	105400	7.63	0.00	11.60	38	11.60	6.64	400	4.0 cpm			Turbidity < 5 NTU's
MC-30	12/17/2009	105700	7.63	0.00	11.70	28	11.90	5.72	400	4.0 cpm			Do < 0.20 mg/l but stable.
MC-30	12/17/2009	110000	7.65	0.00	11.70	21	12.10	5.75	400	4.0 cpm			Do Test Kit Reading - 0.24 mg/L
MC-30	12/17/2009	110300	7.64	0.00	11.70	8	12.20	5.75	400	4.0 cpm			
MC-30	12/17/2009	110600	7.64	0.00	11.80	0	12.30	5.33	400	4.0 cpm			
MC-30	12/17/2009	110900	7.59	0.00	11.80	-6	12.40	4.64	400	4.0 cpm			
MC-30	12/17/2009	111200	7.62	0.00	11.80	-15	12.40	4.64	400	4.0 cpm			
MC-30	12/17/2009	111500	7.65	0.00	11.80	-21	12.50	4.21	400	4.0 cpm			
MC-30	12/17/2009	111800	7.58	0.00	11.80	-23	12.50	4.21	400	4.0 cpm			
MC-12	12/17/2009	115100	6.32	3.16	10.10	260	11.20	3.96	300	2.0 cpm	30	0.08	All parameters stable when samle was collected.
MC-12	12/17/2009	115400	6.67	1.45	10.40	206	10.90	3.32	300	2.0 cpm			Turbidity < 5 NTU's
MC-12	12/17/2009	115700	6.89	0.80	10.50	128	10.90	2.25	300	2.0 cpm			Do < 0.20 mg/l but stable.
MC-12	12/17/2009	120000	7.02	0.26	10.60	55	10.80	1.62	300	2.0 cpm			Do Test Kit Reading - 0.21 mg/L
MC-12	12/17/2009	120300	7.14	0.32	10.50	-9	11.00	1.62	300	2.0 cpm			
MC-12	12/17/2009	120600	7.21	0.14	10.60	-31	11.00	1.27	300	2.0 cpm			
MC-12	12/17/2009	120900	7.26	0.00	10.70	-43	11.20	1.08	300	2.0 cpm			
MC-12	12/17/2009	121200	7.30	0.00	10.80	-54	11.40	1.01	300	2.0 cpm			
MC-12	12/17/2009	121500	7.35	0.00	10.70	-61	11.70	0.93	300	2.0 cpm			
MC-12	12/17/2009	121800	7.36	0.00	10.70	-64	11.60	0.94	300	2.0 cpm			
MC-12D	12/17/2009	123600	6.89	0.00	13.20	-45	0.1190	9.09	400	61 Hz	18	0.77	All parameters stable when samle was collected.
MC-12D	12/17/2009	123900	6.90	0.00	14.60	-55	0.1190	3.49	400	61 Hz			Turbidity < 5 NTU's
MC-12D	12/17/2009	124200	6.89	0.00	16.20	-59	0.1180	1.82	400	61 Hz			Do < 0.20 mg/l but stable.
MC-12D	12/17/2009	124500	6.88	0.00	16.90	-60	0.1180	1.31	400	61 Hz			Do Test Kit Reading - 0.27 mg/L
MC-12D	12/17/2009	124800	6.88	0.00	17.20	-59	0.1170	1.24	400	61 Hz			
MC-12D	12/17/2009	125100	6.88	0.00	17.30	-59	0.1160	1.25	400	61 Hz			
MC-107	12/17/2009	132200	7.50	5.11	10.50	73	11.40	15.40	200	2.0 cpm	39	0.02	All parameters stable when samle was collected.
MC-107	12/17/2009	132500	7.38	4.39	10.80	73	11.10	13.40	200	2.0 cpm			Turbidity < 5 NTU's
MC-107	12/17/2009	132800	7.33	3.82	11.10	76	10.60	12.10	200	2.0 cpm			Do > 0.20 mg/l
MC-107	12/17/2009	133100	7.31	3.32	11.10	76	10.30	9.34	200	2.0 cpm			
MC-107	12/17/2009	133400	7.29	2.81	11.10	71	10.20	8.03	200	2.0 cpm			
MC-107	12/17/2009	133700	7.27	2.43	11.10	62	10.20	5.64	200	2.0 cpm			
MC-107	12/17/2009	134000	7.26	2.11	11.10	52	10.20	4.97	200	2.0 cpm			
MC-107	12/17/2009	134300	7.27	1.92	11.10	47	10.20	4.66	200	2.0 cpm			
MC-107	12/17/2009	134600	7.27	1.80	10.90	41	10.20	4.49	200	2.0 cpm			
MC-107	12/17/2009	134900	7.28	1.59	10.90	30	13.00	3.90	200	2.0 cpm			
MC-107	12/17/2009	135200	7.28	1.40	10.80	21	10.30	2.94	200	2.0 cpm			
MC-107	12/17/2009	135500	7.27	1.30	10.90	17	10.30	2.87	200	2.0 cpm			
MC-107	12/17/2009	135800	7.29	1.26	10.90	11	10.40	2.74	200	2.0 cpm			
MC-26D2	12/17/2009	142600	7.37	0.44	13.20	91	16.80	2.31	400	4.0 cpm	15	1.40	All parameters stable when samle was collected.
MC-26D2	12/17/2009	142900	7.44	0.00	13.30	87	16.90	2.45	400	4.0 cpm			Turbidity < 5 NTU's
MC-26D2	12/17/2009	143200	7.41	0.00	13.20	89	17.00	2.34	400	4.0 cpm			Do < 0.20 mg/l but stable.
MC-26D2	12/17/2009	143500	7.43	0.00	13.20	92	17.00	3.06	400	4.0 cpm			Do Test Kit Reading - 0.28 mg/L
MC-26D2	12/17/2009	143800	7.41	0.00	13.20	96	17.00	3.06	400	4.0 cpm			

Well ID	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	øC	mV	mS/cm	NTUs	ml/min.	Hz or cpm	Minutes	(0.1) ft.	
MC-8	12/17/2009	150900	7.20	9.10	10.20	208	8.60	18.1	100	0.2 cpm	18	0.16	All parameters stable when samle was collected.
MC-8	12/17/2009	151200	7.22	8.84	10.50	210	8.40	20.5	100	0.2 cpm			Turbidity > 5 NTU's but stable.
MC-8	12/17/2009	151500	7.17	8.79	10.70	211	8.30	19.9	100	0.2 cpm			Do > 0.20 mg/l
MC-8	12/17/2009	151800	7.13	8.56	11.00	213	8.30	19.5	100	0.2 cpm			
MC-8	12/17/2009	152100	7.12	8.50	11.10	215	8.20	19.7	100	0.2 cpm			
MC-8	12/17/2009	152400	7.09	8.40	11.10	218	8.20	19.7	100	0.2 cpm			
MC-118D2	12/18/2009	81000	7.09	1.05	13.20	117	72.20	2.74	400	4.0 cpm	27	1.04	All parameters stable when samle was collected.
MC-118D2	12/18/2009	81300	7.06	0.00	13.70	1	76.80	1.77	400	4.0 cpm			Turbidity < 5 NTU's
MC-118D2	12/18/2009	81600	7.03	0.00	13.70	-32	74.70	1.38	400	4.0 cpm			Do < 0.20 mg/l but stable.
MC-118D2	12/18/2009	81900	7.07	0.00	13.70	-48	71.60	1.53	400	4.0 cpm			Do Test Kit Reading - 0.26 mg/L
MC-118D2	12/18/2009	82200	7.07	0.00	13.70	-54	69.40	1.33	400	4.0 cpm			
MC-118D2	12/18/2009	82500	7.09	0.00	13.70	-58	67.60	1.41	400	4.0 cpm			
MC-118D2	12/18/2009	82800	7.09	0.00	13.70	-62	66.30	1.41	400	4.0 cpm			
MC-118D2	12/18/2009	83100	7.09	0.00	13.70	-63	64.90	1.32	400	4.0 cpm			
MC-118D2	12/18/2009	83400	7.10	0.00	13.80	-65	64.60	1.07	400	4.0 cpm			
MC-118D	12/18/2009	85400	6.97	0.00	14.40	-77	96.30	12.80	400	67 Hz	21	1.41	All parameters stable when samle was collected.
MC-118D	12/18/2009	85700	6.92	0.00	15.60	-83	95.40	5.99	400	67 Hz			Turbidity < 5 NTU's
MC-118D	12/18/2009	90000	6.89	0.00	17.60	-87	93.80	3.15	400	67 Hz			Do < 0.20 mg/l but stable.
MC-118D	12/18/2009	90300	6.90	0.00	18.40	-92	95.70	2.73	400	67 Hz			Do Test Kit Reading - 0.22 mg/L
MC-118D	12/18/2009	90600	6.90	0.00	18.90	-94	95.40	2.31	400	67 Hz			
MC-118D	12/18/2009	90900	6.90	0.00	19.10	-95	94.90	2.59	400	67 Hz			
MC-118D	12/18/2009	91200	6.90	0.00	19.10	-95	95.00	2.34	400	67 Hz			
MC-25D2	12/18/2009	94300	7.40	0.00	14.00	-69	37.10	2.67	400	4.0 cpm	33	0.81	All parameters stable when samle was collected.
MC-25D2	12/18/2009	94600	7.35	0.00	14.10	-83	37.70	3.00	400	4.0 cpm			Turbidity < 5 NTU's
MC-25D2	12/18/2009	94900	7.32	0.00	14.10	-89	34.10	2.24	400	4.0 cpm			Do < 0.20 mg/l but stable.
MC-25D2	12/18/2009	95200	7.33	0.00	14.10	-93	32.00	2.39	400	4.0 cpm			Do Test Kit Reading - 0.26 mg/L
MC-25D2	12/18/2009	95500	7.39	0.00	14.10	-96	29.60	2.23	400	4.0 cpm			
MC-25D2	12/18/2009	95800	7.51	0.00	14.10	-102	27.90	2.22	400	4.0 cpm			
MC-25D2	12/18/2009	100100	7.61	0.00	14.00	-106	26.80	2.22	400	4.0 cpm			
MC-25D2	12/18/2009	100400	7.65	0.00	14.00	-106	25.60	1.97	400	4.0 cpm			
MC-25D2	12/18/2009	100700	7.65	0.00	14.00	-106	24.70	1.92	400	4.0 cpm			
MC-25D2	12/18/2009	101000	7.65	0.00	14.10	-105	24.10	1.92	400	4.0 cpm			
MC-25D2	12/18/2009	101300	7.65	0.00	14.00	-104	24.00	1.86	400	4.0 cpm			
MC-25	12/18/2009	105900	6.85	9.62	10.10	192	7.10	28.2	250	4.0 cpm	15	0.09	All parameters stable when samle was collected.
MC-25	12/18/2009	110200	6.59	8.93	10.00	206	7.10	28.7	250	4.0 cpm			Turbidity > 5 NTU's but stable.
MC-25	12/18/2009	100500	6.46	8.80	10.00	214	6.90	25.5	250	4.0 cpm			Do > 0.20 mg/l
MC-25	12/18/2009	100800	6.38	8.72	10.00	220	6.90	24.5	250	4.0 cpm			
MC-25	12/18/2009	111100	6.36	8.78	10.00	223	6.90	24.9	250	4.0 cpm			

Well ID	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	øC	mV	mS/cm	NTUs	ml/min.	Hz or cpm	Minutes	(0.1) ft.	
MC-25D	12/18/2009	114300	7.08	4.72	14.10	220	0.1160	2.86	400	4.0 cpm	42	0.48	All parameters stable when samle was collected.
MC-25D	12/18/2009	114600	7.03	0.00	14.60	215	0.1120	3.20	400	4.0 cpm			Turbidity < 5 NTU's
MC-25D	12/18/2009	114900	7.03	0.00	14.70	209	0.1130	3.29	400	4.0 cpm			Do < 0.20 mg/l but stable.
MC-25D	12/18/2009	115200	7.04	0.00	14.60	196	0.1130	3.23	400	4.0 cpm			Do Test Kit Reading - 0.29 mg/L
MC-25D	12/18/2009	115500	7.04	0.00	14.60	181	0.1130	3.39	400	4.0 cpm			
MC-25D	12/18/2009	115800	7.03	0.00	14.70	163	0.1130	3.63	400	4.0 cpm			
MC-25D	12/18/2009	120100	7.04	0.00	14.60	148	0.1130	3.53	400	4.0 cpm			
MC-25D	12/18/2009	120400	7.04	0.00	14.70	135	0.1130	3.18	400	4.0 cpm			
MC-25D	12/18/2009	120700	7.03	0.00	14.70	116	0.1130	3.49	400	4.0 cpm			
MC-25D	12/18/2009	121000	7.04	0.00	14.60	101	0.1130	3.23	400	4.0 cpm			
MC-25D	12/18/2009	121300	7.04	0.00	14.60	79	0.1130	3.89	400	4.0 cpm			
MC-25D	12/18/2009	121600	7.05	0.00	14.70	59	0.1120	3.39	400	4.0 cpm			
MC-25D	12/18/2009	121900	7.05	0.00	14.60	55	0.1120	3.48	400	4.0 cpm			
MC-25D	12/18/2009	122200	7.04	0.00	14.70	49	0.1120	3.40	400	4.0 cpm			
MC-33	12/18/2009	125600	7.23	1.52	12.60	4	17.20	7.81	400	4.0 cpm	39	0.52	All parameters stable when samle was collected.
MC-33	12/18/2009	125900	6.81	0.00	12.30	-61	17.80	9.04	400	4.0 cpm			Turbidity < 5 NTU's
MC-33	12/18/2009	130200	6.75	0.00	12.20	-74	17.50	7.78	400	4.0 cpm			Do < 0.20 mg/l but stable.
MC-33	12/18/2009	130500	6.81	0.00	12.20	-84	17.00	6.17	400	4.0 cpm			Do Test Kit Reading - 0.21 mg/L
MC-33	12/18/2009	130800	6.81	0.00	12.20	-88	16.30	4.89	400	4.0 cpm			
MC-33	12/18/2009	131100	6.87	0.00	12.20	-93	15.90	4.76	400	4.0 cpm			
MC-33	12/18/2009	130400	6.97	0.00	12.20	-100	15.30	4.16	400	4.0 cpm			
MC-33	12/18/2009	131700	7.01	0.00	12.20	-103	14.70	3.82	400	4.0 cpm			
MC-33	12/18/2009	132000	7.09	0.00	12.20	-108	14.30	3.39	400	4.0 cpm			
MC-33	12/18/2009	132300	7.11	0.00	12.20	-109	14.00	3.15	400	4.0 cpm			
MC-33	12/18/2009	132600	7.15	0.00	12.20	-112	13.60	2.78	400	4.0 cpm			
MC-33	12/18/2009	132900	7.16	0.00	12.20	-113	13.40	2.26	400	4.0 cpm			
MC-33	12/18/2009	133200	7.19	0.00	12.20	-115	13.20	2.08	400	4.0 cpm			
MC-24D2	12/21/2009	81800	6.91	0.00	13.70	386	15.50	2.21	400	4.0 cpm	18	0.06	All parameters stable when samle was collected.
MC-24D2	12/21/2009	82100	7.12	0.00	13.70	381	15.50	2.59	400	4.0 cpm			Turbidity < 5 NTU's
MC-24D2	12/21/2009	82400	7.20	0.00	13.70	375	15.40	2.76	400	4.0 cpm			Do < 0.20 mg/l but stable.
MC-24D2	12/21/2009	82700	7.28	0.00	13.80	363	15.40	2.67	400	4.0 cpm			Do Test Kit Reading - 0.28 mg/L
MC-24D2	12/21/2009	83000	7.30	0.00	13.80	364	15.40	2.79	400	4.0 cpm			
MC-24D2	12/21/2009	83300	7.31	0.00	13.80	359	15.30	2.51	400	4.0 cpm			
MC-24	12/21/2009	85400	7.08	10.43	9.60	382	5.40	18.7	350	4.0 cpm	15	0.13	All parameters stable when samle was collected.
MC-24	12/21/2009	85700	6.73	10.11	9.00	398	5.10	20.2	350	4.0 cpm			Turbidity > 5 NTU's but stable.
MC-24	12/21/2009	90000	6.48	9.90	8.60	403	5.10	20.7	350	4.0 cpm			Do > 0.20 mg/l
MC-24	12/21/2009	90300	6.40	9.80	8.40	405	5.00	20.2	350	4.0 cpm			
MC-24	12/21/2009	90600	6.42	9.79	8.40	402	5.00	20.3	350	4.0 cpm			

Well ID	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	øC	mV	mS/cm	NTUs	ml/min.	Hz or cpm	Minutes	(0.1) ft.	
MC-24D	12/21/2009	92500	6.89	1.36	13.20	380	0.1230	3.40	400	4.0 cpm	42	0.35	All parameters stable when samle was collected.
MC-24D	12/21/2009	92800	6.87	0.00	14.10	314	0.1240	2.88	400	4.0 cpm			Turbidity < 5 NTU's
MC-24D	12/21/2009	93100	6.83	0.00	14.20	288	0.1240	2.91	400	4.0 cpm			Do < 0.20 mg/l but stable.
MC-24D	12/21/2009	93400	6.87	0.00	14.20	271	0.1240	2.82	400	4.0 cpm			Do Test Kit Reading - 0.25 mg/L
MC-24D	12/21/2009	93700	6.82	0.00	14.20	251	0.1240	2.74	400	4.0 cpm			
MC-24D	12/21/2009	94000	6.87	0.00	14.20	234	0.1240	2.75	400	4.0 cpm			
MC-24D	12/21/2009	94300	6.86	0.00	14.20	218	0.1240	2.98	400	4.0 cpm			
MC-24D	12/21/2009	94600	6.87	0.00	14.20	207	0.1240	2.91	400	4.0 cpm			
MC-24D	12/21/2009	94900	6.82	0.00	14.20	194	0.1240	2.93	400	4.0 cpm			
MC-24D	12/21/2009	95200	6.83	0.00	14.20	188	0.1240	2.96	400	4.0 cpm			
MC-24D	12/21/2009	95500	6.86	0.00	14.20	176	0.1240	2.96	400	4.0 cpm			
MC-24D	12/21/2009	95800	6.83	0.00	14.20	168	0.1240	3.21	400	4.0 cpm			
MC-24D	12/21/2009	100100	6.85	0.00	14.20	160	0.1240	3.32	400	4.0 cpm			
MC-24D	12/21/2009	100400	6.83	0.00	14.20	158	0.1240	3.26	400	4.0 cpm			
MC-2D	12/21/2009	103900	7.27	0.00	14.90	204	34.10	3.29	400	65 Hz	30	1.20	All parameters stable when samle was collected.
MC-2D	12/21/2009	104200	7.20	0.00	15.70	192	34.10	2.62	400	65 Hz			Turbidity < 5 NTU's
MC-2D	12/21/2009	104500	7.16	0.00	16.80	182	34.10	1.61	400	65 Hz			Do < 0.20 mg/l but stable.
MC-2D	12/21/2009	104800	7.12	0.00	17.40	176	34.30	1.00	400	65 Hz			Do Test Kit Reading - 0.21 mg/L
MC-2D	12/21/2009	105100	7.11	0.00	17.30	168	34.60	1.42	400	65 Hz			
MC-2D	12/21/2009	105400	7.09	0.00	17.70	159	34.50	1.35	400	65 Hz			
MC-2D	12/21/2009	105700	7.09	0.00	17.90	149	34.50	1.06	400	65 Hz			
MC-2D	12/21/2009	110000	7.08	0.00	18.10	140	34.30	0.88	400	65 Hz			
MC-2D	12/21/2009	110300	7.07	0.00	17.80	133	34.20	0.85	400	65 Hz			
MC-2D	12/21/2009	110600	7.09	0.00	17.90	130	34.00	0.82	400	65 Hz			
MC-2	12/21/2009	113000	6.92	0.00	14.20	-30	15.60	21.8	400	53 Hz	18	0.43	All parameters stable when samle was collected.
MC-2	12/21/2009	113300	6.85	0.00	16.10	-39	15.40	12.6	400	53 Hz			Turbidity < 5 NTU's
MC-2	12/21/2009	113600	6.95	0.00	17.30	-54	15.50	6.95	400	53 Hz			Do < 0.20 mg/l but stable.
MC-2	12/21/2009	113900	6.98	0.00	17.90	-59	15.60	4.58	400	53 Hz			Do Test Kit Reading - 0.28 mg/L
MC-2	12/21/2009	114200	6.97	0.00	18.20	-60	15.60	2.86	400	53 Hz			
MC-2	12/21/2009	114500	6.96	0.00	18.40	-60	15.60	2.27	400	53 Hz			
MC-17	12/21/2009	121800	6.74	0.00	10.50	-20	23.10	5.45	200	1.0 cpm	54	0.40	All parameters stable when samle was collected.
MC-17	12/21/2009	122100	6.75	0.00	10.60	-44	28.20	3.42	200	1.0 cpm			Turbidity < 5 NTU's
MC-17	12/21/2009	122400	6.85	0.00	10.70	-67	32.70	2.66	200	1.0 cpm			Do < 0.20 mg/l but stable.
MC-17	12/21/2009	122700	6.95	0.00	10.80	-81	37.40	3.23	200	1.0 cpm			Do Test Kit Reading - 0.32 mg/L
MC-17	12/21/2009	123000	7.03	0.00	10.80	-87	38.00	1.47	200	1.0 cpm			
MC-17	12/21/2009	123300	7.08	0.00	10.80	-90	37.20	1.20	200	1.0 cpm			
MC-17	12/21/2009	123600	7.11	0.00	10.80	-92	36.10	1.40	200	1.0 cpm			
MC-17	12/21/2009	123900	7.12	0.00	10.80	-92	34.90	1.07	200	1.0 cpm			
MC-17	12/21/2009	124200	7.13	0.00	10.70	-91	33.10	1.07	200	1.0 cpm			
MC-17	12/21/2009	124500	7.13	0.00	10.70	-90	31.70	1.07	200	1.0 cpm			
MC-17	12/21/2009	124800	7.13	0.00	10.60	-88	28.80	1.59	200	1.0 cpm			
MC-17	12/21/2009	125100	7.13	0.00	10.60	-86	28.50	1.40	200	1.0 cpm			
MC-17	12/21/2009	125400	7.12	0.00	10.50	-84	27.90	1.25	200	1.0 cpm			
MC-17	12/21/2009	125700	7.11	0.00	10.40	-82	26.00	1.79	200	1.0 cpm			
MC-17	12/21/2009	130000	7.11	0.00	10.40	-80	24.40	1.68	200	1.0 cpm			
MC-17	12/21/2009	130300	7.10	0.00	10.30	-78	23.40	1.13	200	1.0 cpm			
MC-17	12/21/2009	130600	7.11	0.00	10.40	-79	23.40	1.05	200	1.0 cpm			
MC-17	12/21/2009	130900	7.12	0.00	10.40	-77	22.70	1.02	200	1.0 cpm			

Well ID	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	øC	mV	mS/cm	NTUs	ml/min.	Hz or cpm	Minutes	(0.1) ft.	
MC-17D	12/21/2009	133200	7.30	0.00	12.50	-15	18.60	35.7	400	62 Hz	24	0.24	All parameters stable when samle was collected.
MC-17D	12/21/2009	133500	7.27	0.00	13.50	-9	18.50	11.4	400	62 Hz			Turbidity < 5 NTU's
MC-17D	12/21/2009	133800	7.25	0.00	13.80	-4	18.60	3.64	400	62 Hz			Do < 0.20 mg/l but stable.
MC-17D	12/21/2009	134100	7.24	0.00	14.50	-2	18.50	2.23	400	62 Hz			Do Test Kit Reading - 0.34mg/L
MC-17D	12/21/2009	134400	7.23	0.00	15.10	1	18.50	1.63	400	62 Hz			
MC-17D	12/21/2009	134700	7.22	0.00	15.40	5	18.50	1.06	400	62 Hz			
MC-17D	12/21/2009	135000	7.21	0.00	15.80	9	18.40	1.21	400	62 Hz			
MC-17D	12/21/2009	135300	7.20	0.00	15.80	13	18.40	1.12	400	62 Hz			
MC-1	12/21/2009	144600	6.84	0.00	15.20	5	12.10	5.49	400	56 Hz	21	0.43	All parameters stable when samle was collected.
MC-1	12/21/2009	144900	6.84	0.00	16.90	-8	12.10	3.07	400	56 Hz			Turbidity < 5 NTU's
MC-1	12/21/2009	145200	6.86	0.00	17.60	-25	12.60	2.41	400	56 Hz			Do < 0.20 mg/l but stable.
MC-1	12/21/2009	145500	6.86	0.00	17.90	-33	12.80	2.58	400	56 Hz			Do Test Kit Reading - 0.23mg/L
MC-1	12/21/2009	145800	6.85	0.00	18.30	-39	13.10	2.48	400	56 Hz			
MC-1	12/21/2009	150100	6.85	0.00	18.50	-45	13.20	2.02	400	56 Hz			
MC-1	12/21/2009	150400	6.86	0.00	18.20	-47	13.30	1.66	400	56 Hz			
MC-19D	12/21/2009	153700	7.05	0.00	13.60	22	15.10	10.78	400	72 Hz	18	0.04	All parameters stable when samle was collected.
MC-19D	12/21/2009	154000	7.21	0.00	14.50	13	15.00	6.09	400	72 Hz			Turbidity < 5 NTU's
MC-19D	12/21/2009	154300	7.31	0.00	16.20	9	15.00	3.71	400	72 Hz			Do < 0.20 mg/l but stable.
MC-19D	12/21/2009	154600	7.36	0.00	16.70	8	15.00	2.82	400	72 Hz			Do Test Kit Reading - 0.31mg/L
MC-19D	12/21/2009	154900	7.38	0.00	17.10	11	15.10	2.74	400	72 Hz			
MC-19D	12/21/2009	155200	7.38	0.00	17.20	14	15.20	1.69	400	72 Hz			

Well ID	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	C	mV	mS/cm	NTUs	ml/min	Hz or cpm	Minutes	(0.01) ft.	
UT-ST-1	3/23/2010	82520	7.32	7.43	8.65	165	0.0749	20.4	100	0.2 cpm	21	0.68	All parameters stable when sample was collected.
UT-ST-1	3/23/2010	82806	7.14	7.14	8.71	171	0.0751	14.5	100	0.2 cpm			Turbidity < 5 NTU's
UT-ST-1	3/23/2010	83105	7.03	6.76	8.76	176	0.0749	10.50	100	0.2 cpm			Do > 0.20 mg/L
UT-ST-1	3/23/2010	83407	6.99	6.51	8.80	181	0.0750	2.79	100	0.2 cpm			
UT-ST-1	3/23/2010	83706	6.90	6.37	8.86	184	0.0750	0.90	100	0.2 cpm			
UT-ST-1	3/23/2010	84014	6.86	6.20	8.84	189	0.0748	1.06	100	0.2 cpm			
UT-ST-1	3/23/2010	84305	6.82	5.93	8.91	192	0.0742	1.03	100	0.2 cpm			
PZU-4	3/23/2010	93306	7.08	6.04	9.01	182	0.0740	30.5	100	0.2 cpm	30	0.47	All parameters stable when sample was collected.
PZU-4	3/23/2010	93612	7.00	5.82	9.15	177	0.0746	20.6	100	0.2 cpm			Turbidity < 5 NTU's
PZU-4	3/23/2010	93905	6.90	5.47	9.34	172	0.0747	14.9	100	0.2 cpm			Do > 0.20 mg/L
PZU-4	3/23/2010	94210	6.85	5.11	9.49	169	0.0754	8.70	100	0.2 cpm			
PZU-4	3/23/2010	94532	6.88	4.85	9.73	161	0.0760	8.40	100	0.2 cpm			
PZU-4	3/23/2010	94810	6.82	4.69	9.92	157	0.0762	6.33	100	0.2 cpm			
PZU-4	3/23/2010	95106	6.83	4.48	10.06	149	0.0768	5.49	100	0.2 cpm			
PZU-4	3/23/2010	95405	6.89	4.20	10.22	137	0.0770	4.66	100	0.2 cpm			
PZU-4	3/23/2010	95705	6.80	3.92	10.34	128	0.0777	3.68	100	0.2 cpm			
PZU-4	3/23/2010	100005	6.82	3.80	10.52	129	0.0779	3.70	100	0.2 cpm			
MC-32	3/23/2010	105408	6.67	3.97	12.72	-40	1.151	101.2	100	4.0 cpm	60	0.82	All parameters stable when sample was collected.
MC-32	3/23/2010	105706	6.68	3.74	12.77	-44	1.153	97.6	100	4.0 cpm			Turbidity > 5 NTU's but stable.
MC-32	3/23/2010	110020	6.64	3.34	12.73	-47	1.156	90.5	100	4.0 cpm			Do > 0.20 mg/L
MC-32	3/23/2010	110305	6.62	3.12	12.72	-50	1.157	87.5	100	4.0 cpm			
MC-32	3/23/2010	110641	6.62	2.81	12.75	-51	1.159	80.7	100	4.0 cpm			
MC-32	3/23/2010	110906	6.61	2.66	12.74	-51	1.160	71.9	100	4.0 cpm			
MC-32	3/23/2010	111205	6.61	2.44	12.76	-55	1.162	65.1	100	4.0 cpm			
MC-32	3/23/2010	111501	6.62	2.23	12.83	-58	1.164	61.5	100	4.0 cpm			
MC-32	3/23/2010	111826	6.61	2.66	12.74	-51	1.160	71.9	100	4.0 cpm			
MC-32	3/23/2010	112125	6.64	2.18	12.85	-59	1.164	74.1	100	4.0 cpm			
MC-32	3/23/2010	112413	6.63	2.51	12.77	-59	1.163	68.3	100	4.0 cpm			
MC-32	3/23/2010	112705	6.83	2.47	12.77	-60	1.163	52.8	100	4.0 cpm			
MC-32	3/23/2010	113009	6.70	2.34	12.82	-60	1.163	65.8	100	4.0 cpm			
MC-32	3/23/2010	113306	6.65	2.38	12.94	-59	1.163	86.7	100	4.0 cpm			
MC-32	3/23/2010	113611	6.63	2.69	12.91	-58	1.162	90.5	100	4.0 cpm			
MC-32	3/23/2010	113905	6.63	2.68	12.80	-57	1.162	86.8	100	4.0 cpm			
MC-32	3/23/2010	114205	6.64	2.44	12.71	-56	1.162	82.9	100	4.0 cpm			
MC-32	3/23/2010	114505	6.64	2.26	12.73	-59	1.162	80.9	100	4.0 cpm			
MC-32	3/23/2010	114805	6.64	2.08	12.68	-60	1.162	79.6	100	4.0 cpm			
MC-32	3/23/2010	115105	6.65	2.08	12.62	-62	1.162	78.9	100	4.0 cpm			
MC-123	3/23/2010	125505	6.48	1.00	12.87	-67	1.180	18.9	100	0.2 cpm	21	0.46	All parameters stable when sample was collected.
MC-123	3/23/2010	125805	6.48	1.01	12.84	-69	1.181	9.28	100	0.2 cpm			Turbidity > 5 NTU's but stable.
MC-123	3/23/2010	130106	6.49	0.97	12.82	-71	1.182	15.0	100	0.2 cpm			Do > 0.20 mg/L
MC-123	3/23/2010	130412	6.49	1.04	12.85	-73	1.178	10.3	100	0.2 cpm			
MC-123	3/23/2010	130706	6.48	1.03	12.88	-74	1.174	9.09	100	0.2 cpm			
MC-123	3/23/2010	131005	6.48	1.00	12.91	-74	1.173	9.56	100	0.2 cpm			
MC-123	3/23/2010	131305	6.46	0.96	12.96	-75	1.169	9.39	100	0.2 cpm			

Well ID	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	C	mV	mS/cm	NTUs	ml/min	Hz or cpm	Minutes	(0.01) ft.	
MC-20D	3/23/2010	135105	7.50	4.38	13.96	23	0.1454	35.0	400	4.0 cpm	27	1.18	All parameters stable when sample was collected.
MC-20D	3/23/2010	135405	7.50	2.20	14.11	3	0.1416	87.5	400	4.0 cpm			Turbidity > 5 NTU's but stable.
MC-20D	3/23/2010	135712	7.50	1.25	14.21	-25	0.1379	79.3	400	4.0 cpm			Do > 0.20 mg/L
MC-20D	3/23/2010	140005	7.41	1.23	14.29	-38	0.1373	47.8	400	4.0 cpm			
MC-20D	3/23/2010	140305	7.43	1.46	14.29	-50	0.1367	43.4	400	4.0 cpm			
MC-20D	3/23/2010	140605	7.41	1.57	14.33	-55	0.1358	30.1	400	4.0 cpm			
MC-20D	3/23/2010	140905	7.37	1.58	14.34	-59	0.1356	24.6	400	4.0 cpm			
MC-20D	3/23/2010	141209	7.41	1.52	14.36	-62	0.1360	25.0	400	4.0 cpm			
MC-20D	3/23/2010	141505	7.40	1.51	14.34	-66	0.1355	24.3	400	4.0 cpm			
MC-20	3/23/2010	145205	6.05	2.28	15.21	94	0.0947	29.1	100	0.2 cpm	63	1.38	All parameters stable when sample was collected.
MC-20	3/23/2010	145517	6.02	2.01	15.04	95	0.0971	42.9	100	0.2 cpm			Turbidity < 5 NTU's
MC-20	3/23/2010	145826	5.99	1.82	14.90	94	0.0972	34.4	100	0.2 cpm			Do > 0.20 mg/L
MC-20	3/23/2010	150109	6.04	1.71	15.05	93	0.0968	29.9	100	0.2 cpm			Fe Field Test Kit Reading - 3.30 mg/L Upper Limit.
MC-20	3/23/2010	150413	5.99	1.66	15.21	89	0.0967	25.5	100	0.2 cpm			
MC-20	3/23/2010	150717	6.01	1.48	15.27	88	0.0965	19.0	100	0.2 cpm			
MC-20	3/23/2010	151006	5.97	1.35	15.20	85	0.0976	15.0	100	0.2 cpm			
MC-20	3/23/2010	151310	5.99	1.24	15.23	83	0.0988	13.7	100	0.2 cpm			
MC-20	3/23/2010	151606	5.98	1.17	15.26	80	0.1012	12.4	100	0.2 cpm			
MC-20	3/23/2010	151905	6.02	1.08	15.28	77	0.1041	12.1	100	0.2 cpm			
MC-20	3/23/2010	152205	6.03	1.07	15.35	71	0.1071	12.4	100	0.2 cpm			
MC-20	3/23/2010	152517	6.02	1.03	15.36	69	0.1107	12.5	100	0.2 cpm			
MC-20	3/23/2010	152805	6.05	0.99	15.38	65	0.1132	10.32	100	0.2 cpm			
MC-20	3/23/2010	153105	6.04	1.03	15.39	61	0.1153	7.98	100	0.2 cpm			
MC-20	3/23/2010	153406	6.08	1.01	15.44	59	0.1180	6.63	100	0.2 cpm			
MC-20	3/23/2010	153713	6.09	1.00	15.52	55	0.1209	6.01	100	0.2 cpm			
MC-20	3/23/2010	154006	6.05	0.93	15.50	52	0.1247	5.09	100	0.2 cpm			
MC-20	3/23/2010	154306	6.09	0.94	15.55	48	0.1279	4.95	100	0.2 cpm			
MC-20	3/23/2010	154606	6.05	0.97	15.23	46	0.1313	4.80	100	0.2 cpm			
MC-20	3/23/2010	154905	6.12	0.93	15.04	42	0.1303	4.74	100	0.2 cpm			
MC-20	3/23/2010	155205	6.07	0.88	14.88	43	0.1322	4.71	100	0.2 cpm			
MC-122	3/24/2010	81105	6.64	1.89	10.53	150	0.1856	35.8	100	0.2 cpm	36	0.97	All parameters stable when sample was collected.
MC-122	3/24/2010	81405	6.48	1.70	10.64	152	0.1915	25.8	100	0.2 cpm			Turbidity > 5 NTU's but stable.
MC-122	3/24/2010	81705	6.38	1.56	10.79	150	0.1987	22.6	100	0.2 cpm			Do > 0.20 mg/L
MC-122	3/24/2010	82005	6.33	1.40	10.93	146	0.2075	21.6	100	0.2 cpm			
MC-122	3/24/2010	82305	6.31	1.33	11.04	143	0.2138	15.9	100	0.2 cpm			
MC-122	3/24/2010	82605	6.30	1.23	11.10	139	0.2219	16.3	100	0.2 cpm			
MC-122	3/24/2010	82905	6.26	1.30	11.12	135	0.2303	14.6	100	0.2 cpm			
MC-122	3/24/2010	83206	6.30	1.27	11.15	131	0.2371	13.9	100	0.2 cpm			
MC-122	3/24/2010	83505	6.24	1.24	11.21	127	0.2425	13.1	100	0.2 cpm			
MC-122	3/24/2010	83805	6.27	1.25	11.25	124	0.2472	12.3	100	0.2 cpm			
MC-122	3/24/2010	84105	6.24	1.23	11.30	121	0.2524	13.4	100	0.2 cpm			
MC-122	3/24/2010	84412	6.26	1.24	11.37	117	0.2547	13.4	100	0.2 cpm			

Well ID	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	C	mV	mS/cm	NTUs	ml/min	Hz or cpm	Minutes	(0.01) ft.	
PZU-5	3/24/2010	93105	6.68	3.72	12.87	98	0.3269	46.4	100	0.2 cpm	42	3.60	All parameters stable when sample was collected.
PZU-5	3/24/2010	93400	6.30	3.00	12.77	78	0.3249	41.4	100	0.2 cpm			Turbidity > 5 NTU's but stable.
PZU-5	3/24/2010	93715	6.42	2.71	12.72	69	0.3237	37.7	100	0.2 cpm			Do > 0.20 mg/L
PZU-5	3/24/2010	94006	6.58	2.44	12.67	60	0.3217	36.6	100	0.2 cpm			
PZU-5	3/24/2010	94326	6.57	2.32	12.61	51	0.3179	30.4	100	0.2 cpm			
PZU-5	3/24/2010	94629	6.58	2.27	12.58	43	0.3161	30.5	100	0.2 cpm			
PZU-5	3/24/2010	94947	6.59	2.15	12.63	35	0.3154	29.3	100	0.2 cpm			
PZU-5	3/24/2010	95223	6.30	2.17	12.72	29	0.3137	24.2	100	0.2 cpm			
PZU-5	3/24/2010	95509	6.59	2.12	12.82	21	0.3119	24.6	100	0.2 cpm			
PZU-5	3/24/2010	95814	6.59	2.12	12.92	15	0.3117	18.5	100	0.2 cpm			
PZU-5	3/24/2010	100105	6.63	2.04	13.11	8	0.3091	16.2	100	0.2 cpm			
PZU-5	3/24/2010	100405	6.58	2.03	13.29	4	0.3073	11.7	100	0.2 cpm			
PZU-5	3/24/2010	100705	6.50	2.00	13.49	-4	0.3049	11.4	100	0.2 cpm			
PZU-5	3/24/2010	101005	6.58	1.93	13.71	-10	0.3038	11.2	100	0.2 cpm			
MC-27D	3/24/2010	105105	7.05	1.88	13.50	137	0.5100	63.7	400	4.0 cpm	27	0.58	All parameters stable when sample was collected.
MC-27D	3/24/2010	105406	6.97	1.41	13.57	130	0.5059	55.6	400	4.0 cpm			Turbidity > 5 NTU's but stable.
MC-27D	3/24/2010	105705	6.92	1.36	13.61	124	0.5009	38.2	400	4.0 cpm			Do > 0.20 mg/L
MC-27D	3/24/2010	110027	6.96	1.19	13.63	118	0.4988	32.7	400	4.0 cpm			
MC-27D	3/24/2010	110305	6.91	0.99	13.66	113	0.4972	21.8	400	4.0 cpm			
MC-27D	3/24/2010	110605	6.92	0.85	13.68	107	0.4959	18.3	400	4.0 cpm			
MC-27D	3/24/2010	110905	6.84	0.69	13.67	100	0.4955	17.2	400	4.0 cpm			
MC-27D	3/24/2010	111206	6.92	0.70	13.70	94	0.4944	16.2	400	4.0 cpm			
MC-27D	3/24/2010	111505	6.90	0.65	13.68	96	0.4946	15.8	400	4.0 cpm			
MC-28D	3/24/2010	113806	7.97	3.05	14.03	169	0.1797	8.24	400	4.0 cpm	30	1.45	All parameters stable when sample was collected.
MC-28D	3/24/2010	114105	8.05	1.91	13.93	170	0.1846	4.22	400	4.0 cpm			Turbidity < 5 NTU's
MC-28D	3/24/2010	114406	7.92	1.37	13.97	172	0.1832	4.22	400	4.0 cpm			Do > 0.20 mg/L
MC-28D	3/24/2010	114706	7.84	1.13	13.94	170	0.1836	2.34	400	4.0 cpm			
MC-28D	3/24/2010	115005	7.82	0.90	13.94	145	0.1830	2.87	400	4.0 cpm			
MC-28D	3/24/2010	115307	7.72	0.87	14.00	117	0.1799	4.22	400	4.0 cpm			
MC-28D	3/24/2010	115605	7.57	0.96	14.00	103	0.1762	3.85	400	4.0 cpm			
MC-28D	3/24/2010	115906	7.55	1.26	14.05	97	0.1727	3.24	400	4.0 cpm			
MC-28D	3/24/2010	120205	7.49	1.26	14.08	97	0.1708	3.23	400	4.0 cpm			
MC-28D	3/24/2010	120505	7.46	1.31	14.05	96	0.1707	2.89	400	4.0 cpm			
MC-13D	3/24/2010	123606	7.37	2.75	15.64	211	0.1397	3.44	200	1.0 cpm	21	1.09	All parameters stable when sample was collected.
MC-13D	3/24/2010	123905	7.18	2.42	15.49	214	0.1395	2.82	200	1.0 cpm			Turbidity < 5 NTU's
MC-13D	3/24/2010	124205	7.11	2.12	15.43	217	0.1401	2.60	200	1.0 cpm			Do > 0.20 mg/L
MC-13D	3/24/2010	124506	7.02	1.96	15.55	219	0.1402	2.12	200	1.0 cpm			
MC-13D	3/24/2010	124805	7.08	1.77	15.60	222	0.1403	1.23	200	1.0 cpm			
MC-13D	3/24/2010	125105	7.07	1.65	15.70	224	0.1401	1.31	200	1.0 cpm			
MC-13D	3/24/2010	125407	7.09	1.61	15.74	224	0.1404	0.86	200	1.0 cpm			

Well ID	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	C	mV	mS/cm	NTUs	ml/min	Hz or cpm	Minutes	(0.01) ft.	
MC-13	3/24/2010	131326	7.26	0.89	13.98	225	0.0614	22.7	400	4.0 cpm	33	0.12	All parameters stable when sample was collected.
MC-13	3/24/2010	131605	6.98	0.52	13.30	201	0.0619	12.4	400	4.0 cpm			Turbidity < 5 NTU's
MC-13	3/24/2010	131905	6.91	0.42	13.20	174	0.0639	9.61	400	4.0 cpm			Do > 0.20 mg/L
MC-13	3/24/2010	132205	6.89	0.36	13.17	147	0.0653	4.61	400	4.0 cpm			
MC-13	3/24/2010	132505	6.75	0.34	13.21	124	0.0665	4.68	400	4.0 cpm			
MC-13	3/24/2010	132822	6.81	0.34	13.26	101	0.0669	2.87	400	4.0 cpm			
MC-13	3/24/2010	133105	6.75	0.29	13.24	84	0.0670	1.43	400	4.0 cpm			
MC-13	3/24/2010	133405	6.80	0.31	13.35	67	0.0672	1.00	400	4.0 cpm			
MC-13	3/24/2010	133722	6.70	0.32	13.31	50	0.0681	1.87	400	4.0 cpm			
MC-13	3/24/2010	134005	6.77	0.29	13.33	47	0.0678	1.78	400	4.0 cpm			
MC-13	3/24/2010	134305	6.72	0.29	13.34	41	0.0688	1.76	400	4.0 cpm			
MC-14D	3/24/2010	140705	7.52	2.53	15.62	115	0.1289	19.3	400	4.0 cpm	33	2.03	All parameters stable when sample was collected.
MC-14D	3/24/2010	141005	7.30	1.49	15.43	113	0.1301	12.2	400	4.0 cpm			Turbidity < 5 NTU's
MC-14D	3/24/2010	141305	7.23	0.97	15.37	101	0.1313	6.89	400	4.0 cpm			Do > 0.20 mg/L
MC-14D	3/24/2010	141605	7.41	0.73	15.33	81	0.1316	4.78	400	4.0 cpm			
MC-14D	3/24/2010	141905	7.33	0.72	15.37	59	0.1317	3.50	400	4.0 cpm			
MC-14D	3/24/2010	142205	7.38	0.71	15.34	36	0.1314	3.37	400	4.0 cpm			
MC-14D	3/24/2010	142505	7.32	0.48	15.34	14	0.1315	3.13	400	4.0 cpm			
MC-14D	3/24/2010	142805	7.36	0.41	15.34	-4	0.1317	2.71	400	4.0 cpm			
MC-14D	3/24/2010	143105	7.37	0.40	15.37	-30	0.1314	1.85	400	4.0 cpm			
MC-14D	3/24/2010	143405	7.35	0.36	15.37	-33	0.1312	2.66	400	4.0 cpm			
MC-14D	3/24/2010	143705	7.40	0.38	15.34	-36	0.1314	2.26	400	4.0 cpm			
MC-15	3/25/2010	80440	7.17	1.43	9.91	138	0.1066	6.19	200	1.0 cpm	27	0.66	All parameters stable when sample was collected.
MC-15	3/25/2010	80706	6.99	1.24	9.91	126	0.1081	4.41	200	1.0 cpm			Turbidity < 5 NTU's
MC-15	3/25/2010	81005	6.85	1.07	9.89	119	0.1089	3.42	200	1.0 cpm			Do > 0.20 mg/L
MC-15	3/25/2010	81306	6.81	0.93	9.88	112	0.1098	2.80	200	1.0 cpm			
MC-15	3/25/2010	81605	6.75	0.81	9.88	104	0.1098	2.51	200	1.0 cpm			
MC-15	3/25/2010	81906	6.79	0.71	9.88	97	0.1100	1.55	200	1.0 cpm			
MC-15	3/25/2010	82205	6.79	0.61	9.89	87	0.1101	1.58	200	1.0 cpm			
MC-15	3/25/2010	82505	6.76	0.60	9.90	79	0.1118	1.23	200	1.0 cpm			
MC-15	3/25/2010	82805	6.79	0.57	9.92	78	0.1135	0.46	200	1.0 cpm			
MC-15D	3/25/2010	85006	7.00	0.69	12.14	171	0.3062	3.09	400	64 Hz	21	0.62	All parameters stable when sample was collected.
MC-15D	3/25/2010	85307	6.97	0.41	13.79	172	0.3049	0.87	400	64 Hz			Turbidity < 5 NTU's
MC-15D	3/25/2010	85606	6.94	0.36	15.39	175	0.3022	1.14	400	64 Hz			Do > 0.20 mg/L
MC-15D	3/25/2010	85905	6.91	0.30	16.19	178	0.2996	1.08	400	64 Hz			
MC-15D	3/25/2010	90205	6.90	0.28	16.54	182	0.2971	0.25	400	64 Hz			
MC-15D	3/25/2010	90515	6.89	0.29	16.76	185	0.2953	0.60	400	64 Hz			
MC-15D	3/25/2010	90817	6.87	0.27	16.90	187	0.2935	0.32	400	64 Hz			
MC-16	3/25/2010	94114	7.08	1.91	10.60	53	0.1543	18.8	200	1.0 cpm	21	0.52	All parameters stable when sample was collected.
MC-16	3/25/2010	94421	7.02	1.33	10.54	4	0.1385	6.43	200	1.0 cpm			Turbidity < 5 NTU's
MC-16	3/25/2010	94705	7.05	1.03	10.53	-18	0.1218	3.43	200	1.0 cpm			Do > 0.20 mg/L
MC-16	3/25/2010	95005	7.10	0.87	10.54	-31	0.1132	3.25	200	1.0 cpm			
MC-16	3/25/2010	95305	7.06	0.76	10.56	-41	0.1111	2.54	200	1.0 cpm			
MC-16	3/25/2010	95623	7.06	0.77	10.66	-49	0.1119	2.92	200	1.0 cpm			
MC-16	3/25/2010	95914	6.99	0.74	10.70	-50	0.1133	2.72	200	1.0 cpm			

Well ID	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	C	mV	mS/cm	NTUs	ml/min	Hz or cpm	Minutes	(0.01) ft.	
MC-2D	3/25/2010	102405	7.00	0.99	14.56	48	0.2943	3.28	400	70 Hz	24	1.04	All parameters stable when sample was collected.
MC-2D	3/25/2010	102708	6.91	0.56	15.80	55	0.3029	0.99	400	70 Hz			Turbidity < 5 NTU's
MC-2D	3/25/2010	103005	6.87	0.44	16.83	61	0.3059	0.96	400	70 Hz			Do > 0.20 mg/L
MC-2D	3/25/2010	103305	6.85	0.43	17.51	66	0.3066	1.22	400	70 Hz			
MC-2D	3/25/2010	103605	6.84	0.70	17.91	72	0.3040	1.22	400	70 Hz			
MC-2D	3/25/2010	103907	6.84	0.81	18.33	78	0.3025	1.22	400	70 Hz			
MC-2D	3/25/2010	104205	6.82	0.77	18.54	84	0.3011	0.80	400	70 Hz			
MC-2D	3/25/2010	104505	6.82	0.77	18.53	83	0.3001	0.49	400	70 Hz			
MC-2	3/25/2010	110505	6.96	0.46	13.68	95	0.1061	13.0	400	52 Hz	27	0.46	All parameters stable when sample was collected.
MC-2	3/25/2010	110805	6.87	0.32	14.65	65	0.1071	9.80	400	52 Hz			Turbidity < 5 NTU's
MC-2	3/25/2010	111105	6.80	0.28	15.77	43	0.1096	7.56	400	52 Hz			Do > 0.20 mg/L
MC-2	3/25/2010	111407	6.77	0.23	16.53	24	0.1114	4.53	400	52 Hz			
MC-2	3/25/2010	111705	6.76	0.23	17.21	7	0.1121	4.02	400	52 Hz			
MC-2	3/25/2010	112005	6.75	0.23	17.72	-5	0.1126	3.53	400	52 Hz			
MC-2	3/25/2010	112309	6.73	0.22	17.92	-15	0.1128	3.23	400	52 Hz			
MC-2	3/25/2010	112605	6.73	0.20	17.95	-21	0.1132	1.48	400	52 Hz			
MC-2	3/25/2010	112905	6.73	0.21	18.10	-23	0.1127	1.22	400	52 Hz			
MC-33	3/25/2010	124707	6.70	1.46	12.40	-63	0.1761	9.12	350	4.0 cpm	36	0.42	All parameters stable when sample was collected.
MC-33	3/25/2010	125018	6.73	0.49	11.32	-74	0.1783	7.31	350	4.0 cpm			Turbidity < 5 NTU's
MC-33	3/25/2010	125305	6.76	0.38	11.02	-81	0.1769	5.55	350	4.0 cpm			Do > 0.20 mg/L
MC-33	3/25/2010	125605	6.79	0.28	10.83	-85	0.1728	4.61	350	4.0 cpm			
MC-33	3/25/2010	125905	6.81	0.26	10.77	-89	0.1684	3.69	350	4.0 cpm			
MC-33	3/25/2010	130206	6.79	0.27	10.74	-86	0.1650	3.64	350	4.0 cpm			
MC-33	3/25/2010	130506	6.82	0.23	10.72	-91	0.1606	3.25	350	4.0 cpm			
MC-33	3/25/2010	130806	6.84	0.27	10.70	-93	0.1572	2.99	350	4.0 cpm			
MC-33	3/25/2010	131105	6.84	0.24	10.72	-94	0.1537	2.97	350	4.0 cpm			
MC-33	3/25/2010	131417	6.84	0.24	10.77	-94	0.1510	2.51	350	4.0 cpm			
MC-33	3/25/2010	131705	6.86	0.25	10.82	-95	0.1482	2.06	350	4.0 cpm			
MC-33	3/25/2010	132005	6.86	0.26	10.85	-96	0.1466	1.68	350	4.0 cpm			
MC-14	3/25/2010	135213	6.69	2.96	12.36	6	0.7824	13.5	100	0.2 cpm	36	1.31	All parameters stable when sample was collected.
MC-14	3/25/2010	135508	6.69	2.63	12.36	-12	0.6956	17.5	100	0.2 cpm			Turbidity < 5 NTU's
MC-14	3/25/2010	135805	6.74	2.60	12.37	-18	0.5993	18.9	100	0.2 cpm			Do > 0.20 mg/L
MC-14	3/25/2010	140132	6.70	2.30	12.27	-18	0.4474	7.16	100	0.2 cpm			Fe Field Test Kit Reading - 2.76 mg/L.
MC-14	3/25/2010	140405	6.75	2.22	12.24	-15	0.3748	7.22	100	0.2 cpm			
MC-14	3/25/2010	140737	6.69	2.04	12.22	-11	0.3087	5.40	100	0.2 cpm			
MC-14	3/25/2010	141040	6.70	1.96	12.22	-8	0.2727	4.21	100	0.2 cpm			
MC-14	3/25/2010	141305	6.71	1.99	12.22	-5	0.2544	3.75	100	0.2 cpm			
MC-14	3/25/2010	141605	6.65	1.95	12.22	-1	0.2387	3.46	100	0.2 cpm			
MC-14	3/25/2010	141905	6.67	1.88	12.17	2	0.2307	3.36	100	0.2 cpm			
MC-14	3/25/2010	142205	6.64	1.77	12.11	4	0.2279	2.90	100	0.2 cpm			
MC-14	3/25/2010	142506	6.68	1.70	12.03	5	0.2330	2.60	100	0.2 cpm			

Well ID	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	C	mV	mS/cm	NTUs	ml/min	Hz or cpm	Minutes	(0.01) ft.	
MC-21	3/26/2010	80506	7.11	1.82	11.45	287	0.1149	15.8	400	4.0 cpm	21	0.07	All parameters stable when sample was collected.
MC-21	3/26/2010	80805	6.92	1.56	11.55	263	0.1144	3.20	400	4.0 cpm			Turbidity < 5 NTU's
MC-21	3/26/2010	81105	6.93	1.50	11.65	244	0.1148	1.32	400	4.0 cpm			Do > 0.20 mg/L
MC-21	3/26/2010	81405	6.80	1.50	11.62	233	0.1154	1.56	400	4.0 cpm			Fe Field Test Kit Reading - 2.68 mg/L.
MC-21	3/26/2010	81710	6.84	1.58	11.50	223	0.1150	2.21	400	4.0 cpm			
MC-21	3/26/2010	82005	6.81	1.61	11.47	216	0.1153	2.26	400	4.0 cpm			
MC-21	3/26/2010	82307	6.79	1.59	11.47	214	0.1158	2.24	400	4.0 cpm			
MC-1	3/26/2010	85416	6.87	0.61	10.73	225	0.0883	23.3	400	57 Hz	27	0.85	All parameters stable when sample was collected.
MC-1	3/26/2010	85705	6.75	0.51	10.75	226	0.0839	15.9	400	57 Hz			Turbidity < 5 NTU's
MC-1	3/26/2010	90005	6.70	0.48	12.12	226	0.0791	10.16	400	57 Hz			Do > 0.20 mg/L
MC-1	3/26/2010	90308	6.67	0.40	13.70	226	0.0755	9.28	400	57 Hz			Fe Field Test Kit Reading - 0.64 mg/L.
MC-1	3/26/2010	90605	6.64	0.38	14.84	227	0.0757	4.44	400	57 Hz			
MC-1	3/26/2010	90905	6.63	0.35	15.77	226	0.0780	3.74	400	57 Hz			
MC-1	3/26/2010	91206	6.62	0.33	16.46	225	0.0785	3.85	400	57 Hz			
MC-1	3/26/2010	91507	6.62	0.32	16.85	223	0.0778	2.55	400	57 Hz			
MC-1	3/26/2010	91806	6.59	0.31	16.80	221	0.0775	1.99	400	57 Hz			
MC-10D	3/26/2010	95016	6.84	1.48	12.11	233	0.8101	29.2	400	83 Hz	45	1.97	All parameters stable when sample was collected.
MC-10D	3/26/2010	95305	6.82	2.07	12.66	175	0.8251	12.2	400	83 Hz			Turbidity < 5 NTU's
MC-10D	3/26/2010	95605	6.77	1.87	14.73	133	0.8327	6.00	400	83 Hz			Do > 0.20 mg/L
MC-10D	3/26/2010	95905	6.73	1.59	15.72	104	0.8338	4.01	400	83 Hz			Do Test Kit Reading - 0.23 mg/L.
MC-10D	3/26/2010	100205	6.73	1.51	16.10	83	0.8338	4.75	400	83 Hz			Fe Field Test Kit Reading - 3.30 mg/L Upper Limit.
MC-10D	3/26/2010	100505	6.72	0.89	16.33	63	0.8346	3.44	400	83 Hz			
MC-10D	3/26/2010	100806	6.71	0.27	16.08	44	0.8392	2.93	400	83 Hz			
MC-10D	3/26/2010	101105	6.70	0.16	15.65	28	0.8526	3.01	400	83 Hz			
MC-10D	3/26/2010	101405	6.71	0.19	16.11	11	0.8511	2.33	400	83 Hz			
MC-10D	3/26/2010	101705	6.71	0.18	16.20	-3	0.8507	2.09	400	83 Hz			
MC-10D	3/26/2010	102005	6.70	0.16	16.30	-15	0.8516	1.87	400	83 Hz			
MC-10D	3/26/2010	102329	6.69	0.15	16.32	-25	0.8525	2.09	400	83 Hz			
MC-10D	3/26/2010	102605	6.69	0.15	16.40	-31	0.8528	1.90	400	83 Hz			
MC-10D	3/26/2010	102915	6.68	0.14	16.34	-36	0.8541	1.46	400	83 Hz			
MC-10D	3/26/2010	103206	6.68	0.15	16.45	-39	0.8537	1.40	400	83 Hz			
MC-31	3/26/2010	105907	7.65	2.10	10.23	97	0.0774	11.5	400	4.0 cpm	36	0.12	All parameters stable when sample was collected.
MC-31	3/26/2010	110205	7.42	0.68	10.06	90	0.0749	7.69	400	4.0 cpm			Turbidity < 5 NTU's
MC-31	3/26/2010	110507	7.33	0.36	9.98	69	0.0780	4.69	400	4.0 cpm			Do > 0.20 mg/L
MC-31	3/26/2010	110805	7.29	0.29	9.93	44	0.0829	3.97	400	4.0 cpm			Fe Field Test Kit Reading - 1.06 mg/L.
MC-31	3/26/2010	111105	7.25	0.29	9.94	15	0.0870	2.54	400	4.0 cpm			
MC-31	3/26/2010	111405	7.20	0.23	9.94	-9	0.0904	2.10	400	4.0 cpm			
MC-31	3/26/2010	111705	7.19	0.23	9.92	-29	0.0919	1.68	400	4.0 cpm			
MC-31	3/26/2010	112005	7.19	0.20	9.87	-44	0.0932	1.51	400	4.0 cpm			
MC-31	3/26/2010	112305	7.18	0.27	9.85	-54	0.0947	1.46	400	4.0 cpm			
MC-31	3/26/2010	112605	7.17	0.25	9.84	-65	0.0963	1.46	400	4.0 cpm			
MC-31	3/26/2010	112905	7.16	0.25	9.81	-67	0.0973	1.65	400	4.0 cpm			
MC-31	3/26/2010	113205	7.16	0.24	9.78	-72	0.0980	0.93	400	4.0 cpm			

Well ID	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	C	mV	mS/cm	NTUs	ml/min	Hz or cpm	Minutes	(0.01) ft.	
MC-12	3/29/2010	90805	8.00	1.03	9.98	122	0.1116	1.42	300	2.0 cpm	33	0.02	All parameters stable when sample was collected.
MC-12	3/29/2010	91110	7.81	0.88	10.07	108	0.1067	1.67	300	2.0 cpm			Turbidity < 5 NTU's
MC-12	3/29/2010	91405	7.72	0.87	10.09	96	0.1056	0.91	300	2.0 cpm			Do > 0.20 mg/L
MC-12	3/29/2010	91705	7.68	0.88	10.14	84	0.1046	1.01	300	2.0 cpm			
MC-12	3/29/2010	92005	7.64	0.92	10.17	73	0.1021	0.40	300	2.0 cpm			
MC-12	3/29/2010	92305	7.61	0.93	10.20	62	0.1014	0.58	300	2.0 cpm			
MC-12	3/29/2010	92606	7.62	0.94	10.22	51	0.1009	0.47	300	2.0 cpm			
MC-12	3/29/2010	92905	7.61	0.96	10.24	40	0.0997	0.44	300	2.0 cpm			
MC-12	3/29/2010	93205	7.61	0.95	10.24	30	0.0986	0.25	300	2.0 cpm			
MC-12	3/29/2010	93505	7.60	1.01	10.24	21	0.0987	0.25	300	2.0 cpm			
MC-12	3/29/2010	93805	7.60	0.97	10.25	22	0.0985	0.25	300	2.0 cpm			
MC-12D	3/29/2010	100306	6.97	0.48	13.73	83	0.8937	28.6	400	62 Hz	18	0.84	All parameters stable when sample was collected.
MC-12D	3/29/2010	100605	6.95	0.35	15.17	72	0.8907	14.8	400	62 Hz			Turbidity < 5 NTU's
MC-12D	3/29/2010	100906	6.93	0.26	15.78	62	0.8858	7.27	400	62 Hz			Do > 0.20 mg/L
MC-12D	3/29/2010	101205	6.93	0.22	15.89	54	0.8810	4.62	400	62 Hz			
MC-12D	3/29/2010	101505	6.93	0.21	16.08	47	0.8772	3.09	400	62 Hz			
MC-12D	3/29/2010	101805	6.93	0.23	16.23	46	0.8730	2.96	400	62 Hz			
MC-107	3/29/2010	104505	7.77	3.12	10.24	149	0.0936	2.94	200	1.0 cpm	21	0.00	All parameters stable when sample was collected.
MC-107	3/29/2010	104805	7.60	2.90	10.29	154	0.0917	4.17	200	1.0 cpm			Turbidity < 5 NTU's
MC-107	3/29/2010	105107	7.48	2.72	10.25	160	0.0907	7.07	200	1.0 cpm			Do > 0.20 mg/L
MC-107	3/29/2010	105408	7.40	2.72	10.26	165	0.0899	3.66	200	1.0 cpm			
MC-107	3/29/2010	105705	7.33	2.58	10.26	169	0.0891	1.95	200	1.0 cpm			
MC-107	3/29/2010	110005	7.31	2.40	10.27	172	0.0880	2.04	200	1.0 cpm			
MC-107	3/29/2010	110305	7.28	2.40	10.27	175	0.0878	1.81	200	1.0 cpm			
MC-8	3/29/2010	113410	7.43	7.51	9.68	223	0.0892	7.12	100	0.2 cpm	18	0.07	All parameters stable when sample was collected.
MC-8	3/29/2010	113720	7.30	7.09	9.73	229	0.0887	6.82	100	0.2 cpm			Turbidity < 5 NTU's
MC-8	3/29/2010	114014	7.24	7.01	9.75	233	0.0890	7.55	100	0.2 cpm			Do > 0.20 mg/L
MC-8	3/29/2010	114325	7.19	7.16	9.77	237	0.0890	4.79	100	0.2 cpm			
MC-8	3/29/2010	114607	7.15	7.18	9.77	241	0.0897	4.55	100	0.2 cpm			
MC-8	3/29/2010	114911	7.12	7.12	9.75	245	0.0900	4.45	100	0.2 cpm			
MC-26D2	3/29/2010	121606	7.55	4.00	11.74	265	0.1355	2.97	400	4.0 cpm	39	1.82	All parameters stable when sample was collected.
MC-26D2	3/29/2010	121905	7.53	2.36	12.29	264	0.1368	3.22	400	4.0 cpm			Turbidity > 5 NTU's but stable.
MC-26D2	3/29/2010	122205	7.52	2.05	12.40	265	0.1371	3.14	400	4.0 cpm			Do > 0.20 mg/L
MC-26D2	3/29/2010	122506	7.53	1.98	12.44	264	0.1381	17.8	400	4.0 cpm			
MC-26D2	3/29/2010	122810	7.53	2.24	12.42	265	0.1372	14.2	400	4.0 cpm			
MC-26D2	3/29/2010	123106	7.53	2.25	12.50	265	0.1364	10.41	400	4.0 cpm			
MC-26D2	3/29/2010	123405	7.53	2.23	12.44	265	0.1364	9.66	400	4.0 cpm			
MC-26D2	3/29/2010	123705	7.53	2.22	12.43	266	0.1365	6.71	400	4.0 cpm			
MC-26D2	3/29/2010	124005	7.53	2.21	12.42	266	0.1362	4.92	400	4.0 cpm			
MC-26D2	3/29/2010	124309	7.53	2.36	12.38	266	0.1361	8.86	400	4.0 cpm			
MC-26D2	3/29/2010	124605	7.54	2.17	12.38	267	0.1362	7.31	400	4.0 cpm			
MC-26D2	3/29/2010	124908	7.51	2.13	12.38	267	0.1359	7.04	400	4.0 cpm			
MC-26D2	3/29/2010	125203	7.51	2.13	12.38	266	0.1357	6.94	400	4.0 cpm			

Well ID	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	C	mV	mS/cm	NTUs	ml/min	Hz or cpm	Minutes	(0.01) ft.	
MC-30	3/29/2010	133431	8.20	4.48	10.11	284	0.0727	26.9	400	4.0 cpm	30	0.30	All parameters stable when sample was collected.
MC-30	3/29/2010	133708	8.05	3.08	10.25	284	0.0727	20.8	400	4.0 cpm			Turbidity < 5 NTU's
MC-30	3/29/2010	134005	7.96	2.10	10.29	285	0.0734	13.2	400	4.0 cpm			Do > 0.20 mg/L
MC-30	3/29/2010	134305	7.89	1.66	10.33	284	0.0757	10.02	400	4.0 cpm			Fe Field Test Kit Reading - 0.33 mg/L.
MC-30	3/29/2010	134606	7.84	1.50	10.36	284	0.0783	7.42	400	4.0 cpm			
MC-30	3/29/2010	134906	7.79	1.48	10.37	284	0.0803	7.00	400	4.0 cpm			
MC-30	3/29/2010	135214	7.77	1.42	10.38	283	0.0814	5.87	400	4.0 cpm			
MC-30	3/29/2010	135505	7.76	1.44	10.36	282	0.0820	4.85	400	4.0 cpm			
MC-30	3/29/2010	135805	7.75	1.35	10.35	281	0.0832	4.50	400	4.0 cpm			
MC-30	3/29/2010	140110	7.73	1.33	10.34	280	0.0836	4.45	400	4.0 cpm			
MC-30D	3/29/2010	142207	6.99	3.39	12.16	295	1.137	1.27	400	4.0 cpm	24	0.13	All parameters stable when sample was collected.
MC-30D	3/29/2010	142506	6.82	1.53	12.34	293	1.160	1.35	400	4.0 cpm			Turbidity < 5 NTU's
MC-30D	3/29/2010	142805	6.80	0.91	12.41	291	1.168	2.41	400	4.0 cpm			Do > 0.20 mg/L
MC-30D	3/29/2010	143105	6.79	0.69	12.49	290	1.171	2.92	400	4.0 cpm			Fe Field Test Kit Reading - 1.57 mg/L.
MC-30D	3/29/2010	143405	6.78	0.47	12.50	289	1.172	2.81	400	4.0 cpm			
MC-30D	3/29/2010	143705	6.78	0.36	12.41	289	1.172	4.47	400	4.0 cpm			
MC-30D	3/29/2010	144005	6.77	0.37	12.44	290	1.170	4.37	400	4.0 cpm			
MC-30D	3/29/2010	144305	6.78	0.34	12.44	290	1.166	4.37	400	4.0 cpm			
MC-25D2	3/30/2010	83705	7.82	3.45	11.15	220	0.2804	9.81	400	4.0 cpm	33	0.90	All parameters stable when sample was collected.
MC-25D2	3/30/2010	84005	7.56	1.72	12.10	225	0.2992	23.3	400	4.0 cpm			Turbidity > 5 NTU's but stable.
MC-25D2	3/30/2010	84305	7.49	1.14	12.44	228	0.2929	26.5	400	4.0 cpm			Do > 0.20 mg/L
MC-25D2	3/30/2010	84605	7.42	0.91	12.43	230	0.2792	23.0	400	4.0 cpm			
MC-25D2	3/30/2010	84905	7.47	0.81	12.41	227	0.2665	25.0	400	4.0 cpm			
MC-25D2	3/30/2010	85206	7.47	0.84	12.42	226	0.2567	25.6	400	4.0 cpm			
MC-25D2	3/30/2010	85505	7.47	0.81	12.53	223	0.2479	24.4	400	4.0 cpm			
MC-25D2	3/30/2010	85805	7.46	0.82	12.49	221	0.2411	25.3	400	4.0 cpm			
MC-25D2	3/30/2010	90105	7.45	0.83	12.46	219	0.2332	22.9	400	4.0 cpm			
MC-25D2	3/30/2010	90409	7.46	0.85	12.50	215	0.2268	23.4	400	4.0 cpm			
MC-25D2	3/30/2010	90706	7.46	0.90	12.44	212	0.2265	23.1	400	4.0 cpm			
MC-25	3/30/2010	92506	7.34	3.88	10.73	227	0.1062	25.5	400	4.0 cpm	18	0.08	All parameters stable when sample was collected.
MC-25	3/30/2010	92812	7.12	2.33	10.77	230	0.1085	16.7	400	4.0 cpm			Turbidity < 5 NTU's
MC-25	3/30/2010	93105	7.02	2.10	10.86	232	0.1090	9.36	400	4.0 cpm			Do > 0.20 mg/L
MC-25	3/30/2010	93405	6.91	1.94	10.87	237	0.1103	3.99	400	4.0 cpm			
MC-25	3/30/2010	93705	6.93	1.91	10.92	237	0.1105	3.05	400	4.0 cpm			
MC-25	3/30/2010	94005	6.91	1.98	10.97	239	0.1103	2.10	400	4.0 cpm			
MC-25D	3/30/2010	95506	7.08	3.73	12.23	257	0.8772	419	400	4.0 cpm	30	0.45	All parameters stable when sample was collected.
MC-25D	3/30/2010	95810	6.99	1.48	12.76	259	0.8948	114	400	4.0 cpm			Turbidity > 5 NTU's but stable.
MC-25D	3/30/2010	100106	6.97	1.06	12.77	261	0.9010	36.7	400	4.0 cpm			Do > 0.20 mg/L
MC-25D	3/30/2010	100405	6.96	0.57	12.84	262	0.9055	29.7	400	4.0 cpm			Fe Field Test Kit Reading - 0.25 mg/L.
MC-25D	3/30/2010	100707	6.96	0.39	12.95	264	0.9084	23.6	400	4.0 cpm			
MC-25D	3/30/2010	101007	6.96	0.33	12.94	266	0.9103	17.5	400	4.0 cpm			
MC-25D	3/30/2010	101305	6.95	0.30	12.88	269	0.9121	17.1	400	4.0 cpm			
MC-25D	3/30/2010	101605	6.95	0.28	12.99	271	0.9150	11.4	400	4.0 cpm			
MC-25D	3/30/2010	101905	6.95	0.26	12.96	273	0.9172	11.2	400	4.0 cpm			
MC-25D	3/30/2010	102205	6.95	0.26	12.87	275	0.9195	10.61	400	4.0 cpm			

Well ID	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	C	mV	mS/cm	NTUs	ml/min	Hz or cpm	Minutes	(0.01) ft.	
MC-118D2	3/30/2010	105008	7.33	3.27	11.65	297	0.6060	11.8	400	4.0 cpm	27	1.06	All parameters stable when sample was collected.
MC-118D2	3/30/2010	105305	7.11	1.44	12.45	296	0.6181	11.6	400	4.0 cpm			Turbidity < 5 NTU's
MC-118D2	3/30/2010	105605	7.06	0.73	12.71	288	0.5773	10.89	400	4.0 cpm			Do > 0.20 mg/L
MC-118D2	3/30/2010	105905	7.05	0.47	12.69	282	0.5474	7.53	400	4.0 cpm			
MC-118D2	3/30/2010	110205	7.04	0.35	12.67	278	0.5290	5.79	400	4.0 cpm			
MC-118D2	3/30/2010	110505	7.04	0.30	12.60	273	0.5198	4.74	400	4.0 cpm			
MC-118D2	3/30/2010	110805	6.97	0.26	12.68	273	0.5122	3.88	400	4.0 cpm			
MC-118D2	3/30/2010	111115	7.00	0.26	12.68	268	0.5020	3.74	400	4.0 cpm			
MC-118D2	3/30/2010	111406	7.05	0.25	12.74	266	0.4977	3.73	400	4.0 cpm			
MC-118D	3/30/2010	113527	6.91	0.46	12.96	243	0.8353	90.9	400	63 Hz	36	1.84	All parameters stable when sample was collected.
MC-118D	3/30/2010	113805	6.89	0.33	14.56	225	0.8457	65.1	400	63 Hz			Turbidity < 5 NTU's
MC-118D	3/30/2010	114105	6.87	0.31	15.86	203	0.8504	32.9	400	63 Hz			Do = 0.20 mg/L
MC-118D	3/30/2010	114407	6.86	0.29	16.57	181	0.8506	15.5	400	63 Hz			Fe Field Test Kit Reading - 3.08 mg/L.
MC-118D	3/30/2010	114706	6.85	0.25	16.94	160	0.8498	10.56	400	63 Hz			
MC-118D	3/30/2010	115009	6.84	0.25	17.15	139	0.8417	8.31	400	63 Hz			
MC-118D	3/30/2010	115305	6.84	0.23	17.17	120	0.8372	7.18	400	63 Hz			
MC-118D	3/30/2010	115610	6.84	0.20	17.22	100	0.8360	4.92	400	63 Hz			
MC-118D	3/30/2010	115905	6.83	0.23	17.25	83	0.8353	4.52	400	63 Hz			
MC-118D	3/30/2010	120205	6.84	0.20	17.47	58	0.8338	4.08	400	63 Hz			
MC-118D	3/30/2010	120505	6.84	0.19	17.60	52	0.8331	4.16	400	63 Hz			
MC-118D	3/30/2010	120805	6.83	0.20	17.42	49	0.8301	3.51	400	63 Hz			
MC-24D2	3/30/2010	123606	8.10	5.80	11.40	156	0.1273	7.93	400	4.0 cpm	21	0.00	All parameters stable when sample was collected.
MC-24D2	3/30/2010	123905	7.83	3.38	12.11	168	0.1248	18.1	400	4.0 cpm			Turbidity > 5 NTU's but stable.
MC-24D2	3/30/2010	124206	7.70	2.41	12.30	176	0.1246	20.7	400	4.0 cpm			Do > 0.20 mg/L
MC-24D2	3/30/2010	124506	7.62	1.91	12.32	182	0.1250	20.9	400	4.0 cpm			
MC-24D2	3/30/2010	124805	7.55	1.64	12.42	196	0.1247	20.7	400	4.0 cpm			
MC-24D2	3/30/2010	125107	7.52	1.52	12.43	197	0.1249	19.0	400	4.0 cpm			
MC-24D2	3/30/2010	125405	7.53	1.51	12.46	192	0.1248	18.8	400	4.0 cpm			
MC-24	3/30/2010	131018	7.64	8.87	10.42	228	0.0461	24.5	400	4.0 cpm	21	0.10	All parameters stable when sample was collected.
MC-24	3/30/2010	131305	7.49	8.27	10.58	237	0.0464	23.1	400	4.0 cpm			Turbidity > 5 NTU's but stable.
MC-24	3/30/2010	131605	7.38	8.08	10.66	241	0.0469	23.0	400	4.0 cpm			Do > 0.20 mg/L
MC-24	3/30/2010	131906	7.27	8.00	10.67	248	0.0478	24.0	400	4.0 cpm			
MC-24	3/30/2010	132205	7.21	7.94	10.74	254	0.0490	25.1	400	4.0 cpm			
MC-24	3/30/2010	132508	7.16	7.89	10.75	260	0.0495	25.4	400	4.0 cpm			
MC-24	3/30/2010	132805	7.15	7.98	10.71	262	0.0498	25.4	400	4.0 cpm			

Well ID	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	C	mV	mS/cm	NTUs	ml/min	Hz or cpm	Minutes	(0.01) ft.	
MC-24D	3/30/2010	134505	6.98	4.11	11.50	289	0.9336	358	400	4.0 cpm	54	0.33	All parameters stable when sample was collected.
MC-24D	3/30/2010	134805	6.88	1.48	12.38	290	0.9590	183	400	4.0 cpm			Turbidity > 5 NTU's but stable.
MC-24D	3/30/2010	135105	6.85	0.71	12.73	291	0.9654	200	400	4.0 cpm			Do > 0.20 mg/L
MC-24D	3/30/2010	135405	6.86	0.43	13.53	291	0.9672	215	400	4.0 cpm			Fe Field Test Kit Reading - 0.12 mg/L.
MC-24D	3/30/2010	135705	6.85	0.26	12.99	293	0.9659	198	400	4.0 cpm			
MC-24D	3/30/2010	140005	6.81	0.29	12.90	298	0.9633	163	400	4.0 cpm			
MC-24D	3/30/2010	140313	6.85	0.21	12.94	297	0.9610	166	400	4.0 cpm			
MC-24D	3/30/2010	140605	6.85	0.18	12.88	299	0.9599	128	400	4.0 cpm			
MC-24D	3/30/2010	140905	6.84	0.18	12.92	301	0.9597	94.0	400	4.0 cpm			
MC-24D	3/30/2010	141205	6.84	0.21	12.97	302	0.9602	83.9	400	4.0 cpm			
MC-24D	3/30/2010	141505	6.81	0.22	12.86	305	0.9603	74.2	400	4.0 cpm			
MC-24D	3/30/2010	141805	6.84	0.18	12.93	305	0.9597	60.7	400	4.0 cpm			
MC-24D	3/30/2010	142105	6.84	0.18	12.96	306	0.9586	47.9	400	4.0 cpm			
MC-24D	3/30/2010	142405	6.84	0.46	12.89	307	0.9583	45.2	400	4.0 cpm			
MC-24D	3/30/2010	142706	6.83	0.20	12.80	308	0.9571	37.7	400	4.0 cpm			
MC-24D	3/30/2010	143005	6.76	0.27	12.83	310	0.9571	33.6	400	4.0 cpm			
MC-24D	3/30/2010	143306	6.84	0.26	12.81	309	0.9562	32.4	400	4.0 cpm			
MC-24D	3/30/2010	143606	6.84	0.25	12.82	310	0.9557	31.4	400	4.0 cpm			
MC-19D	3/30/2010	152005	7.71	0.73	14.50	327	0.1200	16.5	400	68 Hz	24	0.04	All parameters stable when sample was collected.
MC-19D	3/30/2010	152305	7.55	0.32	15.28	330	0.1209	6.30	400	68 Hz			Turbidity < 5 NTU's
MC-19D	3/30/2010	152606	7.47	0.22	16.02	330	0.1210	7.83	400	68 Hz			Do < 0.20 mg/L but stable.
MC-19D	3/30/2010	152905	7.38	0.20	16.25	332	0.1221	10.55	400	68 Hz			Do Test Kit Reading - 0.20 mg/L.
MC-19D	3/30/2010	153205	7.35	0.20	16.42	332	0.1225	6.14	400	68 Hz			
MC-19D	3/30/2010	153505	7.32	0.17	16.60	331	0.1230	3.42	400	68 Hz			
MC-19D	3/30/2010	153805	7.29	0.16	16.55	331	0.1237	3.15	400	68 Hz			
MC-19D	3/30/2010	154106	7.26	0.17	16.49	332	0.1243	3.00	400	68 Hz			
MC-17	3/30/2010	160606	7.55	6.98	10.23	343	0.0598	10.82	200	2.0 cpm	18	0.05	All parameters stable when sample was collected.
MC-17	3/30/2010	160910	7.43	7.11	10.25	342	0.0557	10.76	200	2.0 cpm			Turbidity > 5 NTU's but stable.
MC-17	3/30/2010	161206	7.41	6.55	10.18	337	0.0493	9.76	200	2.0 cpm			Do > 0.20 mg/L
MC-17	3/30/2010	161505	7.36	5.89	10.13	336	0.0471	9.73	200	2.0 cpm			
MC-17	3/30/2010	161805	7.32	5.65	10.13	336	0.0464	9.89	200	2.0 cpm			
MC-17	3/30/2010	162114	7.26	5.49	10.11	336	0.0463	9.43	200	2.0 cpm			
MC-17D	3/30/2010	164705	7.14	0.43	12.71	337	0.1580	2.41	400	61 H z	15	0.47	All parameters stable when sample was collected.
MC-17D	3/30/2010	165005	7.14	0.39	13.74	336	0.1585	0.77	400	61 H z			Turbidity < 5 NTU's
MC-17D	3/30/2010	165305	7.13	0.33	14.88	335	0.1595	0.55	400	61 H z			Do > 0.20 mg/L
MC-17D	3/30/2010	165605	7.12	0.33	14.84	334	0.1592	0.17	400	61 H z			
MC-17D	3/30/2010	165905	7.11	0.30	15.17	334	0.1592	0.12	400	61 H z			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	C	mV	mS/cm	NTUs	ml/min	Hz or cpm	Minutes	(0.01) ft.	
UT-ST-1	6/21/2010	121005	6.51	5.05	15.99	19	0.1569	0.64	100	0.2 cpm	33	0.08	All parameters stable when sample was collected.
UT-ST-1	6/21/2010	121305	6.51	4.83	15.97	11	0.1413	0.64	100	0.2 cpm			Turbidity < 5 NTU's
UT-ST-1	6/21/2010	121621	6.63	4.62	15.93	11	0.1262	0.64	100	0.2 cpm			Do > 0.20 mg/L
UT-ST-1	6/21/2010	121906	6.78	4.51	15.90	12	0.1164	0.43	100	0.2 cpm			
UT-ST-1	6/21/2010	122208	6.70	4.36	15.89	15	0.1095	0.12	100	0.2 cpm			
UT-ST-1	6/21/2010	122505	6.70	4.34	15.87	20	0.1031	0.00	100	0.2 cpm			
UT-ST-1	6/21/2010	122805	6.75	4.26	15.85	23	0.0973	0.00	100	0.2 cpm			
UT-ST-1	6/21/2010	123123	6.72	4.16	15.83	28	0.0922	0.00	100	0.2 cpm			
UT-ST-1	6/21/2010	123405	6.65	4.13	15.84	32	0.0888	0.00	100	0.2 cpm			
UT-ST-1	6/21/2010	123705	6.66	4.09	15.82	34	0.0880	0.25	100	0.2 cpm			
UT-ST-1	6/21/2010	124005	6.70	4.06	15.87	39	0.0879	0.00	100	0.2 cpm			
PZU-4	6/21/2010	132705	6.48	3.61	17.11	-3	0.1304	4.92	100	0.2 cpm	42	0.14	All parameters stable when sample was collected.
PZU-4	6/21/2010	133005	6.44	3.17	16.96	-9	0.1179	4.11	100	0.2 cpm			Turbidity < 5 NTU's
PZU-4	6/21/2010	133305	6.50	2.89	16.97	-13	0.1122	2.63	100	0.2 cpm			Do > 0.20 mg/L
PZU-4	6/21/2010	133605	6.55	2.68	16.97	-18	0.1062	1.78	100	0.2 cpm			
PZU-4	6/21/2010	133906	6.55	2.73	17.02	-16	0.0997	1.48	100	0.2 cpm			
PZU-4	6/21/2010	134205	6.56	2.89	17.10	-15	0.0946	1.05	100	0.2 cpm			
PZU-4	6/21/2010	134505	6.57	3.19	17.11	-12	0.0899	0.98	100	0.2 cpm			
PZU-4	6/21/2010	134812	6.63	3.59	16.95	-12	0.0842	0.78	100	0.2 cpm			
PZU-4	6/21/2010	135105	6.66	3.90	16.81	-7	0.0830	0.78	100	0.2 cpm			
PZU-4	6/21/2010	135406	6.64	4.25	16.68	-2	0.0797	0.43	100	0.2 cpm			
PZU-4	6/21/2010	135705	6.66	4.47	16.60	3	0.0775	0.63	100	0.2 cpm			
PZU-4	6/21/2010	140005	6.67	4.64	16.55	6	0.0751	0.40	100	0.2 cpm			
PZU-4	6/21/2010	140305	6.67	4.81	16.51	8	0.0734	1.04	100	0.2 cpm			
PZU-4	6/21/2010	140611	6.71	4.90	16.46	10	0.0731	0.28	100	0.2 cpm			
PZU-5	6/21/2010	144505	6.65	4.46	16.62	-28	0.4452	10.64	100	0.2 cpm	21	0.11	All parameters stable when sample was collected.
PZU-5	6/21/2010	144805	6.69	3.95	16.52	-43	0.4449	8.99	100	0.2 cpm			Turbidity > 5 NTU's but stable.
PZU-5	6/21/2010	145105	6.67	3.60	16.44	-48	0.4461	8.63	100	0.2 cpm			Do > 0.20 mg/L
PZU-5	6/21/2010	145405	6.62	3.22	16.40	-52	0.4461	10.04	100	0.2 cpm			
PZU-5	6/21/2010	145705	6.66	2.92	16.37	-54	0.4445	9.66	100	0.2 cpm			
PZU-5	6/21/2010	150006	6.69	2.65	16.35	-56	0.4413	9.59	100	0.2 cpm			
PZU-5	6/21/2010	150310	6.67	2.64	16.32	-56	0.4336	8.83	100	0.2 cpm			
MC-13D	6/22/2010	75905	7.04	2.72	13.85	196	0.1390	7.29	200	1.0 cpm	21	0.73	All parameters stable when sample was collected.
MC-13D	6/22/2010	80205	6.96	1.74	13.73	195	0.1358	1.19	200	1.0 cpm			Turbidity < 5 NTU's
MC-13D	6/22/2010	80505	6.97	1.27	13.65	193	0.1346	0.54	200	1.0 cpm			Do > 0.20 mg/L
MC-13D	6/22/2010	80805	7.00	1.06	13.61	191	0.1335	1.31	200	1.0 cpm			
MC-13D	6/22/2010	81105	6.97	0.91	13.59	189	0.1335	0.93	200	1.0 cpm			
MC-13D	6/22/2010	81405	6.99	0.83	13.58	188	0.1327	0.41	200	1.0 cpm			
MC-13D	6/22/2010	81707	7.02	0.82	13.59	186	0.1328	0.36	200	1.0 cpm			
MC-13	6/22/2010	83918	6.86	0.55	13.76	80	0.0577	23.0	400	3.0 cpm	18	0.10	All parameters stable when sample was collected.
MC-13	6/22/2010	84205	6.82	0.44	13.73	30	0.0578	5.95	400	3.0 cpm			Turbidity < 5 NTU's
MC-13	6/22/2010	84505	6.79	0.38	13.74	6	0.0584	6.13	400	3.0 cpm			Do > 0.20 mg/L
MC-13	6/22/2010	84805	6.79	0.38	13.74	-7	0.0585	4.82	400	3.0 cpm			
MC-13	6/22/2010	85105	6.82	0.38	13.77	-14	0.0584	4.25	400	3.0 cpm			
MC-13	6/22/2010	85407	6.79	0.35	13.79	-15	0.0586	4.46	400	3.0 cpm			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	C	mV	mS/cm	NTUs	ml/min	Hz or cpm	Minutes	(0.01) ft.	
MC-14D	6/22/2010	91705	7.54	1.83	14.75	-50	0.1306	29.9	400	4.0 cpm	24	2.10	All parameters stable when sample was collected.
MC-14D	6/22/2010	92006	7.49	0.95	14.63	-68	0.1281	16.2	400	4.0 cpm			Turbidity < 5 NTU's
MC-14D	6/22/2010	92305	7.50	0.95	14.59	-79	0.1274	10.20	400	4.0 cpm			Do > 0.20 mg/L
MC-14D	6/22/2010	92619	7.47	0.49	14.55	-85	0.1271	9.07	400	4.0 cpm			
MC-14D	6/22/2010	92905	7.39	0.50	14.55	-85	0.1271	7.73	400	4.0 cpm			
MC-14D	6/22/2010	93205	7.50	0.38	14.53	-96	0.1271	4.78	400	4.0 cpm			
MC-14D	6/22/2010	93543	7.49	0.36	14.51	-99	0.1269	4.80	400	4.0 cpm			
MC-14D	6/22/2010	93805	7.50	0.36	14.51	-101	0.1269	4.65	400	4.0 cpm			
MC-14	6/22/2010	100417	6.79	2.79	16.67	-72	0.6735	5.34	100	0.2 cpm	27	0.86	All parameters stable when sample was collected.
MC-14	6/22/2010	100705	6.77	2.46	16.67	-74	0.6436	3.27	100	0.2 cpm			Turbidity < 5 NTU's
MC-14	6/22/2010	101005	6.76	2.24	16.70	-74	0.6166	3.79	100	0.2 cpm			Do > 0.20 mg/L
MC-14	6/22/2010	101305	6.73	2.05	16.71	-70	0.5901	2.41	100	0.2 cpm			
MC-14	6/22/2010	101605	6.73	1.91	16.75	-69	0.5683	2.30	100	0.2 cpm			
MC-14	6/22/2010	101905	6.70	1.78	16.80	-67	0.5516	1.95	100	0.2 cpm			
MC-14	6/22/2010	102205	6.72	1.67	16.84	-65	0.5382	2.80	100	0.2 cpm			
MC-14	6/22/2010	102505	6.70	1.60	16.88	-63	0.5295	1.95	100	0.2 cpm			
MC-14	6/22/2010	102806	6.72	1.59	16.88	-62	0.5240	2.06	100	0.2 cpm			
MC-32	6/22/2010	110905	6.65	2.63	17.37	-61	0.5809	10.89	100	4.0 cpm	15	1.09	All parameters stable when sample was collected.
MC-32	6/22/2010	111205	6.66	2.59	17.62	-69	0.5696	7.78	100	4.0 cpm			Turbidity > 5 NTU's but stable.
MC-32	6/22/2010	111515	6.63	2.38	18.21	-73	0.5664	10.97	100	4.0 cpm			Do > 0.20 mg/L
MC-32	6/22/2010	111840	6.63	2.20	18.41	-76	0.5616	10.34	100	4.0 cpm			
MC-32	6/22/2010	112113	6.62	2.19	18.64	-74	0.5587	10.23	100	4.0 cpm			
MC-123	6/22/2010	120705	6.47	1.85	16.84	15	0.4839	7.58	100	0.2 cpm	18	0.38	All parameters stable when sample was collected.
MC-123	6/22/2010	121005	6.44	1.67	16.67	0	0.4610	4.10	100	0.2 cpm			Turbidity < 5 NTU's
MC-123	6/22/2010	121305	6.44	1.50	16.43	-10	0.4465	4.28	100	0.2 cpm			Do > 0.20 mg/L
MC-123	6/22/2010	121615	6.46	1.24	16.09	-17	0.4329	3.77	100	0.2 cpm			
MC-123	6/22/2010	121924	6.43	1.17	15.89	-22	0.4244	2.53	100	0.2 cpm			
MC-123	6/22/2010	122239	6.46	1.13	15.80	-25	0.4205	2.37	100	0.2 cpm			
MC-20D	6/22/2010	125105	7.44	1.29	14.30	-12	0.1391	175.0	400	4.0 cpm	33	1.33	All parameters stable when sample was collected.
MC-20D	6/22/2010	125406	7.48	1.52	14.36	-35	0.1389	149.0	400	4.0 cpm			Turbidity > 5 NTU's but stable.
MC-20D	6/22/2010	125705	7.42	0.98	14.23	-49	0.1384	56.3	400	4.0 cpm			Do > 0.20 mg/L
MC-20D	6/22/2010	130005	7.46	0.91	14.20	-62	0.1376	34.0	400	4.0 cpm			
MC-20D	6/22/2010	130305	7.43	0.84	14.18	-68	0.1373	22.7	400	4.0 cpm			
MC-20D	6/22/2010	130605	7.26	0.74	14.15	-62	0.1370	14.8	400	4.0 cpm			
MC-20D	6/22/2010	130918	7.42	0.69	14.24	-77	0.1373	12.4	400	4.0 cpm			
MC-20D	6/22/2010	131205	7.20	0.66	14.29	-69	0.1369	9.85	400	4.0 cpm			
MC-20D	6/22/2010	131505	7.44	0.59	14.26	-85	0.1372	7.20	400	4.0 cpm			
MC-20D	6/22/2010	131806	7.41	0.60	14.24	-85	0.1369	7.17	400	4.0 cpm			
MC-20D	6/22/2010	132105	7.45	0.55	14.29	-90	0.1371	7.13	400	4.0 cpm			
MC-20	6/22/2010	134805	6.47	2.12	17.71	32	0.2152	8.09	100	0.2 cpm	15	0.07	All parameters stable when sample was collected.
MC-20	6/22/2010	135105	6.37	1.87	17.90	34	0.2168	5.00	100	0.2 cpm			Turbidity < 5 NTU's
MC-20	6/22/2010	135405	6.38	1.75	18.24	34	0.2173	3.95	100	0.2 cpm			Do > 0.20 mg/L
MC-20	6/22/2010	135748	6.38	1.65	18.54	33	0.2187	3.35	100	0.2 cpm			
MC-20	6/22/2010	140007	6.37	1.61	18.80	33	0.2194	3.27	100	0.2 cpm			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	C	mV	mS/cm	NTUs	ml/min	Hz or cpm	Minutes	(0.01) ft.	
MC-122	6/22/2010	143105	6.86	1.53	18.33	41	0.1377	39.7	100	0.2 cpm	15	0.72	All parameters stable when sample was collected.
MC-122	6/22/2010	143417	6.86	1.28	18.11	26	0.1314	10.70	100	0.2 cpm			Turbidity > 5 NTU's but stable.
MC-122	6/22/2010	143717	6.92	1.13	17.90	7	0.1274	8.77	100	0.2 cpm			Do > 0.20 mg/L
MC-122	6/22/2010	144005	6.85	1.05	17.74	3	0.1251	8.33	100	0.2 cpm			
MC-122	6/22/2010	144305	6.94	1.03	17.50	-2	0.1238	7.98	100	0.2 cpm			
MC-27D	6/23/2010	80018	6.95	2.19	13.91	157	0.4278	127.0	400	4.0 cpm	45	0.75	All parameters stable when sample was collected.
MC-27D	6/23/2010	80306	6.92	1.28	13.67	158	0.4134	79.6	400	4.0 cpm			Turbidity > 5 NTU's but stable.
MC-27D	6/23/2010	80605	6.92	0.83	13.56	154	0.4080	55.5	400	4.0 cpm			Do > 0.20 mg/L
MC-27D	6/23/2010	80905	6.92	0.56	13.52	147	0.4068	37.1	400	4.0 cpm			
MC-27D	6/23/2010	81230	6.91	0.46	13.49	137	0.4091	28.4	400	4.0 cpm			
MC-27D	6/23/2010	81530	6.93	0.40	13.47	124	0.4098	30.8	400	4.0 cpm			
MC-27D	6/23/2010	81805	6.95	0.45	13.48	113	0.4104	24.5	400	4.0 cpm			
MC-27D	6/23/2010	82109	6.91	0.36	13.50	105	0.4118	18.9	400	4.0 cpm			
MC-27D	6/23/2010	82409	6.94	0.30	13.54	91	0.4138	16.3	400	4.0 cpm			
MC-27D	6/23/2010	82705	6.93	0.32	13.59	82	0.4136	16.7	400	4.0 cpm			
MC-27D	6/23/2010	83005	6.95	0.41	13.60	71	0.4143	15.4	400	4.0 cpm			
MC-27D	6/23/2010	83305	6.97	0.35	13.62	60	0.4150	15.0	400	4.0 cpm			
MC-27D	6/23/2010	83606	6.98	0.33	13.61	52	0.4161	15.0	400	4.0 cpm			
MC-27D	6/23/2010	83905	6.98	0.34	13.72	44	0.4171	14.1	400	4.0 cpm			
MC-27D	6/23/2010	84213	6.97	0.32	13.89	43	0.4188	13.8	400	4.0 cpm			
MC-28D	6/23/2010	91305	7.23	2.88	14.30	54	0.1547	6.79	400	4.0 cpm	18	1.47	All parameters stable when sample was collected.
MC-28D	6/23/2010	91605	7.18	3.49	14.27	60	0.1539	2.62	400	4.0 cpm			Turbidity < 5 NTU's
MC-28D	6/23/2010	91939	7.20	3.15	14.95	63	0.1539	1.84	400	4.0 cpm			Do > 0.20 mg/L
MC-28D	6/23/2010	92216	7.12	2.91	14.79	68	0.1538	1.62	400	4.0 cpm			
MC-28D	6/23/2010	92509	7.17	2.68	14.44	77	0.1529	1.51	400	4.0 cpm			
MC-28D	6/23/2010	92805	7.18	2.64	14.37	72	0.1523	2.00	400	4.0 cpm			
MC-26D2	6/23/2010	95705	7.26	3.38	15.65	128	0.1372	2.11	400	4.0 cpm	15	1.38	All parameters stable when sample was collected.
MC-26D2	6/23/2010	100005	7.24	2.77	15.43	123	0.1359	1.98	400	4.0 cpm			Turbidity < 5 NTU's
MC-26D2	6/23/2010	100305	7.20	2.35	15.39	126	0.1354	1.75	400	4.0 cpm			Do > 0.20 mg/L
MC-26D2	6/23/2010	100605	7.21	2.32	15.35	121	0.1354	1.46	400	4.0 cpm			
MC-26D2	6/23/2010	100910	7.19	2.13	15.32	122	0.1355	1.27	400	4.0 cpm			
MC-8	6/23/2010	105005	6.69	3.76	18.69	148	0.0697	12.1	200	1.0 cpm	18	0.10	All parameters stable when sample was collected.
MC-8	6/23/2010	105305	6.53	3.25	18.08	154	0.0651	6.32	200	1.0 cpm			Turbidity > 5 NTU's but stable.
MC-8	6/23/2010	105605	6.44	3.10	18.02	158	0.0628	8.60	200	1.0 cpm			Do > 0.20 mg/L
MC-8	6/23/2010	105909	6.34	3.19	17.90	161	0.0613	7.25	200	1.0 cpm			
MC-8	6/23/2010	110205	6.39	3.21	17.83	162	0.0609	7.02	200	1.0 cpm			
MC-8	6/23/2010	110507	6.36	3.10	17.91	163	0.0615	6.95	200	1.0 cpm			
MC-25	6/23/2010	122905	6.51	8.08	18.64	178	0.0981	4.25	350	4.0 cpm	15	0.12	All parameters stable when sample was collected.
MC-25	6/23/2010	123205	6.47	7.95	18.54	183	0.0991	2.37	350	4.0 cpm			Turbidity < 5 NTU's
MC-25	6/23/2010	123505	6.48	7.72	18.54	187	0.0999	1.54	350	4.0 cpm			Do > 0.20 mg/L
MC-25	6/23/2010	123815	6.43	7.62	18.44	194	0.1005	1.03	350	4.0 cpm			
MC-25	6/23/2010	124110	6.38	7.62	18.37	195	0.1012	0.93	350	4.0 cpm			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	C	mV	mS/cm	NTUs	ml/min	Hz or cpm	Minutes	(0.01) ft.	
MC-25D	6/23/2010	130005	6.72	2.06	16.63	220	0.5438	88.1	400	4.0 cpm	21	0.41	All parameters stable when sample was collected.
MC-25D	6/23/2010	130305	6.74	1.15	16.19	218	0.5333	38.9	400	4.0 cpm			Turbidity < 5 NTU's
MC-25D	6/23/2010	130605	6.71	0.68	16.03	218	0.5286	17.4	400	4.0 cpm			Do > 0.20 mg/L
MC-25D	6/23/2010	130907	6.71	0.46	15.98	214	0.5256	7.45	400	4.0 cpm			
MC-25D	6/23/2010	131205	6.74	0.38	15.91	208	0.5224	4.88	400	4.0 cpm			
MC-25D	6/23/2010	131505	6.75	0.35	15.87	201	0.5191	4.73	400	4.0 cpm			
MC-25D	6/23/2010	131809	6.71	0.37	15.91	199	0.5173	3.33	400	4.0 cpm			
MC-25D2	6/23/2010	133505	7.24	2.38	16.38	154	0.1597	12.7	400	4.0 cpm	18	1.07	All parameters stable when sample was collected.
MC-25D2	6/23/2010	133810	7.31	1.23	15.83	139	0.1418	12.6	400	4.0 cpm			Turbidity < 5 NTU's
MC-25D2	6/23/2010	134126	7.28	1.54	15.67	128	0.1370	7.61	400	4.0 cpm			Do > 0.20 mg/L
MC-25D2	6/23/2010	134406	7.27	1.02	15.68	118	0.1359	4.95	400	4.0 cpm			
MC-25D2	6/23/2010	134706	7.19	1.01	15.60	111	0.1353	4.81	400	4.0 cpm			
MC-25D2	6/23/2010	135005	7.25	0.93	15.67	117	0.1348	4.69	400	4.0 cpm			
MC-31	6/24/2010	80706	6.97	0.77	13.95	84	0.1004	3.71	400	4.0 cpm	21	0.07	All parameters stable when sample was collected.
MC-31	6/24/2010	81012	7.28	0.66	13.91	-14	0.1045	2.93	400	4.0 cpm			Turbidity < 5 NTU's
MC-31	6/24/2010	81305	7.03	0.74	13.90	-36	0.1063	1.18	400	4.0 cpm			Do > 0.20 mg/L
MC-31	6/24/2010	81605	7.06	0.49	13.93	-57	0.1069	0.69	400	4.0 cpm			
MC-31	6/24/2010	81905	7.07	0.58	13.98	-69	0.1069	0.69	400	4.0 cpm			
MC-31	6/24/2010	82205	7.03	0.53	14.00	-73	0.1075	0.72	400	4.0 cpm			
MC-31	6/24/2010	82522	7.05	0.53	13.99	-79	0.1068	0.62	400	4.0 cpm			
MC-10D	6/24/2010	90905	6.78	0.18	17.25	-68	0.4638	174.0	400	55 Hz	24	1.25	All parameters stable when sample was collected.
MC-10D	6/24/2010	91205	6.78	0.18	17.33	-69	0.4617	24.2	400	55 Hz			Turbidity < 5 NTU's
MC-10D	6/24/2010	91505	6.78	0.18	17.40	-71	0.4597	27.2	400	55 Hz			Do = 0.20 mg/L
MC-10D	6/24/2010	91805	6.78	0.18	17.47	-71	0.4585	19.9	400	55 Hz			
MC-10D	6/24/2010	92105	6.77	0.21	17.52	-72	0.4568	19.0	400	55 Hz			
MC-10D	6/24/2010	92405	6.77	0.19	17.62	-73	0.4561	2.39	400	55 Hz			
MC-10D	6/24/2010	92706	6.77	0.21	17.69	-73	0.4551	1.81	400	55 Hz			
MC-10D	6/24/2010	93005	6.77	0.20	17.74	-74	0.4534	1.17	400	55 Hz			
MC-30D	6/24/2010	95708	6.67	2.49	15.10	41	0.4116	1.18	400	4.0 cpm	21	0.20	All parameters stable when sample was collected.
MC-30D	6/24/2010	100014	6.61	1.28	14.78	44	0.3950	0.15	400	4.0 cpm			Turbidity < 5 NTU's
MC-30D	6/24/2010	100305	6.60	0.92	14.67	45	0.3888	0.37	400	4.0 cpm			Do > 0.20 mg/L
MC-30D	6/24/2010	100607	6.59	0.55	14.65	44	0.3861	0.44	400	4.0 cpm			
MC-30D	6/24/2010	100905	6.59	0.41	14.65	44	0.3850	0.70	400	4.0 cpm			
MC-30D	6/24/2010	101205	6.59	0.40	14.65	43	0.3844	0.79	400	4.0 cpm			
MC-30D	6/24/2010	101505	6.59	0.40	14.66	42	0.3844	1.40	400	4.0 cpm			
MC-30	6/24/2010	103205	7.45	1.59	15.18	41	0.0918	6.50	400	4.0 cpm	15	0.24	All parameters stable when sample was collected.
MC-30	6/24/2010	103507	7.38	1.09	14.88	46	0.0875	3.81	400	4.0 cpm			Turbidity < 5 NTU's
MC-30	6/24/2010	103806	7.35	0.91	14.80	43	0.0874	2.45	400	4.0 cpm			Do > 0.20 mg/L
MC-30	6/24/2010	104105	7.35	0.84	14.82	34	0.0873	1.47	400	4.0 cpm			
MC-30	6/24/2010	104406	7.35	0.82	14.80	35	0.0873	0.95	400	4.0 cpm			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	C	mV	mS/cm	NTUs	ml/min	Hz or cpm	Minutes	(0.01) ft.	
MC-33	6/24/2010	111605	6.67	1.16	15.25	77	0.1717	1.61	400	4.0 cpm	27	0.39	All parameters stable when sample was collected.
MC-33	6/24/2010	111905	6.68	0.56	14.95	5	0.1613	0.46	400	4.0 cpm			Turbidity < 5 NTU's
MC-33	6/24/2010	112200	6.67	0.39	14.95	-39	0.1490	0.37	400	4.0 cpm			Do > 0.20 mg/L
MC-33	6/24/2010	112505	6.82	0.40	14.95	-59	0.1464	0.00	400	4.0 cpm			
MC-33	6/24/2010	112821	6.87	0.37	14.97	-71	0.1400	0.17	400	4.0 cpm			
MC-33	6/24/2010	113105	6.86	0.34	14.93	-77	0.1358	0.00	400	4.0 cpm			
MC-33	6/24/2010	113405	6.89	0.35	15.01	-82	0.1330	0.00	400	4.0 cpm			
MC-33	6/24/2010	113705	6.81	0.33	15.05	-80	0.1305	0.00	400	4.0 cpm			
MC-33	6/24/2010	114006	6.81	0.34	15.04	-83	0.1297	0.00	400	4.0 cpm			
MC-12	6/24/2010	124818	6.90	2.03	18.14	-1	0.1522	1.93	200	1.0 cpm	21	0.04	All parameters stable when sample was collected.
MC-12	6/24/2010	125105	6.97	1.55	17.78	-54	0.1438	0.15	200	1.0 cpm			Turbidity < 5 NTU's
MC-12	6/24/2010	125409	7.00	1.12	17.54	-78	0.1371	0.00	200	1.0 cpm			Do > 0.20 mg/L
MC-12	6/24/2010	125705	7.04	0.94	17.47	-91	0.1322	0.00	200	1.0 cpm			
MC-12	6/24/2010	130006	7.08	0.80	17.38	-98	0.1285	0.00	200	1.0 cpm			
MC-12	6/24/2010	130311	7.12	0.80	17.40	-103	0.1262	0.00	200	1.0 cpm			
MC-12	6/24/2010	130605	7.09	0.74	17.45	-105	0.1248	0.00	200	1.0 cpm			
MC-12D	6/24/2010	133105	6.59	0.56	16.48	27	0.4326	0.30	400	49 Hz	18	0.77	All parameters stable when sample was collected.
MC-12D	6/24/2010	133406	6.67	0.39	17.19	15	0.4386	0.00	400	49 Hz			Turbidity < 5 NTU's
MC-12D	6/24/2010	133705	6.70	0.32	18.09	5	0.4496	0.00	400	49 Hz			Do > 0.20 mg/L
MC-12D	6/24/2010	134005	6.75	0.28	18.51	-3	0.4534	0.00	400	49 Hz			
MC-12D	6/24/2010	134311	6.73	0.29	18.75	-8	0.4548	0.00	400	49 Hz			
MC-12D	6/24/2010	134631	6.73	0.27	18.97	-12	0.4551	0.00	400	49 Hz			
MC-107	6/24/2010	141605	7.02	2.22	19.17	26	0.1262	1.37	200	1.0 cpm	21	0.03	All parameters stable when sample was collected.
MC-107	6/24/2010	141905	6.89	1.69	18.80	31	0.1211	0.88	200	1.0 cpm			Turbidity < 5 NTU's
MC-107	6/24/2010	142205	6.92	1.39	18.66	34	0.1174	0.79	200	1.0 cpm			Do > 0.20 mg/L
MC-107	6/24/2010	142522	6.92	1.22	18.56	35	0.1147	0.81	200	1.0 cpm			
MC-107	6/24/2010	142807	6.91	1.08	18.52	36	0.1141	0.43	200	1.0 cpm			
MC-107	6/24/2010	143116	6.85	1.02	18.55	36	0.1135	0.00	200	1.0 cpm			
MC-107	6/24/2010	143406	6.85	1.06	18.52	38	0.1134	0.00	200	1.0 cpm			
MC-118D2	6/25/2010	74805	6.82	2.29	14.80	150	0.4515	2.55	400	4.0 cpm	36	1.38	All parameters stable when sample was collected.
MC-118D2	6/25/2010	75105	6.83	1.04	14.52	142	0.4428	2.13	400	4.0 cpm			Turbidity < 5 NTU's
MC-118D2	6/25/2010	75405	6.85	0.60	14.46	133	0.4377	1.24	400	4.0 cpm			Do > 0.20 mg/L
MC-118D2	6/25/2010	75705	6.86	0.43	14.38	121	0.4340	1.16	400	4.0 cpm			
MC-118D2	6/25/2010	80005	6.87	0.32	14.34	102	0.4311	1.36	400	4.0 cpm			
MC-118D2	6/25/2010	80305	6.87	0.30	14.33	83	0.4290	1.13	400	4.0 cpm			
MC-118D2	6/25/2010	80606	6.86	0.21	14.35	65	0.4289	1.10	400	4.0 cpm			
MC-118D2	6/25/2010	80906	6.89	0.17	14.35	47	0.4270	0.58	400	4.0 cpm			
MC-118D2	6/25/2010	81205	6.83	0.19	14.36	37	0.4260	1.19	400	4.0 cpm			
MC-118D2	6/25/2010	81505	6.89	0.20	14.35	21	0.4249	0.68	400	4.0 cpm			
MC-118D2	6/25/2010	81806	6.88	0.22	14.33	13	0.4238	0.57	400	4.0 cpm			
MC-118D2	6/25/2010	82114	6.89	0.22	14.29	12	0.4228	0.45	400	4.0 cpm			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	C	mV	mS/cm	NTUs	ml/min	Hz or cpm	Minutes	(0.01) ft.	
MC-118D	6/25/2010	84126	6.76	0.48	15.73	9	0.4352	15.6	400	58 Hz	18	1.87	All parameters stable when sample was collected.
MC-118D	6/25/2010	84405	6.76	0.35	16.94	-11	0.4465	6.66	400	58 Hz			Turbidity < 5 NTU's
MC-118D	6/25/2010	84705	6.77	0.27	17.85	-28	0.4568	2.69	400	58 Hz			Do > 0.20 mg/L
MC-118D	6/25/2010	85005	6.76	0.25	18.26	-40	0.4598	2.95	400	58 Hz			
MC-118D	6/25/2010	85306	6.76	0.24	18.47	-48	0.4602	2.81	400	58 Hz			
MC-118D	6/25/2010	85605	6.75	0.23	18.68	-50	0.4607	1.86	400	58 Hz			
MC-2D	6/25/2010	92905	7.07	0.54	16.07	-7	0.2687	1.26	400	53 Hz	15	1.78	All parameters stable when sample was collected.
MC-2D	6/25/2010	93218	7.02	0.39	16.73	-7	0.2512	0.00	400	53 Hz			Turbidity < 5 NTU's
MC-2D	6/25/2010	93505	7.02	0.30	17.65	-7	0.2496	0.00	400	53 Hz			Do > 0.20 mg/L
MC-2D	6/25/2010	93805	6.98	0.30	17.97	-4	0.2510	0.00	400	53 Hz			
MC-2D	6/25/2010	94108	6.97	0.28	18.11	-1	0.2505	0.00	400	53 Hz			
MC-2	6/25/2010	100005	6.52	0.45	16.49	63	0.3700	3.64	400	49 Hz	21	0.38	All parameters stable when sample was collected.
MC-2	6/25/2010	100305	6.60	0.30	17.85	-2	0.3783	6.90	400	49 Hz			Turbidity < 5 NTU's
MC-2	6/25/2010	100605	6.64	0.26	19.65	-48	0.3965	4.96	400	49 Hz			Do = 0.20 mg/L
MC-2	6/25/2010	100905	6.66	0.26	21.06	-68	0.4083	3.80	400	49 Hz			
MC-2	6/25/2010	101205	6.67	0.22	22.15	-78	0.4098	2.53	400	49 Hz			
MC-2	6/25/2010	101510	6.66	0.21	22.32	-83	0.4061	1.25	400	49 Hz			
MC-2	6/25/2010	101810	6.66	0.20	22.69	-86	0.4040	1.41	400	49 Hz			
MC-1	6/25/2010	105218	6.65	0.71	16.43	18	0.3392	29.7	400	55 Hz	24	0.31	All parameters stable when sample was collected.
MC-1	6/25/2010	105505	6.67	0.62	17.06	-19	0.2263	11.1	400	55 Hz			Turbidity < 5 NTU's
MC-1	6/25/2010	105810	6.65	0.90	18.99	-27	0.1394	5.78	400	55 Hz			Do > 0.20 mg/L
MC-1	6/25/2010	110137	6.58	0.77	20.36	-18	0.1158	2.36	400	55 Hz			
MC-1	6/25/2010	110406	6.52	1.02	20.89	-10	0.1125	1.51	400	55 Hz			
MC-1	6/25/2010	110706	6.47	1.29	21.43	0	0.1125	1.27	400	55 Hz			
MC-1	6/25/2010	111005	6.47	1.33	21.72	5	0.1111	1.87	400	55 Hz			
MC-1	6/25/2010	111308	6.44	1.28	21.83	9	0.1098	0.94	400	55 Hz			
MC-21	6/28/2010	84505	5.78	1.37	16.37	214	0.1670	3.52	400	3.0 cpm	24	0.06	All parameters stable when sample was collected.
MC-21	6/28/2010	84805	5.90	1.42	16.25	211	0.1676	3.06	400	3.0 cpm			Turbidity < 5 NTU's
MC-21	6/28/2010	85105	6.07	1.54	16.28	204	0.1676	2.43	400	3.0 cpm			Do > 0.20 mg/L
MC-21	6/28/2010	85405	6.20	1.59	16.30	196	0.1682	0.59	400	3.0 cpm			
MC-21	6/28/2010	85709	6.26	1.58	16.31	187	0.1691	0.00	400	3.0 cpm			
MC-21	6/28/2010	90009	6.32	1.61	16.32	170	0.1702	0.00	400	3.0 cpm			
MC-21	6/28/2010	90311	6.42	1.60	16.37	166	0.1707	0.00	400	3.0 cpm			
MC-21	6/28/2010	90606	6.41	1.63	16.40	160	0.1715	0.00	400	3.0 cpm			
MC-24D2	6/28/2010	93207	6.86	2.36	15.66	125	0.2229	1.91	400	4.0 cpm	18	0.03	All parameters stable when sample was collected.
MC-24D2	6/28/2010	93516	6.99	1.85	15.41	108	0.2236	1.54	400	4.0 cpm			Turbidity < 5 NTU's
MC-24D2	6/28/2010	93805	6.98	1.67	15.32	101	0.2238	1.83	400	4.0 cpm			Do > 0.20 mg/L
MC-24D2	6/28/2010	94105	6.95	1.43	15.32	97	0.2242	1.02	400	4.0 cpm			
MC-24D2	6/28/2010	94408	6.97	1.47	15.31	96	0.2238	1.00	400	4.0 cpm			
MC-24D2	6/28/2010	94705	7.01	1.51	15.24	98	0.2240	1.22	400	4.0 cpm			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	C	mV	mS/cm	NTUs	ml/min	Hz or cpm	Minutes	(0.01) ft.	
MC-24	6/28/2010	100205	6.84	3.22	17.22	118	0.1499	2.68	400	4.0 cpm	15	0.05	All parameters stable when sample was collected.
MC-24	6/28/2010	100505	6.69	2.48	17.25	120	0.1534	2.06	400	4.0 cpm			Turbidity < 5 NTU's
MC-24	6/28/2010	100806	6.52	2.45	17.38	125	0.1529	1.90	400	4.0 cpm			Do > 0.20 mg/L
MC-24	6/28/2010	101115	6.52	2.60	17.44	131	0.1525	1.89	400	4.0 cpm			
MC-24	6/28/2010	101409	6.53	2.71	17.55	133	0.1523	1.79	400	4.0 cpm			
MC-24D	6/28/2010	102905	6.59	1.69	16.30	178	0.9651	10.97	400	4.0 cpm	30	0.28	All parameters stable when sample was collected.
MC-24D	6/28/2010	103205	6.54	1.19	16.10	179	0.9291	8.15	400	4.0 cpm			Turbidity > 5 NTU's but stable.
MC-24D	6/28/2010	103505	6.56	0.75	16.00	177	0.9123	11.4	400	4.0 cpm			Do > 0.20 mg/L
MC-24D	6/28/2010	103816	6.59	0.82	15.98	176	0.9026	15.1	400	4.0 cpm			
MC-24D	6/28/2010	104105	6.58	0.66	15.98	176	0.8958	13.0	400	4.0 cpm			
MC-24D	6/28/2010	104406	6.53	0.49	15.97	177	0.8900	12.7	400	4.0 cpm			
MC-24D	6/28/2010	104705	6.66	0.42	16.00	173	0.8857	13.0	400	4.0 cpm			
MC-24D	6/28/2010	105006	6.58	0.35	15.98	173	0.8824	12.5	400	4.0 cpm			
MC-24D	6/28/2010	105306	6.60	0.34	16.07	171	0.8797	12.5	400	4.0 cpm			
MC-24D	6/28/2010	105605	6.58	0.34	16.03	171	0.8744	11.8	400	4.0 cpm			
MC-15D	6/28/2010	120405	6.88	0.54	15.47	113	0.6112	3.67	400	49 Hz	15	1.25	All parameters stable when sample was collected.
MC-15D	6/28/2010	120705	6.68	0.40	16.46	116	0.6151	0.17	400	49 Hz			Turbidity < 5 NTU's
MC-15D	6/28/2010	121005	6.69	0.33	17.46	116	0.6160	0.00	400	49 Hz			Do > 0.20 mg/L
MC-15D	6/28/2010	121305	6.70	0.32	17.70	115	0.6156	0.00	400	49 Hz			
MC-15D	6/28/2010	121610	6.70	0.32	17.98	114	0.6160	0.00	400	49 Hz			
MC-15	6/28/2010	125810	6.87	1.16	18.26	176	0.2814	2.02	200	1.0 cpm	33	0.43	All parameters stable when sample was collected.
MC-15	6/28/2010	130105	6.59	0.94	18.05	179	0.2643	1.13	200	1.0 cpm			Turbidity < 5 NTU's
MC-15	6/28/2010	130405	6.58	0.81	17.93	168	0.2576	1.29	200	1.0 cpm			Do > 0.20 mg/L
MC-15	6/28/2010	130716	6.51	0.75	17.78	148	0.2659	1.06	200	1.0 cpm			
MC-15	6/28/2010	131026	6.47	0.68	17.77	127	0.2729	0.64	200	1.0 cpm			
MC-15	6/28/2010	131305	6.51	0.69	17.82	112	0.2754	1.00	200	1.0 cpm			
MC-15	6/28/2010	131607	6.45	0.66	17.84	96	0.2807	0.26	200	1.0 cpm			
MC-15	6/28/2010	131910	6.51	0.65	17.89	83	0.2827	0.00	200	1.0 cpm			
MC-15	6/28/2010	132205	6.52	0.61	17.99	72	0.2836	0.00	200	1.0 cpm			
MC-15	6/28/2010	132505	6.54	0.59	18.12	65	0.2819	0.00	200	1.0 cpm			
MC-15	6/28/2010	132806	6.54	0.59	18.24	63	0.2814	0.00	200	1.0 cpm			
MC-16	6/28/2010	135505	6.61	1.27	17.66	61	0.1752	1.66	200	1.0 cpm	27	0.27	All parameters stable when sample was collected.
MC-16	6/28/2010	135805	6.59	0.98	17.58	45	0.1753	1.05	200	1.0 cpm			Turbidity < 5 NTU's
MC-16	6/28/2010	140105	6.57	0.84	17.63	23	0.1837	0.80	200	1.0 cpm			Do > 0.20 mg/L
MC-16	6/28/2010	140405	6.68	0.73	17.68	3	0.1927	0.48	200	1.0 cpm			
MC-16	6/28/2010	140706	6.65	0.65	17.73	-14	0.2013	0.25	200	1.0 cpm			
MC-16	6/28/2010	141015	6.61	0.59	17.77	-28	0.2125	0.48	200	1.0 cpm			
MC-16	6/28/2010	141306	6.70	0.53	17.82	-38	0.2201	0.13	200	1.0 cpm			
MC-16	6/28/2010	141604	6.77	0.53	17.86	-47	0.2259	0.18	200	1.0 cpm			
MC-16	6/28/2010	141907	6.72	0.50	17.97	-48	0.2270	0.10	200	1.0 cpm			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	C	mV	mS/cm	NTUs	ml/min	Hz or cpm	Minutes	(0.01) ft.	
MC-19D	6/29/2010	92405	6.75	0.68	15.88	133	0.2876	16.3	400	53 Hz	15	0.02	All parameters stable when sample was collected.
MC-19D	6/29/2010	92705	6.72	0.49	16.27	130	0.3105	5.88	400	53 Hz			Turbidity < 5 NTU's
MC-19D	6/29/2010	93005	6.75	0.40	17.25	126	0.3171	4.62	400	53 Hz			Do > 0.20 mg/L
MC-19D	6/29/2010	93305	6.80	0.38	17.25	122	0.3187	4.16	400	53 Hz			
MC-19D	6/29/2010	93614	6.85	0.38	17.72	117	0.3196	1.35	400	53 Hz			
MC-17	6/29/2010	100705	6.65	1.20	16.18	163	0.2512	5.99	200	1.0 cpm	39	0.17	All parameters stable when sample was collected.
MC-17	6/29/2010	101005	6.63	0.95	15.96	156	0.2556	3.49	200	1.0 cpm			Turbidity < 5 NTU's
MC-17	6/29/2010	101305	6.57	0.80	16.07	135	0.2797	3.37	200	1.0 cpm			Do > 0.20 mg/L
MC-17	6/29/2010	101605	6.56	0.70	15.98	106	0.3211	2.64	200	1.0 cpm			
MC-17	6/29/2010	101905	6.56	0.69	15.84	78	0.3607	2.25	200	1.0 cpm			
MC-17	6/29/2010	102205	6.55	0.67	15.87	54	0.3945	1.22	200	1.0 cpm			
MC-17	6/29/2010	102505	6.60	0.62	15.92	34	0.4093	1.61	200	1.0 cpm			
MC-17	6/29/2010	102805	6.62	0.64	15.97	18	0.4124	0.46	200	1.0 cpm			
MC-17	6/29/2010	103108	6.63	0.60	15.91	5	0.4239	0.06	200	1.0 cpm			
MC-17	6/29/2010	103405	6.57	0.57	15.95	-5	0.4214	0.00	200	1.0 cpm			
MC-17	6/29/2010	103705	6.66	0.56	16.03	-14	0.4101	0.00	200	1.0 cpm			
MC-17	6/29/2010	104005	6.62	0.56	15.97	-21	0.4035	0.00	200	1.0 cpm			
MC-17	6/29/2010	104307	6.68	0.55	16.03	-22	0.3994	0.00	200	1.0 cpm			
MC-17D	6/29/2010	110805	6.85	0.89	14.96	15	0.2450	2.25	400	50 Hz	15	0.39	All parameters stable when sample was collected.
MC-17D	6/29/2010	111105	6.86	0.84	15.31	11	0.2454	1.47	400	50 Hz			Turbidity < 5 NTU's
MC-17D	6/29/2010	111405	6.86	0.78	16.05	8	0.2456	1.11	400	50 Hz			Do > 0.20 mg/L
MC-17D	6/29/2010	111707	6.89	0.75	16.25	5	0.2465	1.01	400	50 Hz			
MC-17D	6/29/2010	112005	6.90	0.75	16.24	4	0.2466	0.78	400	50 Hz			

Well ID	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	C	mV	mS/cm	NTUs	ml/min	Hz or cpm	Minutes	(0.01) ft.	
MC-31	9/13/2010	125003	6.32	0.95	16.36	64	0.1570	6.41	300	4.0 cpm	24	0.03	All parameters stable when sample was collected.
MC-31	9/13/2010	125304	6.41	0.54	16.24	20	0.1600	4.51	300	4.0 cpm			Turbidity < 5 NTU's
MC-31	9/13/2010	125602	6.49	0.44	16.23	1	0.1689	2.71	300	4.0 cpm			Do > 0.20 mg/L
MC-31	9/13/2010	125901	6.51	0.38	16.21	-8	0.1735	3.46	300	4.0 cpm			Fe Field Test Kit Reading - 3.30 mg/L Upper Limit.
MC-31	9/13/2010	130205	6.74	0.33	16.35	-25	0.1810	2.45	300	4.0 cpm			
MC-31	9/13/2010	130508	6.54	0.42	16.45	-13	0.1893	2.98	300	4.0 cpm			
MC-31	9/13/2010	130805	6.56	0.37	16.36	-18	0.1941	2.25	300	4.0 cpm			
MC-31	9/13/2010	131108	6.63	0.39	16.32	-23	0.1939	2.17	300	4.0 cpm			
MC-30D	9/13/2010	134605	6.51	2.77	15.51	117	0.4759	2.72	400	4.0 cpm	21	0.06	All parameters stable when sample was collected.
MC-30D	9/13/2010	134905	6.39	1.16	15.09	116	0.4435	1.42	400	4.0 cpm			Turbidity < 5 NTU's
MC-30D	9/13/2010	135205	6.44	0.66	14.92	114	0.4309	0.82	400	4.0 cpm			Do > 0.20 mg/L
MC-30D	9/13/2010	135505	6.49	0.43	14.88	110	0.4258	1.47	400	4.0 cpm			Fe Field Test Kit Reading - 1.69 mg/L
MC-30D	9/13/2010	135806	6.51	0.30	14.87	109	0.4202	1.71	400	4.0 cpm			
MC-30D	9/13/2010	140107	6.52	0.28	14.88	107	0.4158	1.45	400	4.0 cpm			
MC-30D	9/13/2010	140409	6.50	0.29	14.86	106	0.4115	1.37	400	4.0 cpm			
MC-30	9/13/2010	142705	7.45	1.40	18.29	108	0.1594	3.19	400	4.0 cpm	15	0.23	All parameters stable when sample was collected.
MC-30	9/13/2010	143015	7.09	0.71	17.86	120	0.1546	2.53	400	4.0 cpm			Turbidity < 5 NTU's
MC-30	9/13/2010	143306	7.13	0.38	17.77	102	0.1561	1.64	400	4.0 cpm			Do > 0.20 mg/L
MC-30	9/13/2010	143605	7.19	0.40	17.78	100	0.1575	1.82	400	4.0 cpm			Fe Field Test Kit Reading - 0.11 mg/L
MC-30	9/13/2010	143908	7.19	0.40	17.73	94	0.1588	1.67	400	4.0 cpm			
PZU-4	9/14/2010	90405	6.26	2.54	16.75	54	0.1959	14.7	100	0.2 cpm	33	0.77	All parameters stable when sample was collected.
PZU-4	9/14/2010	90705	6.38	2.69	16.79	46	0.1841	15.1	100	0.2 cpm			Turbidity < 5 NTU's
PZU-4	9/14/2010	91005	6.49	2.35	16.78	39	0.1722	12.8	100	0.2 cpm			Do > 0.20 mg/L
PZU-4	9/14/2010	91305	6.53	2.15	16.79	39	0.1646	12.4	100	0.2 cpm			
PZU-4	9/14/2010	91643	6.53	1.93	16.83	40	0.1539	10.12	100	0.2 cpm			
PZU-4	9/14/2010	91905	6.53	1.84	16.85	41	0.1484	8.05	100	0.2 cpm			
PZU-4	9/14/2010	92205	6.53	1.67	16.88	43	0.1449	7.46	100	0.2 cpm			
PZU-4	9/14/2010	92505	6.52	1.65	16.92	44	0.1401	7.37	100	0.2 cpm			
PZU-4	9/14/2010	92805	6.52	1.53	16.93	45	0.1331	4.87	100	0.2 cpm			
PZU-4	9/14/2010	93105	6.52	1.45	16.96	46	0.1332	4.26	100	0.2 cpm			
PZU-4	9/14/2010	93405	6.51	1.42	16.96	47	0.1312	4.20	100	0.2 cpm			
PZU-5	9/14/2010	102206	6.42	1.78	16.79	39	0.3698	7.46	100	0.2 cpm	15	4.57	All parameters stable when sample was collected.
PZU-5	9/14/2010	102505	6.44	1.55	16.79	29	0.3646	4.63	100	0.2 cpm			Turbidity < 5 NTU's
PZU-5	9/14/2010	102806	6.45	1.39	16.81	24	0.3620	4.84	100	0.2 cpm			Do > 0.20 mg/L
PZU-5	9/14/2010	103105	6.44	1.37	16.82	22	0.3602	4.89	100	0.2 cpm			
PZU-5	9/14/2010	103408	6.45	1.28	16.82	21	0.3605	4.91	100	0.2 cpm			
MC-32	9/14/2010	112019	6.64	2.47	17.33	22	0.4127	15.0	100	0.2 cpm	15	4.57	All parameters stable when sample was collected.
MC-32	9/14/2010	112305	6.62	2.05	17.27	15	0.4106	14.7	100	0.2 cpm			Turbidity > 5 NTU's but stable.
MC-32	9/14/2010	112605	6.63	1.88	17.26	13	0.4069	13.4	100	0.2 cpm			Do > 0.20 mg/L
MC-32	9/14/2010	112905	6.64	1.72	17.27	13	0.4032	13.0	100	0.2 cpm			
MC-32	9/14/2010	113205	6.63	1.74	17.27	13	0.4010	12.8	100	0.2 cpm			

Well ID	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	C	mV	mS/cm	NTUs	ml/min	Hz or cpm	Minutes	(0.01) ft.	
MC-123	9/14/2010	123005	6.65	0.98	16.49	31	0.3676	31.9	100	0.2 cpm	18	0.66	All parameters stable when sample was collected.
MC-123	9/14/2010	123305	6.62	0.84	16.39	16	0.3579	25.4	100	0.2 cpm			Turbidity > 5 NTU's but stable.
MC-123	9/14/2010	123606	6.61	0.75	16.38	11	0.3540	27.5	100	0.2 cpm			Do > 0.20 mg/L
MC-123	9/14/2010	123911	6.59	0.63	16.41	7	0.3517	12.3	100	0.2 cpm			
MC-123	9/14/2010	124206	6.60	0.61	16.46	5	0.3502	12.0	100	0.2 cpm			
MC-123	9/14/2010	124512	6.59	0.66	16.51	3	0.3489	12.0	100	0.2 cpm			
MC-20D	9/14/2010	132805	7.56	1.23	14.38	-8	0.2206	68.6	400	4.0 cpm	39	1.49	All parameters stable when sample was collected.
MC-20D	9/14/2010	133105	7.47	0.78	14.34	-19	0.2189	29.4	400	4.0 cpm			Turbidity < 5 NTU's
MC-20D	9/14/2010	133409	7.52	0.75	14.30	-22	0.2185	21.9	400	4.0 cpm			Do > 0.20 mg/L
MC-20D	9/14/2010	133705	7.50	0.71	14.30	-28	0.2185	14.0	400	4.0 cpm			
MC-20D	9/14/2010	134005	7.45	0.65	14.27	-26	0.2182	11.5	400	4.0 cpm			
MC-20D	9/14/2010	134305	7.42	0.59	14.24	-27	0.2178	9.88	400	4.0 cpm			
MC-20D	9/14/2010	134610	7.42	0.53	14.25	-28	0.2182	8.56	400	4.0 cpm			
MC-20D	9/14/2010	134905	7.43	0.48	14.23	-29	0.2178	7.15	400	4.0 cpm			
MC-20D	9/14/2010	135205	7.43	0.44	14.24	-30	0.2178	5.97	400	4.0 cpm			
MC-20D	9/14/2010	135506	7.44	0.41	14.22	-32	0.2178	5.79	400	4.0 cpm			
MC-20D	9/14/2010	135805	7.45	0.39	14.22	-33	0.2178	4.98	400	4.0 cpm			
MC-20D	9/14/2010	140107	7.44	0.37	14.24	-33	0.2185	4.88	400	4.0 cpm			
MC-20D	9/14/2010	140406	7.45	0.37	14.23	-33	0.2184	4.45	400	4.0 cpm			
MC-20	9/14/2010	143205	6.64	1.23	17.29	-4	0.3168	11.0	100	0.2 cpm	18	1.43	All parameters stable when sample was collected.
MC-20	9/14/2010	143509	6.62	1.13	17.34	0	0.3111	10.49	100	0.2 cpm			Turbidity > 5 NTU's but stable.
MC-20	9/14/2010	143823	6.59	0.98	17.41	4	0.3069	10.01	100	0.2 cpm			Do > 0.20 mg/L
MC-20	9/14/2010	144122	6.56	0.93	17.44	9	0.3043	7.27	100	0.2 cpm			Fe Field Test Kit Reading - 3.30 mg/L Upper Limit.
MC-20	9/14/2010	144406	6.54	0.90	17.46	12	0.3028	7.25	100	0.2 cpm			
MC-20	9/14/2010	144706	6.52	0.88	17.58	15	0.3031	7.04	100	0.2 cpm			
MC-122	9/15/2010	82206	6.74	1.08	14.59	326	0.2023	33.1	100	0.2 cpm	27	0.88	All parameters stable when sample was collected.
MC-122	9/15/2010	82525	6.77	1.02	14.62	245	0.2012	24.5	100	0.2 cpm			Turbidity > 5 NTU's but stable.
MC-122	9/15/2010	82818	6.78	0.90	14.63	162	0.2008	22.7	100	0.2 cpm			Do > 0.20 mg/L
MC-122	9/15/2010	83107	6.82	0.88	14.64	117	0.2004	17.8	100	0.2 cpm			
MC-122	9/15/2010	83455	6.84	0.83	14.68	87	0.1999	15.5	100	0.2 cpm			
MC-122	9/15/2010	83705	6.87	0.83	14.70	74	0.1999	11.6	100	0.2 cpm			
MC-122	9/15/2010	84007	6.87	0.77	14.76	63	0.1989	10.33	100	0.2 cpm			
MC-122	9/15/2010	84305	6.89	0.76	14.84	57	0.1987	9.98	100	0.2 cpm			
MC-122	9/15/2010	84605	6.90	0.75	14.96	55	0.1984	9.41	100	0.2 cpm			
MC-27D	9/15/2010	93306	6.87	1.85	14.46	113	0.3549	13.0	400	4.0 cpm	24	0.59	All parameters stable when sample was collected.
MC-27D	9/15/2010	93605	6.80	0.93	13.99	92	0.3498	13.0	400	4.0 cpm			Turbidity < 5 NTU's
MC-27D	9/15/2010	93905	6.80	0.51	13.87	74	0.3472	9.62	400	4.0 cpm			Do > 0.20 mg/L
MC-27D	9/15/2010	94208	6.81	1.44	13.77	65	0.3447	5.47	400	4.0 cpm			
MC-27D	9/15/2010	94510	6.82	0.77	13.72	59	0.3430	4.87	400	4.0 cpm			
MC-27D	9/15/2010	94804	6.82	0.25	13.71	56	0.3419	4.65	400	4.0 cpm			
MC-27D	9/15/2010	95110	6.83	0.25	13.69	52	0.3410	4.26	400	4.0 cpm			
MC-27D	9/15/2010	95411	6.85	0.25	13.72	47	0.3404	4.15	400	4.0 cpm			

Well ID	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	C	mV	mS/cm	NTUs	ml/min	Hz or cpm	Minutes	(0.01) ft.	
MC-28D	9/15/2010	101906	7.36	2.50	15.04	84	0.2628	1.30	400	4.0 cpm	30	1.16	All parameters stable when sample was collected.
MC-28D	9/15/2010	102205	7.36	1.18	14.35	81	0.2645	1.07	400	4.0 cpm			Turbidity < 5 NTU's
MC-28D	9/15/2010	102506	7.36	0.82	14.19	79	0.2651	0.86	400	4.0 cpm			Do > 0.20 mg/L
MC-28D	9/15/2010	102805	7.36	0.74	14.13	79	0.2647	0.78	400	4.0 cpm			
MC-28D	9/15/2010	103105	7.37	0.81	14.11	80	0.2623	0.78	400	4.0 cpm			
MC-28D	9/15/2010	103405	7.35	1.03	14.13	83	0.2594	0.43	400	4.0 cpm			
MC-28D	9/15/2010	103706	7.30	1.27	14.22	86	0.2562	0.42	400	4.0 cpm			
MC-28D	9/15/2010	104005	7.35	1.52	14.28	88	0.2540	0.59	400	4.0 cpm			
MC-28D	9/15/2010	104305	7.27	1.51	14.32	93	0.2525	0.23	400	4.0 cpm			
MC-28D	9/15/2010	104612	7.29	1.62	14.29	94	0.2516	0.20	400	4.0 cpm			
MC-19D	9/15/2010	112505	7.59	0.72	17.03	111	0.2267	4.97	400	81 Hz	15	0.04	All parameters stable when sample was collected.
MC-19D	9/15/2010	112805	7.31	0.47	17.19	119	0.2095	3.49	400	81 Hz			Turbidity < 5 NTU's
MC-19D	9/15/2010	113105	7.23	0.37	18.04	120	0.2068	1.42	400	81 Hz			Do > 0.20 mg/L
MC-19D	9/15/2010	113408	7.17	0.34	18.25	118	0.2050	0.87	400	81 Hz			
MC-19D	9/15/2010	113706	7.14	0.34	18.48	116	0.2056	0.77	400	81 Hz			
MC-15	9/15/2010	120823	6.91	1.78	19.63	53	0.2341	7.82	200	1.0 cpm	18	0.50	All parameters stable when sample was collected.
MC-15	9/15/2010	121105	6.81	1.29	19.42	30	0.2395	5.71	200	1.0 cpm			Turbidity < 5 NTU's
MC-15	9/15/2010	121406	6.71	0.96	19.33	17	0.2427	4.14	200	1.0 cpm			Do > 0.20 mg/L
MC-15	9/15/2010	121705	6.74	0.77	19.26	6	0.2453	2.29	200	1.0 cpm			
MC-15	9/15/2010	122005	6.76	0.72	19.24	-1	0.2473	2.24	200	1.0 cpm			
MC-15	9/15/2010	122308	6.80	0.70	19.24	-3	0.2492	2.24	200	1.0 cpm			
MC-15D	9/15/2010	124305	6.65	0.74	15.80	56	0.3248	0.76	400	68 Hz	18	0.58	All parameters stable when sample was collected.
MC-15D	9/15/2010	124605	6.67	0.32	16.64	59	0.3348	0.40	400	68 Hz			Turbidity < 5 NTU's
MC-15D	9/15/2010	124905	6.71	0.24	18.03	60	0.3535	0.00	400	68 Hz			Do = 0.20 mg/L
MC-15D	9/15/2010	125206	6.76	0.20	18.80	60	0.3661	0.00	400	68 Hz			
MC-15D	9/15/2010	125507	6.78	0.20	18.99	62	0.3725	0.00	400	68 Hz			
MC-15D	9/15/2010	125810	6.79	0.20	19.10	64	0.3771	0.00	400	68 Hz			
MC-14	9/15/2010	134705	6.81	2.04	21.12	29	0.3471	1.16	100	0.2 cpm	24	1.17	All parameters stable when sample was collected.
MC-14	9/15/2010	135005	6.73	1.83	20.82	24	0.3266	1.43	100	0.2 cpm			Turbidity < 5 NTU's
MC-14	9/15/2010	135307	6.72	1.77	21.00	21	0.3066	1.30	100	0.2 cpm			Do > 0.20 mg/L
MC-14	9/15/2010	135606	6.70	1.67	21.38	18	0.2944	0.89	100	0.2 cpm			Fe Field Test Kit Reading - 3.19 mg/L
MC-14	9/15/2010	135905	6.71	1.52	21.46	16	0.2806	0.97	100	0.2 cpm			
MC-14	9/15/2010	140209	6.72	1.41	21.44	15	0.2723	1.06	100	0.2 cpm			
MC-14	9/15/2010	140505	6.71	1.36	21.55	14	0.2666	0.90	100	0.2 cpm			
MC-14	9/15/2010	140805	6.75	1.30	21.85	11	0.2680	0.88	100	0.2 cpm			
MC-14D	9/16/2010	83006	7.16	2.46	15.63	239	0.2090	3.03	400	4.0 cpm	24	1.77	All parameters stable when sample was collected.
MC-14D	9/16/2010	83305	7.14	1.14	15.18	154	0.2093	2.58	400	4.0 cpm			Turbidity < 5 NTU's
MC-14D	9/16/2010	83605	7.13	0.70	15.10	62	0.2095	3.00	400	4.0 cpm			Do > 0.20 mg/L
MC-14D	9/16/2010	83905	7.13	0.52	15.08	32	0.2095	2.77	400	4.0 cpm			
MC-14D	9/16/2010	84205	7.13	0.46	15.08	18	0.2096	2.76	400	4.0 cpm			
MC-14D	9/16/2010	84506	7.13	0.44	15.04	8	0.2095	2.30	400	4.0 cpm			
MC-14D	9/16/2010	84818	7.14	0.40	15.04	2	0.2095	1.94	400	4.0 cpm			
MC-14D	9/16/2010	85118	7.15	0.41	15.08	-1	0.2096	1.70	400	4.0 cpm			

Well ID	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	C	mV	mS/cm	NTUs	ml/min	Hz or cpm	Minutes	(0.01) ft.	
MC-13	9/16/2010	92505	7.40	1.04	17.63	58	0.0945	2.39	400	3.0 cpm	21	0.07	All parameters stable when sample was collected.
MC-13	9/16/2010	92805	7.17	0.53	17.56	54	0.0989	1.76	400	3.0 cpm			Turbidity < 5 NTU's
MC-13	9/16/2010	93105	7.00	0.39	17.53	45	0.1024	1.07	400	3.0 cpm			Do > 0.20 mg/L
MC-13	9/16/2010	93405	6.92	0.34	17.53	37	0.1045	1.05	400	3.0 cpm			
MC-13	9/16/2010	93705	6.90	0.31	17.53	31	0.1052	0.87	400	3.0 cpm			
MC-13	9/16/2010	94012	6.85	0.28	17.56	27	0.1056	0.81	400	3.0 cpm			
MC-13	9/16/2010	94307	6.86	0.28	17.58	23	0.1052	0.79	400	3.0 cpm			
MC-13D	9/16/2010	100505	6.95	2.37	16.25	41	0.2251	0.62	200	1.0 cpm	21	0.73	All parameters stable when sample was collected.
MC-13D	9/16/2010	100807	6.89	1.88	16.04	46	0.2266	0.23	200	1.0 cpm			Turbidity < 5 NTU's
MC-13D	9/16/2010	101105	6.88	1.56	15.92	50	0.2273	0.79	200	1.0 cpm			Do > 0.20 mg/L
MC-13D	9/16/2010	101421	6.89	1.35	15.89	53	0.2273	0.30	200	1.0 cpm			
MC-13D	9/16/2010	101705	6.89	1.17	15.80	56	0.2284	0.23	200	1.0 cpm			
MC-13D	9/16/2010	102006	6.89	1.07	15.75	58	0.2280	0.09	200	1.0 cpm			
MC-13D	9/16/2010	102309	6.92	1.06	15.73	60	0.2280	0.00	200	1.0 cpm			
MC-16	9/16/2010	110705	6.86	2.73	17.93	109	0.1437	6.36	200	1.0 cpm	24	0.36	All parameters stable when sample was collected.
MC-16	9/16/2010	111009	6.76	1.99	17.72	84	0.1497	4.51	200	1.0 cpm			Turbidity < 5 NTU's
MC-16	9/16/2010	111307	6.64	1.93	17.75	72	0.1551	3.49	200	1.0 cpm			Do > 0.20 mg/L
MC-16	9/16/2010	111605	6.77	1.60	17.63	48	0.1882	2.06	200	1.0 cpm			
MC-16	9/16/2010	111906	6.77	1.17	17.61	31	0.1830	1.54	200	1.0 cpm			
MC-16	9/16/2010	112205	6.71	0.90	17.60	18	0.1766	1.03	200	1.0 cpm			
MC-16	9/16/2010	112505	6.78	0.83	17.66	11	0.1738	0.70	200	1.0 cpm			
MC-16	9/16/2010	112810	6.77	0.84	17.71	9	0.1734	0.61	200	1.0 cpm			
MC-17	9/16/2010	120205	6.75	1.81	19.31	64	0.2450	1.73	200	1.0 cpm	24	0.21	All parameters stable when sample was collected.
MC-17	9/16/2010	120508	6.71	1.27	19.22	38	0.3301	0.97	200	1.0 cpm			Turbidity < 5 NTU's
MC-17	9/16/2010	120826	6.72	0.91	19.16	14	0.3418	1.00	200	1.0 cpm			Do > 0.20 mg/L
MC-17	9/16/2010	121105	6.74	0.70	19.16	0	0.3397	0.53	200	1.0 cpm			
MC-17	9/16/2010	121405	6.76	0.61	19.14	-11	0.3390	0.47	200	1.0 cpm			
MC-17	9/16/2010	121723	6.74	0.51	19.13	-17	0.3369	0.45	200	1.0 cpm			
MC-17	9/16/2010	122015	6.83	0.50	19.13	-22	0.3343	0.37	200	1.0 cpm			
MC-17	9/16/2010	122337	6.82	0.48	19.17	-24	0.3338	0.30	200	1.0 cpm			
MC-17D	9/16/2010	125205	6.81	0.44	16.35	59	0.2710	4.62	400	72 Hz	15	0.17	All parameters stable when sample was collected.
MC-17D	9/16/2010	125506	6.85	0.38	17.25	60	0.2744	2.59	400	72 Hz			Turbidity < 5 NTU's
MC-17D	9/16/2010	125805	6.87	0.35	18.00	59	0.2754	1.58	400	72 Hz			Do > 0.20 mg/L
MC-17D	9/16/2010	130105	6.88	0.35	18.18	59	0.2766	1.32	400	72 Hz			
MC-17D	9/16/2010	130405	6.89	0.35	18.20	60	0.2786	1.07	400	72 Hz			
MC-21	9/16/2010	135704	7.07	0.56	19.47	84	0.2300	8.21	400	3.0 cpm	15	0.04	All parameters stable when sample was collected.
MC-21	9/16/2010	140005	6.79	0.45	19.15	35	0.2294	2.82	400	3.0 cpm			Turbidity < 5 NTU's
MC-21	9/16/2010	140305	6.70	0.40	19.20	22	0.2294	1.69	400	3.0 cpm			Do > 0.20 mg/L
MC-21	9/16/2010	140605	6.67	0.39	19.23	15	0.2293	1.37	400	3.0 cpm			Fe Field Test Kit Reading - 2.85 mg/L
MC-21	9/16/2010	140905	6.67	0.39	19.26	14	0.2297	1.60	400	3.0 cpm			

Well ID	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	C	mV	mS/cm	NTUs	ml/min	Hz or cpm	Minutes	(0.01) ft.	
MC-24D2	9/17/2010	84505	6.64	3.38	15.75	296	0.2082	1.14	400	4.0 cpm	15	0.03	All parameters stable when sample was collected.
MC-24D2	9/17/2010	84806	6.76	2.31	14.95	289	0.2067	0.93	400	4.0 cpm			Turbidity < 5 NTU's
MC-24D2	9/17/2010	85105	6.77	1.71	14.63	288	0.2065	1.56	400	4.0 cpm			Do > 0.20 mg/L
MC-24D2	9/17/2010	85411	6.87	1.59	14.56	284	0.2065	1.48	400	4.0 cpm			
MC-24D2	9/17/2010	85708	6.84	1.55	14.54	281	0.2063	0.74	400	4.0 cpm			
MC-24	9/17/2010	91617	6.86	6.30	19.34	277	0.0886	21.0	400	4.0 cpm	15	0.18	All parameters stable when sample was collected.
MC-24	9/17/2010	91905	6.77	6.02	19.49	274	0.0859	20.5	400	4.0 cpm			Turbidity > 5 NTU's but stable.
MC-24	9/17/2010	92205	6.64	6.02	19.59	269	0.0861	20.4	400	4.0 cpm			Do > 0.20 mg/L
MC-24	9/17/2010	92505	6.61	5.99	19.62	278	0.0866	19.9	400	4.0 cpm			
MC-24	9/17/2010	92805	6.60	6.03	19.64	278	0.0876	19.8	400	4.0 cpm			
MC-24D	9/17/2010	95305	6.55	2.04	15.94	283	0.3881	5.56	400	4.0 cpm	21	0.09	All parameters stable when sample was collected.
MC-24D	9/17/2010	95605	6.48	0.92	15.25	284	0.3800	4.39	400	4.0 cpm			Turbidity < 5 NTU's
MC-24D	9/17/2010	95905	6.56	0.48	15.07	284	0.3781	4.16	400	4.0 cpm			Do = 0.20 mg/L
MC-24D	9/17/2010	100219	6.57	0.32	15.05	286	0.3777	2.37	400	4.0 cpm			Fe Field Test Kit Reading - 0.44 mg/L
MC-24D	9/17/2010	100505	6.57	0.22	15.14	288	0.3788	3.06	400	4.0 cpm			
MC-24D	9/17/2010	100805	6.57	0.20	15.02	289	0.3770	2.17	400	4.0 cpm			
MC-24D	9/17/2010	101109	6.58	0.20	15.01	288	0.3768	2.00	400	4.0 cpm			
MC-1	9/17/2010	103605	7.24	0.59	19.03	10	0.2624	21.1	400	62 Hz	15	0.59	All parameters stable when sample was collected.
MC-1	9/17/2010	103905	6.92	0.42	19.78	-5	0.2398	9.43	400	62 Hz			Turbidity > 5 NTU's but stable.
MC-1	9/17/2010	104205	6.87	0.35	19.93	-8	0.2301	9.57	400	62 Hz			Do > 0.20 mg/L
MC-1	9/17/2010	104507	6.85	0.33	20.11	-9	0.2283	9.49	400	62 Hz			Fe Field Test Kit Reading - 3.30 mg/L Upper Limit.
MC-1	9/17/2010	104805	6.80	0.34	20.02	-9	0.2255	9.37	400	62 Hz			
MC-2D	9/20/2010	101005	6.88	0.79	16.71	172	0.3088	1.04	400	72 Hz	21	1.12	All parameters stable when sample was collected.
MC-2D	9/20/2010	101306	6.67	0.39	17.20	173	0.3223	0.24	400	72 Hz			Turbidity < 5 NTU's
MC-2D	9/20/2010	101605	6.60	0.28	18.20	172	0.3322	0.04	400	72 Hz			Do = 0.20 mg/L
MC-2D	9/20/2010	101906	6.46	0.22	18.90	170	0.3361	0.00	400	72 Hz			
MC-2D	9/20/2010	102205	6.59	0.19	19.28	167	0.3346	0.00	400	72 Hz			
MC-2D	9/20/2010	102513	6.52	0.20	19.42	165	0.3337	0.00	400	72 Hz			
MC-2D	9/20/2010	102819	6.57	0.20	19.57	162	0.3324	0.00	400	72 Hz			
MC-2	9/20/2010	104605	6.59	0.58	20.35	86	0.1612	8.23	400	56 Hz	18	0.55	All parameters stable when sample was collected.
MC-2	9/20/2010	104937	6.50	0.34	22.44	47	0.1608	5.24	400	56 Hz			Turbidity < 5 NTU's
MC-2	9/20/2010	105205	6.49	0.29	23.81	32	0.1630	4.43	400	56 Hz			Do > 0.20 mg/L
MC-2	9/20/2010	105505	6.48	0.28	23.97	20	0.1629	3.84	400	56 Hz			
MC-2	9/20/2010	105805	6.46	0.27	24.09	14	0.1634	3.55	400	56 Hz			
MC-2	9/20/2010	110106	6.47	0.28	24.15	12	0.1632	3.39	400	56 Hz			
MC-33	9/20/2010	113405	6.19	0.57	17.70	27	0.1594	5.95	400	4.0 cpm	15	0.18	All parameters stable when sample was collected.
MC-33	9/20/2010	113705	6.25	0.28	17.68	0	0.1428	4.70	400	4.0 cpm			Turbidity < 5 NTU's
MC-33	9/20/2010	114005	6.28	0.21	17.78	-12	0.1324	4.80	400	4.0 cpm			Do > 0.20 mg/L
MC-33	9/20/2010	114305	6.38	0.19	17.87	-20	0.1293	3.61	400	4.0 cpm			
MC-33	9/20/2010	114605	6.33	0.21	17.86	-20	0.1286	3.01	400	4.0 cpm			

Well ID	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	C	mV	mS/cm	NTUs	ml/min	Hz or cpm	Minutes	(0.01) ft.	
MC-107	9/20/2010	121805	6.78	1.93	18.10	42	0.1094	2.37	200	1.0 cpm	27	0.03	All parameters stable when sample was collected.
MC-107	9/20/2010	122105	6.71	1.52	18.06	43	0.1078	1.27	200	1.0 cpm			Turbidity < 5 NTU's
MC-107	9/20/2010	122405	6.64	1.22	18.07	44	0.1068	1.10	200	1.0 cpm			Do > 0.20 mg/L
MC-107	9/20/2010	122706	6.58	0.95	18.09	43	0.1061	1.01	200	1.0 cpm			
MC-107	9/20/2010	123029	6.61	0.79	18.14	43	0.1061	0.94	200	1.0 cpm			
MC-107	9/20/2010	123308	6.56	0.70	18.18	43	0.1059	0.25	200	1.0 cpm			
MC-107	9/20/2010	123633	6.60	0.50	18.24	41	0.1061	0.19	200	1.0 cpm			
MC-107	9/20/2010	123929	6.65	0.51	18.34	41	0.1059	0.32	200	1.0 cpm			
MC-107	9/20/2010	124206	6.59	0.49	18.35	40	0.1057	0.24	200	1.0 cpm			
MC-12	9/20/2010	130507	6.71	0.97	18.21	62	0.1184	2.07	300	2.0 cpm	18	0.04	All parameters stable when sample was collected.
MC-12	9/20/2010	130805	6.71	0.62	18.08	46	0.1203	1.53	300	2.0 cpm			Turbidity < 5 NTU's
MC-12	9/20/2010	131105	6.74	0.44	17.99	28	0.1220	1.27	300	2.0 cpm			Do > 0.20 mg/L
MC-12	9/20/2010	131405	6.81	0.34	17.96	11	0.1230	0.76	300	2.0 cpm			
MC-12	9/20/2010	131713	6.72	0.31	17.96	4	0.1241	0.64	300	2.0 cpm			
MC-12	9/20/2010	132005	6.79	0.31	18.01	3	0.1243	0.57	300	2.0 cpm			
MC-12D	9/20/2010	133720	6.31	0.38	15.29	39	0.7534	2.20	400	67 Hz	18	0.72	All parameters stable when sample was collected.
MC-12D	9/20/2010	134005	6.35	0.24	16.03	32	0.7347	0.97	400	67 Hz			Turbidity < 5 NTU's
MC-12D	9/20/2010	134318	6.36	0.16	17.58	25	0.7253	0.61	400	67 Hz			Do < 0.20 mg/L but stable.
MC-12D	9/20/2010	134617	6.37	0.07	19.09	19	0.7176	0.80	400	67 Hz			Do Test Kit Reading - 0.13 mg/L
MC-12D	9/20/2010	134918	6.42	0.06	19.25	15	0.7070	0.65	400	67 Hz			
MC-12D	9/20/2010	135207	6.44	0.07	19.55	12	0.7001	0.41	400	67 Hz			
MC-10D	9/20/2010	142205	6.53	0.10	17.46	-34	0.5392	3.48	400	80 Hz	15	0.87	All parameters stable when sample was collected.
MC-10D	9/20/2010	142505	6.53	0.04	17.82	-39	0.5307	2.11	400	80 Hz			Turbidity < 5 NTU's
MC-10D	9/20/2010	142807	6.54	0.00	18.00	-41	0.5222	1.63	400	80 Hz			Do < 0.20 mg/L but stable.
MC-10D	9/20/2010	143107	6.54	0.00	18.09	-42	0.5145	1.15	400	80 Hz			Do Test Kit Reading - 0.17 mg/L
MC-10D	9/20/2010	143405	6.55	0.00	18.16	-43	0.5075	0.97	400	80 Hz			Fe Field Test Kit Reading - 3.30 mg/L Upper Limit.
MC-25	9/21/2010	82906	6.34	4.12	20.03	286	0.0930	17.1	250	4.0 cpm	15	0.11	All parameters stable when sample was collected.
MC-25	9/21/2010	83205	6.20	3.41	20.33	280	0.0935	15.4	250	4.0 cpm			Turbidity > 5 NTU's but stable.
MC-25	9/21/2010	83505	6.20	3.14	20.35	274	0.0943	13.7	250	4.0 cpm			Do > 0.20 mg/L
MC-25	9/21/2010	83805	6.21	3.04	20.32	270	0.0942	13.2	250	4.0 cpm			
MC-25	9/21/2010	84107	6.25	2.97	20.41	265	0.0944	13.2	250	4.0 cpm			
MC-25D	9/21/2010	90505	6.40	2.39	15.78	268	0.6239	8.21	400	4.0 cpm	18	0.25	All parameters stable when sample was collected.
MC-25D	9/21/2010	90805	6.39	1.34	15.25	268	0.6195	5.96	400	4.0 cpm			Turbidity < 5 NTU's
MC-25D	9/21/2010	91105	6.41	0.90	15.08	269	0.6183	4.92	400	4.0 cpm			Do > 0.20 mg/L
MC-25D	9/21/2010	91408	6.42	0.72	14.99	271	0.6160	4.00	400	4.0 cpm			Fe Field Test Kit Reading - 0.61 mg/L
MC-25D	9/21/2010	91705	6.44	0.65	15.00	272	0.6133	3.63	400	4.0 cpm			
MC-25D	9/21/2010	92005	6.46	0.66	14.94	272	0.6091	3.20	400	4.0 cpm			

Well ID	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	C	mV	mS/cm	NTUs	ml/min	Hz or cpm	Minutes	(0.01) ft.	
MC-25D2	9/21/2010	94605	7.14	1.46	15.25	145	0.2299	7.04	400	4.0 cpm	24	0.51	All parameters stable when sample was collected.
MC-25D2	9/21/2010	94905	7.00	1.10	14.85	141	0.2367	4.79	400	4.0 cpm			Turbidity < 5 NTU's
MC-25D2	9/21/2010	95206	6.98	0.49	14.79	131	0.2249	4.84	400	4.0 cpm			Do > 0.20 mg/L
MC-25D2	9/21/2010	95505	6.97	0.50	14.72	109	0.2100	4.09	400	4.0 cpm			
MC-25D2	9/21/2010	95806	6.96	0.52	14.74	81	0.2004	3.79	400	4.0 cpm			
MC-25D2	9/21/2010	100105	6.96	0.57	14.71	60	0.1918	3.04	400	4.0 cpm			
MC-25D2	9/21/2010	100416	6.88	0.61	14.70	45	0.1848	3.93	400	4.0 cpm			
MC-25D2	9/21/2010	100711	6.95	0.61	14.73	35	0.1806	2.75	400	4.0 cpm			
MC-25D2	9/21/2010	101026	6.97	0.65	14.68	36	0.1797	2.52	400	4.0 cpm			
MC-118D	9/21/2010	103718	6.50	0.44	17.99	15	0.5125	6.91	400	74 Hz	15	1.76	All parameters stable when sample was collected.
MC-118D	9/21/2010	104005	6.51	0.36	19.34	-4	0.5159	3.95	400	74 Hz			Turbidity < 5 NTU's
MC-118D	9/21/2010	104306	6.50	0.31	20.09	-14	0.5141	3.29	400	74 Hz			Do > 0.20 mg/L
MC-118D	9/21/2010	104605	6.51	0.34	20.41	-20	0.5071	3.66	400	74 Hz			Fe Field Test Kit Reading - 3.30 mg/L Upper Limit.
MC-118D	9/21/2010	104906	6.48	0.33	20.58	-24	0.4997	3.17	400	74 Hz			
MC-118D2	9/21/2010	112009	6.61	1.97	16.85	37	0.4476	4.71	400	4.0 cpm	18	0.76	All parameters stable when sample was collected.
MC-118D2	9/21/2010	112305	6.48	0.97	16.03	34	0.4285	2.34	400	4.0 cpm			Turbidity < 5 NTU's
MC-118D2	9/21/2010	112611	6.54	0.60	15.82	28	0.4182	1.45	400	4.0 cpm			Do > 0.20 mg/L
MC-118D2	9/21/2010	112925	6.51	0.41	15.65	22	0.4099	1.37	400	4.0 cpm			
MC-118D2	9/21/2010	113207	6.47	0.39	15.67	18	0.4052	1.83	400	4.0 cpm			
MC-118D2	9/21/2010	113505	6.54	0.39	15.60	16	0.4015	1.77	400	4.0 cpm			
MC-8	9/21/2010	115705	7.02	1.30	20.58	12	0.1049	4.44	150	0.5 cpm	15	0.37	All parameters stable when sample was collected.
MC-8	9/21/2010	120005	6.88	1.27	20.75	26	0.1040	4.15	150	0.5 cpm			Turbidity < 5 NTU's
MC-8	9/21/2010	120305	6.80	1.20	20.82	36	0.1030	2.33	150	0.5 cpm			Do > 0.20 mg/L
MC-8	9/21/2010	120605	6.73	1.28	20.90	45	0.1021	3.92	150	0.5 cpm			
MC-8	9/21/2010	120906	6.75	1.24	20.85	44	0.1023	2.22	150	0.5 cpm			
MC-26D2	9/21/2010	123208	6.84	2.39	16.87	61	0.1405	2.52	400	4.0 cpm	15	0.70	All parameters stable when sample was collected.
MC-26D2	9/21/2010	123505	6.87	1.31	15.93	66	0.1404	2.67	400	4.0 cpm			Turbidity < 5 NTU's
MC-26D2	9/21/2010	123808	6.86	0.76	15.73	58	0.1405	1.77	400	4.0 cpm			Do > 0.20 mg/L
MC-26D2	9/21/2010	124105	6.83	0.73	15.39	55	0.1401	1.60	400	4.0 cpm			
MC-26D2	9/21/2010	124406	6.81	0.74	15.32	63	0.1396	1.47	400	4.0 cpm			

Well ID	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	C	mV	mS/cm	NTUs	ml/min	Hz or cpm	Minutes	(0.01) ft.	
UT-ST-1	12/13/2010	134113	6.88	2.19	13.44	56	0.0898	1.67	100	0.2 cpm	18	0.02	All parameters stable when sample was collected.
UT-ST-1	12/13/2010	134410	6.78	2.12	13.26	58	0.0894	0.56	100	0.2 cpm			Turbidity < 5 NTU's
UT-ST-1	12/13/2010	134705	6.78	2.04	13.29	56	0.0882	0.38	100	0.2 cpm			Do > 0.20 mg/L
UT-ST-1	12/13/2010	135007	6.79	2.02	13.27	55	0.0859	0.09	100	0.2 cpm			
UT-ST-1	12/13/2010	135306	6.82	2.02	13.27	53	0.0843	0.27	100	0.2 cpm			
UT-ST-1	12/13/2010	135619	6.79	1.95	13.23	55	0.0843	0.25	100	0.2 cpm			
PZU-4	12/13/2010	143606	6.75	4.44	12.30	111	0.0550	4.65	100	0.2 cpm	15	0.07	All parameters stable when sample was collected.
PZU-4	12/13/2010	143914	6.71	4.19	12.37	109	0.0543	4.25	100	0.2 cpm			Turbidity < 5 NTU's
PZU-4	12/13/2010	144205	6.72	4.33	12.40	107	0.0540	4.59	100	0.2 cpm			Do > 0.20 mg/L
PZU-4	12/13/2010	144505	6.72	4.41	12.52	105	0.0540	4.61	100	0.2 cpm			
PZU-4	12/13/2010	144806	6.73	4.29	12.61	105	0.0543	4.46	100	0.2 cpm			
MC-28D	12/14/2010	81107	6.74	3.24	11.92	200	0.1530	2.95	400	4.0 cpm	15	1.11	All parameters stable when sample was collected.
MC-28D	12/14/2010	81428	6.87	1.95	12.37	197	0.1533	1.29	400	4.0 cpm			Turbidity < 5 NTU's
MC-28D	12/14/2010	81705	6.90	1.43	12.52	196	0.1535	0.87	400	4.0 cpm			Do > 0.20 mg/L
MC-28D	12/14/2010	82006	6.95	1.34	12.56	191	0.1533	0.57	400	4.0 cpm			
MC-28D	12/14/2010	82308	6.99	1.32	12.51	190	0.1532	0.53	400	4.0 cpm			
MC-27D	12/14/2010	84907	6.91	2.71	11.65	106	0.5022	8.34	400	4.0 cpm	39	0.67	All parameters stable when sample was collected.
MC-27D	12/14/2010	85206	6.92	1.29	12.05	63	0.4995	5.86	400	4.0 cpm			Turbidity < 5 NTU's
MC-27D	12/14/2010	85505	6.92	0.71	12.17	44	0.4962	5.24	400	4.0 cpm			Do > 0.20 mg/L
MC-27D	12/14/2010	85806	6.93	0.46	12.26	32	0.4933	8.33	400	4.0 cpm			
MC-27D	12/14/2010	90105	6.93	0.35	12.31	24	0.4928	8.54	400	4.0 cpm			
MC-27D	12/14/2010	90405	6.93	0.27	12.29	18	0.4927	7.85	400	4.0 cpm			
MC-27D	12/14/2010	90705	6.94	0.25	12.32	13	0.4937	7.70	400	4.0 cpm			
MC-27D	12/14/2010	91005	6.95	0.25	12.37	9	0.4930	6.45	400	4.0 cpm			
MC-27D	12/14/2010	91307	6.93	0.21	12.43	7	0.4925	5.28	400	4.0 cpm			
MC-27D	12/14/2010	91605	6.92	0.20	12.38	4	0.4931	5.40	400	4.0 cpm			
MC-27D	12/14/2010	91905	6.94	0.23	12.34	1	0.4922	4.90	400	4.0 cpm			
MC-27D	12/14/2010	92205	6.96	0.22	12.37	-1	0.4917	4.55	400	4.0 cpm			
MC-27D	12/14/2010	92505	6.96	0.21	12.38	-3	0.4924	4.34	400	4.0 cpm			
MC-26D2	12/14/2010	95913	7.71	3.95	12.26	54	0.1356	1.52	400	4.0 cpm	15	1.51	All parameters stable when sample was collected.
MC-26D2	12/14/2010	100205	7.63	2.35	12.82	58	0.1384	0.52	400	4.0 cpm			Turbidity < 5 NTU's
MC-26D2	12/14/2010	100505	7.50	1.91	12.95	63	0.1396	0.32	400	4.0 cpm			Do > 0.20 mg/L
MC-26D2	12/14/2010	100805	7.50	1.83	12.90	62	0.1394	1.11	400	4.0 cpm			
MC-26D2	12/14/2010	101105	7.43	1.74	12.99	65	0.1390	0.98	400	4.0 cpm			
MC-8	12/14/2010	105708	7.42	6.70	9.46	135	0.0575	11.1	100	0.2 cpm	18	0.03	All parameters stable when sample was collected.
MC-8	12/14/2010	110008	7.38	6.40	9.76	138	0.0570	12.1	100	0.2 cpm			Turbidity > 5 NTU's but stable.
MC-8	12/14/2010	110330	7.30	6.17	9.93	143	0.0563	10.85	100	0.2 cpm			Do > 0.20 mg/L
MC-8	12/14/2010	110618	7.25	6.05	9.99	146	0.0560	9.95	100	0.2 cpm			
MC-8	12/14/2010	110910	7.20	6.05	9.96	150	0.0558	9.44	100	0.2 cpm			
MC-8	12/14/2010	111207	7.15	5.97	10.01	154	0.0557	9.06	100	0.2 cpm			

Well ID	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	C	mV	mS/cm	NTUs	ml/min	Hz or cpm	Minutes	(0.01) ft.	
MC-25	12/14/2010	115416	7.04	8.05	10.29	191	0.1125	8.83	375	4.0 cpm	15	0.18	All parameters stable when sample was collected.
MC-25	12/14/2010	115709	6.92	7.83	10.28	198	0.1152	6.05	375	4.0 cpm			Turbidity < 5 NTU's
MC-25	12/14/2010	120006	6.88	7.79	10.29	199	0.1147	4.85	375	4.0 cpm			Do > 0.20 mg/L
MC-25	12/14/2010	120305	6.87	7.76	10.36	200	0.1147	4.18	375	4.0 cpm			
MC-25	12/14/2010	120605	6.83	7.78	10.35	203	0.1152	3.24	375	4.0 cpm			
MC-25D2	12/14/2010	122705	7.06	4.00	13.16	200	0.1848	12.0	400	4.0 cpm	30	0.62	All parameters stable when sample was collected.
MC-25D2	12/14/2010	123008	6.86	2.72	13.46	178	0.2037	20.9	400	4.0 cpm			Turbidity > 5 NTU's but stable.
MC-25D2	12/14/2010	123305	7.02	2.05	13.34	143	0.2065	18.9	400	4.0 cpm			Do > 0.20 mg/L
MC-25D2	12/14/2010	123610	7.07	1.61	13.18	113	0.2096	15.5	400	4.0 cpm			
MC-25D2	12/14/2010	123905	7.11	1.32	13.12	84	0.2152	14.6	400	4.0 cpm			
MC-25D2	12/14/2010	124207	7.11	1.08	13.00	62	0.2208	13.0	400	4.0 cpm			
MC-25D2	12/14/2010	124505	7.09	0.99	13.00	43	0.2217	12.1	400	4.0 cpm			
MC-25D2	12/14/2010	124805	7.15	0.93	12.99	22	0.2217	9.20	400	4.0 cpm			
MC-25D2	12/14/2010	125116	7.18	0.89	12.97	19	0.2190	8.66	400	4.0 cpm			
MC-25D2	12/14/2010	125408	7.15	0.89	12.92	14	0.2174	8.34	400	4.0 cpm			
MC-25D	12/14/2010	131605	6.95	3.08	12.49	78	0.9341	2.60	400	4.0 cpm	21	0.20	All parameters stable when sample was collected.
MC-25D	12/14/2010	131907	6.88	1.19	12.97	72	0.9599	2.49	400	4.0 cpm			Turbidity < 5 NTU's
MC-25D	12/14/2010	132207	6.84	0.60	13.09	67	0.9587	2.08	400	4.0 cpm			Do > 0.20 mg/L
MC-25D	12/14/2010	132505	6.83	0.40	13.18	63	0.9572	2.15	400	4.0 cpm			
MC-25D	12/14/2010	132811	6.80	0.25	13.15	60	0.9522	1.71	400	4.0 cpm			
MC-25D	12/14/2010	133106	6.82	0.25	13.21	57	0.9456	1.49	400	4.0 cpm			
MC-25D	12/14/2010	133405	6.79	0.24	13.28	56	0.9373	1.53	400	4.0 cpm			
MC-32	12/15/2010	83205	6.66	0.51	10.40	-73	1.394	15.3	100	0.2 cpm	15	5.15	All parameters stable when sample was collected.
MC-32	12/15/2010	83507	6.67	0.33	10.51	-76	1.409	14.4	100	0.2 cpm			Turbidity > 5 NTU's but stable.
MC-32	12/15/2010	83805	6.67	0.24	10.52	-77	1.421	14.6	100	0.2 cpm			Do > 0.20 mg/L
MC-32	12/15/2010	84105	6.67	0.22	10.48	-79	1.427	14.5	100	0.2 cpm			
MC-32	12/15/2010	84405	6.66	0.22	10.38	-79	1.428	14.5	100	0.2 cpm			
MC-123	12/15/2010	94514	6.75	1.20	10.66	22	0.3827	6.56	100	0.2 cpm	21	0.37	All parameters stable when sample was collected.
MC-123	12/15/2010	94805	6.63	1.03	11.08	30	0.3808	5.68	100	0.2 cpm			Turbidity < 5 NTU's
MC-123	12/15/2010	95105	6.58	0.87	11.28	36	0.3798	4.90	100	0.2 cpm			Do > 0.20 mg/L
MC-123	12/15/2010	95410	6.53	0.83	11.27	41	0.3792	4.65	100	0.2 cpm			
MC-123	12/15/2010	95705	6.49	0.73	11.41	43	0.3794	4.27	100	0.2 cpm			
MC-123	12/15/2010	100005	6.42	0.70	11.43	46	0.3817	3.83	100	0.2 cpm			
MC-123	12/15/2010	100309	6.40	0.69	11.62	47	0.3840	3.81	100	0.2 cpm			

Well ID	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	C	mV	mS/cm	NTUs	ml/min	Hz or cpm	Minutes	(0.01) ft.	
MC-20D	12/15/2010	103407	7.43	2.61	12.40	8	0.1354	8.71	400	4.0 cpm	39	0.82	All parameters stable when sample was collected.
MC-20D	12/15/2010	103705	7.47	1.17	12.68	-23	0.1345	62.5	400	4.0 cpm			Turbidity < 5 NTU's
MC-20D	12/15/2010	104011	7.37	0.84	12.77	-40	0.1339	63.2	400	4.0 cpm			Do > 0.20 mg/L
MC-20D	12/15/2010	104312	7.44	0.64	12.75	-53	0.1335	41.0	400	4.0 cpm			
MC-20D	12/15/2010	104605	7.30	0.59	12.78	-55	0.1330	24.3	400	4.0 cpm			
MC-20D	12/15/2010	104905	7.37	0.59	12.79	-64	0.1327	12.7	400	4.0 cpm			
MC-20D	12/15/2010	105205	7.31	0.58	12.80	-64	0.1324	10.19	400	4.0 cpm			
MC-20D	12/15/2010	105505	7.37	0.55	12.85	-71	0.1323	9.49	400	4.0 cpm			
MC-20D	12/15/2010	105805	7.33	0.53	12.73	-71	0.1323	6.24	400	4.0 cpm			
MC-20D	12/15/2010	110105	7.39	0.48	12.78	-76	0.1324	5.45	400	4.0 cpm			
MC-20D	12/15/2010	110405	7.38	0.45	12.90	-77	0.1326	4.95	400	4.0 cpm			
MC-20D	12/15/2010	110705	7.40	0.42	12.90	-80	0.1322	4.49	400	4.0 cpm			
MC-20D	12/15/2010	111005	7.38	0.42	12.84	-81	0.1322	4.44	400	4.0 cpm			
MC-20	12/15/2010	113806	6.57	1.26	11.02	0	0.3683	16.6	100	0.2 cpm	57	0.03	All parameters stable when sample was collected.
MC-20	12/15/2010	114106	6.52	1.03	11.15	0	0.3557	13.7	100	0.2 cpm			Turbidity < 5 NTU's
MC-20	12/15/2010	114405	7.08	0.90	11.14	-2	0.3489	13.6	100	0.2 cpm			Do > 0.20 mg/L
MC-20	12/15/2010	114707	6.58	0.85	11.15	0	0.3626	11.6	100	0.2 cpm			
MC-20	12/15/2010	115006	6.53	0.77	11.25	1	0.3775	11.4	100	0.2 cpm			
MC-20	12/15/2010	115327	6.50	0.69	11.27	-1	0.3661	9.49	100	0.2 cpm			
MC-20	12/15/2010	115625	9.08	0.77	11.26	-6	0.3601	11.2	100	0.2 cpm			
MC-20	12/15/2010	115906	6.40	0.88	11.24	-3	0.3635	10.62	100	0.2 cpm			
MC-20	12/15/2010	120208	6.56	0.90	11.23	-4	0.3891	11.8	100	0.2 cpm			
MC-20	12/15/2010	120505	6.45	0.93	11.21	-4	0.4146	8.96	100	0.2 cpm			
MC-20	12/15/2010	120805	6.63	0.91	11.21	-9	0.4316	9.94	100	0.2 cpm			
MC-20	12/15/2010	121105	6.53	0.92	11.23	-11	0.4118	9.03	100	0.2 cpm			
MC-20	12/15/2010	121406	6.52	0.91	11.31	-10	0.3853	8.75	100	0.2 cpm			
MC-20	12/15/2010	121705	6.67	0.79	11.36	-7	0.3622	4.89	100	0.2 cpm			
MC-20	12/15/2010	122005	6.45	0.78	11.32	-4	0.3500	4.62	100	0.2 cpm			
MC-20	12/15/2010	122312	6.51	0.82	11.33	-1	0.3399	4.22	100	0.2 cpm			
MC-20	12/15/2010	122608	6.51	0.79	11.36	2	0.3321	3.43	100	0.2 cpm			
MC-20	12/15/2010	122906	6.47	0.74	11.34	4	0.3265	3.38	100	0.2 cpm			
MC-20	12/15/2010	123205	6.48	0.73	11.32	7	0.3235	2.81	100	0.2 cpm			
MC-122	12/15/2010	140606	6.71	2.96	11.29	63	0.1185	60.3	100	0.2 cpm	33	0.14	All parameters stable when sample was collected.
MC-122	12/15/2010	140929	6.62	3.08	11.09	70	0.1151	45.6	100	0.2 cpm			Turbidity > 5 NTU's but stable.
MC-122	12/15/2010	141205	6.57	3.28	10.95	75	0.1130	44.0	100	0.2 cpm			Do > 0.20 mg/L
MC-122	12/15/2010	141505	6.45	3.55	10.92	82	0.1099	29.7	100	0.2 cpm			
MC-122	12/15/2010	141805	6.46	3.68	10.87	89	0.1075	29.5	100	0.2 cpm			
MC-122	12/15/2010	142105	6.38	3.54	10.75	92	0.1062	24.1	100	0.2 cpm			
MC-122	12/15/2010	142407	6.34	3.66	10.63	98	0.1049	18.8	100	0.2 cpm			
MC-122	12/15/2010	142717	6.36	3.62	10.56	102	0.1044	16.7	100	0.2 cpm			
MC-122	12/15/2010	143005	6.34	3.53	10.46	105	0.1040	15.5	100	0.2 cpm			
MC-122	12/15/2010	143305	6.34	3.59	10.45	108	0.1039	15.5	100	0.2 cpm			
MC-122	12/15/2010	143605	6.30	3.57	10.40	111	0.1039	14.8	100	0.2 cpm			

Well ID	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	C	mV	mS/cm	NTUs	ml/min	Hz or cpm	Minutes	(0.01) ft.	
PZU-5	12/16/2010	82307	6.55	2.17	8.79	222	0.3262	54.7	100	0.2 cpm	42	0.14	All parameters stable when sample was collected.
PZU-5	12/16/2010	82605	6.62	1.90	9.09	208	0.3259	55.2	100	0.2 cpm			Turbidity > 5 NTU's but stable.
PZU-5	12/16/2010	82905	6.65	1.71	9.36	200	0.3261	51.7	100	0.2 cpm			Do > 0.20 mg/L
PZU-5	12/16/2010	83205	6.61	1.52	9.56	193	0.3266	44.7	100	0.2 cpm			
PZU-5	12/16/2010	83505	6.66	1.42	9.66	187	0.3260	37.9	100	0.2 cpm			
PZU-5	12/16/2010	83805	6.59	1.36	9.69	183	0.3259	37.0	100	0.2 cpm			
PZU-5	12/16/2010	84111	6.61	1.34	9.67	180	0.3238	37.6	100	0.2 cpm			
PZU-5	12/16/2010	84442	6.61	1.20	9.60	177	0.3211	31.0	100	0.2 cpm			
PZU-5	12/16/2010	84706	6.62	1.20	9.59	176	0.3187	26.6	100	0.2 cpm			
PZU-5	12/16/2010	85005	6.58	1.28	9.79	174	0.3161	21.5	100	0.2 cpm			
PZU-5	12/16/2010	85305	6.62	1.38	9.89	172	0.3129	21.7	100	0.2 cpm			
PZU-5	12/16/2010	85605	6.60	1.42	10.10	171	0.3101	16.2	100	0.2 cpm			
PZU-5	12/16/2010	85905	6.61	1.53	10.21	171	0.3084	16.4	100	0.2 cpm			
PZU-5	12/16/2010	90208	6.63	1.52	10.31	171	0.3076	15.1	100	0.2 cpm			
MC-118D	12/16/2010	94305	6.84	0.64	13.65	81	0.8074	32.7	100	61 Hz	27	1.98	All parameters stable when sample was collected.
MC-118D	12/16/2010	94605	6.80	0.13	15.25	16	0.8262	12.7	100	61 Hz			Turbidity < 5 NTU's
MC-118D	12/16/2010	94905	6.77	0.02	16.59	-10	0.8112	6.37	100	61 Hz			Do < 0.20 mg/L but stable.
MC-118D	12/16/2010	95205	6.78	0.00	17.12	-23	0.7686	4.31	100	61 Hz			Do Test Kit Reading - 0.07 mg/L
MC-118D	12/16/2010	95505	6.81	0.95	16.84	-29	0.7044	18.5	100	61 Hz			
MC-118D	12/16/2010	95809	6.77	0.07	17.13	-32	0.7422	10.04	100	61 Hz			
MC-118D	12/16/2010	100106	6.76	0.00	17.65	-38	0.7624	4.64	100	61 Hz			
MC-118D	12/16/2010	100406	6.76	0.00	17.92	-42	0.7751	3.52	100	61 Hz			
MC-118D	12/16/2010	100705	6.74	0.00	18.06	-46	0.7828	3.16	100	61 Hz			
MC-118D2	12/16/2010	102906	7.06	2.27	13.26	-14	0.6068	4.40	400	4.0 cpm	33	0.82	All parameters stable when sample was collected.
MC-118D2	12/16/2010	103205	6.80	0.77	13.46	-10	0.6495	2.49	400	4.0 cpm			Turbidity < 5 NTU's
MC-118D2	12/16/2010	103506	6.85	0.27	13.55	-13	0.6515	2.12	400	4.0 cpm			Do < 0.20 mg/L but stable.
MC-118D2	12/16/2010	103806	6.82	0.08	13.53	-14	0.6378	0.92	400	4.0 cpm			Do Test Kit Reading - 0.32 mg/L
MC-118D2	12/16/2010	104105	6.82	0.01	13.56	-17	0.6223	1.15	400	4.0 cpm			
MC-118D2	12/16/2010	104405	6.81	0.00	13.60	-18	0.6097	0.85	400	4.0 cpm			
MC-118D2	12/16/2010	104705	6.86	0.00	13.60	-20	0.5980	0.31	400	4.0 cpm			
MC-118D2	12/16/2010	105005	6.79	0.00	13.59	-20	0.5879	0.27	400	4.0 cpm			
MC-118D2	12/16/2010	105306	6.85	0.00	13.59	-21	0.5781	0.26	400	4.0 cpm			
MC-118D2	12/16/2010	105608	6.84	0.00	13.57	-22	0.5693	0.52	400	4.0 cpm			
MC-118D2	12/16/2010	105906	6.81	0.00	13.53	-20	0.5611	0.33	400	4.0 cpm			
MC-24D2	12/16/2010	113105	7.73	4.38	12.00	-15	0.1247	0.68	400	4.0 cpm	18	0.04	All parameters stable when sample was collected.
MC-24D2	12/16/2010	113437	7.55	2.17	12.91	-4	0.1257	0.71	400	4.0 cpm			Turbidity < 5 NTU's
MC-24D2	12/16/2010	113705	7.49	1.80	13.02	-2	0.1256	1.45	400	4.0 cpm			Do > 0.20 mg/L
MC-24D2	12/16/2010	114005	7.41	1.60	13.03	4	0.1259	1.45	400	4.0 cpm			
MC-24D2	12/16/2010	114305	7.43	1.56	13.07	5	0.1261	1.37	400	4.0 cpm			
MC-24D2	12/16/2010	114605	7.36	1.50	13.12	8	0.1260	1.33	400	4.0 cpm			
MC-24	12/16/2010	120212	7.67	7.51	9.99	34	0.0299	16.5	400	4.0 cpm	15	0.14	All parameters stable when sample was collected.
MC-24	12/16/2010	120505	7.61	7.17	9.80	37	0.0274	17.1	400	4.0 cpm			Turbidity > 5 NTU's but stable.
MC-24	12/16/2010	120805	7.31	7.05	9.65	53	0.0269	16.7	400	4.0 cpm			Do > 0.20 mg/L
MC-24	12/16/2010	121105	7.35	7.05	9.59	54	0.0270	16.9	400	4.0 cpm			
MC-24	12/16/2010	121406	7.35	7.05	9.50	56	0.0269	16.9	400	4.0 cpm			

Well ID	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	C	mV	mS/cm	NTUs	ml/min	Hz or cpm	Minutes	(0.01) ft.	
MC-24D	12/16/2010	123405	6.96	2.65	12.34	103	0.9527	1.56	400	4.0 cpm	18	0.27	All parameters stable when sample was collected.
MC-24D	12/16/2010	123708	6.83	0.92	12.99	97	0.9665	1.48	400	4.0 cpm			Turbidity < 5 NTU's
MC-24D	12/16/2010	124005	6.66	0.38	13.21	93	0.9693	1.80	400	4.0 cpm			Do < 0.20 mg/L but stable.
MC-24D	12/16/2010	124305	6.58	0.10	13.25	87	0.9685	2.19	400	4.0 cpm			Do Test Kit Reading - 0.34 mg/L
MC-24D	12/16/2010	124605	6.66	0.09	13.26	83	0.9658	2.96	400	4.0 cpm			
MC-24D	12/16/2010	124915	6.67	0.09	13.29	79	0.9661	2.96	400	4.0 cpm			
MC-2	12/16/2010	132205	7.57	0.38	13.79	-58	0.1620	7.48	400	47 Hz	18	0.48	All parameters stable when sample was collected.
MC-2	12/16/2010	132505	7.34	0.17	14.75	-63	0.1728	4.30	400	47 Hz			Turbidity < 5 NTU's
MC-2	12/16/2010	132805	7.24	0.13	15.79	-60	0.1765	1.65	400	47 Hz			Do < 0.20 mg/L but stable.
MC-2	12/16/2010	133105	7.13	0.12	16.30	-57	0.1761	0.92	400	47 Hz			Do Test Kit Reading - 0.27 mg/L
MC-2	12/16/2010	133408	7.06	0.11	16.59	-54	0.1733	0.94	400	47 Hz			
MC-2	12/16/2010	133706	7.04	0.11	16.76	-53	0.1729	0.74	400	47 Hz			
MC-2D	12/16/2010	135519	6.90	1.24	14.20	-4	0.3104	0.37	400	56 Hz	18	1.55	All parameters stable when sample was collected.
MC-2D	12/16/2010	135805	6.92	0.34	15.19	-4	0.3149	0.16	400	56 Hz			Turbidity < 5 NTU's
MC-2D	12/16/2010	140105	6.93	0.16	16.20	-5	0.3145	0.06	400	56 Hz			Do < 0.20 mg/L but stable.
MC-2D	12/16/2010	140405	6.89	0.14	16.64	-4	0.3152	0.07	400	56 Hz			Do Test Kit Reading - 0.36 mg/L
MC-2D	12/16/2010	140705	6.94	0.13	17.03	-2	0.3151	0.10	400	56 Hz			
MC-2D	12/16/2010	141006	6.92	0.13	17.13	-1	0.3140	0.08	400	56 Hz			
MC-1	12/16/2010	143905	7.52	6.17	10.19	21	0.0370	24.9	400	48 Hz	18	0.10	All parameters stable when sample was collected.
MC-1	12/16/2010	144205	7.51	6.41	11.39	22	0.0374	21.6	400	48 Hz			Turbidity > 5 NTU's but stable.
MC-1	12/16/2010	144505	7.59	6.38	12.28	20	0.0374	21.2	400	48 Hz			Do > 0.20 mg/L
MC-1	12/16/2010	144805	7.55	6.33	12.95	26	0.0373	20.6	400	48 Hz			
MC-1	12/16/2010	145105	7.50	6.30	13.22	33	0.0368	20.6	400	48 Hz			
MC-1	12/16/2010	145406	7.46	6.34	13.32	35	0.0368	20.2	400	48 Hz			
MC-21	12/17/2010	82024	6.62	2.00	10.42	126	0.0815	9.68	400	3.0 cpm	24	0.03	All parameters stable when sample was collected.
MC-21	12/17/2010	82358	6.68	2.55	10.57	77	0.0816	6.34	400	3.0 cpm			Turbidity < 5 NTU's
MC-21	12/17/2010	82605	6.81	2.70	10.63	60	0.0822	4.84	400	3.0 cpm			Do > 0.20 mg/L
MC-21	12/17/2010	82905	6.80	2.82	10.71	42	0.0828	4.08	400	3.0 cpm			
MC-21	12/17/2010	83205	6.85	3.01	10.69	30	0.0827	3.28	400	3.0 cpm			
MC-21	12/17/2010	83506	6.83	2.97	10.72	21	0.0834	3.41	400	3.0 cpm			
MC-21	12/17/2010	83805	6.85	3.01	10.68	15	0.0837	3.33	400	3.0 cpm			
MC-21	12/17/2010	84105	6.85	3.05	10.67	12	0.0835	3.20	400	3.0 cpm			
MC-13D	12/17/2010	90606	6.92	2.44	10.02	27	0.1351	2.40	200	1.0 cpm	21	0.71	All parameters stable when sample was collected.
MC-13D	12/17/2010	90923	7.04	1.97	10.27	29	0.1353	1.52	200	1.0 cpm			Turbidity < 5 NTU's
MC-13D	12/17/2010	91205	7.07	1.63	10.43	30	0.1356	1.22	200	1.0 cpm			Do > 0.20 mg/L
MC-13D	12/17/2010	91505	7.02	1.39	10.55	32	0.1355	1.17	200	1.0 cpm			
MC-13D	12/17/2010	91805	7.03	1.28	10.65	33	0.1358	0.77	200	1.0 cpm			
MC-13D	12/17/2010	92105	7.04	1.20	10.74	34	0.1361	0.76	200	1.0 cpm			
MC-13D	12/17/2010	92406	7.03	1.16	10.78	36	0.1357	0.35	200	1.0 cpm			

Well ID	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	C	mV	mS/cm	NTUs	ml/min	Hz or cpm	Minutes	(0.01) ft.	
MC-13	12/17/2010	94606	7.24	0.75	9.36	65	0.0487	44.7	400	4.0 cpm	21	0.11	All parameters stable when sample was collected.
MC-13	12/17/2010	94905	7.20	0.74	9.44	61	0.0407	28.8	400	4.0 cpm			Turbidity > 5 NTU's but stable.
MC-13	12/17/2010	95206	7.20	1.15	9.53	62	0.0396	16.0	400	4.0 cpm			Do > 0.20 mg/L
MC-13	12/17/2010	95505	7.10	1.43	9.56	63	0.0397	11.9	400	4.0 cpm			
MC-13	12/17/2010	95805	7.07	2.00	9.47	66	0.0404	11.6	400	4.0 cpm			
MC-13	12/17/2010	100105	7.02	1.95	9.58	65	0.0406	11.4	400	4.0 cpm			
MC-13	12/17/2010	100406	7.10	2.08	9.56	64	0.0406	10.54	400	4.0 cpm			
MC-14D	12/17/2010	104314	7.30	3.77	11.42	81	0.1217	2.75	400	4.0 cpm	27	1.37	All parameters stable when sample was collected.
MC-14D	12/17/2010	104609	7.22	1.58	12.48	52	0.1211	1.68	400	4.0 cpm			Turbidity < 5 NTU's
MC-14D	12/17/2010	104905	7.35	0.91	12.77	14	0.1201	1.31	400	4.0 cpm			Do > 0.20 mg/L
MC-14D	12/17/2010	105205	7.34	0.67	12.81	-2	0.1200	0.85	400	4.0 cpm			
MC-14D	12/17/2010	105506	7.36	0.57	12.84	-22	0.1201	0.59	400	4.0 cpm			
MC-14D	12/17/2010	105806	7.29	0.52	12.83	-28	0.1202	0.42	400	4.0 cpm			
MC-14D	12/17/2010	110105	7.39	0.47	12.86	-40	0.1202	0.46	400	4.0 cpm			
MC-14D	12/17/2010	110405	7.37	0.43	12.91	-43	0.1203	0.27	400	4.0 cpm			
MC-14D	12/17/2010	110705	7.41	0.45	12.87	-50	0.1200	0.27	400	4.0 cpm			
MC-14	12/20/2010	101105	6.61	1.47	7.25	36	0.4133	43.4	100	0.2 cpm	54	1.33	All parameters stable when sample was collected.
MC-14	12/20/2010	101406	6.59	1.29	7.65	27	0.3762	37.6	100	0.2 cpm			Turbidity < 5 NTU's
MC-14	12/20/2010	101705	6.62	1.16	8.13	20	0.3487	24.2	100	0.2 cpm			Do > 0.20 mg/L
MC-14	12/20/2010	102006	6.61	0.98	8.35	16	0.3362	21.4	100	0.2 cpm			
MC-14	12/20/2010	102306	6.61	0.95	8.31	14	0.3368	14.1	100	0.2 cpm			
MC-14	12/20/2010	102605	6.58	0.94	8.09	12	0.3405	13.5	100	0.2 cpm			
MC-14	12/20/2010	102907	6.56	0.91	7.91	10	0.3518	9.07	100	0.2 cpm			
MC-14	12/20/2010	103205	6.57	0.88	7.86	7	0.3587	9.04	100	0.2 cpm			
MC-14	12/20/2010	103510	6.56	0.84	7.79	4	0.3654	8.35	100	0.2 cpm			
MC-14	12/20/2010	103806	6.59	0.86	7.84	1	0.3773	4.69	100	0.2 cpm			
MC-14	12/20/2010	104105	6.61	0.79	7.98	-2	0.3799	4.89	100	0.2 cpm			
MC-14	12/20/2010	104414	6.60	0.75	8.18	-6	0.3817	3.52	100	0.2 cpm			
MC-14	12/20/2010	104705	6.63	0.68	8.40	-9	0.3784	4.17	100	0.2 cpm			
MC-14	12/20/2010	105005	6.63	0.63	8.37	-11	0.3865	2.54	100	0.2 cpm			
MC-14	12/20/2010	105305	6.61	0.59	8.63	-13	0.3970	2.04	100	0.2 cpm			
MC-14	12/20/2010	105606	6.67	0.52	8.99	-16	0.3875	3.98	100	0.2 cpm			
MC-14	12/20/2010	105905	6.68	0.50	9.11	-18	0.3856	2.38	100	0.2 cpm			
MC-14	12/20/2010	110208	6.63	0.47	8.88	-18	0.3989	1.71	100	0.2 cpm			
MC-12	12/20/2010	113306	7.37	1.68	8.91	-18	0.0780	15.6	350	3.0 cpm	27	0.01	All parameters stable when sample was collected.
MC-12	12/20/2010	113605	7.35	1.29	9.45	-18	0.0791	18.0	350	3.0 cpm			Turbidity < 5 NTU's
MC-12	12/20/2010	113905	7.25	1.10	9.57	-20	0.0796	15.7	350	3.0 cpm			Do > 0.20 mg/L
MC-12	12/20/2010	114205	7.25	0.96	9.87	-23	0.0842	8.96	350	3.0 cpm			
MC-12	12/20/2010	114506	7.28	1.08	10.07	-28	0.0833	6.44	350	3.0 cpm			
MC-12	12/20/2010	114805	7.25	0.93	10.12	-32	0.0838	5.63	350	3.0 cpm			
MC-12	12/20/2010	115113	7.21	1.06	10.17	-37	0.0838	4.09	350	3.0 cpm			
MC-12	12/20/2010	115406	7.23	1.06	10.17	-41	0.0824	3.67	350	3.0 cpm			
MC-12	12/20/2010	115705	7.17	1.13	10.20	-44	0.0824	3.62	350	3.0 cpm			

Well ID	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	C	mV	mS/cm	NTUs	ml/min	Hz or cpm	Minutes	(0.01) ft.	
MC-12D	12/20/2010	121606	6.72	0.75	11.75	3	0.7937	179	400	54 Hz	54	0.74	All parameters stable when sample was collected.
MC-12D	12/20/2010	121905	6.73	0.30	12.32	-6	0.8010	44.2	400	54 Hz			Turbidity < 5 NTU's
MC-12D	12/20/2010	122205	6.76	0.23	14.00	-14	0.7995	11.4	400	54 Hz			Do < 0.20 mg/L but stable.
MC-12D	12/20/2010	122505	6.77	0.17	15.14	-19	0.7967	3.73	400	54 Hz			Do Test Kit Reading - 0.29 mg/L
MC-12D	12/20/2010	122806	6.77	0.15	15.32	-22	0.7922	3.86	400	54 Hz			
MC-12D	12/20/2010	123106	6.77	0.13	15.54	-24	0.7892	4.94	400	54 Hz			
MC-12D	12/20/2010	123411	6.78	0.10	15.86	-25	0.7850	4.99	400	54 Hz			
MC-12D	12/20/2010	123707	6.77	0.13	15.97	-26	0.7861	9.13	400	54 Hz			
MC-12D	12/20/2010	124028	6.77	0.11	16.28	-27	0.7826	8.22	400	54 Hz			
MC-12D	12/20/2010	124305	6.76	0.11	16.30	-28	0.7820	10.19	400	54 Hz			
MC-12D	12/20/2010	124605	6.75	0.10	16.21	-27	0.7795	7.63	400	54 Hz			
MC-12D	12/20/2010	124906	6.75	0.07	16.26	-28	0.7791	7.96	400	54 Hz			
MC-12D	12/20/2010	125208	6.75	0.08	16.44	-28	0.7786	7.39	400	54 Hz			
MC-12D	12/20/2010	125505	6.75	0.07	16.49	-29	0.7765	6.59	400	54 Hz			
MC-12D	12/20/2010	125805	6.75	0.07	16.58	-29	0.7760	5.15	400	54 Hz			
MC-12D	12/20/2010	130105	6.74	0.07	16.64	-29	0.7753	4.84	400	54 Hz			
MC-12D	12/20/2010	130405	6.74	0.06	16.50	-29	0.7745	4.61	400	54 Hz			
MC-12D	12/20/2010	130707	6.74	0.06	16.60	-29	0.7737	4.28	400	54 Hz			
MC-30D	12/20/2010	133205	6.82	2.44	11.38	11	0.9849	2.37	400	4.0 cpm	21	0.12	All parameters stable when sample was collected.
MC-30D	12/20/2010	133511	6.66	0.97	12.02	16	1.032	1.69	400	4.0 cpm			Turbidity < 5 NTU's
MC-30D	12/20/2010	133805	6.58	0.52	12.19	17	1.039	0.83	400	4.0 cpm			Do < 0.20 mg/L but stable.
MC-30D	12/20/2010	134105	6.56	0.33	12.13	17	1.038	1.07	400	4.0 cpm			Do Test Kit Reading - 0.33 mg/L
MC-30D	12/20/2010	134405	6.55	0.17	12.09	17	1.037	1.54	400	4.0 cpm			
MC-30D	12/20/2010	134706	6.55	0.16	12.16	17	1.034	0.91	400	4.0 cpm			
MC-30D	12/20/2010	135006	6.55	0.17	12.16	17	1.032	0.88	400	4.0 cpm			
MC-30	12/20/2010	140609	7.71	6.59	10.04	-9	0.0833	19.3	400	4.0 cpm	24	0.32	All parameters stable when sample was collected.
MC-30	12/20/2010	140905	7.65	4.96	10.38	-3	0.0779	12.4	400	4.0 cpm			Turbidity < 5 NTU's
MC-30	12/20/2010	141205	7.55	3.54	10.49	4	0.0826	8.37	400	4.0 cpm			Do > 0.20 mg/L
MC-30	12/20/2010	141505	7.55	2.80	10.53	5	0.0861	6.74	400	4.0 cpm			
MC-30	12/20/2010	141805	7.50	2.39	10.49	7	0.0884	5.44	400	4.0 cpm			
MC-30	12/20/2010	142105	7.50	2.06	10.53	7	0.0908	4.76	400	4.0 cpm			
MC-30	12/20/2010	142405	7.47	1.87	10.58	9	0.0918	4.53	400	4.0 cpm			
MC-30	12/20/2010	142705	7.46	1.86	10.61	8	0.0917	4.00	400	4.0 cpm			
MC-10D	12/20/2010	145306	6.87	0.20	14.13	-43	0.8239	13.8	400	67 Hz	24	0.68	All parameters stable when sample was collected.
MC-10D	12/20/2010	145605	6.86	0.17	15.12	-53	0.8259	3.83	400	67 Hz			Turbidity > 5 NTU's but stable.
MC-10D	12/20/2010	145905	6.85	0.13	15.53	-59	0.8279	9.31	400	67 Hz			Do < 0.20 mg/L but stable.
MC-10D	12/20/2010	150205	6.84	0.12	15.69	-63	0.8305	22.6	400	67 Hz			Do Test Kit Reading - 0.49 mg/L
MC-10D	12/20/2010	150510	6.83	0.11	15.84	-67	0.8328	17.4	400	67 Hz			
MC-10D	12/20/2010	150805	6.81	0.07	15.89	-68	0.8348	11.7	400	67 Hz			
MC-10D	12/20/2010	151105	6.81	0.06	15.97	-70	0.8359	11.4	400	67 Hz			
MC-10D	12/20/2010	151405	6.81	0.06	15.99	-71	0.8379	10.82	400	67 Hz			

Well ID	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	C	mV	mS/cm	NTUs	ml/min	Hz or cpm	Minutes	(0.01) ft.	
MC-31	12/21/2010	92716	6.87	1.09	9.76	97	0.0745	40.2	400	4.0 cpm	30	0.10	All parameters stable when sample was collected.
MC-31	12/21/2010	93005	7.04	0.42	9.93	47	0.0713	24.4	400	4.0 cpm			Turbidity > 5 NTU's but stable.
MC-31	12/21/2010	93305	7.08	0.29	10.04	7	0.0724	18.2	400	4.0 cpm			Do > 0.20 mg/L
MC-31	12/21/2010	93605	7.05	0.25	10.13	-15	0.0750	16.1	400	4.0 cpm			
MC-31	12/21/2010	93905	7.07	0.22	10.11	-33	0.0769	13.1	400	4.0 cpm			
MC-31	12/21/2010	94205	7.04	0.21	10.17	-43	0.0789	12.1	400	4.0 cpm			
MC-31	12/21/2010	94505	7.05	0.22	10.14	-51	0.0805	12.1	400	4.0 cpm			
MC-31	12/21/2010	94825	7.06	0.20	10.21	-57	0.0814	10.24	400	4.0 cpm			
MC-31	12/21/2010	95106	7.04	0.20	10.19	-54	0.0825	9.55	400	4.0 cpm			
MC-31	12/21/2010	95405	7.05	0.21	10.20	-64	0.0822	9.53	400	4.0 cpm			
MC-107	12/21/2010	104028	7.59	6.20	8.75	-8	0.0413	27.9	300	3.0 cpm	24	0.03	All parameters stable when sample was collected.
MC-107	12/21/2010	104305	7.53	5.53	9.07	-2	0.0426	16.4	300	3.0 cpm			Turbidity < 5 NTU's
MC-107	12/21/2010	104606	7.38	5.10	9.14	5	0.0437	7.91	300	3.0 cpm			Do > 0.20 mg/L
MC-107	12/21/2010	104906	7.35	4.64	9.09	11	0.0459	7.60	300	3.0 cpm			
MC-107	12/21/2010	105205	7.22	4.23	9.08	14	0.0483	5.42	300	3.0 cpm			
MC-107	12/21/2010	105505	7.26	4.09	9.08	17	0.0495	4.37	300	3.0 cpm			
MC-107	12/21/2010	105805	7.21	3.80	9.17	17	0.0507	4.28	300	3.0 cpm			
MC-107	12/21/2010	110105	7.25	3.79	9.20	19	0.0500	3.04	300	3.0 cpm			
MC-33	12/21/2010	112305	7.07	1.35	11.30	30	0.1639	146	400	4.0 cpm	30	0.46	All parameters stable when sample was collected.
MC-33	12/21/2010	112606	6.63	0.41	11.24	-9	0.1675	80.2	400	4.0 cpm			Turbidity > 5 NTU's but stable.
MC-33	12/21/2010	112906	6.75	0.24	11.23	-29	0.1641	54.6	400	4.0 cpm			Do > 0.20 mg/L
MC-33	12/21/2010	113205	6.76	0.21	11.22	-39	0.1574	42.8	400	4.0 cpm			
MC-33	12/21/2010	113505	6.77	0.22	11.26	-48	0.1507	33.0	400	4.0 cpm			
MC-33	12/21/2010	113805	6.82	0.18	11.23	-54	0.1442	24.2	400	4.0 cpm			
MC-33	12/21/2010	114105	6.84	0.20	11.30	-58	0.1391	18.1	400	4.0 cpm			
MC-33	12/21/2010	114405	6.86	0.22	11.32	-61	0.1353	14.1	400	4.0 cpm			
MC-33	12/21/2010	114705	6.85	0.20	11.30	-64	0.1325	13.1	400	4.0 cpm			
MC-33	12/21/2010	115006	6.90	0.21	11.31	-66	0.1319	12.9	400	4.0 cpm			
MC-15D	12/21/2010	122324	7.01	1.53	11.43	-11	0.3347	3.01	400	55 Hz	24	0.87	All parameters stable when sample was collected.
MC-15D	12/21/2010	122613	6.97	0.95	12.19	-12	0.3459	1.32	400	55 Hz			Turbidity < 5 NTU's
MC-15D	12/21/2010	122906	6.97	0.65	13.28	-13	0.3560	0.46	400	55 Hz			Do > 0.20 mg/L
MC-15D	12/21/2010	123206	6.94	0.48	14.07	-13	0.3596	0.49	400	55 Hz			
MC-15D	12/21/2010	123505	6.92	0.43	14.41	-12	0.3623	0.22	400	55 Hz			
MC-15D	12/21/2010	123805	6.90	0.33	14.48	-11	0.3644	0.17	400	55 Hz			
MC-15D	12/21/2010	124106	6.89	0.30	14.60	-10	0.3652	0.08	400	55 Hz			
MC-15D	12/21/2010	124405	6.88	0.30	14.62	-9	0.3669	0.06	400	55 Hz			

Well ID	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	C	mV	mS/cm	NTUs	ml/min	Hz or cpm	Minutes	(0.01) ft.	
MC-15	12/21/2010	131323	7.82	6.25	7.57	7	0.0520	17.4	200	2.0 cpm	42	0.27	All parameters stable when sample was collected.
MC-15	12/21/2010	131605	7.56	4.94	7.42	25	0.0609	13.1	200	2.0 cpm			Turbidity < 5 NTU's
MC-15	12/21/2010	131905	7.30	3.93	7.28	38	0.0655	10.00	200	2.0 cpm			Do > 0.20 mg/L
MC-15	12/21/2010	132205	7.13	3.26	7.18	46	0.0659	6.71	200	2.0 cpm			
MC-15	12/21/2010	132505	6.98	3.01	7.14	51	0.0626	5.65	200	2.0 cpm			
MC-15	12/21/2010	132805	6.95	2.77	7.15	53	0.0580	4.67	200	2.0 cpm			
MC-15	12/21/2010	133105	6.88	2.78	7.17	54	0.0540	4.55	200	2.0 cpm			
MC-15	12/21/2010	133405	6.94	2.79	7.15	56	0.0510	3.98	200	2.0 cpm			
MC-15	12/21/2010	133705	6.91	2.92	7.12	59	0.0479	3.56	200	2.0 cpm			
MC-15	12/21/2010	134005	6.82	2.89	7.11	60	0.0458	2.95	200	2.0 cpm			
MC-15	12/21/2010	134308	6.83	2.82	7.10	62	0.0439	3.37	200	2.0 cpm			
MC-15	12/21/2010	134605	6.80	2.74	7.08	63	0.0423	3.24	200	2.0 cpm			
MC-15	12/21/2010	134905	6.88	2.70	7.08	64	0.0429	3.09	200	2.0 cpm			
MC-15	12/21/2010	135206	6.90	2.71	7.03	65	0.0415	2.80	200	2.0 cpm			
MC-16	12/21/2010	141633	6.94	2.86	7.81	69	0.0619	37.5	200	2.0 cpm	24	0.20	All parameters stable when sample was collected.
MC-16	12/21/2010	141905	6.89	2.43	7.76	69	0.0641	33.4	200	2.0 cpm			Turbidity > 5 NTU's but stable.
MC-16	12/21/2010	142206	6.84	2.27	7.60	71	0.0654	21.1	200	2.0 cpm			Do > 0.20 mg/L
MC-16	12/21/2010	142505	6.76	2.20	7.54	72	0.0662	15.2	200	2.0 cpm			
MC-16	12/21/2010	142805	6.77	2.18	7.72	71	0.0687	16.3	200	2.0 cpm			
MC-16	12/21/2010	143105	6.90	1.89	7.77	68	0.0733	16.8	200	2.0 cpm			
MC-16	12/21/2010	143405	6.85	1.77	7.81	67	0.0740	16.2	200	2.0 cpm			
MC-16	12/21/2010	143707	6.88	1.73	7.92	65	0.0752	15.4	200	2.0 cpm			
MC-17	12/21/2010	150717	7.01	1.29	9.24	79	0.0699	17.3	200	2.0 cpm	24	0.07	All parameters stable when sample was collected.
MC-17	12/21/2010	151006	7.04	1.36	9.32	79	0.0677	13.5	200	2.0 cpm			Turbidity < 5 NTU's
MC-17	12/21/2010	151309	6.86	1.68	9.28	82	0.0661	9.00	200	2.0 cpm			Do > 0.20 mg/L
MC-17	12/21/2010	151609	6.88	2.09	9.24	84	0.0651	6.15	200	2.0 cpm			
MC-17	12/21/2010	151905	6.84	2.37	9.25	86	0.0648	4.20	200	2.0 cpm			
MC-17	12/21/2010	152227	6.82	2.64	9.24	86	0.0638	3.84	200	2.0 cpm			
MC-17	12/21/2010	152505	6.74	2.84	9.19	88	0.0633	3.40	200	2.0 cpm			
MC-17	12/21/2010	152807	6.81	2.90	9.14	89	0.0629	3.13	200	2.0 cpm			
MC-17D	12/21/2010	155206	6.92	1.28	12.02	99	0.1624	38.3	400	60 Hz	18	0.48	All parameters stable when sample was collected.
MC-17D	12/21/2010	155505	6.95	0.51	12.50	92	0.1638	16.0	400	60 Hz			Turbidity < 5 NTU's
MC-17D	12/21/2010	155805	6.97	0.37	12.95	87	0.1637	4.33	400	60 Hz			Do > 0.20 mg/L
MC-17D	12/21/2010	160105	6.99	0.30	13.54	82	0.1640	1.47	400	60 Hz			
MC-17D	12/21/2010	160405	6.99	0.28	13.65	78	0.1645	0.70	400	60 Hz			
MC-17D	12/21/2010	160707	6.99	0.29	13.92	75	0.1642	0.56	400	60 Hz			
MC-19D	12/21/2010	164023	7.42	2.61	12.86	99	0.1213	17.5	400	66 Hz	21	0.00	All parameters stable when sample was collected.
MC-19D	12/21/2010	164305	7.38	0.89	12.71	99	0.1205	14.2	400	66 Hz			Turbidity < 5 NTU's
MC-19D	12/21/2010	164605	7.28	0.42	13.38	95	0.1209	3.54	400	66 Hz			Do > 0.20 mg/L
MC-19D	12/21/2010	164907	7.27	0.27	14.25	89	0.1209	2.66	400	66 Hz			
MC-19D	12/21/2010	165205	7.26	0.25	15.07	84	0.1215	1.22	400	66 Hz			
MC-19D	12/21/2010	165506	7.23	0.23	15.42	79	0.1218	0.88	400	66 Hz			
MC-19D	12/21/2010	165805	7.20	0.23	15.48	76	0.1220	0.74	400	66 Hz			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	C	mV	mS/cm	NTUs	ml/min.	HZ or cpm	Minutes	(0.01) ft.	
UT-ST-1	32111	144909	6.84	1.87	9.33	130	0.0906	8.47	100	0.2 cpm	27	0.03	All parameters stable when sample was collected.
UT-ST-1	32111	145206	6.87	1.73	9.14	134	0.0830	7.09	100	0.2 cpm			Turbidity < 5 NTU
UT-ST-1	32111	145511	6.91	1.89	9.03	126	0.0771	4.48	100	0.2 cpm			Do > 0.20 mg/L
UT-ST-1	32111	145808	6.97	1.96	9.00	122	0.0722	4.24	100	0.2 cpm			
UT-ST-1	32111	150113	7.03	2.14	9.01	119	0.0687	3.67	100	0.2 cpm			
UT-ST-1	32111	150407	7.06	2.35	9.03	116	0.0667	3.02	100	0.2 cpm			
UT-ST-1	32111	150705	7.11	2.41	9.09	114	0.0652	2.32	100	0.2 cpm			
UT-ST-1	32111	151012	7.12	2.46	9.20	114	0.0639	1.96	100	0.2 cpm			
UT-ST-1	32111	151305	7.13	2.50	9.24	113	0.0633	1.88	100	0.2 cpm			
PZU-4	32111	160006	6.89	1.45	9.80	145	0.1025	42.7	100	0.2 cpm	48	0.07	All parameters stable when sample was collected.
PZU-4	32111	160319	6.89	1.33	9.77	132	0.1002	50.5	100	0.2 cpm			Turbidity > 5 NTU but stable.
PZU-4	32111	160605	6.89	1.31	9.61	129	0.0972	49.8	100	0.2 cpm			Do > 0.20 mg/L
PZU-4	32111	160907	6.93	1.48	9.50	127	0.0959	69.9	100	0.2 cpm			
PZU-4	32111	161207	6.92	1.56	9.44	123	0.0934	54.8	100	0.2 cpm			
PZU-4	32111	161509	6.94	1.86	9.39	120	0.0891	42.2	100	0.2 cpm			
PZU-4	32111	161807	6.93	2.77	9.30	117	0.0801	32.4	100	0.2 cpm			
PZU-4	32111	162107	6.94	3.80	9.20	115	0.0713	23.5	100	0.2 cpm			
PZU-4	32111	162405	6.94	4.56	9.11	114	0.0646	18.2	100	0.2 cpm			
PZU-4	32111	162706	6.94	5.18	9.05	113	0.0594	15.3	100	0.2 cpm			
PZU-4	32111	163006	6.95	5.67	8.99	112	0.0556	12.9	100	0.2 cpm			
PZU-4	32111	163305	6.97	6.01	8.99	111	0.0533	10.49	100	0.2 cpm			
PZU-4	32111	163608	7.00	6.31	9.02	109	0.0507	9.88	100	0.2 cpm			
PZU-4	32111	163908	7.01	6.58	9.06	108	0.0478	8.48	100	0.2 cpm			
PZU-4	32111	164205	7.02	6.72	9.09	108	0.0473	8.42	100	0.2 cpm			
PZU-4	32111	164509	7.02	6.90	9.07	108	0.0464	7.91	100	0.2 cpm			
MC-32	3/22/2011	85405	6.95	2.39	8.58	128	1.337	4.65	100	4.0 cpm	48	6.01	All parameters stable when sample was collected.
MC-32	3/22/2011	85706	7.01	2.09	8.60	125	1.339	5.11	100	4.0 cpm			Turbidity > 5 NTU but stable.
MC-32	3/22/2011	90036	7.10	1.86	8.56	120	1.340	5.71	100	4.0 cpm			Do > 0.20 mg/L
MC-32	3/22/2011	90306	7.07	1.71	8.61	112	1.343	5.51	100	4.0 cpm			
MC-32	3/22/2011	90606	7.08	1.50	8.75	93	1.344	5.31	100	4.0 cpm			
MC-32	3/22/2011	90929	7.14	1.42	8.71	62	1.344	5.47	100	4.0 cpm			
MC-32	3/22/2011	91206	7.12	1.34	8.72	37	1.346	5.57	100	4.0 cpm			
MC-32	3/22/2011	91505	7.11	1.23	8.77	11	1.346	5.61	100	4.0 cpm			
MC-32	3/22/2011	91805	7.09	1.19	8.82	-8	1.344	5.64	100	4.0 cpm			
MC-32	3/22/2011	92106	7.13	1.11	8.87	-23	1.339	5.68	100	4.0 cpm			
MC-32	3/22/2011	92405	7.14	1.12	8.89	-35	1.327	5.74	100	4.0 cpm			
MC-32	3/22/2011	92706	7.11	1.02	8.92	-44	1.306	6.17	100	4.0 cpm			
MC-32	3/22/2011	93005	7.13	1.03	8.97	-51	1.273	5.96	100	4.0 cpm			
MC-32	3/22/2011	93305	7.14	1.04	8.98	-58	1.200	6.90	100	4.0 cpm			
MC-32	3/22/2011	93611	7.07	1.06	9.00	-63	1.198	6.62	100	4.0 cpm			
MC-32	3/22/2011	93906	7.14	1.10	9.07	-66	1.168	6.44	100	4.0 cpm			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	C	mV	mS/cm	NTUs	ml/min.	HZ or cpm	Minutes	(0.01) ft.	
MC-123	3/22/2011	104606	7.64	1.92	10.22	-46	0.1486	18.9	100	0.2 cpm	27	0.39	All parameters stable when sample was collected.
MC-123	3/22/2011	104905	7.41	1.65	10.36	-35	0.1421	17.3	100	0.2 cpm			Turbidity > 5 NTU but stable.
MC-123	3/22/2011	105206	7.26	1.49	10.41	-29	0.1381	12.4	100	0.2 cpm			Do > 0.20 mg/L
MC-123	3/22/2011	105505	7.05	1.35	10.42	-26	0.1357	8.99	100	0.2 cpm			
MC-123	3/22/2011	105805	6.94	1.30	10.36	-23	0.1342	12.0	100	0.2 cpm			
MC-123	3/22/2011	110105	6.84	1.21	10.27	-20	0.1331	7.92	100	0.2 cpm			
MC-123	3/22/2011	110406	6.78	1.19	10.28	-19	0.1331	7.37	100	0.2 cpm			
MC-123	3/22/2011	110705	6.75	1.13	10.40	-19	0.1330	7.00	100	0.2 cpm			
MC-123	3/22/2011	111005	6.74	1.11	10.49	-18	0.1330	6.74	100	0.2 cpm			
MC-20D	3/22/2011	115708	7.71	2.28	12.49	-39	0.1434	18.1	400	4.0 cpm	48	1.01	All parameters stable when sample was collected.
MC-20D	3/22/2011	120005	7.81	1.13	12.76	-46	0.1413	78.3	400	4.0 cpm			Turbidity < 5 NTU
MC-20D	3/22/2011	120305	7.69	1.35	12.79	-45	0.1407	35.9	400	4.0 cpm			Do > 0.20 mg/L
MC-20D	3/22/2011	120606	7.75	1.43	12.79	-49	0.1405	22.8	400	4.0 cpm			
MC-20D	3/22/2011	120905	7.71	1.46	12.74	-50	0.1402	16.9	400	4.0 cpm			
MC-20D	3/22/2011	121206	7.60	1.35	12.83	-48	0.1398	15.6	400	4.0 cpm			
MC-20D	3/22/2011	121505	7.72	1.30	12.83	-58	0.1398	12.5	400	4.0 cpm			
MC-20D	3/22/2011	121806	7.67	1.28	12.86	-57	0.1400	10.38	400	4.0 cpm			
MC-20D	3/22/2011	122105	7.75	1.20	12.86	-66	0.1400	9.42	400	4.0 cpm			
MC-20D	3/22/2011	122405	7.61	1.11	12.70	-63	0.1396	8.08	400	4.0 cpm			
MC-20D	3/22/2011	122705	7.76	1.08	12.70	-73	0.1395	5.98	400	4.0 cpm			
MC-20D	3/22/2011	123008	7.71	1.03	12.74	-75	0.1398	5.82	400	4.0 cpm			
MC-20D	3/22/2011	123305	7.77	0.98	12.67	-80	0.1399	5.15	400	4.0 cpm			
MC-20D	3/22/2011	123610	7.78	0.97	12.59	-82	0.1398	4.90	400	4.0 cpm			
MC-20D	3/22/2011	123909	7.74	0.94	12.62	-78	0.1399	4.52	400	4.0 cpm			
MC-20D	3/22/2011	124205	7.76	0.95	12.59	-86	0.1398	3.82	400	4.0 cpm			
MC-20	3/22/2011	131705	7.28	2.50	10.96	-28	0.1228	8.09	100	0.2 cpm	18	0.04	All parameters stable when sample was collected.
MC-20	3/22/2011	132006	7.19	2.13	10.98	-25	0.1199	6.74	100	0.2 cpm			Turbidity < 5 NTU
MC-20	3/22/2011	132307	7.15	1.89	11.03	-24	0.1182	5.72	100	0.2 cpm			Do > 0.20 mg/L
MC-20	3/22/2011	132606	7.12	1.73	11.03	-24	0.1167	4.51	100	0.2 cpm			Fe Field Test Kit Reading - 1.52 mg/L
MC-20	3/22/2011	132907	7.11	1.64	11.07	-25	0.1158	4.12	100	0.2 cpm			
MC-20	3/22/2011	133206	7.08	1.59	11.09	-24	0.1155	3.63	100	0.2 cpm			
MC-122	3/22/2011	143013	7.33	1.97	12.01	-4	0.1275	54.2	100	0.2 cpm	33	0.14	All parameters stable when sample was collected.
MC-122	3/22/2011	143306	7.33	1.76	12.11	-1	0.1266	42.9	100	0.2 cpm			Turbidity > 5 NTU but stable.
MC-122	3/22/2011	143606	7.27	1.90	12.15	2	0.1260	28.8	100	0.2 cpm			Do > 0.20 mg/L
MC-122	3/22/2011	143907	6.72	2.24	12.23	7	0.1266	26.6	100	0.2 cpm			
MC-122	3/22/2011	144206	7.23	2.68	12.31	8	0.1273	18.7	100	0.2 cpm			
MC-122	3/22/2011	144506	6.93	3.28	12.31	14	0.1276	13.9	100	0.2 cpm			
MC-122	3/22/2011	144808	6.62	3.79	12.22	21	0.1285	11.2	100	0.2 cpm			
MC-122	3/22/2011	145105	6.83	4.25	12.11	25	0.1286	10.37	100	0.2 cpm			
MC-122	3/22/2011	145416	6.79	4.67	12.02	30	0.1292	7.83	100	0.2 cpm			
MC-122	3/22/2011	145710	6.80	4.92	11.94	33	0.1293	7.43	100	0.2 cpm			
MC-122	3/22/2011	150005	6.71	5.18	11.94	36	0.1294	7.26	100	0.2 cpm			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	C	mV	mS/cm	NTUs	ml/min.	HZ or cpm	Minutes	(0.01) ft.	
PZU-5	3/22/2011	160306	6.81	2.18	13.32	21	0.3099	74.2	100	0.2 cpm	27	0.13	All parameters stable when sample was collected.
PZU-5	3/22/2011	160605	6.83	1.87	13.16	23	0.3093	57.4	100	0.2 cpm			Turbidity > 5 NTU but stable.
PZU-5	3/22/2011	160909	6.75	1.67	12.99	24	0.3080	45.1	100	0.2 cpm			Do > 0.20 mg/L
PZU-5	3/22/2011	161205	6.69	1.52	12.82	24	0.3070	33.1	100	0.2 cpm			
PZU-5	3/22/2011	161505	6.66	1.40	12.72	24	0.3068	30.8	100	0.2 cpm			
PZU-5	3/22/2011	161807	6.48	1.32	12.58	25	0.3058	24.1	100	0.2 cpm			
PZU-5	3/22/2011	162121	6.71	1.31	12.48	25	0.3041	19.9	100	0.2 cpm			
PZU-5	3/22/2011	162411	6.67	1.39	12.45	24	0.3010	18.8	100	0.2 cpm			
PZU-5	3/22/2011	162706	6.70	1.45	12.36	23	0.2969	18.3	100	0.2 cpm			
MC-26D2	3/23/2011	85008	7.40	2.02	12.28	113	0.1382	15.9	400	4.0 cpm	42	0.83	All parameters stable when sample was collected.
MC-26D2	3/23/2011	85307	7.49	1.98	12.31	109	0.1375	17.7	400	4.0 cpm			Turbidity < 5 NTU
MC-26D2	3/23/2011	85609	7.45	1.94	12.32	111	0.1372	15.4	400	4.0 cpm			Do > 0.20 mg/L
MC-26D2	3/23/2011	85909	7.32	1.86	12.36	116	0.1370	12.2	400	4.0 cpm			
MC-26D2	3/23/2011	90206	7.41	1.87	12.42	110	0.1369	9.79	400	4.0 cpm			
MC-26D2	3/23/2011	90506	7.52	1.86	12.43	107	0.1370	8.29	400	4.0 cpm			
MC-26D2	3/23/2011	90809	7.52	1.86	12.47	106	0.1372	7.18	400	4.0 cpm			
MC-26D2	3/23/2011	91105	7.56	1.84	12.51	105	0.1372	7.02	400	4.0 cpm			
MC-26D2	3/23/2011	91405	7.52	1.83	12.50	105	0.1374	5.64	400	4.0 cpm			
MC-26D2	3/23/2011	91706	7.33	1.82	12.51	112	0.1372	5.05	400	4.0 cpm			
MC-26D2	3/23/2011	92005	7.61	1.82	12.50	101	0.1372	5.18	400	4.0 cpm			
MC-26D2	3/23/2011	92305	7.41	1.84	12.52	109	0.1375	4.95	400	4.0 cpm			
MC-26D2	3/23/2011	92606	7.42	1.83	12.56	103	0.1375	4.57	400	4.0 cpm			
MC-26D2	3/23/2011	92907	7.45	1.82	12.59	103	0.1374	4.17	400	4.0 cpm			
MC-8	3/23/2011	104305	7.68	8.92	9.56	151	0.0392	20.6	200	1.0 cpm	15	0.03	All parameters stable when sample was collected.
MC-8	3/23/2011	104609	7.44	8.78	9.48	155	0.0384	20.0	200	1.0 cpm			Turbidity > 5 NTU but stable.
MC-8	3/23/2011	104910	7.45	8.66	9.46	154	0.0378	18.6	200	1.0 cpm			Do > 0.20 mg/L
MC-8	3/23/2011	105205	7.36	8.68	9.49	152	0.0372	18.4	200	1.0 cpm			
MC-8	3/23/2011	105505	7.46	8.65	9.57	151	0.0367	17.3	200	1.0 cpm			
MC-118D2	3/23/2011	120118	7.15	1.66	13.55	166	0.6692	11.4	400	4.0 cpm	21	0.66	All parameters stable when sample was collected.
MC-118D2	3/23/2011	120405	7.05	0.95	13.62	160	0.6700	9.08	400	4.0 cpm			Turbidity < 5 NTU
MC-118D2	3/23/2011	120705	7.04	0.62	13.71	155	0.6589	7.06	400	4.0 cpm			Do > 0.20 mg/L
MC-118D2	3/23/2011	121006	7.05	0.48	13.77	151	0.6438	5.73	400	4.0 cpm			
MC-118D2	3/23/2011	121306	7.07	0.49	13.74	147	0.6289	4.83	400	4.0 cpm			
MC-118D2	3/23/2011	121605	7.08	0.53	13.74	143	0.6172	3.90	400	4.0 cpm			
MC-118D2	3/23/2011	121905	7.02	0.54	13.74	143	0.6113	3.11	400	4.0 cpm			
MC-118D	3/23/2011	125505	7.05	0.14	15.58	82	0.8770	38.8	400	57 Hz	33	1.73	All parameters stable when sample was collected.
MC-118D	3/23/2011	125805	7.00	0.12	16.34	70	0.8825	23.6	400	57 Hz			Turbidity < 5 NTU
MC-118D	3/23/2011	130105	6.89	0.06	16.54	53	0.8862	16.7	400	57 Hz			Do < 0.20 mg/L but stable.
MC-118D	3/23/2011	130406	6.93	0.04	16.70	31	0.8879	10.14	400	57 Hz			Do Test Kit Reading - 0.29 mg/L
MC-118D	3/23/2011	130706	6.97	0.08	16.84	11	0.8875	7.48	400	57 Hz			Fe Field Test Kit Reading - 3.30 mg/L Upper Limit
MC-118D	3/23/2011	131006	6.96	0.02	16.99	-7	0.8906	7.17	400	57 Hz			
MC-118D	3/23/2011	131305	6.99	0.05	17.24	-21	0.8895	4.80	400	57 Hz			
MC-118D	3/23/2011	131605	7.00	0.02	17.29	-32	0.8910	3.37	400	57 Hz			
MC-118D	3/23/2011	131905	6.98	0.03	17.33	-43	0.8900	2.87	400	57 Hz			
MC-118D	3/23/2011	132205	6.89	0.02	17.42	-47	0.8913	2.51	400	57 Hz			
MC-118D	3/23/2011	132506	6.89	0.03	17.46	-53	0.8909	2.32	400	57 Hz			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	C	mV	mS/cm	NTUs	ml/min.	HZ or cpm	Minutes	(0.01) ft.	
MC-25	3/23/2011	141305	8.07	8.78	10.21	-39	0.1061	3.40	375	4.0 cpm	18	0.13	All parameters stable when sample was collected.
MC-25	3/23/2011	141606	7.62	8.60	10.14	-27	0.1063	2.74	375	4.0 cpm			Turbidity < 5 NTU
MC-25	3/23/2011	141905	7.55	8.49	10.07	-24	0.1068	2.32	375	4.0 cpm			Do > 0.20 mg/L
MC-25	3/23/2011	142213	7.31	8.32	10.01	-13	0.1074	2.12	375	4.0 cpm			
MC-25	3/23/2011	142505	7.28	8.34	10.00	-6	0.1076	2.09	375	4.0 cpm			
MC-25	3/23/2011	142805	7.21	8.28	9.97	-3	0.1077	1.28	375	4.0 cpm			
MC-25D2	3/23/2011	154306	7.62	2.72	13.54	-12	0.1403	9.73	400	4.0 cpm	21	0.48	All parameters stable when sample was collected.
MC-25D2	3/23/2011	154606	7.37	1.42	13.39	-10	0.1364	12.3	400	4.0 cpm			Turbidity > 5 NTU but stable.
MC-25D2	3/23/2011	154905	7.34	0.96	13.38	-7	0.1349	10.7	400	4.0 cpm			Do > 0.20 mg/L
MC-25D2	3/23/2011	155205	7.37	0.81	13.38	-11	0.1337	11.9	400	4.0 cpm			
MC-25D2	3/23/2011	155506	7.40	0.72	13.37	-13	0.1328	11.2	400	4.0 cpm			
MC-25D2	3/23/2011	155805	7.40	0.67	13.37	-16	0.1328	11.0	400	4.0 cpm			
MC-25D2	3/23/2011	160110	7.50	0.66	13.34	-20	0.1323	10.8	400	4.0 cpm			
MC-25D	3/23/2011	163219	7.45	1.48	13.30	25	0.9625	36.0	400	4.0 cpm	36	0.24	All parameters stable when sample was collected.
MC-25D	3/23/2011	163505	7.20	0.88	13.31	24	0.9606	24.1	400	4.0 cpm			Turbidity < 5 NTU
MC-25D	3/23/2011	163806	7.01	0.45	13.31	24	0.9539	15.2	400	4.0 cpm			Do < 0.20 mg/L but stable.
MC-25D	3/23/2011	164106	7.04	0.24	13.32	23	0.9507	12.7	400	4.0 cpm			Do Test Kit Reading - 0.38 mg/L
MC-25D	3/23/2011	164414	6.88	0.13	13.35	22	0.9463	8.73	400	4.0 cpm			Fe Field Test Kit Reading - 0.65 mg/L
MC-25D	3/23/2011	164710	7.07	0.07	13.36	18	0.9450	7.29	400	4.0 cpm			
MC-25D	3/23/2011	165009	7.05	0.03	13.39	14	0.9443	5.98	400	4.0 cpm			
MC-25D	3/23/2011	165305	7.05	0.00	13.40	15	0.9447	5.37	400	4.0 cpm			
MC-25D	3/23/2011	165605	7.09	0.00	13.41	11	0.9433	5.42	400	4.0 cpm			
MC-25D	3/23/2011	165905	7.09	0.00	13.42	11	0.9444	4.58	400	4.0 cpm			
MC-25D	3/23/2011	170231	7.03	0.00	13.44	9	0.9413	4.77	400	4.0 cpm			
MC-25D	3/23/2011	170505	7.08	0.00	13.45	8	0.9412	4.65	400	4.0 cpm			
MC-28D	3/24/2011	84508	7.38	3.74	11.49	67	0.1587	4.71	400	4.0 cpm	15	0.91	All parameters stable when sample was collected.
MC-28D	3/24/2011	84806	7.56	2.92	11.77	60	0.1591	4.09	400	4.0 cpm			Turbidity < 5 NTU
MC-28D	3/24/2011	85106	7.48	2.65	11.88	64	0.1593	3.48	400	4.0 cpm			Do > 0.20 mg/L
MC-28D	3/24/2011	85405	7.50	2.50	11.93	64	0.1594	3.16	400	4.0 cpm			
MC-28D	3/24/2011	85705	7.53	2.50	11.97	62	0.1591	3.08	400	4.0 cpm			
MC-27D	3/24/2011	94105	7.51	1.23	11.53	104	0.4619	47.4	400	4.0 cpm	39	0.38	All parameters stable when sample was collected.
MC-27D	3/24/2011	94406	7.48	0.69	11.66	104	0.4552	37.1	400	4.0 cpm			Turbidity > 5 NTU but stable.
MC-27D	3/24/2011	94705	7.46	0.43	11.75	103	0.4534	32.0	400	4.0 cpm			Do < 0.20 mg/L but stable.
MC-27D	3/24/2011	95005	7.42	0.28	11.80	103	0.4522	38.2	400	4.0 cpm			Do Test Kit Reading - 0.30 mg/L
MC-27D	3/24/2011	95305	7.31	0.22	11.83	105	0.4515	37.0	400	4.0 cpm			
MC-27D	3/24/2011	95606	7.35	0.16	11.86	102	0.4512	34.1	400	4.0 cpm			
MC-27D	3/24/2011	95937	7.39	0.17	11.87	97	0.4523	31.4	400	4.0 cpm			
MC-27D	3/24/2011	100205	7.40	0.16	11.93	95	0.4527	28.4	400	4.0 cpm			
MC-27D	3/24/2011	100526	7.38	0.14	11.93	92	0.4542	24.1	400	4.0 cpm			
MC-27D	3/24/2011	100808	7.40	0.13	11.89	90	0.4539	22.2	400	4.0 cpm			
MC-27D	3/24/2011	101119	7.40	0.11	11.92	88	0.4553	17.9	400	4.0 cpm			
MC-27D	3/24/2011	101406	7.39	0.10	11.90	86	0.4559	17.8	400	4.0 cpm			
MC-27D	3/24/2011	101705	7.39	0.10	11.91	90	0.4559	16.5	400	4.0 cpm			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	C	mV	mS/cm	NTUs	ml/min.	HZ or cpm	Minutes	(0.01) ft.	
MC-24D2	3/24/2011	115011	8.55	6.87	11.51	85	0.1330	7.23	400	4.0 cpm	33	0.00	All parameters stable when sample was collected.
MC-24D2	3/24/2011	115315	8.19	4.33	12.05	101	0.1324	6.68	400	4.0 cpm			Turbidity < 5 NTU
MC-24D2	3/24/2011	115640	8.15	3.05	12.25	99	0.1319	7.81	400	4.0 cpm			Do > 0.20 mg/L
MC-24D2	3/24/2011	115905	8.05	2.54	12.33	102	0.1319	7.44	400	4.0 cpm			
MC-24D2	3/24/2011	120207	7.98	2.18	12.39	103	0.1321	6.52	400	4.0 cpm			
MC-24D2	3/24/2011	120505	7.91	1.93	12.44	103	0.1320	6.47	400	4.0 cpm			
MC-24D2	3/24/2011	120808	7.79	1.81	12.48	105	0.1315	5.44	400	4.0 cpm			
MC-24D2	3/24/2011	121106	7.73	1.75	12.50	106	0.1318	5.38	400	4.0 cpm			
MC-24D2	3/24/2011	121405	7.74	1.70	12.51	103	0.1316	4.86	400	4.0 cpm			
MC-24D2	3/24/2011	121706	7.73	1.67	12.52	101	0.1315	4.47	400	4.0 cpm			
MC-24D2	3/24/2011	122005	7.73	1.66	12.53	99	0.1316	3.99	400	4.0 cpm			
MC-24	3/24/2011	130007	7.42	7.42	9.27	130	0.0642	3.88	400	4.0 cpm	15	0.00	All parameters stable when sample was collected.
MC-24	3/24/2011	130317	7.40	7.51	9.21	131	0.0638	2.70	400	4.0 cpm			Turbidity < 5 NTU
MC-24	3/24/2011	130605	7.27	7.58	9.20	140	0.0633	2.32	400	4.0 cpm			Do > 0.20 mg/L
MC-24	3/24/2011	130907	7.29	7.60	9.17	137	0.0631	2.34	400	4.0 cpm			
MC-24	3/24/2011	131205	7.23	7.60	9.14	139	0.0628	2.30	400	4.0 cpm			
MC-24D	3/24/2011	134506	7.23	2.47	12.15	156	1.037	20.2	400	4.0 cpm	36	0.14	All parameters stable when sample was collected.
MC-24D	3/24/2011	134805	7.14	0.93	12.54	155	1.050	35.1	400	4.0 cpm			Turbidity > 5 NTU but stable.
MC-24D	3/24/2011	135108	7.10	0.37	12.68	153	1.056	31.1	400	4.0 cpm			Do < 0.20 mg/L but stable.
MC-24D	3/24/2011	135411	7.03	0.13	12.74	151	1.056	27.9	400	4.0 cpm			Do Test Kit Reading - 0.30 mg/L
MC-24D	3/24/2011	135705	6.93	0.02	12.78	150	1.056	30.1	400	4.0 cpm			Fe Field Test Kit Reading - 0.59 mg/L
MC-24D	3/24/2011	140005	6.90	0.00	12.82	149	1.056	30.8	400	4.0 cpm			
MC-24D	3/24/2011	140306	7.02	0.00	12.80	146	1.056	35.3	400	4.0 cpm			
MC-24D	3/24/2011	140605	6.77	0.00	12.82	147	1.055	38.0	400	4.0 cpm			
MC-24D	3/24/2011	140909	6.98	0.00	12.93	142	1.054	37.5	400	4.0 cpm			
MC-24D	3/24/2011	141205	6.91	0.00	12.98	140	1.054	38.0	400	4.0 cpm			
MC-24D	3/24/2011	141505	6.97	0.00	12.98	137	1.055	37.2	400	4.0 cpm			
MC-24D	3/24/2011	141806	7.00	0.00	13.00	135	1.055	36.2	400	4.0 cpm			
MC-1	3/24/2011	152407	8.24	8.54	9.26	138	0.0706	16.1	400	53 Hz	27	0.16	All parameters stable when sample was collected.
MC-1	3/24/2011	152706	8.06	8.56	9.98	143	0.0669	6.81	400	53 Hz			Turbidity < 5 NTU
MC-1	3/24/2011	153005	8.00	8.56	10.62	142	0.0660	4.17	400	53 Hz			Do > 0.20 mg/L
MC-1	3/24/2011	153308	7.84	8.56	10.90	147	0.0643	3.71	400	53 Hz			Fe Field Test Kit Reading - 0.21 mg/L
MC-1	3/24/2011	153606	7.72	8.55	11.15	150	0.0626	2.99	400	53 Hz			
MC-1	3/24/2011	153906	7.60	8.55	11.16	154	0.0613	3.24	400	53 Hz			
MC-1	3/24/2011	154206	7.51	8.53	11.24	157	0.0601	2.99	400	53 Hz			
MC-1	3/24/2011	154506	7.44	8.50	11.26	159	0.0591	3.29	400	53 Hz			
MC-1	3/24/2011	154806	7.41	8.50	11.26	160	0.0586	3.15	400	53 Hz			
MC-13D	3/25/2011	90505	7.47	1.13	9.83	142	0.1372	0.59	200	1.0 cpm	21	0.84	All parameters stable when sample was collected.
MC-13D	3/25/2011	90808	7.45	0.96	9.98	142	0.1370	0.69	200	1.0 cpm			Turbidity < 5 NTU
MC-13D	3/25/2011	91113	7.43	0.87	9.97	142	0.1370	1.09	200	1.0 cpm			Do > 0.20 mg/L
MC-13D	3/25/2011	91405	7.44	0.77	10.01	142	0.1372	0.55	200	1.0 cpm			
MC-13D	3/25/2011	91741	7.44	0.71	10.15	141	0.1371	0.42	200	1.0 cpm			
MC-13D	3/25/2011	92021	7.44	0.68	10.13	140	0.1373	0.61	200	1.0 cpm			
MC-13D	3/25/2011	92309	7.40	0.65	10.05	141	0.1372	0.63	200	1.0 cpm			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	C	mV	mS/cm	NTUs	ml/min.	HZ or cpm	Minutes	(0.01) ft.	
MC-13	3/25/2011	95707	7.68	0.81	8.80	147	0.0475	8.22	400	3.0 cpm	21	0.10	All parameters stable when sample was collected.
MC-13	3/25/2011	100006	7.62	0.68	8.88	147	0.0473	6.41	400	3.0 cpm			Turbidity < 5 NTU
MC-13	3/25/2011	100305	7.52	0.74	8.86	149	0.0470	5.41	400	3.0 cpm			Do > 0.20 mg/L
MC-13	3/25/2011	100607	7.46	0.87	8.92	150	0.0474	4.86	400	3.0 cpm			
MC-13	3/25/2011	100905	7.41	1.04	8.95	149	0.0481	4.38	400	3.0 cpm			
MC-13	3/25/2011	101206	7.39	1.12	8.96	148	0.0472	4.40	400	3.0 cpm			
MC-13	3/25/2011	101505	7.32	1.14	8.99	148	0.0476	4.38	400	3.0 cpm			
MC-14	3/25/2011	110327	7.12	0.69	9.76	132	0.9575	8.11	100	0.2 cpm	45	1.41	All parameters stable when sample was collected.
MC-14	3/25/2011	110612	7.07	0.37	9.70	125	0.8990	7.05	100	0.2 cpm			Turbidity < 5 NTU
MC-14	3/25/2011	110909	7.09	0.37	9.65	116	0.8584	5.78	100	0.2 cpm			Do > 0.20 mg/L
MC-14	3/25/2011	111208	7.08	0.41	9.65	102	0.8342	4.54	100	0.2 cpm			Fe Field Test Kit Reading - 3.30 mg/L Upper Limit
MC-14	3/25/2011	111528	7.08	0.42	9.67	85	0.8155	3.32	100	0.2 cpm			
MC-14	3/25/2011	111805	7.08	0.40	9.72	70	0.8071	3.32	100	0.2 cpm			
MC-14	3/25/2011	112105	7.05	0.42	9.74	53	0.8012	2.69	100	0.2 cpm			
MC-14	3/25/2011	112408	7.05	0.43	9.73	38	0.7995	1.59	100	0.2 cpm			
MC-14	3/25/2011	112706	7.06	0.43	9.72	25	0.8032	1.47	100	0.2 cpm			
MC-14	3/25/2011	113005	7.06	0.44	9.71	14	0.8097	1.20	100	0.2 cpm			
MC-14	3/25/2011	113305	7.07	0.42	9.74	4	0.8170	1.73	100	0.2 cpm			
MC-14	3/25/2011	113605	7.08	0.41	9.75	-5	0.8259	1.71	100	0.2 cpm			
MC-14	3/25/2011	113906	7.01	0.41	9.74	-12	0.8361	1.45	100	0.2 cpm			
MC-14	3/25/2011	114216	7.06	0.37	9.73	-18	0.8462	1.19	100	0.2 cpm			
MC-14	3/25/2011	114521	7.08	0.37	9.75	-22	0.8509	1.10	100	0.2 cpm			
MC-14D	3/25/2011	123706	8.12	3.66	11.87	-89	0.1301	14.1	400	4.0 cpm	30	1.21	All parameters stable when sample was collected.
MC-14D	3/25/2011	124005	8.08	1.92	12.45	-88	0.1288	12.5	400	4.0 cpm			Turbidity < 5 NTU
MC-14D	3/25/2011	124305	8.03	1.24	12.70	-83	0.1283	9.91	400	4.0 cpm			Do > 0.20 mg/L
MC-14D	3/25/2011	124608	7.83	0.93	12.77	-74	0.1283	6.02	400	4.0 cpm			
MC-14D	3/25/2011	124914	7.86	0.73	12.85	-76	0.1285	4.70	400	4.0 cpm			
MC-14D	3/25/2011	125219	8.05	0.62	12.91	-84	0.1286	3.86	400	4.0 cpm			
MC-14D	3/25/2011	125508	7.93	0.53	12.98	-85	0.1287	2.54	400	4.0 cpm			
MC-14D	3/25/2011	125811	7.90	0.41	13.07	-86	0.1290	2.28	400	4.0 cpm			
MC-14D	3/25/2011	130105	7.90	0.40	13.11	-88	0.1290	2.00	400	4.0 cpm			
MC-14D	3/25/2011	130405	7.90	0.37	13.14	-86	0.1290	1.78	400	4.0 cpm			
MC-21	3/25/2011	134312	7.89	1.06	10.65	-45	0.0779	2.09	400	3.0 cpm	27	0.06	All parameters stable when sample was collected.
MC-21	3/25/2011	134608	7.28	1.12	10.61	-43	0.0791	1.37	400	3.0 cpm			Turbidity < 5 NTU
MC-21	3/25/2011	134906	7.39	1.25	10.58	-43	0.0800	1.49	400	3.0 cpm			Do > 0.20 mg/L
MC-21	3/25/2011	135205	7.30	1.35	10.55	-42	0.0808	1.15	400	3.0 cpm			Fe Field Test Kit Reading - 1.80 mg/L
MC-21	3/25/2011	135506	7.31	1.52	10.53	-42	0.0805	1.05	400	3.0 cpm			
MC-21	3/25/2011	135806	7.30	1.81	10.47	-43	0.0793	0.99	400	3.0 cpm			
MC-21	3/25/2011	140107	7.21	2.01	10.44	-42	0.0782	0.99	400	3.0 cpm			
MC-21	3/25/2011	140405	7.18	2.14	10.39	-42	0.0780	0.91	400	3.0 cpm			
MC-21	3/25/2011	140706	7.17	2.17	10.39	-42	0.0778	0.73	400	3.0 cpm			
MC-15	3/28/2011	90706	6.60	7.59	8.08	148	0.0447	4.64	200	1.0 cpm	15	0.14	All parameters stable when sample was collected.
MC-15	3/28/2011	91005	6.43	7.47	8.09	156	0.0436	3.36	200	1.0 cpm			Turbidity < 5 NTU
MC-15	3/28/2011	91305	6.38	8.32	8.09	168	0.0447	3.79	200	1.0 cpm			Do > 0.20 mg/L
MC-15	3/28/2011	91606	6.31	8.25	8.11	173	0.0456	2.33	200	1.0 cpm			
MC-15	3/28/2011	91905	6.29	8.26	8.15	178	0.0459	2.22	200	1.0 cpm			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	C	mV	mS/cm	NTUs	ml/min.	HZ or cpm	Minutes	(0.01) ft.	
MC-15D	3/28/2011	95105	6.74	0.30	11.93	184	0.4478	0.63	400	51 Hz	21	1.08	All parameters stable when sample was collected.
MC-15D	3/28/2011	95405	6.78	0.19	13.26	179	0.4537	0.29	400	51 Hz			Turbidity < 5 NTU
MC-15D	3/28/2011	95706	6.85	0.16	14.10	174	0.4550	0.16	400	51 Hz			Do < 0.20 mg/L but stable.
MC-15D	3/28/2011	100007	6.87	0.13	14.53	170	0.4550	0.20	400	51 Hz			Do Test Kit Reading - 0.24 mg/L
MC-15D	3/28/2011	100306	6.93	0.15	14.84	165	0.4550	0.14	400	51 Hz			
MC-15D	3/28/2011	100605	6.95	0.15	15.03	161	0.4548	0.07	400	51 Hz			
MC-15D	3/28/2011	100906	6.94	0.14	15.13	157	0.4546	0.07	400	51 Hz			
MC-2	3/28/2011	121208	7.19	0.96	12.21	70	0.1614	10.39	400	48 Hz	15	0.65	All parameters stable when sample was collected.
MC-2	3/28/2011	121505	7.24	0.24	12.59	68	0.1570	1.83	400	48 Hz			Turbidity < 5 NTU
MC-2	3/28/2011	121806	7.21	0.15	12.75	66	0.1568	0.62	400	48 Hz			Do < 0.20 mg/L but stable.
MC-2	3/28/2011	122107	7.18	0.14	13.08	63	0.1582	0.76	400	48 Hz			Do Test Kit Reading - 0.14 mg/L
MC-2	3/28/2011	122405	7.18	0.14	13.10	57	0.1589	0.52	400	48 Hz			
MC-2D	3/28/2011	131116	7.82	4.75	13.68	51	0.2884	0.58	400	55 Hz	21	2.05	All parameters stable when sample was collected.
MC-2D	3/28/2011	131406	7.58	2.23	14.69	55	0.3032	0.31	400	55 Hz			Turbidity < 5 NTU
MC-2D	3/28/2011	131706	7.37	1.01	15.57	55	0.3119	0.10	400	55 Hz			Do > 0.20 mg/L
MC-2D	3/28/2011	132005	7.24	0.75	15.96	55	0.3153	0.16	400	55 Hz			
MC-2D	3/28/2011	132312	7.17	0.60	16.17	55	0.3158	0.15	400	55 Hz			
MC-2D	3/28/2011	132605	7.14	0.54	16.23	54	0.3152	0.09	400	55 Hz			
MC-2D	3/28/2011	132905	7.13	0.55	16.29	54	0.3142	0.07	400	55 Hz			
MC-10D	3/28/2011	142205	7.16	0.23	12.40	100	0.9211	32.8	400	61 Hz	36	1.30	All parameters stable when sample was collected.
MC-10D	3/28/2011	142505	7.02	0.00	13.25	98	0.9488	16.9	400	61 Hz			Turbidity < 5 NTU
MC-10D	3/28/2011	142805	7.03	0.00	14.44	93	0.9569	7.63	400	61 Hz			Do < 0.20 mg/L but stable.
MC-10D	3/28/2011	143107	6.97	0.00	15.08	89	0.9589	4.19	400	61 Hz			Do Test Kit Reading - 0.15 mg/L
MC-10D	3/28/2011	143406	6.97	0.00	15.39	83	0.9575	2.43	400	61 Hz			Fe Field Test Kit Reading - 3.30 mg/L Upper Limit
MC-10D	3/28/2011	143705	6.96	0.00	15.58	73	0.9587	1.87	400	61 Hz			
MC-10D	3/28/2011	144030	7.00	0.00	15.79	60	0.9564	2.35	400	61 Hz			
MC-10D	3/28/2011	144314	7.04	0.00	15.86	50	0.9523	2.23	400	61 Hz			
MC-10D	3/28/2011	144608	6.95	0.00	15.94	42	0.9499	2.36	400	61 Hz			
MC-10D	3/28/2011	144905	6.93	0.00	15.96	34	0.9454	1.99	400	61 Hz			
MC-10D	3/28/2011	145207	6.92	0.00	16.02	28	0.9441	1.75	400	61 Hz			
MC-10D	3/28/2011	145506	6.94	0.00	16.11	24	0.9402	1.73	400	61 Hz			
MC-30D	3/28/2011	154806	7.07	1.42	13.02	24	1.075	3.98	400	4.0 cpm	21	0.05	All parameters stable when sample was collected.
MC-30D	3/28/2011	155105	6.71	0.55	12.92	31	1.074	2.45	400	4.0 cpm			Turbidity < 5 NTU
MC-30D	3/28/2011	155405	6.60	0.19	12.93	34	1.069	3.27	400	4.0 cpm			Do < 0.20 mg/L but stable.
MC-30D	3/28/2011	155705	6.91	0.03	12.92	33	1.065	3.32	400	4.0 cpm			Do Test Kit Reading - 0.33 mg/L
MC-30D	3/28/2011	160010	6.69	0.00	12.90	34	1.053	3.64	400	4.0 cpm			Fe Field Test Kit Reading - 1.45 mg/L
MC-30D	3/28/2011	160305	6.62	0.00	12.91	35	1.048	3.99	400	4.0 cpm			
MC-30D	3/28/2011	160606	6.65	0.00	12.91	36	1.040	2.96	400	4.0 cpm			
MC-30	3/28/2011	164611	8.16	4.80	9.89	-7	0.0611	5.96	400	4.0 cpm	18	0.35	All parameters stable when sample was collected.
MC-30	3/28/2011	164908	7.78	3.39	9.84	-2	0.0652	4.17	400	4.0 cpm			Turbidity < 5 NTU
MC-30	3/28/2011	165205	7.77	2.77	9.84	1	0.0678	3.53	400	4.0 cpm			Do > 0.20 mg/L
MC-30	3/28/2011	165509	7.73	2.58	9.85	4	0.0688	3.24	400	4.0 cpm			Fe Field Test Kit Reading - 0.04 mg/L
MC-30	3/28/2011	165805	7.76	2.43	9.84	3	0.0697	3.00	400	4.0 cpm			
MC-30	3/28/2011	170115	7.74	2.35	9.85	5	0.0706	2.28	400	4.0 cpm			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	C	mV	mS/cm	NTUs	ml/min.	HZ or cpm	Minutes	(0.01) ft.	
MC-19D	3/29/2011	84905	7.41	0.39	13.12	204	0.1211	105.0	400	61 Hz	33	0.01	All parameters stable when sample was collected.
MC-19D	3/29/2011	85205	7.41	0.26	14.14	202	0.1214	41.5	400	61 Hz			Turbidity < 5 NTU
MC-19D	3/29/2011	85505	7.37	0.24	14.73	202	0.1223	22.7	400	61 Hz			Do < 0.20 mg/L but stable.
MC-19D	3/29/2011	85805	7.36	0.20	15.13	201	0.1244	20.3	400	61 Hz			Do Test Kit Reading - 0.34 mg/L
MC-19D	3/29/2011	90106	7.32	0.16	15.37	201	0.1273	13.8	400	61 Hz			
MC-19D	3/29/2011	90413	7.31	0.15	15.51	200	0.1304	9.48	400	61 Hz			
MC-19D	3/29/2011	90705	7.30	0.14	15.60	198	0.1339	5.93	400	61 Hz			
MC-19D	3/29/2011	91005	7.29	0.12	15.72	197	0.1367	4.44	400	61 Hz			
MC-19D	3/29/2011	91307	7.27	0.14	15.67	196	0.1397	4.60	400	61 Hz			
MC-19D	3/29/2011	91605	7.25	0.15	15.67	195	0.1422	4.08	400	61 Hz			
MC-19D	3/29/2011	91906	7.27	0.14	15.82	191	0.1435	2.49	400	61 Hz			
MC-12D	3/29/2011	101206	6.97	0.00	13.70	225	0.8338	21.3	400	58 Hz	15	1.56	All parameters stable when sample was collected.
MC-12D	3/29/2011	101505	7.00	0.00	14.48	220	0.8308	8.30	400	58 Hz			Turbidity < 5 NTU
MC-12D	3/29/2011	101805	7.00	0.00	14.81	218	0.8319	2.97	400	58 Hz			Do < 0.20 mg/L but stable.
MC-12D	3/29/2011	102105	6.98	0.00	14.95	215	0.8314	1.90	400	58 Hz			Do Test Kit Reading - 0.14 mg/L
MC-12D	3/29/2011	102405	6.96	0.00	15.06	213	0.8313	0.78	400	58 Hz			
MC-12	3/29/2011	105123	7.61	0.41	9.48	140	0.1087	3.31	400	3.0 cpm	18	0.07	All parameters stable when sample was collected.
MC-12	3/29/2011	105405	7.59	0.46	9.48	133	0.1112	1.15	400	3.0 cpm			Turbidity < 5 NTU
MC-12	3/29/2011	105705	7.63	0.50	9.48	123	0.1119	0.46	400	3.0 cpm			Do > 0.20 mg/L
MC-12	3/29/2011	110005	7.67	0.55	9.48	114	0.1117	0.21	400	3.0 cpm			
MC-12	3/29/2011	110306	7.64	0.55	9.51	105	0.1115	0.14	400	3.0 cpm			
MC-12	3/29/2011	110605	7.66	0.60	9.53	104	0.1114	0.07	400	3.0 cpm			
MC-107	3/29/2011	113505	7.74	3.21	9.38	62	0.0411	3.00	400	3.0 cpm	18	0.06	All parameters stable when sample was collected.
MC-107	3/29/2011	113805	7.58	2.59	9.28	64	0.0416	2.39	400	3.0 cpm			Turbidity < 5 NTU
MC-107	3/29/2011	114105	7.57	2.17	9.24	63	0.0425	2.10	400	3.0 cpm			Do > 0.20 mg/L
MC-107	3/29/2011	114407	7.55	1.80	9.18	61	0.0426	1.63	400	3.0 cpm			
MC-107	3/29/2011	114716	7.59	1.71	9.15	59	0.0430	1.51	400	3.0 cpm			
MC-107	3/29/2011	115006	7.53	1.64	9.15	57	0.0432	1.29	400	3.0 cpm			
MC-33	3/29/2011	123908	6.98	1.30	10.32	116	0.1643	19.6	400	3.0 cpm	33	0.46	All parameters stable when sample was collected.
MC-33	3/29/2011	124206	6.98	0.39	10.14	112	0.1663	9.47	400	3.0 cpm			Turbidity < 5 NTU
MC-33	3/29/2011	124509	6.96	0.24	10.08	109	0.1639	7.48	400	3.0 cpm			Do > 0.20 mg/L
MC-33	3/29/2011	124806	6.96	0.22	10.05	107	0.1609	6.74	400	3.0 cpm			
MC-33	3/29/2011	125105	6.99	0.21	10.02	102	0.1578	6.80	400	3.0 cpm			
MC-33	3/29/2011	125415	6.88	0.20	10.00	102	0.1532	6.30	400	3.0 cpm			
MC-33	3/29/2011	125705	7.03	0.20	9.99	89	0.1476	6.44	400	3.0 cpm			
MC-33	3/29/2011	130006	7.06	0.20	10.00	79	0.1424	4.81	400	3.0 cpm			
MC-33	3/29/2011	130305	7.07	0.21	10.00	70	0.1371	4.77	400	3.0 cpm			
MC-33	3/29/2011	130609	7.08	0.20	10.01	65	0.1355	4.73	400	3.0 cpm			
MC-33	3/29/2011	130905	7.08	0.21	10.01	60	0.1334	4.16	400	3.0 cpm			
MC-16	3/29/2011	134905	7.15	1.20	9.05	54	0.0889	2.81	200	1.0 cpm	18	0.19	All parameters stable when sample was collected.
MC-16	3/29/2011	135207	7.14	0.85	9.02	50	0.0910	2.40	200	1.0 cpm			Turbidity < 5 NTU
MC-16	3/29/2011	135505	7.16	0.72	9.00	47	0.0922	1.87	200	1.0 cpm			Do > 0.20 mg/L
MC-16	3/29/2011	135807	7.17	0.61	8.98	44	0.0932	0.97	200	1.0 cpm			
MC-16	3/29/2011	140105	7.18	0.56	8.97	43	0.0947	0.85	200	1.0 cpm			
MC-16	3/29/2011	140405	7.18	0.55	8.96	42	0.0957	0.80	200	1.0 cpm			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	C	mV	mS/cm	NTUs	ml/min.	HZ or cpm	Minutes	(0.01) ft.	
MC-17	3/29/2011	145206	7.33	8.79	9.20	67	0.0384	3.81	200	1.0 cpm	21	0.06	All parameters stable when sample was collected.
MC-17	3/29/2011	145506	7.20	8.57	9.11	77	0.0394	2.98	200	1.0 cpm			Turbidity < 5 NTU
MC-17	3/29/2011	145810	7.13	8.39	9.04	85	0.0406	2.38	200	1.0 cpm			Do > 0.20 mg/L
MC-17	3/29/2011	150110	7.06	8.10	8.99	89	0.0421	2.00	200	1.0 cpm			
MC-17	3/29/2011	150405	7.04	7.77	8.97	92	0.0439	2.35	200	1.0 cpm			
MC-17	3/29/2011	150705	6.98	7.68	8.97	94	0.0446	1.61	200	1.0 cpm			
MC-17	3/29/2011	151006	6.97	7.54	8.95	96	0.0453	1.53	200	1.0 cpm			
MC-17D	3/29/2011	153620	7.11	2.42	11.85	96	0.1428	30.2	400	54 Hz	21	0.48	All parameters stable when sample was collected.
MC-17D	3/29/2011	153905	7.18	1.76	12.28	90	0.1360	9.01	400	54 Hz			Turbidity < 5 NTU
MC-17D	3/29/2011	154205	7.22	1.53	13.23	85	0.1359	3.20	400	54 Hz			Do > 0.20 mg/L
MC-17D	3/29/2011	154506	7.24	1.44	13.93	82	0.1362	1.60	400	54 Hz			
MC-17D	3/29/2011	154806	7.24	1.36	14.35	79	0.1373	1.34	400	54 Hz			
MC-17D	3/29/2011	155106	7.24	1.28	14.65	77	0.1389	0.89	400	54 Hz			
MC-17D	3/29/2011	155407	7.23	1.22	14.79	76	0.1406	0.62	400	54 Hz			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	C	mV	mS/cm	NTUs	ml/min.	Hz or cpm	Minutes	(0.01) ft.	
UT-ST-1	6/21/2011	91706	7.68	2.56	15.10	29	0.0756	1.71	100	0.2 cpm	27	0.23	All parametrs satble when sample was collected.
UT-ST-1	6/21/2011	92005	7.77	2.45	14.86	30	0.0713	2.51	100	0.2 cpm			Turbidity < 5 NTU
UT-ST-1	6/21/2011	92309	7.83	2.34	14.87	32	0.0673	6.73	100	0.2 cpm			Do > 0.20 mg/L
UT-ST-1	6/21/2011	92651	7.99	2.41	14.68	35	0.0643	6.20	100	0.2 cpm			
UT-ST-1	6/21/2011	92906	7.84	2.26	14.72	34	0.0633	5.43	100	0.2 cpm			
UT-ST-1	6/21/2011	93207	7.87	2.04	15.09	35	0.0614	4.16	100	0.2 cpm			
UT-ST-1	6/21/2011	93520	7.93	2.15	14.94	38	0.0609	3.27	100	0.2 cpm			
UT-ST-1	6/21/2011	93806	8.01	2.18	15.02	41	0.0604	1.92	100	0.2 cpm			
UT-ST-1	6/21/2011	94107	8.01	2.21	15.05	44	0.0601	1.32	100	0.2 cpm			
PZU-4	6/21/2011	104007	7.23	1.12	21.81	-64	0.1626	12.5	100	0.2 cpm	24	0.32	All parametrs satble when sample was collected.
PZU-4	6/21/2011	104310	7.47	1.07	20.30	-66	0.1590	10.69	100	0.2 cpm			Turbidity < 5 NTU
PZU-4	6/21/2011	104609	7.59	1.05	19.83	-64	0.1488	10.60	100	0.2 cpm			Do > 0.20 mg/L
PZU-4	6/21/2011	104906	7.64	0.97	19.65	-64	0.1461	9.20	100	0.2 cpm			
PZU-4	6/21/2011	105239	7.69	0.97	19.31	-66	0.1254	4.49	100	0.2 cpm			
PZU-4	6/21/2011	105507	7.73	1.03	19.62	-66	0.1268	4.12	100	0.2 cpm			
PZU-4	6/21/2011	105810	7.76	0.96	19.60	-67	0.1267	3.14	100	0.2 cpm			
PZU-4	6/21/2011	110109	7.77	0.94	19.70	-67	0.1236	2.98	100	0.2 cpm			
MC-15	6/21/2011	115009	7.84	1.01	16.19	-104	0.6354	4.50	200	1.0 cpm	18	0.52	All parametrs satble when sample was collected.
MC-15	6/21/2011	115308	7.87	0.76	15.79	-101	0.6225	2.24	200	1.0 cpm			Turbidity < 5 NTU
MC-15	6/21/2011	115606	7.89	0.59	15.60	-96	0.6077	1.87	200	1.0 cpm			Do > 0.20 mg/L
MC-15	6/21/2011	115906	7.87	0.54	15.47	-93	0.5982	1.88	200	1.0 cpm			
MC-15	6/21/2011	120206	7.85	0.52	15.45	-90	0.5969	1.44	200	1.0 cpm			
MC-15	6/21/2011	120506	7.82	0.53	15.42	-88	0.5972	0.82	200	1.0 cpm			
MC-1	6/21/2011	135405	7.69	0.41	16.52	-104	0.6729	9.78	400	55 Hz	51	0.40	All parametrs satble when sample was collected.
MC-1	6/21/2011	135709	7.88	0.33	17.74	-94	0.5925	4.54	400	55 Hz			Turbidity < 5 NTU
MC-1	6/21/2011	140007	7.83	0.30	19.35	-81	0.5231	2.15	400	55 Hz			Do > 0.20 mg/L
MC-1	6/21/2011	140307	7.78	0.29	20.33	-73	0.4760	1.28	400	55 Hz			
MC-1	6/21/2011	140608	7.72	0.24	20.87	-70	0.4511	0.87	400	55 Hz			
MC-1	6/21/2011	140907	7.70	0.30	21.16	-69	0.4318	0.70	400	55 Hz			
MC-1	6/21/2011	141211	7.70	0.37	21.32	-68	0.3995	0.82	400	55 Hz			
MC-1	6/21/2011	141506	7.68	0.46	21.41	-65	0.3681	0.73	400	55 Hz			
MC-1	6/21/2011	141806	7.62	0.66	21.53	-60	0.3241	0.89	400	55 Hz			
MC-1	6/21/2011	142107	7.64	0.58	21.53	-58	0.3288	0.83	400	55 Hz			
MC-1	6/21/2011	142406	7.55	0.57	21.73	-58	0.3175	0.90	400	55 Hz			
MC-1	6/21/2011	142707	7.46	0.50	21.76	-58	0.3210	0.46	400	55 Hz			
MC-1	6/21/2011	143007	7.47	0.49	21.81	-60	0.3133	0.78	400	55 Hz			
MC-1	6/21/2011	143306	7.51	0.48	21.78	-59	0.2963	0.93	400	55 Hz			
MC-1	6/21/2011	143606	7.50	0.52	21.73	-56	0.2746	0.52	400	55 Hz			
MC-1	6/21/2011	143906	7.60	0.53	21.75	-55	0.2772	0.54	400	55 Hz			
MC-1	6/21/2011	144207	7.60	0.51	21.72	-56	0.2733	0.51	400	55 Hz			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	C	mV	mS/cm	NTUs	ml/min.	Hz or cpm	Minutes	(0.01) ft.	
MC-2	6/21/2011	153909	6.95	0.35	18.18	-102	1.3630	9.96	400	49 Hz	69	0.24	All parametrs satble when sample was collected.
MC-2	6/21/2011	154207	7.27	0.25	19.26	-112	1.4130	4.72	400	49 Hz			Turbidity < 5 NTU
MC-2	6/21/2011	154506	7.43	0.22	20.84	-119	1.4220	3.73	400	49 Hz			Do < 0.20 mg/L but stable.
MC-2	6/21/2011	154807	7.53	0.19	21.93	-122	1.4140	3.50	400	49 Hz			Do Test Kit Reading - 0.34 mg/L
MC-2	6/21/2011	155105	7.51	0.18	22.56	-124	1.3990	3.26	400	49 Hz			
MC-2	6/21/2011	155406	7.54	0.16	22.84	-125	1.3790	2.29	400	49 Hz			
MC-2	6/21/2011	155707	7.56	0.16	23.08	-126	1.3400	2.03	400	49 Hz			
MC-2	6/21/2011	160006	7.57	0.17	23.21	-125	1.2870	1.94	400	49 Hz			
MC-2	6/21/2011	160307	7.58	0.15	23.40	-125	1.2260	2.27	400	49 Hz			
MC-2	6/21/2011	160607	7.58	0.16	23.42	-124	1.1640	1.64	400	49 Hz			
MC-2	6/21/2011	160906	7.58	0.16	23.37	-123	1.1010	1.49	400	49 Hz			
MC-2	6/21/2011	161205	7.59	0.16	23.41	-122	1.0370	1.13	400	49 Hz			
MC-2	6/21/2011	161506	7.59	0.17	23.35	-121	0.9869	1.41	400	49 Hz			
MC-2	6/21/2011	161806	7.59	0.15	23.40	-121	0.9420	1.41	400	49 Hz			
MC-2	6/21/2011	162106	7.60	0.18	23.45	-120	0.9021	1.16	400	49 Hz			
MC-2	6/21/2011	162406	7.60	0.18	23.47	-119	0.8645	1.11	400	49 Hz			
MC-2	6/21/2011	162707	7.54	0.18	23.57	-118	0.8357	1.09	400	49 Hz			
MC-2	6/21/2011	163009	7.60	0.18	23.54	-117	0.8018	1.45	400	49 Hz			
MC-2	6/21/2011	163305	7.60	0.17	23.48	-117	0.7775	1.15	400	49 Hz			
MC-2	6/21/2011	163606	7.61	0.17	23.57	-116	0.7554	1.24	400	49 Hz			
MC-2	6/21/2011	163907	7.61	0.16	23.60	-116	0.7282	1.22	400	49 Hz			
MC-2	6/21/2011	164207	7.61	0.17	23.68	-115	0.7153	1.16	400	49 Hz			
MC-2	6/21/2011	164506	7.61	0.16	23.68	-115	0.7070	1.51	400	49 Hz			
MC-2D	6/22/2011	82606	7.00	0.68	15.71	158	0.5968	1.56	400	47 Hz	18	1.33	All parametrs satble when sample was collected.
MC-2D	6/22/2011	82907	7.21	0.30	16.27	137	0.4346	1.26	400	47 Hz			Turbidity < 5 NTU
MC-2D	6/22/2011	83206	7.37	0.25	17.03	123	0.3883	1.06	400	47 Hz			Do = 0.20 mg/L
MC-2D	6/22/2011	83511	7.41	0.20	17.42	100	0.3740	1.06	400	47 Hz			
MC-2D	6/22/2011	83811	7.45	0.20	17.51	98	0.3670	1.22	400	47 Hz			
MC-2D	6/22/2011	84106	7.47	0.20	17.58	93	0.3633	1.15	400	47 Hz			
MC-26D2	6/22/2011	94906	7.75	2.49	14.52	98	0.1507	2.09	400	4.0 cpm	15	1.12	All parametrs satble when sample was collected.
MC-26D2	6/22/2011	95208	7.81	2.24	14.47	98	0.1511	1.70	400	4.0 cpm			Turbidity < 5 NTU
MC-26D2	6/22/2011	95505	7.82	2.04	14.44	96	0.1508	1.25	400	4.0 cpm			Do > 0.20 mg/L
MC-26D2	6/22/2011	95803	7.83	1.93	14.39	94	0.1514	2.03	400	4.0 cpm			
MC-26D2	6/22/2011	100111	7.84	1.84	14.34	93	0.1511	2.65	400	4.0 cpm			
MC-8	6/22/2011	105005	7.64	5.19	16.79	131	0.1150	8.21	200	1.0 cpm	21	0.12	All parametrs satble when sample was collected.
MC-8	6/22/2011	105306	7.28	4.80	16.65	133	0.1152	4.23	200	1.0 cpm			Turbidity < 5 NTU
MC-8	6/22/2011	105613	7.25	4.60	16.55	133	0.1152	5.78	200	1.0 cpm			Do > 0.20 mg/L
MC-8	6/22/2011	105906	7.17	4.26	16.63	134	0.1159	5.60	200	1.0 cpm			
MC-8	6/22/2011	110205	7.18	4.28	16.68	135	0.1153	3.24	200	1.0 cpm			
MC-8	6/22/2011	110506	7.15	4.12	16.74	135	0.1158	2.33	200	1.0 cpm			
MC-8	6/22/2011	110805	7.25	4.00	16.86	136	0.1155	2.12	200	1.0 cpm			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	C	mV	mS/cm	NTUs	ml/min.	Hz or cpm	Minutes	(0.01) ft.	
MC-25D	6/22/2011	114506	6.91	1.14	16.00	93	0.7828	21.7	400	4.0 cpm	27	0.35	All parametrs satble when sample was collected.
MC-25D	6/22/2011	114807	7.28	0.78	15.92	71	0.7564	19.6	400	4.0 cpm			Turbidity > 5 NTU but stable.
MC-25D	6/22/2011	115106	7.31	0.50	15.80	61	0.7338	14.4	400	4.0 cpm			Do > 0.20 mg/L
MC-25D	6/22/2011	115406	7.37	0.38	15.67	53	0.7264	10.86	400	4.0 cpm			
MC-25D	6/22/2011	115706	7.41	0.30	15.57	49	0.7255	9.67	400	4.0 cpm			
MC-25D	6/22/2011	120005	7.56	0.28	15.45	46	0.7232	9.77	400	4.0 cpm			
MC-25D	6/22/2011	120305	7.44	0.27	15.42	43	0.7258	9.13	400	4.0 cpm			
MC-25D	6/22/2011	120614	7.47	0.27	15.55	41	0.7239	10.07	400	4.0 cpm			
MC-25D	6/22/2011	120907	7.49	0.25	15.70	39	0.7229	9.39	400	4.0 cpm			
MC-25D2	6/22/2011	123907	7.28	2.71	15.77	67	0.1439	6.36	400	4.0 cpm	21	0.81	All parametrs satble when sample was collected.
MC-25D2	6/22/2011	124205	7.73	1.07	15.40	52	0.1408	2.16	400	4.0 cpm			Turbidity < 5 NTU
MC-25D2	6/22/2011	124508	7.94	0.99	15.26	16	0.1412	2.00	400	4.0 cpm			Do > 0.20 mg/L
MC-25D2	6/22/2011	124808	7.99	0.87	15.25	0	0.1409	1.70	400	4.0 cpm			
MC-25D2	6/22/2011	125106	8.06	0.79	15.21	-11	0.1409	2.02	400	4.0 cpm			
MC-25D2	6/22/2011	125407	8.05	0.72	15.24	-15	0.1413	2.82	400	4.0 cpm			
MC-25D2	6/22/2011	125705	8.10	0.72	15.17	-20	0.1412	2.45	400	4.0 cpm			
MC-25	6/22/2011	131921	7.13	5.01	18.87	90	0.0995	10.63	300	4.0 cpm	15	0.08	All parametrs satble when sample was collected.
MC-25	6/22/2011	132227	7.11	4.24	18.71	105	0.1028	9.83	300	4.0 cpm			Turbidity > 5 NTU but stable.
MC-25	6/22/2011	132506	7.10	4.07	18.58	108	0.1040	7.97	300	4.0 cpm			Do > 0.20 mg/L
MC-25	6/22/2011	132806	7.07	3.96	18.53	114	0.1045	7.44	300	4.0 cpm			
MC-25	6/22/2011	133105	7.01	3.90	18.52	118	0.1042	7.24	300	4.0 cpm			
MC-24D2	6/22/2011	150110	7.22	2.61	15.84	69	0.1407	1.56	400	4.0 cpm	21	0.00	All parametrs satble when sample was collected.
MC-24D2	6/22/2011	150408	7.50	1.84	15.31	69	0.1406	1.99	400	4.0 cpm			Turbidity < 5 NTU
MC-24D2	6/22/2011	150707	7.65	1.48	15.16	68	0.1413	1.90	400	4.0 cpm			Do > 0.20 mg/L
MC-24D2	6/22/2011	151008	7.71	1.31	15.06	66	0.1408	2.19	400	4.0 cpm			
MC-24D2	6/22/2011	151306	7.71	1.19	15.06	64	0.1413	1.85	400	4.0 cpm			
MC-24D2	6/22/2011	151607	7.79	1.16	15.00	64	0.1408	1.86	400	4.0 cpm			
MC-24D2	6/22/2011	151905	7.80	1.13	14.98	63	0.1413	1.76	400	4.0 cpm			
MC-24	6/22/2011	153709	6.92	2.58	16.10	95	0.1038	1.89	400	4.0 cpm	15	0.06	All parametrs satble when sample was collected.
MC-24	6/22/2011	154006	7.06	1.32	16.06	100	0.1083	1.25	400	4.0 cpm			Turbidity < 5 NTU
MC-24	6/22/2011	154312	7.14	1.19	16.11	99	0.1079	0.80	400	4.0 cpm			Do > 0.20 mg/L
MC-24	6/22/2011	154608	7.08	1.15	16.14	103	0.1084	1.09	400	4.0 cpm			
MC-24	6/22/2011	154909	7.12	1.12	16.18	101	0.1089	0.94	400	4.0 cpm			
MC-24D	6/22/2011	160811	8.27	1.80	14.96	117	0.6786	31.6	400	4.0 cpm	24	0.23	All parametrs satble when sample was collected.
MC-24D	6/22/2011	161131	7.31	1.03	14.79	115	0.5655	28.4	400	4.0 cpm			Turbidity > 5 NTU but stable.
MC-24D	6/22/2011	161435	7.30	0.63	14.69	105	0.5112	29.6	400	4.0 cpm			Do > 0.20 mg/L
MC-24D	6/22/2011	161709	7.39	0.48	14.70	97	0.4953	27.4	400	4.0 cpm			
MC-24D	6/22/2011	162007	7.35	0.38	14.69	90	0.4886	31.2	400	4.0 cpm			
MC-24D	6/22/2011	162324	7.38	0.32	14.61	83	0.4879	32.2	400	4.0 cpm			
MC-24D	6/22/2011	162621	7.40	0.30	14.62	79	0.4896	32.9	400	4.0 cpm			
MC-24D	6/22/2011	162938	7.44	0.29	14.58	73	0.4948	32.6	400	4.0 cpm			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	C	mV	mS/cm	NTUs	ml/min.	Hz or cpm	Minutes	(0.01) ft.	
MC-118D	6/27/2011	112306	7.27	0.25	18.47	-65	0.7112	3.41	400	55 Hz	18	2.11	All parametrs satble when sample was collected.
MC-118D	6/27/2011	112605	7.15	0.22	18.94	-69	0.7060	3.25	400	55 Hz			Turbidity < 5 NTU
MC-118D	6/27/2011	112906	7.31	0.19	18.98	-73	0.7065	2.52	400	55 Hz			Do < 0.20 mg/L but stable.
MC-118D	6/27/2011	113205	7.19	0.17	19.05	-73	0.7036	1.91	400	55 Hz			Do Test Kit Reading - 0.21 mg/L
MC-118D	6/27/2011	113505	7.24	0.18	19.11	-76	0.7026	1.18	400	55 Hz			
MC-118D	6/27/2011	113805	7.24	0.17	19.19	-76	0.7018	0.87	400	55 Hz			
MC-118D2	6/27/2011	121607	6.92	0.93	16.09	-22	0.5202	5.06	400	4.0 cpm	21	1.21	All parametrs satble when sample was collected.
MC-118D2	6/27/2011	121907	7.19	0.53	15.84	-33	0.4829	4.67	400	4.0 cpm			Turbidity < 5 NTU
MC-118D2	6/27/2011	122206	7.19	0.35	15.65	-39	0.4612	4.36	400	4.0 cpm			Do > 0.20 mg/L
MC-118D2	6/27/2011	122506	7.11	0.28	15.61	-44	0.4496	3.85	400	4.0 cpm			
MC-118D2	6/27/2011	122807	7.16	0.20	15.57	-47	0.4367	3.35	400	4.0 cpm			
MC-118D2	6/27/2011	123105	7.26	0.22	15.52	-50	0.4269	3.60	400	4.0 cpm			
MC-118D2	6/27/2011	123406	7.23	0.21	15.52	-50	0.4245	3.56	400	4.0 cpm			
MC-107	6/27/2011	133806	7.10	0.44	15.68	-10	0.1167	0.20	400	3.0 cpm	15	0.08	All parametrs satble when sample was collected.
MC-107	6/27/2011	134119	7.41	0.35	15.58	-24	0.1127	0.00	400	3.0 cpm			Turbidity < 5 NTU
MC-107	6/27/2011	134405	7.51	0.34	15.56	-30	0.1108	0.00	400	3.0 cpm			Do > 0.20 mg/L
MC-107	6/27/2011	134706	7.54	0.32	15.60	-35	0.1097	0.03	400	3.0 cpm			
MC-107	6/27/2011	135015	7.50	0.31	15.52	-39	0.1100	0.00	400	3.0 cpm			
MC-12D	6/27/2011	144806	6.60	0.28	15.93	-24	0.9743	0.84	400	48 Hz	15	1.07	All parametrs satble when sample was collected.
MC-12D	6/27/2011	145102	6.85	0.20	16.74	-21	0.9768	0.50	400	48 Hz			Turbidity < 5 NTU
MC-12D	6/27/2011	145411	6.93	0.14	17.16	-22	0.9800	0.98	400	48 Hz			Do < 0.20 mg/L but stable.
MC-12D	6/27/2011	145707	6.91	0.14	17.42	-23	0.9812	0.82	400	48 Hz			Do Test Kit Reading - 0.21 mg/L
MC-12D	6/27/2011	150005	7.00	0.13	17.57	-25	0.9815	0.58	400	48 Hz			
MC-12	6/27/2011	153805	7.45	0.51	16.80	-144	0.1619	1.32	400	3.0 cpm	27	0.09	All parametrs satble when sample was collected.
MC-12	6/27/2011	154105	7.48	0.27	15.90	-136	0.1484	0.28	400	3.0 cpm			Turbidity < 5 NTU
MC-12	6/27/2011	154409	7.65	0.22	15.53	-133	0.1433	0.00	400	3.0 cpm			Do > 0.20 mg/L
MC-12	6/27/2011	154706	7.73	0.20	15.40	-130	0.1390	0.12	400	3.0 cpm			
MC-12	6/27/2011	155006	7.70	0.19	15.38	-129	0.1360	0.00	400	3.0 cpm			
MC-12	6/27/2011	155306	7.82	0.19	15.35	-127	0.1343	0.00	400	3.0 cpm			
MC-12	6/27/2011	155606	7.72	0.22	15.38	-126	0.1319	0.00	400	3.0 cpm			
MC-12	6/27/2011	155905	7.72	0.21	15.31	-124	0.1302	0.07	400	3.0 cpm			
MC-12	6/27/2011	160208	7.82	0.21	15.32	-123	0.1281	0.00	400	3.0 cpm			
MC-28D	6/28/2011	91005	6.88	3.12	14.09	129	0.1631	2.41	400	4.0 cpm	15	1.87	All parametrs satble when sample was collected.
MC-28D	6/28/2011	91309	7.05	2.71	13.95	125	0.1625	1.32	400	4.0 cpm			Turbidity < 5 NTU
MC-28D	6/28/2011	91605	7.10	2.53	13.94	122	0.1624	0.92	400	4.0 cpm			Do > 0.20 mg/L
MC-28D	6/28/2011	91905	7.13	2.49	13.89	119	0.1624	0.48	400	4.0 cpm			
MC-28D	6/28/2011	92205	7.13	2.47	13.85	116	0.1625	0.49	400	4.0 cpm			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	C	mV	mS/cm	NTUs	ml/min.	Hz or cpm	Minutes	(0.01) ft.	
MC-27D	6/28/2011	101406	7.01	1.63	13.96	36	0.4292	34.0	400	4.0 cpm	27	0.99	All parametrs satble when sample was collected.
MC-27D	6/28/2011	101706	7.29	0.84	13.67	12	0.4172	18.4	400	4.0 cpm			Turbidity < 5 NTU
MC-27D	6/28/2011	102010	7.34	0.46	13.56	2	0.4145	8.65	400	4.0 cpm			Do > 0.20 mg/L
MC-27D	6/28/2011	102306	7.41	0.32	13.55	-5	0.4139	6.36	400	4.0 cpm			
MC-27D	6/28/2011	102607	7.43	0.26	13.50	-12	0.4139	6.61	400	4.0 cpm			
MC-27D	6/28/2011	102907	7.45	0.25	13.47	-16	0.4160	6.15	400	4.0 cpm			
MC-27D	6/28/2011	103206	7.47	0.23	13.46	-20	0.4167	4.90	400	4.0 cpm			
MC-27D	6/28/2011	103505	7.48	0.23	13.46	-24	0.4169	4.95	400	4.0 cpm			
MC-27D	6/28/2011	103806	7.51	0.22	13.43	-26	0.4175	4.94	400	4.0 cpm			
MC-14	6/28/2011	120106	7.34	1.73	15.92	-91	1.6670	14.4	100	0.2 cpm	30	1.27	All parametrs satble when sample was collected.
MC-14	6/28/2011	120405	7.35	1.43	15.83	-96	1.6240	20.9	100	0.2 cpm			Turbidity > 5 NTU but stable.
MC-14	6/28/2011	120706	7.37	1.36	15.78	-101	1.5220	20.2	100	0.2 cpm			Do > 0.20 mg/L
MC-14	6/28/2011	121005	7.38	1.10	15.75	-101	1.3800	22.3	100	0.2 cpm			
MC-14	6/28/2011	121308	7.40	1.08	15.78	-100	1.2430	24.0	100	0.2 cpm			
MC-14	6/28/2011	121611	7.44	0.94	15.79	-101	1.0430	29.1	100	0.2 cpm			
MC-14	6/28/2011	121905	7.42	0.95	15.85	-100	0.9343	21.5	100	0.2 cpm			
MC-14	6/28/2011	122205	7.42	0.80	15.85	-101	0.8517	18.8	100	0.2 cpm			
MC-14	6/28/2011	122505	7.43	0.77	15.81	-102	0.8295	17.3	100	0.2 cpm			
MC-14	6/28/2011	122813	7.44	0.73	15.79	-102	0.8397	17.2	100	0.2 cpm			
MC-14D	6/28/2011	131407	8.05	2.49	15.34	-59	0.1430	34.1	400	4.0 cpm	27	2.04	All parametrs satble when sample was collected.
MC-14D	6/28/2011	131705	8.16	1.27	14.76	-81	0.1406	66.7	400	4.0 cpm			Turbidity > 5 NTU but stable.
MC-14D	6/28/2011	132006	8.17	0.72	14.64	-86	0.1398	33.2	400	4.0 cpm			Do > 0.20 mg/L
MC-14D	6/28/2011	132306	8.18	0.51	14.57	-95	0.1394	22.0	400	4.0 cpm			
MC-14D	6/28/2011	132605	8.16	0.40	14.57	-98	0.1395	14.1	400	4.0 cpm			
MC-14D	6/28/2011	132906	8.20	0.34	14.56	-103	0.1398	11.1	400	4.0 cpm			
MC-14D	6/28/2011	133205	8.18	0.31	14.55	-104	0.1394	9.21	400	4.0 cpm			
MC-14D	6/28/2011	133506	8.20	0.30	14.57	-107	0.1397	8.43	400	4.0 cpm			
MC-14D	6/28/2011	133805	8.20	0.30	14.58	-108	0.1392	8.37	400	4.0 cpm			
MC-21	6/28/2011	142515	7.45	0.56	16.02	-34	0.0825	2.33	400	3.0 cpm	18	0.05	All parametrs satble when sample was collected.
MC-21	6/28/2011	142805	7.52	0.42	15.88	-49	0.0842	0.99	400	3.0 cpm			Turbidity < 5 NTU
MC-21	6/28/2011	143105	7.56	0.38	15.82	-57	0.0854	0.81	400	3.0 cpm			Do > 0.20 mg/L
MC-21	6/28/2011	143405	7.58	0.33	15.77	-62	0.0861	0.58	400	3.0 cpm			
MC-21	6/28/2011	143706	7.59	0.31	15.76	-65	0.0865	0.66	400	3.0 cpm			
MC-21	6/28/2011	144006	7.58	0.30	15.75	-67	0.0866	0.46	400	3.0 cpm			
MC-13	6/28/2011	151605	7.37	0.40	14.21	-50	0.1140	5.41	400	3.0 cpm	15	0.14	All parametrs satble when sample was collected.
MC-13	6/28/2011	151905	7.27	0.31	14.20	-51	0.1129	3.51	400	3.0 cpm			Turbidity < 5 NTU
MC-13	6/28/2011	152205	7.37	0.27	14.14	-51	0.1110	2.88	400	3.0 cpm			Do > 0.20 mg/L
MC-13	6/28/2011	152506	7.34	0.26	14.09	-52	0.1101	1.74	400	3.0 cpm			
MC-13	6/28/2011	152805	7.36	0.25	14.09	-51	0.1091	1.97	400	3.0 cpm			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	C	mV	mS/cm	NTUs	ml/min.	Hz or cpm	Minutes	(0.01) ft.	
MC-13D	6/28/2011	155907	7.51	0.92	14.61	-8	0.1353	1.62	200	1.0 cpm	21	0.78	All parametrs satble when sample was collected.
MC-13D	6/28/2011	160205	7.52	0.70	14.45	-5	0.1346	1.32	200	1.0 cpm			Turbidity < 5 NTU
MC-13D	6/28/2011	160506	7.41	0.59	14.38	-1	0.1344	1.34	200	1.0 cpm			Do > 0.20 mg/L
MC-13D	6/28/2011	160805	7.48	0.54	14.33	1	0.1338	1.12	200	1.0 cpm			
MC-13D	6/28/2011	161106	7.49	0.48	14.35	3	0.1341	1.11	200	1.0 cpm			
MC-13D	6/28/2011	161406	7.48	0.47	14.32	5	0.1343	0.95	200	1.0 cpm			
MC-13D	6/28/2011	161705	7.53	0.44	14.36	5	0.1338	0.89	200	1.0 cpm			
MC-15D	6/29/2011	94907	6.95	0.25	15.34	111	0.3396	0.09	400	48 Hz	15	1.84	All parametrs satble when sample was collected.
MC-15D	6/29/2011	95206	6.89	0.18	15.73	107	0.3381	0.09	400	48 Hz			Turbidity < 5 NTU
MC-15D	6/29/2011	95506	6.91	0.17	15.86	103	0.3373	0.08	400	48 Hz			Do < 0.20 mg/L but stable.
MC-15D	6/29/2011	95807	6.89	0.16	15.94	100	0.3367	0.09	400	48 Hz			Do Test Kit Reading - 0.24 mg/L
MC-15D	6/29/2011	100108	6.93	0.16	15.98	97	0.3372	0.09	400	48 Hz			
MC-10D	6/29/2011	111906	7.39	0.40	14.61	-83	0.9754	2.92	400	49 Hz	15	1.07	All parametrs satble when sample was collected.
MC-10D	6/29/2011	112205	7.41	0.34	15.32	-86	0.9720	1.64	400	49 Hz			Turbidity < 5 NTU
MC-10D	6/29/2011	112505	7.36	0.28	15.81	-88	0.9697	0.93	400	49 Hz			Do > 0.20 mg/L
MC-10D	6/29/2011	112805	7.36	0.28	16.09	-89	0.9688	0.63	400	49 Hz			
MC-10D	6/29/2011	113106	7.34	0.27	16.24	-90	0.9686	0.29	400	49 Hz			
MC-31	6/29/2011	121205	8.13	0.57	13.29	-127	0.1034	4.75	350	4.0 cpm	15	0.07	All parametrs satble when sample was collected.
MC-31	6/29/2011	121508	8.13	0.35	13.19	-131	0.1064	3.17	350	4.0 cpm			Turbidity < 5 NTU
MC-31	6/29/2011	121805	8.09	0.30	13.19	-132	0.1082	1.80	350	4.0 cpm			Do > 0.20 mg/L
MC-31	6/29/2011	122105	8.07	0.27	13.15	-133	0.1108	1.55	350	4.0 cpm			
MC-31	6/29/2011	122405	8.09	0.27	13.11	-133	0.1112	1.19	350	4.0 cpm			
MC-30D	6/29/2011	130005	6.76	1.90	14.29	58	1.178	1.30	400	4.0 cpm	24	0.21	All parametrs satble when sample was collected.
MC-30D	6/29/2011	130307	6.79	1.18	14.20	59	1.164	1.64	400	4.0 cpm			Turbidity < 5 NTU
MC-30D	6/29/2011	130605	6.84	0.84	14.18	59	1.140	2.71	400	4.0 cpm			Do > 0.20 mg/L
MC-30D	6/29/2011	130905	6.83	0.67	14.19	58	1.119	4.50	400	4.0 cpm			
MC-30D	6/29/2011	131208	6.83	0.55	14.16	56	1.097	3.49	400	4.0 cpm			
MC-30D	6/29/2011	131506	6.84	0.45	14.16	54	1.072	4.00	400	4.0 cpm			
MC-30D	6/29/2011	131805	6.86	0.42	14.15	51	1.058	4.71	400	4.0 cpm			
MC-30D	6/29/2011	132108	6.89	0.40	14.17	49	1.043	4.05	400	4.0 cpm			
MC-30	6/29/2011	134006	7.48	0.78	13.92	-27	0.1622	2.53	400	4.0 cpm	18	0.28	All parametrs satble when sample was collected.
MC-30	6/29/2011	134309	7.61	0.37	13.91	-30	0.1515	0.99	400	4.0 cpm			Turbidity < 5 NTU
MC-30	6/29/2011	134610	7.68	0.39	13.89	-35	0.1443	0.93	400	4.0 cpm			Do > 0.20 mg/L
MC-30	6/29/2011	134905	7.68	0.46	13.90	-39	0.1402	0.33	400	4.0 cpm			
MC-30	6/29/2011	135205	7.71	0.49	13.90	-41	0.1382	0.68	400	4.0 cpm			
MC-30	6/29/2011	135506	7.72	0.48	13.90	-42	0.1377	0.37	400	4.0 cpm			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	C	mV	mS/cm	NTUs	ml/min.	Hz or cpm	Minutes	(0.01) ft.	
MC-33	6/29/2011	151906	7.47	0.79	14.12	-94	0.2154	3.70	350	4.0 cpm	33	0.39	All parametrs satble when sample was collected.
MC-33	6/29/2011	152210	7.56	0.40	13.89	-102	0.2002	3.21	350	4.0 cpm			Turbidity < 5 NTU
MC-33	6/29/2011	152521	7.56	0.29	13.83	-106	0.1877	2.75	350	4.0 cpm			Do > 0.20 mg/L
MC-33	6/29/2011	152805	7.57	0.26	13.84	-108	0.1816	1.00	350	4.0 cpm			
MC-33	6/29/2011	153105	7.58	0.25	13.86	-109	0.1742	1.24	350	4.0 cpm			
MC-33	6/29/2011	153406	7.59	0.23	13.86	-110	0.1679	0.75	350	4.0 cpm			
MC-33	6/29/2011	153705	7.61	0.24	13.84	-111	0.1615	1.38	350	4.0 cpm			
MC-33	6/29/2011	154005	7.60	0.24	13.88	-111	0.1576	0.85	350	4.0 cpm			
MC-33	6/29/2011	154306	7.58	0.23	13.96	-111	0.1518	1.45	350	4.0 cpm			
MC-33	6/29/2011	154605	7.60	0.24	13.96	-109	0.1495	1.53	350	4.0 cpm			
MC-33	6/29/2011	154908	7.64	0.24	13.93	-111	0.1476	0.96	350	4.0 cpm			
MC-32	6/30/2011	94114	7.42	1.89	14.75	-109	1.216	10.97	100	4.0 cpm	15	4.74	All parametrs satble when sample was collected.
MC-32	6/30/2011	94405	7.47	1.75	14.68	-110	1.216	11.6	100	4.0 cpm			Turbidity > 5 NTU but stable.
MC-32	6/30/2011	94708	7.39	1.52	14.65	-108	1.216	12.0	100	4.0 cpm			Do > 0.20 mg/L
MC-32	6/30/2011	95020	7.38	1.49	14.64	-112	1.216	12.7	100	4.0 cpm			
MC-32	6/30/2011	95324	7.43	1.39	14.59	-115	1.215	12.5	100	4.0 cpm			
MC-123	6/30/2011	104710	7.15	1.15	14.62	-61	0.9941	4.89	100	0.2 cpm	15	0.46	All parametrs satble when sample was collected.
MC-123	6/30/2011	105005	7.25	1.13	14.63	-66	1.003	1.68	100	0.2 cpm			Turbidity < 5 NTU
MC-123	6/30/2011	105305	7.26	1.07	14.60	-69	1.008	1.61	100	0.2 cpm			Do > 0.20 mg/L
MC-123	6/30/2011	105605	7.23	1.07	14.60	-70	1.010	1.07	100	0.2 cpm			
MC-123	6/30/2011	105906	7.31	1.08	14.58	-71	1.012	0.85	100	0.2 cpm			
MC-20D	6/30/2011	113306	7.89	2.40	14.42	-69	0.1618	22.4	400	4.0 cpm	51	1.49	All parametrs satble when sample was collected.
MC-20D	6/30/2011	113605	8.12	0.91	13.79	-102	0.1574	137.0	400	4.0 cpm			Turbidity < 5 NTU
MC-20D	6/30/2011	113905	8.11	0.57	13.66	-103	0.1564	71.2	400	4.0 cpm			Do > 0.20 mg/L
MC-20D	6/30/2011	114216	8.11	0.46	13.70	-100	0.1564	40.1	400	4.0 cpm			
MC-20D	6/30/2011	114505	8.14	0.41	13.68	-105	0.1552	30.5	400	4.0 cpm			
MC-20D	6/30/2011	114805	8.20	0.35	13.62	-106	0.1556	22.2	400	4.0 cpm			
MC-20D	6/30/2011	115105	8.08	0.34	13.64	-104	0.1553	17.9	400	4.0 cpm			
MC-20D	6/30/2011	115407	8.09	0.32	13.63	-108	0.1549	12.9	400	4.0 cpm			
MC-20D	6/30/2011	115710	8.10	0.31	13.65	-109	0.1548	11.8	400	4.0 cpm			
MC-20D	6/30/2011	120005	8.17	0.30	13.75	-110	0.1557	10.29	400	4.0 cpm			
MC-20D	6/30/2011	120305	8.13	0.29	13.75	-111	0.1550	8.42	400	4.0 cpm			
MC-20D	6/30/2011	120606	8.18	0.29	13.76	-112	0.1550	7.00	400	4.0 cpm			
MC-20D	6/30/2011	120906	8.25	0.27	13.76	-113	0.1550	6.66	400	4.0 cpm			
MC-20D	6/30/2011	121211	8.15	0.27	13.77	-111	0.1550	5.96	400	4.0 cpm			
MC-20D	6/30/2011	121506	8.22	0.28	13.73	-114	0.1554	4.79	400	4.0 cpm			
MC-20D	6/30/2011	121806	8.25	0.29	13.74	-114	0.1551	4.73	400	4.0 cpm			
MC-20D	6/30/2011	122107	8.28	0.27	13.75	-114	0.1553	4.48	400	4.0 cpm			
MC-20	6/30/2011	125406	7.07	1.98	15.93	-25	0.1517	3.11	100	0.2 cpm	18	0.33	All parametrs satble when sample was collected.
MC-20	6/30/2011	125705	7.15	1.66	15.64	-30	0.1506	2.72	100	0.2 cpm			Turbidity < 5 NTU
MC-20	6/30/2011	130006	7.16	1.52	15.41	-31	0.1499	2.53	100	0.2 cpm			Do > 0.20 mg/L
MC-20	6/30/2011	130306	7.19	1.45	15.24	-30	0.1469	2.95	100	0.2 cpm			
MC-20	6/30/2011	130605	7.11	1.39	15.11	-25	0.1444	2.70	100	0.2 cpm			
MC-20	6/30/2011	130906	7.09	1.31	15.06	-21	0.1435	1.95	100	0.2 cpm			

Well	Date	Time	pH	DO	Temp	ORP	SpCond	Turbidity	Flow Rate	Pump Speed	Total Purge Time	Drawdown	Comments
	MMDDYY	HHMMSS		mg/l	C	mV	mS/cm	NTUs	ml/min.	Hz or cpm	Minutes	(0.01) ft.	
MC-122	6/30/2011	134217	7.55	1.47	15.26	-59	0.1340	3.60	100	0.2 cpm	18	0.80	All parametrs satble when sample was collected.
MC-122	6/30/2011	134510	7.68	1.35	15.16	-64	0.1334	4.38	100	0.2 cpm			Turbidity < 5 NTU
MC-122	6/30/2011	134810	7.68	1.21	14.99	-66	0.1337	3.39	100	0.2 cpm			Do > 0.20 mg/L
MC-122	6/30/2011	135105	7.73	1.02	14.89	-68	0.1325	3.14	100	0.2 cpm			
MC-122	6/30/2011	135410	7.70	0.92	14.78	-68	0.1326	2.17	100	0.2 cpm			
MC-122	6/30/2011	135706	7.72	0.93	14.69	-68	0.1316	1.72	100	0.2 cpm			
PZU-5	6/30/2011	143808	7.38	2.43	15.19	-80	0.4791	2.84	100	0.2 cpm	54	0.54	All parametrs satble when sample was collected.
PZU-5	6/30/2011	144108	7.43	2.07	15.09	-84	0.4829	2.78	100	0.2 cpm			Turbidity < 5 NTU
PZU-5	6/30/2011	144406	7.53	1.77	15.02	-86	0.4847	2.72	100	0.2 cpm			Do > 0.20 mg/L
PZU-5	6/30/2011	144707	7.44	1.55	15.00	-88	0.4854	3.42	100	0.2 cpm			
PZU-5	6/30/2011	145010	7.46	1.42	15.09	-89	0.4829	3.82	100	0.2 cpm			
PZU-5	6/30/2011	145309	7.53	1.32	15.22	-89	0.4752	10.30	100	0.2 cpm			
PZU-5	6/30/2011	145607	7.51	1.28	15.33	-89	0.4641	7.70	100	0.2 cpm			
PZU-5	6/30/2011	145907	7.45	1.14	15.44	-87	0.4441	9.01	100	0.2 cpm			
PZU-5	6/30/2011	150212	7.39	1.12	15.60	-80	0.4125	9.38	100	0.2 cpm			
PZU-5	6/30/2011	150506	7.31	1.14	15.60	-71	0.3797	8.17	100	0.2 cpm			
PZU-5	6/30/2011	150805	7.27	1.32	15.49	-60	0.3466	4.98	100	0.2 cpm			
PZU-5	6/30/2011	151106	7.25	1.57	15.57	-52	0.3246	3.58	100	0.2 cpm			
PZU-5	6/30/2011	151406	7.18	1.87	15.72	-42	0.3109	2.77	100	0.2 cpm			
PZU-5	6/30/2011	151705	7.19	2.10	15.77	-35	0.3012	1.99	100	0.2 cpm			
PZU-5	6/30/2011	152005	7.15	2.31	15.70	-29	0.2926	1.07	100	0.2 cpm			
PZU-5	6/30/2011	152306	7.07	2.48	15.56	-23	0.2872	0.39	100	0.2 cpm			
PZU-5	6/30/2011	152614	7.07	2.62	15.32	-18	0.2825	0.25	100	0.2 cpm			
PZU-5	6/30/2011	152906	7.08	2.72	15.30	-13	0.2807	0.22	100	0.2 cpm			
MC-16	7/1/2011	90805	7.59	1.00	13.84	-99	0.2165	3.08	200	1.0 cpm	15	0.75	All parametrs satble when sample was collected.
MC-16	7/1/2011	91106	7.67	0.69	13.83	-108	0.2002	2.65	200	1.0 cpm			Turbidity < 5 NTU
MC-16	7/1/2011	91406	7.68	0.56	13.82	-107	0.1956	2.05	200	1.0 cpm			Do > 0.20 mg/L
MC-16	7/1/2011	91706	7.70	0.54	13.86	-106	0.1933	1.10	200	1.0 cpm			
MC-16	7/1/2011	92011	7.69	0.51	13.88	-104	0.1915	0.76	200	1.0 cpm			
MC-17	7/1/2011	95709	7.11	1.14	15.99	-65	0.2050	2.71	200	1.0 cpm	33	0.35	All parametrs satble when sample was collected.
MC-17	7/1/2011	100006	7.34	0.75	15.59	-80	0.1864	2.33	200	1.0 cpm			Turbidity < 5 NTU
MC-17	7/1/2011	100305	7.32	0.62	15.40	-81	0.1855	1.44	200	1.0 cpm			Do > 0.20 mg/L
MC-17	7/1/2011	100605	7.37	0.53	15.30	-80	0.1938	1.01	200	1.0 cpm			
MC-17	7/1/2011	100905	7.37	0.50	15.27	-79	0.2048	0.69	200	1.0 cpm			
MC-17	7/1/2011	101205	7.31	0.48	15.28	-79	0.2183	0.52	200	1.0 cpm			
MC-17	7/1/2011	101505	7.26	0.45	15.32	-78	0.2296	0.39	200	1.0 cpm			
MC-17	7/1/2011	101805	7.46	0.43	15.40	-78	0.2405	0.32	200	1.0 cpm			
MC-17	7/1/2011	102107	7.40	0.44	15.52	-78	0.2468	0.45	200	1.0 cpm			
MC-17	7/1/2011	102406	7.40	0.42	15.62	-78	0.2503	0.45	200	1.0 cpm			
MC-17	7/1/2011	102707	7.46	0.41	15.70	-77	0.2499	0.35	200	1.0 cpm			
MC-17D	7/1/2011	105606	6.99	1.18	14.61	-27	0.1654	2.27	400	48 Hz	15	1.62	All parametrs satble when sample was collected.
MC-17D	7/1/2011	105906	7.24	0.82	14.90	-8	0.1604	0.32	400	48 Hz			Turbidity < 5 NTU
MC-17D	7/1/2011	110209	7.30	0.77	15.55	-2	0.1608	0.22	400	48 Hz			Do > 0.20 mg/L
MC-17D	7/1/2011	110509	7.29	0.75	15.84	4	0.1609	0.11	400	48 Hz			
MC-17D	7/1/2011	110805	7.29	0.72	16.01	7	0.1609	0.08	400	48 Hz			

APPENDIX I

Analytical Results for Groundwater

TABLE I-1

GROUNDWATER ANALYTICAL RESULTS FOR VOLATILE ORGANIC COMPOUNDS (2004-2009)[1]

PSC Washougal Facility

Washougal, Washington

Concentrations in micrograms per liter (µg/L)

Analyte / Sample ID / Date Sampled	MC-1																					
	3/23/2004	6/15/2004	9/16/2004	12/16/2004	3/17/2005	6/8/2005	9/15/2005	12/1/2005	3/9/2006	6/8/2006	9/14/2006	12/21/2006	3/8/2007	6/7/2007	9/13/2007	12/19/2007	3/14/2008	6/13/2008	9/26/2008	12/3/2008	3/27/2009	6/30/2009
1,2-Dibromo-3-chloropropane	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0028 U	0.0028 U	0.0018 U	0.0018 U	0.0018 U	0.0018 U	0.0018 U	0.0018 U	0.0014 U	0.0014 U	0.0014 U	0.0097 U	0.0028 U	--	--	--	--
1,2-Dibromoethane	--	0.01 U	--	--	--	--	--	0.0017 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,1-Trichloroethane	1 U	2.23	1.02	1 U	1 U	0.94	0.44 J	0.43 J	0.12 U	0.54	0.22 J	0.12 J	0.42 J	0.51	0.18 J	0.76	0.51	0.11 J	0.17 J	0.92	0.24 J	0.1 J
1,1,2-Trichlorotrifluoroethane	2 U	2 U	2 U	2 U	2 U	0.14 U	0.14 U	0.23 J	0.14 U	0.21 J	0.14 U	0.14 U	0.15 J	0.2 J	0.14 U	0.27 J	0.14 J	0.079 U	0.18 J	0.25 J	0.08 J	0.13 U
1,1-Dichloro-1,2,2-trifluoroethane	1 U	1 U	1 U	1 U	1 U	0.14 U	0.14 U	0.14 U	0.14 U	0.18 U	0.18 U	0.18 U	0.49 U	0.49 U	0.49 U	0.49 U	1 U	0.38 U	0.38 U	0.38 U	1 U	0.21 U
1,1-Dichloroethane	1 U	1 U	1 U	1 U	1 U	0.11 U	0.27 J	0.11 U	0.11 U	0.13 J	0.17 J	0.11 U	0.11 U	0.22 J	0.19 J	0.11 U	0.5 U	0.33 J	0.21 J	0.26 J	0.05 J	0.32 J
1,1-Dichloroethene	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.0056 J	0.017 J	0.046	0.0047 U	0.0057 U	0.013 J	0.0066 U	0.02 J	0.029	0.0062 J	0.0061 U	0.02 U	0.0061 U	0.0095 U	0.011 J	0.02 U	0.0095 U
1,2-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.5 U	0.06 J	0.044 U	0.044 U	0.5 U	0.12 U
1,2-Dichloroethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.5 U	0.073 U	0.073 U	0.073 U	0.5 U	0.08 U
2-Butanone	10 U	10 U	10 U	10 U	10 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2.3 UJ	2.3 U	2.3 U	2.3 U	20 U	3.8 U	3.8 U	3.8 U	20 U	1.9 U
2-Methylpentane	1 U	1 U	1 U	1 U	1 U	0.15 U	0.15 U	0.15 U	0.15 U	0.16 U	0.16 U	0.16 U	0.49 U	0.49 U	0.49 U	0.49 U	1 U	0.4 U	0.4 U	0.4 U	1 U	0.21 U
3-Methylpentane	1 U	1 U	1 U	1 U	1 U	0.12 U	0.12 U	0.12 U	0.12 U	0.15 U	0.15 U	0.15 U	0.41 U	0.41 U	0.41 U	0.41 U	1 U	0.36 U	0.36 U	0.36 U	1 U	0.18 U
Acetone	25 U	25 U	25 U	25 U	25 U	4.1 U	7.2 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	20 U	2.5 U	2.5 U	2.5 U	20 U	3.3 U
Benzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.045 U	0.045 U	0.045 U	0.5 U	0.038 U
Carbon disulfide	1 U	1 U	1 U	1 U	1 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.5 U	0.045 U	0.045 U	0.045 U	0.5 U	0.1 U
Carbon tetrachloride	0.062	0.05 U	0.05 U	0.05 U	0.05 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.068 U	0.068 U	0.068 U	0.5 U	0.096 U
Chlorobenzene	1 U	1 U	1 U	1 U	1 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.045 U	0.045 U	0.045 U	0.5 U	0.11 U
Chloroethane	1 U	1 U	1 U	1 U	1 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.5 U	0.14 J	0.13 U	0.13 U	0.5 U	0.16 U
Chloroform	1 U	1 U	1 U	1 U	1 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.042 U	0.042 U	0.042 U	0.5 U	0.064 U
Chloromethane	5 U	5 U	5 U	5 U	5 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.11 UJ	0.053 U	0.08 UJ	0.5 U	0.053 U
cis-1,2-Dichloroethene	1 U	1 U	1 U	1 U	1 U	0.12 U	0.24 J	0.12 U	0.12 U	0.12 U	0.26 J	0.12 U	0.12 U	0.27 J	0.4 J	0.12 U	0.13 J	0.21 J	0.5	0.17 J	0.5 U	0.4 J
Dichlorodifluoromethane	1 U	1 U	1 U	1 U	1 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.5 U	0.083 U	0.083 U	0.083 U	0.5 U	0.13 U
Ethylbenzene	1 U	1 U	1 U	1 U	1 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.5 U	0.042 U	0.042 U	0.042 U	0.5 U	0.05 U
m,p-Xylene	2 U	2 U	2 U	2 U	2 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.5 U	0.078 U	0.078 U	0.078 U	0.5 U	0.091 U
Methylcyclopentane	1 U	1 U	1 U	1 U	1 U	0.13 U	0.13 U	0.13 U	0.13 U	0.14 U	0.14 U	0.14 U	0.42 U	0.42 U	0.42 U	0.42 U	1 U	0.4 U	0.4 U	0.4 U	1 U	0.21 U
Methylene chloride	5 U	5 U	5 U	5 U	5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.23 U	0.23 U	0.23 U	2 U	0.17 U
o-Xylene	1 U	1 U	1 U	1 U	1 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.5 U	0.06 J	0.037 U	0.037 U	0.5 U	0.074 U
Tetrachloroethene	1.27	2.86	2.16	1.61	1.69	1.6	0.77	1.7	0.38 J	1.2	0.43 J	0.67	1	1	0.42 J	3.2	1.8	0.51	0.3 J	2.1	2.2	0.48 J
Toluene	1 U	1 U	1 U	1 U	1 U	0.11 U	0.11 U	0.11 U	0.11 U	0.22 U	0.11 U	0.11 U	0.11 U	0.11 U	0.15 UJ	0.11 U	0.5 U	0.54 UJ	0.19 J	0.048 U	0.5 U	0.052 U
trans-1,2-Dichloroethene	1 U	1 U	1 U	1 U	1 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.5 U	0.048 U	0.048 U	0.048 U	0.5 U	0.091 U
Trichloroethene	1 U	1 U	1 U	1 U	1 U	0.54	0.45 J	0.26 J	0.14 U	0.58	0.36 J	0.14 U	0.22 J	0.65	0.35 J	0.75	0.69	0.46 J	0.25 J	0.6	0.75	0.43 J
Trichlorofluoromethane	1 U	1 U	1 U	1 U	1 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.086 U	0.086 U	0.086 U	0.5 U	0.12 U
Vinyl chloride	0.025	0.032	0.319	0.02 U	0.082 U	0.019 J	0.19	0.0093 J	0.0081 U	0.028	0.14	0.0023 U	0.0023 U	0.087	0.16	0.0035 U	0.02 U	0.071	0.18	0.074 J	0.02 U	0.11

TABLE I-1

GROUNDWATER ANALYTICAL RESULTS FOR VOLATILE ORGANIC COMPOUNDS (2004-2009)[1]

PSC Washougal Facility
Washougal, Washington

Concentrations in micrograms per liter (µg/L)

Analyte / Sample ID / Date Sampled	MC-2																					
	3/24/2004	6/16/2004	9/14/2004	12/14/2004	3/15/2005	6/9/2005	9/13/2005	11/29/2005	3/7/2006	6/6/2006	9/13/2006	12/20/2006	3/8/2007	6/7/2007	9/12/2007	12/21/2007	3/14/2008	6/12/2008	9/23/2008	12/3/2008	3/27/2009	6/29/2009
1,2-Dibromo-3-chloropropane	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0028 U	0.0028 U	0.0018 U	0.0018 U	0.0018 U	0.0018 U	0.0018 U	0.0018 U	0.0014 U	0.0014 U	0.0014 U	0.0099 U	0.0028 U	--	--	--	--
1,2-Dibromoethane	--	0.01 U	--	--	--	--	--	0.0017 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,1-Trichloroethane	1.03	1 U	1 U	1 U	1 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.5 U	0.05 U	0.05 U	0.05 U	0.5 U	0.075 U
1,1,2-Trichlorotrifluoroethane	7.8	11.3	2 U	2 U	2 U	0.38 J	9.5	0.44 J	0.14 U	0.14 U	15	0.2 U	0.14 U	0.53	13	0.14 U	0.5 U	4.2	2.2	0.22 J	0.5 U	0.13 U
1,1-Dichloro-1,2,2-trifluoroethane	1 U	1 U	1 U	1 U	1 U	0.14 U	0.14 U	0.14 U	0.14 U	0.18 U	0.18 U	0.18 U	0.49 U	0.49 U	0.49 U	0.49 U	1 U	0.38 U	0.38 U	0.38 U	1 U	0.21 U
1,1-Dichloroethane	1 U	4.09	1 U	1 U	1 U	0.37 J	0.11 U	0.11 J	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.14 J	0.11 U	0.11 U	0.5 U	0.042 U	0.042 U	0.09 J	0.5 U	0.1 J
1,1-Dichloroethene	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.0047 U	0.05 U	0.006 J	0.0079 J	0.0047 U	0.11 U	0.0066 U	0.0066 U	0.0066 U	0.0061 U	0.0061 U	0.02 U	0.0061 U	0.0095 U	0.0095 U	0.02 U	0.0095 U
1,2-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.5 U	0.044 U	0.044 U	0.044 U	0.5 U	0.12 U
1,2-Dichloroethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.5 U	0.073 U	0.073 U	0.073 U	0.5 U	0.08 U
2-Butanone	10 U	10 U	10 U	10 U	10 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2.3 UJ	2.3 U	2.3 U	2.3 U	20 U	3.8 U	3.8 U	3.8 U	20 U	1.9 U
2-Methylpentane	1 U	1 U	1 U	1 U	1 U	0.15 U	0.15 U	0.15 U	0.15 U	0.16 U	0.16 U	0.16 U	0.49 U	0.49 U	0.49 U	0.49 U	1 U	0.4 U	0.4 U	0.4 U	1 U	0.21 U
3-Methylpentane	1 U	1 U	1 U	1 U	1 U	0.12 U	0.12 U	0.12 U	0.12 U	0.15 U	0.15 U	0.15 U	0.41 U	0.41 U	0.41 U	0.41 U	1 U	0.36 U	0.36 U	0.36 U	1 U	0.18 U
Acetone	25 U	25 U	25 U	25 U	25 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	20 U	2.5 U	2.5 U	2.5 U	20 U	3.3 U
Benzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.045 U	0.045 U	0.045 U	0.5 U	0.038 U
Carbon disulfide	1 U	1 U	1 U	1 U	1 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.5 U	0.045 U	0.045 U	0.045 U	0.5 U	0.1 U
Carbon tetrachloride	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.068 U	0.068 U	0.068 U	0.5 U	0.096 U
Chlorobenzene	1 U	1 U	1 U	1 U	1 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.045 U	0.045 U	0.045 U	0.5 U	0.11 U
Chloroethane	1 U	1 U	1 U	1 U	1 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.5 U	0.13 U	0.13 U	0.13 U	0.5 U	0.16 U
Chloroform	1 U	1 U	1 U	1 U	1 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.042 U	0.042 U	0.042 U	0.5 U	0.064 U
Chloromethane	5 U	5 U	5 U	5 U	5 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.11 UJ	0.053 U	0.053 U	0.5 U	0.053 U
cis-1,2-Dichloroethene	1 U	1 U	1 U	1 U	1 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.5 U	0.045 U	0.045 U	0.045 U	0.5 U	0.067 U
Dichlorodifluoromethane	1 U	1 U	1 U	1 U	1 U	0.17 U	6.8 U	0.17 U	0.17 U	0.17 U	0.17 U	0.5 U	0.17 U	0.17 U	0.17 U	0.17 U	0.5 U	0.083 U	0.083 U	0.083 U	0.5 U	0.13 U
Ethylbenzene	1 U	1 U	1 U	1 U	1 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.5 U	0.042 U	0.042 U	0.042 U	0.5 U	0.05 U
m,p-Xylene	2 U	2 U	2 U	2 U	2 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.5 U	0.078 U	0.078 U	0.078 U	0.5 U	0.091 U
Methylcyclopentane	1 U	1 U	1 U	1 U	1 U	0.13 U	0.13 U	0.13 U	0.13 U	0.14 U	0.14 U	0.14 U	0.42 U	0.42 U	0.42 U	0.42 U	1 U	0.4 U	0.4 U	0.4 U	1 U	0.21 U
Methylene chloride	5 U	5 U	5 U	5 U	5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.23 U	0.23 U	0.23 U	2 U	0.17 U
o-Xylene	1 U	1 U	1 U	1 U	1 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.5 U	0.037 U	0.037 U	0.037 U	0.5 U	0.074 U
Tetrachloroethene	0.15	0.088	1 U	1 U	1 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.5 U	0.077 U	0.077 U	0.077 U	0.5 U	0.066 U
Toluene	1 U	1 U	1 U	1 U	1 U	0.11 U	0.3 J	0.11 U	0.16 U	0.22 U	0.32 U	0.13 J	0.11 J	0.11 U	0.41 UJ	0.11 U	0.5 U	0.54 UJ	0.2 J	0.048 U	0.5 UJ	0.09 J
trans-1,2-Dichloroethene	1 U	1 U	1 U	1 U	1 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.5 U	0.048 U	0.048 U	0.048 U	0.5 U	0.091 U
Trichloroethene	1 U	1 U	1 U	1 U	1 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.061 U	0.061 U	0.061 U	0.5 U	0.1 U
Trichlorofluoromethane	1 U	1 U	1 U	1 U	1 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.086 U	0.086 U	0.086 U	0.5 U	0.12 U
Vinyl chloride	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.0081 U	0.011 J	0.0081 U	0.0094 J	0.0081 U	0.0037 J	0.0055 J	0.01 J	0.016 J	0.0035 U	0.0035 U	0.02 U	0.0035 U	0.0035 U	0.0035 U	0.02 U	0.0084 U

TABLE I-1

GROUNDWATER ANALYTICAL RESULTS FOR VOLATILE ORGANIC COMPOUNDS (2004-2009)[1]

PSC Washougal Facility

Washougal, Washington

Concentrations in micrograms per liter (µg/L)

Analyte	Sample ID / Date Sampled	MC-2D																				
		3/24/2004	6/16/2004	9/14/2004	12/14/2004	3/15/2005	6/9/2005	9/13/2005	11/29/2005	3/7/2006	6/6/2006	9/13/2006	12/20/2006	3/8/2007	6/7/2007	9/12/2007	12/21/2007	3/14/2008	6/12/2008	9/23/2008	12/3/2008	3/27/2009	6/29/2009
1,2-Dibromo-3-chloropropane		0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0028 U	0.0028 U	0.0018 U	0.0018 U	0.0018 U	0.0018 U	0.0018 U	0.0018 U	0.0096 U	0.0014 U	0.0014 U	0.0097 U	0.0028 U	--	--		
1,2-Dibromoethane		--	0.01 U	--	--	--	--	--	0.0017 U	--	--	--	--	--	--	--	--	--	--	--	--		
1,1,1-Trichloroethane		1 U	1 U	1 U	1 U	1 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.5 U	0.05 U	0.05 U	0.05 U	0.5 U	0.075 U
1,1,2-Trichlorotrifluoroethane		3.44	3.69	5.57	6.01	3.05	5.9	3.7	3.8	4.6	22	4.9	6.1	5.1	5.3	6	4.5	3.3	23	4.1	4.6	4	10
1,1-Dichloro-1,2,2-trifluoroethane		1 U	1 U	1 U	1 U	1 U	0.14 U	0.14 U	0.14 U	0.14 U	0.18 U	0.18 U	0.18 U	0.49 U	0.49 U	0.49 U	0.49 U	1 U	0.38 U	0.38 U	0.38 U	1 U	0.21 U
1,1-Dichloroethane		1 U	1 U	1 U	1 U	1 U	1.1	0.8	0.85	1.1	5.4	1.6	1.5	1.7	2.1	2.2	1.8	1.4	8.9	1.7	2	1.6	4.7
1,1-Dichloroethene		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.041 U	0.023 U	0.03 U	0.041 U	0.13 U	0.041 U	0.048 U	0.034	0.031 U	0.0061 U	0.0061 U	0.02 U	0.022 U	0.0095 U	0.0095 U	0.02 U	0.0095 U
1,2-Dichlorobenzene		1 U	1 U	1 U	1 U	1 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.5 U	0.044 U	0.044 U	0.044 U	0.5 U	0.12 U
1,2-Dichloroethane		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.5 U	0.073 U	0.073 U	0.073 U	0.5 U	0.08 U
2-Butanone		10 U	10 U	10 U	10 U	10 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2.3 UJ	2.3 U	2.3 U	2.3 U	20 U	3.8 U	3.8 U	3.8 U	20 U	1.9 U
2-Methylpentane		1 U	1 U	1 U	1 U	1 U	0.15 U	0.15 U	0.15 U	0.15 U	0.16 U	0.16 U	0.16 U	0.49 U	0.49 U	0.49 U	0.49 U	1 U	0.4 U	0.4 U	0.4 U	1 U	0.21 U
3-Methylpentane		1 U	1 U	1 U	1 U	1 U	0.12 U	0.12 U	0.12 U	0.12 U	0.15 U	0.15 U	0.15 U	0.41 U	0.41 U	0.41 U	0.41 U	1 U	0.36 U	0.36 U	0.36 U	1 U	0.18 U
Acetone		25 U	25 U	25 U	25 U	25 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	20 U	2.5 U	2.5 U	2.5 U	20 U	3.3 U
Benzene		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.045 U	0.045 U	0.045 U	0.5 U	0.038 U
Carbon disulfide		1 U	1 U	1 U	1 U	1 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.5 U	0.045 U	0.045 U	0.045 U	0.5 U	0.1 U
Carbon tetrachloride		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.068 U	0.068 U	0.068 U	0.5 U	0.096 U
Chlorobenzene		1 U	1 U	1 U	1 U	1 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.045 U	0.045 U	0.045 U	0.5 U	0.11 U
Chloroethane		1 U	1 U	1 U	1 U	1 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.5 U	0.13 U	0.13 U	0.13 U	0.5 U	0.16 U
Chloroform		1 U	1 U	1 U	1 U	1 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.042 U	0.042 U	0.042 U	0.5 U	0.064 U
Chloromethane		5 U	5 U	5 U	5 U	5 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.18 J	0.14 U	0.5 U	0.14 UJ	0.06 J	0.053 U	0.5 U	0.053 U
cis-1,2-Dichloroethene		1 U	1 U	1 U	1 U	1 U	0.12 U	0.12 U	0.12 U	0.14 J	0.7	0.22 J	0.32 J	0.33 J	0.34 J	0.35 J	0.42 J	0.31 J	2.1	0.42 J	0.52	0.36 J	1.3
Dichlorodifluoromethane		1 U	1 U	1 U	1 U	1 U	0.17 U	0.28 J	0.17 U	0.17 U	0.17 U	0.17 U	0.5 U	0.17 U	0.17 U	0.17 U	0.17 U	0.5 U	0.083 U	0.083 U	0.083 U	0.5 U	0.13 U
Ethylbenzene		1 U	1 U	1 U	1 U	1 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.5 U	0.042 U	0.042 U	0.042 U	0.5 U	0.05 U
m,p-Xylene		2 U	2 U	2 U	2 U	2 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.5 U	0.078 U	0.078 U	0.078 U	0.5 U	0.091 U
Methylcyclopentane		1 U	1 U	1 U	1 U	1 U	0.13 U	0.13 U	0.13 U	0.13 U	0.14 U	0.14 U	0.14 U	0.42 U	0.42 U	0.42 U	0.42 U	1 U	0.4 U	0.4 U	0.4 U	1 U	0.21 U
Methylene chloride		5 U	5 U	5 U	5 U	5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.23 U	0.23 U	0.23 U	2 U	0.17 U
o-Xylene		1 U	1 U	1 U	1 U	1 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.5 U	0.037 U	0.037 U	0.037 U	0.5 U	0.074 U
Tetrachloroethene		0.059	0.05 U	1 U	1 U	1 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.5 U	0.077 U	0.077 U	0.077 U	0.5 U	0.066 U
Toluene		1 U	1 U	1 U	1 U	1 U	0.11 U	0.11 U	0.11 U	0.16 U	0.22 U	0.11 U	0.11 U	0.11 U	0.11 U	0.25 UJ	0.11 U	0.5 U	0.54 UJ	0.07 J	0.048 U	0.5 U	0.052 U
trans-1,2-Dichloroethene		1 U	1 U	1 U	1 U	1 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.5 U	0.048 U	0.048 U	0.048 U	0.5 U	0.091 U
Trichloroethene		1 U	1 U	1 U	1 U	1 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.12 J	0.061 U	0.061 U	0.5 U	0.1 U
Trichlorofluoromethane		1 U	1 U	1 U	1 U	1 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.086 U	0.086 U	0.086 U	0.5 U	0.12 U
Vinyl chloride		0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.0081 U	0.042	0.046	0.088	0.073	0.045	0.17	0.14	0.17	0.0089 J	0.017 J	0.0089 J	0.023	0.011 J	0.01 J	0.02 U	0.018 J

TABLE I-1

GROUNDWATER ANALYTICAL RESULTS FOR VOLATILE ORGANIC COMPOUNDS (2004-2009)[1]

PSC Washougal Facility

Washougal, Washington

Concentrations in micrograms per liter (µg/L)

Analyte / Sample ID / Date Sampled	MC-8																				
	3/24/2004	6/17/2004	9/14/2004	12/14/2004	3/15/2005	6/8/2005	9/13/2005	11/30/2005	3/7/2006	6/7/2006	9/12/2006	12/21/2006	3/8/2007	6/6/2007	9/13/2007	12/20/2007	3/14/2008	6/11/2008	9/26/2008	12/4/2008	3/26/2009	6/30/2009
1,2-Dibromo-3-chloropropane	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0028 U	0.0028 U	0.0018 U	0.0018 U	0.0018 U	0.0018 U	0.0018 U	0.0018 U	0.0014 U	0.0014 U	0.0014 U	0.0097 U	0.0028 U	--	--	--	--
1,2-Dibromoethane	--	0.01 U	--	--	--	--	--	0.0017 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,1-Trichloroethane	1 U	1 U	1 U	1 U	1 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.5 U	0.05 U	0.05 U	0.05 U	0.5 U	0.075 U
1,1,2-Trichlorotrifluoroethane	2 U	8.84	26.2	2 U	2 U	0.31 J	0.16 J	0.29 J	0.45 J	0.32 J	0.3 J	0.69 U	0.42 J	0.24 J	0.37 J	0.45 J	0.14 J	0.08 J	0.16 J	0.23 J	0.13 J	0.3 J
1,1-Dichloro-1,2,2-trifluoroethane	1 U	1 U	1 U	1 U	1 U	0.14 U	0.14 U	0.14 U	0.14 U	0.18 U	0.18 U	0.18 U	0.49 U	0.49 U	0.49 U	0.49 U	1 U	0.38 U	0.38 U	0.38 U	1 U	0.21 U
1,1-Dichloroethane	1 U	1 U	1 U	1 U	1 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.5 U	0.042 U	0.042 U	0.042 U	0.5 U	0.077 U
1,1-Dichloroethene	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.0047 U	0.014 J	0.0047 U	0.0047 U	0.0047 U	0.017 J	0.0066 U	0.0066 U	0.0081 U	0.016 J	0.0061 U	0.02 U	0.0061 U	0.01 J	0.0095 U	0.02 U	0.0095 U
1,2-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.5 U	0.044 U	0.044 U	0.044 U	0.5 U	0.12 U
1,2-Dichloroethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.5 U	0.073 U	0.073 U	0.073 U	0.5 U	0.08 U
2-Butanone	10 U	10 U	10 U	10 U	10 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2.3 UJ	2.3 U	2.3 U	2.3 U	20 U	3.8 U	3.8 U	3.8 U	20 U	1.9 U
2-Methylpentane	1 U	1 U	1.39	1 U	1 U	0.15 U	0.58 J	0.15 U	0.15 U	0.16 U	0.68 J	0.16 U	0.49 U	0.49 U	1.3	0.49 U	1 U	0.4 U	2	0.4 U	1 U	0.21 U
3-Methylpentane	1 U	1 U	1 U	1 U	1 U	0.12 U	0.49 J	0.12 U	0.12 U	0.15 U	0.46 J	0.15 U	0.41 U	0.41 U	1	0.41 U	1 U	0.36 U	1.6	0.36 U	1 UJ	0.18 U
Acetone	25 U	25 U	25 U	25 U	25 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	20 U	2.5 U	2.5 U	2.5 U	20 U	7.4 UJ
Benzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.045 U	0.045 U	0.045 U	0.5 U	0.038 U
Carbon disulfide	1 U	1 U	1 U	1 U	1 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.5 U	0.045 U	0.045 U	0.045 U	0.5 U	0.1 U
Carbon tetrachloride	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.068 U	0.068 U	0.068 U	0.5 U	0.096 U
Chlorobenzene	1 U	1 U	1 U	1 U	1 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.045 U	0.045 U	0.045 U	0.5 U	0.11 U
Chloroethane	1 U	1 U	1 U	1 U	1 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.5 U	0.13 U	0.13 U	0.13 U	0.5 U	0.16 U
Chloroform	1 U	1 U	1 U	1 U	1 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.042 U	0.042 U	0.042 U	0.5 U	0.064 U
Chloromethane	5 U	5 U	5 U	5 U	5 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 J	0.14 U	0.5 U	0.11 UJ	0.053 U	0.053 U	0.5 U	0.1 UJ
cis-1,2-Dichloroethene	1 U	1.23	2.61	1 U	1 U	0.12 U	2.5	0.12 U	0.12 U	0.12 U	2.4	0.12 U	0.12 U	0.12 U	1.3	0.12 U	0.5 U	0.045 U	0.72	0.045 U	0.5 U	0.067 U
Dichlorodifluoromethane	1 U	1 U	1 U	1 U	1 U	0.17 U	0.97 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.5 U	0.083 U	0.083 U	0.083 U	0.5 U	0.13 U
Ethylbenzene	1 U	1 U	1 U	1 U	1 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.5 U	0.042 U	0.06 J	0.042 U	0.5 U	0.05 U
m,p-Xylene	2 U	2 U	2 U	2 U	2 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.31 J	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.5 U	0.078 U	0.15 J	0.078 U	0.5 U	0.091 U
Methylcyclopentane	1 U	1 U	1 U	1 U	1 U	0.13 U	0.13 U	0.13 U	0.13 U	0.14 U	0.32 J	0.14 U	0.42 U	0.42 U	0.42 U	0.42 U	1 U	0.4 U	1	0.4 U	1 UJ	0.21 U
Methylene chloride	5 U	5 U	5 U	5 U	5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.23 U	0.23 U	0.23 U	2 U	0.17 U
o-Xylene	1 U	1 U	1 U	1 U	1 U	0.11 U	0.16 J	0.11 U	0.11 U	0.11 U	0.16 J	0.11 U	0.11 U	0.11 U	0.2 J	0.11 U	0.5 U	0.037 U	0.25 J	0.037 U	0.5 U	0.074 U
Tetrachloroethene	1.88	1.86	1.22	1.09	2.36	2.3	0.67	1.2	0.98	1.8	0.74	0.98	0.96	1.8	0.6	0.5	0.85	1.2	0.43 J	0.77	0.68	1.3
Toluene	1 U	1 U	1 U	1 U	1 U	0.11 U	0.15 J	0.11 U	0.11 U	0.11 U	0.2 J	0.11 U	0.11 U	0.11 U	0.16 UJ	0.11 U	0.5 U	0.54 UJ	0.33 J	0.048 U	0.5 U	0.052 U
trans-1,2-Dichloroethene	1 U	1 U	1 U	1 U	1 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.5 U	0.048 U	0.048 U	0.048 U	0.5 U	0.091 U
Trichloroethene	1 U	1 U	1 U	1 U	1 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.061 U	0.061 U	0.061 U	0.5 U	0.1 U
Trichlorofluoromethane	1 U	1 U	1 U	1 U	1 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.086 U	0.086 U	0.086 U	0.5 U	0.12 U
Vinyl chloride	0.02 U	0.02 U	0.113	0.02 U	0.173 U	0.0086 J	0.1	0.0081 U	0.0081 U	0.0081 U	0.21	0.0023 U	0.0058 J	0.031	0.24	0.0054 J	0.02 U	0.0091 J	0.43	0.02	0.02 U	0.021

TABLE I-1

GROUNDWATER ANALYTICAL RESULTS FOR VOLATILE ORGANIC COMPOUNDS (2004-2009)[1]

PSC Washougal Facility

Washougal, Washington

Concentrations in micrograms per liter (µg/L)

Sample ID	MC-10D																					
Analyte / Date Sampled	3/24/2004	6/16/2004	9/14/2004	12/14/2004	3/15/2005	6/7/2005	9/13/2005	11/29/2005	3/7/2006	6/6/2006	9/13/2006	12/20/2006	3/7/2007	6/6/2007	9/12/2007	12/21/2007	3/13/2008	6/12/2008	9/26/2008	12/5/2008	3/25/2009	6/29/2009
1,2-Dibromo-3-chloropropane	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0028 U	0.0028 U	0.0018 U	0.0018 U	0.0018 U	0.0018 U	0.0018 U	0.0018 U	0.0014 U	0.0014 U	0.0014 U	0.0097 U	0.0028 U	--	--	--	--
1,2-Dibromoethane	--	0.01 U	--	--	--	--	--	0.0017 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,1-Trichloroethane	1 U	1 U	1 U	1 U	1 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.5 U	0.05 U	0.05 U	0.05 U	0.5 U	0.075 U
1,1,2-Trichlorotrifluoroethane	2 U	2 U	2 U	2 U	2 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.079 U	0.079 U	0.079 U	0.5 U	0.13 U
1,1-Dichloro-1,2,2-trifluoroethane	1 U	1 U	1 U	1 U	1 U	0.14 U	0.14 U	0.14 U	0.14 U	0.18 U	0.18 U	0.18 U	0.49 U	0.49 U	0.49 U	0.49 U	1 U	0.38 U	0.38 U	0.38 U	1 U	0.21 U
1,1-Dichloroethane	1 U	1 U	1 U	1 U	1 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.5 U	0.042 U	0.042 U	0.042 U	0.5 U	0.077 U
1,1-Dichloroethene	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.0047 U	0.0047 U	0.0047 U	0.0047 U	0.0047 U	0.0066 U	0.0066 U	0.0066 U	0.0066 U	0.0061 U	0.0061 U	0.02 U	0.0061 U	0.0095 U	0.0095 U	0.02 U	0.0095 U
1,2-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.5 U	0.044 U	0.044 U	0.044 U	0.5 U	0.12 U
1,2-Dichloroethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.5 U	0.073 U	0.073 U	0.073 U	0.5 U	0.08 U
2-Butanone	10 U	10 U	10 U	10 U	10 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2.3 UJ	2.3 U	2.3 U	2.3 U	20 U	3.8 U	3.8 U	3.8 U	20 U	1.9 U
2-Methylpentane	1 U	1 U	1 U	1 U	1 U	0.15 U	0.15 U	0.15 U	0.15 U	0.16 U	0.16 U	0.16 U	0.49 U	0.49 U	0.49 U	0.49 U	1 U	0.4 U	0.4 U	0.4 U	1 U	0.21 U
3-Methylpentane	1 U	1 U	1 U	1 U	1 U	0.12 U	0.12 U	0.12 U	0.12 U	0.15 U	0.15 U	0.15 U	0.41 U	0.41 U	0.41 U	0.41 U	1 U	0.36 U	0.36 U	0.36 U	1 UJ	0.18 U
Acetone	25 U	25 U	25 U	25 U	25 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	20 U	2.5 U	2.5 U	2.5 U	20 U	3.3 U
Benzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.045 U	0.045 U	0.045 U	0.5 U	0.038 U
Carbon disulfide	1 U	1 U	1 U	1 U	1 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.5 U	0.045 U	0.045 U	0.045 U	0.5 U	0.1 U
Carbon tetrachloride	0.061	0.05 U	0.05 U	0.05 U	0.05 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.068 U	0.068 U	0.068 U	0.5 U	0.096 U
Chlorobenzene	1 U	1 U	1 U	1 U	1 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.045 U	0.045 U	0.045 U	0.5 U	0.11 U
Chloroethane	1 U	1 U	1 U	1 U	1 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.5 U	0.13 U	0.13 U	0.13 U	0.5 U	0.16 U
Chloroform	1 U	1 U	1 U	1 U	1 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.042 U	0.042 U	0.042 U	0.5 U	0.064 U
Chloromethane	5 U	5 U	5 U	5 U	5 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.11 UJ	0.053 U	0.053 U	0.5 U	0.053 U
cis-1,2-Dichloroethene	1 U	1 U	1 U	1 U	1 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.5 U	0.045 U	0.045 U	0.045 U	0.5 U	0.067 U
Dichlorodifluoromethane	1 U	1 U	1 U	1 U	1 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.5 U	0.083 U	0.083 U	0.083 U	0.5 U	0.13 U
Ethylbenzene	1 U	1 U	1 U	1 U	1 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.5 U	0.042 U	0.042 U	0.042 U	0.5 U	0.05 U
m,p-Xylene	2 U	2 U	2 U	2 U	2 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.5 U	0.078 U	0.078 U	0.078 U	0.5 U	0.091 U
Methylcyclopentane	1 U	1 U	1 U	1 U	1 U	0.13 U	0.13 U	0.13 U	0.13 U	0.14 U	0.14 U	0.14 U	0.42 U	0.42 U	0.42 U	0.42 U	1 U	0.4 U	0.4 U	0.4 U	1 UJ	0.21 U
Methylene chloride	5 U	5 U	5 U	5 U	5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.23 U	0.23 U	0.23 U	2 U	0.17 U
o-Xylene	1 U	1 U	1 U	1 U	1 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.5 U	0.037 U	0.037 U	0.037 U	0.5 U	0.074 U
Tetrachloroethene	0.05 U	0.05 U	1 U	1 U	1 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.5 U	0.077 U	0.077 U	0.077 U	0.5 U	0.066 U
Toluene	1 U	1 U	1 U	1 U	1 U	0.11 U	0.11 U	0.11 U	0.16 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.5 U	0.54 UJ	0.05 J	0.048 U	0.5 U	0.052 U
trans-1,2-Dichloroethene	1 U	1 U	1 U	1 U	1 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.5 U	0.048 U	0.048 U	0.048 U	0.5 U	0.091 U
Trichloroethene	1 U	1 U	1 U	1 U	1 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.061 U	0.061 U	0.061 U	0.5 U	0.1 U
Trichlorofluoromethane	1 U	1 U	1 U	1 U	1 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.086 U	0.086 U	0.086 U	0.5 U	0.12 U
Vinyl chloride	0.02 U	0.02 U	0.027 U	0.02 U	0.02 U	0.0081 U	0.0081 U	0.0081 U	0.0081 U	0.0081 U	0.0043 J	0.0041 J	0.0054 J	0.0068 J	0.0035 U	0.0074 J	0.02 U	0.0035 U	0.0035 U	0.0035 J	0.02 U	0.0084 U

TABLE I-1

GROUNDWATER ANALYTICAL RESULTS FOR VOLATILE ORGANIC COMPOUNDS (2004-2009)[1]

PSC Washougal Facility

Washougal, Washington

Concentrations in micrograms per liter (µg/L)

Sample ID	MC-12																				
Analyte / Date Sampled	3/23/2004	6/15/2004	9/16/2004	12/16/2004	3/17/2005	6/9/2005	9/15/2005	12/1/2005	3/9/2006	6/8/2006	9/12/2006	12/20/2006	3/7/2007	6/6/2007	9/12/2007	12/21/2007	3/13/2008	6/13/2008	9/26/2008	12/5/2008	3/25/2009	6/29/2009
1,2-Dibromo-3-chloropropane	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0028 U	0.0028 U	0.0018 U	0.0018 U	0.0018 U	0.0018 U	0.0018 U	0.0018 U	0.0014 U	0.0014 U	0.0014 U	0.0099 U	0.0028 U	--	--	--	--
1,2-Dibromoethane	--	0.01 U	--	--	--	--	--	0.0017 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,1-Trichloroethane	1 U	1 U	1 U	1 U	1 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.5 U	0.05 U	0.05 U	0.05 U	0.5 U	0.075 U
1,1,2-Trichlorotrifluoroethane	2 U	2 U	2 U	2 U	2 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.079 U	0.079 U	0.079 U	0.5 U	0.13 U
1,1-Dichloro-1,2,2-trifluoroethane	1 U	1 U	1 U	1 U	1 U	0.14 U	0.14 U	0.14 U	0.14 U	0.18 U	0.18 U	0.18 U	0.49 U	0.49 U	0.49 U	0.49 U	1 U	0.38 U	0.38 U	0.38 U	1 U	0.21 U
1,1-Dichloroethane	1 U	1 U	1 U	1 U	1 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.5 U	0.042 U	0.042 U	0.042 U	0.5 U	0.077 U
1,1-Dichloroethene	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.0047 U	0.0047 U	0.0047 U	0.0047 U	0.0047 U	0.0066 U	0.0066 U	0.0066 U	0.0066 U	0.0061 U	0.0061 U	0.02 U	0.0061 U	0.0095 U	0.0095 U	0.02 U	0.0095 U
1,2-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.5 U	0.044 U	0.044 U	0.044 U	0.5 U	0.12 U
1,2-Dichloroethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.5 U	0.073 U	0.073 U	0.073 U	0.5 U	0.08 U
2-Butanone	10 U	10 U	10 U	10 U	10 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2.3 UJ	2.3 U	2.3 U	2.3 U	20 U	3.8 U	3.8 U	3.8 U	20 U	1.9 U
2-Methylpentane	1 U	1 U	1 U	1 U	1 U	0.15 U	0.15 U	0.15 U	0.15 U	0.16 U	0.16 U	0.16 U	0.49 U	0.49 U	0.49 U	0.49 U	1 U	0.4 U	0.4 U	0.4 U	1 U	0.21 U
3-Methylpentane	1 U	1 U	1 U	1 U	1 U	0.12 U	0.12 U	0.12 U	0.12 U	0.15 U	0.15 U	0.15 U	0.41 U	0.41 U	0.41 U	0.41 U	1 U	0.36 U	0.36 U	0.36 U	1 UJ	0.18 U
Acetone	25 U	25 U	25 U	25 U	25 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	20 U	2.5 U	2.5 U	2.5 U	20 U	7.4 UJ
Benzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.045 U	0.045 U	0.045 U	0.5 U	0.038 U
Carbon disulfide	1 U	1 U	1 U	1 U	1 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.5 U	0.045 U	0.045 U	0.045 U	0.5 U	0.1 U
Carbon tetrachloride	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.068 U	0.068 U	0.068 U	0.5 U	0.096 U
Chlorobenzene	1 U	1 U	1 U	1 U	1 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.045 U	0.045 U	0.045 U	0.5 U	0.11 U
Chloroethane	1 U	1 U	1 U	1 U	1 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.5 U	0.13 U	0.13 U	0.13 U	0.5 U	0.16 U
Chloroform	1 U	1 U	1 U	1 U	1 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.042 U	0.042 U	0.042 U	0.5 U	0.064 U
Chloromethane	5 U	5 U	5 U	5 U	5 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.053 U	0.053 U	0.07 UJ	0.5 U	0.053 U
cis-1,2-Dichloroethene	1 U	1 U	1 U	1 U	1 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.5 U	0.045 U	0.045 U	0.045 U	0.5 U	0.067 U
Dichlorodifluoromethane	1 U	1 U	1 U	1 U	1 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.5 U	0.083 U	0.083 U	0.083 U	0.5 U	0.13 U
Ethylbenzene	1 U	1 U	1 U	1 U	1 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.5 U	0.042 U	0.042 U	0.042 U	0.5 U	0.05 U
m,p-Xylene	2 U	2 U	2 U	2 U	2 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.5 U	0.078 U	0.078 U	0.078 U	0.5 U	0.091 U
Methylcyclopentane	1 U	1 U	1 U	1 U	1 U	0.13 U	0.13 U	0.13 U	0.13 U	0.14 U	0.14 U	0.14 U	0.42 U	0.42 U	0.42 U	0.42 U	1 U	0.4 U	0.4 U	0.4 U	1 UJ	0.21 U
Methylene chloride	5 U	5 U	5.13 U	5 U	5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.23 U	0.23 U	0.23 U	2 U	0.17 U
o-Xylene	1 U	1 U	1 U	1 U	1 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.5 U	0.037 U	0.037 U	0.037 U	0.5 U	0.074 U
Tetrachloroethene	0.05 U	0.05 U	1 U	1 U	1 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.5 U	0.077 U	0.077 U	0.077 U	0.5 U	0.066 U
Toluene	1 U	1 U	1 U	1 U	1 U	0.11 U	0.12 J	0.11 U	0.11 U	0.22 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.5 U	0.54 UJ	0.048 U	0.12 UJ	0.5 U	0.052 U
trans-1,2-Dichloroethene	1 U	1 U	1 U	1 U	1 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.5 U	0.048 U	0.048 U	0.048 U	0.5 U	0.091 U
Trichloroethene	1 U	1 U	1 U	1 U	1 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.061 U	0.061 U	0.061 U	0.5 U	0.1 U
Trichlorofluoromethane	1 U	1 U	1 U	1 U	1 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.086 U	0.086 U	0.086 U	0.5 U	0.12 U
Vinyl chloride	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.0081 U	0.0081 U	0.0081 U	0.0081 U	0.0081 U	0.0023 U	0.0023 U	0.0023 U	0.0023 U	0.0035 U	0.0037 J	0.02 U	0.0035 U	0.0035 U	0.0035 U	0.02 U	0.0084 U

TABLE I-1

GROUNDWATER ANALYTICAL RESULTS FOR VOLATILE ORGANIC COMPOUNDS (2004-2009)[1]

PSC Washougal Facility
Washougal, Washington

Concentrations in micrograms per liter (µg/L)

Sample ID	MC-12D																					
Analyte / Date Sampled	3/24/2004	6/16/2004	9/14/2004	12/14/2004	3/15/2005	6/9/2005	9/13/2005	11/29/2005	3/7/2006	6/6/2006	9/12/2006	12/20/2006	3/7/2007	6/5/2007	9/12/2007	12/21/2007	3/13/2008	6/12/2008	9/26/2008	12/5/2008	3/25/2009	6/29/2009
1,2-Dibromo-3-chloropropane	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0028 U	0.0028 U	0.0018 U	0.0018 U	0.0018 U	0.0018 U	0.0018 U	0.0018 U	0.0014 U	0.0014 U	0.0014 U	0.0098 U	0.0028 U	--	--	--	--
1,2-Dibromoethane	--	0.01 U	--	--	--	--	--	0.0017 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,1-Trichloroethane	1 U	1 U	1 U	1 U	1 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.5 U	0.05 U	0.05 U	0.05 U	0.5 U	0.075 U
1,1,2-Trichlorotrifluoroethane	2 U	2 U	2 U	2 U	2 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.079 U	0.079 U	0.079 U	0.5 U	0.13 U
1,1-Dichloro-1,2,2-trifluoroethane	1 U	1 U	1 U	1 U	1 U	0.14 U	0.14 U	0.14 U	0.14 U	0.18 U	0.18 U	0.18 U	0.49 U	0.49 U	0.49 U	0.49 U	1 U	0.38 U	0.38 U	0.38 U	1 U	0.21 U
1,1-Dichloroethane	1 U	1 U	1 U	1 U	1 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.5 U	0.042 U	0.042 U	0.042 U	0.5 U	0.077 U
1,1-Dichloroethene	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.0047 U	0.0047 U	0.0047 U	0.0047 U	0.0047 U	0.0066 U	0.0066 U	0.0066 U	0.0066 U	0.0061 U	0.0061 U	0.02 U	0.0061 U	0.0095 U	0.0095 U	0.02 U	0.0095 U
1,2-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.5 U	0.044 U	0.044 U	0.044 U	0.5 U	0.12 U
1,2-Dichloroethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.5 U	0.073 U	0.073 U	0.073 U	0.5 U	0.08 U
2-Butanone	10 U	10 U	10 U	10 U	10 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2.3 UJ	2.3 U	2.3 U	2.3 U	20 U	3.8 U	3.8 U	3.8 U	20 U	1.9 U
2-Methylpentane	1 U	1 U	1 U	1 U	1 U	0.15 U	0.15 U	0.15 U	0.15 U	0.16 U	0.16 U	0.16 U	0.49 U	0.49 U	0.49 U	0.49 U	1 U	0.4 U	0.4 U	0.4 U	1 U	0.21 U
3-Methylpentane	1 U	1 U	1 U	1 U	1 U	0.12 U	0.12 U	0.12 U	0.12 U	0.15 U	0.15 U	0.15 U	0.41 U	0.41 U	0.41 U	0.41 U	1 U	0.36 U	0.36 U	0.36 U	1 UJ	0.18 U
Acetone	25 U	25 U	25 U	25 U	25 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	20 U	2.5 U	2.5 U	2.5 U	20 U	3.3 U
Benzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.045 U	0.045 U	0.045 U	0.5 U	0.038 U
Carbon disulfide	1 U	1 U	1 U	1 U	1 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.5 U	0.045 U	0.045 U	0.045 U	0.5 U	0.1 U
Carbon tetrachloride	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.068 U	0.068 U	0.068 U	0.5 U	0.096 U
Chlorobenzene	1 U	1 U	1 U	1 U	1 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.045 U	0.045 U	0.045 U	0.5 U	0.11 U
Chloroethane	1 U	1 U	1 U	1 U	1 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.5 U	0.13 U	0.13 U	0.13 U	0.5 U	0.16 U
Chloroform	1 U	1 U	1 U	1 U	1 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.042 U	0.042 U	0.042 U	0.5 U	0.064 U
Chloromethane	5 U	5 U	5 U	5 U	5 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.053 U	0.053 U	0.053 U	0.5 U	0.053 U
cis-1,2-Dichloroethene	1 U	1 U	1 U	1 U	1 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.5 U	0.045 U	0.045 U	0.045 U	0.5 U	0.067 U
Dichlorodifluoromethane	1 U	1 U	1 U	1 U	1 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.5 U	0.083 U	0.083 U	0.083 U	0.5 U	0.13 U
Ethylbenzene	1 U	1 U	1 U	1 U	1 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.5 U	0.042 U	0.042 U	0.042 U	0.5 U	0.05 U
m,p-Xylene	2 U	2 U	2 U	2 U	2 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.5 U	0.078 U	0.078 U	0.078 U	0.5 U	0.091 U
Methylcyclopentane	1 U	1 U	1 U	1 U	1 U	0.13 U	0.13 U	0.13 U	0.13 U	0.14 U	0.14 U	0.14 U	0.42 U	0.42 U	0.42 U	0.42 U	1 U	0.4 U	0.4 U	0.4 U	1 UJ	0.21 U
Methylene chloride	5 U	5 U	5 U	5 U	5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.23 U	0.23 U	0.23 U	2 U	0.17 U
o-Xylene	1 U	1 U	1 U	1 U	1 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.5 U	0.037 U	0.037 U	0.037 U	0.5 U	0.074 U
Tetrachloroethene	0.05 U	0.05 U	1 U	1 U	1 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.5 U	0.077 U	0.077 U	0.077 U	0.5 U	0.066 U
Toluene	1 U	1 U	1 U	1 U	1 U	0.11 U	0.11 U	0.11 U	0.12 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.25 UJ	0.11 U	0.5 U	0.54 UJ	0.048 U	0.12 UJ	0.5 U	0.052 U
trans-1,2-Dichloroethene	1 U	1 U	1 U	1 U	1 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.5 U	0.048 U	0.048 U	0.048 U	0.5 U	0.091 U
Trichloroethene	1 U	1 U	1 U	1 U	1 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.061 U	0.061 U	0.061 U	0.5 U	0.1 U
Trichlorofluoromethane	1 U	1 U	1 U	1 U	1 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.086 U	0.086 U	0.086 U	0.5 U	0.12 U
Vinyl chloride	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.0081 U	0.0081 U	0.0081 U	0.0081 U	0.0081 U	0.0023 U	0.0023 U	0.0023 U	0.0023 U	0.0035 U	0.0042 J	0.02 U	0.0035 U	0.0035 U	0.0035 U	0.02 U	0.0084 U

TABLE I-1

GROUNDWATER ANALYTICAL RESULTS FOR VOLATILE ORGANIC COMPOUNDS (2004-2009)[1]

PSC Washougal Facility
Washougal, Washington

Concentrations in micrograms per liter (µg/L)

Analyte	Sample ID / Date Sampled	MC-13																				
		3/23/2004	6/16/2004	9/14/2004	12/15/2004	3/16/2005	6/8/2005	9/14/2005	11/29/2005	3/7/2006	6/7/2006	9/12/2006	12/19/2006	3/6/2007	6/6/2007	9/11/2007	12/19/2007	3/12/2008	6/11/2008	9/24/2008	12/1/2008	3/27/2009	6/23/2009
1,2-Dibromo-3-chloropropane		0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0028 U	0.0028 U	0.0018 U	0.0018 U	0.0018 U	0.0018 U	0.0018 U	0.0018 U	0.0014 U	0.0014 U	0.0014 U	0.0098 U	0.0028 U	--	--	--	--
1,2-Dibromoethane		--	0.01 U	--	--	--	--	--	0.0017 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,1-Trichloroethane		1 U	1 U	1 U	1 U	1 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.5 U	0.05 U	0.05 U	0.05 U	0.5 U	0.075 U
1,1,2-Trichlorotrifluoroethane		13.3	9.91	2 U	2 U	2 U	0.14 U	0.14 U	0.14 U	0.14 U	0.21 U	0.14 U	3.1	10	210	0.14 U	0.14 U	0.5 U	0.079 U	0.079 U	0.079 U	0.5 U	0.13 U
1,1-Dichloro-1,2,2-trifluoroethane		1 U	1 U	1 U	1 U	1 U	0.14 U	0.14 U	0.14 U	0.14 U	0.18 U	0.18 U	0.18 U	0.49 U	0.49 U	0.49 U	0.49 U	1 U	0.38 U	0.38 U	0.38 U	1 U	0.21 U
1,1-Dichloroethane		1 U	1 U	1 U	1 U	1 U	0.11 U	0.11 U	0.11 U	0.29 J	0.2 J	0.12 J	0.11 U	0.11 U	0.11 J	0.12 J	0.11 U	0.5 U	0.06 J	0.11 J	0.1 J	0.5 U	0.1 J
1,1-Dichloroethene		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.0047 U	0.0047 U	0.0047 U	0.0065 J	0.0054 U	0.0066 U	0.02 U	0.04	0.79 U	0.0061 U	0.0061 U	0.02 U	0.0061 U	0.0095 U	0.0095 U	0.02 U	0.0095 U
1,2-Dichlorobenzene		1 U	1 U	1 U	1 U	1 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.5 U	0.044 U	0.044 U	0.044 U	0.5 U	0.12 U
1,2-Dichloroethane		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.5 U	0.073 U	0.073 U	0.073 U	0.5 U	0.08 U
2-Butanone		10 U	10 U	10 U	10 U	10 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2.3 UJ	2.3 U	2.3 U	2.3 U	20 U	3.8 U	3.8 U	3.8 U	20 U	1.9 U
2-Methylpentane		1 U	1 U	1 U	1 U	1 U	0.15 U	0.15 U	0.15 U	0.15 U	0.16 U	0.16 U	0.16 U	0.49 U	0.49 U	0.49 U	0.49 U	1 U	0.4 U	0.4 U	0.4 U	1 U	0.21 U
3-Methylpentane		1 U	1 U	1 U	1 U	1 U	0.12 U	0.12 U	0.12 U	0.12 U	0.15 U	0.15 U	0.15 U	0.41 U	0.41 U	0.41 U	0.41 U	1 U	0.36 U	0.36 U	0.36 U	1 U	0.18 U
Acetone		25 U	25 U	25 U	25 U	25 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	20 U	2.5 U	2.5 U	2.5 U	20 U	3.3 U
Benzene		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.045 U	0.045 U	0.07 UJ	0.5 U	0.04 J
Carbon disulfide		1 U	1 U	1 U	1 U	1 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.5 U	0.045 U	0.045 U	0.045 U	0.5 U	0.1 U
Carbon tetrachloride		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.068 U	0.068 U	0.068 U	0.5 U	0.096 U
Chlorobenzene		1 U	1 U	1 U	1 U	1 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.045 U	0.045 U	0.045 U	0.5 U	0.11 U
Chloroethane		1 U	1 U	1 U	1 U	1 U	0.23 U	0.31 J	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.28 U	0.23 U	0.23 U	0.23 U	0.5 U	0.13 U	0.13 U	0.13 U	0.5 U	0.16 U
Chloroform		1 U	1 U	1 U	1 U	1 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.042 U	0.042 U	0.042 U	0.5 U	0.064 U
Chloromethane		5 U	5 U	5 U	5 U	5 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.13 UJ	0.053 U	0.053 U	0.5 U	0.053 U
cis-1,2-Dichloroethene		1 U	1 U	1 U	1 U	1 U	0.19 J	0.26 J	0.2 J	0.28 J	0.28 J	0.22 J	0.35 J	0.24 J	0.73	0.23 J	0.12 U	0.13 J	0.09 J	0.18 J	0.17 J	0.5 U	0.33 J
Dichlorodifluoromethane		1 U	1 U	1 U	1 U	1 U	0.17 U	1.1 U	0.17 U	0.17 U	0.17 U	0.17 U	0.5 U	0.17 U	0.17 U	0.17 U	0.17 U	0.5 U	0.083 U	0.083 U	0.083 U	0.5 U	0.13 U
Ethylbenzene		1 U	1 U	1 U	1 U	1 U	0.15 J	0.19 J	0.17 J	0.26 J	0.13 U	0.16 J	0.14 J	0.13 U	0.17 J	0.19 J	0.13 U	0.5 U	0.042 U	0.09 J	0.1 J	0.5 U	0.05 U
m,p-Xylene		2 U	2 U	2 U	2 U	2 U	0.22 U	0.38 J	0.35 J	0.24 J	0.22 U	0.32 J	0.3 J	0.22 U	0.45 J	0.45 J	0.22 U	0.5 U	0.078 U	0.26 J	0.25 J	0.5 U	0.1 J
Methylcyclopentane		1 U	1 U	1 U	1 U	1 U	0.13 U	0.13 U	0.13 U	0.13 J	0.14 U	0.14 U	0.17 J	0.42 U	0.56 J	0.42 U	0.42 U	1 U	0.4 U	0.4 U	0.4 U	1 U	0.21 U
Methylene chloride		5 U	5 U	5 U	5 U	5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.23 U	0.23 U	0.23 U	2 U	0.17 U
o-Xylene		1 U	1 U	1 U	1 U	1 U	0.14 J	0.23 J	0.21 J	0.5	0.14 J	0.25 J	0.39 J	0.24 J	0.61	0.38 J	0.19 J	0.11 J	0.037 U	0.17 J	0.19 J	0.08 J	0.11 J
Tetrachloroethene		0.276	0.05 U	1 U	1 U	1 U	0.13 U	0.13 U	0.13 U	0.28 J	0.23 J	0.13 U	0.13 J	0.18 J	0.33 J	0.17 J	0.13 U	0.5 U	0.14 J	0.077 U	0.08 J	0.08 J	0.1 J
Toluene		1.1	1.23	1.82 U	1.36	1 U	1.9 U	0.94	0.84	0.76	0.37 U	0.69	0.9	0.5	1.7	0.89	0.22 J	0.18 J	0.54 UJ	0.56	0.58 U	0.5 UJ	0.31 J
trans-1,2-Dichloroethene		1 U	1 U	1 U	1 U	1 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.5 U	0.048 U	0.048 U	0.048 U	0.5 U	0.091 U
Trichloroethene		1 U	1 U	1 U	1 U	1 U	0.14 U	0.14 J	0.14 U	0.27 J	0.32 J	0.16 J	0.16 J	0.15 J	0.21 J	0.14 U	0.14 U	0.5 U	0.061 U	0.061 U	0.07 J	0.5 U	0.1 U
Trichlorofluoromethane		1 U	1 U	1 U	1 U	1 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.086 U	0.086 U	0.086 U	0.5 U	0.12 U
Vinyl chloride		1.02	0.02 U	0.606	0.398	0.416	0.33	0.32	0.27	0.41	0.65	0.47	0.47	0.24	0.83	0.64	0.28	0.2	0.23	0.77	0.56 J	0.14	0.4

TABLE I-1

GROUNDWATER ANALYTICAL RESULTS FOR VOLATILE ORGANIC COMPOUNDS (2004-2009)[1]

PSC Washougal Facility

Washougal, Washington

Concentrations in micrograms per liter (µg/L)

Sample ID	MC-13D																				
Analyte / Date Sampled	3/23/2004	6/16/2004	9/14/2004	12/15/2004	3/16/2005	6/9/2005	9/14/2005	11/29/2005	3/7/2006	6/7/2006	9/12/2006	12/19/2006	3/6/2007	6/6/2007	9/11/2007	12/19/2007	3/12/2008	6/11/2008	9/24/2008	12/1/2008	3/27/2009	6/23/2009
1,2-Dibromo-3-chloropropane	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0028 U	0.0028 U	0.0018 U	0.0018 U	0.0018 U	0.0018 U	0.0018 U	0.0018 U	0.0014 U	0.0014 U	0.0014 U	0.0096 U	0.0028 U	--	--	--	--
1,2-Dibromoethane	--	0.01 U	--	--	--	--	--	0.0017 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,1-Trichloroethane	1 U	1 U	1 U	1 U	1 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.5 U	0.05 U	0.05 U	0.05 U	0.5 U	0.09 J
1,1,2-Trichlorotrifluoroethane	5.02	17.5	3.34	2.19	2 U	2.9	0.55	0.52	2.8	85 D	4	3.8	2.5	23	1.7	1.1	1.5	40	5.9	3.9	3.6	81
1,1-Dichloro-1,2,2-trifluoroethane	1 U	1 U	1 U	1 U	1 U	0.14 U	0.14 U	0.14 U	0.14 U	0.18 U	0.18 U	0.18 U	0.49 U	0.49 U	0.49 U	0.49 U	1 U	0.38 U	0.38 U	0.38 U	1 U	0.21 U
1,1-Dichloroethane	1 U	1 U	1 U	1 U	1 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.5 U	0.042 U	0.042 U	0.042 U	0.5 U	0.077 U
1,1-Dichloroethene	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.018 U	0.0061 U	0.0047 U	0.023 U	0.55 U	0.033 U	0.025 U	0.011 J	0.13 U	0.01 J	0.0061 U	0.02 U	0.043 U	0.0095 U	0.0095 U	0.016 J	0.055
1,2-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.5 U	0.044 U	0.044 U	0.044 U	0.5 U	0.12 U
1,2-Dichloroethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.5 U	0.073 U	0.073 U	0.073 U	0.5 U	0.08 U
2-Butanone	10 U	10 U	10 U	10 U	10 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2.3 UJ	2.3 U	2.3 U	2.3 U	20 U	3.8 U	3.8 U	3.8 U	20 U	1.9 U
2-Methylpentane	1 U	1 U	1 U	1 U	1 U	0.15 U	0.15 U	0.15 U	0.15 U	0.16 U	0.16 U	0.16 U	0.49 U	0.49 U	0.49 U	0.49 U	1 U	0.4 U	0.4 U	0.4 U	1 U	0.21 U
3-Methylpentane	1 U	1 U	1 U	1 U	1 U	0.12 U	0.12 U	0.12 U	0.12 U	0.15 U	0.15 U	0.15 U	0.41 U	0.41 U	0.41 U	0.41 U	1 U	0.36 U	0.36 U	0.36 U	1 U	0.18 U
Acetone	25 U	25 U	25 U	25 U	25 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	20 U	2.5 U	2.5 U	2.5 U	20 U	3.3 U
Benzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.045 U	0.045 U	0.045 U	0.5 U	0.038 U
Carbon disulfide	1 U	1 U	1 U	1 U	1 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.5 U	0.045 U	0.045 U	0.045 U	0.5 U	0.1 U
Carbon tetrachloride	0.064	0.05 U	0.05 U	0.05 U	0.05 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.068 U	0.068 U	0.068 U	0.5 U	0.096 U
Chlorobenzene	1 U	1 U	1 U	1 U	1 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.045 U	0.045 U	0.045 U	0.5 U	0.11 U
Chloroethane	1 U	1 U	1 U	1 U	1 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.5 U	0.13 U	0.13 U	0.13 U	0.5 U	0.16 U
Chloroform	1 U	1 U	1 U	1 U	1 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.042 U	0.042 U	0.042 U	0.5 U	0.064 U
Chloromethane	5 U	5 U	5 U	5 U	5 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.11 UJ	0.053 U	0.1 UJ	0.5 U	0.053 U
cis-1,2-Dichloroethene	1 U	1 U	1 U	1 U	1 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.5 U	0.045 U	0.045 U	0.045 U	0.5 U	0.08 J
Dichlorodifluoromethane	1 U	1 U	1 U	1 U	1 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.5 U	0.083 U	0.083 U	0.083 U	0.5 U	0.13 U
Ethylbenzene	1 U	1 U	1 U	1 U	1 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.5 U	0.042 U	0.042 U	0.042 U	0.5 U	0.05 U
m,p-Xylene	2 U	2 U	2 U	2 U	2 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.5 U	0.078 U	0.078 U	0.078 U	0.5 U	0.091 U
Methylcyclopentane	1 U	1 U	1 U	1 U	1 U	0.13 U	0.13 U	0.13 U	0.13 U	0.14 U	0.14 U	0.14 U	0.42 U	0.42 U	0.42 U	0.42 U	1 U	0.4 U	0.4 U	0.4 U	1 U	0.21 U
Methylene chloride	5 U	5 U	5 U	5 U	5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.23 U	0.23 U	0.23 U	2 U	0.17 U
o-Xylene	1 U	1 U	1 U	1 U	1 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.5 U	0.037 U	0.037 U	0.037 U	0.5 U	0.074 U
Tetrachloroethene	0.05 U	0.121	1 U	1 U	1 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.5 U	0.077 U	0.077 U	0.077 U	0.5 U	0.066 U
Toluene	1 U	1 U	1 U	1 U	1 U	0.11 U	0.11 U	0.11 U	0.14 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.5 U	0.54 UJ	0.048 U	0.12 UJ	0.5 U	0.052 U
trans-1,2-Dichloroethene	1 U	1 U	1 U	1 U	1 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.5 U	0.048 U	0.048 U	0.048 U	0.5 U	0.091 U
Trichloroethene	1 U	1 U	1 U	1 U	1 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.061 U	0.061 U	0.061 U	0.5 U	0.1 U
Trichlorofluoromethane	1 U	1 U	1 U	1 U	1 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.086 U	0.086 U	0.086 U	0.5 U	0.12 U
Vinyl chloride	0.02 U	0.51	0.02 U	0.02 U	0.02 U	0.0081 U	0.0081 U	0.0081 U	0.0081 U	0.0081 U	0.0023 U	0.0023 U	0.0023 U	0.0026 J	0.0035 U	0.0038 J	0.02 U	0.0035 U	0.0035 U	0.0035 U	0.02 U	0.0084 U

TABLE I-1

GROUNDWATER ANALYTICAL RESULTS FOR VOLATILE ORGANIC COMPOUNDS (2004-2009)[1]

PSC Washougal Facility

Washougal, Washington

Concentrations in micrograms per liter (µg/L)

Sample ID	MC-14																				
Analyte / Date Sampled	3/23/2004	9/16/2004	12/16/2004	3/17/2005	6/8/2005	9/15/2005	12/1/2005	3/9/2006	6/8/2006	9/12/2006	12/19/2006	3/6/2007	6/5/2007	9/11/2007	12/19/2007	3/13/2008	6/13/2008	9/24/2008	12/1/2008	3/24/2009	6/24/2009
1,2-Dibromo-3-chloropropane	0.01 U	0.01 U	0.01 U	0.01 U	0.0028 U	0.0028 U	0.0018 U	0.0018 U	0.0018 U	0.0018 U	0.0018 U	0.0018 U	0.0014 U	0.0014 U	0.0014 U	0.0098 U	0.0028 U	--	--	--	--
1,2-Dibromoethane	--	--	--	--	--	--	0.0017 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,1-Trichloroethane	1 U	1 U	1 U	1 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.5 U	0.05 U	0.05 U	0.05 U	0.5 U	0.075 U
1,1,2-Trichlorotrifluoroethane	2 U	2 U	2 U	2 U	0.43 J	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.47 J	0.14 U	0.14 U	0.14 U	3.4	0.079 U	0.079 U	0.079 U	0.5 U	0.13 U
1,1-Dichloro-1,2,2-trifluoroethane	1 U	1 U	1 U	1 U	0.14 U	0.14 U	0.14 U	0.14 U	0.18 U	0.18 U	0.18 U	0.49 U	0.49 U	0.49 U	0.49 U	1 U	0.38 U	0.38 U	0.38 U	1 U	0.21 U
1,1-Dichloroethane	12.5	7.48	24.5	27.9	17	5.6	6.6	74	59	9.3	16	26	29	16	11	36	43	7.2	5.5	9.3	24
1,1-Dichloroethene	0.05 U	0.051	0.05 U	0.05 U	0.035	0.017 J	0.034	0.037	0.026 U	0.015 J	0.026	0.028	0.012 J	0.029	0.027	0.065	0.025	0.011 J	0.026	0.015 J	0.018 J
1,2-Dichlorobenzene	1.99	3.46	1.75	2.71	1.7	2.9	1.2	1.1	2.1	2.5	0.71	0.76	0.78	1.6	0.66	0.8	0.76	0.93	0.63	0.54	0.66
1,2-Dichloroethane	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.15 J	0.12 U	0.12 U	0.12 U	0.12 U	0.5 U	0.073 U	0.073 U	0.073 U	0.5 U	0.08 U
2-Butanone	10 U	10 U	10 U	10 U	2 U	2 U	2 U	3.4 J	2 U	2 U	7.7 J	5.7 J	2.3 U	2.3 U	2.3 U	3.2 J	3.8 U	3.8 U	3.8 U	20 U	1.9 U
2-Methylpentane	1 U	1 U	1 U	1 U	0.15 U	0.15 U	0.15 U	0.15 U	0.16 U	0.16 U	0.16 U	0.49 U	0.49 U	0.49 U	0.49 U	1 U	0.4 U	0.4 U	0.4 U	1 U	0.21 U
3-Methylpentane	1 U	1 U	1.31	1 U	0.12 U	0.12 U	0.12 U	0.16 J	0.15 U	0.15 U	0.15 U	0.41 U	0.41 U	0.41 U	0.41 U	1 U	0.36 U	0.36 U	0.36 U	1 U	0.18 U
Acetone	25 U	25 U	25 U	25 U	6.5 U	4.7 U	4.1 U	8.7 J	4.1 U	4.1 U	29	11 J	4.8 J	4.1 U	5.1 U	5.8 J	2.9 J	2.5 U	2.5 U	20 U	3.3 U
Benzene	3.18	2.52	5.07	7.92	5.3	3.1	2.8	7.4	8.1	2.8	3.9	3.6	4.2	5	3.7	4.7	6.5	2.3	2.1	2.9	4.8
Carbon disulfide	1 U	1 U	1 U	1 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.5 U	0.045 U	0.045 U	0.045 U	0.5 U	0.1 U
Carbon tetrachloride	0.05 U	0.05 U	0.05 U	0.05 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.068 U	0.068 U	0.068 U	0.5 U	0.096 U
Chlorobenzene	1 U	1 U	1 U	1 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.045 U	0.045 U	0.045 U	0.06 J	0.11 U
Chloroethane	35	17.4	44.6	59.4	56	19	14	84 D	120 D	21	33	38	52	35	30	33	75	13	8.6	17	34
Chloroform	1 U	1 U	1 U	1 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.042 U	0.042 U	0.042 U	0.5 U	0.064 U
Chloromethane	5 U	5 U	5 U	5 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.13 UJ	0.053 U	0.053 U	0.5 U	0.053 U
cis-1,2-Dichloroethene	3	6.31	6.53	2.48	4.9	1.3	4	10	3.1	1.7	4.7	11	1.7	2.4	3.5	27	4	1.4	2.1	1.2	2.1
Dichlorodifluoromethane	1 U	1 U	1 U	1 U	0.17 U	9.1 U	0.17 U	0.17 U	0.17 U	0.17 U	0.5 U	0.17 U	0.17 U	0.17 U	0.17 U	0.5 U	0.083 U	0.083 U	0.083 U	0.5 U	0.13 U
Ethylbenzene	13.2	7.23	5.95	17.3	5.1	12	2.4	6.3	19	12	1.7	1.7	4.9	13	5.6	3	6.1	6.3	1	4.2	2.7
m,p-Xylene	44.6	12.5	15.6	47.5	14	40	4.7	26	64	47	4.7	4.6	19	46	21	7.9	21	23	2.6	17	9.5
Methylcyclopentane	1.37	1 U	1 U	1.11	0.87 J	1.2	0.65 J	1.4	0.91 J	1.1	0.84 J	0.69 J	0.79 J	1.3	0.78 J	1.1	1.3	1.4	0.48 J	0.92 J	1.2
Methylene chloride	5 U	5 U	5 U	5 U	0.51 U	0.57 U	1 U	1.1 U	0.98 J	0.25 J	0.38 J	0.39 J	0.54 J	0.31 J	0.37 J	0.46 J	0.68 J	0.24 J	0.23 U	2 U	0.37 J
o-Xylene	31.3	27.3	30.4	57.7	42	33	21	47	70	37	14	13	23	37	22	19	27	20	6.1	14	17
Tetrachloroethene	0.05 U	1 U	1 U	1 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 J	0.13 U	0.13 U	0.13 U	0.2 J	0.25 J	0.077 U	0.077 U	0.1 J	0.5 U	0.066 U
Toluene	14.8	13	14.8	32	18	17	8.9	19	32	13	7.2	6.9	13	19	11	8	16	10	2.6	6.3	7
trans-1,2-Dichloroethene	1 U	1 U	1 U	1 U	0.48 J	0.31 J	0.31 J	1.1	1	0.36 J	0.41 J	0.51	0.72	0.66	0.46 J	0.66	0.99	0.38 J	0.25 J	0.34 J	0.76
Trichloroethene	1 U	1 U	1 U	1 U	0.84	0.3 J	0.86	0.68	0.41 J	0.32 J	0.66	0.72	0.25 J	0.36 J	0.38 J	0.69	0.22 J	0.19 J	0.49 J	0.39 J	0.41 J
Trichlorofluoromethane	1 U	1 U	1 U	1 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.086 U	0.086 U	0.086 U	0.5 U	0.12 U
Vinyl chloride	14.2	10.7	16.3	7.97	7.6 D	2.2	3.3	42 D	25 D	2.8	6	20	7.7	4.7	2.3	37	9.9	2	1.3 J	1.1	5.8

TABLE I-1

GROUNDWATER ANALYTICAL RESULTS FOR VOLATILE ORGANIC COMPOUNDS (2004-2009)[1]

PSC Washougal Facility

Washougal, Washington

Concentrations in micrograms per liter (µg/L)

Sample ID	MC-14D										MC-15											
Analyte / Date Sampled	10/24/2007	12/18/2007	3/11/2008	3/11/2008	6/10/2008	6/10/2008	9/24/2008	12/1/2008	3/24/2009	6/23/2009	3/25/2004	6/17/2004	9/15/2004	12/15/2004	3/16/2005	6/7/2005	9/14/2005	11/30/2005	3/8/2006	6/6/2006	9/13/2006	12/21/2006
1,2-Dibromo-3-chloropropane	0.0014 U	0.0014 U	0.0097 U	0.0098 U	0.0028 U	0.0028 U	--	--	--	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0028 U	0.0028 U	0.0018 U	0.0018 U	0.0018 U	0.0018 U	0.0018 U
1,2-Dibromoethane	--	--	--	--	--	--	--	--	--	--	--	0.01 U	--	--	--	--	--	0.0017 U	--	--	--	--
1,1,1-Trichloroethane	0.12 U	0.12 U	0.5 U	0.5 U	0.05 U	0.05 U	0.05 U	0.05 U	0.5 U	0.075 U	1 U	1 U	1 U	1 U	1 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
1,1,2-Trichlorotrifluoroethane	0.14 U	0.14 U	0.5 U	0.5 U	0.079 U	0.079 U	0.079 U	0.079 U	0.5 U	0.13 U	2 U	2 U	2 U	2 U	2 U	0.14 U	0.14 J	0.14 U	0.14 U	0.15 J	0.14 U	0.14 U
1,1-Dichloro-1,2,2-trifluoroethane	0.49 U	0.49 U	1 U	1 U	0.38 U	0.38 U	0.38 U	0.38 U	1 U	0.21 U	1 U	1 U	1 U	1 U	1 U	0.14 U	0.14 U	0.14 U	0.14 U	0.18 U	0.18 U	0.18 U
1,1-Dichloroethane	0.3 J	0.11 U	0.5 U	0.5 U	0.042 U	0.042 U	0.042 U	0.042 U	0.5 U	0.077 U	1 U	1 U	1 U	1 U	1 U	0.16 J	0.11 U	0.11 J	0.11 U	0.16 J	0.11 U	0.11 U
1,1-Dichloroethene	0.0061 U	0.0061 U	0.02 U	0.02 U	0.0061 U	0.0061 U	0.0095 U	0.0095 U	0.02 U	0.0095 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.0065 J	0.0047 U	0.0074 J	0.0047 U	0.007 U	0.0066 U	0.0066 U
1,2-Dichlorobenzene	0.12 U	0.12 U	0.5 U	0.5 U	0.044 U	0.044 U	0.044 U	0.044 U	0.5 U	0.12 U	1 U	1 U	1 U	1 U	1 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
1,2-Dichloroethane	0.12 U	0.12 U	0.5 U	0.5 U	0.073 U	0.073 U	0.073 U	0.073 U	0.5 U	0.08 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
2-Butanone	2.3 U	2.3 U	20 U	20 U	3.8 U	3.8 U	3.8 U	3.8 U	20 U	1.9 U	10 U	10 U	10 U	10 U	10 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ
2-Methylpentane	0.49 U	0.49 U	1 U	1 U	0.4 U	0.4 U	0.4 U	0.4 U	1 U	0.21 U	1 U	1 U	1 U	1 U	1 U	0.15 U	0.15 U	0.15 U	0.15 U	0.16 U	0.16 U	0.16 U
3-Methylpentane	0.41 U	0.41 U	1 U	1 U	0.36 U	0.36 U	0.36 U	0.36 U	1 U	0.18 U	1 U	1 U	1 U	1 U	1 U	0.12 U	0.12 U	0.12 U	0.12 U	0.15 U	0.15 U	0.15 U
Acetone	4.1 U	4.1 U	20 U	20 U	2.5 U	2.5 U	2.5 U	2.5 U	20 U	3.3 U	25 U	25 U	25 U	25 U	25 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U
Benzene	0.14 U	0.14 U	0.5 U	0.5 U	0.045 U	0.045 U	0.045 U	0.045 U	0.5 U	0.038 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Carbon disulfide	0.16 U	0.16 U	0.5 U	0.5 U	0.045 U	0.045 U	0.045 U	0.045 U	0.5 U	0.1 U	1 U	1 U	1 U	1 U	1 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
Carbon tetrachloride	0.14 U	0.14 U	0.5 U	0.5 U	0.068 U	0.068 U	0.068 U	0.068 U	0.5 U	0.096 U	0.062	0.05 U	0.05 U	0.05 U	0.05 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Chlorobenzene	0.14 U	0.14 U	0.5 U	0.5 U	0.045 U	0.045 U	0.045 U	0.045 U	0.5 U	0.11 U	1 U	1 U	1 U	1 U	1 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Chloroethane	0.23 U	0.23 U	0.5 U	0.5 U	0.13 U	0.13 U	0.13 U	0.13 U	0.5 U	0.16 U	1 U	1 U	1 U	1 U	1 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
Chloroform	0.14 U	0.14 U	0.5 U	0.5 U	0.042 U	0.042 U	0.042 U	0.042 U	0.5 U	0.064 U	1 U	1 U	1 U	1 U	1 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Chloromethane	0.14 U	0.14 U	0.5 U	0.5 U	0.2 UJ	0.11 UJ	0.053 U	0.053 U	0.5 U	0.053 U	5 U	5 U	5 U	5 U	5 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
cis-1,2-Dichloroethene	0.48 J	0.12 U	0.5 U	0.5 U	0.045 U	0.045 U	0.045 U	0.045 U	0.5 U	0.067 U	1 U	1 U	1 U	1 U	1 U	0.71	0.4 J	0.24 J	0.12 U	0.18 J	0.33 J	0.12 U
Dichlorodifluoromethane	0.17 U	0.17 U	0.5 U	0.5 U	0.083 U	0.083 U	0.083 U	0.083 U	0.5 U	0.13 U	1 U	1 U	1 U	1 U	1 U	0.17 U	0.71 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Ethylbenzene	0.13 U	0.13 U	0.5 U	0.5 U	0.042 U	0.042 U	0.042 U	0.042 U	0.5 U	0.05 U	1 U	1 U	1 U	1 U	1 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
m,p-Xylene	0.22 U	0.22 U	0.5 U	0.5 U	0.078 U	0.078 U	0.078 U	0.078 U	0.5 U	0.091 U	2 U	2 U	2 U	2 U	2 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Methylcyclopentane	0.42 U	0.42 U	1 U	1 U	0.4 U	0.4 U	0.4 U	0.4 U	1 U	0.21 U	1 U	1 U	1 U	1 U	1 U	0.13 U	0.13 U	0.13 U	0.13 U	0.14 U	0.14 U	0.14 U
Methylene chloride	0.2 U	0.2 U	2 U	2 U	0.23 U	0.23 U	0.23 U	0.23 U	2 U	0.17 U	5 U	5 U	5 U	5 U	5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
o-Xylene	0.11 U	0.11 U	0.5 U	0.5 U	0.037 U	0.037 U	0.037 U	0.037 U	0.5 U	0.074 U	1 U	1 U	1 U	1 U	1 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
Tetrachloroethene	0.13 U	0.13 U	0.5 U	0.5 U	0.077 U	0.077 U	0.077 U	0.077 U	0.5 U	0.066 U	0.731	0.57	1 U	1 U	1 U	0.13 U	0.13 U	0.13 U	0.13 U	0.36 J	0.13 U	0.13 U
Toluene	0.46 J	0.11 U	0.5 U	0.5 U	0.54 UJ	0.54 UJ	0.048 U	0.12 UJ	0.5 U	0.052 U	3.05	1 U	1 U	1 U	1 U	1.9 U	0.15 J	0.11 U	2	0.22 U	0.19 U	3.9
trans-1,2-Dichloroethene	0.15 U	0.15 U	0.5 U	0.5 U	0.048 U	0.048 U	0.048 U	0.048 U	0.5 U	0.091 U	1 U	1 U	1 U	1 U	1 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
Trichloroethene	0.14 U	0.14 U	0.5 U	0.5 U	0.061 U	0.061 U	0.061 U	0.061 U	0.5 U	0.1 U	1 U	1 U	1 U	1 U	1 U	0.43 J	0.39 J	0.25 J	0.14 U	0.62	0.29 J	0.14 U
Trichlorofluoromethane	0.14 U	0.14 U	0.5 U	0.5 U	0.086 U	0.086 U	0.086 U	0.086 U	0.5 U	0.12 U	1 U	1 U	1 U	1 U	1 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Vinyl chloride	0.12	0.007 U	0.0039 J	0.02 U	0.0035 U	0.0035 U	0.019 J	0.012 J	0.02 U	0.0084 U	0.039	0.02 U	0.027	0.02 U	0.063 U	0.026	0.036	0.016 U	0.0086 J	0.022	0.031	0.0023 U

TABLE I-1

GROUNDWATER ANALYTICAL RESULTS FOR VOLATILE ORGANIC COMPOUNDS (2004-2009)[1]

PSC Washougal Facility

Washougal, Washington

Concentrations in micrograms per liter (µg/L)

Sample ID	MC-15 (Continued)										MC-15D											
Analyte / Date Sampled	3/6/2007	6/5/2007	9/11/2007	12/20/2007	3/12/2008	6/11/2008	9/23/2008	12/2/2008	3/24/2009	6/24/2009	3/25/2004	6/16/2004	9/14/2004	12/14/2004	3/16/2005	6/7/2005	9/14/2005	11/30/2005	3/8/2006	6/6/2006	9/13/2006	12/21/2006
1,2-Dibromo-3-chloropropane	0.0018 U	0.0014 U	0.0014 U	0.0014 U	0.0097 U	0.0028 U	--	--	--	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0028 U	0.0028 U	0.0018 U	0.0018 U	0.0018 U	0.0018 U	0.0097 U
1,2-Dibromoethane	--	--	--	--	--	--	--	--	--	--	--	0.01 U	--	--	--	--	--	0.0017 U	--	--	--	--
1,1,1-Trichloroethane	0.12 U	0.12 U	0.12 U	0.12 U	0.5 U	0.05 U	0.05 U	0.05 U	0.5 U	0.075 U	1 U	1 U	1 U	1 U	1 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
1,1,2-Trichlorotrifluoroethane	0.14 U	45	0.14 U	0.14 U	0.49 J	4.1	0.079 U	0.079 U	0.5 U	11	123 D	103 D	92.7 D	116 D	73.6 D	110 D	80 D	67	120 D	82 D	97 D	99 D
1,1-Dichloro-1,2,2-trifluoroethane	0.49 U	0.49 U	0.49 U	0.49 U	1 U	0.38 U	0.38 U	0.38 U	1 U	0.21 U	23.1	1 U	1 U	1 U	1 U	0.14 U	0.14 U	0.14 U	0.14 U	0.18 U	0.18 U	0.18 U
1,1-Dichloroethane	0.11 U	0.11 U	0.11 U	0.11 U	0.5 U	0.042 U	0.042 U	0.042 U	0.5 U	0.077 U	31	33.1	28	27.9	24.7	47	33	23	62	31	39	47
1,1-Dichloroethene	0.0066 U	0.17 U	0.0061 U	0.0061 U	0.02 U	0.0061 U	0.0095 U	0.0095 U	0.02 U	0.0095 U	0.07	0.054	0.068	0.05 U	0.05 U	0.69 U	0.53 U	0.53 U	1.1 U	0.58 U	0.72 U	0.58 U
1,2-Dichlorobenzene	0.12 U	0.12 U	0.12 U	0.12 U	0.5 U	0.044 U	0.044 U	0.044 U	0.5 U	0.12 U	1 U	1 U	1 U	1 U	1 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
1,2-Dichloroethane	0.12 U	0.12 U	0.12 U	0.12 U	0.5 U	0.073 U	0.073 U	0.073 U	0.5 U	0.08 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
2-Butanone	2.3 UJ	2.3 U	2.3 U	2.3 U	20 U	3.8 U	3.8 U	3.8 U	20 U	1.9 U	10 U	10 U	10 U	10 U	10 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ
2-Methylpentane	0.49 U	0.49 U	0.49 U	0.49 U	1 U	0.4 U	0.4 U	0.4 U	1 U	0.21 U	1 U	1 U	1 U	1 U	1 U	0.15 U	0.15 U	0.15 U	0.15 U	0.16 U	0.16 U	0.16 U
3-Methylpentane	0.41 U	0.41 U	0.41 U	0.41 U	1 U	0.36 U	0.36 U	0.36 U	1 U	0.18 U	1 U	1 U	1 U	1 U	1 U	0.12 U	0.12 U	0.12 U	0.12 U	0.15 U	0.15 U	0.15 U
Acetone	4.1 U	4.1 U	4.1 U	4.1 U	20 U	2.5 U	2.5 U	2.5 U	20 U	3.3 U	25 U	25 U	25 U	25 U	25 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U
Benzene	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.045 U	0.045 U	0.045 U	0.5 U	0.038 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Carbon disulfide	0.16 U	0.16 U	0.16 U	0.16 U	0.5 U	0.045 U	0.045 U	0.045 U	0.5 U	0.1 U	1 U	1 U	1 U	1 U	1 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
Carbon tetrachloride	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.068 U	0.068 U	0.068 U	0.5 U	0.096 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Chlorobenzene	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.045 U	0.045 U	0.045 U	0.5 U	0.11 U	1 U	1 U	1 U	1 U	1 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Chloroethane	0.23 U	0.23 U	0.23 U	0.23 U	0.5 U	0.13 U	0.13 U	0.13 U	0.5 U	0.16 U	1 U	1 U	1 U	1 U	1 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.47 J	0.23 U
Chloroform	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.042 U	0.042 U	0.042 U	0.5 U	0.064 U	1 U	1 U	1 U	1 U	1 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Chloromethane	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.11 UJ	0.053 U	0.053 U	0.5 U	0.053 U	5 U	5 U	5 U	5 U	5 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
cis-1,2-Dichloroethene	0.12 U	0.12 J	0.17 J	0.12 U	0.5 U	0.1 J	0.13 J	0.045 U	0.5 U	0.067 U	4.01	4.28	3.72	3.22	3.56	5.9	5	3.4	11	4.9	7.6	12
Dichlorodifluoromethane	0.17 U	0.17 U	0.17 U	0.17 U	0.5 U	0.083 U	0.083 U	0.083 U	0.5 U	0.13 U	1 U	1 U	1 U	1 U	1 U	0.17 U	11 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Ethylbenzene	0.13 U	0.13 U	0.13 U	0.13 U	0.5 U	0.042 U	0.042 U	0.042 U	0.5 U	0.05 U	1 U	1 U	1 U	1 U	1 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
m,p-Xylene	0.22 U	0.22 U	0.22 U	0.22 U	0.5 U	0.078 U	0.078 U	0.078 U	0.5 U	0.091 U	2 U	2 U	2 U	2 U	2 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Methylcyclopentane	0.42 U	0.42 U	0.42 U	0.42 U	1 U	0.4 U	0.4 U	0.4 U	1 U	0.21 U	1 U	1 U	1 U	1 U	1 U	0.13 U	0.13 U	0.13 U	0.13 U	0.14 U	0.14 U	0.14 U
Methylene chloride	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.23 U	0.23 U	0.23 U	2 U	0.17 U	5 U	5 U	5 U	5 U	5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
o-Xylene	0.11 U	0.11 U	0.11 U	0.11 U	0.5 U	0.037 U	0.037 U	0.037 U	0.5 U	0.074 U	1 U	1 U	1 U	1 U	1 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
Tetrachloroethene	0.13 U	0.18 J	0.18 J	0.13 U	0.5 U	0.077 U	0.077 U	0.077 U	0.5 U	0.066 U	0.235	0.18	1 U	1 U	1 U	0.18 J	0.13 J	0.13 U	0.22 J	0.17 J	0.18 J	0.21 J
Toluene	3.7	1.3	0.22 J	0.11 U	0.96	0.65 U	0.41 J	0.12 UJ	0.39 J	0.11 J	1 U	1 U	1 U	1 U	1 U	0.11 U	0.11 U	0.11 U	0.12 U	0.22 U	0.11 U	0.11 U
trans-1,2-Dichloroethene	0.15 U	0.15 U	0.15 U	0.15 U	0.5 U	0.048 U	0.048 U	0.048 U	0.5 U	0.091 U	1 U	1 U	1 U	1 U	1 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
Trichloroethene	0.14 U	0.14 U	0.19 J	0.14 U	0.5 U	0.061 U	0.13 J	0.061 U	0.5 U	0.1 U	1 U	1 U	1 U	1 U	1 U	0.52	0.4 J	0.32 J	0.6	0.36 J	0.43 J	0.5
Trichlorofluoromethane	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.086 U	0.086 U	0.086 U	0.5 U	0.12 U	1 U	1 U	1 U	1 U	1 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Vinyl chloride	0.0023 U	0.015 J	0.0035 U	0.0035 U	0.02 U	0.0035 U	0.0035 U	0.0035 U	0.02 U	0.0084 U	0.089	0.156	0.126 U	0.02 U	0.103 U	0.16	0.56	1	1.3	0.36	0.4	1.4

TABLE I-1

GROUNDWATER ANALYTICAL RESULTS FOR VOLATILE ORGANIC COMPOUNDS (2004-2009)[1]

PSC Washougal Facility

Washougal, Washington

Concentrations in micrograms per liter (µg/L)

Sample ID	MC-15D (Continued)											MC-16										
Analyte / Date Sampled	3/6/2007	6/5/2007	9/11/2007	12/20/2007	3/12/2008	6/12/2008	9/23/2008	12/2/2008	3/24/2009	6/24/2009	6/24/2009	3/25/2004	6/17/2004	9/15/2004	12/15/2004	3/16/2005	6/7/2005	9/14/2005	11/30/2005	3/8/2006	6/7/2006	9/13/2006
1,2-Dibromo-3-chloropropane	0.0018 U	0.0096 U	0.0014 U	0.0014 U	0.0096 U	0.0028 U	--	--	--	--	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0028 U	0.0028 U	0.0018 U	0.0018 U	0.0018 U	0.0018 U
1,2-Dibromoethane	--	--	--	--	--	--	--	--	--	--	--	--	0.01 U	--	--	--	--	--	0.0017 U	--	--	--
1,1,1-Trichloroethane	0.12 U	0.12 U	0.12 U	0.12 U	0.5 U	0.05 U	0.05 U	0.05 U	0.05 J	0.075 U	0.075 U	1 U	1 U	1 U	1 U	1 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
1,1,2-Trichlorotrifluoroethane	110	88	87	62	72	73 J	85	78	83	80	79	2 U	2 U	2 U	2 U	2 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
1,1-Dichloro-1,2,2-trifluoroethane	0.49 U	0.49 U	0.49 U	0.49 U	1 U	0.38 U	0.38 U	0.38 U	1 U	0.21 U	0.21 U	1 U	1 U	1 U	1 U	1 U	0.14 U	0.14 U	0.14 U	0.14 U	0.18 U	0.18 U
1,1-Dichloroethane	61	54	51	39	62	55	44	45	63	59	70	2.81	5.34	5.64	3.83	1.47	1.4	0.95	0.63	0.74	0.46 J	0.32 J
1,1-Dichloroethene	0.56	0.42 U	0.0061 U	0.07 U	0.083	0.085	0.081	0.07 U	0.1	0.09	0.089	0.631	0.52	0.483	1.03 J	0.369	0.69	0.36	0.28	0.36	0.17	0.17
1,2-Dichlorobenzene	0.12 U	0.12 U	0.12 U	0.12 U	0.5 U	0.044 U	0.044 U	0.044 U	0.5 U	0.12 U	0.12 U	1 U	1 U	1 U	1 U	1 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
1,2-Dichloroethane	0.12 U	0.12 U	0.12 U	0.12 U	0.5 U	0.073 U	0.073 U	0.073 U	0.5 U	0.08 U	0.08 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.17 J	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
2-Butanone	2.3 UJ	2.3 U	2.3 U	2.3 U	20 U	3.8 U	3.8 U	3.8 U	20 U	1.9 U	1.9 U	10 U	10 U	10 U	10 U	10 U	2 U	2 U	2 U	2 U	2 U	2 U
2-Methylpentane	0.49 U	0.49 U	0.49 U	0.49 U	1 U	0.4 U	0.4 U	0.4 U	1 U	0.21 U	0.21 U	1 U	1 U	1 U	1 U	1 U	0.15 U	0.15 U	0.15 U	0.15 U	0.16 U	0.16 U
3-Methylpentane	0.41 U	0.41 U	0.41 U	0.41 U	1 U	0.36 U	0.36 U	0.36 U	1 U	0.18 U	0.18 U	1 U	1 U	1 U	1 U	1 U	0.12 U	0.12 U	0.12 U	0.12 U	0.15 U	0.15 U
Acetone	4.1 U	4.1 U	4.1 U	4.1 U	20 U	2.5 U	2.5 U	2.5 U	20 U	3.3 U	3.7 J	25 U	25 U	25 U	25 U	25 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U
Benzene	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.045 U	0.045 U	0.045 U	0.5 U	0.038 U	0.04 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Carbon disulfide	0.16 U	0.16 U	0.16 U	0.16 U	0.5 U	0.045 U	0.045 U	0.045 U	0.5 U	0.1 U	0.1 U	1 U	1 U	1 U	1 U	1 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
Carbon tetrachloride	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.068 U	0.068 U	0.068 U	0.5 U	0.096 U	0.096 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Chlorobenzene	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.045 U	0.045 U	0.045 U	0.5 U	0.11 U	0.11 U	1 U	1 U	1 U	1 U	1 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Chloroethane	0.23 U	0.23 U	0.23 U	0.23 U	0.5 U	0.6	0.13 U	0.13 U	0.5 U	0.16 U	0.16 U	8.38	7	5.72	19.9	4.86	15	3.2	2.8	5.2	1.7	1.1
Chloroform	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.042 U	0.042 U	0.042 U	0.5 U	0.064 U	0.064 U	1 U	1 U	1 U	1 U	1 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Chloromethane	0.14 U	0.14 U	0.14 U	0.14 J	0.5 U	0.11 UJ	0.053 U	0.053 U	0.1 J	0.053 U	0.053 U	5 U	5 U	5 U	5 U	5 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
cis-1,2-Dichloroethene	17	13	14	11	20	17	13	13	23	21	24	1 U	1 U	1 U	1 U	1 U	0.24 J	0.12 J	0.12 J	0.12 J	0.12 U	0.12 U
Dichlorodifluoromethane	0.17 U	0.17 U	0.17 U	0.17 U	0.5 U	0.083 U	0.083 U	0.083 U	0.5 U	0.13 U	0.13 U	1 U	1 U	1 U	1 U	1 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Ethylbenzene	0.13 U	0.13 U	0.13 U	0.13 U	0.5 U	0.042 U	0.042 U	0.042 U	0.5 U	0.05 U	0.05 U	1 U	1 U	1 U	1 U	1 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
m,p-Xylene	0.22 U	0.22 U	0.22 U	0.22 U	0.5 U	0.078 U	0.078 U	0.078 U	0.5 U	0.091 U	0.091 U	2 U	2 U	2 U	2 U	2 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Methylcyclopentane	0.42 U	0.42 U	0.42 U	0.42 U	1 U	0.4 U	0.4 U	0.4 U	1 U	0.21 U	0.21 U	1 U	1 U	1 U	1 U	1 U	0.13 U	0.13 U	0.13 U	0.13 U	0.14 U	0.14 U
Methylene chloride	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.23 U	0.23 U	0.23 U	2 U	0.17 U	0.17 U	5 U	5 U	5 U	5 U	5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
o-Xylene	0.11 U	0.11 U	0.11 U	0.11 U	0.5 U	0.037 U	0.037 U	0.037 U	0.5 U	0.074 U	0.074 U	1 U	1 U	1 U	1 U	1 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
Tetrachloroethene	0.2 J	0.18 J	0.21 J	0.17 J	0.23 J	0.18 J	0.17 J	0.15 J	0.22 J	0.18 J	0.23 J	0.076	0.05 U	1 U	1 U	1 U	0.13 U	0.13 U	0.13 U	0.13 U	0.15 J	0.13 U
Toluene	0.11 U	0.11 U	0.22 J	0.11 U	0.5 U	0.54 UJ	0.048 U	0.048 U	0.5 U	0.052 U	0.052 U	1 U	1 U	1 U	1 U	1 U	0.11 U	0.11 U	0.11 U	0.12 U	0.24 U	0.11 U
trans-1,2-Dichloroethene	0.15 U	0.15 U	0.15 U	0.15 U	0.5 U	0.048 U	0.048 U	0.048 U	0.5 U	0.091 U	0.091 U	1 U	1 U	1 U	1 U	1 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
Trichloroethene	0.53	0.49 J	0.47 J	0.37 J	0.51	0.48 J	0.36 J	0.42 J	0.48 J	0.47 J	0.55	1 U	1 U	1 U	1 U	1 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Trichlorofluoromethane	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.086 U	0.086 U	0.086 U	0.5 U	0.12 U	0.12 U	1 U	1 U	1 U	1 U	1 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Vinyl chloride	1.9	1.9	0.15	0.14	0.24	0.18	0.18	0.14 J	0.23	0.27	0.25	0.132	0.109	0.141	0.214 J	0.042 U	0.13	0.081	0.096	0.12	0.062	0.048

TABLE I-1

GROUNDWATER ANALYTICAL RESULTS FOR VOLATILE ORGANIC COMPOUNDS (2004-2009)[1]
PSC Washougal Facility
Washougal, Washington

Concentrations in micrograms per liter (µg/L)

Sample ID	MC-16 (Continued)											MC-17										
Analyte / Date Sampled	12/21/2006	3/7/2007	6/5/2007	9/11/2007	12/20/2007	3/12/2008	6/12/2008	9/23/2008	12/3/2008	3/24/2009	6/24/2009	3/25/2004	6/17/2004	9/15/2004	12/14/2004	3/16/2005	6/7/2005	9/14/2005	11/30/2005	3/7/2006	6/7/2006	9/14/2006
1,2-Dibromo-3-chloropropane	0.0018 U	0.0018 U	0.0014 U	0.0014 U	0.0014 U	0.0097 U	0.0028 U	--	--	--	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0028 U	0.0028 U	0.0018 U	0.0018 U	0.0018 U	0.0018 U
1,2-Dibromoethane	--	--	--	--	--	--	--	--	--	--	--	--	0.01 U	--	--	--	--	--	0.0017 U	--	--	--
1,1,1-Trichloroethane	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.5 U	0.05 U	0.05 U	0.05 U	0.5 U	0.075 U	1 U	1 U	1 U	1 U	1 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
1,1,2-Trichlorotrifluoroethane	0.26 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.17 J	0.079 U	0.079 U	0.5 U	0.13 U	2 U	2 U	2 U	2 U	2 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
1,1-Dichloro-1,2,2-trifluoroethane	0.18 U	0.49 U	0.49 U	0.49 U	0.49 U	1 U	0.38 U	0.38 U	0.38 U	1 U	0.21 U	1 U	1 U	1 U	1 U	1 U	0.14 U	0.14 U	0.14 U	0.14 U	0.18 U	0.18 U
1,1-Dichloroethane	0.11 U	0.22 J	0.27 J	0.43 J	0.24 J	0.39 J	0.28 J	0.18 J	0.31 J	0.33 J	0.2 J	1 U	1 U	1 U	1 U	1 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
1,1-Dichloroethene	0.02	0.12	0.14	0.18	0.078	0.21	0.13	0.09	0.14	0.22	0.13	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.0047 U	0.0047 U	0.0047 U	0.0047 U	0.0047 U	0.0066 U
1,2-Dichlorobenzene	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.5 U	0.044 U	0.044 U	0.044 U	0.5 U	0.12 U	1 U	1 U	1 U	1 U	1 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
1,2-Dichloroethane	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.5 U	0.073 U	0.073 U	0.073 U	0.5 U	0.08 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
2-Butanone	2 UJ	2.3 UJ	2.3 U	2.3 U	2.3 U	20 U	3.8 U	3.8 U	3.8 U	20 U	1.9 U	10 U	10 U	10 U	10 U	10 U	2 U	2 U	2 U	2 U	2 U	2 U
2-Methylpentane	0.16 U	0.49 U	0.49 U	0.49 U	0.49 U	1 U	0.4 U	0.4 U	0.4 U	1 U	0.21 U	1 U	1 U	1 U	1 U	1 U	0.15 U	0.15 U	0.15 U	0.15 U	0.16 U	0.16 U
3-Methylpentane	0.15 U	0.41 U	0.41 U	0.41 U	0.41 U	1 U	0.36 U	0.36 U	0.36 U	1 U	0.18 U	1 U	1 U	1 U	1 U	1 U	0.12 U	0.12 U	0.12 U	0.12 U	0.15 U	0.15 U
Acetone	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	20 U	2.5 U	2.5 U	2.5 U	20 U	3.3 U	25 U	25 U	25 U	25 U	25 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U
Benzene	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.045 U	0.045 U	0.045 U	0.5 U	0.038 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Carbon disulfide	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.5 U	0.045 U	0.045 U	0.045 U	0.5 U	0.1 U	1 U	1 U	1 U	1 U	1 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
Carbon tetrachloride	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.068 U	0.068 U	0.068 U	0.5 U	0.096 U	0.062	0.05 U	0.05 U	0.05 U	0.05 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Chlorobenzene	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.045 U	0.045 U	0.045 U	0.5 U	0.11 U	1 U	1 U	1 U	1 U	1 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Chloroethane	0.23 U	1.2	0.98	0.54	1.4	1.7	0.78	0.22 J	1	1.7	0.65	1 U	1 U	1 U	1 U	1 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
Chloroform	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.042 U	0.042 U	0.042 U	0.5 U	0.064 U	1 U	1 U	1 U	1 U	1 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Chloromethane	0.14 U	0.14 U	0.14 U	0.14 J	0.14 U	0.5 U	0.11 UJ	0.053 U	0.053 U	0.5 U	0.053 U	5 U	5 U	5 U	5 U	5 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
cis-1,2-Dichloroethene	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.5 U	0.08 J	0.045 U	0.045 U	0.08 J	0.07 J	1 U	1 U	1 U	1 U	1 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
Dichlorodifluoromethane	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.5 U	0.083 U	0.083 U	0.083 U	0.5 U	0.13 U	1 U	1 U	1 U	1 U	1 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Ethylbenzene	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.5 U	0.042 U	0.042 U	0.042 U	0.5 U	0.05 U	1 U	1 U	1 U	1 U	1 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
m,p-Xylene	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.5 U	0.078 U	0.078 U	0.078 U	0.5 U	0.091 U	2 U	2 U	2 U	2 U	2 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Methylcyclopentane	0.14 U	0.42 U	0.42 U	0.42 U	0.42 U	1 U	0.4 U	0.4 U	0.4 U	1 U	0.21 U	1 U	1 U	1 U	1 U	1 U	0.13 U	0.13 U	0.13 U	0.13 U	0.14 U	0.14 U
Methylene chloride	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.23 U	0.23 U	0.23 U	2 U	0.17 U	5 U	5 U	5 U	5 U	5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
o-Xylene	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.5 U	0.037 U	0.037 U	0.037 U	0.5 U	0.074 U	1 U	1 U	1 U	1 U	1 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
Tetrachloroethene	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.5 U	0.077 U	0.077 U	0.077 U	0.5 U	0.066 U	0.05 U	0.05 U	1 U	1 U	1 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
Toluene	0.45 J	0.25 J	0.28 J	0.11 U	0.11 U	0.31 J	0.54 UJ	0.048 U	0.37 UJ	0.47 J	0.33 J	1 U	1 U	1 U	1 U	1 U	1.9 U	0.11 U	0.11 U	0.19 U	0.22 U	0.11 U
trans-1,2-Dichloroethene	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.5 U	0.048 U	0.048 U	0.048 U	0.5 U	0.091 U	1 U	1 U	1 U	1 U	1 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
Trichloroethene	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.061 U	0.061 U	0.061 U	0.5 U	0.1 U	1 U	1 U	1 U	1 U	1 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Trichlorofluoromethane	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.086 U	0.086 U	0.086 U	0.5 U	0.12 U	1 U	1 U	1 U	1 U	1 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Vinyl chloride	0.0067 J	0.052	0.055	0.032	0.031	0.065	0.034	0.015 J	0.028 J	0.039	0.037	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.0081 U	0.0081 U	0.0081 U	0.0081 U	0.0081 U	0.0023 U

TABLE I-1

GROUNDWATER ANALYTICAL RESULTS FOR VOLATILE ORGANIC COMPOUNDS (2004-2009)[1]
PSC Washougal Facility
Washougal, Washington

Concentrations in micrograms per liter (µg/L)

Sample ID	MC-17 (Continued)											MC-17D										
Analyte / Date Sampled	12/20/2006	3/8/2007	6/7/2007	9/13/2007	12/20/2007	3/12/2008	6/12/2008	9/25/2008	12/3/2008	3/24/2009	6/25/2009	3/25/2004	6/17/2004	9/15/2004	12/15/2004	3/16/2005	6/10/2005	9/15/2005	12/1/2005	3/7/2006	6/7/2006	9/14/2006
1,2-Dibromo-3-chloropropane	0.0018 U	0.0018 U	0.0014 U	0.0014 U	0.0014 U	0.0096 U	0.0028 U	--	--	--	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0028 U	0.0028 U	0.0018 U	0.0018 U	0.0018 U	0.0018 U
1,2-Dibromoethane	--	--	--	--	--	--	--	--	--	--	--	--	0.01 U	--	--	--	--	--	0.0017 U	--	--	--
1,1,1-Trichloroethane	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.5 U	0.05 U	0.05 U	0.05 U	0.5 U	0.075 U	1 U	1 U	1 U	1 U	1 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
1,1,2-Trichlorotrifluoroethane	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.079 U	0.079 U	0.079 U	0.5 U	0.13 U	2 U	2 U	2 U	2 U	2 U	0.15 J	0.14 U	0.14 U	0.16 J	0.14 U	0.15 J
1,1-Dichloro-1,2,2-trifluoroethane	0.18 U	0.49 U	0.49 U	0.49 U	0.49 U	1 U	0.38 U	0.38 U	0.38 U	1 U	0.21 U	1 U	1 U	1 U	1 U	1 U	0.14 U	0.14 U	0.14 U	0.14 U	0.18 U	0.18 U
1,1-Dichloroethane	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.5 U	0.042 U	0.042 U	0.042 U	0.5 U	0.077 U	1 U	1 U	1 U	1 U	1 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
1,1-Dichloroethene	0.0066 U	0.0066 U	0.0066 U	0.0061 U	0.0061 U	0.02 U	0.0061 U	0.0095 U	0.0095 U	0.02 U	0.0095 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.0047 U	0.0047 U	0.0047 U	0.0047 U	0.0047 U	0.0066 U
1,2-Dichlorobenzene	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.5 U	0.044 U	0.044 U	0.044 U	0.5 U	0.12 U	1 U	1 U	1 U	1 U	1 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
1,2-Dichloroethane	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.5 U	0.073 U	0.073 U	0.073 U	0.5 U	0.08 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
2-Butanone	2 UJ	2.3 UJ	2.3 U	2.3 U	2.3 U	20 U	3.8 U	3.8 U	3.8 U	20 U	1.9 U	10 U	10 U	10 U	10 U	10 U	2 U	2 U	2 U	2 U	2 U	2 U
2-Methylpentane	0.16 U	0.49 U	0.49 U	0.49 U	0.49 U	1 U	0.4 U	0.4 U	0.4 U	1 U	0.21 U	1 U	1 U	1 U	1 U	1 U	0.15 U	0.15 U	0.15 U	0.15 U	0.16 U	0.16 U
3-Methylpentane	0.15 U	0.41 U	0.41 U	0.41 U	0.41 U	1 U	0.36 U	0.36 U	0.36 U	1 U	0.18 U	1 U	1 U	1 U	1 U	1 U	0.12 U	0.12 U	0.12 U	0.12 U	0.15 U	0.15 U
Acetone	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	20 U	2.5 U	2.5 U	2.5 U	20 U	4.9 J	25 U	25 U	25 U	25 U	25 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U
Benzene	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.045 U	0.045 U	0.045 U	0.5 U	0.038 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Carbon disulfide	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.5 U	0.045 U	0.045 U	0.045 U	0.5 U	0.1 U	1 U	1 U	1 U	1 U	1 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
Carbon tetrachloride	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.068 U	0.068 U	0.068 U	0.5 U	0.096 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Chlorobenzene	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.045 U	0.045 U	0.045 U	0.5 U	0.11 U	1 U	1 U	1 U	1 U	1 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Chloroethane	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.5 U	0.13 U	0.13 U	0.13 U	0.5 U	0.16 U	1 U	1 U	1 U	1 U	1 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
Chloroform	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.042 U	0.042 U	0.042 U	0.5 U	0.064 U	1 U	1 U	1 U	1 U	1 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Chloromethane	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.11 UJ	0.053 U	0.08 J	0.5 U	0.053 U	5 U	5 U	5 U	5 U	5 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
cis-1,2-Dichloroethene	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.5 U	0.045 U	0.045 U	0.045 U	0.5 U	0.067 U	1 U	1 U	1 U	1 U	1 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
Dichlorodifluoromethane	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.5 U	0.083 U	0.083 U	0.083 U	0.5 U	0.13 U	1 U	1 U	1 U	1 U	1 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Ethylbenzene	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.5 U	0.042 U	0.042 U	0.042 U	0.5 U	0.05 U	1 U	1 U	1 U	1 U	1 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
m,p-Xylene	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.5 U	0.078 U	0.078 U	0.078 U	0.5 U	0.091 U	2 U	2 U	2 U	2 U	2 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Methylcyclopentane	0.14 U	0.42 U	0.42 U	0.42 U	0.42 U	1 U	0.4 U	0.4 U	0.4 U	1 U	0.21 U	1 U	1 U	1 U	1 U	1 U	0.13 U	0.13 U	0.13 U	0.13 U	0.14 U	0.14 U
Methylene chloride	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.23 U	0.23 U	0.23 U	2 U	0.17 U	5 U	5 U	5 U	5 U	5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
o-Xylene	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.5 U	0.037 U	0.037 U	0.037 U	0.5 U	0.074 U	1 U	1 U	1 U	1 U	1 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
Tetrachloroethene	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.5 U	0.077 U	0.077 U	0.077 U	0.5 U	0.066 U	0.05 U	0.05 U	1 U	1 U	1 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
Toluene	0.11 U	0.11 U	0.24 J	0.11 U	0.11 U	0.15 J	0.55 U	0.048 U	0.76	0.35 J	0.67	1 U	1 U	1 U	1 U	1 U	0.11 U	0.11 U	0.11 U	0.11 U	0.22 U	0.11 U
trans-1,2-Dichloroethene	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.5 U	0.048 U	0.048 U	0.048 U	0.5 U	0.091 U	1 U	1 U	1 U	1 U	1 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
Trichloroethene	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.061 U	0.061 U	0.061 U	0.5 U	0.1 U	1 U	1 U	1 U	1 U	1 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Trichlorofluoromethane	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.086 U	0.086 U	0.086 U	0.5 U	0.12 U	1 U	1 U	1 U	1 U	1 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Vinyl chloride	0.0023 U	0.0023 U	0.0023 U	0.0035 U	0.0035 U	0.02 U	0.0035 U	0.0035 U	0.0035 U	0.02 U	0.0084 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.0081 U	0.0081 U	0.0081 U	0.0081 U	0.0081 U	0.0023 U

TABLE I-1

GROUNDWATER ANALYTICAL RESULTS FOR VOLATILE ORGANIC COMPOUNDS (2004-2009)[1]
PSC Washougal Facility
Washougal, Washington

Concentrations in micrograms per liter (µg/L)

Analyte / Sample ID / Date Sampled	MC-17D (Continued)																		MC-19D			
	12/20/2006	3/8/2007	6/7/2007	9/13/2007	9/13/2007	12/20/2007	3/12/2008	3/12/2008	6/12/2008	6/12/2008	9/25/2008	9/25/2008	12/2/2008	12/2/2008	3/24/2009	3/24/2009	6/26/2009	6/26/2009	3/24/2004	6/16/2004	9/15/2004	12/14/2004
1,2-Dibromo-3-chloropropane	0.0018 U	0.0018 U	0.0095 U	0.0014 U	0.0014 U	0.0014 U	0.0097 U	0.0097 U	0.0028 U	0.0028 U	--	--	--	--	--		--		0.01 U	0.01 U	0.01 U	0.01 U
1,2-Dibromoethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		--		--	0.01 U	--	--
1,1,1-Trichloroethane	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.5 U	0.5 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.5 U	0.5 U	0.075 U	0.075 U	1 U	1 U	1 U	1 U
1,1,2-Trichlorotrifluoroethane	0.17 U	0.22 J	0.14 U	0.14 U	0.17 J	0.14 J	0.18 J	0.18 J	0.19 J	0.14 J	0.17 J	0.21 J	0.15 J	0.18 J	0.27 J	0.23 J	0.19 J	0.19 J	2 U	2.67	2.23	2 U
1,1-Dichloro-1,2,2-trifluoroethane	0.18 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	1 U	1 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	1 U	1 U	0.21 U	0.21 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.5 U	0.5 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.5 U	0.5 U	0.077 U	0.077 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	0.0066 U	0.0066 U	0.0066 U	0.0061 U	0.0061 U	0.019 J	0.02 U	0.02 U	0.0061 U	0.0061 U	0.0095 U	0.0095 U	0.0095 U	0.0095 U	0.02 U		0.0095 U	0.0095 U	0.05 U	0.05 U	0.05 U	0.05 U
1,2-Dichlorobenzene	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.5 U	0.5 U	0.044 U	0.044 U	0.044 U	0.044 U	0.044 U	0.044 U	0.5 U	0.5 U	0.12 U	0.12 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.5 U	0.5 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.073 U	0.5 U	0.5 U	0.08 U	0.08 U	0.1 U	0.1 U	0.1 U	0.1 U
2-Butanone	2 UJ	2.3 UJ	2.3 U	2.3 U	2.3 U	2.3 U	20 U	20 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	20 U	20 U	1.9 U	1.9 U	10 U	10 U	10 U	10 U
2-Methylpentane	0.16 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	1 U	1 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	1 U	1 U	0.21 U	0.21 U	1 U	1 U	1 U	1 U
3-Methylpentane	0.15 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	1 U	1 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	1 U	1 U	0.18 U	0.18 U	1 U	1 U	1 U	1 U
Acetone	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	20 U	20 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	20 U	20 U	3.3 U	3.3 U	25 U	25 U	25 U	25 U
Benzene	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.5 U	0.045 U	0.045 U	0.045 U	0.045 U	0.045 U	0.045 U	0.5 U	0.5 U	0.038 U	0.038 U	0.5 U	0.5 U	0.5 U	0.5 U
Carbon disulfide	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.5 U	0.5 U	0.045 U	0.045 U	0.045 U	0.045 U	0.045 U	0.045 U	0.5 U	0.5 U	0.1 U	0.1 U	1 U	1 U	1 U	1 U
Carbon tetrachloride	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.5 U	0.068 U	0.068 U	0.068 U	0.068 U	0.068 U	0.068 U	0.5 U	0.5 U	0.096 U	0.096 U	0.061	0.05 U	0.05 U	0.05 U
Chlorobenzene	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.5 U	0.045 U	0.045 U	0.045 U	0.045 U	0.045 U	0.045 U	0.5 U	0.5 U	0.11 U	0.11 U	1 U	1 U	1 U	1 U
Chloroethane	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.5 U	0.5 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.5 U	0.5 U	0.16 U	0.16 U	1 U	1 U	1 U	1 U
Chloroform	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.5 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.5 U	0.5 U	0.064 U	0.064 U	1 U	1 U	1 U	1 U
Chloromethane	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.5 U	0.11 UJ	0.11 UJ	0.053 U	0.053 U	0.053 U	0.053 U	0.5 U	0.5 U	0.053 U	0.053 U	5 U	5 U	5 U	5 U
cis-1,2-Dichloroethene	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.5 U	0.5 U	0.045 U	0.045 U	0.045 U	0.045 U	0.045 U	0.045 U	0.5 U	0.5 U	0.067 U	0.067 U	1 U	1 U	1 U	1 U
Dichlorodifluoromethane	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.5 U	0.5 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.5 U	0.5 U	0.13 U	0.13 U	1 U	1 U	1 U	1 U
Ethylbenzene	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.5 U	0.5 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.5 U	0.5 U	0.05 U	0.05 U	1 U	1 U	1 U	1 U
m,p-Xylene	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.5 U	0.5 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U	0.5 U	0.5 U	0.091 U	0.091 U	2 U	2 U	2 U	2 U
Methylcyclopentane	0.14 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	1 U	1 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	1 U	1 U	0.21 U	0.21 U	1 U	1 U	1 U	1 U
Methylene chloride	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	2 U	2 U	0.17 U	0.17 U	5 U	5 U	5 U	5 U
o-Xylene	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.5 U	0.5 U	0.037 U	0.037 U	0.037 U	0.037 U	0.037 U	0.037 U	0.5 U	0.5 U	0.074 U	0.074 U	1 U	1 U	1 U	1 U
Tetrachloroethene	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.5 U	0.5 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.5 U	0.5 U	0.066 U	0.066 U	0.05 U	0.05 U	1 U	1 U
Toluene	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.5 U	0.5 U	0.54 UJ	0.54 UJ	0.048 U	0.048 U	0.048 U	0.048 U	0.5 U	0.5 U	0.052 U	0.052 U	1 U	1 U	1 U	1 U
trans-1,2-Dichloroethene	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.5 U	0.5 U	0.048 U	0.048 U	0.048 U	0.048 U	0.048 U	0.048 U	0.5 U	0.5 U	0.091 U	0.091 U	1 U	1 U	1 U	1 U
Trichloroethene	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.5 U	0.061 U	0.061 U	0.061 U	0.061 U	0.061 U	0.061 U	0.5 U	0.5 U	0.1 U	0.1 U	1 U	1 U	1 U	1 U
Trichlorofluoromethane	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.5 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.5 U	0.5 U	0.12 U	0.12 U	1 U	1 U	1 U	1 U
Vinyl chloride	0.0023 U	0.0023 U	0.0023 U	0.0035 U	0.0035 U	0.02 J	0.02 U	0.02 U	0.0035 U	0.0035 U	0.0035 U	0.0035 U	0.0035 U	0.0035 U	0.02 U	--	0.0084 U	0.0084 U	0.02 U	0.02 U	0.02 U	0.02 U

TABLE I-1

GROUNDWATER ANALYTICAL RESULTS FOR VOLATILE ORGANIC COMPOUNDS (2004-2009)[1]
PSC Washougal Facility
Washougal, Washington

Concentrations in micrograms per liter (µg/L)

Analyte / Sample ID / Date Sampled	MC-19D (Continued)																	
	3/15/2005	6/7/2005	9/13/2005	11/29/2005	3/8/2006	6/6/2006	9/13/2006	12/21/2006	3/7/2007	6/7/2007	9/12/2007	12/21/2007	3/14/2008	6/13/2008	9/26/2008	12/5/2008	3/25/2009	6/30/2009
1,2-Dibromo-3-chloropropane	0.01 U	0.0028 U	0.0028 U	0.0018 U	0.0018 U	0.0018 U	0.0018 U	0.0096 U	0.0018 U	0.0014 U	0.0014 U	0.0014 U	0.0098 U	0.0028 U	--	--	--	--
1,2-Dibromoethane	--	--	--	0.0017 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,1-Trichloroethane	1 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.5 U	0.05 U	0.05 U	0.05 U	0.5 U	0.075 U
1,1,2-Trichlorotrifluoroethane	2 U	2.6	1.9	2.8	4.2	1.5	3.1	3.5	4.9	6.3	4.1	4.1	3.4	2.7	5	5.7	7.7	8.2
1,1-Dichloro-1,2,2-trifluoroethane	1 U	0.14 U	0.14 U	0.14 U	0.14 U	0.18 U	0.18 U	0.18 U	0.58 J	0.49 U	0.49 U	0.49 U	1 U	0.38 U	0.38 U	0.38 U	1 U	0.21 U
1,1-Dichloroethane	1 U	0.11 U	0.11 U	0.11 J	0.16 J	0.11 U	0.12 J	0.18 J	0.25 J	0.44 J	0.26 J	0.21 J	0.21 J	0.4 J	0.46 J	0.26 J	0.45 J	0.98
1,1-Dichloroethene	0.05 U	0.0047 U	0.0097 U	0.021 U	0.032 U	0.009 U	0.024 U	0.023 U	0.028	0.037 U	0.0061 U	0.0061 U	0.02 U	0.0061 U	0.0095 U	0.0095 U	0.02 U	0.0095 U
1,2-Dichlorobenzene	1 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.5 U	0.044 U	0.044 U	0.044 U	0.5 U	0.12 U
1,2-Dichloroethane	0.1 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.5 U	0.073 U	0.073 U	0.073 U	0.5 U	0.08 U
2-Butanone	10 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2.3 UJ	2.3 U	2.3 U	2.3 U	20 U	3.8 U	3.8 U	3.8 U	20 U	1.9 U
2-Methylpentane	1 U	0.15 U	0.15 U	0.15 U	0.15 U	0.16 U	0.16 U	0.16 U	0.49 U	0.49 U	0.49 U	0.49 U	1 U	0.4 U	0.4 U	0.4 U	1 U	0.21 U
3-Methylpentane	1 U	0.12 U	0.12 U	0.12 U	0.12 U	0.15 U	0.15 U	0.15 U	0.41 U	0.41 U	0.41 U	0.41 U	1 U	0.36 U	0.36 U	0.36 U	1 UJ	0.18 U
Acetone	25 U	4.1 U	5.3 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	20 U	2.5 U	2.5 U	2.5 U	20 U	3.3 U
Benzene	0.5 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.045 U	0.045 U	0.045 U	0.5 U	0.038 U
Carbon disulfide	1 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.5 U	0.045 U	0.045 U	0.045 U	0.5 U	0.1 U
Carbon tetrachloride	0.05 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.068 U	0.068 U	0.068 U	0.5 U	0.096 U
Chlorobenzene	1 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.045 U	0.045 U	0.045 U	0.5 U	0.11 U
Chloroethane	1 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.5 U	0.13 U	0.13 U	0.13 U	0.5 U	0.16 U
Chloroform	1 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.042 U	0.042 U	0.042 U	0.5 U	0.064 U
Chloromethane	5 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.053 U	0.053 U	0.053 U	0.5 U	0.053 U
cis-1,2-Dichloroethene	1 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.5 U	0.045 U	0.045 U	0.045 U	0.5 U	0.08 J
Dichlorodifluoromethane	1 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.5 U	0.083 U	0.083 U	0.083 U	0.5 U	0.13 U
Ethylbenzene	1 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.5 U	0.042 U	0.042 U	0.042 U	0.5 U	0.05 U
m,p-Xylene	2 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.5 U	0.078 U	0.078 U	0.078 U	0.5 U	0.091 U
Methylcyclopentane	1 U	0.13 U	0.13 U	0.13 U	0.13 U	0.14 U	0.14 U	0.14 U	0.42 U	0.42 U	0.42 U	0.42 U	1 U	0.4 U	0.4 U	0.4 U	1 UJ	0.21 U
Methylene chloride	5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.23 U	0.23 U	0.23 U	2 U	0.17 U
o-Xylene	1 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.5 U	0.037 U	0.037 U	0.037 U	0.5 U	0.074 U
Tetrachloroethene	1 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.5 U	0.077 U	0.077 U	0.077 U	0.5 U	0.066 U
Toluene	1 U	0.11 U	0.11 U	0.11 U	0.13 U	0.11 U	0.11 U	0.11 U	0.11 U	0.39 J	0.31 UJ	0.11 U	0.5 U	0.54 UJ	0.048 U	0.048 U	0.5 UJ	0.052 U
trans-1,2-Dichloroethene	1 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.5 U	0.048 U	0.048 U	0.048 U	0.5 U	0.091 U
Trichloroethene	1 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.061 U	0.061 U	0.061 U	0.5 U	0.1 U
Trichlorofluoromethane	1 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.086 U	0.086 U	0.086 U	0.5 U	0.12 U
Vinyl chloride	0.02 U	0.0081 U	0.0081 U	0.0084 J	0.013 J	0.0081 U	0.0072 J	0.022	0.028	0.051	0.0035 U	0.0083 J	0.02 U	0.0035 U	0.0035 U	0.0035 U	0.02 U	0.0084 U

TABLE I-1

GROUNDWATER ANALYTICAL RESULTS FOR VOLATILE ORGANIC COMPOUNDS (2004-2009)[1]

PSC Washougal Facility

Washougal, Washington

Concentrations in micrograms per liter (µg/L)

Sample ID	MC-20																	
Analyte / Date Sampled	3/23/2004	6/15/2004	12/16/2004	3/17/2005	6/9/2005	12/1/2005	3/9/2006	6/8/2006	12/19/2006	3/5/2007	6/4/2007	12/19/2007	3/13/2008	6/13/2008	9/22/2008	12/2/2008	3/23/2009	6/23/2009
1,2-Dibromo-3-chloropropane	0.01 U	0.01 U	0.01 U	0.01 U	0.0028 U	0.0018 U	0.0018 U	0.0018 U	0.0018 U	0.0018 U	0.0014 U	0.0014 U	0.0097 U	0.0028 U	--	--	--	--
1,2-Dibromoethane	--	0.01 U	--	--	--	0.0017 U	--	--	--	--	--	--	--	--	--	--	--	--
1,1,1-Trichloroethane	7.73	2.24	3.08	1 U	1.7	0.21 J	3.2	0.64	0.85	3.7	0.96	0.12 U	1.3	0.96	0.18 J	0.07 J	0.34 J	0.78
1,1,2-Trichlorotrifluoroethane	2 U	2 U	2 U	2 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.079 U	0.079 U	0.079 U	0.5 U	0.13 U
1,1-Dichloro-1,2,2-trifluoroethane	1 U	1 U	1 U	1 U	0.14 U	0.14 U	0.14 U	0.18 U	0.18 U	0.49 U	0.49 U	0.49 U	1 U	0.38 U	0.38 U	0.38 U	1 U	0.21 U
1,1-Dichloroethane	2.74	4.34	2.4	1.52	3.6	2.1	0.73	2	0.37 J	0.81	0.62	1.2	0.96	0.61	1.5	1.1	0.3 J	0.73
1,1-Dichloroethene	0.06	0.05 U	0.05 U	0.05 U	0.013 J	0.024	0.11	0.009 U	0.018 J	0.088	0.02	0.0091 J	0.019 J	0.0061 U	0.0096 J	0.0095 U	0.02 U	0.0095 U
1,2-Dichlorobenzene	1 U	1 U	1 U	1 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.5 U	0.044 U	0.044 U	0.044 U	0.5 U	0.12 U
1,2-Dichloroethane	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.5 U	0.073 U	0.073 U	0.073 U	0.5 U	0.08 U
2-Butanone	10 U	10 U	10 U	10 U	2 U	2 U	3.2 J	2 U	2 UJ	2.3 UJ	2.9 J	2.3 U	20 U	3.8 U	3.8 U	3.8 U	20 U	1.9 U
2-Methylpentane	1 U	1 U	1 U	1 U	0.15 U	0.15 U	0.15 U	0.16 U	0.16 U	0.49 U	0.49 U	0.49 U	1 U	0.4 U	0.4 U	0.4 U	1 U	0.21 U
3-Methylpentane	1 U	1 U	1 U	1 U	0.12 U	0.12 U	0.12 U	0.15 U	0.15 U	0.41 U	0.41 U	0.41 U	1 U	0.36 U	0.36 U	0.36 U	1 U	0.18 U
Acetone	25 U	25 U	25 U	25 U	4.1 U	4.1 U	12 J	8.2 J	4.1 U	4.1 U	5.8 J	4.1 U	20 U	3 J	2.5 U	2.5 U	20 U	3.3 U
Benzene	0.5 U	0.5 U	0.5 U	0.5 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.045 U	0.05 J	0.045 U	0.5 U	0.04 J
Carbon disulfide	1 U	1 U	1 U	1 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.5 U	0.045 U	0.045 U	0.045 U	0.5 U	0.1 U
Carbon tetrachloride	0.061	0.05 U	0.05 U	0.05 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.068 U	0.068 U	0.068 U	0.5 U	0.096 U
Chlorobenzene	1 U	1 U	1 U	1 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.045 U	0.045 U	0.045 U	0.5 U	0.11 U
Chloroethane	1 U	1 U	1 U	1 U	0.29 J	0.91	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.24 J	0.5 U	0.13 U	0.13 U	0.13 U	0.5 U	0.16 U
Chloroform	1 U	1 U	1 U	1 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.042 U	0.042 U	0.042 U	0.5 U	0.064 U
Chloromethane	5 U	5 U	5 U	5 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.053 U	0.053 U	0.053 U	0.5 U	0.053 U
cis-1,2-Dichloroethene	1.3	2.69	1 U	1.03	0.48 J	0.44 J	0.41 J	1.1	0.12 U	0.66	0.49 J	0.71	0.61	0.55	0.61	0.76	0.5 U	0.3 J
Dichlorodifluoromethane	1 U	1 U	1 U	1 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.5 U	0.083 U	0.083 U	0.083 U	0.5 U	0.13 U
Ethylbenzene	1 U	1 U	1 U	1 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.14 J	0.5 U	0.042 U	0.042 U	0.69	0.15 J	0.05 U
m,p-Xylene	2 U	2 U	2 U	2 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.5 U	0.078 U	0.078 U	0.078 U	0.5 U	0.091 U
Methylcyclopentane	1 U	1 U	1 U	1 U	0.13 U	0.13 U	0.13 U	0.14 U	0.14 U	0.42 U	0.42 U	0.42 U	1 U	0.4 U	0.4 U	0.4 U	1 U	0.21 U
Methylene chloride	5 U	5 U	5 U	5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.23 U	0.23 U	0.23 U	2 U	0.17 U
o-Xylene	1 U	1 U	1 U	1 U	0.11 U	0.11 U	0.13 J	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.5 U	0.037 U	0.037 U	0.037 U	0.5 U	0.074 U
Tetrachloroethene	1.71	0.146	1 U	1 U	0.15 J	0.13 U	2	0.23 J	0.5	1.5	0.32 J	0.13 U	0.57	0.38 J	0.26 J	0.11 J	0.29 J	0.42 J
Toluene	1 U	1 U	1 U	1 U	0.11 U	0.12 J	0.11 U	0.26 U	0.11 U	0.11 U	0.11 U	0.14 J	0.5 U	0.54 UJ	0.05 J	0.22 UJ	0.5 UJ	0.052 U
trans-1,2-Dichloroethene	1 U	1 U	1 U	1 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.5 U	0.048 U	0.048 U	0.048 U	0.5 U	0.091 U
Trichloroethene	3.88	1.75	1 U	1 U	1.4	0.8	3.1	0.62	0.65	2.6	1.5	0.39 J	1.7	1.8	0.49 J	0.42 J	0.29 J	1.4
Trichlorofluoromethane	1 U	1 U	1 U	1 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.086 U	0.086 U	0.086 U	0.5 U	0.12 U
Vinyl chloride	0.266	0.265	0.02 U	0.415	0.16	0.16	0.09	0.15	0.05	0.16	0.1	0.18	0.18	0.078	0.32	0.17 J	0.0099 J	0.13

TABLE I-1

GROUNDWATER ANALYTICAL RESULTS FOR VOLATILE ORGANIC COMPOUNDS (2004-2009)[1]

PSC Washougal Facility

Washougal, Washington

Concentrations in micrograms per liter (µg/L)

Sample ID	MC-20-D								MC-21													
Analyte / Date Sampled	10/23/2007	12/18/2007	3/11/2008	6/10/2008	9/22/2008	12/2/2008	3/23/2009	6/23/2009	3/23/2004	6/15/2004	9/16/2004	12/16/2004	3/17/2005	6/8/2005	9/15/2005	12/1/2005	3/9/2006	6/8/2006	9/12/2006	12/19/2006	3/6/2007	6/5/2007
1,2-Dibromo-3-chloropropane	0.0014 U	0.0014 U	0.0097 U	0.0028 U	--	--	--	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0028 U	0.0028 U	0.0018 U	0.0018 U	0.0018 U	0.0018 U	0.0018 U	0.0018 U	0.0014 U
1,2-Dibromoethane	--	--	--	--	--	--	--	--	--	0.01 U	--	--	--	--	--	0.0017 U	--	--	--	--	--	--
1,1,1-Trichloroethane	0.12 U	0.12 U	0.5 U	0.05 U	0.05 U	0.05 U	0.5 U	0.075 U	1.47	2.42	1 U	1.18	1 U	0.92	0.13 J	0.4 J	0.19 J	0.19 J	0.12 U	0.32 J	0.16 J	0.2 J
1,1,2-Trichlorotrifluoroethane	0.14 U	0.14 U	0.5 U	0.079 U	0.079 U	0.079 U	0.5 U	0.13 U	2 U	2 U	2 U	2 U	2 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
1,1-Dichloro-1,2,2-trifluoroethane	0.49 U	0.49 U	1 U	0.38 U	0.38 U	0.38 U	1 U	0.21 U	1 U	1 U	1 U	1 U	1 U	0.14 U	0.14 U	0.14 U	0.14 U	0.18 U	0.18 U	0.18 U	0.49 U	0.49 U
1,1-Dichloroethane	0.11 U	0.11 U	0.5 U	0.042 U	0.042 U	0.042 U	0.5 U	0.077 U	1 U	1.8	1 U	1 U	1 U	0.22 J	0.37 J	0.16 J	0.11 U	0.4 J	0.3 J	0.11 J	0.18 J	0.28 J
1,1-Dichloroethene	0.0061 U	0.0061 U	0.02 U	0.0061 U	0.0095 U	0.0095 U	0.02 U	0.0095 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.007 J	0.031 J	0.045 J	0.012 J	0.0051 U	0.0066 U	0.0073 J	0.0066 U	0.013 U
1,2-Dichlorobenzene	0.12 U	0.12 U	0.5 U	0.044 U	0.044 U	0.044 U	0.5 U	0.12 U	1.38	9.65	1.77	1.65	1 U	0.85	0.59	0.41 J	0.25 J	4.6	0.79	0.6	3.5	3.5
1,2-Dichloroethane	0.12 U	0.12 U	0.5 U	0.073 U	0.073 U	0.073 U	0.5 U	0.08 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
2-Butanone	2.3 U	2.3 U	20 U	3.8 U	3.8 U	3.8 U	20 U	1.9 U	10 U	10 U	10 U	10 U	10 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2.3 UJ	2.3 U
2-Methylpentane	0.49 U	0.49 U	1 U	0.4 U	0.4 U	0.4 U	1 U	0.21 U	1.47	1 U	1.81	1 U	1 U	0.61 J	0.96 J	0.5 J	0.15 U	0.16 U	0.62 J	0.27 J	0.49 U	0.49 U
3-Methylpentane	0.41 U	0.41 U	1 U	0.36 U	0.36 U	0.36 U	1 U	0.18 U	1 U	1 U	1 U	1 U	1.17	0.63 J	0.72 J	0.4 J	0.12 J	0.15 U	0.55 J	0.25 J	0.41 U	0.41 U
Acetone	4.1 U	4.1 U	20 U	2.5 U	2.5 U	2.5 U	20 U	3.3 U	25 U	25 U	25 U	25 U	25 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	8.3 J	4.1 U	4.1 U
Benzene	0.14 U	0.14 U	0.5 U	0.045 U	0.045 U	0.045 U	0.5 U	0.038 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.14 U	0.2 J	0.14 U	0.14 U	0.14 U	0.14 J	0.14 U	0.14 U	0.14 U
Carbon disulfide	0.16 U	0.16 U	0.5 U	0.045 U	0.045 U	0.045 U	0.5 U	0.1 U	1 U	1 U	1 U	1 U	1 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
Carbon tetrachloride	0.14 U	0.14 U	0.5 U	0.068 U	0.068 U	0.068 U	0.5 U	0.096 U	0.062	0.05 U	0.05 U	0.05 U	0.05 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Chlorobenzene	0.14 U	0.14 U	0.5 U	0.045 U	0.045 U	0.045 U	0.5 U	0.11 U	1 U	1 U	1 U	1 U	1 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Chloroethane	0.23 U	0.23 U	0.5 U	0.13 U	0.13 U	0.13 U	0.5 U	0.16 U	1 U	1 U	1 U	1 U	1 U	0.23 U	0.24 J	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
Chloroform	0.14 U	0.14 U	0.5 U	0.042 U	0.042 U	0.042 U	0.5 U	0.064 U	1 U	1 U	1 U	1 U	1 U	0.14 U	0.14 U	0.19 J	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Chloromethane	0.14 U	0.14 U	0.5 U	0.11 UJ	0.053 U	0.053 U	0.5 U	0.053 U	5 U	5 U	5 U	5 U	5 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
cis-1,2-Dichloroethene	0.12 U	0.12 U	0.5 U	0.045 U	0.045 U	0.045 U	0.5 U	0.067 U	1 U	1 U	1 U	1 U	1 U	0.42 J	0.47 J	0.43 J	0.17 J	0.23 J	0.31 J	0.25 J	0.16 J	0.3 J
Dichlorodifluoromethane	0.17 U	0.17 U	0.5 U	0.083 U	0.083 U	0.083 U	0.5 U	0.13 U	1 U	1 U	1 U	1 U	1 U	0.17 U	0.85 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Ethylbenzene	0.13 U	0.13 U	0.5 U	0.042 U	0.042 U	0.042 U	0.5 U	0.05 U	6.32	13.7	1 U	3.75	1 U	1.2	0.26 J	0.39 J	0.15 J	5.5	0.29 J	1.4	6.8	5.8
m,p-Xylene	0.22 U	0.22 U	0.5 U	0.078 U	0.078 U	0.078 U	0.5 U	0.091 U	37.1	65.8	2 U	3.1	2 U	1.5	0.63	0.41 J	0.22 J	14	0.37 J	3	34	14
Methylcyclopentane	0.42 U	0.42 U	1 U	0.4 U	0.4 U	0.4 U	1 U	0.21 U	1 U	1 U	1 U	1 U	1 U	0.22 J	0.46 J	0.27 J	0.13 U	0.14 U	0.32 J	0.14 U	0.42 U	0.42 U
Methylene chloride	0.2 U	0.2 U	2 U	0.23 U	0.23 U	0.23 U	2 U	0.17 U	5 U	5 U	5 U	5 U	5 U	0.2 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
o-Xylene	0.11 U	0.11 U	0.5 U	0.037 U	0.037 U	0.037 U	0.5 U	0.074 U	20.9	46.7	2.16	5.57	1 U	3.5	0.81	0.86	0.36 J	50	0.93	5.3	26	22
Tetrachloroethene	0.13 U	0.13 U	0.5 U	0.077 U	0.077 U	0.077 U	0.5 U	0.066 U	4.02	3.17	1 U	1.29	1.28	2	0.33 J	0.74	0.61	1.2	0.22 J	0.52	0.38 J	0.95
Toluene	0.79 U	0.11 U	0.5 U	0.54 UJ	0.048 U	0.048 U	0.5 U	0.052 U	1 U	1 U	2.5 U	1 U	1 U	1.9 U	1.3	0.58	0.28 U	0.4 U	0.87	0.22 J	0.27 J	0.33 J
trans-1,2-Dichloroethene	0.15 U	0.15 U	0.5 U	0.048 U	0.048 U	0.048 U	0.5 U	0.091 U	1 U	1 U	1 U	1 U	1 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
Trichloroethene	0.14 U	0.14 U	0.5 U	0.061 U	0.061 U	0.061 U	0.5 U	0.1 U	1.02	1 U	1 U	1 U	1 U	0.8	0.4 J	0.58	0.4 J	0.27 J	0.26 J	0.43 J	0.42 J	0.44 J
Trichlorofluoromethane	0.14 U	0.14 U	0.5 U	0.086 U	0.086 U	0.086 U	0.5 U	0.12 U	1 U	1 U	1 U	1 U	1 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Vinyl chloride	0.0053 J	0.0041 J	0.02 U	0.0035 U	0.0035 U	0.0035 U	0.02 U	0.0084 U	0.186	0.22	0.816	0.375	0.339	0.12 J	0.49 J	0.18 J	0.059 J	0.11 J	0.24	0.059 J	0.081 J	0.13 J

TABLE I-1

GROUNDWATER ANALYTICAL RESULTS FOR VOLATILE ORGANIC COMPOUNDS (2004-2009)[1]
PSC Washougal Facility
Washougal, Washington

Concentrations in micrograms per liter (µg/L)

Sample ID	MC-21 (Continued)								MC-24								MC-24D				
Analyte / Date Sampled	9/11/2007	12/19/2007	3/13/2008	6/13/2008	9/23/2008	12/1/2008	3/24/2009	6/25/2009	10/24/2007	12/18/2007	3/12/2008	6/10/2008	6/11/2008	9/24/2008	12/3/2008	3/27/2009	6/26/2009	10/24/2007	12/18/2007	3/11/2008	6/10/2008	9/24/2008
1,2-Dibromo-3-chloropropane	0.0014 U	0.0014 U	0.0098 U	0.0028 U	--	--	--	--	0.0014 U	0.0014 U	0.0096 U	0.0028 U	--	--	--	--	--	0.0014 U	0.0014 U	0.0097 U	0.0028 U	--
1,2-Dibromoethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,1-Trichloroethane	0.12 U	0.12 U	0.2 J	0.13 J	0.05 U	0.18 J	0.14 J	0.14 J	0.12 U	0.12 U	0.5 U	0.05 U	--	0.05 U	0.05 U	0.5 U	0.075 U	0.38 J	0.58 U	0.58 J	0.5 J	0.3 J
1,1,2-Trichlorotrifluoroethane	0.14 U	0.14 U	0.5 U	0.079 U	0.079 U	0.079 U	0.5 U	0.13 U	0.14 U	0.14 U	0.5 U	0.079 U	--	0.079 U	0.079 U	0.5 U	0.13 U	740	830	820	790	680
1,1-Dichloro-1,2,2-trifluoroethane	0.49 U	0.49 U	1 U	0.38 U	0.38 U	0.38 U	1 U	0.21 U	0.49 U	0.49 U	1 U	0.38 U	--	0.38 U	0.38 U	1 U	0.21 U	1.3 U	2.5 U	2 U	1.9 U	1.9 U
1,1-Dichloroethane	0.29 J	0.14 J	0.2 J	0.19 J	0.24 J	0.2 J	0.15 J	0.13 J	0.11 U	0.11 U	0.5 U	0.042 U	--	0.042 U	0.042 U	0.5 U	0.077 U	560	630	720	700	540
1,1-Dichloroethene	0.0061 U	0.0061 U	0.02 U	0.0061 U	0.0095 U	0.0095 U	0.02 U	0.0095 U	0.0061 U	0.0061 U	0.02 U	0.0061 U	--	0.0095 U	0.0095 U	0.02 U	0.0095 U	0.84 U	5.2 U	0.02 U	0.0061 U	0.77 U
1,2-Dichlorobenzene	0.53	0.18 J	0.82	1.8	0.38 J	0.52	0.51	0.47 J	0.12 U	0.12 U	0.5 U	0.044 U	--	0.044 U	0.044 U	0.5 U	0.12 U	0.28 U	0.56 U	1 U	0.22 U	0.22 U
1,2-Dichloroethane	0.12 U	0.12 U	0.5 U	0.073 U	0.073 U	0.073 U	0.5 U	0.08 U	0.12 U	0.12 U	0.5 U	0.073 U	--	0.073 U	0.073 U	0.5 U	0.08 U	0.29 U	0.57 U	0.26 J	0.37 U	0.37 U
2-Butanone	2.3 U	2.3 U	20 U	3.8 U	3.8 U	3.8 U	20 U	1.9 U	2.3 U	2.3 U	20 U	3.8 U	--	3.8 U	3.8 U	20 U	1.9 U	5.8 U	12 U	40 U	19 U	19 U
2-Methylpentane	0.49 U	0.49 U	0.51 J	0.4 U	0.4 U	0.4 U	1 U	0.29 J	0.49 U	0.49 U	1 U	0.4 U	--	0.4 U	0.4 U	1 U	0.21 U	1.3 U	2.5 U	2 U	2 U	2 U
3-Methylpentane	0.44 J	0.41 U	0.41 J	0.36 U	0.36 U	0.36 U	1 U	0.22 J	0.41 U	0.41 U	1 U	0.36 U	--	0.36 U	0.36 U	1 U	0.18 U	1.1 U	2.1 U	2 U	1.8 U	1.8 U
Acetone	4.1 U	4.1 U	20 U	2.5 U	2.5 U	2.5 U	20 U	3.3 U	4.1 U	4.1 U	20 U	2.5 U	--	2.5 U	2.5 U	20 U	3.3 U	11 U	21 U	40 U	13 U	13 U
Benzene	0.18 J	0.14 U	0.5 U	0.045 U	0.19 J	0.07 UJ	0.06 J	0.06 J	0.14 U	0.14 U	0.5 U	0.045 U	--	0.045 U	0.045 U	0.5 U	0.038 U	0.85 J	1.1 J	1.3	1.2 J	0.85 J
Carbon disulfide	0.16 U	0.16 U	0.5 U	0.045 U	0.045 U	0.045 U	0.5 U	0.1 U	0.16 U	0.16 U	0.5 U	0.045 U	--	0.045 U	0.045 U	0.5 U	0.1 U	0.4 U	0.8 U	1 U	0.23 U	0.23 U
Carbon tetrachloride	0.14 U	0.14 U	0.5 U	0.068 U	0.068 U	0.068 U	0.5 U	0.096 U	0.14 U	0.14 U	0.5 U	0.068 U	--	0.068 U	0.068 U	0.5 U	0.096 U	0.35 U	0.7 U	1 U	0.34 U	0.34 U
Chlorobenzene	0.14 U	0.14 U	0.5 U	0.045 U	0.15 J	0.045 U	0.11 J	0.11 U	0.14 U	0.14 U	0.5 U	0.045 U	--	0.045 U	0.045 U	0.5 U	0.11 U	0.34 U	0.67 U	1 U	0.23 U	0.23 U
Chloroethane	0.23 U	0.23 U	0.5 U	0.13 U	0.13 U	0.13 U	0.5 U	0.16 U	0.23 U	0.23 U	0.5 U	0.13 U	--	0.13 U	0.13 U	0.5 U	0.16 U	2.7 U	1.2 U	1 U	3.9	0.65 U
Chloroform	0.14 U	0.14 U	0.5 U	0.042 U	0.042 U	0.042 U	0.5 U	0.064 U	0.14 U	0.14 U	0.5 U	0.042 U	--	0.042 U	0.042 U	0.5 U	0.064 U	0.34 U	0.68 U	1 U	0.21 U	0.21 U
Chloromethane	0.14 U	0.14 U	0.5 U	0.11 UJ	0.053 U	0.1 UJ	0.5 U	0.053 U	0.14 U	0.14 U	0.5 U	0.12 UJ	--	0.47 J	0.08 UJ	0.5 U	0.053 U	0.34 U	0.68 U	1 U	0.45 UJ	0.27 U
cis-1,2-Dichloroethene	0.33 J	0.17 J	0.28 J	0.26 J	0.26 J	0.14 J	0.2 J	0.27 J	0.12 U	0.12 U	0.5 U	0.045 U	--	0.045 U	0.045 U	0.5 U	0.067 U	410	500	540	480	380
Dichlorodifluoromethane	0.17 U	0.17 U	0.5 U	0.083 U	0.083 U	0.083 U	0.5 U	0.13 U	0.17 U	0.17 U	0.5 U	0.083 U	--	0.083 U	0.083 U	0.5 U	0.13 U	0.42 U	0.83 U	1 U	0.42 U	0.42 U
Ethylbenzene	0.23 J	0.21 J	0.67	0.62	0.12 J	0.34 J	0.71	0.05 U	0.13 U	0.13 U	0.5 U	0.042 U	--	0.042 U	0.042 U	0.5 U	0.05 U	0.33 U	0.65 U	1 U	0.21 U	0.21 U
m,p-Xylene	0.4 J	0.23 J	1.4	0.92	0.48 J	0.45 J	0.96	0.21 J	0.22 U	0.22 U	0.5 U	0.078 U	--	0.078 U	0.078 U	0.5 U	0.091 U	0.55 U	1.1 U	1 U	0.39 U	0.39 U
Methylcyclopentane	0.5 J	0.42 U	1 U	0.4 U	0.44 J	0.4 U	1 U	0.21 U	0.42 U	0.42 U	1 U	0.4 U	--	0.4 U	0.4 U	1 U	0.21 U	1.1 U	2.1 U	2 U	2 U	2 U
Methylene chloride	0.2 U	0.2 U	2 U	0.23 U	0.23 U	0.23 U	2 U	0.17 U	0.2 U	0.2 U	2 U	0.23 U	--	0.23 U	0.23 U	2 U	0.17 U	0.63 J	1.2 J	0.78 J	1.2 U	1.2 U
o-Xylene	0.81	0.41 J	3.7	2.8	0.64	1.1	3.4	0.28 J	0.11 U	0.11 U	0.5 U	0.037 U	--	0.037 U	0.037 U	0.5 U	0.074 U	2.6	4.8	7.1	5.1	2.9
Tetrachloroethene	0.21 J	0.4 J	0.33 J	0.56	0.15 J	0.22 J	0.36 J	0.53	0.13 U	0.13 U	0.5 U	0.077 U	--	0.077 U	0.077 U	0.5 U	0.066 U	2.2	2.5	2.8	2.4 J	2 J
Toluene	1.2	0.44 J	0.5 UJ	0.54 UJ	0.94	0.33 UJ	0.5 UJ	0.27 J	0.31 UJ	0.11 U	0.5 U	0.54 UJ	--	0.24 J	0.12 UJ	0.5 U	0.052 U	0.85 J	0.54 U	1 U	0.54 UJ	0.24 U
trans-1,2-Dichloroethene	0.15 U	0.15 U	0.5 U	0.048 U	0.048 U	0.048 U	0.5 U	0.091 U	0.15 U	0.15 U	0.5 U	0.048 U	--	0.048 U	0.048 U	0.5 U	0.091 U	0.36 U	0.72 U	1 U	0.75 J	0.24 U
Trichloroethene	0.32 J	0.22 J	0.43 J	0.38 J	0.26 J	0.25 J	0.4 J	0.4 J	0.14 U	0.14 U	0.5 U	0.061 U	--	0.061 U	0.061 U	0.5 U	0.1 U	3.4	3.5	3.9	3.4	3
Trichlorofluoromethane	0.14 U	0.14 U	0.5 U	0.086 U	0.086 U	0.086 U	0.5 U	0.12 U	0.14 U	0.14 U	0.5 U	0.086 U	--	0.086 U	0.086 U	0.5 U	0.12 U	0.33 U	0.66 U	1 U	0.43 U	0.43 U
Vinyl chloride	0.3 J	0.17 J	0.1 J	0.082 J	0.26 J	0.13 J	0.082 J	0.085 J	0.0035 U	0.0035 U	0.02 U	0.0035 U	--	0.0035 U	0.0035 U	0.02 U	0.0084 U	3.2	4.8	5	4.7	4

TABLE I-1

GROUNDWATER ANALYTICAL RESULTS FOR VOLATILE ORGANIC COMPOUNDS (2004-2009)[1]

PSC Washougal Facility
Washougal, Washington

Concentrations in micrograms per liter (µg/L)

Sample ID	MC-24D (Continued)				MC-25								MC-25D								
Analyte / Date Sampled	12/3/2008	3/27/2009	6/26/2009	6/26/2009	10/24/2007	12/19/2007	3/12/2008	6/11/2008	9/25/2008	12/4/2008	3/26/2009	6/29/2009	10/24/2007	10/24/2007	12/18/2007	3/12/2008	6/11/2008	9/25/2008	12/4/2008	3/26/2009	6/26/2009	3/26/2009
1,2-Dibromo-3-chloropropane	--	--	--	--	0.0014 U	0.0014 U	0.0097 U	0.0028 U	--	--	--	--	0.0014 U	0.0014 U	0.0014 U	0.0096 U	0.0028 U	--	--	--	--	--
1,2-Dibromoethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,1-Trichloroethane	0.55 J	0.75 J	0.63 J	0.075 U	0.12 U	0.12 U	0.5 U	0.05 U	0.05 U	0.09 J	0.5 U	0.075 U	0.29 U	0.29 U	0.24 U	1 U	0.1 U	0.065 J	0.25 U	2.5 U	0.38 U	0.5 U
1,1,2-Trichlorotrifluoroethane	910	1100	1000	0.13 U	0.2 J	0.14 U	0.22 J	0.15 J	0.079 U	0.079 U	0.38 J	0.3 J	400	390	320	300	290	430	360	310	330	45
1,1-Dichloro-1,2,2-trifluoroethane	1.9 U	5 U	0.53 U	0.21 U	0.49 U	0.49 U	1 U	0.38 U	0.38 U	0.38 U	1 U	0.21 U	1.3 U	1.3 U	0.98 U	2 U	0.76 U	0.5 U	1.9 U	5 U	1.1 U	1 U
1,1-Dichloroethane	640	750	730	0.077 U	0.11 U	0.11 U	0.5 U	0.042 U	0.042 U	0.042 U	0.5 U	0.077 U	740	750	540	660	410	960	960	900	850	18
1,1-Dichloroethene	1.1 U	1.1	0.36	0.0095 U	0.0061 U	0.0061 U	0.02 U	0.0061 U	0.0095 U	0.0095 U	0.02 U	0.0095 U	1.1 U	1.1 U	0.56 U	0.02 U	0.59 U	1.3	1.9	2.1	1.8	0.02 U
1,2-Dichlorobenzene	0.22 U	2.5 U	0.3 U	0.12 U	0.12 U	0.12 U	0.5 U	0.044 U	0.044 U	0.044 U	0.5 U	0.12 U	0.28 U	0.28 U	0.23 U	1 U	0.088 U	0.058 U	0.22 U	2.5 U	0.6 U	0.5 U
1,2-Dichloroethane	0.37 U	2.5 U	0.28 J	0.08 U	0.12 U	0.12 U	0.5 U	0.073 U	0.073 U	0.073 U	0.5 U	0.08 U	0.29 U	0.29 U	0.23 U	1 U	0.15 U	0.25 J	0.37 U	2.5 U	0.4 U	0.5 U
2-Butanone	19 U	100 U	4.8 U	1.9 U	2.3 U	2.3 U	20 U	3.8 U	3.8 U	3.8 U	20 U	1.9 U	5.8 U	5.8 U	4.6 U	40 U	7.6 U	5 U	19 U	100 U	9.5 U	20 U
2-Methylpentane	2 U	5 U	0.53 U	0.21 U	0.49 U	0.49 U	1 U	0.4 U	0.4 U	0.4 U	1 U	0.21 U	1.3 U	1.3 U	0.98 U	2 U	0.8 U	0.52 U	2 U	5 U	1.1 U	1 U
3-Methylpentane	1.8 U	5 U	0.45 U	0.18 U	0.41 U	0.41 U	1 U	0.36 U	0.36 U	0.36 U	1 UJ	0.18 U	1.1 U	1.1 U	0.82 U	2 U	0.72 U	0.47 U	1.8 U	5 U	0.9 U	1 UJ
Acetone	13 U	100 U	8.3 U	3.3 U	4.1 U	4.1 U	20 U	2.5 U	2.5 U	2.5 U	20 U	3.3 U	11 U	11 U	8.2 U	40 U	5 U	3.3 U	13 U	100 U	17 U	20 U
Benzene	1.2 J	1.5 J	1.3	0.038 U	0.14 U	0.14 U	0.5 U	0.045 U	0.045 U	0.045 U	0.5 U	0.038 U	0.65 J	0.7 J	0.46 J	0.46 J	0.44 J	0.87	0.85 J	1.1 J	0.85 J	0.05 J
Carbon disulfide	0.23 U	2.5 U	0.25 U	0.1 U	0.16 U	0.16 U	0.5 U	0.045 U	0.045 U	0.045 U	0.5 U	0.1 U	0.4 U	0.4 U	0.32 U	1 U	0.09 U	0.059 U	0.23 U	2.5 U	0.5 U	0.5 U
Carbon tetrachloride	0.34 U	2.5 U	0.24 U	0.096 U	0.14 U	0.14 U	0.5 U	0.068 U	0.068 U	0.068 U	0.5 U	0.096 U	0.35 U	0.35 U	0.28 U	1 U	0.14 U	0.089 U	0.34 U	2.5 U	0.48 U	0.5 U
Chlorobenzene	0.23 U	2.5 U	0.28 U	0.11 U	0.14 U	0.14 U	0.5 U	0.045 U	0.045 U	0.045 U	0.5 U	0.11 U	0.34 U	0.34 U	0.27 U	1 U	0.09 U	0.059 U	0.23 U	2.5 U	0.55 U	0.5 U
Chloroethane	0.65 U	2.5 U	0.4 U	0.16 U	0.23 U	0.23 U	0.5 U	0.13 U	0.13 U	0.13 U	0.5 U	0.16 U	3.3 U	3.5 U	0.46 U	2.9	2.8	0.17 U	6.4	2.5 U	0.8 U	0.5 U
Chloroform	0.21 U	2.5 U	0.16 U	0.064 U	0.14 U	0.14 U	0.5 U	0.042 U	0.042 U	0.042 U	0.5 U	0.064 U	0.34 U	0.34 U	0.28 U	1 U	0.084 U	0.055 U	0.21 U	2.5 U	0.32 U	0.5 U
Chloromethane	0.27 U	2.5 U	0.14 U	0.17 UJ	0.14 U	0.14 U	0.14 J	0.11 UJ	0.053 U	0.053 U	0.5 U	0.1 UJ	0.34 U	0.34 U	0.28 U	1 U	0.7 UJ	0.069 U	0.27 U	2.5 U	0.27 U	0.5 U
cis-1,2-Dichloroethene	500	610	560	0.067 U	0.12 U	0.12 U	0.5 U	0.045 U	0.15 J	0.045 U	0.5 U	0.067 U	510	510	440	620	300	900	1200	1300	990	8.7
Dichlorodifluoromethane	0.42 U	2.5 U	0.33 U	0.13 U	0.17 U	0.17 U	0.5 U	0.083 U	0.083 U	0.083 U	0.5 U	0.13 U	0.42 U	0.42 U	0.34 U	1 U	1.7 U	1.3 U	0.42 U	2.5 U	0.65 U	0.5 U
Ethylbenzene	0.21 U	2.5 U	0.13 U	0.05 U	0.13 U	0.13 U	0.5 U	0.042 U	0.042 U	0.042 U	0.5 U	0.05 U	0.33 U	0.33 U	0.26 U	1 U	0.084 U	0.055 U	0.21 U	2.5 U	0.25 U	0.5 U
m,p-Xylene	0.39 U	2.5 U	0.23 U	0.091 U	0.22 U	0.22 U	0.5 U	0.078 U	0.078 U	0.078 U	0.5 U	0.091 U	0.55 U	0.55 U	0.44 U	1 U	0.16 U	0.11 U	0.39 U	2.5 U	0.46 U	0.5 U
Methylcyclopentane	2 U	5 U	0.7 J	0.21 U	0.42 U	0.42 U	1 U	0.4 U	0.4 U	0.4 U	1 UJ	0.21 U	1.1 U	1.1 U	0.84 U	2 U	0.8 U	0.52 U	2 U	5 U	1.1 U	1 UJ
Methylene chloride	1.2 U	10 U	0.63 J	0.17 U	0.2 U	0.2 U	2 U	0.23 U	0.23 U	0.23 U	2 U	0.17 U	0.6 J	0.63 J	0.62 J	0.7 J	0.46 U	0.55 J	1.2 U	10 U	0.85 J	2 U
o-Xylene	4.9	7.7	5.8	0.074 U	0.11 U	0.11 U	0.5 U	0.037 U	0.037 U	0.037 U	0.5 U	0.074 U	3.1	3.1	0.84 J	0.7 J	0.66 J	4.9	2.9	3.7	2.4 J	0.5 U
Tetrachloroethene	2.8	3.7	3.1	0.066 U	0.79	0.57	0.51	0.58	0.55	0.78	0.51	0.78	3.5	3.7	4.7	3.6	2.9	3	3	3.4	3.2	0.31 J
Toluene	0.24 U	2.5 U	0.15 J	0.052 U	0.11 U	0.11 U	0.5 U	0.54 UJ	0.048 U	0.048 U	0.5 U	0.052 U	1.3 UJ	2.1	0.22 U	1 U	0.54 UJ	1.3	1.3 UJ	2 J	0.45 J	0.5 U
trans-1,2-Dichloroethene	0.24 U	2.5 U	2	0.091 U	0.15 U	0.15 U	0.5 U	0.048 U	0.048 U	0.048 U	0.5 U	0.091 U	0.36 U	0.36 U	0.34 J	0.38 J	0.2 J	0.33 J	0.5 J	0.95 J	1.6 J	0.5 U
Trichloroethene	3.4	3.8	3.6	0.1 U	0.21 J	0.14 U	0.5 U	0.07 J	0.32 J	0.08 J	0.5 U	0.1 U	4.8	5.3	3.7	4	3	5.1	4.6	5.3	4.2	0.13 J
Trichlorofluoromethane	0.43 U	2.5 U	0.3 U	0.12 U	0.14 U	0.14 U	0.5 U	0.086 U	0.086 U	0.086 U	0.5 U	0.12 U	0.33 U	0.33 U	0.27 U	1 U	0.18 U	0.12 U	0.43 U	2.5 U	0.6 U	0.5 U
Vinyl chloride	3.7 J	5.2	2.1	0.0084 U	0.2	0.017 J	0.02 U	0.013 J	0.38	0.0035 U	0.02 U	0.0084 U	6.7	6.4	5.1	5.2	3.8	7.5	11	17	22	0.22

TABLE I-1

GROUNDWATER ANALYTICAL RESULTS FOR VOLATILE ORGANIC COMPOUNDS (2004-2009)[1]

PSC Washougal Facility

Washougal, Washington

Concentrations in micrograms per liter (µg/L)

Sample ID	MC-25D (Continued)					MC-26D2								MC-27D	MC-28D	MC-30		MC-30D			
Analyte / Date Sampled	6/26/2009	9/29/2008	12/4/2008	3/26/2009	6/26/2009	9/29/2008	9/29/2008	12/3/2008	12/3/2008	3/26/2009	3/26/2009	6/30/2009	6/30/2009	6/25/2009	6/25/2009	9/29/2008	12/5/2008	9/29/2008	12/5/2008	3/25/2009	6/29/2009
1,2-Dibromo-3-chloropropane	--	--	--	--	--	--	--	--	--	--		--	--	--	--	--	--	--	--	--	--
1,2-Dibromoethane	--	--	--	--	--	--	--	--	--	--		--	--	--	--	--	--	--	--	--	--
1,1,1-Trichloroethane	0.075 U	0.05 U	0.05 U	0.5 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.5 U	0.5 U	0.075 U	0.075 U	0.075 U	0.075 U	0.05 U	0.05 U	0.05 U	0.05 U	0.5 U	0.075 U
1,1,2-Trichlorotrifluoroethane	0.47 J	10	42	45	0.47 J	1.6	2.2	0.24 J	0.19 J	0.5 U	0.1 J	0.13 U	0.13 U	410	15	0.079 U	0.079 U	0.079 U	0.079 U	0.5 U	0.13 U
1,1-Dichloro-1,2,2-trifluoroethane	0.21 U	0.38 U	0.38 U	1 U	0.21 U	0.38 U	0.38 U	0.38 U	0.38 U	1 U	1 U	0.21 U	0.21 U	0.21 U	0.21 U	0.38 U	0.38 U	0.38 U	0.38 U	1 U	0.21 U
1,1-Dichloroethane	0.69	3.7	18	18	0.69	0.042 U	0.042 U	0.042 U	0.042 U	0.5 U	0.5 U	0.077 U	0.077 U	6.7	0.077 U	0.042 U	0.042 U	0.042 U	0.042 U	0.5 U	0.077 U
1,1-Dichloroethene	0.0095 U	0.0095 U	0.0095 U	0.02 U	0.0095 U	0.0095 U	0.0095 U	0.0095 U	0.0095 U	0.02 U	0.02 U	0.0095 U	0.0095 U	0.0095 U	0.0095 U	0.0095 U	0.0095 U	0.0095 U	0.0095 U	0.02 U	0.0095 U
1,2-Dichlorobenzene	0.12 U	0.044 U	0.044 U	0.5 U	0.12 U	0.044 U	0.044 U	0.044 U	0.044 U	0.5 U	0.5 U	0.12 U	0.12 U	0.12 U	0.12 U	0.044 U	0.044 U	0.044 U	0.044 U	0.5 U	0.12 U
1,2-Dichloroethane	0.08 U	0.073 U	0.073 U	0.5 U	0.08 U	0.073 U	0.073 U	0.073 U	0.073 U	0.5 U	0.5 U	0.08 U	0.08 U	0.08 U	0.08 U	0.073 U	0.073 U	0.073 U	0.073 U	0.5 U	0.08 U
2-Butanone	1.9 U	3.8 U	3.8 U	20 U	1.9 U	3.8 U	3.8 U	3.8 U	3.8 U	20 U	20 U	1.9 U	1.9 U	1.9 U	1.9 U	3.8 U	3.8 U	3.8 U	3.8 U	20 U	1.9 U
2-Methylpentane	0.21 U	0.4 U	0.4 U	1 U	0.21 U	0.4 U	0.4 U	0.4 U	0.4 U	1 U	1 U	0.21 U	0.21 U	0.21 U	0.21 U	0.4 U	0.4 U	0.4 U	0.4 U	1 U	0.21 U
3-Methylpentane	0.18 U	0.36 U	0.36 U	1 UJ	0.18 U	0.36 U	0.36 U	0.36 U	0.36 U	1 UJ	1 UJ	0.18 U	0.18 U	0.21 J	0.18 J	0.36 U	0.36 U	0.36 U	0.36 U	1 UJ	0.18 U
Acetone	3.3 U	2.5 U	2.5 U	20 U	3.3 U	8.3 UJ	8.3 UJ	2.5 U	2.5 U	20 U	20 U	3.3 U	3.3 U	3.3 U	3.3 U	2.5 U	2.5 U	2.5 U	2.5 U	20 U	3.3 U
Benzene	0.038 U	0.045 U	0.09 UJ	0.05 J	0.038 U	0.78	0.96	0.44 J	0.41 J	0.5 U	0.05 J	0.038 U	0.038 U	0.17 J	0.1 J	0.045 U	0.045 U	0.045 U	0.045 U	0.5 U	0.038 U
Carbon disulfide	0.1 J	0.045 U	0.33 J	0.5 U	0.1 J	0.045 U	0.045 U	0.82	0.81	0.5 U	0.5 U	0.1 U	0.1 U	0.1 U	0.1 U	0.045 U	0.045 U	0.045 U	0.045 U	0.5 U	0.1 U
Carbon tetrachloride	0.096 U	0.068 U	0.068 U	0.5 U	0.096 U	0.068 U	0.068 U	0.068 U	0.068 U	0.5 U	0.5 U	0.096 U	0.096 U	0.096 U	0.096 U	0.068 U	0.068 U	0.068 U	0.068 U	0.5 U	0.096 U
Chlorobenzene	0.11 U	0.045 U	0.045 U	0.5 U	0.11 U	0.045 U	0.045 U	0.045 U	0.045 U	0.5 U	0.5 U	0.11 U	0.11 U	0.11 U	0.11 U	0.045 U	0.045 U	0.045 U	0.045 U	0.5 U	0.11 U
Chloroethane	0.16 U	0.13 U	0.13 U	0.5 U	0.16 U	0.13 U	0.13 U	0.13 U	0.13 U	0.5 U	0.5 U	0.16 U	0.16 U	0.16 U	0.16 U	0.13 U	0.13 U	0.13 U	0.13 U	0.5 U	0.16 U
Chloroform	0.064 U	0.042 U	0.042 U	0.5 U	0.064 U	0.042 U	0.042 U	0.042 U	0.042 U	0.5 U	0.5 U	0.064 U	0.064 U	0.064 U	0.064 U	0.042 U	0.042 U	0.042 U	0.042 U	0.5 U	0.064 U
Chloromethane	0.053 U	0.053 U	0.053 U	0.5 U	0.053 U	0.053 U	0.053 U	0.053 U	0.11 UJ	0.5 U	0.5 U	0.053 U	0.053 U	0.053 U	0.053 U	0.053 U	0.07 UJ	0.053 U	0.07 UJ	0.5 U	0.053 U
cis-1,2-Dichloroethene	0.39 J	1.6	6.2	8.7	0.39 J	0.045 U	0.045 U	0.045 U	0.045 U	0.5 U	0.5 U	0.067 U	0.067 U	1.7	0.067 U	0.045 U	0.045 U	0.045 U	0.045 U	0.5 U	0.067 U
Dichlorodifluoromethane	0.13 U	0.083 U	0.083 U	0.5 U	0.13 U	0.083 U	0.083 U	0.083 U	0.083 U	0.5 U	0.5 U	0.13 U	0.13 U	0.13 U	0.13 U	0.083 U	0.083 U	0.083 U	0.083 U	0.5 U	0.13 U
Ethylbenzene	0.05 U	0.042 U	0.042 U	0.5 U	0.05 U	0.23 J	0.31 J	0.13 J	0.11 J	0.5 U	0.5 U	0.05 U	0.05 U	0.05 U	0.05 U	0.042 U	0.042 U	0.042 U	0.042 U	0.5 U	0.05 U
m,p-Xylene	0.091 U	0.078 U	0.078 U	0.5 U	0.091 U	0.58	0.76	0.2 J	0.19 J	0.5 U	0.5 U	0.091 U	0.091 U	0.091 U	0.091 U	0.078 U	0.078 U	0.078 U	0.078 U	0.5 U	0.091 U
Methylcyclopentane	0.21 U	0.4 U	0.4 U	1 UJ	0.21 U	0.4 U	0.4 U	0.4 U	0.4 U	1 UJ	1 UJ	0.21 U	0.21 U	0.21 J	0.21 U	0.4 U	0.4 U	0.4 U	0.4 U	1 UJ	0.21 U
Methylene chloride	0.17 U	0.23 U	0.23 U	2 U	0.17 U	0.23 U	0.23 U	0.23 U	0.23 U	2 U	2 U	0.17 U	0.17 U	0.17 U	0.17 U	0.23 U	0.23 U	0.23 U	0.23 U	2 U	0.17 U
o-Xylene	0.074 U	0.037 U	0.04 J	0.5 U	0.074 U	0.19 J	0.27 J	0.07 J	0.05 J	0.5 U	0.5 U	0.074 U	0.074 U	0.074 U	0.074 U	0.037 U	0.037 U	0.037 U	0.037 U	0.5 U	0.074 U
Tetrachloroethene	0.066 U	0.077 U	0.12 J	0.31 J	0.066 U	0.077 U	0.077 U	0.077 U	0.077 U	0.5 U	0.5 U	0.066 U	0.066 U	0.66	0.066 U	0.077 U	0.077 U	0.077 U	0.077 U	0.5 U	0.066 U
Toluene	0.12 J	0.048 U	0.12 UJ	0.5 U	0.12 J	1.3	1.7	0.4 UJ	0.39 UJ	0.5 UJ	0.5 UJ	0.052 U	0.052 U	0.16 J	0.09 J	0.048 U	0.048 U	0.048 U	0.048 U	0.5 U	0.052 U
trans-1,2-Dichloroethene	0.091 U	0.048 U	0.048 U	0.5 U	0.091 U	0.048 U	0.048 U	0.048 U	0.048 U	0.5 U	0.5 U	0.091 U	0.091 U	0.091 U	0.091 U	0.048 U	0.048 U	0.048 U	0.048 U	0.5 U	0.091 U
Trichloroethene	0.1 U	0.061 U	0.061 U	0.13 J	0.1 U	0.061 U	0.061 U	0.061 U	0.061 U	0.5 U	0.5 U	0.1 U	0.1 U	0.59	0.1 U	0.061 U	0.061 U	0.061 U	0.061 U	0.5 U	0.1 U
Trichlorofluoromethane	0.12 U	0.086 U	0.086 U	0.5 U	0.12 U	0.086 U	0.086 U	0.086 U	0.086 U	0.5 U	0.5 U	0.12 U	0.12 U	0.12 U	0.12 U	0.086 U	0.086 U	0.086 U	0.086 U	0.5 U	0.12 U
Vinyl chloride	0.011 J	0.057	0.16	0.22	0.011 J	0.0035 U	0.0035 U	0.0035 U	0.0035 U	0.02 U	0.02 U	0.0084 U	0.0084 U	0.0084 U	0.0084 U	0.034	0.044	0.0035 U	0.0035 U	0.02 U	0.041

TABLE I-1

GROUNDWATER ANALYTICAL RESULTS FOR VOLATILE ORGANIC COMPOUNDS (2004-2009)[1]
PSC Washougal Facility
Washougal, Washington

Concentrations in micrograms per liter (µg/L)

Sample ID	MC-31				MC-32	MC-33	MC-107														
Analyte / Date Sampled	9/29/2008	12/5/2008	3/25/2009	6/29/2009	6/26/2009	6/25/2009	3/25/2004	6/17/2004	9/15/2004	12/15/2004	3/15/2005	6/9/2005	9/13/2005	11/30/2005	3/8/2006	6/7/2006	9/13/2006	12/20/2006	3/7/2007	6/6/2007	9/12/2007	12/20/2007
1,2-Dibromo-3-chloropropane	--	--	--	--	--	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0028 U	0.0028 U	0.0018 U	0.0018 U	0.0018 U	0.0018 U	0.0018 U	0.0018 U	0.0014 U	0.0014 U	0.0014 U
1,2-Dibromoethane	--	--	--	--	--	--	--	0.01 U	--	--	--	--	--	0.0017 U	--	--	--	--	--	--	--	--
1,1,1-Trichloroethane	0.05 U	0.05 U	0.5 U	0.075 U	0.075 U	0.075 U	1 U	1 U	1 U	1 U	1 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
1,1,2-Trichlorotrifluoroethane	0.079 U	0.079 U	0.5 U	0.13 U	0.26 J	0.13 U	2 U	2 U	2 U	2 U	2 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
1,1-Dichloro-1,2,2-trifluoroethane	0.38 U	0.38 U	1 U	0.21 U	0.21 U	0.21 U	1 U	1 U	1 U	1 U	1 U	0.14 U	0.14 U	0.14 U	0.14 U	0.18 U	0.18 U	0.18 U	0.49 U	0.49 U	0.49 U	0.49 U
1,1-Dichloroethane	0.042 U	0.042 U	0.5 U	0.077 U	0.077 U	0.077 U	1 U	1 U	1 U	1 U	1 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
1,1-Dichloroethene	0.0095 U	0.0095 U	0.02 U	0.0095 U	0.0095 U	0.0095 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.0047 U	0.0047 U	0.0047 U	0.0047 U	0.0047 U	0.0066 U	0.0066 U	0.0066 U	0.0066 U	0.0061 U	0.0061 U
1,2-Dichlorobenzene	0.044 U	0.044 U	0.5 U	0.12 U	0.12 U	0.12 U	1 U	1 U	1 U	1 U	1 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
1,2-Dichloroethane	0.073 U	0.073 U	0.5 U	0.08 U	0.08 U	0.08 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
2-Butanone	3.8 U	3.8 U	20 U	1.9 U	1.9 U	1.9 U	10 U	10 U	10 U	10 U	10 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2.3 UJ	2.3 U	2.3 U	2.3 U
2-Methylpentane	0.4 U	0.4 U	1 U	0.21 U	0.21 U	0.21 U	1 U	1 U	1 U	1 U	1 U	0.15 U	0.15 U	0.15 U	0.15 U	0.16 U	0.16 U	0.16 U	0.49 U	0.49 U	0.49 U	0.49 U
3-Methylpentane	0.36 U	0.36 U	1 UJ	0.18 U	0.18 U	0.18 U	1 U	1 U	1 U	1 U	1 U	0.12 U	0.12 U	0.12 U	0.12 U	0.15 U	0.15 U	0.15 U	0.41 U	0.41 U	0.41 U	0.41 U
Acetone	2.5 U	2.5 U	20 U	3.3 U	3.6 UJ	3.3 U	25 U	25 U	25 U	25 U	25 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U
Benzene	0.045 U	0.045 U	0.5 U	0.038 U	0.038 U	0.038 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Carbon disulfide	0.045 U	0.045 U	0.5 U	0.1 U	0.1 U	0.1 U	1 U	1 U	1 U	1 U	1 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
Carbon tetrachloride	0.068 U	0.068 U	0.5 U	0.096 U	0.096 U	0.096 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Chlorobenzene	0.045 U	0.045 U	0.5 U	0.11 U	0.11 U	0.11 U	1 U	1 U	1 U	1 U	1 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Chloroethane	0.13 U	0.13 U	0.5 U	0.16 U	0.16 U	0.16 U	1 U	1 U	1 U	1 U	1 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
Chloroform	0.042 U	0.042 U	0.5 U	0.064 U	0.064 U	0.064 U	1 U	1 U	1 U	1 U	1 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Chloromethane	0.053 U	0.053 U	0.5 U	0.13 UJ	0.12 UJ	0.053 U	5 U	5 U	5 U	5 U	5 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
cis-1,2-Dichloroethene	0.045 U	0.045 U	0.5 U	0.067 U	0.067 U	0.067 U	1 U	1 U	1 U	1 U	1 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
Dichlorodifluoromethane	0.083 U	0.083 U	0.5 U	0.13 U	0.13 U	0.13 U	1 U	1 U	1 U	1 U	1 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Ethylbenzene	0.042 U	0.042 U	0.5 U	0.05 U	0.05 U	0.05 U	1 U	1 U	1 U	1 U	1 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
m,p-Xylene	0.078 U	0.078 U	0.5 U	0.091 U	0.091 U	0.091 U	2 U	2 U	2 U	2 U	2 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Methylcyclopentane	0.4 U	0.4 U	1 UJ	0.21 U	0.21 U	0.21 U	1 U	1 U	1 U	1 U	1 U	0.13 U	0.13 U	0.13 U	0.13 U	0.14 U	0.14 U	0.14 U	0.42 U	0.42 U	0.42 U	0.42 U
Methylene chloride	0.23 U	0.23 U	2 U	0.17 U	0.17 U	0.17 U	5 U	5 U	5 U	5 U	5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
o-Xylene	0.037 U	0.037 U	0.5 U	0.074 U	0.074 U	0.074 U	1 U	1 U	1 U	1 U	1 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
Tetrachloroethene	0.077 U	0.077 U	0.5 U	0.066 U	0.066 U	0.066 U	0.05 U	0.05 U	1 U	1 U	1 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
Toluene	0.048 U	0.12 UJ	0.5 U	0.052 U	0.11 J	0.052 U	1 U	1 U	1 U	1 U	1 U	0.11 U	0.11 U	0.11 U	0.17 U	0.22 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
trans-1,2-Dichloroethene	0.048 U	0.048 U	0.5 U	0.091 U	0.091 U	0.091 U	1 U	1 U	1 U	1 U	1 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
Trichloroethene	0.061 U	0.061 U	0.5 U	0.1 U	0.1 U	0.1 U	1 U	1 U	1 U	1 U	1 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Trichlorofluoromethane	0.086 U	0.086 U	0.5 U	0.12 U	0.12 U	0.12 U	1 U	1 U	1 U	1 U	1 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Vinyl chloride	0.0037 J	0.0035 U	0.02 U	0.0084 U	0.046	0.0084 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.0081 U	0.0081 U	0.0081 U	0.0081 U	0.0081 U	0.021	0.0023 U	0.0023 U	0.0068 J	0.0054 J	0.0035 U

TABLE I-1

GROUNDWATER ANALYTICAL RESULTS FOR VOLATILE ORGANIC COMPOUNDS (2004-2009)[1]
PSC Washougal Facility
Washougal, Washington

Concentrations in micrograms per liter (µg/L)

Sample ID	MC-107 (Continued)						MC-118D														
Analyte / Date Sampled	3/14/2008	6/11/2008	9/25/2008	12/4/2008	3/25/2009	6/25/2009	3/24/2004	6/17/2004	9/15/2004	12/14/2004	3/15/2005	6/8/2005	9/14/2005	11/30/2005	3/8/2006	6/7/2006	9/12/2006	12/21/2006	3/7/2007	6/6/2007	9/13/2007	12/21/2007
1,2-Dibromo-3-chloropropane	0.0098 U	0.0028 U	--	--	--	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0028 U	0.0028 U	0.0018 U	0.0018 U	0.0018 U	0.0018 U	0.0018 U	0.0018 U	0.0014 U	0.0014 U	0.0014 U
1,2-Dibromoethane	--	--	--	--	--	--	--	0.01 U	--	--	--	--	--	0.0017 U	--	--	--	--	--	--	--	--
1,1,1-Trichloroethane	0.5 U	0.05 U	0.05 U	0.05 U	0.5 U	0.075 U	1 U	1 U	1 U	1 U	1 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.24 U
1,1,2-Trichlorotrifluoroethane	0.5 U	0.079 U	0.079 U	0.079 U	0.5 U	0.13 U	793 D	749 D	561 D	889 D	459 D	570 D	490 D	450 D	420 D	580 D	430 D	310 D	430	280	350	240
1,1-Dichloro-1,2,2-trifluoroethane	1 U	0.38 U	0.38 U	0.38 U	1 U	0.21 U	234 D	1 U	1 U	1 U	1 U	0.14 U	0.14 U	0.14 U	0.14 U	0.18 U	0.18 U	0.18 U	0.49 U	0.49 U	0.49 U	0.98 U
1,1-Dichloroethane	0.5 U	0.042 U	0.042 U	0.042 U	0.5 U	0.077 U	25.2	30	28.1	21.8	22.8	26	25	24	30	26	28	20	25	27	25	16
1,1-Dichloroethene	0.02 U	0.0061 U	0.0095 U	0.0095 U	0.02 U	0.0095 U	0.086	0.084	0.102	0.066	1 U	3 U	2.8 U	3.3 U	2.8 U	2.9 U	2.7 U	1.5 U	1.6 U	1.1 U	0.0061 U	0.0061 U
1,2-Dichlorobenzene	0.5 U	0.044 U	0.044 U	0.044 U	0.5 U	0.12 U	1 U	1 U	1 U	1 U	1 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.23 U
1,2-Dichloroethane	0.5 U	0.073 U	0.073 U	0.073 U	0.5 U	0.08 U	0.1 U	0.1 U	0.1 U	0.1 U	1 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.23 U
2-Butanone	20 U	3.8 U	3.8 U	3.8 U	20 U	1.9 U	10 U	10 U	10 U	10 U	10 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2.3 UJ	2.3 U	2.3 U	4.6 U
2-Methylpentane	1 U	0.4 U	0.4 U	0.4 U	1 U	0.21 U	1 U	1 U	1 U	1 U	1 U	0.15 U	0.15 U	0.15 U	0.15 U	0.16 U	0.16 U	0.16 U	0.49 U	0.49 U	0.49 U	0.98 U
3-Methylpentane	1 U	0.36 U	0.36 U	0.36 U	1 UJ	0.18 U	1 U	1 U	1 U	1 U	1 U	0.15 J	0.17 J	0.12 U	0.12 U	0.15 U	0.15 U	0.16 J	0.41 U	0.41 U	0.41 U	0.82 U
Acetone	20 U	2.5 U	2.5 U	2.5 U	20 U	3.3 U	25 U	25 U	25 U	25 U	25 U	4.1 U	5 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	8.2 U
Benzene	0.5 U	0.045 U	0.045 U	0.045 U	0.5 U	0.038 U	0.5 U	0.5 U	0.52	0.5 U	0.5 U	0.3 J	0.3 J	0.34 J	0.35 J	0.26 J	0.34 J	0.31 J	0.37 J	0.37 J	0.39 J	0.34 J
Carbon disulfide	0.5 U	0.045 U	0.045 U	0.045 U	0.5 U	0.1 U	1 U	1 U	1 U	1 U	1 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.32 U
Carbon tetrachloride	0.5 U	0.068 U	0.068 U	0.068 U	0.5 U	0.096 U	0.061	0.05 U	0.05 U	0.05 U	1 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.28 U
Chlorobenzene	0.5 U	0.045 U	0.045 U	0.045 U	0.5 U	0.11 U	1 U	1 U	1 U	1 U	1 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.27 U
Chloroethane	0.5 U	0.13 U	0.13 U	0.13 U	0.5 U	0.16 U	1 U	1 U	1 U	1 U	1 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.46 U
Chloroform	0.5 U	0.042 U	0.042 U	0.042 U	0.5 U	0.064 U	1 U	1 U	1 U	1 U	1 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.28 U
Chloromethane	0.5 U	0.11 UJ	0.07 J	0.07 UJ	0.5 U	0.11 UJ	5 U	5 U	5 U	5 U	5 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.28 U
cis-1,2-Dichloroethene	0.5 U	0.045 U	0.045 U	0.045 U	0.5 U	0.067 U	76.2 D	99.6 D	140 D	89.8 D	78.5 D	78 D	78 D	76 D	73 D	67	73 D	65 D	89	54	66	43
Dichlorodifluoromethane	0.5 U	0.083 U	0.083 U	0.083 U	0.5 U	0.13 U	1 U	1 U	1 U	1 U	1 U	0.17 U	270 U	0.17 U	0.17 U	0.17 U	0.17 U	3.4 U	0.17 U	0.17 U	0.17 U	0.34 U
Ethylbenzene	0.5 U	0.042 U	0.042 U	0.042 U	0.5 U	0.05 U	1 U	1 U	1 U	1 U	1 U	0.13 U	0.13 U	0.21 J	0.13 U	0.13 U	0.13 J	0.21 J	0.13 U	0.13 U	0.21 J	0.26 U
m,p-Xylene	0.5 U	0.078 U	0.078 U	0.078 U	0.5 U	0.091 U	2 U	2 U	2 U	2 U	2 U	0.22 U	0.31 J	0.42 J	0.3 J	0.22 U	0.28 J	0.47 J	0.44 J	0.31 J	0.64	0.54 J
Methylcyclopentane	1 U	0.4 U	0.4 U	0.4 U	1 UJ	0.21 U	1 U	1 U	1 U	1 U	1 U	0.44 J	0.51 J	0.57 J	0.31 J	0.35 J	0.35 J	0.46 J	0.54 J	0.42 U	0.57 J	0.84 U
Methylene chloride	2 U	0.23 U	0.23 U	0.23 U	2 U	0.17 U	5 U	5 U	5 U	5 U	5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.39 U
o-Xylene	0.5 U	0.037 U	0.037 U	0.037 U	0.5 U	0.074 U	1.64	1.36	2.13	1.94	2.41	1.4	2.1	3.1	2.3	1.2	2.3	3.7	3.6	3.4	4.8	4.1
Tetrachloroethene	0.5 U	0.077 U	0.077 U	0.077 U	0.5 U	0.066 U	20.4	21.3	29.4	23.1	22.6	22	22	21	13	19	16	14	16	13	14	11
Toluene	0.5 U	0.54 UJ	0.048 U	0.048 U	0.5 U	0.26 J	1 U	1 U	7.68	4.83	6.91	1.9 U	6	12	1.7	0.34 U	4.4	11	4.7	3.6	11	7.5
trans-1,2-Dichloroethene	0.5 U	0.048 U	0.048 U	0.048 U	0.5 U	0.091 U	1 U	1 U	1 U	1 U	1 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.29 U
Trichloroethene	0.5 U	0.061 U	0.061 U	0.061 U	0.5 U	0.1 U	3.07	2.89	2.97	2.69	2.48	2.5	2.8	2.8	2	2.2	2.2	1.7	3	1.7	2.2	1.5
Trichlorofluoromethane	0.5 U	0.086 U	0.086 U	0.086 U	0.5 U	0.12 U	1 U	1 U	1 U	1 U	1 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.27 U
Vinyl chloride	0.02 U	0.0035 U	0.0035 U	0.0035 U	0.02 U	0.0084 U	8.35	7.31	7.46	5.08	5.66	5.7	7.2 D	7.9	11 D	4.9	9.1	9.8 D	12	8.5	13	11

TABLE I-1

GROUNDWATER ANALYTICAL RESULTS FOR VOLATILE ORGANIC COMPOUNDS (2004-2009)[1]

PSC Washougal Facility
Washougal, Washington

Concentrations in micrograms per liter (µg/L)

Sample ID	MC-118D (Continued)										MC-122										
Analyte / Date Sampled	3/14/2008	6/13/2008	9/25/2008	12/4/2008	3/26/2009	6/30/2009	9/29/2008	12/4/2008	3/26/2009	6/30/2009	12/19/2006	3/6/2007	6/5/2007	10/23/2007	12/18/2007	3/11/2008	6/10/2008	9/22/2008	12/2/2008	3/23/2009	6/23/2009
1,2-Dibromo-3-chloropropane	0.0097 U	0.0028 U	--	--	--	--	--	--	--	--	0.0018 U	0.0018 U	0.0014 U	0.0014 U	0.0014 U	0.0096 U	0.0028 U	--	--	--	--
1,2-Dibromoethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,1-Trichloroethane	0.5 U	0.05 U	0.25 U	0.1 U	0.5 U	0.075 U	0.05 U	0.05 U	0.5 U	0.075 U	0.12 U	1.3	0.22 J	0.12 U	0.12 U	0.15 J	0.1 J	0.09 J	0.11 J	0.18 J	0.09 J
1,1,2-Trichlorotrifluoroethane	340	380	370	420	480	510	39	100	210	62	8.6	7.6	13	1.4	5.9	9.3	11	10	1.3	4.6	13
1,1-Dichloro-1,2,2-trifluoroethane	1 U	0.38 U	1.9 U	0.76 U	1 U	0.21 U	0.38 U	0.38 U	1 U	0.21 U	0.18 U	0.49 U	0.49 U	0.49 U	0.49 U	1 U	0.38 U	0.38 U	0.38 U	1 U	0.21 U
1,1-Dichloroethane	20	22	33	31	35	47	1.8	14	17	17	0.14 J	0.26 J	0.13 J	3.1	0.11 U	0.5 U	0.042 U	0.78	0.51	0.39 J	0.077 U
1,1-Dichloroethene	0.02 U	0.0061 U	0.0095 U	0.0095 U	0.02 U	0.0095 U	0.0095 U	0.0095 U	0.02 U	0.0095 U	0.063 U	0.071	0.087 U	0.0091 J	0.015 J	0.02	0.03	0.026	0.012 J	0.019 J	0.033
1,2-Dichlorobenzene	0.5 U	0.044 U	0.22 U	0.088 U	0.5 U	0.12 U	0.044 U	0.044 U	0.5 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.5 U	0.044 U	0.044 U	0.044 U	0.5 U	0.12 U
1,2-Dichloroethane	0.5 U	0.073 U	0.37 U	0.15 U	0.5 U	0.08 U	0.073 U	0.073 U	0.5 U	0.08 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.5 U	0.073 U	0.073 U	0.073 U	0.5 U	0.08 U
2-Butanone	20 U	3.8 U	19 U	7.6 U	20 U	1.9 U	3.8 U	3.8 U	20 U	1.9 U	2 UJ	2.3 UJ	2.3 U	2.3 U	2.3 U	20 U	3.8 U	3.8 U	3.8 U	20 U	1.9 U
2-Methylpentane	1 U	0.4 U	2 U	0.8 U	1 U	0.21 U	0.4 U	0.4 U	1 U	0.26 J	0.16 U	0.49 U	0.49 U	0.49 U	0.49 U	1 U	0.4 U	0.4 U	0.4 U	1 U	0.21 U
3-Methylpentane	1 U	0.36 U	1.8 U	0.72 U	1 UJ	0.38 J	0.36 U	0.51 J	1 UJ	0.38 J	0.15 U	0.41 U	0.41 U	0.41 U	0.41 U	1 U	0.36 U	0.36 U	0.36 U	1 U	0.18 U
Acetone	20 U	2.5 U	13 U	5 U	20 U	3.3 U	8.3 UJ	2.5 U	20 U	3.3 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	20 U	2.5 U	2.5 U	2.5 U	20 U	3.3 U
Benzene	0.4 J	0.39 J	0.55 J	0.6 J	0.77	0.86	0.43 J	0.39 J	0.36 J	0.42 J	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.045 U	0.045 U	0.045 U	0.5 U	0.038 U
Carbon disulfide	0.5 U	0.045 U	0.23 U	0.09 U	0.5 U	0.1 U	0.045 U	0.4 J	0.5 U	0.27 J	0.16 U	0.16 U	0.16 U	0.33 J	0.16 U	0.5 U	0.045 U	0.045 U	0.045 U	0.5 U	0.1 U
Carbon tetrachloride	0.5 U	0.068 U	0.34 U	0.14 U	0.5 U	0.096 U	0.068 U	0.068 U	0.5 U	0.096 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.068 U	0.068 U	0.068 U	0.5 U	0.096 U
Chlorobenzene	0.5 U	0.045 U	0.23 U	0.09 U	0.05 J	0.11 U	0.045 U	0.045 U	0.5 U	0.11 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.045 U	0.045 U	0.045 U	0.5 U	0.11 U
Chloroethane	0.5 U	0.13 U	0.65 U	0.26 U	0.5 U	0.16 U	0.13 U	0.13 U	0.5 U	0.16 U	0.23 U	0.23 U	0.23 U	0.6	0.23 U	0.5 U	0.13 U	0.57	0.13 U	0.5 U	0.16 U
Chloroform	0.5 U	0.042 U	0.21 U	0.084 U	0.5 U	0.064 U	0.042 U	0.042 U	0.5 U	0.064 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.042 U	0.042 U	0.042 U	0.5 U	0.064 U
Chloromethane	0.5 U	0.053 U	0.27 U	0.11 U	0.36 J	0.053 U	0.053 U	0.24 UJ	0.5 U	0.053 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.053 U	0.053 U	0.053 U	0.5 U	0.053 U
cis-1,2-Dichloroethene	44	51	38	39	48	55	0.35 J	15	20	19	0.19 J	0.12 U	0.12 U	4.7	0.12 U	0.5 U	0.045 U	4.3	0.8	0.19 J	0.067 U
Dichlorodifluoromethane	0.5 U	510	0.42 U	0.17 U	0.5 U	0.13 U	0.083 U	0.083 U	0.5 U	0.13 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.5 U	0.083 U	0.083 U	0.083 U	0.5 U	0.13 U
Ethylbenzene	0.5 U	0.042 U	0.65 J	0.58 J	0.4 J	0.25 J	0.09 J	0.12 J	0.5 U	0.05 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.5 U	0.042 U	0.042 U	0.042 U	0.5 U	0.05 U
m,p-Xylene	0.62	0.21 J	1.8 J	1.7	3.1	2	0.24 J	0.54	0.16 J	0.16 J	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.5 U	0.078 U	0.078 U	0.078 U	0.5 U	0.091 U
Methylcyclopentane	0.69 J	0.71 J	2 U	0.86 J	1.3 J	1.5	0.4 U	0.4 U	0.51 J	0.46 J	0.14 U	0.42 U	0.42 U	0.42 U	0.42 U	1 U	0.4 U	0.4 U	0.4 U	1 U	0.21 U
Methylene chloride	2 U	0.23 U	1.2 U	0.46 U	2 U	0.17 U	0.23 U	0.23 U	2 U	0.17 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.23 U	0.23 U	0.23 U	2 U	0.17 U
o-Xylene	5.8	4.2	11	16	23	26	0.15 J	4	7.8	5.4	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.5 U	0.037 U	0.037 U	0.037 U	0.5 U	0.074 U
Tetrachloroethene	12	11	6.4	6	6.9	7.2	0.077 U	2.2	3.1	2.6	0.13 U	0.59	0.16 J	0.25 J	0.14 J	0.21 J	0.11 J	0.13 J	0.21 J	0.27 J	0.13 J
Toluene	6.9	1.5 U	38	49	43	15	0.56	0.95	0.5 UJ	0.23 J	0.11 U	0.11 U	0.11 U	0.79 UJ	0.11 U	0.5 U	0.54 UJ	0.048 U	0.12 UJ	0.5 UJ	0.052 U
trans-1,2-Dichloroethene	0.5 U	0.048 U	0.24 U	0.096 U	0.06 J	0.12 J	0.048 U	0.048 U	0.5 U	0.091 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.5 U	0.048 U	0.048 U	0.048 U	0.5 U	0.091 U
Trichloroethene	1.8	2	1.6 J	1.5	1.6	1.9	0.061 U	0.52	0.76	0.65	0.14 U	0.35 J	0.14 U	0.14 U	0.14 U	0.5 U	0.061 U	0.07 J	0.09 J	0.19 J	0.1 U
Trichlorofluoromethane	0.5 U	0.086 U	0.43 U	0.18 U	0.5 U	0.12 U	0.086 U	0.086 U	0.5 U	0.12 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.086 U	0.086 U	0.086 U	0.5 U	0.12 U
Vinyl chloride	10	9.3	8.6	9	13	18	0.017 J	2.5	4	3.4	0.082	0.029	0.03	2.7	0.01 J	0.0067 J	0.007 J	1.7	0.48 J	0.11	0.0084 U

TABLE I-1

GROUNDWATER ANALYTICAL RESULTS FOR VOLATILE ORGANIC COMPOUNDS (2004-2009)[1]

PSC Washougal Facility

Washougal, Washington

Concentrations in micrograms per liter (µg/L)

Sample ID	MC-123											PZU-4							
Analyte / Date Sampled	12/19/2006	3/5/2007	6/4/2007	10/23/2007	12/18/2007	3/11/2008	6/10/2008	9/22/2008	12/2/2008	3/23/2009	6/23/2009	10/23/2007	12/17/2007	3/10/2008	6/9/2008	9/26/2008	12/1/2008	3/23/2009	6/22/2009
1,2-Dibromo-3-chloropropane	0.0018 U	0.0018 U	0.0014 U	0.0014 U	0.0014 U	0.0096 U	0.0028 U	--	--	--	--	0.0014 U	--	0.0097 U	0.0028 U	--	--	--	--
1,2-Dibromoethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,1-Trichloroethane	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.5 U	0.05 U	0.05 U	0.05 U	0.5 U	0.075 U	0.12 U	0.12 U	0.5 U	0.05 U	0.05 U	0.05 U	0.5 U	0.075 U
1,1,2-Trichlorotrifluoroethane	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.079 U	0.079 U	0.079 U	0.5 U	0.13 U	0.14 U	0.14 U	0.5 U	0.079 U	0.079 U	0.079 U	0.5 U	0.13 U
1,1-Dichloro-1,2,2-trifluoroethane	0.18 U	0.49 U	0.49 U	0.49 U	0.49 U	1 U	0.38 U	0.38 U	0.38 U	1 U	0.21 U	0.49 U	0.49 U	1 U	0.38 U	0.38 U	0.38 U	1 U	0.21 U
1,1-Dichloroethane	2.4	0.64	0.44 J	3.1	0.73	0.49 J	1.7	3.1	0.62	0.54	2.6	0.11 U	0.11 U	0.5 U	0.042 U	0.042 U	0.042 U	0.5 U	0.077 U
1,1-Dichloroethene	0.0066 U	0.0066 U	0.0066 U	0.0061 U	0.0062 J	0.02 U	0.0061 U	0.0095 U	0.0095 U	0.02 U	0.018 J	0.0061 U	0.0061 U	0.02 U	0.0061 U	0.0095 U	0.0095 U	0.02 U	0.0095 U
1,2-Dichlorobenzene	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.5 U	0.044 U	0.044 U	0.044 U	0.5 U	0.12 U	0.12 U	0.12 U	0.5 U	0.044 U	0.044 U	0.044 U	0.5 U	0.12 U
1,2-Dichloroethane	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.5 U	0.073 U	0.073 U	0.073 U	0.5 U	0.08 U	0.12 U	0.12 U	0.5 U	0.073 U	0.073 U	0.073 U	0.5 U	0.08 U
2-Butanone	2 UJ	2.3 UJ	2.3 U	2.3 U	2.3 U	20 U	3.8 U	3.8 U	3.8 U	20 U	1.9 U	2.3 U	2.3 U	20 U	3.8 U	3.8 U	3.8 U	20 U	1.9 U
2-Methylpentane	0.16 U	0.49 U	0.49 U	0.49 U	0.49 U	1 U	0.4 U	0.4 U	0.4 U	1 U	0.21 U	0.49 U	0.49 U	1 U	0.4 U	0.4 U	0.4 U	1 U	0.21 U
3-Methylpentane	0.15 U	0.41 U	0.41 U	0.41 U	0.41 U	1 U	0.36 U	0.36 U	0.36 U	1 U	0.18 U	0.41 U	0.41 U	1 U	0.36 U	0.36 U	0.36 U	1 U	0.18 U
Acetone	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	20 U	2.5 U	2.5 U	2.5 U	20 U	3.3 U	4.1 U	4.1 U	20 U	2.5 U	2.5 U	2.5 U	20 U	3.3 U
Benzene	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.045 U	0.09 J	0.045 U	0.5 U	0.08 J	0.14 U	0.14 U	0.5 U	0.08 J	0.09 J	0.07 UJ	0.5 U	0.06 J
Carbon disulfide	0.16 U	0.27 J	0.16 U	0.16 U	0.16 U	0.5 U	0.11 UJ	0.045 U	0.045 U	0.5 U	0.1 U	0.16 U	0.16 U	0.5 U	0.045 U	0.045 U	0.045 U	0.5 U	0.1 U
Carbon tetrachloride	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.068 U	0.068 U	0.068 U	0.5 U	0.096 U	0.14 U	0.14 U	0.5 U	0.068 U	0.068 U	0.068 U	0.5 U	0.096 U
Chlorobenzene	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.045 U	0.045 U	0.045 U	0.5 U	0.11 U	0.14 U	0.14 U	0.5 U	0.045 U	0.045 U	0.045 U	0.5 U	0.11 U
Chloroethane	1.1 U	0.23 U	0.23 U	0.23 U	0.23 U	0.5 U	0.13 U	0.13 U	0.13 U	0.5 U	0.16 U	0.23 U	0.23 U	0.5 U	0.13 U	0.13 U	0.13 U	0.5 U	0.16 U
Chloroform	0.24 J	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.042 U	0.042 U	0.042 U	0.5 U	0.064 U	0.14 U	0.14 U	0.5 U	0.042 U	0.042 U	0.042 U	0.5 U	0.064 U
Chloromethane	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.11 UJ	0.053 U	0.053 U	0.5 U	0.053 U	0.14 U	0.14 U	0.5 U	0.11 UJ	0.053 U	0.053 U	0.5 U	0.053 U
cis-1,2-Dichloroethene	2.1	0.34 J	0.33 J	3.6	0.79	0.31 J	1.7	3.5	0.75	0.49 J	2.5	0.15 J	0.12 U	0.5 U	0.2 J	0.2 J	0.08 J	0.06 J	0.16 J
Dichlorodifluoromethane	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.5 U	0.083 U	0.083 U	0.083 U	0.5 U	0.13 U	0.17 U	0.17 U	0.5 U	0.083 U	0.083 U	0.083 U	0.5 U	0.13 U
Ethylbenzene	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.5 U	0.042 U	0.042 U	0.042 U	0.5 U	0.05 U	0.17 J	0.13 U	0.5 U	0.042 U	0.042 U	0.042 U	0.5 U	0.05 U
m,p-Xylene	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.5 U	0.078 U	0.078 U	0.078 U	0.5 U	0.091 U	0.52	0.22 U	0.5 U	0.1 J	0.078 U	0.078 U	0.5 U	0.091 U
Methylcyclopentane	0.14 U	0.42 U	0.42 U	0.42 U	0.42 U	1 U	0.4 U	0.4 U	0.4 U	1 U	0.21 U	0.42 U	0.42 U	1 U	0.4 U	0.4 U	0.4 U	1 U	0.21 U
Methylene chloride	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.23 U	0.23 U	0.23 U	2 U	0.17 U	0.2 U	0.2 U	2 U	0.23 U	0.23 U	0.23 U	2 U	0.17 U
o-Xylene	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.5 U	0.037 U	0.037 U	0.037 U	0.5 U	0.074 U	0.2 J	0.11 U	0.5 U	0.04 J	0.037 U	0.037 U	0.5 U	0.074 U
Tetrachloroethene	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.5 U	0.077 U	0.077 U	0.077 U	0.5 U	0.066 U	0.14 J	0.13 U	0.5 U	0.077 U	0.12 J	0.077 U	0.5 U	0.07 J
Toluene	0.19 J	0.11 U	0.13 J	0.79 UJ	0.48 J	0.5 U	0.54 UJ	0.048 U	0.26 UJ	0.44 J	0.052 U	2.3 U	0.11 U	0.5 U	0.54 UJ	0.048 U	0.12 UJ	0.5 U	0.052 U
trans-1,2-Dichloroethene	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.5 U	0.048 U	0.048 U	0.048 U	0.5 U	0.091 U	0.15 U	0.15 U	0.5 U	0.048 U	0.048 U	0.048 U	0.5 U	0.091 U
Trichloroethene	0.14 U	0.16 J	0.33 J	0.14 U	0.14 U	0.5 U	0.061 U	0.061 U	0.061 U	0.5 U	0.1 U	0.14 U	0.14 U	0.5 U	0.061 U	0.061 U	0.061 U	0.5 U	0.1 U
Trichlorofluoromethane	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.5 U	0.086 U	0.086 U	0.086 U	0.5 U	0.12 U	0.14 U	0.14 U	0.5 U	0.086 U	0.086 U	0.086 U	0.5 U	0.12 U
Vinyl chloride	1.3	0.25	0.19	2.3	0.43	0.29	1.1	2.7	0.23 J	0.27	1.5	0.044	0.015 J	0.032	0.068	0.07	0.022 J	0.018 J	0.036

TABLE I-1

GROUNDWATER ANALYTICAL RESULTS FOR VOLATILE ORGANIC COMPOUNDS (2004-2009)[1]

PSC Washougal Facility
Washougal, Washington

Concentrations in micrograms per liter (µg/L)

Sample ID	PZU-5								UT-ST-1								
Analyte / Date Sampled	10/22/2007	12/17/2007	3/10/2008	6/10/2008	9/23/2008	12/2/2008	3/23/2009	6/22/2009	10/23/2007	10/24/2007	12/17/2007	3/10/2008	6/9/2008	9/24/2008	12/1/2008	3/23/2009	6/22/2009
1,2-Dibromo-3-chloropropane	0.0014 U	--	0.0098 U	0.0028 U	--	--	--	--	--	0.0014 U	--	0.0097 U	0.0028 U	--	--	--	--
1,2-Dibromoethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,1-Trichloroethane	0.12 U	0.14 J	0.5 U	0.05 U	0.18 J	0.17 J	0.12 J	0.1 J	0.12 U	--	0.12 U	0.5 U	0.05 U	0.05 U	0.05 U	0.5 U	0.075 U
1,1,2-Trichlorotrifluoroethane	0.14 U	0.14 U	0.5 U	0.079 U	0.079 U	0.079 U	0.5 U	0.13 U	0.14 U	--	0.14 U	0.5 U	0.079 U	0.079 U	0.079 U	0.5 U	0.13 U
1,1-Dichloro-1,2,2-trifluoroethane	--	0.49 U	1 U	0.38 U	0.38 U	0.38 U	1 U	0.21 U	--	--	0.49 U	1 U	0.38 U	0.38 U	0.38 U	1 U	0.21 U
1,1-Dichloroethane	0.28 J	0.11 U	0.5 U	0.05 J	0.09 J	0.06 J	0.05 J	0.077 U	0.11 U	--	0.11 U	0.5 U	0.042 U	0.042 U	0.042 U	0.5 U	0.077 U
1,1-Dichloroethene	0.0061 U	0.0061 U	0.02 U	0.0061 U	0.0095 U	0.0095 U	0.02 U	0.0095 U	0.0061 U	0.0061 U	0.0061 U	0.02 U	0.0061 U	--	0.0095 U	0.02 U	0.0095 U
1,2-Dichlorobenzene	0.12 U	0.12 U	0.5 U	0.044 U	0.044 U	0.044 U	0.5 U	0.12 U	0.12 U	--	0.12 U	0.5 U	0.044 U	0.044 U	0.044 U	0.5 U	0.12 U
1,2-Dichloroethane	0.12 U	0.12 U	0.5 U	0.073 U	0.073 U	0.073 U	0.5 U	0.08 U	0.12 U	--	0.12 U	0.5 U	0.073 U	0.073 U	0.073 U	0.5 U	0.08 U
2-Butanone	2.3 U	2.3 U	20 U	3.8 U	3.8 U	3.8 U	20 U	1.9 U	2.3 U	--	2.3 U	20 U	3.8 U	3.8 U	3.8 U	20 U	1.9 U
2-Methylpentane	0.49 U	0.49 U	1 U	0.4 U	0.4 U	0.4 U	1 U	0.21 U	0.49 U	--	0.49 U	1 U	0.4 U	0.4 U	0.4 U	1 U	0.21 U
3-Methylpentane	0.41 U	0.41 U	1 U	0.36 U	0.36 U	0.36 U	1 U	0.18 U	0.41 U	--	0.41 U	1 U	0.36 U	0.36 U	0.36 U	1 U	0.18 U
Acetone	4.8 J	4.1 U	20 U	2.5 U	2.5 U	3.2 UJ	20 U	3.3 U	4.1 U	--	4.1 U	20 U	2.5 U	2.5 U	2.5 U	20 U	3.3 U
Benzene	0.14 U	0.14 U	0.5 U	0.045 U	0.045 U	0.045 U	0.5 U	0.038 U	0.14 U	--	0.14 U	0.5 U	0.045 U	0.045 U	0.045 U	0.5 U	0.038 U
Carbon disulfide	0.22 J	0.16 U	0.5 U	0.11 UJ	0.045 U	0.045 U	0.5 U	0.1 U	0.16 U	--	0.16 U	0.5 U	0.045 U	0.045 U	0.045 U	0.5 U	0.1 U
Carbon tetrachloride	0.14 U	0.14 U	0.5 U	0.068 U	0.068 U	0.068 U	0.5 U	0.096 U	0.14 U	--	0.14 U	0.5 U	0.068 U	0.068 U	0.068 U	0.5 U	0.096 U
Chlorobenzene	0.14 U	0.14 U	0.5 U	0.045 U	0.045 U	0.045 U	0.5 U	0.11 U	0.14 U	--	0.14 U	0.5 U	0.045 U	0.045 U	0.045 U	0.5 U	0.11 U
Chloroethane	0.23 U	0.23 U	0.5 U	0.13 U	0.13 U	0.13 U	0.5 U	0.16 U	0.23 U	--	0.23 U	0.5 U	0.13 U	0.13 U	0.13 U	0.5 U	0.16 U
Chloroform	0.14 U	0.14 U	0.5 U	0.042 U	0.042 U	0.06 J	0.05 J	0.064 U	0.14 U	--	0.14 U	0.5 U	0.042 U	0.042 U	0.042 U	0.5 U	0.064 U
Chloromethane	0.14 U	0.14 U	0.5 U	0.053 U	0.053 U	0.053 U	0.5 U	0.053 U	0.14 U	--	0.14 U	0.5 U	0.12 UJ	0.053 U	0.053 U	0.5 U	0.1 UJ
cis-1,2-Dichloroethene	0.19 J	0.12 U	0.5 U	0.045 U	0.06 J	0.045 U	0.5 U	0.07 J	0.12 U	--	0.12 U	0.5 U	0.045 U	0.045 U	0.045 U	0.5 U	0.067 U
Dichlorodifluoromethane	0.17 U	0.17 U	0.5 U	0.083 U	0.083 U	0.083 U	0.5 U	0.13 U	0.17 U	--	0.17 U	0.5 U	0.083 U	0.083 U	0.083 U	0.5 U	0.13 U
Ethylbenzene	0.13 U	0.13 U	0.5 U	0.042 U	0.042 U	0.042 U	0.5 U	0.05 U	0.13 U	--	0.13 U	0.5 U	0.042 U	0.042 U	0.042 U	0.5 U	0.05 U
m,p-Xylene	0.22 U	0.22 U	0.5 U	0.078 U	0.078 U	0.078 U	0.5 U	0.091 U	0.22 U	--	0.22 U	0.5 U	0.078 U	0.078 U	0.08 J	0.5 U	0.091 U
Methylcyclopentane	0.42 U	0.42 U	1 U	0.4 U	0.4 U	0.4 U	1 U	0.21 U	0.42 U	--	0.42 U	1 U	0.4 U	0.4 U	0.4 U	1 U	0.21 U
Methylene chloride	0.2 U	0.2 U	2 U	0.23 U	0.23 U	0.23 U	2 U	0.17 U	0.2 U	--	0.2 U	2 U	0.23 U	0.23 U	0.23 U	2 U	0.17 U
o-Xylene	0.11 U	0.11 U	0.5 U	0.037 U	0.037 U	0.037 U	0.5 U	0.074 U	0.11 U	--	0.11 U	0.5 U	0.037 U	0.037 U	0.037 U	0.5 U	0.074 U
Tetrachloroethene	0.13 U	0.16 J	0.14 J	0.1 J	0.17 J	0.15 J	0.15 J	0.066 U	0.13 U	--	0.13 U	0.5 U	0.077 U	0.077 U	0.077 U	0.5 U	0.066 U
Toluene	0.18 J	0.11 U	0.5 U	0.54 UJ	0.048 U	0.12 UJ	0.5 U	0.052 U	1.8 U	--	0.11 U	0.5 U	0.54 UJ	0.048 U	0.12 UJ	0.5 UJ	0.2 J
trans-1,2-Dichloroethene	0.15 U	0.15 U	0.5 U	0.048 U	0.048 U	0.048 U	0.5 U	0.091 U	0.15 U	--	0.15 U	0.5 U	0.048 U	0.048 U	0.048 U	0.5 U	0.091 U
Trichloroethene	0.14 U	0.14 U	0.5 U	0.061 U	0.061 U	0.061 U	0.5 U	0.1 U	0.14 U	--	0.14 U	0.5 U	0.061 U	0.061 U	0.061 U	0.5 U	0.1 U
Trichlorofluoromethane	0.14 U	0.14 U	0.5 U	0.086 U	0.086 U	0.086 U	0.5 U	0.12 U	0.14 U	--	0.14 U	0.5 U	0.086 U	0.086 U	0.086 U	0.5 U	0.12 U
Vinyl chloride	0.047	0.036	0.012 J	0.081	0.029	0.017 J	0.015 J	0.029	0.0035 U	0.0035 U	0.0035 U	0.02 U	0.0035 U	--	0.0035 U	0.02 U	0.0084 U

Notes
1. Laboratory data flags are as follows:
J = value is an estimate.
U = not detected at reporting limit listed.
UJ = value is an estimate at reporting limit listed.
UR = result is rejected due to quality control issues.

Abbreviations
-- = not available/not applicable
µg/L = micrograms per liter

TABLE I-2

GROUNDWATER ANALYTICAL RESULTS FOR SEMIVOLATILE ORGANIC COMPOUNDS (2007-2008)[1]

PSC Washougal Facility

Washougal, Washington

Concentrations in micrograms per liter (µg/L)

Site ID	MC-14D						MC-20D				MC-24				MC-24D			
Sample Date	10/24/2007	12/18/2007	3/11/2008	3/11/2008 Field Dup.	6/10/2008	6/10/2008 Field Dup.	10/23/2007	12/18/2007	3/11/2008	6/10/2008	10/24/2007	12/18/2007	3/12/2008	6/10/2008	10/24/2007	12/18/2007	3/11/2008	6/10/2008
Analyte																		
SVOCs (µg/L)																		
1,2,4-Trichlorobenzene	0.016 U	0.016 U	0.19 U	0.2 U	0.016 U	0.016 U	0.016 U	0.016 U	0.19 U	0.017 U	0.016 U	0.016 U	0.19 U	0.016 U	0.016 U	0.016 U	0.19 U	0.017 U
1,2-Dichlorobenzene	0.022 U	0.022 U	0.19 U	0.2 U	0.022 U	0.022 U	0.022 U	0.022 U	0.19 U	0.023 U	0.022 U	0.022 U	0.19 U	0.022 U	0.022 U	0.022 U	0.19 U	0.023 U
1,3-Dichlorobenzene	0.021 U	0.021 U	0.19 U	0.2 U	0.021 U	0.021 U	0.021 U	0.021 U	0.19 U	0.022 U	0.021 U	0.021 U	0.19 U	0.021 U	0.021 U	0.021 U	0.19 U	0.022 U
1,4-Dichlorobenzene	0.029 U	0.029 U	0.19 U	0.2 U	0.029 U	0.029 U	0.029 U	0.029 U	0.19 U	0.03 U	0.029 U	0.029 U	0.19 U	0.029 U	0.029 U	0.029 U	0.19 U	0.03 U
1-Methylnaphthalene	--	--	--	--	0.0035 U	0.0035 U	--	--	--	0.0035 U	--	--	--	0.0035 U	--	--	--	0.0035 U
2,4,5-Trichlorophenol	0.031 U	0.031 U	0.48 U	0.48 U	0.031 U	0.031 U	0.031 U	0.031 UJ	0.48 U	0.032 U	0.031 U	0.031 U	0.48 U	0.031 U	0.031 U	0.031 U	0.48 U	0.032 U
2,4,6-Trichlorophenol	0.058 U	0.058 U	0.48 U	0.48 U	0.058 U	0.058 U	0.058 U	0.058 UJ	0.48 U	0.06 U	0.058 U	0.058 U	0.48 U	0.058 U	0.058 U	0.058 U	0.48 U	0.06 U
2,4-Dichlorophenol	0.047 U	0.047 U	0.48 U	0.48 U	0.047 U	0.047 U	0.047 U	0.047 UJ	0.48 U	0.049 U	0.047 U	0.047 U	0.48 U	0.047 U	0.047 U	0.047 U	0.48 U	0.048 U
2,4-Dimethylphenol	--	2.2 UR	3.8 U	3.9 U	2.2 U	2.2 U	--	2.2 UR	3.8 U	2.3 U	--	2.2 UR	3.8 U	2.2 U	--	2.2 UR	3.8 U	2.3 U
2,4-Dinitrophenol	0.17 U	0.17 U	3.8 U	3.9 U	0.17 U	0.17 U	0.17 U	0.17 UJ	3.8 U	0.18 U	0.17 U	0.17 U	3.8 U	0.17 U	0.17 U	0.17 U	3.8 U	0.18 U
2,4-Dinitrotoluene	0.018 U	0.018 U	0.19 U	0.2 U	0.018 U	0.018 U	0.018 U	0.018 U	0.19 U	0.019 U	0.018 U	0.018 U	0.19 U	0.018 U	0.018 U	0.018 U	0.19 U	0.019 U
2,6-Dinitrotoluene	0.033 U	0.033 U	0.19 U	0.2 U	0.033 U	0.033 U	0.033 U	0.033 U	0.19 U	0.034 U	0.033 U	0.033 U	0.19 U	0.033 U	0.033 U	0.033 U	0.19 U	0.034 U
2-Chloronaphthalene	0.041 U	0.041 U	0.19 U	0.2 U	0.041 U	0.041 U	0.041 U	0.041 U	0.19 U	0.043 U	0.041 U	0.041 U	0.19 U	0.041 U	0.041 U	0.041 U	0.19 U	0.042 U
2-Chlorophenol	0.054 U	0.054 U	0.48 U	0.48 U	0.054 U	0.054 U	0.054 U	0.054 UJ	0.48 U	0.056 U	0.054 U	0.054 U	0.48 U	0.054 U	0.054 U	0.054 U	0.48 U	0.056 U
2-Methyl-4,6-dinitrophenol	0.025 U	--	1.9 U	2 U	0.025 U	0.025 U	0.025 U	--	1.9 U	0.026 U	0.025 U	--	1.9 U	0.025 U	0.025 U	--	1.9 U	0.026 U
2-Methylnaphthalene	--	0.0025 U	0.02 UJ	0.02 U	0.0023 U	0.0023 U	0.0093 UJ	0.0023 U	0.02 U	0.0023 U	0.0023 U	0.0023 U	0.02 U	0.0023 U	0.0067 UJ	0.0067 U	0.019 UJ	0.0029 J
2-Methylphenol	0.11 UJ	0.11 UR	0.48 U	0.48 U	0.11 U	0.11 U	0.11 UJ	0.11 UR	0.48 U	0.12 U	0.11 UJ	0.11 UR	0.48 U	0.11 U	0.11 UJ	0.11 UR	0.48 U	0.12 U
2-Nitroaniline	0.024 U	0.024 U	0.19 U	0.2 U	0.024 U	0.024 U	0.024 U	0.024 U	0.19 U	0.025 U	0.024 U	0.024 U	0.19 U	0.024 U	0.024 U	0.024 U	0.19 U	0.025 U
2-Nitrophenol	0.063 U	0.063 U	0.48 U	0.48 U	0.063 U	0.063 U	0.063 U	0.063 UJ	0.48 U	0.065 U	0.063 U	0.063 U	0.48 U	0.063 U	0.063 U	0.063 U	0.48 U	0.065 U
3,3'-Dichlorobenzidine	--	0.43 U	1.9 UR	2 UR	0.43 U	0.43 U	--	0.43 U	1.9 UR	0.44 U	--	0.43 U	1.9 UR	0.43 U	--	0.43 U	1.9 UR	0.44 U
3-Nitroaniline	0.029 U	0.029 U	0.95 U	0.96 U	0.029 U	0.029 U	0.029 U	0.029 U	0.95 U	0.03 U	0.029 U	0.029 U	0.95 U	0.029 U	0.029 U	0.029 U	0.95 U	0.03 U
4,6-Dinitro-2-methylphenol	--	0.025 U	--	--	--	--	--	0.025 UJ	--	--	--	0.025 U	--	--	--	0.025 U	--	--
4-Bromophenyl phenyl ether	0.026 U	0.026 U	0.19 U	0.2 U	0.026 U	0.026 U	0.026 U	0.026 U	0.19 U	0.027 U	0.026 U	0.026 U	0.19 U	0.026 U	0.026 U	0.026 U	0.19 U	0.027 U
4-Chloro-3-methylphenol	0.037 U	0.037 U	0.48 U	0.48 U	0.037 U	0.037 U	0.037 U	0.037 UJ	0.48 U	0.038 U	0.037 U	0.037 U	0.48 U	0.037 U	0.037 U	0.037 U	0.48 U	0.038 U
4-Chloroaniline	--	0.025 U	0.19 U	0.2 U	0.025 U	0.025 U	--	0.025 U	0.19 U	0.026 U	--	0.025 U	0.19 U	0.025 U	--	0.025 U	0.19 U	0.026 U
4-Chlorophenyl phenyl ether	0.027 U	0.027 U	0.19 U	0.2 U	0.027 U	0.027 U	0.027 U	0.027 U	0.19 U	0.028 U	0.027 U	0.027 U	0.19 U	0.027 U	0.027 U	0.027 U	0.19 U	0.028 U
4-Methylphenol	--	0.12 UR	0.48 U	0.48 U	0.12 U	0.12 U	--	0.12 UR	0.48 U	0.13 U	--	0.12 UR	0.48 U	0.12 U	--	0.12 UR	0.48 U	0.13 U
4-Nitroaniline	0.019 U	0.019 U	0.95 U	0.96 U	0.019 U	0.019 U	0.019 U	0.019 U	0.95 U	0.02 U	0.019 U	0.019 U	0.95 U	0.019 U	0.019 U	0.019 U	0.95 U	0.02 U
4-Nitrophenol	0.28 U	0.28 U	1.9 U	2 U	0.28 U	0.28 U	0.28 U	0.28 UJ	1.9 U	0.29 U	0.28 U	0.28 U	1.9 U	0.28 U	0.28 U	0.28 U	1.9 U	0.29 U
Acenaphthene	0.0044 U	0.0044 U	0.02 U	0.02 U	0.0044 U	0.0044 U	0.0044 U	0.0044 U	0.02 U	0.0044 U	0.0044 U	0.0044 U	0.02 U	0.0044 U	0.0044 U	0.0044 U	0.019 U	0.0044 U
Acenaphthylene	0.0034 U	0.0034 U	0.02 U	0.02 U	0.0034 U	0.0034 U	0.0034 U	0.0034 U	0.02 U	0.0034 U	0.0034 U	0.0034 U	0.02 U	0.0034 U	0.0034 U	0.0034 U	0.019 U	0.0034 U
Anthracene	0.0036 U	0.0036 UJ	0.02 U	0.02 U	0.0036 U	0.0036 U	0.0036 U	0.0036 UJ	0.02 U	0.0036 U	0.0036 U	0.0036 UJ	0.02 U	0.0036 U	0.0036 U	0.0036 UJ	0.019 U	0.0036 U
Benzo(a)anthracene	0.0026 U	0.0026 U	0.02 U	0.02 U	0.0026 U	0.0026 U	0.0026 U	0.0026 U	0.02 U	0.0026 U	0.0026 U	0.0026 U	0.02 U	0.0026 U	0.0026 U	0.0026 U	0.019 U	0.0026 U
Benzo(a)pyrene	0.0043 U	0.0043 UJ	0.02 U	0.02 U	0.0043 U	0.0043 U	0.0043 U	0.0043 UJ	0.02 U	0.0043 U	0.0043 U	0.0043 UJ	0.02 U	0.0043 U	0.0043 U	0.0043 UJ	0.019 U	0.0043 U
Benzo(b)fluoranthene	0.0023 U	0.0023 U	0.02 U	0.02 U	0.0023 U	0.0023 U	0.0023 U	0.0023 U	0.02 U	0.0023 U	0.0023 U	0.0023 U	0.02 U	0.0023 U	0.0023 U	0.0023 U	0.019 U	0.0023 U
Benzo(g,h,i)perylene	0.0029 U	0.0029 U	0.02 U	0.02 U	0.0029 U	0.0029 U	0.0029 U	0.0029 U	0.02 U	0.0029 U	0.0029 U	0.0029 U	0.02 U	0.0029 U	0.0029 U	0.0029 U	0.019 U	0.0029 U
Benzo(k)fluoranthene	0.0025 U	0.0025 U	0.02 U	0.02 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.02 U	0.0025 U	0.0025 U	0.0025 U	0.02 U	0.0025 U	0.0025 U	0.0025 U	0.019 U	0.0025 U
Benzoic acid	1.8 UJ	1.9 U	4.8 U	4.8 U	1.1 U	1.1 U	1.7 UJ	1.6 UJ	4.8 U	1.2 U	1.6 UJ	1.9 U	4.8 U	1.1 U	1.4 UJ	1.9 U	4.8 U	1.3 J
Benzyl alcohol	0.077 J	0.073 U	4.8 U	4.8 U	0.073 U	0.073 U	0.073 U	0.073 U	4.8 U	0.075 U	0.073 U	0.073 U	4.8 U	0.073 U	0.073 U	0.073 U	4.8 U	0.075 U
bis(2-Chloroethoxy)methane	0.024 U	0.024 U	0.19 U	0.2 U	0.024 U	0.024 U	0.024 U	0.024 U	0.19 U	0.025 U	0.024 U	0.024 U	0.19 U	0.024 U	0.024 U	0.024 U	0.19 U	0.025 U
bis(2-Chloroethyl) ether	0.035 U	0.035 U	0.19 U	0.2 U	0.035 U	0.035 U	0.035 U	0.035 U	0.19 U	0.036 U	0.035 U	0.035 U	0.19 U	0.035 U	0.035 U	0.035 U	0.19 U	0.036 U
bis(2-Chloroisopropyl) ether	0.026 U	0.026 U	0.19 U	0.2 U	0.026 U	0.026 U	0.026 U	0.026 U	0.19 U	0.027 U	0.026 U	0.026 U	0.19 U	0.026 U	0.026 U	0.026 U	0.19 U	0.027 U
bis(2-Ethylhexyl) phthalate	0.18 J	0.15 J	0.95 UJ	0.96 UJ	0.13 U	0.13 U	0.58 J	0.15 J	0.95 UJ	0.93 J	0.13 U	0.13 U	0.95 UJ	0.13 U	0.24 J	0.19 J	0.95 UJ	0.17 J
Butyl benzyl phthalate	0.018 U	0.018 U	0.19 U	0.2 U	0.018 U	0.048 J	0.018 U	0.045 U	0.19 UJ	0.019 U	0.018 U	0.018 U	0.19 UJ	0.018 U	0.018 U	0.045 U	0.19 UJ	0.019 U
Carbazole	--	--	--	--	0.0045 U	0.0045 U	--	--	--	0.0045 U	--	--	--	0.0045 U	--	--	--	0.0045 U
Chrysene	0.0034 U	0.0034 U	0.02 U	0.02 U	0.0034 U	0.0034 U	0.0034 U	0.0034 U	0.02 U	0.0034 U	0.0034 U	0.0034 U	0.02 U	0.0034 U	0.0034 U	0.0034 U	0.019 U	0.0034 U
Dibenzo(a,h)anthracene	0.0025 U	0.0025 U	0.02 U	0.02 U	0.0031 J	0.0025 U	0.0025 U	0.0025 U	0.02 U	0.0025 U	0.0025 U	0.0025 U	0.02 U	0.0025 U	0.0025 U	0.0025 U	0.019 U	0.0025 U
Dibenzofuran	0.0046 U	0.0046 U	0.02 U	0.02 U	0.0046 U	0.0046 U	0.0046 U	0.0046 U	0.02 U	0.0046 U	0.0046 U	0.0046 U	0.02 U	0.0046 U	0.0046 U	0.0046 U	0.019 U	0.0046 U

TABLE I-2

GROUNDWATER ANALYTICAL RESULTS FOR SEMIVOLATILE ORGANIC COMPOUNDS (2007-2008)[1]
PSC Washougal Facility
Washougal, Washington

Concentrations in micrograms per liter (µg/L)

Site ID	MC-14D						MC-20D				MC-24				MC-24D			
Sample Date	10/24/2007	12/18/2007	3/11/2008	3/11/2008	6/10/2008	6/10/2008	10/23/2007	12/18/2007	3/11/2008	6/10/2008	10/24/2007	12/18/2007	3/12/2008	6/10/2008	10/24/2007	12/18/2007	3/11/2008	6/10/2008
Analyte				Field Dup.		Field Dup.												
SVOCs (µg/L) (Continued)																		
Diethyl phthalate	0.097 UJ	0.062 U	0.19 UJ	0.2 UJ	0.012 U	0.025 UJ	0.13 UJ	0.062 U	0.19 UJ	0.032 UJ	0.036 UJ	0.062 U	0.19 UJ	0.012 U	0.05 UJ	0.062 U	0.19 UJ	0.037 UJ
Dimethyl phthalate	0.021 U	0.021 U	0.19 U	0.2 U	0.021 U	0.021 U	0.021 U	0.021 U	0.19 U	0.022 U	0.021 U	0.021 U	0.19 U	0.021 U	0.021 U	0.021 U	0.19 U	0.022 U
Di-n-butyl phthalate	0.49 U	0.25 U	0.19 U	0.2 U	0.13 UJ	0.15 UJ	0.37 U	0.25 U	0.19 U	0.14 UJ	0.23 U	0.25 U	0.19 U	0.13 UJ	0.27 U	0.25 U	0.19 U	0.16 UJ
Di-n-octyl phthalate	0.018 U	0.018 U	0.19 U	0.2 U	0.018 U	0.018 U	0.018 U	0.018 U	0.19 U	0.019 U	0.018 U	0.018 U	0.19 U	0.018 U	0.018 U	0.018 U	0.19 U	0.019 U
Fluoranthene	0.0044 U	0.0044 U	0.02 U	0.02 U	0.0044 U	0.0044 U	0.0044 U	0.0044 U	0.02 U	0.0044 U	0.0044 U	0.0044 U	0.02 U	0.0044 U	0.0044 U	0.0044 U	0.019 U	0.0044 U
Fluorene	0.0038 U	0.0038 U	0.02 U	0.02 U	0.0038 U	0.0038 U	0.0038 U	0.0038 U	0.02 U	0.0038 U	0.0038 U	0.0038 U	0.02 U	0.0038 U	0.0038 U	0.0038 U	0.019 U	0.0038 U
Hexachlorobenzene	0.022 U	0.022 U	0.19 U	0.2 U	0.022 U	0.022 U	0.022 U	0.022 U	0.19 U	0.023 U	0.022 U	0.022 U	0.19 U	0.022 U	0.022 U	0.022 U	0.19 U	0.023 U
Hexachlorobutadiene	0.027 U	0.027 U	0.19 U	0.2 U	0.027 U	0.027 U	0.027 U	0.027 U	0.19 U	0.028 U	0.027 U	0.027 U	0.19 U	0.027 U	0.027 U	0.027 U	0.19 U	0.028 U
Hexachlorocyclopentadiene	0.19 U	0.19 U	0.95 UR	0.96 UR	0.19 U	0.19 U	0.19 U	0.19 U	0.95 UR	0.2 U	0.19 U	0.19 U	0.95 UR	0.19 U	0.19 U	0.19 U	0.95 UR	0.2 U
Hexachloroethane	0.024 U	0.024 U	0.19 U	0.2 U	0.024 U	0.024 U	0.024 U	0.024 U	0.19 U	0.025 U	0.024 U	0.024 U	0.19 U	0.024 U	0.024 U	0.024 U	0.19 U	0.025 U
Indeno(1,2,3-cd)pyrene	0.0026 U	0.0026 U	0.02 U	0.02 U	0.0033 UJ	0.0026 U	0.0026 U	0.0026 U	0.02 U	0.0026 U	0.0026 U	0.0026 U	0.02 U	0.0026 U	0.0026 U	0.0026 U	0.019 U	0.0026 U
Isophorone	0.016 U	0.016 U	0.19 U	0.2 U	0.016 U	0.016 U	0.016 U	0.016 U	0.19 U	0.017 U	0.016 U	0.016 U	0.19 U	0.016 U	0.016 U	0.016 U	0.19 U	0.017 U
Naphthalene	0.019 UJ	0.022 U	0.02 UJ	0.02 UJ	0.02 UJ	0.02 UJ	0.025 U	0.022 U	0.02 UJ	0.003 U	0.019 UJ	0.0052 U	0.02 U	0.003 U	0.027 U	0.044 U	0.019 U	0.025 U
Nitrobenzene	0.028 U	0.028 U	0.19 U	0.2 U	0.028 U	0.028 U	0.028 U	0.028 U	0.19 U	0.029 U	0.028 U	0.028 U	0.19 U	0.028 U	0.028 U	0.028 U	0.19 U	0.029 U
N-Nitrosodi-n-propylamine	0.037 UJ	--	0.19 U	0.2 U	0.037 U	0.037 U	0.037 UJ	--	0.19 U	0.038 U	0.037 UJ	--	0.19 U	0.037 U	0.037 UJ	--	0.19 U	0.038 U
N-Nitrosodiphenylamine	--	0.048 U	0.19 U	0.2 U	0.048 U	0.048 U	--	0.048 U	0.19 U	0.05 U	--	0.048 U	0.19 U	0.048 U	--	0.048 U	0.19 U	0.049 U
N-Nitrosodipropylamine	--	0.037 U	--	--	--	--	--	0.037 U	--	--	--	0.037 U	--	--	--	0.037 U	--	--
Pentachlorophenol	0.34 U	0.34 U	0.95 U	0.96 U	0.34 U	0.34 U	0.34 U	0.34 UJ	0.95 U	0.35 U	0.34 U	0.34 U	0.95 U	0.34 U	0.34 U	0.34 U	0.95 U	0.35 U
Phenanthrene	0.0082 UJ	0.005 J	0.02 U	0.02 U	0.005 U	0.005 U	0.005 U	0.005 U	0.02 U	0.005 U	0.005 U	0.005 U	0.02 U	0.005 U	0.005 U	0.005 U	0.019 U	0.005 U
Phenol	0.3 UJ	0.063 U	0.48 U	0.48 U	0.063 U	0.063 U	0.3 UJ	0.063 UJ	0.48 U	0.065 U	0.28 UJ	0.063 U	0.48 U	0.063 U	0.28 UJ	0.063 U	0.48 U	0.065 U
Pyrene	0.0035 U	0.0035 U	0.02 U	0.02 U	0.0035 U	0.0035 U	0.0035 U	0.0035 U	0.02 U	0.0035 U	0.0035 U	0.0035 U	0.02 U	0.0035 U	0.0035 U	0.0035 U	0.019 U	0.0035 U

TABLE I-2

GROUNDWATER ANALYTICAL RESULTS FOR SEMIVOLATILE ORGANIC COMPOUNDS (2007-2008)[1]

PSC Washougal Facility

Washougal, Washington

Concentrations in micrograms per liter (µg/L)

Site ID	MC-25				MC-25D					MC-122				MC-123			
Sample Date	10/24/2007	12/19/2007	3/12/2008	6/11/2008	10/24/2007	10/24/2007	12/18/2007	3/12/2008	6/11/2008	10/23/2007	12/18/2007	3/11/2008	6/10/2008	10/23/2007	12/18/2007	3/11/2008	6/10/2008
Analyte						Field Dup.											
PAHs (µg/L)																	
1,2,4-Trichlorobenzene	0.016 U	0.016 U	0.2 U	0.016 U	0.016 U	0.016 U	0.016 U	0.2 U	0.016 U	0.016 U	0.016 U	0.2 U	0.016 U	0.016 U	0.016 U	0.2 U	0.016 U
1,2-Dichlorobenzene	0.022 U	0.022 U	0.2 U	0.022 U	0.022 U	0.022 U	0.022 U	0.2 U	0.022 U	0.022 U	0.022 U	0.2 U	0.022 U	0.022 U	0.022 U	0.2 U	0.022 U
1,3-Dichlorobenzene	0.021 U	0.021 U	0.2 U	0.021 U	0.021 U	0.021 U	0.021 U	0.2 U	0.021 U	0.021 U	0.021 U	0.2 U	0.021 U	0.021 U	0.021 U	0.2 U	0.021 U
1,4-Dichlorobenzene	0.029 U	0.029 U	0.2 U	0.029 U	0.029 U	0.029 U	0.029 U	0.2 U	0.029 U	0.029 U	0.029 U	0.2 U	0.029 U	0.029 U	0.029 U	0.2 U	0.029 U
1-Methylnaphthalene	--	--	--	0.0035 U	--	--	--	--	0.0035 U	--	--	--	0.0035 U	--	--	--	0.0035 U
2,4,5-Trichlorophenol	0.031 U	0.031 U	0.48 U	0.031 U	0.031 U	0.031 U	0.031 U	0.48 U	0.031 U	0.031 U	0.031 U	0.48 U	0.031 U	0.031 U	0.031 U	0.49 U	0.031 U
2,4,6-Trichlorophenol	0.058 U	0.058 U	0.48 U	0.058 U	0.058 U	0.058 U	0.058 U	0.48 U	0.058 U	0.058 U	0.058 U	0.48 U	0.058 U	0.058 U	0.058 U	0.49 U	0.058 U
2,4-Dichlorophenol	0.047 U	0.047 U	0.48 U	0.047 U	0.047 U	0.047 U	0.047 U	0.48 U	0.047 U	0.047 U	0.047 U	0.48 U	0.047 U	0.047 U	0.047 U	0.49 U	0.047 U
2,4-Dimethylphenol	--	2.2 UR	3.9 U	2.2 U	--	--	2.2 UR	3.9 U	2.2 U	--	2.2 UR	3.9 U	2.2 U	--	2.2 UR	3.9 U	2.2 U
2,4-Dinitrophenol	0.17 U	0.17 U	3.9 U	0.17 U	0.17 U	0.17 U	0.17 U	3.9 U	0.17 U	0.17 U	0.17 U	3.9 U	0.17 U	0.17 U	0.17 U	3.9 U	0.17 U
2,4-Dinitrotoluene	0.018 U	0.018 U	0.2 U	0.018 U	0.018 U	0.018 U	0.018 U	0.2 U	0.018 U	0.018 U	0.018 U	0.2 U	0.018 U	0.018 U	0.018 U	0.2 U	0.018 U
2,6-Dinitrotoluene	0.033 U	0.033 U	0.2 U	0.033 U	0.033 U	0.033 U	0.033 U	0.2 U	0.033 U	0.033 U	0.033 U	0.2 U	0.033 U	0.033 U	0.033 U	0.2 U	0.033 U
2-Chloronaphthalene	0.041 U	0.041 U	0.2 U	0.041 U	0.041 U	0.041 U	0.041 U	0.2 U	0.041 U	0.041 U	0.041 U	0.2 U	0.041 U	0.041 U	0.041 U	0.2 U	0.041 U
2-Chlorophenol	0.054 U	0.054 U	0.48 U	0.054 U	0.054 U	0.054 U	0.054 U	0.48 U	0.054 U	0.054 U	0.054 U	0.48 U	0.054 U	0.054 U	0.054 U	0.49 U	0.054 U
2-Methyl-4,6-dinitrophenol	0.025 U	--	2 U	0.025 U	0.025 U	0.025 U	--	2 U	0.025 U	0.025 U	--	2 U	0.025 U	0.025 U	--	2 U	0.025 U
2-Methylnaphthalene	0.0048 UJ	0.0027 U	0.02 U	0.0023 U	0.0048 UJ	0.0048 UJ	0.003 U	0.02 U	0.0023 U	0.0048 UJ	0.0025 U	0.02 U	0.0023 U	0.0042 UJ	0.0023 U	0.02 U	0.0023 U
2-Methylphenol	0.11 UJ	0.11 UR	0.48 U	0.11 U	0.11 UJ	0.11 UJ	0.11 UR	0.48 U	0.11 U	0.11 UJ	0.11 UR	0.48 U	0.11 U	0.11 UJ	0.11 UR	0.49 U	0.11 U
2-Nitroaniline	0.024 U	0.024 U	0.2 U	0.024 U	0.024 U	0.024 U	0.024 U	0.2 U	0.024 U	0.024 U	0.024 U	0.2 U	0.024 U	0.024 U	0.024 U	0.2 U	0.024 U
2-Nitrophenol	0.063 U	0.063 U	0.48 U	0.063 U	0.063 U	0.063 U	0.063 U	0.48 U	0.063 U	0.063 U	0.063 U	0.48 U	0.063 U	0.063 U	0.063 U	0.49 U	0.063 U
3,3'-Dichlorobenzidine	--	0.43 U	2 UR	0.43 U	--	--	0.43 U	2 UR	0.43 U	--	0.43 U	2 UR	0.43 U	--	0.43 U	2 UR	0.43 U
3-Nitroaniline	0.029 U	0.029 U	0.96 U	0.029 U	0.029 U	0.029 U	0.029 U	0.96 U	0.029 U	0.029 U	0.029 U	0.96 U	0.029 U	0.029 U	0.029 U	0.97 U	0.029 U
4,6-Dinitro-2-methylphenol	--	0.025 U	--	--	--	--	0.025 U	--	--	--	0.025 U	--	--	--	0.025 U	--	--
4-Bromophenyl phenyl ether	0.026 U	0.026 U	0.2 U	0.026 U	0.026 U	0.026 U	0.026 U	0.2 U	0.026 U	0.026 U	0.026 U	0.2 U	0.026 U	0.026 U	0.026 U	0.2 U	0.026 U
4-Chloro-3-methylphenol	0.037 U	0.037 U	0.48 U	0.037 U	0.037 U	0.037 U	0.037 U	0.48 U	0.037 U	0.037 U	0.037 U	0.48 U	0.037 U	0.037 U	0.037 U	0.49 U	0.037 U
4-Chloroaniline	--	0.025 U	0.2 U	0.025 U	--	--	0.025 U	0.2 U	0.025 U	--	0.025 U	0.2 U	0.025 U	--	0.025 U	0.2 U	0.025 U
4-Chlorophenyl phenyl ether	0.027 U	0.027 U	0.2 U	0.027 U	0.027 U	0.027 U	0.027 U	0.2 U	0.027 U	0.027 U	0.027 U	0.2 U	0.027 U	0.027 U	0.027 U	0.2 U	0.027 U
4-Methylphenol	--	0.12 UR	0.48 U	0.12 U	--	--	0.12 UR	0.48 U	0.12 U	--	0.12 UR	0.48 U	0.12 U	3.2 J	0.12 UR	0.49 U	0.12 U
4-Nitroaniline	0.019 U	0.019 U	0.96 U	0.019 U	0.019 U	0.019 U	0.019 U	0.96 U	0.019 U	0.019 U	0.019 U	0.96 U	0.019 U	0.019 U	0.019 U	0.97 U	0.019 U
4-Nitrophenol	0.28 U	0.28 U	2 U	0.28 U	0.28 U	0.28 U	0.28 U	2 U	0.28 U	0.28 U	0.28 U	2 U	0.28 U	0.28 U	0.28 U	2 U	0.28 U
Acenaphthene	0.0053 J	0.0044 U	0.02 U	0.0044 U	0.0044 U	0.0044 U	0.0044 U	0.02 U	0.0044 U	0.0044 U	0.0044 U	0.02 U	0.0044 U	0.0044 U	0.0044 U	0.02 U	0.0044 U
Acenaphthylene	0.0034 U	0.0034 U	0.02 U	0.0034 U	0.0034 U	0.0034 U	0.0034 U	0.02 U	0.0034 U	0.0034 U	0.0034 U	0.02 U	0.0034 U	0.0034 U	0.0034 U	0.02 U	0.0034 U
Anthracene	0.0056 J	0.0036 UJ	0.02 U	0.0036 U	0.0036 U	0.0036 U	0.0036 UJ	0.02 U	0.0036 U	0.0036 U	0.0036 UJ	0.02 U	0.0036 U	0.0036 U	0.0036 UJ	0.02 U	0.0036 U
Benzo(a)anthracene	0.0026 U	0.0026 U	0.02 U	0.0026 U	0.0038 J	0.0026 U	0.0026 U	0.02 U	0.0026 U	0.0026 U	0.0047 J	0.02 U	0.0026 U	0.0026 U	0.0047 J	0.02 U	0.0026 U
Benzo(a)pyrene	0.0043 U	0.0043 UJ	0.02 U	0.0043 U	0.0043 U	0.0043 U	0.0043 UJ	0.02 U	0.0043 U	0.0043 U	0.0043 UJ	0.02 U	0.0043 U	0.0043 U	0.0043 UJ	0.02 U	0.0043 U
Benzo(b)fluoranthene	0.0023 U	0.0023 U	0.02 U	0.0023 U	0.0028 J	0.0023 U	0.0023 U	0.02 U	0.0023 U	0.0023 U	0.0025 J	0.02 U	0.0023 U	0.0023 U	0.0046 J	0.02 U	0.0023 U
Benzo(g,h,i)perylene	0.0029 U	0.0029 U	0.02 U	0.0029 U	0.0057 UJ	0.0029 U	0.0029 U	0.02 U	0.0029 U	0.0029 U	0.0029 U	0.02 U	0.0029 U	0.0029 U	0.005 J	0.02 U	0.0029 U
Benzo(k)fluoranthene	0.0025 U	0.0025 U	0.02 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.02 U	0.0025 U	0.0025 U	0.0025 U	0.02 U	0.0025 U	0.0025 U	0.0035 J	0.02 U	0.0025 U
Benzoic acid	1.5 UJ	1.9 U	4.8 U	1.1 U	1.1 U	1.6 UJ	1.9 U	1.2 J	1.1 U	1.5 UJ	1.9 U	4.8 U	1.1 U	14	1.9 U	4.9 U	1.1 U
Benzyl alcohol	0.073 U	0.073 U	4.8 U	0.073 U	0.073 U	0.073 U	0.073 U	4.8 U	0.073 U	0.073 U	0.073 U	4.8 U	0.073 U	0.085 J	0.073 U	4.9 U	0.073 U
bis(2-Chloroethoxy)methane	0.024 U	0.024 U	0.2 U	0.024 U	0.024 U	0.024 U	0.024 U	0.2 U	0.024 U	0.024 U	0.024 U	0.2 U	0.024 U	0.024 U	0.024 U	0.2 U	0.024 U
bis(2-Chloroethyl) ether	0.035 U	0.035 U	0.2 U	0.035 U	0.035 U	0.035 U	0.035 U	0.2 U	0.035 U	0.035 U	0.035 U	0.2 U	0.035 U	0.035 U	0.035 U	0.2 U	0.035 U
bis(2-Chloroisopropyl) ether	0.026 U	0.026 U	0.2 U	0.026 U	0.026 U	0.026 U	0.026 U	0.2 U	0.026 U	0.026 U	0.026 U	0.2 U	0.026 U	0.026 U	0.026 U	0.2 U	0.026 U
bis(2-Ethylhexyl) phthalate	0.2 J	0.24 J	0.96 UJ	0.13 U	0.19 J	0.36 J	0.35 J	0.96 UJ	0.13 U	0.13 U	0.87 J	0.96 UJ	0.16 J	0.18 J	0.24 J	0.97 UJ	0.13 U
Butyl benzyl phthalate	0.018 U	0.067 U	0.2 UJ	0.018 U	0.018 U	0.018 U	0.045 U	0.2 UJ	0.018 U	0.018 U	0.045 U	0.2 UJ	0.039 J	0.043 J	0.047 U	0.2 UJ	0.018 U
Carbazole	--	--	--	0.0045 U	--	--	--	--	0.0045 U	--	--	--	0.0045 U	--	--	--	0.0045 U
Chrysene	0.0034 U	0.0034 U	0.02 U	0.0034 U	0.0034 U	0.0034 U	0.0034 U	0.02 U	0.0034 U	0.0034 U	0.0034 U	0.02 U	0.0034 U	0.0034 U	0.0036 J	0.02 U	0.0034 U
Dibenzo(a,h)anthracene	0.0025 U	0.0025 U	0.02 U	0.0025 U	0.0055 J	0.0025 U	0.0025 U	0.02 U	0.0025 U	0.0025 U	0.0025 U	0.02 U	0.0025 U	0.0025 U	0.0035 J	0.02 U	0.0025 U
Dibenzofuran	0.006 J	0.0046 U	0.02 U	0.0046 U	0.0046 U	0.0046 U	0.0046 U	0.02 U	0.0046 U	0.0046 U	0.0046 U	0.02 U	0.0046 U	0.0046 U	0.0046 U	0.02 U	0.0046 U

TABLE I-2

GROUNDWATER ANALYTICAL RESULTS FOR SEMIVOLATILE ORGANIC COMPOUNDS (2007-2008)[1]
PSC Washougal Facility
Washougal, Washington

Concentrations in micrograms per liter (µg/L)

Site ID	MC-25				MC-25D					MC-122				MC-123			
Sample Date	10/24/2007	12/19/2007	3/12/2008	6/11/2008	10/24/2007	10/24/2007	12/18/2007	3/12/2008	6/11/2008	10/23/2007	12/18/2007	3/11/2008	6/10/2008	10/23/2007	12/18/2007	3/11/2008	6/10/2008
Analyte						Field Dup.											
PAHs (µg/L) (Continued)																	
Diethyl phthalate	0.052 UJ	0.062 U	0.2 UJ	0.022 UJ	0.043 UJ	0.049 UJ	0.062 U	0.2 UJ	0.022 UJ	0.034 UJ	0.62 U	0.2 UJ	0.022 UJ	0.037 UJ	0.062 U	0.2 UJ	0.025 UJ
Dimethyl phthalate	0.021 U	0.021 U	0.2 U	0.021 U	0.021 U	0.021 U	0.021 U	0.2 U	0.021 U	0.021 U	0.021 U	0.2 U	0.021 U	0.021 U	0.021 U	0.2 U	0.021 U
Di-n-butyl phthalate	0.34 U	0.25 U	0.2 U	0.064 UJ	0.25 U	0.33 U	0.25 U	0.2 U	0.12 UJ	0.25 U	0.25 U	0.2 U	0.12 UJ	0.36 U	0.25 U	0.2 U	0.15 UJ
Di-n-octyl phthalate	0.018 U	0.018 U	0.2 U	0.018 U	0.018 U	0.018 U	0.018 U	0.2 U	0.018 U	0.018 U	0.018 U	0.2 U	0.018 U	0.018 U	0.018 U	0.2 U	0.018 U
Fluoranthene	0.0044 U	0.0044 U	0.02 U	0.0044 U	0.0044 U	0.0044 U	0.0044 U	0.02 U	0.0044 U	0.0044 U	0.0044 U	0.02 U	0.0044 U	0.0044 U	0.0046 J	0.02 U	0.0044 U
Fluorene	0.007 J	0.0038 U	0.02 U	0.0038 U	0.0038 U	0.0038 U	0.0038 U	0.02 U	0.0038 U	0.0038 U	0.0038 U	0.02 U	0.0038 U	0.0038 U	0.0038 U	0.02 U	0.0038 U
Hexachlorobenzene	0.022 U	0.022 U	0.2 U	0.022 U	0.022 U	0.022 U	0.022 U	0.2 U	0.022 U	0.022 U	0.022 U	0.2 U	0.022 U	0.022 U	0.022 U	0.2 U	0.022 U
Hexachlorobutadiene	0.027 U	0.027 U	0.2 U	0.027 U	0.027 U	0.027 U	0.027 U	0.2 U	0.027 U	0.027 U	0.027 U	0.2 U	0.027 U	0.027 U	0.027 U	0.2 U	0.027 U
Hexachlorocyclopentadiene	0.19 U	0.19 U	0.96 UR	0.19 U	0.19 U	0.19 U	0.19 U	0.96 UR	0.19 U	0.19 U	0.19 U	0.96 UR	0.19 U	0.19 U	0.19 U	0.97 UR	0.19 U
Hexachloroethane	0.024 U	0.024 U	0.2 U	0.024 U	0.024 U	0.024 U	0.024 U	0.2 U	0.024 U	0.024 U	0.024 U	0.2 U	0.024 U	0.024 U	0.024 U	0.2 U	0.024 U
Indeno(1,2,3-cd)pyrene	0.0026 U	0.0026 U	0.02 U	0.0026 U	0.0059 J	0.0026 U	0.0026 U	0.02 U	0.0026 U	0.0026 U	0.0026 U	0.02 U	0.0026 U	0.0026 U	0.0038 J	0.02 U	0.0026 U
Isophorone	0.016 U	0.016 U	0.2 U	0.016 U	0.016 U	0.016 U	0.016 U	0.2 U	0.016 U	0.016 U	0.016 U	0.2 U	0.016 U	0.016 U	0.016 U	0.2 U	0.016 U
Naphthalene	0.019 UJ	0.022 U	0.024 U	0.003 U	0.019 UJ	0.019 UJ	0.022 U	0.02 UJ	0.02 UJ	0.019 UJ	0.022 U	0.02 U	0.02 UJ	0.019 UJ	0.022 U	0.02 UJ	0.02 UJ
Nitrobenzene	0.028 U	0.028 U	0.2 U	0.028 U	0.028 U	0.028 U	0.028 U	0.2 U	0.028 U	0.028 U	0.028 U	0.2 U	0.028 U	0.028 U	0.028 U	0.2 U	0.028 U
N-Nitrosodi-n-propylamine	0.037 UJ	--	0.2 U	0.037 U	0.037 UJ	0.037 UJ	--	0.2 U	0.037 U	0.037 UJ	--	0.2 U	0.037 U	0.037 UJ	--	0.2 U	0.037 U
N-Nitrosodiphenylamine	--	0.048 U	0.2 U	0.048 U	--	--	0.048 U	0.2 U	0.048 U	--	0.048 U	0.2 U	0.048 U	--	0.048 U	0.2 U	0.048 U
N-Nitrosodipropylamine	--	0.037 U	--	--	--	--	0.037 U	--	--	--	0.037 U	--	--	--	0.037 U	--	--
Pentachlorophenol	0.34 U	0.34 U	0.96 U	0.34 U	0.34 U	0.34 U	0.34 U	0.96 U	0.34 U	0.34 U	0.34 U	0.96 U	0.34 U	0.34 U	0.34 U	0.97 U	0.34 U
Phenanthrene	0.0092 UJ	0.005 U	0.02 U	0.005 U	0.005 U	0.005 U	0.005 U	0.02 U	0.005 U	0.005 U	0.007 J	0.02 U	0.005 U	0.005 U	0.005 U	0.02 U	0.005 U
Phenol	0.28 UJ	0.063 U	0.066 J	0.063 U	0.28 UJ	0.28 UJ	0.063 U	0.073 J	0.063 U	0.28 UJ	0.15 U	0.48 U	0.063 U	1.6	0.15 U	0.49 U	0.063 U
Pyrene	0.0035 U	0.0035 U	0.02 U	0.0035 U	0.0035 U	0.0035 U	0.0035 U	0.02 U	0.0035 U	0.0035 U	0.0045 J	0.02 U	0.0035 U	0.0035 U	0.0035 U	0.02 U	0.0035 U

TABLE I-2

GROUNDWATER ANALYTICAL RESULTS FOR SEMIVOLATILE ORGANIC COMPOUNDS (2007-2008)[1]
PSC Washougal Facility
Washougal, Washington

Concentrations in micrograms per liter (µg/L)

Site ID	PZU-4					PZU-5				UT-ST-1		
Sample Date	10/24/2007	10/25/2007	12/17/2007	3/10/2008	6/9/2008	10/23/2007	12/17/2007	3/10/2008	6/10/2008	12/17/2007	3/10/2008	6/9/2008
Analyte												
PAHs (µg/L)												
1,2,4-Trichlorobenzene	0.016 U	0.016 U	0.016 U	0.2 U	0.016 U	0.016 U	0.016 U	0.2 U	0.016 U	0.016 U	0.2 U	0.016 U
1,2-Dichlorobenzene	0.022 U	0.022 U	0.022 U	0.2 U	0.022 U	0.022 U	0.022 U	0.2 U	0.022 U	0.022 U	0.2 U	0.022 U
1,3-Dichlorobenzene	0.87	0.86	0.22	0.2	0.078 J	0.021 U	0.021 U	0.2 U	0.021 U	0.49	0.36	0.11 J
1,4-Dichlorobenzene	0.029 U	0.029 U	0.029 U	0.2 U	0.029 U	0.029 U	0.029 U	0.2 U	0.029 U	0.029 U	0.2 U	0.029 U
1-Methylnaphthalene	--	--	--	--	0.0035 U	--	--	--	0.0061 J	--	--	0.0035 U
2,4,5-Trichlorophenol	0.031 U	0.031 U	0.031 U	0.5 U	0.031 U	0.031 U	0.031 U	0.5 U	0.031 U	0.031 UR	0.48 U	0.031 U
2,4,6-Trichlorophenol	0.058 U	0.058 U	0.058 U	0.5 U	0.058 U	0.058 U	0.058 U	0.5 U	0.058 U	0.058 UR	0.48 U	0.058 U
2,4-Dichlorophenol	0.051 J	0.047 U	0.047 U	0.5 U	0.047 U	0.047 U	0.047 U	0.5 U	0.055 J	0.047 UR	0.48 U	0.047 U
2,4-Dimethylphenol	--	--	2.2 UR	4 U	2.2 U	--	2.2 UR	4 U	2.2 U	2.2 UR	3.9 U	2.2 U
2,4-Dinitrophenol	0.17 U	0.17 U	0.17 U	4 U	0.17 U	0.17 U	0.17 U	4 U	0.17 U	0.17 UR	3.9 U	0.17 U
2,4-Dinitrotoluene	0.018 U	0.018 U	0.018 U	0.2 U	0.018 U	0.018 U	0.018 U	0.2 U	0.018 U	0.018 U	0.2 U	0.018 U
2,6-Dinitrotoluene	0.033 U	0.033 U	0.033 U	0.2 U	0.033 U	0.033 U	0.033 U	0.2 U	0.033 U	0.033 U	0.2 U	0.033 U
2-Chloronaphthalene	0.041 U	0.041 U	0.041 U	0.2 U	0.041 U	0.041 U	0.041 U	0.2 U	0.041 U	0.041 U	0.2 U	0.041 U
2-Chlorophenol	0.054 U	0.054 U	0.054 U	0.5 U	0.054 U	0.054 U	0.054 U	0.5 U	0.054 U	0.054 UR	0.48 U	0.054 U
2-Methyl-4,6-dinitrophenol	0.025 U	0.025 U	--	2 U	0.025 U	0.025 U	--	2 U	0.025 U	--	2 U	0.025 U
2-Methylnaphthalene	0.0069 UJ	0.0048 UJ	0.0023 U	0.02 UJ	0.0023 U	0.013 UJ	0.012 U	0.02 UJ	0.0072 J	0.0025 U	0.02 UJ	0.0023 U
2-Methylphenol	0.11 UJ	0.11 UJ	0.11 UR	0.5 U	0.11 U	0.11 UJ	0.11 UR	0.5 U	0.11 U	0.11 UR	0.48 U	0.11 U
2-Nitroaniline	0.024 U	0.024 U	0.024 U	0.2 U	0.024 U	0.024 U	0.024 U	0.2 U	0.024 U	0.024 U	0.2 U	0.024 U
2-Nitrophenol	0.063 U	0.063 U	0.063 U	0.5 U	0.063 U	0.063 U	0.063 U	0.5 U	0.063 U	0.063 UR	0.48 U	0.063 U
3,3'-Dichlorobenzidine	--	--	0.43 U	2 UR	0.43 U	--	0.43 U	2 UR	0.43 U	0.43 U	2 UR	0.43 U
3-Nitroaniline	0.029 U	0.029 U	0.029 U	0.99 U	0.029 U	0.029 U	0.029 U	0.99 U	0.029 U	0.029 U	0.96 U	0.029 U
4,6-Dinitro-2-methylphenol	--	--	0.025 U	--	--	--	0.025 U	--	--	0.025 UR	--	--
4-Bromophenyl phenyl ether	0.026 U	0.026 U	0.026 U	0.2 U	0.026 U	0.026 U	0.026 U	0.2 U	0.026 U	0.026 U	0.2 U	0.026 U
4-Chloro-3-methylphenol	0.037 U	0.037 U	0.037 U	0.5 U	0.037 U	0.037 U	0.037 U	0.5 U	0.037 U	0.037 UR	0.48 U	0.037 U
4-Chloroaniline	--	--	0.025 U	0.2 U	0.025 U	--	0.025 U	0.2 U	0.025 U	0.025 U	0.2 U	0.025 U
4-Chlorophenyl phenyl ether	0.027 U	0.027 U	0.027 U	0.2 U	0.027 U	0.027 U	0.027 U	0.2 U	0.027 U	0.027 U	0.2 U	0.027 U
4-Methylphenol	--	--	0.12 UR	0.5 U	0.12 U	--	0.12 UR	0.5 U	0.12 U	0.12 UR	0.48 U	0.12 U
4-Nitroaniline	0.019 U	0.019 U	0.019 U	0.99 U	0.019 U	0.019 U	0.019 U	0.99 U	0.019 U	0.019 U	0.96 U	0.019 U
4-Nitrophenol	0.28 U	0.28 U	0.28 U	2 U	0.28 U	0.28 U	0.28 U	2 U	0.28 U	0.28 UR	2 U	0.28 U
Acenaphthene	0.0044 U	0.0044 U	0.0044 U	0.02 U	0.0044 U	0.0044 U	0.0044 U	0.02 U	0.0046 U	0.0044 U	0.02 U	0.0044 U
Acenaphthylene	0.0034 U	0.0034 U	0.0034 U	0.02 U	0.0034 U	0.011 UJ	0.0034 U	0.02 U	0.0036 U	0.0034 U	0.02 U	0.0034 U
Anthracene	0.004 J	0.0046 J	0.0036 UJ	0.02 U	0.0036 U	0.0074 J	0.0036 UJ	0.02 U	0.0038 U	0.0036 UJ	0.02 U	0.0036 U
Benzo(a)anthracene	0.0058 UJ	0.0043 UJ	0.0026 U	0.02 U	0.0026 U	0.0053 UJ	0.0036 J	0.02 U	0.0027 U	0.0026 U	0.0039 J	0.0026 U
Benzo(a)pyrene	0.0043 U	0.0043 U	0.0043 UJ	0.02 U	0.0043 U	0.0043 U	0.0043 UJ	0.02 U	0.0045 U	0.0043 UJ	0.02 U	0.0043 U
Benzo(b)fluoranthene	0.003 J	0.0047 J	0.0023 U	0.02 U	0.0023 U	0.0041 J	0.0023 U	0.0057 J	0.0024 U	0.0023 U	0.02 U	0.0023 U
Benzo(g,h,i)perylene	0.0076 UJ	0.01 UJ	0.0055 J	0.0036 J	0.0035 J	0.013 J	0.0066 J	0.032	0.0045 J	0.0029 U	0.02 U	0.0029 U
Benzo(k)fluoranthene	0.0025 U	0.0025 U	0.0025 U	0.02 U	0.0025 U	0.0025 U	0.0025 U	0.02 U	0.0026 U	0.0025 U	0.02 U	0.0025 U
Benzoic acid	1.8 UJ	1.5 UJ	1.9 U	5 U	1.1 U	1.5 UJ	1.9 U	5 U	1.1 U	2.1 UR	4.8 U	1.1 U
Benzyl alcohol	0.073 U	0.073 U	0.073 U	5 UJ	0.073 U	0.073 U	0.073 U	5 U	0.073 U	0.073 U	4.8 U	0.073 U
bis(2-Chloroethoxy)methane	0.024 U	0.024 U	0.024 U	0.2 U	0.024 U	0.024 U	0.024 U	0.2 U	0.024 U	0.024 U	0.2 U	0.024 U
bis(2-Chloroethyl) ether	0.035 U	0.035 U	0.035 U	0.2 U	0.035 U	0.035 U	0.035 U	0.2 U	0.035 U	0.035 U	0.2 U	0.035 U
bis(2-Chloroisopropyl) ether	0.026 U	0.026 U	0.026 U	0.2 U	0.026 U	0.026 U	0.026 U	0.2 U	0.026 U	0.026 U	0.2 U	0.026 U
bis(2-Ethylhexyl) phthalate	0.19 J	0.16 J	0.13 U	0.99 UJ	0.13 U	0.13 U	0.13 U	0.99 UJ	0.13 U	0.13 U	0.96 UJ	0.13 U
Butyl benzyl phthalate	0.031 J	0.018 U	0.048 U	0.2 UJ	0.018 U	0.045 J	0.051 U	0.2 UJ	0.051 J	0.047 U	0.2 UJ	0.041 J
Carbazole	--	--	--	--	0.0045 U	--	--	--	0.0047 U	--	--	0.0045 U
Chrysene	0.004 J	0.0056 J	0.0034 U	0.02 U	0.0034 U	0.0074 J	0.0042 J	0.02 U	0.0036 U	0.0034 U	0.02 U	0.0034 U
Dibenzo(a,h)anthracene	0.0025 U	0.0025 U	0.0025 U	0.02 U	0.0025 U	0.0025 U	0.0025 U	0.02 U	0.0026 U	0.0025 U	0.02 U	0.0025 U
Dibenzofuran	0.0047 J	0.0046 U	0.0046 U	0.02 U	0.0046 U	0.0046 U	0.0046 U	0.02 U	0.0048 U	0.0046 U	0.02 U	0.0046 U

TABLE I-2

GROUNDWATER ANALYTICAL RESULTS FOR SEMIVOLATILE ORGANIC COMPOUNDS (2007-2008)[1]
PSC Washougal Facility
Washougal, Washington

Concentrations in micrograms per liter (µg/L)

Site ID	PZU-4					PZU-5				UT-ST-1		
Sample Date	10/24/2007	10/25/2007	12/17/2007	3/10/2008	6/9/2008	10/23/2007	12/17/2007	3/10/2008	6/10/2008	12/17/2007	3/10/2008	6/9/2008
Analyte												
PAHs (µg/L) (Continued)												
Diethyl phthalate	0.061 UJ	0.043 UJ	0.062 U	0.2 UJ	0.028 UJ	0.49	0.12 U	0.2 UJ	0.09 UJ	0.062 U	0.2 UJ	0.024 UJ
Dimethyl phthalate	0.021 U	0.021 U	0.021 U	0.2 U	0.021 U	0.042 J	0.021 U	0.2 U	0.021 U	0.021 U	0.2 U	0.021 U
Di-n-butyl phthalate	0.32 U	0.27 U	0.25 U	0.2 U	0.13 UJ	0.47	0.25 U	0.2 U	0.16 UJ	0.25 U	0.2 U	0.14 UJ
Di-n-octyl phthalate	0.018 U	0.018 U	0.018 U	0.2 U	0.018 U	0.018 U	0.018 U	0.2 U	0.018 U	0.018 U	0.2 U	0.018 U
Fluoranthene	0.061	0.066	0.0065 J	0.02 U	0.0044 U	0.28	0.019 J	0.017 J	0.0066 J	0.0044 U	0.02 U	0.0044 U
Fluorene	0.0072 J	0.0038 U	0.0038 U	0.02 U	0.0038 U	0.01 J	0.0046 J	0.02 U	0.0048 J	0.0038 U	0.02 U	0.0038 U
Hexachlorobenzene	0.022 U	0.022 U	0.022 U	0.2 U	0.022 U	0.022 U	0.022 U	0.2 U	0.022 U	0.022 U	0.2 U	0.022 U
Hexachlorobutadiene	0.027 U	0.027 U	0.027 U	0.2 U	0.027 U	0.027 U	0.027 U	0.2 U	0.027 U	0.027 U	0.2 U	0.027 U
Hexachlorocyclopentadiene	0.19 U	0.19 U	0.19 U	0.99 UR	0.19 U	0.19 U	0.19 U	0.99 UR	0.19 U	0.19 U	0.96 UR	0.19 U
Hexachloroethane	0.024 U	0.024 U	0.024 U	0.2 U	0.024 U	0.024 U	0.024 U	0.2 U	0.024 U	0.024 U	0.2 U	0.024 U
Indeno(1,2,3-cd)pyrene	0.0027 J	0.003 J	0.0026 U	0.02 U	0.0026 U	0.003 J	0.0026 U	0.0082 J	0.0027 U	0.0026 U	0.02 U	0.0026 U
Isophorone	0.016 U	0.016 U	0.016 U	0.2 U	0.016 U	0.016 U	0.016 U	0.2 U	0.016 U	0.016 U	0.2 U	0.016 U
Naphthalene	0.035 U	0.019 UJ	0.022 U	0.02 UJ	0.02 UJ	0.076 U	0.027 U	0.02 UJ	0.02 UJ	0.022 U	0.02 UJ	0.003 U
Nitrobenzene	0.028 U	0.028 U	0.028 U	0.2 U	0.028 U	0.028 U	0.028 U	0.2 U	0.028 U	0.028 U	0.2 U	0.028 U
N-Nitrosodi-n-propylamine	0.037 UJ	0.037 UJ	--	0.2 U	0.037 U	0.037 UJ	--	0.2 U	0.037 U	--	0.2 U	0.037 U
N-Nitrosodiphenylamine	--	--	0.048 U	0.2 U	0.048 U	--	0.048 U	0.2 U	0.048 U	0.048 U	0.2 U	0.048 U
N-Nitrosodipropylamine	--	--	0.037 U	--	--	--	0.037 U	--	--	0.037 U	--	--
Pentachlorophenol	0.34 U	0.34 U	0.34 U	0.99 U	0.34 U	0.34 U	0.34 U	0.99 U	0.34 U	0.34 UR	0.96 U	0.34 U
Phenanthrene	0.018 UJ	0.017 UJ	0.005 U	0.02 U	0.005 U	0.045	0.012 J	0.0074 J	0.0097 J	0.005 U	0.02 U	0.005 U
Phenol	0.31 UJ	0.28 UJ	0.15 U	0.5 U	0.063 U	0.28 UJ	0.063 U	0.5 U	0.063 U	0.21 UR	0.48 U	0.063 U
Pyrene	0.12	0.13	0.011 J	0.006 J	0.0041 J	0.57	0.038	0.039	0.011 J	0.0035 U	0.02 U	0.0035 U

Notes
1. Laboratory data flags are as follows:
   J = value is an estimate.
   U = not detected at reporting limit listed.
   UJ = value is an estimate at reporting limit listed.
   UR = result is rejected due to quality control issues.

Abbreviations
-- = not available/not applicable
µg/L = micrograms per liter

TABLE I-3

GROUNDWATER ANALYTICAL RESULTS FOR 1,4-DIOXANE (2007-2008)[1]
PSC Washougal Facility
Washougal, Washington

Sample ID	MC-1																				
Analyte / Date Sampled	3/23/2004	6/15/2004	9/16/2004	12/16/2004	3/17/2005	6/8/2005	9/15/2005	12/1/2005	3/9/2006	6/8/2006	9/14/2006	12/21/2006	3/8/2007	6/7/2007	9/13/2007	12/19/2007	3/14/2008	6/13/2008	9/26/2008	12/3/2008	3/27/2009	6/30/2009
1,4-Dioxane (µg/L)	1 U	1.16 U	1 U	1 U	1 U	0.47 U	0.47 U	0.47 U	0.47 U	0.27 U	0.27 U	0.27 U	0.27 U	0.35 J	0.26 U	0.26 U	1 U	0.3 J	0.24 U	0.24 U	1 U	0.38 J

Sample ID	MC-2																				
Analyte / Date Sampled	3/24/2004	6/16/2004	9/14/2004	12/14/2004	3/15/2005	6/9/2005	9/13/2005	11/29/2005	3/7/2006	6/6/2006	9/13/2006	12/20/2006	3/8/2007	6/7/2007	9/12/2007	12/21/2007	3/14/2008	6/12/2008	9/23/2008	12/3/2008	3/27/2009	6/29/2009
1,4-Dioxane (µg/L)	1 U	1.2 U	1 U	1 U	1 U	0.47 U	0.47 U	0.47 U	0.47 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.26 U	0.26 U	1 U	0.46 J	0.24 U	0.24 U	1 U	0.16 U

Sample ID	MC-2D																				
Analyte / Date Sampled	3/24/2004	6/16/2004	9/14/2004	12/14/2004	3/15/2005	6/9/2005	9/13/2005	11/29/2005	3/7/2006	6/6/2006	9/13/2006	12/20/2006	3/8/2007	6/7/2007	9/12/2007	12/21/2007	3/14/2008	6/12/2008	9/23/2008	12/3/2008	3/27/2009	6/29/2009
1,4-Dioxane (µg/L)	1 U	1.18 U	1 U	1 U	1 U	0.47 U	0.47 U	0.47 U	0.47 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.26 U	0.26 U	1 U	0.26 U	0.24 U	0.24 U	1 U	0.16 U

Sample ID	MC-8																				
Analyte / Date Sampled	3/24/2004	6/17/2004	9/14/2004	12/14/2004	3/15/2005	6/8/2005	9/13/2005	11/30/2005	3/7/2006	6/7/2006	9/12/2006	12/21/2006	3/8/2007	6/6/2007	9/13/2007	12/20/2007	3/14/2008	6/11/2008	9/26/2008	12/4/2008	3/26/2009	6/30/2009
1,4-Dioxane (µg/L)	1 U	1 U	1 U	1 U	1 U	0.47 U	0.47 U	0.47 U	0.47 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.26 U	0.26 U	1 U	0.26 U	0.24 U	0.24 U	1 U	0.16 U

Sample ID	MC-10D																				
Analyte / Date Sampled	3/24/2004	6/16/2004	9/14/2004	12/14/2004	3/15/2005	6/7/2005	9/13/2005	11/29/2005	3/7/2006	6/6/2006	9/13/2006	12/20/2006	3/7/2007	6/6/2007	9/12/2007	12/21/2007	3/13/2008	6/12/2008	9/26/2008	12/5/2008	3/25/2009	6/29/2009
1,4-Dioxane (µg/L)	1 U	1.16 U	1 U	1 U	1 U	0.47 U	0.47 U	0.47 U	0.47 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.26 U	0.26 U	1 U	0.26 U	0.24 U	0.24 U	1 U	0.16 U

Sample ID	MC-12																				
Analyte / Date Sampled	3/23/2004	6/15/2004	9/16/2004	12/16/2004	3/17/2005	6/9/2005	9/15/2005	12/1/2005	3/9/2006	6/8/2006	9/12/2006	12/20/2006	3/7/2007	6/6/2007	9/12/2007	12/21/2007	3/13/2008	6/13/2008	9/26/2008	12/5/2008	3/25/2009	6/29/2009
1,4-Dioxane (µg/L)	1 U	1 U	1 U	1 U	1 U	0.47 U	0.47 U	0.61 J	0.47 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.26 U	0.26 U	1 U	0.26 U	0.24 U	0.24 U	1 U	0.16 U

Sample ID	MC-12D																				
Analyte / Date Sampled	3/24/2004	6/16/2004	9/14/2004	12/14/2004	3/15/2005	6/9/2005	9/13/2005	11/29/2005	3/7/2006	6/6/2006	9/12/2006	12/20/2006	3/7/2007	6/5/2007	9/12/2007	12/21/2007	3/13/2008	6/12/2008	9/26/2008	12/5/2008	3/25/2009	6/29/2009
1,4-Dioxane (µg/L)	7.17	6.53	6.38	6.93	6.68	6	5.8	5.2	5.2	5.8	5.3	9.6	5.2	7.2	4.7	5.2	4.6	5.5	4.1	4.2	3.5	4.6

TABLE I-3

GROUNDWATER ANALYTICAL RESULTS FOR 1,4-DIOXANE (2007-2008)[1]
PSC Washougal Facility
Washougal, Washington

Sample ID	MC-13																				
Analyte / Date Sampled	3/23/2004	6/16/2004	9/14/2004	12/15/2004	3/16/2005	6/8/2005	9/14/2005	11/29/2005	3/7/2006	6/7/2006	9/12/2006	12/19/2006	3/6/2007	6/6/2007	9/11/2007	12/19/2007	3/12/2008	6/11/2008	9/24/2008	12/1/2008	3/27/2009	6/23/2009
1,4-Dioxane (µg/L)	1 U	1.16 U	1 U	1 U	1 U	0.47 U	0.47 U	0.5 J	0.47 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.26 U	0.26 U	1 U	0.32 J	0.24 U	0.24 U	1 U	0.16 U

Sample ID	MC-13D																				
Analyte / Date Sampled	3/23/2004	6/16/2004	9/14/2004	12/15/2004	3/16/2005	6/9/2005	9/14/2005	11/29/2005	3/7/2006	6/7/2006	9/12/2006	12/19/2006	3/6/2007	6/6/2007	9/11/2007	12/19/2007	3/12/2008	6/11/2008	9/24/2008	12/1/2008	3/27/2009	6/23/2009
1,4-Dioxane (µg/L)	1 U	1 U	1 U	1 U	1 U	0.47 U	0.47 U	0.47 U	0.47 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.26 U	0.26 U	1 U	0.26 U	0.24 U	0.24 U	1 U	0.16 U

Sample ID	MC-14																				MC-14D
Analyte / Date Sampled	3/29/2004	9/16/2004	12/16/2004	3/17/2005	6/8/2005	9/15/2005	12/1/2005	3/9/2006	6/8/2006	9/12/2006	12/19/2006	3/6/2007	6/5/2007	9/11/2007	12/19/2007	3/13/2008	6/13/2008	9/24/2008	12/1/2008	3/24/2009	6/24/2009	10/24/2007
1,4-Dioxane (µg/L)	153 D	74.1 D	233 D	155	160 D	65	96	180 D	380 D	75	160 D	170	180	120	54	230	390	33	57	110	270	0.33 J

Sample ID	MC-14D (Continued)									MC-15											
Analyte / Date Sampled	12/18/2007	3/11/2008	3/11/2008	6/10/2008	6/10/2008	9/24/2008	12/1/2008	3/24/2009	6/23/2009	3/25/2004	6/17/2004	9/15/2004	12/15/2004	3/16/2005	6/7/2005	9/14/2005	11/30/2005	3/8/2006	6/6/2006	9/13/2006	12/21/2006	3/6/2007
1,4-Dioxane (µg/L)	0.26 U	1 U	1 U	0.26 U	0.26 U	0.24 U	0.24 U	1 U	0.16 U	1 U	1 U	1 U	1 U	1 U	0.47 U	0.47 U	0.53 J	0.47 U	0.27 U	0.27 U	0.27 U	0.27 U

Sample ID	MC-15 (Continued)									MC-15D											
Analyte / Date Sampled	6/5/2007	9/11/2007	12/20/2007	3/12/2008	6/11/2008	9/23/2008	12/2/2008	3/24/2009	6/24/2009	3/25/2004	6/16/2004	9/14/2004	12/14/2004	3/16/2005	6/7/2005	9/14/2005	11/30/2005	3/8/2006	6/6/2006	9/13/2006	12/21/2006	3/6/2007
1,4-Dioxane (µg/L)	0.27 U	0.26 U	0.26 U	1 U	0.33 J	0.24 U	0.24 U	1 U	0.18 J	1 U	1.15 U	1 U	1 U	1 U	0.89 J	0.66 J	0.84 J	1.1	0.39 J	0.72 J	1.1	1.3

Sample ID	MC-15D (Continued)										MC-16											
Analyte / Date Sampled	6/5/2007	9/11/2007	12/20/2007	3/12/2008	6/12/2008	9/23/2008	12/2/2008	3/24/2009	6/24/2009	6/24/2009	3/25/2004	6/17/2004	9/15/2004	12/15/2004	3/16/2005	6/7/2005	9/14/2005	11/30/2005	3/8/2006	6/7/2006	9/13/2006	12/21/2006
1,4-Dioxane (µg/L)	0.99 J	0.8 J	1	1.3	1.2	1	0.24 U	1.2	1.1	1.4	1 U	1 U	1 U	1 U	1 U	0.47 U	0.47 U	0.56 J	0.47 U	0.27 U	0.27 U	0.27 U

Sample ID	MC-16 (Continued)										MC-17											
Analyte / Date Sampled	3/7/2007	6/5/2007	9/11/2007	12/20/2007	3/12/2008	6/12/2008	9/23/2008	12/3/2008	3/24/2009	6/24/2009	3/25/2004	6/17/2004	9/15/2004	12/14/2004	3/16/2005	6/7/2005	9/14/2005	11/30/2005	3/7/2006	6/7/2006	9/14/2006	12/20/2006
1,4-Dioxane (µg/L)	0.27 U	0.27 U	0.26 U	0.26 U	1 U	0.72 J	0.24 U	0.24 U	1 U	0.16 U	1 U	1 U	1 U	1 U	1 U	0.47 U	0.47 U	0.47 U	0.47 U	0.27 U	0.27 U	0.27 U

TABLE I-3

GROUNDWATER ANALYTICAL RESULTS FOR 1,4-DIOXANE (2007-2008)[1]
PSC Washougal Facility
Washougal, Washington

Sample ID	MC-17 (Continued)										MC-17D									
Analyte / Date Sampled	3/8/2007	6/7/2007	9/13/2007	12/20/2007	3/12/2008	6/12/2008	9/25/2008	12/3/2008	3/24/2009	6/25/2009	3/25/2004	6/17/2004	9/15/2004	12/15/2004	3/16/2005	6/10/2005	9/15/2005	12/1/2005	3/7/2006	6/7/2006
1,4-Dioxane (µg/L)	0.27 U	0.27 U	0.26 U	0.26 U	1 U	0.26 U	0.24 U	0.24 U	1 U	0.16 U	1 U	1 U	1 U	1 U	1 U	0.47 U	0.47 U	0.47 U	0.47 U	0.27 U

Sample ID	MC-17D (Continued)																		
Analyte / Date Sampled	9/14/2006	12/20/2006	3/8/2007	6/7/2007	9/13/2007	9/13/2007	12/20/2007	3/12/2008	3/12/2008	6/12/2008	6/12/2008	9/25/2008	9/25/2008	12/2/2008	12/2/2008	3/24/2009	3/24/2009	6/26/2009	6/26/2009
1,4-Dioxane (µg/L)	0.27 U	0.27 U	0.27 U	0.27 U	0.26 U	0.26 U	0.26 U	1 U	1 U	0.26 U	0.26 U	0.24 U	0.24 U	0.24 U	0.24 U	1 U	1 U	0.16 U	0.16 U

Sample ID	MC-19D																		
Analyte / Date Sampled	3/24/2004	6/16/2004	9/15/2004	12/14/2004	3/15/2005	6/7/2005	9/13/2005	11/29/2005	3/8/2006	6/6/2006	9/13/2006	12/21/2006	3/7/2007	6/7/2007	9/12/2007	12/21/2007	3/14/2008	6/13/2008	9/26/2008	12/5/2008
1,4-Dioxane (µg/L)	1 U	1 U	1 U	1 U	1 U	0.47 U	0.47 U	0.47 U	0.47 U	0.77 J	0.27 U	0.27 U	0.27 U	0.27 U	0.26 U	0.26 U	1 U	0.26 U	0.24 U	0.24 U

Sample ID	MC-19D (Continued)		MC-20																	
Analyte / Date Sampled	3/25/2009	6/30/2009	3/23/2004	6/15/2004	12/16/2004	3/17/2005	6/9/2005	12/1/2005	3/9/2006	6/8/2006	12/19/2006	3/5/2007	6/4/2007	12/19/2007	3/13/2008	6/13/2008	9/22/2008	12/2/2008	3/23/2009	6/23/2009
1,4-Dioxane (µg/L)	1 U	0.16 U	1.49	14.8	12.2	24.8	1.8	38	7.5	48	0.78 J	25	9.6	14	14	4.3 J	17	24	1 U	1.7

Sample ID	MC-20D								MC-21										
Analyte / Date Sampled	10/23/2007	12/18/2007	3/11/2008	6/10/2008	9/22/2008	12/2/2008	3/23/2009	6/23/2009	3/23/2004	6/15/2004	9/16/2004	12/16/2004	3/17/2005	6/8/2005	9/15/2005	12/1/2005	3/9/2006	6/8/2006	9/12/2006	12/19/2006
1,4-Dioxane (µg/L)	0.26 U	0.37 J	1 U	0.26 U	0.24 U	0.24 U	1 U	0.16 U	1 U	1 U	1.29	1 U	1 U	0.47 J	0.92 J	0.71 J	0.47 U	0.66 J	0.74 J	0.27 U

Sample ID	MC-21 (Continued)										MC-24								MC-24D	
Analyte / Date Sampled	3/6/2007	6/5/2007	9/11/2007	12/19/2007	3/13/2008	6/13/2008	9/23/2008	12/1/2008	3/24/2009	6/25/2009	10/24/2007	12/18/2007	3/12/2008	6/10/2008	9/24/2008	12/3/2008	3/27/2009	6/26/2009	10/24/2007	12/18/2007
1,4-Dioxane (µg/L)	0.27 U	0.27 U	0.26 U	0.26 U	1 U	0.28 J	0.24 U	0.24 U	1 U	0.36 J	0.26 U	0.26 U	1 U	0.26 U	0.24 U	0.24 U	1 U	0.25 J	7.3	9.9

Sample ID	MC-24D (Continued)							MC-25							MC-25D					
Analyte / Date Sampled	3/11/2008	6/10/2008	9/24/2008	12/3/2008	3/27/2009	6/26/2009	6/26/2009	10/24/2007	12/19/2007	3/12/2008	6/11/2008	9/25/2008	12/4/2008	3/26/2009	6/29/2009	10/24/2007	10/24/2007	12/18/2007	3/12/2008	6/11/2008
1,4-Dioxane (µg/L)	9.1	8	7.8	9	9.7	9.7	0.16 U	0.26 U	0.26 U	1 U	0.26 U	0.24 U	0.24 U	1 U	0.16 U	4.9	5.1	5	4.3	3.7 J

TABLE I-3

GROUNDWATER ANALYTICAL RESULTS FOR 1,4-DIOXANE (2007-2008)[1]
PSC Washougal Facility
Washougal, Washington

Sample ID	MC-25D										MC-26D2								MC-27D	MC-28D
Analyte / Date Sampled	9/25/2008	12/4/2008	3/26/2009	6/26/2009	3/26/2009	6/26/2009	9/29/2008	12/4/2008	3/26/2009	6/26/2009	9/29/2008	9/29/2008	12/3/2008	12/3/2008	3/26/2009	3/26/2009	6/30/2009	6/30/2009	6/25/2009	6/25/2009
1,4-Dioxane (µg/L)	6.1	5.7	5.9	5.8	1 U	0.24 J	0.24 U	0.24 U	1 U	0.24 J	0.24 U	0.24 U	0.24 U	0.24 U	1 U	1 U	0.16 U	0.16 U	1.5	0.19 J

Sample ID	MC-30		MC-30D				MC-31				MC-32	MC-33	MC-107							
Analyte / Date Sampled	9/29/2008	12/5/2008	9/29/2008	12/5/2008	3/25/2009	6/29/2009	9/29/2008	12/5/2008	3/25/2009	6/29/2009	6/26/2009	6/25/2009	3/25/2004	6/17/2004	9/15/2004	12/15/2004	3/15/2005	6/9/2005	9/13/2005	11/30/2005
1,4-Dioxane (µg/L)	0.24 U	0.24 U	3.1	2.9	1 U	0.16 U	0.24 U	0.24 U	1 U	0.16 U	0.35 J	0.16 U	1 U	1 U	1 U	1 U	1 U	0.47 U	0.47 U	0.47 U

Sample ID	MC-107 (Continued)														MC-118D					
Analyte / Date Sampled	3/8/2006	6/7/2006	9/13/2006	12/20/2006	3/7/2007	6/6/2007	9/12/2007	12/20/2007	3/14/2008	6/11/2008	9/25/2008	12/4/2008	3/25/2009	6/25/2009	3/24/2004	6/17/2004	9/15/2004	12/14/2004	3/15/2005	6/8/2005
1,4-Dioxane (µg/L)	0.47 UJ	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.26 U	0.26 U	1 U	0.26 U	0.24 U	0.24 U	1 U	0.16 U	8.77	7.8 J	5.65	7.71	7.77	6.8

Sample ID	MC-118D (Continued)																			
Analyte / Date Sampled	9/14/2005	11/30/2005	3/8/2006	6/7/2006	9/12/2006	12/21/2006	3/7/2007	6/6/2007	9/13/2007	12/21/2007	3/14/2008	6/13/2008	9/25/2008	12/4/2008	3/26/2009	6/30/2009	9/29/2008	12/4/2008	3/26/2009	6/30/2009
1,4-Dioxane (µg/L)	7.5	7.2	7.7	6.9	6.6	7.3	6.7	7.4	6.8	8.2	6.7	7	8.3	9	7.9	9.6	0.24 U	2.4	3.7	3

Sample ID	MC-122										MC-123								
Analyte / Date Sampled	12/19/2006	3/6/2007	6/5/2007	10/23/2007	12/18/2007	3/11/2008	6/10/2008	9/22/2008	12/2/2008	3/23/2009	6/23/2009	12/19/2006	3/5/2007	6/4/2007	10/23/2007	12/18/2007	3/11/2008	6/10/2008	9/22/2008	12/2/2008
1,4-Dioxane (µg/L)	6.7	0.88 J	0.44 J	15	3.1	1.4	1.1	2.2	2.6	0.92 J	0.2 J	64	4.7	2.8	49	21	6.8	17 J	54	25

Sample ID	MC-123 (Continued)		PZU-4							PZU-5							
Analyte / Date Sampled	3/23/2009	6/23/2009	10/23/2007	12/17/2007	3/10/2008	6/9/2008	12/1/2008	3/23/2009	6/22/2009	10/22/2007	12/17/2007	3/10/2008	6/10/2008	9/23/2008	12/2/2008	3/23/2009	6/22/2009
1,4-Dioxane (µg/L)	8.2	45	0.26 U	0.26 U	1 U	0.26 U	0.24 U	1 U	0.16 U	0.48 J	0.26 U	1 U	0.26 U	0.24 U	0.24 U	1 U	0.16 U

Sample ID	UT-ST-1					
Analyte / Date Sampled	12/17/2007	3/10/2008	6/9/2008	12/1/2008	3/23/2009	6/22/2009
1,4-Dioxane (µg/L)	0.26 U	1 U	0.26 U	0.24 U	1 U	0.16 U

Notes
1. Laboratory data flags are as follows:
J = value is an estimate.
U = not detected at reporting limit listed.

Abbreviations
-- = not available/not applicable
µg/L = micrograms per liter

TABLE I-4

GROUNDWATER ANALYTICAL RESULTS FOR TOTAL PETROLEUM HYDROCARBONS (2004-2009)[1]

PSC Washougal Facility
Washougal, Washington

Concentrations in micrograms per liter (µg/L)

Analyte	Sample ID	MC-1				MC-2			
	Date Sampled	9/26/2008	12/3/2008	3/27/2009	6/30/2009	9/23/2008	12/3/2008	3/27/2009	6/29/2009
Diesel range hydrocarbons		--	--	--	--	--	--	--	--
Lube oil range hydrocarbons		--	--	--	--	--	--	--	--
TPH (as gasoline)		50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U

Analyte	Sample ID	MC-2D				MC-8			
	Date Sampled	9/23/2008	12/3/2008	3/27/2009	6/29/2009	9/26/2008	12/4/2008	3/26/2009	6/30/2009
Diesel range hydrocarbons		--	--	--	--	--	--	--	--
Lube oil range hydrocarbons		--	--	--	--	--	--	--	--
TPH (as gasoline)		50 U	50 U	50 U	50 U	52 J	50 U	50 U	50 U

Analyte	Sample ID	MC-10D				MC-12			
	Date Sampled	9/26/2008	12/5/2008	3/25/2009	6/29/2009	9/26/2008	12/5/2008	3/25/2009	6/29/2009
Diesel range hydrocarbons		--	--	--	--	--	--	--	--
Lube oil range hydrocarbons		--	--	--	--	--	--	--	--
TPH (as gasoline)		50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U

Analyte	Sample ID	MC-12D				MC-13			
	Date Sampled	9/26/2008	12/5/2008	3/25/2009	6/29/2009	9/24/2008	12/1/2008	3/27/2009	6/23/2009
Diesel range hydrocarbons		--	--	--	--	--	--	--	--
Lube oil range hydrocarbons		--	--	--	--	--	--	--	--
TPH (as gasoline)		50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U

TABLE I-4

GROUNDWATER ANALYTICAL RESULTS FOR TOTAL PETROLEUM HYDROCARBONS (2004-2009)[1]

PSC Washougal Facility
Washougal, Washington

Concentrations in micrograms per liter (µg/L)

Analyte	Sample ID	MC-12D				MC-13				MC-13D	
	Date Sampled	9/26/2008	12/5/2008	3/25/2009	6/29/2009	9/24/2008	12/1/2008	3/27/2009	6/23/2009	9/24/2008	12/1/2008
Diesel range hydrocarbons		--	--	--	--	--	--	--	--	--	--
Lube oil range hydrocarbons		--	--	--	--	--	--	--	--	--	--
TPH (as gasoline)		50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U

Analyte	Sample ID	MC-13D (Continued)		MC-14				MC-14D			
	Date Sampled	3/27/2009	6/23/2009	9/24/2008	12/1/2008	3/24/2009	6/24/2009	10/24/2007	12/18/2007	3/11/2008	3/11/2008
Diesel range hydrocarbons		--	--	--	--	--	--	11 U	11 U	250 U	250 U
Lube oil range hydrocarbons		--	--	--	--	--	--	19 U	19 U	500 U	500 U
TPH (as gasoline)		50 U	50 U	340 J	99 J	170 J	190 J	13 U	13 U	50 U	50 U

Analyte	Sample ID	MC-14D (Continued)						MC-15			
	Date Sampled	6/10/2008	6/10/2008	9/24/2008	12/1/2008	3/24/2009	6/23/2009	9/23/2008	12/2/2008	3/24/2009	6/24/2009
Diesel range hydrocarbons		270 U	270 U	--	--	--	--	--	--	--	--
Lube oil range hydrocarbons		530 U	530 U	--	--	--	--	--	--	--	--
TPH (as gasoline)		50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U

Analyte	Sample ID	MC-15D					MC-16				MC-17
	Date Sampled	9/23/2008	12/2/2008	3/24/2009	6/24/2009	6/24/2009	9/23/2008	12/3/2008	3/24/2009	6/24/2009	9/25/2008
Diesel range hydrocarbons		--	--	--	--	--	--	--	--	--	--
Lube oil range hydrocarbons		--	--	--	--	--	--	--	--	--	--
TPH (as gasoline)		50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U

TABLE I-4

GROUNDWATER ANALYTICAL RESULTS FOR TOTAL PETROLEUM HYDROCARBONS (2004-2009)[1]

PSC Washougal Facility
Washougal, Washington

Concentrations in micrograms per liter (µg/L)

Sample ID	MC-17 (Continued)			MC-17D				
Analyte / Date Sampled	12/3/2008	3/24/2009	6/25/2009	9/25/2008	9/25/2008	12/2/2008	12/2/2008	3/24/2009
Diesel range hydrocarbons	--	--	--	--	--	--	--	--
Lube oil range hydrocarbons	--	--	--	--	--	--	--	--
TPH (as gasoline)	50 U	50 U	50 U		50 U	50 U	50 U	50 U

Sample ID	MC-17D (Continued)		MC-19D				MC-20	
Analyte / Date Sampled	6/26/2009	6/26/2009	9/26/2008	12/5/2008	3/25/2009	6/30/2009	9/22/2008	12/2/2008
Diesel range hydrocarbons	--	--	--	--	--	--	--	--
Lube oil range hydrocarbons	--	--	--	--	--	--	--	--
TPH (as gasoline)	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U

Sample ID	MC-20 (Continued)		MC-20D					
Analyte / Date Sampled	3/23/2009	6/23/2009	10/23/2007	12/18/2007	3/11/2008	6/10/2008	9/22/2008	12/2/2008
Diesel range hydrocarbons	--	--	12 U	11 U	250 U	270 U	--	--
Lube oil range hydrocarbons	--	--	20 U	19 U	500 U	530 U	--	--
TPH (as gasoline)	50 U	50 U	50 U	13 U	13 U	50 U	50 U	50 U

Sample ID	MC-20D (Continued)		MC-21				MC-24	
Analyte / Date Sampled	3/23/2009	6/23/2009	9/23/2008	12/1/2008	3/24/2009	6/25/2009	10/24/2007	12/18/2007
Diesel range hydrocarbons	--	--	--	--	--	--	12 U	11 U
Lube oil range hydrocarbons	--	--	--	--	--	--	20 U	19 U
TPH (as gasoline)	50 U	50 U	50 U	370 J	510 J	500 J	460 J	13 U

TABLE I-4

GROUNDWATER ANALYTICAL RESULTS FOR TOTAL PETROLEUM HYDROCARBONS (2004-2009)[1]

PSC Washougal Facility
Washougal, Washington

Concentrations in micrograms per liter (µg/L)

Analyte	Sample ID / Date Sampled	MC-24 (Continued)						MC-24D		
		3/12/2008	6/10/2008	9/24/2008	12/3/2008	3/27/2009	6/26/2009	10/24/2007	12/18/2007	3/11/2008
Diesel range hydrocarbons		260 U	260 U	--	--	--	--	11 U	11 U	260 U
Lube oil range hydrocarbons		510 U	520 U	--	--	--	--	19 U	19 U	510 U
TPH (as gasoline)		13 U	50 U	50 U	50 U	50 U	50 U	50 U	13 U	13 U

Analyte	Sample ID / Date Sampled	MC-24D (Continued)						MC-25		
		6/10/2008	9/24/2008	12/3/2008	3/27/2009	6/26/2009	6/26/2009	10/24/2007	12/19/2007	3/12/2008
Diesel range hydrocarbons		260 U	--	--	--	--	--	12 U	11 U	250 U
Lube oil range hydrocarbons		520 U	--	--	--	--	--	20 U	19 U	500 U
TPH (as gasoline)		50 U	50 U	50 U	50 U	50 U	50 U	50 U	13 U	13 U

Analyte	Sample ID / Date Sampled	MC-25 (Continued)					MC-25D			
		6/11/2008	9/25/2008	12/4/2008	3/26/2009	6/29/2009	10/24/2007	10/24/2007	12/18/2007	3/12/2008
Diesel range hydrocarbons		250 U	--	--	--	--	11 U	11 U	11 U	250 U
Lube oil range hydrocarbons		500 U	--	--	--	--	19 U	19 U	19 U	500 U
TPH (as gasoline)		50 U	50 U	50 U	50 U	50 U	50 U	13 U	13 U	13 U

Analyte	Sample ID / Date Sampled	MC-25D (Continued)								
		6/11/2008	9/25/2008	12/4/2008	3/26/2009	6/26/2009	3/26/2009	6/26/2009	9/29/2008	12/4/2008
Diesel range hydrocarbons		260 U	--	--	--	--	--	--	--	--
Lube oil range hydrocarbons		520 U	--	--	--	--	--	--	--	--
TPH (as gasoline)		50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U

TABLE I-4

GROUNDWATER ANALYTICAL RESULTS FOR TOTAL PETROLEUM HYDROCARBONS (2004-2009)[1]

PSC Washougal Facility
Washougal, Washington

Concentrations in micrograms per liter (µg/L)

Analyte	Sample ID / Date Sampled	MC-26D2 9/29/2008	MC-26D2 9/29/2008	MC-26D2 12/3/2008	MC-26D2 12/3/2008	MC-26D2 3/26/2009	MC-26D2 6/30/2009	MC-26D2 6/30/2009	MC-27D 6/25/2009	MC-28D 6/25/2009	MC-30 9/29/2008
Diesel range hydrocarbons		--	--	--	--	--	--	--	--	--	--
Lube oil range hydrocarbons		--	--	--	--	--	--	--	--	--	--
TPH (as gasoline)		69 J	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U

Analyte	Sample ID / Date Sampled	MC-30D 12/5/2008	MC-30D 3/25/2009	MC-30D 6/29/2009	MC-30D 9/29/2008	MC-30D 12/5/2008	MC-30D 3/25/2009	MC-30D 6/29/2009	MC-31 9/29/2008	MC-32 12/5/2008	MC-32 3/25/2009
Diesel range hydrocarbons		--	--	--	--	--	--	--	--	--	--
Lube oil range hydrocarbons		--	--	--	--	--	--	--	--	--	--
TPH (as gasoline)		50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U

Analyte	Sample ID / Date Sampled	MC-32 6/29/2009	MC-32 6/26/2009	MC-33 6/25/2009	MC-107 9/25/2008	MC-107 12/4/2008	MC-107 3/25/2009	MC-107 6/25/2009	MC-118D 9/25/2008	MC-118D 12/4/2008	MC-118D 3/26/2009
Diesel range hydrocarbons		--	--	--	--	--	--	--	--	--	--
Lube oil range hydrocarbons		--	--	--	--	--	--	--	--	--	--
TPH (as gasoline)		50 U	50 U	50 U	50 U	50 U	50 U	50 U	180 J	200 J	200 J

Analyte	Sample ID / Date Sampled	MC-118D (Continued) 6/30/2009	MC-118D (Continued) 9/29/2008	MC-118D (Continued) 12/4/2008	MC-118D (Continued) 3/26/2009	MC-118D (Continued) 6/30/2009	MC-122 10/23/2007	MC-122 12/18/2007	MC-122 3/11/2008	MC-122 6/10/2008	MC-122 9/22/2008
Diesel range hydrocarbons		--	--	--	--	--	11 U	11 U	250 U	260 U	--
Lube oil range hydrocarbons		--	--	--	--	--	19 U	19 U	500 U	520 U	--
TPH (as gasoline)		110 J	50 U	50 U	50 U	50 U	13 U	13 U	50 U	50 U	50 U

TABLE I-4

GROUNDWATER ANALYTICAL RESULTS FOR TOTAL PETROLEUM HYDROCARBONS (2004-2009)[1]

PSC Washougal Facility
Washougal, Washington

Concentrations in micrograms per liter (µg/L)

Analyte	Sample ID	MC-122 (Continued)			MC-123				
	Date Sampled	12/2/2008	3/23/2009	6/23/2009	10/23/2007	12/18/2007	3/11/2008	6/10/2008	9/22/2008
Diesel range hydrocarbons		--	--	--	11 U	11 U	250 U	250 U	--
Lube oil range hydrocarbons		--	--	--	19 U	19 U	500 U	500 U	--
TPH (as gasoline)		50 U	50 U	50 U	13 U	13 U	50 U	50 U	50 U

Analyte	Sample ID	MC-123 (Continued)			PZU-4				
	Date Sampled	12/2/2008	3/23/2009	6/23/2009	10/24/2007	12/17/2007	3/10/2008	6/9/2008	9/26/2008
Diesel range hydrocarbons		--	--	--	11 U	11 U	250 U	260 U	--
Lube oil range hydrocarbons		--	--	--	19 U	19 U	500 U	520 U	--
TPH (as gasoline)		50 U	50 U	50 U	13 U	13 U	50 U	50 U	50 U

Analyte	Sample ID	PZU-4 (Continued)			PZU-5				
	Date Sampled	12/1/2008	3/23/2009	6/22/2009	12/17/2007	3/10/2008	6/10/2008	9/23/2008	12/2/2008
Diesel range hydrocarbons		--	--	--	11 U	260 U	260 U	--	--
Lube oil range hydrocarbons		--	--	--	19 U	520 U	520 U	--	--
TPH (as gasoline)		50 U	50 U	50 U	13 U	50 U	50 U	50 U	50 U

Analyte	Sample ID	PZU-5 (Continued)		UT-ST-1						
	Date Sampled	3/23/2009	6/22/2009	10/23/2007	12/17/2007	3/10/2008	6/9/2008	12/1/2008	3/23/2009	6/22/2009
Diesel range hydrocarbons		--	--	--	11 U	250 U	250 U	--	--	--
Lube oil range hydrocarbons		--	--	13 U	19 U	500 U	500 U	--	--	--
TPH (as gasoline)		50 U	50 U	--	13 U	50 U	50 U	50 U	50 U	50 U

Notes
1. Laboratory data flags are as follows:
   J = value is an estimate.
   U = not detected at reporting limit listed.

Abbreviations
-- = not available/not applicable
µg/L = micrograms per liter

TABLE I-5

GROUNDWATER ANALYTICAL RESULTS FOR NATURAL ATTENUATION PARAMETERS AND METALS (2004-2009)
PSC Washougal Facility
Washougal, Washington

Site ID	MC-1																				MC-2							
Analyte / **Sample Date**	3/23/2004	6/15/2004	9/16/2004	12/16/2004	3/17/2005	6/8/2005	9/15/2005	12/1/2005	3/9/2006	6/8/2006	9/14/2006	12/21/2006	3/8/2007	6/7/2007	9/13/2007	12/19/2007	3/14/2008	6/13/2008	9/26/2008	3/27/2009	3/24/2004	6/16/2004	9/14/2004	12/14/2004	3/15/2005	6/9/2005	9/13/2005	11/29/2005
Conventionals (mg/L)																												
Ammonia (as N)	--	--	--	--	--	--	--	--	--	--	0.3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bicarbonate Alkalinity (as $CaCO_3$)	--	--	--	--	--	--	--	--	--	--	70	20	39	108	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbonate Alkalinity (as $CaCO_3$)	--	--	--	--	--	--	--	--	--	--	0.8 U	0.8 U	0.8 U	0.8 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hydroxide Alkalinity (as $CaCO_3$)	--	--	--	--	--	--	--	--	--	--	--	0.8 U	0.8 U	0.8 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total alkalinity	--	--	--	--	--	--	--	--	--	--	--	20	--	--	--	--	--	--	72	26	--	--	--	--	--	--	--	--
Chloride	0.77	1.12	1.49	1.53 J	1.37	0.4	1.2	1.1	1	1	0.6	2.3	1.5	1.2	0.9	0.6	1	1	1.1	1.2	--	--	--	--	--	--	--	--
Cyanide	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate(as N)	--	--	--	--	--	0.09 J	0.008 U	0.07 J	0.2	0.11 J	0.008 U	0.6	1.6	0.003 U	0.006 U	1.3	0.4	0.008 U	0.008 U	0.6	--	--	--	--	--	--	--	--
Nitrite (as N)	0.1 U	0.1 U	0.2 U	0.2 U	0.2 U	--	--	--	--	--	--	0.006 U	0.003 U	0.003 U	--	--	--	--	0.004 U	0.1 U	--	--	--	--	--	--	--	--
Sulfate	--	--	--	--	--	--	--	--	--	--	0.2	0.7	1.4	0.9	--	--	--	--	2	1.8	--	--	--	--	--	--	--	--
Sulfide	1 U	1 U	20 U	20 U	20 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.2 U	0.004 U	0.004 U	2 U	2 U	0.4 U	0.4 U	2 U	--	--	--	--	--	--	--	--
Total Organic Carbon	1 U	2.34	13.2 D	1.26	1.23	1.4	2.7	1.4	1.4	1.8	2.8	1.2	1.4	3.4	3.1	1.7	2.3	3.8	2.9	1.7	--	--	--	--	--	--	--	--
Ferrous Iron	0	0.68	1.58	0.13	0.08	0.08	1.84	0.08	0.21	0.03	1.87	0.35	0.28	1.97	3.3	1.42	0.67 J	1.6	3.3	0.02 UJ	--	--	--	--	--	--	--	--
Ferric Iron	0.5	0.121	6.8	0.96	0.556	0.67	0.14	0.6	1.9	1 U	1 U	1.65	0.043	0.37 U	0.76	0.02	0.003 UJ	1.5	2.18	0.7 J	--	--	--	--	--	--	--	--
Gases (µg/L)																												
Ethane	10 U	10 U	10 U	10 U	10 U	0.35 U	3.9	0.38 U	0.38 U	2.1	18	0.1 U	0.15 J	1.1	2.2	0.1 U	0.5 U	0.78	0.65	0.5 U	10 U	10 U	10 U	10 U	10 U	0.35 U	0.86	18
Ethene	10 U	10 U	10 U	10 U	10 U	0.55 U	3.2	0.55 U	0.55 U	1.5 J	8.4	0.1 U	0.1 U	0.76 J	0.94 J	0.1 U	1.5 U	0.35 J	0.19 U	1.5 U	10 U	10 U	10 U	10 U	10 U	0.55 U	0.55 U	14
Methane	677	3490	8190 D	250 J	1360 D	990	7600	270	0.3 U	980	9300	2.3	180	2200	9000	7.1	7.1	6900	12000	200	4590	7330	3100	3400 DJ	12800 D	3300	9100	4400
Dissolved Metals (mg/L)																												
Antimony	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Barium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Beryllium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Calcium	--	--	--	--	--	--	--	--	--	--	--	5.79	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cobalt	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Copper	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	0.247	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	--	--	--	--	--	--	--	--	--	--	--	1.59	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Mercury	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nickel	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Potassium	--	--	--	--	--	--	--	--	--	--	--	1.2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Selenium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Silver	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sodium	--	--	--	--	--	--	--	--	--	--	--	1.38	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Thallium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tin	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vanadium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Zinc	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total Metals (mg/L)																												
Antimony	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Barium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Beryllium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Calcium	--	--	--	--	--	--	--	--	--	--	17.4	5.96	10.6	18.6	--	--	--	--	--	--								
Chromium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cobalt	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Copper	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	0.5	0.801	8.38	1.09	0.636	0.751	2	0.684	2.14	0.517	2.04	2	0.323	2.34	4.06	1.44	0.353 J	3.1	5.48	0.445 J	--	--	--	--	--	--	--	--
Lead	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	--	--	--	--	--	--	--	--	--	--	5.03	1.8	3.4	6.68	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese	--	--	--	--	--	--	--	--	--	--	0.954	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Mercury	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nickel	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Potassium	--	--	--	--	--	--	--	--	--	--	2.53	0.8 U	2.1	2.9	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Selenium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Silver	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sodium	--	--	--	--	--	--	--	--	--	--	3.32	1.4	1.94	3.26	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Thallium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tin	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vanadium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Zinc	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE I-5

GROUNDWATER ANALYTICAL RESULTS FOR NATURAL ATTENUATION PARAMETERS AND METALS (2004-2009)
PSC Washougal Facility
Washougal, Washington

Site ID	'MC-2 (continued)										MC-2D																	
Analyte **Sample Date**	**3/7/2006**	**6/6/2006**	**9/13/2006**	**12/20/2006**	**3/8/2007**	**6/7/2007**	**9/12/2007**	**12/21/2007**	**3/14/2008**	**6/12/2008**	**3/24/2004**	**6/16/2004**	**9/14/2004**	**12/14/2004**	**3/15/2005**	**6/9/2005**	**9/13/2005**	**11/29/2005**	**3/7/2006**	**6/6/2006**	**9/13/2006**	**12/20/2006**	**3/8/2007**	**6/7/2007**	**9/12/2007**	**12/21/2007**	**3/14/2008**	**6/12/2008**
Conventionals (mg/L)																												
Ammonia (as N)	--	--	0.79	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.016 U	--	--	--	--	--	--	--
Bicarbonate Alkalinity (as $CaCO_3$)	--	--	71	86	74	143	--	--	--	--	--	--	--	--	--	--	--	--	--	--	138	141	143	144	--	--	--	--
Carbonate Alkalinity (as $CaCO_3$)	--	--	0.8 U	0.8 U	0.8 U	0.8 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.8 U	0.8 U	0.8 U	0.8 U	--	--	--	--
Hydroxide Alkalinity (as $CaCO_3$)	--	--	--	0.8 U	0.8 U	0.8 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.8 U	0.8 U	0.8 U	--	--	--	--
Total alkalinity	--	--	--	86	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	141	--	--	--	--	--	--
Chloride	--	--	0.8	0.9	0.9	1.3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.7	2	2	1.8	--	--	--	--
Cyanide	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate(as N)	--	--	0.008 U	0.2	0.1	0.2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.011 J	0.02 U	0.004 U	0.003 U	--	--	--	--
Nitrite (as N)	--	--	--	0.006 U	0.003 U	0.003 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.006 U	0.003 U	0.003 U	--	--	--	--
Sulfate	--	--	0.06 U	0.9	0.4	1.4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5.7	4.5	4.5	4.5	--	--	--	--
Sulfide	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total Organic Carbon	--	--	2.2	2	2	2.3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.5	0.4 J	0.7	0.33 J	--	--	--	--
Ferrous Iron	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ferric Iron	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Gases (µg/L)																												
Ethane	5	0.38 U	1.5	0.77	7.3	1	1.8	0.18 J	0.25 J	0.1 U	10 U	10 U	10 U	10 U	10 U	0.35 U	0.35 U	0.38 U	0.38 U	0.9	0.1 U	0.1 U	0.1 U	0.37 J	0.1 U	0.48 J	0.5 U	0.1 U
Ethene	4.6	0.55 U	0.58 J	0.44 J	5.1	0.61 J	1.1 J	0.1 U	0.26 J	0.1 U	10 U	10 U	10 U	10 U	10 U	0.55 U	0.55 U	0.55 U	0.55 U	0.55 U	0.12 J	0.1 U	0.1 U	0.1 U	0.16 J	0.17 J	1.5 U	0.1 U
Methane	2700	3100	11000	5500	5000	3700	7300	3600	3100	5000	156	135	109	138 J	162	74	73	79	36	53	81	96	70	50	65	73	78	99
Dissolved Metals (mg/L)																												
Antimony	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Barium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Beryllium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Calcium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cobalt	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Copper	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Mercury	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nickel	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Potassium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Selenium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Silver	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sodium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Thallium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tin	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vanadium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Zinc	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total Metals (mg/L)																												
Antimony	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Barium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Beryllium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Calcium	--	--	17.5	19.7	16.9	32.1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	25.9	25.3	26.7	25.6	--	--	--	--
Chromium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cobalt	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Copper	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	--	--	5.53	6.85	6.04	11.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	12.7	12.5	13.1	12.7	--	--	--	--
Manganese	--	--	1.26	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0263	--	--	--	--	--	--	--
Mercury	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nickel	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Potassium	--	--	2.36	1.8	1.7	2.3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.68	3.7	4.3	3.4	--	--	--	--
Selenium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Silver	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sodium	--	--	4.14	5.03	3.86	5.35	--	--	--	--	--	--	--	--	--	--	--	--	--	--	13.9	14	14.2	14.4	--	--	--	--
Thallium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tin	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vanadium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Zinc	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE I-5

GROUNDWATER ANALYTICAL RESULTS FOR NATURAL ATTENUATION PARAMETERS AND METALS (2004-2009)
PSC Washougal Facility
Washougal, Washington

Site ID	MC-8																		MC-10D									
Analyte / Sample Date	**3/24/2004**	**6/17/2004**	**9/14/2004**	**12/14/2004**	**3/15/2005**	**6/8/2005**	**9/13/2005**	**11/30/2005**	**3/7/2006**	**6/7/2006**	**9/12/2006**	**12/21/2006**	**3/8/2007**	**6/6/2007**	**9/13/2007**	**12/20/2007**	**3/14/2008**	**6/11/2008**	**3/24/2004**	**6/16/2004**	**9/14/2004**	**12/14/2004**	**3/15/2005**	**6/7/2005**	**9/13/2005**	**11/29/2005**	**3/7/2006**	**6/6/2006**
Conventionals (mg/L)																												
Ammonia (as N)	--	--	--	--	--	--	--	--	--	--	0.18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bicarbonate Alkalinity (as $CaCO_3$)	--	--	--	--	--	--	--	--	--	--	73	26	21	82	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbonate Alkalinity (as $CaCO_3$)	--	--	--	--	--	--	--	--	--	--	0.8 U	0.8 U	0.8 U	0.8 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hydroxide Alkalinity (as $CaCO_3$)	--	--	--	--	--	--	--	--	--	--	--	0.8 U	0.8 U	0.8 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total alkalinity	--	--	--	--	--	--	--	--	--	--	--	26	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloride	--	--	--	--	--	--	--	--	--	--	1.1	3.1	1.1	1.9	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cyanide	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate(as N)	--	--	--	--	--	--	--	--	--	--	0.013 J	0.6	0.7	0.9	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrite (as N)	--	--	--	--	--	--	--	--	--	--	--	0.006 U	0.003 U	0.003 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	--	--	--	--	--	--	--	--	--	--	0.6	2.2	1.8	7.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total Organic Carbon	--	--	--	--	--	--	--	--	--	--	4.1	3	4.5	4.8	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ferrous Iron	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ferric Iron	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Gases (µg/L)																												
Ethane	10 U	10 U	10 U	10 U	10 U	0.35 U	0.35 U	0.38 U	0.38 U	0.38 U	1	0.1 U	0.1 U	0.1 U	0.11 J	0.1 U	0.5 U	0.1 U	10 U	10 U	10 U	10 U	10 U	0.35 U	0.35 U	4.2	0.38 U	0.38 U
Ethene	10 U	10 U	10 U	10 U	10 U	0.55 U	0.55 U	0.55 U	0.55 U	0.55 U	0.8 J	0.1 U	0.1 U	0.1 U	0.12 J	0.1 U	1.5 U	0.1 U	10 U	10 U	10 U	10 U	10 U	0.55 U	0.55 U	1.7	0.55 U	0.55 U
Methane	49.5	755	1270	5.33 J	799	120	880	1.9	0.3 U	1.8	1700	0.42 J	0.53 UJ	78	1800	0.48 U	0.5 U	34	2860	3750	1940	3540 DJ	5660 D	2800	3000	4100	2100	740
Dissolved Metals (mg/L)																												
Antimony	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Barium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Beryllium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Calcium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cobalt	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Copper	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Mercury	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nickel	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Potassium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Selenium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Silver	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sodium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Thallium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tin	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vanadium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Zinc	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--				--	--
Total Metals (mg/L)																												
Antimony	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Barium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Beryllium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Calcium	--	--	--	--	--	--	--	--	--	--	19.9	11.1	8.46	26.2	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cobalt	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Copper	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	--	--	--	--	--	--	--	--	--	--	3.26	0.614	0.645	2.97	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese	--	--	--	--	--	--	--	--	--	--	0.368	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Mercury	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nickel	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Potassium	--	--	--	--	--	--	--	--	--	--	2.29	1	1.6	2.1	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Selenium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Silver	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sodium	--	--	--	--	--	--	--	--	--	--	5.81	2.37	2.17	6.98	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Thallium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tin	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vanadium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Zinc	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE I-5

GROUNDWATER ANALYTICAL RESULTS FOR NATURAL ATTENUATION PARAMETERS AND METALS (2004-2009)
PSC Washougal Facility
Washougal, Washington

Site ID	MC-10D (continued)										MC-12																	
Analyte / Sample Date	9/13/2006	12/20/2006	3/7/2007	6/6/2007	9/12/2007	12/21/2007	3/13/2008	6/12/2008	9/26/2008	3/25/2009	3/23/2004	6/15/2004	9/16/2004	12/16/2004	3/17/2005	6/9/2005	9/15/2005	12/1/2005	3/9/2006	6/8/2006	9/12/2006	12/20/2006	3/7/2007	6/6/2007	9/12/2007	12/21/2007	3/13/2008	6/13/2008
Conventionals (mg/L)																												
Ammonia (as N)	0.41	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.19	--	--	--	--	--	--	--
Bicarbonate Alkalinity (as $CaCO_3$)	415	449	449	478	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	33	56	63	60	--	--	--	--
Carbonate Alkalinity (as $CaCO_3$)	0.8 U	0.8 U	0.8 U	0.8 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.8 U	0.8 U	0.8 U	0.8 U	--	--	--	--
Hydroxide Alkalinity (as $CaCO_3$)	--	0.8 U	0.8 U	0.8 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.8 U	0.8 U	0.8 U	--	--	--	--
Total alkalinity	--	449	--	--	--	--	--	--	498	530	--	--	--	--	--	--	--	--	--	--	--	56			--	--	--	--
Chloride	1.3	2.1	2.2	1.8	--	--	--	--	0.3	2.1	1.64	0.77	0.857	1.34 J	1.58	0.8	0.5	1	1.3	0.7	0.5	1	1	1	1	1.1	1.7	0.9
Cyanide	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate(as N)	0.008 U	0.008 U	0.004 U	0.003 U	--	--	--	--	0.008 U	0.3	--	--	--	--	--	0.05 J	0.008 U	0.2	0.02 J	0.033 J	0.009 J	0.1	0.004 U	0.003 U	0.016 J	0.1	0.084 J	0.044 J
Nitrite (as N)	--	0.006 U	0.003 U	0.003 U	--	--	--	--	0.004 U	0.5 U	0.1 U	0.1 U	0.2 U	0.2 U	0.2 U	--	--	--	--	--	--	0.006 U	0.003 U	0.003 U	--	--	--	--
Sulfate	0.06 U	0.06 J	0.007 U	0.007 U	--	--	--	--	0.5	0.4	--	--	--	--	--	2	--	--	--	--	1.7	1.5	0.8	0.8	--	--	--	--
Sulfide	--	--	--	--	--	--	--	--	0.4 U	2 U	1 U	1 U	20 U	20 U	20 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.2 U	0.004 U	0.004 U	2 U	2 U	0.4 U
Total Organic Carbon	1.5	1.4	1.7	1.6	--	--	--	--	1.4	8.1	1.04	1.33	7.1 D	1.06	1.43	1.6	1.9	1.5	1.2	1.1	1.8	1.4	1.3	1.4	1.2	1.1	1.4	1.2
Ferrous Iron	--	--	--	--	--	--	--	--	3.3	10.7	0.07	1.07	1.13	0.96	1.02	1.09	1	0.8	0.58	0.67	0.75	0.73	0.36	0.91	1.05	3.3 J	3.3 J	0.89
Ferric Iron	--	--	--	--	--	--	--	--	13.8	2.33	0.684	0	0.45	0	0.02	0.17	0.15	0.12	1 U	1 U	1 U	0.014	0.27	0.02 U	0.003	0.003 UJ	0.02 UJ	0.01
Gases (µg/L)																												
Ethane	1.2	0.26 J	0.5	0.44 J	0.67	0.17 J	0.14 J	0.1 U	0.21 J	0.5 U	10 U	10 U	10 U	10 U	10 U	0.35 U	0.35 U	1	0.38 U	0.39 J	0.36 J	0.1 U	0.16 J	0.14 J	0.18 J	0.1 U	0.14 J	0.1 U
Ethene	0.44 J	0.1 U	0.16 J	0.1 U	0.23 J	0.1 U	1.5 U	0.1 U	0.19 U	1.5 U	10 U	10 U	10 U	10 U	10 U	0.55 U	0.55 U	0.71 J	0.55 U	0.55 U	0.24 J	0.1 U	0.1 U	0.13 J	0.16 J	0.1 U	1.5 U	0.1 U
Methane	3300	2600	2100	2300	2900	4200	2700	960	3700	2600	726	1080	3710 D	429 J	1100	490	1500	1000	580	580	1200	510	580	500	2100	590	850	540
Dissolved Metals (mg/L)																												
Antimony	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Barium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Beryllium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Calcium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cobalt	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Copper	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Mercury	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nickel	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Potassium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Selenium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Silver	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sodium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Thallium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tin	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vanadium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Zinc	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total Metals (mg/L)																												
Antimony	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Barium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Beryllium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Calcium	83.5	88.4	89.7	88	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	13.1	13.9	14.2	13.1	--	--	--	--
Chromium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cobalt	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Copper	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	--	--	--	--	--	--	--	--	17.1	13	0.754	1.07	1.58	0.951	1.04	1.26	1.2	0.915	0.604	0.722	0.879	0.744	0.627	0.852	1.01	0.866 J	0.486 J	0.903
Lead	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	44.3	46.3	46.2	47.1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	4.16	4.58	4.65	4.29	--	--	--	--
Manganese	2.14	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.539	--	--	--	--	--	--	--
Mercury	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nickel	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Potassium	5.92	6	6.4	6.4	--	--	--	--	--	--									--	--	1.68	1.2	1.7	1.7	--	--	--	--
Selenium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Silver	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sodium	13.4	14	14.2	14.6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.23	3.04	2.88	3.03	--	--	--	--
Thallium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tin	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vanadium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Zinc	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE I-5

GROUNDWATER ANALYTICAL RESULTS FOR NATURAL ATTENUATION PARAMETERS AND METALS (2004-2009)
PSC Washougal Facility
Washougal, Washington

Site ID	MC-12D																		MC-13								
Analyte / Sample Date	3/24/2004	6/16/2004	9/14/2004	12/14/2004	3/15/2005	6/9/2005	9/13/2005	11/29/2005	3/7/2006	6/6/2006	9/12/2006	12/20/2006	3/7/2007	6/5/2007	9/12/2007	12/21/2007	3/13/2008	6/12/2008	3/23/2004	6/16/2004	9/14/2004	12/15/2004	3/16/2005	6/8/2005	9/14/2005	11/29/2005	3/7/2006	6/7/2006
Conventionals (mg/L)																											
Ammonia (as N)	--	--	--	--	--	--	--	--	--	--	0.24	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bicarbonate Alkalinity (as $CaCO_3$)	--	--	--	--	--	--	--	--	--	--	637	608	630	680	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbonate Alkalinity (as $CaCO_3$)	--	--	--	--	--	--	--	--	--	--	0.8 U	0.8 U	0.8 U	0.8 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hydroxide Alkalinity (as $CaCO_3$)	--	--	--	--	--	--	--	--	--	--	--	0.8 U	0.8 U	0.8 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total alkalinity	--	--	--	--	--	--	--	--	--	--	--	608	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloride	--	--	--	--	--	--	--	--	--	--	1.4	1.9	2.2	1.7	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cyanide	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate(as N)	--	--	--	--	--	--	--	--	--	--	0.008 U	0.025 U	0.004 U	0.003 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrite (as N)	--	--	--	--	--	--	--	--	--	--	--	0.006 U	0.003 U	0.003 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	--	--	--	--	--	--	--	--	--	--	0.15 J	0.14 J	0.007 U	0.007 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total Organic Carbon	--	--	--	--	--	--	--	--	--	--	3.8	3.5	3.7	4.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ferrous Iron	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ferric Iron	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Gases (µg/L)																												
Ethane	10 U	10 U	10 U	10 U	10 U	0.35 U	0.35 U	0.38 U	0.38 U	0.38 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.1 U	10 U	10 U	10 U	10 U	10 U	0.77	0.83	0.38 U	0.38 U	1.9
Ethene	10 U	10 U	10 U	10 U	10 U	0.55 U	0.55 U	0.55 U	0.55 U	0.55 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	1.5 U	0.1 U	10 U	10 U	10 U	10 U	10 U	0.7 J	1.4 J	0.55 U	1.1 J	1.9
Methane	325	258	356	253 J	712	320	310	440	270	41	400	280	560	410	620	690	620	110	1620	2610	3610	4370 DJ	3980 D	1600	3600	1900	700	1700
Dissolved Metals (mg/L)																												
Antimony	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Barium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Beryllium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Calcium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cobalt	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Copper	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	--	--	--	--	--	--	--	--	--	--	66.3	62.6	65.1	66.3	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese	--	--	--	--	--	--	--	--	--	--	0.487	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Mercury	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nickel	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Potassium	--	--	--	--	--	--	--	--	--	--	8.3	8.3	9	8.4	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Selenium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Silver	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sodium	--	--	--	--	--	--	--	--	--	--	18.5	18.2	19.1	19.1	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Thallium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tin	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vanadium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Zinc	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total Metals (mg/L)																												
Antimony	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Barium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Beryllium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Calcium	--	--	--	--	--	--	--	--	--	--	144	125	131	130	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cobalt	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Copper	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	--	--	--	--	--	--	--	--	--	--	66.3	62.6	65.1	66.3	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese	--	--	--	--	--	--	--	--	--	--	0.487	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Mercury	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nickel	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Potassium	--	--	--	--	--	--	--	--	--	--	8.3	8.3	9	8.4	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Selenium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Silver	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sodium	--	--	--	--	--	--	--	--	--	--	18.5	18.2	19.1	19.1	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Thallium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tin	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vanadium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Zinc	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE I-5

GROUNDWATER ANALYTICAL RESULTS FOR NATURAL ATTENUATION PARAMETERS AND METALS (2004-2009)
PSC Washougal Facility
Washougal, Washington

Site ID	'MC-13 (continued)								MC-13D															
Analyte / Sample Date	9/12/2006	12/19/2006	3/6/2007	6/6/2007	9/11/2007	12/19/2007	3/12/2008	6/11/2008	3/23/2004	6/16/2004	9/14/2004	12/15/2004	3/16/2005	6/9/2005	9/14/2005	11/29/2005	3/7/2006	6/7/2006	9/12/2006	12/19/2006	3/6/2007	6/6/2007	9/11/2007	12/19/2007	3/12/2008	6/11/2008
Conventionals (mg/L)																								
Ammonia (as N)	0.37	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.017 U	--	--	--	--	--	--	--
Bicarbonate Alkalinity (as $CaCO_3$)	44	48	46	57	--	--	--	--	--	--	--	--	--	--	--	--	--	--	364	67	65	66	--	--	--	--
Carbonate Alkalinity (as $CaCO_3$)	0.8 U	0.8 U	0.8 U	0.8 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.8 U	0.8 U	0.8 U	0.8 U	--	--	--	--
Hydroxide Alkalinity (as $CaCO_3$)	--	0.8 U	0.8 U	0.8 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.8 U	0.8 U	0.8 U	--	--	--	--
Total alkalinity	--	48	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	67	--	--	--	--	--	--
Chloride	11.4	2.3	3.8	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2.4	2.6	2.5	2.2	--	--	--	--
Cyanide	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate(as N)	0.008 U	0.009 U	0.004 U	0.003 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.9	1.8	1.7	1.2	--	--	--	--
Nitrite (as N)	--	0.006 U	0.003 U	0.003 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.006 U	0.003 U	0.003 U	--	--	--	--
Sulfate	1.1	0.4	1.5	1.1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	7.5	7.1	6.6	6	--	--	--	--
Sulfide	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total Organic Carbon	1.6	3.5	1.6	2.1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.12 J	0.15 J	0.11 J	0.07 J	--	--	--	--
Ferrous Iron	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ferric Iron	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Gases (µg/L)																								
Ethane	4.8	2.2	0.1 U	0.73	1.1	0.17 J	0.5 U	0.1 U	10 U	10 U	10 U	10 U	10 U	0.35 U	0.35 U	0.38 U	0.38 U	0.38 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.1 U
Ethene	3.9	2.3	0.15 J	0.76 J	1.5	0.12 J	1.5 U	0.1 U	10 U	10 U	10 U	10 U	10 U	0.55 U	0.55 U	0.55 U	0.55 U	0.55 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	1.5 U	0.1 U
Methane	3300	2900	780	1500	2500	480	270	930	1.2 U	1.46	1.76 U	1.52 J	1.2 U	0.3 U	0.3 U	0.3 U	0.3 U	1.8	0.3 U	0.36 J	0.3 U	0.74	0.3 U	0.48 U	0.5 U	1.4
Dissolved Metals (mg/L)																								
Antimony	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Barium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Beryllium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Calcium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cobalt	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Copper	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Mercury	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nickel	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Potassium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Selenium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Silver	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sodium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Thallium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tin	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vanadium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Zinc	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total Metals (mg/L)																								
Antimony	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Barium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Beryllium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Calcium	12.7	10.6	10.2	11.8	--	--	--	--	--	--	--	--	--	--	--	--	--	--	14	13.5	13.6	12.9	--	--	--	--
Chromium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cobalt	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Copper	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	4.78	3.74	3.6	4.47	--	--	--	--	--	--	--	--	--	--	--	--	--	--	7.51	7.15	7.41	7.09	--	--	--	--
Manganese	0.666	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00169	--	--	--	--	--	--	--
Mercury	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nickel	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Potassium	1.99	1.4	2	1.2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.82	3.7	4.2	3	--	--	--	--
Selenium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Silver	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sodium	3.99	3.64	3.51	4.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	7.38	7.92	7.24	7.19	--	--	--	--
Thallium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tin	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vanadium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Zinc	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE I-5

GROUNDWATER ANALYTICAL RESULTS FOR NATURAL ATTENUATION PARAMETERS AND METALS (2004-2009)
PSC Washougal Facility
Washougal, Washington

Site ID	MC-14																								
Analyte / **Sample Date**	**3/23/2004**	**6/15/2004**	**9/16/2004**	**12/16/2004**	**3/17/2005**	**6/8/2005**	**9/15/2005**	**12/1/2005**	**3/9/2006**	**6/8/2006**	**9/12/2006**	**12/19/2006**	**3/6/2007**	**6/5/2007**	**9/11/2007**	**12/19/2007**	**3/13/2008**	**6/13/2008**	**9/24/2008**	**3/24/2009**	**6/24/2009**	**10/24/2007**	**12/18/2007**	**3/11/2008**	**6/10/2008**
Conventionals (mg/L)																									
Ammonia (as N)	--	--	--	--	--	--	--	--	--	--	2.07	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bicarbonate Alkalinity (as $CaCO_3$)	--	--	--	--	--	--	--	--	--	--	495	568	521	462	--	--	--	--	--	--	--	--	--	--	--
Carbonate Alkalinity (as $CaCO_3$)	--	--	--	--	--	--	--	--	--	--	0.8 U	0.8 U	0.8 U	0.8 U	--	--	--	--	--	--	--	--	--	--	--
Hydroxide Alkalinity (as $CaCO_3$)	--	--	--	--	--	--	--	--	--	--	--	0.8 U	0.8 U	0.8 U	--	--	--	--	--	--	--	--	--	--	--
Total alkalinity	--	--	--	--	--	--	--	--	--	--	--	568	--	--	--	--	--	--	208	340	--	--	--	--	--
Chloride	10.8	20.3 D	5.81 D	7.99 D	12.3 D	15.1	5.9	6.2	13	18.7	9.6	12.3	10.4	11	8	20	15.4	21.2	3.2	5.6	--	--	--	--	--
Cyanide	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.003 U	--	--	--	--
Nitrate(as N)	--	--	--	--	--	0.008 U	0.008 U	0.008 U	0.008 U	0.008 U	0.008 U	0.009 U	0.004 U	0.003 U	0.006 U	0.006 U	0.1 U	0.008 U	0.008 U	0.1 U	--	--	--	--	--
Nitrite (as N)	0.1 U	0.1	0.2 U	0.2 U	0.2 U	--	--	--	--	--	--	0.052 J	0.003 U	0.003 U	--	--	--	--	0.004 U	0.007 J	--	--	--	--	--
Sulfate	--	--	--	--	--	--	--	--	--	--	0.06 U	0.11 J	0.007 U	0.007 U	--	--	--	--	0.112 J	0.104 J	--	--	--	--	--
Sulfide	1 U	1 U	20 U	20 U	20 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.2 U	0.004 U	0.004 U	2 U	2 U	0.4 U	0.4 U	2 U	0.4 U	--	--	--	--
Total Organic Carbon	24.1	11.2	40 D	6.9	10.5	11.8	12.9	14.8	28	13.8	7.4	35.3	22.2	13.9	11.9	30.1	35.4	16.8	5.3	12.4	--	--	--	--	--
Ferrous Iron	1.76	1.02	1.06	3.3	2.51	2.44	2.24	3.3	3.18	2.61	2.42	3.3	2.15	3.3	3.3	3.3	3.3	3.3	3.3	23	--	1.08	0.62 J	0.87	1.14 J
Ferric Iron	21.2	55.3	19.14	22.5	36.29	33	18.8	27.2	48.2	55.5	17.4	49.2	49.8	36.2	30.5	32.2	50	53.1	14.5	1.28	--	0.003	0.003 UJ	0.085	0.004 UJ
Gases (µg/L)																									
Ethane	10 U	10 U	10 U	10 U	10 U	3.3	0.78	0.56	2	0.51	0.67	0.77	0.99	0.39 J	1.3	0.47 J	0.3 J	0.1 U	0.58	0.3 J	--	--	--	--	--
Ethene	78.6	229	127	84.1	177	81	120	61	150	130	140	72	60	120	120	13	130	130	130	62	--	--	--	--	--
Methane	10200	10600	8390 D	6070 DJ	8920 D	4400	6400	3800	7200	5200	5500	7000	4200	4400	4700	580	4600	4000	9500	4400	--	--	--	--	--
Dissolved Metals (mg/L)																									
Antimony	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00011	--	--	--	--
Barium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.113	--	--	--	--
Beryllium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.000009	--	--	--	--
Cadmium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00002	--	--	--	--
Calcium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00035	--	--	--	--
Cobalt	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0033	--	--	--	--
Copper	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00037	--	--	--	--
Iron	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.000041	--	--	--	--
Magnesium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Mercury	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00002 U	--	--	--	--
Nickel	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.185	--	--	--	--
Potassium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Selenium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0003 U	--	--	--	--
Silver	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.000019	--	--	--	--
Sodium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Thallium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.000005 U	--	--	--	--
Tin	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.000024	--	--	--	--
Vanadium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0016	--	--	--	--
Zinc	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0024	--	--	--	--
Total Metals (mg/L)																									
Antimony	--	0.0027 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0001	--	--		
Barium	--	0.22	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.11	0.0225	0.0258	0.0256	0.02393
Beryllium	--	0.0001 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.000011	--	--	--	--
Cadmium	--	0.0004 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00001	0.000023	0.000005 U	0.000008	0.00002 U
Calcium	--	--	--	--	--	--	--	--	--	--	50.4	164	130	107	--	--	--	--	--	--	--	--	--	--	--
Chromium	--	0.0019	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0003	0.00029 U	0.0002 U	0.0002 U	0.00021 U
Cobalt	--	0.0011 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.002	0.000451	0.00014	0.000123	0.000169
Copper	--	0.001 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00056	0.00108	0.00045	0.00071	0.000157
Iron	23	56.3	20.2	25.8	38.8	35.4	21	30.5	51.4	58.1	19.8	52.5	51.9	39.5	33.8	35.5	53.3	56.4	17.8	24.3	--	0.649	0.478 J	0.903	0.779
Lead	--	0.0031 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00011	--	--	--	--
Magnesium	--	--	--	--	--	--	--	--	--	--	19.2	64.9	52.5	44.1	--	--	--	--	--	--	--	7.78	7.2	7.35	7.4
Manganese	--	--	--	--	--	--	--	--	--	--	3.82	--	--	--	--	--	--	--	--	--	--	0.281	0.295	0.272	0.411
Mercury	--	0.0001 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00002 U	v	--	--	0.00003 U
Nickel	--	0.15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.161	0.00048	0.0002	0.0002 U	0.00019
Potassium	--	--	--	--	--	--	--	--	--	--	3.03	4.9	4.1	3.4	--	--	--	--	--	--	--	4.49	3.9	3.72	3.7
Selenium	--	0.0043 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0003	--	--	--	--
Silver	--	0.0008 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00002	0.000009 U	0.000004 U	0.00002 U	0.000009 U
Sodium	--	--	--	--	--	--	--	--	--	--	8.52	22.3	16.2	14.2	--	--	--	--	--	--	--	10.6	9.64	7.9	8.51
Thallium	--	0.0069 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.000005 U	--	--	--	--
Tin	--	0.0037 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.000022	--	--	--	--
Vanadium	--	0.0014	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0016	0.00058	0.00018	0.0002	0.000118
Zinc	--	0.0005 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0017	0.0026	0.0031 U	0.0005 U	0.0006 U

TABLE I-5

GROUNDWATER ANALYTICAL RESULTS FOR NATURAL ATTENUATION PARAMETERS AND METALS (2004-2009)
PSC Washougal Facility
Washougal, Washington

Site ID	MC-15																		MC-15D							
Analyte / **Sample Date**	**3/25/2004**	**6/17/2004**	**9/15/2004**	**12/15/2004**	**3/16/2005**	**6/7/2005**	**9/14/2005**	**11/30/2005**	**3/8/2006**	**6/6/2006**	**9/13/2006**	**12/21/2006**	**3/6/2007**	**6/5/2007**	**9/11/2007**	**12/20/2007**	**3/12/2008**	**6/11/2008**	**3/25/2004**	**3/16/2005**	**6/16/2004**	**6/7/2005**	**9/14/2004**	**9/14/2005**	**11/30/2005**	**12/14/2004**
Conventionals (mg/L)																										
Ammonia (as N)	--	--	--	--	--	--	--	--	--	--	1.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bicarbonate Alkalinity (as $CaCO_3$)	--	--	--	--	--	--	--	--	--	--	108	18 J	15	101	--	--	--	--	--	--	--	--	--	--	--	--
Carbonate Alkalinity (as $CaCO_3$)	--	--	--	--	--	--	--	--	--	--	0.8 U	0.8 U	0.8 U	0.8 U	--	--	--	--	--	--	--	--	--	--	--	--
Hydroxide Alkalinity (as $CaCO_3$)	--	--	--	--	--	--	--	--	--	--	--	0.8 U	0.8 U	0.8 U	--	--	--	--	--	--	--	--	--	--	--	--
Total alkalinity	--	--	--	--	--	--	--	--	--	--	--	18 J	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloride	--	--	--	--	--	--	--	--	--	--	1.2	2.3	0.5	1.6	--	--	--	--	--	--	--	--	--	--	--	--
Cyanide	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate(as N)	--	--	--	--	--	--	--	--	--	--	0.008 U	0.01 U	0.004 U	0.003 U	--	--	--	--	--	--	--	--	--	--	--	--
Nitrite (as N)	--	--	--	--	--	--	--	--	--	--	--	0.006 U	0.003 U	0.003 U	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	--	--	--	--	--	--	--	--	--	--	0.06 U	0.7	0.5	0.5	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total Organic Carbon	--	--	--	--	--	--	--	--	--	--	2.6	2.2	2	2.5	--	--	--	--	--	--	--	--	--	--	--	--
Ferrous Iron	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ferric Iron	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Gases (µg/L)																										
Ethane	10 U	10 U	10 U	10 U	10 U	0.35 U	13	1.9	2	2.4	1.1	0.18 J	0.48 J	1.2	6	0.1 U	0.29 J	0.1 U	10 U	10 U	10 U	5.5	10 U	0.35 U	0.38 U	10 U
Ethene	10 U	10 U	10 U	10 U	10 U	0.55 U	9.1	1.8	1.5	1.5 J	0.5 J	0.16 J	0.4 J	0.54 J	3.8	0.1 U	0.37 J	0.1 U	10 U	10 U	10 U	0.55 U	10 U	0.55 U	0.55 U	10 U
Methane	6310	15000	10000	1700 D	10900 D	5700	8800	2500	1200	6200	10000	1000	1500	6800	7000	0.48 U	2300	6200	812	708	1180	680	935	620	390	402 J
Dissolved Metals (mg/L)																										
Antimony	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Barium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Beryllium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Calcium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cobalt	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Copper	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Mercury	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nickel	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Potassium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Selenium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Silver	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sodium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Thallium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tin	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vanadium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Zinc	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total Metals (mg/L)																										
Antimony	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Barium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Beryllium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Calcium							--	--	--	--	25.6	4.24	4.03	22.4	--	--	--	--								
Chromium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cobalt	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Copper	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	--	--	--	--	--	--	--	--	--	--	--	0.785	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	--	--	--	--	--	--	--	--	--	--	7.66	1.51	1.14	7.2	--	--	--	--								
Manganese	--	--	--	--	--	--	--	--	--	--	1.68	--	--	--	--	--	--	--								
Mercury	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nickel	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Potassium							--	--	--	--	2.66	0.8 U	0.9	2.8	--	--	--	--								
Selenium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Silver	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sodium							--	--	--	--	5.04	0.99	1.09	5.02	--	--	--	--								
Thallium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tin	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vanadium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Zinc	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE I-5

GROUNDWATER ANALYTICAL RESULTS FOR NATURAL ATTENUATION PARAMETERS AND METALS (2004-2009)
PSC Washougal Facility
Washougal, Washington

Site ID	MC-15D										MC-16																	
Analyte / **Sample Date**	**3/8/2006**	**6/6/2006**	**9/13/2006**	**12/21/2006**	**3/6/2007**	**6/5/2007**	**9/11/2007**	**12/20/2007**	**3/12/2008**	**6/12/2008**	**3/25/2004**	**6/17/2004**	**9/15/2004**	**12/15/2004**	**3/16/2005**	**6/7/2005**	**9/14/2005**	**11/30/2005**	**3/8/2006**	**6/7/2006**	**9/13/2006**	**12/21/2006**	**3/7/2007**	**6/5/2007**	**9/11/2007**	**12/20/2007**	**3/12/2008**	**6/12/2008**
Conventionals (mg/L)																												
Ammonia (as N)	--	--	0.036 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.04	--	--	--	--	--	--	--
Bicarbonate Alkalinity (as $CaCO_3$)	--	--	163	186	194	194	--	--	--	--	--	--	--	--	--	--	--	--	--	--	87	42	59	65	--	--	--	--
Carbonate Alkalinity (as $CaCO_3$)	--	--	0.8 U	0.8 U	0.8 U	0.8 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.8 U	0.8 U	0.8 U	0.8 U	--	--	--	--
Hydroxide Alkalinity (as $CaCO_3$)	--	--	--	0.8 U	0.8 U	0.8 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.8 U	0.8 U	0.8 U	--	--	--	--
Total alkalinity	--	--	--	186	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	42	--	--	--	--	--	--
Chloride	--	--	4.8	5.9	6.4	6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.9	1.1	1.1	1.9	--	--	--	--
Cyanide	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate(as N)	--	--	0.2	0.1	0.004 U	0.003 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.008 U	0.008 U	0.004 U	0.003 U	--	--	--	--
Nitrite (as N)	--	--	--	0.006 U	0.003 U	0.003 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.006 U	0.003 U	0.003 U	--	--	--	--
Sulfate	--	--	2.1	1.7	1.6	1.6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.06 U	1.3	0.4	1.4	--	--	--	--
Sulfide	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total Organic Carbon	--	--	0.35 J	0.7	0.5	0.36 J	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2.2	1.9	1.4	1.9	--	--	--	--
Ferrous Iron	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ferric Iron	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Gases (µg/L)																												
Ethane	0.38 U	0.38 U	0.47 J	0.27 J	0.1 U	0.3 J	0.31 J	7.2	0.5 U	0.1 U	10 U	10 U	10 U	10 U	10 U	3	4.4	0.42 J	3.8	6.9	1.9	0.62	0.71	0.93	2.8	0.19 J	0.17 J	0.27 J
Ethene	0.55 U	0.55 U	0.33 J	0.22 J	0.2 J	0.11 J	0.12 J	0.19 J	0.14 J	0.1 U	10 U	10 U	10 U	10 U	10 U	2	4	0.55 U	2.6	4.7	0.96 J	0.42 J	0.57 J	0.81 J	2.1	0.1 U	1.5 U	0.1 U
Methane	580	620	710	710	770	720	790	740	390	1100	10200	11300	10900	10800 D	12000 D	7000	6500	3000	4400	4900	8000	530	2000	3400	5600	2700	2500	5300
Dissolved Metals (mg/L)																												
Antimony	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Barium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Beryllium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Calcium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cobalt	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Copper	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Mercury	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nickel	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Potassium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Selenium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Silver	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sodium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Thallium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tin	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vanadium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Zinc	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total Metals (mg/L)																												
Antimony	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Barium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Beryllium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Calcium	--	--	31.2	35.8	38.6	36.6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	17.4	8.12	12.1	14.6	--	--	--	--
Chromium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cobalt	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Copper	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	--	--	16.3	17.9	19.5	18.6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese	--	--	0.183	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.24	--	--	--	--	--	--	--
Mercury	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nickel	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Potassium	--	--	5.36	6.2	6.1	6.2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2.03	1.1	1.9	1.6	--	--	--	--
Selenium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Silver	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sodium	--	--	12.3	13.7	13.9	13.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	4.15	4.52	3.1	3.46	--	--	--	--
Thallium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tin	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vanadium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Zinc	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE I-5

GROUNDWATER ANALYTICAL RESULTS FOR NATURAL ATTENUATION PARAMETERS AND METALS (2004-2009)
PSC Washougal Facility
Washougal, Washington

Site ID	MC-17																		MC-17D									
Analyte **Sample Date**	**3/25/2004**	**6/17/2004**	**9/15/2004**	**12/15/2004**	**3/16/2005**	**6/7/2005**	**9/14/2005**	**11/30/2005**	**3/7/2006**	**6/7/2006**	**9/14/2006**	**12/20/2006**	**3/8/2007**	**6/7/2007**	**9/13/2007**	**12/20/2007**	**3/12/2008**	**6/12/2008**	**3/25/2004**	**6/17/2004**	**9/15/2004**	**12/15/2004**	**3/16/2005**	**6/9/2005**	**9/15/2005**	**12/1/2005**	**3/7/2006**	**6/7/2006**
Conventionals (mg/L)																												
Ammonia (as N)	--	--	--	--	--	--	--	--	--	--	0.77	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bicarbonate Alkalinity (as $CaCO_3$)	--	--	--	--	--	--	--	--	--	--	100	45	56	94	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbonate Alkalinity (as $CaCO_3$)	--	--	--	--	--	--	--	--	--	--	0.8 U	0.8 U	0.8 U	0.8 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hydroxide Alkalinity (as $CaCO_3$)	--	--	--	--	--	--	--	--	--	--	--	0.8 U	0.8 U	0.8 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total alkalinity	--	--	--	--	--	--	--	--	--	--	--	45	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloride	--	--	--	--	--	--	--	--	--	--	1.1	1.3	1.7	1.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cyanide	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate(as N)	--	--	--	--	--	--	--	--	--	--	0.008 U	2.2	9.1	0.003 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrite (as N)	--	--	--	--	--	--	--	--	--	--	--	0.039 J	0.003 U	0.003 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	--	--	--	--	--	--	--	--	--	--	0.14 J	2.5	4.2	0.007 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total Organic Carbon	--	--	--	--	--	--	--	--	--	--	1.6	1.1	1.1	1.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ferrous Iron	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ferric Iron	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Gases (µg/L)																												
Ethane	10 U	10 U	10 U	10 U	10 U	0.76	1.5	1.8	0.57	2.2	3.2	0.85	0.22 J	0.78	1.3	0.1 U	0.5 U	0.1 U	10 U	10 U	10 U	10 U	10 U	0.35 U	0.35 U	0.38 U	0.38 U	0.38 U
Ethene	10 U	10 U	10 U	10 U	10 U	0.62 J	1.2 J	1.6	0.55 U	1.4 J	1.5 J	0.51 J	0.1 U	0.68 J	0.53 J	0.1 U	1.5 U	0.1 U	10 U	10 U	10 U	10 U	10 U	0.55 U	0.55 U	0.55 U	0.55 U	0.55 U
Methane	4120	5750	8090	5840 D	11000 D	4700	5900	3500	1600	3000	7200	490	570	2100	7300	1100	700	3900	13.7	1.2 U	30.8	6.34	70.6 J	0.3 U	76 J	36	18	1.1
Dissolved Metals (mg/L)																												
Antimony	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Barium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Beryllium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Calcium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cobalt	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Copper	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	--	--	--	--	--	--	--	--	--	--	7.98	3.63	6.96	6.66	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese	--	--	--	--	--	--	--	--	--	--	1.54	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Mercury	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nickel	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Potassium	--	--	--	--	--	--	--	--	--	--	2.02	1.7	1.7	0.9	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Selenium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Silver	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sodium	--	--	--	--	--	--	--	--	--	--	4.29	3.53	4.34	3.96	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Thallium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tin	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vanadium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Zinc	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total Metals (mg/L)																												
Antimony	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Barium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Beryllium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Calcium	--	--	--	--	--	--	--	--	--	--	24.2	13.9	23.8	22.2	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cobalt	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Copper	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	--	--	--	--	--	--	--	--	--	--	7.98	3.63	6.96	6.66	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese	--	--	--	--	--	--	--	--	--	--	1.54	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Mercury	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nickel	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Potassium	--	--	--	--	--	--	--	--	--	--	2.02	1.7	1.7	0.9	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Selenium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Silver	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sodium	--	--	--	--	--	--	--	--	--	--	4.29	3.53	4.34	3.96	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Thallium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tin	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vanadium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Zinc	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE I-5

GROUNDWATER ANALYTICAL RESULTS FOR NATURAL ATTENUATION PARAMETERS AND METALS (2004-2009)
PSC Washougal Facility
Washougal, Washington

Site ID	MC-17D (continued)								MC-19D																	
Analyte / Sample Date	9/14/2006	12/20/2006	3/8/2007	6/7/2007	9/13/2007	12/20/2007	3/12/2008	6/12/2008	3/24/2004	6/16/2004	9/15/2004	12/14/2004	3/15/2005	6/7/2005	9/13/2005	11/29/2005	3/8/2006	6/6/2006	9/13/2006	12/21/2006	3/7/2007	6/7/2007	9/12/2007	12/21/2007	3/14/2008	6/13/2008
Conventionals (mg/L)																										
Ammonia (as N)	0.032 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.02 U	--	--	--	--	--	--	--
Bicarbonate Alkalinity (as $CaCO_3$)	92	80	83	76	--	--	--	--	--	--	--	--	--	--	--	--	--	--	91	73	70	80	--	--	--	--
Carbonate Alkalinity (as $CaCO_3$)	0.8 U	0.8 U	0.8 U	0.8 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.8 U	0.8 U	0.8 U	0.8 U	--	--	--	--
Hydroxide Alkalinity (as $CaCO_3$)	--	0.8 U	0.8 U	0.8 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.8 U	0.8 U	0.8 U	--	--	--	--
Total alkalinity	--	80	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	73			--	--	--	--
Chloride	1.6	1.9	1.9	1.8	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.4	1.7	1.7	1.6	--	--	--	--
Cyanide	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate(as N)	0.3	0.3	0.3	0.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.07 J	0.1	0.1	0.003 U	--	--	--	--
Nitrite (as N)	--	0.006 U	0.003 U	0.003 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.006 U	0.003 U	0.003 U	--	--	--	--
Sulfate	2.8	2.7	2.5	3.4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2.2	2.7	2.6	2.1	--	--	--	--
Sulfide	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total Organic Carbon	0.14 J	0.24 J	0.16 J	0.06 J	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.15 J	0.17 J	0.1 J	0.07 J	--	--	--	--
Ferrous Iron	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ferric Iron	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Gases (µg/L)																										
Ethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.1 U	10 U	10 U	10 U	10 U	10 U	0.35 U	0.35 U	0.38 U	0.38 U	0.38 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.18 J	0.5 U	0.1 U
Ethene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	1.5 U	0.1 U	10 U	10 U	10 U	10 U	10 U	0.55 U	0.55 U	0.55 U	0.55 U	0.55 U	0.1 U	0.1 U	0.1 U	0.12 J	0.1 U	0.1 U	1.5 U	0.1 U
Methane	41	0.78	14	0.3 U	71	25	38	0.48 U	4.99	6	5.3 U	6.55 J	7.09	8.9	8.3	10	3.8	9	14	11	15	86	7.9	10	18	22
Dissolved Metals (mg/L)																										
Antimony	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Barium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Beryllium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Calcium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cobalt	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Copper	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	7.3	7.19	7.49	6.33	--	--	--	--	--	--	--	--	--	--	--	--	--	--	8.57	6.91	7.25	8.84	--	--	--	--
Manganese	0.00495	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.021 EJ	--	--	--	--	--	--	--
Mercury	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nickel	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Potassium	3.1	3	3.4	4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2.8	2.9	3	2.9	--	--	--	--
Selenium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Silver	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sodium	9.04	8.9	9.06	8.17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	8.63	7.63	7.9	8.85	--	--	--	--
Thallium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tin	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vanadium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Zinc	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total Metals (mg/L)																										
Antimony	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Barium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Beryllium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Calcium	15.6	14.7	15.4	12.9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	17	13.6	14.4	17.5	--	--	--	--
Chromium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cobalt	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Copper	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	7.3	7.19	7.49	6.33	--	--	--	--	--	--	--	--	--	--	--	--	--	--	8.57	6.91	7.25	8.84	--	--	--	--
Manganese	0.00495	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.021 EJ	--	--	--	--	--	--	--
Mercury	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nickel	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Potassium	3.1	3	3.4	4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2.8	2.9	3	2.9	--	--	--	--
Selenium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Silver	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sodium	9.04	8.9	9.06	8.17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	8.63	7.63	7.9	8.85	--	--	--	--
Thallium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tin	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vanadium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Zinc	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE I-5

GROUNDWATER ANALYTICAL RESULTS FOR NATURAL ATTENUATION PARAMETERS AND METALS (2004-2009)
PSC Washougal Facility
Washougal, Washington

Site ID	MC-20																	MC-20D				MC-21						
Analyte / Sample Date	3/23/2004	6/15/2004	12/16/2004	3/17/2005	6/9/2005	12/1/2005	3/9/2006	6/8/2006	12/19/2006	3/5/2007	6/4/2007	12/19/2007	3/13/2008	6/13/2008	9/22/2008	9/25/2008	3/23/2009	10/23/2007	12/18/2007	3/11/2008	6/10/2008	3/23/2004	6/15/2004	9/16/2004	12/16/2004	9/15/2005	3/17/2005	6/8/2005
Conventionals (mg/L)																												
Ammonia (as N)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bicarbonate Alkalinity (as $CaCO_3$)	--	--	--	--	--	--	--	--	74	147	77	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbonate Alkalinity (as $CaCO_3$)	--	--	--	--	--	--	--	--	0.8 U	0.8 U	0.8 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hydroxide Alkalinity (as $CaCO_3$)	--	--	--	--	--	--	--	--	0.8 U	0.8 U	0.8 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total alkalinity	--	--	--	--	--	--	--	--	74	--	--	--	--	--	--	138	51	--	--	--	--	--	--	--	--	--	--	--
Chloride	2.51	2.32	14.8 D	12.2 D	5.4	15.9	1.4	2.2	5.3	2.6	2.1	14	4.6	2.8	--	5.2	4.5	--	--	--	--	1.53	0.81	1.97	0.998 J	1.4	1.59	0.9
Cyanide	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate(as N)	--	--		--	0.008 U	0.008 U	0.008 U	0.008 U	0.7	0.4	0.003 U	0.006 U	0.1 U	0.008 U	--	0.074 J	0.1 U	--	--	--	--	--	--		--	0.008 U	--	0.5
Nitrite (as N)	0.1 U	0.1 U	0.2 U	0.2 U	--	--	--	--	0.006 U	0.003 U	0.003 U	--	--	--	--	0.004 U	0.1 U	--	--	--	--	0.1 U	0.1 U	0.2 U	0.2 U	--	0.2 U	--
Sulfate	--	--	--	--	--	--	--	--	3.8	5	0.5	--	--	--	--	11.7	2.3	--	--	--	--	--	--	--	--	--	--	--
Sulfide	1 U	1.12	20 U	20 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.2 U	0.004 U	2 U	2 U	0.4 U	--	0.4 U	2 U	--	--	--	--	1 U	1 U	20 U	20 U	0.3 U	20 U	0.3 U
Total Organic Carbon	2.58	3.59	1.19	12.5	3.3	16.3	3	3.4	3.6	2.3	2.4	12.2	3.8	1.8	--	3.2	3	--	--	--	--	1.64	2.16	11.2 D	1.69	1.9	1.52	1.9
Ferrous Iron	1.4	2.08	3.3	2.81	2.63	3.3	2.34	3.3	3.3	3.3	3.3	3.3	3.3	3.3	--	3.3	10.2	1.18	1.41 J	1.63	1.13	2.57	1.57	1.75	3.1	2.74	3.3	2.9
Ferric Iron	1.83	15.1	25.1	47.49	20.7	21.5	4.7	18.3	0.54	0.86	5.2	42.2	16.3	6.1	--	14.9	1.6	4.18	0.003 UJ	0.11	0.57	2.73	2.24	7.46	4.02	6.35	3.98	0.15
Gases (µg/L)																												
Ethane	10 U	10 U	10 U	10 U	0.35 U	0.38 U	0.38 U	0.71	0.1 U	0.36 J	0.19 J	0.2 J	0.33 J	0.1 U	0.11 U	--	0.5 U	--	--	--	--	10 U	10 U	10 U	10 U	1.8	10 U	0.35 U
Ethene	10 U	10 U	10 U	10 U	0.68 J	0.79 J	1.2 J	1.1 J	0.1 U	0.4 J	0.36 J	0.17 J	0.52 J	0.11 J	0.59 J	--	1.5 U	--	--	--	--	10 U	10 U	17.2	10 U	15	10 U	1.2 J
Methane	1530	5040	413 J	10700 D	2000	900	680	1500	200	820	650	720	1800	480	2000	--	630	--	--	--	--	888	2580	13400 D	1460 DJ	7100	5170 D	1400
Dissolved Metals (mg/L)																												
Antimony	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Barium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0214	--	0.0247	--	--	--	--	--	--	--	--
Beryllium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00002	--	0.00002 U	--	--	--	--	--	--	--	--
Calcium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00034 U	--	0.0002 U	--	--	--	--	--	--	--	--
Cobalt	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00127	--	0.000128	--	--	--	--	--	--	--	--
Copper	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00016	--	0.0001 U	--	--	--	--	--	--	--	--
Iron	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.883	--	--	--	--	--	--	--	--
Lead	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	7.86	--	7.52	--	--	--	--	--	--	--	--
Manganese	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.225	--	0.172	--	--	--	--	--	--	--	--
Mercury	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nickel	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00058	--	0.0002 U	--	--	--	--	--	--	--	--
Potassium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.82	--	3.45	--	--	--	--	--	--	--	--
Selenium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Silver	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.000012	--	0.00002 U	--	--	--	--	--	--	--	--
Sodium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	11.5	--	7.04	--	--	--	--	--	--	--	--
Thallium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tin	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vanadium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00022	--	0.000052	--	--	--	--	--	--	--	--
Zinc	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0008 U	--	0.0005 U	--	--	--	--	--	--	--	--
Total Metals (mg/L)																												
Antimony	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Barium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0416	0.0277	0.0287	0.02985	--	--	--	--	--	--	--
Beryllium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.000025	0.000013	0.000013	0.00002 U	--	--	--	--	--	--	--
Calcium	--	--	--	--	--	--	--	--	18.6	37.7	17.4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00239	0.0003 U	0.0002 U	0.00032 U	--	--	--	--	--	--	--
Cobalt	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00123	0.000108	0.000089	0.000112	--	--	--	--	--	--	--
Copper	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00361	0.00022	0.00034	0.000562	--	--	--	--	--	--	--
Iron	5.3	17.2	28.4	50.3	23.3	24.8	7.04	21.6	3.84	4.16	8.5	45.5	19.6	9.4	--	18.2	11.8	5.36	1.3 J	1.74	1.7	3.23	3.81	9.21	7.12	9.1	7.28	3.05
Lead	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	--	--	--	--	--	--	--	--	6.48	11.7	5.45	--	--	--	--	--	--	8.68	7.78	7.59	7.69	--	--	--	--	--	--	--
Manganese	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.269	0.207	0.234	0.21	--	--	--	--	--	--	--
Mercury	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00003 U	--	--	--	--	--	--	--
Nickel	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00155	0.00022	0.0002 U	0.00037	--	--	--	--	--	--	--
Potassium	--	--	--	--	--	--	--	--	0.8 U	2.8	1.9	--	--	--	--	--	--	4.03	3.6	3.51	3.4	--	--	--	--	--	--	--
Selenium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Silver	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.000011	0.000004 U	0.00002 U	0.000009 U	--	--	--	--	--	--	--
Sodium	--	--	--	--	--	--	--	--	8.92	7.78	4.96	--	--	--	--	--	--	12.3	7.82	7.3	7.38	--	--	--	--	--	--	--
Thallium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tin	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vanadium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00548	0.00019	0.000293	0.000251	--	--	--	--	--	--	--
Zinc	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0059	0.0014 U	0.0005 U	0.0006 U	--	--	--	--	--	--	--

TABLE I-5

GROUNDWATER ANALYTICAL RESULTS FOR NATURAL ATTENUATION PARAMETERS AND METALS (2004-2009)
PSC Washougal Facility
Washougal, Washington

Site ID	MC-21 (Continued)													MC-24					MC-24D						MC-25			
Analyte / Sample Date	12/1/2005	3/9/2006	6/8/2006	9/12/2006	12/19/2006	3/6/2007	6/5/2007	9/11/2007	12/19/2007	3/13/2008	6/13/2008	9/23/2008	3/24/2009	10/24/2007	12/18/2007	3/12/2008	6/10/2008	6/11/2008	10/24/2007	12/18/2007	3/11/2008	6/10/2008	9/24/2008	3/27/2009	10/24/2007	12/19/2007	3/12/2008	6/11/2008
Conventionals (mg/L)																												
Ammonia (as N)	--	--	--	0.95	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bicarbonate Alkalinity (as $CaCO_3$)	--	--	--	74	36	41	76	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbonate Alkalinity (as $CaCO_3$)	--	--	--	0.8 U	0.8 U	0.8 U	0.8 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hydroxide Alkalinity (as $CaCO_3$)	--	--	--	--	0.8 U	0.8 U	0.8 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total alkalinity	--	--	--	--	36		--	--	--	--	--	66	64	--	--	--	--	--	--	--	--	--	62	573	--	--	--	--
Chloride	2.1	2	1.2	1.1	1.8	3	9.4	1.3	1.3	1	1.3	1	1.8	--	--	--	--	--	--	--	--	--	32.4	41	--	--	--	--
Cyanide	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate(as N)	0.3	0.16 J	0.019 J	0.008 U	0.2	9.8	0.4	0.006 U	0.5	0.3	0.2	0.008 U	7.5	--	--	--	--	--	--	--	--	--	0.008 U	0.1 U	--	--	--	--
Nitrite (as N)	--	--	--	--	0.022 J	0.003 U	0.003 U	--	--	--	--	0.004 U	0.1 U	--	--	--	--	--	--	--	--	--	0.004 U	0.4	--	--	--	--
Sulfate	--	--	--	0.16 J	1.4	4	0.8	--	--	--	--	0.133 J	5.5	--	--	--	--	--	--	--	--	--	0.8	1.1	--	--	--	--
Sulfide	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.2 U	0.004 U	0.004 U	2 U	2 U	0.4 U	0.4 U	2 U	--	--	--	--	--	--	--	--	--	0.4 U	2 U	--	--	--	--
Total Organic Carbon	1.8	1.3	2.2	2	5.6	4.5	6.5	2.2	1.6	5.7	3.3	2	5.5	--	--	--	--	--	--	--	--	--	1.6	2.1	--	--	--	--
Ferrous Iron	3.3	1.56	2.83	3.3	1.89	2.79	3.3	3.3	0.71	3.3	3.3	3.3	3.2	0.45	0.71	0.49	0.4	--	0.22	0.26	0.76	0.68	0.37	0.4	1.04	0.83	0.55	0.88
Ferric Iron	1.12	1.4	1 U	5.8	0.97	0.16	2.8	5.03	3.75	3.63	1.1	4.56	1.56	1.98	3.48	1.73	1.4	--	0.83	1.18	1.13	0.72	0.14	0.32	0.003	0.21	0.36	0.32
Gases (µg/L)																												
Ethane	0.43 J	0.38 U	0.38 U	0.55	0.4 J	0.64	0.3 J	2.2	0.21 J	0.3 J	0.36 J	0.23 J	0.5 U	--	--	--	--	--	--	--	--	--	0.11 U	93	--	--	--	--
Ethene	2	0.55 U	1.6	10	0.6 J	0.91 J	1.2 J	12	1.2 J	1.3 J	1.2 J	13	1.5 UJ	--	--	--	--	--	--	--	--	--	0.79 J	1.6	--	--	--	--
Methane	1200	300	81	5700	540	880	1400	5100	1100	2400	4000	8200	2300	--	--	--	--	--	--	--	--	--	2900	3800	--	--	--	--
Dissolved Metals (mg/L)																												
Antimony	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Barium	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0047	0.00512	0.0078	--	0.00622	0.083	--	0.0876	--	--	--	0.0276	0.0271	0.0214	--
Beryllium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium	--	--	--	--	--	--	--	--	--	--	--	--	--	0.000006	0.000016	0.000009	--	0.00002 U	0.000026	--	0.000013	--	--	--	0.000044	0.000021	0.000013	--
Calcium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00044 U	0.00097 U	0.0002 U	--	0.00069 U	0.00062 U	--	0.0002 U	--	--	--	0.00035 U	0.00031 U	0.0002 U	--
Cobalt	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0012	0.00119	0.000571	--	0.00327	0.00618	--	0.0038	--	--	--	0.000686	0.000883	0.000157	--
Copper	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00169	0.00261	0.003	--	0.00212	0.00133	--	0.0014	--	--	--	0.00123	0.00081	0.00076	--
Iron	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.1	1.67	--	0.678	--	--	0.437	--	--	--	--	0.195	0.09	--
Lead	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	--	--	--	--	--	--	--	--	--	--	--	--	--	1.95	1.56	2.21	--	2.62	64.2	--	62.8	--	--	--	4.08	5.07	4.28	--
Manganese	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0077	0.0127	0.0135	--	0.0119	0.64	--	0.366	--	--	--	0.122	0.00973	0.0018	--
Mercury	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nickel	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00049	0.00061	0.0002 U	--	0.00097	0.0057	--	0.0052	--	--	--	0.00161	0.00126	0.0002 U	--
Potassium	--	--	--	--	--	--	--	--	--	--	--	--	--	1.87	1.8	1.69	--	2.1	9.05	--	8.72	--	--	--	2.94	2.8	2.48	--
Selenium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Silver	--	--	--	--	--	--	--	--	--	--	--	--	--	0.000009 U	0.000006	0.00002 U	--	0.000009 U	0.000009 U	--	0.00002 U	--	--	--	0.000009 U	0.000004 U	0.00002 U	--
Sodium	--	--	--	--	--	--	--	--	--	--	--	--	--	1.95	1.54	2.02	--	2.26	22.9	--	22.7	--	--	--	3.15	5.99	3.74	--
Thallium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tin	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vanadium	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00385	0.00404	0.0042	--	0.004579	0.0073	--	0.0051	--	--	--	0.00092	0.00148	0.0012	--
Zinc	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0076	0.0033 U	0.0005 U	--	0.0025 U	0.0029	--	0.0005 U	--	--	--	0.0053	0.0022 U	0.0005 U	--
Total Metals (mg/L)																												
Antimony	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Barium	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0113	0.0142	0.0096	0.01004	--	0.0843	0.104	0.0962	0.09132	--	--	0.0301	0.0306	0.0261	0.03477
Beryllium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00001	0.000012	0.00002 U	0.00002 U	--	0.000031	0.000018	0.000028	0.000035	--	--	0.000042	0.000028	0.000025	0.000026
Calcium	--	--	--	16.8	8.33	19.1	18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00093 U	0.00123	0.00077	0.00087 U	--	0.00086 U	0.00063 U	0.00088	0.00066 U	--	--	0.00045 U	0.00052 U	0.0002 U	0.00055 U
Cobalt	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00064	0.00107	0.000475	0.000462	--	0.00644	0.00519	0.0043	0.008936	--	--	0.0006	0.000374	0.000295	0.000378
Copper	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00408	0.00682	0.0036	0.003802	--	0.0023	0.00253	0.0027	0.003231	--	--	0.00163	0.00131	0.0012	0.001727
Iron	4.46	2.98	3.41	9.05	2.86	2.95	6.11	8.33	4.46	6.93	4.4	7.86	4.73	2.43	4.19	2.22	1.8	--	1.05	1.44	1.89	1.4	0.509	0.685	0.865	1.04	0.911	1.2
Lead	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	--	--	--	5.23	2.89	6.89	6.72	--	--	--	--	--	--	2.18	2.17	2.38	2.82	--	63.4	60.5	62.9	55.8	--	--	4.23	5.19	4.42	4.97
Manganese	--	--	--	1.34	--	--	--	--	--	--	--	--	--	0.0238	0.0392	0.0187	0.0169	--	0.574	0.522	0.392	0.735	--	--	0.12	0.0227	0.0146	0.0189
Mercury	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00003 U	--	--	--	--	0.00003 U	--	--	--	--	--	0.00003 U
Nickel	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0009	0.00115	0.0002 U	0.00077	--	0.00599	0.00611	0.0056	0.01095	--	--	0.0017	0.00148	0.0002 U	0.00189
Potassium	--	--	--	2.35	1.3	1.8	1.4	--	--	--	--	--	--	1.95	1.1	1.78	2.2	--	8.97	9.1	8.82	8.1	--	--	2.97	2.6	2.52	3
Selenium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Silver	--	--	--	--	--	--	--	--	--	--	--	--	--	0.000011	0.000006	0.00002 U	0.000009 U	--	0.000015	0.000004 U	0.00002 U	0.000009 U	--	--	0.000009 U	0.000012	0.00002 U	0.000009 U
Sodium	--	--	--	4.08	2.75	3.79	3.7	--	--	--	--	--	--	1.93	1.64	2.16	2.29	--	21.5	22.4	22.7	21.9	--	--	3.29	5.85	3.75	3.45
Thallium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tin	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vanadium	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0057	0.00664	0.0046	0.005373	--	0.00965	0.00746	0.0091	0.005053	--	--	0.00134	0.00233	0.0019	0.002417
Zinc	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0044	0.0092	0.0005 U	0.0042 U	--	0.0081	0.0025 U	0.0005 U	0.0033 U	--	--	0.0046	0.0059 U	0.0005 U	0.0037

TABLE I-5

GROUNDWATER ANALYTICAL RESULTS FOR NATURAL ATTENUATION PARAMETERS AND METALS (2004-2009)
PSC Washougal Facility
Washougal, Washington

Site ID	MC-25D						MC-30		MC-30D		MC-31		MC-107													
Analyte / Sample Date	**10/24/2007**	**12/18/2007**	**3/12/2008**	**6/11/2008**	**9/25/2008**	**3/26/2009**	**9/29/2008**	**3/25/2009**	**9/29/2008**	**3/25/2009**	**9/29/2008**	**3/25/2009**	**3/25/2004**	**6/17/2004**	**9/15/2004**	**12/15/2004**	**3/15/2005**	**6/9/2005**	**9/13/2005**	**11/30/2005**	**3/8/2006**	**6/7/2006**	**9/13/2006**	**12/20/2006**	**3/7/2007**	**6/6/2007**
Conventionals (mg/L)																										
Ammonia (as N)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.34	--	--	--
Bicarbonate Alkalinity (as $CaCO_3$)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	75	44	50	60
Carbonate Alkalinity (as $CaCO_3$)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.8 U	0.8 U	0.8 U	0.8 U
Hydroxide Alkalinity (as $CaCO_3$)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.8 U	0.8 U	0.8 U
Total alkalinity	--	--	--	--	470	521	64	49	706	870	68	41	--	--	--	--	--	--	--	--	--	--	--	44	--	--
Chloride	--	--	--	--	60.4	65.8	1.1	1.3	0.5	3.4	1	2.3	--	--	--	--	--	--	--	--	--	--	1.1	1.5	1.3	1
Cyanide	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate(as N)	--	--	--	--	0.008 U	0.3	0.008 U	0.4	0.033 J	0.3	0.008 U	0.3	--	--	--	--	--	--	--	--	--	--	0.008 U	0.024 U	0.004 U	0.003 U
Nitrite (as N)	--	--	--	--	0.3	0.5	0.004 U	0.1 U	0.004 U	0.5 U	0.004 U	0.1 U	--	--	--	--	--	--	--	--	--	--	--	0.006 U	0.003 U	0.003 U
Sulfate	--	--	--	--	3.2	2.9	0.118 J	18	2.5	0.5	0.184 J	1.5	--	--	--	--	--	--	--	--	--	--	0.16 J	0.8	0.6	1
Sulfide	--	--	--	--	0.4 U	2 U	0.4 U	2 U	0.4 U	2 U	0.4 U	2 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total Organic Carbon	--	--	--	--	2.6	3.2	2.4	1.8	3.3	3.5	1.9	1.3	--	--	--	--	--	--	--	--	--	--	2.1	1	1.1	1.3
Ferrous Iron	1.65	2.15 J	1.91	1.86	0.65	2.09	0.98	1.3	3.3	3.2	3.3	4.1	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ferric Iron	1.07	0.003 UJ	4.49	0.54	0.58	0	0.15	0	1.58	1.66	1.5	1.49	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Gases (µg/L)																										
Ethane	--	--	--	--	0.11 U	190 J	0.11 J	0.5 U	2.2	0.5 U	0.22 J	0.2 J	10 U	10 U	10 U	10 U	10 U	0.35 U	0.35 U	0.38 U	0.38 U	0.49 J	9.6	0.11 J	0.1 U	4.9
Ethene	--	--	--	--	2.3	3.9	0.19 U	1.5 U	1.2 J	1.5 U	0.19 U	1.5 U	10 U	10 U	10 U	10 U	10 U	0.55 U	0.55 U	0.55 U	0.55 U	0.55 U	7.5	0.1 U	0.1 U	4.1
Methane	--	--	--	--	4400	5100	3000	400	260	340	9800	6500	1680	2400	700	393 J	606 D	82	650	300	250	990	3900	170	190	1200
Dissolved Metals (mg/L)																										
Antimony	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Barium	0.132	0.119	0.108	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Beryllium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium	0.000042	0.000028	0.000023	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Calcium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium	0.00174 U	0.0002 U	0.0002 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cobalt	0.017	0.0125	0.0089	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Copper	0.00978	0.00871	0.0069	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	--	1.57	1.36	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	61	47.9	48.6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese	0.874	0.504	0.41	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Mercury	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nickel	0.0201	0.0165	0.0124	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Potassium	9.35	7.9	8.09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Selenium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Silver	0.000009 U	0.000004 U	0.00002 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sodium	22.9	21.1	21.7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Thallium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tin	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vanadium	0.00397	0.00185	0.0026	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Zinc	0.0021	0.0022 U	0.0005 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total Metals (mg/L)																										
Antimony	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Barium	0.135	0.128	0.132	0.104	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Beryllium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium	0.000035	0.000034	0.000066	0.00002 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Calcium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	18	10.7	10.5	13.2
Chromium	0.00111 U	0.00074 U	0.0021	0.00055 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cobalt	0.0174	0.0121	0.0098	0.009462	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Copper	0.0107	0.0109	0.014	0.00671	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	2.72	1.92 J	6.4	2.4	1.23	2.86	1.13	1.34	4.88	4.88	4.8	5.6	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	58.7	47.3	50.7	41.4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5.48	3.61	3.53	4.4
Manganese	0.864	0.497	0.439	0.937	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.799	--	--	--
Mercury	--	--	--	0.00003 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nickel	0.0192	0.0167	0.014	0.01455	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Potassium	8.96	8.3	8.56	7.3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2.06	1.1	1.3	1.2
Selenium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Silver	0.000015	0.000004 U	0.00002 U	0.000009 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sodium	21.9	20.8	22.8	20.3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.99	2.59	2.34	3
Thallium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tin	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vanadium	0.00654	0.00476	0.0124	0.002116	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Zinc	0.003	0.0048 U	0.0005 U	0.0024 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE I-5

GROUNDWATER ANALYTICAL RESULTS FOR NATURAL ATTENUATION PARAMETERS AND METALS (2004-2009)
PSC Washougal Facility
Washougal, Washington

Site ID	MC-107 (continued)				MC-118D																			
Analyte / **Sample Date**	**9/12/2007**	**12/20/2007**	**3/14/2008**	**6/11/2008**	**3/24/2004**	**6/17/2004**	**9/15/2004**	**12/14/2004**	**3/15/2005**	**6/8/2005**	**9/14/2005**	**11/30/2005**	**3/8/2006**	**6/7/2006**	**9/12/2006**	**12/21/2006**	**3/7/2007**	**6/6/2007**	**9/13/2007**	**12/21/2007**	**3/14/2008**	**6/13/2008**	**9/25/2008**	**3/26/2009**
Conventionals (mg/L)																								
Ammonia (as N)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.8	--	--	--	--	--	--	--	--	--
Bicarbonate Alkalinity (as $CaCO_3$)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	459	479	512	530	--	--	--	--	--	--
Carbonate Alkalinity (as $CaCO_3$)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.8 U	0.8 U	0.8 U	0.8 U	--	--	--	--	--	--
Hydroxide Alkalinity (as $CaCO_3$)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.8 U	0.8 U	0.8 U	--	--	--	--	--	--
Total alkalinity	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	479	--	--	--	--	--	--	468	479
Chloride	--	--	--	--	--	--	--	--	--	--	--	--	--	--	24.9	26.7	29.6	36	--	--	--	--	35.7	34.2
Cyanide	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate(as N)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.008 U	0.016 U	0.004 U	0.003 U	--	--	--	--	0.2	0.3
Nitrite (as N)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.015 U	0.003 U	0.003 U	--	--	--	--	0.3	0.4
Sulfate	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.8	0.9	0.6	0.6	--	--	--	--	1	2.2
Sulfide	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.4 U	2 U
Total Organic Carbon	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5	5.1	6.6	5	--	--	--	--	4.1	4.3
Ferrous Iron	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.3	11.9
Ferric Iron	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	10.5	2.19
Gases (µg/L)																								
Ethane	0.1 U	0.1 U	0.5 U	0.1 U	85.8	96.7	90.7	58.6	102	68	0.78	0.38 U	1.6	0.86	0.1 U	0.1 U	0.1 U	58	66	61	79	0.1 U	0.11 U	110
Ethene	0.1 U	0.1 U	1.5 U	0.1 U	10 U	10 U	10 U	10 U	10 U	1.2	0.81 J	0.9 J	1.9	0.55 U	1.6	1.2 J	1 J	0.8 J	0.93 J	0.63 J	0.78 J	0.77 J	0.94 J	1.5 UJ
Methane	2700	210	360	1400	5760	7610	3970	5680 DJ	9360 D	4900	4800	4200	4400	2600	5200	4700	5300	3600	4700	3900	5700	5100	5900	6200
Dissolved Metals (mg/L)																								
Antimony	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Barium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Beryllium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Calcium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cobalt	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Copper	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Mercury	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nickel	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Potassium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Selenium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Silver	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sodium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Thallium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tin	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vanadium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Zinc	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total Metals (mg/L)																								
Antimony	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Barium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Beryllium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Calcium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	99.5	94.2	105	98.7	--	--	--	--	--	--
Chromium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cobalt	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Copper	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	13.8	14.1
Lead	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	51.5	51.8	57.1	56.1	--	--	--	--	--	--
Manganese	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.54	--	--	--	--	--	--	--	--	--
Mercury	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nickel	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Potassium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	9.8	10.2	9.8	9.5	--	--	--	--	--	--
Selenium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Silver	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sodium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	28.2	26.8	25	24.3	--	--	--	--	--	--
Thallium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tin	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vanadium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Zinc	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE I-5

GROUNDWATER ANALYTICAL RESULTS FOR NATURAL ATTENUATION PARAMETERS AND METALS (2004-2009)
PSC Washougal Facility
Washougal, Washington

Site ID	MC-122								MC-123							PZU-4				PZU-5				UT-ST-1		
Analyte **Sample Date**	**12/19/2006**	**3/6/2007**	**6/5/2007**	**10/23/2007**	**12/18/2007**	**12/19/2006**	**3/11/2008**	**6/10/2008**	**3/5/2007**	**6/4/2007**	**10/23/2007**	**12/19/2006**	**12/18/2007**	**3/11/2008**	**6/10/2008**	**10/25/2007**	**12/17/2007**	**3/10/2008**	**6/9/2008**	**10/22/2007**	**12/17/2007**	**3/10/2008**	**6/10/2008**	**12/17/2007**	**3/10/2008**	**6/9/2008**
Conventionals (mg/L)																										
Ammonia (as N)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bicarbonate Alkalinity (as $CaCO_3$)	78	53	73	--	--	78	--	--	212	169	--	710	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbonate Alkalinity (as $CaCO_3$)	0.8 U	0.8 U	0.8 U	--	--	0.8 U	--	--	0.8 U	0.8 U	--	0.8 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hydroxide Alkalinity (as $CaCO_3$)	0.8 U	0.8 U	0.8 U	--	--	0.8 U	--	--	0.8 U	0.8 U	--	0.8 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total alkalinity	78	--	--	--	--	78	--	--			--	710	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloride	2.7	2.6	2.1	--	--	2.7	--	--	10.2	2.9	--	19.1	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cyanide	--	--	--	--	--	--	--	--			--		--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate(as N)	0.013 U	0.004 U	0.003 U	--	--	0.013 U	--	--	0.004 U	0.003 U	--	0.011 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrite (as N)	0.006 U	0.003 U	0.003 U	--	--	0.006 U	--	--	0.003 U	0.003 U	--	0.006 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	4.3	19.5	4	--	--	4.3	--	--	1.1	0.3	--	9.8	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide	--	--	--	--	--	--	--	--			--		--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total Organic Carbon	2.1	2.7	0.6	--	--	2.1	--	--	5.4	5.7	--	11.3	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ferrous Iron	--	--	--	3.3	3.3	--	2.97	0.83 J	--	--	3.3	--	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	2.43 J	3.3	2.66 J	0 U	0.16 J	0.08 J
Ferric Iron	--	--	--	6.4	5.46	--	0.05	0.004 UJ	--	--	42.8	--	50.8	20.9	28	0.44	1.17	4.79	1.3	5	0.003 UJ	6.65	0.004 UJ	0.231	0.003 UJ	0.004 UJ
Gases (µg/L)																										
Ethane	0.18 J	0.1 U	0.1 U	--	--	0.18 J	--	--	0.88	0.15 J	--	0.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethene	0.5 J	0.1 U	0.1 U	--	--	0.5 J	--	--	0.68 J	0.19 J	--	0.6 J	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methane	130	35	57	--	--	130	--	--	1700	2100	--	740	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved Metals (mg/L)																										
Antimony	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Barium	--	--	--	0.0765	--	0.023	--	--	--	--	0.219	--	0.302	0.122	--	--	--	--	--	--	0.0725	0.0482	--	--	--	--
Beryllium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium	--	--	--	0.000029	--	0.000012	--	--	--	--	0.000022	--	0.000024	0.000021	--	--	--	--	--	--	0.000115	0.000097	--	--	--	--
Calcium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium	--	--	--	0.00039 U	--	0.0002 U	--	--	--	--	0.00093 U	--	0.0002 U	0.0002 U	--	--	--	--	--	--	0.0002 U	0.0002 U	--	--	--	--
Cobalt	--	--	--	0.00643	--	0.0015	--	--	--	--	0.0162	--	0.015	0.0083	--	--	--	--	--	--	0.00268	0.0027	--	--	--	--
Copper	--	--	--	0.00022	--	0.00012	--	--	--	--	0.00047	--	0.00049	0.00017	--	--	--	--	--	--	0.00146	0.00029	--	--	--	--
Iron	--	--	--	--	--	2.41	--	--	--	--	--	--	52.4	25.5	--	--	--	--	--	--	1.87	10.7	--	--	--	--
Lead	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	--	--	--	26	--	9.07	--	--	--	--	68.7	--	50.7	26.4	--	--	--	--	--	--	19.6	17.2	--	--	--	--
Manganese	--	--	--	2.88	--	0.394	--	--	--	--	13.4	--	7.17	4.37	--	--	--	--	--	--	0.996	1.49	--	--	--	--
Mercury	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nickel	--	--	--	0.0194	--	0.0002 U	--	--	--	--	0.0656	--	0.0963	0.0222	--	--	--	--	--	--	0.00993	0.0081	--	--	--	--
Potassium	--	--	--	5.33	--	4.13	--	--	--	--	7.22	--	5.7	3.33	--	--	--	--	--	--	3.8	3.2	--	--	--	--
Selenium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Silver	--	--	--	0.000009 U	--	0.00002 U	--	--	--	--	0.000009 U	--	0.000004 U	0.00002 U	--	--	--	--	--	--	0.000004 U	0.00002 U	--	--	--	--
Sodium	--	--	--	13.9	--	8.32	--	--	--	--	22.5	--	27.5	11.9	--	--	--	--	--	--	18.9	12.5	--	--	--	--
Thallium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tin	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vanadium	--	--	--	0.00064	--	--	0.0021	--	--	--	0.00099	--	0.00079	0.000692	--	--	--	--	--	--	0.0007	0.000548	--	--	--	--
Zinc	--	--	--	0.0112	--	--	0.0005 U	--	--	--	0.0035	--	0.0019 U	0.0005 U	--	--	--	--	--	--	0.0035 U	0.0005 U	--	--	--	--
Total Metals (mg/L)																										
Antimony	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Barium	--	--	--	0.0737	0.0481	--	0.0235	0.01938	--	--	0.215	--	0.326	0.127	0.171	0.0302	0.0192	0.0208	0.01614	0.065	0.0769	0.0493	0.03375	0.0205	0.0122	0.01591
Beryllium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium	--	--	--	0.000041	0.000042	--	0.000013	0.00002 U	--	--	0.00007	--	0.000046	0.000026	0.000183	0.000084	0.00005	0.000079	0.00002 U	0.000378	0.000113	0.000076	0.000085	0.000039	0.000024	0.000023
Calcium	19.6	19.3	12.1	--	--	19.6	--	--	51.9	45.9	--	158	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium	--	--	--	0.00051 U	0.00047 U	--	0.0002 U	0.00024 U	--	--	0.00045 U	--	0.00027 U	0.0002 U	0.00028 U	0.00037 U	0.00022 U	0.0002 U	0.00021 U	0.00135 U	0.00029 U	0.0019	0.00021 U	0.00023 U	0.0002 U	0.00029 U
Cobalt	--	--	--	0.00618	0.00352	--	0.0013	0.000567	--	--	0.0158	--	0.0141	0.0079	0.0075	0.001	0.000495	0.000385	0.000205	0.00575	0.00238	0.0023	0.001075	0.000247	0.000058	0.000058
Copper	--	--	--	0.0006	0.0006	--	0.0001 U	0.000167	--	--	0.00062	--	0.00064	0.00034	0.000675	0.00063	0.00042	0.0005	0.000216	0.0018	0.00171	0.0022	0.000746	0.00059	0.00033	0.000333
Iron	--	--	--	9.7	8.76	--	3.02	0.802 J	--	--	46.1	--	54.1	24.2	31.3	3.74	4.47	8.09	4.6	8.3	2.31 J	9.95	2.4 J	0.231	0.137 J	0.064 J
Lead	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	8.65	8.19	6.29	23	11.4	8.65	8.73	7.51	21.5	18.5	65.6	75.6	52.2	25.4	37.4	4.66	2.84	2.7	2.54	23.5	20.3	13.9	11.9	3.49	2.42	3.22
Manganese	--	--	--	2.56	0.912	--	0.385	0.165	--	--	12.9	--	7.34	3.91	10.4	0.961	0.67	0.711	0.591	1.54	1.04	1.61	0.737	0.116	0.0853	0.0502
Mercury	--	--	--	--	--	--	--	0.00003 U	--	--	--	--	--	--	0.00003 U	--	--	--	0.00003 U	--	--	--	0.00003 U	--	--	0.00003 U
Nickel	--	--	--	0.0172	0.00375	--	0.0002 U	0.00139	--	--	0.0653	--	0.0926	0.0209	0.0304	0.00132	0.00062	0.0002 U	0.00035	0.102	0.00994	0.0116	0.00432	0.00061	0.0002 U	0.00043
Potassium	4.1	3.7	3.7	4.95	4.8	4.1	4.04	3.9	2.8	2.1	6.78	10.2	5.1	3.31	4.2	2.05	1.5	1.22	1.2	5.44	4.2	3.05	2.3	1.5	1.08	1.2
Selenium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Silver	--	--	--	0.000016	0.000004 U	--	0.00002 U	0.000009 U	--	--	0.000009 U	--	0.000004 U	0.00002 U	0.000009 U	0.000009 U	0.000004 U	0.00002 U	0.000019	0.000009 U	0.000004 U	0.00002 U	0.000009 U	0.000004 U	0.00002 U	0.000009 U
Sodium	9.43	7.24	7.87	12.3	9.36	9.43	8.26	8.27	10.8	9.02	21.1	33.3	28.2	11.5	15.1	3.19	2.47	2.22	2.53	10.9	19.2	10.6	8.67	2.72	2.26	2.81
Thallium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tin	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vanadium	--	--	--	0.00127	0.00468	--	0.0024	0.003353	--	--	0.00106	--	0.0008	0.000907	0.000866	0.00054	0.00061	0.0012	0.00047	0.00909	0.00084	0.0021	0.00078	0.00065	0.000508	0.000594
Zinc	--	--	--	0.008	0.0048 U	--	0.0005 U	0.001 U	--	--	0.0082	--	0.0019 U	0.0005 U	0.0022 U	0.005	0.0027 U	0.0005 U	0.001 U	0.005	0.004 U	0.0005 U	0.0023 U	0.0014 U	0.0005 U	0.0007 U

Notes
1. Laboratory data flags are as follows:
J = value is an estimate.
U = not detected at reporting limit listed.
UJ = value is an estimate at reporting limit listed.
UR = result is rejected due to quality control issues.

Abbreviations
-- = not available/not applicable
µg/L = micrograms per liter

TABLE I-6

GROUNDWATER ANALYTICAL RESULTS FOR ARSENIC (2004-2009)[1]
PSC Washougal Facility
Washougal, Washington

Concentrations are in milligrams per liter (mg/L)

Site ID	MC-1													
Analyte / Sample Date	3/23/2004	6/15/2004	9/16/2004	12/16/2004	3/17/2005	6/8/2005	9/15/2005	12/1/2005	3/9/2006	6/8/2006	9/14/2006	12/21/2006	3/8/2007	6/7/2007
Dissolved														
Arsenic	0.000448	--	--	0.00106	--	--	--	--	0.0007	--	--	0.0005	--	--
Total														
Arsenic	0.0024	0.0025	0.0007	0.0008	0.0085	0.0011	0.0122	0.0051	0.0009	0.00132	0.013	0.00062	0.00128	0.00687
Arsenic III	--	--	--	--	--	--	--	--	--	--	0.0115	0.000092	0.000385	0.000338
Arsenic V	--	--	--	--	--	--	--	--	--	--	0.00143	0.00048	0.000665	0.00739

Site ID	MC-1 (Continued)								MC-2					
Analyte / Sample Date	9/13/2007	12/19/2007	3/14/2008	6/13/2008	9/26/2008	12/3/2008	3/27/2009	6/30/2009	3/7/2006	6/6/2006	9/13/2006	12/20/2006	3/8/2007	6/7/2007
Dissolved														
Arsenic	--	0.00092	--	--	0.0185	--	0.001	--	--	--	--	--	--	--
Total														
Arsenic	0.0185	0.00103	0.00079	0.01104	0.0179	0.0078	0.0011	0.0102	0.01	0.0191	0.062	0.0141	0.0147	0.018
Arsenic III	--	--	--	--	--	--	--	--	--	--	0.0648	0.012	0.0162	0.0219
Arsenic V	--	--	--	--	--	--	--	--	--	--	0.004 U	0.0043	0.0004 U	0.0035 J

Site ID	MC-2 (Continued)								MC-2D					
Analyte / Sample Date	9/12/2007	12/21/2007	3/14/2008	6/12/2008	9/23/2008	12/3/2008	3/27/2009	6/29/2009	3/7/2006	6/6/2006	9/13/2006	12/20/2006	3/8/2007	6/7/2007
Dissolved														
Arsenic	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total														
Arsenic	0.0595	0.0152	0.0143	0.03	0.054	0.0133	0.0122	0.0187	0.0008	0.00065	0.00064	0.00073	0.0008	0.00071
Arsenic III	--	--	--	--	--	--	--	--	--	--	0.000013 B	0.00016 J	0.00003	0.000015 J
Arsenic V	--	--	--	--	--	--	--	--	--	--	0.00064	0.00067	0.000573	0.000696

Site ID	MC-2D (Continued)								MC-8					
Analyte / Sample Date	9/12/2007	12/21/2007	3/14/2008	6/12/2008	9/23/2008	12/3/2008	3/27/2009	6/29/2009	3/24/2004	6/17/2004	12/14/2004	3/15/2005	3/7/2006	6/7/2006
Dissolved														
Arsenic	--	--	--	--	--	--	--	--	0.00018	0.00118	0.000382	0.001 U	0.0007	--
Total														
Arsenic	0.00056	0.00081	0.00062	0.00077	0.0008	0.0006	0.0008	0.0007	--	--	--	--	0.0011	0.00045
Arsenic III	--	--	--	--		--	--	--	--	--	--	--	--	--
Arsenic V	--	--	--	--		--	--	--	--	--	--	--	--	--

TABLE I-6

GROUNDWATER ANALYTICAL RESULTS FOR ARSENIC (2004-2009)[1]
PSC Washougal Facility
Washougal, Washington

Concentrations are in milligrams per liter (mg/L)

Site ID	MC-8 (Continued)												MC-10D	
Analyte / Sample Date	9/12/2006	12/21/2006	3/8/2007	6/6/2007	9/13/2007	12/20/2007	3/14/2008	6/11/2008	9/26/2008	12/4/2008	3/26/2009	6/30/2009	3/24/2004	6/16/2004
Dissolved														
Arsenic	--	--	0.0018	--		0.00092	--	--	--	0.0006	--	--	--	--
Total														
Arsenic	0.00124	0.00159	0.00215	0.00039	0.0011	0.00113	0.00042	0.00036	0.001	0.0008	0.0008	0.0006	0.0174	0.0015
Arsenic III	0.00048	0.000024 J	0.000089	0.000019 J		--	--	--	--	--	--	--	--	--
Arsenic V	0.0008	0.0016	0.00135	0.000372		--	--	--	--	--	--	--	--	--

Site ID	MC-10D (continued)													
Analyte / Sample Date	9/14/2004	12/14/2004	3/15/2005	6/7/2005	9/13/2005	11/29/2005	3/7/2006	6/6/2006	9/13/2006	12/20/2006	3/7/2007	6/6/2007	9/12/2007	12/21/2007
Dissolved														
Arsenic	--	--	--	--	--	--	--	--	--	--	0.00253	--	--	--
Total														
Arsenic	0.0141	0.0041	0.0024	0.0146	0.0012	0.0012	0.0037	0.00411	0.00351	0.00332	0.00329	0.00354	0.0033	0.00359
Arsenic III	--	--	--	--	--	--	--	--	0.0024	0.0032	0.00291	0.00361	--	--
Arsenic V	--	--	--	--	--	--	--	--	0.00142	0.000001 U	0.0004 U	0.00058	--	--

Site ID	MC-10D (continued)						MC-12							
Analyte / Sample Date	3/13/2008	6/12/2008	9/26/2008	12/5/2008	3/25/2009	6/29/2009	3/23/2004	6/15/2004	9/16/2004	12/16/2004	3/17/2005	6/9/2005	9/15/2005	12/1/2005
Dissolved														
Arsenic	0.0026	--	--	--	--	--	--	--	--	--	--	--	--	--
Total														
Arsenic	0.0027	0.00485	0.0032	0.0036	0.0031	0.0032	0.0007	0.013	0.0125	0.0007	0.0006	0.0271	0.0296	0.0008
Arsenic III	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Arsenic V	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Site ID	MC-12 (Continued)													
Analyte / Sample Date	3/9/2006	6/8/2006	9/12/2006	12/20/2006	3/7/2007	6/6/2007	9/12/2007	12/21/2007	3/13/2008	6/13/2008	9/26/2008	12/5/2008	3/25/2009	6/29/2009
Dissolved														
Arsenic	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total														
Arsenic	0.0111	0.0135	0.0203	0.0138	0.0107	0.0133	0.0195	0.0117	0.0092	0.01439	0.017	0.012	0.0122	0.0174
Arsenic III	--	--	0.0223	0.0097	0.00839	0.0122	--	--	--	--	--	--	--	--
Arsenic V	--	--	0.0055	0.0047	0.00157	0.0032	--	--	--	--	--	--	--	--

TABLE I-6

GROUNDWATER ANALYTICAL RESULTS FOR ARSENIC (2004-2009)[1]
PSC Washougal Facility
Washougal, Washington

Concentrations are in milligrams per liter (mg/L)

Analyte	Site ID / Sample Date	MC-12D 3/24/2004	6/16/2004	9/14/2004	12/14/2004	3/15/2005	6/9/2005	9/13/2005	11/29/2005	6/6/2006	3/7/2006	9/12/2006	12/20/2006	3/7/2007	6/5/2007	9/12/2007
Dissolved																
Arsenic		--	--	--	--	--	--	--	--	--	--	--	--	0.00086	--	--
Total																
Arsenic		0.0013	0.016	0.0122	0.0005	0.0018	0.0065	0.0187	0.0005	0.00069	0.001	0.00066	0.00078	0.00093	0.001	0.00075
Arsenic III		--	--	--	--	--	--	--	--	--	--	0.00034	0.00034	0.000379	0.000562	--
Arsenic V		--	--	--	--	--	--	--	--	--	--	0.00031 B	0.00034	0.000397	0.000473	--

Analyte	Site ID / Sample Date	MC-12D (Continued) 12/21/2007	3/13/2008	6/12/2008	9/26/2008	12/5/2008	3/25/2009	6/29/2009	MC-13 3/23/2004	6/16/2004	9/14/2004	12/15/2004	3/16/2005	6/8/2005	9/14/2005	11/29/2005
Dissolved																
Arsenic		--	0.00079	--	--	--	0.0011	--	--	--	--	--	--	--	--	--
Total																
Arsenic		0.00098	0.00087	0.00117	0.0008	0.0009	0.0012	0.0012	0.0087	0.0002	0.0009	0.0009	0.0084	0.0003	0.0008	0.0014
Arsenic III		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Arsenic V		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Analyte	Site ID / Sample Date	MC-13 (Continued) 3/7/2006	6/7/2006	9/12/2006	12/19/2006	3/6/2007	6/6/2007	9/11/2007	12/19/2007	3/12/2008	6/11/2008	9/24/2008	12/1/2008	3/27/2009	6/23/2009
Dissolved															
Arsenic		--	--	--	--	--	--	--	--	--	--	--	--	0.0038	--
Total															
Arsenic		0.005	0.00617	0.0112	0.00585	0.00395	0.00491	0.0092	0.00471	0.0034	0.0053	0.0081	0.0061	0.0041	0.0051
Arsenic III		--	--	0.0106	0.0051	0.00411	0.000143	--	--	--	--	--	--	--	--
Arsenic V		--	--	0.00195	0.0006	0.0004 U	0.00579	--	--	--	--	--	--	--	--

Analyte	Site ID / Sample Date	MC-13D 3/23/2004	6/16/2004	9/14/2004	12/15/2004	3/16/2005	6/9/2005	9/14/2005	11/29/2005	3/7/2006	6/7/2006	9/12/2006	12/19/2006	3/6/2007	6/6/2007	9/11/2007
Dissolved																
Arsenic		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total																
Arsenic		0.0007	0.0009	0.0006	0.001	0.0009	0.0007	0.0006	0.0008	0.0008	0.00085	0.00071	0.00083	0.00092	0.00079	0.0007
Arsenic III		--	--	--	--	--	--	--	--	--		0.00004 U	0.000009 U	U	0.000009 U	--
Arsenic V		--	--	--	--	--	--	--	--	--		0.000702	0.00077	0.000726	0.000787	--

TABLE I-6

GROUNDWATER ANALYTICAL RESULTS FOR ARSENIC (2004-2009)[1]

PSC Washougal Facility
Washougal, Washington

Concentrations are in milligrams per liter (mg/L)

Site ID	MC-13D (Continued)							MC-14							
Analyte / Sample Date	12/19/2007	3/12/2008	6/11/2008	9/24/2008	12/1/2008	3/27/2009	6/23/2009	3/23/2004	6/15/2004	9/16/2004	12/16/2004	3/17/2005	6/8/2005	9/15/2005	12/1/2005
Dissolved															
Arsenic	--	--	--	--	--	--	--	--	--	--	0.0489	--	--	--	--
Total															
Arsenic	0.00091	0.00074	0.00084	0.0008	0.0008	0.0008	0.0008	0.001	0.0007	0.009	0.0241	0.0008	0.0061	0.0019	0.0012
Arsenic III	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Arsenic V	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Site ID	MC-14 (Continued)														
Analyte / Sample Date	3/9/2006	6/8/2006	9/12/2006	12/19/2006	3/6/2007	6/5/2007	9/11/2007	12/19/2007	3/13/2008	6/13/2008	9/24/2008	12/1/2008	3/24/2009	6/24/2009	6/24/2009
Dissolved															
Arsenic	--	0.0536	--	--	0.0335	--	--	0.0413	--	--	--	--	--	0.0339	0.0321
Total															
Arsenic	0.0379	0.0479	0.0541	0.0405	0.0293	0.0375	0.0697	0.0433	0.0461	0.04638	0.0587	0.0258	0.0279	0.034	0.0344
Arsenic III	--	--	0.033	0.031	0.0175	0.0389	--	--	--	--	--	--	--	--	--
Arsenic V	--	--	0.0255	0.008	0.00975	0.0175	--	--	--	--	--	--	--	--	--

Site ID	MC-14D								MC-15						
Analyte / Sample Date	10/24/2007	12/18/2007	3/11/2008	6/10/2008	9/24/2008	12/1/2008	3/24/2009	6/23/2009	3/25/2004	6/17/2004	9/15/2004	12/15/2004	3/16/2005	6/7/2005	9/14/2005
Dissolved															
Arsenic	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total															
Arsenic	0.00107	0.00102	0.0009	0.00082	0.0008	0.0006	0.0004	0.0006	0.0302	0.0262	0.0006	0.0007	0.0188	0.0008	0.0005
Arsenic III	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Arsenic V	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Site ID	MC-15 (continued)														
Analyte / Sample Date	11/30/2005	3/8/2006	6/6/2006	9/13/2006	12/21/2006	3/6/2007	6/5/2007	9/11/2007	12/20/2007	3/12/2008	6/11/2008	9/23/2008	12/2/2008	3/24/2009	6/24/2009
Dissolved															
Arsenic	--	--	--	--	--	--	--	--	0.00042	--	--	--	--	--	--
Total															
Arsenic	0.0007	0.0045	0.0226	0.044	0.00223	0.00164	0.0162	0.0433	0.00107	0.0021	0.02185	0.0426	0.0078	0.0048	0.0136
Arsenic III	--	--	--	0.0143	0.0017	0.00084	0.018	--	--	--	--	--	--	--	--
Arsenic V	--	--	--	0.0293	0.00046	0.00109	0.0021 J	--	--	--	--	--	--	--	--

TABLE I-6

GROUNDWATER ANALYTICAL RESULTS FOR ARSENIC (2004-2009)[1]

PSC Washougal Facility
Washougal, Washington

Concentrations are in milligrams per liter (mg/L)

Site ID	MC-15 (Continued)					MC-15D											
Analyte / Sample Date	3/25/2004	6/16/2004	9/14/2004	3/16/2005	6/7/2005	9/14/2005	3/8/2006	6/6/2006	9/13/2006	12/21/2006	3/6/2007	6/5/2007	9/11/2007	12/20/2007	3/12/2008	6/12/2008	9/23/2008
Dissolved																	
Arsenic	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total																	
Arsenic	0.0099	0.0047	0.003	0.0159	0.01	0.0028	0.0007	0.00048	0.00043	0.00054	0.00058	0.00052	0.00042	0.00056	0.00058	0.00061	0.0005
Arsenic III	--	--	--	--	--	--	--	--	0.00006	0.000009 U	0.000055	0.000013 J	--	--	--	--	--
Arsenic V	--	--	--	--	--	--	--	--	0.000373	0.0005	0.000436	0.000506	--	--	--	--	--

Site ID	MC-15D (continued)			MC-16												
Analyte / Sample Date	12/2/2008	3/24/2009	6/24/2009	3/8/2006	6/7/2006	9/13/2006	12/21/2006	3/7/2007	6/5/2007	9/11/2007	12/20/2007	3/12/2008	6/12/2008	9/23/2008	12/3/2008	3/24/2009	6/24/2009
Dissolved																	
Arsenic	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total																	
Arsenic	0.0005	0.0007	0.0006	0.0174	0.0297	0.0463	0.00698	0.0113	0.0216	0.0398	0.00506	0.0165	0.02932	0.0343	0.0153	0.013	0.0271
Arsenic III	--	--	--	--	--	0.0169	0.0066	0.0107	0.0241	--	--	--	--	--	--	--	--
Arsenic V	--	--	--	--	--	0.0316	0.0013	0.00117	0.00213	--	--	--	--	--	--	--	--

Site ID	MC-17														MC-17D		
Analyte / Sample Date	3/7/2006	6/7/2006	9/14/2006	12/20/2006	3/8/2007	6/7/2007	9/13/2007	12/20/2007	3/12/2008	6/12/2008	9/25/2008	12/3/2008	3/24/2009	6/25/2009	3/7/2006	6/7/2006	9/14/2006
Dissolved																	
Arsenic	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total																	
Arsenic	0.0153	0.026	0.0361	0.00193	0.00204	0.0128	0.0443	0.00237	0.0062	0.01734	0.0336	0.0134	0.0125	0.0296	0.0008	0.00063	0.00062
Arsenic III	--	--	0.041	0.0006	0.000751	0.000211	--	--	--	--	--	--	--	--	--	--	0.0002 U
Arsenic V	--	--	0.002 U	0.0014	0.00094	0.0138	--	--	--	--	--	--	--	--	--	--	0.00062

Site ID	MC-17D (Continued)										
Analyte / Sample Date	12/20/2006	3/8/2007	6/7/2007	9/13/2007	12/20/2007	3/12/2008	6/12/2008	9/25/2008	12/2/2008	3/24/2009	6/26/2009
Dissolved											
Arsenic	--	--	--	--	--	--	--	--	--	--	--
Total											
Arsenic	0.00074	0.00086	0.00076	0.00056	0.00074	0.00069	0.00068	0.0008	0.0006	0.0008	0.0007
Arsenic III	0.000066	0.000049	0.000009 U	--	--	--	--	--	--	--	--
Arsenic V	0.00065	0.000668	0.000799	--	--	--	--	--	--	--	--

TABLE I-6

GROUNDWATER ANALYTICAL RESULTS FOR ARSENIC (2004-2009)[1]

PSC Washougal Facility
Washougal, Washington

Concentrations are in milligrams per liter (mg/L)

Site ID	MC-19D														MC-20			
Analyte / Sample Date	3/8/2006	6/6/2006	9/13/2006	12/21/2006	3/7/2007	6/7/2007	9/12/2007	12/21/2007	3/14/2008	6/13/2008	9/26/2008	12/5/2008	3/25/2009	6/30/2009	3/17/2005	3/9/2006	6/8/2006	12/19/2006
Dissolved																		
Arsenic	--	--	--	--	--	--	--	--	--	--	--	0.0008	0.0008	--	0.0151	--	0.0133	--
Total																		
Arsenic	0.0008	0.00067	0.00057	0.00117	0.00099	0.0011	0.00082	0.00095	0.0015	0.00081	0.0008	0.0009	0.0013	0.0018	--	0.005	0.0127	0.00293
Arsenic III	--	--	0.00002 U	0.000021 J	U	0.000253	--	--	--	--	--	--	--	--	--	--	--	0.0022
Arsenic V	--	--	0.000571	0.00063	0.000661	0.000835	--	--	--	--	--	--	--	--	--	--	--	0.00067

Site ID	MC-20 (continued)											MC-20D					
Analyte / Sample Date	3/5/2007	6/4/2007	12/19/2007	3/13/2008	6/13/2008	6/9/2008	9/22/2008	9/25/2008	12/2/2008	3/23/2009	6/23/2009	10/23/2007	12/18/2007	3/11/2008	6/10/2008	9/22/2008	12/2/2008
Dissolved																	
Arsenic	--	--	--	0.0048	--	0.00301	--	0.0055	0.0134	0.0149	0.0066	0.00078	--	0.00044	--	--	--
Total																	
Arsenic	0.00168	0.00833	0.0193	0.0049	0.00469	--	--	0.0103	0.0136	0.016	0.0065	0.00105	0.00055	0.00043	0.00043	0.0006	0.0005
Arsenic III	0.00154	0.00109	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Arsenic V	0.0001 U	0.00828	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Site ID	MC-20D (Cont.)		MC-21													MC-24	
Analyte / Sample Date	3/23/2009	6/23/2009	3/9/2006	6/8/2006	9/12/2006	12/19/2006	3/6/2007	6/5/2007	9/11/2007	12/19/2007	3/13/2008	6/13/2008	9/23/2008	12/1/2008	3/24/2009	6/25/2009	10/24/2007	12/18/2007
Dissolved																		
Arsenic	0.0005	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00019	0.0002
Total																		
Arsenic	0.0005	0.0005	0.0092	0.00894	0.01	0.00579	0.00745	0.0091	0.0162	0.00678	0.0082	0.01001	0.0157	0.0103	0.0087	0.0084	0.00022	0.00029
Arsenic III	--	--	--	--	0.013	0.0041	0.00684	0.00928	--	--	--	--	--	--	--	--	--	--
Arsenic V	--	--	--	--	0.0004 U	0.002	0.00148	0.00156	--	--	--	--	--	--	--	--	--	--

Site ID	MC-24 (continued)							MC-24D								MC-24D2
Analyte / Sample Date	3/12/2008	6/10/2008	6/11/2008	9/24/2008	12/3/2008	3/27/2009	6/26/2009	10/24/2007	12/18/2007	3/11/2008	6/10/2008	9/24/2008	12/3/2008	3/27/2009	6/26/2009	6/26/2009
Dissolved																
Arsenic	0.00015	--	0.00022	0.0003	0.0002 U	0.0005 U	0.0003	0.00061	--	0.00059	--	--	--	--	0.0006	0.0014
Total																
Arsenic	0.00024	0.00022		0.0004	0.0002 U	0.0002	0.0003	0.0006	0.00088	0.0008	0.00062	0.0006	0.0007	0.0009	0.0008	0.0014
Arsenic III	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Arsenic V	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE I-6

GROUNDWATER ANALYTICAL RESULTS FOR ARSENIC (2004-2009)[1]

PSC Washougal Facility
Washougal, Washington

Concentrations are in milligrams per liter (mg/L)

Site ID	MC-25								MC-25D							
Analyte / Sample Date	10/24/2007	12/19/2007	3/12/2008	6/11/2008	9/25/2008	12/4/2008	3/26/2009	6/29/2009	10/24/2007	12/18/2007	3/12/2008	6/11/2008	9/25/2008	12/4/2008	3/26/2009	6/26/2009
Dissolved																
Arsenic	0.00133	0.00078	0.0004	--	0.0014	0.0006	0.0006	--	0.00084	0.0009	0.00064	--	0.0007	--	0.0008	--
Total																
Arsenic	0.00128	0.00103	0.00073	0.00078	0.0022	0.0012	0.0009	0.0007	0.00096	0.00101	0.0008	0.00067	0.0008	0.0007	0.0009	0.0009
Arsenic III	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Arsenic V	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Site ID	MC-25D2				MC-26D2				MC-27D	MC-28D	MC-30				MC-30D			
Analyte / Sample Date	9/29/2008	12/4/2008	3/26/2009	6/26/2009	9/29/2008	12/3/2008	3/26/2009	6/30/2009	6/25/2009	6/25/2009	9/29/2008	12/5/2008	3/25/2009	6/29/2009	9/29/2008	12/5/2008	3/25/2009	6/29/2009
Dissolved																		
Arsenic	0.0007	0.0006	0.0006	0.0005	0.0006	0.0005	0.0006	--	0.0009	0.0009	--	--	0.0053	--	0.0014	--	--	--
Total																		
Arsenic	0.0009	0.0007	0.0007	0.0006	0.0007	0.0005	0.0006	0.0008	0.001	0.001	0.0147	0.0099	0.0061	0.009	0.0014	0.0026	0.0019	0.0012
Arsenic III	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Arsenic V	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Site ID	MC-31				MC-32	MC-33	MC-107											
Analyte / Sample Date	9/29/2008	12/5/2008	3/25/2009	6/29/2009	6/29/2009	6/25/2009	3/25/2004	6/17/2004	9/15/2004	12/15/2004	3/15/2005	6/9/2005	9/13/2005	11/30/2005	3/8/2006	6/7/2006	9/13/2006	12/20/2006
Dissolved																		
Arsenic	--	--	--	--	0.0279	--	--	--	--	--	--	--	--	--	--	--	--	--
Total																		
Arsenic	0.0285	0.0273	0.0241	0.0302	0.0188	0.0262	0.0102	0.0184	0.0032	0.0011	0.0093	0.0031	0.004	0.0034	0.0157	0.0178	0.0264	0.0102
Arsenic III	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0237	0.0064
Arsenic V	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0036 B	0.0052

Site ID	MC-107 (Continued)										MC-118D							
Analyte / Sample Date	3/7/2007	6/6/2007	9/12/2007	12/20/2007	3/14/2008	6/11/2008	9/25/2008	12/4/2008	3/25/2009	6/25/2009	3/24/2004	6/17/2004	9/15/2004	12/14/2004	3/15/2005	6/8/2005	9/14/2005	11/30/2005
Dissolved																		
Arsenic	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total																		
Arsenic	0.00913	0.0167	0.0231	0.00531	0.0068	0.0124	0.024	0.0147	0.0093	0.0184	0.0008	0.034	0.0004	0.0136	0.0279	0.0344	0.0006	0.0048
Arsenic III	0.00448	0.0148	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Arsenic V	0.00404	0.0044	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE I-6

GROUNDWATER ANALYTICAL RESULTS FOR ARSENIC (2004-2009)[1]
PSC Washougal Facility
Washougal, Washington

Concentrations are in milligrams per liter (mg/L)

Site ID	MC-118D (Continued)														MC-118D2			
Analyte / Sample Date	3/8/2006	6/7/2006	9/12/2006	12/21/2006	3/7/2007	6/6/2007	9/13/2007	12/21/2007	3/14/2008	6/13/2008	9/25/2008	12/4/2008	3/26/2009	6/30/2009	9/29/2008	12/4/2008	6/30/2009	3/26/2009
Dissolved																		
Arsenic	--	--	--	--	--	--	--	--	0.0046	--	--	--	--	--	--	0.0007	--	--
Total																		
Arsenic	0.0039	0.00363	0.0046	0.00443	0.0056	0.00427	0.0048	0.00527	0.0046	0.00537	0.0039	0.0036	0.004	0.0034	0.0006	0.0007	0.0007	0.0011
Arsenic III	--	--	0.001	0.0036	0.00443	0.00309	--	--	--	--	--	--	--	--	--	--	--	--
Arsenic V	--	--	0.00377	0.00064	0.00114	0.00157	--	--	--	--	--	--	--	--	--	--	--	--

Site ID	MC-122										
Analyte / Sample Date	12/19/2006	3/6/2007	6/5/2007	10/23/2007	12/18/2007	3/11/2008	6/10/2008	9/22/2008	12/2/2008	3/23/2009	6/23/2009
Dissolved											
Arsenic	--	0.00147	--	0.0079	--	0.0021	--	0.0016	0.0064	0.0021	0.0012
Total											
Arsenic	0.00538	0.0018	0.00297	0.00825	0.00597	0.0023	0.00168	0.002	0.0063	0.0024	0.0015
Arsenic III	0.0035	0.000357	0.00144	--	--	--	--	--	--	--	--
Arsenic V	0.002	0.00116	0.00158	--	--	--	--	--	--	--	--

Site ID	MC-123											PZU-4						
Analyte / Sample Date	12/19/2006	3/5/2007	6/4/2007	10/23/2007	12/18/2007	3/11/2008	6/10/2008	9/22/2008	12/2/2008	3/23/2009	6/23/2009	10/25/2007	12/17/2007	3/10/2008	6/9/2008	12/1/2008	3/23/2009	6/22/2009
Dissolved																		
Arsenic	--	0.0102	--	0.0179	0.0162	0.0133	--	--	0.0312	0.0122	--	--	--	--	--	--	--	--
Total																		
Arsenic	0.00509	0.0108	0.0179	0.0186	0.0154	0.0136	0.01943	0.0141	0.0335	0.0146	0.0141	0.0114	0.0143	0.0163	0.01473	0.0135	0.0099	0.0159
Arsenic III	0.0027	0.0103	0.00136	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Arsenic V	0.0019	0.00046 J	0.0174	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Site ID	PZU-5								UT-ST-1					
Analyte / Sample Date	10/22/2007	12/17/2007	3/10/2008	6/10/2008	9/23/2008	12/2/2008	3/23/2009	6/22/2009	12/17/2007	3/10/2008	6/9/2008	12/1/2008	3/23/2009	6/22/2009
Dissolved														
Arsenic	--	0.00258	0.0048	--	0.0124	0.0105	0.0045	0.0092	--	--	--	--	--	--
Total														
Arsenic	0.0044	0.00277	0.0065	0.00314	0.0129	0.0083	0.0047	0.01	0.00353	0.003	0.00308	0.0036	0.003	0.0028
Arsenic III	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Arsenic V	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes
1. Laboratory data flags are as follows:
J = value is an estimate.
U = not detected at reporting limit listed.

Abbreviations
-- = not available/not applicable

TABLE I-7

APPENDIX IX GROUNDWATER FOR MC-14 (2004-2009)[1]

PSC Washougal Facility

Washougal, Washington

Analyte / Sample ID / Sample Date	MC-14 6/15/2004	MC-14 6/24/2009
Conventionals (mg/L)		
Chloride	20.3 D	--
Nitrite (as N)	0.1	--
Sulfide	1 U	0.4 U
Total Organic Carbon	11.2	--
Ferrous Iron	1.02	--
Ferric Iron	55.3	--
Dioxins/Furans (ng/L)		
1,2,3,4,7,8-Hexachlorodibenzofuran	--	0.00022 U
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	--	0.000274 U
1,2,3,6,7,8-Hexachlorodibenzofuran	--	0.000205 U
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	--	0.000224 U
1,2,3,7,8,9-Hexachlorodibenzofuran	--	0.000252 U
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	--	0.000245 U
1,2,3,7,8-Pentachlorodibenzofuran	--	0.000237 U
1,2,3,7,8-Pentachlorodibenzo-p-dioxin	--	0.00029 U
2,3,4,6,7,8-Hexachlorodibenzofuran	--	0.000233 U
2,3,4,7,8-Pentachlorodibenzofuran	--	0.000233 U
2,3,7,8-Tetrachlorodibenzofuran	--	0.000226 U
2,3,7,8-Tetrachlorodibenzo-p-dioxin	--	0.000316 U
Hexachlorodibenzofurans (HxCDF), Total	--	0.000205 U
Pentachlorodibenzofurans (PeCDF), Total	--	0.000233 U
Pentachlorodibenzo-p-dioxin (PeCDD), Total	--	0.00029 U
Dioxin	0.21 U	--
Hexachlorodibenzofuran	0.25 U	--
Pentachlorodibenzofuran	0.35 U	--
Pentachlorodibenzo-p-dioxin	0.16 U	--
Total HXCDD	0.29 U	0.000849 J
Total TCDD	0.21 U	0.000316 U
Total TCDF	0.21 U	0.000226 U
Gases (µg/L)		
Ethane	10 U	--
Ethene	229	--
Methane	10,600	--
Herbicides (µg/L)		
2,4,5-T	0.5 U	0.058 U
2,4,5-TP	--	0.059 U
2,4-D	1 U	0.16 J
2,4-DB	--	0.6 U
Dalapon	--	0.095 U
Dicamba	--	0.1 U
Dichlorprop	--	0.06 U
Dinoseb	--	0.05 U
MCPA	--	35 U
MCPP	--	44 J
Silvex	0.5 U	--

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APPENDIX IX GROUNDWATER FOR MC-14 (2004-2009)[1]
PSC Washougal Facility
Washougal, Washington

Analyte / Sample ID / Sample Date	MC-14 6/15/2004	MC-14 6/24/2009
Metals (mg/L)		
Antimony	0.0027 U	0.0001
Arsenic	0.061	0.0339
Barium	0.22	0.11
Beryllium	0.0001 U	0.000009
Cadmium	0.0004 U	0.00001
Chromium	0.0019	0.0003
Cobalt	0.0011 U	0.002
Copper	0.001 U	0.00037
Cyanide	0.01 U	0.003 U
Iron	56.3	--
Lead	0.0031 U	0.000041
Mercury	0.0001 U	0.00002 U
Nickel	0.15	0.161
Selenium	0.0043 U	0.0003
Silver	0.0008 U	0.000019
Thallium	0.0069 U	0.000005 U
Tin	0.0037 U	0.000022
Vanadium	0.0014	0.0016
Zinc	0.0005 U	0.0017
Organophosphorus Pesticides (ug/L)		
Azinphos-methyl (Guthion)	--	0.03 U
Bolstar	--	0.014 U
Chlorpyrifos	--	0.036 U
Coumaphos	--	0.021 U
Demeton-O,S	--	0.16 U
Diazinon	--	0.025 U
Dichlorvos	--	0.043 U
Dimethoate	0.5 U	0.049 U
Disulfoton	0.5 U	0.03 U
Ethyl parathion	0.5 U	--
Famphur	1.2 U	--
EPN	--	0.026 U
Ethoprop	--	0.033 U
Fensulfothion	--	0.036 U
Fenthion	--	0.015 U
Malathion	--	0.017 U
Merphos	--	0.033 U
Methyl parathion	0.5 U	0.02 U
Mevinphos	--	0.039 U
O,O,O-Triethylphosphorothioate	0.5 U	--
Parathion	--	0.011 U
Phorate	0.5 U	0.025 U
Ronnel	--	0.024 U
Stirophos	--	0.035 U
Sulfotep	--	0.013 U
Thionazin	0.5 U	--
Tokuthion	--	0.015 U
Trichloronate	--	0.029 U

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APPENDIX IX GROUNDWATER FOR MC-14 (2004-2009)[1]
PSC Washougal Facility
Washougal, Washington

Analyte / Sample ID / Sample Date	MC-14 6/15/2004	MC-14 6/24/2009
Pesticides/PCBs (µg/L)		
4,4'-DDD	0.1 U	0.00021 U
4,4'-DDE	0.1 U	0.0005 U
4,4'-DDT	0.1 U	0.00017 U
Aldrin	0.05 U	0.00011 U
alpha-BHC	0.05 U	0.00021 U
alpha-Chlordane	0.05 U	0.00027 U
Aroclor 1016	1 U	0.0041 U
Aroclor 1221	1 U	0.0041 U
Aroclor 1232	1 U	0.0041 U
Aroclor 1242	1 U	0.0041 U
Aroclor 1248	1 U	0.0041 U
Aroclor 1254	1 U	0.0041 U
Aroclor 1260	1 U	0.0041 U
beta-BHC	0.05 U	0.00041 U
delta-BHC	0.05 U	0.00014 U
Dieldrin	0.1 U	0.00037 U
Endosulfan I	0.05 U	0.00025 U
Endosulfan II	0.1 U	0.00061 U
Endosulfan sulfate	0.1 U	0.00028 U
Endrin	0.1 U	0.00049 U
Endrin aldehyde	0.1 U	0.0005 U
gamma-Chlordane	0.05 U	0.00031 U
Heptachlor	0.05 U	0.00018 U
Heptachlor epoxide	0.05 U	0.00021 U
Isodrin	0.1 U	--
Kepone	0.5 U	--
Lindane	0.05 U	--
Methoxychlor	0.5 U	0.00028 U
Toxaphene	5 U	0.025 U
Endrin Ketone	--	0.00032 U
gamma-BHC	--	0.00047 U
SVOCs (µg/L)		
1,2,4,5-Tetrachlorobenzene	10 U	0 UJ
1,2,4-Trichlorobenzene	10 U	0.69 U
1,2-Dichlorobenzene	10 U	0.84 U
1,3,5-Trinitrobenzene	--	0.74 U
1,3-Dichlorobenzene	10 U	0.69 U
1,3-Dinitrobenzene	--	1.1 U
1,4-Dichlorobenzene	10 U	0.62 U
1,4-Dioxane	10 U	--
1,4-Naphthoquinone	10 U	0.41 U
1,4-Phenylenediamine	--	37 U
1-Naphthylamine	10 U	0 UJ
2,3,4,6-Tetrachlorophenol	10 U	1.1 U
2,4,5-Trichlorophenol	10 U	0.74 U
2,4,6-Trichlorophenol	26 U	0.4 U
2,4-Dichlorophenol	10 U	0.58 U
2,4-Dimethylphenol	10 U	0.52 U

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APPENDIX IX GROUNDWATER FOR MC-14 (2004-2009)[1]
PSC Washougal Facility
Washougal, Washington

Analyte / Sample ID / Sample Date	MC-14 6/15/2004	MC-14 6/24/2009
SVOCs (µg/L) (Continued)		
2,4-Dinitrophenol	26 U	4.3 U
2,4-Dinitrotoluene	10 U	0.53 U
2,6-Dichlorophenol	10 U	0.93 U
2,6-Dinitrotoluene	10 U	0.68 U
2-Acetylaminofluorene	--	0.45 U
2-Chloronaphthalene	10 U	0.57 U
2-Chlorophenol	10 U	0.61 U
2-Methylaniline	10 U	4.1 U
2-Methyl-5-nitroaniline	--	2 U
2-Methylnaphthalene	10 U	0.47 U
2-Methylphenol	10 U	0.64 U
2-Naphthylamine	10 U	2 U
2-Nitroaniline	26 U	0.65 U
2-Nitrophenol	10 U	0.73 U
2-Picoline	10 U	8.7 U
3,3'-Dichlorobenzidine	10 U	0.53 U
3,3'-Dimethylbenzidine	10 U	11 U
3-Methylcholanthrene	10 U	0.6 U
3-Nitroaniline	26 U	6.3 U
4,6-Dinitro2-methylphenol	26 U	--
4-Aminobiphenyl	10 U	2.8 U
4-Bromophenyl phenyl ether	10 U	0.53 U
4-Chloro-3-methylphenol	10 U	0.95 U
4-Chloroaniline	10 U	0.73 U
4-Chlorophenyl phenyl ether	10 U	0.54 U
4-Methylphenol	10 U	0.93 U
4-Nitroaniline	26 U	7.8 U
4-Nitrophenol	26 U	3.8 U
4-Nitroquinoline 1-oxide	20 U	--
5-Nitro-o-toluidine	10 U	--
7,12-Dimethylbenz(a)anthracene	10 U	0.62 U
Acenaphthene	10 U	0.55 U
Acenaphthylene	10 U	0.46 U
Acetamidofluorene	10 U	--
Acetophenone	10 U	1.2 U
alpha, alpha-Dimethylphenethylamine	10 U	--
Aniline	10 U	0.95 U
Anthracene	10 U	1.2 U
Aramite	20 U	--
Benzo(a)anthracene	10 U	1.2 U
Benzo(a)pyrene	10 U	1.3 U
Benzo(b)fluoranthene	10 U	1.2 U
Benzo(g,h,i)perylene	10 U	1.6 U
Benzo(k)fluoranthene	10 U	1.6 U
Benzoic acid	26 U	12 U
Benzyl alcohol	10 U	0.73 U
bis(2-Chloroethoxy)methane	10 U	0.54 U
bis(2-Chloroethyl) ether	10 U	0.65 U
bis(2-Chloroisopropyl) ether	10 U	0.61 U

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APPENDIX IX GROUNDWATER FOR MC-14 (2004-2009)[1]
PSC Washougal Facility
Washougal, Washington

Analyte / Sample ID / Sample Date	MC-14 6/15/2004	MC-14 6/24/2009
SVOCs (µg/L) (Continued)		
bis(2-Ethylhexyl) phthalate	0.7 J	3.7 U
Butyl benzyl phthalate	10 U	0.91 U
Chlorobenzilate	10 U	0.87 U
Chrysene	10 U	1.6 U
Diallate	10 U	--
Dibenzo(a,h)anthracene	10 U	1.5 U
Dibenzofuran	10 U	0.63 U
Diethyl phthalate	10 U	0.56 U
Dimethyl phthalate	10 U	0.5 U
Di-n-butyl phthalate	U	0.71 U
Di-n-octyl phthalate	10 U	1.3 U
Dinoseb	51 U	--
Diphenylamine	10 U	0.82 U
Ethyl methacrylate	10 U	--
Ethyl methanesulfonate	10 U	0.55 U
Fluoranthene	10 U	1.3 U
Fluorene	10 U	0.63 U
Hexachlorobenzene	10 U	1.3 U
Hexachlorobutadiene	10 U	0.57 U
Hexachlorocyclopentadiene	10 U	2.4 U
Hexachloroethane	10 U	0.56 U
Hexachlorophene	260 U	--
Hexachloropropene	10 U	0 UJ
Indeno(1,2,3-cd)pyrene	10 U	1.4 U
Isodrin	--	0.7 U
Isophorone	10 U	0.48 U
Isosafrole	10 U	0.93 U
Kepone	--	8 U
m-Dinitrobenzene	10 U	--
Methapyrilene	10 U	18 U
Methyl methacrylate	10 U	--
Methyl methanesulfonate	10 U	0.6 U
Naphthalene	10 U	0.71 U
Nitrobenzene	10 U	1.1 U
N-Nitrosodiethylamine	10 U	0.8 U
N-Nitrosodimethylamine	10 U	0.93 U
N-Nitrosodi-n-butylamine	10 U	1.2 U
N-Nitrosodiphenylamine	10 U	0.93 U
N-Nitrosodipropylamine	10 U	0.96 U
N-Nitrosomethylethylamine	10 U	8.9 U
N-Nitrosomorpholine	10 U	0.49 U
N-Nitrosopiperidine	51 U	0.62 U
N-Nitrosopyrrolidine	10 U	0.76 U
PCNB	51 U	--
O,O,O-Triethylphosphorothioate	--	0.72 U
o-Toluidine	--	2.8 U
p-Dimethylaminoazobenzene	10 U	0.6 U
Pentachlorobenzene	10 U	0.6 U
Pentachloroethane	10 U	--

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APPENDIX IX GROUNDWATER FOR MC-14 (2004-2009)[1]
PSC Washougal Facility
Washougal, Washington

Analyte / Sample ID / Sample Date	MC-14 6/15/2004	MC-14 6/24/2009
SVOCs (µg/L) (Continued)		
Pentachlorophenol	26 U	4.8 U
Phenacetin	10 U	0.82 U
Phenanthrene	10 U	0.94 U
Phenol	10 U	0.63 U
p-Phenylenediamine	10 U	--
Pronamide	10 U	--
Pyrene	10 U	1.5 U
Pyridine	10 U	15 U
Safrole	10 U	0.7 U
sym-Trinitrobenzene	10 U	--
Pentachloronitrobenzene	--	0.45 U
VOCs (µg/L)		
1,2-Dibromo-3-chloropropane	0.01 U	--
1,2-Dibromoethane	0.01 U	--
1,1,1,2-Tetrachloroethane	5 U	0.11 U
1,1,1-Trichloroethane	1 U	0.075 U
1,1,2,2-Tetrachloroethane	5 U	0.16 U
1,1,2-Trichloroethane	5 U	0.14 U
1,1,2-Trichlorotrifluoroethane	2 U	0.13 U
1,1-Dichloro-1,2,2-trifluoroethane	1 U	--
1,1-Dichloroethane	65	23
1,1-Dichloroethene	1 U	0.074 U
1,1-Dichloropropene	--	0.089 U
1,2,3-Trichlorobenzene	--	0.11 U
1,2,3-Trichloropropane	5 U	0.2 U
1,2,4-Trichlorobenzene	--	0.096 U
1,2,4-Trimethylbenzene	--	3
1,2-Dibromo-3-chloropropane	5 U	0.2 U
1,2-Dibromoethane	5 U	0.1 U
1,2-Dichlorobenzene	3.45	0.72
1,2-Dichloroethane	1 U	0.08 U
1,2-Dichloroethene	65	--
1,2-Dichloropropane	5 U	0.095 U
1,3,5-Trimethylbenzene	--	0.69 J
1,3-Dichlorobenzene	--	0.11 J
1,3-Dichloropropane	--	0.14 U
1,4-Dichlorobenzene	--	0.17 J
1,4-Dioxane	--	310 J
2,2-Dichloro-1,1,1-trifluoroethane	--	0.21 U
2,2-Dichloropropane	--	0.06 U
2-Butanone	2 J	1.9 U
2-Chloro-1,3-butadiene	--	3.6 U
2-Chlorotoluene	--	0.96 J
2-Hexanone	10 U	2.7 U
2-methylpentane	1 U	0.21 U
3-Chloro-1-propene	--	0.094 U
3-Methylpentane	1 U	0.18 U
4-Chlorotoluene	--	0.13 U
4-Isopropyltoluene	--	3.3

TABLE I-7

APPENDIX IX GROUNDWATER FOR MC-14 (2004-2009)[1]
PSC Washougal Facility
Washougal, Washington

Analyte / Sample ID / Sample Date	MC-14 6/15/2004	MC-14 6/24/2009
VOCs (µg/L) (Continued)		
4-Methyl-2-pentanone	10 U	2.6 U
Acetone	4 J	3.3 U
Acetonitrile	20 U	6.4 U
Acrolein	20 U	0.96 U
Acrylonitrile	5 U	0.26 U
Allyl chloride	10 U	--
Benzene	8	4.6
Bromobenzene	--	0.12 U
Bromochloromethane	--	0.16 U
Bromodichloromethane	5 U	0.091 U
Bromoform	5 U	0.16 U
Bromomethane	10 U	0.09 U
Carbon disulfide	1 U	0.1 U
Carbon tetrachloride	1 U	0.096 U
Chlorobenzene	1 U	0.11 U
Chloroethane	124 D	34
Chloroform	1 U	0.064 U
Chloromethane	5 U	0.053 U
Chloroprene	5 U	--
cis-1,2-Dichloroethene	92.4 D	2
cis-1,3-Dichloropropene	5 U	0.18 U
cis-1,4-Dichloro-2-butene	--	1.4 U
Dibromochloromethane	5 U	0.14 U
Dibromomethane	--	0.15 U
Dichlorodifluoromethane	5	0.13 U
Ethyl cyanide	50 U	--
Ethyl methacrylate	--	0.15 U
Ethylbenzene	31	2.7
Hexachlorobutadiene	--	0.11 U
Iodomethane	--	0.11 U
Isobutyl alcohol	100 U	0 UJ
Isopropylbenzene	--	0.8 J
m,p-Xylene	113 D	10
Methacrylonitrile	10 U	0.32 U
Methyl iodide	5 U	--
Methyl methacrylate	--	0.15 U
Methylcyclopentane	1.82	1.5
Methylene bromide	5 U	--
Methylene chloride	5 U	0.28 J
Naphthalene	--	0.31 J
n-Butylbenzene	--	0.42 U
n-Propylbenzene	--	0.53 U
o-Xylene	78.6 D	17
Propionitrile	--	1.1 U
sec-Butylbenzene	--	0.38 J
Styrene	5 U	0.12 U
tert-Butylbenzene	--	0.06 J
Tetrachloroethene	1 U	0.066 U
Toluene	41.2	6.9

TABLE I-7

APPENDIX IX GROUNDWATER FOR MC-14 (2004-2009)[1]
PSC Washougal Facility
Washougal, Washington

Analyte / Sample ID / Sample Date	MC-14 6/15/2004	MC-14 6/24/2009
VOCs (µg/L) (Continued)		
trans-1,2-Dichloroethene	1	0.71
trans-1,3-Dichloropropene	5 U	0.068 U
trans-1,4-Dichloro-2-butene	20 U	0.35 U
Trichloroethene	1 U	0.33 J
Trichlorofluoromethane	1 U	0.12 U
Vinyl acetate	10 U	0.43 U
Vinyl chloride	78.4 D	5.9

Notes
1. Laboratory data flags are as follows:
   D = value is reported from a dilution.
   J = value is an estimate.
   U = not detected at reporting limit listed.
   UJ = value is an estimate at reporting limit listed.

Abbreviations
-- = not available/not applicable
µg/L = micrograms per liter
mg/L = milligrams per liter
N = nitrogen
ng/L = nanograms per liter
SVOCs = semivolatile organic compounds
VOCs = volatile organic compounds

TABLE I-8

GROUNDWATER ANALYTICAL RESULTS FOR TEMPORARY WELLS (2004-2009)[1]

PSC Washougal Facility
Washougal, Washington

Site ID	GP-91	GP-92	GP-92	GP-93	GP-94	GP-94	GP-95	GP-95	GP-96	GP-97	GP-97	GP-97	GP-98	GP-99
Depth	8	8	8	8	8	11.5	20	25	18	12	19	19.8	16.5	15.5
Date Sampled	10/5/2007	10/3/2007	10/3/2007	10/3/2007	10/4/2007	10/4/2007	10/1/2007	10/1/2007	10/3/2007	10/5/2007	10/5/2007	10/5/2007	10/4/2007	10/4/2007
Analyte			Field Dup.											
Dissolved Metals (mg/L)														
Arsenic	0.0303	0.0209	0.0204	0.0149	0.0357	0.0465	0.00169	0.00153	0.00157	0.0208	--	--	0.00352	0.0231
Barium	0.0258	0.0161	0.0159	0.0164	0.0231	0.0511	0.204	0.181	0.0612	0.0404	--	--	0.0918	0.096
Cadmium	0.000035	0.000007	0.000005 U	0.000005	0.000006	0.000024	0.000071	0.000023	0.000049	0.000015	--	--	0.000041	0.000031
Chromium	0.00059 U	0.00059 U	0.00059 U	0.00059 U	0.00059 U	0.00059 U	0.00226 U	0.00059 U	0.00061 U	0.00059 U	--	--	0.0011 U	0.00066 U
Cobalt	0.000657	0.000176	0.000177	0.000157	0.000116	0.00125	0.021	0.00684	0.00322	0.000337	--	--	0.00539	0.00437
Copper	0.00244 U	0.00244 U	0.00244 U	0.00244 U	0.00244 U	0.00244 U	0.00368 U	0.00244 U	0.00244 U	0.00244 U	--	--	0.00244 U	0.00244 U
Iron	4.02	1.16	1.12	0.577	3.12	17.2	25.7	7.55	2.67	4.99	--	--	3.56	18.5
Lead	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	3.22	2.57	2.5	2.89	3.31	5.44	94.1	76.8	26	6.36	--	--	33.1	35.6
Manganese	0.755	0.439	0.429	0.42	0.806	1.82	10.6	3.14	2.36	1.55	--	--	2.87	3.45
Mercury	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nickel	0.00122	0.00044 U	0.00033 U	0.00032 U	0.00048	0.00438	0.0206	0.0126	0.00603	0.00237	--	--	0.00915	0.00697
Potassium	2	0.9	1.7	1.8	2	3.2	14.7	12.2	5.8	2.2	--	--	5.6	6.1
Silver	0.000007 U	0.000004 U	0.000007 U	0.000007 U	0.000004 U	0.000012 U	0.000028 U	0.000007 U	0.000007 U	0.000004 U	--	--	0.000007 U	0.000004 U
Sodium	3.13	3.02	2.93	2.7	3.44	4.58	25.4	22.8	14	4.52	--	--	12.3	13.2
Vanadium	0.00075	0.00019	0.00019	0.00024	0.00038	0.00056	0.00813	0.00073	0.00088	0.00058	--	--	0.0033	0.00099
Zinc	0.0038 U	0.0029 U	0.0014 U	0.0025 U	0.0056 U	0.0575	0.115	0.0151	0.0054 U	0.0281	--	--	0.0164	0.0334
Total Metals (mg/L)														
Arsenic	0.0308	0.0212	0.0211	0.0153	0.0338	0.0472	0.00375	0.003	0.00224	0.021	--	--	0.00515	0.0274
Barium	0.0523	0.0508	0.04	0.0444	0.0565	0.0879	0.91	0.322	0.107	0.0613	--	--	0.203	0.774
Cadmium	0.000363	0.000306	0.000216	0.000167	0.000301	0.000456	0.00134	0.000097	0.000081	0.000107	--	--	0.000196	0.000836
Chromium	0.00245 U	0.00296 U	0.00206 U	0.00213 U	0.00306	0.00491	0.0738	0.0135	0.00725	0.00182 U	--	--	0.0184	0.0895
Cobalt	0.00189	0.00173	0.00119	0.00146	0.00195	0.00343	0.0756	0.0179	0.00545	0.00132	--	--	0.0113	0.0482
Copper	0.0118 U	0.01 U	0.00689 U	0.00506 U	0.00894 U	0.0139	0.144	0.0247	0.00551 U	0.00435 U	--	--	0.0183	0.1
Iron	8.13	6.01	4.51	4.12	7.67	24	148	40.9	10.4	7.57	--	--	27.2	148
Lead	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	4.06	3.47	3.13	3.59	4.22	6.8	106	76.7	26.8	7.17	--	--	35.4	61
Manganese	0.866	0.498	0.476	0.477	0.869	1.94	12.5	3.47	2.49	1.68	--	--	3.06	4.99
Mercury	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nickel	0.0034	0.00328	0.0023	0.00243	0.00359	0.012	0.0666	0.0208	0.0117	0.00384	--	--	0.0216	0.0688
Potassium	1.8	1.7	1.1	1.6	0.9 U	3.2	15.7	11.8	6.4	2	--	--	5.9	11.9
Silver	0.000036	0.000029 U	0.00002 U	0.000024 U	0.000021 U	0.000041	0.000339	0.000073	0.000021 U	0.000016 U	--	--	0.000067	0.000242
Sodium	3.51	3.32	3.16	2.92	3.63	4.9	27.9	23.2	14.4	4.84	--	--	13.3	15.1
Vanadium	0.00584	0.00621	0.00436	0.00424	0.006	0.00802	0.287	0.0486	0.0102	0.00357	--	--	0.0542	0.17
Zinc	0.0214	0.0246	0.0177	0.0223	0.0322	0.117	0.363	0.0791	0.0279	0.0229	--	--	0.0918	0.322
SVOCs (µg/L)														
1,2,4-Trichlorobenzene	0.017 U	0.016 U	0.016 U	0.017 U	0.032 U	0.018 U	0.016 U	0.017 U	0.018 U	0.018 U	--	--	0.016 U	0.017 U
1,2-Dichlorobenzene	0.023 U	0.022 U	0.022 U	0.023 U	0.044 U	0.025 U	0.022 U	0.023 U	0.025 U	0.053 J	--	--	0.022 U	0.023 U
1,3-Dichlorobenzene	0.022 U	0.021 U	0.021 U	0.022 U	0.042 U	0.024 U	0.021 U	0.022 U	0.024 U	0.023 U	--	--	0.021 U	0.022 U
1,4-Dichlorobenzene	0.03 U	0.029 U	0.029 U	0.03 U	0.058 U	0.032 U	0.029 U	0.03 U	0.033 U	0.031 U	--	--	0.029 U	0.03 U
2,4,5-Trichlorophenol	0.032 U	0.031 U	0.031 U	0.032 U	0.062 U	0.035 U	0.031 U	0.032 U	0.035 U	0.033 U	--	--	0.031 U	0.032 U
2,4,6-Trichlorophenol	0.06 U	0.058 U	0.058 U	0.06 U	0.12 U	0.064 U	0.058 U	0.059 U	0.065 U	0.062 U	--	--	0.058 U	0.059 U

TABLE I-8

GROUNDWATER ANALYTICAL RESULTS FOR TEMPORARY WELLS (2004-2009)[1]

PSC Washougal Facility
Washougal, Washington

Site ID	GP-91	GP-92	GP-92	GP-93	GP-94	GP-94	GP-95	GP-95	GP-96	GP-97	GP-97	GP-97	GP-98	GP-99
Depth	8	8	8	8	8	11.5	20	25	18	12	19	19.8	16.5	15.5
Date Sampled	10/5/2007	10/3/2007	10/3/2007	10/3/2007	10/4/2007	10/4/2007	10/1/2007	10/1/2007	10/3/2007	10/5/2007	10/5/2007	10/5/2007	10/4/2007	10/4/2007
Analyte			Field Dup.											
SVOCs (µg/L) (Continued)														
2,4-Dichlorophenol	0.049 U	0.047 U	0.047 U	0.049 U	0.094 U	0.052 U	0.047 U	0.048 U	0.078 J	0.05 U	--	--	0.047 U	0.048 U
2,4-Dimethylphenol	--	--	--	--	--	--	2.2 U	2.3 U	--	--	--	--	--	--
2,4-Dinitrophenol	0.18 U	0.17 U	0.17 U	0.18 U	0.34 U	0.19 U	0.17 U	0.18 U	0.19 U	0.19 U	--	--	0.17 U	0.18 U
2,4-Dinitrotoluene	0.019 U	0.018 U	0.018 U	0.019 U	0.036 U	0.02 U	0.018 U	0.019 U	0.02 U	0.02 U	--	--	0.018 U	0.019 U
2,6-Dinitrotoluene	0.035 U	0.033 U	0.033 U	0.035 U	0.066 U	0.037 U	0.033 U	0.034 U	0.037 U	0.036 U	--	--	0.033 U	0.034 U
2-Chloronaphthalene	0.043 U	0.041 U	0.041 U	0.043 U	0.082 U	0.046 U	0.041 U	0.042 U	0.046 U	0.044 U	--	--	0.041 U	0.042 U
2-Chlorophenol	0.056 U	0.054 U	0.054 U	0.056 U	0.11 U	0.06 U	0.054 U	0.055 U	0.06 U	0.058 U	--	--	0.054 U	0.055 U
2-Methyl-4,6-Dinitrophenol	0.026 U	0.025 U	0.025 U	0.026 U	0.05 U	0.028 U	0.025 U	0.026 U	0.028 U	0.027 U	--	--	0.025 U	0.026 U
2-Methylnaphthalene	0.027 U	0.026 U	0.026 U	0.079 J	0.052 U	0.029 U	0.026 U	0.027 U	0.029 U	0.028 U	--	--	0.026 U	0.027 U
2-Methylphenol	0.12 U	0.11 U	0.11 U	0.12 U	0.22 U	0.13 U	0.11 U	0.12 U	0.13 U	0.12 U	--	--	0.11 U	0.12 U
2-Nitroaniline	0.025 U	0.024 U	0.024 U	0.025 U	0.048 U	0.027 U	0.024 U	0.025 U	0.027 U	0.026 U	--	--	0.024 U	0.025 U
2-Nitrophenol	0.065 U	0.063 U	0.063 U	0.065 U	0.13 U	0.07 U	0.063 U	0.064 U	0.07 U	0.068 U	--	--	0.063 U	0.064 U
3,3'-Dichlorobenzidine	--	--	--	--	--	--	0.43 U	0.44 U	--	--	--	--	--	--
3-Nitroaniline	0.03 U	0.029 U	0.029 U	0.03 U	0.058 U	0.032 U	0.029 U	0.03 U	0.033 U	0.031 U	--	--	0.029 U	0.03 U
4-Bromophenyl Phenyl Ether	0.027 U	0.026 U	0.026 U	0.027 U	0.052 U	0.029 U	0.026 U	0.027 U	0.029 U	0.028 U	--	--	0.026 U	0.027 U
4-Chloro-3-methylphenol	0.039 U	0.037 U	0.037 U	0.039 U	0.074 U	0.041 U	0.037 U	0.038 U	0.042 U	0.04 U	--	--	0.037 U	0.038 U
4-Chloroaniline	--	--	--	--	--	--	0.025 U	0.026 U	--	--	--	--	--	--
4-Chlorophenyl Phenyl Ether	0.028 U	0.027 U	0.027 U	0.028 U	0.054 U	0.03 U	0.027 U	0.028 U	0.03 U	0.029 U	--	--	0.027 U	0.028 U
4-Methylphenol	0.13 U	0.12 U	0.12 U	0.13 U	0.24 U	0.14 U	0.12 U	0.13 U	0.14 U	0.18 J	--	--	0.12 U	0.13 U
4-Nitroaniline	0.02 U	0.019 U	0.019 U	0.02 U	0.038 U	0.021 U	0.019 U	0.02 U	0.022 U	0.021 U	--	--	0.019 U	0.02 U
4-Nitrophenol	0.29 U	0.28 U	0.28 U	0.29 U	0.56 U	0.31 U	0.28 U	0.29 U	0.32 U	0.3 U	--	--	0.28 U	0.29 U
Acenaphthene	0.027 U	0.026 U	0.026 U	0.027 U	0.052 U	0.029 U	0.026 U	0.027 U	0.029 U	0.028 U	--	--	0.026 U	0.027 U
Acenaphthylene	0.016 U	0.015 U	0.015 U	0.016 U	0.03 U	0.017 U	0.015 U	0.016 U	0.017 U	0.016 U	--	--	0.015 U	0.016 U
Anthracene	0.025 U	0.024 U	0.024 U	0.025 U	0.048 U	0.027 U	0.024 U	0.025 U	0.027 U	0.026 U	--	--	0.024 U	0.025 U
Benzo(a)anthracene	0.019 U	0.018 U	0.018 U	0.019 U	0.036 U	0.02 U	0.018 U	0.019 U	0.02 U	0.02 U	--	--	0.018 U	0.019 U
Benzo(a)pyrene	0.032 U	0.031 U	0.031 U	0.032 U	0.062 U	0.035 U	0.031 U	0.032 U	0.035 U	0.033 U	--	--	0.031 U	0.032 U
Benzo(b)fluoranthene	0.018 U	0.017 U	0.017 U	0.018 U	0.034 U	0.019 U	0.017 U	0.018 U	0.019 U	0.019 U	--	--	0.017 U	0.018 U
Benzo(g,h,i)perylene	0.02 U	0.019 U	0.019 U	0.02 U	0.038 U	0.021 U	0.019 U	0.02 U	0.022 U	0.021 U	--	--	0.019 U	0.02 U
Benzo(k)fluoranthene	0.025 U	0.024 U	0.024 U	0.025 U	0.048 U	0.027 U	0.024 U	0.025 U	0.027 U	0.026 U	--	--	0.024 U	0.025 U
Benzoic Acid	1.2 U	1.8 UJ	1.8 UJ	1.8 UJ	2.9 UJ	2.3 UJ	1.8 UJ	1.2 U	2.8 UJ	1.8 UJ	--	--	1.8 UJ	2 UJ
Benzyl Alcohol	0.076 U	0.073 U	0.073 U	0.1 J	0.15 U	0.081 U	0.073 U	0.074 U	0.082 U	0.078 U	--	--	0.073 U	0.074 U
Bis(2-chloroethoxy)methane	0.025 U	0.024 U	0.024 U	0.025 U	0.048 U	0.027 U	0.024 U	0.025 U	0.027 U	0.026 U	--	--	0.024 U	0.025 U
Bis(2-chloroethyl)ether	0.037 U	0.035 U	0.035 U	0.037 U	0.07 U	0.039 U	0.035 U	0.036 U	0.039 U	0.038 U	--	--	0.035 U	0.036 U
Bis(2-chloroisopropyl)ether	0.027 U	0.026 U	0.026 U	0.027 U	0.052 U	0.029 U	0.026 U	0.027 U	0.029 U	0.028 U	--	--	0.026 U	0.027 U
Bis(2-ethylhexyl)phthalate	0.47 J	0.3 J	0.13 U	0.47 J	0.47 J	6	0.13 U	0.14 U	0.35 J	1.7	--	--	0.23 J	0.58 J
Butyl Benzyl Phthalate	0.054 UJ	0.054 UJ	0.058 J	0.054 UJ	0.11 UJ	0.055 UJ	0.018 U	0.019 U	0.02 U	0.074 UJ	--	--	0.13 UJ	0.019 U
Chrysene	0.029 U	0.028 U	0.028 U	0.029 U	0.056 U	0.031 U	0.028 U	0.029 U	0.032 U	0.03 U	--	--	0.028 U	0.029 U
Dibenzo(a,h)anthracene	0.018 U	0.017 U	0.017 U	0.018 U	0.034 U	0.019 U	0.017 U	0.018 U	0.019 U	0.019 U	--	--	0.017 U	0.018 U
Dibenzofuran	0.019 U	0.018 U	0.018 U	0.019 U	0.036 U	0.02 U	0.018 U	0.019 U	0.02 U	0.02 U	--	--	0.018 U	0.019 U
Diethyl Phthalate	1.3 UJ	1.3 UJ	1.3 UJ	1.3 UJ	UJ	1.3 UJ	1.4 UJ	1.3 UJ	1.3 U	1.3 UJ	--	--	1.3 UJ	1.3 UJ
Dimethyl Phthalate	0.022 U	0.021 U	0.021 U	0.022 U	0.042 U	0.024 U	0.021 U	0.022 U	0.024 U	0.023 U	--	--	0.021 U	0.022 U
Di-n-butyl Phthalate	1.2 U	1.2 UJ	1.2 UJ	1.2 U	1.2 U	1.2 U	1.2 UJ	1.2 UJ	1.2 UJ	1.2 U	--	--	1.2 U	1.2 U

TABLE I-8

GROUNDWATER ANALYTICAL RESULTS FOR TEMPORARY WELLS (2004-2009)[1]

PSC Washougal Facility
Washougal, Washington

Site ID	GP-91	GP-92	GP-92	GP-93	GP-94	GP-94	GP-95	GP-95	GP-96	GP-97	GP-97	GP-97	GP-98	GP-99
Depth	8	8	8	8	8	11.5	20	25	18	12	19	19.8	16.5	15.5
Date Sampled	10/5/2007	10/3/2007	10/3/2007	10/3/2007	10/4/2007	10/4/2007	10/1/2007	10/1/2007	10/3/2007	10/5/2007	10/5/2007	10/5/2007	10/4/2007	10/4/2007
Analyte			Field Dup.											
SVOCs (µg/L) (Continued)														
Di-n-octyl Phthalate	0.019 U	0.018 U	0.018 U	0.019 U	0.036 U	0.02 U	0.018 U	0.019 U	0.02 U	0.02 U	--	--	0.018 U	0.019 U
Fluoranthene	0.021 U	0.02 U	0.02 U	0.026 J	0.04 U	0.022 U	0.02 U	0.021 U	0.023 U	0.022 U	--	--	0.02 U	0.021 U
Fluorene	0.028 U	0.027 U	0.027 U	0.028 U	0.054 U	0.03 U	0.027 U	0.028 U	0.03 U	0.029 U	--	--	0.027 U	0.028 U
Hexachlorobenzene	0.023 U	0.022 U	0.022 U	0.023 U	0.044 U	0.025 U	0.022 U	0.023 U	0.025 U	0.024 U	--	--	0.022 U	0.023 U
Hexachlorobutadiene	0.028 U	0.027 U	0.027 U	0.028 U	0.054 U	0.03 U	0.027 U	0.028 U	0.03 U	0.029 U	--	--	0.027 U	0.028 U
Hexachlorocyclopentadiene	--	--	--	--	--	--	0.19 U	0.2 U	--	--	--	--	--	--
Hexachloroethane	0.025 U	0.024 U	0.024 U	0.025 U	0.048 U	0.027 U	0.024 U	0.025 U	0.027 U	0.026 U	--	--	0.024 U	0.025 U
Indeno(1,2,3-cd)pyrene	0.022 U	0.021 U	0.021 U	0.022 U	0.042 U	0.024 U	0.021 U	0.022 U	0.024 U	0.023 U	--	--	0.021 U	0.022 U
Isophorone	0.017 U	0.016 U	0.016 U	0.017 U	0.032 U	0.018 U	0.016 U	0.017 U	0.063 J	0.018 U	--	--	0.016 U	0.017 U
Naphthalene	0.023 U	0.022 U	0.022 U	0.082 UJ	0.044 U	0.025 U	0.022 U	0.023 U	0.048 UJ	0.024 U	--	--	0.022 U	0.037 UJ
Nitrobenzene	0.029 U	0.028 U	0.028 U	0.029 U	0.056 U	0.031 U	0.028 U	0.029 U	0.032 U	0.03 U	--	--	0.028 U	0.029 U
N-Nitrosodi-n-propylamine	0.039 U	0.037 U	0.037 U	0.039 U	0.074 U	0.041 U	0.037 U	0.038 U	0.042 U	0.04 U	--	--	0.037 U	0.038 U
N-Nitrosodiphenylamine	0.05 U	0.048 U	0.048 U	0.05 U	0.096 U	0.053 U	0.048 U	0.049 U	0.054 U	0.052 U	--	--	0.048 U	0.049 U
Pentachlorophenol	0.36 U	0.34 U	0.34 U	0.36 U	0.68 U	0.38 U	0.34 U	0.35 U	0.38 U	0.37 U	--	--	0.34 U	0.35 U
Phenanthrene	0.023 U	0.022 U	0.022 U	0.023 U	0.044 U	0.025 U	0.022 U	0.023 U	0.025 U	0.024 U	--	--	0.022 U	0.023 U
Phenol	0.63 UJ	0.63 UJ	0.63 UJ	0.63 UJ	0.64 UJ	0.63 UJ	0.063 U	0.064 U	0.85 U	0.068 U	--	--	0.63 UJ	0.63 UJ
Pyrene	0.02 U	0.019 U	0.019 U	0.025 J	0.038 U	0.021 U	0.019 U	0.02 U	0.022 U	0.021 U	--	--	0.019 U	0.02 U
1,4-Dioxane	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	9.3	5	1	0.26 U			2.1	3.1
TPH (µg/L)														
Diesel range hydrocarbons	12 U	11 U	11 U	12 U	12 U	12 U	11 U	11 U	12 U	260 J	12 U	--	12 U	12 U
Lube oil range hydrocarbons	21 U	19 U	19 U	21 U	21 U	20 U	19 U	19 U	20 U	20 U	20 U	--	20 U	20 U
TPH (as gasoline)	13 U	13 U	13 U	13 U	13 U	13 U	13 U	13 U	13 U	550 J	5700 J	--	13 U	13 U
VOCs (µg/L)														
1,1,1-Trichloroethane	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	--	1.2 U	0.12 U	0.12 U
1,1,2-Trichlorotrifluoroethane	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.15 J	0.64	0.14 U	0.14 U	--	3400	0.14 U	0.14 U
1,1-Dichloroethane	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.38 J	0.11 U	0.32 J	--	110	0.11 U	0.11 U
1,1-Dichloroethene	0.0061 U	0.0061 U	0.0061 U	0.0061 U	0.0061 U	0.0061 U	0.0061 U	0.0061 U	0.0061 U	0.0096 J	--	0.0061 U	0.0061 U	0.0061 U
1,2-Dichlorobenzene	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	--	1.2 U	0.12 U	0.12 U
1,2-Dichloroethane	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	--	1.2 U	0.12 U	0.12 U
2,2-Dichloro-1,1,1-trifluoroethane	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	--	4.9 U	0.49 U	0.49 U
2-Butanone	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	--	23 U	2.3 U	2.3 U
2-Methylpentane	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	--	4.9 U	0.49 U	0.49 U
3-Methylpentane	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	--	4.1 U	0.41 U	0.41 U
Acetone	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	5.8 UJ	4.1 U	--	41 U	4.1 U	4.1 U
Benzene	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	--	13	0.14 U	0.14 U
Carbon Disulfide	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	--	1.6 U	0.16 U	0.26 J
Carbon Tetrachloride	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	--	1.4 U	0.14 U	0.14 U
Chlorobenzene	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	--	1.4 U	0.14 U	0.14 U
Chloroethane	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	--	2.3 U	0.23 U	0.23 U
Chloroform	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	--	1.4 U	0.14 U	0.14 U
Chloromethane	0.14 U	0.14 U	0.25 J	0.14 U	0.14 U	0.26 J	0.14 U	0.14 U	0.14 U	0.16 J	--	1.7 J	0.14 U	0.14 U
cis-1,2-Dichloroethene	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.14 J	0.12 U	0.12 U	0.12 U	1.7	--	40	0.12 U	0.12 U

TABLE I-8

GROUNDWATER ANALYTICAL RESULTS FOR TEMPORARY WELLS (2004-2009)[1]

PSC Washougal Facility
Washougal, Washington

Site ID	GP-91	GP-92	GP-92	GP-93	GP-94	GP-94	GP-95	GP-95	GP-96	GP-97	GP-97	GP-97	GP-98	GP-99
Depth	8	8	8	8	8	11.5	20	25	18	12	19	19.8	16.5	15.5
Date Sampled	10/5/2007	10/3/2007	10/3/2007	10/3/2007	10/4/2007	10/4/2007	10/1/2007	10/1/2007	10/3/2007	10/5/2007	10/5/2007	10/5/2007	10/4/2007	10/4/2007
Analyte			Field Dup.											
VOCs (µg/L) (Continued)														
Dichlorodifluoromethane	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	--	1.7 U	0.17 U	0.17 U
Ethylbenzene	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	4	--	77	0.13 U	0.13 U
m,p-Xylene	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	8.8	--	230	0.22 U	0.22 U
Methylcyclopentane	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U	--	4.2 U	0.42 U	0.42 U
Methylene Chloride	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	--	2.1 UJ	0.2 U	0.2 U
o-Xylene	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	3.4	--	96	0.11 U	0.11 U
Tetrachloroethene	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	--	20	0.13 U	0.13 U
Toluene	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.23 J	0.11 U	0.11 U	0.21 J	17	--	2000	0.11 U	0.11 U
trans-1,2-Dichloroethene	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	--	1.5 U	0.15 U	0.15 U
Trichloroethene	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	--	5.6	0.14 U	0.14 U
Trichlorofluoromethane	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	--	1.4 U	0.14 U	0.14 U
Vinyl Chloride	0.0055 J	0.0035 U	0.0038 J	0.0035 U	0.0071 J	0.013 J	0.0035 U	0.0035 U	0.0055 J	1.5	--	0.3	0.0035 U	0.0035 U

TABLE I-8

GROUNDWATER ANALYTICAL RESULTS FOR TEMPORARY WELLS (2004-2009)[1]

PSC Washougal Facility
Washougal, Washington

Site ID	GP-100	GP-101	GP-104	GP-104	GP-105	GP-107	GP-107	GP-108	GP-110	GP-112	GP-113	GP-114
Depth	12	11	5	5	6	7.5	7.5	7.5	7	8	7.5	7
Date Sampled	10/3/2007	10/2/2007	5/5/2009	5/5/2009	5/5/2009	9/3/2008	9/3/2008	9/3/2008	9/2/2008	9/4/2008	9/3/2008	9/3/2008
Analyte				Field Dup.			Field Dup.					
Dissolved Metals (mg/L)												
Arsenic	0.0263	0.0308	0.0004	0.0004	0.0052	0.0404	0.0399	0.0328	0.0125	0.0084	0.0166	0.0432
Barium	0.0355	0.0609	0.01085	0.01062	0.01132	0.02175	0.02428	0.02252	0.01549	0.05205	0.02814	0.01755
Cadmium	0.000012	0.000005 U	0.00004	0.00004	0.00003	0.00002 U	0.00002 U	0.00002 U	0.00002 U	0.00008	0.00002 U	0.00002 U
Chromium	0.00059 U	0.00059 U	0.0002 U	0.0002 U	0.0002 U	0.00005 U	0.00072 U	0.00072 U	0.0002	0.00072 U	0.00072 U	0.00072 U
Cobalt	0.000585	0.00125	--	--	--	--	--	--	--	--	--	--
Copper	0.00244 U	0.00244 U	0.00089	0.00107	0.0005	0.00022 U	0.00022 U	0.00022 U	0.00027	0.00414	0.00022 U	0.00022 U
Iron	5.19	15.3	0.007	0.007	0.009	3.2	3.1	4.5	1.1	4.4	4.4	2.8
Lead	--	--	0.00002 U	0.00002 U	--	--	--	--	--	--	--	--
Magnesium	5.41	7.66	--	--	--	--	--	--	--	--	--	--
Manganese	1.09	1.92	0.0212	0.035	0.353	0.743	0.744	0.714	0.27	0.742	1.2	0.691
Mercury	--	--	0.0002 U	0.0002 U	--	--	--	--	--	--	--	--
Nickel	0.00605	0.00649	0.0011	0.00111	0.00069	0.00112 U	0.00139 U	0.00252	0.00925	0.01507	0.00329	0.00221
Potassium	3.1	3.3	1.25	1.22	1.2	1.6	1.7	1.5	1.2	2	2.1	1.6
Silver	0.000004 U	0.000007 U	0.00002 U	0.00002 U	0.00002 U	0.000038	0.000056	0.000053	0.000009 U	0.000046	0.000051	0.000027
Sodium	4.69	5.14	--	--	--	--	--	--	--	--	--	--
Vanadium	0.0008	0.00072	0.00046	0.00046	0.00015	0.000372	0.000386	0.00047	0.000465	0.000858	0.000329	0.00044
Zinc	0.0018 U	0.0062	0.0017	0.0033	0.0019	0.0048 U	0.0054 U	0.0144	0.034	0.0452	0.0141	0.0136
Total Metals (mg/L)												
Arsenic	0.0271	0.0306	0.0024	0.0025	0.0085	0.0407	0.0387	0.0316	0.0127	0.0086	0.0162	0.0438
Barium	0.317	0.0765	0.06566	0.06358	0.02865	0.02962	0.02708	0.0339	0.02616	0.05352	0.03326	0.02408
Cadmium	0.000569	0.000133	0.0002	0.0002	0.0001	0.00004	0.00004	0.00014	0.00012	0.00008	0.00002	0.00005
Chromium	0.031	0.00175 U	0.00318	0.00328	0.00101	0.00079	0.00064	0.00148	0.00129	0.00116	0.00137	0.00068
Cobalt	0.0165	0.00209	--	--	--	--	--	--	--	--	--	--
Copper	0.0431	0.00391 U	0.00841	0.00855	0.00287	0.00178	0.00149	0.00481	0.00369	0.00626	0.00359	0.00222
Iron	53.3	17.6	10.9	10.7	4.63	4.5	4.1	5.9	2	5.4	4.7	3.5
Lead	--	--	0.00451	0.004666	--	--	--	--	--	--	--	--
Magnesium	15.8	8.33	--	--	--	--	--	--	--	--	--	--
Manganese	1.74	2.03	0.145	0.141	0.401	0.776	0.746	0.731	0.282	0.722	1.1	0.692
Mercury	--	--	0.0002 U	0.0002 U	--	--	--	--	--	--	--	--
Nickel	0.0354	0.00855	0.00506	0.00506	0.00166	0.0023 U	0.00204 U	0.00368	0.00537	0.00701	0.00329	0.00342
Potassium	6.2	2.9	2.34	2.31	1.42	1.8	1.7	1.7	1.3	1.9	2	1.6
Silver	0.000158	0.000018 U	0.000029	0.00003	0.00002 U	0.000063	0.000045	0.000102	0.000021	0.000068	0.000063	0.000071
Sodium	6.39	5.38	--	--	--	--	--	--	--	--	--	--
Vanadium	0.0672	0.00334	0.01036	0.01071	0.00306	0.001778	0.001561	0.002944	0.002717	0.001871	0.001028	0.001516
Zinc	0.126	0.021	0.0254	0.0258	0.0092	0.013	0.0099 U	0.0222	0.03	0.0376	0.0158	0.0206
SVOCs (µg/L)												
1,2,4-Trichlorobenzene	0.016 U	0.016 U	--	--	--	--	--	--	0.018 U	0.039 UJ	0.016 UJ	--
1,2-Dichlorobenzene	0.048 J	0.69	--	--	--	--	--	--	0.025 U	0.043 J	0.059 J	--
1,3-Dichlorobenzene	0.021 U	0.083 J	--	--	--	--	--	--	0.024 U	0.021 UJ	0.021 UJ	--
1,4-Dichlorobenzene	0.029 U	0.11 J	--	--	--	--	--	--	0.033 U	0.029 UJ	0.029 UJ	--
2,4,5-Trichlorophenol	0.031 U	0.031 U	--	--	--	--	--	--	0.035 U	0.031 UJ	0.031 UJ	--
2,4,6-Trichlorophenol	0.058 U	0.058 U	--	--	--	--	--	--	0.065 U	0.058 UJ	0.058 UJ	--

TABLE I-8

GROUNDWATER ANALYTICAL RESULTS FOR TEMPORARY WELLS (2004-2009)[1]

PSC Washougal Facility
Washougal, Washington

Site ID	GP-100	GP-101	GP-104	GP-104	GP-105	GP-107	GP-107	GP-108	GP-110	GP-112	GP-113	GP-114
Depth	12	11	5	5	6	7.5	7.5	7.5	7	8	7.5	7
Date Sampled	10/3/2007	10/2/2007	5/5/2009	5/5/2009	5/5/2009	9/3/2008	9/3/2008	9/3/2008	9/2/2008	9/4/2008	9/3/2008	9/3/2008
Analyte				Field Dup.			Field Dup.					
SVOCs (µg/L) (Continued)												
2,4-Dichlorophenol	0.047 U	0.047 U	--	--	--	--	--	--	0.053 U	0.1 J	0.047 UJ	--
2,4-Dimethylphenol	--	--	--	--	--	--	--	--	2.5 UR	2.2 UJ	2.2 UJ	--
2,4-Dinitrophenol	0.17 U	0.17 U	--	--	--	--	--	--	0.19 UR	0.17 UJ	0.17 UJ	--
2,4-Dinitrotoluene	0.018 U	0.018 U	--	--	--	--	--	--	0.02 U	0.018 UJ	0.018 UJ	--
2,6-Dinitrotoluene	0.033 U	0.033 U	--	--	--	--	--	--	0.037 U	0.033 UJ	0.033 UJ	--
2-Chloronaphthalene	0.041 U	0.041 U	--	--	--	--	--	--	0.046 U	0.041 UJ	0.041 UJ	--
2-Chlorophenol	0.054 U	0.054 U	--	--	--	--	--	--	0.06 U	0.054 UJ	0.054 UJ	--
2-Methyl-4,6-Dinitrophenol	0.025 U	0.025 U	--	--	--	--	--	--	0.028 U	0.025 UJ	0.025 UJ	--
2-Methylnaphthalene	0.026 U	0.087 J	--	--	--	--	--	--	0.029 U	0.032 J	0.026 UJ	--
2-Methylphenol	0.11 U	0.11 U	--	--	--	--	--	--	0.13 U	0.11 UJ	0.11 UJ	--
2-Nitroaniline	0.024 U	0.024 U	--	--	--	--	--	--	0.027 U	0.024 UJ	0.024 UJ	--
2-Nitrophenol	0.063 U	0.063 U	--	--	--	--	--	--	0.07 U	0.063 UJ	0.063 UJ	--
3,3'-Dichlorobenzidine	--	--	--	--	--	--	--	--	0.48 U	0.43 UJ	0.43 UJ	--
3-Nitroaniline	0.029 U	0.029 U	--	--	--	--	--	--	0.033 U	0.029 UJ	0.029 UJ	--
4-Bromophenyl Phenyl Ether	0.026 U	0.026 U	--	--	--	--	--	--	0.029 U	0.026 UJ	0.026 UJ	--
4-Chloro-3-methylphenol	0.037 U	0.037 U	--	--	--	--	--	--	0.042 U	0.037 UJ	0.037 UJ	--
4-Chloroaniline	--	--	--	--	--	--	--	--	0.028 U	0.025 UJ	0.025 UJ	--
4-Chlorophenyl Phenyl Ether	0.027 U	0.027 U	--	--	--	--	--	--	0.03 U	0.027 UJ	0.027 UJ	--
4-Methylphenol	0.12 U	0.12 U	--	--	--	--	--	--	0.14 U	0.12 UJ	0.12 UJ	--
4-Nitroaniline	0.019 U	0.019 U	--	--	--	--	--	--	0.022 U	0.019 UJ	0.019 UJ	--
4-Nitrophenol	0.28 U	0.28 U	--	--	--	--	--	--	0.32 U	0.28 UJ	0.28 UJ	--
Acenaphthene	0.026 U	0.05 J	--	--	--	--	--	--	0.029 U	0.026 UJ	0.034 UJ	--
Acenaphthylene	0.015 U	0.015 U	--	--	--	--	--	--	0.017 U	0.015 UJ	0.015 UJ	--
Anthracene	0.024 U	0.024 U	--	--	--	--	--	--	0.027 U	0.024 UJ	0.026 UJ	--
Benzo(a)anthracene	0.018 U	0.018 U	--	--	--	--	--	--	0.02 U	0.018 UJ	0.035 J	--
Benzo(a)pyrene	0.031 U	0.031 U	--	--	--	--	--	--	0.035 U	0.031 UJ	0.031 UJ	--
Benzo(b)fluoranthene	0.017 U	0.017 U	--	--	--	--	--	--	0.019 U	0.017 UJ	0.03 UJ	--
Benzo(g,h,i)perylene	0.019 U	0.019 U	--	--	--	--	--	--	0.022 U	0.019 UJ	0.025 UJ	--
Benzo(k)fluoranthene	0.024 U	0.024 U	--	--	--	--	--	--	0.027 U	0.024 UJ	0.024 UJ	--
Benzoic Acid	1.7 UJ	1.9 UJ	--	--	--	--	--	--	1.3 UR	4.2 UJ	4.2 UJ	--
Benzyl Alcohol	0.094 J	0.11 J	--	--	--	--	--	--	0.082 U	0.85 UJ	0.85 UJ	--
Bis(2-chloroethoxy)methane	0.024 U	0.024 U	--	--	--	--	--	--	0.027 U	0.024 UJ	0.024 UJ	--
Bis(2-chloroethyl)ether	0.035 U	0.035 U	--	--	--	--	--	--	0.039 U	0.035 UJ	0.035 UJ	--
Bis(2-chloroisopropyl)ether	0.026 U	0.026 U	--	--	--	--	--	--	0.029 U	0.026 UJ	0.026 UJ	--
Bis(2-ethylhexyl)phthalate	0.19 J	0.13 U	--	--	--	--	--	--	0.66 UJ	0.77 UJ	0.77 UJ	--
Butyl Benzyl Phthalate	0.018 U	0.018 U	--	--	--	--	--	--	0.02 U	0.26 UJ	0.26 UJ	--
Chrysene	0.028 U	0.028 U	--	--	--	--	--	--	0.032 U	0.028 UJ	0.033 J	--
Dibenzo(a,h)anthracene	0.017 U	0.017 U	--	--	--	--	--	--	0.019 U	0.017 UJ	0.021 UJ	--
Dibenzofuran	0.018 U	0.025 J	--	--	--	--	--	--	0.02 U	0.018 UJ	0.018 UJ	--
Diethyl Phthalate	1.3 U	1.3 UJ	--	--	--	--	--	--	0.34 U	0.62 UJ	0.23 UJ	--
Dimethyl Phthalate	0.021 U	0.021 U	--	--	--	--	--	--	0.024 U	0.021 UJ	0.033 UJ	--
Di-n-butyl Phthalate	1.2 U	1.2 U	--	--	--	--	--	--	0.28 U	0.69 UJ	0.69 UJ	--

TABLE I-8

GROUNDWATER ANALYTICAL RESULTS FOR TEMPORARY WELLS (2004-2009)[1]

PSC Washougal Facility
Washougal, Washington

Site ID	GP-100	GP-101	GP-104	GP-104	GP-105	GP-107	GP-107	GP-108	GP-110	GP-112	GP-113	GP-114
Depth	12	11	5	5	6	7.5	7.5	7.5	7	8	7.5	7
Date Sampled	10/3/2007	10/2/2007	5/5/2009	5/5/2009	5/5/2009	9/3/2008	9/3/2008	9/3/2008	9/2/2008	9/4/2008	9/3/2008	9/3/2008
Analyte				Field Dup.			Field Dup.					
SVOCs (µg/L) (Continued)												
Di-n-octyl Phthalate	0.018 U	0.018 U	--	--	--	--	--	--	0.02 U	0.018 UJ	0.064 UJ	--
Fluoranthene	0.02 U	0.02 U	--	--	--	--	--	--	0.11 J	0.089 UJ	0.089 UJ	--
Fluorene	0.027 U	0.043 J	--	--	--	--	--	--	0.03 U	0.027 UJ	0.027 UJ	--
Hexachlorobenzene	0.022 U	0.022 U	--	--	--	--	--	--	0.025 U	0.022 UJ	0.022 UJ	--
Hexachlorobutadiene	0.027 U	0.027 U	--	--	--	--	--	--	0.03 U	0.027 UJ	0.027 UJ	--
Hexachlorocyclopentadiene	--	--	--	--	--	--	--	--	0.22 U	0.19 UJ	0.19 UJ	--
Hexachloroethane	0.024 U	0.024 U	--	--	--	--	--	--	0.027 U	0.024 UJ	0.024 UJ	--
Indeno(1,2,3-cd)pyrene	0.021 U	0.021 U	--	--	--	--	--	--	0.024 U	0.021 UJ	0.024 UJ	--
Isophorone	0.016 U	0.016 U	--	--	--	--	--	--	0.018 U	0.016 UJ	0.016 UJ	--
Naphthalene	0.037 UJ	0.19 UJ	--	--	--	--	--	--	0.025 U	0.022 UJ	0.028 UJ	--
Nitrobenzene	0.028 U	0.028 U	--	--	--	--	--	--	0.032 U	0.028 UJ	0.028 UJ	--
N-Nitrosodi-n-propylamine	0.037 U	0.037 U	--	--	--	--	--	--	0.042 U	0.037 UJ	0.037 UJ	--
N-Nitrosodiphenylamine	0.048 U	0.048 U	--	--	--	--	--	--	0.054 U	0.048 UJ	0.048 UJ	--
Pentachlorophenol	0.34 U	0.34 U	--	--	--	--	--	--	0.38 UJ	0.34 UJ	0.34 UJ	--
Phenanthrene	0.022 U	0.022 U	--	--	--	--	--	--	0.025 U	0.039 UJ	0.039 UJ	--
Phenol	0.63 U	0.63 U	--	--	--	--	--	--	0.07 U	1.8 UJ	0.063 UJ	--
Pyrene	0.019 U	0.019 U	--	--	--	--	--	--	0.14 J	0.11 UJ	0.11 UJ	--
1,4-Dioxane	0.26 U	15	1 U	1 U	1 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
TPH (µg/L)												
Diesel range hydrocarbons	11 U	11 U	260 U	270 U	260 U	12 U	13 U	12 U	260 U	12 U	11 U	12 U
Lube oil range hydrocarbons	19 U	19 U	520 U	530 U	520 U	21 U	22 U	20 U	520 U	20 U	19 U	21 U
TPH (as gasoline)	13 U	410 J	50 U	50 U	250 U	13 U	13 U	13 U	50 U	190 J	13 U	13 U
VOCs (µg/L)												
1,1,1-Trichloroethane	0.12 U	0.12 U	0.5 U	0.5 U	0.5 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
1,1,2-Trichlorotrifluoroethane	0.14 U	0.14 U	0.5 U	0.5 U	0.5 U	0.079 U	0.079 U	0.079 U	0.079 U	0.15 J	0.079 U	0.079 U
1,1-Dichloroethane	0.3 J	2.5	0.5 U	0.5 U	0.5 U	0.042 U	0.042 U	0.73	0.042 U	0.042 U	0.042 U	0.042 U
1,1-Dichloroethene	0.0061 U	0.0078 J	0.02 U	0.02 U	0.02 U	0.0095 U	0.0095 U	0.48	0.0095 U	0.0095 U	0.0095 U	0.0095 U
1,2-Dichlorobenzene	0.12 J	1.4	0.5 U	0.5 U	0.5 U	0.044 U	0.044 U	0.044 U	0.044 U	0.05 J	0.08 J	0.044 U
1,2-Dichloroethane	0.12 U	0.12 U	0.5 U	0.5 U	0.5 U	0.073 U	0.073 U	0.1 J	0.073 U	0.073 U	0.073 U	0.073 U
2,2-Dichloro-1,1,1-trifluoroethane	0.49 U	0.49 U	1 U	1 U	1 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
2-Butanone	2.3 U	2.3 U	20 U	20 U	20 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
2-Methylpentane	0.49 U	0.49 U	1 U	1 U	1 U	2	2	7.5	0.4 U	14	20	2.8
3-Methylpentane	0.41 U	0.41 U	1 U	1 U	1 U	5.6	6.1	21	0.36 U	42	55	8
Acetone	4.1 U	4.1 U	20 U	20 U	20 U	2.5 U	13 UJ	13 UJ	2.5 U	13 UJ	13 UJ	13 UJ
Benzene	0.14 U	2.5	0.5 U	0.5 U	0.5 U	0.045 U	0.045 U	0.045 U	0.045 U	0.05 J	0.045 U	0.045 U
Carbon Disulfide	0.16 U	0.16 U	0.5 U	0.5 U	0.5 U	0.045 U	0.05 UJ	0.05 UJ	0.21 UJ	0.05 UJ	0.045 U	0.1 UJ
Carbon Tetrachloride	0.14 U	0.14 U	0.5 U	0.5 U	0.5 U	0.068 U	0.068 U	0.068 U	0.068 U	0.068 U	0.068 U	0.068 U
Chlorobenzene	0.14 U	0.21 J	0.5 U	0.5 U	0.5 U	0.045 U	0.045 U	0.045 U	0.045 U	0.045 U	0.045 U	0.045 U
Chloroethane	0.35 J	7.6	0.5 U	0.5 U	0.5 U	0.13 U	0.13 U	9.8	0.13 U	0.13 U	0.13 U	0.13 U
Chloroform	0.14 U	0.14 U	0.5 U	0.5 U	0.5 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U	0.042 U
Chloromethane	0.14 U	0.14 U	0.5 U	0.5 U	0.5 U	0.053 U	0.053 U	0.053 U	0.053 U	0.053 U	0.053 U	0.053 U
cis-1,2-Dichloroethene	0.26 J	1.6	0.5 U	0.5 U	0.05 J	0.045 U	0.045 U	0.38 J	0.045 U	0.67	0.11 J	0.045 U

TABLE I-8

GROUNDWATER ANALYTICAL RESULTS FOR TEMPORARY WELLS (2004-2009)[1]

PSC Washougal Facility
Washougal, Washington

Site ID	GP-100	GP-101	GP-104	GP-104	GP-105	GP-107	GP-107	GP-108	GP-110	GP-112	GP-113	GP-114
Depth	12	11	5	5	6	7.5	7.5	7.5	7	8	7.5	7
Date Sampled	10/3/2007	10/2/2007	5/5/2009	5/5/2009	5/5/2009	9/3/2008	9/3/2008	9/3/2008	9/2/2008	9/4/2008	9/3/2008	9/3/2008
Analyte				Field Dup.			Field Dup.					
VOCs (µg/L) (Continued)												
Dichlorodifluoromethane	0.17 U	0.17 U	0.5 U	0.5 U	0.5 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U
Ethylbenzene	0.26 J	6.7	0.5 U	0.5 U	0.5 U	0.042 U	0.042 U	0.042 U	0.042 U	3.9	0.042 U	0.042 U
m,p-Xylene	1.8	9.9	0.5 U	0.5 U	0.11 J	0.078 U	0.078 U	0.078 U	0.21 J	6.1	0.22 J	0.078 U
Methylcyclopentane	0.42 U	1.3	1 U	1 U	1 U	14	15	42	0.4 U	120	120 J	18
Methylene Chloride	0.2 U	0.2 U	2 U	2 U	2 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
o-Xylene	0.58	9.1	0.5 U	0.5 U	0.04 J	0.037 U	0.037 U	0.037 U	0.07 J	3.7	0.09 J	0.037 U
Tetrachloroethene	0.13 U	0.13 U	0.5 U	0.5 U	0.5 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U
Toluene	1	6.8	0.5 UJ	0.5 UJ	0.18 J	0.048 U	0.49 UJ	0.49 UJ	0.22 J	9.4	0.49 UJ	0.49 UJ
trans-1,2-Dichloroethene	0.15 U	0.19 J	0.5 U	0.5 U	0.5 U	0.048 U	0.048 U	0.048 U	0.048 U	0.048 U	0.048 U	0.048 U
Trichloroethene	0.14 U	0.14 J	0.5 U	0.5 U	0.5 U	0.061 U	0.061 U	0.08 J	0.061 U	0.08 J	0.21 J	0.061 U
Trichlorofluoromethane	0.14 U	0.14 U	0.5 U	0.5 U	0.5 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U
Vinyl Chloride	0.64	2.2	0.02 U	0.02 U	0.02 U	0.0035 U	0.0035 U	0.092	0.0035 U	1.6	0.5	0.0035 U

Note
1. Laboratory data flags are as follows:
J = value is an estimate.
U = not detected at the reporting limit listed.
UJ = value is an estimate at the reporting limit listed.
UR = result is rejected due to quality control issues.

Abbreviations
-- = not available/not applicable
µg/L = micrograms per liter
mg/L = milligrams per liter
SVOCs = semivolatile organic compounds
TPH = total petroleum hydrocarbons
VOCs = volatile organic compounds

TABLE I-9

GROUNDWATER ANALYTICAL RESULTS FOR VOLATILE ORGANIC COMPOUNDS (3Q09-2Q11)[1]

PSC Washougal Facility
Washougal, Washington

Concentrations in micrograms per liter (µg/L)

Sample ID	MC-1								MC-2								MC-2D					
Analyte / Date Sampled	9/29/2009	12/21/2009	3/26/2010	6/25/2010	9/17/2010	12/16/2010	3/24/2011	6/21/2011	9/23/2009	12/21/2009	3/25/2010	6/25/2010	9/20/2010	12/16/2010	3/28/2011	6/21/2011	9/23/2009	12/21/2009	3/25/2010	6/25/2010	9/20/2010	12/16/2010
1,1,1-Trichloroethane	0.5 U	0.26 J	0.5 U	0.22 J	0.5 U	0.5 U	0.5 U	0.13 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.075 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichlorotrifluoroethane	0.5 U	0.18 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.13 U	10	0.16 J	0.5 U	2.3	0.29 J	0.36 J	0.5 U	0.23 J	3.5	8.4	4.7	37	6.1	12
1,1-Dichloroethane	0.11 J	0.28 J	0.08 J	0.12 J	0.09 J	0.5 U	0.5 U	0.23 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.077 U	2	2.8	1.8	13	3.6	4.7
1,1-Dichloroethene	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.006 J	0.5 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.0059 U	0.02 U	0.02 U	0.02 U	0.2 U	0.02 U	0.02 U
1,2-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.12 J	0.02 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.12 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.08 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.08 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,2-Dichloro-1,1,1-trifluoroethane	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	0.21 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.21 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone	20 U	20 U	20 U	20 U	20 U	20 U	5 U	1.9 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	1.9 U	20 U	20 U	20 U	20 U	20 U	20 U
2-Chloroethyl Vinyl Ether	--	--	--	--	--	--	20 U	0.16 U	--	--	--	--	--	--	5 U	0.16 U	--	--	--	--	--	--
2-Methylpentane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.21 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.21 U	1 U	1 U	1 U	1 U	1 U	1 U
3-Methylpentane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.18 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.18 U	1 U	1 U	1 U	1 U	1 U	1 U
Acetone	20 U	20 U	20 U	20 U	20 U	20 U	20 U	3.3 U	20 UJ	20 U	20 U	20 U	20 U	20 U	20 U	3.3 U	20 U	20 U	20 U	20 U	20 U	20 U
Benzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.054 U	0.06 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.054 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Carbon disulfide	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.055 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.055 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Carbon tetrachloride	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.096 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.096 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.11 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.11 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.16 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.16 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.072 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.072 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloromethane	0.5 UJ	0.5 U	0.5 U	0.07 J	0.5 U	0.5 U	0.5 U	0.068 U	0.5 U	0.5 U	0.5 U	0.06 J	0.5 U	0.5 UJ	0.5 U	0.068 U	0.5 U	0.5 U	0.5 U	0.09 J	0.5 U	0.5 U
cis-1,2-Dichloroethene	0.27 J	0.34 J	0.1 J	0.11 J	0.31 J	0.5 U	0.5 U	0.2 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.067 U	0.56	0.75	0.49 J	3.5	1.3	1.9
Dichlorodifluoromethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.13 U	0.5 U	0.5 U	0.5 U	4.3 U	0.5 U	1.7 U	0.5 U	0.13 U	0.5 U	0.5 U	0.5 U	7.6 U	0.5 U	2.6 U
Ethylbenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.05 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.05 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
m,p-Xylene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.091 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.091 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclopentane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.21 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.21 U	1 U	1 U	1 U	1 U	1 U	1 U
Methylene chloride	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.1 U	2 U	2 U	2 U	2 U	2 U	2 U
o-Xylene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.074 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.074 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Tetrachloroethene	0.14 J	1.1	0.65	1.6	0.11 J	0.35 J	0.22 J	1.2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.099 U	0.5 U	0.5 U	0.5 U	0.1 J	0.5 U	0.5 U
Toluene	0.5 U	0.43 UJ	0.5 U	0.5 U	0.5 U	0.24 J	0.5 U	0.052 U	0.5 UJ	0.43 UJ	0.5 U	0.13 J	0.5 UJ	0.5 UJ	0.5 U	0.052 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ
trans-1,2-Dichloroethene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.057 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.057 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethene	0.16 J	0.5 U	0.35 J	0.72	0.16 J	0.5 U	0.5 U	0.62	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.1 U	0.5 U	0.31 UJ	0.5 U	0.13 J	0.5 U	0.5 U
Trichlorofluoromethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.12 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.12 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride	0.2 J	0.081	0.036	0.015 J	0.089	0.02 U	0.02 U	0.029	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.0045 U	0.013 J	0.012 J	0.0087 J	0.065	0.019 J	0.029

TABLE I-9

GROUNDWATER ANALYTICAL RESULTS FOR VOLATILE ORGANIC COMPOUNDS (3Q09-2Q11)[1]

PSC Washougal Facility
Washougal, Washington

Concentrations in micrograms per liter (µg/L)

Sample ID	MC-2D (Continued)		MC-8								MC-10D								MC-12				
Analyte / Date Sampled	3/28/2011	6/22/2011	9/28/2009	12/17/2009	3/29/2010	6/23/2010	9/21/2010	12/14/2010	3/23/2011	6/22/2011	9/24/2009	12/17/2009	3/26/2010	6/24/2010	9/20/2010	12/20/2010	3/28/2011	6/29/2011	9/24/2009	12/17/2009	3/29/2010	6/24/2010	9/20/2010
1,1,1-Trichloroethane	0.5 U	0.16 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.075 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.075 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichlorotrifluoroethane	16	0.074 U	0.77	0.17 J	0.5 U	0.5 U	0.93	0.35 J	0.22 J	0.13 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.17 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethane	12	1.9 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.077 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.077 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethene	0.016 J	37	0.01 J	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.0059 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.0059 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
1,2-Dichlorobenzene	0.5 U	0.13 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.12 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.12 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	0.5 U	0.12 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.08 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.08 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,2-Dichloro-1,1,1-trifluoroethane	1 U	0.3 J	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	0.21 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.21 U	1 U	1 U	1 U	1 U	1 U
2-Butanone	20 U	24	20 U	20 U	20 U	20 U	20 U	20 U	20 U	1.9 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	1.9 U	20 U	20 U	20 U	20 U	20 U
2-Chloroethyl Vinyl Ether	5 U	0.1 U	--	--	--	--	--	--	5 U	0.16 U	--	--	--	--	--	--	5 U	0.16 U	--	--	--	--	--
2-Methylpentane	1 U	0.21 U	1.5	1 U	1 U	1 U	0.62 J	1 U	1 U	0.21 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.21 U	1 U	1 U	1 U	1 U	1 U
3-Methylpentane	1 U	0.068 U	1.2	1 U	1 U	1 U	0.61 J	1 U	1 U	0.18 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.18 U	1 U	1 U	1 U	1 U	1 U
Acetone	20 U	0.075 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	3.3 U	20 UJ	20 U	20 U	20 U	20 U	20 U	20 U	3.3 U	20 U	20 U	20 U	20 U	20 U
Benzene	0.5 U	0.054 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.054 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.054 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Carbon disulfide	0.5 U	0.072 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.055 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.055 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Carbon tetrachloride	0.5 U	3.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.096 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.096 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	0.5 U	0.096 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.11 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.11 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroethane	0.5 U	0.055 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.16 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.16 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform	0.5 U	11	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.072 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.072 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloromethane	0.5 U	0.041 U	0.5 U	0.5 U	0.5 U	0.06 J	0.5 U	0.5 U	0.5 U	0.068 U	0.5 UJ	0.5 U	0.5 U	0.23 J	0.5 U	0.5 U	0.5 U	0.068 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	5.6	0.095	0.77	0.5 U	0.5 U	0.5 U	0.25 J	0.5 U	0.5 U	0.067 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.067 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dichlorodifluoromethane	0.5 U	0.091 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.13 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.13 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Ethylbenzene	0.5 U	0.12 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.05 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.05 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
m,p-Xylene	0.5 U	0.057 U	0.19 J	0.5 U	0.5 U	0.5 U	0.12 J	0.5 U	0.5 U	0.091 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.091 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclopentane	1 U	0.18 U	1.4	1 U	1 U	1 U	0.51 J	1 U	1 U	0.21 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.21 U	1 U	1 U	1 U	1 U	1 U
Methylene chloride	2 U	0.11 J	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.1 U	2 U	2 U	2 U	2 U	2 U
o-Xylene	0.5 U	0.16 U	0.31 J	0.5 U	0.5 U	0.5 U	0.22 J	0.5 U	0.5 U	0.074 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.074 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Tetrachloroethene	0.5 U	0.11 U	0.81	0.49 J	0.73	0.81	1.1	0.6	0.59	0.99	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.099 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	0.5 U	0.1 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.052 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.052 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ
trans-1,2-Dichloroethene	0.5 U	0.21 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.057 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.057 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethene	0.5 U	0.08 U	0.13 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane	0.5 U	0.05 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.12 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.12 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride	0.057	0.21 U	0.81 J	0.02 U	0.011 J	0.02 U	0.32	0.02 U	0.02 U	0.0045 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.0045 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U

TABLE I-9

GROUNDWATER ANALYTICAL RESULTS FOR VOLATILE ORGANIC COMPOUNDS (3Q09-2Q11)[1]

PSC Washougal Facility
Washougal, Washington

Concentrations in micrograms per liter (µg/L)

Sample ID	MC-12 (Continued)			MC-12D								MC-13								MC-13D			
Analyte / Date Sampled	12/20/2010	3/29/2011	6/27/2011	9/24/2009	12/17/2009	3/29/2010	6/24/2010	9/20/2010	12/20/2010	3/29/2011	6/27/2011	9/22/2009	12/16/2009	3/24/2010	6/22/2010	9/16/2010	12/17/2010	3/25/2011	6/28/2011	9/22/2009	12/16/2009	3/24/2010	6/22/2010
1,1,1-Trichloroethane	0.5 U	0.5 U	0.075 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.075 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.075 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichlorotrifluoroethane	0.5 U	0.5 U	0.13 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.13 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.13 U	4.4	3.3	2.9	22
1,1-Dichloroethane	0.5 U	0.5 U	0.077 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.077 U	0.1 J	0.08 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.077 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethene	0.02 U	0.02 U	0.0059 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.0059 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.0059 U	0.02 U	0.02 U	0.02 U	0.02 U
1,2-Dichlorobenzene	0.5 U	0.5 U	0.12 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.12 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.12 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	0.5 U	0.5 U	0.08 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.08 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.08 U	0.5 U	0.5 U	0.5 U	0.5 U
2,2-Dichloro-1,1,1-trifluoroethane	1 U	1 U	0.21 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.21 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.21 U	1 U	1 U	1 U	1 U
2-Butanone	20 U	20 U	1.9 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	1.9 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	1.9 U	20 U	20 U	20 U	20 U
2-Chloroethyl Vinyl Ether	--	5 U	0.16 U	--	--	--	--	--	--	5 U	0.16 U	--	--	--	--	--	--	5 U	0.16 U	--	--	--	--
2-Methylpentane	1 U	1 U	0.21 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.21 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.21 U	1 U	1 U	1 U	1 U
3-Methylpentane	1 U	1 U	0.18 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.18 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.18 U	1 U	1 U	1 U	1 U
Acetone	20 U	20 U	3.3 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	3.3 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	3.3 U	20 UJ	20 U	20 U	20 U
Benzene	0.5 U	0.5 U	0.054 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.054 U	0.05 J	0.5 U	0.04 J	0.5 U	0.5 U	0.5 U	0.5 U	0.054 U	0.5 U	0.5 U	0.5 U	0.5 U
Carbon disulfide	0.5 U	0.5 U	0.055 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.055 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.055 U	0.5 U	0.5 U	0.5 U	0.5 U
Carbon tetrachloride	0.5 U	0.5 U	0.096 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.096 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.096 U	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	0.5 U	0.5 U	0.11 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.11 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.11 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroethane	0.5 U	0.5 U	0.16 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.16 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.16 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform	0.5 U	0.5 U	0.072 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.072 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.072 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloromethane	0.5 U	0.5 U	0.068 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.068 U	0.5 U	0.09 UJ	0.5 U	0.5 U	0.07 J	0.5 U	0.5 U	0.068 U	0.5 UJ	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	0.5 U	0.5 U	0.067 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.067 U	0.17 J	0.1 J	0.1 J	0.5 U	0.5 U	0.5 U	0.5 U	0.1 J	0.5 U	0.5 U	0.5 U	0.5 U
Dichlorodifluoromethane	0.5 U	0.5 U	0.13 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.13 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.13 U	0.5 U	0.5 U	0.5 U	0.5 U
Ethylbenzene	0.5 U	0.5 U	0.05 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.05 U	0.07 J	0.5 U	0.05 J	0.5 U	0.5 U	0.5 U	0.5 U	0.05 U	0.5 U	0.5 U	0.5 U	0.5 U
m,p-Xylene	0.5 U	0.5 U	0.091 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.091 U	0.14 J	0.5 U	0.5 U	0.5 U	0.12 J	0.5 U	0.5 U	0.091 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclopentane	1 U	1 U	0.21 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.21 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.21 U	1 U	1 U	1 U	1 U
Methylene chloride	2 U	2 U	0.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.1 U	2 U	2 U	2 U	2 U
o-Xylene	0.5 U	0.5 U	0.074 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.074 U	0.11 J	0.5 U	0.09 J	0.5 U	0.5 U	0.5 U	0.5 U	0.074 U	0.5 U	0.5 U	0.5 U	0.5 U
Tetrachloroethene	0.5 U	0.5 U	0.099 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.099 U	0.5 U	0.09 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.15 J	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	0.5 UJ	0.5 U	0.052 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.052 U	0.33 J	0.43 UJ	0.28 J	0.16 J	0.5 UJ	0.5 UJ	0.5 U	0.43 UJ	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,2-Dichloroethene	0.5 U	0.5 U	0.057 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.057 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.057 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethene	0.5 U	0.5 U	0.1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.1 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane	0.5 U	0.5 U	0.12 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.12 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.12 U	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride	0.02 U	0.02 U	0.0045 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.0045 U	0.63 J	0.35	0.28	0.14	0.13	0.052	0.056	0.14	0.02 U	0.02 U	0.02 U	0.02 U

TABLE I-9

GROUNDWATER ANALYTICAL RESULTS FOR VOLATILE ORGANIC COMPOUNDS (3Q09-2Q11)[1]

PSC Washougal Facility
Washougal, Washington

Concentrations in micrograms per liter (µg/L)

Sample ID	MC-13D (Continued)				MC-14								MC-14D								MC-15		
Analyte / Date Sampled	9/16/2010	12/17/2010	3/25/2011	6/28/2011	9/22/2009	12/16/2009	3/25/2010	6/22/2010	9/15/2010	12/20/2010	3/25/2011	6/28/2011	9/22/2009	12/16/2009	3/24/2010	6/22/2010	9/16/2010	12/17/2010	3/25/2011	6/28/2011	9/13/2009	12/16/2009	3/25/2010
1,1,1-Trichloroethane	0.5 U	0.5 U	0.5 U	0.48 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.08 J	0.075 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.075 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichlorotrifluoroethane	2.4	3.2	23	670	0.5 U	0.5 U	0.5 U	0.5 U	0.27 J	0.5 U	0.5 U	0.13 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.15 J	0.5 U	0.5 U	0.5 U
1,1-Dichloroethane	0.5 U	0.5 U	0.5 U	0.2 U	1.8	4.5	2.2	8.7	0.82	3.8	19	19	0.13 J	0.5 U	0.21 J	0.5 U	0.14 J	0.5 U	0.5 U	0.077 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethene	0.02 U	0.02 U	0.02 U	0.74 U	0.03	0.012 J	0.02 U	0.02 U	0.013 J	0.02 U	0.024	0.014 J	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.0059 U	0.02 U	0.02 U	0.02 U
1,2-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.3 U	0.73	0.43 J	0.4 J	0.32 J	0.58	0.56	0.47 J	0.54	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.12 U	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	0.5 U	0.5 U	0.5 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.08 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.08 U	0.5 U	0.5 U	0.5 U
2,2-Dichloro-1,1,1-trifluoroethane	1 U	1 U	1 U	0.53 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.21 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.21 U	1 U	1 U	1 U
2-Butanone	20 U	20 U	20 U	4.8 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	1.9 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	1.9 U	20 U	20 U	20 U
2-Chloroethyl Vinyl Ether	--	--	5 U	0.4 U	--	--	--	--	--	--	5 U	0.16 U	--	--	--	--	--	--	5 U	0.16 U	--	--	--
2-Methylpentane	1 U	1 U	1 U	0.53 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.21 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.21 U	1 U	1 U	1 U
3-Methylpentane	1 U	1 U	1 U	0.45 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.18 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.18 U	1 U	1 U	1 U
Acetone	20 U	20 U	20 U	8.3 U	20 UJ	20 U	20 U	20 U	20 U	20 U	20 U	3.3 U	20 UJ	20 U	20 U	20 U	20 U	20 U	20 U	3.3 U	20 UJ	20 U	20 U
Benzene	0.5 U	0.5 U	0.5 U	0.14 U	0.81	2	0.98	2.5	0.43 J	2	3.5	4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.054 U	0.06 J	0.5 U	0.5 U
Carbon disulfide	0.5 U	0.5 U	0.5 U	0.14 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.055 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.055 U	0.5 U	0.5 U	0.5 U
Carbon tetrachloride	0.5 U	0.5 U	0.5 U	0.24 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.096 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.096 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	0.5 U	0.5 U	0.5 U	0.28 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.11 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.11 U	0.5 U	0.5 U	0.5 U
Chloroethane	0.5 U	0.5 U	0.5 U	0.4 U	1.6	8.2	2.8	13	0.51	4.2	12	9.8	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.16 U	0.5 U	0.5 U	0.5 U
Chloroform	0.5 U	0.5 U	0.5 U	0.18 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.072 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.072 U	0.5 U	0.5 U	0.5 U
Chloromethane	0.5 U	0.5 U	0.5 U	0.17 U	0.5 UJ	0.5 U	0.5 U	0.07 J	0.08 J	0.5 UJ	0.5 U	0.068 U	0.5 U	0.5 U	0.5 U	0.07 J	0.5 U	0.5 U	0.5 U	0.068 U	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	0.5 U	0.5 U	0.5 U	0.17 U	1.5	0.93	0.7	0.78	1	0.51	8.1	1.2	0.09 J	0.5 U	0.13 J	0.5 U	0.1 J	0.5 U	0.5 U	0.067 U	0.08 J	0.5 U	0.5 U
Dichlorodifluoromethane	0.5 U	0.5 U	0.5 U	0.33 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 J	0.5 U	0.13 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.13 U	0.5 U	0.5 U	0.5 U
Ethylbenzene	0.5 U	0.5 U	0.5 U	0.13 U	1.2	3.3	0.88	3.3	0.76	2.6	1.8	1.9	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.05 U	0.5 U	0.5 U	0.5 U
m,p-Xylene	0.5 U	0.5 U	0.5 U	0.23 U	4.2	15	2.5	13	2.1	6.2	4.3	5.6	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.091 U	0.5 U	0.5 U	0.5 U
Methylcyclopentane	1 U	1 U	1 U	0.53 U	0.43 J	0.69 J	0.41 J	0.51 J	0.28 J	0.51 J	1.1	1.2	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.21 U	1 U	1 U	1 U
Methylene chloride	2 U	2 U	2 U	0.53 UJ	2 U	2 U	2 U	0.18 J	2 U	2 U	2 UJ	0.12 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.1 U	2 U	2 U	2 U
o-Xylene	0.5 U	0.5 U	0.5 U	0.19 U	5.6	13	3.4	15	3.1	10	10	13	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.074 U	0.5 U	0.5 U	0.5 U
Tetrachloroethene	0.5 U	0.5 U	0.5 U	0.25 U	0.5 U	0.15 J	0.09 J	0.09 J	0.5 U	0.11 J	0.27 J	0.099 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.099 U	0.1 J	0.09 J	0.15 J
Toluene	0.5 UJ	0.5 UJ	0.5 U	0.13 U	1.9	5.8	1.5	5.1	0.5 U	3.7	3	5.1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.052 U	0.5 U	0.5 U	0.5 U
trans-1,2-Dichloroethene	0.5 U	0.5 U	0.5 U	0.15 U	0.16 J	0.29 J	0.11 J	0.33 J	0.11 J	0.21 J	0.47 J	0.61	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.057 U	0.5 U	0.5 U	0.5 U
Trichloroethene	0.5 U	0.5 U	0.5 U	0.25 U	0.36 J	0.33 J	0.26 J	0.25 J	0.25 J	0.22 J	0.56	0.26 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.1 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane	0.5 U	0.5 U	0.5 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.12 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.12 U	0.5 U	0.5 U	0.5 U
Vinyl chloride	0.02 U	0.02 U	0.02 U	0.0087 J	1.4 J	0.61	0.46	0.73	0.54	0.44	6.2	1.9	0.035 J	0.02 U	0.053	0.02 U	0.034	0.02 U	0.02 U	0.0045 U	0.02 U	0.02 U	0.02 U

TABLE I-9

GROUNDWATER ANALYTICAL RESULTS FOR VOLATILE ORGANIC COMPOUNDS (3Q09-2Q11)[1]

PSC Washougal Facility
Washougal, Washington

Concentrations in micrograms per liter (µg/L)

Sample ID	MC-15 (Continued)					MC-15D												MC-20					
Analyte / Date Sampled	6/28/2010	9/15/2010	12/21/2010	3/28/2011	6/21/2011	9/23/2009	9/23/2009	12/16/2009	12/16/2009	3/25/2010	3/25/2010	6/28/2010	6/28/2010	9/15/2010	12/21/2010	3/28/2011	6/29/2011	3/23/2010	6/22/2010	9/14/2010	12/15/2010	3/22/2011	6/30/2011
1,1,1-Trichloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.075 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.075 U	0.15 J	0.58	0.12 J	0.45 J	0.57	0.22 J
1,1,2-Trichlorotrifluoroethane	0.26 J	0.5 U	0.5 U	0.5 U	0.13 U	67	70	87	90	82	80	87	89	79	130	140	54	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.13 U
1,1-Dichloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.077 U	58	58	57	59	50	51	66	62	60	78	120	44	0.28 J	0.74	0.94	0.29 J	0.24 J	0.18 J
1,1-Dichloroethene	0.02 U	0.02 U	0.02 U	0.02 U	0.0059 U	0.11	0.1	0.02 U	0.02 U	0.02 U	0.02 U	0.17 U	0.17 U	0.094	0.19	0.21	0.07 U	0.02 U	0.014 J	0.02 U	0.02 U	0.01 J	0.0059 U
1,2-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.12 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.12 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.12 U
1,2-Dichloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.08 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.08 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.08 U
2,2-Dichloro-1,1,1-trifluoroethane	1 U	1 U	1 U	1 U	0.21 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.21 U	1 U	1 U	1 U	1 U	1 U	0.21 U
2-Butanone	20 U	20 U	20 U	20 U	1.9 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	1.9 U	20 U	20 U	20 U	20 U	20 U	1.9 U
2-Chloroethyl Vinyl Ether	--	--	--	5 U	0.16 U	--	--	--	--	--	--	--	--	--	--	5 U	0.16 U	--	--	--	--	5 U	0.16 U
2-Methylpentane	1 U	1 U	1 U	1 U	0.21 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.21 U	1 U	1 U	1 U	1 U	1 U	0.21 U
3-Methylpentane	1 U	1 U	1 U	1 U	0.18 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.18 U	1 U	1 U	1 U	1 U	1 U	0.18 U
Acetone	20 U	20 U	20 UJ	20 U	3.3 U	20 UJ	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	3.3 U	4.6 J	20 U	20 U	20 U	20 U	5.7 J
Benzene	0.5 U	0.5 U	0.5 U	0.5 U	0.054 U	0.05 J	0.04 J	0.04 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.07 J	0.12 J	0.054 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.054 U
Carbon disulfide	0.5 U	0.5 U	0.5 U	0.5 U	0.055 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.055 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.055 U
Carbon tetrachloride	0.5 U	0.5 U	0.5 U	0.5 U	0.096 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.096 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.096 U
Chlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.11 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.11 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.11 U
Chloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.16 U	0.61	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.62	0.5 U	0.5 U	0.5 U	0.5 U	0.16 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.16 U
Chloroform	0.5 U	0.5 U	0.5 U	0.5 U	0.072 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.072 U	0.5 U	0.5 U	0.5 U	0.08 J	0.5 U	0.072 U
Chloromethane	0.5 UJ	0.5 U	0.5 U	0.5 U	0.068 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.068 U	0.5 U	0.5 U	0.08 J	0.5 U	0.5 U	0.068 U
cis-1,2-Dichloroethene	0.5 U	0.5 U	0.5 U	0.5 U	0.067 U	21	21	22	22	19	19	32	35	28	53	75	23	0.07 J	0.32 J	0.51	0.09 J	0.19 J	0.18 J
Dichlorodifluoromethane	9.9 U	0.5 U	0.5 U	0.5 U	0.13 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	21 U	22 U	0.5 U	31 U	0.5 U	0.13 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.13 U
Ethylbenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.05 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.05 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.05 U
m,p-Xylene	0.5 U	0.5 U	0.5 U	0.5 U	0.091 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.091 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.091 U
Methylcyclopentane	1 U	1 U	1 U	1 U	0.21 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.21 U	1 U	1 U	1 U	1 U	1 U	0.21 U
Methylene chloride	2 U	2 U	2 U	2 U	0.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	0.1 U	2 U	2 U	2 U	2 U	2 U	0.1 U
o-Xylene	0.5 U	0.5 U	0.5 U	0.5 U	0.074 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.074 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.074 U
Tetrachloroethene	0.5 U	0.5 U	0.5 U	0.5 U	0.099 U	0.18 J	0.15 J	0.19 J	0.22 J	0.17 J	0.15 J	0.17 J	0.2 J	0.21 J	0.27 J	0.28 J	0.14 J	0.18 J	0.39 J	0.32 J	0.65	1.7	0.37 J
Toluene	0.42 J	0.5 U	0.5 UJ	0.13 J	0.19 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.052 U	0.15 J	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.052 U
trans-1,2-Dichloroethene	0.5 U	0.5 U	0.5 U	0.5 U	0.057 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.057 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.057 U
Trichloroethene	0.5 U	0.1 J	0.5 U	0.5 U	0.1 U	0.42 J	0.44 J	0.45 J	0.4 J	0.35 J	0.36 J	0.44 J	0.44 J	0.41 J	0.52	0.67	0.27 J	0.26 J	0.95	0.34 J	0.44 J	1.4	0.53
Trichlorofluoromethane	0.5 U	0.5 U	0.5 U	0.5 U	0.12 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.12 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.12 U
Vinyl chloride	0.02 U	0.02 U	0.02 U	0.02 U	0.0045 U	0.28 J	0.27 J	0.22	0.23	0.21	0.22	0.43	0.42	0.24	0.52	0.73	0.24	0.015 J	0.2	0.15	0.02	0.03	0.06

TABLE I-9

GROUNDWATER ANALYTICAL RESULTS FOR VOLATILE ORGANIC COMPOUNDS (3Q09-2Q11)[1]

PSC Washougal Facility
Washougal, Washington

Concentrations in micrograms per liter (µg/L)

Sample ID	MC-20D								MC-21								MC-24					
Analyte / Date Sampled	9/22/2009	12/15/2009	3/23/2010	6/22/2010	9/14/2010	12/15/2010	3/22/2011	6/30/2011	9/23/2009	12/16/2009	3/26/2010	6/28/2010	9/16/2010	12/17/2010	3/25/2011	6/28/2011	9/28/2009	12/21/2009	3/30/2010	6/28/2010	9/17/2010	12/16/2010
1,1,1-Trichloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.075 U	0.5 U	0.09 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.075 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichlorotrifluoroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.13 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.13 U	0.13 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.077 U	0.21 J	0.24 J	0.1 J	0.08 J	0.17 J	0.09 J	0.09 J	0.1 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethene	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.0059 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.0059 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
1,2-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.12 U	0.34 J	0.17 J	0.17 J	0.14 J	0.27 J	0.15 J	0.43 J	0.36 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.08 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.08 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,2-Dichloro-1,1,1-trifluoroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.21 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.21 U	1 UJ	1 U	1 U	1 U	1 U	1 U
2-Butanone	20 U	20 U	20 U	20 U	20 U	20 U	20 U	1.9 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	1.9 U	20 U	20 U	20 U	20 U	20 U	20 U
2-Chloroethyl Vinyl Ether	--	--	--	--	--	--	5 U	0.16 U	--	--	--	--	--	--	5 U	0.16 U	--	--	--	--	--	--
2-Methylpentane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.21 U	0.32 J	1 U	1 U	1 U	0.22 J	1 U	1 U	0.21 U	1 U	1 U	1 U	1 U	1 U	1 U
3-Methylpentane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.18 U	0.31 J	1 U	1 U	1 U	0.29 J	1 U	1 U	0.18 U	1 U	1 U	1 U	1 U	1 U	1 U
Acetone	20 U	20 U	20 U	20 U	20 U	20 U	20 U	3.3 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	3.3 U	20 U	20 U	20 U	20 U	20 U	20 U
Benzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.054 U	0.14 J	0.18 J	0.06 J	0.5 U	0.1 J	0.5 U	0.5 U	0.054 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Carbon disulfide	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.055 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.055 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Carbon tetrachloride	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.096 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.096 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.11 U	0.11 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.11 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.16 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.16 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.072 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.072 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloromethane	0.5 U	0.5 U	0.5 U	0.5 U	0.1 J	0.5 UJ	0.5 U	0.068 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.068 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ
cis-1,2-Dichloroethene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.067 U	0.31 J	0.15 J	0.14 J	0.16 J	0.29 J	0.1 J	0.12 J	0.16 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dichlorodifluoromethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.13 U	0.47 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.13 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Ethylbenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.05 U	0.14 J	0.25 J	0.5 U	0.5 U	0.08 J	0.06 J	0.06 J	0.07 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
m,p-Xylene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.091 U	0.47 J	0.42 J	0.25 J	0.14 J	0.6	0.26 J	0.17 J	0.22 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclopentane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.21 U	0.35 J	0.25 J	1 U	1 U	0.25 J	1 U	1 U	0.21 U	1 U	1 U	1 U	1 U	1 U	1 U
Methylene chloride	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.1 U	2 U	2 U	2 U	2 U	2 U	2 U
o-Xylene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.074 U	0.44 J	0.33 J	0.25 J	0.15 J	0.41 J	0.24 J	0.25 J	0.45 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Tetrachloroethene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.099 U	0.08 J	0.3 J	0.19 J	0.22 J	0.13 J	0.25 J	0.24 J	0.45 J	0.07 J	0.5 U	0.5 U	0.07 J	0.5 U	0.5 U
Toluene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.43 UJ	0.7 J	0.5 U	0.19 J	0.12 J	0.5 UJ	0.5 UJ	0.07 J	0.43 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ
trans-1,2-Dichloroethene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.057 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.057 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.1 U	0.26 J	0.23 J	0.19 J	0.18 J	0.25 J	0.15 J	0.3 J	0.3 J	0.5 U	0.31 UJ	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.12 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.12 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.0045 U	0.32 J	0.22 J	0.06 J	0.064	0.24 J	0.074 J	0.061 J	0.075	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U

TABLE I-9

GROUNDWATER ANALYTICAL RESULTS FOR VOLATILE ORGANIC COMPOUNDS (3Q09-2Q11)[1]
PSC Washougal Facility
Washougal, Washington

Concentrations in micrograms per liter (µg/L)

Sample ID	MC-24 (Continued)		MC-24D								MC-24D2								MC-25				
Analyte / Date Sampled	3/24/2011	6/22/2011	9/28/2009	12/21/2009	3/30/2010	6/28/2010	9/17/2010	12/16/2010	3/24/2011	6/22/2011	9/28/2009	12/21/2009	3/30/2010	6/28/2010	9/17/2010	12/16/2010	3/24/2011	6/22/2011	9/28/2009	12/18/2009	3/30/2010	6/23/2010	9/21/2010
1,1,1-Trichloroethane	0.5 U	0.075 U	0.68 J	1.1	0.9 J	7.5 J	0.65 J	1 J	0.8 J	0.23 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.075 U	0.5 U	0.08 J	0.5 U	0.5 U	0.5 U
1,1,2-Trichlorotrifluoroethane	0.5 U	0.13 U	800	1400	1800	130	970	1700	1600	390	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.13 U	0.5 U	0.5 U	0.91	0.44 J	0.17 J
1,1-Dichloroethane	0.5 U	0.077 U	540	690	790	68	560	690	1100	210	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.077 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethene	0.02 U	0.0059 U	0.89	0.04 U	1.8 U	0.1 U	0.92	1.6 U	1.7	0.52 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.0059 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 UJ
1,2-Dichlorobenzene	0.5 U	0.12 U	1.3 U	1 U	5 U	25 U	1.3 U	2.5 U	5 U	0.12 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.12 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	0.5 U	0.08 U	0.28 J	0.26 J	5 U	25 U	0.23 J	2.5 U	5 U	0.08 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.08 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,2-Dichloro-1,1,1-trifluoroethane	1 U	0.21 U	2.5 UJ	2 U	10 U	5 U	2.5 U	5 U	10 U	0.21 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	0.21 U	1 UJ	1 U	1 U	1 U	1 U
2-Butanone	20 U	1.9 U	50 U	40 U	200 U	1000 U	50 U	100 U	200 U	1.9 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	1.9 U	20 U	20 U	20 U	20 U	20 U
2-Chloroethyl Vinyl Ether	5 U	0.16 U	--	--	--	--	--	--	50 U	0.16 U	--	--	--	--	--	--	5 U	0.16 U	--	--	--	--	--
2-Methylpentane	1 U	0.21 U	2.5 U	2 U	10 U	5 U	2.5 U	5 U	10 U	0.21 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.21 U	1 U	1 U	1 U	1 U	1 U
3-Methylpentane	1 U	0.18 U	2.5 U	2 U	10 U	5 U	2.5 U	5 U	10 U	0.18 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.18 U	1 U	1 U	1 U	1 U	1 U
Acetone	20 U	3.3 U	50 U	40 U	200 U	1000 U	50 U	100 U	200 U	3.3 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	3.3 U	20 U	20 U	20 U	20 U	20 U
Benzene	0.5 U	0.054 U	0.98 J	1.4	1.7 J	14 J	1.3	1.6 J	2.3 J	0.51	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.054 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Carbon disulfide	0.5 U	0.055 U	1.3 U	1 U	5 U	25 U	1.3 U	2.5 U	5 U	0.055 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.055 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Carbon tetrachloride	0.5 U	0.096 U	1.3 U	1 U	5 U	25 U	1.3 U	2.5 U	5 U	0.096 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.096 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	0.5 U	0.11 U	1.3 U	1 U	5 U	25 U	1.3 U	2.5 U	5 U	0.11 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.11 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroethane	0.5 U	0.16 U	1.3 U	1 U	5 U	31	3 U	2.5 U	6.1	1.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.16 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform	0.5 U	0.072 U	1.3 U	1 U	5 U	25 U	1.3 U	2.9	5 U	0.072 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.072 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloromethane	0.5 U	0.068 U	1.3 U	1 U	5 U	25 UJ	1.3 U	2.5 J	5 U	0.068 U	0.5 U	0.07 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.068 U	0.5 UJ	0.07 UJ	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	0.5 U	0.067 U	450	590	740	66	560	840	1000	210	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.067 U	0.13 J	0.5 U	0.5 U	0.5 U	0.09 J
Dichlorodifluoromethane	0.5 U	0.13 U	1.3 U	1 U	5 U	2600 U	1.3 U	380 U	5 U	0.13 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.13 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Ethylbenzene	0.5 U	0.05 U	1.3 U	1 U	5 U	25 U	1.3 U	2.5 U	5 U	0.05 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.05 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
m,p-Xylene	0.5 U	0.091 U	1.3 U	1 U	5 U	25 U	1.3 U	2.5 U	5 U	0.091 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.091 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclopentane	1 U	0.21 U	2.5 U	0.86 J	10 U	5 U	0.58 J	1.2 J	10 U	0.31 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.21 U	1 U	1 U	1 U	1 U	1 U
Methylene chloride	2 U	0.1 U	0.6 J	0.6 J	20 U	11 J	5 UJ	10 UJ	20 UJ	0.16 J	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.1 U	2 U	2 U	2 U	2 U	2 U
o-Xylene	0.5 U	0.074 U	4.2	8	11	94	9.4	14	15	3.1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.074 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Tetrachloroethene	0.5 U	0.099 U	2.5	3.7	5.1	29	2.8	4.5	3.7 J	1.6	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.099 U	0.59	0.54	0.35 J	0.49 J	0.85
Toluene	0.5 U	0.052 U	1.3 U	0.43 UJ	5 U	25 U	1.3 U	2.5 UJ	5 U	0.08 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.052 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ
trans-1,2-Dichloroethene	0.5 U	0.057 U	1.3 U	0.28 J	5 U	25 U	1.3 U	2.5 U	5 U	0.057 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.057 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethene	0.5 U	0.1 U	2.8	4	4.3 J	31	2.9	3.4	3.8 J	1.3	0.5 U	0.31 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.1 U	0.29 J	0.5 U	0.16 J	0.5 U	0.11 J
Trichlorofluoromethane	0.5 U	0.12 U	1.3 U	1 U	5 U	25 U	1.3 U	2.5 U	5 U	0.12 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.12 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride	0.02 U	0.0045 U	5.1 J	6.8	9.1	7.9	6.2	9	11	3.1	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.0045 U	0.31 J	0.02 U	0.063	0.02 U	0.017 J

TABLE I-9

GROUNDWATER ANALYTICAL RESULTS FOR VOLATILE ORGANIC COMPOUNDS (3Q09-2Q11)[1]

PSC Washougal Facility
Washougal, Washington

Concentrations in micrograms per liter (µg/L)

Sample ID	MC-25 (Continued)			MC-25D								MC-25D2								MC-26D2			
Analyte / Date Sampled	12/14/2010	3/23/2011	6/22/2011	9/28/2009	12/18/2009	3/30/2010	6/23/2010	9/21/2010	12/14/2010	3/23/2011	6/22/2011	9/28/2009	12/18/2009	3/30/2010	6/23/2010	9/21/2010	12/14/2010	3/23/2011	6/22/2011	9/28/2009	12/17/2009	12/17/2009	3/29/2010
1,1,1-Trichloroethane	0.5 U	0.5 U	0.075 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U	0.075 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.075 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichlorotrifluoroethane	0.5 U	0.16 J	0.34 J	1 J	490	480	440	530	600	510	360	36	31	56	1.2	17	28	0.14 J	0.13 U	0.22 J	0.36 J	0.41 J	3
1,1-Dichloroethane	0.5 U	0.5 U	0.077 U	0.55 J	640	620	650	700	770	1300	440	21	21	23	1.2	8.2	13	0.25 J	0.077 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethene	0.02 U	0.02 U	0.0059 U	2.5 U	1.7	1.9	2	1.9	2.3	2.7	0.95 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.017 J	0.02 U	0.0059 U	0.02 U	0.02 U	0.02 U	0.02 U
1,2-Dichlorobenzene	0.5 U	0.5 U	0.12 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U	0.12 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.12 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	0.5 U	0.5 U	0.08 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U	0.1 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.08 U	0.5 U	0.5 U	0.5 U	0.5 U
2,2-Dichloro-1,1,1-trifluoroethane	1 U	1 U	0.21 U	1100	5 U	5 U	5 U	5 U	5 U	10 U	0.21 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	0.21 U	1 UJ	1 U	1 U	1 U
2-Butanone	20 U	20 U	1.9 U	2.5 U	100 U	100 U	100 U	100 U	100 U	200 U	1.9 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	1.9 U	20 U	20 U	20 U	20 U
2-Chloroethyl Vinyl Ether	--	5 U	0.16 U	--	--	--	--	--	--	50 U	0.16 U	--	--	--	--	--	--	5 U	0.16 U	--	--	--	--
2-Methylpentane	1 U	1 U	0.21 U	770	5 U	5 U	5 U	5 U	5 U	10 U	0.21 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.21 U	1 U	1 U	1 U	1 U
3-Methylpentane	1 U	1 U	0.18 U	2.5 U	5 U	5 U	5 U	5 U	5 U	10 U	0.18 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.18 U	1 U	1 U	1 U	1 U
Acetone	20 U	20 U	3.3 U	10 U	100 U	100 U	100 U	100 U	100 U	200 U	3.3 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	3.3 U	20 UJ	20 U	20 U	20 U
Benzene	0.5 U	0.5 U	0.054 U	2.5 U	0.65 J	0.7 J	0.75 J	0.75 J	0.8 J	1.2 J	0.52	0.05 J	0.04 J	0.06 J	0.5 U	0.5 U	0.5 U	0.5 U	0.054 U	0.5 U	0.5 U	0.5 U	0.5 U
Carbon disulfide	0.5 U	0.5 U	0.055 U	100 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U	0.055 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.055 U	0.5 U	0.5 U	0.5 U	0.5 U
Carbon tetrachloride	0.5 U	0.5 U	0.096 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U	0.096 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.096 U	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	0.5 U	0.5 U	0.11 U	480	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U	0.11 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.11 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroethane	0.5 U	0.5 U	0.16 U	100 U	2.5 U	2.5 U	4.7 U	5.4 U	2.5 U	8.1	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.16 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform	0.5 U	0.5 U	0.072 U	4.1	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U	0.072 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.072 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloromethane	0.5 U	0.5 U	0.068 U	2.5 U	2.5 U	2.5 U	0.8 J	2.5 U	2.5 U	5 U	0.068 U	0.5 U	0.07 UJ	0.11 J	0.07 J	0.5 U	0.5 U	0.5 U	0.068 U	0.5 U	0.07 UJ	0.5 U	0.5 U
cis-1,2-Dichloroethene	0.5 U	0.5 U	0.067 U	2.5 U	990	1100	1200	1400	1700	2400	580	13	14	19	1.1	7.3	13	0.35 J	0.07 J	0.5 U	0.5 U	0.5 U	0.5 U
Dichlorodifluoromethane	0.5 U	0.5 U	0.13 U	5 U	2.5 U	2.5 U	460 U	2.5 U	370 U	5 U	0.13 U	0.5 U	0.5 U	0.5 U	2.3 U	0.5 U	34 U	0.5 U	0.13 U	0.5 U	0.5 U	0.5 U	0.5 U
Ethylbenzene	0.5 U	0.5 U	0.05 U	5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U	0.05 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.05 U	0.5 U	0.5 U	0.5 U	0.5 U
m,p-Xylene	0.5 U	0.5 U	0.091 U	5 UJ	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U	0.091 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.091 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclopentane	1 U	1 U	0.21 U	5 U	5 U	5 U	5 U	5 U	5 U	10 U	0.27 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.21 U	1 U	1 U	1 U	1 U
Methylene chloride	2 U	2 U	0.1 U	5	10 U	10 U	1 J	10 U	2.2 J	20 UJ	0.24 J	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.1 U	2 U	2 U	2 U	2 U
o-Xylene	0.5 U	0.5 U	0.074 U	2.5 U	1.8 J	2.6	3.1	3	3.1	1.9 J	1.4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.074 U	0.5 U	0.5 U	0.5 U	0.5 U
Tetrachloroethene	0.42 J	0.32 J	0.49 J	2.5 U	3.1	2.8	2.9	2.6	2.9	2.7 J	2.6	0.36 J	0.42 J	0.75	0.5 U	0.32 J	0.56	0.5 U	0.099 U	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	0.5 U	0.5 U	0.052 U	2.5 U	1.1 UJ	2.5 UJ	2.5 U	2.5 U	2.6	5 U	0.09 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.052 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,2-Dichloroethene	0.5 U	0.5 U	0.057 U	3.5	0.55 J	2.5 U	2.5 U	2.5 U	2.5 U	5 U	0.42 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.057 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethene	0.5 U	0.5 U	0.1 U	1.6 J	3.7	3.4	2.7	3	3.2	3.3 J	2.6	0.17 J	0.17 J	0.27 J	0.5 U	0.13 J	0.24 J	0.5 U	0.1 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane	0.5 U	0.5 U	0.12 U	28 J	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U	0.12 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.12 U	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride	0.02 U	0.0046 J	0.0045 U	2.3	20	30	34	37	52	69	18	0.39 J	0.56	1.1	0.044	0.36	0.85	0.031	0.0054 J	0.02 U	0.02 U	0.02 U	0.02 U

TABLE I-9

GROUNDWATER ANALYTICAL RESULTS FOR VOLATILE ORGANIC COMPOUNDS (3Q09-2Q11)[1]

PSC Washougal Facility
Washougal, Washington

Concentrations in micrograms per liter (µg/L)

Sample ID	MC-26D2 (Continued)							MC-27D								MC-28D						
Analyte / Date Sampled	3/29/2010	6/23/2010	6/23/2010	9/21/2010	12/14/2010	3/23/2011	6/22/2011	9/25/2009	12/16/2009	3/24/2010	6/23/2010	9/15/2010	12/14/2010	3/24/2011	6/28/2011	9/25/2009	3/24/2010	6/23/2010	9/15/2010	12/14/2010	3/24/2011	6/28/2011
1,1,1-Trichloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.075 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.075 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.1 J
1,1,2-Trichlorotrifluoroethane	3	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.13 U	180	230	130	160	99	110	130	310	3.8	1.2	2.2	1.3	0.81	0.84	140
1,1-Dichloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.077 U	3.8	3.2	1.8	2.4	1.7	1.4	2.7	3.6	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.077 U
1,1-Dichloroethene	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.0059 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	1.4 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.0059 U
1,2-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.12 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.12 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.12 U
1,2-Dichloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.08 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.08 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.08 U
2,2-Dichloro-1,1,1-trifluoroethane	1 U	1 U	1 U	1 U	1 U	1 U	0.21 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.21 U	1 U	1 U	1 U	1 U	1 U	1 U	0.21 U
2-Butanone	20 U	20 U	20 U	20 U	20 U	20 U	1.9 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	1.9 U	20 U	20 U	20 U	20 U	20 U	20 U	1.9 U
2-Chloroethyl Vinyl Ether	--	--	--	--	--	5 U	0.16 U	--	--	--	--	--	--	5 U	0.16 U	--	--	--	--	--	5 U	0.16 U
2-Methylpentane	1 U	1 U	1 U	1 U	1 U	1 U	0.21 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.21 U	0.21 J	1 U	1 U	1 U	1 U	1 U	0.21 U
3-Methylpentane	1 U	1 U	1 U	1 U	1 U	1 U	0.18 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.18 U	0.19 J	1 U	1 U	1 U	1 U	1 U	0.18 U
Acetone	20 U	20 U	20 U	20 U	20 U	20 U	3.3 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	3.3 U	20 UJ	20 U	20 U	20 U	20 U	20 U	3.3 U
Benzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.054 U	0.1 J	0.06 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.054 U	0.09 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.054 U
Carbon disulfide	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.055 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.055 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.055 U
Carbon tetrachloride	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.096 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.096 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.096 U
Chlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.11 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.11 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.11 U
Chloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.16 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.16 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.16 U
Chloroform	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.072 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.072 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.072 U
Chloromethane	0.5 U	0.5 U	0.06 J	0.5 U	0.5 U	0.5 U	0.068 U	0.5 U	0.11 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.09 J	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.068 U
cis-1,2-Dichloroethene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.067 U	1.1	1	0.58	0.67	0.58	0.48 J	0.76	0.96	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.067 U
Dichlorodifluoromethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.13 U	0.5 U	0.5 U	0.5 U	21 U	0.5 U	11 U	0.5 U	0.13 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.13 U
Ethylbenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.05 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.05 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.05 U
m,p-Xylene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.091 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.091 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.091 U
Methylcyclopentane	1 U	1 U	1 U	1 U	1 U	1 U	0.21 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.21 U	1 U	1 U	1 U	1 U	1 U	1 U	0.21 U
Methylene chloride	2 U	2 U	2 U	2 U	2 U	2 U	0.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	0.1 U	2 U	2 U	2 U	2 U	2 U	2 UJ	0.1 U
o-Xylene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.074 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.074 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.074 U
Tetrachloroethene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.099 U	0.49 J	0.54	0.37 J	0.28 J	0.31 J	0.34 J	0.36 J	0.46 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.11 J
Toluene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.052 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.052 U	0.5 UJ	0.06 J	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.052 U
trans-1,2-Dichloroethene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.057 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.057 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.057 U
Trichloroethene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.1 U	0.43 J	0.4 J	0.28 J	0.33 J	0.27 J	0.26 J	0.33 J	0.35 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.1 U
Trichlorofluoromethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.12 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.12 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.12 U
Vinyl chloride	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.0045 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.0045 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.0045 U

TABLE I-9

GROUNDWATER ANALYTICAL RESULTS FOR VOLATILE ORGANIC COMPOUNDS (3Q09-2Q11)[1]

PSC Washougal Facility
Washougal, Washington

Concentrations in micrograms per liter (µg/L)

Sample ID	MC-30								MC-30D								MC-31						
Analyte / Date Sampled	9/28/2009	12/30/2009	3/29/2010	6/24/2010	9/13/2010	12/20/2010	3/28/2011	6/29/2011	9/24/2009	12/17/2009	3/29/2010	6/24/2010	9/13/2010	12/20/2010	3/28/2011	6/29/2011	9/24/2009	12/17/2009	3/26/2010	6/24/2010	9/13/2010	12/21/2010	6/29/2011
1,1,1-Trichloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.075 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.075 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.075 U
1,1,2-Trichlorotrifluoroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.13 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.13 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.13 U
1,1-Dichloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.077 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.077 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.077 U
1,1-Dichloroethene	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.0059 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.0059 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.0059 U
1,2-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.12 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.12 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.12 U
1,2-Dichloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.08 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.08 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.08 U
2,2-Dichloro-1,1,1-trifluoroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.21 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.21 U	1 U	1 U	1 U	1 U	1 U	1 U	0.21 U
2-Butanone	20 U	20 U	20 U	20 U	20 U	20 U	20 U	1.9 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	1.9 U	20 U	20 U	20 U	2.4 J	20 U	20 U	1.9 U
2-Chloroethyl Vinyl Ether	--	--	--	--	--	--	5 U	0.16 U	--	--	--	--	--	--	5 U	0.16 U	--	--	--	--	--	--	0.16 U
2-Methylpentane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.21 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.21 U	1 U	1 U	1 U	1 U	1 U	1 U	0.21 U
3-Methylpentane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.18 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.18 U	1 U	1 U	1 U	1 U	1 U	1 U	0.18 U
Acetone	20 U	20 U	20 U	20 U	20 U	20 U	20 U	3.3 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	3.3 U	20 UJ	20 U	20 U	20 U	20 U	20 U	3.3 U
Benzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.054 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.054 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.054 U
Carbon disulfide	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.055 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.055 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.055 U
Carbon tetrachloride	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.096 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.096 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.096 U
Chlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.11 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.11 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.11 U
Chloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.16 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.16 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.16 U
Chloroform	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.072 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.072 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.072 U
Chloromethane	0.5 UJ	0.5 U	0.5 U	0.07 J	0.5 U	0.5 U	0.5 U	0.068 U	0.5 UJ	0.5 U	0.5 U	0.06 J	0.5 U	0.5 U	0.5 U	0.068 U	0.5 UJ	0.07 UJ	0.5 U	0.5 U	0.08 J	0.5 UJ	0.068 U
cis-1,2-Dichloroethene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.067 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.067 U	0.5 U	0.07 J	0.5 U	0.5 U	0.5 U	0.5 U	0.067 U
Dichlorodifluoromethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.13 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.13 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.13 U
Ethylbenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.05 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.05 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.05 U
m,p-Xylene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.091 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.091 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.091 U
Methylcyclopentane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.21 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.21 U	1 U	1 U	1 U	1 U	1 U	1 U	0.21 U
Methylene chloride	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.1 U	2 U	2 U	2 U	2 U	2 U	2 U	0.1 U
o-Xylene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.074 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.074 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.074 U
Tetrachloroethene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.099 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.099 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.099 U
Toluene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.06 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.052 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.052 U
trans-1,2-Dichloroethene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.057 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.057 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.057 U
Trichloroethene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.1 U
Trichlorofluoromethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.12 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.12 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.12 U
Vinyl chloride	0.025 J	0.063	0.015 J	0.031	0.022	0.014 J	0.014 J	0.051	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.0045 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.0045 U

TABLE I-9

GROUNDWATER ANALYTICAL RESULTS FOR VOLATILE ORGANIC COMPOUNDS (3Q09-2Q11)[1]

PSC Washougal Facility
Washougal, Washington

Concentrations in micrograms per liter (µg/L)

Sample ID	MC-32								MC-33								MC-107					
Analyte / Date Sampled	9/22/2009	12/15/2009	3/23/2010	6/22/2010	9/14/2010	12/15/2010	3/22/2011	6/30/2011	9/23/2009	12/18/2009	3/25/2010	6/24/2010	9/20/2010	12/21/2010	3/29/2011	6/29/2011	9/24/2009	12/17/2009	3/29/2010	6/24/2010	9/20/2010	12/21/2010
1,1,1-Trichloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.075 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.075 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichlorotrifluoroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.13 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.13 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.077 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.077 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethene	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.0059 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.0059 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
1,2-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.12 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.12 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.08 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.08 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,2-Dichloro-1,1,1-trifluoroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.21 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.21 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone	20 U	20 U	20 U	20 U	20 U	20 U	20 U	1.9 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	1.9 U	20 U	20 U	20 U	20 U	20 U	20 U
2-Chloroethyl Vinyl Ether	--	--	--	--	--	--	5 U	0.16 U	--	--	--	--	--	--	5 U	0.16 U	--	--	--	--	--	--
2-Methylpentane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.21 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.21 U	1 U	1 U	1 U	1 U	1 U	1 U
3-Methylpentane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.18 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.18 U	1 U	1 U	1 U	1 U	1 U	1 U
Acetone	20 UJ	20 U	20 U	20 U	20 U	20 U	20 U	3.3 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	3.3 U	20 U	20 U	20 U	20 U	20 U	20 U
Benzene	0.05 J	0.5 U	0.04 J	0.5 U	0.5 U	0.5 U	0.5 U	0.054 U	0.04 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.054 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Carbon disulfide	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.055 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.055 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Carbon tetrachloride	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.096 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.096 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.11 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.11 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.16 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.16 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.072 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.072 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloromethane	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.068 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.068 U	0.5 UJ	0.5 U	0.5 U	0.06 J	0.5 U	0.5 U
cis-1,2-Dichloroethene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.067 U	0.09 J	0.09 J	0.5 U	0.5 U	0.5 U	0.08 J	0.5 U	0.067 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dichlorodifluoromethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.13 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.13 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Ethylbenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.05 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.05 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
m,p-Xylene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.091 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.091 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclopentane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.21 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.21 U	1 U	1 U	1 U	1 U	1 U	1 U
Methylene chloride	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.1 U	2 U	2 U	2 U	2 U	2 U	2 U
o-Xylene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.074 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.074 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Tetrachloroethene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.099 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.099 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	0.5 UJ	0.5 U	0.14 J	0.24 J	0.5 UJ	0.5 U	0.5 U	0.43 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.052 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ
trans-1,2-Dichloroethene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.057 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.057 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.12 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.12 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride	0.048 J	0.034	0.024	0.017 J	0.021	0.016 J	0.012 J	0.018 J	0.02 U	0.02 U	0.037	0.019 J	0.0098 J	0.013 J	0.0049 J	0.0045 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U

TABLE I-9

GROUNDWATER ANALYTICAL RESULTS FOR VOLATILE ORGANIC COMPOUNDS (3Q09-2Q11)[1]

PSC Washougal Facility
Washougal, Washington

Concentrations in micrograms per liter (µg/L)

Sample ID	MC-107 (Continued)		MC-118D								MC-118D2								MC-122				
Analyte / Date Sampled	3/29/2011	6/27/2011	9/25/2009	12/18/2009	3/30/2010	6/25/2010	9/21/2010	12/18/2010	3/23/2011	6/27/2011	9/25/2009	12/18/2009	3/30/2010	6/25/2010	9/21/2010	12/16/2010	3/23/2011	6/27/2011	9/23/2009	12/15/2009	3/24/2010	6/22/2010	9/15/2010
1,1,1-Trichloroethane	0.5 U	0.075 U	0.5 U	1 U	1.3 U	0.5 U	0.5 U	1 U	1.3 U	0.15 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.075 U	0.14 J	0.19 J	0.09 J	0.09 J	0.5 U
1,1,2-Trichlorotrifluoroethane	0.5 U	0.13 U	460	510	650	480	620	560	480	730	180	250	320	190	290	390	270	120	9	1.4	2.6	9.2	11
1,1-Dichloroethane	0.5 U	0.077 U	33	25	23	23	26	19	28	100	18	18	15	13	17	13	19	10	0.12 J	1.1	0.55	0.08 J	0.08 J
1,1-Dichloroethene	0.02 U	0.0059 U	0.02 U	0.02 U	0.05 U	2.2 U	0.02 U	0.02 U	0.02 U	3.6 U	0.02 U	0.02 U	0.02 U	0.98 U	0.02 U	0.02 U	0.02 U	0.6 U	0.026	0.018 J	0.024	0.02 U	0.032
1,2-Dichlorobenzene	0.5 U	0.12 U	0.5 U	1 U	1.3 U	0.5 U	0.5 U	1 U	1.3 U	0.24 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.12 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	0.5 U	0.08 U	0.5 U	1 U	1.3 U	0.5 U	0.5 U	1 U	1.3 U	0.16 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.08 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,2-Dichloro-1,1,1-trifluoroethane	1 U	0.21 U	1 U	2 U	2.5 U	1 U	1 U	2 U	2.5 U	0.42 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.21 U	1 U	1 U	1 U	1 U	1 U
2-Butanone	20 U	1.9 U	20 U	40 U	50 U	20 U	20 U	40 U	50 U	3.8 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	1.9 U	20 U	20 U	20 U	20 U	20 U
2-Chloroethyl Vinyl Ether	5 U	0.16 U	--	--	--	--	--	--	13 U	0.32 U	--	--	--	--	--	--	5 U	0.16 U	--	--	--	--	--
2-Methylpentane	1 U	0.21 U	1 U	2 U	2.5 U	1 U	0.23 J	2 U	2.5 U	0.42 U	1 U	0.21 J	1 U	1 U	1 U	1 U	1 U	0.21 U	1 U	1 U	1 U	1 U	1 U
3-Methylpentane	1 U	0.18 U	0.3 J	2 U	2.5 U	0.24 J	0.29 J	2 U	2.5 U	0.36 U	0.26 J	0.23 J	1 U	1 U	1 U	0.19 J	0.19 J	0.18 U	1 U	1 U	1 U	1 U	1 U
Acetone	20 U	3.3 U	20 UJ	40 U	50 U	20 U	20 U	40 U	50 U	6.6 U	20 UJ	20 U	20 U	20 U	20 U	20 U	20 U	3.3 U	20 UJ	20 U	20 U	20 U	20 U
Benzene	0.5 U	0.054 U	0.74	0.58 J	0.63 J	0.56	0.7	0.58 J	0.73 J	0.34 J	0.39 J	0.35 J	0.32 J	0.29 J	0.35 J	0.32 J	0.42 J	0.21 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Carbon disulfide	0.5 U	0.055 U	0.5 U	1 U	1.3 U	0.5 U	0.5 U	1 U	1.3 U	0.11 U	0.5 U	0.5 U	0.17 J	0.4 J	0.5 UJ	0.5 U	0.1 J	0.055 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Carbon tetrachloride	0.5 U	0.096 U	0.5 U	1 U	1.3 U	0.5 U	0.5 U	1 U	1.3 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.096 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	0.5 U	0.11 U	0.5 U	1 U	1.3 U	0.5 U	0.5 U	1 U	1.3 U	0.22 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.11 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroethane	0.5 U	0.16 U	0.5 U	1 U	1.3 U	0.5 U	0.5 U	1 U	1.3 U	0.32 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.16 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform	0.5 U	0.072 U	0.5 U	1 U	1.3 U	0.5 U	0.5 U	1 U	1.3 U	0.15 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.072 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloromethane	0.5 U	0.068 U	0.5 U	0.78 J	1.3 U	0.5 U	0.5 U	1 U	1.3 U	0.14 U	0.5 U	1	0.19 J	0.5 U	0.5 U	0.5 U	0.5 U	0.068 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	0.5 U	0.067 U	43	32	33	33	39	31	39	160	20	21	18	16	21	19	23	11	0.5 U	1.5	0.34 J	0.5 U	0.18 J
Dichlorodifluoromethane	0.5 U	0.13 U	0.5 U	1 U	1.3 U	330 U	0.5 U	330 U	1.3 U	0.26 U	0.5 U	0.5 U	0.5 U	180 U	0.5 U	250 U	0.5 U	0.13 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Ethylbenzene	0.5 U	0.05 U	0.2 J	0.12 J	1.3 U	0.05 J	0.27 J	0.12 J	1.3 U	0.1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.05 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
m,p-Xylene	0.5 U	0.091 U	2.7	1.2	1.2 J	0.4 J	2.3	1.2	0.83 J	0.19 U	0.5 U	0.5 U	0.5 U	0.5 U	0.1 J	0.5 U	0.5 U	0.091 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclopentane	1 U	0.21 U	1.1	1.1 J	1.3 J	1.2	1.2	1.3 J	1.2 J	0.52 J	0.49 J	0.59 J	0.63 J	0.44 J	0.52 J	0.72 J	0.72 J	0.26 J	1 U	1 U	1 U	1 U	1 U
Methylene chloride	2 U	0.1 U	2 U	4 U	5 U	2 U	2 U	4 UJ	5 UJ	0.36 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.1 U	2 U	2 U	2 U	2 U	2 U
o-Xylene	0.5 U	0.074 U	28	16	19	21	26	24	21	5.3	7.9	8.2	8.6	7.7	9.6	11	8.7	2.8	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Tetrachloroethene	0.5 U	0.099 U	6.2	5.8	6	6	5.8	5.4	4.5	3.8	2.6	3.1	3	2.1	2.8	3	2.7	1.2	0.28 J	0.35 J	0.23 J	0.13 J	0.19 J
Toluene	0.5 U	0.052 U	24	13	15	4.4	27	14	4.5	0.78 UJ	0.5 UJ	0.43 UJ	0.5 UJ	0.09 J	0.5 U	0.5 UJ	0.11 J	0.43 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ
trans-1,2-Dichloroethene	0.5 U	0.057 U	0.5 U	1 U	1.3 U	0.5 U	0.5 U	1 U	1.3 U	0.12 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.057 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethene	0.5 U	0.1 U	1.5	1.4	1.4	1.4	1.7	1.4	1.3	1.2	0.73	0.8	0.79	0.58	0.81	0.81	0.78	0.34 J	0.5 U	0.24 J	0.33 J	0.5 U	0.5 U
Trichlorofluoromethane	0.5 U	0.12 U	0.5 U	1 U	1.3 U	0.5 U	0.5 U	1 U	1.3 U	0.24 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.12 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride	0.02 U	0.0045 U	17 J	12	12	12	11	11	15	11	5.4 J	5.6	5.2	5.2	5.5	5.8	6.9	3.4	0.18 J	0.48	0.075	0.023	0.19

TABLE I-9

GROUNDWATER ANALYTICAL RESULTS FOR VOLATILE ORGANIC COMPOUNDS (3Q09-2Q11)[1]

PSC Washougal Facility
Washougal, Washington

Concentrations in micrograms per liter (µg/L)

Sample ID	MC-122 (Continued)			MC-123								PZU-4								PZU-5			
Analyte / Date Sampled	12/15/2010	3/22/2011	6/30/2011	9/22/2009	12/15/2009	3/23/2010	6/22/2010	9/14/2010	12/15/2010	3/22/2011	6/30/2011	9/21/2009	12/15/2009	3/23/2010	6/21/2010	9/14/2010	12/13/2010	3/21/2011	6/21/2011	6/21/2009	12/15/2009	3/24/2010	6/21/2010
1,1,1-Trichloroethane	0.76	1.3	0.075 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.18 J	0.21 J	0.075 U	0.18 J	0.08 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.075 U	0.12 J	0.13 J	0.09 J	0.5 U
1,1,2-Trichlorotrifluoroethane	1.8	4.1	17	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.13 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.13 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethane	0.15 J	0.2 J	0.08 J	1.9	0.79	0.59	0.67	1.5	0.14 J	0.13 J	0.94	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.077 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethene	0.02 U	0.019 J	0.052 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.0059 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.0059 U	0.02 U	0.02 U	0.02 U	0.02 U
1,2-Dichlorobenzene	0.5 U	0.5 U	0.12 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.12 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.12 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	0.5 U	0.5 U	0.08 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.08 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.08 U	0.5 U	0.5 U	0.5 U	0.5 U
2,2-Dichloro-1,1,1-trifluoroethane	1 U	1 U	0.21 U	0.42 J	1 U	1 U	1 U	1 U	1 U	1 U	0.21 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.21 U	1 U	1 U	1 U	1 U
2-Butanone	20 U	20 U	1.9 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	1.9 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	1.9 U	20 U	20 U	20 U	20 U
2-Chloroethyl Vinyl Ether	--	5 U	0.16 U	--	--	--	--	--	--	5 U	0.16 U	--	--	--	--	--	--	5 U	0.16 U	--	--	--	--
2-Methylpentane	1 U	1 U	0.21 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.21 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.21 U	1 U	1 U	1 U	1 U
3-Methylpentane	1 U	1 U	0.18 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.18 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.18 U	1 U	1 U	1 U	1 U
Acetone	20 U	20 U	3.3 U	20 UJ	20 U	20 U	20 U	20 U	20 U	20 U	3.3 U	20 UJ	20 U	20 U	20 U	20 U	20 U	20 U	3.3 U	20 UJ	20 U	20 U	20 U
Benzene	0.5 U	0.5 U	0.054 U	0.09 J	0.04 J	0.5 U	0.5 U	0.07 J	0.5 U	0.5 U	0.054 U	0.06 J	0.04 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.054 U	0.5 U	0.5 U	0.5 U	0.5 U
Carbon disulfide	0.5 U	0.5 U	0.055 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.055 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.055 U	0.5 U	0.5 U	0.5 U	0.5 U
Carbon tetrachloride	0.5 U	0.5 U	0.096 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.096 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.096 U	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	0.5 U	0.5 U	0.11 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.11 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.11 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroethane	0.5 U	0.5 U	0.16 U	1.9 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.16 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.16 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform	0.08 J	0.09 J	0.072 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.072 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.072 U	0.5 U	0.09 J	0.5 U	0.5 U
Chloromethane	0.5 U	0.5 U	0.068 U	0.5 U	0.5 U	0.5 U	0.06 J	0.07 J	0.5 U	0.5 U	0.068 U	0.5 UJ	0.07 UJ	0.5 U	0.06 J	0.5 U	0.5 U	0.5 U	0.068 U	0.5 U	0.5 U	0.5 U	0.06 J
cis-1,2-Dichloroethene	0.5 U	0.15 J	0.067 U	2.1	0.97	0.52	0.54	1.7	0.5 U	0.5 U	0.9	0.15 J	0.11 J	0.5 U	0.5 U	0.07 J	0.5 U	0.5 U	0.067 U	0.07 J	0.07 J	0.5 U	0.5 U
Dichlorodifluoromethane	0.5 U	0.5 U	0.13 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.13 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.13 U	0.5 U	0.5 U	0.5 U	0.5 U
Ethylbenzene	0.5 U	0.5 U	0.05 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.05 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.05 U	0.5 U	0.5 U	0.5 U	0.5 U
m,p-Xylene	0.5 U	0.5 U	0.091 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.091 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.091 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclopentane	1 U	1 U	0.21 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.21 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.21 U	1 U	1 U	1 U	1 U
Methylene chloride	2 U	2 U	0.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.1 U	2 U	2 U	2 U	2 U
o-Xylene	0.5 U	0.5 U	0.074 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.074 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.074 U	0.5 U	0.5 U	0.5 U	0.5 U
Tetrachloroethene	1.2	1.6	0.099 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.14 J	0.2 J	0.099 U	0.29 J	0.19 J	0.07 J	0.5 U	0.11 J	0.1 J	0.5 U	0.099 U	0.16 J	0.5 U	0.13 J	0.12 J
Toluene	0.5 UJ	0.5 U	0.052 U	0.5 U	0.5 U	0.37 J	0.11 J	0.5 UJ	0.5 U	0.5 U	0.052 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.052 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,2-Dichloroethene	0.5 U	0.5 U	0.057 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.057 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.057 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethene	0.28 J	0.62	0.1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.1 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane	0.5 U	0.5 U	0.12 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.12 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.12 U	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride	0.02 U	0.017 J	0.042	0.93 J	0.28	0.22	0.23	0.4	0.02 U	0.014 J	0.22	0.025 J	0.023	0.015 J	0.0088 J	0.02	0.02 U	0.0076 J	0.032	0.028 J	0.03	0.015 J	0.027

TABLE I-9

GROUNDWATER ANALYTICAL RESULTS FOR VOLATILE ORGANIC COMPOUNDS (3Q09-2Q11)[1]

PSC Washougal Facility
Washougal, Washington

Concentrations in micrograms per liter (µg/L)

Sample ID	PZU-5 (Continued)				UZ-ST-1						
Analyte **Date Sampled**	**9/14/2010**	**12/16/2010**	**3/22/2011**	**6/30/2011**	**9/23/2009**	**12/15/2009**	**3/23/2010**	**6/21/2010**	**12/15/2010**	**3/21/2011**	**6/21/2011**
1,1,1-Trichloroethane	0.5 U	0.5 U	0.5 U	0.13 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.075 U
1,1,2-Trichlorotrifluoroethane	0.5 U	0.5 U	0.5 U	0.13 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.13 U
1,1-Dichloroethane	0.5 U	0.5 U	0.5 U	0.077 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.077 U
1,1-Dichloroethene	0.02 U	0.02 U	0.02 U	0.0059 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.0059 U
1,2-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.12 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.12 U
1,2-Dichloroethane	0.5 U	0.5 U	0.5 U	0.08 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.08 U
2,2-Dichloro-1,1,1-trifluoroethane	1 U	1 U	1 U	0.21 U	1 U	1 U	1 U	1 U	1 U	1 U	0.21 U
2-Butanone	20 U	20 U	20 U	1.9 U	20 U	20 U	20 U	20 U	20 U	20 U	1.9 U
2-Chloroethyl Vinyl Ether	--	--	5 U	0.16 U	--	--	--	--	--	5 U	0.16 U
2-Methylpentane	1 U	1 U	1 U	0.21 U	1 U	1 U	1 U	1 U	1 U	1 U	0.21 U
3-Methylpentane	1 U	1 U	1 U	0.18 U	1 U	1 U	1 U	1 U	1 U	1 U	0.18 U
Acetone	20 U	20 U	20 U	3.3 U	20 UJ	20 U	20 U	20 U	20 U	20 U	3.3 U
Benzene	0.5 U	0.5 U	0.5 U	0.054 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.054 U
Carbon disulfide	0.5 UJ	0.5 U	0.5 U	0.055 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.055 U
Carbon tetrachloride	0.5 U	0.5 U	0.5 U	0.096 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.096 U
Chlorobenzene	0.5 U	0.5 U	0.5 U	0.11 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.11 U
Chloroethane	0.5 U	0.5 U	0.5 U	0.16 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.16 U
Chloroform	0.5 U	0.09 J	0.09 J	0.072 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.072 U
Chloromethane	0.5 U	0.5 U	0.5 U	0.068 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.068 U
cis-1,2-Dichloroethene	0.5 U	0.5 U	0.5 U	0.067 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.067 U
Dichlorodifluoromethane	0.5 U	0.5 U	0.5 U	0.13 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.13 U
Ethylbenzene	0.5 U	0.5 U	0.5 U	0.05 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.05 U
m,p-Xylene	0.5 U	0.5 U	0.5 U	0.091 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.091 U
Methylcyclopentane	1 U	1 U	1 U	0.21 U	1 U	1 U	1 U	1 U	1 U	1 U	0.21 U
Methylene chloride	2 U	2 U	2 U	0.1 U	2 U	2 U	2 U	2 U	2 U	2 U	0.1 U
o-Xylene	0.5 U	0.5 U	0.5 U	0.074 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.074 U
Tetrachloroethene	0.14 J	0.24 J	0.16 J	0.23 J	0.08 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.099 U
Toluene	0.5 UJ	0.5 UJ	0.5 U	0.052 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.08 UJ
trans-1,2-Dichloroethene	0.5 U	0.5 U	0.5 U	0.057 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.057 U
Trichloroethene	0.5 U	0.5 U	0.5 U	0.1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.1 U
Trichlorofluoromethane	0.5 U	0.5 U	0.5 U	0.12 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.12 U
Vinyl chloride	0.014 J	0.012 J	0.0092 J	0.0058 J	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.0045 U

Notes
1. Laboratory data flags are as follows:
J = value is an estimate.
U = not detected at reporting limit listed.
UJ = value is an estimate at reporting limit listed.
UR = result is rejected due to quality control issues.

Abbreviations
-- = not available/not applicable
µg/L = micrograms per liter

TABLE I-10

GROUNDWATER ANALYTICAL RESULTS FOR 1,4-DIOXANE (3Q09 - 2Q11)[1]
PSC Washougal Facility
Washougal, Washington

Sample ID		MC-1								MC-2								MC-2D			
Analyte	Date Sampled	9/29/2009	12/21/2009	3/26/2010	6/25/2010	9/17/2010	12/16/2010	3/24/2011	6/21/2011	9/23/2009	12/21/2009	3/25/2010	6/25/2010	9/20/2010	12/16/2010	3/28/2011	6/21/2011	9/23/2009	12/21/2009	3/25/2010	6/25/2010
1,4-Dioxane (µg/L)		1 U	1 U	1 U	1 UJ	0.89 J	1 U	1 U	0.16 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	0.16 U	1 U	0.24 J	1 U	1 UJ

Sample ID		MC-2D (Continued)				MC-3								MC-12							
Analyte	Date Sampled	9/20/2010	12/16/2010	3/28/2011	6/22/2011	9/28/2009	12/17/2009	3/29/2010	6/23/2010	9/21/2010	12/14/2010	3/23/2011	6/22/2011	9/24/2009	12/17/2009	3/29/2010	6/24/2010	9/20/2010	12/20/2010	3/29/2011	6/27/2011
1,4-Dioxane (µg/L)		1 U	1 U	1 U	0.16 U	1 U	0.2 J	1 U	1 U	1 U	1 U	1 U	0.16 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	0.16 U

Sample ID		MC-8						MC-10D						MC-12D							
Analyte	Date Sampled	9/28/2009	12/17/2009	3/29/2010	6/23/2010	9/21/2010	12/14/2010	9/24/2009	12/17/2009	3/26/2010	6/24/2010	9/20/2010	12/20/2010	9/24/2009	12/17/2009	3/29/2010	6/24/2010	9/20/2010	12/20/2010	3/29/2011	6/27/2011
1,4-Dioxane (µg/L)		1 U	0.2 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4.3	4.4	3.8	4.9	3.7	4	4	4.5

Sample ID		MC-13								MC-13D								MC-14			
Analyte	Date Sampled	9/22/2009	12/16/2009	3/24/2010	6/22/2010	9/16/2010	12/17/2010	3/25/2011	6/28/2011	9/22/2009	12/16/2009	3/24/2010	6/22/2010	9/16/2010	12/17/2010	3/25/2011	6/28/2011	9/22/2009	12/16/2009	3/25/2010	6/22/2010
1,4-Dioxane (µg/L)		1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	0.16 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	0.16 U	13	45	31	130

Sample ID		MC-14 (Continued)				MC-14D								MC-15							
Analyte	Date Sampled	9/15/2010	12/20/2010	3/25/2011	6/28/2011	9/22/2009	12/16/2009	3/24/2010	6/22/2010	9/16/2010	12/17/2010	3/25/2011	6/28/2011	9/23/2009	12/16/2009	3/25/2010	6/28/2010	9/15/2010	12/21/2010	3/28/2011	6/21/2011
1,4-Dioxane (µg/L)		5.7	80	300	400	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	0.16 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	0.16 U

Sample ID		MC-15D								MC-16							
Analyte	Date Sampled	9/23/2009	9/23/2009	12/16/2009	12/16/2009	3/25/2010	3/25/2010	6/28/2010	6/28/2010	9/15/2010	12/21/2010	3/28/2011	6/29/2011	9/23/2009	12/16/2009	3/25/2010	6/28/2010	9/16/2010	12/21/2010	3/29/2011	7/1/2011
1,4-Dioxane (µg/L)		1.5	1.2	1.4	1.3	1.2	1.1	2	1.9	1.5	2.8	2.8	0.48 J	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	0.16 U

Sample ID		MC-17								MC-17D											
Analyte	Date Sampled	9/25/2009	12/21/2009	3/30/2010	6/29/2010	9/16/2010	12/21/2010	3/29/2011	7/1/2011	9/24/2009	9/24/2009	12/21/2009	12/21/2009	3/30/2010	3/30/2010	6/29/2010	6/29/2010	9/16/2010	12/21/2010	3/29/2011	7/1/2011
1,4-Dioxane (µg/L)		1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.16 U	**1 U**	**1 U**	**1 U**	**1 U**	**1 U**	**1 U**	**1 U**	**1 U**	**1 U**	**1 U**	**1 U**	**0.16 U**

TABLE I-10

GROUNDWATER ANALYTICAL RESULTS FOR 1,4-DIOXANE (3Q09 - 2Q11)[1]
PSC Washougal Facility
Washougal, Washington

Sample ID		MC-19D							MC-20						MC-20D		
Analyte	Date Sampled	9/29/2009	12/21/2009	3/30/2010	6/29/2010	9/15/2010	12/21/2010	3/29/2011	3/23/2010	6/22/2010	9/14/2010	12/15/2010	3/22/2011	6/30/2011	9/22/2009	12/15/2009	3/23/2010
1,4-Dioxane (µg/L)		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1	3.7	12	1.1	2.8	2.2	1 U	1 U	1 U

Sample ID		MC-20D (Continued)					MC-21								MC-24		
Analyte	Date Sampled	6/22/2010	9/14/2010	12/15/2010	3/22/2011	6/30/2011	9/23/2009	12/16/2009	3/26/2010	6/28/2010	9/16/2010	12/17/2010	3/25/2011	6/28/2011	9/28/2009	12/21/2009	3/30/2010
1,4-Dioxane (µg/L)		1 U	1 U	1 U	1 U	0.16 U	0.67 J	0.45 J	0.21 J	1 UJ	0.43 J	0.26 J	1 U	0.16 U	1 U	1 U	1 U

Sample ID		MC-24 (Continued)					MC-24D								MC-24D2		
Analyte	Date Sampled	6/28/2010	9/17/2010	12/16/2010	3/24/2011	6/22/2011	9/28/2009	12/21/2009	3/30/2010	6/28/2010	9/17/2010	12/16/2010	3/24/2011	6/22/2011	9/28/2009	12/21/2009	3/30/2010
1,4-Dioxane (µg/L)		1 UJ	1 U	1 U	1 U	0.16 U	9.6	10	11	11	11	13	15	2.7	1 U	1 U	1 U

Sample ID		MC-24D2 (Continued)					MC-25								MC-25D		
Analyte	Date Sampled	6/28/2010	9/17/2010	12/16/2010	3/24/2011	6/22/2011	9/28/2009	12/18/2009	3/30/2010	6/23/2010	9/21/2010	12/14/2010	3/23/2011	6/22/2011	9/28/2009	12/18/2009	3/30/2010
1,4-Dioxane (µg/L)		1 U	1 U	1 U	1 U	0.16 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	0.16 U	9	6.4	6.6

Sample ID		MC-25D					MC-25D2								MC-26D2		
Analyte	Date Sampled	6/23/2010	9/21/2010	12/14/2010	3/23/2011	6/22/2011	9/28/2009	12/18/2009	3/30/2010	6/23/2010	9/21/2010	12/14/2010	3/23/2011	6/22/2011	9/28/2009	12/17/2009	12/17/2009
1,4-Dioxane (µg/L)		6.9	7	7.9	7.6	3.4	1 U	0.58 J	0.56 J	1 UJ	0.26 J	0.72 J	1 U	0.16 U	1 U	1 U	1 U

Sample ID		MC-26D2 (Continued)								MC-27D							
Analyte	Date Sampled	3/29/2010	3/29/2010	6/23/2010	6/23/2010	9/21/2010	12/14/2010	3/23/2011	6/22/2011	9/25/2009	12/16/2009	3/24/2010	6/23/2010	9/15/2010	12/14/2010	3/24/2011	6/28/2011
1,4-Dioxane (µg/L)		1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.16 U	3.4	3.7	3	2.8	3.2	3.3	3	1.7

Sample ID		MC-28	MC-28D							MC-30							
Analyte	Date Sampled	12/16/2009	9/25/2009	3/24/2010	6/23/2010	9/15/2010	12/14/2010	3/24/2011	6/28/2011	9/24/2009	12/17/2009	3/29/2010	6/24/2010	9/13/2010	12/20/2010	3/28/2011	6/29/2011
1,4-Dioxane (µg/L)		3.7 3	1 U	1 U	1 UJ	1 U	1 U	1 U	0.16 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.16 U

TABLE I-10

GROUNDWATER ANALYTICAL RESULTS FOR 1,4-DIOXANE (3Q09 - 2Q11)[1]
PSC Washougal Facility
Washougal, Washington

Sample ID	MC-30D								MC-31						
Analyte / Date Sampled	9/24/2009	12/17/2009	3/29/2010	6/24/2010	9/13/2010	12/20/2010	3/28/2011	6/29/2011	9/24/2009	12/17/2009	3/26/2010	6/24/2010	9/13/2010	12/21/2010	6/29/2011
1,4-Dioxane (µg/L)	3.3	3.5	2.9	2.5	2.6	3.3	2.7	0.9 J	1 U	1 U	1 U	1 U	0.2 J	1 U	0.16 U

Sample ID	MC-32								MC-33							
Analyte / Date Sampled	9/22/2009	12/15/2009	3/23/2010	6/22/2010	9/14/2010	12/15/2010	3/22/2011	6/30/2011	9/23/2009	12/18/2009	3/25/2010	6/24/2010	9/20/2010	12/21/2010	3/29/2011	6/29/2011
1,4-Dioxane (µg/L)	1 U	0.47 J	0.35 J	1 UJ	0.44 J	0.39 J	1 U	0.16 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	0.16 U

Sample ID	MC-107								MC-118D							
Analyte / Date Sampled	9/24/2009	12/17/2009	3/29/2010	6/24/2010	9/20/2010	12/21/2010	3/29/2011	6/27/2011	9/25/2009	12/18/2009	3/30/2010	6/25/2010	9/21/2010	12/16/2010	3/23/2011	6/27/2011
1,4-Dioxane (µg/L)	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	0.16 U	8.1	8.9	7.7	8.2	8.1	7.9	8.5	5

Sample ID	MC-118D2								MC-122							
Analyte / Date Sampled	9/25/2009	12/18/2009	3/30/2010	6/25/2010	9/21/2010	12/16/2010	3/23/2011	6/27/2011	9/23/2009	12/15/2009	3/24/2010	6/22/2010	9/15/2010	12/15/2010	3/22/2011	6/30/2011
1,4-Dioxane (µg/L)	4.7	4.9	3.9	4.3	4.7	5.3	5.4	2.5	1.5	4.8	1.9	1 UJ	0.59 J	1 U	1 U	0.16 U

Sample ID	MC-123								PZU-4							
Analyte / Date Sampled	9/22/2009	12/15/2009	3/23/2010	6/22/2010	9/14/2010	12/15/2010	3/22/2011	6/30/2011	9/21/2009	12/15/2009	3/23/2010	6/21/2010	9/14/2010	12/13/2010	3/21/2011	6/21/2011
1,4-Dioxane (µg/L)	34	20	12	11	21	1.1	1 U	10	1 U	1.4 U	1 U	1 UJ	1 U	1 U	1 U	0.16 U

Sample ID	PZU-5								UT-ST-1					
Analyte / Date Sampled	9/21/2009	12/15/2009	3/24/2010	6/21/2010	9/14/2010	12/16/2010	3/22/2011	6/30/2011	12/15/2009	3/23/2010	6/21/2010	12/13/2010	3/21/2011	6/21/2011
1,4-Dioxane (µg/L)	1 U	0.2 J	1 U	1 U	0.26 J	1 U	1 U	0.16 U	1 U	1 U	1 U	1 U	1 U	0.16 U

Notes

1. Laboratory data flags are as follows:
   J = value is an estimate.
   U = not detected at reporting limit listed.

Abbreviations

-- = not available/not applicable
µg/L = micrograms per liter

TABLE I-11

GROUNDWATER ANALYTICAL RESULTS FOR TOTAL PETROLEUM HYDROCARBONS (3Q09 - 2Q11)[1]
PSC Washougal Facility
Washougal, Washington

Sample ID	MC-1								MC-2							
Analyte / Date Sampled	9/29/2009	12/21/2009	3/26/2010	6/25/2010	9/17/2010	12/16/2010	3/24/2011	6/21/2011	9/23/2009	12/21/2009	3/25/2010	6/25/2010	9/20/2010	12/16/2010	3/28/2011	6/21/2011
TPH (as gasoline)	50 U	50 U	50 U	50 U	50 U	50 U	50 U	14 UJ	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U

Sample ID	MC-2D								MC-8							
Analyte / Date Sampled	9/23/2009	12/21/2009	3/25/2010	6/25/2010	9/20/2010	12/16/2010	3/28/2011	6/22/2011	9/28/2009	12/17/2009	3/29/2010	6/23/2010	9/21/2010	12/14/2010	3/23/2011	6/22/2011
TPH (as gasoline)	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50U	50U	50U	50U	14J	50U	50U	50U

Sample ID	MC-10D								MC-12							
Analyte / Date Sampled	9/24/2009	12/17/2009	3/26/2010	6/24/2010	9/20/2010	12/20/2010	3/28/2011	6/29/2011	9/24/2009	12/17/2009	3/29/2010	6/24/2010	9/20/2010	12/20/2010	3/29/2011	6/27/2011
TPH (as gasoline)	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U

Sample ID	MC-12D								MC-13							
Analyte / Date Sampled	9/24/2009	12/17/2009	3/29/2010	6/24/2010	9/20/2010	12/20/2010	3/29/2011	6/27/2011	9/22/2009	12/16/2009	3/24/2010	6/22/2010	9/16/2010	12/17/2010	3/25/2011	6/28/2011
TPH (as gasoline)	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	19 J

Sample ID	MC-13D								MC-14							
Analyte / Date Sampled	9/22/2009	12/16/2009	3/24/2010	6/22/2010	9/16/2010	12/17/2010	3/25/2011	6/28/2011	9/22/2009	12/16/2009	3/25/2010	6/22/2010	9/15/2010	12/20/2010	3/25/2011	6/28/2011
TPH (as gasoline)	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	140 J	140 J	85 J	170 J	110 J	170 J	150 J	160 J

Sample ID	MC-14D								MC-15							
Analyte / Date Sampled	9/22/2009	12/16/2009	3/24/2010	6/22/2010	9/16/2010	12/17/2010	3/25/2011	6/28/2011	9/23/2009	12/16/2009	3/25/2010	6/28/2010	9/15/2010	12/21/2010	3/28/2011	6/21/2011
TPH (as gasoline)	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U

Sample ID	MC-15D											
Analyte / Date Sampled	9/23/2009	9/23/2009	12/16/2009	12/16/2009	3/25/2010	3/25/2010	6/28/2010	6/28/2010	9/15/2010	12/21/2010	3/28/2011	6/29/2011
TPH (as gasoline)	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U

TABLE I-11

GROUNDWATER ANALYTICAL RESULTS FOR TOTAL PETROLEUM HYDROCARBONS (3Q09 - 2Q11)[1]

PSC Washougal Facility
Washougal, Washington

Sample ID	MC-16								MC-17							
Analyte / Date Sampled	9/23/2009	12/16/2009	3/25/2010	6/28/2010	9/16/2010	12/21/2010	3/29/2011	7/1/2011	9/25/2009	12/21/2009	3/30/2010	6/29/2010	9/16/2010	12/21/2010	3/29/2011	7/1/2011
TPH (as gasoline)	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U

Sample ID	MC-17D								MC-19D			
Analyte / Date Sampled	9/24/2009	9/24/2009	12/21/2009	12/21/2009	3/30/2010	3/30/2010	6/29/2010	6/29/2010	9/16/2010	12/21/2010	3/29/2011	7/1/2011	9/29/2009	12/21/2009	3/30/2010	6/29/2010
TPH (as gasoline)	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U

Sample ID	MC-20									MC-20D							
Analyte / Date Sampled	9/15/2010	12/21/2010	3/29/2011	3/23/2010	6/22/2010	9/14/2010	12/15/2010	3/22/2011	6/30/2011	9/22/2009	12/15/2009	3/23/2010	6/22/2010	9/14/2010	12/15/2010	3/22/2011	6/30/2011
TPH (as gasoline)	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U

Sample ID	MC-21								MC-24							
Analyte / Date Sampled	9/23/2009	12/16/2009	3/26/2010	6/28/2010	9/16/2010	12/17/2010	3/25/2011	6/28/2011	9/28/2009	12/21/2009	3/30/2010	6/28/2010	9/17/2010	12/16/2010	3/24/2011	6/22/2011
TPH (as gasoline)	360 J	320 J	210 J	190 J	280 J	330 J	470 J	400 J	50 U	50 U	50 U	16 J	50 U	50 U	50 U	50 U

Sample ID	MC-24D								MC-24D2							
Analyte / Date Sampled	9/28/2009	12/21/2009	3/30/2010	6/28/2010	9/17/2010	12/16/2010	3/24/2011	6/22/2011	9/28/2009	12/21/2009	3/30/2010	6/28/2010	9/17/2010	12/16/2010	3/24/2011	6/22/2011
TPH (as gasoline)	50 U	50 U	60 J	58 J	43 J	72 J	61 J	21 UJ	50 U	50 U	50 U	27 J	50 U	50 U	50 U	50 U

Sample ID	MC-25								MC-25D							
Analyte / Date Sampled	9/28/2009	12/18/2009	3/30/2010	6/23/2010	9/21/2010	12/14/2010	3/23/2011	6/22/2011	9/28/2009	12/18/2009	3/30/2010	6/23/2010	9/21/2010	12/14/2010	3/23/2011	6/22/2011
TPH (as gasoline)	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	21 J	21 J	32 J	50 U	14 UJ

Sample ID	MC-25D2								MC-26D2								
Analyte / Date Sampled	9/28/2009	12/18/2009	3/30/2010	6/23/2010	9/21/2010	12/14/2010	3/23/2011	6/22/2011	9/28/2009	12/17/2009	12/17/2009	3/29/2010	3/29/2010	6/23/2010	6/23/2010	9/21/2010	12/14/2010
TPH (as gasoline)	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U

TABLE I-11

GROUNDWATER ANALYTICAL RESULTS FOR TOTAL PETROLEUM HYDROCARBONS (3Q09 - 2Q11)[1]

PSC Washougal Facility
Washougal, Washington

Sample ID	MC-26D2 (Continued)		MC-27D								MC-28	MC-28D						
Analyte / Date Sampled	3/23/2011	6/22/2011	9/25/2009	12/16/2009	3/24/2010	6/23/2010	9/15/2010	12/14/2010	3/24/2011	6/28/2011	12/16/2009	9/25/2009	3/24/2010	6/23/2010	9/15/2010	12/14/2010	3/24/2011	6/28/2011
TPH (as gasoline)	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50U	50 U	50 U	50 U	50 U	50 U	50 U	50 U

Sample ID	MC-30								MC-30D							
Analyte / Date Sampled	9/24/2009	12/17/2009	3/29/2010	6/24/2010	9/13/2010	12/20/2010	3/28/2011	6/29/2011	9/24/2009	12/17/2009	3/29/2010	6/24/2010	9/13/2010	12/20/2010	3/28/2011	6/29/2011
TPH (as gasoline)	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U

Sample ID	MC-31							MC-32								MC-33D		
Analyte / Date Sampled	9/24/2009	12/17/2009	3/26/2010	6/24/2010	9/13/2010	12/21/2010	6/29/2011	9/22/2009	12/15/2009	3/23/2010	6/22/2010	9/14/2010	12/15/2010	3/22/2011	6/30/2011	9/23/2009	12/18/2009	3/25/2010
TPH (as gasoline)	50 U	50 U	50 U	50 U	50 UJ	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U

Sample ID	MC-33 (Continued)					MC-107								MC-118D				
Analyte / Date Sampled	6/24/2010	9/20/2010	12/21/2010	3/29/2011	6/29/2011	9/24/2009	12/17/2009	3/29/2010	6/24/2010	9/20/2010	12/21/2010	3/29/2011	6/27/2011	9/25/2009	12/18/2009	3/30/2010	6/25/2010	9/21/2010
TPH (as gasoline)	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	170 J	120 J	130 J	91 J	170 J

Sample ID	MC-118 (Continued)			MC-118D2								MC-122						
Analyte / Date Sampled	12/16/2010	3/23/2011	6/27/2011	9/25/2009	12/18/2009	3/30/2010	6/25/2010	9/21/2010	12/16/2010	3/23/2011	6/27/2011	9/23/2009	12/15/2009	3/24/2010	6/22/2010	9/15/2010	12/15/2010	3/22/2011
TPH (as gasoline)	160 J	100 J	40 J	50 U	50 U	50 U	34 J	37 J	48 J	50 U	19 J	50 U	50 U	50 U	50 U	50 U	50 U	50 U

Sample ID	MC-122 (Continued)	MC-123							
Analyte / Date Sampled	6/30/2011	9/22/2009	12/15/2009	3/23/2010	6/22/2010	9/14/2010	12/15/2010	3/22/2011	6/30/2011
TPH (as gasoline)	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U

Notes

1. Laboratory data flags are as follows:
   J = value is an estimate.
   U = not detected at reporting limit listed.

Abbreviations

-- = not available/not applicable
µg/L = micrograms per liter

TABLE I-12

GROUNDWATER ANALYTICAL RESULTS FOR NATURAL ATTENUATION PARAMETERS AND METALS (3Q09 - 2Q11)[1]
PSC Washougal Facility
Washougal, Washington

Sample ID	MC-1								MC-2								MC-2D								MC-8			
Analyte **Date Sampled**	9/29/2009	12/21/2009	3/26/2010	6/25/2010	9/17/2010	12/16/2010	3/24/2011	6/21/2011	9/23/2009	12/21/2009	3/25/2010	6/25/2010	9/20/2010	12/16/2010	3/28/2011	6/21/2011	9/23/2009	12/21/2009	3/25/2010	6/25/2010	9/20/2010	12/16/2010	3/28/2011	6/22/2011	9/28/2009	12/17/2009	3/29/2010	6/23/2010
Conventionals (mg/L)																												
Ammonia (as N)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bicarbonate Alkalinity (as $CaCO_3$)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
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Hydroxide Alkalinity (as $CaCO_3$)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total alkalinity	0.4 J	--	43.8	--	74.7	--	40.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
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Sulfate	2.97	--	0.94	--	0.4 U	--	0.46	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide	0.87	--	2 U	--	2 U	--	0.4 J	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
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Ferrous Iron	3.22	--	0.64	--	3.3	--	0.21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
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TABLE I-12

GROUNDWATER ANALYTICAL RESULTS FOR NATURAL ATTENUATION PARAMETERS AND METALS (3Q09 - 2Q11)[1]
PSC Washougal Facility
Washougal, Washington

Sample ID	MC-8 (Continued)				MC-10D								MC-12								MC-12D							
Analyte **Date Sampled**	9/21/2010	12/14/2010	3/23/2011	6/22/2011	9/24/2009	12/17/2009	3/26/2010	6/24/2010	9/20/2010	12/20/2010	3/28/2011	6/29/2011	9/24/2009	12/17/2009	3/29/2010	6/24/2010	9/20/2010	12/20/2010	3/29/2011	6/27/2011	9/24/2009	12/17/2009	3/29/2010	6/24/2010	9/20/2010	12/20/2010	3/29/2011	6/27/2011
Conventionals (mg/L)																												
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Carbonate Alkalinity (as $CaCO_3$)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hydroxide Alkalinity (as $CaCO_3$)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total alkalinity	--	--	--	--	519	--	605	--	596	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total Organic Carbon	--	--	--	--	2.03	--	1.86	--	2.98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloride	--	--	--	--	1.78	--	2.91	--	2.17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
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TABLE I-12

GROUNDWATER ANALYTICAL RESULTS FOR NATURAL ATTENUATION PARAMETERS AND METALS (3Q09 - 2Q11)[1]
PSC Washougal Facility
Washougal, Washington

Sample ID	MC-13								MC-13D								MC-14								MC-14D			
Analyte **Date Sampled**	**9/22/2009**	**12/16/2009**	**3/24/2010**	**6/22/2010**	**9/16/2010**	**12/17/2010**	**3/25/2011**	**6/28/2011**	**9/22/2009**	**12/16/2009**	**3/24/2010**	**6/22/2010**	**9/16/2010**	**12/17/2010**	**3/25/2011**	**6/28/2011**	**9/22/2009**	**12/16/2009**	**3/25/2010**	**6/22/2010**	**9/15/2010**	**12/20/2010**	**3/25/2011**	**6/28/2011**	**9/22/2009**	**12/16/2009**	**3/24/2010**	**6/22/2010**
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TABLE I-12

GROUNDWATER ANALYTICAL RESULTS FOR NATURAL ATTENUATION PARAMETERS AND METALS (3Q09 - 2Q11)[1]
PSC Washougal Facility
Washougal, Washington

Sample ID	MC-14D (Continued)				MC-15								MC-15D												MC-20		
Analyte **Date Sampled**	**9/16/2010**	**12/17/2010**	**3/25/2011**	**6/28/2011**	**9/13/2009**	**12/16/2009**	**3/25/2010**	**6/28/2010**	**9/15/2010**	**12/21/2010**	**3/28/2011**	**6/21/2011**	**9/23/2009**	**9/23/2009**	**12/16/2009**	**12/16/2009**	**3/25/2010**	**3/25/2010**	**6/28/2010**	**6/28/2010**	**9/15/2010**	**12/21/2010**	**3/28/2011**	**6/29/2011**	**3/23/2010**	**6/22/2010**	**9/14/2010**
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TABLE I-12

GROUNDWATER ANALYTICAL RESULTS FOR NATURAL ATTENUATION PARAMETERS AND METALS (3Q09 - 2Q11)[1]
PSC Washougal Facility
Washougal, Washington

Sample ID	MC-20 (Continued)			MC-20D								MC-21								MC-24								MC-24D	
Analyte **Date Sampled**	12/15/2010	3/22/2011	6/30/2011	9/22/2009	12/15/2009	3/23/2010	6/22/2010	9/14/2010	12/15/2010	3/22/2011	6/30/2011	9/23/2009	12/16/2009	3/26/2010	6/28/2010	9/16/2010	12/17/2010	3/25/2011	6/28/2011	9/28/2009	12/21/2009	3/30/2010	6/28/2010	9/17/2010	12/16/2010	3/24/2011	6/22/2011	9/28/2009	12/21/2009
Conventionals (mg/L)																													
Ammonia (as N)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bicarbonate Alkalinity (as $CaCO_3$)	--	70.7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbonate Alkalinity (as $CaCO_3$)	--	9 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hydroxide Alkalinity (as $CaCO_3$)	--	9 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total alkalinity	--	70.7	--	--	--	--	--	--	--	--	--	75.4	--	68.8	--	76.8	--	40.6	--	--	--	--	--	--	--	--	--	610	--
Total Organic Carbon	--	0.93	--	--	--	--	--	--	--	--	--	2.19	--	1.78	--	2.9	--	2.64	--	--	--	--	--	--	--	--	--	2.59	--
Chloride	--	1.62	--	--	--	--	--	--	--	--	--	1.18	--	1.39	--	1.7	--	1.31	--	--	--	--	--	--	--	--	--	36.2	--
Nitrate(as N)	--	0.01 J	--	--	--	--	--	--	--	--	--	0.1 U	--	0.21	--	0.2 U	--	1.06	--	--	--	--	--	--	--	--	--	0.1 U	--
Nitrite (as N)	--	0.1 U	--	--	--	--	--	--	--	--	--	0.1 U	--	0.1 U	--	0.2 U	--	0.1 U	--	--	--	--	--	--	--	--	--	0.11	--
Sulfate	--	3.46	--	--	--	--	--	--	--	--	--	0.11 J	--	0.47	--	0.16 J	--	2.4	--	--	--	--	--	--	--	--	--	0.68	--
Sulfide	--	0.4 J	--	--	--	--	--	--	--	--	--	0.7 J	--	2 U	--	2 U	--	2 U	--	--	--	--	--	--	--	--	--	2 U	--
Cyanide	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ferrous Iron	--	1.52	--	--	--	--	--	--	--	--	--	2.16	--	2.68	--	2.85	--	1.8	--	--	--	--	--	--	--	--	--	0.38	--
Ferric Iron	--	0.22	--	--	--	--	--	--	--	--	--	4.7	--	1.8	--	3.2	--	0.41	--	--	--	--	--	--	--	--	--	0.46	--
Gases (µg/L)																													
Ethane	--	0.17 J	--	--	--	--	--	--	--	--	--	0.14 J	--	0.6 U	--	0.36 J	--	0.075 J	--	--	--	--	--	--	--	--	--	39	--
Ethene	--	0.37 J	--	--	--	--	--	--	--	--	--	3.6	--	0.63 J	--	3.6	--	0.29 J	--	--	--	--	--	--	--	--	--	0.58 J	--
Methane	--	550	--	--	--	--	--	--	--	--	--	4700	--	1700	--	3900	--	1100	--	--	--	--	--	--	--	--	--	1800	--
Dissolved Metals (mg/L)																													
Antimony	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
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Beryllium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Calcium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
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Cobalt	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
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Iron	--	1.74	--	--	--	--	--	--	--	--	--	6.83	--	4.52	--	6.01	--	2.21	--	--	--	--	--	--	--	--	--	0.838	--
Lead	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Mercury	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
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Potassium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
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Silver	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sodium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
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Total Metals (mg/L)																													
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Beryllium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Calcium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cobalt	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Copper	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	--	1.74	--	--	--	--	--	--	--	--	--	6.83	--	4.52	--	6.01	--	2.21	--	--	--	--	--	--	--	--	--	0.838	--
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Potassium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Selenium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Silver	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sodium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Thallium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
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TABLE I-12

GROUNDWATER ANALYTICAL RESULTS FOR NATURAL ATTENUATION PARAMETERS AND METALS (3Q09 - 2Q11)[1]
PSC Washougal Facility
Washougal, Washington

Sample ID	MC-24D (Continued)						MC-24D2								MC-25								MC-25D						
Analyte **Date Sampled**	3/30/2010	6/28/2010	9/17/2010	12/16/2010	3/24/2011	6/22/2011	9/28/2009	12/21/2009	3/30/2010	6/28/2010	9/17/2010	12/16/2010	3/24/2011	6/22/2011	9/28/2009	12/18/2009	3/30/2010	6/23/2010	9/21/2010	12/14/2010	3/23/2011	6/22/2011	9/28/2009	12/18/2009	3/30/2010	6/23/2010	9/21/2010	12/14/2010	3/23/2011
Conventionals (mg/L)																													
Ammonia (as N)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bicarbonate Alkalinity (as $CaCO_3$)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbonate Alkalinity (as $CaCO_3$)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hydroxide Alkalinity (as $CaCO_3$)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total alkalinity	622	--	633	--	623	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	523	--	550	--	518	--	53.8
Total Organic Carbon	2.92	--	3.35	--	3.42	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.41	--	3.49	--	4.64	--	3.06
Chloride	41.2	--	38.2	--	48.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	60.1	--	54.4	--	55.8	--	56.5
Nitrate(as N)	0.1 U	--	0.2 U	--	0.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.1 U	--	0.1 U	--	0.2 U	--	0.1 U
Nitrite (as N)	0.29	--	0.2 U	--	0.17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.28	--	0.43	--	0.2 U	--	0.1 U
Sulfate	0.86	--	0.89	--	1.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2.54	--	2.75	--	3.26	--	4.44
Sulfide	2 U	--	2 U	--	2 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.4 J	--	2 U	--	2 U	--	2 U
Cyanide	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ferrous Iron	0.12	--	0.44	--	0.59	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.45	--	0.25	--	0.61	--	0.65
Ferric Iron	1.7	--	0.11	--	3.8	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.22	--	0.57	--	0.02 U	--	0.54
Gases (µg/L)																													
Ethane	78	--	53	--	0.6 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	76	--	150	--	120	--	120
Ethene	1.8	--	1.4	--	1.2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2.2	--	5.9	--	7.4	--	11
Methane	3300	--	2400	--	1500	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2300	--	4300	--	3500	--	3600
Dissolved Metals (mg/L)																													
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Beryllium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
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Iron	1.83	--	0.546	--	4.39	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.674	--	0.823	--	0.592	--	1.18
Lead	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
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Mercury	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nickel	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Potassium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
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Total Metals (mg/L)																													
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Beryllium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
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Cobalt	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Copper	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	1.83	--	0.546	--	4.39	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.674	--	0.823	--	0.592	--	1.18
Lead	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
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TABLE I-12

GROUNDWATER ANALYTICAL RESULTS FOR NATURAL ATTENUATION PARAMETERS AND METALS (3Q09 - 2Q11)[1]
PSC Washougal Facility
Washougal, Washington

Sample ID	MC-25D2								MC-26D2												MC-27D								MC-28D	
Analyte **Date Sampled**	**9/28/2009**	**12/18/2009**	**3/30/2010**	**6/23/2010**	**9/21/2010**	**12/14/2010**	**3/23/2011**	**6/22/2011**	**9/28/2009**	**12/17/2009**	**12/17/2009**	**3/29/2010**	**3/29/2010**	**6/23/2010**	**6/23/2010**	**9/21/2010**	**12/14/2010**	**3/23/2011**	**6/22/2011**	**9/25/2009**	**12/16/2009**	**3/24/2010**	**6/23/2010**	**9/15/2010**	**12/14/2010**	**3/24/2011**	**6/28/2011**	**9/25/2009**	**3/24/2010**
Conventionals (mg/L)																														
Ammonia (as N)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bicarbonate Alkalinity (as $CaCO_3$)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbonate Alkalinity (as $CaCO_3$)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hydroxide Alkalinity (as $CaCO_3$)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total alkalinity	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
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Potassium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
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Silver	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sodium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
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TABLE I-12

GROUNDWATER ANALYTICAL RESULTS FOR NATURAL ATTENUATION PARAMETERS AND METALS (3Q09 - 2Q11)[1]
PSC Washougal Facility
Washougal, Washington

Sample ID	MC-28D (Continued)					MC-30								MC-30D								MC-31						
Analyte **Date Sampled**	6/23/2010	9/15/2010	12/14/2010	3/24/2011	6/28/2011	9/28/2009	12/30/2009	3/29/2010	6/24/2010	9/13/2010	12/20/2010	3/28/2011	6/29/2011	9/24/2009	12/17/2009	3/29/2010	6/24/2010	9/13/2010	12/20/2010	3/28/2011	6/29/2011	9/24/2009	12/17/2009	3/26/2010	6/24/2010	9/13/2010	12/21/2010	6/29/2011
Conventionals (mg/L)																												
Ammonia (as N)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bicarbonate Alkalinity (as $CaCO_3$)	--	--	--	--	--	--	--	56.5	--	--	--	--	--	--	--	844	--	--	--	--	--	--	--	--	--	--	--	--
Carbonate Alkalinity (as $CaCO_3$)	--	--	--	--	--	--	--	2 U	--	--	--	--	--	--	--	2 U	--	--	--	--	--	--	--	--	--	--	--	--
Hydroxide Alkalinity (as $CaCO_3$)	--	--	--	--	--	--	--	2 U	--	--	--	--	--	--	--	2 U	--	--	--	--	--	--	--	--	--	--	--	--
Total alkalinity	--	--	--	--	--	72.4	--	56.5	--	59.4	--	--	--	726	--	844	--	248	--	--	--	59.4	--	54.2	--	68.5	--	--
Total Organic Carbon	--	--	--	--	--	2.46	--	1.91	--	2.79	--	--	--	3.7	--	4	--	3.87	--	--	--	2.44	--	1.69	--	3.24	--	--
Chloride	--	--	--	--	--	0.81	--	1.72	--	0.94	--	--	--	2.56	--	4.3	--	2.84	--	--	--	1.05	--	1.19	--	1.03	--	--
Nitrate(as N)	--	--	--	--	--	0.1 U	--	0.01 J	--	0.01 J	--	--	--	0.05 J	--	0.1 U	--	0.2 U	--	--	--	0.1 U	--	0.1 U	--	0.2 U	--	--
Nitrite (as N)	--	--	--	--	--	0.1 U	--	0.1 U	--	0.2 U	--	0.1 U	--	0.1 U	--	0.1 U	--	0.2 U	--	0.1 U	--	0.1 U	--	0.1 U	--	0.2 U	--	--
Sulfate	--	--	--	--	--	0.45	--	1.08	--	0.58	--	--	--	0.36	--	0.36	--	0.43	--	--	--	0.12 J	--	0.17 J	--	0.4 U	--	--
Sulfide	--	--	--	--	--	0.4 J	--	2 U	--	2 U	--	2 U	--	0.5 J	--	2 U	--	2 U	--	2 U	--	0.5 J	--	2 U	--	0.4 J	--	--
Cyanide	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ferrous Iron	--	--	--	--	--	0.05	--	0.33	--	0.11	--	0.04	--	2.05	--	1.57	--	1.69	--	1.45	--	1.68	--	1.06	--	3.3	--	--
Ferric Iron	--	--	--	--	--	0.12	--	0.02 U	--	0 U	--	0.09	--	0.26	--	0.51	--	0 U	--	0.46	--	4	--	4.9	--	2.4	--	--
Gases (µg/L)																												
Ethane	--	--	--	--	--	0.5 U	--	0.6 U	--	0.73	--	0.6 U	--	0.5 U	--	0.6 U	--	0.6 U	--	0.6 U	--	0.13 J	--	0.13 J	--	1.2	--	--
Ethene	--	--	--	--	--	1.5 U	--	1 U	--	0.62 J	--	1 U	--	1.5 U	--	1 U	--	1 U	--	1 U	--	1.5 U	--	1 U	--	0.6 J	--	--
Methane	--	--	--	--	--	1500	--	650	--	2300	--	960	--	160	--	290	--	120	--	31	--	6000	--	5600	--	8600	--	--
Dissolved Metals (mg/L)																												
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Iron	--	--	--	--	--	0.174	--	0.304	--	0.108	--	0.134	--	2.31	--	2.08	--	1.71	--	1.91	--	5.66	--	5.93	--	5.72	--	--
Lead	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
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TABLE I-12

GROUNDWATER ANALYTICAL RESULTS FOR NATURAL ATTENUATION PARAMETERS AND METALS (3Q09 - 2Q11)[1]
PSC Washougal Facility
Washougal, Washington

Sample ID	MC-32								MC-33								MC-107								MC-118D				
Analyte **Date Sampled**	**9/22/2009**	**12/15/2009**	**3/23/2010**	**6/22/2010**	**9/14/2010**	**12/15/2010**	**3/22/2011**	**6/30/2011**	**9/23/2009**	**12/18/2009**	**3/25/2010**	**6/24/2010**	**9/20/2010**	**12/21/2010**	**3/29/2011**	**6/29/2011**	**9/24/2009**	**12/17/2009**	**3/29/2010**	**6/24/2010**	**9/20/2010**	**12/21/2010**	**3/29/2011**	**6/27/2011**	**9/25/2009**	**12/18/2009**	**3/30/2010**	**6/25/2010**	**9/21/2010**
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TABLE I-12

GROUNDWATER ANALYTICAL RESULTS FOR NATURAL ATTENUATION PARAMETERS AND METALS (3Q09 - 2Q11)[1]
PSC Washougal Facility
Washougal, Washington

Sample ID	MC-118D (Continued)			MC-118D2								MC-122								MC-123							
Analyte **Date Sampled**	**12/18/2010**	**3/23/2011**	**6/27/2011**	**9/25/2009**	**12/18/2009**	**3/30/2010**	**6/25/2010**	**9/21/2010**	**12/16/2010**	**3/23/2011**	**6/27/2011**	**9/23/2009**	**12/15/2009**	**3/24/2010**	**6/22/2010**	**9/15/2010**	**12/15/2010**	**3/22/2011**	**6/30/2011**	**9/22/2009**	**12/15/2009**	**3/23/2010**	**6/22/2010**	**9/14/2010**	**12/15/2010**	**3/22/2011**	**6/30/2011**
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Nickel	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Potassium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Selenium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Silver	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sodium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Thallium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tin	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vanadium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Zinc	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total Metals (mg/L)																											
Antimony	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Barium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Beryllium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Calcium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cobalt	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Copper	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	--	14.9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Mercury	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nickel	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Potassium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Selenium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Silver	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sodium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Thallium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tin	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vanadium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Zinc	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE I-12

GROUNDWATER ANALYTICAL RESULTS FOR NATURAL ATTENUATION PARAMETERS AND METALS (3Q09 - 2Q11)[1]
PSC Washougal Facility
Washougal, Washington

Sample ID	PZU-4								PZU-5								UZ-ST-1						
Analyte **Date Sampled**	**9/21/2009**	**12/15/2009**	**3/23/2010**	**6/21/2010**	**9/14/2010**	**12/13/2010**	**3/21/2011**	**6/21/2011**	**6/21/2009**	**12/15/2009**	**3/24/2010**	**6/21/2010**	**9/14/2010**	**12/16/2010**	**3/22/2011**	**6/30/2011**	**9/23/2009**	**12/15/2009**	**3/23/2010**	**6/21/2010**	**12/15/2010**	**3/21/2011**	**6/21/2011**
Conventionals (mg/L)																							
Ammonia (as N)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bicarbonate Alkalinity (as $CaCO_3$)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbonate Alkalinity (as $CaCO_3$)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hydroxide Alkalinity (as $CaCO_3$)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total alkalinity	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total Organic Carbon	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chloride	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrate(as N)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nitrite (as N)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfate	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sulfide	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cyanide	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ferrous Iron	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ferric Iron	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Gases (µg/L)																							
Ethane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methane	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved Metals (mg/L)																							
Antimony	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Barium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Beryllium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Calcium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cobalt	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Copper	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Mercury	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nickel	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Potassium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Selenium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Silver	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sodium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Thallium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tin	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vanadium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Zinc	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total Metals (mg/L)																							
Antimony	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Barium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Beryllium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Calcium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cobalt	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Copper	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Magnesium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Mercury	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nickel	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Potassium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Selenium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Silver	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sodium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Thallium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tin	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vanadium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Zinc	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes
1. Laboratory data flags are as follows:
   J = value is an estimate.
   U = not detected at reporting limit listed.
   UJ = value is an estimate at reporting limit listed.
   UR = result is rejected due to quality control issues.

Abbreviations
-- = not available/not applicable
µg/L = micrograms per liter

TABLE I-13

GROUNDWATER ANALYTICAL RESULTS FOR ARSENIC (3Q09 - 2Q11)[1]
PSC Washougal Facility
Washougal, Washington

Analyte / Site ID / Sample Date	MC-1								MC-2								MC-2D	
	9/29/2009	12/21/2009	3/26/2010	6/25/2010	9/17/2010	12/16/2010	3/24/2011	6/21/2011	9/23/2009	12/21/2009	3/25/2010	6/25/2010	9/20/2010	12/16/2010	3/28/2011	6/21/2011	9/23/2009	12/21/2009
Dissolved																		
Arsenic	--	--	--	--	0.0229	0.0008	--	--	--	--	--	--	--	--	--	--	--	--
Total																		
Arsenic	0.0217	0.0137	0.0055	0.0028	0.0233	0.0009	0.0008	0.0097	0.0547	0.0175	0.0129	0.0229	0.0218	0.0186	0.0116	0.024	0.0005 U	0.0005 U
Arsenic III	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Arsenic V	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Analyte / Site ID / Sample Date	MC-2D (Continued)						MC-8								MC-10D			
	3/25/2010	6/25/2010	9/20/2010	12/16/2010	3/28/2011	6/22/2011	9/28/2009	12/17/2009	3/29/2010	6/23/2010	9/21/2010	12/14/2010	3/23/2011	6/22/2011	9/24/2009	12/17/2009	3/26/2010	6/24/2010
Dissolved																		
Arsenic	--	--	--	--	--	--	--	0.0005 U	--	0.0007	--	0.0008	--	--	--	--	--	--
Total																		
Arsenic	0.0009	0.0006	0.0007	0.0007	0.0006	0.0006	0.0005 U	0.0013	0.0006	0.0008	0.0013	0.001	0.0011	0.0009	0.0035	0.0039	0.003	0.0032
Arsenic III	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Arsenic V	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Analyte / Site ID / Sample Date	MC-10D (Continued)		MC-12								MC-12D							
	9/20/2010	12/20/2010	9/24/2009	12/17/2009	3/29/2010	6/24/2010	9/20/2010	12/20/2010	3/29/2011	6/27/2011	9/24/2009	12/17/2009	3/29/2010	6/24/2010	9/20/2010	12/20/2010	3/29/2011	6/27/2011
Dissolved																		
Arsenic	0.0034	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total																		
Arsenic	0.0037	0.0043	0.0209	0.0121	0.0148	0.0272	0.0229	0.0191	0.0144	0.0182	0.0005 U	0.0012	0.001	0.0011	0.0011	0.0014	0.001	0.001
Arsenic III	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Arsenic V																		

Analyte / Site ID / Sample Date	MC-13							MC-13D								MC-14		
	9/22/2009	3/24/2010	6/22/2010	9/16/2010	12/17/2010	3/25/2011	6/28/2011	9/22/2009	12/16/2009	3/24/2010	6/22/2010	9/16/2010	12/17/2010	3/25/2011	6/28/2011	9/22/2009	12/16/2009	3/25/2010
Dissolved																		
Arsenic	--	--	--	--	0.0029	--	--	--	--	--	--	--	--	--	--	--	--	--
Total																		
Arsenic	0.0081	0.0058	0.0059	0.0084	0.0028	0.0025	0.0046	0.0005 U	0.0005 U	0.0009	0.0008	0.0007	0.0008	0.0008	0.0008	0.0404	0.0204	0.0243
Arsenic III	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Arsenic V	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE I-13

GROUNDWATER ANALYTICAL RESULTS FOR ARSENIC (3Q09 - 2Q11)[1]
PSC Washougal Facility
Washougal, Washington

Analyte / Site ID	MC-14 (Continued)					MC-14D								MC-15		
Sample Date	6/22/2010	9/15/2010	12/20/2010	3/25/2011	6/28/2011	9/22/2009	12/16/2009	3/24/2010	6/22/2010	9/16/2010	12/17/2010	3/25/2011	6/28/2011	9/23/2009	12/16/2009	3/25/2010
Dissolved																
Arsenic	--	--	--	--	0.0415	--	--	--	--	--	--	--	0.0008	--	--	--
Total																
Arsenic	0.0275	0.0362	0.0189	0.0231	0.0399	0.0005 U	0.0005 U	0.0005 U	0.0008	0.0003 J	0.0004 J	0.0006	0.001	0.0356	0.0074	0.0091
Arsenic III	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Arsenic V	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Analyte / Site ID	MC-15 (Continued)					MC-15D									
Sample Date	6/28/2010	9/15/2010	12/21/2010	3/28/2011	6/21/2011	9/23/2009	9/23/2009	12/16/2009	12/16/2009	3/25/2010	3/25/2010	6/28/2010	6/28/2010	9/15/2010	12/21/2010
Dissolved															
Arsenic	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total															
Arsenic	0.0117	0.0339	0.0022	0.0007	0.0254	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0006	0.0006	0.0006	0.0005	0.0004 J	0.0006
Arsenic III	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Arsenic V	--	--	--	--	--	--	--	--	--	--	--	--	--		

Analyte / Site ID	MC-15D (Continued)		MC-16								MC-17					
Sample Date	3/28/2011	6/29/2011	9/23/2009	12/16/2009	3/25/2010	6/28/2010	9/16/2010	12/21/2010	3/29/2011	7/1/2011	9/25/2009	12/21/2009	3/30/2010	6/29/2010	9/16/2010	12/21/2010
Dissolved																
Arsenic	--	--	--	--	--	--	--	0.0043	--	--	--	--	0.0031	--	--	--
Total																
Arsenic	0.0004 J	0.0005 J	0.0369	0.0109	0.0202	0.0204	0.0339	0.0053	0.0094	0.0299	0.0396	0.018	0.0034	0.0216	0.0444	0.0014
Arsenic III	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Arsenic V											--	--	--	--	--	--

Analyte / Site ID	MC-17 (Continued)		MC-17D												MC-19D	
Sample Date	3/29/2011	7/1/2011	9/24/2009	9/24/2009	12/21/2009	12/21/2009	3/30/2010	3/30/2010	6/29/2010	6/29/2010	9/16/2010	12/21/2010	3/29/2011	7/1/2011	9/29/2009	12/21/2009
Dissolved																
Arsenic	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total																
Arsenic	0.0006	0.0216	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0007	0.0007	0.0008	0.0007	0.0007	0.0007	0.0025	0.0007	0.0005 U	0.0005 U
Arsenic III	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Arsenic V	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE I-13

GROUNDWATER ANALYTICAL RESULTS FOR ARSENIC (3Q09 - 2Q11)[1]
PSC Washougal Facility
Washougal, Washington

Site ID	MC-19D (Continued)					MC-20						MC-20D					
Analyte / Sample Date	3/30/2010	6/29/2010	9/15/2010	12/21/2010	3/29/2011	3/23/2010	6/22/2010	9/14/2010	12/15/2010	3/22/2011	6/30/2011	9/22/2009	12/15/2009	3/23/2010	6/22/2010	9/14/2010	12/15/2010
Dissolved																	
Arsenic	--	--	--	--	--	--	--	0.0281	--	--	--	--	--	0.0005 U	0.0005 J	--	--
Total																	
Arsenic	0.0013	0.0009	0.0008	0.0009	0.0017	0.0108	0.0021	0.026	0.0021	0.0015	0.0086	0.0005 U	0.0005 U	0.0006	0.0006	0.0005 J	0.0005
Arsenic III	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Arsenic V	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Site ID	MC-20D (Continued)		MC-21								MC-24					
Analyte / Sample Date	3/22/2011	6/30/2011	9/23/2009	12/16/2009	3/26/2010	6/28/2010	9/16/2010	12/17/2010	3/25/2011	6/28/2011	9/28/2009	12/21/2009	3/30/2010	6/28/2010	9/17/2010	12/16/2010
Dissolved																
Arsenic	--	--	--	--	--	--	--	--	--	--	0.0005 U	0.0003 UJ	0.0001 J	--	0.0002 J	0.0002 J
Total																
Arsenic	0.0005 J	0.0005	0.0167	0.0101	0.0106	0.0097	0.0167	0.0073	0.0072	0.0089	0.0005 U	0.0003 UJ	0.0001 J	0.0002 J	0.0002 J	0.0002 J
Arsenic III	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Arsenic V	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Site ID	MC-24 (Continued)		MC-24D								MC-24D2				
Analyte / Sample Date	3/24/2011	6/22/2011	9/28/2009	12/21/2009	3/30/2010	6/28/2010	9/17/2010	12/16/2010	3/24/2011	6/22/2011	9/28/2009	12/21/2009	3/30/2010	6/28/2010	9/17/2010
Dissolved															
Arsenic	--	--	0.0005 U	0.0006	0.0006	--	--	--	0.0006	0.0004 J	--	--	0.001	--	--
Total															
Arsenic	0.0005 U	0.0001 J	0.0005 U	0.0005 U	0.0008	0.0009	0.0005 J	0.0007	0.0009	0.0013	0.0005 U	0.0012	0.0012	0.0014	0.001
Arsenic III	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Arsenic V	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Site ID	MC-24D2 (Continued)			MC-25							MC-25D				
Analyte / Sample Date	12/16/2010	3/24/2011	6/22/2011	9/28/2009	12/18/2009	3/30/2010	6/23/2010	9/21/2010	12/14/2010	3/23/2011	6/22/2011	9/28/2009	12/18/2009	3/30/2010	6/23/2010	9/21/2010
Dissolved																
Arsenic	--	--	--	0.0005 U	0.0005 U	--	--	0.0007	--	--	0.0005	--	--	0.0006	--	--
Total																
Arsenic	0.0011	0.001	0.0011	0.0005 U	0.0005 U	0.0007	0.0007	0.0008	0.0005	0.0005 J	0.0006	0.0005 U	0.0005 U	0.0007	0.0008	0.0006
Arsenic III	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Arsenic V	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE I-13

GROUNDWATER ANALYTICAL RESULTS FOR ARSENIC (3Q09 - 2Q11)[1]
PSC Washougal Facility
Washougal, Washington

Analyte	Site ID	MC-25D (Continued)			MC-25D2								MC-26D2				
	Sample Date	12/14/2010	3/23/2011	6/22/2011	9/28/2009	12/18/2009	3/30/2010	6/23/2010	9/21/2010	12/14/2010	3/23/2011	6/22/2011	9/28/2009	12/17/2009	12/17/2009	3/29/2010	3/29/2010
Dissolved																	
Arsenic		--	--	0.0004 J	--	--	0.0006	--	--	0.0006	0.0005	--	--	--	--	0.0006	0.0008
Total																	
Arsenic		0.0007	0.0007	0.0008	0.0005 U	0.0005 U	0.0007	0.0007	0.0006	0.0007	0.0007	0.0007	0.0005 U	0.0005 U	0.0005 U	0.0008	0.0007
Arsenic III		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Arsenic V		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Analyte	Site ID	MC-26D2 (Continued)						MC-27D								MC-28
	Sample Date	6/23/2010	6/23/2010	9/21/2010	12/14/2010	3/23/2011	6/22/2011	9/25/2009	12/16/2009	3/24/2010	6/23/2010	9/15/2010	12/14/2010	3/24/2011	6/28/2011	12/16/2009
Dissolved																
Arsenic		--	--	--	--	--	--	0.0005 U	0.0005 U	0.0009	0.0008	--	--	0.0008	--	--
Total																
Arsenic		0.0009	0.0009	0.0008	0.0009	0.0009	0.0009	0.0005 U	0.0005 U	0.0011	0.0011	0.001	0.0011	0.0014	0.0014	0.0011
Arsenic III		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Arsenic V		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Analyte	Site ID	MC-28D						MC-30								
	Sample Date	9/25/2009	3/24/2010	6/23/2010	9/15/2010	12/14/2010	3/24/2011	6/28/2011	9/24/2009	12/17/2009	3/29/2010	6/24/2010	9/13/2010	12/20/2010	3/28/2011	6/29/2011
Dissolved																
Arsenic		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total																
Arsenic		0.0005 U	0.001	0.0008	0.0008	0.0009	0.0009	0.0009	0.0139	0.0103	0.0083	0.0092	0.0163	0.0061	0.0063	0.0159
Arsenic III		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Arsenic V		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Analyte	Site ID	MC-30D								MC-31						
	Sample Date	9/24/2009	12/17/2009	3/29/2010	6/24/2010	9/13/2010	12/20/2010	3/28/2011	6/29/2011	9/24/2009	12/17/2009	3/26/2010	6/24/2010	9/13/2010	12/21/2010	6/29/2011
Dissolved																
Arsenic		--	--	--	--	--	--	--	--	--	--	--	--	--	0.0289	--
Total																
Arsenic		0.0005 U	0.0014	0.001	0.0008	0.0009	0.001	0.0007	0.0007	0.0361	0.0335	0.031	0.0319	0.0409	0.0298	0.0294
Arsenic III		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Arsenic V		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE I-13

GROUNDWATER ANALYTICAL RESULTS FOR ARSENIC (3Q09 - 2Q11)[1]

PSC Washougal Facility
Washougal, Washington

Analyte	Site ID / Sample Date	MC-32 9/22/2009	MC-32 12/15/2009	MC-32 3/23/2010	MC-32 6/22/2010	MC-32 9/14/2010	MC-32 12/15/2010	MC-32 3/22/2011	MC-32 6/30/2011	MC-33 9/23/2009	MC-33 12/18/2009	MC-33 3/25/2010	MC-33 6/24/2010	MC-33 9/20/2010	MC-33 12/21/2010	MC-33 3/29/2011	MC-33 6/29/2011
Dissolved																	
Arsenic		0.0286	0.1131	0.0113	0.0736	0.083	0.0784	0.0264	0.0488	--	--	--	--	--	0.0314	--	--
Total																	
Arsenic		0.025	0.1338	0.0708	0.0757	0.02	0.0706	0.0227	0.0458	0.0355	0.03	0.0317	0.0316	0.037	0.0337	0.0305	0.03
Arsenic III		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Arsenic V		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Analyte	Site ID / Sample Date	MC-107 9/24/2009	MC-107 12/17/2009	MC-107 3/29/2010	MC-107 6/24/2010	MC-107 9/20/2010	MC-107 12/21/2010	MC-107 3/29/2011	MC-107 6/27/2011	MC-118D 9/25/2009	MC-118D 12/18/2009	MC-118D 3/30/2010	MC-118D 6/25/2010	MC-118D 9/21/2010	MC-118D 12/16/2010	MC-118D 3/23/2011	MC-118D 6/27/2011
Dissolved																	
Arsenic		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total																	
Arsenic		0.0263	0.0102	0.005	0.0125	0.0122	0.0058	0.0048	0.0101	0.0039	0.0045	0.0037	0.0042	0.0042	0.0038	0.0039	0.0037
Arsenic III		--	--	--	--	--	--	--	--								
Arsenic V		--	--	--	--	--	--	--	--								

Analyte	Site ID / Sample Date	MC-118D2 9/25/2009	MC-118D2 12/18/2009	MC-118D2 3/30/2010	MC-118D2 6/25/2010	MC-118D2 9/21/2010	MC-118D2 12/16/2010	MC-118D2 3/23/2011	MC-118D2 6/27/2011	MC-122 9/23/2009	MC-122 12/15/2009	MC-122 3/24/2010	MC-122 6/22/2010	MC-122 9/15/2010	MC-122 12/15/2010	MC-122 3/22/2011	MC-122 6/30/2011
Dissolved																	
Arsenic		--	--	--	--	--	--	--	--	0.0018	0.0035	0.0022	0.0018	0.0017	0.0004 J	0.0004 J	--
Total																	
Arsenic		0.0005 U	0.0013	0.0011	0.0006	0.0011	0.0012	0.0013	0.0007	0.0019	0.0037	0.0028	0.0021	0.0016	0.0007	0.0008	0.0013
Arsenic III										--	--	--	--	--	--	--	--
Arsenic V										--	--	--	--	--	--	--	--

Analyte	Site ID / Sample Date	MC-123 9/22/2009	MC-123 12/15/2009	MC-123 3/23/2010	MC-123 6/22/2010	MC-123 9/14/2010	MC-123 12/15/2010	MC-123 3/22/2011	MC-123 6/30/2011	PZU-4 9/21/2009	PZU-4 12/15/2009	PZU-4 3/23/2010	PZU-4 6/21/2010	PZU-4 9/14/2010	PZU-4 12/13/2010	PZU-4 3/21/2011	PZU-4 6/21/2011
Dissolved																	
Arsenic		--	--	0.0144	--	0.0203	--	0.0011	--	--	0.0145	--	--	--	--	0.0028	--
Total																	
Arsenic		0.0233	0.0254	0.0157	0.0144	0.0209	0.002	0.0012	0.0167	0.0258	0.015	0.013	0.0067	0.0183	0.0031	0.0028	0.0148
Arsenic III		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Arsenic V		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE I-13

GROUNDWATER ANALYTICAL RESULTS FOR ARSENIC (3Q09 - 2Q11)[1]

PSC Washougal Facility
Washougal, Washington

Analyte	Site ID / Sample Date	PZU-5 9/21/2009	12/15/2009	3/24/2010	6/21/2010	9/14/2010	12/16/2010	3/22/2011	6/30/2011
Dissolved									
Arsenic		--	0.0105	0.0112	0.0019	--	0.0015	0.0012	--
Total									
Arsenic		0.0102	0.0112	0.013	0.0036	0.0188	0.0021	0.0021	0.0026
Arsenic III		--	--	--	--	--	--	--	--
Arsenic V		--	--	--	--	--	--	--	--

Analyte	Site ID / Sample Date	UT-ST-1 12/15/2009	3/23/2010	6/21/2010	12/13/2010	3/21/2011	6/21/2011
Dissolved							
Arsenic		0.0005 U	--	--	--	--	--
Total							
Arsenic		0.0022	0.0034	0.0042	0.003	0.0041	0.0037
Arsenic III		--	--	--	--	--	--
Arsenic V		--	--	--	--	--	--

Notes
1. Laboratory data flags are as follows:
   J = value is an estimate.
   U = not detected at reporting limit listed.
   UJ = value is an estimate at reporting limit listed.
   UR = result is rejected due to quality control issues.

Abbreviations
-- = not available/not applicable
µg/L = micrograms per liter

TABLE I-14

GROUNDWATER ANALYTICAL RESULTS FOR TEMPORARY WELLS (2010 - 2011) [1,2]

PSC Washougal Facility
Washougal, Washington

Sample ID / Sample Date	Preliminary Cleanup Level	GP-116 8/10/2011	GP-117 8/10/2011	GP-118 8/10/2011	GP-118 Field Dup. 8/11/2011	GP-122 8/11/2011
Total Metals (mg/L)						
Arsenic	0.025/0.00151	0.0031	**0.0359**	**0.0086**	**0.0078**	
SVOCs (µg/L)						
1,4-Dioxane	4	**11**	1.0 U	**11**	**12**	**78**
VOCs (µg/L)						
1,1,1-Trichloroethane	200	0.55 J	1.0 U	25 U	25 U	0.50 U
1,1,2-Trichlorotrifluoroethane	240,000	1,400	290	24 J	25 U	0.50 U
1,1-Dichloroethane	314	**460**	1.0 U	**8,200**	**7,900**	170
1,1-Dichloroethene	0.057	2.5 U	1.0 U	**16 J**	**9.0 J**	0.50 U
1,2-Dichlorobenzene	262	2.5 U	2.4	25 U	25 U	0.50 U
1,2-Dichloroethane	0.38	2.5 U	1.0 U	25 U	25 U	0.50 U
2,2-Dichloro-1,1,1-trifluoroetha	NE	5.0 U	2.0 U	50 U	50 U	1.0 U
2-Butanone	4,800	100 U	40 U	1,000 U	1,000 U	20 U
2-Methylpentane	NE	5.0 U	2.0 U	50 U	50 U	1.0 U
3-Methylpentane	NE	5.0 U	2.0 U	50 U	50 U	1.0 U
Acetone	800	100 U	40 U	1,000 U	1,000 U	5.6 J
Benzene	0.8	**2.3 J**	**0.24 J**	**6.0 J**	**5.0 J**	0.23 J
Carbon Disulfide	42	2.5 U	1.0 U	25 U	25 U	0.50 U
Carbon Tetrachloride	0.14	2.5 U	1.0 U	25 U	25 U	0.50 U
Chlorobenzene	0.5	2.5 U	1.0 U	25 U	25 U	0.50 U
Chloroethane	3.14	2.5 U	1.0 U	**29**	**21 J**	1.3 U
Chloroform	0.582	2.5 U	1.0 U	25 U	25 U	0.50 U
Chloromethane	2.2	2.5 U	1.0 U	25 U	25 U	0.50 U
cis-1,2-Dichloroethene	22	**450**	4.7	**16,000**	**15,000**	**550**
Dichlorodifluoromethane	1.55	2.5 U	1.0 U	25 U	25 U	0.50 U
Ethylbenzene	384	2.5 U	58	6.0 J	4.5 J	0.39 J
m,p-Xylene	39	2.5 U	**160**	9.5 J	5.5 J	0.98
Methylcyclopentane	NE	1.1 J	2.0 U	50 U	50 U	1.0 U
Methylene Chloride	4.6	1.1 J	0.22 J	**7.5 J**	**12 J**	0.15 J
o-Xylene	16,000	23	44	7.0 J	5.5 J	0.47 J
Tetrachloroethene	0.081	**4.5**	**3.8**	**24 J**	**11 J**	**0.83**
Toluene	640	0.50 J	81	**1,200**	**1,000**	4.6
trans-1,2-Dichloroethene	19	2.5 U	1.0 U	5.0 J	3.5 J	1.2
Trichloroethene	0.055	**2.4 J**	**1.1**	25 U	25 U	**0.94**
Trichlorofluoromethane	2,400	2.5 U	1.0 U	25 U	25 U	0.50 U
Vinyl Chloride	0.025	**7.2**	**1.8**	**21 J**	**11 J**	**2.6**

Notes
1. Data flags are as follows:
   J = concentration shown is an estimate.
   U = analyte not detected at or above laboratory reporting limit indicated.
2. **Bold** values exceed preliminary cleanup levels obtained from Table 9-2 of the RI/FS.

Abbreviations
µg/L = micrograms per liter
mg/L = milligrams per liter
NE = not established
SVOCs = semivolatile organic compounds
VOCs = volatile organic compounds

APPENDIX J

Analytical Results for Surface Water and Sediment

TABLE J-1

ANALYTICAL RESULTS FOR POREWATER 2007-2008[1]

PSC Washougal Facility
Washougal, Washington

Location ID	MC-SM-1	MC-SM-2		MC-SM-3			MC-SM-4	MC-SM-5	MC-SM-6
Sample Date	10/25/2007	9/21/2007	12/8/2008	9/21/2007	9/21/2007 Field Dup.	12/8/2008	12/8/2008	12/8/2008	12/8/2008
Analyte									
Metals (mg/L)									
Arsenic	0.00192	0.0057	0.001	0.0035	0.0021	0.0014	0.0052	0.0027	0.0059
Barium	0.0951	0.161	0.0543	0.221	0.17	0.128	0.069	0.0836	0.0642
Cadmium	0.000124	0.000629 J	0.00045	0.000325 J	0.00073 J	0.00029	0.00001	0.00012	0.0001
Chromium	0.00272	0.00239	0.00013	0.00259	0.00039	0.00014	0.00022	0.0007	0.00077
Cobalt	0.007	0.00895	--	0.0101	0.00343	--	--	--	--
Copper	0.00417	0.0075 U	0.005084	0.00694	0.00603 J	0.004173	0.000802	0.00358	0.002407
Iron	2.63	5.08	0.036	4.79	0.17 U	0.034	19.2	1.6	1.9
Magnesium	33.6	44.3	--	77.1	73.5	--	--	--	--
Manganese	1.11	3.15	0.269	4.09	1.75	2.7	4.5	3.6	2.1
Mercury	0.00003 U	--	--	--	--	--	--	--	--
Nickel	0.0264	0.0847 J	0.0312	0.112 J	0.0804 J	0.155	0.0123	0.0201	0.0207
Potassium	1.3	2.31	1.3	4.32	1.55	1.8	1.8	0.6	1.7
Silver	0.000027	0.000037	0.000005 U	0.00004	0.000006	0.000005 U	0.000012 U	0.000005 U	0.000005 U
Sodium	22.8	32.3	--	42.8	47.3	--	--	--	--
Vanadium	0.00835	0.00738	0.0014	0.00664	0.00522	0.0015	0.000203	0.0024	0.0036
Zinc	0.0115	0.043	0.0061	0.0129	0.00911 U	0.0083	0.003	0.0075	0.0068
SVOCs (µg/L)									
1,2,4-Trichlorobenzene	0.016 U	0.018 U	--	0.016 U	0.016 U	--	--	--	--
1,2-Dichlorobenzene	0.022 U	0.024 U	--	0.022 U	0.022 U	--	--	--	--
1,3-Dichlorobenzene	0.021 U	0.023 U	--	0.021 U	0.021 U	--	--	--	--
1,4-Dichlorobenzene	0.029 U	0.031 U	--	0.029 U	0.029 U	--	--	--	--
2,4,5-Trichlorophenol	0.031 U	0.033 U	--	0.031 U	0.031 U	--	--	--	--
2,4,6-Trichlorophenol	0.058 U	0.062 U	--	0.058 U	0.058 U	--	--	--	--
2,4-Dichlorophenol	0.047 U	0.05 U	--	0.047 U	0.047 U	--	--	--	--
2,4-Dimethylphenol	--	2.4 U	--	2.2 U	2.2 U	--	--	--	--
2,4-Dinitrophenol	0.17 U	0.19 U	--	0.17 U	0.17 U	--	--	--	--
2,4-Dinitrotoluene	0.018 U	0.02 U	--	0.018 U	0.018 U	--	--	--	--
2,6-Dinitrotoluene	0.033 U	0.036 U	--	0.033 U	0.033 U	--	--	--	--
2-Chloronaphthalene	0.041 U	0.044 U	--	0.041 U	0.041 U	--	--	--	--
2-Chlorophenol	0.054 U	0.058 U	--	0.054 U	0.054 U	--	--	--	--

TABLE J-1

ANALYTICAL RESULTS FOR POREWATER 2007-2008[1]
PSC Washougal Facility
Washougal, Washington

Location ID	MC-SM-1	MC-SM-2		MC-SM-3			MC-SM-4	MC-SM-5	MC-SM-6
Sample Date	10/25/2007	9/21/2007	12/8/2008	9/21/2007	9/21/2007 Field Dup.	12/8/2008	12/8/2008	12/8/2008	12/8/2008
Analyte									
SVOCs (µg/L)									
2-Methyl-4,6-dinitrophenol	0.025 U	0.027 U	--	0.025 U	0.025 U	--	--	--	--
2-Methylnaphthalene	0.026 U	0.028 U	--	0.026 U	0.026 U	--	--	--	--
2-Methylphenol	0.11 U	0.12 U	--	0.11 U	0.11 U	--	--	--	--
2-Nitroaniline	0.024 U	0.026 U	--	0.024 U	0.024 U	--	--	--	--
2-Nitrophenol	0.063 U	0.068 U	--	0.063 U	0.063 U	--	--	--	--
3,3'-Dichlorobenzidine	0.43 U	0.46 U	--	0.43 U	0.43 U	--	--	--	--
3-Nitroaniline	0.029 U	0.031 U	--	0.029 U	0.029 U	--	--	--	--
4-Bromophenyl phenyl ether	0.026 U	0.028 U	--	0.026 U	0.026 U	--	--	--	--
4-Chloro-3-methylphenol	0.037 U	0.04 U	--	0.037 U	0.037 U	--	--	--	--
4-Chloroaniline	0.025 U	0.027 U	--	0.025 U	0.025 U	--	--	--	--
4-Chlorophenyl phenyl ether	0.027 U	0.029 U	--	0.027 U	0.027 U	--	--	--	--
4-Methylphenol	0.12 U	0.13 U	--	0.12 U	0.12 U	--	--	--	--
4-Nitroaniline	0.019 U	0.021 U	--	0.019 U	0.019 U	--	--	--	--
4-Nitrophenol	0.28 U	0.3 U	--	0.28 U	0.28 U	--	--	--	--
Acenaphthene	0.026 U	0.028 U	--	0.026 U	0.026 U	--	--	--	--
Acenaphthylene	0.015 U	0.016 U	--	0.015 U	0.015 U	--	--	--	--
Anthracene	0.024 U	0.026 U	--	0.024 U	0.024 U	--	--	--	--
Benzo(a)anthracene	0.018 U	0.02 U	--	0.018 U	0.018 U	--	--	--	--
Benzo(a)pyrene	0.031 U	0.033 U	--	0.031 U	0.031 U	--	--	--	--
Benzo(b)fluoranthene	0.017 U	0.019 U	--	0.017 U	0.017 U	--	--	--	--
Benzo(g,h,i)perylene	0.019 U	0.021 U	--	0.019 U	0.019 U	--	--	--	--
Benzo(k)fluoranthene	0.024 U	0.026 U	--	0.024 U	0.024 U	--	--	--	--
Benzoic acid	1.8 J	1.2 U	--	1.1 U	1.1 U	--	--	--	--
Benzyl alcohol	0.076 J	0.15 UJ	--	0.14 UJ	0.073 U	--	--	--	--
bis(2-Chloroethoxy)methane	0.024 U	0.026 U	--	0.024 U	0.024 U	--	--	--	--
bis(2-Chloroethyl) ether	0.035 U	0.038 U	--	0.035 U	0.035 U	--	--	--	--
bis(2-Chloroisopropyl) ether	0.026 U	0.028 U	--	0.026 U	0.026 U	--	--	--	--
bis(2-Ethylhexyl) phthalate	0.18 J	0.14 U	--	0.13 U	0.13 U	--	--	--	--
Butyl benzyl phthalate	0.018 U	0.02 U	--	0.018 U	0.018 U	--	--	--	--

TABLE J-1

ANALYTICAL RESULTS FOR POREWATER 2007-2008[1]
PSC Washougal Facility
Washougal, Washington

Location ID	MC-SM-1	MC-SM-2		MC-SM-3			MC-SM-4	MC-SM-5	MC-SM-6
Sample Date	10/25/2007	9/21/2007	12/8/2008	9/21/2007	9/21/2007 Field Dup.	12/8/2008	12/8/2008	12/8/2008	12/8/2008
Analyte									
SVOCs (µg/L) (Continued)									
Chrysene	0.028 U	0.03 U	--	0.028 U	0.028 U	--	--	--	--
Dibenzo(a,h)anthracene	0.017 U	0.019 U	--	0.017 U	0.017 U	--	--	--	--
Dibenzofuran	0.018 U	0.02 U	--	0.018 U	0.018 U	--	--	--	--
Diethyl phthalate	0.08 UJ	0.013 U	--	0.012 U	0.012 U	--	--	--	--
Dimethyl phthalate	0.021 U	0.023 U	--	0.021 U	0.021 U	--	--	--	--
Di-n-butyl phthalate	0.31 U	1.7 U	--	1.7 U	1.7 U	--	--	--	--
Di-n-octyl phthalate	0.018 U	0.02 U	--	0.018 U	0.018 U	--	--	--	--
Fluoranthene	0.02 U	0.022 U	--	0.02 U	0.02 U	--	--	--	--
Fluorene	0.027 U	0.029 U	--	0.027 U	0.027 U	--	--	--	--
Hexachlorobenzene	0.022 U	0.024 U	--	0.022 U	0.022 U	--	--	--	--
Hexachlorobutadiene	0.027 U	0.029 U	--	0.027 U	0.027 U	--	--	--	--
Hexachlorocyclopentadiene	0.19 U	0.21 U	--	0.19 U	0.19 U	--	--	--	--
Hexachloroethane	0.024 U	0.026 U	--	0.024 U	0.024 U	--	--	--	--
Indeno(1,2,3-cd)pyrene	0.021 U	0.023 U	--	0.021 U	0.021 U	--	--	--	--
Isophorone	0.016 U	0.018 U	--	0.069 J	0.016 U	--	--	--	--
Naphthalene	0.022 U	0.024 U	--	0.022 U	0.022 U	--	--	--	--
Nitrobenzene	0.028 U	0.03 U	--	0.028 U	0.028 U	--	--	--	--
n-Nitrosodi-n-propylamine	0.037 U	0.04 U	--	0.037 U	0.037 U	--	--	--	--
n-Nitrosodiphenylamine	0.048 U	0.052 U	--	0.048 U	0.048 U	--	--	--	--
Pentachlorophenol	0.34 U	0.37 U	--	0.34 U	0.34 U	--	--	--	--
Phenanthrene	0.022 U	0.024 U	--	0.022 U	0.022 U	--	--	--	--
Phenol	0.47 UJ	0.068 U	--	0.063 U	0.063 U	--	--	--	--
Pyrene	0.019 U	0.021 U	--	0.019 U	0.019 U	--	--	--	--
1,4-Dioxane	--	31 J	0.3 U	35 J	18 J	7.8	0.24 U	0.24 U	0.24 U
TPH(µg/L)									
Diesel range hydrocarbons	13 U	360 U	--	360 U	330 U	--	--	--	--
Lube oil range hydrocarbons	23 U	720 U	--	720 U	650 U	--	--	--	--
TPH (as gasoline)	13 U	50 U	--	50 U	50 U	--	--	--	--

TABLE J-1

ANALYTICAL RESULTS FOR POREWATER 2007-2008[1]

PSC Washougal Facility
Washougal, Washington

Location ID	MC-SM-1	MC-SM-2		MC-SM-3			MC-SM-4	MC-SM-5	MC-SM-6
Sample Date	10/25/2007	9/21/2007	12/8/2008	9/21/2007	9/21/2007 Field Dup.	12/8/2008	12/8/2008	12/8/2008	12/8/2008
Analyte									
VOCs (µg/L)									
1,1,1-Trichloroethane	0.12 U	0.12 U	0.05 U	0.12 U	0.12 U	0.05 U	0.05 U	0.05 U	0.05 U
1,1,2-Trichlorotrifluoroethane	0.14 U	0.14 U	0.079 U	0.14 U	0.14 U	0.079 U	0.079 U	0.079 U	0.079 U
1,1-Dichloroethane	0.19 J	2.1	0.09 J	1.2	0.34 J	0.31 J	0.042 U	0.042 U	0.042 U
1,1-Dichloroethene	--	0.0061 U	0.0095 U	0.0061 U	0.0061 U	0.0095 U	0.0095 U	0.0095 U	0.0095 U
1,2-Dichlorobenzene	0.12 U	0.12 U	0.044 U	0.12 U	0.12 U	0.044 U	0.044 U	0.044 U	0.044 U
1,2-Dichloroethane	0.12 U	0.12 U	0.073 U	0.12 U	0.12 U	0.073 U	0.073 U	0.073 U	0.073 U
2,2-Dichloro-1,1,1-trifluoroethane	0.49 U	0.49 U	0.38 U	0.49 U	0.49 U	0.38 U	0.38 U	0.38 U	0.38 U
2-Butanone	2.3 U	2.3 U	3.8 U	2.3 U	2.3 U	3.8 U	3.8 U	3.8 U	3.8 U
2-Methylpentane	0.49 U	0.49 U	0.4 U	0.49 U	0.49 U	0.4 U	0.4 U	8.2	0.4 U
3-Methylpentane	0.41 U	0.41 U	0.36 U	0.41 U	0.41 U	0.36 U	0.36 U	21	0.36 U
Acetone	4.1 U	4.1 U	2.5 U	4.1 U	4.1 U	2.5 U	2.5 U	2.5 U	2.5 U
Benzene	0.14 U	0.14 U	0.045 U	0.14 U	0.14 U	0.045 U	0.045 U	0.045 U	0.045 U
Carbon disulfide	0.16 U	0.16 U	0.045 U	0.16 U	0.16 U	0.045 U	0.045 U	0.045 U	0.045 U
Carbon tetrachloride	0.14 U	0.14 U	0.068 U	0.14 U	0.14 U	0.068 U	0.068 U	0.068 U	0.068 U
Chlorobenzene	0.14 U	0.14 U	0.045 U	0.14 U	0.14 U	0.045 U	0.045 U	0.045 U	0.045 U
Chloroethane	0.23 U	0.23 U	0.13 U	0.23 U	0.23 U	0.13 U	0.13 U	0.13 U	0.13 U
Chloroform	0.14 U	0.14 U	0.042 U	0.14 U	0.14 U	0.042 U	0.042 U	0.042 U	0.042 U
Chloromethane	0.14 U	0.14 U	0.08 J	0.14 U	0.14 U	0.12 J	0.06 J	0.09 J	0.1 J
cis-1,2-Dichloroethene	0.12 U	2.9	0.1 J	0.92	0.22 J	0.1 J	0.045 U	0.045 U	0.045 U
Dichlorodifluoromethane	0.17 U	0.17 U	0.083 U	0.17 U	0.17 U	0.083 U	0.083 U	0.083 U	0.083 U
Ethylbenzene	0.13 U	0.13 U	0.042 U	0.13 U	0.13 U	0.042 U	0.042 U	0.042 U	0.042 U
m,p-Xylene	0.22 U	0.22 U	0.078 U	0.22 U	0.22 U	0.078 U	0.078 U	0.078 U	0.078 U
Methylcyclopentane	0.42 U	0.42 U	0.4 U	0.42 U	0.42 U	0.4 U	0.4 U	37	0.4 U
Methylene chloride	0.2 U	0.2 U	0.23 U	0.2 U	0.2 U	0.23 U	0.23 U	0.23 U	0.23 U
o-Xylene	0.11 U	0.11 U	0.037 U	0.11 U	0.11 U	0.037 U	0.037 U	0.037 U	0.037 U
Tetrachloroethene	0.13 U	0.13 U	0.077 U	0.13 U	0.13 U	0.077 U	0.077 U	0.077 U	0.077 U
Toluene	0.11 U	0.11 U	0.2 J	0.11 U	0.11 U	0.07 J	0.07 J	0.09 J	0.25 J

TABLE J-1

ANALYTICAL RESULTS FOR POREWATER 2007-2008[1]
PSC Washougal Facility
Washougal, Washington

Location ID	MC-SM-1	MC-SM-2		MC-SM-3			MC-SM-4	MC-SM-5	MC-SM-6
Sample Date	10/25/2007	9/21/2007	12/8/2008	9/21/2007	9/21/2007 Field Dup.	12/8/2008	12/8/2008	12/8/2008	12/8/2008
Analyte									
VOCs (µg/L) (Continued)									
trans-1,2-Dichloroethene	0.15 U	0.15 U	0.048 U	0.15 U	0.15 U	0.048 U	0.048 U	0.048 U	0.048 U
Trichloroethene	0.14 U	0.14 U	0.061 U	0.14 U	0.14 U	0.061 U	0.061 U	0.061 U	0.061 U
Trichlorofluoromethane	0.14 U	0.14 U	0.086 U	0.14 U	0.14 U	0.086 U	0.086 U	0.086 U	0.086 U
Vinyl chloride	--	0.28	0.0079 J	0.34	0.027	0.025	0.0035 U	0.0035 U	0.0035 U

Notes
1. Laboratory data flags are as follows:
   J = value is an estimate.
   U = not detected at reporting limit listed.

Abbreviations
-- = not available/not applicable
µg/L = micrograms per liter
mg/L = milligrams per liter
SVOCs = semivolatile organic compounds
TPH = total petroleum hydrocarbons
VOCs = volatile organic compounds

TABLE J-2

ANALYTICAL RESULTS FOR SEDIMENT

PSC Washougal Facility
Washougal, Washington

	GC-1 9/11/2008	GC-2 9/11/2008	MC-SM-1 9/9/2008	MC-SM-2 9/9/2008	MC-SM-3 9/9/2008	MC-SM-4 9/9/2008	MC-SM-5 9/9/2008	MC-SM-6 9/9/2008
Metals (mg/kg)								
Arsenic	207	11.1	4.1	2.85	3.26	1.84	2.32	4.8
Barium	746	150	111	119	101	68.5	115	146
Cadmium	0.28	0.459	0.415	0.372	0.322	0.079	0.244	1.06
Chromium	9.05	16.3	9.75	8.25	8.89	8.26	9.02	14.2
Copper	12.6	50.3	12.2	7.16	8.25	6.71	8.08	18.9
Iron	119,000	40,700	17,900	15,800	17,300	14,100	15,100	21,400
Manganese	882	516	370	289	284	153	212	438
Nickel	8.71	9.97	9.58	8.42	9.35	7.32	9.83	12.6
Potassium	779	965	1100	981	928	481	827	1160
Silver	0.04 U	0.05	0.09	0.03	0.02 U	0.02 U	0.03 U	0.07
Vanadium	40.6	73.9	45.2	35.5	45.6	39.6	35.5	55.9
Zinc	50.4	88.3	75.4	59.2	53.7	38.3	48.9	113
SVOCs (µg/kg)								
1,4-Dioxane	2.8 UJ	2 UJ	0.45 UJ	0.45 UJ	0.45 UJ	0.88 UJ	0.86 UJ	0.9 UJ
TPH (mg/kg)								
TPH (as gasoline)	15 U	19 U	--	--	--	--	--	--
VOCs (µg/kg)								
1,1,1-Trichloroethane	0.47 U	0.41 U	0.19 U	0.29 J	0.18 J	2.8 J	0.25 J	0.23 U
1,1,2-Trichlorotrifluoroethane	0.3 U	0.27 U	0.12 U	0.14 U	0.11 U	0.12 U	0.12 U	0.15 U
1,1-Dichloroethane	0.15 U	0.14 U	0.059 U	0.067 U	0.053 U	0.059 U	0.059 U	0.071 U
1,1-Dichloroethene	0.22 U	0.19 U	0.085 U	0.097 U	0.077 U	0.087 U	0.087 U	0.11 U
1,2-Dichlorobenzene	0.2 U	0.18 U	0.077 U	0.088 U	0.07 U	0.078 U	0.078 U	0.093 U
1,2-Dichloroethane	0.17 U	0.15 U	0.066 U	0.075 U	0.06 U	0.067 U	0.067 U	0.08 U
2,2-Dichloro-1,1,1-trifluoroethane	15 U	14 U	6.1 U	6.9 U	5.5 U	6.1 U	6.1 U	7.3 U
2-Butanone	25 J	40 J	31	23 J	8.2 J	3.6 J	13 J	18 J
2-Methylpentane	15 U	14 U	6.1 U	6.9 U	5.5 U	6.1 U	6.1 U	7.3 U
3-Methylpentane	15 U	14 U	6.1 U	6.9 U	5.5 U	6.1 U	6.1 U	7.3 U

TABLE J-2

ANALYTICAL RESULTS FOR SEDIMENT
PSC Washougal Facility
Washougal, Washington

	GC-1 9/11/2008	GC-2 9/11/2008	MC-SM-1 9/9/2008	MC-SM-2 9/9/2008	MC-SM-3 9/9/2008	MC-SM-4 9/9/2008	MC-SM-5 9/9/2008	MC-SM-6 9/9/2008
VOCs (µg/kg) (Continued)								
Acetone	210	400	400	280	95	42 U	170	250
Benzene	0.44 U	0.38 U	0.17 U	0.2 U	0.16 U	0.18 U	0.18 U	0.21 U
Carbon disulfide	31	10 J	0.38 J	1.4 J	0.23 J	0.066 U	0.37 J	0.35 J
Carbon tetrachloride	0.24 U	0.22 U	0.095 U	0.11 U	0.086 U	0.096 U	0.096 U	0.12 U
Chlorobenzene	0.17 U	0.15 U	0.066 U	0.075 U	0.06 U	0.067 U	0.067 U	0.08 U
Chloroethane	0.93 U	0.82 U	0.37 U	0.42 U	0.33 U	0.37 U	0.37 U	0.45 U
Chloroform	0.15 U	0.14 U	0.059 U	0.067 U	0.053 U	0.059 U	0.059 U	0.071 U
Chloromethane	0.18 U	0.16 U	0.07 U	0.079 U	0.063 U	0.071 U	0.071 U	0.084 U
cis-1,2-Dichloroethene	0.25 U	0.22 U	0.099 U	0.12 U	0.089 U	0.49 J	0.1 U	0.12 U
Dichlorodifluoromethane	0.23 U	0.2 U	0.088 U	0.1 U	0.079 U	3 J	0.64 J	0.11 U
Ethylbenzene	0.13 U	0.12 U	0.49 J	0.7 J	0.46 J	1.2 J	0.34 J	0.4 J
m,p-Xylene	0.68 J	0.76 J	1.4 J	1.8 J	1.1 J	2.7 J	0.85 J	0.69 J
Methylcyclopentane	15 U	14 U	6.1 U	6.9 U	5.5 U	6.1 U	6.1 U	7.3 U
Methylene chloride	1.6 UJ	1.1 UJ	4.1 UJ	4.1 UJ	4.1 UJ	4.1 UJ	4.1 UJ	4.1 UJ
o-Xylene	0.19 U	0.16 U	0.5 J	0.64 J	0.37 J	0.85 J	0.33 J	0.25 J
Tetrachloroethene	0.37 U	0.33 U	1.1 J	1.5 J	1.1 J	4.1 J	0.69 J	0.53 J
Toluene	1.7 J	2.5 J	2.7 J	3.2 J	2 J	11	2.2 J	2.1 J
trans-1,2-Dichloroethene	0.15 U	0.14 U	0.059 U	0.067 U	0.053 U	0.059 U	0.059 U	0.071 U
Trichloroethene	0.4 U	0.36 U	0.16 U	0.33 J	0.25 J	2.5 J	0.26 J	0.2 U
Trichlorofluoromethane	0.17 U	0.15 U	0.066 U	0.075 U	0.06 U	0.067 U	0.067 U	0.08 U
Vinyl chloride	0.18 U	0.16 U	0.07 U	0.079 U	0.063 U	0.071 U	0.071 U	0.084 U

Notes
1. Laboratory data flags are as follows:
   J = value is an estimate.
   U = not detected at the reporting limit listed.
   UJ = value is an estimate at reporting limit listed.

Abbreviations
µg/kg = micrograms per kilogram
mg/kg = milligrams per kilogram
SVOCs = semivolatile organic compounds
TPH = total petroleum hydrocarbons
VOCs = volatile organic compounds

File Name: CPCRKSED.WR1
Updated: May 23,1991 MKT

Table 4.6
CHEMPRO WASHOUGAL RFI
Sediment Samples Analytical Results
Gibbons Creek

Compound	East-0	East-175	West-75	West-300
Volatile Organics (mg/Kg)				
Vinyl Chloride	0.01 ND	0.03 ND	0.01 ND	0.01 ND
1,1-Dichloroethene	0.01 ND	0.025 ND	0.01 ND	0.01 ND
Acetone	0.106	0.05 ND	0.035	0.02 ND
Carbon Disulfide	0.01 ND	0.025 ND	0.01 ND	0.01 ND
Methylene Chloride	0.029	0.081	0.02 ND	0.02 ND
Trans 1,2-Dichloroethene	0.01 ND	0.025 ND	0.01 ND	0.01 ND
2-Butanone	0.02 ND	0.05 ND	0.02 ND	0.02 ND
1,1-Dichloroethane	0.01 ND	0.025 ND	0.01 ND	0.01 ND
Chloroform	0.01 ND	0.025 ND	0.01 ND	0.01 ND
1,1,1-Trichloroethane	0.01 ND	0.025 ND	0.01 ND	0.01 ND
Carbon Tetrachloride	0.01 ND	0.025 ND	0.01 ND	0.01 ND
Benzene	0.01 ND	0.025 ND	0.01 ND	0.01 ND
1,2-Dichloroethane	0.01 ND	0.025 ND	0.01 ND	0.01 ND
Trichloroethene	0.01 ND	0.025 ND	0.01 ND	0.01 ND
Toluene	0.01 ND	0.027	0.01 ND	0.01 ND
Tetrachloroethene	0.01 ND	0.025 ND	0.01 ND	0.01 ND
Chlorobenzene	0.01 ND	0.025 ND	0.01 ND	0.01 ND
Ethylbenzene	0.01 ND	0.025 ND	0.01 ND	0.01 ND
Total Xylenes	0.01 ND	0.025 ND	0.01 ND	0.01 ND
Dichlorotrifluoroethane	0.02 ND	0.05 ND	0.02 ND	0.02 ND
Trichlorofluoromethane (Freon11)	0.02 ND	0.05 ND	0.02 ND	0.02 ND
Trichlorotrifluoroethane (Freon 113)	0.02 ND	0.05 ND	0.02 ND	0.02 ND
Methylcyclopentane	0.04 ND	0.1 ND	0.04 ND	0.04 ND
2-Methylpentane	0.04 ND	0.1 ND	0.04 ND	0.04 ND
3-Methylpentane	0.04 ND	0.1 ND	0.04 ND	0.04 ND
Cis-1,2-Dichlorethene	0.01 ND	0.03 ND	0.01 ND	0.01 ND
1,2-Dibromo-3-chloropropane	0.02 ND	0.05 ND	0.02 ND	0.02 ND
1,2-Dichlorobenzene	0.01 ND	0.03 ND	0.01 ND	0.01 ND
Phenols/PAHs (mg/Kg)				
Phenol	0.3 ND	0.3 ND	0.3 ND J	0.3 ND J
2-Methylphenol	0.3 ND	0.3 ND	0.3 ND J	0.3 ND J
Acetophenone	0.2 ND	0.2 ND	0.2 ND J	0.2 ND J
4-Dimethylphenol	0.3 ND	0.3 ND	0.3 ND J	0.3 ND J
Naphthalene	0.2 ND	0.2 ND	0.2 ND J	0.2 ND J
2-Methylnaphthalene	0.2 ND	0.2 ND	0.2 ND J	0.2 ND J
Metals (mg/Kg)				
Arsenic	10	20	27	8
Barium	235	439	257	99
Cobalt	22	61	28	12
Nickel	16	42	24	12
Zinc	110	189	141	66

ND = Not detected at limit indicated.
Samples collected 08/27/90 & 08/28/90

File Name: CPMARSED.WR1
Updated: May 23,1991 MKT

Table 4.7
CHEMPRO WASHOUGAL RFI
Sediment Samples Analytical Results
Steigerwald Marsh

Compound	B-1-0-0.5	B-1-2-2.5	B-2-0-0.5	B-2-2-2.5
Volatile Organics (mg/Kg)				
Vinyl Chloride	0.005 ND	0.005 ND	0.005 ND	0.005 ND
1,1-Dichloroethene	0.005 ND	0.005 ND	0.005 ND	0.005 ND
Acetone	0.02 ND	0.02 ND	0.02 ND	0.02 ND
Carbon Disulfide	0.005 ND	0.005 ND	0.005 ND	0.005 ND
Methylene Chloride	0.02 ND	0.02 ND	0.02 ND	0.02 ND
Trans 1,2-Dichloroethene	0.005 ND	0.005 ND	0.005 ND	0.005 ND
2-Butanone	0.02 ND	0.02 ND	0.02 ND	0.02 ND
1,1-Dichloroethane	0.005 ND	0.005 ND	0.005 ND	0.005 ND
Chloroform	0.005 ND	0.005 ND	0.005 ND	0.005 ND
1,1,1-Trichloroethane	0.005 ND	0.005 ND	0.005 ND	0.005 ND
Carbon Tetrachloride	0.005 ND	0.005 ND	0.005 ND	0.005 ND
Benzene	0.005 ND	0.005 ND	0.005 ND	0.005 ND
1,2-Dichloroethane	0.005 ND	0.005 ND	0.005 ND	0.005 ND
Trichloroethene	0.005 ND	0.005 ND	0.005 ND	0.005 ND
Toluene	0.005 ND	0.005 ND	0.005 ND	0.005 ND
Tetrachloroethene	0.005 ND	0.005 ND	0.005 ND	0.005 ND
Chlorobenzene	0.005 ND	0.005 ND	0.005 ND	0.005 ND
Ethylbenzene	0.005 ND	0.005 ND	0.005 ND	0.005 ND
Total Xylenes	0.011	0.005 ND	0.006	0.005 ND
Dichlorotrifluoroethane	0.01 ND	0.01 ND	0.01 ND	0.01 ND
Trichlorofluoromethane (Freon11)	0.01 ND	0.01 ND	0.01 ND	0.01 ND
Trichlorotrifluoroethane (Freon 113)	0.01 ND	0.01 ND	0.01 ND	0.01 ND
Methylcyclopentane	0.02 ND	0.02 ND	0.02 ND	0.02 ND
2-Methylpentane	0.02 ND	0.02 ND	0.02 ND	0.02 ND
3-Methylpentane	0.02 ND	0.02 ND	0.02 ND	0.02 ND
Cis-1,2-Dichlorethene	0.005 ND	0.005 ND	0.005 ND	0.005 ND
1,2-Dibromo-3-chloropropane	0.01 ND	0.01 ND	0.01 ND	0.01 ND
1,2-Dichlorobenzene	0.005 ND	0.005 ND	0.005 ND	0.005 ND
Phenols/PAHs (mg/Kg)				
Phenol	0.3 ND	0.3 ND	0.3 ND J	0.3 ND J
2-Methylphenol	0.3 ND	0.3 ND	0.3 ND J	0.3 ND J
Acetophenone	0.2 ND	0.2 ND	0.2 ND J	0.2 ND J
4-Dimethylphenol	0.3 ND	0.3 ND	0.3 ND J	0.3 ND J
Naphthalene	0.2 ND	0.2 ND	0.2 ND J	0.2 ND J
2-Methylnaphthalene	0.2 ND	0.2 ND	0.2 ND J	0.2 ND J
Metals (mg/Kg)				
Arsenic	15	5	8	7
Barium	190	186	190	186
Cobalt	18	13	16	13
Nickel	23	23	23	23
Zinc	206	70	85	72

ND = Not detected at limit indicated.
Samples collected 08/27/90 & 08/28/90

File Name: CPMARSED.WR1
Updated: May 23,1991 MKT

Table 4.7
CHEMPRO WASHOUGAL RFI
Sediment Samples Analytical Results
Steigerwald Marsh

Compound	B-3-0-0.5	B-3-2-2.5	B-4-0-0.5	B-4-2-2.5
Volatile Organics (mg/Kg)				
Vinyl Chloride	0.005 ND	0.005 ND	0.005 ND	0.005 ND
1,1-Dichloroethene	0.005 ND	0.005 ND	0.005 ND	0.005 ND
Acetone	0.02 ND	0.02 ND	0.031 ND	0.023
Carbon Disulfide	0.005 ND	0.005 ND	0.005 ND	0.005 ND
Methylene Chloride	0.02 ND	0.02 ND	0.02 ND	0.02 ND
Trans 1,2-Dichloroethene	0.005 ND	0.005 ND	0.005 ND	0.005 ND
2-Butanone	0.02 ND	0.02 ND	0.02 ND	0.02 ND
1,1-Dichloroethane	0.005 ND	0.005 ND	0.005 ND	0.005 ND
Chloroform	0.005 ND	0.005 ND	0.005 ND	0.005 ND
1,1,1-Trichloroethane	0.005 ND	0.005 ND	0.005 ND	0.005 ND
Carbon Tetrachloride	0.005 ND	0.005 ND	0.005 ND	0.005 ND
Benzene	0.005 ND	0.005 ND	0.005 ND	0.005 ND
1,2-Dichloroethane	0.005 ND	0.005 ND	0.005 ND	0.005 ND
Trichloroethene	0.005 ND	0.005 ND	0.005 ND	0.005 ND
Toluene	0.005 ND	0.005 ND	0.005 ND	0.005 ND
Tetrachloroethene	0.005 ND	0.005 ND	0.005 ND	0.005 ND
Chlorobenzene	0.005 ND	0.005 ND	0.005 ND	0.005 ND
Ethylbenzene	0.005 ND	0.005 ND	0.005 ND	0.005 ND
Total Xylenes	0.005	0.007	0.005	0.005 ND
Dichlorotrifluoroethane	0.01 ND	0.01 ND	0.01 ND	0.01 ND
Trichlorofluoromethane (Freon11)	0.01 ND	0.01 ND	0.01 ND	0.01 ND
Trichlorotrifluoroethane (Freon 113)	0.01 ND	0.01 ND	0.01 ND	0.01 ND
Methylcyclopentane	0.02 ND	0.02 ND	0.02 ND	0.02 ND
2-Methylpentane	0.02 ND	0.02 ND	0.02 ND	0.02 ND
3-Methylpentane	0.02 ND	0.02 ND	0.02 ND	0.02 ND
Cis-1,2-Dichlorethene	0.005 ND	0.005 ND	0.005 ND	0.005 ND
1,2-Dibromo-3-chloropropane	0.01 ND	0.01 ND	0.01 ND	0.01 ND
1,2-Dichlorobenzene	0.005 ND	0.005 ND	0.005 ND	0.005 ND
Phenols/PAHs (mg/Kg)				
Phenol	0.3 ND J	0.3 ND J	0.3 ND J	0.3 ND J
2-Methylphenol	0.3 ND J	0.3 ND J	0.3 ND J	0.3 ND J
Acetophenone	0.2 ND J	0.2 ND J	0.2 ND J	0.2 ND J
4-Dimethylphenol	0.3 ND J	0.3 ND J	0.3 ND J	0.3 ND J
Naphthalene	0.2 ND J	0.2 ND J	0.2 ND J	0.2 ND J
2-Methylnaphthalene	0.2 ND J	0.2 ND J	0.2 ND J	0.2 ND J
Metals (mg/Kg)				
Arsenic	3	11	10 J	9
Barium	90	173	172	190
Cobalt	7	14	15	17
Nickel	11	20	23	25
Zinc	36	196	173	71

ND = Not detected at limit indicated.
Samples collected 08/27/90 & 08/28/90

File Name: CPMARSED.WR1
Updated: May 23,1991 MKT

Table 4.7
CHEMPRO WASHOUGAL RFI
Sediment Samples Analytical Results
Steigerwald Marsh

Compound	B-5-0-0.5	B-6-0-0.5	B-6-2-2.5	B-6-2-2.5 Duplicate
Volatile Organics (mg/Kg)				
Vinyl Chloride	0.005 ND	0.005 ND	0.005 ND	0.005 ND
1,1-Dichloroethene	0.005 ND	0.005 ND	0.005 ND	0.005 ND
Acetone	0.02 ND	0.056	0.02 ND	0.02 ND
Carbon Disulfide	0.005 ND	0.005 ND	0.005 ND	0.005 ND
Methylene Chloride	0.02 ND	0.02 ND	0.02 ND	0.02 ND
Trans 1,2-Dichloroethene	0.005 ND	0.005 ND	0.005 ND	0.005 ND
2-Butanone	0.02 ND	0.02 ND	0.020 ND	0.02 ND
1,1-Dichloroethane	0.005 ND	0.005 ND	0.005 ND	0.005 ND
Chloroform	0.005 ND	0.005 ND	0.005 ND	0.005 ND
1,1,1-Trichloroethane	0.005 ND	0.005 ND	0.005 ND	0.005 ND
Carbon Tetrachloride	0.005 ND	0.005 ND	0.005 ND	0.005 ND
Benzene	0.005 ND	0.005 ND	0.005 ND	0.005 ND
1,2-Dichloroethane	0.005 ND	0.005 ND	0.005 ND	0.005 ND
Trichloroethene	0.005 ND	0.005 ND	0.005 ND	0.005 ND
Toluene	0.005 ND	0.005 ND	0.005 ND	0.005 ND
Tetrachloroethene	0.005 ND	0.005 ND	0.005 ND	0.005 ND
Chlorobenzene	0.005 ND	0.005 ND	0.005 ND	0.005 ND
Ethylbenzene	0.005 ND	0.005 ND	0.005 ND	0.005 ND
Total Xylenes	0.006	0.005 ND	0.005 ND	0.005 ND
Dichlorotrifluoroethane	0.01 ND	0.01 ND	0.01 ND	0.01 ND
Trichlorofluoromethane (Freon11)	0.01 ND	0.01 ND	0.01 ND	0.01 ND
Trichlorotrifluoroethane (Freon 113)	0.01 ND	0.01 ND	0.01 ND	0.01 ND
Methylcyclopentane	0.02 ND	0.02 ND	0.02 ND	0.02 ND
2-Methylpentane	0.02 ND	0.02 ND	0.02 ND	0.02 ND
3-Methylpentane	0.02 ND	0.02 ND	0.02 ND	0.02 ND
Cis-1,2-Dichlorethene	0.005 ND	0.005 ND	0.005 ND	0.005 ND
1,2-Dibromo-3-chloropropane	0.01 ND	0.01 ND	0.01 ND	0.01 ND
1,2-Dichlorobenzene	0.005 ND	0.005 ND	0.005 ND	0.005 ND
Phenols/PAHs (mg/Kg)				
Phenol	0.3 ND	0.3 ND	0.3 ND	0.3 ND
2-Methylphenol	0.3 ND	0.3 ND	0.3 ND	0.3 ND
Acetophenone	0.2 ND	0.2 ND	0.2 ND	0.2 ND
4-Dimethylphenol	0.3 ND	0.3 ND	0.3 ND	0.3 ND
Naphthalene	0.2 ND	0.2 ND	0.2 ND	0.2 ND
2-Methylnaphthalene	0.2 ND	0.2 ND	0.2 ND	0.2 ND
Metals (mg/Kg)				
Arsenic	5	13	4	3
Barium	115	171	164	177
Cobalt	11	16	13	15
Nickel	14	20	20	23
Zinc	72	179	63	66

ND = Not detected at limit indicated.
Samples collected 08/27/90 & 08/28/90

File Name: CPVOSW1.WR1
Updated: 2/15/91 TJH

CHEMPRO WASHOUGAL
Water Sample Analytical Results

Volatile Organics (ppm)

SW-1

COMPOUND	04/23/90	06/05/90	07/16/90	08/27/90	10/09/90	11/20/90	01/17/91
Vinyl Chloride	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND
1,1-Dichloroethene	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND
Acetone	0.01 ND	0.01 ND	0.01 ND	0.01 ND	0.02 ND	0.02 ND	0.02 ND
Carbon Disulfide	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND
Methylene Chloride	0.01 ND	0.01 ND	0.01 ND	0.01 ND	0.01 ND	0.01 ND	0.01 ND
Trans 1,2-Dichloroethene	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND
2-Butanone	0.01 ND	0.01 ND	0.01 ND	0.01 ND	0.01 ND	0.01 ND	0.01 ND
1,1-Dichloroethane	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND
Chloroform	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND
1,1,1-Trichloroethane	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND
Carbon Tetrachloride	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND
Benzene	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND
1,2-Dichloroethane	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND
Trichloroethene	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND
Toluene	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND
Tetrachloroethene	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND
Chlorobenzene	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND
Ethylbenzene	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND
Total Xylenes	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND
Dichlorotrifluoroethane	0.01 ND	0.01 ND	0.01 ND	0.01 ND	0.01 ND	0.01 ND	0.01 ND
Trichlorofluoromethane (Freon 11)	0.01 ND	0.01 ND	0.01 ND	0.01 ND	0.01 ND	0.01 ND	0.01 ND
Trichlorotrifluoroethane (Freon 113)	0.01 ND	0.01 ND	0.01 ND	0.01 ND	0.01 ND	0.01 ND	0.01 ND
Methylcyclopentane	0.02 ND	0.02 ND	0.02 ND	0.02 ND	0.02 ND	0.02 ND	0.02 ND
2-Methylpentane	0.02 ND	0.02 ND	0.02 ND	0.02 ND	0.02 ND	0.02 ND	0.02 ND
3-Methylpentane	0.02 ND	0.02 ND	0.02 ND	0.02 ND	0.02 ND	0.02 ND	0.02 ND
Cis-1,2-Dichloroethene			0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND
1,2-Dibromo-3-chloropropane			0.001 ND	0.01 ND	0.01 ND	0.01 ND	0.01 ND
1,2-Dichlorobenzene				0.001 ND	0.001 ND	0.001 ND	0.001 ND

Notes: ND = None detected at limit indicated.

File Name: CPVOSW2.WR1
Updated: 2/26/91 LMS

CHEMPRO WASHOUGAL
Water Sample Analytical Results

Volatile Organics (ppm)

SW-2

COMPOUND	04/23/90	06/05/90	07/16/90	08/27/90	10/09/90	11/20/90	01/07/91
Vinyl Chloride	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND
1,1-Dichloroethene	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND
Acetone	0.01 ND	0.01 ND	0.01 ND	0.01 ND	0.02 ND	0.02 ND	0.02 ND
Carbon Disulfide	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND
Methylene Chloride	0.01 ND	0.01 ND	0.01 ND	0.01 ND	0.01 ND	0.01 ND	0.01 ND
Trans 1,2-Dichloroethene	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND
2-Butanone	0.01 ND	0.01 ND	0.01 ND	0.01 ND	0.01 ND	0.01 ND	0.01 ND
1,1-Dichloroethane	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND
Chloroform	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND
1,1,1-Trichloroethane	0.0032	0.001 ND	0.001 ND	0.0044	0.001 ND	0.001 ND	0.0013
Carbon Tetrachloride	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND
Benzene	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND
1,2-Dichloroethane	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND
Trichloroethene	0.001 ND	0.001 ND	0.001 ND	0.0021	0.001 ND	0.001 ND	0.001 ND
Toluene	0.0035	0.001 ND	0.001 ND	0.0058	0.001 ND	0.001 ND	0.0033
Tetrachloroethene	0.001 ND	0.001 ND	0.001 ND	0.0016	0.001 ND	0.001 ND	0.001 ND
Chlorobenzene	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND
Ethylbenzene	0.001 ND	0.001 ND	0.001 ND	0.0010	0.001 ND	0.001 ND	0.001 ND
Total Xylenes	0.0025	0.001 ND	0.001 ND	0.0069	0.001 ND	0.001 ND	0.0029
Dichlorotrifluoroethane	0.01 ND	0.01 ND	0.01 ND	0.01 ND	0.01 ND	0.01 ND	0.01 ND
Trichlorofluoromethane (Freon 11)	0.01 ND	0.01 ND	0.01 ND	0.01 ND	0.01 ND	0.01 ND	0.01 ND
Trichlorotrifluoroethane (Freon 113)	0.01 ND	0.01 ND	0.01 ND	0.01 ND	0.01 ND	0.01 ND	0.01 ND
Methylcyclopentane	0.02 ND	0.02 ND	0.02 ND	0.02 ND	0.02 ND	0.02 ND	0.02 ND
2-Methylpentane	0.02 ND	0.02 ND	0.02 ND	0.02 ND	0.02 ND	0.02 ND	0.02 ND
3-Methylpentane	0.02 ND	0.02 ND	0.02 ND	0.02 ND	0.02 ND	0.02 ND	0.02 ND
Cis-1,2-Dichloroethene			0.001 ND	0.0025	0.001 ND	0.001 ND	0.0011
1,2-Dibromo-3-chloropropane			0.001 ND	0.01 ND	0.01 ND	0.01 ND	0.01 ND
1,2-Dichlorobenzene				0.001 ND	0.001 ND	0.001 ND	0.001 ND

Notes: ND = None detected at limit indicated.

File Name: CPVOSW3.WR1
Updated: 2/15/91 TJH

CHEMPRO WASHOUGAL
Water Sample Analytical Results

Volatile Organics (ppm)

SW-3

COMPOUND	04/23/90	06/05/90	07/16/90	08/27/90	10/09/90	11/20/90	01/07/91
Vinyl Chloride	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND
1,1-Dichloroethene	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND
Acetone	0.01 ND	0.01 ND	0.01 ND	0.01 ND	0.02 ND	0.02 ND	0.02 ND
Carbon Disulfide	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND
Methylene Chloride	0.01 ND	0.01 ND	0.01 ND	0.01 ND	0.01 ND	0.01 ND	0.01 ND
Trans 1,2-Dichloroethene	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND
2-Butanone	0.01 ND	0.01 ND	0.01 ND	0.01 ND	0.01 ND	0.01 ND	0.01 ND
1,1-Dichloroethane	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND
Chloroform	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND
1,1,1-Trichloroethane	0.0014	0.0026	0.001 ND	0.0018	0.0029	0.0010	0.001 ND
Carbon Tetrachloride	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND
Benzene	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND
1,2-Dichloroethane	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND
Trichloroethene	0.001 ND	0.0020	0.001 ND	0.001 ND	0.0016 ND	0.0010	0.001 ND
Toluene	0.0021	0.0042	0.0011	0.0026	0.0020	0.0013	0.001 ND
Tetrachloroethene	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND
Chlorobenzene	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND
Ethylbenzene	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND	0.001 ND
Total Xylenes	0.0011	0.0032	0.001 ND	0.0022	0.0032	0.001 ND	0.001 ND
Dichlorotrifluoroethane	0.01 ND	0.01 ND	0.01 ND	0.01 ND	0.01 ND	0.01 ND	0.01 ND
Trichlorofluoromethane (Freon 11)	0.01 ND	0.01 ND	0.01 ND	0.01 ND	0.01 ND	0.01 ND	0.01 ND
Trichlorotrifluoroethane (Freon 113)	0.01 ND	0.01 ND	0.01 ND	0.01 ND	0.01 ND	0.01 ND	0.01 ND
Methylcyclopentane	0.02 ND	0.02 ND	0.02 ND	0.02 ND	0.02 ND	0.02 ND	0.02 ND
2-Methylpentane	0.02 ND	0.02 ND	0.02 ND	0.02 ND	0.02 ND	0.02 ND	0.02 ND
3-Methylpentane	0.02 ND	0.02 ND	0.02 ND	0.02 ND	0.02 ND	0.02 ND	0.02 ND
Cis-1,2-Dichloroethene			0.001 ND	0.001 ND	0.0012	0.001 ND	0.001 ND
1,2-Dibromo-3-chloropropane			0.00 ND	0.01 ND	0.01 ND	0.01 ND	0.01 ND
1,2-Dichlorobenzene				0.001 ND	0.001 ND	0.001 ND	0.001 ND

Notes: ND = None detected at limit indicated.

File Name: CPVOSW4.WR1
Updated: 2/15/91 TJH

CHEMPRO WASHOUGAL
Water Sample Analytical Results

Volatile Organics (ppm)

SW-4

COMPOUND	04/24/90	06/05/90	07/16/90	08/27/90	10/09/90	11/20/90	01/17/91
Vinyl Chloride	0.001 ND	0.001 ND	0.001 ND	Dry	0.001 ND	0.001 ND	0.001 ND
1,1-Dichloroethene	0.001 ND	0.001 ND	0.001 ND	Did not	0.001 ND	0.001 ND	0.001 ND
Acetone	0.01 ND	0.01 ND	0.01 ND	Sample	0.02 ND	0.02 ND	0.02 ND
Carbon Disulfide	0.001 ND	0.001 ND	0.001 ND		0.001 ND	0.001 ND	0.001 ND
Methylene Chloride	0.01 ND	0.01 ND	0.01 ND		0.01 ND	0.01 ND	0.01 ND
Trans 1,2-Dichloroethene	0.001 ND	0.001 ND	0.001 ND		0.001 ND	0.001 ND	0.001 ND
2-Butanone	0.01 ND	0.01 ND	0.01 ND		0.01 ND	0.01 ND	0.01 ND
1,1-Dichloroethane	0.001 ND	0.001 ND	0.001 ND		0.001 ND	0.001 ND	0.001 ND
Chloroform	0.001 ND	0.001 ND	0.001 ND		0.001 ND	0.001 ND	0.001 ND
1,1,1-Trichloroethane	0.001 ND	0.001 ND	0.001 ND		0.001 ND	0.001 ND	0.001 ND
Carbon Tetrachloride	0.001 ND	0.001 ND	0.001 ND		0.001 ND	0.001 ND	0.001 ND
Benzene	0.001 ND	0.001 ND	0.001 ND		0.001 ND	0.001 ND	0.001 ND
1,2-Dichloroethane	0.001 ND	0.001 ND	0.001 ND		0.001 ND	0.001 ND	0.001 ND
Trichloroethene	0.001 ND	0.001 ND	0.001 ND		0.001 ND	0.001 ND	0.001 ND
Toluene	0.001 ND	0.001 ND	0.001 ND		0.001 ND	0.001 ND	0.001 ND
Tetrachloroethene	0.001 ND	0.001 ND	0.001 ND		0.001 ND	0.001 ND	0.001 ND
Chlorobenzene	0.001 ND	0.001 ND	0.001 ND		0.001 ND	0.001 ND	0.001 ND
Ethylbenzene	0.001 ND	0.001 ND	0.001 ND		0.001 ND	0.001 ND	0.001 ND
Total Xylenes	0.001 ND	0.001 ND	0.001 ND		0.0011	0.001 ND	0.001 ND
Dichlorotrifluoroethane	0.01 ND	0.01 ND	0.01 ND		0.01 ND	0.01 ND	0.01 ND
Trichlorofluoromethane (Freon 11)	0.01 ND	0.01 ND	0.01 ND		0.01 ND	0.01 ND	0.01 ND
Trichlorotrifluoroethane (Freon 113)	0.01 ND	0.01 ND	0.01 ND		0.01 ND	0.01 ND	0.01 ND
Methylcyclopentane	0.02 ND	0.02 ND	0.02 ND		0.02 ND	0.02 ND	0.02 ND
2-Methylpentane	0.02 ND	0.02 ND	0.02 ND		0.02 ND	0.02 ND	0.02 ND
3-Methylpentane	0.02 ND	0.02 ND	0.02 ND		0.02 ND	0.02 ND	0.02 ND
Cis-1,2-Dichloroethene			0.001 ND		0.001 ND	0.001 ND	0.001 ND
1,2-Dibromo-3-chloropropane			0.001 ND		0.01 ND	0.01 ND	0.01 ND
1,2-Dichlorobenzene					0.001 ND	0.001 ND	0.001 ND

Notes: ND = None detected at limit indicated.

File Name: CPFP.WR1
Updated: 2/27/91 WRB

CHEMPRO WASHOUGAL
Water Sample Analytical Results
Field Parameters

SITE	DATE	pH	SPECIFIC CONDUCTANCE (umhos)	TEMP. (deg. C)	DISSOLVED OXYGEN (mg/L)
MC-16	04/23/90	6.57	251	11.0	---
	06/05/90	6.81	256	13.0	---
	07/16/90	6.32	250	17.0	---
	08/27/90	6.67	369	15.0	---
	10/08/90	6.96	249	16.0	---
	11/19/90	7.02	153	13.5	2.2
	01/07/91	6.82	261	8.8	---
MC-17	04/23/90	6.46	134	11.0	---
	06/05/90	6.81	122	13.0	---
	07/16/90	6.49	161	16.0	---
	08/27/90	6.71	197	15.0	---
	10/08/90	6.83	228	17.0	---
	11/19/90	6.92	150	14.0	2.5
	01/07/91	6.73	133	10.0	---
MC-18	07/16/90	6.78	211	14.0	---
	08/27/90	6.73	567	15.0	---
	10/08/90	6.88	754	14.0	---
	11/19/90	5.25	658	13.0	2.2
	01/07/91	6.74	724	13.7	---
SW-1	04/23/90	6.35	102	12.0	---
	06/05/90	6.65	156	16.0	---
	07/16/90	7.01	264	19.0	---
	08/27/90	6.79	219	21.0	---
	10/08/90	7.33	270	12.0	---
	11/20/90	7.31	139	7.0	1.8
	01/17/91	5.84	95	7.5	---
SW-2	04/23/90	6.55	90	11.0	---
	06/05/90	7.10	97	15.0	---
	07/16/90	7.09	123	24.0	---
	08/27/90	6.87	157	22.0	---
	10/08/90	7.40	170	14.5	---
	11/20/90	6.96	95	7.0	4.2
	01/07/91	7.02	132	1.4	---

File Name: CPFP.WR1
Updated: 2/27/91 WRB

CHEMPRO WASHOUGAL
Water Sample Analytical Results
Field Parameters

SITE	DATE	pH	SPECIFIC CONDUCTANCE (umhos)	TEMP. (deg. C)	DISSOLVED OXYGEN (mg/L)
SW-3	04/23/90	6.61	84	11.0	---
	06/05/90	6.68	110	16.0	---
	07/16/90	6.91	126	24.0	---
	08/27/90	6.83	146	22.0	---
	10/08/90	7.06	171	14.0	---
	11/20/90	7.03	96	7.0	4.8
	01/07/91	6.98	99	5.8	---
SW-4	04/23/90	6.90	125	11.0	---
	06/05/90	7.07	103	15.0	---
	07/16/90	7.35	146	22.0	---
	08/27/90	DRY	DRY	DRY	---
	10/08/90	7.09	194	14.5	---
	11/20/90	6.90	135	7.0	1.6
	01/17/91	6.96	146	6.3	---

File Name: CPMET_MC.WR1
Updated: 3/18/91 TEG

CHEMPRO WASHOUGAL RFI
Water Sample Analytical Results
DISSOLVED METALS (ppm)

Sample Location	Date	Arsenic	Barium	Cobalt	Nickel	Zinc
MC-14	08/27/90	0.093	0.190	0.01 ND	0.02	0.01 ND
	10/08/90	0.098	0.127	0.01 ND	0.02 ND	0.01 ND
	11/19/90	0.054	0.094	0.01 ND	0.02 ND	0.01 ND
(Dup.)	11/19/90	0.054	0.085	0.01 ND	0.02 ND	0.01 ND
	01/07/91	0.071	0.155	0.01 ND	0.04	0.01 ND
MC-15	08/27/90	0.035	0.075	0.01 ND	0.02 ND	0.01 ND
	10/08/90	0.035	0.064	0.01 ND	0.02 ND	0.01 ND
	11/19/90	0.027	0.080	0.01 ND	0.02 ND	0.01 ND
	01/07/91	0.030	0.105	0.01 ND	0.02 ND	0.01 ND
MC-15D	08/27/90	0.005 ND	0.019	0.01 ND	0.02 ND	0.01 ND
	10/08/90	0.005 ND	0.020	0.01 ND	0.02 ND	0.01 ND
	11/19/90	0.005 ND	0.017	0.01 ND	0.02 ND	0.01 ND
	01/07/91	0.005 ND	0.019	0.01 ND	0.02 ND	0.01 ND
MC-16	08/27/90	0.046	0.058	0.01 ND	0.02 ND	0.01 ND
	10/08/90	0.043	0.054	0.01 ND	0.02 ND	0.01 ND
	11/19/90	0.024	0.038	0.01 ND	0.02 ND	0.01 ND
	01/07/91	0.038	0.068	0.01 ND	0.02 ND	0.01 ND
MC-17	08/27/90	0.051	0.059	0.01 ND	0.02 ND	0.01 ND
	10/08/90	0.046	0.051	0.01 ND	0.02 ND	0.01 ND
	11/19/90	0.022	0.040	0.01 ND	0.02 ND	0.01 ND
	01/07/91	0.025	0.032	0.01 ND	0.02 ND	0.01 ND
MC-18D	08/27/90	0.005	0.094	0.02	0.02 ND	0.01 ND
(Dup.)	08/27/90	0.005	0.094	0.02	0.02 ND	0.01 ND
	10/08/90	0.007	0.110	0.02	0.02 ND	0.01 ND
	11/19/90	0.006	0.107	0.02	0.02 ND	0.01 ND
	01/07/91	0.006	0.132	0.04	0.02 ND	0.01 ND
SW-1*	08/27/90	0.013	0.169	0.02	0.02 ND	0.04
	10/08/90	0.011	0.039	0.01 ND	0.02 ND	0.03
	11/20/90	0.005 ND	0.031	0.01 ND	0.02 ND	0.01 ND
	01/17/91	0.005 ND	0.023	0.01 ND	0.02 ND	0.01 ND
SW-2*	08/27/90	0.005	0.051	0.01 ND	0.02 ND	0.01
	10/08/90	0.005 ND	0.028	0.01 ND	0.02 ND	0.01 ND
	11/20/90	0.005 ND	0.019	0.01 ND	0.02 ND	0.01 ND
	01/07/91	0.006	0.041	0.01 ND	0.02 ND	0.04

File Name: CPMET_MC.WR1
Updated: 3/18/91 TEG

CHEMPRO WASHOUGAL RFI
Water Sample Analytical Results
DISSOLVED METALS (ppm)

Sample Location	Date	Arsenic	Barium	Cobalt	Nickel	Zinc
SW-3*	08/27/90	0.005 ND	0.042	0.01 ND	0.02 ND	0.01 ND
	10/08/90	0.005 ND	0.023	0.01 ND	0.02 ND	0.01 ND
	11/20/90	0.005 ND	0.020	0.01 ND	0.02 ND	0.01 ND
	01/07/91	0.005 ND	0.011	0.01 ND	0.02 ND	0.01
SW-4*	08/27/90	Dry - Did not sample				
	10/08/90	0.018	0.151	0.02	0.02 ND	0.12
	11/20/90	0.005 ND	0.025	0.01 ND	0.02 ND	0.01
	01/17/91	0.005 ND	0.015	0.01 ND	0.02 ND	0.01 ND
Field Blank	08/27/90	0.005 ND	0.005	0.01 ND	0.02 ND	0.01 ND
	10/08/90	0.005 ND	0.005 ND	0.01 ND	0.02 ND	0.01 ND
	11/20/90	0.005 ND	0.005 ND	0.01 ND	0.02 ND	0.01 ND
	01/07/91	0.005 ND	0.005 ND	0.01 ND	0.02 ND	0.01 ND
Trip Blank	08/27/90	0.005 ND	0.005	0.01 ND	0.02 ND	0.01 ND
	10/08/90	0.005 ND	0.005 ND	0.01 ND	0.02 ND	0.01 ND
	11/20/90	0.005 ND	0.005 ND	0.01 ND	0.02 ND	0.01 ND

ND = None Detected at level indicated

* Results for surface water sites are total concentrations, not dissolved.

(Dup) = Duplicate sample collected.

File Name: CPPHENOL.WR1

Updated: May 21,1991 LMS

CHEMPRO WASHOUGAL RFI
Water Sample Analytical Results

Polynuclear Aromatic Hydrocarbons / Phenols (ppm)

SAMPLE LOCATION	DATE	Phenol	2-Methyl-phenol	Acetophenone	2,4-Dimethyl-phenol	Naphthalene	2-Methyl-naphthalene
SW-1	08/27/90	0.002 ND	0.002 ND	0.001 ND	0.002 ND	0.001 ND	0.001 ND
	10/08/90	0.002 ND	0.002 ND	0.002 ND	0.002 ND	0.002 ND	0.002 ND
	11/20/90	0.002 ND	0.002 ND	0.002 ND	0.002 ND	0.002 ND	0.002 ND
	01/17/91	0.002 ND	0.002 ND	0.002 ND	0.002 ND	0.002 ND	0.002 ND
SW-2	08/27/90	0.002 ND	0.002 ND	0.001 ND	0.002 ND	0.001 ND	0.001 ND
	10/08/90	0.002 ND	0.002 ND	0.002 ND	0.002 ND	0.002 ND	0.002 ND
	11/20/90	0.002 ND	0.002 ND	0.002 ND	0.002 ND	0.002 ND	0.002 ND
	01/07/91	0.002 ND	0.002 ND	0.002 ND	0.002 ND	0.002 ND	0.002 ND
SW-3	08/27/90	0.002 ND	0.002 ND	0.001 ND	0.002 ND	0.001 ND	0.001 ND
	10/08/90	0.002 ND	0.002 ND	0.002 ND	0.002 ND	0.002 ND	0.002 ND
	11/20/90	0.002 ND	0.002 ND	0.002 ND	0.002 ND	0.002 ND	0.002 ND
	01/07/91	0.002 ND	0.002 ND	0.002 ND	0.002 ND	0.002 ND	0.002 ND
SW-4	08/27/90	Dry - Did not sample					
	10/08/90	0.002 ND	0.002 ND	0.002 ND	0.002 ND	0.002 ND	0.002 ND
	11/20/90	0.002 ND	0.002 ND	0.002 ND	0.002 ND	0.002 ND	0.002 ND
	01/17/91	0.002 ND	0.002 ND	0.002 ND	0.002 ND	0.002 ND	0.002 ND
Field Blank	08/27/90	0.002 ND	0.002 ND	0.001 ND	0.002 ND	0.001 ND	0.001 ND
	10/09/90	0.002 ND	0.002 ND	0.002 ND	0.002 ND	0.002 ND	0.002 ND
	11/20/90	0.002 ND	0.002 ND	0.002 ND	0.002 ND	0.002 ND	0.002 ND
	01/07/91	0.002 ND	0.002 ND	0.002 ND	0.002 ND	0.002 ND	0.002 ND
	02/14/91	0.002 ND	0.002 ND	0.002 ND	0.002 ND	0.002 ND	0.002 ND
Trip Blank	08/27/90	0.002 ND	0.002 ND	0.001 ND	0.002 ND	0.001 ND	0.001 ND
	10/09/90	0.002 ND	0.002 ND	0.002 ND	0.002 ND	0.002 ND	0.002 ND
	11/20/90	0.002 ND	0.002 ND	0.002 ND	0.002 ND	0.002 ND	0.002 ND

ND = None Detected at level indicated

J = Estimated Value

(Dup) = Duplicate sample collected.

File Name: CPTPHEN.WR1
Updated: 8/14/90 LMS

CHEMPRO WASHOUGAL RFI
Water Sample Analysis

Total Phenols (ppm)

SITE	DATE	TOTAL PHENOLS
MC-16	04/23/90	0.01
	06/05/90	0.01 ND
	07/16/90	0.01 ND
MC-17	04/23/90	0.01 ND
	06/05/90	0.01 ND
	07/16/90	0.01 ND
SW-1	04/23/90	0.04
	06/05/90	0.03
	07/16/90	0.01 ND
SW-2	04/23/90	0.01
	06/05/90	0.02
	07/16/90	0.01 ND
SW-3	04/23/90	0.01 ND
	06/05/90	0.01
	07/16/90	0.01 ND
SW-4	04/23/90	0.01 ND
	06/05/90	0.01
	07/16/90	0.01 ND
Field Blank	04/23/90	0.01 ND
	06/05/90	0.01
	07/16/90	0.01 ND
Trip Blank	04/23/90	0.01 ND
	07/16/90	0.01 ND

Notes: ND = None detected at limit indicated.

APPENDIX K

Groundwater Elevation Data 1994-2009

TABLE K-1

GROUNDWATER ELEVATION DATA 1994-2009

PSC Washougal Facility
Washougal, Washington

All measurements are in feet

Well ID	Date	Measuring Point Elevation	Depth to Water	Ground Surface Elevation	Groundwater Elevation
MC-1	1/1/1994	17.14	5	17.7	12.14
MC-12	1/1/1994	18.91	4	17.7	14.91
MC-12D	1/1/1994	19.25	3.5	17.7	15.75
MC-13	1/1/1994	19.14	8	18	11.14
MC-13D	1/1/1994	20.13	6.9	18.3	13.23
MC-14	1/1/1994	18.41	7	17	11.41
MC-15	1/1/1994	17.46	6	16.4	11.46
MC-15D	1/1/1994	17.37	5.3	16.2	12.07
MC-16	1/1/1994	17.67	6.5	16.4	11.17
MC-17	1/1/1994	17.57	6	16.4	11.57
MC-18	1/1/1994	17.14	3.5	17.6	13.64
MC-2	1/1/1994	17	4	17.6	13
MC-2D	1/1/1994	17.1	4	17.6	13.1
MC-7	1/1/1994	17.04	3	17.4	14.04
MC-8	1/1/1994	19.05	5.5	17.7	13.55
MC-8D	1/1/1994	19.21	6	17.7	13.21
MC-8S	1/1/1994	18.98	6	17.7	12.98
MC-1	8/3/1994	17.14	5.56	17.7	11.58
MC-12	8/3/1994	18.91	5.51	17.7	13.4
MC-12D	8/3/1994	19.25	4.96	17.7	14.29
MC-13	8/3/1994	19.14	8.65	18	10.49
MC-13D	8/3/1994	20.13	10.25	18.3	9.88
MC-14	8/3/1994	18.41	7.99	17	10.42
MC-15	8/3/1994	17.46	7	16.4	10.46
MC-15D	8/3/1994	17.37	7.97	16.2	9.4
MC-16	8/3/1994	17.67	7.26	16.4	10.41
MC-17	8/3/1994	17.57	7.06	16.4	10.51
MC-18	8/3/1994	17.14	6.78	17.6	10.36
MC-2	8/3/1994	17	4.5	17.6	12.5
MC-2D	8/3/1994	17.1	7.77	17.6	9.33
MC-7	8/3/1994	17.04	4	17.4	13.04
MC-8	8/3/1994	19.05	6.92	17.7	12.13
MC-8D	8/3/1994	19.21	7.07	17.7	12.14
MC-8S	8/3/1994	18.98	6.83	17.7	12.15
MC-1	11/10/1994	17.14	3.56	17.7	13.58
MC-12	11/10/1994	18.91	2.73	17.7	16.18
MC-12D	11/10/1994	19.25	7.13	17.7	12.12
MC-13	11/10/1994	19.14	6.99	18	12.15
MC-13D	11/10/1994	20.13	8.13	18.3	12
MC-14	11/10/1994	18.41	6.35	17	12.06
MC-15	11/10/1994	17.46	5.34	16.4	12.12
MC-15D	11/10/1994	17.37	5.95	16.2	11.42
MC-16	11/10/1994	17.67	5.68	16.4	11.99
MC-17	11/10/1994	17.57	5.68	16.4	11.89

TABLE K-1

GROUNDWATER ELEVATION DATA 1994-2009

PSC Washougal Facility
Washougal, Washington

All measurements are in feet

Well ID	Date	Measuring Point Elevation	Depth to Water	Ground Surface Elevation	Groundwater Elevation
MC-18	11/10/1994	17.14	4.97	17.6	12.17
MC-2	11/10/1994	17	2.62	17.6	14.38
MC-2D	11/10/1994	17.1	5.66	17.6	11.44
MC-7	11/10/1994	17.04	1.47	17.4	15.57
MC-8	11/10/1994	19.05	4.15	17.7	14.9
MC-8D	11/10/1994	19.21	4.39	17.7	14.82
MC-8S	11/10/1994	18.98	4.21	17.7	14.77
MC-1	2/8/1995	17.14	2.75	17.7	14.39
MC-12	2/8/1995	18.91	2.97	17.7	15.94
MC-12D	2/8/1995	19.25	5.09	17.7	14.16
MC-13	2/8/1995	19.14	6.35	18	12.79
MC-13D	2/8/1995	20.13	6.8	18.3	13.33
MC-14	2/8/1995	18.41	5.76	17	12.65
MC-15	2/8/1995	17.46	4.94	16.4	12.52
MC-15D	2/8/1995	17.37	3.72	16.2	13.65
MC-16	2/8/1995	17.67	5.19	16.4	12.48
MC-17	2/8/1995	17.57	5.11	16.4	12.46
MC-18	2/8/1995	17.14	2.95	17.6	14.19
MC-2	2/8/1995	17	1.71	17.6	15.29
MC-2D	2/8/1995	17.1	3.35	17.6	13.75
MC-7	2/8/1995	17.04	1.13	17.4	15.91
MC-8	2/8/1995	19.05	3.42	17.7	15.63
MC-8D	2/8/1995	19.21	3.7	17.7	15.51
MC-8S	2/8/1995	18.98	3.5	17.7	15.48
MC-1	5/2/1995	17.14	3.81	17.7	13.33
MC-12	5/2/1995	18.91	2.39	17.7	16.52
MC-12D	5/2/1995	19.25	5.56	17.7	13.69
MC-13	5/2/1995	19.14	7.41	18	11.73
MC-13D	5/2/1995	20.13	7.1	18.3	13.03
MC-14	5/2/1995	18.41	6.53	17	11.88
MC-15	5/2/1995	17.46	5.14	16.4	12.32
MC-15D	5/2/1995	17.37	3.93	16.2	13.44
MC-16	5/2/1995	17.67	5.44	16.4	12.23
MC-17	5/2/1995	17.57	5.35	16.4	12.22
MC-18	5/2/1995	17.14	3.23	17.6	13.91
MC-2	5/2/1995	17	2.47	17.6	14.53
MC-2D	5/2/1995	17.1	3.6	17.6	13.5
MC-7	5/2/1995	17.04	1.7	17.4	15.34
MC-8	5/2/1995	19.05	5.66	17.7	13.39
MC-8D	5/2/1995	19.21	5.78	17.7	13.43
MC-8S	5/2/1995	18.98	5.39	17.7	13.59
MC-1	8/14/1995	17.14	5	17.7	12.14
MC-12	8/14/1995	18.91	5	17.7	13.91
MC-12D	8/14/1995	19.25	8.44	17.7	10.81

TABLE K-1

GROUNDWATER ELEVATION DATA 1994-2009

PSC Washougal Facility
Washougal, Washington

All measurements are in feet

Well ID	Date	Measuring Point Elevation	Depth to Water	Ground Surface Elevation	Groundwater Elevation
MC-13	8/14/1995	19.14	8.4	18	10.74
MC-13D	8/14/1995	20.13	9.38	18.3	10.75
MC-14	8/14/1995	18.41	7.68	17	10.73
MC-15	8/14/1995	17.46	6.62	16.4	10.84
MC-15D	8/14/1995	17.37	6.8	16.2	10.57
MC-16	8/14/1995	17.67	6.85	16.4	10.82
MC-17	8/14/1995	17.57	6.71	16.4	10.86
MC-18	8/14/1995	17.14	5.8	17.6	11.34
MC-2	8/14/1995	17	2.11	17.6	14.89
MC-2D	8/14/1995	17.1	6.63	17.6	10.47
MC-7	8/14/1995	17.04	1.7	17.4	15.34
MC-8	8/14/1995	19.05	6.9	17.7	12.15
MC-8D	8/14/1995	19.21	7	17.7	12.21
MC-8S	8/14/1995	18.98	6.67	17.7	12.31
MC-1	11/18/1995	17.14	3.96	17.7	13.18
MC-12	11/18/1995	18.91	2.21	17.7	16.7
MC-12D	11/18/1995	19.25	5.61	17.7	13.64
MC-13	11/18/1995	19.14	7.05	18	12.09
MC-13D	11/18/1995	20.13	7.07	18.3	13.06
MC-14	11/18/1995	18.41	6.46	17	11.95
MC-15	11/18/1995	17.46	5.4	16.4	12.06
MC-15D	11/18/1995	17.37	4.4	16.2	12.97
MC-16	11/18/1995	17.67	5.67	16.4	12
MC-17	11/18/1995	17.57	5.67	16.4	11.9
MC-18	11/18/1995	17.14	4.09	17.6	13.05
MC-2	11/18/1995	17	3	17.6	14
MC-2D	11/18/1995	17.1	3.94	17.6	13.16
MC-7	11/18/1995	17.04	3.54	17.4	13.5
MC-8	11/18/1995	19.05	5	17.7	14.05
MC-8D	11/18/1995	19.21	5.16	17.7	14.05
MC-8S	11/18/1995	18.98	4.81	17.7	14.17
MC-1	2/27/1996	17.14	2	17.7	15.14
MC-12	2/27/1996	18.91	2.24	17.7	16.67
MC-12D	2/27/1996	19.25	2.37	17.7	16.88
MC-13	2/27/1996	19.14	6.2	18	12.94
MC-13D	2/27/1996	20.13	6.82	18.3	13.31
MC-14	2/27/1996	18.41	5.27	17	13.14
MC-15	2/27/1996	17.46	4.1	16.4	13.36
MC-15D	2/27/1996	17.37	0.3	16.2	17.07
MC-16	2/27/1996	17.67	4.23	16.4	13.44
MC-17	2/27/1996	17.57	4	16.4	13.57
MC-18	2/27/1996	17.14	0.6	17.6	16.54
MC-2	2/27/1996	17	0.64	17.6	16.36
MC-2D	2/27/1996	17.1	0.2	17.6	16.9

TABLE K-1

GROUNDWATER ELEVATION DATA 1994-2009

PSC Washougal Facility
Washougal, Washington

All measurements are in feet

Well ID	Date	Measuring Point Elevation	Depth to Water	Ground Surface Elevation	Groundwater Elevation
MC-2D	2/27/1996	17.1	0.65	17.6	16.45
MC-7	2/27/1996	17.04	1.25	17.4	15.79
MC-8	2/27/1996	19.05	3.96	17.7	15.09
MC-8D	2/27/1996	19.21	4	17.7	15.21
MC-8S	2/27/1996	18.98	3.75	17.7	15.23
MC-1	6/4/1996	17.14	3.71	17.7	13.43
MC-12	6/4/1996	18.91	3.53	17.7	15.38
MC-12D	6/4/1996	19.25	3.37	17.7	15.88
MC-13	6/4/1996	19.14	7.42	18	11.72
MC-13D	6/4/1996	20.13	6.05	18.3	14.08
MC-14	6/4/1996	18.41	6.66	17	11.75
MC-15	6/4/1996	17.46	5.49	16.4	11.97
MC-15D	6/4/1996	17.37	1.39	16.2	15.98
MC-16	6/4/1996	17.67	5.61	16.4	12.06
MC-17	6/4/1996	17.57	5.44	16.4	12.13
MC-18	6/4/1996	17.14	1.9	17.6	15.24
MC-2	6/4/1996	17	2.27	17.6	14.73
MC-2D	6/4/1996	17.1	0.85	17.6	16.25
MC-2D	6/4/1996	17.1	1.96	17.6	15.14
MC-7	6/4/1996	17.04	1.96	17.4	15.08
MC-8	6/4/1996	19.05	5.78	17.7	13.27
MC-8D	6/4/1996	19.21	5.84	17.7	13.37
MC-8S	6/4/1996	18.98	5.49	17.7	13.49
MC-1	8/27/1996	17.14	4.81	17.7	12.33
MC-12	8/27/1996	18.91	5.22	17.7	13.69
MC-12D	8/27/1996	19.25	7	17.7	12.25
MC-13	8/27/1996	19.14	7.5	18	11.64
MC-13D	8/27/1996	20.13	7.82	18.3	12.31
MC-14	8/27/1996	18.41	6.7	17	11.71
MC-15	8/27/1996	17.46	5.7	16.4	11.76
MC-15D	8/27/1996	17.37	5.56	16.2	11.81
MC-16	8/27/1996	17.67	5.88	16.4	11.79
MC-17	8/27/1996	17.57	5.76	16.4	11.81
MC-18	8/27/1996	17.14	5.01	17.6	12.13
MC-2	8/27/1996	17	3.88	17.6	13.12
MC-2D	8/27/1996	17.1	5.32	17.6	11.78
MC-7	8/27/1996	17.04	3.61	17.4	13.43
MC-8	8/27/1996	19.05	6.8	17.7	12.25
MC-8D	8/27/1996	19.21	0	17.7	19.21
MC-8S	8/27/1996	18.98	0	17.7	18.98
MC-1	2/24/1997	17.14	3.4	17.7	13.74
MC-12	2/24/1997	18.91	3.26	17.7	15.65
MC-12D	2/24/1997	19.25	4.26	17.7	14.99
MC-13	2/24/1997	19.14	7.28	18	11.86

TABLE K-1

GROUNDWATER ELEVATION DATA 1994-2009

PSC Washougal Facility
Washougal, Washington

All measurements are in feet

Well ID	Date	Measuring Point Elevation	Depth to Water	Ground Surface Elevation	Groundwater Elevation
MC-13D	2/24/1997	20.13	6.42	18.3	13.71
MC-14	2/24/1997	18.41	6.48	17	11.93
MC-15	2/24/1997	17.46	5.33	16.4	12.13
MC-15D	2/24/1997	17.37	2.31	16.2	15.06
MC-16	2/24/1997	17.67	5.49	16.4	12.18
MC-17	2/24/1997	17.57	5.23	16.4	12.34
MC-18	2/24/1997	17.14	1.96	17.6	15.18
MC-2	2/24/1997	17	1.98	17.6	15.02
MC-2D	2/24/1997	17.1	1.93	17.6	15.17
MC-7	2/24/1997	17.04	1.66	17.4	15.38
MC-8	2/24/1997	19.05	5.45	17.7	13.6
MC-8D	2/24/1997	19.21	5.53	17.7	13.68
MC-8S	2/24/1997	18.98	5.21	17.7	13.77
MC-1	5/19/1997	17.14	3.79	17.7	13.35
MC-12	5/19/1997	18.91	3.86	17.7	15.05
MC-12D	5/19/1997	19.25	2.33	17.7	16.92
MC-13	5/19/1997	19.14	7.3	18	11.84
MC-13D	5/19/1997	20.13	5.44	18.3	14.69
MC-14	5/19/1997	18.41	6.55	17	11.86
MC-15	5/19/1997	17.46	5.46	16.4	12
MC-15D	5/19/1997	17.37	0	16.2	17.37
MC-16	5/19/1997	17.67	5.62	16.4	12.05
MC-17	5/19/1997	17.57	5.48	16.4	12.09
MC-18	5/19/1997	17.14	1.51	17.6	15.63
MC-2	5/19/1997	17	2.45	17.6	14.55
MC-2D	5/19/1997	17.1	0	17.6	17.1
MC-7	5/19/1997	17.04	2.24	17.4	14.8
MC-8	5/19/1997	19.05	5.81	17.7	13.24
MC-8D	5/19/1997	19.21	5.89	17.7	13.32
MC-8S	5/19/1997	18.98	5.61	17.7	13.37
MC-1	8/25/1997	17.14	3.99	17.7	13.15
MC-12	8/25/1997	18.91	4.3	17.7	14.61
MC-12D	8/25/1997	19.25	6.67	17.7	12.58
MC-13	8/25/1997	19.14	7.93	18	11.21
MC-13D	8/25/1997	20.13	6.58	18.3	13.55
MC-14	8/25/1997	18.41	5.55	17	12.86
MC-15	8/25/1997	17.46	4.59	16.4	12.87
MC-15D	8/25/1997	17.37	4.27	16.2	13.1
MC-16	8/25/1997	17.67	4.74	16.4	12.93
MC-17	8/25/1997	17.57	4.37	16.4	13.2
MC-18	8/25/1997	17.14	3.57	17.6	13.57
MC-2	8/25/1997	17	4.63	17.6	12.37
MC-2D	8/25/1997	17.1	4.17	17.6	12.93
MC-7	8/25/1997	17.04	2.89	17.4	14.15

TABLE K-1

GROUNDWATER ELEVATION DATA 1994-2009

PSC Washougal Facility
Washougal, Washington

All measurements are in feet

Well ID	Date	Measuring Point Elevation	Depth to Water	Ground Surface Elevation	Groundwater Elevation
MC-8	8/25/1997	19.05	5.87	17.7	13.18
MC-8D	8/25/1997	19.21	6	17.7	13.21
MC-8S	8/25/1997	18.98	5.72	17.7	13.26
MC-1	12/1/1997	17.14	4.41	17.7	12.73
MC-12	12/1/1997	18.91	4.75	17.7	14.16
MC-12D	12/1/1997	19.25	6.82	17.7	12.43
MC-13	12/1/1997	19.14	8.81	18	10.33
MC-13D	12/1/1997	20.13	8.17	18.3	11.96
MC-14	12/1/1997	18.41	8.14	17	10.27
MC-15	12/1/1997	17.46	7.11	16.4	10.35
MC-15D	12/1/1997	17.37	5.4	16.2	11.97
MC-16	12/1/1997	17.67	7.48	16.4	10.19
MC-17	12/1/1997	17.57	7.36	16.4	10.21
MC-18	12/1/1997	17.14	4.73	17.6	12.41
MC-2	12/1/1997	17	2.96	17.6	14.04
MC-2D	12/1/1997	17.1	4.63	17.6	12.47
MC-7	12/1/1997	17.04	3.2	17.4	13.84
MC-8	12/1/1997	19.05	7.1	17.7	11.95
MC-1	3/2/1998	17.14	2.1	17.7	15.04
MC-12	3/2/1998	18.91	5.74	17.7	13.17
MC-12D	3/2/1998	19.25	5.29	17.7	13.96
MC-13	3/2/1998	19.14	11.05	18	8.09
MC-13D	3/2/1998	20.13	6.95	18.3	13.18
MC-14	3/2/1998	18.41	10.01	17	8.4
MC-15	3/2/1998	17.46	8.48	16.4	8.98
MC-15D	3/2/1998	17.37	3.78	16.2	13.59
MC-16	3/2/1998	17.67	8.8	16.4	8.87
MC-17	3/2/1998	17.57	9.16	16.4	8.41
MC-18	3/2/1998	17.14	3.12	17.6	14.02
MC-2	3/2/1998	17	1.27	17.6	15.73
MC-2D	3/2/1998	17.1	3.5	17.6	13.6
MC-7	3/2/1998	17.04	0	17.4	17.04
MC-8	3/2/1998	19.05	7.68	17.7	11.37
MC-1	6/15/1998	17.14	4.13	17.7	13.01
MC-12	6/15/1998	18.91	3.58	17.7	15.33
MC-12D	6/15/1998	19.25	4.81	17.7	14.44
MC-13	6/15/1998	19.14	7.64	18	11.5
MC-13D	6/15/1998	20.13	6.89	18.3	13.24
MC-14	6/15/1998	18.41	6.93	17	11.48
MC-15	6/15/1998	17.46	5.85	16.4	11.61
MC-15D	6/15/1998	17.37	2.91	16.2	14.46
MC-16	6/15/1998	17.67	6.11	16.4	11.56
MC-17	6/15/1998	17.57	5.95	16.4	11.62
MC-18	6/15/1998	17.14	2.77	17.6	14.37

TABLE K-1

GROUNDWATER ELEVATION DATA 1994-2009

PSC Washougal Facility
Washougal, Washington

All measurements are in feet

Well ID	Date	Measuring Point Elevation	Depth to Water	Ground Surface Elevation	Groundwater Elevation
MC-2	6/15/1998	17	2.55	17.6	14.45
MC-2D	6/15/1998	17.1	2.53	17.6	14.57
MC-7	6/15/1998	17.04	1.67	17.4	15.37
MC-8	6/15/1998	19.05	5.94	17.7	13.11
MC-1	8/24/1998	17.14	5.44	17.7	11.7
MC-12	8/24/1998	18.91	5.15	17.7	13.76
MC-12D	8/24/1998	19.25	8.12	17.7	11.13
MC-13	8/24/1998	19.14	8.52	18	10.62
MC-13D	8/24/1998	20.13	9.21	18.3	10.92
MC-14	8/24/1998	18.41	7.88	17	10.53
MC-15	8/24/1998	17.46	6.85	16.4	10.61
MC-15D	8/24/1998	17.37	6.67	16.2	10.7
MC-16	8/24/1998	17.67	7.05	16.4	10.62
MC-17	8/24/1998	17.57	6.84	16.4	10.73
MC-2	8/24/1998	17	4.14	17.6	12.86
MC-2D	8/24/1998	17.1	6.36	17.6	10.74
MC-7	8/24/1998	17.04	3.62	17.4	13.42
MC-8	8/24/1998	19.05	7.15	17.7	11.9
MC-1	11/30/1998	17.14	3.47	17.7	13.67
MC-12	11/30/1998	18.91	1.81	17.7	17.1
MC-12D	11/30/1998	19.25	6.47	17.7	12.78
MC-13	11/30/1998	19.14	7.35	18	11.79
MC-13D	11/30/1998	20.13	7.99	18.3	12.14
MC-14	11/30/1998	18.41	6.62	17	11.79
MC-15	11/30/1998	17.46	5.19	16.4	12.27
MC-15D	11/30/1998	17.37	5.1	16.2	12.27
MC-16	11/30/1998	17.67	5.68	16.4	11.99
MC-17	11/30/1998	17.57	5.75	16.4	11.82
MC-2	11/30/1998	17	2.48	17.6	14.52
MC-2D	11/30/1998	17.1	4.78	17.6	12.32
MC-8	11/30/1998	19.05	4.53	17.7	14.52
MC-1	3/1/1999	17.14	0.47	17.7	16.67
MC-12	3/1/1999	18.91	1.51	17.7	17.4
MC-12D	3/1/1999	19.25	2.74	17.7	16.51
MC-13	3/1/1999	19.14	4.69	18	14.45
MC-13D	3/1/1999	20.13	5.12	18.3	15.01
MC-14	3/1/1999	18.41	3.76	17	14.65
MC-15	3/1/1999	17.46	1.07	16.4	16.39
MC-15D	3/1/1999	17.37	1.01	16.2	16.36
MC-16	3/1/1999	17.67	1.28	16.4	16.39
MC-17	3/1/1999	17.57	1.26	16.4	16.31
MC-2	3/1/1999	17	0.01	17.6	16.99
MC-2D	3/1/1999	17.1	0.48	17.6	16.62
MC-8	3/1/1999	19.05	2.92	17.7	16.13

TABLE K-1

GROUNDWATER ELEVATION DATA 1994-2009

PSC Washougal Facility
Washougal, Washington

All measurements are in feet

Well ID	Date	Measuring Point Elevation	Depth to Water	Ground Surface Elevation	Groundwater Elevation
MC-1	6/9/1999	17.14	4.49	17.7	12.65
MC-12	6/9/1999	18.91	4.02	17.7	14.89
MC-12D	6/9/1999	19.25	4.72	17.7	14.53
MC-13	6/9/1999	19.14	7.82	18	11.32
MC-13D	6/9/1999	20.13	6.95	18.3	13.18
MC-14	6/9/1999	18.41	7.03	17	11.38
MC-15	6/9/1999	17.46	5.93	16.4	11.53
MC-15D	6/9/1999	17.37	2.66	16.2	14.71
MC-16	6/9/1999	17.67	6.19	16.4	11.48
MC-17	6/9/1999	17.57	6.07	16.4	11.5
MC-2D	6/9/1999	17.1	2.21	17.6	14.89
MC-8	6/9/1999	19.05	6.4	17.7	12.65
MC-1	9/7/1999	17.14	5.31	17.7	11.83
MC-107	9/7/1999	20.13	6.66	17.3	13.47
MC-10D	9/7/1999	21.04	11.25	18.5	9.79
MC-118D	9/7/1999	17.28	6.29	17.7	10.99
MC-12	9/7/1999	18.91	5.31	17.7	13.6
MC-12D	9/7/1999	19.25	8.72	17.7	10.53
MC-13	9/7/1999	19.14	8.54	18	10.6
MC-13D	9/7/1999	20.13	9.55	18.3	10.58
MC-14	9/7/1999	18.41	7.78	17	10.63
MC-15	9/7/1999	17.46	6.72	16.4	10.74
MC-15D	9/7/1999	17.37	7.21	16.2	10.16
MC-16	9/7/1999	17.67	6.96	16.4	10.71
MC-17	9/7/1999	17.57	6.78	16.4	10.79
MC-17D	9/7/1999	19.92	10.04	17.1	9.88
MC-19D	9/7/1999	20.78	11.8	18.2	8.98
MC-2	9/7/1999	17	4.2	17.6	12.8
MC-2D	9/7/1999	17.1	6.91	17.6	10.19
MC-8	9/7/1999	19.05	7.18	17.7	11.87
MC-1	11/29/1999	17.14	10.1	17.7	7.04
MC-107	11/29/1999	20.13	4.64	17.3	15.49
MC-10D	11/29/1999	21.04	7.38	18.5	13.66
MC-118D	11/29/1999	17.28	5.21	17.7	12.07
MC-12	11/29/1999	18.91	3.27	17.7	15.64
MC-12D	11/29/1999	19.25	6.73	17.7	12.52
MC-13	11/29/1999	19.14	7.34	18	11.8
MC-13D	11/29/1999	20.13	7.57	18.3	12.56
MC-14	11/29/1999	18.41	6.68	17	11.73
MC-15	11/29/1999	17.46	5.64	16.4	11.82
MC-15D	11/29/1999	17.37	4.19	16.2	13.18
MC-16	11/29/1999	17.67	5.89	16.4	11.78
MC-17	11/29/1999	17.57	5.79	16.4	11.78
MC-17D	11/29/1999	19.92	6.64	17.1	13.28

TABLE K-1

GROUNDWATER ELEVATION DATA 1994-2009

PSC Washougal Facility
Washougal, Washington

All measurements are in feet

Well ID	Date	Measuring Point Elevation	Depth to Water	Ground Surface Elevation	Groundwater Elevation
MC-19D	11/29/1999	20.78	7.53	18.2	13.25
MC-2	11/29/1999	17	2.51	17.6	14.49
MC-2D	11/29/1999	17.1	3.71	17.6	13.39
MC-8	11/29/1999	19.05	5.61	17.7	13.44
MC-1	3/6/2000	17.14	11.41	17.7	5.73
MC-107	3/6/2000	20.13	3.36	17.3	16.77
MC-10D	3/6/2000	21.06	8.03	18.5	13.03
MC-118D	3/6/2000	17.3	4.05	17.7	13.25
MC-12	3/6/2000	18.91	1.97	17.7	16.94
MC-12D	3/6/2000	19.25	5.89	17.7	13.36
MC-13	3/6/2000	19.14	7.34	18	11.8
MC-13D	3/6/2000	20.13	7.61	18.3	12.52
MC-14	3/6/2000	18.41	6.63	17	11.78
MC-15	3/6/2000	17.46	5.51	16.4	11.95
MC-15D	3/6/2000	17.37	4.57	16.2	12.8
MC-16	3/6/2000	17.67	5.7	16.4	11.97
MC-17	3/6/2000	17.57	6.29	16.4	11.28
MC-17D	3/6/2000	19.94	7.13	17.1	12.81
MC-19D	3/6/2000	20.8	9.33	18.2	11.47
MC-2	3/6/2000	17	1.52	17.6	15.48
MC-2D	3/6/2000	17.1	4.1	17.6	13
MC-8	3/6/2000	19.05	5.02	17.7	14.03
MC-1	6/5/2000	17.14	4.65	17.7	12.49
MC-107	6/5/2000	20.13	5.59	17.3	14.54
MC-10D	6/5/2000	21.06	8.86	18.5	12.2
MC-118D	6/5/2000	17.3	4.92	17.7	12.38
MC-12	6/5/2000	18.91	4.23	17.7	14.68
MC-12D	6/5/2000	19.25	6.76	17.7	12.49
MC-13	6/5/2000	19.14	8.08	18	11.06
MC-13D	6/5/2000	20.13	8.12	18.3	12.01
MC-14	6/5/2000	18.41	7.39	17	11.02
MC-15	6/5/2000	17.46	6.28	16.4	11.18
MC-15D	6/5/2000	17.37	5.13	16.2	12.24
MC-16	6/5/2000	17.67	6.5	16.4	11.17
MC-17	6/5/2000	17.57	6.33	16.4	11.24
MC-17D	6/5/2000	19.94	7.68	17.1	12.26
MC-19D	6/5/2000	20.8	8.69	18.2	12.11
MC-2	6/5/2000	17	3.15	17.6	13.85
MC-20	6/5/2000	19.7	9.78	17.8	9.92
MC-21	6/5/2000	16.79	5.22	17.1	11.57
MC-2D	6/5/2000	17.1	4.78	17.6	12.32
MC-8	6/5/2000	19.05	6.55	17.7	12.5
MC-1	9/12/2000	17.14	5.67	17.7	11.47
MC-107	9/12/2000	20.13	6.95	17.3	13.18

TABLE K-1

GROUNDWATER ELEVATION DATA 1994-2009

PSC Washougal Facility
Washougal, Washington

All measurements are in feet

Well ID	Date	Measuring Point Elevation	Depth to Water	Ground Surface Elevation	Groundwater Elevation
MC-10D	9/12/2000	21.06	11.96	18.5	9.1
MC-118D	9/12/2000	17.3	7.36	17.7	9.94
MC-12	9/12/2000	18.91	5.51	17.7	13.4
MC-12D	9/12/2000	19.25	9.38	17.7	9.87
MC-13	9/12/2000	19.14	8.84	18	10.3
MC-13D	9/12/2000	20.13	10.16	18.3	9.97
MC-14	9/12/2000	18.41	8.1	17	10.31
MC-15	9/12/2000	17.46	6.99	16.4	10.47
MC-15D	9/12/2000	17.37	7.87	16.2	9.5
MC-16	9/12/2000	17.67	7.22	16.4	10.45
MC-17	9/12/2000	17.57	6.73	16.4	10.84
MC-17D	9/12/2000	19.94	10.71	17.1	9.23
MC-19D	9/12/2000	20.8	12.46	18.2	8.34
MC-2	9/12/2000	17	4.36	17.6	12.64
MC-20	9/12/2000	19.7	10.69	17.8	9.01
MC-21	9/12/2000	16.79	6.01	17.1	10.78
MC-2D	9/12/2000	17.1	7.61	17.6	9.49
MC-8	9/12/2000	19.05	7.58	17.7	11.47
MC-1	12/3/2000	17.14	5.04	17.7	12.1
MC-107	12/3/2000	20.13	5.82	17.3	14.31
MC-10D	12/3/2000	21.06	10.91	18.5	10.15
MC-118D	12/3/2000	17.3	6.57	17.7	10.73
MC-12	12/3/2000	18.91	4.34	17.7	14.57
MC-12D	12/3/2000	19.25	5.45	17.7	13.8
MC-13	12/3/2000	19.14	8.41	18	10.73
MC-13D	12/3/2000	20.13	9.47	18.3	10.66
MC-14	12/3/2000	18.41	7.72	17	10.69
MC-15	12/3/2000	17.46	6	16.4	11.46
MC-15D	12/3/2000	17.37	7.04	16.2	10.33
MC-16	12/3/2000	17.67	6.83	16.4	10.84
MC-17	12/3/2000	17.57	6.69	16.4	10.88
MC-17D	12/3/2000	19.94	15.87	17.1	4.07
MC-19D	12/3/2000	20.8	11.63	18.2	9.17
MC-2	12/3/2000	17	3.76	17.6	13.24
MC-20	12/3/2000	19.7	10.02	17.8	9.68
MC-21	12/3/2000	16.79	5.51	17.1	11.28
MC-2D	12/3/2000	17.1	6.73	17.6	10.37
MC-8	12/3/2000	19.05	6.81	17.7	12.24
MC-1	3/5/2001	17.14	5.33	17.7	11.81
MC-107	3/5/2001	20.13	6.31	17.3	13.82
MC-10D	3/5/2001	21.06	11.03	18.5	10.03
MC-118D	3/5/2001	17.3	6.65	17.7	10.65
MC-12	3/5/2001	18.91	4.88	17.7	14.03
MC-12D	3/5/2001	19.25	8.58	17.7	10.67

TABLE K-1

GROUNDWATER ELEVATION DATA 1994-2009

PSC Washougal Facility
Washougal, Washington

All measurements are in feet

Well ID	Date	Measuring Point Elevation	Depth to Water	Ground Surface Elevation	Groundwater Elevation
MC-13	3/5/2001	19.14	8.55	18	10.59
MC-13D	3/5/2001	20.13	9.51	18.3	10.62
MC-14	3/5/2001	18.41	7.87	17	10.54
MC-15	3/5/2001	17.46	6.76	16.4	10.7
MC-15D	3/5/2001	17.37	7.17	16.2	10.2
MC-16	3/5/2001	17.67	6.97	16.4	10.7
MC-17	3/5/2001	17.57	6.81	16.4	10.76
MC-17D	3/5/2001	19.94	9.98	17.1	9.96
MC-19D	3/5/2001	20.8	11.84	18.2	8.96
MC-2	3/5/2001	17	4	17.6	13
MC-20	3/5/2001	19.7	10.08	17.8	9.62
MC-21	3/5/2001	16.79	5.74	17.1	11.05
MC-2D	3/5/2001	17.1	7.26	17.6	9.84
MC-8	3/5/2001	19.05	7.2	17.7	11.85
MC-1	6/5/2001	17.14	4.81	17.7	12.33
MC-107	6/5/2001	20.13	5.58	17.3	14.55
MC-10D	6/5/2001	21.06	10.54	18.5	10.52
MC-118D	6/5/2001	17.3	6.04	17.7	11.26
MC-12	6/5/2001	18.91	6.98	17.7	11.93
MC-12D	6/5/2001	19.25	7.96	17.7	11.29
MC-13	6/5/2001	19.14	8.34	18	10.8
MC-13D	6/5/2001	20.13	8.96	18.3	11.17
MC-14	6/5/2001	18.41	7.59	17	10.82
MC-15	6/5/2001	17.46	6.31	16.4	11.15
MC-15D	6/5/2001	17.37	6.57	16.2	10.8
MC-16	6/5/2001	17.67	6.6	16.4	11.07
MC-17	6/5/2001	17.57	6.58	16.4	10.99
MC-17D	6/5/2001	19.94	9.35	17.1	10.59
MC-19D	6/5/2001	20.8	11.01	18.2	9.79
MC-2	6/5/2001	17	3.62	17.6	13.38
MC-20	6/5/2001	19.7	10.58	17.8	9.12
MC-21	6/5/2001	16.79	5.42	17.1	11.37
MC-2D	6/5/2001	17.1	6.25	17.6	10.85
MC-8	6/5/2001	19.05	7.3	17.7	11.75
MC-1	8/23/2001	17.14	5.88	17.7	11.26
MC-107	8/23/2001	20.13	7.37	17.3	12.76
MC-10D	8/23/2001	21.06	12.19	18.5	8.87
MC-118D	8/23/2001	17.3	7.47	17.7	9.83
MC-12	8/23/2001	18.91	5.94	17.7	12.97
MC-12D	8/23/2001	19.25	9.53	17.7	9.72
MC-13	8/23/2001	19.14	8.96	18	10.18
MC-13D	8/23/2001	20.13	10.24	18.3	9.89
MC-14	8/23/2001	18.41	8.23	17	10.18
MC-15	8/23/2001	17.46	7.03	16.4	10.43

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GROUNDWATER ELEVATION DATA 1994-2009

PSC Washougal Facility
Washougal, Washington

All measurements are in feet

Well ID	Date	Measuring Point Elevation	Depth to Water	Ground Surface Elevation	Groundwater Elevation
MC-15D	8/23/2001	17.37	8.07	16.2	9.3
MC-16	8/23/2001	17.67	7.28	16.4	10.39
MC-17	8/23/2001	17.57	7.13	16.4	10.44
MC-17D	8/23/2001	19.94	10.96	17.1	8.98
MC-19D	8/23/2001	20.8	12.94	18.2	7.86
MC-2	8/23/2001	17	4.89	17.6	12.11
MC-20	8/23/2001	19.7	12.64	17.8	7.06
MC-21	8/23/2001	16.79	6.25	17.1	10.54
MC-2D	8/23/2001	17.1	7.81	17.6	9.29
MC-8	8/23/2001	19.05	7.83	17.7	11.22
MC-1	12/10/2001	17.14	3.66	17.7	13.48
MC-107	12/10/2001	20.13	4.17	17.3	15.96
MC-10D	12/10/2001	21.06	9.58	18.5	11.48
MC-118D	12/10/2001	17.3	4.8	17.7	12.5
MC-12	12/10/2001	18.91	2.71	17.7	16.2
MC-12D	12/10/2001	19.25	6.74	17.7	12.51
MC-13	12/10/2001	19.14	7.58	18	11.56
MC-13D	12/10/2001	20.13	7.96	18.3	12.17
MC-14	12/10/2001	18.41	6.87	17	11.54
MC-15	12/10/2001	17.46	5.74	16.4	11.72
MC-15D	12/10/2001	17.37	5.65	16.2	11.72
MC-16	12/10/2001	17.67	6.05	16.4	11.62
MC-17	12/10/2001	17.57	5.99	16.4	11.58
MC-17D	12/10/2001	19.94	8.47	17.1	11.47
MC-19D	12/10/2001	20.8	10.35	18.2	10.45
MC-2	12/10/2001	17	2.42	17.6	14.58
MC-20	12/10/2001	19.7	9.64	17.8	10.06
MC-21	12/10/2001	16.79	4.57	17.1	12.22
MC-22	12/10/2001	20.87	2.87	18	18
MC-23	12/10/2001	19.99	2.49	17.5	17.5
MC-2D	12/10/2001	17.1	5.21	17.6	11.89
MC-8	12/10/2001	19.05	5.58	17.7	13.47
PZU-1	12/10/2001	17.44	7.4	17.8	10.04
PZU-2	12/10/2001	17.74	7.74	18.1	10
PZU-3	12/10/2001	17.7	6.7	17.7	11
UT-ST-1	12/10/2001	19.4	0.15	19.4	19.25
MC-1	3/4/2002	17.14	6.12	17.7	11.02
MC-107	3/4/2002	20.13	4.9	17.3	15.23
MC-10D	3/4/2002	21.06	9.82	18.5	11.24
MC-118D	3/4/2002	17.3	5.47	17.7	11.83
MC-12	3/4/2002	18.91	3.61	17.7	15.3
MC-12D	3/4/2002	19.25	7.29	17.7	11.96
MC-13	3/4/2002	19.14	7.75	18	11.39
MC-13D	3/4/2002	20.13	8.47	18.3	11.66

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GROUNDWATER ELEVATION DATA 1994-2009

PSC Washougal Facility
Washougal, Washington

All measurements are in feet

Well ID	Date	Measuring Point Elevation	Depth to Water	Ground Surface Elevation	Groundwater Elevation
MC-14	3/4/2002	18.41	7.01	17	11.4
MC-15	3/4/2002	17.46	5.83	16.4	11.63
MC-15D	3/4/2002	17.37	5.96	16.2	11.41
MC-16	3/4/2002	17.67	6.03	16.4	11.64
MC-17	3/4/2002	17.57	5.91	16.4	11.66
MC-17D	3/4/2002	19.94	8.76	17.1	11.18
MC-19D	3/4/2002	20.8	10.61	18.2	10.19
MC-2	3/4/2002	17	2.5	17.6	14.5
MC-20	3/4/2002	19.7	9.54	17.8	10.16
MC-21	3/4/2002	16.79	4.79	17.1	12
MC-22	3/4/2002	20.87	2.87	18	18
MC-23	3/4/2002	19.99	2.49	17.5	17.5
MC-2D	3/4/2002	17.1	5.64	17.6	11.46
MC-8	3/4/2002	19.05	5.96	17.7	13.09
PZU-1	3/4/2002	17.44	7.26	17.8	10.18
PZU-2	3/4/2002	17.74	7.6	18.1	10.14
PZU-3	3/4/2002	17.7	6.7	17.7	11
UT-ST-1	3/4/2002	19.4	0	19.4	19.4
MC-1	6/3/2002	17.14	5.69	17.7	11.45
MC-107	6/3/2002	20.13	5.92	17.3	14.21
MC-10D	6/3/2002	21.06	6.87	18.5	14.19
MC-118D	6/3/2002	17.3	3.92	17.7	13.38
MC-12	6/3/2002	18.91	4.55	17.7	14.36
MC-12D	6/3/2002	19.25	5.61	17.7	13.64
MC-13	6/3/2002	19.14	8	18	11.14
MC-13D	6/3/2002	20.13	7.53	18.3	12.6
MC-14	6/3/2002	18.41	7.26	17	11.15
MC-15	6/3/2002	17.46	6.11	16.4	11.35
MC-15D	6/3/2002	17.37	3.71	16.2	13.66
MC-16	6/3/2002	17.67	6.28	16.4	11.39
MC-17	6/3/2002	17.57	6.11	16.4	11.46
MC-17D	6/3/2002	19.94	5.27	17.1	14.67
MC-19D	6/3/2002	20.8	6.05	18.2	14.75
MC-2	6/3/2002	17	3.41	17.6	13.59
MC-20	6/3/2002	19.7	9.47	17.8	10.23
MC-21	6/3/2002	16.79	5.29	17.1	11.5
MC-22	6/3/2002	20.87	2.87	18	18
MC-23	6/3/2002	19.99	2.49	17.5	17.5
MC-2D	6/3/2002	17.1	3.21	17.6	13.89
MC-8	6/3/2002	19.05	6.67	17.7	12.38
PZU-1	6/3/2002	17.44	7.11	17.8	10.33
PZU-2	6/3/2002	17.74	7.3	18.1	10.44
PZU-3	6/3/2002	17.7	6.45	17.7	11.25
UT-ST-1	6/3/2002	19.4	0	19.4	19.4

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GROUNDWATER ELEVATION DATA 1994-2009

PSC Washougal Facility
Washougal, Washington

All measurements are in feet

Well ID	Date	Measuring Point Elevation	Depth to Water	Ground Surface Elevation	Groundwater Elevation
MC-1	8/26/2002	17.14	5.89	17.7	11.25
MC-107	8/26/2002	20.13	7.15	17.3	12.98
MC-10D	8/26/2002	21.06	11.8	18.5	9.26
MC-118D	8/26/2002	17.3	7.24	17.7	10.06
MC-12	8/26/2002	18.91	5.71	17.7	13.2
MC-12D	8/26/2002	19.25	0	17.7	19.25
MC-13	8/26/2002	19.14	8.81	18	10.33
MC-13D	8/26/2002	20.13	10.17	18.3	9.96
MC-14	8/26/2002	18.41	8.19	17	10.22
MC-15	8/26/2002	17.46	7.12	16.4	10.34
MC-15D	8/26/2002	17.37	7.83	16.2	9.54
MC-16	8/26/2002	17.67	7.31	16.4	10.36
MC-17	8/26/2002	17.57	7.11	16.4	10.46
MC-17D	8/26/2002	19.94	10.37	17.1	9.57
MC-19D	8/26/2002	20.8	12.26	18.2	8.54
MC-2	8/26/2002	17	4.72	17.6	12.28
MC-20	8/26/2002	19.7	1.9	17.8	17.8
MC-21	8/26/2002	16.79	6.22	17.1	10.57
MC-22	8/26/2002	20.87	2.87	18	18
MC-23	8/26/2002	19.99	2.49	17.5	17.5
MC-2D	8/26/2002	17.1	7.55	17.6	9.55
MC-8	8/26/2002	19.05	7.62	17.7	11.43
PZU-1	8/26/2002	17.44	8.15	17.8	9.29
PZU-2	8/26/2002	17.74	8.4	18.1	9.34
PZU-3	8/26/2002	17.7	7.32	17.7	10.38
UT-ST-1	8/26/2002	19.4	9.4	19.4	10
MC-1	12/2/2002	17.14	5.91	17.7	11.23
MC-107	12/2/2002	20.13	7.27	17.3	12.86
MC-10D	12/2/2002	21.06	11.45	18.5	9.61
MC-118D	12/2/2002	17.3	7.11	17.7	10.19
MC-12	12/2/2002	18.91	7.83	17.7	11.08
MC-12D	12/2/2002	19.25	9.04	17.7	10.21
MC-13	12/2/2002	19.14	8.96	18	10.18
MC-13D	12/2/2002	20.13	9.99	18.3	10.14
MC-14	12/2/2002	18.41	8.27	17	10.14
MC-15	12/2/2002	17.46	7.15	16.4	10.31
MC-15D	12/2/2002	17.37	7.52	16.2	9.85
MC-16	12/2/2002	17.67	7.36	16.4	10.31
MC-17	12/2/2002	17.57	7.16	16.4	10.41
MC-17D	12/2/2002	20.14	10.38	17.1	9.76
MC-19D	12/2/2002	20.8	11.95	18.2	8.85
MC-2	12/2/2002	17	4.83	17.6	12.17
MC-20	12/2/2002	19.7	10.83	17.8	8.87
MC-21	12/2/2002	16.79	6.32	17.1	10.47

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GROUNDWATER ELEVATION DATA 1994-2009

PSC Washougal Facility
Washougal, Washington

All measurements are in feet

Well ID	Date	Measuring Point Elevation	Depth to Water	Ground Surface Elevation	Groundwater Elevation
MC-22	12/2/2002	20.87	2.87	18	18
MC-23	12/2/2002	19.99	2.49	17.5	17.5
MC-2D	12/2/2002	17.1	7.31	17.6	9.79
MC-8	12/2/2002	19.05	7.82	17.7	11.23
PZU-1	12/2/2002	17.44	0	17.8	17.44
PZU-2	12/2/2002	17.74	8.4	18.1	9.34
PZU-3	12/2/2002	17.7	7.41	17.7	10.29
UT-ST-1	12/2/2002	19.4	9.54	19.4	9.86
MC-1	3/10/2003	17.14	2.81	17.7	14.33
MC-107	3/10/2003	20.13	12.38	17.3	7.75
MC-10D	3/10/2003	21.06	7.86	18.5	13.2
MC-118D	3/10/2003	17.3	3.84	17.7	13.46
MC-12	3/10/2003	18.91	1.7	17.7	17.21
MC-12D	3/10/2003	19.25	5.61	17.7	13.64
MC-13	3/10/2003	19.14	7.04	18	12.1
MC-13D	3/10/2003	20.13	7.26	18.3	12.87
MC-14	3/10/2003	18.41	6.33	17	12.08
MC-15	3/10/2003	17.46	5.15	16.4	12.31
MC-15D	3/10/2003	17.37	4.36	16.2	13.01
MC-16	3/10/2003	17.67	5.37	16.4	12.3
MC-17	3/10/2003	17.57	5.28	16.4	12.29
MC-17D	3/10/2003	20.14	7.09	17.1	13.05
MC-19D	3/10/2003	20.8	8.34	18.2	12.46
MC-2	3/10/2003	17	1.45	17.6	15.55
MC-20	3/10/2003	19.7	9.03	17.8	10.67
MC-21	3/10/2003	16.79	3.99	17.1	12.8
MC-22	3/10/2003	20.87	9.89	18	10.98
MC-23	3/10/2003	19.99	8.68	17.5	11.31
MC-2D	3/10/2003	17.1	3.86	17.6	13.24
MC-8	3/10/2003	19.05	4.69	17.7	14.36
PZU-1	3/10/2003	17.44	6.75	17.8	10.69
PZU-2	3/10/2003	17.74	7.13	18.1	10.61
PZU-3	3/10/2003	17.7	6.32	17.7	11.38
UT-ST-1	3/10/2003	19.4	0.15	19.4	19.25
MC-1	6/9/2003	17.14	5.77	17.7	11.37
MC-107	6/9/2003	20.13	5.81	17.3	14.32
MC-10D	6/9/2003	21.06	7.96	18.5	13.1
MC-118D	6/9/2003	17.3	5.61	17.7	11.69
MC-12	6/9/2003	18.91	4.46	17.7	14.45
MC-12D	6/9/2003	19.25	6.33	17.7	12.92
MC-13	6/9/2003	19.14	8.11	18	11.03
MC-13D	6/9/2003	20.13	8.07	18.3	12.06
MC-14	6/9/2003	18.41	7.42	17	10.99
MC-15	6/9/2003	17.46	6.32	16.4	11.14

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GROUNDWATER ELEVATION DATA 1994-2009

PSC Washougal Facility
Washougal, Washington

All measurements are in feet

Well ID	Date	Measuring Point Elevation	Depth to Water	Ground Surface Elevation	Groundwater Elevation
MC-15D	6/9/2003	17.37	4.54	16.2	12.83
MC-16	6/9/2003	17.67	6.54	16.4	11.13
MC-17	6/9/2003	17.57	6.37	16.4	11.2
MC-17D	6/9/2003	20.14	6.62	17.1	13.52
MC-19D	6/9/2003	20.8	7.38	18.2	13.42
MC-2	6/9/2003	17	3.31	17.6	13.69
MC-20	6/9/2003	19.7	10.08	17.8	9.62
MC-21	6/9/2003	16.79	5.37	17.1	11.42
MC-22	6/9/2003	20.87	2.87	18	18
MC-23	6/9/2003	19.99	2.49	17.5	17.5
MC-2D	6/9/2003	17.1	4.16	17.6	12.94
MC-8	6/9/2003	19.05	6.66	17.7	12.39
PZU-1	6/9/2003	17.44	7.54	17.8	9.9
PZU-2	6/9/2003	17.74	7.83	18.1	9.91
PZU-3	6/9/2003	17.7	6.88	17.7	10.82
UT-ST-1	6/9/2003	19.4	9.01	19.4	10.39
MC-1	9/8/2003	17.14	5.82	17.7	11.32
MC-107	9/8/2003	20.13	7.41	17.3	12.72
MC-10D	9/8/2003	21.06	12.56	18.5	8.5
MC-118D	9/8/2003	17.3	7.82	17.7	9.48
MC-12	9/8/2003	18.91	5.9	17.7	13.01
MC-12D	9/8/2003	19.25	9.89	17.7	9.36
MC-13	9/8/2003	19.14	9.01	18	10.13
MC-13D	9/8/2003	20.13	10.7	18.3	9.43
MC-14	9/8/2003	18.41	8.28	17	10.13
MC-15	9/8/2003	17.46	6.75	16.4	10.71
MC-15D	9/8/2003	17.37	8.56	16.2	8.81
MC-16	9/8/2003	17.67	7.19	16.4	10.48
MC-17	9/8/2003	17.57	7.15	16.4	10.42
MC-17D	9/8/2003	20.14	11.55	17.1	8.59
MC-19D	9/8/2003	20.8	13.37	18.2	7.43
MC-2	9/8/2003	17	4.81	17.6	12.19
MC-20	9/8/2003	19.7	1.9	17.8	17.8
MC-21	9/8/2003	16.79	7.21	17.1	9.58
MC-22	9/8/2003	20.87	2.87	18	18
MC-23	9/8/2003	19.99	2.49	17.5	17.5
MC-2D	9/8/2003	17.1	8.2	17.6	8.9
MC-8	9/8/2003	19.05	7.83	17.7	11.22
PZU-1	9/8/2003	17.44	8.31	17.8	9.13
PZU-2	9/8/2003	17.74	8.56	18.1	9.18
PZU-3	9/8/2003	17.7	7.41	17.7	10.29
UT-ST-1	9/8/2003	19.4	9.61	19.4	9.79
MC-1	12/1/2003	17.14	4.47	17.7	12.67
MC-107	12/1/2003	20.13	5.72	17.3	14.41

TABLE K-1

GROUNDWATER ELEVATION DATA 1994-2009

PSC Washougal Facility
Washougal, Washington

All measurements are in feet

Well ID	Date	Measuring Point Elevation	Depth to Water	Ground Surface Elevation	Groundwater Elevation
MC-10D	12/1/2003	21.06	11.22	18.5	9.84
MC-118D	12/1/2003	17.3	6.37	17.7	10.93
MC-12	12/1/2003	18.91	4.06	17.7	14.85
MC-12D	12/1/2003	19.25	8.55	17.7	10.7
MC-13	12/1/2003	19.14	8.22	18	10.92
MC-13D	12/1/2003	20.13	8.46	18.3	11.67
MC-14	12/1/2003	18.41	7.5	17	10.91
MC-15	12/1/2003	17.46	5.91	16.4	11.55
MC-15D	12/1/2003	17.37	7.04	16.2	10.33
MC-16	12/1/2003	17.67	6.4	16.4	11.27
MC-17	12/1/2003	17.57	6.47	16.4	11.1
MC-17D	12/1/2003	20.14	9.95	17.1	10.19
MC-19D	12/1/2003	20.8	11.52	18.2	9.28
MC-2	12/1/2003	17	3.85	17.6	13.15
MC-20	12/1/2003	19.7	9.98	17.8	9.72
MC-21	12/1/2003	16.79	5.29	17.1	11.5
MC-22	12/1/2003	20.87	2.87	18	18
MC-23	12/1/2003	19.99	2.49	17.5	17.5
MC-2D	12/1/2003	17.1	7.1	17.6	10
MC-8	12/1/2003	19.05	6.53	17.7	12.52
PZU-1	12/1/2003	17.44	7.82	17.8	9.62
PZU-2	12/1/2003	17.74	8.14	18.1	9.6
PZU-3	12/1/2003	17.7	7.07	17.7	10.63
UT-ST-1	12/1/2003	19.4	9.28	19.4	10.12
MC-1	3/22/2004	17.14	4	17.7	13.14
MC-107	3/22/2004	20.13	5	17.3	15.13
MC-10D	3/22/2004	21.06	9.84	18.5	11.22
MC-118D	3/22/2004	17.3	4.89	17.7	12.41
MC-12	3/22/2004	18.91	3.75	17.7	15.16
MC-12D	3/22/2004	19.25	6.84	17.7	12.41
MC-13	3/22/2004	19.14	7.72	18	11.42
MC-13D	3/22/2004	20.13	8.45	18.3	11.68
MC-14	3/22/2004	18.41	6.91	17	11.5
MC-15	3/22/2004	17.46	5.77	16.4	11.69
MC-15D	3/22/2004	17.37	5.94	16.2	11.43
MC-16	3/22/2004	17.67	5.91	16.4	11.76
MC-17	3/22/2004	17.57	5.7	16.4	11.87
MC-17D	3/22/2004	20.14	8.83	17.1	11.31
MC-19D	3/22/2004	20.8	10.23	18.2	10.57
MC-2	3/22/2004	17	2.43	17.6	14.57
MC-20	3/22/2004	19.7	9.44	17.8	10.26
MC-21	3/22/2004	16.79	4.85	17.1	11.94
MC-22	3/22/2004	20.87	2.87	18	18
MC-23	3/22/2004	19.99	2.49	17.5	17.5

TABLE K-1

GROUNDWATER ELEVATION DATA 1994-2009

PSC Washougal Facility
Washougal, Washington

All measurements are in feet

Well ID	Date	Measuring Point Elevation	Depth to Water	Ground Surface Elevation	Groundwater Elevation
MC-2D	3/22/2004	17.1	5.7	17.6	11.4
MC-8	3/22/2004	19.05	6.14	17.7	12.91
PZU-1	3/22/2004	17.44	6.28	17.8	11.16
PZU-2	3/22/2004	17.74	7.39	18.1	10.35
PZU-3	3/22/2004	17.7	7.12	17.7	10.58
UT-ST-1	3/22/2004	19.4	8.82	19.4	10.58
MC-1	6/14/2004	17.14	4.21	17.7	12.93
MC-107	6/14/2004	20.13	5.8	17.3	14.33
MC-10D	6/14/2004	21.06	8.25	18.5	12.81
MC-118D	6/14/2004	17.3	4.75	17.7	12.55
MC-12	6/14/2004	18.91	3.7	17.7	15.21
MC-12D	6/14/2004	19.25	6.51	17.7	12.74
MC-13	6/14/2004	19.14	8.12	18	11.02
MC-13D	6/14/2004	20.13	8.2	18.3	11.93
MC-14	6/14/2004	18.41	7.4	17	11.01
MC-15	6/14/2004	17.46	6.24	16.4	11.22
MC-15D	6/14/2004	17.37	4.84	16.2	12.53
MC-16	6/14/2004	17.67	6.51	16.4	11.16
MC-17	6/14/2004	17.57	6.4	16.4	11.17
MC-17D	6/14/2004	20.14	7.35	17.1	12.79
MC-19D	6/14/2004	20.8	7.86	18.2	12.94
MC-2	6/14/2004	17	3.38	17.6	13.62
MC-20	6/14/2004	19.7	9.8	17.8	9.9
MC-21	6/14/2004	16.79	5.33	17.1	11.46
MC-22	6/14/2004	20.87	2.87	18	18
MC-23	6/14/2004	19.99	2.49	17.5	17.5
MC-2D	6/14/2004	17.1	4.4	17.6	12.7
MC-8	6/14/2004	19.05	6.62	17.7	12.43
PZU-1	6/14/2004	17.44	7.5	17.8	9.94
PZU-2	6/14/2004	17.74	7.75	18.1	9.99
PZU-3	6/14/2004	17.7	6.78	17.7	10.92
UT-ST-1	6/14/2004	19.4	9	19.4	10.4
MC-1	9/13/2004	17.14	5.63	17.7	11.51
MC-107	9/13/2004	20.13	6.85	17.3	13.28
MC-10D	9/13/2004	21.06	11.72	18.5	9.34
MC-118D	9/13/2004	17.3	7.23	17.7	10.07
MC-12	9/13/2004	18.91	5.42	17.7	13.49
MC-12D	9/13/2004	19.25	9.2	17.7	10.05
MC-13	9/13/2004	19.14	8.76	18	10.38
MC-13D	9/13/2004	20.13	10.09	18.3	10.04
MC-14	9/13/2004	18.41	8.09	17	10.32
MC-15	9/13/2004	17.46	6.99	16.4	10.47
MC-15D	9/13/2004	17.37	7.81	16.2	9.56
MC-16	9/13/2004	17.67	7.19	16.4	10.48

TABLE K-1

GROUNDWATER ELEVATION DATA 1994-2009

PSC Washougal Facility
Washougal, Washington

All measurements are in feet

Well ID	Date	Measuring Point Elevation	Depth to Water	Ground Surface Elevation	Groundwater Elevation
MC-17	9/13/2004	17.57	7.02	16.4	10.55
MC-17D	9/13/2004	20.14	10.7	17.1	9.44
MC-19D	9/13/2004	20.8	12.31	18.2	8.49
MC-2	9/13/2004	17	4.43	17.6	12.57
MC-20	9/13/2004	19.7	12.05	17.8	7.65
MC-21	9/13/2004	16.79	6.1	17.1	10.69
MC-22	9/13/2004	20.87	2.87	18	18
MC-23	9/13/2004	19.99	2.49	17.5	17.5
MC-2D	9/13/2004	17.1	7.5	17.6	9.6
MC-8	9/13/2004	19.05	7.47	17.7	11.58
PZU-1	9/13/2004	17.44	8.19	17.8	9.25
PZU-2	9/13/2004	17.74	8.46	18.1	9.28
PZU-3	9/13/2004	17.7	7.37	17.7	10.33
UT-ST-1	9/13/2004	19.4	9.36	19.4	10.04
MC-1	12/13/2004	17.14	4	17.7	13.14
MC-107	12/13/2004	20.13	5.21	17.3	14.92
MC-10D	12/13/2004	21.06	8.87	18.5	12.19
MC-118D	12/13/2004	17.3	4.89	17.7	12.41
MC-12	12/13/2004	18.91	5.21	17.7	13.7
MC-12D	12/13/2004	19.25	6.67	17.7	12.58
MC-13	12/13/2004	19.14	7.78	18	11.36
MC-13D	12/13/2004	20.13	8.13	18.3	12
MC-14	12/13/2004	18.41	7.04	17	11.37
MC-15	12/13/2004	17.46	5.79	16.4	11.67
MC-15D	12/13/2004	17.37	5.29	16.2	12.08
MC-16	12/13/2004	17.67	6.16	16.4	11.51
MC-17	12/13/2004	17.57	6.11	16.4	11.46
MC-17D	12/13/2004	20.14	8.04	17.1	12.1
MC-19D	12/13/2004	20.8	9.38	18.2	11.42
MC-2	12/13/2004	17	2.98	17.6	14.02
MC-20	12/13/2004	19.7	9.68	17.8	10.02
MC-21	12/13/2004	16.79	4.85	17.1	11.94
MC-22	12/13/2004	20.87	2.87	18	18
MC-23	12/13/2004	19.99	2.49	17.5	17.5
MC-2D	12/13/2004	17.1	4.86	17.6	12.24
MC-8	12/13/2004	19.05	6.14	17.7	12.91
PZU-1	12/13/2004	17.44	7.45	17.8	9.99
PZU-2	12/13/2004	17.74	7.76	18.1	9.98
PZU-3	12/13/2004	17.7	6.76	17.7	10.94
UT-ST-1	12/13/2004	19.4	8.92	19.4	10.48
MC-1	3/14/2005	17.14	5.35	17.7	11.79
MC-107	3/14/2005	20.13	6.43	17.3	13.7
MC-10D	3/14/2005	21.06	11.03	18.5	10.03
MC-118D	3/14/2005	17.3	6.52	17.7	10.78

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GROUNDWATER ELEVATION DATA 1994-2009

PSC Washougal Facility
Washougal, Washington

All measurements are in feet

Well ID	Date	Measuring Point Elevation	Depth to Water	Ground Surface Elevation	Groundwater Elevation
MC-12	3/14/2005	18.91	5.01	17.7	13.9
MC-12D	3/14/2005	19.25	8.52	17.7	10.73
MC-13	3/14/2005	19.14	8.51	18	10.63
MC-13D	3/14/2005	20.13	9.41	18.3	10.72
MC-14	3/14/2005	18.41	7.86	17	10.55
MC-15	3/14/2005	17.46	6.77	16.4	10.69
MC-15D	3/14/2005	17.37	6.97	16.2	10.4
MC-16	3/14/2005	17.67	6.96	16.4	10.71
MC-17	3/14/2005	17.57	6.79	16.4	10.78
MC-17D	3/14/2005	20.14	9.83	17.1	10.31
MC-19D	3/14/2005	20.8	11.38	18.2	9.42
MC-2	3/14/2005	17	6.98	17.6	10.02
MC-20	3/14/2005	19.7	10.38	17.8	9.32
MC-21	3/14/2005	16.79	5.83	17.1	10.96
MC-22	3/14/2005	20.87	2.87	18	18
MC-23	3/14/2005	19.99	2.49	17.5	17.5
MC-2D	3/14/2005	17.1	6.77	17.6	10.33
MC-8	3/14/2005	19.05	7.18	17.7	11.87
PZU-1	3/14/2005	17.44	7.92	17.8	9.52
PZU-2	3/14/2005	17.74	8.22	18.1	9.52
PZU-3	3/14/2005	17.7	7.16	17.7	10.54
UT-ST-1	3/14/2005	19.4	9.18	19.4	10.22
MC-1	6/6/2005	17.14	4.3	17.7	12.84
MC-107	6/6/2005	20.13	5.33	17.3	14.8
MC-10D	6/6/2005	21.06	8.94	18.5	12.12
MC-118D	6/6/2005	17.3	4.93	17.7	12.37
MC-12	6/6/2005	18.91	3.87	17.7	15.04
MC-12D	6/6/2005	19.25	6.74	17.7	12.51
MC-13	6/6/2005	19.14	7.8	18	11.34
MC-13D	6/6/2005	20.13	8.09	18.3	12.04
MC-14	6/6/2005	18.41	7.09	17	11.32
MC-15	6/6/2005	17.46	5.92	16.4	11.54
MC-15D	6/6/2005	17.37	5.18	16.2	12.19
MC-16	6/6/2005	17.67	6.23	16.4	11.44
MC-17	6/6/2005	17.57	6.1	16.4	11.47
MC-17D	6/6/2005	20.14	7.88	17.1	12.26
MC-19D	6/6/2005	20.8	9	18.2	11.8
MC-2	6/6/2005	17	2.91	17.6	14.09
MC-20	6/6/2005	19.7	9.53	17.8	10.17
MC-21	6/6/2005	16.79	5	17.1	11.79
MC-22	6/6/2005	20.87	2.87	18	18
MC-23	6/6/2005	19.99	2.49	17.5	17.5
MC-2D	6/6/2005	17.1	4.82	17.6	12.28
MC-8	6/6/2005	19.05	6.23	17.7	12.82

TABLE K-1

GROUNDWATER ELEVATION DATA 1994-2009

PSC Washougal Facility
Washougal, Washington

All measurements are in feet

Well ID	Date	Measuring Point Elevation	Depth to Water	Ground Surface Elevation	Groundwater Elevation
PZU-1	6/6/2005	17.44	7.28	17.8	10.16
PZU-2	6/6/2005	17.74	8.91	18.1	8.83
PZU-3	6/6/2005	17.7	6.65	17.7	11.05
UT-ST-1	6/6/2005	19.4	8.76	19.4	10.64
MC-1	9/12/2005	17.14	5.84	17.7	11.3
MC-107	9/12/2005	20.13	7.11	17.3	13.02
MC-10D	9/12/2005	21.06	12.84	18.5	8.22
MC-118D	9/12/2005	17.3	7.97	17.7	9.33
MC-12	9/12/2005	18.91	5.65	17.7	13.26
MC-12D	9/12/2005	19.25	10.03	17.7	9.22
MC-13	9/12/2005	19.14	8.82	18	10.32
MC-13D	9/12/2005	20.13	10.81	18.3	9.32
MC-14	9/12/2005	18.41	8.21	17	10.2
MC-15	9/12/2005	17.46	7.11	16.4	10.35
MC-15D	9/12/2005	17.37	8.76	16.2	8.61
MC-16	9/12/2005	17.67	7.3	16.4	10.37
MC-17	9/12/2005	17.57	7.09	16.4	10.48
MC-17D	9/12/2005	20.14	11.78	17.1	8.36
MC-19D	9/12/2005	20.8	13.68	18.2	7.12
MC-2	9/12/2005	17	4.65	17.6	12.35
MC-20	9/12/2005	19.7	1.9	17.8	17.8
MC-21	9/12/2005	16.79	6.23	17.1	10.56
MC-22	9/12/2005	20.87	2.87	18	18
MC-23	9/12/2005	19.99	2.49	17.5	17.5
MC-2D	9/12/2005	17.1	8.45	17.6	8.65
MC-8	9/12/2005	19.05	7.56	17.7	11.49
PZU-1	9/12/2005	17.44	8.26	17.8	9.18
PZU-2	9/12/2005	17.74	8.54	18.1	9.2
PZU-3	9/12/2005	17.7	7.41	17.7	10.29
UT-ST-1	9/12/2005	19.4	9.38	19.4	10.02
MC-1	11/28/2005	17.14	4.14	17.7	13
MC-107	11/28/2005	20.13	5.14	17.3	14.99
MC-10D	11/28/2005	21.06	10.85	18.5	10.21
MC-118D	11/28/2005	17.3	6.28	17.7	11.02
MC-12	11/28/2005	18.91	3.69	17.7	15.22
MC-12D	11/28/2005	19.25	8.26	17.7	10.99
MC-13	11/28/2005	19.14	8.02	18	11.12
MC-13D	11/28/2005	20.13	9.26	18.3	10.87
MC-14	11/28/2005	18.41	7.28	17	11.13
MC-15	11/28/2005	17.46	6.07	16.4	11.39
MC-15D	11/28/2005	17.37	6.88	16.2	10.49
MC-16	11/28/2005	17.67	6.46	16.4	11.21
MC-17	11/28/2005	17.57	6.43	16.4	11.14
MC-17D	11/28/2005	20.14	9.8	17.1	10.34

TABLE K-1

GROUNDWATER ELEVATION DATA 1994-2009

PSC Washougal Facility
Washougal, Washington

All measurements are in feet

Well ID	Date	Measuring Point Elevation	Depth to Water	Ground Surface Elevation	Groundwater Elevation
MC-19D	11/28/2005	20.8	11.56	18.2	9.24
MC-2	11/28/2005	17	2.94	17.6	14.06
MC-20	11/28/2005	19.7	9.99	17.8	9.71
MC-21	11/28/2005	16.79	5.1	17.1	11.69
MC-22	11/28/2005	20.87	2.87	18	18
MC-23	11/28/2005	19.99	2.49	17.5	17.5
MC-2D	11/28/2005	17.1	6.6	17.6	10.5
MC-8	11/28/2005	19.05	6.26	17.7	12.79
PZU-1	11/28/2005	17.44	7.81	17.8	9.63
PZU-2	11/28/2005	17.74	8.14	18.1	9.6
PZU-3	11/28/2005	17.7	6.97	17.7	10.73
UT-ST-1	11/28/2005	19.4	9	19.4	10.4
MC-1	3/6/2006	17.14	3.4	17.7	13.74
MC-107	3/6/2006	20.13	4.31	17.3	15.82
MC-10D	3/6/2006	21.06	9.54	18.5	11.52
MC-118D	3/6/2006	17.3	5.06	17.7	12.24
MC-12	3/6/2006	18.91	3.04	17.7	15.87
MC-12D	3/6/2006	19.25	7.02	17.7	12.23
MC-13	3/6/2006	19.14	7.45	18	11.69
MC-13D	3/6/2006	20.13	8.12	18.3	12.01
MC-14	3/6/2006	18.41	6.66	17	11.75
MC-15	3/6/2006	17.46	5.48	16.4	11.98
MC-15D	3/6/2006	17.37	5.62	16.2	11.75
MC-16	3/6/2006	17.67	5.66	16.4	12.01
MC-17	3/6/2006	17.57	5.51	16.4	12.06
MC-17D	3/6/2006	20.14	8.43	17.1	11.71
MC-19D	3/6/2006	20.8	9.87	18.2	10.93
MC-2	3/6/2006	17	1.85	17.6	15.15
MC-20	3/6/2006	19.7	9.32	17.8	10.38
MC-21	3/6/2006	16.79	4.41	17.1	12.38
MC-22	3/6/2006	20.87	2.87	18	18
MC-23	3/6/2006	19.99	2.49	17.5	17.5
MC-2D	3/6/2006	17.1	5.28	17.6	11.82
MC-8	3/6/2006	19.05	5.59	17.7	13.46
PZU-3	3/6/2006	17.7	6.43	17.7	11.27
UT-ST-1	3/6/2006	19.4	8.63	19.4	10.77
MC-1	6/5/2006	17.14	4	17.7	13.14
MC-107	6/5/2006	20.13	5.04	17.3	15.09
MC-10D	6/5/2006	21.06	6.18	18.5	14.88
MC-118D	6/5/2006	17.3	3.63	17.7	13.67
MC-12	6/5/2006	18.91	3.67	17.7	15.24
MC-12D	6/5/2006	19.25	5.18	17.7	14.07
MC-13	6/5/2006	19.14	7.83	18	11.31
MC-13D	6/5/2006	20.13	7.41	18.3	12.72

TABLE K-1

GROUNDWATER ELEVATION DATA 1994-2009

PSC Washougal Facility
Washougal, Washington

All measurements are in feet

Well ID	Date	Measuring Point Elevation	Depth to Water	Ground Surface Elevation	Groundwater Elevation
MC-14	6/5/2006	18.41	7.06	17	11.35
MC-15	6/5/2006	17.46	5.83	16.4	11.63
MC-15D	6/5/2006	17.37	3.29	16.2	14.08
MC-16	6/5/2006	17.67	6.12	16.4	11.55
MC-17	6/5/2006	17.57	5.96	16.4	11.61
MC-17D	6/5/2006	20.14	5.45	17.1	14.69
MC-19D	6/5/2006	20.8	5.16	18.2	15.64
MC-2	6/5/2006	17	2.52	17.6	14.48
MC-20	6/5/2006	19.7	9.61	17.8	10.09
MC-21	6/5/2006	16.79	4.88	17.1	11.91
MC-22	6/5/2006	20.87	2.87	18	18
MC-23	6/5/2006	19.99	2.49	17.5	17.5
MC-2D	6/5/2006	17.1	2.75	17.6	14.35
MC-8	6/5/2006	19.05	6.08	17.7	12.97
PZU-3	6/5/2006	17.7	6.85	17.7	10.85
UT-ST-1	6/5/2006	19.4	8.91	19.4	10.49
MC-1	9/11/2006	17.14	5.96	17.7	11.18
MC-107	9/11/2006	20.13	7.23	17.3	12.9
MC-10D	9/11/2006	21.06	12.64	18.5	8.42
MC-118D	9/11/2006	17.3	7.92	17.7	9.38
MC-12	9/11/2006	18.91	5.82	17.7	13.09
MC-12D	9/11/2006	19.25	9.99	17.7	9.26
MC-13	9/11/2006	19.14	8.91	18	10.23
MC-13D	9/11/2006	20.13	10.63	18.3	9.5
MC-14	9/11/2006	18.41	8.27	17	10.14
MC-15	9/11/2006	17.46	7.18	16.4	10.28
MC-15D	9/11/2006	17.37	8.39	16.2	8.98
MC-16	9/11/2006	17.67	7.36	16.4	10.31
MC-17	9/11/2006	17.57	7.13	16.4	10.44
MC-17D	9/11/2006	20.14	11.3	17.1	8.84
MC-19D	9/11/2006	20.8	13.06	18.2	7.74
MC-2	9/11/2006	17	4.78	17.6	12.22
MC-20	9/11/2006	19.7	1.9	17.8	17.8
MC-21	9/11/2006	16.79	6.32	17.1	10.47
MC-22	9/11/2006	20.87	2.87	18	18
MC-23	9/11/2006	19.99	2.49	17.5	17.5
MC-2D	9/11/2006	17.1	8.24	17.6	8.86
MC-8	9/11/2006	19.05	7.72	17.7	11.33
PZU-3	9/11/2006	17.7	7.44	17.7	10.26
UT-ST-1	9/11/2006	19.4	9.42	19.4	9.98
MC-1	12/18/2006	17.14	2.73	17.7	14.41
MC-107	12/18/2006	20.13	3.09	17.3	17.04
MC-10D	12/18/2006	21.04	7.96	18.5	13.08
MC-118D	12/18/2006	17.3	3.81	17.7	13.49

TABLE K-1

GROUNDWATER ELEVATION DATA 1994-2009

PSC Washougal Facility
Washougal, Washington

All measurements are in feet

Well ID	Date	Measuring Point Elevation	Depth to Water	Ground Surface Elevation	Groundwater Elevation
MC-12	12/18/2006	18.91	1.81	17.7	17.1
MC-122	12/18/2006	19.95	9.82	17.5	10.13
MC-123	12/18/2006	19.91	9.91	17.4	10
MC-12D	12/18/2006	19.25	5.58	17.7	13.67
MC-13	12/18/2006	19.14	6.95	18	12.19
MC-13D	12/18/2006	20.13	7.13	18.3	13
MC-14	12/18/2006	18.41	6.13	17	12.28
MC-15	12/18/2006	17.46	4.85	16.4	12.61
MC-15D	12/18/2006	17.37	4.44	16.2	12.93
MC-16	12/18/2006	17.67	5.04	16.4	12.63
MC-17	12/18/2006	17.57	5.03	16.4	12.54
MC-17D	12/18/2006	19.92	7.19	17.1	12.73
MC-19D	12/18/2006	18.05	6.02	18.2	12.03
MC-2	12/18/2006	17	1.36	17.6	15.64
MC-20	12/18/2006	19.7	9.38	17.8	10.32
MC-21	12/18/2006	16.79	3.74	17.1	13.05
MC-2D	12/18/2006	17.1	3.95	17.6	13.15
MC-8	12/18/2006	19.05	4.62	17.7	14.43
PZU-3	12/18/2006	17.03	6.28	17.7	10.75
UT-ST-1	12/18/2006	19.25	8.56	19.4	10.69
MC-1	3/5/2007	17.14	2.75	17.7	14.39
MC-107	3/5/2007	20.13	2.87	17.3	17.26
MC-10D	3/5/2007	21.04	8.64	18.5	12.4
MC-118D	3/5/2007	17.28	4.2	17.7	13.08
MC-12	3/5/2007	18.91	1.6	17.7	17.31
MC-122	3/5/2007	19.95	9.4	17.5	10.55
MC-123	3/5/2007	19.91	9.62	17.4	10.29
MC-12D	3/5/2007	19.25	6.03	17.7	13.22
MC-13	3/5/2007	19.14	6.74	18	12.4
MC-13D	3/5/2007	20.13	7.45	18.3	12.68
MC-14	3/5/2007	18.41	5.95	17	12.46
MC-15	3/5/2007	17.46	4.71	16.4	12.75
MC-15D	3/5/2007	17.37	4.87	16.2	12.5
MC-16	3/5/2007	17.67	4.76	16.4	12.91
MC-17	3/5/2007	17.57	4.7	16.4	12.87
MC-17D	3/5/2007	19.92	7.68	17.1	12.24
MC-19D	3/5/2007	18.05	6.5	18.2	11.55
MC-2	3/5/2007	17	1.17	17.6	15.83
MC-20	3/5/2007	19.7	8.87	17.8	10.83
MC-21	3/5/2007	16.79	3.68	17.1	13.11
MC-2D	3/5/2007	17.1	4.53	17.6	12.57
MC-8	3/5/2007	19.05	4.4	17.7	14.65
PZU-3	3/5/2007	17.03	5.68	17.7	11.35
UT-ST-1	3/5/2007	19.25	8.16	19.4	11.09

TABLE K-1

GROUNDWATER ELEVATION DATA 1994-2009

PSC Washougal Facility
Washougal, Washington

All measurements are in feet

Well ID	Date	Measuring Point Elevation	Depth to Water	Ground Surface Elevation	Groundwater Elevation
MC-1	6/4/2007	17.14	4.4	17.7	12.74
MC-107	6/4/2007	20.13	5.53	17.3	14.6
MC-10D	6/4/2007	21.04	8.66	18.5	12.38
MC-118D	6/4/2007	17.28	5.05	17.7	12.23
MC-12	6/4/2007	18.91	4.15	17.7	14.76
MC-122	6/4/2007	19.95	10.26	17.5	9.69
MC-123	6/4/2007	19.91	10.53	17.4	9.38
MC-12D	6/4/2007	19.25	6.7	17.7	12.55
MC-13	6/4/2007	19.14	7.7	18	11.44
MC-13D	6/4/2007	20.13	8.32	18.3	11.81
MC-14	6/4/2007	18.41	6.95	17	11.46
MC-15	6/4/2007	17.46	5.8	16.4	11.66
MC-15D	6/4/2007	17.37	5.23	16.2	12.14
MC-16	6/4/2007	17.67	5.9	16.4	11.77
MC-17	6/4/2007	17.57	5.68	16.4	11.89
MC-17D	6/4/2007	19.92	7.81	17.1	12.11
MC-19D	6/4/2007	18.05	5.89	18.2	12.16
MC-2	6/4/2007	17	3.01	17.6	13.99
MC-20	6/4/2007	19.7	9.21	17.8	10.49
MC-21	6/4/2007	16.79	4.96	17.1	11.83
MC-2D	6/4/2007	17.1	4.82	17.6	12.28
MC-8	6/4/2007	19.05	6.3	17.7	12.75
PZU-3	6/4/2007	17.03	6.29	17.7	10.74
UT-ST-1	6/4/2007	19.25	8.65	19.4	10.6
MC-1	9/10/2007	17.14	5.75	17.7	11.39
MC-107	9/10/2007	20.13	7.12	17.3	13.01
MC-10D	9/10/2007	21.04	12.93	18.5	8.11
MC-118D	9/10/2007	17.28	8.01	17.7	9.27
MC-12	9/10/2007	18.91	5.68	17.7	13.23
MC-122	9/10/2007	19.95	11.55	17.5	8.4
MC-123	9/10/2007	19.91	11.76	17.4	8.15
MC-12D	9/10/2007	19.25	10.11	17.7	9.14
MC-13	9/10/2007	19.14	8.8	18	10.34
MC-13D	9/10/2007	20.13	10.61	18.3	9.52
MC-14	9/10/2007	18.41	8.15	17	10.26
MC-15	9/10/2007	17.46	7.08	16.4	10.38
MC-15D	9/10/2007	17.37	8.56	16.2	8.81
MC-16	9/10/2007	17.67	7.28	16.4	10.39
MC-17	9/10/2007	17.57	7.08	16.4	10.49
MC-17D	9/10/2007	19.92	11.55	17.1	8.37
MC-19D	9/10/2007	18.05	10.69	18.2	7.36
MC-2	9/10/2007	17	4.64	17.6	12.36
MC-20	9/10/2007	19.7	1.9	17.8	17.8
MC-21	9/10/2007	16.79	6.18	17.1	10.61

TABLE K-1

GROUNDWATER ELEVATION DATA 1994-2009

PSC Washougal Facility
Washougal, Washington

All measurements are in feet

Well ID	Date	Measuring Point Elevation	Depth to Water	Ground Surface Elevation	Groundwater Elevation
MC-2D	9/10/2007	17.1	8.47	17.6	8.63
MC-8	9/10/2007	19.05	7.57	17.7	11.48
PZU-3	9/10/2007	17.03	7.41	17.7	9.62
UT-ST-1	9/10/2007	19.25	9.39	19.4	9.86
MC-1	10/22/2007	17.14	5.02	17.7	12.12
MC-107	10/22/2007	20.13	5.89	17.3	14.24
MC-10D	10/22/2007	21.04	11.68	18.5	9.36
MC-118D	10/22/2007	17.28	7.02	17.7	10.26
MC-12	10/22/2007	18.91	4.27	17.7	14.64
MC-122	10/22/2007	19.95	10.12	17.5	9.83
MC-123	10/22/2007	19.91	10.03	17.4	9.88
MC-12D	10/22/2007	19.25	9	17.7	10.25
MC-13	10/22/2007	19.14	8.43	18	10.71
MC-13D	10/22/2007	20.13	9.77	18.3	10.36
MC-14	10/22/2007	18.41	7.65	17	10.76
MC-14D	10/22/2007	19.33	9.21	17.2	10.12
MC-15	10/22/2007	17.46	6.2	16.4	11.26
MC-15D	10/22/2007	17.37	7.55	16.2	9.82
MC-16	10/22/2007	17.67	6.49	16.4	11.18
MC-17	10/22/2007	17.57	6.43	16.4	11.14
MC-17D	10/22/2007	19.92	10.52	17.1	9.4
MC-19D	10/22/2007	18.05	9.74	18.2	8.31
MC-2	10/22/2007	17	3.91	17.6	13.09
MC-20	10/22/2007	19.7	10.11	17.8	9.59
MC-20D	10/22/2007	20.18	9.98	17.8	10.2
MC-21	10/22/2007	16.79	5.59	17.1	11.2
MC-24	10/22/2007	19.49	6.37	16.8	13.12
MC-24D	10/22/2007	19.03	9.09	16.9	9.94
MC-25	10/22/2007	16.97	3.62	17.4	13.35
MC-25D	10/22/2007	16.71	6.48	17	10.23
MC-2D	10/22/2007	17.1	7.35	17.6	9.75
MC-8	10/22/2007	19.05	6.79	17.7	12.26
PZU-3	10/22/2007	17.03	7.19	17.7	9.84
PZU-4	10/22/2007	18.58	8.62	18.8	9.96
PZU-5	10/22/2007	18.34	9	18.7	9.34
UT-ST-1	10/22/2007	19.25	9.18	19.4	10.07
MC-1	12/16/2007	17.14	3.62	17.7	13.52
MC-107	12/16/2007	20.13	2.52	17.3	17.61
MC-10D	12/16/2007	21.04	9.6	18.5	11.44
MC-118D	12/16/2007	17.28	5.2	17.7	12.08
MC-12	12/16/2007	18.91	3.36	17.7	15.55
MC-122	12/16/2007	19.95	9.97	17.5	9.98
MC-123	12/16/2007	19.91	9.95	17.4	9.96
MC-12D	12/16/2007	19.25	7.02	17.7	12.23

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GROUNDWATER ELEVATION DATA 1994-2009

PSC Washougal Facility
Washougal, Washington

All measurements are in feet

Well ID	Date	Measuring Point Elevation	Depth to Water	Ground Surface Elevation	Groundwater Elevation
MC-13	12/16/2007	19.14	8.69	18	10.45
MC-13D	12/16/2007	20.13	8.3	18.3	11.83
MC-14	12/16/2007	18.41	6.89	17	11.52
MC-14D	12/16/2007	19.33	7.79	17.2	11.54
MC-15	12/16/2007	17.46	5.81	16.4	11.65
MC-15D	12/16/2007	17.37	5.82	16.2	11.55
MC-16	12/16/2007	17.67	5.85	16.4	11.82
MC-17	12/16/2007	17.57	5.94	16.4	11.63
MC-17D	12/16/2007	19.92	8.73	17.1	11.19
MC-19D	12/16/2007	18.05	7.73	18.2	10.32
MC-2	12/16/2007	17	2.43	17.6	14.57
MC-20	12/16/2007	19.7	9.67	17.8	10.03
MC-20D	12/16/2007	20.18	8.82	17.8	11.36
MC-21	12/16/2007	16.79	5.91	17.1	10.88
MC-24	12/16/2007	19.49	8.11	16.8	11.38
MC-24D	12/16/2007	19.03	7.13	16.9	11.9
MC-25	12/16/2007	16.97	2.54	17.4	14.43
MC-25D	12/16/2007	16.71	4.59	17	12.12
MC-2D	12/16/2007	17.1	5.45	17.6	11.65
MC-8	12/16/2007	19.05	4.93	17.7	14.12
PZU-3	12/16/2007	17.03	6.87	17.7	10.16
PZU-4	12/16/2007	18.58	8.23	18.8	10.35
PZU-5	12/16/2007	18.34	8.09	18.7	10.25
UT-ST-1	12/16/2007	19.25	9.64	19.4	9.61
MC-1	3/9/2008	17.14	3.59	17.7	13.55
MC-107	3/9/2008	20.13	4.6	17.3	15.53
MC-10D	3/9/2008	21.04	9.4	18.5	11.64
MC-118D	3/9/2008	17.28	5.07	17.7	12.21
MC-12	3/9/2008	18.91	3.2	17.7	15.71
MC-122	3/9/2008	19.95	9.73	17.5	10.22
MC-123	3/9/2008	19.91	9.79	17.4	10.12
MC-12D	3/9/2008	19.25	6.97	17.7	12.28
MC-13	3/9/2008	19.14	7.6	18	11.54
MC-13D	3/9/2008	20.13	8.22	18.3	11.91
MC-14	3/9/2008	18.41	6.7	17	11.71
MC-14D	3/9/2008	19.33	7.68	17.2	11.65
MC-15	3/9/2008	17.46	5.36	16.4	12.1
MC-15D	3/9/2008	17.37	5.66	16.2	11.71
MC-16	3/9/2008	17.67	5.51	16.4	12.16
MC-17	3/9/2008	17.57	5.32	16.4	12.25
MC-17D	3/9/2008	19.92	8.45	17.1	11.47
MC-19D	3/9/2008	18.05	7.23	18.2	10.82
MC-2	3/9/2008	17	2.27	17.6	14.73
MC-20	3/9/2008	19.7	9.09	17.8	10.61

TABLE K-1

GROUNDWATER ELEVATION DATA 1994-2009

PSC Washougal Facility
Washougal, Washington

All measurements are in feet

Well ID	Date	Measuring Point Elevation	Depth to Water	Ground Surface Elevation	Groundwater Elevation
MC-20D	3/9/2008	20.18	8.71	17.8	11.47
MC-21	3/9/2008	16.79	4.65	17.1	12.14
MC-24	3/9/2008	19.49	4.44	16.8	15.05
MC-24D	3/9/2008	19.03	7.03	16.9	12
MC-25	3/9/2008	16.97	2.57	17.4	14.4
MC-25D	3/9/2008	16.71	4.54	17	12.17
MC-2D	3/9/2008	17.1	5.39	17.6	11.71
MC-8	3/9/2008	19.05	5.89	17.7	13.16
PZU-3	3/9/2008	17.03	6.2	17.7	10.83
PZU-4	3/9/2008	18.58	8.06	18.8	10.52
PZU-5	3/9/2008	18.34	7.98	18.7	10.36
UT-ST-1	3/9/2008	19.25	8.64	19.4	10.61
MC-1	6/8/2008	17.14	4.28	17.7	12.86
MC-107	6/8/2008	20.13	5.31	17.3	14.82
MC-10D	6/8/2008	21.04	4.94	18.5	16.1
MC-118D	6/8/2008	17.28	2.82	17.7	14.46
MC-12	6/8/2008	18.91	3.91	17.7	15
MC-122	6/8/2008	19.95	9.73	17.5	10.22
MC-123	6/8/2008	19.91	9.86	17.4	10.05
MC-12D	6/8/2008	19.25	4.32	17.7	14.93
MC-13	6/8/2008	19.14	7.72	18	11.42
MC-13D	6/8/2008	20.13	6.71	18.3	13.42
MC-14	6/8/2008	18.41	6.91	17	11.5
MC-14D	6/8/2008	19.33	5.34	17.2	13.99
MC-15	6/8/2008	17.46	5.7	16.4	11.76
MC-15D	6/8/2008	17.37	2.14	16.2	15.23
MC-16	6/8/2008	17.67	5.85	16.4	11.82
MC-17	6/8/2008	17.57	5.61	16.4	11.96
MC-17D	6/8/2008	19.92	4.13	17.1	15.79
MC-19D	6/8/2008	18.05	0.69	18.2	17.36
MC-2	6/8/2008	17	2.83	17.6	14.17
MC-20	6/8/2008	19.7	9.18	17.8	10.52
MC-20D	6/8/2008	20.18	6.39	17.8	13.79
MC-21	6/8/2008	16.79	4.92	17.1	11.87
MC-24	6/8/2008	19.49	5.4	16.8	14.09
MC-24D	6/8/2008	19.03	3.71	16.9	15.32
MC-25	6/8/2008	16.97	3.04	17.4	13.93
MC-25D	6/8/2008	16.71	1.97	17	14.74
MC-2D	6/8/2008	17.1	1.66	17.6	15.44
MC-8	6/8/2008	19.05	6.19	17.7	12.86
PZU-3	6/8/2008	17.03	6.46	17.7	10.57
PZU-4	6/8/2008	18.58	8.1	18.8	10.48
PZU-5	6/8/2008	18.34	8.02	18.7	10.32
UT-ST-1	6/8/2008	19.25	8.68	19.4	10.57

TABLE K-1

GROUNDWATER ELEVATION DATA 1994-2009

PSC Washougal Facility
Washougal, Washington

All measurements are in feet

Well ID	Date	Measuring Point Elevation	Depth to Water	Ground Surface Elevation	Groundwater Elevation
MC-1	9/21/2008	17.14	5.93	17.7	11.21
MC-107	9/21/2008	20.13	7.24	17.3	12.89
MC-10D	9/21/2008	21.04	12.74	18.5	8.3
MC-118D	9/21/2008	17.28	7.97	17.7	9.31
MC-118D2	9/21/2008	17.26	7.93	17.6	9.33
MC-12	9/21/2008	18.91	5.84	17.7	13.07
MC-122	9/21/2008	19.95	11.58	17.5	8.37
MC-123	9/21/2008	19.91	11.67	17.4	8.24
MC-12D	9/21/2008	19.25	10.06	17.7	9.19
MC-13	9/21/2008	19.14	8.93	18	10.21
MC-13D	9/21/2008	20.13	10.61	18.3	9.52
MC-14	9/21/2008	18.41	8.24	17	10.17
MC-14D	9/21/2008	19.33	10.1	17.2	9.23
MC-15	9/21/2008	17.46	7.16	16.4	10.3
MC-15D	9/21/2008	17.37	8.48	16.2	8.89
MC-16	9/21/2008	17.67	7.33	16.4	10.34
MC-17	9/21/2008	17.57	7.09	16.4	10.48
MC-17D	9/21/2008	19.92	11.45	17.1	8.47
MC-19D	9/21/2008	18.05	10.7	18.2	7.35
MC-2	9/21/2008	17	4.75	17.6	12.25
MC-20	9/21/2008	19.7	11.69	17.8	8.01
MC-20D	9/21/2008	20.18	11.87	17.8	8.31
MC-21	9/21/2008	16.79	6.31	17.1	10.48
MC-24	9/21/2008	19.49	7.34	16.8	12.15
MC-24D	9/21/2008	19.03	10.14	16.9	8.89
MC-25	9/21/2008	16.97	4.69	17.4	12.28
MC-25D	9/21/2008	16.71	7.5	17	9.21
MC-25D2	9/21/2008	16.68	7.52	17.2	9.16
MC-26D2	9/21/2008	20.07	10.76	17.6	9.31
MC-2D	9/21/2008	17.1	8.33	17.6	8.77
MC-30	9/21/2008	20.32	6.83	18.2	13.49
MC-30D	9/21/2008	20.77	11.89	18.2	8.88
MC-31	9/21/2008	21.03	7.57	17.9	13.46
MC-8	9/21/2008	19.05	7.67	17.7	11.38
PZU-3	9/21/2008	17.03	7.42	17.7	9.61
PZU-4	9/21/2008	18.58	8.88	18.8	9.7
PZU-5	9/21/2008	18.34	9.49	18.7	8.85
UT-ST-1	9/21/2008	19.25	9.35	19.4	9.9
MC-1	11/30/2008	17.14	4.86	17.7	12.28
MC-107	11/30/2008	20.13	5.69	17.3	14.44
MC-10D	11/30/2008	21.04	10.69	18.5	10.35
MC-118D	11/30/2008	17.28	6.26	17.7	11.02
MC-118D2	11/30/2008	17.26	6.22	17.6	11.04
MC-12	11/30/2008	18.91	4.21	17.7	14.7

TABLE K-1

GROUNDWATER ELEVATION DATA 1994-2009

PSC Washougal Facility
Washougal, Washington

All measurements are in feet

Well ID	Date	Measuring Point Elevation	Depth to Water	Ground Surface Elevation	Groundwater Elevation
MC-122	11/30/2008	19.95	10.23	17.5	9.72
MC-123	11/30/2008	19.91	10.17	17.4	9.74
MC-12D	11/30/2008	19.25	8.17	17.7	11.08
MC-13	11/30/2008	19.14	8.26	18	10.88
MC-13D	11/30/2008	20.13	9.32	18.3	10.81
MC-14	11/30/2008	18.41	7.56	17	10.85
MC-14D	11/30/2008	19.33	8.76	17.2	10.57
MC-15	11/30/2008	17.46	6.33	16.4	11.13
MC-15D	11/30/2008	17.37	6.86	16.2	10.51
MC-16	11/30/2008	17.67	6.66	16.4	11.01
MC-17	11/30/2008	17.57	6.5	16.4	11.07
MC-17D	11/30/2008	19.92	9.75	17.1	10.17
MC-19D	11/30/2008	18.05	8.69	18.2	9.36
MC-2	11/30/2008	17	3.55	17.6	13.45
MC-20	11/30/2008	19.7	9.98	17.8	9.72
MC-20D	11/30/2008	20.18	9.71	17.8	10.47
MC-21	11/30/2008	16.79	5.46	17.1	11.33
MC-24	11/30/2008	19.49	5.96	16.8	13.53
MC-24D	11/30/2008	19.03	8.28	16.9	10.75
MC-25	11/30/2008	16.97	3.46	17.4	13.51
MC-25D	11/30/2008	16.71	5.72	17	10.99
MC-25D2	11/30/2008	16.68	5.72	17.2	10.96
MC-26D2	11/30/2008	20.07	9.05	17.6	11.02
MC-2D	11/30/2008	17.1	6.49	17.6	10.61
MC-30	11/30/2008	20.32	5.43	18.2	14.89
MC-30D	11/30/2008	20.77	9.9	18.2	10.87
MC-31	11/30/2008	21.03	6.74	17.9	14.29
MC-8	11/30/2008	19.05	6.66	17.7	12.39
PZU-3	11/30/2008	17.03	7.1	17.7	9.93
PZU-4	11/30/2008	18.58	8.47	18.8	10.11
PZU-5	11/30/2008	18.34	8.74	18.7	9.6
UT-ST-1	11/30/2008	19.25	9.06	19.4	10.19
MC-1	3/22/2009	17.14	3.83	17.7	13.31
MC-107	3/22/2009	20.13	3.98	17.3	16.15
MC-10D	3/22/2009	21.04	10.06	18.5	10.98
MC-118D	3/22/2009	17.28	5.56	17.7	11.72
MC-118D2	3/22/2009	17.26	5.58	17.6	11.68
MC-12	3/22/2009	18.91	2.38	17.7	16.53
MC-122	3/22/2009	19.95	10.11	17.5	9.84
MC-123	3/22/2009	19.91	10.03	17.4	9.88
MC-12D	3/22/2009	19.25	7.47	17.7	11.78
MC-13	3/22/2009	19.14	7.7	18	11.44
MC-13D	3/22/2009	20.13	8.72	18.3	11.41
MC-14	3/22/2009	18.41	6.93	17	11.48

TABLE K-1

GROUNDWATER ELEVATION DATA 1994-2009

PSC Washougal Facility
Washougal, Washington

All measurements are in feet

Well ID	Date	Measuring Point Elevation	Depth to Water	Ground Surface Elevation	Groundwater Elevation
MC-14D	3/22/2009	19.33	8.25	17.2	11.08
MC-15	3/22/2009	17.46	5.71	16.4	11.75
MC-15D	3/22/2009	17.37	6.28	16.2	11.09
MC-16	3/22/2009	17.67	5.88	16.4	11.79
MC-17	3/22/2009	17.57	5.75	16.4	11.82
MC-17D	3/22/2009	19.92	9.14	17.1	10.78
MC-19D	3/22/2009	18.05	8.07	18.2	9.98
MC-2	3/22/2009	17	2.18	17.6	14.82
MC-20	3/22/2009	19.7	9.7	17.8	10
MC-20D	3/22/2009	20.18	9.25	17.8	10.93
MC-21	3/22/2009	16.79	4.72	17.1	12.07
MC-24	3/22/2009	19.49	4.55	16.8	14.94
MC-24D	3/22/2009	19.03	7.62	16.9	11.41
MC-25	3/22/2009	16.97	3.31	17.4	13.66
MC-25D	3/22/2009	16.71	5.06	17	11.65
MC-25D2	3/22/2009	16.68	5.08	17.2	11.6
MC-26D2	3/22/2009	20.07	8.39	17.6	11.68
MC-2D	3/22/2009	17.1	5.87	17.6	11.23
MC-30	3/22/2009	20.32	3.67	18.2	16.65
MC-30D	3/22/2009	20.77	9.23	18.2	11.54
MC-31	3/22/2009	21.03	5.09	17.9	15.94
MC-8	3/22/2009	19.05	5.64	17.7	13.41
PZU-3	3/22/2009	17.03	6.83	17.7	10.2
PZU-4	3/22/2009	18.58	8.2	18.8	10.38
PZU-5	3/22/2009	18.34	8.21	18.7	10.13
UT-ST-1	3/22/2009	19.25	8.99	19.4	10.26
MC-1	6/22/2009	17.14	4.31	17.7	12.83
MC-107	6/22/2009	20.13	5.48	17.3	14.65
MC-10D	6/22/2009	21.04	8.07	18.5	12.97
MC-118D	6/22/2009	17.28	4.73	17.7	12.55
MC-118D2	6/22/2009	17.26	4.7	17.6	12.56
MC-12	6/22/2009	18.91	4.02	17.7	14.89
MC-122	6/22/2009	19.95	10.51	17.5	9.44
MC-123	6/22/2009	19.91	10.54	17.4	9.37
MC-12D	6/22/2009	19.25	6.49	17.7	12.76
MC-13	6/22/2009	19.14	7.88	18	11.26
MC-13D	6/22/2009	20.13	8.25	18.3	11.88
MC-14	6/22/2009	18.41	7.15	17	11.26
MC-14D	6/22/2009	19.33	7.33	17.2	12
MC-15	6/22/2009	17.46	5.86	16.4	11.6
MC-15D	6/22/2009	17.37	4.71	16.2	12.66
MC-16	6/22/2009	17.67	6.04	16.4	11.63
MC-17	6/22/2009	17.57	5.86	16.4	11.71
MC-17D	6/22/2009	19.92	7.17	17.1	12.75

TABLE K-1

GROUNDWATER ELEVATION DATA 1994-2009

PSC Washougal Facility
Washougal, Washington

All measurements are in feet

Well ID	Date	Measuring Point Elevation	Depth to Water	Ground Surface Elevation	Groundwater Elevation
MC-19D	6/22/2009	18.05	4.95	18.2	13.1
MC-2	6/22/2009	17	2.88	17.6	14.12
MC-20	6/22/2009	19.7	9.7	17.8	10
MC-20D	6/22/2009	20.18	8.33	17.8	11.85
MC-21	6/22/2009	16.79	5.06	17.1	11.73
MC-24	6/22/2009	19.49	5.3	16.8	14.19
MC-24D	6/22/2009	19.03	6.24	16.9	12.79
MC-24D2	6/22/2009	18.21	5.45	16.4	12.76
MC-25	6/22/2009	16.97	3.11	17.4	13.86
MC-25D	6/22/2009	16.71	4.09	17	12.62
MC-25D2	6/22/2009	16.68	4.05	17.2	12.63
MC-26D2	6/22/2009	20.07	7.49	17.6	12.58
MC-27D	6/22/2009	17.52	5.09	17.8	12.43
MC-28D	6/22/2009	17.79	5.63	18.1	12.16
MC-2D	6/22/2009	17.1	4.36	17.6	12.74
MC-30	6/22/2009	20.32	5	18.2	15.32
MC-30D	6/22/2009	20.77	7.94	18.2	12.83
MC-31	6/22/2009	21.03	5.88	17.9	15.15
MC-32	6/22/2009	20.3	10.78	17.4	9.52
MC-33	6/22/2009	20.87	5.95	17.9	14.92
MC-8	6/22/2009	19.05	6.27	17.7	12.78
PZU-3	6/22/2009	17.03	6.67	17.7	10.36
PZU-4	6/22/2009	18.58	8.2	18.8	10.38
PZU-5	6/22/2009	18.34	8.43	18.7	9.91
UT-ST-1	6/22/2009	19.25	8.8	19.4	10.45

APPENDIX L

Slug Test Data

TABLE L-1

2007 SLUG TEST DATA TABLES: PZU-3, MC-2D, MC-10D, MC-14D, MC-15D, AND MC-17D
PSC Washougal Facility
Washougal, Washington

Time Elapsed (seconds)	PZU - 3	MC-2D		MC-10D		MC-14D		MC-15D		MC-17D	
	Rising Head Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)
0	0.042	2.426	3.812	2.219	3.055	2.604	3.208	2.052	2.871	2.152	3.071
2	0.029	2.653	3.512	1.917	1.811	2.407	0.983	1.773	1.559	2.307	2.716
4	0.025	2.790	3.350	1.895	1.803	2.297	2.471	1.601	1.472	1.913	1.719
6	0.020	2.714	3.061	1.825	1.751	2.203	2.135	1.468	1.378	1.640	1.497
8	0.017	2.649	2.641	1.763	1.699	2.127	2.217	1.365	1.300	1.421	1.318
10	0.015	2.588	2.444	1.707	1.652	2.058	2.018	1.279	1.229	1.235	1.155
12	0.012	2.533	2.392	1.654	1.608	1.995	1.990	1.201	1.166	1.075	1.014
14	0.012	2.477	2.339	1.605	1.570	1.938	1.930	1.134	1.111	0.939	0.890
16	0.010	2.424	2.289	1.543	1.528	1.884	1.877	1.079	1.071	0.821	0.781
18	0.007	2.368	2.236	1.503	1.491	1.837	1.828	1.031	1.023	0.716	0.687
20	0.005	2.318	2.186	1.459	1.456	1.787	1.780	0.985	0.975	0.628	0.605
22	0.005	2.269	2.138	1.422	1.429	1.745	1.738	0.939	0.939	0.552	0.534
24	0.005	2.220	2.079	1.382	1.399	1.701	1.696	0.897	0.897	0.487	0.471
26	0.002	2.172	2.031	1.350	1.367	1.663	1.654	0.861	0.855	0.428	0.416
28	0.005	2.126	1.987	1.315	1.340	1.627	1.619	0.827	0.828	0.357	0.368
30	0.002	2.082	1.943	1.280	1.298	1.590	1.581	0.794	0.807	0.327	0.340
32	0.002	2.038	1.899	1.248	1.271	1.558	1.549	0.766	0.781	0.292	0.290
34	0.003	1.994	1.859	1.221	1.244	1.525	1.516	0.739	0.754	0.258	0.265
36	0.002	1.950	1.829	1.191	1.221	1.493	1.486	0.712	0.729	0.231	0.238
38	0.000	1.908	1.788	1.164	1.196	1.464	1.455	0.685	0.691	0.208	0.212
40	0.002	1.868	1.746	1.134	1.171	1.438	1.428	0.659	0.672	0.185	0.189
42	0	1.828	1.708	1.109	1.147	1.409	1.399	0.628	0.651	0.174	0.171
44	0.002	1.792	1.670	1.082	1.124	1.384	1.375	0.622	0.632	0.156	0.152
46	0	1.754	1.638	1.055	1.102	1.357	1.350	0.603	0.615	0.139	0.137
48	0	1.717	1.599	1.033	1.080	1.333	1.325	0.582	0.596	0.126	0.124
50	0	1.679	1.565	1.010	1.060	1.310	1.300	0.565	0.580	0.112	0.114
52	0	1.645	1.531	0.988	1.041	1.272	1.277	0.548	0.563	0.103	0.105
54	0	1.610	1.494	0.968	1.020	1.256	1.258	0.533	0.548	0.093	0.093
56	0	1.576	1.460	0.948	0.998	1.237	1.237	0.517	0.533	0.084	0.088
58	0	1.544	1.425	0.929	0.983	1.226	1.216	0.500	0.515	0.074	0.082
60	0	1.511	1.393	0.909	0.963	1.207	1.197	0.489	0.506	0.069	0.074
62	--	1.481	1.360	0.887	0.946	1.188	1.178	0.475	0.492	0.063	0.071
64	--	1.448	1.328	0.869	0.929	1.170	1.159	0.464	0.479	0.057	0.064
66	--	1.416	1.299	0.852	0.914	1.151	1.142	0.451	0.468	0.053	0.061
68	--	1.385	1.269	0.832	0.896	1.134	1.125	0.439	0.452	0.049	0.055
70	--	1.356	1.240	0.815	0.882	1.117	1.107	0.428	0.445	0.044	0.053
72	--	1.327	1.215	0.797	0.867	1.102	1.092	0.416	0.433	0.040	0.050
74	--	1.301	1.187	0.782	0.852	1.084	1.075	0.407	0.422	0.038	0.046
76	--	1.272	1.160	0.765	0.837	1.069	1.060	0.397	0.412	0.034	0.044
78	--	1.246	1.135	0.750	0.825	1.054	1.046	0.388	0.403	0.032	0.040
80	--	1.219	1.112	0.735	0.810	1.039	1.031	0.376	0.393	0.028	0.038

TABLE L-1

2007 SLUG TEST DATA TABLES: PZU-3, MC-2D, MC-10D, MC-14D, MC-15D, AND MC-17D
PSC Washougal Facility
Washougal, Washington

Time Elapsed (seconds)	PZU - 3	MC-2D		MC-10D		MC-14D		MC-15D		MC-17D	
	Rising Head Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)
82	--	1.194	1.085	0.721	0.795	1.023	1.016	0.369	0.384	0.027	0.038
84	--	1.169	1.062	0.708	0.780	1.012	1.002	0.359	0.374	0.025	0.036
86	--	1.144	1.040	0.691	0.773	0.999	0.991	0.351	0.366	0.023	0.034
88	--	1.120	1.017	0.681	0.758	0.987	0.987	0.344	0.359	0.021	0.032
90	--	1.096	0.994	0.668	0.745	0.972	0.974	0.340	0.353	0.019	0.032
92	--	1.073	0.973	0.654	0.733	0.960	0.964	0.327	0.344	0.019	0.028
94	--	1.052	0.952	0.644	0.723	0.949	0.951	0.321	0.336	0.021	0.028
96	--	1.030	0.944	0.629	0.711	0.936	0.935	0.313	0.330	0.019	0.027
98	--	1.009	0.923	0.614	0.693	0.924	0.924	0.306	0.321	0.017	0.024
100	--	0.986	0.904	0.607	0.683	0.913	0.916	0.300	0.315	0.015	0.027
102	--	0.967	0.885	0.594	0.671	0.903	0.905	0.292	0.307	0.013	0.024
104	--	0.946	0.864	0.582	0.661	0.892	0.886	0.287	0.303	0.011	0.022
106	--	0.924	0.845	0.572	0.651	0.880	0.876	0.281	0.296	0.011	0.022
108	--	0.906	0.826	0.557	0.641	0.871	0.863	0.275	0.290	0.009	0.021
110	--	0.888	0.806	0.547	0.631	0.859	0.853	0.269	0.284	0.009	0.019
112	--	0.869	0.789	0.537	0.621	0.850	0.842	0.264	0.279	0.009	0.021
114	--	0.850	0.772	0.527	0.612	0.840	0.830	0.258	0.275	0.007	0.019
116	--	0.833	0.753	0.517	0.602	0.831	0.823	0.254	0.267	0.007	0.019
118	--	0.816	0.734	0.507	0.592	0.821	0.813	0.250	0.263	0.006	0.017
120	--	0.797	0.719	0.500	0.584	0.811	0.804	0.245	0.258	0.004	0.017
122	--	0.782	0.699	0.488	0.575	0.804	0.792	0.241	0.254	0.004	0.017
124	--	0.764	0.684	0.480	0.567	0.794	0.785	0.235	0.248	0.006	0.017
126	--	0.749	0.669	0.470	0.560	0.785	0.775	0.231	0.244	0.004	0.015
128	--	0.734	0.654	0.460	0.550	0.777	0.767	0.225	0.246	0.002	0.015
130	--	0.719	0.638	0.453	0.542	0.769	0.758	0.220	0.246	0.002	0.015
132	--	0.705	0.625	0.443	0.532	0.760	0.750	0.218	0.241	0.002	0.013
134	--	0.690	0.612	0.438	0.525	0.752	0.743	0.214	0.235	0.002	0.013
136	--	0.676	0.598	0.428	0.520	0.743	0.733	0.210	0.214	0.002	0.011
138	--	0.663	0.589	0.426	0.510	0.735	0.725	0.205	0.216	0.002	0.013
140	--	0.650	0.575	0.413	0.502	0.727	0.718	0.203	0.212	0	0.013
142	--	0.635	0.562	0.408	0.498	0.720	0.710	0.201	0.208	0	0.013
144	--	0.621	0.552	0.401	0.490	0.714	0.702	0.195	0.206	0	0.011
146	--	0.608	0.539	0.391	0.483	0.706	0.697	0.193	0.200	0	0.009
148	--	0.594	0.526	0.384	0.476	0.699	0.689	0.189	0.199	--	0.013
150	--	0.583	0.516	0.376	0.465	0.693	0.683	0.187	0.195	--	0.013
152	--	0.571	0.505	0.366	0.461	0.685	0.676	0.182	0.191	--	0.011
154	--	0.560	0.495	0.361	0.453	0.678	0.670	0.178	0.187	--	0.011
156	--	0.548	0.484	0.356	0.448	0.672	0.662	0.176	0.185	--	0.009
158	--	0.537	0.474	0.351	0.443	0.666	0.657	0.174	0.181	--	0.011
160	--	0.526	0.466	0.344	0.436	0.659	0.649	0.170	0.179	--	0.011
162	--	0.514	0.468	0.337	0.431	0.653	0.644	0.166	0.176	--	0.017

TABLE L-1

2007 SLUG TEST DATA TABLES: PZU-3, MC-2D, MC-10D, MC-14D, MC-15D, AND MC-17D
PSC Washougal Facility
Washougal, Washington

Time Elapsed (seconds)	PZU - 3	MC-2D		MC-10D		MC-14D		MC-15D		MC-17D	
	Rising Head Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)
164	--	0.502	0.459	0.332	0.423	0.647	0.636	0.164	0.172	--	0.017
166	--	0.493	0.449	0.324	0.418	0.640	0.630	0.161	0.170	--	0.015
168	--	0.484	0.439	0.314	0.411	0.634	0.624	0.159	0.168	--	0.013
170	--	0.474	0.430	0.307	0.406	0.628	0.618	0.157	0.164	--	0.015
172	--	0.465	0.421	0.302	0.398	0.621	0.613	0.153	0.162	--	0.004
174	--	0.453	0.411	0.294	0.393	0.617	0.607	0.149	0.158	--	0.006
176	--	0.445	0.399	0.289	0.391	0.611	0.601	0.149	0.157	--	0.004
178	--	0.436	0.392	0.287	0.384	0.605	0.595	0.145	0.155	--	0.006
180	--	0.426	0.384	0.280	0.379	0.600	0.590	0.145	0.151	--	0.004
182	--	0.419	0.375	0.284	0.377	0.594	0.582	0.142	0.149	--	0.006
184	--	0.411	0.367	0.280	0.369	0.590	0.578	0.138	0.147	--	0.004
186	--	0.402	0.359	0.277	0.364	0.582	0.573	0.138	0.143	--	0.004
188	--	0.394	0.352	0.270	0.359	0.579	0.569	0.136	0.141	--	0.004
190	--	0.384	0.342	0.267	0.357	0.573	0.563	0.134	0.137	--	0.004
192	--	0.377	0.337	0.260	0.351	0.569	0.557	0.132	0.137	--	0.006
194	--	0.371	0.329	0.250	0.347	0.563	0.553	0.128	0.134	--	0.004
196	--	0.361	0.321	0.240	0.341	0.558	0.548	0.126	0.132	--	0.004
198	--	0.353	0.313	0.245	0.339	0.552	0.542	0.126	0.130	--	0.002
200	--	0.346	0.308	0.242	0.334	0.548	0.538	0.122	0.128	--	0.002
202	--	0.340	0.300	0.237	0.332	0.542	0.532	0.121	0.126	--	0
204	--	0.334	0.295	0.232	0.320	0.537	0.529	0.119	0.124	--	0.002
206	--	0.325	0.287	0.230	0.314	0.533	0.525	0.119	0.122	--	0
208	--	0.317	0.281	0.223	0.312	0.527	0.519	0.117	0.118	--	0
210	--	0.310	0.274	0.220	0.309	0.523	0.513	0.115	0.118	--	0
212	--	0.306	0.270	0.218	0.307	0.519	0.511	0.113	0.116	--	--
214	--	0.298	0.264	0.213	0.302	0.514	0.508	0.109	0.113	--	--
216	--	0.295	0.258	0.208	0.297	0.510	0.502	0.109	0.120	--	--
218	--	0.285	0.253	0.205	0.292	0.506	0.498	0.107	0.118	--	--
220	--	0.283	0.247	0.200	0.287	0.502	0.494	0.105	0.116	--	--
222	--	0.277	0.241	0.200	0.285	0.496	0.489	0.103	0.103	--	--
224	--	0.272	0.237	0.195	0.280	0.493	0.485	0.101	0.099	--	--
226	--	0.264	0.231	0.193	0.277	0.491	0.481	0.096	0.103	--	--
228	--	0.260	0.225	0.190	0.277	0.485	0.477	0.086	0.101	--	--
230	--	0.252	0.222	0.185	0.275	0.481	0.473	0.086	0.099	--	--
232	--	0.247	0.216	0.183	0.273	0.475	0.469	0.090	0.097	--	--
234	--	0.241	0.212	0.180	0.268	0.473	0.464	0.090	0.095	--	--
236	--	0.237	0.208	0.173	0.263	0.470	0.462	0.092	0.095	--	--
238	--	0.231	0.203	0.173	0.257	0.464	0.458	0.090	0.094	--	--
240	--	0.226	0.199	0.168	0.257	0.460	0.454	0.088	0.092	--	--
242	--	0.220	0.195	0.163	0.255	0.456	0.450	0.086	0.092	--	--
244	--	0.214	0.189	0.163	0.253	0.454	0.447	0.084	0.090	--	--

TABLE L-1

2007 SLUG TEST DATA TABLES: PZU-3, MC-2D, MC-10D, MC-14D, MC-15D, AND MC-17D
PSC Washougal Facility
Washougal, Washington

Time Elapsed (seconds)	PZU - 3	MC-2D		MC-10D		MC-14D		MC-15D		MC-17D	
	Rising Head Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)
246	--	0.211	0.187	0.158	0.248	0.449	0.443	0.084	0.088	--	--
248	--	0.205	0.182	0.156	0.245	0.445	0.439	0.082	0.088	--	--
250	--	0.201	0.180	0.153	0.242	0.443	0.435	0.080	0.086	--	--
252	--	0.197	0.191	0.148	0.240	0.439	0.431	0.079	0.084	--	--
254	--	0.193	0.188	0.148	0.233	0.435	0.430	0.079	0.082	--	--
256	--	0.188	0.184	0.143	0.230	0.433	0.426	0.077	0.080	--	--
258	--	0.184	0.182	0.143	0.225	0.428	0.422	0.075	0.078	--	--
260	--	0.180	0.178	0.141	0.225	0.426	0.420	0.075	0.078	--	--
262	--	0.176	0.172	0.133	0.220	0.422	0.416	0.073	0.078	--	--
264	--	0.172	0.170	0.133	0.220	0.420	0.410	0.071	0.076	--	--
266	--	0.168	0.168	0.131	0.218	0.416	0.408	0.071	0.076	--	--
268	--	0.165	0.162	0.126	0.215	0.412	0.406	0.069	0.074	--	--
270	--	0.161	0.161	0.123	0.210	0.409	0.403	0.069	0.073	--	--
272	--	0.157	0.155	0.121	0.208	0.405	0.399	0.067	0.071	--	--
274	--	0.153	0.155	0.121	0.205	0.403	0.397	0.067	0.071	--	--
276	--	0.149	0.151	0.116	0.205	0.399	0.391	0.065	0.069	--	--
278	--	0.147	0.146	0.121	0.201	0.395	0.391	0.063	0.067	--	--
280	--	0.144	0.144	0.116	0.198	0.393	0.387	0.063	0.067	--	--
282	--	0.140	0.140	0.116	0.195	0.389	0.385	0.061	0.065	--	--
284	--	0.136	0.138	0.114	0.195	0.386	0.382	0.061	0.065	--	--
286	--	0.134	0.136	0.109	0.193	0.382	0.378	0.059	0.063	--	--
288	--	0.130	0.132	0.109	0.190	0.380	0.376	0.059	0.065	--	--
290	--	0.128	0.130	0.106	0.190	0.378	0.372	0.058	0.065	--	--
292	--	0.126	0.128	0.104	0.185	0.376	0.368	0.058	0.063	--	--
294	--	0.124	0.124	0.101	0.183	0.372	0.364	0.056	0.063	--	--
296	--	0.121	0.122	0.099	0.185	0.368	0.362	0.056	0.061	--	--
298	--	0.117	0.118	0.096	0.183	0.368	0.361	0.052	0.059	--	--
300	--	0.115	0.117	0.094	0.180	0.365	0.362	0.052	0.059	--	--
302	--	0.111	0.115	0.094	0.176	0.361	0.370	0.054	0.057	--	--
304	--	0.107	0.113	0.091	0.168	0.359	0.366	0.052	0.057	--	--
306	--	0.105	0.111	0.089	0.168	0.357	0.362	0.050	0.057	--	--
308	--	0.104	0.109	0.089	0.168	0.353	0.361	0.050	0.055	--	--
310	--	0.102	0.107	0.089	0.166	0.349	0.357	0.050	0.055	--	--
312	--	0.097	0.105	0.084	0.166	0.349	0.355	0.048	0.053	--	--
314	--	0.096	0.104	0.081	0.163	0.346	0.351	0.048	0.052	--	--
316	--	0.094	0.100	0.081	0.158	0.342	0.349	0.046	0.061	--	--
318	--	0.092	0.099	0.081	0.156	0.340	0.345	0.046	0.061	--	--
320	--	0.092	0.098	0.081	0.156	0.336	0.344	0.046	0.061	--	--
322	--	0.088	0.096	0.079	0.156	0.336	0.340	0.042	0.057	--	--
324	--	0.086	0.094	0.076	0.153	0.332	0.336	0.044	0.057	--	--
326	--	0.083	0.092	0.074	0.151	0.328	0.334	0.042	0.042	--	--

TABLE L-1

2007 SLUG TEST DATA TABLES: PZU-3, MC-2D, MC-10D, MC-14D, MC-15D, AND MC-17D
PSC Washougal Facility
Washougal, Washington

Time Elapsed (seconds)	PZU - 3	MC-2D		MC-10D		MC-14D		MC-15D		MC-17D	
	Rising Head Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)
328	--	0.083	0.090	0.074	0.151	0.326	0.332	0.042	0.044	--	--
330	--	0.079	0.094	0.071	0.149	0.326	0.328	0.040	0.042	--	--
332	--	0.077	0.094	0.069	0.148	0.325	0.326	0.040	0.042	--	--
334	--	0.077	0.092	0.069	0.146	0.321	0.324	0.040	0.042	--	--
336	--	0.075	0.090	0.066	0.141	0.319	0.320	0.038	0.042	--	--
338	--	0.073	0.088	0.066	0.139	0.315	0.319	0.035	0.042	--	--
340	--	0.073	0.088	0.064	0.139	0.313	0.317	0.035	0.042	--	--
342	--	0.069	0.086	0.062	0.136	0.311	0.313	0.031	0.040	--	--
344	--	0.067	0.084	0.059	0.136	0.309	0.311	0.042	0.040	--	--
346	--	0.065	0.082	0.059	0.134	0.307	0.309	0.037	0.040	--	--
348	--	0.063	0.082	0.059	0.133	0.304	0.307	0.037	0.038	--	--
350	--	0.063	0.081	0.057	0.131	0.304	0.303	0.035	0.040	--	--
352	--	0.062	0.079	0.057	0.131	0.300	0.301	0.035	0.036	--	--
354	--	0.062	0.077	0.052	0.131	0.298	0.298	0.035	0.036	--	--
356	--	0.060	0.075	0.052	0.126	0.298	0.296	0.033	0.036	--	--
358	--	0.060	0.075	0.049	0.126	0.296	0.294	0.033	0.034	--	--
360	--	0.054	0.073	0.049	0.126	0.292	0.292	0.033	0.034	--	--
362	--	0.054	0.071	0.047	0.121	0.290	0.290	0.033	0.034	--	--
364	--	0.052	0.069	0.054	0.119	0.288	0.286	0.029	0.032	--	--
366	--	0.052	0.067	0.047	0.121	0.286	0.284	0.029	0.032	--	--
368	--	0.050	0.067	0.047	0.119	0.284	0.284	0.029	0.034	--	--
370	--	0.048	0.067	0.044	0.116	0.283	0.280	0.029	0.031	--	--
372	--	0.046	0.065	0.042	0.114	0.279	0.278	0.027	0.031	--	--
374	--	0.046	0.063	0.044	0.111	0.279	0.277	0.027	0.029	--	--
376	--	0.044	0.063	0.044	0.109	0.275	0.275	0.027	0.029	--	--
378	--	0.044	0.063	0.044	0.109	0.273	0.273	0.027	0.029	--	--
380	--	0.042	0.061	0.042	0.107	0.271	0.271	0.027	0.031	--	--
382	--	0.041	0.061	0.039	0.107	0.271	0.269	0.025	0.027	--	--
384	--	0.041	0.060	0.042	0.106	0.267	0.267	0.025	0.025	--	--
386	--	0.041	0.060	0.039	0.104	0.265	0.263	0.023	0.027	--	--
388	--	0.037	0.058	0.039	0.101	0.265	0.263	0.025	0.027	--	--
390	--	0.039	0.056	0.037	0.102	0.262	0.259	0.023	0.025	--	--
392	--	0.037	0.055	0.037	0.102	0.260	0.259	0.023	0.025	--	--
394	--	0.035	0.055	0.034	0.099	0.260	0.257	0.023	0.025	--	--
396	--	0.033	0.057	0.032	0.099	0.256	0.256	0.021	0.023	--	--
398	--	0.033	0.050	0.034	0.099	0.256	0.254	0.021	0.021	--	--
400	--	0.031	0.048	0.034	0.094	0.254	0.252	0.021	0.023	--	--
402	--	0.031	0.048	0.032	0.092	0.252	0.250	0.021	0.021	--	--
404	--	0.031	0.046	0.032	0.092	0.250	0.248	0.021	0.023	--	--
406	--	0.031	0.044	0.029	0.089	0.248	0.246	0.019	0.023	--	--
408	--	0.029	0.046	0.027	0.089	0.246	0.244	0.019	0.021	--	--

TABLE L-1

2007 SLUG TEST DATA TABLES: PZU-3, MC-2D, MC-10D, MC-14D, MC-15D, AND MC-17D
PSC Washougal Facility
Washougal, Washington

Time Elapsed (seconds)	PZU - 3	MC-2D		MC-10D		MC-14D		MC-15D		MC-17D	
	Rising Head Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)
410	--	0.027	0.042	0.029	0.089	0.244	0.242	0.019	0.021	--	--
412	--	0.029	0.044	0.029	0.087	0.244	0.242	0.019	0.021	--	--
414	--	0.027	0.042	0.027	0.087	0.241	0.240	0.019	0.019	--	--
416	--	0.025	0.042	0.027	0.086	0.241	0.238	0.017	0.019	--	--
418	--	0.027	0.044	0.024	0.084	0.241	0.236	0.016	0.019	--	--
420	--	0.025	0.042	0.024	0.087	0.237	0.235	0.017	0.019	--	--
422	--	0.025	0.042	0.024	0.084	0.235	0.233	0.016	0.017	--	--
424	--	0.023	0.042	0.022	0.084	0.235	0.231	0.015	0.017	--	--
426	--	0.023	0.040	0.022	0.082	0.233	0.229	0.015	0.019	--	--
428	--	0.021	0.040	0.022	0.079	0.231	0.227	0.015	0.017	--	--
430	--	0.021	0.040	0.019	0.082	0.229	0.225	0.016	0.017	--	--
432	--	0.021	0.040	0.019	0.082	0.227	0.223	0.016	0.015	--	--
434	--	0.021	0.036	0.017	0.079	0.225	0.221	0.014	0.017	--	--
436	--	0.020	0.037	0.019	0.077	0.223	0.219	0.015	0.013	--	--
438	--	0.020	0.035	0.017	0.077	0.223	0.219	0.014	0.015	--	--
440	--	0.020	0.034	0.017	0.079	0.221	0.219	0.014	0.013	--	--
442	--	0.018	0.036	0.017	0.074	0.220	0.215	0.014	0.015	--	--
444	--	0.018	0.037	0.014	0.072	0.218	0.214	0.010	0.013	--	--
446	--	0.018	0.034	0.017	0.071	0.218	0.212	0.006	0.013	--	--
448	--	0.014	0.033	0.014	0.072	0.216	0.210	0.008	0.013	--	--
450	--	0.014	0.033	0.014	0.069	0.214	0.210	0.012	0.011	--	--
452	--	0.014	0.032	0.014	0.069	0.212	0.208	0.008	0.011	--	--
454	--	0.012	0.032	0.014	0.067	0.212	0.206	0.008	0.011	--	--
456	--	0.014	0.032	0.014	0.067	0.210	0.206	0.008	0.011	--	--
458	--	0.012	0.032	0.009	0.067	0.208	0.204	0.008	0.011	--	--
460	--	0.010	0.031	0.012	0.064	0.206	0.202	0.008	0.010	--	--
462	--	0.010	0.031	0.012	0.062	0.206	0.200	0.019	0.010	--	--
464	--	0.010	0.033	0.012	0.059	0.204	0.198	0.016	0.010	--	--
466	--	0.008	0.029	0.009	0.062	0.202	0.196	0.016	0.010	--	--
468	--	0.008	0.031	0.009	0.059	0.200	0.196	0.014	0.008	--	--
470	--	0.008	0.013	0.009	0.057	0.202	0.196	0.014	0.010	--	--
472	--	0.010	0.015	0.009	0.057	0.200	0.194	0.012	0.008	--	--
474	--	0.010	0.002	0.009	0.054	0.199	0.193	0.012	0.008	--	--
476	--	0.008	0	0.007	0.057	0.199	0.191	0.012	0.008	--	--
478	--	0.008	0	0.007	0.057	0.197	0.191	0.010	0.008	--	--
480	--	0.008	--	0.007	0.054	0.197	0.189	0.010	0.008	--	--
482	--	0.008	--	0.007	0.052	0.193	0.189	0.008	0.004	--	--
484	--	0.010	--	0.005	0.052	0.193	0.191	0.008	0.008	--	--
486	--	0.006	--	0.007	0.052	0.193	0.185	0.010	0.006	--	--
488	--	0.006	--	0.005	0.052	0.191	0.183	0.008	0.019	--	--
490	--	0.004	--	0.005	0.052	0.191	0.183	0.008	0.017	--	--

TABLE L-1

2007 SLUG TEST DATA TABLES: PZU-3, MC-2D, MC-10D, MC-14D, MC-15D, AND MC-17D
PSC Washougal Facility
Washougal, Washington

Time Elapsed (seconds)	PZU - 3	MC-2D		MC-10D		MC-14D		MC-15D		MC-17D	
	Rising Head Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)
492	--	0.004	--	0.005	0.052	0.189	0.181	0.006	0.002	--	--
494	--	0.006	--	0.009	0.050	0.187	0.181	0.006	0.004	--	--
496	--	0.004	--	0.009	0.047	0.185	0.179	0.008	0.002	--	--
498	--	0.006	--	0.007	0.047	0.185	0.177	0.006	0.004	--	--
500	--	0.004	--	0.009	0.045	0.183	0.175	0.004	0.004	--	--
502	--	0.004	--	0.007	0.047	0.181	0.175	0.006	0.004	--	--
504	--	0.002	--	0.007	0.047	0.181	0.173	0.004	0.002	--	--
506	--	0	--	0.007	0.045	0.179	0.173	0.006	0.002	--	--
508	--	0.002	--	0.007	0.045	0.179	0.172	0.004	0.002	--	--
510	--	0.002	--	0.007	0.045	0.178	0.172	0.004	0.002	--	--
512	--	0	--	0.005	0.045	0.178	0.168	0.004	0	--	--
514	--	0.001	--	0.005	0.042	0.178	0.170	0.004	0	--	--
516	--	0.002	--	0.005	0.042	0.176	0.168	0.004	0	--	--
518	--	0	--	0.005	0.040	0.174	0.166	0.002	--	--	--
520	--	0.002	--	0.002	0.042	0.174	0.164	0.004	--	--	--
522	--	0	--	0.002	0.040	0.170	0.162	0.002	--	--	--
524	--	0	--	0.002	0.040	0.170	0.162	0	--	--	--
526	--	0	--	0	0.037	0.170	0.160	--	--	--	--
528	--	0	--	--	0.037	0.168	0.160	--	--	--	--
530	--	0	--	--	0.037	0.166	0.158	--	--	--	--
532	--	--	--	--	0.037	0.166	0.156	--	--	--	--
534	--	--	--	--	0.035	0.166	0.156	--	--	--	--
536	--	--	--	--	0.035	0.164	0.154	--	--	--	--
538	--	--	--	--	0.032	0.162	0.154	--	--	--	--
540	--	--	--	--	0.032	0.162	0.152	--	--	--	--
542	--	--	--	--	0.032	0.160	0.152	--	--	--	--
544	--	--	--	--	0.035	0.160	0.152	--	--	--	--
546	--	--	--	--	0.032	0.160	0.151	--	--	--	--
548	--	--	--	--	0.030	0.158	0.149	--	--	--	--
550	--	--	--	--	0.032	0.157	0.147	--	--	--	--
552	--	--	--	--	0.032	0.157	0.149	--	--	--	--
554	--	--	--	--	0.030	0.155	0.147	--	--	--	--
556	--	--	--	--	0.030	0.155	0.145	--	--	--	--
558	--	--	--	--	0.030	0.153	0.145	--	--	--	--
560	--	--	--	--	0.027	0.153	0.143	--	--	--	--
562	--	--	--	--	0.025	0.151	0.143	--	--	--	--
564	--	--	--	--	0.025	0.151	0.141	--	--	--	--
566	--	--	--	--	0.027	0.149	0.143	--	--	--	--
568	--	--	--	--	0.025	0.149	0.141	--	--	--	--
570	--	--	--	--	0.022	0.149	0.139	--	--	--	--
572	--	--	--	--	0.022	0.147	0.141	--	--	--	--

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2007 SLUG TEST DATA TABLES: PZU-3, MC-2D, MC-10D, MC-14D, MC-15D, AND MC-17D
PSC Washougal Facility
Washougal, Washington

Time Elapsed (seconds)	PZU - 3	MC-2D		MC-10D		MC-14D		MC-15D		MC-17D	
	Rising Head Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)
574	--	--	--	--	0.025	0.147	0.139	--	--	--	--
576	--	--	--	--	0.022	0.145	0.139	--	--	--	--
578	--	--	--	--	0.025	0.145	0.141	--	--	--	--
580	--	--	--	--	0.022	0.145	0.139	--	--	--	--
582	--	--	--	--	0.022	0.141	0.139	--	--	--	--
584	--	--	--	--	0.022	0.141	0.139	--	--	--	--
586	--	--	--	--	0.022	0.141	0.139	--	--	--	--
588	--	--	--	--	0.020	0.141	0.137	--	--	--	--
590	--	--	--	--	0.022	0.139	0.135	--	--	--	--
592	--	--	--	--	0.025	0.137	0.135	--	--	--	--
594	--	--	--	--	0.020	0.137	0.135	--	--	--	--
596	--	--	--	--	0.017	0.136	0.133	--	--	--	--
598	--	--	--	--	0.017	0.136	0.133	--	--	--	--
600	--	--	--	--	0.017	0.136	0.131	--	--	--	--
602	--	--	--	--	0.017	0.134	0.130	--	--	--	--
604	--	--	--	--	0.017	0.134	0.131	--	--	--	--
606	--	--	--	--	0.017	0.134	0.130	--	--	--	--
608	--	--	--	--	0.012	0.132	0.130	--	--	--	--
610	--	--	--	--	0.017	0.132	0.128	--	--	--	--
612	--	--	--	--	0.017	0.130	0.128	--	--	--	--
614	--	--	--	--	0.015	0.130	0.126	--	--	--	--
616	--	--	--	--	0.020	0.128	0.126	--	--	--	--
618	--	--	--	--	0.025	0.128	0.126	--	--	--	--
620	--	--	--	--	0.007	0.128	0.124	--	--	--	--
622	--	--	--	--	0.012	0.126	0.124	--	--	--	--
624	--	--	--	--	0.010	0.124	0.122	--	--	--	--
626	--	--	--	--	0.010	0.124	0.124	--	--	--	--
628	--	--	--	--	0.007	0.124	0.124	--	--	--	--
630	--	--	--	--	0.010	0.124	0.120	--	--	--	--
632	--	--	--	--	0.012	0.124	0.120	--	--	--	--
634	--	--	--	--	0.010	0.122	0.120	--	--	--	--
636	--	--	--	--	0.010	0.122	0.118	--	--	--	--
638	--	--	--	--	0.010	0.120	0.118	--	--	--	--
640	--	--	--	--	0.007	0.120	0.116	--	--	--	--
642	--	--	--	--	0.010	0.120	0.116	--	--	--	--
644	--	--	--	--	0.010	0.118	0.116	--	--	--	--
646	--	--	--	--	0.010	0.118	0.116	--	--	--	--
648	--	--	--	--	0.010	0.116	0.114	--	--	--	--
650	--	--	--	--	0.007	0.116	0.114	--	--	--	--
652	--	--	--	--	0.010	0.116	0.114	--	--	--	--
654	--	--	--	--	0.010	0.116	0.112	--	--	--	--

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2007 SLUG TEST DATA TABLES: PZU-3, MC-2D, MC-10D, MC-14D, MC-15D, AND MC-17D
PSC Washougal Facility
Washougal, Washington

Time Elapsed (seconds)	PZU - 3	MC-2D		MC-10D		MC-14D		MC-15D		MC-17D	
	Rising Head Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)
656	--	--	--	--	0.007	0.115	0.112	--	--	--	--
658	--	--	--	--	0.007	0.115	0.110	--	--	--	--
660	--	--	--	--	0.007	0.113	0.110	--	--	--	--
662	--	--	--	--	0.007	0.113	0.110	--	--	--	--
664	--	--	--	--	0.010	0.113	0.109	--	--	--	--
666	--	--	--	--	0.007	0.111	0.109	--	--	--	--
668	--	--	--	--	0.005	0.111	0.109	--	--	--	--
670	--	--	--	--	0.010	0.109	0.109	--	--	--	--
672	--	--	--	--	0	0.109	0.120	--	--	--	--
674	--	--	--	--	--	0.109	0.120	--	--	--	--
676	--	--	--	--	--	0.109	0.116	--	--	--	--
678	--	--	--	--	--	0.109	0.116	--	--	--	--
680	--	--	--	--	--	0.109	0.114	--	--	--	--
682	--	--	--	--	--	0.111	0.114	--	--	--	--
684	--	--	--	--	--	0.109	0.114	--	--	--	--
686	--	--	--	--	--	0.109	0.112	--	--	--	--
688	--	--	--	--	--	0.111	0.112	--	--	--	--
690	--	--	--	--	--	0.111	0.110	--	--	--	--
692	--	--	--	--	--	0.109	0.110	--	--	--	--
694	--	--	--	--	--	0.109	0.109	--	--	--	--
696	--	--	--	--	--	0.111	0.109	--	--	--	--
698	--	--	--	--	--	0.109	0.107	--	--	--	--
700	--	--	--	--	--	0.107	0.107	--	--	--	--
702	--	--	--	--	--	0.107	0.107	--	--	--	--
704	--	--	--	--	--	0.107	0.107	--	--	--	--
706	--	--	--	--	--	0.107	0.089	--	--	--	--
708	--	--	--	--	--	0.107	0.091	--	--	--	--
710	--	--	--	--	--	0.105	0.089	--	--	--	--
712	--	--	--	--	--	0.105	0.089	--	--	--	--
714	--	--	--	--	--	0.105	0.089	--	--	--	--
716	--	--	--	--	--	0.103	0.088	--	--	--	--
718	--	--	--	--	--	0.103	0.088	--	--	--	--
720	--	--	--	--	--	0.103	0.089	--	--	--	--
722	--	--	--	--	--	0.103	0.088	--	--	--	--
724	--	--	--	--	--	0.101	0.088	--	--	--	--
726	--	--	--	--	--	0.101	0.086	--	--	--	--
728	--	--	--	--	--	0.101	0.088	--	--	--	--
730	--	--	--	--	--	0.101	0.084	--	--	--	--
732	--	--	--	--	--	0.099	0.086	--	--	--	--
734	--	--	--	--	--	0.099	0.086	--	--	--	--
736	--	--	--	--	--	0.099	0.084	--	--	--	--

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2007 SLUG TEST DATA TABLES: PZU-3, MC-2D, MC-10D, MC-14D, MC-15D, AND MC-17D
PSC Washougal Facility
Washougal, Washington

Time Elapsed (seconds)	PZU - 3	MC-2D		MC-10D		MC-14D		MC-15D		MC-17D	
	Rising Head Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)
738	--	--	--	--	--	0.099	0.084	--	--	--	--
740	--	--	--	--	--	0.097	0.084	--	--	--	--
742	--	--	--	--	--	0.099	0.084	--	--	--	--
744	--	--	--	--	--	0.097	0.084	--	--	--	--
746	--	--	--	--	--	0.097	0.082	--	--	--	--
748	--	--	--	--	--	0.097	0.082	--	--	--	--
750	--	--	--	--	--	0.095	0.082	--	--	--	--
752	--	--	--	--	--	0.095	0.082	--	--	--	--
754	--	--	--	--	--	0.095	0.080	--	--	--	--
756	--	--	--	--	--	0.095	0.080	--	--	--	--
758	--	--	--	--	--	0.094	0.080	--	--	--	--
760	--	--	--	--	--	0.095	0.080	--	--	--	--
762	--	--	--	--	--	0.094	0.078	--	--	--	--
764	--	--	--	--	--	0.092	0.078	--	--	--	--
766	--	--	--	--	--	0.092	0.078	--	--	--	--
768	--	--	--	--	--	0.090	0.076	--	--	--	--
770	--	--	--	--	--	0.090	0.076	--	--	--	--
772	--	--	--	--	--	0.088	0.076	--	--	--	--
774	--	--	--	--	--	0.090	0.074	--	--	--	--
776	--	--	--	--	--	0.088	0.074	--	--	--	--
778	--	--	--	--	--	0.086	0.074	--	--	--	--
780	--	--	--	--	--	0.088	0.072	--	--	--	--
782	--	--	--	--	--	0.086	0.072	--	--	--	--
784	--	--	--	--	--	0.086	0.074	--	--	--	--
786	--	--	--	--	--	0.086	0.072	--	--	--	--
788	--	--	--	--	--	0.086	0.070	--	--	--	--
790	--	--	--	--	--	0.086	0.072	--	--	--	--
792	--	--	--	--	--	0.084	0.070	--	--	--	--
794	--	--	--	--	--	0.082	0.070	--	--	--	--
796	--	--	--	--	--	0.082	0.070	--	--	--	--
798	--	--	--	--	--	0.082	0.068	--	--	--	--
800	--	--	--	--	--	0.082	0.068	--	--	--	--
802	--	--	--	--	--	0.080	0.068	--	--	--	--
804	--	--	--	--	--	0.082	0.068	--	--	--	--
806	--	--	--	--	--	0.080	0.068	--	--	--	--
808	--	--	--	--	--	0.082	0.067	--	--	--	--
810	--	--	--	--	--	0.080	0.067	--	--	--	--
812	--	--	--	--	--	0.078	0.065	--	--	--	--
814	--	--	--	--	--	0.078	0.065	--	--	--	--
816	--	--	--	--	--	0.078	0.065	--	--	--	--
818	--	--	--	--	--	0.078	0.063	--	--	--	--

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2007 SLUG TEST DATA TABLES: PZU-3, MC-2D, MC-10D, MC-14D, MC-15D, AND MC-17D
PSC Washougal Facility
Washougal, Washington

Time Elapsed (seconds)	PZU - 3	MC-2D		MC-10D		MC-14D		MC-15D		MC-17D	
	Rising Head Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)
820	--	--	--	--	--	0.078	0.065	--	--	--	--
822	--	--	--	--	--	0.078	0.065	--	--	--	--
824	--	--	--	--	--	0.076	0.065	--	--	--	--
826	--	--	--	--	--	0.076	0.065	--	--	--	--
828	--	--	--	--	--	0.074	0.063	--	--	--	--
830	--	--	--	--	--	0.076	0.063	--	--	--	--
832	--	--	--	--	--	0.074	0.063	--	--	--	--
834	--	--	--	--	--	0.074	0.061	--	--	--	--
836	--	--	--	--	--	0.074	0.061	--	--	--	--
838	--	--	--	--	--	0.074	0.059	--	--	--	--
840	--	--	--	--	--	0.073	0.059	--	--	--	--
842	--	--	--	--	--	0.073	0.059	--	--	--	--
844	--	--	--	--	--	0.073	0.059	--	--	--	--
846	--	--	--	--	--	0.073	0.059	--	--	--	--
848	--	--	--	--	--	0.073	0.059	--	--	--	--
850	--	--	--	--	--	0.071	0.055	--	--	--	--
852	--	--	--	--	--	0.073	0.059	--	--	--	--
854	--	--	--	--	--	0.073	0.055	--	--	--	--
856	--	--	--	--	--	0.071	0.057	--	--	--	--
858	--	--	--	--	--	0.071	0.055	--	--	--	--
860	--	--	--	--	--	0.071	0.057	--	--	--	--
862	--	--	--	--	--	0.071	0.055	--	--	--	--
864	--	--	--	--	--	0.068	0.055	--	--	--	--
866	--	--	--	--	--	0.071	0.055	--	--	--	--
868	--	--	--	--	--	0.069	0.055	--	--	--	--
870	--	--	--	--	--	0.069	0.053	--	--	--	--
872	--	--	--	--	--	0.069	0.053	--	--	--	--
874	--	--	--	--	--	0.067	0.053	--	--	--	--
876	--	--	--	--	--	0.067	0.055	--	--	--	--
878	--	--	--	--	--	0.067	0.051	--	--	--	--
880	--	--	--	--	--	0.066	0.051	--	--	--	--
882	--	--	--	--	--	0.067	0.051	--	--	--	--
884	--	--	--	--	--	0.065	0.049	--	--	--	--
886	--	--	--	--	--	0.067	0.051	--	--	--	--
888	--	--	--	--	--	0.065	0.051	--	--	--	--
890	--	--	--	--	--	0.063	0.051	--	--	--	--
892	--	--	--	--	--	0.065	0.051	--	--	--	--
894	--	--	--	--	--	0.065	0.049	--	--	--	--
896	--	--	--	--	--	0.065	0.049	--	--	--	--
898	--	--	--	--	--	0.063	0.047	--	--	--	--
900	--	--	--	--	--	0.063	0.049	--	--	--	--

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2007 SLUG TEST DATA TABLES: PZU-3, MC-2D, MC-10D, MC-14D, MC-15D, AND MC-17D
PSC Washougal Facility
Washougal, Washington

Time Elapsed (seconds)	PZU - 3	MC-2D		MC-10D		MC-14D		MC-15D		MC-17D	
	Rising Head Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)
902	--	--	--	--	--	0.063	0.047	--	--	--	--
904	--	--	--	--	--	0.063	0.047	--	--	--	--
906	--	--	--	--	--	0.063	0.047	--	--	--	--
908	--	--	--	--	--	0.061	0.047	--	--	--	--
910	--	--	--	--	--	0.063	0.047	--	--	--	--
912	--	--	--	--	--	0.061	0.046	--	--	--	--
914	--	--	--	--	--	0.063	0.046	--	--	--	--
916	--	--	--	--	--	0.063	0.046	--	--	--	--
918	--	--	--	--	--	0.061	0.046	--	--	--	--
920	--	--	--	--	--	0.059	0.046	--	--	--	--
922	--	--	--	--	--	0.059	0.046	--	--	--	--
924	--	--	--	--	--	0.059	0.044	--	--	--	--
926	--	--	--	--	--	0.059	0.044	--	--	--	--
928	--	--	--	--	--	0.059	0.044	--	--	--	--
930	--	--	--	--	--	0.057	0.044	--	--	--	--
932	--	--	--	--	--	0.059	0.044	--	--	--	--
934	--	--	--	--	--	0.059	0.044	--	--	--	--
936	--	--	--	--	--	0.057	0.044	--	--	--	--
938	--	--	--	--	--	0.057	0.042	--	--	--	--
940	--	--	--	--	--	0.057	0.042	--	--	--	--
942	--	--	--	--	--	0.055	0.042	--	--	--	--
944	--	--	--	--	--	0.057	0.040	--	--	--	--
946	--	--	--	--	--	0.055	0.042	--	--	--	--
948	--	--	--	--	--	0.055	0.042	--	--	--	--
950	--	--	--	--	--	0.055	0.040	--	--	--	--
952	--	--	--	--	--	0.055	0.040	--	--	--	--
954	--	--	--	--	--	0.053	0.040	--	--	--	--
956	--	--	--	--	--	0.053	0.040	--	--	--	--
958	--	--	--	--	--	0.053	0.040	--	--	--	--
960	--	--	--	--	--	0.055	0.038	--	--	--	--
962	--	--	--	--	--	0.055	0.040	--	--	--	--
964	--	--	--	--	--	0.055	0.036	--	--	--	--
966	--	--	--	--	--	0.053	0.036	--	--	--	--
968	--	--	--	--	--	0.053	0.036	--	--	--	--
970	--	--	--	--	--	0.053	0.036	--	--	--	--
972	--	--	--	--	--	0.052	0.036	--	--	--	--
974	--	--	--	--	--	0.052	0.036	--	--	--	--
976	--	--	--	--	--	0.052	0.036	--	--	--	--
978	--	--	--	--	--	0.052	0.036	--	--	--	--
980	--	--	--	--	--	0.052	0.034	--	--	--	--
982	--	--	--	--	--	0.053	0.034	--	--	--	--

TABLE L-1

2007 SLUG TEST DATA TABLES: PZU-3, MC-2D, MC-10D, MC-14D, MC-15D, AND MC-17D
PSC Washougal Facility
Washougal, Washington

Time Elapsed (seconds)	PZU - 3	MC-2D		MC-10D		MC-14D		MC-15D		MC-17D	
	Rising Head Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)
984	--	--	--	--	--	0.049	0.034	--	--	--	--
986	--	--	--	--	--	0.052	0.034	--	--	--	--
988	--	--	--	--	--	0.050	0.034	--	--	--	--
990	--	--	--	--	--	0.050	0.034	--	--	--	--
992	--	--	--	--	--	0.050	0.032	--	--	--	--
994	--	--	--	--	--	0.048	0.034	--	--	--	--
996	--	--	--	--	--	0.050	0.032	--	--	--	--
998	--	--	--	--	--	0.048	0.032	--	--	--	--
1000	--	--	--	--	--	0.048	0.032	--	--	--	--
1002	--	--	--	--	--	0.048	0.032	--	--	--	--
1004	--	--	--	--	--	0.047	0.032	--	--	--	--
1006	--	--	--	--	--	0.048	0.030	--	--	--	--
1008	--	--	--	--	--	0.048	0.030	--	--	--	--
1010	--	--	--	--	--	0.048	0.030	--	--	--	--
1012	--	--	--	--	--	0.050	0.030	--	--	--	--
1014	--	--	--	--	--	0.048	0.030	--	--	--	--
1016	--	--	--	--	--	0.046	0.030	--	--	--	--
1018	--	--	--	--	--	0.046	0.030	--	--	--	--
1020	--	--	--	--	--	0.045	0.028	--	--	--	--
1022	--	--	--	--	--	0.045	0.028	--	--	--	--
1024	--	--	--	--	--	0.046	0.030	--	--	--	--
1026	--	--	--	--	--	0.045	0.028	--	--	--	--
1028	--	--	--	--	--	0.044	0.028	--	--	--	--
1030	--	--	--	--	--	0.044	0.028	--	--	--	--
1032	--	--	--	--	--	0.044	0.028	--	--	--	--
1034	--	--	--	--	--	0.044	0.026	--	--	--	--
1036	--	--	--	--	--	0.044	0.027	--	--	--	--
1038	--	--	--	--	--	0.042	0.026	--	--	--	--
1040	--	--	--	--	--	0.042	0.026	--	--	--	--
1042	--	--	--	--	--	0.042	0.026	--	--	--	--
1044	--	--	--	--	--	0.042	0.026	--	--	--	--
1046	--	--	--	--	--	0.042	0.026	--	--	--	--
1048	--	--	--	--	--	0.042	0.025	--	--	--	--
1050	--	--	--	--	--	0.042	0.025	--	--	--	--
1052	--	--	--	--	--	0.042	0.025	--	--	--	--
1054	--	--	--	--	--	0.042	0.026	--	--	--	--
1056	--	--	--	--	--	0.040	0.025	--	--	--	--
1058	--	--	--	--	--	0.040	0.025	--	--	--	--
1060	--	--	--	--	--	0.040	0.025	--	--	--	--
1062	--	--	--	--	--	0.040	0.025	--	--	--	--
1064	--	--	--	--	--	0.040	0.023	--	--	--	--

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2007 SLUG TEST DATA TABLES: PZU-3, MC-2D, MC-10D, MC-14D, MC-15D, AND MC-17D
PSC Washougal Facility
Washougal, Washington

Time Elapsed (seconds)	PZU - 3	MC-2D		MC-10D		MC-14D		MC-15D		MC-17D	
	Rising Head Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)
1066	--	--	--	--	--	0.040	0.023	--	--	--	--
1068	--	--	--	--	--	0.038	0.023	--	--	--	--
1070	--	--	--	--	--	0.040	0.023	--	--	--	--
1072	--	--	--	--	--	0.038	0.023	--	--	--	--
1074	--	--	--	--	--	0.038	0.023	--	--	--	--
1076	--	--	--	--	--	0.038	0.023	--	--	--	--
1078	--	--	--	--	--	0.038	0.023	--	--	--	--
1080	--	--	--	--	--	0.038	0.021	--	--	--	--
1082	--	--	--	--	--	0.038	0.019	--	--	--	--
1084	--	--	--	--	--	0.038	0.021	--	--	--	--
1086	--	--	--	--	--	0.036	0.021	--	--	--	--
1088	--	--	--	--	--	0.036	0.021	--	--	--	--
1090	--	--	--	--	--	0.036	0.021	--	--	--	--
1092	--	--	--	--	--	0.036	0.019	--	--	--	--
1094	--	--	--	--	--	0.036	0.021	--	--	--	--
1096	--	--	--	--	--	0.036	0.021	--	--	--	--
1098	--	--	--	--	--	0.036	0.019	--	--	--	--
1100	--	--	--	--	--	0.034	0.019	--	--	--	--
1102	--	--	--	--	--	0.034	0.019	--	--	--	--
1104	--	--	--	--	--	0.036	0.019	--	--	--	--
1106	--	--	--	--	--	0.034	0.017	--	--	--	--
1108	--	--	--	--	--	0.034	0.019	--	--	--	--
1110	--	--	--	--	--	0.034	0.017	--	--	--	--
1112	--	--	--	--	--	0.034	0.017	--	--	--	--
1114	--	--	--	--	--	0.034	0.017	--	--	--	--
1116	--	--	--	--	--	0.034	0.017	--	--	--	--
1118	--	--	--	--	--	0.034	0.017	--	--	--	--
1120	--	--	--	--	--	0.034	0.017	--	--	--	--
1122	--	--	--	--	--	0.034	0.015	--	--	--	--
1124	--	--	--	--	--	0.032	0.017	--	--	--	--
1126	--	--	--	--	--	0.034	0.017	--	--	--	--
1128	--	--	--	--	--	0.034	0.015	--	--	--	--
1130	--	--	--	--	--	0.034	0.013	--	--	--	--
1132	--	--	--	--	--	0.034	0.015	--	--	--	--
1134	--	--	--	--	--	0.032	0.013	--	--	--	--
1136	--	--	--	--	--	0.032	0.013	--	--	--	--
1138	--	--	--	--	--	0.032	0.013	--	--	--	--
1140	--	--	--	--	--	0.030	0.013	--	--	--	--
1142	--	--	--	--	--	0.030	0.011	--	--	--	--
1144	--	--	--	--	--	0.030	0.013	--	--	--	--
1146	--	--	--	--	--	0.032	0.011	--	--	--	--

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2007 SLUG TEST DATA TABLES: PZU-3, MC-2D, MC-10D, MC-14D, MC-15D, AND MC-17D
PSC Washougal Facility
Washougal, Washington

Time Elapsed (seconds)	PZU - 3	MC-2D		MC-10D		MC-14D		MC-15D		MC-17D	
	Rising Head Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)
1148	--	--	--	--	--	0.032	0.011	--	--	--	--
1150	--	--	--	--	--	0.030	0.011	--	--	--	--
1152	--	--	--	--	--	0.030	0.011	--	--	--	--
1154	--	--	--	--	--	0.029	0.011	--	--	--	--
1156	--	--	--	--	--	0.028	0.011	--	--	--	--
1158	--	--	--	--	--	0.031	0.011	--	--	--	--
1160	--	--	--	--	--	0.028	0.009	--	--	--	--
1162	--	--	--	--	--	0.028	0.010	--	--	--	--
1164	--	--	--	--	--	0.030	0.009	--	--	--	--
1166	--	--	--	--	--	0.028	0.009	--	--	--	--
1168	--	--	--	--	--	0.028	0.009	--	--	--	--
1170	--	--	--	--	--	0.028	0.009	--	--	--	--
1172	--	--	--	--	--	0.028	0.009	--	--	--	--
1174	--	--	--	--	--	0.028	0.009	--	--	--	--
1176	--	--	--	--	--	0.028	0.009	--	--	--	--
1178	--	--	--	--	--	0.028	0.007	--	--	--	--
1180	--	--	--	--	--	0.028	0.009	--	--	--	--
1182	--	--	--	--	--	0.026	0.007	--	--	--	--
1184	--	--	--	--	--	0.026	0.007	--	--	--	--
1186	--	--	--	--	--	0.026	0.007	--	--	--	--
1188	--	--	--	--	--	0.028	0.007	--	--	--	--
1190	--	--	--	--	--	0.026	0.007	--	--	--	--
1192	--	--	--	--	--	0.028	0.007	--	--	--	--
1194	--	--	--	--	--	0.026	0.008	--	--	--	--
1196	--	--	--	--	--	0.026	0.008	--	--	--	--
1198	--	--	--	--	--	0.024	0.007	--	--	--	--
1200	--	--	--	--	--	0.026	0.007	--	--	--	--
1202	--	--	--	--	--	0.024	0.007	--	--	--	--
1204	--	--	--	--	--	0.024	0.005	--	--	--	--
1206	--	--	--	--	--	0.026	0.005	--	--	--	--
1208	--	--	--	--	--	0.026	0.010	--	--	--	--
1210	--	--	--	--	--	0.026	0.006	--	--	--	--
1212	--	--	--	--	--	0.026	0.006	--	--	--	--
1214	--	--	--	--	--	0.024	0.004	--	--	--	--
1216	--	--	--	--	--	0.026	0.006	--	--	--	--
1218	--	--	--	--	--	0.026	0.006	--	--	--	--
1220	--	--	--	--	--	0.024	0.005	--	--	--	--
1222	--	--	--	--	--	0.023	0.004	--	--	--	--
1224	--	--	--	--	--	0.023	0.004	--	--	--	--
1226	--	--	--	--	--	0.023	0.004	--	--	--	--
1228	--	--	--	--	--	0.025	0.006	--	--	--	--

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2007 SLUG TEST DATA TABLES: PZU-3, MC-2D, MC-10D, MC-14D, MC-15D, AND MC-17D
PSC Washougal Facility
Washougal, Washington

Time Elapsed (seconds)	PZU - 3	MC-2D		MC-10D		MC-14D		MC-15D		MC-17D	
	Rising Head Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)
1230	--	--	--	--	--	0.023	0.004	--	--	--	--
1232	--	--	--	--	--	0.023	0.004	--	--	--	--
1234	--	--	--	--	--	0.025	0.003	--	--	--	--
1236	--	--	--	--	--	0.023	0.005	--	--	--	--
1238	--	--	--	--	--	0.024	0.015	--	--	--	--
1240	--	--	--	--	--	0.023	0.015	--	--	--	--
1242	--	--	--	--	--	0.023	0.015	--	--	--	--
1244	--	--	--	--	--	0.025	0.010	--	--	--	--
1246	--	--	--	--	--	0.023	0.010	--	--	--	--
1248	--	--	--	--	--	0.023	0.010	--	--	--	--
1250	--	--	--	--	--	0.023	0.013	--	--	--	--
1252	--	--	--	--	--	0.023	0.013	--	--	--	--
1254	--	--	--	--	--	0.023	0.011	--	--	--	--
1256	--	--	--	--	--	0.021	0.011	--	--	--	--
1258	--	--	--	--	--	0.021	0.013	--	--	--	--
1260	--	--	--	--	--	0.021	0.011	--	--	--	--
1262	--	--	--	--	--	0.023	0.011	--	--	--	--
1264	--	--	--	--	--	0.021	0.011	--	--	--	--
1266	--	--	--	--	--	0.021	0.011	--	--	--	--
1268	--	--	--	--	--	0.021	0.011	--	--	--	--
1270	--	--	--	--	--	0.021	0.009	--	--	--	--
1272	--	--	--	--	--	0.021	0.009	--	--	--	--
1274	--	--	--	--	--	0.023	0.010	--	--	--	--
1276	--	--	--	--	--	0.021	0.010	--	--	--	--
1278	--	--	--	--	--	0.021	0.008	--	--	--	--
1280	--	--	--	--	--	0.021	0.008	--	--	--	--
1282	--	--	--	--	--	0.019	0.008	--	--	--	--
1284	--	--	--	--	--	0.019	0.008	--	--	--	--
1286	--	--	--	--	--	0.021	0.005	--	--	--	--
1288	--	--	--	--	--	0.019	0.005	--	--	--	--
1290	--	--	--	--	--	0.019	0.005	--	--	--	--
1292	--	--	--	--	--	0.019	0.008	--	--	--	--
1294	--	--	--	--	--	0.019	0.006	--	--	--	--
1296	--	--	--	--	--	0.017	0.006	--	--	--	--
1298	--	--	--	--	--	0.017	0.004	--	--	--	--
1300	--	--	--	--	--	0.017	0.003	--	--	--	--
1302	--	--	--	--	--	0.019	0.004	--	--	--	--
1304	--	--	--	--	--	0.017	0.005	--	--	--	--
1306	--	--	--	--	--	0.017	0.004	--	--	--	--
1308	--	--	--	--	--	0.017	0.004	--	--	--	--
1310	--	--	--	--	--	0.017	0.003	--	--	--	--

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2007 SLUG TEST DATA TABLES: PZU-3, MC-2D, MC-10D, MC-14D, MC-15D, AND MC-17D
PSC Washougal Facility
Washougal, Washington

Time Elapsed (seconds)	PZU - 3	MC-2D		MC-10D		MC-14D		MC-15D		MC-17D	
	Rising Head Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)
1312	--	--	--	--	--	0.017	0.004	--	--	--	--
1314	--	--	--	--	--	0.017	0.002	--	--	--	--
1316	--	--	--	--	--	0.017	0.003	--	--	--	--
1318	--	--	--	--	--	0.017	0.005	--	--	--	--
1320	--	--	--	--	--	0.017	0.003	--	--	--	--
1322	--	--	--	--	--	0.017	0.003	--	--	--	--
1324	--	--	--	--	--	0.017	0.006	--	--	--	--
1326	--	--	--	--	--	0.017	0.004	--	--	--	--
1328	--	--	--	--	--	0.017	0.002	--	--	--	--
1330	--	--	--	--	--	0.017	0.002	--	--	--	--
1332	--	--	--	--	--	0.017	0.004	--	--	--	--
1334	--	--	--	--	--	0.015	0.003	--	--	--	--
1336	--	--	--	--	--	0.015	0.002	--	--	--	--
1338	--	--	--	--	--	0.015	0.003	--	--	--	--
1340	--	--	--	--	--	0.015	0.004	--	--	--	--
1342	--	--	--	--	--	0.015	0.002	--	--	--	--
1344	--	--	--	--	--	0.015	0.002	--	--	--	--
1346	--	--	--	--	--	0.015	0.002	--	--	--	--
1348	--	--	--	--	--	0.015	0.002	--	--	--	--
1350	--	--	--	--	--	0.015	0.002	--	--	--	--
1352	--	--	--	--	--	0.015	0.002	--	--	--	--
1354	--	--	--	--	--	0.015	0	--	--	--	--
1356	--	--	--	--	--	0.015	0.002	--	--	--	--
1358	--	--	--	--	--	0.015	0.002	--	--	--	--
1360	--	--	--	--	--	0.013	0	--	--	--	--
1362	--	--	--	--	--	0.013	0	--	--	--	--
1364	--	--	--	--	--	0.015	0.002	--	--	--	--
1366	--	--	--	--	--	0.015	0	--	--	--	--
1368	--	--	--	--	--	0.015	0	--	--	--	--
1370	--	--	--	--	--	0.013	0	--	--	--	--
1372	--	--	--	--	--	0.013	0	--	--	--	--
1374	--	--	--	--	--	0.013	0	--	--	--	--
1376	--	--	--	--	--	0.013	0	--	--	--	--
1378	--	--	--	--	--	0.013	0	--	--	--	--
1380	--	--	--	--	--	0.011	--	--	--	--	--
1382	--	--	--	--	--	0.013	--	--	--	--	--
1384	--	--	--	--	--	0.013	--	--	--	--	--
1386	--	--	--	--	--	0.013	--	--	--	--	--
1388	--	--	--	--	--	0.011	--	--	--	--	--
1390	--	--	--	--	--	0.011	--	--	--	--	--
1392	--	--	--	--	--	0.011	--	--	--	--	--

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2007 SLUG TEST DATA TABLES: PZU-3, MC-2D, MC-10D, MC-14D, MC-15D, AND MC-17D
PSC Washougal Facility
Washougal, Washington

Time Elapsed (seconds)	PZU - 3	MC-2D		MC-10D		MC-14D		MC-15D		MC-17D	
	Rising Head Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)
1394	--	--	--	--	--	0.011	--	--	--	--	--
1396	--	--	--	--	--	0.011	--	--	--	--	--
1398	--	--	--	--	--	0.011	--	--	--	--	--
1400	--	--	--	--	--	0.011	--	--	--	--	--
1402	--	--	--	--	--	0.011	--	--	--	--	--
1404	--	--	--	--	--	0.011	--	--	--	--	--
1406	--	--	--	--	--	0.013	--	--	--	--	--
1408	--	--	--	--	--	0.011	--	--	--	--	--
1410	--	--	--	--	--	0.011	--	--	--	--	--
1412	--	--	--	--	--	0.011	--	--	--	--	--
1414	--	--	--	--	--	0.011	--	--	--	--	--
1416	--	--	--	--	--	0.011	--	--	--	--	--
1418	--	--	--	--	--	0.009	--	--	--	--	--
1420	--	--	--	--	--	0.009	--	--	--	--	--
1422	--	--	--	--	--	0.009	--	--	--	--	--
1424	--	--	--	--	--	0.009	--	--	--	--	--
1426	--	--	--	--	--	0.009	--	--	--	--	--
1428	--	--	--	--	--	0.009	--	--	--	--	--
1430	--	--	--	--	--	0.011	--	--	--	--	--
1432	--	--	--	--	--	0.009	--	--	--	--	--
1434	--	--	--	--	--	0.009	--	--	--	--	--
1436	--	--	--	--	--	0.009	--	--	--	--	--
1438	--	--	--	--	--	0.009	--	--	--	--	--
1440	--	--	--	--	--	0.010	--	--	--	--	--
1442	--	--	--	--	--	0.009	--	--	--	--	--
1444	--	--	--	--	--	0.009	--	--	--	--	--
1446	--	--	--	--	--	0.009	--	--	--	--	--
1448	--	--	--	--	--	0.009	--	--	--	--	--
1450	--	--	--	--	--	0.008	--	--	--	--	--
1452	--	--	--	--	--	0.009	--	--	--	--	--
1454	--	--	--	--	--	0.009	--	--	--	--	--
1456	--	--	--	--	--	0.007	--	--	--	--	--
1458	--	--	--	--	--	0.007	--	--	--	--	--
1460	--	--	--	--	--	0.009	--	--	--	--	--
1462	--	--	--	--	--	0.009	--	--	--	--	--
1464	--	--	--	--	--	0.009	--	--	--	--	--
1466	--	--	--	--	--	0.007	--	--	--	--	--
1468	--	--	--	--	--	0.007	--	--	--	--	--
1470	--	--	--	--	--	0.007	--	--	--	--	--
1472	--	--	--	--	--	0.007	--	--	--	--	--
1474	--	--	--	--	--	0.007	--	--	--	--	--

TABLE L-1

2007 SLUG TEST DATA TABLES: PZU-3, MC-2D, MC-10D, MC-14D, MC-15D, AND MC-17D
PSC Washougal Facility
Washougal, Washington

Time Elapsed (seconds)	PZU - 3	MC-2D		MC-10D		MC-14D		MC-15D		MC-17D	
	Rising Head Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)
1476	--	--	--	--	--	0.007	--	--	--	--	--
1478	--	--	--	--	--	0.007	--	--	--	--	--
1480	--	--	--	--	--	0.007	--	--	--	--	--
1482	--	--	--	--	--	0.007	--	--	--	--	--
1484	--	--	--	--	--	0.007	--	--	--	--	--
1486	--	--	--	--	--	0.007	--	--	--	--	--
1488	--	--	--	--	--	0.005	--	--	--	--	--
1490	--	--	--	--	--	0.005	--	--	--	--	--
1492	--	--	--	--	--	0.026	--	--	--	--	--
1494	--	--	--	--	--	0.021	--	--	--	--	--
1496	--	--	--	--	--	0.019	--	--	--	--	--
1498	--	--	--	--	--	0.017	--	--	--	--	--
1500	--	--	--	--	--	0.019	--	--	--	--	--
1502	--	--	--	--	--	0.019	--	--	--	--	--
1504	--	--	--	--	--	0.017	--	--	--	--	--
1506	--	--	--	--	--	0.017	--	--	--	--	--
1508	--	--	--	--	--	0.017	--	--	--	--	--
1510	--	--	--	--	--	0.017	--	--	--	--	--
1512	--	--	--	--	--	0.017	--	--	--	--	--
1514	--	--	--	--	--	0.015	--	--	--	--	--
1516	--	--	--	--	--	0.015	--	--	--	--	--
1518	--	--	--	--	--	0.015	--	--	--	--	--
1520	--	--	--	--	--	0.013	--	--	--	--	--
1522	--	--	--	--	--	0.013	--	--	--	--	--
1524	--	--	--	--	--	0.013	--	--	--	--	--
1526	--	--	--	--	--	0.013	--	--	--	--	--
1528	--	--	--	--	--	0.013	--	--	--	--	--
1530	--	--	--	--	--	0.011	--	--	--	--	--
1532	--	--	--	--	--	0.013	--	--	--	--	--
1534	--	--	--	--	--	0.013	--	--	--	--	--
1536	--	--	--	--	--	0.013	--	--	--	--	--
1538	--	--	--	--	--	0.011	--	--	--	--	--
1540	--	--	--	--	--	0.013	--	--	--	--	--
1542	--	--	--	--	--	0.011	--	--	--	--	--
1544	--	--	--	--	--	0.011	--	--	--	--	--
1546	--	--	--	--	--	0.011	--	--	--	--	--
1548	--	--	--	--	--	0.011	--	--	--	--	--
1550	--	--	--	--	--	0.009	--	--	--	--	--
1552	--	--	--	--	--	0.011	--	--	--	--	--
1554	--	--	--	--	--	0.011	--	--	--	--	--
1556	--	--	--	--	--	0.009	--	--	--	--	--

TABLE L-1

2007 SLUG TEST DATA TABLES: PZU-3, MC-2D, MC-10D, MC-14D, MC-15D, AND MC-17D
PSC Washougal Facility
Washougal, Washington

Time Elapsed (seconds)	PZU - 3	MC-2D		MC-10D		MC-14D		MC-15D		MC-17D	
	Rising Head Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)
1558	--	--	--	--	--	0.009	--	--	--	--	--
1560	--	--	--	--	--	0.009	--	--	--	--	--
1562	--	--	--	--	--	0.009	--	--	--	--	--
1564	--	--	--	--	--	0.009	--	--	--	--	--
1566	--	--	--	--	--	0.009	--	--	--	--	--
1568	--	--	--	--	--	0.008	--	--	--	--	--
1570	--	--	--	--	--	0.009	--	--	--	--	--
1572	--	--	--	--	--	0.007	--	--	--	--	--
1574	--	--	--	--	--	0.007	--	--	--	--	--
1576	--	--	--	--	--	0.007	--	--	--	--	--
1578	--	--	--	--	--	0.009	--	--	--	--	--
1580	--	--	--	--	--	0.007	--	--	--	--	--
1582	--	--	--	--	--	0.007	--	--	--	--	--
1584	--	--	--	--	--	0.007	--	--	--	--	--
1586	--	--	--	--	--	0.007	--	--	--	--	--
1588	--	--	--	--	--	0.007	--	--	--	--	--
1590	--	--	--	--	--	0.007	--	--	--	--	--
1592	--	--	--	--	--	0.005	--	--	--	--	--
1594	--	--	--	--	--	0.005	--	--	--	--	--
1596	--	--	--	--	--	0.005	--	--	--	--	--
1598	--	--	--	--	--	0.005	--	--	--	--	--
1600	--	--	--	--	--	0.005	--	--	--	--	--
1602	--	--	--	--	--	0.005	--	--	--	--	--
1604	--	--	--	--	--	0.005	--	--	--	--	--
1606	--	--	--	--	--	0.005	--	--	--	--	--
1608	--	--	--	--	--	0.007	--	--	--	--	--
1610	--	--	--	--	--	0.005	--	--	--	--	--
1612	--	--	--	--	--	0.005	--	--	--	--	--
1614	--	--	--	--	--	0.005	--	--	--	--	--
1616	--	--	--	--	--	0.005	--	--	--	--	--
1618	--	--	--	--	--	0.007	--	--	--	--	--
1620	--	--	--	--	--	0.005	--	--	--	--	--
1622	--	--	--	--	--	0.005	--	--	--	--	--
1624	--	--	--	--	--	0.005	--	--	--	--	--
1626	--	--	--	--	--	0.003	--	--	--	--	--
1628	--	--	--	--	--	0.005	--	--	--	--	--
1630	--	--	--	--	--	0.005	--	--	--	--	--
1632	--	--	--	--	--	0.005	--	--	--	--	--
1634	--	--	--	--	--	0.003	--	--	--	--	--
1636	--	--	--	--	--	0.003	--	--	--	--	--
1638	--	--	--	--	--	0.003	--	--	--	--	--

TABLE L-1

2007 SLUG TEST DATA TABLES: PZU-3, MC-2D, MC-10D, MC-14D, MC-15D, AND MC-17D
PSC Washougal Facility
Washougal, Washington

Time Elapsed (seconds)	PZU - 3	MC-2D		MC-10D		MC-14D		MC-15D		MC-17D	
	Rising Head Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)
1640	--	--	--	--	--	0.005	--	--	--	--	--
1642	--	--	--	--	--	0.003	--	--	--	--	--
1644	--	--	--	--	--	0.005	--	--	--	--	--
1646	--	--	--	--	--	0.005	--	--	--	--	--
1648	--	--	--	--	--	0.003	--	--	--	--	--
1650	--	--	--	--	--	0.003	--	--	--	--	--
1652	--	--	--	--	--	0.003	--	--	--	--	--
1654	--	--	--	--	--	0.005	--	--	--	--	--
1656	--	--	--	--	--	0.003	--	--	--	--	--
1658	--	--	--	--	--	0.005	--	--	--	--	--
1660	--	--	--	--	--	0.005	--	--	--	--	--
1662	--	--	--	--	--	0.005	--	--	--	--	--
1664	--	--	--	--	--	0.003	--	--	--	--	--
1666	--	--	--	--	--	0.003	--	--	--	--	--
1668	--	--	--	--	--	0.003	--	--	--	--	--
1670	--	--	--	--	--	0.003	--	--	--	--	--
1672	--	--	--	--	--	0.003	--	--	--	--	--
1674	--	--	--	--	--	0.003	--	--	--	--	--
1676	--	--	--	--	--	0.003	--	--	--	--	--
1678	--	--	--	--	--	0.003	--	--	--	--	--
1680	--	--	--	--	--	0.003	--	--	--	--	--
1682	--	--	--	--	--	0.003	--	--	--	--	--
1684	--	--	--	--	--	0.003	--	--	--	--	--
1686	--	--	--	--	--	0.003	--	--	--	--	--
1688	--	--	--	--	--	0.003	--	--	--	--	--
1690	--	--	--	--	--	0.003	--	--	--	--	--
1692	--	--	--	--	--	0.002	--	--	--	--	--
1694	--	--	--	--	--	0.002	--	--	--	--	--
1696	--	--	--	--	--	0.002	--	--	--	--	--
1698	--	--	--	--	--	0.002	--	--	--	--	--
1700	--	--	--	--	--	0.002	--	--	--	--	--
1702	--	--	--	--	--	0.003	--	--	--	--	--
1704	--	--	--	--	--	0.002	--	--	--	--	--
1706	--	--	--	--	--	0.002	--	--	--	--	--
1708	--	--	--	--	--	0.002	--	--	--	--	--
1710	--	--	--	--	--	0.002	--	--	--	--	--
1712	--	--	--	--	--	0.002	--	--	--	--	--
1714	--	--	--	--	--	0.002	--	--	--	--	--
1716	--	--	--	--	--	0	--	--	--	--	--
1718	--	--	--	--	--	0.002	--	--	--	--	--
1720	--	--	--	--	--	0.002	--	--	--	--	--

TABLE L-1

2007 SLUG TEST DATA TABLES: PZU-3, MC-2D, MC-10D, MC-14D, MC-15D, AND MC-17D
PSC Washougal Facility
Washougal, Washington

Time Elapsed (seconds)	PZU - 3	MC-2D		MC-10D		MC-14D		MC-15D		MC-17D	
	Rising Head Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)	Slug Test Displacement (feet of water)
1722	--	--	--	--	--	0	--	--	--	--	--
1724	--	--	--	--	--	0	--	--	--	--	--
1726	--	--	--	--	--	0.002	--	--	--	--	--
1728	--	--	--	--	--	0	--	--	--	--	--
1730	--	--	--	--	--	0.002	--	--	--	--	--
1732	--	--	--	--	--	0	--	--	--	--	--
1734	--	--	--	--	--	0.002	--	--	--	--	--
1736	--	--	--	--	--	0	--	--	--	--	--
1738	--	--	--	--	--	0	--	--	--	--	--
1740	--	--	--	--	--	0	--	--	--	--	--
1742	--	--	--	--	--	0	--	--	--	--	--
1744	--	--	--	--	--	0	--	--	--	--	--
1746	--	--	--	--	--	0	--	--	--	--	--
1748	--	--	--	--	--	0	--	--	--	--	--
1750	--	--	--	--	--	0	--	--	--	--	--

TABLE L-2

2007 SLUG TEST DATA TABLES: MC-20, MC-20D, MC-24, MC-24D, AND MC-25
PSC Washougal Facility
Washougal, Washington

Time Elapsed (seconds)	MC-20		MC-20D		MC-24		MC-24D		MC-25	
	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)
0	0.164	0.179	2.441	3.401	0.222	0.027	2.875	2.068	1.548	1.305
2	0.111	0.088	2.325	3.151	1.246	0.730	2.4	2.073	0.937	0.845
4	0.071	0.063	2.214	2.623	1.093	0.867	2.187	1.944	0.637	0.577
6	0.054	0.052	2.121	2.662	0.950	0.617	2.016	1.823	0.447	0.439
8	0.048	0.046	2.038	1.708	0.849	0.568	1.86	1.712	0.328	0.330
10	0.042	0.040	1.962	2.012	0.771	0.529	1.719	1.608	0.283	0.278
12	0.039	0.038	1.891	1.914	0.708	0.497	1.593	1.511	0.268	0.253
14	0.037	0.034	1.825	1.853	0.655	0.469	1.474	1.422	0.244	0.238
16	0.033	0.033	1.765	1.798	0.607	0.444	1.367	1.335	0.221	0.233
18	0.031	0.031	1.708	1.746	0.567	0.419	1.266	1.266	0.204	0.218
20	0.031	0.029	1.655	1.694	0.529	0.398	1.172	1.191	0.194	0.204
22	0.029	0.027	1.605	1.660	0.497	0.379	1.087	1.122	0.184	0.189
24	0.027	0.027	1.557	1.616	0.466	0.360	1.008	1.055	0.177	0.181
26	0.027	0.025	1.511	1.572	0.439	0.345	0.936	0.991	0.169	0.171
28	0.027	0.023	1.469	1.532	0.415	0.330	0.869	0.929	0.165	0.164
30	0.027	0.023	1.427	1.494	0.392	0.312	0.805	0.869	0.157	0.159
32	0.025	0.023	1.389	1.456	0.371	0.299	0.748	0.817	0.155	0.152
34	0.023	0.023	1.353	1.416	0.352	0.290	0.694	0.768	0.150	0.147
36	0.023	0.023	1.315	1.379	0.335	0.274	0.644	0.723	0.145	0.144
38	0.023	0.021	1.282	1.345	0.318	0.265	0.599	0.684	0.140	0.137
40	0.021	0.023	1.248	1.310	0.303	0.252	0.554	0.642	0.137	0.134
42	0.021	0.021	1.217	1.280	0.289	0.242	0.518	0.607	0.135	0.132
44	0.021	0.021	1.187	1.261	0.276	0.232	0.478	0.572	0.133	0.127
46	0.020	0.021	1.158	1.249	0.263	0.225	0.445	0.540	0.127	0.122
48	0.020	0.023	1.129	1.200	0.253	0.215	0.416	0.510	0.125	0.122
50	0.020	0.019	1.103	1.173	0.242	0.206	0.386	0.483	0.122	0.117
52	0.019	0.019	1.078	1.144	0.232	0.196	0.361	0.458	0.120	0.114
54	0.017	0.019	1.051	1.121	0.223	0.191	0.339	0.433	0.118	0.112
56	0.017	0.015	1.028	1.094	0.213	0.183	0.314	0.409	0.113	0.109
58	0.017	0.017	1.003	1.072	0.205	0.175	0.292	0.389	0.110	0.107
60	0.017	0.017	0.982	1.049	0.197	0.168	0.275	0.369	0.108	0.104
62	0.017	0.017	0.959	1.024	0.192	0.164	0.257	0.352	0.105	0.102
64	0.015	0.017	0.940	1.003	0.184	0.156	0.242	0.334	0.103	0.099
66	0.017	0.017	0.921	0.984	0.179	0.152	0.227	0.317	0.100	0.099
68	0.015	0.015	0.898	0.965	0.173	0.147	0.21	0.302	0.100	0.097
70	0.017	0.017	0.881	0.945	0.167	0.143	0.195	0.287	0.098	0.094

TABLE L-2

2007 SLUG TEST DATA TABLES: MC-20, MC-20D, MC-24, MC-24D, AND MC-25
PSC Washougal Facility
Washougal, Washington

Time Elapsed (seconds)	MC-20		MC-20D		MC-24		MC-24D		MC-25	
	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)
72	0.017	0.015	0.862	0.926	0.162	0.137	0.183	0.275	0.095	0.089
74	0.017	0.015	0.844	0.909	0.156	0.133	0.175	0.260	0.093	0.089
76	0.015	0.015	0.829	0.892	0.150	0.129	0.163	0.250	0.093	0.087
78	0.015	0.015	0.812	0.875	0.146	0.126	0.153	0.240	0.090	0.084
80	0.015	0.017	0.795	0.858	0.140	0.122	0.143	0.230	0.088	0.082
82	0.015	0.015	0.778	0.844	0.137	0.118	0.136	0.220	0.088	0.079
84	0.014	0.015	0.762	0.825	0.133	0.114	0.128	0.211	0.085	0.077
86	0.015	0.015	0.747	0.814	0.129	0.112	0.121	0.201	0.082	0.076
88	0.015	0.015	0.736	0.796	0.125	0.109	0.111	0.193	0.080	0.076
90	0.015	0.014	0.718	0.783	0.123	0.105	0.109	0.188	0.080	0.074
92	0.014	0.015	0.707	0.770	0.120	0.101	0.101	0.181	0.078	0.074
94	0.014	0.014	0.692	0.756	0.116	0.099	0.096	0.173	0.078	0.072
96	0.014	0.014	0.678	0.743	0.112	0.095	0.091	0.168	0.075	0.072
98	0.014	0.014	0.667	0.730	0.108	0.093	0.086	0.163	0.073	0.067
100	0.014	0.014	0.655	0.718	0.106	0.091	0.081	0.156	0.073	0.067
102	0.014	0.013	0.642	0.707	0.102	0.089	0.076	0.151	0.070	0.067
104	0.012	0.014	0.629	0.695	0.101	0.086	0.074	0.146	0.070	0.064
106	0.014	0.014	0.619	0.682	0.099	0.084	0.069	0.141	0.067	0.064
108	0.014	0.013	0.608	0.670	0.095	0.082	0.064	0.136	0.065	0.061
110	0.014	0.011	0.596	0.659	0.093	0.078	0.062	0.131	0.065	0.061
112	0.012	0.011	0.585	0.649	0.091	0.076	0.059	0.129	0.065	0.061
114	0.012	0.012	0.575	0.640	0.089	0.076	0.054	0.124	0.065	0.059
116	0.012	0.011	0.564	0.626	0.087	0.074	0.054	0.121	0.062	0.056
118	0.012	0.014	0.554	0.619	0.083	0.072	0.052	0.119	0.059	0.056
120	0.012	0.012	0.545	0.607	0.083	0.068	0.052	0.114	0.059	0.054
122	0.012	0.012	0.537	0.596	0.080	0.069	0.049	0.111	0.057	0.054
124	0.012	0.011	0.527	0.588	0.080	0.066	0.044	0.109	0.057	0.051
126	0.012	0.012	0.520	0.579	0.076	0.063	0.042	0.107	0.054	0.051
128	0.012	0.012	0.510	0.571	0.074	0.063	0.042	0.102	0.054	0.051
130	0.012	0.010	0.501	0.563	0.072	0.061	0.039	0.102	0.052	0.048
132	0.012	0.010	0.491	0.554	0.070	0.059	0.037	0.099	0.052	0.048
134	0.012	0.010	0.485	0.544	0.068	0.057	0.039	0.097	0.052	0.048
136	0.012	0.009	0.476	0.538	0.066	0.055	0.037	0.094	0.052	0.048
138	0.012	0.009	0.468	0.531	0.064	0.055	0.034	0.092	0.051	0.048
140	0.010	0.010	0.462	0.523	0.064	0.053	0.032	0.089	0.049	0.044
142	0.012	0.009	0.453	0.514	0.064	0.051	0.032	0.089	0.049	0.044

TABLE L-2

2007 SLUG TEST DATA TABLES: MC-20, MC-20D, MC-24, MC-24D, AND MC-25
PSC Washougal Facility
Washougal, Washington

Time Elapsed (seconds)	MC-20		MC-20D		MC-24		MC-24D		MC-25	
	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)
144	0.010	0.010	0.447	0.508	0.061	0.049	0.029	0.084	0.046	0.041
146	0.010	0.009	0.439	0.500	0.059	0.049	0.027	0.082	0.046	0.041
148	0.010	0.010	0.434	0.493	0.059	0.047	0.027	0.082	0.046	0.041
150	0.010	0.009	0.428	0.487	0.057	0.049	0.027	0.082	0.043	0.039
152	0.010	0.009	0.418	0.479	0.055	0.046	0.024	0.079	0.041	0.039
154	0.010	0.010	0.413	0.474	0.055	0.045	0.024	0.077	0.041	0.041
156	0.010	0.007	0.407	0.466	0.053	0.043	0.024	0.077	0.041	0.039
158	0.010	0.009	0.401	0.460	0.051	0.042	0.022	0.072	0.041	0.039
160	0.010	0.009	0.394	0.453	0.051	0.040	0.022	0.072	0.038	0.036
162	0.010	0.009	0.388	0.447	0.049	0.038	0.022	0.069	0.038	0.036
164	0.010	0.007	0.382	0.443	0.051	0.040	0.019	0.069	0.038	0.034
166	0.010	0.008	0.375	0.435	0.047	0.038	0.019	0.069	0.038	0.036
168	0.010	0.007	0.371	0.431	0.045	0.036	0.017	0.069	0.036	0.033
170	0.010	0.007	0.365	0.424	0.045	0.034	0.017	0.067	0.038	0.034
172	0.010	0.007	0.361	0.420	0.043	0.036	0.017	0.067	0.036	0.033
174	0.008	0.009	0.355	0.428	0.043	0.034	0.014	0.064	0.036	0.031
176	0.008	0.007	0.350	0.420	0.043	0.032	0.014	0.064	0.033	0.031
178	0.008	0.008	0.344	0.412	0.041	0.032	0.014	0.062	0.033	0.031
180	0.008	0.008	0.342	0.409	0.041	0.032	0.012	0.062	0.033	0.028
182	0.008	0.007	0.336	0.405	0.040	0.030	0.012	0.062	0.033	0.028
184	0.008	0.010	0.332	0.399	0.040	0.029	0.012	0.062	0.031	0.028
186	0.006	0.008	0.327	0.391	0.038	0.029	0.012	0.059	0.031	0.028
188	0.006	0.008	0.323	0.386	0.038	0.028	0.01	0.059	0.031	0.028
190	0.008	0.008	0.317	0.382	0.036	0.026	0.01	0.057	0.031	0.028
192	0.008	0.008	0.313	0.376	0.036	0.026	0.01	0.055	0.031	0.026
194	0.008	0.010	0.308	0.372	0.034	0.026	0.01	0.055	0.028	0.026
196	0.006	0.008	0.304	0.368	0.034	0.024	0.01	0.055	0.028	0.023
198	0.008	0.008	0.302	0.363	0.032	0.024	0.01	0.055	0.026	0.023
200	0.008	0.007	0.296	0.359	0.032	0.026	0.01	0.055	0.028	0.023
202	0.008	0.008	0.292	0.353	0.032	0.024	0.01	0.052	0.026	0.023
204	0.008	0.008	0.289	0.346	0.032	0.022	0.007	0.052	0.026	0.021
206	0.008	0.008	0.281	0.344	0.030	0.022	0.007	0.052	0.026	0.023
208	0.006	0.008	0.279	0.340	0.030	0.022	0.007	0.050	0.025	0.023
210	0.006	0.008	0.273	0.336	0.028	0.021	0.007	0.052	0.025	0.023
212	0.008	0.008	0.271	0.332	0.030	0.021	0.005	0.050	0.023	0.023
214	0.006	0.007	0.268	0.326	0.028	0.021	0.007	0.050	0.023	0.021

TABLE L-2

2007 SLUG TEST DATA TABLES: MC-20, MC-20D, MC-24, MC-24D, AND MC-25
PSC Washougal Facility
Washougal, Washington

Time Elapsed (seconds)	MC-20		MC-20D		MC-24		MC-24D		MC-25	
	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)
216	0.006	0.006	0.262	0.323	0.026	0.019	0.005	0.047	0.023	0.021
218	0.006	0.007	0.258	0.319	0.028	0.019	0.005	0.047	0.025	0.021
220	0.006	0.010	0.254	0.315	0.026	0.019	0.005	0.047	0.023	0.021
222	0.006	0.007	0.252	0.311	0.026	0.019	0.005	0.047	0.023	0.021
224	0.008	0.008	0.248	0.309	0.024	0.019	0.005	0.045	0.020	0.018
226	0.006	0.007	0.245	0.303	0.024	0.019	0.005	0.047	0.020	0.018
228	0.006	0.007	0.243	0.301	0.024	0.017	0.005	0.045	0.023	0.018
230	0.007	0.007	0.239	0.296	0.024	0.017	0.005	0.045	0.020	0.018
232	0.008	0.007	0.233	0.294	0.024	0.017	0.002	0.045	0.020	0.018
234	0.006	0.007	0.231	0.290	0.024	0.017	0.002	0.045	0.020	0.015
236	0.006	0.006	0.229	0.286	0.022	0.015	0.002	0.045	0.020	0.016
238	0.006	0.006	0.227	0.282	0.022	0.015	0.002	0.045	0.020	0.018
240	0.006	0.006	0.224	0.277	0.022	0.015	0.002	0.045	0.018	0.018
242	0.006	0.006	0.220	0.279	0.020	0.015	0.002	0.042	0.018	0.018
244	0.004	0.006	0.216	0.271	0.020	0.015	0.002	0.043	0.018	0.015
246	0.004	0.006	0.214	0.267	0.019	0.013	0	0.043	0.018	0.015
248	0.004	0.006	0.212	0.267	0.019	0.013	--	0.043	0.018	0.015
250	0.006	0.007	0.208	0.263	0.019	0.013	--	0.043	0.018	0.015
252	0.004	0.007	0.204	0.261	0.019	0.013	--	0.042	0.018	0.015
254	0.004	0.008	0.203	0.257	0.019	0.013	--	0.040	0.015	0.015
256	0.004	0.006	0.199	0.255	0.019	0.011	--	0.040	0.015	0.013
258	0.004	0.007	0.197	0.252	0.019	0.013	--	0.040	0.015	0.013
260	0.006	0.006	0.193	0.250	0.017	0.013	--	0.040	0.015	0.013
262	0.006	0.006	0.191	0.248	0.019	0.011	--	0.037	0.018	0.013
264	0.004	0.006	0.189	0.244	0.017	0.009	--	0.040	0.015	0.013
266	0.004	0.006	0.185	0.242	0.017	0.009	--	0.037	0.015	0.011
268	0.004	0.006	0.185	0.240	0.015	0.011	--	0.040	0.015	0.011
270	0.004	0.004	0.182	0.235	0.015	0.009	--	0.038	0.015	0.011
272	0.004	0.006	0.180	0.237	0.015	0.009	--	0.038	0.015	0.013
274	0.004	0.006	0.178	0.233	0.015	0.009	--	0.037	0.015	0.011
276	0.004	0.006	0.176	0.229	0.015	0.009	--	0.037	0.012	0.011
278	0.004	0.006	0.172	0.227	0.015	0.009	--	0.038	0.015	0.011
280	0.002	0.006	0.170	0.225	0.013	0.009	--	0.038	0.012	0.011
282	0.004	0.006	0.168	0.221	0.013	0.009	--	0.035	0.012	0.011
284	0.004	0.006	0.166	0.219	0.013	0.008	--	0.035	0.012	0.011
286	0.004	0.006	0.162	0.219	0.011	0.008	--	0.035	0.012	0.008

TABLE L-2

2007 SLUG TEST DATA TABLES: MC-20, MC-20D, MC-24, MC-24D, AND MC-25
PSC Washougal Facility
Washougal, Washington

Time Elapsed (seconds)	MC-20		MC-20D		MC-24		MC-24D		MC-25	
	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)
288	0.002	0.006	0.161	0.216	0.011	0.009	--	0.035	0.012	0.008
290	0.002	0.006	0.159	0.214	0.013	0.011	--	0.035	0.012	0.011
292	0.004	0.006	0.157	0.212	0.011	0.007	--	0.035	0.012	0.011
294	0.004	0.004	0.155	0.210	0.011	0.008	--	0.033	0.012	0.008
296	0.004	0.006	0.153	0.206	0.011	0.006	--	0.032	0.012	0.003
298	0.004	0.006	0.151	0.204	0.011	0.008	--	0.032	0.010	0.003
300	0.004	0.006	0.151	0.202	0.009	0.007	--	0.033	0.010	0.003
302	0.004	0.004	0.149	0.200	0.011	0.007	--	0.032	0.010	0.006
304	0.002	0.006	0.145	0.198	0.009	0.008	--	0.030	0.010	0.003
306	0.002	0.004	0.143	0.196	0.009	0.006	--	0.032	0.010	0.006
308	0.004	0.004	0.141	0.193	0.009	0.005	--	0.032	0.010	0.003
310	0.002	0.004	0.141	0.191	0.009	0.006	--	0.030	0.012	0.006
312	0.004	0.006	0.140	0.193	0.009	0.006	--	0.030	0.007	0.003
314	0.002	0.004	0.134	0.189	0.007	0.005	--	0.030	0.010	0.006
316	0.002	0.006	0.132	0.187	0.009	0.006	--	0.030	0.007	0.003
318	0.002	0.004	0.130	0.187	0.009	0.006	--	0.030	0.010	0.003
320	0.002	0.006	0.128	0.183	0.007	0.006	--	0.030	0.007	0.003
322	0.004	0.004	0.126	0.183	0.007	0.006	--	0.027	0.007	0.003
324	0.004	0.006	0.126	0.181	0.007	0.006	--	0.027	0.007	0.003
326	0.004	0.006	0.124	0.179	0.007	0.004	--	0.027	0.007	0.003
328	0.004	0.006	0.122	0.177	0.007	0.004	--	0.027	0.007	0.003
330	0.004	0.006	0.120	0.175	0.007	0.004	--	0.027	0.007	0.003
332	0.004	0.004	0.120	0.174	0.007	0.004	--	0.027	0.010	0.003
334	0.004	0.004	0.119	0.172	0.005	0.004	--	0.027	0.007	0.003
336	0.004	0.004	0.119	0.170	0.007	0.004	--	0.025	0.007	0.003
338	0.002	0.004	0.115	0.168	0.007	0.004	--	0.027	0.007	0.003
340	0.004	0.006	0.115	0.168	0.005	0.004	--	0.027	0.007	0.003
342	0.004	0.006	0.115	0.164	0.005	0.004	--	0.027	0.007	0.003
344	0.004	0.006	0.113	0.162	0.006	0.004	--	0.027	0.007	0.003
346	0.004	0.006	0.111	0.162	0.005	0.004	--	0.025	0.007	0.003
348	0.004	0.004	0.109	0.162	0.006	0.004	--	0.025	0.005	0.003
350	0.002	0.004	0.109	0.158	0.005	0.004	--	0.027	0.007	0.003
352	0.002	0.004	0.107	0.158	0.005	0.004	--	0.025	0.005	0.001
354	0.002	0.004	0.107	0.156	0.005	0.002	--	0.025	0.005	0.003
356	0.004	0.004	0.103	0.154	0.006	0.004	--	0.022	0.007	0.003
358	0.004	0.006	0.103	0.154	0.005	0.002	--	0.025	0.004	0.001

TABLE L-2

2007 SLUG TEST DATA TABLES: MC-20, MC-20D, MC-24, MC-24D, AND MC-25
PSC Washougal Facility
Washougal, Washington

Time Elapsed (seconds)	MC-20		MC-20D		MC-24		MC-24D		MC-25	
	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)
360	0.002	0.006	0.103	0.153	0.005	0.002	--	0.025	0.007	0
362	0.002	0.004	0.101	0.153	0.005	0.002	--	0.027	0.004	0
364	0.004	0.004	0.099	0.151	0.005	0.002	--	0.025	0.004	--
366	0.002	0.004	0.098	0.149	0.005	0.002	--	0.022	0.004	--
368	0.002	0.004	0.098	0.145	0.006	0.002	--	0.025	0.004	--
370	0.004	0.004	0.098	0.147	0.006	0.002	--	0.025	0.004	--
372	0.004	0.006	0.096	0.145	0.004	0.002	--	0.025	0.002	--
374	0.002	0.004	0.094	0.139	0.003	0.002	--	0.025	0.004	--
376	0.004	0.004	0.093	0.143	0.003	0.004	--	0.022	0.004	--
378	0.004	0.004	0.094	0.141	0.003	0.002	--	0.022	0.004	--
380	0.002	0.004	0.090	0.141	0.003	0.002	--	0.022	0.002	--
382	0.002	0.004	0.090	0.137	0.003	0.002	--	0.022	0.002	--
384	0.002	0.004	0.088	0.137	0.004	0.002	--	0.022	0.002	--
386	0.002	0.004	0.088	0.135	0.003	0.002	--	0.020	0.002	--
388	0.002	0.004	0.086	0.133	0.004	0.002	--	0.035	0.002	--
390	0.002	0.004	0.086	0.133	0.003	0.002	--	0.032	0.004	--
392	0.002	0.004	0.084	0.132	0.003	0.002	--	0.040	0.002	--
394	0.002	0.004	0.084	0.132	0.003	0.002	--	0.030	0.004	--
396	0.002	0.004	0.080	0.130	0.005	0.004	--	0.030	0.002	--
398	0.002	0.004	0.080	0.130	0.003	0.002	--	0.027	0.004	--
400	0	0.004	0.080	0.128	0.003	0.002	--	0.027	0.004	--
402	0.002	0.002	0.078	0.126	0.003	0.002	--	0.027	0.002	--
404	0.002	0.004	0.080	0.124	0.004	0	--	0.025	0.002	--
406	0.002	0.004	0.076	0.126	0.002	0.002	--	0.025	0.002	--
408	0.002	0.004	0.076	0.122	0.001	0	--	0.025	0.002	--
410	0.002	0.004	0.076	0.122	0.003	0.002	--	0.022	0.002	--
412	0.002	0.004	0.075	0.118	0.004	0.002	--	0.025	0.002	--
414	0.002	0.004	0.073	0.120	0.004	0.002	--	0.022	0.002	--
416	0.002	0.004	0.073	0.120	0.005	0	--	0.022	0.002	--
418	0.002	0.004	0.071	0.116	0.003	0	--	0.020	0.002	--
420	0	0.004	0.073	0.116	0.001	0.002	--	0.020	0.002	--
422	0	0.004	0.071	0.116	0.004	0.002	--	0.020	0.002	--
424	0.002	0.004	0.071	0.116	0.003	0	--	0.020	0.002	--
426	0.002	0.004	0.069	0.114	0.002	0	--	0.017	0.002	--
428	0	0.006	0.067	0.114	0.004	0	--	0.020	--	--
430	0.002	0.004	0.065	0.114	0.002	0.002	--	0.017	--	--

TABLE L-2

2007 SLUG TEST DATA TABLES: MC-20, MC-20D, MC-24, MC-24D, AND MC-25
PSC Washougal Facility
Washougal, Washington

Time Elapsed (seconds)	MC-20		MC-20D		MC-24		MC-24D		MC-25	
	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)
432	0.002	0.004	0.065	0.112	0.002	0	--	0.017	--	--
434	0	0.004	0.065	0.111	0.002	0	--	0.017	--	--
436	0.002	0.006	0.063	0.111	0.001	0	--	0.017	--	--
438	0.002	0.004	0.063	0.111	0.002	0	--	0.017	--	--
440	0.002	0.004	0.063	0.109	0.004	0	--	0.017	--	--
442	0	0.004	0.061	0.109	0.002	0	--	0.017	--	--
444	0	0.004	0.061	0.107	0.002	0	--	0.017	--	--
446	0	0.004	0.059	0.105	0.002	0	--	0.015	--	--
448	0	0.002	0.059	0.105	0.002	0	--	0.015	--	--
450	0	0.004	0.059	0.105	0.004	0	--	0.017	--	--
452	0	0.004	0.057	0.103	0.002	0.002	--	0.015	--	--
454	0	0.004	0.057	0.105	0.002	0	--	0.015	--	--
456	0.002	0.004	0.057	0.103	0.002	0.002	--	0.017	--	--
458	0.002	0.002	0.055	0.103	0.002	0.004	--	0.015	--	--
460	0	0.004	0.055	0.101	0	0.002	--	0.017	--	--
462	0.002	0.002	0.054	0.101	0	0.002	--	0.015	--	--
464	0	0.004	0.055	0.099	0	0.002	--	0.012	--	--
466	0.002	0.002	0.054	0.099	0.002	0.002	--	0.012	--	--
468	0.002	0.004	0.054	0.097	0.002	0	--	0.015	--	--
470	0.002	0.004	0.052	0.097	0.002	0	--	0.012	--	--
472	0	0.004	0.052	0.097	0.002	0	--	0.012	--	--
474	0.002	0.002	0.052	0.095	0.002	0	--	0.012	--	--
476	0.002	0.004	0.049	0.095	0	0	--	0.015	--	--
478	0.002	0.002	0.048	0.095	0.002	--	--	0.012	--	--
480	0.002	0.004	0.048	0.097	0.001	--	--	0.010	--	--
482	0.002	0.004	0.048	0.099	0.002	--	--	0.010	--	--
484	0.002	0.002	0.046	0.097	0.002	--	--	0.010	--	--
486	0.002	0.002	0.046	0.097	0	--	--	0.010	--	--
488	0.002	0.004	0.046	0.095	0.002	--	--	0.010	--	--
490	0	0.004	0.044	0.095	0.002	--	--	0.010	--	--
492	0.002	0.004	0.042	0.095	0.002	--	--	0.010	--	--
494	0.002	0.002	0.042	0.091	0	--	--	0.010	--	--
496	0	0.004	0.042	0.093	0.004	--	--	0.012	--	--
498	0.002	0.004	0.042	0.089	0.002	--	--	0.010	--	--
500	0	0.004	0.040	0.089	0.002	--	--	0.010	--	--
502	0.002	0.004	0.038	0.091	0	--	--	0.010	--	--

TABLE L-2

2007 SLUG TEST DATA TABLES: MC-20, MC-20D, MC-24, MC-24D, AND MC-25
PSC Washougal Facility
Washougal, Washington

Time Elapsed (seconds)	MC-20		MC-20D		MC-24		MC-24D		MC-25	
	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)
504	0.002	0.002	0.040	0.089	0	--	--	0.010	--	--
506	0.002	0.002	0.040	0.089	0.002	--	--	0.010	--	--
508	0.002	0.002	0.038	0.087	0	--	--	0.010	--	--
510	0.002	0.002	0.040	0.088	0	--	--	0.010	--	--
512	0.002	0.002	0.038	0.088	0	--	--	0.010	--	--
514	0.002	0.004	0.038	0.086	0	--	--	0.010	--	--
516	0.002	0.002	0.038	0.086	0	--	--	0.007	--	--
518	0.002	0.002	0.034	0.084	0	--	--	0.010	--	--
520	0.002	0.004	0.034	0.084	0	--	--	0.010	--	--
522	0.002	0.002	0.034	0.082	0	--	--	0.010	--	--
524	0.002	0.002	0.034	0.084	0	--	--	0.010	--	--
526	0.002	0.002	0.034	0.084	0.002	--	--	0.010	--	--
528	0.002	0.002	0.033	0.082	0.002	--	--	0.007	--	--
530	0.002	0.002	0.033	0.082	0	--	--	0.007	--	--
532	0.004	0.002	0.033	0.080	0	--	--	0.007	--	--
534	0.002	0.002	0.031	0.080	0	--	--	0.010	--	--
536	0.002	0.002	0.031	0.080	0	--	--	0.007	--	--
538	0.002	0.002	0.031	0.080	0.002	--	--	0.005	--	--
540	0.002	0.002	0.029	0.078	0	--	--	0.007	--	--
542	0.002	0.002	0.029	0.076	0	--	--	0.007	--	--
544	0.002	0.002	0.029	0.078	0	--	--	0.007	--	--
546	0.002	0.002	0.029	0.080	0	--	--	0.007	--	--
548	0.002	0.002	0.029	0.076	0.002	--	--	0.010	--	--
550	0.002	0.002	0.027	0.076	0.002	--	--	0.010	--	--
552	0.002	0.002	0.027	0.076	0	--	--	0.005	--	--
554	0.002	0.002	0.027	0.076	0.002	--	--	0.007	--	--
556	0.002	0.002	0.027	0.076	0	--	--	0.005	--	--
558	0.002	0.002	0.027	0.074	0	--	--	0.005	--	--
560	0.002	0.002	0.027	0.074	0	--	--	0.005	--	--
562	0.002	0.002	0.023	0.072	0	--	--	0.002	--	--
564	0.004	0.002	0.023	0.072	0.002	--	--	0.002	--	--
566	0.002	0.004	0.023	0.072	0	--	--	0.002	--	--
568	0.002	0.002	0.023	0.072	0.002	--	--	0.002	--	--
570	0.002	0.002	0.023	0.070	0	--	--	0	--	--
572	0.002	0.002	0.023	0.070	0	--	--	0	--	--
574	0.002	0.002	0.021	0.070	0	--	--	0.002	--	--

TABLE L-2

2007 SLUG TEST DATA TABLES: MC-20, MC-20D, MC-24, MC-24D, AND MC-25
PSC Washougal Facility
Washougal, Washington

Time Elapsed (seconds)	MC-20		MC-20D		MC-24		MC-24D		MC-25	
	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)
576	0.004	0.002	0.021	0.070	0	--	--	0.002	--	--
578	0.002	0.002	0.019	0.068	0	--	--	0.003	--	--
580	0.002	0.002	0.021	0.070	--	--	--	0	--	--
582	0.004	0.002	0.019	0.070	--	--	--	0	--	--
584	0.002	0.002	0.019	0.068	--	--	--	0.003	--	--
586	0.002	0.002	0.021	0.068	--	--	--	0	--	--
588	0.002	0.002	0.019	0.067	--	--	--	0	--	--
590	0.002	0.002	0.019	0.065	--	--	--	0.003	--	--
592	0.002	0.002	0.017	0.066	--	--	--	0	--	--
594	0.002	0.002	0.017	0.065	--	--	--	0.003	--	--
596	0.002	0.002	0.017	0.067	--	--	--	0.005	--	--
598	0.004	0.004	0.017	0.065	--	--	--	0	--	--
600	0.004	0.004	0.017	0.064	--	--	--	0.003	--	--
602	0.004	0.002	0.015	0.064	--	--	--	0.003	--	--
604	0.004	0.002	0.013	0.064	--	--	--	0	--	--
606	0.002	0.002	0.017	0.062	--	--	--	0	--	--
608	0.004	0.002	0.015	0.062	--	--	--	0.003	--	--
610	0.025	0.002	0.015	0.063	--	--	--	0	--	--
612	0.010	0.002	0.015	0.064	--	--	--	0	--	--
614	0.008	0.002	0.015	0.061	--	--	--	0	--	--
616	0.004	0.002	0.017	0.061	--	--	--	0.084	--	--
618	0	0.002	0.013	0.061	--	--	--	0.002	--	--
620	0	0.002	0.017	0.061	--	--	--	--	--	--
622	0	0.002	0.011	0.061	--	--	--	--	--	--
624	0	0.002	0.011	0.061	--	--	--	--	--	--
626	0	0.002	0.013	0.061	--	--	--	--	--	--
628	0	0.002	0.012	0.059	--	--	--	--	--	--
630	0	0.002	0.009	0.059	--	--	--	--	--	--
632	0	0.002	0.010	0.059	--	--	--	--	--	--
634	0	0.002	0.012	0.059	--	--	--	--	--	--
636	0	0.002	0.010	0.059	--	--	--	--	--	--
638	0	0.002	0.009	0.057	--	--	--	--	--	--
640	0	0.002	0.009	0.059	--	--	--	--	--	--
642	0	0.002	0.010	0.059	--	--	--	--	--	--
644	0	0.002	0.010	0.057	--	--	--	--	--	--
646	0	0.002	0.010	0.057	--	--	--	--	--	--

TABLE L-2

2007 SLUG TEST DATA TABLES: MC-20, MC-20D, MC-24, MC-24D, AND MC-25
PSC Washougal Facility
Washougal, Washington

Time Elapsed (seconds)	MC-20		MC-20D		MC-24		MC-24D		MC-25	
	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)
648	0	0.004	0.008	0.057	--	--	--	--	--	--
650	0	0.004	0.007	0.055	--	--	--	--	--	--
652	0	0.002	0.007	0.055	--	--	--	--	--	--
654	0	0.002	0.010	0.055	--	--	--	--	--	--
656	--	0.002	0.007	0.055	--	--	--	--	--	--
658	--	0.002	0.006	0.053	--	--	--	--	--	--
660	--	0.006	0.008	0.053	--	--	--	--	--	--
662	--	0.002	0.005	0.053	--	--	--	--	--	--
664	--	0.002	0.005	0.051	--	--	--	--	--	--
666	--	0.002	0.008	0.053	--	--	--	--	--	--
668	--	0.002	0.006	0.051	--	--	--	--	--	--
670	--	0.002	0.006	0.053	--	--	--	--	--	--
672	--	0.002	0.005	0.051	--	--	--	--	--	--
674	--	0.004	0.005	0.051	--	--	--	--	--	--
676	--	0.002	0.006	0.051	--	--	--	--	--	--
678	--	0	0.006	0.051	--	--	--	--	--	--
680	--	0.002	0.006	0.049	--	--	--	--	--	--
682	--	0.002	0.005	0.051	--	--	--	--	--	--
684	--	0.002	0.004	0.051	--	--	--	--	--	--
686	--	0.002	0.002	0.051	--	--	--	--	--	--
688	--	0.002	0.004	0.051	--	--	--	--	--	--
690	--	0.002	0.004	0.049	--	--	--	--	--	--
692	--	0.002	0.002	0.049	--	--	--	--	--	--
694	--	0.004	0.002	0.049	--	--	--	--	--	--
696	--	0.004	0.004	0.047	--	--	--	--	--	--
698	--	0.004	0	0.049	--	--	--	--	--	--
700	--	0.002	0	0.049	--	--	--	--	--	--
702	--	0.002	0	0.047	--	--	--	--	--	--
704	--	0.002	--	0.049	--	--	--	--	--	--
706	--	0.002	--	0.047	--	--	--	--	--	--
708	--	0	--	0.047	--	--	--	--	--	--
710	--	0.002	--	0.047	--	--	--	--	--	--
712	--	0.002	--	0.047	--	--	--	--	--	--
714	--	0.004	--	0.047	--	--	--	--	--	--
716	--	0.002	--	0.044	--	--	--	--	--	--
718	--	0.002	--	0.046	--	--	--	--	--	--

TABLE L-2

2007 SLUG TEST DATA TABLES: MC-20, MC-20D, MC-24, MC-24D, AND MC-25
PSC Washougal Facility
Washougal, Washington

Time Elapsed (seconds)	MC-20		MC-20D		MC-24		MC-24D		MC-25	
	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)
720	--	0.002	--	0.046	--	--	--	--	--	--
722	--	0.002	--	0.047	--	--	--	--	--	--
724	--	0.002	--	0.047	--	--	--	--	--	--
726	--	0.004	--	0.046	--	--	--	--	--	--
728	--	0.002	--	0.046	--	--	--	--	--	--
730	--	0.002	--	0.036	--	--	--	--	--	--
732	--	0.002	--	0.049	--	--	--	--	--	--
734	--	0.002	--	0.049	--	--	--	--	--	--
736	--	0.002	--	0.047	--	--	--	--	--	--
738	--	0.002	--	0.047	--	--	--	--	--	--
740	--	0.002	--	0.047	--	--	--	--	--	--
742	--	0.002	--	0.047	--	--	--	--	--	--
744	--	0.004	--	0.046	--	--	--	--	--	--
746	--	0.002	--	0.046	--	--	--	--	--	--
748	--	0.002	--	0.046	--	--	--	--	--	--
750	--	0.002	--	0.046	--	--	--	--	--	--
752	--	0.002	--	0.046	--	--	--	--	--	--
754	--	0.002	--	0.044	--	--	--	--	--	--
756	--	0.002	--	0.044	--	--	--	--	--	--
758	--	0.004	--	0.044	--	--	--	--	--	--
760	--	0.002	--	0.046	--	--	--	--	--	--
762	--	0.002	--	0.044	--	--	--	--	--	--
764	--	0.002	--	0.044	--	--	--	--	--	--
766	--	0.004	--	0.044	--	--	--	--	--	--
768	--	0.002	--	0.042	--	--	--	--	--	--
770	--	0.002	--	0.044	--	--	--	--	--	--
772	--	0.002	--	0.044	--	--	--	--	--	--
774	--	0.002	--	0.042	--	--	--	--	--	--
776	--	0.002	--	0.046	--	--	--	--	--	--
778	--	0.004	--	0.055	--	--	--	--	--	--
780	--	0.002	--	0.047	--	--	--	--	--	--
782	--	0.004	--	0.047	--	--	--	--	--	--
784	--	0.004	--	0.046	--	--	--	--	--	--
786	--	0.004	--	0.046	--	--	--	--	--	--
788	--	0	--	0.046	--	--	--	--	--	--
790	--	--	--	0.044	--	--	--	--	--	--

TABLE L-2

2007 SLUG TEST DATA TABLES: MC-20, MC-20D, MC-24, MC-24D, AND MC-25
PSC Washougal Facility
Washougal, Washington

Time Elapsed (seconds)	MC-20		MC-20D		MC-24		MC-24D		MC-25	
	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)
792	--	--	--	0.047	--	--	--	--	--	--
794	--	--	--	0.051	--	--	--	--	--	--
796	--	--	--	0.051	--	--	--	--	--	--
798	--	--	--	0.051	--	--	--	--	--	--
800	--	--	--	0.049	--	--	--	--	--	--
802	--	--	--	0.049	--	--	--	--	--	--
804	--	--	--	0.049	--	--	--	--	--	--
806	--	--	--	0.049	--	--	--	--	--	--
808	--	--	--	0.047	--	--	--	--	--	--
810	--	--	--	0.047	--	--	--	--	--	--
812	--	--	--	0.047	--	--	--	--	--	--
814	--	--	--	0.046	--	--	--	--	--	--
816	--	--	--	0.044	--	--	--	--	--	--
818	--	--	--	0.046	--	--	--	--	--	--
820	--	--	--	0.046	--	--	--	--	--	--
822	--	--	--	0.046	--	--	--	--	--	--
824	--	--	--	0.046	--	--	--	--	--	--
826	--	--	--	0.046	--	--	--	--	--	--
828	--	--	--	0.046	--	--	--	--	--	--
830	--	--	--	0.044	--	--	--	--	--	--
832	--	--	--	0.044	--	--	--	--	--	--
834	--	--	--	0.044	--	--	--	--	--	--
836	--	--	--	0.044	--	--	--	--	--	--
838	--	--	--	0.028	--	--	--	--	--	--
840	--	--	--	0.028	--	--	--	--	--	--
842	--	--	--	0.028	--	--	--	--	--	--
844	--	--	--	0.028	--	--	--	--	--	--
846	--	--	--	0.030	--	--	--	--	--	--

TABLE L-3

2007 SLUG TEST DATA TABLES: MC-25D, MC-118D, AND MC-122
PSC Washougal Facility
Washougal, Washington

Time Elapsed (seconds)	MC-25D		MC-118D		MC-122		MC-122	
	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)
0	2.476	3.769	3.441	4.183	2.454	2.424	1.799	1.632
2	2.270	2.501	-0.124	3.477	2.362	2.348	1.631	1.437
4	2.110	2.119	2.683	3.376	2.291	2.281	1.466	1.267
6	1.973	1.993	2.629	2.908	2.234	2.221	1.317	1.117
8	1.853	1.888	2.579	2.470	2.182	2.167	1.178	0.980
10	1.742	1.790	2.535	2.484	2.135	2.110	1.052	0.858
12	1.641	1.696	2.495	2.455	2.087	2.055	0.938	0.747
14	1.547	1.618	2.460	3.034	2.025	2.001	0.835	0.654
16	1.463	1.538	2.426	2.482	1.976	1.949	0.740	0.574
18	1.385	1.469	2.391	2.358	1.929	1.902	0.654	0.507
20	1.311	1.408	2.361	2.326	1.880	1.857	0.582	0.457
22	1.244	1.343	2.329	2.296	1.835	1.813	0.522	0.416
24	1.181	1.286	2.295	2.267	1.790	1.773	0.475	0.385
26	1.121	1.227	2.265	2.242	1.748	1.731	0.437	0.362
28	1.064	1.174	2.235	2.215	1.706	1.682	0.407	0.342
30	1.015	1.120	2.208	2.185	1.667	1.640	0.380	0.296
32	0.965	1.059	2.178	2.160	1.632	1.597	0.359	0.303
34	0.919	1.016	2.151	2.133	1.597	1.560	0.340	0.290
36	0.875	0.972	2.123	2.106	1.565	1.528	0.326	0.288
38	0.837	0.934	2.096	2.081	1.536	1.501	0.313	0.281
40	0.797	0.897	2.069	2.056	1.506	1.469	0.299	0.271
42	0.763	0.860	2.044	2.034	1.476	1.437	0.279	0.261
44	0.728	0.827	2.019	2.009	1.449	1.404	0.259	0.254
46	0.700	0.797	1.992	1.986	1.421	1.380	0.240	0.244
48	0.669	0.762	1.967	1.967	1.394	1.352	0.242	0.233
50	0.638	0.734	1.945	1.942	1.369	1.328	0.250	0.240
52	0.614	0.841	1.920	1.924	1.345	1.303	0.227	0.233
54	0.589	0.646	1.898	1.900	1.323	1.283	0.208	0.229
56	0.564	0.656	1.876	1.875	1.300	1.263	0.212	0.223
58	0.543	0.633	1.853	1.855	1.278	1.241	0.208	0.221
60	0.520	0.610	1.831	1.833	1.255	1.219	0.204	0.215

TABLE L-3

2007 SLUG TEST DATA TABLES: MC-25D, MC-118D, AND MC-122
PSC Washougal Facility
Washougal, Washington

Time Elapsed (seconds)	MC-25D		MC-118D		MC-122		MC-122	
	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)
62	0.499	0.589	1.809	1.813	1.239	1.199	0.218	0.213
64	0.482	0.566	1.787	1.791	1.216	1.177	0.212	0.210
66	0.463	0.549	1.764	1.771	1.199	1.159	0.216	0.208
68	0.446	0.528	1.745	1.751	1.179	1.142	0.227	0.202
70	0.429	0.509	1.725	1.734	1.159	1.125	0.221	0.200
72	0.415	0.494	1.705	1.714	1.142	1.112	0.212	0.198
74	0.398	0.478	1.683	1.694	1.124	1.097	0.208	0.196
76	0.387	0.462	1.663	1.674	1.107	1.083	0.204	0.194
78	0.371	0.448	1.643	1.655	1.090	1.070	0.200	0.191
80	0.358	0.433	1.623	1.640	1.072	1.055	0.197	0.189
82	0.346	0.433	1.603	1.622	1.057	1.043	0.206	0.187
84	0.335	0.418	1.584	1.600	1.040	1.031	0.197	0.185
86	0.323	0.406	1.566	1.585	1.023	1.018	0.191	0.183
88	0.312	0.393	1.549	1.578	1.008	1.006	0.195	0.181
90	0.302	0.380	1.531	1.563	0.993	0.996	0.191	0.179
92	0.292	0.368	1.514	1.548	0.978	0.984	0.187	0.177
94	0.283	0.357	1.497	1.528	0.963	0.971	0.185	0.175
96	0.275	0.345	1.479	1.516	0.946	0.961	0.184	0.173
98	0.266	0.336	1.462	1.491	0.932	0.949	0.182	0.173
100	0.258	0.326	1.445	1.474	0.919	0.939	0.178	0.171
102	0.250	0.315	1.427	1.457	0.904	0.929	0.174	0.169
104	0.243	0.307	1.412	1.439	0.889	0.917	0.172	0.167
106	0.235	0.298	1.395	1.424	0.874	0.907	0.172	0.166
108	0.228	0.288	1.380	1.407	0.862	0.897	0.170	0.166
110	0.222	0.281	1.365	1.392	0.849	0.887	0.168	0.164
112	0.216	0.273	1.350	1.374	0.835	0.877	0.166	0.162
114	0.210	0.265	1.336	1.360	0.822	0.867	0.163	0.162
116	0.203	0.258	1.318	1.340	0.810	0.860	0.159	0.162
118	0.197	0.250	1.303	1.327	0.795	0.850	0.161	0.160
120	0.191	0.244	1.291	1.315	0.785	0.840	0.161	0.158

TABLE L-3

2007 SLUG TEST DATA TABLES: MC-25D, MC-118D, AND MC-122
PSC Washougal Facility
Washougal, Washington

Time Elapsed (seconds)	MC-25D		MC-118D		MC-122		MC-122	
	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)
122	0.187	0.239	1.276	1.300	0.771	0.833	0.155	0.156
124	0.180	0.233	1.259	1.285	0.763	0.823	0.164	0.156
126	0.176	0.226	1.246	1.270	0.751	0.815	0.161	0.154
128	0.172	0.221	1.232	1.258	0.741	0.808	0.159	0.154
130	0.168	0.214	1.219	1.246	0.729	0.800	0.157	0.152
132	0.162	0.210	1.204	1.231	0.718	0.793	0.155	0.152
134	0.158	0.204	1.192	1.221	0.708	0.783	0.153	0.150
136	0.153	0.201	1.177	1.206	0.701	0.778	0.151	0.148
138	0.149	0.195	1.164	1.194	0.691	0.771	0.153	0.148
140	0.147	0.189	1.152	1.181	0.681	0.763	0.151	0.146
142	0.141	0.187	1.140	1.169	0.674	0.756	0.149	0.146
144	0.137	0.181	1.125	1.156	0.664	0.751	0.147	0.146
146	0.134	0.178	1.115	1.144	0.656	0.743	0.149	0.144
148	0.130	0.174	1.102	1.132	0.646	0.738	0.145	0.142
150	0.126	0.170	1.090	1.119	0.639	0.731	0.145	0.142
152	0.124	0.164	1.078	1.107	0.634	0.724	0.144	0.142
154	0.118	0.176	1.065	1.097	0.624	0.719	0.144	0.140
156	0.114	0.172	1.053	1.085	0.617	0.711	0.141	0.138
158	0.110	0.168	1.043	1.072	0.612	0.706	0.139	0.139
160	0.109	0.164	1.031	1.062	0.604	0.701	0.139	0.139
162	0.095	0.161	1.021	1.053	0.597	0.696	0.137	0.139
164	0.088	0.157	1.008	1.038	0.590	0.691	0.137	0.136
166	0.088	0.155	0.998	1.028	0.582	0.686	0.137	0.134
168	0.084	0.151	0.989	1.018	0.577	0.682	0.137	0.134
170	0.082	0.147	0.976	1.008	0.570	0.677	0.136	0.134
172	0.080	0.143	0.966	0.996	0.565	0.672	0.134	0.132
174	0.076	0.142	0.956	0.988	0.557	0.664	0.134	0.132
176	0.074	0.138	0.946	0.978	0.555	0.659	0.132	0.132
178	0.072	0.134	0.934	0.966	0.547	0.654	0.134	0.131
180	0.068	0.132	0.926	0.956	0.543	0.652	0.132	0.131

TABLE L-3

2007 SLUG TEST DATA TABLES: MC-25D, MC-118D, AND MC-122
PSC Washougal Facility
Washougal, Washington

Time Elapsed (seconds)	MC-25D		MC-118D		MC-122		MC-122	
	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)
182	0.067	0.128	0.914	0.949	0.540	0.644	0.130	0.129
184	0.067	0.128	0.904	0.936	0.528	0.639	0.130	0.129
186	0.065	0.124	0.894	0.928	0.513	0.637	0.128	0.127
188	0.063	0.122	0.887	0.919	0.520	0.632	0.130	0.127
190	0.061	0.119	0.877	0.906	0.513	0.627	0.130	0.127
192	0.059	0.117	0.867	0.899	0.508	0.622	0.126	0.127
194	0.059	0.113	0.857	0.889	0.505	0.620	0.126	0.127
196	0.055	0.111	0.847	0.879	0.500	0.615	0.124	0.125
198	0.055	0.109	0.840	0.871	0.495	0.610	0.124	0.123
200	0.053	0.107	0.830	0.861	0.491	0.605	0.122	0.123
202	0.051	0.105	0.822	0.852	0.488	0.602	0.124	0.121
204	0.049	0.103	0.812	0.842	0.483	0.597	0.122	0.121
206	0.047	0.101	0.805	0.834	0.478	0.595	0.122	0.121
208	0.047	0.100	0.793	0.827	0.476	0.587	0.120	0.121
210	0.043	0.098	0.788	0.817	0.471	0.583	0.120	0.119
212	0.043	0.098	0.778	0.809	0.466	0.583	0.118	0.119
214	0.041	0.094	0.770	0.800	0.463	0.578	0.122	0.119
216	0.041	0.092	0.763	0.792	0.458	0.573	0.118	0.117
218	0.040	0.092	0.755	0.785	0.456	0.570	0.118	0.117
220	0.038	0.090	0.748	0.775	0.451	0.565	0.117	0.117
222	0.036	0.088	0.738	0.767	0.448	0.563	0.115	0.115
224	0.036	0.086	0.731	0.760	0.443	0.558	0.115	0.115
226	0.036	0.087	0.723	0.752	0.441	0.555	0.109	0.115
228	0.034	0.085	0.716	0.745	0.436	0.550	0.111	0.115
230	0.032	0.083	0.708	0.738	0.434	0.548	0.117	0.113
232	0.032	0.081	0.701	0.730	0.429	0.545	0.117	0.113
234	0.030	0.081	0.693	0.723	0.429	0.540	0.115	0.113
236	0.030	0.079	0.686	0.715	0.424	0.535	0.113	0.111
238	0.028	0.079	0.679	0.708	0.421	0.533	0.113	0.111
240	0.030	0.077	0.673	0.701	0.416	0.531	0.111	0.110

TABLE L-3

2007 SLUG TEST DATA TABLES: MC-25D, MC-118D, AND MC-122
PSC Washougal Facility
Washougal, Washington

Time Elapsed (seconds)	MC-25D		MC-118D		MC-122		MC-122	
	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)
242	0.028	0.077	0.666	0.693	0.411	0.526	0.111	0.109
244	0.024	0.075	0.658	0.686	0.409	0.526	0.111	0.109
246	0.028	0.075	0.651	0.678	0.406	0.523	0.111	0.109
248	0.026	0.079	0.644	0.671	0.406	0.518	0.109	0.110
250	0.026	0.077	0.636	0.666	0.401	0.516	0.107	0.109
252	0.024	0.075	0.631	0.658	0.399	0.511	0.107	0.107
254	0.022	0.075	0.624	0.651	0.396	0.508	0.109	0.107
256	0.022	0.073	0.616	0.644	0.394	0.506	0.107	0.107
258	0.022	0.073	0.614	0.639	0.391	0.503	0.107	0.105
260	0.019	0.071	0.606	0.631	0.389	0.499	0.107	0.105
262	0.019	0.071	0.599	0.624	0.387	0.493	0.107	0.105
264	0.019	0.067	0.592	0.619	0.384	0.491	0.105	0.104
266	0.015	0.069	0.587	0.614	0.379	0.486	0.105	0.104
268	0.019	0.067	0.582	0.606	0.379	0.483	0.105	0.105
270	0.015	0.066	0.574	0.601	0.374	0.481	0.105	0.104
272	0.017	0.066	0.567	0.597	0.374	0.476	0.103	0.104
274	0.017	0.064	0.562	0.589	0.372	0.474	0.103	0.102
276	0.015	0.062	0.557	0.582	0.367	0.474	0.101	0.102
278	0.012	0.062	0.552	0.577	0.367	0.471	0.103	0.102
280	0.013	0.060	0.547	0.572	0.364	0.469	0.101	0.100
282	0.014	0.060	0.540	0.567	0.362	0.466	0.101	0.100
284	0.012	0.060	0.535	0.559	0.362	0.464	0.101	0.100
286	0.013	0.060	0.530	0.554	0.359	0.461	0.101	0.098
288	0.015	0.058	0.522	0.549	0.357	0.459	0.099	0.098
290	0.013	0.058	0.517	0.542	0.352	0.456	0.099	0.098
292	0.012	0.058	0.512	0.537	0.352	0.454	0.099	0.098
294	0.014	0.056	0.507	0.532	0.347	0.451	0.099	0.098
296	0.013	0.056	0.502	0.542	0.347	0.449	0.099	0.096
298	0.013	0.056	0.498	0.535	0.344	0.446	0.096	0.096
300	0.015	0.054	0.493	0.530	0.342	0.444	0.097	0.096

TABLE L-3

2007 SLUG TEST DATA TABLES: MC-25D, MC-118D, AND MC-122
PSC Washougal Facility
Washougal, Washington

Time Elapsed (seconds)	MC-25D		MC-118D		MC-122		MC-122	
	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)
302	0.013	0.054	0.488	0.525	0.340	0.442	0.097	0.096
304	0.013	0.053	0.483	0.517	0.337	0.439	0.097	0.096
306	0.013	0.054	0.478	0.515	0.337	0.437	0.096	0.094
308	0.013	0.052	0.473	0.510	0.335	0.434	0.096	0.094
310	0.013	0.051	0.468	0.502	0.332	0.431	0.096	0.094
312	0.013	0.051	0.463	0.497	0.330	0.432	0.096	0.094
314	0.013	0.049	0.460	0.490	0.330	0.429	0.094	0.092
316	0.013	0.051	0.455	0.488	0.327	0.427	0.094	0.092
318	0.011	0.049	0.450	0.483	0.325	0.424	0.094	0.092
320	0.013	0.050	0.446	0.475	0.325	0.422	0.094	0.092
322	0.013	0.049	0.441	0.470	0.322	0.420	0.094	0.092
324	0.011	0.049	0.436	0.465	0.320	0.417	0.092	0.090
326	0.011	0.047	0.433	0.463	0.317	0.415	0.092	0.090
328	0.012	0.047	0.428	0.455	0.317	0.412	0.092	0.090
330	0.011	0.047	0.423	0.450	0.315	0.412	0.090	0.090
332	0.011	0.047	0.418	0.448	0.312	0.410	0.090	0.090
334	0.009	0.045	0.416	0.441	0.312	0.407	0.090	0.090
336	0.009	0.045	0.413	0.436	0.310	0.405	0.088	0.088
338	0.009	0.045	0.408	0.433	0.310	0.405	0.086	0.088
340	0.009	0.043	0.403	0.428	0.307	0.400	0.088	0.088
342	0.009	0.043	0.398	0.423	0.305	0.400	0.088	0.088
344	0.009	0.043	0.396	0.421	0.305	0.397	0.086	0.086
346	0.007	0.043	0.391	0.416	0.302	0.395	0.086	0.086
348	0.009	0.043	0.386	0.408	0.300	0.392	0.086	0.086
350	0.007	0.043	0.384	0.406	0.297	0.390	0.086	0.086
352	0.009	0.043	0.381	0.401	0.297	0.390	0.084	0.084
354	0.009	0.041	0.376	0.396	0.295	0.387	0.084	0.084
356	0.009	0.041	0.371	0.393	0.295	0.385	0.084	0.084
358	0.007	0.041	0.369	0.391	0.292	0.382	0.084	0.084
360	0.007	0.039	0.366	0.384	0.292	0.380	0.084	0.084

TABLE L-3

2007 SLUG TEST DATA TABLES: MC-25D, MC-118D, AND MC-122
PSC Washougal Facility
Washougal, Washington

Time Elapsed (seconds)	MC-25D		MC-118D		MC-122		MC-122	
	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)
362	0.007	0.039	0.361	0.379	0.290	0.380	0.084	0.084
364	0.005	0.039	0.359	0.374	0.290	0.377	0.084	0.082
366	0.007	0.039	0.354	0.371	0.288	0.377	0.084	0.083
368	0.007	0.039	0.351	0.366	0.285	0.375	0.083	0.082
370	0.005	0.037	0.346	0.364	0.285	0.375	0.080	0.082
372	0.005	0.033	0.346	0.359	0.285	0.370	0.083	0.082
374	0.005	0.037	0.342	0.356	0.283	0.370	0.083	0.080
376	0.005	0.035	0.339	0.351	0.280	0.368	0.080	0.082
378	0.005	0.035	0.334	0.346	0.280	0.365	0.081	0.080
380	0.003	0.037	0.332	0.346	0.278	0.363	0.081	0.080
382	0.003	0.035	0.329	0.341	0.275	0.363	0.081	0.080
384	0.005	0.033	0.324	0.337	0.275	0.360	0.081	0.080
386	0.003	0.035	0.322	0.334	0.275	0.360	0.079	0.080
388	0.003	0.033	0.317	0.332	0.273	0.358	0.079	0.078
390	0.003	0.033	0.314	0.327	0.273	0.355	0.079	0.078
392	0.001	0.033	0.311	0.324	0.270	0.355	0.077	0.078
394	0.003	0.033	0.309	0.319	0.268	0.350	0.077	0.078
396	0.003	0.033	0.306	0.317	0.268	0.350	0.079	0.078
398	0.002	0.032	0.302	0.314	0.265	0.348	0.077	0.077
400	0.002	0.034	0.302	0.314	0.265	0.348	0.079	0.075
402	0.002	0.032	0.297	0.312	0.263	0.345	0.077	0.071
404	0.002	0.032	0.294	0.312	0.263	0.345	0.075	0.067
406	0.002	0.032	0.292	0.312	0.263	0.343	0.077	0.065
408	0	0.032	0.290	0.309	0.260	0.340	0.075	0.063
410	--	0.032	0.287	0.304	0.260	0.340	0.075	0.065
412	--	0.030	0.282	0.302	0.258	0.338	0.075	0.065
414	--	0.030	0.279	0.299	0.255	0.338	0.075	0.063
416	--	0.030	0.277	0.297	0.255	0.335	0.073	0.063
418	--	0.030	0.275	0.292	0.255	0.333	0.073	0.063
420	--	0.035	0.272	0.289	0.253	0.333	0.073	0.063

TABLE L-3

2007 SLUG TEST DATA TABLES: MC-25D, MC-118D, AND MC-122
PSC Washougal Facility
Washougal, Washington

Time Elapsed (seconds)	MC-25D		MC-118D		MC-122		MC-122	
	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)
422	--	0.030	0.269	0.287	0.253	0.330	0.073	0.061
424	--	0.028	0.267	0.282	0.250	0.331	0.073	0.061
426	--	0.028	0.265	0.280	0.250	0.328	0.071	0.061
428	--	0.028	0.262	0.277	0.250	0.326	0.071	0.063
430	--	0.028	0.260	0.272	0.248	0.326	0.071	0.061
432	--	0.030	0.257	0.270	0.245	0.323	0.071	0.059
434	--	0.028	0.252	0.267	0.245	0.323	0.071	0.059
436	--	0.026	0.252	0.265	0.245	0.321	0.071	0.059
438	--	0.026	0.250	0.262	0.243	0.321	0.070	0.061
440	--	0.028	0.245	0.260	0.240	0.318	0.070	0.061
442	--	0.026	0.245	0.257	0.240	0.318	0.070	0.059
444	--	0.026	0.240	0.255	0.238	0.316	0.068	0.059
446	--	0.028	0.240	0.250	0.238	0.313	0.068	0.059
448	--	0.026	0.238	0.247	0.238	0.313	0.068	0.057
450	--	0.026	0.235	0.247	0.236	0.311	0.068	0.059
452	--	0.026	0.233	0.242	0.236	0.311	0.068	0.057
454	--	0.026	0.230	0.240	0.233	0.311	0.068	0.057
456	--	0.026	0.228	0.238	0.233	0.309	0.068	0.057
458	--	0.026	0.225	0.235	0.233	0.306	0.069	0.055
460	--	0.024	0.222	0.233	0.231	0.306	0.067	0.055
462	--	0.026	0.220	0.230	0.231	0.304	0.067	0.055
464	--	0.024	0.218	0.228	0.228	0.301	0.067	0.055
466	--	0.026	0.215	0.228	0.228	0.301	0.065	0.055
468	--	0.026	0.213	0.223	0.226	0.299	0.065	0.055
470	--	0.026	0.213	0.221	0.226	0.301	0.065	0.053
472	--	0.026	0.210	0.218	0.226	0.299	0.065	0.055
474	--	0.024	0.208	0.215	0.223	0.296	0.066	0.055
476	--	0.026	0.208	0.213	0.223	0.296	0.066	0.053
478	--	0.024	0.205	0.210	0.221	0.294	0.066	0.053
480	--	0.024	0.203	0.208	0.221	0.291	0.064	0.053

TABLE L-3

2007 SLUG TEST DATA TABLES: MC-25D, MC-118D, AND MC-122
PSC Washougal Facility
Washougal, Washington

Time Elapsed (seconds)	MC-25D		MC-118D		MC-122		MC-122	
	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)
482	--	0.024	0.200	0.205	0.218	0.291	0.064	0.053
484	--	0.022	0.195	0.203	0.218	0.289	0.063	0.053
486	--	0.022	0.195	0.203	0.218	0.289	0.063	0.053
488	--	0.024	0.193	0.200	0.218	0.286	0.063	0.051
490	--	0.024	0.193	0.198	0.216	0.286	0.061	0.051
492	--	0.022	0.191	0.193	0.213	0.286	0.063	0.051
494	--	0.022	0.186	0.190	0.213	0.284	0.063	0.051
496	--	0.023	0.188	0.190	0.211	0.281	0.061	0.051
498	--	0.022	0.186	0.188	0.211	0.281	0.062	0.049
500	--	0.023	0.183	0.186	0.211	0.281	0.060	0.049
502	--	0.023	0.181	0.183	0.211	0.279	0.062	0.049
504	--	0.023	0.178	0.183	0.208	0.279	0.062	0.049
506	--	0.023	0.178	0.181	0.206	0.276	0.062	0.049
508	--	0.023	0.176	0.178	0.206	0.276	0.060	0.049
510	--	0.021	0.175	0.176	0.206	0.276	0.061	0.049
512	--	0.023	0.173	0.176	0.206	0.274	0.061	0.049
514	--	0.025	0.171	0.171	0.203	0.274	0.059	0.047
516	--	0.025	0.168	0.171	0.201	0.271	0.059	0.047
518	--	0.023	0.166	0.168	0.201	0.271	0.059	0.049
520	--	0.023	0.163	0.168	0.201	0.269	0.060	0.047
522	--	0.021	0.163	0.166	0.201	0.269	0.058	0.047
524	--	0.023	0.161	0.163	0.200	0.269	0.060	0.045
526	--	0.023	0.158	0.161	0.198	0.266	0.058	0.047
528	--	0.021	0.158	0.158	0.198	0.266	0.060	0.047
530	--	0.023	0.158	0.156	0.196	0.264	0.059	0.045
532	--	0.021	0.156	0.156	0.196	0.264	0.059	0.045
534	--	0.023	0.156	0.153	0.196	0.264	0.059	0.045
536	--	0.023	0.153	0.153	0.196	0.261	0.059	0.045
538	--	0.021	0.151	0.148	0.193	0.259	0.059	0.045
540	--	0.023	0.148	0.148	0.193	0.259	0.059	0.045

TABLE L-3

2007 SLUG TEST DATA TABLES: MC-25D, MC-118D, AND MC-122
PSC Washougal Facility
Washougal, Washington

Time Elapsed (seconds)	MC-25D		MC-118D		MC-122		MC-122	
	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)
542	--	0.021	0.148	0.148	0.191	0.259	0.058	0.045
544	--	0.021	0.146	0.143	0.189	0.257	0.056	0.043
546	--	0.021	0.143	0.143	0.189	0.257	0.056	0.043
548	--	0.021	0.146	0.141	0.189	0.254	0.054	0.043
550	--	0.021	0.143	0.138	0.189	0.254	0.055	0.042
552	--	0.021	0.141	0.138	0.186	0.252	0.055	0.043
554	--	0.021	0.139	0.136	0.186	0.252	0.055	0.043
556	--	0.021	0.139	0.136	0.186	0.252	0.055	0.043
558	--	0.019	0.139	0.134	0.186	0.249	0.055	0.043
560	--	0.019	0.136	0.134	0.184	0.247	0.053	0.041
562	--	0.019	0.134	0.131	0.184	0.247	0.054	0.042
564	--	0.019	0.134	0.129	0.181	0.247	0.056	0.042
566	--	0.019	0.134	0.129	0.181	0.247	0.054	0.041
568	--	0.019	0.131	0.126	0.179	0.244	0.054	0.042
570	--	0.019	0.129	0.124	0.179	0.244	0.054	0.042
572	--	0.019	0.129	0.124	0.179	0.242	0.053	0.040
574	--	0.019	0.126	0.121	0.179	0.242	0.053	0.043
576	--	0.019	0.124	0.121	0.176	0.242	0.053	0.042
578	--	0.019	0.124	0.119	0.176	0.239	0.053	0.040
580	--	0.019	0.124	0.119	0.176	0.239	0.053	0.040
582	--	0.017	0.121	0.119	0.174	0.237	0.054	0.039
584	--	0.019	0.119	0.116	0.176	0.239	0.054	0.039
586	--	0.017	0.119	0.114	0.174	0.237	0.052	0.040
588	--	0.019	0.116	0.111	0.171	0.234	0.052	0.040
590	--	0.017	0.116	0.111	0.171	0.235	0.052	0.039
592	--	0.017	0.116	0.109	0.171	0.232	0.052	0.038
594	--	0.017	0.116	0.109	0.171	0.232	0.050	0.038
596	--	0.017	0.111	0.111	0.171	0.229	0.050	0.038
598	--	0.015	0.114	0.114	0.169	0.232	0.050	0.038
600	--	0.017	0.111	0.114	0.169	0.230	0.050	0.037

TABLE L-3

2007 SLUG TEST DATA TABLES: MC-25D, MC-118D, AND MC-122
PSC Washougal Facility
Washougal, Washington

Time Elapsed (seconds)	MC-25D		MC-118D		MC-122		MC-122	
	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)
602	--	0.017	0.109	0.114	0.166	0.227	0.050	0.038
604	--	--	0.109	0.111	0.166	0.227	0.050	0.036
606	--	--	0.109	0.111	0.169	0.227	0.051	0.036
608	--	--	0.109	0.111	0.164	0.227	0.051	0.036
610	--	--	0.106	0.109	0.166	0.227	0.051	0.036
612	--	--	0.106	0.109	0.163	0.225	0.051	0.036
614	--	--	0.104	0.106	0.163	0.222	0.049	0.036
616	--	--	0.101	0.106	0.163	0.222	0.049	0.036
618	--	--	0.101	0.104	0.164	0.222	0.049	0.034
620	--	--	0.101	0.101	0.161	0.222	0.049	0.036
622	--	--	0.101	0.101	0.161	0.217	0.047	0.036
624	--	--	0.099	0.099	0.161	0.217	0.049	0.034
626	--	--	0.099	0.099	0.161	0.217	0.049	0.034
628	--	--	0.099	0.096	0.159	0.217	0.047	0.034
630	--	--	0.096	0.094	0.159	0.217	0.047	0.032
632	--	--	0.096	0.096	0.159	0.215	0.049	0.034
634	--	--	0.094	0.094	0.156	0.215	0.047	0.034
636	--	--	0.094	0.091	0.158	0.212	0.047	0.032
638	--	--	0.091	0.089	0.156	0.212	0.041	0.034
640	--	--	0.091	0.091	0.154	0.212	0.041	0.032
642	--	--	0.091	0.089	0.154	0.212	0.045	0.032
644	--	--	0.091	0.086	0.153	0.210	0.047	0.032
646	--	--	0.089	0.086	0.153	0.210	0.047	0.032
648	--	--	0.089	0.084	0.151	0.210	0.045	0.032
650	--	--	0.089	0.084	0.154	0.210	0.043	0.032
652	--	--	0.087	0.082	0.151	0.205	0.045	0.032
654	--	--	0.087	0.082	0.149	0.202	0.043	0.032
656	--	--	0.084	0.082	0.149	0.202	0.043	0.032
658	--	--	0.084	0.079	0.149	0.202	0.045	0.032
660	--	--	0.084	0.079	0.148	0.202	0.045	0.030

TABLE L-3

2007 SLUG TEST DATA TABLES: MC-25D, MC-118D, AND MC-122
PSC Washougal Facility
Washougal, Washington

Time Elapsed (seconds)	MC-25D		MC-118D		MC-122		MC-122	
	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)
662	--	--	0.084	0.077	0.146	0.202	0.046	0.030
664	--	--	0.082	0.077	0.146	0.202	0.044	0.030
666	--	--	0.082	0.077	0.146	0.202	0.044	0.029
668	--	--	0.082	0.074	0.146	0.202	0.044	0.029
670	--	--	0.079	0.074	0.144	0.200	0.044	0.030
672	--	--	0.079	0.072	0.144	0.200	0.042	0.030
674	--	--	0.079	0.072	0.144	0.198	0.042	0.030
676	--	--	0.077	0.072	0.144	0.198	0.042	0.030
678	--	--	0.077	0.069	0.141	0.198	0.042	0.030
680	--	--	0.074	0.069	0.141	0.198	0.042	0.029
682	--	--	0.077	0.069	0.139	0.195	0.042	0.029
684	--	--	0.072	0.067	0.139	0.195	0.042	0.029
686	--	--	0.072	0.067	0.141	0.193	0.042	0.029
688	--	--	0.072	0.064	0.111	0.193	0.040	0.029
690	--	--	0.069	0.064	0.126	0.190	0.040	0.029
692	--	--	0.069	0.062	0.124	0.190	0.040	0.029
694	--	--	0.069	0.062	0.124	0.190	0.042	0.029
696	--	--	0.069	0.062	0.124	0.188	0.041	0.027
698	--	--	0.067	0.059	0.139	0.188	0.040	0.027
700	--	--	0.067	0.062	0.141	0.188	0.041	0.027
702	--	--	0.067	0.059	0.139	0.185	0.041	0.027
704	--	--	0.067	0.059	0.139	0.185	0.041	0.027
706	--	--	0.067	0.057	0.136	0.185	0.041	0.027
708	--	--	0.064	0.057	0.134	0.185	0.039	0.025
710	--	--	0.064	0.057	0.134	0.185	0.041	0.025
712	--	--	0.062	0.057	0.134	0.183	0.041	0.025
714	--	--	0.062	0.054	0.134	0.183	0.039	0.025
716	--	--	0.062	0.054	0.134	0.183	0.039	0.025
718	--	--	0.062	0.052	0.131	0.183	0.039	0.025
720	--	--	0.062	0.052	0.129	0.180	0.039	0.023

TABLE L-3

2007 SLUG TEST DATA TABLES: MC-25D, MC-118D, AND MC-122
PSC Washougal Facility
Washougal, Washington

Time Elapsed (seconds)	MC-25D		MC-118D		MC-122		MC-122	
	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)
722	--	--	0.059	0.049	0.129	0.180	0.039	0.023
724	--	--	0.062	0.052	0.129	0.180	0.039	0.023
726	--	--	0.059	0.049	0.129	0.178	0.039	0.022
728	--	--	0.059	0.047	0.129	0.178	0.039	0.023
730	--	--	0.059	0.047	0.129	0.178	0.039	0.022
732	--	--	0.057	0.047	0.126	0.178	0.039	0.022
734	--	--	0.057	0.044	0.126	0.175	0.039	0.023
736	--	--	0.057	0.044	0.124	0.175	0.037	0.023
738	--	--	0.057	0.047	0.124	0.175	0.037	0.022
740	--	--	0.057	0.044	0.124	0.175	0.037	0.022
742	--	--	0.054	0.044	0.121	0.173	0.039	0.022
744	--	--	0.052	0.044	0.121	0.173	0.037	0.024
746	--	--	0.052	0.042	0.121	0.173	0.037	0.022
748	--	--	0.052	0.042	0.121	0.170	0.035	0.020
750	--	--	0.052	0.039	0.121	0.170	0.035	0.020
752	--	--	0.052	0.042	0.119	0.168	0.029	0.020
754	--	--	0.052	0.039	0.119	0.168	0.037	0.022
756	--	--	0.052	0.037	0.119	0.168	0.037	0.020
758	--	--	0.049	0.039	0.116	0.168	0.037	0.020
760	--	--	0.049	0.037	0.119	0.168	0.035	0.018
762	--	--	0.049	0.037	0.119	0.168	0.037	0.020
764	--	--	0.049	0.037	0.116	0.165	0.037	0.020
766	--	--	0.049	0.037	0.116	0.165	0.037	0.020
768	--	--	0.047	0.037	0.114	0.165	0.033	0.019
770	--	--	0.047	0.034	0.116	0.163	0.035	0.021
772	--	--	0.047	0.034	0.116	0.163	0.035	0.019
774	--	--	0.047	0.034	0.114	0.163	0.033	0.019
776	--	--	0.044	0.034	0.114	0.160	0.035	0.019
778	--	--	0.044	0.032	0.114	0.160	0.033	0.021
780	--	--	0.044	0.032	0.114	0.160	0.033	0.019

TABLE L-3

2007 SLUG TEST DATA TABLES: MC-25D, MC-118D, AND MC-122
PSC Washougal Facility
Washougal, Washington

Time Elapsed (seconds)	MC-25D		MC-118D		MC-122		MC-122	
	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)
782	--	--	0.044	0.032	0.111	0.160	0.032	0.019
784	--	--	0.042	0.032	0.111	0.160	0.029	0.019
786	--	--	0.042	0.032	0.111	0.158	0.029	0.017
788	--	--	0.044	0.030	0.111	0.158	0.032	0.019
790	--	--	0.042	0.030	0.109	0.158	0.036	0.017
792	--	--	0.044	0.030	0.111	0.158	0.034	0.017
794	--	--	0.042	0.030	0.109	0.155	0.034	0.017
796	--	--	0.042	0.027	0.109	0.155	0.034	0.017
798	--	--	0.042	0.027	0.109	0.155	0.034	0.017
800	--	--	0.037	0.025	0.109	0.153	0.034	0.017
802	--	--	0.039	0.025	0.109	0.153	0.032	0.017
804	--	--	0.040	0.027	0.106	0.153	0.032	0.016
806	--	--	0.037	0.025	0.106	0.153	0.032	0.017
808	--	--	0.037	0.025	0.106	0.153	0.032	0.016
810	--	--	0.037	0.025	0.106	0.153	0.030	0.016
812	--	--	0.037	0.022	0.106	0.153	0.032	0.016
814	--	--	0.037	0.022	0.106	0.150	0.032	0.017
816	--	--	0.037	0.022	0.104	0.148	0.032	0.016
818	--	--	0.037	0.022	0.104	0.148	0.030	0.016
820	--	--	0.035	0.022	0.104	0.148	0.034	0.016
822	--	--	0.035	0.020	0.104	0.148	0.034	0.016
824	--	--	0.035	0.020	0.104	0.148	0.032	0.016
826	--	--	0.035	0.020	0.101	0.148	0.032	0.016
828	--	--	0.035	0.020	0.101	0.146	0.032	0.014
830	--	--	0.035	0.017	0.101	0.146	0.032	0.014
832	--	--	0.032	0.017	0.101	0.146	0.032	0.016
834	--	--	0.032	0.017	0.101	0.143	0.032	0.014
836	--	--	0.032	0.017	0.101	0.143	0.032	0.016
838	--	--	0.030	0.017	0.099	0.143	0.032	0.014
840	--	--	0.032	0.015	0.099	0.143	0.032	0.014

TABLE L-3

2007 SLUG TEST DATA TABLES: MC-25D, MC-118D, AND MC-122
PSC Washougal Facility
Washougal, Washington

Time Elapsed (seconds)	MC-25D		MC-118D		MC-122		MC-122	
	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)
842	--	--	0.030	0.017	0.099	0.141	0.032	0.014
844	--	--	0.030	0.015	0.099	0.141	0.032	0.012
846	--	--	0.032	0.015	0.099	0.141	0.032	0.014
848	--	--	0.032	0.017	0.099	0.141	0.030	0.012
850	--	--	0.030	0.020	0.097	0.141	0.030	0.014
852	--	--	0.027	0.020	0.097	0.139	0.030	0.012
854	--	--	0.030	0.020	0.097	0.139	0.030	0.012
856	--	--	0.030	0.017	0.094	0.138	0.030	0.012
858	--	--	0.030	0.020	0.094	0.141	0.030	0.012
860	--	--	0.030	0.017	0.094	0.138	0.030	0.012
862	--	--	0.030	0.017	0.094	0.138	0.030	0.011
864	--	--	0.027	0.015	0.094	0.136	0.030	0.012
866	--	--	0.025	0.015	0.092	0.136	0.030	0.012
868	--	--	0.022	0.002	0.092	0.134	0.030	0.011
870	--	--	0.022	0	0.092	0.136	0.030	0.013
872	--	--	0.025	0	0.092	0.133	0.030	0.013
874	--	--	0.025	0	0.092	0.134	0.028	0.011
876	--	--	0.025	0	0.089	0.133	0.030	0.009
878	--	--	0.025	--	0.092	0.133	0.030	0.011
880	--	--	0.025	--	0.089	0.134	0.028	0.011
882	--	--	0.023	--	0.089	0.131	0.030	0.011
884	--	--	0.023	--	0.089	0.131	0.030	0.009
886	--	--	0.022	--	0.089	0.129	0.028	0.011
888	--	--	0.023	--	0.089	0.131	0.028	0.009
890	--	--	0.022	--	0.087	0.131	0.028	0.009
892	--	--	0.022	--	0.089	0.129	0.026	0.011
894	--	--	0.022	--	0.087	0.123	0.028	0.009
896	--	--	0.020	--	0.087	0.126	0.028	0.009
898	--	--	0.023	--	0.087	0.126	0.028	0.009
900	--	--	0.020	--	0.084	0.126	0.028	0.009

TABLE L-3

2007 SLUG TEST DATA TABLES: MC-25D, MC-118D, AND MC-122
PSC Washougal Facility
Washougal, Washington

Time Elapsed (seconds)	MC-25D		MC-118D		MC-122		MC-122	
	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)
902	--	--	0.023	--	0.084	0.126	0.026	0.009
904	--	--	0.022	--	0.084	0.126	0.028	0.009
906	--	--	0.020	--	0.084	0.126	0.026	0.009
908	--	--	0.018	--	0.084	0.124	0.028	0.009
910	--	--	0.023	--	0.084	0.124	0.026	0.009
912	--	--	0.020	--	0.082	0.124	0.026	0.009
914	--	--	0.020	--	0.084	0.124	0.024	0.009
916	--	--	0.020	--	0.082	0.121	0.026	0.009
918	--	--	0.018	--	0.084	0.121	0.026	0.007
920	--	--	0.020	--	0.084	0.121	0.028	0.009
922	--	--	0.018	--	0.082	0.118	0.026	0.009
924	--	--	0.018	--	0.082	0.119	0.026	0.007
926	--	--	0.018	--	0.079	0.121	0.028	0.008
928	--	--	0.018	--	0.079	0.121	0.026	0.008
930	--	--	0.018	--	0.082	0.119	0.026	0.008
932	--	--	0.018	--	0.079	0.119	0.026	0.008
934	--	--	0.018	--	0.079	0.119	0.025	0.008
936	--	--	0.015	--	0.079	0.116	0.024	0.008
938	--	--	0.015	--	0.079	0.116	0.023	0.006
940	--	--	0.015	--	0.079	0.116	0.025	0.008
942	--	--	0.015	--	0.079	0.116	0.023	0.008
944	--	--	0.015	--	0.077	0.114	0.023	0.006
946	--	--	0.015	--	0.077	0.114	0.023	0.006
948	--	--	0.015	--	0.077	0.114	0.023	0.008
950	--	--	0.013	--	0.074	0.114	0.023	0.006
952	--	--	0.015	--	0.074	0.114	0.023	0.006
954	--	--	0.015	--	0.077	0.111	0.023	0.006
956	--	--	0.015	--	0.074	0.111	0.023	0.006
958	--	--	0.015	--	0.074	0.111	0.022	0.006
960	--	--	0.015	--	0.074	0.111	0.023	0.006

TABLE L-3

2007 SLUG TEST DATA TABLES: MC-25D, MC-118D, AND MC-122
PSC Washougal Facility
Washougal, Washington

Time Elapsed (seconds)	MC-25D		MC-118D		MC-122		MC-122	
	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)
962	--	--	0.013	--	0.074	0.111	0.023	0.006
964	--	--	0.013	--	0.072	0.109	0.023	0.004
966	--	--	0.015	--	0.072	0.106	0.023	0.006
968	--	--	0.013	--	0.072	0.106	0.022	0.006
970	--	--	0.013	--	0.072	0.104	0.022	0.006
972	--	--	0.013	--	0.072	0.104	0.022	0.004
974	--	--	0.013	--	0.072	0.104	0.022	0.004
976	--	--	0.013	--	0.072	0.106	0.022	0.006
978	--	--	0.015	--	0.072	0.104	0.022	0.004
980	--	--	0.013	--	0.072	0.104	0.023	0.004
982	--	--	0.013	--	0.069	0.104	0.023	0.004
984	--	--	0.013	--	0.069	0.104	0.022	0.004
986	--	--	0.010	--	0.069	0.101	0.022	0.004
988	--	--	0.013	--	0.069	0.101	0.023	0.004
990	--	--	0.010	--	0.067	0.101	0.022	0.004
992	--	--	0.013	--	0.067	0.101	0.022	0.004
994	--	--	0.013	--	0.067	0.101	0.022	0.004
996	--	--	0.013	--	0.067	0.099	0.020	0.002
998	--	--	0.013	--	0.067	0.101	0.022	0.004
1000	--	--	0.013	--	0.067	0.099	0.020	0.004
1002	--	--	0.013	--	0.064	0.099	0.022	0.004
1004	--	--	0.013	--	0.067	0.099	0.020	0.004
1006	--	--	0.010	--	0.064	0.099	0.022	0.002
1008	--	--	0.010	--	0.064	0.099	0.020	0.004
1010	--	--	0.010	--	0.064	0.099	0.020	0.002
1012	--	--	0.013	--	0.064	0.096	0.020	0.002
1014	--	--	0.010	--	0.064	0.096	0.020	0.002
1016	--	--	0.010	--	0.064	0.096	0.020	0.004
1018	--	--	0.010	--	0.064	0.096	0.020	0.004
1020	--	--	0.008	--	0.064	0.094	0.020	0.002

TABLE L-3

2007 SLUG TEST DATA TABLES: MC-25D, MC-118D, AND MC-122
PSC Washougal Facility
Washougal, Washington

Time Elapsed (seconds)	MC-25D		MC-118D		MC-122		MC-122	
	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)
1022	--	--	0.010	--	0.062	0.094	0.020	0.002
1024	--	--	0.010	--	0.062	0.094	0.019	0.004
1026	--	--	0.010	--	0.064	0.094	0.021	0.002
1028	--	--	0.008	--	0.062	0.094	0.019	0.002
1030	--	--	0.010	--	0.059	0.094	0.019	0.002
1032	--	--	0.010	--	0.062	0.094	0.019	0.002
1034	--	--	0.010	--	0.062	0.091	0.019	0.002
1036	--	--	0.010	--	0.062	0.091	0.019	0.002
1038	--	--	0.010	--	0.062	0.091	0.017	0
1040	--	--	0.008	--	0.059	0.089	0.019	0
1042	--	--	0.008	--	0.059	0.089	0.019	0.002
1044	--	--	0.008	--	0.059	0.091	0.017	0
1046	--	--	0.008	--	0.059	0.089	0.019	0
1048	--	--	0.008	--	0.059	0.089	0.017	0
1050	--	--	0.008	--	0.059	0.089	0.017	0
1052	--	--	0.008	--	0.057	0.087	0.017	0
1054	--	--	0.008	--	0.057	0.087	0.017	0
1056	--	--	0.008	--	0.057	0.087	0.019	--
1058	--	--	0.005	--	0.057	0.084	0.017	--
1060	--	--	0.008	--	0.057	0.087	0.017	--
1062	--	--	0.008	--	0.057	0.084	0.017	--
1064	--	--	0.005	--	0.057	0.084	0.015	--
1066	--	--	0.005	--	0.057	0.087	0.015	--
1068	--	--	0.005	--	0.057	0.084	0.015	--
1070	--	--	0.005	--	0.054	0.084	0.015	--
1072	--	--	0.005	--	0.057	0.084	0.015	--
1074	--	--	0.005	--	0.054	0.084	0.015	--
1076	--	--	0.005	--	0.054	0.084	0.015	--
1078	--	--	0.005	--	0.054	0.084	0.013	--
1080	--	--	0.005	--	0.054	0.084	0.015	--

TABLE L-3

2007 SLUG TEST DATA TABLES: MC-25D, MC-118D, AND MC-122
PSC Washougal Facility
Washougal, Washington

Time Elapsed (seconds)	MC-25D		MC-118D		MC-122		MC-122	
	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)
1082	--	--	0.005	--	0.052	0.082	0.013	--
1084	--	--	0.005	--	0.054	0.082	0.013	--
1086	--	--	0.005	--	0.052	0.082	0.015	--
1088	--	--	0.005	--	0.054	0.079	0.015	--
1090	--	--	0.005	--	0.054	0.082	0.013	--
1092	--	--	0.005	--	0.052	0.082	0.015	--
1094	--	--	0.005	--	0.052	0.079	0.013	--
1096	--	--	0.003	--	0.052	0.079	0.013	--
1098	--	--	0.005	--	0.049	0.079	0.013	--
1100	--	--	0.003	--	0.049	0.077	0.013	--
1102	--	--	0.003	--	0.052	0.077	0.015	--
1104	--	--	0.003	--	0.049	0.077	0.013	--
1106	--	--	0.003	--	0.049	0.077	0.013	--
1108	--	--	0.003	--	0.049	0.077	0.013	--
1110	--	--	0.003	--	0.047	0.079	0.013	--
1112	--	--	0.003	--	0.047	0.077	0.013	--
1114	--	--	0.003	--	0.049	0.077	0.011	--
1116	--	--	0.003	--	0.049	0.077	0.011	--
1118	--	--	0	--	0.049	0.077	0.011	--
1120	--	--	0.003	--	0.047	0.077	0.011	--
1122	--	--	0	--	0.047	0.074	0.013	--
1124	--	--	--	--	0.049	0.074	0.011	--
1126	--	--	--	--	0.047	0.074	0.011	--
1128	--	--	--	--	0.047	0.072	0.013	--
1130	--	--	--	--	0.047	0.074	0.011	--
1132	--	--	--	--	0.045	0.072	0.009	--
1134	--	--	--	--	0.045	0.072	0.011	--
1136	--	--	--	--	0.045	0.074	0.011	--
1138	--	--	--	--	0.045	0.072	0.011	--
1140	--	--	--	--	0.045	0.072	0.009	--

TABLE L-3

2007 SLUG TEST DATA TABLES: MC-25D, MC-118D, AND MC-122
PSC Washougal Facility
Washougal, Washington

Time Elapsed (seconds)	MC-25D		MC-118D		MC-122		MC-122	
	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)
1142	--	--	--	--	0.045	0.072	0.011	--
1144	--	--	--	--	0.045	0.072	0.011	--
1146	--	--	--	--	0.045	0.072	0.011	--
1148	--	--	--	--	0.045	0.069	0.010	--
1150	--	--	--	--	0.045	0.069	0.011	--
1152	--	--	--	--	0.045	0.072	0.011	--
1154	--	--	--	--	0.045	0.069	0.010	--
1156	--	--	--	--	0.045	0.069	0.010	--
1158	--	--	--	--	0.045	0.069	0.010	--
1160	--	--	--	--	0.045	0.069	0.010	--
1162	--	--	--	--	0.042	0.069	0.010	--
1164	--	--	--	--	0.042	0.069	0.010	--
1166	--	--	--	--	0.042	0.067	0.010	--
1168	--	--	--	--	0.042	0.069	0.008	--
1170	--	--	--	--	0.032	0.067	0.010	--
1172	--	--	--	--	0.035	0.067	0.010	--
1174	--	--	--	--	0.047	0.067	0.010	--
1176	--	--	--	--	0.045	0.067	0.008	--
1178	--	--	--	--	0.042	0.064	0.008	--
1180	--	--	--	--	0.042	0.064	0.010	--
1182	--	--	--	--	0.040	0.067	0.008	--
1184	--	--	--	--	0.040	0.064	0.008	--
1186	--	--	--	--	0.040	0.067	0.010	--
1188	--	--	--	--	0.040	0.064	0.008	--
1190	--	--	--	--	0.040	0.064	0.010	--
1192	--	--	--	--	0.040	0.062	0.010	--
1194	--	--	--	--	0.040	0.062	0.008	--
1196	--	--	--	--	0.040	0.062	0.010	--
1198	--	--	--	--	0.037	0.062	0.008	--
1200	--	--	--	--	0.040	0.062	0.010	--

TABLE L-3

2007 SLUG TEST DATA TABLES: MC-25D, MC-118D, AND MC-122
PSC Washougal Facility
Washougal, Washington

Time Elapsed (seconds)	MC-25D		MC-118D		MC-122		MC-122	
	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)
1202	--	--	--	--	0.037	0.062	0.007	--
1204	--	--	--	--	0.037	0.062	0.007	--
1206	--	--	--	--	0.037	0.059	0.007	--
1208	--	--	--	--	0.037	0.059	0.009	--
1210	--	--	--	--	0.037	0.059	0.009	--
1212	--	--	--	--	0.037	0.059	0.007	--
1214	--	--	--	--	0.035	0.059	0.009	--
1216	--	--	--	--	0.037	0.057	0.007	--
1218	--	--	--	--	0.037	0.059	0.007	--
1220	--	--	--	--	0.035	0.057	0.007	--
1222	--	--	--	--	0.035	0.057	0.007	--
1224	--	--	--	--	0.035	0.057	0.007	--
1226	--	--	--	--	0.037	0.057	0.007	--
1228	--	--	--	--	0.035	0.057	0.007	--
1230	--	--	--	--	0.035	0.054	0.007	--
1232	--	--	--	--	0.035	0.054	0.007	--
1234	--	--	--	--	0.035	0.054	0.007	--
1236	--	--	--	--	0.035	0.057	0.007	--
1238	--	--	--	--	0.032	0.054	0.007	--
1240	--	--	--	--	0.032	0.054	0.007	--
1242	--	--	--	--	0.032	0.057	0.007	--
1244	--	--	--	--	0.035	0.057	0.007	--
1246	--	--	--	--	0.032	0.054	0.007	--
1248	--	--	--	--	0.032	0.054	0.007	--
1250	--	--	--	--	0.032	0.054	0.005	--
1252	--	--	--	--	0.032	0.054	0.005	--
1254	--	--	--	--	0.032	0.054	0.005	--
1256	--	--	--	--	0.032	0.054	0.005	--
1258	--	--	--	--	0.030	0.054	0.007	--
1260	--	--	--	--	0.030	0.054	0.005	--

TABLE L-3

2007 SLUG TEST DATA TABLES: MC-25D, MC-118D, AND MC-122
PSC Washougal Facility
Washougal, Washington

Time Elapsed (seconds)	MC-25D		MC-118D		MC-122		MC-122	
	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)
1262	--	--	--	--	0.030	0.052	0.005	--
1264	--	--	--	--	0.032	0.052	0.005	--
1266	--	--	--	--	0.032	0.052	0.005	--
1268	--	--	--	--	0.030	0.052	0.005	--
1270	--	--	--	--	0.030	0.052	0.007	--
1272	--	--	--	--	0.030	0.052	0.007	--
1274	--	--	--	--	0.030	0.052	0.005	--
1276	--	--	--	--	0.030	0.049	0.007	--
1278	--	--	--	--	0.030	0.049	0.005	--
1280	--	--	--	--	0.027	0.049	0.005	--
1282	--	--	--	--	0.027	0.052	0.005	--
1284	--	--	--	--	0.027	0.049	0.005	--
1286	--	--	--	--	0.027	0.049	0.005	--
1288	--	--	--	--	0.027	0.049	0.005	--
1290	--	--	--	--	0.027	0.049	0.005	--
1292	--	--	--	--	0.027	0.049	0.005	--
1294	--	--	--	--	0.027	0.049	0.003	--
1296	--	--	--	--	0.027	0.049	0.003	--
1298	--	--	--	--	0.027	0.049	0.005	--
1300	--	--	--	--	0.025	0.047	0.005	--
1302	--	--	--	--	0.025	0.049	0.005	--
1304	--	--	--	--	0.025	0.049	0.005	--
1306	--	--	--	--	0.025	0.047	0.003	--
1308	--	--	--	--	0.025	0.047	0.005	--
1310	--	--	--	--	0.025	0.047	0.003	--
1312	--	--	--	--	0.025	0.044	0.005	--
1314	--	--	--	--	0.025	0.047	0.005	--
1316	--	--	--	--	0.025	0.044	0.005	--
1318	--	--	--	--	0.025	0.044	0.003	--
1320	--	--	--	--	0.025	0.047	0.003	--

TABLE L-3

2007 SLUG TEST DATA TABLES: MC-25D, MC-118D, AND MC-122
PSC Washougal Facility
Washougal, Washington

Time Elapsed (seconds)	MC-25D		MC-118D		MC-122		MC-122	
	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)
1322	--	--	--	--	0.022	0.044	0.003	--
1324	--	--	--	--	0.022	0.044	0.005	--
1326	--	--	--	--	0.025	0.044	0.005	--
1328	--	--	--	--	0.022	0.044	0.003	--
1330	--	--	--	--	0.025	0.044	0.003	--
1332	--	--	--	--	0.022	0.042	0.003	--
1334	--	--	--	--	0.022	0.042	0.003	--
1336	--	--	--	--	0.022	0.042	0.003	--
1338	--	--	--	--	0.022	0.044	0.005	--
1340	--	--	--	--	0.022	0.042	0.003	--
1342	--	--	--	--	0.020	0.042	0.003	--
1344	--	--	--	--	0.020	0.042	0.005	--
1346	--	--	--	--	0.022	0.042	0.005	--
1348	--	--	--	--	0.022	0.042	0.003	--
1350	--	--	--	--	0.022	0.042	0.003	--
1352	--	--	--	--	0.022	0.042	0.003	--
1354	--	--	--	--	0.022	0.042	0.003	--
1356	--	--	--	--	0.020	0.039	0.003	--
1358	--	--	--	--	0.022	0.042	0.003	--
1360	--	--	--	--	0.020	0.042	0.003	--
1362	--	--	--	--	0.019	0.039	0.003	--
1364	--	--	--	--	0.020	0.039	0.003	--
1366	--	--	--	--	0.020	0.039	0.005	--
1368	--	--	--	--	0.020	0.039	0.003	--
1370	--	--	--	--	0.020	0.039	0.005	--
1372	--	--	--	--	0.020	0.039	0.003	--
1374	--	--	--	--	0.017	0.039	0.003	--
1376	--	--	--	--	0.020	0.039	0.005	--
1378	--	--	--	--	0.020	0.039	0.003	--
1380	--	--	--	--	0.020	0.037	0.003	--

TABLE L-3

2007 SLUG TEST DATA TABLES: MC-25D, MC-118D, AND MC-122
PSC Washougal Facility
Washougal, Washington

Time Elapsed (seconds)	MC-25D		MC-118D		MC-122		MC-122	
	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)
1382	--	--	--	--	0.017	0.039	0.003	--
1384	--	--	--	--	0.020	0.039	0.003	--
1386	--	--	--	--	0.017	0.037	0.003	--
1388	--	--	--	--	0.017	0.037	0.001	--
1390	--	--	--	--	0.017	0.037	0.003	--
1392	--	--	--	--	0.017	0.035	0.003	--
1394	--	--	--	--	0.017	0.037	0.003	--
1396	--	--	--	--	0.017	0.035	0.003	--
1398	--	--	--	--	0.020	0.035	0.001	--
1400	--	--	--	--	0.015	0.035	0.003	--
1402	--	--	--	--	0.017	0.037	0.003	--
1404	--	--	--	--	0.017	0.035	0.003	--
1406	--	--	--	--	0.017	0.035	0.003	--
1408	--	--	--	--	0.015	0.032	0.003	--
1410	--	--	--	--	0.017	0.035	0.003	--
1412	--	--	--	--	0.017	0.035	0.001	--
1414	--	--	--	--	0.017	0.035	0.003	--
1416	--	--	--	--	0.015	0.035	0.003	--
1418	--	--	--	--	0.015	0.035	0.003	--
1420	--	--	--	--	0.015	0.035	0.003	--
1422	--	--	--	--	0.017	0.035	0.003	--
1424	--	--	--	--	0.015	0.035	0.001	--
1426	--	--	--	--	0.014	0.032	0.001	--
1428	--	--	--	--	0.015	0.035	0.003	--
1430	--	--	--	--	0.014	0.032	0.003	--
1432	--	--	--	--	0.015	0.032	0.003	--
1434	--	--	--	--	0.015	0.032	0.003	--
1436	--	--	--	--	0.015	0.032	0.003	--
1438	--	--	--	--	0.015	0.032	0.003	--
1440	--	--	--	--	0.012	0.032	0.003	--

TABLE L-3

2007 SLUG TEST DATA TABLES: MC-25D, MC-118D, AND MC-122
PSC Washougal Facility
Washougal, Washington

Time Elapsed (seconds)	MC-25D		MC-118D		MC-122		MC-122	
	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)
1442	--	--	--	--	0.015	0.030	0.001	--
1444	--	--	--	--	0.015	0.032	0.001	--
1446	--	--	--	--	0.015	0.030	0.003	--
1448	--	--	--	--	0.015	0.030	0.001	--
1450	--	--	--	--	0.015	0.032	0.001	--
1452	--	--	--	--	0.012	0.030	0.001	--
1454	--	--	--	--	0.015	0.030	0.001	--
1456	--	--	--	--	0.012	0.030	0.003	--
1458	--	--	--	--	0.010	0.030	0.001	--
1460	--	--	--	--	0.012	0.030	0.001	--
1462	--	--	--	--	0.012	0.030	0.003	--
1464	--	--	--	--	0.012	0.027	0.003	--
1466	--	--	--	--	0.012	0.027	0.001	--
1468	--	--	--	--	0.012	0.030	0.003	--
1470	--	--	--	--	0.012	0.027	0.001	--
1472	--	--	--	--	0.010	0.027	0.001	--
1474	--	--	--	--	0.010	0.027	0.001	--
1476	--	--	--	--	0.012	0.027	0	--
1478	--	--	--	--	0.010	0.027	0.001	--
1480	--	--	--	--	0.010	0.025	0	--
1482	--	--	--	--	0.012	0.025	0.001	--
1484	--	--	--	--	0.010	0.025	0	--
1486	--	--	--	--	0.010	0.027	0	--
1488	--	--	--	--	0.010	0.025	0	--
1490	--	--	--	--	0.010	0.025	0	--
1492	--	--	--	--	0.010	0.025	0	--
1494	--	--	--	--	0.010	0.025	--	--
1496	--	--	--	--	0.010	0.027	--	--
1498	--	--	--	--	0.010	0.025	--	--
1500	--	--	--	--	0.010	0.025	--	--

TABLE L-3

2007 SLUG TEST DATA TABLES: MC-25D, MC-118D, AND MC-122
PSC Washougal Facility
Washougal, Washington

Time Elapsed (seconds)	MC-25D		MC-118D		MC-122		MC-122	
	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)
1502	--	--	--	--	0.010	0.025	--	--
1504	--	--	--	--	0.010	0.025	--	--
1506	--	--	--	--	0.009	0.025	--	--
1508	--	--	--	--	0.009	0.025	--	--
1510	--	--	--	--	0.007	0.022	--	--
1512	--	--	--	--	0.007	0.025	--	--
1514	--	--	--	--	0.007	0.022	--	--
1516	--	--	--	--	0.007	0.022	--	--
1518	--	--	--	--	0.007	0.025	--	--
1520	--	--	--	--	0.007	0.025	--	--
1522	--	--	--	--	0.010	0.022	--	--
1524	--	--	--	--	0.007	0.022	--	--
1526	--	--	--	--	0.010	0.022	--	--
1528	--	--	--	--	0.007	0.022	--	--
1530	--	--	--	--	0.007	0.022	--	--
1532	--	--	--	--	0.007	0.022	--	--
1534	--	--	--	--	0.007	0.022	--	--
1536	--	--	--	--	0.007	0.022	--	--
1538	--	--	--	--	0.007	0.022	--	--
1540	--	--	--	--	0.007	0.022	--	--
1542	--	--	--	--	0.007	0.022	--	--
1544	--	--	--	--	0.005	0.020	--	--
1546	--	--	--	--	0.007	0.020	--	--
1548	--	--	--	--	0.007	0.020	--	--
1550	--	--	--	--	0.007	0.020	--	--
1552	--	--	--	--	0.007	0.020	--	--
1554	--	--	--	--	0.005	0.020	--	--
1556	--	--	--	--	0.005	0.020	--	--
1558	--	--	--	--	0.005	0.017	--	--
1560	--	--	--	--	0.005	0.020	--	--

TABLE L-3

2007 SLUG TEST DATA TABLES: MC-25D, MC-118D, AND MC-122
PSC Washougal Facility
Washougal, Washington

Time Elapsed (seconds)	MC-25D		MC-118D		MC-122		MC-122	
	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)
1562	--	--	--	--	0.007	0.020	--	--
1564	--	--	--	--	0.007	0.020	--	--
1566	--	--	--	--	0.005	0.020	--	--
1568	--	--	--	--	0.005	0.017	--	--
1570	--	--	--	--	0.005	0.017	--	--
1572	--	--	--	--	0.005	0.020	--	--
1574	--	--	--	--	0.005	0.017	--	--
1576	--	--	--	--	0.005	0.020	--	--
1578	--	--	--	--	0.002	0.017	--	--
1580	--	--	--	--	0.002	0.017	--	--
1582	--	--	--	--	0.005	0.017	--	--
1584	--	--	--	--	0.005	0.017	--	--
1586	--	--	--	--	0.002	0.020	--	--
1588	--	--	--	--	0.005	0.017	--	--
1590	--	--	--	--	0.005	0.017	--	--
1592	--	--	--	--	0.002	0.017	--	--
1594	--	--	--	--	0.005	0.017	--	--
1596	--	--	--	--	0.002	0.017	--	--
1598	--	--	--	--	0.005	0.015	--	--
1600	--	--	--	--	0.002	0.017	--	--
1602	--	--	--	--	0.005	0.015	--	--
1604	--	--	--	--	0.002	0.017	--	--
1606	--	--	--	--	0.002	0.015	--	--
1608	--	--	--	--	0.002	0.015	--	--
1610	--	--	--	--	0.002	0.015	--	--
1612	--	--	--	--	-0.010	0.015	--	--
1614	--	--	--	--	-0.013	0.015	--	--
1616	--	--	--	--	0.005	0.015	--	--
1618	--	--	--	--	0	0.015	--	--
1620	--	--	--	--	0	0.015	--	--

TABLE L-3

2007 SLUG TEST DATA TABLES: MC-25D, MC-118D, AND MC-122
PSC Washougal Facility
Washougal, Washington

Time Elapsed (seconds)	MC-25D		MC-118D		MC-122		MC-122	
	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)
1622	--	--	--	--	0.002	0.015	--	--
1624	--	--	--	--	0.002	0.015	--	--
1626	--	--	--	--	0	0.012	--	--
1628	--	--	--	--	0.002	0.015	--	--
1630	--	--	--	--	0.002	0.015	--	--
1632	--	--	--	--	0.002	0.015	--	--
1634	--	--	--	--	0	0.015	--	--
1636	--	--	--	--	0.002	0.015	--	--
1638	--	--	--	--	0.002	0.015	--	--
1640	--	--	--	--	0.002	0.015	--	--
1642	--	--	--	--	0.002	0.012	--	--
1644	--	--	--	--	0.002	0.012	--	--
1646	--	--	--	--	0	0.012	--	--
1648	--	--	--	--	0	0.012	--	--
1650	--	--	--	--	0	0.012	--	--
1652	--	--	--	--	0	0.012	--	--
1654	--	--	--	--	0	0.012	--	--
1656	--	--	--	--	0	0.012	--	--
1658	--	--	--	--	0	0.012	--	--
1660	--	--	--	--	--	0.012	--	--
1662	--	--	--	--	--	0.013	--	--
1664	--	--	--	--	--	0.013	--	--
1666	--	--	--	--	--	0.015	--	--
1668	--	--	--	--	--	0.012	--	--
1670	--	--	--	--	--	0.013	--	--
1672	--	--	--	--	--	0.010	--	--
1674	--	--	--	--	--	0.013	--	--
1676	--	--	--	--	--	0.012	--	--
1678	--	--	--	--	--	0.012	--	--
1680	--	--	--	--	--	0.012	--	--

TABLE L-3

2007 SLUG TEST DATA TABLES: MC-25D, MC-118D, AND MC-122
PSC Washougal Facility
Washougal, Washington

Time Elapsed (seconds)	MC-25D		MC-118D		MC-122		MC-122	
	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)
1682	--	--	--	--	--	0.010	--	--
1684	--	--	--	--	--	0.010	--	--
1686	--	--	--	--	--	0.013	--	--
1688	--	--	--	--	--	0.010	--	--
1690	--	--	--	--	--	0.010	--	--
1692	--	--	--	--	--	0.010	--	--
1694	--	--	--	--	--	0.010	--	--
1696	--	--	--	--	--	0.010	--	--
1698	--	--	--	--	--	0.010	--	--
1700	--	--	--	--	--	0.010	--	--
1702	--	--	--	--	--	0.010	--	--
1704	--	--	--	--	--	0.010	--	--
1706	--	--	--	--	--	0.010	--	--
1708	--	--	--	--	--	0.010	--	--
1710	--	--	--	--	--	0.007	--	--
1712	--	--	--	--	--	0.010	--	--
1714	--	--	--	--	--	0.010	--	--
1716	--	--	--	--	--	0.007	--	--
1718	--	--	--	--	--	0.007	--	--
1720	--	--	--	--	--	0.007	--	--
1722	--	--	--	--	--	0.007	--	--
1724	--	--	--	--	--	0.007	--	--
1726	--	--	--	--	--	0.010	--	--
1728	--	--	--	--	--	0.007	--	--
1730	--	--	--	--	--	0.007	--	--
1732	--	--	--	--	--	0.007	--	--
1734	--	--	--	--	--	0.007	--	--
1736	--	--	--	--	--	0.008	--	--
1738	--	--	--	--	--	0.008	--	--
1740	--	--	--	--	--	0.007	--	--

TABLE L-3

2007 SLUG TEST DATA TABLES: MC-25D, MC-118D, AND MC-122
PSC Washougal Facility
Washougal, Washington

Time Elapsed (seconds)	MC-25D		MC-118D		MC-122		MC-122	
	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)
1742	--	--	--	--	--	0.008	--	--
1744	--	--	--	--	--	0.008	--	--
1746	--	--	--	--	--	0.008	--	--
1748	--	--	--	--	--	0.007	--	--
1750	--	--	--	--	--	0.007	--	--
1752	--	--	--	--	--	0.007	--	--
1754	--	--	--	--	--	0.008	--	--
1756	--	--	--	--	--	0.008	--	--
1758	--	--	--	--	--	0.005	--	--
1760	--	--	--	--	--	0.008	--	--
1762	--	--	--	--	--	0.005	--	--
1764	--	--	--	--	--	0.007	--	--
1766	--	--	--	--	--	0.008	--	--
1768	--	--	--	--	--	0.008	--	--
1770	--	--	--	--	--	0.005	--	--
1772	--	--	--	--	--	0.005	--	--
1774	--	--	--	--	--	0.005	--	--
1776	--	--	--	--	--	0.005	--	--
1778	--	--	--	--	--	0.008	--	--
1780	--	--	--	--	--	0.005	--	--
1782	--	--	--	--	--	0.005	--	--
1784	--	--	--	--	--	0.008	--	--
1786	--	--	--	--	--	0.005	--	--
1788	--	--	--	--	--	0.005	--	--
1790	--	--	--	--	--	0.005	--	--
1792	--	--	--	--	--	0.008	--	--
1794	--	--	--	--	--	0.008	--	--
1796	--	--	--	--	--	0.005	--	--
1798	--	--	--	--	--	0.005	--	--
1800	--	--	--	--	--	0.005	--	--

TABLE L-3

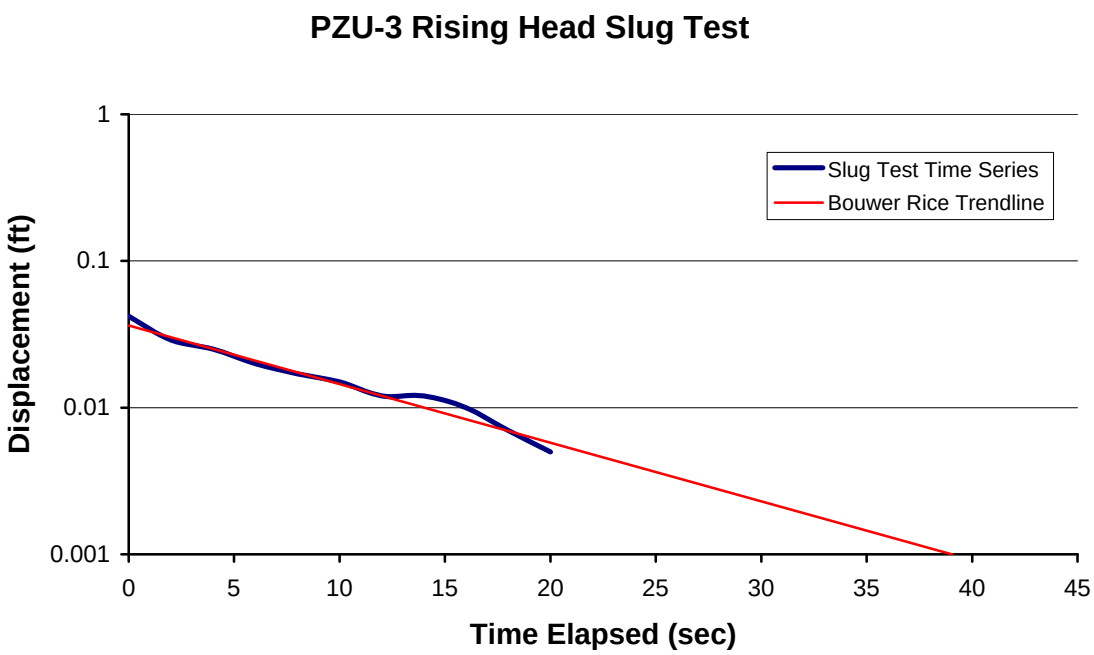
2007 SLUG TEST DATA TABLES: MC-25D, MC-118D, AND MC-122
PSC Washougal Facility
Washougal, Washington

Time Elapsed (seconds)	MC-25D		MC-118D		MC-122		MC-122	
	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)
1802	--	--	--	--	--	0.005	--	--
1804	--	--	--	--	--	0.003	--	--
1806	--	--	--	--	--	0.005	--	--
1808	--	--	--	--	--	0.005	--	--
1810	--	--	--	--	--	0.005	--	--
1812	--	--	--	--	--	0.003	--	--
1814	--	--	--	--	--	0.003	--	--
1816	--	--	--	--	--	0.005	--	--
1818	--	--	--	--	--	0.002	--	--
1820	--	--	--	--	--	0.002	--	--
1822	--	--	--	--	--	0.003	--	--
1824	--	--	--	--	--	0.003	--	--
1826	--	--	--	--	--	0.002	--	--
1828	--	--	--	--	--	0.002	--	--
1830	--	--	--	--	--	0.003	--	--
1832	--	--	--	--	--	0.002	--	--
1834	--	--	--	--	--	0.003	--	--
1836	--	--	--	--	--	0.003	--	--
1838	--	--	--	--	--	0.003	--	--
1840	--	--	--	--	--	0.003	--	--
1842	--	--	--	--	--	0.003	--	--
1844	--	--	--	--	--	0.002	--	--
1846	--	--	--	--	--	0.003	--	--
1848	--	--	--	--	--	0	--	--
1850	--	--	--	--	--	0	--	--
1852	--	--	--	--	--	0	--	--
1854	--	--	--	--	--	0	--	--
1856	--	--	--	--	--	0	--	--
1858	--	--	--	--	--	0.003	--	--
1860	--	--	--	--	--	0	--	--

TABLE L-3

2007 SLUG TEST DATA TABLES: MC-25D, MC-118D, AND MC-122
PSC Washougal Facility
Washougal, Washington

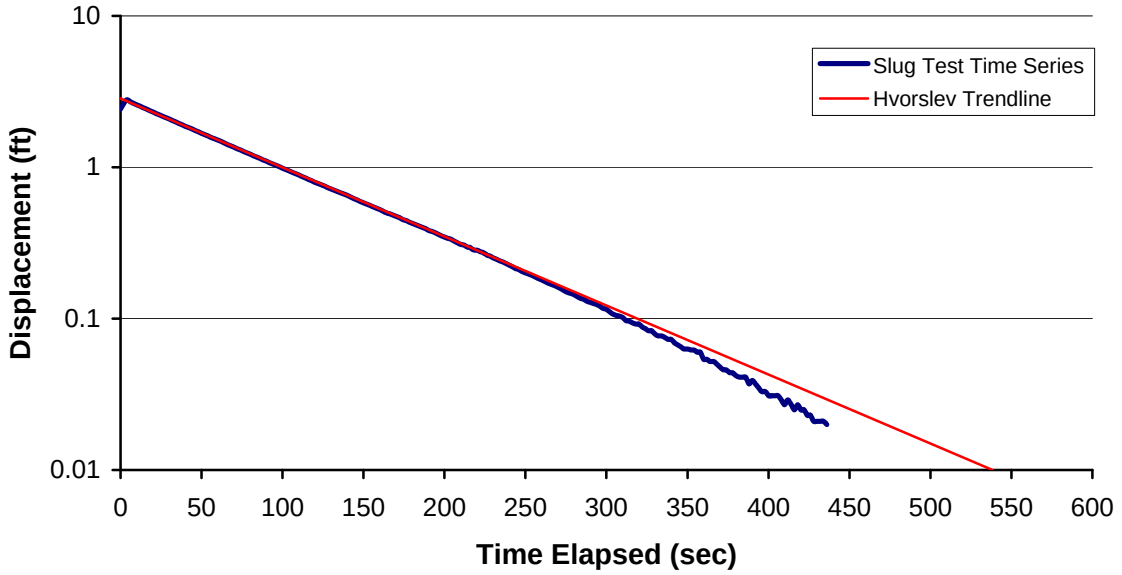
Time Elapsed (seconds)	MC-25D		MC-118D		MC-122		MC-122	
	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Rising Head Slug Test Displacement (feet of water)	Falling Head Slug Test Displacement (feet of water)	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)	Rising Head Slug Test #1 Displacement (feet of water)	Rising Head Slug Test #2 Displacement (feet of water)
1862	--	--	--	--	--	0	--	--
1864	--	--	--	--	--	0	--	--
1866	--	--	--	--	--	0	--	--
1868	--	--	--	--	--	0	--	--
1870	--	--	--	--	--	0	--	--
1872	--	--	--	--	--	0	--	--



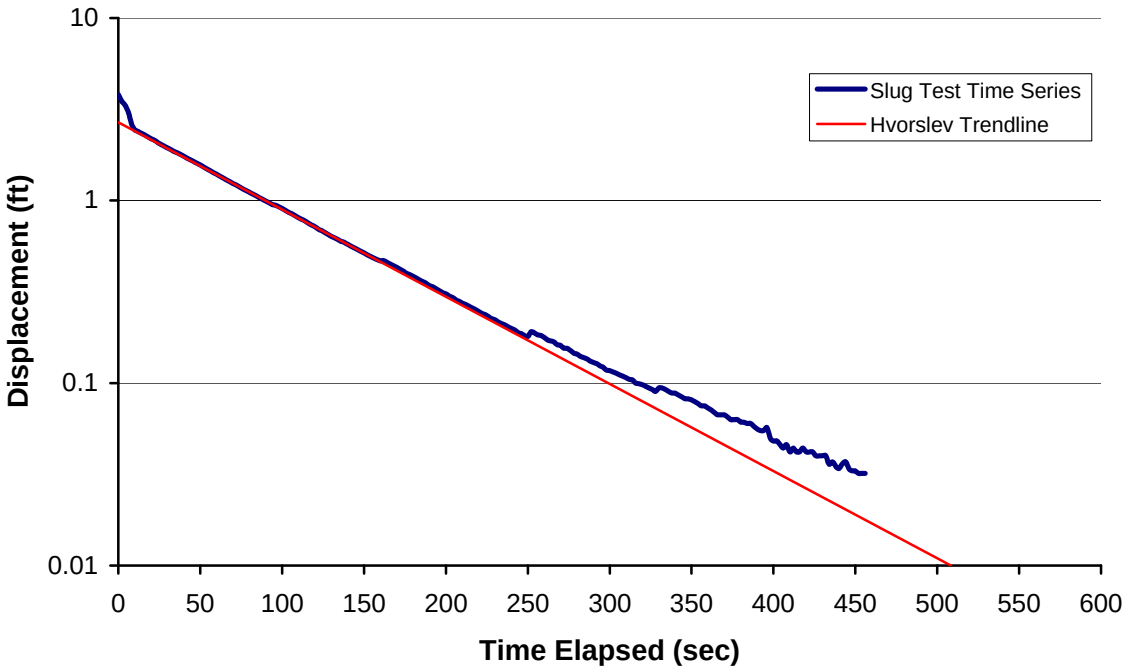
GROUNDWATER DISPLACEMENT VERSUS TIME (OCTOBER 2007)
PSC Washougal Facility
Washougal, Washington

By: RLW	Date: 11/14/08	Project No.:9625
AMEC Geomatrix		Figure **L-1**

MC-2D Rising Head Slug Test



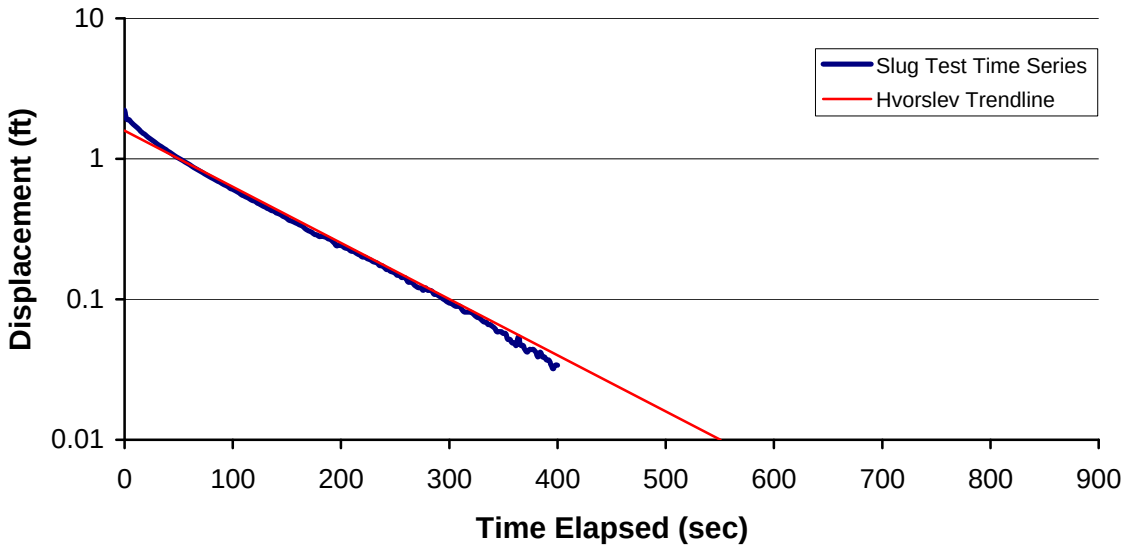
MC-2D Falling Head Slug Test



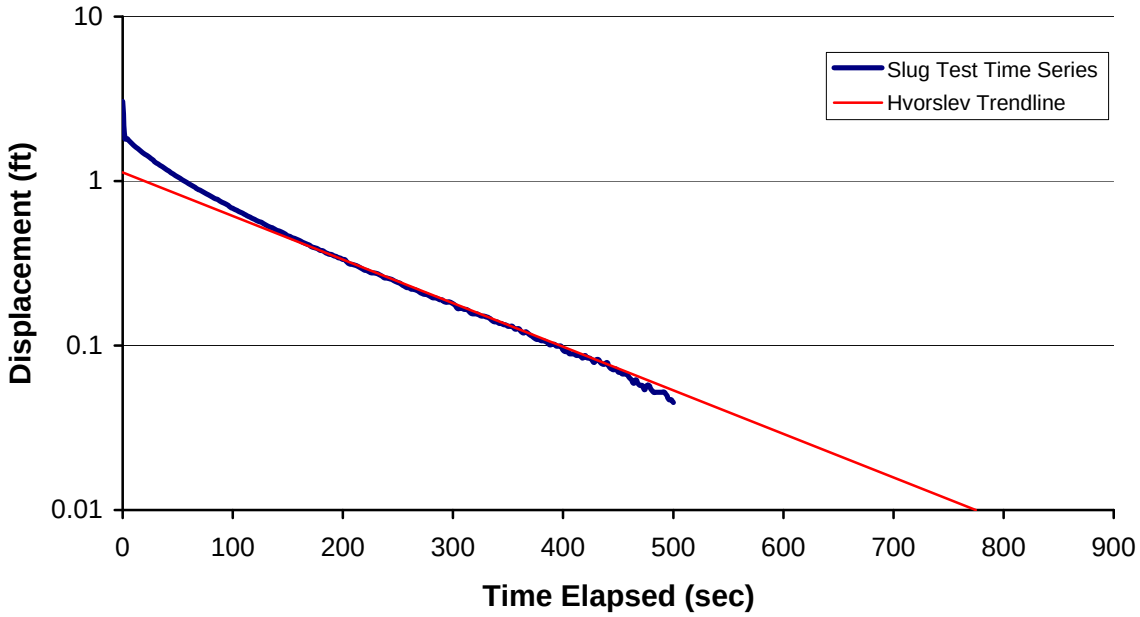
GROUNDWATER DISPLACEMENT VERSUS TIME (OCTOBER 2007)
PSC Washougal Facility
Washougal, Washington

By: RLW	Date: 11/14/08	Project No.: 9625
AMEC Geomatrix		Figure **L-2**

MC-10D Rising Head Slug Test

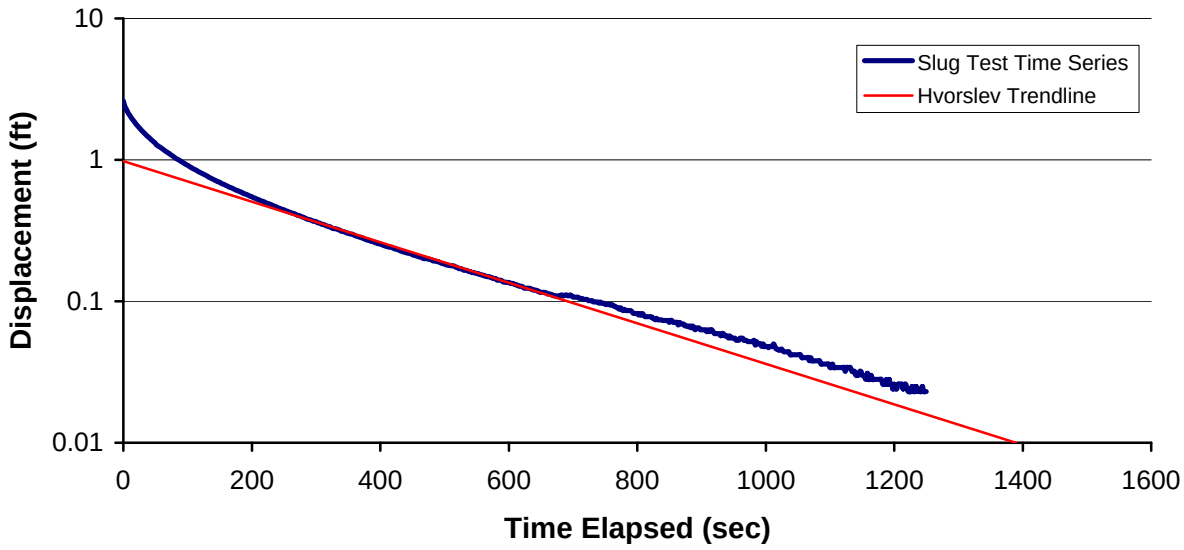


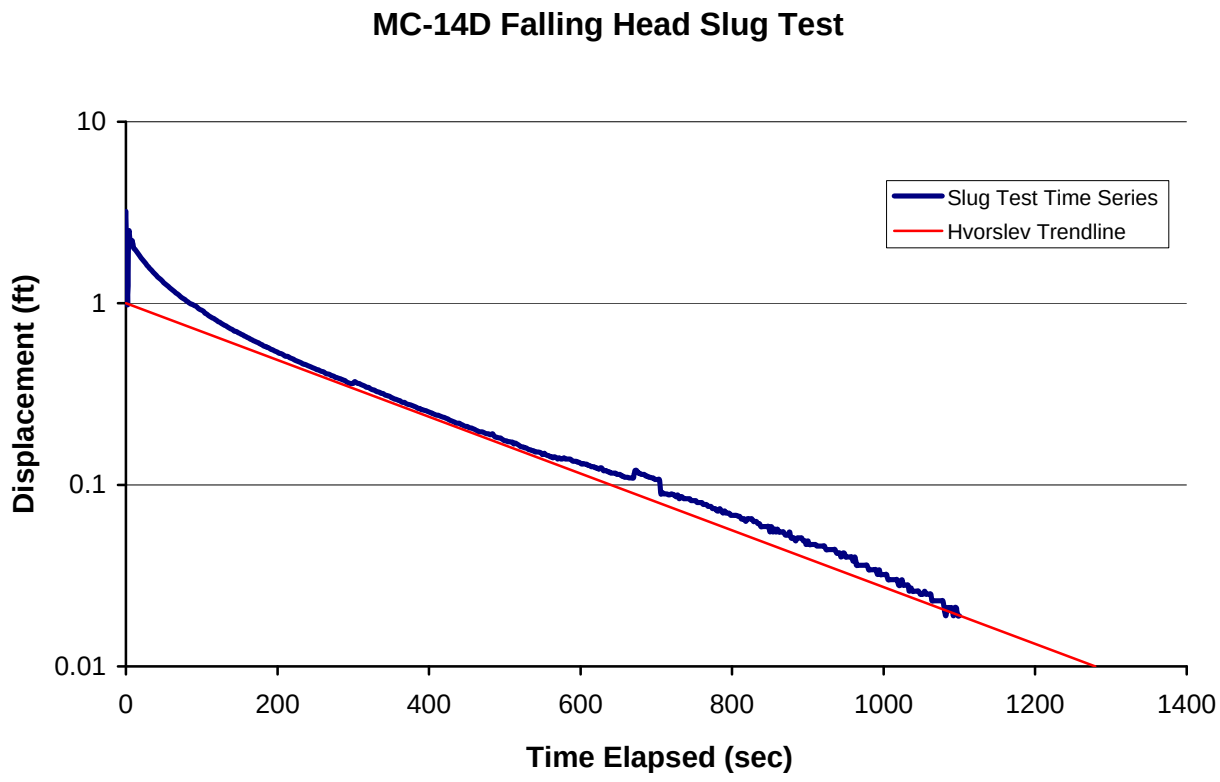
MC-10D Falling Head Slug Test



GROUNDWATER DISPLACEMENT VERSUS TIME (OCTOBER 2007)
PSC Washougal Facility
Washougal, Washington

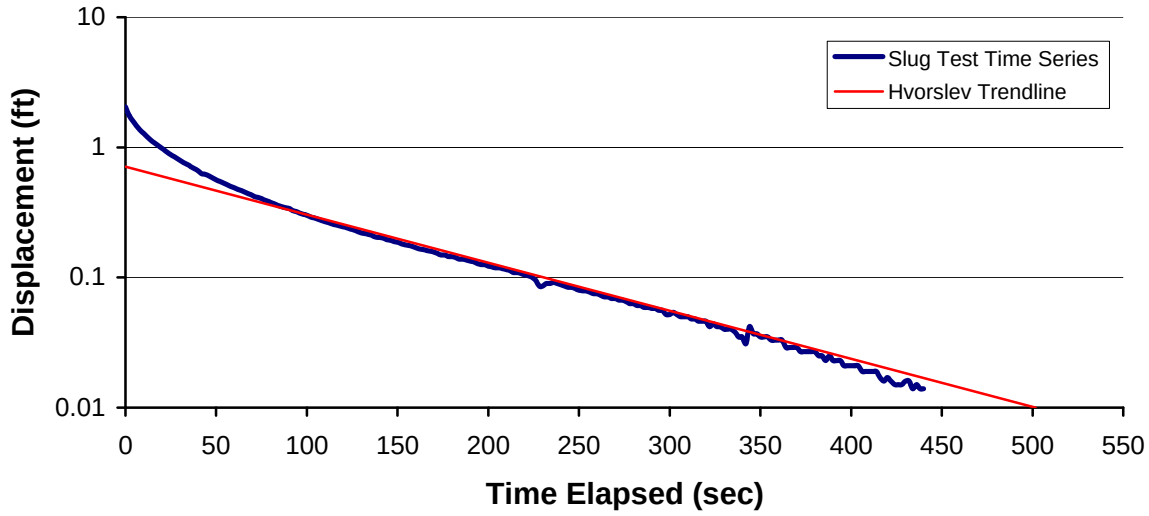
By: RLW	Date: 11/14/08	Project No. 9625
AMEC Geomatrix		Figure **L-3**

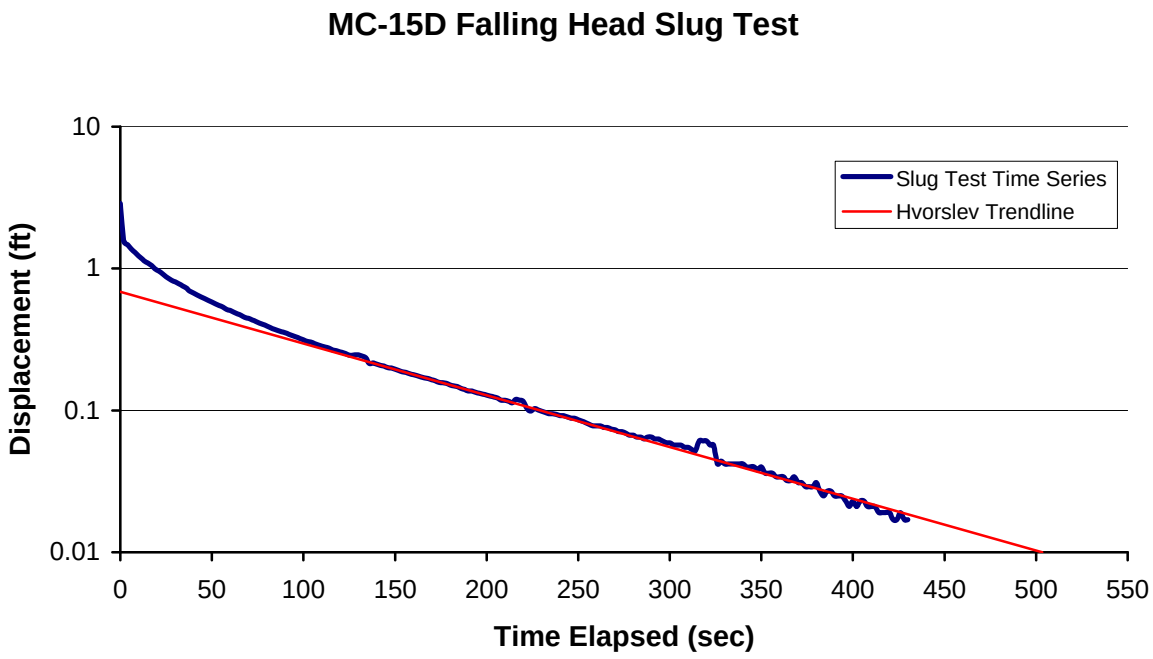




GROUNDWATER DISPLACEMENT VERSUS TIME (OCTOBER 2007)
PSC Washougal Facility
Washougal, Washington

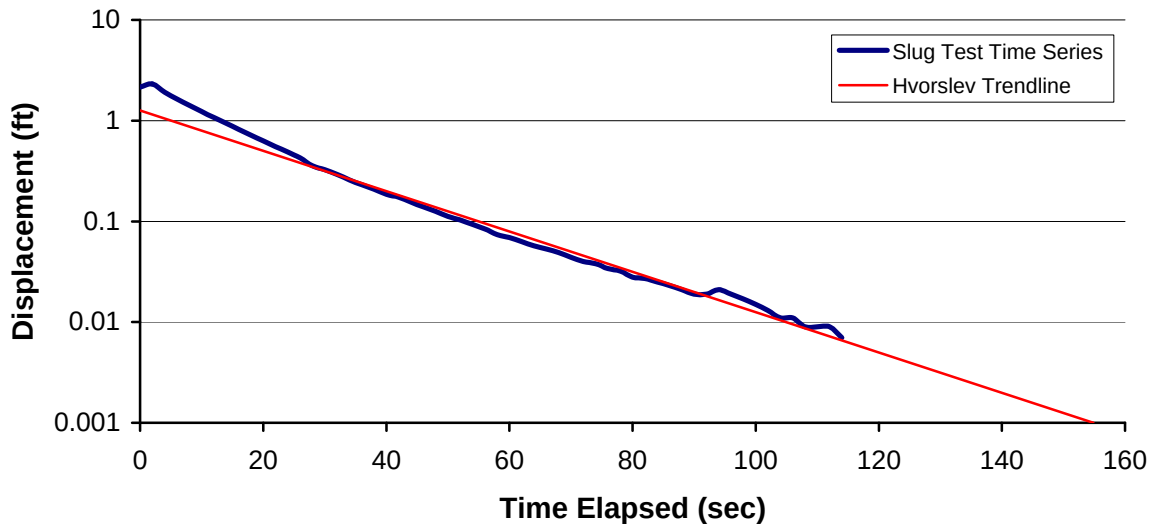
By: RLW	Date: 11/14/08	Project No.: 9625
AMEC Geomatrix		Figure **L-4**

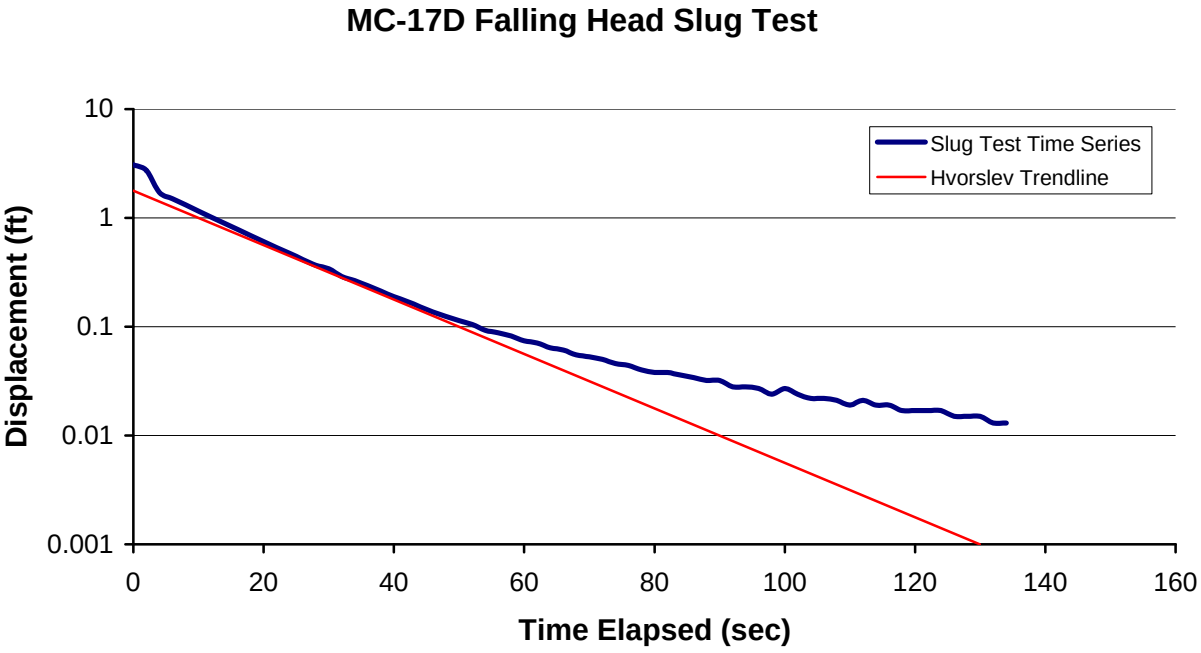




GROUNDWATER DISPLACEMENT VERSUS TIME (SEPTEMBER 2007)
PSC Washougal Facility
Washougal, Washington

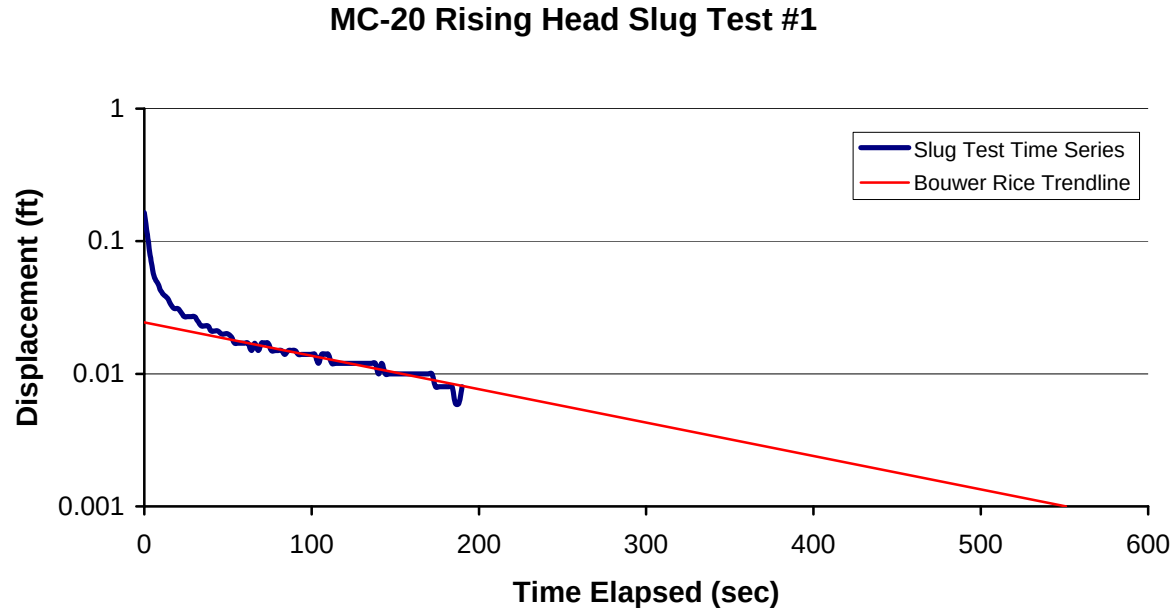
By: RLW	Date: 11/14/08	Project No.: 9625
AMEC Geomatrix		Figure **L-5**

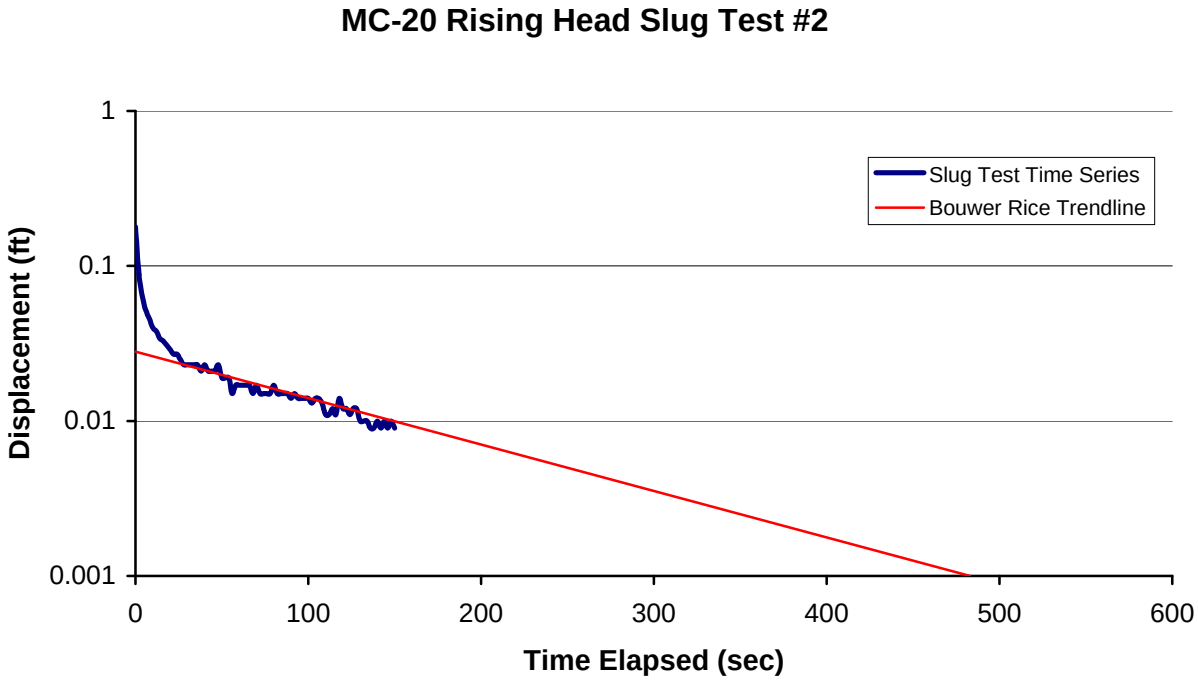




GROUNDWATER DISPLACEMENT VERSUS TIME (SEPTEMBER 2007)
PSC Washougal Facility
Washougal, Washington

By: RLW	Date: 11/14/08	Project No. 9625
AMEC Geomatrix		Figure **L-6**

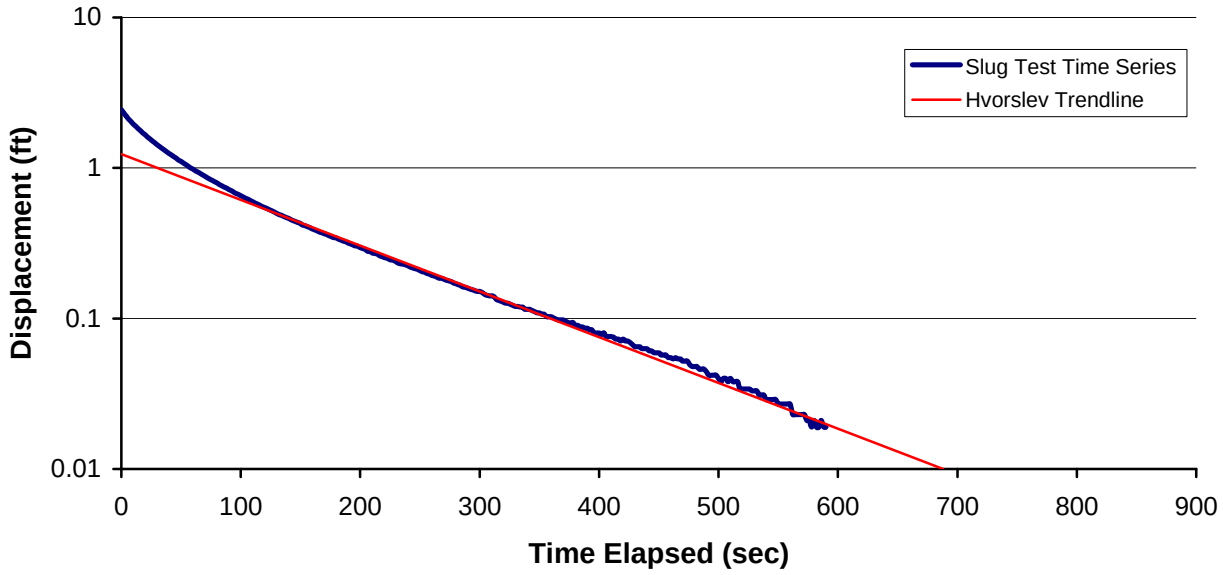




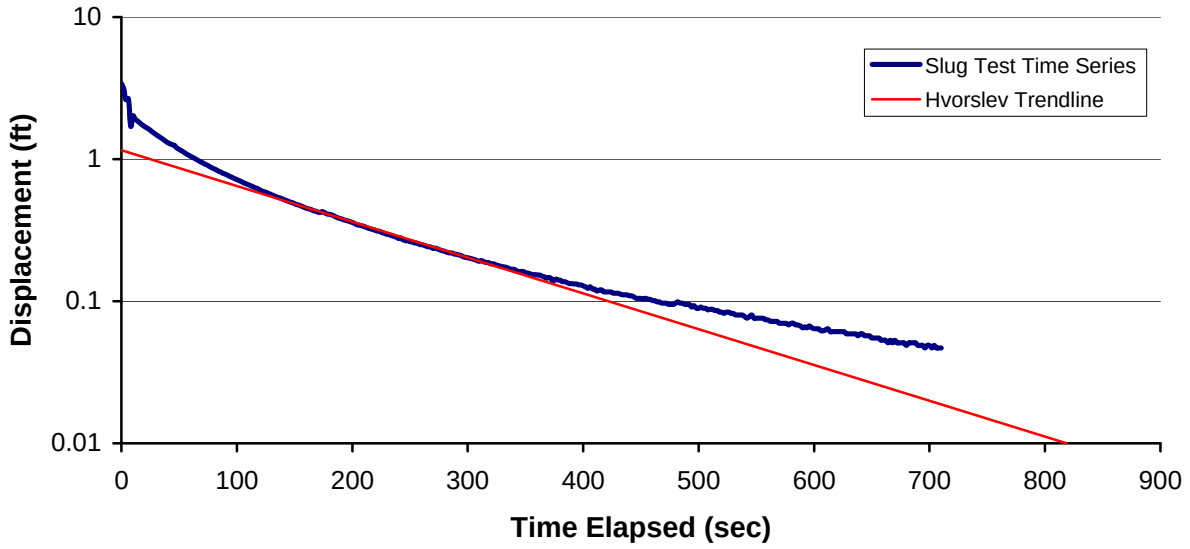
GROUNDWATER DISPLACEMENT VERSUS TIME (SEPTEMBER 2007)
PSC Washougal Facility
Washougal, Washington

By: RLW	Date: 11/14/08	Project No. 9625
AMEC Geomatrix		Figure **L-7**

MC-20D Rising Head Slug Test



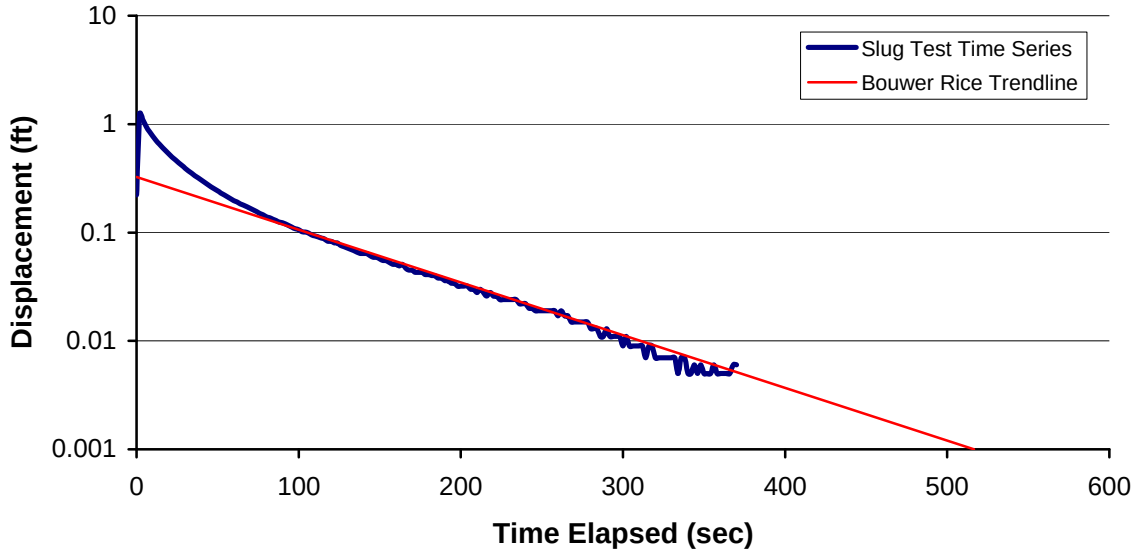
MC-20D Falling Head Slug Test



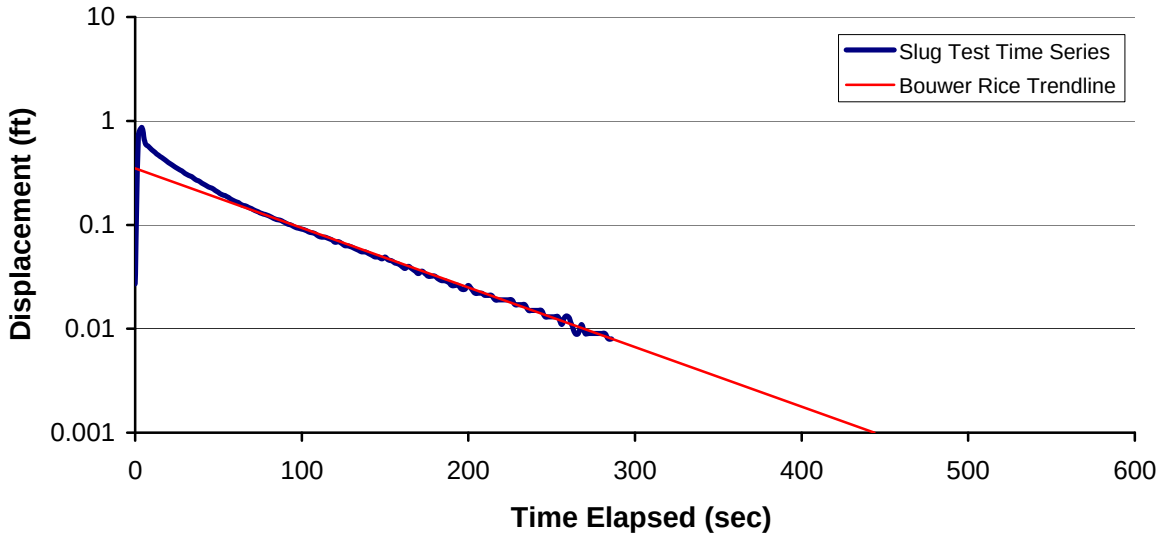
GROUNDWATER DISPLACEMENT VERSUS TIME (OCTOBER 2007)
PSC Washougal Facility
Washougal, Washington

By: RLW	Date: 11/14/08	Project No.: 9625
AMEC Geomatrix		Figure **L-8**

MC-24 Rising Head Slug Test #1



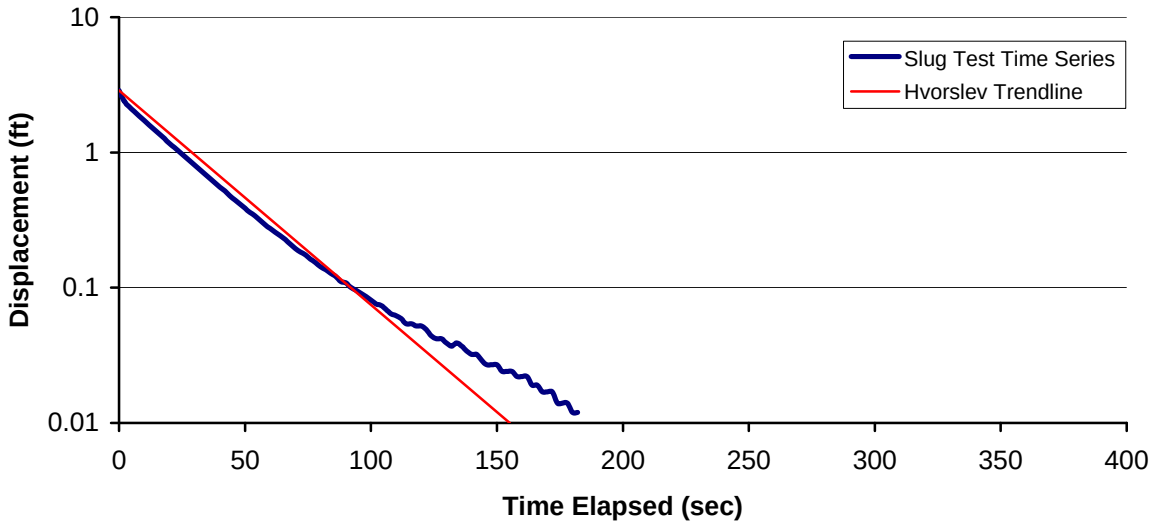
MC-24 Rising Head Slug Test #2



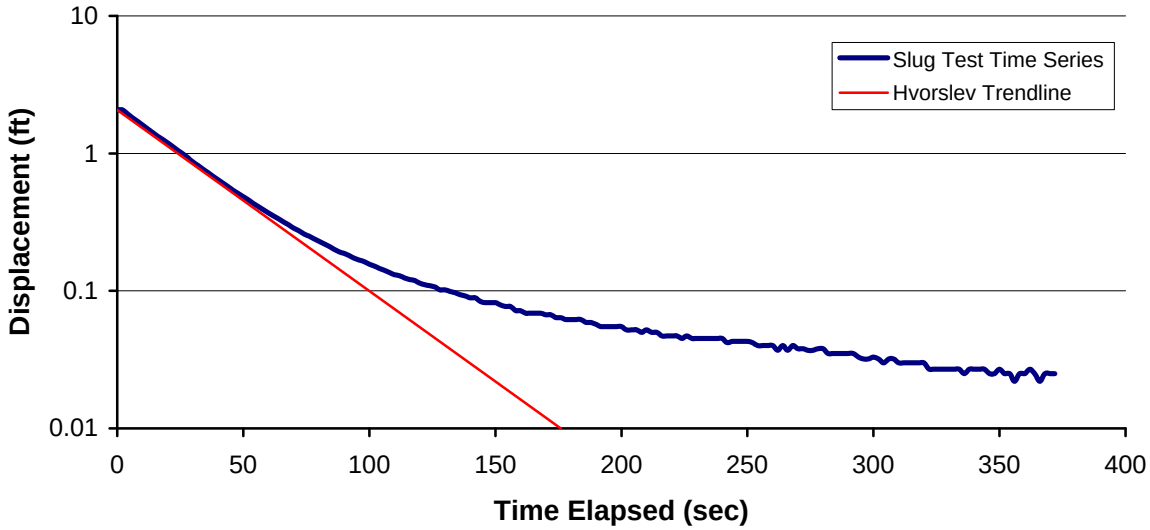
GROUNDWATER DISPLACEMENT VERSUS TIME (OCTOBER 2007)
PSC Washougal Facility
Washougal, Washington

By: RLW	Date: 11/14/08	Project No.: 9625
AMEC Geomatrix		Figure **L-9**

MC-24D Rising Head Slug Test



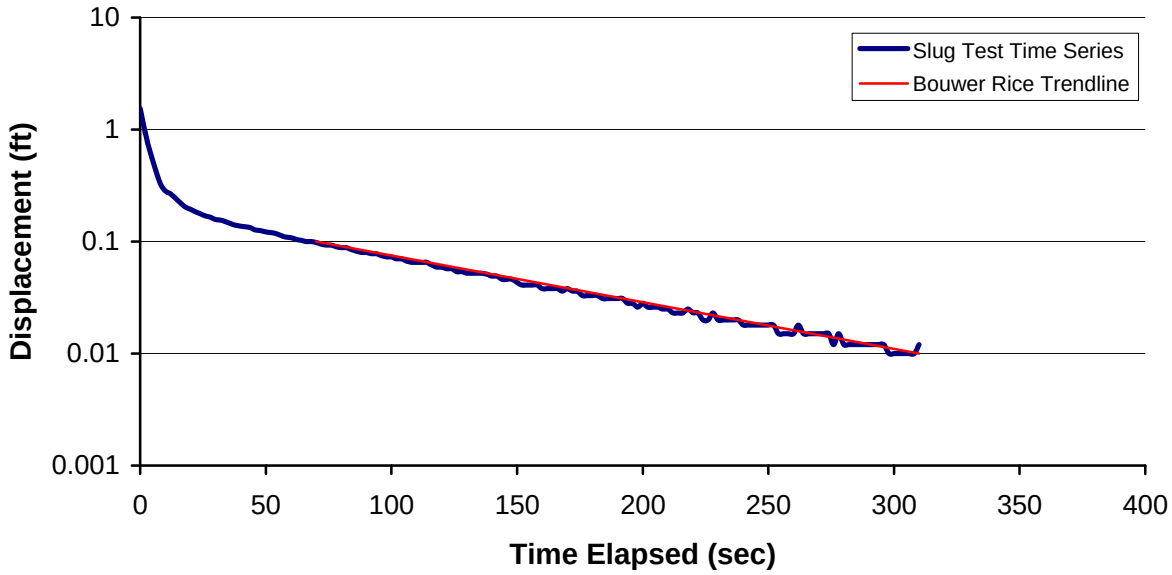
MC-24D Falling Head Slug Test



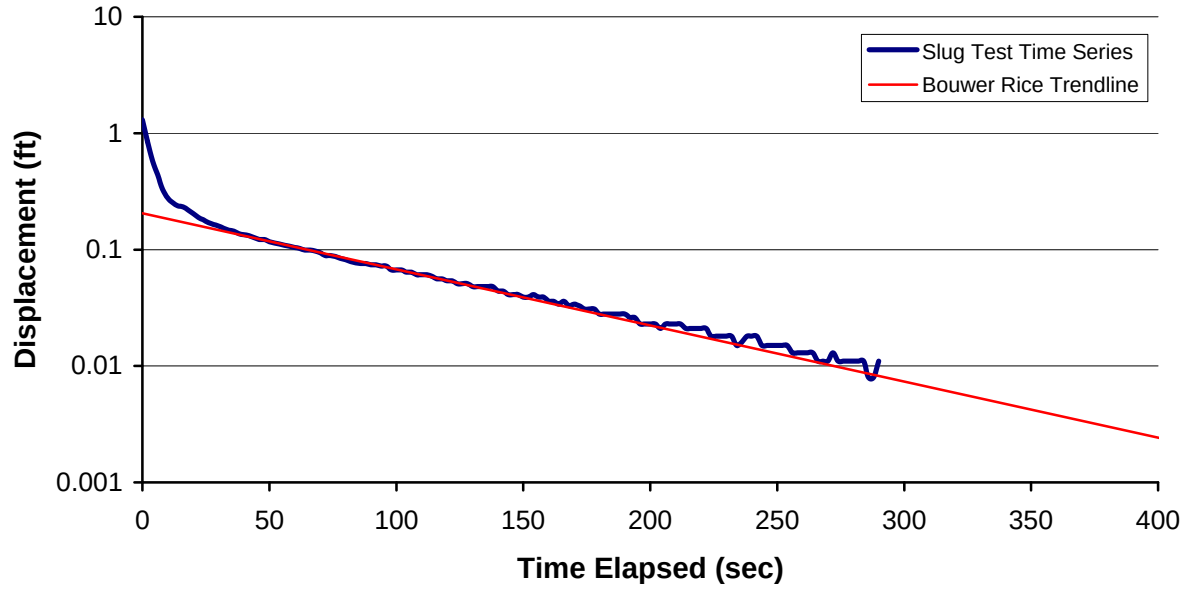
GROUNDWATER DISPLACEMENT VERSUS TIME (OCTOBER 2007)
PSC Washougal Facility
Washougal, Washington

By: RLW	Date: 11/14/08	Project No. 9625
AMEC Geomatrix		Figure **L-10**

MC-25 Rising Head Slug Test #1



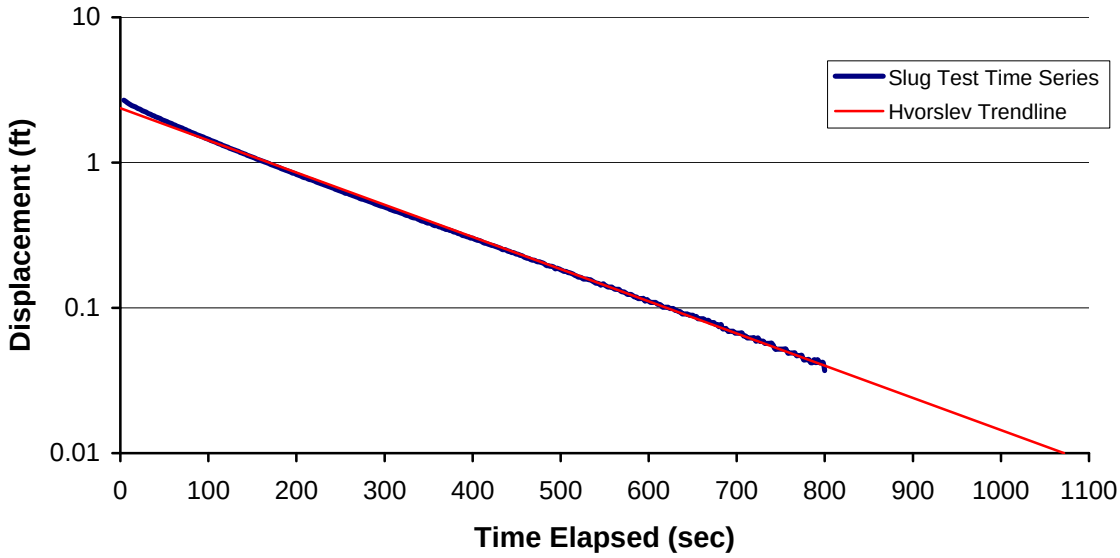
MC-25 Rising Head Slug Test #2



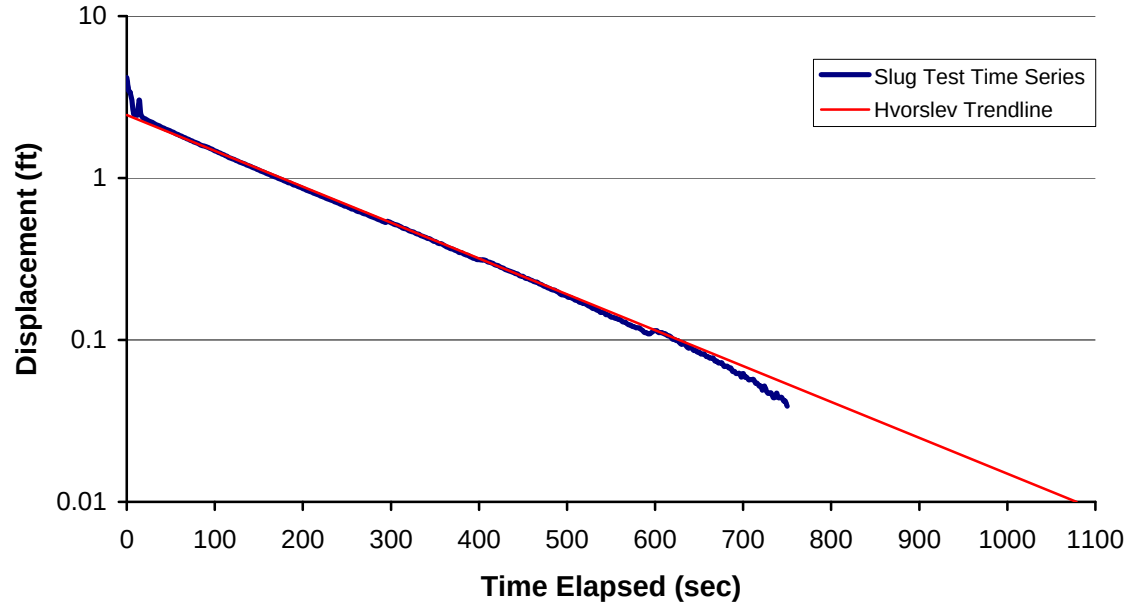
GROUNDWATER DISPLACEMENT VERSUS TIME (OCTOBER 2007)
PSC Washougal Facility
Washougal, Washington

By: RLW	Date: 11/14/08	Project No.: 9625
AMEC Geomatrix		Figure **L-11**

MC-118D Rising Head Slug Test



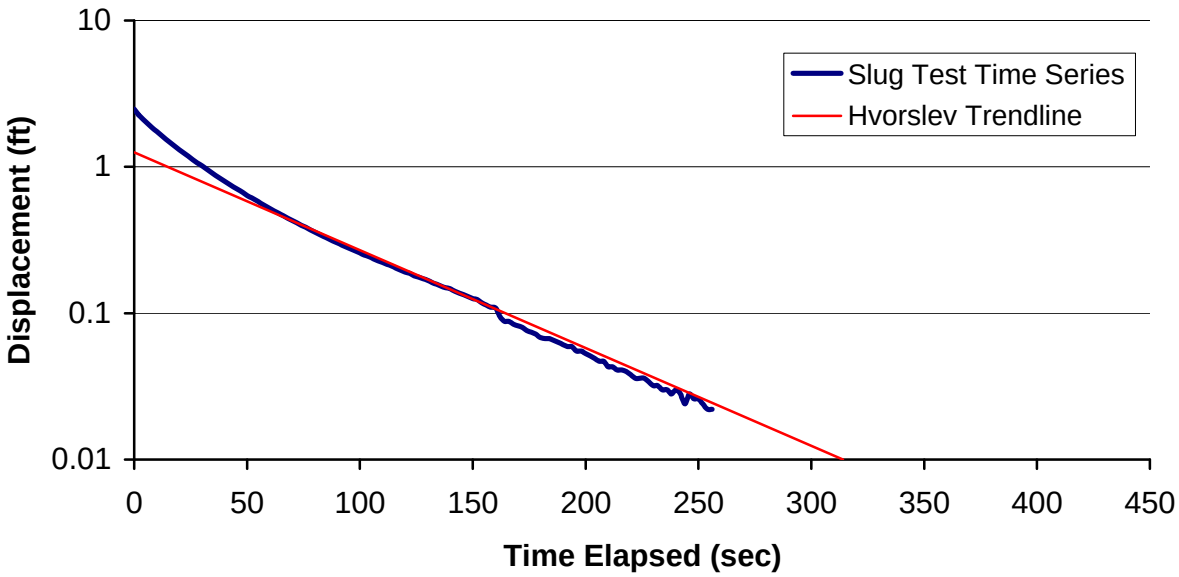
MC-118D Falling Head Slug Test



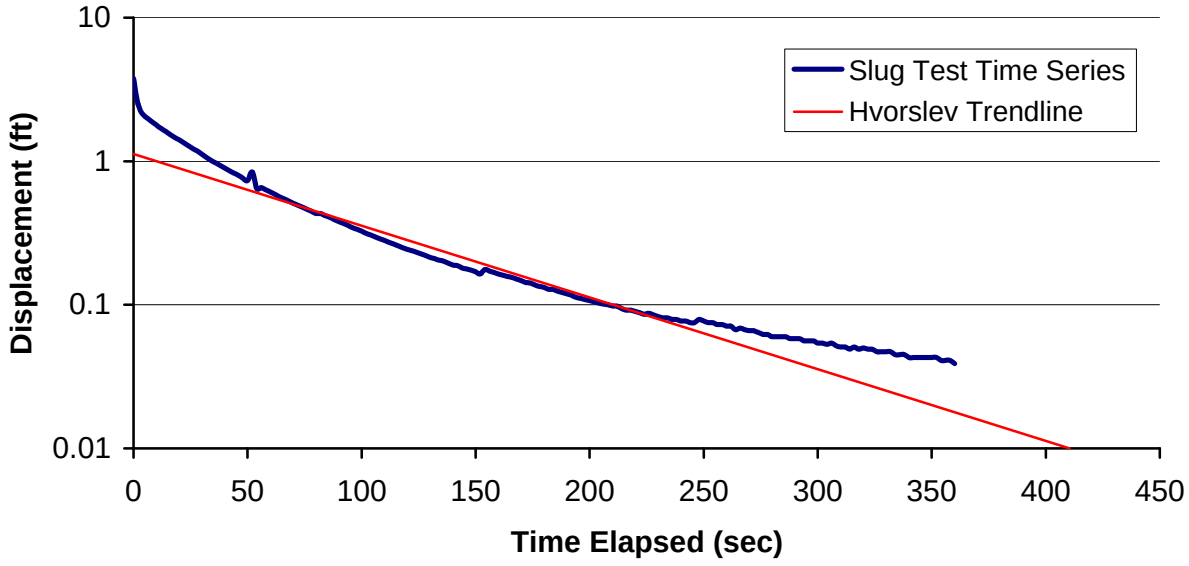
GROUNDWATER DISPLACEMENT VERSUS TIME (OCTOBER 2007)
PSC Washougal Facility
Washougal, Washington

By: RLW	Date: 11/14/08	Project No.: 9625
AMEC Geomatrix		Figure **L-12**

MC-25D Rising Head Slug Test

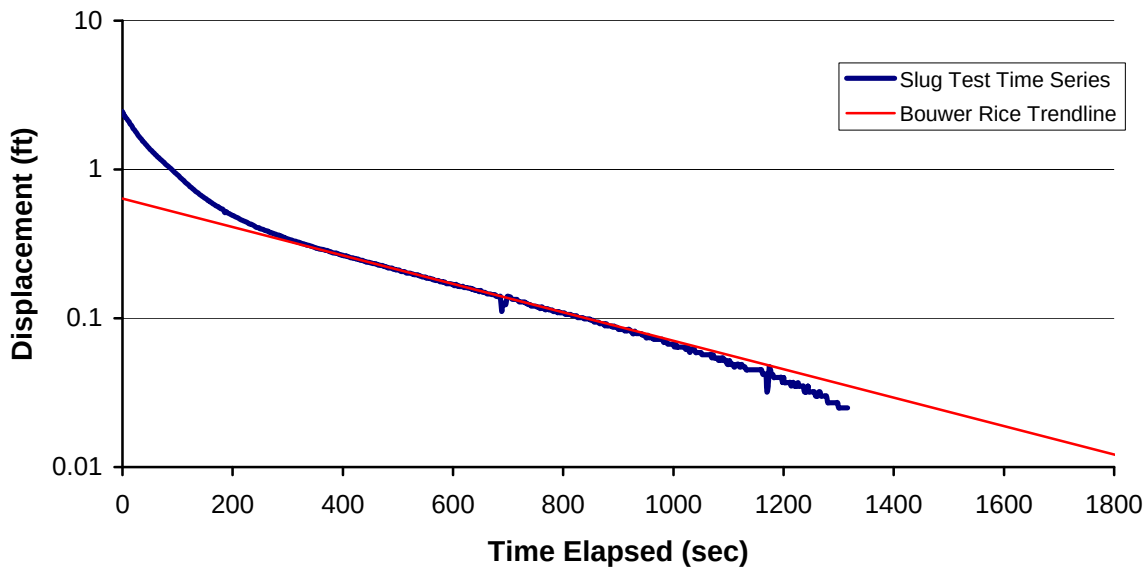


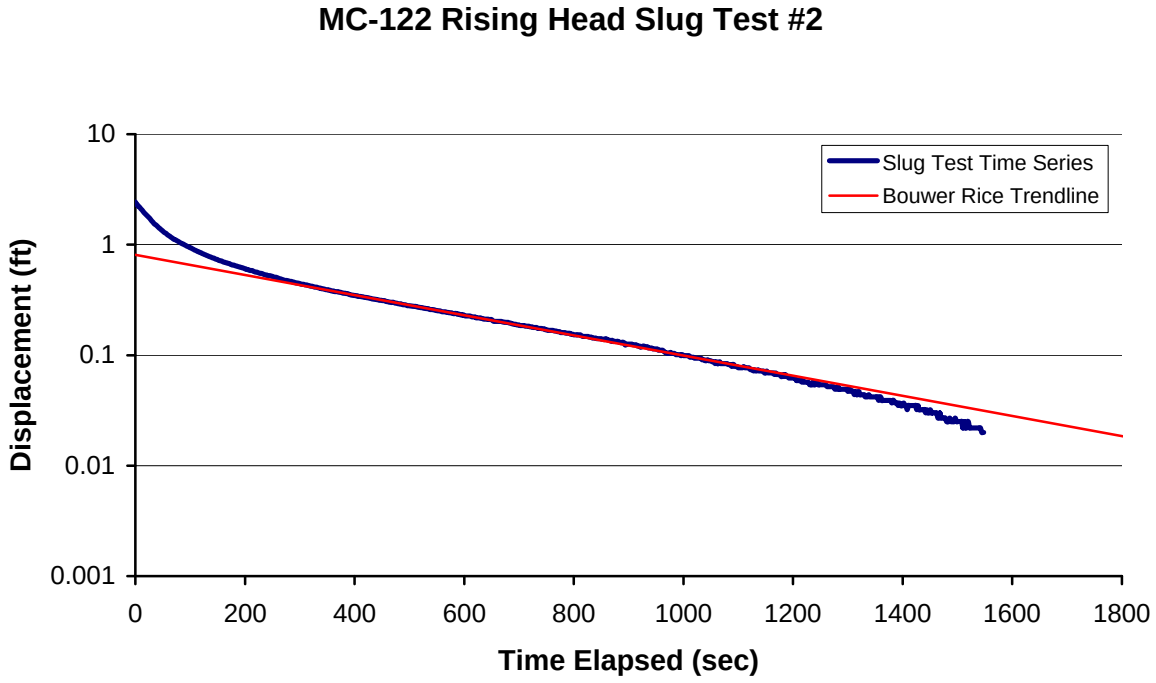
MC-25D Falling Head Slug Test



GROUNDWATER DISPLACEMENT VERSUS TIME (OCTOBER 2007)
PSC Washougal Facility
Washougal, Washington

By: RLW	Date: 11/14/08	Project No.: 9625
AMEC Geomatrix		Figure **L-13**

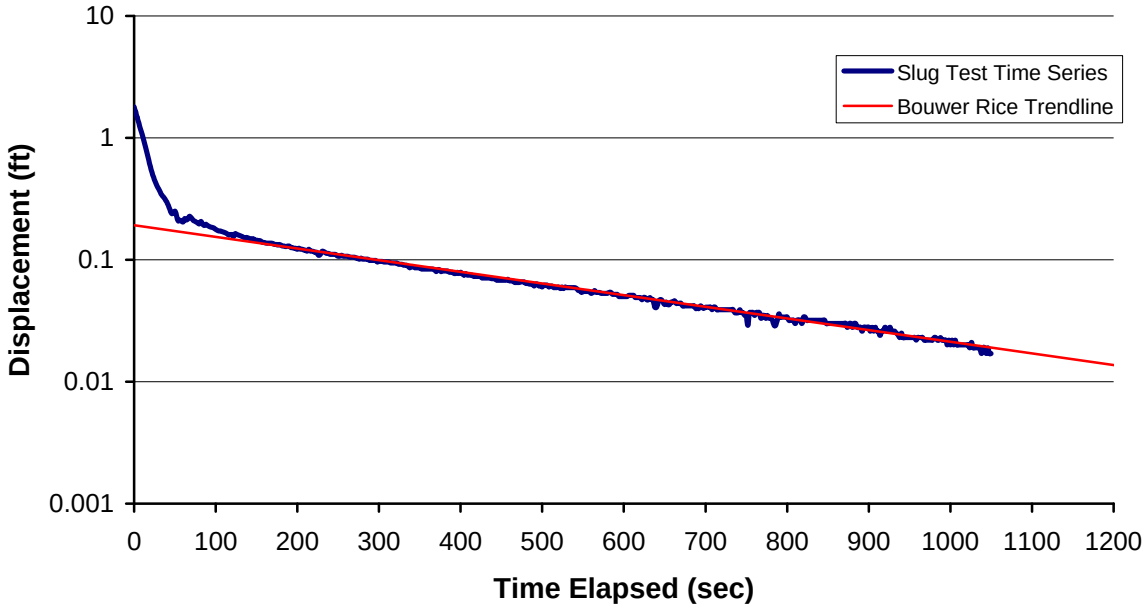




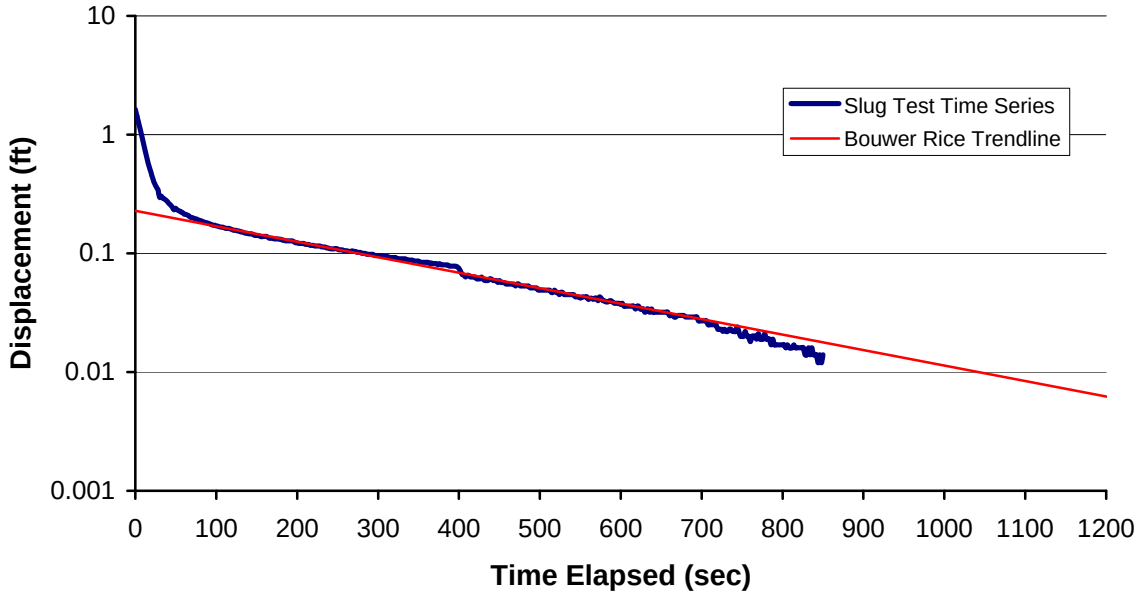
GROUNDWATER DISPLACEMENT VERSUS TIME (SEPTEMBER 2007)
PSC Washougal Facility
Washougal, Washington

By: RLW	Date: 11/14/08	Project No.: 9625
AMEC Geomatrix		Figure **L-14**

MC-123 Rising Head Slug Test #1



MC-123 Rising Head Slug Test #2



GROUNDWATER DISPLACEMENT VERSUS TIME (SEPTEMBER 2007)
PSC Washougal Facility
Washougal, Washington

By: RLW	Date: 11/14/08	Project No.: 9625
AMEC Geomatrix		Figure **L-15**

APPENDIX M

Steigerwald Lake National Wildlife Refuge and Gibbons Creek Remnant Channel Site-Specific Terrestrial Ecological Evaluation

APPENDIX M.1

STEIGERWALD LAKE NATIONAL WILDLIFE REFUGE

SITE-SPECIFIC TERRESTRIAL ECOLOGICAL EVALUATION

PSC Washougal Facility

Washougal, Washington

Prepared for:

Burlington Environmental, LLC
Kent, Washington

Prepared by:

AMEC Environment & Infrastructure, Inc.
600 University Street, Suite 600
Seattle, Washington 98101
(206) 342-1760

September 2013

Project No. 0096250060

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STEIGERWALD LAKE NATIONAL WILDLIFE REFUGE
SITE-SPECIFIC TERRESTRIAL ECOLOGICAL EVALUATION

PSC Washougal Facility
Washougal, Washington

1.0 INTRODUCTION

This appendix provides an assessment of the potential ecological risk posed by chemicals detected in surficial sediments and porewater collected in the Steigerwald Lake National Wildlife Refuge (SLNWR), adjacent to the Burlington Environmental LLC, a wholly owned subsidiary of PSC Environmental Services, LLC (PSC), Washougal facility. This document addresses only ecological risk. The human health effects associated with exposure to contaminated media or consumption of ecological receptors harvested from these two areas are not assessed, as human health effects are considered in the RI and cleanup levels addressing human health will be finalized in the FS for the PSC Washougal site.

This appendix lays out the procedures for conducting a site-specific terrestrial ecological evaluation under Washington's Model Toxics Control Act (MTCA) (Washington Administrative Code [WAC] 173-340-7493), and how these procedures were adhered to for the PSC Washougal RI.

2.0 METHODS

WAC 173-340-7493(1)(c) specifies two elements in planning a site-specific terrestrial ecological evaluation that must be approved by Ecology: (1) the **problem formulation** step, and (2) **selecting an allowable method** for addressing issues identified as part of problem formulation.

2.1 PROBLEM FORMULATION

Problem formulation is completed by addressing four questions specified in WAC 173-340-7493(2).

WAC 173-340-7493(2)(a)(i) The Chemicals of Ecological Concern

Constituents of potential concern (COPCs) have been established as part of the RI, including consideration of migration pathways of these COPCs to surface water and potential exposure of ecological human receptors. All site COPCs were considered in this ecological assessment.

WAC 173-340-7493(2)(a)(ii) Exposure Pathways

Section 8 of the RI describes the conceptual site model for contaminant exposure. The primary exposure pathway identified that could cause exposure of plants or animals to the COPCs is contaminated groundwater discharging to surface water and sediment that comes in contact with plants or animals. Shallow soil at the site could potentially expose small birds, rodents, and rabbits to COPCs. Soil chemicals of concern (COCs) include constituents listed in MTCA Table 749-3, Wildlife; however, based on historical sampling results, very few concentrations in the upper 6 feet of soil exceed levels listed in MTCA Table 749-3, for wildlife. Soil concentrations which exceed MTCA Table 749-3 criteria are summarized in RI Table 8-1. Barium is the only potential compound of concern, is only found in samples collected on PSCs property (not in the marsh), and as described in Section 8 of the RI, the barium concentrations only slightly exceed the criteria in MTCA Table 749-3 and are far below reported background levels for barium in the region and statewide. Additionally, in many areas of the site man-made barriers such as buildings and pavement prevent exposure to shallow soils. Figure 2-1 of the RI shows that such barriers cover nearly 75% of the site, including the most highly impacted areas.

WAC 173-340-7493(2)(a)(iii)(B) Terrestrial Ecological Receptors of Concern

Small birds, rodent, rabbits, and fish are all assumed to be present either on PSC property and/or in the nearby SLNWR. To conduct this assessment, a species was selected that would allow a conservative calculation of quantitative risk based on the concentrations of COPCs detected at the site, as allowed under WAC 173-340-7493(2)(a)(iii)(B). The great blue heron (*Ardea herodias*) was selected as a representative target receptor for assessing the potential ecological risk of COPCs detected in surficial sediment samples. This omnivorous bird inhabits sheltered, shallow bays and inlets, sloughs, marshes, wet meadows, shores of lakes, and rivers (Seattle Audubon Society, 2010). The great blue heron breeds in colonies, and adult birds forage for food a distance of 3.1 to 8 kilometers (km) from the colonies (EPA, 1993). The birds consume a variety of organisms, with small fish comprising 88 to 94 percent of the diet (EPA, 1993). This species is a year-round resident in the vicinity of the PSC Washougal Facility (Seattle Audubon Society, 2010) and is expected to be present in the SLNWR. The great blue heron has been selected as a representative avian predator species for evaluating potential ecological risk at cleanup sites in the Pacific Northwest by the Regional Sediment Evaluation Team, whose members include state agencies in Washington, Oregon, Idaho, and several federal agencies (RSET, 2009).

WAC 173-340-7493(2)(a)(iv) Toxicological Assessment

The potential ecological risk to herons is assessed in this evaluation by calculating a hazard quotient (HQ). A HQ greater than 1 was selected as the threshold for concluding that

unacceptable ecological risks may be present. The dose (D) of sediment COPCs ingested by a great blue heron was calculated from a conservative estimate of the concentration of COPCs in fish tissue and by assuming that 2 percent by weight of the heron's total diet consists of sediment. Conservative toxicity reference values (TRVs) for metals were selected by using the lower of either the U.S. Environmental Protection Agency (EPA) Region 9 recommended low TRV for birds or the estimated wildlife no-observed-adverse-effect level (NOAEL) value for great blue heron (Sample et al., 1996). TRVs for compounds for which a literature search found no references for TRVs were estimated using an allometric scaling approach (Suter et al., 2000). The allometric scaling approach is based on the observation that many morphological, physiological, biochemical, pharmacological, and toxicological attributes of animals vary with some function of an animal's body weight (Suter et al., 2000). More detail on how the toxicological assessment was completed is provided in later sections of this assessment.

2.2 METHOD SELECTION

WAC 173-340-7493(3) describes the allowable methods for screening and conducting the assessment. These methods include using soil cleanup levels provided in Table 749-3 of MTCA or one or more of the following methods: literature surveys [WAC 173-340-7493(3)(a)], soil bioassays [WAC 173-340-7493(3)(b)], wildlife exposure models [WAC 173-340-7493(3)(c)], biomarkers [WAC 173-340-7493(3)(d)], site-specific field studies [WAC 173-340-7493(3)(e)], weight of evidence [WAC 173-340-7493(3)(f)], or other method approved by the department of Ecology [WAC 173-340-7493(3)(g)].

Since sediment and surface water affected by connection to shallow groundwater are the primary media of concern, this assessment did not rely solely on the soil cleanup levels given in Table 749-3 allowed under this section. Instead, this assessment was based on additional tools specified by WAC 173-340-7493(3) and detailed in the following subsections.

2.2.1 Literature surveys [WAC 173-340-7493(3)(a)]

Literature surveys were performed to seek relevant screening standards. These surveys adhered to the recommendations stipulated in WAC 173-340-7493(3)(a) and WAC 173-340-7493(4), though they go beyond soil to also seek values relevant to sediment and surface water. Where possible, site-specific data were compared directly to relevant screening levels.

Sediment: Washington State has not promulgated freshwater sediment standards, and no freshwater sediment cleanup criteria values are specified under MTCA (Ecology, 2007). However, in 2002 Ecology began a project to identify and ultimately select freshwater sediment quality values for use in Ecology's sediment management programs. Although this project has not been completed, lowest apparent effects thresholds (LAETs), which represent

conservative thresholds for a level of concern to ecological receptors, were proposed for several chemicals (Ecology, 2003). Concentrations of chemicals detected in sediment at the Steigerwald Lake National Wildlife Refuge were compared to LAET values to assess the potential for adverse ecological risk from exposure to sediment.

LAET values are available for 7 of the 24 compounds detected in sediment near the site. To assess ecological impacts for chemicals without LAET values, other widely accepted freshwater sediment screening values were used to screen the sediment data. These sources, whose use for this project was approved by Ecology, include the following:

- National Oceanic and Atmospheric Administration (NOAA) Screening Quick Reference Tables for freshwater sediment (Buchman, 2008); and
- EPA Region 5 Resource Conservation and Recovery Act (RCRA) Ecological Screening levels for sediment (EPA, 2003).

Sediment Porewater: The approach used to assess potential ecological impacts from exposure to surface water was to compare sediment porewater concentrations to EPA National Recommended Water Quality Criteria (EPA, 2009). If water quality criteria were not available, concentrations were compared to other widely accepted ecological screening values for surface waters (surface water screening levels [SWSLs]). The screening values for surface water were obtained from the following sources:

- EPA National Recommended Freshwater Acute Criteria for Protection of Aquatic Life (EPA, 2009);
- EPA National Recommended Freshwater Chronic Criteria for Protection of Aquatic Life (EPA, 2009);
- Secondary Acute Ecological Screening Values for Surface Water (Suter and Tsao, 1996);
- Secondary Chronic Ecological Screening Values for Surface Water (Suter and Tsao, 1996);
- Lowest Chronic Ecological Screening Values for Surface Water (Suter and Tsao, 1996);
- Acute Freshwater Ecological Toxicity Reference Values (Friday, 1999); and
- Chronic Freshwater Ecological Toxicity Reference Values (Friday, 1999).

Comparing sediment porewater concentrations to screening values developed for surface water is a very conservative approach for assessing potential ecological risk. Chemical

concentrations in porewater would be diluted as the porewater enters overlying surface water through diffusion and vertical groundwater advection.

Groundwater: Potential ecological impacts from groundwater entering the SLNWR were assessed by first identifying the chemicals present in groundwater at concentrations greater than MTCA groundwater cleanup levels that are protective of surface water based on ecological risk (referred to as COPCs). These cleanup levels are described fully in Section 9.0 of the RI. The maximum concentration of each COPC was then compared to the SWSLs used for sediment porewater. COPCs with maximum concentrations less than SWSLs are assumed to not pose any adverse ecological risk. COPCs with maximum concentrations above SWSLs (referred to as chemicals of concern [COCs]) were further evaluated to assess potential ecological risk.

Exposure to ecological receptors results from groundwater passing through the sediments into overlying surface waters. A portion of the chemical concentration in groundwater may partition to sediment particles and associated organic matter, and dissolved concentrations will be further diluted as they reach surface water through advection and diffusion. The impact of COCs on sediment concentrations was evaluated through the sediment screening described above. The potential impact of COCs on surface water was evaluated by comparing groundwater concentrations to the maximum concentration measured in sediment porewater. If the COC maximum sediment porewater concentration is below the SWSL, it is assumed that the COC in groundwater does not pose an unacceptable ecological risk due to partitioning to particulates and/or dilution. This is a conservative assumption because of the further dilution that would occur due to mixing with surface waters.

2.2.2 Wildlife Exposure Models [WAC 173-340-7493(3)(c)(iii)]

Screening values provide a quick way to evaluate the potential for adverse risk to ecological receptors. The selection of site-specific target receptors and species-specific toxicity information provides a more rigorous analysis of potential ecological risk due to COCs at the site. This section provides an assessment of the potential ecological risk of the metals detected in surficial sediment samples collected in the SLNWR adjacent to the PSC property and the two organic compounds (acetone and carbon disulfide) that exceeded sediment screening levels.

Consistent with WAC 173-340-7493(3)(c)(iii), the great blue heron (*Ardea herodias*) was selected as a representative target receptor. The great blue heron is the most sensitive ecological receptor in the Steigerwald Marsh ecosystem. Great blue herons are more sensitive than other receptors because they are at the top of the food chain and therefore subject to biomagnification of contaminants through the food chain. Selecting the great blue heron as the

representative target receptor is therefore a conservative approach to risk evaluation. WAC 173-340-7493(3)(c)(iii) references section (7) when a substitute receptor is selected.

The selection of the great blue heron complies with WAC 173-340-7493(7) because:

(a) It is "a reasonable surrogate for a receptor that is characteristic of the ecoregion where the site is located."

(b) It is "characteristic of the ecoregion where the site is located and will serve as a surrogate for wildlife species that are, or may become exposed to soil contaminants at the site… and is expected to be vulnerable to the effects of soil contamination relative to the current default species because of high exposure or known sensitivity to hazardous substances found in soil at the site." The great blue heron is vulnerable to the effects of contamination in the wetland relative to default species because of potential high exposure to hazardous substances found at the Site that may be present in the marsh. As a receptor at the top of the food chain they are subject to biomagnification of contaminants.

(c) "Scientific studies concerning the proposed substitute receptor species are available in the literature to select reasonable maximum exposure estimates for variables listed in Table 749-4."

(d) "The species is most ecologically similar to the default receptor being replaced." The heron is an avian predator.

(e) "Unless there is clear and convincing evidence that they are not characteristic of the ecoregion where the site is located, the following groups shall be included in the wildlife exposure model: A small mammalian predator on soil-associated invertebrates, a small avian predator on soil-associated invertebrates, and a small mammalian herbivore." Since sediment and surface water, not soil, are the primary media of concern, selecting the heron, which feeds and resides in these media, is more appropriate for this site. Additionally, the great blue heron has been selected as a representative avian predator species for evaluating potential ecological risk at cleanup sites in the Pacific Northwest by the Regional Sediment Evaluation Team, whose members include state agencies in Washington, Oregon, Idaho, and several federal agencies (RSET, 2009).

(f) Extra precautions built in "to account for uncertainties in the level of protection provided to substitute receptor species and toxicologically sensitive species" may be required. This was done and is referenced where appropriate in the following sections.

The potential ecological risk to herons was assessed by calculating a hazard quotient (HQ) using Equation (1):

$$HQ = \left(\frac{D_{m,i}}{TRV_{m,i}} \right)$$ Equation (1)

Where:

$D_{m,i}$ = total dose of metal i (in milligrams per kilogram of body weight per day [mg/kg-day]);
$TRV_{m,i}$ = toxicity reference value (mg/kg-day).

An HQ greater than 1 was selected as the threshold for concluding that unacceptable ecological risks may be present, consistent with WAC 173-340-7493(7)(f)(iii).

The dose (D) of sediment COCs ingested by great blue heron was calculated from a conservative estimate of fish tissue concentration and by assuming that 2 percent by weight of the heron's total diet consists of sediment. The daily dose of ingested COCs was calculated using Equation (2):

$$D = \left[\frac{\left(C_{fish} * f_{fish} * I_{food} \right) + \left(C_{sed} * f_{sed} * I_{food} \right)}{BW} \right] * AUF$$ Equation (2)

Where:

D = dose (mg/kg-day);
C_{fish} = estimated whole-body COC concentration in fish (mg/kg wet weight);
f_{fish} = fraction of fish in the diet (0.98);
I_{food} = ingestion rate (0.42 kilogram per day [kg/day]);
C_{sed} = sediment COC concentration (mg/kg wet weight);
f_{sed} = fraction of sediment in the diet (0.02);
BW = body weight (2.39 kg);
AUF = area use factor.

Whole-body COC concentrations in fish were estimated by assuming that the concentration of COCs in fish tissue was equal to the maximum measured sediment concentration (mg/kg dry weight). Fish wet weight COC concentrations were calculated assuming a fish/water content of 75 percent (Suter et al., 2000). A sediment water content of 30 percent was assumed to

convert dry weight-based sediment values to wet weight. The body weight and ingestion rate values used in Equation (1) are recommended by Sample et al. (1996).

AUF is the ratio of the potentially impacted area within the SLNWR adjacent to the PSC Washougal Facility to the foraging area of the great blue heron. The impact area was assumed to be a region extending 75 feet east of South 32nd Street and 200 feet south of a line perpendicular to the northern property boundary (0.34 acre). A great blue heron foraging range of 7,463 acres was used to calculate the AUF. This value was derived conservatively using the minimum foraging range (3.1 km) reported by EPA (1993) and assuming that this value represents the radius of a foraging area.

The toxicity reference values (TRVs) used in Equation (1) are shown in Table M.1-1 Conservative TRVs for metals were selected by using the lower of either the EPA Region 9 recommended low TRV for birds or the estimated wildlife NOAEL value for great blue heron (Sample et al., 1996), consistent with WAC 173-340-7493(7)(f)(i).

A literature search found no references for TRVs for acetone or carbon disulfide in birds. TRVs for these compounds were estimated using an allometric scaling approach (Suter et al., 2000). The allometric scaling approach is based on the observation that many morphological, physiological, biochemical, pharmacological, and toxicological attributes of animals vary with some function of an animal's body weight (Suter et al., 2000). If a toxicity value (e.g., NOAEL) and the body weights of both the test species and endpoint species are known and an appropriate scaling factor is selected, the toxicity value for the wildlife species of concern may be calculated as:

$$NOAEL_W = NOAEL_T \ (BW_T/BW_W)^{1-b} \qquad \text{Equation (3)}$$

Where:

$NOAEL_W$ = No observed apparent effects level for the wildlife species of interest,

$NOAEL_T$ = No observed apparent effects level for test species,

BW_T = Body weight (grams) of test species,

BW_W = Body weight (grams) of wildlife species of concern, and

b = Scaling factor.

NOAEL values of 10 mg/kg-day for acetone (EPA, 2010) and 42.5 mg/kg-day for carbon disulfide (Sample et al., 1996) were found for the Norway rat (*Rattus norvegicus*). Average body weights for the Norway rat and great blue heron, the wildlife receptor species of concern, are 300 grams (g) (NRC, 1995) and 2,229 g (EPA, 1993), respectively. A scaling factor of 0.94

was used based on information presented in Suter et al. (2000). The calculated TRVs for acetone and carbon disulfide are presented in Table M.1-1.

2.2.3 Weight of evidence [WAC 173-340-7493(3)(f)]

WAC 173-340-7493(3)(f) specifies that "A weight of evidence approach shall include a balance in the application of literature, field, and laboratory data, recognizing that each has particular strengths and weaknesses. Site-specific data shall be given greater weight than default values or assumptions where appropriate." This approach was applied for the site by assessing both:

- the site specific data versus relevant screening levels identified through the literature search, and
- results for a wildlife exposure model for a site-specific relevant species.

Results of the two separate assessments are described in Sections 3.0 and 4.0.

3.0 SCREENING RESULTS

Sampling has been conducted at multiple locations over the course of the RI to gather data that should be representative of maximum, facility-caused impacts (including impacts from historic releases and migration) in the marsh. The history of investigation is described more fully in the RI report. Data from sediment, porewater, and groundwater were used in this assessment.

3.1 SEDIMENTS

Table M.1-2 compares the results of chemical analyses in sediments from six stations in the SLNWR to freshwater sediment ecological screening values. Two metals (iron and vanadium) exceeded screening levels at one sampling location (MC-SM6); acetone exceeded its sediment screening level at all six sampling locations.

3.2 SEDIMENT POREWATER

Table M.1-3 compares sediment porewater concentrations to SWSLs. Eight metals (barium, cadmium, cobalt, iron, magnesium, manganese, nickel, and vanadium) and one organic compound (ethylbenzene) had porewater concentrations that exceeded SWSLs at one or more sampling locations.

Constituents in porewater may move vertically into overlying water due to groundwater advection and dilution. This process may dilute the porewater concentrations. The extent of dilution would depend on the concentration of the COCs in overlying waters and the extent of mixing within surface waters. Table M.1-4 shows the dilution factors required for

concentrations of COCs to meet surface water ecological screening values. For most of the COCs in Table M.1-4, only modest dilutions would be required to meet screening criteria.

3.3 GROUNDWATER

Two metals (arsenic and copper) and five organic compounds (1,1-dichloroethane, 1, 4-dioxane, tetrachloroethene, trichloroethane, and vinyl chloride) had maximum concentrations in groundwater wells adjacent to the SLNWR that exceeded MTCA groundwater cleanup levels (Table 9-7 in RI). All of the constituents except copper and 1,4-dioxane had maximum groundwater concentrations below SWSLs protective of aquatic life (Table M.1-5). Therefore, arsenic, 1,1-dichloroethane, tetrachloroethene, trichloroethane, and vinyl chloride do not pose an unacceptable ecological risk to aquatic receptors.

The maximum porewater concentration of copper and 1,4-dioxane are below SWSLs (Table M.1-5). This finding shows that these chemicals are also not chemicals of concern, presumably due to sediment partitioning and dilution as the groundwater moves toward surficial sediment. While concentrations do not pose an unacceptable ecological risk for surface water and sediments, they continue to be a concern in the overall RI for groundwater and are retained in the RI as COCs for consideration in groundwater.

The screening assessment shows that all chemicals detected in groundwater wells adjacent to the SLNWR are below levels of ecological concern.

3.4 SCREENING SUMMARY

Table M.1-6 shows metals and organic compounds that exceed ecological screening levels in the three media. The constituents shown in Table M.1-6 are the COCs considered in this risk evaluation. No chemicals exceed screening levels for groundwater. Iron, vanadium, and acetone exceed screening levels in sediment; and barium, cadmium, cobalt, iron, manganese, magnesium, nickel, vanadium, and ethylbenzene exceed screening levels in porewater.

4.0 ECOLOGICAL RISK ASSESSMENT

Table M.1-7 shows the sediment COC concentrations and the HQ values calculated assuming exposure to the maximum measured sediment concentration. All of the HQ values are orders of magnitude below a level of concern (i.e., HQ > 1). The highest HQ value (0.0013) was calculated for arsenic; this value is 764 times below a level of concern.

5.0 RISK SCREENING SUMMARY

The results of this screening show that based on the data collected in 2007 and 2008 concentrations of COCs in sediments in the SLNWR adjacent to the PSC Washougal Facility

do not pose an unacceptable risk to ecological receptors. This screening is based on several conservative assumptions that reduce the uncertainty associated with this conclusion. These assumptions are listed below.

- The maximum concentration of COCs measured in any sediment sample was used to estimate exposure.
- Concentrations of COCs in fish tissue were assumed to be equal to the maximum concentration in sediments.
- The estimated fish tissue concentrations assume fish prey would spend 100 percent of their time in the wetland adjacent to the PSC Washougal Facility.
- A sediment ingestion rate equal to 2 percent by weight of the total heron diet was assumed.
- The lowest of the applicable TRVs was selected for metals. Values at the higher end of the range recommended by EPA Region 9 are at least an order of magnitude higher; therefore, HQ values would be lower by a factor of at least 10 if these TRVs had been used.
- No TRVs were found for acetone or carbon disulfide in avian species. An allometric scaling factor based on body weight and NOAELs for acetone and carbon disulfide in the laboratory rat was used to estimate TRVs for these compounds in the great blue heron. The use of the scaling factor in combination with an NOAEL provides a conservative approach in estimating TRVs for acetone and carbon disulfide.
- The minimum foraging range for the great blue heron was used to calculate foraging area. If the EPA (1993) mean foraging range had been used, HQ values would be lower by a factor of 80.

6.0 CONCLUSION

The results of the screening assessment and ecological risk assessment for great blue heron demonstrate that there is no significant potential for adverse ecological impacts to ecological receptors that may utilize the SLNWR adjacent to the PSC Washougal facility. Concentrations of metals and organic compounds in groundwater and sediment are substantially below any level of potential concern. Concentrations of COCs in porewater are elevated above surface water screening levels for metals and for ethylbenzene (at one site). With the exception of barium and iron, relatively modest dilutions would result in porewater concentrations equal to screening values. There are no ambient water quality criteria for barium, therefore there is more uncertainty associated with the risk estimate for this element. Iron is a common co-contaminant occurring at high concentrations in sediments in many regions and in naturally occurring reducing environments such as marshes. Iron is not generally considered toxic for regulatory purposes.

7.0 REFERENCES

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TABLES

TABLE M.1-1

TOXICITY REFERENCE VALUES

PSC Washougal Facility
Washougal, Washington

Analyte	TRV (mg/kg-day)	Source[1,2,3,4,5]
Arsenic	2.5	1
Barium	20.8	1
Cadmium	0.7	2
Chromium	1	1
Copper	2.3	2
Manganese	77.6	2
Nickel	1.38	2
Silver	178	3
Vanadium	11.4	1
Zinc	14.5	2
Acetone	8.9	4
Carbon Disulfide	37.7	5

Notes

1. Estimated wildlife NOAEL value for Great Blue Heron (Sample et al., 1996).
2. EPA Region 9 recommended low TRV for birds (http://www.dtsc.ca.gov/AssessingRisk/eco.cfm#Currently_Recommended_U.S._Environmental_Protection_Agency_Region_9_Biological_Technical_Assistance_Group_(BTAG)_Mammalian_and_Avian_Toxicity_Reference_Values_(TRVs),_2/24/09).
3. EPA Aquire database.
4. Based on NOAEL value for rat (Sample et al., 1996).
5. Based on NOAEL value for rat (EPA, 2010).

Abbreviations

EPA = U.S. Environmental Protection Agency
mg/kg-day = milligrams per kilogram per day
NOAEL = No-Observed-Adverse-Effect Level
TRV = toxicity reference value

TABLE M.1-2

COMPARISON OF CHEMICAL CONCENTRATIONS IN SEDIMENTSWITH LOWEST APPARENT EFFECTS, THRESHOLD LEVELS, OR OTHER ECOLOGICAL SCREENING VALUES[1,2]

PSC Washougal Facility
Washougal, Washington

Chemicals	2003 LAET[3]	Sample Stations (sampling date and depth [feet below ground surface] provided below station number)					
		MC-SM1	MC-SM2	MC-SM3	MC-SM4	MC-SM5	MC-SM6
		09-Sep-08	09-Sep-08	09-Sep-08	09-Sep-08	09-Sep-08	09-Sep-08
		0.5	0.5	0.5	0.5	0.5	0.5
Metals (mg/kg)							
Arsenic	31.4	4.1	2.85	3.26	1.84	2.32	4.8
Barium	NA	111	119	101	68.5	115	146
Cadmium	2.39	0.415	0.372	0.322	0.079	0.244	1.06
Chromium	95	9.75	8.25	8.89	8.26	9.02	14.2
Copper	335	12.2	7.16	8.25	6.71	8.08	18.9
Iron	20,000[4]	17,900	15,800	17,300	14,100	15,100	21,400
Manganese	460[4]	370	289	284	153	212	438
Mercury	0.8	—	—	—	—	—	—
Nickel	53.1	9.58	8.42	9.35	7.32	9.83	12.6
Potassium	NA	1,100	981	928	481	827	1,160
Silver	0.545	0.09	0.03	0.02 U	0.02 U	0.03 U	0.07
Vanadium	50[4]	45.2	36.5	45.6	39.6	35.5	55.9
Zinc	683	75.4	59.2	53.7	38.3	48.9	113
Petroleum Hydrocarbons (mg/kg)							
Diesel Range Hydrocarbons	NA	N/A	N/A	N/A	N/A	N/A	N/A
Lube Oil Range Hydrocarbons	NA	N/A	N/A	N/A	N/A	N/A	N/A
TPH (as gasoline)	NA	N/A	N/A	N/A	N/A	N/A	N/A
SVOCs (µg/kg)							
1,4-Dioxane	2,176[5]	0.45 UJ	41.7	0.45 UJ	0.88 UJ	0.86 UJ	0.9 UJ
VOCs (µg/kg)							
1,1,1-Trichloroethane	213[6]	0.19 U	0.29 J	0.18 J	2.8 J	0.25 J	0.23 U
1,1,2-Trichlorotrifluoroethane	NA	0.12 U	0.14 U	0.11 U	0.12 U	0.12 U	0.15 U
1,1-Dichloroethane	0.575[6]	0.059 U	0.067 U	0.053 U	0.059 U	0.059 U	0.071 U
1,1-Dichloroethene	19.4[6]	0.085 U	0.097 U	0.077 U	0.087 U	0.087 U	0.11 U
1,2-Dichlorobenzene	294[6]	0.077 U	0.088 U	0.07 U	0.078 U	0.078 U	0.093 U
1,2-Dichloroethane	260[6]	0.066 U	0.075 U	0.06 U	0.067 U	0.067 U	0.08 U
2,2-Dichloro-1,1,1-trifluoroethane	NA	6.1 U	6.9 U	5.5 U	6.1 U	6.1 U	7.3 U
2-Butanone	NA	31	23 J	8.2 J	3.6 J	13 J	18 J
2-Methylpentane	NA	6.1 U	6.9 U	5.5 U	6.1 U	6.1 U	7.3 U
3-Methylpentane	NA	6.1 U	6.9 U	5.5 U	6.1 U	6.1 U	7.3 U
Acetone	9.9[6]	400	280	95	42 U	170	250
Benzene	142[6]	0.17 U	0.2 U	0.16 U	0.18 U	0.18 U	0.21 U
Carbon disulfide	23.9[6]	0.38 J	1.4 J	0.23 J	0.066 U	0.37 J	0.35 J
Carbon tetrachloride	1,450[6]	0.095 U	0.11 U	0.086 U	0.096 U	0.096 U	0.12 U
Chlorobenzene	291[6]	0.066 U	0.075 U	0.06 U	0.067 U	0.067 U	0.08 U
Chloroethane	NA	0.37 U	0.42 U	0.33 U	0.37 U	0.37 U	0.45 U

TABLE M.1-2

COMPARISON OF CHEMICAL CONCENTRATIONS IN SEDIMENTSWITH LOWEST APPARENT EFFECTS, THRESHOLD LEVELS, OR OTHER ECOLOGICAL SCREENING VALUES[1,2]

PSC Washougal Facility
Washougal, Washington

Chemicals	2003 LAET[3]	Sample Stations (sampling date and depth [feet below ground surface] provided below station number)					
		MC-SM1	MC-SM2	MC-SM3	MC-SM4	MC-SM5	MC-SM6
		09-Sep-08	09-Sep-08	09-Sep-08	09-Sep-08	09-Sep-08	09-Sep-08
		0.5	0.5	0.5	0.5	0.5	0.5
VOCs (µg/kg) (continued)							
Chloroform	121[6]	0.059 U	0.067 U	0.053 U	0.059 U	0.059 U	0.071 U
Chloromethane	NA	0.07 U	0.079 U	0.063 U	0.071 U	0.071 U	0.084 U
cis-1,2-Dichloroethene	19.4[6]	0.099 U	0.12 U	0.089 U	0.49 J	0.1 U	0.12 U
Dichlorodifluoromethane	NA	0.088 U	0.1 U	0.079 U	3 J	0.64 J	0.11 U
Ethylbenzene	175[6]	0.49 J	0.7 J	0.46 J	1.2 J	0.34 J	0.4 J
m,p-Xylenes	430[6]	1.4 J	1.8 J	1.1 J	2.7 J	0.85 J	0.69 J
Methylcyclopentane	NA	6.1 U	6.9 U	5.5 U	6.1 U	6.1 U	7.3 U
Methylene chloride	159[6]	4.1 UJ	4.1 UJ	4.1 UJ	4.1 UJ	4.1 UJ	4.1 UJ
VOCs (µg/kg) (continued)							
o-Xylene	430[6]	0.5 J	0.64 J	0.37 J	0.85 J	0.33 J	0.25 J
Tetrachloroethene	920[6]	1.1 J	1.5 J	1.1 J	4.1 J	0.69 J	0.53 J
Toluene	1,220[6]	2.7 J	3.2 J	2 J	11	2.2 J	2.1 J
trans-1,2-Dichloroethene	19.4[6]	0.059 U	0.067 U	0.053 U	0.059 U	0.059 U	0.071 U
Trichloroethene	112[6]	0.16 U	0.33 J	0.25 J	2.5 J	0.26 J	0.2 U
Trichlorofluoromethane	NA	0.066 U	0.075 U	0.06 U	0.067 U	0.067 U	0.08 U
Vinyl Chloride	202[6]	0.07 U	0.079 U	0.063 U	0.071 U	0.071 U	0.084 U

Notes
1. Shaded cells indicate concentration exceeds LAET criterion.
2. Data qualifiers are as follows:
   J = value is an estimate.
   U = not detected at reporting limit listed.
   UJ = value is an estimate at reporting limit listed.
3. LAET (Ecology, 2003) except where otherwise noted.
4. Reference: Buchman, 2008.
5. Freshwater Sediment Toxicity Reference Value calculated using equilibrium partitioning approach assuming a fractional organic carbon content of 0.04 (EPA, 1993).
6. U.S. EPA Region 5 RCRA ecological screening levels (EPA, 2003).

Abbreviation(s)
EPA = U.S. Environmental Protection Agency
LAET = Lowest Apparent Effects Threshold
mg/kg = milligrams per kilogram
NA = not available
N/A = not analyzed

TABLE M.1-3

COMPARISON OF SEDIMENT POREWATER CONCENTRATIONS
WITH AMBIENT WATER QUALITY CRITERIA AND/OR OTHER ECOLOGICAL SCREENING VALUES[1,2]
PSC Washougal Facility
Washougal, Washington

Chemical	Acute[3] Criterion	Chronic[4] Criterion	MC-SM-1 25-Oct-07	MC-SM-2 21-Sep-07	MC-SM-2 08-Dec-08	MC-SM-3 21-Sep-07	MC-SM-3 08-Dec-08	MC-SM-4 08-Dec-08	MC-SM-5 08-Dec-08	MC-SM-6 08-Dec-08
Inorganics (dissolved) - mg/L										
Arsenic	0.34	0.15	0.002	0.0057	0.001	0.0035	0.0016	0.0052	0.0027	0.0059
Barium	NA	NA	0.095	0.161	0.054	0.221	0.129	0.069	0.0836	0.0642
Cadmium	0.002	0.00025	1E-04	0.0006 J	5E-04	0.0007 J	0.0003	1E-05	0.0001	0.0001
Chromium	0.57	0.074	0.003	0.0024	1E-04	0.0026	0.0001	0.0002	0.0007	0.0008
Cobalt	NA	NA	0.007	0.009	N/A	0.0101	N/A	N/A	N/A	
Copper	0.013	0.009	0.004	0.0075 U	0.005	0.0069	0.0042	0.0008	0.0036	0.0024
Iron	NA	NA	2.63	5.08	0.036	4.79	0.034	19.2	1.6	1.9
Magnesium	NA	NA	33.6	44.3	N/A	77.1	N/A	N/A	N/A	N/A
Manganese	NA	NA	1.14	3.15	0.269	4.09	2.7	4.5	3.6	2.1
Mercury	0.0014	0.00077	3E-05 U	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Nickel	0.47	0.052	0.026	0.0847 J	0.031	0.112 J	0.159	0.0123	0.0201	0.0211
Potassium	NA	NA	1.3	2.31	1.3	4.32	1.9	1.8	0.6	1.7
Silver	0.0032	NA	3E-05	4E-05	5E-06 U	4E-05	5E-06 U	1E-05 U	5E-06 U	5E-06 U
Sodium	NA	NA	22.8	32.3	N/A	47.3	N/A	N/A	N/A	N/A
Vanadium	NA	NA	0.008	0.0074	0.001	0.0066	0.0015	0.0002	0.0024	0.0036
Zinc	0.12	0.12	0.012	0.043	0.006	0.0129	0.0083	0.0043	0.0075	0.0068
Inorganics (total) - mg/L										
Arsenic	NA	NA	0.003	0.0107	0.001	0.0109	0.0014	0.0114	0.0038	0.0064
Barium	0.11[5]	0.004[6]	0.156	0.519	0.055	1.01	0.128	0.0979	0.0881	0.0677
Cadmium	NA	NA	3E-04	0.0028 J	5E-04	0.0016 J	0.0005	1E-05	0.0002	0.0002
Chromium	NA	NA	0.008	0.0294	2E-04	0.0579	0.0003	0.0003	0.0016	0.0012
Cobalt	1.5[5]	0.023[6]	0.01	0.0256		0.0437	N/A	N/A	N/A	N/A
Copper	NA	NA	0.014	0.0737	0.006	0.117	0.005	0.001	0.0046	0.0035
Iron	NA	1.0	11	56.5	0.088	101	0.092	29.2	3.6	3.1
Magnesium	NA	82[7]	35.6	55.9	N/A	100	N/A	N/A	N/A	N/A
Manganese	2.3[5]	0.12[6]	1.11	3.94	0.271	5.54	2.7	4.5	3.7	2.4

TABLE M.1-3

COMPARISON OF SEDIMENT POREWATER CONCENTRATIONS
WITH AMBIENT WATER QUALITY CRITERIA AND/OR OTHER ECOLOGICAL SCREENING VALUES[1,2]
PSC Washougal Facility
Washougal, Washington

Chemical	Acute[3] Criterion	Chronic[4] Criterion	MC-SM-1 25-Oct-07	MC-SM-2 21-Sep-07	MC-SM-2 08-Dec-08	MC-SM-3 21-Sep-07	MC-SM-3 08-Dec-08	MC-SM-4 08-Dec-08	MC-SM-5 08-Dec-08	MC-SM-6 08-Dec-08
Inorganics (total) - mg/L (Continued)										
Mercury	NA	NA	4E-05	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Nickel	NA	NA	0.029	0.112 J	0.032	0.163 J	0.155	0.0126	0.0201	0.0207
Potassium	NA	53[7]	1.8	6.43	1.3	12.4	1.8	1.8	0.6	1.9
Silver	NA	NA	1E-04	0.0004	2E-05 U	0.0006	2E-05 U	2E-05 U	2E-05 U	3E-05 U
Sodium	NA	680[7]	24	33	N/A	47.6	N/A	N/A	N/A	N/A
Vanadium	0.28[8]	0.019[9]	0.024	0.0635	0.002	0.125	0.0015	0.0019	0.0047	0.0046
Zinc	NA	NA	0.073	0.26	0.007	0.232	0.009	0.003	0.0078	0.0093
TPH - µg/L										
Diesel Range Hydrocarbons	NA	NA	13 U	360 U	N/A	330 U	N/A	N/A	N/A	N/A
Lube Oil Range Hydrocarbons	NA	NA	23 U	720 U	N/A	650 U	N/A	N/A	N/A	N/A
TPH (as gasoline)	NA	NA	13 U	50 U	N/A	50 U	N/A	N/A	N/A	N/A
SVOCs - µg/L										
1,2,4-Trichlorobenzene	NA	0.01[10]	0.016 U	0.018 U	N/A	0.016 U	N/A	N/A	N/A	N/A
1,2-Dichlorobenzene	158[11]	15.8[12]	0.022 U	0.024 U	N/A	0.022 U	N/A	N/A	N/A	N/A
1,3-Dichlorobenzene	502[11]	50.2[12]	0.021 U	0.023 U	N/A	0.021 U	N/A	N/A	N/A	N/A
1,4-Dichlorobenzene	112[11]	11.2[12]	0.029 U	0.031 U	N/A	0.029 U	N/A	N/A	N/A	N/A
1,4-Dioxane	6,210,000[8]	49.6[9]	N/A	31 J	0.3 U	35 J	7.8	0.24 U	0.24 U	0.24 U
2,4,5-Trichlorophenol	NA	18[10]	0.031 U	0.033 U	N/A	0.031 U	N/A	N/A	N/A	N/A
2,4,6-Trichlorophenol	32[11]	3.2[12]	0.058 U	0.062 U	N/A	0.058 U	N/A	N/A	N/A	N/A
2,4-Dichlorophenol	202[11]	36.5[12]	0.047 U	0.05 U	N/A	0.047 U	N/A	N/A	N/A	N/A
2,4-Dimethylphenol	212[11]	21.2[12]		2.4 U	N/A	2.2 U	N/A	N/A	N/A	N/A
2,4-Dinitrophenol	62[11]	6.2[12]	0.17 U	0.19 U	N/A	0.17 U	N/A	N/A	N/A	N/A
2,4-Dinitrotoluene	3,100[11]	310[12]	0.018 U	0.02 U	N/A	0.018 U	N/A	N/A	N/A	N/A
2,6-Dinitrotoluene	NA	NA	0.033 U	0.036 U	N/A	0.033 U	N/A	N/A	N/A	N/A
2-Chloronaphthalene	NA	NA	0.041 U	0.044 U	N/A	0.041 U	N/A	N/A	N/A	N/A
2-Chlorophenol	438[11]	43.8[12]	0.054 U	0.058 U	N/A	0.054 U	N/A	N/A	N/A	N/A
2-Methyl-4,6-Dinitrophenol	NA	NA	0.025 U	0.027 U	N/A	0.025 U	N/A	N/A	N/A	N/A

TABLE M.1-3

COMPARISON OF SEDIMENT POREWATER CONCENTRATIONS
WITH AMBIENT WATER QUALITY CRITERIA AND/OR OTHER ECOLOGICAL SCREENING VALUES[1,2]
PSC Washougal Facility
Washougal, Washington

Chemical	Acute[3] Criterion	Chronic[4] Criterion	MC-SM-1 25-Oct-07	MC-SM-2 21-Sep-07	MC-SM-2 08-Dec-08	MC-SM-3 21-Sep-07	MC-SM-3 08-Dec-08	MC-SM-4 08-Dec-08	MC-SM-5 08-Dec-08	MC-SM-6 08-Dec-08
SVOCs - µg/L (continued)										
2-Methylnaphthalene	NA	NA	0.026 U	0.028 U	N/A	0.026 U	N/A	N/A	N/A	N/A
2-Methylphenol	230[5]	13[6]	0.11 U	0.12 U	N/A	0.11 U	N/A	N/A	N/A	N/A
2-Nitroaniline	NA	NA	0.024 U	0.026 U	N/A	0.024 U	N/A	N/A	N/A	N/A
2-Nitrophenol	NA	3,500[12]	0.063 U	0.068 U	N/A	0.063 U	N/A	N/A	N/A	N/A
3,3'-Dichlorobenzidine	NA	NA	0.43 U	0.46 U	N/A	0.43 U	N/A	N/A	N/A	N/A
3-Nitroaniline	NA	NA	0.029 U	0.031 U	N/A	0.029 U	N/A	N/A	N/A	N/A
4-Bromophenyl phenyl ether	36[11]	12.2[12]	0.026 U	0.028 U	N/A	0.026 U	N/A	N/A	N/A	N/A
4-Chloro-3-methylphenol	3.0[11]	0.3[12]	0.037 U	0.04 U	N/A	0.037 U	N/A	N/A	N/A	N/A
4-Chloroaniline	NA	NA	0.025 U	0.027 U	N/A	0.025 U	N/A	N/A	N/A	N/A
4-Chlorophenyl phenyl ether	NA	NA	0.027 U	0.029 U	N/A	0.027 U	N/A	N/A	N/A	N/A
4-Methylphenol	NA	NA	0.12 U	0.13 U	N/A	0.12 U	N/A	N/A	N/A	N/A
4-Nitroaniline	NA	NA	0.019 U	0.021 U	N/A	0.019 U	N/A	N/A	N/A	N/A
4-Nitrophenol	828[11]	82.8[12]	0.28 U	0.3 U	N/A	0.28 U	N/A	N/A	N/A	N/A
Acenaphthene	170[11]	17[12]	0.026 U	0.028 U	N/A	0.026 U	N/A	N/A	N/A	N/A
Acenaphthylene	NA	NA	0.015 U	0.016 U	N/A	0.015 U	N/A	N/A	N/A	N/A
Anthracene	13[5]	0.73[6]	0.024 U	0.026 U	N/A	0.024 U	N/A	N/A	N/A	N/A
Benzo(a)anthracene	0.49[5]	0.027[6]	0.018 U	0.02 U	N/A	0.018 U	N/A	N/A	N/A	N/A
Benzo(a)pyrene	0.24[5]	0.014[6]	0.031 U	0.033 U	N/A	0.031 U	N/A	N/A	N/A	N/A
Benzo(b)fluoranthene	NA	NA	0.017 U	0.019 U	N/A	0.017 U	N/A	N/A	N/A	N/A
Benzo(g,h,i)perylene	NA	NA	0.019 U	0.021 U	N/A	0.019 U	N/A	N/A	N/A	N/A
Benzo(k)fluoranthene	NA	NA	0.024 U	0.026 U	N/A	0.024 U	N/A	N/A	N/A	N/A
Benzoic acid	740[5]	42[6]	1.8 J	1.2 U	N/A	1.1 U	N/A	N/A	N/A	N/A
Benzyl alcohol	150[5]	8.6[6]	0.076 J	0.15 UJ	N/A	0.073 U	N/A	N/A	N/A	N/A
bis(2-Chloroethoxy)methane	NA	NA	0.024 U	0.026 U	N/A	0.024 U	N/A	N/A	N/A	N/A
bis(2-Chloroethyl) ether	23,800[11]	2,380[12]	0.035 U	0.038 U	N/A	0.035 U	N/A	N/A	N/A	N/A
bis(2-Chloroisopropyl) ether	NA	NA	0.026 U	0.028 U	N/A	0.026 U	N/A	N/A	N/A	N/A
bis(2-Ethylhexyl) phthalate	1,110[11]	0.3[12]	0.18 J	0.14 U	N/A	0.13 U	N/A	N/A	N/A	N/A

TABLE M.1-3

COMPARISON OF SEDIMENT POREWATER CONCENTRATIONS
WITH AMBIENT WATER QUALITY CRITERIA AND/OR OTHER ECOLOGICAL SCREENING VALUES[1,2]
PSC Washougal Facility
Washougal, Washington

Chemical	Acute[3] Criterion	Chronic[4] Criterion	MC-SM-1 25-Oct-07	MC-SM-2 21-Sep-07	MC-SM-2 08-Dec-08	MC-SM-3 21-Sep-07	MC-SM-3 08-Dec-08	MC-SM-4 08-Dec-08	MC-SM-5 08-Dec-08	MC-SM-6 08-Dec-08
SVOCs - µg/L (continued)										
Butyl benzyl phthalate	330[11]	22[12]	0.018 U	0.02 U	N/A	0.018 U	N/A	N/A	N/A	N/A
Chrysene	NA	NA	0.028 U	0.03 U	N/A	0.028 U	N/A	N/A	N/A	N/A
Dibenzo(a,h)anthracene	NA	NA	0.017 U	0.019 U	N/A	0.017 U	N/A	N/A	N/A	N/A
Dibenzofuran	66[5]	3.7[6]	0.018 U	0.02 U	N/A	0.018 U	N/A	N/A	N/A	N/A
Diethyl phthalate	5,210[11]	521[12]	0.08 UJ	0.013 U	N/A	0.012 U	N/A	N/A	N/A	N/A
Dimethyl phthalate	3,300[11]	330[12]	0.021 U	0.023 U	N/A	0.021 U	N/A	N/A	N/A	N/A
Di-n-butyl phthalate	94[11]	9.4[12]	0.31 U	1.7 U	N/A	1.7 U	N/A	N/A	N/A	N/A
Di-n-octyl phthalate	NA	788[10]	0.018 U	0.02 U	N/A	0.018 U	N/A	N/A	N/A	N/A
Fluoranthene	398[11]	39.8[12]	0.02 U	0.022 U	N/A	0.02 U	N/A	N/A	N/A	N/A
Fluorene	70[5]	3.9[6]	0.027 U	0.029 U	N/A	0.027 U	N/A	N/A	N/A	N/A
Hexachlorobenzene	NA	NA	0.022 U	0.024 U	N/A	0.022 U	N/A	N/A	N/A	N/A
Hexachlorobutadiene	9[11]	0.93[12]	0.027 U	0.029 U	N/A	0.027 U	N/A	N/A	N/A	N/A
Hexachlorocyclopentadiene	0.7[11]	0.07[12]	0.19 U	0.21 U	N/A	0.19 U	N/A	N/A	N/A	N/A
Hexachloroethane	98[11]	0.98[12]	0.024 U	0.026 U	N/A	0.024 U	N/A	N/A	N/A	N/A
Indeno(1,2,3-cd)pyrene	NA	NA	0.021 U	0.023 U	N/A	0.021 U	N/A	N/A	N/A	N/A
Isophorone	11,700[11]	1,170[12]	0.016 U	0.018 U	N/A	0.069 J	N/A	N/A	N/A	N/A
Naphthalene	230[11]	62[12]	0.022 U	0.024 U	N/A	0.022 U	N/A	N/A	N/A	N/A
Nitrobenzene	2,700[11]	270[12]	0.028 U	0.03 U	N/A	0.028 U	N/A	N/A	N/A	N/A
N-Nitrosodi-n-propylamine	NA	NA	0.037 U	0.04 U	N/A	0.037 U	N/A	N/A	N/A	N/A
N-Nitrosodiphenylamine	585[11]	58.5[12]	0.048 U	0.052 U	N/A	0.048 U	N/A	N/A	N/A	N/A
Pentachlorophenol	19	15	0.34 U	0.37 U	N/A	0.34 U	N/A	N/A	N/A	N/A
Phenanthrene	NA	0.4[10]	0.022 U	0.024 U	N/A	0.022 U	N/A	N/A	N/A	N/A
Phenol	1,020[11]	256[12]	0.47 UJ	0.068 U	N/A	0.063 U	N/A	N/A	0.05 U	N/A
Pyrene	NA	0.025[10]	0.019 U	0.021 U	N/A	0.019 U	N/A	N/A	0.079 U	N/A

TABLE M.1-3

COMPARISON OF SEDIMENT POREWATER CONCENTRATIONS
WITH AMBIENT WATER QUALITY CRITERIA AND/OR OTHER ECOLOGICAL SCREENING VALUES[1,2]
PSC Washougal Facility
Washougal, Washington

Chemical	Acute[3] Criterion	Chronic[4] Criterion	MC-SM-1 25-Oct-07	MC-SM-2 21-Sep-07	MC-SM-2 08-Dec-08	MC-SM-3 21-Sep-07	MC-SM-3 08-Dec-08	MC-SM-4 08-Dec-08	MC-SM-5 08-Dec-08	MC-SM-6 08-Dec-08
VOCs - µg/L										
1,1,1-Trichloroethane	5,280[11]	528[12]	0.12 U	0.12 U	0.05 U	0.12 U	0.05 U	0.05 U	0.042 U	0.05 U
1,1,2-Trichlorotrifluoroethane	NA	NA	0.14 U	0.14 U	0.079 U	0.14 U	0.079 U	0.079 U	0.0095 U	0.079 U
1,1-Dichloroethane	830[5]	47[6]	0.19 J	2.1	0.09 J	1.2	0.31 J	0.042 U	0.044 U	0.042 U
1,1-Dichloroethene	3,030[11]	303[12]	N/A	0.0061 U	0.01 U	0.0061 U	0.0095 U	0.0095 U	0.073 U	0.0095 U
1,2-Dichlorobenzene	502[11]	50.2[12]	0.12 U	0.12 U	0.044 U	0.12 U	0.044 U	0.044 U	0.38 U	0.044 U
1,2-Dichloroethane	11,800[11]	2,000[12]	0.12 U	0.12 U	0.073 U	0.12 U	0.073 U	0.073 U	3.8 U	0.073 U
2,2-Dichloro-1,1,1-trifluoroethane	NA	NA	0.49 U	0.49 U	0.38 U	0.49 U	0.38 U	0.38 U	8.2	0.38 U
2-Butanone	240,000[5]	14,000[6]	2.3 U	2.3 U	3.8 U	2.3 U	3.8 U	3.8 U	21	3.8 U
2-Methylpentane	NA	NA	0.49 U	0.49 U	0.4 U	0.49 U	0.4 U	0.4 U	2.5 U	0.4 U
3-Methylpentane	NA	NA	0.41 U	0.41 U	0.36 U	0.41 U	0.36 U	0.36 U	0.045 U	0.36 U
Acetone	28,000[11]	1,500[6]	4.1 U	4.1 U	2.5 U	4.1 U	2.5 U	2.5 U	0.045 U	2.5 U
Benzene	530[11]	53[12]	0.14 U	0.14 U	0.045 U	0.14 U	0.045 U	0.045 U	0.068 U	0.045 U
Carbon disulfide	17[5]	0.92[6]	0.16 U	0.16 U	0.045 U	0.16 U	0.045 U	0.045 U	0.045 U	0.045 U
Carbon tetrachloride	3,520[11]	352[12]	0.14 U	0.14 U	0.068 U	0.14 U	0.068 U	0.068 U	0.13 U	0.068 U
Chlorobenzene	1,950[11]	195[12]	0.14 U	0.14 U	0.045 U	0.14 U	0.045 U	0.045 U	0.042 U	0.045 U
Chloroethane	NA	NA	0.23 U	0.23 U	0.13 U	0.23 U	0.13 U	0.13 U	0.09 J	0.13 U
Chloroform	2,890[11]	289[12]	0.14 U	0.14 U	0.042 U	0.14 U	0.042 U	0.042 U	0.045 U	0.042 U
Chloromethane	19,300[11]	1,930[12]	0.14 U	0.14 U	0.08 J	0.14 U	0.12 J	0.06 J	0.083 U	0.1 J
cis-1,2-Dichloroethene	1,100[5]	590[6]	0.12 U	2.9	0.1 J	0.92	0.1 J	0.045 U	0.042 U	0.045 U
Dichlorodifluoromethane	NA	NA	0.17 U	0.17 U	0.083 U	0.17 U	0.083 U	0.083 U	0.078 U	0.083 U
Ethylbenzene	130[5]	7.3[6]	0.13 U	0.13 U	0.042 U	0.13 U	0.042 U	0.042 U	37	0.042 U
m,p-Xylenes	32[5]	1.8[6]	0.22 U	0.22 U	0.078 U	0.22 U	0.078 U	0.078 U	0.23 U	0.078 U
Methylcyclopentane	NA	NA	0.42 U	0.42 U	0.4 U	0.42 U	0.4 U	0.4 U	0.037 U	0.4 U
Methylene chloride	19,300[11]	1,930[12]	0.2 U	0.2 U	0.23 U	0.2 U	0.23 U	0.23 U	0.077 U	0.23 U
o-Xylene	230[5]	13[6]	0.11 U	0.11 U	0.037 U	0.11 U	0.037 U	0.037 U	0.09 J	0.037 U
Tetrachloroethene	528[11]	84[12]	0.13 U	0.13 U	0.077 U	0.13 U	0.077 U	0.077 U	0.048 U	0.077 U

TABLE M.1-3

COMPARISON OF SEDIMENT POREWATER CONCENTRATIONS
WITH AMBIENT WATER QUALITY CRITERIA AND/OR OTHER ECOLOGICAL SCREENING VALUES[1,2]
PSC Washougal Facility
Washougal, Washington

Chemical	Acute[3] Criterion	Chronic[4] Criterion	MC-SM-1 25-Oct-07	MC-SM-2 21-Sep-07	MC-SM-2 08-Dec-08	MC-SM-3 21-Sep-07	MC-SM-3 08-Dec-08	MC-SM-4 08-Dec-08	MC-SM-5 08-Dec-08	MC-SM-6 08-Dec-08
VOCs - µg/L (continued)										
Toluene	120[5]	9.8[6]	0.11 U	0.11 U	0.2 J	0.11 U	0.07 J	0.07 J	0.061 U	0.25 J
trans-1,2-Dichloroethene	1,100[5]	590[6]	0.15 U	0.15 U	0.048 U	0.15 U	0.048 U	0.048 U	0.086 U	0.048 U
Trichloroethene	440[5]	47[6]	0.14 U	0.14 U	0.061 U	0.14 U	0.061 U	0.061 U	0.0035 U	0.061 U
Trichlorofluoromethane	NA	NA	0.14 U	0.14 U	0.086 U	0.14 U	0.086 U	0.086 U	N/A	0.086 U
Vinyl Chloride	NA	3,880[8]	N/A	0.28	0.008 J	0.34	0.025	0.0035 U	N/A	0.0035 U

Notes
1. Shaded cells indicate detected concentration that exceeds at least one screening criterion.
2. Data qualifiers are as follows:
   J = value is an estimate.
   U = not detected at reporting limit listed.
3. EPA National Recommended Freshwater Acute Criterion for Protection of Aquatic Life.
4. EPA National Recommended Freshwater Chronic Criterion for Protection of Aquatic Life.
5. Secondary Acute Ecological Screening Value for Surface Water (Suter and Tsao, 1996).
6. Secondary Chronic Ecological Screening Value for Surface Water (Suter and Tsao, 1996).
7. Lowest Chronic Ecological Screening Value for Surface Water (Suter and Tsao, 1996).
8. Acute Freshwater Ecological Toxicity Reference Value (Friday, 1999).
9. Chronic Freshwater Ecological Toxicity Reference Value (Friday, 1999).
10. Ecological Screening Value for Surface Waters (Friday, 2005).
11. Acute Ecological Screening Value for Surface Water (EPA, 2001).
12. Chronic Ecological Screening Value for Surface Water (EPA, 2001).

Abbreviations
µg/L = micrograms per liter
EPA = U.S. Environmental Protection Agency
mg/L = milligrams per liter
N/A = not analyzed
NA = not available
SVOCs = semivolatile organic compounds
TPH = total petroleum hydrocarbons
VOCs = volatile organic compounds

TABLE M.1-4

SEDIMENT POREWATER DILUTION REQUIRED TO MEET AMBIENT WATER QUALITY CRITERIA AND/OR OTHER ECOLOGICAL SCREENING VALUES

PSC Washougal Facility
Washougal, Washington

Chemical	Acute[1] Criterion	Chronic[2] Criterion	MC-SM-1 25-Oct-07	MC-SM-2 21-Sep-07	MC-SM-2 08-Dec-08	MC-SM-3 21-Sep-07	MC-SM-3 08-Dec-08	MC-SM-4 08-Dec-08	MC-SM-5 08-Dec-08	MC-SM-6 08-Dec-08
Inorganics (dissolved) - mg/L										
Cadmium	0.002	0.00025	—	2.5	1.8	2.9	1.2	—	—	—
Nickel	0.47	0.052	—	1.6	—	2.2	3.1	—	—	—
Inorganics (total) - mg/L										
Barium	0.11[3]	0.004[4]	39	130	14	253	32	24	22	17
Cobalt	1.5[3]	0.023[4]	—	1.1	—	1.9	—			
Iron	NA	1.0	11	57	—	101	—	29	3.6	3.1
Magnesium	NA	82[5]	—	—	—	1.2	—	—	—	—
Manganese	2.3[3]	0.12[4]	9.3	32.8	2.3	46	23	38	31	20
Vanadium	0.28[6]	0.019[7]	1.2	3.3	—	6.6	—	—	—	—
SVOCs - µg/L										
Ethylbenzene	130[3]	7.3[4]	—	—	—	—	—	—	5.1	—

Notes
1. EPA National Recommended Freshwater Acute Criterion for Protection of Aquatic Life.
2. EPA National Recommended Freshwater Chronic Criterion for Protection of Aquatic Life.
3. Secondary Acute Ecological Screening Value for Surface Water (Suter and Tsao, 1996).
4. Secondary Chronic Ecological Screening Value for Surface Water (Suter and Tsao, 1996).
5. Lowest Chronic Ecological Screening Value for Surface Water (Suter and Tsao, 1996).
6. Acute Freshwater Ecological Toxicity Reference Value (Friday, 1999).
7. Chronic Freshwater Ecological Toxicity Reference Value (Friday, 1999).

Abbreviations
— = not analyzed
µg/L = micrograms per liter
mg/L = milligrams per liter
SVOCs = semivolatile organic compounds

TABLE M.1-5

COMPARISON OF GROUNDWATER CONCENTRATIONS, SEDIMENT POREWATER CONCENTRATIONS, AND SURFACE WATER SCREENING LEVELS FOR CHEMICALS THAT EXCEED MTCA GROUNDWATER CLEANUP LEVELS

PSC Washougal Facility
Washougal, Washington

Analytes	Units	SWSL[1]	Groundwater Concentration		Sediment Porewater Concentration	
			Maximum	Mean[2]	Maximum	Mean[2]
Arsenic	mg/L	0.15	0.034	0.009	0.006	0.003
Copper	mg/L	0.009	0.019	0.002	0.007	0.004
1,1-Dichloroethene	µg/L	303	0.110	0.030	< 0.073[3]	
1,4-Dioxane	µg/L	49.6	54	14.8	35	18.6
Tetrachloroethene	µg/L	84	2.0	0.389	< 0.130[3]	
Trichloroethene	µg/L	47	3.88	1.09	< 0.14[3]	
Vinyl chloride	µg/L	3,880	2.70	0.41	0.340	0.163

Notes
1. Surface Water Screening Level.
2. Mean of detected values.
3. Analyte was not detected in all samples; value shown is the highest reporting limit.

Abbreviations
µg/L = micrograms per liter
mg/L = milligrams per liter
MTCA = Model Toxics Control Act
SWSL = Surface Water Screening Level

TABLE M.1-6

SUMMARY OF CHEMICALS THAT EXCEED ECOLOGICAL SCREENING LEVELS IN DIFFERENT MEDIA

PSC Washougal Facility
Washougal, Washington

	Sediment	Sediment Porewater	Groundwater[1]
Metals			
Arsenic			
Barium		X	
Cadmium		X	
Cobalt		X	
Iron	X	X	
Manganese		X	
Magnesium		X	
Nickel		X	
Vanadium	X	X	
Organics			
Acetone	X		
Carbon disulfide			
Ethylbenzene		X	

Note
1. No chemicals exceeded ecological screening levels in groundwater.

TABLE M.1-7

CONCENTRATIONS AND HAZARD QUOTIENT VALUES FOR SEDIMENT CHEMICALS OF CONCERN [1]

PSC Washougal Facility
Washougal, Washington

Concentrations in milligrams per kilogram (mg/kg)

Site ID	MC-SM1	MC-SM2	MC-SM3	MC-SM4	MC-SM5	MC-SM6	
Sample Date	9-Sep-08	9-Sep-08	9-Sep-08	9-Sep-08	9-Sep-08	9-Sep-08	
Analyte / Sample Depth (feet bgs)	0.5	0.5	0.5	0.5	0.5	0.5	HQ
Arsenic	4.1	2.85	3.26	1.84	2.32	4.8	0.0013
Barium	111	119	101	68.5	115	146	0.0011
Cadmium	0.415	0.372	0.322	0.079	0.244	1.06	0.00005
Chromium	9.75	8.25	8.89	8.26	9.02	14.2	0.00050
Copper	12.2	7.16	8.25	6.71	8.08	18.9	0.0007
Iron	17,900	15,800	17,300	14,100	15,100	21,400	NA[2]
Manganese	370	289	284	153	212	438	0.0004
Nickel	9.58	8.42	9.35	7.32	9.83	12.6	0.0003
Potassium	1,100	981	928	481	827	1,160	NA[3]
Silver	0.09	0.03	0.02 U	0.02 U	0.03 U	0.07	0.00000
Vanadium	45.2	36.5	45.6	39.6	35.5	55.9	0.0002
Zinc	75.4	59.2	53.7	38.3	48.9	113	0.0002
Acetone	0.40	0.28	0.095	0.042	0.17	0.25	0.00001
Carbon Disulfide	0.00038 J	0.0014 J	0.00023 J	0.000066 U	0.00037 J	0.00035 J	2.6E -8

Notes
1. J = Result is an estimate
2. EPA considers iron to be nontoxic.
3. Essential nutrient.

Abbreviations
COC = chemical of concern
EPA = U.S. Environmental Protection Agency
feet bgs = feet below ground surface
HQ = Hazard Quotient for the maximum sediment concentration
mg/kg = milligrams per kilogram

APPENDIX M.2

GIBBONS CREEK REMNANT CHANNEL EVALUATION

PSC Washougal Facility

Washougal, Washington

Prepared for:

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September 2013

Project No. 0096250060

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GIBBONS CREEK REMNANT CHANNEL EVALUATION

PSC Washougal Facility
Washougal, Washington

1.0 INTRODUCTION

This appendix provides an assessment of the surface water and sediment data collected from Gibbons Creek Remnant Channel (GCRC), north of the Burlington Environmental LLC, a wholly owned subsidiary of PSC Environmental Services, LLC (PSC), Washougal facility. Since GCRC is a surface water body, evaluation of the GCRC was completed following procedures for surface water evaluations in WAC 173-340-730 (Surface water cleanup standards) and the procedures for sediment evaluations described in WAC 173-340-760 (which addresses Chapter 13-204 WAC, Sediment Management Standards).

2.0 METHODS

WAC 173-340-730 contains surface water cleanup standards. The historical and recent surface water data collected from GCRC was screened against the Method B cleanup standards described in this section of MTCA. This screening is presented in Table M2-1.

WAC 173-340-760 is the section of MTCA that references sediment cleanup standards. No freshwater sediment cleanup criteria values are specified under MTCA; however MTCA does reference WAC 173-204, Sediment Management Standards. WAC 173-204 does not currently address freshwater sediments. This section is currently under revision by Ecology and draft sediment standards are available. Sediment data collected from GCRC was screened against these 2012 draft standards. This screening is presented in Table M2-2.

3.0 RESULTS

Surface water sampling was conducted in 1990-1991 in the GCRC and sediment samples were collected in 2008. The history of investigation is described more fully in the RI report, Section 11.3.1.2.

Table M.2-1 compares results of the 1990-1991 surface water results to the lowest of the surface water screening levels reviewed as part of selecting MTCA Method B screening levels consistent with WAC 173-340-730. These include:

- Water Quality Standards for Surface Waters of the State of Washington (WAC 173-201A) – Acute and Chronic effects, Aquatic Life, Freshwater;

- National Recommended Water Quality Criteria (NRWQC) (Clean Water Act §304) – Freshwater, Acute and Chronic effects, Aquatic Life and for the Protection of Human Health, Consumption of Water and Organisms and Consumption of Organisms Only ;

- National Toxics Rule (40 CFR 131) – Freshwater, Acute and Chronic effects, Aquatic Life, and Human Health, Consumption of Water and Organisms; and

- MTCA Method B Surface Water table values using Ecology's Cleanup Levels and Risk Calculation (CLARC) tables if a federal or local surface water value is not found in the above references (Ecology, 2007a).

Samples were collected at locations SW-2 and SW-3 between April 1990 and January 1991 and analyzed selectively for metals, volatile organic compounds (VOCs), and semivolatile organic compounds (SVOCs). Results showed slightly elevated arsenic and zinc above the screening level in a sample collected from location SW-2, collected immediately east of the culvert that runs beneath 32nd Street. Arsenic was detected in the surface water sample during August and January, and the concentrations were very close to the reporting limit achieved by the lab at that time. Zinc was only detected in the sample from SW-2 during the January event. None of the detected concentrations from SW-3 exceeded the screening levels.

Table M.2-2 compares results of the 2008 sediment samples to the 2012 draft Washington fresh water sediment standards. Both the cleanup screening level (CSL) and the sediment cleanup objective (SCO) are presented. Arsenic is the only compound detected above these screening levels in one of the two samples collected. There are currently no draft screening levels for SVOCs, total petroleum hydrocarbons (TPH), or VOCs.

4.0 REFERENCES

Ecology (Washington State Department of Ecology), 2012, Draft Sediment Cleanup Users Manual II, Guidance for Implementing the Sediment Management Standards, Chapter 173-204 WAC, Publication No. 12-09-057 (accessed November 27, 2012).

Ecology, 2007, Model Toxics Control Act Statue and Regulation: Washington State Department of Ecology, Publication No. 94-06, Olympia.

TABLES

TABLE M.2-1

GIBBONS CREEK SURFACE WATER ANALYTICAL RESULTS[1]
PSC Washougal Facility
Washougal, Washington

	Lowest Surface Water ARAR (mg/L)[2]	SW-2							SW-3						
		4/23/1990	6/5/1990	7/16/1990	8/27/1990	10/9/1990	11/20/1990	1/7/1991	4/23/1990	6/5/1990	7/16/1990	8/27/1990	10/9/1990	11/20/1990	1/7/1991
Metals (mg/L)															
Arsenic	0.0005	NA	NA	NA	0.005	0.005 U	0.005 U	0.006	NA	NA	NA	0.005 U	0.005 U	0.005 U	0.005 U
Barium	1	NA	NA	NA	0.051	0.028	0.019	0.041	NA	NA	NA	0.042	0.023	0.02	0.011
Cobalt	--	NA	NA	NA	0.01 U	0.01 U	0.01 U	0.01 U	NA	NA	NA	0.01 U	0.01 U	0.01 U	0.01 U
Nickel	0.04865	NA	NA	NA	0.02 U	0.02 U	0.02 U	0.02 U	NA	NA	NA	0.02 U	0.02 U	0.02 U	0.02 U
Zinc	0.03229	NA	NA	NA	0.01	0.01 U	0.01 U	0.04	NA	NA	NA	0.01 U	0.01 U	0.01 U	0.01
Total Phenols (mg/L)															
Total Phenols	--	0.01	0.02	.01 U	NA	NA	NA	NA	.01 U	0.01	.01 U	NA	NA	NA	NA
Polynuclear Aromatic Hydrocarbons (mg/L)															
Phenol	2.4	NA	NA	NA	0.002 U	0.002 U	0.002 U	0.002 U	NA	NA	NA	0.002 U	0.002 U	0.002 U	0.002 U
2-Methylphenol	--	NA	NA	NA	0.002 U	0.002 U	0.002 U	0.002 U	NA	NA	NA	0.002 U	0.002 U	0.002 U	0.002 U
Acetophenone	--	NA	NA	NA	0.001 U	0.002 U	0.002 U	0.002 U	NA	NA	NA	0.001 U	0.002 U	0.002 U	0.002 U
2,4-Dimethylphenol	0.38	NA	NA	NA	0.002 U	0.002 U	0.002 U	0.002 U	NA	NA	NA	0.002 U	0.002 U	0.002 U	0.002 U
Napthalene	4.938	NA	NA	NA	0.001 U	0.002 U	0.002 U	0.002 U	NA	NA	NA	0.001 U	0.002 U	0.002 U	0.002 U
2-Methylnaphthalene	--	NA	NA	NA	0.001 U	0.002 U	0.002 U	0.002 U	NA	NA	NA	0.001 U	0.002 U	0.002 U	0.002 U
Field Parameters															
pH	--	6.55	7.1	7.09	6.87	7.4	6.96	7.02	6.61	6.68	6.91	6.83	7.06	7.03	6.98
Specific Conductance (umhos)	--	90	97	123	157	170	95	132	84	110	126	146	171	96	99
Temperature (deg. C)	--	11	15	24	22	14.5	7	1.4	11	16	24	22	14	7	5.8
Dissolved Oxygen (mg/L)	--	N/A	N/A	N/A	N/A	N/A	4.2	N/A	N/A	N/A	N/A	N/A	N/A	4.8	N/A
VOCs (mg/L)															
1,1,1-Trichloroethane	926	0.00032	0.001 U	0.001 U	0.0044	0.001 U	0.001 U	0.0013	0.0014	0.0026	0.001 U	0.0018	0.0029	0.001	0.0013
1,1-Dichloroethane	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,1-Dichloroethene	0.000057	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dibromo-3-chloropropane	--	NA	NA	0.001 U	0.01 U	0.01 U	0.01 U	0.01 U	NA	NA	0.001 U	0.01 U	0.01 U	0.01 U	0.01 U
1,2-Dichlorobenzene	0.42	NA	NA	NA	0.001 U	0.001 U	0.001 U	0.001 U	NA	NA	NA	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dichloroethane	0.00038	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
2-Butanone	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
2-Methylpentane	--	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
3-Methylpentane	--	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Acetone	--	0.01 U	0.01 U	0.01 U	0.01 U	0.02 U	0.02 U	0.02 U	0.01 U	0.01 U	0.01 U	0.01 U	0.02 U	0.02 U	0.02 U
Benzene	0.0012	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Carbon disulfide	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Carbon tetrachloride	0.00023	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Chlorobenzene	0.13	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Chloroform	0.0057	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
cis-1,2-Dichloroethene	--	NA	NA	0.001 U	0.0025	0.001 U	0.001 U	0.0011	NA	NA	0.001 U	0.001 U	0.0012	0.001 U	0.001 U
Dichlorotrifluoroethane	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Ethylbenzene	0.53	0.001 U	0.001 U	0.001 U	0.001	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Methylcyclopentane	--	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Methylene chloride	0.0046	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U

TABLE M.2-1

GIBBONS CREEK SURFACE WATER ANALYTICAL RESULTS[1]
PSC Washougal Facility
Washougal, Washington

	Lowest Surface Water ARAR (mg/L)[2]	SW-2							SW-3						
		4/23/1990	6/5/1990	7/16/1990	8/27/1990	10/9/1990	11/20/1990	1/7/1991	4/23/1990	6/5/1990	7/16/1990	8/27/1990	10/9/1990	11/20/1990	1/7/1991
VOCs (mg/L) (continued)															
Tetrachloroethene	0.00069	0.001 U	0.001 U	0.001 U	0.0016	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Toluene	1.3	0.0035	0.001 U	0.001 U	0.0058	0.001 U	0.001 U	0.0033	0.0021	0.0042	0.0011	0.0026	0.002	0.0013	0.001 U
Total Xylenes	--	0.0025	0.001 U	0.001 U	0.0069	0.001 U	0.001 U	0.0029	0.0011	0.0032	0.001 U	0.0022	0.0032	0.001 U	0.001 U
trans-1,2-Dichloroethene	0.14	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Trichloroethene	0.0025	0.001 U	0.001 U	0.001 U	0.0021	0.001 U	0.001 U	0.001 U	0.001 U	0.002	0.001 U	0.001 U	0.001 U	0.001	0.001 U
Trichlorofluoromethane	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Trichlorotrifluoroethane	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Vinyl chloride	0.000025	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U

Notes
1. Laboratory data flags are as follows:
U = not detected at the reporting limit listed.
2. Values obtained from Revised Table 9-2 of Remedial Investigation Report.

Abbreviations
-- = not established
ARAR = applicable or relevant and appropriate requirement
mg/L = milligrams per liter
NA = Not analyzed
VOCs = volatile organic compounds

TABLE M.2-2

GIBBONS CREEK SEDIMENT ANALYTICAL RESULTS [1]

PSC Washougal Facility

Washougal, Washington

Analyte	East-0 8/27/1990	East-175 8/27/1990	West-75 8/27/1990	West-300 8/27/1990	GC-1 9/11/2008	GC-2 9/11/2008	Freshwater Sediment[2] SCO	Freshwater Sediment[2] CSL
Metals (mg/kg)								
Arsenic	15	5	8	7	207	11.1	14	120
Barium	190	186	190	186	746	150	--	--
Cadmium	NA	NA	NA	NA	0.28	0.459	2.1	5.4
Chromium	NA	NA	NA	NA	9.05	16.3	--	--
Cobalt	18	13	16	13	NA	NA	--	--
Copper	NA	NA	NA	NA	12.6	50.3	400	1200
Iron	NA	NA	NA	NA	119,000	40,700	--	--
Manganese	NA	NA	NA	NA	882	516	--	--
Nickel	23	23	23	23	8.71	9.97	26	110
Potassium	NA	NA	NA	NA	779	965	--	--
Silver	NA	NA	NA	NA	0.04 U	0.05	0.57	1.7
Vanadium	NA	NA	NA	NA	40.6	73.9	--	--
Zinc	206	70	85	72	50.4	88.3	3200	>4200
SVOCs (µg/kg)								
Phenol	300 U	300 U	300 UJ	300 UJ	NA	NA	120	210
2-Methylphenol	300 U	300 U	300 UJ	300 UJ	NA	NA	--	--
Acetophenone	200 U	200 U	200 UJ	200 UJ	NA	NA	--	--
4-Dimethylphenol	300 U	300 U	300 UJ	300 UJ	NA	NA	--	--
Napthalene	200 U	200 U	200 UJ	200 UJ	NA	NA	--	--
2-Methylnaphthalene	200 U	200 U	200 UJ	200 UJ	NA	NA	--	--
1,4-Dioxane	NA	NA	NA	NA	2.8 UJ	2 UJ	--	--
TPH (mg/kg)								
TPH (as gasoline)	NA	NA	NA	NA	15 U	19 U	--	--
VOCs (µg/kg)								
1,1,1-Trichloroethane	5 U	5 U	5 U	5 U	0.47 U	0.41 U	--	--
1,1,2-Trichlorotrifluoroethane	NA	NA	NA	NA	0.3 U	0.27 U	--	--
1,1-Dichloroethane	5 U	5 U	5 U	5 U	0.15 U	0.14 U	--	--
1,1-Dichloroethene	5 U	5 U	5 U	5 U	0.22 U	0.19 U	--	--
1,2-Dichlorobenzene	5 U	5 U	5 U	5 U	0.2 U	0.18 U	--	--
1,2-Dichloroethane	5 U	5 U	5 U	5 U	0.17 U	0.15 U	--	--
1,2-Dibromo-3-chloropropane	10 U	10 U	10 U	10 U	NA	NA	--	--
2,2-Dichloro-1,1,1-trifluoroethane	NA	NA	NA	NA	15 U	14 U	--	--
2-Butanone	20 U	20 U	20 U	20 U	25 J	40 J	--	--
2-Methylpentane	20 U	20 U	20 U	20 U	15 U	14 U	--	--
3-Methylpentane	20 U	20 U	20 U	20 U	15 U	14 U	--	--
Acetone	20 U	20 U	20 U	20 U	210	400	--	--
Benzene	5 U	5 U	5 U	5 U	0.44 U	0.38 U	--	--
Carbon disulfide	5 U	5 U	5 U	5 U	31	10 J	--	--
Carbon tetrachloride	5 U	5 U	5 U	5 U	0.24 U	0.22 U	--	--

TABLE M.2-2

GIBBONS CREEK SEDIMENT ANALYTICAL RESULTS [1]

PSC Washougal Facility
Washougal, Washington

Analyte	East-0	East-175	West-75	West-300	GC-1	GC-2	Freshwater Sediment[2]	
	8/27/1990	8/27/1990	8/27/1990	8/27/1990	9/11/2008	9/11/2008	SCO	CSL
VOCs (µg/kg) (Continued)								
Chlorobenzene	5 U	5 U	5 U	5 U	0.17 U	0.15 U	--	--
Chloroethane	NA	NA	NA	NA	0.93 U	0.82 U	--	--
Chloroform	5 U	5 U	5 U	5 U	0.15 U	0.14 U	--	--
Chloromethane	NA	NA	NA	NA	0.18 U	0.16 U	--	--
cis-1,2-Dichloroethene	5 U	5 U	5 U	5 U	0.25 U	0.22 U	--	--
Dichlorodifluoromethane	NA	NA	NA	NA	0.23 U	0.2 U	--	--
Dichlorotrifluoroethane	10 U	10 U	10 U	10 U	0.23 U	0.2 U	--	--
Ethylbenzene	5 U	5 U	5 U	5 U	0.13 U	0.12 U	--	--
m,p-Xylene	NA	NA	NA	NA	0.68 J	0.76 J	--	--
Methylcyclopentane	20 U	20 U	20 U	20 U	15 U	14 U	--	--
Methylene chloride	20 U	20 U	20 U	20 U	1.6 UJ	1.1 UJ	--	--
o-Xylene	NA	NA	NA	NA	0.19 U	0.16 U	--	--
Tetrachloroethene	5 U	5 U	5 U	5 U	0.37 U	0.33 U	--	--
Toluene	5 U	5 U	5 U	5 U	1.7 J	2.5 J	--	--
trans-1,2-Dichloroethene	5 U	5 U	5 U	5 U	0.15 U	0.14 U	--	--
Trichloroethene	5 U	5 U	5 U	5 U	0.4 U	0.36 U	--	--
Trichlorofluoromethane	10 U	10 U	10 U	10 U	0.17 U	0.15 U	--	--
Trichlorotrifluoroethane	10 U	10 U	10 U	10 U	NA	NA	--	--
Vinyl chloride	5 U	5 U	5 U	5 U	0.18 U	0.16 U	--	--
Total Xylenes	11	5 U	6	5 U	NA	NA	--	--

Notes
1. Laboratory data flags are as follows:
   J = value is an estimate.
   U = not detected at the reporting limit listed.
   UJ = value is an estimate at reporting limit listed.
2. Values obtained from Table 2-2 of Ecology's Draft Sediment Cleanup Users Manual II, August 2012.

Abbreviations
-- = Screening level not established.
µg/kg = micrograms per kilogram
CSL = Cleanup Screening Level - The action level for remediation of contaminated sediments
mg/kg = milligrams per kilogram
SCO = Sediment Cleanup Level - The screening level that remediated sediments should achieve.
SVOCs = semivolatile organic compounds
TPH = total petroleum hydrocarbons
VOCs = volatile organic compounds

APPENDIX N

Calculation of Cleanup Levels Protective of Indoor Air

APPENDIX N
CALCULATION OF CLEANUP LEVELS PROTECTIVE OF INDOOR AIR

PSC Washougal Facility
Washougal, Washington

This appendix describes the methods used to evaluate the vapor intrusion pathway at the Philip Services Corporation (PSC) facility in Washougal, Washington.

1.0 SOIL CLEANUP LEVEL CALCULATION

Soil cleanup levels must be protective of indoor air under Washington Administrative Code (WAC) 173-340-745(5)(b)(iii)(C). Washington's Model Toxics Control Act (MTCA) provides several alternative methods to demonstrate that cleanup levels are protective of indoor air [WAC 173-340-745 (5)(c)(iv)(B)].

> *Evaluation methods. Soil cleanup levels that are protective of the indoor and ambient air shall be determined on a site-specific basis. Soil cleanup levels may be evaluated as being protective of air pathways using any of the following methods:*
>
> *(I) Measurements of the soil vapor concentrations, using methods approved by the department, demonstrating vapors in the soil would not exceed air cleanup levels established under WAC 173-340-750.*
>
> *(II) Measurements of ambient air concentrations and/or indoor air vapor concentrations throughout buildings, using methods approved by the department, demonstrating air does not exceed cleanup levels established under WAC 173-340-750. Such measurements must be representative of current and future site conditions when vapors are likely to enter and accumulate in structures. Measurement of ambient air may be excluded if it can be shown that indoor air is the most protective point of exposure.*
>
> *(III) Use of modeling methods approved by the department to demonstrate the air cleanup standards established under WAC 173-340-750 will not be exceeded. When this method is used, the department may require soil vapor and/or air monitoring to be conducted to verify the calculations and compliance with air cleanup standards.*

(IV) Other methods as approved by the department demonstrating the air cleanup standards established under WAC 173-340-750 will not be exceeded.

[WAC 173-340-745 (5)(c)(iv)(B)]

Since indoor air has been sampled at the facility (under work plans approved by the Washington State Department of Ecology [Ecology]), method (II) was selected to demonstrate attainment of indoor air cleanup levels. This method allows for direct comparison of air quality data to MTCA cleanup levels for air (WAC 173-340-750). Indoor air quality samples were collected and analyzed for Building 1 following installation of the Sub-Slab Depressurization System (PSC, 2005). These 2005 analytical results were compared to MTCA Method C cleanup levels for air, including assessment of cumulative effects. This comparison was done using the Equation (1).

$$EF = \frac{C_{indoorair}}{\text{MTCA air CUL}} \qquad \text{Equation (1)}$$

Where:

EF = the exceedance factor

$C_{indoorair}$ = concentration in indoor air (in micrograms per cubic meter [$\mu g/m^3$])

MTCA air CUL = MTCA Method C cleanup level for air ($\mu g/m^3$), based on a carcinogenic risk of 1×10^{-5} and a hazard quotient (HQ) of 1.

Analytical results from that 2005 evaluation for detected constituents are included as Table N-1. Trichloroethene (TCE) was the only constituent detected at a concentration above the MTCA Method C cleanup level for indoor air. Sampling was conducted in June 2010 to ensure the depressurization system was continuing to operate as designed. The results are included in Table N-2. There were no VOCs detected at concentrations above the MTCA Method C cleanup levels for indoor air. These sampling events are representative of current and future site conditions when vapors are likely to accumulate in structures on the site, since Building 1 represents a worst-case scenario as described below. Should conditions change in the future, such as building modifications, earthquake damage, etc., the risk would be reassessed.

Currently the existing depressurization system in Building 1 addresses risk from the inhalation pathway in Building 1. Building 1 is built on soil with the highest detected concentrations of TCE in soil at the facility. Therefore, Building 1 represents a worst-case scenario for the potential for vapors to be transmitted from contaminated soil to indoor air at the PSC facility. Because risk of exposure in indoor air in Building 1 are already addressed, and since Building 1 represents the worst-case scenario of potential

exposure, specific cleanup levels protective of indoor air were not developed for the RI/FS for direct comparison to analytical results for soil.

If future development were to create additional indoor spaces that may be at risk for indoor air contamination as a result of contaminated soil underlying the new development or damage to the existing structure should occur, PSC would either (1) conduct additional soil sampling in the area, if required, to determine the risk that contaminated soil may cause to indoor air; or (2) evaluate concentrations of constituents of concern (COCs) in indoor air following the same method used for Building 1. As noted in WAC 173-340-745(5)(b)(iii)(C)(III), the soil vapor pathway shall be evaluated "for volatile organic compounds, including petroleum components, whenever the concentration is significantly higher than a concentration derived for protection of groundwater for drinking water beneficial use." Since drinking water screening levels are being applied to the site as one of the criteria used in developing preliminary cleanup levels (PCLs) for soil, no additional soil screening levels need to be formulated to be protective of indoor air. The soil PCLs in the RI meet MTCA's criteria for being stringent enough to be protective of the vapor intrusion pathway. If soil remains on the property at concentrations above PCLs, PSC would need to evaluate the risk for indoor air contamination as described in this section. PSC plans to maintain the existing interim measure for vapor intrusion and put in place acceptable measures such as vapor barriers if any additional buildings are planned prior to completion of cleanup at the property.

2.0 GROUNDWATER CLEANUP LEVEL CALCULATION

Groundwater cleanup levels protective of indoor air were calculated in the 2010 draft RI for the facility using an office worker scenario. In light of more recent Ecology guidance documents, PSC has revised the approach to developing groundwater cleanup levels protective of indoor air and will instead rely on the approach recommended by Ecology in their *Draft Guidance for Evaluating Soil Vapor Intrusion in Washington State* (Ecology, 2009).

Ecology (2009) recommends back-calculating generically protective groundwater concentrations from the MTCA Method B air cleanup levels to develop groundwater cleanup levels protective of indoor air in areas of groundwater contamination. This calculation is presented in Table B-1 of the recent guidance document (Ecology, 2009). The calculation embeds the assumption that soil gas immediately above and in equilibrium with volatile organic compounds (VOCs) at the water table will attenuate by a minimum factor of 1,000 (i.e., that indoor air levels will be no higher than 0.001 of

equilibrium soil gas concentrations). Table B-1 has been included as Attachment N-1, and the calculation is as follows (Equation 1):

$$SL_{GW} = SL_{IA}/VAF * UCF * H_{cc}$$

Where:

SL_{GW} = Screening level in groundwater protective of indoor air, µg/L
SL_{IA} = Acceptable indoor air screening level, µg/m^3.
VAF = Vapor attenuation factor (unitless); a default value of 0.001 was used.
H_{cc} = Henry's constant, unitless.
UCF = Unit conversion factor, 1000 L/m^3.

The groundwater screening levels in Table B-1 can be used to assess groundwater concentrations at the site in the Shallow Groundwater Zone to determine if they are protective of the indoor air pathway. However, the 2009 guidance has not been updated to reflect screening levels that may have changed due to updates to the compound-specific toxicological values for reference dose and cancer risk levels. Ecology requested that PSC recalculate indoor air cleanup levels using MTCA Equation 750-1 for noncarcinogens and Equation 750-2 for carcinogens, following the procedures outlined in the 2009 guidance. Equations 750-1 and 750-2 are included as attachment N-3.

An evaluation of the EPA IRIS database in 2013 identified five compounds with updated Reference Concentrations for Chronic Inhalation Exposure (RfC) and Inhalation Unit Risks. The IRIS print outs are included in Attachment N-2. The updated compounds, the RfC values, and the Inhalation Unit Risk values are summarized in Table N-3.

The RfC values were converted to the Inhalation Reference Dose (RfDi) value used in Equation 750-1 using the following equation (Equation 2):

[RfC (mg/m^3) x 20 m^3/day] / 70 kg = RfDi (mg/kg*day)

The Inhalation Unit Risk values were converted to the Inhalation Cancer Potency Factor (CPFi) used in Equation 750-2 using the following equation (Equation 3):

Unit risk (µg/m^3)$^{-1}$ x 70 kg x (20 m^3/day)$^{-1}$ x 1000 µg/mg = CPFi (mg/kg*day)$^{-1}$

The calculated RfDi and Inhalation Cancer Potency Factors are summarized on Table N-3.

Updated vapor cleanup levels were then calculated using Equation 750-1 for non-carcinogens and 750-2 for carcinogens. Equations 750-1 and 750-2 are included in Attachment N-3. These updated vapor cleanup levels were then used to calculate groundwater cleanup levels using Equation 1 described above and in Chapter 3 of Ecology's guidance (Ecology, 2009). The updated groundwater cleanup levels protective of indoor air are presented in Table N-3, attached.

REFERENCES

Ecology (Washington State Department of Ecology), 2009, Draft Guidance for Evaluating Soil Vapor Intrusion in Washington State, Publication no. 09-09-047, Washington State Department of Ecology, October.

PSC, 2005, Supplemental Remedial Investigation II: Vapor Intrusion Sampling, Philip Services Corporation, Washougal Facility, Washougal, Washington, August 10.

TABLES

TABLE N-1

JUNE 2005 VAPOR INTRUSION ANALYTICAL RESULTS AND EVALUATION[1,2]

PSC Washougal Facility
Washougal, Washington

concentrations in micrograms per cubic meter (µg/m^3)

Analyte	Soil Gas Result	Highest Indoor Air Result	Ambient Air Result	Indoor Air Minus Ambient Air Result	MTCA Method C Air Cleanup Level		NCEF[3]	CEF[3]
					Non-Carc.	Carc.		
1,2,4-Trimethylbenzene	1.2 U	0.94	0.18 U	0.94	5.95	--	--	--
1,3,5-Trimethylbenzene	1.2 U	0.31	0.18 U	0.31	5.95	--	--	--
1,4-Dichlorobenzene	1.5 U	0.21	0.22 U	0.21	800	--	--	--
Benzene	1.9 U	0.78	0.35	0.43	30	3.21	--	--
Carbon tetrachloride	1.5 U	0.62	0.61	0.01	--	1.67	--	--
Chloromethane	1.2 U	1.10	1.00	0.10	--	--	--	--
Ethylbenzene	1.0 U	1.90	0.22	1.68	1,000	--	--	--
Freon 12	91	3.00	2.60	0.40	200	--	0.002	--
m,p-Xylene	2.1 U	4.60	0.62	3.98	100	--	--	--
o-Xylene	1.0 U	1.30	0.19	1.11	--	--	--	--
Styrene	1.0 U	1.20	2.30	0.00	1,000	--	--	--
Toluene	0.92 U	5.7	1.7	4.00	400	--	--	--
trans-1,2-Dichloroethene	4.8 U	0.92	0.71 U	0.92	70	--	--	--
Trichloroethene	380	2.7	0.19 U	2.70	35	0.22	0.08	12.3

Notes

1. Source: PSC, 2005, Supplemental Remedial Investigation II: Vapor Intrusion Sampling, Phillip Services Corporation, Washougal Facility, Washougal, WA, August.
2. The data qualifiers presented in this table are:
   U = The analyte was not detected (the reporting limit is presented).
3. NCEFs and CEFs were calculated only for analytes that exhibited a complete exposure pathway for the soil gas to indoor air vapor intrusion pathway (i.e., the analyte was detected in soil gas and indoor air).

Abbreviations

-- = not available or not applicable
µg/m^3 = micrograms per cubic meter
CEF = Cancer Exceedance Factor - Corrected Indoor Air Concentration/Cancer MTCA Method C Cleanup Level
MTCA = Model Toxics Control Act
NCEF = Noncancer Exceedance Factor = Corrected Indoor Concentration/Noncancer MTCA Method C Cleanup Level

TABLE N-2

JUNE 2010 VAPOR INTRUSION SAMPLING RESULTS AND EVALUATION (POST-SSDSI)[1]

PSC Washougal Facility
Washougal, Washington

Cas No.	Analyte	Indoor Air (µg/m^3)		Ambient Air (µg/m^3)	MTCA Method C Air Cleanup Levels (µg/m^3) [2]		Maximum Detected Indoor Air Concentration µg/m^3	Maximum Detected Ambient Air Concentration µg/m^3	Corrected Indoor Air Concentration (IA - AA) µg/m^3	Analytes Detected in Indoor Air Above Background Concentrations[3]	
		WASH-IA1-0610	WASH-9-IA1-0610	WASH-AA1-0610	Noncancer (750-1)	Cancer (750-2)				NCEF[4]	CEF[5]
71-55-6	1,1,1-Trichloroethane	0.38	0.38	0.19 U	5,000	--	0.38	--	0.38	0.00008	--
79-34-5	1,1,2,2-Tetrachloroethane	0.23 U	0.23 U	0.24 U	--	0.43	--	--	--	--	--
79-00-5	1,1,2-Trichloroethane	0.18 U	0.18 U	0.19 U	--	1.56	--	--	--	--	--
75-34-3	1,1-Dichloroethane	0.14 U	0.14 U	0.14 U	500	--	--	--	--	--	--
75-35-4	1,1-Dichloroethene	0.067 U	0.067 U	0.069 U	200	0.073	--	--	--	--	--
95-63-6	1,2,4-Trimethylbenzene	1.6	1.3	0.86 U	5.95	--	1.6	--	1.6	0.3	--
95-50-1	1,2-Dichlorobenzene	1 U	1 U	1 U	200	--	--	--	--	--	--
107-06-2	1,2-Dichloroethane	0.51	0.51	0.14 U	4.9	0.96	0.51	--	0.51	0.1	0.5
108-67-8	1,3,5-Trimethylbenzene	0.82 U	0.82 U	0.86 U	5.95	--	--	--	--	--	--
541-73-1	1,3-Dichlorobenzene	1 U	1 U	1 U	--	--	--	--	--	--	--
106-46-7	1,4-Dichlorobenzene	1 U	1 U	1 U	800	--	--	--	--	--	--
71-43-2	Benzene	1.2	1.2	0.44	30	3.21	1.2	0.44	0.76	0.03	0.2
75-15-0	Carbon Disulfide	2.6 U	2.6 U	2.7 U	700	--	--	--	--	--	--
56-23-5	Carbon Tetrachloride	1 U	1 U	1.1 U	100	4.17	--	--	--	--	--
108-90-7	Chlorobenzene	0.77 U	0.77 U	0.8 U	20	--	--	--	--	--	--
75-00-3	Chloroethane	0.44 U	0.44 U	0.46 U	10,000	--	--	--	--	--	--
67-66-3	Chloroform	0.82 U	0.82 U	0.85 U	49	1.09	--	--	--	--	--
74-87-3	Chloromethane	0.98	1	0.92	90	13.89	1	0.92	0.08	0.0009	0.006
156-59-2	cis-1,2-Dichloroethene	0.13 U	0.13 U	0.14 U	35	--	--	--	--	--	--
100-41-4	Ethylbenzene	1.1	1.1	0.36	1,000	--	1.1	0.36	0.74	0.0007	--
75-71-8	Freon 12	2.6	2.6	1.9	200	--	2.6	1.9	0.7	0.004	--
108-38-3, 1	m,p-Xylene	3.4	3.3	1.5	100	--	3.4	1.5	1.9	0.02	--
75-09-2	Methylene Chloride	1.2 UJ	1.2 UJ	1.2 UJ	3,000	53.19	--	--	--	--	--
95-47-6	o-Xylene	1.1	1.1	0.39	100	--	1.1	0.39	0.71	0.007	--
100-42-5	Styrene	0.72 U	0.72 U	0.74 U	1000	--	--	--	--	--	--
127-18-4	Tetrachloroethene	0.23 U	0.23 U	0.26	595	4.17	--	0.26	--	--	--
108-88-3	Toluene	5.6	5.7	1.7	5,000	--	5.7	1.7	4	0.0008	--
156-60-5	trans-1,2-Dichloroethene	0.67 U	0.67 U	0.69 U	70	--	--	--	--	--	--
79-01-6	Trichloroethene	0.18 U	0.18 U	0.19 U	35	0.98	--	--	--	--	--
75-01-4	Vinyl Chloride	0.043 U	0.043 U	0.045 U	100	2.84	--	--	--	--	--
									Cumulative Exceedance Factors:	**0.4**	**0.8**

Notes
1. The Data Qualifiers presented in this table are:
   U = The analyte was not detected (the reporting limit is presented).
   J = The result is an estimated value.
2. The MTCA Method C Cleanup Levels were calculated per WAC 173-340-750(4) using the following target risk goals for individual analytes:
   Cancer Risk (CR) = 1E-05
   Hazard Quotient (HQ) = 1
3. NCEFs and CEFs were only calculated for analytes detected in indoor air at concentrations greater thank ambient air concentrations (i.e., background).
4. NCEF is calculed as follows: Corrected Indoor Air Concentration / Noncancer MTCA Method C Cleanup Level
5. CEF is calculated as follows: Corrected Indoor Air Concentration / Cancer MTCA Method C Cleanup Level

Abbreviations
AA = Ambient Air
Cancer = Cancer-Based MTCA Method C Cleanup Level
CEF = Cancer Exceedance Factor
IA = Indoor Air
MTCA = Model Toxics Control Act
NCEF = Noncancer Exceedance Factor
Noncancer = Noncancer-Based MTCA Method C Cleanup Level
SSDSI = Sub-Slab Depressurization System Installation

TABLE N-3

RECALCULATED INDOOR AIR CLEANUP LEVELS AND GROUNDWATER SCREENING LEVELS[1]

PSC Washougal Facility
Washougal, Washington

Compound	CAS	Risk Driver	New RFC[2]	New RfDi[2]	New Unit Risk[3]	New CPFi[4]	Indoor Air Cleanup Level (µg/m3)		Method B Groundwater Screening Level [7] (µg/L)	
							C[5]	NC[6]	C	NC
carbon tetrachloride	56-23-5	C	--	--	6.00E-06	2.10E-02	0.42	--	0.54	--
methylene chloride	75-09-2	C	0.60	0.17	1.00E-08	3.50E-05	250	274	4433.96	4864.69
nitrobenzene	98-95-3	NC	9.00E-03	2.57E-03	--	--	--	4	--	10514.29
tetrachloroethylene (PCE)	127-18-4	C	4.00E-03	1.14E-03	2.60E-07	9.10E-04	9.62	2	22.89	4.35
trichloroethylene (TCE)	79-01-6	C	2.00E-03	5.71E-04	4.10E-06	1.44E-02	0.61	1	2.56	3.84

Notes
1. -- = not applicable
2. Values obtained from EPA IRIS database, see Attachment N-2.
3. Values obtained using Equation 2 described in Appendix N.
4. Values obtained using Equation 3 described in Appendix N.
5. Values obtained using Equation 750-2, see Attachment N-3.
6. Values obtained using Equation 750-1, see Attachment N-3.
7. Protective of indoor air. Value obtained using Equation 1 described in Appendix N.

Abbreviations
µg/L = micrograms per liter
µg/m^3 = micrograms per cubic meter
C = carcinogen
CAS = chemical abstract service number
CPFi = Cancer Potency Factor
NC = non-carcinogen
RFC = Reference Concentrations for Chronic Inhalation Exposure
RfDi = Inhalation Reference Dose

ATTACHMENT N-1

Table B-1. ***Indoor Air Cleanup Levels, Groundwater Screening Levels, and Soil Gas Screening Levels***

Note: Numeric values are rounded and expressed with two significant numbers. The ***numerator*** *soil gas value is the screening level for* ***sub-slab*** *measurements; the* ***denominator*** *value is the screening level for* ***deep*** *soil gas measurements.*

		Method B							Method C						
		Risk Driver	Indoor Air CUL[79] (µg/m³)		GW SL[80] (µg/L)		Soil Gas SL[81] (µg/m³)		Risk Driver	Indoor Air CUL (µg/m³)		GW SL (µg/L)		Soil Gas SL (µg/m³)	
Name of Hazardous Substance	[82]CAS #		C[83]	NC	C	NC	C	NC		C	NC	C	NC	C	NC
2-chloro-1,3-butadiene (chloroprene)	126-99-8	NC		3.2		12		32/320	NC		7		25		70/700
acetaldehyde	75-07-0	C	1.1	4.1	530	1900	11/110	41/410	NC	11	9	5300	4200	110/1100	90/900
acetonitrile	75-05-8	NC		27		33000		270/2700	NC		60		72000		600/6000
acetophenone	98-86-2	NC		0.008		50		0.08/0.8	NC		0.018		110		0.18/1.8
acrolein (Propenal)	107-02-8	NC		0.0091		2.9		0.091/0.91	NC		0.02		6.4		0.2/2
acrylonitrile	107-13-1	C	0.037	0.91	16	390	0.37/3.7	9.1/91	C	0.37	2	160	850	3.7/37	20/200
aldrin	309-00-2	C	0.00051		0.32		0.0051/0.051		C	0.0051		3.2		0.051/0.51	
benzene	71-43-2	C	0.32	14	2.4	100	3.2/32	140/1400	C	3.2	30	24	230	32/320	300/3000
benzyl chloride	100-44-7	C	0.052		6.2		0.52/5.2		C	0.52		62		5.2/52	
bis(2-chloroethyl)ether	111-44-4	C	0.0076		26		0.076/0.76		C	0.076		260		0.76/7.6	
bromodichloromethane	75-27-4	C	0.0033		0.09		0.033/0.33		C	0.033		0.9		0.33/3.3	
bromoform	75-25-2	C	2.3		200		23/230		C	23		2000		230/2300	
bromomethane (bromomethane)	74-83-9	NC		2.3		13		23/230	NC		5		28		50/500
butadiene;1,3-	106-99-0	C	0.08	0.91	0.037	0.42	0.8/8	9.1/91	C	0.8	2	0.37	0.92	8/80	20/200
carbon disulfide	75-15-0	NC		320		400		3200/32000	NC		700		870		7000/70000
carbon tetrachloride	56-23-5	C	0.17		0.22		1.7/17		C	1.7		2.2		17/170	
chlorobenzene	108-90-7	NC		8		100		80/800	NC		18		220		180/1800
chlorodifluoromethane (Freon 22)	75-45-6	NC		23000		27000		230000/2300000	NC		50000		58000		500000/5000000
chloroform	67-66-3	C	0.11		1.2		1.1/11		C	1.1		12		11/110	
chloromethane	74-87-3	C	1.4		5.2		14/140		C	14		52		140/1400	
chloropropane;2-	75-29-6	NC		4.6		12		46/460	NC		10		26		100/1000
cumene (Isopropylbenzene)	98-82-8	NC		180		720		1800/18000	NC		400		1600		4000/40000
dibromochloromethane	124-48-1	C	0.0045		0.22		0.045/0.45		C	0.045		2.2		0.45/4.5	
dichlorobenzene;1,2-	95-50-1	NC		64		1800		640/6400	NC		140		4000		1400/14000
dichlorobenzene;1,4-	106-46-7	NC		370		7900		3700/37000	NC		800		17000		8000/80000
dichlorodifluoromethane (Freon 12)	75-71-8	NC		80		9.9		800/8000	NC		180		22		1800/18000
dichloroethane;1,1- (DCA)	75-34-3	NC		320		2300		3200/32000	NC		700		5000		7000/70000
dichloroethane;1,2- (DCA)	107-06-2	C	0.096	2.2	4.2	98	0.96/9.6	22/220	C	0.96	4.9	42	210	9.6/96	49/490
dichloroethylene;1,1- (DCE)	75-35-4	NC		91		130		910/9100	NC		200		280		2000/20000
dichloroethylene;1,2-,cis (DCE)	156-59-2	NC		16		160		160/1600	NC		35		350		350/3500
dichloroethylene;1,2-,trans (DCE)	156-60-5	NC		32		130		320/3200	NC		70		290		700/7000
dichloropropane;1,2-	78-87-5	NC		1.8		28		18/180	NC		4		62		40/400
dichloropropene;1,3-	542-75-6	C	0.63	9.1	1.6	23	6.3/63	91/910	C	6.3	20	16	51	63/630	200/2000
Diisopropyl Ether (isopropyl ether)	108-20-3	NC		180		2900		1800/18000	NC		400		6300		4000/40000
ethyl chloride	75-00-3	C	3	4600	12	18000	30/300	46000/460000	C	30	10000	120	40000	300/3000	100000/1000000

[79] Indoor Air Cleanup Level calculated using Equations 750-1 (for carcinogens) or 750-2 (for carcinogens) defined by MTCA.

[80] Ground Water Screening Level or that concentration in the groundwater expected to not result in exceedance of the air cleanup level in an overlying structure under most circumstances (See Chapter 3 for more information on the appropriate use of these screening levels). GW SL = [Indoor Air CUL]/[Hcc* α *1000], where α = 1.0E-3.

[81] Soil Gas Screening Level that concentration in the soil gas just beneath a building (first value) or at 15 foot depth or greater (second value) expected to not result in exceedance of the air cleanup level in an overlying structure under most circumstances (see Chapter 3 for more information on the appropriate use of these screening levels). Soil Gas SL = [Indoor Air CUL]/[α], where α = 0.1 or 0.01, depending on the depth of the soil gas sample to be compared to.

[82] Chemical Abstracts Number.

[83] "C" refers to the substance's toxicity as a carcinogen; "NC" refers its toxicity as a non-carcinogen.

Table B-1. *Indoor Air Cleanup Levels, Groundwater Screening Levels, and Soil Gas Screening Levels (Continued)*

Name of Hazardous Substance	CAS #	Method B							Method C							
		Risk Driver	Indoor Air CUL ($\mu g/m^3$)		GW SL ($\mu g/L$)		Soil Gas SL ($\mu g/m^3$)		Risk Driver	Indoor Air CUL ($\mu g/m^3$)		GW SL ($\mu g/L$)		Soil Gas SL ($\mu g/m^3$)	
			C	NC	C	NC	C	NC		C	NC	C	NC	C	NC
ethylbenzene	100-41-4	NC		460		2800		4600/46000	NC		1000		6100		10000/100000
ethylene dibromide (EDB)	106-93-4	C	0.011	0.16	0.74	10	0.11/1.1	1.6/16	C	0.11	0.35	7.4	23	1.1/11	3.5/35
ethylene oxide	75-21-8	C	0.025		1.6		0.25/2.5		C	0.25		16		2.5/25	
hexachlorobutadiene	87-68-3	C	0.11		0.81		1.1/11		C	1.1		8.1		11/110	
hexachloroethane	67-72-1	C	0.63		8.6		6.3/63		C	6.3		86		63/630	
hexane;n-	110-54-3	NC		320		7.8		3200/32000	NC		700		17		7000/70000
hydrogen cyanide	74-90-8	NC		1.4		390		14/140	NC		3		860		30/300
mercury (elemental)	7439-97-6	NC		0.14		0.89		1.4/14	NC		0.3		1.9		3/30
methacrylonitrile	126-98-7	NC		0.32		56		3.2/32	NC		0.7		120		7/70
methyl ethyl ketone	78-93-3	NC		460		350000		4600/46000	NC		1000		760000		10000/100000
methyl isobutyl ketone	108-10-1	NC		32		11000		320/3200	NC		70		24000		700/7000
methyl methacrylate	80-62-6	NC		320		46000		3200/32000	NC		700		100000		7000/70000
methyl tert-butyl ether (MTBE)	1634-04-4	C	9.6	1400	610	86000	96/960	14000/140000	C	96	3000	6100	190000	960/9600	30000/300000
methylcyclohexane	108-87-2	NC		1400		570		14000/140000	NC		3000		1300		30000/300000
methylene chloride	75-09-2	C	5.3	1400	94	24000	53/530	14000/140000	C	53	3000	940	53000	530/5300	30000/300000
naphthalene	91-20-3	NC		1.4		170		14/140	NC		3		360		30/300
nitrobenzene	98-95-3	NC		0.27		690		2.7/27	NC		0.6		1500		6/60
nitropropane;2-	79-46-9	C	0.00093	9.1	0.36	3500	0.0093/0.093	91/910	C	0.0093	20	3.6	7700	0.093/0.93	200/2000
styrene	100-42-5	C	4.4	460	78	8200	44/440	4600/46000	C	44	1000	780	18000	440/4400	10000/100000
tetrachloroethane;1,1,1,2-	630-20-6	C	0.34		7.4		3.4/34		C	3.4		74		34/340	
tetrachloroethane;1,1,2,2-	79-34-5	C	0.043		6.2		0.43/4.3		C	0.43		62		4.3/43	
tetrachloroethylene (PCE)	127-18-4	C	0.42	16	1	40	4.2/42	160/1600	C	4.2	35	10	88	42/420	350/3500
toluene	108-88-3	NC		2200		15000		22000/220000	NC		4900		33000		49000/490000
trichloro-1,2,2-trifluoroethane;1,1,2- (Freon 113)	76-13-1	NC		14000		1100		140000/1400000	NC		30000		2400		300000/3000000
trichlorobenzene;1,2,4-	120-82-1	NC		91		3900		910/9100	NC		200		8400		2000/20000
trichloroethane;1,1,1- (TCA)	71-55-6	NC		4800		11000		48000/480000	NC		11000		25000		110000/1100000
trichloroethane;1,1,2-	79-00-5	C	0.16		7.9		1.6/16		C	1.6		79		16/160	
trichloroethylene (TCE)	79-01-6	C	0.1	16	0.42	67	1/10	160/1600	C	1	35	4.2	150	10/100	350/3500
trichlorofluoromethane (Freon 11)	75-69-4	NC		320		120		3200/32000	NC		700		260		7000/70000
trimethylbenzene;1,2,4-	95-63-6	NC		2.7		24		27/270	NC		6		52		60/600
trimethylbenzene;1,3,5-	108-67-8	NC		2.7		25		27/270	NC		6		54		60/600
vinyl acetate	108-05-4	NC		91		7800		910/9100	NC		200		17000		2000/20000
vinyl chloride	75-01-4	C	0.28	46	0.35	57	2.8/28	460/4600	C	2.8	100	3.5	120	28/280	1000/10000
xylene;m-	108-38-3	NC		46		310		460/4600	NC		100		670		1000/10000
xylene;o-	95-47-6	NC		46		440		460/4600	NC		100		960		1000/10000
VPH [EC5-6 aliphatics + EC6-8 aliphatics] fraction	NE	NC				140			NC				310		
VPH [EC8-10 aliphatics + EC10-12 aliphatics] fraction	NE	NC				2.9			NC				6.4		
VPH [C8-10 aromatics + EC10-12 aromatics] fraction-[naphthalene]	NE	NC				1300			NC				2800		
APH [EC5-8 aliphatics] fraction	NE	NC		2700				27000/270000	NC		6000				60000/600000
APH [EC9-12 aliphatics] fraction	NE	NC		140				1400/14000	NC		300				3000/30000
APH [EC9-10 aromatics] fraction	NE	NC		180				1800/18000	NC		400				4000/40000

Integrated Risk Information System (IRIS)

Carbon tetrachloride Quickview (CASRN 56-23-5)

Health assessment information on a chemical substance is included in IRIS only after a comprehensive review of toxicity data by U.S. EPA health scientists from several Program Offices, Regional Offices, and the Office of Research and Development.

Disclaimer: This QuickView represents a snapshot of key information. We suggest that you read the IRIS Summary to put this information into complete context.

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Carbon tetrachloride Source Documents

Carbon tetrachloride Summary
Toxicological Review of Carbon tetrachloride (PDF) (473 Pages, 3.04 M, about PDF)

Revision History

Date	Section	Description
03/31/2010	I., II., VI.	RfD and cancer assessment sections updated RfC assessment added.

See IRIS Summary for complete revision history.

Status of Data for Carbon tetrachloride

File First On-Line: 01/31/1987; **Last Significant Revision:** 03/31/2010

Category (section)	Status	Last Revised
Oral RfD Assessment	On-line	03/31/2010
Inhalation RfC Assessment	On-line	03/31/2010
Carcinogenicity Assessment	On-line	03/31/2010

Synonyms

56-23-5	Carbon tetrachloride
Acritet	Carbo tetrachloride
Benzinoform	Czterochlorek wegla
Carbona	ENT 4,705
Carbon chloride	Fasciolin
Carbon tet	more...

Chronic Health Hazard Assessments for Noncarcinogenic Effects

Reference Dose for Chronic Oral Exposure (RfD)

Critical Effect	Point of Departure*	UF	RfD
Elevated serum SDH activity	BMD_{2x} (ADJ): 3.9 mg/kg-day	1000	0.004 mg/kg-day

* The Point of Departure listed serves as a basis from which the Oral RfD was derived. See Discussion of Conversion Factors and Assumptions for more details.

Principal and Supporting Studies (Oral RfD)

Subchronic oral rat study, Bruckner et al., 1986

Confidence in the Oral RfD

Study -- Medium
Database -- Medium
RfD -- Medium

Reference Concentration for Chronic Inhalation Exposure (RfC)

Critical Effect	Point of Departure*	UF	RfC
Fatty changes in the liver	$BMCL_{10}$ (HEC): 14.3 mg/m^3	100	0.1 mg/m^3

* The Point of Departure listed serves as a basis from which the Inhalation RfC was derived. See Discussion of Conversion Factors and Assumptions for more details.

Principal and Supporting Studies (Inhalation RfC)

Chronic inhalation toxicity study in rats, Nagano et al., 2007b, JBRC, 1998

Confidence in the Inhalation RfC

Study -- High
Database -- Medium
RfC -- Medium

Carcinogenicity Assessment for Lifetime Exposure

Weight-of-Evidence Characterization

Likely to be carcinogenic to humans

Weight-of-Evidence Narrative:

Under the Guidelines for Carcinogen Risk Assessment (U.S. EPA, 2005a), carbon tetrachloride is "likely to be carcinogenic to humans."
This may be a synopsis of the full weight-of-evidence narrative. See IRIS Summary.

Quantitative Estimate of Carcinogenic Risk from Oral Exposure

Oral Slope Factor(s)	Extrapolation Method
7 $x10^{-2}$ per mg/kg-day	Multistage model with linear extrapolation from the POD (LED_{10}).

Drinking Water Unit Risks

2$x10^{-6}$ per µg/L

Risk Level	Concentration
E-4 (1 in 10,000)	50 µg/L
E-5 (1 in 100,000)	5 µg/L
E-6 (1 in 1,000,000)	0.5 µg/L

Dose-Response Data (Carcinogenicity, Oral Exposure)

Tumor Type: Hepatocellular adenoma or carcinoma
Test Species: Female BDF1 mouse
Route: Inhalation, route-to-route extrapolation, PBPK modeling
Reference: Nagano et al., 2007b, JBRC, 1998

Quantitative Estimate of Carcinogenic Risk from Inhalation Exposure

Inhalation Unit Risk(s)	Extrapolation Method
6 $x10^{-6}$ per $\mu g/m^3$	Log-probit model with linear extrapolation from the POD (LEC_{10}).

Inhalation Concentrations at Specified Risk Levels

http://cfpub.epa.gov/ncea/iris/index.cfm?fuseaction=iris.showQuickView&substance_nmbr=0020
Last updated on Wednesday, July 31, 2013

Risk Level	Concentration
E-4 (1 in 10,000)	17 $\mu g/m^3$
E-5 (1 in 100,000)	1.7 $\mu g/m^3$
E-6 (1 in 1,000,000)	0.17 $\mu g/m^3$

Dose-Response Data (Carcinogenicity, Inhalation Exposure)

Tumor Type: Pheochromocytoma
Test Species: Male BDF1 mouse
Route: Inhalation
Reference: Nagano et al. 2007b, JBRC 1998

Integrated Risk Information System (IRIS)

Dichloromethane Quickview (CASRN 75-09-2)

Health assessment information on a chemical substance is included in IRIS only after a comprehensive review of toxicity data by U.S. EPA health scientists from several Program Offices, Regional Offices, and the Office of Research and Development.

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Dichloromethane Source Documents

Dichloromethane Summary Toxicological Review of Dichloromethane (PDF) (567 Pages, 5.10 M, about PDF)

Revision History

Date	Section	Description
11/18/2011	I., II., VI.	RfD and cancer assessment updated. RfC added.

See IRIS Summary for complete revision history.

Status of Data for Dichloromethane

File First On-Line: 01/31/1987; **Last Significant Revision:** 11/18/2011

Category (section)	Status	Last Revised
Oral RfD Assessment	On-line	11/18/2011
Inhalation RfC Assessment	On-line	11/18/2011
Carcinogenicity Assessment	On-line	11/18/2011

Synonyms

75-09-2
Chlorure de methylene
DCM
Dichlormethan, uvasol
Dichloromethane
1,1-Dichloromethane
Freon 30
Methane dichloride
Methane, dichloro-
Methylene bichloride
Methylene chloride
more...

Chronic Health Hazard Assessments for Noncarcinogenic Effects

Reference Dose for Chronic Oral Exposure (RfD)

Critical Effect	Point of Departure*	UF	RfD
Hepatic effects (hepatic vacuolation, liver foci)	$BMDL_{10}$ (HED): 0.19 mg/kg-day	30	6×10^{-3} mg/kg-day

* The Point of Departure listed serves as a basis from which the Oral RfD was derived. See Discussion of Conversion Factors and Assumptions for more details.

Principal and Supporting Studies (Oral RfD)

2-Year rat drinking water bioassay, Serota et al., 1986a

Confidence in the Oral RfD

Study -- High
Database -- Medium/High
RfD -- High

Reference Concentration for Chronic Inhalation Exposure (RfC)

Critical Effect	Point of Departure*	UF	RfC
Hepatic effects (hepatic vacuolation)	$BMDL_{10}$ (HEC): 17.2 mg/m^3	30	$6x10^{-1}$ mg/m^3

* The Point of Departure listed serves as a basis from which the Inhalation RfC was derived. See Discussion of Conversion Factors and Assumptions for more details.

Principal and Supporting Studies (Inhalation RfC)

2-Year rat inhalation bioassay, Nitschke et al. (1988a)

Confidence in the Inhalation RfC

Study -- High
Database -- Medium/High
RfC -- Medium/High

Carcinogenicity Assessment for Lifetime Exposure

Weight-of-Evidence Characterization

Likely to be carcinogenic to humans

Weight-of-Evidence Narrative:

Following U.S. EPA (2005a) Guidelines for Carcinogen Risk Assessment, dichloromethane is "likely to be carcinogenic in humans," based predominantly on evidence of carcinogenicity at two sites in 2-year bioassays in male and female B6C3F1 mice (liver and lung tumors) with inhalation exposure (NTP, 1986) and at one site in male B6C3F1 mice (liver tumors) with drinking water exposure (Serota et al., 1986b Hazleton Laboratories, 1983).
This may be a synopsis of the full weight-of-evidence narrative. See IRIS Summary.

Quantitative Estimate of Carcinogenic Risk from Oral Exposure

Oral Slope Factor (s)	Extrapolation Method
$2 x10^{-3}$ per mg/kg-day	Multistage model with linear extrapolation from the point of departure (BMDL10).

EPA has concluded, by a weight of evidence evaluation, that Dichloromethane is carcinogenic by a mutagenic mode of action. As a result, increased early-life susceptibility is assumed and the age-dependent adjustment factors (ADAFs) should be used when estimating age-specific cancer risks. See IRIS Summary.

Dose-Response Data (Carcinogenicity, Oral Exposure)

Tumor Type: Hepatocellular carcinomas or adenomas
Test Species: Male B6C3F1 mice
Route: Oral, drinking water
Reference: Serota et al. (1986b)

Quantitative Estimate of Carcinogenic Risk from Inhalation Exposure

Inhalation Unit Risk (s)	Extrapolation Method
$1 x10^{-8}$ per $\mu g/m^3$	Multistage model with linear extrapolation from the point of departure (BMDL10).

EPA has concluded, by a weight of evidence evaluation, that Dichloromethane is carcinogenic by a mutagenic mode of action. As a result, increased early-life susceptibility is assumed and the

age-dependent adjustment factors (ADAFs) should be used when estimating age-specific cancer risks. See IRIS Summary.

http://cfpub.epa.gov/ncea/iris/index.cfm?fuseaction=iris.showQuickView&substance_nmbr=0070
Last updated on Wednesday, July 31, 2013

Dose-Response Data (Carcinogenicity, Inhalation Exposure)

Tumor Type: Hepatocellular carcinomas or adenomas, bronchoalveolar carcinomas or adenomas
Test Species: Male B6C3F1 mice
Route: Inhalation
Reference: Mennear et al. (1988), NTP (1986)

Integrated Risk Information System (IRIS)

Nitrobenzene Quickview (CASRN 98-95-3)

Health assessment information on a chemical substance is included in IRIS only after a comprehensive review of toxicity data by U.S. EPA health scientists from several Program Offices, Regional Offices, and the Office of Research and Development.

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Nitrobenzene Source Documents

Nitrobenzene Summary
Toxicological Review of Nitrobenzene (PDF) (250 Pages, 3.83 M, about PDF)

Revision History

Date	Section	Description
02/06/2009	I., II.	Revised the RfD; added an RfC; revised the cancer assessment.

See IRIS Summary for complete revision history.

Status of Data for Nitrobenzene

File First On-Line: 01/31/1987; **Last Significant Revision:** 02/06/2009

Category (section)	Status	Last Revised
Oral RfD Assessment	On-line	02/06/2009
Inhalation RfC Assessment	On-line	02/06/2009
Carcinogenicity Assessment	On-line	02/06/2009

Synonyms

98-95-3	NCI-c60082
Benzene, nitro-	Nitrobenzene
Essence of Mirbane	Nitrobenzol
Essence of Myrbane	Oil of Mirbane
Mirbane oil	Oil of Myrbane

Chronic Health Hazard Assessments for Noncarcinogenic Effects

Reference Dose for Chronic Oral Exposure (RfD)

Critical Effect	Point of Departure*	UF	RfD
Increased methemoglobin levels	BMDL (1SD): 1.8 mg/kg-day	1000	2×10^{-3} mg/kg-day

* The Point of Departure listed serves as a basis from which the Oral RfD was derived. See Discussion of Conversion Factors and Assumptions for more details.

Principal and Supporting Studies (Oral RfD)

Subchronic rat study, NTP, 1983

Confidence in the Oral RfD

Study -- High
Database -- Medium
RfD -- Medium

Reference Concentration for Chronic Inhalation Exposure (RfC)

Critical Effect	Point of Departure*	UF	RfC
Bronchiolization of the alveoli and olfactory degeneration	$BMCL_{10}$ (HEC): 0.26 mg/m^3	30	$9x10^{-3}$ mg/m^3

* The Point of Departure listed serves as a basis from which the Inhalation RfC was derived. See Discussion of Conversion Factors and Assumptions for more details.

Principal and Supporting Studies (Inhalation RfC)

Chronic mouse study, CIIT, 1993

Confidence in the Inhalation RfC

Study -- High
Database -- High
RfC -- Medium

Carcinogenicity Assessment for Lifetime Exposure

Weight-of-Evidence Characterization

Likely to be carcinogenic to humans (Combined route)

Weight-of-Evidence Narrative:

Under the Guidelines for Carcinogen Risk Assessment (U.S. EPA, 2005a), nitrobenzene is classified as "likely to be carcinogenic to humans" by any route of exposure.
This may be a synopsis of the full weight-of-evidence narrative. See IRIS Summary.

Quantitative Estimate of Carcinogenic Risk from Oral Exposure

Not Assessed under the IRIS Program.

Quantitative Estimate of Carcinogenic Risk from Inhalation Exposure

Inhalation Unit Risk(s)	Extrapolation Method
$4 x10^{-5}$ per $\mu g/m^3$	Multistage model with linear extrapolation from the POD (LEC10).

Inhalation Concentrations at Specified Risk Levels

Risk Level	Concentration
E-4 (1 in 10,000)	2.5 $\mu g/m^3$
E-5 (1 in 100,000)	0.25 $\mu g/m^3$
E-6 (1 in 1,000,000)	0.025 $\mu g/m^3$

Dose-Response Data (Carcinogenicity, Inhalation Exposure)

Tumor Type: Liver hepatocellular adenomas or carcinomas, kidney tubular adenomas or carcinomas, thyroid follicular cell adenomas or carcinomas
Test Species: Rat/F344 (male)
Route: Inhalation
Reference: CIIT (1993)

Integrated Risk Information System (IRIS)

Tetrachloroethylene Quickview (CASRN 127-18-4)

Health assessment information on a chemical substance is included in IRIS only after a comprehensive review of toxicity data by U.S. EPA health scientists from several Program Offices, Regional Offices, and the Office of Research and Development.

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Tetrachloroethylene Source Documents

Tetrachloroethylene Summary
Toxicological Review of Tetrachloroethylene (PDF)
(1,077 Pages, 144.20 M, about PDF)
Tetrachloroethylene Support Documents

Revision History

Date	Section	Description
02/10/2012	I., II., VI.	RfD updated. RfC and cancer assessment added.

See IRIS Summary for complete revision history.

Status of Data for Tetrachloroethylene

File First On-Line: 01/31/1987; **Last Significant Revision:** 02/10/2012

Category (section)	Status	Last Revised
Oral RfD Assessment	On-line	02/10/2012
Inhalation RfC Assessment	On-line	02/10/2012
Carcinogenicity Assessment	On-line	02/10/2012

Synonyms

127-18-4	Dowclene ec
Ankilostin	ENT 1,860
Antisol 1	Ethylene, tetrachloro-
Carbon bichloride	Fedal-UN
Czterochloroetylen	NCI-C04580
Didakene	more...

Chronic Health Hazard Assessments for Noncarcinogenic Effects

Reference Dose for Chronic Oral Exposure (RfD)

Critical Effect	Point of Departure*	UF	RfD
Multiple	**Multiple**	**Multiple**	**6×10^{-3} mg/kg-day**
Neurotoxicity (reaction time, cognitive effects)	LOAEL: 9.7 mg/kg-day	1000	candidate RfD = 0.0097 mg/kg-day

Neurotoxicity (color vision)	LOAEL: 2.6 mg/kg-day	1,000	candidate RfD = 0.0026 mg/kg-day

* The Point of Departure listed serves as a basis from which the Oral RfD was derived. See Discussion of Conversion Factors and Assumptions for more details.

Principal and Supporting Studies (Oral RfD)

Occupationally-exposed adults, Echeverria et al., 1995 (Neurotoxicity (reaction time, cognitive effects))
Occupationally-exposed adults, Cavalleri et al., 1994 (Neurotoxicity (color vision))

Confidence in the Oral RfD

Study -- Medium
Database -- Medium
RfD -- Medium

Reference Concentration for Chronic Inhalation Exposure (RfC)

Critical Effect	Point of Departure*	UF	RfC
Multiple	**Multiple**	**Multiple**	**4×10^{-2} mg/m^3**
Neurotoxicity (reaction time, cognitive effects)	LOAEL: 56 mg/m^3	1,000	candidate RfC = 0.056 mg/m^3
Neurotoxicity (color vision)	LOAEL: 15 mg/m^3	1,000	candidate RfC = 0.015 mg/m^3

* The Point of Departure listed serves as a basis from which the Inhalation RfC was derived. See Discussion of Conversion Factors and Assumptions for more details.

Principal and Supporting Studies (Inhalation RfC)

Occupationally-exposed adults, Echeverria et al., 1995 (Neurotoxicity (reaction time, cognitive effects))
Occupationally-exposed adults, Cavalleri et al., 1994 (Neurotoxicity (color vision))

Confidence in the Inhalation RfC

Study -- Medium
Database -- Medium
RfC -- Medium

Carcinogenicity Assessment for Lifetime Exposure

Weight-of-Evidence Characterization

Likely to be carcinogenic to humans

Weight-of-Evidence Narrative:

Following EPA (2005a) Guidelines for Carcinogen Risk Assessment, tetrachloroethylene is "likely to be carcinogenic in humans by all routes of exposure."
This may be a synopsis of the full weight-of-evidence narrative. See IRIS Summary.

Quantitative Estimate of Carcinogenic Risk from Oral Exposure

Oral Slope Factor(s)	Extrapolation Method
2.1×10^{-3} per mg/kg-day	Multistage model (with linear extrapolation from the point of departure (BMDL10), followed by route-to-route extrapolation to the oral route and interspecies extrapolation using the PBPK model of Chiu and Ginsberg (2011).

Drinking Water Unit Risks

6.1×10^{-8} per µg/L

http://cfpub.epa.gov/ncea/iris/index.cfm?fuseaction=iris.showQuickView&substance_nmbr=0106
last updated on Wednesday, July 31, 2013

Risk Level	Concentration
E-4 (1 in 10,000)	2000 µg/L
E-5 (1 in 100,000)	200 µg/L
E-6 (1 in 1,000,000)	20 µg/L

Dose-Response Data (Carcinogenicity, Oral Exposure)

Tumor Type: Hepatocellular adenomas or carcinomas
Test Species: Male Crj:BDF1 mice
Route: Inhalation
Reference: JISA, 1993

Quantitative Estimate of Carcinogenic Risk from Inhalation Exposure

Inhalation Unit Risk(s)	Extrapolation Method
2.6×10^{-7} per $\mu g/m^3$	Multistage model with linear extrapolation from the point of departure (BMCL10), followed by extrapolation to humans using the PBPK model of Chiu and Ginsberg (2011).

Inhalation Concentrations at Specified Risk Levels

Risk Level	Concentration
E-4 (1 in 10,000)	400 $\mu g/m^3$
E-5 (1 in 100,000)	40 $\mu g/m^3$
E-6 (1 in 1,000,000)	4 $\mu g/m^3$

Dose-Response Data (Carcinogenicity, Inhalation Exposure)

Tumor Type: Hepatocellular adenomas or carcinomas
Test Species: Male Crj:BDF1 mice
Route: Inhalation
Reference: JISA, 1993

Integrated Risk Information System (IRIS)

Trichloroethylene Quickview (CASRN 79-01-6)

Health assessment information on a chemical substance is included in IRIS only after a comprehensive review of toxicity data by U.S. EPA health scientists from several Program Offices, Regional Offices, and the Office of Research and Development.

Disclaimer: This QuickView represents a snapshot of key information. We suggest that you read the IRIS Summary to put this information into complete context.

For definitions of terms in the IRIS Web site, refer to the IRIS Glossary.

Trichloroethylene Source Documents

Trichloroethylene Summary
Trichloroethylene Support Documents

Revision History

Date	Section	Description
09/28/2011	I., II., VI.	RfD, RfC, and Cancer assessment added.

See IRIS Summary for complete revision history.

Status of Data for Trichloroethylene

File First On-Line: 03/31/1987; **Last Significant Revision:** 09/28/2011

Category (section)	Status	Last Revised
Oral RfD Assessment	On-line	09/28/2011
Inhalation RfC Assessment	On-line	09/28/2011
Carcinogenicity Assessment	On-line	09/28/2011

Synonyms

79-01-6
Anamenth
Benzinol
Cecolene
Chlorilen
1-Chloro-2,2-dichloroethylene
Chlorylea
Chorylen
CirCosolv
Crawhaspol
1,1-Dichloro-2-chloroethylene
more...

Chronic Health Hazard Assessments for Noncarcinogenic Effects

Reference Dose for Chronic Oral Exposure (RfD)

Critical Effect	Point of Departure*	UF	RfD
Multiple	**Multiple**	**Multiple**	**5×10^{-4} mg/kg/day**
Decreased thymus weight in female $B6C3F_1$ mice (adult immunological effects)	LOAEL(HED_{99}): 0.048 mg/kg/day	100	candidate RfD = 4.8×10^{-4} mg/kg/day

Decreased plaque-forming cell (PFC) response, increased delayed-type hypersensitivity in B6C3F$_1$ mice (development Immunotoxicity)	LOAEL: 0.37 mg/kg/day	1,000	candidate RfD = 3.7×10^{-4} mg/kg/day
Increased fetal cardiac malformations in Sprague-Dawley rats (heart malformations)	BMDL$_{01}$ (HED$_{99}$): 0.0051 mg/kg/day	10	candidate RfD = 5.1×10^{-4} mg/kg/day

* The Point of Departure listed serves as a basis from which the Oral RfD was derived. See Discussion of Conversion Factors and Assumptions for more details.

Principal and Supporting Studies (Oral RfD)

30-week drinking water study , Keil et al., 2009 (adult immunological effects)
Drinking water exposure from gestation day (GD) 0 to 3 or 8 weeks of age , Peden-Adams et al., 2006 (development immunotoxicity)
Drinking water exposure from GD 1 to 22 , Johnson et al., 2003 (heart malformations)

Confidence in the Oral RfD

Study -- Medium/High (adult immunological effects and developmental immunotoxicity); Medium (heart malformations)
Database -- High
RfD -- High

Reference Concentration for Chronic Inhalation Exposure (RfC)

Critical Effect	Point of Departure*	UF	RfC
Multiple	**Multiple**	**Multiple**	**0.002 mg/m^3**
Decreased thymus weight in female B6C3F$_1$ mice (immunotoxicity)	LOAEL (HEC$_{99}$): 0.19 mg/m^3	100	candidate RfC = 0.0019 mg/m^3
Increased fetal cardiac malformations in Sprague-Dawley rats (heart malformations)	BMDL$_{01}$ (HEC$_{99}$): 0.021 mg/m^3	10	candidate RfC = 0.0021 mg/m^3

* The Point of Departure listed serves as a basis from which the Inhalation RfC was derived. See Discussion of Conversion Factors and Assumptions for more details.

Principal and Supporting Studies (Inhalation RfC)

30-week drinking water study , Keil et al., 2009 (immunotoxicity)
Drinking water exposure from GD 1 to 22, Johnson et al., 2003 (heart malformations)

Confidence in the Inhalation RfC

Study -- Medium/High (immunotoxicity); Medium (heart malformations)
Database -- High
RfC -- High

Carcinogenicity Assessment for Lifetime Exposure

Weight-of-Evidence Characterization

Carcinogenic to humans

Weight-of-Evidence Narrative:

Following U.S. EPA (2005b) Guidelines for Carcinogen Risk Assessment, TCE is characterized as "carcinogenic to humans" by all routes of exposure.
This may be a synopsis of the full weight-of-evidence narrative. See IRIS Summary.

Quantitative Estimate of Carcinogenic Risk from Oral Exposure

Oral Slope Factor(s)	Extrapolation Method

4.6×10^{-2} per mg/kg-day	PBPK model-based route-to-route extrapolation of the inhalation unit risk estimate for kidney cancer with a factor of 5 applied to include non-Hodgkin's lymphoma (NHL) and liver cancer risks, combined risk

http://cfpub.epa.gov/ncea/iris/index.cfm?fuseaction=iris.showQuickView&substance_nmbr=0199
Last updated on Wednesday, July 31, 2013

EPA has concluded, by a weight of evidence evaluation, that TCE is carcinogenic by a mutagenic mode of action for induction of kidney tumors. As a result, increased early-life susceptibility is assumed for kidney cancer and the age-dependent adjustment factors (ADAFs) should be used for the kidney cancer component of the total cancer risk when estimating age-specific cancer risks. See IRIS Summary.

Dose-Response Data (Carcinogenicity, Oral Exposure)

Tumor Type: Renal cell carcinoma, non-Hodgkin's lymphoma, and liver tumors
Test Species: Human (epidemiological studies)
Route: Inhalation, (route-to-route extrapolation to Oral)
Reference: Charbotel et al., 2006 EPA, 2011 Raaschou-Nielsen et al., 2003

Quantitative Estimate of Carcinogenic Risk from Inhalation Exposure

Inhalation Unit Risk(s)	Extrapolation Method
4.1×10^{-6} per $\mu g/m^3$	Low-dose linear extrapolation from the point of departure (LEC01) with a factor of 4 applied to include non-Hodgkin's lymphoma (NHL) and liver cancer risks, combined risk

EPA has concluded, by a weight of evidence evaluation, that TCE is carcinogenic by a mutagenic mode of action for induction of kidney tumors. As a result, increased early-life susceptibility is assumed for kidney cancer and the age-dependent adjustment factors (ADAFs) should be used for the kidney cancer component of the total cancer risk when estimating age-specific cancer risks. See IRIS Summary.

Dose-Response Data (Carcinogenicity, Inhalation Exposure)

Tumor Type: Renal cell carcinoma, non-Hodgkin's lymphoma, and liver tumors
Test Species: Human (epidemiological studies)
Route: Inhalation
Reference: Charbotel et al. 2006 EPA, 2011 Raaschou-Nielsen et al., 2003

Noncarcinogens: Equation 750-1

$$Air\ Cleanup\ Level\ (ug/m^3) = \frac{RfD_i \times ABW \times UCF \times HQ \times AT}{BR \times ABS_i \times ED \times EF}$$

Parameter		Default Value		Units
		Method B	Method C	
Risk				
• Hazard Quotient	HQ	1	1	unitless
Toxicological Parameters				
• Inhalation Reference Dose	RfD_i	chemical-specific	chemical-specific	mg/kg-day
Exposure Parameters				
• Average Body Weight	ABW	16	70	kg
• Averaging Time	AT	6	30	years
• Exposure Duration	ED	6	30	years
• Exposure Frequency	EF	1	1	unitless
• Air Breathing Rate	BR	10	20	m^3/day
• Inhalation Absorption Fraction	ABS_i	1.0	1.0	unitless
Unit Conversion Factors				
• Unit Conversion Factor	UCF	1,000	1,000	µg/mg

NOTE: Default values highlighted in green differ for Method B and Method C.

Carcinogens: Equation 750-2

$$Air\ Cleanup\ Level\ (ug/m^3) = \frac{RISK \times ABW \times AT \times UCF}{CPF_i \times BR \times ABS_i \times ED \times EF}$$

Parameter		Default Value		Units
		Method B	Method C	
Risk				
• Carcinogenic Risk	RISK	1×10^{-6}	1×10^{-5}	unitless
Toxicological Parameters				
• Inhalation Cancer Potency Factor	CPF_i	chemical-specific	chemical-specific	kg-day/mg
Exposure Parameters				
• Average Body Weight	ABW	70	70	kg
• Averaging Time	AT	75	75	years
• Exposure Duration	ED	30	30	years
• Exposure Frequency	EF	1	1	unitless
• Air Breathing Rate	BR	20	20	m^3/day
• Inhalation Absorption Fraction	ABS_i	1.0	1.0	unitless
Unit Conversion Factors				
• Unit Conversion Factor	UCF	1,000	1,000	µg/mg

NOTE: Default values highlighted in green differ for Method B and Method C.

APPENDIX O

Assessment of Arsenic in Groundwater

APPENDIX O

ASSESSMENT OF ARSENIC IN GROUNDWATER

PSC Washougal Facility

Washougal, Washington

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ATTACHMENT

Attachment O-1 Groundwater Solutions Technical Memorandum

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ASSESSMENT OF ARSENIC IN GROUNDWATER
PSC Washougal Facility
Washougal, Washington

1.0 INTRODUCTION

AMEC Environment & Infrastructure, Inc. (AMEC), has prepared this assessment of arsenic in groundwater on behalf of Burlington Environmental LLC, a wholly owned subsidiary of PSC Environmental Services, LLC (PSC). This assessment addresses the occurrence, distribution, mobilization, and probable sources of arsenic in soil and groundwater at the PSC facility in Washougal, Washington, and presents a comparison of site arsenic concentrations to background levels established for the state of Washington. This assessment is included as an appendix to the Final Remedial Investigation report (RI Report) prepared for the PSC Washougal facility (AMEC, 2011). This assessment was undertaken in response to a technical memorandum prepared by Groundwater Solutions (GWS) (GWS, 2008), comments provided by the Washington State Department of Ecology (Ecology) on the 2008 draft of this Arsenic Assessment (AMEC Geomatrix, 2008), and discussions with Ecology on July 11, 2011. This assessment compares arsenic concentrations in groundwater at the PSC Washougal facility to background levels of arsenic in groundwater recently determined for the state of Washington by Ecology (Ecology, 2010; San Juan, 2010). This comparison has been performed to assess the need for mitigation of arsenic at the site and to assist in developing a final plan for management of arsenic at the site.

1.1 LOCAL SETTING

Arsenic has been detected at concentrations greater than Washington Model Toxics Control Act (MTCA) Method A and Method B cleanup levels in groundwater samples collected from wells located at the Washougal facility. However, since elevated background concentrations of arsenic occur frequently in soil and groundwater in the Pacific Northwest, and elevated arsenic levels are known to be present at other sites in the vicinity of the PSC site, it has been unclear whether high arsenic concentrations at the PSC property resulted from activities at the PSC facility, background conditions, or some combination of the two. Arsenic occurs naturally in glacial sediments, in volcanic glass, adsorbed to and coprecipitated with iron oxides and other metal oxides, adsorbed to clay mineral sources, or associated with organic carbon and sulfide minerals (Welch et al., 2000; Hinkle and Polette, 1998). Reducing conditions in the presence of organic carbon may result in arsenic mobilization via reduction of iron oxyhydroxides and associated release of adsorbed arsenic. Arsenic in groundwater may also result from upgradient industrial sources, as arsenic is commonly used for industrial purposes, or by

mobilization as a result of reducing conditions created by upgradient sources, including sources such as sanitary sewage leaks from sewer lines.

In 2010, the MTCA Science Advisory Board (SAB) reviewed a statewide dataset of groundwater data for arsenic (Ecology, 2010; San Juan, 2010). For this background study, arsenic study data were obtained from the Washington Department of Health (DOH) Drinking Water Program. A total of 18,238 groundwater sample results, collected over a 10-year period (2000-2010) from 6,776 drinking water wells (depths of 10 to 2,200 feet.), were evaluated. Ecology used the "MTCAStat" statistical software to estimate background arsenic concentrations using the procedures specified in Washington Administrative Code (WAC) 173-340-709. The review produced the following key results:

- On a statewide basis, Ecology estimated that arsenic concentrations of micrograms per liter (10.7 µg/L) represent the 90th percentile of the sampling distribution for groundwater in the State.
- High arsenic concentrations (> 25 µg/L) were detected in 12 western Washington counties (Clark, Cowlitz, Island, Jefferson, King, Lewis, Mason, Skagit, Skamania, Snohomish, Thurston and Whatcom). The PSC Washougal facility is located in Clark County.

At the PSC Washougal facility, shallow vadose-zone soil consists predominantly of fill material that originated as sediments dredged from the Columbia River. These sediments have been found to contain arsenic at concentrations ranging from 0.6 milligrams per kilogram (mg/kg) to 7.2 mg/kg in the Washougal area (U.S. Environmental Protection Agency [EPA], 1996). This shallow fill material was placed atop a former marsh and is underlain by a silt layer, which may contain organic material. A deeper gravel aquifer unit is present below the silt.

Silt from the former marsh is likely to contain sufficiently elevated levels of organic material to produce reducing conditions through degradation of the organic matter. The presence of woody and root debris has been observed in the silt layer throughout the site. Under highly reducing conditions, methanogenesis may take place. Reducing conditions due to organic material from the marsh could also result in mobilization of metals, including iron and arsenic.

The PSC Washougal property is bounded by industrial property to the north, south, and west and by a marsh to the east. At least one of the industrial properties, a former wood-treating plant to the south of the site, has been identified as having groundwater contaminated with high levels of arsenic. Surrounding properties of concern are discussed later in this appendix.

1.2 PRIOR STUDIES

Two prior studies have examined arsenic at the PSC property to determine whether arsenic concentrations exceeding MTCA Method A and Method B cleanup levels occur as a result of area background concentrations or due to activities at the PSC property.

1.2.1 PSC Investigation

In 2002, PSC undertook a study of area background concentrations in the Shallow Groundwater Zone to determine whether arsenic is a contaminant related to activities at the PSC facility. The study compared concentrations of arsenic in soil and groundwater to those in the general area (PSC, 2002).

The area background arsenic concentration for soil was calculated from 32 soil samples acquired from within 0.25 mile of the site. PSC determined the area background concentration to be 3.21 mg/kg of arsenic. This value is similar to a natural background arsenic concentration of 5.81 mg/kg reported for Clark County (San Juan, 1994) and within the range reported by EPA (1996). All soil samples at the PSC facility were found to contain arsenic concentrations below the calculated background concentration, except for one sample with a concentration of 3.72 mg/kg, which fell within the range of expected natural variability.

The background arsenic concentration in groundwater was calculated from 12 water samples obtained from direct-push borings. The locations of these July 2002 PSC direct-push borings within the PSC property and the associated analytical data are displayed on Figure O-1 (four sampling locations located outside the range of Figure O-1 are not shown). The calculated background for groundwater based on these samples was determined to be 57.19 µg/L of arsenic. PSC concluded that arsenic concentrations in groundwater samples from all wells located on the PSC property were below this background level. However, Ecology rejected this value as an appropriate background, because Ecology considers monitoring wells, not direct-push borings, suitable for determining background concentrations. Ecology generally prefers that monitoring well data be used for background estimations for metals because: (1) samples can be collected from the same locations repeatedly over time; (2) background concentrations are ultimately compared to concentrations associated with monitoring well samples (not direct-push samples); and (3) direct push and well sampling have differing abilities to filter fines containing inorganics. These factors can result in systematic error if sampling data from both techniques are being used to represent groundwater quality. In addition, Ecology generally considers upgradient groundwater samples, collected close to the site, to be better representative of background COC levels.

Groundwater data from the direct-push borings, however, indicate the presence of high concentrations of arsenic in the area surrounding the PSC property. High values of arsenic

were noted in particular in groundwater collected from borings on the south perimeter of the PSC property (Figure O-1). Groundwater in this location is likely influenced by former wood-treating activities at the industrial property to the south of the PSC property, as discussed in Section 3.0.

1.2.2 GWS Technical Memorandum

In January 2008, GWS conducted an evaluation of arsenic in groundwater at the Washougal facility (GWS, 2008). The technical memorandum examined four quarters of arsenic data from September 2006 to June 2007, and presented conclusions and recommendations based on the findings. A complete list of these conclusions and recommendations is available in the GWS technical memorandum, provided as an attachment to this appendix.

This appendix presents a response to the recommendations by GWS, including a full analysis of historical data on arsenic and associated parameters from the PSC Washougal site since January 2000. An assessment of the influence of arsenic contamination at neighboring properties is also provided.

2.0 ARSENIC OCCURRENCE

The following sections present an analysis of analytical data for arsenic in groundwater at the PSC property in response to the recommendations by GWS.

This section compares the calculated background to background concentrations in groundwater in the state in order to develop a cleanup level for the site and aid in cleanup action decision making. Arsenic occurrence, distribution, and geochemistry are also discussed in order to determine the likely factors influencing arsenic concentrations at the site.

2.1 GROUNDWATER BACKGROUND

Background concentrations of arsenic for this analysis were determined using standards set forth in WAC 173-340-709. Calculations were performed using Ecology's MTCAStat program. Data from the first quarter of 2004 to the second quarter of 2012 were used. In both the Shallow Groundwater Zone and the Lower Aquifer, these data were found to fit a lognormal distribution (R^2 = 0.98 and R^2 = 0.95, respectively, where an R^2 = 1 indicates a perfect fit to a lognormal distribution). Ecology recommends the use of a 90th percentile upper confidence limit (UCL) concentration or four times the 50th percentile UCL concentrations, whichever is lower, for the background concentration. The 90th percentile values for both the Shallow Groundwater Zone and the Lower Aquifer provided lower background concentrations and were therefore selected for use as the background concentrations.

Analytical results from wells MC-12, MC-107, and MC-30 were used to calculate a background arsenic concentration for the Shallow Groundwater Zone (see Figure 11-28 in the RI Report for well locations). Wells MC-12 and MC-107 had also been used by GWS (2008) to calculate the background arsenic concentration. Well MC-30 was installed on the upgradient edge of the property in 2008 to provide an additional upgradient background well and had not yet been installed at the time of the GWS memorandum. Well MC-30 was additionally used to calculate the background arsenic concentration due to its location in the upgradient portion of the PSC property, and because no releases of contaminants from operations at the PSC facility are expected to have influenced this well. A total of 92 data points from these wells for total arsenic concentration (representing quarterly monitoring results from 2004 to 2012) were used in Ecology's MTCAStat program, yielding a background concentration of 22.84 µg/L total arsenic. The data used for this calculation are presented in Table O-1. The MTCAStat output is provided in Table O-2.

Analytical results from wells MC-12D and MC-30D were used to calculate the background concentration of arsenic in the Lower Aquifer (see Figure 11-29 in the RI Report for well locations). This choice differs from the recommendation by GWS to use wells MC-12D and MC-13D. The GWS memorandum noted that the dominant direction of groundwater flow in the Lower Aquifer is toward the south and suggested that MC-12D and MC-13D are therefore in an upgradient position relative to any potential releases that may have occurred on the PSC property. However, as discussed in the RI Report, groundwater flow in the Lower Aquifer is highly variable and experiences periodic reversals to a northward direction (Geomatrix, 2007). These reversals result from variations in water level in the Columbia River caused by tides, seasonal variation, and unpredictable releases from upstream dams.

Because of these variations, it was considered inappropriate to include well MC-13D in this study for calculation of background arsenic concentration. The well is located along the PSC property boundary in an area that may have experienced periodic reversals in the direction of groundwater flow. Instead, analytical results from well MC-30D were used in the calculations. Well MC-30D was installed in 2008 toward the northwest corner of the property near well MC-12D in order to provide an additional background well. Both wells MC-12D and MC-30D are located in an upgradient/cross-gradient position relative to operations at the PSC property, and both are located outside the footprint of former operations where most releases are expected to have occurred. No contaminant releases have been documented near these wells.

A total of 55 data points for total arsenic concentration for wells MC-12D and MC-30D (representing available quarterly groundwater monitoring results from 2004 to 2012) were used to yield a 90th percentile UCL background arsenic concentration of 1.42 µg/L in the

Lower Aquifer. The data used for this calculation are presented in Table O-1. The MTCAStat output is provided in Table O-3. In calculations for both the Shallow Groundwater Zone and Lower Aquifer, the 90th percentile UCL value yielded lower background concentrations than four times the 50th percentile concentrations. The 50th percentile values were 51.56 µg/L and 3.68 µg/L for the Shallow Groundwater Zone and the Lower Aquifer, respectively.

In summary, the calculated background for arsenic is 22.84 µg/L for the Shallow Groundwater Zone and 1.42 µg/L for the Lower Aquifer. It is difficult to ascertain if these background values should be categorized strictly as natural or area background values given that the site is affected by both natural and anthropogenic (area) influences:

- Natural - The site and surrounding industrial park are built over a large marsh resulting in naturally reducing conditions. These naturally reducing conditions are directly impacting concentrations of arsenic on the site. The arsenic concentrations show a clear and consistent trend of higher concentrations in the Shallow Groundwater Zone during the summer months (when the groundwater elevation is lowest and we observe the strongest reducing conditions) and lower concentrations in the winter months when recharge of oxygenated rainwater occurs. The natural conditions (high organic content and peat layers that promote reducing conditions) would encourage mobility of arsenic.

- Area - The site is located within a man-made industrial park, constructed on imported fill. The shallow aquifer is actually within this fill zone, but the geochemistry of this unit is strongly influenced by the methanogenic conditions produced by the underlying marsh deposits.

PSC's site-specific background calculation yielded results consistent with results from Ecology's 2010 study that indicates high arsenic concentrations are present in Clark County (Ecology, 2010; Section 1.1). PSC has therefore set the preliminary cleanup level (PCL) for arsenic at the calculated site-specific area background level of 22.84 µg/L for the Shallow Groundwater Zone and 1.42 µg/L for the Lower Aquifer.

2.2 ARSENIC DISTRIBUTION

AMEC evaluated groundwater quality data for the PSC property relative to the background concentrations calculated above. The calculated background value for arsenic in the Shallow Groundwater Zone is 22.84 µg/L. Figure 11-28 in the RI Report shows the highest annual average concentration of arsenic in samples collected in the Shallow Groundwater Zone over the period from 2004 through the second quarter of 2012. The areas with elevated arsenic concentrations occur primarily along the eastern property perimeter, around the waste oil tank system, and at scattered locations north and northwest of the former tank farm area (see Figure 11-28 in the RI Report). The highest average arsenic concentration (63.1 µg/L) within the PSC property over the period from 2004 through the second quarter of 2012 was noted in

groundwater samples from MC-14. The average arsenic concentration in groundwater samples collected from well MC-31, on the upgradient side of the property near the southern property boundary, also exceeded the area background concentration, at a concentration of 33.4 µg/L.

In the Lower Aquifer, most arsenic concentrations in groundwater are below the PCL, but groundwater samples from wells MC-118D, MC-10D, and MC-30D (used as a background well) were found to exceed the site specific background concentration of 1.42 µg/L for arsenic when average values over the period from 2004 through the second quarter of 2012 are considered (Figure 11-29 in the RI Report).

The highest average annual concentration from samples from all wells collected between 2004 and the second quarter of 2012 in the Shallow Groundwater Zone downgradient of the site to the east of the site boundary were below the background concentration of 22.84 µg/L except for well MC-32 with a concentration of 59.3 µg/L (Figure 11-28 in the RI Report). This suggests that no migration of arsenic at concentrations greater than the background concentration is occurring from the PSC property.

2.3 ARSENIC GEOCHEMISTRY

GWS recommended that historical arsenic trends in on-site groundwater be evaluated with respect to organic contaminants, total organic carbon (TOC), iron (including ferrous and ferric iron, where data are available), pH/oxidation-reduction potential (ORP), and the relative proportion of arsenate [As(V)] and arsenite [As(III)]. In addition to examining the relationship between arsenic and these parameters, this analysis evaluates the relationship between arsenic and methane in groundwater wells. The analysis is presented separately for the Shallow Groundwater Zone and Lower Aquifer.

2.3.1 Shallow Groundwater Zone

Arsenic occurrence and geochemistry for the Shallow Groundwater Zone are presented in this section. Seasonal trends; the relationship of arsenic to organic contaminants, TOC, iron, and pH/ORP; and arsenic speciation are discussed. Summary plots of the various constituent trends for the Shallow Groundwater Zone are provided in Figures O-2 through O-30.

2.3.1.1 Seasonal Trends

Seasonal trend plots of arsenic and other geochemical indicators were evaluated, similar to the trends evaluated by GWS, using the larger data set extending back to 2000. This study supports the conclusion by GWS that arsenic concentrations vary seasonally in the shallow aquifer, with the highest concentrations observed in the fall, when the water table is lowest (Figure O-2). Seasonal variations could result due to dilution from precipitation during the wet

season, or from redox changes due to influx of oxygen-rich rainwater. Concentrations of organic contaminants, TOC, iron, and methane also show seasonal variation. Because all these constituents are affected by redox chemistry, the relative influence of dilution and redox chemistry cannot be determined from the available data.

2.3.1.2 Arsenic versus Organic Contaminants

No clear relationship was found in this study between arsenic and chlorinated organic contaminants in groundwater (Figures O-3 through O-10). However, seasonal fluctuations in concentrations occur, and appear strongly linked to groundwater elevation at the site. Figure 12-1 in the RI Report shows that the highest TCE concentrations occur at times of high groundwater elevations. This finding is in direct contrast with the trends in arsenic concentration, which show the highest concentrations occur at times of low groundwater elevations. In other words, arsenic and chlorinated organic contaminants seem to have opposing trends in concentration in relation to groundwater elevation.

Groundwater from well MC-14, which contained the highest concentration of arsenic, is associated with high concentrations of the organic contaminants tetrachloroethene (PCE), *cis*-1,2-dichloroethene (cis-1,2-DCE), trichloroethene (TCE), and vinyl chloride (Figures O-3 and O-6). Organic contaminants at the PSC property may exacerbate mobilization of arsenic in the areas of the highest organic contamination. Degradation of organic contaminants in groundwater at or near these wells likely contributes to reducing conditions, resulting in higher arsenic concentrations in groundwater at these locations.

2.3.1.3 Arsenic versus Methane

High concentrations of arsenic in groundwater correlate well with high observed methane concentrations (Figures O-9 through O-12). Methane concentrations as high as 15 to 20 milligrams per liter (mg/L) have historically occurred in samples from wells with high levels of arsenic, namely MC-2, MC-14, MC-15, MC-16, and MC-17. By 2007, lower levels of methane were observed in samples from these wells, but methane nonetheless remained elevated, with values from 5 to 10 mg/L observed in 2007 through 2009. These data suggest that high levels of arsenic in groundwater are associated with reducing conditions, as methane is produced only in highly reducing environments, including naturally reducing environments.

The elevated levels of methane observed in groundwater samples containing high levels of arsenic could come from several sources. As the industrial area is built on the site of a former marsh, the silt layer underlying the shallow fill at the site contains organic material, such as vegetation and peat. An olive grey to olive black organic soil layer consisting of very fine silt and clay, frequently containing woody debris and/or root debris, was observed in most borings on site at depths below about 6 to 10 feet bgs (see Appendix F in RI Report). The organic

material in this deposit is likely to decay and thereby produce reducing conditions and methane in groundwater; in fact, due to the common association of marsh environments and methane, methane is often referred to as “swamp gas.” Methane could also be produced during degradation of organic contaminants, such as benzene, toluene, ethylbenzene, and xylenes (BTEX) or total petroleum hydrocarbons (TPH). However, TPH has not historically been detected at the PSC facility, and BTEX concentrations in groundwater samples from all wells containing high methane were very low or below the detection limit, except in well MC-14, where slightly elevated BTEX concentrations were observed. Finally, methane could migrate from the existing marsh on the east side of the site, which could explain elevated levels of methane in groundwater samples from wells MC-14, MC-15, MC-16, and MC-17. However, migration from the marsh is an unlikely source of methane for wells MC-2 and MC-10D (a Lower Aquifer well, discussed in Section 2.3.2), which contain elevated levels of methane but are distant from the marsh.

2.3.1.4 Iron and Total Organic Carbon

In general, groundwater in wells with high levels of arsenic tends to have high concentrations of iron, although limited data for iron are available (Figures O-13 and O-14). These elevated concentrations of iron, which is normally released to solution under reducing conditions, further support the hypothesis that reducing conditions exist in these wells. High TOC content does not appear to be related to high levels of arsenic (Figures O-15 and O-16), but is elevated in groundwater samples from MC-14, probably due to the presence of organic contaminants (Figure O-15).

2.3.1.5 pH and ORP

Data for pH and ORP are not closely correlated with any other observed parameters (Figures O-17 through O-27). Values for pH and ORP only weakly follow the seasonal variation observed for other parameters. No prominent differences are evident in pH and ORP values on the east versus the west side of the property. The ORP of all wells in the Shallow Groundwater Zone ranged from -45 millivolts (mV) to 388 mV in 2008-2009, suggesting at least slightly reducing conditions. The high concentrations of methane, which can persist only under reducing conditions, and the elevated concentrations of iron and arsenic, both of which tend to mobilize only under reducing conditions, support the hypothesis that reducing conditions exist. The pH and ORP meters are routinely calibrated and checked during monitoring events, following the manufactures’ recommendations; however, during future monitoring events, additional calibration and checks of the meters are recommended to gain extra assurance that field pH and ORP readings are accurate.

2.3.1.6 As(III) and As(V)

Four quarters of As(III) and As(V) data are available. Arsenic speciation varies depending on redox environment; As(III) dominates in more reducing environments. If reducing conditions are producing arsenic mobilization, a greater proportion of As(III) compared to As(V) would be evident in downgradient wells compared to upgradient wells. No clear trend is evident in ratios of As(III) and As(V) in samples from wells on the PSC property in either the Shallow Groundwater Zone or Lower Aquifer (Figure O-28). Although As(III) appears to predominate in a majority of wells, the ratio is highly variable, possibly due to seasonal influx of oxygenated water. No trend is evident between upgradient and downgradient wells. In 2002, PSC also concluded that no statistically significant difference in the ratio of As(III) to As(V) was evident between upgradient and downgradient direct-push borings (PSC, 2002).

We recommend that analysis for As(III) and As(V) be discontinued. Other indicators of redox environment are available, and no systematic trend is evident in the available data.

2.3.2 Lower Aquifer

Summary plots of constituent trends for groundwater in the Lower Aquifer are provided in Figures O-2 and Figures O-29 through O-43. In the Lower Aquifer, seasonal patterns appear muted or nonexistent (Figure O-2), as noted by GWS (Figures 2 and 9 in GWS, 2008). Some periodic variation in parameters does occur, but may result from water level changes in the Columbia River. This variation does not appear to be as closely related to wet and dry seasons as was variation in the Shallow Groundwater Zone.

GWS identified two wells, MC-10D and MC-118D, as containing groundwater with higher concentrations of arsenic compared to background well MC-12D (Figure O-31). Both wells also contain high concentrations of methane (Figure O-31), which is consistent with observations in the Shallow Groundwater Zone. Limited data for total iron are available for each of these wells, but the resulting iron values are elevated compared to values observed in groundwater samples from MC-12D. In September 2003, the total iron concentration of groundwater samples was 9.58 mg/L for MC-10D; 17.2 mg/L for well MC-118D; and 3.81 mg/L for well MC-12D. In other respects, however, the two wells differ significantly. Groundwater samples from MC-118D contain elevated levels of organic contaminants (Figures O-29 and O-30) and TOC (Figure O-35). Well MC-118D appears to have been affected by contaminant releases in the Shallow Groundwater Zone. In contrast, no elevated levels of these constituents exist in MC-10D.

Groundwater chemistry and historical information for MC-10D support the conclusion that no releases from the facility have impacted this well. MC-10D is located cross-gradient and far from PSC facility source areas, and no evidence of contamination originating for the PSC

facility is evident in this well. No historical activity that could have provided a source of contamination is known in this area of the property. Higher arsenic concentrations in this well could result from elevated levels of arsenic in groundwater at the property to the south of the Washougal facility. Arsenic concentrations in groundwater slightly to the south along the perimeter of the site, sampled by direct-push borings in 2002, are significantly higher than arsenic concentrations in groundwater samples from well MC-10D (Figure O-1). The arsenic source to the south does not represent a release from the PSC property and instead appears to be elevated due to industrial activity at other nearby properties. GWS recommended the installation of a shallow well in the area of MC-10D to evaluate conditions in this area, even though groundwater chemistry and the history of the site suggest this is not necessary. PSC did install a Shallow Groundwater Zone well in this area, MC-31, in 2008.

3.0 NEIGHBORING PROPERTIES

The property to the south of the PSC property represents the main property of concern as a potential area arsenic source in groundwater. The property is owned by TrueGuard, LLC (TrueGuard), which operates a wood-treating facility. TrueGuard is currently part of Ecology's Voluntary Cleanup Program and has been conducting investigation and cleanup activities for soil and groundwater related to arsenic and copper contamination. Prior to October 2007, the property was owned by Allweather Wood (AWW), which also conducted wood-treating operations. Chemicals used by AWW for wood treatment included chromated copper arsenic (CCA), an arsenic source.

High arsenic concentrations in groundwater at the former AWW property were documented in June and August 2007 and reported to Ecology (Ecology, 2007; Maul Foster & Alongi, Inc., 2008). Arsenic concentrations from 600 to 6,400 µg/L were documented in groundwater from shallow wells located in the central portion of the facility (Figure O-1). Arsenic concentrations in groundwater samples from four groundwater monitoring wells on the TrueGuard property (MW-3, MW-8, MW-9, and MW-10) ranged from 600 to 4,800 µg/L in June 2007, and from 690 to 6,400 µg/L in August 2007. At the northwest corner of the TrueGuard property, the arsenic concentration in groundwater from well MW-2 was documented at 33 µg/L, and on the western border, arsenic in groundwater from well MW-5 was documented at 61 µg/L. More recent analytical results for samples collected in 2009 are presented in Figure 2-4 of the RI Report.

In April 2008, approximately 5,250 pounds of Adventus EHC-MTM was injected into the uppermost aquifer at 10 locations in two separate areas of the former AWW property. Ecology had approved this pilot test, which was intended to assess the applicability of in situ stabilization (via chemical reduction) of dissolved arsenic concentrations in the uppermost

aquifer. Post-injection groundwater sampling was completed in July and October 2008 and in January and March 2009. The data show marginal improvement in arsenic groundwater quality—concentrations of arsenic decreased only slightly. Quarterly groundwater monitoring was performed on May 4 and 5, 2009, and the results were consistent with prior monitoring events. The average concentration of dissolved arsenic in samples obtained from monitoring wells MW-3 and MW-11 on May 5, 2009, is 1,700 µg/L[1]. As a result of successful bench-scale testing, TrueGuard plans to conduct an additional pilot test to evaluate a different remedial approach designed to create an oxidizing environment in which arsenic removal via chemisorption can occur (Maul Foster and Alongi, Inc., 2009).

Arsenic releases from the former AWW property have likely impacted surface waters as well as groundwater in the area, including Steigerwald Marsh to the east. A January 2009 letter to Ecology regarding stormwater management at the TrueGuard facility reports that over 500,000 gallons of untreated stormwater was discharged (presumably to Steigerwald Marsh). The untreated stormwater contained concentrations of arsenic at 27.2 µg/L (TrueGuard, 2009). Historical stormwater testing from AWW in February 1996 found arsenic concentrations as high as 1,030 µg/L. Stormwater runoff from the AWW property has been historically discharged to the marsh and to the Gibbons Creek remnant channel along South 32nd Street.

Direct-push borings conducted along the property boundary of the former AWW property, on or immediately south of the southern perimeter of the PSC property, confirm the presence of elevated concentrations of arsenic in groundwater in this area (Figure O-1). Arsenic concentrations in groundwater samples collected from direct-push borings conducted by PSC along the southern perimeter of the PSC property, just north of the former AWW property, range from 29.3 µg/L to 45 µg/L. Direct-push borings conducted by TrueGuard on the former AAW property in this area indicate arsenic concentrations in groundwater samples of up to 55 µg/L.

Although the former AWW property is located cross-gradient of the PSC site, some migration of arsenic-containing groundwater onto the PSC property is expected. This is particularly true in the Lower Aquifer, where the direction of groundwater flow is variable. Higher arsenic concentrations in samples from well MC-10D on the PSC facility may result from the influence of this affected groundwater originating from the former AWW property.

[1] Note this is dissolved arsenic; PSC's evaluation is primarily based on *total*, not dissolved, concentrations which tend to be higher than dissolved concentrations as a result of the presence of colloidal particles.

4.0 CONCLUSIONS AND RECOMMENDATIONS

Results of this analysis, conclusions, and final recommendations for addressing arsenic at the site are presented in this section. The results of the investigations reported here have confirmed that arsenic is difficult to address at the site under MTCA. Several factors about the PSC site make addressing elevated concentrations of arsenic particularly complicated.

- A site source has not been found, and data from upgradient locations on and off site indicate that arsenic concentrations are above the standard cleanup levels. While concentrations are higher in some areas of the site, addressing arsenic as part of cleanup in these areas would not attain low MTCA cleanup levels established for the site.

- The data indicate arsenic is present at concentrations above standard cleanup levels based on statewide background concentrations. PSC understands that when evaluating background concentrations under MTCA, natural background calculations are the preferred method to use. However, the site has both natural and anthropogenic (area) influences, as described above in Section 2.1.

The site-specific studies and literature review have led to a robust characterization of both arsenic and general geochemical conditions at the site. This characterization has aided in development of cleanup levels consistent with MTCA and will assist PSC in consideration of cleanup options for the site. This assessment has produced the following conclusions:

- Based on spatial, hydrologic, and geochemical evidence, wells MC-12, MC-107, and MC-30were used for calculating background arsenic levels in the Shallow Groundwater Zone. The wells MC-12D and MC-30D were used as wells for calculating background arsenic levels in the Lower Aquifer. These wells are the same as recommended in the GWS technical memorandum, except that recently installed wells MC-30 and MC-30D were added, and well MC-13D was not used. Well MC-13D is not used for the analyses in this document because its proximity to the PSC facility footprint, in an area where the dominant direction of groundwater flow reverses periodically, means it may be influenced by flow from the PSC facility and suggests it does not represent background conditions.

- The calculated area background concentration for arsenic for the Shallow Groundwater Zone is 22.84 µg/L. The elevated background value for the Shallow Groundwater Zone is consistent with the Ecology background study (Ecology 2010a, 2010b), which reported that high arsenic concentrations (> 25 µg/L) are frequently encountered in 12 counties in western Washington, including Clark County. PSC has set the PCL for arsenic at the calculated site-specific area background level of 22.84 µg/L for the Shallow Groundwater Zone.

- The calculated background concentration for arsenic in the Lower Aquifer is 1.42 µg/L, though background levels in the Lower Aquifer are more challenging to calculate due to shifting groundwater flow direction. PSC has set the PCL for arsenic at the calculated site-specific area background level of 1.42 µg/L for the Lower Aquifer.

- High concentrations of arsenic in groundwater samples appear to be related to reducing conditions. Methane and iron concentrations appear to be elevated in all groundwater samples containing high levels of arsenic. These constituents are markers of a reducing environment.

- No historical release of arsenic on the PSC property has been identified in historical information, and no release pattern is evident in geochemical data from the site. The potential for arsenic releases due to PSC operations cannot be entirely ruled out; however, PSC believes this to be very unlikely.

- Two predominant likely sources of arsenic to groundwater at the PSC property have been identified: arsenic dissolution and desorption from natural sediments in response to reducing conditions, and arsenic migration from neighboring properties. Arsenic may migrate to the PSC property from the former AWW plant to the south, where releases of CCA have resulted in concentrations of arsenic in groundwater as much as two orders of magnitude higher than arsenic concentrations at the PSC property. However, the cross-gradient position of the AWW property relative to the PSC property may limit arsenic migration except to wells on the south side of the facility. Groundwater and surface waters from the AWW property may also influence the marsh to the east of the site. Former releases of arsenic due to PSC operations cannot be ruled out as a third potential source of arsenic to the site; however, as noted above, no evidence of a release has been found, and PSC considers site operations a much less likely source of arsenic to the site.

- Contamination at the PSC property may exacerbate mobilization of arsenic in the areas with the highest concentrations of organic contaminants. Degradation of organic contaminants in groundwater at or near these wells likely contributes to reducing conditions, resulting in higher arsenic concentrations in groundwater at these locations.

- Well MC-10D in the Lower Aquifer exhibits concentrations of arsenic elevated over site-specific background levels. However, the cross-gradient position of this well relative to the PSC facility operations makes it unlikely to experience contamination related to the facility. The low concentrations of organic contaminants in groundwater samples from this well support this conclusion. This well is close to the AWW property to the south and is more likely to have been influenced by arsenic contamination from that property.

- The dominant source of methane in the Shallow Groundwater Zone and the Lower Aquifer has not been unequivocally identified. The most likely source is the silt layer underlying the shallow aquifer. This silt represents the remnant of a former marsh and is likely to contain organic matter, which produces methane during degradation. However, high methane concentrations could also result from unidentified organic contamination or by migration of methane from the marsh to the east of the PSC property.

- The Shallow Groundwater Zone, Lower Aquifer, and Silt Layer differ markedly in geological provenance and makeup. Arsenic levels in the Shallow Groundwater Zone are considerably higher than in the Lower Aquifer. The Lower Aquifer consists

of natural pre-existing deposits, while the Shallow Aquifer consists mainly of anthropogenic fill material. The Silt Layer consists of deposits from the former marsh that was present in the area of the site and the entire industrial park and which was subsequently filled in as part of industrial development. It is very likely that the geochemical makeup of these three units, including their arsenic content, will differ markedly.

- Analysis of As(III) and As(V) shows no clear trend across the PSC property or within individual wells. No further analysis of these analytes is recommended.

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TABLES

TABLE O-1

TOTAL ARSENIC DATA FOR AREA BACKGROUND CALCULATION[1]

PSC Washougal Facility
Washougal, Washington

Site ID	Sample Date	Total Arsenic (µg/L)
MC-107	25-Mar-04	18.5
	17-Jun-04	18
	15-Sep-04	24.1
	15-Dec-04	11.2
	15-Mar-05	13.6
	09-Jun-05	9.44
	13-Sep-05	15
	30-Nov-05	12.3
	08-Mar-06	15.7
	07-Jun-06	17.8
	13-Sep-06	26.4
	13-Sep-06	27
	20-Dec-06	10.2
	20-Dec-06	12
	07-Mar-07	9.13
	07-Mar-07	8.52
	06-Jun-07	16.7
	06-Jun-07	19
	12-Sep-07	23.1
	20-Dec-07	5.31
	14-Mar-08	6.8
	11-Jun-08	12.4
	25-Sep-08	24
	04-Dec-08	14.7
	25-Mar-09	9.3
	25-Jun-09	18.4
MC-12	23-Mar-04	12.4
	15-Jun-04	17.6
	16-Sep-04	26.6
	16-Dec-04	16.1
	17-Mar-05	13.2
	09-Jun-05	16.8
	15-Sep-05	19
	01-Dec-05	14.2
	09-Mar-06	11.1
	08-Jun-06	13.5
	12-Sep-06	20.3
	12-Sep-06	28
	20-Dec-06	13.8
	20-Dec-06	14
	07-Mar-07	10.7
	07-Mar-07	9.96
	06-Jun-07	15
	06-Jun-07	13.3
	12-Sep-07	19.5
	21-Dec-07	11.7
	13-Mar-08	9.2
	13-Jun-08	14.39
	26-Sep-08	17
	05-Dec-08	12
	25-Mar-09	12.2
	29-Jun-09	17.4

Site ID	Sample Date	Total Arsenic (µg/L)
MC-12D	24-Mar-04	0.586
	16-Jun-04	0.648
	16-Jun-04	1 U
	14-Sep-04	0.732
	14-Dec-04	0.647
	15-Mar-05	1 U
	09-Jun-05	0.95
	13-Sep-05	1.5
	29-Nov-05	0.94
	07-Mar-06	1
	06-Jun-06	0.69
	12-Sep-06	0.8
	12-Sep-06	0.66
	20-Dec-06	0.78
	20-Dec-06	0.68
	07-Mar-07	0.93
	07-Mar-07	0.776
	05-Jun-07	1
	05-Jun-07	1.06
	12-Sep-07	0.75
	21-Dec-07	0.98
	13-Mar-08	0.87
	12-Jun-08	1.17
	26-Sep-08	0.8
	05-Dec-08	0.9
	25-Mar-09	1.2
	29-Jun-09	1.2
MC-30	29-Sep-08	14.7
	05-Dec-08	9.9
	25-Mar-09	6.1
	29-Jun-09	9
MC-30D	29-Sep-08	1.4
	05-Dec-08	2.6
	25-Mar-09	1.9
	29-Jun-09	1.2

Notes
1. Data flags are as follows:
U = Not detected above the reporting limit shown at the left.

Abbreviations
µg/L = micrograms per liter

TABLE O-2

BACKGROUND DATA ANALYSIS FOR THE SHALLOW AQUIFER
PSC Washougal Facility
Washougal, Washington

Data	ID
3.88	MC-107
4.8	MC-107
5	MC-107
5.31	MC-107
5.8	MC-107
6	MC-107
6.1	MC-30
6.1	MC-30
6.3	MC-30
6.8	MC-107
7	MC-107
7.15	MC-30
8.3	MC-30
8.52	MC-107
9	MC-30
9.13	MC-107
9.2	MC-12
9.2	MC-30
9.3	MC-107
9.44	MC-107
9.5	MC-107
9.56	MC-12
9.9	MC-30
9.96	MC-12
10.1	MC-107
10.2	MC-107
10.2	MC-107
10.3	MC-30
10.7	MC-12
11.1	MC-12
11.2	MC-107
11.6	MC-30
11.7	MC-12
11.9	MC-30
12	MC-107
12	MC-12
12.1	MC-12
12.2	MC-107
12.2	MC-12
12.3	MC-107
12.4	MC-107
12.4	MC-12
12.5	MC-107
13.2	MC-12
13.3	MC-12
13.5	MC-12
13.5	MC-12
13.6	MC-107

MTCA*Stat*97 Background Module

Paste values | Sort data | Create report | Clear all | Histogram | 5 | 10 | 20

Number of samples		Uncensored values	
Uncensored	92	Mean	14.080
Censored	0	Lognormal mean	14.180
TOTAL	92	Std. devn.	5.758
		Median	13.5
		Min.	3.88
		Max.	28

Evaluate data distribution

Distribution decision - Normal probability plots

Lognormal distribution?		Normal distribution?	
r-squared is:	**0.98**	r-squared is:	**0.97**

Finished
Quit without saving changes

Recommendations:

Use lognormal distribution.

Clear messages

Background calculation

Distribution selection

- (●) Lognormal
- ( ) Normal
- ( ) Neither (nonparametric)

	Enter percentile	Value corresponding to that percentile is:
	90	22.84
1 =	**50th**	12.89
2 =	**4 X 50th**	51.56
3 = Nonparametric method		Coefficient of Variation = 0.47

Calculate percentile

TABLE O-2

BACKGROUND DATA ANALYSIS FOR THE SHALLOW AQUIFER
PSC Washougal Facility
Washougal, Washington

Data	ID						
13.8	MC-12						
13.9	MC-30						
14	MC-12						
14.2	MC-12						
14.3	MC-12						
14.39	MC-12						
14.4	MC-12						
14.7	MC-107						
14.7	MC-30						
14.8	MC-12						
15	MC-107						
15	MC-12						
15.7	MC-107						
15.9	MC-30						
16.1	MC-12						
16.3	MC-30						
16.7	MC-107						
16.8	MC-12						
17	MC-12						
17.4	MC-12						
17.6	MC-12						
17.8	MC-107						
18	MC-107						
18.2	MC-12						
18.4	MC-107						
18.5	MC-107						
18.58	MC-30						
19	MC-107						
19	MC-12						
19.1	MC-12						
19.5	MC-12						
20.3	MC-12						
20.9	MC-12						
22.3	MC-12						
22.9	MC-12						
23.1	MC-107						
24	MC-107						
24.1	MC-107						
26.3	MC-107						
26.4	MC-107						
26.6	MC-12						
27	MC-107						
27.2	MC-12						
28	MC-12						

TABLE O-3

BACKGROUND DATA ANALYSIS FOR THE LOWER AQUIFER
PSC Washougal Facility
Washougal, Washington

Data	ID
<0.5	MC-12D
<0.5	MC-30D
<1	MC-12D
<1	MC-12D
0.586	MC-12D
0.647	MC-12D
0.648	MC-12D
0.66	MC-12D
0.68	MC-12D
0.69	MC-12D
0.7	MC-30D
0.7	MC-30D
0.71	MC-30D
0.732	MC-12D
0.75	MC-12D
0.776	MC-12D
0.78	MC-12D
0.8	MC-12D
0.8	MC-12D
0.8	MC-30D
0.8	MC-30D
0.87	MC-12D
0.9	MC-12D
0.9	MC-12D
0.9	MC-30D
0.93	MC-12D
0.94	MC-12D
0.95	MC-12D
0.98	MC-12D
1	MC-12D
1	MC-12D
1	MC-12D
1	MC-12D
1	MC-12D
1	MC-12D
1	MC-30D
1	MC-30D
1	MC-30D
1.06	MC-12D
1.1	MC-12D
1.1	MC-12D

MTCA*Stat*97 Background Module

Paste values | Sort data | Create report | Clear all | Histogram | 5 | 10 | 20

Number of samples		Uncensored values	
Uncensored	51	Mean	1.007
Censored	4	Lognormal mean	1.004
TOTAL	55	Std. devn.	0.340
		Median	1
		Min.	0.586
		Max.	2.6

Evaluate data distribution

Distribution decision - Normal probability plots

Lognormal distribution?		Normal distribution?	
r-squared is:	**0.95**	r-squared is:	**0.82**

Recommendations:

Use lognormal distribution.

Finished — Quit without saving changes

Background calculation

Clear messages

Distribution selection

- (●) Lognormal
- ( ) Normal
- ( ) Neither (nonparametric)

1 =
2 =
3 = Nonparametric method

Calculate percentile

Enter percentile	Value corresponding to that percentile is:
90	1.42
50th	0.92
4 X 50th	3.68

Coefficient of Variation = 0.35

TABLE O-3

BACKGROUND DATA ANALYSIS FOR THE LOWER AQUIFER
PSC Washougal Facility
Washougal, Washington

Data	ID						
1.1	MC-12D						
1.1	MC-30D						
1.12	MC-12D						
1.17	MC-12D						
1.2	MC-12D						
1.2	MC-12D						
1.2	MC-12D						
1.2	MC-30D						
1.4	MC-12D						
1.4	MC-30D						
1.4	MC-30D						
1.5	MC-12D						
1.9	MC-30D						
2.6	MC-30D						

FIGURES

Plot Date: 09/10/13 - 1:58pm, Plotted by: adam.stenberg
Drawing Path: S:\9625\010_RI-2012\CAD\, Drawing Name: Figure O-1_PSC-Wash_OFFSITE-Aresenic-2007_091013.DWG

PSC PROPERTY

TRUEGUARD, LLC FACILITY

FORMER TANK-FARM AREA

LAB/OFFICE/ WAREHOUSE BLDG 1

CONTAINER STORAGE BLDG 2

CONTAINER STORAGE BLDG 3

WASTE OIL TANK SYSTEM

GP-51 13.4
GP-52 16.4
GP-53 25.9
GP-54 32.3
GP-56 42.5 (~600ft west of GP-53) near South 28th Steet

GP-77 18.7
GP-76 35.9
GP-75 42.7
GP-48 31.5
GP-49 14.6
GP-36 26
GP-44 23.2
GP-45 32.6
GP-50 30.1
GP-37 32.4
GP-46 35
GP-38 28.5
GP-66 42.2
GP-69 35.3
GP-40 16.1
GP-47 26.2
GP-43 29
GP-41 23.1
GP-67 24.8
GP-70 27.1
GP-39 24
GP-65 24.8
GP-68 31
GP-74 33.3
GP-73 14.2
GP-42 31.2
GP-72 24.8

GP-61 25.4
GP-62 27.2
GP-71 23.7
GP-63 28.7
GP-64 33.7

GP-88 32.2
GP-89 29.3
GP-90 45
GP-58 41.2
GP-11 55
GP-10 33
GP-9 48
GP-1 49
GP-2 51
GP-3 18
GP-4 75
GP-5 100
GP-7 41
GP-6 77
GP-8 360

MW-2 33
MW-1 45
MW-5 61
MW-10 6,400
MW-9 2,600
MW-3 690
MW-8 3,300
GP-14 5.9
GP-18 61
GP-17 24
GP-16 32
GP-15 5
GP-13 15
GP-12B 28

GP-22 44
GP-21 310
GP-20 120
GP-19 73
GP-23 96
GP-24 62
GP-27 83
GP-26 62
GP-25 30

SOUTH 32nd STREET

EXPLANATION

- ▲ July 2002 PSC Direct-Push Sample
- ⊕ August 2007 TrueGuard Monitoring Well
- ⊕ August 2007 TrueGuard Extraction Well
- ■ July 2007 TrueGuard Direct-Push Sample
- ◆ September 2007 TrueGuard Direct-Push Sample
- 6,400 Arsenic Result in µg/L
- — — — Property Line

Note:
2007 analytical results for arsenic in groundwater on the PSC property are shown in Figure 11 of the Remedial Investigation Technical Memorandum (Geomatrix, 2008a).

N

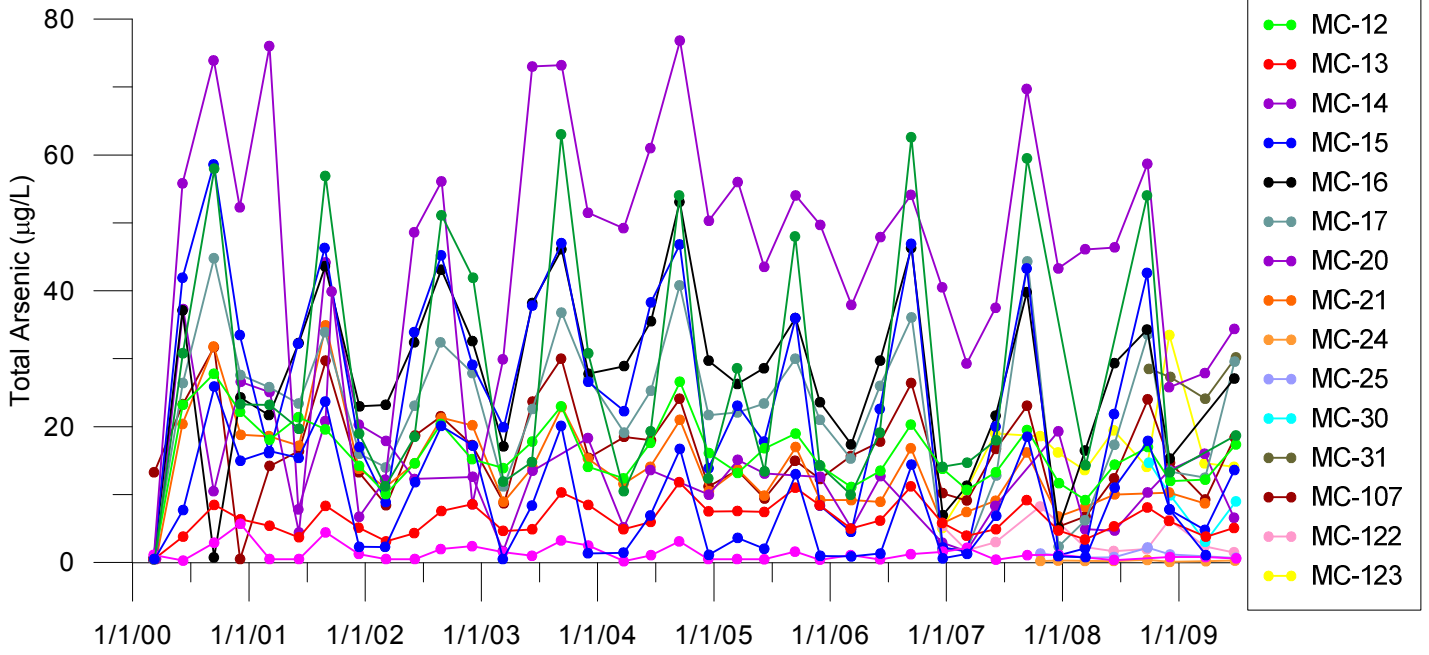
0 40 80
APPROXIMATE SCALE IN FEET

TOTAL ARSENIC CONCENTRATIONS IN AREA GROUNDWATER (SHALLOW GROUNDWATER ZONE)

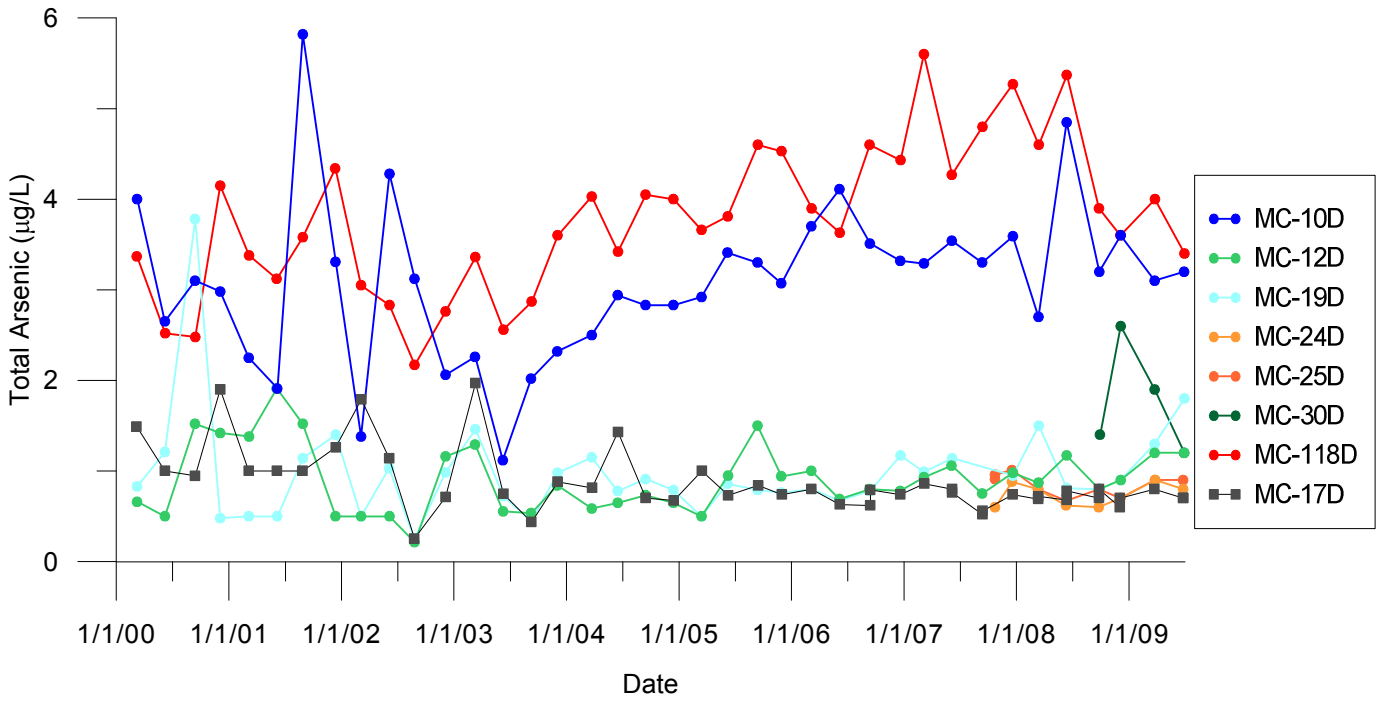
PSC Washougal Facility
Washougal, Washington

By: APS	Date: 09/10/13	Project No. 09625
amec		Figure O-1

Shallow Groundwater Zone Arsenic Trends



Lower Aquifer Arsenic Trends



Abbreviation: µg/L = micrograms per liter

Note: 1. Value plotted is one-half the reporting limit when analyte was not detected.

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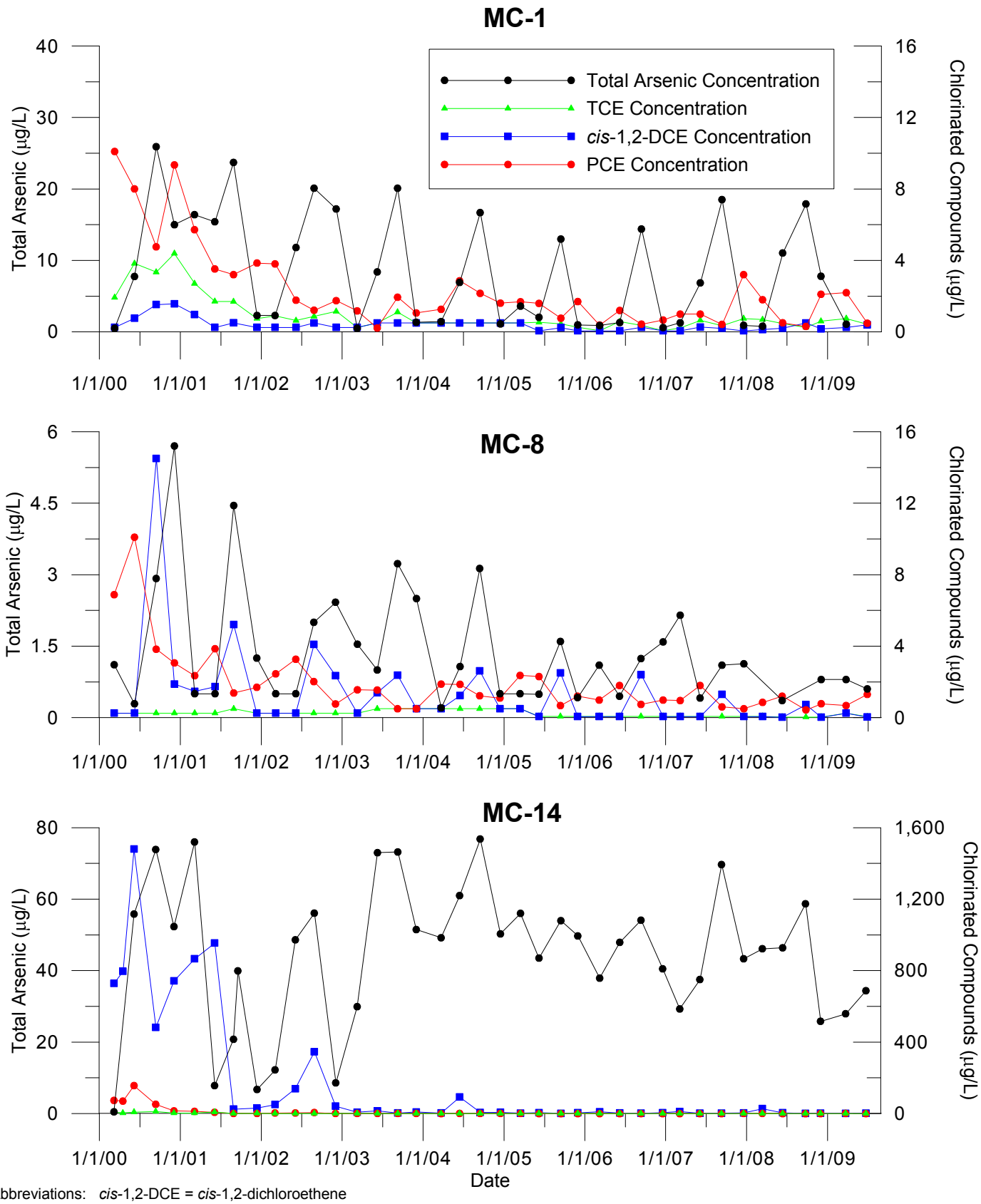
TOTAL ARSENIC CONCENTRATION VERSUS TIME
PSC Washougal Facility
Washougal, Washington

Project No.
9625

Figure No.
O-2

P:\9625 - PSC Washougal\3000 REPORT\2009 RI FS Report\Agency Draft\Appendix P Arsenic\Figures\FigureP-2_ArsenicSeasonalTrends.grf



Abbreviations: *cis*-1,2-DCE = *cis*-1,2-dichloroethene
µg/L = micrograms per liter
PCE = tetrachloroethene
TCE = trichloroethene

Note: 1. Value plotted is one-half the reporting limit when analyte was not detected.

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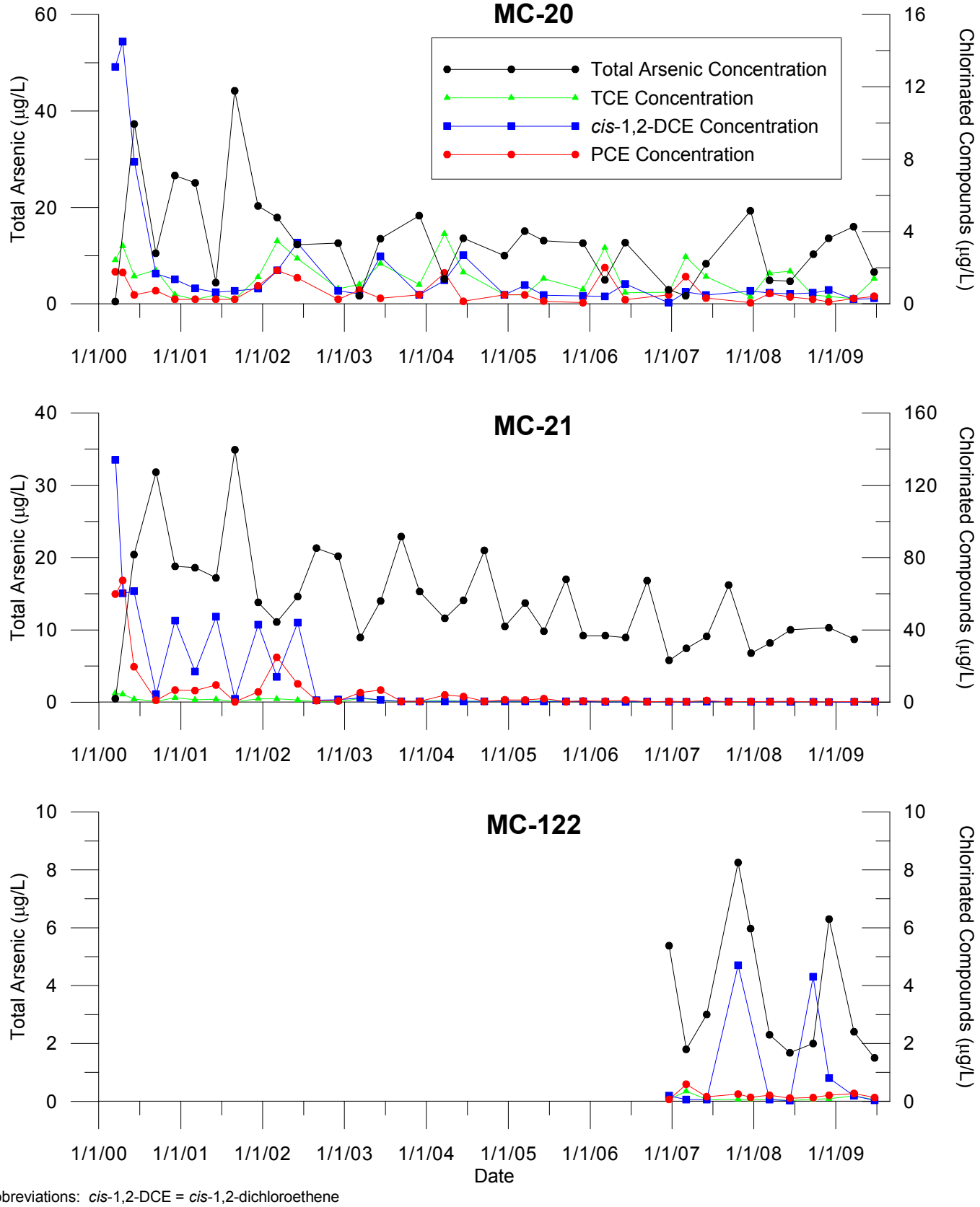
ARSENIC AND CHLORINATED COMPOUNDS VERSUS TIME
Shallow Groundwater Zone Wells MC-1, MC-8, & MC-14
PSC Washougal Facility, Washougal, Washington

Project No. 9625

Figure No. **O-3**

P:\9625 - PSC Washougal\3000 REPORT\2009 RI FS Report\Agency Draft\Appendix P Arsenic\Figures\FigureP-3_As vs chlorinateds_a.grf



Abbreviations: *cis*-1,2-DCE = *cis*-1,2-dichloroethene
µg/L = micrograms per liter
PCE = tetrachloroethene
TCE = trichloroethene

Note: 1. Value plotted is one-half the reporting limit when analyte was not detected.

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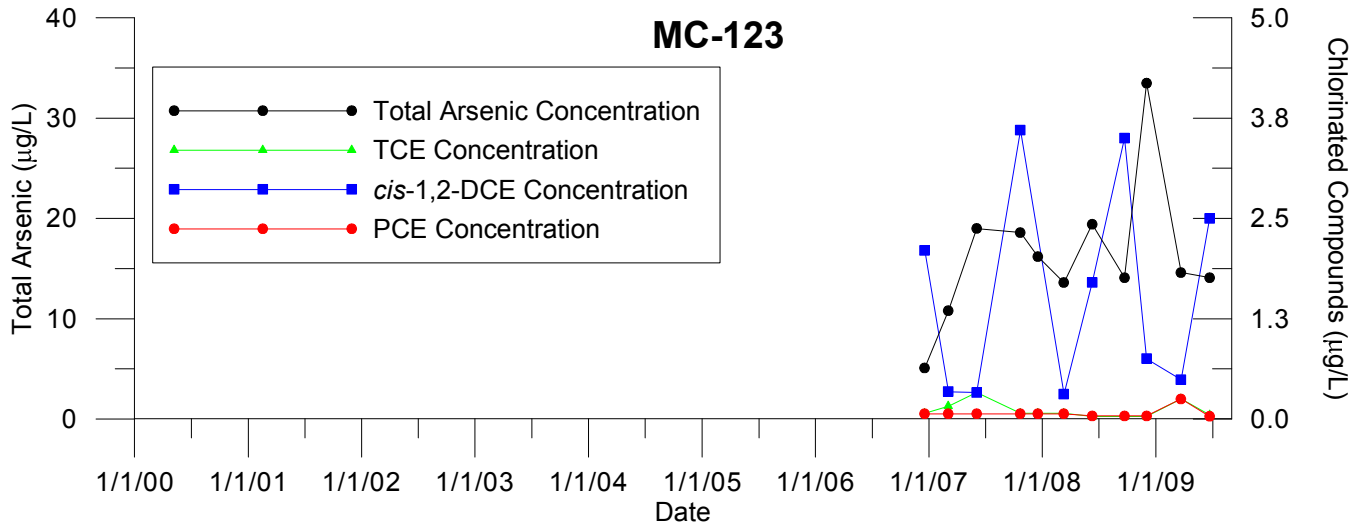
ARSENIC AND CHLORINATED COMPOUNDS VERSUS TIME
Shallow Groundwater Zone Wells MC-20, MC-21, & MC-122
PSC Washougal Facility, Washougal, Washington

Project No. 9625

Figure No. **O-4**

P:\9625 - PSC Washougal\3000 REPORT\2009 RI FS Report\Agency Draft\Appendix P Arsenic\Figures\FigureP-4 As vs chlorinateds b.grf



Abbreviations: *cis*-1,2-DCE = *cis*-1,2-dichloroethene
µg/L = micrograms per liter
PCE = tetrachloroethene
TCE = trichloroethene

Note: 1. Value plotted is one-half the reporting limit when analyte was not detected.

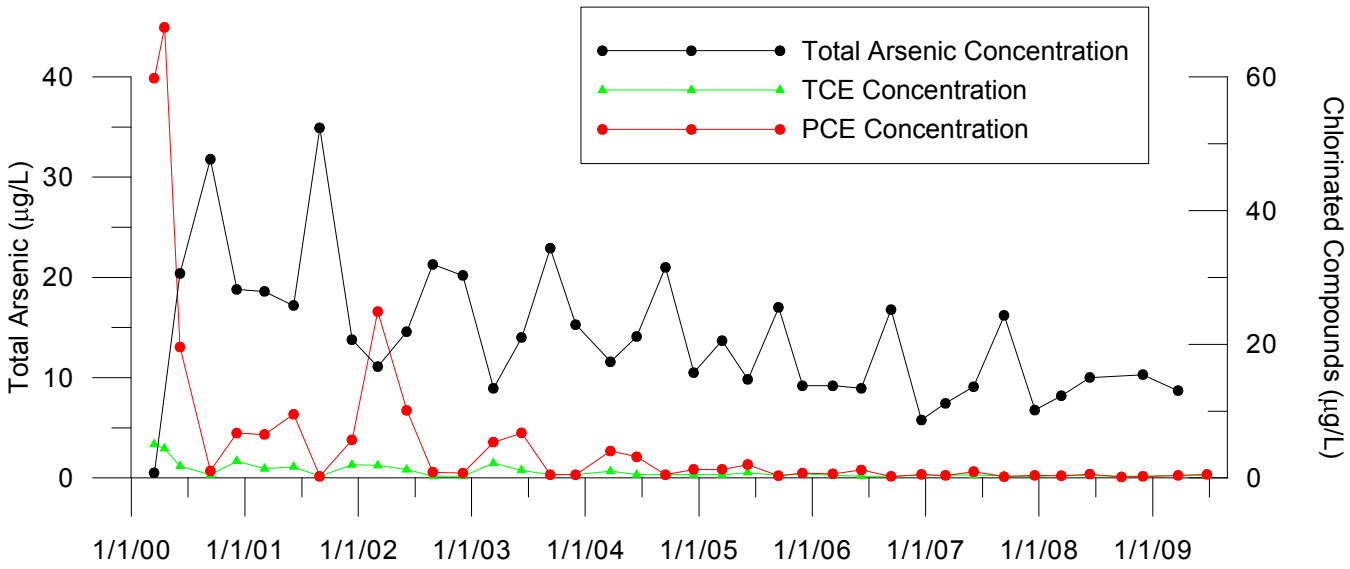
ARSENIC AND CHLORINATED COMPOUNDS VERSUS TIME
Shallow Groundwater Zone Well MC-123
PSC Washougal Facility, Washougal, Washington

Project No. 9625

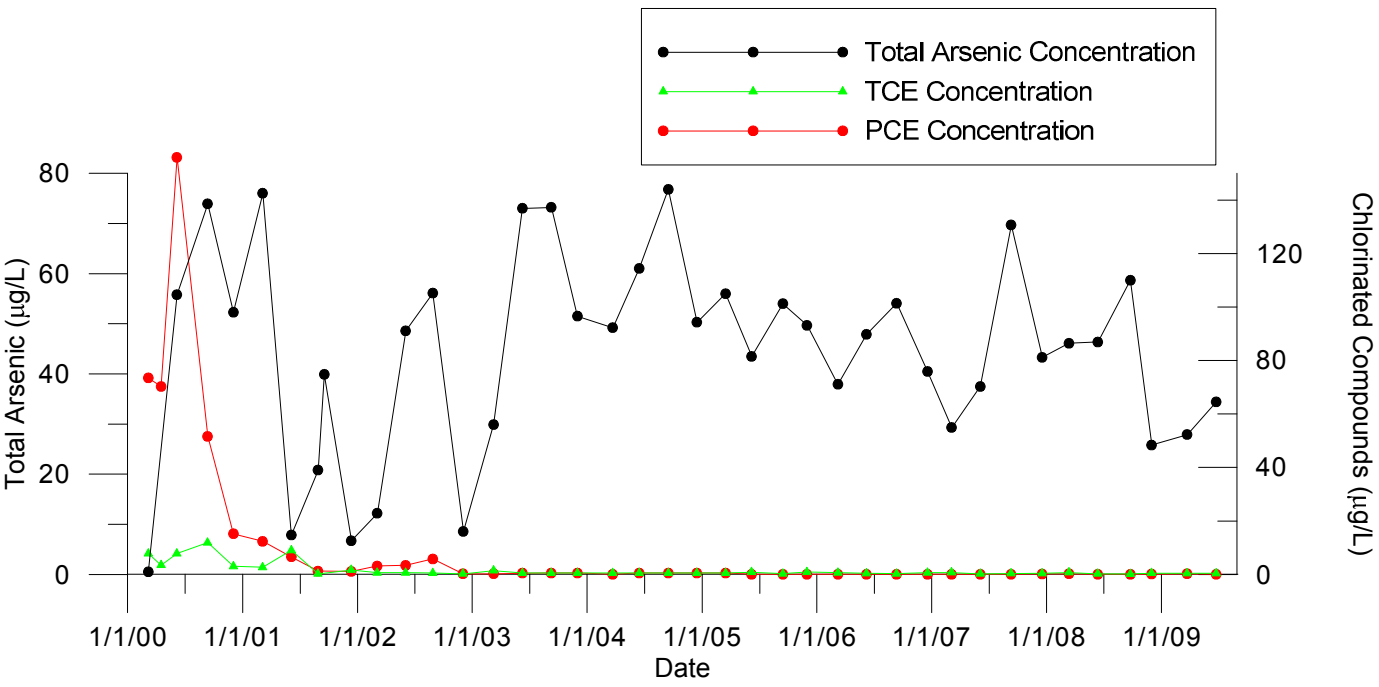
Figure No. **O-5**

P:\9625 - PSC Washougal\3000 REPORT\2009 RI FS Report\Agency Draft\Appendix P Arsenic\Figures\FigureP-5 As vs chlorinateds c.grf

MC-21



MC-14

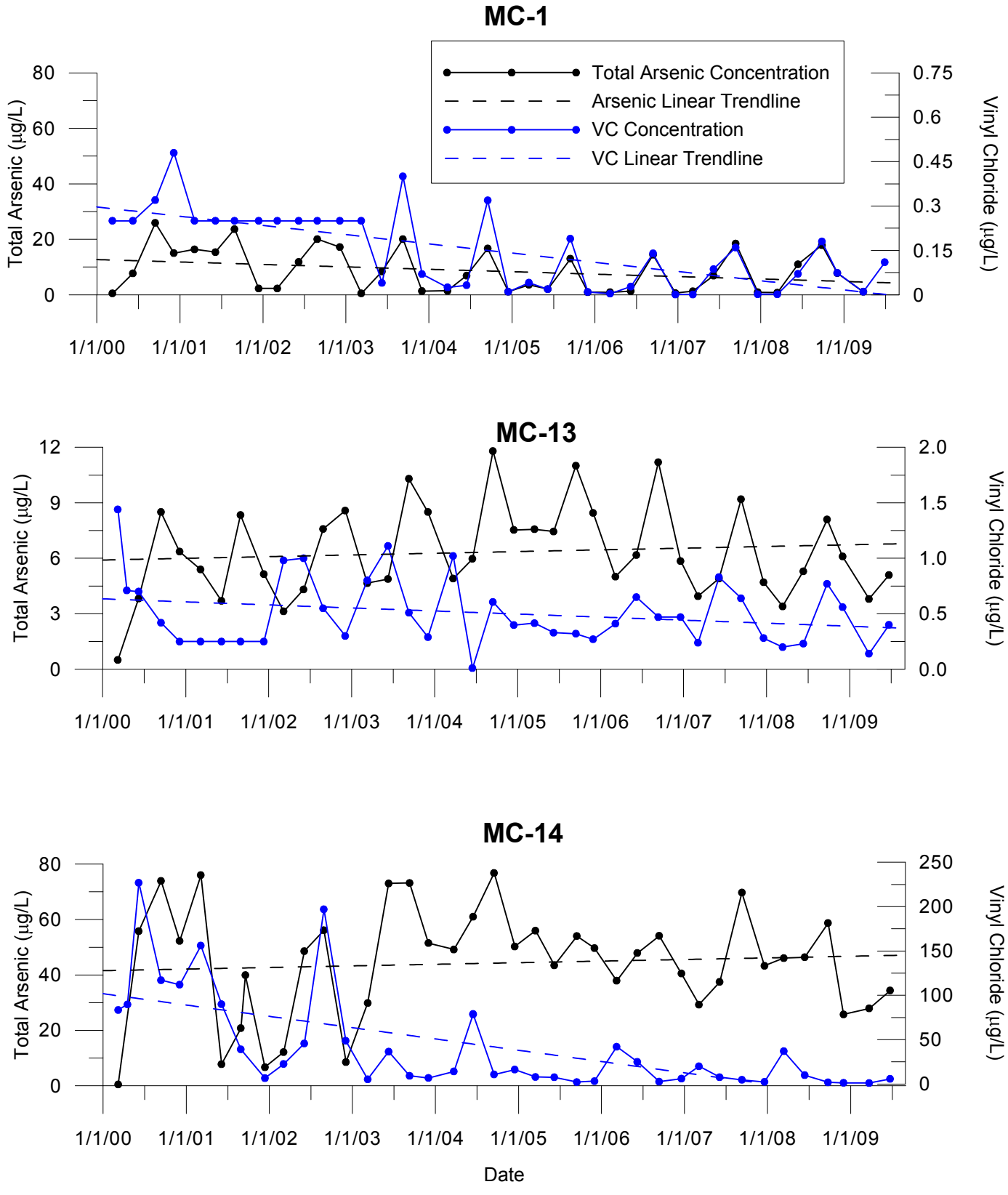


Abbreviations: *cis*-1,2-DCE = *cis*-1,2-dichloroethene
µg/L = micrograms per liter
PCE = tetrachloroethene
TCE = trichloroethene

Note: 1. Value plotted is one-half the reporting limit when analyte was not detected.

amec	ARSENIC AND TCE / PCE VERSUS TIME Shallow Groundwater Zone Wells MC-21 and MC-14 PSC Washougal Facility, Washougal, Washington	Project No. 9625 Figure No. **O-6**

P:\9625 - PSC Washougal\3000 REPORT\2009 RI FS Report\Agency Draft\Appendix P Arsenic\Figures\FigureP-4 As vs chlorinateds b.grf



Abbreviations: µg/L = micrograms per liter
VC = vinyl chloride

Note: 1. Value is one-half reporting limit when analyte was not detected.

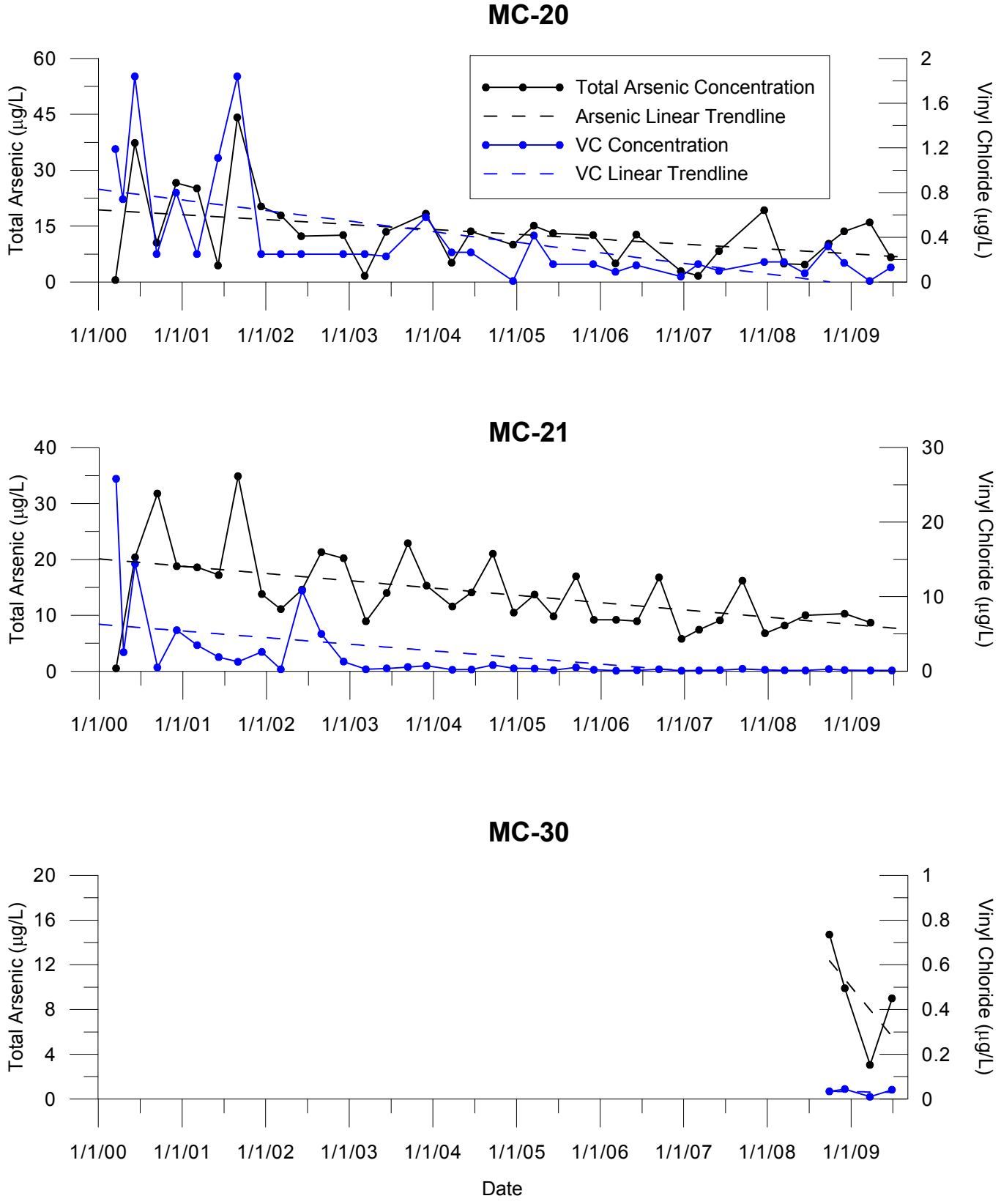
amec

ARSENIC AND VINYL CHLORIDE VERSUS TIME
Shallow Groundwater Zone Wells MC-1, MC-13, & MC-14
PSC Washougal Facility, Washougal, Washington

Project No.
9625

Figure No.
O-7

P:\9625 - PSC Washougal\3000 REPORT\2009 RI FS Report\Agency Draft\Appendix P Arsenic\Figures\FigureP-6_As vs VC_a.grf



Abbreviations: µg/L = micrograms per liter
VC = vinyl chloride

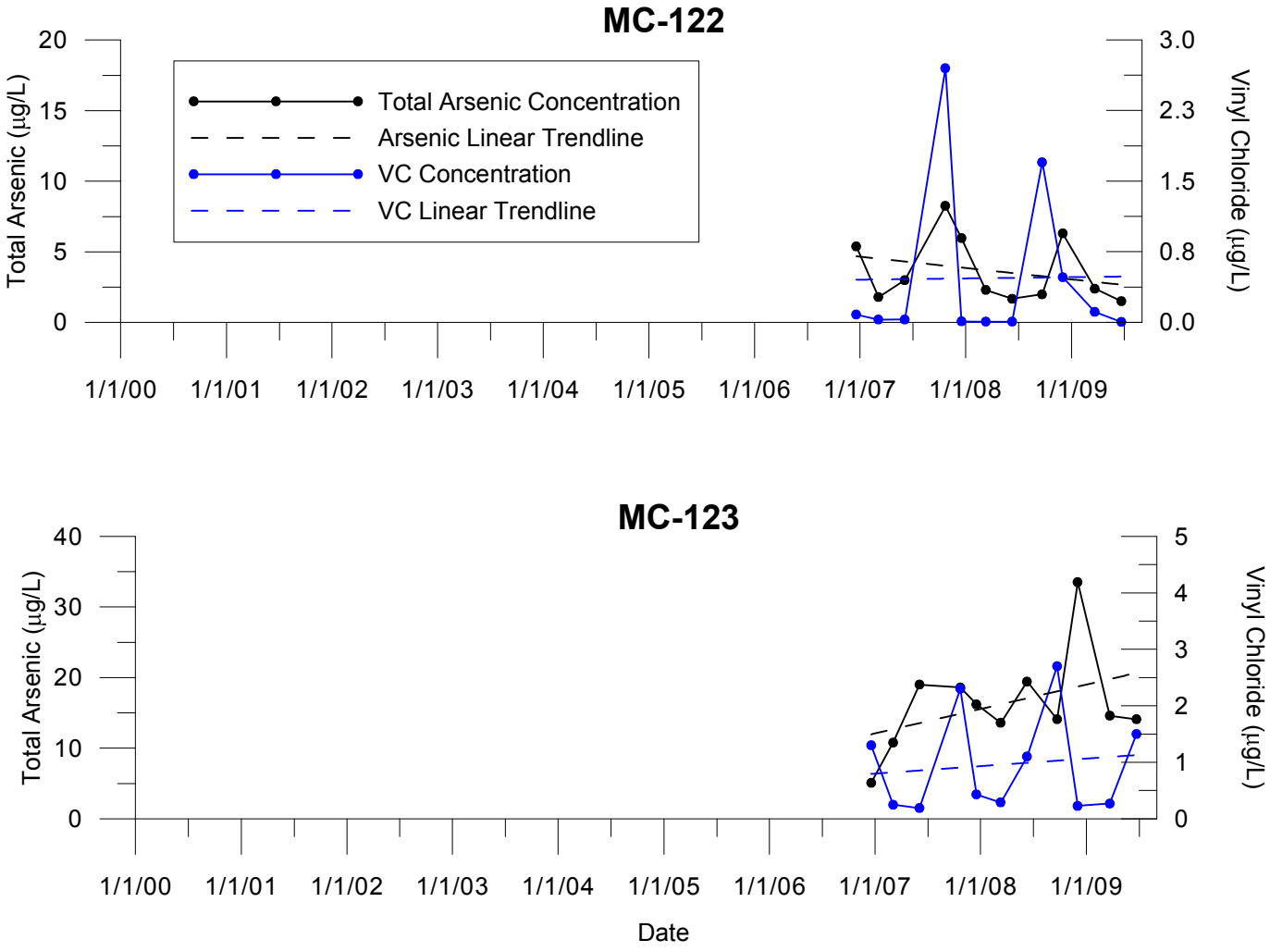
Note: 1. Value plotted is one-half the reporting limit when analyte was not detected.

ARSENIC AND VINYL CHLORIDE VERSUS TIME
Shallow Groundwater Zone Wells MC-20, MC-21, & MC-30
PSC Washougal Facility, Washougal, Washington

Project No. 9625

Figure No. **O-8**

P:\9625 - PSC Washougal\3000 REPORT\2009 RI FS Report\Agency Draft\Appendix P Arsenic\Figures\FigureP-7_As vs VC_b.grf



Abbreviations: µg/L = micrograms per liter
VC = vinyl chloride

Note: 1. Value plotted is one-half the reporting limit when analyte was not detected.

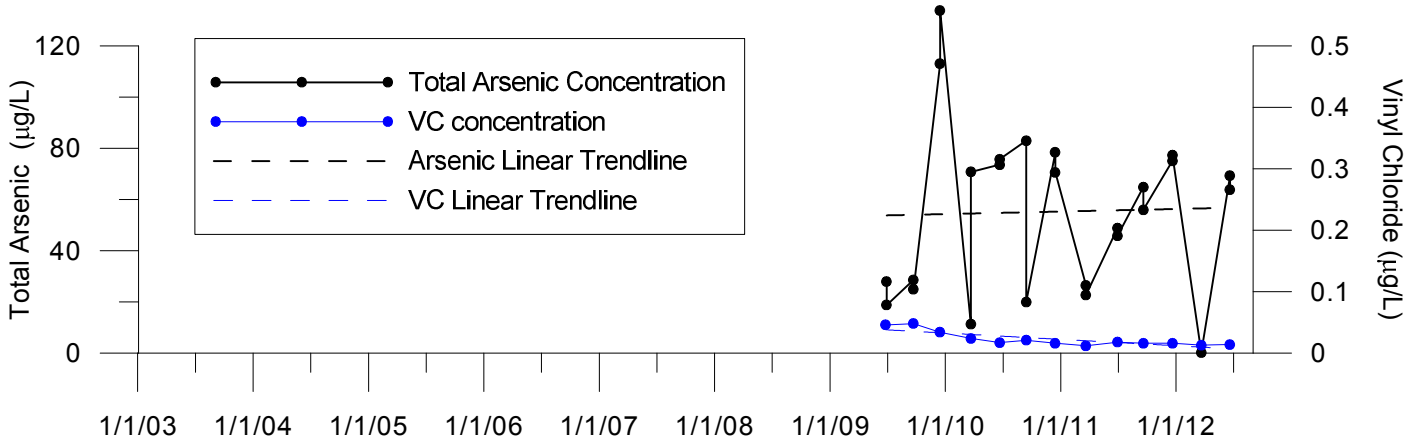
ARSENIC AND VINYL CHLORIDE VERSUS TIME
Shallow Groundwater Zone Wells MC-122 and MC-123
PSC Washougal Facility, Washougal, Washington

Project No. 9625

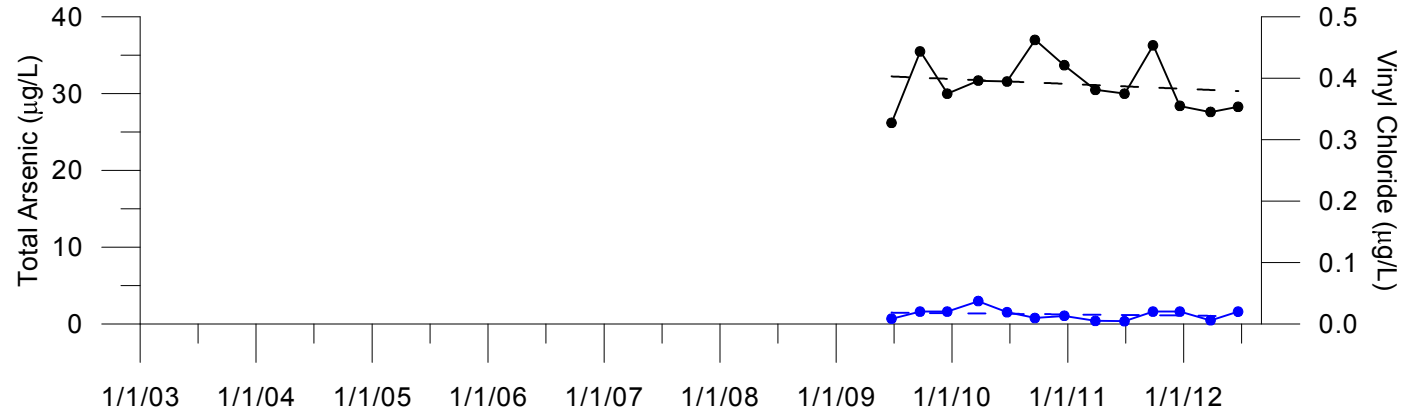
Figure No. **O-9**

P:\9625 - PSC Washougal\3000 REPORT\2009 RI FS Report\Agency Draft\Appendix P Arsenic\Figures\FigureP-8_As vs VC_c.grf

MC-32



MC-33



Abbreviations: µg/L = micrograms per liter
VC = vinyl chloride

Note: 1. Value plotted is one-half the reporting limit when analyte was not detected.

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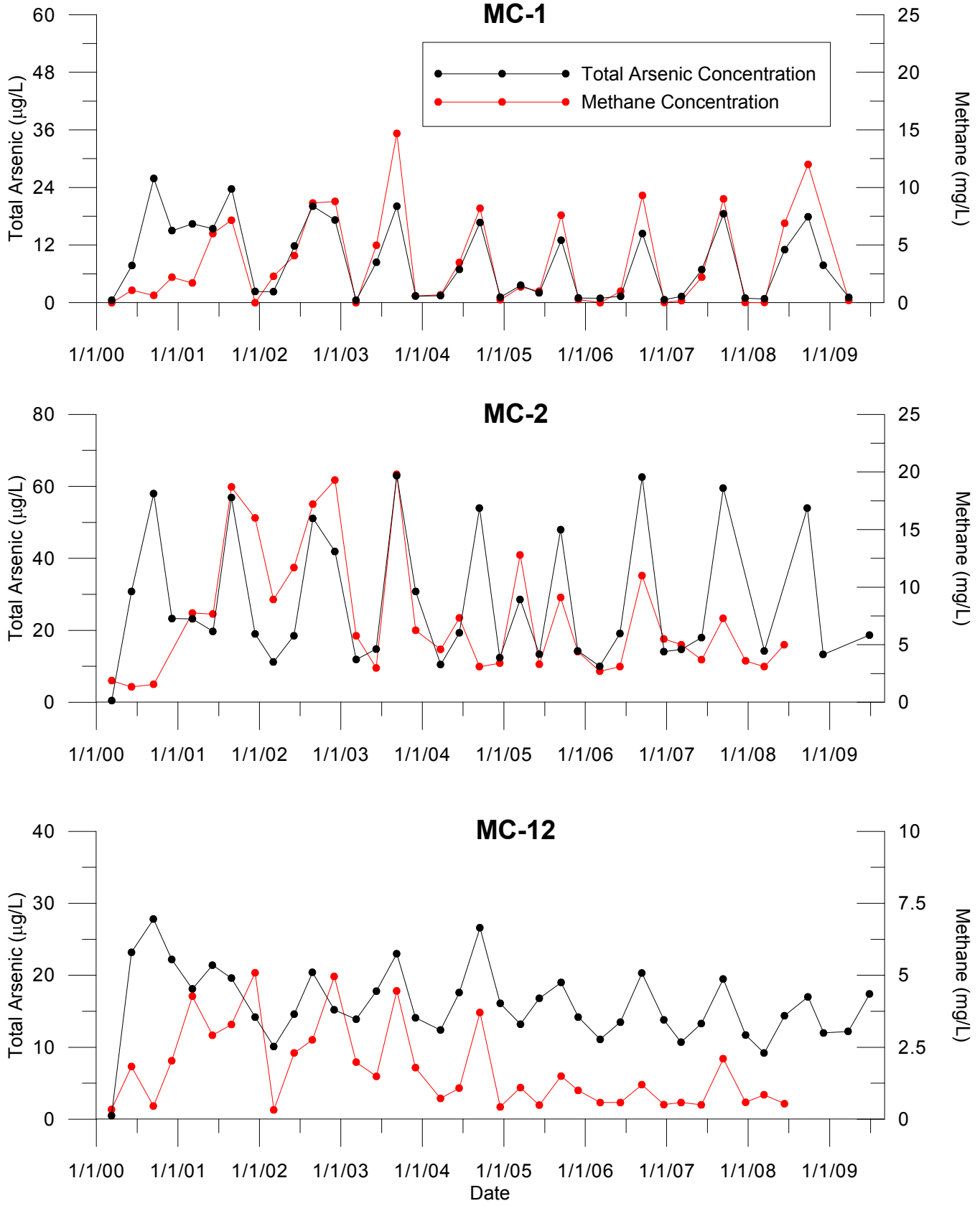
ARSENIC AND VINYL CHLORIDE VERSUS TIME
Shallow Groundwater Zone Wells MC-32 and MC-33
PSC Washougal Facility, Washougal, Washington

Project No. 9625

Figure No. **O-10**

P:\9625 - PSC Washougal\3000 REPORT\2009 RI FS Report\Agency Draft\Appendix P Arsenic\Figures\FigureP-8_As vs VC_c.grf



Abbreviations: µg/L = micrograms per liter
mg/L = milligrams per liter

Note: 1. Value plotted is one-half the reporting limit when analyte was not detected.

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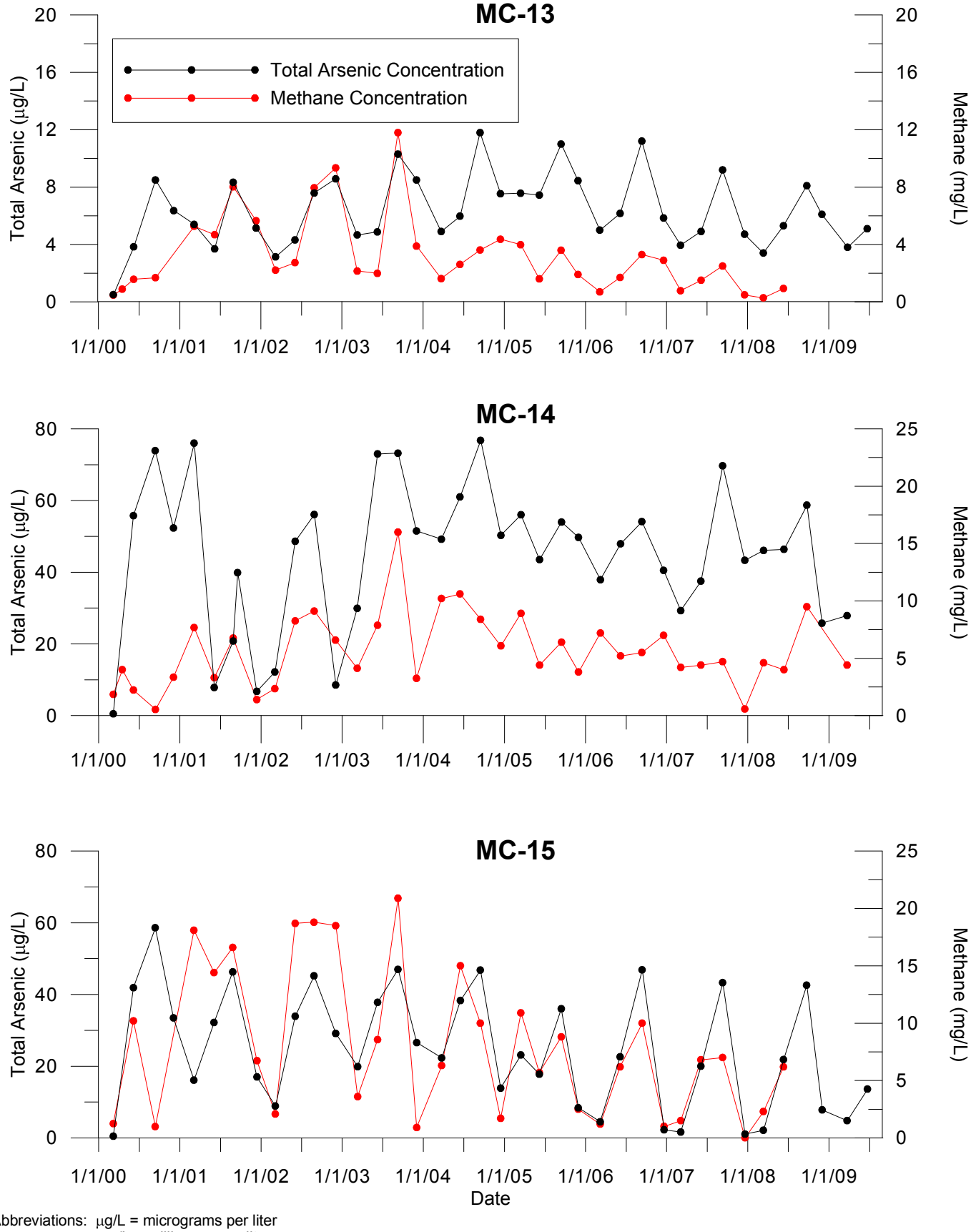
ARSENIC AND METHANE VERSUS TIME
Shallow Groundwater Zone Wells MC-1, MC-2, & MC-12
PSC Washougal Facility, Washougal, Washington

Project No.
9625

Figure No.
O-11

P:\9625 - PSC Washougal\3000 REPORT\2009 RI FS Report\Agency Draft\Appendix P Arsenic\Figures\FigureP-9_As vs CH4_a.grf



Abbreviations: µg/L = micrograms per liter
mg/L = milligrams per liter

Note: 1. Value plotted is one-half the reporting limit when analyte was not detected.

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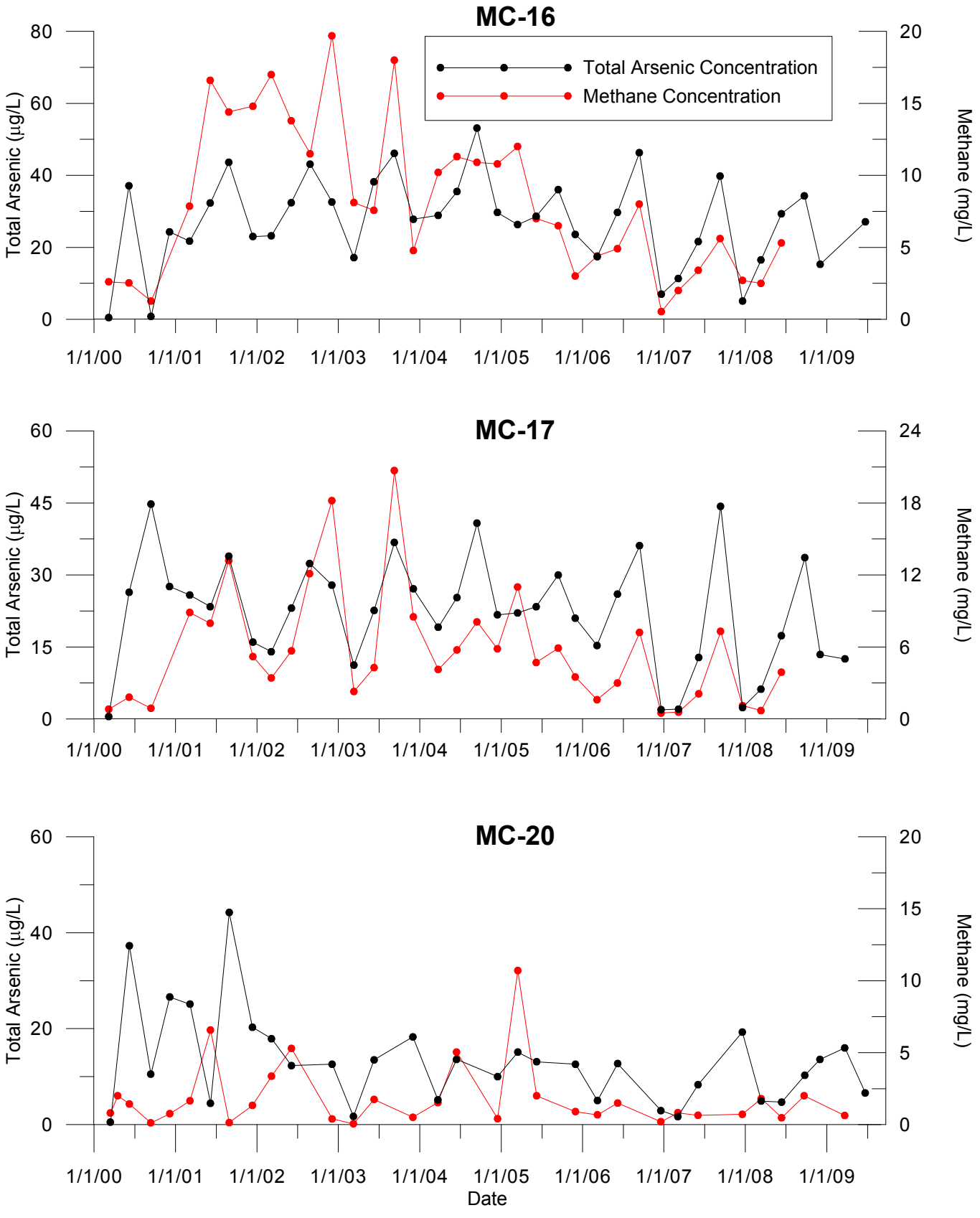
ARSENIC AND METHANE VERSUS TIME
Shallow Groundwater Zone Wells MC-13, MC-14, & MC-15
PSC Washougal Facility, Washougal, Washington

Project No. 9625

Figure No. **O-12**

P:\9625 - PSC Washougal\3000 REPORT\2009 RI FS Report\Agency Draft\Appendix P Arsenic\Figures\FigureP-10_As vs CH4_b.grf



Abbreviations: µg/L = micrograms per liter
mg/L = milligrams per liter

Note: 1. Value plotted is one-half the reporting limit when analyte was not detected.

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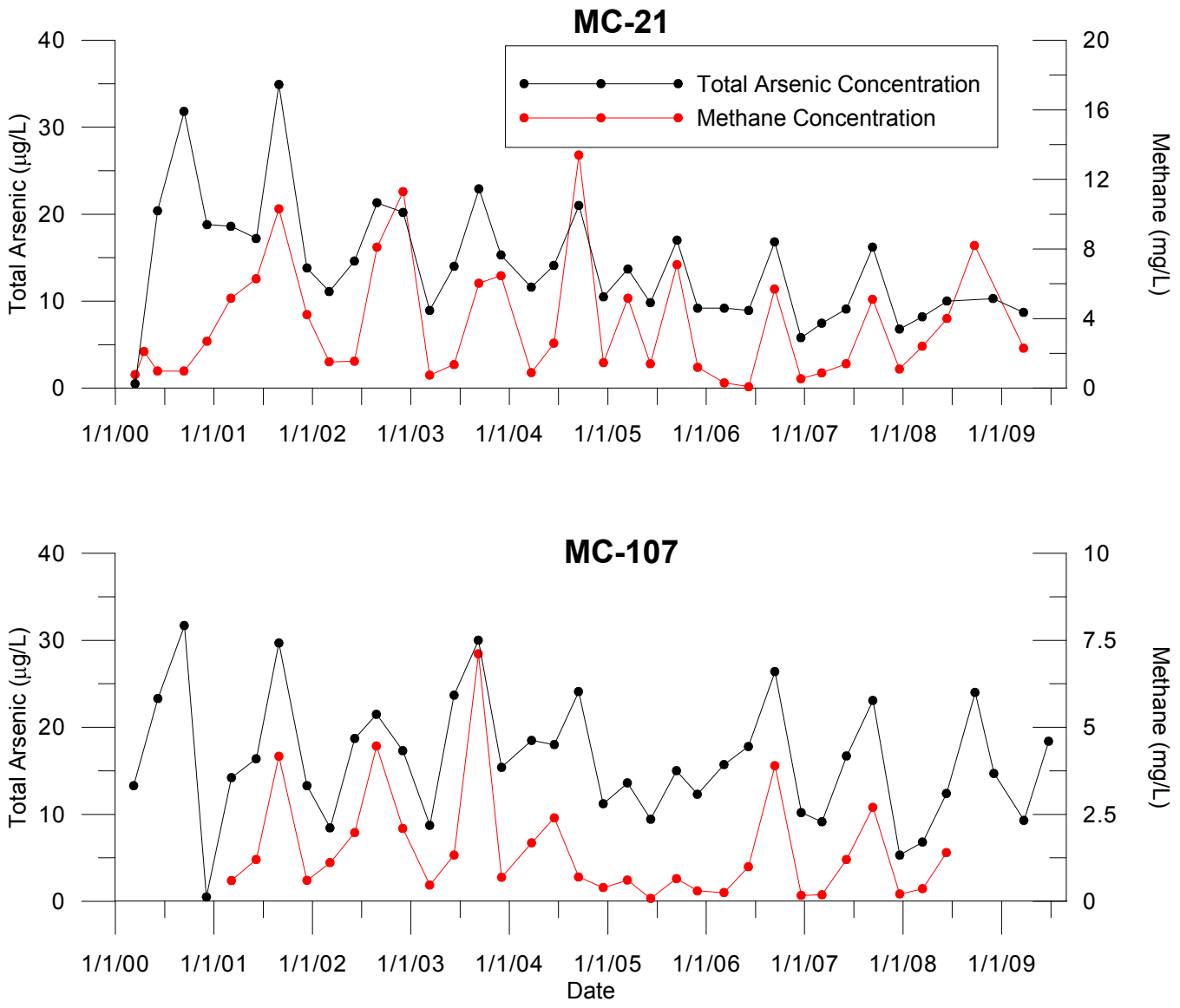
ARSENIC AND METHANE VERSUS TIME
Shallow Groundwater Zone Wells MC-16, MC-17, & MC-20
PSC Washougal Facility, Washougal, Washington

Project No. 9625

Figure No. **O-13**

P:\9625 - PSC Washougal\3000 REPORT\2009 RI FS Report\Agency Draft\Appendix P Arsenic\Figures\FigureP-11_As vs CH4_c.grf



Abbreviations: µg/L = micrograms per liter
mg/L = milligrams per liter

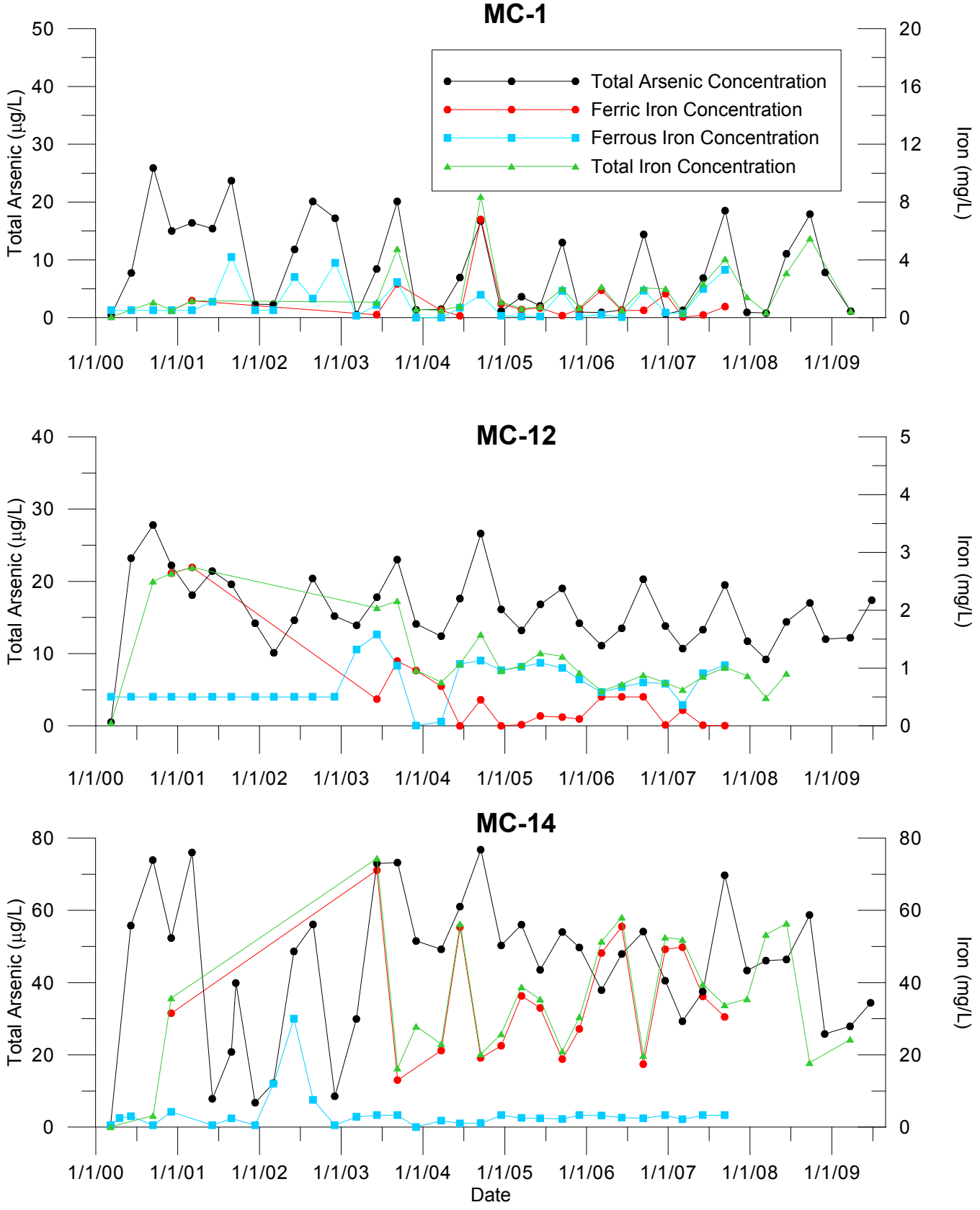
Note: 1. Value plotted is one-half the reporting limit when analyte was not detected.

ARSENIC AND METHANE VERSUS TIME
Shallow Groundwater Zone Wells MC-21 and MC-107
PSC Washougal Facility, Washougal, Washington

Project No. 9625

Figure No. **O-14**

P:\9625 - PSC Washougal\3000 REPORT\2009 RI FS Report\Agency Draft\Appendix P Arsenic\Figures\FigureP-12_As vs CH4_d.grf



Abbreviations: µg/L = microgram per liter
mg/L = milligrams per liter

Note: 1. Value plotted is one-half the reporting limit when analyte was not detected.

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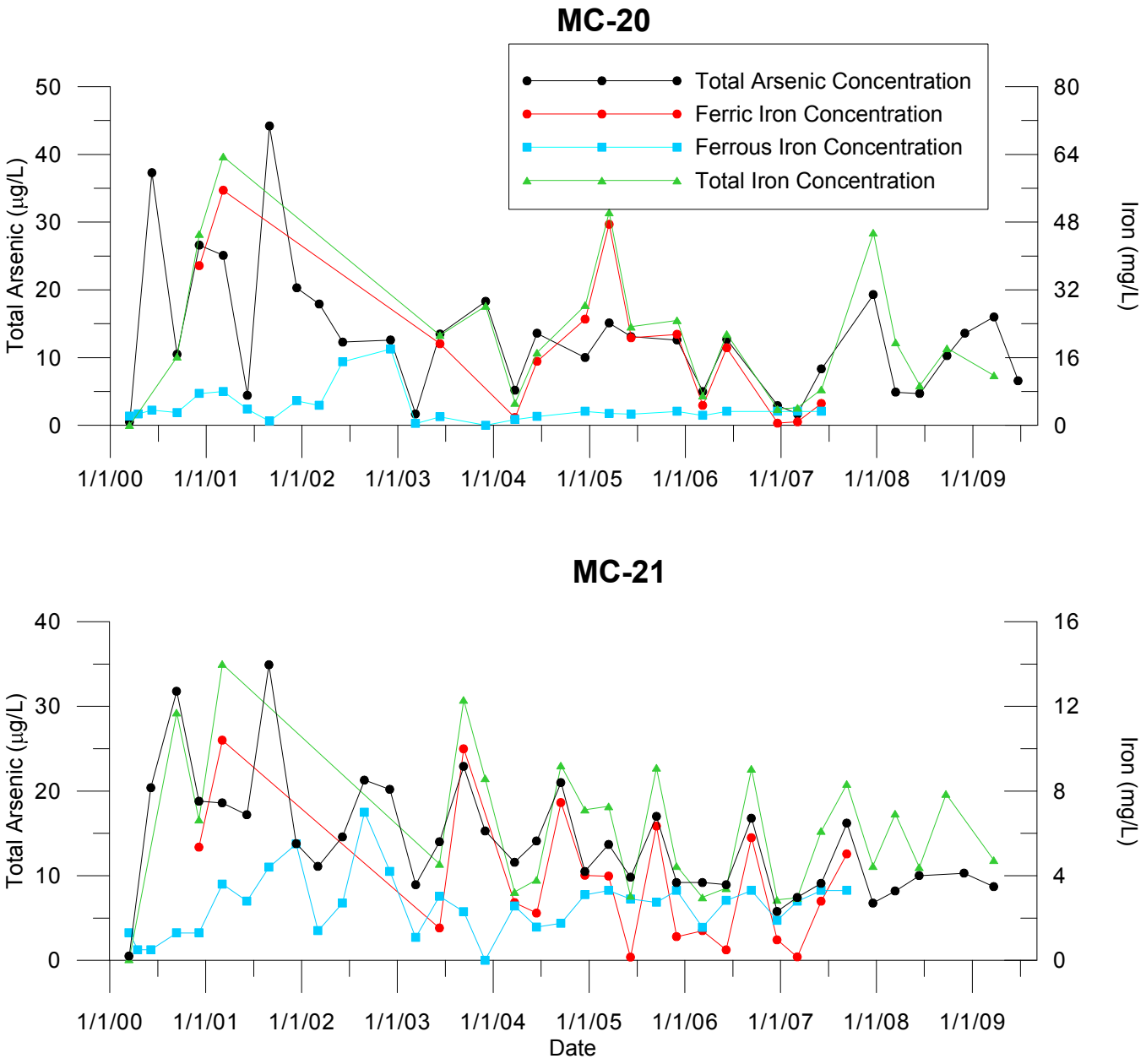
ARSENIC AND IRON VERSUS TIME
Shallow Groundwater Zone Wells MC-1, MC-12, & MC-14
PSC Washougal Facility, Washougal, Washington

Project No. 9625

Figure No. **O-15**

P:\9625 - PSC Washougal\3000 REPORT\2009 RI FS Report\Agency Draft\Appendix P Arsenic\Figures\FigureP-13_As vs Fe_a.grf



Abbreviations: µg/L = micrograms per liter
mg/L = milligrams per liter

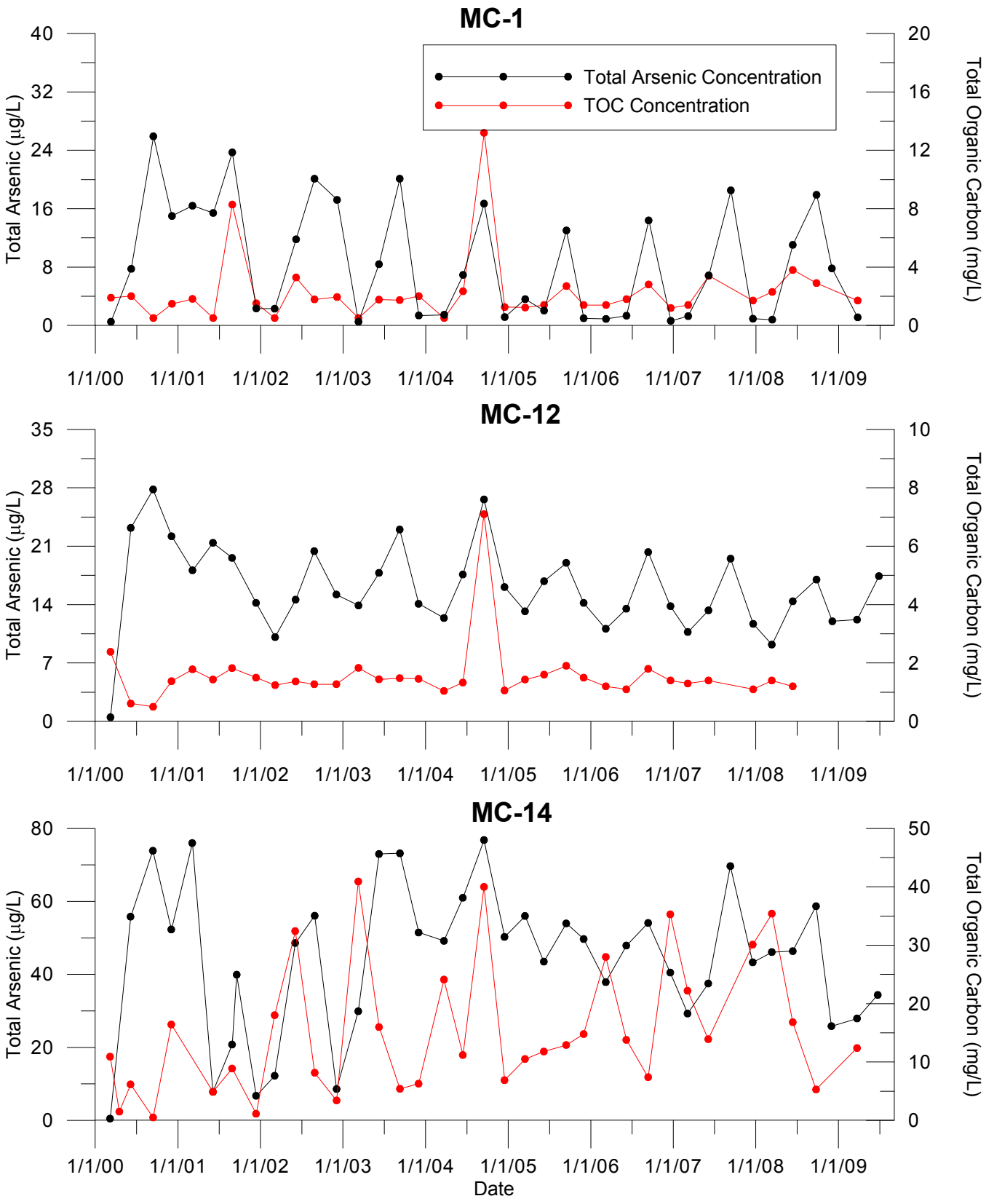
P:\9625 - PSC Washougal\3000 REPORT\2009 RI FS Report\Agency Draft\Appendix P Arsenic\Figures\FigureP-14_As vs Fe_b.grf

amec

ARSENIC AND IRON VERSUS TIME
Shallow Groundwater Zone Wells MC-20 and MC-21
PSC Washougal Facility, Washougal, Washington

Project No.
9625

Figure No.
O-16



Abbreviations: µg/L = micrograms per liter
mg/L = milligrams per liter
TOC = total organic carbon

Note: 1. Value plotted is one-half the reporting limit when analyte was not detected.

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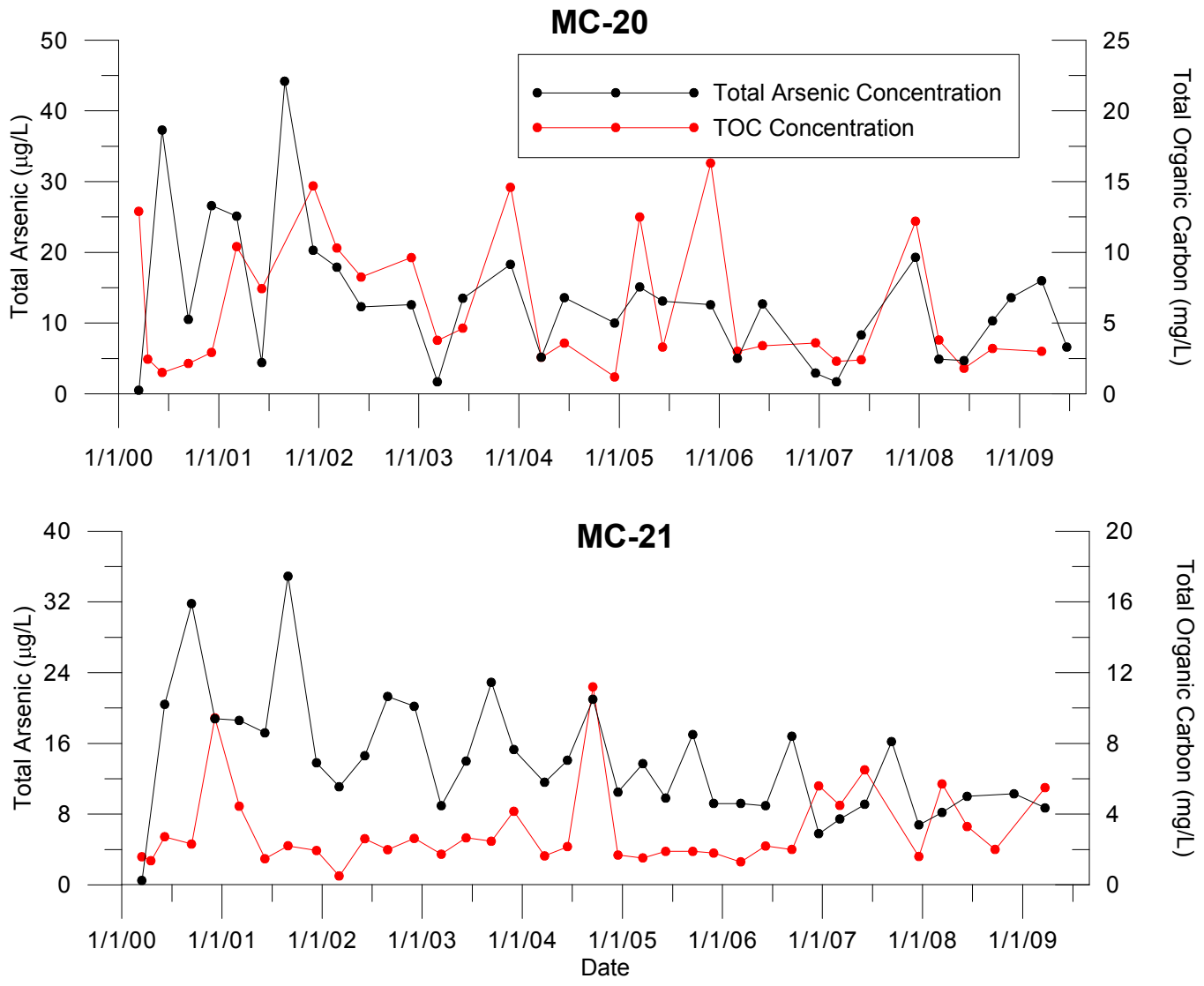
ARSENIC AND TOTAL ORGANIC CARBON VERSUS TIME
Shallow Groundwater Zone Wells MC-1, MC-12, & MC-14
PSC Washougal Facility, Washougal, Washington

Project No.
9625

Figure No.
O-17

P:\9625 - PSC Washougal\3000 REPORT\2009 RI FS Report\Agency Draft\Appendix P Arsenic\Figures\FigureP-15_As vs TOC_a.grf



Abbreviations: µg/L = micrograms per liter
mg/L = milligrams per liter
TOC = total organic carbon

Note: 1. Value plotted is one-half the reporting limit when analyte was not detected.

amec

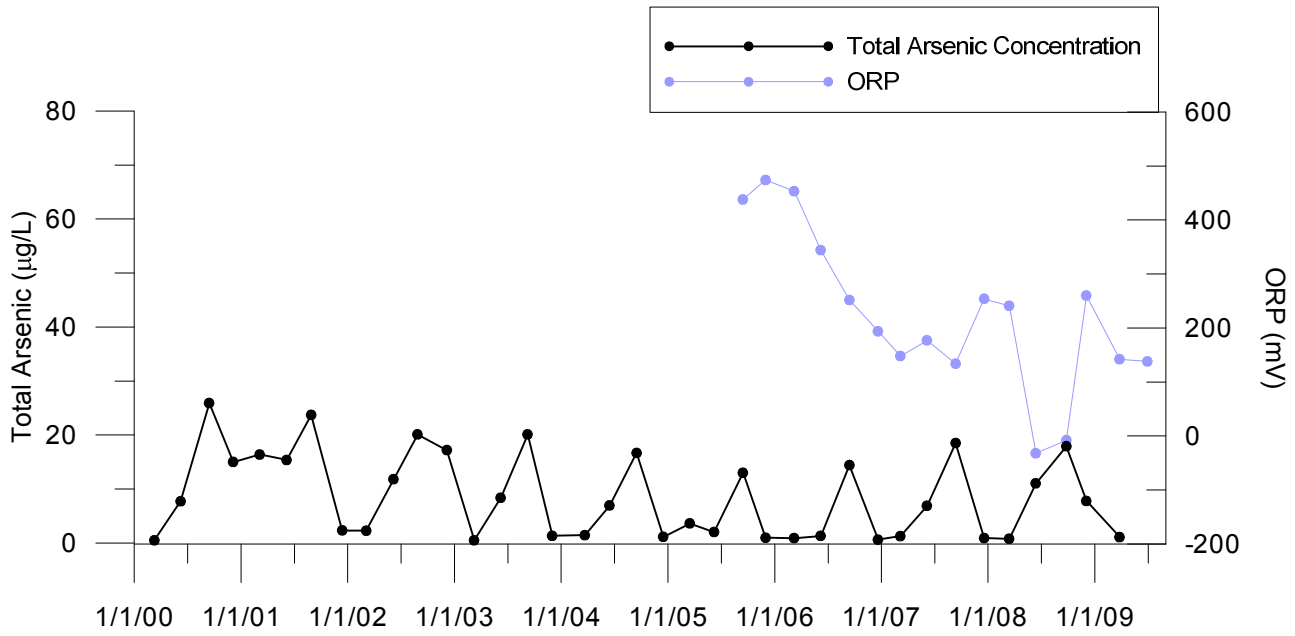
ARSENIC AND TOTAL ORGANIC CARBON VERSUS TIME
Shallow Groundwater Zone Wells MC-20 and MC-21
PSC Washougal Facility, Washougal, Washington

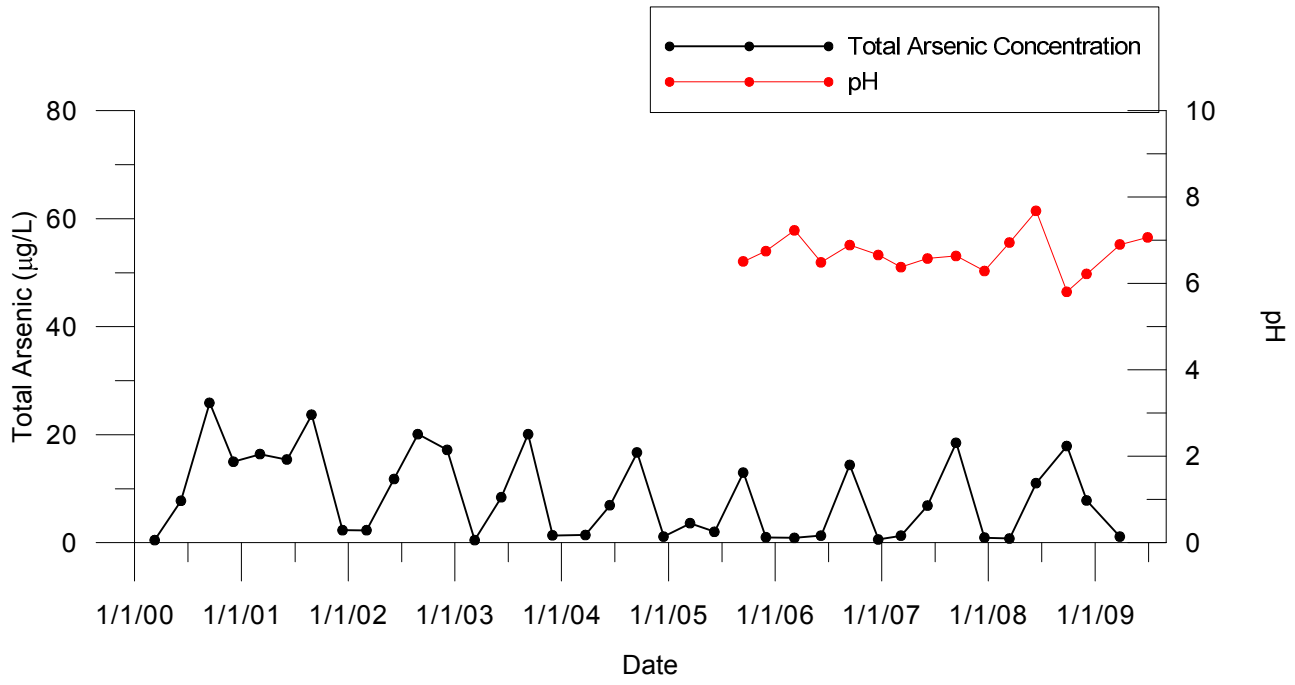
Project No. 9625

Figure No. **O-18**

P:\9625 - PSC Washougal\3000 REPORT\2009 RI FS Report\Agency Draft\Appendix P Arsenic\Figures\FigureP-16_As vs TOC_b.grf

MC-1





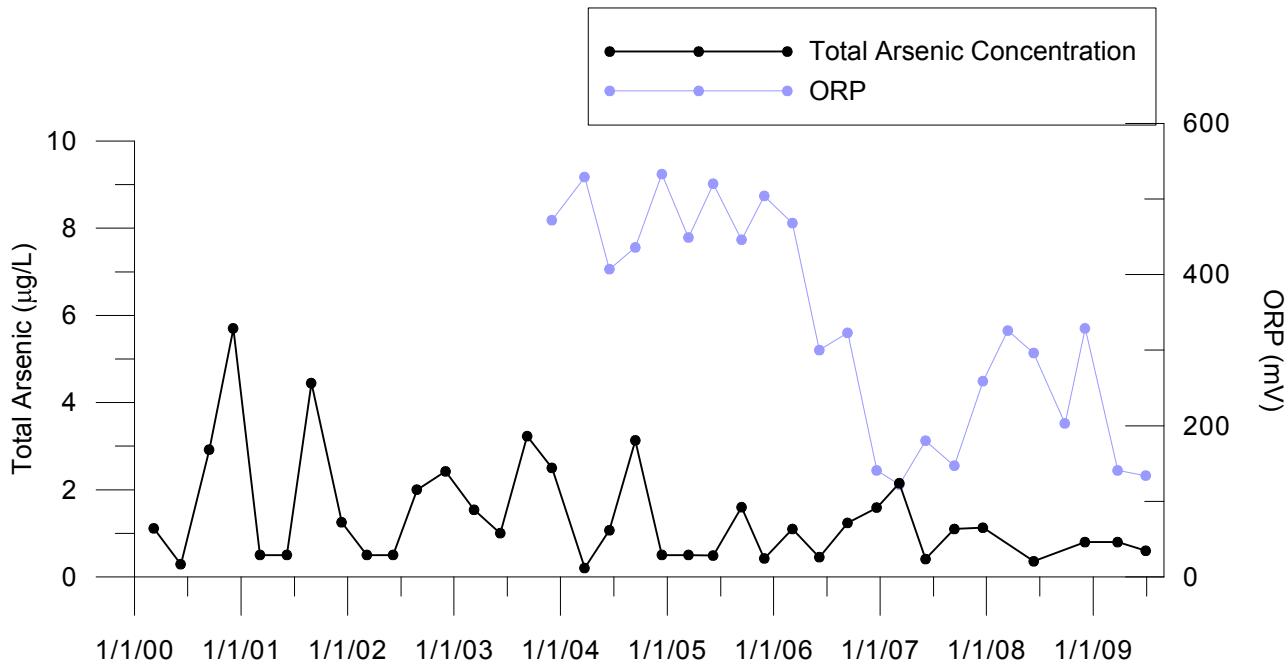
Abbreviations: µg/L = micrograms per liter
mV = millivolts
ORP = oxidation-reduction potential

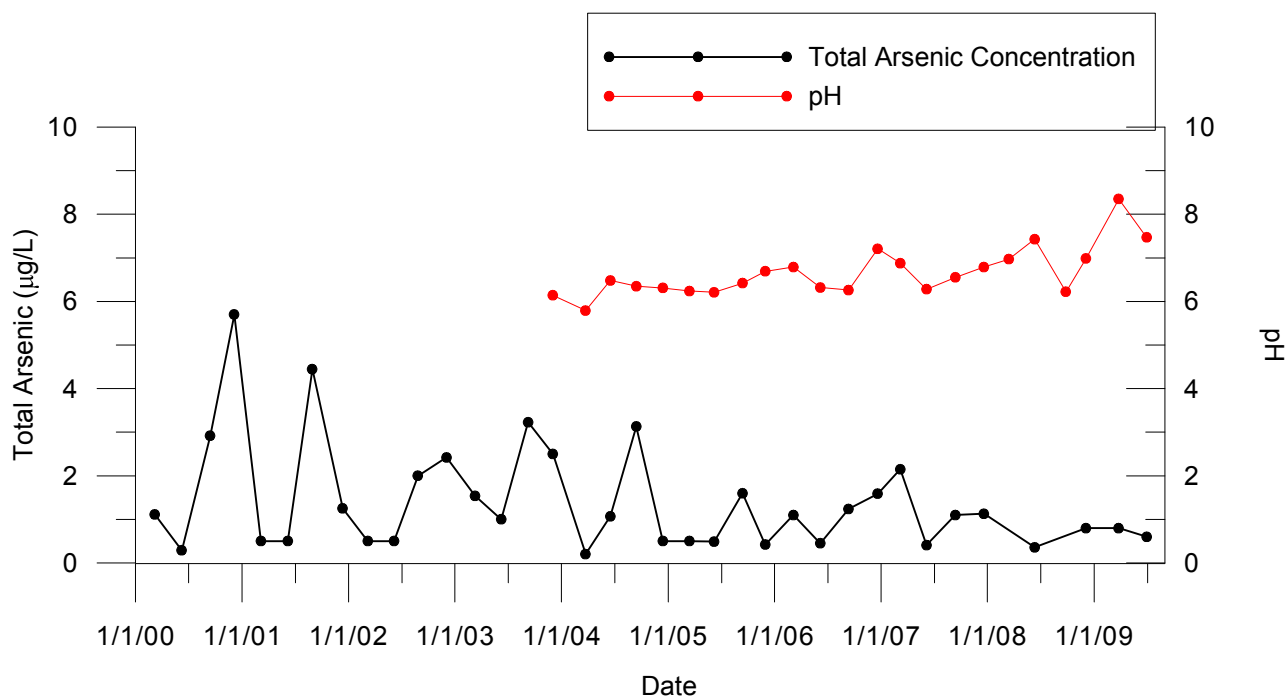
Note: 1. Value plotted is one-half the reporting limit when analyte was not detected.

amec	ORP, pH, AND ARSENIC VERSUS TIME Shallow Groundwater Zone Well MC-1 PSC Washougal Facility, Washougal, Washington	Project No. 9625 Figure No. **O-19**

P:\9625 - PSC Washougal\3000 REPORT\2009 RI FS Report\Agency Draft\Appendix P Arsenic\Figures\FigureP-17_pH&ORP_a.grf

MC-8





Abbreviations: µg/L = micrograms per liter
mV = millivolts
ORP = oxidation-reduction potential

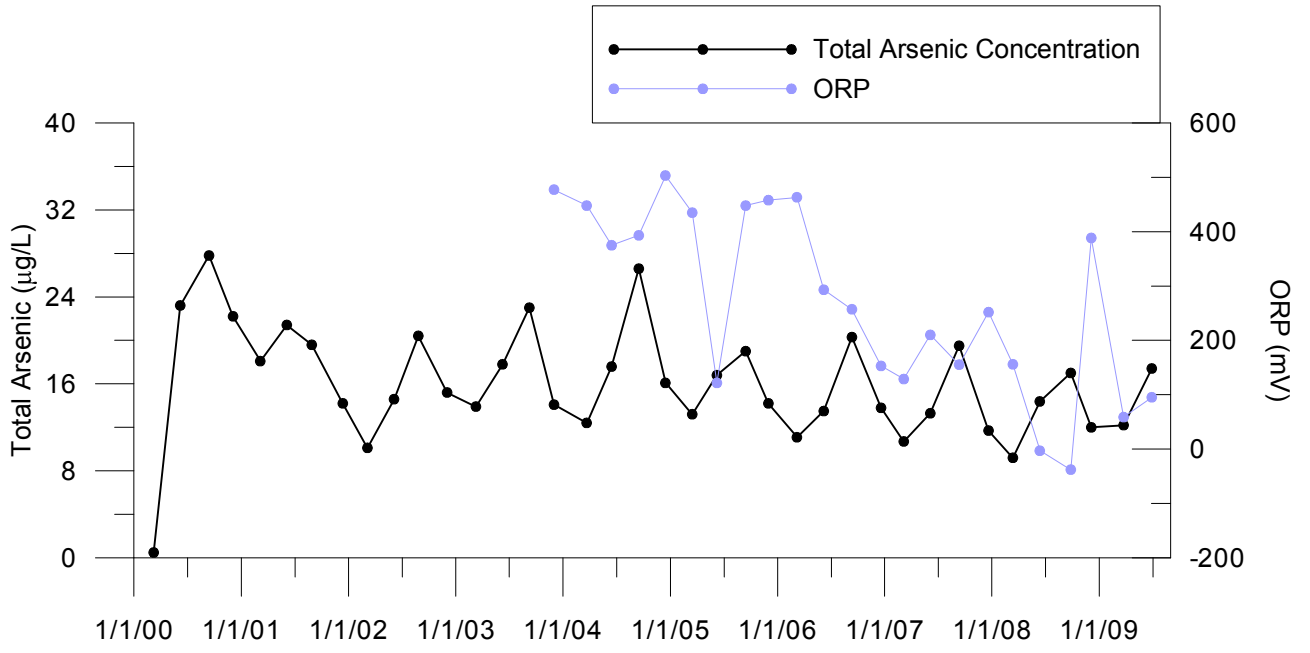
Note: 1. Value plotted is one-half the reporting limit when analyte was not detected.

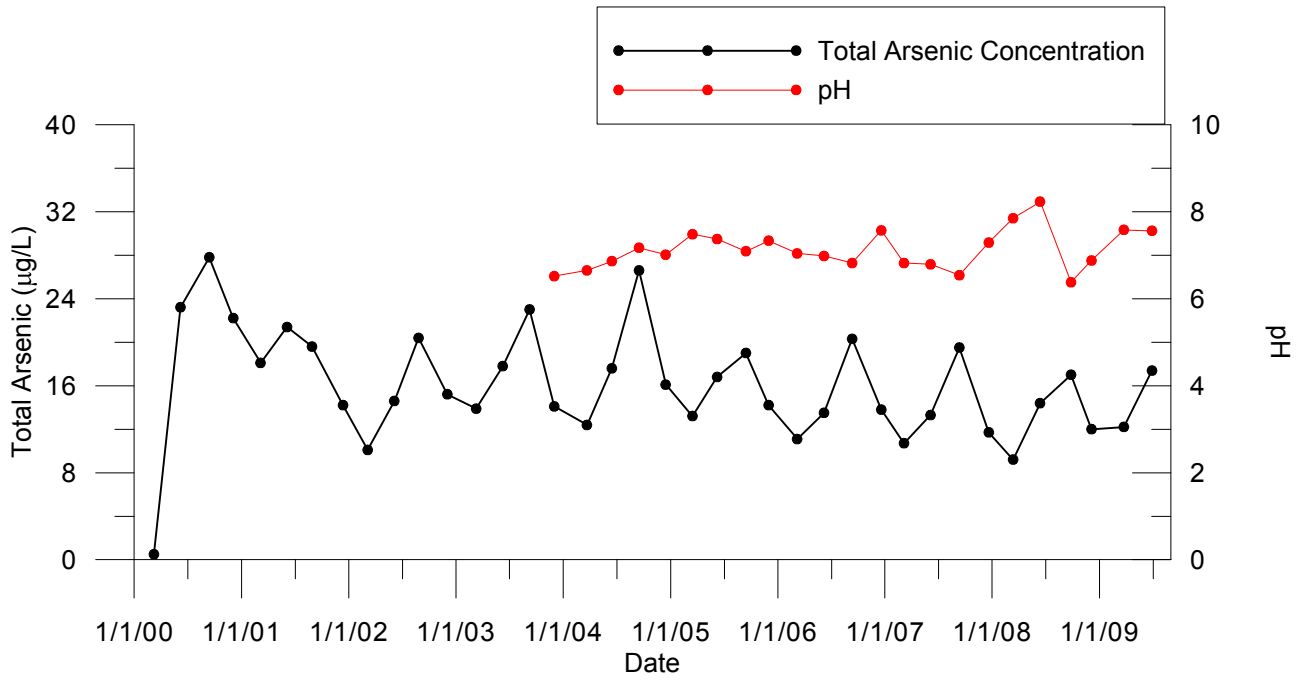
amec	ORP, pH, AND ARSENIC VERSUS TIME Shallow Groundwater Zone Well MC-8 PSC Washougal Facility, Washougal, Washington	Project No. 9625 Figure No. **O-20**

P:\9625 - PSC Washougal\3000 REPORT\2009 RI FS Report\Agency Draft\Appendix P Arsenic\FiguresFigureP-18_pH&ORP_b.grf

P:\9625 - PSC Washougal\3000 REPORT\2009 RI FS Report\Agency Draft\Appendix P Arsenic\Figures\FigureP-19_pH&ORP_c.grf

MC-12





Abbreviations: µg/L = micrograms per liter
mV = millivolts
ORP = oxidation-reduction potential

Note: 1. Value plotted is one-half the reporting limit when analyte was not detected.

amec

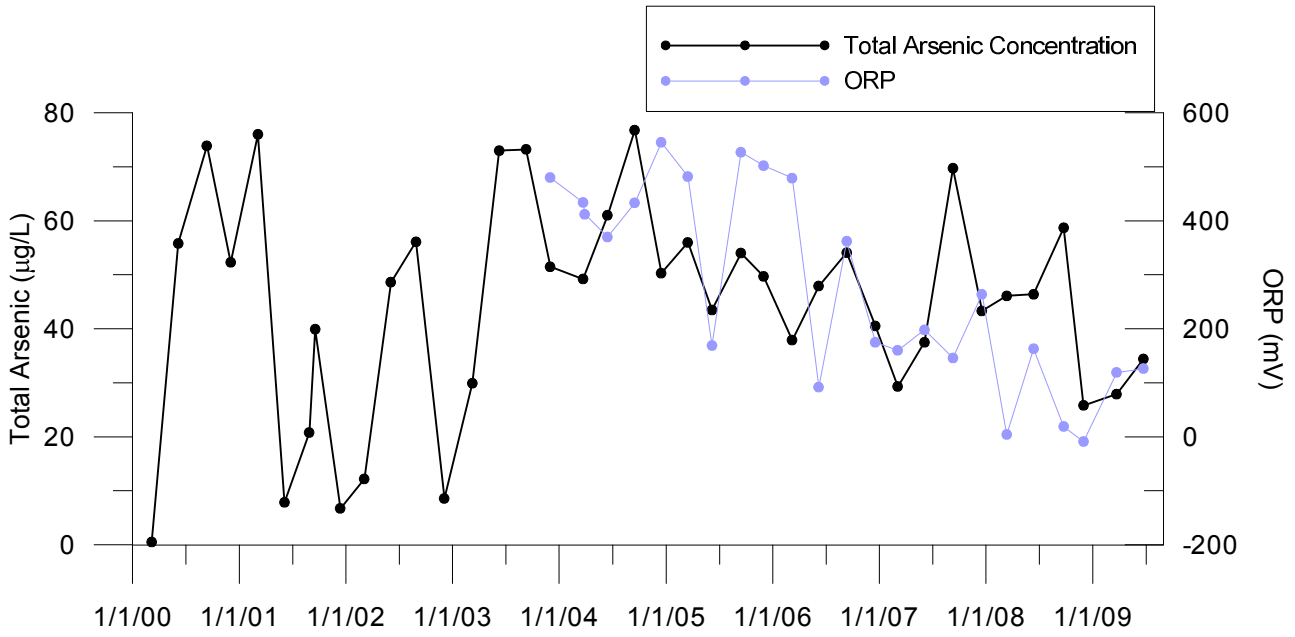
ORP, pH, AND ARSENIC VERSUS TIME
Shallow Groundwater Zone Well MC-12
PSC Washougal Facility, Washougal, Washington

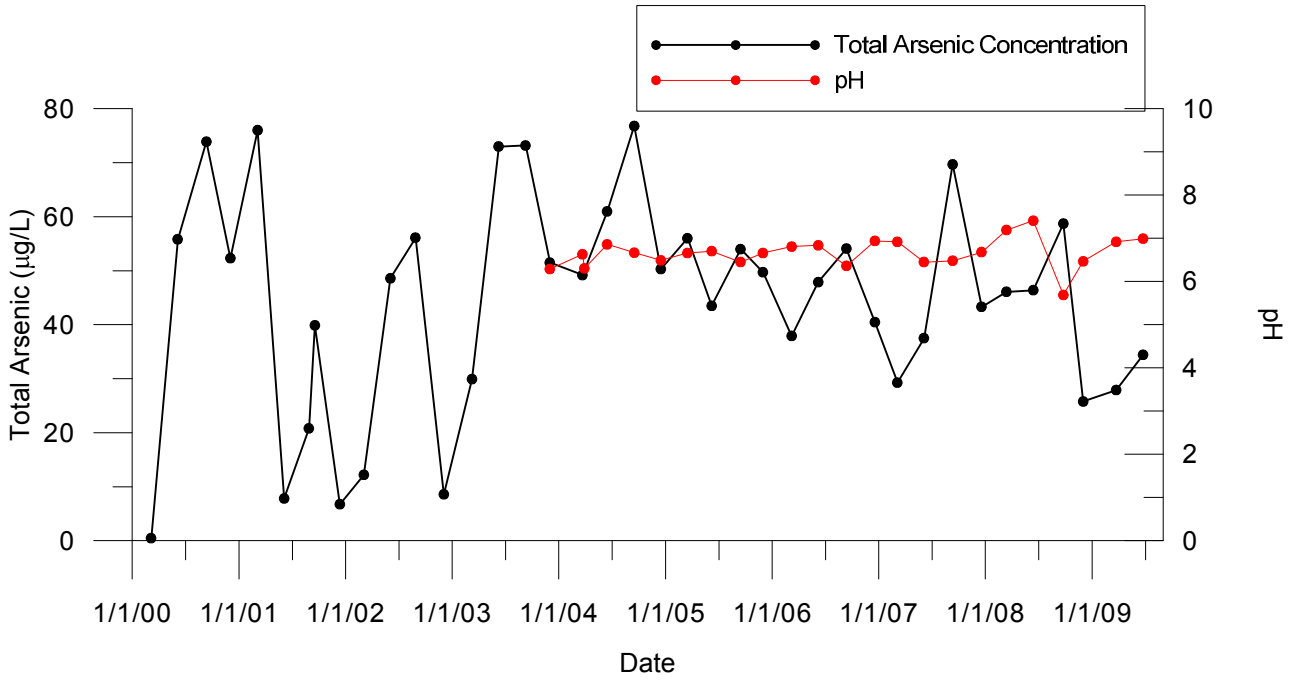
Project No. 9625

Figure No. **O-21**

P:\9625 - PSC Washougal\3000 REPORT\2009 RI FS Report\Agency Draft\Appendix P Arsenic\Figures\FigureP-20_pH&ORP_d.grf

MC-14





Abbreviations: µg/L = micrograms per liter
mV = millivolts
ORP = oxidation-reduction potential

Note: 1. Value plotted is one-half the reporting limit when analyte was not detected.

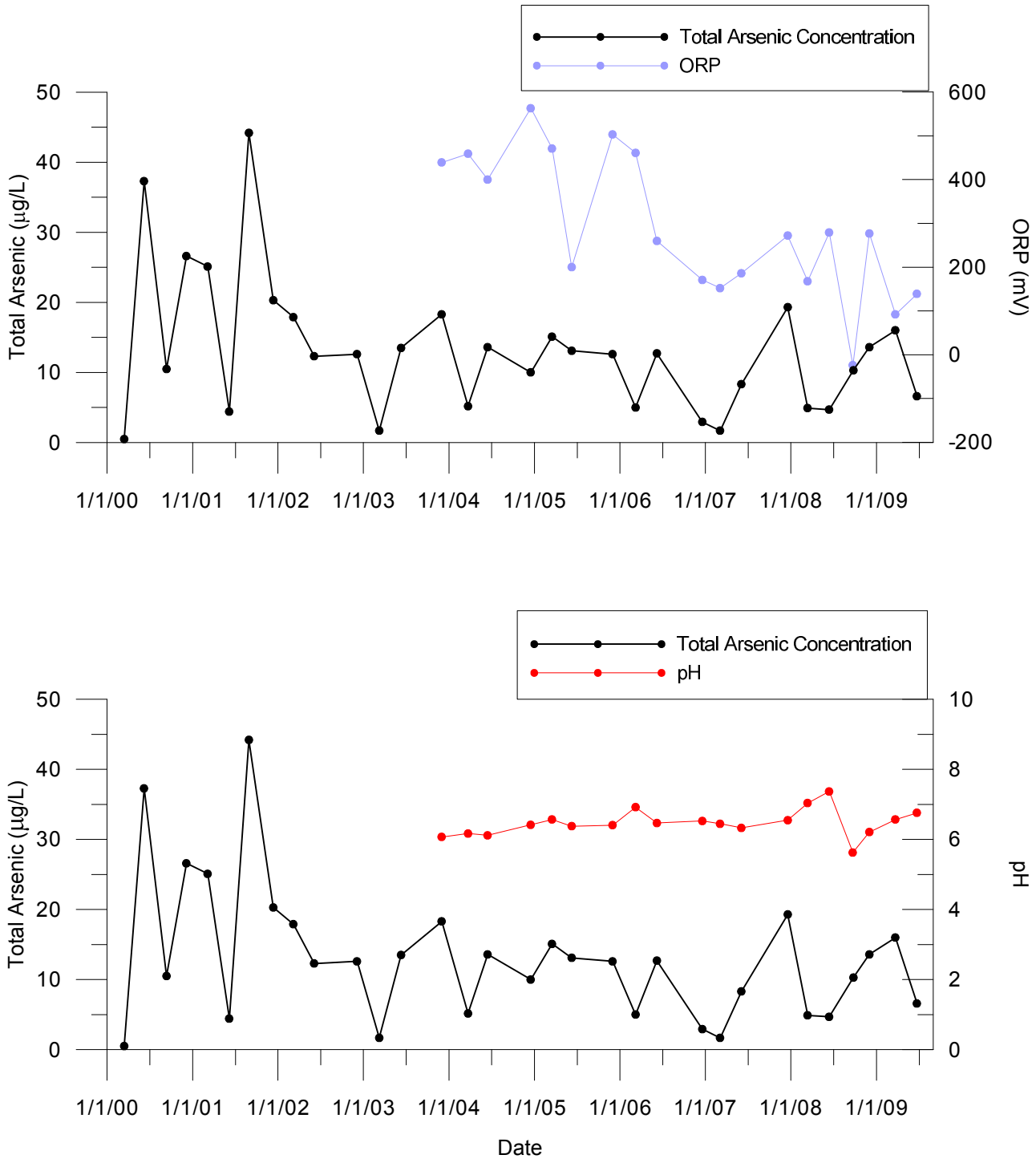
amec

ORP, pH, AND ARSENIC VERSUS TIME
Shallow Groundwater Zone Well MC-14
PSC Washougal Facility, Washougal, Washington

Project No.
9625

Figure No.
O-22

MC-20



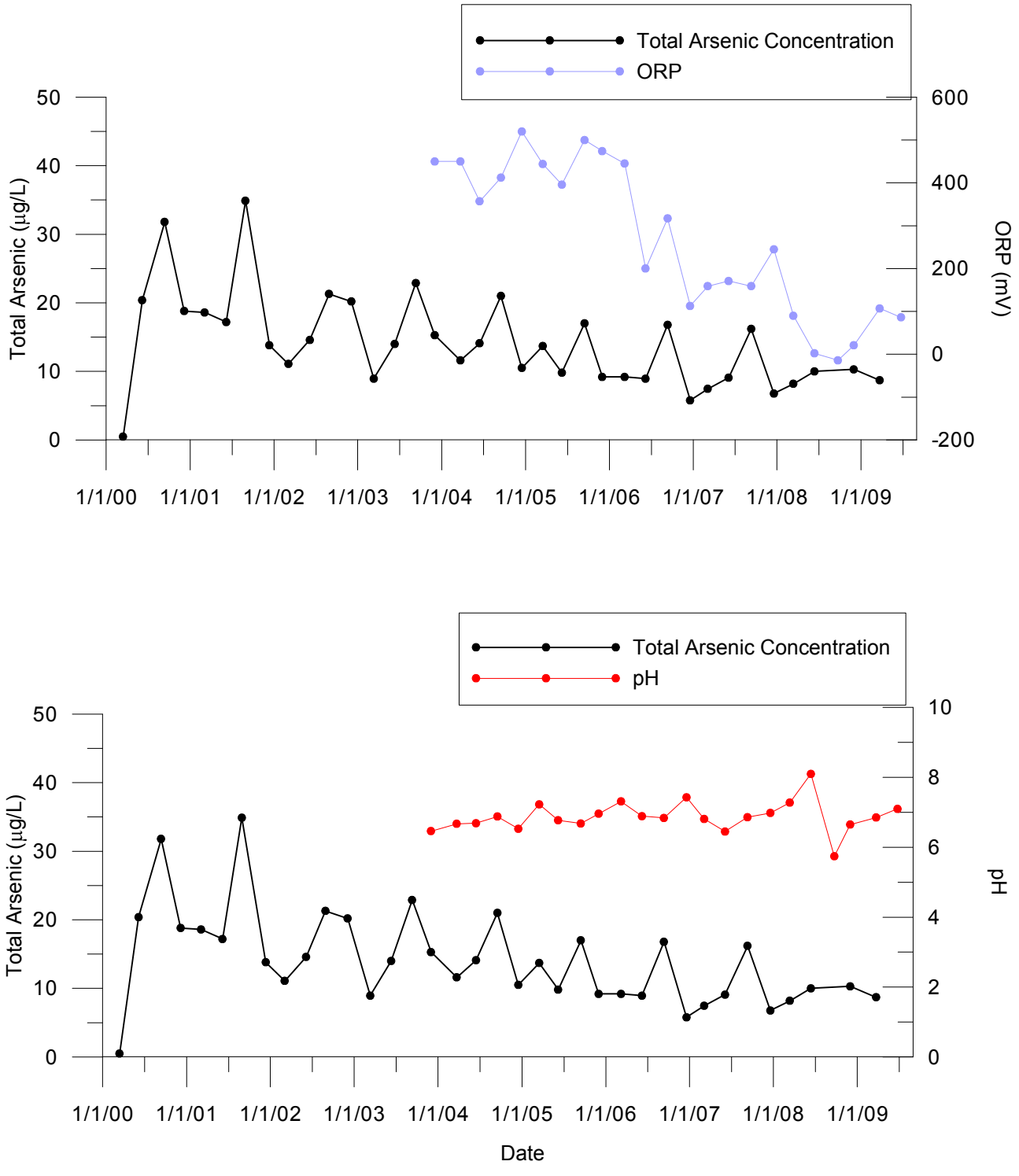
Abbreviations: µg/L = micrograms per liter
mV = millivolts
ORP = oxidation-reduction potential

Note: 1. Value plotted is one-half the reporting limit when analyte was not detected.

amec	ORP, pH, AND ARSENIC VERSUS TIME Shallow Groundwater Zone Well MC-20 PSC Washougal Facility, Washougal, Washington	Project No. 9625 Figure No. **O-23**

P:\9625 - PSC Washougal\3000 REPORT\2009 RI FS Report\Agency Draft\Appendix P Arsenic\Figures\FigureP-21_pH&ORP_e.grf

MC-21

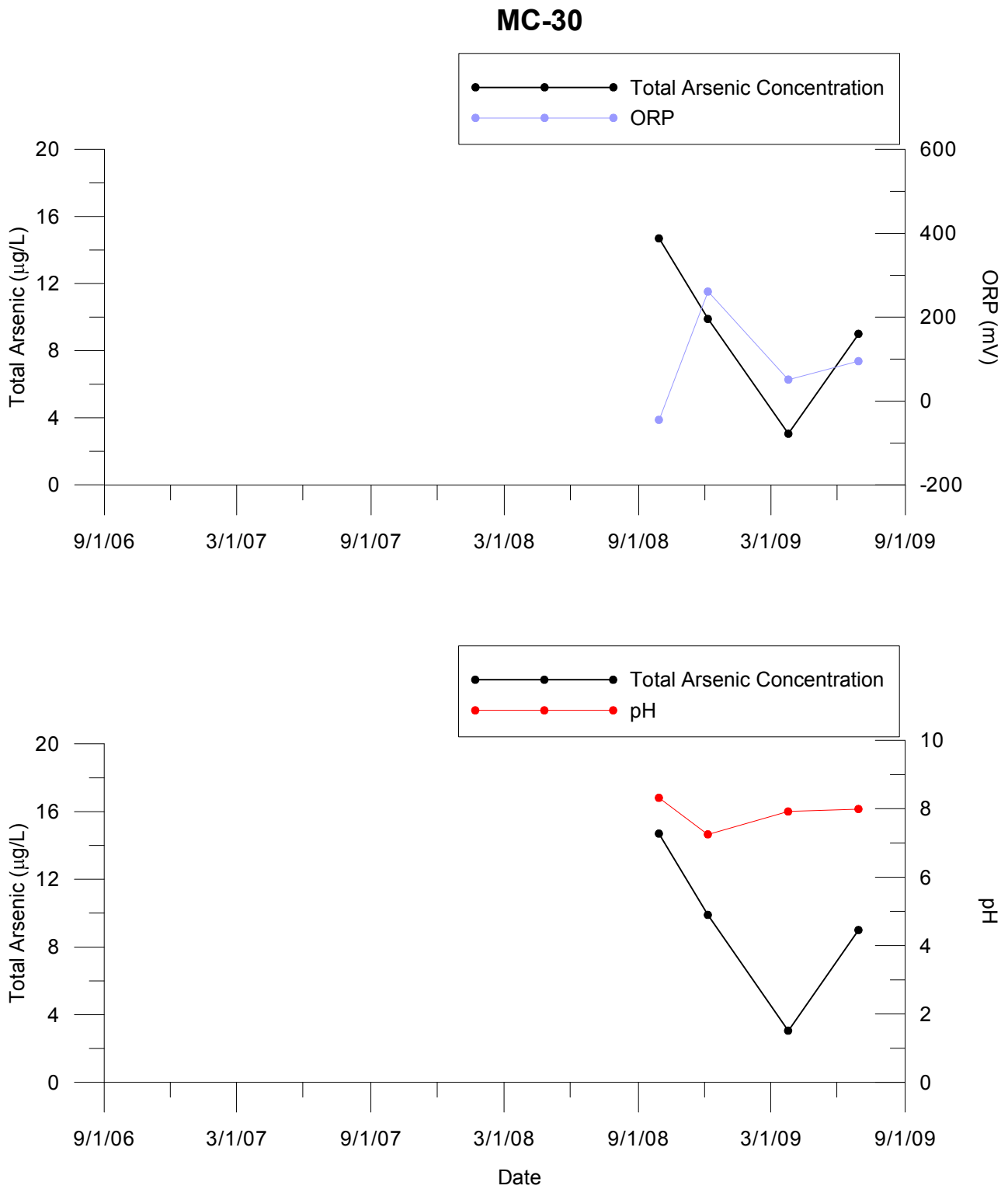


Abbreviations: µg/L = micrograms per liter
mV = millivolts
ORP = oxidation-reduction potential

Note: 1. Value plotted is one-half the reporting limit when analyte was not detected.

amec	ORP, pH, AND ARSENIC VERSUS TIME Shallow Groundwater Zone Well MC-21 PSC Washougal Facility, Washougal, Washington	Project No. 9625 Figure No. **O-24**

P:\9625 - PSC Washougal\3000 REPORT\2009 RI FS Report\Agency Draft\Appendix P Arsenic\Figures\FigureP-22_pH&ORP_f.grf



Abbreviations: µg/L = micrograms per liter
mV = millivolts
ORP = oxidation-reduction potential

Note: 1. Value plotted is one-half the reporting limit when analyte was not detected.

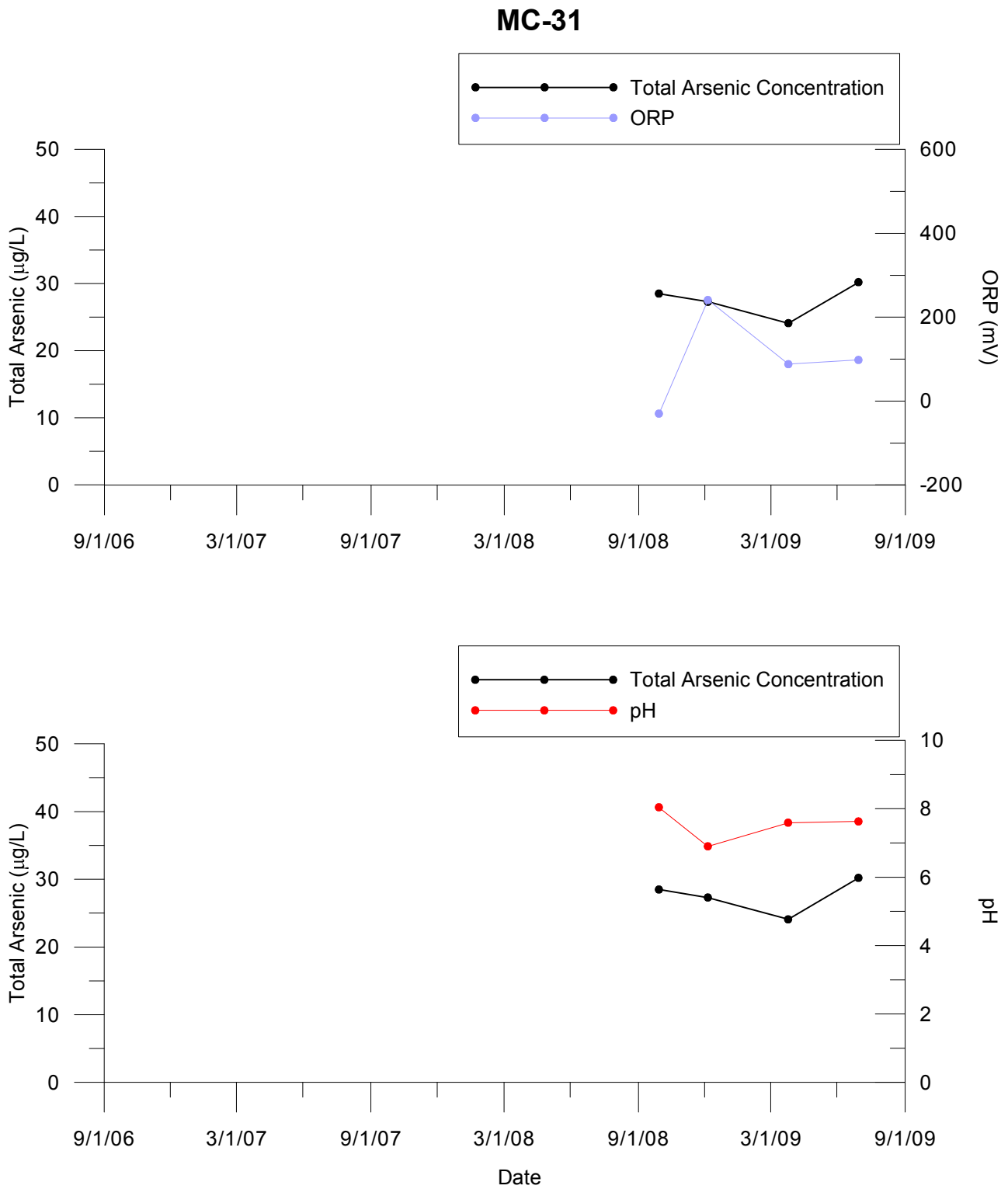
amec

ORP, pH, AND ARSENIC VERSUS TIME
Shallow Groundwater Zone Well MC-30
PSC Washougal Facility, Washougal, Washington

Project No.
9625

Figure No.
O-25

P:\9625 - PSC Washougal\3000 REPORT\2009 RI FS Report\Agency Draft\Appendix P Arsenic\Figures\FigureP-23_pH&ORP_g.grf



Abbreviations: µg/L = micrograms per liter
mV = millivolts
ORP = oxidation-reduction potential

Note: 1. Value plotted is one-half the reporting limit when analyte was not detected.

amec

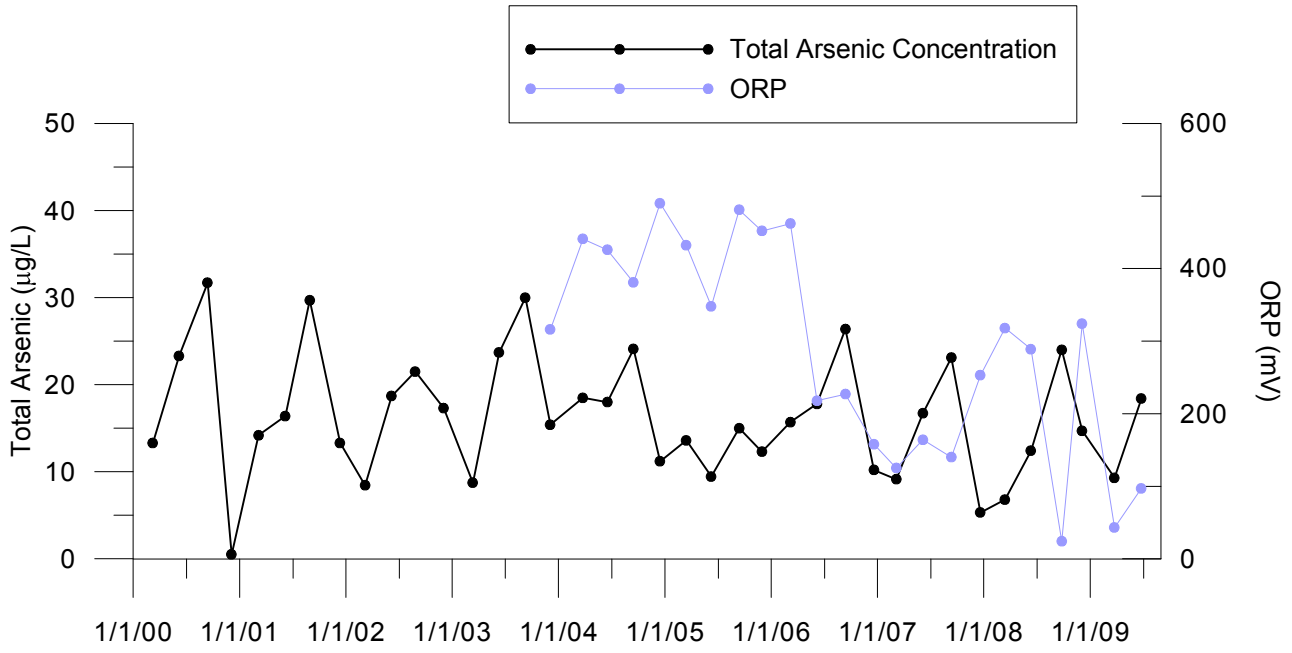
ORP, pH, AND ARSENIC VERSUS TIME
Shallow Groundwater Zone Well MC-31
PSC Washougal Facility, Washougal, Washington

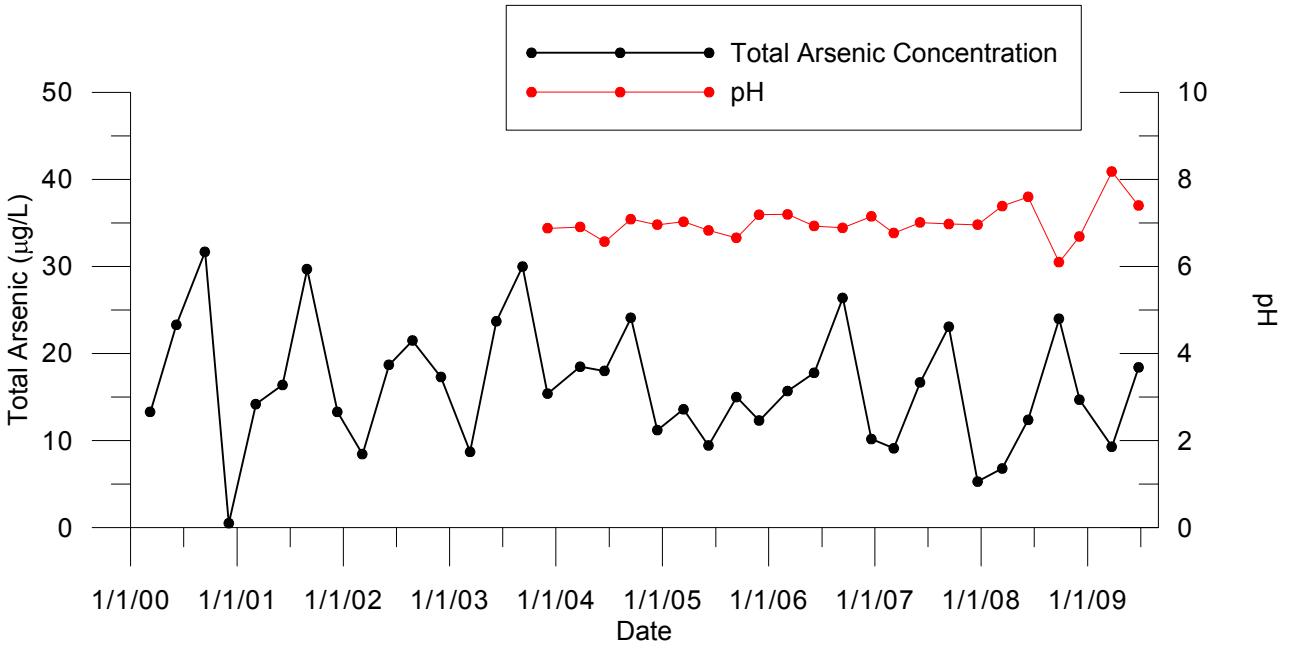
Project No.
9625

Figure No.
O-26

P:\9625 - PSC Washougal\3000 REPORT\2009 RI FS Report\Agency Draft\Appendix P Arsenic\Figures\FigureP-24_pH&ORP_h.grf

MC-107



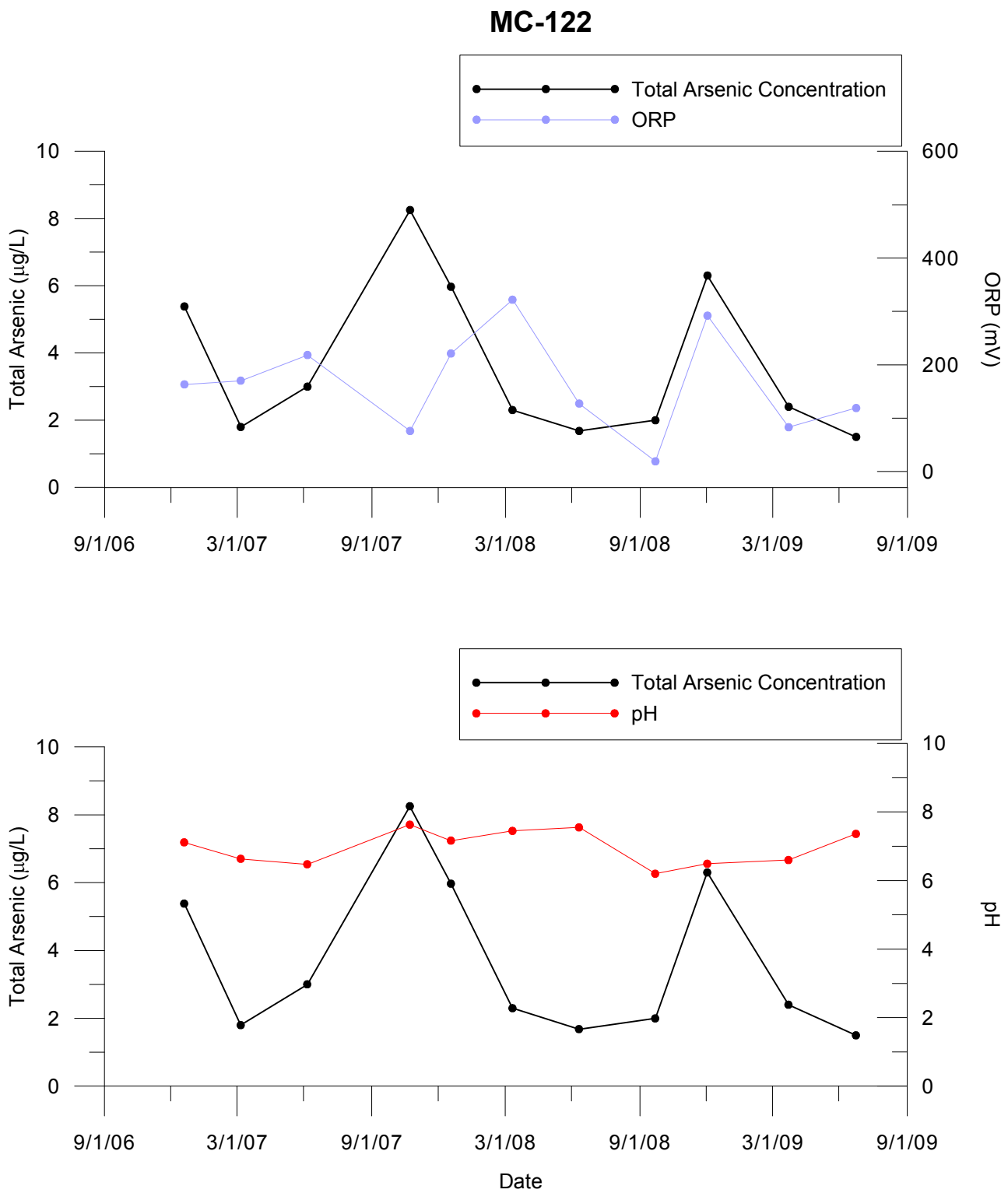


Abbreviations: µg/L = micrograms per liter
mV = millivolts
ORP = oxidation-reduction potential

Note: 1. Value plotted is one-half the reporting limit when analyte was not detected.

amec	ORP, pH, AND ARSENIC VERSUS TIME Shallow Groundwater Zone Well MC-107 PSC Washougal Facility, Washougal, Washington	Project No. 9625 Figure No. **O-27**

P:\9625 - PSC Washougal\3000 REPORT\2009 RI FS Report\Agency Draft\Appendix P Arsenic\Figures\FigureP-25_pH&ORP_i.grf

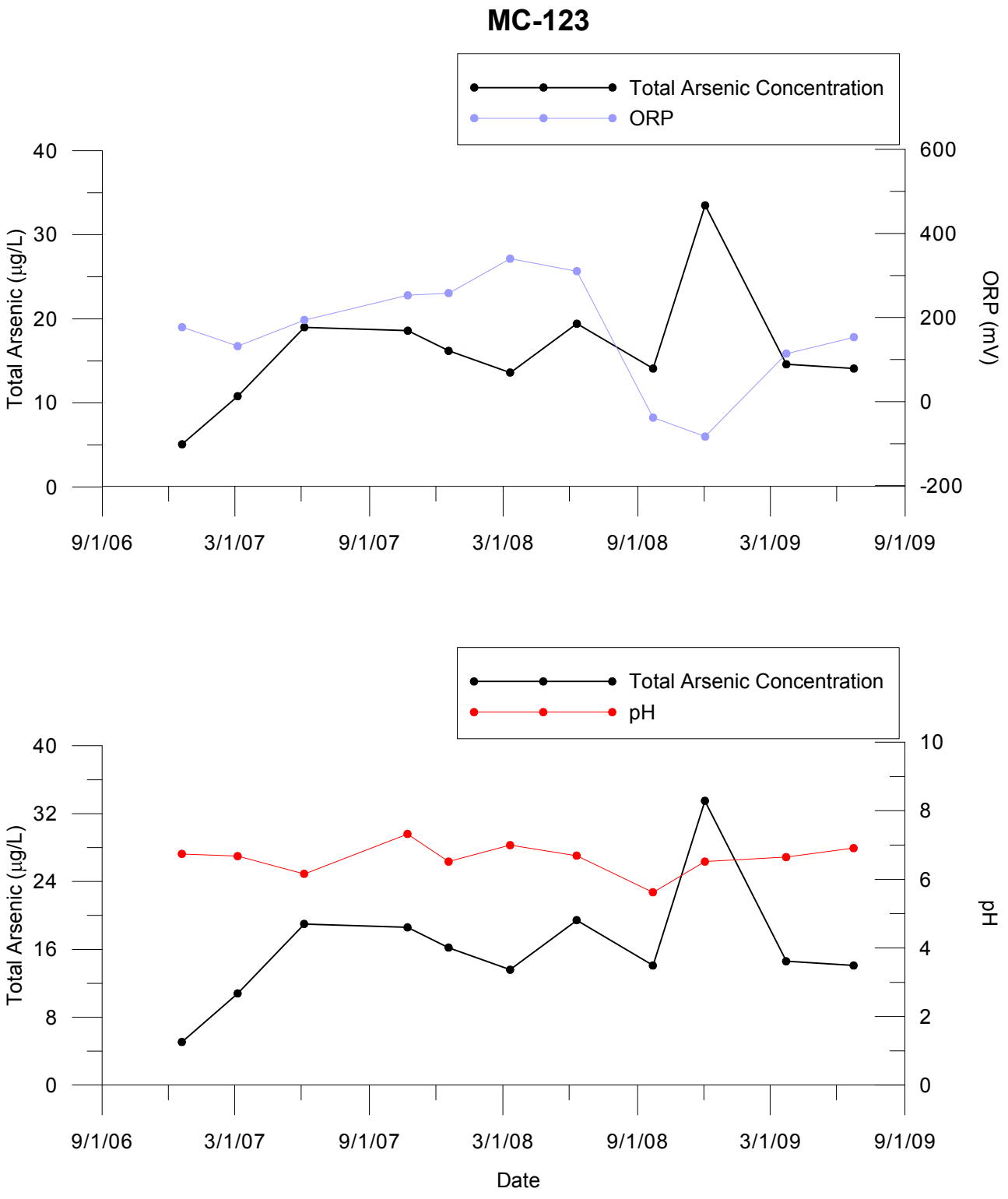


Abbreviations: µg/L = micrograms per liter
mV = millivolts
ORP = oxidation-reduction potential

Note: 1. Value plotted is one-half the reporting limit when analyte was not detected.

amec	ORP, pH, AND ARSENIC VERSUS TIME Shallow Groundwater Zone Well MC-122 PSC Washougal Facility, Washougal, Washington	Project No. 9625 Figure No. **O-28**

P:\9625 - PSC Washougal\3000 REPORT\2009 RI FS Report\Agency Draft\Appendix P Arsenic\Figures\FigureP-26_pH&ORP_j.grf



Abbreviations: µg/L = micrograms per liter
mV = millivolts
ORP = oxidation-reduction potential

Note: 1. Value plotted is one-half the reporting limit when analyte was not detected.

amec

ORP, pH, AND ARSENIC VERSUS TIME
Shallow Groundwater Zone Well MC-123
PSC Washougal Facility, Washougal, Washington

Project No.
9625

Figure No.
O-29

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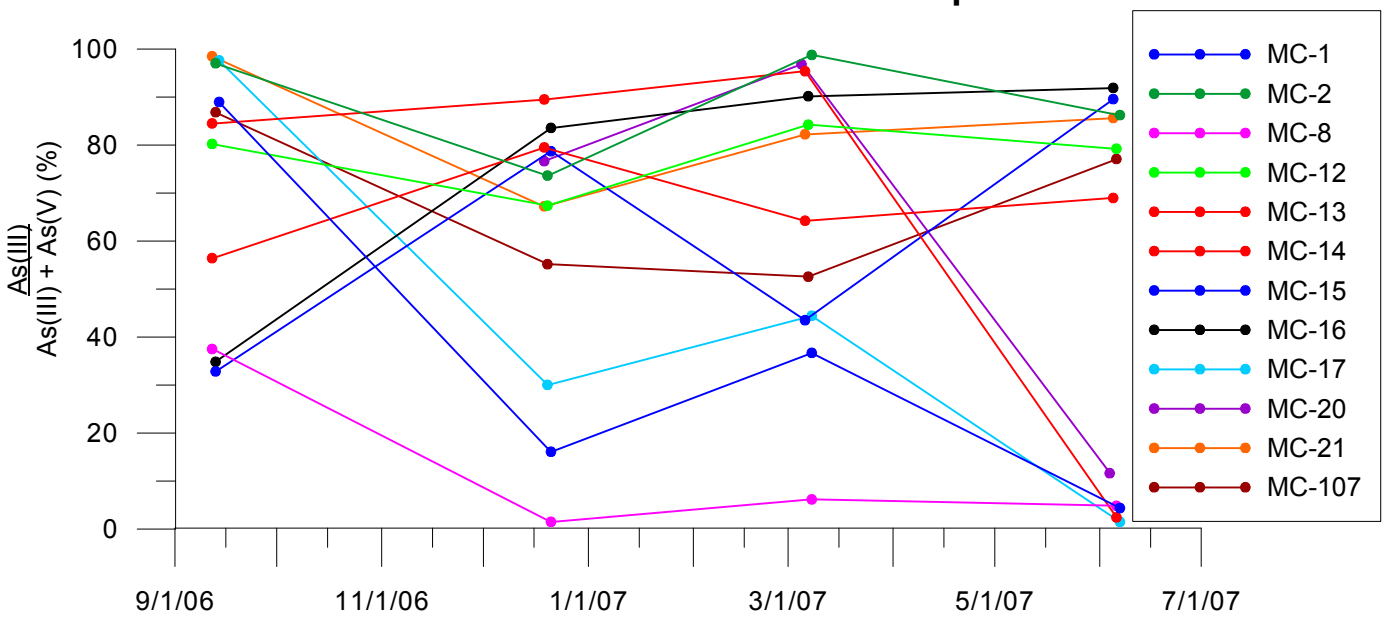
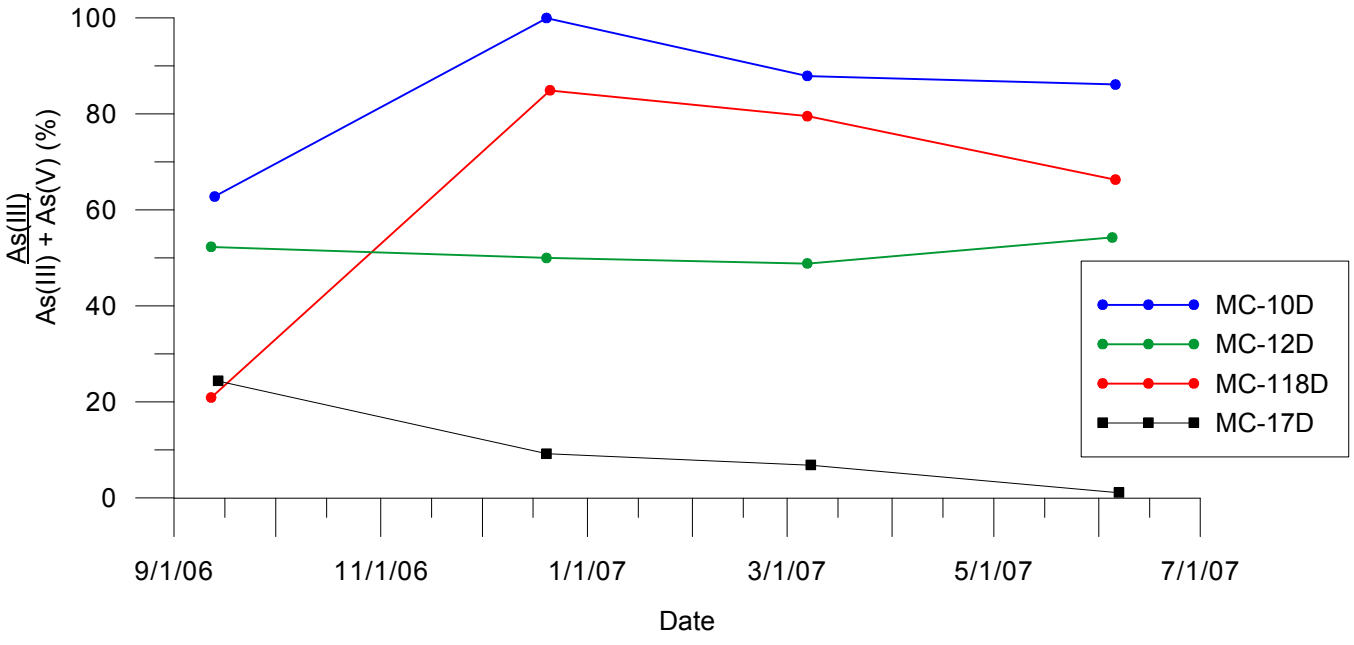
Shallow Groundwater Zone Arsenic Speciation



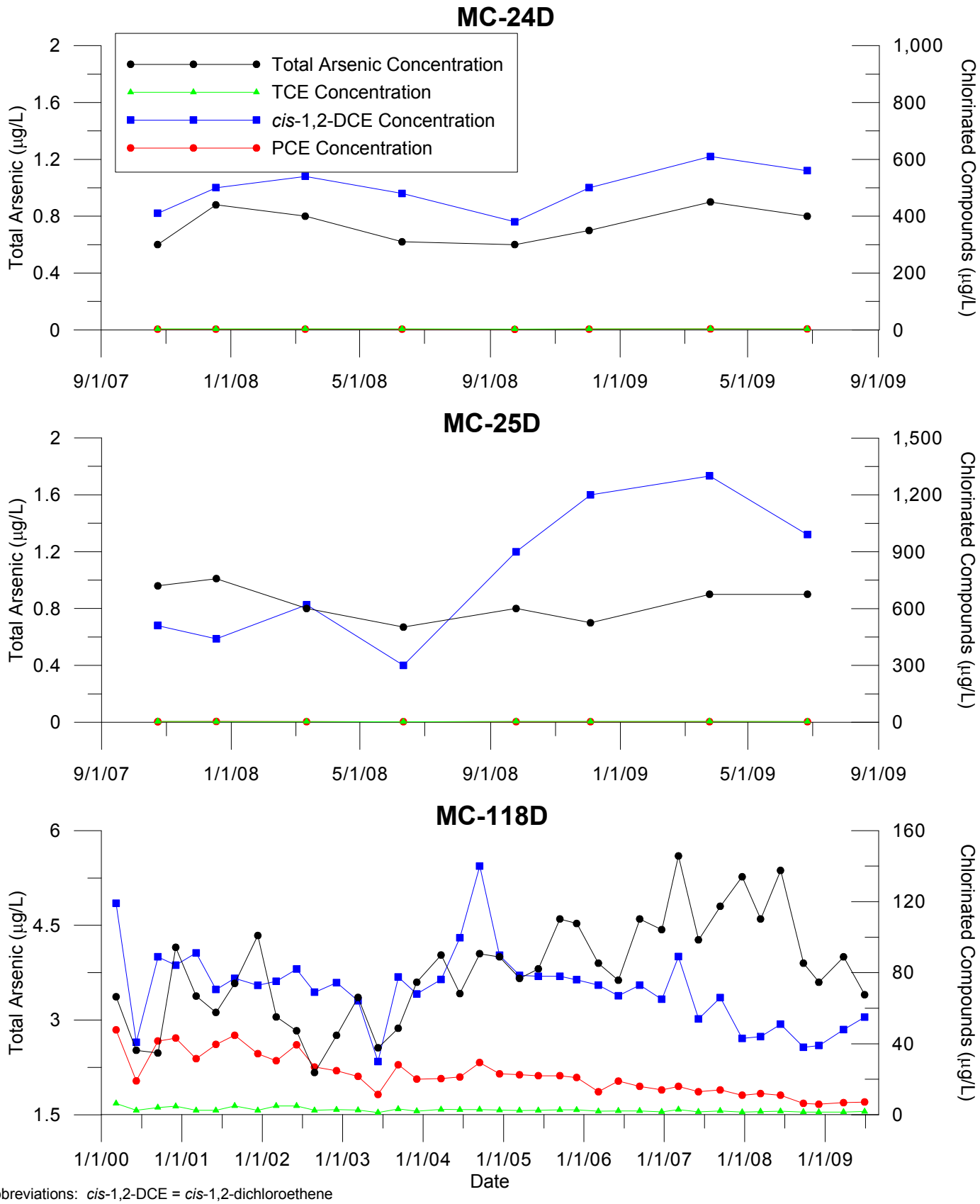
Lower Aquifer Arsenic Speciation



Note: 1. Value plotted is one-half the reporting limit when analyte was not detected.

amec	PERCENTAGE ARSENITE VERSUS TIME PSC Washougal Facility Washougal, Washington	Project No. 9625 Figure No. **O-30**

P:\9625 - PSC Washougal\3000 REPORT\2009 RI FS Report\Agency Draft\Appendix P Arsenic\Figures\FigureP-28_AsIIIAsV.grf



Abbreviations: *cis*-1,2-DCE = *cis*-1,2-dichloroethene
µg/L = micrograms per liter
PCE = tetrachloroethene
TCE = trichlorethene

Note: 1. Value plotted is one-half the reporting limit when analyte was not detected.

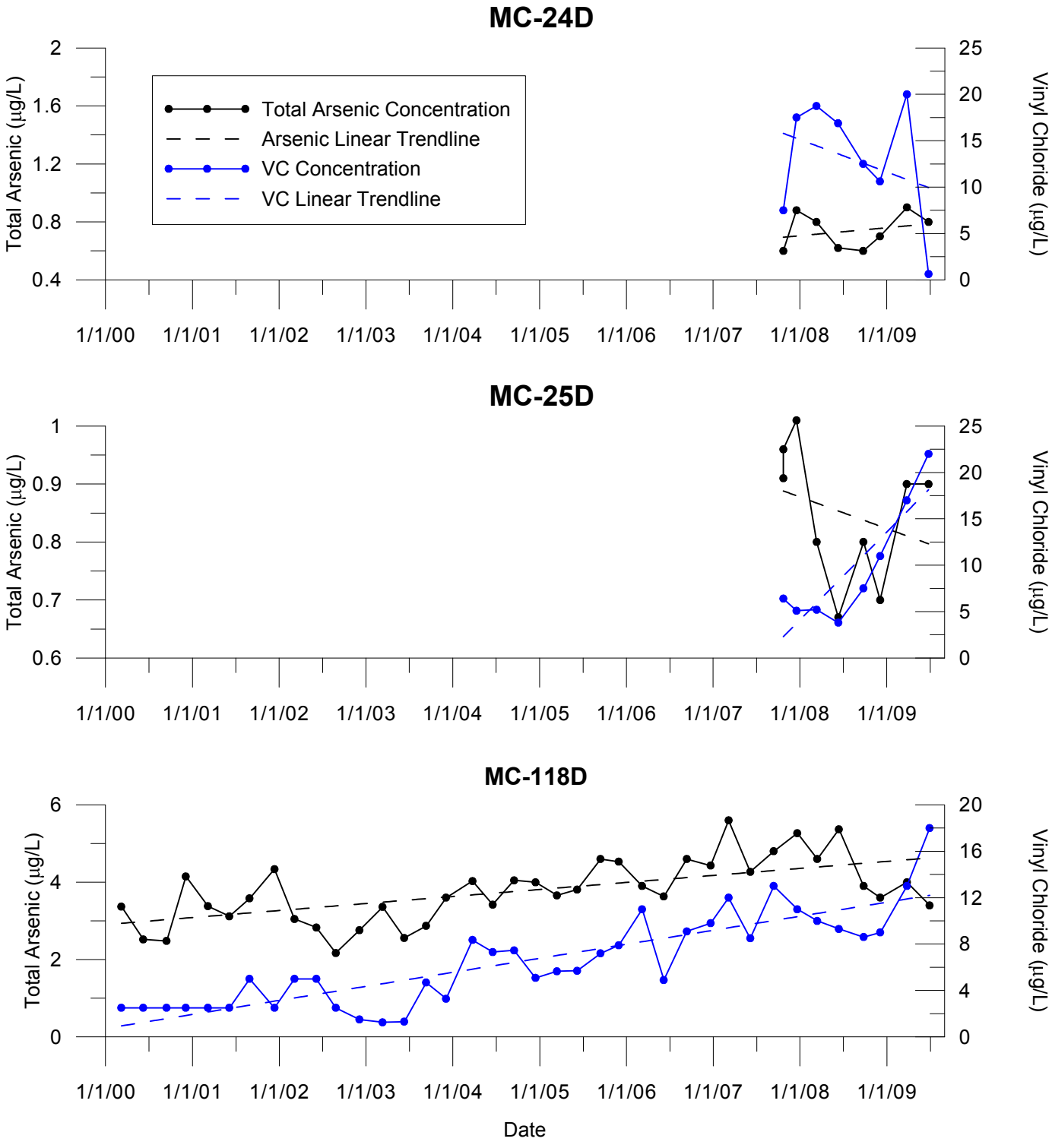
amec

ARSENIC AND CHLORINATED COMPOUNDS VERSUS TIME
Lower Aquifer Wells MC-24D, MC-25D, & MC-118D
PSC Washougal Facility, Washougal, Washington

Project No. 9625

Figure No. **O-31**

P:\9625 - PSC Washougal\3000 REPORT\2009 RI FS Report\Agency Draft\Appendix P Arsenic\Figures\FigureP-29_As vs chlorinateds_Lower.grf



Abbreviations: µg/L = micrograms per liter
VC = vinyl chloride

Note: 1. Value plotted is one-half the reporting limit when analyte was not detected.

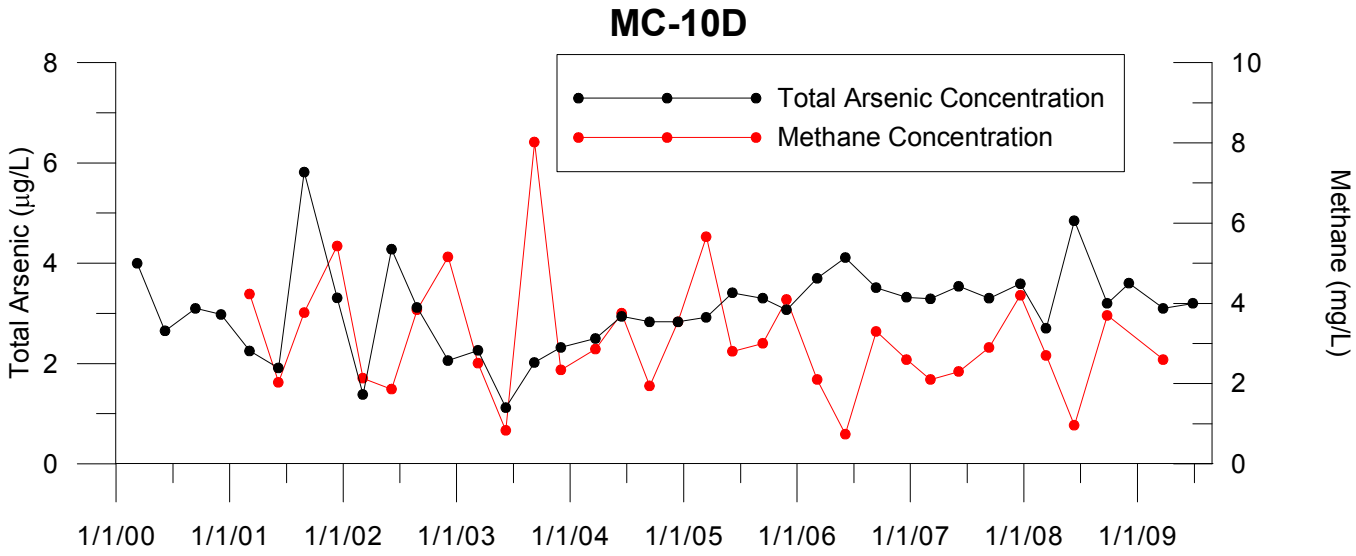
amec

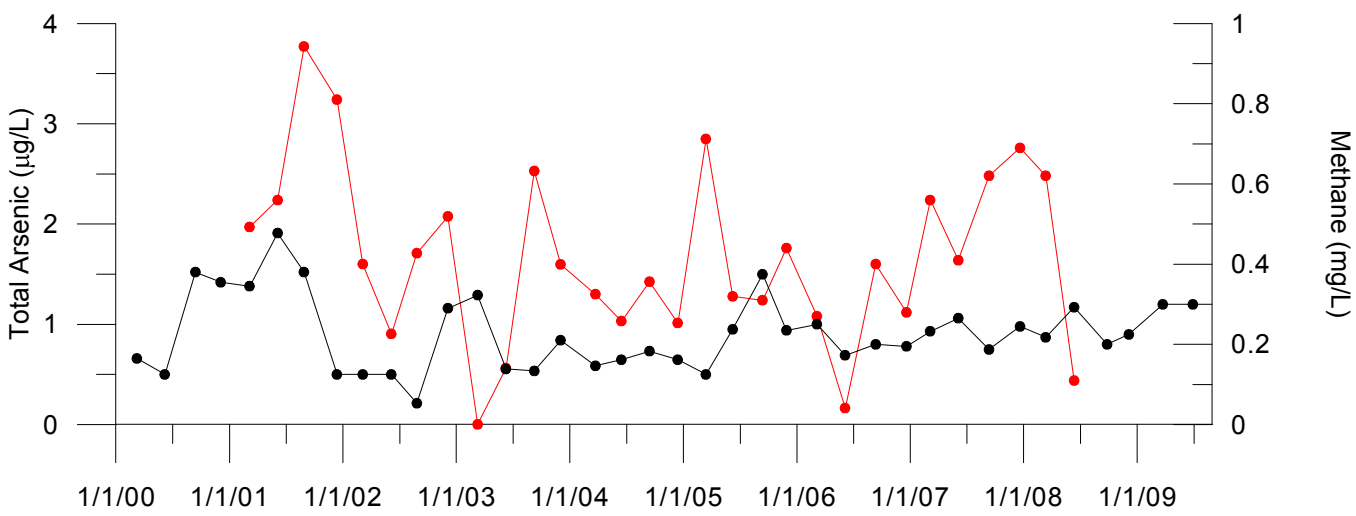
ARSENIC AND VINYL CHLORIDE VERSUS TIME
Lower Aquifer Wells MC-24D, MC-25D & MC-118D
PSC Washougal Facility, Washougal, Washington

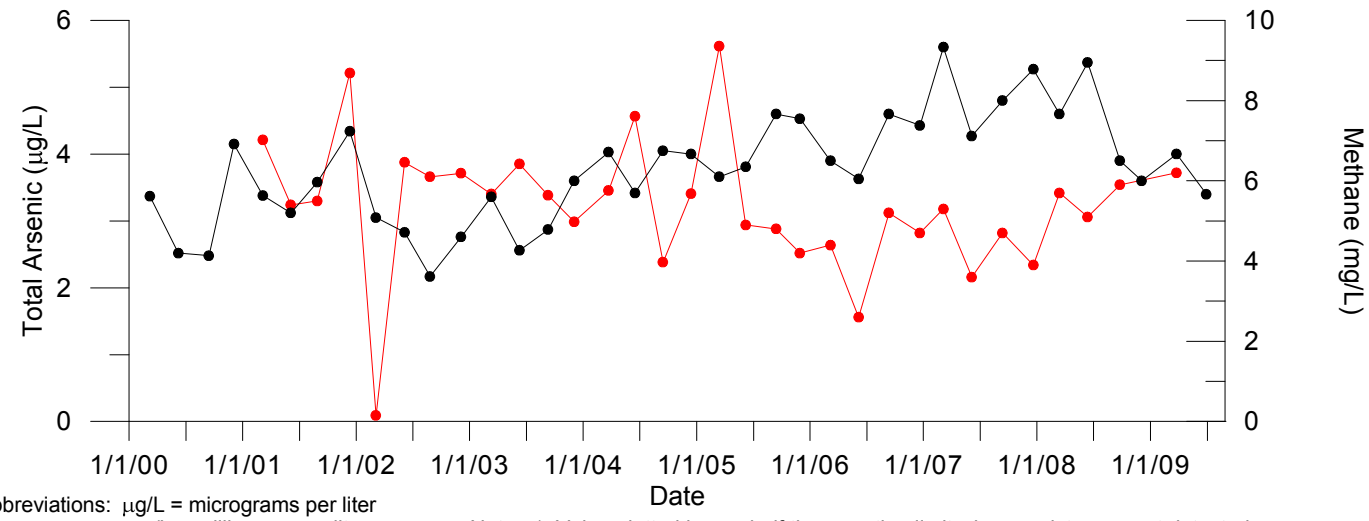
Project No.
9625

Figure No.
O-32

P:\9625 - PSC Washougal\3000 REPORT\2009 RI FS Report\Agency Draft\Appendix P Arsenic\Figures\FigureP-30_As vs VC_Lower.grf







Abbreviations: µg/L = micrograms per liter
mg/L = milligrams per liter

Note: 1. Value plotted is one-half the reporting limit when analyte was not detected.

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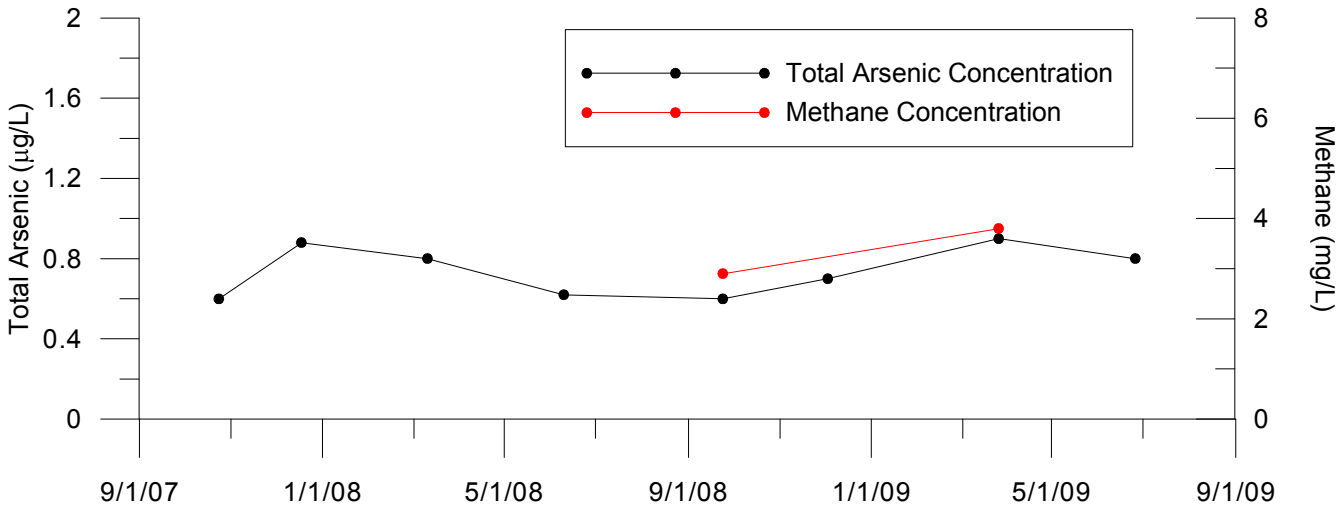
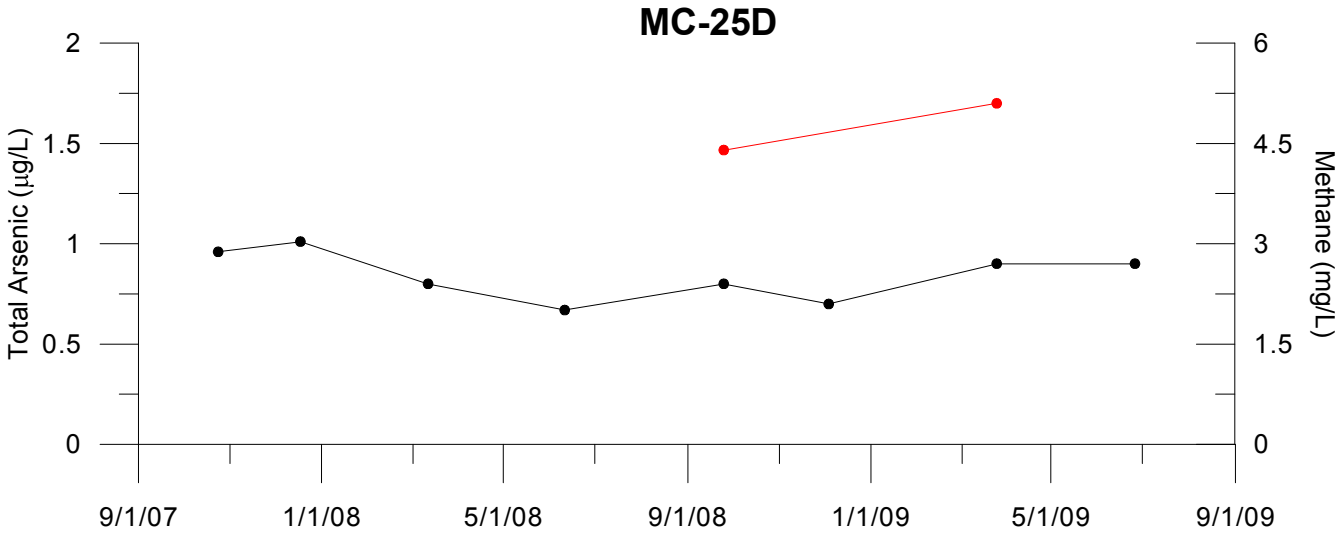
ARSENIC AND METHANE VERSUS TIME
Lower Aquifer Wells MC-10D, MC-12D, & MC-118D
PSC Washougal Facility, Washougal, Washington

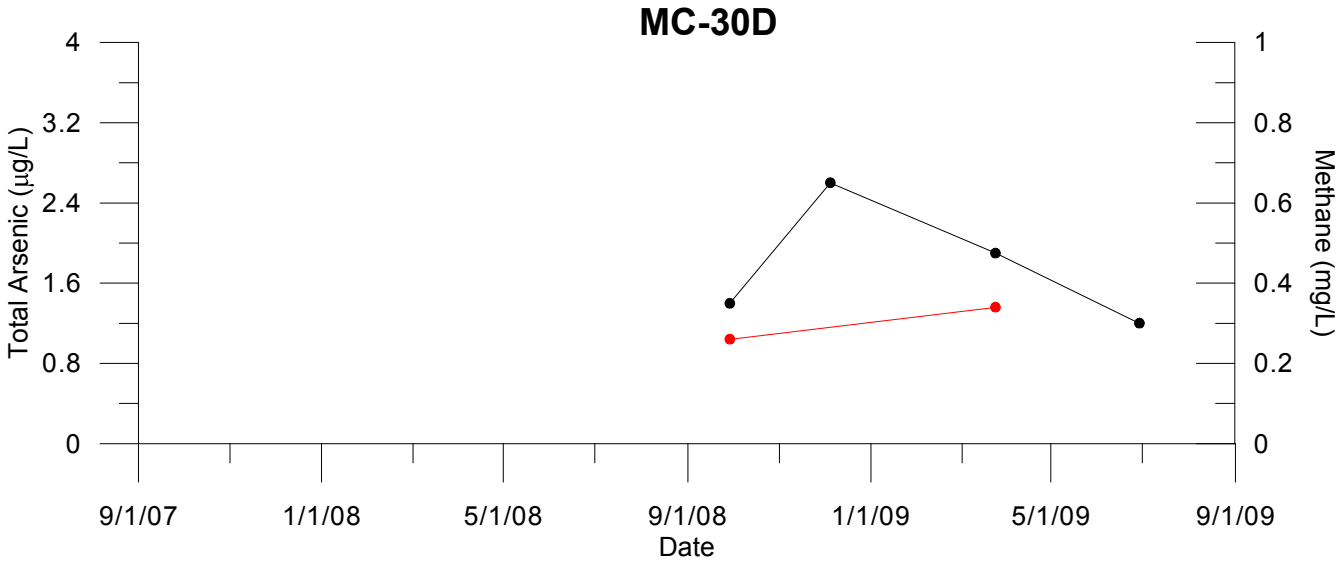
Project No.
9625

Figure No.
O-33

P:\9625 - PSC Washougal\3000 REPORT\2009 RI FS Report\Agency Draft\Appendix P Arsenic\Figures\FigureP-31_As vs CH4_Lower_a.grf







Abbreviations: µg/L = micrograms per liter
mg/L = milligrams per liter

Note: 1. Value plotted is one-half the reporting limit when analyte was not detected.

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ARSENIC AND METHANE VERSUS TIME
Lower Aquifer Wells MC-24D, MC-25D, & MC-30D
PSC Washougal Facility, Washougal, Washington

Project No.
9625

Figure No.
O-34

P:\9625 - PSC Washougal\3000 REPORT\2009 RI FS Report\Agency Draft\Appendix P Arsenic\Figures\FigureP-32_As vs CH4_Lower_b.grf

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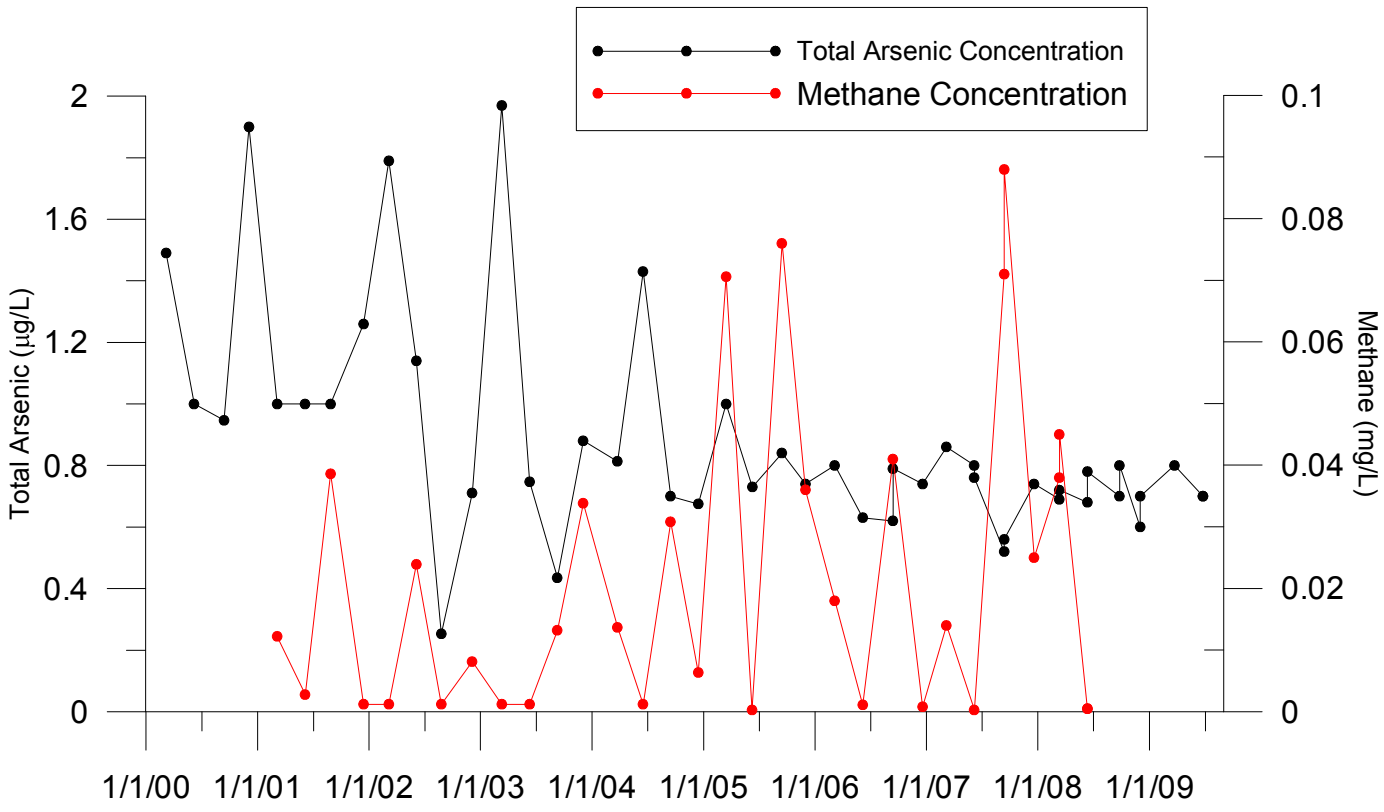
MC-17D



Abbreviations: µg/L = micrograms per liter
mg/L = milligrams per liter

Note: 1. Value plotted is one-half the reporting limit when analyte was not detected.

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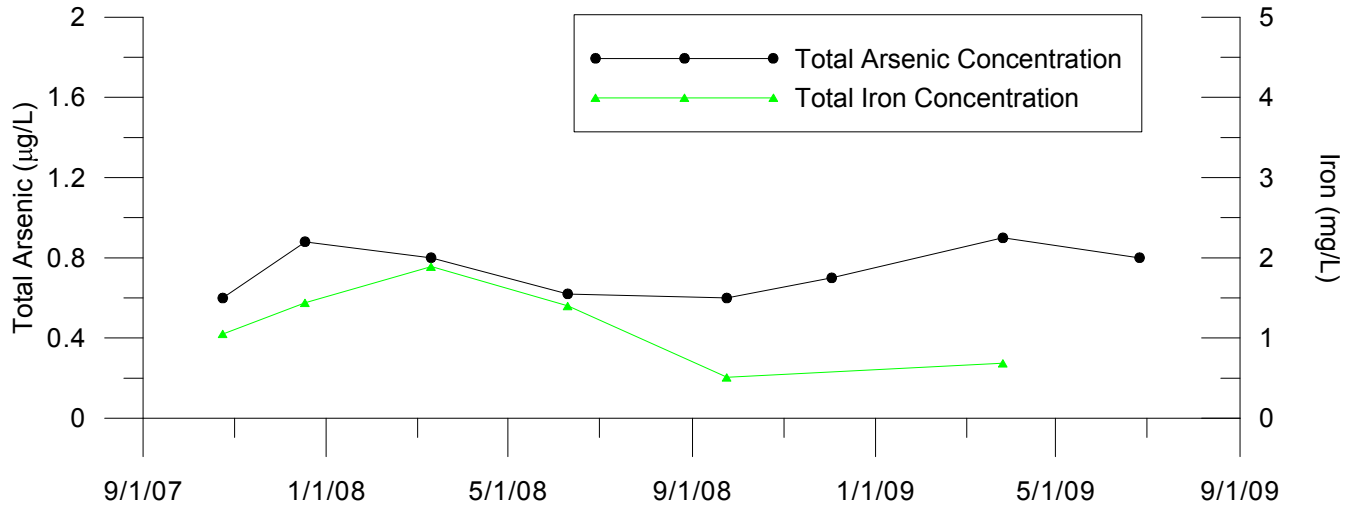
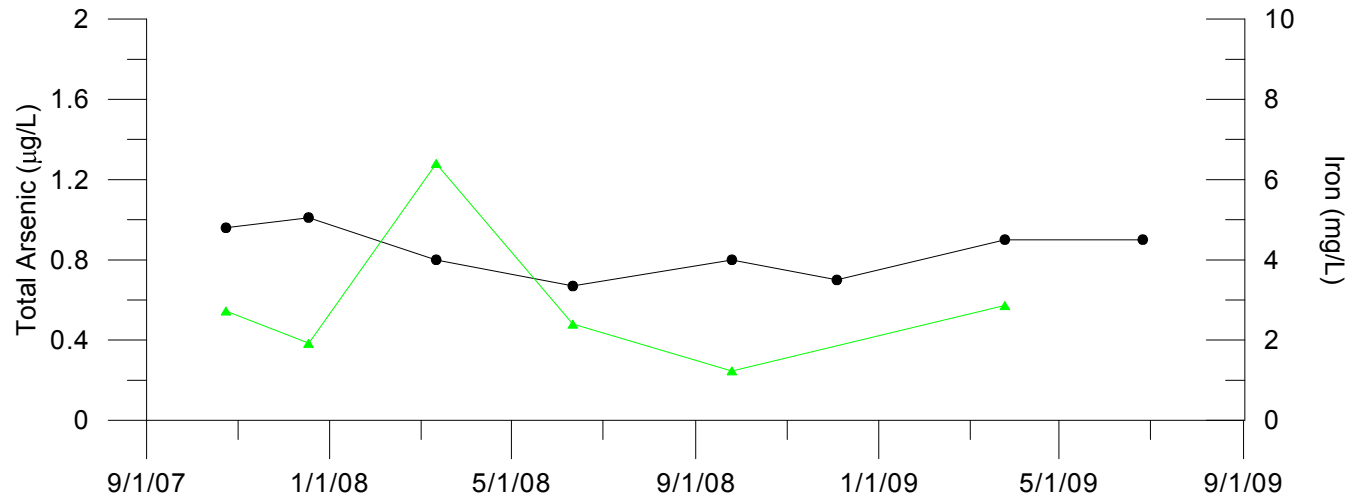
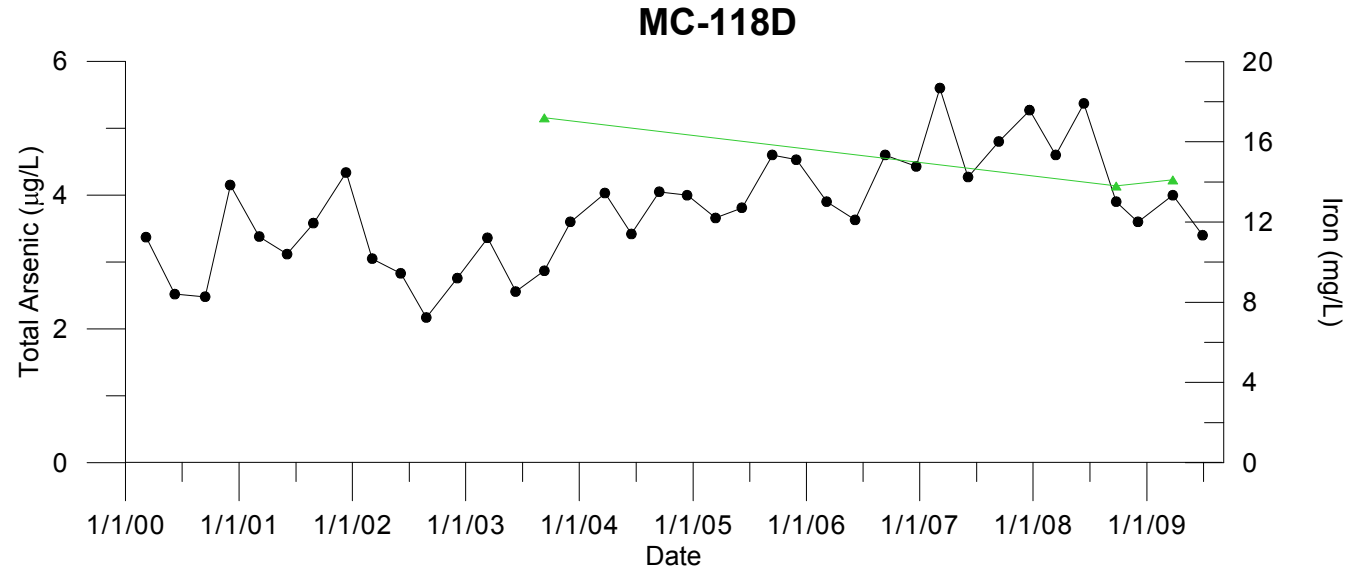
ARSENIC AND METHANE VERSUS TIME
Lower Aquifer Well MC-17D
PSC Washougal Facility, Washougal, Washington

Project No. 9625

Figure No. **O-35**







Abbreviations: µg/L = microgram per liter
mg/L = milligrams per liter

Note: 1. Value plotted is one-half the reporting limit when analyte was not detected.

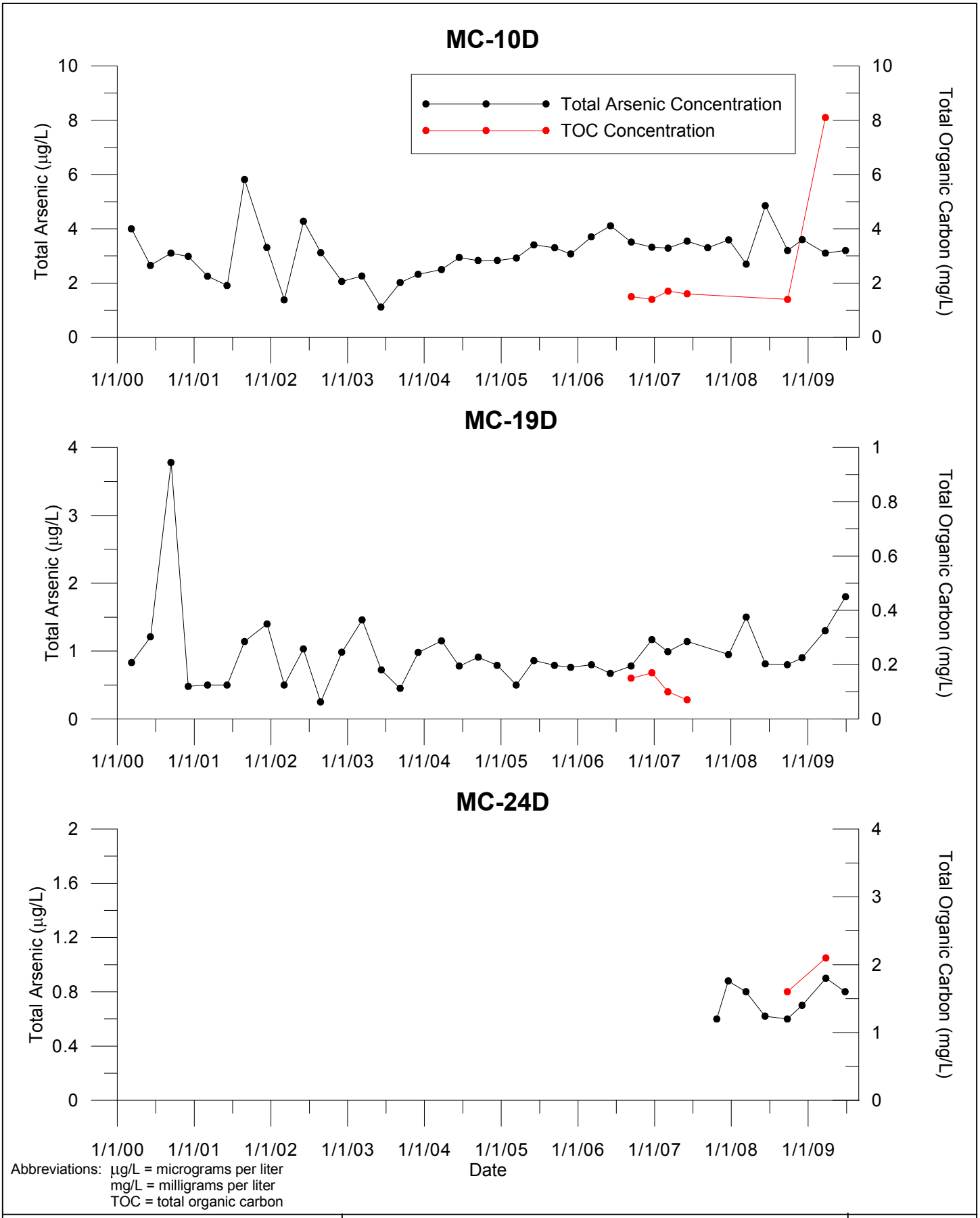
amec

ARSENIC AND IRON VERSUS TIME
Lower Aquifer Wells MC-24D, MC-25D, & MC-118D
PSC Washougal Facility, Washougal, Washington

Project No.
9625

Figure No.
O-36

P:\9625 - PSC Washougal\3000 REPORT\2009 RI FS Report\Agency Draft\Appendix P Arsenic\Figures\FigureP-33_As vs Fe_Lower.grf



Abbreviations: µg/L = micrograms per liter
mg/L = milligrams per liter
TOC = total organic carbon

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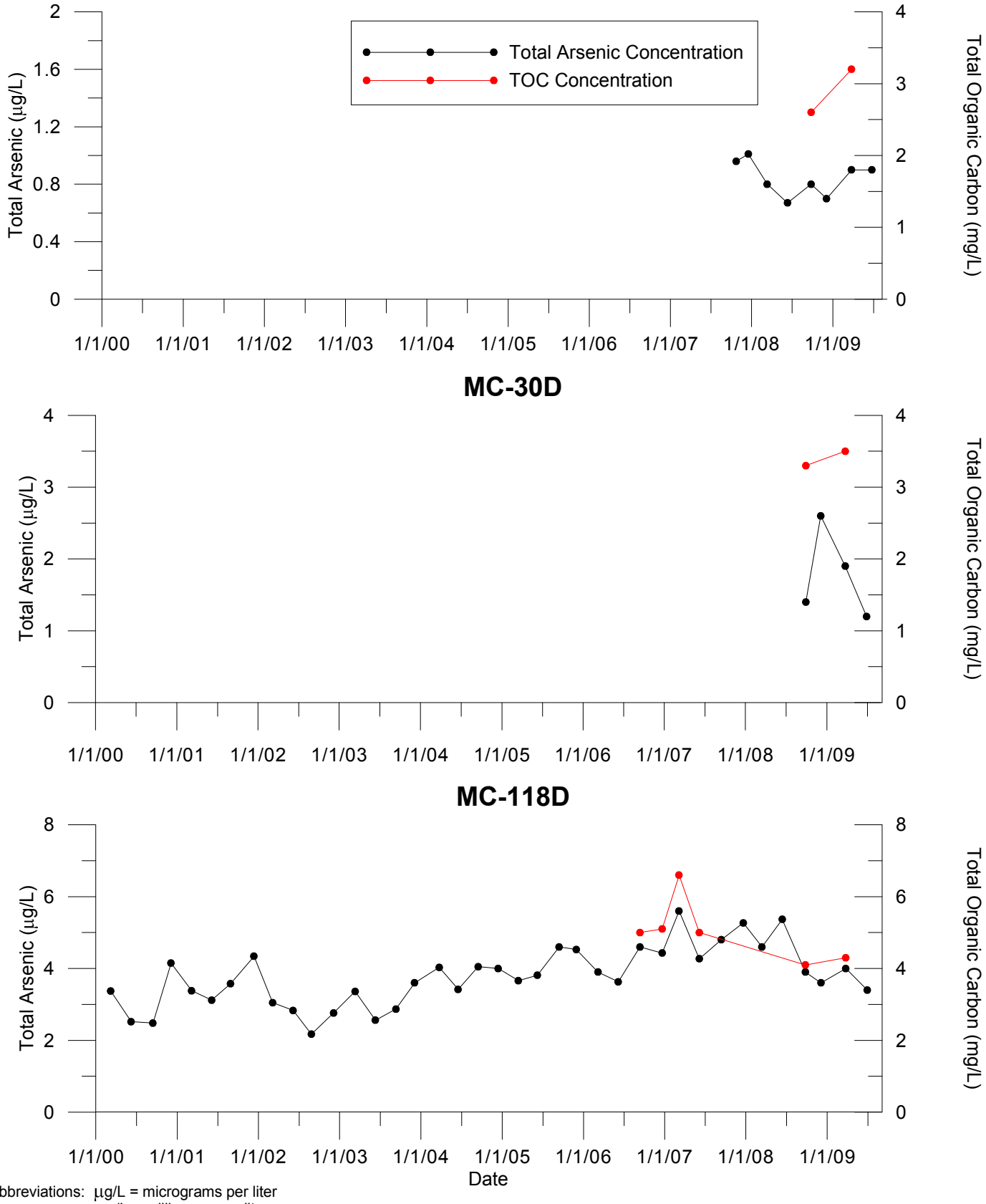
ARSENIC AND TOTAL ORGANIC CARBON VERSUS TIME
Lower Aquifer Wells MC-10D, MC-19D & MC-24D
PSC Washougal Facility, Washougal, Washington

Project No.
9625

Figure No.
O-37

P:\9625 - PSC Washougal\3000 REPORT\2009 RI FS Report\Agency Draft\Appendix P Arsenic\Figures\FigureP-34_As vs TOC_Lower_a.grf



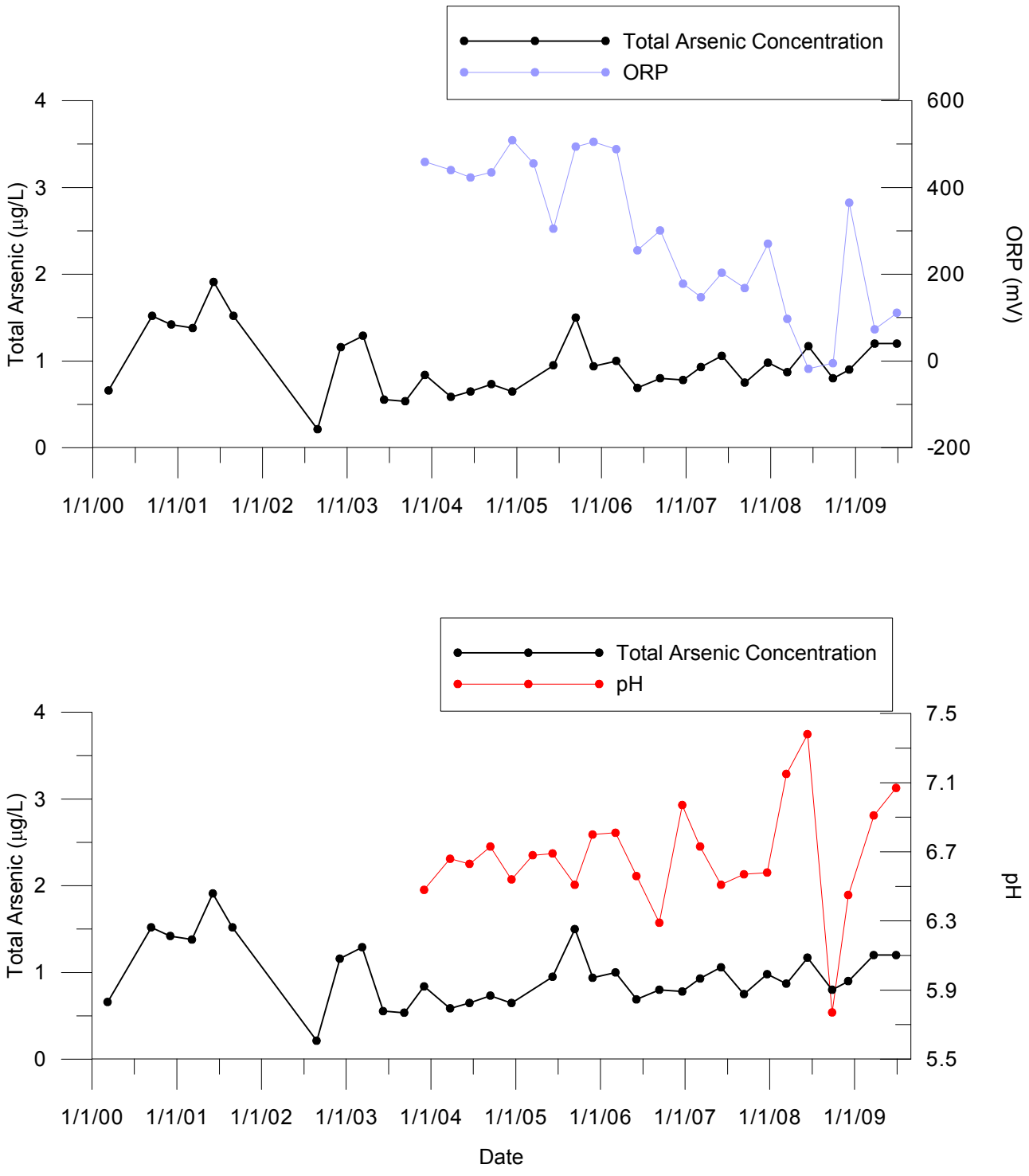
Abbreviations: µg/L = micrograms per liter
mg/L = milligrams per liter
TOC = total organic carbon

ARSENIC AND TOTAL ORGANIC CARBON VERSUS TIME
Lower Aquifer Wells MC-25D, MC-30D & MC-118D
PSC Washougal Facility, Washougal, Washington

Project No. 9625

Figure No. **O-38**

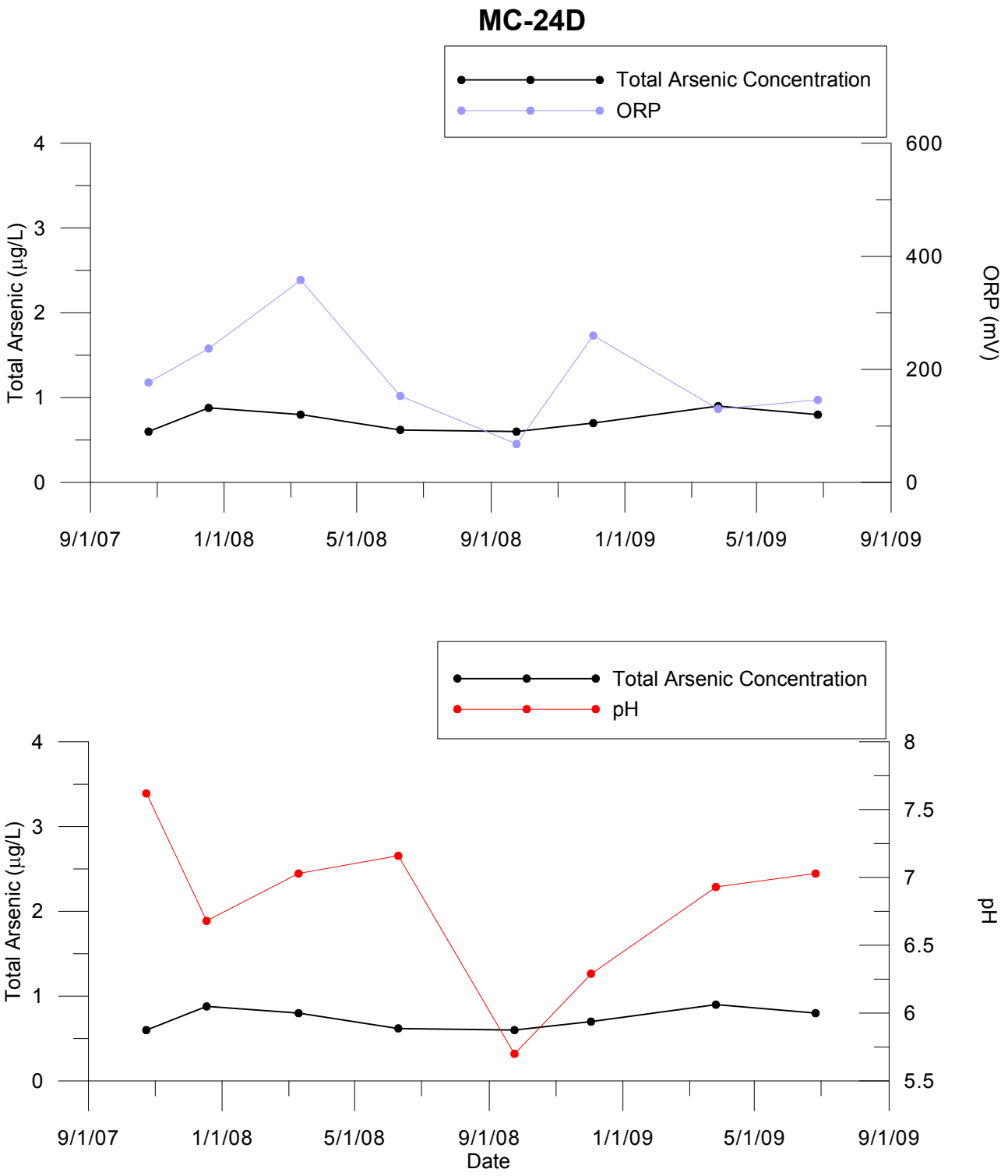
P:\9625 - PSC Washougal\3000 REPORT\2009 RI FS Report\Agency Draft\Appendix P Arsenic\Figures\FigureP-35_As vs TOC_Lower_b.grf



Abbreviations: µg/L = micrograms per liter
mV = millivolts
ORP = oxidation reduction potential

amec	ORP, PH, AND ARSENIC VERSUS TIME Lower Aquifer Well MC-12D PSC Washougal Facility, Washougal, Washington	Project No. 9625 Figure No. **O-39**

P:\9625 - PSC Washougal\3000 REPORT\2009 RI FS Report\Agency Draft\Appendix P Arsenic\FiguresFigureP-36_pH&ORPLower_a.grf



Abbreviations: µg/L = micrograms per liter
mV = millivolts
ORP = oxidation reduction potential

ORP, PH, AND ARSENIC VERSUS TIME
Lower Aquifer Well MC-24D
PSC Washougal Facility, Washougal, Washington

Project No. 9625

Figure No. **O-40**

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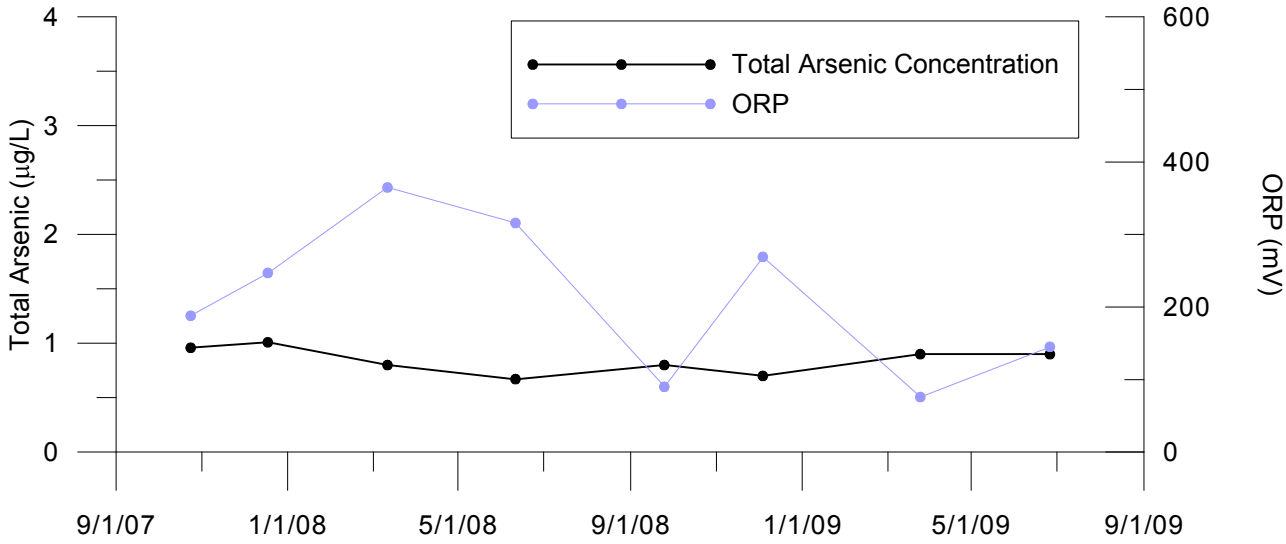
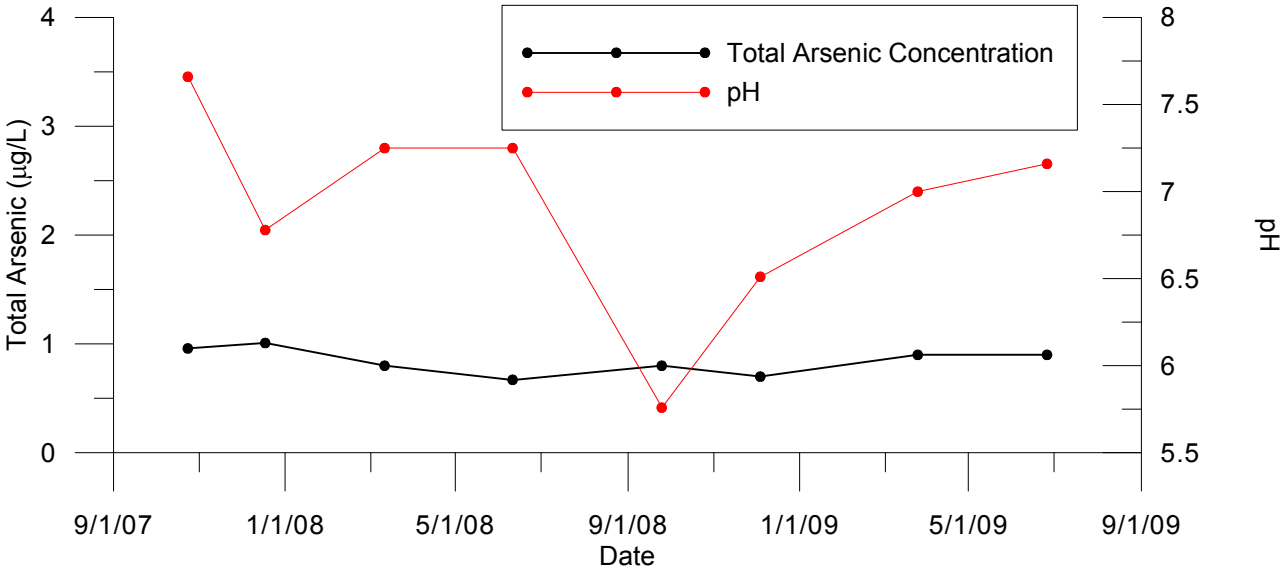
MC-25D

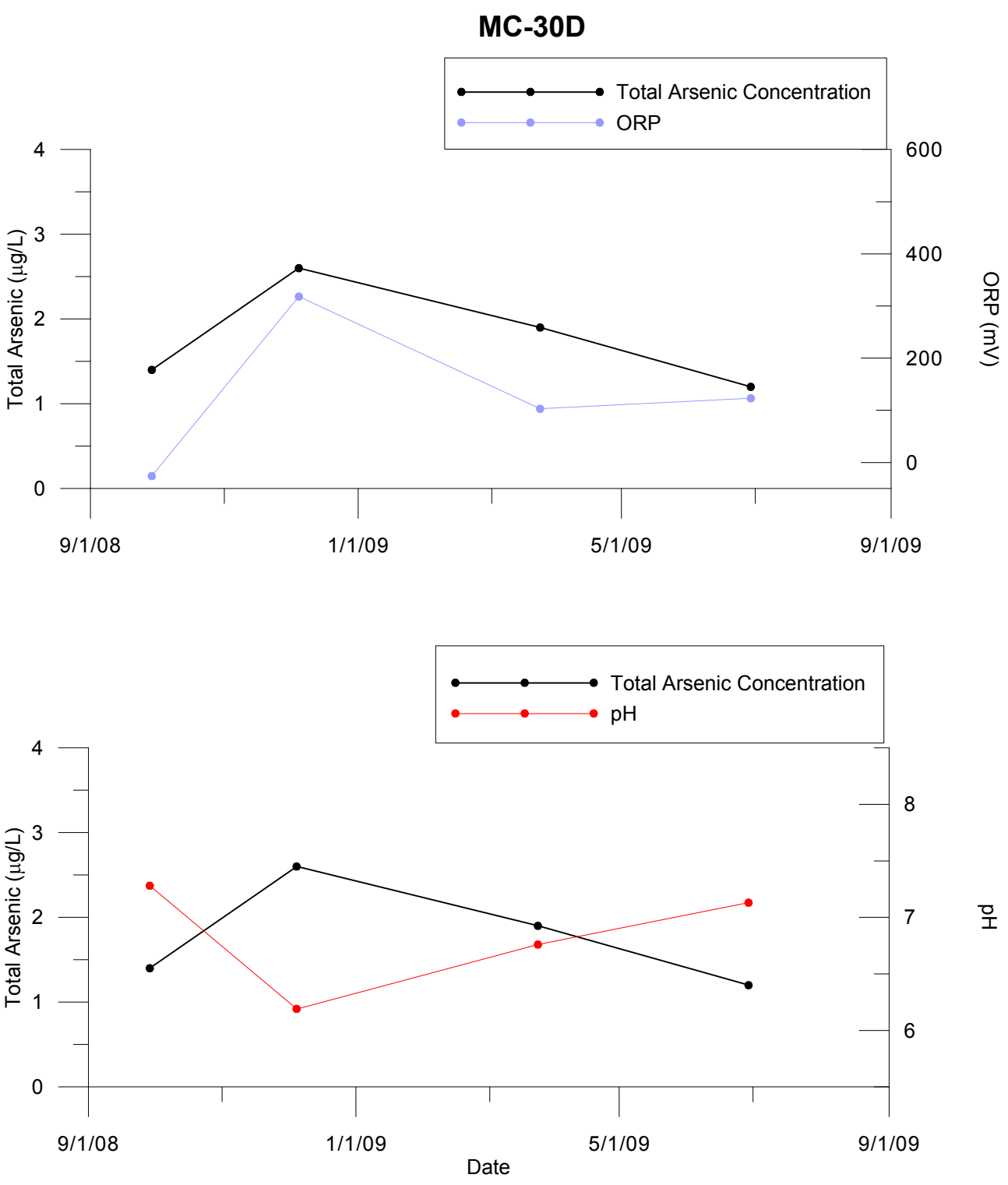




Abbreviations: g/L = micrograms per liter
mV = millivolts
ORP = oxidation reduction potential

amec	ORP, PH, AND ARSENIC VERSUS TIME Lower Aquifer Well MC-25D PSC Washougal Facility, Washougal, Washington	Project No. 9625 Figure No. **O-41**

P:\9625 - PSC Washougal\3000 REPORT\2009 RI FS Report\Agency Draft\Appendix P Arsenic\Figures\FigureP-38_pH&ORPLower_c.grf



Abbreviations: µg/L = micrograms per liter
mV = millivolts
ORP = oxidation reduction potential

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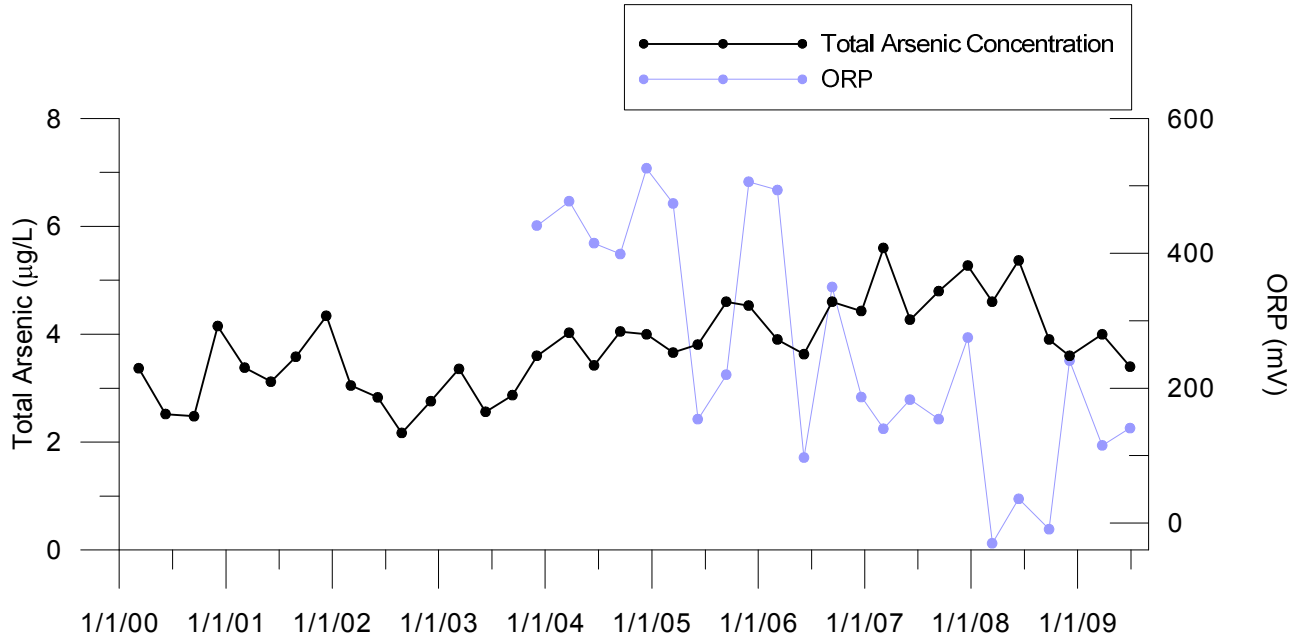
amec

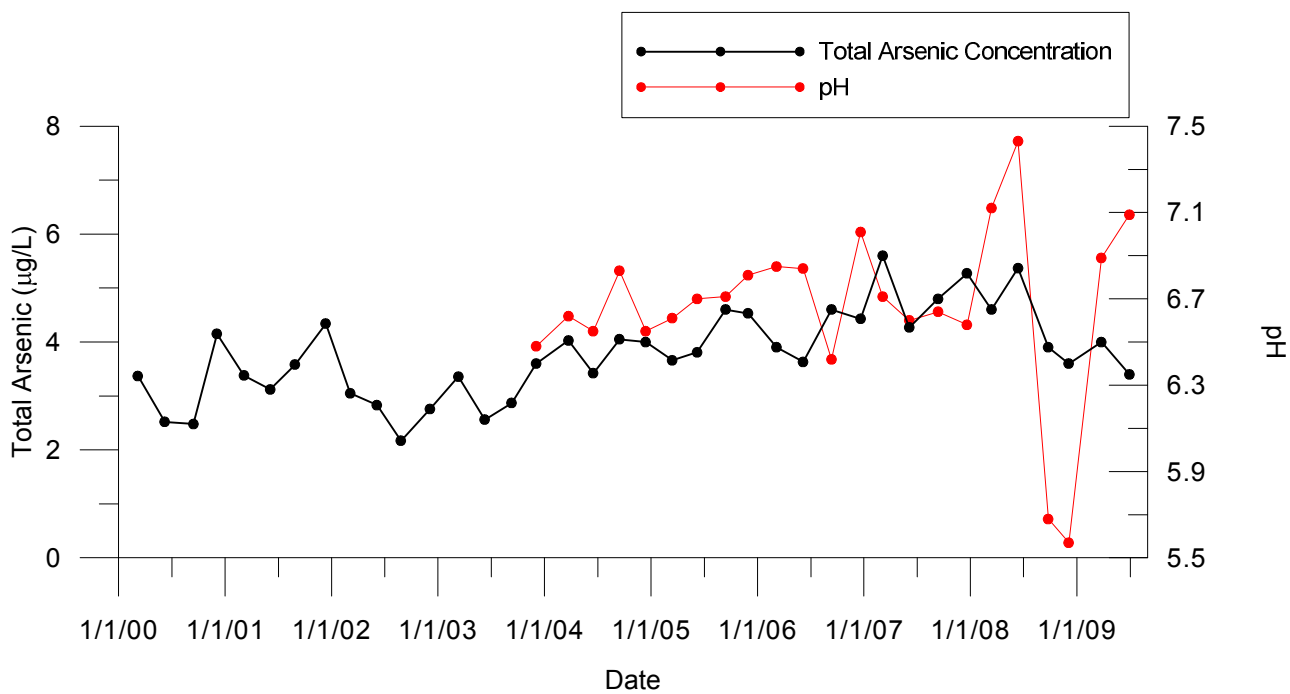
ORP, PH, AND ARSENIC VERSUS TIME
Lower Aquifer Well MC-30D
PSC Washougal Facility, Washougal, Washington

Project No.
9625

Figure No.
O-42

MC-118D





Abbreviations: µg/L = micrograms per liter
mV = millivolts
ORP = oxidation reduction potential

amec

ORP, PH, AND ARSENIC VERSUS TIME
Lower Aquifer Well MC-118D
PSC Washougal Facility, Washougal, Washington

Project No.
9625

Figure No.
O-43

P:\9625 - PSC Washougal\3000 REPORT\2009 RI FS Report\Agency Draft\Appendix P Arsenic\Figures\FigureP-40_pH&ORPLower_e.grf

ATTACHMENT O-1

Groundwater Solutions Technical Memorandum

Memorandum

To: Kaia Petersen, Ecology RPM

From: Tong Li, GWS

Date: January 23, 2008

Re: Evaluation of Arsenic occurrence and distribution at PSC- Washougal Facility Site.

The purpose of this technical memorandum is to conduct a preliminary evaluation of groundwater arsenic occurrence and distribution at the former PSC dangerous waste management facility in Washougal, Washington.

Background

The Washougal Facility was constructed as a phenolic resin production plant by the McClary Columbia Corporation in 1978. It was converted to a facility for water solvent recovery as well as oil blending and drum storage in 1981. Chempro bought the facility in 1986 and PSC took over ownership in 1993 by acquiring Burlington Environmental, Inc., which had owned Chempro since 1992.

Multiple investigations and interim actions to characterize and remediate soil and groundwater contaminations have been conducted at the facility since 1984. In addition to organic compounds that were released and migrated into the groundwater, a number of metals were also identified as constituents of potential concern (COPCs) in the groundwater. Arsenic has been consistently detected in elevated concentrations above regulatory cleanup levels in both the Shallow Groundwater Zone and the Lower Aquifer. However, arsenic is also a constituent that occurs naturally in glacial deposits and sand and gravel aquifers with glacial origin. Arsenic is commonly observed as an inorganic cation in shallow groundwater in the Pacific Northwest region.

Data used in this evaluation include four quarters groundwater sampling data and arsenic speciation data from September and December 2006, and March and June 2007. There are 14 Shallow Groundwater Zone and 8 Lower Aquifer Zone monitoring wells included in this study. The well locations are shown in the attached well location map, reproduced from the Remedial Investigation Work Plan

(Geomatrix 2007). Additional monitoring wells and piezometers were installed in September and October 2007. These new wells and piezometers were not included in this arsenic data evaluation. There are four sets of arsenic data for each quarter: arsenic analysis results along with other metals (referring as sampling data in all graphics), total arsenic, As (III), and As (V) from arsenic speciation analysis. In this report, total arsenic represents total concentrations of As (III) and As (V) (or the sum of the two oxidation states of arsenic) rather than conventionally-used total versus dissolved metal concentrations. In general, arsenic sampling results are consistent with the total arsenic concentrations; small variations should be considered within the normal range of lab methodology variations.

Geochemistry of Arsenic Occurrence

Arsenic occurrence in aquifer materials is generally associated with iron oxy-hydroxides and sulfides. A common cause of arsenic occurrence in shallow groundwater is considered to be the reduction of iron oxy-hydroxides in the presence of organic carbon and the release of adsorbed arsenic from the aquifer matrix and materials (Welch et al 2000; Smedley and Kinniburgh 2002).

Arsenic in groundwater occurs in two oxidation states: arsenite (As [III]) and arsenate (As [V]). Both As (III) and As (V) adsorb to metal oxides and clay particles, which limit arsenic mobility in groundwater. Naturally occurring arsenic in groundwater was thought to be associated with iron oxides reduction and to occur under more reduced aquifer geochemical conditions (Kelly et al 2005).

Groundwater geochemical conditions at the Washougal site have not been fully characterized and this remains an important task for the remedial investigation (RI) in 2008. Preliminary review groundwater sampling data collected from the third quarter 2006 through the second quarter 2007 shows that dissolved oxygen (DO) concentrations were mostly greater than 0.2 mg/L and redox potential (ORP) ranged generally between 100 and 250 mV. These DO and ORP values indicate that the shallow aquifer zones at the Washougal site are mostly under aerobic or oxidized conditions. Based on the available data, it cannot be determined whether the geochemical conditions of the Shallow Groundwater or Lower Aquifer zones at Washougal site are favorable for naturally occurring arsenic in groundwater.

pH and ORP measurements as well as arsenic concentrations at all existing and new monitoring wells during the most recent sampling round (September/October 2007) are presented in Table 9. The table shows that pH measurements in later October 2007 were significantly (one to more than 2 units) higher than the pH measurements in September 2007. It is unknown why such variations occurred, and how these pH variations impacted arsenic concentrations in the Shallow Groundwater and Lower Aquifer zones. However, these elevated pH measurements may be, at least partially,

the reason why arsenic concentrations were as low as they were sampled and analyzed in the new monitoring wells.

Arsenic in the Sand Fill Shallow Groundwater Zone

In September 2006, groundwater samples were collected and analyzed for arsenic and arsenic speciation at 11 monitoring wells installed in the Shallow Groundwater Zone. During the following three rounds of sampling, three more wells (MC-20, MC-122, and MC-123) were added to the arsenic sampling and analysis (Tables 1 through 4). Based on the site hydrogeologic conceptual model presented in the Remedial Investigation Work Plan (Geomatrix 2007), wells MC-12 and MC-107 appear to be located upgradient and to the west of the site. Well MC-8 appears to be cross-gradient to the north. Other monitoring wells are either located on the site or at downgradient from the site based on the shallow groundwater flow direction.

In general, MC-14 shows consistently the highest arsenic concentrations at the site, except for the September 2006 monitoring event when the arsenic concentrations at MC-14 were the second highest. The arsenic concentrations at MC-14 range from 29.3 to 54.1 μg/L for the sampling data, and 27.2 to 58.3 μg/L for total arsenic speciation (Figure 1). Well MC-8, located cross-gradient from the former Tank Farm Area, had the lowest arsenic detection among all the monitoring wells. Arsenic concentrations at MC-8 range from 0.4 to 2.2 μg/L (Figure 11). Several other downgradient wells -- MC-15, MC-16, MC-21, MC-17, and MC-1 -- also had elevated arsenic detections in one or more sampling rounds (Figures 2, 3, 10, 4, and 8). Well MC-2, located near the Container Storage Building 2, had the highest detection of 62.6 μg/L during September 2006 (Figure 5).

Wells MC-12 and MC-107 are believed to be located upgradient of the site. Arsenic concentrations from these two wells were also elevated. Arsenic concentrations at wells MC-12 and MC-107 range from 10.6 to 20.2 μg/L and 9.1 to 26.3 μg/L, respectively (Figures 6 and 7). However, moderately high arsenic concentrations in these upgradient wells were generally less elevated and had less seasonal fluctuation than some of the downgradient or on-site wells such as MC-2, MC-14, and MC-15.

Arsenic concentrations at the Shallow Groundwater Zone monitoring wells show a temporal variation pattern that appears to be consistent with precipitation recharge. At most monitoring wells, maximum concentration of the year occurred during September 2006 sampling event, which is the dry season of the year. The lowest arsenic concentration appears to be at the wet season when infiltration recharge from rainfalls is at the highest level. The lowest arsenic concentration of the year occurred in December 2006 at wells MC-21, MC-16, MC-17, MC-1, MC-2, and MC-123. At other wells MC-14, MC-15, MC-13, MC-12, MC-107, MC122, and MC-20, the lowest concentration of the year occurred in March 2007 (Figures 1

through 14). In general, arsenic concentrations at all wells were comparable and low during December 2006 and March 2007, and start to rebound in June 2007.

The spatial and temporal distributions of arsenic speciation data (i.e., As (III) and As (V)) were more complex. In general, arsenite (III) is more predominant oxidation state than arsenate (V) at the Washougal site. However, the As (III)/As (V) ratio varied significantly at different locations and different sampling rounds. Well MC-2 is the only location that has predominantly detected the more reduced state of arsenite in all four quarterly sampling rounds (Figure 5). Well MC-13, located at the opposite northeast corner of the site, also shows predominantly As (III) except in June 2007 (Figure 9). The two upgradient wells, especially MC-107 (Figure 7), show a moderately high As (III)/As (V) ratio in dry season (September 2006) and lower As (III)/As (V) ratio in wet and recharge season (December 2006 and March 2007). This indicates that rainfall infiltration added the extra oxygen needed to transfer As (III) to As (V).

It is generally true that the As (III)/As (V) ratio varies temporally at the same monitoring well locations. In September 2006, As (III)/As (V) ratios in seven wells (MC-17, MC-2, MC-1, MC-12, MC-13, MC-21, and MC-107) were greater than 4 (Table 1), and the ratio was less than 1 in three wells (MC-15, MC-16, and MC-8). During December 2006 sampling event, As (III)/As (V) ratio of greater than 4 occurred only at two wells, MC-13 and MC-16. The As (III)/As (V) ratios at most monitoring wells ranged from 1 to 4, whereas the ratios at wells MC-17 and MC-1 were reversed from September to December 2006 (Tables 1 and 2). A similar reverse pattern was observed for As (III)/As (V) ratio at well MC-123 during third quarter (March 2007) and fourth quarter (June 2007). Arsenic speciation at well MC-123 transferred from predominantly As (III) in March 2007 to predominantly As (V) in June 2007. It should be noted that the most elevated arsenic concentration location, well MC-14, showed a relatively small ratio of As (III)/As (V) ranging from 1.3 to 3.8.

Vinyl chloride (VC) results in all of the Shallow Groundwater Zone wells for the four sampling rounds are also presented in Tables 1 through 4 for comparison with the arsenic concentrations. Wells MC-14, MC-13, MC-20, and MC-123 showed consistently elevated VC detections. Well MC-14 that had shown the highest arsenic detections also had the most elevated VC detections among all of the Shallow Groundwater Zone wells.

Figures 23, 24, and 25 show the temporal trend comparisons of arsenic and VC concentrations at wells MC-14, MC-13, and MC-20 from September 2006 through June 2007 (four sampling events except for MC-20). At wells MC-14 and MC-20, the temporal trends of arsenic and VC appear to be opposite based on limited data evaluated in this study. The VC trend appears to be consistent with arsenic trend at well MC-13. Nevertheless, the arsenic in these wells may be related to the releases and migrations of the organic compounds.

Arsenic in the Lower Aquifer

Groundwater sampling and analysis for arsenic and arsenic speciation were conducted in eight deep wells that were completed in the upper portion of the Lower Aquifer. Based on the site hydrogeological conceptual model presented in the Remedial Investigation Work Plan (Geomatrix 2007) and Ecology's comments on the work plan, the Lower Aquifer groundwater flow direction is highly variable, perhaps on a daily basis (tidal effects) and seasonal changes with river stages. It is difficult to determine which wells are at upgradient or downgradient of site releases. The Lower Aquifer flow directions and gradient will be further characterized during implementation of the RI work plan. Based on the historical tidal study information and on average, wells MC-12D, MC-118D, and MC-13D may be considered upgradient wells for the Lower Aquifer. However, chlorinated organic contamination has been consistently detected at well MC-118D, which precludes MC-118D as a representative upgradient well.

Arsenic concentrations in wells MC-12D and MC-13D are generally around 1 μg/L, approximately one to two orders of magnitude lower than the arsenic concentrations detected in the Shallow Groundwater Zone (Figures 17 and 18). It is unknown that these detected arsenic levels are representative natural background. However, these values are not much higher than observed arsenic concentrations in many Western Washington locations that do not have known groundwater contaminations. In fact, majority of the existing monitoring wells in the Lower Aquifer Zone at the site, including MC-2D, MC-15D, MC-17D, and MC-19D, showed arsenic detections and concentrations similar to the those observed in wells MC-12D and MC-13D (Figures 22, 19, 20, and 21). It is likely that the natural background arsenic level in the Lower Aquifer Zone are consistent to the concentrations that observed in these six Lower Aquifer wells.

Lower Aquifer monitoring wells MC-10D and MC-118D (Figures 15 and 16) showed elevated arsenic concentrations than other wells. It is unknown what the source of arsenic at well MC-10D might be because it is located at the far southwest corner of the site and approximately several hundred feet from the buildings and facility operations. A Shallow Groundwater Zone well should be installed at the MC-10D location paired with MC-10D to understand geochemistry and COPC levels in the Shallow Groundwater Zone. Well MC-118D shows the highest detection of arsenic concentrations among all deep wells on the site. It has also consistently detected other organic contaminations. VC has been detected in well MC-118D at the highest elevated concentrations among all monitoring wells in the Shallow Groundwater and Lower Aquifer zones. It is premature at this point to determine how the arsenic detections in MC-118D are related to site releases or degradations of organic compounds.

Figures 15 through 22 show that temporal variations of arsenic concentrations were insignificant at all Lower Aquifer monitoring wells. The stable arsenic concentrations in the deep wells may indicate that arsenic in the Lower Aquifer have reached a steady state with groundwater flow, recharge and discharge to and from the site. In addition, this may also indicate that geochemistry of the Lower Aquifer does not vary significantly with groundwater elevation fluctuations during the wet and dry seasons.

Arsenic speciation data for the Lower Aquifer wells also clearly divides the wells into two distinct groups. The arsenic oxidation states in the six wells at which arsenic concentrations were mostly below 1 μg/L, wells MC-12D, MC-13D, MC-2D, MC-15D, MC-17D, and MC-19D, were predominantly arsenate (As(V)). On the other hand, elevated arsenic concentrations detected in wells MC-10D and MC-118D were mostly arsenite (As (III)).

As an indicator compound for chlorinated VOCs, VC results for the same sampling events are also presented in Tables 5 through 8. At well MC-118D, VC concentrations were consistently elevated as the highest among all wells, also the highest for arsenic in all Lower Aquifer Zone wells. VC was also several orders of magnitude more elevated at wells MC-15D and MC-2D than other Lower Aquifer Zone wells. However, arsenic concentrations were at the similar low levels in these two wells with other Lower Aquifer Zone wells.

Graphic comparisons of arsenic and VC concentrations at wells MC-118D, MC-15D, and MC-2D for the four sampling events are shown in Figures 26, 27, and 28. Arsenic and VC show a remarkably consistent temporal variation pattern at well MC-118D, with VC concentrations as approximately twice as arsenic concentrations (Figure 26). However, the temporal variation trend appears to be opposite at wells MC-15D and MC-2D, though the magnitude of the variations were relatively small for arsenic.

Conclusions and Recommendations

In general, arsenic occurrences, spatial and temporal distributions at the Washougal site are complex, especially in the Shallow Groundwater Zone. The following summaries the preliminary findings of data evaluation based on four quarterly sampling and arsenic speciation results:

- Arsenic concentrations are one to two orders of magnitude more elevated in the Shallow Groundwater Zone than those observed in the upper portion of the Lower Aquifer. Based on limited data, elevated arsenic concentrations observed in the Shallow Groundwater Zone should be considered a site related or released constituent of concern.

- The most elevated arsenic concentrations in the Shallow Groundwater Zone occurred at downgradient of Former Tank Farm area (MC-14) and the south of the Container Storage Building 2 (MC-2).

- Several downgradient wells along the site's eastern boundary, including MC-15, MC-16, and MC-123, appear to have more elevated arsenic detections than other areas.

- Arsenic concentrations in the Shallow Groundwater Zone varied considerably with time. It appears that arsenic was either diluted by rainfall infiltration or precipitated because of changes in shallow groundwater geochemistry during December 2006 and March 2007 wet season sampling rounds.

- Arsenic concentrations in most deep wells completed in the upper portion of the Lower Aquifer, except for wells MC-10D and MC-118D, are believed not to be elevated above natural background levels.

- Arsenic concentrations in the Lower Aquifer Zone appear to vary insignificantly over the one-year period and are not impacted by groundwater recharge and discharge fluctuations during dry and wet seasons.

- As (III) occurred more than As (V) in the Shallow Aquifer Zone, especially during the dry seasons. Similar to the total arsenic concentrations, the ratio of As (III)/As (V) varied significantly in both spatial and temporal distributions in the Shallow Groundwater Zone.

- As (V) appears to be predominant in six out of a total of eight deep wells installed in the upper portion of the Lower Aquifer. The concentrations of As (V) were low and appear to within the typical natural background levels for aquifers with alluvial and glacial deposits.

Specific recommendations for further characterization of arsenic occurrence at the Washougal site are as follows:

- Arsenic background level should be determined for both the Shallow Groundwater Zone and the Lower Aquifer. It may be difficult to determine the natural background level for the Shallow Groundwater Zone. However, an area background should be determined.

- Seasonal variations in arsenic concentrations should be considered when the area background level is statistically calculated.

- Arsenic seasonal variation patterns and trends in the Shallow Groundwater Zone should be further evaluated and confirmed with more historical data, especially for the wells with consistently higher detections. In addition,

historical groundwater data with acceptable data quality and the most recent arsenic data in several Shallow Groundwater Zone wells and wells MC-118D and MC-10D should be evaluated to assess if there is a spatial and temporal "release" pattern.

- Historical soil data did not indicate any elevated arsenic concentrations or soil sources in previous characterizations. However, arsenic soil data quality should be assessed as part of the data quality assessment conducted in the RI.

- Relationship between arsenic concentration and pH/Eh should be further characterized. Specifically, ORP versus arsenic relationships should be evaluated and compared between upgradient and downgradient wells.

- Temporal and spatial variations in historical pH measurements should be assessed. Relationships between arsenic concentrations and pH measurements should be evaluated for both Shallow Groundwater and Lower Aquifer zone wells.

- Relationship between arsenic and organic contaminants and total organic content (TOC) should be further characterized to determine whether elevated arsenic concentrations are related to released contaminants (such as chlorinated VOC) or natural organics (such as peaty layers intersected by well screens).

- Arsenic and iron speciation should be continuously analyzed in all Shallow Groundwater Zone wells and wells MC-10D and MC-118D. Relationship between arsenic and ferric/ferrous iron concentrations should be further characterized.

- Consistent detections of total arsenic and elevated As (III)/As (V) ratios in wells MC-118D and MC-10D should be further monitored and evaluated. A new monitoring well should be installed in the Shallow Groundwater Zone near well MC-10D to characterize shallow groundwater quality at this area.

- Arsenic concentrations and As (III)/As (V) speciation results reported in the Quarterly Groundwater Reports should be checked for entry errors.

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Table 1. Q1 (9/12/06-9/14/06) Shallow Groundwater Arsenic and VC Data
(concentrations in μg/L)

Well ID	Sampling Data	Total As	As (III)	As (v)	Ratio As (III)/As (V)	Vinyl Chloride
MC-14	54.1	58.6	33	25.5	1.3	2.8
MC-15	46.9	43.6	14.3	29.3	0.5	0.031
MC-16	46.3	48.5	16.9	31.6	0.5	0.048
MC-17	36.1	38.4	41	<2	>21	<0.0023
MC-2	62.6	62.1	64.8	<4	>16	0.0037
MC-1	14.4	12.9	11.5	1.4	8.2	0.14
MC-12	20.3	27.8	22.3	5.5	4.1	<0.0023
MC-13	11.2	12.5	10.6	2	5.3	0.47
MC-21	16.8	10.4	13	<0.4	>33	0.24
MC-8	1.24	1.28	0.5	0.8	0.6	0.21
MC-107	26.4	27.3	23.7	3.6	6.6	0.021
MC-122	NS	NS	NS	NS	NS	NS
MC-123	NS	NS	NS	NS	NS	NS
MC-20	NS	NS	NS	NS	NS	NS

Note: NS – Not sampled

Table 2. Q2 (12/19/06-12/21/06) Shallow Groundwater Arsenic and VC Data
(concentrations in μg/L)

Well ID	Sampling Data	Total As	As (III)	As (v)	Ratio As (III)/As (V)	Vinyl Chloride
MC-14	40.5	38.8	30.7	8	3.8	6.0
MC-15	2.2	2.1	1.7	0.5	3.4	<0.0023
MC-16	6.9	7.9	6.6	1.3	5.1	0.0067
MC-17	1.9	1.9	0.6	1.4	0.4	<0.0023
MC-2	14.1	16.3	12	4.3	2.8	0.0055
MC-1	0.62	5.8	0.1	0.5	0.2	<0.0023
MC-12	13.8	14.4	9.7	4.7	2.1	<0.0023
MC-13	5.9	5.7	5.1	0.6	8.5	0.47
MC-21	5.8	6.1	4.1	2	2.1	0.059
MC-8	1.6	1.6	0.02	1.6	0.01	<0.0023
MC-107	10.2	11.5	6.4	5.2	1.2	<0.0023
MC-122	5.4	5.4	3.5	2	1.8	0.082
MC-123	5.1	4.6	2.7	1.9	1.4	1.3
MC-20	2.9	2.8	2.2	0.7	3.1	0.05

Table 3. Q3 (3/05/07-3/08/07) Shallow Groundwater Arsenic and VC Data
(concentrations in μg/L)

Well ID	Sampling Data	Total As	As (III)	As (v)	Ratio As (III)/As (V)	Vinyl Chloride
MC-14	29.3	27.2	17.5	9.8	1.8	20
MC-15	1.6	1.93	0.8	1.09	0.7	<0.0023
MC-16	11.3	11.9	10.7	1.2	8.9	0.052
MC-17	2	1.7	0.75	0.9	0.8	<0.0023
MC-2	14.7	16.1	16.2	<0.4	>40	0.01
MC-1	1.3	1.1	0.4	0.67	0.6	<0.0023
MC-12	10.7	10	8.4	1.6	5.3	<0.0023
MC-13	4	4.5	4.1	<0.4	>10	0.24
MC-21	7.5	8.3	6.8	1.5	4.5	0.081
MC-8	2.2	1.4	0.09	1.4	0.06	0.0058
MC-107	9.1	8.5	4.5	4	1.1	<0.0023
MC-122	1.8	1.5	0.4	1.2	0.3	0.029
MC-123	10.8	10.8	10.3	0.5	21	0.25
MC-20	1.7	1.6	1.54	<0.1	>15	0.16

Table 4. Q4 (6/4/07-6/7/07) Shallow Groundwater Arsenic and VC Data
(concentrations in μg/L)

Well ID	Sampling Data	Total As	As (III)	As (v)	Ratio As (III)/As (V)	Vinyl Chloride
MC-14	37.5	56.3	39	17.5	2.2	7.7
MC-15	16.2	20	18	2.1	8.6	0.015
MC-16	21.6	26.2	24.1	2.13	11	0.055
MC-17	12.8	14	0.2	13.8	0.01	<0.0023
MC-2	18	25.5	21.9	3.5	6.3	0.016
MC-1	6.9	7.7	0.3	7.4	0.04	0.087
MC-12	13.3	15.4	12.2	3.2	3.8	<0.0023
MC-13	4.9	5.9	0.14	5.8	0.02	0.83
MC-21	9.1	10.8	9.3	1.6	5.8	0.13
MC-8	0.41	0.4	0.02	0.4	0.05	0.031
MC-107	16.7	19.2	14.8	4.4	3.4	0.0068
MC-122	3	3.02	1.4	1.6	0.9	0.03
MC-123	17.9	18.8	1.4	17.4	0.08	0.19
MC-20	8.3	9.4	1.1	8.3	0.1	0.10

Table 5. Q1 (9/12/06-9/14/06) Lower Aquifer Well Arsenic and VC Data
(concentrations in μg/L)

Well ID	Sampling Data	Total As	As (III)	As (v)	Ratio As (III)/As (v)	Vinyl Chloride
MC-10D	3.51	3.82	2.40	1.42	1.7	0.0043
MC-118D	4.60	4.77	1.00	3.77	0.3	9.1
MC-12D	0.80	0.66	0.34	0.31	1.1	<0.0023
MC-13D	0.80	0.71	<0.04	0.70	<0.06	<0.0023
MC-15D	0.66	0.43	<0.06	0.37	<0.16	0.4
MC-17D	0.79	0.62	0.20	0.62	0.3	<0.0023
MC-19D	0.78	0.57	<0.02	0.57	<0.04	0.0072
MC-2D	0.84	0.64	0.01	0.64	0.02	0.045

Table 6. Q2 (12/19/06-12/21/06) Lower Aquifer Well Arsenic and VC Data
(concentrations in μg/L)

Well ID	Sampling Data	Total As	As (III)	As (v)	Ratio As (III)/As (v)	Vinyl Chloride
MC-10D	3.32	3.39	3.17	<0.001	>3170	0.0041
MC-118D	4.43	4.25	3.61	0.64	5.6	9.8
MC-12D	0.78	0.68	0.34	0.34	1	<0.0023
MC-13D	0.83	0.77	0.01	0.77	0.01	<0.0023
MC-15D	0.54	0.50	0.01	0.50	0.02	1.4
MC-17D	0.74	0.71	0.07	0.65	0.1	<0.0023
MC-19D	1.17	0.65	0.02	0.63	0.03	0.022
MC-2D	0.73	0.67	0.16	0.67	0.24	0.17

Table 7. Q3 (3/05/07- 3/08/07) Lower Aquifer Well Arsenic and VC Data
(concentrations in μg/L)

Well ID	Sampling Data	Total As	As (III)	As (v)	Ratio As (III)/As (v)	Vinyl Chloride
MC-10D	3.29	3.21	2.91	<0.4	>7.3	0.0054
MC-118D	5.60	5.57	4.43	1.14	3.9	12
MC-12D	0.93	0.78	0.38	0.40	0.95	<0.0023
MC-13D	0.92	0.73	NT	0.73	NC	<0.0023
MC-15D	0.58	0.49	0.06	0.44	0.13	1.9
MC-17D	0.86	0.72	0.05	0.67	0.07	<0.0023
MC-19D	0.99	0.67	NT	0.66	NC	0.028
MC-2D	0.80	0.60	0.03	0.57	0.05	0.14

Notes: NC – Not calculated
NT – Not tested (?)

Table 8. Q4 (6/4/07- 6/7/07) Lower Aquifer Well Arsenic and VC Data
(concentrations in μg/L)

Well ID	Sampling Data	Total As	As (III)	As (v)	Ratio As (III)/As (v)	Vinyl Chloride
MC-10D	3.54	4.19	3.61	0.58	6.22	0.0068
MC-118D	4.27	4.66	3.09	1.57	2	8.5
MC-12D	1.06	1.04	0.56	0.47	1.2	<0.0023
MC-13D	0.85	0.79	<0.01	0.79	<0.01	0.0026
MC-15D	0.58	0.52	0.01	0.51	0.03	1.9
MC-17D	0.76	0.80	<0.01	0.80	<0.01	<0.0023
MC-19D	1.14	1.09	0.25	0.84	0.3	0.051
MC-2D	0.74	0.71	0.02	0.70	0.02	0.17

Table 9. pH/ORP/As Data during Most Recent (September/October 2007) Sampling Event

Well	Date	ORP	pH	As [ug/l]
MC-1	Mid-Sep	+133-144	6.6-6.7	18.5
MC-107	Mid-Sep	135-145	6.9-7.3	23.1
MC-10D	Mid-Sep	165-171	6.6-6.8	3.3
MC-118D	Mid-Sep	153-157	6.6-6.7	4.8
MC-12	Mid-Sep	152-157	6.5-6.7	19.5
MC-12D	Mid-Sep	168-182	6.3-6.6	0.8
MC-13	Mid-Sep	173-192	6.1-6.6	9.2
MC-13D	Mid-Sep	179-202	6.4-6.7	0.7
MC-14	Mid-Sep	144-164	6.5-6.6	69.7
MC-15	Mid-Sep	179-181	6.6-6.8	43.3
MC-15D	Mid-Sep	189-207	6.3-6.7	0.4
MC-16	Mid-Sep	171-174	6.5-6.6	39.8
MC-17	Mid-Sep	149-153	6.5-6.6	44.3
MC-17D	Mid-Sep	131-152	6.7-7	0.6
MC-19D	Mid-Sep	126-149	6.6-7	0.8
MC-2	Mid-Sep	137	6.5-6.6	59.5
MC-21	Mid-Sep	151-159	6.9	16.2
MC-2D	Mid-Sep	147-161	6.5-6.8	0.6
MC-8	Mid-Sep	136-147	6.6-7	1.1
MC-122	Late-Oct	63-76	7.6-8.3	8.3
MC-123	Late-Oct	238-253	7.3-7.4	18.6
MC-14D	Late-Oct	137-202	8.6-8.8	1.1
MC-20D	Late-Oct	-26 - 209	8.6-9	1.1
MC-24	Late-Oct	165-196	8.2-9	0.2
MC-24D	Late-Oct	162-177	7.6-8.4	0.6
MC-25	Late-Oct	177-184	8.4-9.3	1.3
MC-25D	Late-Oct	188-195	7.6-7.9	1.0

Note: Data from the most recent Quarterly Report (PSC 2008)

Figure 1. Arsenic Concentrations at Shallow Groundwater Well MC-14

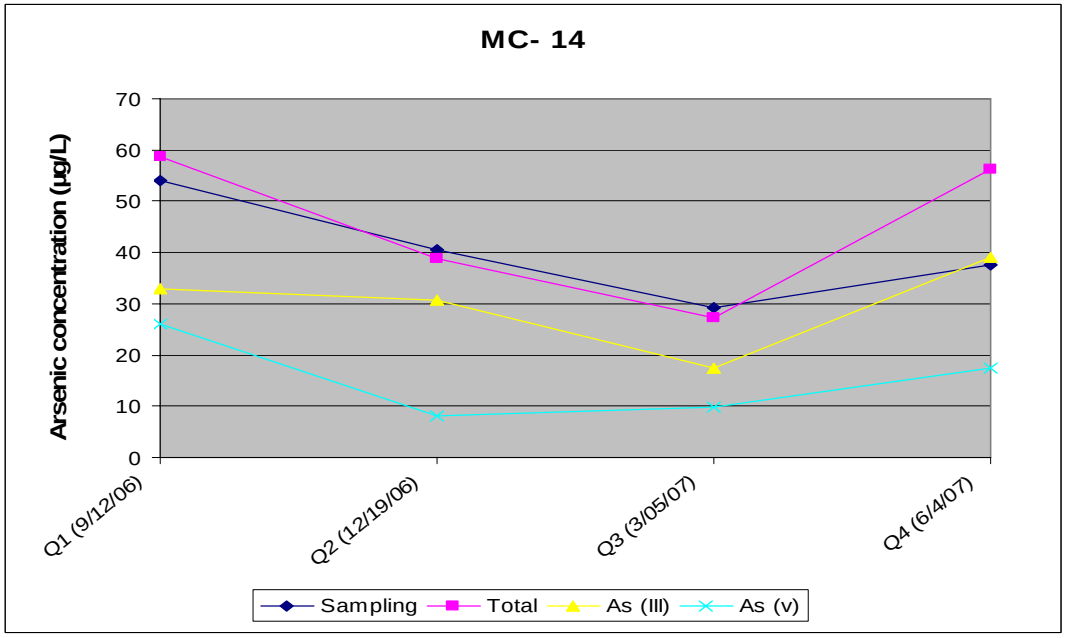


Figure 2. Arsenic Concentrations at Shallow Groundwater Well MC-15

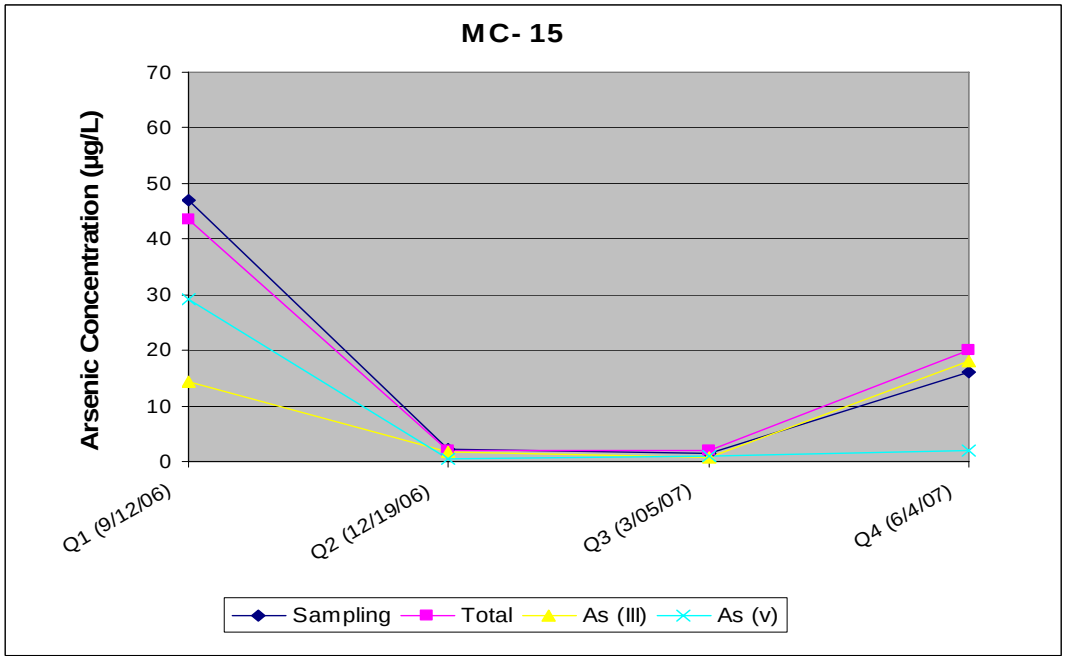


Figure 3. Arsenic Concentrations at Shallow Groundwater Well MC-16

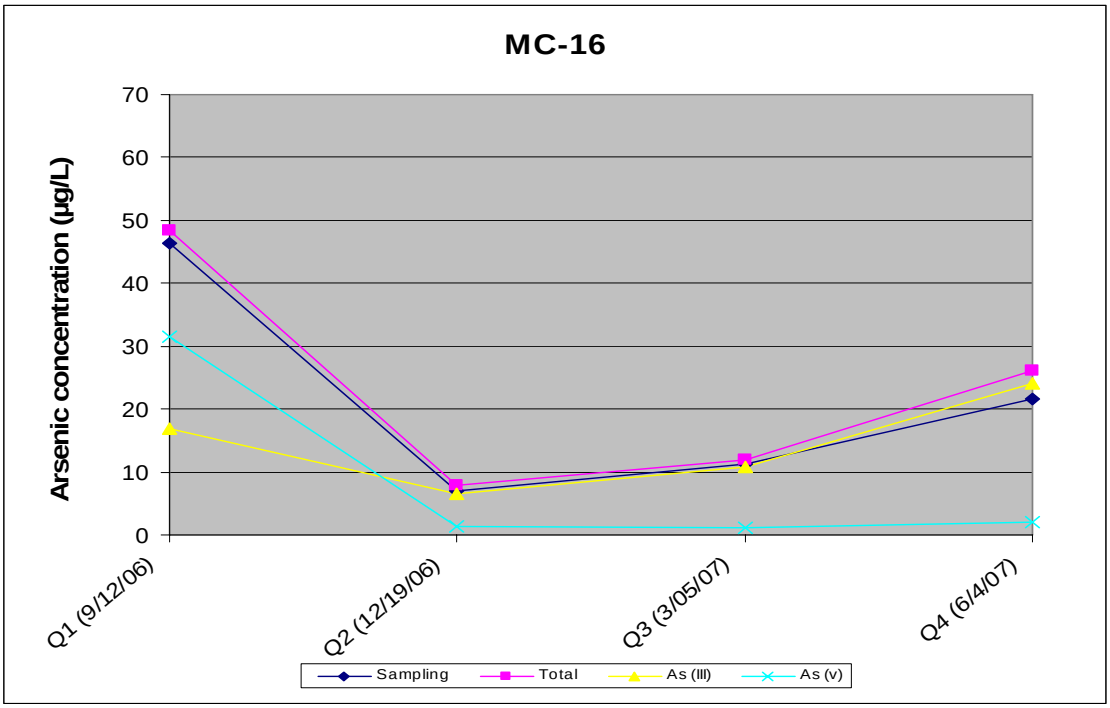


Figure 4. Arsenic Concentrations at Shallow Groundwater Well MC-17

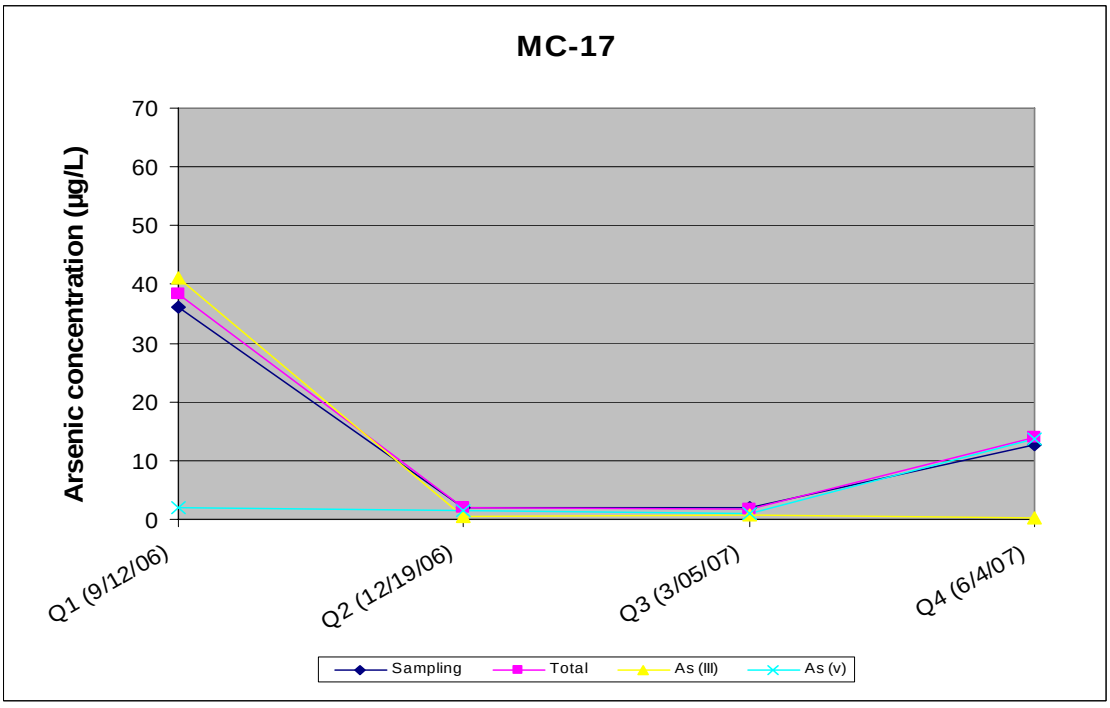


Figure 5. Arsenic Concentrations at Shallow Groundwater Well MC-2

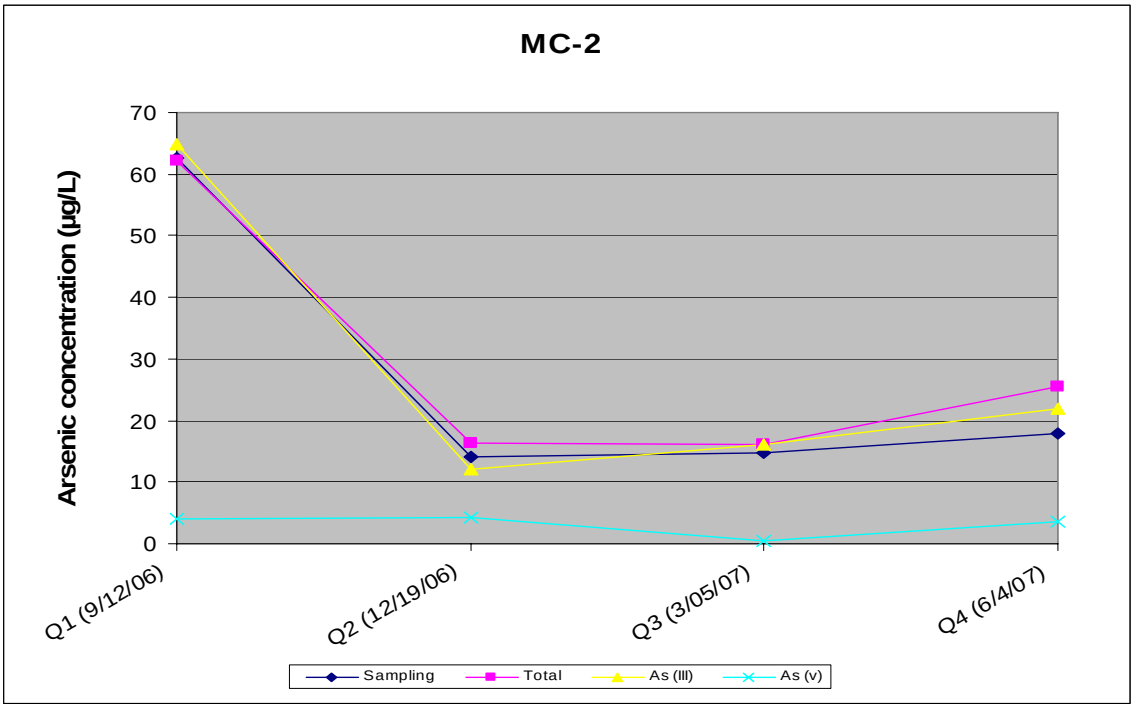


Figure 6. Arsenic Concentrations at Shallow Groundwater Well MC-12

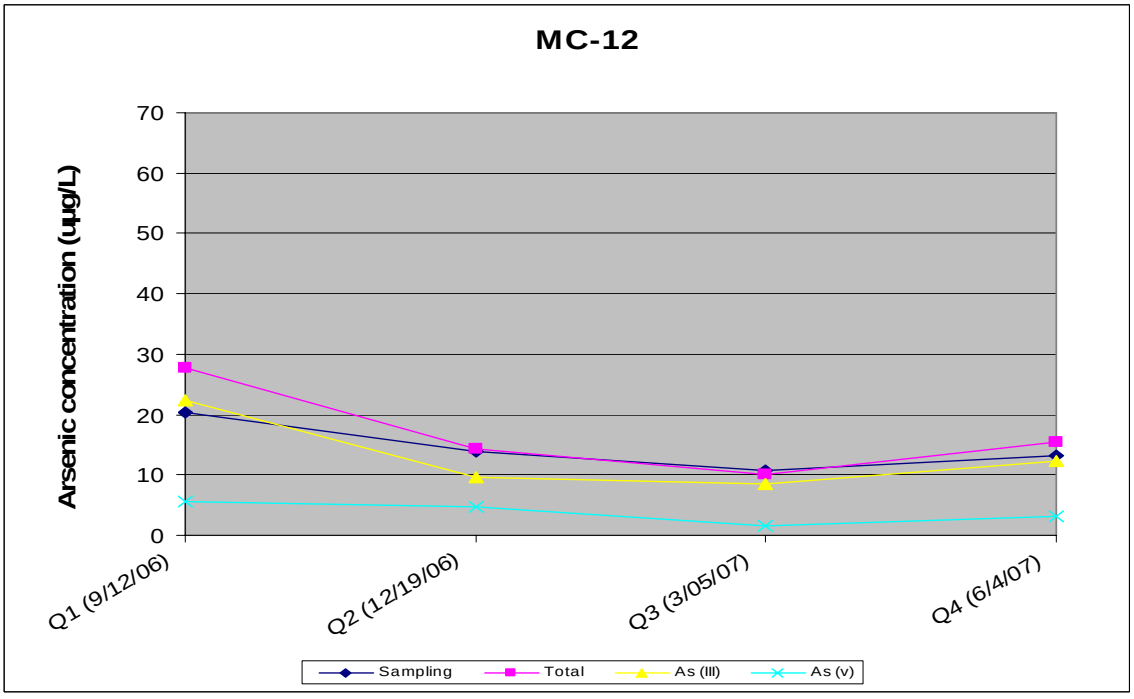


Figure 7. Arsenic Concentrations at Shallow Groundwater Well MC-107

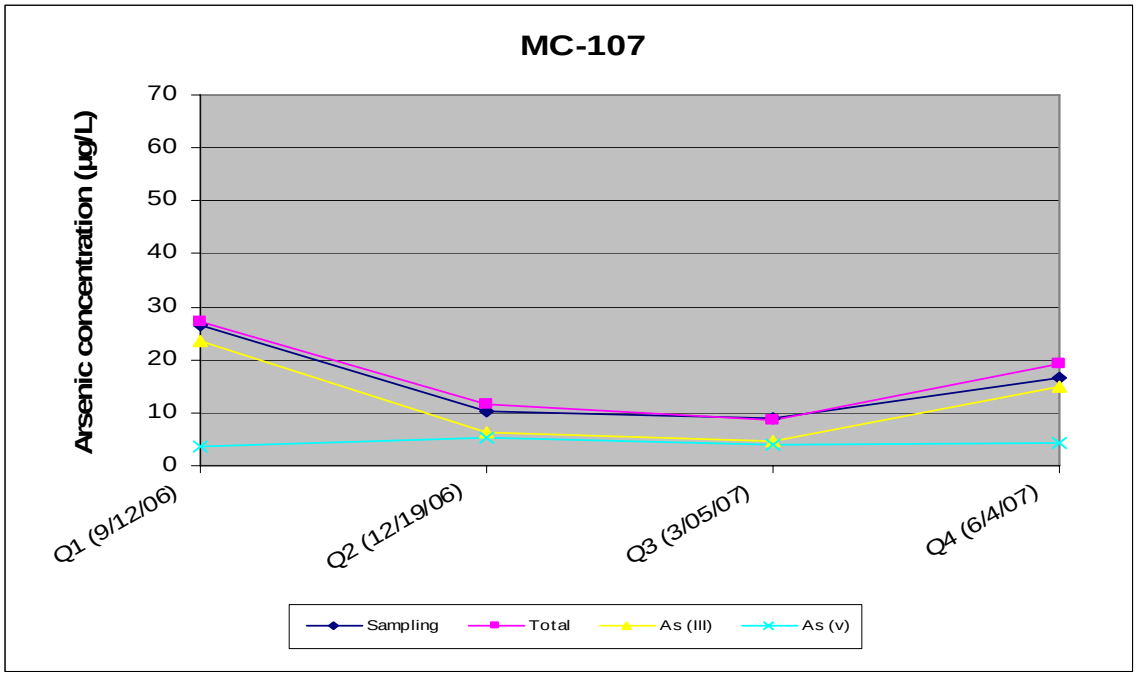


Figure 8. Arsenic Concentrations at Shallow Groundwater Well MC-1

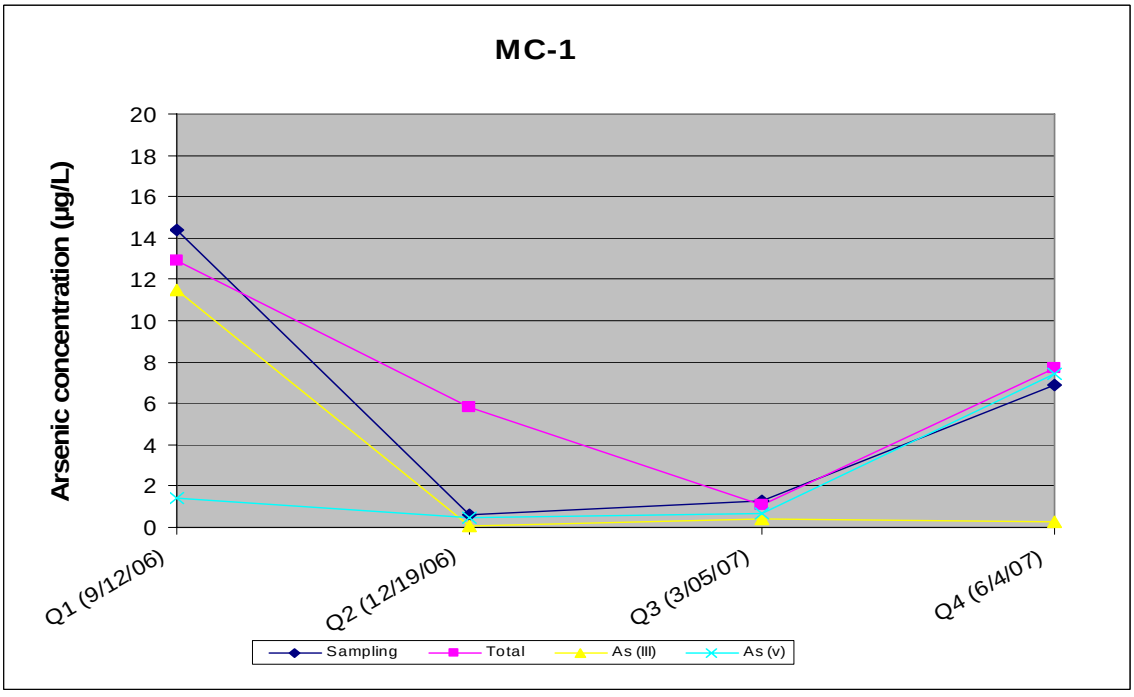


Figure 9. Arsenic Concentrations at Shallow Groundwater Well MC-13

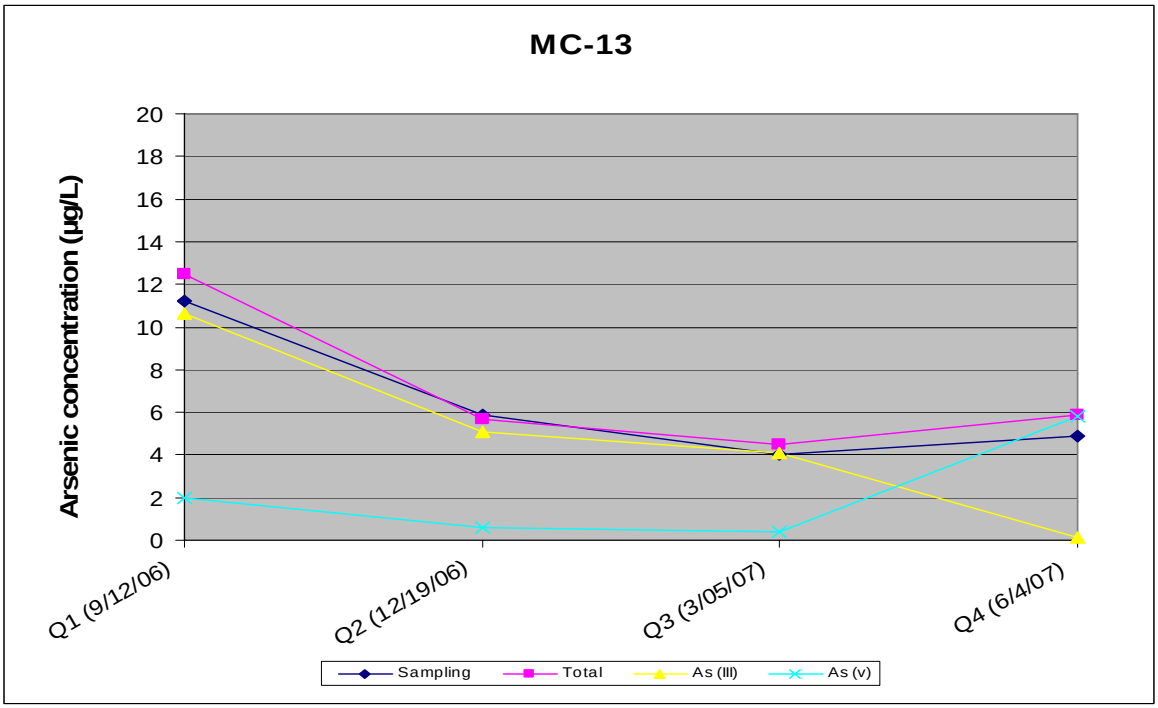


Figure 10. Arsenic Concentrations at Shallow Groundwater Well MC-21

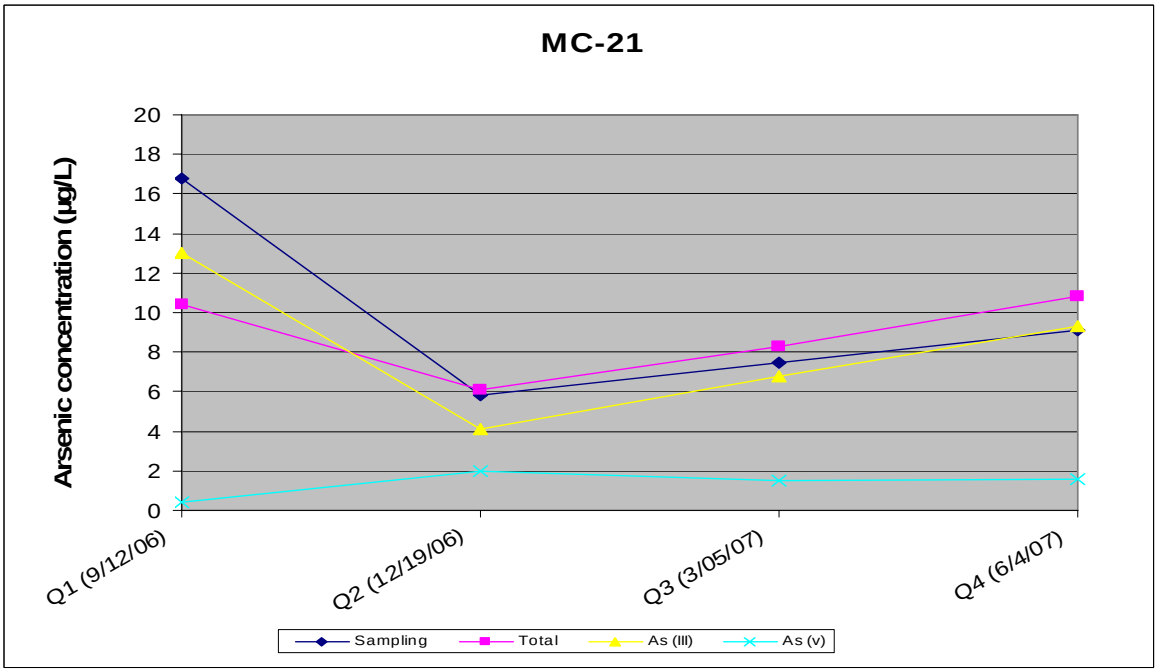


Figure 11. Arsenic Concentrations at Shallow Groundwater Well MC-8

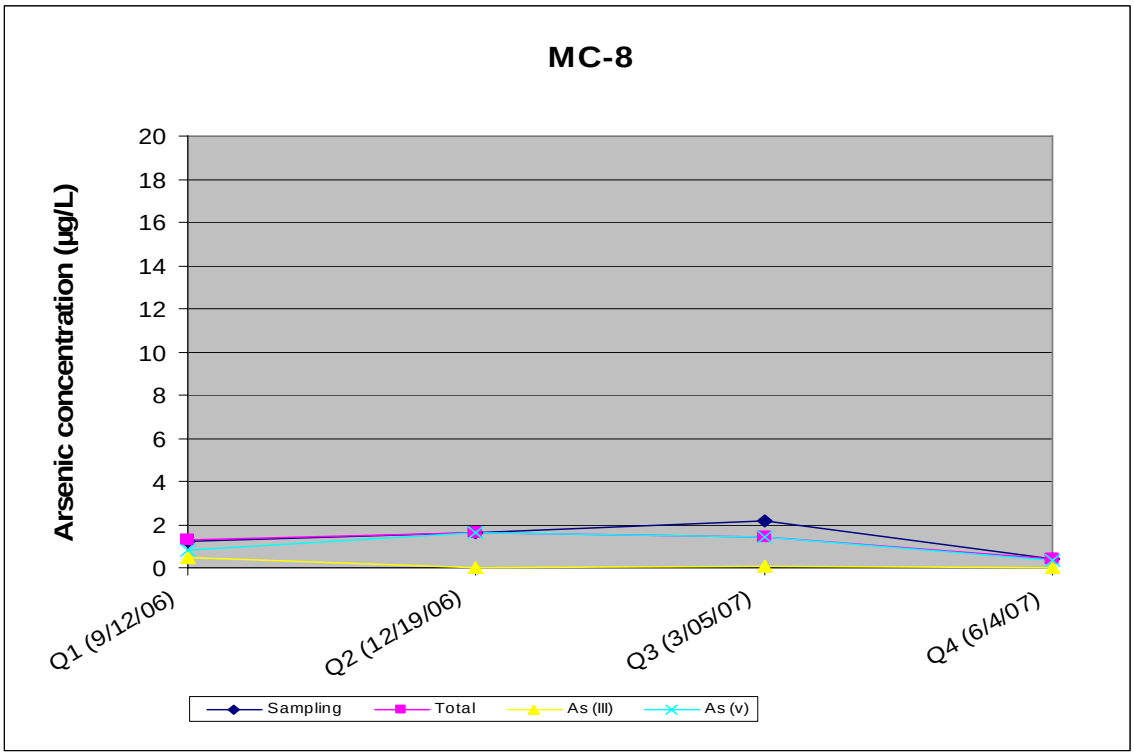


Figure 12. Arsenic Concentrations at Shallow Groundwater Well MC-122

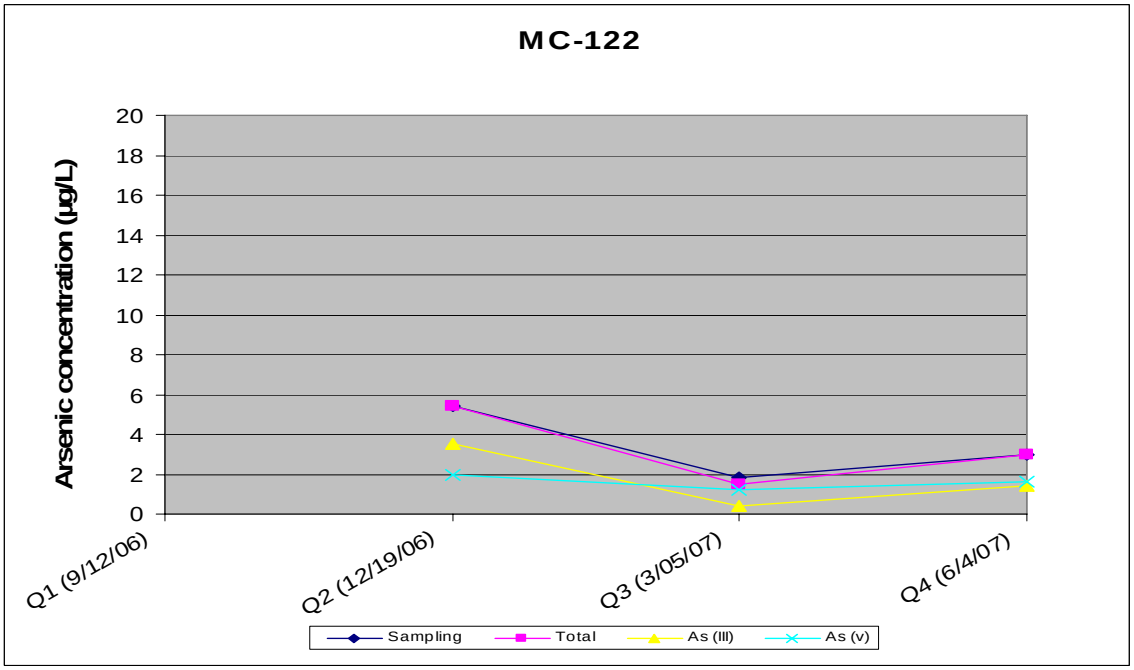


Figure 13. Arsenic Concentrations at Shallow Groundwater Well MC-20

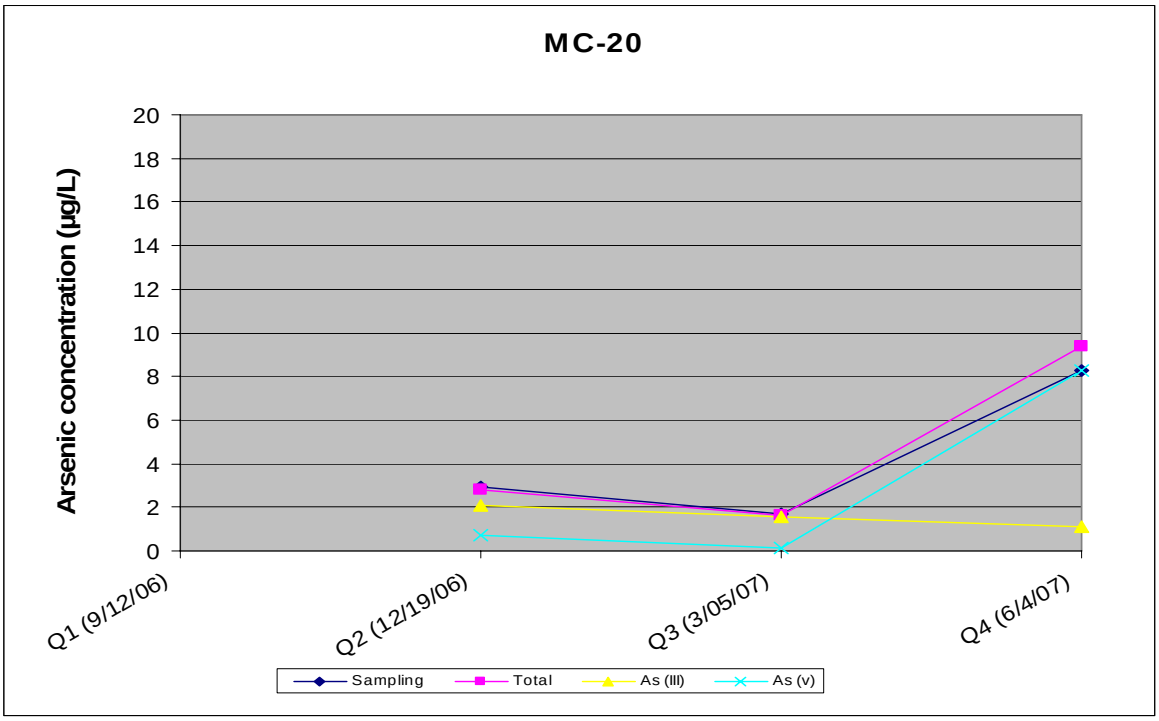


Figure 14. Arsenic Concentrations at Shallow Groundwater Well MC-123

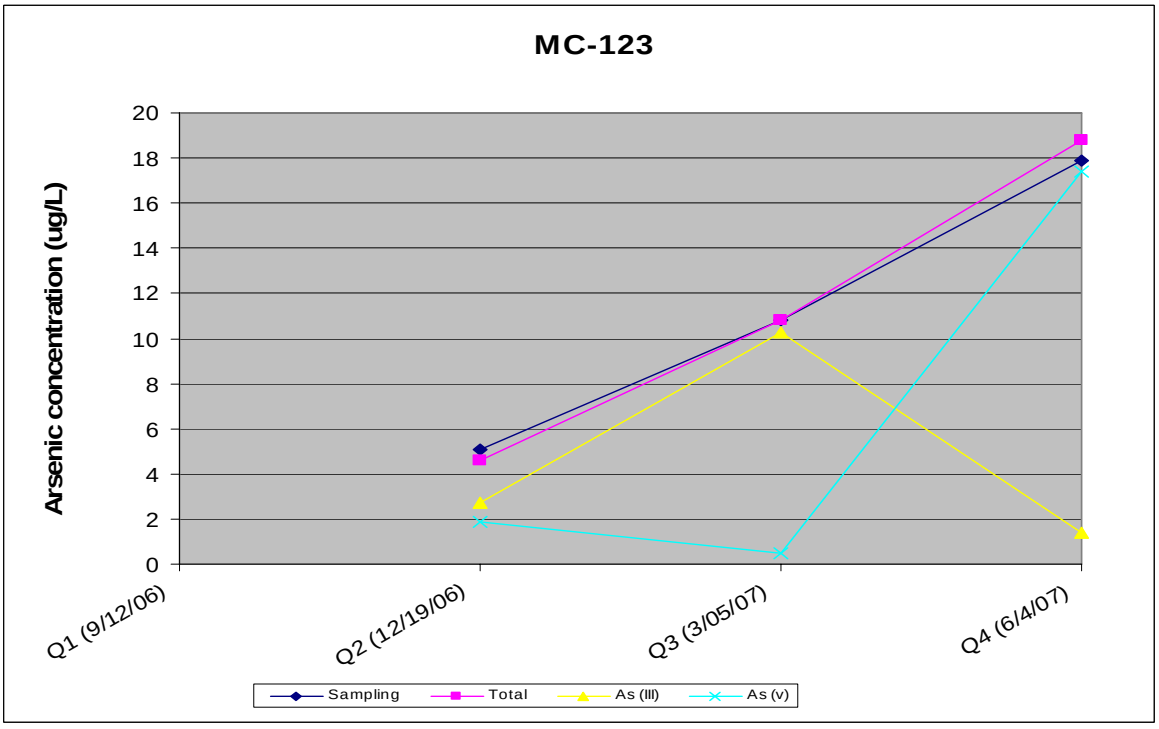


Figure 15. Arsenic Concentrations at Lower Aquifer Well MC-10D

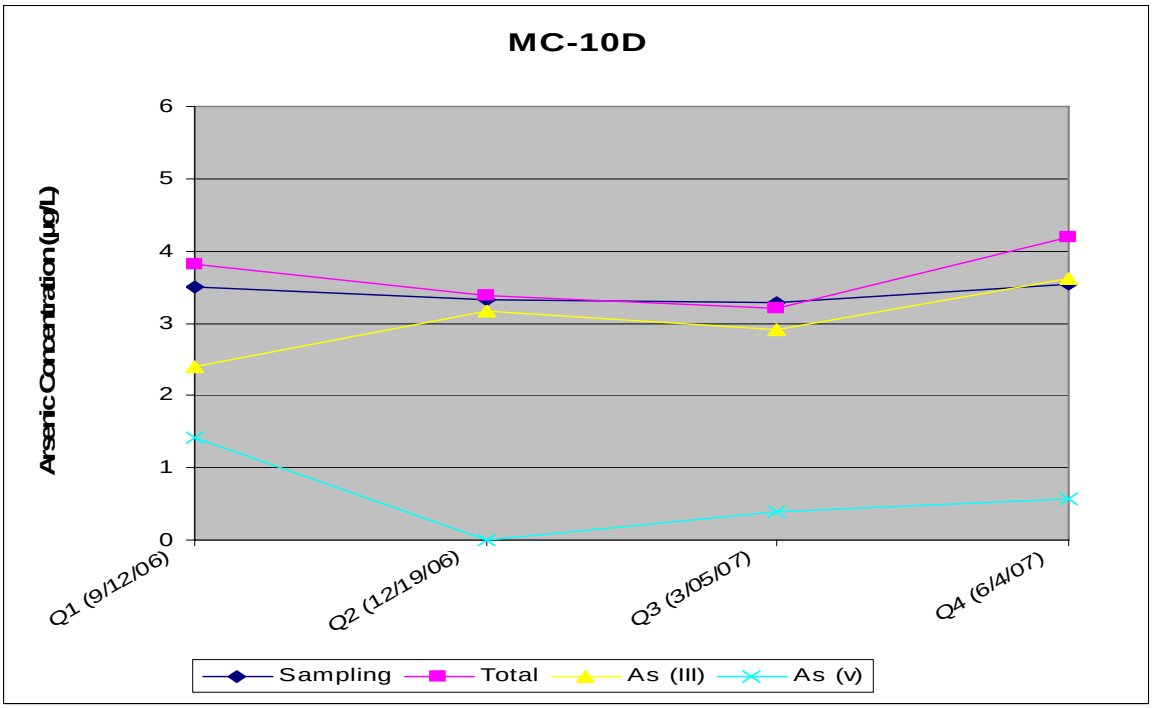


Figure 16. Arsenic Concentrations at Lower Aquifer Well MC-118D

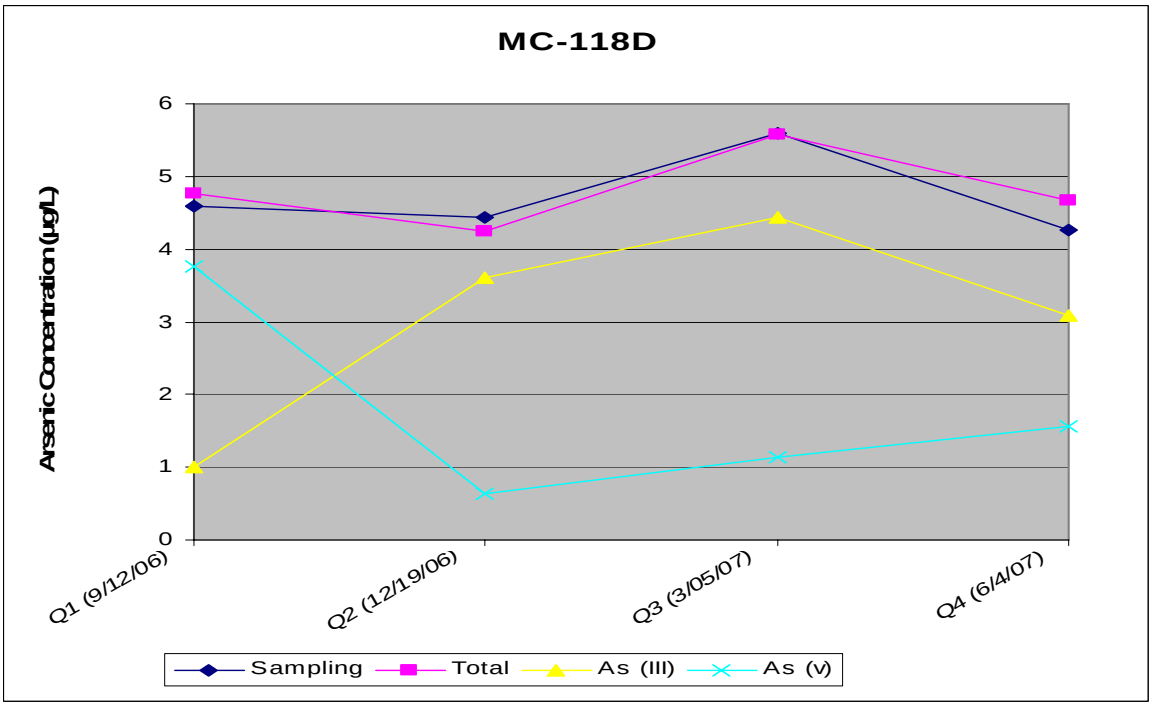


Figure 17. Arsenic Concentrations at Lower Aquifer Well MC-12D

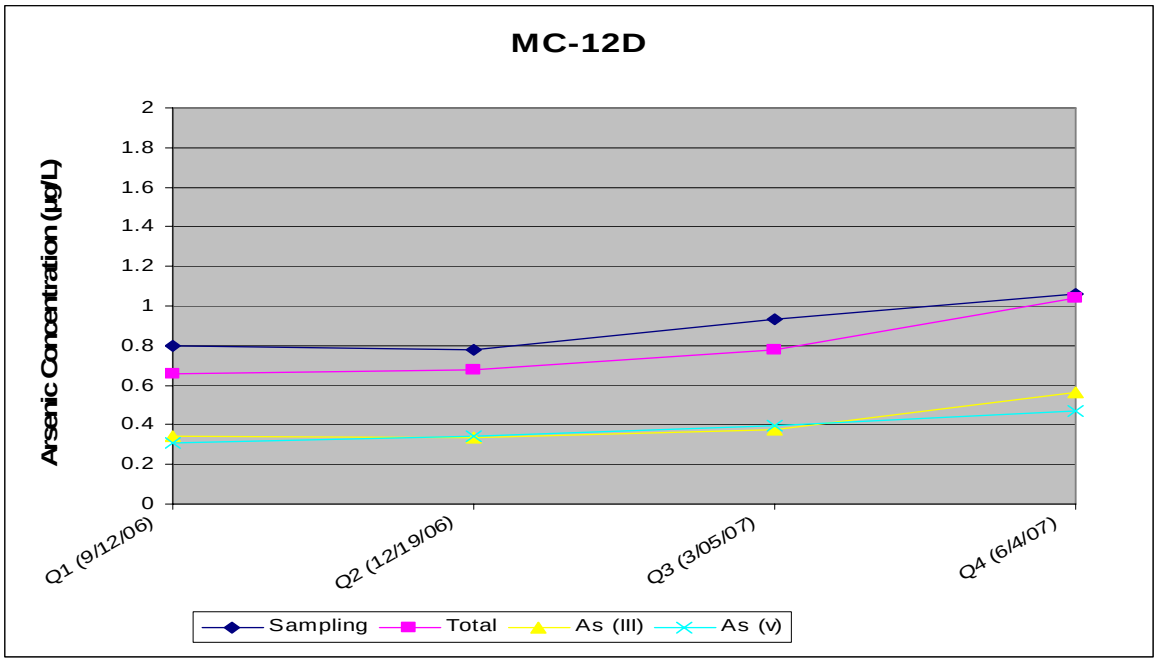


Figure 18. Arsenic Concentrations at Lower Aquifer Well MC-13D

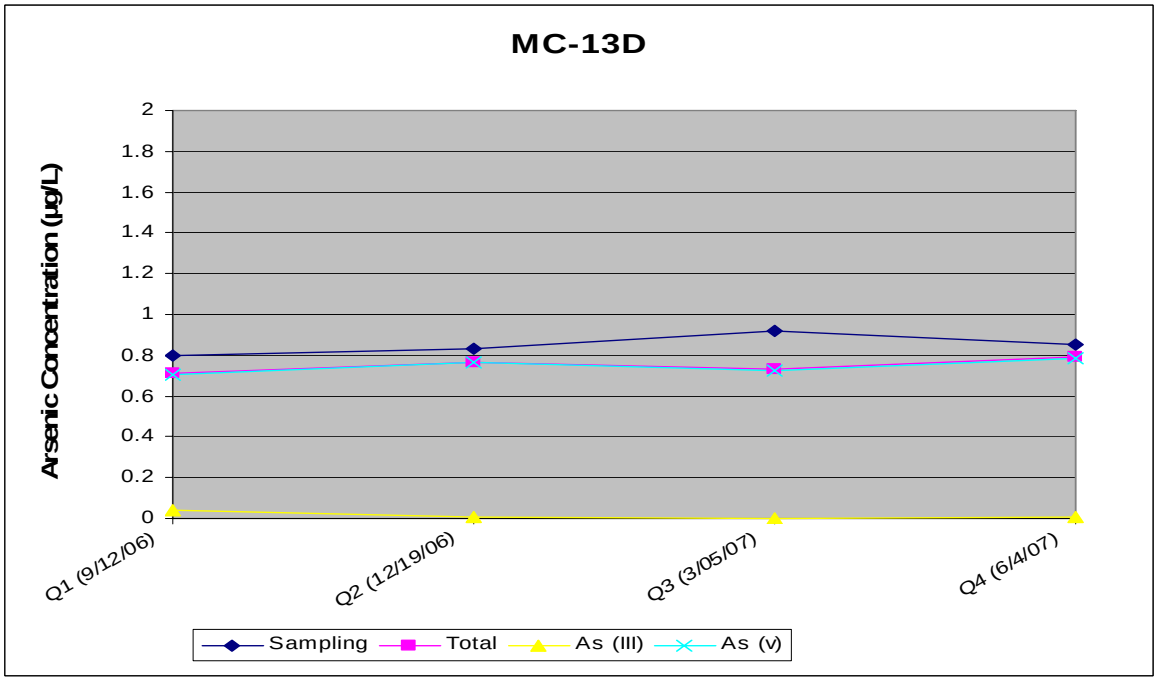


Figure 19. Arsenic Concentrations at Lower Aquifer Well MC-15D

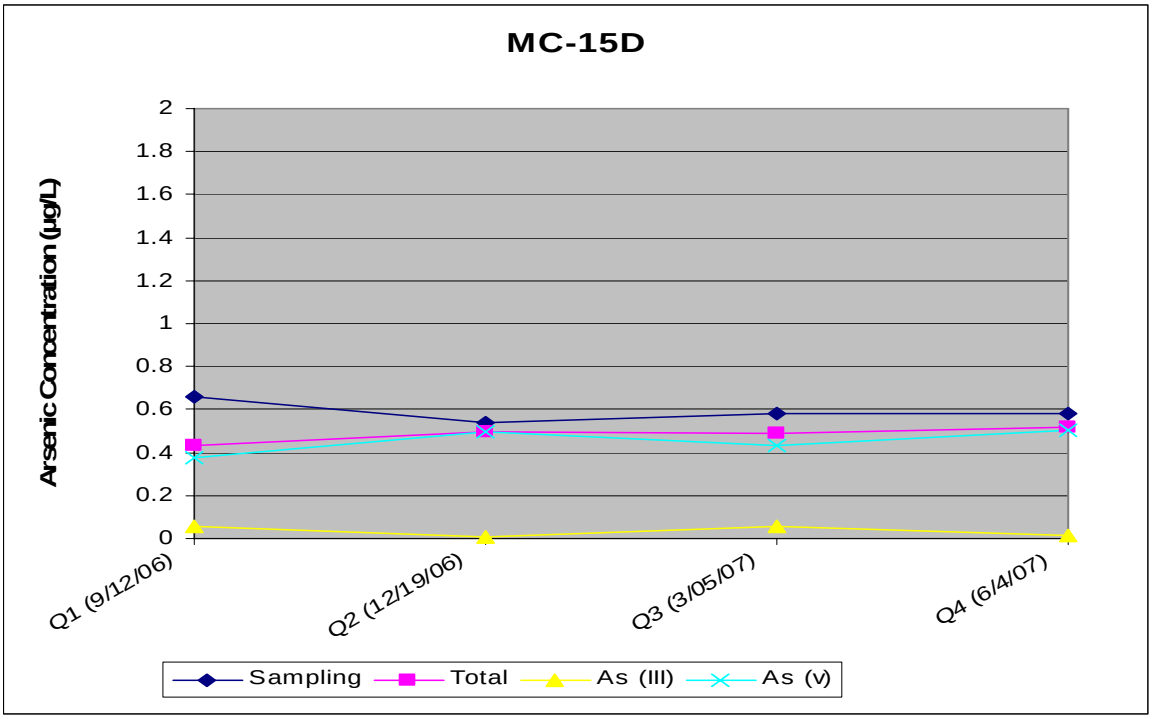


Figure 20. Arsenic Concentrations at Lower Aquifer Well MC-17D

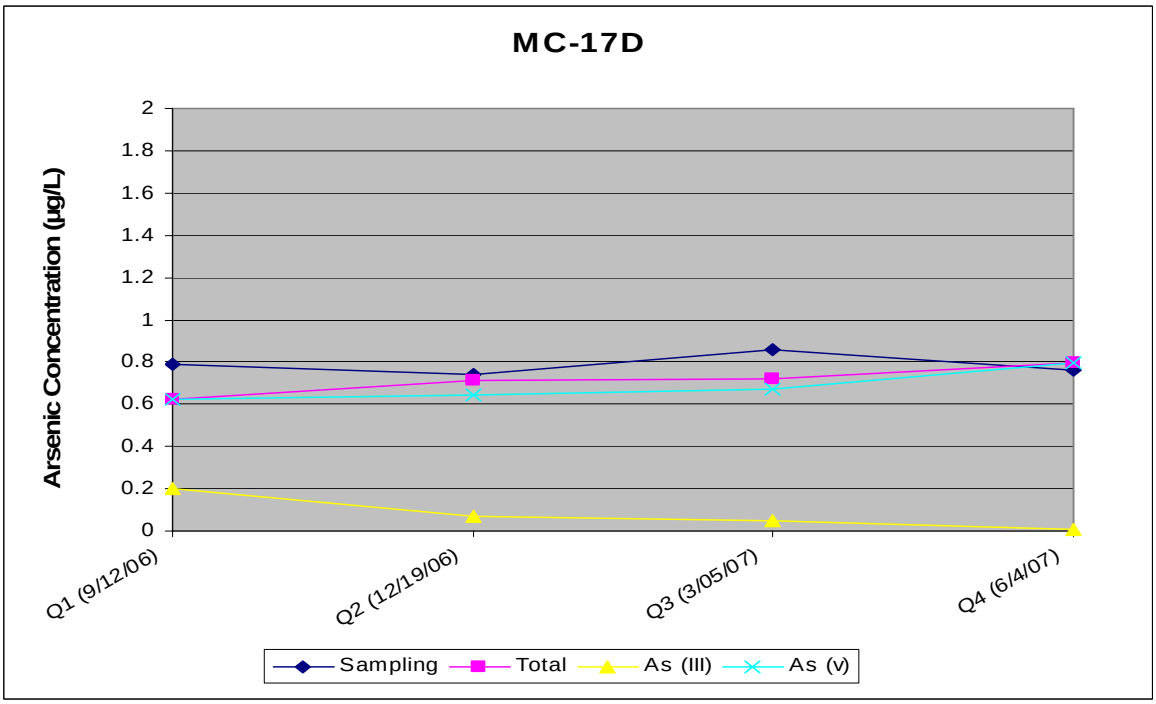


Figure 21. Arsenic Concentrations at Lower Aquifer Well MC-19D

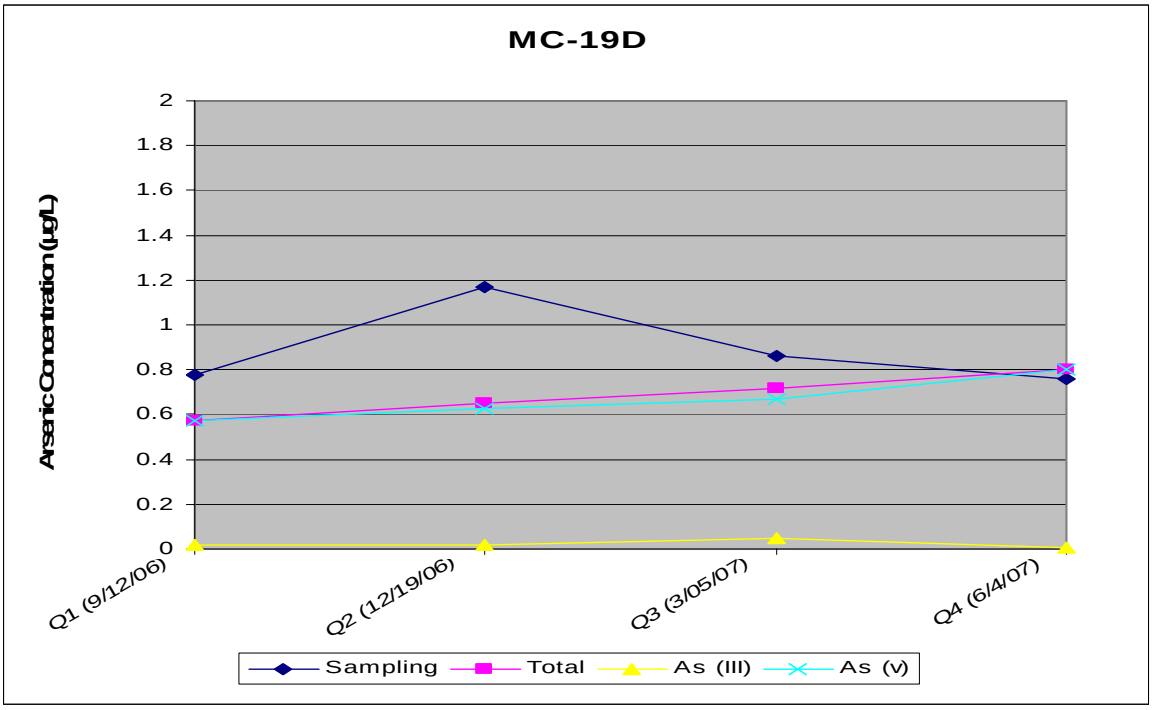


Figure 22. Arsenic Concentrations at Lower Aquifer Well MC-2D

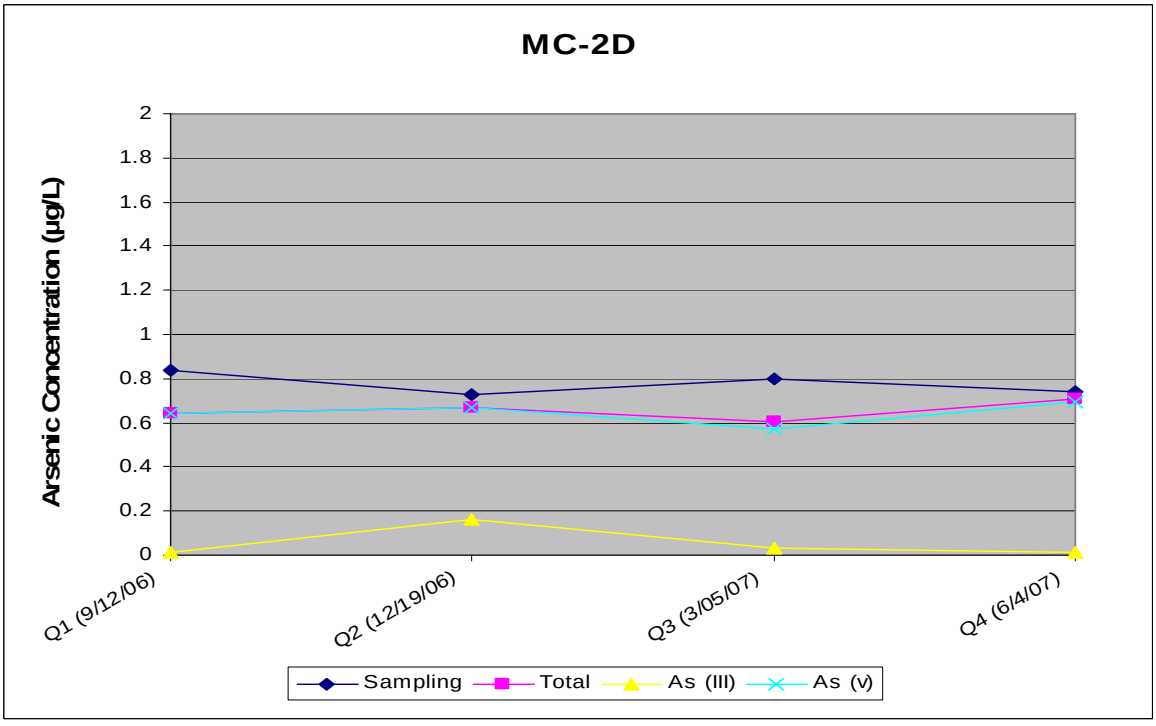


Figure 23. Comparison of Arsenic and Vinyl Chloride Concentrations at Shallow Groundwater Well MC-14

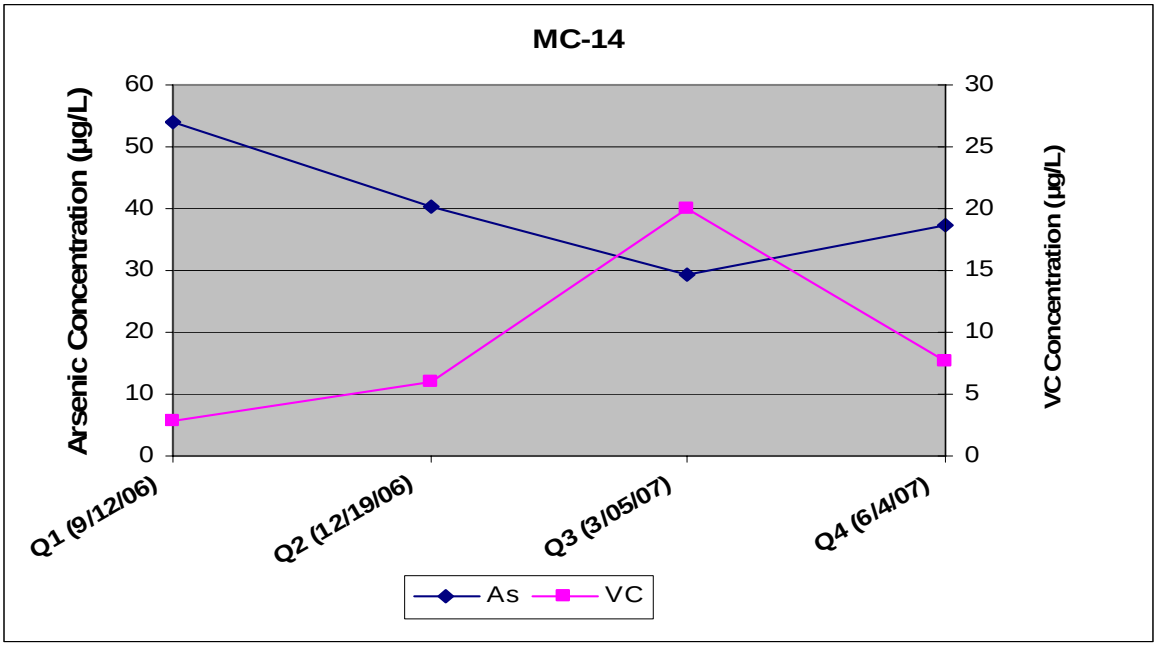


Figure 24. Comparison of Arsenic and Vinyl Chloride Concentrations at Shallow Groundwater Well MC-13

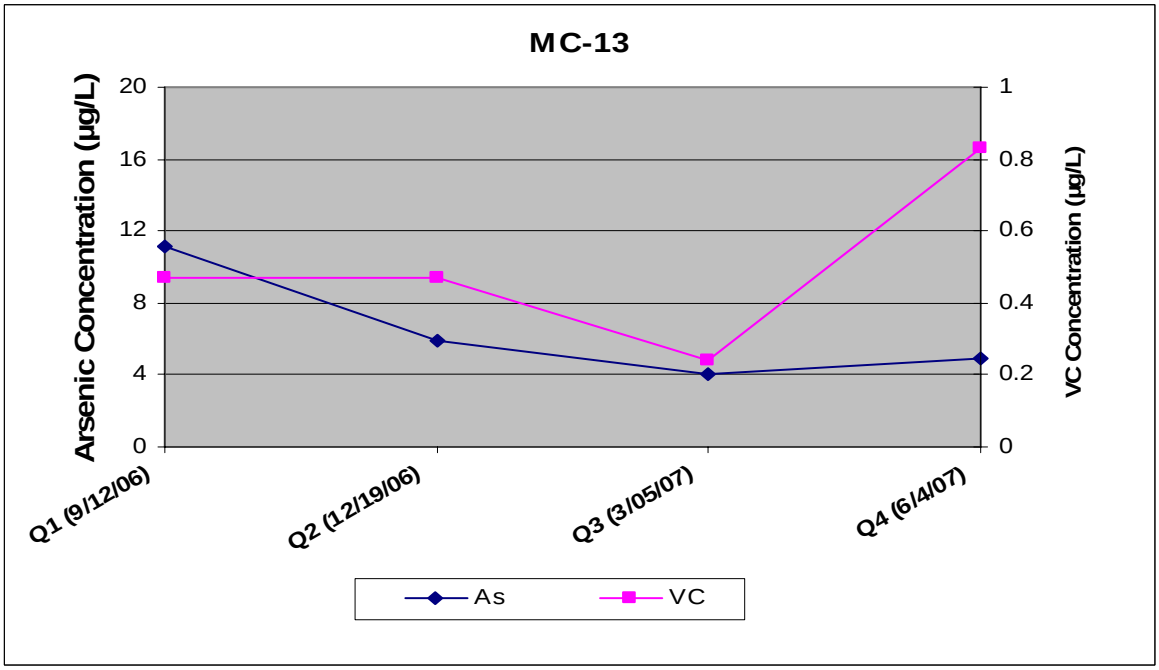


Figure 25. Comparison of Arsenic and Vinyl Chloride Concentrations at Shallow Groundwater Well MC-20

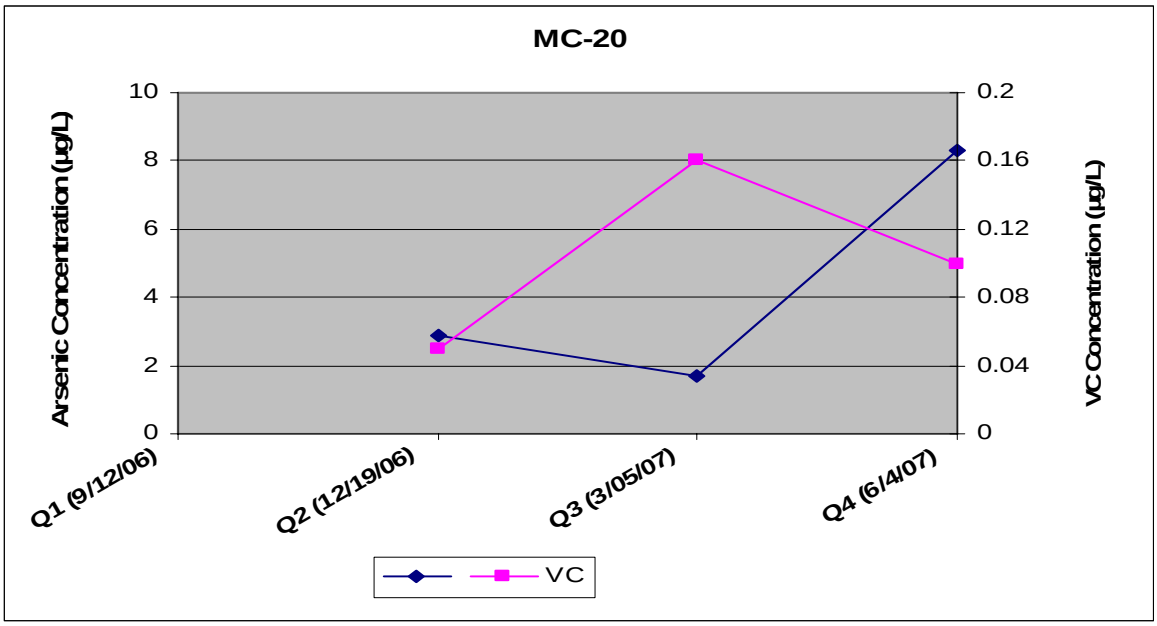


Figure 26. Comparison of Arsenic and Vinyl Chloride Concentrations at Lower Aquifer Well MC-118D

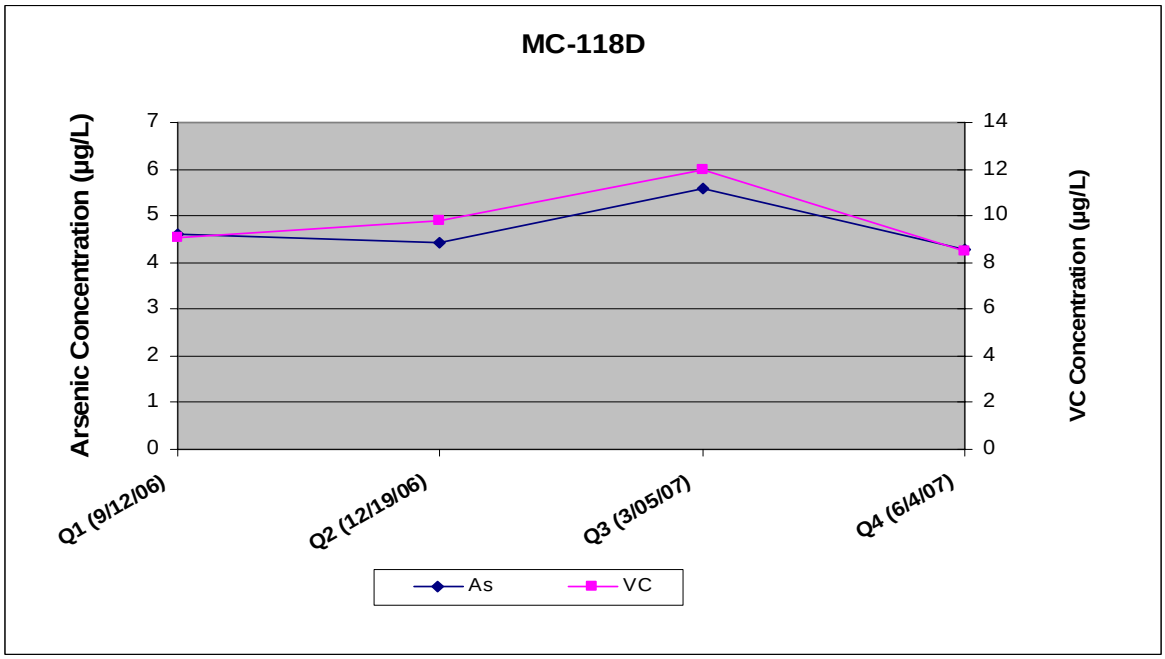


Figure 27. Comparison of Arsenic and Vinyl Chloride Concentrations at Lower Aquifer Well MC-15D

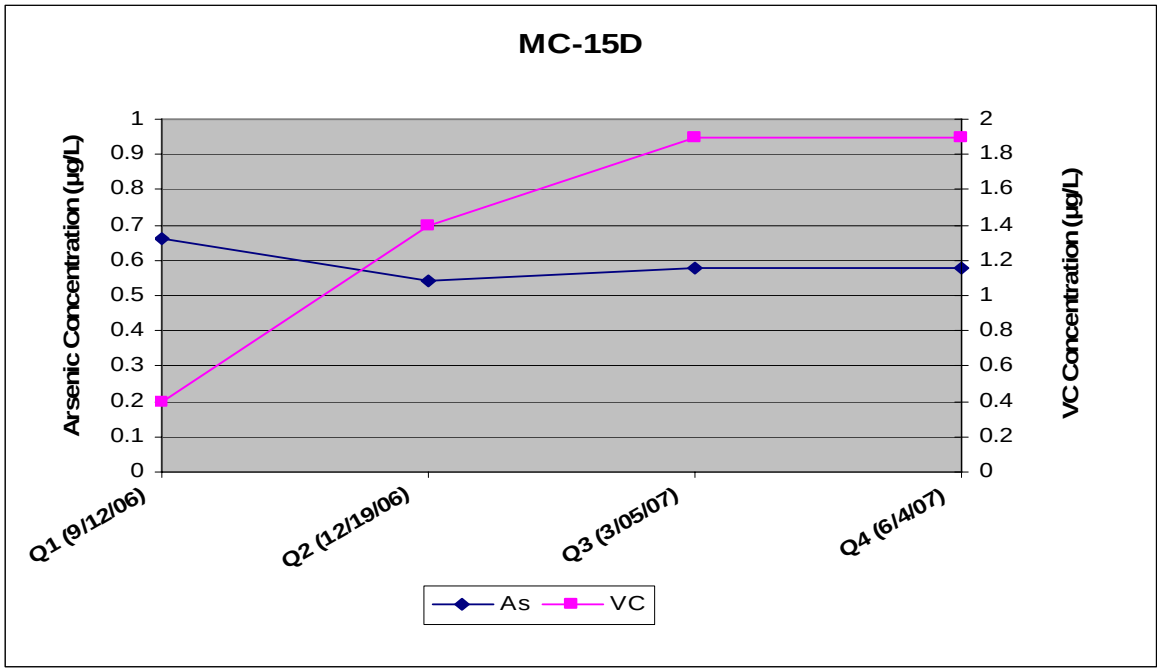
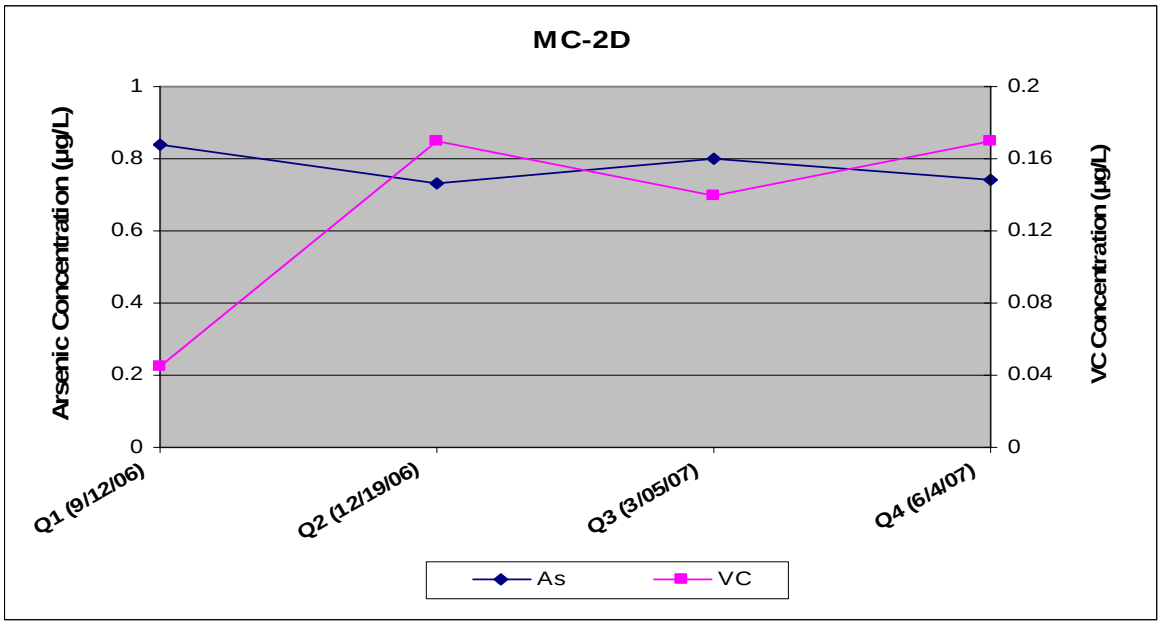
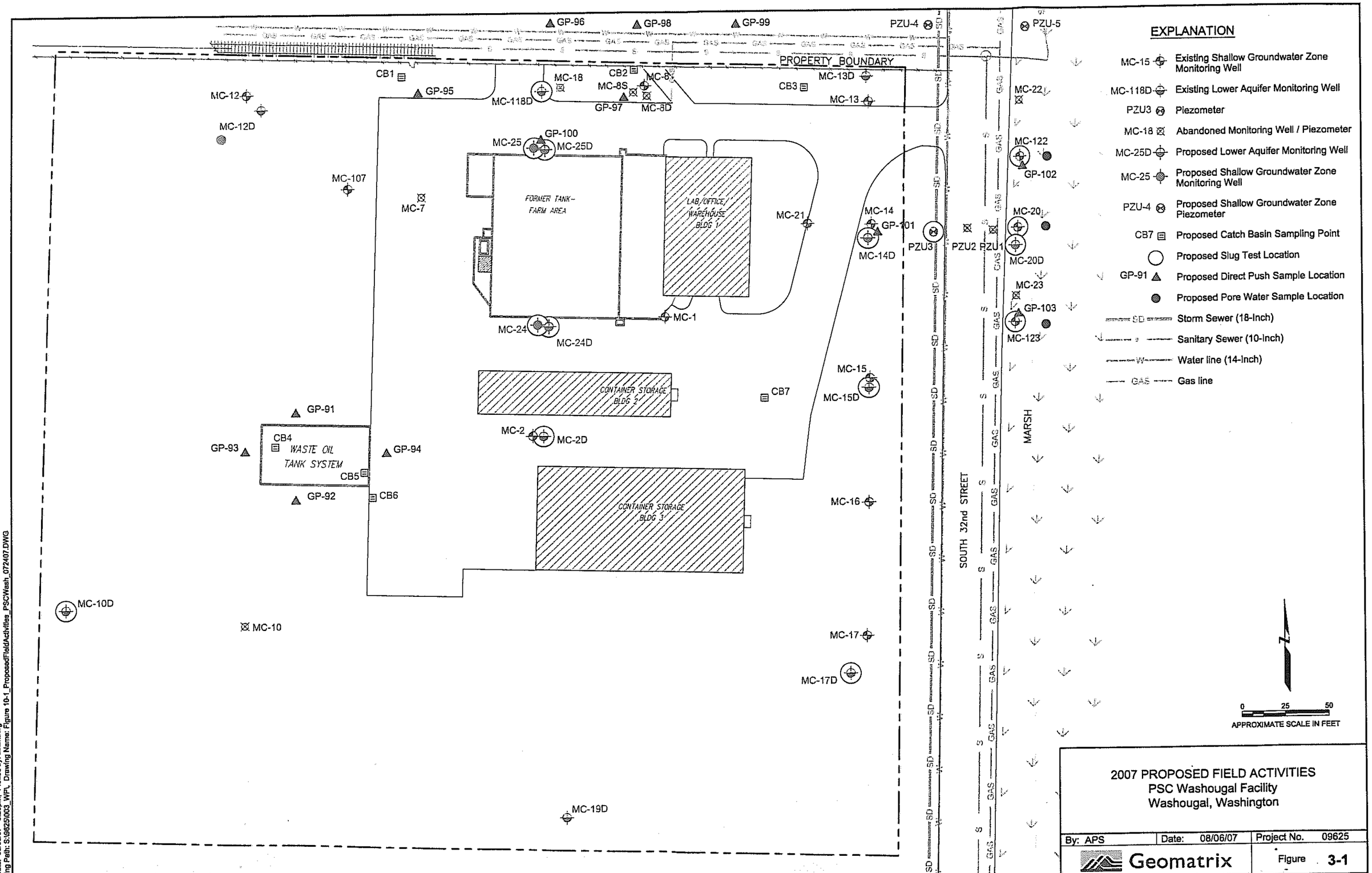


Figure 28. Comparison of Arsenic and Vinyl Chloride Concentrations at Lower Aquifer Well MC-2D





2007 PROPOSED FIELD ACTIVITIES
PSC Washougal Facility
Washougal, Washington

By: APS	Date: 08/06/07	Project No. 09625
Geomatrix		Figure 3-1

Plot Date: 08/06/07 - 3:23pm, Plotted by: astanberg
Drawing Path: S:\09625\003_WP\, Drawing Name: Figure 10-1_ProposedFieldActivities_PSCWash_072407.DWG

APPENDIX P

Final Cleanup Level Calculations

TABLE P-1

SOIL CLEANUP LEVEL CALCULATIONS FOR THE PROTECTION OF GROUNDWATER

PSC Washougal Facility
Washougal, Washington

		Constants					
		DF	UCF	F_{oc}	Θ_w	Θ_a	ρ_b
		20	0.001	0.001	0.3	0.13	1.5
		Dimensionless	mg/µg	g/g	ml/ml	ml/ml	kg/L
		Chemical Specific Constants					
		C_w	K_{oc}[1]	K_d[2]	H_{cc}[3]		C_s[4]
Chemical	**CAS**	µg/l	ml/g	L/kg	Dimensionless		mg/kg
Inorganics							
Antimony	7440-36-0	5.6E+00	--[5]	4.5E+01	0.0E+00	--	5.1E+00
Arsenic	7440-38-2	2.3E+01	--	2.9E+01	0.0E+00	--	1.3E+01
Barium	7440-39-3	1.0E+03	--	4.1E+01	0.0E+00	--	8.2E+02
Beryllium	7440-41-7	4.0E+00	--	7.9E+02	0.0E+00	--	6.3E+01
Cadmium	7440-43-9a	2.5E-01	--	6.7E+00	0.0E+00	--	3.5E-02
Chromium (total)	7440-47-3	5.0E+01	--	1.0E+03	0.0E+00	--	1.0E+03
Chromium VI	18540-29-9	--	--	1.9E+01	0.0E+00	--	--
Cobalt	7440-48-4	--	--	--	--	--	--
Copper	7440-50-8	3.5E+00	--	2.2E+01	0.0E+00	--	1.5E+00
Cyanide[6]	57-12-5	1.0E+01	--	5.0E+00	2.0E+00	--	1.1E+00
Lead	7439-92-1	5.4E-01	--	1.0E+04	0.0E+00	--	1.1E+02
Manganese	7439-96-5	5.0E+01	--	--	0.0E+00	--	--
Mercury	7439-97-6	2.0E-01	--	5.2E+01	4.7E-01	--	2.1E-01
Nickel	7440-02-0	4.9E+01	--	6.5E+01	0.0E+00	--	6.4E+01
Selenium	7782-49-2	5.0E+01	--	5.0E+00	0.0E+00	--	5.2E+00
Silver	7440-22-4	3.2E-01	--	8.3E+00	0.0E+00	--	5.4E-02
Sulfide	18496-25-8	--	--	--	--	--	--
Thallium (Soluble Salts)	7440-28-0	2.4E-01	--	7.1E+01	0.0E+00	--	3.4E-01
Vanadium	7440-62-2	1.1E+00	--	1.0E+03	0.0E+00	--	2.2E+01
Zinc	7440-66-6	3.2E+01	--	6.2E+01	0.0E+00	--	4.0E+01
PCBs/Pesticides							
Aldrin	309-00-2	5.0E-04	4.9E+04	4.9E+01	7.0E-03	--	4.92E-04
beta-BHC	319-85-7	9.1E-03	2.1E+03	2.1E+00	3.1E-05	--	4.19E-04
delta-BHC	319-86-8	1.2E-02	--	--	--	--	--
alpha-Chlordane	103-71-9	--	--	--	--	--	--
gamma-Chlordane	12789-03-6	--	--	--	--	--	--
4,4'-DDD	72-54-8	4.7E-04	4.6E+04	4.6E+01	1.6E-04	--	4.34E-04
4,4'-DDE	72-55-9	5.0E-04	8.6E+04	8.6E+01	8.6E-04	--	8.62E-04
4,4'-DDT	50-29-3	4.7E-04	6.8E+05	6.8E+02	3.3E-04	--	6.39E-03
Dieldrin	60-57-1	5.0E-04	2.6E+04	2.6E+01	6.2E-04	--	2.62E-04
Endosulfan I[6]	959-98-8	5.6E-02	2.0E+03	2.0E+00	4.6E-04	--	2.46E-03
Endosulfan II[6]	33213-65-9	5.6E-02	2.0E+03	2.0E+00	4.6E-04	--	2.46E-03
Endosulfan sulfate	1031-07-8	--	--	--	--	--	--
Endrin	72-20-8	0.0023	1.10E+04	1.1E+01	3.1E-04	--	5.15E-04
Endrin aldehyde	7421-93-4	--	--	--	--	--	--
Endrin ketone	53494-70-5	--	--	--	--	--	--
Heptachlor	76-44-8	0.0005	9.50E+03	9.5E+00	4.50E-02	--	9.70E-05
Heptachlor epoxide	1024-57-3	0.0005	8.30E+04	8.3E+01	3.90E-04	--	8.32E-04
Lindane	58-89-9	0.019	1.40E+03	1.4E+00	5.70E-04	--	6.08E-04
Methoxychlor	72-43-5	0.03	8.00E+04	8.0E+01	6.50E-04	--	4.81E-02
Toxaphene	8001-35-2	0.025	9.60E+04	9.6E+01	2.50E-04	--	4.81E-02
Polychlorinated biphenyls, total	1336-36-3	0.005	3.10E+05	3.1E+02	--	--	--

TABLE P-1

SOIL CLEANUP LEVEL CALCULATIONS FOR THE PROTECTION OF GROUNDWATER

PSC Washougal Facility
Washougal, Washington

		Constants					
		DF	UCF	F_{oc}	Θ_w	Θ_a	ρ_b
		20	0.001	0.001	0.3	0.13	1.5
		Dimensionless	mg/µg	g/g	ml/ml	ml/ml	kg/L
		Chemical Specific Constants					
		C_w	K_{oc}[1]	K_d[2]	H_{cc}[3]		C_s[4]
Chemical	**CAS**	µg/l	ml/g	L/kg	Dimensionless		mg/kg
SVOCs							
Acenaphthene	83-32-9	6.4E+02	4.9E+03	4.9E+00	6.4E-03	--	6.53E+01
Acenaphthylene	208-96-8	--	--	--	--	--	--
Acetophenone	98-86-2	5.0E+01	--	--	--	--	--
Aniline	62-53-3	7.7E+00	--	--	--	--	--
Anthracene	120-12-7	4.8E+03	2.3E+04	2.3E+01	2.7E-03	--	2.27E+03
Azobenzene	103-33-3	--	--	--	--	--	--
alpha-BHC	319-84-6	0.0026	1.8E+03	1.8E+00	4.4E-03	--	1.04E-04
Benzidine	--	--	--	--	--	--	--
Benzo(a)anthracene	56-55-3	2.0E-02	3.6E+05	3.6E+02	1.4E-04	--	1.44E-01
Benzo(a)pyrene	50-32-8	1.6E-02	9.7E+05	9.7E+02	4.6E-05	--	3.06E-01
Benzo(b)fluoranthene	205-99-2	1.9E-02	1.2E+06	1.2E+03	4.6E-03	--	4.66E-01
Benzo(ghi)perylene	191-24-2	--	--	--	--	--	--
Benzo(k)fluoranthene	207-08-9	1.3E-02	1.3E+06	1.3E+03	3.4E-05	--	3.38E-01
Benzoic acid	65-85-0	6.4E+04	6.0E-01	6.0E-04	6.3E-05	--	2.57E+02
Benzyl alcohol	100-51-6	8.0E+02	--	--	--	--	--
4-Bromophenyl phenyl ether	101-55-3	--	--	--	--	--	--
Butyl benzyl phthalate	85-68-7	8.2E+00	1.4E+04	1.4E+01	5.2E-05	--	2.29E+00
bis(2-Chloro-1-methylethyl) ether	108-60-1	6.3E-01	--	--	--	--	--
4-Chloro-3-methylphenol	59-50-7	--	--	--	--	--	--
p-Chloroaniline (4-chloroaniline)	106-47-8	2.2E-01	6.6E+01	6.6E-02	1.4E-05	--	1.17E-03
bis(2-Chloroethoxy)methane	111-91-1	--	--	--	--	--	--
bis(2-Chloroethyl) ether	111-44-4	2.0E-01	7.6E+01	7.6E-02	7.4E-04	--	1.10E-03
2-Chloronaphthalene	91-58-7	6.40E+02	--	--	--	--	--
2-Chlorophenol	95-57-8	4.00E+01	3.88E+02	3.9E-01	1.60E-02	--	4.72E-01
4-Chlorophenyl phenyl ether	7005-72-3	--	--	--	--	--	--
Chrysene	218-01-9	1.2E-02	4.0E+05	4.0E+02	3.9E-03	--	9.92E-02
o-Cresol (2-methylphenol)	95-48-7	4.0E+02	9.1E+01	9.1E-02	4.9E-05	--	2.33E+00
Cumene (Isopropylbenzene)	98-82-8	7.2E+02	--	--	--	--	--
3,3'-Dichlorobenzidine	91-94-1	2.00E+00	7.24E+02	7.24E-01	1.64E-07	--	3.70E-02
2,4-Dichlorophenol	120-83-2	2.40E+01	1.47E+02	1.47E-01	1.30E-04	--	1.67E-01
Dibenzo(a,h)anthracene	53-70-3	1.6E-02	1.8E+06	1.80E+03	6.0E-07	--	5.83E-01
Dibenzofuran	132-64-9	1.6E+01	6.9E+01	6.90E-02	3.1E-05	--	8.61E-02
Di-n-butyl phthalate	84-74-2	1.6E+03	1.6E+03	1.60E+00	3.9E-08	--	5.76E+01
Di-n-octyl phthalate	117-84-0	--	8.3E+07	8.32E+04	2.7E-03	--	--
Diethyl phthalate	84-66-2	1.3E+04	8.2E+01	8.20E-02	1.9E-05	--	7.22E+01
Dimethyl phthalate[7]	131-11-3	2.7E+05	1.6E+00	1.56E-03	1.1E-07	--	1.09E+03
2,4-Dimethylphenol	105-67-9	1.60E+02	2.09E+02	2.09E-01	8.20E-05	--	1.31E+00
2,4-Dinitrophenol	51-28-5	3.20E+01	1.00E-02	1.00E-05	1.82E-05	--	1.28E-01
2,4-Dinitrotoluene	121-14-2	1.80E-01	9.55E+01	9.55E-02	3.80E-06	--	1.06E-03
2,6-Dinitrotoluene	606-20-2	1.60E+01	6.92E+01	6.92E-02	3.06E-05	--	8.61E-02
1,4-Dioxane[7]	123-91-1	1.0E+00	1.7E+01	1.70E-02	4.8E-06	--	4.34E-03
bis(2-Ethylhexyl) phthalate	117-81-7	1.2E+00	1.1E+05	1.10E+02	4.2E-06	--	2.64E+00

TABLE P-1

SOIL CLEANUP LEVEL CALCULATIONS FOR THE PROTECTION OF GROUNDWATER

PSC Washougal Facility
Washougal, Washington

		Constants					
		DF	UCF	F_{oc}	Θ_w	Θ_a	ρ_b
		20	0.001	0.001	0.3	0.13	1.5
		Dimensionless	mg/µg	g/g	ml/ml	ml/ml	kg/L
		Chemical Specific Constants					
		C_w	K_{oc}[1]	K_d[2]	H_{cc}[3]		C_s[4]
Chemical	**CAS**	µg/l	ml/g	L/kg	Dimensionless		mg/kg
SVOCs (Continued)							
Fluoranthene	206-44-0	9.0E+01	4.9E+04	4.9E+01	6.6E-04	--	8.87E+01
Fluorene	86-73-7	6.4E+02	7.7E+03	7.7E+00	2.6E-03	--	1.01E+02
Hexachlorobenzene	118-74-1	1.4E-01	8.0E+04	8.0E+01	5.4E-02	--	2.26E-01
Hexachlorobutadiene	87-68-3	4.4E-01	5.4E+04	5.4E+01	3.3E-01	--	4.75E-01
Hexachlorocyclopentadiene	77-47-4	4.0E+01	2.0E+05	2.0E+02	1.1E+00	--	1.60E+02
Hexachloroethane	67-72-1	1.4E+00	1.8E+03	1.8E+00	1.6E-01	--	5.58E-02
Indeno(1,2,3-cd)pyrene	193-39-5	2.0E-02	3.5E+06	3.5E+03	6.6E-05	--	1.40E+00
Isophorone	78-59-1	8.4E+00	4.7E+01	4.7E-02	2.7E-04	--	4.15E-02
2-Methyl-4,6-dinitrophenol	534-52-1	--	--	--	--	--	--
1-Methylnaphthalene	90-12-0	1.51E+00	--	--	--	--	--
2-Methylnaphthalene	91-57-6	3.20E+01	--	--	--	--	--
4-Methylphenol	106-44-5	4.0E+01	--	--	--	--	--
N-Nitroso-di-n-propylamine	621-64-7	2.0E-01	2.4E+01	2.4E-02	9.2E-05	--	8.96E-04
N-Nitrosodiphenylamine	86-30-6	3.3E+00	1.3E+03	1.3E+00	2.1E-04	--	9.90E-02
Naphthalene	91-20-3	1.6E+02	1.2E+03	1.2E+00	2.0E-02	--	4.46E+00
Nitrobenzene	98-95-3	1.6E+01	1.2E+02	1.2E-01	9.8E-04	--	1.02E-01
2-Nitroaniline	88-74-4	1.60E+02	--	--	--	--	--
3-Nitroaniline	99-09-2	--	--	--	--	--	--
4-Nitroaniline	100-01-6	--	--	--	--	--	--
2-Nitrophenol	88-75-5	--	--	--	--	--	--
4-Nitrophenol	100-02-7	--	--	--	--	--	--
Pentachlorophenol	87-86-5	7.3E-01	5.9E+02	5.9E-01	1.0E-06	--	1.16E-02
Phenanthrene	85-01-8	--	--	--	--	--	--
Phenol	108-95-2	2.4E+03	2.9E+01	2.9E-02	1.6E-05	--	1.10E+01
Pyrene	129-00-0	4.8E+02	6.8E+04	6.8E+01	4.5E-04	--	6.55E+02
2,4,5-Trichlorophenol	95-95-4	8.00E+02	1.60E+03	1.60E+00	1.78E-04	--	2.88E+01
2,4,6-Trichlorophenol	88-06-2	1.40E+00	3.81E+02	3.81E-01	3.19E-04	--	1.63E-02
TPH							
Diesel	NA	5.0E+02	--	--	--	--	--
Gasoline	86290-81-5	8.0E+02	--	--	--	--	--
Heavy Oil	NA	5.00E+02	--	--	--	--	--
VOCs							
Acetone	67-64-1	7.2E+03	5.8E-01	5.75E-04	1.6E-03	--	2.89E+01
Acrolein	107-02-8	2.9E+00	--	--	--	--	--
Acrylonitrile	107-13-1	1.0E+00	--	--	--	--	--
Benzene	71-43-2	8.0E-01	6.2E+01	6.20E-02	2.3E-01	--	4.51E-03
Bromobenzene	108-86-1	--	--	--	--	--	--
Bromochloromethane	74-97-5	5.0E-01	--	--	--	--	--
Bromodichloromethane	75-27-4	7.1E-01	5.5E+01	5.50E-02	6.6E-02	--	3.68E-03
Bromoform	75-25-2	4.3E+00	1.3E+02	1.26E-01	2.2E-02	--	2.82E-02
Bromomethane	74-83-9	1.1E+01	9.0E+00	9.00E-03	2.6E-01	--	5.18E-02
2-Butanone (MEK)	78-93-3	4.80E+03	--	--	--	--	--

TABLE P-1

SOIL CLEANUP LEVEL CALCULATIONS FOR THE PROTECTION OF GROUNDWATER

PSC Washougal Facility
Washougal, Washington

		Constants					
		DF	UCF	F_{oc}	Θ_w	Θ_a	ρ_b
		20	0.001	0.001	0.3	0.13	1.5
		Dimensionless	mg/µg	g/g	ml/ml	ml/ml	kg/L
		Chemical Specific Constants					
		C_w	K_{oc}[1]	K_d[2]	H_{cc}[3]		C_s[4]
Chemical	**CAS**	µg/l	ml/g	L/kg	Dimensionless		mg/kg
VOCs (Continued)							
n-Butylbenzene	104-51-8	6.1E+01	--	--	--	--	--
sec-Butylbenzene	135-98-8	6.1E+01	--	--	--	--	--
tert-Butylbenzene	98-06-6	6.1E+01	--	--	--	--	--
Carbon disulfide	75-15-0	4.0E+02	4.6E+01	4.57E-02	1.2E+00	--	2.83E+00
Carbon tetrachloride	56-23-5	2.3E-01	1.5E+02	1.52E-01	1.3E+00	--	2.12E-03
Chlorobenzene	108-90-7	1.0E+02	2.2E+02	2.24E-01	1.5E-01	--	8.74E-01
2-Chloroethyl vinyl ether	110-75-8	--	--	--	--	--	--
Chloroform	67-66-3	1.2E+00	5.3E+01	5.3E-02	1.5E-01	--	6.38E-03
Chloromethane[6]	74-87-3	5.2E+00	6.0E+00	6.0E-03	3.2E+00	--	5.00E-02
2-Chlorotoluene	95-49-8	1.60E+02	--	--	--	--	--
4-Chlorotoluene	106-43-4	--	--	--	--	--	--
1,2-Dibromo-3-chloropropane	96-12-8	1.0E+00	--	--	--	--	--
1,4-Dibromobenzene	106-37-6	8.0E+01	--	--	--	--	--
Dibromochloromethane	124-48-1	5.0E-01	6.3E+01	6.3E-02	3.2E-02	--	2.66E-03
1,1-Dichloro-1,2,2-trifluoroethane	812-04-4	--	--	--	--	--	--
2,2-Dichloro-1,1,1-trifluoroethane	306-83-2	--	--	--	--	--	--
1,2-Dichlorobenzene	95-50-1	4.20E+02	3.79E+02	3.79E-01	7.79E-02	--	4.92E+00
1,3-Dichlorobenzene	541-73-1	3.20E+02	--	--	--	--	--
1,4-Dichlorobenzene	106-46-7	6.30E+01	6.16E+02	6.16E-01	9.96E-02	--	1.04E+00
Dichlorodifluoromethane	75-71-8	9.9E+00	--	--	--	--	--
1,1-Dichloroethane	75-34-3	1.60E+03	5.30E+01	5.30E-02	2.30E-01	--	8.73E+00
1,2-Dichloroethane	107-06-2	0.38	3.80E+01	3.80E-02	4.01E-02	--	1.84E-03
1,1-Dichloroethene	75-35-4	5.70E-02	6.50E+01	6.50E-02	1.10E+00	--	4.11E-04
cis-1,2-Dichloroethene	156-59-2	1.6E+01	3.6E+01	3.6E-02	1.7E-01	--	8.02E-02
trans-1,2-Dichloroethene	156-60-5	1.0E+02	3.8E+01	3.8E-02	3.9E-01	--	5.44E-01
1,2-Dichloropropane	78-87-5	5.00E-01	4.70E+01	4.70E-02	1.15E-01	--	2.57E-03
2,2-Dichloropropane	594-20-7	--	--	--	--	--	--
1,3-Dichloropropane	142-28-9	--	--	--	--	--	--
1,1-Dichloropropene	563-58-6	--	--	--	--	--	--
cis-1,3-Dichloropropene	10061-01-5	--	--	--	--	--	--
trans-1,3-dichloropropene	10061-02-6	--	--	--	--	--	--
Chloroethane	75-00-3	1.2E+01	--	--	--	--	--
Ethyl ether	60-29-7	--	--	--	--	--	--
Ethylbenzene	100-41-4	5.3E+02	2.0E+02	2.0E-01	3.2E-01	--	4.58E+00
1,2-Dibromoethane (EDB)	106-93-4	9.81E-01	6.60E+01	--	--	--	--
2-Hexanone	591-78-6	--	--	--	--	--	--
p-Isopropyltoluene (p-cymene)	99-87-6	--	--	--	--	--	--
4-Methyl-2-butanone	108-10-1	6.40E+02	--	--	--	--	--
Methylcyclopentane	96-37-7	--	--	--	--	--	--
Methylene bromide	74-95-3	4.8E+01	--	--	--	--	--
Methylene Chloride	75-09-2	4.6E+00	1.0E+01	1.0E-02	9.0E-02	--	2.00E-02
2-Methylpentane	107-83-5	--	--	--	--	--	--

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PSC Washougal Facility
Washougal, Washington

		Constants					
		DF	UCF	F_{oc}	Θ_w	Θ_a	ρ_b
		20	0.001	0.001	0.3	0.13	1.5
		Dimensionless	mg/µg	g/g	ml/ml	ml/ml	kg/L
		Chemical Specific Constants					
		C_w	K_{oc}[1]	K_d[2]	H_{cc}[3]		C_s[4]
Chemical	CAS	µg/l	ml/g	L/kg	Dimensionless		mg/kg
VOCs (Continued)							
3-Methylpentane	96-14-0	--	--	--	--	--	--
Naphthalene	91-20-3	1.6E+02	1.2E+03	1.2E+00	2.0E-02	--	4.46E+00
n-Propylbenzene[7]	103-65-1	8.0E+02	3.6E+00	3.6E-03	1.1E-02	--	3.27E+00
Styrene	100-42-5	7.8E+01	9.1E+02	9.1E-01	1.1E-01	--	1.75E+00
1,1,1,2-Tetrachloroethane	630-20-6	1.7	--	--	--	--	--
1,1,2,2-Tetrachloroethane	79-34-5	0.17	79	7.90E-02	0.0141	--	9.53E-04
Tetrachloroethene	127-18-4	6.9E-01	2.7E+02	2.7E-01	7.5E-01	--	7.38E-03
1,2,3-Trichlorobenzene	87-61-6	--	--	--	--	--	--
1,2,4,-Trichlorobenzene	120-82-1	1.51E+00	1.66E+03	1.66E+00	5.82E-02	--	5.63E-02
1,1,1-Trichloroethane	71-55-6	2.00E+02	1.35E+02	1.35E-01	7.05E-01	--	1.58E+00
1,1,2-Trichloroethane	79-00-5	5.90E-01	7.50E+01	7.50E-02	3.74E-02	--	3.28E-03
Trichloroethene	79-01-6	5.4E-01	9.4E+01	9.4E-02	4.2E-01	--	3.57E-03
1,2,3-Trichloropropane	96-18-4	0.5	--	--	--	--	--
1,1,2-Trichlorotrifluoroethane	76-13-1	1.1E+03	--	--	--	--	--
1,2,4-Trimethylbenzene	95-63-6	2.40E+01	--	--	--	--	--
1,3,5-Trimethylbenzene	108-67-8	2.50E+01	--	--	--	--	--
Toluene	108-88-3	6.4E+02	1.4E+02	1.4E-01	2.7E-01	--	4.65E+00
Trichlorofluoromethane	75-69-4	1.2E+02	--	--	--	--	--
Vinyl acetate	108-05-4	7.8E+03	5.3E+00	5.3E-03	2.1E-02	--	3.23E+01
Vinyl chloride	75-01-4	2.5E-02	1.9E+01	1.9E-02	1.1E+00	--	1.57E-04
m,p-Xylene	106-42-3	6.7E+02	3.1E+02	3.1E-01	3.1E-01	--	7.19E+00
o-Xylene	95-47-6	4.4E+02	2.4E+02	2.4E-01	2.1E-01	--	4.04E+00

Notes:

1. K_{oc} values were provided by the Washington State Department of Ecology CLARC online database.
2. If K_d values for inorganic constituents were provided by the Washington State Department of Ecology CLARC online database. Kd values for all other constituents were calculated using MTCA Equation 747-2.
3. Henry's law constants are values provided by the Washington State Department of Ecology CLARC online database.
4. Soil concerntrations for groundwater protection calculated using MTCA Equation 747-1.
5. -- = not available
6. Distribution coefficient (K_d) from EPA, 2005. Henry's law constant (Hcc) from Sander, 1999.
7. Distribution coefficient (K_d) and Henry's law constant (Hcc) from Syracuse Research :http://www.srcinc.com/what-we-do/databaseform

Abbreviations:

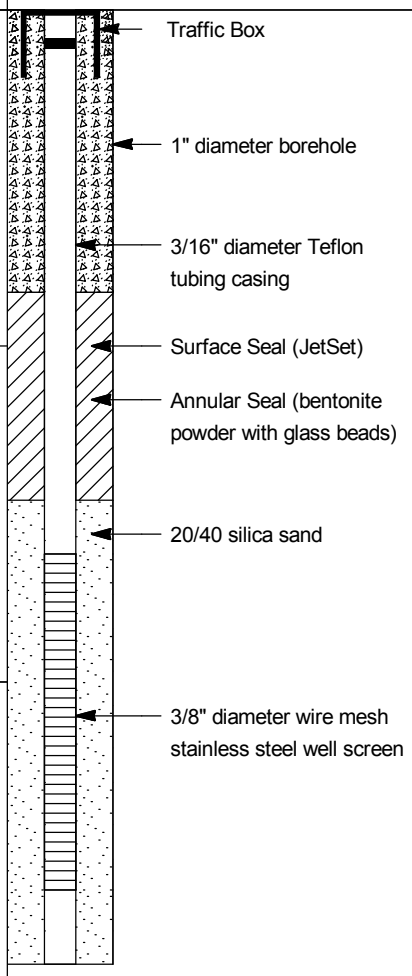
CAS = Chemical Abstract Service Registry Number
DF = Dilution factor
UCF = Unit conversion factor
F_{oc} = Soil fraction of organic carbon
µg = micrograms
kg = kilograms
Θ_w = Water-filled soil porosity
Θ_a = Air filled soil porosity
ρ_b = Dry bulk soil density
C_w = Groundwater cleanup level
mg = milligrams
mL = milliliter
K_{oc} = Soil organic carbon-water particioning coefficient
K_d = Distribution coefficient
H_{cc} = Henry's law constant
C_s = Soil concentration
g = grams
L = Liter

APPENDIX Q

Soil Gas Port Well Construction Diagrams

PROJECT: Monitoring Well Replacement PSC Washougal	**Log of Well No. Soil gas wells**
BORING LOCATION:	GROUND SURFACE ELEVATION AND DATUM:
DRILLING CONTRACTOR: PSC	DATE STARTED: 9/22/01 / DATE FINISHED: 9/24/01
DRILLING METHOD: Installed by hand	TOTAL DEPTH (ft.): 1.4 / SCREEN INTERVAL (ft.): 0.81 to 1.31
DRILLING EQUIPMENT: NA	DEPTH TO WATER: / FIRST / COMPL. / CASING: 3/16" Teflon tubing
SAMPLING METHOD: NA	LOGGED BY: C. Johnson/T. Gray
HAMMER WEIGHT: NA / DROP: NA	RESPONSIBLE PROFESSIONAL: / REG. NO.

DEPTH (feet)	SAMPLES: Sample No.	SAMPLES: Sample	SAMPLES: Blows/ Foot	OVM Reading	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. density, structure, cementation, react. w/HCl, geo. inter. Surface Elevation:	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
0						
1						
2						



APPENDIX R

Analytical Results for Soil Gas and Indoor Air

TABLE R-1

ANALYTICAL RESULTS FOR VOLATILE ORGANIC COMPOUNDS IN SOIL GAS[1]
PSC Washougal Facility
Washougal, Washington

Concentrations in micrograms per cubic meter (µg/m^3)

Sample ID	GP-36	GP-36	GP-37	GP-37	GP-37	GP-38	GP-38	GP-39	GP-39	GP-40	GP-40	GP-41	GP-41	GP-42	GP-42	GP-43	GP-43	GP-48	GP-48	GP-49	GP-49
Analyte **Sample Date**	**10/2/2001**	**2/24/2002**	**10/2/2001**	**2/24/2002**	**6/9/2005**	**10/2/2001**	**2/24/2002**	**10/2/2001**	**2/25/2002**	**10/2/2001**	**2/24/2002**	**10/2/2001**	**2/24/2002**	**10/2/2001**	**2/24/2002**	**10/2/2001**	**2/24/2002**	**10/2/2001**	**2/24/2002**	**10/2/2001**	**2/24/2002**
1,1,1-Trichloroethane	4,500	930	22,000	6,400	420	79,000	4,600	140,000	970	590,000	76,000	65,000	10,000	210,000	120,000	91,000	26,000	1,200	170	1,700	1,800
1,1,2,2-Tetrachloroethane	15 U	6.4 U	120 U	NA	1.7 U	400 U	NA	590 U	NA	2,800 U	NA	240 U	NA	1,100 U	NA	600 U	110 U	5.5 U	NA	6.1 U	NA
1,1,2-Trichloroethane	12 U	5.1 U	93 U	NA	1.3 U	320 U	NA	460 U	NA	2,200 U	NA	190 U	NA	910 U	NA	470 U	86 U	4.4 U	NA	4.8 U	NA
1,1-Dichloroethane	120	12	260	77	5.8	770	44	1,000	6.2	4,600	400	2,600	130	2,600	1,900	6,200	1,000	26	NA	38	16
1,1-Dichloroethene	8.6 U	3.7 U	68 U	15	1.2 U	230 U	NA	340 U	NA	1,600 U	NA	330 U	42	660 U	NA	440	87 U	5.0	NA	3.5 U	NA
1,2,4-Trimethylbenzene	11 U	4.6 U	84 U	NA	1.2 U	280 U	NA	420 U	NA	2,000 U	NA	170 U	NA	820 U	NA	430 U	77 U	3.9 U	NA	4.4 U	NA
1,2-Dichlorobenzene	13 U	5.6 U	100 U	NA	1.5 U	350 U	NA	510 U	NA	2,400 U	NA	210 U	NA	1,000 U	NA	520 U	95 U	4.8 U	NA	5.3 U	NA
1,2-Dichloroethane	8.8 U	3.8 U	69 U	NA	0.99 U	230 U	NA	340 U	NA	1,600 U	NA	140 U	NA	670 U	NA	350 U	64 U	3.2 U	NA	3.6 U	NA
1,3,5-Trimethylbenzene	11 U	4.6 U	84 U	NA	1.2 U	280 U	NA	420 U	NA	2,000 U	NA	170 U	NA	820 U	NA	430 U	77 U	3.9 U	NA	4.4 U	NA
1,3-Dichlorobenzene	13 U	5.6 U	100 U	NA	1.5 U	350 U	NA	510 U	NA	2,400 U	NA	210 U	NA	1,000 U	NA	520 U	95 U	4.8 U	NA	5.3 U	NA
1,4-Dichlorobenzene	13 U	5.6 U	100 U	NA	1.5 U	350 U	NA	510 U	NA	2,400 U	NA	210 U	NA	1,000 U	NA	520 U	95 U	4.8 U	NA	5.3 U	NA
2-Butanone (MEK)	26 U	11 U	200 U	NA	--	680 U	NA	1,000 U	NA	4,800 U	NA	420 U	NA	2,000 U	NA	1000 U	180 U	9.5 U	NA	10 U	NA
4-Methyl-2-pentanone (MIBK)	36 U	15 U	280 U	NA	--	950 U	NA	1,400 U	NA	6,700 U	NA	580 U	NA	2,700 U	NA	1400 U	260 U	13 U	NA	14 U	NA
Acetone	21 U	13	160 U	NA	--	550 U	NA	810 U	16	3,900 U	NA	340 U	NA	1,600 U	NA	820 U	150 U	10	9	12	NA
Benzene	7 U	3 U	54 U	NA	1.9 U	180 U	NA	270 U	NA	1,300 U	NA	110 U	NA	530 U	NA	280 U	50 U	2.6 U	NA	2.8 U	NA
Carbon disulfide	27 U	12 U	210 U	NA	3.8 U	720 U	NA	1,100 U	NA	5,100 U	NA	440 U	NA	2,100 U	NA	1100 U	200 U	10 U	NA	11 U	NA
Carbon tetrachloride	14 U	5.8 U	110 U	NA	1.5 U	360 U	NA	540 U	NA	2,600 U	NA	220 U	NA	1,000 U	NA	550 U	99 U	5 U	NA	5.6 U	NA
Chlorobenzene	10 U	4.3 U	79 U	NA	1.1 U	270 U	NA	390 U	NA	1,900 U	NA	160 U	NA	770 U	NA	400 U	72 U	3.7 U	NA	4.1 U	NA
Chloroethane	5.8 U	2.4 U	45 U	NA	1.6 U	150 U	NA	220 U	NA	1,100 U	NA	94 U	NA	440 U	NA	230 U	42 U	2.1 U	NA	2.3 U	NA
Chloroform	46	4.5 U	83 U	NA	4.6	280 U	NA	420 U	NA	2,000 U	NA	170 U	NA	810 U	NA	420 U	77 U	3.9 U	NA	4.3 U	NA
Chloromethane	4.5 U	1.9 U	35 U	NA	1.2 U	120 U	NA	180 U	NA	840 U	NA	73 U	NA	340 U	NA	180 U	32 U	1.6 U	NA	1.8 U	NA
Chlorotoluene	11 U	4.8 U	88 U	NA	--	300 U	NA	440 U	NA	2,100,000 U	NA	180,000 U	NA	860,000 U	NA	450 U	--	4.2 U	NA	4.6 U	NA
cis-1,2-Dichloroethene	87	14	1700	420	29	8,200	400	20,000	76	100,000	5,400	16,000	870	25,000	15,000	28,000	5,900	3.7	NA	4.1	NA
Dichlorodifluoromethane (freon)	11 U	4.6 U	84 U	NA	91	290 U	NA	420 U	NA	2,000 U	NA	180 U	NA	820 U	NA	430 U	78 U	4 U	NA	4.4 U	NA
Ethylbenzene	9.5 U	4 U	74 U	NA	1 U	250 U	NA	370 U	NA	1,800 U	NA	150 U	NA	720 U	NA	380 U	68 U	3.5 U	NA	3.9 U	NA
m,p-Xylene	9.5 U	4 U	74 U	NA	2.1 U	250 U	NA	370 U	NA	1,800 U	NA	150 U	NA	720 U	NA	380 U	68 U	3.5 U	NA	3.9 U	NA
Methylene chloride	7.6 U	3.2 U	100	NA	8.5 U	300	NA	300 U	170	1,400 U	NA	200	33	1200	NA	300 U	55 U	2.8 U	NA	3.1 U	NA
o-Xylene	9.5 U	4 U	74 U	NA	1 U	250 U	NA	370 U	NA	1,800 U	NA	150 U	NA	720 U	NA	380 U	68 U	3.5 U	NA	3.9 U	NA
Styrene	9.3 U	4 U	73 U	NA	1 U	250 U	NA	360 U	NA	1,700 U	NA	150 U	NA	710 U	NA	370 U	67 U	3.4 U	NA	3.8 U	NA
Tetrachloroethene	4,100	1,100	11,000	3,800	1400 J	16,000	1,700	27,000	540	71,000	16,000	8,800	1,900	34,000	25,000	17,000	5,200	790	110	1,200	1,400
Toluene	8.2 U	3.7 U	64 U	NA	0.92 U	220 U	NA	320 U	NA	1,500 U	NA	130 U	44	630 U	NA	330 U	59 U	3 U	2.9	3.4 U	NA
trans-1,2-Dichloroethene	34 U	15 U	270 U	NA	4.8 U	920 U	NA	1,400 U	NA	6,500 U	NA	560 U	NA	2,600 U	NA	1400 U	250 U	13 U	NA	14 U	NA
Trichloroethene	460	130	1,500	550	380	1,300	150	1,600	38	3,300	820	1,500	230	2,500	2,200	2,300	690	51	3.8	49	43
Vinyl chloride	5.6 U	2.4 U	44 U	NA	0.31 U	150 U	NA	220 U	NA	1,000 U	NA	91 U	NA	430 U	NA	340	40 U	2 U	NA	2.3 U	NA

Notes
1. Laboratory data flags are as follows:
J = value is an estimate
U = not detected at reporting limit listed.

Abbreviations
-- = not analyzed
µg/m^3 = micrograms per cubic meter
NA = not available
VOCs = volatile organic compounds

TABLE R-2

ANALYTICAL RESULTS FOR VOLATILE ORGANIC COMPOUNDS IN AMBIENT AIR[1]

PSC Washougal Facility
Washougal, Washington

Concentrations are in micrograms per cubic meter (µg/m^3)

	Indoor Air				Ambient Air			
Sample ID	**WASH-IA1-0605**	**WASH-9-IA1-0605**	**WASH-IA1-0610**	**WASH-9-IA1-0610**	**Building1Ambient-0901**	**Upwind Ambient-0901**	**WASH-AA1-0605**	**WASH-AA1-0610**
Analyte Sample Date	**6/8/2005**	**6/8/2005**	**6/29/2010**	**6/29/2010**	**10/2/2001**	**10/2/2001**	**6/8/2005**	**6/29/2010**
		Field Dup.		**Field Dup.**				
Freon 12	3.0	3.0	2.6	2.6	2.5	2.6	2.6	1.9
Chloromethane	1.1	1.1	0.98	1	1.2	1	1.0	0.92
Vinyl chloride	0.044 U	0.044 U	0.043 U	0.043 U	0.044 U	0.044 U	0.046 U	0.045 U
Chloroethane	0.22 U	0.22 U	0.44 U	0.44 U	0.22 U	0.23 U	0.24 U	0.46 U
1,1-Dichloroethene	0.068 U	0.068 U	0.067 U	0.067 U	0.068 U	0.069 U	0.071 U	0.069 U
Methylene chloride	1.2 U	1.2 U	1.2 U	1.2 U	1.3	0.82	1.2 U	1.2 U
1,1-Dichloroethane	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
cis-1,2-Dichloroethene	0.14 U	0.14 U	0.13 U	0.13 U	0.14 U	0.14 U	0.14 U	0.14 U
Chloroform	0.17 U	0.17 U	0.82 U	0.82 U	0.17	0.17 U	0.17 U	0.85 U
1,1,1-Trichloroethane	0.19 U	0.19 U	0.38	0.38	0.35	0.28	0.20 U	0.19 U
Carbon tetrachloride	0.62	0.58	1.0 U	1.0 U	0.21 U	0.22 U	0.61	1.1 U
Benzene	0.74	0.78	1.2	1.2	1.4	1.3	0.35	0.44
1,2-Dichloroethane	0.14 U	0.14 U	0.51	0.51	0.14 U	0.14 U	0.14 U	0.14 U
Trichloroethene	2.7	2.5	0.18 U	0.18 U	0.18 U	0.19 U	0.19 U	0.19 U
Toluene	5.5	5.7	5.6	5.7	5.4	4.7	1.7	1.7
1,1,2-Trichloroethane	0.19 U	0.19 U	0.18 U	0.18 U	0.19 U	0.19 U	0.20 U	0.19 U
Tetrachloroethene	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.95	0.24 U	0.26
Chlorobenzene	0.16 U	0.16 U	0.77 U	0.77 U	0.16 U	0.16 U	0.16 U	0.80 U
Ethylbenzene	1.9	1.6	1.1	1.1	0.57	0.64	0.22	0.36
m,p-Xylene	4.6	3.2	3.4	3.3	1.7	2.2	0.62	1.5
o-Xylene	1.3	0.98	1.1	1.1	0.64	0.93	0.19	0.39
Styrene	0.99	1.2	0.72 U	0.72 U	3.0	3.2	2.3	0.74 U
1,1,2,2-Tetrachloroethane	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.24 U	0.24 U	0.24 U
1,3,5-Trimethylbenzene	0.31	0.30	0.82 U	0.82 U	0.17 U	0.28	0.18 U	0.86 U
1,2,4-Trimethylbenzene	0.94	0.86	1.6	1.3	0.33	0.9	0.18 U	0.86 U
1,3-Dichlorobenzene	0.20 U	0.20 U	1.0 U	1.0 U	0.20 U	0.21 U	0.22 U	1.0 U
1,4-Dichlorobenzene	0.21	0.21	1.0 U	1.0 U	0.20 U	0.21 U	0.22 U	1.0 U
Chlorotoluene	--	--	--	--	0.88 U	0.90 U	--	--
1,2-Dichlorobenzene	0.20 U	0.20 U	1.0 U	1.0 U	0.20 U	0.21 U	0.22 U	1.0 U
Acetone	--	--	--	--	23	22	--	--
Carbon disulfide	6.8	0.53 U	2.6 U	2.6 U	1.5	0.54 U	0.56 U	2.7 U
trans-1,2-Dichloroethene	0.92	0.88	0.67 U	0.67 U	0.68 U	0.69 U	0.71 U	0.69 U
2-Butanone (MEK)	--	--	--	--	2.6	2.3	--	--
4-Methyl-2-pentanone	--	--	--	--	1.2	0.71 U	--	--

Notes
1. Laboratory data flags are as follows:
   J = value is an estimate.
   U = not detected at reporting limit listed.

Abbreviations
-- = not analyzed
VOCs = volatile organic compounds