

**ADDITIONAL SITE
CHARACTERIZATION REPORT**

BAYLINER MARINE
17825 59TH AVENUE NE
ARLINGTON, WASHINGTON



April 9, 2010



Stantec

**ADDITIONAL SITE
CHARACTERIZATION REPORT**

**BAYLINER MARINE
17825 59TH AVENUE NE
ARLINGTON, WASHINGTON 98223**

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Table of Contents

1.0 INTRODUCTION	1
1.1 BACKGROUND	1
1.1.1 Subject Property Description	1
1.1.2 Phase I ESA Findings	2
1.1.3 Phase II ESA Findings.....	2
1.1.4 December 2009 Additional Site Investigation	5
1.2 ADDITIONAL INVESTIGATION SCOPE OF WORK	5

2.0 SUBSURFACE INVESTIGATION.....	8
2.1 PRE-FIELD WORK ACTIVITIES.....	8
2.2 INSTALLATION OF FEBRUARY 2010 SOIL BORINGS	8
2.3 MONITORING WELL CONSTRUCTION.....	9
2.4 INSTALLATION OF MARCH 2010 SOIL BORINGS.....	10
2.5 GROUNDWATER SAMPLING.....	11
2.6 LABORATORY ANALYSES.....	11
2.7 WELLHEAD SURVEY.....	12

3.0 SUMMARY OF FINDINGS.....	13
3.1 OBSERVED SUBSURFACE CONDITIONS.....	13
3.2 SOIL SAMPLE ANALYTICAL RESULTS	13
3.3 GROUNDWATER SAMPLE ANALYTICAL RESULTS	14
3.4 EVALUATION OF AQUIFER CHARACTERISTICS.....	16
3.5 VAPOR INTRUSION RISK SCREENING.....	17
3.5.1 Preliminary VI Assessment.....	17
3.5.2 Tier I Assessment.....	18

4.0 SUMMARY AND CONCLUSIONS.....	21
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APPENDICES

Appendix A	Figures
	Figure 1 – Site Location Map
	Figure 2 – Site Plan
	Figure 3 – Site Plan with Groundwater Elevations
Appendix B	Tables
	Table 1 – Monitoring Well Data
	Table 2 – VOCs in Soil
	Table 3 –SVOCs in Soil
	Table 4 – RCRA Metals in Soil
	Table 5 – VOCs in Groundwater

ADDITIONAL SITE CHARACTERIZATION REPORT

Table of Contents

Table 6 - SVOCs in Groundwater
Table 7 – RCRA Metals in Groundwater
Table 8 – VOCs and SVOCs in Pond Sediment
Table 9 – RCRA Metals in Pond Sediment

Appendix C	Boring Logs/Well Construction Logs
Appendix D	Groundwater Sampling Data Sheets
Appendix E	Laboratory Analytical Reports And Chain-of-Custody– February 2010
Appendix F	Laboratory Analytical Reports And Chain-of-Custody – March 2010
Appendix G	Soil Vapor Sample Analytical Report – March 2010
Appendix H	J & E Model Outputs

1.0 INTRODUCTION

This report presents results of continuing environmental investigations at the Bayliner Marine property located at 17825 59th Avenue NE, Arlington, Snohomish County, Washington 98223. This report describes the construction of two groundwater monitoring wells in February 2010, installation of nine additional soil borings in February and March 2010 for screening of the lateral extent of contamination impacts, collection of soil, groundwater and soil vapor samples for laboratory analyses, and evaluation of published data about aquifer characteristics in the area. Based on findings of previous site investigations, Brunswick directed that the site investigations described herein be performed.

1.1 BACKGROUND

Stantec was retained by Brunswick Corporation, owner of the subject property, in March 2009 to initially complete a Phase I ESA, and then a Phase II ESA in preparation for a potential sale of the subject property. Based on findings of these assessments, additional site investigation was carried out in December 2009.

1.1.1 Subject Property Description

The subject property is a 32.8-acre industrial site developed with three office buildings and thirteen industrial buildings constructed between 1969 and 1996. The subject property also includes employee parking lots, boat storage areas, and three stormwater retention ponds. The subject property operated as a fiberglass boat manufacturing facility from 1968 until December 2008, and has been in the process of being closed down since then. Prior to 1968, the site consisted of undeveloped land.

Figure 1 in Appendix A depicts the location of the subject property. Figure 2 presents a Site Plan of the subject property showing boring and sampling locations.

The subject property is located in an area of moderately dense industrial and commercial development. It is bordered on the north by 180th Street NE. Across the street to the north of Building 1 is Campbell and Neilson Auto Wrecking (18021 59th Avenue NE). Undeveloped land is located across the street to the north of Building's 2, 3 and 4. Across the street to the north of the eastern boat storage yard is the Stella-Jones wood preserving plant (6520 188th Street NE).

The subject property is bordered on the east by a currently vacant former manufacturing building (address and former tenants unknown). Further to the east are a Burlington Northern Railroad line, smaller commercial structures, and 67th Avenue NE. A residential neighborhood

lies beyond 67th Avenue. The subject property is bordered on the south primarily by undeveloped land. To the west of the subject property is 59th Avenue NE, with the Arlington Municipal Airport beyond.

1.1.2 Phase I ESA Findings

The March 23, 2009 Phase I ESA Report identified the following Recognized Environmental Conditions (RECs) associated with the subject property:

- Wastewater discharges from the facility were originally directed to two septic systems with leach fields on the subject property. All wastewater from the facility went to the on-site septic systems from 1968 until at least 1987. Bayliner buildings were gradually connected to the municipal sanitary sewer system between 1987 and 2005. Chemical waste constituents that may have been present in the wastewater discharges had the potential to migrate from the leach fields to subsurface soil and groundwater beneath the subject property.
- All stormwater catch basins and trench drains on the property discharged the collected stormwater to a series of three retention ponds along the southern boundary of the subject property. There was a potential that chemical or petroleum contaminants that became entrained in stormwater runoff may have accumulated in sediments within the ponds or leached to underlying soil or groundwater.
- Washington Department of Ecology's underground storage tank (UST) database indicated that two USTs had been present on the subject property from 1964 until 1996. However, the database did not provide any additional information about the removal of the tanks, and files researched at the City of Arlington Fire Department contained no record at all of former USTs. If USTs had indeed been previously present, there was a potential that petroleum leaks or spills from the tank systems could have caused contamination of subsurface soil or groundwater.

1.1.3 Phase II ESA Findings

In response to the results of the Phase I ESA, Brunswick Corporation directed Stantec to complete a Phase II ESA to further evaluate the potential presence of subsurface contamination associated with the RECs discussed above, as well as other aspects of the environmental condition of the property. The results of the Phase II ESA were detailed in a report dated June 25, 2009. Key findings of the Phase II ESA are summarized below:

Former Underground Storage Tanks. Mr. Tad Blankenbaker, site manager at the Bayliner Marine facility, reported that he had worked at the subject property for 20 years, and that the

ADDITIONAL SITE CHARACTERIZATION REPORT**Bayliner Marine – Arlington, Washington**

INTRODUCTION

April 9, 2010

USTs had been formerly located in the area just north of Building #11. Stantec also reviewed files pertaining to the former USTs at the Northwest Region office of the Department of Ecology in Bellevue, Washington. Ecology records indicated that one 5,000-gallon aviation gasoline UST and one 9,000-gallon Jet-A UST were removed from the ground in April 1989. No further documentation, such as results of soil sampling conducted at the time of the removal, was present in the Ecology files.

Stella-Jones (former J.H. Baxter) Woodtreating Facility, 6520 188th St. NE. Although not identified as a REC in the Phase I ESA report, Brunswick directed Stantec to conduct a review of Ecology files concerning groundwater quality data at the Stella-Jones site. This review was done in response to inquiries made by a potential buyer of the property about the potential for environmental impact from the Stella Jones site. A portion of the Stella Jones facility is located directly across 180th Street to the north of the subject property. The Stella-Jones facility treats telephone and power poles using a pressure-treating process with a solution of 5% pentachlorophenol (PCP) in a base oil carrier. An alternate treatment process using Copper Naphthanate was added to the facility in approximately 2002-2003. Parcel A includes approximately 17 acres used for the pole treatment operations, located in the northern part of the Stella-Jones facility, more than 1,500 feet north of the subject property. Parcel B comprises 28 acres on the southern part of the facility adjacent to the Bayliner property. Parcel B has been used for untreated pole storage and pole peeling only. No wood treating has ever occurred on Parcel B. The woodtreating facility began operation on Parcel A in the mid-1960s. PCP and creosote waste were reportedly disposed into a pit on the south portion of Parcel A. The facility was purchased by J.H. Baxter in 1970, and Baxter purchased Parcel B for storage of untreated poles. The operation previously owned by J.H. Baxter was acquired by Stella-Jones Corp. in 2007.

An initial groundwater investigation began in 1989, and six monitoring wells were installed on Parcel A and two on Parcel B. An investigation of soil and groundwater quality in the untreated pole storage area (Parcel B) was completed in October 2002. Grab groundwater samples were collected from each boring location. In addition, a groundwater monitoring well (MW-14) was added to the site's well network near the southern boundary of the Baxter facility, across the street from the employee parking lot on the Bayliner property. A low PCP concentration of 0.067 micrograms per liter ($\mu\text{g/L}$) was reported in the groundwater sample from SB-57, across the street from the northeast corner of the Bayliner property. PCP was not detected at any of the other groundwater sample locations within 1,000 feet of the subject property (SB-54, SB-55, SB-56, SB-58, MW-4, MW-14). The only locations with elevated concentrations of PCP, PAHs and TPH-D were located 2,000 to 3,000 feet north of the subject property. October 2002 groundwater data showed a fairly steep groundwater gradient across the Stella-Jones property toward the northwest.

Groundwater sampling conducted in February 2004 found no PCP or PAHs at MW-4 or MW-14, the wells nearest to the subject property. The closest reported contamination to the Bayliner

ADDITIONAL SITE CHARACTERIZATION REPORT**Bayliner Marine – Arlington, Washington**

INTRODUCTION

April 9, 2010

property was at MW-10, about 1,500 feet to the north. No data more recent than 2004 was found in the Department of Ecology files.

Based on the reviewed information, there is no indication that contamination at the Stella-Jones site is likely to have impacted the subject property.

Sampling of Soil, Groundwater and Pond Sediment. In May 2009, soil borings were completed using a hollow-stem auger drilling rig at 7 locations (B-1 through B-7) selected to evaluate potential impacts from the areas of concern identified as RECs in the Phase I report. Samples of soil and groundwater from each location were collected for laboratory analyses. Observed subsurface soil in the borings consisted of fine-to-coarse-grained sand with traces of gravel. Groundwater was encountered at a depth of approximately 18 feet below ground surface (bgs) in each boring.

To evaluate potential accumulations of contamination in the three on-site retention ponds, Stantec collected a surface sediment sample from the bottom of each pond. Acetone was detected at low concentrations in the sediment samples from RP-1 (0.14 mg/kg) and RP-3 (0.056 mg/kg). Acetone was not detected in the sample from RP-2. No other VOCs or SVOCs were detected in any of the pond sediment samples at concentrations exceeding the laboratory method detection limit (MDL). The sediment samples contained several RCRA metals, in all cases below MTCA Method A Soil Cleanup Levels for Unrestricted Site Use, or below US EPA risk-based screening levels in cases where MTCA cleanup levels have not been established.

The Phase II ESA identified an area of shallow groundwater impacted with Tetrachloroethylene (PCE) at concentrations above the MTCA Method A Groundwater Cleanup Level of 5 micrograms per liter ($\mu\text{g/L}$). The highest reported concentration of PCE was 42 $\mu\text{g/L}$ at B-4, located in the area of a former septic system leach field north of Building 14. At B-5, approximately 200 feet northwest in the presumed downgradient direction from B-4, the reported PCE concentration was 31 $\mu\text{g/L}$. At B-6, which is near the northern property boundary approximately 600 feet in the presumed downgradient direction from B-4, the PCE concentration was 18 $\mu\text{g/L}$. Based on the data generated in this preliminary investigation, the lateral extent of PCE impact to the east and west appeared to be limited. No other VOCs were detected in the collected groundwater samples. The source of the PCE contamination is not known.

No SVOCs were detected in any of the groundwater samples. Several metals were identified in the groundwater samples, but only arsenic in B-5 at 24 $\mu\text{g/L}$ and lead in B-1 at 20 $\mu\text{g/L}$ exceeded the respective MTCA Method A Cleanup Levels. The elevated concentrations of arsenic and lead in groundwater samples may be attributable to turbidity in the samples, since the samples were not filtered prior to analysis.

ADDITIONAL SITE CHARACTERIZATION REPORT**Bayliner Marine – Arlington, Washington**

INTRODUCTION

April 9, 2010

The analytical results did not identify any compounds in soil at concentrations exceeding Method A Soil Cleanup Levels for Unrestricted Site Use. The low reported concentrations of PCE in soil are not indicative of a source point contributing to the PCE impacts to groundwater.

Locations of the Phase II ESA borings are depicted on Figure 2 in Appendix A. Analytical results from the May 2009 samples are summarized in the tables in Appendix B.

1.1.4 December 2009 Additional Site Investigation

Five groundwater monitoring wells were constructed to further characterize and confirm the Phase II findings. As with the Phase II groundwater samples from May 2009, PCE was detected in groundwater at concentrations exceeding the MTCA Method A groundwater cleanup level at MW-1 (near Building 11 in the south-center of the site) and at MW-4 (near the north-central perimeter of the facility). Trichloroethylene (TCE) was also detected in groundwater at MW-4. The presence of PCE and TCE at this location indicates that the VOC-contaminant plume may extend off site to the north. No VOCs were detected in groundwater at the other three well locations.

Depth to groundwater ranged from 17 to 22 feet, with a gradient of 0.0034 ft/ft in a northwesterly direction.

PCE was detected in soil at two locations, but concentrations were below the MTCA Method A Cleanup Level for residential soils, and appear likely to represent a residual “smear” effect from PCE in fluctuating levels of groundwater rather than a source point for solvent release.

A City of Arlington municipal water supply well was identified as a potential downgradient receptor of concern for the VOC-impacted groundwater. The well is located approximately 1,500 feet north-northwest of the subject property, and the well extracts water from a groundwater zone between 151 and 181 feet bgs, considerably deeper than the groundwater zone where solvent impacts have been found at the subject property.

1.2 ADDITIONAL INVESTIGATION SCOPE OF WORK

This report describes additional investigation undertaken in February and March 2010 to confirm and expand upon the data obtained during the previous site investigations. The completed scope of work included the following elements:

- Preparation and Submittal of VCP Application. On behalf of Brunswick Corporation, Stantec completed an application to enter the site into Ecology’s Voluntary Cleanup Program (VCP). The completed VCP Agreement, application, and copies of previous site investigation reports were submitted to Ecology’s Northwest Region Cleanup Program office on February 16, 2010.

ADDITIONAL SITE CHARACTERIZATION REPORT**Bayliner Marine – Arlington, Washington**

INTRODUCTION

April 9, 2010

- *Pre-Field Activities.* Prior to mobilizing to the site, the One Call Utility Notification Service was notified to alert the utility companies in the area of the scheduled work, and request that they mark all underground utilities in accordance with State of Washington requirements. In addition, Stantec subcontracted with a private utility locating contractor to mark underground utilities on the subject property near the proposed February 2010 boring locations. The site-specific health and safety plan was updated to reflect the additional project activities, in accordance with federal regulations (40 CFR 1910.120).
- *Groundwater Sampling and Analyses.* Two groundwater monitoring wells were constructed in February 2010, and soil borings were completed with temporary wells at two additional locations in February 2010. Seven additional soil borings were completed in March 2010 by Landau Associates, Inc., a consultant representing a potential buyer of the property. Groundwater samples were collected from these 11 locations and the five previously existing monitoring wells monitor current groundwater quality and seasonal fluctuations in contaminant concentrations, and allow further delineation of the lateral extent of impacted groundwater. Groundwater samples from each location were analyzed for VOCs by US EPA Method 8260. Selected groundwater samples were also analyzed for dissolved metals by US EPA Methods 6010 and 7471.
- *Soil Sampling and Analyses.* Soil samples from each of the four February 2010 borings were selected for laboratory analysis of VOCs, total RCRA metals, and hexavalent chromium.
- *Surveying and Determination of Groundwater Gradient.* Locations and top-of-casing elevations of the two new wells were surveyed, and depth-to-water measurements were made in all seven site monitoring wells in February 2010 to allow calculation of the relative groundwater surface elevation, gradient, and direction of flow.
- *Evaluation of Aquifer Characteristics in Site Vicinity.* Stantec completed a desk-top review of published information and documents to assess characteristics of the groundwater aquifers in the vicinity of the subject property and whether subsurface conditions suggested a likelihood for VOCs in the shallow groundwater zone to migrate to deeper groundwater zones tapped by the nearby municipal supply well or other water supply wells in the area.
- *Vapor Intrusion Risk Screening.* Site soil and groundwater data was compared to draft Tier 1 Vapor Intrusion Screening Levels being considered by Ecology. The intent was to evaluate the risk for VOCs in groundwater to result in accumulations of volatile vapors in site buildings, and to identify whether additional testing or evaluation would be warranted. In March 2010, one sub-slab soil vapor sample was obtained beneath

Building 11, the building located immediately downgradient from the location where the highest VOC concentrations in groundwater had been observed.

2.0 SUBSURFACE INVESTIGATION

2.1 PRE-FIELD WORK ACTIVITIES

Prior to mobilizing to the site, on February 9, 2010 Stantec notified the Washington Utilities Underground Location Center (800-424-5555) to alert the utility companies in the area of the scheduled work, and request that they mark all underground utility locations in accordance with State of Washington requirements. In addition, Stantec subcontracted with Locates Down Under (LDU), a private utility locating contractor to mark private underground utilities near the proposed boring locations. On February 17, 2010, a representative of LDU met Stantec at the subject property to mark locations of all power, communications, natural gas and water lines in the vicinity of the proposed borings.

Landau Associates submitted a similar utility locate request to the Washington Utilities Underground Location Center prior to initiating subsurface investigations in March 2010.

Stantec contacted the City of Arlington Public Works Department and reviewed Snohomish County property assessment files to identify the owner of land in the 180th Street NE right-of-way where three of the borings were proposed. It was determined that 180th Street NE is a private roadway which is located on the property owned by Brunswick Corporation. Therefore, no further arrangements for access to the February 2010 boring locations was required.

2.2 INSTALLATION OF FEBRUARY 2010 SOIL BORINGS

Four soil borings were completed at the site on February 17 and 18, 2010. The locations were as follows:

- Boring MW-6 was installed on the east side of Building 4;
- Boring MW-7 was installed in the right-of-way for 180th Avenue NE, approximately 80 feet northwest of MW-4;
- Boring B-8 was installed in the right-of-way for 180th Avenue NE, approximately 290 feet west of MW-7 and approximately 80 feet northeast of MW-5;
- Boring B-9 was installed in the right-of-way for 180th Avenue NE, approximately 330 feet east of MW-7.

Locations of these borings are depicted on Figure 2 in Appendix A.

ADDITIONAL SITE CHARACTERIZATION REPORT**Bayliner Marine – Arlington, Washington**

SUBSURFACE INVESTIGATION

April 9, 2010

The location of MW-6 was selected in order to help define the eastward extent of the plume of VOC-impacted groundwater. The locations for MW-7, B-8 and B-9 were intended to be as far north as possible while still within the street right-of-way owned by Brunswick, in order to help define the northern extent of the plume of VOC-impacted groundwater. However, due to the presence of underground natural gas, water and telephone lines along the northern edge of the right-of-way, the borings were placed approximately 5 feet south of the northern edge of the street pavement, in order to provide an adequate margin of drilling safety away from the buried utilities.

Stantec retained Cascade Drilling Services, Inc. of Woodinville, Washington to provide hollow-stem auger drilling equipment and crews for installation of four soil borings at the subject property. As an added safety precaution, the first 5 feet of each boring were cleared using a hand auger. The 6.25-inch O.D. auger stem was then lowered into the hand-cleared boring and drilling began. Drill cuttings were placed into 55-gallon steel drums which, when full, were closed with a lid, labeled with Stantec's contact information and temporarily stored on-site.

Soil samples were obtained at every 5 feet of depth using a split-spoon sampler advanced ahead of the drill string. Soil samples were examined for visual or olfactory indications of contamination and were screened in the field for volatile organic vapors using a photoionization detector (PID) with a 10.6 electron-volt lamp. Soil samples were also characterized according to the Unified Soil Classification System and observations were recorded on a boring log. Copies of the boring logs are provided in Appendix C.

Soil samples from each depth interval were collected from the split spoon and transferred to clean, laboratory-supplied sample containers, placed in a cooler, and held for possible laboratory analyses. Soil samples for VOC analysis were obtained in accordance with EPA Method 5035 using a laboratory-supplied syringe to minimize loss of volatile constituents during sample collection.

The borings were continued to at least 5 feet below the first encountered groundwater.

At B-8 and B-9, a temporary groundwater monitoring well was established after completion of the boring. The depth to water was measured in the temporary well and recorded. Then a groundwater sample was withdrawn using a low-flow peristaltic pump with dedicated polyethylene tubing. The groundwater samples were decanted directly into clean, laboratory supplied VOA vials.

2.3 MONITORING WELL CONSTRUCTION

After reaching the total depth of the borings, groundwater monitoring wells were constructed in borings MW-6 and MW-7. Wells were constructed of 2-inch diameter Schedule 40 PVC pipe,

ADDITIONAL SITE CHARACTERIZATION REPORT**Bayliner Marine – Arlington, Washington**

SUBSURFACE INVESTIGATION

April 9, 2010

machine-slotted with 0.01-inch screen from approximately 10 feet above to approximately 5 feet below the groundwater surface. The annular space around the well casing was filled with 10/20 Colorado silica sand to a point 2 feet above the screened interval of the well. The remainder of the boring was filled with hydrated bentonite to within 2 feet of the surface. The upper 2 feet of the boring was then sealed with concrete and a flush-mounted well monument installed at the ground surface.

Well construction details are presented in Appendix B, Table 1, and in the well construction logs provided in Appendix C.

2.4 INSTALLATION OF MARCH 2010 SOIL BORINGS

On March 18, 2010 Landau Associates completed seven additional borings to further characterize groundwater conditions beneath the subject property. Boring locations were as follows:

- Boring B-10 was located near the western property boundary, west of Building 6 along 59th Avenue NE.
- Boring B-11 was located directly downgradient (north) of Stormwater Retention Pond #1.
- Boring B-12 was located directly downgradient (north) of Stormwater Retention Pond #3.
- Boring B-13 was located near the northern property boundary, northeast of Building 3 along 180th Street NE.
- Borings B-14 and B-15 were located on the north side of Building 11, downgradient (north) from the locations where the highest VOC concentrations in groundwater had been observed.
- Boring B-16 was located near the northern property boundary north of Building 2, proximate to MW-4.

Locations of these borings are depicted on Figure 2 in Appendix A.

The March 2010 borings were installed using direct-push drilling equipment supplied by Cascade Drilling Services, Inc. of Woodinville, Washington. Probes were driven into the soil until groundwater was encountered.

To facilitate evaluation of the vertical distribution of VOCs in groundwater, Boring B-14 was completed to a total depth of approximately 48 feet bgs and boring B-16 was completed to 50 feet bgs. All other borings were completed to a depth of approximately five feet below the depth of first encountered groundwater.

One soil sample was collected from boring B-15. No other soil samples were obtained from the March 2010 borings, and soil lithology of the borings was not logged.

2.5 GROUNDWATER SAMPLING

On February 18, 2010, depth-to-water measurements were taken in each of the previously existing on-site wells, MW-1 through MW-5. The wells were then purged by removing approximately 5 to 10 well volumes of water. Purge water was tested for pH, conductivity, dissolved oxygen, oxygen reduction potential, and temperature. Details of removed water volumes and field monitoring of water quality parameters are presented in the Groundwater Sampling Data Sheets in Appendix D.

Following purging, groundwater samples were collected using a low-flow peristaltic pump with dedicated polyethylene tubing. The groundwater samples were decanted directly into clean, laboratory supplied VOA vials.

Following completion of wells MW-6 and MW-7, the wells were allowed to stabilize for approximately 24 hours. On February 19, 2010, wells MW-6 and MW-7 were purged and sampled using the same methodology described above.

In borings B-10 through B-16 in March 2010, a temporary PVC well screen was lowered into the boring through the probe interior to facilitate collection of groundwater samples. Groundwater was withdrawn using clean, dedicated polyethylene tubing connected to a low-flow pump. Water was purged from the boring until it appeared clear of sediment, then a sample was decanted directly into a laboratory-supplied VOA vial. At B-14 and B-16, the temporary well screen was removed after collection of the first sample, and the probe was advanced an additional 10 feet. The temporary well screen was then placed back into the probe to allow collection of a groundwater sample from a deeper interval. The process was repeated again to allow sample collection from a third depth interval.

2.6 LABORATORY ANALYSES

Two soil samples were selected for laboratory analyses from each of borings B-8 and B-9. The selected samples were from the depth interval just above the saturated zone, and from a shallower depth interval based on PID readings observed in the field.

The selected soil samples and the groundwater samples from each of the borings and wells were maintained on ice in a cooler and under chain-of-custody until delivery to the project laboratory. All samples collected by Stantec on February 18-19, 2010 were shipped to Environmental Science Corp. (ESC) laboratory in Mt. Juliet, Tennessee for analyses. The soil and groundwater samples were analyzed by ESC for the following parameters:

ADDITIONAL SITE CHARACTERIZATION REPORT**Bayliner Marine – Arlington, Washington**

SUBSURFACE INVESTIGATION

April 9, 2010

- Volatile Organic Compounds (VOCs) by US EPA Method 8260B
- RCRA 8 Total Metals (soil samples only) by US EPA Method 6010 (arsenic, barium, cadmium, chromium, lead, selenium and silver) and US EPA Method 7471 (mercury).
- Chromium VI (soil samples only) by US EPA Method 7196.
- RCRA 8 Dissolved Metals (groundwater samples only) by US EPA Methods 6010 and 7471.

All samples collected by Landau Associates on March 19, 2010 were delivered to ALS Analytical Chemistry and Testing Services in Everett, Washington where they were analyzed for VOCs by EPA Method 8260 and for Total Petroleum Hydrocarbons (TPH) by Northwest TPH-Hydrocarbon Identification (NWTPH-HCID) method.

2.7 WELLHEAD SURVEY

The locations of wells MW-6 and MW-7 were surveyed by Stantec personnel on February 19, 2010, and elevations of the top-of-casing for each well were surveyed to the nearest 0.01 foot. Elevations were correlated to the previously surveyed elevations of the other five site monitoring wells. Depth-to-water measurements were used in conjunction with the survey data to determine the relative groundwater surface elevation, gradient, and direction of flow, as presented in section 3.1. Top-of-casing elevations, depth-to-water measurements, and calculated potentiometric surface elevations in each well are presented in Appendix B, Table 1.

3.0 SUMMARY OF FINDINGS

3.1 OBSERVED SUBSURFACE CONDITIONS

Observed subsurface soils in the borings MW-6, MW-7, B-8 and B-9 were consistent with conditions observed in previous borings at the site, consisting of fine-to-coarse-grained sand with traces of gravel. Similar soil conditions were noted at all depth intervals in all of the borings, with the only noticeable difference being slight variation in the amount of gravel. Static groundwater levels measured February 18-19, 2010 ranged from 15 to 20 feet bgs in all seven monitoring wells. Similar groundwater depths were encountered in the seven soil borings completed by Landau Associates on March 19, 2010.

According to the USGS 7.5-minute topographic map for the Smokey Point, Washington quadrangle (1981), the subject property is located at an elevation of approximately 130 feet above mean sea level. The area to the north, south and west is relatively flat, sloping downward slightly toward the Stillaguamish River approximately 1.4 miles to the northwest. However, an area of low hills rise steeply just to the east of the subject property, reaching to ridges of up to 350 feet above mean sea level within less than one-half-mile.

Data collected on February 18-19, 2010 from the subject property monitoring wells was used to evaluate groundwater flow direction. As summarized in Appendix B, Table 1, the potentiometric surface elevations ranged from 114.88 feet above mean sea level (MSL) at MW-3 in the southeast corner of the property, to 110.94 feet above MSL at MW-5 in the northwest corner of the property. This results in an overall gradient across the site of 0.0029 feet per foot (ft/ft) in a west-northwesterly direction. Potentiometric surface contours, as measured on February 18-19, 2010, are illustrated on Figure 3 in Appendix A.

The groundwater surface elevations measured in February 2010 were, on average, about 2.5 feet higher than the elevations measured in December 2009. The gradient was slightly less steep than the gradient calculated in December 2009. Groundwater flow direction appears to be generally consistent with the earlier measurements.

3.2 SOIL SAMPLE ANALYTICAL RESULTS

Analytical results for soil samples are summarized in Appendix B, Tables 2, 3 and 4. Complete copies of the laboratory analytical reports for February 2010 are provided in Appendix E.

Tetrachloroethylene (PCE) was not present above the detection limit of the laboratory method in the samples collected from MW-6, MW-7 or B-8. A low concentration of PCE (0.002 mg/kg) was found in the sample from the 20-foot depth in B-9. However, no PCE was detected in the

ADDITIONAL SITE CHARACTERIZATION REPORT**Bayliner Marine – Arlington, Washington**

SUMMARY OF FINDINGS

April 9, 2010

shallower sample from 5 feet bgs at B-9. Similar low concentrations of PCE, ranging from 0.0036 mg/kg to 0.044 mg/kg, had been detected in soil samples collected during previous investigations at the site. The detected PCE concentrations are below the MTCA Method A Soil Cleanup Level for Unrestricted Site Use (0.05 mg/kg) established by the Department of Ecology.

The only other VOC detected in any of the February 2010 soil samples at concentrations above the laboratory MDL was 0.0014 mg/kg Chloromethane in the sample from 15 feet bgs at MW-6. No Method A soil cleanup level for chloromethane has been established by Ecology. As a means of screening the significance of this finding, the reported concentration was compared to the US EPA's Regional Risk-Based Screening Level. The detected concentration in MW-6 is nearly five orders of magnitude below the EPA Screening Level of 120 mg/kg.

One soil sample was collected on March 19, 2010 from boring B-15 by Landau Associates at a depth just above the groundwater interface. No VOCs were detected in the sample above the laboratory method reporting limit.

Several RCRA metals were present in the soil samples from MW-6, MW-7, B-8 and B-9.. Results were compared against MTCA Method A Soil Cleanup Levels for Unrestricted Site Use. Method A Cleanup Levels have been established for 6 of the 9 metals analyzed (arsenic, cadmium, total chromium, hexavalent chromium [chromium VI], lead and mercury). For the other three metals (barium, silver, selenium), results were compared with the US EPA's Regional Risk-Based Screening Level.

Detected concentrations in the February 2010 soil samples for lead, and mercury were below their respective Method A Cleanup levels.

Barium was present in all 8 samples, at concentrations ranging from 38 to 110 mg/kg. These concentrations are consistent with sampling data from previous investigations at the site, and are well below the US EPA's Regional Risk-Based Screening Level for barium in residential soil of 15,000 mg/kg.

Arsenic, cadmium, hexavalent chromium, silver and selenium were not detected above the laboratory method detection limit in any of the samples

3.3 GROUNDWATER SAMPLE ANALYTICAL RESULTS

Analytical results for groundwater samples are summarized in Appendix B, Tables 5, 6 and 7. Complete copies of the laboratory analytical reports for February 2010 are provided in Appendix E. Copies of the laboratory analytical reports for March 2010 are provided in Appendix F.

ADDITIONAL SITE CHARACTERIZATION REPORT**Bayliner Marine – Arlington, Washington**

SUMMARY OF FINDINGS

April 9, 2010

PCE was reported at concentrations of 48 µg/L at MW-1, 45 µg/L in the first sample at B-14, and 40 µg/L at B-15.. These concentrations exceed the MTCA Method A Cleanup Level of 5 µg/L, and are similar to the 59 µg/L at MW-1 in December 2009, and 42 µg/L PCE detected at nearby B-4 in May 2009.

PCE was reported at a concentration of 5.3 µg/L in the sample at MW-4, and 3.9 µg/L in the first sample from nearby B-16. These are just slightly above and below the MTCA Method A groundwater cleanup level of 5 µg/L, and below the previously reported concentrations of 13 µg/L in December 2009 and 18 µg/L in May 2009 at nearby B-6. No other VOCs were detected above the laboratory MDL in any of the February or March 2010 groundwater samples from these locations.

To allow an evaluation of the vertical distribution of VOCs within the shallow groundwater zone, groundwater samples were collected from three discrete depth intervals in borings B-14 and B-16. In the sample from 30-34 feet bgs in B-14, PCE was reported at a concentration of 40 µg/L, slightly less than the concentration in the shallower sample at that location. No VOCs were detected in the sample from the deeper interval (44-48 feet bgs) at B-14. At B-16, the sample collected from a depth of 32-36 feet bgs contained a PCE concentration of 7.3 µg/L, slightly higher than the concentration in the shallower sample from this location, and slightly higher than the shallow sample collected from nearby MW-7. However, no VOCs were detected in the sample from the deeper interval (46-50 feet bgs) at B-16.

Several RCRA metals were detected in groundwater samples. Results were compared against MTCA Method A Groundwater Cleanup Levels that have been established for 5 of the 8 metals analyzed (arsenic, cadmium, total chromium, lead and mercury). For the other three metals (barium, silver, selenium), results were compared with the US EPA's Regional Risk-Based Screening Level.

Barium was detected at a dissolved concentration of 42 µg/L in B-8, below the Risk-Based Screening Level of 7,300 µg/L. Barium was not detected above the laboratory MDL in any of the other February 2010 samples.

Silver was detected at a concentration of 96 µg/L in the sample from B-8, below the Risk-Based Screening Level of 180 µg/L. Silver was not detected above the laboratory MDL in any of the other samples.

Arsenic, cadmium, chromium, mercury, and selenium were not detected above the laboratory MDL in any of the groundwater samples.

3.4 EVALUATION OF AQUIFER CHARACTERISTICS

The physiographic features and rock units of the Arlington area represent the end product of a complex geologic process. The glacially derived sands and gravels of Pleistocene age are the most recent rocks deposited in the area, and various units of this group serve as the major aquifers in the area¹.

The Stillaguamish sand member is an outwash deposit which accumulated to a thickness of about 200 feet at a time when the melting ice temporarily blocked the river at the north end of Getchell Hill and caused the Stillaguamish drainage to pass southward through a spillway now followed by the Pilchuck River². The deposits are largely fine sand and clay but contain much coarser material towards the top and especially around the margin opposite points of tributary-stream debouchments. Review of well logs³ in the region confirms the presence of significant, discontinuous layers of clay within the sand aquifers.

The general topographic gradient in the vicinity of the subject property is to the west. The subject property is underlain by Lynnwood loamy sand soils. Lynnwood soils have high infiltration rates and are considered well drained to excessively drained sands and gravels. Based on groundwater elevations measured during site monitoring events, the overall groundwater flow across the site is in a west-northwesterly direction.

Observed subsurface soil in the borings at the Bayliner site consisted of fine-to-coarse-grained sand with traces of gravel. Similar soil conditions were noted at all depth intervals in all of the borings, with the only noticeable difference being slight variation in the amount of gravel. Groundwater was encountered at depths of approximately 20 to 30 feet bgs in all borings.

The well construction log for the City of Arlington water supply well, approximately 1,500 feet northwest of the subject property, does not indicate the presence of a confining layer in the stratigraphy at the site. However, a layer of fine sand with yellow clay was logged from 103 to 112 feet bgs. This layer of sand and clay is below the shallow water bearing zone and above the well screen interval and lower water bearing unit.

Based on a desk top review of available information, the upper and lower water bearing units are most likely in hydraulic communication. Such clay layers or layers of lower hydraulic conductivity may be present between the two units, but review of area well logs indicates that these zones are discontinuous. However, the potential for shallow groundwater contamination at the site to significantly impact the City of Arlington water supply well appears to be low, based on the following factors:

¹ Report On The Geology And Ground-Water Resources Of The Arlington Heights, Snohomish County, Washington, Paul A. Eddy, 1970, Open-File Technical Report 70-01

² Geology and Ore Deposits of the Sultan Basin, Snohomish County, Washington Bulletin No. 36 Ward Carithers and A. K. Guard, 1945

³ Water well logs, Washington State Department of Ecology web site (<http://apps.ecy.wa.gov/welllog/scripts/mapresults3.asp>)

ADDITIONAL SITE CHARACTERIZATION REPORT**Bayliner Marine – Arlington, Washington**

SUMMARY OF FINDINGS

April 9, 2010

- Relatively low VOC concentrations at the site with no indication of significant and/or ongoing contaminant source;
- VOC concentrations in downgradient wells are at or below MTCA Method A groundwater cleanup levels;
- Given the relatively low VOC concentrations at the site, VOC concentrations would most likely attenuate to concentrations below MTCA Method A groundwater cleanup levels prior to migrating to the water supply well ;
- Distance of the City of Arlington supply well is approximately 1,500 feet.
- The City of Arlington water supply well screen interval is approximately 151 to 181 feet bgs and draws water primarily from the lower water bearing zones of the aquifer.

3.5 VAPOR INTRUSION RISK SCREENING

Washington Administrative Code (WAC) 173-340-357(3)(f)(i) *et seq* requires persons responsible for cleanup to consider the vapor intrusion (VI) pathway when conducting remedial investigations under MTCA cleanup regulations. Accordingly, Stantec evaluated this pathway using the Washington Department of Ecology (Ecology) *Guidance for Evaluating Soil Vapor Intrusion in Washington State: Investigation and Remedial Action* (October 2009). Although currently in draft form only and under review, this guidance represents an approach to vapor intrusion assessment which is consistent with current knowledge and practice. Ecology recommends a tiered approach to VI assessment which includes:

- Preliminary Assessment - Assessing chemical volatility, toxicity and distance from possible source(s);
- Tier I Assessment - Comparison of empirically-derived chemical concentrations to Method B and Method C Cleanup Levels; and,
- Tier II Assessment - Collection of additional data including indoor air and soil gas sampling and analysis.

3.5.1 Preliminary VI Assessment

- Tetrachloroethylene (PCE) has been identified in groundwater. PCE has sufficient volatility and toxicity to warrant VI assessment.
- Occupied building(s) are currently present near and possibly above locations where PCE has been identified in groundwater.

ADDITIONAL SITE CHARACTERIZATION REPORT

Bayliner Marine – Arlington, Washington

SUMMARY OF FINDINGS

April 9, 2010

Because of these conditions a Tier I assessment was conducted to further evaluate whether known subsurface contamination has the *potential* to unacceptably impact indoor air quality.

3.5.2 Tier I Assessment

The first step of the Tier I assessment consisted of comparison of the maximum concentration of PCE detected in groundwater (59 µg/L, MW-1, Dec. 2009) to generic screening levels which were developed using conservative assumptions. Table B-1 of the guidance provides generic groundwater screening levels for PCE of 1 µg/L (Method B-Unrestricted Use) and 10 µg/L (Method C-Industrial Use).

Since the on-site groundwater concentration of PCE exceeds these screening levels, the guidance indicates that the US EPA Johnson & Ettinger model may be used to predict maximum concentrations of PCE in indoor air.

The screening version of the US EPA Johnson and Ettinger model (GW-SCREEN Version 3.0) was used to predict the indoor air concentration of PCE, an attenuation factor and the incremental risks associated with measured concentrations of PCE in site groundwater. The following user-defined parameters were used in the model:

Depth To Water	18.89 ft	Measured depth associated with December 2009 sample with the highest reported PCE concentration
Soil Type	Sand	The actual site-specific soil type has been observed to be sandy gravel; however, sandy gravel is not included as an option in the model.. Accordingly, sand was used as the option that most closely matches actual site conditions. It should be noted that Ecology has previously expressed concern that the use of sand as a soil type for sites with sandy gravel soils may not be appropriately conservative
Maximum PCE Concentration	59 µg/L	

To provide the most conservative estimate of potential risk, default parameters were used for all other model inputs. A copy of the model output is provided in Appendix H.

The results of the modeling show that cumulative excess cancer risk (ECR) for PCE using the model-defined hypothetical residential building is 3.0×10^{-5} and above the lower bound of the discretionary risk range (an ECR of 1×10^{-6}). The modeled non-cancer risk (Hazard Quotient) is 2.0×10^{-2} which is well below the target maximum Hazard Quotient of 1. The predicted indoor air

ADDITIONAL SITE CHARACTERIZATION REPORT**Bayliner Marine – Arlington, Washington**

SUMMARY OF FINDINGS

April 9, 2010

concentration (C_{building}) is $1.23\text{E}+01$ micrograms per cubic meter [$\mu\text{g}/\text{m}^3$] which exceeds both Method B and C Indoor Air Cleanup Levels (0.42 and $4.2 \mu\text{g}/\text{m}^3$ respectively).

Although these calculations suggest a potential for VI they are considered to represent an over estimate of potential VI risk (irrespective of the inherent uncertainties associated with use of J & E model defaults) for the following reasons:

- The Method B exposure assumptions (WAC 173-340-750) and the J & E Model are based on residential receptors (e.g., body weight, occupancy frequency and exposure duration, etc.). The site current and anticipated future use is industrial. The property is located in an area zoned for industrial use.
- Risk estimates were derived assuming a continuous exposure to the maximum concentration of PCE over the entire exposure duration without considering possible reductions in contaminant concentrations.
- The maximum detected concentration of PCE was used and assumed to be uniformly distributed across the entire hypothetical building footprint.

To further evaluate the potential for VI risk, a sub-slab soil vapor sample was collected by Landau Associates on March 23, 2010 from beneath the floor slab of Building #11. The sample was collected near the southeast corner of the building, approximately 30 to 40 feet from MW-1 and B-4, where the highest concentrations of PCE in groundwater have been recorded. A 1-inch outside diameter (O.D.) core was removed from the slab by a concrete coring company on March 17. The hole was then temporarily plugged with a rubber stopper and plumbers putty. The vapor sample was collected on March 23 by removing the plug and inserting a porous polyethylene vapor implant connected to $\frac{1}{4}$ inch O.D. Teflon® tubing. The tubing was then connected to a Columbia Analytical Services (CAS)-supplied 6-liter Summa® canister (without a flow-controller) using a Swagelock compression fitting. Landau terminated sample collection when the vacuum gauge registered -9 inches Mercury (in Hg). The canister was delivered to CAS for analysis of VOCs using USEPA Method TO-15.

Results of analysis reported by CAS identified the presence of PCE in the sub-slab vapor sample at a concentration of $2,700 \mu\text{g}/\text{m}^3$. Trichlorofluoromethane ($12 \mu\text{g}/\text{m}^3$), and tetrahydrofuran ($19 \mu\text{g}/\text{m}^3$) were also reported. No other VOCs were detected above the method reporting limits (MRLs). However due to the smaller volume of sample collected MRLs for target compounds were raised. A copy of the laboratory analytical report and chain-of-custody is provided in Appendix G.

Attenuation factors (α) of 0.1 to 0.001, where $\alpha = \text{Concentration}_{\text{indoor air}} / \text{Concentration}_{\text{soil gas}}$, are typically used to approximate the attenuation of VOCs as they move through the concrete slab. For illustrative purposes, an attenuation factor of 0.1 applied to the PCE concentration in sub-slab soil vapor would yield a predicted PCE concentration in indoor air of $270 \mu\text{g}/\text{m}^3$, well in excess of the Level B and Level C cleanup levels established by Ecology. However, in our

ADDITIONAL SITE CHARACTERIZATION REPORT

Bayliner Marine – Arlington, Washington

SUMMARY OF FINDINGS

April 9, 2010

experience site-specific attenuation factors for buildings of this age and construction generally approximate 0.0001, so actual indoor air concentrations may be lower.

4.0 SUMMARY AND CONCLUSIONS

The results of the Additional Site Investigations conducted in February and March 2010 successfully defined the lateral extent of VOC-impacted groundwater at the site. The results corroborated earlier findings that soils are relatively uniform across the site, consisting of fine-grained to coarse-grained sand with traces of gravel. Static water levels were measured at depths of 15 to 20 feet bgs, with groundwater elevations averaging about 2.5 feet higher than in the December 2009 sampling event. This is to be expected, as the February sampling event occurred near the end of the period of typically greatest precipitation during the year. The groundwater gradient across the site, at 0.0029 ft./ft., is slightly less steep than in December 2009. The direction of flow remained toward the northwest.

Impacts To Soil

Soil sample analytical results from the four new borings completed in February 2010 were consistent with previous results from across the site. Concentrations of RCRA metals in soil samples were all below applicable MTCA Method A Cleanup Levels for unrestricted land use or US EPA Risk-Based Screening Levels. PCE was detected at a low concentration in one of the eight samples from February 2010. The PCE concentration (0.002 mg/kg) was below the MTCA Method A Cleanup Level of 0.05 mg/kg. This appears to represent residual PCE in the capillary fringe resulting from fluctuating levels of groundwater. No evidence of a PCE release point has been identified from the soil samples collected at the site.

Impacts to Groundwater

The presence of VOCs in shallow groundwater is the most significant area of concern at the subject property. However, the results of the February and March 2010 groundwater sampling indicate that the area of VOC-impacted groundwater is limited to a relatively narrow band extending from MW-1 on the southeast to MW-4 on the northwest end. As in previous sampling events, the highest PCE concentrations were found in the area around Building 11 (MW-1, B-14 and B-15) in the south-central portion of the property. VOCs were not detected at the upgradient well location (MW-3). The eastern extent of the VOC plume has been defined by the low PCE concentrations (below the MTCA Method A cleanup level) at B-2 and B-3 and the absence of VOCs in the groundwater samples at MW-6, B-1, B-9 and B-13. The western extent of the PCE impact appears to be defined by the absence of PCE in samples from MW-2, MW-5, MW-7, B-7, B-8, B-10 and B-11.

The PCE concentration measured in the February 2010 sample at MW-4 was 5.3 µg/L. This is less than the December 2009 concentration of 13 µg/L, and only slightly exceeds the MTCA Method A groundwater cleanup level of 5.0 µg/L. The shallow sample (18-22 feet bgs) from

ADDITIONAL SITE CHARACTERIZATION REPORT**Bayliner Marine – Arlington, Washington**

SUMMARY AND CONCLUSIONS

April 9, 2010

nearby B-16 contained a similar concentration of 3.9 µg/L PCE. A deeper sample (32-36 feet bgs) from B-16 had a slightly higher PCE concentration of 7.3 µg/L. However, the sample from 46-50 feet bgs in B-16 contained no VOCs. TCE detected in the December 2009 sample at MW-4 was not present in the February 2010 sample. The downgradient monitoring well sample from MW-7 collected in February 2010 contained no VOCs.

When MW-4 was installed in December 2009, it was believed to be near the northern property boundary of the Bayliner Marine site. However, it was subsequently determined that 180th Avenue NE is a private roadway and that the right-of-way is actually within the Bayliner Marine property boundary. Based on this new information, MW-7 represents the monitoring compliance point at the downgradient property boundary, and no VOCs were detected above the laboratory MDL at MW-7. Consequently, the data indicates preliminarily that the downgradient reach of the VOC-impacted groundwater does not extend beyond the property line of the Bayliner site.

Based on the limited lateral and vertical extent of the VOC impacts demonstrated by the February-March 2010 groundwater data, and on the relatively low reported PCE concentrations, the VOC impacts at the subject property appear to be unlikely to impact the nearby municipal water supply well. The municipal well draws water from a point that is greater than 1,500 feet lateral distance and 150 feet vertical distance from the furthest downgradient impacted well at the Bayliner site. PCE concentrations would be expected to attenuate to concentrations below the Method A cleanup level before migrating over that distance.

It is recommended that quarterly monitoring of the seven on-site wells continue for at least two additional quarters (May-June 2010 and August-September 2010) to evaluate the impacts of seasonal groundwater fluctuations on gradient, flow direction, and VOC concentrations. Unless indicated by findings of subsequent monitoring events, further delineation of the extent of VOC impact in groundwater does not appear to be warranted.

Vapor Intrusion Risk

The highest PCE concentrations in groundwater at the site exceed generic groundwater screening levels for vapor intrusion risks for PCE. To further assess the potential for vapor intrusion concerns, Stantec used the US EPA Johnson & Ettinger model to predict maximum concentrations of PCE in indoor air. The results of the modeling show that cumulative excess cancer risk (ECR) for PCE using the model-defined hypothetical residential building exceeds the lower bound of the discretionary risk range (an ECR of 1×10^{-6}). The predicted indoor air concentration of 12.3 µg/m³ exceeds both Method B and C Indoor Air Cleanup Levels (0.42 and 4.2 µg/m³ respectively). Although these calculations suggest a potential for vapor intrusion, they appear to over estimate the potential vapor intrusion risk, because the model uses a conservative assumption of residential property use, while the actual current and anticipated future property uses are industrial. Further, the risk evaluation is based upon an assumed continuous exposure to the maximum concentration of PCE over the entire exposure duration,

ADDITIONAL SITE CHARACTERIZATION REPORT**Bayliner Marine – Arlington, Washington**

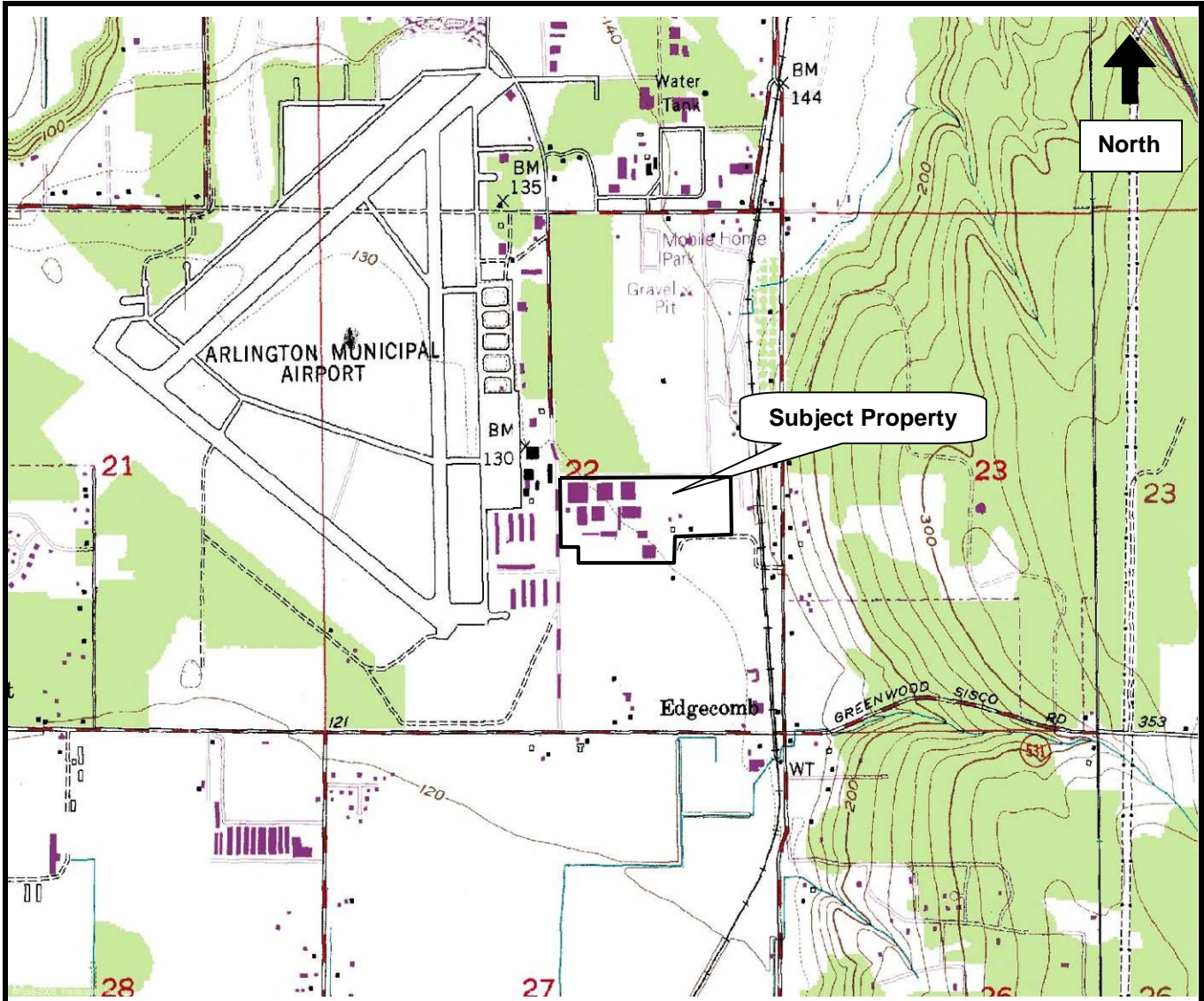
SUMMARY AND CONCLUSIONS


April 9, 2010

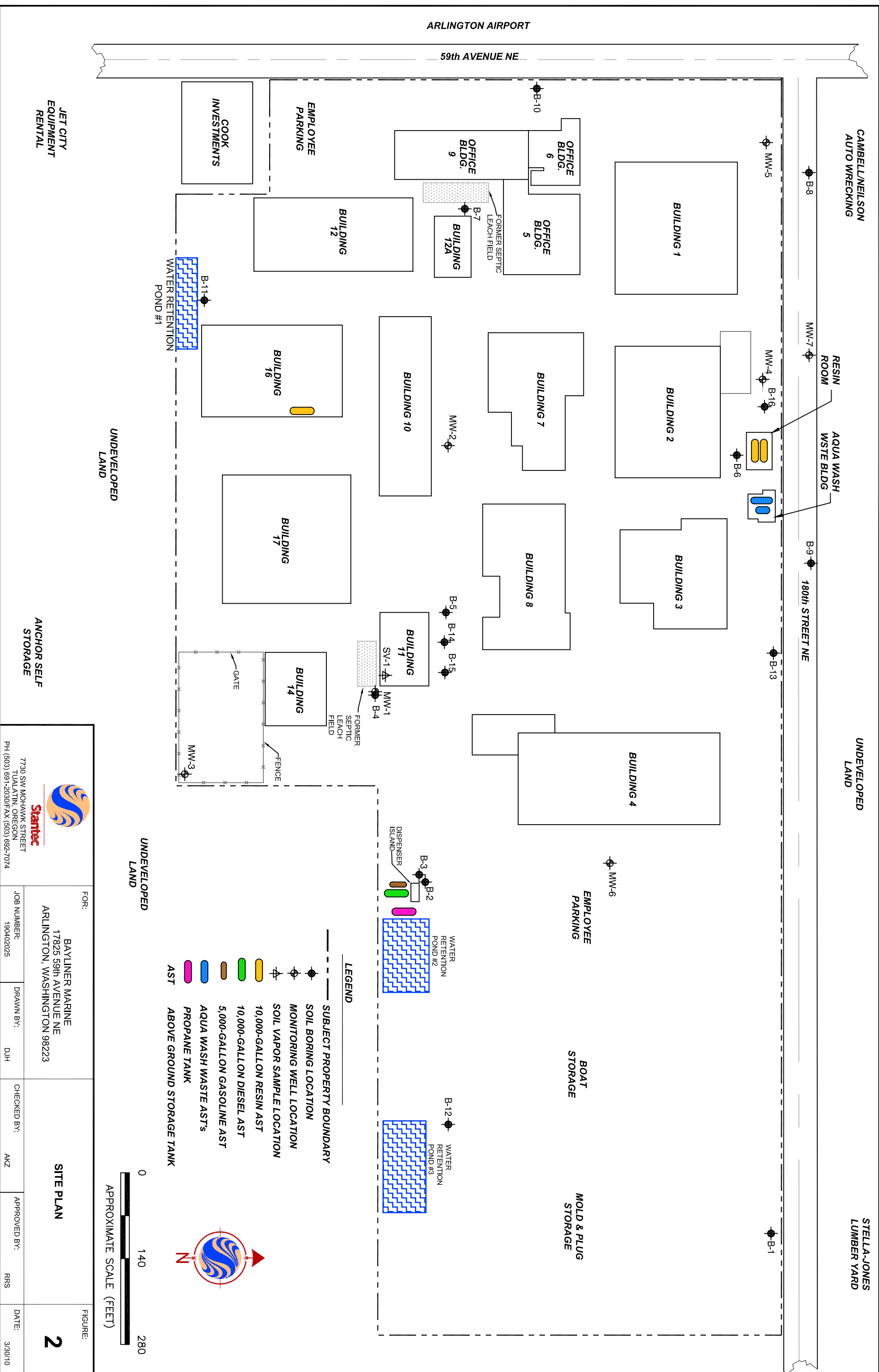
without considering possible reductions in contaminant concentrations over time, or the much lower concentrations detected at other locations of the property.

A sub-slab soil vapor sample collected beneath the floor slab of Building 11 in March 2010 contained a PCE concentration of 2,700 $\mu\text{g}/\text{m}^3$. Using conservative default factors to estimate attenuation of the vapor through the floor slab, this concentration suggests the potential that PCE concentrations in indoor air may exceed the Method B and Method C cleanup levels established under MTCA. Further assessment of indoor air vapor potential will be necessary to evaluate vapor intrusion risks at the site.

APPENDIX A
FIGURES

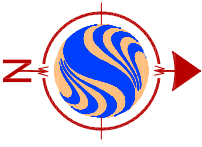


 <p>Site</p> <p>Washington</p> <p>Quadrangle Location Map</p>	<p>Job #: 190402025</p> <p>Site Location Map</p> <p>US Marine 17825 59th Avenue Arlington, Washington 98223</p>	<p>Stantec</p> <p>7730 SW Mohawk St. Tualatin, Oregon 97062</p>	
<p>DATE: 03/04/09</p>	<p>Source: USGS Smokey Point, WA Quad 1981</p>	<p>Scale 1:25000</p>	<p>Figure: 1</p>
<p>DWN: Paula Fitzgerald</p>	<p>APPR: Amy Zach</p>	<p>Revision: 0</p>	



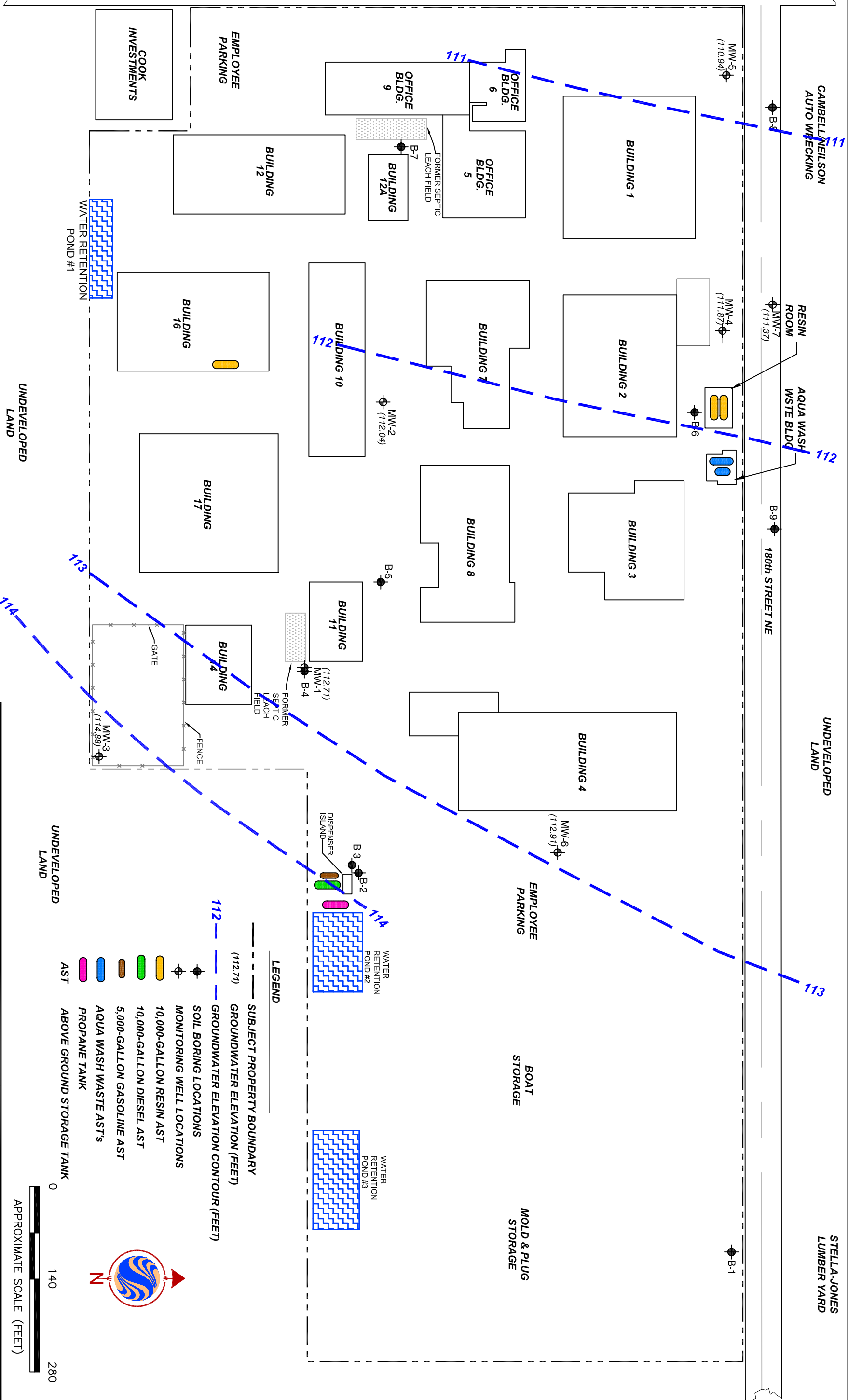
LEGEND

- SUBJECT PROPERTY BOUNDARY
- SOIL BORING LOCATION
- ⊕ MONITORING WELL LOCATION
- ⚡ SOIL VAPOR SAMPLE LOCATION
- 10,000-GALLON RESIN AST
- 10,000-GALLON DIESEL AST
- 5,000-GALLON GASOLINE AST
- AQUA WASH WASTE AST'S
- PROPANE TANK
- AST ABOVE GROUND STORAGE TANK

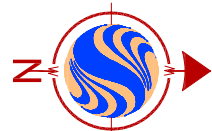


<p>7730 SW MOHAWK STREET TUALATIN, OREGON PH (503) 691-2030/FAX (503) 692-7074</p>	FOR:	BAYLINER MARINE 17825 59th AVENUE NE ARLINGTON, WASHINGTON 98223	<p>SITE PLAN</p>	FIGURE:	2				
	JOB NUMBER:	190402026		DRAWN BY:	DJH	CHECKED BY:	AKZ	APPROVED BY:	RRS

FILEPATH:K:\1-CLIENT\SIBAYLINER MARINE-190402026\MAR2010\190402026-FIG 2&3-BAYLINER MARINE.dwg\plm\fig 30_2010 at 12:02\layout SITE PLAN-FIG.2



- LEGEND**
- (112.71) SUBJECT PROPERTY BOUNDARY
 - (112.71) GROUNDWATER ELEVATION (FEET)
 - GROUNDWATER ELEVATION CONTOUR (FEET)
 - SOIL BORING LOCATIONS
 - MONITORING WELL LOCATIONS
 - 10,000-GALLON RESIN AST
 - 10,000-GALLON DIESEL AST
 - 5,000-GALLON GASOLINE AST
 - AQUA WASH WASTE AST'S
 - PROPANE TANK
 - AST ABOVE GROUND STORAGE TANK



<p>7730 SW MOHAWK STREET TUALATIN, OREGON PH (503) 691-2030/FAX (503) 692-7074</p>		<p>FOR: BAYLINER MARINE 17825 59th AVENUE NE ARLINGTON, WASHINGTON 98223</p>		<p>SITE PLAN WITH GROUNDWATER ELEVATIONS</p>		<p>FIGURE: 3</p>	
JOB NUMBER:	190402025	DRAWN BY:	DJH	CHECKED BY:	AKZ	APPROVED BY:	RRS
DATE:	2/24/10						

APPENDIX B
TABLES

Table 1
Monitoring Well Data
Bayliner Marine - Arlington, Washington

Well No.	Measurement Date	Total Depth (feet)	Top of Casing Elevation (ft MSL)	Screened Interval (ft. bgs)		Screened Interval (ft. MSL)		Depth to Groundwater (Feet)	Groundwater Elevation (Ft. MSL)
				Top	Bottom	Top	Bottom		
MW-1	12/10/2009	29.95	129.42	15	30	114.42	99.42	18.89	110.53
	2/18/2010							16.71	112.71
MW-2	12/10/2009	27.25	129.68	15	30	114.68	99.68	20.02	109.66
	2/18/2010							17.64	112.04
MW-3	12/10/2009	24.3	129.90	10	25	119.9	104.9	16.89	113.01
	2/18/2010							15.02	114.88
MW-4	12/10/2009	28.4	130.42	15	30	115.42	100.42	21.2	109.22
	2/18/2010							18.55	111.87
MW-5	12/10/2009	33.95	130.39	20	35	110.39	95.39	21.96	108.43
	2/18/2010							19.45	110.94
MW-6	2/19/2010	25.00	129.59	15	25	114.59	104.59	16.68	112.91
MW-7	2/19/2010	30.00	131.27	15	30	116.27	101.27	19.90	111.37

Environmental Site Investigation Report

**TABLE 2 - SUMMARY OF LABORATORY ANALYTICAL RESULTS
BAYLINER MARINE PROPERTY, ARLINGTON, WASHINGTON
VOCs IN SOIL**

Sample #	Sample Date	Sample Depth (feet bgs) ¹	VOCs ² (mg/kg) ³	MTCA Method A Cleanup Level ⁴ (mg/kg)	US EPA Regional Risk-Based Screening Level ⁵ (mg/kg)
B-1	5/20/09	15	PCE ⁶ 0.0036 All Others BDL ⁷	PCE 0.05	PCE 0.57
B-2	5/20/09	15	PCE 0.0041 All Others BDL	PCE 0.05	PCE 0.57
B-3	5/21/09	15	PCE 0.0075 All Others BDL	PCE 0.05	PCE 0.57
B-4	5/21/09	15	PCE 0.0049 All Others BDL	PCE 0.05	PCE 0.57
B-5	5/21/09	15	PCE 0.011 All Others BDL	PCE 0.05	PCE 0.57
B-6	5/21/09	5	Acetone 0.082 PCE 0.044 Styrene 0.0026 All Others BDL	Acetone NE ⁸ PCE 0.05 Styrene NE	Acetone 61,000 PCE 0.57 Styrene 6,500
B-7	5/21/09	15	All BDL	N/A	N/A
MW-1	12/10/09	20	PCE 0.025 All Others BDL	PCE 0.05	PCE 0.57
MW-2	12/10/09	20	All BDL	N/A	N/A
MW-3	12/10/09	15	All BDL	N/A	N/A
MW-4	12/10/09	20	PCE 0.0039 All Others BDL	PCE 0.05	PCE 0.57
MW-5	12/10/09	5	All BDL	N/A	N/A
	12/10/09	20	All BDL	N/A	N/A
MW-6	2/17/10	5	All BDL	N/A	N/A
		15	Chloromethane 0.0014 All Others BDL	Chloromethane NE	Chloromethane 120
MW-7	2/17/10	15	All BDL	N/A	N/A
		20	All BDL	N/A	N/A
B-8	2/18/10	15	All BDL	N/A	N/A
		20	All BDL	N/A	N/A
B-9	2/18/10	5	All BDL		
		20	PCE 0.002 All Others BDL	PCE 0.05	PCE 0.057
B-15	3/19/10	Unknown	All BDL	N/A	N/A

- NOTES:
- 1 Sample depth in feet below ground surface (bgs)
 - 2 VOCs = Volatile Organic Compounds by USEPA Method 8260 B
 - 3 Mg/kg = milligrams per kilogram
 - 4 Method A Soil Cleanup Level for Unrestricted Land Use established under Washington Model Toxics Cleanup Act (MTCA)
 - 5 Regional Risk Based-Screening Level Table Master published by US Environmental Protection Agency
 - 6 PCE = Tetrachloroethylene (aka perchlorethylene)
 - 7 BDL = Below Detection Limit for the laboratory analytical method
 - 8 NE = MTCA Method A cleanup level Not Established for this contaminant

**TABLE 3
SUMMARY OF LABORATORY ANALYTICAL RESULTS
BAYLINER MARINE PROPERTY, ARLINGTON, WASHINGTON
SVOCs IN SOIL**

<i>Sample #</i>	<i>Sample Date</i>	<i>Sample Depth (feet bgs)¹</i>	<i>SVOCs² (mg/kg)³</i>	<i>MTCA Method A Cleanup Level⁴ (mg/kg)</i>	<i>US EPA Regional Risk-Based Screening Level⁵ (mg/kg)</i>
B-1-15	5/20/09	15	PCP ⁶ BDL ⁷ All Others BDL	N/A	N/A
B-2-15	5/20/09	15	PCP BDL All Others BDL	N/A	N/A
B-3-15	5/21/09	15	PCP BDL All Others BDL	N/A	N/A
B-4-15	5/21/09	15	PCP BDL All Others BDL	N/A	N/A
B-5-15	5/21/09	15	PCP BDL All Others BDL	N/A	N/A
B-6-5	5/21/09	5	Dimethyl Phthalate 1.3 PCP BDL All Others BDL	Dimethyl Phthalate NE ⁸	Dimethyl Phthalate NE
B-7-15	5/21/09	15	PCP BDL All Others BDL	N/A	N/A

NOTES:

- 1 Sample depth in feet below ground surface (bgs)
- 2 SVOCs = Semi-Volatile Organic Compounds by USEPA Method 8270 C
- 3 Mg/kg = milligrams per kilogram
- 4 Method A Soil Cleanup Level for Unrestricted Land Use established under Washington Model Toxics Cleanup Act (MTCA)
- 5 Regional Risk Based-Screening Level Table Master published by US Environmental Protection Agency
- 6 PCP = Pentachlorophenol
- 7 BDL = Below Detection Limit for the laboratory analytical method
- 8 NE = Cleanup level is Not Established for this compound

**TABLE 4
SUMMARY OF LABORATORY ANALYTICAL RESULTS
BAYLINER MARINE PROPERTY, ARLINGTON, WASHINGTON
RCRA METALS IN SOIL**

Sample #	Sample Date	Sample Depth (feet bgs) ¹	Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	Silver	MTCA Method A Cleanup Level ³	US EPA Regional Risk-Based Screening Level ⁴
			(all values in mg/kg) ²									
B-1-15	5/20/09	15	BDL ⁵	52	0.89	Total 32 Cr III 30 Cr VI BDL	3.2	0.025	BDL	BDL	Arsenic 20 Barium NE ⁶	Arsenic 0.39 Barium 15,000
B-2-15	5/20/09	15	BDL	58	0.66	Total 29 Cr III 25 Cr VI BDL	2.7	BDL	BDL	BDL	Cadmium 2	Cadmium 70
B-3-15	5/21/09	15	BDL	43	0.92	Total 61 Cr III 55 Cr VI BDL	3.2	0.022	BDL	BDL	Chromium-Total NE Chromium VI 19	Chromium-Total 280 Chromium VI 39
B-4-15	5/21/09	15	BDL	55	0.8	Total 38 Cr III 36 Cr VI BDL	3.2	BDL	BDL	BDL	Lead 250	Lead 400
B-5-15	5/21/09	15	BDL	49	1.2	Total 140 Cr III 140 Cr VI BDL	3.8	BDL	BDL	BDL	Mercury 2 Selenium NE	Mercury 4.3 Selenium 390
B-6-5	5/21/09	5	BDL	56	0.93	Total 33 Cr III 31 Cr VI BDL	7.2	0.028	BDL	BDL	Silver NE	Silver 390
B-7-15	5/21/09	15	1.4	60	0.38	Total 45 Cr III NA Cr VI NA	3.4	BDL	BDL	1.2		
MW-1	12/09/09	20	BDL	58	0.84	Total 43 Cr VI BDL	1.3	BDL	BDL	BDL		
MW-2	12/09/09	20	BDL	59	0.84	Total 41 Cr VI BDL	1.6	BDL	BDL	BDL		
MW-3	12/09/09	15	BDL	53	0.89	Total 33 Cr VI BDL	1.9	BDL	BDL	BDL		
MW-4	12/09/09	20	BDL	62	1.0	Total 51 Cr VI BDL	1.8	0.224	BDL	BDL		
MW-5	12/09/09	5	BDL	52	1.0	Total 35 Cr VI BDL	4.7	0.027	BDL	BDL		
	12/09/09	20	BDL	48	0.87	Total 54 Cr VI BDL	1.7	0.021	BDL	BDL		

Environmental Site Investigation Report

Sample #	Sample Date	Sample Depth (feet bgs) ¹	Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	Silver	MTCA Method A Cleanup Level ³	US EPA Regional Risk-Based Screening Level ⁴
MW-6	2/17/10	5	BDL	41	BDL	Total 25 CR III 24 CR VI BDL	3.9	BDL	BDL	BDL	Arsenic 20 Barium NE ⁶ Cadmium 2	Arsenic 0.39 Barium 15,000 Cadmium 70
		15	BDL	48	BDL	Total 43 CR III 41 CR VI BDL	4.5	BDL	BDL	BDL		
MW-7	2/17/10	15	BDL	38	BDL	Total 130 CR III 130 CR VI BDL	4.5	BDL	BDL	BDL	Chromium-Total NE Chromium VI 19	Chromium-Total 280 Chromium VI 39
		20	BDL	48	BDL	Total 38 CR III 35 CR VI BDL	4.1	BDL	BDL	BDL		
B-8	2/17/10	15	BDL	53	BDL	Total 52 CR III 50 CR VI BDL	6.2	0.021	BDL	BDL	Mercury 2 Selenium NE	Mercury 4.3 Selenium 390
		20	BDL	48	BDL	Total 120 CR III 110 CR VI BDL	6.2	BDL	BDL	BDL		
B-9	2/17/10	5	BDL	110	BDL	Total 28 CR III 27 CR VI BDL	4.4	0.023	BDL	BDL		
		20	BDL	61	BDL	Total 46 CR III 39 CR VI BDL	4.6	BDL	BDL	BDL		

NOTES:

- 1 Sample depth in feet below ground surface (bgs)
- 2 Mg/kg = milligrams per kilogram
- 3 Method A Soil Cleanup Level for Unrestricted Land Use established under Washington Model Toxics Cleanup Act (MTCA)
- 4 Regional Risk Based-Screening Level Table Master published by US Environmental Protection Agency
- 5 BDL = Below Detection Limit of laboratory analytical method
- 6 MTCA Method A Cleanup Level is not established for this compound

**TABLE 5
SUMMARY OF LABORATORY ANALYTICAL RESULTS
BAYLINER MARINE PROPERTY, ARLINGTON, WASHINGTON
VOCs IN GROUNDWATER**

Sample #	Sample Date	VOCs ¹ (µg/L) ²	MTCA Method A Cleanup Level ³ (µg/L)
B-1	5/20/09	All BDL ⁴	N/A
B-2	5/21/09	PCE ⁵ 1.5 All Others BDL	PCE 5
B-3	5/21/09	PCE 3.3 All Others BDL	PCE 5
B-4	5/21/09	PCE 42 All Others BDL	PCE 5
B-5	5/21/09	PCE 31 All Others BDL	PCE 5
B-6	5/21/09	PCE 18	PCE 5
B-7	5/21/09	All BDL	N/A
MW-1	12/09/09	PCE 59 All Others BDL	PCE 5
	2/18/10	PCE 48 All Others BDL	
MW-2	12/09/09	All BDL	N/A
	2/18/10	All BDL	
MW-3	12/09/09	All BDL	N/A
	2/18/10	All BDL	
MW-4	12/09/09	PCE 13 TCE⁶ 16 All Others BDL	PCE 5 TCE 5
	2/18/10	PCE 5.3 TCE BDL All Others BDL	
MW-5	12/09/09	All BDL	N/A
	2/18/10	All BDL	
MW-6	2/19/10	All BDL	N/A
MW-7	2/19/10	All BDL	N/A
B-8	2/18/10	All BDL	N/A
B-9	2/18/10	All BDL	N/A
B-10	3/19/10	All BDL	N/A
B-11	3/19/10	All BDL	N/A
B-12	3/19/10	All BDL	N/A
B-13	3/19/10	All BDL	N/A
B-14 (16-20')	3/19/10	PCE 45 All Others BDL	PCE 5
B-14 (30-34')	3/19/10	PCE 40 All Others BDL	PCE 5

Environmental Site Investigation Report

Sample #	Sample Date	VOCs ¹ (µg/L) ²	MTCA Method A Cleanup Level ³ (µg/L)
B-14 (44-48')	3/19/10	All BDL	N/A
B-15	3/19/10	PCE 40 All Others BDL	PCE 5
B-16 (18-22')	3/19/10	PCE 3.9 All Others BDL	N/A
B-16 (32-36')	3/19/10	PCE 7.3 Ethylbenzene 3.4 All Others ND	PCE 5 Ethylbenzene 700
B-16 (46-50')	3/19/10	All BDL	N/A

NOTES: Values in bold font exceed applicable cleanup guidelines

- 1 VOCs = Volatile Organic Compounds by USEPA Method 8260 B
- 2 µg/L = micrograms per liter
- 3 Method A Groundwater Cleanup Level established under Washington Model Toxics Cleanup Act (MTCA)
- 4 BDL = Below Detection Limit for the laboratory analytical method
- 5 PCE = Tetrachloroethylene (aka perchlorethylene)
- 6 TCE - Trichloroethylene

**TABLE 6
SUMMARY OF LABORATORY ANALYTICAL RESULTS
BAYLINER MARINE PROPERTY, ARLINGTON, WASHINGTON
SVOCs IN GROUNDWATER**

Sample #	Sample Date	Depth to Water (feet bgs) ¹	SVOCs ² (µg/L) ³	MTCA Method A Cleanup Level ⁴ (µg/L)
B-1	5/20/09	18	PCP ⁵ BDL ⁶ All Others BDL	N/A
B-2	5/21/09	15	PCP BDL All Others BDL	N/A
B-3	5/21/09	15	PCP BDL All Others BDL	N/A
B-4	5/21/09	15	PCP BDL All Others BDL	N/A
B-5	5/21/09	15	PCP BDL All Others BDL	N/A
B-6	5/21/09	15	PCP BDL All Others BDL	N/A
B-7	5/21/09	15	PP BDL All Others BDL	N/A

NOTES:

- 1 Depth to groundwater in feet below ground surface (bgs)
- 2 SVOCs = Semi-Volatile Organic Compounds by USEPA Method 8270 C
- 3 µg/L = micrograms per liter
- 4 Method A Groundwater Cleanup Level established under Washington Model Toxics Cleanup Act (MTCA)
- 5 PCP = Pentachlorophenol
- 6 BDL = Below Detection Limit for the laboratory analytical method

**TABLE 7
SUMMARY OF LABORATORY ANALYTICAL RESULTS
BAYLINER MARINE PROPERTY
ARLINGTON, WASHINGTON**

RCRA METALS IN GROUNDWATER

Sample #	Sample Date	Arsenic	Barium	Cadmium	Chromium (Total)	Lead	Mercury	Selenium	Silver	MTCA Method A Cleanup Level ²	US EPA Regional Risk-Based Screening Level ³	
		<i>(all values in µg/L)¹</i>										
B-1	5/20/09	BDL ⁴	480	BDL	43	20	0.21	BDL	BDL	Arsenic 5	Arsenic 0.045	
B-2	5/21/09	BDL	91	BDL	20	6.9	BDL	BDL	BDL	Barium NE ⁵	Barium 7,300	
B-3	5/21/09	BDL	70	BDL	12	7.1	BDL	BDL	BDL			
B-4	5/21/09	BDL	190	BDL	38	7.6	BDL	BDL	BDL			
B-5	5/21/09	24	91	BDL	14	BDL	BDL	22	BDL		Cadmium 5	Cadmium 18
B-6	5/21/09	BDL	71	BDL	BDL	BDL	BDL	BDL	BDL		Chromium (Total) 50	Chromium (Total) 100
B-7	5/21/09	BDL	82	BDL	32	6.5	BDL	BDL	BDL			
MW-1	12/10/09	BDL	42	BDL	12	BDL	BDL	BDL	BDL	Lead 15	Lead 15	
	2/18/10	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL			
MW-2	12/10/09	BDL	96	BDL	26	BDL	BDL	BDL	BDL	Mercury 2	Mercury 0.57	
	2/18/10	BDL	7	BDL	BDL	BDL	BDL	BDL	BDL			
MW-3	12/10/09	BDL	87	BDL	18	BDL	BDL	BDL	BDL	Selenium NE	Selenium 180	
	2/18/10	BDL	BDL	BDL	BDL	9.3	BDL	BDL	BDL			
MW-4	12/10/09	BDL	96	BDL	35	7.2	BDL	BDL	BDL	Silver NE	Silver 180	
	2/18/10	BDL	6	BDL	BDL	BDL	BDL	BDL	BDL			
MW-5	12/10/09	BDL	13	BDL	BDL	BDL	BDL	BDL	14			
	2/18/10	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL			
MW-6	2/19/10	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL			
MW-7	2/19/10	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL			
B-8	2/18/10	BDL	42	BDL	BDL	BDL	BDL	BDL	96			
B-9	2/18/10	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL			

NOTES:

- 1 µg/L = micrograms per liter
- 2 Method A Groundwater Cleanup Level established under Washington Model Toxics Cleanup Act (MTCA)
- 3 Regional Risk Based-Screening Level Table Master published by US Environmental Protection Agency
- 4 BDL = Below Detection Limit of laboratory analytical method
- 5 MTCA Method A Cleanup Level is not established for this compound

**TABLE 8
SUMMARY OF LABORATORY ANALYTICAL RESULTS
BAYLINER MARINE PROPERTY, ARLINGTON, WASHINGTON
VOCs AND SVOCs IN POND SEDIMENT**

Sample #	Sample Date	VOCs ¹	SVOCs ³	MTCA Method A Cleanup Level ⁴	US EPA Regional Risk-Based Screening Level ⁵
		<i>(all values in mg/kg)²</i>			
RP-1	5/22/09	Acetone 0.14 All Others BDL ⁶	All BDL	Acetone NE ⁷	Acetone 61,000
RP-2	5/22/09	All BDL	All BDL	---	---
RP-3	5/22/09	Acetone 0.056 All Others BDL	All BDL	Acetone NE	Acetone 61,000
Trip Blank	5/22/09	All BDL	N/A	---	---

NOTES:

- 1 VOCs = Volatile Organic Compounds by USEPA Method 8260 B
- 2 Mg/kg = milligrams per kilogram
- 3 SVOCs = Semi-Volatile Organic Compounds by USEPA Method 8270 C
- 4 Method A Soil Cleanup Level for Unrestricted Land Use established under Washington Model Toxics Cleanup Act (MTCA)
- 5 Regional Risk Based-Screening Level Table Master published by US Environmental Protection Agency
- 6 BDL = Below Detection Limit for the laboratory analytical method
- 7 MTCA Method A Cleanup Level is not established for this compound

**TABLE 9
SUMMARY OF LABORATORY ANALYTICAL RESULTS
BAYLINER MARINE PROPERTY, ARLINGTON, WASHINGTON
RCRA METALS IN POND SEDIMENT**

Sample #	Sample Date	Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	Silver	MTCA Method A Cleanup Level ³	US EPA Regional Risk-Based Screening Level ⁴
		<i>(all values in mg/kg)²</i>									
RP-1	5/22/09	13	63	1.8	Total 80 Cr III 40 Cr VI BDL	160	0.12	BDL ⁵	1.8	Arsenic 20 Barium NE ⁶ Cadmium 2 Chromium-Total NE Chromium III 2000 Chromium VI 19 Lead 250 Mercury 2 Selenium NE Silver NE	Arsenic 0.39 Barium 15,000 Cadmium 70 Chromium-Total 280 Chromium III 120,000 Chromium VI 39 Lead 400 Mercury 4.3 Selenium 390 Silver 390
RP-2	5/22/09	3.4	52	0.59	Total 47 Cr III 33 Cr VI BDL	17	0.037	BDL	1.2		
RP-3	5/22/09	2.7	56	0.49	Total 42 Cr III 38 Cr VI BDL	10	0.025	BDL	1.2		

NOTES:

- 1 Sample depth in feet below ground surface (bgs)
- 2 Mg/kg = milligrams per kilogram
- 3 Method A Soil Cleanup Level for Unrestricted Land Use established under Washington Model Toxics Cleanup Act (MTCA)
- 4 Regional Risk Based-Screening Level Table Master published by US Environmental Protection Agency
- 5 BDL = Below Detection Limit of laboratory analytical method
- 6 MTCA Method A Cleanup Level is not established for this compound

APPENDIX C
BORING LOGS

PROJECT: **Bayliner Marine**
 LOCATION: **17825 59th Avenue NE, Arlington, WA**
 PROJECT NUMBER: **190402025.200.0002**

WELL / PROBEHOLE / BOREHOLE NO:

MW-6

PAGE 1 OF 1



DATE: STARTED **2/17/2010** COMPLETED: **2/17/2010**
 TIME: STARTED COMPLETED:
 DRILLING COMPANY: **Cascade Drilling Inc.**
 DRILLING EQUIPMENT: **CME 75**
 DRILLING METHOD: **Hollow Stem Auger**
 SAMPLING EQUIPMENT: **Split Spoon**

NORTHING (ft): EASTING (ft):
 LATITUDE: LONGITUDE:
 GROUND ELEV (ft): TOC ELEV (ft):
 INITIAL DTW (ft): **17 2/17/10** BOREHOLE DEPTH (ft): **25.0**
 STATIC DTW (ft): **16.68 2/19/10** WELL DEPTH (ft): **25**
 WELL CASING DIAM. (in): **2** BOREHOLE DIAM. (in): **6.25**
 LOGGED BY: **ACZ** CHECKED BY: **RRS**

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace P/D (ppm)	Depth (feet)	Well Construction
10 10			Gravel Car Pool Parking Area							
10 15		SW	SW: Gravelly sand, fine to medium grained, <25% gravel, dark grayish brown, damp to moist, no odor, no staining, medium dense		10 15 MW-6-5*	15 20 22	0.9		5	
10 20					10 20 MW-6-10	24 25 28	0.0		10	
10 24		SW	SW: Gravelly sand, fine to coarse grained, <25% gravel, brown to olive gray, damp, no odor, no staining, medium dense		10 24 MW-6-15*	26 30 31	0.0		15	
		SW	SW: Gravelly sand, fine to coarse grained, <25% gravel, brown to olive gray, wet to saturated, no odor, no staining, medium dense to dense							
10 30		SW	SW: Silty sand to gravelly sand, fine to coarse grained, olive gray, saturated, no odor, no staining, dense		10 30 MW-6-20	25 25 27	0.0		20	
10 35			Hole terminated at 26.5 feet.		10 35 MW-6-25	50 for 5	0.0		25	
			* - Sample submitted for analysis.							
30									30	
35									35	

GEO FORM 304 STANTEC037 GWM INSTALI - BRUNSLICK - ARLINGTON, WA (P.L) SEC0R037.GDT 3/25/10

APPENDIX D
GROUNDWATER SAMPLING DATA SHEETS

GROUNDWATER SAMPLING DATA SHEET

SECOR International

7730 SW Mohawk, Tualatin, OR 97062

Stantec Project No.: 190402025 Date: 2/18/10 Well No: MW-1

Facility Name: Brunswick Temperature: _____ °F or °C

Field Personnel: Janet Nash Weather: Sunny

FIELD MEASUREMENTS:

A. Total Depth (TD) of Well from TOC: 30.00 FT. or IN.

C. Static Water Level (SWL) Below Top of Casing (TOC): 16.71 FT. or IN.

D. Height of Water Column in Casing: (h = TD-SWL) 13.29 FT. or IN.

E. Useful approximate Purge Volumes (PV) per foot of water column

	<u>3 Well Vols.</u>	<u>5 Well Vols.</u>				
5/8" diameter =	21.8 mL/ft		X	feet of water	=	PV (milliliters)
2" diameter =	0.5 gal/ft	0.82 gal/ft	X	feet of water	=	PV (gallons)
4" diameter =	2.0 gal/ft	3.25 gal/ft	X	feet of water	=	PV (gallons)
6" diameter =	4.4 gal/ft	7.35 gal/ft	X	feet of water	=	PV (gallons)

Purge Method: disposable bailer / trash pump / pvc hand bail Duration: _____
in-line pump / single valve sampler / syringe

OBSERVATIONS:

	<u>Time</u>	<u>Turbidity</u>	<u>pH</u>	<u>Temp.</u>	<u>Conduct.</u>	<u>DO</u> mg/L	<u>ORP</u>	<u>SWL</u>
1st Volume:	<u>1424</u>	<u>low</u>	<u>5.63</u>	<u>53.74</u>	<u>96</u>	<u>3.38</u>	<u>-78.1</u>	
2nd Volume:	<u>1427</u>	<u>clr</u>	<u>5.27</u>	<u>53.04</u>	<u>90</u>	<u>3.36</u>	<u>-75.0</u>	
3rd Volume:	<u>1430</u>	<u>clr</u>	<u>5.62</u>	<u>52.62</u>	<u>95</u>	<u>3.36</u>	<u>-82.1</u>	
4th Volume:	<u>1433</u>	<u>clr</u>	<u>5.38</u>	<u>52.44</u>	<u>100</u>	<u>3.23</u>	<u>-30.9</u>	
5th Volume:								

Total Volume of Water Purged From Well: 51 gallon

Purge Water Stored/Disposed of Where/How: On-Site 55-gallon drum

SAMPLES COLLECTED:

Depth to Water at time of sample collection: _____ >80%

<u>Sample Numbers(s):</u>	<u>Time:</u>	<u>Size/Number of Container(s):</u>	<u>Preservative:</u>
<u>MW-1</u>	<u>1440</u>		

COMMENTS:

- Casing Capacities:**
- 2-inch hole.....0.16 gal/in ft.
 - 4-inch hole.....0.65 gal/in ft.
 - 6.5-inch hole.....1.70 gal/in ft.
 - 8-inch hole.....2.60 gal/in ft.
 - 10-inch hole.....4.10 gal/in ft.

Recharge Calculation at Time of Sample Collection:

Total Depth of Well: _____
 Original Water Column: _____ x 0.80 = - (_____)
 Collect sample when Depth to Water measures
 Less than or equal to: _____

GROUNDWATER SAMPLING DATA SHEET

SECOR International

7730 SW Mohawk, Tualatin, OR 97062

Stantec Project No.: 190402025 Date: 2/18/10 Well No: MW-2

Facility Name: Brunswick Temperature: _____ °F or °C

Field Personnel: Janet Nash Weather: Sunny

FIELD MEASUREMENTS:

A. Total Depth (TD) of Well from TOC: 29.70 FT. or IN.

C. Static Water Level (SWL) Below Top of Casing (TOC): 17.64 FT. or IN.

D. Height of Water Column in Casing: (h = TD-SWL) 12.06 FT. or IN.

E. Useful approximate Purge Volumes (PV) per foot of water column

	<u>3 Well Vols.</u>	<u>5 Well Vols.</u>				
5/8" diameter =	21.8 mL/ft		X	feet of water	=	PV (milliliters)
2" diameter =	0.5 gal/ft	0.82 gal/ft	X	feet of water	=	PV (gallons)
4" diameter =	2.0 gal/ft	3.25 gal/ft	X	feet of water	=	PV (gallons)
6" diameter =	4.4 gal/ft	7.35 gal/ft	X	feet of water	=	PV (gallons)

Purge Method: disposable bailer / trash pump / pvc hand bail Duration: _____
in-line pump / single valve sampler / syringe

OBSERVATIONS:

	<u>Time</u>	<u>Turbidity</u>	<u>pH</u>	<u>Temp.</u>	<u>Conduct.</u>	<u>DO</u>	<u>ORP</u>	<u>SWL</u>
1st Volume:	<u>1500</u>	<u>low</u>	<u>5.08</u>	<u>54.41</u>	<u>50</u>	<u>31.7</u>	<u>-11.0</u>	_____
2nd Volume:	<u>1503</u>	<u>low</u>	<u>4.87</u>	<u>54.14</u>	<u>75</u>	<u>33.9</u>	<u>-5.8</u>	_____
3rd Volume:	<u>1506</u>	<u>low</u>	<u>4.81</u>	<u>53.99</u>	<u>80</u>	<u>33.9</u>	<u>0.4</u>	_____
4th Volume:	<u>1509</u>	<u>low</u>	<u>4.80</u>	<u>53.94</u>	<u>79</u>	<u>34.4</u>	<u>3.8</u>	_____
5th Volume:	_____	_____	_____	_____	_____	_____	_____	_____

Total Volume of Water Purged From Well: < 1 gal

Purge Water Stored/Disposed of Where/How: On-Site 55-gallon drum

SAMPLES COLLECTED:

Depth to Water at time of sample collection: _____ >80%

<u>Sample Number(s):</u>	<u>Time:</u>	<u>Size/Number of Container(s):</u>	<u>Preservative:</u>
<u>MW-2</u>	<u>1515</u>	_____	_____
_____	_____	_____	_____

COMMENTS:

Casing Capacities:

- 2-inch hole.....0.16 gal/in ft.
- 4-inch hole.....0.65 gal/in ft.
- 6.5-inch hole.....1.70 gal/in ft.
- 8-inch hole.....2.60 gal/in ft.
- 10-inch hole.....4.10 gal/in ft.

Recharge Calculation at Time of Sample Collection:

Total Depth of Well: _____
 Original Water Column: _____ x 0.80 = -(_____)
 Collect sample when Depth to Water measures
 Less than or equal to: _____

GROUNDWATER SAMPLING DATA SHEET

SECOR International

7730 SW Mohawk, Tualatin, OR 97062

Stantec Project No.: 190402025 Date: 2/18/10 Well No: MW-3
 Facility Name: Brunswick Temperature: _____ °F or °C
 Field Personnel: Janet Nash Weather: Sunny

FIELD MEASUREMENTS:

- A. Total Depth (TD) of Well from TOC: 23.91 FT. or IN.
- C. Static Water Level (SWL) Below Top of Casing (TOC): 15.02 FT. or IN.
- D. Height of Water Column in Casing: (h = TD-SWL) 8.89 FT. or IN.
- E. Useful approximate Purge Volumes (PV) per foot of water column

	<u>3 Well Vols.</u>	<u>5 Well Vols.</u>					
5/8" diameter =	21.8 mL/ft		X	feet of water	=		PV (milliliters)
2" diameter =	0.5 gal/ft	0.82 gal/ft	X	feet of water	=		PV (gallons)
4" diameter =	2.0 gal/ft	3.25 gal/ft	X	feet of water	=		PV (gallons)
6" diameter =	4.4 gal/ft	7.35 gal/ft	X	feet of water	=		PV (gallons)

Purge Method: disposable bailer / trash pump / pvc hand bail Duration: _____
in-line pump / single valve sampler / syringe

OBSERVATIONS:

	<u>Time</u>	<u>Turbidity</u>	<u>pH</u>	<u>Temp.</u>	<u>Conduct.</u>	<u>DO</u>	<u>ORP</u>	<u>SWL</u>
1st Volume:	<u>1346</u>	<u>low</u>	<u>5.51</u>	<u>50.69</u>	<u>71</u>	<u>5.29</u>	<u>-122.2</u>	
2nd Volume:	<u>1349</u>	<u>low</u>	<u>4.66</u>	<u>50.15</u>	<u>79</u>	<u>4.29</u>	<u>-103.3</u>	
3rd Volume:	<u>1352</u>	<u>low</u>	<u>4.71</u>	<u>49.65</u>	<u>82</u>	<u>3.62</u>	<u>-105.4</u>	
4th Volume:	<u>1355</u>	<u>low</u>	<u>4.79</u>	<u>49.54</u>	<u>71</u>	<u>3.51</u>	<u>-106.2</u>	
5th Volume:								

Total Volume of Water Purged From Well: < 1 gal

Purge Water Stored/Disposed of Where/How: _____

SAMPLES COLLECTED:

Depth to Water at time of sample collection: _____ >80%

<u>Sample Numbers(s):</u>	<u>Time:</u>	<u>Size/Number of Container(s):</u>	<u>Preservative:</u>
<u>MW-3</u>	<u>1405</u>		

COMMENTS:

- Casing Capacities:
- 2-inch hole.....0.16 gal/in ft.
 - 4-inch hole.....0.65 gal/in ft.
 - 6.5-inch hole.....1.70 gal/in ft.
 - 8-inch hole.....2.60 gal/in ft.
 - 10-inch hole.....4.10 gal/in ft.

Recharge Calculation at Time of Sample Collection:

Total Depth of Well: _____
 Original Water Column: _____ x 0.80 = .-(_____)
 Collect sample when Depth to Water measures
 Less than or equal to: _____

GROUNDWATER SAMPLING DATA SHEET

SECOR International

7730 SW Mohawk, Tualatin, OR 97062

Stantec Project No.: 190402025 Date: 2/18/10 Well No: MW-4
 Facility Name: Brunswick Temperature: _____ °F or °C
 Field Personnel: Janet Nash Weather: Sunny

FIELD MEASUREMENTS:

A. Total Depth (TD) of Well from TOC: 28.40 FT. or IN.
 C. Static Water Level (SWL) Below Top of Casing (TOC): 18.55 FT. or IN.
 D. Height of Water Column in Casing: (h = TD-SWL) 9.85 FT. or IN.
 E. Useful approximate Purge Volumes (PV) per foot of water column

	<u>3 Well Vols.</u>	<u>5 Well Vols.</u>				
5/8" diameter =	21.8 mL/ft		X	feet of water	=	PV (milliliters)
2" diameter =	0.5 gal/ft	0.82 gal/ft	X	feet of water	=	PV (gallons)
4" diameter =	2.0 gal/ft	3.25 gal/ft	X	feet of water	=	PV (gallons)
6" diameter =	4.4 gal/ft	7.35 gal/ft	X	feet of water	=	PV (gallons)

Purge Method: disposable bailer / trash pump / pvc hand bail Duration: _____
in-line pump / single valve sampler / syringe

OBSERVATIONS:

	<u>Time</u>	<u>Turbidity</u>	<u>pH</u>	<u>Temp.</u>	<u>Conduct.</u>	<u>DO</u>	<u>ORP</u>	<u>SWL</u>
1st Volume:	<u>1551</u>	<u>low</u>	<u>5.54</u>	<u>56.59</u>	<u>85</u>	<u>3.77</u>	<u>-50.3</u>	
2nd Volume:	<u>1554</u>	<u>low</u>	<u>5.20</u>	<u>56.83</u>	<u>68</u>	<u>3.38</u>	<u>-45.6</u>	
3rd Volume:	<u>1557</u>	<u>low</u>	<u>5.23</u>	<u>56.74</u>	<u>83</u>	<u>3.23</u>	<u>-29.7</u>	
4th Volume:	<u>1600</u>	<u>low</u>	<u>5.20</u>	<u>56.70</u>	<u>85</u>	<u>3.09</u>	<u>-28.0</u>	
5th Volume:								

Total Volume of Water Purged From Well: < 1 gal
 Purge Water Stored/Disposed of Where/How: On-Site 55-gallon drum

SAMPLES COLLECTED:

Depth to Water at time of sample collection: _____ >80%

Sample Numbers(s): MW-4 Time: 1605 Size/Number of Container(s): _____ Preservative: _____

COMMENTS:

Casing Capacities:
 2-inch hole.....0.16 gal/lin ft.
 4-inch hole.....0.65 gal/lin ft.
 6 5-inch hole.....1.70 gal/lin ft.
 8-inch hole.....2.60 gal/lin ft.
 10-inch hole.....4.10 gal/lin ft.

Recharge Calculation at Time of Sample Collection:

Total Depth of Well: _____
 Original Water Column: _____ x 0.80 = -()
 Collect sample when Depth to Water measures
 Less than or equal to: _____

GROUNDWATER SAMPLING DATA SHEET

SECOR International

7730 SW Mohawk, Tualatin, OR 97062

Stantec Project No.: 190402025 Date: 2/18/10 Well No: MW-5

Facility Name: Brunswick Temperature: _____ °F or °C

Field Personnel: Janet Nash Weather: Sunny

FIELD MEASUREMENTS:

A. Total Depth (TD) of Well from TOC: 33.70 FT. or IN.

C. Static Water Level (SWL) Below Top of Casing (TOC): 19.45 FT. or IN.

D. Height of Water Column in Casing: (h = TD-SWL) 14.25 FT. or IN.

E. Useful approximate Purge Volumes (PV) per foot of water column

	<u>3 Well Vols.</u>	<u>5 Well Vols.</u>				
5/8" diameter =	21.8 mL/ft		X	feet of water	=	PV (milliliters)
2" diameter =	0.5 gal/ft	0.82 gal/ft	X	feet of water	=	PV (gallons)
4" diameter =	2.0 gal/ft	3.25 gal/ft	X	feet of water	=	PV (gallons)
6" diameter =	4.4 gal/ft	7.35 gal/ft	X	feet of water	=	PV (gallons)

Purge Method: disposable bailer / trash pump / pvc hand bail Duration: _____
in-line pump / single valve sampler / syringe

OBSERVATIONS:

	<u>Time</u>	<u>Turbidity</u>	<u>pH</u>	<u>Temp.</u>	<u>Conduct.</u>	<u>DO</u>	<u>ORP</u>	<u>SWL</u>
1st Volume:	<u>1524</u>	<u>Med</u>	<u>5.28</u>	<u>56.32</u>	<u>67</u>	<u>3.17</u>	<u>-26.5</u>	
2nd Volume:	<u>1527</u>	<u>low</u>	<u>5.50</u>	<u>56.92</u>	<u>100</u>	<u>3.12</u>	<u>-46.3</u>	
3rd Volume:	<u>1530</u>	<u>low</u>	<u>5.48</u>	<u>57.04</u>	<u>87</u>	<u>3.13</u>	<u>-46.8</u>	
4th Volume:	<u>1533</u>	<u>low</u>	<u>5.41</u>	<u>57.14</u>	<u>83</u>	<u>3.17</u>	<u>-51.2</u>	
5th Volume:								

Total Volume of Water Purged From Well: < 1 gallon

Purge Water Stored/Disposed of Where/How: On-Site 55-gallon drum

SAMPLES COLLECTED:

Depth to Water at time of sample collection: _____ >80%

Sample Number(s): _____ Time: _____ Size/Number of Container(s): _____ Preservative: _____

MW-5 1535 _____ _____

COMMENTS:

Casing Capacities:
 2-inch hole.....0.16 gal/in ft.
 4-inch hole.....0.65 gal/in ft.
 6.5-inch hole.....1.70 gal/in ft.
 8-inch hole.....2.60 gal/in ft.
 10-inch hole.....4.10 gal/in ft.

Recharge Calculation at Time of Sample Collection:

Total Depth of Well: _____
 Original Water Column: _____ x 0.80 = - (_____)
 Collect sample when Depth to Water measures
 Less than or equal to: _____

GROUNDWATER SAMPLING DATA SHEET

SECOR International

7730 SW Mohawk, Tualatin, OR 97062

Stantec Project No.: 190402025 Date: 2/19/10 Well No: MW-6a
 Facility Name: Brunswick Temperature: _____ °F or °C
 Field Personnel: Janet Nash Weather: Sunny

FIELD MEASUREMENTS:

A. Total Depth (TD) of Well from TOC: 25.00 FT. or IN.
 C. Static Water Level (SWL) Below Top of Casing (TOC): 16.68 FT. or IN.
 D. Height of Water Column in Casing: (h = TD-SWL) 8.32 FT. or IN.
 E. Useful approximate Purge Volumes (PV) per foot of water column

	<u>3 Well Vols.</u>	<u>5 Well Vols.</u>				
5/8" diameter =	21.8 mL/ft		X	feet of water	=	PV (milliliters)
2" diameter =	0.5 gal/ft	0.82 gal/ft	X	feet of water	=	PV (gallons)
4" diameter =	2.0 gal/ft	3.25 gal/ft	X	feet of water	=	PV (gallons)
6" diameter =	4.4 gal/ft	7.35 gal/ft	X	feet of water	=	PV (gallons)

Purge Method: disposable bailer / trash pump / pvc hand bail Duration: _____
in-line pump / single valve sampler / syringe

OBSERVATIONS:

	<u>Time</u>	<u>Turbidity</u>	<u>pH</u>	<u>Temp.</u>	<u>Conduct.</u>	<u>DO</u>	<u>ORP</u>	<u>SWL</u>
1st Volume:	<u>1018</u>	<u>clr</u>	<u>5.47</u>	<u>49.72</u>	<u>90</u>	<u>3.32</u>	<u>-0.4</u>	_____
2nd Volume:	<u>1022</u>	<u>clr</u>	<u>5.27</u>	<u>50.09</u>	<u>11</u>	<u>3.58</u>	<u>6.6</u>	_____
3rd Volume:	<u>1026</u>	<u>clr</u>	<u>5.27</u>	<u>50.19</u>	<u>155</u>	<u>3.60</u>	<u>5.1</u>	_____
4th Volume:	_____	_____	_____	_____	_____	_____	_____	_____
5th Volume:	_____	_____	_____	_____	_____	_____	_____	_____

Total Volume of Water Purged From Well: < 1 gal

Purge Water Stored/Disposed of Where/How: On-Site 55-gallon drum

SAMPLES COLLECTED:

Depth to Water at time of sample collection: _____ >80%

Sample Number(s):	Time:	Size/Number of Container(s):	Preservative:
<u>MW-6a</u>	<u>1030</u>	_____	_____
_____	_____	_____	_____

COMMENTS:

Casing Capacities:
 2-inch hole.....0.16 gal/in ft.
 4-inch hole.....0.65 gal/in ft.
 6.5-inch hole.....1.70 gal/in ft.
 8-inch hole.....2.60 gal/in ft.
 10-inch hole.....4.10 gal/in ft.

Recharge Calculation at Time of Sample Collection:

Total Depth of Well: _____
 Original Water Column: _____ x 0.80 = -(_____)
 Collect sample when Depth to Water measures
 Less than or equal to: _____

GROUNDWATER SAMPLING DATA SHEET

SECOR International

7730 SW Mohawk, Tualatin, OR 97062

Stantec Project No.: 190402025 Date: 2/19/10 Well No: MW-7

Facility Name: Brunswick Temperature: _____ °F or °C

Field Personnel: Janet Nash Weather: Sunny

FIELD MEASUREMENTS:

A. Total Depth (TD) of Well from TOC: 30.00 FT. or IN.

C. Static Water Level (SWL) Below Top of Casing (TOC): 19.90 FT. or IN.

D. Height of Water Column in Casing: (h = TD-SWL) 10.10 FT. or IN.

E. Useful approximate Purge Volumes (PV) per foot of water column

	<u>3 Well Vols.</u>	<u>5 Well Vols.</u>				
5/8" diameter =	21.8 mL/ft		X	feet of water	=	PV (milliliters)
2" diameter =	0.5 gal/ft	0.82 gal/ft	X	feet of water	=	PV (gallons)
4" diameter =	2.0 gal/ft	3.25 gal/ft	X	feet of water	=	PV (gallons)
6" diameter =	4.4 gal/ft	7.35 gal/ft	X	feet of water	=	PV (gallons)

Purge Method: disposable bailer / trash pump / pvc hand bail Duration: _____
in-line pump / single valve sampler / syringe

OBSERVATIONS:

	<u>Time</u>	<u>Turbidity</u>	<u>pH</u>	<u>Temp.</u>	<u>Conduct.</u>	<u>DO</u>	<u>ORP</u>	<u>SWL</u>
1st Volume:	<u>0956</u>	<u>low</u>	<u>5.04</u>	<u>52.35</u>	<u>38</u>	<u>2.89</u>	<u>-91.6</u>	_____
2nd Volume:	<u>1000</u>	<u>clr</u>	<u>5.26</u>	<u>53.46</u>	<u>93</u>	<u>2.57</u>	<u>-124.2</u>	_____
3rd Volume:	<u>1004</u>	<u>clr</u>	<u>5.27</u>	<u>53.65</u>	<u>27</u>	<u>2.59</u>	<u>-116.2</u>	_____
4th Volume:	<u>1008</u>	_____	_____	_____	_____	_____	_____	_____
5th Volume:	_____	_____	_____	_____	_____	_____	_____	_____

Total Volume of Water Purged From Well: ~~_____~~ < 1 gal

Purge Water Stored/Disposed of Where/How: On-Site 55-gallon drum

SAMPLES COLLECTED:

Depth to Water at time of sample collection: _____ >80%

<u>Sample Numbers(s):</u>	<u>Time:</u>	<u>Size/Number of Container(s):</u>	<u>Preservative:</u>
<u>MW-7</u>	<u>1010</u>	_____	_____
_____	_____	_____	_____

COMMENTS:

Casing Capacities:
 2-inch hole.....0.16 gal/in ft.
 4-inch hole.....0.65 gal/in ft.
 6.5-inch hole.....1.70 gal/in ft.
 8-inch hole.....2.60 gal/in ft.
 10-inch hole.....4.10 gal/in ft.

Recharge Calculation at Time of Sample Collection:

Total Depth of Well: _____
 Original Water Column: _____ x 0.80 = - (_____)
 Collect sample when Depth to Water measures
 Less than or equal to: _____

APPENDIX E
LABORATORY ANALYTICAL REPORTS
AND CHAIN-OF-CUSTODY FORMS
FEBRUARY 2010



12065 Lebanon Rd.
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Tax I.D. 62-0814289

Est. 1970

Amy Zach
Stantec Consulting - Tualatin, OR
7730 SW Mohawk Street

Tualatin, OR 97062

Report Summary

Friday February 26, 2010

Report Number: L445864

Samples Received: 02/20/10

Client Project: 190402025.200.0002

Description: Brunswick Bayliner Marine

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:

T. Alan Harvill, ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT - PH-0197, FL - E87487
GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375, DW21704, ND - R-140
NJ - TN002, NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 00109, WV - 233
AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910

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Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



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REPORT OF ANALYSIS

Amy Zach
Stantec Consulting - Tualatin, OR
7730 SW Mohawk Street
Tualatin, OR 97062

February 26, 2010

Date Received : February 20, 2010
Description : Brunswick Bayliner Marine
Sample ID : MW-6-5
Collected By : Janet Nash
Collection Date : 02/17/10 10:15

ESC Sample # : L445864-01

Site ID :

Project # : 190402025.200.0002

Table with 7 columns: Parameter, Dry Result, Det. Limit, Units, Method, Date, Dil. Rows include Chromium, Hexavalent; Chromium, Trivalent; Total Solids; Mercury; Arsenic; Barium; Cadmium; Chromium; Lead; Selenium; Silver; and Volatile Organics (Acetone, Acrylonitrile, Benzene, Bromobenzene, Bromodichloromethane, Bromoform, Bromomethane, n-Butylbenzene, sec-Butylbenzene, tert-Butylbenzene, Carbon tetrachloride, Chlorobenzene, Chlorodibromomethane, Chloroethane, 2-Chloroethyl vinyl ether, Chloroform, Chloromethane, 2-Chlorotoluene, 4-Chlorotoluene, 1,2-Dibromo-3-Chloropropane, 1,2-Dibromoethane, Dibromomethane, 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, Dichlorodifluoromethane, 1,1-Dichloroethane).

Results listed are dry weight basis.
BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:

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The reported analytical results relate only to the sample submitted



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Est. 1970

REPORT OF ANALYSIS

Amy Zach
Stantec Consulting - Tualatin, OR
7730 SW Mohawk Street
Tualatin, OR 97062

February 26, 2010

Date Received : February 20, 2010
Description : Brunswick Bayliner Marine
Sample ID : MW-6-5
Collected By : Janet Nash
Collection Date : 02/17/10 10:15

ESC Sample # : L445864-01

Site ID :

Project # : 190402025.200.0002

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
1,2-Dichloroethane	BDL	0.0010	mg/kg	8260B	02/22/10	1
1,1-Dichloroethene	BDL	0.0010	mg/kg	8260B	02/22/10	1
cis-1,2-Dichloroethene	BDL	0.0010	mg/kg	8260B	02/22/10	1
trans-1,2-Dichloroethene	BDL	0.0010	mg/kg	8260B	02/22/10	1
1,2-Dichloropropane	BDL	0.0010	mg/kg	8260B	02/22/10	1
1,1-Dichloropropene	BDL	0.0010	mg/kg	8260B	02/22/10	1
1,3-Dichloropropane	BDL	0.0010	mg/kg	8260B	02/22/10	1
cis-1,3-Dichloropropene	BDL	0.0010	mg/kg	8260B	02/22/10	1
trans-1,3-Dichloropropene	BDL	0.0010	mg/kg	8260B	02/22/10	1
2,2-Dichloropropane	BDL	0.0010	mg/kg	8260B	02/22/10	1
Di-isopropyl ether	BDL	0.0010	mg/kg	8260B	02/22/10	1
Ethylbenzene	BDL	0.0010	mg/kg	8260B	02/22/10	1
Hexachloro-1,3-Butadiene	BDL	0.0010	mg/kg	8260B	02/22/10	1
Isopropylbenzene	BDL	0.0010	mg/kg	8260B	02/22/10	1
p-Isopropyltoluene	BDL	0.0010	mg/kg	8260B	02/22/10	1
2-Butanone (MEK)	BDL	0.010	mg/kg	8260B	02/22/10	1
Methylene Chloride	BDL	0.0052	mg/kg	8260B	02/22/10	1
4-Methyl-2-pentanone (MIBK)	BDL	0.010	mg/kg	8260B	02/22/10	1
Methyl tert-butyl ether	BDL	0.0010	mg/kg	8260B	02/22/10	1
Naphthalene	BDL	0.0052	mg/kg	8260B	02/22/10	1
n-Propylbenzene	BDL	0.0010	mg/kg	8260B	02/22/10	1
Styrene	BDL	0.0010	mg/kg	8260B	02/22/10	1
1,1,1,2-Tetrachloroethane	BDL	0.0010	mg/kg	8260B	02/22/10	1
1,1,2,2-Tetrachloroethane	BDL	0.0010	mg/kg	8260B	02/22/10	1
Tetrachloroethene	BDL	0.0010	mg/kg	8260B	02/22/10	1
Toluene	BDL	0.0052	mg/kg	8260B	02/22/10	1
1,2,3-Trichlorobenzene	BDL	0.0010	mg/kg	8260B	02/22/10	1
1,2,4-Trichlorobenzene	BDL	0.0010	mg/kg	8260B	02/22/10	1
1,1,1-Trichloroethane	BDL	0.0010	mg/kg	8260B	02/22/10	1
1,1,2-Trichloroethane	BDL	0.0010	mg/kg	8260B	02/22/10	1
1,1,2-Trichloro-1,2,2-trifluoro	BDL	0.0010	mg/kg	8260B	02/22/10	1
Trichloroethene	BDL	0.0010	mg/kg	8260B	02/22/10	1
Trichlorofluoromethane	BDL	0.0052	mg/kg	8260B	02/22/10	1
1,2,3-Trichloropropane	BDL	0.0010	mg/kg	8260B	02/22/10	1
1,2,4-Trimethylbenzene	BDL	0.0010	mg/kg	8260B	02/22/10	1
1,3,5-Trimethylbenzene	BDL	0.0010	mg/kg	8260B	02/22/10	1
Vinyl chloride	BDL	0.0010	mg/kg	8260B	02/22/10	1
Xylenes, Total	BDL	0.0031	mg/kg	8260B	02/22/10	1
Surrogate Recovery						
Toluene-d8	99.3		% Rec.	8260B	02/22/10	1
Dibromofluoromethane	115.		% Rec.	8260B	02/22/10	1
4-Bromofluorobenzene	106.		% Rec.	8260B	02/22/10	1

Results listed are dry weight basis.

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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The reported analytical results relate only to the sample submitted

Reported: 02/26/10 08:57 Printed: 02/26/10 08:59



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Est. 1970

REPORT OF ANALYSIS

Amy Zach
Stantec Consulting - Tualatin, OR
7730 SW Mohawk Street
Tualatin, OR 97062

February 26, 2010

Date Received : February 20, 2010
Description : Brunswick Bayliner Marine
Sample ID : MW-6-15
Collected By : Janet Nash
Collection Date : 02/17/10 10:24

ESC Sample # : L445864-02

Site ID :

Project # : 190402025.200.0002

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Chromium, Hexavalent	BDL	2.1	mg/kg	3060A/7196A	02/25/10	1
Chromium, Trivalent	41.	0.50	mg/kg	Calc.	02/24/10	1
Total Solids	96.5		%	2540G	02/23/10	1
Mercury	BDL	0.021	mg/kg	7471	02/23/10	1
Arsenic	BDL	1.0	mg/kg	6010B	02/24/10	1
Barium	48.	0.26	mg/kg	6010B	02/24/10	1
Cadmium	BDL	0.26	mg/kg	6010B	02/24/10	1
Chromium	43.	0.52	mg/kg	6010B	02/24/10	1
Lead	4.5	0.26	mg/kg	6010B	02/24/10	1
Selenium	BDL	5.2	mg/kg	6010B	02/24/10	5
Silver	BDL	0.52	mg/kg	6010B	02/24/10	1
Volatile Organics						
Acetone	BDL	0.052	mg/kg	8260B	02/22/10	1
Acrylonitrile	BDL	0.010	mg/kg	8260B	02/22/10	1
Benzene	BDL	0.0010	mg/kg	8260B	02/22/10	1
Bromobenzene	BDL	0.0010	mg/kg	8260B	02/22/10	1
Bromodichloromethane	BDL	0.0010	mg/kg	8260B	02/22/10	1
Bromoform	BDL	0.0010	mg/kg	8260B	02/22/10	1
Bromomethane	BDL	0.0052	mg/kg	8260B	02/22/10	1
n-Butylbenzene	BDL	0.0010	mg/kg	8260B	02/22/10	1
sec-Butylbenzene	BDL	0.0010	mg/kg	8260B	02/22/10	1
tert-Butylbenzene	BDL	0.0010	mg/kg	8260B	02/22/10	1
Carbon tetrachloride	BDL	0.0010	mg/kg	8260B	02/22/10	1
Chlorobenzene	BDL	0.0010	mg/kg	8260B	02/22/10	1
Chlorodibromomethane	BDL	0.0010	mg/kg	8260B	02/22/10	1
Chloroethane	BDL	0.0052	mg/kg	8260B	02/22/10	1
2-Chloroethyl vinyl ether	BDL	0.052	mg/kg	8260B	02/22/10	1
Chloroform	BDL	0.0052	mg/kg	8260B	02/22/10	1
Chloromethane	0.0014	0.0010	mg/kg	8260B	02/22/10	1
2-Chlorotoluene	BDL	0.0010	mg/kg	8260B	02/22/10	1
4-Chlorotoluene	BDL	0.0010	mg/kg	8260B	02/22/10	1
1,2-Dibromo-3-Chloropropane	BDL	0.0052	mg/kg	8260B	02/22/10	1
1,2-Dibromoethane	BDL	0.0010	mg/kg	8260B	02/22/10	1
Dibromomethane	BDL	0.0010	mg/kg	8260B	02/22/10	1
1,2-Dichlorobenzene	BDL	0.0010	mg/kg	8260B	02/22/10	1
1,3-Dichlorobenzene	BDL	0.0010	mg/kg	8260B	02/22/10	1
1,4-Dichlorobenzene	BDL	0.0010	mg/kg	8260B	02/22/10	1
Dichlorodifluoromethane	BDL	0.0052	mg/kg	8260B	02/22/10	1
1,1-Dichloroethane	BDL	0.0010	mg/kg	8260B	02/22/10	1

Results listed are dry weight basis.

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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Est. 1970

REPORT OF ANALYSIS

Amy Zach
 Stantec Consulting - Tualatin, OR
 7730 SW Mohawk Street
 Tualatin, OR 97062

February 26, 2010

Date Received : February 20, 2010
 Description : Brunswick Bayliner Marine
 Sample ID : MW-6-15
 Collected By : Janet Nash
 Collection Date : 02/17/10 10:24

ESC Sample # : L445864-02

Site ID :

Project # : 190402025.200.0002

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
1,2-Dichloroethane	BDL	0.0010	mg/kg	8260B	02/22/10	1
1,1-Dichloroethene	BDL	0.0010	mg/kg	8260B	02/22/10	1
cis-1,2-Dichloroethene	BDL	0.0010	mg/kg	8260B	02/22/10	1
trans-1,2-Dichloroethene	BDL	0.0010	mg/kg	8260B	02/22/10	1
1,2-Dichloropropane	BDL	0.0010	mg/kg	8260B	02/22/10	1
1,1-Dichloropropene	BDL	0.0010	mg/kg	8260B	02/22/10	1
1,3-Dichloropropane	BDL	0.0010	mg/kg	8260B	02/22/10	1
cis-1,3-Dichloropropene	BDL	0.0010	mg/kg	8260B	02/22/10	1
trans-1,3-Dichloropropene	BDL	0.0010	mg/kg	8260B	02/22/10	1
2,2-Dichloropropane	BDL	0.0010	mg/kg	8260B	02/22/10	1
Di-isopropyl ether	BDL	0.0010	mg/kg	8260B	02/22/10	1
Ethylbenzene	BDL	0.0010	mg/kg	8260B	02/22/10	1
Hexachloro-1,3-Butadiene	BDL	0.0010	mg/kg	8260B	02/22/10	1
Isopropylbenzene	BDL	0.0010	mg/kg	8260B	02/22/10	1
p-Isopropyltoluene	BDL	0.0010	mg/kg	8260B	02/22/10	1
2-Butanone (MEK)	BDL	0.010	mg/kg	8260B	02/22/10	1
Methylene Chloride	BDL	0.0052	mg/kg	8260B	02/22/10	1
4-Methyl-2-pentanone (MIBK)	BDL	0.010	mg/kg	8260B	02/22/10	1
Methyl tert-butyl ether	BDL	0.0010	mg/kg	8260B	02/22/10	1
Naphthalene	BDL	0.0052	mg/kg	8260B	02/22/10	1
n-Propylbenzene	BDL	0.0010	mg/kg	8260B	02/22/10	1
Styrene	BDL	0.0010	mg/kg	8260B	02/22/10	1
1,1,1,2-Tetrachloroethane	BDL	0.0010	mg/kg	8260B	02/22/10	1
1,1,2,2-Tetrachloroethane	BDL	0.0010	mg/kg	8260B	02/22/10	1
Tetrachloroethene	BDL	0.0010	mg/kg	8260B	02/22/10	1
Toluene	BDL	0.0052	mg/kg	8260B	02/22/10	1
1,2,3-Trichlorobenzene	BDL	0.0010	mg/kg	8260B	02/22/10	1
1,2,4-Trichlorobenzene	BDL	0.0010	mg/kg	8260B	02/22/10	1
1,1,1-Trichloroethane	BDL	0.0010	mg/kg	8260B	02/22/10	1
1,1,2-Trichloroethane	BDL	0.0010	mg/kg	8260B	02/22/10	1
1,1,2-Trichloro-1,2,2-trifluoro	BDL	0.0010	mg/kg	8260B	02/22/10	1
Trichloroethene	BDL	0.0010	mg/kg	8260B	02/22/10	1
Trichlorofluoromethane	BDL	0.0052	mg/kg	8260B	02/22/10	1
1,2,3-Trichloropropane	BDL	0.0010	mg/kg	8260B	02/22/10	1
1,2,4-Trimethylbenzene	BDL	0.0010	mg/kg	8260B	02/22/10	1
1,3,5-Trimethylbenzene	BDL	0.0010	mg/kg	8260B	02/22/10	1
Vinyl chloride	BDL	0.0010	mg/kg	8260B	02/22/10	1
Xylenes, Total	BDL	0.0031	mg/kg	8260B	02/22/10	1
Surrogate Recovery						
Toluene-d8	99.6		% Rec.	8260B	02/22/10	1
Dibromofluoromethane	114.		% Rec.	8260B	02/22/10	1
4-Bromofluorobenzene	105.		% Rec.	8260B	02/22/10	1

Results listed are dry weight basis.

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Amy Zach
 Stantec Consulting - Tualatin, OR
 7730 SW Mohawk Street
 Tualatin, OR 97062

February 26, 2010

Date Received : February 20, 2010
 Description : Brunswick Bayliner Marine
 Sample ID : MW-7-15
 Collected By : Janet Nash
 Collection Date : 02/17/10 12:39

ESC Sample # : L445864-03

Site ID :

Project # : 190402025.200.0002

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Chromium, Hexavalent	BDL	2.1	mg/kg	3060A/7196A	02/25/10	1
Chromium, Trivalent	130	0.50	mg/kg	Calc.	02/24/10	1
Total Solids	95.5		%	2540G	02/23/10	1
Mercury	BDL	0.021	mg/kg	7471	02/23/10	1
Arsenic	BDL	1.0	mg/kg	6010B	02/24/10	1
Barium	38.	0.26	mg/kg	6010B	02/24/10	1
Cadmium	BDL	0.26	mg/kg	6010B	02/24/10	1
Chromium	130	0.52	mg/kg	6010B	02/24/10	1
Lead	4.5	0.26	mg/kg	6010B	02/24/10	1
Selenium	BDL	5.2	mg/kg	6010B	02/24/10	5
Silver	BDL	0.52	mg/kg	6010B	02/24/10	1
Volatile Organics						
Acetone	BDL	0.052	mg/kg	8260B	02/22/10	1
Acrylonitrile	BDL	0.010	mg/kg	8260B	02/22/10	1
Benzene	BDL	0.0010	mg/kg	8260B	02/22/10	1
Bromobenzene	BDL	0.0010	mg/kg	8260B	02/22/10	1
Bromodichloromethane	BDL	0.0010	mg/kg	8260B	02/22/10	1
Bromoform	BDL	0.0010	mg/kg	8260B	02/22/10	1
Bromomethane	BDL	0.0052	mg/kg	8260B	02/22/10	1
n-Butylbenzene	BDL	0.0010	mg/kg	8260B	02/22/10	1
sec-Butylbenzene	BDL	0.0010	mg/kg	8260B	02/22/10	1
tert-Butylbenzene	BDL	0.0010	mg/kg	8260B	02/22/10	1
Carbon tetrachloride	BDL	0.0010	mg/kg	8260B	02/22/10	1
Chlorobenzene	BDL	0.0010	mg/kg	8260B	02/22/10	1
Chlorodibromomethane	BDL	0.0010	mg/kg	8260B	02/22/10	1
Chloroethane	BDL	0.0052	mg/kg	8260B	02/22/10	1
2-Chloroethyl vinyl ether	BDL	0.052	mg/kg	8260B	02/22/10	1
Chloroform	BDL	0.0052	mg/kg	8260B	02/22/10	1
Chloromethane	BDL	0.0010	mg/kg	8260B	02/22/10	1
2-Chlorotoluene	BDL	0.0010	mg/kg	8260B	02/22/10	1
4-Chlorotoluene	BDL	0.0010	mg/kg	8260B	02/22/10	1
1,2-Dibromo-3-Chloropropane	BDL	0.0052	mg/kg	8260B	02/22/10	1
1,2-Dibromoethane	BDL	0.0010	mg/kg	8260B	02/22/10	1
Dibromomethane	BDL	0.0010	mg/kg	8260B	02/22/10	1
1,2-Dichlorobenzene	BDL	0.0010	mg/kg	8260B	02/22/10	1
1,3-Dichlorobenzene	BDL	0.0010	mg/kg	8260B	02/22/10	1
1,4-Dichlorobenzene	BDL	0.0010	mg/kg	8260B	02/22/10	1
Dichlorodifluoromethane	BDL	0.0052	mg/kg	8260B	02/22/10	1
1,1-Dichloroethane	BDL	0.0010	mg/kg	8260B	02/22/10	1

Results listed are dry weight basis.
 BDL - Below Detection Limit
 Det. Limit - Practical Quantitation Limit(PQL)
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REPORT OF ANALYSIS

Amy Zach
Stantec Consulting - Tualatin, OR
7730 SW Mohawk Street
Tualatin, OR 97062

February 26, 2010

Date Received : February 20, 2010
Description : Brunswick Bayliner Marine
Sample ID : MW-7-15
Collected By : Janet Nash
Collection Date : 02/17/10 12:39

ESC Sample # : L445864-03

Site ID :

Project # : 190402025.200.0002

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
1,2-Dichloroethane	BDL	0.0010	mg/kg	8260B	02/22/10	1
1,1-Dichloroethene	BDL	0.0010	mg/kg	8260B	02/22/10	1
cis-1,2-Dichloroethene	BDL	0.0010	mg/kg	8260B	02/22/10	1
trans-1,2-Dichloroethene	BDL	0.0010	mg/kg	8260B	02/22/10	1
1,2-Dichloropropane	BDL	0.0010	mg/kg	8260B	02/22/10	1
1,1-Dichloropropene	BDL	0.0010	mg/kg	8260B	02/22/10	1
1,3-Dichloropropane	BDL	0.0010	mg/kg	8260B	02/22/10	1
cis-1,3-Dichloropropene	BDL	0.0010	mg/kg	8260B	02/22/10	1
trans-1,3-Dichloropropene	BDL	0.0010	mg/kg	8260B	02/22/10	1
2,2-Dichloropropane	BDL	0.0010	mg/kg	8260B	02/22/10	1
Di-isopropyl ether	BDL	0.0010	mg/kg	8260B	02/22/10	1
Ethylbenzene	BDL	0.0010	mg/kg	8260B	02/22/10	1
Hexachloro-1,3-Butadiene	BDL	0.0010	mg/kg	8260B	02/22/10	1
Isopropylbenzene	BDL	0.0010	mg/kg	8260B	02/22/10	1
p-Isopropyltoluene	BDL	0.0010	mg/kg	8260B	02/22/10	1
2-Butanone (MEK)	BDL	0.010	mg/kg	8260B	02/22/10	1
Methylene Chloride	BDL	0.0052	mg/kg	8260B	02/22/10	1
4-Methyl-2-pentanone (MIBK)	BDL	0.010	mg/kg	8260B	02/22/10	1
Methyl tert-butyl ether	BDL	0.0010	mg/kg	8260B	02/22/10	1
Naphthalene	BDL	0.0052	mg/kg	8260B	02/22/10	1
n-Propylbenzene	BDL	0.0010	mg/kg	8260B	02/22/10	1
Styrene	BDL	0.0010	mg/kg	8260B	02/22/10	1
1,1,1,2-Tetrachloroethane	BDL	0.0010	mg/kg	8260B	02/22/10	1
1,1,2,2-Tetrachloroethane	BDL	0.0010	mg/kg	8260B	02/22/10	1
Tetrachloroethene	BDL	0.0010	mg/kg	8260B	02/22/10	1
Toluene	BDL	0.0052	mg/kg	8260B	02/22/10	1
1,2,3-Trichlorobenzene	BDL	0.0010	mg/kg	8260B	02/22/10	1
1,2,4-Trichlorobenzene	BDL	0.0010	mg/kg	8260B	02/22/10	1
1,1,1-Trichloroethane	BDL	0.0010	mg/kg	8260B	02/22/10	1
1,1,2-Trichloroethane	BDL	0.0010	mg/kg	8260B	02/22/10	1
1,1,2-Trichloro-1,2,2-trifluoro	BDL	0.0010	mg/kg	8260B	02/22/10	1
Trichloroethene	BDL	0.0010	mg/kg	8260B	02/22/10	1
Trichlorofluoromethane	BDL	0.0052	mg/kg	8260B	02/22/10	1
1,2,3-Trichloropropane	BDL	0.0010	mg/kg	8260B	02/22/10	1
1,2,4-Trimethylbenzene	BDL	0.0010	mg/kg	8260B	02/22/10	1
1,3,5-Trimethylbenzene	BDL	0.0010	mg/kg	8260B	02/22/10	1
Vinyl chloride	BDL	0.0010	mg/kg	8260B	02/22/10	1
Xylenes, Total	BDL	0.0031	mg/kg	8260B	02/22/10	1
Surrogate Recovery						
Toluene-d8	99.6		% Rec.	8260B	02/22/10	1
Dibromofluoromethane	112.		% Rec.	8260B	02/22/10	1
4-Bromofluorobenzene	111.		% Rec.	8260B	02/22/10	1

Results listed are dry weight basis.

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Amy Zach
 Stantec Consulting - Tualatin, OR
 7730 SW Mohawk Street
 Tualatin, OR 97062

February 26, 2010

Date Received : February 20, 2010
 Description : Brunswick Bayliner Marine
 Sample ID : MW-7-20
 Collected By : Janet Nash
 Collection Date : 02/17/10 12:44

ESC Sample # : L445864-04

Site ID :

Project # : 190402025.200.0002

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Chromium, Hexavalent	BDL	2.2	mg/kg	3060A/7196A	02/25/10	1
Chromium, Trivalent	35.	0.50	mg/kg	Calc.	02/24/10	1
Total Solids	91.7		%	2540G	02/23/10	1
Mercury	BDL	0.022	mg/kg	7471	02/23/10	1
Arsenic	BDL	1.1	mg/kg	6010B	02/24/10	1
Barium	48.	0.27	mg/kg	6010B	02/24/10	1
Cadmium	BDL	0.27	mg/kg	6010B	02/24/10	1
Chromium	38.	0.54	mg/kg	6010B	02/24/10	1
Lead	4.1	0.27	mg/kg	6010B	02/24/10	1
Selenium	BDL	5.4	mg/kg	6010B	02/24/10	5
Silver	BDL	0.54	mg/kg	6010B	02/24/10	1
Volatile Organics						
Acetone	BDL	0.054	mg/kg	8260B	02/22/10	1
Acrylonitrile	BDL	0.011	mg/kg	8260B	02/22/10	1
Benzene	BDL	0.0011	mg/kg	8260B	02/22/10	1
Bromobenzene	BDL	0.0011	mg/kg	8260B	02/22/10	1
Bromodichloromethane	BDL	0.0011	mg/kg	8260B	02/22/10	1
Bromoform	BDL	0.0011	mg/kg	8260B	02/22/10	1
Bromomethane	BDL	0.0054	mg/kg	8260B	02/22/10	1
n-Butylbenzene	BDL	0.0011	mg/kg	8260B	02/22/10	1
sec-Butylbenzene	BDL	0.0011	mg/kg	8260B	02/22/10	1
tert-Butylbenzene	BDL	0.0011	mg/kg	8260B	02/22/10	1
Carbon tetrachloride	BDL	0.0011	mg/kg	8260B	02/22/10	1
Chlorobenzene	BDL	0.0011	mg/kg	8260B	02/22/10	1
Chlorodibromomethane	BDL	0.0011	mg/kg	8260B	02/22/10	1
Chloroethane	BDL	0.0054	mg/kg	8260B	02/22/10	1
2-Chloroethyl vinyl ether	BDL	0.054	mg/kg	8260B	02/22/10	1
Chloroform	BDL	0.0054	mg/kg	8260B	02/22/10	1
Chloromethane	BDL	0.0011	mg/kg	8260B	02/22/10	1
2-Chlorotoluene	BDL	0.0011	mg/kg	8260B	02/22/10	1
4-Chlorotoluene	BDL	0.0011	mg/kg	8260B	02/22/10	1
1,2-Dibromo-3-Chloropropane	BDL	0.0054	mg/kg	8260B	02/22/10	1
1,2-Dibromoethane	BDL	0.0011	mg/kg	8260B	02/22/10	1
Dibromomethane	BDL	0.0011	mg/kg	8260B	02/22/10	1
1,2-Dichlorobenzene	BDL	0.0011	mg/kg	8260B	02/22/10	1
1,3-Dichlorobenzene	BDL	0.0011	mg/kg	8260B	02/22/10	1
1,4-Dichlorobenzene	BDL	0.0011	mg/kg	8260B	02/22/10	1
Dichlorodifluoromethane	BDL	0.0054	mg/kg	8260B	02/22/10	1
1,1-Dichloroethane	BDL	0.0011	mg/kg	8260B	02/22/10	1

Results listed are dry weight basis.
 BDL - Below Detection Limit
 Det. Limit - Practical Quantitation Limit (PQL)
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REPORT OF ANALYSIS

Amy Zach
 Stantec Consulting - Tualatin, OR
 7730 SW Mohawk Street
 Tualatin, OR 97062

February 26, 2010

Date Received : February 20, 2010
 Description : Brunswick Bayliner Marine
 Sample ID : MW-7-20
 Collected By : Janet Nash
 Collection Date : 02/17/10 12:44

ESC Sample # : L445864-04

Site ID :

Project # : 190402025.200.0002

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
1,2-Dichloroethane	BDL	0.0011	mg/kg	8260B	02/22/10	1
1,1-Dichloroethene	BDL	0.0011	mg/kg	8260B	02/22/10	1
cis-1,2-Dichloroethene	BDL	0.0011	mg/kg	8260B	02/22/10	1
trans-1,2-Dichloroethene	BDL	0.0011	mg/kg	8260B	02/22/10	1
1,2-Dichloropropane	BDL	0.0011	mg/kg	8260B	02/22/10	1
1,1-Dichloropropene	BDL	0.0011	mg/kg	8260B	02/22/10	1
1,3-Dichloropropane	BDL	0.0011	mg/kg	8260B	02/22/10	1
cis-1,3-Dichloropropene	BDL	0.0011	mg/kg	8260B	02/22/10	1
trans-1,3-Dichloropropene	BDL	0.0011	mg/kg	8260B	02/22/10	1
2,2-Dichloropropane	BDL	0.0011	mg/kg	8260B	02/22/10	1
Di-isopropyl ether	BDL	0.0011	mg/kg	8260B	02/22/10	1
Ethylbenzene	BDL	0.0011	mg/kg	8260B	02/22/10	1
Hexachloro-1,3-Butadiene	BDL	0.0011	mg/kg	8260B	02/22/10	1
Isopropylbenzene	BDL	0.0011	mg/kg	8260B	02/22/10	1
p-Isopropyltoluene	BDL	0.0011	mg/kg	8260B	02/22/10	1
2-Butanone (MEK)	BDL	0.011	mg/kg	8260B	02/22/10	1
Methylene Chloride	BDL	0.0054	mg/kg	8260B	02/22/10	1
4-Methyl-2-pentanone (MIBK)	BDL	0.011	mg/kg	8260B	02/22/10	1
Methyl tert-butyl ether	BDL	0.0011	mg/kg	8260B	02/22/10	1
Naphthalene	BDL	0.0054	mg/kg	8260B	02/22/10	1
n-Propylbenzene	BDL	0.0011	mg/kg	8260B	02/22/10	1
Styrene	BDL	0.0011	mg/kg	8260B	02/22/10	1
1,1,1,2-Tetrachloroethane	BDL	0.0011	mg/kg	8260B	02/22/10	1
1,1,2,2-Tetrachloroethane	BDL	0.0011	mg/kg	8260B	02/22/10	1
Tetrachloroethene	BDL	0.0011	mg/kg	8260B	02/22/10	1
Toluene	BDL	0.0054	mg/kg	8260B	02/22/10	1
1,2,3-Trichlorobenzene	BDL	0.0011	mg/kg	8260B	02/22/10	1
1,2,4-Trichlorobenzene	BDL	0.0011	mg/kg	8260B	02/22/10	1
1,1,1-Trichloroethane	BDL	0.0011	mg/kg	8260B	02/22/10	1
1,1,2-Trichloroethane	BDL	0.0011	mg/kg	8260B	02/22/10	1
1,1,2-Trichloro-1,2,2-trifluoro	BDL	0.0011	mg/kg	8260B	02/22/10	1
Trichloroethene	BDL	0.0011	mg/kg	8260B	02/22/10	1
Trichlorofluoromethane	BDL	0.0054	mg/kg	8260B	02/22/10	1
1,2,3-Trichloropropane	BDL	0.0011	mg/kg	8260B	02/22/10	1
1,2,4-Trimethylbenzene	BDL	0.0011	mg/kg	8260B	02/22/10	1
1,3,5-Trimethylbenzene	BDL	0.0011	mg/kg	8260B	02/22/10	1
Vinyl chloride	BDL	0.0011	mg/kg	8260B	02/22/10	1
Xylenes, Total	BDL	0.0033	mg/kg	8260B	02/22/10	1
Surrogate Recovery						
Toluene-d8	102.		% Rec.	8260B	02/22/10	1
Dibromofluoromethane	115.		% Rec.	8260B	02/22/10	1
4-Bromofluorobenzene	111.		% Rec.	8260B	02/22/10	1

Results listed are dry weight basis.

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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Est. 1970

REPORT OF ANALYSIS

Amy Zach
 Stantec Consulting - Tualatin, OR
 7730 SW Mohawk Street
 Tualatin, OR 97062

February 26, 2010

Date Received : February 20, 2010
 Description : Brunswick Bayliner Marine
 Sample ID : B-9-5
 Collected By : Janet Nash
 Collection Date : 02/18/10 08:56

ESC Sample # : L445864-05

Site ID :

Project # : 190402025.200.0002

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Chromium, Hexavalent	BDL	2.1	mg/kg	3060A/7196A	02/25/10	1
Chromium, Trivalent	27.	0.50	mg/kg	Calc.	02/24/10	1
Total Solids	96.2		%	2540G	02/23/10	1
Mercury	0.023	0.021	mg/kg	7471	02/23/10	1
Arsenic	BDL	5.2	mg/kg	6010B	02/24/10	5
Barium	110	0.26	mg/kg	6010B	02/24/10	1
Cadmium	BDL	0.26	mg/kg	6010B	02/24/10	1
Chromium	28.	0.52	mg/kg	6010B	02/24/10	1
Lead	4.4	0.26	mg/kg	6010B	02/24/10	1
Selenium	BDL	5.2	mg/kg	6010B	02/24/10	5
Silver	BDL	0.52	mg/kg	6010B	02/24/10	1
Volatile Organics						
Acetone	BDL	0.052	mg/kg	8260B	02/22/10	1
Acrylonitrile	BDL	0.010	mg/kg	8260B	02/22/10	1
Benzene	BDL	0.0010	mg/kg	8260B	02/22/10	1
Bromobenzene	BDL	0.0010	mg/kg	8260B	02/22/10	1
Bromodichloromethane	BDL	0.0010	mg/kg	8260B	02/22/10	1
Bromoform	BDL	0.0010	mg/kg	8260B	02/22/10	1
Bromomethane	BDL	0.0052	mg/kg	8260B	02/22/10	1
n-Butylbenzene	BDL	0.0010	mg/kg	8260B	02/22/10	1
sec-Butylbenzene	BDL	0.0010	mg/kg	8260B	02/22/10	1
tert-Butylbenzene	BDL	0.0010	mg/kg	8260B	02/22/10	1
Carbon tetrachloride	BDL	0.0010	mg/kg	8260B	02/22/10	1
Chlorobenzene	BDL	0.0010	mg/kg	8260B	02/22/10	1
Chlorodibromomethane	BDL	0.0010	mg/kg	8260B	02/22/10	1
Chloroethane	BDL	0.0052	mg/kg	8260B	02/22/10	1
2-Chloroethyl vinyl ether	BDL	0.052	mg/kg	8260B	02/22/10	1
Chloroform	BDL	0.0052	mg/kg	8260B	02/22/10	1
Chloromethane	BDL	0.0010	mg/kg	8260B	02/22/10	1
2-Chlorotoluene	BDL	0.0010	mg/kg	8260B	02/22/10	1
4-Chlorotoluene	BDL	0.0010	mg/kg	8260B	02/22/10	1
1,2-Dibromo-3-Chloropropane	BDL	0.0052	mg/kg	8260B	02/22/10	1
1,2-Dibromoethane	BDL	0.0010	mg/kg	8260B	02/22/10	1
Dibromomethane	BDL	0.0010	mg/kg	8260B	02/22/10	1
1,2-Dichlorobenzene	BDL	0.0010	mg/kg	8260B	02/22/10	1
1,3-Dichlorobenzene	BDL	0.0010	mg/kg	8260B	02/22/10	1
1,4-Dichlorobenzene	BDL	0.0010	mg/kg	8260B	02/22/10	1
Dichlorodifluoromethane	BDL	0.0052	mg/kg	8260B	02/22/10	1
1,1-Dichloroethane	BDL	0.0010	mg/kg	8260B	02/22/10	1

Results listed are dry weight basis.

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit (PQL)

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REPORT OF ANALYSIS

Amy Zach
 Stantec Consulting - Tualatin, OR
 7730 SW Mohawk Street
 Tualatin, OR 97062

February 26, 2010

Date Received : February 20, 2010
 Description : Brunswick Bayliner Marine
 Sample ID : B-9-5
 Collected By : Janet Nash
 Collection Date : 02/18/10 08:56

ESC Sample # : L445864-05

Site ID :

Project # : 190402025.200.0002

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
1,2-Dichloroethane	BDL	0.0010	mg/kg	8260B	02/22/10	1
1,1-Dichloroethene	BDL	0.0010	mg/kg	8260B	02/22/10	1
cis-1,2-Dichloroethene	BDL	0.0010	mg/kg	8260B	02/22/10	1
trans-1,2-Dichloroethene	BDL	0.0010	mg/kg	8260B	02/22/10	1
1,2-Dichloropropane	BDL	0.0010	mg/kg	8260B	02/22/10	1
1,1-Dichloropropene	BDL	0.0010	mg/kg	8260B	02/22/10	1
1,3-Dichloropropane	BDL	0.0010	mg/kg	8260B	02/22/10	1
cis-1,3-Dichloropropene	BDL	0.0010	mg/kg	8260B	02/22/10	1
trans-1,3-Dichloropropene	BDL	0.0010	mg/kg	8260B	02/22/10	1
2,2-Dichloropropane	BDL	0.0010	mg/kg	8260B	02/22/10	1
Di-isopropyl ether	BDL	0.0010	mg/kg	8260B	02/22/10	1
Ethylbenzene	BDL	0.0010	mg/kg	8260B	02/22/10	1
Hexachloro-1,3-Butadiene	BDL	0.0010	mg/kg	8260B	02/22/10	1
Isopropylbenzene	BDL	0.0010	mg/kg	8260B	02/22/10	1
p-Isopropyltoluene	BDL	0.0010	mg/kg	8260B	02/22/10	1
2-Butanone (MEK)	BDL	0.010	mg/kg	8260B	02/22/10	1
Methylene Chloride	BDL	0.0052	mg/kg	8260B	02/22/10	1
4-Methyl-2-pentanone (MIBK)	BDL	0.010	mg/kg	8260B	02/22/10	1
Methyl tert-butyl ether	BDL	0.0010	mg/kg	8260B	02/22/10	1
Naphthalene	BDL	0.0052	mg/kg	8260B	02/22/10	1
n-Propylbenzene	BDL	0.0010	mg/kg	8260B	02/22/10	1
Styrene	BDL	0.0010	mg/kg	8260B	02/22/10	1
1,1,1,2-Tetrachloroethane	BDL	0.0010	mg/kg	8260B	02/22/10	1
1,1,2,2-Tetrachloroethane	BDL	0.0010	mg/kg	8260B	02/22/10	1
Tetrachloroethene	BDL	0.0010	mg/kg	8260B	02/22/10	1
Toluene	BDL	0.0052	mg/kg	8260B	02/22/10	1
1,2,3-Trichlorobenzene	BDL	0.0010	mg/kg	8260B	02/22/10	1
1,2,4-Trichlorobenzene	BDL	0.0010	mg/kg	8260B	02/22/10	1
1,1,1-Trichloroethane	BDL	0.0010	mg/kg	8260B	02/22/10	1
1,1,2-Trichloroethane	BDL	0.0010	mg/kg	8260B	02/22/10	1
1,1,2-Trichloro-1,2,2-trifluoro	BDL	0.0010	mg/kg	8260B	02/22/10	1
Trichloroethene	BDL	0.0010	mg/kg	8260B	02/22/10	1
Trichlorofluoromethane	BDL	0.0052	mg/kg	8260B	02/22/10	1
1,2,3-Trichloropropane	BDL	0.0010	mg/kg	8260B	02/22/10	1
1,2,4-Trimethylbenzene	BDL	0.0010	mg/kg	8260B	02/22/10	1
1,3,5-Trimethylbenzene	BDL	0.0010	mg/kg	8260B	02/22/10	1
Vinyl chloride	BDL	0.0010	mg/kg	8260B	02/22/10	1
Xylenes, Total	BDL	0.0031	mg/kg	8260B	02/22/10	1
Surrogate Recovery						
Toluene-d8	98.6		% Rec.	8260B	02/22/10	1
Dibromofluoromethane	116.		% Rec.	8260B	02/22/10	1
4-Bromofluorobenzene	105.		% Rec.	8260B	02/22/10	1

Results listed are dry weight basis.

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Amy Zach
 Stantec Consulting - Tualatin, OR
 7730 SW Mohawk Street
 Tualatin, OR 97062

February 26, 2010

Date Received : February 20, 2010
 Description : Brunswick Bayliner Marine
 Sample ID : B-9-20
 Collected By : Janet Nash
 Collection Date : 02/18/10 09:05

ESC Sample # : L445864-06

Site ID :

Project # : 190402025.200.0002

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Chromium, Hexavalent	BDL	2.3	mg/kg	3060A/7196A	02/25/10	1
Chromium, Trivalent	39.	0.50	mg/kg	Calc.	02/24/10	1
Total Solids	86.1		%	2540G	02/23/10	1
Mercury	BDL	0.023	mg/kg	7471	02/23/10	1
Arsenic	BDL	1.2	mg/kg	6010B	02/24/10	1
Barium	61.	0.29	mg/kg	6010B	02/24/10	1
Cadmium	BDL	0.29	mg/kg	6010B	02/24/10	1
Chromium	46.	0.58	mg/kg	6010B	02/24/10	1
Lead	4.6	0.29	mg/kg	6010B	02/24/10	1
Selenium	BDL	5.8	mg/kg	6010B	02/24/10	5
Silver	BDL	0.58	mg/kg	6010B	02/24/10	1
Volatile Organics						
Acetone	BDL	0.058	mg/kg	8260B	02/22/10	1
Acrylonitrile	BDL	0.012	mg/kg	8260B	02/22/10	1
Benzene	BDL	0.0012	mg/kg	8260B	02/22/10	1
Bromobenzene	BDL	0.0012	mg/kg	8260B	02/22/10	1
Bromodichloromethane	BDL	0.0012	mg/kg	8260B	02/22/10	1
Bromoform	BDL	0.0012	mg/kg	8260B	02/22/10	1
Bromomethane	BDL	0.0058	mg/kg	8260B	02/22/10	1
n-Butylbenzene	BDL	0.0012	mg/kg	8260B	02/22/10	1
sec-Butylbenzene	BDL	0.0012	mg/kg	8260B	02/22/10	1
tert-Butylbenzene	BDL	0.0012	mg/kg	8260B	02/22/10	1
Carbon tetrachloride	BDL	0.0012	mg/kg	8260B	02/22/10	1
Chlorobenzene	BDL	0.0012	mg/kg	8260B	02/22/10	1
Chlorodibromomethane	BDL	0.0012	mg/kg	8260B	02/22/10	1
Chloroethane	BDL	0.0058	mg/kg	8260B	02/22/10	1
2-Chloroethyl vinyl ether	BDL	0.058	mg/kg	8260B	02/22/10	1
Chloroform	BDL	0.0058	mg/kg	8260B	02/22/10	1
Chloromethane	BDL	0.0012	mg/kg	8260B	02/22/10	1
2-Chlorotoluene	BDL	0.0012	mg/kg	8260B	02/22/10	1
4-Chlorotoluene	BDL	0.0012	mg/kg	8260B	02/22/10	1
1,2-Dibromo-3-Chloropropane	BDL	0.0058	mg/kg	8260B	02/22/10	1
1,2-Dibromoethane	BDL	0.0012	mg/kg	8260B	02/22/10	1
Dibromomethane	BDL	0.0012	mg/kg	8260B	02/22/10	1
1,2-Dichlorobenzene	BDL	0.0012	mg/kg	8260B	02/22/10	1
1,3-Dichlorobenzene	BDL	0.0012	mg/kg	8260B	02/22/10	1
1,4-Dichlorobenzene	BDL	0.0012	mg/kg	8260B	02/22/10	1
Dichlorodifluoromethane	BDL	0.0058	mg/kg	8260B	02/22/10	1
1,1-Dichloroethane	BDL	0.0012	mg/kg	8260B	02/22/10	1

Results listed are dry weight basis.
 BDL - Below Detection Limit
 Det. Limit - Practical Quantitation Limit (PQL)
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REPORT OF ANALYSIS

Amy Zach
Stantec Consulting - Tualatin, OR
7730 SW Mohawk Street
Tualatin, OR 97062

February 26, 2010

Date Received : February 20, 2010
Description : Brunswick Bayliner Marine
Sample ID : B-9-20
Collected By : Janet Nash
Collection Date : 02/18/10 09:05

ESC Sample # : L445864-06

Site ID :

Project # : 190402025.200.0002

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
1,2-Dichloroethane	BDL	0.0012	mg/kg	8260B	02/22/10	1
1,1-Dichloroethene	BDL	0.0012	mg/kg	8260B	02/22/10	1
cis-1,2-Dichloroethene	BDL	0.0012	mg/kg	8260B	02/22/10	1
trans-1,2-Dichloroethene	BDL	0.0012	mg/kg	8260B	02/22/10	1
1,2-Dichloropropane	BDL	0.0012	mg/kg	8260B	02/22/10	1
1,1-Dichloropropene	BDL	0.0012	mg/kg	8260B	02/22/10	1
1,3-Dichloropropane	BDL	0.0012	mg/kg	8260B	02/22/10	1
cis-1,3-Dichloropropene	BDL	0.0012	mg/kg	8260B	02/22/10	1
trans-1,3-Dichloropropene	BDL	0.0012	mg/kg	8260B	02/22/10	1
2,2-Dichloropropane	BDL	0.0012	mg/kg	8260B	02/22/10	1
Di-isopropyl ether	BDL	0.0012	mg/kg	8260B	02/22/10	1
Ethylbenzene	BDL	0.0012	mg/kg	8260B	02/22/10	1
Hexachloro-1,3-Butadiene	BDL	0.0012	mg/kg	8260B	02/22/10	1
Isopropylbenzene	BDL	0.0012	mg/kg	8260B	02/22/10	1
p-Isopropyltoluene	BDL	0.0012	mg/kg	8260B	02/22/10	1
2-Butanone (MEK)	BDL	0.012	mg/kg	8260B	02/22/10	1
Methylene Chloride	BDL	0.0058	mg/kg	8260B	02/22/10	1
4-Methyl-2-pentanone (MIBK)	BDL	0.012	mg/kg	8260B	02/22/10	1
Methyl tert-butyl ether	BDL	0.0012	mg/kg	8260B	02/22/10	1
Naphthalene	BDL	0.0058	mg/kg	8260B	02/22/10	1
n-Propylbenzene	BDL	0.0012	mg/kg	8260B	02/22/10	1
Styrene	BDL	0.0012	mg/kg	8260B	02/22/10	1
1,1,1,2-Tetrachloroethane	BDL	0.0012	mg/kg	8260B	02/22/10	1
1,1,2,2-Tetrachloroethane	BDL	0.0012	mg/kg	8260B	02/22/10	1
Tetrachloroethene	0.0020	0.0012	mg/kg	8260B	02/22/10	1
Toluene	BDL	0.0058	mg/kg	8260B	02/22/10	1
1,2,3-Trichlorobenzene	BDL	0.0012	mg/kg	8260B	02/22/10	1
1,2,4-Trichlorobenzene	BDL	0.0012	mg/kg	8260B	02/22/10	1
1,1,1-Trichloroethane	BDL	0.0012	mg/kg	8260B	02/22/10	1
1,1,2-Trichloroethane	BDL	0.0012	mg/kg	8260B	02/22/10	1
1,1,2-Trichloro-1,2,2-trifluoro	BDL	0.0012	mg/kg	8260B	02/22/10	1
Trichloroethene	BDL	0.0012	mg/kg	8260B	02/22/10	1
Trichlorofluoromethane	BDL	0.0058	mg/kg	8260B	02/22/10	1
1,2,3-Trichloropropane	BDL	0.0012	mg/kg	8260B	02/22/10	1
1,2,4-Trimethylbenzene	BDL	0.0012	mg/kg	8260B	02/22/10	1
1,3,5-Trimethylbenzene	BDL	0.0012	mg/kg	8260B	02/22/10	1
Vinyl chloride	BDL	0.0012	mg/kg	8260B	02/22/10	1
Xylenes, Total	BDL	0.0035	mg/kg	8260B	02/22/10	1
Surrogate Recovery						
Toluene-d8	101.		% Rec.	8260B	02/22/10	1
Dibromofluoromethane	121.		% Rec.	8260B	02/22/10	1
4-Bromofluorobenzene	101.		% Rec.	8260B	02/22/10	1

Results listed are dry weight basis.

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Amy Zach
 Stantec Consulting - Tualatin, OR
 7730 SW Mohawk Street
 Tualatin, OR 97062

February 26, 2010

Date Received : February 20, 2010
 Description : Brunswick Bayliner Marine
 Sample ID : B-8-15
 Collected By : Janet Nash
 Collection Date : 02/18/10 11:07

ESC Sample # : L445864-07

Site ID :

Project # : 190402025.200.0002

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Chromium, Hexavalent	BDL	2.1	mg/kg	3060A/7196A	02/25/10	1
Chromium, Trivalent	50.	0.50	mg/kg	Calc.	02/24/10	1
Total Solids	95.0		%	2540G	02/23/10	1
Mercury	0.021	0.021	mg/kg	7471	02/23/10	1
Arsenic	BDL	1.0	mg/kg	6010B	02/24/10	1
Barium	53.	0.26	mg/kg	6010B	02/24/10	1
Cadmium	BDL	0.26	mg/kg	6010B	02/24/10	1
Chromium	52.	0.53	mg/kg	6010B	02/24/10	1
Lead	6.2	0.26	mg/kg	6010B	02/24/10	1
Selenium	BDL	5.3	mg/kg	6010B	02/24/10	5
Silver	BDL	0.53	mg/kg	6010B	02/24/10	1
Volatile Organics						
Acetone	BDL	0.053	mg/kg	8260B	02/22/10	1
Acrylonitrile	BDL	0.010	mg/kg	8260B	02/22/10	1
Benzene	BDL	0.0010	mg/kg	8260B	02/22/10	1
Bromobenzene	BDL	0.0010	mg/kg	8260B	02/22/10	1
Bromodichloromethane	BDL	0.0010	mg/kg	8260B	02/22/10	1
Bromoform	BDL	0.0010	mg/kg	8260B	02/22/10	1
Bromomethane	BDL	0.0053	mg/kg	8260B	02/22/10	1
n-Butylbenzene	BDL	0.0010	mg/kg	8260B	02/22/10	1
sec-Butylbenzene	BDL	0.0010	mg/kg	8260B	02/22/10	1
tert-Butylbenzene	BDL	0.0010	mg/kg	8260B	02/22/10	1
Carbon tetrachloride	BDL	0.0010	mg/kg	8260B	02/22/10	1
Chlorobenzene	BDL	0.0010	mg/kg	8260B	02/22/10	1
Chlorodibromomethane	BDL	0.0010	mg/kg	8260B	02/22/10	1
Chloroethane	BDL	0.0053	mg/kg	8260B	02/22/10	1
2-Chloroethyl vinyl ether	BDL	0.053	mg/kg	8260B	02/22/10	1
Chloroform	BDL	0.0053	mg/kg	8260B	02/22/10	1
Chloromethane	BDL	0.0010	mg/kg	8260B	02/22/10	1
2-Chlorotoluene	BDL	0.0010	mg/kg	8260B	02/22/10	1
4-Chlorotoluene	BDL	0.0010	mg/kg	8260B	02/22/10	1
1,2-Dibromo-3-Chloropropane	BDL	0.0053	mg/kg	8260B	02/22/10	1
1,2-Dibromoethane	BDL	0.0010	mg/kg	8260B	02/22/10	1
Dibromomethane	BDL	0.0010	mg/kg	8260B	02/22/10	1
1,2-Dichlorobenzene	BDL	0.0010	mg/kg	8260B	02/22/10	1
1,3-Dichlorobenzene	BDL	0.0010	mg/kg	8260B	02/22/10	1
1,4-Dichlorobenzene	BDL	0.0010	mg/kg	8260B	02/22/10	1
Dichlorodifluoromethane	BDL	0.0053	mg/kg	8260B	02/22/10	1
1,1-Dichloroethane	BDL	0.0010	mg/kg	8260B	02/22/10	1

Results listed are dry weight basis.

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit (PQL)

Note:

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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Amy Zach
 Stantec Consulting - Tualatin, OR
 7730 SW Mohawk Street
 Tualatin, OR 97062

February 26, 2010

Date Received : February 20, 2010
 Description : Brunswick Bayliner Marine
 Sample ID : B-8-15
 Collected By : Janet Nash
 Collection Date : 02/18/10 11:07

ESC Sample # : L445864-07

Site ID :

Project # : 190402025.200.0002

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
1,2-Dichloroethane	BDL	0.0010	mg/kg	8260B	02/22/10	1
1,1-Dichloroethene	BDL	0.0010	mg/kg	8260B	02/22/10	1
cis-1,2-Dichloroethene	BDL	0.0010	mg/kg	8260B	02/22/10	1
trans-1,2-Dichloroethene	BDL	0.0010	mg/kg	8260B	02/22/10	1
1,2-Dichloropropane	BDL	0.0010	mg/kg	8260B	02/22/10	1
1,1-Dichloropropene	BDL	0.0010	mg/kg	8260B	02/22/10	1
1,3-Dichloropropane	BDL	0.0010	mg/kg	8260B	02/22/10	1
cis-1,3-Dichloropropene	BDL	0.0010	mg/kg	8260B	02/22/10	1
trans-1,3-Dichloropropene	BDL	0.0010	mg/kg	8260B	02/22/10	1
2,2-Dichloropropane	BDL	0.0010	mg/kg	8260B	02/22/10	1
Di-isopropyl ether	BDL	0.0010	mg/kg	8260B	02/22/10	1
Ethylbenzene	BDL	0.0010	mg/kg	8260B	02/22/10	1
Hexachloro-1,3-Butadiene	BDL	0.0010	mg/kg	8260B	02/22/10	1
Isopropylbenzene	BDL	0.0010	mg/kg	8260B	02/22/10	1
p-Isopropyltoluene	BDL	0.0010	mg/kg	8260B	02/22/10	1
2-Butanone (MEK)	BDL	0.010	mg/kg	8260B	02/22/10	1
Methylene Chloride	BDL	0.0053	mg/kg	8260B	02/22/10	1
4-Methyl-2-pentanone (MIBK)	BDL	0.010	mg/kg	8260B	02/22/10	1
Methyl tert-butyl ether	BDL	0.0010	mg/kg	8260B	02/22/10	1
Naphthalene	BDL	0.0053	mg/kg	8260B	02/22/10	1
n-Propylbenzene	BDL	0.0010	mg/kg	8260B	02/22/10	1
Styrene	BDL	0.0010	mg/kg	8260B	02/22/10	1
1,1,1,2-Tetrachloroethane	BDL	0.0010	mg/kg	8260B	02/22/10	1
1,1,2,2-Tetrachloroethane	BDL	0.0010	mg/kg	8260B	02/22/10	1
Tetrachloroethene	BDL	0.0010	mg/kg	8260B	02/22/10	1
Toluene	BDL	0.0053	mg/kg	8260B	02/22/10	1
1,2,3-Trichlorobenzene	BDL	0.0010	mg/kg	8260B	02/22/10	1
1,2,4-Trichlorobenzene	BDL	0.0010	mg/kg	8260B	02/22/10	1
1,1,1-Trichloroethane	BDL	0.0010	mg/kg	8260B	02/22/10	1
1,1,2-Trichloroethane	BDL	0.0010	mg/kg	8260B	02/22/10	1
1,1,2-Trichloro-1,2,2-trifluoro	BDL	0.0010	mg/kg	8260B	02/22/10	1
Trichloroethene	BDL	0.0010	mg/kg	8260B	02/22/10	1
Trichlorofluoromethane	BDL	0.0053	mg/kg	8260B	02/22/10	1
1,2,3-Trichloropropane	BDL	0.0010	mg/kg	8260B	02/22/10	1
1,2,4-Trimethylbenzene	BDL	0.0010	mg/kg	8260B	02/22/10	1
1,3,5-Trimethylbenzene	BDL	0.0010	mg/kg	8260B	02/22/10	1
Vinyl chloride	BDL	0.0010	mg/kg	8260B	02/22/10	1
Xylenes, Total	BDL	0.0032	mg/kg	8260B	02/22/10	1
Surrogate Recovery						
Toluene-d8	102.		% Rec.	8260B	02/22/10	1
Dibromofluoromethane	116.		% Rec.	8260B	02/22/10	1
4-Bromofluorobenzene	104.		% Rec.	8260B	02/22/10	1

Results listed are dry weight basis.

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Amy Zach
Stantec Consulting - Tualatin, OR
7730 SW Mohawk Street
Tualatin, OR 97062

February 26, 2010

Date Received : February 20, 2010
Description : Brunswick Bayliner Marine
Sample ID : B-8-20
Collected By : Janet Nash
Collection Date : 02/18/10 11:10

ESC Sample # : L445864-08

Site ID :

Project # : 190402025.200.0002

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Chromium, Hexavalent	BDL	2.2	mg/kg	3060A/7196A	02/25/10	1
Chromium, Trivalent	110	0.50	mg/kg	Calc.	02/24/10	1
Total Solids	92.5		%	2540G	02/23/10	1
Mercury	BDL	0.022	mg/kg	7471	02/23/10	1
Arsenic	BDL	1.1	mg/kg	6010B	02/24/10	1
Barium	48.	0.27	mg/kg	6010B	02/24/10	1
Cadmium	BDL	0.27	mg/kg	6010B	02/24/10	1
Chromium	120	0.54	mg/kg	6010B	02/24/10	1
Lead	6.2	0.27	mg/kg	6010B	02/24/10	1
Selenium	BDL	5.4	mg/kg	6010B	02/24/10	5
Silver	BDL	0.54	mg/kg	6010B	02/24/10	1
Volatile Organics						
Acetone	BDL	0.054	mg/kg	8260B	02/22/10	1
Acrylonitrile	BDL	0.011	mg/kg	8260B	02/22/10	1
Benzene	BDL	0.0011	mg/kg	8260B	02/22/10	1
Bromobenzene	BDL	0.0011	mg/kg	8260B	02/22/10	1
Bromodichloromethane	BDL	0.0011	mg/kg	8260B	02/22/10	1
Bromoform	BDL	0.0011	mg/kg	8260B	02/22/10	1
Bromomethane	BDL	0.0054	mg/kg	8260B	02/22/10	1
n-Butylbenzene	BDL	0.0011	mg/kg	8260B	02/22/10	1
sec-Butylbenzene	BDL	0.0011	mg/kg	8260B	02/22/10	1
tert-Butylbenzene	BDL	0.0011	mg/kg	8260B	02/22/10	1
Carbon tetrachloride	BDL	0.0011	mg/kg	8260B	02/22/10	1
Chlorobenzene	BDL	0.0011	mg/kg	8260B	02/22/10	1
Chlorodibromomethane	BDL	0.0011	mg/kg	8260B	02/22/10	1
Chloroethane	BDL	0.0054	mg/kg	8260B	02/22/10	1
2-Chloroethyl vinyl ether	BDL	0.054	mg/kg	8260B	02/22/10	1
Chloroform	BDL	0.0054	mg/kg	8260B	02/22/10	1
Chloromethane	BDL	0.0011	mg/kg	8260B	02/22/10	1
2-Chlorotoluene	BDL	0.0011	mg/kg	8260B	02/22/10	1
4-Chlorotoluene	BDL	0.0011	mg/kg	8260B	02/22/10	1
1,2-Dibromo-3-Chloropropane	BDL	0.0054	mg/kg	8260B	02/22/10	1
1,2-Dibromoethane	BDL	0.0011	mg/kg	8260B	02/22/10	1
Dibromomethane	BDL	0.0011	mg/kg	8260B	02/22/10	1
1,2-Dichlorobenzene	BDL	0.0011	mg/kg	8260B	02/22/10	1
1,3-Dichlorobenzene	BDL	0.0011	mg/kg	8260B	02/22/10	1
1,4-Dichlorobenzene	BDL	0.0011	mg/kg	8260B	02/22/10	1
Dichlorodifluoromethane	BDL	0.0054	mg/kg	8260B	02/22/10	1
1,1-Dichloroethane	BDL	0.0011	mg/kg	8260B	02/22/10	1

Results listed are dry weight basis.

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit (PQL)

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REPORT OF ANALYSIS

Amy Zach
Stantec Consulting - Tualatin, OR
7730 SW Mohawk Street
Tualatin, OR 97062

February 26, 2010

Date Received : February 20, 2010
Description : Brunswick Bayliner Marine
Sample ID : B-8-20
Collected By : Janet Nash
Collection Date : 02/18/10 11:10

ESC Sample # : L445864-08

Site ID :

Project # : 190402025.200.0002

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
1,2-Dichloroethane	BDL	0.0011	mg/kg	8260B	02/22/10	1
1,1-Dichloroethene	BDL	0.0011	mg/kg	8260B	02/22/10	1
cis-1,2-Dichloroethene	BDL	0.0011	mg/kg	8260B	02/22/10	1
trans-1,2-Dichloroethene	BDL	0.0011	mg/kg	8260B	02/22/10	1
1,2-Dichloropropane	BDL	0.0011	mg/kg	8260B	02/22/10	1
1,1-Dichloropropene	BDL	0.0011	mg/kg	8260B	02/22/10	1
1,3-Dichloropropane	BDL	0.0011	mg/kg	8260B	02/22/10	1
cis-1,3-Dichloropropene	BDL	0.0011	mg/kg	8260B	02/22/10	1
trans-1,3-Dichloropropene	BDL	0.0011	mg/kg	8260B	02/22/10	1
2,2-Dichloropropane	BDL	0.0011	mg/kg	8260B	02/22/10	1
Di-isopropyl ether	BDL	0.0011	mg/kg	8260B	02/22/10	1
Ethylbenzene	BDL	0.0011	mg/kg	8260B	02/22/10	1
Hexachloro-1,3-Butadiene	BDL	0.0011	mg/kg	8260B	02/22/10	1
Isopropylbenzene	BDL	0.0011	mg/kg	8260B	02/22/10	1
p-Isopropyltoluene	BDL	0.0011	mg/kg	8260B	02/22/10	1
2-Butanone (MEK)	BDL	0.011	mg/kg	8260B	02/22/10	1
Methylene Chloride	BDL	0.0054	mg/kg	8260B	02/22/10	1
4-Methyl-2-pentanone (MIBK)	BDL	0.011	mg/kg	8260B	02/22/10	1
Methyl tert-butyl ether	BDL	0.0011	mg/kg	8260B	02/22/10	1
Naphthalene	BDL	0.0054	mg/kg	8260B	02/22/10	1
n-Propylbenzene	BDL	0.0011	mg/kg	8260B	02/22/10	1
Styrene	BDL	0.0011	mg/kg	8260B	02/22/10	1
1,1,1,2-Tetrachloroethane	BDL	0.0011	mg/kg	8260B	02/22/10	1
1,1,2,2-Tetrachloroethane	BDL	0.0011	mg/kg	8260B	02/22/10	1
Tetrachloroethene	BDL	0.0011	mg/kg	8260B	02/22/10	1
Toluene	BDL	0.0054	mg/kg	8260B	02/22/10	1
1,2,3-Trichlorobenzene	BDL	0.0011	mg/kg	8260B	02/22/10	1
1,2,4-Trichlorobenzene	BDL	0.0011	mg/kg	8260B	02/22/10	1
1,1,1-Trichloroethane	BDL	0.0011	mg/kg	8260B	02/22/10	1
1,1,2-Trichloroethane	BDL	0.0011	mg/kg	8260B	02/22/10	1
1,1,2-Trichloro-1,2,2-trifluoro	BDL	0.0011	mg/kg	8260B	02/22/10	1
Trichloroethene	BDL	0.0011	mg/kg	8260B	02/22/10	1
Trichlorofluoromethane	BDL	0.0054	mg/kg	8260B	02/22/10	1
1,2,3-Trichloropropane	BDL	0.0011	mg/kg	8260B	02/22/10	1
1,2,4-Trimethylbenzene	BDL	0.0011	mg/kg	8260B	02/22/10	1
1,3,5-Trimethylbenzene	BDL	0.0011	mg/kg	8260B	02/22/10	1
Vinyl chloride	BDL	0.0011	mg/kg	8260B	02/22/10	1
Xylenes, Total	BDL	0.0032	mg/kg	8260B	02/22/10	1
Surrogate Recovery						
Toluene-d8	97.5		% Rec.	8260B	02/22/10	1
Dibromofluoromethane	115.		% Rec.	8260B	02/22/10	1
4-Bromofluorobenzene	108.		% Rec.	8260B	02/22/10	1

Results listed are dry weight basis.

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Amy Zach
 Stantec Consulting - Tualatin, OR
 7730 SW Mohawk Street
 Tualatin, OR 97062

February 26, 2010

Date Received : February 20, 2010
 Description : Brunswick Bayliner Marine
 Sample ID : B-9
 Collected By : Janet Nash
 Collection Date : 02/18/10 09:50

ESC Sample # : L445864-09

Site ID :

Project # : 190402025.200.0002

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Chromium,Hexavalent	BDL	10.	ug/l	7196A	02/20/10	1
Chromium,Trivalent	95.	10.	ug/l	Calc	02/24/10	1
Mercury,Dissolved	BDL	0.20	ug/l	7470A	02/23/10	1
Arsenic,Dissolved	BDL	20.	ug/l	6010B	02/23/10	1
Barium,Dissolved	BDL	5.0	ug/l	6010B	02/23/10	1
Cadmium,Dissolved	BDL	5.0	ug/l	6010B	02/23/10	1
Chromium	95.	10.	ug/l	6010B	02/24/10	1
Chromium,Dissolved	BDL	10.	ug/l	6010B	02/23/10	1
Lead,Dissolved	BDL	5.0	ug/l	6010B	02/23/10	1
Selenium,Dissolved	BDL	20.	ug/l	6010B	02/23/10	1
Silver,Dissolved	BDL	10.	ug/l	6010B	02/23/10	1
Volatile Organics						
Acetone	BDL	50.	ug/l	8260B	02/21/10	1
Acrolein	BDL	50.	ug/l	8260B	02/21/10	1
Acrylonitrile	BDL	10.	ug/l	8260B	02/21/10	1
Benzene	BDL	1.0	ug/l	8260B	02/21/10	1
Bromobenzene	BDL	1.0	ug/l	8260B	02/21/10	1
Bromodichloromethane	BDL	1.0	ug/l	8260B	02/21/10	1
Bromoform	BDL	1.0	ug/l	8260B	02/21/10	1
Bromomethane	BDL	5.0	ug/l	8260B	02/21/10	1
n-Butylbenzene	BDL	1.0	ug/l	8260B	02/21/10	1
sec-Butylbenzene	BDL	1.0	ug/l	8260B	02/21/10	1
tert-Butylbenzene	BDL	1.0	ug/l	8260B	02/21/10	1
Carbon tetrachloride	BDL	1.0	ug/l	8260B	02/21/10	1
Chlorobenzene	BDL	1.0	ug/l	8260B	02/21/10	1
Chlorodibromomethane	BDL	1.0	ug/l	8260B	02/21/10	1
Chloroethane	BDL	5.0	ug/l	8260B	02/21/10	1
2-Chloroethyl vinyl ether	BDL	50.	ug/l	8260B	02/21/10	1
Chloroform	BDL	5.0	ug/l	8260B	02/21/10	1
Chloromethane	BDL	2.5	ug/l	8260B	02/21/10	1
2-Chlorotoluene	BDL	1.0	ug/l	8260B	02/21/10	1
4-Chlorotoluene	BDL	1.0	ug/l	8260B	02/21/10	1
1,2-Dibromo-3-Chloropropane	BDL	5.0	ug/l	8260B	02/21/10	1
1,2-Dibromoethane	BDL	1.0	ug/l	8260B	02/21/10	1
Dibromomethane	BDL	1.0	ug/l	8260B	02/21/10	1
1,2-Dichlorobenzene	BDL	1.0	ug/l	8260B	02/21/10	1
1,3-Dichlorobenzene	BDL	1.0	ug/l	8260B	02/21/10	1
1,4-Dichlorobenzene	BDL	1.0	ug/l	8260B	02/21/10	1
Dichlorodifluoromethane	BDL	5.0	ug/l	8260B	02/21/10	1
1,1-Dichloroethane	BDL	1.0	ug/l	8260B	02/21/10	1

BDL - Below Detection Limit
 Det. Limit - Practical Quantitation Limit(PQL)



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REPORT OF ANALYSIS

Amy Zach
 Stantec Consulting - Tualatin, OR
 7730 SW Mohawk Street
 Tualatin, OR 97062

February 26, 2010

Date Received : February 20, 2010
 Description : Brunswick Bayliner Marine
 Sample ID : B-9
 Collected By : Janet Nash
 Collection Date : 02/18/10 09:50

ESC Sample # : L445864-09

Site ID :

Project # : 190402025.200.0002

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
1,2-Dichloroethane	BDL	1.0	ug/l	8260B	02/21/10	1
1,1-Dichloroethene	BDL	1.0	ug/l	8260B	02/21/10	1
cis-1,2-Dichloroethene	BDL	1.0	ug/l	8260B	02/21/10	1
trans-1,2-Dichloroethene	BDL	1.0	ug/l	8260B	02/21/10	1
1,2-Dichloropropane	BDL	1.0	ug/l	8260B	02/21/10	1
1,1-Dichloropropene	BDL	1.0	ug/l	8260B	02/21/10	1
1,3-Dichloropropane	BDL	1.0	ug/l	8260B	02/21/10	1
cis-1,3-Dichloropropene	BDL	1.0	ug/l	8260B	02/21/10	1
trans-1,3-Dichloropropene	BDL	1.0	ug/l	8260B	02/21/10	1
2,2-Dichloropropane	BDL	1.0	ug/l	8260B	02/21/10	1
Di-isopropyl ether	BDL	1.0	ug/l	8260B	02/21/10	1
Ethylbenzene	BDL	1.0	ug/l	8260B	02/21/10	1
Hexachloro-1,3-Butadiene	BDL	1.0	ug/l	8260B	02/21/10	1
Isopropylbenzene	BDL	1.0	ug/l	8260B	02/21/10	1
p-Isopropyltoluene	BDL	1.0	ug/l	8260B	02/21/10	1
2-Butanone (MEK)	BDL	10.	ug/l	8260B	02/21/10	1
Methylene Chloride	BDL	5.0	ug/l	8260B	02/21/10	1
4-Methyl-2-pentanone (MIBK)	BDL	10.	ug/l	8260B	02/21/10	1
Methyl tert-butyl ether	BDL	1.0	ug/l	8260B	02/21/10	1
Naphthalene	BDL	5.0	ug/l	8260B	02/21/10	1
n-Propylbenzene	BDL	1.0	ug/l	8260B	02/21/10	1
Styrene	BDL	1.0	ug/l	8260B	02/21/10	1
1,1,1,2-Tetrachloroethane	BDL	1.0	ug/l	8260B	02/21/10	1
1,1,2,2-Tetrachloroethane	BDL	1.0	ug/l	8260B	02/21/10	1
1,1,2-Trichloro-1,2,2-trifluoro	BDL	1.0	ug/l	8260B	02/21/10	1
Tetrachloroethene	BDL	1.0	ug/l	8260B	02/21/10	1
Toluene	BDL	5.0	ug/l	8260B	02/21/10	1
1,2,3-Trichlorobenzene	BDL	1.0	ug/l	8260B	02/21/10	1
1,2,4-Trichlorobenzene	BDL	1.0	ug/l	8260B	02/21/10	1
1,1,1-Trichloroethane	BDL	1.0	ug/l	8260B	02/21/10	1
1,1,2-Trichloroethane	BDL	1.0	ug/l	8260B	02/21/10	1
Trichloroethene	BDL	1.0	ug/l	8260B	02/21/10	1
Trichlorofluoromethane	BDL	5.0	ug/l	8260B	02/21/10	1
1,2,3-Trichloropropane	BDL	1.0	ug/l	8260B	02/21/10	1
1,2,4-Trimethylbenzene	BDL	1.0	ug/l	8260B	02/21/10	1
1,2,3-Trimethylbenzene	BDL	1.0	ug/l	8260B	02/21/10	1
1,3,5-Trimethylbenzene	BDL	1.0	ug/l	8260B	02/21/10	1
Vinyl chloride	BDL	1.0	ug/l	8260B	02/21/10	1
Xylenes, Total	BDL	3.0	ug/l	8260B	02/21/10	1
Surrogate Recovery						
Toluene-d8	97.9		% Rec.	8260B	02/21/10	1
Dibromofluoromethane	97.6		% Rec.	8260B	02/21/10	1
4-Bromofluorobenzene	98.9		% Rec.	8260B	02/21/10	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Amy Zach
 Stantec Consulting - Tualatin, OR
 7730 SW Mohawk Street
 Tualatin, OR 97062

February 26, 2010

Date Received : February 20, 2010
 Description : Brunswick Bayliner Marine
 Sample ID : TRIP BLANK
 Collected By : Janet Nash
 Collection Date :

ESC Sample # : L445864-10

Site ID :

Project # : 190402025.200.0002

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Volatile Organics						
Acetone	BDL	50.	ug/l	8260B	02/21/10	1
Acrolein	BDL	50.	ug/l	8260B	02/21/10	1
Acrylonitrile	BDL	10.	ug/l	8260B	02/21/10	1
Benzene	BDL	1.0	ug/l	8260B	02/21/10	1
Bromobenzene	BDL	1.0	ug/l	8260B	02/21/10	1
Bromodichloromethane	BDL	1.0	ug/l	8260B	02/21/10	1
Bromoform	BDL	1.0	ug/l	8260B	02/21/10	1
Bromomethane	BDL	5.0	ug/l	8260B	02/21/10	1
n-Butylbenzene	BDL	1.0	ug/l	8260B	02/21/10	1
sec-Butylbenzene	BDL	1.0	ug/l	8260B	02/21/10	1
tert-Butylbenzene	BDL	1.0	ug/l	8260B	02/21/10	1
Carbon tetrachloride	BDL	1.0	ug/l	8260B	02/21/10	1
Chlorobenzene	BDL	1.0	ug/l	8260B	02/21/10	1
Chlorodibromomethane	BDL	1.0	ug/l	8260B	02/21/10	1
Chloroethane	BDL	5.0	ug/l	8260B	02/21/10	1
2-Chloroethyl vinyl ether	BDL	50.	ug/l	8260B	02/21/10	1
Chloroform	BDL	5.0	ug/l	8260B	02/21/10	1
Chloromethane	BDL	2.5	ug/l	8260B	02/21/10	1
2-Chlorotoluene	BDL	1.0	ug/l	8260B	02/21/10	1
4-Chlorotoluene	BDL	1.0	ug/l	8260B	02/21/10	1
1,2-Dibromo-3-Chloropropane	BDL	5.0	ug/l	8260B	02/21/10	1
1,2-Dibromoethane	BDL	1.0	ug/l	8260B	02/21/10	1
Dibromomethane	BDL	1.0	ug/l	8260B	02/21/10	1
1,2-Dichlorobenzene	BDL	1.0	ug/l	8260B	02/21/10	1
1,3-Dichlorobenzene	BDL	1.0	ug/l	8260B	02/21/10	1
1,4-Dichlorobenzene	BDL	1.0	ug/l	8260B	02/21/10	1
Dichlorodifluoromethane	BDL	5.0	ug/l	8260B	02/21/10	1
1,1-Dichloroethane	BDL	1.0	ug/l	8260B	02/21/10	1
1,2-Dichloroethane	BDL	1.0	ug/l	8260B	02/21/10	1
1,1-Dichloroethene	BDL	1.0	ug/l	8260B	02/21/10	1
cis-1,2-Dichloroethene	BDL	1.0	ug/l	8260B	02/21/10	1
trans-1,2-Dichloroethene	BDL	1.0	ug/l	8260B	02/21/10	1
1,2-Dichloropropane	BDL	1.0	ug/l	8260B	02/21/10	1
1,1-Dichloropropene	BDL	1.0	ug/l	8260B	02/21/10	1
1,3-Dichloropropane	BDL	1.0	ug/l	8260B	02/21/10	1
cis-1,3-Dichloropropene	BDL	1.0	ug/l	8260B	02/21/10	1
trans-1,3-Dichloropropene	BDL	1.0	ug/l	8260B	02/21/10	1
2,2-Dichloropropane	BDL	1.0	ug/l	8260B	02/21/10	1
Di-isopropyl ether	BDL	1.0	ug/l	8260B	02/21/10	1
Ethylbenzene	BDL	1.0	ug/l	8260B	02/21/10	1
Hexachloro-1,3-Butadiene	BDL	1.0	ug/l	8260B	02/21/10	1
Isopropylbenzene	BDL	1.0	ug/l	8260B	02/21/10	1
p-Isopropyltoluene	BDL	1.0	ug/l	8260B	02/21/10	1

BDL - Below Detection Limit
 Det. Limit - Practical Quantitation Limit(PQL)



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REPORT OF ANALYSIS

Amy Zach
 Stantec Consulting - Tualatin, OR
 7730 SW Mohawk Street
 Tualatin, OR 97062

February 26, 2010

Date Received : February 20, 2010
 Description : Brunswick Bayliner Marine
 Sample ID : TRIP BLANK
 Collected By : Janet Nash
 Collection Date :

ESC Sample # : L445864-10

Site ID :

Project # : 190402025.200.0002

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
2-Butanone (MEK)	BDL	10.	ug/l	8260B	02/21/10	1
Methylene Chloride	BDL	5.0	ug/l	8260B	02/21/10	1
4-Methyl-2-pentanone (MIBK)	BDL	10.	ug/l	8260B	02/21/10	1
Methyl tert-butyl ether	BDL	1.0	ug/l	8260B	02/21/10	1
Naphthalene	BDL	5.0	ug/l	8260B	02/21/10	1
n-Propylbenzene	BDL	1.0	ug/l	8260B	02/21/10	1
Styrene	BDL	1.0	ug/l	8260B	02/21/10	1
1,1,1,2-Tetrachloroethane	BDL	1.0	ug/l	8260B	02/21/10	1
1,1,2,2-Tetrachloroethane	BDL	1.0	ug/l	8260B	02/21/10	1
1,1,2-Trichloro-1,2,2-trifluoro	BDL	1.0	ug/l	8260B	02/21/10	1
Tetrachloroethene	BDL	1.0	ug/l	8260B	02/21/10	1
Toluene	BDL	5.0	ug/l	8260B	02/21/10	1
1,2,3-Trichlorobenzene	BDL	1.0	ug/l	8260B	02/21/10	1
1,2,4-Trichlorobenzene	BDL	1.0	ug/l	8260B	02/21/10	1
1,1,1-Trichloroethane	BDL	1.0	ug/l	8260B	02/21/10	1
1,1,2-Trichloroethane	BDL	1.0	ug/l	8260B	02/21/10	1
Trichloroethene	BDL	1.0	ug/l	8260B	02/21/10	1
Trichlorofluoromethane	BDL	5.0	ug/l	8260B	02/21/10	1
1,2,3-Trichloropropane	BDL	1.0	ug/l	8260B	02/21/10	1
1,2,4-Trimethylbenzene	BDL	1.0	ug/l	8260B	02/21/10	1
1,2,3-Trimethylbenzene	BDL	1.0	ug/l	8260B	02/21/10	1
1,3,5-Trimethylbenzene	BDL	1.0	ug/l	8260B	02/21/10	1
Vinyl chloride	BDL	1.0	ug/l	8260B	02/21/10	1
Xylenes, Total	BDL	3.0	ug/l	8260B	02/21/10	1
Surrogate Recovery						
Toluene-d8	95.1		% Rec.	8260B	02/21/10	1
Dibromofluoromethane	95.4		% Rec.	8260B	02/21/10	1
4-Bromofluorobenzene	102.		% Rec.	8260B	02/21/10	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Amy Zach
 Stantec Consulting - Tualatin, OR
 7730 SW Mohawk Street
 Tualatin, OR 97062

February 26, 2010

Date Received : February 20, 2010
 Description : Brunswick Bayliner Marine
 Sample ID : B-8
 Collected By : Janet Nash
 Collection Date : 02/18/10 11:55

ESC Sample # : L445864-11

Site ID :

Project # : 190402025.200.0002

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Chromium,Hexavalent	BDL	10.	ug/l	7196A	02/20/10	1
Chromium,Trivalent	18.	10.	ug/l	Calc	02/24/10	1
Mercury,Dissolved	BDL	0.20	ug/l	7470A	02/23/10	1
Arsenic,Dissolved	BDL	20.	ug/l	6010B	02/23/10	1
Barium,Dissolved	42.	5.0	ug/l	6010B	02/23/10	1
Cadmium,Dissolved	BDL	5.0	ug/l	6010B	02/23/10	1
Chromium	18.	10.	ug/l	6010B	02/24/10	1
Chromium,Dissolved	BDL	10.	ug/l	6010B	02/23/10	1
Lead,Dissolved	BDL	5.0	ug/l	6010B	02/23/10	1
Selenium,Dissolved	BDL	20.	ug/l	6010B	02/23/10	1
Silver,Dissolved	96.	10.	ug/l	6010B	02/23/10	1
Volatile Organics						
Acetone	BDL	50.	ug/l	8260B	02/21/10	1
Acrolein	BDL	50.	ug/l	8260B	02/21/10	1
Acrylonitrile	BDL	10.	ug/l	8260B	02/21/10	1
Benzene	BDL	1.0	ug/l	8260B	02/21/10	1
Bromobenzene	BDL	1.0	ug/l	8260B	02/21/10	1
Bromodichloromethane	BDL	1.0	ug/l	8260B	02/21/10	1
Bromoform	BDL	1.0	ug/l	8260B	02/21/10	1
Bromomethane	BDL	5.0	ug/l	8260B	02/21/10	1
n-Butylbenzene	BDL	1.0	ug/l	8260B	02/21/10	1
sec-Butylbenzene	BDL	1.0	ug/l	8260B	02/21/10	1
tert-Butylbenzene	BDL	1.0	ug/l	8260B	02/21/10	1
Carbon tetrachloride	BDL	1.0	ug/l	8260B	02/21/10	1
Chlorobenzene	BDL	1.0	ug/l	8260B	02/21/10	1
Chlorodibromomethane	BDL	1.0	ug/l	8260B	02/21/10	1
Chloroethane	BDL	5.0	ug/l	8260B	02/21/10	1
2-Chloroethyl vinyl ether	BDL	50.	ug/l	8260B	02/21/10	1
Chloroform	BDL	5.0	ug/l	8260B	02/21/10	1
Chloromethane	BDL	2.5	ug/l	8260B	02/21/10	1
2-Chlorotoluene	BDL	1.0	ug/l	8260B	02/21/10	1
4-Chlorotoluene	BDL	1.0	ug/l	8260B	02/21/10	1
1,2-Dibromo-3-Chloropropane	BDL	5.0	ug/l	8260B	02/21/10	1
1,2-Dibromoethane	BDL	1.0	ug/l	8260B	02/21/10	1
Dibromomethane	BDL	1.0	ug/l	8260B	02/21/10	1
1,2-Dichlorobenzene	BDL	1.0	ug/l	8260B	02/21/10	1
1,3-Dichlorobenzene	BDL	1.0	ug/l	8260B	02/21/10	1
1,4-Dichlorobenzene	BDL	1.0	ug/l	8260B	02/21/10	1
Dichlorodifluoromethane	BDL	5.0	ug/l	8260B	02/21/10	1
1,1-Dichloroethane	BDL	1.0	ug/l	8260B	02/21/10	1

BDL - Below Detection Limit
 Det. Limit - Practical Quantitation Limit(PQL)



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REPORT OF ANALYSIS

Amy Zach
 Stantec Consulting - Tualatin, OR
 7730 SW Mohawk Street
 Tualatin, OR 97062

February 26, 2010

Date Received : February 20, 2010
 Description : Brunswick Bayliner Marine
 Sample ID : B-8
 Collected By : Janet Nash
 Collection Date : 02/18/10 11:55

ESC Sample # : L445864-11

Site ID :

Project # : 190402025.200.0002

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
1,2-Dichloroethane	BDL	1.0	ug/l	8260B	02/21/10	1
1,1-Dichloroethene	BDL	1.0	ug/l	8260B	02/21/10	1
cis-1,2-Dichloroethene	BDL	1.0	ug/l	8260B	02/21/10	1
trans-1,2-Dichloroethene	BDL	1.0	ug/l	8260B	02/21/10	1
1,2-Dichloropropane	BDL	1.0	ug/l	8260B	02/21/10	1
1,1-Dichloropropene	BDL	1.0	ug/l	8260B	02/21/10	1
1,3-Dichloropropane	BDL	1.0	ug/l	8260B	02/21/10	1
cis-1,3-Dichloropropene	BDL	1.0	ug/l	8260B	02/21/10	1
trans-1,3-Dichloropropene	BDL	1.0	ug/l	8260B	02/21/10	1
2,2-Dichloropropane	BDL	1.0	ug/l	8260B	02/21/10	1
Di-isopropyl ether	BDL	1.0	ug/l	8260B	02/21/10	1
Ethylbenzene	BDL	1.0	ug/l	8260B	02/21/10	1
Hexachloro-1,3-Butadiene	BDL	1.0	ug/l	8260B	02/21/10	1
Isopropylbenzene	BDL	1.0	ug/l	8260B	02/21/10	1
p-Isopropyltoluene	BDL	1.0	ug/l	8260B	02/21/10	1
2-Butanone (MEK)	BDL	10.	ug/l	8260B	02/21/10	1
Methylene Chloride	BDL	5.0	ug/l	8260B	02/21/10	1
4-Methyl-2-pentanone (MIBK)	BDL	10.	ug/l	8260B	02/21/10	1
Methyl tert-butyl ether	BDL	1.0	ug/l	8260B	02/21/10	1
Naphthalene	BDL	5.0	ug/l	8260B	02/21/10	1
n-Propylbenzene	BDL	1.0	ug/l	8260B	02/21/10	1
Styrene	BDL	1.0	ug/l	8260B	02/21/10	1
1,1,1,2-Tetrachloroethane	BDL	1.0	ug/l	8260B	02/21/10	1
1,1,2,2-Tetrachloroethane	BDL	1.0	ug/l	8260B	02/21/10	1
1,1,2-Trichloro-1,2,2-trifluoro	BDL	1.0	ug/l	8260B	02/21/10	1
Tetrachloroethene	BDL	1.0	ug/l	8260B	02/21/10	1
Toluene	BDL	5.0	ug/l	8260B	02/21/10	1
1,2,3-Trichlorobenzene	BDL	1.0	ug/l	8260B	02/21/10	1
1,2,4-Trichlorobenzene	BDL	1.0	ug/l	8260B	02/21/10	1
1,1,1-Trichloroethane	BDL	1.0	ug/l	8260B	02/21/10	1
1,1,2-Trichloroethane	BDL	1.0	ug/l	8260B	02/21/10	1
Trichloroethene	BDL	1.0	ug/l	8260B	02/21/10	1
Trichlorofluoromethane	BDL	5.0	ug/l	8260B	02/21/10	1
1,2,3-Trichloropropane	BDL	1.0	ug/l	8260B	02/21/10	1
1,2,4-Trimethylbenzene	BDL	1.0	ug/l	8260B	02/21/10	1
1,2,3-Trimethylbenzene	BDL	1.0	ug/l	8260B	02/21/10	1
1,3,5-Trimethylbenzene	BDL	1.0	ug/l	8260B	02/21/10	1
Vinyl chloride	BDL	1.0	ug/l	8260B	02/21/10	1
Xylenes, Total	BDL	3.0	ug/l	8260B	02/21/10	1
Surrogate Recovery						
Toluene-d8	96.1		% Rec.	8260B	02/21/10	1
Dibromofluoromethane	101.		% Rec.	8260B	02/21/10	1
4-Bromofluorobenzene	99.5		% Rec.	8260B	02/21/10	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

Amy Zach
 Stantec Consulting - Tualatin, OR
 7730 SW Mohawk Street
 Tualatin, OR 97062

February 26, 2010

Date Received : February 20, 2010
 Description : Brunswick Bayliner Marine
 Sample ID : MW-3
 Collected By : Janet Nash
 Collection Date : 02/18/10 14:05

ESC Sample # : L445864-12

Site ID :

Project # : 190402025.200.0002

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Chromium,Hexavalent	13.	10.	ug/l	7196A	02/20/10	1
Chromium,Trivalent	BDL	10.	ug/l	Calc	02/24/10	1
Mercury,Dissolved	BDL	0.20	ug/l	7470A	02/23/10	1
Arsenic,Dissolved	BDL	20.	ug/l	6010B	02/23/10	1
Barium,Dissolved	BDL	5.0	ug/l	6010B	02/23/10	1
Cadmium,Dissolved	BDL	5.0	ug/l	6010B	02/23/10	1
Chromium	BDL	10.	ug/l	6010B	02/24/10	1
Chromium,Dissolved	BDL	10.	ug/l	6010B	02/23/10	1
Lead,Dissolved	9.3	5.0	ug/l	6010B	02/23/10	1
Selenium,Dissolved	BDL	20.	ug/l	6010B	02/23/10	1
Silver,Dissolved	BDL	10.	ug/l	6010B	02/23/10	1
Volatile Organics						
Acetone	BDL	50.	ug/l	8260B	02/21/10	1
Acrolein	BDL	50.	ug/l	8260B	02/21/10	1
Acrylonitrile	BDL	10.	ug/l	8260B	02/21/10	1
Benzene	BDL	1.0	ug/l	8260B	02/21/10	1
Bromobenzene	BDL	1.0	ug/l	8260B	02/21/10	1
Bromodichloromethane	BDL	1.0	ug/l	8260B	02/21/10	1
Bromoform	BDL	1.0	ug/l	8260B	02/21/10	1
Bromomethane	BDL	5.0	ug/l	8260B	02/21/10	1
n-Butylbenzene	BDL	1.0	ug/l	8260B	02/21/10	1
sec-Butylbenzene	BDL	1.0	ug/l	8260B	02/21/10	1
tert-Butylbenzene	BDL	1.0	ug/l	8260B	02/21/10	1
Carbon tetrachloride	BDL	1.0	ug/l	8260B	02/21/10	1
Chlorobenzene	BDL	1.0	ug/l	8260B	02/21/10	1
Chlorodibromomethane	BDL	1.0	ug/l	8260B	02/21/10	1
Chloroethane	BDL	5.0	ug/l	8260B	02/21/10	1
2-Chloroethyl vinyl ether	BDL	50.	ug/l	8260B	02/21/10	1
Chloroform	BDL	5.0	ug/l	8260B	02/21/10	1
Chloromethane	BDL	2.5	ug/l	8260B	02/21/10	1
2-Chlorotoluene	BDL	1.0	ug/l	8260B	02/21/10	1
4-Chlorotoluene	BDL	1.0	ug/l	8260B	02/21/10	1
1,2-Dibromo-3-Chloropropane	BDL	5.0	ug/l	8260B	02/21/10	1
1,2-Dibromoethane	BDL	1.0	ug/l	8260B	02/21/10	1
Dibromomethane	BDL	1.0	ug/l	8260B	02/21/10	1
1,2-Dichlorobenzene	BDL	1.0	ug/l	8260B	02/21/10	1
1,3-Dichlorobenzene	BDL	1.0	ug/l	8260B	02/21/10	1
1,4-Dichlorobenzene	BDL	1.0	ug/l	8260B	02/21/10	1
Dichlorodifluoromethane	BDL	5.0	ug/l	8260B	02/21/10	1
1,1-Dichloroethane	BDL	1.0	ug/l	8260B	02/21/10	1

BDL - Below Detection Limit
 Det. Limit - Practical Quantitation Limit(PQL)



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REPORT OF ANALYSIS

Amy Zach
 Stantec Consulting - Tualatin, OR
 7730 SW Mohawk Street
 Tualatin, OR 97062

February 26, 2010

Date Received : February 20, 2010
 Description : Brunswick Bayliner Marine
 Sample ID : MW-3
 Collected By : Janet Nash
 Collection Date : 02/18/10 14:05

ESC Sample # : L445864-12

Site ID :

Project # : 190402025.200.0002

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
1,2-Dichloroethane	BDL	1.0	ug/l	8260B	02/21/10	1
1,1-Dichloroethene	BDL	1.0	ug/l	8260B	02/21/10	1
cis-1,2-Dichloroethene	BDL	1.0	ug/l	8260B	02/21/10	1
trans-1,2-Dichloroethene	BDL	1.0	ug/l	8260B	02/21/10	1
1,2-Dichloropropane	BDL	1.0	ug/l	8260B	02/21/10	1
1,1-Dichloropropene	BDL	1.0	ug/l	8260B	02/21/10	1
1,3-Dichloropropane	BDL	1.0	ug/l	8260B	02/21/10	1
cis-1,3-Dichloropropene	BDL	1.0	ug/l	8260B	02/21/10	1
trans-1,3-Dichloropropene	BDL	1.0	ug/l	8260B	02/21/10	1
2,2-Dichloropropane	BDL	1.0	ug/l	8260B	02/21/10	1
Di-isopropyl ether	BDL	1.0	ug/l	8260B	02/21/10	1
Ethylbenzene	BDL	1.0	ug/l	8260B	02/21/10	1
Hexachloro-1,3-Butadiene	BDL	1.0	ug/l	8260B	02/21/10	1
Isopropylbenzene	BDL	1.0	ug/l	8260B	02/21/10	1
p-Isopropyltoluene	BDL	1.0	ug/l	8260B	02/21/10	1
2-Butanone (MEK)	BDL	10.	ug/l	8260B	02/21/10	1
Methylene Chloride	BDL	5.0	ug/l	8260B	02/21/10	1
4-Methyl-2-pentanone (MIBK)	BDL	10.	ug/l	8260B	02/21/10	1
Methyl tert-butyl ether	BDL	1.0	ug/l	8260B	02/21/10	1
Naphthalene	BDL	5.0	ug/l	8260B	02/21/10	1
n-Propylbenzene	BDL	1.0	ug/l	8260B	02/21/10	1
Styrene	BDL	1.0	ug/l	8260B	02/21/10	1
1,1,1,2-Tetrachloroethane	BDL	1.0	ug/l	8260B	02/21/10	1
1,1,2,2-Tetrachloroethane	BDL	1.0	ug/l	8260B	02/21/10	1
1,1,2-Trichloro-1,2,2-trifluoro	BDL	1.0	ug/l	8260B	02/21/10	1
Tetrachloroethene	BDL	1.0	ug/l	8260B	02/21/10	1
Toluene	BDL	5.0	ug/l	8260B	02/21/10	1
1,2,3-Trichlorobenzene	BDL	1.0	ug/l	8260B	02/21/10	1
1,2,4-Trichlorobenzene	BDL	1.0	ug/l	8260B	02/21/10	1
1,1,1-Trichloroethane	BDL	1.0	ug/l	8260B	02/21/10	1
1,1,2-Trichloroethane	BDL	1.0	ug/l	8260B	02/21/10	1
Trichloroethene	BDL	1.0	ug/l	8260B	02/21/10	1
Trichlorofluoromethane	BDL	5.0	ug/l	8260B	02/21/10	1
1,2,3-Trichloropropane	BDL	1.0	ug/l	8260B	02/21/10	1
1,2,4-Trimethylbenzene	BDL	1.0	ug/l	8260B	02/21/10	1
1,2,3-Trimethylbenzene	BDL	1.0	ug/l	8260B	02/21/10	1
1,3,5-Trimethylbenzene	BDL	1.0	ug/l	8260B	02/21/10	1
Vinyl chloride	BDL	1.0	ug/l	8260B	02/21/10	1
Xylenes, Total	BDL	3.0	ug/l	8260B	02/21/10	1
Surrogate Recovery						
Toluene-d8	97.2		% Rec.	8260B	02/21/10	1
Dibromofluoromethane	99.0		% Rec.	8260B	02/21/10	1
4-Bromofluorobenzene	99.4		% Rec.	8260B	02/21/10	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

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REPORT OF ANALYSIS

Amy Zach
 Stantec Consulting - Tualatin, OR
 7730 SW Mohawk Street
 Tualatin, OR 97062

February 26, 2010

Date Received : February 20, 2010
 Description : Brunswick Bayliner Marine
 Sample ID : MW-1
 Collected By : Janet Nash
 Collection Date : 02/18/10 14:40

ESC Sample # : L445864-13

Site ID :

Project # : 190402025.200.0002

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Chromium, Hexavalent	BDL	10.	ug/l	7196A	02/20/10	1
Chromium, Trivalent	BDL	10.	ug/l	Calc	02/24/10	1
Mercury, Dissolved	BDL	0.20	ug/l	7470A	02/23/10	1
Arsenic, Dissolved	BDL	20.	ug/l	6010B	02/23/10	1
Barium, Dissolved	BDL	5.0	ug/l	6010B	02/23/10	1
Cadmium, Dissolved	BDL	5.0	ug/l	6010B	02/23/10	1
Chromium	BDL	10.	ug/l	6010B	02/24/10	1
Chromium, Dissolved	BDL	10.	ug/l	6010B	02/23/10	1
Lead, Dissolved	BDL	5.0	ug/l	6010B	02/23/10	1
Selenium, Dissolved	BDL	20.	ug/l	6010B	02/23/10	1
Silver, Dissolved	BDL	10.	ug/l	6010B	02/23/10	1
Volatile Organics						
Acetone	BDL	50.	ug/l	8260B	02/21/10	1
Acrolein	BDL	50.	ug/l	8260B	02/21/10	1
Acrylonitrile	BDL	10.	ug/l	8260B	02/21/10	1
Benzene	BDL	1.0	ug/l	8260B	02/21/10	1
Bromobenzene	BDL	1.0	ug/l	8260B	02/21/10	1
Bromodichloromethane	BDL	1.0	ug/l	8260B	02/21/10	1
Bromoform	BDL	1.0	ug/l	8260B	02/21/10	1
Bromomethane	BDL	5.0	ug/l	8260B	02/21/10	1
n-Butylbenzene	BDL	1.0	ug/l	8260B	02/21/10	1
sec-Butylbenzene	BDL	1.0	ug/l	8260B	02/21/10	1
tert-Butylbenzene	BDL	1.0	ug/l	8260B	02/21/10	1
Carbon tetrachloride	BDL	1.0	ug/l	8260B	02/21/10	1
Chlorobenzene	BDL	1.0	ug/l	8260B	02/21/10	1
Chlorodibromomethane	BDL	1.0	ug/l	8260B	02/21/10	1
Chloroethane	BDL	5.0	ug/l	8260B	02/21/10	1
2-Chloroethyl vinyl ether	BDL	50.	ug/l	8260B	02/21/10	1
Chloroform	BDL	5.0	ug/l	8260B	02/21/10	1
Chloromethane	BDL	2.5	ug/l	8260B	02/21/10	1
2-Chlorotoluene	BDL	1.0	ug/l	8260B	02/21/10	1
4-Chlorotoluene	BDL	1.0	ug/l	8260B	02/21/10	1
1,2-Dibromo-3-Chloropropane	BDL	5.0	ug/l	8260B	02/21/10	1
1,2-Dibromoethane	BDL	1.0	ug/l	8260B	02/21/10	1
Dibromomethane	BDL	1.0	ug/l	8260B	02/21/10	1
1,2-Dichlorobenzene	BDL	1.0	ug/l	8260B	02/21/10	1
1,3-Dichlorobenzene	BDL	1.0	ug/l	8260B	02/21/10	1
1,4-Dichlorobenzene	BDL	1.0	ug/l	8260B	02/21/10	1
Dichlorodifluoromethane	BDL	5.0	ug/l	8260B	02/21/10	1
1,1-Dichloroethane	BDL	1.0	ug/l	8260B	02/21/10	1

BDL - Below Detection Limit
 Det. Limit - Practical Quantitation Limit(PQL)



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REPORT OF ANALYSIS

Amy Zach
Stantec Consulting - Tualatin, OR
7730 SW Mohawk Street
Tualatin, OR 97062

February 26, 2010

Date Received : February 20, 2010
Description : Brunswick Bayliner Marine
Sample ID : MW-1
Collected By : Janet Nash
Collection Date : 02/18/10 14:40

ESC Sample # : L445864-13

Site ID :

Project # : 190402025.200.0002

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
1,2-Dichloroethane	BDL	1.0	ug/l	8260B	02/21/10	1
1,1-Dichloroethene	BDL	1.0	ug/l	8260B	02/21/10	1
cis-1,2-Dichloroethene	BDL	1.0	ug/l	8260B	02/21/10	1
trans-1,2-Dichloroethene	BDL	1.0	ug/l	8260B	02/21/10	1
1,2-Dichloropropane	BDL	1.0	ug/l	8260B	02/21/10	1
1,1-Dichloropropene	BDL	1.0	ug/l	8260B	02/21/10	1
1,3-Dichloropropane	BDL	1.0	ug/l	8260B	02/21/10	1
cis-1,3-Dichloropropene	BDL	1.0	ug/l	8260B	02/21/10	1
trans-1,3-Dichloropropene	BDL	1.0	ug/l	8260B	02/21/10	1
2,2-Dichloropropane	BDL	1.0	ug/l	8260B	02/21/10	1
Di-isopropyl ether	BDL	1.0	ug/l	8260B	02/21/10	1
Ethylbenzene	BDL	1.0	ug/l	8260B	02/21/10	1
Hexachloro-1,3-Butadiene	BDL	1.0	ug/l	8260B	02/21/10	1
Isopropylbenzene	BDL	1.0	ug/l	8260B	02/21/10	1
p-Isopropyltoluene	BDL	1.0	ug/l	8260B	02/21/10	1
2-Butanone (MEK)	BDL	10.	ug/l	8260B	02/21/10	1
Methylene Chloride	BDL	5.0	ug/l	8260B	02/21/10	1
4-Methyl-2-pentanone (MIBK)	BDL	10.	ug/l	8260B	02/21/10	1
Methyl tert-butyl ether	BDL	1.0	ug/l	8260B	02/21/10	1
Naphthalene	BDL	5.0	ug/l	8260B	02/21/10	1
n-Propylbenzene	BDL	1.0	ug/l	8260B	02/21/10	1
Styrene	BDL	1.0	ug/l	8260B	02/21/10	1
1,1,1,2-Tetrachloroethane	BDL	1.0	ug/l	8260B	02/21/10	1
1,1,2,2-Tetrachloroethane	BDL	1.0	ug/l	8260B	02/21/10	1
1,1,2-Trichloro-1,2,2-trifluoro	BDL	1.0	ug/l	8260B	02/21/10	1
Tetrachloroethene	48.	1.0	ug/l	8260B	02/21/10	1
Toluene	BDL	5.0	ug/l	8260B	02/21/10	1
1,2,3-Trichlorobenzene	BDL	1.0	ug/l	8260B	02/21/10	1
1,2,4-Trichlorobenzene	BDL	1.0	ug/l	8260B	02/21/10	1
1,1,1-Trichloroethane	BDL	1.0	ug/l	8260B	02/21/10	1
1,1,2-Trichloroethane	BDL	1.0	ug/l	8260B	02/21/10	1
Trichloroethene	BDL	1.0	ug/l	8260B	02/21/10	1
Trichlorofluoromethane	BDL	5.0	ug/l	8260B	02/21/10	1
1,2,3-Trichloropropane	BDL	1.0	ug/l	8260B	02/21/10	1
1,2,4-Trimethylbenzene	BDL	1.0	ug/l	8260B	02/21/10	1
1,2,3-Trimethylbenzene	BDL	1.0	ug/l	8260B	02/21/10	1
1,3,5-Trimethylbenzene	BDL	1.0	ug/l	8260B	02/21/10	1
Vinyl chloride	BDL	1.0	ug/l	8260B	02/21/10	1
Xylenes, Total	BDL	3.0	ug/l	8260B	02/21/10	1
Surrogate Recovery						
Toluene-d8	96.9		% Rec.	8260B	02/21/10	1
Dibromofluoromethane	100.		% Rec.	8260B	02/21/10	1
4-Bromofluorobenzene	97.4		% Rec.	8260B	02/21/10	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Amy Zach
 Stantec Consulting - Tualatin, OR
 7730 SW Mohawk Street
 Tualatin, OR 97062

February 26, 2010

Date Received : February 20, 2010
 Description : Brunswick Bayliner Marine
 Sample ID : MW-2
 Collected By : Janet Nash
 Collection Date : 02/18/10 15:15

ESC Sample # : L445864-14

Site ID :

Project # : 190402025.200.0002

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Chromium,Hexavalent	BDL	10.	ug/l	7196A	02/20/10	1
Chromium,Trivalent	19.	10.	ug/l	Calc	02/24/10	1
Mercury,Dissolved	BDL	0.20	ug/l	7470A	02/23/10	1
Arsenic,Dissolved	BDL	20.	ug/l	6010B	02/23/10	1
Barium,Dissolved	7.0	5.0	ug/l	6010B	02/23/10	1
Cadmium,Dissolved	BDL	5.0	ug/l	6010B	02/23/10	1
Chromium	19.	10.	ug/l	6010B	02/24/10	1
Chromium,Dissolved	BDL	10.	ug/l	6010B	02/23/10	1
Lead,Dissolved	BDL	5.0	ug/l	6010B	02/23/10	1
Selenium,Dissolved	BDL	20.	ug/l	6010B	02/23/10	1
Silver,Dissolved	BDL	10.	ug/l	6010B	02/23/10	1
Volatile Organics						
Acetone	BDL	50.	ug/l	8260B	02/21/10	1
Acrolein	BDL	50.	ug/l	8260B	02/21/10	1
Acrylonitrile	BDL	10.	ug/l	8260B	02/21/10	1
Benzene	BDL	1.0	ug/l	8260B	02/21/10	1
Bromobenzene	BDL	1.0	ug/l	8260B	02/21/10	1
Bromodichloromethane	BDL	1.0	ug/l	8260B	02/21/10	1
Bromoform	BDL	1.0	ug/l	8260B	02/21/10	1
Bromomethane	BDL	5.0	ug/l	8260B	02/21/10	1
n-Butylbenzene	BDL	1.0	ug/l	8260B	02/21/10	1
sec-Butylbenzene	BDL	1.0	ug/l	8260B	02/21/10	1
tert-Butylbenzene	BDL	1.0	ug/l	8260B	02/21/10	1
Carbon tetrachloride	BDL	1.0	ug/l	8260B	02/21/10	1
Chlorobenzene	BDL	1.0	ug/l	8260B	02/21/10	1
Chlorodibromomethane	BDL	1.0	ug/l	8260B	02/21/10	1
Chloroethane	BDL	5.0	ug/l	8260B	02/21/10	1
2-Chloroethyl vinyl ether	BDL	50.	ug/l	8260B	02/21/10	1
Chloroform	BDL	5.0	ug/l	8260B	02/21/10	1
Chloromethane	BDL	2.5	ug/l	8260B	02/21/10	1
2-Chlorotoluene	BDL	1.0	ug/l	8260B	02/21/10	1
4-Chlorotoluene	BDL	1.0	ug/l	8260B	02/21/10	1
1,2-Dibromo-3-Chloropropane	BDL	5.0	ug/l	8260B	02/21/10	1
1,2-Dibromoethane	BDL	1.0	ug/l	8260B	02/21/10	1
Dibromomethane	BDL	1.0	ug/l	8260B	02/21/10	1
1,2-Dichlorobenzene	BDL	1.0	ug/l	8260B	02/21/10	1
1,3-Dichlorobenzene	BDL	1.0	ug/l	8260B	02/21/10	1
1,4-Dichlorobenzene	BDL	1.0	ug/l	8260B	02/21/10	1
Dichlorodifluoromethane	BDL	5.0	ug/l	8260B	02/21/10	1
1,1-Dichloroethane	BDL	1.0	ug/l	8260B	02/21/10	1

BDL - Below Detection Limit
 Det. Limit - Practical Quantitation Limit(PQL)



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REPORT OF ANALYSIS

Amy Zach
Stantec Consulting - Tualatin, OR
7730 SW Mohawk Street
Tualatin, OR 97062

February 26, 2010

Date Received : February 20, 2010
Description : Brunswick Bayliner Marine
Sample ID : MW-2
Collected By : Janet Nash
Collection Date : 02/18/10 15:15

ESC Sample # : L445864-14

Site ID :

Project # : 190402025.200.0002

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
1,2-Dichloroethane	BDL	1.0	ug/l	8260B	02/21/10	1
1,1-Dichloroethene	BDL	1.0	ug/l	8260B	02/21/10	1
cis-1,2-Dichloroethene	BDL	1.0	ug/l	8260B	02/21/10	1
trans-1,2-Dichloroethene	BDL	1.0	ug/l	8260B	02/21/10	1
1,2-Dichloropropane	BDL	1.0	ug/l	8260B	02/21/10	1
1,1-Dichloropropene	BDL	1.0	ug/l	8260B	02/21/10	1
1,3-Dichloropropane	BDL	1.0	ug/l	8260B	02/21/10	1
cis-1,3-Dichloropropene	BDL	1.0	ug/l	8260B	02/21/10	1
trans-1,3-Dichloropropene	BDL	1.0	ug/l	8260B	02/21/10	1
2,2-Dichloropropane	BDL	1.0	ug/l	8260B	02/21/10	1
Di-isopropyl ether	BDL	1.0	ug/l	8260B	02/21/10	1
Ethylbenzene	BDL	1.0	ug/l	8260B	02/21/10	1
Hexachloro-1,3-Butadiene	BDL	1.0	ug/l	8260B	02/21/10	1
Isopropylbenzene	BDL	1.0	ug/l	8260B	02/21/10	1
p-Isopropyltoluene	BDL	1.0	ug/l	8260B	02/21/10	1
2-Butanone (MEK)	BDL	10.	ug/l	8260B	02/21/10	1
Methylene Chloride	BDL	5.0	ug/l	8260B	02/21/10	1
4-Methyl-2-pentanone (MIBK)	BDL	10.	ug/l	8260B	02/21/10	1
Methyl tert-butyl ether	BDL	1.0	ug/l	8260B	02/21/10	1
Naphthalene	BDL	5.0	ug/l	8260B	02/21/10	1
n-Propylbenzene	BDL	1.0	ug/l	8260B	02/21/10	1
Styrene	BDL	1.0	ug/l	8260B	02/21/10	1
1,1,1,2-Tetrachloroethane	BDL	1.0	ug/l	8260B	02/21/10	1
1,1,2,2-Tetrachloroethane	BDL	1.0	ug/l	8260B	02/21/10	1
1,1,2-Trichloro-1,2,2-trifluoro	BDL	1.0	ug/l	8260B	02/21/10	1
Tetrachloroethene	BDL	1.0	ug/l	8260B	02/21/10	1
Toluene	BDL	5.0	ug/l	8260B	02/21/10	1
1,2,3-Trichlorobenzene	BDL	1.0	ug/l	8260B	02/21/10	1
1,2,4-Trichlorobenzene	BDL	1.0	ug/l	8260B	02/21/10	1
1,1,1-Trichloroethane	BDL	1.0	ug/l	8260B	02/21/10	1
1,1,2-Trichloroethane	BDL	1.0	ug/l	8260B	02/21/10	1
Trichloroethene	BDL	1.0	ug/l	8260B	02/21/10	1
Trichlorofluoromethane	BDL	5.0	ug/l	8260B	02/21/10	1
1,2,3-Trichloropropane	BDL	1.0	ug/l	8260B	02/21/10	1
1,2,4-Trimethylbenzene	BDL	1.0	ug/l	8260B	02/21/10	1
1,2,3-Trimethylbenzene	BDL	1.0	ug/l	8260B	02/21/10	1
1,3,5-Trimethylbenzene	BDL	1.0	ug/l	8260B	02/21/10	1
Vinyl chloride	BDL	1.0	ug/l	8260B	02/21/10	1
Xylenes, Total	BDL	3.0	ug/l	8260B	02/21/10	1
Surrogate Recovery						
Toluene-d8	96.2		% Rec.	8260B	02/21/10	1
Dibromofluoromethane	101.		% Rec.	8260B	02/21/10	1
4-Bromofluorobenzene	95.2		% Rec.	8260B	02/21/10	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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Tax I.D. 62-0814289

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REPORT OF ANALYSIS

Amy Zach
 Stantec Consulting - Tualatin, OR
 7730 SW Mohawk Street
 Tualatin, OR 97062

February 26, 2010

Date Received : February 20, 2010
 Description : Brunswick Bayliner Marine
 Sample ID : MW-5
 Collected By : Janet Nash
 Collection Date : 02/18/10 15:35

ESC Sample # : L445864-15

Site ID :

Project # : 190402025.200.0002

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Chromium,Hexavalent	BDL	10.	ug/l	7196A	02/20/10	1
Chromium,Trivalent	BDL	10.	ug/l	Calc	02/24/10	1
Mercury,Dissolved	BDL	0.20	ug/l	7470A	02/23/10	1
Arsenic,Dissolved	BDL	20.	ug/l	6010B	02/23/10	1
Barium,Dissolved	BDL	5.0	ug/l	6010B	02/23/10	1
Cadmium,Dissolved	BDL	5.0	ug/l	6010B	02/23/10	1
Chromium	BDL	10.	ug/l	6010B	02/24/10	1
Chromium,Dissolved	BDL	10.	ug/l	6010B	02/23/10	1
Lead,Dissolved	BDL	5.0	ug/l	6010B	02/23/10	1
Selenium,Dissolved	BDL	20.	ug/l	6010B	02/23/10	1
Silver,Dissolved	BDL	10.	ug/l	6010B	02/23/10	1
Volatile Organics						
Acetone	BDL	50.	ug/l	8260B	02/21/10	1
Acrolein	BDL	50.	ug/l	8260B	02/21/10	1
Acrylonitrile	BDL	10.	ug/l	8260B	02/21/10	1
Benzene	BDL	1.0	ug/l	8260B	02/21/10	1
Bromobenzene	BDL	1.0	ug/l	8260B	02/21/10	1
Bromodichloromethane	BDL	1.0	ug/l	8260B	02/21/10	1
Bromoform	BDL	1.0	ug/l	8260B	02/21/10	1
Bromomethane	BDL	5.0	ug/l	8260B	02/21/10	1
n-Butylbenzene	BDL	1.0	ug/l	8260B	02/21/10	1
sec-Butylbenzene	BDL	1.0	ug/l	8260B	02/21/10	1
tert-Butylbenzene	BDL	1.0	ug/l	8260B	02/21/10	1
Carbon tetrachloride	BDL	1.0	ug/l	8260B	02/21/10	1
Chlorobenzene	BDL	1.0	ug/l	8260B	02/21/10	1
Chlorodibromomethane	BDL	1.0	ug/l	8260B	02/21/10	1
Chloroethane	BDL	5.0	ug/l	8260B	02/21/10	1
2-Chloroethyl vinyl ether	BDL	50.	ug/l	8260B	02/21/10	1
Chloroform	BDL	5.0	ug/l	8260B	02/21/10	1
Chloromethane	BDL	2.5	ug/l	8260B	02/21/10	1
2-Chlorotoluene	BDL	1.0	ug/l	8260B	02/21/10	1
4-Chlorotoluene	BDL	1.0	ug/l	8260B	02/21/10	1
1,2-Dibromo-3-Chloropropane	BDL	5.0	ug/l	8260B	02/21/10	1
1,2-Dibromoethane	BDL	1.0	ug/l	8260B	02/21/10	1
Dibromomethane	BDL	1.0	ug/l	8260B	02/21/10	1
1,2-Dichlorobenzene	BDL	1.0	ug/l	8260B	02/21/10	1
1,3-Dichlorobenzene	BDL	1.0	ug/l	8260B	02/21/10	1
1,4-Dichlorobenzene	BDL	1.0	ug/l	8260B	02/21/10	1
Dichlorodifluoromethane	BDL	5.0	ug/l	8260B	02/21/10	1
1,1-Dichloroethane	BDL	1.0	ug/l	8260B	02/21/10	1

BDL - Below Detection Limit
 Det. Limit - Practical Quantitation Limit(PQL)



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REPORT OF ANALYSIS

Amy Zach
Stantec Consulting - Tualatin, OR
7730 SW Mohawk Street
Tualatin, OR 97062

February 26, 2010

Date Received : February 20, 2010
Description : Brunswick Bayliner Marine
Sample ID : MW-5
Collected By : Janet Nash
Collection Date : 02/18/10 15:35

ESC Sample # : L445864-15

Site ID :

Project # : 190402025.200.0002

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
1,2-Dichloroethane	BDL	1.0	ug/l	8260B	02/21/10	1
1,1-Dichloroethene	BDL	1.0	ug/l	8260B	02/21/10	1
cis-1,2-Dichloroethene	BDL	1.0	ug/l	8260B	02/21/10	1
trans-1,2-Dichloroethene	BDL	1.0	ug/l	8260B	02/21/10	1
1,2-Dichloropropane	BDL	1.0	ug/l	8260B	02/21/10	1
1,1-Dichloropropene	BDL	1.0	ug/l	8260B	02/21/10	1
1,3-Dichloropropane	BDL	1.0	ug/l	8260B	02/21/10	1
cis-1,3-Dichloropropene	BDL	1.0	ug/l	8260B	02/21/10	1
trans-1,3-Dichloropropene	BDL	1.0	ug/l	8260B	02/21/10	1
2,2-Dichloropropane	BDL	1.0	ug/l	8260B	02/21/10	1
Di-isopropyl ether	BDL	1.0	ug/l	8260B	02/21/10	1
Ethylbenzene	BDL	1.0	ug/l	8260B	02/21/10	1
Hexachloro-1,3-Butadiene	BDL	1.0	ug/l	8260B	02/21/10	1
Isopropylbenzene	BDL	1.0	ug/l	8260B	02/21/10	1
p-Isopropyltoluene	BDL	1.0	ug/l	8260B	02/21/10	1
2-Butanone (MEK)	BDL	10.	ug/l	8260B	02/21/10	1
Methylene Chloride	BDL	5.0	ug/l	8260B	02/21/10	1
4-Methyl-2-pentanone (MIBK)	BDL	10.	ug/l	8260B	02/21/10	1
Methyl tert-butyl ether	BDL	1.0	ug/l	8260B	02/21/10	1
Naphthalene	BDL	5.0	ug/l	8260B	02/21/10	1
n-Propylbenzene	BDL	1.0	ug/l	8260B	02/21/10	1
Styrene	BDL	1.0	ug/l	8260B	02/21/10	1
1,1,1,2-Tetrachloroethane	BDL	1.0	ug/l	8260B	02/21/10	1
1,1,2,2-Tetrachloroethane	BDL	1.0	ug/l	8260B	02/21/10	1
1,1,2-Trichloro-1,2,2-trifluoro	BDL	1.0	ug/l	8260B	02/21/10	1
Tetrachloroethene	BDL	1.0	ug/l	8260B	02/21/10	1
Toluene	BDL	5.0	ug/l	8260B	02/21/10	1
1,2,3-Trichlorobenzene	BDL	1.0	ug/l	8260B	02/21/10	1
1,2,4-Trichlorobenzene	BDL	1.0	ug/l	8260B	02/21/10	1
1,1,1-Trichloroethane	BDL	1.0	ug/l	8260B	02/21/10	1
1,1,2-Trichloroethane	BDL	1.0	ug/l	8260B	02/21/10	1
Trichloroethene	BDL	1.0	ug/l	8260B	02/21/10	1
Trichlorofluoromethane	BDL	5.0	ug/l	8260B	02/21/10	1
1,2,3-Trichloropropane	BDL	1.0	ug/l	8260B	02/21/10	1
1,2,4-Trimethylbenzene	BDL	1.0	ug/l	8260B	02/21/10	1
1,2,3-Trimethylbenzene	BDL	1.0	ug/l	8260B	02/21/10	1
1,3,5-Trimethylbenzene	BDL	1.0	ug/l	8260B	02/21/10	1
Vinyl chloride	BDL	1.0	ug/l	8260B	02/21/10	1
Xylenes, Total	BDL	3.0	ug/l	8260B	02/21/10	1
Surrogate Recovery						
Toluene-d8	96.1		% Rec.	8260B	02/21/10	1
Dibromofluoromethane	101.		% Rec.	8260B	02/21/10	1
4-Bromofluorobenzene	98.4		% Rec.	8260B	02/21/10	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

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REPORT OF ANALYSIS

Amy Zach
 Stantec Consulting - Tualatin, OR
 7730 SW Mohawk Street
 Tualatin, OR 97062

February 26, 2010

Date Received : February 20, 2010
 Description : Brunswick Bayliner Marine
 Sample ID : MW-4
 Collected By : Janet Nash
 Collection Date : 02/18/10 16:05

ESC Sample # : L445864-16

Site ID :

Project # : 190402025.200.0002

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Chromium,Hexavalent	BDL	10.	ug/l	7196A	02/20/10	1
Chromium,Trivalent	BDL	10.	ug/l	Calc	02/24/10	1
Mercury,Dissolved	BDL	0.20	ug/l	7470A	02/23/10	1
Arsenic,Dissolved	BDL	20.	ug/l	6010B	02/23/10	1
Barium,Dissolved	6.0	5.0	ug/l	6010B	02/23/10	1
Cadmium,Dissolved	BDL	5.0	ug/l	6010B	02/23/10	1
Chromium	BDL	10.	ug/l	6010B	02/24/10	1
Chromium,Dissolved	BDL	10.	ug/l	6010B	02/23/10	1
Lead,Dissolved	BDL	5.0	ug/l	6010B	02/23/10	1
Selenium,Dissolved	BDL	20.	ug/l	6010B	02/23/10	1
Silver,Dissolved	BDL	10.	ug/l	6010B	02/23/10	1
Volatile Organics						
Acetone	BDL	50.	ug/l	8260B	02/21/10	1
Acrolein	BDL	50.	ug/l	8260B	02/21/10	1
Acrylonitrile	BDL	10.	ug/l	8260B	02/21/10	1
Benzene	BDL	1.0	ug/l	8260B	02/21/10	1
Bromobenzene	BDL	1.0	ug/l	8260B	02/21/10	1
Bromodichloromethane	BDL	1.0	ug/l	8260B	02/21/10	1
Bromoform	BDL	1.0	ug/l	8260B	02/21/10	1
Bromomethane	BDL	5.0	ug/l	8260B	02/21/10	1
n-Butylbenzene	BDL	1.0	ug/l	8260B	02/21/10	1
sec-Butylbenzene	BDL	1.0	ug/l	8260B	02/21/10	1
tert-Butylbenzene	BDL	1.0	ug/l	8260B	02/21/10	1
Carbon tetrachloride	BDL	1.0	ug/l	8260B	02/21/10	1
Chlorobenzene	BDL	1.0	ug/l	8260B	02/21/10	1
Chlorodibromomethane	BDL	1.0	ug/l	8260B	02/21/10	1
Chloroethane	BDL	5.0	ug/l	8260B	02/21/10	1
2-Chloroethyl vinyl ether	BDL	50.	ug/l	8260B	02/21/10	1
Chloroform	BDL	5.0	ug/l	8260B	02/21/10	1
Chloromethane	BDL	2.5	ug/l	8260B	02/21/10	1
2-Chlorotoluene	BDL	1.0	ug/l	8260B	02/21/10	1
4-Chlorotoluene	BDL	1.0	ug/l	8260B	02/21/10	1
1,2-Dibromo-3-Chloropropane	BDL	5.0	ug/l	8260B	02/21/10	1
1,2-Dibromoethane	BDL	1.0	ug/l	8260B	02/21/10	1
Dibromomethane	BDL	1.0	ug/l	8260B	02/21/10	1
1,2-Dichlorobenzene	BDL	1.0	ug/l	8260B	02/21/10	1
1,3-Dichlorobenzene	BDL	1.0	ug/l	8260B	02/21/10	1
1,4-Dichlorobenzene	BDL	1.0	ug/l	8260B	02/21/10	1
Dichlorodifluoromethane	BDL	5.0	ug/l	8260B	02/21/10	1
1,1-Dichloroethane	BDL	1.0	ug/l	8260B	02/21/10	1

BDL - Below Detection Limit
 Det. Limit - Practical Quantitation Limit(PQL)



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REPORT OF ANALYSIS

Amy Zach
 Stantec Consulting - Tualatin, OR
 7730 SW Mohawk Street
 Tualatin, OR 97062

February 26, 2010

Date Received : February 20, 2010
 Description : Brunswick Bayliner Marine
 Sample ID : MW-4
 Collected By : Janet Nash
 Collection Date : 02/18/10 16:05

ESC Sample # : L445864-16

Site ID :

Project # : 190402025.200.0002

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
1,2-Dichloroethane	BDL	1.0	ug/l	8260B	02/21/10	1
1,1-Dichloroethene	BDL	1.0	ug/l	8260B	02/21/10	1
cis-1,2-Dichloroethene	BDL	1.0	ug/l	8260B	02/21/10	1
trans-1,2-Dichloroethene	BDL	1.0	ug/l	8260B	02/21/10	1
1,2-Dichloropropane	BDL	1.0	ug/l	8260B	02/21/10	1
1,1-Dichloropropene	BDL	1.0	ug/l	8260B	02/21/10	1
1,3-Dichloropropane	BDL	1.0	ug/l	8260B	02/21/10	1
cis-1,3-Dichloropropene	BDL	1.0	ug/l	8260B	02/21/10	1
trans-1,3-Dichloropropene	BDL	1.0	ug/l	8260B	02/21/10	1
2,2-Dichloropropane	BDL	1.0	ug/l	8260B	02/21/10	1
Di-isopropyl ether	BDL	1.0	ug/l	8260B	02/21/10	1
Ethylbenzene	BDL	1.0	ug/l	8260B	02/21/10	1
Hexachloro-1,3-Butadiene	BDL	1.0	ug/l	8260B	02/21/10	1
Isopropylbenzene	BDL	1.0	ug/l	8260B	02/21/10	1
p-Isopropyltoluene	BDL	1.0	ug/l	8260B	02/21/10	1
2-Butanone (MEK)	BDL	10.	ug/l	8260B	02/21/10	1
Methylene Chloride	BDL	5.0	ug/l	8260B	02/21/10	1
4-Methyl-2-pentanone (MIBK)	BDL	10.	ug/l	8260B	02/21/10	1
Methyl tert-butyl ether	BDL	1.0	ug/l	8260B	02/21/10	1
Naphthalene	BDL	5.0	ug/l	8260B	02/21/10	1
n-Propylbenzene	BDL	1.0	ug/l	8260B	02/21/10	1
Styrene	BDL	1.0	ug/l	8260B	02/21/10	1
1,1,1,2-Tetrachloroethane	BDL	1.0	ug/l	8260B	02/21/10	1
1,1,2,2-Tetrachloroethane	BDL	1.0	ug/l	8260B	02/21/10	1
1,1,2-Trichloro-1,2,2-trifluoro	BDL	1.0	ug/l	8260B	02/21/10	1
Tetrachloroethene	5.3	1.0	ug/l	8260B	02/21/10	1
Toluene	BDL	5.0	ug/l	8260B	02/21/10	1
1,2,3-Trichlorobenzene	BDL	1.0	ug/l	8260B	02/21/10	1
1,2,4-Trichlorobenzene	BDL	1.0	ug/l	8260B	02/21/10	1
1,1,1-Trichloroethane	BDL	1.0	ug/l	8260B	02/21/10	1
1,1,2-Trichloroethane	BDL	1.0	ug/l	8260B	02/21/10	1
Trichloroethene	BDL	1.0	ug/l	8260B	02/21/10	1
Trichlorofluoromethane	BDL	5.0	ug/l	8260B	02/21/10	1
1,2,3-Trichloropropane	BDL	1.0	ug/l	8260B	02/21/10	1
1,2,4-Trimethylbenzene	BDL	1.0	ug/l	8260B	02/21/10	1
1,2,3-Trimethylbenzene	BDL	1.0	ug/l	8260B	02/21/10	1
1,3,5-Trimethylbenzene	BDL	1.0	ug/l	8260B	02/21/10	1
Vinyl chloride	BDL	1.0	ug/l	8260B	02/21/10	1
Xylenes, Total	BDL	3.0	ug/l	8260B	02/21/10	1
Surrogate Recovery						
Toluene-d8	96.6		% Rec.	8260B	02/21/10	1
Dibromofluoromethane	101.		% Rec.	8260B	02/21/10	1
4-Bromofluorobenzene	96.8		% Rec.	8260B	02/21/10	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

Amy Zach
 Stantec Consulting - Tualatin, OR
 7730 SW Mohawk Street
 Tualatin, OR 97062

February 26, 2010

Date Received : February 20, 2010
 Description : Brunswick Bayliner Marine
 Sample ID : MW-7
 Collected By : Janet Nash
 Collection Date : 02/19/10 10:10

ESC Sample # : L445864-17

Site ID :

Project # : 190402025.200.0002

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Chromium,Hexavalent	BDL	10.	ug/l	7196A	02/20/10	1
Chromium,Trivalent	BDL	10.	ug/l	Calc	02/24/10	1
Mercury,Dissolved	BDL	0.20	ug/l	7470A	02/23/10	1
Arsenic,Dissolved	BDL	20.	ug/l	6010B	02/23/10	1
Barium,Dissolved	BDL	5.0	ug/l	6010B	02/23/10	1
Cadmium,Dissolved	BDL	5.0	ug/l	6010B	02/23/10	1
Chromium	BDL	10.	ug/l	6010B	02/24/10	1
Chromium,Dissolved	BDL	10.	ug/l	6010B	02/23/10	1
Lead,Dissolved	BDL	5.0	ug/l	6010B	02/23/10	1
Selenium,Dissolved	BDL	20.	ug/l	6010B	02/23/10	1
Silver,Dissolved	BDL	10.	ug/l	6010B	02/23/10	1
Volatile Organics						
Acetone	BDL	50.	ug/l	8260B	02/21/10	1
Acrolein	BDL	50.	ug/l	8260B	02/21/10	1
Acrylonitrile	BDL	10.	ug/l	8260B	02/21/10	1
Benzene	BDL	1.0	ug/l	8260B	02/21/10	1
Bromobenzene	BDL	1.0	ug/l	8260B	02/21/10	1
Bromodichloromethane	BDL	1.0	ug/l	8260B	02/21/10	1
Bromoform	BDL	1.0	ug/l	8260B	02/21/10	1
Bromomethane	BDL	5.0	ug/l	8260B	02/21/10	1
n-Butylbenzene	BDL	1.0	ug/l	8260B	02/21/10	1
sec-Butylbenzene	BDL	1.0	ug/l	8260B	02/21/10	1
tert-Butylbenzene	BDL	1.0	ug/l	8260B	02/21/10	1
Carbon tetrachloride	BDL	1.0	ug/l	8260B	02/21/10	1
Chlorobenzene	BDL	1.0	ug/l	8260B	02/21/10	1
Chlorodibromomethane	BDL	1.0	ug/l	8260B	02/21/10	1
Chloroethane	BDL	5.0	ug/l	8260B	02/21/10	1
2-Chloroethyl vinyl ether	BDL	50.	ug/l	8260B	02/21/10	1
Chloroform	BDL	5.0	ug/l	8260B	02/21/10	1
Chloromethane	BDL	2.5	ug/l	8260B	02/21/10	1
2-Chlorotoluene	BDL	1.0	ug/l	8260B	02/21/10	1
4-Chlorotoluene	BDL	1.0	ug/l	8260B	02/21/10	1
1,2-Dibromo-3-Chloropropane	BDL	5.0	ug/l	8260B	02/21/10	1
1,2-Dibromoethane	BDL	1.0	ug/l	8260B	02/21/10	1
Dibromomethane	BDL	1.0	ug/l	8260B	02/21/10	1
1,2-Dichlorobenzene	BDL	1.0	ug/l	8260B	02/21/10	1
1,3-Dichlorobenzene	BDL	1.0	ug/l	8260B	02/21/10	1
1,4-Dichlorobenzene	BDL	1.0	ug/l	8260B	02/21/10	1
Dichlorodifluoromethane	BDL	5.0	ug/l	8260B	02/21/10	1
1,1-Dichloroethane	BDL	1.0	ug/l	8260B	02/21/10	1

BDL - Below Detection Limit
 Det. Limit - Practical Quantitation Limit(PQL)



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REPORT OF ANALYSIS

Amy Zach
 Stantec Consulting - Tualatin, OR
 7730 SW Mohawk Street
 Tualatin, OR 97062

February 26, 2010

Date Received : February 20, 2010
 Description : Brunswick Bayliner Marine
 Sample ID : MW-7
 Collected By : Janet Nash
 Collection Date : 02/19/10 10:10

ESC Sample # : L445864-17

Site ID :

Project # : 190402025.200.0002

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
1,2-Dichloroethane	BDL	1.0	ug/l	8260B	02/21/10	1
1,1-Dichloroethene	BDL	1.0	ug/l	8260B	02/21/10	1
cis-1,2-Dichloroethene	BDL	1.0	ug/l	8260B	02/21/10	1
trans-1,2-Dichloroethene	BDL	1.0	ug/l	8260B	02/21/10	1
1,2-Dichloropropane	BDL	1.0	ug/l	8260B	02/21/10	1
1,1-Dichloropropene	BDL	1.0	ug/l	8260B	02/21/10	1
1,3-Dichloropropane	BDL	1.0	ug/l	8260B	02/21/10	1
cis-1,3-Dichloropropene	BDL	1.0	ug/l	8260B	02/21/10	1
trans-1,3-Dichloropropene	BDL	1.0	ug/l	8260B	02/21/10	1
2,2-Dichloropropane	BDL	1.0	ug/l	8260B	02/21/10	1
Di-isopropyl ether	BDL	1.0	ug/l	8260B	02/21/10	1
Ethylbenzene	BDL	1.0	ug/l	8260B	02/21/10	1
Hexachloro-1,3-Butadiene	BDL	1.0	ug/l	8260B	02/21/10	1
Isopropylbenzene	BDL	1.0	ug/l	8260B	02/21/10	1
p-Isopropyltoluene	BDL	1.0	ug/l	8260B	02/21/10	1
2-Butanone (MEK)	BDL	10.	ug/l	8260B	02/21/10	1
Methylene Chloride	BDL	5.0	ug/l	8260B	02/21/10	1
4-Methyl-2-pentanone (MIBK)	BDL	10.	ug/l	8260B	02/21/10	1
Methyl tert-butyl ether	BDL	1.0	ug/l	8260B	02/21/10	1
Naphthalene	BDL	5.0	ug/l	8260B	02/21/10	1
n-Propylbenzene	BDL	1.0	ug/l	8260B	02/21/10	1
Styrene	BDL	1.0	ug/l	8260B	02/21/10	1
1,1,1,2-Tetrachloroethane	BDL	1.0	ug/l	8260B	02/21/10	1
1,1,2,2-Tetrachloroethane	BDL	1.0	ug/l	8260B	02/21/10	1
1,1,2-Trichloro-1,2,2-trifluoro	BDL	1.0	ug/l	8260B	02/21/10	1
Tetrachloroethene	BDL	1.0	ug/l	8260B	02/21/10	1
Toluene	BDL	5.0	ug/l	8260B	02/21/10	1
1,2,3-Trichlorobenzene	BDL	1.0	ug/l	8260B	02/21/10	1
1,2,4-Trichlorobenzene	BDL	1.0	ug/l	8260B	02/21/10	1
1,1,1-Trichloroethane	BDL	1.0	ug/l	8260B	02/21/10	1
1,1,2-Trichloroethane	BDL	1.0	ug/l	8260B	02/21/10	1
Trichloroethene	BDL	1.0	ug/l	8260B	02/21/10	1
Trichlorofluoromethane	BDL	5.0	ug/l	8260B	02/21/10	1
1,2,3-Trichloropropane	BDL	1.0	ug/l	8260B	02/21/10	1
1,2,4-Trimethylbenzene	BDL	1.0	ug/l	8260B	02/21/10	1
1,2,3-Trimethylbenzene	BDL	1.0	ug/l	8260B	02/21/10	1
1,3,5-Trimethylbenzene	BDL	1.0	ug/l	8260B	02/21/10	1
Vinyl chloride	BDL	1.0	ug/l	8260B	02/21/10	1
Xylenes, Total	BDL	3.0	ug/l	8260B	02/21/10	1
Surrogate Recovery						
Toluene-d8	96.4		% Rec.	8260B	02/21/10	1
Dibromofluoromethane	102.		% Rec.	8260B	02/21/10	1
4-Bromofluorobenzene	96.9		% Rec.	8260B	02/21/10	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

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Reported: 02/26/10 08:57 Printed: 02/26/10 08:59



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12065 Lebanon Rd.
 Mt. Juliet, TN 37122
 (615) 758-5858
 1-800-767-5859
 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Amy Zach
 Stantec Consulting - Tualatin, OR
 7730 SW Mohawk Street
 Tualatin, OR 97062

February 26, 2010

Date Received : February 20, 2010
 Description : Brunswick Bayliner Marine
 Sample ID : MW-6
 Collected By : Janet Nash
 Collection Date : 02/19/10 10:30

ESC Sample # : L445864-18

Site ID :

Project # : 190402025.200.0002

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Chromium,Hexavalent	BDL	10.	ug/l	7196A	02/20/10	1
Chromium,Trivalent	BDL	10.	ug/l	Calc	02/24/10	1
Mercury,Dissolved	BDL	0.20	ug/l	7470A	02/23/10	1
Arsenic,Dissolved	BDL	20.	ug/l	6010B	02/23/10	1
Barium,Dissolved	BDL	5.0	ug/l	6010B	02/23/10	1
Cadmium,Dissolved	BDL	5.0	ug/l	6010B	02/23/10	1
Chromium	BDL	10.	ug/l	6010B	02/24/10	1
Chromium,Dissolved	BDL	10.	ug/l	6010B	02/23/10	1
Lead,Dissolved	BDL	5.0	ug/l	6010B	02/23/10	1
Selenium,Dissolved	BDL	20.	ug/l	6010B	02/23/10	1
Silver,Dissolved	BDL	10.	ug/l	6010B	02/23/10	1
Volatile Organics						
Acetone	BDL	50.	ug/l	8260B	02/21/10	1
Acrolein	BDL	50.	ug/l	8260B	02/21/10	1
Acrylonitrile	BDL	10.	ug/l	8260B	02/21/10	1
Benzene	BDL	1.0	ug/l	8260B	02/21/10	1
Bromobenzene	BDL	1.0	ug/l	8260B	02/21/10	1
Bromodichloromethane	BDL	1.0	ug/l	8260B	02/21/10	1
Bromoform	BDL	1.0	ug/l	8260B	02/21/10	1
Bromomethane	BDL	5.0	ug/l	8260B	02/21/10	1
n-Butylbenzene	BDL	1.0	ug/l	8260B	02/21/10	1
sec-Butylbenzene	BDL	1.0	ug/l	8260B	02/21/10	1
tert-Butylbenzene	BDL	1.0	ug/l	8260B	02/21/10	1
Carbon tetrachloride	BDL	1.0	ug/l	8260B	02/21/10	1
Chlorobenzene	BDL	1.0	ug/l	8260B	02/21/10	1
Chlorodibromomethane	BDL	1.0	ug/l	8260B	02/21/10	1
Chloroethane	BDL	5.0	ug/l	8260B	02/21/10	1
2-Chloroethyl vinyl ether	BDL	50.	ug/l	8260B	02/21/10	1
Chloroform	BDL	5.0	ug/l	8260B	02/21/10	1
Chloromethane	BDL	2.5	ug/l	8260B	02/21/10	1
2-Chlorotoluene	BDL	1.0	ug/l	8260B	02/21/10	1
4-Chlorotoluene	BDL	1.0	ug/l	8260B	02/21/10	1
1,2-Dibromo-3-Chloropropane	BDL	5.0	ug/l	8260B	02/21/10	1
1,2-Dibromoethane	BDL	1.0	ug/l	8260B	02/21/10	1
Dibromomethane	BDL	1.0	ug/l	8260B	02/21/10	1
1,2-Dichlorobenzene	BDL	1.0	ug/l	8260B	02/21/10	1
1,3-Dichlorobenzene	BDL	1.0	ug/l	8260B	02/21/10	1
1,4-Dichlorobenzene	BDL	1.0	ug/l	8260B	02/21/10	1
Dichlorodifluoromethane	BDL	5.0	ug/l	8260B	02/21/10	1
1,1-Dichloroethane	BDL	1.0	ug/l	8260B	02/21/10	1

BDL - Below Detection Limit
 Det. Limit - Practical Quantitation Limit(PQL)



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Est. 1970

REPORT OF ANALYSIS

Amy Zach
 Stantec Consulting - Tualatin, OR
 7730 SW Mohawk Street
 Tualatin, OR 97062

February 26, 2010

Date Received : February 20, 2010
 Description : Brunswick Bayliner Marine
 Sample ID : MW-6
 Collected By : Janet Nash
 Collection Date : 02/19/10 10:30

ESC Sample # : L445864-18

Site ID :

Project # : 190402025.200.0002

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
1,2-Dichloroethane	BDL	1.0	ug/l	8260B	02/21/10	1
1,1-Dichloroethene	BDL	1.0	ug/l	8260B	02/21/10	1
cis-1,2-Dichloroethene	BDL	1.0	ug/l	8260B	02/21/10	1
trans-1,2-Dichloroethene	BDL	1.0	ug/l	8260B	02/21/10	1
1,2-Dichloropropane	BDL	1.0	ug/l	8260B	02/21/10	1
1,1-Dichloropropene	BDL	1.0	ug/l	8260B	02/21/10	1
1,3-Dichloropropane	BDL	1.0	ug/l	8260B	02/21/10	1
cis-1,3-Dichloropropene	BDL	1.0	ug/l	8260B	02/21/10	1
trans-1,3-Dichloropropene	BDL	1.0	ug/l	8260B	02/21/10	1
2,2-Dichloropropane	BDL	1.0	ug/l	8260B	02/21/10	1
Di-isopropyl ether	BDL	1.0	ug/l	8260B	02/21/10	1
Ethylbenzene	BDL	1.0	ug/l	8260B	02/21/10	1
Hexachloro-1,3-Butadiene	BDL	1.0	ug/l	8260B	02/21/10	1
Isopropylbenzene	BDL	1.0	ug/l	8260B	02/21/10	1
p-Isopropyltoluene	BDL	1.0	ug/l	8260B	02/21/10	1
2-Butanone (MEK)	BDL	10.	ug/l	8260B	02/21/10	1
Methylene Chloride	BDL	5.0	ug/l	8260B	02/21/10	1
4-Methyl-2-pentanone (MIBK)	BDL	10.	ug/l	8260B	02/21/10	1
Methyl tert-butyl ether	BDL	1.0	ug/l	8260B	02/21/10	1
Naphthalene	BDL	5.0	ug/l	8260B	02/21/10	1
n-Propylbenzene	BDL	1.0	ug/l	8260B	02/21/10	1
Styrene	BDL	1.0	ug/l	8260B	02/21/10	1
1,1,1,2-Tetrachloroethane	BDL	1.0	ug/l	8260B	02/21/10	1
1,1,2,2-Tetrachloroethane	BDL	1.0	ug/l	8260B	02/21/10	1
1,1,2-Trichloro-1,2,2-trifluoro	BDL	1.0	ug/l	8260B	02/21/10	1
Tetrachloroethene	BDL	1.0	ug/l	8260B	02/21/10	1
Toluene	BDL	5.0	ug/l	8260B	02/21/10	1
1,2,3-Trichlorobenzene	BDL	1.0	ug/l	8260B	02/21/10	1
1,2,4-Trichlorobenzene	BDL	1.0	ug/l	8260B	02/21/10	1
1,1,1-Trichloroethane	BDL	1.0	ug/l	8260B	02/21/10	1
1,1,2-Trichloroethane	BDL	1.0	ug/l	8260B	02/21/10	1
Trichloroethene	BDL	1.0	ug/l	8260B	02/21/10	1
Trichlorofluoromethane	BDL	5.0	ug/l	8260B	02/21/10	1
1,2,3-Trichloropropane	BDL	1.0	ug/l	8260B	02/21/10	1
1,2,4-Trimethylbenzene	BDL	1.0	ug/l	8260B	02/21/10	1
1,2,3-Trimethylbenzene	BDL	1.0	ug/l	8260B	02/21/10	1
1,3,5-Trimethylbenzene	BDL	1.0	ug/l	8260B	02/21/10	1
Vinyl chloride	BDL	1.0	ug/l	8260B	02/21/10	1
Xylenes, Total	BDL	3.0	ug/l	8260B	02/21/10	1
Surrogate Recovery						
Toluene-d8	96.8		% Rec.	8260B	02/21/10	1
Dibromofluoromethane	101.		% Rec.	8260B	02/21/10	1
4-Bromofluorobenzene	99.9		% Rec.	8260B	02/21/10	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

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Reported: 02/26/10 08:57 Printed: 02/26/10 08:59

Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L445864-01	WG464299	SAMP	Lead	R1127350	B
	WG464299	SAMP	Selenium	R1127350	O
L445864-02	WG464299	SAMP	Lead	R1127350	B
	WG464299	SAMP	Selenium	R1127350	O
	WG464258	SAMP	Mercury	R1126869	P1
L445864-03	WG464299	SAMP	Lead	R1127350	B
	WG464299	SAMP	Selenium	R1127350	O
L445864-04	WG464299	SAMP	Lead	R1127350	B
	WG464299	SAMP	Selenium	R1127350	O
L445864-05	WG464299	SAMP	Arsenic	R1127350	O
	WG464299	SAMP	Lead	R1127350	B
	WG464299	SAMP	Selenium	R1127350	O
L445864-06	WG464299	SAMP	Lead	R1127350	B
	WG464299	SAMP	Selenium	R1127350	O
L445864-07	WG464299	SAMP	Lead	R1127350	B
	WG464299	SAMP	Selenium	R1127350	O
L445864-08	WG464299	SAMP	Lead	R1127350	B
	WG464299	SAMP	Selenium	R1127350	O
L445864-09	WG464252	SAMP	Chromium,Hexavalent	R1124148	T8
L445864-11	WG464252	SAMP	Chromium,Hexavalent	R1124148	T8
L445864-12	WG464252	SAMP	Chromium,Hexavalent	R1124148	T8
L445864-13	WG464252	SAMP	Chromium,Hexavalent	R1124148	T8
L445864-14	WG464252	SAMP	Chromium,Hexavalent	R1124148	T8
L445864-15	WG464252	SAMP	Chromium,Hexavalent	R1124148	T8
L445864-16	WG464252	SAMP	Chromium,Hexavalent	R1124148	T8
L445864-17	WG464252	SAMP	Chromium,Hexavalent	R1124148	T8
L445864-18	WG464252	SAMP	Chromium,Hexavalent	R1124148	T8

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
B	(EPA) - The indicated compound was found in the associated method blank as well as the laboratory sample.
O	(ESC) Sample diluted due to matrix interferences that impaired the ability to make an accurate analytical determination. The detection limit is elevated in order to reflect the necessary dilution.
P1	RPD value not applicable for sample concentrations less than 5 times the reporting limit.
T8	(ESC) - Additional method/sample information: Sample(s) received past/too close to holding time expiration.

Qualifier Report Information

ESC utilizes sample and result qualifiers as set forth by the EPA Contract Laboratory Program and as required by most certifying bodies including NELAC. In addition to the EPA qualifiers adopted by ESC, we have implemented ESC qualifiers to provide more information pertaining to our analytical results. Each qualifier is designated in the qualifier explanation as either EPA or ESC. Data qualifiers are intended to provide the ESC client with more detailed information concerning the potential bias of reported data. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods, it is common for some compounds to fall outside of established ranges. These exceptions are evaluated and all reported data is valid and useable unless qualified as 'R' (Rejected).

Definitions

- Accuracy** - The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as: control samples, matrix spike recoveries, surrogate recoveries, etc.
- Precision** - The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Difference.
- Surrogate** - Organic compounds that are similar in chemical composition, extraction, and chromatography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.
- TIC** - Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.

Summary of Remarks For Samples Printed
02/26/10 at 08:59:50

TSR Signing Reports: 358
R4 - Rush: Three Day

Sample: L445864-01 Account: SECORTOR Received: 02/20/10 09:00 Due Date: 02/25/10 00:00 RPT Date: 02/26/10 08:57
Sample: L445864-02 Account: SECORTOR Received: 02/20/10 09:00 Due Date: 02/25/10 00:00 RPT Date: 02/26/10 08:57
Sample: L445864-03 Account: SECORTOR Received: 02/20/10 09:00 Due Date: 02/25/10 00:00 RPT Date: 02/26/10 08:57
Sample: L445864-04 Account: SECORTOR Received: 02/20/10 09:00 Due Date: 02/25/10 00:00 RPT Date: 02/26/10 08:57
Sample: L445864-05 Account: SECORTOR Received: 02/20/10 09:00 Due Date: 02/25/10 00:00 RPT Date: 02/26/10 08:57
Sample: L445864-06 Account: SECORTOR Received: 02/20/10 09:00 Due Date: 02/25/10 00:00 RPT Date: 02/26/10 08:57
Sample: L445864-07 Account: SECORTOR Received: 02/20/10 09:00 Due Date: 02/25/10 00:00 RPT Date: 02/26/10 08:57
Sample: L445864-08 Account: SECORTOR Received: 02/20/10 09:00 Due Date: 02/25/10 00:00 RPT Date: 02/26/10 08:57
Sample: L445864-09 Account: SECORTOR Received: 02/20/10 09:00 Due Date: 02/25/10 00:00 RPT Date: 02/26/10 08:57
Added CRICP per JW. AV 2/22. Metals will NOT be field filtered or preserved.
Sample: L445864-10 Account: SECORTOR Received: 02/20/10 09:00 Due Date: 02/25/10 00:00 RPT Date: 02/26/10 08:57
Sample: L445864-11 Account: SECORTOR Received: 02/20/10 09:00 Due Date: 02/25/10 00:00 RPT Date: 02/26/10 08:57
Added CRICP per JW. AV 2/22. Metals will NOT be field filtered or preserved.
Sample: L445864-12 Account: SECORTOR Received: 02/20/10 09:00 Due Date: 02/25/10 00:00 RPT Date: 02/26/10 08:57
Added CRICP per JW. AV 2/22. Metals will NOT be field filtered or preserved.
Sample: L445864-13 Account: SECORTOR Received: 02/20/10 09:00 Due Date: 02/25/10 00:00 RPT Date: 02/26/10 08:57
Added CRICP per JW. AV 2/22. Metals will NOT be field filtered or preserved.
Sample: L445864-14 Account: SECORTOR Received: 02/20/10 09:00 Due Date: 02/25/10 00:00 RPT Date: 02/26/10 08:57
Added CRICP per JW. AV 2/22. Metals will NOT be field filtered or preserved.
Sample: L445864-15 Account: SECORTOR Received: 02/20/10 09:00 Due Date: 02/25/10 00:00 RPT Date: 02/26/10 08:57
Added CRICP per JW. AV 2/22. Metals will NOT be field filtered or preserved.
Sample: L445864-16 Account: SECORTOR Received: 02/20/10 09:00 Due Date: 02/25/10 00:00 RPT Date: 02/26/10 08:57
Added CRICP per JW. AV 2/22. Metals will NOT be field filtered or preserved.
Sample: L445864-17 Account: SECORTOR Received: 02/20/10 09:00 Due Date: 02/25/10 00:00 RPT Date: 02/26/10 08:57
Added CRICP per JW. AV 2/22. Metals will NOT be field filtered or preserved.
Sample: L445864-18 Account: SECORTOR Received: 02/20/10 09:00 Due Date: 02/25/10 00:00 RPT Date: 02/26/10 08:57
Added CRICP per JW. AV 2/22. Metals will NOT be field filtered or preserved.



YOUR LAB OF CHOICE

Stantec Consulting - Tualatin, OR
 Amy Zach
 7730 SW Mohawk Street
 Tualatin, OR 97062

Quality Assurance Report
 Level II

L445864

12065 Lebanon Rd.
 Mt. Juliet, TN 37122
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 1-800-767-5859
 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

February 26, 2010

Analyte	Result	Laboratory Blank		Limit	Batch	Date Analyzed
		Units	% Rec			
Chromium, Hexavalent	< .01	mg/l			WG464252	02/20/10 12:31
1,1,1,2-Tetrachloroethane	< .001	mg/l			WG464281	02/21/10 01:11
1,1,1-Trichloroethane	< .001	mg/l			WG464281	02/21/10 01:11
1,1,2,2-Tetrachloroethane	< .001	mg/l			WG464281	02/21/10 01:11
1,1,2-Trichloroethane	< .001	mg/l			WG464281	02/21/10 01:11
1,1,2-Trichloro-1,2,2-trifluoroethane	< .001	mg/l			WG464281	02/21/10 01:11
1,1-Dichloroethane	< .001	mg/l			WG464281	02/21/10 01:11
1,1-Dichloroethene	< .001	mg/l			WG464281	02/21/10 01:11
1,1-Dichloropropene	< .001	mg/l			WG464281	02/21/10 01:11
1,2,3-Trichlorobenzene	< .001	mg/l			WG464281	02/21/10 01:11
1,2,3-Trichloropropane	< .001	mg/l			WG464281	02/21/10 01:11
1,2,3-Trimethylbenzene	< .001	mg/l			WG464281	02/21/10 01:11
1,2,4-Trichlorobenzene	< .001	mg/l			WG464281	02/21/10 01:11
1,2,4-Trimethylbenzene	< .001	mg/l			WG464281	02/21/10 01:11
1,2-Dibromo-3-Chloropropane	< .005	mg/l			WG464281	02/21/10 01:11
1,2-Dibromoethane	< .001	mg/l			WG464281	02/21/10 01:11
1,2-Dichlorobenzene	< .001	mg/l			WG464281	02/21/10 01:11
1,2-Dichloroethane	< .001	mg/l			WG464281	02/21/10 01:11
1,2-Dichloropropane	< .001	mg/l			WG464281	02/21/10 01:11
1,3,5-Trimethylbenzene	< .001	mg/l			WG464281	02/21/10 01:11
1,3-Dichlorobenzene	< .001	mg/l			WG464281	02/21/10 01:11
1,3-Dichloropropane	< .001	mg/l			WG464281	02/21/10 01:11
1,4-Dichlorobenzene	< .001	mg/l			WG464281	02/21/10 01:11
2,2-Dichloropropane	< .001	mg/l			WG464281	02/21/10 01:11
2-Butanone (MEK)	< .01	mg/l			WG464281	02/21/10 01:11
2-Chloroethyl vinyl ether	< .001	mg/l			WG464281	02/21/10 01:11
2-Chlorotoluene	< .001	mg/l			WG464281	02/21/10 01:11
4-Chlorotoluene	< .001	mg/l			WG464281	02/21/10 01:11
4-Methyl-2-pentanone (MIBK)	< .01	mg/l			WG464281	02/21/10 01:11
Acetone	< .05	mg/l			WG464281	02/21/10 01:11
Acrolein	< .05	mg/l			WG464281	02/21/10 01:11
Acrylonitrile	< .01	mg/l			WG464281	02/21/10 01:11
Benzene	< .001	mg/l			WG464281	02/21/10 01:11
Bromobenzene	< .001	mg/l			WG464281	02/21/10 01:11
Bromodichloromethane	< .001	mg/l			WG464281	02/21/10 01:11
Bromoform	< .001	mg/l			WG464281	02/21/10 01:11
Bromomethane	< .005	mg/l			WG464281	02/21/10 01:11
Carbon tetrachloride	< .001	mg/l			WG464281	02/21/10 01:11
Chlorobenzene	< .001	mg/l			WG464281	02/21/10 01:11
Chlorodibromomethane	< .001	mg/l			WG464281	02/21/10 01:11
Chloroethane	< .001	mg/l			WG464281	02/21/10 01:11
Chloroform	< .005	mg/l			WG464281	02/21/10 01:11
Chloromethane	< .001	mg/l			WG464281	02/21/10 01:11
cis-1,2-Dichloroethene	< .001	mg/l			WG464281	02/21/10 01:11
cis-1,3-Dichloropropene	< .001	mg/l			WG464281	02/21/10 01:11
Di-isopropyl ether	< .001	mg/l			WG464281	02/21/10 01:11
Dibromomethane	< .001	mg/l			WG464281	02/21/10 01:11
Dichlorodifluoromethane	< .005	mg/l			WG464281	02/21/10 01:11
Ethylbenzene	< .001	mg/l			WG464281	02/21/10 01:11
Hexachloro-1,3-Butadiene	< .001	mg/l			WG464281	02/21/10 01:11
Isopropylbenzene	< .001	mg/l			WG464281	02/21/10 01:11
Methyl tert-butyl ether	< .001	mg/l			WG464281	02/21/10 01:11
Methylene Chloride	< .005	mg/l			WG464281	02/21/10 01:11
n-Butylbenzene	< .001	mg/l			WG464281	02/21/10 01:11
n-Propylbenzene	< .001	mg/l			WG464281	02/21/10 01:11
Naphthalene	< .005	mg/l			WG464281	02/21/10 01:11
p-Isopropyltoluene	< .001	mg/l			WG464281	02/21/10 01:11

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YOUR LAB OF CHOICE

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 Amy Zach
 7730 SW Mohawk Street

Quality Assurance Report
 Level II

Tualatin, OR 97062

L445864

12065 Lebanon Rd.
 Mt. Juliet, TN 37122
 (615) 758-5858
 1-800-767-5859
 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

February 26, 2010

Analyte	Result	Laboratory Blank		Limit	Batch	Date Analyzed
		Units	% Rec			
sec-Butylbenzene	< .001	mg/l			WG464281	02/21/10 01:11
Styrene	< .001	mg/l			WG464281	02/21/10 01:11
tert-Butylbenzene	< .001	mg/l			WG464281	02/21/10 01:11
Tetrachloroethene	< .001	mg/l			WG464281	02/21/10 01:11
Toluene	< .005	mg/l			WG464281	02/21/10 01:11
trans-1,2-Dichloroethene	< .001	mg/l			WG464281	02/21/10 01:11
trans-1,3-Dichloropropene	< .001	mg/l			WG464281	02/21/10 01:11
Trichloroethene	< .001	mg/l			WG464281	02/21/10 01:11
Trichlorofluoromethane	< .005	mg/l			WG464281	02/21/10 01:11
Vinyl chloride	< .001	mg/l			WG464281	02/21/10 01:11
Xylenes, Total	< .003	mg/l			WG464281	02/21/10 01:11
4-Bromofluorobenzene		% Rec.	101.6	75-128	WG464281	02/21/10 01:11
Dibromofluoromethane		% Rec.	91.89	79-125	WG464281	02/21/10 01:11
Toluene-d8		% Rec.	94.72	87-114	WG464281	02/21/10 01:11
1,1,1,2-Tetrachloroethane	< .001	mg/kg			WG464314	02/21/10 21:49
1,1,1-Trichloroethane	< .001	mg/kg			WG464314	02/21/10 21:49
1,1,2,2-Tetrachloroethane	< .001	mg/kg			WG464314	02/21/10 21:49
1,1,2-Trichloroethane	< .001	mg/kg			WG464314	02/21/10 21:49
1,1,2-Trichloro-1,2,2-trifluoroethane	< .001	mg/kg			WG464314	02/21/10 21:49
1,1-Dichloroethane	< .001	mg/kg			WG464314	02/21/10 21:49
1,1-Dichloroethene	< .001	mg/kg			WG464314	02/21/10 21:49
1,1-Dichloropropene	< .001	mg/kg			WG464314	02/21/10 21:49
1,2,3-Trichlorobenzene	< .001	mg/kg			WG464314	02/21/10 21:49
1,2,3-Trichloropropane	< .001	mg/kg			WG464314	02/21/10 21:49
1,2,4-Trichlorobenzene	< .001	mg/kg			WG464314	02/21/10 21:49
1,2,4-Trimethylbenzene	< .001	mg/kg			WG464314	02/21/10 21:49
1,2-Dibromo-3-Chloropropane	< .005	mg/kg			WG464314	02/21/10 21:49
1,2-Dibromoethane	< .001	mg/kg			WG464314	02/21/10 21:49
1,2-Dichlorobenzene	< .001	mg/kg			WG464314	02/21/10 21:49
1,2-Dichloroethane	< .001	mg/kg			WG464314	02/21/10 21:49
1,2-Dichloropropane	< .001	mg/kg			WG464314	02/21/10 21:49
1,3,5-Trimethylbenzene	< .001	mg/kg			WG464314	02/21/10 21:49
1,3-Dichlorobenzene	< .001	mg/kg			WG464314	02/21/10 21:49
1,3-Dichloropropane	< .001	mg/kg			WG464314	02/21/10 21:49
1,4-Dichlorobenzene	< .001	mg/kg			WG464314	02/21/10 21:49
2,2-Dichloropropane	< .001	mg/kg			WG464314	02/21/10 21:49
2-Butanone (MEK)	< .01	mg/kg			WG464314	02/21/10 21:49
2-Chloroethyl vinyl ether	< .001	mg/kg			WG464314	02/21/10 21:49
2-Chlorotoluene	< .001	mg/kg			WG464314	02/21/10 21:49
4-Chlorotoluene	< .001	mg/kg			WG464314	02/21/10 21:49
4-Methyl-2-pentanone (MIBK)	< .01	mg/kg			WG464314	02/21/10 21:49
Acetone	< .05	mg/kg			WG464314	02/21/10 21:49
Acrylonitrile	< .01	mg/kg			WG464314	02/21/10 21:49
Benzene	< .001	mg/kg			WG464314	02/21/10 21:49
Bromobenzene	< .001	mg/kg			WG464314	02/21/10 21:49
Bromodichloromethane	< .001	mg/kg			WG464314	02/21/10 21:49
Bromoform	< .001	mg/kg			WG464314	02/21/10 21:49
Bromomethane	< .005	mg/kg			WG464314	02/21/10 21:49
Carbon tetrachloride	< .001	mg/kg			WG464314	02/21/10 21:49
Chlorobenzene	< .001	mg/kg			WG464314	02/21/10 21:49
Chlorodibromomethane	< .001	mg/kg			WG464314	02/21/10 21:49
Chloroethane	< .005	mg/kg			WG464314	02/21/10 21:49
Chloroform	< .005	mg/kg			WG464314	02/21/10 21:49
Chloromethane	< .001	mg/kg			WG464314	02/21/10 21:49
cis-1,2-Dichloroethene	< .001	mg/kg			WG464314	02/21/10 21:49
cis-1,3-Dichloropropene	< .001	mg/kg			WG464314	02/21/10 21:49
Di-isopropyl ether	< .001	mg/kg			WG464314	02/21/10 21:49

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Analyte	Result	Laboratory Blank		Limit	Batch	Date Analyzed
		Units	% Rec			
Dibromomethane	< .001	mg/kg			WG464314	02/21/10 21:49
Dichlorodifluoromethane	< .005	mg/kg			WG464314	02/21/10 21:49
Ethylbenzene	< .001	mg/kg			WG464314	02/21/10 21:49
Hexachloro-1,3-Butadiene	< .001	mg/kg			WG464314	02/21/10 21:49
Isopropylbenzene	< .001	mg/kg			WG464314	02/21/10 21:49
Methyl tert-butyl ether	< .001	mg/kg			WG464314	02/21/10 21:49
Methylene Chloride	< .005	mg/kg			WG464314	02/21/10 21:49
n-Butylbenzene	< .001	mg/kg			WG464314	02/21/10 21:49
n-Propylbenzene	< .001	mg/kg			WG464314	02/21/10 21:49
Naphthalene	< .005	mg/kg			WG464314	02/21/10 21:49
p-Isopropyltoluene	< .001	mg/kg			WG464314	02/21/10 21:49
sec-Butylbenzene	< .001	mg/kg			WG464314	02/21/10 21:49
Styrene	< .001	mg/kg			WG464314	02/21/10 21:49
tert-Butylbenzene	< .001	mg/kg			WG464314	02/21/10 21:49
Tetrachloroethene	< .001	mg/kg			WG464314	02/21/10 21:49
Toluene	< .005	mg/kg			WG464314	02/21/10 21:49
trans-1,2-Dichloroethene	< .001	mg/kg			WG464314	02/21/10 21:49
trans-1,3-Dichloropropene	< .001	mg/kg			WG464314	02/21/10 21:49
Trichloroethene	< .001	mg/kg			WG464314	02/21/10 21:49
Trichlorofluoromethane	< .005	mg/kg			WG464314	02/21/10 21:49
Vinyl chloride	< .001	mg/kg			WG464314	02/21/10 21:49
Xylenes, Total	< .003	mg/kg			WG464314	02/21/10 21:49
4-Bromofluorobenzene		% Rec.	112.3	59-140	WG464314	02/21/10 21:49
Dibromofluoromethane		% Rec.	99.00	63-139	WG464314	02/21/10 21:49
Toluene-d8		% Rec.	95.34	84-116	WG464314	02/21/10 21:49
Total Solids	< .1	%			WG464377	02/23/10 10:30
Total Solids	< .1	%			WG464378	02/23/10 10:33
Arsenic, Dissolved	< .02	mg/l			WG464546	02/23/10 16:23
Barium, Dissolved	< .005	mg/l			WG464546	02/23/10 16:23
Cadmium, Dissolved	< .005	mg/l			WG464546	02/23/10 16:23
Chromium, Dissolved	< .01	mg/l			WG464546	02/23/10 16:23
Lead, Dissolved	< .005	mg/l			WG464546	02/23/10 16:23
Selenium, Dissolved	< .02	mg/l			WG464546	02/23/10 16:23
Silver, Dissolved	< .01	mg/l			WG464546	02/23/10 16:23
Mercury, Dissolved	< .0002	mg/l			WG464257	02/23/10 20:12
Mercury	< .02	mg/kg			WG464258	02/23/10 22:43
Chromium	< .01	mg/l			WG464527	02/24/10 08:17
Arsenic	< 1	mg/kg			WG464299	02/24/10 08:35
Barium	< .25	mg/kg			WG464299	02/24/10 08:35
Cadmium	< .25	mg/kg			WG464299	02/24/10 08:35
Chromium	< .5	mg/kg			WG464299	02/24/10 08:35
Lead	0.313	mg/kg			WG464299	02/24/10 08:35
Selenium	< 1	mg/kg			WG464299	02/24/10 08:35
Silver	< .5	mg/kg			WG464299	02/24/10 08:35

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Analyte	Result	Laboratory Blank		Limit	Batch	Date Analyzed
		Units	% Rec			
Chromium,Hexavalent	< 2	mg/kg			WG464275	02/25/10 17:10

Analyte	Units	Duplicate		RPD	Limit	Ref Samp	Batch
		Result	Duplicate				
Chromium,Hexavalent	mg/l	0	0	0	20	L445864-18	WG464252
Chromium,Hexavalent	mg/l	0	0	0	20	L445847-01	WG464252
Total Solids	%	89.0	87.9	1.32	5	L445751-05	WG464377
Total Solids	%	78.0	77.3	0.465	5	L445886-02	WG464378
Arsenic,Dissolved	mg/l	0	0	0	20	L445937-21	WG464546
Barium,Dissolved	mg/l	0.0440	0.0428	1.62	20	L445937-21	WG464546
Cadmium,Dissolved	mg/l	0	0	0	20	L445937-21	WG464546
Chromium,Dissolved	mg/l	0	0.000500	NA	20	L445937-21	WG464546
Lead,Dissolved	mg/l	0.00510	0.00592	14.1	20	L445937-21	WG464546
Selenium,Dissolved	mg/l	0	0	0	20	L445937-21	WG464546
Silver,Dissolved	mg/l	0	0.00250	NA	20	L445937-21	WG464546
Mercury,Dissolved	mg/l	0	0	0	20	L445786-14	WG464257
Mercury	mg/kg	0.0210	0	NA	20	L445864-02	WG464258
Chromium	mg/l	0	0	0	20	L445749-01	WG464527
Arsenic	mg/kg	0	6.20	NA	20	L445838-24	WG464299
Barium	mg/kg	300.	350.	15.7	20	L445838-24	WG464299
Cadmium	mg/kg	0	0	0	20	L445838-24	WG464299
Chromium	mg/kg	19.0	19.0	0.525	20	L445838-24	WG464299
Lead	mg/kg	14.0	17.0	16.6	20	L445838-24	WG464299
Selenium	mg/kg	0	0.518	NA	20	L445838-24	WG464299
Silver	mg/kg	0	0	0	20	L445838-24	WG464299
Chromium,Hexavalent	mg/kg	0	0	0	20	L445952-03	WG464275
Chromium,Hexavalent	mg/kg	0	0	0	20	L445864-01	WG464275

Analyte	Units	Laboratory Control Sample		% Rec	Limit	Batch
		Known Val	Result			
Chromium,Hexavalent	mg/l	.6	0.609	102.	85-115	WG464252
1,1,1,2-Tetrachloroethane	mg/l	.025	0.0281	112.	75-134	WG464281
1,1,1-Trichloroethane	mg/l	.025	0.0235	94.0	67-137	WG464281
1,1,2,2-Tetrachloroethane	mg/l	.025	0.0259	104.	72-128	WG464281
1,1,2-Trichloroethane	mg/l	.025	0.0269	108.	79-123	WG464281
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/l	.025	0.0298	119.	51-149	WG464281
1,1-Dichloroethane	mg/l	.025	0.0218	87.0	67-133	WG464281
1,1-Dichloroethene	mg/l	.025	0.0261	104.	60-130	WG464281

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Analyte	Units	Laboratory Control Sample		% Rec	Limit	Batch
		Known Val	Result			
1,1-Dichloropropene	mg/l	.025	0.0222	88.7	68-132	WG464281
1,2,3-Trichlorobenzene	mg/l	.025	0.0259	104.	63-138	WG464281
1,2,3-Trichloropropane	mg/l	.025	0.0257	103.	68-130	WG464281
1,2,3-Trimethylbenzene	mg/l	.025	0.0259	104.	70-127	WG464281
1,2,4-Trichlorobenzene	mg/l	.025	0.0255	102.	65-137	WG464281
1,2,4-Trimethylbenzene	mg/l	.025	0.0279	112.	72-135	WG464281
1,2-Dibromo-3-Chloropropane	mg/l	.025	0.0305	122.	55-134	WG464281
1,2-Dibromoethane	mg/l	.025	0.0271	108.	75-126	WG464281
1,2-Dichlorobenzene	mg/l	.025	0.0270	108.	75-122	WG464281
1,2-Dichloroethane	mg/l	.025	0.0219	87.6	63-137	WG464281
1,2-Dichloropropene	mg/l	.025	0.0228	91.3	74-122	WG464281
1,3,5-Trimethylbenzene	mg/l	.025	0.0276	110.	73-134	WG464281
1,3-Dichlorobenzene	mg/l	.025	0.0278	111.	73-131	WG464281
1,3-Dichloropropene	mg/l	.025	0.0257	103.	77-119	WG464281
1,4-Dichlorobenzene	mg/l	.025	0.0264	106.	70-121	WG464281
2,2-Dichloropropane	mg/l	.025	0.0232	92.9	46-151	WG464281
2-Butanone (MEK)	mg/l	.125	0.106	84.9	53-132	WG464281
2-Chloroethyl vinyl ether	mg/l	.125	0.106	84.8	0-171	WG464281
2-Chlorotoluene	mg/l	.025	0.0264	105.	74-128	WG464281
4-Chlorotoluene	mg/l	.025	0.0270	108.	74-130	WG464281
4-Methyl-2-pentanone (MIBK)	mg/l	.125	0.113	90.5	60-142	WG464281
Acetone	mg/l	.125	0.103	82.2	48-134	WG464281
Acrolein	mg/l	.125	0.0915	73.2	6-182	WG464281
Acrylonitrile	mg/l	.125	0.0985	78.8	60-140	WG464281
Benzene	mg/l	.025	0.0217	86.8	67-126	WG464281
Bromobenzene	mg/l	.025	0.0256	102.	76-123	WG464281
Bromodichloromethane	mg/l	.025	0.0240	96.1	68-133	WG464281
Bromoform	mg/l	.025	0.0306	122.	60-139	WG464281
Bromomethane	mg/l	.025	0.0222	88.8	45-175	WG464281
Carbon tetrachloride	mg/l	.025	0.0252	101.	64-141	WG464281
Chlorobenzene	mg/l	.025	0.0269	108.	77-125	WG464281
Chlorodibromomethane	mg/l	.025	0.0291	116.	73-138	WG464281
Chloroethane	mg/l	.025	0.0229	91.8	49-155	WG464281
Chloroform	mg/l	.025	0.0223	89.2	66-126	WG464281
Chloromethane	mg/l	.025	0.0216	86.3	45-152	WG464281
cis-1,2-Dichloroethene	mg/l	.025	0.0248	99.3	72-128	WG464281
cis-1,3-Dichloropropene	mg/l	.025	0.0234	93.4	73-131	WG464281
Di-isopropyl ether	mg/l	.025	0.0210	83.8	63-139	WG464281
Dibromomethane	mg/l	.025	0.0236	94.5	73-125	WG464281
Dichlorodifluoromethane	mg/l	.025	0.0340	136.	39-189	WG464281
Ethylbenzene	mg/l	.025	0.0275	110.	76-129	WG464281
Hexachloro-1,3-Butadiene	mg/l	.025	0.0295	118.	67-135	WG464281
Isopropylbenzene	mg/l	.025	0.0274	110.	73-132	WG464281
Methyl tert-butyl ether	mg/l	.025	0.0232	93.0	51-142	WG464281
Methylene Chloride	mg/l	.025	0.0226	90.4	64-125	WG464281
n-Butylbenzene	mg/l	.025	0.0270	108.	63-142	WG464281
n-Propylbenzene	mg/l	.025	0.0265	106.	71-132	WG464281
Naphthalene	mg/l	.025	0.0263	105.	56-145	WG464281
p-Isopropyltoluene	mg/l	.025	0.0288	115.	68-138	WG464281
sec-Butylbenzene	mg/l	.025	0.0275	110.	70-135	WG464281
Styrene	mg/l	.025	0.0278	111.	78-130	WG464281
tert-Butylbenzene	mg/l	.025	0.0278	111.	72-134	WG464281
Tetrachloroethene	mg/l	.025	0.0293	117.	67-135	WG464281
Toluene	mg/l	.025	0.0238	95.1	72-122	WG464281
trans-1,2-Dichloroethene	mg/l	.025	0.0237	94.9	67-129	WG464281
trans-1,3-Dichloropropene	mg/l	.025	0.0224	89.6	66-137	WG464281
Trichloroethene	mg/l	.025	0.0258	103.	74-126	WG464281
Trichlorofluoromethane	mg/l	.025	0.0260	104.	54-156	WG464281
Vinyl chloride	mg/l	.025	0.0228	91.1	55-153	WG464281

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Analyte	Units	Laboratory Control Sample		% Rec	Limit	Batch
		Known Val	Result			
Xylenes, Total	mg/l	.075	0.0822	110.	75-128	WG464281
4-Bromofluorobenzene				99.10	75-128	WG464281
Dibromofluoromethane				89.30	79-125	WG464281
Toluene-d8				95.15	87-114	WG464281
1,1,1,2-Tetrachloroethane	mg/kg	.025	0.0246	98.2	73-134	WG464314
1,1,1-Trichloroethane	mg/kg	.025	0.0200	79.8	62-135	WG464314
1,1,2,2-Tetrachloroethane	mg/kg	.025	0.0217	87.0	74-129	WG464314
1,1,2-Trichloroethane	mg/kg	.025	0.0224	89.4	77-124	WG464314
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg	.025	0.0235	93.9	49-155	WG464314
1,1-Dichloroethane	mg/kg	.025	0.0193	77.1	61-134	WG464314
1,1-Dichloroethene	mg/kg	.025	0.0183	73.2	53-136	WG464314
1,1-Dichloropropene	mg/kg	.025	0.0179	71.5	63-132	WG464314
1,2,3-Trichlorobenzene	mg/kg	.025	0.0198	79.4	62-146	WG464314
1,2,3-Trichloropropane	mg/kg	.025	0.0222	88.8	70-133	WG464314
1,2,4-Trichlorobenzene	mg/kg	.025	0.0199	79.5	61-148	WG464314
1,2,4-Trimethylbenzene	mg/kg	.025	0.0217	86.9	68-135	WG464314
1,2-Dibromo-3-Chloropropane	mg/kg	.025	0.0198	79.0	61-134	WG464314
1,2-Dibromoethane	mg/kg	.025	0.0221	88.4	76-127	WG464314
1,2-Dichlorobenzene	mg/kg	.025	0.0213	85.3	77-123	WG464314
1,2-Dichloroethane	mg/kg	.025	0.0196	78.3	58-141	WG464314
1,2-Dichloropropane	mg/kg	.025	0.0180	72.1	71-128	WG464314
1,3,5-Trimethylbenzene	mg/kg	.025	0.0221	88.4	71-133	WG464314
1,3-Dichlorobenzene	mg/kg	.025	0.0223	89.1	71-132	WG464314
1,3-Dichloropropane	mg/kg	.025	0.0214	85.5	76-120	WG464314
1,4-Dichlorobenzene	mg/kg	.025	0.0201	80.4	72-123	WG464314
2,2-Dichloropropane	mg/kg	.025	0.0209	83.5	50-147	WG464314
2-Butanone (MEK)	mg/kg	.125	0.0958	76.7	51-131	WG464314
2-Chloroethyl vinyl ether	mg/kg	.125	0.143	114.	0-188	WG464314
2-Chlorotoluene	mg/kg	.025	0.0208	83.2	73-128	WG464314
4-Chlorotoluene	mg/kg	.025	0.0215	86.0	72-129	WG464314
4-Methyl-2-pentanone (MIBK)	mg/kg	.125	0.104	83.3	61-143	WG464314
Acetone	mg/kg	.125	0.0957	76.5	44-140	WG464314
Acrylonitrile	mg/kg	.125	0.0917	73.4	55-143	WG464314
Benzene	mg/kg	.025	0.0168	67.0	65-128	WG464314
Bromobenzene	mg/kg	.025	0.0215	86.1	75-123	WG464314
Bromodichloromethane	mg/kg	.025	0.0211	84.5	66-126	WG464314
Bromoform	mg/kg	.025	0.0210	83.9	64-139	WG464314
Bromomethane	mg/kg	.025	0.0146	58.3	41-175	WG464314
Carbon tetrachloride	mg/kg	.025	0.0194	77.7	60-140	WG464314
Chlorobenzene	mg/kg	.025	0.0227	90.9	75-125	WG464314
Chlorodibromomethane	mg/kg	.025	0.0249	99.5	72-137	WG464314
Chloroethane	mg/kg	.025	0.0166	66.3	44-159	WG464314
Chloroform	mg/kg	.025	0.0194	77.7	63-123	WG464314
Chloromethane	mg/kg	.025	0.0130	52.1	42-149	WG464314
cis-1,2-Dichloroethene	mg/kg	.025	0.0186	74.4	71-129	WG464314
cis-1,3-Dichloropropene	mg/kg	.025	0.0183	73.0	73-132	WG464314
Di-isopropyl ether	mg/kg	.025	0.0212	84.7	59-143	WG464314
Dibromomethane	mg/kg	.025	0.0194	77.7	70-130	WG464314
Dichlorodifluoromethane	mg/kg	.025	0.0255	102.	26-186	WG464314
Ethylbenzene	mg/kg	.025	0.0229	91.6	74-128	WG464314
Hexachloro-1,3-Butadiene	mg/kg	.025	0.0182	72.7	65-137	WG464314
Isopropylbenzene	mg/kg	.025	0.0214	85.6	73-130	WG464314
Methyl tert-butyl ether	mg/kg	.025	0.0220	88.0	44-148	WG464314
Methylene Chloride	mg/kg	.025	0.0177	70.7	57-129	WG464314
n-Butylbenzene	mg/kg	.025	0.0194	77.5	60-145	WG464314
n-Propylbenzene	mg/kg	.025	0.0209	83.5	71-132	WG464314
Naphthalene	mg/kg	.025	0.0223	89.1	61-142	WG464314

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Quality Assurance Report
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 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

February 26, 2010

Analyte	Units	Laboratory Control Sample		% Rec	Limit	Batch
		Known Val	Result			
p-Isopropyltoluene	mg/kg	.025	0.0210	84.0	67-138	WG464314
sec-Butylbenzene	mg/kg	.025	0.0219	87.7	71-134	WG464314
Styrene	mg/kg	.025	0.0214	85.8	76-133	WG464314
tert-Butylbenzene	mg/kg	.025	0.0233	93.0	72-132	WG464314
Tetrachloroethene	mg/kg	.025	0.0197	78.8	65-135	WG464314
Toluene	mg/kg	.025	0.0177	70.9	70-120	WG464314
trans-1,2-Dichloroethene	mg/kg	.025	0.0166	66.4	61-133	WG464314
trans-1,3-Dichloropropene	mg/kg	.025	0.0200	79.9	70-135	WG464314
Trichloroethene	mg/kg	.025	0.0199	79.8	71-126	WG464314
Trichlorofluoromethane	mg/kg	.025	0.0157	63.0	52-147	WG464314
Vinyl chloride	mg/kg	.025	0.0209	83.7	50-151	WG464314
Xylenes, Total	mg/kg	.075	0.0667	88.9	74-127	WG464314
4-Bromofluorobenzene				109.1	59-140	WG464314
Dibromofluoromethane				100.4	63-139	WG464314
Toluene-d8				98.88	84-116	WG464314
Total Solids	%	50	50.0	100.	85-115	WG464377
Total Solids	%	50	50.0	100.	85-115	WG464378
Arsenic, Dissolved	mg/l	1.13	1.03	91.2	85-115	WG464546
Barium, Dissolved	mg/l	1.13	1.12	99.1	85-115	WG464546
Cadmium, Dissolved	mg/l	1.13	1.12	99.1	85-115	WG464546
Chromium, Dissolved	mg/l	1.13	1.15	102.	85-115	WG464546
Lead, Dissolved	mg/l	1.13	1.12	99.1	85-115	WG464546
Selenium, Dissolved	mg/l	1.13	1.02	90.3	85-115	WG464546
Silver, Dissolved	mg/l	1.13	1.11	98.2	85-115	WG464546
Mercury, Dissolved	mg/l	.003	0.00284	94.7	85-115	WG464257
Mercury	mg/kg	8.77	10.7	122.	71.6-127.7	WG464258
Chromium	mg/l	1.13	1.13	100.	85-115	WG464527
Arsenic	mg/kg	192	192.	100.	78.6-120.8	WG464299
Barium	mg/kg	420	432.	103.	78.8-121.4	WG464299
Cadmium	mg/kg	70.1	67.0	95.6	78.5-121.5	WG464299
Chromium	mg/kg	168	171.	102.	80.4-120.2	WG464299
Lead	mg/kg	113	114.	101.	77.3-122.1	WG464299
Selenium	mg/kg	176	171.	97.2	75.6-125.0	WG464299
Silver	mg/kg	115	113.	98.3	66-133.9	WG464299
Chromium, Hexavalent	mg/kg	100	97.4	97.4	50-143	WG464275

Analyte	Units	Laboratory Control Sample Duplicate			Limit	RPD	Limit	Batch
		Result	Ref	%Rec				
Chromium, Hexavalent	mg/l	0.602	0.609	100.	85-115	1.16	20	WG464252
1,1,1,2-Tetrachloroethane	mg/l	0.0280	0.0281	112.	75-134	0.0435	20	WG464281

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Analyte	Units	Laboratory Control		Sample Duplicate		Limit	RPD	Limit	Batch
		Result	Ref	%Rec					
1,1,1-Trichloroethane	mg/l	0.0248	0.0235	99.0		67-137	5.26	20	WG464281
1,1,2,2-Tetrachloroethane	mg/l	0.0263	0.0259	105.		72-128	1.40	20	WG464281
1,1,2-Trichloroethane	mg/l	0.0271	0.0269	108.		79-123	0.547	20	WG464281
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/l	0.0288	0.0298	115.		51-149	3.33	20	WG464281
1,1-Dichloroethane	mg/l	0.0215	0.0218	86.0		67-133	1.11	20	WG464281
1,1-Dichloroethene	mg/l	0.0251	0.0261	100.		60-130	3.59	20	WG464281
1,1-Dichloropropene	mg/l	0.0230	0.0222	92.0		68-132	3.78	20	WG464281
1,2,3-Trichlorobenzene	mg/l	0.0259	0.0259	103.		63-138	0.293	20	WG464281
1,2,3-Trichloropropene	mg/l	0.0263	0.0257	105.		68-130	2.09	20	WG464281
1,2,3-Trimethylbenzene	mg/l	0.0255	0.0259	102.		70-127	1.72	20	WG464281
1,2,4-Trichlorobenzene	mg/l	0.0254	0.0255	101.		65-137	0.430	20	WG464281
1,2,4-Trimethylbenzene	mg/l	0.0282	0.0279	113.		72-135	1.13	20	WG464281
1,2-Dibromo-3-Chloropropane	mg/l	0.0303	0.0305	121.		55-134	0.743	20	WG464281
1,2-Dibromoethane	mg/l	0.0274	0.0271	110.		75-126	1.00	20	WG464281
1,2-Dichlorobenzene	mg/l	0.0263	0.0270	105.		75-122	2.49	20	WG464281
1,2-Dichloroethane	mg/l	0.0219	0.0219	87.0		63-137	0.109	20	WG464281
1,2-Dichloropropene	mg/l	0.0224	0.0228	89.0		74-122	1.97	20	WG464281
1,3,5-Trimethylbenzene	mg/l	0.0282	0.0276	113.		73-134	2.27	20	WG464281
1,3-Dichlorobenzene	mg/l	0.0281	0.0278	112.		73-131	0.899	20	WG464281
1,3-Dichloropropene	mg/l	0.0255	0.0257	102.		77-119	0.600	20	WG464281
1,4-Dichlorobenzene	mg/l	0.0258	0.0264	103.		70-121	2.31	20	WG464281
2,2-Dichloropropene	mg/l	0.0224	0.0232	90.0		46-151	3.64	20	WG464281
2-Butanone (MEK)	mg/l	0.109	0.106	87.0		53-132	2.99	20	WG464281
2-Chloroethyl vinyl ether	mg/l	0.104	0.106	83.0		0-171	2.15	27	WG464281
2-Chlorotoluene	mg/l	0.0272	0.0264	109.		74-128	2.93	20	WG464281
4-Chlorotoluene	mg/l	0.0274	0.0270	110.		74-130	1.76	20	WG464281
4-Methyl-2-pentanone (MIBK)	mg/l	0.111	0.113	89.0		60-142	1.71	20	WG464281
Acetone	mg/l	0.101	0.103	81.0		48-134	1.44	20	WG464281
Acrolein	mg/l	0.0895	0.0915	72.0		6-182	2.21	39	WG464281
Acrylonitrile	mg/l	0.0973	0.0985	78.0		60-140	1.22	20	WG464281
Benzene	mg/l	0.0220	0.0217	88.0		67-126	1.29	20	WG464281
Bromobenzene	mg/l	0.0264	0.0256	106.		76-123	3.22	20	WG464281
Bromodichloromethane	mg/l	0.0237	0.0240	95.0		68-133	1.58	20	WG464281
Bromoform	mg/l	0.0309	0.0306	124.		60-139	1.11	20	WG464281
Bromomethane	mg/l	0.0226	0.0222	90.0		45-175	1.86	20	WG464281
Carbon tetrachloride	mg/l	0.0264	0.0252	105.		64-141	4.64	20	WG464281
Chlorobenzene	mg/l	0.0271	0.0269	108.		77-125	0.476	20	WG464281
Chlorodibromomethane	mg/l	0.0289	0.0291	116.		73-138	0.525	20	WG464281
Chloroethane	mg/l	0.0225	0.0229	90.0		49-155	2.09	20	WG464281
Chloroform	mg/l	0.0214	0.0223	86.0		66-126	4.12	20	WG464281
Chloromethane	mg/l	0.0209	0.0216	83.0		45-152	3.39	20	WG464281
cis-1,2-Dichloroethene	mg/l	0.0223	0.0248	89.0		72-128	10.8	20	WG464281
cis-1,3-Dichloropropene	mg/l	0.0233	0.0234	93.0		73-131	0.301	20	WG464281
Di-isopropyl ether	mg/l	0.0207	0.0210	83.0		63-139	1.17	20	WG464281
Dibromomethane	mg/l	0.0236	0.0236	94.0		73-125	0.0238	20	WG464281
Dichlorodifluoromethane	mg/l	0.0332	0.0340	133.		39-189	2.11	24	WG464281
Ethylbenzene	mg/l	0.0279	0.0275	112.		76-129	1.47	20	WG464281
Hexachloro-1,3-Butadiene	mg/l	0.0293	0.0295	117.		67-135	0.639	20	WG464281
Isopropylbenzene	mg/l	0.0280	0.0274	112.		73-132	2.16	20	WG464281
Methyl tert-butyl ether	mg/l	0.0230	0.0232	92.0		51-142	1.28	20	WG464281
Methylene Chloride	mg/l	0.0220	0.0226	88.0		64-125	2.52	20	WG464281
n-Butylbenzene	mg/l	0.0264	0.0270	106.		63-142	2.05	20	WG464281
n-Propylbenzene	mg/l	0.0272	0.0265	109.		71-132	2.52	20	WG464281
Naphthalene	mg/l	0.0263	0.0263	105.		56-145	0.122	20	WG464281
p-Isopropyltoluene	mg/l	0.0291	0.0288	116.		68-138	1.30	20	WG464281
sec-Butylbenzene	mg/l	0.0283	0.0275	113.		70-135	2.75	20	WG464281
Styrene	mg/l	0.0280	0.0278	112.		78-130	0.776	20	WG464281
tert-Butylbenzene	mg/l	0.0285	0.0278	114.		72-134	2.52	20	WG464281
Tetrachloroethene	mg/l	0.0293	0.0293	117.		67-135	0.0737	20	WG464281

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Analyte	Units	Laboratory Control		Sample Duplicate	Limit	RPD	Limit	Batch
		Result	Ref	%Rec				
Toluene	mg/l	0.0238	0.0238	95.0	72-122	0.105	20	WG464281
trans-1,2-Dichloroethene	mg/l	0.0231	0.0237	92.0	67-129	2.89	20	WG464281
trans-1,3-Dichloropropene	mg/l	0.0218	0.0224	87.0	66-137	2.70	20	WG464281
Trichloroethene	mg/l	0.0257	0.0258	103.	74-126	0.318	20	WG464281
Trichlorofluoromethane	mg/l	0.0254	0.0260	102.	54-156	2.15	20	WG464281
Vinyl chloride	mg/l	0.0220	0.0228	88.0	55-153	3.27	20	WG464281
Xylenes, Total	mg/l	0.0829	0.0822	110.	75-128	0.852	20	WG464281
4-Bromofluorobenzene				102.6	75-128			WG464281
Dibromofluoromethane				95.14	79-125			WG464281
Toluene-d8				94.61	87-114			WG464281
1,1,1,2-Tetrachloroethane	mg/kg	0.0265	0.0246	106.	73-134	7.43	20	WG464314
1,1,1-Trichloroethane	mg/kg	0.0215	0.0200	86.0	62-135	7.54	20	WG464314
1,1,2,2-Tetrachloroethane	mg/kg	0.0231	0.0217	92.0	74-129	6.26	20	WG464314
1,1,2-Trichloroethane	mg/kg	0.0236	0.0224	94.0	77-124	5.37	20	WG464314
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg	0.0248	0.0235	99.0	49-155	5.45	20	WG464314
1,1-Dichloroethane	mg/kg	0.0203	0.0193	81.0	61-134	5.04	20	WG464314
1,1-Dichloroethane	mg/kg	0.0194	0.0183	78.0	53-136	5.70	20	WG464314
1,1-Dichloropropene	mg/kg	0.0193	0.0179	77.0	63-132	7.62	20	WG464314
1,2,3-Trichlorobenzene	mg/kg	0.0215	0.0198	86.0	62-146	7.77	20	WG464314
1,2,3-Trichloropropane	mg/kg	0.0234	0.0222	93.0	70-133	5.09	20	WG464314
1,2,4-Trichlorobenzene	mg/kg	0.0217	0.0199	87.0	61-148	8.77	20	WG464314
1,2,4-Trimethylbenzene	mg/kg	0.0233	0.0217	93.0	68-135	7.02	20	WG464314
1,2-Dibromo-3-Chloropropane	mg/kg	0.0210	0.0198	84.0	61-134	6.33	21	WG464314
1,2-Dibromoethane	mg/kg	0.0241	0.0221	96.0	76-127	8.78	20	WG464314
1,2-Dichlorobenzene	mg/kg	0.0221	0.0213	88.0	77-123	3.52	20	WG464314
1,2-Dichloroethane	mg/kg	0.0218	0.0196	87.0	58-141	10.7	20	WG464314
1,2-Dichloropropane	mg/kg	0.0204	0.0180	82.0	71-128	12.4	20	WG464314
1,3,5-Trimethylbenzene	mg/kg	0.0241	0.0221	96.0	71-133	8.81	20	WG464314
1,3-Dichlorobenzene	mg/kg	0.0242	0.0223	97.0	71-132	8.10	20	WG464314
1,3-Dichloropropane	mg/kg	0.0224	0.0214	90.0	76-120	4.76	20	WG464314
1,4-Dichlorobenzene	mg/kg	0.0214	0.0201	86.0	72-123	6.24	20	WG464314
2,2-Dichloropropane	mg/kg	0.0225	0.0209	90.0	50-147	7.58	20	WG464314
2-Butanone (MEK)	mg/kg	0.104	0.0958	83.0	51-131	7.71	25	WG464314
2-Chloroethyl vinyl ether	mg/kg	0.151	0.143	121.	0-188	5.90	39	WG464314
2-Chlorotoluene	mg/kg	0.0228	0.0208	91.0	73-128	9.42	20	WG464314
4-Chlorotoluene	mg/kg	0.0233	0.0215	93.0	72-129	8.07	20	WG464314
4-Methyl-2-pentanone (MIBK)	mg/kg	0.112	0.104	89.0	61-143	6.86	23	WG464314
Acetone	mg/kg	0.105	0.0957	84.0	44-140	8.99	25	WG464314
Acrylonitrile	mg/kg	0.0973	0.0917	78.0	55-143	5.92	20	WG464314
Benzene	mg/kg	0.0182	0.0168	73.0	65-128	8.15	20	WG464314
Bromobenzene	mg/kg	0.0225	0.0215	90.0	75-123	4.27	20	WG464314
Bromodichloromethane	mg/kg	0.0224	0.0211	90.0	66-126	5.83	20	WG464314
Bromoform	mg/kg	0.0235	0.0210	94.0	64-139	11.4	20	WG464314
Bromomethane	mg/kg	0.0159	0.0146	63.0	41-175	8.47	20	WG464314
Carbon tetrachloride	mg/kg	0.0214	0.0194	86.0	60-140	9.79	20	WG464314
Chlorobenzene	mg/kg	0.0241	0.0227	96.0	75-125	5.74	20	WG464314
Chlorodibromomethane	mg/kg	0.0261	0.0249	104.	72-137	5.01	20	WG464314
Chloroethane	mg/kg	0.0191	0.0166	76.0	44-159	14.4	20	WG464314
Chloroform	mg/kg	0.0214	0.0194	86.0	63-123	9.64	20	WG464314
Chloromethane	mg/kg	0.0143	0.0130	57.0	42-149	9.50	20	WG464314
cis-1,2-Dichloroethene	mg/kg	0.0200	0.0186	80.0	71-129	7.29	20	WG464314
cis-1,3-Dichloropropene	mg/kg	0.0197	0.0183	79.0	73-132	7.82	20	WG464314
Di-isopropyl ether	mg/kg	0.0229	0.0212	92.0	59-143	7.79	20	WG464314
Dibromomethane	mg/kg	0.0215	0.0194	86.0	70-130	10.2	20	WG464314
Dichlorodifluoromethane	mg/kg	0.0272	0.0255	109.	26-186	6.13	22	WG464314
Ethylbenzene	mg/kg	0.0234	0.0229	94.0	74-128	2.07	20	WG464314
Hexachloro-1,3-Butadiene	mg/kg	0.0201	0.0182	80.0	65-137	10.1	20	WG464314

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 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

February 26, 2010

Analyte	Units	Laboratory Control Sample Duplicate			Limit	RPD	Limit	Batch
		Result	Ref	%Rec				
Isopropylbenzene	mg/kg	0.0228	0.0214	91.0	73-130	6.24	20	WG464314
Methyl tert-butyl ether	mg/kg	0.0229	0.0220	92.0	44-148	4.15	20	WG464314
Methylene Chloride	mg/kg	0.0180	0.0177	72.0	57-129	2.06	20	WG464314
n-Butylbenzene	mg/kg	0.0211	0.0194	84.0	60-145	8.72	20	WG464314
n-Propylbenzene	mg/kg	0.0225	0.0209	90.0	71-132	7.54	20	WG464314
Napththalene	mg/kg	0.0243	0.0223	97.0	61-142	8.71	20	WG464314
p-Isopropyltoluene	mg/kg	0.0228	0.0210	91.0	67-138	8.22	20	WG464314
sec-Butylbenzene	mg/kg	0.0237	0.0219	95.0	71-134	7.81	20	WG464314
Styrene	mg/kg	0.0231	0.0214	92.0	76-133	7.27	20	WG464314
tert-Butylbenzene	mg/kg	0.0254	0.0233	102.	72-132	8.96	20	WG464314
Tetrachloroethene	mg/kg	0.0209	0.0197	84.0	65-135	5.84	20	WG464314
Toluene	mg/kg	0.0191	0.0177	76.0	70-120	7.30	20	WG464314
trans-1,2-Dichloroethene	mg/kg	0.0179	0.0166	71.0	61-133	7.41	20	WG464314
trans-1,3-Dichloropropene	mg/kg	0.0221	0.0200	88.0	70-135	10.0	20	WG464314
Trichloroethene	mg/kg	0.0221	0.0199	88.0	71-126	10.1	20	WG464314
Trichlorofluoromethane	mg/kg	0.0166	0.0157	66.0	52-147	5.55	20	WG464314
Vinyl chloride	mg/kg	0.0217	0.0209	87.0	50-151	3.73	20	WG464314
Xylenes, Total	mg/kg	0.0712	0.0667	95.0	74-127	6.56	20	WG464314
4-Bromofluorobenzene				108.2	59-140			WG464314
Dibromofluoromethane				100.3	63-139			WG464314
Toluene-d8				98.99	84-116			WG464314
Chromium,Hexavalent	mg/kg	98.3	97.4	98.0	50-143	0.920	20	WG464275

Analyte	Units	Matrix Spike				Limit	Ref Samp	Batch
		MS Res	Ref Res	TV	% Rec			
Chromium,Hexavalent	mg/l	0.501	0	.5	100.	85-115	L445855-01	WG464252
1,1,1,2-Tetrachloroethane	mg/l	0.0267	0	.025	107.	45-152	L445786-08	WG464281
1,1,1-Trichloroethane	mg/l	0.0228	0	.025	91.2	31-161	L445786-08	WG464281
1,1,2,2-Tetrachloroethane	mg/l	0.0259	0	.025	104.	49-149	L445786-08	WG464281
1,1,2-Trichloroethane	mg/l	0.0263	0	.025	105.	46-145	L445786-08	WG464281
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/l	0.0289	0	.025	116.	14-168	L445786-08	WG464281
1,1-Dichloroethane	mg/l	0.0212	0	.025	84.7	30-159	L445786-08	WG464281
1,1-Dichloroethene	mg/l	0.0253	0	.025	101.	10-162	L445786-08	WG464281
1,1-Dichloropropene	mg/l	0.0212	0	.025	84.9	14-162	L445786-08	WG464281
1,2,3-Trichlorobenzene	mg/l	0.0251	0	.025	100.	32-143	L445786-08	WG464281
1,2,3-Trichloropropane	mg/l	0.0261	0	.025	104.	48-148	L445786-08	WG464281
1,2,3-Trimethylbenzene	mg/l	0.0245	0	.025	97.9	36-141	L445786-08	WG464281
1,2,4-Trichlorobenzene	mg/l	0.0247	0	.025	98.8	27-142	L445786-08	WG464281
1,2,4-Trimethylbenzene	mg/l	0.0267	0	.025	107.	29-153	L445786-08	WG464281
1,2-Dibromo-3-Chloropropane	mg/l	0.0302	0	.025	121.	37-148	L445786-08	WG464281
1,2-Dibromoethane	mg/l	0.0265	0	.025	106.	41-149	L445786-08	WG464281
1,2-Dichlorobenzene	mg/l	0.0257	0	.025	103.	40-139	L445786-08	WG464281
1,2-Dichloroethane	mg/l	0.0211	0	.025	84.3	29-167	L445786-08	WG464281
1,2-Dichloropropane	mg/l	0.0220	0	.025	88.1	39-148	L445786-08	WG464281
1,3,5-Trimethylbenzene	mg/l	0.0264	0	.025	106.	33-149	L445786-08	WG464281
1,3-Dichlorobenzene	mg/l	0.0272	0	.025	109.	32-148	L445786-08	WG464281
1,3-Dichloropropane	mg/l	0.0245	0	.025	98.1	44-142	L445786-08	WG464281
1,4-Dichlorobenzene	mg/l	0.0251	0	.025	100.	32-136	L445786-08	WG464281
2,2-Dichloropropane	mg/l	0.0234	0	.025	93.6	14-158	L445786-08	WG464281
2-Butanone (MEK)	mg/l	0.106	0	.125	84.9	32-151	L445786-08	WG464281
2-Chloroethyl vinyl ether	mg/l	0.000607	0	.125	0.486	0-175	L445786-08	WG464281
2-Chlorotoluene	mg/l	0.0258	0	.025	103.	35-147	L445786-08	WG464281
4-Chlorotoluene	mg/l	0.0264	0	.025	105.	33-147	L445786-08	WG464281
4-Methyl-2-pentanone (MIBK)	mg/l	0.114	0	.125	91.4	40-160	L445786-08	WG464281

* Performance of this Analyte is outside of established criteria.
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 Amy Zach
 7730 SW Mohawk Street
 Tualatin, OR 97062

Quality Assurance Report
 Level II

L445864

12065 Lebanon Rd.
 Mt. Juliet, TN 37122
 (615) 758-5858
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 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

February 26, 2010

Analyte	Units	MS Res	Matrix Spike		% Rec	Limit	Ref Samp	Batch
			Ref Res	TV				
Acetone	mg/l	0.106	0.00371	.125	82.0	25-157	L445786-08	WG464281
Acrolein	mg/l	0.0929	0	.125	74.3	0-179	L445786-08	WG464281
Acrylonitrile	mg/l	0.101	0	.125	81.1	37-162	L445786-08	WG464281
Benzene	mg/l	0.0209	0	.025	83.6	16-158	L445786-08	WG464281
Bromobenzene	mg/l	0.0250	0	.025	100.	37-147	L445786-08	WG464281
Bromodichloromethane	mg/l	0.0234	0	.025	93.7	45-147	L445786-08	WG464281
Bromoform	mg/l	0.0299	0	.025	119.	38-152	L445786-08	WG464281
Bromomethane	mg/l	0.0222	0	.025	88.8	0-191	L445786-08	WG464281
Carbon tetrachloride	mg/l	0.0236	0	.025	94.4	22-168	L445786-08	WG464281
Chlorobenzene	mg/l	0.0258	0	.025	103.	33-148	L445786-08	WG464281
Chlorodibromomethane	mg/l	0.0278	0	.025	111.	48-151	L445786-08	WG464281
Chloroethane	mg/l	0.0225	0	.025	89.9	4-176	L445786-08	WG464281
Chloroform	mg/l	0.0216	0	.025	86.5	37-147	L445786-08	WG464281
Chloromethane	mg/l	0.0216	0	.025	86.4	10-174	L445786-08	WG464281
cis-1,2-Dichloroethene	mg/l	0.0242	0	.025	97.0	29-156	L445786-08	WG464281
cis-1,3-Dichloropropene	mg/l	0.0227	0	.025	91.0	35-148	L445786-08	WG464281
Di-isopropyl ether	mg/l	0.0206	0	.025	82.4	39-160	L445786-08	WG464281
Dibromomethane	mg/l	0.0233	0	.025	93.4	36-152	L445786-08	WG464281
Dichlorodifluoromethane	mg/l	0.0361	0	.025	144.	0-200	L445786-08	WG464281
Ethylbenzene	mg/l	0.0264	0	.025	105.	29-150	L445786-08	WG464281
Hexachloro-1,3-Butadiene	mg/l	0.0271	0	.025	108.	28-144	L445786-08	WG464281
Isopropylbenzene	mg/l	0.0266	0	.025	106.	35-147	L445786-08	WG464281
Methyl tert-butyl ether	mg/l	0.0227	0	.025	91.0	24-167	L445786-08	WG464281
Methylene Chloride	mg/l	0.0238	0	.025	95.1	23-151	L445786-08	WG464281
n-Butylbenzene	mg/l	0.0251	0	.025	100.	22-151	L445786-08	WG464281
n-Propylbenzene	mg/l	0.0255	0	.025	102.	26-150	L445786-08	WG464281
Naphthalene	mg/l	0.0259	0	.025	104.	24-160	L445786-08	WG464281
p-Isopropyltoluene	mg/l	0.0276	0	.025	110.	28-151	L445786-08	WG464281
sec-Butylbenzene	mg/l	0.0265	0	.025	106.	32-149	L445786-08	WG464281
Styrene	mg/l	0.0271	0	.025	108.	38-149	L445786-08	WG464281
tert-Butylbenzene	mg/l	0.0271	0	.025	108.	36-149	L445786-08	WG464281
Tetrachloroethene	mg/l	0.0278	0	.025	111.	13-157	L445786-08	WG464281
Toluene	mg/l	0.0229	0	.025	91.4	22-152	L445786-08	WG464281
trans-1,2-Dichloroethene	mg/l	0.0229	0	.025	91.5	11-160	L445786-08	WG464281
trans-1,3-Dichloropropene	mg/l	0.0220	0	.025	87.9	33-153	L445786-08	WG464281
Trichloroethene	mg/l	0.0243	0	.025	97.2	18-163	L445786-08	WG464281
Trichlorofluoromethane	mg/l	0.0251	0	.025	100.	10-177	L445786-08	WG464281
Vinyl chloride	mg/l	0.0228	0	.025	91.2	0-179	L445786-08	WG464281
Xylenes, Total	mg/l	0.0788	0	.075	105.	27-151	L445786-08	WG464281
4-Bromofluorobenzene					102.9	75-128		WG464281
Dibromofluoromethane					90.77	79-125		WG464281
Toluene-d8					97.26	87-114		WG464281
1,1,1,2-Tetrachloroethane	mg/kg	0.142	0	.025	114.	29-145	L445838-20	WG464314
1,1,1-Trichloroethane	mg/kg	0.117	0	.025	93.3	23-147	L445838-20	WG464314
1,1,2,2-Tetrachloroethane	mg/kg	0.126	0	.025	101.	18-150	L445838-20	WG464314
1,1,2-Trichloroethane	mg/kg	0.125	0	.025	100.	35-140	L445838-20	WG464314
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg	0.136	0	.025	109.	10-145	L445838-20	WG464314
1,1-Dichloroethane	mg/kg	0.111	0	.025	89.2	24-148	L445838-20	WG464314
1,1-Dichloroethene	mg/kg	0.109	0	.025	87.1	10-149	L445838-20	WG464314
1,1-Dichloropropene	mg/kg	0.0997	0	.025	79.7	10-141	L445838-20	WG464314
1,2,3-Trichlorobenzene	mg/kg	0.111	0	.025	88.6	10-129	L445838-20	WG464314
1,2,3-Trichloropropane	mg/kg	0.123	0	.025	98.2	30-148	L445838-20	WG464314
1,2,4-Trichlorobenzene	mg/kg	0.115	0	.025	92.4	10-119	L445838-20	WG464314
1,2,4-Trimethylbenzene	mg/kg	0.121	0	.025	97.0	10-145	L445838-20	WG464314
1,2-Dibromo-3-Chloropropane	mg/kg	0.109	0	.025	87.4	19-145	L445838-20	WG464314
1,2-Dibromoethane	mg/kg	0.127	0	.025	101.	24-145	L445838-20	WG464314
1,2-Dichlorobenzene	mg/kg	0.126	0	.025	100.	12-130	L445838-20	WG464314

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February 26, 2010

Analyte	Units	MS Res	Matrix Spike		% Rec	Limit	Ref Samp	Batch
			Ref Res	TV				
1,2-Dichloroethane	mg/kg	0.117	0	.025	93.3	21-155	L445838-20	WG464314
1,2-Dichloropropane	mg/kg	0.107	0	.025	85.3	28-144	L445838-20	WG464314
1,3,5-Trimethylbenzene	mg/kg	0.125	0	.025	99.7	10-135	L445838-20	WG464314
1,3-Dichlorobenzene	mg/kg	0.124	0	.025	99.0	10-129	L445838-20	WG464314
1,3-Dichloropropane	mg/kg	0.118	0	.025	94.6	31-137	L445838-20	WG464314
1,4-Dichlorobenzene	mg/kg	0.116	0	.025	92.6	10-121	L445838-20	WG464314
2,2-Dichloropropane	mg/kg	0.125	0	.025	100.	18-144	L445838-20	WG464314
2-Butanone (MEK)	mg/kg	0.545	0	.125	87.2	21-143	L445838-20	WG464314
2-Chloroethyl vinyl ether	mg/kg	0.805	0	.125	129.	0-176	L445838-20	WG464314
2-Chlorotoluene	mg/kg	0.119	0	.025	94.8	10-132	L445838-20	WG464314
4-Chlorotoluene	mg/kg	0.123	0	.025	98.1	10-129	L445838-20	WG464314
4-Methyl-2-pentanone (MIBK)	mg/kg	0.580	0	.125	92.8	31-151	L445838-20	WG464314
Acetone	mg/kg	0.564	0	.125	90.3	13-158	L445838-20	WG464314
Acrylonitrile	mg/kg	0.524	0	.125	83.8	20-154	L445838-20	WG464314
Benzene	mg/kg	0.0991	0	.025	79.3	16-143	L445838-20	WG464314
Bromobenzene	mg/kg	0.120	0	.025	96.2	14-135	L445838-20	WG464314
Bromodichloromethane	mg/kg	0.121	0	.025	96.9	27-139	L445838-20	WG464314
Bromoform	mg/kg	0.126	0	.025	101.	21-144	L445838-20	WG464314
Bromomethane	mg/kg	0.0871	0	.025	69.6	0-180	L445838-20	WG464314
Carbon tetrachloride	mg/kg	0.115	0	.025	91.7	12-149	L445838-20	WG464314
Chlorobenzene	mg/kg	0.127	0	.025	102.	17-134	L445838-20	WG464314
Chlorodibromomethane	mg/kg	0.141	0	.025	113.	28-147	L445838-20	WG464314
Chloroethane	mg/kg	0.103	0	.025	82.2	0-172	L445838-20	WG464314
Chloroform	mg/kg	0.117	0	.025	93.6	28-138	L445838-20	WG464314
Chloromethane	mg/kg	0.0827	0	.025	66.2	10-158	L445838-20	WG464314
cis-1,2-Dichloroethene	mg/kg	0.109	0	.025	86.9	21-147	L445838-20	WG464314
cis-1,3-Dichloropropene	mg/kg	0.104	0	.025	83.1	17-145	L445838-20	WG464314
Di-isopropyl ether	mg/kg	0.127	0	.025	102.	31-153	L445838-20	WG464314
Dibromomethane	mg/kg	0.113	0	.025	90.3	24-147	L445838-20	WG464314
Dichlorodifluoromethane	mg/kg	0.161	0	.025	129.	0-192	L445838-20	WG464314
Ethylbenzene	mg/kg	0.124	0	.025	99.2	12-137	L445838-20	WG464314
Hexachloro-1,3-Butadiene	mg/kg	0.103	0	.025	82.4	10-123	L445838-20	WG464314
Isopropylbenzene	mg/kg	0.118	0	.025	94.1	14-134	L445838-20	WG464314
Methyl tert-butyl ether	mg/kg	0.130	0	.025	104.	21-157	L445838-20	WG464314
Methylene Chloride	mg/kg	0.102	0	.025	81.4	12-149	L445838-20	WG464314
n-Butylbenzene	mg/kg	0.108	0	.025	86.6	10-130	L445838-20	WG464314
n-Propylbenzene	mg/kg	0.115	0	.025	91.8	10-130	L445838-20	WG464314
Naphthalene	mg/kg	0.128	0	.025	102.	0-146	L445838-20	WG464314
p-Isopropyltoluene	mg/kg	0.115	0	.025	92.2	10-131	L445838-20	WG464314
sec-Butylbenzene	mg/kg	0.123	0	.025	98.2	10-134	L445838-20	WG464314
Styrene	mg/kg	0.123	0	.025	98.3	10-140	L445838-20	WG464314
tert-Butylbenzene	mg/kg	0.131	0	.025	105.	11-137	L445838-20	WG464314
Tetrachloroethene	mg/kg	0.105	0	.025	83.7	10-131	L445838-20	WG464314
Toluene	mg/kg	0.0987	0	.025	79.0	12-136	L445838-20	WG464314
trans-1,2-Dichloroethene	mg/kg	0.0951	0	.025	76.1	10-143	L445838-20	WG464314
trans-1,3-Dichloropropene	mg/kg	0.118	0	.025	94.5	16-147	L445838-20	WG464314
Trichloroethene	mg/kg	0.111	0	.025	88.9	10-155	L445838-20	WG464314
Trichlorofluoromethane	mg/kg	0.0920	0	.025	73.6	10-154	L445838-20	WG464314
Vinyl chloride	mg/kg	0.122	0	.025	97.6	10-159	L445838-20	WG464314
Xylenes, Total	mg/kg	0.378	0	.075	101.	10-138	L445838-20	WG464314
4-Bromofluorobenzene					108.0	59-140		WG464314
Dibromofluoromethane					101.8	63-139		WG464314
Toluene-d8					97.58	84-116		WG464314
Arsenic,Dissolved	mg/l	1.02	0	1.13	90.3	75-125	L445937-21	WG464546
Barium,Dissolved	mg/l	1.08	0.0428	1.13	91.8	75-125	L445937-21	WG464546
Cadmium,Dissolved	mg/l	1.03	0	1.13	91.2	75-125	L445937-21	WG464546
Chromium,Dissolved	mg/l	1.06	0.000500	1.13	93.8	75-125	L445937-21	WG464546

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Analyte	Units	MS Res	Matrix Spike		% Rec	Limit	Ref Samp	Batch
			Ref Res	TV				
Lead, Dissolved	mg/l	1.05	0.00592	1.13	92.4	75-125	L445937-21	WG464546
Selenium, Dissolved	mg/l	1.00	0	1.13	88.5	75-125	L445937-21	WG464546
Silver, Dissolved	mg/l	0.159	0.00250	1.13	13.8*	75-125	L445937-21	WG464546
Mercury, Dissolved	mg/l	0.00283	0	.003	94.3	70-130	L445786-14	WG464257
Mercury	mg/kg	0.260	0	.25	104.	70-130	L445864-02	WG464258
Chromium	mg/l	1.16	0	1.13	103.	75-125	L445749-01	WG464527
Arsenic	mg/kg	49.8	6.20	10	87.2	75-125	L445838-24	WG464299
Barium	mg/kg	400.	350.	10	100.	75-125	L445838-24	WG464299
Cadmium	mg/kg	43.1	0	10	86.2	75-125	L445838-24	WG464299
Chromium	mg/kg	63.3	19.0	10	88.6	75-125	L445838-24	WG464299
Lead	mg/kg	61.2	17.0	10	88.4	75-125	L445838-24	WG464299
Selenium	mg/kg	43.0	0.518	10	85.0	75-125	L445838-24	WG464299
Silver	mg/kg	44.4	0	10	88.8	75-125	L445838-24	WG464299
Chromium, Hexavalent	mg/kg	19.5	0	20	97.5	80-120	L445864-02	WG464275

Analyte	Units	MSD	Matrix Spike Duplicate		Limit	RPD	Limit	Ref Samp	Batch
			Ref	%Rec					
Chromium, Hexavalent	mg/l	0.494	0.501	98.8	85-115	1.41	20	L445855-01	WG464252
1,1,1,2-Tetrachloroethane	mg/l	0.0279	0.0267	111.	45-152	4.40	21	L445786-08	WG464281
1,1,1-Trichloroethane	mg/l	0.0245	0.0228	98.1	31-161	7.32	23	L445786-08	WG464281
1,1,2,2-Tetrachloroethane	mg/l	0.0278	0.0259	111.	49-149	7.31	22	L445786-08	WG464281
1,1,2-Trichloroethane	mg/l	0.0276	0.0263	110.	46-145	4.69	20	L445786-08	WG464281
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/l	0.0293	0.0289	117.	14-168	1.47	24	L445786-08	WG464281
1,1-Dichloroethane	mg/l	0.0220	0.0212	87.9	30-159	3.73	21	L445786-08	WG464281
1,1-Dichloroethene	mg/l	0.0253	0.0253	101.	10-162	0.136	23	L445786-08	WG464281
1,1-Dichloropropene	mg/l	0.0225	0.0212	90.2	14-162	6.06	23	L445786-08	WG464281
1,2,3-Trichlorobenzene	mg/l	0.0273	0.0251	109.	32-143	8.52	33	L445786-08	WG464281
1,2,3-Trichloropropane	mg/l	0.0272	0.0261	109.	48-148	3.86	23	L445786-08	WG464281
1,2,3-Trimethylbenzene	mg/l	0.0255	0.0245	102.	36-141	4.19	25	L445786-08	WG464281
1,2,4-Trichlorobenzene	mg/l	0.0266	0.0247	106.	27-142	7.19	30	L445786-08	WG464281
1,2,4-Trimethylbenzene	mg/l	0.0282	0.0267	113.	29-153	5.71	27	L445786-08	WG464281
1,2-Dibromo-3-Chloropropane	mg/l	0.0322	0.0302	129.	37-148	6.21	27	L445786-08	WG464281
1,2-Dibromoethane	mg/l	0.0279	0.0265	112.	41-149	5.30	21	L445786-08	WG464281
1,2-Dichlorobenzene	mg/l	0.0273	0.0257	109.	40-139	6.10	23	L445786-08	WG464281
1,2-Dichloroethane	mg/l	0.0222	0.0211	88.8	29-167	5.25	21	L445786-08	WG464281
1,2-Dichloropropane	mg/l	0.0228	0.0220	91.3	39-148	3.61	20	L445786-08	WG464281
1,3,5-Trimethylbenzene	mg/l	0.0280	0.0264	112.	33-149	5.76	26	L445786-08	WG464281
1,3-Dichlorobenzene	mg/l	0.0281	0.0272	112.	32-148	3.08	24	L445786-08	WG464281
1,3-Dichloropropane	mg/l	0.0262	0.0245	105.	44-142	6.75	20	L445786-08	WG464281
1,4-Dichlorobenzene	mg/l	0.0267	0.0251	107.	32-136	6.32	23	L445786-08	WG464281
2,2-Dichloropropane	mg/l	0.0232	0.0234	92.9	14-158	0.829	23	L445786-08	WG464281
2-Butanone (MEK)	mg/l	0.116	0.106	93.1	32-151	9.18	26	L445786-08	WG464281
2-Chloroethyl vinyl ether	mg/l	0	0.000607	0.00	0-175	200.*	75	L445786-08	WG464281
2-Chlorotoluene	mg/l	0.0269	0.0258	108.	35-147	4.07	24	L445786-08	WG464281
4-Chlorotoluene	mg/l	0.0276	0.0264	110.	33-147	4.74	25	L445786-08	WG464281
4-Methyl-2-pentanone (MIBK)	mg/l	0.121	0.114	96.9	40-160	5.85	28	L445786-08	WG464281

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Analyte	Units	MSD	Matrix Spike Duplicate		Limit	RPD	Limit Ref	Samp	Batch
			Ref	%Rec					
Acetone	mg/l	0.111	0.106	85.7	25-157	4.24	26	L445786-08	WG464281
Acrolein	mg/l	0.0888	0.0929	71.0	0-179	4.51	39	L445786-08	WG464281
Acrylonitrile	mg/l	0.107	0.101	85.7	37-162	5.50	24	L445786-08	WG464281
Benzene	mg/l	0.0219	0.0209	87.7	16-158	4.81	21	L445786-08	WG464281
Bromobenzene	mg/l	0.0264	0.0250	105.	37-147	5.30	23	L445786-08	WG464281
Bromodichloromethane	mg/l	0.0245	0.0234	97.9	45-147	4.38	20	L445786-08	WG464281
Bromoform	mg/l	0.0317	0.0299	127.	38-152	5.92	20	L445786-08	WG464281
Bromomethane	mg/l	0.0234	0.0222	93.5	0-191	5.14	35	L445786-08	WG464281
Carbon tetrachloride	mg/l	0.0262	0.0236	105.	22-168	10.6	24	L445786-08	WG464281
Chlorobenzene	mg/l	0.0271	0.0258	108.	33-148	5.04	22	L445786-08	WG464281
Chlorodibromomethane	mg/l	0.0293	0.0278	117.	48-151	5.30	21	L445786-08	WG464281
Chloroethane	mg/l	0.0229	0.0225	91.4	4-176	1.67	27	L445786-08	WG464281
Chloroform	mg/l	0.0224	0.0216	89.5	37-147	3.37	21	L445786-08	WG464281
Chloromethane	mg/l	0.0216	0.0216	86.4	10-174	0.0390	28	L445786-08	WG464281
cis-1,2-Dichloroethene	mg/l	0.0232	0.0242	92.6	29-156	4.59	22	L445786-08	WG464281
cis-1,3-Dichloropropene	mg/l	0.0236	0.0227	94.3	35-148	3.61	21	L445786-08	WG464281
Di-isopropyl ether	mg/l	0.0213	0.0206	85.3	39-160	3.45	21	L445786-08	WG464281
Dibromomethane	mg/l	0.0241	0.0233	96.4	36-152	3.14	20	L445786-08	WG464281
Dichlorodifluoromethane	mg/l	0.0354	0.0361	142.	0-200	1.94	26	L445786-08	WG464281
Ethylbenzene	mg/l	0.0278	0.0264	111.	29-150	5.19	24	L445786-08	WG464281
Hexachloro-1,3-Butadiene	mg/l	0.0295	0.0271	118.	28-144	8.62	33	L445786-08	WG464281
Isopropylbenzene	mg/l	0.0278	0.0266	111.	35-147	4.45	25	L445786-08	WG464281
Methyl tert-butyl ether	mg/l	0.0237	0.0227	95.0	24-167	4.26	22	L445786-08	WG464281
Methylene Chloride	mg/l	0.0243	0.0238	97.2	23-151	2.21	21	L445786-08	WG464281
n-Butylbenzene	mg/l	0.0269	0.0251	108.	22-151	7.02	29	L445786-08	WG464281
n-Propylbenzene	mg/l	0.0268	0.0255	107.	26-150	5.23	25	L445786-08	WG464281
Naphthalene	mg/l	0.0274	0.0259	110.	24-160	5.52	37	L445786-08	WG464281
p-Isopropyltoluene	mg/l	0.0286	0.0276	114.	28-151	3.40	27	L445786-08	WG464281
sec-Butylbenzene	mg/l	0.0279	0.0265	112.	32-149	4.91	26	L445786-08	WG464281
Styrene	mg/l	0.0283	0.0271	113.	38-149	4.10	23	L445786-08	WG464281
tert-Butylbenzene	mg/l	0.0284	0.0271	113.	36-149	4.57	26	L445786-08	WG464281
Tetrachloroethene	mg/l	0.0288	0.0278	115.	13-157	3.58	24	L445786-08	WG464281
Toluene	mg/l	0.0239	0.0229	95.6	22-152	4.51	22	L445786-08	WG464281
trans-1,2-Dichloroethene	mg/l	0.0230	0.0229	92.1	11-160	0.713	23	L445786-08	WG464281
trans-1,3-Dichloropropene	mg/l	0.0229	0.0220	91.6	33-153	4.03	22	L445786-08	WG464281
Trichloroethene	mg/l	0.0256	0.0243	102.	18-163	5.21	21	L445786-08	WG464281
Trichlorofluoromethane	mg/l	0.0255	0.0251	102.	10-177	1.76	24	L445786-08	WG464281
Vinyl chloride	mg/l	0.0228	0.0228	91.3	0-179	0.0556	26	L445786-08	WG464281
Xylenes, Total	mg/l	0.0830	0.0788	111.	27-151	5.14	23	L445786-08	WG464281
4-Bromofluorobenzene				102.3	75-128				WG464281
Dibromofluoromethane				94.12	79-125				WG464281
Toluene-d8				95.61	87-114				WG464281
1,1,1,2-Tetrachloroethane	mg/kg	0.121	0.142	96.7	29-145	16.3	31	L445838-20	WG464314
1,1,1-Trichloroethane	mg/kg	0.0968	0.117	77.4	23-147	18.6	32	L445838-20	WG464314
1,1,2,2-Tetrachloroethane	mg/kg	0.105	0.126	83.9	18-150	18.5	33	L445838-20	WG464314
1,1,2-Trichloroethane	mg/kg	0.110	0.125	88.0	35-140	12.9	29	L445838-20	WG464314
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg	0.110	0.136	88.0	10-145	21.4	35	L445838-20	WG464314
1,1-Dichloroethane	mg/kg	0.0935	0.111	74.8	24-148	17.6	31	L445838-20	WG464314
1,1-Dichloroethene	mg/kg	0.0879	0.109	70.3	10-149	21.3	34	L445838-20	WG464314
1,1-Dichloropropene	mg/kg	0.0812	0.0997	64.9	10-141	20.5	34	L445838-20	WG464314
1,2,3-Trichlorobenzene	mg/kg	0.0888	0.111	71.1	10-129	22.0	43	L445838-20	WG464314
1,2,3-Trichloropropane	mg/kg	0.110	0.123	88.2	30-148	10.7	32	L445838-20	WG464314
1,2,4-Trichlorobenzene	mg/kg	0.0884	0.115	70.7	10-119	26.6	44	L445838-20	WG464314
1,2,4-Trimethylbenzene	mg/kg	0.103	0.121	82.3	10-145	16.4	41	L445838-20	WG464314
1,2-Dibromo-3-Chloropropane	mg/kg	0.0899	0.109	71.9	19-145	19.4	35	L445838-20	WG464314
1,2-Dibromoethane	mg/kg	0.106	0.127	85.0	24-145	17.6	31	L445838-20	WG464314
1,2-Dichlorobenzene	mg/kg	0.103	0.126	82.2	12-130	20.0	35	L445838-20	WG464314

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Analyte	Units	MSD	Matrix Spike Duplicate		Limit	RPD	Limit Ref	Samp	Batch
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1,2-Dichloroethane	mg/kg	0.0954	0.117	76.3	21-155	20.0	29	L445838-20	WG464314
1,2-Dichloropropane	mg/kg	0.0888	0.107	71.0	28-144	18.3	30	L445838-20	WG464314
1,3,5-Trimethylbenzene	mg/kg	0.106	0.125	84.4	10-135	16.6	39	L445838-20	WG464314
1,3-Dichlorobenzene	mg/kg	0.107	0.124	85.9	10-129	14.2	38	L445838-20	WG464314
1,3-Dichloropropane	mg/kg	0.101	0.118	80.8	31-137	15.7	29	L445838-20	WG464314
1,4-Dichlorobenzene	mg/kg	0.0956	0.116	76.4	10-121	19.1	36	L445838-20	WG464314
2,2-Dichloropropane	mg/kg	0.100	0.125	80.3	18-144	22.0	32	L445838-20	WG464314
2-Butanone (MEK)	mg/kg	0.433	0.545	69.2	21-143	23.0	37	L445838-20	WG464314
2-Chloroethyl vinyl ether	mg/kg	0.656	0.805	105.	0-176	20.3	50	L445838-20	WG464314
2-Chlorotoluene	mg/kg	0.100	0.119	80.1	10-132	16.8	37	L445838-20	WG464314
4-Chlorotoluene	mg/kg	0.102	0.123	81.7	10-129	18.2	38	L445838-20	WG464314
4-Methyl-2-pentanone (MIBK)	mg/kg	0.471	0.580	75.4	31-151	20.7	36	L445838-20	WG464314
Acetone	mg/kg	0.450	0.564	72.0	13-158	22.5	34	L445838-20	WG464314
Acrylonitrile	mg/kg	0.423	0.524	67.7	20-154	21.2	35	L445838-20	WG464314
Benzene	mg/kg	0.0812	0.0991	65.0	16-143	19.9	31	L445838-20	WG464314
Bromobenzene	mg/kg	0.102	0.120	81.4	14-135	16.7	39	L445838-20	WG464314
Bromodichloromethane	mg/kg	0.102	0.121	81.9	27-139	16.8	30	L445838-20	WG464314
Bromoform	mg/kg	0.103	0.126	82.6	21-144	20.2	34	L445838-20	WG464314
Bromomethane	mg/kg	0.0689	0.0871	55.1	0-180	23.3	41	L445838-20	WG464314
Carbon tetrachloride	mg/kg	0.0951	0.115	76.1	12-149	18.6	34	L445838-20	WG464314
Chlorobenzene	mg/kg	0.109	0.127	87.4	17-134	15.2	34	L445838-20	WG464314
Chlorodibromomethane	mg/kg	0.119	0.141	94.9	28-147	17.3	32	L445838-20	WG464314
Chloroethane	mg/kg	0.0848	0.103	67.8	0-172	19.1	38	L445838-20	WG464314
Chloroform	mg/kg	0.0948	0.117	75.9	28-138	20.9	30	L445838-20	WG464314
Chloromethane	mg/kg	0.0645	0.0827	51.6	10-158	24.7	35	L445838-20	WG464314
cis-1,2-Dichloroethene	mg/kg	0.0923	0.109	73.8	21-147	16.2	31	L445838-20	WG464314
cis-1,3-Dichloropropene	mg/kg	0.0882	0.104	70.6	17-145	16.2	32	L445838-20	WG464314
Di-isopropyl ether	mg/kg	0.104	0.127	83.2	31-153	20.1	29	L445838-20	WG464314
Dibromomethane	mg/kg	0.0930	0.113	74.4	24-147	19.3	30	L445838-20	WG464314
Dichlorodifluoromethane	mg/kg	0.128	0.161	102.	0-192	23.0	38	L445838-20	WG464314
Ethylbenzene	mg/kg	0.107	0.124	85.4	12-137	14.9	36	L445838-20	WG464314
Hexachloro-1,3-Butadiene	mg/kg	0.0828	0.103	66.2	10-123	21.8	50	L445838-20	WG464314
Isopropylbenzene	mg/kg	0.104	0.118	82.8	14-134	12.7	37	L445838-20	WG464314
Methyl tert-butyl ether	mg/kg	0.104	0.130	83.2	21-157	21.9	31	L445838-20	WG464314
Methylene Chloride	mg/kg	0.0840	0.102	67.2	12-149	19.1	31	L445838-20	WG464314
n-Butylbenzene	mg/kg	0.0890	0.108	71.2	10-130	19.5	48	L445838-20	WG464314
n-Propylbenzene	mg/kg	0.0979	0.115	78.3	10-130	15.8	40	L445838-20	WG464314
Naphthalene	mg/kg	0.0992	0.128	79.4	0-146	25.0	43	L445838-20	WG464314
p-Isopropyltoluene	mg/kg	0.0989	0.115	79.1	10-131	15.3	43	L445838-20	WG464314
sec-Butylbenzene	mg/kg	0.103	0.123	82.3	10-134	17.7	43	L445838-20	WG464314
Styrene	mg/kg	0.103	0.123	82.2	10-140	17.9	35	L445838-20	WG464314
tert-Butylbenzene	mg/kg	0.113	0.131	90.4	11-137	14.9	39	L445838-20	WG464314
Tetrachloroethene	mg/kg	0.0947	0.105	75.7	10-131	9.96	35	L445838-20	WG464314
Toluene	mg/kg	0.0835	0.0987	66.8	12-136	16.7	32	L445838-20	WG464314
trans-1,2-Dichloroethene	mg/kg	0.0772	0.0951	61.7	10-143	20.8	33	L445838-20	WG464314
trans-1,3-Dichloropropene	mg/kg	0.0962	0.118	76.9	16-147	20.5	32	L445838-20	WG464314
Trichloroethene	mg/kg	0.0937	0.111	75.0	10-155	17.1	33	L445838-20	WG464314
Trichlorofluoromethane	mg/kg	0.0759	0.0920	60.7	10-154	19.2	32	L445838-20	WG464314
Vinyl chloride	mg/kg	0.0984	0.122	78.7	10-159	21.4	36	L445838-20	WG464314
Xylenes, Total	mg/kg	0.320	0.378	85.5	10-138	16.4	36	L445838-20	WG464314
4-Bromofluorobenzene				109.1	59-140				WG464314
Dibromofluoromethane				100.1	63-139				WG464314
Toluene-d8				97.91	84-116				WG464314
Arsenic,Dissolved	mg/l	1.12	1.02	99.1	75-125	9.35	20	L445937-21	WG464546
Barium,Dissolved	mg/l	1.17	1.08	99.8	75-125	8.00	20	L445937-21	WG464546
Cadmium,Dissolved	mg/l	1.12	1.03	99.1	75-125	8.37	20	L445937-21	WG464546
Chromium,Dissolved	mg/l	1.16	1.06	103.	75-125	9.01	20	L445937-21	WG464546

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Lead, Dissolved	mg/l	1.14	1.05	100.	75-125	8.22	20	L445937-21	WG464546
Selenium, Dissolved	mg/l	1.10	1.00	97.3	75-125	9.52	20	L445937-21	WG464546
Silver, Dissolved	mg/l	0.139	0.159	12.1*	75-125	13.4	20	L445937-21	WG464546
Mercury, Dissolved	mg/l	0.00282	0.00283	94.0	70-130	0.354	20	L445786-14	WG464257
Mercury	mg/kg	0.275	0.260	110.	70-130	5.61	20	L445864-02	WG464258
Chromium	mg/l	1.18	1.16	104.	75-125	1.71	20	L445749-01	WG464527
Arsenic	mg/kg	51.2	49.8	90.0	75-125	2.77	20	L445838-24	WG464299
Barium	mg/kg	431.	400.	162.*	75-125	7.46	20	L445838-24	WG464299
Cadmium	mg/kg	42.8	43.1	85.6	75-125	0.698	20	L445838-24	WG464299
Chromium	mg/kg	61.8	63.3	85.6	75-125	2.40	20	L445838-24	WG464299
Lead	mg/kg	62.0	61.2	90.0	75-125	1.30	20	L445838-24	WG464299
Selenium	mg/kg	38.3	43.0	75.6	75-125	11.6	20	L445838-24	WG464299
Silver	mg/kg	43.5	44.4	87.0	75-125	2.05	20	L445838-24	WG464299
Chromium, Hexavalent	mg/kg	19.7	19.5	98.5	80-120	1.02	20	L445864-02	WG464275

Batch number / Run number / Sample number cross reference

WG464252: R1124148: L445864-09 11 12 13 14 15 16 17 18
 WG464281: R1124449: L445864-09 10 11 12 13 14 15 16 17 18
 WG464314: R1125273: L445864-01 02 03 04 05 06 07 08
 WG464377: R1125794: L445864-01
 WG464378: R1125795: L445864-02 03 04 05 06 07 08
 WG464546: R1126768: L445864-09 11 12 13 14 15 16 17 18
 WG464257: R1126849: L445864-09 11 12 13 14 15 16 17 18
 WG464258: R1126869: L445864-01 02 03 04 05 06 07 08
 WG464527: R1126991: L445864-09 11 12 13 14 15 16 17 18
 WG464299: R1127350: L445864-01 02 03 04 05 06 07 08
 WG464275: R1128648: L445864-01 02 03 04 05 06 07 08

* * Calculations are performed prior to rounding of reported values .
 * Performance of this Analyte is outside of established criteria.
 For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



YOUR LAB OF CHOICE

Stantec Consulting - Tualatin, OR
Amy Zach
7730 SW Mohawk Street
Tualatin, OR 97062

Quality Assurance Report
Level II

L445864

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

February 26, 2010

The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.

Stantec Consulting - Tualatin,
OR
 7730 SW Mohawk Street
 Tualatin, OR 97062

Billing information:
 Accounts Payable
 7730 SW Mohawk Street
 Tualatin, OR 97062

Analysis/Container/Preservative

B155
 Chain of Custody
 Page 1 of 3

ESC
 L.A.B S.C.I.E.N.C.E.S
 12065 Lebanon Road
 Mt. Juliet, TN 37122

Phone: (800) 767-5859
 Phone: (615) 758-5858
 Fax: (615) 758-5859

Report to: **Amy Zach**

Email: **amy.zach@stantec.com, patri**

Project Description: **Brunswick Bayliner Marine**

City/State Collected: **Arlington, WA**

Phone: (503) 691-2030
 FAX: (503) 692-7074

Client Project #: **190402025.200.0002**

Lab Project #: **SECORTOR-BRUNSWICK**

Collected by (print): **Janet Nash**

Site/Facility ID#:

P.O.#:

Collected by (signature): *Janet Nash*
 Immediately Packed on Ice N Y

Rush? (Lab MUST Be Notified)
 ___ Same Day 200%
 ___ Next Day 100%
 ___ Two Day 50%
 Three Day 25%

Date Results Needed
 Email? ___ No Yes
 FAX? ___ No ___ Yes

CR6 / CR3 / TS 4ozClr-NoPres
CR6 / CR3 250mlHDPE-NoPres
RCRA8 Metals 2ozClr-NoPres
RCRA8 Metals- Diss 500mlHDPE-NoPres
V8260 40ml/NaHSO4/Syr/MeOH
V8260 40ml/Amb-HCl
V8260- Trip Blank 40ml/Amb-HCl-Bk
VOC Screen 2ozClr-NoPres

Acctnum: **SECORTOR** (lab use only)
 Template/Prelogin **T62887/ P310705**
 Cooler #: **2-9**
 Shipped Via: **FedEX Ground**

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	CR6 / CR3 / TS 4ozClr-NoPres	CR6 / CR3 250mlHDPE-NoPres	RCRA8 Metals 2ozClr-NoPres	RCRA8 Metals- Diss 500mlHDPE-NoPres	V8260 40ml/NaHSO4/Syr/MeOH	V8260 40ml/Amb-HCl	V8260- Trip Blank 40ml/Amb-HCl-Bk	VOC Screen 2ozClr-NoPres
MW-6-5	Grab	SS	5'	2-17-10	1015	6	X		X		X			X
MW-6-15	Grab	SS	15'	2-17-10	1024	6	X		X		X			X
MW-7-15	Grab	SS	15'	2-17-10	1239	6	X		X		X			X
MW-7-20	Grab	SS	20'	2-17-10	1244	6	X		X		X			X
B-9-5	Grab	SS	9'	2-18-10	0856	6	X		X		X			X
B-9-20	Grab	SS	20'	2-18-10	0905	6	X		X		X			X
B-8-15	Grab	SS	15'	2-18-10	1107	6	X		X		X			X
B-8-20	Grab	SS	20'	2-18-10	1110	6	X		X		X			X
		SS				6	X		X		X			X

Remarks/Contaminant Sample # (lab only)
 L445664-01
 L445864-02
 -03
 -04
 -05
 -06
 -07
 -08
 -09
 JF

*Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other _____

pH _____ Temp _____

Remarks: Metals will NOT be field filtered or preserved.

Flow _____ Other _____

6700 4647 2524 , 6700 4647 2504

Relinquished by: (Signature) <i>Janet Nash</i>	Date: 2/19/10	Time: 1300	Received by: (Signature)	Samples returned via: <input type="checkbox"/> UPS	Condition: (lab use only)
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	<input type="checkbox"/> FedEx <input type="checkbox"/> Courier <input type="checkbox"/>	
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature) <i>J. Fuller</i>	Temp: 3.6°	Bottles Received: 95
	Date:	Time:		Date: 02-20-10	Time: 0900
				COC Seal Intact: Y ___ N <input checked="" type="checkbox"/> NA	pH Checked: NCF: <input checked="" type="checkbox"/>

Stanfec Consulting - Tualatin, OR
 7730 SW Mohawk Street
 Tualatin, OR 97062

Billing information:
 Accounts Payable
 7730 SW Mohawk Street
 Tualatin, OR 97062

Report to: **Amy Zach**

Email: **amy.zach@stantec.com, patri**

Project Description: **Brunswick □ Bayliner Marine**

City/State Collected: **Arlington WA**

Phone: **(503) 691-2030**
 FAX: **(503) 692-7074**

Client Project #: **190402025.200.0002**

Lab Project #: **SECORTOR-BRUNSWICK**

Collected by (print): **Janet Nash**

Site/Facility ID#:

P.O.#:

Collected by (signature): *Janet Nash*
 Immediately Packed on Ice N ___ Y ___

Rush? (Lab MUST Be Notified)
 ___ Same Day 200%
 ___ Next Day 100%
 ___ Two Day 50%
 Three Day 25%

Date Results Needed
 Email? ___No Yes
 FAX? ___No ___Yes

Analysis/Container/Preservative	
CR6 / CR3 / TS 4ozClr-NoPres	
CR6 / CR3 250mlHDPE-NoPres	
RCRA8 Metals 2ozClr-NoPres	
RCRA8 Metals- Diss 500mlHDPE-NoPres	
V8260 40ml/NaHSO4/Syr/MeOH	
V8260 40ml/Amb-HCl	
V8260- Trip Blank 40ml/Amb-HCl-Bk	
VOC Screen 2ozClr-NoPres	

Chain of Custody
 Page **2** of **3**

ESC
 L.A.B S.C.I.E.N.C.E.S
 12065 Lebanon Road
 Mt. Juliet, TN 37122

Phone: (800) 767-5859
 Phone: (615) 758-5858
 Fax: (615) 758-5859

Acctnum: **SECORTOR** (lab use only)
 Template/Prelogin: **T62887/ P310705**
 Cooler #: **2-92**
 Shipped Via: **FedEX Ground**

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	CR6 / CR3 / TS 4ozClr-NoPres	CR6 / CR3 250mlHDPE-NoPres	RCRA8 Metals 2ozClr-NoPres	RCRA8 Metals- Diss 500mlHDPE-NoPres	V8260 40ml/NaHSO4/Syr/MeOH	V8260 40ml/Amb-HCl	V8260- Trip Blank 40ml/Amb-HCl-Bk	VOC Screen 2ozClr-NoPres
B-9	Grab	GW	—	2-18-10	0950	5		X		X		X		
TRIP BLANK		GW				24							X	
B-8	Grab	GW	—	2-18-10	1155	5		X		X		X		
MW-3	Grab	GW	—	2-18-10	1405	5		X		X		X		
MW-1	Grab	GW	—	2-18-10	1440	5		X		X		X		
MW-2	Grab	GW	—	2-18-10	1515	5		X		X		X		
MW-5	Grab	GW	—	2-18-10	1535	5		X		X		X		
MW-4	Grab	GW	—	2-18-10	1605	5		X		X		X		
		GW				5		X		X		X		

Remarks/Contaminant Sample # (lab only)
 L445864-16-09
 -17-10
 -12-11
 -13-12
 -15-14
 -16-15
 -17-16
 -18-17
 -19-18

*Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other _____

pH _____ Temp _____

Remarks: Metals will NOT be field filtered or preserved.

Flow _____ Other _____

Relinquished by: (Signature) <i>Janet Nash</i>	Date: 2/19/10	Time: 1:20	Received by: (Signature) <i>[Signature]</i>	Samples returned via: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Courier <input type="checkbox"/>	Condition: (lab use only)
Relinquished by: (Signature) <i>[Signature]</i>	Date:	Time:	Received by: (Signature) <i>[Signature]</i>	Temp: 3.6°C Bottles Received: 95	COC Seal Intact: ___ Y ___ N <input checked="" type="checkbox"/>
Relinquished by: (Signature) <i>[Signature]</i>	Date:	Time:	Received for lab by: (Signature) <i>J. Felle</i>	Date: 02-20-10 Time: 0900	pH Checked: NCF: <input checked="" type="checkbox"/>

Stantec Consulting - Tualatin,
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 7730 SW Mohawk Street
 Tualatin, OR 97062

Billing information:
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 Tualatin, OR 97062

Analysis/Container/Preservative

Chain of Custody
 Page 3 of 3

Report to: **Amy Zach**
 Email: **amy.zach@stantec.com, patri**

Project Description: **Brunswick** **Bayliner Marine**
 City/State Collected: **Arlington WA**
 Client Project #: **190402025.200.0002**
 Lab Project #: **SECORTOR-BRUNSWICK**
 Phone: **(503) 691-2030**
 FAX: **(503) 692-7074**

Collected by (print): **Janet Nash**
 Site/Facility ID#: _____
 P.O.#: _____

Collected by (signature): **Janet Nash**
Rush? (Lab MUST Be Notified)
 Same Day 200%
 Next Day 100%
 Two Day 50%
 Three Day 25%
 Date Results Needed _____
 Email? No Yes
 FAX? No Yes
 No. of Cntrs _____

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs
MW-7	Grab	GW	—	2-19-10	1010	5
MW-6	Grab	GW	—	2-19-10	1030	5

CR6 / CR3 / TS 4ozClr-NoPres	CR6 / CR3 250mlHDPE-NoPres	RCRA8 Metals 2ozClr-NoPres	RCRA8 Metals- Diss 500mlHDPE-NoPres	V8260 40ml/NaHSO4/Syr/MeOH	V8260 40ml/Amb-HCl	V8260- Trip Blank 40ml/Amb-HCl-Bik	VOC Screen 2ozClr-NoPres
X	X	X	X	X	X	X	X

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 Mt. Juliet, TN 37122
 Phone: (800) 767-5859
 Phone: (615) 758-5858
 Fax: (615) 758-5859

Acctnum: **SECORTOR** (lab use only)
 Template/Prelogin: **T62887/ P310705**
 Cooler #: **2-9-1**
 Shipped Via: **FedEX Ground**

Remarks/Contaminant Sample # (lab only)
1445864 -17
-19

*Matrix: **SS** - Soil **GW** - Groundwater **WW** - WasteWater **DW** - Drinking Water **OT** - Other _____
 pH _____ Temp _____
 Remarks: **Metals will NOT be field filtered or preserved.**
 Flow _____ Other _____

Relinquished by (Signature): Janet Nash	Date: 2/19/10	Time: 1200	Received by (Signature): _____	Samples returned via: <input type="checkbox"/> UPS	Condition: _____ (lab use only)
Relinquished by (Signature): _____	Date: _____	Time: _____	Received by (Signature): _____	<input type="checkbox"/> FedEx <input type="checkbox"/> Courier <input type="checkbox"/> _____	COC Seal Intact: <input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA
Relinquished by (Signature): _____	Date: _____	Time: _____	Received for lab by (Signature): J. Ellis	Temp: 3.6°C Bottles Received: 95	
				Date: 02-20-10 Time: 0900	pH Checked: _____ NCF: <input checked="" type="checkbox"/>

Susan Peach

From: Andy Vann
Sent: Monday, February 22, 2010 1:59 PM
To: Reporting
Subject: FW: L445864-09 and -11 through -18 - Add CRICP - Pull 250mlHDPE-NoPres container from wet-lab to run sample

Importance: High

Attachments: Picture (Metafile)

Please scan with coc. Thanks

From: Jarred Willis
Sent: Monday, February 22, 2010 1:14 PM
To: Login
Cc: Due Metals; Metals Prep; Sample Storage; Due WetLab; Elizabeth Reed; Fran Meenen
Subject: L445864-09 and -11 through -18 - Add CRICP - Pull 250mlHDPE-NoPres container from wet-lab to run sample
Importance: High

Please add CRICP to L445864-09 and -11 through -18 from *SECORTOR*. Pull 250mlHDPE-NoPres container from wet-lab that was used for CR6 to run sample. We will need to add HNO3 and analyze it for CRICP.

Samples are R4s due Friday, 2/26.

Thanks,

Jarred Willis

Technical Service Representative (TSR)

E-mail: jwillis@esclabsciences.com

Phone: 800-767-5859 Ext. 9678

Direct: (615) 773-9678

www.esclabsciences.com



ENVIRONMENTAL SCIENCE CORP.

SAMPLE NON-CONFORMANCE FORM

Login No.: L445864
Date: 02-20-10
Evaluated by: J. Fuller
Client: SECTOR

J. Willis

Non-Conformance (check applicable items)

<input type="checkbox"/> Chain of Custody is missing	<input type="checkbox"/> Login Clarification Needed
<input type="checkbox"/> Improper container type	<input type="checkbox"/> Improper preservation
<input type="checkbox"/> Chain of custody is incomplete	<input type="checkbox"/> Container lid not intact
<input checked="" type="checkbox"/> Parameter(s) past holding time	<input type="checkbox"/> Improper temperature
<input type="checkbox"/> Broken container(s) see below	<input type="checkbox"/> Broken container: sufficient sample volume remains for analysis requested
<input type="checkbox"/> Insufficient packing material around container	
<input type="checkbox"/> Insufficient packing material inside cooler	
<input type="checkbox"/> Improper handling by carrier (FedEx / UPS / Courier)	
<input type="checkbox"/> Sample was frozen	

Comments: CAC past holding time: 6-9, MW-7, MW-6

Login Instructions:

TSR Initials: JW

Client informed by call / email / fax / voice mail

date: 2/22 time: 1400

Client contact: Amy Zach

-Log samples and quality per client

APPENDIX F
LABORATORY ANALYTICAL REPORTS
AND CHAIN-OF-CUSTODY FORMS
MARCH 2010



CERTIFICATE OF ANALYSIS

CLIENT: Landau Associates, Inc.
130 - 2nd Ave. S.
Edmonds, WA 98020

DATE: 3/25/2010
ALS JOB#: 1003102
DATE RECEIVED: 3/19/2010
WDOE ACCREDITATION #: C1336

CLIENT CONTACT: Alyssa Johnson
CLIENT PROJECT ID: Bayliner Marine / #786003.010.012
CLIENT SAMPLE ID: 3/19/2010 B-12
ALS SAMPLE #: -01

DATA RESULTS

ANALYTE	METHOD	RESULTS*	REPORTING LIMITS	DILUTION FACTOR	UNITS**	ANALYSIS DATE	ANALYSIS BY
Gasoline	NWTPH-HCID	ND	130	1	UG/L	3/22/2010	EBS
Diesel Fuel	NWTPH-HCID	ND	310	1	UG/L	3/22/2010	EBS
Motor Oil	NWTPH-HCID	ND	310	1	UG/L	3/22/2010	EBS
CFC-12	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Chloromethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Vinyl Chloride	EPA-8260	ND	0.20	1	UG/L	3/22/2010	CCN
Bromomethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Chloroethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
CFC-11	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Acetone	EPA-8260	ND	25	1	UG/L	3/22/2010	CCN
Carbon Disulfide	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,1-Dichloroethene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Methylene Chloride	EPA-8260	ND	5.0	1	UG/L	3/22/2010	CCN
Acrylonitrile	EPA-8260	ND	10	1	UG/L	3/22/2010	CCN
Methyl t-butyl ether	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Trans-1,2-Dichloroethene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,1-Dichloroethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
2-Butanone	EPA-8260	ND	10	1	UG/L	3/22/2010	CCN
Cis-1,2-Dichloroethene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
2,2-Dichloropropane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Bromochloromethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Chloroform	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,1,1-Trichloroethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,1-Dichloropropene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Carbon Tetrachloride	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,2-Dichloroethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Benzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Trichloroethene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,2-Dichloropropane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Dibromomethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Dichlorobromomethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Trans-1,3-Dichloropropene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Methyl isobutyl ketone	EPA-8260	ND	10	1	UG/L	3/22/2010	CCN
Toluene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Cis-1,3-Dichloropropene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,1,2-Trichloroethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
2-Hexanone	EPA-8260	ND	10	1	UG/L	3/22/2010	CCN
1,3-Dichloropropane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN



CERTIFICATE OF ANALYSIS

CLIENT: Landau Associates, Inc.
130 - 2nd Ave. S.
Edmonds, WA 98020

DATE: 3/25/2010
ALS JOB#: 1003102
DATE RECEIVED: 3/19/2010
WDOE ACCREDITATION #: C1336

CLIENT CONTACT: Alyssa Johnson
CLIENT PROJECT ID: Bayliner Marine / #786003.010.012
CLIENT SAMPLE ID: 3/19/2010 B-12
ALS SAMPLE #: -01

DATA RESULTS

ANALYTE	METHOD	RESULTS*	REPORTING LIMITS	DILUTION FACTOR	UNITS**	ANALYSIS DATE	ANALYSIS BY
Tetrachloroethene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Dibromochloromethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Ethylene dibromide	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Chlorobenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,1,1,2-Tetrachloroethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Ethylbenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
m, p-Xylene	EPA-8260	ND	4.0	1	UG/L	3/22/2010	CCN
Styrene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
o-Xylene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Bromoform	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Isopropylbenzene (Cumene)	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,1,2,2-Tetrachloroethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,2,3-Trichloropropane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Bromobenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
n-Propylbenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
2-Chlorotoluene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,3,5-Trimethylbenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
4-Chlorotoluene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Tert-Butylbenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,2,4-Trimethylbenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Sec-Butylbenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
p-Isopropyltoluene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,3-Dichlorobenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,4-Dichlorobenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
n-Butylbenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,2-Dichlorobenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,2-Dibromo-3-Chloropropane	EPA-8260	ND	10	1	UG/L	3/22/2010	CCN
1,2,4-Trichlorobenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Hexachlorobutadiene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Naphthalene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,2,3-Trichlorobenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT.
** UNITS FOR ALL NON-LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS.

APPROVED BY:



CERTIFICATE OF ANALYSIS

CLIENT: Landau Associates, Inc.
130 - 2nd Ave. S.
Edmonds, WA 98020

DATE: 3/25/2010
ALS JOB#: 1003102
DATE RECEIVED: 3/19/2010
WDOE ACCREDITATION #: C1336

CLIENT CONTACT: Alyssa Johnson
CLIENT PROJECT ID: Bayliner Marine / #786003.010.012
CLIENT SAMPLE ID: 3/19/2010 B-13
ALS SAMPLE #: -02

DATA RESULTS

ANALYTE	METHOD	RESULTS*	REPORTING LIMITS	DILUTION FACTOR	UNITS**	ANALYSIS DATE	ANALYSIS BY
CFC-12	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Chloromethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Vinyl Chloride	EPA-8260	ND	0.20	1	UG/L	3/22/2010	CCN
Bromomethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Chloroethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
CFC-11	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Acetone	EPA-8260	ND	25	1	UG/L	3/22/2010	CCN
Carbon Disulfide	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,1-Dichloroethene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Methylene Chloride	EPA-8260	ND	5.0	1	UG/L	3/22/2010	CCN
Acrylonitrile	EPA-8260	ND	10	1	UG/L	3/22/2010	CCN
Methyl t-butyl ether	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Trans-1,2-Dichloroethene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,1-Dichloroethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
2-Butanone	EPA-8260	ND	10	1	UG/L	3/22/2010	CCN
Cis-1,2-Dichloroethene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
2,2-Dichloropropane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Bromochloromethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Chloroform	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,1,1-Trichloroethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,1-Dichloropropene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Carbon Tetrachloride	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,2-Dichloroethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Benzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Trichloroethene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,2-Dichloropropane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Dibromomethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Dichlorobromomethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Trans-1,3-Dichloropropene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Methyl isobutyl ketone	EPA-8260	ND	10	1	UG/L	3/22/2010	CCN
Toluene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Cis-1,3-Dichloropropene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,1,2-Trichloroethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
2-Hexanone	EPA-8260	ND	10	1	UG/L	3/22/2010	CCN
1,3-Dichloropropane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Tetrachloroethene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Dibromochloromethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Ethylene dibromide	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN



CERTIFICATE OF ANALYSIS

CLIENT: Landau Associates, Inc.
130 - 2nd Ave. S.
Edmonds, WA 98020

DATE: 3/25/2010
ALS JOB#: 1003102
DATE RECEIVED: 3/19/2010
WDOE ACCREDITATION #: C1336

CLIENT CONTACT: Alyssa Johnson
CLIENT PROJECT ID: Bayliner Marine / #786003.010.012
CLIENT SAMPLE ID: 3/19/2010 B-13
ALS SAMPLE #: -02

DATA RESULTS

ANALYTE	METHOD	RESULTS*	REPORTING LIMITS	DILUTION FACTOR	UNITS**	ANALYSIS DATE	ANALYSIS BY
Chlorobenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,1,1,2-Tetrachloroethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Ethylbenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
m, p-Xylene	EPA-8260	ND	4.0	1	UG/L	3/22/2010	CCN
Styrene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
o-Xylene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Bromoform	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Isopropylbenzene (Cumene)	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,1,2,2-Tetrachloroethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,2,3-Trichloropropane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Bromobenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
n-Propylbenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
2-Chlorotoluene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,3,5-Trimethylbenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
4-Chlorotoluene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Tert-Butylbenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,2,4-Trimethylbenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Sec-Butylbenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
p-Isopropyltoluene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,3-Dichlorobenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,4-Dichlorobenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
n-Butylbenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,2-Dichlorobenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,2-Dibromo-3-Chloropropane	EPA-8260	ND	10	1	UG/L	3/22/2010	CCN
1,2,4-Trichlorobenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Hexachlorobutadiene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Naphthalene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,2,3-Trichlorobenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT.

** UNITS FOR ALL NON-LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS.

APPROVED BY:



CERTIFICATE OF ANALYSIS

CLIENT: Landau Associates, Inc.
130 - 2nd Ave. S.
Edmonds, WA 98020

DATE: 3/25/2010
ALS JOB#: 1003102
DATE RECEIVED: 3/19/2010
WDOE ACCREDITATION #: C1336

CLIENT CONTACT: Alyssa Johnson
CLIENT PROJECT ID: Bayliner Marine / #786003.010.012
CLIENT SAMPLE ID: 3/19/2010 B-11
ALS SAMPLE #: -03

DATA RESULTS

ANALYTE	METHOD	RESULTS*	REPORTING LIMITS	DILUTION FACTOR	UNITS**	ANALYSIS DATE	ANALYSIS BY
CFC-12	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Chloromethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Vinyl Chloride	EPA-8260	ND	0.20	1	UG/L	3/22/2010	CCN
Bromomethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Chloroethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
CFC-11	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Acetone	EPA-8260	ND	25	1	UG/L	3/22/2010	CCN
Carbon Disulfide	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,1-Dichloroethene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Methylene Chloride	EPA-8260	ND	5.0	1	UG/L	3/22/2010	CCN
Acrylonitrile	EPA-8260	ND	10	1	UG/L	3/22/2010	CCN
Methyl t-butyl ether	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Trans-1,2-Dichloroethene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,1-Dichloroethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
2-Butanone	EPA-8260	ND	10	1	UG/L	3/22/2010	CCN
Cis-1,2-Dichloroethene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
2,2-Dichloropropane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Bromochloromethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Chloroform	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,1,1-Trichloroethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,1-Dichloropropene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Carbon Tetrachloride	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,2-Dichloroethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Benzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Trichloroethene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,2-Dichloropropane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Dibromomethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Dichlorobromomethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Trans-1,3-Dichloropropene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Methyl isobutyl ketone	EPA-8260	ND	10	1	UG/L	3/22/2010	CCN
Toluene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Cis-1,3-Dichloropropene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,1,2-Trichloroethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
2-Hexanone	EPA-8260	ND	10	1	UG/L	3/22/2010	CCN
1,3-Dichloropropane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Tetrachloroethene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Dibromochloromethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Ethylene dibromide	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN



CERTIFICATE OF ANALYSIS

CLIENT: Landau Associates, Inc.
130 - 2nd Ave. S.
Edmonds, WA 98020

DATE: 3/25/2010
ALS JOB#: 1003102
DATE RECEIVED: 3/19/2010
WDOE ACCREDITATION #: C1336

CLIENT CONTACT: Alyssa Johnson
CLIENT PROJECT ID: Bayliner Marine / #786003.010.012
CLIENT SAMPLE ID: 3/19/2010 B-11
ALS SAMPLE #: -03

DATA RESULTS

ANALYTE	METHOD	RESULTS*	REPORTING LIMITS	DILUTION FACTOR	UNITS**	ANALYSIS DATE	ANALYSIS BY
Chlorobenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,1,1,2-Tetrachloroethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Ethylbenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
m, p-Xylene	EPA-8260	ND	4.0	1	UG/L	3/22/2010	CCN
Styrene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
o-Xylene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Bromoform	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Isopropylbenzene (Cumene)	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,1,2,2-Tetrachloroethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,2,3-Trichloropropane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Bromobenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
n-Propylbenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
2-Chlorotoluene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,3,5-Trimethylbenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
4-Chlorotoluene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Tert-Butylbenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,2,4-Trimethylbenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Sec-Butylbenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
p-Isopropyltoluene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,3-Dichlorobenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,4-Dichlorobenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
n-Butylbenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,2-Dichlorobenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,2-Dibromo-3-Chloropropane	EPA-8260	ND	10	1	UG/L	3/22/2010	CCN
1,2,4-Trichlorobenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Hexachlorobutadiene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Naphthalene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,2,3-Trichlorobenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT.

** UNITS FOR ALL NON-LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS.

APPROVED BY:



CERTIFICATE OF ANALYSIS

CLIENT: Landau Associates, Inc.
130 - 2nd Ave. S.
Edmonds, WA 98020

DATE: 3/25/2010
ALS JOB#: 1003102
DATE RECEIVED: 3/19/2010
WDOE ACCREDITATION #: C1336

CLIENT CONTACT: Alyssa Johnson
CLIENT PROJECT ID: Bayliner Marine / #786003.010.012
CLIENT SAMPLE ID: 3/19/2010 B-10
ALS SAMPLE #: -04

DATA RESULTS

ANALYTE	METHOD	RESULTS*	REPORTING LIMITS	DILUTION FACTOR	UNITS**	ANALYSIS DATE	ANALYSIS BY
CFC-12	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Chloromethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Vinyl Chloride	EPA-8260	ND	0.20	1	UG/L	3/22/2010	CCN
Bromomethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Chloroethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
CFC-11	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Acetone	EPA-8260	ND	25	1	UG/L	3/22/2010	CCN
Carbon Disulfide	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,1-Dichloroethene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Methylene Chloride	EPA-8260	ND	5.0	1	UG/L	3/22/2010	CCN
Acrylonitrile	EPA-8260	ND	10	1	UG/L	3/22/2010	CCN
Methyl t-butyl ether	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Trans-1,2-Dichloroethene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,1-Dichloroethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
2-Butanone	EPA-8260	ND	10	1	UG/L	3/22/2010	CCN
Cis-1,2-Dichloroethene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
2,2-Dichloropropane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Bromochloromethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Chloroform	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,1,1-Trichloroethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,1-Dichloropropene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Carbon Tetrachloride	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,2-Dichloroethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Benzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Trichloroethene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,2-Dichloropropane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Dibromomethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Dichlorobromomethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Trans-1,3-Dichloropropene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Methyl isobutyl ketone	EPA-8260	ND	10	1	UG/L	3/22/2010	CCN
Toluene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Cis-1,3-Dichloropropene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,1,2-Trichloroethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
2-Hexanone	EPA-8260	ND	10	1	UG/L	3/22/2010	CCN
1,3-Dichloropropane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Tetrachloroethene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Dibromochloromethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Ethylene dibromide	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN



CERTIFICATE OF ANALYSIS

CLIENT: Landau Associates, Inc.
130 - 2nd Ave. S.
Edmonds, WA 98020

DATE: 3/25/2010
ALS JOB#: 1003102
DATE RECEIVED: 3/19/2010
WDOE ACCREDITATION #: C1336

CLIENT CONTACT: Alyssa Johnson
CLIENT PROJECT ID: Bayliner Marine / #786003.010.012
CLIENT SAMPLE ID: 3/19/2010 B-10
ALS SAMPLE #: -04

DATA RESULTS

ANALYTE	METHOD	RESULTS*	REPORTING LIMITS	DILUTION FACTOR	UNITS**	ANALYSIS DATE	ANALYSIS BY
Chlorobenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,1,1,2-Tetrachloroethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Ethylbenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
m, p-Xylene	EPA-8260	ND	4.0	1	UG/L	3/22/2010	CCN
Styrene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
o-Xylene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Bromoform	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Isopropylbenzene (Cumene)	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,1,2,2-Tetrachloroethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,2,3-Trichloropropane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Bromobenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
n-Propylbenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
2-Chlorotoluene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,3,5-Trimethylbenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
4-Chlorotoluene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Tert-Butylbenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,2,4-Trimethylbenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Sec-Butylbenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
p-Isopropyltoluene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,3-Dichlorobenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,4-Dichlorobenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
n-Butylbenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,2-Dichlorobenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,2-Dibromo-3-Chloropropane	EPA-8260	ND	10	1	UG/L	3/22/2010	CCN
1,2,4-Trichlorobenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Hexachlorobutadiene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Naphthalene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,2,3-Trichlorobenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT.

** UNITS FOR ALL NON-LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS.

APPROVED BY:



CERTIFICATE OF ANALYSIS

CLIENT: Landau Associates, Inc.
130 - 2nd Ave. S.
Edmonds, WA 98020

DATE: 3/25/2010
ALS JOB#: 1003102
DATE RECEIVED: 3/19/2010
WDOE ACCREDITATION #: C1336

CLIENT CONTACT: Alyssa Johnson
CLIENT PROJECT ID: Bayliner Marine / #786003.010.012
CLIENT SAMPLE ID: 3/19/2010 B-14 (16-20)
ALS SAMPLE #: -05

DATA RESULTS

ANALYTE	METHOD	RESULTS*	REPORTING LIMITS	DILUTION FACTOR	UNITS**	ANALYSIS DATE	ANALYSIS BY
Gasoline	NWTPH-HCID	ND	130	1	UG/L	3/22/2010	EBS
Diesel Fuel	NWTPH-HCID	ND	310	1	UG/L	3/22/2010	EBS
Motor Oil	NWTPH-HCID	ND	310	1	UG/L	3/22/2010	EBS
CFC-12	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Chloromethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Vinyl Chloride	EPA-8260	ND	0.20	1	UG/L	3/22/2010	CCN
Bromomethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Chloroethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
CFC-11	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Acetone	EPA-8260	ND	25	1	UG/L	3/22/2010	CCN
Carbon Disulfide	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,1-Dichloroethene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Methylene Chloride	EPA-8260	ND	5.0	1	UG/L	3/22/2010	CCN
Acrylonitrile	EPA-8260	ND	10	1	UG/L	3/22/2010	CCN
Methyl t-butyl ether	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Trans-1,2-Dichloroethene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,1-Dichloroethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
2-Butanone	EPA-8260	ND	10	1	UG/L	3/22/2010	CCN
Cis-1,2-Dichloroethene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
2,2-Dichloropropane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Bromochloromethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Chloroform	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,1,1-Trichloroethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,1-Dichloropropene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Carbon Tetrachloride	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,2-Dichloroethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Benzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Trichloroethene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,2-Dichloropropane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Dibromomethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Dichlorobromomethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Trans-1,3-Dichloropropene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Methyl isobutyl ketone	EPA-8260	ND	10	1	UG/L	3/22/2010	CCN
Toluene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Cis-1,3-Dichloropropene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,1,2-Trichloroethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
2-Hexanone	EPA-8260	ND	10	1	UG/L	3/22/2010	CCN
1,3-Dichloropropane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN



CERTIFICATE OF ANALYSIS

CLIENT: Landau Associates, Inc.
130 - 2nd Ave. S.
Edmonds, WA 98020

DATE: 3/25/2010
ALS JOB#: 1003102
DATE RECEIVED: 3/19/2010
WDOE ACCREDITATION #: C1336

CLIENT CONTACT: Alyssa Johnson
CLIENT PROJECT ID: Bayliner Marine / #786003.010.012
CLIENT SAMPLE ID: 3/19/2010 B-14 (16-20)
ALS SAMPLE #: -05

DATA RESULTS

ANALYTE	METHOD	RESULTS*	REPORTING LIMITS	DILUTION FACTOR	UNITS**	ANALYSIS DATE	ANALYSIS BY
Tetrachloroethene	EPA-8260	45	4.0	2	UG/L	3/24/2010	CCN
Dibromochloromethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Ethylene dibromide	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Chlorobenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,1,1,2-Tetrachloroethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Ethylbenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
m, p-Xylene	EPA-8260	ND	4.0	1	UG/L	3/22/2010	CCN
Styrene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
o-Xylene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Bromoform	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Isopropylbenzene (Cumene)	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,1,2,2-Tetrachloroethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,2,3-Trichloropropane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Bromobenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
n-Propylbenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
2-Chlorotoluene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,3,5-Trimethylbenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
4-Chlorotoluene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Tert-Butylbenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,2,4-Trimethylbenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Sec-Butylbenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
p-Isopropyltoluene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,3-Dichlorobenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,4-Dichlorobenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
n-Butylbenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,2-Dichlorobenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,2-Dibromo-3-Chloropropane	EPA-8260	ND	10	1	UG/L	3/22/2010	CCN
1,2,4-Trichlorobenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Hexachlorobutadiene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Naphthalene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,2,3-Trichlorobenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT.

** UNITS FOR ALL NON-LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS.

APPROVED BY:



CERTIFICATE OF ANALYSIS

CLIENT: Landau Associates, Inc.
130 - 2nd Ave. S.
Edmonds, WA 98020

DATE: 3/25/2010
ALS JOB#: 1003102
DATE RECEIVED: 3/19/2010
WDOE ACCREDITATION #: C1336

CLIENT CONTACT: Alyssa Johnson
CLIENT PROJECT ID: Bayliner Marine / #786003.010.012
CLIENT SAMPLE ID: 3/19/2010 B-14 (30-34)
ALS SAMPLE #: -06

DATA RESULTS

ANALYTE	METHOD	RESULTS*	REPORTING LIMITS	DILUTION FACTOR	UNITS**	ANALYSIS DATE	ANALYSIS BY
CFC-12	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Chloromethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Vinyl Chloride	EPA-8260	ND	0.20	1	UG/L	3/22/2010	CCN
Bromomethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Chloroethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
CFC-11	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Acetone	EPA-8260	ND	25	1	UG/L	3/22/2010	CCN
Carbon Disulfide	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,1-Dichloroethene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Methylene Chloride	EPA-8260	ND	5.0	1	UG/L	3/22/2010	CCN
Acrylonitrile	EPA-8260	ND	10	1	UG/L	3/22/2010	CCN
Methyl t-butyl ether	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Trans-1,2-Dichloroethene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,1-Dichloroethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
2-Butanone	EPA-8260	ND	10	1	UG/L	3/22/2010	CCN
Cis-1,2-Dichloroethene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
2,2-Dichloropropane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Bromochloromethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Chloroform	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,1,1-Trichloroethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,1-Dichloropropene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Carbon Tetrachloride	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,2-Dichloroethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Benzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Trichloroethene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,2-Dichloropropane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Dibromomethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Dichlorobromomethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Trans-1,3-Dichloropropene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Methyl isobutyl ketone	EPA-8260	ND	10	1	UG/L	3/22/2010	CCN
Toluene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Cis-1,3-Dichloropropene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,1,2-Trichloroethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
2-Hexanone	EPA-8260	ND	10	1	UG/L	3/22/2010	CCN
1,3-Dichloropropane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Tetrachloroethene	EPA-8260	40	2.0	1	UG/L	3/22/2010	CCN
Dibromochloromethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Ethylene dibromide	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN



CERTIFICATE OF ANALYSIS

CLIENT: Landau Associates, Inc.
130 - 2nd Ave. S.
Edmonds, WA 98020

DATE: 3/25/2010
ALS JOB#: 1003102
DATE RECEIVED: 3/19/2010
WDOE ACCREDITATION #: C1336

CLIENT CONTACT: Alyssa Johnson
CLIENT PROJECT ID: Bayliner Marine / #786003.010.012
CLIENT SAMPLE ID: 3/19/2010 B-14 (30-34)
ALS SAMPLE #: -06

DATA RESULTS

ANALYTE	METHOD	RESULTS*	REPORTING LIMITS	DILUTION FACTOR	UNITS**	ANALYSIS DATE	ANALYSIS BY
Chlorobenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,1,1,2-Tetrachloroethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Ethylbenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
m, p-Xylene	EPA-8260	ND	4.0	1	UG/L	3/22/2010	CCN
Styrene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
o-Xylene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Bromoform	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Isopropylbenzene (Cumene)	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,1,2,2-Tetrachloroethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,2,3-Trichloropropane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Bromobenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
n-Propylbenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
2-Chlorotoluene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,3,5-Trimethylbenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
4-Chlorotoluene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Tert-Butylbenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,2,4-Trimethylbenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Sec-Butylbenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
p-Isopropyltoluene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,3-Dichlorobenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,4-Dichlorobenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
n-Butylbenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,2-Dichlorobenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,2-Dibromo-3-Chloropropane	EPA-8260	ND	10	1	UG/L	3/22/2010	CCN
1,2,4-Trichlorobenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Hexachlorobutadiene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Naphthalene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,2,3-Trichlorobenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT.

** UNITS FOR ALL NON-LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS.

APPROVED BY:



CERTIFICATE OF ANALYSIS

CLIENT: Landau Associates, Inc.
130 - 2nd Ave. S.
Edmonds, WA 98020

DATE: 3/25/2010
ALS JOB#: 1003102
DATE RECEIVED: 3/19/2010
WDOE ACCREDITATION #: C1336

CLIENT CONTACT: Alyssa Johnson
CLIENT PROJECT ID: Bayliner Marine / #786003.010.012
CLIENT SAMPLE ID: 3/19/2010 B-14 (44-48)
ALS SAMPLE #: -07

DATA RESULTS

ANALYTE	METHOD	RESULTS*	REPORTING LIMITS	DILUTION FACTOR	UNITS**	ANALYSIS DATE	ANALYSIS BY
CFC-12	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Chloromethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Vinyl Chloride	EPA-8260	ND	0.20	1	UG/L	3/22/2010	CCN
Bromomethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Chloroethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
CFC-11	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Acetone	EPA-8260	ND	25	1	UG/L	3/22/2010	CCN
Carbon Disulfide	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,1-Dichloroethene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Methylene Chloride	EPA-8260	ND	5.0	1	UG/L	3/22/2010	CCN
Acrylonitrile	EPA-8260	ND	10	1	UG/L	3/22/2010	CCN
Methyl t-butyl ether	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Trans-1,2-Dichloroethene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,1-Dichloroethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
2-Butanone	EPA-8260	ND	10	1	UG/L	3/22/2010	CCN
Cis-1,2-Dichloroethene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
2,2-Dichloropropane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Bromochloromethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Chloroform	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,1,1-Trichloroethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,1-Dichloropropene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Carbon Tetrachloride	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,2-Dichloroethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Benzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Trichloroethene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,2-Dichloropropane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Dibromomethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Dichlorobromomethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Trans-1,3-Dichloropropene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Methyl isobutyl ketone	EPA-8260	ND	10	1	UG/L	3/22/2010	CCN
Toluene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Cis-1,3-Dichloropropene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,1,2-Trichloroethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
2-Hexanone	EPA-8260	ND	10	1	UG/L	3/22/2010	CCN
1,3-Dichloropropane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Tetrachloroethene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Dibromochloromethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Ethylene dibromide	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN



CERTIFICATE OF ANALYSIS

CLIENT: Landau Associates, Inc.
130 - 2nd Ave. S.
Edmonds, WA 98020

DATE: 3/25/2010
ALS JOB#: 1003102
DATE RECEIVED: 3/19/2010
WDOE ACCREDITATION #: C1336

CLIENT CONTACT: Alyssa Johnson
CLIENT PROJECT ID: Bayliner Marine / #786003.010.012
CLIENT SAMPLE ID: 3/19/2010 B-14 (44-48)
ALS SAMPLE #: -07

DATA RESULTS

ANALYTE	METHOD	RESULTS*	REPORTING LIMITS	DILUTION FACTOR	UNITS**	ANALYSIS DATE	ANALYSIS BY
Chlorobenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,1,1,2-Tetrachloroethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Ethylbenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
m, p-Xylene	EPA-8260	ND	4.0	1	UG/L	3/22/2010	CCN
Styrene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
o-Xylene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Bromoform	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Isopropylbenzene (Cumene)	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,1,2,2-Tetrachloroethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,2,3-Trichloropropane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Bromobenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
n-Propylbenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
2-Chlorotoluene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,3,5-Trimethylbenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
4-Chlorotoluene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Tert-Butylbenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,2,4-Trimethylbenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Sec-Butylbenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
p-Isopropyltoluene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,3-Dichlorobenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,4-Dichlorobenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
n-Butylbenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,2-Dichlorobenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,2-Dibromo-3-Chloropropane	EPA-8260	ND	10	1	UG/L	3/22/2010	CCN
1,2,4-Trichlorobenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Hexachlorobutadiene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Naphthalene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,2,3-Trichlorobenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT.

** UNITS FOR ALL NON-LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS.

APPROVED BY:



CERTIFICATE OF ANALYSIS

CLIENT: Landau Associates, Inc.
130 - 2nd Ave. S.
Edmonds, WA 98020

DATE: 3/25/2010
ALS JOB#: 1003102
DATE RECEIVED: 3/19/2010
WDOE ACCREDITATION #: C1336

CLIENT CONTACT: Alyssa Johnson
CLIENT PROJECT ID: Bayliner Marine / #786003.010.012
CLIENT SAMPLE ID: 3/19/2010 B-15
ALS SAMPLE #: -08

DATA RESULTS

ANALYTE	METHOD	RESULTS*	REPORTING LIMITS	DILUTION FACTOR	UNITS**	ANALYSIS DATE	ANALYSIS BY
Gasoline	NWTPH-HCID	ND	130	1	UG/L	3/22/2010	EBS
Diesel Fuel	NWTPH-HCID	ND	310	1	UG/L	3/22/2010	EBS
Motor Oil	NWTPH-HCID	ND	310	1	UG/L	3/22/2010	EBS
CFC-12	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Chloromethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Vinyl Chloride	EPA-8260	ND	0.20	1	UG/L	3/22/2010	CCN
Bromomethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Chloroethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
CFC-11	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Acetone	EPA-8260	ND	25	1	UG/L	3/22/2010	CCN
Carbon Disulfide	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,1-Dichloroethene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Methylene Chloride	EPA-8260	ND	5.0	1	UG/L	3/22/2010	CCN
Acrylonitrile	EPA-8260	ND	10	1	UG/L	3/22/2010	CCN
Methyl t-butyl ether	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Trans-1,2-Dichloroethene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,1-Dichloroethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
2-Butanone	EPA-8260	ND	10	1	UG/L	3/22/2010	CCN
Cis-1,2-Dichloroethene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
2,2-Dichloropropane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Bromochloromethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Chloroform	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,1,1-Trichloroethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,1-Dichloropropene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Carbon Tetrachloride	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,2-Dichloroethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Benzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Trichloroethene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,2-Dichloropropane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Dibromomethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Dichlorobromomethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Trans-1,3-Dichloropropene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Methyl isobutyl ketone	EPA-8260	ND	10	1	UG/L	3/22/2010	CCN
Toluene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Cis-1,3-Dichloropropene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,1,2-Trichloroethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
2-Hexanone	EPA-8260	ND	10	1	UG/L	3/22/2010	CCN
1,3-Dichloropropane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN



CERTIFICATE OF ANALYSIS

CLIENT: Landau Associates, Inc.
130 - 2nd Ave. S.
Edmonds, WA 98020

DATE: 3/25/2010
ALS JOB#: 1003102
DATE RECEIVED: 3/19/2010
WDOE ACCREDITATION #: C1336

CLIENT CONTACT: Alyssa Johnson
CLIENT PROJECT ID: Bayliner Marine / #786003.010.012
CLIENT SAMPLE ID: 3/19/2010 B-15
ALS SAMPLE #: -08

DATA RESULTS

ANALYTE	METHOD	RESULTS*	REPORTING LIMITS	DILUTION FACTOR	UNITS**	ANALYSIS DATE	ANALYSIS BY
Tetrachloroethene	EPA-8260	40	2.0	1	UG/L	3/22/2010	CCN
Dibromochloromethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Ethylene dibromide	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Chlorobenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,1,1,2-Tetrachloroethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Ethylbenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
m, p-Xylene	EPA-8260	ND	4.0	1	UG/L	3/22/2010	CCN
Styrene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
o-Xylene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Bromoform	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Isopropylbenzene (Cumene)	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,1,2,2-Tetrachloroethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,2,3-Trichloropropane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Bromobenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
n-Propylbenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
2-Chlorotoluene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,3,5-Trimethylbenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
4-Chlorotoluene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Tert-Butylbenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,2,4-Trimethylbenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Sec-Butylbenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
p-Isopropyltoluene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,3-Dichlorobenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,4-Dichlorobenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
n-Butylbenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,2-Dichlorobenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,2-Dibromo-3-Chloropropane	EPA-8260	ND	10	1	UG/L	3/22/2010	CCN
1,2,4-Trichlorobenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Hexachlorobutadiene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Naphthalene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,2,3-Trichlorobenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT.

** UNITS FOR ALL NON-LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS.

APPROVED BY:



CERTIFICATE OF ANALYSIS

CLIENT: Landau Associates, Inc.
130 - 2nd Ave. S.
Edmonds, WA 98020

DATE: 3/25/2010
ALS JOB#: 1003102
DATE RECEIVED: 3/19/2010
WDOE ACCREDITATION #: C1336

CLIENT CONTACT: Alyssa Johnson
CLIENT PROJECT ID: Bayliner Marine / #786003.010.012
CLIENT SAMPLE ID: 3/19/2010 B-16 (18-22)
ALS SAMPLE #: -09

DATA RESULTS

ANALYTE	METHOD	RESULTS*	REPORTING LIMITS	DILUTION FACTOR	UNITS**	ANALYSIS DATE	ANALYSIS BY
Gasoline	NWTPH-HCID	ND	130	1	UG/L	3/22/2010	EBS
Diesel Fuel	NWTPH-HCID	ND	310	1	UG/L	3/22/2010	EBS
Motor Oil	NWTPH-HCID	ND	310	1	UG/L	3/22/2010	EBS
CFC-12	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Chloromethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Vinyl Chloride	EPA-8260	ND	0.20	1	UG/L	3/22/2010	CCN
Bromomethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Chloroethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
CFC-11	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Acetone	EPA-8260	ND	25	1	UG/L	3/22/2010	CCN
Carbon Disulfide	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,1-Dichloroethene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Methylene Chloride	EPA-8260	ND	5.0	1	UG/L	3/22/2010	CCN
Acrylonitrile	EPA-8260	ND	10	1	UG/L	3/22/2010	CCN
Methyl t-butyl ether	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Trans-1,2-Dichloroethene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,1-Dichloroethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
2-Butanone	EPA-8260	ND	10	1	UG/L	3/22/2010	CCN
Cis-1,2-Dichloroethene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
2,2-Dichloropropane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Bromochloromethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Chloroform	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,1,1-Trichloroethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,1-Dichloropropene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Carbon Tetrachloride	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,2-Dichloroethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Benzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Trichloroethene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,2-Dichloropropane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Dibromomethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Dichlorobromomethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Trans-1,3-Dichloropropene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Methyl isobutyl ketone	EPA-8260	ND	10	1	UG/L	3/22/2010	CCN
Toluene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Cis-1,3-Dichloropropene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,1,2-Trichloroethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
2-Hexanone	EPA-8260	ND	10	1	UG/L	3/22/2010	CCN
1,3-Dichloropropane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN



CERTIFICATE OF ANALYSIS

CLIENT: Landau Associates, Inc.
130 - 2nd Ave. S.
Edmonds, WA 98020

DATE: 3/25/2010
ALS JOB#: 1003102
DATE RECEIVED: 3/19/2010
WDOE ACCREDITATION #: C1336

CLIENT CONTACT: Alyssa Johnson
CLIENT PROJECT ID: Bayliner Marine / #786003.010.012
CLIENT SAMPLE ID: 3/19/2010 B-16 (18-22)
ALS SAMPLE #: -09

DATA RESULTS

ANALYTE	METHOD	RESULTS*	REPORTING LIMITS	DILUTION FACTOR	UNITS**	ANALYSIS DATE	ANALYSIS BY
Tetrachloroethene	EPA-8260	3.9	2.0	1	UG/L	3/22/2010	CCN
Dibromochloromethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Ethylene dibromide	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Chlorobenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,1,1,2-Tetrachloroethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Ethylbenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
m, p-Xylene	EPA-8260	ND	4.0	1	UG/L	3/22/2010	CCN
Styrene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
o-Xylene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Bromoform	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Isopropylbenzene (Cumene)	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,1,2,2-Tetrachloroethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,2,3-Trichloropropane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Bromobenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
n-Propylbenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
2-Chlorotoluene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,3,5-Trimethylbenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
4-Chlorotoluene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Tert-Butylbenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,2,4-Trimethylbenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Sec-Butylbenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
p-Isopropyltoluene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,3-Dichlorobenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,4-Dichlorobenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
n-Butylbenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,2-Dichlorobenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,2-Dibromo-3-Chloropropane	EPA-8260	ND	10	1	UG/L	3/22/2010	CCN
1,2,4-Trichlorobenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Hexachlorobutadiene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Naphthalene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,2,3-Trichlorobenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT.

** UNITS FOR ALL NON-LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS.

APPROVED BY:



CERTIFICATE OF ANALYSIS

CLIENT: Landau Associates, Inc.
130 - 2nd Ave. S.
Edmonds, WA 98020

DATE: 3/25/2010
ALS JOB#: 1003102
DATE RECEIVED: 3/19/2010
WDOE ACCREDITATION #: C1336

CLIENT CONTACT: Alyssa Johnson
CLIENT PROJECT ID: Bayliner Marine / #786003.010.012
CLIENT SAMPLE ID: 3/19/2010 B-16 (32-36)
ALS SAMPLE #: -10

DATA RESULTS

ANALYTE	METHOD	RESULTS*	REPORTING LIMITS	DILUTION FACTOR	UNITS**	ANALYSIS DATE	ANALYSIS BY
CFC-12	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Chloromethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Vinyl Chloride	EPA-8260	ND	0.20	1	UG/L	3/22/2010	CCN
Bromomethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Chloroethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
CFC-11	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Acetone	EPA-8260	ND	25	1	UG/L	3/22/2010	CCN
Carbon Disulfide	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,1-Dichloroethene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Methylene Chloride	EPA-8260	ND	5.0	1	UG/L	3/22/2010	CCN
Acrylonitrile	EPA-8260	ND	10	1	UG/L	3/22/2010	CCN
Methyl t-butyl ether	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Trans-1,2-Dichloroethene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,1-Dichloroethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
2-Butanone	EPA-8260	ND	10	1	UG/L	3/22/2010	CCN
Cis-1,2-Dichloroethene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
2,2-Dichloropropane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Bromochloromethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Chloroform	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,1,1-Trichloroethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,1-Dichloropropene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Carbon Tetrachloride	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,2-Dichloroethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Benzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Trichloroethene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,2-Dichloropropane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Dibromomethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Dichlorobromomethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Trans-1,3-Dichloropropene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Methyl isobutyl ketone	EPA-8260	ND	10	1	UG/L	3/22/2010	CCN
Toluene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Cis-1,3-Dichloropropene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,1,2-Trichloroethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
2-Hexanone	EPA-8260	ND	10	1	UG/L	3/22/2010	CCN
1,3-Dichloropropane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Tetrachloroethene	EPA-8260	7.3	2.0	1	UG/L	3/22/2010	CCN
Dibromochloromethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Ethylene dibromide	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN



CERTIFICATE OF ANALYSIS

CLIENT: Landau Associates, Inc.
130 - 2nd Ave. S.
Edmonds, WA 98020

DATE: 3/25/2010
ALS JOB#: 1003102
DATE RECEIVED: 3/19/2010
WDOE ACCREDITATION #: C1336

CLIENT CONTACT: Alyssa Johnson
CLIENT PROJECT ID: Bayliner Marine / #786003.010.012
CLIENT SAMPLE ID: 3/19/2010 B-16 (32-36)
ALS SAMPLE #: -10

DATA RESULTS

ANALYTE	METHOD	RESULTS*	REPORTING LIMITS	DILUTION FACTOR	UNITS**	ANALYSIS DATE	ANALYSIS BY
Chlorobenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,1,1,2-Tetrachloroethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Ethylbenzene	EPA-8260	3.4	2.0	1	UG/L	3/22/2010	CCN
m, p-Xylene	EPA-8260	ND	4.0	1	UG/L	3/22/2010	CCN
Styrene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
o-Xylene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Bromoform	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Isopropylbenzene (Cumene)	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,1,2,2-Tetrachloroethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,2,3-Trichloropropane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Bromobenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
n-Propylbenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
2-Chlorotoluene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,3,5-Trimethylbenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
4-Chlorotoluene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Tert-Butylbenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,2,4-Trimethylbenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Sec-Butylbenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
p-Isopropyltoluene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,3-Dichlorobenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,4-Dichlorobenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
n-Butylbenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,2-Dichlorobenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,2-Dibromo-3-Chloropropane	EPA-8260	ND	10	1	UG/L	3/22/2010	CCN
1,2,4-Trichlorobenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Hexachlorobutadiene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Naphthalene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,2,3-Trichlorobenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT.

** UNITS FOR ALL NON-LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS.

APPROVED BY:



CERTIFICATE OF ANALYSIS

CLIENT: Landau Associates, Inc.
130 - 2nd Ave. S.
Edmonds, WA 98020

DATE: 3/25/2010
ALS JOB#: 1003102
DATE RECEIVED: 3/19/2010
WDOE ACCREDITATION #: C1336

CLIENT CONTACT: Alyssa Johnson
CLIENT PROJECT ID: Bayliner Marine / #786003.010.012
CLIENT SAMPLE ID: 3/19/2010 B-16 (46-50)
ALS SAMPLE #: -11

DATA RESULTS

ANALYTE	METHOD	RESULTS*	REPORTING LIMITS	DILUTION FACTOR	UNITS**	ANALYSIS DATE	ANALYSIS BY
CFC-12	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Chloromethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Vinyl Chloride	EPA-8260	ND	0.20	1	UG/L	3/22/2010	CCN
Bromomethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Chloroethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
CFC-11	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Acetone	EPA-8260	ND	25	1	UG/L	3/22/2010	CCN
Carbon Disulfide	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,1-Dichloroethene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Methylene Chloride	EPA-8260	ND	5.0	1	UG/L	3/22/2010	CCN
Acrylonitrile	EPA-8260	ND	10	1	UG/L	3/22/2010	CCN
Methyl t-butyl ether	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Trans-1,2-Dichloroethene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,1-Dichloroethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
2-Butanone	EPA-8260	ND	10	1	UG/L	3/22/2010	CCN
Cis-1,2-Dichloroethene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
2,2-Dichloropropane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Bromochloromethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Chloroform	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,1,1-Trichloroethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,1-Dichloropropene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Carbon Tetrachloride	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,2-Dichloroethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Benzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Trichloroethene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,2-Dichloropropane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Dibromomethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Dichlorobromomethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Trans-1,3-Dichloropropene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Methyl isobutyl ketone	EPA-8260	ND	10	1	UG/L	3/22/2010	CCN
Toluene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Cis-1,3-Dichloropropene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,1,2-Trichloroethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
2-Hexanone	EPA-8260	ND	10	1	UG/L	3/22/2010	CCN
1,3-Dichloropropane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Tetrachloroethene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Dibromochloromethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Ethylene dibromide	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN



CERTIFICATE OF ANALYSIS

CLIENT: Landau Associates, Inc.
130 - 2nd Ave. S.
Edmonds, WA 98020

DATE: 3/25/2010
ALS JOB#: 1003102
DATE RECEIVED: 3/19/2010
WDOE ACCREDITATION #: C1336

CLIENT CONTACT: Alyssa Johnson
CLIENT PROJECT ID: Bayliner Marine / #786003.010.012
CLIENT SAMPLE ID: 3/19/2010 B-16 (46-50)
ALS SAMPLE #: -11

DATA RESULTS

ANALYTE	METHOD	RESULTS*	REPORTING LIMITS	DILUTION FACTOR	UNITS**	ANALYSIS DATE	ANALYSIS BY
Chlorobenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,1,1,2-Tetrachloroethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Ethylbenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
m, p-Xylene	EPA-8260	ND	4.0	1	UG/L	3/22/2010	CCN
Styrene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
o-Xylene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Bromoform	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Isopropylbenzene (Cumene)	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,1,2,2-Tetrachloroethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,2,3-Trichloropropane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Bromobenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
n-Propylbenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
2-Chlorotoluene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,3,5-Trimethylbenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
4-Chlorotoluene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Tert-Butylbenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,2,4-Trimethylbenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Sec-Butylbenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
p-Isopropyltoluene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,3-Dichlorobenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,4-Dichlorobenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
n-Butylbenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,2-Dichlorobenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,2-Dibromo-3-Chloropropane	EPA-8260	ND	10	1	UG/L	3/22/2010	CCN
1,2,4-Trichlorobenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Hexachlorobutadiene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Naphthalene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,2,3-Trichlorobenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT.

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APPROVED BY:



CERTIFICATE OF ANALYSIS

CLIENT: Landau Associates, Inc.
130 - 2nd Ave. S.
Edmonds, WA 98020

DATE: 3/25/2010
ALS JOB#: 1003102
DATE RECEIVED: 3/19/2010
WDOE ACCREDITATION #: C1336

CLIENT CONTACT: Alyssa Johnson
CLIENT PROJECT ID: Bayliner Marine / #786003.010.012
CLIENT SAMPLE ID: 3/19/2010 Trip Blanks
ALS SAMPLE #: -12

DATA RESULTS

ANALYTE	METHOD	RESULTS*	REPORTING LIMITS	DILUTION FACTOR	UNITS**	ANALYSIS DATE	ANALYSIS BY
CFC-12	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Chloromethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Vinyl Chloride	EPA-8260	ND	0.20	1	UG/L	3/22/2010	CCN
Bromomethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Chloroethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
CFC-11	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Acetone	EPA-8260	ND	25	1	UG/L	3/22/2010	CCN
Carbon Disulfide	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,1-Dichloroethene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Methylene Chloride	EPA-8260	ND	5.0	1	UG/L	3/22/2010	CCN
Acrylonitrile	EPA-8260	ND	10	1	UG/L	3/22/2010	CCN
Methyl t-butyl ether	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Trans-1,2-Dichloroethene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,1-Dichloroethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
2-Butanone	EPA-8260	ND	10	1	UG/L	3/22/2010	CCN
Cis-1,2-Dichloroethene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
2,2-Dichloropropane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Bromochloromethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Chloroform	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,1,1-Trichloroethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,1-Dichloropropene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Carbon Tetrachloride	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,2-Dichloroethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Benzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Trichloroethene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,2-Dichloropropane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Dibromomethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Dichlorobromomethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Trans-1,3-Dichloropropene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Methyl isobutyl ketone	EPA-8260	ND	10	1	UG/L	3/22/2010	CCN
Toluene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Cis-1,3-Dichloropropene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,1,2-Trichloroethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
2-Hexanone	EPA-8260	ND	10	1	UG/L	3/22/2010	CCN
1,3-Dichloropropane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Tetrachloroethene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Dibromochloromethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Ethylene dibromide	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN



CERTIFICATE OF ANALYSIS

CLIENT: Landau Associates, Inc.
130 - 2nd Ave. S.
Edmonds, WA 98020

DATE: 3/25/2010
ALS JOB#: 1003102
DATE RECEIVED: 3/19/2010
WDOE ACCREDITATION #: C1336

CLIENT CONTACT: Alyssa Johnson
CLIENT PROJECT ID: Bayliner Marine / #786003.010.012
CLIENT SAMPLE ID: 3/19/2010 Trip Blanks
ALS SAMPLE #: -12

DATA RESULTS

ANALYTE	METHOD	RESULTS*	REPORTING LIMITS	DILUTION FACTOR	UNITS**	ANALYSIS DATE	ANALYSIS BY
Chlorobenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,1,1,2-Tetrachloroethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Ethylbenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
m, p-Xylene	EPA-8260	ND	4.0	1	UG/L	3/22/2010	CCN
Styrene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
o-Xylene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Bromoform	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Isopropylbenzene (Cumene)	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,1,2,2-Tetrachloroethane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,2,3-Trichloropropane	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Bromobenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
n-Propylbenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
2-Chlorotoluene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,3,5-Trimethylbenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
4-Chlorotoluene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Tert-Butylbenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,2,4-Trimethylbenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Sec-Butylbenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
p-Isopropyltoluene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,3-Dichlorobenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,4-Dichlorobenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
n-Butylbenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,2-Dichlorobenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,2-Dibromo-3-Chloropropane	EPA-8260	ND	10	1	UG/L	3/22/2010	CCN
1,2,4-Trichlorobenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Hexachlorobutadiene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
Naphthalene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN
1,2,3-Trichlorobenzene	EPA-8260	ND	2.0	1	UG/L	3/22/2010	CCN

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT.

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APPROVED BY:



CERTIFICATE OF ANALYSIS

CLIENT: Landau Associates, Inc.
130 - 2nd Ave. S.
Edmonds, WA 98020

DATE: 3/25/2010
ALS JOB#: 1003102
DATE RECEIVED: 3/19/2010
WDOE ACCREDITATION #: C1336

CLIENT CONTACT: Alyssa Johnson
CLIENT PROJECT ID: Bayliner Marine / #786003.010.012
CLIENT SAMPLE ID: 3/19/2010 B-15
ALS SAMPLE #: -13

DATA RESULTS

ANALYTE	METHOD	RESULTS*	REPORTING LIMITS	DILUTION FACTOR	UNITS**	ANALYSIS DATE	ANALYSIS BY
Gasoline	NWTPH-HCID	ND	20	1	MG/KG	3/22/2010	EBS
Diesel Fuel	NWTPH-HCID	ND	50	1	MG/KG	3/22/2010	EBS
Motor Oil	NWTPH-HCID	ND	100	1	MG/KG	3/22/2010	EBS
CFC-12	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
Chloromethane	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
Vinyl Chloride	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
Bromomethane	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
Chloroethane	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
CFC-11	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
Acetone	EPA-8260	ND	50	1	UG/KG	3/22/2010	CCN
1,1-Dichloroethene	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
Methylene Chloride	EPA-8260	ND	20	1	UG/KG	3/22/2010	CCN
Acrylonitrile	EPA-8260	ND	50	1	UG/KG	3/22/2010	CCN
Methyl t-butyl ether	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
Trans-1,2-Dichloroethene	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
1,1-Dichloroethane	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
2-Butanone	EPA-8260	ND	50	1	UG/KG	3/22/2010	CCN
Cis-1,2-Dichloroethene	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
2,2-Dichloropropane	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
Bromochloromethane	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
Chloroform	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
1,1,1-Trichloroethane	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
1,1-Dichloropropene	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
Carbon Tetrachloride	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
1,2-Dichloroethane	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
Benzene	EPA-8260	ND	5.0	1	UG/KG	3/22/2010	CCN
Trichloroethene	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
1,2-Dichloropropane	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
Dibromomethane	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
Dichlorobromomethane	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
Trans-1,3-Dichloropropene	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
Methyl isobutyl ketone	EPA-8260	ND	50	1	UG/KG	3/22/2010	CCN
Toluene	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
Cis-1,3-Dichloropropene	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
1,1,2-Trichloroethane	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
2-Hexanone	EPA-8260	ND	50	1	UG/KG	3/22/2010	CCN
1,3-Dichloropropane	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
Tetrachloroethene	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN



CERTIFICATE OF ANALYSIS

CLIENT: Landau Associates, Inc.
130 - 2nd Ave. S.
Edmonds, WA 98020

DATE: 3/25/2010
ALS JOB#: 1003102
DATE RECEIVED: 3/19/2010
WDOE ACCREDITATION #: C1336

CLIENT CONTACT: Alyssa Johnson
CLIENT PROJECT ID: Bayliner Marine / #786003.010.012
CLIENT SAMPLE ID: 3/19/2010 B-15
ALS SAMPLE #: -13

DATA RESULTS

ANALYTE	METHOD	RESULTS*	REPORTING LIMITS	DILUTION FACTOR	UNITS**	ANALYSIS DATE	ANALYSIS BY
Dibromochloromethane	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
Ethylene dibromide	EPA-8260	ND	5.0	1	UG/KG	3/22/2010	CCN
Chlorobenzene	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
1,1,1,2-Tetrachloroethane	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
Ethylbenzene	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
m, p-Xylene	EPA-8260	ND	20	1	UG/KG	3/22/2010	CCN
Styrene	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
o-Xylene	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
Bromoform	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
Isopropylbenzene (Cumene)	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
1,1,2,2-Tetrachloroethane	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
1,2,3-Trichloropropane	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
Bromobenzene	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
n-Propylbenzene	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
2-Chlorotoluene	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
1,3,5-Trimethylbenzene	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
4-Chlorotoluene	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
Tert-Butylbenzene	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
1,2,4-Trimethylbenzene	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
Sec-Butylbenzene	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
p-Isopropyltoluene	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
1,3-Dichlorobenzene	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
1,4-Dichlorobenzene	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
n-Butylbenzene	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
1,2-Dichlorobenzene	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
1,2-Dibromo-3-Chloropropane	EPA-8260	ND	50	1	UG/KG	3/22/2010	CCN
1,2,4-Trichlorobenzene	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
Hexachlorobutadiene	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
Naphthalene	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
1,2,3-Trichlorobenzene	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT.

** UNITS FOR ALL NON-LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS.

APPROVED BY:



CERTIFICATE OF ANALYSIS

CLIENT: Landau Associates, Inc.
130 - 2nd Ave. S.
Edmonds, WA 98020

DATE: 3/25/2010
ALS JOB#: 1003102
DATE RECEIVED: 3/19/2010
WDOE ACCREDITATION #: C1336

CLIENT CONTACT: Alyssa Johnson
CLIENT PROJECT ID: Bayliner Marine / #786003.010.012
CLIENT SAMPLE ID: 3/19/2010 IDW
ALS SAMPLE #: -14

DATA RESULTS

ANALYTE	METHOD	RESULTS*	REPORTING LIMITS	DILUTION FACTOR	UNITS**	ANALYSIS DATE	ANALYSIS BY
CFC-12	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
Chloromethane	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
Vinyl Chloride	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
Bromomethane	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
Chloroethane	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
CFC-11	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
Acetone	EPA-8260	ND	50	1	UG/KG	3/22/2010	CCN
1,1-Dichloroethene	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
Methylene Chloride	EPA-8260	ND	20	1	UG/KG	3/22/2010	CCN
Acrylonitrile	EPA-8260	ND	50	1	UG/KG	3/22/2010	CCN
Methyl t-butyl ether	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
Trans-1,2-Dichloroethene	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
1,1-Dichloroethane	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
2-Butanone	EPA-8260	ND	50	1	UG/KG	3/22/2010	CCN
Cis-1,2-Dichloroethene	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
2,2-Dichloropropane	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
Bromochloromethane	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
Chloroform	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
1,1,1-Trichloroethane	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
1,1-Dichloropropene	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
Carbon Tetrachloride	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
1,2-Dichloroethane	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
Benzene	EPA-8260	ND	5.0	1	UG/KG	3/22/2010	CCN
Trichloroethene	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
1,2-Dichloropropane	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
Dibromomethane	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
Dichlorobromomethane	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
Trans-1,3-Dichloropropene	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
Methyl isobutyl ketone	EPA-8260	ND	50	1	UG/KG	3/22/2010	CCN
Toluene	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
Cis-1,3-Dichloropropene	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
1,1,2-Trichloroethane	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
2-Hexanone	EPA-8260	ND	50	1	UG/KG	3/22/2010	CCN
1,3-Dichloropropane	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
Tetrachloroethene	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
Dibromochloromethane	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
Ethylene dibromide	EPA-8260	ND	5.0	1	UG/KG	3/22/2010	CCN
Chlorobenzene	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN



CERTIFICATE OF ANALYSIS

CLIENT: Landau Associates, Inc.
130 - 2nd Ave. S.
Edmonds, WA 98020

DATE: 3/25/2010
ALS JOB#: 1003102
DATE RECEIVED: 3/19/2010
WDOE ACCREDITATION #: C1336

CLIENT CONTACT: Alyssa Johnson
CLIENT PROJECT ID: Bayliner Marine / #786003.010.012
CLIENT SAMPLE ID: 3/19/2010 IDW
ALS SAMPLE #: -14

DATA RESULTS

ANALYTE	METHOD	RESULTS*	REPORTING LIMITS	DILUTION FACTOR	UNITS**	ANALYSIS DATE	ANALYSIS BY
1,1,1,2-Tetrachloroethane	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
Ethylbenzene	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
m, p-Xylene	EPA-8260	ND	20	1	UG/KG	3/22/2010	CCN
Styrene	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
o-Xylene	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
Bromoform	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
Isopropylbenzene (Cumene)	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
1,1,2,2-Tetrachloroethane	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
1,2,3-Trichloropropane	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
Bromobenzene	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
n-Propylbenzene	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
2-Chlorotoluene	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
1,3,5-Trimethylbenzene	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
4-Chlorotoluene	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
Tert-Butylbenzene	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
1,2,4-Trimethylbenzene	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
Sec-Butylbenzene	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
p-Isopropyltoluene	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
1,3-Dichlorobenzene	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
1,4-Dichlorobenzene	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
n-Butylbenzene	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
1,2-Dichlorobenzene	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
1,2-Dibromo-3-Chloropropane	EPA-8260	ND	50	1	UG/KG	3/22/2010	CCN
1,2,4-Trichlorobenzene	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
Hexachlorobutadiene	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
Naphthalene	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN
1,2,3-Trichlorobenzene	EPA-8260	ND	10	1	UG/KG	3/22/2010	CCN

* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT.

** UNITS FOR ALL NON-LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS.

APPROVED BY:



CERTIFICATE OF ANALYSIS

CLIENT: Landau Associates, Inc.
130 - 2nd Ave. S.
Edmonds, WA 98020

DATE: 3/25/2010
ALS JOB#: 1003102
DATE RECEIVED: 3/19/2010
WDOE ACCREDITATION #: C1336

CLIENT CONTACT: Alyssa Johnson
CLIENT PROJECT ID: Bayliner Marine / #786003.010.012

QUALITY CONTROL RESULTS

SURROGATE RECOVERY

ALS SAMPLE ID	METHOD	SUR ID	% RECV
1003102-01	NWTPH-HCID	BCB	56%
1003102-01	NWTPH-HCID	C25 (conc)	80%
1003102-01	NWTPH-HCID	C25	105%
1003102-01	EPA-8260	1,2-Dichloroethane-d4	112%
1003102-01	EPA-8260	Toluene-d8	92%
1003102-01	EPA-8260	4-Bromofluorobenzene	103%
1003102-02	EPA-8260	1,2-Dichloroethane-d4	114%
1003102-02	EPA-8260	Toluene-d8	93%
1003102-02	EPA-8260	4-Bromofluorobenzene	94%
1003102-03	EPA-8260	1,2-Dichloroethane-d4	115%
1003102-03	EPA-8260	Toluene-d8	93%
1003102-03	EPA-8260	4-Bromofluorobenzene	99%
1003102-04	EPA-8260	1,2-Dichloroethane-d4	116%
1003102-04	EPA-8260	Toluene-d8	93%
1003102-04	EPA-8260	4-Bromofluorobenzene	98%
1003102-05	NWTPH-HCID	BCB	58%
1003102-05	NWTPH-HCID	C25	105%
1003102-05	NWTPH-HCID	C25 (conc)	81%
1003102-05	EPA-8260	1,2-Dichloroethane-d4	119%
1003102-05	EPA-8260	Toluene-d8	91%
1003102-05	EPA-8260	4-Bromofluorobenzene	100%
1003102-05 2X Dilution	EPA-8260	1,2-Dichloroethane-d4	112%
1003102-05 2X Dilution	EPA-8260	Toluene-d8	93%
1003102-05 2X Dilution	EPA-8260	4-Bromofluorobenzene	104%
1003102-06	EPA-8260	1,2-Dichloroethane-d4	119%
1003102-06	EPA-8260	Toluene-d8	93%
1003102-06	EPA-8260	4-Bromofluorobenzene	95%
1003102-07	EPA-8260	1,2-Dichloroethane-d4	119%
1003102-07	EPA-8260	Toluene-d8	94%
1003102-07	EPA-8260	4-Bromofluorobenzene	97%
1003102-08	NWTPH-HCID	BCB	84%
1003102-08	NWTPH-HCID	C25	107%
1003102-08	NWTPH-HCID	C25 (conc)	80%
1003102-08	EPA-8260	1,2-Dichloroethane-d4	122%
1003102-08	EPA-8260	Toluene-d8	95%



CERTIFICATE OF ANALYSIS

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130 - 2nd Ave. S.
Edmonds, WA 98020

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WDOE ACCREDITATION #: C1336

CLIENT CONTACT: Alyssa Johnson
CLIENT PROJECT ID: Bayliner Marine / #786003.010.012

QUALITY CONTROL RESULTS

SURROGATE RECOVERY

ALS SAMPLE ID	METHOD	SUR ID	% RECV
1003102-08	EPA-8260	4-Bromofluorobenzene	90%
1003102-09	NWTPH-HCID	BCB	57%
1003102-09	NWTPH-HCID	C25	107%
1003102-09	NWTPH-HCID	C25 (conc)	79%
1003102-09	EPA-8260	1,2-Dichloroethane-d4	125%
1003102-09	EPA-8260	Toluene-d8	93%
1003102-09	EPA-8260	4-Bromofluorobenzene	96%
1003102-10	EPA-8260	1,2-Dichloroethane-d4	123%
1003102-10	EPA-8260	Toluene-d8	92%
1003102-10	EPA-8260	4-Bromofluorobenzene	97%
1003102-11	EPA-8260	1,2-Dichloroethane-d4	127%
1003102-11	EPA-8260	Toluene-d8	92%
1003102-11	EPA-8260	4-Bromofluorobenzene	90%
1003102-12	EPA-8260	1,2-Dichloroethane-d4	109%
1003102-12	EPA-8260	Toluene-d8	94%
1003102-12	EPA-8260	4-Bromofluorobenzene	101%
1003102-13	NWTPH-HCID	BCB	78%
1003102-13	NWTPH-HCID	C25	79%
1003102-13	EPA-8260	1,2-Dichloroethane-d4	102%
1003102-13	EPA-8260	Toluene-d8	94%
1003102-13	EPA-8260	4-Bromofluorobenzene	101%
1003102-14	EPA-8260	1,2-Dichloroethane-d4	109%
1003102-14	EPA-8260	Toluene-d8	95%
1003102-14	EPA-8260	4-Bromofluorobenzene	101%

APPROVED BY:



CERTIFICATE OF ANALYSIS

CLIENT: Landau Associates, Inc.
130 - 2nd Ave. S.
Edmonds, WA 98020

DATE: 3/25/2010
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WDOE ACCREDITATION #: C1336

CLIENT CONTACT: Alyssa Johnson
CLIENT PROJECT ID: Bayliner Marine / #786003.010.012

QUALITY CONTROL RESULTS

BLANK RESULTS

QC SAMPLE ID	MATRIX	METHOD	ANALYTE	RESULT	UNITS
MB-032210S	Soil	NWTPH-HCID	Gasoline	ND(<20)	MG/KG
MB-032210S	Soil	NWTPH-HCID	Diesel Fuel	ND(<50)	MG/KG
MB-032210S	Soil	NWTPH-HCID	Motor Oil	ND(<100)	MG/KG
MB-032210W	Water	NWTPH-HCID	Gasoline	ND(<130)	UG/L
MB-032210W	Water	NWTPH-HCID	Diesel Fuel	ND(<310)	UG/L
MB-032210W	Water	NWTPH-HCID	Motor Oil	ND(<310)	UG/L
MB-032210S	Soil	EPA-8260	CFC-12	ND(<10)	UG/KG
MB-032210S	Soil	EPA-8260	Chloromethane	ND(<10)	UG/KG
MB-032210S	Soil	EPA-8260	Vinyl Chloride	ND(<10)	UG/KG
MB-032210S	Soil	EPA-8260	Bromomethane	ND(<10)	UG/KG
MB-032210S	Soil	EPA-8260	Chloroethane	ND(<10)	UG/KG
MB-032210S	Soil	EPA-8260	Carbon Tetrachloride	ND(<10)	UG/KG
MB-032210S	Soil	EPA-8260	CFC-11	ND(<10)	UG/KG
MB-032210S	Soil	EPA-8260	Acetone	ND(<50)	UG/KG
MB-032210S	Soil	EPA-8260	1,1-Dichloroethene	ND(<10)	UG/KG
MB-032210S	Soil	EPA-8260	Methylene Chloride	ND(<20)	UG/KG
MB-032210S	Soil	EPA-8260	Acrylonitrile	ND(<50)	UG/KG
MB-032210S	Soil	EPA-8260	Methyl t-butyl ether	ND(<10)	UG/KG
MB-032210S	Soil	EPA-8260	Trans-1,2-Dichloroethene	ND(<10)	UG/KG
MB-032210S	Soil	EPA-8260	1,1-Dichloroethane	ND(<10)	UG/KG
MB-032210S	Soil	EPA-8260	2-Butanone	ND(<50)	UG/KG
MB-032210S	Soil	EPA-8260	Cis-1,2-Dichloroethene	ND(<10)	UG/KG
MB-032210S	Soil	EPA-8260	2,2-Dichloropropane	ND(<10)	UG/KG
MB-032210S	Soil	EPA-8260	Bromochloromethane	ND(<10)	UG/KG
MB-032210S	Soil	EPA-8260	Chloroform	ND(<10)	UG/KG
MB-032210S	Soil	EPA-8260	1,1,1-Trichloroethane	ND(<10)	UG/KG
MB-032210S	Soil	EPA-8260	1,1-Dichloropropene	ND(<10)	UG/KG
MB-032210S	Soil	EPA-8260	1,2-Dichloroethane	ND(<10)	UG/KG
MB-032210S	Soil	EPA-8260	Benzene	ND(<5.0)	UG/KG
MB-032210S	Soil	EPA-8260	Trichloroethene	ND(<10)	UG/KG
MB-032210S	Soil	EPA-8260	1,2-Dichloropropane	ND(<10)	UG/KG
MB-032210S	Soil	EPA-8260	Dibromomethane	ND(<10)	UG/KG
MB-032210S	Soil	EPA-8260	Dichlorobromomethane	ND(<10)	UG/KG
MB-032210S	Soil	EPA-8260	Trans-1,3-Dichloropropene	ND(<10)	UG/KG
MB-032210S	Soil	EPA-8260	Methyl isobutyl ketone	ND(<50)	UG/KG
MB-032210S	Soil	EPA-8260	Toluene	ND(<10)	UG/KG



CERTIFICATE OF ANALYSIS

CLIENT: Landau Associates, Inc.
130 - 2nd Ave. S.
Edmonds, WA 98020

DATE: 3/25/2010
ALS JOB#: 1003102
DATE RECEIVED: 3/19/2010
WDOE ACCREDITATION #: C1336

CLIENT CONTACT: Alyssa Johnson
CLIENT PROJECT ID: Bayliner Marine / #786003.010.012

QUALITY CONTROL RESULTS

BLANK RESULTS

QC SAMPLE ID	MATRIX	METHOD	ANALYTE	RESULT	UNITS
MB-032210S	Soil	EPA-8260	Cis-1,3-Dichloropropene	ND(<10)	UG/KG
MB-032210S	Soil	EPA-8260	1,1,2-Trichloroethane	ND(<10)	UG/KG
MB-032210S	Soil	EPA-8260	2-Hexanone	ND(<50)	UG/KG
MB-032210S	Soil	EPA-8260	1,3-Dichloropropane	ND(<10)	UG/KG
MB-032210S	Soil	EPA-8260	Tetrachloroethene	ND(<10)	UG/KG
MB-032210S	Soil	EPA-8260	Dibromochloromethane	ND(<10)	UG/KG
MB-032210S	Soil	EPA-8260	Ethylene dibromide	ND(<5.0)	UG/KG
MB-032210S	Soil	EPA-8260	Chlorobenzene	ND(<10)	UG/KG
MB-032210S	Soil	EPA-8260	1,1,1,2-Tetrachloroethane	ND(<10)	UG/KG
MB-032210S	Soil	EPA-8260	Ethylbenzene	ND(<10)	UG/KG
MB-032210S	Soil	EPA-8260	m, p-Xylene	ND(<20)	UG/KG
MB-032210S	Soil	EPA-8260	Styrene	ND(<10)	UG/KG
MB-032210S	Soil	EPA-8260	o-Xylene	ND(<10)	UG/KG
MB-032210S	Soil	EPA-8260	Bromoform	ND(<10)	UG/KG
MB-032210S	Soil	EPA-8260	Isopropylbenzene (Cumene)	ND(<10)	UG/KG
MB-032210S	Soil	EPA-8260	1,1,2,2-Tetrachloroethane	ND(<10)	UG/KG
MB-032210S	Soil	EPA-8260	1,2,3-Trichloropropane	ND(<10)	UG/KG
MB-032210S	Soil	EPA-8260	Bromobenzene	ND(<10)	UG/KG
MB-032210S	Soil	EPA-8260	n-Propylbenzene	ND(<10)	UG/KG
MB-032210S	Soil	EPA-8260	2-Chlorotoluene	ND(<10)	UG/KG
MB-032210S	Soil	EPA-8260	1,3,5-Trimethylbenzene	ND(<10)	UG/KG
MB-032210S	Soil	EPA-8260	4-Chlorotoluene	ND(<10)	UG/KG
MB-032210S	Soil	EPA-8260	Tert-Butylbenzene	ND(<10)	UG/KG
MB-032210S	Soil	EPA-8260	1,2,4-Trimethylbenzene	ND(<10)	UG/KG
MB-032210S	Soil	EPA-8260	Sec-Butylbenzene	ND(<10)	UG/KG
MB-032210S	Soil	EPA-8260	p-Isopropyltoluene	ND(<10)	UG/KG
MB-032210S	Soil	EPA-8260	1,3-Dichlorobenzene	ND(<10)	UG/KG
MB-032210S	Soil	EPA-8260	1,4-Dichlorobenzene	ND(<10)	UG/KG
MB-032210S	Soil	EPA-8260	n-Butylbenzene	ND(<10)	UG/KG
MB-032210S	Soil	EPA-8260	1,2-Dichlorobenzene	ND(<10)	UG/KG
MB-032210S	Soil	EPA-8260	1,2-Dibromo-3-Chloropropane	ND(<50)	UG/KG
MB-032210S	Soil	EPA-8260	1,2,4-Trichlorobenzene	ND(<10)	UG/KG
MB-032210S	Soil	EPA-8260	Hexachlorobutadiene	ND(<10)	UG/KG
MB-032210S	Soil	EPA-8260	Naphthalene	ND(<10)	UG/KG
MB-032210S	Soil	EPA-8260	1,2,3-Trichlorobenzene	ND(<10)	UG/KG
MB-032210W	Water	EPA-8260	CFC-12	ND(<2.0)	UG/L



CERTIFICATE OF ANALYSIS

CLIENT: Landau Associates, Inc.
130 - 2nd Ave. S.
Edmonds, WA 98020

DATE: 3/25/2010
ALS JOB#: 1003102
DATE RECEIVED: 3/19/2010
WDOE ACCREDITATION #: C1336

CLIENT CONTACT: Alyssa Johnson
CLIENT PROJECT ID: Bayliner Marine / #786003.010.012

QUALITY CONTROL RESULTS

BLANK RESULTS

QC SAMPLE ID	MATRIX	METHOD	ANALYTE	RESULT	UNITS
MB-032210W	Water	EPA-8260	Chloromethane	ND(<2.0)	UG/L
MB-032210W	Water	EPA-8260	Vinyl Chloride	ND(<0.20)	UG/L
MB-032210W	Water	EPA-8260	Bromomethane	ND(<2.0)	UG/L
MB-032210W	Water	EPA-8260	Chloroethane	ND(<2.0)	UG/L
MB-032210W	Water	EPA-8260	Carbon Tetrachloride	ND(<2.0)	UG/L
MB-032210W	Water	EPA-8260	CFC-11	ND(<2.0)	UG/L
MB-032210W	Water	EPA-8260	Carbon Disulfide	ND(<2.0)	UG/L
MB-032210W	Water	EPA-8260	Acetone	ND(<25)	UG/L
MB-032210W	Water	EPA-8260	1,1-Dichloroethene	ND(<2.0)	UG/L
MB-032210W	Water	EPA-8260	Methylene Chloride	ND(<5.0)	UG/L
MB-032210W	Water	EPA-8260	Acrylonitrile	ND(<10)	UG/L
MB-032210W	Water	EPA-8260	Methyl t-butyl ether	ND(<2.0)	UG/L
MB-032210W	Water	EPA-8260	Trans-1,2-Dichloroethene	ND(<2.0)	UG/L
MB-032210W	Water	EPA-8260	1,1-Dichloroethane	ND(<2.0)	UG/L
MB-032210W	Water	EPA-8260	2-Butanone	ND(<10)	UG/L
MB-032210W	Water	EPA-8260	Cis-1,2-Dichloroethene	ND(<2.0)	UG/L
MB-032210W	Water	EPA-8260	2,2-Dichloropropane	ND(<2.0)	UG/L
MB-032210W	Water	EPA-8260	Bromochloromethane	ND(<2.0)	UG/L
MB-032210W	Water	EPA-8260	Chloroform	ND(<2.0)	UG/L
MB-032210W	Water	EPA-8260	1,1,1-Trichloroethane	ND(<2.0)	UG/L
MB-032210W	Water	EPA-8260	1,1-Dichloropropene	ND(<2.0)	UG/L
MB-032210W	Water	EPA-8260	1,2-Dichloroethane	ND(<2.0)	UG/L
MB-032210W	Water	EPA-8260	Benzene	ND(<2.0)	UG/L
MB-032210W	Water	EPA-8260	Trichloroethene	ND(<2.0)	UG/L
MB-032210W	Water	EPA-8260	1,2-Dichloropropane	ND(<2.0)	UG/L
MB-032210W	Water	EPA-8260	Dibromomethane	ND(<2.0)	UG/L
MB-032210W	Water	EPA-8260	Dichlorobromomethane	ND(<2.0)	UG/L
MB-032210W	Water	EPA-8260	Trans-1,3-Dichloropropene	ND(<2.0)	UG/L
MB-032210W	Water	EPA-8260	Methyl isobutyl ketone	ND(<10)	UG/L
MB-032210W	Water	EPA-8260	Toluene	ND(<2.0)	UG/L
MB-032210W	Water	EPA-8260	Cis-1,3-Dichloropropene	ND(<2.0)	UG/L
MB-032210W	Water	EPA-8260	1,1,2-Trichloroethane	ND(<2.0)	UG/L
MB-032210W	Water	EPA-8260	2-Hexanone	ND(<10)	UG/L
MB-032210W	Water	EPA-8260	1,3-Dichloropropane	ND(<2.0)	UG/L
MB-032210W	Water	EPA-8260	Tetrachloroethene	ND(<2.0)	UG/L
MB-032210W	Water	EPA-8260	Dibromochloromethane	ND(<2.0)	UG/L



CERTIFICATE OF ANALYSIS

CLIENT: Landau Associates, Inc.
130 - 2nd Ave. S.
Edmonds, WA 98020

DATE: 3/25/2010
ALS JOB#: 1003102
DATE RECEIVED: 3/19/2010
WDOE ACCREDITATION #: C1336

CLIENT CONTACT: Alyssa Johnson
CLIENT PROJECT ID: Bayliner Marine / #786003.010.012

QUALITY CONTROL RESULTS

BLANK RESULTS

QC SAMPLE ID	MATRIX	METHOD	ANALYTE	RESULT	UNITS
MB-032210W	Water	EPA-8260	Ethylene dibromide	ND(<0.010)	UG/L
MB-032210W	Water	EPA-8260	Chlorobenzene	ND(<2.0)	UG/L
MB-032210W	Water	EPA-8260	1,1,1,2-Tetrachloroethane	ND(<2.0)	UG/L
MB-032210W	Water	EPA-8260	Ethylbenzene	ND(<2.0)	UG/L
MB-032210W	Water	EPA-8260	m, p-Xylene	ND(<4.0)	UG/L
MB-032210W	Water	EPA-8260	Styrene	ND(<2.0)	UG/L
MB-032210W	Water	EPA-8260	o-Xylene	ND(<2.0)	UG/L
MB-032210W	Water	EPA-8260	Bromoform	ND(<2.0)	UG/L
MB-032210W	Water	EPA-8260	Isopropylbenzene (Cumene)	ND(<2.0)	UG/L
MB-032210W	Water	EPA-8260	1,1,2,2-Tetrachloroethane	ND(<2.0)	UG/L
MB-032210W	Water	EPA-8260	1,2,3-Trichloropropane	ND(<2.0)	UG/L
MB-032210W	Water	EPA-8260	Bromobenzene	ND(<2.0)	UG/L
MB-032210W	Water	EPA-8260	n-Propylbenzene	ND(<2.0)	UG/L
MB-032210W	Water	EPA-8260	2-Chlorotoluene	ND(<2.0)	UG/L
MB-032210W	Water	EPA-8260	1,3,5-Trimethylbenzene	ND(<2.0)	UG/L
MB-032210W	Water	EPA-8260	4-Chlorotoluene	ND(<2.0)	UG/L
MB-032210W	Water	EPA-8260	Tert-Butylbenzene	ND(<2.0)	UG/L
MB-032210W	Water	EPA-8260	1,2,4-Trimethylbenzene	ND(<2.0)	UG/L
MB-032210W	Water	EPA-8260	Sec-Butylbenzene	ND(<2.0)	UG/L
MB-032210W	Water	EPA-8260	p-Isopropyltoluene	ND(<2.0)	UG/L
MB-032210W	Water	EPA-8260	1,3-Dichlorobenzene	ND(<2.0)	UG/L
MB-032210W	Water	EPA-8260	1,4-Dichlorobenzene	ND(<2.0)	UG/L
MB-032210W	Water	EPA-8260	n-Butylbenzene	ND(<2.0)	UG/L
MB-032210W	Water	EPA-8260	1,2-Dichlorobenzene	ND(<2.0)	UG/L
MB-032210W	Water	EPA-8260	1,2-Dibromo-3-Chloropropane	ND(<10)	UG/L
MB-032210W	Water	EPA-8260	1,2,4-Trichlorobenzene	ND(<2.0)	UG/L
MB-032210W	Water	EPA-8260	Hexachlorobutadiene	ND(<2.0)	UG/L
MB-032210W	Water	EPA-8260	Naphthalene	ND(<2.0)	UG/L
MB-032210W	Water	EPA-8260	1,2,3-Trichlorobenzene	ND(<2.0)	UG/L

APPROVED BY:



CERTIFICATE OF ANALYSIS

CLIENT: Landau Associates, Inc.
130 - 2nd Ave. S.
Edmonds, WA 98020

DATE: 3/25/2010
ALS JOB#: 1003102
DATE RECEIVED: 3/19/2010
WDOE ACCREDITATION #: C1336

CLIENT CONTACT: Alyssa Johnson
CLIENT PROJECT ID: Bayliner Marine / #786003.010.012

QUALITY CONTROL RESULTS

BLANK SPIKE/BLANK SPIKE DUPLICATE RESULTS

QC BATCH ID	MATRIX	METHOD	ANALYTE	SPIKE AMOUNT	BLANK SPIKE RECOVERY	BLANK SPIKE DUPLICATE RECOVERY	RPD
608	Soil	EPA-8260	1,1-Dichloroethene	10	94%	90%	5
608	Soil	EPA-8260	Benzene	10	95%	92%	2
608	Soil	EPA-8260	Trichloroethene	10	84%	82%	2
608	Soil	EPA-8260	Toluene	10	84%	81%	3
608	Soil	EPA-8260	Chlorobenzene	10	83%	80%	4
610	Water	EPA-8260	1,1-Dichloroethene	10	98%	88%	11
610	Water	EPA-8260	Benzene	10	97%	93%	4
610	Water	EPA-8260	Trichloroethene	10	98%	94%	4
610	Water	EPA-8260	Toluene	10	100%	96%	4
610	Water	EPA-8260	Chlorobenzene	10	100%	96%	4

APPROVED BY:



- Seattle (Edmonds) (425) 778-0907
- Tacoma (253) 926-2493
- Spokane (509) 327-9737
- Portland (Tigard) (503) 443-6010
- _____

1003102

Date 3/19/2010
Page 1 of 2

Chain-of-Custody Record

Project Name	<u>Bayliner Marine</u>		Project No.	<u>786003.010.012</u>		Testing Parameters				Turnaround Time <input checked="" type="checkbox"/> Standard <u>ASJ</u> <input type="checkbox"/> Accelerated <input checked="" type="checkbox"/> <u>3-day</u>	
Project Location/Event	<u>Arlington, WA / Further investigation</u>		VOCs TPH-HCID NWTPH-D(HOLD) NWTPH-G(HOLD)								Observations/Comments
Sampler's Name	<u>Alyssa Ballinger Johnson</u>										
Project Contact	<u>Alyssa Johnson / Larry Beard</u>										
Send Results To	<u>Larry Beard / Anne Halvorsen</u>										
Sample I.D.	Date	Time	Matrix	No. of Containers	VOCs	TPH-HCID	NWTPH-D(HOLD)	NWTPH-G(HOLD)			

Sample I.D.	Date	Time	Matrix	No. of Containers	VOCs	TPH-HCID	NWTPH-D(HOLD)	NWTPH-G(HOLD)			
1 B-12	3/19/2010	0810	H ₂ O	8	X	X	X	X	X Allow water samples to settle, collect aliquot from clear portion NWTPH-Dx: X run acid wash/silica gel cleanup ___ run samples standardized to _____ product ___ Analyze for EPH if no specific product identified VOC/BTEX/VPH (soil): ___ non-preserved ___ preserved w/methanol ___ preserved w/sodium bisulfate ___ Freeze upon receipt ___ Dissolved metal water samples field filtered Other <u>HOLD NWTPH-D + NWTPH-G.</u>		
2 B-13		0905		3	X						
3 B-11		1010		3	X						
4 B-10		1100		3	X						
5 B-14 (16-20)		1200		8	X	X	X	X			
6 B-14 (30-34)		1230		3	X						
7 B-14 (44-48)		1305		3	X						
8 B-15		1350		8	X	X	X	X			
9 B-16 (18-22)		1440		8	X	X	X	X			
10 B-16 (38-36)		1530		3	X						
11 B-16 (46-50)	↓	1545	↓	3	X						
12 TRIP BLANKS		—	H ₂ O	2	X						
13 B-15	3/19/2010	1346	Soil	5	X	X	X	X			
14 IDW	3/19/10	1630	Soil	2	X						

X 3/20/10 - Per Alyssa - run Voc for trip blanks.

Special Shipment/Handling or Storage Requirements <u>on ice</u>		Method of Shipment	
Relinquished by <u>Alyssa Ballinger Johnson</u> <small>Signature</small> <u>Alyssa Ballinger Johnson</u> <small>Printed Name</small> <u>Landau Associates</u> <small>Company</small> Date <u>3/19/2010</u> Time _____	Received by <u>[Signature]</u> <small>Signature</small> <u>Rick Bryan</u> <small>Printed Name</small> <u>ALS</u> <small>Company</small> Date <u>3/19/10</u> Time <u>5:20</u>	Relinquished by _____ <small>Signature</small> _____ <small>Printed Name</small> _____ <small>Company</small> Date _____ Time _____	Received by _____ <small>Signature</small> _____ <small>Printed Name</small> _____ <small>Company</small> Date _____ Time _____

APPENDIX G
SOIL VAPOR LABORATORY ANALYTICAL REPORT

LABORATORY REPORT

March 26, 2010

Larry Beard
Landau Associates, Inc.
130 2nd Ave. South
Edmonds, WA 98020

RE: Bayliner Marine / 786003.010.012

Dear Larry:

Enclosed are the results of the sample submitted to our laboratory on March 25, 2010. For your reference, this analysis has been assigned our service request number P1001064.

All analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.caslab.com. Results are intended to be considered in their entirety and apply only to the samples analyzed and reported herein. Your report contains 16 pages.

Columbia Analytical Services, Inc. is certified by the California Department of Health Services, NELAP Laboratory Certificate No. 02115CA; Arizona Department of Health Services, Certificate No. AZ0694; Florida Department of Health, NELAP Certification E871020; New Jersey Department of Environmental Protection, NELAP Laboratory Certification ID #CA009; New York State Department of Health, NELAP NY Lab ID No: 11221; Oregon Environmental Laboratory Accreditation Program, NELAP ID: CA20007; The American Industrial Hygiene Association, Laboratory #101661; United States Department of Defense Environmental Laboratory Accreditation Program (DoD-ELAP), Certificate No. L10-3; Pennsylvania Registration No. 68-03307; TX Commission of Environmental Quality, NELAP ID T104704413-09-TX; Minnesota Department of Health, Certificate No. 11495AA. Each of the certifications listed above have an explicit Scope of Accreditation that applies to specific matrices/methods/analytes; therefore, please contact me for information corresponding to a particular certification.

If you have any questions, please call me at (805) 526-7161.

Respectfully submitted,

Columbia Analytical Services, Inc.



Sue Anderson
Project Manager

Page
1 of 16

Client: Landau Associates, Inc.
Project: Bayliner Marine / 786003.010.012

CAS Project No: P1001064

CASE NARRATIVE

The sample was received intact under chain of custody on March 25, 2010 and was stored in accordance with the analytical method requirements. Please refer to the sample acceptance check form for additional information. The results reported herein are applicable only to the condition of the sample at the time of sample receipt.

Volatile Organic Compound Analysis

The sample was analyzed for selected volatile organic compounds in accordance with EPA Method TO-15 from the Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition (EPA/625/R-96/010b), January, 1999. The analytical system was comprised of a gas chromatograph/mass spectrometer (GC/MS) interfaced to a whole-air preconcentrator.

The spike recovery of benzyl chloride for the Laboratory Control Sample (LCS) analyzed was outside the laboratory generated control criterion. The recovery error equates to a potential low bias. However, the spike recovery of the analyte in question was within the method criteria; therefore, the data quality has not been significantly affected. No corrective action was necessary.

The results of analyses are given in the attached laboratory report. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for utilization of less than the complete report.

Client: Landau Associates, Inc.
Project: Bayliner Marine/786003.010.012

Service Request: P1001064

SAMPLE CROSS-REFERENCE

<u>SAMPLE #</u>	<u>CLIENT SAMPLE ID</u>	<u>DATE</u>	<u>TIME</u>
P1001064-001	Building 11 subslab	3/23/10	14:43
P1001064-002	SC01001	3/23/10	00:00

Client: Landau Associates, Inc.

Project: Bayliner Marine 786003.010.012

Detailed Sample Information

<u>CAS Sample ID</u>	<u>Client Sample ID</u>	<u>Container Type</u>	<u>Pi1</u> (Hg)	<u>Pi1</u> (psig)	<u>Pf1</u> (Hg)	<u>Pi2</u> (psig)	<u>Pf2</u>	<u>Cont ID</u>	<u>Order #</u>	<u>FC ID</u>
P1001064-001.01	Building 11 substab	6.0 L-Surmma Canister Source	-7.3	-3.6	3.5			SC01077	17076	OA01054
P1001064-002.01	SC01001	6.0 L-Surmma Canister Source						SC01001	17076	

Miscellaneous Items - received

- AVG01144
- OA01055
- AVG00866

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Page 1 of 3

Client: Landau Associates, Inc.
Client Sample ID: Building 11 subslab
Client Project ID: Bayliner Marine / 786003.010.012

CAS Project ID: P1001064
 CAS Sample ID: P1001064-001

Test Code: EPA TO-15
 Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS8
 Analyst: Elsa Moctezuma
 Sampling Media: 6.0 L Summa Canister
 Test Notes:
 Container ID: SC01077

Date Collected: 3/23/10
 Date Received: 3/25/10
 Date Analyzed: 3/25/10
 Volume(s) Analyzed: 0.060 Liter(s)
 0.015 Liter(s)

Initial Pressure (psig): -3.6 Final Pressure (psig): 3.5

Canister Dilution Factor: 1.64

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	ND	14	ND	7.9	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	14	ND	2.8	
74-87-3	Chloromethane	ND	5.5	ND	2.6	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	14	ND	2.0	
75-01-4	Vinyl Chloride	ND	2.7	ND	1.1	
106-99-0	1,3-Butadiene	ND	2.7	ND	1.2	
74-83-9	Bromomethane	ND	2.7	ND	0.70	
75-00-3	Chloroethane	ND	2.7	ND	1.0	
64-17-5	Ethanol	ND	140	ND	73	
75-05-8	Acetonitrile	ND	14	ND	8.1	
107-02-8	Acrolein	ND	55	ND	24	
67-64-1	Acetone	ND	140	ND	58	
75-69-4	Trichlorofluoromethane	12	2.7	2.1	0.49	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	27	ND	11	
107-13-1	Acrylonitrile	ND	14	ND	6.3	
75-35-4	1,1-Dichloroethene	ND	2.7	ND	0.69	
75-09-2	Methylene Chloride	ND	14	ND	3.9	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	2.7	ND	0.87	
76-13-1	Trichlorotrifluoroethane	ND	2.7	ND	0.36	
75-15-0	Carbon Disulfide	ND	140	ND	44	
156-60-5	trans-1,2-Dichloroethene	ND	2.7	ND	0.69	
75-34-3	1,1-Dichloroethane	ND	2.7	ND	0.68	
1634-04-4	Methyl tert-Butyl Ether	ND	2.7	ND	0.76	
108-05-4	Vinyl Acetate	ND	140	ND	39	
78-93-3	2-Butanone (MEK)	ND	140	ND	46	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Verified By: _____ Date: 3/26/10 **7**

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Page 1 of 3

Client: Landau Associates, Inc.
Client Sample ID: Method Blank
Client Project ID: Bayliner Marine / 786003.010.012

CAS Project ID: P1001064
 CAS Sample ID: P100325-MB

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS8
Analyst: Elsa Moctezuma
Sampling Media: 6.0 L Summa Canister
Test Notes:

Date Collected: NA
Date Received: NA
Date Analyzed: 3/25/10
Volume(s) Analyzed: 1.00 Liter(s)

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m ³	MRL µg/m ³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	ND	0.50	ND	0.29	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	0.50	ND	0.10	
74-87-3	Chloromethane	ND	0.20	ND	0.097	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.50	ND	0.072	
75-01-4	Vinyl Chloride	ND	0.10	ND	0.039	
106-99-0	1,3-Butadiene	ND	0.10	ND	0.045	
74-83-9	Bromomethane	ND	0.10	ND	0.026	
75-00-3	Chloroethane	ND	0.10	ND	0.038	
64-17-5	Ethanol	ND	5.0	ND	2.7	
75-05-8	Acetonitrile	ND	0.50	ND	0.30	
107-02-8	Acrolein	ND	2.0	ND	0.87	
67-64-1	Acetone	ND	5.0	ND	2.1	
75-69-4	Trichlorofluoromethane	ND	0.10	ND	0.018	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	1.0	ND	0.41	
107-13-1	Acrylonitrile	ND	0.50	ND	0.23	
75-35-4	1,1-Dichloroethene	ND	0.10	ND	0.025	
75-09-2	Methylene Chloride	ND	0.50	ND	0.14	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.10	ND	0.032	
76-13-1	Trichlorotrifluoroethane	ND	0.10	ND	0.013	
75-15-0	Carbon Disulfide	ND	5.0	ND	1.6	
156-60-5	trans-1,2-Dichloroethene	ND	0.10	ND	0.025	
75-34-3	1,1-Dichloroethane	ND	0.10	ND	0.025	
1634-04-4	Methyl tert-Butyl Ether	ND	0.10	ND	0.028	
108-05-4	Vinyl Acetate	ND	5.0	ND	1.4	
78-93-3	2-Butanone (MEK)	ND	5.0	ND	1.7	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Page 2 of 3

Client: Landau Associates, Inc.
Client Sample ID: Method Blank
Client Project ID: Bayliner Marine / 786003.010.012

CAS Project ID: P1001064
 CAS Sample ID: P100325-MB

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS8
Analyst: Elsa Moctezuma
Sampling Media: 6.0 L Summa Canister
Test Notes:

Date Collected: NA
Date Received: NA
Date Analyzed: 3/25/10
Volume(s) Analyzed: 1.00 Liter(s)

Canister Dilution Factor: 1.00

CAS #	Compound	Result	MRL	Result	MRL	Data Qualifier
		µg/m ³	µg/m ³	ppbV	ppbV	
156-59-2	cis-1,2-Dichloroethene	ND	0.10	ND	0.025	
141-78-6	Ethyl Acetate	ND	0.50	ND	0.14	
110-54-3	n-Hexane	ND	0.50	ND	0.14	
67-66-3	Chloroform	ND	0.10	ND	0.020	
109-99-9	Tetrahydrofuran (THF)	ND	0.50	ND	0.17	
107-06-2	1,2-Dichloroethane	ND	0.10	ND	0.025	
71-55-6	1,1,1-Trichloroethane	ND	0.10	ND	0.018	
71-43-2	Benzene	ND	0.10	ND	0.031	
56-23-5	Carbon Tetrachloride	ND	0.10	ND	0.016	
110-82-7	Cyclohexane	ND	0.50	ND	0.15	
78-87-5	1,2-Dichloropropane	ND	0.10	ND	0.022	
75-27-4	Bromodichloromethane	ND	0.10	ND	0.015	
79-01-6	Trichloroethene	ND	0.10	ND	0.019	
123-91-1	1,4-Dioxane	ND	0.50	ND	0.14	
80-62-6	Methyl Methacrylate	ND	0.50	ND	0.12	
142-82-5	n-Heptane	ND	0.50	ND	0.12	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ND	0.11	
108-10-1	4-Methyl-2-pentanone	ND	0.50	ND	0.12	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ND	0.11	
79-00-5	1,1,2-Trichloroethane	ND	0.10	ND	0.018	
108-88-3	Toluene	ND	0.50	ND	0.13	
591-78-6	2-Hexanone	ND	0.50	ND	0.12	
124-48-1	Dibromochloromethane	ND	0.10	ND	0.012	
106-93-4	1,2-Dibromoethane	ND	0.10	ND	0.013	
123-86-4	n-Butyl Acetate	ND	0.50	ND	0.11	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

[Signature]

3/26/10

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Page 3 of 3

Client: Landau Associates, Inc.
Client Sample ID: Method Blank
Client Project ID: Bayliner Marine / 786003.010.012

CAS Project ID: P1001064
 CAS Sample ID: P100325-MB

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS8
Analyst: Elsa Moctezuma
Sampling Media: 6.0 L Summa Canister
Test Notes:

Date Collected: NA
Date Received: NA
Date Analyzed: 3/25/10
Volume(s) Analyzed: 1.00 Liter(s)

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m ³	MRL µg/m ³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	ND	0.50	ND	0.11	
127-18-4	Tetrachloroethene	ND	0.10	ND	0.015	
108-90-7	Chlorobenzene	ND	0.10	ND	0.022	
100-41-4	Ethylbenzene	ND	0.50	ND	0.12	
179601-23-1	m,p-Xylenes	ND	0.50	ND	0.12	
75-25-2	Bromoform	ND	0.50	ND	0.048	
100-42-5	Styrene	ND	0.50	ND	0.12	
95-47-6	o-Xylene	ND	0.50	ND	0.12	
111-84-2	n-Nonane	ND	0.50	ND	0.095	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.10	ND	0.015	
98-82-8	Cumene	ND	0.50	ND	0.10	
80-56-8	alpha-Pinene	ND	0.50	ND	0.090	
103-65-1	n-Propylbenzene	ND	0.50	ND	0.10	
622-96-8	4-Ethyltoluene	ND	0.50	ND	0.10	
108-67-8	1,3,5-Trimethylbenzene	ND	0.50	ND	0.10	
95-63-6	1,2,4-Trimethylbenzene	ND	0.50	ND	0.10	
100-44-7	Benzyl Chloride	ND	0.50	ND	0.097	
541-73-1	1,3-Dichlorobenzene	ND	0.10	ND	0.017	
106-46-7	1,4-Dichlorobenzene	ND	0.10	ND	0.017	
95-50-1	1,2-Dichlorobenzene	ND	0.10	ND	0.017	
5989-27-5	d-Limonene	ND	0.50	ND	0.090	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.50	ND	0.052	
120-82-1	1,2,4-Trichlorobenzene	ND	0.50	ND	0.067	
91-20-3	Naphthalene	ND	0.50	ND	0.095	
87-68-3	Hexachlorobutadiene	ND	0.50	ND	0.047	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

COLUMBIA ANALYTICAL SERVICES, INC.

LABORATORY CONTROL SAMPLE SUMMARY

Page 1 of 3

Client: Landau Associates, Inc.
Client Sample ID: Lab Control Sample
Client Project ID: Bayliner Marine / 786003.010.012

CAS Project ID: P1001064
 CAS Sample ID: P100325-LCS

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS8
Analyst: Elsa Moctezuma
Sampling Media: 6.0 L Summa Canister
Test Notes:

Date Collected: NA
Date Received: NA
Date Analyzed: 3/25/10
Volume(s) Analyzed: NA Liter(s)

CAS #	Compound	Spike Amount ng	Result ng	% Recovery	CAS	Data Qualifier
					Acceptance Limits	
115-07-1	Propene	26.3	21.3	81	58-133	
75-71-8	Dichlorodifluoromethane (CFC 12)	26.0	20.1	77	63-114	
74-87-3	Chloromethane	25.0	24.8	99	60-130	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	26.0	21.8	84	63-118	
75-01-4	Vinyl Chloride	25.3	21.8	86	63-123	
106-99-0	1,3-Butadiene	26.8	28.5	106	63-141	
74-83-9	Bromomethane	25.8	25.5	99	67-133	
75-00-3	Chloroethane	25.5	22.3	87	65-122	
64-17-5	Ethanol	130	118	91	54-137	
75-05-8	Acetonitrile	26.0	21.5	83	59-128	
107-02-8	Acrolein	26.3	21.0	80	61-131	
67-64-1	Acetone	132	106	80	60-117	
75-69-4	Trichlorofluoromethane	26.3	20.5	78	62-125	
67-63-0	2-Propanol (Isopropyl Alcohol)	48.0	43.9	91	57-125	
107-13-1	Acrylonitrile	25.8	25.4	98	66-136	
75-35-4	1,1-Dichloroethene	27.5	24.8	90	71-121	
75-09-2	Methylene Chloride	26.8	21.3	79	67-109	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	27.0	27.2	101	64-145	
76-13-1	Trichlorotrifluoroethane	27.5	23.4	85	71-124	
75-15-0	Carbon Disulfide	26.0	20.7	80	64-119	
156-60-5	trans-1,2-Dichloroethene	25.5	23.5	92	68-126	
75-34-3	1,1-Dichloroethane	26.5	24.8	94	67-124	
1634-04-4	Methyl tert-Butyl Ether	26.3	22.2	84	67-124	
108-05-4	Vinyl Acetate	126	156	124	50-171	
78-93-3	2-Butanone (MEK)	26.8	24.0	90	69-136	

Verified By: _____ Date: 3/26/10 **14**

APPENDIX H
J & E MODEL OUTPUT

DATA ENTRY SHEET

GW-SCREEN
Version 3.1; 02/04

Reset to
Defaults

CALCULATE RISK-BASED GROUNDWATER CONCENTRATION (enter "X" in "YES" box)

YES

OR

CALCULATE INCREMENTAL RISKS FROM ACTUAL GROUNDWATER CONCENTRATION
(enter "X" in "YES" box and initial groundwater conc. below)

YES

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Initial groundwater conc., C_w ($\mu\text{g/L}$)	Chemical
127184	5.90E+01	Tetrachloroethylene

MORE
↓

ENTER Depth below grade to bottom of enclosed space floor, L_f (cm)	ENTER Depth below grade to water table, L_{WT} (cm)	ENTER SCS soil type directly above water table	ENTER Average soil/ groundwater temperature, T_s ($^{\circ}\text{C}$)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
15	575	S	10	5

MORE
↓

ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)	ENTER Vadose zone SCS soil type Lookup Soil Parameters	ENTER Vadose zone soil dry bulk density, ρ_s^v (g/cm^3)	ENTER Vadose zone soil total porosity, n^v (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^v (cm^3/cm^3)
S			S	1.66	0.375	0.054

MORE
↓

ENTER Target risk for carcinogens, TR (unitless)	ENTER Target hazard quotient for noncarcinogens, THQ (unitless)	ENTER Averaging time for carcinogens, AT_c (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
1.0E-06	1	70	30	30	350

Used to calculate risk-based
groundwater concentration.

INTERMEDIATE CALCULATIONS SHEET

Source-building separation, L_T (cm)	Vadose zone soil air-filled porosity, θ_a^v (cm ³ /cm ³)	Vadose zone effective total fluid saturation, S_{ie} (cm ³ /cm ³)	Vadose zone soil intrinsic permeability, k_i (cm ²)	Vadose zone soil relative air permeability, k_{ra} (cm ²)	Vadose zone soil effective vapor permeability, k_v (cm ²)	Thickness of capillary zone, L_{cz} (cm)	Total porosity in capillary zone, n_{cz} (cm ³ /cm ³)	Air-filled porosity in capillary zone, $\theta_{a,cz}$ (cm ³ /cm ³)	Water-filled porosity in capillary zone, $\theta_{w,cz}$ (cm ³ /cm ³)	Floor-wall seam perimeter, X_{crack} (cm)
560	0.321	0.003	9.92E-08	0.998	9.91E-08	17.05	0.375	0.122	0.253	4,000

Bldg. ventilation rate, $Q_{building}$ (cm ³ /s)	Area of enclosed space below grade, A_B (cm ²)	Crack-to-total area ratio, η (unitless)	Crack depth below grade, Z_{crack} (cm)	Enthalpy of vaporization at ave. groundwater temperature, $\Delta H_{v,TS}$ (cal/mol)	Henry's law constant at ave. groundwater temperature, H_{TS} (atm·m ³ /mol)	Henry's law constant at ave. groundwater temperature, H'_{TS} (unitless)	Vapor viscosity at ave. soil temperature, μ_{TS} (g/cm-s)	Vadose zone effective diffusion coefficient, D_v^{eff} (cm ² /s)	Capillary zone effective diffusion coefficient, D_{cz}^{eff} (cm ² /s)	Total overall effective diffusion coefficient, D_T^{eff} (cm ² /s)
1.69E+04	1.00E+06	4.00E-04	15	9,553	7.81E-03	3.36E-01	1.75E-04	1.16E-02	4.63E-04	6.71E-03

Diffusion path length, L_d (cm)	Convection path length, L_p (cm)	Source vapor conc., C_{source} (µg/m ³)	Crack radius, r_{crack} (cm)	Average vapor flow rate into bldg., Q_{soil} (cm ³ /s)	Crack effective diffusion coefficient, D^{crack} (cm ² /s)	Area of crack, A_{crack} (cm ²)	Exponent of equivalent foundation Peclet number, $\exp(Pe^f)$ (unitless)	Infinite source indoor attenuation coefficient, α (unitless)	Infinite source bldg. conc., $C_{building}$ (µg/m ³)	Unit risk factor, URF (µg/m ³) ⁻¹	Reference conc., RfC (mg/m ³)
560	15	1.98E+04	0.10	8.33E+01	1.16E-02	4.00E+02	5.42E+77	6.18E-04	1.23E+01	5.9E-06	6.0E-01

RESULTS SHEET

RISK-BASED GROUNDWATER CONCENTRATION CALCULATIONS:

Indoor exposure groundwater conc., carcinogen (µg/L)	Indoor exposure groundwater conc., noncarcinogen (µg/L)	Risk-based indoor exposure groundwater conc., (µg/L)	Pure component water solubility, S (µg/L)	Final indoor exposure groundwater conc., (µg/L)
NA	NA	NA	2.00E+05	NA

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
3.0E-05	2.0E-02

MESSAGE SUMMARY BELOW:

END