*RI/FS and Cleanup Action Plan Tarr, LLC Vancouver Cardlock Site Vancouver, Washington* 

> Prepared for: Tarr, LLC

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## 1.0 Introduction

This report describes the investigation activities, feasibility study, and a proposed cleanup action plan for the Tarr, LLC Vancouver Cardlock site (the Site; Figures 1 and 2). The Site is located at 7208 NE St. Johns Road, in Vancouver, Washington. This report was prepared following the requirements for Remedial Investigation and Feasibility Study reporting under WAC 173-340-350 and for Cleanup Action Plans under WAC 173-340-380. Ash Creek Associates, Inc.'s (Ash Creek's) services were completed in accordance with the Project Authorization for Phase II Environmental Site Assessment (ESA) services dated March 28, 2011, and authorized by Tarr, LLC on April 26, 2011. Site investigation and remediation at the Site are being conducted under the oversight of the Washington State Department of Ecology (Ecology) Voluntary Cleanup Program.

In addition to the supporting tables and figures, this report includes two appendices:

- Appendix A Exploration Logs and Standard Operating Procedures;
- Appendix B Laboratory Data Reports.

## 2.0 Background

This section includes a description of the Facility, as well prior environmental activities at the Site.

### 2.1 Facility Location and Description

The Site is comprised of two parcels of land (Figure 2). The northwest parcel (APN 149261000) is approximately 0.1 acre and includes a dwelling (currently used as an office). The main parcel (APN 149264000) is approximately 1.54 acres, and includes a shop building, an office/warehouse building, one 10,000-gallon diesel underground storage tank (UST), one 5,000-gallon gasoline UST, one 3,000-gallon gasoline UST, one 6,000-gallon off-road diesel aboveground storage tank (AST), two 250-gallon used/new oil ASTs, and a fueling canopy. The canopy is at the south side of the Site, near St. Johns Road.

Two of the USTs (the 10,000-gallon diesel and 5,000-gallon gasoline) are adjacent to the west and east sides of the canopy. The USTs dispense fuel through dispensers under the canopy and from a satellite dispenser, south of the canopy. The third UST (3,000-gallon gasoline) is west of the office/warehouse building. A dispenser at the southwest corner of the office/warehouse building dispenses gasoline from the 3,000-gallon UST.

The office at tax lot 149261000 and the shop building are reportedly used by JW Dart & Sons Trucking. The other structures, as well as the on-site tanks and dispensers, are used by Tarr, LLC for the cardlock



commercial fueling business. Tarr, LLC, or an affiliated business entity, have dispensed fuel at the site since 1988, and are the only parties that have dispensed fuel at the site.

The site carries a light-industrial zoning designation (ML). This designation is intended to provide for those less-intensive industrial uses which produce little noise, odor, and pollution. It also provides for resource-based uses and service uses that are deemed compatible with light industrial uses. Residential land uses are interspersed with commercial-industrial uses to the northwest of the Site, and residential land uses predominate within approximately 1,000 to 3,000 feet of the Site in all directions. Agricultural land uses (or former agricultural uses) are present at distances between 500 and 1,000 feet north of the Site. The site obtains its water from a municipal source. According to the Ecology well log viewer, water wells are present within one quarter mile of the Site.

#### 2.2 Prior Environmental Activities

In 2010, Tarr, LLC obtained a Phase I ESA as part of the process required to obtain financing with the Site as collateral (Partner Engineering and Science [PES], 2010). Despite there being no obvious signs of contamination and no indications of an ongoing leak, the Phase I ESA concluded that the UST systems on the property represented a Recognized Environmental Condition (REC) as defined by ASTM.

In March, 2011, Tarr, LLC contracted with Ash Creek to complete a Phase II ESA to resolve the REC related to the UST systems at the Site. Ash Creek conducted a Phase II ESA that consisted of soil and groundwater direct-push explorations (SB-1 through SB-8). The results are summarized on Figure 2. In summary, petroleum hydrocarbons were observed in shallow soil near the unleaded gasoline fuel dispenser adjacent to the office, and in soil near the 3,000-gallon unleaded gasoline UST. Petroleum hydrocarbon impacts were not observed in any of the explorations completed around the tanks and dispensers of the main fuel island at the south side of the Site.

In response to the discovery of petroleum hydrocarbon contamination in soil, Tarr, LLC reported a release through the Washington Emergency Management System on March 2, 2011. Environmental Report Tracking System (ERTS) number 625287 was assigned to the release. Additionally, Tarr, LLC arranged for line and tank tightness testing for the unleaded fuel UST and dispenser. The UST system passed the tank and line testing.

The results of the Phase II ESA, including a copy of the tank and line testing report, were described in the Phase II ESA report (Ash Creek, 2011). The results of the Phase II ESA are incorporated into the site characterization results described in Section 3.0.



## 3.0 April-May 2011 Site Investigation Results

The April-May 2011 field activities consisted of:

- Preparatory activities;
- Completing seven direct-push explorations for soil and/or groundwater sampling (SB-9 through SB-15);
- Installing, developing, and sampling three groundwater monitoring wells (MW-1 through MW-3);
- Analyzing soil and groundwater samples; and
- Managing investigation derived waste.

### 3.1 Preparatory Activities

**Underground Utility Locates.** An underground utility locate was conducted by Locates Down Under (under subcontract to Ash Creek) prior to performing the subsurface work. A public utility notification request was also submitted through the One-Call service.

**Site Health and Safety Plan.** A Site-specific Health and Safety Plan (HASP) was prepared prior to the investigation activities. A health and safety meeting with the drilling subcontractor was conducted on site prior to start of the investigation activities. A copy of the HASP was maintained with Ash Creek personnel at the Site throughout the investigation activities.

### 3.2 Direct-Push Explorations

On April 28, 2011, the direct-push explorations (SB-9 through SB-15) were completed at the locations shown on Figure 3. Major Drilling of Tualatin, Oregon (under subcontract to Ash Creek) provided and operated the direct-push equipment. Seven direct-push explorations were completed at the following locations (as shown on Figure 2):

- Explorations SB-9 through SB-11 were completed at the satellite gasoline dispenser; and
- Explorations SB-12 through SB-15 were completed around the northern (3,000-gallon) unleaded gasoline UST.

**Field Methods.** Soil cores were obtained continuously from near the ground surface to the total depth of each exploration per Standard Operating Procedure (SOP) 2.4 and SOP 2.7 (Appendix A). Field exploration logs are included in Appendix A. Each soil sample was field screened for volatile organic compounds (VOCs) using a photoionization detector (PID) and for the presence of petroleum hydrocarbons using a sheen test.



After sampling activities were completed, each exploration was abandoned by filling the exploration with granular bentonite and hydrating the bentonite with water. Cement concrete was used to seal the pavement surface.

**Field Observations.** The areas above each of the UST and dispenser areas are paved. A uniform gravel sub-grade layer was not observed beneath the pavement. Native soils at the Site consisted of silty sand, which was generally encountered from beneath the pavement to the terminus of the explorations (20 feet below the ground surface [bgs]). In some places the pavement was underlain by up to 4 feet of silt, sand, and gravel of varying compositions. Groundwater was observed at approximately 9 feet bgs in the direct-push explorations and monitoring wells.

The sampling locations are shown on Figure 3. The observations made by the Ash Creek field scientist and the field screening results are summarized below.

- Satellite Gasoline Dispenser. In prior exploration SB-5, field screening (sheen tests and PID readings) indicated petroleum hydrocarbons were present over a narrow interval of between 3 and 5 feet. The narrow interval of contamination sits directly on a 1-foot-thick lens of clayey silt. In explorations SB-9 through SB-11, each completed approximately 5 feet from SB-5, petroleum field screening did not indicate that petroleum hydrocarbons were present. Soils encountered in SB-9 through SB-11 consisted of sand, with varying amounts of silt and gravel. The clay layer observed in SB-5 was not observed in SB-9 through SB-11. Explorations in this area did not extend to groundwater.
- Northern Unleaded Gasoline UST. In prior explorations SB-6 and SB-7, field screening (sheen tests and PID readings) in SB-6 indicated the presence of petroleum hydrocarbons from just beneath the ground surface and into the saturated zone. PID readings and sheen tests in SB-6 were highest around 13 feet bgs. In SB-7, positive field screening results were first observed at 8 feet bgs and reached their highest level at 18 feet bgs (within the saturated zone).

Field screening in MW-1 showed similar results as SB-6; positive field screening was observed near the surface and extended into the saturated zone, and the highest field screening results were observed at 12.5 feet bgs. Farther away from the tank, explorations SB-12 and SB-13 showed lower field screening results, compared to the explorations closer to the tank. Field screening in SB-14, MW-2, and MW-3 did not indicate petroleum hydrocarbons were present. SB-15 was a groundwater sample location, so field screening was not conducted. Sand with varying amounts of silt were observed in the explorations completed in the vicinity of the UST. Petroleum sheens or other indications of separate-phase product were not observed in these explorations.

### 3.3 Monitoring Well Installation and Development

On April 28, 2011, monitoring wells MW-1 through MW-3 were installed at the locations shown on Figure 3. Each monitoring well was constructed with 2-inch PVC, 10 slot screen, and installed over an interval of 8 to

18 feet bgs. Monitoring well construction details are provided in the well construction logs contained in Appendix A.

On May 4, 2011, monitoring wells MW-1 through MW-3 were developed following Ash Creek SOP 2.14.

On May 10, 2011, monitoring wells MW-1 through MW-3 were sampled using low flow sampling techniques following Ash Creek SOP 2.5.

On May 25, 2011, monitoring wells MW-1 through MW-3 were surveyed by Statewide Land Surveying of Gresham, Oregon.

#### 3.4 Sample Analyses

Sample analyses were completed by Pace Analytical of Seattle, Washington. Soil samples were analyzed for some of the following:

- Total petroleum hydrocarbons as gasoline (TPHg) using Northwest TPH Gx;
- Total petroleum hydrocarbons as diesel (TPHd) using Northwest TPH Dx;
- VOCs using EPA 8260 (with EPA 5035 sample preservation);
- Lead using EPA 6010; and
- Volatile and Extractable Petroleum Hydrocarbons (VPH/EPH).

Pace Analytical subcontracted the VPH/EPH analyses to Fremont Analytical. The laboratory analytical data report was reviewed, including any qualifiers assigned by the laboratory. The data was acceptable for use for assessing the nature and extent of contamination and remedial decision making, and none of the data points were flagged.

### 3.5 Investigation Derived Waste Management

Soil and decontamination wash water were drummed and stored at the Site in preparation for disposal or treatment at an off-site facility. Drums were labeled with the Site name, generated contents, and date. Investigation derived waste disposal is pending.

Disposable items, such as gloves, pump tubing, paper towels, etc., were placed in plastic bags after use and deposited in trash receptacles for disposal.



## 4.0 Results

This section describes the results of the April-May 2011 Site Investigation. A discussion of the results for both areas of the Site where contamination was identified during the Phase II ESA are described below (dispenser area and 3,000-gallon unleaded gasoline tank). Tables 1 through 4 summarize the results of the April-May 2011 Site Investigation and also include the results from the prior Phase II ESA. Table 5 summarizes the depth-to-water measurements in MW-1 through MW-3. The Site Investigation results are summarized on Figures 4 and 5. The results for the April-May 2001 investigation are discussed below, and the analytical results for the Site are incorporated into the discussion of the nature and extent of contamination in Section 5.0.

### 4.1 Gasoline Dispenser

Petroleum hydrocarbons were not detected in SB-9 through SB-11. Each of these explorations was completed approximately 5 feet from SB-5. In the absence of field screening results to guide sample collection, these samples were analyzed from 8.5 feet bgs in order to assess whether contaminant migration at depth was occurring.

### 4.2 3,000-Gallon Unleaded Gasoline UST

Concentrations of petroleum hydrocarbons were detected in soil in the following explorations completed for the April-May site investigation: SB-12, SB-13, and MW-1. Of these samples, concentrations of benzene in SB-13(8.0), concentrations of benzene in MW-1(2.5), and concentrations of benzene, ethylbenzene, naphthalene, total xylenes, and TPH-G in MW-1(12.5) exceeded MTCA Method A cleanup levels (see discussion of applicable cleanup levels in Section 4.1). Petroleum hydrocarbons were not detected in soil samples collected from the remaining direct-push explorations or monitoring well installations during the April-May 2011 site investigation.

Concentrations of petroleum hydrocarbons were detected in groundwater above MTCA Method A cleanup levels in MW-1 (benzene, ethylbenzene, naphthalene, xylenes, and TPHg). Concentrations of petroleum hydrocarbons in groundwater were also detected in SB-13 (TPHd) and SB-15 (TPHg, TPHd, and petroleum related VOCs); however, none of the detected concentrations exceeded MTCA Method A cleanup levels. Petroleum hydrocarbons were not detected in groundwater samples collected from the remaining direct-push explorations or monitoring well installations during the April-May 2011 site investigation.

# 5.0 Conceptual Site Model and Remedial Action Area

Land use information and the results of the site investigation activities completed at the Site were used to develop a conceptual site model for the site, identify applicable cleanup levels, and identify remedial action areas. This information was used as the basis for the feasibility study in Section 6.0.



### 5.1 Conceptual Site Model

Based on water level measurements in MW-1 through MW-3 taken on May 10, 2011, the water table is first encountered at approximately 8 feet bgs and the groundwater flow direction is to the west towards Cold Canyon (Figure 6).

The Site is currently used for commercial purposes and carries a light industrial zoning designation that governs future uses of the property. The Site is supplied by municipal water. Water wells are present within one quarter mile of the Site, but well beyond the extent of contamination. There is insufficient information to make a determination that groundwater is not potable. Additionally, the ML zoning designation (light industrial) is not consistent with Ecology's definition of a heavy industrial property. Therefore, MTCA Method C cleanup levels cannot be developed for the site. MTCA Method A cleanup levels are used to define the remedial action areas. MTCA Method A cleanup levels will be applied as part of a future closure evaluation. MTCA Method B cleanup levels will be utilized for compounds where no Method A cleanup levels are available. MTCA Method A cleanup levels are considered protective of the human health exposure pathways that are potentially present at the Site, including:

- Direct contact with contaminated soils for an occupational worker; and
- Direct contact with contaminated soil and groundwater for an excavation worker.

MTCA Method A levels do not consider vapor intrusion, however default Method A cleanup levels are based on groundwater ingestion, which are considered to be low enough to be protective of the vapor intrusion pathway. In some cases, Ecology alters the Method A screening levels to more stringent levels to account for possible vapor intrusion. Since the source areas are within 100 feet of a structure, groundwater screening levels for the protection of indoor air from Ecology's Draft vapor intrusion guidance (Ecology, 2009) were also considered when defining the remedial action areas in Section 5.3.

### 5.1.1 Terrestrial Ecological Exclusion

WAC 173-340-7490 requires that contaminated sites be evaluated to assess whether contamination may have a potential affect on terrestrial ecological species, and if so, develop cleanup levels to address the ecological risk. WAC 173-340-3491 provides a process to demonstrate an exclusion from the ecological evaluation if certain conditions are met.

For the Tarr Vancouver site, we propose that a Terrestrial Ecological Exclusion is appropriate because the Site (defined as where contamination has been identified) is greater than 500 feet from undeveloped, contiguous open space with the potential to provide ecological habitat, and the Site is fully developed. Figure 7 shows the location of the Site, and the distance to the closest open spaces. Furthermore, the



contaminants detected on the site are largely not present on Table 749-2 (WAC 173-340-3491), and when present, concentrations are below the industrial-commercial values provided in the table.

#### 5.2 Nature and Extent of Contamination

Two sources of contamination were identified at the Site in the vicinity of the unleaded gas dispenser and the 3,000-gallon unleaded fuel UST. Figures 4 and 5 summarize the concentrations of petroleum hydrocarbons in soil and groundwater at the Site. TPHg, TPHd, benzene, and naphthalene are used as indicator compounds on these figures. Petroleum hydrocarbons (gasoline-, diesel-, and oil-range near the dispenser; and gasoline-range hydrocarbons and associated constituents near the 3,000-gallon unleaded UST) are the chemicals of potential concern at the Site. Two localized sources are present. The first source consists of a small area of soil contamination near the dispenser, and the second source consists of a small area of soil and groundwater contamination near the 3,000-gallon unleaded UST. The contamination sources exist only on Tarr, LLC property, and there are no surface water bodies within the extent of contamination. SB-14 is directly downgradient of the unleaded UST, and petroleum hydrocarbons were not detected in groundwater at this location, which indicates the extent of contamination does not extend off site.

In the vicinity of the gasoline dispenser, a small area of contamination was identified, as shown on Figure 8. Gasoline and naphthalene are present above MTCA Method A cleanup levels in SB-5. Based on the results of SB-5 and SB-9 through SB-11, a localized contamination source approximately 50 square feet in area, over an interval from 3 to 5 feet bgs is present. Groundwater contamination was not present; the vertical extent of contamination was found to stop before the groundwater was contacted.

In the vicinity of the 3,000-gallon unleaded gasoline UST, soil and groundwater contamination is present in shallow intervals near the tank and in groundwater a short distance from the tank. Concentrations of benzene in soil are present above MTCA Method A cleanup levels in SB-6 (2.5) and SB-13 (2.5). The shallow nature of the soil impacts near SB-6, and to a lesser degree in SB-13, indicate that a surface release occurred. At deeper depths in soil (below the water table surface), concentrations of TPHg are present above MTCA Method A cleanup levels in SB-6 (13.5) and concentrations of TPHg, benzene, naphthalene, and total xylenes are present above MTCA Method A cleanup levels in MW-1 (12.5).

The groundwater flow direction is westerly, as shown on Figure 6. In MW-1, concentrations of benzene, ethylbenzene, naphthalene, xylenes, and TPHg were detected above MTCA Method A cleanup levels. Gasoline range hydrocarbons and constituents were not detected in SB-14. The only chemical of potential concern detected in SB-13, located between the UST and the warehouse building was TPHg at a concentration of 97 micrograms per liter ( $\mu$ g/L), which is below the MTCA Method A cleanup level. No VOCs (e.g., benzene, ethylbenzene, xylenes, or naphthalene) were detected in SB-13. Gasoline-range hydrocarbons and constituents were not detected in MW-2, MW-3, and SB-12.

### 5.3 Remedial Action Areas

The areas where detected concentrations of petroleum hydrocarbons and constituents exceed MTCA Method A cleanup levels and Ecology vapor intrusion screening levels (Ecology, 2009) are shown on Figure 8. These areas are defined as:

- Soil near the unleaded gasoline dispenser between 3 and 5 feet bgs; and
- Soil and groundwater in the area near the 3,000-gallon unleaded gasoline UST.

Section 6.0 describes the Feasibility Study that was completed to develop a recommendation for remedial action.

## 6.0 Feasibility Study

A streamlined feasibility study (FS) was prepared to address residual contamination in soil and groundwater above MTCA Method A cleanup levels. The FS describes a range of applicable treatment or disposal alternatives, provides a comparative analysis of the applicable alternatives, and provides a recommendation for a proposed cleanup action. A range of treatment, removal, and management response actions were screened for general applicability to the contaminants of potential concern and media requiring treatment (soil and groundwater). The following remediation technologies that are applicable to site conditions and the chemical properties of the contaminants of concern include:

- Soil Vapor Extraction soil and groundwater treatment at 3,000-gallon unleaded UST;
- Excavation soil at satellite dispenser and 3,000-gallon unleaded UST;
- Capping soil at satellite dispenser;
- In-situ enhanced bioremediation groundwater at 3,000-gallon unleaded UST; and
- Natural attenuation groundwater at 3,000-gallon unleaded UST.

### 6.1 Definition of Remedial Technologies

Each of the remedial technologies that are applicable to the site media and contaminants that are present is described in this section.

### 6.1.1 Soil Vapor Extraction

This alternative would be used to address soil and groundwater contamination at the site within the identified remedial action areas. Soil vapor extraction (SVE) is an *in situ* vadose zone soil remediation technology in which a vacuum is applied to the soil to induce the controlled flow of air and remove volatile and some semi-volatile contaminants from the soil. While SVE is a soil treatment, SVE in a source area will

also remediate small zones of groundwater impacts by removing the contaminant source and inducing volatilization from groundwater to soil vapor. Soil vapor is extracted through vertical wells and can be treated if needed prior to being discharged to outdoor air (such as with activated carbon). The contaminants at the site are comprised of volatile compounds and are amenable to vapor extraction.

#### 6.1.2 Soil Excavation

This alternative would be used to address soil contamination at the site. Soil excavation involves excavation and landfill disposal of contaminated soil. For the 3,000-gallon unleaded UST, soils would be excavated using vacuum extraction to minimize potential damage to piping, and shoring would be required to protect the building from being undermined during excavation. In order to complete the excavation, the pavement surface and gasoline dispenser would have to be removed and replaced. Engineered backfill would be required to protect the UST system.

#### 6.1.3 Capping

This alternative would be used to address soil contamination in the vicinity of the dispenser only. Capping involves use of an existing barrier or installation of a new barrier over impacted soils. Together with a soil management plan, an engineered cap is effective at preventing direct contact with impacted soils and may be effective in reducing vapor impacts to indoor and outdoor air at the Site. Capping would involve utilizing the existing pavement surfaces to prevent human exposure. Capping will eliminate risk, but will not treat or remove contamination. Institutional controls would be required if a capping alternative is implemented.

#### 6.1.4 In Situ Enhanced Bioremediation

This alternative would be used for groundwater within the 3,000-gallon unleaded UST remedial action area. This alternative involves injection or direct placement of a passive oxygen delivery product such as Oxygen Releasing Compound (ORC) manufactured by Regenesis to treat groundwater. The oxygen delivery product provides a slow release of oxygen to the subsurface to enhance the natural biodegradation of petroleum hydrocarbons. The contaminants at the Site are comprised of petroleum compounds that are amenable to enhanced bioremediation.

### 6.1.5 Monitored Natural Attenuation

This alternative would be used for groundwater within the 3,000-gallon unleaded UST remedial action area. Monitored Natural Attenuation (MNA) involves utilizing natural processes to reduce contaminant levels to acceptable concentrations. These processes include natural biodegradation, dispersion, dilution, sorption, volatilization, and chemical or biological stabilization, transformation, or destruction of hazardous substances (WAC 173-340-200). Monitoring is used to verify that these processes are actively reducing



hazardous substance concentrations. A monitoring well network is already in place at the Site, so monitoring of natural attenuation in groundwater can be achieved at relatively low cost.

### 6.2 Identification of Remedial Alternatives

Several of these remedial technologies are applicable to only to certain media or certain portions of the Site. Therefore, the technologies were assembled into four remedial alternatives, each addressing the affected media at the Site, as follows:

- 1. SVE for soil and groundwater treatment at 3,000-gallon unleaded UST;
- 2. Excavation of soil at dispenser and 3,000-gallon unleaded UST and in situ enhanced bioremediation for groundwater in the vicinity of the 3,000-gallon unleaded UST;
- 3. Excavation of soil at dispenser and 3,000-gallon unleaded UST, and MNA for groundwater in the vicinity of the 3,000-gallon unleaded UST;
- 4. Excavation of soil at 3,000-gallon unleaded UST, capping of soil at dispenser, and MNA for groundwater in the vicinity of the 3,000-gallon unleaded UST; and
- 5. SVE for soil and groundwater treatment at 3,000-gallon unleaded UST and capping at the dispenser area.

Tables 6 through 10 include cost estimates for each remedial alternative. The cost estimates include costs for site preparation, remedial construction, and follow-up groundwater monitoring. Table 11 summarizes the comparative analysis of the remedial alternatives. The comparative analysis is a head to head ranking of each remedial alternative, according to the following balancing factors:

- Protectiveness: •
- Permanence; •
- Cost;
- Long-Term Effectiveness; •
- Management of Short-Term Risks; •
- Implementability; and •
- Public Concerns.

The comparative analysis is summarized as follows;

**Protectiveness** – Each of the remedial alternatives was found to be protective of human health; •



- **Permanence** Alternatives 4 and 5, which rely on natural attenuation and/or capping for some of the affected media at the Site, were considered less permanent than Alternatives 1 through 3, which remove or treat contamination;
- **Cost** Estimated costs ranged from \$63,500 (excavation and natural attenuation for UST area, capping for dispenser area) to \$109,000 (excavation and enhanced bioremediation for UST area, excavation for dispenser area);
- Long-Term Effectiveness Alternatives 4 and 5, which rely on natural attenuation and/or capping for some of the affected media at the Site, were considered to be less effective in the long-term than Alternatives 1 through 3, which remove or treat contamination;
- Short-Term Risks SVE was found to have the lowest short-term risks. Excavation adjacent to the in-service UST and the building were found to carry a higher level of short-term risks, compared to SVE. Also, capping carried less risk than excavation at the dispenser.
- Implementability Alternatives 2 through 4, which involved excavation around the UST system, were considered to less implementable that the alternatives that did not involve excavation; and
- **Public Concerns** Alternatives 4 and 5, which both involve capping and natural attenuation, were considered to have a greater potential for public concerns because not all the contamination is treated or removed.

### 6.3 Proposed Remedial Action

Based on the results of this FS, the recommended cleanup action alternative for the Site is SVE combined with excavation at the dispenser.

This cleanup action was selected for the following reasons.

- The cleanup action protects human health and the environment, complies with cleanup standards, and provides for compliance monitoring.
- The cleanup action is as permanent or more permanent than the other cleanup actions evaluated. The action uses permanent approaches to the maximum extent practicable, the source area is treated, and the affected groundwater is treated to the extent that the volume of treated groundwater will shrink with time.
- The cleanup action addresses the potential for present and future migration of hazardous substances through treatment of the source area at the 3,000-gallon unleaded UST and excavation of contaminated soils at the dispenser.



## 7.0 Cleanup Action Plan

This section describes the proposed cleanup action plan. The cleanup action plan identifies the permits that are required for remedial action, and the task sequence to implement the corrective action. A brief design report will be prepared prior to implementation in order document construction and excavation details.

### 7.1 Permitting and Design Report

The anticipated permitting requirements are summarized below:

- The proposed remedial action will disturb less than 75 square feet and move less than 10 cubic • yards. These amounts are under the threshold requirements for a grading permit in Clark County.
- The proposed SVE system will only treat a limited area. We do not anticipate that the discharge • concentrations will require treatment according to the requirements of the Southwest Clean Air Agency (SWCAA).
- Soil that is excavated from the site will be profiled for disposal with the receiving landfill and a disposal permit will be obtained.

The design report will include the following elements:

- Obtaining required permits;
- Engineered plans for dispenser excavation and soil vapor extraction system; •
- Operations and maintenance procedures; and •
- Remedial performance monitoring. •

#### 7.2 Worker and Public Safety

A HASP will be prepared to document the health and safety procedures for Ash Creek's staff. Subcontractors will be required to prepare a similar HASP for their work on the project.

The work will be coordinated with Tarr's operations to prevent disruption of their operations, and integrate the remediation program into their operations.

Any loads travelling to or leaving the site will be covered to prevent materials spillage to roadways.

### 7.3 Proposed Remedial Action

The proposed remedial action consists of the following activities.



#### 7.3.1 Dispenser Excavation

The sequence of remedial activities at the gasoline dispenser is described below:

- Remove fuel dispenser.
- Remove pavement surface.
- Excavate soil to the limits shown.
- Field screen excavated soil and segregate clean overburden (anticipated from 0 to 3 feet).
- Load soil and transport to landfill for disposal.
- Backfill excavation, re-pave area, re-install dispenser.

In total, 6 cubic yards of contaminated soil will be removed from this area. There are no long-term monitoring requirements associated with this portion of the cleanup action.

#### 7.3.2 3,000-Gallon Unleaded Fuel UST

The sequence of remedial activities at the UST is described below:

- Prepare the site, including pavement stripping and electrical connections.
- Install SVE wells.
- Trenching for SVE return lines.
- Install SVE return lines and backfill trench.
- Install blower and controls.
- Repave SVE area.

A quarterly groundwater monitoring program will be initiated. Quarterly monitoring would be completed until the end of second quarter 2012 (allowing for one year of quarterly monitoring), and then reduced to annual monitoring until the remedial goals have been achieved.

### 7.4 Points of Compliance

The points of compliance will include soil between the ground surface and the water table interface within each remedial action area, and groundwater concentrations as measured in MW-1.

### 7.5 Cleanup Levels

The table below lists all compounds in soil or groundwater that have been detected above Method A or Method B cleanup levels at the Site, as well as the corresponding Method A and B Cleanup levels that will

be applied to the Cleanup Action Plan. When implementing the Cleanup Action Plan, Method A cleanup levels will serve as the primary cleanup level. When a Method A cleanup level is not established, Method B cleanup levels will be used.

Compound	S	oil	Groundwater			
	Method A	Method B	Method A	Method B		
	Cleanup Level	Cleanup Level	Cleanup Level	Cleanup Level		
	(mg/kg)	(mg/kg)	(µg/L)	(µg/L)		
TPHg	100		800			
TPHd	2,000		500			
1,2,4-Trimethylbenzene	NE	4,000	NE	400		
1,3,5-Trimethylbenzene	NE	4,000	NE	400		
Benzene	0.03		5			
Ethylbenzene	6		700			
Naphthalenes	5		160			
Xylenes	9		1,000			

Note:

- 1. -- = Method B cleanup level not established or not applicable.
- 2. NE = Not established.

## 8.0 References

- Ash Creek, 2011. Phase II Environmental Site Assessment, Vancouver Cardlock, 7208 NE St. Johns Road, Vancouver, Washington.
- Ecology, 2009. Guidance for Evaluating Soil Vapor Intrusion in Washington State: Investigation and Remedial Action, Washington State Department of Ecology Toxics Cleanup Program, Publication no. 09-09-047. October 2009.
- Partner Engineering and Science, 2010. *Phase I Environmental Site Assessment, Tarr, Inc., 7208 NE St. Johns Road, Vancouver Washington.* June 24, 2010.



#### Table 1 Soil Analytical Results: TPH and PAHs Vancouver Cardlock RI/FS and Cleanup Action Plan Vancouver, Washington

	Sample Number:	SB-1 (13.5)	SB-2 (13.0)	SB-3 (13.0)	SB-4 (13.5)	SB-5 (3.0)	SB-5 (8.5)	SB-6 (13.5)	SB-7 (13.0)	SB-8 (14.0)	SB-9 (8.5)	SB-10 (7.5)	SB-11 (7.5)	SB-12 (2.5)	Soil Method A
	Sample Date:	3/1/2011	3/1/2011	3/1/2011	3/1/2011	3/1/2011	3/1/2011	3/1/2011	3/1/2011	3/1/2011	4/28/2011	4/28/2011	4/28/2011	4/29/2011	Unrestricted Land
	Depth:	13.5 feet	13.0 feet	13.0 feet	13.5 feet	3.0 feet	8.5 feet	13.5 feet	13 feet	14 feet	8.5 feet	7.5 feet	7.5 feet	2.5 feet	Use, Table Value
Hydrocarbon Identification			•			•	•			•	•	•	•	•	•
Gasoline Range		ND	ND	ND	ND	Detected		Detected		ND					
Diesel Range		ND	ND	ND	ND	Detected		Detected		ND					
Motor Oil Range		ND	ND	ND	ND	Detected		ND		ND					
Petroleum Hydrocarbons (mg/kg)															
Gasoline						2,280	<7.5	907	<7.1		<8.0	<7.9	<8.0	<9.7	30/100*
Diesel						1,960	<26.2	194	<25		<26.5	<26.5	<26.5	<28.8	2,000
Motor Oil						1,260	<105	ND	<100		<106	<106	<106	137	2,000
Metals (mg/kg)															
Lead															
PAHs ( <b>µ</b> g/kg)															
1-Methylnaphthalene						6,360									5,000**
2-Methylnaphthalene						13,300									5,000**
Acenaphthene						39.7									
Acenaphthylene						16.5									
Anthracene						12.8									
Benzo(a)anthracene						8.1									
Benzo(a)pyrene						29.5									100
Benzo(b)fluoranthene						26.9									
Benzo(g,h,i)perylene						52									
Benzo(k)fluoranthene						10.4									
Chrysene						68.2									
Dibenz(a,h)anthracene						15.1									
Fluoranthene						15.2									
Fluorene						46.3									
Indeno(1,2,3-cd)pyrene						15.6									
Naphthalene						8,860									5,000**
Phenanthrene						96.7									
Pyrene						32.5									

Notes:

Notes:
mg/kg = Milligrams per kilogram (parts per million [ppm]).
µg/kg = Micrograms per kilogram (parts per billion [ppb]).
< = Not detected above the indicated method reporting limit (MRL).</li>
Bold indicates detected concentration of listed analyte.
Shading indicates detected concentration exceeding at least one screening value.
-- = Not analyzed or cleanup level not established.
30/100\* = MTCA Method A cleanup values for TPH-G when benzene is present (30 mg/kg) or when no detectable benzene is present (100 mg/kg).
\*\*5,000 = MTCA Method A cleanup level for sum of naphthalene, 1-methylnaphthalene, and 2-methylnaphthalene

#### Table 1 Soil Analytical Results: TPH and PAHs Vancouver Cardlock RI/FS and Cleanup Action Plan Vancouver, Washington

Sample Number:	SB-12 (7.5)	SB-13 (2.5)	SB-13 (8.0)	SB-14 (2.5)	SB-14 (7.5)	MW-1 (12.5)	MW-2 (7.5)	MW-3 (7.5)	Soil Method A
Sample Date:	4/29/2011	4/28/2011	4/28/2011	4/29/2011	4/29/2011	4/29/2011	4/28/2011	4/29/2011	Unrestricted Land
Depth:	7.5 feet	2.5 feet	8.0 feet	2.5 feet	7.5 feet	12.5 feet	7.5 feet	7.5 feet	Use, Table Value
Hydrocarbon Identification			•	•	•	·	•		•
Gasoline Range									
Diesel Range									
Motor Oil Range									
Petroleum Hydrocarbons (mg/kg)									
Gasoline	<7.8	8.7	<7.1	<7.5	<7.6	2,140	<7.2	<7.8	30/100*
Diesel	<26.8	<24.5	<26.1	<24.2	<24.6	59.9	<25.9	<25.0	2,000
Motor Oil	<107	<98.1	<105	<96.9	<98.4	<104	<104	<100	2,000
Metals (mg/kg)									
Lead		46.8		11.1		8.5			
PAHs (µg/kg)									
1-Methylnaphthalene	<9.1					1,380			
2-Methylnaphthalene	<9.1					3,190			
Acenaphthene	<9.1					23.5			
Acenaphthylene	<9.1					<8.9			
Anthracene	<9.1					<8.9			
Benzo(a)anthracene	<9.1					<8.9			
Benzo(a)pyrene	<9.1					<8.9			100
Benzo(b)fluoranthene	<9.1					<8.9			
Benzo(g,h,i)perylene	<9.1					<8.9			
Benzo(k)fluoranthene	<9.1					<8.9			
Chrysene	<9.1					<8.9			
Dibenz(a,h)anthracene	<9.1					<8.9			
Fluoranthene	<9.1					<8.9			
Fluorene	<9.1					52.0			
Indeno(1,2,3-cd)pyrene	<9.1					<8.9			
Naphthalene	<9.1					3,350			5,000
Phenanthrene	<9.1					84.2			
Pyrene	<9.1					10.1			

Notes:

Notes:
mg/kg = Milligrams per kilogram (parts per million [ppm]).
µg/kg = Micrograms per kilogram (parts per billion [ppb]).
< = Not detected above the indicated method reporting limit (MRL).</li>
Bold indicates detected concentration of listed analyte.
Shading indicates detected concentration exceeding at least one screening value.
-- = Not analyzed or cleanup level not established.
30/100\* = MTCA Method A cleanup values for TPH-G when benzene is present (30 mg/kg) or when no detectable benzene is present (100 mg/kg).
\*\*5,000 = MTCA Method A cleanup level for sum of naphthalene, 1-methylnaphthalene, and 2-methylnaphthalene

RI/FS and Cleanup Action Plan Tarr, LLC Vancouver Cardlock Site 1821-00 Page 2 of 2

## Table 2 Soil Analytical Results: VOCs Vancouver Cardlock RI/FS and Cleanup Action Plan Vancouver, Washington

Sample Number:	SB-5 (3.0)	SB-12 (7.5)	SB-13 (8.0)	MW-1 (2.5)	MW-1 (12.5)	Soil, Method A.
Sample Date:	3.0	7.5	8.0	2.5	12.5	Unrestricted Land Use,
Depth:	3/1/2010	//20/2011	//28/2011	1/20/2011	1/20/2011	Table Value
VOCs (ua/ka)	3/1/2010	4/27/2011	4/20/2011	4/27/2011	4/27/2011	
Acetone	< 10.5	<11.0	17.1	155	259	
tert-Amylmethyl ether	<3.1	<3.3	<3.4	<4.2	<3.5	
Benzene	<3.1	<3.3	62.1	162	940	30
Bromobenzene	< 3.1	<3.3	<3.4	<4.2	<3.5	
Bromochloromethane	<3.1	<3.3	<3.4	<4.2	<3.5	
Bromodichloromethane	<3.1	<3.3	<3.4	<4.2	<3.5	
Bromotorm	<3.1	<3.3	<3.4	<4.2	<3.5	
2-Butanone	< 3.1 38 7	<3.3	< 3.4	<4.2	< 3.5	
n-Butylbenzene	296	<3.3	<3.4	<4.2	<3.5	
sec-Butylbenzene	150	<3.3	4.5	8.4	1.400	
tert-Butylbenzene	< 3.1	<3.3	<3.4	<4.2	<3.5	
Carbon disulfide	3.1	<3.3	<3.4	<4.2	<3.5	
Carbon tetrachloride	< 3.1	<3.3	<3.4	<4.2	<3.5	
Chlorobenzene	< 3.1	<3.3	<3.4	<4.2	<3.5	
Chloroethane	< 3.1	<3.3	<3.4	<4.2	<3.5	
Chloroform	< 3.1	<3.3	<3.4	<4.2	<3.5	
Chlorotoluene	< 3.1	<3.3	<3.4	<4.2	<3.5	
4-Chlorotoluene	< 3.1	<3.3	<3.4	<4.2	<3.5	
1.2-Dibromo-3-chloropropane	< 5.2	<5.5	<5.6	<7.0	<5.8	
Dibromochloromethane	< 3.1	<3.3	<3.4	<4.2	<3.5	
1,2-Dibromoethane (EDB)	< 3.1	<3.3	<3.4	<4.2	<3.5	
Dibromomethane	< 3.1	<3.3	<3.4	<4.2	<3.5	
1,2-Dichlorobenzene	< 3.1	<3.3	<3.4	<4.2	<3.5	
1,3-Dichlorobenzene	< 3.1	<3.3	<3.4	<4.2	<3.5	
1,4-Dichlorobenzene	< 3.1	<3.3	<3.4	<4.2	<3.5	
Dichlorodifluoromethane	< 3.1	<3.3	<3.4	<4.2	<3.5	
1,1-Dichloroethane	< 3.1	<3.3	<3.4	<4.2	<3.5	
1,2-Dichloroethene (Total)	< 3.1	<0.0	< 3.4	<4.2	< 3.5	
1 1-Dichloroethene	< 3.1	<3.3	<3.4	<4.2	<3.5	
cis-1,2-Dichloroethene	< 3.1	<3.3	<3.4	<4.2	<3.5	
trans-1,2-Dichloroethene	< 3.1	<3.3	<3.4	<4.2	<3.5	
1,2-Dichloropropane	< 3.1	<3.3	<3.4	<4.2	<3.5	
1,3-Dichloropropane	< 3.1	<3.3	<3.4	<4.2	<3.5	
2,2-Dichloropropane	< 3.1	<3.3	<3.4	<4.2	<3.5	
1,1-Dichloropropene	< 3.1	<3.3	<3.4	<4.2	<3.5	
cis-1,3-Dichloropropene	< 3.1	<3.3	<3.4	<4.2	<3.5	
trans-1,3-Dichloropropene	< 3.1	<3.3	<3.4	<4.2	<3.5	
Hexachloro-1.3-butadiene	< 3.1	<3.3	<34	<4 2	<3.5	0,000
2-Hexanone	10.5	<11.0	<11.3	<14.1	<11.6	
Isopropylbenzene (Cumene)	57.4	<3.9	11.3	9.2	3,010	
p-Isopropyltoluene	266	<3.3	<3.4	<4.2	805	
Methylene chloride	< 10.5	<11.0	<11.3	<14.1	<11.6	20
4-Methyl-2-pentanone (MIBK)	< 10.5	<11.0	<11.3	<14.1	<11.6	
Methyl-tert-butyl ether	< 3.1	<3.3	<3.4	<4.2	<3.5	
n-Propylbenzene 141	141	<3.9	28.2	12.7	11,100	
Styrene	< 3.1	<3.3	<3.4	<4.2	<3.5	
1 1 2 2-Tetrachloroethane	< 3.1	<3.3	<3.4	<4.2	<3.5	
Tetrachloroethene	< 3.1	<3.3	<3.4	<4.2	<3.5	50
Toluene	8.5	<3.9	14.8	27.3	712	7,000
1,2,3-Trichlorobenzene	< 3.1	<3.3	<3.4	<4.2	<3.5	
1,2,4-Trichlorobenzene	< 3.1	<3.3	<3.4	<4.2	<3.5	
1,1,1-Trichloroethane	< 3.1	<3.3	<3.4	<4.2	<3.5	2,000
1,1,2-Trichloroethane	< 3.1	<3.3	<3.4	<4.2	<3.5	
I richloroethene	< 3.1	<3.3	<3.4	<4.2	<3.5	30
I richiorofiluoromethane	< 3.1	<3.3	<3.4	<4.2	<3.5	
1,2,3- Hichloropropane	< 3.1	< 3.3	<3.4	<4.2	<3.5	
Vinvl chloride	< 3.1	<3.3	<3.4	<4.2	<3.5	
Xvlene (Total)	281	<11.6	425	141	143.000	9,000
m&p-Xylene	180	<7.7	307	118	113,000	
o-Xylene	101	<3.9	118	22.9	28,800	
Naphthalene	15,200	<3.9	7.2	20.5	10,700	5,000
1,2,4- I rimethylbenzene	54,000	<3.9	<3.4	3270	120,000	
1,3,5- I rimethylbenzene	12,800	<3.9	24.7	89.3	34,300	

 Notes:

 1.
 VOCs = Volatile organic compounds by EPA Method 8260B.

 2.
 µg/kg = Micrograms per kilogram (parts per billion [ppb]).

 3.
 <= Not detected above the indicated method reporting limit (MRL).</td>

 4.
 Bold indicates detected concentration of listed analyte.

 5.
 Shading indicates detected concentration exceeding at least one screening value.

 6.
 --- = Not analyzed or cleanup level not establishec

## Table 3 Groundwater Analytical Results: TPH and VOCs Vancouver Cardlock RI/FS and Cleanup Action Plan Vancouver, Washington

Sample Number: Sample Date:	SB-12 4/29/2011	SB-13 4/28/2011	SB-14 4/29/2011	SB-15 4/29/2011	MW-1 5/10/2011	MW-1 DUP 5/10/2011	MW-2 5/10/2011	MW-3 5/10/2011	Groundwater Method A, Table Value
Petroleum Hydrocarbons (µg/L)									
TPH-Diesel Range	<75	97	<76	140	4,800	5,100	<76	<76	500
TPH-Gasoline Range	< 50	<50	< 50	<300 473	78,200	490 78.000	<50	<50	800
n n ousointo nungo	-00	-00	-00		10,200	10,000	100	.00	000
VOCs (µg/L)									
1,1,1,2-Tetrachloroethane		<1.0		<1.0	<1.0		<1.0	<1.0	
1,1,1-Trichloroethane		<1.0		<1.0	<1.0		<1.0	<1.0	200
1 1 2-Trichloroethane		<1.0		<1.0	<1.0		<1.0	<1.0	
1.1-Dichloroethane		<1.0		<1.0	<1.0		<1.0	<1.0	
1,1-Dichloroethene		<1.0		<1.0	<1.0		<1.0	<1.0	
1,1-Dichloropropene		<1.0		<1.0	<1.0		<1.0	<1.0	
1,2,3-Trichlorobenzene		<1.0		<1.0	<1.0		<1.0	<1.0	
1,2,3-Trichloropropane		<1.0		<1.0	<1.0		<1.0	<1.0	
1,2,4-Trimethylbenzene		<1.0		<1.0	<1.0 4 150		<1.0	<1.0	
1,2,4- mineurybenzene 1,2-Dibromo-3-chloropropane		<4.0		<4.0	<4.0		<4.0	<4.0	
1,2-Dibromoethane (EDB)		<1.0		<1.0	<1.0		<1.0	<1.0	
1,2-Dichlorobenzene		<1.0		<1.0	<1.0		<1.0	<1.0	
1,2-Dichloroethane		<1.0		<1.0	<1.0		<1.0	<1.0	5
1,2-Dichloroethene (Total)		<2.0		<2.0	<2.0		<2.0	<2.0	
1,2-Dichloropropane		<1.0		<1.0	<1.0		<1.0	<1.0	
1,3,5-1rimetnyibenzene		<1.0		4.1	881 <1.0		<1.0	<1.0	
1.3 Dichloropropage		<1.0		<1.0	<1.0		<1.0	<1.0	
1.4-Dichlorobenzene		<1.0		<1.0	<1.0		<1.0	<1.0	
2,2-Dichloropropane		<1.0		<1.0	<1.0		<1.0	<1.0	
2-Butanone (MEK)		<5.0		<5.0	<5.0		<5.0	<5.0	
2-Chlorotoluene		<1.0		<1.0	<1.0		<1.0	<1.0	
2-Hexanone		<5.0		<5.0	<5.0		<5.0	<5.0	
4-Chlorotoluene		<1.0		<1.0	<1.0		<1.0	<1.0	
4-Methyl-2-pentanone (MIBK)		<5.0		<5.0	<5.0		<5.0	<5.0	
Renzene		<5.0		< 5.0	0.0		< 0.0	< 0.0 IVI 1	
Bromobenzene		<1.0		<1.0	<1.0		<1.0	<1.0	
Bromochloromethane		<1.0		<1.0	<1.0		<1.0	<1.0	
Bromodichloromethane		<1.0		<1.0	<1.0		<1.0	<1.0	
Bromoform		<1.0		<1.0	<1.0		<1.0	<1.0	
Bromomethane		<1.0		<1.0	<1.0		<1.0	<1.0	
Carbon Disulfide		<1.0		<1.0	<1.0		<1.0	<1.0	
Carbon tetrachionide Chlorobenzene		<1.0		<1.0	<1.0		<1.0	<1.0	
Chloroethane		<1.0		<1.0	<1.0		<1.0	<1.0	
Chloroform		<1.0		<1.0	<1.0		<1.0	<1.0	
Chloromethane		<1.0		<1.0	<1.0		<1.0	<1.0	
Dibromochloromethane		<1.0		<1.0	<1.0		<1.0	<1.0	
Dibromomethane		<1.0		<1.0	<1.0		<1.0	<1.0	
Dichlorodifluoromethane		<1.0		<1.0	<1.0		<1.0	<1.0 M1	
Etnyibenzene Hevachloro 1.3 butadiene		<1.0		<b>2.8</b>	2,170 <1.0		<1.0	<1.0	700
Isopronylbenzene (Cumene)		<1.0		3.4	134		<1.0	<1.0	
Methyl-tert-butyl ether		<1.0		<1.0	1.4		<1.0	<1.0	
Methylene chloride		<4.0		<4.0	<4.0		<4.0	<4.0 M1	5
Naphthalene		<1.0		<1.0	800		<1.0	<1.0	160
Styrene		<1.0		<1.0	<1.0		<1.0	<1.0	
Tetrachloroethene (PCE)		<1.0		<1.0	<1.0		<1.0	<1.0 M1	5
Trichlereethone		<1.0		<1.0	/28		<1.0	<1.0	1,000
Trichlorofluoromethane		<1.0		<1.0	<1.0		<1.0	<1.0	5
Vinvl chloride		<1.0		<1.0	<1.0		<1.0	<1.0	0.2
Xylene (Total)		<3.0		<3.0	11,900		<3.0	<3.0	1,000
cis-1,2-Dichloroethene		<1.0		<1.0	<1.0		<1.0	<1.0	
cis-1,3-Dichloropropene		<1.0		<1.0	<1.0		<1.0	<1.0	
m&p-Xylene		<2.0		<2.0	9,280		<2.0	<2.0	
n-Butyibenzene		<1.0		<1.0	56.8		<1.0	<1.0	
n-riopyidenzene n-Xvlene		<1.0		<b>9.3</b>	340 2.640		<1.0	<1.0	
p-Isopropyltoluene		<1.0		<1.0	10.4		<1.0	<1.0	
sec-Butylbenzene		<1.0		2.6	17.3		<1.0	<1.0	
tert-Butylbenzene		<1.0		<1.0	<1.0		<1.0	<1.0	
trans-1,2-Dichloroethene		<1.0		<1.0	<1.0		<1.0	<1.0	
trans-1,3-Dichloropropene		<1.0		<1.0	<1.0		<1.0	<1.0	

 trains 1, 5:Diction/optopletie
 - <1.0</td>
 - 

 Notes:
 1.
 VOCS = Volatile organic compounds by EPA Method 8260B

 2.
 < = Not detected above the indicated method reporting limit (MRL)</td>

 3.
 µg/L = Micrograms per liter (parts per billion (ppb)).

 5.
 Bold indicates detected concentration of listed analyte

 6.
 Shading indicates detected concentration exceeding at least one screening value

 7.
 M1 = Matrix spike recovery exceeded QC limits

#### Table 4 Soil Analytical Results: VPH and EPH Vancouver Cardlock RI/FS and Cleanup Action Plan Vancouver, Washington

Sample Number:	MW-1 (12.5)
Sample Date:	4/29/2011
Depth:	12.5 feet
Extractable Hydrocarbons (mg/kg)	
Aliphatic Hydrocarbon (C8-C10)	79.1
Aliphatic Hydrocarbon (C10-C12)	308
Aliphatic Hydrocarbon (C12-C16)	152
Aliphatic Hydrocarbon (C16-C21)	45.3
Aliphatic Hydrocarbon (C21-C34)	25.4
Aromatic Hydrocarbon (C8-C10)	35.9
Aromatic Hydrocarbon (C10-C12)	44.4
Aromatic Hydrocarbon (C12-C16)	25.1
Aromatic Hydrocarbon (C16-C21)	10.5
Aromatic Hydrocarbon (C21-C34)	0.854
Petroleum Hydrocarbons (mg/kg)	
Aliphatic Hydrocarbon (C10-C12)	131
Aliphatic Hydrocarbon (C5-C6)	0.2
Aliphatic Hydrocarbon (C6-C8)	4.11
Aliphatic Hydrocarbon (C8-C10)	60.4
Aromatic Hydrocarbon (C10-C12)	181
Aromatic Hydrocarbon (C12-C16)	33.4
Aromatic Hydrocarbon (C8-C10)	228
Benzene	0.888
Ethylbenzene	12.1
m,p-Xylene	35.6
Naphthalene	11.4
o-Xylene	18.1
Toluene	1.64

Note:

1. mg/kg = Milligrams per kilogram (parts per billion [ppm]).

#### Table 5 Groundwater Elevations and Field Parameters Vancouver Cardlock RI/FS and Cleanup Action Plan Vancouver, Washington

		Top of			Field Parameters							
Sample Point	Sample Date	Casing Elevation (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	Temperature (°C)	рН	Conductivity (µS)	ORP (mV)	DO (ppm)			
MW-1	5/10/2011	262.43	7.45	254.98	12.73	7.84	815	-85.4	0.7			
MW-2	5/10/2011	262.48	8.78	253.70	11.05	5.98	94	105.6	3.7			
MW-3	5/10/2011	262.74	7.9	254.84	14.84	6.16	533	87.1	0.88			

#### Notes:

1. Monitoring well survey conducted on May 25, 2011 by Statewide Land Survey, Inc.

2. Vertical control established using Global Positioning System, vertical Datum is NAVD 88.

4. °C = Degrees Celsius.

5.  $\mu$ S = Microsiemens.

6. mV = Millivolts.

7. ppm = Parts per million.

RI/FS and Cleanup Action Plan Tarr, LLC Vancouver Cardlock Site 1821-00 Page 1 of 1

## Table 6 Soil Vapor Extraction for Unleaded UST Soil and Groundwater, Excavate Dispenser Area Vancouver Cardlock RI/FS and Cleanup Action Plan Vancouver, Washington

Item Description	Personnel	Unit	Unit Cost	Quantity	Total <sup>1</sup>	Notes
Design and Work Plan						
Prepare final remedial design	ACA Engineer	est.	\$5,000	1	\$5,000	Short performance specification.
			1	ask Subtotal	\$5,000	
Site Preparation						
Planning and preparation, pre-con meeting	Project	hour	\$113	10	\$1,130	
Utility Locate	Subcontractor	day	\$750	1	\$750	
HASP	ACA	est.	\$500	1	\$500	
			1	ask Subtotal	\$2,380	
Soil Excavation and Disposal: Dispenser Area						
Site Preparation	Subcontractor	est.	\$250	1	\$250	Asphalt cutting
Dispenser Decommissioning	Subcontractor	est.	\$2,500	1	\$2,500	Remove pump and associated piping and power
Clean overburden excavation	Subcontractor	ton	\$50	6	\$300	
Contaminated soil excavation	Subcontractor	ton	\$50	9	\$450	
Contaminated soil trucking and disposal	Subcontractor	ton	\$95	9	\$855	
Oversight during project	ACA	day	\$1,000	2	\$2,000	
Senior oversight and coordination	Foxwell	hour	\$145	4	\$580	
Confirmation sampling/profiling	est.	est.	\$750	1	\$750	
Site restoration: Backfill and compaction	Subcontractor	ton	\$40	12	\$480	
Site restoration: Paving	Subcontractor	sq yd	\$30	11	\$330	
Dispenser Reinstall	Subcontractor	est.	\$2,500	1	\$2,500	Install pump and associated piping and power
			1	ask Subtotal	\$10,995	
SVE System: Construct System and Initial Operation	IS					
Planning and preparation	Sr. Staff	hour	\$82	4	\$328	Subcontractor coordination.
Power supply for SVE	Subcontractor	est.	\$750	1	\$750	
Oversight system construction	Sr. Staff	hour	\$82	32	\$2,624	One week of installation oversight, install two wells and SVE equipment
Vapor Extraction Well Installation	Subcontractor	est.	\$1,770	2	\$3,540	Install 2 wells with vacuum extraction, drum soil.
Waste Disposal	Subcontractor	est.	\$1,000	1	\$1,000	Cuttings from drilling and trenching.
Mechanical equipment and connections						Blower, enclosure, electrical connections, piping.
EN404 Blower and Controls	Subcontractor	est.	\$5,000	1	\$5,000	
Piping and trenching	Subcontractor	est.	\$5,000	1	\$5,000	
Site resoration	Subcontractor	est.	\$2,500	1	\$2,500	
Operations and maintenance, power	Subcontractor	year	\$4,000	2	\$8,000	Vapor controls, minor maintenance, power.
ACA monitoring	Staff	year	\$6,000	2	\$12,000	Monthly Site visits and monitoring for two years.
Equipment and supplies	est.	day	\$225	5	\$1,125	ACA truck, misc. field equipment, PPE.
Senior oversight and coordination	Foxwell	hour	\$145	8	\$1,160	
Engineering	Stevens	hour	\$134	4	\$536	
Construction and startup report	est.	est.	\$5,000	1	\$5,000	
Vapor Sampling	est.	est.	\$500	4	\$2,000	Four discharge sampling events
				ask Subtotal	\$50,563	
Monitoring and Closeout Reporting						
Quarterly Groundwater Monitoring	ACA	event	\$2,500	5	\$12,500	Quarterly through 2nd quarter 2012, annual thereafter
Closeout Report	ACA	est.	\$5,000	1	\$5,000	
			1	ask Subtotal	\$17,500	
			TOTAL ESTIMA	ATED COST 1:	\$86,438	

Note: 1. Cost estimate is for planning purposes and should be considered to have +/- 25% accuracy.

#### Table 7 Soil Excavation at Unleaded Tank and Dispenser, Groundwater Enhanced Bioremediation Vancouver Cardlock RI/FS and Cleanup Action Plan Vancouver, Washington

Item Description	Personnel	Unit	Unit Cost	Quantity	Total <sup>1</sup>	Notes
Design and Work Plan						
Prepare final remedial design	ACA Engineer	est.	\$5,000	1	\$5,000	Short performance specification.
	-		٦	Task Subtotal	\$5,000	
Site Preparation						
Planning and preparation, pre-con meeting	Project	hour	\$113	10	\$1,130	
Utility Locate	Subcontractor	day	\$750	1	\$750	
HASP	ACA	est.	\$500	1	\$500	
			1	Fask Subtotal	\$2,380	
Soil Excavation and Disposal: Dispenser Area						
Site Preparation	Subcontractor	est.	\$250	1	\$250	Asphalt cutting
Dispenser Decommissioning	Subcontractor	est.	\$2,500	1	\$2,500	Remove pump and associated piping and power
Clean overburden excavation	Subcontractor	ton	\$50	6	\$300	
Contaminated soil excavation	Subcontractor	ton	\$50	9	\$450	
Contaminated soil trucking and disposal	Subcontractor	ton	\$95	9	\$855	
Oversight during project	ACA	day	\$1,000	2	\$2,000	
Senior oversight and coordination	Foxwell	hour	\$145	4	\$580	
Confirmation sampling/profiling	est.	est.	\$750	1	\$750	
Site restoration: Backfill and compaction	Subcontractor	ton	\$40	12	\$480	
Site restoration: Paving	Subcontractor	sq yd	\$30	11	\$330	
Dispenser Reinstall	Subcontractor	est.	\$2,500	1	\$2,500	Install pump and associated piping and power
			٦	Fask Subtotal	\$10,995	
Soil Excavation and Disposal: UST Area						
Planning and preparation	Project	hour	\$113	24	\$2,712	
Site Preparation	Subcontractor	hour	\$100	1	\$100	Asphalt cutting
Slope stabilization and shoring	Subcontractor	est.	\$10,000	1	\$10,000	Shoring for portion of excavatin close to building
Contaminated soil excavation	Subcontractor	ton	\$25	100	\$2,500	
Contaminated soil trucking and disposal	Subcontractor	ton	\$95	100	\$9,500	
Oversight during project	ACA	day	\$1,000	3	\$3,000	
Senior oversight and coordination	Foxwell	hour	\$145	8	\$1,160	
Confirmation sampling/profiling	est.	est.	\$4,000	1	\$4,000	
Site restoration: Backfill and compaction	Subcontractor	ton	\$40	120	\$4,800	
Site restoration: Paving	Subcontractor	sq yd	\$30	32	\$960	
			1	Fask Subtotal	\$38,732	
Groundwater Enhanced Bioremediation						
Site Preparation	Subcontractor	est.	\$750	1	\$750	Asphalt coring, etc
Bioinjection drilling	Subcontractor	day	\$3,500	2	\$7,000	
ORC for bioinjections	est.	est.	\$18,000	1	\$18,000	
Oversight during project phase	ACA	day	\$1,000	2	\$2,000	
Senior oversight and coordination	Foxwell	hour	\$145	8	\$1,160	
Principal review	Clough	hour	\$160	2	\$320	
Remediation report	est.	est.	\$5,000	1	\$5,000	
Site Restoration: Patching	Subcontractor	est.	\$200	1	\$200	
			1	Fask Subtotal	\$34,430	
Monitoring and Closeout Reporting						
Quarterly Groundwater Monitoring	ACA	event	\$2,500	5	\$12,500	Quarterly through 2nd quarter 2012, annual thereafter
Closeout Report	ACA	est.	\$5,000	1	\$5,000	
			1	ask Subtotal	\$17,500	
			TOTAL ESTIM	ATED COST <sup>1</sup> :	\$109,037	

*Note:* 1. Cost estimate is for planning purposes and should be considered to have +/- 25% accuracy.

#### Table 8 Soil Excavation at Unleaded Tank and Dispenser, Groundwater Natural Attenuation Vancouver Cardlock RI/FS and Cleanup Action Plan Vancouver, Washington

Item Description	Personnel	Unit	Unit Cost	Quantity	Total <sup>1</sup>	Notes
Design and Work Plan						
Prepare final remedial design	ACA Engineer	est.	\$5,000	1	\$5,000	Short performance specification.
1 3	3		Т	ask Subtotal	\$5,000	
Site Preparation						
Planning and preparation, pre-con meeting	Project	hour	\$113	10	\$1,130	
Utility Locate	Subcontractor	day	\$750	1	\$750	
HASP	ACA	est.	\$500	1	\$500	
			Т	ask Subtotal	\$2,380	
Soil Excavation and Disposal: UST Area						
Planning and preparation	Project	hour	\$113	24	\$2.712	
Site Preparation	Subcontractor	hour	\$100	1	\$100	Asphalt cutting
Slope stabilization and shoring	Subcontractor	est.	\$10,000	1	\$10,000	Shoring for portion of excavatin close to building
Contaminated soil excavation	Subcontractor	ton	\$25	100	\$2,500	о , ,
Contaminated soil trucking and disposal	Subcontractor	ton	\$95	100	\$9,500	
Oversight during project	ACA	day	\$1,000	3	\$3,000	
Senior oversight and coordination	Foxwell	hour	\$145	8	\$1,160	
Confirmation sampling/profiling	est.	est.	\$4,000	1	\$4,000	
Site restoration: Backfill and compaction	Subcontractor	ton	\$40	120	\$4,800	
Site restoration: Paving	Subcontractor	sq yd	\$30	32	\$960	
, , , , , , , , , , , , , , , , , , ,			T	ask Subtotal	\$38,732	
Soil Excavation and Disposal: Dispenser Area						
Site Preparation	Subcontractor	est.	\$250	1	\$250	Asphalt cutting
Dispenser Decommissioning	Subcontractor	est.	\$2,500	1	\$2,500	Remove pump and associated piping and power
Clean overburden excavation	Subcontractor	ton	\$50	6	\$300	
Contaminated soil excavation	Subcontractor	ton	\$50	9	\$450	
Contaminated soil trucking and disposal	Subcontractor	ton	\$95	9	\$855	
Oversight during project	ACA	day	\$1,000	2	\$2,000	
Senior oversight and coordination	Foxwell	hour	\$145	4	\$580	
Confirmation sampling/profiling	est.	est.	\$750	1	\$750	
Site restoration: Backfill and compaction	Subcontractor	ton	\$40	12	\$480	
Site restoration: Paving	Subcontractor	sq yd	\$30	11	\$330	
Dispenser Reinstall	Subcontractor	est.	\$2,500	1	\$2,500	Install pump and associated piping and power
			Т	ask Subtotal	\$10,995	
Groundwater Natural Attenuation						
Additional natural attenuation analyses	ACA	est.	\$2,000	1	\$2,000	Addl. Analytical costs beyond quarterly monitoring
			Т	ask Subtotal	\$2,000	
Monitoring and Closeout Reporting				1		
Quarterly Groundwater Monitoring	ACA	event	\$2,500	5	\$12,500	Quarterly through 2nd guarter 2012, annual thereafter
Closeout Report	ACA	est	\$5,000	1	\$5,000	5 . 5 . 1
olosoodi hopoli	non	0.51.	φ3,000 Τ	ask Subtotal	\$17,500	
					¢1,,500	
			TOTAL ESTIMA	ILD COST :	\$76,607	

Note:

1. Cost estimate is for planning purposes and should be considered to have +/- 25% accuracy.

#### Table 9 Soil Excavation at Unleaded Tank, Cap in Place at Dispenser, Groundwater Natural Attenuation Vancouver Cardlock RI/FS and Cleanup Action Plan Vancouver, Washington

Item Description	Personnel	Unit	Unit Cost	Quantity	Total <sup>1</sup>	Notes
Site Preparation						
Pre Construction meeting with contractors	Foxwell	est.	\$1,500	1	\$1,500	
Utility Locate	Subcontractor	day	\$750	1	\$750	
HASP	ACA	est.	\$1,000	1	\$1,000	
			1	ask Subtotal	\$3,250	
Soil Excavation and Disposal: UST Area						
Planning and preparation	Project	hour	\$113	24	\$2,712	
Site Preparation	Subcontractor	hour	\$100	1	\$100	Asphalt cutting
Slope stabilization and shoring	Subcontractor	est.	\$10,000	1	\$10,000	Shoring for portion of excavatin close to building
Contaminated soil excavation	Subcontractor	ton	\$25	100	\$2,500	
Contaminated soil trucking and disposal	Subcontractor	ton	\$95	100	\$9,500	
Oversight during project	ACA	day	\$1,000	3	\$3,000	
Senior oversight and coordination	Foxwell	hour	\$145	8	\$1,160	
Confirmation sampling/profiling	est.	est.	\$4,000	1	\$4,000	
Site restoration: Backfill and compaction	Subcontractor	ton	\$40	120	\$4,800	
Site restoration: Paving	Subcontractor	sq yd	\$30	32	\$960	
			Т	ask Subtotal	\$38,732	
Cap in Place: Dispenser Area						
Soil Management Plan for Dispenser Area	ACA	est.	\$2,000	1	\$2,000	
			Task Su	btotal	\$2,000	
Groundwater Natural Attenuation						
Additional natural attenuation analyses	ACA	est.	\$2,000	1	\$2,000	Addl. Analytical costs beyond quarterly monitoring
			Т	ask Subtotal	\$2,000	
Monitoring and Closeout Reporting						
Quarterly Groundwater Monitoring	ACA	event	\$2,500	5	\$12,500	Quarterly through 2nd quarter 2012, annual thereafter
Closeout Report	ACA	est.	\$5,000	1	\$5,000	
			1	ask Subtotal	\$17,500	
	I		TOTAL ESTIMA	ATED COST <sup>1</sup> :	\$63,482	

Note:

1. Cost estimate is for planning purposes and should be considered to have +/- 25% accuracy.

#### Table 10 Soil Vapor Extraction for Unleaded UST Soil and Groundwater, Cap Dispenser Area Vancouver Cardlock RI/FS and Cleanup Action Plan Vancouver, Washington

Item Description	Personnel	Unit	Unit Cost	Quantity	Total <sup>1</sup>	Notes								
Desian and Work Plan														
Prepare final remedial design	ACA Engineer	est.	\$5,000	1	\$5,000	Short performance specification.								
			1	ask Subtotal	\$5,000									
Site Preparation														
Planning and preparation, pre-con meeting	Project	hour	\$113	10	\$1,130									
Utility Locate	Subcontractor	day	\$750	1	\$750									
HASP	ACA	est.	\$500	1	\$500									
			۱	ask Subtotal	\$2,380									
SVE System: Construct System and Initial Operation	S													
Planning and preparation	Sr. Staff	hour	\$82	4	\$328	Subcontractor coordination.								
Power supply for SVF	Subcontractor	est.	\$750	1	\$750									
Oversight system construction	Sr. Staff	hour	\$82	32	\$2,624	One week of installation oversight, install nine horizontal wells.								
Vapor Extraction Well Installation	Subcontractor	est.	\$1,770	2	\$3,540	Install 2 wells with vacuum extraction, drum soil.								
Waste Disposal	Subcontractor	est.	\$1.000	1	\$1,000	Cuttings from drilling and trenching.								
Mechanical equipment and connections						Blower, enclosure, electrical connections, piping.								
EN404 Blower and Controls	Subcontractor	est.	\$5,000	1	\$5,000									
Piping and trenching	Subcontractor	est.	\$5,000	1	\$5,000									
Site resoration	Subcontractor	est.	\$2,500	1	\$2,500									
Operations and maintenance, power	Subcontractor	year	\$4,000	2	\$8,000	Vapor controls, minor maintenance, power.								
ACA monitoring	Staff	year	\$6,000	2	\$12,000	Monthly Site visits and monitoring for two years.								
Equipment and supplies	est.	day	\$225	5	\$1,125	ACA truck, misc. field equipment, PPE.								
Senior oversight and coordination	Foxwell	hour	\$145	8	\$1,160									
Engineering	Stevens	hour	\$134	4	\$536									
Construction and startup report	est.	est.	\$5,000	1	\$5,000									
Vapor Sampling	est.	est.	\$500	4	\$2,000	Four discharge sampling events								
			1	ask Subtotal	\$50,563									
Cap in Place: Dispenser Area														
Soil Management Plan for Dispenser Area	ACA	est.	\$2,000	1	\$2,000									
			١	ask Subtotal	\$2,000									
Monitoring and Closeout Reporting														
Quarterly Groundwater Monitoring	ACA	event	\$2,500	5	\$12,500	Quarterly through 2nd quarter 2012, annual thereafter								
Closeout Report	ACA	est.	\$5,000	1	\$5,000									
· · · · · · · · · · · · · · · · · · ·			1	ask Subtotal	\$17,500									
			TOTAL ESTIM/	ATED COST :	\$77,443									

Note:

1. Cost estimate is for planning purposes and should be considered to have +/- 25% accuracy.

#### Table 11 Comparative Analysis of Cleanup Alternatives Vancouver Cardlock RI/FS and Cleanup Action Plan Vancouver, Washington

	Ranking Criteria																																				
Groundwater Alternatives		Prot	tective	eness			Permanence					Cost					Long-Term Effectiveness					Management of Short-Term Risks					Implementability					Public Concerns					Rank
	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5		
1 Soil Vapor Extraction/Excavation		0	0	0	0		0	0	+	+		+		-			0	0	+	+		+	+	+	-		+	+	+	0		0	0	+	+	9	1
2 Excavation and In-situ Enhanced Bioremediation/Excavation	0		0	0	0	0		0	+	+	-			-	-	0		0	+	+	-		0		-			0	0		0		0	+	+	-3	4
3 Excavation and Natural Attenuation/Excavation	0	0		0	0	0	0		+	+	+	+		-	+	0	0		+	+	-	0		-	-	-	0		0	-	0	0		+	+	3	2
4 Excavation and Natural Attenuation/Capping	0	0	0		0	-				0	+	+	+		+	-				0	-	+	+		-		0	0					•		0	-7	5
5 Soil Vapor Extraction/Capping	0	0	0	0		-			0		+	+	-	·		-	-		0		+	+	+	+		0	+	+	+		-	-	-	0		-2	3

#### Notes:

+ = The alternative is favored over the compared alternative (score = 1).

0 = The alternative is equal with the compared alternative (score = 0).

- = The alternative is less favorable than the compared alternative (score = -1).

Alternative Definition = UST Area/Dispenser Area
















# Terrestrial Ecological Exclusion Tarr, LLC Vancouver Cardlock 7208 NE St. Johns Road Vancouver, Washington Vancouver, Washington Ash Creek Associates, Inc.

May 2011

nental and Geotechnical Consultants

7



Appendix A

**Exploration Logs and Standard Operating Procedures** 

# Sample Descriptions

Classification of soils in this report is based on visual field and laboratory observations which include density/consistency, moisture condition, and grain size, and should not be construed to imply field nor laboratory testing unless presented herein. Visual-manual classification methods of ASTM D 2488 were used as an identification guide.

Soil descriptions consist of the following:

MAJOR CONSTITUENT with additional remarks; color, moisture, minor constituents, density/consistency.

# Density/Consistency

Soil density/consistency in borings is related primarily to the Standard Penetration Resistance. Soil density/consistency in test pits and push probe explorations is estimated based on visual observation and is presented parenthetically on test pit and push probe exploration logs.

SAND and GRAVEL	Standard Penetration Resistance <u>in Blows/Foot</u>	SILT or CLAY Density	Standard Penetration Resistance in Blows/Foot	Approximate Shear Strength <u>in TSF</u>
Very loose Loose Medium dense Dense Very dense	0 - 4 4 - 10 10 - 30 30 - 50 >50	Very soft Soft Medium stiff Stiff Very Stiff Hard	0 - 2 2 - 4 4 - 8 8 - 15 15 - 30 >30	<0.125 0.125 - 0.25 0.25 - 0.5 0.5 - 1.0 1.0 - 2.0 >2.0

# Moisture

Dry	Little perceptible moisture.	Not identified in description	0 - 5
SI. Moist	Some perceptible moisture, probably below optimum.	Slightly (clayey, silty, etc.)	5 - 12
Moist	Probably near optimum moisture content.	Clayey, silty, sandy, gravelly	12 - 30
Wet	Much perceptible moisture, probably above optimum.	Very (clayey, silty, etc.)	30 - 50

# **Sampling Symbols**

BORING AND PUSH-PROBE SYMBOLS

- Recovery
   No Recovery
   Touristic Content of the content
- Temporarily Screened Interval
- PID Photoionization Detector Reading
- W Water Sample
- Sample Submitted for Chemical Analysis
- NS No Sheen
- SS Slight Sheen
- MS Moderate Sheen
- HS Heavy Sheen
- BF Biogenic Film

# TEST PIT SOIL SAMPLES

- Grab (Jar)
- $\square$ 
  - Bag Shelby Tube

# Groundwater Observations and Monitoring Well Construction

**Minor Constituents** 



Estimated Percentage

# Key to Exploration Logs

Tarr, LLC Vancouver Cardlock Phase II ESA 7208 NE St. Johns Road Vancouver, Washington

Ash Creek Associates Inc	Project Number	1821-00	Figure
Environmental and Geotechnical Consultants	May	2011	Key

Å E	Ash (	Creek <sub>ental an</sub>	Ass d Geot	OCÍ ate echnical	es, Inc. I Consultants	Tarr, LLC Vancouver Cardlock Phase II ESA 7208 NE St. Johns Road Vancouver, Washington	Boring Number: SB-9 Project Number: 1821-00 Logged By: M. Whitson Date: April 28, 2011
Depth, feet	Core Interval/Recovery	Laboratory Sample ID	DID	Sheen	Líth	ologíc Descríptíon	Site Conditions: Partly Cloudy (40°F) Drilling Contractor: Major Drilling Drilling Equipment: Geoprobe 7822DT Sampler Type: 5' Open Core Depth to Water (ATD): Surface Elevation: Boring Details and Notes:
	Hand Auger	SB-9-2.5	<5 <5	NS NS	Aspha Sandy Iow pla Gravel graine	It concrete surface (2-3"). SILT with gravel; dark brown, moist, medium stiff, (65-70% astic silt, 20-25% very fine-grained sand, 10% gravel). Iy SAND; dark brown, moist, loose, (75% fine- to medium- d sand, 25% fine to medium gravel and pebbles).	
		SB-9-8.5	<5 <5	NS NS	Silty S very fii — Becor	AND; medium brown, moist, medium dense, (75% fine- to ne-grained sand, 25% low plastic silt).	
					Botton	n of Boring at 10.0' BGS.	
				I	1		Page 1/1

Ash Creek Associates, Inc. Environmental and Geotechnical Consultants						Tarr, LLC Vancouver Cardlock Phase II ESA 7208 NE St. Johns Road Vancouver, Washington	Boring Number: <b>SB-10</b> Project Number: <b>1821-00</b> Logged By: M. Whitson Date: April 28, 2011
Depth, feet	Core Interval/Recovery	Laboratory Sample ID	PID	Sheen	Líth	ologíc Description	Site Conditions: Partly Cloudy (40°F) Drilling Contractor: Major Drilling Drilling Equipment: Geoprobe 7822DT Sampler Type: 5' Open Core Depth to Water (ATD): 9.25' Surface Elevation: Boring Details and Notes:
	Con Auger	SB-10-75 SB-10-25 SB-10-25 Labo	J         J           J         J           J         J	NS NS	Aspha Gravel mediuu 3-4-in Silty S grained Sandy plastic Silty S to med Becor Bottom	It concrete surface (9"). Ity SAND; dark brown, moist, medium dense, (65% fine- to n-grained sand, 35% medium to coarse gravel). ch lens of cobbles. AND; dark brown, moist, dense, (60-70% fine- to very fine- d sand, 30-40% low plastic silt). SILT; medium brown mottled gray, moist, soft, (60% low silt, 40% fine- to very fine-grained sand). AND; medium brown mottled gray, moist, loose, (85% fine- tium-grained sand, 15% low plastic silt). nes wet. n of Boring at 10.0' BGS.	Boring Details and Notes:

Ash Creek Associates, Inc. Environmental and Geotechnical Consultants						Tarr, LLC Vancouver Cardlock Phase II ESA 7208 NE St. Johns Road Vancouver, Washington	Boring Number: SB-11 Project Number: 1821-00 Logged By: M. Whitson Date: April 28, 2011
Depth, feet	Core Interval/Recovery	Laboratory Sample ID	DID	Sheen	Líth	ologíc Descríptíon	Site Conditions: Partly Cloudy (40°F) Drilling Contractor: Major Drilling Drilling Equipment: Geoprobe 7822DT Sampler Type: 5' Open Core Depth to Water (ATD): 9.25' Surface Elevation: Boring Details and Notes:
	Correction of the Auger Correc	88-11-75 58-11-25 58-11-25 Labo	ପାଧ ସ ସ ସ ସ ସ ସ ସ ସ ସ ସ ସ ସ ସ ସ ସ ସ ସ ସ ସ	Shee	Aspha Gravel to mec plastic Silty S (65% f Becor Botton	It concrete surface (2-3"). Jy silty SAND; dark brown, moist, medium dense, (55% fine- fium-grained sand, 25% fine to coarse gravel, 20% low silt fines). AND; medium brown mottled gray, moist, medium dense, ine- to very fine-grained sand, 35% low plastic silt). nes SAND with silt, (silt decrease to 5-10%). nes wet. n of Boring at 10.0' BGS.	Boring Details and Notes.

				,		Tarr, LLC Vancouver Cardlock Phase II ESA	Boring Number:	SB-12
рания (р. 1994) Г	∖sh ( nvironm	Creek	: Ass d Geot	ociat	es, Inc.	7208 NE St. Johns Road	Project Number: <b>1821-00</b>	
					Consultants	Vancouver, Washington	Logged By: M. Whitson	
<u> </u>							Site Conditions Partly Cloud	v (60°E)
							Drilling Contractor: Major Dril	
	ery						Drilling Equipment: Gooprobo	
	SCOV	ole					Sampler Type: 5' Open Core	102201
	al/Re	amp					Depth to Water (ATD): 8 0'	
eet	tervo	L L					Surface Elevation:	
th, f		orato		L L	ا الم	alaría Dasariatian		
Dep	Ű	Labo	PID	Shee			Boring Details and Not	es:
					Aspha	t concrete surface (2-3").		
	ßer	5			Sandy	SILT with clay; dark brown, moist, medium stiff,		
	ראר וא ⊳נ	8-12-2	11.4	NS	(60% 5-10%	low plastic silt fines, 30-35% fine to very fine sand,		
	Har	SE						
					Silty S	AND; brownish gray, moist, medium dense,		
5-	$  \neg$				(75%)	fine to very fine sand, 25% low plastic silt).		
		50			- Becon	nes mottled gray.		
	1 /	3-12-7	17.6	NS	Decor			
	1/	SI			_ pecor	nes wet.		
10-					- Silt ind	crease to 40%, 55% sand, <5% clay.		
-					- Becor	nes medium dense to dense.		
-	/		18.6	NS	Becon	nes reddish brown, no mottling.	_	
-						<b>.</b>	-	
-							-	
15—	$\vdash$				(95%)	fine to medium sand, 5% low plastic silt).	— 15	
-					└- Becor	nes very wet/saturated, very loose.	-	
-			170	NIC	- Becon	nes dark brown, medium-grained.	_	
-			17.9	IND		lens of silt.	_	
-					2 In ah	long of oilt	_	
20—					2-11101		20	
-					Bottom	of Boring at 20.0' BGS.	_	
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Ash Creek Associates, Inc. Environmental and Geotechnical Consultants						Tarr, LLC Vancouver Cardlock Phase II ESA 7208 NE St. Johns Road Vancouver, Washington	Boring Number: Project Number: <b>1821-00</b> Logged By: M Whitson	SB-13
	• ~					(uncource), (rushington	Date: April 28, 2011	
							Site Conditions: Cloudy (40°	°-50°F)
							Drilling Contractor: Major Dri	lling
	ver	$\square$					Drilling Equipment: Geoprobe	e 7822DT
	Seco	ple					Sampler Type: 5' Open Core	•
	val/F	San					Depth to Water (ATD): 8.5'	
feet	nter	tory					Surface Elevation:	
Depth,	Core	Labora	PID	Sheen	Lith	ologic Description	Boring Details and No	tes:
					Aspha	It concrete surface (3-4").		
	ger	5			Gravel	ly SAND; dark brown, moist, loose, 55% fine to coarse sand,		
	Pi Au	-13-2	16.3	NS	45% fi	ne to medium gravels.		
	Har	B						
5—	$\square$				Silty S	AND; medium gray with brown mottling, moist, medium		
			77	NIC	dense,	(65-70% fine to very fine sand, 30-35% low plastic silt fines).		
		8.0	7.5	INS				
_		8-13-3	10.2	NS	-Becom	nes less silty (~10%).		
	V	SI			-Becorr	nes wet.	_	
10	Ę						— 10	
_					-Becom	hes dark gray, loose and fine to medium-grained.	_	
_			<5	NS	—Silt inc	reases (20-25%).	_	
_		13.5			-Silt de	creases (10%).		
_	Ц	B-13-	16.5	NS				
15		S			Becom	ne very wet very loose and fine-grained		
15	/				Booon		15	
			F	NIC				
			<>	INS				
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Tarr, LLC Vancouver Cardlock						Tarr. LLC Vancouver Cardlock Phase II ESA	Boring Number:	SB-14	
- A	∖sh (	Creek	: Ass	ociat	es, Inc.	7208 NE St. Johns Road	Project Number: 1821-00		
Environmental and Geotechnical Consultants						Vancouver, Washington	Logged By: M. Whitson		
							Date: April 29, 2011		
							Site Conditions: Cloudy (50°F	·)	
							Drilling Contractor: Major Drilli	ng	
	ver,	$\square$					Drilling Equipment: Geoprobe	7822DT	
	eco	ple					Sampler Type: 5' Open Core		
	al/R	San					Depth to Water (ATD): 8.75'		
feet	terv	ory					Surface Elevation:		
oth,	<u> </u>	orati		сц	Lith	alogic Description			
Dep	Ū	Lab	E	She		ologic Description	Boring Details and Note	2S:	
					Sandy	SILT with clay: dark brown moist (65-70% low plastic silt			
					fines, 2	15-25% fine sand, 5-10% low plastic clay).	_		
_	Auger	-2.5			-Becom	nes reddish brown.	_		
_	/ pue	88-14	8.3	NS					
	Ϊ	0,			L				
5					Silty S	AND; medium reddish brown, moist, medium dense,	5		
5					(65-70	% fine to very fine sand, 30-35% low plastic silt).			
							_		
		14-75	8.5	NS					
		SB-			-Becom	nes fine to medium-grained, brown, and silt is 15-20%.			
					-Becom	nes wet.	- <u> </u>		
10	H				-Becom	nes very loose, saturated.	— 10		
_							_		
_									
			11,1	NS					
					_	<i>.</i>			
15	$  \square$				-Becom	nes very fine-grained.	15		
-									
				NIC			_		
			6.1	INS			_		
_					SAND silt fine	with silt; brown, wet, loose, (95% fine sand, ~5% low plastic			
20-							20		
					Bottom	n of Boring at 20.0' BGS.			
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# 1. PURPOSE AND SCOPE

This Standard Operating Procedure (SOP) describes the methods for observing and sampling from push-probes (i.e., GeoProbe<sup>™</sup>). Subsurface soil cores may be obtained using this system for purposes of determining subsurface soil conditions and for obtaining soil samples for physical and/or chemical evaluation. Grab groundwater samples may be collected using temporary well screens. Soil vapor samples may be obtained using temporary well points. Shallow (less than 50 feet), small-diameter (2-inch max) pre-packed wells may also be installed using push-probe equipment. This procedure is applicable during all Ash Creek Associates (ACA) push-probe activities.

# 2. EQUIPMENT AND MATERIALS

The following materials are necessary for this procedure:

- Traffic cones, measuring tape, spatula, and buckets/drums
- Sampling equipment (water level probe, pumps, tubing) and laboratory-supplied sample containers
- Field documentation materials
- Decontamination materials
- Personal protective equipment (as required by project Health and Safety Plan)

# 3. METHODOLOGY

# Coring Procedure (Conducted by Drilling Subcontractor):

The sampling procedure includes driving a 2-inch outside-diameter, 5-foot-long, push-probe soil sampler to the desired depth using a combination of hydraulic pressure and mechanical hammer blows. When the sampling depth is reached, the pin attaching the sampler's tip is released (if a tip is used), which allows the tip to slide inside the sampler (Macro-Core Sampler with removable plastic liner). The sampler is driven the length of the sampler to collect a soil core, which is then withdrawn from the exploration. When the sampler is retrieved from the borehole the drive head/cutting shoe is detached and the liner is removed. Soil cores are collected continuously to the full depth of the exploration unless otherwise specified in a project-specific sampling and analysis plan (SAP). Verify that the subcontractor decontaminates the sampling device (per SOP 1.2) prior to its initial use and following collection of each soil sample.

# Logging and Soil Sample Collection:

Remove the soil core from the sampler for field screening, description, and placement into sample jars. Soil samples will be collected for field screening and possible chemical analysis on two foot intervals unless otherwise specified in a project-specific SAP. The sampling interval will be determined in the field based on recovery, soil variability, and evidence of contamination. Complete field screening as specified in SOP-2.1. Soil samples should be collected using different procedures for volatile on non-volatile analyses, as follows.

- Volatile Analyses. Sampling for volatile organics analysis (VOA) is different than other routine
  physical or chemical testing because of the potential loss of volatiles during sampling. To limit volatile
  loss, the soil sample must be obtained as quickly and as directly as possible. If a VOA sample is to
  collected as part of a multiple analyte sample, the VOA sample portion will be obtained first. The VOA
  sample should be obtained from a discrete portion of the entire collected sample and should not be
  composited or homogenized. Sample bottles should be filled to capacity, with no headspace. Specific
  procedures for collecting VOA samples using the EPA Method 5035 are discussed in SOP 2.7.
- Other Analyses. Soil samples for non-volatile analyses will be thoroughly homogenized in a stainless steel bowl prior to bottling. Sample homogenizing is accomplished by manually mixing the entire soil

sample in the stainless steel bowl with a clean sampling tool until a uniform mixture is achieved. The sample jar should be filled completely.

Any extra soil generated during probing activities will be placed in Department of Transportation (DOT) approved drums.

# Grab Groundwater Sample Collection:

Collect grab groundwater samples using a sampling attachment with a 4 to 5-foot-long temporary screen (specify to drillers whether to use decontaminated stainless steel or disposable PVC. Also, specify whether a filter pack is necessary based on field observations). Obtain samples using a peristaltic pump unless otherwise specified in the SAP with new tubing for each boring. Record field parameters (e.g., temperature, conductivity, and pH) prior to sampling.

# Backfilling the Excavation (Conducted by Drilling Subcontractor):

After sampling activities are completed, abandon each exploration in accordance with Oregon Water Resources Department (OWRD) regulations and procedures. The abandonment procedure typically consists of filling the exploration with granular bentonite and hydrating the bentonite with water. Match the surface completion to the surrounding materials.

STANDARD OPERATING PROCEDURE	SOP Number:	2.5
	Date:	February 8, 2011
LOW FLOW GROUNDWATER SAMPLING PROCEDURES	Revision Number:	0.03
	Page:	1 of 1

# 1. PURPOSE AND SCOPE

This Standard Operating Procedure (SOP) describes the methods for collection of groundwater samples from monitoring wells applying low flow protocols. Low flow sampling is a method of collecting samples that does not require the removal of large volumes of water and therefore does not overly agitate the water, suspend particles, or potentially aspirate VOCs. Typical flow rates for low flow sampling range from 0.1 L/min to 0.5 L/min depending on site characteristics. The groundwater monitoring activities will consist of measuring water levels, purging and sampling groundwater, and measuring groundwater field parameters. This procedure is applicable during all Ash Creek Associates (ACA) low flow groundwater sampling activities.

# 2. EQUIPMENT AND MATERIALS

The following materials are necessary for this procedure:

- Traffic cones, tools, keys, and buckets/drums
- Water quality meter with calibration solutions (record daily calibration/calibration check in field notes)
- · Sampling equipment (water level probe, pumps, tubing) and laboratory-supplied sample containers
- Field documentation materials
- Decontamination materials
- Personal protective equipment (as required by project Health and Safety Plan)

# 3. METHODOLOGY

# Water Levels:

Water levels in the wells will be measured and recorded for the purpose of determining groundwater elevations and gradient. The wells will be opened and the water level allowed to equilibrate before the measurements are taken. Measurements of the depth to water will be made to the nearest 0.01 foot using an electronic probe.

# Purging:

Purge using low-flow sampling equipment (e.g., peristaltic pump or bladder pump) at a low-flow rate to limit water table drawdown. Unless specified otherwise in the project-specific sampling and analysis plan (SAP) the sample tubing/pump will be lowered to the middle of the saturated screened interval. To assess the effectiveness of purging, groundwater field parameters (pH, electrical conductivity, and temperature) will be measured using a flow cell connected to the discharge tubing of the sample pump. Purging will be considered complete when the water quality parameters (i.e., pH, temperature, and specific conductance) stabilize within 10 percent for three consecutive 3-minute intervals. Consult the project-specific SAP for additional parameters and stabilization criteria. Purge water will be placed in Department of Transportation (DOT) approved drums.

# Sample Collection:

After the purging of each well is complete, collect groundwater samples for chemical analyses using the same pump and tubing used for the well purging.

# Low Yield Sampling Procedure:

If drawdown of the water table is unavoidable and a well pumps dry during purging, discontinue measurement of water quality parameters. Collect groundwater samples once the water level recovers to 90 percent of the pre-purge water column. Contact project manager in the event of slow recharge conditions. Always collect samples for VOC analysis as soon after recharge as possible.

STANDARD OPERATING PROCEDURE	SOP Number:	2.7
	Date:	January 25, 2010
EPA METHOD 5035A SOIL SAMPLING PROCEDURES	Revision Number:	0.01
	Page:	1 of 2

# 1. PURPOSE AND SCOPE

This Standard Operating Procedure (SOP) describes the methods used for obtaining soil samples for chemical analysis for volatile organic compounds (VOCs) by EPA Method 5035A. Samples collected using the 5035A protocols are not exposed to the atmosphere after sampling thereby reducing the potential for loss of VOCs during sample transport, handling, and analysis. This procedure assumes the use of the PowerStop Handle sampler with disposable EasyDraw Syringes or Terra Core Samplers. This procedure is applicable during all Ash Creek Associates (ACA) soil sampling activities where the 5035A protocols are employed.

# 2. EQUIPMENT AND MATERIALS

The following materials are necessary for this procedure:

- Sampling equipment (PowerStop Handle, disposable EasyDraw Syringes, Terra Core Samplers)
- Laboratory-supplied sample containers (pre-weighed 40ml VOA vials including labels, preservative, stir bars, etc. [number and type as specified by the lab], two ounce jars)
  - Vials used from ACA stock must be weighed to confirm loss of reagents is less than 0.02 grams. Record vial tare weight in field notes. Discard vials with dates over 6 months old.
- Field documentation materials
- Decontamination materials
- Personal protective equipment (as required by Health and Safety Plan)

# 3. METHODOLOGY

The project-specific sampling and analysis plan (SAP) will define the specific requirements for 5035A methodology required for a particular site or by a regulatory agency.

# Analytical Requirements

- VOCs must be analyzed within 14 days of collection.
- Field preserved samples (e.g., sodium bisulfate or methanol) must be maintained at 4° C.
- Sample collected without preservative (e.g., reagent water) must frozen or analyzed within 48 hours.

# Collection of Samples

- When using the PowerStop Handle, clip the syringe into the handle in one of the three 5 gram positions. Use the heavy position for dense clay, the light position for dry sandy soil, and the medium position for all others.
- Using the handle, push the sampler into the soil to collect the sample. Continue pushing until the soil column has forced the plunger in the syringe to the stopping point or filled the sampler.
- Wipe all debris from the outside of the sampler. The soil plug should be flush with the mouth of the sampler. Remove any excess soil that extends beyond the mouth of the sampler.
- Extrude the 5 gram sample into vial and cap vial immediately. Hold vial at an angle when extruding to minimize splashing. Gently swirl vial for 10 seconds to break up soil particles (do not shake).
- When capping the vial, be sure to remove any soil or debris from the threads of the vial.
- Repeat process for each additional vial.
- Fill a two ounce container (to capacity) for percent total solids determination.

STANDARD OPERATING PROCEDURE	SOP Number:	2.7
	Date:	January 25, 2010
EPA METHOD 5035A SOIL SAMPLING PROCEDURES	Revision Number:	0.01
	Page:	2 of 2
Additional Considerations		

# Additional Considerations

- Methanol contamination can occur from adjacent activities (e.g., exhaust from running equipment or vehicles, hot tar roofing, facility operations, etc). Collection and analysis of methanol field blank (e.g., additional methanol vial left open during period of sampling) is recommended.
- Acidification of carbonaceous soils with sodium bisulfate can cause effervescence and loss of VOCs.
- Certain volatile compounds such as 2-chloroethylvinyl ether may be lost by acidification.
- Acidification of certain soils with sodium bisulfate may cause the formation of acetone through oxidation of soil waxes and humic material (e.g., organic materials such as roots).

STANDARD OPERATING PROCEDURE	SOP Number:	2.14
	Date:	October 7, 2009
MONITORING WELL DEVELOPMENT PROCEDURES	Revision Number:	0.01
	Page:	1 of 1

# 1. PURPOSE AND SCOPE

This Standard Operating Procedure (SOP) describes the methods for developing monitoring wells following construction; however, this procedure is also applicable for the redevelopment of existing monitoring wells. Monitoring wells will be allowed to sit for a minimum of 48 hours following completion, or applicable local or state regulated waiting period, before initiating the well development process. This procedure is applicable during all Ash Creek Associates (ACA) well development activities.

# 2. EQUIPMENT AND MATERIALS

The following materials are necessary for this procedure:

- Field documentation materials
- Well Purge Equipment (i.e., High flow centrifugal down-hole pump or bailer)
- Multi-parameter meter (temperature, pH, and conductivity)
- Decontamination materials
- Drums and/or high-capacity tank for storage of purged water
- Personal protective equipment (as required by project Health and Safety Plan)

# 3. METHODOLOGY

The well will be set up in a manner such that the volume of water generated can be easily determined and field parameters can be collected. The development activities will be completed to maximize the removal of sediment from the well casing.

# Procedures:

- Measure depth to water (DTW) and total depth of the well prior to development and calculate the casing volume.
- Field parameters (temperature, pH, and conductivity) will be measured for each casing volume removed.
- Purge water will be placed in Department of Transportation (DOT) approved drums or high-capacity tank.
- After the removal of eight casing volumes, field parameters will be monitored for stability.

The well will be considered developed after a minimum of 10 casing volumes have been removed, field parameters have stabilized, and purged water is as free of sediment as possible. Field parameters will be considered stable if temperature, pH, and conductivity are within 10% for three consecutive casing volumes. Wells will also be considered developed if the well is pumped dry during the development process. Consult the project-specific SAP for additional parameters and stabilization criteria.

# Documentation:

The field representative will document the well development activities. Details to be noted include the following:

- Depths to water;
- Total depth of the well;
- Purging type and rate;
- Field parameters; and
- Total volume of water purged.

# Appendix B

Laboratory Data Report



Pace Analytical Services, Inc. 940 South Harney Seattle, WA 98108 (206)767-5060

May 19, 2011

John Foxwell Ash Creek Associates 3015 SW First Ave Portland, OR 97201

RE: Project: Tarr Vancouver - 1821-00 Pace Project No.: 257638

Dear John Foxwell:

Enclosed are the analytical results for sample(s) received by the laboratory on May 12, 2011. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

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

Sincerely,

ENNI (-ROSS

Jennifer Gross

jennifer.gross@pacelabs.com Project Manager

Enclosures

cc: Lisa Domenighini, Pace Analytical Seattle

# **REPORT OF LABORATORY ANALYSIS**

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Page 1 of 28



## **CERTIFICATIONS**

Project: Tarr Vancouver - 1821-00

Pace Project No.: 257638

Washington Certification IDs 940 South Harney Street, Seattle, WA 98108 Alaska CS Certification #: UST-025 Alaska Drinking Water VOC Certification #: WA01230 Alaska Drinking Water Micro Certification #: WA01230

California Certification #: 01153CA Florida/NELAP Certification #: E87617 Oregon Certification #: WA200007 Washington Certification #: C1229

# **REPORT OF LABORATORY ANALYSIS**





# SAMPLE ANALYTE COUNT

Project:Tarr Vancouver - 1821-00Pace Project No.:257638

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
257638001	 MW-1	NWTPH-Dx	AY1	4	PASI-S
		EPA 5030B/8260	LPM	71	PASI-S
		NWTPH-Gx	LNH	2	PASI-S
257638002	MW-1 DUP	NWTPH-Dx	AY1	4	PASI-S
		NWTPH-Gx	LNH	2	PASI-S
257638003	MW-3	NWTPH-Dx	AY1	4	PASI-S
		EPA 5030B/8260	LNH	71	PASI-S
		NWTPH-Gx	LNH	2	PASI-S
257638004	MW-2	NWTPH-Dx	AY1	4	PASI-S
		EPA 5030B/8260	LNH	71	PASI-S
		NWTPH-Gx	LNH	2	PASI-S

# **REPORT OF LABORATORY ANALYSIS**





Project: Tarr Vancouver - 1821-00

### Pace Project No.: 257638

### Method: NWTPH-Dx

Description:NWTPH-Dx GCSClient:Ash Creek AssociatesDate:May 19, 2011

### General Information:

4 samples were analyzed for NWTPH-Dx. All samples were received in acceptable condition with any exceptions noted below.

### Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

### Sample Preparation:

The samples were prepared in accordance with EPA 3510 with any exceptions noted below.

### Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

### Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

### Surrogates:

All surrogates were within QC limits with any exceptions noted below.

### Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

### Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

### Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

### **Duplicate Sample:**

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

# **REPORT OF LABORATORY ANALYSIS**





Project: Tarr Vancouver - 1821-00

Pace Project No.: 257638

### Method: EPA 5030B/8260

Description:8260 MSVClient:Ash Creek AssociatesDate:May 19, 2011

### General Information:

3 samples were analyzed for EPA 5030B/8260. All samples were received in acceptable condition with any exceptions noted below.

### Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

### Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

### Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

### Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

### Surrogates:

All surrogates were within QC limits with any exceptions noted below.

### Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

### Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

### Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

### QC Batch: MSV/4419

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 257594004

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 70016)
  - Chloroform
  - Methylene chloride
  - Tetrachloroethene
- MSD (Lab ID: 70017)
  - Methylene chloride
    - Tetrachloroethene

### QC Batch: MSV/4442

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 257638003

- M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
  - MS (Lab ID: 70393)
    - Acetone
    - Dichlorodifluoromethane

# **REPORT OF LABORATORY ANALYSIS**

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Project: Tarr Vancouver - 1821-00

Pace Project No.: 257638

Method:EPA 5030B/8260Description:8260 MSVClient:Ash Creek AssociatesDate:May 19, 2011

# QC Batch: MSV/4442

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 257638003

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- Tetrachloroethene
- MSD (Lab ID: 70394)
  - Dichlorodifluoromethane
  - Methylene chloride
  - Tetrachloroethene

### **Duplicate Sample:**

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

# **REPORT OF LABORATORY ANALYSIS**





Project: Tarr Vancouver - 1821-00

### Pace Project No.: 257638

### Method: NWTPH-Gx

Description:NWTPH-Gx MSVClient:Ash Creek AssociatesDate:May 19, 2011

### General Information:

4 samples were analyzed for NWTPH-Gx. All samples were received in acceptable condition with any exceptions noted below.

### Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):** All criteria were within method requirements with any exceptions noted below.

### Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

### **Internal Standards:**

All internal standards were within QC limits with any exceptions noted below.

### Surrogates:

All surrogates were within QC limits with any exceptions noted below.

### Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

### Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

### Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

### **Duplicate Sample:**

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

### Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

# **REPORT OF LABORATORY ANALYSIS**





Project: Tarr Vancouver - 1821-00

Pace Project No.: 257638

Parameters         Results         Units         Report Limit         DF         Prepared         Analyzed         CAS No.         Qua           NWTPH-Dx GCS         Analytical Method: NWTPH-Dx         Preparation Method: EPA 3510           Diesel Range         4.8 mg/L         0.076         1         05/13/11 11:20         05/16/11 21:37         64742-65-0           n-Octacosane (S)         102 %         50-150         1         05/13/11 11:20         05/16/11 21:37         630-02-4           o-Terphenyl (S)         97 %         50-150         1         05/13/11 11:20         05/16/11 21:37         630-02-4           acTeo MSV         Analytical Method: EPA 5030B/8260         1         05/13/11 11:23         71-55-6         1         1,1.1-Trichioroethane         ND ug/L         1.0         1         05/13/11 11:23         79-34-5           1,1.2-Tetrachloroethane         ND ug/L         1.0         1         05/13/11 11:23         75-35-6         1         1,1.2-Trichioroethane         ND ug/L         1.0         1         05/13/11 11:23         75-34-3           1,1.2-Tetrachloroethane         ND ug/L         1.0         1         05/13/11 11:23         75-35-4           1,1.2-Trichoroethane         ND ug/L         1.0         1         05/13/11 11:23<	Sample: MW-1	Lab ID: 257638001	Collected: 05/10/11 14:25	Received: 05	5/12/11 08:45 N	latrix: Water	
NWTPH-bx GCS         Analytical Method: NWTPH-bx Preparation Method: EPA 3510           Diesel Range Motor Oil Range n-Octacosane (S)         4.8 mg/L         0.076         1         05/13/11 11:20         05/16/11 21:37         64742-65-0           n-Octacosane (S)         102 %         50-150         1         05/13/11 11:20         05/16/11 21:37         630-02-4           o-Terphenyl (S)         97 %         50-150         1         05/13/11 11:20         05/16/11 21:37         630-02-4           8260 MSV         Analytical Method: EPA 5030B/8260         1         05/13/11 11:23         70-55-6           1,1,1-Trichloroethane         ND ug/L         1.0         1         05/13/11 12:33         70-34-5           1,1,2-Trichloroethane         ND ug/L         1.0         1         05/13/11 12:33         70-34-5           1,1-Dichloroethane         ND ug/L         1.0         1         05/13/11 12:33         75-34-3           1,1-Dichloroethane         ND ug/L         1.0         1         05/13/11 12:33         75-35-4           1,1-Dichloroethane         ND ug/L         1.0         1         05/13/11 12:33         75-35-4           1,2-Dichloroethane         ND ug/L         1.0         1         05/13/11 12:33         75-35-4           1,	Parameters	Results Units	Report Limit DF	Prepared	Analyzed	CAS No.	Qual
Diesel Range         4.8 mg/L         0.076         1         05/13/11 11:20         05/16/11 21:37         64742-65-0           n-Octacosane (S)         102 %         50-150         1         05/13/11 11:20         05/16/11 21:37         630-02-4           o-Terphenyl (S)         97 %         50-150         1         05/13/11 11:20         05/16/11 21:37         630-02-4           8260 MSV         Analytical Method: EPA 5030B/8260          05/13/11 11:23         70.16/11 21:33         71.55-6           1,1,1-Tichloroethane         ND ug/L         1.0         1         05/13/11 12:33         71.55-6           1,1,2-Titchloroethane         ND ug/L         1.0         1         05/13/11 12:33         75.34-3           1,1-Dichloroethane         ND ug/L         1.0         1         05/13/11 12:33         75.35-4           1,1-Dichloroethane         ND ug/L         1.0         1         05/13/11 12:33         75.35-4           1,1-Dichloroethane         ND ug/L         1.0         1         05/13/11 12:33         75.35-4           1,1-Dichloroethane         ND ug/L         1.0         1         05/13/11 12:33         76.36-4           1,2-3 Titchlorobenzene         ND ug/L         1.0         1         05/13/11 12:33	NWTPH-Dx GCS	Analytical Method: NWTF	PH-Dx Preparation Method: E	PA 3510			
Motor Oil Range         0.44 mg/L         0.38         1         05/13/11 11:20         05/16/11 21:37         64742-65-0           n-Octacosane (S)         102 %         50-150         1         05/13/11 11:20         05/16/11 21:37         630-02-4           o-Terphenyl (S)         97 %         50-150         1         05/13/11 11:20         05/16/11 21:37         630-02-4           8260 MSV         Analytical Method: EPA 5030B/8260         1         05/13/11 12:33         76-36-3           1,1,1-Trichloroethane         ND ug/L         1.0         1         05/13/11 12:33         79-34-5           1,1,2-Tetrachloroethane         ND ug/L         1.0         1         05/13/11 12:33         79-34-5           1,1-Zrichloroethane         ND ug/L         1.0         1         05/13/11 12:33         79-34-5           1,1-Dichloroethane         ND ug/L         1.0         1         05/13/11 12:33         75-34-3           1,1-Dichloroethane         ND ug/L         1.0         1         05/13/11 12:33         75-34-3           1,1-Dichloroethane         ND ug/L         1.0         1         05/13/11 12:33         87-61-6           1,2-3-Trichloropopane         ND ug/L         1.0         1         05/13/11 12:33         87-61-6	Diesel Range	<b>4.8</b> mg/L	0.076 1	05/13/11 11:20	05/16/11 21:37		
n-Octacosane (S)         102 %         50-150         1         05/13/11 11:20         05/16/11 21:37         630-02-4           actor prephenyl (S)         97 %         50-150         1         05/13/11 11:20         05/16/11 21:37         84-15-1           actor prephenyl (S)         Analytical Method: EPA 5030B/8260         1         05/13/11 12:33         630-20-6           1,1,1-Z-Tetrachloroethane         ND ug/L         1.0         1         05/13/11 12:33         79-34-5           1,1,2-Tetrachloroethane         ND ug/L         1.0         1         05/13/11 12:33         79-34-5           1,1,2-Tetrachloroethane         ND ug/L         1.0         1         05/13/11 12:33         79-34-5           1,1,2-Tetrachloroethane         ND ug/L         1.0         1         05/13/11 12:33         75-34-3           1,1-Dichloroethane         ND ug/L         1.0         1         05/13/11 12:33         75-35-4           1,1-Dichloroptopene         ND ug/L         1.0         1         05/13/11 12:33         86-61-6           1,2,3-Trichlorobenzene         ND ug/L         1.0         1         05/13/11 12:33         96-13-4           1,2-Dichlorobenzene         ND ug/L         1.0         1         05/13/11 12:33         96-13-4 <td>Motor Oil Range</td> <td>0.44 mg/L</td> <td>0.38 1</td> <td>05/13/11 11:20</td> <td>05/16/11 21:37</td> <td>64742-65-0</td> <td></td>	Motor Oil Range	0.44 mg/L	0.38 1	05/13/11 11:20	05/16/11 21:37	64742-65-0	
o-Terphenyl (S)         97 %         50-150         1         05/13/11 11:20         05/16/11 21:37         84-15-1           8260 MSV         Analytical Method: EPA 5030B/8260         1         05/13/11 12:33         630-20-6           1,1,1-Trichloroethane         ND ug/L         1.0         1         05/13/11 12:33         71-55-6           1,1,2-Tetrachloroethane         ND ug/L         1.0         1         05/13/11 12:33         79-34-5           1,1-2-Trichloroethane         ND ug/L         1.0         1         05/13/11 12:33         79-34-5           1,1-Dichloroethane         ND ug/L         1.0         1         05/13/11 12:33         79-34-5           1,1-Dichloroethane         ND ug/L         1.0         1         05/13/11 12:33         75-34-3           1,1-Dichloroethane         ND ug/L         1.0         1         05/13/11 12:33         75-35-4           1,2-Sirichlorobenzene         ND ug/L         1.0         1         05/13/11 12:33         75-35-4           1,2,3-Trichlorobenzene         ND ug/L         1.0         1         05/13/11 12:33         76-66           1,2,3-Trichlorobenzene         ND ug/L         1.0         1         05/13/11 12:33         96-63-6           1,2,4-Trichloroebenzene	n-Octacosane (S)	102 %	50-150 1	05/13/11 11:20	05/16/11 21:37	630-02-4	
8260 MSV         Analytical Method: EPA 5030B/8260           1,1,1-Trichloroethane         ND ug/L         1.0         1         05/13/11 12:33         630-20-6           1,1,1-Trichloroethane         ND ug/L         1.0         1         05/13/11 12:33         71-55-6           1,1,2-Trichloroethane         ND ug/L         1.0         1         05/13/11 12:33         79-40-5           1,1-Dichloroethane         ND ug/L         1.0         1         05/13/11 12:33         75-34-3           1,1-Dichloroethane         ND ug/L         1.0         1         05/13/11 12:33         75-34-3           1,1-Dichloroethane         ND ug/L         1.0         1         05/13/11 12:33         76-35-4           1,1-Dichloroptopene         ND ug/L         1.0         1         05/13/11 12:33         76-35-4           1,2,3-Trichloroppropane         ND ug/L         1.0         1         05/13/11 12:33         96-18-4           1,2,4-Trinethylbenzene         MD ug/L         1.0         1         05/13/11 12:33         96-18-4           1,2,4-Trinethylbenzene         ND ug/L         1.0         1         05/13/11 12:33         96-12-8           1,2,4-Trinethylbenzene         ND ug/L         1.0         1         05/13/11 12:33	o-Terphenyl (S)	97 %	50-150 1	05/13/11 11:20	05/16/11 21:37	84-15-1	
1,1,1,2-TetrachloroethaneND ug/L1.0105/13/11 12:33630-20-61,1,1-TrichloroethaneND ug/L1.0105/13/11 12:3371-55-61,1,2-TitchloroethaneND ug/L1.0105/13/11 12:3379-34-51,1,2-TrichloroethaneND ug/L1.0105/13/11 12:3375-34-31,1-DichloroethaneND ug/L1.0105/13/11 12:3375-34-31,1-DichloroethaneND ug/L1.0105/13/11 12:3375-35-41,1-DichloroethaneND ug/L1.0105/13/11 12:3387-61-61,2-JaTichlorobenzeneND ug/L1.0105/13/11 12:3387-61-61,2,3-TrichloropopaneND ug/L1.0105/13/11 12:3387-61-61,2,4-TrinethylbenzeneMD ug/L1.0105/13/11 12:33120-82-11,2,4-TrimethylbenzeneND ug/L25.02505/17/11 18:3595-63-61,2-Dibromo-3-chloropropaneND ug/L1.0105/13/11 12:33106-93-41,2-Dibromoethane (EDB)ND ug/L1.0105/13/11 12:33107-06-21,2-DichlorobenzeneND ug/L1.0105/13/11 12:3376-87-51,2-DichloropenpaneND ug/L2.0105/13/11 12:3376-87-51,2-DichloroethaneND ug/L1.0105/13/11 12:3376-87-51,2-DichloroethaneND ug/L2.0105/13/11 12:3376-87-51,2-DichloroethaneND ug/L1.01<	8260 MSV	Analytical Method: EPA 5	030B/8260				
1,1,1-TrichloroethaneND ug/L1.0105/13/11 12:3371-55-61,1,2,2-TetrachloroethaneND ug/L1.0105/13/11 12:3379-03-51,1,2-TrichloroethaneND ug/L1.0105/13/11 12:3375-34-31,1-DichloroethaneND ug/L1.0105/13/11 12:3375-35-41,1-DichloroethaneND ug/L1.0105/13/11 12:33563-58-61,2,3-TrichloroptopeneND ug/L1.0105/13/11 12:3387-61-61,2,3-TrichloroptopaneND ug/L1.0105/13/11 12:3396-18-41,2,4-TrichloroptopaneND ug/L1.0105/13/11 12:3396-18-41,2-LitrichloroptopaneND ug/L1.0105/13/11 12:3396-63-641,2-LitrichloroptopaneND ug/L25.02505/17/11 18:3596-63-641,2-DichloroptopaneND ug/L1.0105/13/11 12:3396-03-441,2-DichloroptopaneND ug/L1.0105/13/11 12:3396-03-441,2-DichloroptopaneND ug/L1.0105/13/11 12:3396-50-111,2-DichloroptopaneND ug/L1.0105/13/11 12:3396-50-111,2-DichloroptopaneND ug/L1.0105/13/11 12:3396-50-111,2-DichloroptopaneND ug/L1.0105/13/11 12:3396-50-111,2-DichloroptopaneND ug/L2.0105/13/11 12:3396-50-111,2-DichloroptopaneND ug/L1.01	1,1,1,2-Tetrachloroethane	ND ug/L	1.0 1		05/13/11 12:33	630-20-6	
1,1,2,2-TetrachloroethaneND ug/L1.0105/13/11 12:3379-34-51,1,2-TrichloroethaneND ug/L1.0105/13/11 12:3375-34-31,1-DichloroethaneND ug/L1.0105/13/11 12:3375-34-31,1-DichloroetheneND ug/L1.0105/13/11 12:3375-35-41,1-DichloroetheneND ug/L1.0105/13/11 12:3375-36-41,2,3-TrichloropropeneND ug/L1.0105/13/11 12:33863-86-61,2,3-TrichloropropaneND ug/L1.0105/13/11 12:3396-18-41,2,4-TrinethylbenzeneND ug/L1.0105/13/11 12:3396-18-41,2-Uirbiromo-3-chloropropaneND ug/L25.02505/17/11 18:3595-63-61,2-DichlorobenzeneND ug/L1.0105/13/11 12:3396-12-81,2-DichlorobenzeneND ug/L1.0105/13/11 12:3396-12-81,2-DichlorobenzeneND ug/L1.0105/13/11 12:3396-63-61,2-DichlorobenzeneND ug/L1.0105/13/11 12:33106-93-41,2-DichlorobenzeneND ug/L1.0105/13/11 12:33106-93-41,2-DichlorobenzeneND ug/L1.0105/13/11 12:33107-06-21,2-DichloropenaeND ug/L1.0105/13/11 12:33107-06-21,2-DichloropenaeND ug/L1.0105/13/11 12:3374-51,3-DichlorobenzeneND ug/L1.0105	1,1,1-Trichloroethane	ND ug/L	1.0 1		05/13/11 12:33	71-55-6	
1,1,2-TrichloroethaneND ug/L1.0105/13/11 12:3379-00-51,1-DichloroethaneND ug/L1.0105/13/11 12:3375-34-31,1-DichloroetheneND ug/L1.0105/13/11 12:3375-35-41,1-DichloroppeneND ug/L1.0105/13/11 12:33563-58-61,2,3-TrichlorobenzeneND ug/L1.0105/13/11 12:3387-61-61,2,3-TrichlorobenzeneND ug/L1.0105/13/11 12:3396-18-41,2,4-TrinchlorobenzeneND ug/L1.0105/13/11 12:3396-18-41,2-Dibromo-3-chloropropaneND ug/L25.02505/17/11 18:3595-63-61,2-Dibromo-3-chloropropaneND ug/L1.0105/13/11 12:33106-93-41,2-DichlorobenzeneND ug/L1.0105/13/11 12:33106-93-41,2-DichlorobenzeneND ug/L1.0105/13/11 12:33106-93-41,2-DichlorobenzeneND ug/L1.0105/13/11 12:33107-06-21,2-DichlorobenzeneND ug/L1.0105/13/11 12:33107-06-21,2-DichloropopaneND ug/L2.0105/13/11 12:33540-59-01,3-DichloropopaneND ug/L1.0105/13/11 12:33540-59-01,3-DichloropopaneND ug/L1.0105/13/11 12:33540-59-01,3-DichloropopaneND ug/L1.0105/13/11 12:33540-59-01,3-DichloropopaneND ug/L1.01 <td>1,1,2,2-Tetrachloroethane</td> <td>ND ug/L</td> <td>1.0 1</td> <td></td> <td>05/13/11 12:33</td> <td>79-34-5</td> <td></td>	1,1,2,2-Tetrachloroethane	ND ug/L	1.0 1		05/13/11 12:33	79-34-5	
1,1-DichloroethaneND ug/L1.0105/13/11 12:3375-34-31,1-DichloroetheneND ug/L1.0105/13/11 12:3375-35-41,1-DichloropropeneND ug/L1.0105/13/11 12:33563-58-61,2,3-TrichlorobenzeneND ug/L1.0105/13/11 12:3387-61-61,2,3-TrichlorobenzeneND ug/L1.0105/13/11 12:3396-18-41,2,4-TrinchlorobenzeneND ug/L1.0105/13/11 12:3396-18-41,2,4-Trinethylbenzene4150ug/L25.02505/17/11 18:3595-63-61,2-Dibromo-3-chloropropaneND ug/L4.0105/13/11 12:3396-12-81,2-DichlorobenzeneND ug/L1.0105/13/11 12:3396-93-41,2-DichlorobenzeneND ug/L1.0105/13/11 12:3396-12-81,2-DichlorobenzeneND ug/L1.0105/13/11 12:3396-12-81,2-DichlorobenzeneND ug/L1.0105/13/11 12:3396-16-131,2-DichlorobenzeneND ug/L1.0105/13/11 12:3396-16-131,2-DichloroptaneND ug/L1.0105/13/11 12:3396-16-131,2-DichloroptaneND ug/L1.0105/13/11 12:3396-16-131,2-DichloroptaneND ug/L1.0105/13/11 12:33106-67-81,3-DichloroptaneND ug/L1.0105/13/11 12:33142-28-91,3-DichloropenzeneND ug/L1.01	1,1,2-Trichloroethane	ND ug/L	1.0 1		05/13/11 12:33	79-00-5	
1,1-DichloroetheneND ug/L1.0105/13/11 12:3375-35-41,1-DichloropropeneND ug/L1.0105/13/11 12:33563-58-61,2,3-TrichlorobenzeneND ug/L1.0105/13/11 12:3387-61-61,2,3-TrichloropropaneND ug/L1.0105/13/11 12:3396-18-41,2,4-TrichlorobenzeneND ug/L1.0105/13/11 12:33120-82-11,2,4-Trimethylbenzene4150ug/L25.02505/17/11 18:3595-63-61,2-Dibromo-3-chloropropaneND ug/L4.0105/13/11 12:3396-12-81,2-Dibromo-thane (EDB)ND ug/L1.0105/13/11 12:3396-39-41,2-DichlorobenzeneND ug/L1.0105/13/11 12:3396-50-11,2-DichlorobenzeneND ug/L1.0105/13/11 12:3395-50-11,2-DichlorobenzeneND ug/L1.0105/13/11 12:3395-50-11,2-DichloroptaneND ug/L2.0105/13/11 12:3395-50-11,2-DichloroptaneND ug/L1.0105/13/11 12:3378-87-51,3,5-Trimethylbenzene881ug/L25.02505/17/11 18:35108-67-81,3-DichloroptopaneND ug/L1.0105/13/11 12:33142-28-91,3-DichloroptopaneND ug/L1.0105/13/11 12:33142-28-91,3-DichloroptopaneND ug/L1.0105/13/11 12:33142-28-91,3-DichloroptopaneND ug/L<	1,1-Dichloroethane	ND ug/L	1.0 1		05/13/11 12:33	75-34-3	
1,1-DichloropropeneND ug/L1.0105/13/11 12:33563-58-61,2,3-TrichlorobenzeneND ug/L1.0105/13/11 12:3387-61-61,2,3-TrichloropropaneND ug/L1.0105/13/11 12:3396-18-41,2,4-TrinchlorobenzeneND ug/L1.0105/13/11 12:3396-18-41,2,4-Trimethylbenzene4150ug/L25.02505/17/11 18:3595-63-61,2-Dibromo-3-chloropropaneND ug/L4.0105/13/11 12:3396-12-81,2-Dibromo-3-chloropropaneND ug/L1.0105/13/11 12:3396-93-41,2-DichlorobenzeneND ug/L1.0105/13/11 12:3395-50-11,2-DichlorobenzeneND ug/L1.0105/13/11 12:33107-06-21,2-DichloroptaneND ug/L1.0105/13/11 12:33540-59-01,2-DichloroptaneND ug/L2.0105/13/11 12:33540-59-01,2-DichloroptaneND ug/L1.0105/13/11 12:3378-87-51,3,5-Trimethylbenzene881 ug/L25.02505/17/11 18:35108-67-81,3-DichloroptopaneND ug/L1.0105/13/11 12:33541-73-11,3-DichloroptopaneND ug/L1.0105/13/11 12:33142-28-91,4-DichlorobenzeneND ug/L1.0105/13/11 12:33142-28-91,4-DichlorobenzeneND ug/L1.0105/13/11 12:33106-46-7	1,1-Dichloroethene	ND ug/L	1.0 1		05/13/11 12:33	75-35-4	
1,2,3-TrichlorobenzeneND ug/L1.0105/13/11 12:3387-61-61,2,3-TrichloropropaneND ug/L1.0105/13/11 12:3396-18-41,2,4-TrichlorobenzeneND ug/L1.0105/13/11 12:33120-82-11,2,4-Trimethylbenzene <b>4150</b> ug/L25.02505/17/11 18:3595-63-61,2-Dibromo-3-chloropropaneND ug/L4.0105/13/11 12:3396-12-81,2-Dibromoethane (EDB)ND ug/L1.0105/13/11 12:3396-93-41,2-DichlorobenzeneND ug/L1.0105/13/11 12:3395-50-11,2-DichloroethaneND ug/L1.0105/13/11 12:3395-50-11,2-DichloroethaneND ug/L1.0105/13/11 12:3396-90-91,2-DichloropropaneND ug/L2.0105/13/11 12:3376-8-91,2-DichloropropaneND ug/L1.0105/13/11 12:3376-78-91,3-DichloropropaneND ug/L1.0105/13/11 12:33541-73-11,3-DichloropropaneND ug/L1.0105/13/11 12:33541-73-11,3-DichloropropaneND ug/L1.0105/13/11 12:33142-28-91,4-DichlorobenzeneND ug/L1.0105/13/11 12:33142-28-91,4-DichlorobenzeneND ug/L1.0105/13/11 12:33142-28-9	1,1-Dichloropropene	ND ug/L	1.0 1		05/13/11 12:33	563-58-6	
1,2,3-TrichloropropaneND ug/L1.0105/13/11 12:3396-18-41,2,4-TrichlorobenzeneND ug/L1.0105/13/11 12:33120-82-11,2,4-Trimethylbenzene <b>4150</b> ug/L25.02505/17/11 18:3595-63-61,2-Dibromo-3-chloropropaneND ug/L4.0105/13/11 12:3396-12-81,2-Dibromoethane (EDB)ND ug/L1.0105/13/11 12:3396-50-11,2-DichlorobenzeneND ug/L1.0105/13/11 12:3395-50-11,2-DichloroethaneND ug/L1.0105/13/11 12:3395-50-11,2-DichloroethaneND ug/L2.0105/13/11 12:3396-781,2-DichloropropaneND ug/L1.0105/13/11 12:3378-87-51,3-DichloropropaneND ug/L25.02505/17/11 18:35108-67-81,3-DichlorobenzeneND ug/L1.0105/13/11 12:33541-73-11,3-DichloropropaneND ug/L1.0105/13/11 12:33142-28-91,4-DichlorobenzeneND ug/L1.0105/13/11 12:33142-28-9	1,2,3-Trichlorobenzene	ND ug/L	1.0 1		05/13/11 12:33	87-61-6	
1,2,4-TrichlorobenzeneND ug/L1.0105/13/11 12:33120-82-11,2,4-Trimethylbenzene4150 ug/L25.02505/17/11 18:3595-63-61,2-Dibromo-3-chloropropaneND ug/L4.0105/13/11 12:3396-12-81,2-Dibromoethane (EDB)ND ug/L1.0105/13/11 12:33106-93-41,2-DichlorobenzeneND ug/L1.0105/13/11 12:3395-50-11,2-DichloroethaneND ug/L1.0105/13/11 12:33107-06-21,2-DichloroethaneND ug/L2.0105/13/11 12:33540-59-01,2-DichloroptopaneND ug/L1.0105/13/11 12:33540-59-01,2-DichloroptopaneND ug/L1.0105/13/11 12:33540-59-01,3-5-Trimethylbenzene881ug/L25.02505/17/11 18:35108-67-81,3-DichlorobenzeneND ug/L1.0105/13/11 12:33541-73-11,3-DichloropropaneND ug/L1.0105/13/11 12:33142-28-91,4-DichlorobenzeneND ug/L1.0105/13/11 12:33142-28-9	1,2,3-Trichloropropane	ND ug/L	1.0 1		05/13/11 12:33	96-18-4	
1,2,4-Trimethylbenzene4150ug/L25.02505/17/118:3595-63-61,2-Dibromo-3-chloropropaneNDug/L4.0105/13/1112:3396-12-81,2-Dibromoethane (EDB)NDug/L1.0105/13/1112:33106-93-41,2-DichlorobenzeneNDug/L1.0105/13/1112:3395-50-11,2-DichloroethaneNDug/L1.0105/13/1112:33107-06-21,2-Dichloroethene (Total)NDug/L2.0105/13/1112:33540-59-01,2-DichloropropaneNDug/L1.0105/13/1112:3378-87-51,3,5-Trimethylbenzene881ug/L25.02505/17/11835108-67-81,3-DichlorobenzeneNDug/L1.0105/13/1112:33541-73-11,3-DichloropropaneNDug/L1.0105/13/1112:33142-28-91,4-DichlorobenzeneNDug/L1.0105/13/1112:33106-46-7	1,2,4-Trichlorobenzene	ND ug/L	1.0 1		05/13/11 12:33	120-82-1	
1,2-Dibromo-3-chloropropaneND ug/L4.0105/13/11 12:3396-12-81,2-Dibromoethane (EDB)ND ug/L1.0105/13/11 12:33106-93-41,2-DichlorobenzeneND ug/L1.0105/13/11 12:3395-50-11,2-DichloroethaneND ug/L1.0105/13/11 12:33107-06-21,2-Dichloroethene (Total)ND ug/L2.0105/13/11 12:33540-59-01,2-DichloropropaneND ug/L1.0105/13/11 12:3378-87-51,3,5-Trimethylbenzene881 ug/L25.02505/17/11 18:35108-67-81,3-DichlorobenzeneND ug/L1.0105/13/11 12:33541-73-11,3-DichloropropaneND ug/L1.0105/13/11 12:33142-28-91,4-DichlorobenzeneND ug/L1.0105/13/11 12:33106-46-7	1,2,4-Trimethylbenzene	<b>4150</b> ug/L	25.0 25		05/17/11 18:35	95-63-6	
1,2-Dibromoethane (EDB)ND ug/L1.0105/13/11 12:33106-93-41,2-DichlorobenzeneND ug/L1.0105/13/11 12:3395-50-11,2-DichloroethaneND ug/L1.0105/13/11 12:33107-06-21,2-Dichloroethene (Total)ND ug/L2.0105/13/11 12:33540-59-01,2-DichloropropaneND ug/L1.0105/13/11 12:3378-87-51,3,5-Trimethylbenzene881 ug/L25.02505/17/11 18:35108-67-81,3-DichloropropaneND ug/L1.0105/13/11 12:33541-73-11,3-DichloropropaneND ug/L1.0105/13/11 12:33142-28-91,4-DichlorobenzeneND ug/L1.0105/13/11 12:33106-46-7	1,2-Dibromo-3-chloropropane	ND ug/L	4.0 1		05/13/11 12:33	96-12-8	
1,2-DichlorobenzeneND ug/L1.0105/13/11 12:3395-50-11,2-DichloroethaneND ug/L1.0105/13/11 12:33107-06-21,2-Dichloroethene (Total)ND ug/L2.0105/13/11 12:33540-59-01,2-DichloropropaneND ug/L1.0105/13/11 12:3378-87-51,3,5-Trimethylbenzene881 ug/L25.02505/17/11 18:35108-67-81,3-DichloropropaneND ug/L1.0105/13/11 12:33541-73-11,3-DichloropropaneND ug/L1.0105/13/11 12:33142-28-91,4-DichlorobenzeneND ug/L1.0105/13/11 12:33106-46-7	1,2-Dibromoethane (EDB)	ND ug/L	1.0 1		05/13/11 12:33	106-93-4	
1,2-DichloroethaneND ug/L1.0105/13/11 12:33107-06-21,2-Dichloroethene (Total)ND ug/L2.0105/13/11 12:33540-59-01,2-DichloropropaneND ug/L1.0105/13/11 12:3378-87-51,3,5-Trimethylbenzene881 ug/L25.02505/17/11 18:35108-67-81,3-DichlorobenzeneND ug/L1.0105/13/11 12:33541-73-11,3-DichloropropaneND ug/L1.0105/13/11 12:33142-28-91,4-DichlorobenzeneND ug/L1.0105/13/11 12:33106-46-7	1,2-Dichlorobenzene	ND ug/L	1.0 1		05/13/11 12:33	95-50-1	
1,2-Dichloroethene (Total)ND ug/L2.0105/13/11 12:33540-59-01,2-DichloropropaneND ug/L1.0105/13/11 12:3378-87-51,3,5-Trimethylbenzene881 ug/L25.02505/17/11 18:35108-67-81,3-DichlorobenzeneND ug/L1.0105/13/11 12:33541-73-11,3-DichloropropaneND ug/L1.0105/13/11 12:33142-28-91,4-DichlorobenzeneND ug/L1.0105/13/11 12:33106-46-7	1,2-Dichloroethane	ND ug/L	1.0 1		05/13/11 12:33	107-06-2	
1,2-DichloropropaneND ug/L1.0105/13/11 12:3378-87-51,3,5-Trimethylbenzene881 ug/L25.02505/17/11 18:35108-67-81,3-DichlorobenzeneND ug/L1.0105/13/11 12:33541-73-11,3-DichloropropaneND ug/L1.0105/13/11 12:33142-28-91,4-DichlorobenzeneND ug/L1.0105/13/11 12:33106-46-7	1,2-Dichloroethene (Total)	ND ug/L	2.0 1		05/13/11 12:33	540-59-0	
1,3,5-Trimethylbenzene881 ug/L25.02505/17/11 18:35108-67-81,3-DichlorobenzeneND ug/L1.0105/13/11 12:33541-73-11,3-DichloropropaneND ug/L1.0105/13/11 12:33142-28-91,4-DichlorobenzeneND ug/L1.0105/13/11 12:33106-46-7	1,2-Dichloropropane	ND ug/L	1.0 1		05/13/11 12:33	78-87-5	
1,3-DichlorobenzeneND ug/L1.0105/13/11 12:33541-73-11,3-DichloropropaneND ug/L1.0105/13/11 12:33142-28-91,4-DichlorobenzeneND ug/L1.0105/13/11 12:33106-46-7	1,3,5-Trimethylbenzene	<b>881</b> ug/L	25.0 25		05/17/11 18:35	108-67-8	
1,3-DichloropropaneND ug/L1.0105/13/11 12:33142-28-91,4-DichlorobenzeneND ug/L1.0105/13/11 12:33106-46-7	1,3-Dichlorobenzene	ND ug/L	1.0 1		05/13/11 12:33	541-73-1	
1,4-Dichlorobenzene ND ug/L 1.0 1 05/13/11 12:33 106-46-7	1,3-Dichloropropane	ND ug/L	1.0 1		05/13/11 12:33	142-28-9	
· · · · · · · · · · · · · · · · · · ·	1,4-Dichlorobenzene	ND ug/L	1.0 1		05/13/11 12:33	106-46-7	
2,2-Dichloropropane ND ug/L 1.0 1 05/13/11 12:33 594-20-7	2,2-Dichloropropane	ND ug/L	1.0 1		05/13/11 12:33	594-20-7	
2-Butanone (MEK) ND ug/L 5.0 1 05/13/11 12:33 78-93-3	2-Butanone (MEK)	ND ug/L	5.0 1		05/13/11 12:33	78-93-3	
2-Chlorotoluene ND ug/L 1.0 1 05/13/11 12:33 95-49-8	2-Chlorotoluene	ND ug/L	1.0 1		05/13/11 12:33	95-49-8	
2-Hexanone ND ug/L 5.0 1 05/13/11 12:33 591-78-6	2-Hexanone	ND ug/L	5.0 1		05/13/11 12:33	591-78-6	
4-Chlorotoluene ND ug/L 1.0 1 05/13/11 12:33 106-43-4	4-Chlorotoluene	ND ug/L	1.0 1		05/13/11 12:33	106-43-4	
4-Methyl-2-pentanone (MIBK) ND ug/L 5.0 1 05/13/11 12:33 108-10-1	4-Methyl-2-pentanone (MIBK)	ND ug/L	5.0 1		05/13/11 12:33	108-10-1	
Acetone 6.0 ug/L 5.0 1 05/13/11 12:33 67-64-1	Acetone	6.0 ug/L	5.0 1		05/13/11 12:33	67-64-1	
Benzene 1350 ug/L 25.0 25 05/17/11 18:35 71-43-2	Benzene	<b>1350</b> ug/L	25.0 25		05/17/11 18:35	71-43-2	
Bromobenzene ND ug/L 1.0 1 05/13/11 12:33 108-86-1	Bromobenzene	ND ug/L	1.0 1		05/13/11 12:33	108-86-1	
Bromochloromethane ND ug/L 1.0 1 05/13/11 12:33 74-97-5	Bromochloromethane	ND ug/L	1.0 1		05/13/11 12:33	74-97-5	
Bromodichloromethane ND ug/L 1.0 1 05/13/11 12:33 75-27-4	Bromodichloromethane	ND ug/L	1.0 1		05/13/11 12:33	75-27-4	
Bromoform ND ug/L 1.0 1 05/13/11 12:33 75-25-2	Bromoform	ND ug/L	1.0 1		05/13/11 12:33	75-25-2	
Bromomethane ND ug/L 1.0 1 05/13/11 12:33 74-83-9	Bromomethane	ND ug/L	1.0 1		05/13/11 12:33	74-83-9	
Carbon disulfide ND ug/L 1.0 1 05/13/11 12:33 75-15-0	Carbon disulfide	ND ua/L	1.0 1		05/13/11 12:33	75-15-0	
Carbon tetrachloride ND ug/L 1.0 1 05/13/11 12:33 56-23-5	Carbon tetrachloride	ND ua/L	1.0 1		05/13/11 12:33	56-23-5	
Chlorobenzene ND ug/L 1.0 1 05/13/11 12:33 108-90-7	Chlorobenzene	ND ua/L	1.0 1		05/13/11 12:33	108-90-7	
Chloroethane ND ug/L 1.0 1 05/13/11 12:33 75-00-3	Chloroethane		1.0 1		05/13/11 12:33	75-00-3	
Chloroform ND ug/L 10 1 05/13/11 12:33 67-66-3	Chloroform		10 1		05/13/11 12:33	67-66-3	
Chloromethane ND ug/L 1.0 1 05/13/11 12:33 74-87-3	Chloromethane	ND ug/L	1.0 1		05/13/11 12:33	74-87-3	
Dibromochloromethane ND ug/L 1.0 1 05/13/11 12:33 124-48-1	Dibromochloromethane	ND ua/L	1.0 1		05/13/11 12:33	124-48-1	

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# **REPORT OF LABORATORY ANALYSIS**

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Project: Tarr Vancouver - 1821-00

Pace Project No.: 257638

Sample: MW-1	Lab ID: 257638001	Collected: 05/10/11	14:25	Received: 0	5/12/11 08:45 N	latrix: Water	
Parameters	Results Uni	ts Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EP	A 5030B/8260					
Dibromomethane	ND ug/L	1.0	1		05/13/11 12:33	74-95-3	
Dichlorodifluoromethane	ND ug/L	1.0	1		05/13/11 12:33	75-71-8	
Ethylbenzene	<b>2170</b> ug/L	25.0	25		05/17/11 18:35	100-41-4	
Hexachloro-1,3-butadiene	ND ug/L	1.0	1		05/13/11 12:33	87-68-3	
Isopropylbenzene (Cumene)	<b>134</b> ug/L	1.0	1		05/13/11 12:33	98-82-8	
Methyl-tert-butyl ether	<b>1.4</b> ug/L	1.0	1		05/13/11 12:33	1634-04-4	
Methylene chloride	ND ug/L	4.0	1		05/13/11 12:33	75-09-2	
Naphthalene	800 ug/L	25.0	25		05/17/11 18:35	91-20-3	
Styrene	ND ug/L	1.0	1		05/13/11 12:33	100-42-5	
Tetrachloroethene	ND ug/L	1.0	1		05/13/11 12:33	127-18-4	
Toluene	<b>728</b> ug/L	25.0	25		05/17/11 18:35	108-88-3	
Trichloroethene	ND ug/L	1.0	1		05/13/11 12:33	79-01-6	
Trichlorofluoromethane	ND ug/L	1.0	1		05/13/11 12:33	75-69-4	
Vinyl chloride	ND ug/L	1.0	1		05/13/11 12:33	75-01-4	
Xylene (Total)	11900 ug/L	75.0	25		05/17/11 18:35	1330-20-7	
cis-1,2-Dichloroethene	ND ug/L	1.0	1		05/13/11 12:33	156-59-2	
cis-1,3-Dichloropropene	ND ug/L	1.0	1		05/13/11 12:33	10061-01-5	
m&p-Xylene	9280 ug/L	50.0	25		05/17/11 18:35	179601-23-1	
n-Butylbenzene	56.8 ug/L	1.0	1		05/13/11 12:33	104-51-8	
n-Propylbenzene	<b>340</b> ug/L	1.0	1		05/13/11 12:33	103-65-1	
o-Xylene	<b>2640</b> ug/L	25.0	25		05/17/11 18:35	95-47-6	
p-Isopropyltoluene	<b>10.4</b> ug/L	1.0	1		05/13/11 12:33	99-87-6	
sec-Butylbenzene	17.3 ug/L	1.0	1		05/13/11 12:33	135-98-8	
tert-Butylbenzene	ND ug/L	1.0	1		05/13/11 12:33	98-06-6	
trans-1,2-Dichloroethene	ND ug/L	1.0	1		05/13/11 12:33	156-60-5	
trans-1,3-Dichloropropene	ND ug/L	1.0	1		05/13/11 12:33	10061-02-6	
4-Bromofluorobenzene (S)	96 %	80-120	1		05/13/11 12:33	460-00-4	
Dibromofluoromethane (S)	94 %	80-122	1		05/13/11 12:33	1868-53-7	
1,2-Dichloroethane-d4 (S)	95 %	80-124	1		05/13/11 12:33	17060-07-0	
Toluene-d8 (S)	97 %	80-123	1		05/13/11 12:33	2037-26-5	
NWTPH-Gx MSV	Analytical Method: NW	/TPH-Gx					
Gasoline Range Organics	<b>78200</b> ug/L	1250	25		05/17/11 18:35		
4-Bromofluorobenzene (S)	99 %	50-150	25		05/17/11 18:35	460-00-4	
Sample: MW-1 DUP	Lab ID: 257638002	Collected: 05/10/11	14:25	Received: 0	5/12/11 08:45 N	latrix: Water	

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Dx GCS	Analytical Met	hod: NWTPH-D	Preparation M	ethod:	EPA 3510			
Diesel Range	<b>5.1</b> m	g/L	0.076	1	05/13/11 11:20	05/16/11 22:10		
Motor Oil Range	<b>0.49</b> m	g/L	0.38	1	05/13/11 11:20	05/16/11 22:10	64742-65-0	
n-Octacosane (S)	63 %	)	50-150	1	05/13/11 11:20	05/16/11 22:10	630-02-4	
o-Terphenyl (S)	61 %	)	50-150	1	05/13/11 11:20	05/16/11 22:10	84-15-1	

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# **REPORT OF LABORATORY ANALYSIS**

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Project: Tarr Vancouver - 1821-00

Pace Project No.: 257638

Sample: MW-1 DUP	Lab ID: 2576	38002	Collected:	05/10/1	1 14:25	Received: 05	/12/11 08:45 N	latrix: Water	
Parameters	Results	Units	Repor	rt Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Gx MSV	Analytical Meth	od: NWTP	H-Gx						
Gasoline Range Organics 4-Bromofluorobenzene (S)	<b>78000</b> ug/ 98 %	L		1250 50-150	25 25		05/18/11 07:05 05/18/11 07:05	460-00-4	
Sample: MW-3	Lab ID: 2576	38003	Collected:	05/10/1	1 15:30	Received: 05	/12/11 08:45 N	latrix: Water	
Parameters	Results	Units	Repor	t Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Dx GCS	Analytical Meth	od: NWTP	H-Dx Prepa	ration Me	thod: E	PA 3510			
Diesel Range	ND mg	/L		0.076	1	05/13/11 11:20	05/16/11 22:26		
Motor Oil Range	ND mg	/L		0.38	1	05/13/11 11:20	05/16/11 22:26	64742-65-0	
n-Octacosane (S)	105 %			50-150	1	05/13/11 11:20	05/16/11 22:26	630-02-4	
o-Terphenyl (S)	93 %			50-150	1	05/13/11 11:20	05/16/11 22:26	84-15-1	
8260 MSV	Analytical Meth	od: EPA 50	030B/8260						
1,1,1,2-Tetrachloroethane	ND ug/	L		1.0	1		05/17/11 13:09	630-20-6	
1,1,1-Trichloroethane	ND ug/	L		1.0	1		05/17/11 13:09	71-55-6	
1,1,2,2-Tetrachloroethane	ND ug/	L		1.0	1		05/17/11 13:09	79-34-5	
1,1,2-Trichloroethane	ND ug/	L		1.0	1		05/17/11 13:09	79-00-5	
1,1-Dichloroethane	ND ug/	L		1.0	1		05/17/11 13:09	75-34-3	
1,1-Dichloroethene	ND ug/	L		1.0	1		05/17/11 13:09	75-35-4	
1,1-Dichloropropene	ND ug/	L		1.0	1		05/17/11 13:09	563-58-6	
1,2,3-Trichlorobenzene	ND ug/	L		1.0	1		05/17/11 13:09	87-61-6	
1,2,3-Trichloropropane	ND ug/	L		1.0	1		05/17/11 13:09	96-18-4	
1,2,4-Trichlorobenzene	ND ug/	L		1.0	1		05/17/11 13:09	120-82-1	
1,2,4-Trimethylbenzene	ND ug/	L		1.0	1		05/17/11 13:09	95-63-6	
1,2-Dibromo-3-chloropropane	ND ug/	L		4.0	1		05/17/11 13:09	96-12-8	
1,2-Dibromoethane (EDB)	ND ug/	L		1.0	1		05/17/11 13:09	106-93-4	
1,2-Dichlorobenzene	ND ug/	L		1.0	1		05/17/11 13:09	95-50-1	
1,2-Dichloroethane	ND ug/	L		1.0	1		05/17/11 13:09	107-06-2	
1,2-Dichloroethene (Total)	ND ug/	L		2.0	1		05/17/11 13:09	540-59-0	
1,2-Dichloropropane	ND ug/	L		1.0	1		05/17/11 13:09	78-87-5	
1,3,5-Trimethylbenzene	ND ug/	L		1.0	1		05/17/11 13:09	108-67-8	
1,3-Dichlorobenzene	ND ug/	L		1.0	1		05/17/11 13:09	541-73-1	
1,3-Dichloropropane	ND ug/	L		1.0	1		05/17/11 13:09	142-28-9	
1,4-Dichlorobenzene	ND ug/	L		1.0	1		05/17/11 13:09	106-46-7	
2,2-Dichloropropane	ND ug/	L		1.0	1		05/17/11 13:09	594-20-7	
2-Butanone (MEK)	ND ug/	L		5.0	1		05/17/11 13:09	78-93-3	
2-Chlorotoluene	ND ug/	L		1.0	1		05/17/11 13:09	95-49-8	
2-Hexanone	ND ug/	L		5.0	1		05/17/11 13:09	591-78-6	
4-Chlorotoluene	ND ug/	L		1.0	1		05/17/11 13:09	106-43-4	
4-Methyl-2-pentanone (MIBK)	ND ug/	L		5.0	1		05/17/11 13:09	108-10-1	
Acetone	ND ug/	L		5.0	1		05/17/11 13:09	67-64-1	M1
Benzene	ND ug/	L		1.0	1		05/17/11 13:09	71-43-2	
Bromobenzene	ND ug/	L		1.0	1		05/17/11 13:09	108-86-1	
Bromochloromethane	ND ug/	L		1.0	1		05/17/11 13:09	74-97-5	

Date: 05/19/2011 05:13 PM

# **REPORT OF LABORATORY ANALYSIS**

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Project: Tarr Vancouver - 1821-00

Pace Project No.: 257638

Sample: MW-3	Lab ID: 2576	38003	Collected: 05/10/1	1 15:30	Received: 05	5/12/11 08:45 N	latrix: Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Meth	od: EPA 5	030B/8260					
Bromodichloromethane	ND ug/	۲L	1.0	1		05/17/11 13:09	75-27-4	
Bromoform	ND ug/	۲L	1.0	1		05/17/11 13:09	75-25-2	
Bromomethane	ND ug/	۲L	1.0	1		05/17/11 13:09	74-83-9	
Carbon disulfide	ND ug/	۲L	1.0	1		05/17/11 13:09	75-15-0	
Carbon tetrachloride	ND ug/	۲L	1.0	1		05/17/11 13:09	56-23-5	
Chlorobenzene	ND ug/	۲L	1.0	1		05/17/11 13:09	108-90-7	
Chloroethane	ND ug/	۲L	1.0	1		05/17/11 13:09	75-00-3	
Chloroform	ND ug/	۲L	1.0	1		05/17/11 13:09	67-66-3	
Chloromethane	ND ug/	۲L	1.0	1		05/17/11 13:09	74-87-3	
Dibromochloromethane	ND ug/	۲L	1.0	1		05/17/11 13:09	124-48-1	
Dibromomethane	ND ug/	۲L	1.0	1		05/17/11 13:09	74-95-3	
Dichlorodifluoromethane	ND ug/	۲L	1.0	1		05/17/11 13:09	75-71-8	M1
Ethylbenzene	ND ug/	۲L	1.0	1		05/17/11 13:09	100-41-4	
Hexachloro-1,3-butadiene	ND ug/	۲L	1.0	1		05/17/11 13:09	87-68-3	
Isopropylbenzene (Cumene)	ND ug/	۲L	1.0	1		05/17/11 13:09	98-82-8	
Methyl-tert-butyl ether	ND ug/	۲L	1.0	1		05/17/11 13:09	1634-04-4	
Methylene chloride	ND ug/	۲L	4.0	1		05/17/11 13:09	75-09-2	M1
Naphthalene	ND ug/	۲L	1.0	1		05/17/11 13:09	91-20-3	
Styrene	ND ug/	۲L	1.0	1		05/17/11 13:09	100-42-5	
Tetrachloroethene	ND ug/	۲L	1.0	1		05/17/11 13:09	127-18-4	M1
Toluene	ND ug/	۲L	1.0	1		05/17/11 13:09	108-88-3	
Trichloroethene	ND ug/	۲L	1.0	1		05/17/11 13:09	79-01-6	
Trichlorofluoromethane	ND ug/	۲L	1.0	1		05/17/11 13:09	75-69-4	
Vinyl chloride	ND ug/	۲L	1.0	1		05/17/11 13:09	75-01-4	
Xylene (Total)	ND ug/	۲L	3.0	1		05/17/11 13:09	1330-20-7	
cis-1,2-Dichloroethene	ND ug/	۲L	1.0	1		05/17/11 13:09	156-59-2	
cis-1,3-Dichloropropene	ND ug/	۲L	1.0	1		05/17/11 13:09	10061-01-5	
m&p-Xylene	ND ug/	۲L	2.0	1		05/17/11 13:09	179601-23-1	
n-Butylbenzene	ND ug/	۲L	1.0	1		05/17/11 13:09	104-51-8	
n-Propylbenzene	ND ug/	۲L	1.0	1		05/17/11 13:09	103-65-1	
o-Xylene	ND ug/	۲L	1.0	1		05/17/11 13:09	95-47-6	
p-lsopropyltoluene	ND ug/	۲L	1.0	1		05/17/11 13:09	99-87-6	
sec-Butylbenzene	ND ug/	۲L	1.0	1		05/17/11 13:09	135-98-8	
tert-Butylbenzene	ND ug/	۲L	1.0	1		05/17/11 13:09	98-06-6	
trans-1,2-Dichloroethene	ND ug/	۲L	1.0	1		05/17/11 13:09	156-60-5	
trans-1,3-Dichloropropene	ND ug/	۲L	1.0	1		05/17/11 13:09	10061-02-6	
4-Bromofluorobenzene (S)	101 %		80-120	1		05/17/11 13:09	460-00-4	
Dibromofluoromethane (S)	97 %		80-122	1		05/17/11 13:09	1868-53-7	
1,2-Dichloroethane-d4 (S)	96 %		80-124	1		05/17/11 13:09	17060-07-0	
Toluene-d8 (S)	98 %		80-123	1		05/17/11 13:09	2037-26-5	
NWTPH-Gx MSV	Analytical Meth	od: NWTF	PH-Gx					
Gasoline Range Organics	ND ug/	۲L	50.0	1		05/17/11 13:09		
4-Bromofluorobenzene (S)	101 %		50-150	1		05/17/11 13:09	460-00-4	

# **REPORT OF LABORATORY ANALYSIS**





Project: Tarr Vancouver - 1821-00

Pace Project No.: 257638

Parameters         Results         Units         Report Limit         DF         Prepared         Analyzed         CAS No.         Qual           NWTPH-Dx GCS         Analytical Method: NWTPH-Dx         Prepared         06/19/111220         69/19/1112242         69/19/12242         69/19/12242         69/19/12242         69/19/12242         69/19/12242         69/19/12242         69/19/12242         69/19/12242         69/19/12242         69/19/12242         69/19/12242         69/19/12242         69/19/12242         69/19/12242         69/19/12242         69/19/12242         69/19/11120         69/19/11120         69/19/11120         69/19/111220         69/19/11120         69/19/11120         69/19/11120         69/19/11120         69/19/11120         69/19/11120         69/19/11120         69/19/11120         69/19/11120         69/19/11120         69/19/11120         69/19/11120         69/19/11120         69/19/11120         69/19/11120         69/19/11120         69/19/1120 </th <th>Sample: MW-2</th> <th>Lab ID: 257</th> <th>638004</th> <th>Collected: 0</th> <th>)5/10/11</th> <th>16:15</th> <th>Received: 05</th> <th>/12/11 08:45 N</th> <th>latrix: Water</th> <th></th>	Sample: MW-2	Lab ID: 257	638004	Collected: 0	)5/10/11	16:15	Received: 05	/12/11 08:45 N	latrix: Water	
NVTPH-Dx GCS         Analytical Method: NVTPH-Dx Preparation Method: EPA 3510           Diesel Range Motor Oil Range O-Claucosane (S)         ND mg/L         0.076         1         06/13/11 11.20         05/16/11 22.42         63742-65-0           O-Claucosane (S)         106 %         50-150         1         06/13/11 11.20         05/16/11 22.42         630-02.41           O-Terpheny (S)         33 %         60-150         1         05/13/11 11.20         05/16/11 22.42         630-02.41           O-Terpheny (S)         33 %         60-150         1         05/13/11 11.20         05/16/11 22.42         630-02.41           OSO MSV         Analytical Method: EPA 50308/8262         1         05/13/11 11.20         05/17/11 32.67         73-34-5           1,1,1.2.Tertachioroethane         ND ug/L         1.0         1         05/17/11 32.67         73-34-5           1,1.2.Trichoroethane         ND ug/L         1.0         1         05/17/11 32.67         73-34-5           1,1.2.Trichoroethane         ND ug/L         1.0         1         05/17/11 32.67         73-34-5           1,1.2.Trichoroethane         ND ug/L         1.0         1         05/17/11 32.67         73-34-5           1,2.3.Trichoroethane         ND ug/L         1.0         1         05/17/11	Parameters	Results	Units	Report L	imit	DF	Prepared	Analyzed	CAS No.	Qual
Diesel Range         ND mg/L         0.076         1         05/13/11 11:20         05/16/11 22:42         6           ND mg/L         0.08         1         05/13/11 11:20         05/16/11 22:42         80/02:4           0-Terphenyl (S)         39 %         50-160         1         05/13/11 11:20         05/16/11 22:42         80/02:4           1,1.1.2-Tertachloroethane         ND ug/L         1.0         1         05/13/11 11:26         630-20-6           1,1.1.2-Tertachloroethane         ND ug/L         1.0         1         05/17/11 13:26         79-34-5           1,1.2-Tertachloroethane         ND ug/L         1.0         1         05/17/11 13:26         75-34-3           1,1-Dichloroethane         ND ug/L         1.0         1         05/17/11 13:26         75-34-3           1,1-Dichloroethane         ND ug/L         1.0         1         05/17/11 13:26         96-16-6	NWTPH-Dx GCS	Analytical Met	hod: NWTP	PH-Dx Preparat	tion Me	thod: E	PA 3510			
Motor OIR ange         ND mg/L         0.38         1         05/13/11 11:20         05/14/11 11:24         03/02-41           no-Terphenyl (S)         33 %         50-150         1         05/13/11 11:20         05/16/11 12:24         84.05-1           8260 MSV         Analytical Method: EPA 5030B/8260         55.150         1         05/13/11 11:20         05/17/11 11:26         630-20-6           1,1,1-Trichloroethane         ND ug/L         1.0         1         06/17/11 13:26         75-56           1,1,2-Trichloroethane         ND ug/L         1.0         1         05/17/11 13:26         75-36-3           1,1,2-Trichloroethane         ND ug/L         1.0         1         05/17/11 13:26         75-36-3           1,1,2-Trichloroethane         ND ug/L         1.0         1         05/17/11 13:26         75-36-3           1,1-Dichloroptopene         ND ug/L         1.0         1         05/17/11 13:26         87-61-6           1,2-Trichloroptopane         ND ug/L         1.0         1         05/17/11 13:26         87-61-6           1,2-Trichloroptopane         ND ug/L         1.0         1         05/17/11 13:26         87-61-6           1,2-Dichlorobenzene         ND ug/L         1.0         1         05/17/11 13:26	Diesel Range	ND m	g/L	C	0.076	1	05/13/11 11:20	05/16/11 22:42		
n-Octaosane (s). 106 % 50-150 1 06/13/11 11:20 05/16/11 22:42 630-02-4 o-Terphenyl (s) 33 % 50-150 1 06/13/11 11:20 05/16/11 22:42 630-02-4 Set0 MSV Analytical Method: EPA 503008/800 11.1.1.2.Titachloroethane ND ug/L 1.0 1 06/17/11 13:20 71-55.6 1.1.1.2.Titachloroethane ND ug/L 1.0 1 06/17/11 13:20 79-34.5 1.1.2.Titachloroethane ND ug/L 1.0 1 06/17/11 13:20 75-34.3 1.1.Dichloroethane ND ug/L 1.0 1 05/17/11 13:20 75-34.3 1.2.Ja.Tichloroptopane ND ug/L 1.0 1 05/17/11 13:20 95-34.3 1.2.Ja.Tichloroberzene ND ug/L 1.0 1 05/17/11 13:20 95-34.3 1.2.Dichloroethane ND ug/L 1.0 1 05/17/11 13:20 95-36.3 1.2.Dichloroethane ND ug/L 1.0 1 05/17/11 13:20 10-64.7 1.2.Dichloroethane ND ug/L 1.0 1 05/17/11 13:20 10-64.7 1.3.Dichloroethane ND ug/L 1.0 1 05/17/11 13:2	Motor Oil Range	ND m	g/L		0.38	1	05/13/11 11:20	05/16/11 22:42	64742-65-0	
o-Terphenyl (S)         93 %         50-150         1         05/13/11 12.00         05/16/11 22.42         84-15-1           8260 MSV         Analytical Method: EPA 50308/8260         5	n-Octacosane (S)	106 %	•	50	)-150	1	05/13/11 11:20	05/16/11 22:42	630-02-4	
Base MSV         Analytical Method: EPA 5030B/8260           1,1,1-Tichloroethane         ND ug/L         1.0         1         05/17/11 13.20         630-20-6           1,1,1-Tichloroethane         ND ug/L         1.0         1         05/17/11 13.20         75-8-6           1,1,2-Tichloroethane         ND ug/L         1.0         1         05/17/11 13.20         75-34-3           1,1-Dichloroethane         ND ug/L         1.0         1         05/17/11 13.20         75-34-3           1,1-Dichloroethane         ND ug/L         1.0         1         05/17/11 13.20         75-34-3           1,1-Dichloroethane         ND ug/L         1.0         1         05/17/11 13.20         87-81-6           1,2-Dichloroberzene         ND ug/L         1.0         1         05/17/11 13.20         95-83-6           1,2-Dichoroethane (EDB)         ND ug/L         1.0         1         05/17/11 13.20         95-83-6           1,2-Dichoroethane (EDB)         ND ug/L         1.0         1         05/17/11 13.20         95-83-6           1,2-Dichoroethane (EDB)         ND ug/L         1.0         1         05/17/11 13.20         16-83-4           1,2-Dichoroethane (EDB)         ND ug/L         1.0         1         05/17/11 13.20         <	o-Terphenyl (S)	93 %		50	)-150	1	05/13/11 11:20	05/16/11 22:42	84-15-1	
1,1,1-Z-Tetrachloroethane       ND ug/L       1.0       1       05/17/11 13:26       630-20-6         1,1,1-Tickhoroethane       ND ug/L       1.0       1       05/17/11 13:26       71-55-6         1,1,2-Tickhoroethane       ND ug/L       1.0       1       05/17/11 13:26       79-34-5         1,1,2-Tickhoroethane       ND ug/L       1.0       1       05/17/11 13:26       75-34-3         1,1-Dichloroethane       ND ug/L       1.0       1       05/17/11 13:26       75-34-3         1,1-Dichloroethane       ND ug/L       1.0       1       05/17/11 13:26       87-81-6         1,2.3-Tichloropopane       ND ug/L       1.0       1       05/17/11 13:26       87-81-6         1,2.3-Tichloropopane       ND ug/L       1.0       1       05/17/11 13:26       87-81-6         1,2.4-Tichlorobenzene       ND ug/L       1.0       1       05/17/11 13:26       87-83-6         1,2-Dichloroethane       ND ug/L       1.0       1       05/17/11 13:26       87-83-6         1,2-Dichloroethane       ND ug/L       1.0       1       05/17/11 13:26       16-83-4         1,2-Dichloroethane       ND ug/L       1.0       1       05/17/11 13:26       16-83-4         1,2-Dichloropr	8260 MSV	Analytical Met	hod: EPA 5	030B/8260						
1,1,1-Tichioroethane       ND ug/L       1.0       1       05/17/11 13:26       71-55-61         1,1,2-Tichioroethane       ND ug/L       1.0       1       05/17/11 13:26       75-34-51         1,1-Dichioroethane       ND ug/L       1.0       1       05/17/11 13:26       75-33-43         1,1-Dichioroethane       ND ug/L       1.0       1       05/17/11 13:26       75-35-44         1,1-Dichioroethane       ND ug/L       1.0       1       05/17/11 13:26       85-38-6         1,2.3-Tichioropopane       ND ug/L       1.0       1       05/17/11 13:26       85-38-6         1,2.3-Tichioropopane       ND ug/L       1.0       1       05/17/11 13:26       85-38-6         1,2.4-Timethylbenzene       ND ug/L       1.0       1       05/17/11 13:26       85-36-6         1,2-Dichorobenzene       ND ug/L       1.0       1       05/17/11 13:26       85-36-6         1,2-Dichorobenzene </td <td>1,1,1,2-Tetrachloroethane</td> <td>ND ug</td> <td>g/L</td> <td></td> <td>1.0</td> <td>1</td> <td></td> <td>05/17/11 13:26</td> <td>630-20-6</td> <td></td>	1,1,1,2-Tetrachloroethane	ND ug	g/L		1.0	1		05/17/11 13:26	630-20-6	
1,1,2-2-Tetrachloroethane       ND ug/L       1.0       1       05/17/11 13:26       79:34-5         1,1,2-Trichloroethane       ND ug/L       1.0       1       05/17/11 13:26       75:34-3         1,1-Dichloroethane       ND ug/L       1.0       1       05/17/11 13:26       75:35-4         1,1-Dichloroptopene       ND ug/L       1.0       1       05/17/11 13:26       75:35-4         1,2.3-Trichlorobenzane       ND ug/L       1.0       1       05/17/11 13:26       76:36-4         1,2.3-Trichlorobenzane       ND ug/L       1.0       1       05/17/11 13:26       76:36-4         1,2.4-Trichlorobenzane       ND ug/L       1.0       1       05/17/11 13:26       76:36-4         1,2.4-Trichlorobenzane       ND ug/L       1.0       1       05/17/11 13:26       76:36-4         1,2.4-Trichlorobenzane       ND ug/L       1.0       1       05/17/11 13:26       76:36-3         1,2.4-Trichlorobenzane       ND ug/L       1.0       1       05/17/11 13:26       76:47-8         1,2.0-Dichlorobenzane       ND ug/L       1.0       1       05/17/11 13:26       78:47-5         1,2.0-Dichloropopane       ND ug/L       1.0       1       05/17/11 13:26       78:47-5	1,1,1-Trichloroethane	ND ug	g/L		1.0	1		05/17/11 13:26	71-55-6	
1,1,2-Trichloroethane       ND ug/L       1.0       1       05/17/11 13:26       75-34-3         1,1-Dichloroethene       ND ug/L       1.0       1       05/17/11 13:26       75-34-3         1,1-Dichloroethene       ND ug/L       1.0       1       05/17/11 13:26       75-34-3         1,1-Dichloropropene       ND ug/L       1.0       1       05/17/11 13:26       87-61-6         1,2,3-Trichloropropane       ND ug/L       1.0       1       05/17/11 13:26       96-18-4         1,2,4-Trinethylbenzene       ND ug/L       1.0       1       05/17/11 13:26       96-68-4         1,2-Dichorobenzene       ND ug/L       1.0       1       05/17/11 13:26       96-68-4         1,2-Dichorobenzene       ND ug/L       1.0       1       05/17/11 13:26       96-69-6         1,2-Dichorobenzene       ND ug/L       1.0       1       05/17/11 13:26       96-50-1         1,2-Dichorobenzene       ND ug/L       1.0       1       05/17/11 13:26       96-50-1         1,2-Dichorobenzene       ND ug/L       1.0       1       05/17/11 13:26       96-50-1         1,2-Dichorobenzene       ND ug/L       1.0       1       05/17/11 13:26       96-78-8         1,2-Dichorobenzene	1,1,2,2-Tetrachloroethane	ND uç	g/L		1.0	1		05/17/11 13:26	79-34-5	
1,1-Dichloroethane       ND ug/L       1.0       1       05/17/11 13:26       75-34-3         1,1-Dichloropropene       ND ug/L       1.0       1       05/17/11 13:26       75-35-4         1,2,3-Trichloropropene       ND ug/L       1.0       1       05/17/11 13:26       87-81-6         1,2,3-Trichloropenzene       ND ug/L       1.0       1       05/17/11 13:26       87-81-6         1,2,4-Trichloropenzene       ND ug/L       1.0       1       05/17/11 13:26       95-63-6         1,2-Dibromos-holtoropenzene       ND ug/L       1.0       1       05/17/11 13:26       95-63-6         1,2-Dibromos-holtoropenzene       ND ug/L       1.0       1       05/17/11 13:26       106-93-4         1,2-Dichloros-holtoropenzene       ND ug/L       1.0       1       05/17/11 13:26       106-93-4         1,2-Dichlorosthane       ND ug/L       1.0       1       05/17/11 13:26       106-93-4         1,2-Dichlorosthane       ND ug/L       1.0       1       05/17/11 13:26       54-50-0         1,2-Dichlorosthane       ND ug/L       1.0       1       05/17/11 13:26       54-50-0         1,2-Dichlorosthane       ND ug/L       1.0       1       05/17/11 13:26       54-50-0	1,1,2-Trichloroethane	ND uç	g/L		1.0	1		05/17/11 13:26	79-00-5	
1,1-Dichloroethene       ND ug/L       1.0       1       05/17/11 13:26       75-35-4         1,1-Dichloropropene       ND ug/L       1.0       1       05/17/11 13:26       75-61-6         1,2,3-Trichloropropane       ND ug/L       1.0       1       05/17/11 13:26       96-18-4         1,2,4-Trinchloropropane       ND ug/L       1.0       1       05/17/11 13:26       96-18-4         1,2,4-Trinchloropropane       ND ug/L       1.0       1       05/17/11 13:26       96-63-6         1,2-Dichorobanzene       ND ug/L       1.0       1       05/17/11 13:26       96-63-6         1,2-Dichorobanzene       ND ug/L       1.0       1       05/17/11 13:26       95-50-1         1,2-Dichorobanzene       ND ug/L       1.0       1       05/17/11 13:26       37-63-5         1,2-Dichloroethane       ND ug/L       1.0       1       05/17/11 13:26       37-63-5         1,2-Dichloropropane       ND ug/L       1.0       1       05/17/11 13:26       37-63-5         1,3-Dichlorobenzene       ND ug/L       1.0       1       05/17/11 13:26       37-63-5         1,3-Dichlorobenzene       ND ug/L       1.0       1       05/17/11 13:26       36-43-4         1,3-Dichlorobenze	1,1-Dichloroethane	ND ug	j/L		1.0	1		05/17/11 13:26	75-34-3	
1,1-Dickloropropene       ND ug/L       1,0       1       05/17/11 13:26       563-58-6         1,2,3-Trichloropropane       ND ug/L       1,0       1       05/17/11 13:26       96-18-4         1,2,4-Trichloropropane       ND ug/L       1,0       1       05/17/11 13:26       96-18-4         1,2,4-Trichlorobenzene       ND ug/L       1,0       1       05/17/11 13:26       96-18-4         1,2-Ditoromo-3-chloropropane       ND ug/L       1,0       1       05/17/11 13:26       96-12-8         1,2-Ditoromo-3-chloropropane       ND ug/L       1,0       1       05/17/11 13:26       96-12-8         1,2-Ditoromo-3-chloropropane       ND ug/L       1,0       1       05/17/11 13:26       96-12-8         1,2-Dichloroethane (EDB)       ND ug/L       1,0       1       05/17/11 13:26       16-63-6         1,2-Dichloropropane       ND ug/L       1,0       1       05/17/11 13:26       16-67-8         1,3-Dichloropropane       ND ug/L       1,0       1       05/17/11 13:26       16-64-7         1,3-Dichloropropane       ND ug/L       1,0       1       05/17/11 13:26       16-46-7         1,3-Dichloropropane       ND ug/L       1,0       1       05/17/11 13:26       16-46-7	1,1-Dichloroethene	ND ug	g/L		1.0	1		05/17/11 13:26	75-35-4	
1,2,3-Trichlorobenzene       ND ug/L       1.0       1       05/17/11 13:26       87-61-6         1,2,3-Trichloropropane       ND ug/L       1.0       1       05/17/11 13:26       96-18-4         1,2,4-Trichloropenzene       ND ug/L       1.0       1       05/17/11 13:26       96-18-4         1,2-Diromo-3-chloropropane       ND ug/L       1.0       1       05/17/11 13:26       96-63-6         1,2-Diromo-3-chloropropane       ND ug/L       1.0       1       05/17/11 13:26       96-12-8         1,2-Diromo-thane (EDB)       ND ug/L       1.0       1       05/17/11 13:26       96-50-4         1,2-Dichloroethane (EDB)       ND ug/L       1.0       1       05/17/11 13:26       96-50-4         1,2-Dichloroethane (EDB)       ND ug/L       1.0       1       05/17/11 13:26       840-59-0         1,2-Dichloroethane       ND ug/L       1.0       1       05/17/11 13:26       840-58-0         1,2-Dichloroethane       ND ug/L       1.0       1       05/17/11 13:26       840-58-0         1,3-Dichlorobenzene       ND ug/L       1.0       1       05/17/11 13:26       841-33-1         1,3-Dichlorobenzene       ND ug/L       1.0       1       05/17/11 13:26       841-33-1	1,1-Dichloropropene	ND uç	g/L		1.0	1		05/17/11 13:26	563-58-6	
1,2,3-Trichloropropane       ND ug/L       1.0       1       05/17/11 13:26       96-18-4         1,2,4-Trinethylbenzene       ND ug/L       1.0       1       05/17/11 13:26       95-63-6         1,2-Dibromo-3-chloropropane       ND ug/L       1.0       1       05/17/11 13:26       95-63-6         1,2-Dibromo-3-chloropropane       ND ug/L       1.0       1       05/17/11 13:26       95-63-6         1,2-Dibromo-thane (EDB)       ND ug/L       1.0       1       05/17/11 13:26       95-50-1         1,2-Dichorobenzene       ND ug/L       1.0       1       05/17/11 13:26       95-50-1         1,2-Dichorobenzene       ND ug/L       1.0       1       05/17/11 13:26       105-62         1,2-Dichorobenzene       ND ug/L       1.0       1       05/17/11 13:26       105-62         1,3-Dichorobenzene       ND ug/L       1.0       1       05/17/11 13:26       106-67         1,3-Dichorobenzene       ND ug/L       1.0       1       05/17/11 13:26       106-67         1,3-Dichorobenzene       ND ug/L       1.0       1       05/17/11 13:26       106-46-7         2,2-Dichorobenzene       ND ug/L       1.0       1       05/17/11 13:26       106-44-7         2,2-Di	1,2,3-Trichlorobenzene	ND uç	, g/L		1.0	1		05/17/11 13:26	87-61-6	
1,2,4-Trichlorobenzene       ND ug/L       1.0       1       05/17/11 13.26       12-08-1         1,2,4-Trimethylbenzene       ND ug/L       1.0       1       05/17/11 13.26       96-12-8         1,2-Ditorno-s-chloropropane       ND ug/L       1.0       1       05/17/11 13.26       96-12-8         1,2-Ditorno-s-chloropropane       ND ug/L       1.0       1       05/17/11 13.26       96-12-8         1,2-Dichlorobenzene       ND ug/L       1.0       1       05/17/11 13.26       96-6-2         1,2-Dichloropthane       ND ug/L       1.0       1       05/17/11 13.26       10-6-2         1,2-Dichloropthane       ND ug/L       1.0       1       05/17/11 13.26       10-6-2         1,3-Dichloroptopane       ND ug/L       1.0       1       05/17/11 13.26       10-6-2         1,3-Dichloroptopane       ND ug/L       1.0       1       05/17/11 13.26       10-6-2         1,3-Dichloroptopane       ND ug/L       1.0       1       05/17/11 13.26       10-6-4-7         1,3-Dichloroptopane       ND ug/L       1.0       1       05/17/11 13.26       10-6-4-7         1,3-Dichloroptopane       ND ug/L       1.0       1       05/17/11 13.26       10-6-4-7         2-Dic	1,2,3-Trichloropropane	ND uç	, g/L		1.0	1		05/17/11 13:26	96-18-4	
1,2,4-Trimethylbenzene       ND ug/L       1.0       1       05/17/11 13:26       95-63-6         1,2-Dibromo-3-chloropropane       ND ug/L       4.0       1       05/17/11 13:26       96-12-8         1,2-Dibromo-sthane (EDB)       ND ug/L       1.0       1       05/17/11 13:26       06-93-4         1,2-Dichorobenzene       ND ug/L       1.0       1       05/17/11 13:26       07-06-2         1,2-Dichoroethane (Total)       ND ug/L       2.0       1       05/17/11 13:26       78-75         1,2-Dichoropropane       ND ug/L       1.0       1       05/17/11 13:26       78-75         1,3-Dichoropropane       ND ug/L       1.0       1       05/17/11 13:26       78-75         2,2-Dichoropropane       ND ug/L       1.0       1       05/17/11 13:26       78-74         2,2-Dichoropropane       ND ug/L       1.0       1       05/17/11 13:26       78-93         2,2-Dichoropropane	1,2,4-Trichlorobenzene	ND uç	, g/L		1.0	1		05/17/11 13:26	120-82-1	
1,2-Dibromo-3-chloropropane       ND ug/L       4.0       1       05/17/11 13:26       96-12-8         1,2-Dibromoethane (EDB)       ND ug/L       1.0       1       05/17/11 13:26       106-93-4         1,2-Dichlorobenzene       ND ug/L       1.0       1       05/17/11 13:26       95-50-1         1,2-Dichloroethane       ND ug/L       2.0       1       05/17/11 13:26       540-59-0         1,2-Dichloroethane (Total)       ND ug/L       1.0       1       05/17/11 13:26       540-59-0         1,3-Dichloroptopane       ND ug/L       1.0       1       05/17/11 13:26       540-57-0         1,3-Dichloroptopane       ND ug/L       1.0       1       05/17/11 13:26       541-73-1         1,3-Dichloroptopane       ND ug/L       1.0       1       05/17/11 13:26       542-89-0         1,3-Dichloroptopane       ND ug/L       1.0       1       05/17/11 13:26       541-73-1         1,3-Dichloroptopane       ND ug/L       1.0       1       05/17/11 13:26       542-89-0         2,2-Dichloroptopane       ND ug/L       1.0       1       05/17/11 13:26       78-33-3         2,2-Dichloroptopane       ND ug/L       5.0       1       05/17/11 13:26       78-49-8         <	1,2,4-Trimethylbenzene	ND uç	, g/L		1.0	1		05/17/11 13:26	95-63-6	
1,2-Dibromoethane (EDB)       ND ug/L       1.0       1       05/17/11 13:26       106-93-4         1,2-Dichlorobenzene       ND ug/L       1.0       1       05/17/11 13:26       95-50-1         1,2-Dichloroethane       ND ug/L       1.0       1       05/17/11 13:26       70-70-62         1,2-Dichloroethane (Total)       ND ug/L       2.0       1       05/17/11 13:26       70-70-62         1,2-Dichloropropane       ND ug/L       1.0       1       05/17/11 13:26       70-87-5         1,3-Dichlorobenzene       ND ug/L       1.0       1       05/17/11 13:26       70-87-5         1,3-Dichloropropane       ND ug/L       1.0       1       05/17/11 13:26       70-87-5         1,3-Dichloropropane       ND ug/L       1.0       1       05/17/11 13:26       70-87-5         1,3-Dichloropropane       ND ug/L       1.0       1       05/17/11 13:26       70-47-2         2-Dichloropropane       ND ug/L       1.0       1       05/17/11 13:26       70-93-3         2-Dichloropropane       ND ug/L       5.0       1       05/17/11 13:26       70-93-78-6         2-Elwanone (MEK)       ND ug/L       5.0       1       05/17/11 13:26       70-97-8         2-Hexanone <td>1,2-Dibromo-3-chloropropane</td> <td>ND uç</td> <td>, g/L</td> <td></td> <td>4.0</td> <td>1</td> <td></td> <td>05/17/11 13:26</td> <td>96-12-8</td> <td></td>	1,2-Dibromo-3-chloropropane	ND uç	, g/L		4.0	1		05/17/11 13:26	96-12-8	
1,2-Dichlorobenzene       ND ug/L       1.0       1       05/17/11       13:26       95-50-1         1,2-Dichloroethane       ND ug/L       2.0       1       05/17/11       13:26       540-59-0         1,2-Dichloroethane (Total)       ND ug/L       1.0       1       05/17/11       13:26       540-59-0         1,2-Dichloropropane       ND ug/L       1.0       1       05/17/11       13:26       540-59-0         1,3-Dichlorobenzene       ND ug/L       1.0       1       05/17/11       13:26       547-5         1,3-Dichlorobenzene       ND ug/L       1.0       1       05/17/11       13:26       542-29-9         1,4-Dichlorobenzene       ND ug/L       1.0       1       05/17/11       13:26       108-67-8         1,2-Dichloropropane       ND ug/L       1.0       1       05/17/11       13:26       108-67-8         2,2-Dichloropropane       ND ug/L       1.0       1       05/17/11       13:26       108-67-7         2,2-Dichloropropane       ND ug/L       1.0       1       05/17/11       13:26       594-20-7         2-Edutanone (MEK)       ND ug/L       5.0       1       05/17/11       13:26       594-20-7         2-Hexanone <td>1,2-Dibromoethane (EDB)</td> <td>ND ug</td> <td>, a/L</td> <td></td> <td>1.0</td> <td>1</td> <td></td> <td>05/17/11 13:26</td> <td>106-93-4</td> <td></td>	1,2-Dibromoethane (EDB)	ND ug	, a/L		1.0	1		05/17/11 13:26	106-93-4	
1,2-Dichloroethane       ND ug/L       1.0       1       05/17/11 13:26       107-06-2         1,2-Dichloroethene (Total)       ND ug/L       2.0       1       05/17/11 13:26       540-59-0         1,2-Dichloropropane       ND ug/L       1.0       1       05/17/11 13:26       548-7-5         1,3-Dichloropropane       ND ug/L       1.0       1       05/17/11 13:26       108-67-8         1,3-Dichloropropane       ND ug/L       1.0       1       05/17/11 13:26       142-28-9         1,3-Dichloropropane       ND ug/L       1.0       1       05/17/11 13:26       142-28-9         1,4-Dichloropropane       ND ug/L       1.0       1       05/17/11 13:26       142-28-9         1,4-Dichloropropane       ND ug/L       1.0       1       05/17/11 13:26       142-28-9         2,2-Dichloropropane       ND ug/L       1.0       1       05/17/11 13:26       549-76         2-Butanone (MEK)       ND ug/L       5.0       1       05/17/11 13:26       54-9-8         2-Hexanone       ND ug/L       1.0       1       05/17/11 13:26       54-9-8         2-Hexanone (MIBK)       ND ug/L       1.0       1       05/17/11 13:26       168-43-4         4-Methyl-2-pentanone (MIBK	1,2-Dichlorobenzene	ND ug	, į/L		1.0	1		05/17/11 13:26	95-50-1	
1,2-Dichloroethene (Total)       ND ug/L       2.0       1       05/17/11 13:26       540-59-0         1,2-Dichloropropane       ND ug/L       1.0       1       05/17/11 13:26       78-87-5         1,3,5-Trimethylbenzene       ND ug/L       1.0       1       05/17/11 13:26       78-87-5         1,3-Dichlorobenzene       ND ug/L       1.0       1       05/17/11 13:26       541-73-1         1,3-Dichlorobenzene       ND ug/L       1.0       1       05/17/11 13:26       542-28-9         1,4-Dichlorobenzene       ND ug/L       1.0       1       05/17/11 13:26       594-20-7         2-Butanone (MEK)       ND ug/L       5.0       1       05/17/11 13:26       594-30-7         2-Hexanone       ND ug/L       5.0       1       05/17/11 13:26       594-30-7         2-Hexanone (MEK)       ND ug/L       5.0       1       05/17/11 13:26       594-30-7         2-Hexanone (MIBK)       ND ug/L       1.0       1       05/17/11 13:26       594-30-7         2-Hexanone (MIBK)       ND ug/L       5.0       1       05/17/11 13:26       106-43-4         4-Methyl-2-pentanone (MIBK)       ND ug/L       1.0       1       05/17/11 13:26       10-1         Acetone	1,2-Dichloroethane	ND ug	, į/L		1.0	1		05/17/11 13:26	107-06-2	
1,2-Dichloropropane       ND ug/L       1.0       1       05/17/11       13:26       78-87-5         1,3-5-Trimethylbenzene       ND ug/L       1.0       1       05/17/11       13:26       108-67-8         1,3-Dichlorobenzene       ND ug/L       1.0       1       05/17/11       13:26       541-73-1         1,3-Dichlorobenzene       ND ug/L       1.0       1       05/17/11       13:26       142-28-9         1,4-Dichlorobenzene       ND ug/L       1.0       1       05/17/11       13:26       142-28-9         1,4-Dichlorobenzene       ND ug/L       1.0       1       05/17/11       13:26       54-20-7         2-Loicolouene       ND ug/L       5.0       1       05/17/11       13:26       594-20-7         2-Chlorotoluene       ND ug/L       5.0       1       05/17/11       13:26       594-38         2-Hexanone       ND ug/L       5.0       1       05/17/11       13:26       594-78-6         4-Chlorotoluene       ND ug/L       1.0       1       05/17/11       13:26       591-78-6         4-Chlorotoluene       ND ug/L       1.0       1       05/17/11       13:26       166-43-4         4-Methyl-2-pentanone (MIBK) <t< td=""><td>1,2-Dichloroethene (Total)</td><td>ND ug</td><td>, a/L</td><td></td><td>2.0</td><td>1</td><td></td><td>05/17/11 13:26</td><td>540-59-0</td><td></td></t<>	1,2-Dichloroethene (Total)	ND ug	, a/L		2.0	1		05/17/11 13:26	540-59-0	
1,3,5-Trimethylbenzene       ND ug/L       1.0       1       05/17/11 13:26       108-67-8         1,3-Dichlorobenzene       ND ug/L       1.0       1       05/17/11 13:26       541-73-1         1,3-Dichlorobenzene       ND ug/L       1.0       1       05/17/11 13:26       541-73-1         1,4-Dichlorobenzene       ND ug/L       1.0       1       05/17/11 13:26       541-73-1         2,2-Dichlorobenzene       ND ug/L       1.0       1       05/17/11 13:26       594-20-7         2-Butanone (MEK)       ND ug/L       5.0       1       05/17/11 13:26       594-20-7         2-Butanone (MEK)       ND ug/L       5.0       1       05/17/11 13:26       594-30-7         2-Hexanone       ND ug/L       1.0       1       05/17/11 13:26       594-80-7         2-Hexanone       ND ug/L       1.0       1       05/17/11 13:26       594-80-7         2-Hexanone       ND ug/L       1.0       1       05/17/11 13:26       594-80-7         2-Hexanone       ND ug/L       1.0       1       05/17/11 13:26       106-43-4         4-Methyl-2-pentanone (MIBK)       ND ug/L       1.0       1       05/17/11 13:26       108-86-1         Bromochloromethane       ND ug/L<	1,2-Dichloropropane	ND ug	, į/L		1.0	1		05/17/11 13:26	78-87-5	
1,3-Dichlorobenzene       ND ug/L       1.0       1       05/17/11       13:26       541-73-1         1,3-Dichloropropane       ND ug/L       1.0       1       05/17/11       13:26       142-28-9         1,4-Dichlorobenzene       ND ug/L       1.0       1       05/17/11       13:26       162-46-7         2,2-Dichloropropane       ND ug/L       1.0       1       05/17/11       13:26       78-93-3         2-Ebitanone (MEK)       ND ug/L       5.0       1       05/17/11       13:26       99-49-8         2-Chlorotoluene       ND ug/L       5.0       1       05/17/11       13:26       95-49-8         2-Hexanone       ND ug/L       5.0       1       05/17/11       13:26       99-78-6         4-Chlorotoluene       ND ug/L       5.0       1       05/17/11       13:26       166-43-4         4-Methyl-2-pentanone (MIBK)       ND ug/L       5.0       1       05/17/11       13:26       67-64-1         Benzene       ND ug/L       1.0       1       05/17/11       13:26       75-27-4         Bromochloromethane       ND ug/L       1.0       1       05/17/11       13:26       75-27-4         Bromochloromethane       ND ug/L <td>1,3,5-Trimethylbenzene</td> <td>ND ug</td> <td>, į/L</td> <td></td> <td>1.0</td> <td>1</td> <td></td> <td>05/17/11 13:26</td> <td>108-67-8</td> <td></td>	1,3,5-Trimethylbenzene	ND ug	, į/L		1.0	1		05/17/11 13:26	108-67-8	
1,3-DichloropropaneND ug/L1.0105/17/11 13:26142-28-91,4-DichlorobenzeneND ug/L1.0105/17/11 13:26106-46-72,2-DichloropropaneND ug/L1.0105/17/11 13:26594-20-72-Butanone (MEK)ND ug/L5.0105/17/11 13:26594-30-72-Butanone (MEK)ND ug/L5.0105/17/11 13:26594-382-ChlorotolueneND ug/L5.0105/17/11 13:26591-78-64-ChlorotolueneND ug/L5.0105/17/11 13:26106-43-44-Methyl-2-pentanone (MIBK)ND ug/L5.0105/17/11 13:26106-43-44-Methyl-2-pentanone (MIBK)ND ug/L5.0105/17/11 13:26106-43-4AcetoneND ug/L5.0105/17/11 13:26106-43-4BenzeneND ug/L1.0105/17/11 13:26106-43-4BromobenzeneND ug/L1.0105/17/11 13:2671-43-2BromobenzeneND ug/L1.0105/17/11 13:2674-97-5BromobenzeneND ug/L1.0105/17/11 13:2675-27-4BromodichloromethaneND ug/L1.0105/17/11 13:2675-25-2BromodichloromethaneND ug/L1.0105/17/11 13:2675-25-2BromodichloromethaneND ug/L1.0105/17/11 13:2675-25-2Carbon disulfideND ug/L1.0105/17/11 13:2675-25-2Chlorobenzen	1,3-Dichlorobenzene	ND ug	, į/L		1.0	1		05/17/11 13:26	541-73-1	
1.4-Dichlorobenzene       ND ug/L       1.0       1       05/17/11 13:26       106-46-7         2,2-Dichloropropane       ND ug/L       1.0       1       05/17/11 13:26       594-20-7         2-Butanone (MEK)       ND ug/L       5.0       1       05/17/11 13:26       78-93-3         2-Chlorotoluene       ND ug/L       1.0       1       05/17/11 13:26       59-49-8         2-Hexanone       ND ug/L       5.0       1       05/17/11 13:26       59-49-8         2-Hexanone       ND ug/L       5.0       1       05/17/11 13:26       59-49-8         2-Hexanone       ND ug/L       5.0       1       05/17/11 13:26       106-43-4         4-Chlorotoluene       ND ug/L       5.0       1       05/17/11 13:26       108-43-4         4-Methyl-2-pentanone (MIBK)       ND ug/L       5.0       1       05/17/11 13:26       108-43-4         Acetone       ND ug/L       1.0       1       05/17/11 13:26       108-43-4         Bromobenzene       ND ug/L       1.0       1       05/17/11 13:26       14-97-5         Bromochloromethane       ND ug/L       1.0       1       05/17/11 13:26       75-27-4         Bromoform       ND ug/L       1.0	1,3-Dichloropropane	ND ug	, į/L		1.0	1		05/17/11 13:26	142-28-9	
Q2-DichloropropaneND ug/L1.0105/17/11 13:26594-20-72-Butanone (MEK)ND ug/L5.0105/17/11 13:2678-93-32-ChlorotolueneND ug/L1.0105/17/11 13:2695-49-82-HexanoneND ug/L5.0105/17/11 13:26591-78-64-ChlorotolueneND ug/L5.0105/17/11 13:26106-43-44-ChlorotolueneND ug/L5.0105/17/11 13:26106-43-44-Methyl-2-pentanone (MIBK)ND ug/L5.0105/17/11 13:26108-10-1AcetoneND ug/L5.0105/17/11 13:2667-64-1BenzeneND ug/L1.0105/17/11 13:2667-64-1BromobenzeneND ug/L1.0105/17/11 13:2674-97-5BromochloromethaneND ug/L1.0105/17/11 13:2675-27-4BromodichloromethaneND ug/L1.0105/17/11 13:2675-25-2BromomethaneND ug/L1.0105/17/11 13:2675-25-2BromomethaneND ug/L1.0105/17/11 13:2675-25-2Carbon disulfideND ug/L1.0105/17/11 13:2667-64-1Carbon tetrachlorideND ug/L1.0105/17/11 13:2667-65-23-5ChlorobenzeneND ug/L1.0105/17/11 13:2667-50-3ChlorobenzeneND ug/L1.0105/17/11 13:2667-66-3ChlorobenzeneND ug/L1.0	1,4-Dichlorobenzene	ND uc	, a/L		1.0	1		05/17/11 13:26	106-46-7	
2-Butanone (MEK)         ND ug/L         5.0         1         05/17/11 13:26         78-93-3           2-Chlorotoluene         ND ug/L         1.0         1         05/17/11 13:26         95-49-8           2-Hexanone         ND ug/L         5.0         1         05/17/11 13:26         591-78-6           4-Chlorotoluene         ND ug/L         1.0         1         05/17/11 13:26         106-43-4           4-Methyl-2-pentanone (MIBK)         ND ug/L         5.0         1         05/17/11 13:26         108-10-1           Acetone         ND ug/L         5.0         1         05/17/11 13:26         108-10-1           Benzene         ND ug/L         5.0         1         05/17/11 13:26         108-10-1           Bromobenzene         ND ug/L         1.0         1         05/17/11 13:26         108-10-1           Bromobenzene         ND ug/L         1.0         1         05/17/11 13:26         74-97-5           Bromodichloromethane         ND ug/L         1.0         1         05/17/11 13:26         74-97-5           Bromodichloromethane         ND ug/L         1.0         1         05/17/11 13:26         75-27-4           Bromodichloromethane         ND ug/L         1.0         1         05/1	2,2-Dichloropropane	ND uc	, a/L		1.0	1		05/17/11 13:26	594-20-7	
2-Chlorotoluene       ND ug/L       1.0       1       05/17/11       13:26       95-49-8         2-Hexanone       ND ug/L       5.0       1       05/17/11       13:26       591-78-6         4-Chlorotoluene       ND ug/L       1.0       1       05/17/11       13:26       106-43-4         4-Methyl-2-pentanone (MIBK)       ND ug/L       5.0       1       05/17/11       13:26       108-10-1         Acetone       ND ug/L       5.0       1       05/17/11       13:26       67-64-1         Benzene       ND ug/L       1.0       1       05/17/11       13:26       71-43-2         Bromobenzene       ND ug/L       1.0       1       05/17/11       13:26       74-97-5         Bromochloromethane       ND ug/L       1.0       1       05/17/11       13:26       75-27-4         Bromoform       ND ug/L       1.0       1       05/17/11       13:26       75-25-2         Bromomethane       ND ug/L       1.0       1       05/17/11       13:26       74-83-9         Carbon disulfide       ND ug/L       1.0       1       05/17/11       13:26       75-25-2         Carbon tetrachloride       ND ug/L       1.0       1 <td>2-Butanone (MEK)</td> <td>ND uc</td> <td>, a/L</td> <td></td> <td>5.0</td> <td>1</td> <td></td> <td>05/17/11 13:26</td> <td>78-93-3</td> <td></td>	2-Butanone (MEK)	ND uc	, a/L		5.0	1		05/17/11 13:26	78-93-3	
2-Hexanone         ND ug/L         5.0         1         05/17/11 13:26         591-78-6           4-Chlorotoluene         ND ug/L         1.0         1         05/17/11 13:26         106-43-4           4-Methyl-2-pentanone (MIBK)         ND ug/L         5.0         1         05/17/11 13:26         108-10-1           Acetone         ND ug/L         5.0         1         05/17/11 13:26         67-64-1           Benzene         ND ug/L         1.0         1         05/17/11 13:26         71-43-2           Bromobenzene         ND ug/L         1.0         1         05/17/11 13:26         108-86-1           Bromochloromethane         ND ug/L         1.0         1         05/17/11 13:26         74-97-5           Bromodichloromethane         ND ug/L         1.0         1         05/17/11 13:26         75-27-4           Bromoform         ND ug/L         1.0         1         05/17/11 13:26         75-25-2           Bromomethane         ND ug/L         1.0         1         05/17/11 13:26         75-25-2           Bromoform         ND ug/L         1.0         1         05/17/11 13:26         75-25-2           Bromomethane         ND ug/L         1.0         1         05/17/11 13:26         <	2-Chlorotoluene	ND uc	, a/L		1.0	1		05/17/11 13:26	95-49-8	
4-Chlorotoluene       ND ug/L       1.0       1       05/17/11 13:26       106-43-4         4-Methyl-2-pentanone (MIBK)       ND ug/L       5.0       1       05/17/11 13:26       108-10-1         Acetone       ND ug/L       5.0       1       05/17/11 13:26       67-64-1         Benzene       ND ug/L       1.0       1       05/17/11 13:26       71-43-2         Bromobenzene       ND ug/L       1.0       1       05/17/11 13:26       108-86-1         Bromochloromethane       ND ug/L       1.0       1       05/17/11 13:26       74-97-5         Bromodichloromethane       ND ug/L       1.0       1       05/17/11 13:26       75-27-4         Bromodichloromethane       ND ug/L       1.0       1       05/17/11 13:26       75-25-2         Bromodichloromethane       ND ug/L       1.0       1       05/17/11 13:26       75-25-2         Bromotofum       ND ug/L       1.0       1       05/17/11 13:26       75-55-2         Bromotofum       ND ug/L       1.0       1       05/17/11 13:26       75-50-0         Carbon disulfide       ND ug/L       1.0       1       05/17/11 13:26       56-23-5         Chlorobenzene       ND ug/L       1.0	2-Hexanone	ND uc	, a/L		5.0	1		05/17/11 13:26	591-78-6	
4-Methyl-2-pentanone (MIBK)       ND ug/L       5.0       1       05/17/11 13:26       108-10-1         Acetone       ND ug/L       5.0       1       05/17/11 13:26       67-64-1         Benzene       ND ug/L       1.0       1       05/17/11 13:26       71-43-2         Bromobenzene       ND ug/L       1.0       1       05/17/11 13:26       74-97-5         Bromochloromethane       ND ug/L       1.0       1       05/17/11 13:26       74-97-5         Bromoform       ND ug/L       1.0       1       05/17/11 13:26       75-27-4         Bromoform       ND ug/L       1.0       1       05/17/11 13:26       75-27-4         Bromoform       ND ug/L       1.0       1       05/17/11 13:26       75-27-4         Bromomethane       ND ug/L       1.0       1       05/17/11 13:26       75-27-4         Bromotifue       ND ug/L       1.0       1       05/17/11 13:26       75-25-2         Bromotifue       ND ug/L       1.0       1       05/17/11 13:26       75-25-2         Carbon disulfide       ND ug/L       1.0       1       05/17/11 13:26       75-15-0         Carbon tetrachloride       ND ug/L       1.0       1       05/17/11	4-Chlorotoluene	ND uc	, a/L		1.0	1		05/17/11 13:26	106-43-4	
Acetone       ND ug/L       5.0       1       05/17/11 13:26       67-64-1         Benzene       ND ug/L       1.0       1       05/17/11 13:26       71-43-2         Bromobenzene       ND ug/L       1.0       1       05/17/11 13:26       71-43-2         Bromochloromethane       ND ug/L       1.0       1       05/17/11 13:26       74-97-5         Bromodichloromethane       ND ug/L       1.0       1       05/17/11 13:26       75-27-4         Bromoform       ND ug/L       1.0       1       05/17/11 13:26       75-27-4         Bromodichloromethane       ND ug/L       1.0       1       05/17/11 13:26       75-27-4         Bromoform       ND ug/L       1.0       1       05/17/11 13:26       75-25-2         Bromomethane       ND ug/L       1.0       1       05/17/11 13:26       75-25-2         Bromotisulfide       ND ug/L       1.0       1       05/17/11 13:26       75-25-2         Carbon disulfide       ND ug/L       1.0       1       05/17/11 13:26       75-15-0         Carbon tetrachloride       ND ug/L       1.0       1       05/17/11 13:26       56-23-5         Chlorobenzene       ND ug/L       1.0       1 <td< td=""><td>4-Methyl-2-pentanone (MIBK)</td><td>ND uc</td><td>, a/L</td><td></td><td>5.0</td><td>1</td><td></td><td>05/17/11 13:26</td><td>108-10-1</td><td></td></td<>	4-Methyl-2-pentanone (MIBK)	ND uc	, a/L		5.0	1		05/17/11 13:26	108-10-1	
Benzene         ND ug/L         1.0         1         05/17/11 13:26         71-43-2           Bromobenzene         ND ug/L         1.0         1         05/17/11 13:26         108-86-1           Bromochloromethane         ND ug/L         1.0         1         05/17/11 13:26         74-97-5           Bromodichloromethane         ND ug/L         1.0         1         05/17/11 13:26         75-27-4           Bromoform         ND ug/L         1.0         1         05/17/11 13:26         75-25-2           Bromomethane         ND ug/L         1.0         1         05/17/11 13:26         75-15-0           Carbon disulfide         ND ug/L         1.0         1         05/17/11 13:26         75-15-0           Carbon tetrachloride         ND ug/L         1.0         1         05/17/11 13:26         108-90-7           Chlorobenzene         ND ug/L         1.0         1         05/17/11 13:26	Acetone	ND uc	, a/L		5.0	1		05/17/11 13:26	67-64-1	
Bromobenzene         ND ug/L         1.0         1         05/17/11         13:26         108-86-1           Bromochloromethane         ND ug/L         1.0         1         05/17/11         13:26         74-97-5           Bromodichloromethane         ND ug/L         1.0         1         05/17/11         13:26         74-97-5           Bromodichloromethane         ND ug/L         1.0         1         05/17/11         13:26         75-27-4           Bromoform         ND ug/L         1.0         1         05/17/11         13:26         75-25-2           Bromomethane         ND ug/L         1.0         1         05/17/11         13:26         74-83-9           Carbon disulfide         ND ug/L         1.0         1         05/17/11         13:26         75-15-0           Carbon tetrachloride         ND ug/L         1.0         1         05/17/11         13:26         56-23-5           Chlorobenzene         ND ug/L         1.0         1         05/17/11         13:26         108-90-7           Chloroethane         ND ug/L         1.0         1         05/17/11         13:26         75-00-3           Chloroform         ND ug/L         1.0         1         05/17/11	Benzene	ND uc	ı/L		1.0	1		05/17/11 13:26	71-43-2	
Bromochloromethane         ND ug/L         1.0         1         05/17/11 13:26         74-97-5           Bromodichloromethane         ND ug/L         1.0         1         05/17/11 13:26         75-27-4           Bromoform         ND ug/L         1.0         1         05/17/11 13:26         75-25-2           Bromomethane         ND ug/L         1.0         1         05/17/11 13:26         75-25-2           Bromomethane         ND ug/L         1.0         1         05/17/11 13:26         74-83-9           Carbon disulfide         ND ug/L         1.0         1         05/17/11 13:26         75-15-0           Carbon tetrachloride         ND ug/L         1.0         1         05/17/11 13:26         56-23-5           Chlorobenzene         ND ug/L         1.0         1         05/17/11 13:26         108-90-7           Chlorobethane         ND ug/L         1.0         1         05/17/11 13:26         75-00-3           Chloroform         ND ug/L         1.0         1         05/17/11 13:26         75-00-3	Bromobenzene	ND uc	ı/L		1.0	1		05/17/11 13:26	108-86-1	
Bromodichloromethane         ND ug/L         1.0         1         05/17/11 13:26         75-27-4           Bromoform         ND ug/L         1.0         1         05/17/11 13:26         75-25-2           Bromomethane         ND ug/L         1.0         1         05/17/11 13:26         75-25-2           Bromomethane         ND ug/L         1.0         1         05/17/11 13:26         74-83-9           Carbon disulfide         ND ug/L         1.0         1         05/17/11 13:26         75-15-0           Carbon tetrachloride         ND ug/L         1.0         1         05/17/11 13:26         56-23-5           Chlorobenzene         ND ug/L         1.0         1         05/17/11 13:26         108-90-7           Chloroethane         ND ug/L         1.0         1         05/17/11 13:26         75-00-3           Chloroform         ND ug/L         1.0         1         05/17/11 13:26         75-00-3	Bromochloromethane	ND uc	ı/L		1.0	1		05/17/11 13:26	74-97-5	
Bromoform       ND ug/L       1.0       1       05/17/11 13:26       75-25-2         Bromomethane       ND ug/L       1.0       1       05/17/11 13:26       74-83-9         Carbon disulfide       ND ug/L       1.0       1       05/17/11 13:26       75-25-2         Carbon disulfide       ND ug/L       1.0       1       05/17/11 13:26       75-15-0         Carbon tetrachloride       ND ug/L       1.0       1       05/17/11 13:26       56-23-5         Chlorobenzene       ND ug/L       1.0       1       05/17/11 13:26       108-90-7         Chlorobethane       ND ug/L       1.0       1       05/17/11 13:26       75-00-3         Chloroform       ND ug/L       1.0       1       05/17/11 13:26       75-00-3	Bromodichloromethane	ND uc	». — ⊅∕L		1.0	1		05/17/11 13:26	75-27-4	
Bromomethane       ND ug/L       1.0       1       05/17/11 13:26       74-83-9         Carbon disulfide       ND ug/L       1.0       1       05/17/11 13:26       75-15-0         Carbon tetrachloride       ND ug/L       1.0       1       05/17/11 13:26       56-23-5         Chlorobenzene       ND ug/L       1.0       1       05/17/11 13:26       108-90-7         Chlorobethane       ND ug/L       1.0       1       05/17/11 13:26       75-00-3         Chloroform       ND ug/L       1.0       1       05/17/11 13:26       67-66-3	Bromoform	ND uc	y/l		1.0	1		05/17/11 13:26	75-25-2	
Carbon disulfide       ND ug/L       1.0       1       05/17/11 13:26       75-15-0         Carbon tetrachloride       ND ug/L       1.0       1       05/17/11 13:26       56-23-5         Chlorobenzene       ND ug/L       1.0       1       05/17/11 13:26       56-23-5         Chlorobenzene       ND ug/L       1.0       1       05/17/11 13:26       75-00-3	Bromomethane	ND uc	y/l		1.0	1		05/17/11 13:26	74-83-9	
Carbon tetrachloride         ND ug/L         1.0         1         05/17/11 13:26         56-23-5           Chlorobenzene         ND ug/L         1.0         1         05/17/11 13:26         108-90-7           Chloroethane         ND ug/L         1.0         1         05/17/11 13:26         75-00-3           Chloroethane         ND ug/L         1.0         1         05/17/11 13:26         67-66-3	Carbon disulfide	ND uc	», = µ∕L		1.0	1		05/17/11 13:26	75-15-0	
Chlorobenzene         ND ug/L         1.0         1         05/17/11 13:26         108-90-7           Chloroethane         ND ug/L         1.0         1         05/17/11 13:26         75-00-3           Chloroethane         ND ug/L         1.0         1         05/17/11 13:26         67-60-3	Carbon tetrachloride	ND uc	». — ⊅∕L		1.0	1		05/17/11 13:26	56-23-5	
Chloroethane     ND ug/L     1.0     1     05/17/11 13:26     75-00-3       Chloroform     ND ug/L     1.0     1     05/17/11 13:26     67-66-3	Chlorobenzene	ND up	, _ x/L		1.0	1		05/17/11 13:26	108-90-7	
Chloroform $ND ug/l$ 10 1 05/17/11 13:26 67-66-3	Chloroethane	ND up	,, <u>-</u> x/L		1.0	1		05/17/11 13:26	75-00-3	
	Chloroform	ND up	,, <u> </u>		1.0	1		05/17/11 13:26	67-66-3	
Chloromethane ND ug/L 1.0 1 05/17/11 13:26 74-87-3	Chloromethane	ND up	" x/L		1.0	1		05/17/11 13:26	74-87-3	
Dibromochloromethane ND ug/L 1.0 1 05/17/11 13:26 124-48-1	Dibromochloromethane	ND uc	, g/L		1.0	1		05/17/11 13:26	124-48-1	

Date: 05/19/2011 05:13 PM

# **REPORT OF LABORATORY ANALYSIS**

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Project: Tarr Vancouver - 1821-00

Pace Project No.: 257638

Sample: MW-2	Lab ID: 257638004	Collected: 05/10/1	1 16:15	Received: 0	5/12/11 08:45 N	latrix: Water	
Parameters	Results Un	its Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EP	A 5030B/8260					
Dibromomethane	ND ug/L	1.0	1		05/17/11 13:26	74-95-3	
Dichlorodifluoromethane	ND ug/L	1.0	1		05/17/11 13:26	75-71-8	
Ethylbenzene	ND ug/L	1.0	1		05/17/11 13:26	100-41-4	
Hexachloro-1,3-butadiene	ND ug/L	1.0	1		05/17/11 13:26	87-68-3	
Isopropylbenzene (Cumene)	ND ug/L	1.0	1		05/17/11 13:26	98-82-8	
Methyl-tert-butyl ether	ND ug/L	1.0	1		05/17/11 13:26	1634-04-4	
Methylene chloride	ND ug/L	4.0	1		05/17/11 13:26	75-09-2	
Naphthalene	ND ug/L	1.0	1		05/17/11 13:26	91-20-3	
Styrene	ND ug/L	1.0	1		05/17/11 13:26	100-42-5	
Tetrachloroethene	ND ug/L	1.0	1		05/17/11 13:26	127-18-4	
Toluene	ND ug/L	1.0	1		05/17/11 13:26	108-88-3	
Trichloroethene	ND ug/L	1.0	1		05/17/11 13:26	79-01-6	
Trichlorofluoromethane	ND ug/L	1.0	1		05/17/11 13:26	75-69-4	
Vinyl chloride	ND ug/L	1.0	1		05/17/11 13:26	75-01-4	
Xylene (Total)	ND ug/L	3.0	1		05/17/11 13:26	1330-20-7	
cis-1,2-Dichloroethene	ND ug/L	1.0	1		05/17/11 13:26	156-59-2	
cis-1,3-Dichloropropene	ND ug/L	1.0	1		05/17/11 13:26	10061-01-5	
m&p-Xylene	ND ug/L	2.0	1		05/17/11 13:26	179601-23-1	
n-Butylbenzene	ND ug/L	1.0	1		05/17/11 13:26	104-51-8	
n-Propylbenzene	ND ug/L	1.0	1		05/17/11 13:26	103-65-1	
o-Xylene	ND ug/L	1.0	1		05/17/11 13:26	95-47-6	
p-Isopropyltoluene	ND ug/L	1.0	1		05/17/11 13:26	99-87-6	
sec-Butylbenzene	ND ug/L	1.0	1		05/17/11 13:26	135-98-8	
tert-Butylbenzene	ND ug/L	1.0	1		05/17/11 13:26	98-06-6	
trans-1,2-Dichloroethene	ND ug/L	1.0	1		05/17/11 13:26	156-60-5	
trans-1,3-Dichloropropene	ND ug/L	1.0	1		05/17/11 13:26	10061-02-6	
4-Bromofluorobenzene (S)	101 %	80-120	1		05/17/11 13:26	460-00-4	
Dibromofluoromethane (S)	95 %	80-122	1		05/17/11 13:26	1868-53-7	
1,2-Dichloroethane-d4 (S)	94 %	80-124	1		05/17/11 13:26	17060-07-0	
Toluene-d8 (S)	98 %	80-123	1		05/17/11 13:26	2037-26-5	
NWTPH-Gx MSV	Analytical Method: NV	VTPH-Gx					
Gasoline Range Organics	ND ug/L	50.0	1		05/17/11 13:26		
4-Bromofluorobenzene (S)	101 %	50-150	1		05/17/11 13:26	460-00-4	

# **REPORT OF LABORATORY ANALYSIS**

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Project: Tarr Vancouver - 1821-00

Pace Project No.: 257638

QC Batch: OEXT/3703 QC Batch Method: EPA 3510

Associated Lab Samples:

Analysis Method:

Analysis Description:

NWTPH-Dx GCS 257638001, 257638002, 257638003, 257638004

Matrix: Water

NWTPH-Dx

METHOD BLANK: 69962

Associated Lab Samples: 257638001, 257638002, 257638003, 257638004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Diesel Range	mg/L	ND	0.080	05/16/11 20:32	
Motor Oil Range	mg/L	ND	0.40	05/16/11 20:32	
n-Octacosane (S)	%	98	50-150	05/16/11 20:32	
o-Terphenyl (S)	%	84	50-150	05/16/11 20:32	

### LABORATORY CONTROL SAMPLE: 69963

		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Diesel Range	mg/L	5	4.2	84	51-147	
Motor Oil Range	mg/L	5	4.9	98	20-160	
n-Octacosane (S)	%			108	50-150	
o-Terphenyl (S)	%			94	50-150	

# SAMPLE DUPLICATE: 69964

Parameter	Units	257638001 Result	Dup Result	RPD	Qualifiers
Diesel Range	mg/L	4.8	5.4	12	
Motor Oil Range	mg/L	0.44	0.49	9	
n-Octacosane (S)	%	102	99	3	
o-Terphenyl (S)	%	97	96	1	

### SAMPLE DUPLICATE: 69965

Parameter	Units	257644003 Result	Dup Result	RPD	Qualifiers
Diesel Range	mg/L	0.21	0.21	2	
Motor Oil Range	mg/L	ND	.12J		
n-Octacosane (S)	%	108	110	5	
o-Terphenyl (S)	%	98	103	8	

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# **REPORT OF LABORATORY ANALYSIS**

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Project: Tarr Vancouver - 1821-00

Pace Project No.: 257638

QC Batch: MSV/4419 Analysis Method: EPA 5030B/8260 QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge Associated Lab Samples: 257638001 METHOD BLANK: 70014 Matrix: Water Associated Lab Samples: 257638001 Blank Reporting Qualifiers Limit Parameter Units Result Analyzed ND 05/13/11 11:27 1,1,1,2-Tetrachloroethane ug/L 1.0 1,1,1-Trichloroethane ug/L ND 1.0 05/13/11 11 27 1,1,2,2-Tetrachloroethane ug/L ND 1.0 05/13/11 11:27 ND 1,1,2-Trichloroethane ug/L 1.0 05/13/11 11:27 1,1-Dichloroethane ug/L ND 1.0 05/13/11 11:27 1,1-Dichloroethene ug/L ND 1.0 05/13/11 11:27 1,1-Dichloropropene ug/L ND 1.0 05/13/11 11:27 ug/L ND 1.0 05/13/11 11:27 1,2,3-Trichlorobenzene 1,2,3-Trichloropropane ug/L ND 1.0 05/13/11 11:27 1.2.4-Trichlorobenzene ug/L ND 1.0 05/13/11 11:27 1,2,4-Trimethylbenzene ND 05/13/11 11:27 ug/L 1.0 ND 4.0 05/13/11 11:27 1,2-Dibromo-3-chloropropane ug/L ug/L ND 1,2-Dibromoethane (EDB) 1.0 05/13/11 11:27 1,2-Dichlorobenzene ND 1.0 05/13/11 11:27 ug/L ND 1,2-Dichloroethane ug/L 1.0 05/13/11 11:27 1,2-Dichloroethene (Total) ug/L ND 2.0 05/13/11 11:27 1,2-Dichloropropane ug/L ND 1.0 05/13/11 11:27 1,3,5-Trimethylbenzene ug/L ND 1.0 05/13/11 11:27 1.0 05/13/11 11:27 1,3-Dichlorobenzene ug/L ND 05/13/11 11:27 1,3-Dichloropropane ug/L ND 1.0 1,4-Dichlorobenzene ND 1.0 05/13/11 11:27 ug/L 2,2-Dichloropropane ND 1.0 05/13/11 11:27 ug/L ND 5.0 05/13/11 11:27 2-Butanone (MEK) ug/L 2-Chlorotoluene ND 1.0 05/13/11 11:27 ug/L ND 5.0 05/13/11 11:27 2-Hexanone ug/L 4-Chlorotoluene ug/L ND 1.0 05/13/11 11:27 4-Methyl-2-pentanone (MIBK) ug/L ND 5.0 05/13/11 11:27 Acetone ug/L ND 5.0 05/13/11 11:27 Benzene ND 05/13/11 11:27 ug/L 1.0 ND 05/13/11 11:27 Bromobenzene ug/L 1.0 Bromochloromethane ug/L ND 1.0 05/13/11 11:27 Bromodichloromethane ug/L ND 1.0 05/13/11 11:27 ug/L Bromoform ND 1.0 05/13/11 11:27 Bromomethane ug/L ND 10 05/13/11 11:27 Carbon disulfide ug/L ND 1.0 05/13/11 11:27 Carbon tetrachloride ug/L ND 1.0 05/13/11 11:27 Chlorobenzene ND ug/L 1.0 05/13/11 11:27 Chloroethane ug/L ND 1.0 05/13/11 11:27 Chloroform ug/L ND 1.0 05/13/11 11:27 Chloromethane ug/L ND 1.0 05/13/11 11:27 05/13/11 11:27 cis-1,2-Dichloroethene ug/L ND 1.0 cis-1,3-Dichloropropene ug/L ND 1.0 05/13/11 11:27

Dibromochloromethane Date: 05/19/2011 05:13 PM ug/L

## **REPORT OF LABORATORY ANALYSIS**

ND

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1.0

05/13/11 11:27





Matrix: Water

# Project: Tarr Vancouver - 1821-00

Pace Project No.: 257638

# METHOD BLANK: 70014

Associated Lab Samples: 257638001

		Blank	Reporting		
Parameter	Units	Result	Limit	Analyzed	Qualifiers
Dibromomethane	ug/L	ND	1.0	05/13/11 11:27	
Dichlorodifluoromethane	ug/L	ND	1.0	05/13/11 11:27	
Ethylbenzene	ug/L	ND	1.0	05/13/11 11:27	
Hexachloro-1,3-butadiene	ug/L	ND	1.0	05/13/11 11:27	
Isopropylbenzene (Cumene)	ug/L	ND	1.0	05/13/11 11:27	
m&p-Xylene	ug/L	ND	2.0	05/13/11 11:27	
Methyl-tert-butyl ether	ug/L	ND	1.0	05/13/11 11:27	
Methylene chloride	ug/L	ND	4.0	05/13/11 11:27	
n-Butylbenzene	ug/L	ND	1.0	05/13/11 11:27	
n-Propylbenzene	ug/L	ND	1.0	05/13/11 11:27	
Naphthalene	ug/L	ND	1.0	05/13/11 11:27	
o-Xylene	ug/L	ND	1.0	05/13/11 11:27	
p-Isopropyltoluene	ug/L	ND	1.0	05/13/11 11:27	
sec-Butylbenzene	ug/L	ND	1.0	05/13/11 11:27	
Styrene	ug/L	ND	1.0	05/13/11 11:27	
tert-Butylbenzene	ug/L	ND	1.0	05/13/11 11:27	
Tetrachloroethene	ug/L	ND	1.0	05/13/11 11:27	
Toluene	ug/L	ND	1.0	05/13/11 11:27	
trans-1,2-Dichloroethene	ug/L	ND	1.0	05/13/11 11:27	
trans-1,3-Dichloropropene	ug/L	ND	1.0	05/13/11 11:27	
Trichloroethene	ug/L	ND	1.0	05/13/11 11:27	
Trichlorofluoromethane	ug/L	ND	1.0	05/13/11 11:27	
Vinyl chloride	ug/L	ND	1.0	05/13/11 11:27	
Xylene (Total)	ug/L	ND	3.0	05/13/11 11:27	
1,2-Dichloroethane-d4 (S)	%	93	80-124	05/13/11 11:27	
4-Bromofluorobenzene (S)	%	100	80-120	05/13/11 11:27	
Dibromofluoromethane (S)	%	95	80-122	05/13/11 11:27	
Toluene-d8 (S)	%	99	80-123	05/13/11 11:27	

# LABORATORY CONTROL SAMPLE: 70015

		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	20	19.4	97	68-131	
1,1,1-Trichloroethane	ug/L	20	18.3	92	74-137	
1,1,2,2-Tetrachloroethane	ug/L	20	20.0	100	72-126	
1,1,2-Trichloroethane	ug/L	20	18.6	93	76-120	
1,1-Dichloroethane	ug/L	20	19.0	95	76-131	
1,1-Dichloroethene	ug/L	20	19.9	99	68-150	
1,1-Dichloropropene	ug/L	20	18.6	93	74-138	
1,2,3-Trichlorobenzene	ug/L	20	18.2	91	60-136	
1,2,3-Trichloropropane	ug/L	20	18.9	95	62-135	
1,2,4-Trichlorobenzene	ug/L	20	18.7	94	62-136	
1,2,4-Trimethylbenzene	ug/L	20	19.7	99	66-132	
1,2-Dibromo-3-chloropropane	ug/L	20	18.0	90	60-123	
1,2-Dibromoethane (EDB)	ug/L	20	18.5	93	73-124	

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# **REPORT OF LABORATORY ANALYSIS**

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### Project: Tarr Vancouver - 1821-00

Pace Project No.: 257638

# LABORATORY CONTROL SAMPLE: 70015

		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
1,2-Dichlorobenzene	ug/L	20	19.0	95	75-122	
1,2-Dichloroethane	ug/L	20	18.0	90	78-125	
1,2-Dichloroethene (Total)	ug/L	40	38.9	97	77-136	
1,2-Dichloropropane	ug/L	20	18.3	91	76-121	
1,3,5-Trimethylbenzene	ug/L	20	19.1	95	69-130	
1,3-Dichlorobenzene	ug/L	20	19.1	96	75-122	
1,3-Dichloropropane	ug/L	20	17.9	90	77-120	
1,4-Dichlorobenzene	ug/L	20	18.9	95	78-120	
2,2-Dichloropropane	ug/L	20	19.3	97	46-168	
2-Butanone (MEK)	ug/L	40	42.5	106	55-146	
2-Chlorotoluene	ug/L	20	18.7	93	67-129	
2-Hexanone	ug/L	40	42.3	106	58-136	
4-Chlorotoluene	ug/L	20	19.2	96	75-126	
4-Methyl-2-pentanone (MIBK)	ug/L	40	35.6	89	62-137	
Acetone	ug/L	40	56.7	142	30-180	
Benzene	ug/L	20	18.3	91	76-127	
Bromobenzene	ug/L	20	19.0	95	74-120	
Bromochloromethane	ug/L	20	18.8	94	73-132	
Bromodichloromethane	ug/L	20	19.0	95	74-126	
Bromoform	ug/L	20	18.1	90	64-129	
Bromomethane	ug/L	20	18.3	91	40-164	
Carbon disulfide	ug/L	20	18.0	90	32-158	
Carbon tetrachloride	ug/L	20	19.9	100	68-142	
Chlorobenzene	ug/L	20	18.7	94	78-121	
Chloroethane	ug/L	20	15.5	78	58-151	
Chloroform	ug/L	20	18.7	94	80-125	
Chloromethane	ug/L	20	17.5	88	50-152	
cis-1,2-Dichloroethene	ug/L	20	19.7	98	80-135	
cis-1,3-Dichloropropene	ug/L	20	19.4	97	65-134	
Dibromochloromethane	ug/L	20	19.1	96	71-126	
Dibromomethane	ug/L	20	18.5	93	78-126	
Dichlorodifluoromethane	ug/L	20	15.3	77	18-180	
Ethylbenzene	ug/L	20	18.9	94	72-125	
Hexachloro-1,3-butadiene	ug/L	20	17.8	89	60-138	
Isopropylbenzene (Cumene)	ug/L	20	18.6	93	69-135	
m&p-Xylene	ug/L	40	38.1	95	73-126	
Methyl-tert-butyl ether	ug/L	20	18.8	94	58-145	
Methylene chloride	ug/L	20	14.5	73	65-144	
n-Butylbenzene	ug/L	20	18.6	93	66-132	
n-Propylbenzene	ug/L	20	19.0	95	69-131	
Naphthalene	ug/L	20	19.1	96	51-142	
o-Xylene	ug/L	20	19.0	95	73-123	
p-Isopropyltoluene	ug/L	20	19.1	96	67-133	
sec-Butylbenzene	ug/L	20	19.5	98	65-136	
Styrene	ug/L	20	18.7	94	72-128	
tert-Butylbenzene	ug/L	20	17.7	88	61-133	
Tetrachloroethene	ug/L	20	11.8	59	40-164	
Toluene	ug/L	20	18.5	92	69-125	

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# **REPORT OF LABORATORY ANALYSIS**

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### Project: Tarr Vancouver - 1821-00

### Pace Project No.: 257638

# LABORATORY CONTROL SAMPLE: 70015

		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
trans-1,2-Dichloroethene	ug/L	20	19.3	96	73-139	
trans-1,3-Dichloropropene	ug/L	20	16.5	82	56-122	
Trichloroethene	ug/L	20	18.1	90	74-127	
Trichlorofluoromethane	ug/L	20	18.3	92	64-154	
Vinyl chloride	ug/L	20	16.3	81	57-147	
Xylene (Total)	ug/L	60	57.1	95	74-124	
1,2-Dichloroethane-d4 (S)	%			92	80-124	
4-Bromofluorobenzene (S)	%			98	80-120	
Dibromofluoromethane (S)	%			97	80-122	
Toluene-d8 (S)	%			99	80-123	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 70016 70017											
Parameter	Units	257594004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
1,1,1,2-Tetrachloroethane	ug/L	ND	20	20	20.3	20.4	102	102	73-126	.2	
1,1,1-Trichloroethane	ug/L	ND	20	20	20.9	21.0	104	105	69-135	.5	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	20	20.3	21.3	102	107	69-123	5	
1,1,2-Trichloroethane	ug/L	ND	20	20	18.5	19.6	93	98	76-114	6	
1,1-Dichloroethane	ug/L	ND	20	20	22.0	22.1	110	110	74-124	.4	
1,1-Dichloroethene	ug/L	ND	20	20	23.3	23.3	117	117	69-139	.08	
1,1-Dichloropropene	ug/L	ND	20	20	22.3	22.6	112	113	77-134	1	
1,2,3-Trichlorobenzene	ug/L	ND	20	20	17.9	18.8	90	94	63-136	5	
1,2,3-Trichloropropane	ug/L	ND	20	20	17.2	17.3	86	87	66-118	.7	
1,2,4-Trichlorobenzene	ug/L	ND	20	20	19.6	20.2	98	101	68-129	3	
1,2,4-Trimethylbenzene	ug/L	2.7	20	20	22.5	22.2	99	98	72-126	1	
1,2-Dibromo-3-chloropropane	ug/L	ND	20	20	15.2	17.0	76	85	64-124	11	
1,2-Dibromoethane (EDB)	ug/L	ND	20	20	17.0	18.2	85	91	78-117	6	
1,2-Dichlorobenzene	ug/L	1.6	20	20	20.9	21.5	97	100	74-118	3	
1,2-Dichloroethane	ug/L	ND	20	20	18.6	18.9	93	95	73-127	2	
1,2-Dichloroethene (Total)	ug/L	ND	40	40	44.0	43.9	110	110	60-140	.1	
1,2-Dichloropropane	ug/L	ND	20	20	21.5	21.8	108	109	72-126	1	
1,3,5-Trimethylbenzene	ug/L	ND	20	20	22.2	21.5	107	103	68-129	3	
1,3-Dichlorobenzene	ug/L	ND	20	20	20.9	20.8	104	104	73-119	.4	
1,3-Dichloropropane	ug/L	ND	20	20	17.1	18.0	85	90	74-119	6	
1,4-Dichlorobenzene	ug/L	ND	20	20	20.2	20.2	101	101	73-115	.08	
2,2-Dichloropropane	ug/L	ND	20	20	23.3	23.4	117	117	46-157	.3	
2-Butanone (MEK)	ug/L	ND	40	40	28.1	32.6	70	82	65-138	15	
2-Chlorotoluene	ug/L	ND	20	20	20.5	20.6	103	103	68-122	.5	
2-Hexanone	ug/L	ND	40	40	29.2	33.7	73	84	60-135	14	
4-Chlorotoluene	ug/L	ND	20	20	21.6	21.0	108	105	70-122	3	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	40	40	30.5	33.9	76	85	70-135	11	
Acetone	ug/L	ND	40	40	27.4	34.5	69	86	58-146	23	
Benzene	ug/L	17.8	20	20	37.8	39.0	100	106	75-124	3	
Bromobenzene	ug/L	ND	20	20	19.7	20.0	98	100	74-116	2	
Bromochloromethane	ug/L	ND	20	20	18.3	19.0	92	95	75-128	3	
Bromodichloromethane	ug/L	ND	20	20	21.1	21.3	106	107	77-126	.9	

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Project: Tarr Vancouver - 1821-00

Pace Project No.: 257638

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 70016 70017											
Parameter	Units	257594004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Bromoform	ug/L	ND	20	20	16.2	17.3	81	87	61-131	7	
Bromomethane	ug/L	ND	20	20	17.9	19.0	90	95	58-139	6	
Carbon disulfide	ug/L	ND	20	20	21.5	21.3	108	106	39-122	1	
Carbon tetrachloride	ug/L	ND	20	20	23.2	22.9	116	114	67-136	1	
Chlorobenzene	ug/L	ND	20	20	20.6	20.6	103	103	78-115	.2	
Chloroethane	ug/L	ND	20	20	14.7	16.3	74	82	58-137	10	
Chloroform	ug/L	ND	20	20	25.0	24.9	125	124	75-124	.2 M	1
Chloromethane	ug/L	ND	20	20	13.0	14.4	65	72	50-129	10	
cis-1,2-Dichloroethene	ug/L	ND	20	20	21.7	21.8	109	109	78-126	.05	
cis-1,3-Dichloropropene	ug/L	ND	20	20	20.2	20.6	101	103	78-159	2	
Dibromochloromethane	ug/L	ND	20	20	18.3	19.1	92	95	81-125	4	
Dibromomethane	ug/L	ND	20	20	17.5	18.8	87	94	75-124	8	
Dichlorodifluoromethane	ug/L	ND	20	20	9.4	10.6	47	53	30-140	12	
Ethylbenzene	ug/L	1.8	20	20	22.1	21.9	102	101	76-124	1	
Hexachloro-1,3-butadiene	ug/L	ND	20	20	20.5	20.0	103	100	55-132	3	
Isopropylbenzene (Cumene)	ug/L	1.0	20	20	22.1	21.9	105	104	73-127	.9	
m&p-Xylene	ug/L	7.6	40	40	46.5	47.0	97	98	75-124	1	
Methyl-tert-butyl ether	ug/L	2.5	20	20	19.4	20.8	84	91	72-130	7	
Methylene chloride	ug/L	ND	20	20	13.1	12.9	65	64	69-124	2 M	1
n-Butylbenzene	ug/L	ND	20	20	22.7	22.2	114	111	65-131	2	
n-Propylbenzene	ug/L	ND	20	20	22.3	21.9	109	106	69-129	2	
Naphthalene	ug/L	ND	20	20	17.6	19.3	85	93	69-135	9	
o-Xylene	ug/L	3.3	20	20	23.4	23.7	101	102	76-121	1	
p-Isopropyltoluene	ug/L	ND	20	20	22.5	22.0	113	110	69-133	2	
sec-Butylbenzene	ug/L	3.7	20	20	26.2	25.5	112	109	67-132	3	
Styrene	ug/L	ND	20	20	20.3	20.5	101	102	76-121	1	
tert-Butylbenzene	ug/L	ND	20	20	21.1	20.6	101	99	66-132	2	
Tetrachloroethene	ug/L	ND	20	20	13.5	13.6	67	68	70-127	1 M	1
Toluene	ug/L	6.6	20	20	27.0	27.4	102	104	75-124	1	
trans-1,2-Dichloroethene	ug/L	ND	20	20	22.3	22.2	111	111	72-129	.3	
trans-1,3-Dichloropropene	ug/L	ND	20	20	16.3	16.9	81	85	69-122	4	
Trichloroethene	ug/L	ND	20	20	20.8	20.8	104	104	78-124	.08	
Trichlorofluoromethane	ug/L	ND	20	20	18.4	20.1	92	100	60-147	8	
Vinyl chloride	ug/L	ND	20	20	15.0	16.4	75	82	56-136	8	
Xylene (Total)	ug/L	10.9	60	60	69.9	70.7	98	100	76-123	1	
1,2-Dichloroethane-d4 (S)	%						89	92	80-124		
4-Bromofluorobenzene (S)	%						99	99	80-120		
Dibromofluoromethane (S)	%						97	98	80-122		
Toluene-d8 (S)	%						102	101	80-123		

## **REPORT OF LABORATORY ANALYSIS**

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Project: Tarr Vancouver - 1821-00

Pace Project No.: 257638

METHOD BLANK: 70391

QC Batch: MSV/4442 QC Batch Method: EPA 5030B/8260

Associated Lab Samples: 257638003, 257638004 Analysis Description:

Matrix: Water

Analysis Method:

EPA 5030B/8260

8260 MSV Water 10 mL Purge

Associated Lab Samples: 257638003, 257638004

• • • •	,	Blank	Reporting		
Parameter	Units	Result	Limit	Analyzed	Qualifiers
1.1.1.2-Tetrachloroethane	ug/l		1.0	05/17/11 12:00	
1.1.1-Trichloroethane	ug/L	ND	1.0	05/17/11 12:00	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	05/17/11 12:00	
1.1.2-Trichloroethane	ug/L	ND	1.0	05/17/11 12:00	
1-Dichloroethane	ug/L	ND	1.0	05/17/11 12:00	
1-Dichloroethene	ug/L	ND	1.0	05/17/11 12:00	
1-Dichloropropene	ug/L	ND	1.0	05/17/11 12:00	
2.3-Trichlorobenzene	ug/L	ND	1.0	05/17/11 12:00	
2.3-Trichloropropane	ug/L	ND	1.0	05/17/11 12:00	
	ug/L	ND	1.0	05/17/11 12:00	
4-Trimethylbenzene	ug/L		1.0	05/17/11 12:00	
-Dibromo-3-chloropropane	ug/L	ND	4.0	05/17/11 12:00	
P-Dibromoethane (EDB)	ug/L			05/17/11 12:00	
P-Dichlorobenzene	ug/L		1.0	05/17/11 12:00	
	ug/L		1.0	05/17/11 12:00	
Polichloroethene (Total)	ug/L		2.0	05/17/11 12:00	
-Dichloropropape	ug/L		2.0	05/17/11 12:00	
5-Trimethylbenzene	ug/L		1.0	05/17/11 12:00	
Dichlorobenzene	ug/L		1.0	05/17/11 12:00	
Dichloropropapa	ug/L		1.0	05/17/11 12:00	
	ug/L		1.0	05/17/11 12:00	
Dichloropropapa	ug/L		1.0	05/17/11 12:00	
	ug/L		5.0	05/17/11 12:00	
	ug/L		5.0	05/17/11 12:00	
	ug/L		1.0	05/17/11 12:00	
	ug/L		5.0	05/17/11 12:00	
othyl 2 poptopopo (MIRK)	ug/L		1.0	05/17/11 12:00	
topo	ug/L		5.0	05/17/11 12:00	
	ug/L		5.0 1 0	05/17/11 12.00	
	ug/L		1.0	05/17/11 12:00	
modelizerie	ug/L		1.0	05/17/11 12:00	
	ug/L		1.0	05/17/11 12:00	
	ug/L		1.0	05/17/11 12.00	
monorm	ug/L		1.0	05/17/11 12.00	
	ug/L	ND	1.0	05/17/11 12:00	
	ug/L	ND	1.0	05/17/11 12:00	
	ug/L	ND	1.0	05/17/11 12:00	
	ug/L		1.0	05/17/11 12:00	
	ug/L	ND	1.0	05/17/11 12:00	
orororm	ug/L	ND	1.0	05/17/11 12:00	
	ug/L	ND	1.0	05/17/11 12:00	
	ug/L	ND	1.0	05/17/11 12:00	
	ug/L	ND	1.0	05/17/11 12:00	
romochloromethane	ua/L	ND	1.0	05/17/11 12:00	

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## **REPORT OF LABORATORY ANALYSIS**

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Matrix: Water

Project: Tarr Vancouver - 1821-00

## Pace Project No.: 257638

Associated Lab Samples: 257638003, 257638004

		Blank	Reporting		
Parameter	Units	Result	Limit	Analyzed	Qualifiers
Dibromomethane	ug/L	 ND	1.0	05/17/11 12:00	
Dichlorodifluoromethane	ug/L	ND	1.0	05/17/11 12:00	
Ethylbenzene	ug/L	ND	1.0	05/17/11 12:00	
Hexachloro-1,3-butadiene	ug/L	ND	1.0	05/17/11 12:00	
Isopropylbenzene (Cumene)	ug/L	ND	1.0	05/17/11 12:00	
m&p-Xylene	ug/L	ND	2.0	05/17/11 12:00	
Methyl-tert-butyl ether	ug/L	ND	1.0	05/17/11 12:00	
Methylene chloride	ug/L	ND	4.0	05/17/11 12:00	
n-Butylbenzene	ug/L	ND	1.0	05/17/11 12:00	
n-Propylbenzene	ug/L	ND	1.0	05/17/11 12:00	
Naphthalene	ug/L	ND	1.0	05/17/11 12:00	
o-Xylene	ug/L	ND	1.0	05/17/11 12:00	
p-Isopropyltoluene	ug/L	ND	1.0	05/17/11 12:00	
sec-Butylbenzene	ug/L	ND	1.0	05/17/11 12:00	
Styrene	ug/L	ND	1.0	05/17/11 12:00	
tert-Butylbenzene	ug/L	ND	1.0	05/17/11 12:00	
Tetrachloroethene	ug/L	ND	1.0	05/17/11 12:00	
Toluene	ug/L	ND	1.0	05/17/11 12:00	
trans-1,2-Dichloroethene	ug/L	ND	1.0	05/17/11 12:00	
trans-1,3-Dichloropropene	ug/L	ND	1.0	05/17/11 12:00	
Trichloroethene	ug/L	ND	1.0	05/17/11 12:00	
Trichlorofluoromethane	ug/L	ND	1.0	05/17/11 12:00	
Vinyl chloride	ug/L	ND	1.0	05/17/11 12:00	
Xylene (Total)	ug/L	ND	3.0	05/17/11 12:00	
1,2-Dichloroethane-d4 (S)	%	95	80-124	05/17/11 12:00	
4-Bromofluorobenzene (S)	%	101	80-120	05/17/11 12:00	
Dibromofluoromethane (S)	%	97	80-122	05/17/11 12:00	
Toluene-d8 (S)	%	99	80-123	05/17/11 12:00	

## LABORATORY CONTROL SAMPLE: 70392

		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	20	19.1	96	68-131	
1,1,1-Trichloroethane	ug/L	20	18.5	93	74-137	
1,1,2,2-Tetrachloroethane	ug/L	20	19.5	97	72-126	
1,1,2-Trichloroethane	ug/L	20	18.1	90	76-120	
1,1-Dichloroethane	ug/L	20	19.2	96	76-131	
1,1-Dichloroethene	ug/L	20	20.0	100	68-150	
1,1-Dichloropropene	ug/L	20	19.2	96	74-138	
1,2,3-Trichlorobenzene	ug/L	20	17.6	88	60-136	
1,2,3-Trichloropropane	ug/L	20	17.8	89	62-135	
1,2,4-Trichlorobenzene	ug/L	20	18.5	93	62-136	
1,2,4-Trimethylbenzene	ug/L	20	19.5	97	66-132	
1,2-Dibromo-3-chloropropane	ug/L	20	16.9	85	60-123	
1,2-Dibromoethane (EDB)	ug/L	20	18.0	90	73-124	

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# **REPORT OF LABORATORY ANALYSIS**

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## Project: Tarr Vancouver - 1821-00

Pace Project No.: 257638

## LABORATORY CONTROL SAMPLE: 70392

		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
1.2-Dichlorobenzene	ua/L		18.8	94	75-122	
1.2-Dichloroethane	ug/L	20	17.7	88	78-125	
1.2-Dichloroethene (Total)	ug/l	40	39.8	99	77-136	
1.2-Dichloropropane	ug/l	20	18.2	91	76-121	
1.3.5-Trimethylbenzene	ug/L	20	19.2	96	69-130	
1.3-Dichlorobenzene	ug/l	20	19.2	96	75-122	
1.3-Dichloropropane	ug/l	20	17.7	89	77-120	
1.4-Dichlorobenzene	ug/l	20	18.7	94	78-120	
2.2-Dichloropropane	ug/l	20	20.1	100	46-168	
2-Butanone (MEK)	ug/L	40	33.4	83	55-146	
2-Chlorotoluene	ug/L	20	18.8	94	67-129	
2-Hexanone	ug/l	40	33.5	84	58-136	
4-Chlorotoluene	ua/L	20	19.4	97	75-126	
4-Methyl-2-pentanone (MIBK)	ua/L	40	33.3	83	62-137	
Acetone	ua/L	40	36.2	90	30-180	
Benzene	ua/L	20	18.6	93	76-127	
Bromobenzene	ua/L	20	18.7	94	74-120	
Bromochloromethane	ug/l	20	18.4	92	73-132	
Bromodichloromethane	ug/L	20	18.1	94	74-126	
Bromoform	ug/L	20	17.1	86	64-129	
Bromomethane	ug/l	20	21.5	107	40-164	
Carbon disulfide	ug/l	20	18.0	90	32-158	
Carbon tetrachloride	ug/l	20	20.1	101	68-142	
Chlorobenzene	ug/L	20	18.8	94	78-121	
Chloroethane	ug/L	20	17.8	89	58-151	
Chloroform	ug/l	20	18.8	94	80-125	
Chloromethane	ug/l	20	25.6	128	50-152	
cis-1 2-Dichloroethene	ug/L	20	19.9	100	80-135	
cis-1 3-Dichloropropene	ug/L	20	19.6	98	65-134	
Dibromochloromethane	ug/L	20	18.4	92	71-126	
Dibromomethane	ug/l	20	18.0	90	78-126	
Dichlorodifluoromethane	ua/L	20	32.0	160	18-180	
Ethylbenzene	ua/L	20	19.0	.50	72-125	
Hexachloro-1.3-butadiene	ua/L	20	18.0	90	60-138	
Isopropylbenzene (Cumene)	ua/L	20	18.7	93	69-135	
m&p-Xvlene	ua/L	40	38.2	96	73-126	
Methyl-tert-butyl ether	ua/L	20	18.4	92	58-145	
Methylene chloride	ua/L	20	15.7	79	65-144	
n-Butylbenzene	ua/L	20	18.6	93	66-132	
n-Propylbenzene	ug/L	20	19.2	96	69-131	
Naphthalene	ua/L	20	18.2	91	51-142	
o-Xvlene	ua/L	20	19.1	96	73-123	
p-lsopropyltoluene	ua/L	20	19.4	97	67-133	
sec-Butvlbenzene	ua/L	20	19.5	97	65-136	
Styrene	ug/L	20	18.7	93	72-128	
tert-Butvlbenzene	ua/L	20	17.8	89	61-133	
Tetrachloroethene	ug/L	20	11.8	59	40-164	
Toluene	ua/L	20	18.4	92	69-125	

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# **REPORT OF LABORATORY ANALYSIS**

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#### Project: Tarr Vancouver - 1821-00

#### Pace Project No.: 257638

## LABORATORY CONTROL SAMPLE: 70392

		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
trans-1,2-Dichloroethene	ug/L	20	19.9	99	73-139	
trans-1,3-Dichloropropene	ug/L	20	16.3	81	56-122	
Trichloroethene	ug/L	20	18.2	91	74-127	
Trichlorofluoromethane	ug/L	20	21.2	106	64-154	
Vinyl chloride	ug/L	20	21.5	108	57-147	
Xylene (Total)	ug/L	60	57.4	96	74-124	
1,2-Dichloroethane-d4 (S)	%			92	80-124	
4-Bromofluorobenzene (S)	%			99	80-120	
Dibromofluoromethane (S)	%			98	80-122	
Toluene-d8 (S)	%			99	80-123	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 70393 70394											
Parameter	Units	257638003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
1.1.1.2-Tetrachloroethane	ua/L		20	20	19.8	19.0	99	95	73-126		
1.1.1-Trichloroethane	ug/L	ND	20	20	20.3	19.3	102	96	69-135	5	
1.1.2.2-Tetrachloroethane	ua/L	ND	20	20	18.0	19.6	90	98	69-123	9	
1.1.2-Trichloroethane	ua/L	ND	20	20	17.1	17.8	86	89	76-114	4	
1,1-Dichloroethane	ug/L	ND	20	20	20.2	19.6	101	98	74-124	3	
1,1-Dichloroethene	ug/L	ND	20	20	22.6	21.3	113	107	69-139	6	
1,1-Dichloropropene	ug/L	ND	20	20	21.4	19.9	107	99	77-134	7	
1,2,3-Trichlorobenzene	ug/L	ND	20	20	16.8	17.5	84	87	63-136	4	
1,2,3-Trichloropropane	ug/L	ND	20	20	16.5	17.6	82	88	66-118	7	
1,2,4-Trichlorobenzene	ug/L	ND	20	20	18.2	18.0	91	90	68-129	1	
1,2,4-Trimethylbenzene	ug/L	ND	20	20	20.8	19.5	103	96	72-126	6	
1,2-Dibromo-3-chloropropane	ug/L	ND	20	20	15.2	17.3	76	86	64-124	12	
1,2-Dibromoethane (EDB)	ug/L	ND	20	20	16.8	17.5	84	88	78-117	4	
1,2-Dichlorobenzene	ug/L	ND	20	20	18.8	18.6	94	93	74-118	1	
1,2-Dichloroethane	ug/L	ND	20	20	17.5	17.7	87	88	73-127	1	
1,2-Dichloroethene (Total)	ug/L	ND	40	40	42.2	40.2	106	101	60-140	5	
1,2-Dichloropropane	ug/L	ND	20	20	18.8	18.2	94	91	72-126	3	
1,3,5-Trimethylbenzene	ug/L	ND	20	20	20.5	19.2	102	95	68-129	7	
1,3-Dichlorobenzene	ug/L	ND	20	20	20.0	18.9	100	95	73-119	6	
1,3-Dichloropropane	ug/L	ND	20	20	16.8	17.1	84	86	74-119	2	
1,4-Dichlorobenzene	ug/L	ND	20	20	19.3	18.6	96	93	73-115	4	
2,2-Dichloropropane	ug/L	ND	20	20	21.7	20.5	109	102	46-157	6	
2-Butanone (MEK)	ug/L	ND	40	40	25.9	30.5	65	76	65-138	17	
2-Chlorotoluene	ug/L	ND	20	20	20.0	18.8	100	94	68-122	7	
2-Hexanone	ug/L	ND	40	40	26.7	32.1	67	80	60-135	18	
4-Chlorotoluene	ug/L	ND	20	20	20.4	19.2	102	96	70-122	6	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	40	40	29.2	34.0	73	85	70-135	15	
Acetone	ug/L	ND	40	40	21.7	26.8	54	67	58-146	21 N	11
Benzene	ug/L	ND	20	20	19.4	18.7	97	94	75-124	4	
Bromobenzene	ug/L	ND	20	20	19.1	18.3	95	91	74-116	4	
Bromochloromethane	ug/L	ND	20	20	18.4	18.3	92	92	75-128	.3	
Bromodichloromethane	ug/L	ND	20	20	19.3	18.8	97	94	77-126	3	

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# **REPORT OF LABORATORY ANALYSIS**

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Project: Tarr Vancouver - 1821-00

Pace Project No.: 257638

VATRIX SPIKE & MATRIX SPIKE DUPLICATE: 70393 70394											
Parameter	Units	257638003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Bromoform	ug/L	ND	20	20	16.4	17.4	82	87	61-131	6	
Bromomethane	ug/L	ND	20	20	21.9	21.0	109	105	58-139	4	
Carbon disulfide	ug/L	ND	20	20	20.6	19.4	103	97	39-122	6	
Carbon tetrachloride	ug/L	ND	20	20	22.5	21.4	112	107	67-136	5	
Chlorobenzene	ug/L	ND	20	20	19.3	18.5	97	92	78-115	4	
Chloroethane	ug/L	ND	20	20	19.5	17.7	98	89	58-137	10	
Chloroform	ug/L	ND	20	20	19.6	18.8	98	94	75-124	4	
Chloromethane	ug/L	ND	20	20	25.8	25.5	129	128	50-129	1	
cis-1,2-Dichloroethene	ug/L	ND	20	20	21.0	20.0	105	100	78-126	5	
cis-1,3-Dichloropropene	ug/L	ND	20	20	19.9	19.4	99	97	78-159	2	
Dibromochloromethane	ug/L	ND	20	20	18.2	18.4	91	92	81-125	1	
Dibromomethane	ug/L	ND	20	20	17.4	17.9	87	90	75-124	3	
Dichlorodifluoromethane	ug/L	ND	20	20	29.2	28.8	146	144	30-140	2 M1	
Ethylbenzene	ug/L	ND	20	20	20.3	19.0	101	94	76-124	7	
Hexachloro-1,3-butadiene	ug/L	ND	20	20	18.8	18.1	94	90	55-132	4	
Isopropylbenzene (Cumene)	ug/L	ND	20	20	19.8	18.8	99	94	73-127	5	
m&p-Xylene	ug/L	ND	40	40	40.4	38.0	100	94	75-124	6	
Methyl-tert-butyl ether	ug/L	ND	20	20	17.3	18.4	87	92	72-130	6	
Methylene chloride	ug/L	ND	20	20	14.1	13.4	70	67	69-124	5 M1	
n-Butylbenzene	ug/L	ND	20	20	20.2	19.1	101	95	65-131	5	
n-Propylbenzene	ug/L	ND	20	20	21.0	19.5	105	98	69-129	7	
Naphthalene	ug/L	ND	20	20	16.5	18.1	82	90	69-135	9	
o-Xylene	ug/L	ND	20	20	19.6	18.7	98	93	76-121	5	
p-Isopropyltoluene	ug/L	ND	20	20	20.6	19.3	103	97	69-133	7	
sec-Butylbenzene	ug/L	ND	20	20	21.0	19.7	105	98	67-132	6	
Styrene	ug/L	ND	20	20	18.0	17.2	90	86	76-121	5	
tert-Butylbenzene	ug/L	ND	20	20	19.0	18.0	95	90	66-132	6	
Tetrachloroethene	ug/L	ND	20	20	12.9	12.0	64	60	70-127	7 M1	
Toluene	ug/L	ND	20	20	19.6	18.4	97	91	75-124	6	
trans-1,2-Dichloroethene	ug/L	ND	20	20	21.2	20.3	106	101	72-129	5	
trans-1,3-Dichloropropene	ug/L	ND	20	20	16.1	16.0	80	80	69-122	.1	
Trichloroethene	ug/L	ND	20	20	19.1	18.3	95	91	78-124	5	
Trichlorofluoromethane	ug/L	ND	20	20	24.0	23.0	120	115	60-147	4	
Vinyl chloride	ug/L	ND	20	20	23.9	23.0	120	115	56-136	4	
Xylene (Total)	ug/L	ND	60	60	60.0	56.7	99	94	76-123	6	
1,2-Dichloroethane-d4 (S)	%						90	95	80-124		
4-Bromofluorobenzene (S)	%						100	99	80-120		
Dibromofluoromethane (S)	%						98	98	80-122		
Toluene-d8 (S)	%						99	98	80-123		

## **REPORT OF LABORATORY ANALYSIS**

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Project:	Tarr Vancouver -	1821-00					
Pace Project No.:	257638						
QC Batch:	MSV/4444		Analysis M	lethod:	NWTPH-G>	:	
QC Batch Method:	NWTPH-Gx		Analysis D	escription:	NWTPH-G	MSV Water	
Associated Lab Sar	nples: 2576380	01, 257638003, 2576	638004				
METHOD BLANK:	70395		Matr	ix: Water			
Associated Lab Sar	nples: 2576380	01, 257638003, 2576	638004				
			Blank	Reporting			
Parar	neter	Units	Result	Limit	Anal	yzed Quali	fiers
Gasoline Range Or	ganics	ug/L	N	D 50	0.0 05/17/1	1 12:00	
4-Bromofluorobenze	ene (S)	%	10	1 50-1	50 05/17/1	1 12:00	
LABORATORY CO	NTROL SAMPLE:	70396					
			Spike	LCS	LCS	% Rec	
Parar	neter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Gasoline Range Or	ganics	ug/L	500	521	10	4 50-163	
4-Bromofluorobenze	ene (S)	%			10	1 50-150	
SAMPLE DUPLICA	TE: 70773						
			257658014	Dup			
Paran	neter	Units	Result	Result	RPI	D Qualifier	'S
Gasoline Range Or	ganics	ug/L	N	D 7.	1J		
4-Bromofluorobenze	ene (S)	%	10	0 1	01	1	
SAMPLE DUPLICA	TE: 70774						
			257654006	Dup			
Paran	neter	Units	Result	Result	RPI	D Qualifier	ΓS
Gasoline Range Or	ganics	ug/L	N	D 7.	4J		
4-Bromofluorobenze	ene (S)	%	10	1 1	00	.6	

Date: 05/19/2011 05:13 PM

# **REPORT OF LABORATORY ANALYSIS**





Project:Tarr VancouverPace Project No.:257638	- 1821-00					
QC Batch: MSV/4454		Analysis Mo	ethod: N	IWTPH-Gx		
QC Batch Method: NWTPH-Gx		Analysis De	escription: N	IWTPH-Gx M	SV Water	
Associated Lab Samples: 257638	002					
METHOD BLANK: 70490		Matrix	: Water			
Associated Lab Samples: 257638	002					
		Blank	Reporting			
Parameter	Units	Result	Limit	Analyze	d Qualifie	ers
Gasoline Range Organics	ug/L	NC	50.0	05/17/11 2	2:39	
4-Bromofluorobenzene (S)	%	102	2 50-150	05/17/11 2	2:39	
LABORATORY CONTROL SAMPLE	: 70491					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Gasoline Range Organics	ug/L	500	503	101	50-163	
4-Bromofluorobenzene (S)	%			101	50-150	
SAMPLE DUPLICATE: 70535						
		257520004	Dup			
Parameter	Units	Result	Result	RPD	Qualifiers	
Gasoline Range Organics	ug/L	109	123	}	12	
4-Bromofluorobenzene (S)	%	101	101		.5	
SAMPLE DUPLICATE: 70536						
		257564006	Dup			
Parameter	Units	Result	Result	RPD	Qualifiers	
Gasoline Range Organics	ug/L	58.4	67.3	3	14	
4-Bromofluorobenzene (S)	%	101	100	)	1	

Date: 05/19/2011 05:13 PM

# **REPORT OF LABORATORY ANALYSIS**

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## QUALIFIERS

Project: Tarr Vancouver - 1821-00

Pace Project No.: 257638

## DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

**DUP - Sample Duplicate** 

**RPD** - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel Clean-Up

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is NELAP accredited. Contact your Pace PM for the current list of accredited analytes.

## LABORATORIES

#### ANALYTE QUALIFIERS

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

## **REPORT OF LABORATORY ANALYSIS**



PASI-S Pace Analytical Services - Seattle



## QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Tarr Vancouver - 1821-00 Pace Project No.: 257638

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
257638001	 MW-1	EPA 3510	OEXT/3703	NWTPH-Dx	GCSV/2493
257638002	MW-1 DUP	EPA 3510	OEXT/3703	NWTPH-Dx	GCSV/2493
257638003	MW-3	EPA 3510	OEXT/3703	NWTPH-Dx	GCSV/2493
257638004	MW-2	EPA 3510	OEXT/3703	NWTPH-Dx	GCSV/2493
257638001	MW-1	EPA 5030B/8260	MSV/4419		
257638003	MW-3	EPA 5030B/8260	MSV/4442		
257638004	MW-2	EPA 5030B/8260	MSV/4442		
257638001	MW-1	NWTPH-Gx	MSV/4444		
257638002	MW-1 DUP	NWTPH-Gx	MSV/4454		
257638003	MW-3	NWTPH-Gx	MSV/4444		
257638004	MW-2	NWTPH-Gx	MSV/4444		

# **REPORT OF LABORATORY ANALYSIS**

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# CHAIN OF CUSTODY RECORD

Client Name: Ash Cree Address: 3015 SW City/State/Zip: Portland,

Ash Creek Associates	
3015 SW First Ave	
Portland, OR 97201	

Telephone	Number:	503.92
	Fax No.:	503.94

Analytical Lab: Pace Analytical

Page: 1

503.924.4704 503.943.6357

Report To: jfoxwell@ashcreekassociates.com

of 1

# Project Manager: John Foxwell

Project Name: Tarr, LLC Vancouver Phase II ESA

Project Number: 1821-00

Sampler Name: Michael Whitson

								P	rese	erva	tive				Ma	atrix		Т					Ana	alyz	e Fo	or:						
Sample ID / Description	Date Sampled	Time Sampled	No. of Containers Shipped	Grab	Composite	Field Filtered	Ice	HNO <sub>3</sub> (Red Label)	NaOH ( Orange Label)	H <sub>2</sub> SO <sub>4</sub> Plastic (Yellow Label)	H <sub>2</sub> SO <sub>4</sub> Glass(Yellow Label)	None (Black Label) Methanol Sodium Bisulfate DI	Groundwater	Wastewater	Drinking Water	Sludge	Soil Other (second A)	VICCe (EDA ROGN)	TPH-GV (NIM/TPH-GV)	TPH-Dx (NWTPH-Dx)	PAHs (8270)	HdV	EPH	Metals						RUSH TAT (Pre-Schedule	Standard TAT	Fax Results Send QC with report
MW-1	5/10/11	1425	8	X			Х	2	x				X						$\langle \rangle$	$\langle   x \rangle$											X	
MW-1 DUP	5/10/11	1425	8	X			Х	2	X				X						>	$\langle   x \rangle$											X	
MW-3	5/10/11	1530	8	X			х	2	X				X					>	$\langle \rangle$	< X										$\square$	X	
MW-2	5/10/11	1615	8	X			X	;	x				X					)	$\langle \rangle$	< X										Π	X	
													Γ					Τ												Π		
													Γ					Τ												Π		
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								1	1				T	T				T	1	1				T		$\top$	$\top$	1		Π	T	T
Special Instructions:		1			II.		Met	tho	d of	Shi	pm	ent:									La	bor Te VC	mpe OCs	y Co eratu Free	omr ure l e of	nen Jpor Hea	ts: n Re idsp	ceipt	.	,4 Y	íc I	4
Relinquished by: Name/Company MICHAELWHTSON/ACA	05/11	/ [ ]	Ti 126	me 10	Receiv	ved t	NY: N	ame	Cor	mpai	TY CH		S	5	Da Ju			1.2		*									8			
Daniele Barrett /ACA	05/11/1		(:(	<sup>me</sup> )5	Recen	veat	ya Ni	ame	Cor	npa	ny				Da	ate		1	TIME	3												
Relinquished by: Name/Company	05121	ate	Tii	me 15	Receiv	ved b	iy: Na	ame	Cor	npai		ACE	1	OF	Da	ate	F	X24	Time	e												
Relinquished by: Name/Company	Da	ate	Tir	me	Receiv	ved b	y: Na	ame	/Con	npai	ny				Da	ate			Time	9												



.

CLIENT:

# Ash Creek

COC PAGE \_\_\_\_\_ of \_\_\_\_

COC ID#

Sample Line

Item	VG9H	AG1H	AG1U	BG1H	BP1U	BP2U	BP3U	BP2N	BP2S	WGFU	WGKU		Comments
1	6	2 22											
2		1											
3													
4	Ą	\$ \$											
5													
6													
7													
8												 	
9												 	
10												 	 
11													 
12		1	•										Trip Blank? NO

AG1H	1 liter HCL amber glass	BP2S	500mL H2SO4 plastic	JGFU	4oz unpreserved amber wide
AG1U	1liter unpreserved amber glass	BP2U	500mL unpreserved plastic	R	terra core kit
AG2S	500mL H2SO4 amber glass	BP2Z	500mL NaOH, Zn Ac	U	Summa Can
AG2U	500mL unpreserved amber glass	BP3C	250mL NaOH plastic	VG9H	40mL HCL clear vial
AG3S	250mL H2SO4 amber glass	BP3N	250mL HNO3 plastic	VG9T	40mL Na Thio. clear vial
BG1H	1 liter HCL clear glass	BP3S	250mL H2SO4 plastic	VG9U	40mL unpreserved clear vial
BG1U	1 liter unpreserved glass	BP3U	250mL unpreserved plastic	VG9W	40mL glass vial preweighted (EPA 5035)
BP1N	1 liter HNO3 plastic	DG9B	40mL Na Bisulfate amber vial	VSG	Headspace septa vial & HCL
BP1S	1 liter H2SO4 plastic	DG9H	40mL HCL amber voa vial	WGFU	4oz clear soil jar
BP1U	1 liter unpreserved plastic	DG9M	40mL MeOH clear vial	WGFX	4oz wide jar w/hexane wipe
BP1Z	1 liter NaOH, Zn, Ac	DG9T	40mL Na Thio amber vial	ZPLC	Ziploc Bag
BP2N	500mL HNO3 plastic	DG9U	40mL unpreserved amber vial		
BP2O	500mL NaOH plastic		Wipe/Swab		

- 149

	Sample (	Cond	ition Upon Receip	t	
Pace Analytical Client Name	Ash	ree	¥	Project #	257638
Courier: Fed Ex UPS USPS Clier	nt 🗌 Comm	ercial	Pace Other R	<u>CS</u>	
Custody Seal on Cooler/Box Present: Yes	No No	Seais	intact: Yes 🗌	No	
Packing Material: PBubble Wrap Bubble	Bags 🔲 I	None	Other	Temp. Blank Yes	V No
Thermometer Used 132013 or 101731963 or 22609	9 Type of Ice	: Wet	Blue None	Samples on ice, co	oling process has begun
Cooler Temperature 1.4:C	Biological	Tissue	is Frozen: Yes No	Date and Initia	Is of person examining
Temp should be above freezing ≤ 6°C			Comments:		
Chain of Custody Present:	Yes DNo	□n/A	1.		
Chain of Custody Filled Out:	Ves ONO	□n/a	2.		
Chain of Custody Relinquished:	Ves DNo		3.		
Sampier Name & Signature on COC:	□Yes □No		4.		
Samples Arrived within Hold Time:	Dres DNo	□n/A	5.		
Short Hold Time Analysis (<72hr):	Ves No	□n/A	6.		
Rush Turn Around Time Requested:	TYes DNo		7.		
Follow Up / Hold Analysis Requested:	TYes DNo		8.		
Sufficient Volume:	Pyes ONO	□n/a	9.		
Correct Containers Used:		□n/a	10.		
-Pace Containers Used:		□N/A			
Containers Intact:	Ves DNo		11.		
Filtered volume received for Dissolved tests	Yes No		12.		
Sample Labels match COC:	Tes DNo	□n/A	13.		
-Includes date/time/ID/Analysis Matrix:	WT				
All containers needing preservation are found to be in compliance with EPA recommendation.	Eyes DNo		14.	×	
Exceptions: VOA, coliform, TOC, O&G			Initial when completed	Lot # of added preservative	
Samples checked for dechlorination:	□Yes □No	EN/A	15.		
Headspace in VOA Vials ( >6mm):	Yes No	□n/A	16.		
Trip Blanks Present:	Yes No		17.	11	
Trip Blank Custody Seals Present	□Yes □No	ZN/A			
Pace Trip Blank Lot # (if purchased):					
Client Notification/ Resolution:			1 1	Field Data Required	1? Y / N
Person Contacted: (1) 1 Chael Wh	itson	_Date/	Time: 5/12/11	<u>5:40-em</u>	ail
Comments/ Resolution:		- 1	1 10 - 0	12.00	
or analyze separately	?ap		and MW-	IDUP. 2	ame sample
Separate - 15 a field	DUPN	ot	a Lab DUP.	Re	
Project Manager Review:	GR	085		Date:	5/12/11
Note: Whenever there is a discrepancy affecting North Ca Certification Office ( i.e. out of hold, incorrect preservative	arolina complia	nce sam	pies, a copy of this form will containers)	be sent to the North C	Carolina DEHNR



Pace Analytical Services, Inc. 940 South Harney Seattle, WA 98108 (206)767-5060

May 26, 2011

John Foxwell Ash Creek Associates 3015 SW First Ave Portland, OR 97201

RE: Project: Tarr Vancouver 1821-00 Pace Project No.: 257502

Dear John Foxwell:

Enclosed are the analytical results for sample(s) received by the laboratory on May 03, 2011. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

Amended Report, REV-1 05/26/11. Missing results due to reporting issues. Volatiles results for 257502010, 026 and 1,2,4-TMB result on 257502013 are now showing on the report.

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

Sincerely,

ENNI (-ROSS

Jennifer Gross

jennifer.gross@pacelabs.com Project Manager

Enclosures

cc: Lisa Domenighini, Pace Analytical Seattle

# **REPORT OF LABORATORY ANALYSIS**

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## **CERTIFICATIONS**

Project: Tarr Vancouver 1821-00

Pace Project No.: 257502

Washington Certification IDs 940 South Harney Street, Seattle, WA 98108 Alaska CS Certification #: UST-025 Alaska Drinking Water VOC Certification #: WA01230 Alaska Drinking Water Micro Certification #: WA01230

California Certification #: 01153CA Florida/NELAP Certification #: E87617 Oregon Certification #: WA200007 Washington Certification #: C1229

# **REPORT OF LABORATORY ANALYSIS**





# SAMPLE ANALYTE COUNT

Project:Tarr Vancouver 1821-00Pace Project No.:257502

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
257502001	SB-9 (2.5)	ASTM D2974-87	 KJ1	1	PASI-S
257502002	SB-9 (8.5)	NWTPH-Dx	AY1	4	PASI-S
		NWTPH-Gx	СС	3	PASI-S
		ASTM D2974-87	KJ1	1	PASI-S
257502003	SB-10 (2.5)	ASTM D2974-87	KJ1	1	PASI-S
257502004	SB-10 (7.5)	NWTPH-Dx	AY1	4	PASI-S
		NWTPH-Gx	CC	3	PASI-S
		ASTM D2974-87	KJ1	1	PASI-S
257502005	SB-11 (2.5)	ASTM D2974-87	KJ1	1	PASI-S
257502006	SB-11 (7.5)	NWTPH-Dx	AY1	4	PASI-S
		NWTPH-Gx	СС	3	PASI-S
		ASTM D2974-87	KJ1	1	PASI-S
257502007	SB-13 (2.5)	NWTPH-Dx	AY1	4	PASI-S
		NWTPH-Gx	СС	3	PASI-S
		EPA 6010	BGA	1	PASI-S
		ASTM D2974-87	KJ1	1	PASI-S
257502008	SB-13 (8.0)	NWTPH-Dx	AY1	4	PASI-S
		NWTPH-Gx	СС	3	PASI-S
		EPA 8260	LPM	72	PASI-S
		ASTM D2974-87	KJ1	1	PASI-S
257502009	SB-13 (13.5)	ASTM D2974-87	KJ1	1	PASI-S
257502010	SB-13	NWTPH-Dx	AY1	4	PASI-S
		EPA 5030B/8260	LPM	71	PASI-S
		NWTPH-Gx	LPM	2	PASI-S
257502011	MW-2 (2.5)	ASTM D2974-87	KJ1	1	PASI-S
257502012	MW-2 (7.5)	NWTPH-Dx	AY1	4	PASI-S
		NWTPH-Gx	CC	3	PASI-S
		ASTM D2974-87	KJ1	1	PASI-S
257502013	MW-1 (2.5)	EPA 8260	LPM	5	PASI-S
		EPA 8260	LPM	72	PASI-S
		ASTM D2974-87	KJ1	1	PASI-S
257502014	MW-1 (8.0)	ASTM D2974-87	KJ1	1	PASI-S
257502015	MW-1 (12.5)	NWTPH-Dx	AY1	4	PASI-S
		NWTPH-Gx	СС	3	PASI-S
		EPA 6010	BGA	1	PASI-S
		EPA 8270 by SIM	ERB	20	PASI-S
		EPA 8260	LPM	60	PASI-S

## **REPORT OF LABORATORY ANALYSIS**

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# SAMPLE ANALYTE COUNT

Project:Tarr Vancouver 1821-00Pace Project No.:257502

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		ASTM D2974-87	KJ1	1	PASI-S
257502016	MW-1 (17.5)	ASTM D2974-87	KJ1	1	PASI-S
257502017	MW-3 (2.5)	ASTM D2974-87	KJ1	1	PASI-S
257502018	MW-3 (7.5)	NWTPH-Dx	AY1	4	PASI-S
		NWTPH-Gx	СС	3	PASI-S
		ASTM D2974-87	KJ1	1	PASI-S
257502019	SB-14 (2.5)	NWTPH-Dx	AY1	4	PASI-S
		NWTPH-Gx	СС	3	PASI-S
		EPA 6010	BGA	1	PASI-S
		ASTM D2974-87	KJ1	1	PASI-S
257502020	SB-14 (7.5)	NWTPH-Dx	AY1	4	PASI-S
		NWTPH-Gx	СС	3	PASI-S
		ASTM D2974-87	KJ1	1	PASI-S
257502021	SB-14	NWTPH-Dx	AY1	4	PASI-S
		NWTPH-Gx	LPM	2	PASI-S
257502022	SB-12 (2.5)	NWTPH-Dx	AY1	4	PASI-S
		NWTPH-Gx	СС	3	PASI-S
		ASTM D2974-87	KJ1	1	PASI-S
257502023	SB-12 (7.5)	NWTPH-Dx	AY1	4	PASI-S
		NWTPH-Gx	CC	3	PASI-S
		EPA 8270 by SIM	ERB	20	PASI-S
		EPA 8260	LPM	73	PASI-S
		ASTM D2974-87	KJ1	1	PASI-S
257502024	SB-12	NWTPH-Dx	AY1	4	PASI-S
		NWTPH-Gx	LPM	2	PASI-S
257502025	MW-1 (8.0) DUP	ASTM D2974-87	KJ1	1	PASI-S
257502026	SB-15	NWTPH-Dx	AY1	4	PASI-S
		EPA 5030B/8260	LPM	71	PASI-S
		NWTPH-Gx	LPM	2	PASI-S

# **REPORT OF LABORATORY ANALYSIS**





Project: Tarr Vancouver 1821-00

Pace Project No.: 257502

## Method: NWTPH-Dx

Description:NWTPH-Dx GCSClient:Ash Creek AssociatesDate:May 26, 2011

## General Information:

16 samples were analyzed for NWTPH-Dx. All samples were received in acceptable condition with any exceptions noted below.

## Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

## Sample Preparation:

The samples were prepared in accordance with EPA 3510 with any exceptions noted below. The samples were prepared in accordance with EPA 3546 with any exceptions noted below.

## Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

## **Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

## Surrogates:

All surrogates were within QC limits with any exceptions noted below.

## Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

## Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

## Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

#### **Duplicate Sample:**

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

## Additional Comments:

# **REPORT OF LABORATORY ANALYSIS**





Project: Tarr Vancouver 1821-00

Pace Project No.: 257502

## Method: NWTPH-Gx

Description:NWTPH-Gx GCVClient:Ash Creek AssociatesDate:May 26, 2011

## General Information:

12 samples were analyzed for NWTPH-Gx. All samples were received in acceptable condition with any exceptions noted below.

#### Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

## Sample Preparation:

The samples were prepared in accordance with NWTPH-Gx with any exceptions noted below.

## Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

## Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

## Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

## Surrogates:

All surrogates were within QC limits with any exceptions noted below.

## Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

## Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

## Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

#### **Duplicate Sample:**

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

## Additional Comments:

# **REPORT OF LABORATORY ANALYSIS**





Project: Tarr Vancouver 1821-00

Pace Project No.: 257502

# Method: EPA 6010

Description:6010 MET ICPClient:Ash Creek AssociatesDate:May 26, 2011

## General Information:

3 samples were analyzed for EPA 6010. All samples were received in acceptable condition with any exceptions noted below.

## Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

## Sample Preparation:

The samples were prepared in accordance with EPA 3050 with any exceptions noted below.

## Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

## Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

## Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

## Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

## Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

## **Duplicate Sample:**

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

# **REPORT OF LABORATORY ANALYSIS**

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Project: Tarr Vancouver 1821-00

Pace Project No.: 257502

Method:	EPA 8270 by SIM
Description:	8270 MSSV PAH by SIM
Client:	Ash Creek Associates
Date:	May 26, 2011

## General Information:

2 samples were analyzed for EPA 8270 by SIM. All samples were received in acceptable condition with any exceptions noted below.

#### Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

## Sample Preparation:

The samples were prepared in accordance with EPA 3546 with any exceptions noted below.

## Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

#### Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

## Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

## Surrogates:

All surrogates were within QC limits with any exceptions noted below.

## Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

## Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

## Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

#### QC Batch: OEXT/3644

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 257502015

- M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
  - MSD (Lab ID: 68604)
    - 1-Methylnaphthalene

## Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

# **REPORT OF LABORATORY ANALYSIS**

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Project: Tarr Vancouver 1821-00

Pace Project No.: 257502

#### Method: EPA 5030B/8260

Description:8260 MSVClient:Ash Creek AssociatesDate:May 26, 2011

## General Information:

2 samples were analyzed for EPA 5030B/8260. All samples were received in acceptable condition with any exceptions noted below.

#### Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

## Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

#### Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

#### **Internal Standards:**

All internal standards were within QC limits with any exceptions noted below.

#### Surrogates:

All surrogates were within QC limits with any exceptions noted below.

#### Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

#### Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

## Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

#### QC Batch: MSV/4367

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 257488002

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 68736)
  - Chloromethane
  - Tetrachloroethene
- MSD (Lab ID: 68737)
  - Chloromethane
  - Tetrachloroethene

## **Duplicate Sample:**

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

# **REPORT OF LABORATORY ANALYSIS**





Project: Tarr Vancouver 1821-00 Pace Project No.: 257502

## Method: EPA 8260

 Description:
 8260 MSV 5035A Med Level VOA

 Client:
 Ash Creek Associates

 Date:
 May 26, 2011

## General Information:

1 sample was analyzed for EPA 8260. All samples were received in acceptable condition with any exceptions noted below.

#### Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

#### Sample Preparation:

The samples were prepared in accordance with EPA 5035A/5030B with any exceptions noted below.

#### Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

#### Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

## Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

#### Surrogates:

All surrogates were within QC limits with any exceptions noted below.

## Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

#### Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

#### Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

#### **Duplicate Sample:**

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

## Additional Comments:

# **REPORT OF LABORATORY ANALYSIS**





Project: Tarr Vancouver 1821-00

Pace Project No.: 257502

#### Method: EPA 8260

Description:8260/5035A Volatile OrganicsClient:Ash Creek AssociatesDate:May 26, 2011

## General Information:

4 samples were analyzed for EPA 8260. All samples were received in acceptable condition with any exceptions noted below.

#### Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

## Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

#### Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

#### Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

## Surrogates:

All surrogates were within QC limits with any exceptions noted below.

#### QC Batch: MSV/4364

S5: Surrogate recovery outside control limits due to matrix interferences (not confirmed by re-analysis).

- MW-1 (12.5) (Lab ID: 257502015)
  - 1,2-Dichloroethane-d4 (S)
  - 4-Bromofluorobenzene (S)
  - Toluene-d8 (S)

## Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

## Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

#### QC Batch: MSV/4364

L3: Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.

- LCS (Lab ID: 68699)
  - 1,1-Dichloropropene
  - 1,2-Dichloroethene (Total)
  - 1,2-Dichloropropane
  - Bromodichloromethane
  - Dibromomethane
  - Trichloroethene
  - cis-1,2-Dichloroethene
  - cis-1,3-Dichloropropene
- LCSD (Lab ID: 69171)
  - 1,1,2-Trichlorotrifluoroethane

# **REPORT OF LABORATORY ANALYSIS**

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Project: Tarr Vancouver 1821-00 Pace Project No.: 257502

Method:EPA 8260Description:8260/5035A Volatile OrganicsClient:Ash Creek AssociatesDate:May 26, 2011

## QC Batch: MSV/4364

L3: Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.

- 1,1-Dichloropropene
- 1,2-Dichloroethene (Total)
- 1,2-Dichloropropane
- Bromodichloromethane
- Dibromomethane
- Trichloroethene
- cis-1,2-Dichloroethene
- cis-1,3-Dichloropropene

## Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

## **Duplicate Sample:**

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

# **REPORT OF LABORATORY ANALYSIS**





Project: Tarr Vancouver 1821-00

Pace Project No.: 257502

## Method: NWTPH-Gx

Description:NWTPH-Gx MSVClient:Ash Creek AssociatesDate:May 26, 2011

## General Information:

4 samples were analyzed for NWTPH-Gx. All samples were received in acceptable condition with any exceptions noted below.

#### Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):** All criteria were within method requirements with any exceptions noted below.

#### Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

#### **Internal Standards:**

All internal standards were within QC limits with any exceptions noted below.

## Surrogates:

All surrogates were within QC limits with any exceptions noted below.

## Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

#### Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

## Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

#### **Duplicate Sample:**

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

#### Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

# **REPORT OF LABORATORY ANALYSIS**

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Project: Tarr Vancouver 1821-00

Pace Project No.: 257502									
Sample: SB-9 (2.5)	Lab ID: 257	7502001	Collected:	04/28/1	1 09:35	Received: 05	5/03/11 07:50 N	latrix: Solid	
Results reported on a "dry-weig	ght" basis								
Parameters	Results	Units	Report	Limit	DF	Prepared	Analyzed	CAS No.	Qual
Percent Moisture	Analytical Met	hod: ASTM	D2974-87						
Percent Moisture	11.5 %	)		0.10	1		05/03/11 16:31		
Sample: SB-9 (8.5)	Lab ID: 257	7502002	Collected:	04/28/1	1 09:55	Received: 05	5/03/11 07:50 N	fatrix: Solid	
Results reported on a "dry-weig	ght" basis								
Parameters	Results	Units	Report	Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Dx GCS	Analytical Met	hod: NWTF	H-Dx Prepara	ation Me	ethod: E	PA 3546			
Diesel Range	ND m	g/kg		26.5	1	05/03/11 16:15	05/04/11 13:30		
Motor Oil Range	ND m	g/kg		106	1	05/03/11 16:15	05/04/11 13:30	64742-65-0	)
n-Octacosane (S)	99 %	)	5	0-150	1	05/03/11 16:15	05/04/11 13:30	630-02-4	
o-Terphenyl (S)	86 %	)	5	0-150	1	05/03/11 16:15	05/04/11 13:30	84-15-1	
NWTPH-Gx GCV	Analytical Met	hod: NWTP	H-Gx Prepara	ation Me	ethod: N	WTPH-Gx			
Gasoline Range Organics	ND m	a/ka		8.0	1	05/03/11 14:25	05/03/11 17:06		
a,a,a-Trifluorotoluene (S)	112 %	)	5	0-150	1	05/03/11 14:25	05/03/11 17:06	98-08-8	
4-Bromofluorobenzene (S)	71 %	)	5	0-150	1	05/03/11 14:25	05/03/11 17:06	460-00-4	
Percent Moisture	Analytical Met	hod: ASTM	D2974-87						
Percent Moisture	26.3 %	)		0.10	1		05/03/11 16:31		
Sample: SB-10 (2.5)	Lab ID: 257	7502003	Collected:	04/28/1	1 10:40	Received: 05	5/03/11 07:50 N	1atrix: Solid	
Results reported on a "dry-weig	aht" basis								
Parameters	Results	Units	Report	Limit	DF	Prepared	Analyzed	CAS No.	Qual
Percent Moisture	Analytical Met	hod: ASTM	D2974-87						
Percent Moisture	19.6 %	)		0.10	1		05/03/11 16:32		
Sample: SB-10 (7.5)	Lah ID: 257	7502004	Collected:	04/28/1	1 11.05	Received: 05	03/11 07·50 N	Aatrix: Solid	
Results reported on a "drv-weid	nht" basis	002001	Concolou.	0 1/20/1	111.00		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
Parameters	Results	Units	Report	Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Dx GCS	Analytical Met	hod: NWTP	H-Dx Prepara	ation Me	ethod: E	- PA 3546			
Diesel Range	ND m	a/ka		26.5	1	05/03/11 16:15	05/04/11 14.29		
Motor Oil Range	ND m	a/ka		106	1	05/03/11 16:15	05/04/11 14:29	64742-65-0	)
n-Octacosane (S)	100 %	ישייש ו	5	0-150	1	05/03/11 16:15	05/04/11 14:29	630-02-4	
o-Terphenyl (S)	89 %	)	5	0-150	1	05/03/11 16:15	05/04/11 14:29	84-15-1	
NWTPH-Gx GCV	Analytical Met	hod: NWTP	H-Gx Prepara	ation Me	ethod: N	WTPH-Gx			
Gasoline Range Organics	ND m	g/kg		7.9	1	05/03/11 14:25	05/03/11 17:29		
Date: 05/26/2011 03:25 PM	RF		F LABORA	TORY		LYSIS			Page 14 of 57

# **REPORT OF LABORATORY ANALYSIS**

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Project: Tarr Vancouver 1821-00

Pace Project No.: 257502

Sample:         SB-10 (1.3)         Data D1:         D2 JO 2000 To 1000 To 10000 To 10000 To 1000 To 1000 To 10000 To 1000 To 1000 To 10000	Sample: SB-10 (7.5)	Lab ID: 257502	004	Collected: 04/28/	1 11.05	Pacaivad: 05	/02/11 07:50	Matrix: Solid	
Parameters         Results         Units         Report Limit         DF         Prepared         Analyzed         CAS No.         Qual           NWTPH-Gx GCV         Analytical Method: NWTPH-Gx         a.a.a.Trifluorotoluene (S)         120 %         50-150 1         0.5/03/11 14:25         05/03/11 17:29         98-08-8           4 Bromofluorobanzane (S)         76 %         60-150 1         0.5/03/11 14:25         05/03/11 17:29         98-08-8           4 Bromofluorobanzane (S)         76 %         0.10         1         05/03/11 16:32         05/03/11 17:29         480-00-4           Percent Moisture         Analytical Method: ASTM D2974-87          0.10         1         05/03/11 16:32         Matrix: Solid           Results reported on a "dry-weight" basis         Results         Units         Report Limit         DF         Prepared         Analyzed         CAS No.         Qual           Percent Moisture         Analytical Method: ASTM D2974-87         Percent Moisture         13.3 %         0.10         1         05/03/11 07:50         Matrix: Solid           Results reported on a "dry-weight" basis         Parameters         Results         Units         Report Limit         DF         Prepared         Analyzed         CAS No.         Qual           NWTPH-Ds CCS	Results reported on a "drv-weig	nht" hasis	004	001100100	11 11.00		/03/11 07.50		
NWTPH-Gx GCV         Analytical Method: NWTPH-Gx         Second Se	Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
a.a.a.Trifluorotokuene (S)       120 %       50-150       1       05/03/11 14:25       05/03/11 17:29       98-08-3         4-Bromothuorobenzene (S)       76 %       50-150       1       05/03/11 14:25       05/03/11 17:29       480-00-4         Percent Moisture       Analytical Method: ASTM D2974-87        05/03/11 16:32         Sample: SB-11 (2.5)       Lab ID: 257502005       Collected: 04/28/11 11:20       Received: 05/03/11 16:32         Parameters       Results       Units       Report Limit       DF       Prepared       Analyzed       CAS No.       Qual         Percent Moisture       Analytical Method: ASTM D2974-87        Prepared       Analyzed       CAS No.       Qual         Percent Moisture       13.3 %       0.10       1       05/03/11 16:33       CAS No.       Qual         Sample: SB-11 (7.5)       Lab ID: 257502006       Collected: 04/28/11 11:55       Received: 05/03/11 16:30       Matrix: Solid         Results reported on a "dry-weight" basis       Inits       Report Limit       DF       Prepared       Analyzed       CAS No.       Qual         NWTPH-Dx GCS       Analytical Method: NWTPH-Dx       Preparetal Analyzed       CAS No.       Qual         NWTPH-Dx GCY       Analytical Method: NWTPH-Gx       1	NWTPH-Gx GCV	Analytical Method	: NWTP	H-Gx Preparation M	ethod: N	IWTPH-Gx	_		
Percent Moisture         Analytical Method: ASTM D2974-87           Percent Moisture         25.5 %         0.10         1         05/03/11 16:32           Sample:         SB-11 (2.5)         Lab ID:         257502005         Collected:         04/28/11 11:20         Received:         05/03/11 07:50         Matrix:         Solid           Results reported on a "dry-weight" basis         Dnits         Report Limit         DF         Prepared         Analyzed         CAS No.         Qual           Percent Moisture         Analytical Method: ASTM D2974-87         Percent Moisture         Analytical Method: ASTM D2974-87         Percent Moisture         Analytical Method: ASTM D2974-87           Percent Moisture         13.3 %         0.10         1         05/03/11 16:33         Solid           Sample:         SB-11 (7.5)         Lab ID:         257502006         Collected:         04/28/11 11:55         Received:         05/03/11 16:13           Sample:         SB-11 (7.5)         Lab ID:         Lab ID:         257502006         Collected:         04/28/11 11:55         Received:         05/03/11 16:15         05/03/11 16:15           Sample:         SB-11 (7.5)         Lab ID:         257502006         Collected:         04/28/11 11:55         Received:         05/03/11 16:15         05/03/11 14:45<	a,a,a-Trifluorotoluene (S) 4-Bromofluorobenzene (S)	120 % 76 %		50-150 50-150	1 1	05/03/11 14:25 05/03/11 14:25	05/03/11 17:29 05/03/11 17:29	98-08-8 9460-00-4	
Percent Moisture         25.5 %         0.10         1         05/03/11 18:32           Sample:         SB-11 (2.5)         Lab ID:         257502005         Collected:         04/28/11         11:20         Received:         05/03/11         05/03/11         07:50         Matrix:         Solid           Results reported on a "dry-weight" basis         Units         Report Limit         DF         Prepared         Analyzed         CAS No.         Qual           Percent Moisture         Analytical Method: ASTM D2974-87         Prepared         Analyzed         CAS No.         Qual           Sample:         SB-11 (7.5)         Lab ID:         257502006         Collected:         04/28/11         11:55         Received:         05/03/11         05	Percent Moisture	Analytical Method	: ASTM	D2974-87					
Sample:         SB-11 (2.5)         Lab ID:         257502005         Collected:         04/28/11         11:20         Received:         05/03/11         07:50         Matrix:         Solid           Results reported on a "dry-weight" basis         Parameters         Results         Units         Report Limit         DF         Prepared         Analyzed         CAS No.         Qual           Percent Moisture         Analytical Method: ASTM D2974-87         Percent Moisture         13.3 %         0.10         1         05/03/11         05/03/11         6:33           Sample:         SB-11 (7.5)         Lab ID:         257502006         Collected:         04/28/11         11:55         Received:         05/03/11         05/03/11         05/03/11         05/03/11         05/03/11         05/03/11         05/03/11         05/03/11         0.10         0.10         05/03/11         05/03/1	Percent Moisture	25.5 %		0.10	1		05/03/11 16:32	2	
Results reported on a "dry-weight" basis         Parameters         Results         Units         Report Limit         DF         Prepared         Analyzed         CAS No.         Qual           Percent Moisture         Analytical Method: ASTM D2974-87	Sample: SB-11 (2.5)	Lab ID: 257502	005	Collected: 04/28/1	1 11:20	Received: 05	/03/11 07:50	Matrix: Solid	
Parameters         Results         Units         Report Limit         DF         Prepared         Analyzed         CAS No.         Qual           Percent Moisture         Analytical Method: ASTM D2974-87          0.10         1         05/03/11 16:33         05/03/11 16:33            Sample: SB-11 (7.5)         Lab ID: 257502006         Collected: 04/28/11 11:55         Received: 05/03/11 07:50         Matrix: Solid            Results reported on a "dry-weight" basis         Parameters         Results         Units         Report Limit         DF         Prepared         Analyzed         CAS No.         Qual           NWTPH-Dx GCS         Analytical Method: NWTPH-Dx         Prepared         Analyzed         CAS No.         Qual           NWTPH-Dx GCS         Analytical Method: NWTPH-Dx         Prepared         Analyzed         CAS No.         Qual           NWTPH-Dx GCV         Analytical Method: NWTPH-GX         Prepared         Analyzed         CAS No.         Qual           NWTPH-GX GCV         Analytical Method: NWTPH-GX         Prepared         Analyzed         CAS No.         Qual           Sample: SB-13 (2.5)         ND mg/kg         50-150         1         05/03/11 14:25         05/03/11 17:51         98-08-8           Analy	Results reported on a "dry-weig	ght" basis							
Percent Moisture         Analytical Method: ASTM D2974-87           Percent Moisture         13.3 %         0.10         1         05/03/11 16:33           Sample: SB-11 (7.5)         Lab ID: 257502006         Collected: 04/28/11 11:55         Received: 05/03/11 07:50         Matrix: Solid           Results reported on a "dry-weight" basis         Parameters         Results         Units         Report Limit         DF         Prepared         Analyzed         CAS No.         Qual           NWTPH-Dx GCS         Analytical Method: NWTPH-Dx         Preparation Method: EPA 3546         Diesel Range         ND mg/kg         26.5         1         05/03/11 16:15         05/04/11 14:45         64742-65-0           n-Octacosane (S)         102 %         50.150         1         05/03/11 16:15         05/04/11 14:45         6472-65-0           n-Octacosane (S)         90 %         50-150         1         05/03/11 16:15         05/03/11 14:45         6472-65-0           n-Octacosane (S)         90 %         50-150         1         05/03/11 14:45         6472-65-0           n-Octacosane (S)         90 %         50-150         1         05/03/11 14:45         84-15-1           NWTPH-Gx GCV         Analytical Method: NWTPH-Gx         Preparation Method: NWTPH-Gx         Gasoline Range Organics <td< td=""><td>Parameters</td><td>Results</td><td>Units</td><td>Report Limit</td><td>DF</td><td>Prepared</td><td>Analyzed</td><td>CAS No.</td><td>Qual</td></td<>	Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Percent Moisture         13.3 %         0.10         1         05/03/11 16:33           Sample:         SB-11 (7.5)         Lab ID:         257502006         Collected:         0.4/28/11         11:55         Received:         05/03/11         07:50         Matrix:         Solid           Results reported on a "dry-weight" basis         Parameters         Results         Units         Report Limit         DF         Prepared         Analyzed         CAS No.         Qual           NWTPH-Dx GCS         Analytical Method:         NUTPH-Dx         Preparation Method:         EPA 3546           Diesel Range         ND mg/kg         26.5         1         05/03/11         16:15         05/04/11         4:45         64742-65-0           n-Octacosane (S)         102 %         50-150         1         05/03/11         16:15         05/04/11         4:45         630-02-4           o-Terphenyl (S)         90 %         50-150         1         05/03/11         16:15         05/04/11         14:45         64742-65-0           NWTPH-Gx GCV         Analytical Method: NWTPH-Gx         Preparation Method: NWTPH-Gx         NUT         NUT         Result         05/03/11         17:51         65/03/11         17:51         48-08-8         45/03/11         17:51 <td>Percent Moisture</td> <td>Analytical Method</td> <td>: ASTM</td> <td>D2974-87</td> <td></td> <td></td> <td></td> <td></td> <td></td>	Percent Moisture	Analytical Method	: ASTM	D2974-87					
Sample:         SB-11 (7.5)         Lab ID:         257502006         Collected:         04/28/11         11:55         Received:         05/03/11         07:50         Matrix:         Solid           Results reported on a "dry-weight" basis         Parameters         Results         Units         Report Limit         DF         Prepared         Analyzed         CAS No.         Qual           NWTPH-Dx GCS         Analytical Method:         NWTPH-Dx         Preparation Method:         EPA 3546           Diesel Range         ND <mg kg<="" th="">         26.5         1         05/03/11         16:15         05/04/11         14:45         64742-65-0           Notor Oil Range         ND<mg kg<="" th="">         26.5         1         05/03/11         16:15         05/04/11         14:45         64742-65-0           o-Terphenyl (S)         90 %         50-150         1         05/03/11         16:15         05/04/11         14:45         84-15-1           NWTPH-Gx GCV         Analytical Method:         NWTPH-Gx         Preparation Method:         NWTPH-Gx           Gasoline Range Organics         ND<mg kg<="" th="">         80         1         05/03/11         17:51         98-08-3           a_a-Triftinzortoluene (S)         123 %         50-150         05/03/11         05/03</mg></mg></mg>	Percent Moisture	13.3 %		0.10	1		05/03/11 16:33	}	
Results reported on a "dry-weight" basis           Parameters         Results         Units         Report Limit         DF         Prepared         Analyzed         CAS No.         Qual           NWTPH-Dx GCS         Analytical Method: NWTPH-Dx         Preparation Method: EPA 3546         50/03/11 16:15         05/03/11 16:15         05/03/11 14:45         64742-65-0           Diesel Range         ND mg/kg         106         1         05/03/11 16:15         05/04/11 14:45         64742-65-0           n-Octacosane (S)         102 %         50-150         1         05/03/11 16:15         05/04/11 14:45         64742-65-0           o-Terphenyl (S)         90 %         50-150         1         05/03/11 16:15         05/04/11 14:45         64742-65-0           NWTPH-Gx GCV         Analytical Method: NWTPH-GX         Preparation Method: NWTPH-GX         05/03/11 16:15         05/03/11 17:51         8-08-8           4-Bromofluorobenzene (S)         76 %         50-150         1         05/03/11 17:51         98-08-8           4-Bromofluorobenzene (S)         76 %         05/10         1         05/03/11 17:51         98-08-8           4-Bromofluorobenzene (S)         76 %         0.10         1         05/03/11 17:51         98-08-8           Sample: SB-13 (2.5)	Sample: SB-11 (7.5)	Lab ID: 257502	006	Collected: 04/28/1	11 11:55	Received: 05	5/03/11 07:50	Matrix: Solid	
Parameters         Results         Units         Report Limit         DF         Prepared         Analyzed         CAS No.         Qual           NWTPH-Dx GCS         Analytical Method: NWTPH-Dx         Preparation Method: EPA 3546         Example         ND mg/kg         10         05/03/11 16:15         05/04/11 14:45         64742-65-0           Diesel Range         ND mg/kg         106         1         05/03/11 16:15         05/04/11 14:45         630-02-4           n-Octacosane (S)         102 %         50-150         1         05/03/11 16:15         05/04/11 14:45         630-02-4           o-Terphenyl (S)         90 %         50-150         1         05/03/11 16:15         05/04/11 14:45         64742-65-0           NWTPH-Gx GCV         Analytical Method: NWTPH-Gx         Preparation Method: NWTPH-Gx         Formation Method: NWTPH-Gx </td <td>Results reported on a "dry-weig</td> <td>ght" basis</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	Results reported on a "dry-weig	ght" basis							
NWTPH-Dx GCS         Analytical Method: NWTPH-Dx         Preparation Method: EPA 3546           Diesel Range         ND         mg/kg         26.5         1         05/03/11         16:15         05/04/11         14:45         64742-65-0           n-Octacosane (S)         102 %         50-150         1         05/03/11         16:15         05/04/11         14:45         630-02-4           o-Terphenyl (S)         90 %         50-150         1         05/03/11         16:15         05/04/11         14:45         64742-65-0           o-Terphenyl (S)         90 %         50-150         1         05/03/11         16:15         05/04/11         14:45         64-15-1           NWTPH-Gx GCV         Analytical Method: NWTPH-Gx         Preparation Method: NWTPH-Gx         a,a,a-Trifluorotoluene (S)         123 %         50-150         1         05/03/11         17:51         98-08-8           4-Bronofluorobenzene (S)         76 %         50-150         1         05/03/11         17:51         98-08-8           4-Bronofluorobenzene (S)         76 %         50-150         1         05/03/11         17:51         98-08-8           A-Bronofluorobenzene (S)         76 %         0.10         1         05/03/11         05/03/11         16:15	Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Diesel Range         ND mg/kg         26.5         1         05/03/11 16:15         05/04/11 14:45           Motor Oil Range         ND mg/kg         106         1         05/03/11 16:15         05/04/11 14:45         64742-65-0           n-Octacosane (S)         102 %         50-150         1         05/03/11 16:15         05/04/11 14:45         630-02-4           o-Terphenyl (S)         90 %         50-150         1         05/03/11 16:15         05/04/11 14:45         630-02-4           NWTPH-Gx GCV         Analytical Method: NWTPH-Gx         reparation Method: NWTPH-Gx         05/03/11 16:15         05/03/11 17:51         84-15-1           NWTPH-Gx GCV         Analytical Method: NWTPH-Gx         reparation Method: NWTPH-Gx         05/03/11 17:51         98-08-8           4-Bromofluorobenzene (S)         123 %         50-150         1         05/03/11 17:51         98-08-8           4-Bromofluorobenzene (S)         76 %         50-150         1         05/03/11 17:51         98-08-8           4-Bromofluorobenzene (S)         76 %         0.10         1         05/03/11 16:33         46-00-4           Percent Moisture         26.1 %         0.10         1         05/03/11 16:33         50-150         1         05/03/11 107:50         Matrix: Solid	NWTPH-Dx GCS	Analytical Method	: NWTP	H-Dx Preparation M	ethod: E	PA 3546			
Motor Oil Range         ND mg/kg         106         1         05/03/11 16:15         05/04/11 14:45         64742-65-0           n-Octacosane (S)         102 %         50-150         1         05/03/11 16:15         05/04/11 14:45         630-02-4           o-Terphenyl (S)         90 %         50-150         1         05/03/11 16:15         05/04/11 14:45         630-02-4           NWTPH-Gx GCV         Analytical Method: NWTPH-Gx         Preparation Method: NWTPH-Gx           Gasoline Range Organics         ND mg/kg         8.0         1         05/03/11 14:25         05/03/11 17:51         84-15-1           Analytical Method: NWTPH-Gx         Freparation Method: NWTPH-Gx         50-150         1         05/03/11 17:51         98-08-8           4-Bromofluorobenzene (S)         123 %         50-150         1         05/03/11 14:25         05/03/11 17:51         98-08-8           4-Bromofluorobenzene (S)         76 %         50-150         1         05/03/11 16:33         90-00-4           Percent Moisture         Analytical Method: ASTM D2974-87         Percent Moisture         0.10         1         05/03/11 16:33           Sample: SB-13 (2.5)         Lab ID: 257502007         Collected: 04/28/11 12:25         Received: 05/03/11 07:50         Matrix: Solid           Results reported	Diesel Range	ND mg/kg	I	26.5	1	05/03/11 16:15	05/04/11 14:45	5	
n-Octacosane (S)       102 %       50-150       1       05/03/11 16:15       05/04/11 14:45       630-02-4         o-Terphenyl (S)       90 %       50-150       1       05/03/11 16:15       05/04/11 14:45       630-02-4         NWTPH-Gx GCV       Analytical Method: NWTPH-Gx       Preparation Method: NWTPH-Gx         Gasoline Range Organics       ND mg/kg       8.0       1       05/03/11 14:25       05/03/11 17:51       98-08-8         4-Bromofiluorobenzene (S)       76 %       50-150       1       05/03/11 14:25       05/03/11 17:51       98-08-8         4-Bromofiluorobenzene (S)       76 %       50-150       1       05/03/11 14:25       05/03/11 17:51       460-00-4         Percent Moisture       Analytical Method: ASTM D2974-87       Percent Moisture       26.1 %       0.10       1       05/03/11 07:50       Matrix: Solid         Results reported on a "dry-weight" basis	Motor Oil Range	ND mg/kg	1	106	1	05/03/11 16:15	05/04/11 14:45	64742-65-0	
o-Terphenyl (S)         90 %         50-150         1         05/03/11 16:15         05/04/11 14:45         84-15-1           NWTPH-Gx GCV         Analytical Method: NWTPH-Gx         Preparation Method: NWTPH-Gx           Gasoline Range Organics         ND mg/kg         8.0         1         05/03/11 14:25         05/03/11 17:51         98-08-8           4-Bromofluorobenzene (S)         76 %         50-150         1         05/03/11 14:25         05/03/11 17:51         98-08-8           4-Bromofluorobenzene (S)         76 %         50-150         1         05/03/11 14:25         05/03/11 17:51         460-00-4           Percent Moisture         Analytical Method: ASTM D2974-87         Percent Moisture         Analytical Method: ASTM D2974-87           Percent Moisture         26.1 %         0.10         1         05/03/11 16:33           Sample: SB-13 (2.5)         Lab ID: 257502007         Collected: 04/28/11 12:25         Received: 05/03/11 07:50         Matrix: Solid           Results reported on a "dry-weight" basis         Parameters         Results         Units         Report Limit         DF         Prepared         Analyzed         CAS No.         Qual           NWTPH-Dx GCS         Analytical Method: NWTPH-Dx         Preparation Method: EPA 3546         Diesel Range         ND mg/kg         98.1 <td>n-Octacosane (S)</td> <td>102 %</td> <td></td> <td>50-150</td> <td>1</td> <td>05/03/11 16:15</td> <td>05/04/11 14:45</td> <td>630-02-4</td> <td></td>	n-Octacosane (S)	102 %		50-150	1	05/03/11 16:15	05/04/11 14:45	630-02-4	
NWTPH-Gx GCV         Analytical Method: NWTPH-Gx         Preparation Method: NWTPH-Gx           Gasoline Range Organics a,a,a-Trifluorotoluene (S)         ND mg/kg         8.0         1         05/03/11 14:25         05/03/11 17:51         98-08-8           4-Bromofluorobenzene (S)         76 %         50-150         1         05/03/11 14:25         05/03/11 17:51         98-08-8           4-Bromofluorobenzene (S)         76 %         50-150         1         05/03/11 14:25         05/03/11 17:51         460-00-4           Percent Moisture         Analytical Method: ASTM D2974-87           05/03/11 16:33           Sample: SB-13 (2.5)         Lab ID: 257502007         Collected: 04/28/11 12:25         Received: 05/03/11 07:50         Matrix: Solid           Results reported on a "dry-weight" basis           Disol Range         Analytical Method: NWTPH-Dx         Prepared         Analyzed         CAS No.         Qual           NWTPH-Dx GCS         Analytical Method: NWTPH-Dx         Preparation Method: EPA 3546	o-Terphenyl (S)	90 %		50-150	1	05/03/11 16:15	05/04/11 14:45	5 84-15-1	
Gasoline Range Organics       ND mg/kg       8.0       1       05/03/11 14:25       05/03/11 17:51         a,a,a-Trifluorotoluene (S)       123 %       50-150       1       05/03/11 14:25       05/03/11 17:51       98-08-8         4-Bromofluorobenzene (S)       76 %       50-150       1       05/03/11 14:25       05/03/11 17:51       98-08-8         Percent Moisture       Analytical Method: ASTM D2974-87         Percent Moisture       26.1 %       0.10       1       05/03/11 17:50       Matrix: Solid         Sample: SB-13 (2.5)       Lab ID: 257502007       Collected: 04/28/11 12:25       Received: 05/03/11 07:50       Matrix: Solid         Results reported on a "dry-weight" basis       Units       Report Limit       DF       Prepared       Analyzed       CAS No.       Qual         NWTPH-Dx GCS       Analytical Method: NWTPH-Dx       Preparation Method: EPA 3546       Disel Range       ND mg/kg       98.1       1       05/03/11 16:15       05/04/11 15:02       4742-65-0         Disel Range       ND mg/kg       98.1       1       05/03/11 16:15       05/04/11 15:02       64742-65-0         Notor Oil Range       ND mg/kg       98.1       1       05/03/11 16:15       05/04/11 15:02       630-02-4	NWTPH-Gx GCV	Analytical Method	: NWTP	H-Gx Preparation M	ethod: N	IWTPH-Gx			
a,a,a-Trifluorotoluene (S)       123 %       50-150       1       05/03/11 14:25       05/03/11 17:51       98-08-8         4-Bromofluorobenzene (S)       76 %       50-150       1       05/03/11 14:25       05/03/11 17:51       98-08-8         Percent Moisture       Analytical Method: ASTM D2974-87         Percent Moisture       26.1 %       0.10       1       05/03/11 16:33         Sample: SB-13 (2.5)       Lab ID: 257502007       Collected: 04/28/11 12:25       Received: 05/03/11 07:50       Matrix: Solid         Results reported on a "dry-weight" basis       Parameters       Results       Units       Report Limit       DF       Prepared       Analyzed       CAS No.       Qual         NWTPH-Dx GCS       Analytical Method: NWTPH-Dx       Preparation Method: EPA 3546       Diseel Range       ND mg/kg       24.5       1       05/03/11 16:15       05/04/11 15:02         Motor Oil Range       ND mg/kg       98.1       1       05/03/11 16:15       05/04/11 15:02       64742-65-0         n-Octacosane (S)       103 %       50-150       1       05/03/11 16:15       05/04/11 15:02       630-02-4	Gasoline Range Organics	ND mg/kg	1	8.0	1	05/03/11 14:25	05/03/11 17:51		
4-Bromofluorobenzene (S)       76 %       50-150       1       05/03/11 14:25       05/03/11 17:51       460-00-4         Percent Moisture       Analytical Method: ASTM D2974-87         Percent Moisture       26.1 %       0.10       1       05/03/11 16:33         Sample: SB-13 (2.5)       Lab ID: 257502007       Collected: 04/28/11 12:25       Received: 05/03/11 07:50       Matrix: Solid         Results reported on a "dry-weight" basis       Parameters       Results       Units       Report Limit       DF       Prepared       Analyzed       CAS No.       Qual         NWTPH-Dx GCS       Analytical Method: NWTPH-Dx       Preparation Method: EPA 3546       Diesel Range       ND mg/kg       24.5       1       05/03/11 16:15       05/04/11 15:02         Motor Oil Range       ND mg/kg       98.1       1       05/03/11 16:15       05/04/11 15:02       64742-65-0         n-Octacosane (S)       103 %       50-150       1       05/03/11 16:15       05/04/11 15:02       630-02-4	a,a,a-Trifluorotoluene (S)	123 %		50-150	1	05/03/11 14:25	05/03/11 17:51	98-08-8	
Percent Moisture         Analytical Method: ASTM D2974-87           Percent Moisture         26.1 %         0.10         1         05/03/11 16:33           Sample: SB-13 (2.5)         Lab ID: 257502007         Collected: 04/28/11 12:25         Received: 05/03/11 07:50         Matrix: Solid           Results reported on a "dry-weight" basis         Parameters         Results         Units         Report Limit         DF         Prepared         Analyzed         CAS No.         Qual           NWTPH-Dx GCS         Analytical Method: NWTPH-Dx         Preparation Method: EPA 3546         Diesel Range         ND mg/kg         24.5         1         05/03/11 16:15         05/04/11 15:02           Motor Oil Range         ND mg/kg         98.1         1         05/03/11 16:15         05/04/11 15:02         64742-65-0           ND mg/kg         98.1         1         05/03/11 16:15         05/04/11 15:02         64742-65-0	4-Bromofluorobenzene (S)	76 %		50-150	1	05/03/11 14:25	05/03/11 17:51	460-00-4	
Percent Moisture         26.1 %         0.10         1         05/03/11 16:33           Sample:         SB-13 (2.5)         Lab ID:         257502007         Collected:         04/28/11 12:25         Received:         05/03/11 07:50         Matrix:         Solid           Results reported on a "dry-weight" basis         Parameters         Results         Units         Report Limit         DF         Prepared         Analyzed         CAS No.         Qual           NWTPH-Dx GCS         Analytical Method: NWTPH-Dx         Preparation Method: EPA 3546         Eparate of the theory of theory of theory of the theory of the theory of theory of theory of t	Percent Moisture	Analytical Method	ASTM	D2974-87					
Sample:         SB-13 (2.5)         Lab ID:         257502007         Collected:         04/28/11         12:25         Received:         05/03/11         07:50         Matrix:         Solid           Results reported on a "dry-weight" basis         Parameters         Results         Units         Report Limit         DF         Prepared         Analyzed         CAS No.         Qual           NWTPH-Dx GCS         Analytical Method:         NWTPH-Dx         Preparation Method:         EPA 3546           Diesel Range         ND mg/kg         24.5         1         05/03/11         05/04/11         15:02           Motor Oil Range         ND mg/kg         98.1         1         05/03/11         16:15         05/04/11         15:02         64742-65-0           n-Octacosane (S)         103 %         50-150         1         05/03/11         16:15         05/04/11         15:02         630-02-4	Percent Moisture	26.1 %		0.10	1		05/03/11 16:33	3	
Results reported on a "dry-weight" basisParametersResultsUnitsReport LimitDFPreparedAnalyzedCAS No.QualNWTPH-Dx GCSAnalytical Method: NWTPH-DxPreparation Method: EPA 3546Diesel RangeND mg/kg24.5105/03/11 16:1505/04/11 15:02Motor Oil RangeND mg/kg98.1105/03/11 16:1505/04/11 15:0264742-65-0n-Octacosane (S)103 %50-150105/03/11 16:1505/04/11 15:02630-02-4	Sample: SB-13 (2.5)	Lab ID: 257502	007	Collected: 04/28/1	1 12:25	Received: 05	/03/11 07:50	Matrix: Solid	
ParametersResultsUnitsReport LimitDFPreparedAnalyzedCAS No.QualNWTPH-Dx GCSAnalytical Method: NWTPH-DxPreparation Method: EPA 3546Diesel RangeND mg/kg24.5105/03/11 16:1505/04/11 15:02Motor Oil RangeND mg/kg98.1105/03/11 16:1505/04/11 15:02n-Octacosane (S)103 %50-150105/03/11 16:1505/04/11 15:02	Results reported on a "dry-weig	ght" basis							
NWTPH-Dx GCS         Analytical Method: NWTPH-Dx         Preparation Method: EPA 3546           Diesel Range         ND mg/kg         24.5         1         05/03/11 16:15         05/04/11 15:02           Motor Oil Range         ND mg/kg         98.1         1         05/03/11 16:15         05/04/11 15:02         64742-65-0           n-Octacosane (S)         103 %         50-150         1         05/03/11 16:15         05/04/11 15:02         630-02-4	Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Diesel Range         ND mg/kg         24.5         1         05/03/11 16:15         05/04/11 15:02           Motor Oil Range         ND mg/kg         98.1         1         05/03/11 16:15         05/04/11 15:02         64742-65-0           n-Octacosane (S)         103 %         50-150         1         05/03/11 16:15         05/04/11 15:02         630-02-4	NWTPH-Dx GCS	Analytical Method	: NWTP	H-Dx Preparation M	ethod: E	PA 3546			
Motor Oil Range         ND mg/kg         98.1         1         05/03/11         16:15         05/04/11         15:02         64742-65-0           n-Octacosane (S)         103 %         50-150         1         05/03/11         16:15         05/04/11         15:02         64742-65-0	Diesel Range	ND ma/ka	1	24.5	1	05/03/11 16:15	05/04/11 15:02	2	
n-Octacosane (S) 103 % 50-150 1 05/03/11 16:15 05/04/11 15:02 630-02-4	Motor Oil Range	ND mg/kg		98.1	1	05/03/11 16:15	05/04/11 15:02	2 64742-65-0	
	n-Octacosane (S)	103 %		50-150	1	05/03/11 16:15	05/04/11 15:02	2 630-02-4	

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Project: Tarr Vancouver 1821-00

Pace Project No.: 257502

Sample: SB-13 (2.5)	Lab ID: 2575020	07	Collected: 04/28/1	1 12:25	Received: 05	03/11 07:50 N	Aatrix: Solid	
Results reported on a "dry-weigh	t" basis							
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Dx GCS	Analytical Method:	NWTPH-	Dx Preparation Me	thod: E	PA 3546			
o-Terphenyl (S)	92 %		50-150	1	05/03/11 16:15	05/04/11 15:02	84-15-1	
NWTPH-Gx GCV	Analytical Method:	NWTPH-	Gx Preparation Me	ethod: N	IWTPH-Gx			
Gasoline Range Organics	<b>8.7</b> mg/kg		7.0	1	05/05/11 09:59	05/05/11 16:24		
a,a,a-Trifluorotoluene (S)	121 %		50-150	1	05/05/11 09:59	05/05/11 16:24	98-08-8	
4-Bromofluorobenzene (S)	86 %		50-150	1	05/05/11 09:59	05/05/11 16:24	460-00-4	
6010 MET ICP	Analytical Method:	EPA 6010	) Preparation Meth	od: EP	A 3050			
Lead	<b>46.8</b> mg/kg		1.2	1	05/09/11 07:54	05/09/11 15:43	7439-92-1	
Percent Moisture	Analytical Method:	ASTM D2	2974-87					
Percent Moisture	20.3 %		0.10	1		05/03/11 16:34		
Sample: SB-13 (8.0)	Lab ID: 2575020	008	Collected: 04/28/1	1 12:50	Received: 05	5/03/11 07:50 N	Aatrix: Solid	
Results reported on a "dry-weigh	t" basis							
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Dx GCS	Analytical Method:	NWTPH-	Dx Preparation Me	thod: E	PA 3546			
Diesel Range	ND mg/kg		26.1	1	05/03/11 16:15	05/04/11 15:18		
Motor Oil Range	ND mg/kg		105	1	05/03/11 16:15	05/04/11 15:18	64742-65-0	
n-Octacosane (S)	101 %		50-150	1	05/03/11 16:15	05/04/11 15:18	630-02-4	
o-Terphenyl (S)	89 %		50-150	1	05/03/11 16:15	05/04/11 15:18	84-15-1	
NWTPH-Gx GCV	Analytical Method:	NWTPH-	Gx Preparation Me	thod: N	IWTPH-Gx			
Gasoline Range Organics	ND mg/kg		7.1	1	05/03/11 14:25	05/03/11 19:01		
a,a,a-Trifluorotoluene (S)	122 %		50-150	1	05/03/11 14:25	05/03/11 19:01	98-08-8	
4-Bromofluorobenzene (S)	80 %		50-150	1	05/03/11 14:25	05/03/11 19:01	460-00-4	
8260/5035A Volatile Organics	Analytical Method:	EPA 8260	0					
1,1,1,2-Tetrachloroethane	ND ug/kg		3.4	1		05/04/11 12:24	630-20-6	
1,1,1-Trichloroethane	ND ug/kg		3.4	1		05/04/11 12:24	71-55-6	
1,1,2,2-Tetrachloroethane	ND ug/kg		3.4	1		05/04/11 12:24	79-34-5	
1,1,2-Trichloroethane	ND ug/kg		3.4	1		05/04/11 12:24	79-00-5	
1,1,2-Trichlorotrifluoroethane	ND ug/kg		3.4	1		05/04/11 12:24	76-13-1	
1,1-Dichloroethane	ND ug/kg		3.4	1		05/04/11 12:24	75-34-3	
1,1-Dichloroethene	ND ug/kg		3.4	1		05/04/11 12:24	75-35-4	
1,1-Dichloropropene	ND ug/kg		3.4	1		05/04/11 12:24	563-58-6	
1,2,3-Trichlorobenzene	ND ug/kg		3.4	1		05/04/11 12:24	87-61-6	
1,2,3-Trichloropropane	ND ug/kg		3.4	1		05/04/11 12:24	96-18-4	
1,2,4-Trichlorobenzene	ND ug/kg		3.4	1		05/04/11 12:24	120-82-1	
1,2-Dibromo-3-chloropropane	ND ug/kg		5.6	1		05/04/11 12:24	96-12-8	
1,2-Dibromoethane (EDB)	ND ug/kg		3.4	1		05/04/11 12:24	106-93-4	
1,2-Dichlorobenzene	ND ug/kg		3.4	1		05/04/11 12:24	95-50-1	

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Project: Tarr Vancouver 1821-00

Pace Project No.: 257502

Sample: SB-13 (8.0)	Lab ID: 2575	502008	Collected: 04/28/1	1 12:50	Received: 0	5/03/11 07:50 N	latrix: Solid	
Results reported on a "dry-weight	t" basis							
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260/5035A Volatile Organics	Analytical Meth	nod: EPA 826	0					
1,2-Dichloroethane	ND ug/	/kg	3.4	1		05/04/11 12:24	107-06-2	
1,2-Dichloroethene (Total)	ND ug/	/kg	6.8	1		05/04/11 12:24	540-59-0	
1,2-Dichloropropane	ND ug/	/kg	3.4	1		05/04/11 12:24	78-87-5	
1,3,5-Trimethylbenzene	24.7 ug/	/kg	3.4	1		05/04/11 12:24	108-67-8	
1,3-Dichlorobenzene	ND ug	/kg	3.4	1		05/04/11 12:24	541-73-1	
1,3-Dichloropropane	ND ug/	/kg	3.4	1		05/04/11 12:24	142-28-9	
1,4-Dichlorobenzene	ND ug/	/kg	3.4	1		05/04/11 12:24	106-46-7	
2,2-Dichloropropane	ND ug	/kg	3.4	1		05/04/11 12:24	594-20-7	
2-Butanone (MEK)	ND ug	/kg	11.3	1		05/04/11 12:24	78-93-3	
2-Chlorotoluene	ND ug	/kg	3.4	1		05/04/11 12:24	95-49-8	
2-Hexanone	ND ug	/kg	11.3	1		05/04/11 12:24	591-78-6	
4-Chlorotoluene	ND ug	/kg	3.4	1		05/04/11 12:24	106-43-4	
4-Methyl-2-pentanone (MIBK)	ND ug	/kg	11.3	1		05/04/11 12:24	108-10-1	
Acetone	17.1 ug	/ka	11.3	1		05/04/11 12:24	67-64-1	
Benzene	62.1 ug/	/kg	3.4	1		05/04/11 12:24	71-43-2	
Bromobenzene	ND ug	/kg	3.4	1		05/04/11 12:24	108-86-1	
Bromochloromethane	ND ug	/ka	3.4	1		05/04/11 12:24	74-97-5	
Bromodichloromethane	ND ug	/ka	3.4	1		05/04/11 12:24	75-27-4	
Bromoform	ND ug	/ka	3.4	1		05/04/11 12:24	75-25-2	
Bromomethane	ND ug	/kg	3.4	1		05/04/11 12:24	74-83-9	
Carbon disulfide	ND ug	/kg	3.4	1		05/04/11 12:24	75-15-0	
Carbon tetrachloride	ND ug	/kg	3.4	1		05/04/11 12:24	56-23-5	
Chlorobenzene	ND ug	/kg	3.4	1		05/04/11 12:24	108-90-7	
Chloroethane	ND ug	/ka	3.4	1		05/04/11 12:24	75-00-3	
Chloroform	ND ug	/kg	3.4	1		05/04/11 12:24	67-66-3	
Chloromethane	ND ug	/ka	3.4	1		05/04/11 12:24	74-87-3	
Dibromochloromethane	ND ug	/ka	3.4	1		05/04/11 12:24	124-48-1	
Dibromomethane	ND ug	/ka	3.4	1		05/04/11 12:24	74-95-3	
Dichlorodifluoromethane	ND ug	/ka	3.4	1		05/04/11 12:24	75-71-8	
Ethvlbenzene	<b>79.5</b> ug/	/ka	3.4	1		05/04/11 12:24	100-41-4	
Hexachloro-1.3-butadiene	ND ug	/ka	3.4	1		05/04/11 12:24	87-68-3	
Isopropylbenzene (Cumene)	11.3 ug	/ka	3.4	1		05/04/11 12:24	98-82-8	
Methyl-tert-butyl ether	ND ug	/ka	3.4	1		05/04/11 12:24	1634-04-4	
Methylene chloride	ND ug	/ka	11.3	1		05/04/11 12:24	75-09-2	
Naphthalene	<b>7.2</b> ug/	/ka	3.4	1		05/04/11 12:24	91-20-3	
Styrene	ND ug	/ka	3.4	1		05/04/11 12:24	100-42-5	
Tetrachloroethene	ND ug	/ka	3.4	1		05/04/11 12:24	127-18-4	
Toluene	14.8 ug	/ka	3.4	1		05/04/11 12:24	108-88-3	
Trichloroethene	ND ug	/ka	3.4	1		05/04/11 12:24	79-01-6	
Trichlorofluoromethane	ND ug	/ka	3.4	1		05/04/11 12:24	75-69-4	
Vinvl chloride	ND ug	/ka	3.4	1		05/04/11 12:24	75-01-4	
Xvlene (Total)	425 ug	/ka	10.1	1		05/04/11 12:24	1330-20-7	
cis-1.2-Dichloroethene	ND un	/ka	3.4	1		05/04/11 12:24	156-59-2	
cis-1.3-Dichloropropene	ND ug	/ka	3.4	1		05/04/11 12:24	10061-01-5	
m&p-Xylene	<b>307</b> ua	/kg	6.8	1		05/04/11 12:24	179601-23-1	
n-Butylbenzene	ND ug	/kg	3.4	1		05/04/11 12:24	104-51-8	
•	· 3·	2						

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Project: Tarr Vancouver 1821-00

Pace Project No.: 257502

Sample: SB-13 (8.0)	Lab ID: 25750	2008	Collected: 04/2	28/11 12:	50 Received: 0	5/03/11 07:50	Matrix: Solid	
Results reported on a "dry-weight	t" basis							
Parameters	Results	Units	Report Lim	t DF	Prepared	Analyzed	CAS No.	Qual
8260/5035A Volatile Organics	Analytical Metho	d: EPA 8	260					
n-Propylbenzene	<b>28.2</b> ug/kg	g	3	.4 1		05/04/11 12:24	4 103-65-1	
o-Xylene	<b>118</b> ug/k	9	3	.4 1		05/04/11 12:24	4 95-47-6	
p-Isopropyltoluene	ND ug/k	9	3	.4 1		05/04/11 12:24	4 99-87-6	
sec-Butylbenzene	<b>4.5</b> ug/k	q	3	.4 1		05/04/11 12:24	135-98-8	
tert-Amylmethyl ether	ND ug/k	g	3	.4 1		05/04/11 12:24	4 994-05-8	
tert-Butylbenzene	ND ug/k	9	3	.4 1		05/04/11 12:24	4 98-06-6	
trans-1,2-Dichloroethene	ND ug/k	q	3	.4 1		05/04/11 12:24	156-60-5	
trans-1,3-Dichloropropene	ND ug/k	a	3	.4 1		05/04/11 12:24	10061-02-6	
Dibromofluoromethane (S)	100 %	5	80-13	36 1		05/04/11 12:24	1868-53-7	
Toluene-d8 (S)	93 %		80-12	20 1		05/04/11 12:24	1 2037-26-5	
4-Bromofluorobenzene (S)	103 %		72-12	22 1		05/04/11 12:24	460-00-4	
1.2-Dichloroethane-d4 (S)	100 %		80-14	13 1		05/04/11 12:24	17060-07-0	
Percent Moisture	Analytical Metho	MT2A ·h	D2974-87					
Percent Moisture	25 3 %	u. Ao i M	0.4	10 1		05/03/11 16:34	1	
	20.0 /0		0.			00/00/11 10.04	T	
Sample: SB-13 (13.5)	Lab ID: 25750	2009	Collected: 04/2	28/11 13:0	05 Received: 0	5/03/11 07:50	Matrix: Solid	
Results reported on a "drv-weight	t" basis							
					<b>.</b> .		0.00 N	<b>o</b> 1
Parameters	Results	Units	Report Lim	t DF	Prepared	Analyzed	CAS No.	Qual
Percent Moisture	Analytical Metho	d: ASTM	D2974-87					
Percent Moisture	<b>27.7</b> %		0.4	10 1		05/03/11 16:35	5	
Sample: SB-13	Lab ID: 25750	2010	Collected: 04/2	28/11 13:	35 Received: 0	5/03/11 07:50	Matrix: Water	
Parameters	Results	Units	Report Lim	it DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Dx GCS	Analytical Metho	d: NWTF	PH-Dx Preparation	Method:	EPA 3510			
Diesel Range	0 097 mg/l		0.07	75 1	05/03/11 14:25	5 05/03/11 10.40	h	
Motor Oil Pange	ND mg/L	-	0.01	28 1	05/03/11 14:25	05/03/11 10:40	, 64742-65-0	
n-Octacosane (S)	101 %	-	50-14	50 1	05/03/11 14:25	05/03/11 19:40	) 630-02-4	
o Torphonyl (S)	02.0%		50-10	50 1	05/03/11 14.25	5 05/03/11 19:40	9 030-02-4	
	93 /0		50-13	00 1	05/05/11 14.25	00/00/11 19.40	0 04-15-1	
8260 MSV	Analytical Metho	d: EPA 5	030B/8260					
1,1,1,2-Tetrachloroethane	ND ug/L		1	.0 1		05/04/11 18:22	2 630-20-6	
1,1,1-Trichloroethane	ND ug/L		1	.0 1		05/04/11 18:22	2 71-55-6	
1,1,2,2-Tetrachloroethane	ND ug/L		1	.0 1		05/04/11 18:22	2 79-34-5	
1,1,2-Trichloroethane	ND ug/L		1	.0 1		05/04/11 18:22	2 79-00-5	
1,1-Dichloroethane	ND ug/L		1	.0 1		05/04/11 18:22	2 75-34-3	
1,1-Dichloroethene	ND ug/L		1	.0 1		05/04/11 18:22	2 75-35-4	
1,1-Dichloropropene	ND ua/L		1	.0 1		05/04/11 18:22	2 563-58-6	
1,2,3-Trichlorobenzene	ND ug/L		1	.0 1		05/04/11 18:22	2 87-61-6	

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Project: Tarr Vancouver 1821-00

Pace Project No.: 257502

Sample: SB-13	Lab ID: 2575	02010	Collected: 04/28/11 13:35 Received: 05/03/11 07:50		5/03/11 07:50 N	Matrix: Water		
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Metho	od: EPA 5	030B/8260					
1,2,3-Trichloropropane	ND ug/L	_	1.0	1		05/04/11 18:22	96-18-4	
1,2,4-Trichlorobenzene	ND ug/L	_	1.0	1		05/04/11 18:22	120-82-1	
1,2,4-Trimethylbenzene	ND ug/L	_	1.0	1		05/04/11 18:22	95-63-6	
1,2-Dibromo-3-chloropropane	ND ug/L	_	4.0	1		05/04/11 18:22	96-12-8	
1,2-Dibromoethane (EDB)	ND ug/L	_	1.0	1		05/04/11 18:22	106-93-4	
1,2-Dichlorobenzene	ND ug/L	_	1.0	1		05/04/11 18:22	95-50-1	
1,2-Dichloroethane	ND ug/L	_	1.0	1		05/04/11 18:22	107-06-2	
1,2-Dichloroethene (Total)	ND ug/L	_	2.0	1		05/04/11 18:22	540-59-0	
1,2-Dichloropropane	ND ug/L	_	1.0	1		05/04/11 18:22	78-87-5	
1,3,5-Trimethylbenzene	ND ug/L	_	1.0	1		05/04/11 18:22	108-67-8	
1,3-Dichlorobenzene	ND ug/L	_	1.0	1		05/04/11 18:22	541-73-1	
1,3-Dichloropropane	ND ug/L	_	1.0	1		05/04/11 18:22	142-28-9	
1,4-Dichlorobenzene	ND ug/L	_	1.0	1		05/04/11 18:22	106-46-7	
2,2-Dichloropropane	ND ug/L	_	1.0	1		05/04/11 18:22	594-20-7	
2-Butanone (MEK)	ND ug/L	_	5.0	1		05/04/11 18:22	78-93-3	
2-Chlorotoluene	ND ug/L	_	1.0	1		05/04/11 18:22	95-49-8	
2-Hexanone	ND ug/L	_	5.0	1		05/04/11 18:22	591-78-6	
4-Chlorotoluene	ND ug/L	_	1.0	1		05/04/11 18:22	106-43-4	
4-Methyl-2-pentanone (MIBK)	ND ug/L	_	5.0	1		05/04/11 18:22	108-10-1	
Acetone	ND ug/L	_	5.0	1		05/04/11 18:22	67-64-1	
Benzene	ND ug/L	_	1.0	1		05/04/11 18:22	71-43-2	
Bromobenzene	ND ug/L	_	1.0	1		05/04/11 18:22	108-86-1	
Bromochloromethane	ND ug/L	_	1.0	1		05/04/11 18:22	74-97-5	
Bromodichloromethane	ND ug/L	_	1.0	1		05/04/11 18:22	75-27-4	
Bromoform	ND ug/L	_	1.0	1		05/04/11 18:22	75-25-2	
Bromomethane	ND ug/L	_	1.0	1		05/04/11 18:22	74-83-9	
Carbon disulfide	ND ug/L	_	1.0	1		05/04/11 18:22	75-15-0	
Carbon tetrachloride	ND ug/L	_	1.0	1		05/04/11 18:22	56-23-5	
Chlorobenzene	ND ug/L	_	1.0	1		05/04/11 18:22	108-90-7	
Chloroethane	ND ug/L	_	1.0	1		05/04/11 18:22	75-00-3	
Chloroform	ND ug/L	_	1.0	1		05/04/11 18:22	67-66-3	
Chloromethane	ND ug/L	-	1.0	1		05/04/11 18:22	74-87-3	
Dibromochloromethane	ND ug/L	-	1.0	1		05/04/11 18:22	124-48-1	
Dibromomethane	ND ug/L	-	1.0	1		05/04/11 18:22	74-95-3	
Dichlorodifluoromethane	ND ug/L	-	1.0	1		05/04/11 18:22	75-71-8	
Ethylbenzene	ND ug/L	-	1.0	1		05/04/11 18:22	100-41-4	
Hexachloro-1,3-butadiene	ND ug/L	-	1.0	1		05/04/11 18:22	87-68-3	
Isopropylbenzene (Cumene)	ND ug/L	-	1.0	1		05/04/11 18:22	98-82-8	
Methyl-tert-butyl ether	ND ug/L	-	1.0	1		05/04/11 18:22	1634-04-4	
Methylene chloride	ND ug/L	-	4.0	1		05/04/11 18:22	75-09-2	
Naphthalene	ND ug/L	-	1.0	1		05/04/11 18:22	91-20-3	
Styrene	ND ug/L	-	1.0	1		05/04/11 18:22	100-42-5	
Tetrachloroethene	ND ug/L	-	1.0	1		05/04/11 18:22	127-18-4	
Toluene	ND ug/L	-	1.0	1		05/04/11 18:22	108-88-3	
Trichloroethene	ND ug/L	-	1.0	1		05/04/11 18:22	79-01-6	
Trichlorofluoromethane	ND ug/L	-	1.0	1		05/04/11 18:22	75-69-4	
Vinyl chloride	ND ug/L	_	1.0	1		05/04/11 18:22	75-01-4	

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Project: Tarr Vancouver 1821-00

Pace Project No.: 257502

Parameters         Results         Units         Report Limit         DF         Prepared         Analyzed         CAS No.           8260 MSV         Analytical Method: EPA 50308/8260         X/jene (Total)         ND ug/L         3.0         1         05/04/11 18:22         130-20-7           cisi-1.3-Dichlorophene         ND ug/L         1.0         1         05/04/11 18:22         130-20-7           cisi-1.3-Dichlorophene         ND ug/L         2.0         1         05/04/11 18:22         10691-01-5           m8p-Xylene         ND ug/L         1.0         1         05/04/11 18:22         10451-8           n-Propylenzene         ND ug/L         1.0         1         05/04/11 18:22         103-65-1           n-Propylenzene         ND ug/L         1.0         1         05/04/11 18:22         103-65-1           n-Propylenzene         ND ug/L         1.0         1         05/04/11 18:22         103-65-1           n-Stopropyltolune         ND ug/L         1.0         1         05/04/11 18:22         133-65-65           terrs-12-Dichlorophene         ND ug/L         1.0         1         05/04/11 18:22         169-60-7           trans-12-Dichlorophenzene (S)         99 %         80-120         1         05/04/11 18:22	
B260 MSV         Analytical Method: EPA 5030B/8260           Xylene (Total)         ND ug/L         3.0         1         05/04/11 18:22         1330-20-7           cis-1,3-Dichlorophpene         ND ug/L         1.0         1         05/04/11 18:22         1036-59-2           cis-1,3-Dichlorophpene         ND ug/L         2.0         1         05/04/11 18:22         1096-10-15           m&p-xylene         ND ug/L         1.0         1         05/04/11 18:22         104-51-8           n-Propylenzene         ND ug/L         1.0         1         05/04/11 18:22         103-65-1           n-Propylenzene         ND ug/L         1.0         1         05/04/11 18:22         198-76           o-Xylene         ND ug/L         1.0         1         05/04/11 18:22         198-76           o-Sylene         ND ug/L         1.0         1         05/04/11 18:22         198-76           o-Sylene         ND ug/L         1.0         1         05/04/11 18:22         198-76           sea-Butylbenzene         ND ug/L         1.0         1         05/04/11 18:22         198-76           d-Bornofluorobenzene (S)         99 %         80-122         1         05/04/11 18:22         106-02-6           trans-1,3-Dic	Qual
Xylene (Total)         ND ug/L         3.0         1         05/04/11 18:22         1330-20-7           cs:1-3-Dichloroethene         ND ug/L         1.0         1         05/04/11 18:22         1230-21           cs:1-3-Dichloroptopene         ND ug/L         1.0         1         05/04/11 18:22         1021-01-5           msp-Xylene         ND ug/L         1.0         1         05/04/11 18:22         1024-01-15           n-Butylbenzene         ND ug/L         1.0         1         05/04/11 18:22         103-51-8           n-Propylbenzene         ND ug/L         1.0         1         05/04/11 18:22         193-57-8           o-Xylene         ND ug/L         1.0         1         05/04/11 18:22         193-57-8           o-Sopropholene         ND ug/L         1.0         1         05/04/11 18:22         193-57-8           sec-Butylbenzene         ND ug/L         1.0         1         05/04/11 18:22         195-97-8           tert-Butylbenzene         ND ug/L         1.0         1         05/04/11 18:22         156-60-5           trans-1.2-Dichloroethene         ND ug/L         1.0         1         05/04/11 18:22         156-60-5           trans-1.2-Dichloroethene         ND ug/L         1.0         <	
dis-1,2-Dichloroethene         ND         ug/L         1.0         1         05/04/11 18:22         156-59-2           cis-1,3-Dichloropropene         ND         ug/L         1.0         1         05/04/11 18:22         10061-01-5           mg/-Xylene         ND         ug/L         1.0         1         05/04/11 18:22         104-51-8           n-Propylbenzene         ND         ug/L         1.0         1         05/04/11 18:22         104-51-8           n-Propylbenzene         ND         ug/L         1.0         1         05/04/11 18:22         59-7-6           o-Xylene         ND         ug/L         1.0         1         05/04/11 18:22         59-8-7           osc-Butylbenzene         ND         ug/L         1.0         1         05/04/11 18:22         59-8-7           tert-Butylbenzene         ND         ug/L         1.0         1         05/04/11 18:22         99-87-6           sec-Butylbenzene         ND         ug/L         1.0         1         05/04/11 18:22         99-87-6           sec-Butylbenzene         ND         ug/L         1.0         1         05/04/11 18:22         186-05-5           tert-Butylbenzene         ND         ug/L         1.0         1 </td <td></td>	
ois-1.3-Dichloropropene         ND         ug/L         1.0         1         05/04/11 18:22         10/061-01-5           m&p-Xylene         ND         ug/L         2.0         1         05/04/11 18:22         10/061-01-5           m-Propytherzene         ND         ug/L         1.0         1         05/04/11 18:22         10/365-18           n-Propytherzene         ND         ug/L         1.0         1         05/04/11 18:22         99/37-6           o-Xylene         ND         ug/L         1.0         1         05/04/11 18:22         99/37-6           sec-Butythenzene         ND         ug/L         1.0         1         05/04/11 18:22         99/37-6           sec-Butythonzene         ND         ug/L         1.0         1         05/04/11 18:22         99/37-6           esc-Butythonzene         ND         ug/L         1.0         1         05/04/11 18:22         160-60-5           trans-1,3-Dichloroptene         ND         ug/L         1.0         1         05/04/11 18:22         160-60-4           Dibromofluorobenzene (S)         92 %         80-120         1         05/04/11 18:22         160-07-0           Toluene-d8 (S)         92 %         50-150         1         05/0	
m&p-Sylene         ND ug/L         2.0         1         05/04/11 18:22         179601-23-1           n-Butylbenzene         ND ug/L         1.0         1         05/04/11 18:22         104-51-8           n-Propylbenzene         ND ug/L         1.0         1         05/04/11 18:22         103-65-1           o-Xylene         ND ug/L         1.0         1         05/04/11 18:22         99-87-6           p-lsopropyltoluene         ND ug/L         1.0         1         05/04/11 18:22         135-98-8           tert-Butylbenzene         ND ug/L         1.0         1         05/04/11 18:22         135-98-8           tert-Butylbenzene         ND ug/L         1.0         1         05/04/11 18:22         165-05-5           trans-1,2-Dichloroptopene         ND ug/L         1.0         1         05/04/11 18:22         165-0-5           trans-1,2-Dichloroptopene         ND ug/L         1.0         1         05/04/11 18:22         168-6-3-7           trans-1,2-Dichloroptopene         ND ug/L         50.0         1         05/04/11 18:22         168-0-0-4           Dibromofluorobenzene (S)         99 %         80-122         1         05/04/11 18:22         120-0-0-4           Sample:         MW-2 (2.5)         Lab ID:	
n-Butylbenzene ND ug/L 10 1 05/04/11 18:22 104-51-8 n-Propylbenzene ND ug/L 10 1 05/04/11 18:22 103-65-1 o-Xylene ND ug/L 10 1 05/04/11 18:22 93-67-6 sec-Butylbenzene ND ug/L 10 1 05/04/11 18:22 93-67-6 sec-Butylbenzene ND ug/L 10 1 05/04/11 18:22 93-67-6 trans-1,2-Dichloroptene ND ug/L 10 1 05/04/11 18:22 156-80-5 trans-1,3-Dichloroptene ND ug/L 10 1 05/04/11 18:22 156-60-5 trans-1,3-Dichloroptene ND ug/L 10 1 05/04/11 18:22 160-102-6 4-Bromofluorobenzene (S) 99 % 80-120 1 05/04/11 18:22 100-102-6 4-Bromofluoromethane (S) 92 % 80-122 1 05/04/11 18:22 100-07-0 Toluene-d8 (S) 99 % 80-123 1 05/04/11 18:22 100-07-0 Toluene-d8 (S) 99 % 80-123 1 05/04/11 18:22 100-07-0 Toluene-d8 (S) 99 % 50-150 1 05/04/11 18:22 2037-26-5 NWTPH-Gx MSV Analytical Method: NWTPH-Gx Gasoline Range Organics ND ug/L 50.0 1 05/04/11 18:22 460-00-4 Example: MW-2 (2.5) Lab ID: 257502011 Collected: 04/28/11 14:30 Received: 05/03/11 07:50 Matrix: Solid Results reported on a "dry-weight" basis Parameters Results Units Report Limit DF Prepared Analyzed CAS No. 0 Percent Moisture 20.7 % 0.10 1 05/03/11 07:50 Matrix: Solid Results reported on a "dry-weight" basis Parameters Results Units Report Limit DF Prepared Analyzed CAS No. 0 Percent Moisture 20.7 % 0.10 1 05/03/11 07:50 Matrix: Solid Results reported on a "dry-weight" basis Parameters Results Units Report Limit DF Prepared Analyzed CAS No. 0 NWTPH-Dx GCS Analytical Method: NWTPH-Dx Preparation Method: EPA 3546 Diesel Range ND mg/kg 25.9 1 05/03/11 16:15 05/04/11 15:25	
n-Propylenzene         ND ug/L         1.0         1         05/04/11 18:22         10:25         10:25           o-Xylene         ND ug/L         1.0         1         05/04/11 18:22         95-87-6           p-Isopropyltoluene         ND ug/L         1.0         1         05/04/11 18:22         95-87-6           sec-Butylbenzene         ND ug/L         1.0         1         05/04/11 18:22         98-87-6           tert-Butylbenzene         ND ug/L         1.0         1         05/04/11 18:22         128-98-6           tert-Butylbenzene         ND ug/L         1.0         1         05/04/11 18:22         126-60-5           trans-1,2-Dichloroethene         ND ug/L         1.0         1         05/04/11 18:22         126-60-5           trans-1,3-Dichloroethene(S)         92 %         80-122         1         05/04/11 18:22         1060-02-6           Dibromofluorobenzene(S)         92 %         80-123         1         05/04/11 18:22         188-53-7           1,2-Dichloroethene-d4 (S)         99 %         80-123         1         05/04/11 18:22         12060-07-0           Toluene-d8 (S)         99 %         50-10         1         05/04/11 18:22         460-00-4           Sample: MW-2 (2.5)         Lab I	
o-Xylene         ND ug/L         1.0         1         05/04/11 18:22         95-77-6           p-Isopropyltoluene         ND ug/L         1.0         1         05/04/11 18:22         99-87-6           sce-Butylbenzene         ND ug/L         1.0         1         05/04/11 18:22         99-87-6           sce-Butylbenzene         ND ug/L         1.0         1         05/04/11 18:22         98-87-6           sce-Butylbenzene         ND ug/L         1.0         1         05/04/11 18:22         135-98-8           tert-Butylbenzene         ND ug/L         1.0         1         05/04/11 18:22         135-98-8           taras-1,3-Dichloroptene         ND ug/L         1.0         1         05/04/11 18:22         10061-02-6           4-Bromofluorobenzene (S)         99 %         80-120         1         05/04/11 18:22         17060-07-0           Dibromofluoromethane (S)         92 %         80-123         1         05/04/11 18:22         17060-07-0           Toluene-d8 (S)         99 %         80-123         1         05/04/11 18:22         17060-07-0           Arbromofluorobenzene (S)         99 %         50-150         1         05/04/11 18:22         400-00-4           Sample:         MW-2 (2.5)         Lab ID	
p-Isopropyloluene         ND ug/L         1.0         1         05/04/11 18:22         98-87-6           sec-Butylbenzene         ND ug/L         1.0         1         05/04/11 18:22         135-98-8           ter-Butylbenzene         ND ug/L         1.0         1         05/04/11 18:22         135-98-8           ter-Butylbenzene         ND ug/L         1.0         1         05/04/11 18:22         185-60-5           trans-1,2-Dichloroethene         ND ug/L         1.0         1         05/04/11 18:22         10061-02-6           4-Bromofluorobenzene (S)         99 %         80-120         1         05/04/11 18:22         406-00-4           Dibromofluoromethane4(S)         99 %         80-123         1         05/04/11 18:22         2037-26-5           NWTPH-Gx MSV         Analytical Method: NWTPH-Gx         Gasoline Range Organics         ND ug/L         50.0         1         05/04/11 18:22         460-00-4           Sample: MW-2 (2.5)         Lab ID: 257502011         Collected: 04/28/11 14:30         Received: 05/03/11 07:50         Matrix: Solid           Results reported on a "dry-weight" basis         Units         Report Limit         DF         Prepared         Analyzed         CAS No.         0           Percent Moisture         20.7 %	
sec-Butylbenzene         ND ug/L         1.0         1         05/04/11 18:22         135-98-8           tert-Butylbenzene         ND ug/L         1.0         1         05/04/11 18:22         98-06-6           trans-1,2-Dichloroptene         ND ug/L         1.0         1         05/04/11 18:22         135-98-8           trans-1,3-Dichloroptene         ND ug/L         1.0         1         05/04/11 18:22         135-98-6           trans-1,2-Dichloroptene         ND ug/L         1.0         1         05/04/11 18:22         10061-02-6           4-Bromofluorobenzene (S)         92 %         80-122         1         05/04/11 18:22         126-06-7           Dibromofluoromethane (S)         92 %         80-123         1         05/04/11 18:22         2037-26-5           NWTPH-Gx MSV         Analytical Method: NWTPH-Gx               Gasoline Range Organics         ND ug/L         50.0         1         05/04/11 18:22         460-00-4           Sample: MW-2 (2.5)         Lab ID: 257502011         Collected: 04/28/11 14:30         Received: 05/03/11 07:50         Matrix: Solid           Results reported on a "dry-weight" basis         Parameters         Results         Units         Report Limit         DF         Prepared <td></td>	
tert-Butylbenzene         ND ug/L         1.0         1         05/04/11 18:22         98-06-6           trans-1,2-Dichloroethene         ND ug/L         1.0         1         05/04/11 18:22         156-60-5           trans-1,3-Dichloroppene         ND ug/L         1.0         1         05/04/11 18:22         166-0-5           4-Bromofluorobenzene (S)         99 %         80-120         1         05/04/11 18:22         186-53-7           1,2-Dichloroethane (S)         92 %         80-124         1         05/04/11 18:22         186-53-7           1,2-Dichloroethane-04 (S)         96 %         80-123         1         05/04/11 18:22         1766-07-0           Toluene-08 (S)         99 %         80-123         1         05/04/11 18:22         2037-26-5           NWTPH-Gx MSV         Analytical Method: NWTPH-Gx         Gasoline Range Organics         ND ug/L         50.0         1         05/04/11 18:22         460-00-4           4-Bromofluorobenzene (S)         99 %         50-150         1         05/04/11 18:22         460-00-4           Sample: MW-2 (2.5)         Lab ID: 257502011         Collected: 04/28/11 14:30         Received: 05/03/11 07:50         Matrix: Solid           Results reported on a "dry-weight" basis         E         Parameters	
trans-1,2-Dichloroethene         ND ug/L         1.0         1         05/04/11 18:22         156-60-5           trans-1,3-Dichloroppene         ND ug/L         1.0         1         05/04/11 18:22         10061-02-6           -Bromofluorobenzene (S)         99 %         80-120         1         05/04/11 18:22         1086-03-7           Dibromofluoromethane (S)         92 %         80-122         1         05/04/11 18:22         1760-07-0           Dibromofluoromethane (S)         99 %         80-123         1         05/04/11 18:22         17060-07-0           Toluene-d8 (S)         99 %         80-123         1         05/04/11 18:22         2037-26-5           NWTPH-Gx MSV         Analytical Method: NWTPH-Gx         Gasoline Range Organics         ND ug/L         50.0         1         05/04/11 18:22         460-00-4           Sample: MW-2 (2.5)         Lab ID: 257502011         Collected: 04/28/11 14:30         Received: 05/03/11 07:50         Matrix: Solid           Results reported on a "dry-weight" basis         Inits         Report Limit         DF         Prepared         Analyzed         CAS No.         0           Percent Moisture         20.7 %         0.10         1         05/03/11 07:50         Matrix: Solid           Results reported on a "dry-weigh	
trans-1,3-Dichloropropene         ND ug/L         1.0         1         05/04/11 18:22         10061-02-6           4-Bromofluorobenzene (S)         99 %         80-120         1         05/04/11 18:22         1460-00-4           Dibromofluoromethane (S)         92 %         80-122         1         05/04/11 18:22         17660-07-0           Tulene-d8 (S)         99 %         80-123         1         05/04/11 18:22         12060-07-0           Toluene-d8 (S)         99 %         80-123         1         05/04/11 18:22         2037-26-5           NWTPH-Gx MSV         Analytical Method: NWTPH-Gx         Gasoline Range Organics         ND ug/L         50.0         1         05/04/11 18:22         460-00-4           Sample: MW-2 (2.5)         Lab ID: 257502011         Collected: 04/28/11 14:30         Received: 05/03/11 07:50         Matrix: Solid           Results reported on a "dry-weight" basis         Parameters         Results         Units         Report Limit         DF         Prepared         Analyzed         CAS No.         0           Percent Moisture         Analytical Method: ASTM D2974-87         Percent Moisture         Solid         1         05/03/11 07:50         Matrix: Solid           Results reported on a "dry-weight" basis         Units         Report Limit <t< td=""><td></td></t<>	
4-Bromofluorobenzene (S)       99 %       80-120       1       05/04/11 18:22       460-00-4         Dibromofluoromethane (S)       92 %       80-122       1       05/04/11 18:22       17060-07-0         1,2-Dichloroethane-04 (S)       96 %       80-124       1       05/04/11 18:22       17060-07-0         Toluene-08 (S)       99 %       80-123       1       05/04/11 18:22       17060-07-0         NWTPH-Gx MSV       Analytical Method: NWTPH-Gx       Gasoline Range Organics       ND ug/L       50.0       1       05/04/11 18:22       460-00-4         4-Bromofluorobenzene (S)       99 %       50-150       1       05/04/11 18:22       460-00-4         Sample: MW-2 (2.5)       Lab ID: 257502011       Collected: 04/28/11 14:30       Received: 05/03/11 07:50       Matrix: Solid         Results reported on a "dry-weight" basis       Parameters       Results       Units       Report Limit       DF       Prepared       Analyzed       CAS No.       O         Percent Moisture       20.7 %       0.10       1       05/03/11 07:50       Matrix: Solid         Results reported on a "dry-weight" basis       E       E       Parameters       0.10       1       05/03/11 07:50       Matrix: Solid         Results reported on a "dry-weight" basis	
Dibromofluoromethane (S)         92 %         80-122         1         05/04/11 18:22         1868-53-7           1,2-Dichloroethane-d4 (S)         96 %         80-124         1         05/04/11 18:22         17060-07-0           Toluene-d8 (S)         99 %         80-123         1         05/04/11 18:22         2037-26-5           NWTPH-Gx MSV         Analytical Method: NWTPH-Gx         Gasoline Range Organics         ND ug/L         50.0         1         05/04/11 18:22         460-00-4           4-Bromofluorobenzene (S)         99 %         50-150         1         05/04/11 18:22         460-00-4           Sample: MW-2 (2.5)         Lab ID: 257502011         Collected: 04/28/11 14:30         Received: 05/03/11 07:50         Matrix: Solid           Percent Moisture         Analytical Method: ASTM D2974-87         Percent Moisture         Analytical Method: ASTM D2974-87           Percent Moisture         20.7 %         0.10         1         05/03/11 07:50         Matrix: Solid           Results reported on a "dry-weight" basis         Inits         Report Limit         DF         Prepared         Analyzed         CAS No.         O           Parameters         Results         Units         Report Limit         DF         Prepared         Analyzed         CAS No. <t< td=""><td></td></t<>	
1,2-Dichloroethane-d4 (S)       96 %       80-124       1       05/04/11 18:22       17060-07-0         Toluene-d8 (S)       99 %       80-123       1       05/04/11 18:22       2037-26-5         NWTPH-Gx MSV       Analytical Method: NWTPH-Gx         Gasoline Range Organics       ND ug/L       50.0       1       05/04/11 18:22       460-00-4         4-Bromofluorobenzene (S)       99 %       50-150       1       05/04/11 18:22       460-00-4         Sample:       MW-2 (2.5)       Lab ID:       257502011       Collected:       04/28/11 14:30       Received:       05/03/11 07:50       Matrix: Solid         Results reported on a "dry-weight" basis       Parameters       Results       Units       Report Limit       DF       Prepared       Analyzed       CAS No.       0         Percent Moisture       Analytical Method: ASTM D2974-87       Percent Moisture       20.7 %       0.10       1       05/03/11 16:35         Sample:       MW-2 (7.5)       Lab ID:       257502012       Collected:       04/28/11 14:50       Received:       05/03/11 07:50       Matrix: Solid         Results reported on a "dry-weight" basis       Parameters       Results       Units       Report Limit       DF       Prepared       Analyzed       CAS No.	
Toluene-d8 (S)         99 %         80-123         1         05/04/11 18:22         2037-26-5           NWTPH-Gx MSV         Analytical Method: NWTPH-Gx         50.0         1         05/04/11 18:22         460-00-4           Gasoline Range Organics         ND ug/L         50.0         1         05/04/11 18:22         460-00-4           Sample:         MW-2 (2.5)         Lab ID: 257502011         Collected:         04/28/11 14:30         Received:         05/03/11 07:50         Matrix: Solid           Results reported on a "dry-weight" basis         Parameters         Results         Units         Report Limit         DF         Prepared         Analyzed         CAS No.         0           Percent Moisture         Analytical Method: ASTM D2974-87         Percent Moisture         20.7 %         0.10         1         05/03/11 16:35           Sample:         MW-2 (7.5)         Lab ID: 257502012         Collected:         04/28/11 14:50         Received:         05/03/11 07:50         Matrix: Solid           Results reported on a "dry-weight" basis         Image: Collected:         04/28/11 14:50         Received:         05/03/11 07:50         Matrix: Solid           Results reported on a "dry-weight" basis         Image: Collected:         04/28/11 14:50         Received:         05/03/11 07:50         Matrix	
NWTPH-Gx MSV       Analytical Method: NWTPH-Gx         Gasoline Range Organics       ND ug/L       50.0       1       05/04/11 18:22       460-00-4         4-Bromofluorobenzene (S)       99 %       50-150       1       05/04/11 18:22       460-00-4         Sample: MW-2 (2.5)       Lab ID: 257502011       Collected: 04/28/11 14:30       Received: 05/03/11 07:50       Matrix: Solid         Results reported on a "dry-weight" basis       Parameters       Results       Units       Report Limit       DF       Prepared       Analyzed       CAS No.       0         Percent Moisture       Analytical Method: ASTM D2974-87       Percent Moisture       20.7 %       0.10       1       05/03/11 16:35         Sample: MW-2 (7.5)       Lab ID: 257502012       Collected: 04/28/11 14:50       Received: 05/03/11 07:50       Matrix: Solid         Results reported on a "dry-weight" basis       Sample: MW-2 (7.5)       Lab ID: 257502012       Collected: 04/28/11 14:50       Received: 05/03/11 07:50       Matrix: Solid         Results reported on a "dry-weight" basis       Sample: MW-2 (7.5)       Lab ID: 257502012       Collected: 04/28/11 14:50       Received: 05/03/11 07:50       Matrix: Solid         Results reported on a "dry-weight" basis       Sample: MW-2 (7.5)       Lab ID: 257502012       Collected: 04/28/11 14:50       Received: 05/03/11 07:	
Gasoline Range Organics       ND ug/L       50.0       1       05/04/11 18:22         4-Bromofluorobenzene (S)       99 %       50-150       1       05/04/11 18:22       460-00-4         Sample:       MW-2 (2.5)       Lab ID: 257502011       Collected: 04/28/11 14:30       Received: 05/03/11 07:50       Matrix: Solid         Results reported on a "dry-weight" basis       Parameters       Results       Units       Report Limit       DF       Prepared       Analyzed       CAS No.       C         Percent Moisture       Analytical Method: ASTM D2974-87       Percent Moisture       20.7 %       0.10       1       05/03/11 07:50       Matrix: Solid         Sample:       MW-2 (7.5)       Lab ID: 257502012       Collected: 04/28/11 14:50       Received: 05/03/11 07:50       Matrix: Solid         Results reported on a "dry-weight" basis       Imits       Report Limit       DF       Prepared       Analyzed       CAS No.       O         Sample:       MW-2 (7.5)       Lab ID: 257502012       Collected: 04/28/11 14:50       Received: 05/03/11 07:50       Matrix: Solid         Results reported on a "dry-weight" basis       Imits       Report Limit       DF       Prepared       Analyzed       CAS No.       O         NWTPH-Dx GCS       Analytical Method: NWTPH-Dx       Pre	
4-Bromofluorobenzene (S)       99 %       50-150 1       05/04/11 18:22 460-00-4         Sample: MW-2 (2.5)       Lab ID: 257502011       Collected: 04/28/11 14:30       Received: 05/03/11 07:50       Matrix: Solid         Results reported on a "dry-weight" basis       Parameters       Results       Units       Report Limit       DF       Prepared       Analyzed       CAS No.       O         Percent Moisture       Analytical Method: ASTM D2974-87       Percent Moisture       20.7 %       0.10       1       05/03/11 16:35         Sample: MW-2 (7.5)       Lab ID: 257502012       Collected: 04/28/11 14:50       Received: 05/03/11 07:50       Matrix: Solid         Results reported on a "dry-weight" basis       Parameters       Results       Units       Report Limit       DF       Prepared       Analyzed       CAS No.       O         Sample: MW-2 (7.5)       Lab ID: 257502012       Collected: 04/28/11 14:50       Received: 05/03/11 07:50       Matrix: Solid         Results reported on a "dry-weight" basis       Parameters       Results       Units       Report Limit       DF       Prepared       Analyzed       CAS No.       O         NWTPH-Dx GCS       Analytical Method: NWTPH-Dx       Preparation Method: EPA 3546       Diesel Range       ND mg/kg       25.9       1       05/03/11 16:15	
Sample:       MW-2 (2.5)       Lab ID:       257502011       Collected:       04/28/11       14:30       Received:       05/03/11       07:50       Matrix:       Solid         Results reported on a "dry-weight" basis       Parameters       Results       Units       Report Limit       DF       Prepared       Analyzed       CAS No.       O         Percent Moisture       Analytical Method:       ASTM D2974-87       Percent Moisture       20.7 %       0.10       1       05/03/11       07:50       Matrix:       Solid         Sample:       MW-2 (7.5)       Lab ID:       257502012       Collected:       04/28/11       14:50       Received:       05/03/11       07:50       Matrix:       Solid         Results reported on a "dry-weight" basis       Collected:       04/28/11       14:50       Received:       05/03/11       07:50       Matrix:       Solid         Results reported on a "dry-weight" basis       Collected:       04/28/11       14:50       Received:       05/03/11       07:50       Matrix:       Solid         NUTPH-Dx GCS       Analytical Method: NWTPH-Dx       Preparation Method: EPA 3546       Diseel Range       ND       mg/kg       25.9       1       05/03/11       16:15       05/04/11       15:35	
Results reported on a "dry-weight" basis         Parameters       Results       Units       Report Limit       DF       Prepared       Analyzed       CAS No.       CAS No.         Percent Moisture       Analytical Method: ASTM D2974-87         Percent Moisture       20.7 %       0.10       1       05/03/11 16:35         Sample: MW-2 (7.5)       Lab ID: 257502012       Collected: 04/28/11 14:50       Received: 05/03/11 07:50       Matrix: Solid         Results reported on a "dry-weight" basis       Parameters       Results       Units       Report Limit       DF       Prepared       Analyzed       CAS No.       O         NWTPH-Dx GCS       Analytical Method: NWTPH-Dx       Preparation Method: EPA 3546       Diesel Range       ND mg/kg       25.9       1       05/03/11 16:15       05/04/11 15:35	
ParametersResultsUnitsReport LimitDFPreparedAnalyzedCAS No.CAS No.Percent MoistureAnalytical Method: ASTM D2974-87Percent Moisture20.7 %0.10105/03/11 16:35Sample:MW-2 (7.5)Lab ID: 257502012Collected: 04/28/11 14:50Received: 05/03/11 07:50Matrix: SolidResults reported on a "dry-weight" basisParametersResultsUnitsReport LimitDFPreparedAnalyzedCAS No.ONWTPH-Dx GCSAnalytical Method: NWTPH-DxPreparation Method: EPA 3546Diesel RangeND mg/kg25.9105/03/11 16:1505/04/11 15:35	
Percent Moisture       Analytical Method: ASTM D2974-87         Percent Moisture       20.7 %       0.10 1       05/03/11 16:35         Sample: MW-2 (7.5)       Lab ID: 257502012       Collected: 04/28/11 14:50       Received: 05/03/11 07:50       Matrix: Solid         Results reported on a "dry-weight" basis       Parameters       Results       Units       Report Limit       DF       Prepared       Analyzed       CAS No.       O         NWTPH-Dx GCS       Analytical Method: NWTPH-Dx       Preparation Method: EPA 3546       Diesel Range       ND mg/kg       25.9       1       05/03/11 16:15       05/04/11 15:35	Jual
Percent Moisture       20.7 %       0.10       1       05/03/11 16:35         Sample: MW-2 (7.5)       Lab ID: 257502012       Collected: 04/28/11 14:50       Received: 05/03/11 07:50       Matrix: Solid         Results reported on a "dry-weight" basis       Parameters       Results       Units       Report Limit       DF       Prepared       Analyzed       CAS No.       O         NWTPH-Dx GCS       Analytical Method: NWTPH-Dx       Preparation Method: EPA 3546       Diesel Range       ND mg/kg       25.9       1       05/03/11 16:15       05/04/11 15:35	
Sample:       MW-2 (7.5)       Lab ID:       257502012       Collected:       04/28/11       14:50       Received:       05/03/11       07:50       Matrix:       Solid         Results reported on a "dry-weight" basis       Parameters       Results       Units       Report Limit       DF       Prepared       Analyzed       CAS No.       O         NWTPH-Dx GCS       Analytical Method:       NWTPH-Dx       Preparation       Method:       EPA 3546         Diesel Range       ND mg/kg       25.9       1       05/03/11       16:15       05/04/11       15:35	
Results reported on a "dry-weight" basis         Parameters       Results       Units       Report Limit       DF       Prepared       Analyzed       CAS No.       CAS No.         NWTPH-Dx GCS       Analytical Method: NWTPH-Dx       Preparation Method: EPA 3546         Diesel Range       ND mg/kg       25.9       1       05/03/11 16:15       05/04/11 15:35	
Parameters         Results         Units         Report Limit         DF         Prepared         Analyzed         CAS No.         O           NWTPH-Dx GCS         Analytical Method: NWTPH-Dx         Preparation Method: EPA 3546         Diesel Range         ND mg/kg         25.9         1         05/03/11 16:15         05/04/11 15:35	
NWTPH-Dx GCSAnalytical Method: NWTPH-DxPreparation Method: EPA 3546Diesel RangeND mg/kg25.9105/03/11 16:1505/04/11 15:35	Qual
Diesel Range         ND mg/kg         25.9         1         05/03/11 16:15         05/04/11 15:35	
Motor Oil Range ND mg/kg 104 1 05/03/11 16:15 05/04/11 15:35 64742-65-0	
n-Octacosane (S) 105 % 50-150 1 05/03/11 16:15 05/04/11 15:35 630-02-4	
o-Terphenyl (S) 91 % 50-150 1 05/03/11 16:15 05/04/11 15:35 84-15-1	
NWTPH-Gx GCV         Analytical Method: NWTPH-Gx         Preparation Method: NWTPH-Gx	
Gasoline Range Organics ND mg/kg 7.2 1 05/03/11 14:25 05/03/11 19:24	
a a a-Trifluorotoluene (S) 122 % 50-150 1 05/03/11 14:25 05/03/11 19:24 98-08-8	
4-Bromofluorobenzene (S) 77 % 50-150 1 05/03/11 14:25 05/03/11 19:24 460-00-4	

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Project: Tarr Vancouver 1821-00

Pace Project No.: 257502

Sample: MW-2 (7.5)	Lab ID: 257	502012	Collected:	04/28/1	1 14:50	Received: 05	5/03/11 07:50 N	Aatrix: Solid	
Results reported on a "dry-weight"	hasis		e en e e e e e	0 20, .					
	Desults	l lu ita	Dener	4   :		Dressered	A seals sea al		Qual
Parameters		Units			DF				
Percent Moisture	Analytical Met	hod: ASTM D	2974-87						
Percent Moisture	24.5 %	)		0.10	1		05/03/11 16:36		
Sample: MW-1 (2.5)	Lab ID: 257	7502013	Collected:	04/29/1	1 09:20	Received: 05	5/03/11 07:50 N	Aatrix: Solid	
Results reported on a "dry-weight"	basis								
Parameters	Results	Units	Repor	t Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A Med Level VOA	Analytical Met	hod: EPA 826	0 Prepara	tion Meth	hod: EPA	5035A/5030B			
1,2,4-Trimethylbenzene	<b>3270</b> ug	g/kg		80.4	1	05/04/11 07:00	05/06/11 07:18	95-63-6	
Dibromofluoromethane (S)	92 %	)		81-114	1	05/04/11 07:00	05/06/11 07:18	1868-53-7	
Toluene-d8 (S)	98 %	)		84-121	1	05/04/11 07:00	05/06/11 07:18	2037-26-5	
4-Bromofluorobenzene (S)	96 %	)		78-127	1	05/04/11 07:00	05/06/11 07:18	460-00-4	
1,2-Dichloroethane-d4 (S)	95 %	)		76-115	1	05/04/11 07:00	05/06/11 07:18	17060-07-0	
8260/5035A Volatile Organics	Analytical Met	hod: EPA 826	0						
1,1,1,2-Tetrachloroethane	ND ug	g/kg		4.2	1		05/04/11 13:23	630-20-6	
1.1.1-Trichloroethane	ND uc	a/ka		4.2	1		05/04/11 13:23	71-55-6	
1.1.2.2-Tetrachloroethane	ND u	a/ka		4.2	1		05/04/11 13:23	79-34-5	
1.1.2-Trichloroethane	ND u	a/ka		4.2	1		05/04/11 13:23	79-00-5	
1.1.2-Trichlorotrifluoroethane	ND u	a/ka		4.2	1		05/04/11 13:23	76-13-1	13
1.1-Dichloroethane	ND u	a/ka		4.2	1		05/04/11 13:23	75-34-3	_0
1 1-Dichloroethene	ND u	n/ka		4.2	1		05/04/11 13:23	75-35-4	
1 1-Dichloropropene	ND u	n/ka		4.2	1		05/04/11 13:23	563-58-6	
1 2 3-Trichlorobenzene	ND u	n/ka		4.2	1		05/04/11 13:23	87-61-6	
1.2.3-Trichloropropage		g/kg		4.2	1		05/04/11 13:23	96-18-4	
1.2.4-Trichlorobenzene		g/kg g/kg		4.2	1		05/04/11 13:23	120-82-1	
1.2 Dibromo 3 chloropropopo		g/kg		7.2	1		05/04/11 13:23	06 12 9	
1.2 Dibromosthano (EDR)		g/kg		1.0	1		05/04/11 13:23	106 03 4	
1,2-Diblomoethane (EDB)		y/ky a/ka		4.2	1		05/04/11 13.23	100-93-4	
1,2-Dichlorobenzene	ND uç	g/kg		4.2	1		05/04/11 13:23	95-50-1	
1,2-Dichloroethane	ND uç	g/kg		4.2	1		05/04/11 13:23	107-06-2	
1,2-Dichloroethene (Total)	ND UQ	g/kg		8.5	1		05/04/11 13:23	540-59-0	
1,2-Dichloropropane	ND UQ	g/kg		4.2	1		05/04/11 13:23	/8-8/-5	
1,3,5-I rimethylbenzene	89.3 ug	g/kg		4.2	1		05/04/11 13:23	108-67-8	
1,3-Dichlorobenzene	ND uç	g/kg		4.2	1		05/04/11 13:23	541-73-1	
1,3-Dichloropropane	ND uç	g/kg		4.2	1		05/04/11 13:23	142-28-9	
1,4-Dichlorobenzene	ND uç	g/kg		4.2	1		05/04/11 13:23	106-46-7	
2,2-Dichloropropane	ND ug	g/kg		4.2	1		05/04/11 13:23	594-20-7	
2-Butanone (MEK)	ND uç	g/kg		14.1	1		05/04/11 13:23	78-93-3	
2-Chlorotoluene	ND uç	g/kg		4.2	1		05/04/11 13:23	95-49-8	
2-Hexanone	ND ug	g/kg		14.1	1		05/04/11 13:23	591-78-6	
4-Chlorotoluene	ND uç	g/kg		4.2	1		05/04/11 13:23	106-43-4	
4-Methyl-2-pentanone (MIBK)	ND ug	g/kg		14.1	1		05/04/11 13:23	108-10-1	
Acetone	<b>155</b> ug	g/kg		14.1	1		05/04/11 13:23	67-64-1	
Benzene	<b>162</b> ug	g/kg		4.2	1		05/04/11 13:23	71-43-2	
Bromobenzene	ND ug	g/kg		4.2	1		05/04/11 13:23	108-86-1	

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Project: Tarr Vancouver 1821-00

Pace Project No.: 257502

Sample: MW-1 (2.5)	Lab ID: 2575	02013 Collected: 04/29/1	1 09:20	Received: 05	5/03/11 07:50 N	latrix: Solid	
Results reported on a "dry-weigh	t" basis						
Parameters	Results	Units Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260/5035A Volatile Organics	Analytical Metho	od: EPA 8260					
Bromochloromethane	ND ug/l	kg 4.2	1		05/04/11 13:23	74-97-5	
Bromodichloromethane	ND ug/l	kg 4.2	1		05/04/11 13:23	75-27-4	
Bromoform	ND ug/l	kg 4.2	1		05/04/11 13:23	75-25-2	
Bromomethane	ND ug/l	kg 4.2	1		05/04/11 13:23	74-83-9	
Carbon disulfide	ND ug/l	kg 4.2	1		05/04/11 13:23	75-15-0	
Carbon tetrachloride	ND ug/l	kg 4.2	1		05/04/11 13:23	56-23-5	
Chlorobenzene	ND ug/l	kg 4.2	1		05/04/11 13:23	108-90-7	
Chloroethane	ND ug/l	kg 4.2	1		05/04/11 13:23	75-00-3	
Chloroform	ND ug/l	kg 4.2	1		05/04/11 13:23	67-66-3	
Chloromethane	ND ug/l	kg 4.2	1		05/04/11 13:23	74-87-3	
Dibromochloromethane	ND ug/l	kg 4.2	1		05/04/11 13:23	124-48-1	
Dibromomethane	ND ug/l	kg 4.2	1		05/04/11 13:23	74-95-3	
Dichlorodifluoromethane	ND ug/l	kg 4.2	1		05/04/11 13:23	75-71-8	
Ethylbenzene	<b>34.3</b> ug/l	kg 4.2	1		05/04/11 13:23	100-41-4	
Hexachloro-1,3-butadiene	ND ug/l	kg 4.2	1		05/04/11 13:23	87-68-3	
Isopropylbenzene (Cumene)	9.2 ug/l	kg 4.2	1		05/04/11 13:23	98-82-8	
Methyl-tert-butyl ether	ND ug/l	kg 4.2	1		05/04/11 13:23	1634-04-4	
Methylene chloride	ND ug/l	kg 14.1	1		05/04/11 13:23	75-09-2	
Naphthalene	<b>20.5</b> ug/l	kg 4.2	1		05/04/11 13:23	91-20-3	
Styrene	ND ug/l	kg 4.2	1		05/04/11 13:23	100-42-5	
Tetrachloroethene	ND ug/l	kg 4.2	1		05/04/11 13:23	127-18-4	
Toluene	27.3 ug/l	kg 4.2	1		05/04/11 13:23	108-88-3	
Trichloroethene	ND ug/l	kg 4.2	1		05/04/11 13:23	79-01-6	
Trichlorofluoromethane	ND ug/l	kg 4.2	1		05/04/11 13:23	75-69-4	
Vinyl chloride	ND ug/l	kg 4.2	1		05/04/11 13:23	75-01-4	
Xylene (Total)	141 ug/l	kg 12.7	1		05/04/11 13:23	1330-20-7	
cis-1,2-Dichloroethene	ND ug/l	kg 4.2	1		05/04/11 13:23	156-59-2	
cis-1,3-Dichloropropene	ND ug/l	kg 4.2	1		05/04/11 13:23	10061-01-5	
m&p-Xylene	118 ug/l	kg 8.5	1		05/04/11 13:23	179601-23-1	
n-Butylbenzene	ND ug/l	kg 4.2	1		05/04/11 13:23	104-51-8	
n-Propylbenzene	12.7 ug/	kg 4.2	1		05/04/11 13:23	103-65-1	
o-Xylene	<b>22.9</b> ug/l	kg 4.2	1		05/04/11 13:23	95-47-6	
p-Isopropyltoluene	ND ug/l	kg 4.2	1		05/04/11 13:23	99-87-6	
sec-Butylbenzene	<b>8.4</b> ug/l	kg 4.2	1		05/04/11 13:23	135-98-8	
tert-Amylmethyl ether	ND ug/l	kg 4.2	1		05/04/11 13:23	994-05-8	
tert-Butylbenzene	ND ug/l	kg 4.2	1		05/04/11 13:23	98-06-6	
trans-1,2-Dichloroethene	ND ug/l	kg 4.2	1		05/04/11 13:23	156-60-5	
trans-1,3-Dichloropropene	ND ug/l	kg 4.2	1		05/04/11 13:23	10061-02-6	
Dibromofluoromethane (S)	98 %	80-136	1		05/04/11 13:23	1868-53-7	
Toluene-d8 (S)	97 %	80-120	1		05/04/11 13:23	2037-26-5	
4-Bromofluorobenzene (S)	102 %	72-122	1		05/04/11 13:23	460-00-4	
1,2-Dichloroethane-d4 (S)	98 %	80-143	1		05/04/11 13:23	17060-07-0	
Percent Moisture	Analytical Metho	od: ASTM D2974-87					
Percent Moisture	<b>22.2</b> %	0.10	1		05/03/11 16:36		
	/0	5.10			00,00,11,10.00		

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Project: Tarr Vancouver 1821-00

Pace Project No.: 257502									
Sample: MW-1 (8.0)	Lab ID: 257	502014	Collected: (	04/29/1	1 09:55	Received: 0	5/03/11 07:50 N	Aatrix: Solid	
Results reported on a "dry-weig	ght" basis								
Parameters	Results	Units	Report I	Limit	DF	Prepared	Analyzed	CAS No.	Qual
						·			
Percent Moisture	Analytical Met	hod: ASTM	D2974-87						
Percent Moisture	24.9 %			0.10	1		05/03/11 16:37		
Sample: MW-1 (12.5)	Lab ID: 257	502015	Collected: (	04/29/1	1 10:05	Received: 0	5/03/11 07:50 N	Atrix: Solid	
Results reported on a "dry-weig	ght" basis								
Parameters	Results	Units	Report I	Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Dx GCS	Analytical Met	hod: NWTP	H-Dx Prepara	tion Me	ethod: El	PA 3546			
Diesel Range	<b>59.9</b> m	a/ka		26.1	1	05/03/11 16:15	05/04/11 15:51		
Motor Oil Range	ND m	a/ka		104	1	05/03/11 16:15	05/04/11 15:51	64742-65-0	
n-Octacosane (S)	100 %	5. 5	50	0-150	1	05/03/11 16:15	05/04/11 15:51	630-02-4	
o-Terphenyl (S)	87 %		50	0-150	1	05/03/11 16:15	05/04/11 15:51	84-15-1	
NWTPH-Gx GCV	Analytical Metl	hod: NWTP	H-Gx Prepara	ition Me	ethod: N	WTPH-Gx			
Gasoline Range Organics	<b>2140</b> m	a/ka		378	50	05/05/11 09:59	05/05/11 23:05		
a,a,a-Trifluorotoluene (S)	130 %	5. 5	50	0-150	50	05/05/11 09:59	05/05/11 23:05	98-08-8	
4-Bromofluorobenzene (S)	97 %		50	0-150	50	05/05/11 09:59	05/05/11 23:05	460-00-4	
6010 MET ICP	Analytical Metl	hod: EPA 6	010 Preparatio	on Meth	nod: EPA	3050			
Lead	8.5 m	g/kg		1.3	1	05/09/11 07:54	05/09/11 15:46	7439-92-1	
8270 MSSV PAH by SIM	Analytical Met	hod: EPA 8	270 by SIM Pr	eparati	on Meth	od: EPA 3546			
1-Methylnaphthalene	<b>1380</b> ug	/kg		8.9	1	05/03/11 16:15	05/04/11 16:05	90-12-0	
2-Methylnaphthalene	<b>3190</b> ug	/kg		89.3	10	05/03/11 16:15	05/04/11 17:13	91-57-6	
Acenaphthene	<b>23.5</b> ug	ı/kg		8.9	1	05/03/11 16:15	05/04/11 16:05	83-32-9	
Acenaphthylene	ND ug	/kg		8.9	1	05/03/11 16:15	05/04/11 16:05	208-96-8	
Anthracene	ND ug	ı/kg		8.9	1	05/03/11 16:15	05/04/11 16:05	120-12-7	
Benzo(a)anthracene	ND ug	ı/kg		8.9	1	05/03/11 16:15	05/04/11 16:05	56-55-3	
Benzo(a)pyrene	ND ug	/kg		8.9	1	05/03/11 16:15	05/04/11 16:05	50-32-8	
Benzo(b)fluoranthene	ND ug	ı/kg		8.9	1	05/03/11 16:15	05/04/11 16:05	205-99-2	
Benzo(a.h.i)pervlene	ND uc	/ka		8.9	1	05/03/11 16:15	05/04/11 16:05	191-24-2	
Benzo(k)fluoranthene	ND uc	i/ka		8.9	1	05/03/11 16:15	05/04/11 16:05	207-08-9	
Chrysene	ND uc	i/ka		8.9	1	05/03/11 16:15	05/04/11 16:05	218-01-9	
Dibenz(a,h)anthracene	ND uc	ı/ka		8.9	1	05/03/11 16:15	05/04/11 16:05	53-70-3	
Fluoranthene	ND up	ı/ka		8.9	1	05/03/11 16:15	05/04/11 16:05	206-44-0	
Fluorene	52.0 ug	i/ka		8.9	1	05/03/11 16:15	05/04/11 16:05	86-73-7	
Indeno(1.2.3-cd)pyrene		ı/ka		8.9	1	05/03/11 16:15	05/04/11 16:05	193-39-5	
Naphthalene	3350 ug	ı/ka		89.3	10	05/03/11 16:15	05/04/11 17:13	91-20-3	
Phenanthrene	84.2 UC	ı/ka		89	1	05/03/11 16:15	05/04/11 16:05	85-01-8	
Pyrene	101 uc	ı/ka		89	1	05/03/11 16:15	05/04/11 16:05	129-00-0	
2-Eluorobiohenvl (S)	68 %	, ··9	34	1-121	1	05/03/11 16:15	05/04/11 16:05	321-60-8	
Terphenyl-d14 (S)	60 %		3 วเ	)_133	1	05/03/11 16:15	05/04/11 16:05	1718-51-0	
	00 /0		50	- 100		55,00,11 10.15	50/04/11 10.00	1110 01-0	

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Project: Tarr Vancouver 1821-00

Pace Project No.: 257502

Sample: MW-1 (12.5)	Lab ID: 2575	502015	Collected: 04/29/1	1 10:05	Received: 0	5/03/11 07:50 N	Aatrix: Solid	
Results reported on a "dry-weight	" basis							
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260/5035A Volatile Organics	Analytical Meth	od: EPA 8260	)					
Acetone	<b>259</b> ug/	′kg	11.6	1		05/04/11 12:44	67-64-1	
tert-Amylmethyl ether	ND ug/	′kg	3.5	1		05/04/11 12:44	994-05-8	
Bromobenzene	ND ug/	′kg	3.5	1		05/04/11 12:44	108-86-1	
Bromochloromethane	ND ug/	′kg	3.5	1		05/04/11 12:44	74-97-5	
Bromodichloromethane	ND ug/	′kg	3.5	1		05/04/11 12:44	75-27-4	
Bromoform	ND ug/	′kg	3.5	1		05/04/11 12:44	75-25-2	
Bromomethane	ND ug/	′kg	3.5	1		05/04/11 12:44	74-83-9	
2-Butanone (MEK)	ND ug/	′kg	11.6	1		05/04/11 12:44	78-93-3	
n-Butylbenzene	ND ug/	′kg	3.5	1		05/04/11 12:44	104-51-8	
tert-Butylbenzene	ND ug/	′kg	3.5	1		05/04/11 12:44	98-06-6	
Carbon disulfide	ND ug/	′kg	3.5	1		05/04/11 12:44	75-15-0	
Carbon tetrachloride	ND ug/	′kg	3.5	1		05/04/11 12:44	56-23-5	
Chlorobenzene	ND ug/	′kg	3.5	1		05/04/11 12:44	108-90-7	
Chloroethane	ND ug/	′kg	3.5	1		05/04/11 12:44	75-00-3	
Chloroform	ND ug/	′kg	3.5	1		05/04/11 12:44	67-66-3	
Chloromethane	ND ug/	′kg	3.5	1		05/04/11 12:44	74-87-3	
2-Chlorotoluene	ND ug/	′kg	3.5	1		05/04/11 12:44	95-49-8	
4-Chlorotoluene	ND ug/	′kg	3.5	1		05/04/11 12:44	106-43-4	
1,2-Dibromo-3-chloropropane	ND ug/	′kg	5.8	1		05/04/11 12:44	96-12-8	
Dibromochloromethane	ND ug/	′kg	3.5	1		05/04/11 12:44	124-48-1	
1,2-Dibromoethane (EDB)	ND ug/	′kg	3.5	1		05/04/11 12:44	106-93-4	
Dibromomethane	ND ug/	′kg	3.5	1		05/04/11 12:44	74-95-3	
1,2-Dichlorobenzene	ND ug/	′kg	3.5	1		05/04/11 12:44	95-50-1	
1,3-Dichlorobenzene	ND ug/	′kg	3.5	1		05/04/11 12:44	541-73-1	
1,4-Dichlorobenzene	ND ug/	′kg	3.5	1		05/04/11 12:44	106-46-7	
Dichlorodifluoromethane	ND ug/	′kg	3.5	1		05/04/11 12:44	75-71-8	
1,1-Dichloroethane	ND ug/	′kg	3.5	1		05/04/11 12:44	75-34-3	
1,2-Dichloroethane	ND ug/	′kg	3.5	1		05/04/11 12:44	107-06-2	
1,2-Dichloroethene (Total)	ND ug/	′kg	7.0	1		05/04/11 12:44	540-59-0	
1,1-Dichloroethene	ND ug/	′kg	3.5	1		05/04/11 12:44	75-35-4	
cis-1,2-Dichloroethene	ND ug/	′kg	3.5	1		05/04/11 12:44	156-59-2	
trans-1,2-Dichloroethene	ND ug/	′kg	3.5	1		05/04/11 12:44	156-60-5	
1,2-Dichloropropane	ND ug/	′kg	3.5	1		05/04/11 12:44	78-87-5	
1,3-Dichloropropane	ND ug/	′kg	3.5	1		05/04/11 12:44	142-28-9	
2,2-Dichloropropane	ND ug/	′kg	3.5	1		05/04/11 12:44	594-20-7	
1,1-Dichloropropene	ND ug/	′kg	3.5	1		05/04/11 12:44	563-58-6	
cis-1,3-Dichloropropene	ND ug/	′kg	3.5	1		05/04/11 12:44	10061-01-5	
trans-1,3-Dichloropropene	ND ug/	′kg	3.5	1		05/04/11 12:44	10061-02-6	
Hexachloro-1,3-butadiene	ND ug/	′kg	3.5	1		05/04/11 12:44	87-68-3	
2-Hexanone	ND ug/	′kg	11.6	1		05/04/11 12:44	591-78-6	
Methylene chloride	ND ug/	′kg	11.6	1		05/04/11 12:44	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/	′kg	11.6	1		05/04/11 12:44	108-10-1	
Methyl-tert-butyl ether	ND ug/	′kg	3.5	1		05/04/11 12:44	1634-04-4	
Styrene	ND ug/	′kg	3.5	1		05/04/11 12:44	100-42-5	
1,1,1,2-Tetrachloroethane	ND ug/	′kg	3.5	1		05/04/11 12:44	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/	′kg	3.5	1		05/04/11 12:44	79-34-5	

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Project: Tarr Vancouver 1821-00

Pace Project No.: 257502

Sample: MW-1 (12.5)	Lab ID: 257	502015	Collected: 04/29/1	11 10:05	Received: 05	5/03/11 07:50 N	latrix: Solid	
Results reported on a "dry-weigh	t" basis							
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260/5035A Volatile Organics	Analytical Met	nod: EPA 82	260					
Tetrachloroethene	ND ug	/kg	3.5	1		05/04/11 12:44	127-18-4	
1,2,3-Trichlorobenzene	ND ug	/kg	3.5	1		05/04/11 12:44	87-61-6	
1,2,4-Trichlorobenzene	ND ug	/kg	3.5	1		05/04/11 12:44	120-82-1	
1,1,1-Trichloroethane	ND ug	/kg	3.5	1		05/04/11 12:44	71-55-6	
1,1,2-Trichloroethane	ND ug	/kg	3.5	1		05/04/11 12:44	79-00-5	
Trichloroethene	ND ug	/kg	3.5	1		05/04/11 12:44	79-01-6	
Trichlorofluoromethane	ND ug	/kg	3.5	1		05/04/11 12:44	75-69-4	
1,2,3-Trichloropropane	ND ug	/kg	3.5	1		05/04/11 12:44	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND ug	/kg	3.5	1		05/04/11 12:44	76-13-1	L3
Vinyl chloride	ND ug	/kg	3.5	1		05/04/11 12:44	75-01-4	
Dibromofluoromethane (S)	118 %		80-136	1		05/04/11 12:44	1868-53-7	
Toluene-d8 (S)	279 %		80-120	1		05/04/11 12:44	2037-26-5	S5
4-Bromofluorobenzene (S)	1590 %		72-122	1		05/04/11 12:44	460-00-4	S5
1,2-Dichloroethane-d4 (S)	440 %		80-143	1		05/04/11 12:44	17060-07-0	S5
	Analytical Met	nod: EPA 82	260 Preparation Met	hod: EP	A 5035A/5030B			
Benzene	<b>940</b> ug	/kg	37.8	1	05/04/11 07:00	05/06/11 06:08	71-43-2	
sec-Butylbenzene	1400 ug	/kg	75.6	1	05/04/11 07:00	05/06/11 06:08	135-98-8	
Ethylbenzene	<b>21300</b> ug	/kg	75.6	1	05/04/11 07:00	05/06/11 06:08	100-41-4	
Isopropylbenzene (Cumene)	<b>3010</b> ug	/kg	75.6	1	05/04/11 07:00	05/06/11 06:08	98-82-8	
p-lsopropyltoluene	805 ug	/kg	75.6	1	05/04/11 07:00	05/06/11 06:08	99-87-6	
Naphthalene	<b>10700</b> ug	/kg	151	1	05/04/11 07:00	05/06/11 06:08	91-20-3	
n-Propylbenzene	<b>11100</b> ug	/kg	75.6	1	05/04/11 07:00	05/06/11 06:08	103-65-1	
Toluene	<b>712</b> ug	/kg	75.6	1	05/04/11 07:00	05/06/11 06:08	108-88-3	
1,2,4-Trimethylbenzene	<b>120000</b> ug	/kg	1890	25	05/04/11 07:00	05/06/11 01:07	95-63-6	
1,3,5-Trimethylbenzene	34300 ug	/kg	1890	25	05/04/11 07:00	05/06/11 01:07	108-67-8	
Xylene (Total)	143000 ug	/kg	5670	25	05/04/11 07:00	05/06/11 01:07	1330-20-7	
m&p-Xylene	<b>113000</b> ug	/kg	3780	25	05/04/11 07:00	05/06/11 01:07	179601-23-1	
o-Xylene	<b>28800</b> ug	/kg	75.6	1	05/04/11 07:00	05/06/11 06:08	95-47-6	
Dibromofluoromethane (S)	92 %	•	81-114	1	05/04/11 07:00	05/06/11 06:08	1868-53-7	
Toluene-d8 (S)	98 %		84-121	1	05/04/11 07:00	05/06/11 06:08	2037-26-5	
4-Bromofluorobenzene (S)	99 %		78-127	1	05/04/11 07:00	05/06/11 06:08	460-00-4	
1,2-Dichloroethane-d4 (S)	90 %		76-115	1	05/04/11 07:00	05/06/11 06:08	17060-07-0	
Percent Moisture	Analytical Metl	nod: ASTM	D2974-87					
Percent Moisture	25.4 %		0.10	1		05/03/11 16:37		
Sample: MW-1 (17.5)	Lab ID: 257	502016	Collected: 04/29/1	1 10:20	Received: 05	5/03/11 07:50 N	Atrix: Solid	
Results reported on a "dry-weigh	t" basis							

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Percent Moisture	Analytical M	ethod: ASTM D29	74-87					
Percent Moisture	29.2	%	0.10	1		05/03/11 16:38		

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Project: Tarr Vancouver 1821-00

Pace Project No.: 257502

Sample: MW-3 (2.5)	Lab ID: 25	7502017	Collected:	04/29/1	11 10:30	Received: 05	5/03/11 07:50 N	Matrix: Solid	
Results reported on a "dry-weig	ght" basis								
Parameters	Results	Units	Repor	t Limit	DF	Prepared	Analyzed	CAS No.	Qual
Percent Moisture	Analytical Me	thod: ASTM	D2974-87						
Percent Moisture	19.6 %	D		0.10	1		05/03/11 16:39		
Sample: MW-3 (7.5)	Lab ID: 25	7502018	Collected:	04/29/1	1 11:05	Received: 05	5/03/11 07:50 N	Matrix: Solid	
Results reported on a "dry-weig	ght" basis								
Parameters	Results	Units	Repor	t Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Dx GCS	Analytical Me	thod: NWTP	H-Dx Prepar	ration Me	ethod: E	PA 3546			
Diesel Range	ND m	ng/kg		25.0	1	05/03/11 16:15	05/04/11 16:08		
Motor Oil Range	ND m	ig/kg		100	1	05/03/11 16:15	05/04/11 16:08	64742-65-0	
n-Octacosane (S)	103 %	, , , , , , , , , , , , , , , , , , ,	:	50-150	1	05/03/11 16:15	05/04/11 16:08	630-02-4	
o-Terphenyl (S)	91 %	D		50-150	1	05/03/11 16:15	05/04/11 16:08	84-15-1	
NWTPH-Gx GCV	Analytical Me	thod: NWTP	H-Gx Prepa	ration M	ethod: N	IWTPH-Gx			
Gasoline Range Organics	ND m	na/ka		7.8	1	05/03/11 14:25	05/03/11 20:33		
a,a,a-Trifluorotoluene (S)	116 %	5.5		50-150	1	05/03/11 14:25	05/03/11 20:33	98-08-8	
4-Bromofluorobenzene (S)	78 %	D	:	50-150	1	05/03/11 14:25	05/03/11 20:33	460-00-4	
Percent Moisture	Analytical Me	thod: ASTM	D2974-87						
Percent Moisture	25.8 %	D		0.10	1		05/03/11 16:45		
Sample: SB-14 (2.5)	Lab ID: 25	7502019	Collected:	04/29/1	1 14:00	Received: 05	5/03/11 07:50 N	Matrix: Solid	
Results reported on a "dry-weig	ght" basis								
Parameters	Results	Units	Repor	t Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Dx GCS	Analytical Me	thod: NWTP	H-Dx Prepar	ration Me	ethod: E	PA 3546			
Diesel Range	ND m	na/ka		24.2	1	05/03/11 16:15	05/04/11 16:57		
Motor Oil Range	ND m	na/ka		96.9	1	05/03/11 16:15	05/04/11 16:57	64742-65-0	
n-Octacosane (S)	99 %			50-150	1	05/03/11 16:15	05/04/11 16:57	630-02-4	
o-Terphenyl (S)	87 %	-	:	50-150	1	05/03/11 16:15	05/04/11 16:57	84-15-1	
NWTPH-Gx GCV	Analytical Me	thod: NWTP	H-Gx Prepa	ration M	ethod: N	IWTPH-Gx			
Gasoline Range Organics	ND m	na/ka		75	1	05/03/11 14 25	05/03/11 20:56		
a.a.a-Trifluorotoluene (S)	120 %	,		50-150	1	05/03/11 14:25	05/03/11 20:56	98-08-8	
4-Bromofluorobenzene (S)	75 %	-		50-150	1	05/03/11 14:25	05/03/11 20:56	460-00-4	
6010 MET ICP	Analytical Me	thod: EPA 60	010 Preparat	tion Metl	hod: EP/	A 3050			
Lead	<b>11.1</b> m	ng/kg		1.2	1	05/09/11 07:54	05/09/11 15:49	7439-92-1	
Percent Moisture	Analytical Me	thod: ASTM	D2974-87						
Percent Moisture	<b>21</b> / 0/			0 10	1		05/03/11 16.46		
	<b>Z1.4</b> /0	,		0.10	1		00/00/11 10.40		

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Pace Project No.: 257502

Sample: SB-14 (7.5)	Lab ID: 257	502020	Collected: 04/29/2	11 15:10	Received: 05	/03/11 07:50	Matrix: Solid	
Results reported on a "dry-weig	ght" basis							
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Dx GCS	Analytical Met	hod: NWTP	H-Dx Preparation M	ethod: E	PA 3546			
Diesel Range	ND m	g/kg	24.6	1	05/03/11 16:15	05/04/11 17:14		
Motor Oil Range	ND m	g/kg	98.4	1	05/03/11 16:15	05/04/11 17:14	64742-65-0	
n-Octacosane (S)	97 %		50-150	1	05/03/11 16:15	05/04/11 17:14	630-02-4	
o-Terphenyl (S)	85 %		50-150	1	05/03/11 16:15	05/04/11 17:14	84-15-1	
NWTPH-Gx GCV	Analytical Met	hod: NWTP	H-Gx Preparation M	ethod: N	IWTPH-Gx			
Gasoline Range Organics	ND m	g/kg	7.6	1	05/03/11 14:25	05/03/11 21:43	i	
a,a,a-Trifluorotoluene (S)	125 %		50-150	1	05/03/11 14:25	05/03/11 21:43	98-08-8	
4-Bromofluorobenzene (S)	83 %		50-150	1	05/03/11 14:25	05/03/11 21:43	460-00-4	
Percent Moisture	Analytical Met	hod: ASTM	D2974-87					
Percent Moisture	<b>24.1</b> %		0.10	1		05/03/11 16:53	i	
Sample: SB-14	Lab ID: 257	502021	Collected: 04/29/*	11 16:00	Received: 05	/03/11 07:50 I	Matrix: Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Dx GCS	Analytical Met	hod: NWTP	H-Dx Preparation M	ethod: E	PA 3510			
Diesel Range	ND m	a/L	0.076	1	05/03/11 14:25	05/03/11 20:44		
Motor Oil Range	ND m	a/L	0.38	1	05/03/11 14:25	05/03/11 20:44	64742-65-0	
n-Octacosane (S)	97 %	0	50-150	1	05/03/11 14:25	05/03/11 20:44	630-02-4	
o-Terphenyl (S)	89 %		50-150	1	05/03/11 14:25	05/03/11 20:44	84-15-1	
NWTPH-Gx MSV	Analytical Met	hod: NWTP	H-Gx					
Gasoline Range Organics	ND uc	ı/L	50.0	1		05/05/11 15:39	1	
4-Bromofluorobenzene (S)	100 %		50-150	1		05/05/11 15:39	460-00-4	
Sample: SB-12 (2 5)	l ah ID: 257	502022	Collected: 04/29/	11 16.10	Received: 05	/03/11 07:50	Matrix: Solid	
Results reported on a "dry-weig	aht" basis	002022						
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Dx GCS	Analytical Met	hod: NWTP	H-Dx Preparation M	ethod: E	 PA 3546			
Diesel Range	ND m	a/ka	28.8	1	05/03/11 16:15	05/04/11 17:30	1	
Motor Oil Range	137 m	g/kg	115	1	05/03/11 16:15	05/04/11 17:30	64742-65-0	
n-Octacosane (S)	.94 %	9/119	50-150	1	05/03/11 16:15	05/04/11 17:30	630-02-4	
o-Terphenyl (S)	86 %		50-150	1	05/03/11 16:15	05/04/11 17:30	84-15-1	
NWTPH-Gx GCV	Analytical Met	hod: NWTP	H-Gx Preparation M	ethod: N	IWTPH-Gx			
Gasoline Range Organics	ND m	a/ka	9.7	1	05/03/11 14:25	05/03/11 22:06	i	
a,a,a-Trifluorotoluene (S)	125 %		50-150	1	05/03/11 14:25	05/03/11 22:06	98-08-8	
4-Bromofluorobenzene (S)	80 %		50-150	1	05/03/11 14:25	05/03/11 22:06	460-00-4	

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Sample:         SB-12 (2.5)         Lab ID:         257502022         Collected:         04/29/11         16:10         Received:         05/03/11 07:50         Matrix: Solid           Results reported on a "dry-weight" basis         Collected:         04/29/11         DF         Prepared         Analyzed         CAS No.         Qual           Percent Moisture         Analytical Method: ASTM D2974-87         Encontrol         Distance         Collected:         04/29/11         DF         Prepared         Analyzed         CAS No.         Qual           Sample: SB-12 (7.5)         Lab ID:         257502023         Collected:         04/29/11         DF         Prepared         Analyzed         CAS No.         Qual           NMTPH-Dx GCS         Analytical Method: NWTPH-Dx         Report Limit         DF         Prepared         Analyzed         CAS No.         Qual           NMtrO IRange         ND mg/kg         26.8         1         05/03/11 16:15         05/04/11 18:20         M474:265-0           O-Cotacosane (S)         103<%         50-150         1         05/03/11 16:15         05/04/11 18:20         M474:265-0           Analytical Method: NWTPH-GX         Preparation Method: NWTPH-GX         04/03/11 16:15         05/04/11 18:20         04/15:1           NWTPH-GX G	Pace Project No.: 257502									
Results reported on a "dry-weight" basis         Parameters         Results         Units         Report Limit         DF         Prepared         Analyzed         CAS No.         Qual           Percent Moisture         Analytical Method: ASTM D2974-87          0.503/11 10:53              0.503/11 10:53               0.503/11 10:53               0.503/11 10:53              0.503/11 10:53              0.503/11 10:53                0.503/11 10:53                 Parameters         Results         Units         Report Limit         DF         Prepared         Analyzed         CAS No.         Qual           Qual          Analyzed         Qual	Sample: SB-12 (2.5)	Lab ID: 25750	2022	Collected:	04/29/1	1 16:10	Received: 05	6/03/11 07:50 N	latrix: Solid	
Parameters         Results         Units         Report Limit         DF         Prepared         Analyzed         CAS No.         Qual           Percent Moisture         Analytical Method: ASTM D2974-87          0.10         1         05/03/11 07:50         Matrix: Solid           Sample: SB-12 (7.5)         Lab ID: 257502023         Collected:         04/29/11         16.45         Reserved:         05/03/11 07:50         Matrix: Solid           Results reported on a "dry-weight" basis         Parameters         Results         Units         Report Limit         DF         Prepared         Analyzed         CAS No.         Qual           NWTPH-Dx GCS         Analytical Method: NWTPH-Dx         Preparetion Method: EPA 3546         Disol/11 18:10         60/411 18:20         60/424         65/04/11 18:20         60/424         65/04/11 18:20         60/424         65/04/11 18:20         60/424         65/04/11 18:20         60/424         65/04/11 18:20         60/424         65/04/11 18:20         65/04/11 18:20         65/04/11 18:20         65/04/11 18:20         65/04/11 18:20         65/04/11 65/04/11 18:20         65/04/11 65/04/11 18:20         65/04/11 65/04/11 18:20         65/04/11 65/04/11 18:20         65/04/11 65/04/11 18:20         65/04/11 65/04/11 65/04/04/11 65/04/11 65/04/11 65/04/11 65/04/11 65/04/11 65/04/11 65/04/11 65/04/11 65/04/11 65/04/11 65/04/11 65/04/11 65/0	Results reported on a "dry-weight	t" basis								
Percent Moisture         Analytical Method: ASTM D2974-87           Percent Moisture         32.3 %         0.10         1         Opfio/1110-50         Matrix: Solid           Sample:         SB-12 (7.5)         Lab ID:         257502023         Collected:         0/428/11         Received:         0/50/3/11         0.750         Matrix: Solid           Besults         Parameters         Results         Units         Report Limit         DF         Prepared         Analyzed         CAS No.         Qual           NWTPH-Dx GCS         Analytical Method: NWTPH-Dx         Preparation Method:         EPA 3546         Dises         GS0/4/11         B2:0         G4742-65-0         For 0         GS0/4/11         B2:0         G4742-65-0         GS0/4/11         B2:0         G4742-65-0         GS0/4/11         B2:0         G4742-65-0         GS0/4/11         B2:0         G4742-65-0         GS0/4/11	Parameters	Results	Units	Report	Limit	DF	Prepared	Analyzed	CAS No.	Qual
Percent Moisture         32.3 %         0.10         1         05/03/11 16:53           Sample:         SB-12 (7.5)         Lab ID:         257502023         Collected:         0.4/29/11 16:45         Received:         05/03/11 07:50         Matrix:         Solid           Results         Parameters         Results         Units         Report Limit         DF         Preparad         Analyzed         CAS No.         Qual           NVTPH-Dx GCS         Analytical Method: NWTPH-Dx         Preparation Method: EPA 3546         Dissal Range         ND mg/kg         26.8         1         05/03/11 16:15         05/04/11 18:20         6/472-65-0           Ort-Ortacosone (S)         103 %         50-150         1         05/03/11 16:15         05/04/11 18:20         6/472-65-0           WTPH-6x GCV         Analytical Method: NWTPH-6X         Preparation Method: NWTPH-6X         WTPH-6X           Gasoline Range Organics         ND mg/kg         7.8         1         05/03/11 14:25         05/03/11 22:29         80-0-8           Apa-Ar Tifluorotoluene (S)         122 %         60-150         1         05/03/11 12:29         90-0-8           Ademonfluorobluene (S)         122 %         60-0150         1         05/03/11 12:29         90-0-4           Attrocontorobluene (S) </td <td>Percent Moisture</td> <td>Analytical Metho</td> <td>d: ASTM</td> <td>D2974-87</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	Percent Moisture	Analytical Metho	d: ASTM	D2974-87						
Sample:         SB-12 (7.5)         Lab ID:         25750203         Collected:         04/23/11 16:45         Received:         05/03/11 07:50         Matrix:         Solid           Results reported on a "dry-weight" basis         Parameters         Results         Units         Report Limit         DF         Prepared         Analyzed         CAS No.         Qual           NWTPH-Dx GCS         Analytical Method:         NWTPH-Dx         Prepared         Analyzed         CAS No.         Qual           NWTPH-Dx GCS         Analytical Method:         NWTPH-GX         CoS/03/11 16:15         05/03/11 16:15         05/03/11 18:20         63/42-65-0           - Octacosane (S)         103 %         50-150         1         05/03/11 18:15         05/03/11 18:20         63/42-65-0           - Octacosane (S)         103 %         50-150         1         05/03/11 18:20         63/42-65-0           - Octacosane (S)         12%         60-150         1         05/03/11 18:20         63/42-65-0           - Octacosane (S)         12%         60-150         1         05/03/11 18:20         63/42-65-0           - Prepared         Analytical Method:         ND mg/kg         9.1         1         05/03/11 12:29         98-0-8           - Alecomofunctoencene(S)	Percent Moisture	32.3 %			0.10	1		05/03/11 16:53		
Results reported on a "dry-weight" basis         Units         Report Limit         DF         Prepared         Analyzed         CAS No.         Qual           NWTPH-Dx GCS         Analytical Method: NWTPH-Dx         Preparation Method:         EPA 3546           Diesel Range         ND mg/kg         26.8         1         05/03/11 16:15         05/04/11 18:20         64742-65-0           NOT opik Range         ND mg/kg         26.8         1         05/03/11 16:15         05/04/11 18:20         64742-65-0           -C-Cerobassane (S)         103 %         50-150         1         05/03/11 16:15         05/04/11 18:20         64742-65-0           VMTPH-Ox GCV         Analytical Method: NWTPH-Gx         Terpation Method:         ND mg/kg         7.8         1         05/03/11 14:25         05/03/11 22:29         80-00-04           28270 MSSV PAH by SIM         Analytical Method: EPA 8270 by SIM Preparation Method:         EPA 3546         1         05/03/11 16:15         05/04/11 16:50         91-57-6           2470 MSSV PAH by SIM         Analytical Method: EPA 8270 by SIM Preparation Method:         EPA 3546         1         05/03/11 16:15         05/04/11 16:50         91-2-0           2-Methyinaphthalene         ND ug/kg         9.1         1         05/03/11 16:15         05/04/11 16:50         03-2-9 </td <td>Sample: SB-12 (7.5)</td> <td>Lab ID: 25750</td> <td>2023</td> <td>Collected:</td> <td>04/29/1</td> <td>1 16:45</td> <td>Received: 05</td> <td>5/03/11 07:50 N</td> <td>latrix: Solid</td> <td></td>	Sample: SB-12 (7.5)	Lab ID: 25750	2023	Collected:	04/29/1	1 16:45	Received: 05	5/03/11 07:50 N	latrix: Solid	
Parameters         Results         Units         Report Limit         DF         Prepared         Analyzed         CAS No.         Qual           NVTPH-Dx GCS         Analytical Method: NVTPH-Dx         Preparation Method:         S546         5504/11 18:20         67472-65-0           Diesel Range         ND mg/kg         107         1         05/03/11 16:15         05/04/11 18:20         64742-65-0           n-Catacosane (6)         03 %         50-150         1         05/03/11 16:15         05/04/11 18:20         64742-65-0           n-Catacosane (6)         03 %         50-150         1         05/03/11 16:15         05/04/11 18:20         64742-65-0           a_na-Trifluoroblene (5)         ND mg/kg         7.8         1         05/03/11 14:25         05/03/11 22:29         80-02-4           a_na-Trifluoroblene (5)         ND mg/kg         7.8         1         05/03/11 14:25         05/03/11 22:29         80-03-4           Baromofluorobenzene (S)         78 %         50-150         1         05/03/11 14:25         05/03/11 22:29         80-03-4           Acenaphthene         ND ug/kg         9.1         1         05/03/11 16:15         05/04/11 16:50         91-5-6           Acenaphthene         ND ug/kg         9.1         1         <	Results reported on a "dry-weight	t" basis								
NUTPH-Dx GCS         Analytical Method: NWTPH-Dx Preparation Method: EPA 3546           Diesel Range         ND mg/kg         26.8         1         05/03/11 16:15         05/04/11 18:20         64742-65-0           n-Octacosane (S)         0.03 %         50-150         1         05/03/11 16:15         05/04/11 18:20         630-02-4           o-Terphenyl (S)         90 %         50-150         1         05/03/11 16:15         05/03/11 12:22         630-02-4           a_na.Trifluoroblane (S)         ND mg/kg         7.8         1         05/03/11 14:25         05/03/11 22:29         8-0.8-8           a_na.Trifluoroblane (S)         78 %         50-150         1         05/03/11 14:25         05/03/11 22:29         8-0.8-8           a_na.Trifluoroblane (S)         78 %         50-150         1         05/03/11 11:25         05/03/11 22:29         8-0.8-8           4-Bromofluoroblane (S)         78 %         50-150         1         05/03/11 11:150         05/04/11 16:50         01-2-0           -Methynaphthalene         ND ug/kg         9.1         1         05/03/11 11:150         05/04/11 16:50         03-32-9           Acenaphthalene         ND ug/kg         9.1         1         05/03/11 16:15         05/04/11 16:50         05/04/11 16:50         05/04/11 16:50<	Parameters	Results	Units	Report	Limit	DF	Prepared	Analyzed	CAS No.	Qual
Diesel Range         ND mg/kg         16         05/03/11 16:15         05/04/11 18:20         04742-65-0           n-Ctaccosene (\$)         103 %         50 150         1         05/03/11 16:15         05/04/11 18:20         63/742-65-0           o-Terphenyl (\$)         90 %         50 150         1         05/03/11 16:15         05/04/11 18:20         63/742-65-0           NWTPH-GX CCV         Analytical Method: NWTPH-GX         Preparation         NU         05/03/11 14:25         05/03/11 12:29         84-15-1           Gasoline Range Organics         ND mg/kg         7.8         1         05/03/11 14:25         05/03/11 12:29         84-08-8           4Eromollucorbenzene (\$)         122 %         50-150         1         05/03/11 14:25         05/03/11 12:29         84-08-8           4Eromollucorbenzene (\$)         78 %         50-150         1         05/03/11 16:15         05/04/11 16:50         93-2-0           2-Methylnaphthalene         ND ug/kg         9.1         1         05/03/11 16:15         05/04/11 16:50         93-2-0           2-Methylnaphthalene         ND ug/kg         9.1         1         05/03/11 16:15         05/04/11 16:50         05/04/11 16:50         05/04/11 16:50         05/04/11 16:50         05/04/11 16:50         05/04/11 16:50         05	NWTPH-Dx GCS	Analytical Metho	d: NWTP	H-Dx Prepar	ation Me	ethod: El	PA 3546			
Motor Oil Range         ND mg/kg         107         1         650(3)/11 16:15         60/4/11 18:20         64742-65-0           n-Octacosane (S)         103 %         50-150         1         05/03/11 16:15         05/04/11 18:20         64742-65-0           n-Octacosane (S)         90 %         50-150         1         05/03/11 16:15         05/03/11 12:29 <td< td=""><td>Diesel Range</td><td>ND mg/k</td><td>g</td><td></td><td>26.8</td><td>1</td><td>05/03/11 16:15</td><td>05/04/11 18:20</td><td></td><td></td></td<>	Diesel Range	ND mg/k	g		26.8	1	05/03/11 16:15	05/04/11 18:20		
n-Octacosane (S)         103 %         50-150         1         05/03/11 16:15         05/03/11 18:20         63/0-22-4           o-Terpneryl (S)         90 %         60-150         1         05/03/11 16:15         05/03/11 18:20         84-15-1           NWTPH-GX GCV         Analytical Method: NWTPH-GX         S0150         1         05/03/11 14:25         05/03/11 12:29         98-08-8           a_a.F.Tiffuorotoluene (S)         122 %         50-150         1         05/03/11 14:25         05/03/11 12:29         98-08-8           4-Bromofluorobenzene (S)         78 %         50-150         1         05/03/11 14:25         05/03/11 12:29         98-08-8           8270 MSSV PAH by SIM         Analytical Method: EPA 8270 by SIM         Preparation         Method: EPA 3546           1-Methylnaphthalene         ND ug/kg         9.1         1         05/03/11 16:15         05/04/11 16:50         90-12-0           2-Methylnaphthalene         ND ug/kg         9.1         1         05/03/11 16:15         05/04/11 16:50         20-96-8           Anthracene         ND ug/kg         9.1         1         05/03/11 16:15         05/04/11 16:50         20-12-7           Benzo(a)anthracene         ND ug/kg         9.1         1         05/03/11 16:15         05/04/11 16:50	Motor Oil Range	ND mg/k	g		107	1	05/03/11 16:15	05/04/11 18:20	64742-65-0	
o-Terphenyl (S)         90 %         50-150         1         05/03/11 16:15         05/03/11 18:20         84-15-1           NWTPH-Gx GCV         Analytical Method: NWTPH-Gx         Preparation         NWTPH-Gx         05/03/11 14:25         05/03/11 22:29         98-08-8           Gasoline Range Organics         ND <mg kg<="" th="">         7.8         1         05/03/11 14:25         05/03/11 22:29         98-08-8           ABromofluorobezene (S)         78 %         50-150         1         05/03/11 14:25         05/03/11 22:29         98-08-8           4Bromofluorobezene (S)         78 %         0.1         0.5/03/11 14:25         05/03/11 22:29         98-08-8           4Bromofluorobezene (S)         78 %         1         0.5/03/11 16:15         05/03/11 16:50         05/03/11 6:15         05/03/1</mg>	n-Octacosane (S)	103 %	•	Ę	50-150	1	05/03/11 16:15	05/04/11 18:20	630-02-4	
NUTPH-GX CCV         Analytical Method: NWTPH-GX Preparation Method: NWTPH-GX           Gasoline Range Organics a, a, a Tiffluorotoluene (S)         122 %         50-150         1         05/03/11 14:25         05/03/11 22:29         88-08-8           4-Bromofluorobenzene (S)         78 %         50-150         1         05/03/11 14:25         05/03/11 22:29         88-08-8           8270 MSSV PAH by SIM         Analytical Method: EPA 8270 by SIM Preparation Method:         EPA 5546         91-12-0           1-Methylnaphthalene         ND ug/kg         9.1         1         05/03/11 16:15         05/04/11 16:50         91-12-0           2-Methylnaphthalene         ND ug/kg         9.1         1         05/03/11 16:15         05/04/11 16:50         91-12-0           2-Methylnaphthalene         ND ug/kg         9.1         1         05/03/11 16:15         05/04/11 16:50         91-12-0           2-Methylnaphthalene         ND ug/kg         9.1         1         05/03/11 16:15         05/04/11 16:50         20-12-7           Acenaphthylene         ND ug/kg         9.1         1         05/03/11 16:15         05/04/11 16:50         20-99-2           Benzo(a)prene         ND ug/kg         9.1         1         05/03/11 16:15         05/04/11 16:50         20-99-2           Benzo(	o-Terphenyl (S)	90 %		Ę	50-150	1	05/03/11 16:15	05/04/11 18:20	84-15-1	
Gasoline Range Organics         ND mg/kg         7.8         1         05/03/11 14:25         05/03/11 12:29         98-88           4-Bromofluorobuene (S)         78         %         50-150         1         05/03/11 14:25         05/03/11 22:29         98-08-8           4-Bromofluorobuene (S)         78         %         50-150         1         05/03/11 12:29         06-00-4           8270 MSSV PAH by SIM         Analytical Method: EPA 8270 by SIM         Preparation         EPA 354         05/03/11 16:15         05/04/11 16:50         90-12-0           2-Methylnaphthalene         ND ug/kg         9.1         1         05/03/11 16:15         05/04/11 16:50         90-12-0           2-Methylnaphthalene         ND ug/kg         9.1         1         05/03/11 16:15         05/04/11 16:50         83-32-9           Acenaphthylene         ND ug/kg         9.1         1         05/03/11 16:15         05/04/11 16:50         120-12-7           Benzo(alphtracene         ND ug/kg         9.1         1         05/03/11 16:15         05/04/11 16:50         120-32-8           Benzo(b/luoranthene         ND ug/kg         9.1         1         05/03/11 16:15         05/04/11 16:50         205-93-2           Benzo(b/luoranthene         ND ug/kg         9.1	NWTPH-Gx GCV	Analytical Metho	d: NWTP	H-Gx Prepar	ation Me	ethod: N	WTPH-Gx			
a,a,a-Trifluorotoluone (S)         122 %         50-150         1         05/03/11 14:25         05/03/11 22:29         98-08-8           4-Bromofluorobenzene (S)         78 %         50-150         1         05/03/11 14:25         05/03/11 12:29         98-08-8           8270 MSSV PAH by SIM         Analytical Method: EPA 8270 by SIM         Preparation Method: EPA 3546           1-Methylnaphthalene         ND ug/kg         9.1         1         05/03/11 16:15         05/04/11 16:50         91-2-0           2-Methylnaphthalene         ND ug/kg         9.1         1         05/03/11 16:15         05/04/11 16:50         91-57-6           Acenaphthylene         ND ug/kg         9.1         1         05/03/11 16:15         05/04/11 16:50         28-96-8           Anthracene         ND ug/kg         9.1         1         05/03/11 16:15         05/04/11 16:50         205-25-3           Benzo(a)aphthalene         ND ug/kg         9.1         1         05/03/11 16:15         05/04/11 16:50         205-92-2           Benzo(a)phtinarithene         ND ug/kg         9.1         1         05/03/11 16:15         05/04/11 16:50         207-93-2           Benzo(A)phtinarithene         ND ug/kg         9.1         1         05/03/11 16:15         05/04/11 16:50         207-08-9 <td>Gasoline Range Organics</td> <td>ND mg/k</td> <td>g</td> <td></td> <td>7.8</td> <td>1</td> <td>05/03/11 14:25</td> <td>05/03/11 22:29</td> <td></td> <td></td>	Gasoline Range Organics	ND mg/k	g		7.8	1	05/03/11 14:25	05/03/11 22:29		
4-Bromofluorobenzene (S)       78 %       50-150       1       05/03/11 14:25       05/03/11 22:29       460-00-4         8270 MSSV PAH by SIM       Analytical Method: EPA 8270 by SIM       Preparation       Method:       EPA 3546         1-Methylnaphthalene       ND ug/kg       9.1       1       05/03/11 16:15       05/04/11 16:50       91-57-6         2-Methylnaphthalene       ND ug/kg       9.1       1       05/03/11 16:15       05/04/11 16:50       94-37-6         Acenaphthylene       ND ug/kg       9.1       1       05/03/11 16:15       05/04/11 16:50       94-37-6         Acenaphthylene       ND ug/kg       9.1       1       05/03/11 16:15       05/04/11 16:50       94-37-6         Acenaphthylene       ND ug/kg       9.1       1       05/03/11 16:15       05/04/11 16:50       92-28-8         Benzo(a)prene       ND ug/kg       9.1       1       05/03/11 16:15       05/04/11 16:50       92-28-8         Benzo(b)fluoranthene       ND ug/kg       9.1       1       05/03/11 16:15       05/04/11 16:50       92-28-8         Benzo(b)fluoranthene       ND ug/kg       9.1       1       05/03/11 16:15       05/04/11 16:50       20-28-8         Benzo(b)fluoranthene       ND ug/kg       9.1 <t< td=""><td>a,a,a-Trifluorotoluene (S)</td><td>122 %</td><td>0</td><td>Ę</td><td>50-150</td><td>1</td><td>05/03/11 14:25</td><td>05/03/11 22:29</td><td>98-08-8</td><td></td></t<>	a,a,a-Trifluorotoluene (S)	122 %	0	Ę	50-150	1	05/03/11 14:25	05/03/11 22:29	98-08-8	
Bar20 MSSV PAH by SIM         Analytical Method: EPA 8270 by SIM         Preparation         Bethol         Bethol         State           1-Methylnaphthalene         ND         ug/kg         9.1         1         05/03/11 16:15         05/04/11 16:50         90-12-0           2-Methylnaphthalene         ND         ug/kg         9.1         1         05/03/11 16:15         05/04/11 16:50         83-32-9           Acenaphthylene         ND         ug/kg         9.1         1         05/03/11 16:15         05/04/11 16:50         208-96-8           Anthracene         ND         ug/kg         9.1         1         05/03/11 16:15         05/04/11 16:50         201-2-7           Benzo(a)anthracene         ND         ug/kg         9.1         1         05/03/11 16:15         05/04/11 16:50         201-2-7           Benzo(a)pyrene         ND         ug/kg         9.1         1         05/03/11 16:15         05/04/11 16:50         20-12-7           Benzo(b/fluoranthene         ND         ug/kg         9.1         1         05/03/11 16:15         05/04/11 16:50         20-9-9-2           Benzo(k)fluoranthene         ND         ug/kg         9.1         1         05/03/11 16:15         05/04/11 16:50         20-7-0-3           Fluo	4-Bromofluorobenzene (S)	78 %		Ę	50-150	1	05/03/11 14:25	05/03/11 22:29	460-00-4	
1-MethylnaphthaleneND ug/kg9.1105/03/11 16:1505/04/11 16:5090-12-02-MethylnaphthaleneND ug/kg9.1105/03/11 16:1505/04/11 16:5083-32-9AcenaphtheneND ug/kg9.1105/03/11 16:1505/04/11 16:5083-32-9AcenaphthyleneND ug/kg9.1105/03/11 16:1505/04/11 16:50120-12-7Benzo(a)anthraceneND ug/kg9.1105/03/11 16:1505/04/11 16:5050-32-8Benzo(a)pyreneND ug/kg9.1105/03/11 16:1505/04/11 16:50202-92-2Benzo(a)pyreneND ug/kg9.1105/03/11 16:1505/04/11 16:50202-99-2Benzo(b)fluorantheneND ug/kg9.1105/03/11 16:1505/04/11 16:50202-99-2Benzo(b)fluorantheneND ug/kg9.1105/03/11 16:1505/04/11 16:50207-08-9ChryseneND ug/kg9.1105/03/11 16:1505/04/11 16:50217-03Dibenz(a,h)anthraceneND ug/kg9.1105/03/11 16:1505/04/11 16:50217-03FluorantheneND ug/kg9.1105/03/11 16:1505/04/11 16:50216-41-0FluorantheneND ug/kg9.1105/03/11 16:1505/04/11 16:50216-41-0FluorantheneND ug/kg9.1105/03/11 16:1505/04/11 16:50212-3FluorantheneND ug/kg9.1105/03/11 16:1505/04/11 16:5021-2-3PyreneN	8270 MSSV PAH by SIM	Analytical Metho	d: EPA 82	270 by SIM F	Preparati	on Meth	od: EPA 3546			
2-Methylnaphthalene         ND ug/kg         9.1         1         05/03/11         05/03/11         16:15         05/04/11         16:50         91-57-6           Acenaphthene         ND ug/kg         9.1         1         05/03/11         16:15         05/04/11         16:50         208-96-8           Acenaphthylene         ND ug/kg         9.1         1         05/03/11         16:15         05/04/11         16:50         208-96-8           Anthracene         ND ug/kg         9.1         1         05/03/11         16:15         05/04/11         16:50         202-97-8           Benzo(a)anthracene         ND ug/kg         9.1         1         05/03/11         16:15         05/04/11         16:50         205-99-2           Benzo(a)hiloerytene         ND ug/kg         9.1         1         05/03/11         16:15         05/04/11         16:50         207-08-9           Benzo(k)fluoranthene         ND ug/kg         9.1         1         05/03/11         16:15         05/04/11         16:50         237-6           Benzo(k)fluoranthene         ND ug/kg         9.1         1         05/03/11         16:15         05/04/11         16:50         237-3           Fluoranthene         ND ug/kg	1-Methylnaphthalene	ND ua/k	a		9.1	1	05/03/11 16:15	05/04/11 16:50	90-12-0	
AcenaphtheneND ug/kg9.1105/03/11 16:1505/04/11 16:5083-32-9AcenaphthyleneND ug/kg9.1105/03/11 16:1505/04/11 16:50208-96-8AnthraceneND ug/kg9.1105/03/11 16:1505/04/11 16:5056-53Benzo(a)pyreneND ug/kg9.1105/03/11 16:1505/04/11 16:5056-53Benzo(a)pyreneND ug/kg9.1105/03/11 16:1505/04/11 16:50205-99-2Benzo(a)hilperyleneND ug/kg9.1105/03/11 16:1505/04/11 16:50205-99-2Benzo(a)hilperyleneND ug/kg9.1105/03/11 16:1505/04/11 16:50205-99-2Benzo(a)hilperyleneND ug/kg9.1105/03/11 16:1505/04/11 16:50207-08-9ChryseneND ug/kg9.1105/03/11 16:1505/04/11 16:50207-08-9Dibenz(a,h)anthraceneND ug/kg9.1105/03/11 16:1505/04/11 16:50206-44-0FluoreneND ug/kg9.1105/03/11 16:1505/04/11 16:50206-44-0Indeno(1,2,3-cd)pyreneND ug/kg9.1105/03/11 16:1505/04/11 16:50207-37Indeno(1,2,3-cd)pyreneND ug/kg9.1105/03/11 16:1505/04/11 16:50216-0-8PyreneND ug/kg9.1105/03/11 16:1505/04/11 16:50216-0-8PyreneND ug/kg9.1105/03/11 16:1505/04/11 16:50216-0-8Terphenyl-d14 (S)81	2-Methylnaphthalene	ND ug/k	q		9.1	1	05/03/11 16:15	05/04/11 16:50	91-57-6	
AcenaphthyleneND ug/kg9.1105/03/11 16:1505/04/11 16:50208-96-8AnthraceneND ug/kg9.1105/03/11 16:1505/04/11 16:50120-12-7Benzo(a)anthraceneND ug/kg9.1105/03/11 16:1505/04/11 16:5065-5-3Benzo(a)pyreneND ug/kg9.1105/03/11 16:1505/04/11 16:5050-32-8Benzo(b)fluorantheneND ug/kg9.1105/03/11 16:1505/04/11 16:50205-99-2Benzo(k)fluorantheneND ug/kg9.1105/03/11 16:1505/04/11 16:50207-08-9ChryseneND ug/kg9.1105/03/11 16:1505/04/11 16:50207-08-9Dibenz(a,h)anthraceneND ug/kg9.1105/03/11 16:1505/04/11 16:50207-08-9FluorantheneND ug/kg9.1105/03/11 16:1505/04/11 16:50206-44-0FluorantheneND ug/kg9.1105/03/11 16:1505/04/11 16:50206-44-0FluorantheneND ug/kg9.1105/03/11 16:1505/04/11 16:5086-73-7Indeno(1,2,3-cd)pyreneND ug/kg9.1105/03/11 16:1505/04/11 16:5091-20-3PhenanthreneND ug/kg9.1105/03/11 16:1505/04/11 16:5091-20-3PhenanthreneND ug/kg9.1105/03/11 16:1505/04/11 16:50129-00-02-Fluorobiphenyl (S)76 %31-131105/03/11 16:1505/04/11 16:50129-00-02-Fluorobi	Acenaphthene	ND ug/k	q		9.1	1	05/03/11 16:15	05/04/11 16:50	83-32-9	
Anthracene         ND         ug/kg         9.1         1         05/03/11         16:15         05/04/11         16:15         120-12-7           Benzo(a)anthracene         ND         ug/kg         9.1         1         05/03/11         16:15         05/04/11         16:50         56-55-3           Benzo(a)pyrene         ND         ug/kg         9.1         1         05/03/11         16:15         05/04/11         650         205-99-2           Benzo(a),hj)perylene         ND         ug/kg         9.1         1         05/03/11         16:15         05/04/11         650         207-08-9           Benzo(k)fluoranthene         ND         ug/kg         9.1         1         05/03/11         16:15         05/04/11         650         207-08-9           Chrysene         ND         ug/kg         9.1         1         05/03/11         16:15         05/04/11         650         207-08-9           Fluoranthene         ND         ug/kg         9.1         1         05/03/11         16:15         05/04/11         650         206-44-0           Fluoranthene         ND         ug/kg         9.1         1         05/03/11         16:15         05/04/11         16:50         206-44-0	Acenaphthylene	ND ug/k	q		9.1	1	05/03/11 16:15	05/04/11 16:50	208-96-8	
Benzo(a)anthracene         ND ug/kg         9.1         1         05/03/11 16:15         05/04/11 16:50         56-55-3           Benzo(a)pyrene         ND ug/kg         9.1         1         05/03/11 16:15         05/04/11 16:50         50-32-8           Benzo(b)fluoranthene         ND ug/kg         9.1         1         05/03/11 16:15         05/04/11 16:50         205-99-2           Benzo(g), h)perylene         ND ug/kg         9.1         1         05/03/11 16:15         05/04/11 16:50         207-08-9           Benzo(k)fluoranthene         ND ug/kg         9.1         1         05/03/11 16:15         05/04/11 16:50         218-01-9           Dibenz(a,h)anthracene         ND ug/kg         9.1         1         05/03/11 16:15         05/04/11 16:50         218-01-9           Dibenz(a,h)anthracene         ND ug/kg         9.1         1         05/03/11 16:15         05/04/11 16:50         267-44-0           Fluoranthene         ND ug/kg         9.1         1         05/03/11 16:15         05/04/11 16:50         207-03           Fluoranthene         ND ug/kg         9.1         1         05/03/11 16:15         05/04/11 16:50         31-33           Indeno(1,2,3-cd)pyrene         ND ug/kg         9.1         1         05/03/11 16:15         <	Anthracene	ND ug/k	g		9.1	1	05/03/11 16:15	05/04/11 16:50	120-12-7	
Benzo(a)pyrene         ND ug/kg         9.1         1         05/03/11 16:15         05/04/11 16:50         50-32-8           Benzo(g),hi)perylene         ND ug/kg         9.1         1         05/03/11 16:15         05/04/11 16:50         205-99-2           Benzo(g),hi)perylene         ND ug/kg         9.1         1         05/03/11 16:15         05/04/11 16:50         191-24-2           Benzo(k)fluoranthene         ND ug/kg         9.1         1         05/03/11 16:15         05/04/11 16:50         207-08-9           Chrysene         ND ug/kg         9.1         1         05/03/11 16:15         05/04/11 16:50         216-01-9           Dibenz(a,h)anthracene         ND ug/kg         9.1         1         05/03/11 16:15         05/04/11 16:50         266-44-0           Fluoranthene         ND ug/kg         9.1         1         05/03/11 16:15         05/04/11 16:50         86-73-7           Indeno(1,2,3-cd)pyrene         ND ug/kg         9.1         1         05/03/11 16:15         05/04/11 16:50         86-73-7           Naphthalene         ND ug/kg         9.1         1         05/03/11 16:15         05/04/11 16:50         85-01-8           Pyrene         ND ug/kg         9.1         1         05/03/11 16:15         05/04/11 16:50	Benzo(a)anthracene	ND ug/k	g		9.1	1	05/03/11 16:15	05/04/11 16:50	56-55-3	
Benzo(b)fluoranthene         ND ug/kg         9.1         1         05/03/11 16:15         05/04/11 16:50         205-99-2           Benzo(g,h,i)perylene         ND ug/kg         9.1         1         05/03/11 16:15         05/04/11 16:50         207-08-9           Benzo(k)fluoranthene         ND ug/kg         9.1         1         05/03/11 16:15         05/04/11 16:50         207-08-9           Chrysene         ND ug/kg         9.1         1         05/03/11 16:15         05/04/11 16:50         218-01-9           Dibenz(a,h)anthracene         ND ug/kg         9.1         1         05/03/11 16:15         05/04/11 16:50         267-03-7           Fluoranthene         ND ug/kg         9.1         1         05/03/11 16:15         05/04/11 16:50         266-44-0           Fluorene         ND ug/kg         9.1         1         05/03/11 16:15         05/04/11 16:50         86-73-7           Indeno(1,2,3-cd)pyrene         ND ug/kg         9.1         1         05/03/11 16:15         05/04/11 16:50         91-20-3           Npene         ND ug/kg         9.1         1         05/03/11 16:15         05/04/11 16:50         129-03           2-Fluorobiphenyl (S)         76 %         31-31         1         05/03/11 16:15         05/04/11 16:50	Benzo(a)pyrene	ND ug/k	g		9.1	1	05/03/11 16:15	05/04/11 16:50	50-32-8	
Benzo(g,h,i)perylene         ND ug/kg         9.1         1         05/03/11 16:15         05/04/11 16:50         191-24-2           Benzo(k)fluoranthene         ND ug/kg         9.1         1         05/03/11 16:15         05/04/11 16:50         207-08-9           Chrysene         ND ug/kg         9.1         1         05/03/11 16:15         05/04/11 16:50         218-01-9           Dibenz(a,h)anthracene         ND ug/kg         9.1         1         05/03/11 16:15         05/04/11 16:50         206-44-0           Fluoranthene         ND ug/kg         9.1         1         05/03/11 16:15         05/04/11 16:50         86-73-7           Indeno(1,2,3-cd)pyrene         ND ug/kg         9.1         1         05/03/11 16:15         05/04/11 16:50         86-73-7           Naphthalene         ND ug/kg         9.1         1         05/03/11 16:15         05/04/11 16:50         193-39-5           Pyrene         ND ug/kg         9.1         1         05/03/11 16:15         05/04/11 16:50         82-00-0           2-Fluorobiphenyl (S)         76 %         31-131         1         05/03/11 16:15         05/04/11 16:50         321-60-8           Terphenyl-d14 (S)         81 %         30-133         1         05/03/11 16:15         05/04/11 16:50 <td>Benzo(b)fluoranthene</td> <td>ND ug/k</td> <td>g</td> <td></td> <td>9.1</td> <td>1</td> <td>05/03/11 16:15</td> <td>05/04/11 16:50</td> <td>205-99-2</td> <td></td>	Benzo(b)fluoranthene	ND ug/k	g		9.1	1	05/03/11 16:15	05/04/11 16:50	205-99-2	
Benzo(k)fluoranthene         ND ug/kg         9.1         1         05/03/11 16:15         05/04/11 16:50         207-08-9           Chrysene         ND ug/kg         9.1         1         05/03/11 16:15         05/04/11 16:50         218-01-9           Dibenz(a,h)anthracene         ND ug/kg         9.1         1         05/03/11 16:15         05/04/11 16:50         23-70-3           Fluoranthene         ND ug/kg         9.1         1         05/03/11 16:15         05/04/11 16:50         206-44-0           Fluoranthene         ND ug/kg         9.1         1         05/03/11 16:15         05/04/11 16:50         86-73-7           Indeno(1,2,3-cd)pyrene         ND ug/kg         9.1         1         05/03/11 16:15         05/04/11 16:50         91-20-3           Naphthalene         ND ug/kg         9.1         1         05/03/11 16:15         05/04/11 16:50         85-01-8           Pyrene         ND ug/kg         9.1         1         05/03/11 16:15         05/04/11 16:50         85-01-8           Pyrene         ND ug/kg         9.1         1         05/03/11 16:15         05/04/11 16:50         321-60-8           2-Fluorobiphenyl (S)         76 %         31-131         1         05/03/11 16:15         05/04/11 16:50         321-60	Benzo(g,h,i)perylene	ND ug/k	g		9.1	1	05/03/11 16:15	05/04/11 16:50	191-24-2	
ChryseneND ug/kg9.1105/03/11 16:1505/04/11 16:50218-01-9Dibenz(a,h)anthraceneND ug/kg9.1105/03/11 16:1505/04/11 16:5053-70-3FluorantheneND ug/kg9.1105/03/11 16:1505/04/11 16:50206-44-0FluoreneND ug/kg9.1105/03/11 16:1505/04/11 16:5086-73-7Indeno(1,2,3-cd)pyreneND ug/kg9.1105/03/11 16:1505/04/11 16:50193-39-5NaphthaleneND ug/kg9.1105/03/11 16:1505/04/11 16:5091-20-3PhenanthreneND ug/kg9.1105/03/11 16:1505/04/11 16:5085-01-8PyreneND ug/kg9.1105/03/11 16:1505/04/11 16:50129-00-02-Fluorobiphenyl (S)76 %31-131105/03/11 16:1505/04/11 16:50321-60-8Terphenyl-d14 (S)81 %30-133105/03/11 16:1505/04/11 16:501718-51-0 <b>8260/5035A Volatile Organics</b> Analytical Method: EPA 8260105/04/11 13:04630-20-61,1,1-Z-TetrachloroethaneND ug/kg3.3105/04/11 13:04630-20-61,1,2,2-TetrachloroethaneND ug/kg3.3105/04/11 13:0471-55-61,1,2,2-TetrachloroethaneND ug/kg3.3105/04/11 13:0479-34-5	Benzo(k)fluoranthene	ND ug/k	g		9.1	1	05/03/11 16:15	05/04/11 16:50	207-08-9	
Dibenz(a,h)anthraceneND ug/kg9.1105/03/11 16:1505/04/11 16:5053-70-3FluorantheneND ug/kg9.1105/03/11 16:1505/04/11 16:50206-44-0FluoreneND ug/kg9.1105/03/11 16:1505/04/11 16:5086-73-7Indeno(1,2,3-cd)pyreneND ug/kg9.1105/03/11 16:1505/04/11 16:50193-39-5NaphthaleneND ug/kg9.1105/03/11 16:1505/04/11 16:5091-20-3PhenanthreneND ug/kg9.1105/03/11 16:1505/04/11 16:5085-01-8PyreneND ug/kg9.1105/03/11 16:1505/04/11 16:5085-01-8PyreneND ug/kg9.1105/03/11 16:1505/04/11 16:50321-60-82-Fluorobiphenyl (S)76 %31-131105/03/11 16:1505/04/11 16:50321-60-8Terphenyl-d14 (S)81 %30-133105/03/11 16:1505/04/11 16:501718-51-08260/5035A Volatile OrganicsAnalytical Method: EPA 82601105/04/11 13:04630-20-61,1,1-2-TetrachloroethaneND ug/kg3.3105/04/11 13:0471-55-61,1,2,2-TetrachloroethaneND ug/kg3.3105/04/11 13:0471-55-61,1,2,2-TetrachloroethaneND ug/kg3.3105/04/11 13:0479-34-5	Chrysene	ND ug/k	g		9.1	1	05/03/11 16:15	05/04/11 16:50	218-01-9	
Fluoranthene       ND ug/kg       9.1       1       05/03/11 16:15       05/04/11 16:50       206-44-0         Fluorene       ND ug/kg       9.1       1       05/03/11 16:15       05/04/11 16:50       86-73-7         Indeno(1,2,3-cd)pyrene       ND ug/kg       9.1       1       05/03/11 16:15       05/04/11 16:50       193-39-5         Naphthalene       ND ug/kg       9.1       1       05/03/11 16:15       05/04/11 16:50       91-20-3         Phenanthrene       ND ug/kg       9.1       1       05/03/11 16:15       05/04/11 16:50       85-01-8         Pyrene       ND ug/kg       9.1       1       05/03/11 16:15       05/04/11 16:50       129-00-0         2-Fluorobiphenyl (S)       76 %       31-131       1       05/03/11 16:15       05/04/11 16:50       321-60-8         Terphenyl-d14 (S)       81 %       30-133       1       05/03/11 16:15       05/04/11 16:50       1718-51-0         8260/5035A Volatile Organics       Analytical Method: EPA 8260       1       05/04/11 16:50       1718-51-0         1,1,1,-2-Tetrachloroethane       ND ug/kg       3.3       1       05/04/11 13:04       630-20-6         1,1,2,2-Tetrachloroethane       ND ug/kg       3.3       1       05/04/11 13:04	Dibenz(a,h)anthracene	ND ug/k	g		9.1	1	05/03/11 16:15	05/04/11 16:50	53-70-3	
FluoreneND ug/kg9.1105/03/11 16:1505/04/11 16:5086-73-7Indeno(1,2,3-cd)pyreneND ug/kg9.1105/03/11 16:1505/04/11 16:50193-39-5NaphthaleneND ug/kg9.1105/03/11 16:1505/04/11 16:5091-20-3PhenanthreneND ug/kg9.1105/03/11 16:1505/04/11 16:5085-01-8PyreneND ug/kg9.1105/03/11 16:1505/04/11 16:50129-00-02-Fluorobiphenyl (S)76 %31-131105/03/11 16:1505/04/11 16:50321-60-8Terphenyl-d14 (S)81 %30-133105/03/11 16:1505/04/11 16:501718-51-0 <b>8260/5035A Volatile Organics</b> Analytical Method: EPA 82601,1,1-ZretrachloroethaneND ug/kg3.3105/04/11 13:04630-20-61,1,2,2-TetrachloroethaneND ug/kg3.3105/04/11 13:0471-55-61,1,2,2-TetrachloroethaneND ug/kg3.3105/04/11 13:0479-34-5	Fluoranthene	ND ug/k	g		9.1	1	05/03/11 16:15	05/04/11 16:50	206-44-0	
Indeno(1,2,3-cd)pyrene         ND ug/kg         9.1         1         05/03/11 16:15         05/04/11 16:50         193-39-5           Naphthalene         ND ug/kg         9.1         1         05/03/11 16:15         05/04/11 16:50         91-20-3           Phenanthrene         ND ug/kg         9.1         1         05/03/11 16:15         05/04/11 16:50         85-01-8           Pyrene         ND ug/kg         9.1         1         05/03/11 16:15         05/04/11 16:50         129-00-0           2-Fluorobiphenyl (S)         76 %         31-131         1         05/03/11 16:15         05/04/11 16:50         321-60-8           Terphenyl-d14 (S)         81 %         30-133         1         05/03/11 16:15         05/04/11 16:50         1718-51-0           8260/5035A Volatile Organics         Analytical Method: EPA 8260         53.3         1         05/04/11 13:04         630-20-6           1,1,1-Z-Tetrachloroethane         ND ug/kg         3.3         1         05/04/11 13:04         630-20-6           1,1,2-Z-Tetrachloroethane         ND ug/kg         3.3         1         05/04/11 13:04         71-55-6           1,1,2,2-Tetrachloroethane         ND ug/kg         3.3         1         05/04/11 13:04         79-34-5	Fluorene	ND ug/k	g		9.1	1	05/03/11 16:15	05/04/11 16:50	86-73-7	
Naphthalene         ND ug/kg         9.1         1         05/03/11 16:15         05/04/11 16:50         91-20-3           Phenanthrene         ND ug/kg         9.1         1         05/03/11 16:15         05/04/11 16:50         85-01-8           Pyrene         ND ug/kg         9.1         1         05/03/11 16:15         05/04/11 16:50         129-00-0           2-Fluorobiphenyl (S)         76 %         31-131         1         05/03/11 16:15         05/04/11 16:50         321-60-8           Terphenyl-d14 (S)         81 %         30-133         1         05/03/11 16:15         05/04/11 16:50         1718-51-0           8260/5035A Volatile Organics         Analytical Method: EPA 8260            05/04/11 13:04         630-20-6           1,1,1,2-Tetrachloroethane         ND ug/kg         3.3         1         05/04/11 13:04         630-20-6           1,1,2,2-Tetrachloroethane         ND ug/kg         3.3         1         05/04/11 13:04         71-55-6           1,1,2,2-Tetrachloroethane         ND ug/kg         3.3         1         05/04/11 13:04         79-34-5	Indeno(1,2,3-cd)pyrene	ND ug/k	g		9.1	1	05/03/11 16:15	05/04/11 16:50	193-39-5	
Phenanthrene         ND ug/kg         9.1         1         05/03/11 16:15         05/04/11 16:50         85-01-8           Pyrene         ND ug/kg         9.1         1         05/03/11 16:15         05/04/11 16:50         129-00-0           2-Fluorobiphenyl (S)         76 %         31-131         1         05/03/11 16:15         05/04/11 16:50         321-60-8           Terphenyl-d14 (S)         81 %         30-133         1         05/03/11 16:15         05/04/11 16:50         1718-51-0           8260/5035A Volatile Organics         Analytical Method: EPA 8260         X         X         X         X         S           1,1,1,2-Tetrachloroethane         ND ug/kg         3.3         1         05/04/11 13:04         630-20-6           1,1,1-Trichloroethane         ND ug/kg         3.3         1         05/04/11 13:04         71-55-6           1,1,2,2-Tetrachloroethane         ND ug/kg         3.3         1         05/04/11 13:04         79-34-5	Naphthalene	ND ug/k	g		9.1	1	05/03/11 16:15	05/04/11 16:50	91-20-3	
Pyrene         ND ug/kg         9.1         1         05/03/11 16:15         05/04/11 16:50         129-00-0           2-Fluorobiphenyl (S)         76 %         31-131         1         05/03/11 16:15         05/04/11 16:50         321-60-8           Terphenyl-d14 (S)         81 %         30-133         1         05/03/11 16:15         05/04/11 16:50         1718-51-0           8260/5035A Volatile Organics         Analytical Method: EPA 8260         X         X         S         S           1,1,1,2-Tetrachloroethane         ND ug/kg         3.3         1         05/04/11 13:04         630-20-6           1,1,1-Trichloroethane         ND ug/kg         3.3         1         05/04/11 13:04         71-55-6           1,1,2,2-Tetrachloroethane         ND ug/kg         3.3         1         05/04/11 13:04         79-34-5	Phenanthrene	ND ug/k	g		9.1	1	05/03/11 16:15	05/04/11 16:50	85-01-8	
2-Fluorobiphenyl (S)       76 %       31-131       1       05/03/11 16:15       05/04/11 16:50       321-60-8         Terphenyl-d14 (S)       81 %       30-133       1       05/03/11 16:15       05/04/11 16:50       1718-51-0         8260/5035A Volatile Organics       Analytical Method: EPA 8260       5       5       5       5       630-20-6         1,1,1,2-Tetrachloroethane       ND ug/kg       3.3       1       05/04/11 13:04       630-20-6         1,1,1-Trichloroethane       ND ug/kg       3.3       1       05/04/11 13:04       71-55-6         1,1,2,2-Tetrachloroethane       ND ug/kg       3.3       1       05/04/11 13:04       79-34-5	Pyrene	ND ug/k	g		9.1	1	05/03/11 16:15	05/04/11 16:50	129-00-0	
Terphenyl-d14 (S)       81 %       30-133       1       05/03/11 16:15       05/04/11 16:50       1718-51-0         8260/5035A Volatile Organics       Analytical Method: EPA 8260       5       5       5       5         1,1,1,2-Tetrachloroethane       ND ug/kg       3.3       1       05/04/11 13:04       630-20-6         1,1,1-Trichloroethane       ND ug/kg       3.3       1       05/04/11 13:04       71-55-6         1,1,2,2-Tetrachloroethane       ND ug/kg       3.3       1       05/04/11 13:04       79-34-5	2-Fluorobiphenyl (S)	76 %		3	31-131	1	05/03/11 16:15	05/04/11 16:50	321-60-8	
8260/5035A Volatile Organics         Analytical Method: EPA 8260           1,1,1,2-Tetrachloroethane         ND ug/kg         3.3         1         05/04/11 13:04         630-20-6           1,1,1-Trichloroethane         ND ug/kg         3.3         1         05/04/11 13:04         71-55-6           1,1,2,2-Tetrachloroethane         ND ug/kg         3.3         1         05/04/11 13:04         79-34-5	Terphenyl-d14 (S)	81 %		3	30-133	1	05/03/11 16:15	05/04/11 16:50	1718-51-0	
1,1,1,2-TetrachloroethaneND ug/kg3.3105/04/11 13:04630-20-61,1,1-TrichloroethaneND ug/kg3.3105/04/11 13:0471-55-61,1,2,2-TetrachloroethaneND ug/kg3.3105/04/11 13:0479-34-5	8260/5035A Volatile Organics	Analytical Metho	d: EPA 82	260						
1,1,1-TrichloroethaneND ug/kg3.3105/04/11 13:0471-55-61,1,2,2-TetrachloroethaneND ug/kg3.3105/04/11 13:0479-34-5	1,1,1,2-Tetrachloroethane	ND ug/k	g		3.3	1		05/04/11 13:04	630-20-6	
1,1,2,2-Tetrachloroethane ND ug/kg 3.3 1 05/04/11 13:04 79-34-5	1,1,1-Trichloroethane	ND ug/k	g		3.3	1		05/04/11 13:04	71-55-6	
	1,1,2,2-Tetrachloroethane	ND ug/k	g		3.3	1		05/04/11 13:04	79-34-5	

Date: 05/26/2011 03:25 PM

# **REPORT OF LABORATORY ANALYSIS**





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### **ANALYTICAL RESULTS**

Project: Tarr Vancouver 1821-00

Pace Project No.: 257502

Results reported on a "dry-weight" basis         Parameters         Results         Units         Report Limit         DF         Prepared         Analyzed         CAS No.         Qual           2800         Analyzed         Analyzed         Malyzed         Analyzed         CAS No.         Qual           2800         Analyzed         Analyzed         Analyzed         Analyzed         Analyzed         Qual           11.2: Trichloroethane         ND ug/kg         3.3         1         6004/111304         75:34-3           1.1: Dichloroethane         ND ug/kg         3.3         1         6004/111304         75:34-3           1.2: Dichloroethane         ND ug/kg         3.3         1         6004/111304         67:64-6           1.2: Dichloroethanzane         ND ug/kg         3.3         1         6004/111304         67:66-6           1.2: Dichloroethanzane         ND ug/kg         3.3         1         6004/111304         67:66-7           1: 2: Dichloroethanzane         ND ug/kg         3.3         1         6004/111304         67:66-7           1: 2: Dichloroethanzene         ND ug/kg         3.3         1         6004/111304         67:67-8           1: 2: Dichloroethanzene         ND ug/kg         3.3         1	Sample: SB-12 (7.5)	Lab ID: 257	502023	Collected: 04/29/1	1 16:45	Received: 0	5/03/11 07:50 N	Aatrix: Solid	
Parameters         Result         Units         Report Limit         DF         Prepared         Analyzed         CAS No.         Qual           26205035A Volatile Organics         Analytical Method: EPA 8200 <t< th=""><th>Results reported on a "dry-weight</th><th>t" basis</th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></t<>	Results reported on a "dry-weight	t" basis							
Best Source         Analytical Method: EPA 8200           1.1.2-Tricholorosthane         ND ug/kg         3.3         1         0504/11 13:04         76-13:-1           1.1.2-Tricholorosthane         ND ug/kg         3.3         1         0504/11 13:04         75-34:-3           1.1.2-Unichorosthane         ND ug/kg         3.3         1         0504/11 13:04         75-34:-3           1.1.Dichioropropene         ND ug/kg         3.3         1         0504/11 13:04         75-34:-3           1.2.3-Trichorosthane         ND ug/kg         3.3         1         0504/11 13:04         67-84:-4           1.2.3-Trichorosthane         ND ug/kg         3.3         1         0504/11 13:04         96-18:-4           1.2.4-Trimethylberane         ND ug/kg         3.3         1         0504/11 13:04         96-12:-8           1.2.Dichorosthane (EDB)         ND ug/kg         3.3         1         0504/11 13:04         16:-95-4           1.2.Dichorosthane         ND ug/kg         3.3         1         0504/11 13:04         16:-95-4           1.2.Dichorosthane         ND ug/kg         3.3         1         0504/11 13:04         16:-95-4           1.2.Dichorosthane         ND ug/kg         3.3         1         0504/11 13:04         <	Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
1,1.2-Tricklonosthane       ND ugkg       3.3       1       05/04/11 13.04       76-13-1         1,1.2-Tricklonosthane       ND ugkg       3.3       1       05/04/11 13.04       75-34-3         1,1-Dicklonosthane       ND ugkg       3.3       1       05/04/11 13.04       75-34-3         1,1-Dickloropropene       ND ugkg       3.3       1       05/04/11 13.04       75-34-3         1,2.3-Tricklonosterzene       ND ugkg       3.3       1       05/04/11 13.04       95-86-1         1,2.3-Tricklonosterzene       ND ugkg       3.3       1       05/04/11 13.04       96-14-1         1,2.4-Trinettylyterzene       ND ugkg       3.3       1       05/04/11 13.04       96-36-3         1,2-Dichrostylyterzene       ND ugkg       3.3       1       05/04/11 13.04       96-34-3         1.2-Dichrostylterzene       ND ugkg       3.3       1       05/04/11 13.04       96-34-3         <	8260/5035A Volatile Organics	Analytical Meth	od: EPA 826	60					
1,1.2-Tickicotrotifluorachane       ND ugkg       3.3       1       05/04/11 13/04       75-31-1         1.1-Dichicotrothene       ND ugkg       3.3       1       05/04/11 13/04       75-35-4         1.1-Dichicotropropene       ND ugkg       3.3       1       05/04/11 13/04       75-35-4         1.1-Dichicotropropene       ND ugkg       3.3       1       05/04/11 13/04       87-61-6         1.2.3-Tichicotropropene       ND ugkg       3.3       1       05/04/11 13/04       87-61-6         1.2.3-Tichicotropropene       ND ugkg       3.3       1       05/04/11 13/04       96-18-4         1.2.4-Tichicotropropene       ND ugkg       3.3       1       05/04/11 13/04       96-18-4         1.2.4-Tichicotropropene       ND ugkg       3.3       1       05/04/11 13/04       96-12-8         1.2.Dichicotropropene       ND ugkg       3.3       1       05/04/11 13/04       96-90         1.2.Dichicotropropene       ND ugkg       3.3       1       05/04/11 13/04       96-96         1.2.Dichicotropropene       ND ugkg       3.3       1       05/04/11 13/04       96-76         1.3.D-Timethylbenzene       ND ugkg       3.3       1       05/04/11 13/04       96-76	1,1,2-Trichloroethane	ND ug	/kg	3.3	1		05/04/11 13:04	79-00-5	
1.1-Dicklorenthene       ND ugkg       3.3       1       05/04/11 13:04       75:34-3         1.1-Dicklorenthene       ND ugkg       3.3       1       05/04/11 13:04       75:54-4         1.2-Dicklorenthene       ND ugkg       3.3       1       05/04/11 13:04       75:64-1         1.2-Dicklorenthene       ND ugkg       3.3       1       05/04/11 13:04       96:16-1         1.2-A-Trinethylberzene       ND ugkg       3.3       1       05/04/11 13:04       96:16-1         1.2-Dichromethylberzene       ND ugkg       3.3       1       05/04/11 13:04       96:16-1         1.2-Dichromethylberzene       ND ugkg       3.3       1       05/04/11 13:04       96:16-3         1.2-Dichromethylberzene       ND ugkg       3.3       1       05/04/11 13:04       95:0-1         1.2-Dichromethene       ND ugkg       3.3       1       05/04/11 13:04       95:0-1         1.2-Dichromethene       ND ugkg       3.3       1       05/04/11 13:04       95:0-1         1.2-Dichromethene       ND ugkg       3.3       1       05/04/11 13:04       95:0-1         1.3-Dichromethene       ND ugkg       3.3       1       05/04/11 13:04       95:0-1         1.3-Dichromethane	1,1,2-Trichlorotrifluoroethane	ND ug	/kg	3.3	1		05/04/11 13:04	76-13-1	
1.1-Dichloropropene       ND ug/kg       3.3       1       06/04/11 13.04       76-36-4         1.2.3-Trichloropropene       ND ug/kg       3.3       1       05/04/11 13.04       87-81-6         1.2.3-Trichloropropene       ND ug/kg       3.3       1       05/04/11 13.04       96-18-4         1.2.4-Trichloropropene       ND ug/kg       3.9       1       05/04/11 13.04       96-18-4         1.2.4-Trichloropropene       ND ug/kg       3.9       1       05/04/11 13.04       96-18-4         1.2.4-Trichloropropene       ND ug/kg       3.9       1       05/04/11 13.04       96-18-4         1.2.Dichlorofestane       ND ug/kg       3.3       1       05/04/11 13.04       96-12-8         1.2.Dichlorofestane       ND ug/kg       3.3       1       05/04/11 13.04       96-36-8         1.2.Dichlorofestane       ND ug/kg       3.3       1       05/04/11 13.04       96-36-8         1.3.Dichlorofestane       ND ug/kg       3.3       1       05/04/11 13.04       96-37-8         1.3.Dichlorofestane       ND ug/kg       3.3       1       05/04/11 13.04       96-47-8         1.3.Dichlorofestane       ND ug/kg       3.3       1       05/04/11 13.04       96-47-8	1,1-Dichloroethane	ND ug	/kg	3.3	1		05/04/11 13:04	75-34-3	
1.1-Dichloropropene       ND ug/kg       3.3       1       05/04/11 13:04       563-58-6         1.2.3-Trichloroberzene       ND ug/kg       3.3       1       05/04/11 13:04       76-16         1.2.3-Trichloroberzene       ND ug/kg       3.3       1       05/04/11 13:04       76-16         1.2.4-Trinethyberzene       ND ug/kg       3.3       1       05/04/11 13:04       95-63-6         1.2-Dibromo-3-chloropropane       ND ug/kg       3.3       1       05/04/11 13:04       95-63-6         1.2-Dichloroberzene       ND ug/kg       3.3       1       05/04/11 13:04       106-93-4         1.2-Dichloroberzene       ND ug/kg       3.3       1       05/04/11 13:04       106-93-4         1.2-Dichloroberzene       ND ug/kg       3.3       1       05/04/11 13:04       106-93-4         1.2-Dichloroberzene       ND ug/kg       3.3       1       05/04/11 13:04       10-96-7         1.2-Dichloropropane       ND ug/kg       3.3       1       05/04/11 13:04       10-96-7         1.2-Dichloropropane       ND ug/kg       3.3       1       05/04/11 13:04       10-96-7         2-Dichloropropane       ND ug/kg       3.3       1       05/04/11 13:04       10-96-4         <	1,1-Dichloroethene	ND ug	/kg	3.3	1		05/04/11 13:04	75-35-4	
1,2.3-Trichlorobenzene       ND ug/kg       3.3       1       05/04/11 13:04       67-61-6         1,2.3-Trichlorobenzene       ND ug/kg       3.3       1       05/04/11 13:04       96-18-4         1,2.4-Trichlorobenzene       ND ug/kg       3.9       1       05/04/11 13:04       96-18-4         1,2.4-Trichlorobenzene       ND ug/kg       3.9       1       05/04/11 13:04       96-18-4         1,2.0-Diornobenzene       ND ug/kg       3.3       1       05/04/11 13:04       96-12-8         1,2-Dichlorobenzene       ND ug/kg       3.3       1       05/04/11 13:04       96-12-8         1,2-Dichlorobenzene       ND ug/kg       3.3       1       05/04/11 13:04       96-2-8         1,2-Dichlorobenzene       ND ug/kg       3.3       1       05/04/11 13:04       96-2-8         1,3-Dichlorobenzene       ND ug/kg       3.3       1       05/04/11 13:04       16-8-7         2-Dic	1,1-Dichloropropene	ND ug	/kg	3.3	1		05/04/11 13:04	563-58-6	
1,2.3-Trichloropropane       ND ug/kg       3.3       1       05/04/11 13:04       96-18-4         1,2.4-Trichlorophenzene       ND ug/kg       3.3       1       05/04/11 13:04       12-06         1,2.4-Trichlorophenzene       ND ug/kg       3.3       1       05/04/11 13:04       12-06         1,2-Dibromos-Achlorophopane       ND ug/kg       3.3       1       05/04/11 13:04       166-93-4         1,2-Dichlorotehnane (EDB)       ND ug/kg       3.3       1       05/04/11 13:04       106-93-4         1,2-Dichlorotehnane (EDG)       ND ug/kg       3.3       1       05/04/11 13:04       106-93-4         1,2-Dichlorotehnane (EDE)       ND ug/kg       3.3       1       05/04/11 13:04       107-06-2         1,2-Dichlorotehnane       ND ug/kg       3.3       1       05/04/11 13:04       78-87-5         1,3-Dichlorotopropane       ND ug/kg       3.3       1       05/04/11 13:04       142-28-9         1,4-Dichlorotopropane       ND ug/kg       3.3       1       05/04/11 13:04       142-28-9         1,4-Dichlorotopropane       ND ug/kg       3.3       1       05/04/11 13:04       142-28-9         2-Dichlorotopropane       ND ug/kg       3.3       1       05/04/11 13:04       54-4-3<	1,2,3-Trichlorobenzene	ND ug	/kg	3.3	1		05/04/11 13:04	87-61-6	
1,2,4-Trinchiorobenzene       ND ug/kg       3.9       1       05/0/1113/0       12-08-1         1,2,4-Trinchiorobenzene       ND ug/kg       3.9       1       05/0/1113/0       95-63-6         1,2-Ditoromost-actioropropane       ND ug/kg       3.3       1       05/0/1113/0       106-93-4         1,2-Ditorobenzene       ND ug/kg       3.3       1       05/0/1113/0       105-62-1         1,2-Dichorobenzene       ND ug/kg       3.3       1       05/0/1113/0       46-5-6         1,2-Dichorobenzene       ND ug/kg       3.3       1       05/0/1113/0       47-5-7         1,2-Dichorobenzene       ND ug/kg       3.3       1       05/0/1113/0       48-7-7         1,3-Dichorobenzene       ND ug/kg       3.3       1       05/0/1113/0       48-7-7         1,3-Dichorobenzene       ND ug/kg       3.3       1       05/0/1113/0       48-8-7         2,2-Dichoropropane       ND ug/kg       3.3       1       05/0/1113/0       48-9-3         2,2-Dichoropropane       ND ug/kg       3.3       1       05/0/1113/0       48-8-3         2,2-Dichoropropane       ND ug/kg       3.3       1       05/0/1113/0       48-4-3         2,2-Dichoropropane       ND ug/kg <td>1,2,3-Trichloropropane</td> <td>ND ug</td> <td>/kg</td> <td>3.3</td> <td>1</td> <td></td> <td>05/04/11 13:04</td> <td>96-18-4</td> <td></td>	1,2,3-Trichloropropane	ND ug	/kg	3.3	1		05/04/11 13:04	96-18-4	
1.2.4-Trimethybenzene         ND ug/kg         3.9         1         05/10/11 13:04         96-12-8           1.2-Dibromo-3-chloropropane         ND ug/kg         3.3         1         05/04/11 13:04         96-50-1           1.2-Dibromethane (EDB)         ND ug/kg         3.3         1         05/04/11 13:04         95-50-1           1.2-Dichloroethane         ND ug/kg         3.3         1         05/04/11 13:04         70-52           1.2-Dichloroethane         ND ug/kg         3.3         1         05/04/11 13:04         70-52           1.2-Dichloroethane         ND ug/kg         3.3         1         05/04/11 13:04         78-87-5           1.3-Dichloropropane         ND ug/kg         3.3         1         05/04/11 13:04         78-87-5           1.3-Dichloropropane         ND ug/kg         3.3         1         05/04/11 13:04         74-87-5           1.3-Dichloropropane         ND ug/kg         3.3         1         05/04/11 13:04         74-87-5           1.3-Dichloropropane         ND ug/kg         3.3         1         05/04/11 13:04         74-86-7           2-Dichloropropane         ND ug/kg         1.0         05/04/11 13:04         74-86-7           2-Dichoroburene         ND ug/kg         3.3	1,2,4-Trichlorobenzene	ND ug	/kg	3.3	1		05/04/11 13:04	120-82-1	
12-Dibromo3-chicoroprane         ND ug/kg         5.5         1         05/04/11 13:04         96-12-8           1.2-Dibromosthane (EDB)         ND ug/kg         3.3         1         05/04/11 13:04         95-60-1           1.2-Dichloropthane         ND ug/kg         3.3         1         05/04/11 13:04         95-60-1           1.2-Dichloropthane         ND ug/kg         3.3         1         05/04/11 13:04         540-50-0           1.2-Dichloropthane         ND ug/kg         3.3         1         05/04/11 13:04         547-51           1.3-Dichloropthane         ND ug/kg         3.3         1         05/04/11 13:04         547-51           1.3-Dichloropthane         ND ug/kg         3.3         1         05/04/11 13:04         547-51           1.3-Dichloropthane         ND ug/kg         3.3         1         05/04/11 13:04         544-20-7           2-Dichloropthane         ND ug/kg         3.3         1         05/04/11 13:04         544-20-7           2-Butanone (MEK)         ND ug/kg         3.3         1         05/04/11 13:04         544-20-7           2-Butanone (MEK)         ND ug/kg         3.3         1         05/04/11 13:04         544-20-7           2-Hexanone         ND ug/kg         3.3<	1,2,4-Trimethylbenzene	ND ug	/kg	3.9	1		05/10/11 13:10	95-63-6	
1.2-Dichorobehane (EDB)       ND ug/kg       3.3       1       05/04/11 13:04       106-83-4         1.2-Dichorobehane       ND ug/kg       3.3       1       05/04/11 13:04       107-06-2         1.2-Dichorobehane       ND ug/kg       3.6       1       05/04/11 13:04       78-67-5         1.2-Dichoropopane       ND ug/kg       3.3       1       05/04/11 13:04       78-75-5         1.3-Dichoropopane       ND ug/kg       3.3       1       05/04/11 13:04       12-82-9         1.3-Dichoropopane       ND ug/kg       3.3       1       05/04/11 13:04       12-82-9         1.3-Dichoropopane       ND ug/kg       3.3       1       05/04/11 13:04       12-82-9         2-Dichoropopane       ND ug/kg       3.3       1       05/04/11 13:04       12-82-9         2-Dichoropopane       ND ug/kg       3.3       1       05/04/11 13:04       12-8-9         2-Dichoropopane       ND ug/kg       3.3       1       05/04/11 13:04       13-9         2-Dichoropopane       ND ug/kg       3.3       1       05/04/11 13:04       18-94-8         2-Hexanone       ND ug/kg       3.3       1       05/04/11 13:04       18-94-8         2-Hexanone       ND ug/kg	1,2-Dibromo-3-chloropropane	ND ug	/kg	5.5	1		05/04/11 13:04	96-12-8	
1.2-Dichlorobenzene       ND ug/kg       3.3       1       05/04/11 13:04       95-50-1         1.2-Dichloroethene (Total)       ND ug/kg       6.6       1       05/04/11 13:04       76-22         1.2-Dichloroethene (Total)       ND ug/kg       3.3       1       05/04/11 13:04       78-87-5         1.3-Dichloroptropane       ND ug/kg       3.3       1       05/04/11 13:04       78-93-3         2-Chlorotoluene       ND ug/kg       3.3       1       05/04/11 13:04       78-93-3         2-Chlorotoluene       ND ug/kg       1.0       1       05/04/11 13:04       95-49-8         2-Hexanone       ND ug/kg       1.0       1       05/04/11 13:04       95-49-8         2-Hexanone       ND ug/kg       3.3       1       05/04/11 13:04       16-4-1         4-Chlorotoluene       ND ug/kg       3.3       1       05/04/11 13:04       17-43-2         Bromochloromethane	1,2-Dibromoethane (EDB)	ND ug	/kg	3.3	1		05/04/11 13:04	106-93-4	
1.2-Dichloroethane (Total)       ND ug/kg       3.3       1       05/04/11 13:04       107-06-2         1.2-Dichloropthene (Total)       ND ug/kg       3.3       1       05/04/11 13:04       540-59-0         1.3-Dichloroptopane       ND ug/kg       3.3       1       05/04/11 13:04       540-59-0         1.3-Dichloroptopane       ND ug/kg       3.3       1       05/04/11 13:04       541-73-1         1.3-Dichloroptopane       ND ug/kg       3.3       1       05/04/11 13:04       541-73-1         1.3-Dichloroptopane       ND ug/kg       3.3       1       05/04/11 13:04       542-29-0         1.4-Dichlorobenzene       ND ug/kg       3.3       1       05/04/11 13:04       594-20-7         2.2-Dichloroptopane       ND ug/kg       1.0       1       05/04/11 13:04       594-32         2-Chlorotoluene       ND ug/kg       1.0       1       05/04/11 13:04       594-32         2-Hexanone       ND ug/kg       1.0       1       05/04/11 13:04       74-93-3         2-Hexanone       ND ug/kg       3.3       1       05/04/11 13:04       74-93-3         2-Hexanone       ND ug/kg       3.3       1       05/04/11 13:04       74-93-5         Bromochloromethane	1,2-Dichlorobenzene	ND ug	/kg	3.3	1		05/04/11 13:04	95-50-1	
1,2-Dichloroptropane       ND ug/kg       6.6       1       05/04/11 13:04       540-59-0         1,2-Dichloroptropane       ND ug/kg       3.3       1       05/04/11 13:04       78-87-5         1,3-Dichloroberzene       ND ug/kg       3.3       1       05/04/11 13:04       541-73-1         1,3-Dichloroberzene       ND ug/kg       3.3       1       05/04/11 13:04       541-73-1         1,4-Dichloroberzene       ND ug/kg       3.3       1       05/04/11 13:04       542-28-9         1,4-Dichloroberzene       ND ug/kg       3.3       1       05/04/11 13:04       542-28-9         1,4-Dichloroberzene       ND ug/kg       3.3       1       05/04/11 13:04       542-28-9         2,2-Dichlorobropane       ND ug/kg       3.3       1       05/04/11 13:04       542-83         2,-Dichorobropane       ND ug/kg       3.3       1       05/04/11 13:04       542-84         2-Hexanone       ND ug/kg       3.3       1       05/04/11 13:04       74-84-3         2-Hexanone (MIBK)       ND ug/kg       3.3       1       05/04/11 13:04       74-97-5         Bromobenzene       ND ug/kg       3.3       1       05/04/11 13:04       74-97-5         Bromochloromethane	1,2-Dichloroethane	ND ug	/kg	3.3	1		05/04/11 13:04	107-06-2	
1,2-Dichloropropane       ND ug/kg       3.3       1       06/04/11 13:04       78-87-5         1,3.5-Trimethylbenzene       ND ug/kg       3.3       1       05/01/011 13:10       108-67-8         1,3-Dichlorobenzene       ND ug/kg       3.3       1       05/04/11 13:04       447-31         1,3-Dichlorobenzene       ND ug/kg       3.3       1       05/04/11 13:04       42-28-9         1,4-Dichlorobenzene       ND ug/kg       3.3       1       05/04/11 13:04       94-20-7         2-Dichloropropane       ND ug/kg       1.0       1       05/04/11 13:04       94-20-7         2-Butanone (MEK)       ND ug/kg       1.0       1       05/04/11 13:04       95-49-8         2-Hexanone       ND ug/kg       1.0       1       05/04/11 13:04       95-49-8         2-Hexanone       ND ug/kg       1.0       1       05/04/11 13:04       108-10-1         2-Hexanone       ND ug/kg       3.3       1       05/04/11 13:04       76-8-4         4-Chiorobluene       ND ug/kg       3.3       1       05/04/11 13:04       71-43-2         Bromochioromethane       ND ug/kg       3.3       1       05/04/11 13:04       74-87-5         Bromochioromethane       ND ug/kg <td>1,2-Dichloroethene (Total)</td> <td>ND ug</td> <td>/kg</td> <td>6.6</td> <td>1</td> <td></td> <td>05/04/11 13:04</td> <td>540-59-0</td> <td></td>	1,2-Dichloroethene (Total)	ND ug	/kg	6.6	1		05/04/11 13:04	540-59-0	
1,3.5-Trimethylbenzene       ND ug/kg       3.9       1       05/10/11 13:10       108-67-8         1,3.Dichlorobenzene       ND ug/kg       3.3       1       05/04/11 13:04       142-28-9         1,4.Dichlorobenzene       ND ug/kg       3.3       1       05/04/11 13:04       142-28-9         1,4.Dichlorobenzene       ND ug/kg       3.3       1       05/04/11 13:04       142-28-9         2,2-Dichloropropane       ND ug/kg       3.3       1       05/04/11 13:04       78-470-7         2-Butanone (MEK)       ND ug/kg       11.0       1       05/04/11 13:04       78-49-8         2-Hexonone (MIBK)       ND ug/kg       3.3       1       05/04/11 13:04       106-43-4         4-Methyl-2-pentanone (MIBK)       ND ug/kg       11.0       1       05/04/11 13:04       106-13-4         4-Methyl-2-pentanone (MIBK)       ND ug/kg       3.3       1       05/04/11 13:04       106-3-4         4-Methyl-2-pentanone (MIBK)       ND ug/kg       3.3       1       05/04/11 13:04       106-14         Bornobenzene       ND ug/kg       3.3       1       05/04/11 13:04       76-42-1         Bromobenzene       ND ug/kg       3.3       1       05/04/11 13:04       76-25-2	1,2-Dichloropropane	ND ug	/kg	3.3	1		05/04/11 13:04	78-87-5	
1,3-Dichlorobenzene       ND ug/kg       3.3       1       05/04/11 13:04       541-73-1         1,3-Dichloropropane       ND ug/kg       3.3       1       05/04/11 13:04       122-8-9         1,4-Dichlorobenzene       ND ug/kg       3.3       1       05/04/11 13:04       106-6-7         2,2-Dichloropropane       ND ug/kg       3.3       1       05/04/11 13:04       594-20-7         2-Butanone (MEK)       ND ug/kg       3.3       1       05/04/11 13:04       95-49-8         2-Chlorotoluene       ND ug/kg       3.3       1       05/04/11 13:04       95-49-8         2-Hexanone       ND ug/kg       3.3       1       05/04/11 13:04       95-49-8         2-Hexanone       ND ug/kg       3.3       1       05/04/11 13:04       95-49-8         2-Hexanone       ND ug/kg       3.3       1       05/04/11 13:04       16-43-4         4-Chlorotoluene       ND ug/kg       3.3       1       05/04/11 13:04       16-8-3-4         A-Methyl-2-pentanone (MIBK)       ND ug/kg       3.3       1       05/04/11 13:04       16-8-1         Bromochloromethane       ND ug/kg       3.3       1       05/04/11 13:04       74-97-5         Bromodichloromethane       ND u	1,3,5-Trimethylbenzene	ND ug	/kg	3.9	1		05/10/11 13:10	108-67-8	
1,3-Dichloropropane       ND ug/kg       3.3       1       05/04/11 13:04       142:28-9         1,4-Dichlorobenzene       ND ug/kg       3.3       1       05/04/11 13:04       106:46-7         2-Dichloropropane       ND ug/kg       3.3       1       05/04/11 13:04       594:20-7         2-Butanone (MEK)       ND ug/kg       3.3       1       05/04/11 13:04       594:20-7         2-Butanone (MEK)       ND ug/kg       3.3       1       05/04/11 13:04       594:33         2-Hexanone       ND ug/kg       3.3       1       05/04/11 13:04       591-78-6         4-Chiorotoluene       ND ug/kg       3.3       1       05/04/11 13:04       106:43-4         4-Methyl-2-pentanone (MIBK)       ND ug/kg       3.3       1       05/04/11 13:04       108-10-1         Acetone       ND ug/kg       3.3       1       05/04/11 13:04       71-43-2         Bromobenzene       ND ug/kg       3.3       1       05/04/11 13:04       74-97-5         Bromodichloromethane       ND ug/kg       3.3       1       05/04/11 13:04       74-97-5         Bromodorf       ND ug/kg       3.3       1       05/04/11 13:04       74-87-9         Carbon disulfide       ND ug/kg	1,3-Dichlorobenzene	ND ug	/kg	3.3	1		05/04/11 13:04	541-73-1	
1,4-Dichlorobenzene       ND ug/kg       3.3       1       05/04/11 13:04       106-46-7         2,2-Dichloropropane       ND ug/kg       3.3       1       05/04/11 13:04       594-20-7         2-Butanone (MEK)       ND ug/kg       11.0       1       05/04/11 13:04       594-30-3         2-Chlorotoluene       ND ug/kg       3.3       1       05/04/11 13:04       595-49-8         2-Hexanone       ND ug/kg       11.0       1       05/04/11 13:04       591-78-6         4-Chlorotoluene       ND ug/kg       11.0       1       05/04/11 13:04       106-43-4         4-Methyl-2-pentanone (MIBK)       ND ug/kg       11.0       1       05/04/11 13:04       106-43-4         4-Methyl-2-pentanone (MIBK)       ND ug/kg       3.3       1       05/04/11 13:04       71-43-2         Bromochloromethane       ND ug/kg       3.3       1       05/04/11 13:04       71-43-2         Bromochloromethane       ND ug/kg       3.3       1       05/04/11 13:04       78-27-4         Bromochloromethane       ND ug/kg       3.3       1       05/04/11 13:04       78-37-5         Bromochloromethane       ND ug/kg       3.3       1       05/04/11 13:04       78-48-39         Carbon	1,3-Dichloropropane	ND ug	/kg	3.3	1		05/04/11 13:04	142-28-9	
2.2-Dichloropropane         ND ug/kg         3.3         1         05/04/11 13:04         594-20-7           2-Butanone (MEK)         ND ug/kg         11.0         1         05/04/11 13:04         78-93-3           2-Chlorotoluene         ND ug/kg         3.3         1         05/04/11 13:04         59-49-8           2-Hexanone         ND ug/kg         3.3         1         05/04/11 13:04         591-78-6           4-Chlorotoluene         ND ug/kg         3.3         1         05/04/11 13:04         706-43-4           4-Methyl-2-pentanone (MIBK)         ND ug/kg         3.3         1         05/04/11 13:04         71-43-2           Bromobenzene         ND ug/kg         3.3         1         05/04/11 13:04         71-43-2           Bromobenzene         ND ug/kg         3.3         1         05/04/11 13:04         71-43-2           Bromodichloromethane         ND ug/kg         3.3         1         05/04/11 13:04         75-27-4           Bromodichloromethane         ND ug/kg         3.3         1         05/04/11 13:04         75-27-2           Bromodichloromethane         ND ug/kg         3.3         1         05/04/11 13:04         75-27-2           Bromodichloromethane         ND ug/kg         3.3	1,4-Dichlorobenzene	ND ug	/kg	3.3	1		05/04/11 13:04	106-46-7	
2-Butanone (MEK)         ND ug/kg         11.0         1         05/04/11 13:04         78-93-3           2-Chlorotoluene         ND ug/kg         3.3         1         05/04/11 13:04         95-49-8           2-Hexanone         ND ug/kg         3.3         1         05/04/11 13:04         95-49-8           2-Hexanone         ND ug/kg         3.3         1         05/04/11 13:04         106-43-4           4-Chlorotoluene         ND ug/kg         11.0         1         05/04/11 13:04         106-43-4           4-Methyl-2-pentanone (MIBK)         ND ug/kg         11.0         1         05/04/11 13:04         106-43-4           Boracene         ND ug/kg         3.3         1         05/04/11 13:04         71-43-2           Bromochoromethane         ND ug/kg         3.3         1         05/04/11 13:04         74-97-5           Bromochoromethane         ND ug/kg         3.3         1         05/04/11 13:04         75-27-4           Bromothane         ND ug/kg         3.3         1         05/04/11 13:04         75-25-2           Bromothane         ND ug/kg         3.3         1         05/04/11 13:04         75-15-0           Carbon tetrachloride         ND ug/kg         3.3         1 <t< td=""><td>2,2-Dichloropropane</td><td>ND ug</td><td>/kg</td><td>3.3</td><td>1</td><td></td><td>05/04/11 13:04</td><td>594-20-7</td><td></td></t<>	2,2-Dichloropropane	ND ug	/kg	3.3	1		05/04/11 13:04	594-20-7	
2-Chlorotoluene         ND ug/kg         3.3         1         05/04/11 13:04         95-49-8           2-Hexanone         ND ug/kg         11.0         1         05/04/11 13:04         591-78-6           4-Chlorotoluene         ND ug/kg         3.3         1         05/04/11 13:04         106-43-4           4-Methyl-2-pentanone (MIBK)         ND ug/kg         11.0         1         05/04/11 13:04         108-10-1           Acetone         ND ug/kg         3.3         1         05/04/11 13:04         71-43-2           Bromobenzene         ND ug/kg         3.3         1         05/04/11 13:04         74-87-5           Bromodichloromethane         ND ug/kg         3.3         1         05/04/11 13:04         74-97-5           Bromodichloromethane         ND ug/kg         3.3         1         05/04/11 13:04         74-97-5           Bromodichloromethane         ND ug/kg         3.3         1         05/04/11 13:04         74-97-5           Bromodichloromethane         ND ug/kg         3.3         1         05/04/11 13:04         75-27-4           Bromodiride         ND ug/kg         3.3         1         05/04/11 13:04         75-87-6           Carbon disulfide         ND ug/kg         3.3	2-Butanone (MEK)	ND ug	/kg	11.0	1		05/04/11 13:04	78-93-3	
2-Hexanone         ND ug/kg         11.0         1         05/04/11 13:04         591-78-6           4-Chlorotoluene         ND ug/kg         3.3         1         05/04/11 13:04         106-43-4           4-Methyl-2-pentanone (MIBK)         ND ug/kg         11.0         1         05/04/11 13:04         106-43-4           A-Cetone         ND ug/kg         11.0         1         05/04/11 13:04         676-4-1           Benzene         ND ug/kg         3.3         1         05/04/11 13:04         71-43-2           Bromobenzene         ND ug/kg         3.3         1         05/04/11 13:04         74-97-5           Bromothoromethane         ND ug/kg         3.3         1         05/04/11 13:04         75-27-4           Bromotofrom         ND ug/kg         3.3         1         05/04/11 13:04         75-25-2           Bromotofram         ND ug/kg         3.3         1         05/04/11 13:04         75-25-2           Bromotofram         ND ug/kg         3.3         1         05/04/11 13:04         75-25-2           Carbon disulfide         ND ug/kg         3.3         1         05/04/11 13:04         76-8-3           Chlorobenzene         ND ug/kg         3.3         1         05/04/11 13:04 </td <td>2-Chlorotoluene</td> <td>ND ug</td> <td>/kg</td> <td>3.3</td> <td>1</td> <td></td> <td>05/04/11 13:04</td> <td>95-49-8</td> <td></td>	2-Chlorotoluene	ND ug	/kg	3.3	1		05/04/11 13:04	95-49-8	
4-Chlorotoluene       ND ug/kg       3.3       1       05/04/11 13:04       106-43-4         4-Methyl-2-pentanone (MIBK)       ND ug/kg       11.0       1       05/04/11 13:04       108-10-1         Acetone       ND ug/kg       11.0       1       05/04/11 13:04       67-64-1         Benzene       ND ug/kg       3.3       1       05/04/11 13:04       71-43-2         Bromobenzene       ND ug/kg       3.3       1       05/04/11 13:04       74-97-5         Bromodichloromethane       ND ug/kg       3.3       1       05/04/11 13:04       75-27-4         Bromodichloromethane       ND ug/kg       3.3       1       05/04/11 13:04       75-27-2         Bromodichloromethane       ND ug/kg       3.3       1       05/04/11 13:04       75-27-2         Bromoform       ND ug/kg       3.3       1       05/04/11 13:04       75-25-2         Bromotofunde       ND ug/kg       3.3       1       05/04/11 13:04       75-15-0         Carbon disulfide       ND ug/kg       3.3       1       05/04/11 13:04       75-15-0         Chlorobenzene       ND ug/kg       3.3       1       05/04/11 13:04       76-63-3         Chlorobentane       ND ug/kg       3.3<	2-Hexanone	ND ug	/kg	11.0	1		05/04/11 13:04	591-78-6	
4-Methyl-2-pentanone (MIBK)       ND ug/kg       11.0       1       05/04/11 13:04       108-10-1         Acetone       ND ug/kg       3.3       1       05/04/11 13:04       67-64-1         Benzene       ND ug/kg       3.3       1       05/04/11 13:04       71-43-2         Bromobenzene       ND ug/kg       3.3       1       05/04/11 13:04       71-43-2         Bromochloromethane       ND ug/kg       3.3       1       05/04/11 13:04       74-97-5         Bromochloromethane       ND ug/kg       3.3       1       05/04/11 13:04       75-27-4         Bromochloromethane       ND ug/kg       3.3       1       05/04/11 13:04       75-27-4         Bromochloromethane       ND ug/kg       3.3       1       05/04/11 13:04       76-83-         Carbon disulfide       ND ug/kg       3.3       1       05/04/11 13:04       76-83-         Carbon tetrachloride       ND ug/kg       3.3       1       05/04/11 13:04       108-90-7         Chlorobenzene       ND ug/kg       3.3       1       05/04/11 13:04       108-90-7         Chloroform       ND ug/kg       3.3       1       05/04/11 13:04       108-90-7         Chloroform       ND ug/kg       3.	4-Chlorotoluene	ND ug	/kg	3.3	1		05/04/11 13:04	106-43-4	
AcetoneND ug/kg11.0105/04/11 13:0467-64-1BenzeneND ug/kg3.3105/04/11 13:0471-43-2BromobenzeneND ug/kg3.3105/04/11 13:0474-97-5BromochloromethaneND ug/kg3.3105/04/11 13:0475-27-4BromochloromethaneND ug/kg3.3105/04/11 13:0475-27-4BromochloromethaneND ug/kg3.3105/04/11 13:0475-27-4BromochloromethaneND ug/kg3.3105/04/11 13:0475-25-2BromochloromethaneND ug/kg3.3105/04/11 13:0475-25-2BromochloromethaneND ug/kg3.3105/04/11 13:0475-15-0Carbon tetrachlorideND ug/kg3.3105/04/11 13:0475-15-0ChlorobenzeneND ug/kg3.3105/04/11 13:0475-00-3ChlorobenzeneND ug/kg3.3105/04/11 13:0475-00-3ChloroformND ug/kg3.3105/04/11 13:0474-87-3DibromochloromethaneND ug/kg3.3105/04/11 13:0474-87-3DibromochloromethaneND ug/kg3.3105/04/11 13:0474-87-3DibromochloromethaneND ug/kg3.3105/04/11 13:0474-95-3DibromochloromethaneND ug/kg3.3105/04/11 13:0474-95-3DibromochloromethaneND ug/kg3.3105/04/11 13:0475-71-8Ethylbenzen	4-Methyl-2-pentanone (MIBK)	ND ug	/kg	11.0	1		05/04/11 13:04	108-10-1	
Benzene         ND ug/kg         3.3         1         05/04/11 13:04         71-43-2           Bromobenzene         ND ug/kg         3.3         1         05/04/11 13:04         71-43-2           Bromochloromethane         ND ug/kg         3.3         1         05/04/11 13:04         74-97-5           Bromochloromethane         ND ug/kg         3.3         1         05/04/11 13:04         75-27-4           Bromoform         ND ug/kg         3.3         1         05/04/11 13:04         75-25-2           Bromoethane         ND ug/kg         3.3         1         05/04/11 13:04         75-25-2           Bromoethane         ND ug/kg         3.3         1         05/04/11 13:04         75-15-0           Carbon disulfide         ND ug/kg         3.3         1         05/04/11 13:04         75-15-0           Carbon tetrachloride         ND ug/kg         3.3         1         05/04/11 13:04         75-07-3           Chlorobenzene         ND ug/kg         3.3         1         05/04/11 13:04         76-03-3           Chloroform         ND ug/kg         3.3         1         05/04/11 13:04         74-87-3           Dibromochloromethane         ND ug/kg         3.3         1         05/04/11 13:04	Acetone	ND ug	/kg	11.0	1		05/04/11 13:04	67-64-1	
Bromobenzene         ND ug/kg         3.3         1         05/04/11         13:04         108-86-1           Bromochloromethane         ND ug/kg         3.3         1         05/04/11         13:04         74-97-5           Bromodichloromethane         ND ug/kg         3.3         1         05/04/11         13:04         75-27-4           Bromoform         ND ug/kg         3.3         1         05/04/11         13:04         75-25-2           Bromomethane         ND ug/kg         3.3         1         05/04/11         13:04         75-25-2           Carbon disulfide         ND ug/kg         3.3         1         05/04/11         13:04         75-15-0           Carbon tetrachloride         ND ug/kg         3.3         1         05/04/11         13:04         75-00-3           Chlorobenzene         ND ug/kg         3.3         1         05/04/11         13:04         75-00-3           Chlorootrm         ND ug/kg         3.3         1         05/04/11         13:04         74-87-3           Chloromethane         ND ug/kg         3.3         1         05/04/11         13:04         74-87-3           Dibromochloromethane         ND ug/kg         3.3         1         05/04	Benzene	ND ug	/kg	3.3	1		05/04/11 13:04	71-43-2	
Bromochloromethane         ND ug/kg         3.3         1         05/04/11         74-97-5           Bromodichloromethane         ND ug/kg         3.3         1         05/04/11         13:04         75-27-4           Bromodichloromethane         ND ug/kg         3.3         1         05/04/11         13:04         75-25-2           Bromomethane         ND ug/kg         3.3         1         05/04/11         13:04         74-83-9           Carbon disulfide         ND ug/kg         3.3         1         05/04/11         13:04         75-15-0           Carbon tetrachloride         ND ug/kg         3.3         1         05/04/11         13:04         76-25-5           Chlorobenzene         ND ug/kg         3.3         1         05/04/11         13:04         75-15-0           Chlorothtane         ND ug/kg         3.3         1         05/04/11         13:04         75-00-3           Chlorothtane         ND ug/kg         3.3         1         05/04/11         13:04         74-87-3           Dibromochloromethane         ND ug/kg         3.3         1         05/04/11         13:04         74-95-3           Dichorodifluoromethane         ND ug/kg         3.3         1         05/04/1	Bromobenzene	ND ug	/kg	3.3	1		05/04/11 13:04	108-86-1	
Bromodichloromethane         ND ug/kg         3.3         1         05/04/11 13:04         75-27-4           Bromoform         ND ug/kg         3.3         1         05/04/11 13:04         75-25-2           Bromomethane         ND ug/kg         3.3         1         05/04/11 13:04         75-25-2           Bromomethane         ND ug/kg         3.3         1         05/04/11 13:04         75-15-0           Carbon tisulfide         ND ug/kg         3.3         1         05/04/11 13:04         75-15-0           Carbon tetrachloride         ND ug/kg         3.3         1         05/04/11 13:04         75-15-0           Chlorobenzene         ND ug/kg         3.3         1         05/04/11 13:04         75-00-3           Chloroform         ND ug/kg         3.3         1         05/04/11 13:04         75-06-3           Chloroform         ND ug/kg         3.3         1         05/04/11 13:04         76-8-3           Chloroform         ND ug/kg         3.3         1         05/04/11 13:04         74-87-3           Dibromomethane         ND ug/kg         3.3         1         05/04/11 13:04         74-95-3           Dichorodifluoromethane         ND ug/kg         3.3         1         05/04/11 13:	Bromochloromethane	ND ug	/kg	3.3	1		05/04/11 13:04	74-97-5	
Bromoform         ND ug/kg         3.3         1         05/04/11         75-25-2           Bromomethane         ND ug/kg         3.3         1         05/04/11         3.3         74-83-9           Carbon disulfide         ND ug/kg         3.3         1         05/04/11         13:04         75-15-0           Carbon tetrachloride         ND ug/kg         3.3         1         05/04/11         13:04         75-15-0           Carbon tetrachloride         ND ug/kg         3.3         1         05/04/11         13:04         75-15-0           Chlorobenzene         ND ug/kg         3.3         1         05/04/11         13:04         75-00-3           Chloroform         ND ug/kg         3.3         1         05/04/11         13:04         75-60-3           Chloroform         ND ug/kg         3.3         1         05/04/11         13:04         74-87-3           Dibromomethane         ND ug/kg         3.3         1         05/04/11         13:04         74-87-3           Dibromomethane         ND ug/kg         3.3         1         05/04/11         13:04         74-95-3           Dichlorodifluoromethane         ND ug/kg         3.3         1         05/04/11         13:04 </td <td>Bromodichloromethane</td> <td>ND ug</td> <td>/kg</td> <td>3.3</td> <td>1</td> <td></td> <td>05/04/11 13:04</td> <td>75-27-4</td> <td></td>	Bromodichloromethane	ND ug	/kg	3.3	1		05/04/11 13:04	75-27-4	
BromomethaneND ug/kg3.3105/04/11 13:0474-83-9Carbon disulfideND ug/kg3.3105/04/11 13:0475-15-0Carbon tetrachlorideND ug/kg3.3105/04/11 13:0456-23-5ChlorobenzeneND ug/kg3.3105/04/11 13:04108-90-7ChloroethaneND ug/kg3.3105/04/11 13:0475-00-3ChloroformND ug/kg3.3105/04/11 13:0467-66-3ChloromethaneND ug/kg3.3105/04/11 13:0474-87-3DibromochloromethaneND ug/kg3.3105/04/11 13:0474-87-3DibromochloromethaneND ug/kg3.3105/04/11 13:0474-87-3DibromochloromethaneND ug/kg3.3105/04/11 13:0474-87-3DibromochloromethaneND ug/kg3.3105/04/11 13:0474-87-3DibromochloromethaneND ug/kg3.3105/04/11 13:0474-87-3DichlorodifluoromethaneND ug/kg3.3105/04/11 13:0475-71-8EthylbenzeneND ug/kg3.3105/04/11 13:0487-68-3Isopropylbenzene (Cumene)ND ug/kg3.9105/10/11 13:0487-68-3Isopropylbenzene (Cumene)ND ug/kg3.9105/04/11 13:041634-04-4Methyl-tert-butyl etherND ug/kg3.3105/04/11 13:041634-04-4Methylene chlorideND ug/kg11.0105/04/11 13:04 <td< td=""><td>Bromoform</td><td>ND ug</td><td>/kg</td><td>3.3</td><td>1</td><td></td><td>05/04/11 13:04</td><td>75-25-2</td><td></td></td<>	Bromoform	ND ug	/kg	3.3	1		05/04/11 13:04	75-25-2	
Carbon disulfideND ug/kg3.3105/04/11 13:0475-15-0Carbon tetrachlorideND ug/kg3.3105/04/11 13:0456-23-5ChlorobenzeneND ug/kg3.3105/04/11 13:04108-90-7ChloroethaneND ug/kg3.3105/04/11 13:0475-00-3ChloroformND ug/kg3.3105/04/11 13:0475-00-3ChloromethaneND ug/kg3.3105/04/11 13:0467-66-3ChloromethaneND ug/kg3.3105/04/11 13:0474-87-3DibromochloromethaneND ug/kg3.3105/04/11 13:0474-87-3DibromochloromethaneND ug/kg3.3105/04/11 13:0474-95-3DichlorodifluoromethaneND ug/kg3.3105/04/11 13:0475-71-8EthylbenzeneND ug/kg3.3105/04/11 13:0475-71-8Ethylbenzene (Cumene)ND ug/kg3.3105/04/11 13:0487-68-3Isopropylbenzene (Cumene)ND ug/kg3.9105/04/11 13:0487-68-3Methyl-tert-butyl etherND ug/kg3.3105/04/11 13:041634-04-4Methylene chlorideND ug/kg3.3105/04/11 13:0475-09-2	Bromomethane	ND ug	/kg	3.3	1		05/04/11 13:04	74-83-9	
Carbon tetrachlorideND ug/kg3.3105/04/11 13:0456-23-5ChlorobenzeneND ug/kg3.3105/04/11 13:04108-90-7ChloroethaneND ug/kg3.3105/04/11 13:0475-00-3ChloroformND ug/kg3.3105/04/11 13:0467-66-3ChloromethaneND ug/kg3.3105/04/11 13:0474-87-3DibromochloromethaneND ug/kg3.3105/04/11 13:0474-87-3DibromochloromethaneND ug/kg3.3105/04/11 13:0474-95-3DibromochloromethaneND ug/kg3.3105/04/11 13:0474-95-3DibromochloromethaneND ug/kg3.3105/04/11 13:0475-71-8EthylbenzeneND ug/kg3.3105/04/11 13:0475-71-8EthylbenzeneND ug/kg3.3105/04/11 13:0487-68-3Isopropylbenzene (Cumene)ND ug/kg3.3105/04/11 13:0487-68-3Methyl-tert-butyl etherND ug/kg3.3105/04/11 13:0487-68-3Methylene chlorideND ug/kg3.3105/04/11 13:041634-04-4	Carbon disulfide	ND ug	/kg	3.3	1		05/04/11 13:04	75-15-0	
ChlorobenzeneND ug/kg3.3105/04/11 13:04108-90-7ChloroethaneND ug/kg3.3105/04/11 13:0475-00-3ChloroformND ug/kg3.3105/04/11 13:0467-66-3ChloromethaneND ug/kg3.3105/04/11 13:0474-87-3DibromochloromethaneND ug/kg3.3105/04/11 13:04124-48-1DibromochloromethaneND ug/kg3.3105/04/11 13:0474-95-3DibromomethaneND ug/kg3.3105/04/11 13:0474-95-3DibromorethaneND ug/kg3.3105/04/11 13:0475-71-8EthylbenzeneND ug/kg3.9105/04/11 13:0475-71-8EthylbenzeneND ug/kg3.9105/04/11 13:0487-68-3Isopropylbenzene (Cumene)ND ug/kg3.9105/04/11 13:0487-68-3Methyl-tert-butyl etherND ug/kg3.3105/04/11 13:041634-04-4Methylene chlorideND ug/kg11.0105/04/11 13:0475-09-2	Carbon tetrachloride	ND ug	/kg	3.3	1		05/04/11 13:04	56-23-5	
ChloroethaneND ug/kg3.3105/04/11 13:0475-00-3ChloroformND ug/kg3.3105/04/11 13:0467-66-3ChloromethaneND ug/kg3.3105/04/11 13:0474-87-3DibromochloromethaneND ug/kg3.3105/04/11 13:0474-87-3DibromochloromethaneND ug/kg3.3105/04/11 13:0474-95-3DibromothaneND ug/kg3.3105/04/11 13:0474-95-3DibromothaneND ug/kg3.3105/04/11 13:0474-95-3DichlorodifluoromethaneND ug/kg3.3105/04/11 13:0475-71-8EthylbenzeneND ug/kg3.9105/10/11 13:10100-41-4Hexachloro-1,3-butadieneND ug/kg3.3105/04/11 13:0487-68-3Isopropylbenzene (Cumene)ND ug/kg3.9105/10/11 13:1098-82-8Methyl-tert-butyl etherND ug/kg3.3105/04/11 13:041634-04-4Methylene chlorideND ug/kg11.0105/04/11 13:0475-09-2	Chlorobenzene	ND ug	/kg	3.3	1		05/04/11 13:04	108-90-7	
ChloroformND ug/kg3.3105/04/11 13:0467-66-3ChloromethaneND ug/kg3.3105/04/11 13:0474-87-3DibromochloromethaneND ug/kg3.3105/04/11 13:04124-48-1DibromomethaneND ug/kg3.3105/04/11 13:0474-95-3DichlorodifluoromethaneND ug/kg3.3105/04/11 13:0474-95-3DichlorodifluoromethaneND ug/kg3.3105/04/11 13:0475-71-8EthylbenzeneND ug/kg3.9105/10/11 13:10100-41-4Hexachloro-1,3-butadieneND ug/kg3.3105/04/11 13:0487-68-3Isopropylbenzene (Cumene)ND ug/kg3.9105/10/11 13:1098-82-8Methyl-tert-butyl etherND ug/kg3.3105/04/11 13:041634-04-4Methylene chlorideND ug/kg11.0105/04/11 13:0475-09-2	Chloroethane	ND ug	/kg	3.3	1		05/04/11 13:04	75-00-3	
ChloromethaneND ug/kg3.3105/04/11 13:0474-87-3DibromochloromethaneND ug/kg3.3105/04/11 13:04124-48-1DibromomethaneND ug/kg3.3105/04/11 13:0474-95-3DichlorodifluoromethaneND ug/kg3.3105/04/11 13:0474-95-3DichlorodifluoromethaneND ug/kg3.3105/04/11 13:0475-71-8EthylbenzeneND ug/kg3.9105/10/11 13:10100-41-4Hexachloro-1,3-butadieneND ug/kg3.3105/04/11 13:0487-68-3Isopropylbenzene (Cumene)ND ug/kg3.9105/10/11 13:1098-82-8Methyl-tert-butyl etherND ug/kg3.3105/04/11 13:041634-04-4Methylene chlorideND ug/kg11.0105/04/11 13:0475-09-2	Chloroform	ND ug	/kg	3.3	1		05/04/11 13:04	67-66-3	
DibromochloromethaneND ug/kg3.3105/04/11 13:04124-48-1DibromomethaneND ug/kg3.3105/04/11 13:0474-95-3DichlorodifluoromethaneND ug/kg3.3105/04/11 13:0475-71-8EthylbenzeneND ug/kg3.9105/04/11 13:0475-71-8Hexachloro-1,3-butadieneND ug/kg3.3105/04/11 13:0487-68-3Isopropylbenzene (Cumene)ND ug/kg3.9105/04/11 13:0487-68-3Methyl-tert-butyl etherND ug/kg3.3105/04/11 13:041634-04-4Methylene chlorideND ug/kg11.0105/04/11 13:0475-09-2	Chloromethane	ND ug	/kg	3.3	1		05/04/11 13:04	74-87-3	
Dibromomethane         ND ug/kg         3.3         1         05/04/11 13:04         74-95-3           Dichlorodifluoromethane         ND ug/kg         3.3         1         05/04/11 13:04         75-71-8           Ethylbenzene         ND ug/kg         3.9         1         05/04/11 13:04         75-71-8           Hexachloro-1,3-butadiene         ND ug/kg         3.3         1         05/04/11 13:04         87-68-3           Isopropylbenzene (Cumene)         ND ug/kg         3.9         1         05/04/11 13:04         87-68-3           Methyl-tert-butyl ether         ND ug/kg         3.9         1         05/04/11 13:04         1634-04-4           Methylene chloride         ND ug/kg         1.0         1         05/04/11 13:04         75-09-2	Dibromochloromethane	ND ug	/kg	3.3	1		05/04/11 13:04	124-48-1	
Dichlorodifluoromethane         ND ug/kg         3.3         1         05/04/11 13:04         75-71-8           Ethylbenzene         ND ug/kg         3.9         1         05/10/11 13:10         100-41-4           Hexachloro-1,3-butadiene         ND ug/kg         3.3         1         05/04/11 13:04         87-68-3           Isopropylbenzene (Cumene)         ND ug/kg         3.9         1         05/10/11 13:10         98-82-8           Methyl-tert-butyl ether         ND ug/kg         3.3         1         05/04/11 13:04         1634-04-4           Methylene chloride         ND ug/kg         11.0         1         05/04/11 13:04         75-09-2	Dibromomethane	ND ug	/kg	3.3	1		05/04/11 13:04	74-95-3	
EthylbenzeneND ug/kg3.9105/10/11 13:10100-41-4Hexachloro-1,3-butadieneND ug/kg3.3105/04/11 13:0487-68-3Isopropylbenzene (Cumene)ND ug/kg3.9105/10/11 13:1098-82-8Methyl-tert-butyl etherND ug/kg3.3105/04/11 13:041634-04-4Methylene chlorideND ug/kg11.0105/04/11 13:0475-09-2	Dichlorodifluoromethane	ND uq	/kg	3.3	1		05/04/11 13:04	75-71-8	
Hexachloro-1,3-butadiene         ND ug/kg         3.3         1         05/04/11 13:04         87-68-3           Isopropylbenzene (Cumene)         ND ug/kg         3.9         1         05/10/11 13:10         98-82-8           Methyl-tert-butyl ether         ND ug/kg         3.3         1         05/04/11 13:04         1634-04-4           Methylene chloride         ND ug/kg         11.0         1         05/04/11 13:04         75-09-2	Ethylbenzene	ND uq	/kg	3.9	1		05/10/11 13:10	100-41-4	
Isopropylbenzene (Cumene)         ND ug/kg         3.9         1         05/10/11 13:10         98-82-8           Methyl-tert-butyl ether         ND ug/kg         3.3         1         05/04/11 13:04         1634-04-4           Methylene chloride         ND ug/kg         11.0         1         05/04/11 13:04         75-09-2	Hexachloro-1,3-butadiene	ND ua	/kg	3.3	1		05/04/11 13:04	87-68-3	
Methyl-tert-butyl ether         ND ug/kg         3.3         1         05/04/11 13:04         1634-04-4           Methylene chloride         ND ug/kg         11.0         1         05/04/11 13:04         75-09-2	Isopropylbenzene (Cumene)	ND ua	/kg	3.9	1		05/10/11 13:10	98-82-8	
Methylene chloride         ND ug/kg         11.0         1         05/04/11 13:04         75-09-2	Methyl-tert-butyl ether	ND ua	/kg	3.3	1		05/04/11 13:04	1634-04-4	
	Methylene chloride	ND ug	/kg	11.0	1		05/04/11 13:04	75-09-2	

Date: 05/26/2011 03:25 PM

# **REPORT OF LABORATORY ANALYSIS**





Project: Tarr Vancouver 1821-00

Pace Project No.: 257502

Sample: SB-12 (7.5)	Lab ID: 257	502023	Collected: 04/29/1	1 16:45	5 Received: 05	5/03/11 07:50 N	Aatrix: Solid	
Results reported on a "dry-weigh	t" basis							
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260/5035A Volatile Organics	Analytical Mether	nod: EPA 82	260					
Naphthalene	ND ug	/kg	3.9	1		05/10/11 13:10	91-20-3	
Styrene	ND ug	/kg	3.3	1		05/04/11 13:04	100-42-5	
Tetrachloroethene	ND ug	/kg	3.3	1		05/04/11 13:04	127-18-4	
Toluene	ND ug	/kg	3.9	1		05/10/11 13:10	108-88-3	
Trichloroethene	ND ug	/kg	3.3	1		05/04/11 13:04	79-01-6	
Trichlorofluoromethane	ND ug	/kg	3.3	1		05/04/11 13:04	75-69-4	
Vinyl chloride	ND ug	/kg	3.3	1		05/04/11 13:04	75-01-4	
Xylene (Total)	ND ug	/kg	11.6	1		05/10/11 13:10	1330-20-7	
cis-1,2-Dichloroethene	ND ug	/kg	3.3	1		05/04/11 13:04	156-59-2	
cis-1,3-Dichloropropene	ND ug	/kg	3.3	1		05/04/11 13:04	10061-01-5	
m&p-Xylene	ND ug	/kg	7.7	1		05/10/11 13:10	179601-23-1	
n-Butylbenzene	ND ug	/kg	3.3	1		05/04/11 13:04	104-51-8	
n-Propylbenzene	ND ug	/kg	3.9	1		05/10/11 13:10	103-65-1	
o-Xylene	ND ug	/kg	3.9	1		05/10/11 13:10	95-47-6	
p-lsopropyltoluene	ND ug	/kg	3.3	1		05/04/11 13:04	99-87-6	
sec-Butylbenzene	ND ug	/kg	3.3	1		05/04/11 13:04	135-98-8	
tert-Amylmethyl ether	ND ug	/kg	3.3	1		05/04/11 13:04	994-05-8	
tert-Butylbenzene	ND ug	/kg	3.3	1		05/04/11 13:04	98-06-6	
trans-1,2-Dichloroethene	ND ug	/kg	3.3	1		05/04/11 13:04	156-60-5	
trans-1,3-Dichloropropene	ND ug	/kg	3.3	1		05/04/11 13:04	10061-02-6	
Dibromofluoromethane (S)	102 %		80-136	1		05/04/11 13:04	1868-53-7	
Toluene-d8 (S)	91 %		80-120	1		05/04/11 13:04	2037-26-5	
4-Bromofluorobenzene (S)	99 %		72-122	1		05/04/11 13:04	460-00-4	
1,2-Dichloroethane-d4 (S)	106 %		80-143	1		05/04/11 13:04	17060-07-0	
Percent Moisture	Analytical Meth	nod: ASTM I	D2974-87					
Percent Moisture	26.9 %		0.10	1		05/03/11 16:54		
Sample: SB-12	Lab ID: 257	502024	Collected: 04/29/1	1 17:45	6 Received: 05	5/03/11 07:50 N	latrix: Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Dx GCS	Analytical Mether	nod: NWTPI	H-Dx Preparation Me	ethod: E	EPA 3510			
Diesel Range	ND mo	a/L	0.075	1	05/03/11 14:25	05/03/11 21:00		
Motor Oil Range	ND me	a/L	0.38	1	05/03/11 14:25	05/03/11 21:00	64742-65-0	
n-Octacosane (S)	104 %	5	50-150	1	05/03/11 14:25	05/03/11 21:00	630-02-4	
o-Terphenyl (S)	97 %		50-150	1	05/03/11 14:25	05/03/11 21:00	84-15-1	
NWTPH-Gx MSV	Analytical Meth	nod: NWTPI	H-Gx					
Gasoline Range Organics	ND ua	/L	50.0	1		05/05/11 15:56		
4-Bromofluorobenzene (S)	100 %		50-150	1		05/05/11 15:56	460-00-4	

Date: 05/26/2011 03:25 PM

# **REPORT OF LABORATORY ANALYSIS**

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Project: Tarr Vancouver 1821-00

Pace Project No.: 257502

Sample: MW-1 (8.0) DUP	Lab ID: 257	502025	Collected:	04/29/1	1 09:55	Received: 05	/03/11 07:50	Matrix: Solid	
Results reported on a "drv-weigh	nt" basis			•					
Parameters	Results	l Inite	Renor	rt Limit	DE	Prepared	Analyzed	CAS No	Qual
		01110							
Percent Moisture	Analytical Met	hod: ASTM	D2974-87						
Percent Moisture	24.4 %			0.10	1		05/03/11 16:54	ļ	
Sample: SB-15	Lab ID: 257	502026	Collected:	04/29/1	1 13:40	Received: 05	/03/11 07:50	Matrix: Water	
Parameters	Results	Units	Repor	t Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Dx GCS	Analytical Met	hod: NWTP	H-Dx Prepa	ration Me	ethod: E	PA 3510			
Diesel Range	<b>0.14</b> m	a/L		0.076	1	05/03/11 14:25	05/03/11 21:17	7	
Motor Oil Range	ND m	a/L		0.38	1	05/03/11 14:25	05/03/11 21:17	64742-65-0	
n-Octacosane (S)	106 %	0.		50-150	1	05/03/11 14:25	05/03/11 21:17	630-02-4	
o-Terphenyl (S)	100 %			50-150	1	05/03/11 14:25	05/03/11 21:17	7 84-15-1	
8260 MSV	Analytical Met	hod: EPA 50	030B/8260						
1.1.1.2-Tetrachloroethane	ND uc	ı/I		1.0	1		05/04/11 18:56	630-20-6	
1.1.1-Trichloroethane	ND up	r = I/L		1.0	1		05/04/11 18:56	5 71-55-6	
1.1.2.2-Tetrachloroethane	ND uc	r – I/L		1.0	1		05/04/11 18:56	6 79-34-5	
1,1,2-Trichloroethane	ND uc	r – I/L		1.0	1		05/04/11 18:56	6 79-00-5	
1,1-Dichloroethane	ND uc	, I/L		1.0	1		05/04/11 18:56	5 75-34-3	
1,1-Dichloroethene	ND uc	, I/L		1.0	1		05/04/11 18:56	6 75-35-4	
1,1-Dichloropropene	ND uc	, I/L		1.0	1		05/04/11 18:56	563-58-6	
1,2,3-Trichlorobenzene	ND uc	, I/L		1.0	1		05/04/11 18:56	87-61-6	
1,2,3-Trichloropropane	ND ug	, I/L		1.0	1		05/04/11 18:56	6 96-18-4	
1,2,4-Trichlorobenzene	ND ug	ı/L		1.0	1		05/04/11 18:56	6 120-82-1	
1,2,4-Trimethylbenzene	ND ug	ı/L		1.0	1		05/04/11 18:56	6 95-63-6	
1,2-Dibromo-3-chloropropane	ND ug	ı/L		4.0	1		05/04/11 18:56	6 96-12-8	
1,2-Dibromoethane (EDB)	ND ug	ı/L		1.0	1		05/04/11 18:56	6 106-93-4	
1,2-Dichlorobenzene	ND ug	ı/L		1.0	1		05/04/11 18:56	6 95-50-1	
1,2-Dichloroethane	ND ug	ı/L		1.0	1		05/04/11 18:56	6 107-06-2	
1,2-Dichloroethene (Total)	ND ug	ı/L		2.0	1		05/04/11 18:56	6 540-59-0	
1,2-Dichloropropane	ND ug	ı/L		1.0	1		05/04/11 18:56	6 78-87-5	
1,3,5-Trimethylbenzene	4.1 ug	ı/L		1.0	1		05/04/11 18:56	6 108-67-8	
1,3-Dichlorobenzene	ND ug	ı/L		1.0	1		05/04/11 18:56	6 541-73-1	
1,3-Dichloropropane	ND ug	ı/L		1.0	1		05/04/11 18:56	6 142-28-9	
1,4-Dichlorobenzene	ND ug	ı/L		1.0	1		05/04/11 18:56	6 106-46-7	
2,2-Dichloropropane	ND ug	ı/L		1.0	1		05/04/11 18:56	594-20-7	
2-Butanone (MEK)	ND ug	ı/L		5.0	1		05/04/11 18:56	6 78-93-3	
2-Chlorotoluene	ND ug	ı/L		1.0	1		05/04/11 18:56	6 95-49-8	
2-Hexanone	ND ug	ı/L		5.0	1		05/04/11 18:56	6 591-78-6	
4-Chlorotoluene	ND ug	ı/L		1.0	1		05/04/11 18:56	6 106-43-4	
4-Methyl-2-pentanone (MIBK)	ND ug	ı/L		5.0	1		05/04/11 18:56	6 108-10-1	
Acetone	ND ug	ı/L		5.0	1		05/04/11 18:56	67-64-1	
Benzene	1.1 ug	ı/L		1.0	1		05/04/11 18:56	6 71-43-2	
Bromobenzene	ND ug	ı/L		1.0	1		05/04/11 18:56	6 108-86-1	
Bromochloromethane	ND ug	ı/L		1.0	1		05/04/11 18:56	6 74-97-5	

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# **REPORT OF LABORATORY ANALYSIS**

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Project: Tarr Vancouver 1821-00

Pace Project No.: 257502

Sample: SB-15	Lab ID: 2575020	Collected: 04/29/1	1 13:40	Received: 0	5/03/11 07:50 N	latrix: Water	
Parameters	Results	Units Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method:	EPA 5030B/8260					
Bromodichloromethane	ND ug/L	1.0	1		05/04/11 18:56	75-27-4	
Bromoform	ND ug/L	1.0	1		05/04/11 18:56	75-25-2	
Bromomethane	ND ug/L	1.0	1		05/04/11 18:56	74-83-9	
Carbon disulfide	ND ug/L	1.0	1		05/04/11 18:56	75-15-0	
Carbon tetrachloride	ND ug/L	1.0	1		05/04/11 18:56	56-23-5	
Chlorobenzene	ND ug/L	1.0	1		05/04/11 18:56	108-90-7	
Chloroethane	ND ug/L	1.0	1		05/04/11 18:56	75-00-3	
Chloroform	ND ug/L	1.0	1		05/04/11 18:56	67-66-3	
Chloromethane	ND ug/L	1.0	1		05/04/11 18:56	74-87-3	
Dibromochloromethane	ND ug/L	1.0	1		05/04/11 18:56	124-48-1	
Dibromomethane	ND ug/L	1.0	1		05/04/11 18:56	74-95-3	
Dichlorodifluoromethane	ND ug/L	1.0	1		05/04/11 18:56	75-71-8	
Ethylbenzene	<b>2.8</b> ug/L	1.0	1		05/04/11 18:56	100-41-4	
Hexachloro-1.3-butadiene	ND ug/L	1.0	1		05/04/11 18:56	87-68-3	
Isopropylbenzene (Cumene)	<b>3.4</b> ug/L	1.0	1		05/04/11 18:56	98-82-8	
Methyl-tert-butyl ether	ND ug/L	1.0	1		05/04/11 18:56	1634-04-4	
Methylene chloride	ND ug/L	4.0	1		05/04/11 18:56	75-09-2	
Naphthalene	ND ug/l	1.0	1		05/04/11 18:56	91-20-3	
Styrene	ND ug/L	1.0	1		05/04/11 18:56	100-42-5	
Tetrachloroethene	ND ug/L	1.0	1		05/04/11 18:56	127-18-4	
Toluene	ND ug/L	1.0	1		05/04/11 18:56	108-88-3	
Trichloroethene	ND ug/L	1.0	1		05/04/11 18:56	79-01-6	
Trichlorofluoromethane	ND ug/L	1.0	1		05/04/11 18:56	75-69-4	
Vinyl chloride	ND ug/L	1.0	1		05/04/11 18:56	75-01-4	
Xylene (Total)	ND ug/L	3.0	1		05/04/11 18:56	1330-20-7	
cis-1 2-Dichloroethene	ND ug/L	1.0	1		05/04/11 18:56	156-59-2	
cis-1.3-Dichloropropene	ND ug/L	1.0	1		05/04/11 18:56	10061-01-5	
m&n-Xylene	ND ug/L	2.0	1		05/04/11 18:56	179601-23-1	
n-Butylbenzene	ND ug/L	1.0	1		05/04/11 18:56	104-51-8	
n-Propylbenzene	95 ug/L	1.0	1		05/04/11 18:56	103-65-1	
o-Xylene	ND ug/L	1.0	1		05/04/11 18:56	95-47-6	
n-Isopropyltoluene	ND ug/L	1.0	1		05/04/11 18:56	99-87-6	
sec-Butylbenzene	26 ug/L	1.0	1		05/04/11 18:56	135-98-8	
tert-Butylbenzene	ND ug/L	1.0	1		05/04/11 18:56	98-06-6	
trans_1 2-Dichloroethene	ND ug/L	1.0	1		05/04/11 18:56	156-60-5	
trans-1,2 Dichloropropene	ND ug/L	1.0	1		05/04/11 18:56	10061-02-6	
4-Bromofluorobenzene (S)		80-120	1		05/04/11 18:56	460-00-4	
Dibromofluoromethane (S)	93 %	80-120	1		05/04/11 18:56	1868-53-7	
1.2-Dichloroethane-d4 (S)	95 %	80-122	1		05/04/11 18:56	17060-07-0	
Toluono-d8 (S)	90 /0 100 %	00-124 20-122	1		05/04/11 18:56	2037-26-5	
	100 /0	00-123	I		00/04/11 10:00	2001-20-0	
NWTPH-Gx MSV	Analytical Method:	NWTPH-Gx					
Gasoline Range Organics	<b>473</b> ug/L	50.0	1		05/04/11 18:56		
4-Bromofluorobenzene (S)	99 %	50-150	1		05/04/11 18:56	460-00-4	

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# **REPORT OF LABORATORY ANALYSIS**





Paco Project No :	Tarr Va	ncouver 18	321-00						
OC Batch	207502 OFX	/3645		Analysis M	lethod.	NI	WTPH-Dx		
QC Batch Method:	FPA:	3546		Analysis D	escription:	N	WTPH-Dx G(	s	
Associated Lab San	nles	25750200	2 257502004 2	57502006 25750	2007 2575	02008	257502012	257502015 2	57502018 257502019
	ipics.	25750202	20, 257502022, 2	57502023	2001, 2010	02000,	201002012,	201002010, 2	
METHOD BLANK:	68620			Matr	ix: Solid				
Associated Lab San	nples:	25750200 25750202	2, 257502004, 2 20, 257502022, 2	57502006, 25750 57502023	2007, 2575	02008,	257502012,	257502015, 2	57502018, 257502019,
Dama			11-26-	Blank	Repor	ting	A		· C
Paran	neter		Units	Result	LIM	IT	Analyze	d Quai	
Diesel Range			mg/kg	N	D	20.0	05/04/11 11	1:34	
Motor Oil Range			mg/kg	N	D	80.0	05/04/11 1	1:34	
n-Octacosane (S)			%	9	6 4	50-150	05/04/11 1	1:34	
o-Terphenyl (S)			%	8	4 ;	50-150	05/04/11 11	1:34	
LABORATORY COM	TROL	SAMPLE:	68621						
				Spike	LCS		LCS	% Rec	
Paran	neter		Units	Conc.	Result	(	% Rec	Limits	Qualifiers
Diesel Range			ma/ka		43	7		56-124	
Motor Oil Range			ma/ka	500	49	7	99	50-150	
n-Octacosane (S)			%				103	50-150	
o-Terphenyl (S)			%				101	50-150	
SAMPLE DUPLICA	TE: 68	622							
_				257504001	Du	о			
Paran	neter		Units	Result	Res	ult	RPD	Qualifie	rs
Diesel Range			mg/kg	N	D	ND			
Motor Oil Range			mg/kg	N	D	ND			
n-Octacosane (S)			%	10	1	100		2	
o-Terphenyl (S)			%	8	9	87		2	
		600							
SAMPLE DUPLICA	TE: 68	023			Du	C			
SAMPLE DUPLICA	TE: 68	023		257502002	0.1				
SAMPLE DUPLICA	TE: 68 neter	023	Units	257502002 Result	Res	ult	RPD	Qualifie	rs
SAMPLE DUPLICA Paran Diesel Range	TE: 68		Units mg/kg	257502002 Result	Res	ult ND	RPD	Qualifie	rs
SAMPLE DUPLICA Paran Diesel Range Motor Oil Range	TE: 68		Units mg/kg mg/kg	257502002 Result N	Res D D	ult ND ND	RPD	Qualifie	rs
SAMPLE DUPLICA Paran Diesel Range Motor Oil Range n-Octacosane (S)	TE: 68		Units mg/kg mg/kg %	257502002 	Res D D 9	ult ND ND 96	RPD	Qualifie	rs

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# **REPORT OF LABORATORY ANALYSIS**





NWTPH-Dx

NWTPH-Dx GCS

Project: Tarr Vancouver 1821-00

Pace Project No.: 257502

QC Batch: OEXT/3641 QC Batch Method: EPA 3510 Associated Lab Samples: 25750 Analysis Method:

 510
 Analysis Description:

 257502010, 257502021, 257502024, 257502026

Matrix: Water

METHOD BLANK: 68528

Associated Lab Samples: 257502010, 257502021, 257502024, 257502026

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Diesel Range	mg/L	ND	0.080	05/03/11 19:07	
Motor Oil Range	mg/L	ND	0.40	05/03/11 19:07	
n-Octacosane (S)	%	99	50-150	05/03/11 19:07	
o-Terphenyl (S)	%	95	50-150	05/03/11 19:07	

### LABORATORY CONTROL SAMPLE: 68529

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Diesel Range	mg/L		4.7	94	51-147	
Motor Oil Range	mg/L	5	4.9	98	20-160	
n-Octacosane (S)	%			108	50-150	
o-Terphenyl (S)	%			113	50-150	

### SAMPLE DUPLICATE: 68530

Parameter	Units	257492001 Result	Dup Result	RPD	Qualifiers
Diesel Range	mg/L	0.96	0.79	19	
Motor Oil Range	mg/L	2.0	1.5	28	
n-Octacosane (S)	%	104	106	24	
o-Terphenyl (S)	%	96	99	25	

### SAMPLE DUPLICATE: 68627

Parameter	Units	257502010 Result	Dup Result	RPD	Qualifiers
Diesel Range	mg/L	0.097	0.077	23	
Motor Oil Range	mg/L	ND	.099J		
n-Octacosane (S)	%	101	106	5	
o-Terphenyl (S)	%	93	91	2	

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### **REPORT OF LABORATORY ANALYSIS**

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Project:	Tarr Vancouver 1	1821-00					
Pace Project No.:	257502						
OC Batch:	GCV/2268		Analysis M	ethod: NI	WTPH-Gx		
QC Batch Method	NWTPH-Gx		Analysis M	escription: N	WTPH-Gx So	lid GCV	
Acception d Lob Com	2575020	02 257502004 25	7502006 257502	2008 257502012	257502018	257502010 257	502020 257502022
Associated Lab Sali	2575020	)23	1002000, 201002	-000, 207 302012,	, 201002010,	201002010, 201	302020, 237302022,
METHOD BLANK:	68605		Matrix	k: Solid			
Associated Lab Sam	nples: 2575020	)02, 257502004, 25	57502006, 257502	2008, 257502012,	, 257502018,	257502019, 257	502020, 257502022,
	2070020	20	Blank	Reporting			
Param	neter	Units	Result	Limit	Analyzed	d Qualifie	ers
Gasoline Range Org	anics	mg/kg	ND	5.0	05/03/11 16		
4-Bromofluorobenze	ene (S)	%	80	50-150	05/03/11 16	6:43	
a,a,a-Trifluorotoluen	e (S)	%	125	5 50-150	05/03/11 16	6:43	
LABORATORY CON	NTROL SAMPLE:	68606					
Dana		1.1.214	Spike	LCS	LCS	% Rec	
Param	heter		Conc.	Result	% Rec		Qualifiers
Gasoline Range Org	ganics	mg/kg	12.5	12.0	96	54-156	
4-Bromofluorobenze	ene (S)	%			97	50-150	
a,a,a-minuorototuen	e (S)	70			139	50-150	
SAMPLE DUPLICAT	TE: 68901						
			257502006	Dup			
Param	neter	Units	Result	Result	RPD	Qualifiers	
Gasoline Range Ord	anics	mg/kg	ND	.38J			
4-Bromofluorobenze	ene (S)	%	76	5 75		1	
a,a,a-Trifluorotoluen	e (S)	%	123	3 123		.3	
SAMPLE DUPLICAT	FE: 68902						
			257502019	Dup			
Param	neter	Units	Result	Result	RPD	Qualifiers	
Gasoline Range Org	ganics	mg/kg	NE	) 1.7J			
4-Bromofluorobenze	ene (S)	%	75	5 81		7	
a,a,a-Trifluorotoluen	e (S)	%	120	) 120		.2	

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# **REPORT OF LABORATORY ANALYSIS**

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Project: Tarr Vancouv	er 1821-00					
Pace Project No.: 25/502			a dh a al an			
QC Batch: GCV/2269		Analysis M	ethod: N	IWTPH-Gx		
QC Batch Method: NWTPH-G	(	Analysis D	escription: N	WTPH-Gx So	lid GCV	
Associated Lab Samples: 2575	02007, 257502015					
METHOD BLANK: 68809		Matri	x: Solid			
Associated Lab Samples: 2575	02007, 257502015					
		Blank	Reporting			
Parameter	Units	Result	Limit	Analyze	d Qualif	iers
Gasoline Range Organics	mg/kg	N[	5.0	05/05/11 15	5:37	
4-Bromofluorobenzene (S)	%	84	4 50-150	0 05/05/11 15	5:37	
a,a,a-Trifluorotoluene (S)	%	118	3 50-150	05/05/11 15	5:37	
	LE: 68810					
	LL. 00010	Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Gasoline Range Organics	mg/kg	12.5	11.4	91	54-156	
4-Bromofluorobenzene (S)	%			85	50-150	
a,a,a-Trifluorotoluene (S)	%			130	50-150	
SAMPLE DUPLICATE: 68969						
		257502007	Dup			
Parameter	Units	Result	Result	RPD	Qualifier	S
Gasoline Range Organics	mg/kg	8.	7 9.0	)	4	
4-Bromofluorobenzene (S)	%	80	6 90	)	4	
a,a,a-Trifluorotoluene (S)	%	12 <sup>.</sup>	1 129	9	7	
SAMPLE DUPLICATE: 68970						
		257519001	Dup			
Parameter	Units	Result	Result	RPD	Qualifier	S

		201010001	Dup		
Parameter	Units	Result	Result	RPD	Qualifiers
Gasoline Range Organics	mg/kg	40.3	39.6	2	
4-Bromofluorobenzene (S)	%	78	90	14	
a,a,a-Trifluorotoluene (S)	%	115	130	12	

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Project:	Tarr Vancou	ver 1821-00										
Pace Project No.:	257502											
QC Batch:	MPRP/219	96		Analys	is Method	: E	PA 6010					
QC Batch Method:	EPA 3050			Analys	is Descrip	tion: 6	010 MET					
Associated Lab Sar	mples: 257	502007, 2575	02015, 257	502019								
METHOD BLANK:	69119			N	Atrix: So	lid						
Associated Lab Sar	mples: 257	502007, 2575	02015, 257	502019								
				Blank	F	Reporting						
Parar	neter		Units	Resul	t	Limit	Analyz	ed	Qualifiers			
Lead		mg/kg			ND	1.0	05/09/11	15:14				
LABORATORY CO	NTROL SAM	PLE: 69120										
				Spike	LCS	5	LCS	% Re	С			
Parar	neter	I	Units	Conc.	Resi	ult	% Rec	Limits	s Q	ualifiers		
Lead		mg/kg		25		26.2	105	80	)-120		-	
MATRIX SPIKE & N	ATRIX SPIK	E DUPLICATE	: 69121			69122						
				MS	MSD							
		2	57536001	Spike	Spike	MS	MSD	MS	MSD	% Rec		
Parame	ter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	Qual
Lead		mg/kg	8.7	31.5	31.8	39.5	38.9	98	95	75-125	2	

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Project: Tarr Vancouver 1821-00

Pace Project No.: 257502

QC Batch: OEXT/3644		Analysis Meth	nod: Ef	PA 8270 by SIM		
QC Batch Method: EPA	3546	Analysis Des	cription: 82	270/3546 MSSV PA	H by SIM	
Associated Lab Samples:	257502015, 257502023					
METHOD BLANK: 68601		Matrix:	Solid			
Associated Lab Samples:	257502015, 257502023					
		Blank	Reporting			
Parameter	Units	Result	Limit	Analyzed	Qualifiers	
1-Methylnaphthalene	ug/kg	ND	6.7	05/04/11 15:34		
2-Methylnaphthalene	ug/kg	ND	6.7	05/04/11 15:34		
Acenaphthene	ug/kg	ND	6.7	05/04/11 15:34		
Acenaphthylene	ug/kg	ND	6.7	05/04/11 15:34		
Anthracene	ug/kg	ND	6.7	05/04/11 15:34		
Benzo(a)anthracene	ug/kg	ND	6.7	05/04/11 15:34		
Benzo(a)pyrene	ug/kg	ND	6.7	05/04/11 15:34		
Benzo(b)fluoranthene	ug/kg	ND	6.7	05/04/11 15:34		
Benzo(g,h,i)perylene	ug/kg	ND	6.7	05/04/11 15:34		
Benzo(k)fluoranthene	ug/kg	ND	6.7	05/04/11 15:34		
Chrysene	ug/kg	ND	6.7	05/04/11 15:34		
Dibenz(a,h)anthracene	ug/kg	ND	6.7	05/04/11 15:34		
Fluoranthene	ug/kg	ND	6.7	05/04/11 15:34		
Fluorene	ug/kg	ND	6.7	05/04/11 15:34		
Indeno(1,2,3-cd)pyrene	ug/kg	ND	6.7	05/04/11 15:34		
Naphthalene	ug/kg	ND	6.7	05/04/11 15:34		
Phenanthrene	ug/kg	ND	6.7	05/04/11 15:34		
Pyrene	ug/kg	ND	6.7	05/04/11 15:34		
2-Fluorobiphenyl (S)	%	76	31-131	05/04/11 15:34		
Terphenyl-d14 (S)	%	79	30-133	05/04/11 15:34		

#### LABORATORY CONTROL SAMPLE: 68602

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1-Methylnaphthalene	ug/kg		108	81	37-121	
2-Methylnaphthalene	ug/kg	133	106	80	33-132	
Acenaphthene	ug/kg	133	109	82	32-127	
Acenaphthylene	ug/kg	133	100	75	31-134	
Anthracene	ug/kg	133	103	77	42-135	
Benzo(a)anthracene	ug/kg	133	102	76	43-139	
Benzo(a)pyrene	ug/kg	133	112	84	44-144	
Benzo(b)fluoranthene	ug/kg	133	105	79	42-144	
Benzo(g,h,i)perylene	ug/kg	133	99.8	75	46-136	
Benzo(k)fluoranthene	ug/kg	133	117	88	45-147	
Chrysene	ug/kg	133	117	87	42-144	
Dibenz(a,h)anthracene	ug/kg	133	103	77	48-142	
Fluoranthene	ug/kg	133	116	87	44-143	
Fluorene	ug/kg	133	93.5	70	32-146	
Indeno(1,2,3-cd)pyrene	ug/kg	133	99.2	74	47-140	
Naphthalene	ug/kg	133	105	79	35-118	
Phenanthrene	ug/kg	133	115	86	42-131	

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# Project: Tarr Vancouver 1821-00

Pace Project No.: 257502

LABORATORY CONTROL SAMPLE:	68602					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Pyrene	ug/kg	133	111	83	47-136	
2-Fluorobiphenyl (S)	%			81	31-131	
Terphenyl-d14 (S)	%			86	30-133	

MATRIX SPIKE & MATRIX S	1ATRIX SPIKE & MATRIX SPIKE DUPLICATE: 68603 68604										
Parameter	Units	257502015 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
1-Methylnaphthalene	ug/kg	1380	174	176	2700	1650	760	151	31-123	49	D6,M1,M6
2-Methylnaphthalene	ug/kg	3190	174	176	5770	3850	1490	380	15-146	40	D6,M6
Acenaphthene	ug/kg	23.5	174	176	175	169	87	83	19-141	4	
Acenaphthylene	ug/kg	ND	174	176	147	147	80	80	30-142	.08	
Anthracene	ug/kg	ND	174	176	134	125	72	67	38-137	6	
Benzo(a)anthracene	ug/kg	ND	174	176	133	126	75	71	37-143	5	
Benzo(a)pyrene	ug/kg	ND	174	176	143	139	82	79	33-147	3	
Benzo(b)fluoranthene	ug/kg	ND	174	176	131	128	75	73	25-156	2	
Benzo(g,h,i)perylene	ug/kg	ND	174	176	128	121	73	68	26-142	6	
Benzo(k)fluoranthene	ug/kg	ND	174	176	138	132	79	75	35-142	4	
Chrysene	ug/kg	ND	174	176	143	133	81	75	23-150	7	
Dibenz(a,h)anthracene	ug/kg	ND	174	176	131	126	75	72	41-140	4	
Fluoranthene	ug/kg	ND	174	176	145	137	81	76	25-155	5	
Fluorene	ug/kg	52.0	174	176	192	167	81	66	33-152	14	
Indeno(1,2,3-cd)pyrene	ug/kg	ND	174	176	128	122	73	69	36-139	5	
Naphthalene	ug/kg	3350	174	176	5940	4140	1490	449	25-121	36	D6,M6
Phenanthrene	ug/kg	84.2	174	176	284	221	115	78	29-141	25	D6
Pyrene	ug/kg	10.1	174	176	148	135	79	72	36-145	9	
2-Fluorobiphenyl (S)	%						73	77	31-131		
Terphenyl-d14 (S)	%						76	72	30-133		

### **REPORT OF LABORATORY ANALYSIS**

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Project: Tarr Vancouver 1821-00

Pace Project No.: 257502

QC Batch:	MSV/4367	
QC Batch Method:	EPA 5030B/8260	
Associated Lab Sam	ples: 257502010, 25750202	6

Analysis Description:

Matrix: Water

Analysis Method:

EPA 5030B/8260

8260 MSV Water 10 mL Purge

METHOD BLANK: 68734 ciated Lab Se Ass

sociated Lab Samples: 257502010, 25750202	sociated Lab Samples:	257502010, 257502026
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Parameter         Units         Result         Limit         Analyzed         Qualifiers           -Tetrachloroethane         ug/L         ND         1.0         05/04/11 13:19           Tichchoroethane         ug/L         ND         1.0         05/04/11 13:19           Tichchoroethane         ug/L         ND         1.0         05/04/11 13:19           hidroethane         ug/L         ND         1.0         05/04/11 13:19           richloroptopane         ug/L         ND         1.0         05/04/			Blank	Reporting		
Tetrachloroethane         ug/L         ND         1.0         05/04/11 13:19           Tetrachloroethane         ug/L         ND         1.0         05/04/11 13:19           -Tetrachloroethane         ug/L         ND         1.0         05/04/11 13:19           irchloroethane         ug/L         ND         1.0         05/04/11 13:19           irchloroethane         ug/L         ND         1.0         05/04/11 13:19           irchloroethane         ug/L         ND         1.0         05/04/11 13:19           irchloroptopane         ug/L         ND         1.0         05/04/11 13:19           orom-3-chloroptopane         ug/L         ND         1.0         05/04/11 13:19           orom-3-chloroptopane         ug/L         ND         1.0         05/04/11 13:19           hloroptopane         ug/L         ND         1.0         05/04/11 13:19           irhloroptopane         ug/L         ND         1.0         05/04/	Parameter	Units	Result	Limit	Analyzed	Qualifiers
Titchloroethane         ug/L         ND         1.0         05/04/11 13:19           Tetrachioroethane         ug/L         ND         1.0         05/04/11 13:19           Titchloroethane         ug/L         ND         1.0         05/04/11 13:19           thoroethane         ug/L         ND         1.0         05/04/11 13:19           thoroethane         ug/L         ND         1.0         05/04/11 13:19           tichloroptopene         ug/L         ND         1.0         05/04/11 13:19           tichloroptopene         ug/L         ND         1.0         05/04/11 13:19           tichloroptopane         ug/L         ND         1.0         05/04/11 13:19	1.1.1.2-Tetrachloroethane	ua/L		1.0	05/04/11 13:19	
Tetrachloroethane         ug/L         ND         1.0         05/04/11         13:19           richloroethane         ug/L         ND         1.0         05/04/11         13:19           chloroethane         ug/L         ND         1.0         05/04/11         13:19           chloroethane         ug/L         ND         1.0         05/04/11         13:19           richloroppane         ug/L         ND         1.0         05/04/11         13:19           richlorobenzene         ug/L         ND         1.0         05/04/11         3:19           richlorobenzene         ug/L         ND	1.1.1-Trichloroethane	ua/L	ND	1.0	05/04/11 13:19	
Tichloroethane         ug/L         ND         1.0         05/04/11         13:19           hbloroethane         ug/L         ND         1.0         05/04/11         13:19           hbloroethane         ug/L         ND         1.0         05/04/11         13:19           hbloroptopene         ug/L         ND         1.0         05/04/11         13:19           Tichlorobenzene         ug/L         ND         1.0         05/04/11         13:19           Tichlorobenzene         ug/L         ND         1.0         05/04/11         13:19           Tichlorobenzene         ug/L         ND         1.0         05/04/11         13:19           trichlorobenzene         ug/L         ND         1.0         05/04/11         13:19           trichlorobenzene         ug/L         ND         1.0         05/04/11         13:19           trichlorobenzene         ug/L         ND         2.0         05/04/11         13:19           trictoropana         ug/L         ND         1.0         05/04/11         13:19           trictoropanae         ug/L         ND         1.0         05/04/11         13:19           trictoropane         ug/L         ND	1.1.2.2-Tetrachloroethane	ug/L	ND	1.0	05/04/11 13:19	
hioroethane         ug/L         ND         1.0         05/04/11         13:19           hioroethene         ug/L         ND         1.0         05/04/11         13:19           hioroptopene         ug/L         ND         1.0         05/04/11         13:19           Tichloroptopane         ug/L         ND         1.0         05/04/11         13:19           Tichlorobenzene         ug/L         ND         1.0         05/04/11         13:19           Tirichlorobenzene         ug/L         ND         1.0         05/04/11         13:19           trinethylbenzene         ug/L         ND         1.0         05/04/11         13:19           trinethylbenzene         ug/L         ND         1.0         05/04/11         13:19           thorobenzene         ug/L         ND         1.0         05/04/11         13:19           thorobenzene         ug/L         ND         1.0         05/04/11         13:19           thorobenzene         ug/L         ND         1.0         05/04/11         13:19           thoropopane         ug/L         ND         1.0         05/04/11         13:19           thoropopane         ug/L         ND         1.0<	1.1.2-Trichloroethane	ua/L	ND	1.0	05/04/11 13:19	
bit or bit of the second sec	1-Dichloroethane	ug/l	ND	1.0	05/04/11 13:19	
Instruction         By C         ND         1.0         05/04/11         13:19           Tichlorobenzene         ug/L         ND         1.0         05/04/11         13:19           promo-3-chloropropane         ug/L         ND         1.0         05/04/11         13:19           promo-3-chloropropane         ug/L         ND         1.0         05/04/11         13:19           promo-4-schare (EDB)         ug/L         ND         1.0         05/04/11         13:19           phorobenzene         ug/L         ND	1-Dichloroethene	ug/L	ND	1.0	05/04/11 13 19	
mich orbit         yg/L         ND         1.0         05/04/11         13:19           Tichloropropane         ug/L         ND         1.0         05/04/11         13:19           Tichloropropane         ug/L         ND         1.0         05/04/11         13:19           Tichloropropane         ug/L         ND         1.0         05/04/11         13:19           promo-3-chloropropane         ug/L         ND         1.0         05/04/11         13:19           promo-3-chloropropane         ug/L         ND         1.0         05/04/11         13:19           promo-s-chloropropane         ug/L         ND         1.0         05/04/11         13:19           promo-s-chloropropane         ug/L         ND         1.0         05/04/11         13:19           phloroethane         ug/L         ND         1.0         05/04/11         13:19           phloropopane         ug/L	1-Dichloropropene	ug/l	ND	1.0	05/04/11 13:19	
Trichloropropane         ug/L         ND         1.0         05/04/11         13:19           Trichloropropane         ug/L         ND         1.0         05/04/11         13:19           Trimethylbenzene         ug/L         ND         1.0         05/04/11         13:19           promo-3-chloropropane         ug/L         ND         1.0         05/04/11         13:19           promo-3-chloropropane         ug/L         ND         1.0         05/04/11         13:19           promo-3-chloropropane         ug/L         ND         1.0         05/04/11         13:19           phoroethene (Total)         ug/L         ND         1.0         05/04/11         13:19           phoroethene (Total)         ug/L         ND         1.0         05/04/11         13:19           phoroethene (Total)         ug/L         ND         1.0         05/04/11         13:19           phoropane         ug/L	2.3-Trichlorobenzene	ug/l	ND	1.0	05/04/11 13:19	
Description         org/L         ND         1.0         05/04/11         13:19           Trinethylbenzene         ug/L         ND         1.0         05/04/11         13:19           promo-3-chloropropane         ug/L         ND         1.0         05/04/11         13:19           promo-3-chloropropane         ug/L         ND         1.0         05/04/11         13:19           promo-s-chloropropane         ug/L         ND         1.0         05/04/11         13:19           phorobethane         Ug/L         ND         1.0         05/04/11         13:19           phorobethane         Ug/L         ND         1.0         05/04/11         13:19           phorobethane         ug/L         ND         1.0         05/04/11         13:19           phorobenzene         ug/L         ND         1.0         05/04/11         13:19           phoropopane         ug/L         ND	.3-Trichloropropane	ug/l	ND	1.0	05/04/11 13:19	
Instruction         Gyl         ND         1.0         05/04/11         13:19           promo-3-chloropropane         ug/L         ND         4.0         05/04/11         13:19           promo-s-chloropropane         ug/L         ND         1.0         05/04/11         13:19           promo-s-chloropropane         ug/L         ND         1.0         05/04/11         13:19           promo-s-chloropropane         ug/L         ND         1.0         05/04/11         13:19           p-chlorobethene (Total)         ug/L         ND         1.0         05/04/11         13:19           p-chlorobethene (Total)         ug/L         ND         1.0         05/04/11         13:19           p-chlorobethene (Total)         ug/L         ND         1.0         05/04/11         13:19           p-chlorobenzene         ug/L         ND         1.0         05/04/11         13:19           p-orotoluene		ug/L	ND	1.0	05/04/11 13 19	
International control         ug/L         ND         4.0         0.5/04/11         13:19           promo-3-chloropropane         ug/L         ND         1.0         05/04/11         13:19           promo-dischloropropane         ug/L         ND         1.0         05/04/11         13:19           phorobenzene         ug/L         ND         1.0         05/04/11         13:19           phorophane         ug/L         ND         1.0	4-Trimethylbenzene	ug/L	ND	1.0	05/04/11 13 19	
http://www.commethane.com/etback         ug/L         ND         1.0         0.5/04/11         13:19           shlorobenzene         ug/L         ND         1.0         05/04/11         13:19           thiorobenzene         ug/L         ND         1.0         05/04/11         13:19           shlorobenzene         ug/L         ND         1.0         05/04/11         13:19           none         ug/L         ND         1.0         05/04/11         13:19           otoluene         ug/L         ND         1.0         05/04/11         13:19           vj2-pentanone (MIBK)         ug/L         ND	-Dibromo-3-chloropropane	ua/L	ND	4.0	05/04/11 13:19	
Instructure,         Instructure,<	-Dibromoethane (FDB)	ua/L	ND	1.0	05/04/11 13:19	
Instruction         Instruction         Instruction         Instruction           hibrorethane         ug/L         ND         1.0         05/04/11 13:19           none         ug/L         ND         1.0         05/04/11 13:19           rotoluene         ug/L         ND         1.0         05/04/11 13:19           rotoluene         ug/L         ND         1.0         05/04/11 13:19           use         ug/L         ND         1.0         05/04/11 13:19           use         ug/L	-Dichlorobenzene	ug/l	ND	1.0	05/04/11 13:19	
Instructure         Ug/L         ND         10         0.504/11 13:19           chloroethene (Total)         ug/L         ND         1.0         05/04/11 13:19           chloroppropane         ug/L         ND         1.0         05/04/11 13:19           chlorobenzene         ug/L         ND         1.0         05/04/11 13:19           chlorobenzene         ug/L         ND         1.0         05/04/11 13:19           chlorobenzene         ug/L         ND         1.0         05/04/11 13:19           chloroppane         ug/L         ND         1.0         05/04/11 13:19           chloroppane         ug/L         ND         1.0         05/04/11 13:19           chloroppane         ug/L         ND         1.0         05/04/11 13:19           none         ug/L         ND         1.0         05/04/11 13:19           rotoluene         ug/L         ND         5.0         05/04/11 13:19           otoluene         ug/L         ND         5.0         05/04/11 13:19           otoluene         ug/L         ND         5.0         05/04/11 13:19           otoluene         ug/L         ND         1.0         05/04/11 13:19           otoluene	-Dichloroethane	ug/l	ND	1.0	05/04/11 13:19	
Initial of the second	P-Dichloroethene (Total)	ug/L	ND	2.0	05/04/11 13:19	
Not opport         NP	-Dichloropropane	ug/L	ND	1.0	05/04/11 13:19	
Initial biological         ND         1.0         05/04/11         13:19           bihorobenzene         ug/L         ND         1.0         05/04/11         13:19           none         ug/L         ND         1.0         05/04/11         13:19           orotoluene         ug/L         ND         1.0         05/04/11         13:19           oberzene         ug/L         ND         1.0         05/04/11         13:19	5-Trimethylbenzene	ug/L	ND	1.0	05/04/11 13:19	
Not obtained         ug/L         ND         1.0         0.5/04/11         13.19           chloropropane         ug/L         ND         1.0         0.5/04/11         13.19           chloropropane         ug/L         ND         1.0         0.5/04/11         13.19           chloropropane         ug/L         ND         1.0         0.5/04/11         13.19           none (MEK)         ug/L         ND         1.0         0.5/04/11         13.19           rotoluene         ug/L         ND         1.0         0.5/04/11         13.19           none         ug/L         ND         5.0         0.5/04/11         13.19           rotoluene         ug/L         ND         1.0         0.5/04/11         13.19           rotoluene         ug/L         ND         1.0         0.5/04/11         13.19           rotoluene         ug/L         ND         1.0         0.5/04/11	Dichlorobenzene	ug/L	ND	1.0	05/04/11 13:19	
Not opport in the second sec	Dichloropropane	ug/L	ND	1.0	05/04/11 13:19	
Androderization       ug/L       ND       1.0       05/04/11 13:19         chloropropane       ug/L       ND       1.0       05/04/11 13:19         none (MEK)       ug/L       ND       1.0       05/04/11 13:19         rotoluene       ug/L       ND       1.0       05/04/11 13:19         anone       ug/L       ND       1.0       05/04/11 13:19         rotoluene       ug/L       ND       1.0       05/04/11 13:19         rotoluene       ug/L       ND       5.0       05/04/11 13:19         rotoluene       ug/L       ND       5.0       05/04/11 13:19         ree       ug/L       ND       5.0       05/04/11 13:19         ree       ug/L       ND       1.0       05/04/11 13:19         ree       ug/L       ND       1.0       05/04/11 13:19         benzene       ug/L       ND       1.0       05/04/11 13:19         chloromethane       ug/L       ND       1.0       05/04/11 13:19         form       ug/L       ND       1.0       05/04/11 13:19         reftane       ug/L       ND       1.0       05/04/11 13:19         reftane       ug/L       ND       1.0 </td <td>Dichlorobenzene</td> <td>ug/L</td> <td>ND</td> <td>1.0</td> <td>05/04/11 13:19</td> <td></td>	Dichlorobenzene	ug/L	ND	1.0	05/04/11 13:19	
Initial of the second state         Initial of the second state         Initial of the second state           none (MEK)         ug/L         ND         5.0         05/04/11         13:19           rotoluene         ug/L         ND         5.0         05/04/11         13:19           none         ug/L         ND         5.0         05/04/11         13:19           rotoluene         ug/L         ND         5.0         05/04/11         13:19           rotoluene         ug/L         ND         5.0         05/04/11         13:19           rotoluene         ug/L         ND         5.0         05/04/11         13:19           yl-2-pentanone (MIBK)         ug/L         ND         1.0         05/04/11         13:19           yl-2-pentanone (MIBK)         ug/L         ND         1.0         05/04/11         13:19           nee         ug/L         ND         1.0         05/04/11         13:19           nee         ug/L         ND         1.0         05/04/11         13:19           chloromethane         ug/L         ND         1.0         05/04/11         13:19           ofsing form         ug/L         ND         1.0         05/04/11         1	)ichloropropane	ug/L	ND	1.0	05/04/11 13:19	
ND         ND<	tanone (MEK)	ug/L	ND	5.0	05/04/11 13:19	
ND         ND         ND         ND         ND           anone         ug/L         ND         5.0         05/04/11         13:19           rotoluene         ug/L         ND         1.0         05/04/11         13:19           rotoluene         ug/L         ND         5.0         05/04/11         13:19           rotoluene         ug/L         ND         5.0         05/04/11         13:19           re         ug/L         ND         5.0         05/04/11         13:19           re         ug/L         ND         1.0         05/04/11         13:19           benzene         ug/L         ND         1.0         05/04/11         13:19           benzene         ug/L         ND         1.0         05/04/11         13:19           chloromethane         ug/L         ND         1.0         05/04/11         13:19           form         ug/L         ND         1.0         05/04/11         13:19           methane         ug/L         ND         1.0         05/04/11         13:19           in disulfide         ug/L         ND         1.0         05/04/11         13:19           benzene         ug/L<	lorotoluene	ug/L	ND	1.0	05/04/11 13:19	
Initial         ug/L         ND         1.0         05/04/11 13:19           rotoluene         ug/L         ND         1.0         05/04/11 13:19           yl-2-pentanone (MIBK)         ug/L         ND         5.0         05/04/11 13:19           ie         ug/L         ND         5.0         05/04/11 13:19           ie         ug/L         ND         1.0         05/04/11 13:19           benzene         ug/L         ND         1.0         05/04/11 13:19           benzene         ug/L         ND         1.0         05/04/11 13:19           chloromethane         ug/L         ND         1.0         05/04/11 13:19           dichloromethane         ug/L         ND         1.0         05/04/11 13:19           form         ug/L         ND         1.0         05/04/11 13:19           methane         ug/L         ND         1.0         05/04/11 13:19           in disulfide         ug/L         ND         1.0         05/04/11 13:19           in tetrachloride         ug/L         ND         1.0         05/04/11 13:19           benzene         ug/L         ND         1.0         05/04/11 13:19           form         ug/L         ND		ug/L	ND	5.0	05/04/11 13:19	
ND       ND       1.0       05/04/11 13:19         wyl-2-pentanone (MIBK)       ug/L       ND       5.0       05/04/11 13:19         ne       ug/L       ND       1.0       05/04/11 13:19         ne       ug/L       ND       1.0       05/04/11 13:19         benzene       ug/L       ND       1.0       05/04/11 13:19         chloromethane       ug/L       ND       1.0       05/04/11 13:19         chloromethane       ug/L       ND       1.0       05/04/11 13:19         form       ug/L       ND       1.0       05/04/11 13:19         methane       ug/L       ND       1.0       05/04/11 13:19         methane       ug/L       ND       1.0       05/04/11 13:19         n disulfide       ug/L       ND       1.0       05/04/11 13:19         n tetrachloride       ug/L       ND       1.0       05/04/11 13:19         benzene       ug/L       ND       1.0       05/04/11 13:19         form       ug/L       ND       1.0       05/04/11 13:19         benzene       ug/L       ND       1.0       05/04/11 13:19         form       ug/L       ND       1.0       05/04	lorotoluene	ug/L	ND	1.0	05/04/11 13:19	
initial constraints       ug/L       ND       5.0       05/04/11       13:19         ine       ug/L       ND       1.0       05/04/11       13:19         benzene       ug/L       ND       1.0       05/04/11       13:19         chloromethane       ug/L       ND       1.0       05/04/11       13:19         chloromethane       ug/L       ND       1.0       05/04/11       13:19         dichloromethane       ug/L       ND       1.0       05/04/11       13:19         form       ug/L       ND       1.0       05/04/11       13:19         methane       ug/L       ND       1.0       05/04/11       13:19         in disulfide       ug/L       ND       1.0       05/04/11       13:19         in tetrachloride       ug/L       ND       1.0       05/04/11       13:19         benzene       ug/L       ND       1.0       05/04/11       13:19         form       ug/L       ND       1.0       05/04/11       13:19         benzene       ug/L       ND       1.0       05/04/11       13:19         form       ug/L       ND       1.0       05/04/11       13:19<	thyl-2-pentanone (MIBK)	ug/L	ND	5.0	05/04/11 13:19	
ND         ND         ND         ND         ND           ne         ug/L         ND         1.0         05/04/11         13:19           benzene         ug/L         ND         1.0         05/04/11         13:19           chloromethane         ug/L         ND         1.0         05/04/11         13:19           dichloromethane         ug/L         ND         1.0         05/04/11         13:19           form         ug/L         ND         1.0         05/04/11         13:19           form         ug/L         ND         1.0         05/04/11         13:19           methane         ug/L         ND         1.0         05/04/11         13:19           n disulfide         ug/L         ND         1.0         05/04/11         13:19           n tetrachloride         ug/L         ND         1.0         05/04/11         13:19           benzene         ug/L         ND         1.0         05/04/11         13:19           form         ug/L         ND         1.0         05/04/11         13:19           form         ug/L         ND         1.0         05/04/11         13:19           form         u	one	ug/L	ND	5.0	05/04/11 13 19	
benzene       ug/L       ND       1.0       05/04/11 13:19         benzene       ug/L       ND       1.0       05/04/11 13:19         chloromethane       ug/L       ND       1.0       05/04/11 13:19         dichloromethane       ug/L       ND       1.0       05/04/11 13:19         form       ug/L       ND       1.0       05/04/11 13:19         methane       ug/L       ND       1.0       05/04/11 13:19         methane       ug/L       ND       1.0       05/04/11 13:19         n disulfide       ug/L       ND       1.0       05/04/11 13:19         n tetrachloride       ug/L       ND       1.0       05/04/11 13:19         benzene       ug/L       ND       1.0       05/04/11 13:19         form       ug/L       ND       1.0       05/04/11 13:19         benzene       ug/L       ND       1.0       05/04/11 13:19         form       ug/L       ND       1.0       05/04/11 13:19         methane       ug/L       ND       1.0       05/04/11 13:19         -Dichloroethene       ug/L       ND       1.0       05/04/11 13:19         -Dichloropropene       ug/L       ND<	zene	ug/l	ND	1.0	05/04/11 13:19	
chloromethane       ug/L       ND       1.0       05/04/11 13:19         dichloromethane       ug/L       ND       1.0       05/04/11 13:19         form       ug/L       ND       1.0       05/04/11 13:19         methane       ug/L       ND       1.0       05/04/11 13:19         benzene       ug/L       ND       1.0       05/04/11 13:19         form       ug/L       ND       1.0       05/04/11 13:19         form       ug/L       ND       1.0       05/04/11 13:19         methane       ug/L       ND       1.0       05/04/11 13:19         -Dichloroethene       ug/L       ND       1.0       05/04/11 13:19         -Dichloropropene       ug/L       ND       1.0       05/04/11 13:19	nobenzene	ug/l		1.0	05/04/11 13:19	
dichloromethane       ug/L       ND       1.0       05/04/11 13:19         form       ug/L       ND       1.0       05/04/11 13:19         methane       ug/L       ND       1.0       05/04/11 13:19         methane       ug/L       ND       1.0       05/04/11 13:19         in tetrachloride       ug/L       ND       1.0       05/04/11 13:19         in tetrachloride       ug/L       ND       1.0       05/04/11 13:19         benzene       ug/L       ND       1.0       05/04/11 13:19         form       ug/L       ND       1.0       05/04/11 13:19         form       ug/L       ND       1.0       05/04/11 13:19         methane       ug/L       ND       1.0       05/04/11 13:19         form       ug/L       ND       1.0       05/04/11 13:19         methane       ug/L       ND       1.0       05/04/11 13:19         -Dichloroethene       ug/L       ND       1.0       05/04/11 13:19         -Dichloropropene       ug/L       ND       1.0       05/04/11 13:19	nochloromethane	ug/l		1.0	05/04/11 13:19	
Instruction         Instruction <thinstruction< th=""> <thinstruction< th=""></thinstruction<></thinstruction<>	modichloromethane	ug/L	ND	1.0	05/04/11 13:19	
wethane       ug/L       ND       1.0       05/04/11 13:19         n disulfide       ug/L       ND       1.0       05/04/11 13:19         n disulfide       ug/L       ND       1.0       05/04/11 13:19         n tetrachloride       ug/L       ND       1.0       05/04/11 13:19         benzene       ug/L       ND       1.0       05/04/11 13:19         ethane       ug/L       ND       1.0       05/04/11 13:19         form       ug/L       ND       1.0       05/04/11 13:19         methane       ug/L       ND       1.0       05/04/11 13:19         -Dichloroethene       ug/L       ND       1.0       05/04/11 13:19         -Dichloropropene       ug/L       ND       1.0       05/04/11 13:19         -Dichloropropene       ug/L       ND       1.0       05/04/11 13:19	moform	ug/L	ND	1.0	05/04/11 13 19	
Initiality       ug/L       ND       1.0       05/04/11 13:10         In disulfide       ug/L       ND       1.0       05/04/11 13:19         In tetrachloride       ug/L       ND       1.0       05/04/11 13:19         benzene       ug/L       ND       1.0       05/04/11 13:19         ethane       ug/L       ND       1.0       05/04/11 13:19         form       ug/L       ND       1.0       05/04/11 13:19         methane       ug/L       ND       1.0       05/04/11 13:19         -Dichloroethene       ug/L       ND       1.0       05/04/11 13:19         -Dichloropropene       ug/L       ND       1.0       05/04/11 13:19	momethane	ug/L	ND	1.0	05/04/11 13:19	
http://discrete       ug/L       ND       1.0       05/04/11       13:19         http://discrete       ug/L       ND       1.0       05/04/11       13:19         benzene       ug/L       ND       1.0       05/04/11       13:19         ethane       ug/L       ND       1.0       05/04/11       13:19         form       ug/L       ND       1.0       05/04/11       13:19         methane       ug/L       ND       1.0       05/04/11       13:19         -Dichloroethene       ug/L       ND       1.0       05/04/11       13:19         -Dichloropropene       ug/L       ND       1.0       05/04/11       13:19	non disulfide	ug/L	ND	1.0	05/04/11 13:19	
Instruction     ug/L     ND     1.0     05/04/11 13:19       benzene     ug/L     ND     1.0     05/04/11 13:19       ethane     ug/L     ND     1.0     05/04/11 13:19       form     ug/L     ND     1.0     05/04/11 13:19       methane     ug/L     ND     1.0     05/04/11 13:19       -Dichloroethene     ug/L     ND     1.0     05/04/11 13:19       -Dichloropropene     ug/L     ND     1.0     05/04/11 13:19	bon tetrachloride	ug/l		1.0	05/04/11 13:19	
tight         tight <th< td=""><td>probenzene</td><td>ug/L</td><td></td><td>1.0</td><td>05/04/11 13 19</td><td></td></th<>	probenzene	ug/L		1.0	05/04/11 13 19	
triangle	oroethane	ug/l		1.0	05/04/11 13:19	
ug/L         ND         1.0         05/04/11         13:19           -Dichloroethene         ug/L         ND         1.0         05/04/11         13:19           -Dichloropropene         ug/L         ND         1.0         05/04/11         13:19           -Dichloropropene         ug/L         ND         1.0         05/04/11         13:19           -Dichloropropene         ug/L         ND         1.0         05/04/11         13:19	oroform	ug/l		1.0	05/04/11 13:19	
Dichloroethene         ug/L         ND         1.0         05/04/11         13:19           -Dichloropropene         ug/L         ND         1.0         05/04/11         13:19           -Dichloropropene         ug/L         ND         1.0         05/04/11         13:19           -Dichloropropene         ug/L         ND         1.0         05/04/11         13:19	oromethane	ug/l		1.0	05/04/11 13.10	
-Dichloropropene ug/L ND 1.0 05/04/11 13:19	1 2-Dichloroethene	ug/L		1.0	05/04/11 13.19	
$u_{0}/l$ ND 1.0 05/04/11 13:10	-1.3-Dichloropropene	ug/L		1.0	05/04/11 13 19	
	promochloromethane	ug/l		1.0	05/04/11 13:19	

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### **REPORT OF LABORATORY ANALYSIS**





Matrix: Water

# Project: Tarr Vancouver 1821-00

Pace Project No.: 257502

## METHOD BLANK: 68734

Associated Lab Samples: 257502010, 257502026

		Blank	Reporting		
Parameter	Units	Result	Limit	Analyzed	Qualifiers
Dibromomethane	ug/L	ND	1.0	05/04/11 13:19	
Dichlorodifluoromethane	ug/L	ND	1.0	05/04/11 13:19	
Ethylbenzene	ug/L	ND	1.0	05/04/11 13:19	
Hexachloro-1,3-butadiene	ug/L	ND	1.0	05/04/11 13:19	
Isopropylbenzene (Cumene)	ug/L	ND	1.0	05/04/11 13:19	
m&p-Xylene	ug/L	ND	2.0	05/04/11 13:19	
Methyl-tert-butyl ether	ug/L	ND	1.0	05/04/11 13:19	
Methylene chloride	ug/L	ND	4.0	05/04/11 13:19	
n-Butylbenzene	ug/L	ND	1.0	05/04/11 13:19	
n-Propylbenzene	ug/L	ND	1.0	05/04/11 13:19	
Naphthalene	ug/L	ND	1.0	05/04/11 13:19	
o-Xylene	ug/L	ND	1.0	05/04/11 13:19	
p-Isopropyltoluene	ug/L	ND	1.0	05/04/11 13:19	
sec-Butylbenzene	ug/L	ND	1.0	05/04/11 13:19	
Styrene	ug/L	ND	1.0	05/04/11 13:19	
tert-Butylbenzene	ug/L	ND	1.0	05/04/11 13:19	
Tetrachloroethene	ug/L	ND	1.0	05/04/11 13:19	
Toluene	ug/L	ND	1.0	05/04/11 13:19	
trans-1,2-Dichloroethene	ug/L	ND	1.0	05/04/11 13:19	
trans-1,3-Dichloropropene	ug/L	ND	1.0	05/04/11 13:19	
Trichloroethene	ug/L	ND	1.0	05/04/11 13:19	
Trichlorofluoromethane	ug/L	ND	1.0	05/04/11 13:19	
Vinyl chloride	ug/L	ND	1.0	05/04/11 13:19	
Xylene (Total)	ug/L	ND	3.0	05/04/11 13:19	
1,2-Dichloroethane-d4 (S)	%	96	80-124	05/04/11 13:19	
4-Bromofluorobenzene (S)	%	99	80-120	05/04/11 13:19	
Dibromofluoromethane (S)	%	94	80-122	05/04/11 13:19	
Toluene-d8 (S)	%	100	80-123	05/04/11 13:19	

### LABORATORY CONTROL SAMPLE: 68735

		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	20	20.4	102	68-131	
1,1,1-Trichloroethane	ug/L	20	19.6	98	74-137	
1,1,2,2-Tetrachloroethane	ug/L	20	19.7	98	72-126	
1,1,2-Trichloroethane	ug/L	20	18.7	93	76-120	
1,1-Dichloroethane	ug/L	20	20.1	101	76-131	
1,1-Dichloroethene	ug/L	20	21.0	105	68-150	
1,1-Dichloropropene	ug/L	20	20.1	100	74-138	
1,2,3-Trichlorobenzene	ug/L	20	18.7	94	60-136	
1,2,3-Trichloropropane	ug/L	20	18.1	91	62-135	
1,2,4-Trichlorobenzene	ug/L	20	20.1	101	62-136	
1,2,4-Trimethylbenzene	ug/L	20	21.1	106	66-132	
1,2-Dibromo-3-chloropropane	ug/L	20	16.8	84	60-123	
1,2-Dibromoethane (EDB)	ug/L	20	18.5	93	73-124	

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# **REPORT OF LABORATORY ANALYSIS**

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### Project: Tarr Vancouver 1821-00

Pace Project No.: 257502

### LABORATORY CONTROL SAMPLE: 68735

		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
1,2-Dichlorobenzene	ug/L		19.9	100	75-122	
1,2-Dichloroethane	ug/L	20	18.7	94	78-125	
1.2-Dichloroethene (Total)	ug/L	40	41.6	104	77-136	
1.2-Dichloropropane	ug/L	20	19.3	96	76-121	
1.3.5-Trimethylbenzene	ua/L	20	20.7	103	69-130	
1.3-Dichlorobenzene	ua/L	20	20.8	104	75-122	
1.3-Dichloropropane	ug/L	20	18.2	91	77-120	
1.4-Dichlorobenzene	ug/L	20	20.3	102	78-120	
2.2-Dichloropropane	ug/l	20	21.2	106	46-168	
2-Butanone (MEK)	ua/L	40	30.8	77	55-146	
2-Chlorotoluene	ug/l	20	20.3	101	67-129	
2-Hexanone	ug/l	40	32.2	80	58-136	
4-Chlorotoluene	ua/L	20	20.8	104	75-126	
4-Methyl-2-pentanone (MIBK)	ua/L	40	32.8	82	62-137	
Acetone	ua/L	40	32.2	80	30-180	
Benzene	ua/L	20	19.5	97	76-127	
Bromobenzene	ug/L	20	20.0	100	74-120	
Bromochloromethane	ug/L	20	19.2	96	73-132	
Bromodichloromethane	ug/L	20	19.2	97	76 102	
Bromoform	ug/L	20	16.5	82	64-129	
Bromomethane	ug/L	20	18.8	94	40-164	
Carbon disulfide	ug/L	20	18.6	03	32-158	
Carbon tetrachloride	ug/L	20	21.0	105	68-142	
Chlorobenzene	ug/L	20	21.0	105	78-121	
Chloroethane	ug/L	20	17.6	88	58-151	
Chloroform	ug/L	20	10.8	00	80-125	
Chloromethane	ug/L	20	24.1	120	50-123	
cis_1 2-Dichloroethene	ug/L	20	24.1	105	80-135	
cis 1.2 Dichloropropopo	ug/L	20	21.0	103	65 134	
Dibromochloromethane	ug/L	20	20.0	03	71-126	
Dibromomethane	ug/L	20	18.5	02	78-126	
Dichlorodifluoromethane	ug/L	20	10.0 01 A	92 109	18-180	
Ethylbenzene	ug/L	20	21.0	100	70 105	
Heyachloro-1 3-butadiana	ug/L	20	20.3		60 129	
	ug/L	20	20.1	90 100	60-130	
m&n-Yvlene	ug/L	20	20.1	100	72 100	
Mothyl tort butyl othor	ug/L	40	41.0	103	13-120 59 115	
Methylong chloridg	ug/L	20	10.3	91 70	50-140 65 144	
	ug/L	20	17.4 20 F	07 102	66 422	
n Bropylbonzono	ug/L	20	20.0	103	60 121	
Nanhthalana	ug/L	20	20.0	103	51 140	
	ug/L	20	19.0	95	31-14Z	
	ug/L	20	20.5	102	13-123	
	ug/L	20	21.0	105	07-133	
Sec-DulyIDenzene	ug/L	20	21.0	105	00-130	
Stylelle	ug/L	20	20.1	101	12-128	
	ug/∟	20	19.1	90	01-133	
	ug/∟	20	12.8	64 00	40-164	
roluene	ug/L	20	19.8	99	69-125	

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# **REPORT OF LABORATORY ANALYSIS**

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#### Project: Tarr Vancouver 1821-00

#### Pace Project No.: 257502

### LABORATORY CONTROL SAMPLE: 68735

ParameterUnitsConc.Result% RecLimitsQualitiestrans-1,2-Dichloroetheneug/L2020.610373-1390trans-1,3-Dichloropropeneug/L2017.38756-122Trichloroetheneug/L2018.99574-127Trichlorofluoromethaneug/L2018.99464-154	
trans-1,2-Dichloroetheneug/L2020.610373-139trans-1,3-Dichloropropeneug/L2017.38756-122Trichloroetheneug/L2018.99574-127Trichlorofluoromethaneug/L2018.99464-154	alifiers
trans-1,3-Dichloropropene     ug/L     20     17.3     87     56-122       Trichloroethene     ug/L     20     18.9     95     74-127       Trichlorofluoromethane     ug/L     20     18.9     94     64-154	
Trichloroethene         ug/L         20         18.9         95         74-127           Trichlorofluoromethane         ug/L         20         18.9         94         64-154	
Trichlorofluoromethane uq/L 20 18.9 94 64-154	
0	
Vinyl chloride ug/L 20 18.6 93 57-147	
Xylene (Total)         ug/L         60         61.5         103         74-124	
1,2-Dichloroethane-d4 (S) % 91 80-124	
4-Bromofluorobenzene (S) % 98 80-120	
Dibromofluoromethane (S) % 94 80-122	
Toluene-d8 (S) % 100 80-123	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 68736 68737											
			MS	MSD							
		257488002	Spike	Spike	MS	MSD	MS	MSD	% Rec		
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	Qual
1,1,1,2-Tetrachloroethane	ug/L	ND	20	20	20.9	21.3	104	106	73-126	2	
1,1,1-Trichloroethane	ug/L	ND	20	20	21.4	21.5	107	108	69-135	.5	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	20	20.9	21.5	104	108	69-123	3	
1,1,2-Trichloroethane	ug/L	ND	20	20	20.1	20.4	100	102	76-114	2	
1,1-Dichloroethane	ug/L	ND	20	20	21.6	21.7	108	108	74-124	.2	
1,1-Dichloroethene	ug/L	ND	20	20	23.4	23.3	117	117	69-139	.2	
1,1-Dichloropropene	ug/L	ND	20	20	22.0	21.9	110	110	77-134	.4	
1,2,3-Trichlorobenzene	ug/L	ND	20	20	14.8	14.4	74	72	63-136	3	
1,2,3-Trichloropropane	ug/L	ND	20	20	19.6	20.1	98	100	66-118	3	
1,2,4-Trichlorobenzene	ug/L	ND	20	20	15.6	15.0	78	75	68-129	4	
1,2,4-Trimethylbenzene	ug/L	ND	20	20	19.5	19.2	98	96	72-126	2	
1,2-Dibromo-3-chloropropane	ug/L	ND	20	20	18.2	18.3	91	91	64-124	.4	
1,2-Dibromoethane (EDB)	ug/L	ND	20	20	19.8	20.4	99	102	78-117	3	
1,2-Dichlorobenzene	ug/L	ND	20	20	18.7	18.6	93	93	74-118	.2	
1,2-Dichloroethane	ug/L	ND	20	20	20.1	20.3	101	101	73-127	.8	
1,2-Dichloroethene (Total)	ug/L	ND	40	40	44.6	44.3	112	111	60-140	.7	
1,2-Dichloropropane	ug/L	ND	20	20	20.5	20.4	102	102	72-126	.3	
1,3,5-Trimethylbenzene	ug/L	ND	20	20	19.5	19.5	98	97	68-129	.07	
1,3-Dichlorobenzene	ug/L	ND	20	20	18.8	18.9	94	95	73-119	.7	
1,3-Dichloropropane	ug/L	ND	20	20	19.5	19.9	97	100	74-119	2	
1,4-Dichlorobenzene	ug/L	ND	20	20	18.8	18.7	94	94	73-115	.2	
2,2-Dichloropropane	ug/L	ND	20	20	22.1	21.9	111	110	46-157	1	
2-Butanone (MEK)	ug/L	ND	40	40	31.1	33.1	78	83	65-138	6	
2-Chlorotoluene	ug/L	ND	20	20	19.3	19.5	97	97	68-122	.7	
2-Hexanone	ug/L	ND	40	40	35.5	36.3	89	91	60-135	2	
4-Chlorotoluene	ug/L	ND	20	20	19.4	19.5	97	98	70-122	.8	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	40	40	37.3	37.9	93	95	70-135	2	
Acetone	ug/L	ND	40	40	25.9	28.2	65	70	58-146	8	
Benzene	ug/L	ND	20	20	20.7	20.8	104	104	75-124	.4	
Bromobenzene	ug/L	ND	20	20	19.3	19.7	96	98	74-116	2	
Bromochloromethane	ug/L	ND	20	20	20.1	20.6	100	103	75-128	2	
Bromodichloromethane	ug/L	ND	20	20	20.7	20.8	103	104	77-126	.6	

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Project: Tarr Vancouver 1821-00

Pace Project No.: 257502

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 68736 68737											
Parameter	Units	257488002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Bromoform	ug/L	ND	20	20	17.9	18.0	89	90	61-131	.7	
Bromomethane	ug/L	ND	20	20	19.8	21.1	99	105	58-139	6	
Carbon disulfide	ug/L	ND	20	20	20.5	20.8	103	104	39-122	1	
Carbon tetrachloride	ug/L	ND	20	20	23.2	23.2	116	116	67-136	.1	
Chlorobenzene	ug/L	ND	20	20	20.5	20.6	102	103	78-115	.5	
Chloroethane	ug/L	ND	20	20	19.0	20.2	95	101	58-137	6	
Chloroform	ug/L	ND	20	20	21.3	21.3	106	106	75-124	.01	
Chloromethane	ug/L	ND	20	20	27.4	29.9	137	150	50-129	9 M	1
cis-1,2-Dichloroethene	ug/L	ND	20	20	22.2	22.2	111	111	78-126	.01	
cis-1,3-Dichloropropene	ug/L	ND	20	20	21.6	21.8	108	109	78-159	1	
Dibromochloromethane	ug/L	ND	20	20	19.9	20.3	100	101	81-125	2	
Dibromomethane	ug/L	ND	20	20	20.0	20.0	100	100	75-124	.001	
Dichlorodifluoromethane	ug/L	ND	20	20	24.6	26.0	123	130	30-140	5	
Ethylbenzene	ug/L	ND	20	20	20.9	20.9	105	105	76-124	.2	
Hexachloro-1,3-butadiene	ug/L	ND	20	20	14.4	13.7	72	68	55-132	5	
Isopropylbenzene (Cumene)	ug/L	ND	20	20	20.5	20.5	102	102	73-127	.1	
m&p-Xylene	ug/L	ND	40	40	41.2	41.3	103	103	75-124	.2	
Methyl-tert-butyl ether	ug/L	ND	20	20	19.7	20.1	98	100	72-130	2	
Methylene chloride	ug/L	ND	20	20	15.8	15.8	79	79	69-124	.2	
n-Butylbenzene	ug/L	ND	20	20	17.7	17.5	88	87	65-131	1	
n-Propylbenzene	ug/L	ND	20	20	19.9	20.0	100	100	69-129	.009	
Naphthalene	ug/L	ND	20	20	17.1	17.2	85	86	69-135	.5	
o-Xylene	ug/L	ND	20	20	20.6	21.0	103	105	76-121	2	
p-Isopropyltoluene	ug/L	ND	20	20	19.4	19.4	97	97	69-133	.4	
sec-Butylbenzene	ug/L	ND	20	20	19.8	19.6	99	98	67-132	.6	
Styrene	ug/L	ND	20	20	19.6	19.1	98	95	76-121	3	
tert-Butylbenzene	ug/L	ND	20	20	18.7	18.7	94	94	66-132	.2	
Tetrachloroethene	ug/L	ND	20	20	13.3	13.3	66	67	70-127	.3 M	1
Toluene	ug/L	ND	20	20	20.5	20.8	102	104	75-124	1	
trans-1,2-Dichloroethene	ug/L	ND	20	20	22.4	22.0	112	110	72-129	1	
trans-1,3-Dichloropropene	ug/L	ND	20	20	18.0	18.6	90	93	69-122	3	
Trichloroethene	ug/L	ND	20	20	20.3	20.3	101	101	78-124	.08	
Trichlorofluoromethane	ug/L	ND	20	20	22.0	23.2	110	116	60-147	5	
Vinyl chloride	ug/L	ND	20	20	22.1	23.0	110	115	56-136	4	
Xylene (Total)	ug/L	ND	60	60	61.8	62.3	103	104	76-123	.7	
1,2-Dichloroethane-d4 (S)	%						95	96	80-124		
4-Bromofluorobenzene (S)	%						97	98	80-120		
Dibromofluoromethane (S)	%						95	95	80-122		
Toluene-d8 (S)	%						99	99	80-123		

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### **REPORT OF LABORATORY ANALYSIS**

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Project: Tarr Vancouver 1821-00

Pace Project No.: 257502

QC Batch:	MSV/4382
QC Batch Method:	EPA 5035A/5030B

Analysis Method: Analysis Description: EPA 8260 8260 MSV 5035A Medium Soil

Associated Lab Samples: 257502008, 257502013, 257502015

METHOD BLANK: 69174		Matrix:	Solid		
Associated Lab Samples: 257	7502008, 257502013, 257	7502015			
		Blank	Reporting		
Parameter	Units	Result	Limit	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	ND	50.0	05/05/11 22:15	
1,3,5-Trimethylbenzene	ug/kg	ND	50.0	05/05/11 22:15	
Benzene	ug/kg	ND	25.0	05/05/11 22:15	
Ethylbenzene	ug/kg	ND	50.0	05/05/11 22:15	
Isopropylbenzene (Cumene)	ug/kg	ND	50.0	05/05/11 22:15	
m&p-Xylene	ug/kg	ND	100	05/05/11 22:15	
n-Propylbenzene	ug/kg	ND	50.0	05/05/11 22:15	
Naphthalene	ug/kg	ND	100	05/05/11 22:15	
o-Xylene	ug/kg	ND	50.0	05/05/11 22:15	
p-Isopropyltoluene	ug/kg	ND	50.0	05/05/11 22:15	
sec-Butylbenzene	ug/kg	ND	50.0	05/05/11 22:15	
Toluene	ug/kg	ND	50.0	05/05/11 22:15	
Xylene (Total)	ug/kg	ND	150	05/05/11 22:15	
1,2-Dichloroethane-d4 (S)	%	98	76-115	05/05/11 22:15	
4-Bromofluorobenzene (S)	%	95	78-127	05/05/11 22:15	
Dibromofluoromethane (S)	%	91	81-114	05/05/11 22:15	
Toluene-d8 (S)	%	98	84-121	05/05/11 22:15	

#### LABORATORY CONTROL SAMPLE: 69175

Parameter	Linits	Spike Conc	LCS Result	LCS % Rec	% Rec	Qualifiers
				701100		Quanners
1,2,4-Trimethylbenzene	ug/kg	1000	1070	107	69-123	
1,3,5-Trimethylbenzene	ug/kg	1000	1030	103	73-120	
Benzene	ug/kg	1000	1070	107	78-123	
Ethylbenzene	ug/kg	1000	1090	109	74-120	
Isopropylbenzene (Cumene)	ug/kg	1000	1080	108	70-130	
m&p-Xylene	ug/kg	2000	2200	110	75-120	
n-Propylbenzene	ug/kg	1000	1040	104	64-127	
Naphthalene	ug/kg	1000	1140	114	50-131	
o-Xylene	ug/kg	1000	1090	109	74-122	
p-Isopropyltoluene	ug/kg	1000	1060	106	74-122	
sec-Butylbenzene	ug/kg	1000	1070	107	71-125	
Toluene	ug/kg	1000	1080	108	70-121	
Xylene (Total)	ug/kg	3000	3280	109	76-120	
1,2-Dichloroethane-d4 (S)	%			97	76-115	
4-Bromofluorobenzene (S)	%			94	78-127	
Dibromofluoromethane (S)	%			95	81-114	
Toluene-d8 (S)	%			97	84-121	

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# **REPORT OF LABORATORY ANALYSIS**





Project: Tarr Vancouver 1821-00

Pace Project No.: 257502

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 69176 69177											
			MS	MSD							
		257507005	Spike	Spike	MS	MSD	MS	MSD	% Rec		
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	Qual
1,2,4-Trimethylbenzene	ug/kg	1710	1090	1090	2630	2740	84	95	75-133	4	
1,3,5-Trimethylbenzene	ug/kg	428	1090	1090	1430	1480	91	96	77-131	3	
Benzene	ug/kg	640	1090	1090	1670	1710	94	97	79-127	2	
Ethylbenzene	ug/kg	998	1090	1090	2030	2080	95	99	77-126	2	
Isopropylbenzene (Cumene)	ug/kg	66.0	1090	1090	1170	1190	101	103	80-127	2	
m&p-Xylene	ug/kg	4030	2190	2190	5940	6080	88	94	78-120	2	
n-Propylbenzene	ug/kg	308	1090	1090	1320	1370	93	97	78-134	4	
Naphthalene	ug/kg	122	1090	1090	1210	1250	99	104	40-125	4	
o-Xylene	ug/kg	1480	1090	1090	2500	2540	93	96	76-123	2	
p-Isopropyltoluene	ug/kg	ND	1090	1090	1080	1120	96	100	69-145	4	
sec-Butylbenzene	ug/kg	ND	1090	1090	1100	1130	99	102	73-137	3	
Toluene	ug/kg	1700	1090	1090	2640	2710	86	93	77-124	3	
Xylene (Total)	ug/kg	5510	3280	3280	8440	8620	89	95	77-127	2	
1,2-Dichloroethane-d4 (S)	%						97	98	76-115		
4-Bromofluorobenzene (S)	%						93	94	78-127		
Dibromofluoromethane (S)	%						95	96	81-114		
Toluene-d8 (S)	%						98	98	84-121		

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# **REPORT OF LABORATORY ANALYSIS**

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Project: Tarr Vancouver 1821-00

Pace Project No.: 257502

QC Batch:	MSV/4364	Analysis Method:	EPA 8260
QC Batch Method:	EPA 8260	Analysis Description:	8260 MSV 5035A Volatile Organics
Associated Lab Samp	les: 257502008, 257502013, 257502	015, 257502023	

Matrix: Solid

METHOD BLANK:	68698
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Associated Lab Samples: 257502008, 257502013, 257502015, 257502023

		Blank	Reporting		
Parameter	Units	Result	Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	ND	3.0	05/04/11 11:19	
1,1,1-Trichloroethane	ug/kg	ND	3.0	05/04/11 11:19	
1,1,2,2-Tetrachloroethane	ug/kg	ND	3.0	05/04/11 11:19	
1,1,2-Trichloroethane	ug/kg	ND	3.0	05/04/11 11:19	
1,1,2-Trichlorotrifluoroethane	ug/kg	ND	3.0	05/04/11 11:19	
1,1-Dichloroethane	ug/kg	ND	3.0	05/04/11 11:19	
1,1-Dichloroethene	ug/kg	ND	3.0	05/04/11 11:19	
1,1-Dichloropropene	ug/kg	ND	3.0	05/04/11 11:19	
1,2,3-Trichlorobenzene	ug/kg	ND	3.0	05/04/11 11:19	
1,2,3-Trichloropropane	ug/kg	ND	3.0	05/04/11 11:19	
1,2,4-Trichlorobenzene	ug/kg	ND	3.0	05/04/11 11:19	
1,2,4-Trimethylbenzene	ug/kg	ND	3.0	05/04/11 11:19	
1,2-Dibromo-3-chloropropane	ug/kg	ND	5.0	05/04/11 11:19	
1,2-Dibromoethane (EDB)	ug/kg	ND	3.0	05/04/11 11:19	
1,2-Dichlorobenzene	ug/kg	ND	3.0	05/04/11 11:19	
1,2-Dichloroethane	ug/kg	ND	3.0	05/04/11 11:19	
1,2-Dichloroethene (Total)	ug/kg	ND	6.0	05/04/11 11:19	
1,2-Dichloropropane	ug/kg	ND	3.0	05/04/11 11:19	
1,3,5-Trimethylbenzene	ug/kg	ND	3.0	05/04/11 11:19	
1,3-Dichlorobenzene	ug/kg	ND	3.0	05/04/11 11:19	
1,3-Dichloropropane	ug/kg	ND	3.0	05/04/11 11:19	
1,4-Dichlorobenzene	ug/kg	ND	3.0	05/04/11 11:19	
2,2-Dichloropropane	ug/kg	ND	3.0	05/04/11 11:19	
2-Butanone (MEK)	ug/kg	ND	10.0	05/04/11 11:19	
2-Chlorotoluene	ug/kg	ND	3.0	05/04/11 11:19	
2-Hexanone	ug/kg	ND	10.0	05/04/11 11:19	
4-Chlorotoluene	ug/kg	ND	3.0	05/04/11 11:19	
4-Methyl-2-pentanone (MIBK)	ug/kg	ND	10.0	05/04/11 11:19	
Acetone	ug/kg	ND	10.0	05/04/11 11:19	
Benzene	ug/kg	ND	3.0	05/04/11 11:19	
Bromobenzene	ug/kg	ND	3.0	05/04/11 11:19	
Bromochloromethane	ug/kg	ND	3.0	05/04/11 11:19	
Bromodichloromethane	ug/kg	ND	3.0	05/04/11 11:19	
Bromoform	ug/kg	ND	3.0	05/04/11 11:19	
Bromomethane	ug/kg	ND	3.0	05/04/11 11:19	
Carbon disulfide	ug/kg	ND	3.0	05/04/11 11:19	
Carbon tetrachloride	ug/kg	ND	3.0	05/04/11 11:19	
Chlorobenzene	ug/kg	ND	3.0	05/04/11 11:19	
Chloroethane	ug/kg	ND	3.0	05/04/11 11:19	
Chloroform	ug/kg	ND	3.0	05/04/11 11:19	
Chloromethane	ug/kg	ND	3.0	05/04/11 11:19	
cis-1,2-Dichloroethene	ug/kg	ND	3.0	05/04/11 11:19	
cis-1,3-Dichloropropene	ug/kg	ND	3.0	05/04/11 11:19	

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### **REPORT OF LABORATORY ANALYSIS**





### Project: Tarr Vancouver 1821-00

Pace Project No.: 257502

METHOD BLANK: 68698		Matrix:	Solid		
Associated Lab Samples: 2575	02008, 257502013, 257	7502015, 25750202 Blank	23 Reporting		
Parameter	Units	Result	Limit	Analyzed	Qualifiers
Dibromochloromethane	ug/kg	ND	3.0	05/04/11 11:19	
Dibromomethane	ug/kg	ND	3.0	05/04/11 11:19	
Dichlorodifluoromethane	ug/kg	ND	3.0	05/04/11 11:19	
Ethylbenzene	ug/kg	ND	3.0	05/04/11 11:19	
Hexachloro-1,3-butadiene	ug/kg	ND	3.0	05/04/11 11:19	
Isopropylbenzene (Cumene)	ug/kg	ND	3.0	05/04/11 11:19	
m&p-Xylene	ug/kg	ND	6.0	05/04/11 11:19	
Methyl-tert-butyl ether	ug/kg	ND	3.0	05/04/11 11:19	
Methylene chloride	ug/kg	ND	10.0	05/04/11 11:19	
n-Butylbenzene	ug/kg	ND	3.0	05/04/11 11:19	
n-Propylbenzene	ug/kg	ND	3.0	05/04/11 11:19	
Naphthalene	ug/kg	ND	3.0	05/04/11 11:19	
o-Xylene	ug/kg	ND	3.0	05/04/11 11:19	
p-Isopropyltoluene	ug/kg	ND	3.0	05/04/11 11:19	
sec-Butylbenzene	ug/kg	ND	3.0	05/04/11 11:19	
Styrene	ug/kg	ND	3.0	05/04/11 11:19	
tert-Amylmethyl ether	ug/kg	ND	3.0	05/04/11 11:19	
tert-Butylbenzene	ug/kg	ND	3.0	05/04/11 11:19	
Tetrachloroethene	ug/kg	ND	3.0	05/04/11 11:19	
Toluene	ug/kg	ND	3.0	05/04/11 11:19	
trans-1,2-Dichloroethene	ug/kg	ND	3.0	05/04/11 11:19	
trans-1,3-Dichloropropene	ug/kg	ND	3.0	05/04/11 11:19	
Trichloroethene	ug/kg	ND	3.0	05/04/11 11:19	
Trichlorofluoromethane	ug/kg	ND	3.0	05/04/11 11:19	
Vinyl chloride	ug/kg	ND	3.0	05/04/11 11:19	
Xylene (Total)	ug/kg	ND	9.0	05/04/11 11:19	
1,2-Dichloroethane-d4 (S)	%	88	80-143	05/04/11 11:19	
4-Bromofluorobenzene (S)	%	104	72-122	05/04/11 11:19	
Dibromofluoromethane (S)	%	96	80-136	05/04/11 11:19	
Toluene-d8 (S)	%	93	80-120	05/04/11 11:19	

ABORATORY CONTROL SAMPLE & LCSD: 68699 69171										
		Spike	LCS	LCSD	LCS	LCSD	% Rec		Max	
Parameter	Units	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	50	52.2	51.8	104	104	49-136	.7	30	
1,1,1-Trichloroethane	ug/kg	50	63.0	63.3	126	127	56-147	.4	30	
1,1,2,2-Tetrachloroethane	ug/kg	50	49.8	48.2	100	96	62-143	3	30	
1,1,2-Trichloroethane	ug/kg	50	55.3	54.2	111	108	66-127	2	30	
1,1,2-Trichlorotrifluoroethane	ug/kg	50	69.5	71.0	139	142	60-140	2	30 L	.3
1,1-Dichloroethane	ug/kg	50	64.8	64.0	130	128	54-146	1	30	
1,1-Dichloroethene	ug/kg	50	69.3	67.2	139	134	58-152	3	30	
1,1-Dichloropropene	ug/kg	50	67.0	66.7	134	133	74-132	.4	30 L	.3
1,2,3-Trichlorobenzene	ug/kg	50	42.3	43.5	85	87	54-146	3	30	
1,2,3-Trichloropropane	ug/kg	50	45.6	44.4	91	89	49-150	3	30	
1,2,4-Trichlorobenzene	ug/kg	50	44.7	46.2	89	92	48-153	3	30	

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#### Project: Tarr Vancouver 1821-00

Pace Project No.: 257502

LABORATORY CONTROL SAME	PLE & LCSD: 68699		69	171						
		Spike	LCS	LCSD	LCS	LCSD	% Rec		Max	
Parameter	Units	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	50	49.4	48.5	99	97	66-133	2	30	
1,2-Dibromo-3-chloropropane	ug/kg	50	36.2	38.0	72	76	41-156	5	30	
1,2-Dibromoethane (EDB)	ug/kg	50	54.5	51.4	109	103	71-123	6	30	
1,2-Dichlorobenzene	ug/kg	50	49.7	48.1	99	96	71-127	3	30	
1,2-Dichloroethane	ug/kg	50	58.3	57.3	117	115	70-124	2	30	
1,2-Dichloroethene (Total)	ug/kg	100	139	140	139	140	69-138	.6	30	L3
1,2-Dichloropropane	ug/kg	50	65.1	66.3	130	133	71-125	2	30	L3
1,3,5-Trimethylbenzene	ug/kg	50	51.3	49.5	103	99	69-130	4	30	
1,3-Dichlorobenzene	ug/kg	50	51.3	50.4	103	101	73-126	2	30	
1,3-Dichloropropane	ug/kg	50	52.7	53.2	105	106	65-128	.9	30	
1,4-Dichlorobenzene	ug/kg	50	50.4	48.9	101	98	73-125	3	30	
2,2-Dichloropropane	ug/kg	50	67.8	69.8	136	140	36-164	3	30	
2-Butanone (MEK)	ug/kg	100	145	127	145	127	70-171	14	30	
2-Chlorotoluene	ug/kg	50	49.3	48.0	99	96	66-134	3	30	
2-Hexanone	ug/kg	100	110	101	110	101	51-180	9	30	
4-Chlorotoluene	ug/kg	50	54.1	52.6	108	105	64-137	3	30	
4-Methyl-2-pentanone (MIBK)	ug/kg	100	119	120	119	120	50-162	1	30	
Acetone	ug/kg	100	111	102	111	102	47-166	8	30	
Benzene	ug/kg	50	63.4	63.4	127	127	75-133	.05	30	
Bromobenzene	ug/kg	50	50.5	49.3	101	99	71-124	2	30	
Bromochloromethane	ug/kg	50	65.5	64.1	131	128	54-140	2	30	
Bromodichloromethane	ug/kg	50	60.7	61.7	121	123	73-120	2	30	L3
Bromoform	ug/kg	50	39.7	40.4	79	81	43-138	2	30	
Bromomethane	ug/kg	50	58.3	65.9	117	132	54-149	12	30	
Carbon disulfide	ug/kg	50	61.3	63.1	123	126	44-152	3	30	
Carbon tetrachloride	ug/kg	50	63.1	63.3	126	127	46-154	.3	30	
Chlorobenzene	ug/kg	50	53.8	54.7	108	109	72-124	2	30	
Chloroethane	ug/kg	50	60.5	64.7	121	129	58-152	7	30	
Chloroform	ug/kg	50	63.6	62.6	127	125	72-131	2	30	
Chloromethane	ug/kg	50	52.0	55.5	104	111	50-156	7	30	
cis-1,2-Dichloroethene	ug/kg	50	69.7	70.1	139	140	76-132	.6	30	L3
cis-1,3-Dichloropropene	ug/kg	50	67.8	71.4	136	143	69-120	5	30	L3
Dibromochloromethane	ug/kg	50	47.4	47.8	95	96	66-120	.9	30	
Dibromomethane	ug/kg	50	62.9	62.4	126	125	75-122	.8	30	L3
Dichlorodifluoromethane	ug/kg	50	63.6	66.4	127	133	49-157	4	30	
Ethylbenzene	ug/kg	50	50.8	52.4	102	105	68-131	3	30	
Hexachloro-1,3-butadiene	ug/kg	50	45.5	45.9	91	92	66-128	.9	30	
Isopropylbenzene (Cumene)	ug/kg	50	49.3	50.2	99	100	57-142	2	30	
m&p-Xylene	ug/kg	100	109	110	109	110	67-132	1	30	
Methyl-tert-butyl ether	ug/kg	50	60.1	58.7	120	117	52-143	2	30	
Methylene chloride	ug/kg	50	63.2	64.9	126	130	45-146	3	30	
n-Butylbenzene	ug/kg	50	48.5	48.3	97	97	67-139	.4	30	
n-Propylbenzene	ug/kg	50	58.3	56.8	117	114	68-133	3	30	
Naphthalene	ug/kg	50	44.6	45.8	89	92	52-147	3	30	
o-Xylene	ug/kg	50	53.8	54.5	108	109	68-129	1	30	
p-Isopropyltoluene	ug/kg	50	49.3	48.7	99	97	73-129	1	30	
sec-Butylbenzene	ug/kg	50	57.9	56.4	116	113	72-132	3	30	
Styrene	ug/kg	50	52.3	53.1	105	106	62-125	1	30	

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Project: Tarr Vancouver 1821-00

Pace Project No.: 257502

#### LABORATORY CONTROL SAMPLE & LCSD: 68699 69171 Spike LCS LCSD LCS LCSD % Rec Max Parameter Units Conc. Result Result % Rec % Rec Limits RPD RPD Qualifiers tert-Amylmethyl ether ug/kg 50 61.2 61.3 122 123 62-138 .1 30 tert-Butylbenzene ug/kg 50 50.7 48.3 101 97 70-125 5 30 ug/kg Tetrachloroethene 50 43.2 44.3 86 89 62-130 3 30 Toluene 50 56.7 58.1 113 116 73-124 2 30 ug/kg trans-1,2-Dichloroethene 50 69.5 69.9 139 140 64-144 .5 30 ug/kg trans-1,3-Dichloropropene ug/kg 50 47.9 48.5 96 97 50-128 1 30 Trichloroethene ug/kg 50 65.4 66.3 131 133 74-128 1 30 L3 Trichlorofluoromethane 50 62.6 63.8 125 128 57-163 2 30 ug/kg Vinyl chloride ug/kg 50 60.2 62.8 120 126 59-155 4 30 Xylene (Total) ug/kg 150 163 164 108 110 68-130 1 30 1,2-Dichloroethane-d4 (S) % 91 88 80-143 % 4-Bromofluorobenzene (S) 101 96 72-122 Dibromofluoromethane (S) % 100 97 80-136 Toluene-d8 (S) % 93 94 80-120

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### **REPORT OF LABORATORY ANALYSIS**

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Project: Tarr	Vancouver 1	821-00						
Pace Project No.: 257	502							
QC Batch: MS	SV/4368		Analysis I	Method:	NWTPH-Gx			
QC Batch Method: N	VTPH-Gx		Analysis I	Description:	NWTPH-Gx	MSV Water		
Associated Lab Samples	: 2575020	10, 257502026						
METHOD BLANK: 687	39		Mat	rix: Water				
Associated Lab Samples	: 2575020	10, 257502026						
			Blank	Reportin	g			
Parameter		Units	Result	Limit	Analy	zed Qua	alifiers	
Gasoline Range Organic	S	ug/L	Ν	ID :	50.0 05/04/11	13:19		
4-Bromofluorobenzene (	S)	%	1	99 50-	150 05/04/11	13:19		
		68740						
		00740	Spike	LCS	LCS	% Rec		
Parameter		Units	Conc.	Result	% Rec	Limits	Qualifiers	
Gasoline Range Organic	s	ug/L	500	527	105	5 50-163	3	
4-Bromofluorobenzene (	S)	%			98	3 50-150	0	
SAMPLE DUPLICATE:	68741							
			257502010	Dup				
Parameter		Units	Result	Result	RPD	Qualifi	ers	
Gasoline Range Organic	S	ug/L	N	ID 2	4.1J			
4-Bromofluorobenzene (	S)	%	:	99	100	1		

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# **REPORT OF LABORATORY ANALYSIS**

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Project: Ta	rr Vancouver 1	821-00						
Pace Project No.: 25	7502							
QC Batch:	/ISV/4370		Analysis M	lethod:	NWTPH-Gx			
QC Batch Method: N	WTPH-Gx		Analysis D	escription:	NWTPH-Gx M	SV Water		
Associated Lab Sample	es: 2575020	21, 257502024						
METHOD BLANK: 68	783		Matri	x: Water				
Associated Lab Sample	es: 2575020	21, 257502024						
			Blank	Reporting				
Paramete	er	Units	Result	Limit	Analyze	ed Qualif	iers	
Gasoline Range Organ 4-Bromofluorobenzene	ics (S)	ug/L %	NI 9	D 50. 9 50-15	0 05/05/11 0 0 05/05/11 0	9:26 9:26		
LABORATORY CONTR	ROL SAMPLE:	68784						
			Spike	LCS	LCS	% Rec		
Paramete	er	Units	Conc.	Result	% Rec	Limits	Qualifiers	
Gasoline Range Organ	ics	ug/L	500	503	101	50-163		
4-Bromofluorobenzene	(S)	%			98	50-150		
SAMPLE DUPLICATE:	68785							
			257506002	Dup				
Paramete	er	Units	Result	Result	RPD	Qualifier	S	
Gasoline Range Organ	ics	ug/L	N	D 15.4	J			
4-Bromofluorobenzene	(S)	%	10	0 g	8	2		

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# **REPORT OF LABORATORY ANALYSIS**

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Project:	Tarr Vancouve	r 1821-00					
Pace Project No.:	257502						
QC Batch:	PMST/1662		Analysis Meth	od: A	ASTM D2974-8	7	
QC Batch Method:	ASTM D2974	-87	Analysis Desc	ription: E	Dry Weight/Per	cent Moisture	
Associated Lab Sar	mples: 257502 257502	2001, 257502002, 2 2011, 257502012, 2	57502003, 25750200 57502013, 25750201	94, 257502009 4, 257502015	5, 257502006, 5, 257502016,	257502007, 25750200 257502017	18, 257502009,
SAMPLE DUPLICA	TE: 68632						
			257503001	Dup			
Parar	meter	Units	Result	Result	RPD	Qualifiers	
Percent Moisture		%		11.7	7	1	
SAMPLE DUPLICA	TE: 68633						
			257502017	Dup			
Parar	meter	Units	Result	Result	RPD	Qualifiers	
Percent Moisture		%	19.6	19.7	7	.6	

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# **REPORT OF LABORATORY ANALYSIS**

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Project: Tarr Vancouver 1821-00

Pace Project No.: 257502

QC Batch:	PMST	7/1663	Analysis Method:	ASTM D2974-87
QC Batch Method:	ASTM	1 D2974-87	Analysis Description:	Dry Weight/Percent Moisture
Associated Lab Samp	les:	257502018, 257502019, 257502	020, 257502022, 25750202	23, 257502025

SAMPLE DUPLICATE: 68634					
		257502018	Dup		
Parameter	Units	Result	Result	RPD	Qualifiers
Percent Moisture	%	25.8	25.8	.04	

# **REPORT OF LABORATORY ANALYSIS**

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### QUALIFIERS

Project: Tarr Vancouver 1821-00

Pace Project No.: 257502

### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

**DUP - Sample Duplicate** 

**RPD** - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel Clean-Up

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is NELAP accredited. Contact your Pace PM for the current list of accredited analytes.

### LABORATORIES

PASI-S Pace Analytical Services - Seattle

### ANALYTE QUALIFIERS

- D6 The relative percent difference (RPD) between the sample and sample duplicate exceeded laboratory control limits.
- L3 Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.
- M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
- M6 Matrix spike and Matrix spike duplicate recovery not evaluated against control limits due to sample dilution.
- S5 Surrogate recovery outside control limits due to matrix interferences (not confirmed by re-analysis).

### **REPORT OF LABORATORY ANALYSIS**





### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Tarr Vancouver 1821-00 Pace Project No.: 257502

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
257502002	SB-9 (8.5)	EPA 3546	OFXT/3645	NWTPH-Dx	GCSV/2465
257502004	SB-10 (7.5)	EPA 3546	OEXT/3645	NWTPH-Dx	GCSV/2465
257502006	SB-11 (7.5)	EPA 3546	OEXT/3645	NWTPH-Dx	GCSV/2465
257502007	SB-13 (2.5)	EPA 3546	OEXT/3645	NWTPH-Dx	GCSV/2465
257502008	SB-13 (8.0)	EPA 3546	OEXT/3645	NWTPH-Dx	GCSV/2465
257502012	MW-2 (7.5)	EPA 3546	OEXT/3645	NWTPH-Dx	GCSV/2465
257502015	MW-1 (12.5)	EPA 3546	OEXT/3645	NWTPH-Dx	GCSV/2465
257502018	MW-3 (7.5)	EPA 3546	OEXT/3645	NWTPH-Dx	GCSV/2465
257502019	SB-14 (2.5)	EPA 3546	OEXT/3645	NWTPH-Dx	GCSV/2465
257502020	SB-14 (7.5)	EPA 3546	OEXT/3645	NWTPH-Dx	GCSV/2465
257502022	SB-12 (2.5)	EPA 3546	OEXT/3645	NWTPH-Dx	GCSV/2465
257502023	SB-12 (7.5)	EPA 3546	OEXT/3645	NWTPH-Dx	GCSV/2465
257502010	SB-13	EPA 3510	OEXT/3641	NWTPH-Dx	GCSV/2462
257502021	SB-14	EPA 3510	OEXT/3641	NWTPH-Dx	GCSV/2462
257502024	SB-12	EPA 3510	OEXT/3641	NWTPH-Dx	GCSV/2462
257502026	SB-15	EPA 3510	OEXT/3641	NWTPH-Dx	GCSV/2462
257502002	SB-9 (8.5)	NWTPH-Gx	GCV/2268	NWTPH-Gx	GCV/2270
257502004	SB-10 (7.5)	NWTPH-Gx	GCV/2268	NWTPH-Gx	GCV/2270
257502006	SB-11 (7.5)	NWTPH-Gx	GCV/2268	NWTPH-Gx	GCV/2270
257502007	SB-13 (2.5)	NWTPH-Gx	GCV/2269	NWTPH-Gx	GCV/2271
257502008	SB-13 (8.0)	NWTPH-Gx	GCV/2268	NWTPH-Gx	GCV/2270
257502012	MW-2 (7.5)	NWTPH-Gx	GCV/2268	NWTPH-Gx	GCV/2270
257502015	MW-1 (12.5)	NWTPH-Gx	GCV/2269	NWTPH-Gx	GCV/2271
257502018	MW-3 (7.5)	NWTPH-Gx	GCV/2268	NWTPH-Gx	GCV/2270
257502019	SB-14 (2.5)	NWTPH-Gx	GCV/2268	NWTPH-Gx	GCV/2270
257502020	SB-14 (7.5)	NWTPH-Gx	GCV/2268	NWTPH-Gx	GCV/2270
257502022	SB-12 (2.5)	NWTPH-Gx	GCV/2268	NWTPH-Gx	GCV/2270
257502023	SB-12 (7.5)	NWTPH-Gx	GCV/2268	NWTPH-Gx	GCV/2270
257502007	SB-13 (2.5)	EPA 3050	MPRP/2196	EPA 6010	ICP/2105
257502015	MW-1 (12.5)	EPA 3050	MPRP/2196	EPA 6010	ICP/2105
257502019	SB-14 (2.5)	EPA 3050	MPRP/2196	EPA 6010	ICP/2105
257502015	MW-1 (12.5)	EPA 3546	OEXT/3644	EPA 8270 by SIM	MSSV/1610
257502023	SB-12 (7.5)	EPA 3546	OEXT/3644	EPA 8270 by SIM	MSSV/1610
257502010	SB-13	EPA 5030B/8260	MSV/4367		
257502026	SB-15	EPA 5030B/8260	MSV/4367		
257502013	MW-1 (2.5)	EPA 5035A/5030B	MSV/4382	EPA 8260	MSV/4389
257502008	SB-13 (8.0)	EPA 8260	MSV/4364		
257502013	MW-1 (2.5)	EPA 8260	MSV/4364		
257502015	MW-1 (12.5)	EPA 8260	MSV/4364		
257502023	SB-12 (7.5)	EPA 8260	MSV/4364		
257502010	SB-13	NWTPH-Gx	MSV/4368		
257502021	SB-14	NWTPH-Gx	MSV/4370		

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### **REPORT OF LABORATORY ANALYSIS**

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# QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Tarr Vancouver 1821-00 Pace Project No.: 257502

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
257502024	SB-12	NWTPH-Gx	MSV/4370		
257502026	SB-15	NWTPH-Gx	MSV/4368		
257502001	SB-9 (2.5)	ASTM D2974-87	PMST/1662		
257502002	SB-9 (8.5)	ASTM D2974-87	PMST/1662		
257502003	SB-10 (2.5)	ASTM D2974-87	PMST/1662		
257502004	SB-10 (7.5)	ASTM D2974-87	PMST/1662		
257502005	SB-11 (2.5)	ASTM D2974-87	PMST/1662		
257502006	SB-11 (7.5)	ASTM D2974-87	PMST/1662		
257502007	SB-13 (2.5)	ASTM D2974-87	PMST/1662		
257502008	SB-13 (8.0)	ASTM D2974-87	PMST/1662		
257502009	SB-13 (13.5)	ASTM D2974-87	PMST/1662		
257502011	MW-2 (2.5)	ASTM D2974-87	PMST/1662		
257502012	MW-2 (7.5)	ASTM D2974-87	PMST/1662		
257502013	MW-1 (2.5)	ASTM D2974-87	PMST/1662		
257502014	MW-1 (8.0)	ASTM D2974-87	PMST/1662		
257502015	MW-1 (12.5)	ASTM D2974-87	PMST/1662		
257502016	MW-1 (17.5)	ASTM D2974-87	PMST/1662		
257502017	MW-3 (2.5)	ASTM D2974-87	PMST/1662		
257502018	MW-3 (7.5)	ASTM D2974-87	PMST/1663		
257502019	SB-14 (2.5)	ASTM D2974-87	PMST/1663		
257502020	SB-14 (7.5)	ASTM D2974-87	PMST/1663		
257502022	SB-12 (2.5)	ASTM D2974-87	PMST/1663		
257502023	SB-12 (7.5)	ASTM D2974-87	PMST/1663		
257502025	MW-1 (8.0) DUP	ASTM D2974-87	PMST/1663		

Date: 05/26/2011 03:25 PM

# **REPORT OF LABORATORY ANALYSIS**

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# CHAIN OF CUSTODY RECORD

<b>Client Name:</b>	Ash Creek Associates	
Address:	3015 SW First Ave	
City/State/Zip:	Portland, OR 97201	

Telephone Number: 503.924.4704

Analytical Lab: Pace Analytical

Page: 1

503.943.6357 Fax No .:

Report To: jfoxwell@ashcreekassociates.com

of 3

257502

- ice

# Project Manager: John Foxwell

Project Name: Tarr, LLC Vancouver Phase II ESA

Project Number: 1821-00

Sampler Name: Michael Whitson

							Preservative				Matrix								A	Analy	yze	For:									
Sample ID / Description	Date Sampled	Time Sampled	No. of Containers Shipped	Grab	Composite	Field Filtered	Ice	HNU3 (Ked Label) HCI (Blue Label)	NaOH ( Orange Label)	H <sub>2</sub> SO <sub>4</sub> Plastic (Yellow Label) H <sub>2</sub> SO <sub>4</sub> Glass(Yellow Label)	None (Black Label) Methanol, Sodium Bisulfate. DI	Groundwater	Wastewater	Drinking Water	Soil	Other (specify):	VOCs (EPA 8260)	TPH-Gx (NWTPH-Gx)	TPH-Dx (NWTPH-Dx)	PAHs (8270)	VPH	EPH / /	Metals (Led)				Huln	RUSH TAT (Pre-Schedule	Standard TAT	Fax Results	Send QC with report
SB-9 (2.5)	4/28/11	935	7	X			X		$\square$		XX				X	Π											X	2	X		
SB-9 (8.5)	4/28/11	955	7	X			X				XX				X	Π		X	X									T	X		
SB-10 (2.5)	4/28/11	1040	7	X			X				XX				X				ſ									X	X		
SB-10 (7.5)	4/28/11	1105	7	X			X				XX				X			X	X										X		
SB-11 (2.5)	4/28/11	1120	10	X			X				XX				X											5	$\rangle$		X	1	2
SB-11 (7.5)	4/28/11	1155	7	X			х				XX				X			Х	X								ľ		X		
SB-13 (2.5)	4/28/11	1225	6	x			х			-	XX				X			X	X				Х				X		X		
SB-13 (8.0)	4/28/11	1250	6	X			X				XX				X		X	X	X										X		
SB-13 (13.5)	4/28/11	1305	6	x			х				XX				X													C	X		
SB-13	4/28/11	1335	8	x		-	х	X				ΪX					Х	X	χ										X		
Special Instructions: NoTE: ALL 5095 KITS	s were	FROZE	NI	N-H	DUSE	= 0	v/ı Met	∧∕ hod	24 of S	HRS	oF nent:	- :	5A	тр	LIN	4				Lab	orat Tem VOC	pera Ss F	Cor atur ree	mme e Up of H	ents: on F eads	Receip	pt: 4	1.5 Y	3.	6= N	,2
Relinquished by: Name/Company Domuly Bath Ash	05/02	ite ///	ті Ц (	me 45p		ived b	y: Na	ame/0 Yak	Comp	T	ĊS		5	Date	e - 1/	2	Tir +:4	me 74													
Relinquished by: Name/Company	Da	ite	Tir	me	Recei	ived b	y: Na		Comp	R	ace		0	Date 5/03	e 3/11	Ĉ	Tir	ne 50	D												
Relinquished by: Name/Company	Da	te	Tir	me	Recei	ived b	y: Na	ame/(	Comp	bany				Date	e		Tir	ne													
Relinquished by: Name/Company	Da	te	Tir	ne	Recei	ived b	y: Na	ame/C	Comp	bany				Date	e		Tir	ne													



# CHAIN OF CUSTODY RECORD

Client Name:	Ash Creek Associates
Address:	3015 SW First Ave
City/State/Zip:	Portland, OR 97201

Telephone Number: 503.924.4704 Fax No.: 503.943.6357

Report To: jfoxwell@ashcreekassociates.com

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Analytical Lab: Pace Analytical

Page: 2

257502

Project Manager: John Foxwell

Project Name: Tarr, LLC Vancouver Phase II ESA

Project Number: 1821-00

Sampler Name: Michael Whitson

								Pr	rese	ervat	ive		Ι		Ma	trix		T					Ana	lyze	For	r:							
Sample ID / Description	Date Sampled	Time Sampled	No. of Containers Shipped	Grab	Composite	Field Filtered	Ice	HNO <sub>3</sub> (Red Label) HCI (Blue Label)	NaOH ( Orange Label)	H <sub>2</sub> SO <sub>4</sub> Plastic (Yellow Label)	H <sub>2</sub> SO <sub>4</sub> Glass(Yellow Label)	None (Black Label) Methanol. Sodium Bisulfate. DI	Groundwater	Wastewater	Drinking Water	Sludge	Soil	VOCs (EPA 8260)	TPH-Gx (NWTPH-Gx)	TPH-Dx (NWTPH-Dx)	PAHs (8270)	VPH	EPH ,	Metals /Lead				(ITOH		RUSH TAT (Pre-Schedule Standard TAT	Fax Results	Send QC with report	
MW-2 (2.5)	4/28/11	1430	6	X			х					xx					x		A.C.	1 m								S		X			
MW-2 (7.5)	4/28/11	1450	6	X			х					xx					x		X	X										$\rangle$	<		
MW-1 (2.5)	4/29/11	920	6	X			х					xx					x	X												X	$\langle$		
MW-1 (8.0)	4/29/11	955	6	x			х					xx					x	No.										X		X			
MW-1 (12.5)	4/29/11	1005	9	X			X					xx					x	X	X	X	X	X	X	X						X	$\langle$		
MW-1 (17.5)	4/29/11	1020	7	x			х					х×					x	ľ										X		X	$\langle  $		
MW-3 (2.5)	4/29/11	1030	6	X			X					х×					x											X		X	$\langle$		
MW-3 (7.5)	4/29/11	1105	6	X			х					xx					x		X		4									$\rangle$	$\langle$		
SB-14 (2.5)	4/29/11	1400	6	x			х					xx					x		X	X				X						X	(		
SB-14 (7.5)	4/29/11	1510	6	X			х					x x					x		X	X										X	(		
Special Instructions: NOTE: ALL 5035 K	ITS WERE	FROZ	GN	12-	Ног	SE	Wet	hod	√ ∣of∶	24 Shir	-H ome	IRS	C	F	5	Ar	ЧР	Lin	'G		La	bora Ter VC	npe Cs	y Co ratu Free	re U	lpon Heac	s: Rec	ceipt:	4.	5,3 Y	R.G. N	3.	2°ice
Rethquished by: Name/Company	Da	te	Ti	me	Rece	ived b	y: Na	ame/	Con	npan	iy			Τ	Da	te		1	Time	_	1						1.						
Mult Batt Tonk	05/02/	(1(	4:	450	M	ly	16	44	44	in	to	CS		5		2-1	1	4	4	4													
Relinquished by: Name/Company	Da	te	Tir	me	Rece	ived b	y: Na	ame/	Con	npan e	iy F	ac	e	Œ	Da 5/03	$\frac{1}{3}/1$	1	07	rime	0													
Relinquished by: Name/Company	Da	te	Tir	me	Rece	ived b	y: Na	ame/	Con	npan	у				Da	ite		1	Time														•
Relinquished by: Name/Company	Da	te	Tir	me	Recei	ived b	y: Na	ame/	Con	npan	у				Da	ite		1	ime														


### CHAIN OF CUSTODY RECORD

<b>Client Name:</b>	Ash Creek Associates	
Address:	3015 SW First Ave	
City/State/Zip:	Portland, OR 97201	

Telephone	Number:	503.924.4704	
	Fax No.:	503.943.6357	2

Analytical Lab: Pace Analytical

257502

Project Manager: John Foxwell

Project Name: Tarr, LLC Vancouver Phase II ESA

Page: 3

Report To: jfoxwell@ashcreekassociates.com of 3

Project Number: 1821-00

Sampler Name: Michael Whitson

								Pre	eser	vati	ve		Matrix					Analyze For:															
Sample ID / Description	Date Sampled	Time Sampled	No. of Containers Shipped	Grab	Composite	Field Filtered	Ice Internet of the Internet o	HCI (Blue Label)	NaOH ( Orange Label)	H <sub>2</sub> SO <sub>4</sub> Plastic (Yellow Label)	H <sub>2</sub> SO <sub>4</sub> Glass(Yellow Label) None (Black Label)	Methanol, Sodium Bisulfate. DI	Groundwater	Wastewater	Drinking Water	Sludge	Soil Other (enerify):	VOCs (EPA 8260)	TPH-Gx (NWTPH-Gx)	TPH-Dx (NWTPH-Dx)	PAHs (8270)	VPH	EPH	Metals (Cred)					CIJOH	RUSH TAT (Pre-Schedule	Standard TAT	Fax Results Send OC with report	
SB-14	4/29/11	1600	8	X			X	X					X	:				Γ	×	X	0										X,		
SB-12 (2.5)	4/29/11	1610	6	X			X				>	< X					x	T	x	X											X		
SB-12 (7.5)	4/29/11	1645	9	X			x			1	>	< X					x	X	k	X	X		0								X		
SB-12	4/29/11	1745	8	X			X	X					X						X	X	1										Х		
MW-1 (8.0) DUP	4/29/11	955	2	X			X				>	< X					x												X		X		
<b>B</b> -15	4/29/11	1340	8	X			х	X					X	(				X	X	X	j										Х		
																																	-
Special Instructions: NOTE; NU 5035	KITS N	NERE	FROZ	ZEN	1	1- H	Met	SE	W	/ rJ	mei	24 ·	HA	25	OF	5	An	IPL	NG		La	bora Te VC	mpe Cs	y Co eratu Free	omn ure l e of	nent Jpor Hea	ts: n Re ndsp	ceip	t: 4	.5 Y		8. 2 N	,3
Relinquished by: Name/Company	Da 05/00 Da	ate 2/11 ate	ті Ч; ті	me 454 me	Rece		y: Na y: Na y: Na MA				y fing	2C7 il	S	5	Da Da P		1	4	ime 94 50	4 D													
Relinquished by: Name/Company	Da	ite	Ti	me	Rece	ived b	y: Na	ame/	Com	pan	у				Da	ite			Time														
Relinquished by: Name/Company	Da	ite	Ti	me	Rece	ived b	y: Na	ame/(	Com	ipan	У				Da	te			Time														

Sample	e Contai	iner (	Count
--------	----------	--------	-------

CLIENT:			Ash	Crea	ek_							2		Face Analytical
COC PAGE												1	. (1.0)	257502
Item	VG9H	AG1H	AG1U	BG1H	BP1U	BP2U	BP3U	BP2N	BP2S	WGFU	WGKU	1	Destru	Comments
1										2		4		
2										2				
3										2				
4										2				
5										2	1		2	
6										2				
7										11				
8										1				
9										1		V		
10	6	202										-		
11														
12														Trip Blank? NO

AG1H	1 liter HCL amber glass	BP2S	500mL H2SO4 plastic	JGFU	4oz unpreserved amber wide
AG1U	1liter unpreserved amber glass	BP2U	500mL unpreserved plastic	R	terra core kit
AG2S	500mL H2SO4 amber glass	BP2Z	500mL NaOH, Zn Ac	U	Summa Can
AG2U	500mL unpreserved amber glass	BP3C	250mL NaOH plastic	VG9H	40mL HCL clear vial
AG3S	250mL H2SO4 amber glass	BP3N	250mL HNO3 plastic	VG9T	40mL Na Thio. clear vial
BG1H	1 liter HCL clear glass	BP3S	250mL H2SO4 plastic	VG9U	40mL unpreserved clear vial
BG1U	1 liter unpreserved glass	BP3U	250mL unpreserved plastic	VG9W	40mL glass vial preweighted (EPA 5035)
BP1N	1 liter HNO3 plastic	DG9B	40mL Na Bisulfate amber vial	VSG	Headspace septa vial & HCL
BP1S	1 liter H2SO4 plastic	DG9H	40mL HCL amber voa vial	WGFU	4oz clear soil jar
BP1U	1 liter unpreserved plastic	DG9M	40mL MeOH clear vial	WGFX	4oz wide jar w/hexane wipe
BP1Z	1 liter NaOH, Zn, Ac	DG9T	40mL Na Thio amber vial	ZPLC	Ziploc Bag
BP2N	500mL HNO3 plastic	DG9U	40mL unpreserved amber vial		
BP2O	500mL NaOH plastic		Wipe/Swab		

# Sample Container Count

	٨	1
CLIENT:	Ashcree	k



COC PAGE \_2 of \_3

Sample Line Item	VG9H	AG1H	AG1U	BG1H	BP1U	BP2U	BP3U	BP2N	BP2S	WGFU	WGKU	T	DSan	Comments
1										1		1		
2										1 20	63	I		
3										1				
4										A.				
5						_			_	1	1		2	
6										1				Received 6 containers only
7										Г				
8														
9										1		V		
10										1		1		
11														1
12														Trip Blank? ND

AG1H	1 liter HCL amber glass	BP2S	500mL H2SO4 plastic	JGFU	4oz unpreserved amber wide
AG1U	1 liter unpreserved amber glass	BP2U	500mL unpreserved plastic	R	terra core kit
AG2S	500mL H2SO4 amber glass	BP2Z	500mL NaOH, Zn Ac	U	Summa Can
AG2U	500mL unpreserved amber glass	BP3C	250mL NaOH plastic	VG9H	40mL HCL clear vial
AG3S	250mL H2SO4 amber glass	BP3N	250mL HNO3 plastic	VG9T	40mL Na Thio. clear vial
BG1H	1 liter HCL clear glass	BP3S	250mL H2SO4 plastic	VG9U	40mL unpreserved clear vial
BG1U	1 liter unpreserved glass	BP3U	250mL unpreserved plastic	VG9W	40mL glass vial preweighted (EPA 5035)
BP1N	1 liter HNO3 plastic	DG9B	40mL Na Bisulfate amber vial	VSG	Headspace septa vial & HCL
BP1S	1 liter H2SO4 plastic	DG9H	40mL HCL amber voa vial	WGFU	4oz clear soil jar
BP1U	1 liter unpreserved plastic	DG9M	40mL MeOH clear vial	WGFX	4oz wide jar w/hexane wipe
BP1Z	1 liter NaOH, Zn, Ac	DG9T	40mL Na Thio amber vial	ZPLC	Ziploc Bag
BP2N	500mL HNO3 plastic	DG9U	40mL unpreserved amber vial		
BP2O	500mL NaOH plastic	1	Wipe/Swab		

							S	ample	Conta	iner C	ount				
CLIENT:	Asl	ncree	ek												Pace Analytical
COC PAGE	2 of 2												a	5	257502
Sample Line Item	VG9H	AG1H	AG1U	BG1H	BP1U	BP2U	BP3U	BP2N	BP2S	WGFU	WGKU	1	San		Comments
1	6	212													
2										1		1			
3										1	1	I	2		
4	6	242													
5										1			1		
6	6	212													
7															
8							_								
9															
10															
11									· · · · · · · · · · · · · · · · · · ·						
12															Trip Blank? NO
AG1H	1 liter HCI	L amber o	lass				BP2S	500mL H	12SO4 pl	lastic		-		JGFU	4oz unpreserved amber wide
AG111	1liter uppr	nacaniad .	amber al	acc			BP211	500ml (	Innresen	ed nlasti	C			R	terra core kit

AGIH	Tiller HGL amber glass	. BP25	SUUML H2SO4 plastic	Jaru	402 unpreserved amber wide
AG1U	1liter unpreserved amber glass	BP2U	500mL unpreserved plastic	R	terra core kit
AG2S	500mL H2SO4 amber glass	BP2Z	500mL NaOH, Zn Ac	U	Summa Can
AG2U	500mL unpreserved amber glass	BP3C	250mL NaOH plastic	VG9H	40mL HCL clear vial
AG3S	250mL H2SO4 amber glass	BP3N	250mL HNO3 plastic	VG9T	40mL Na Thio. clear vial
BG1H	1 liter HCL clear glass	BP3S	250mL H2SO4 plastic	VG9U	40mL unpreserved clear vial
BG1U	1 liter unpreserved glass	BP3U	250mL unpreserved plastic	VG9W	40mL glass vial preweighted (EPA 5035)
BP1N	1 liter HNO3 plastic	DG9B	40mL Na Bisulfate amber vial	VSG	Headspace septa vial & HCL
BP1S	1 liter H2SO4 plastic	DG9H	40mL HCL amber voa vial	WGFU	4oz clear soil jar
BP1U	1 liter unpreserved plastic	DG9M	40mL MeOH clear vial	WGFX	4oz wide jar w/hexane wipe
BP1Z	1 liter NaOH, Zn, Ac	DG9T	40mL Na Thio amber vial	ZPLC	Ziploc Bag
BP2N	500mL HNO3 plastic	DG9U	40mL unpreserved amber vial		
BP2O	500mL NaOH plastic	1	Wipe/Swab		

	Sample Co	ondition Upon Re	eceipt	
Pace Analytical Olivert Num	A I			057502
Client Name	- Ash	check	Project #	231302
			PCS	
Courier: Fed ExUPSUSPSClier Tracking #:350120		rcial 🗌 Pace Other	100	
Custody Seal on Cooler/Box Present: Yes	No s	Seals intact: Yes	No No	
Packing Material: Bubble Wrap	Bags 🗌 No	one 🗌 Other	Temp. Blank Yes	NO
Thermometer Used 132013 or 101731962 or 22609	9 Type of Ice: /	Wet) Blue None	Samples on ice, cooling	g process has begun ,
Cooler Temperature $4.5, 3.6, 3.2^{\circ}$ Temp should be above freezing $\leq 6^{\circ}$ C	Biological T	SSue is Frozen: Yes M Comments:	Date and Initials contents:	person examining
Chain of Custody Present:	Dites DNO 1	□N/A 1.		
Chain of Custody Filled Out:	Pres DNo 1	DN/A 2.		
Chain of Custody Relinquished:	Dires DNo 1	DN/A 3.		
Sampler Name & Signature on COC:	Pres DNO 1	□N/A 4.		
Samples Arrived within Hold Time:	Yes DNo 1	DN/A 5.		
Short Hold Time Analysis (<72hr):	Pres DNo 1	DNA 6. DE VIAL	s received oilt	side 48hr.
Rush Turn Around Time Requested:	DYes DNo (	DN/A 7.		
Follow Up / Hold Analysis Requested:	DYes DNo [	DN/A 8.		
Sufficient Volume:	Dres []No [	□N/A 9.		
Correct Containers Used:	Pres DNo [	□N/A 10.		
-Pace Containers Used:	ØYes □No [			
Containers Intact:	Pres DNo [	□N/A 11.		
Filtered volume received for Dissolved tests	□Yes □No [	DHTA 12.		· I l
Sample Labels match COC:	- Eres ENO [	DIVA 13. For M	W1-17.5, red	erved a total of
-Includes date/time/ID/Analysis Matrix:	Soil	7 contai	ners. coc read	S 6.
For containers needing preservation have been checked.	□Yes □No .	ENTA 14.		
All containers needing preservation are found to be in compliance with EPA recommendation.	□Yes □No			
Exceptions: VOA, coliform, TOC, O&G		Initial when completed	Lot # of added preservative	
Samples checked for dechlorination:	□Yes □No	2N/A 15.	-	
Headspace in VOA Vials ( >6mm):	□Yes □No	2N/A 16.		
Trip Blanks Present:	DYes DNO [	⊐N/A 17.		
Trip Blank Custody Seals Present	□Yes □No €	AINA		
Pace Trip Blank Lot # (if purchased):				
Client Notification/Resolution: Person Contacted: John Forwel Comments/Resolution: See attached email. Jes	  3] u	Date/Time: <u>531</u>	Field Data Required?	Y / N
Project Manager Review:	Rass		Date: 5	3/11
Note: Whenever there is a discrepancy affecting North Ca Certification Office ( i.e out of hold, incorrect preservative,	rolina compliance out of temp, inco	e samples, a copy of this for rrect containers)	m will be sent to the North Caro	lina DEHNR

# Jennifer Gross - Re: Samples for Tarr Vancouver Phase II ESA.

From:	John Foxwell <jfoxwell@ashcreekassociates.com></jfoxwell@ashcreekassociates.com>
To:	Jennifer Gross <jennifer.gross@pacelabs.com></jennifer.gross@pacelabs.com>
Date:	5/3/2011 1:45 PM
Subject:	Re: Samples for Tarr Vancouver Phase II ESA.

Hi,

Samples were frozen before they left Ash Creek, per agreed approach.

No silica gel cleanup.

1 mg/kg is good on lead.

Full list 8260.

TAT look good.

john

Jennifer Gross <Jennifer.Gross@pacelabs.com> wrote:

Hi John!

I wanted to let you know that the samples arrived this morning, The DI's were not frozen, temperatures were 4.5, 3.6 and 3.2 degrees Celsius. The lab will use the sodium bisulfate vials for analysis instead of the DI vials which arrived out of hold.

Had a couple of questions on these samples:

-Silica Gel isn't listed on the chain, is it needed on the Diesel's

-I can't seem to find that we have analyzed Lead on this project in the past, what RL do you need? 6010 is 1mg/kg but may have dilutions.

-We analyzed the full list for 8260 last time, will these be full list as well?

We have the Gx/Dx/PAH on 5-Day TAT Due 05/10. The 8260/Lead/EPH/VPH are on a 10-Day Due 05/17. All methods except for the Lead will go out of hold on 05/12 and 05/13. Please let me know if you would like a RUSH TAT to meet holding times on hold samples.

Let me know when you get a chance!

Thanks!

## Jennifer Gross

Project Manager Pace Analytical Services - Seattle Direct: 206.957.2426 Main Office: 206.767.5060 Fax: 206.767.5063

#### jennifer.gross@pacelabs.com www.pacelabs.com

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>>> Michael Whitson <MWhitson@ashcreekassociates.com> 5/2/2011 1:25 PM >>> That would be great, thank you!

Sent from my iPhone 4

On May 2, 2011, at 1:23 PM, "Jennifer Gross" < Jennifer.Gross@pacelabs.com > wrote:

Hi Michael,

The can pick up pretty late, as long as there is somebody is in the office. There is a 90-minute window, would 4-5:30 work?

Thanks! Jenni

>>> Michael Whitson <<u>MWhitson@ashcreekassociates.com</u>> 5/2/2011 1:09 PM >>>

Great, yes the pickup will be at our office 3015 SW First Ave Portland, OR 97201. It will be approximately four coolers, and I would prefer a pickup later in the afternoon, what is the latest we can schedule? See COC attached.

Thanks,

#### Michael T. Whitson, GIT

Staff, Geology Group

mwhitson@ashcreekassociates.com

From: Jennifer Gross [mailto:Jennifer.Gross@pacelabs.com]
Sent: Monday, May 02, 2011 12:59 PM
To: Michael Whitson
Subject: RE: Sample Container Request Tarr Vancouver Phase II ESA.

Hi Michael, This is possible, are we picking up at your office? Around what time will they be ready and how many coolers are there? Also, can you send a pdf of the chain.

Thanks!

Jenni

>>> Michael Whitson <<u>MWhitson@ashcreekassociates.com</u>> 5/2/2011 12:35 PM >>>

Hi Jennifer,

We would like to have a courier pick these samples up this afternoon, will that be possible? Let us know, thanks!

#### Michael T. Whitson, GIT

Staff, Geology Group

mwhitson@ashcreekassociates.com

From: Jennifer Gross [mailto:Jennifer.Gross@pacelabs.com]
Sent: Wednesday, April 27, 2011 1:18 PM
To: Michael Whitson
Cc: John Foxwell
Subject: Re: Sample Container Request Tarr Vancouver Phase II ESA.

Hi Michael,

I just wanted to make sure you received the container's for this sampling event. I have been instructed to have you fill both the DI and Sodium Bisulfate vials for the Terra core kits. If you can proceed with freezing the DI portions before shipping in that would eliminate any qualifiers on the results.

Please confirm receipt of this email and let me know if you have any questions!

Thanks!

Jennifer Gross

Project Manager

Pace Analytical Services - Seattle Direct: 206.957.2426 Main Office: 206.767.5060 Fax: 206.767.5063

jennifer.gross@pacelabs.com

www.pacelabs.com

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>>> Michael Whitson <<u>MWhitson@ashcreekassociates.com</u>> 4/22/2011 4:20 PM >>>

Hi Jennifer,

I am requesting sample containers for an addendum to the Tarr Vancouver Phase II ESA (# 1821-00), work will begin next Thursday April 28<sup>th</sup>. We will need sample containers for the following list of analytes:

Soil:

36 X 5035 Soil Kits (VOC's by EPA 8260B) (we plan on running 5 of these samples).

36 X NWTPH-Gx (we plan on running 14 of these samples).

36 X NWTPH-Dx (we plan on running 17 of these samples).

36 X Metals (EPA 6000/7000) (we plan on running 5 of these samples).

6 X PAHs (we plan on running 3 of these samples).

3 X Volatile Petroleum Hydrocarbons (VPH)/ Extractable Petroleum Hydrocarbons (EPH) *(we plan on running all 3 of these samples).* 

Water:

4 X VOC's by EPA 8260B (we plan on running all 4 of these samples).

4 X NWTPH-Dx (we plan on running all 4 of these samples).

4 X NWTPH-Gx (we plan on running all 4 of these samples).

We would like to have these containers early next week if possible. We will freeze the 5035 samples in house and they will be noted as frozen on the COC. We will have the coolers picked up Monday. Will this work to avoid a QA notation that the samples were frozen within 48 hours?

Thank you,

#### Michael T. Whitson, GIT

Staff, Geology Group

mwhitson@ashcreekassociates.com

#### Ash Creek Associates, Inc.

3015 SW 1st Avenue

Portland, Oregon 97201

503-924-4704 ext. 127 (office)

541-282-3811 (mobile)

503-943-6357 (fax)

www.ashcreekassociates.com

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2930 Westlake Ave N Suite 100 Seatlle. WA 98109 T: (206) 352-3790 F: (206) 352-7178 info@fremontanalytical.com

Pace Analytical Seattle Jennifer Gross 940 South Harney Seattle, Washington 98108

#### RE: Tarr Vancouver 1821-00 Lab ID: 1105019

May 17, 2011

#### **Attention Jennifer Gross:**

Fremont Analytical, Inc. received 1 sample(s) on 5/4/2011 for the analyses presented in the following report.

## Extractable Petroleum Hydrocarbons by NWEPH Volatile Petroleum Hydrocarbons by NWVPH

This report consists of the following:

- Case Narrative
- Analytical Results
- Applicable Quality Control Summary Reports
- Chain of Custody

All analyses were performed consistent with the Quality Assurance program of Fremont Analytical, Inc. Please contact the laboratory if you should have any questions about the results.

Thank you for using Fremont Analytical.

Sincerely,

MGR

CC: Regina SteMarie

Michael Dee Sr. Chemist / Principal



CLIENT: Project: Lab Order: Lab Sample II	Pace Analytical Seattle Tarr Vancouver 1821-00 1105019	Work Order	Sample Summary
Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
1105019-001	MW-1 (12.5)	04/29/2011 10:05 AM	05/04/2011 10:20 AM

Note: If no "Time Collected" is supplied, a default of 12:00AM is assigned



Case Narrative

Date: 5/17/2011

CLIENT:Pace Analytical SeattleProject:Tarr Vancouver 1821-00

I. SAMPLE RECEIPT:

All samples were received intact. The temperatures were measured on receipt (Cooler = 1.1 Degrees C., Sample Temperature = 3.6 Degrees C.)

### II. GENERAL REPORTING COMMENTS:

Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed to ensure method criteria are achieved throughout the entire analytical process.

#### **III. ANALYSES AND EXCEPTIONS:**

Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.

NWVPH: Coelution prevents deterimination of surrogate recoveries.



# **Analytical Report**

WO#: **1105019** Date Reported: **5/17/2011** 

Client: Pace Analytical Seattle				Collectio	on Date:	4/29/2011 10:05:00 AM
Project: Tarr Vancouver 1821-00						
<b>I ab ID</b> : 1105019-001				Matrix :	Soil	
Client Sample ID: MW 1 (12 5)				matrix	0011	
			<b>•</b> •			
Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Extractable Petroleum Hydrocarb	ons by NWEI	<u>PH</u>				Analyst: <b>MD</b>
Aliphatic Hvdrocarbon (C8-C10)	79.1	0.480		ma/Ka	1	5/17/2011 9:29:12 PM
Aliphatic Hydrocarbon (C10-C12)	308	0.480		ma/Ka	1	5/17/2011 9:29:12 PM
Aliphatic Hydrocarbon (C12-C16)	152	0.480		ma/Ka	1	5/17/2011 9:29:12 PM
Aliphatic Hydrocarbon (C16-C21)	45.3	0.480		ma/Ka	1	5/17/2011 9:29:12 PM
Aliphatic Hydrocarbon (C21-C34)	25.4	0.480		ma/Ka	1	5/17/2011 9:29:12 PM
Aromatic Hydrocarbon (C8-C10)	35.9	0.480		mg/Kg	1	5/17/2011 9:29:12 PM
Aromatic Hydrocarbon (C10-C12)	44.4	0.480		mg/Kg	1	5/17/2011 9:29:12 PM
Aromatic Hydrocarbon (C12-C16)	25.1	0.480		mg/Kg	1	5/17/2011 9:29:12 PM
Aromatic Hydrocarbon (C16-C21)	10.5	0.480		mg/Kg	1	5/17/2011 9:29:12 PM
Aromatic Hydrocarbon (C21-C34)	0.854	0.480		mg/Kg	1	5/17/2011 9:29:12 PM
Surr: 1-Chlorooctadecane	91.0	65-140		%REC	1	5/17/2011 9:29:12 PM
Surr: o-Terphenyl	77.6	65-140		%REC	1	5/17/2011 9:29:12 PM
Volatile Petroleum Hydrocarbons	by NWVPH					Analyst: MD
Aliphatic Hydrocarbon (C10-C12)	131	0 396		ma/Ka	1	5/11/2011 10 <sup>.</sup> 46 <sup>.</sup> 00 AM
Aliphatic Hydrocarbon (C5-C6)	ND	0.396		ma/Ka	1	5/11/2011 10:46:00 AM
Aliphatic Hydrocarbon (C6-C8)	4.11	0.396		ma/Ka	1	5/11/2011 10:46:00 AM
Aliphatic Hydrocarbon (C8-C10)	60.4	0.396		ma/Ka	1	5/11/2011 10:46:00 AM
Aromatic Hydrocarbon (C10-C12)	181	0.396		mg/Kg	1	5/11/2011 10:46:00 AM
Aromatic Hydrocarbon (C12-C16)	33.4	0.396		mg/Kg	1	5/11/2011 10:46:00 AM
Aromatic Hydrocarbon (C8-C10)	228	0.396		mg/Kg	1	5/11/2011 10:46:00 AM
Benzene	0.888	0.0396		mg/Kg	1	5/11/2011 10:46:00 AM
Ethylbenzene	12.1	0.0396		mg/Kg	1	5/11/2011 10:46:00 AM
m,p-Xylene	35.6	0.0396		mg/Kg	1	5/11/2011 10:46:00 AM
Naphthalene	11.4	0.0396		mg/Kg	1	5/11/2011 10:46:00 AM
o-Xylene	18.1	0.0396		mg/Kg	1	5/11/2011 10:46:00 AM
Toluene	1.64	0.0396		mg/Kg	1	5/11/2011 10:46:00 AM
Surr: Bromoflourobeneze	154	65-135	S	%REC	1	5/11/2011 10:46:00 AM
Surr: Trifluorotoluene	187	65-135	S	%REC	1	5/11/2011 10:46:00 AM

Qualifiers:	В	Analyte detected in the associated Method Blank	
-------------	---	---	--

- E Value above quantitation range
- J Analyte detected below quantitation limits
- RL Reporting Limit

- D Dilution was required
- H Holding times for preparation or analysis exceeded
- ND Not detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

**QC SUMMARY REPORT** 



1105019

Work Order:

#### CLIENT: Pace Analytical Seattle **Extractable Petroleum Hydrocarbons by NWEPH** Tarr Vancouver 1821-00 **Project:** Sample ID: LCS-541 RunNo: 893 SampType: LCS Units: mg/Kg Prep Date: 5/9/2011 LCSS Client ID: Batch ID: 541 Analysis Date: 5/17/2011 SegNo: 17917 Result RL SPK Ref Val %REC HighLimit RPD Ref Val RPDLimit Analyte SPK value LowLimit %RPD Qual Aliphatic Hydrocarbon (C8-C10) 9.35 0.500 0 65 10.00 93.5 140 65 Aliphatic Hydrocarbon (C10-C12) 8.64 0.500 10.00 0 86.4 140 13.1 0 65 140 Aliphatic Hydrocarbon (C12-C16) 0.500 10.00 131 Aliphatic Hydrocarbon (C16-C21) 8.56 0.500 10.00 0 85.6 65 140 Aliphatic Hydrocarbon (C21-C34) 9.51 0.500 10.00 0 95.1 65 140 Aromatic Hydrocarbon (C8-C10) 10.5 0.500 10.00 0 105 65 140 0 Aromatic Hydrocarbon (C10-C12) 8.03 0.500 10.00 80.3 65 140 7.81 0.500 0 65 Aromatic Hydrocarbon (C12-C16) 10.00 78.1 140 0 Aromatic Hydrocarbon (C16-C21) 11.4 0.500 10.00 114 65 140 Aromatic Hydrocarbon (C21-C34) 10.6 0.500 10.00 0 106 65 140 20.1 65 Surr: 1-Chlorooctadecane 20.00 100 140 15.2 20.00 75.9 65 140 Surr: o-Terphenyl Sample ID: MB-541 SampType: MBLK Units: mg/Kg Prep Date: 5/9/2011 RunNo: 893 Client ID: MBLKS Batch ID: 541 Analysis Date: 5/17/2011 SeaNo: 17918 Analyte %RPD Result RL SPK value SPK Ref Val %REC LowLimit HighLimit RPD Ref Val RPDLimit Qual ND 0 500 Aliphatic Hydrocarbon (C8-C10) ND Aliphatic Hydrocarbon (C10-C12) 0.500 Aliphatic Hydrocarbon (C12-C16) ND 0.500 ND 0.500 Aliphatic Hydrocarbon (C16-C21) Aliphatic Hydrocarbon (C21-C34) ND 0.500 ND Aromatic Hydrocarbon (C8-C10) 0.500 Aromatic Hydrocarbon (C10-C12) ND 0.500 Aromatic Hydrocarbon (C12-C16) ND 0.500 ND Aromatic Hydrocarbon (C16-C21) 0.500

Qualifiers:

Value above quantitation range Е

ND Not detected at the Reporting Limit Н Holding times for preparation or analysis exceeded R

Analyte detected below guantitation limits J

Reporting Limit

RL

RPD outside accepted recovery limits

S Spike recovery outside accepted recovery limits





Work Order: CLIENT: Project:	1105019 Pace Analy Tarr Vanco	/tical Seat	tle -00					Extr	actable	QC S	SUMMA Hydrocart	RY RE	PORT NWEPH
Sample ID: MB-541 Client ID: MBLKS		SampType: Batch ID:	MBLK 541			Units: <b>mg/Kg</b>		Prep Da Analysis Da	te: 5/9/201 te: 5/17/20	1 11	RunNo: 893 SeqNo: 179	) 18	
Analyte			Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aromatic Hydrocarbo Surr: 1-Chlorooctad Surr: o-Terphenyl	n (C21-C34) decane		ND 15.5 26.2	0.500	20.00 20.00		77.6 131	65 65	140 140				

Qualifiers: E

E Value above quantitation range

H Holding times for preparation or analysis exceeded

J Analyte detected below quantitation limits

ND Not detected at the Reporting Limit

S Spike recovery outside accepted recovery limits

R RPD outside accepted recovery limits

RL Reporting Limit

**QC SUMMARY REPORT** 



1105019

Work Order:

Benzene

Ethylbenzene

m,p-Xylene

o-Xylene

Toluene

Qualifiers:

Е

ND

Naphthalene

#### CLIENT: Pace Analytical Seattle Volatile Petroleum Hydrocarbons by NWVPH Tarr Vancouver 1821-00 Project: Sample ID: 1105019-001BDUP RunNo: 894 SampType: DUP Units: mg/Kg Prep Date: 4/29/2011 Client ID: MW-1 (12.5) Batch ID: 618 Analysis Date: 5/11/2011 SegNo: 17919 Result RL SPK value SPK Ref Val %REC HighLimit RPD Ref Val RPDLimit Qual Analyte LowLimit %RPD Aliphatic Hydrocarbon (C10-C12) 132 0.396 0 0 0.991 30 131.0 Aliphatic Hydrocarbon (C5-C6) ND 0 0 0.396 0 0 30 5.38 0 0 4.114 26.7 30 Aliphatic Hydrocarbon (C6-C8) 0.396 Aliphatic Hydrocarbon (C8-C10) 62.5 0.396 0 0 60.40 3.41 30 Aromatic Hydrocarbon (C10-C12) 179 0.396 0 0 180.6 1.16 30 Aromatic Hydrocarbon (C12-C16) 34.5 0.396 0 0 33.35 3.48 30 229 228.1 Aromatic Hydrocarbon (C8-C10) 0.396 0 0 0.317 30 Benzene 1.01 0.0396 0 0 0.8877 12.8 30 11.3 0 0 12.07 Ethylbenzene 0.0396 6.80 30 m,p-Xylene 35.1 0.0396 0 0 35.56 1.33 30 12.4 0.0396 0 0 11.42 30 Naphthalene 8.44 o-Xylene 18.2 0.0396 0 0 18.14 0.298 30 1.82 0 30 Toluene 0.0396 Λ 1.641 10.3 С Surr Bromoflourobeneze 3 956 282 65 135 0 S С 3.956 339 65 135 0 S Surr: Trifluorotoluene Sample ID: LCS-618 SampType: LCS RunNo: 894 Units: mg/Kg Prep Date: 5/11/2011 Client ID: LCSS Batch ID: 618 Analysis Date: 5/11/2011 SeqNo: 17921 RL Analyte Result SPK value SPK Ref Val %REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Not detected at the Reporting Limit S Spike recovery outside accepted recovery limits

Value above quantitation range

5.26

5.69

8.30

5.67

6.02

5 60

0.0500

0.0500

0.0500

0.0500

0.0500

0 0500

5.000

5.000

10.00

5.000

5.000

5 000

Н Holding times for preparation or analysis exceeded

0

0

0

0

0

0

105

114

83.0

113

120

112

65

65

65

65

65

65

R RPD outside accepted recovery limits J Analyte detected below guantitation limits

Reporting Limit RL

140

140

140

140

140

140

Fremont
[Analytical]

Work Order:         1           CLIENT:         P           Project:         T	105019 Pace Anal Parr Vanco	ytical Seattle ouver 1821-00						Volatile	QC Petroleum	SUMMA Hydrocart	RY REI	PORT NWVPH
Sample ID: LCS-618		SampType: LCS			Units: <b>mg/Kg</b>		Prep Da	te: 5/11/20	11	RunNo: 894	•	
Client ID: LCSS		Batch ID: 618					Analysis Da	te: 5/11/20	11	SeqNo: 179	21	
Analyte		Resu	ılt RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: Bromoflouroben	ieze	4.6	60	5.000		92.0	65	135				
Surr: Trifluorotoluene		5.2	16	5.000		103	65	135				
Sample ID: MB-618		SampType: MBLI	<		Units: mg/Kg		Prep Da	te: 5/11/20	11	RunNo: 894	ŀ	
Client ID: MBLKS		Batch ID: 618					Analysis Da	te: 5/11/20	11	SeqNo: 179	22	
Analyte		Resi	ılt RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aliphatic Hydrocarbon (0	C10-C12)	Ν	D 0.500		0	0						
Aliphatic Hydrocarbon (0	C5-C6)	N	D 0.500		0	0						
Aliphatic Hydrocarbon (0	C6-C8)	N	D 0.500		0	0						
Aliphatic Hydrocarbon (0	C8-C10)	N	D 0.500		0	0						
Aromatic Hydrocarbon (	C10-C12)	N	D 0.500		0	0						
Aromatic Hydrocarbon (	C12-C16)	N	D 0.500		0	0						
Aromatic Hydrocarbon (	C8-C10)	N	D 0.500		0	0						
Benzene		N	D 0.0500		0	0						
Ethylbenzene		N	D 0.0500		0	0						
m,p-Xylene		N	D 0.0500		0	0						
Naphthalene		N	D 0.0500		0	0						
o-Xylene		N	D 0.0500		0	0						
Toluene		N	D 0.0500		0	0						
Surr: Bromoflouroben	ieze	4.3	36	5.000		87.3	65	135				
Surr: Trifluorotoluene		5.7	73	5.000		115	65	135				

Qualifiers:

E Value above quantitation range

H Holding times for preparation or analysis exceeded

J Analyte detected below quantitation limits

RL Reporting Limit

ND Not detected at the Reporting Limit

S Spike recovery outside accepted recovery limits

R RPD outside accepted recovery limits

Pace Analytical				LAB USE ONLY			ts	asap			2009 Page 1 of
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Chai	Report	Jennife Pace A 940 So Seattle, Phone Email: j		Item	1	6 4	5	Transfe 1 2 3 3 5 5			Tuesday