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CLEANUP ACTION PROGRESS REPORT

MAY 2008

WHIDBEY MARINE & AUTO SUPPLY FACILITY 1689 MAIN STREET FREELAND, WASHINGTON

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For: Whidbey Marine & Auto Supply 1689 Main Street Freeland, Washington

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1.0 INTRODUCTION

Farallon Consulting, L.L.C. (Farallon) has prepared this progress report to document the status of the cleanup action related to the release of gasoline from the underground storage tank (UST) system at the Whidbey Marine & Auto Supply facility located at 1689 Main Street in Freeland, Washington (herein referred to as the Facility) (Figure 1). The cleanup action at the Facility is being conducted under the Washington State Department of Ecology (Ecology) Voluntary Cleanup Program. The Facility has been assigned Toxics Cleanup Program Identification Number NW1529.

This progress report presents the results of the additional groundwater monitoring well and remediation well installation activities conducted at the Facility in March 2008 along with the results of the groundwater monitoring event completed in April 2008, and a discussion of the overall progress of the cleanup action. The report also details the operation and maintenance (O&M) activities conducted from February 8 through May 14, 2008 for the soil vapor extraction (SVE) system installed at the Facility. The SVE system currently consists of a regenerative blower and catalytic oxidizer (Catox) connected via subsurface piping to three SVE wells designated SVE-1, SVE-2S, and SVE-2D, and one dual purpose SVE/monitoring well designated MW-1 (Figure 2). An additional SVE well, designated SVE-4 will be connected to the system as part of treatment system modifications anticipated to be completed in June 2008.

The SVE system was installed to remove gasoline-range petroleum hydrocarbons in vadose zone soil identified during soil and groundwater investigations conducted at the Facility in 2005 and 2006.

The progress report is organized as follows:

- Section 2 describes the groundwater monitoring well and remediation well installation and soil sampling methods for the March 2008 field activities.
- Section 3 presents the groundwater sampling methods and analytical results for the April 2008 groundwater monitoring event at the Facility.
- Section 4 details the O&M activities conducted on the SVE system from February 8 through May 14, 2008.
- Section 5 presents an updated conceptual site model for the Facility.
- Section 6 provides Farallon's summary and conclusions pertaining to recent investigation, monitoring, and remediation activities conducted at the Facility.

2.0 GROUNDWATER MONITORING WELL AND REMEDIATION WELL INSTALLATION

Three additional groundwater monitoring wells, MW-6 through MW-8, and two additional remediation wells, air sparge (AS) well AS-3 and SVE well SVE-4, were installed at the Facility in late March 2008. Locations of the wells are shown on Figure 2. Farallon had previously proposed installing two groundwater monitoring wells along the north side of Main Street near the Facility, within the county road right-of-way, to delineate the extent of contaminants south of the existing monitoring wells MW-1 and MW-4. The right-of-way permit application to perform the work and install the groundwater monitoring wells within the county right-of-way was initially denied by Island County. Correspondence with Island County indicated that an agreement might be arranged to allow for the installation the monitoring wells provided assurances were obtained from Whidbey Marine & Auto Supply for maintenance of the wells. Pending resolution of the right-of-way issues the monitoring well locations were moved to the west-adjacent property to better delineate contaminant impacts in the down-gradient direction of groundwater flow from MW-2 and MW-4 (Figure 2). A description of the field activities and results of the soil sampling completed during the installation of the groundwater and remediation wells are presented below.

2.1 FIELD METHODS

The well installation activities were conducted at the Facility on March 24 through 26, 2008. Cascade Drilling, Inc. of Woodinville, Washington performed the drilling activities at the Facility using a hollow-stem auger drilling rig. Prior to commencement of drilling, Applied Professional Services, Inc. of North Bend, Washington conducted a private utility location survey at the Facility. The field activities were conducted under the supervision of a Washington State-licensed geologist.

The wells were sampled every 2.5 feet from 4 feet below the ground surface (bgs) to depths ranging from 44 to 54 feet bgs using an 18-inch-long split spoon sampler. At depths greater than 44 to 54 feet bgs, the wells were sampled continuously to final boring depths ranging from 64.5 to 75.5 feet bgs using an 18-inch-long split spoon sampler to better characterize conditions near the perched groundwater zone. The sampler was decontaminated after each sample interval was completed. Each soil sample was described in accordance with the Unified Soil Classification System ASTM Standard D2488-06, *Standard Practice for Description and Identification of Soils,* and evidence of potential contamination such as unusual odor, discoloration, or sheen was noted. The soil samples were also screened in the field using a photoionization detector (PID) to detect the presence of volatile organic vapors. The boring logs containing the soil descriptions, field observations, and PID readings are provided in Appendix A.

Select soil samples retained for potential laboratory analysis were transferred to laboratoryprepared containers. Care was taken to not handle the seal or the inside cap of the container when placing the sample into the containers. Soil sample containers were labeled using a unique sample number and placed immediately in an iced cooler. The soil samples were submitted for laboratory analysis to CCI Analytical Laboratories of Everett, Washington under standard chainof-custody protocols. The soil samples were selected for chemical analysis based on elevated PID readings. In the absence of elevated PID readings, soil samples displaying other evidence of potential contamination such as unusual odor, discoloration, or sheen were submitted for analysis. At least two soil samples from each of the borings were submitted for laboratory analysis with the exception of soil samples from remediation well SVE-4. Soil samples were not submitted for laboratory analysis from the boring for remediation well SVE-4 because of the close proximity to remediation well AS-3.

2.1.1 Analytical Methods

The selected soil samples were analyzed for total petroleum hydrocarbons as gasoline-range organics (GRO) by Northwest Method NWTPH-Gx and for benzene, toluene, ethylbenzene, and xylenes (BTEX) by U.S. Environmental Protection Agency Method 8021B. The soil samples were collected following EPA Method 5035A, in accordance with Ecology guidance, to reduce the potential loss of volatile compounds during sample collection.

2.1.2 Well Development

Following the installation, the wells were developed to remove fine-grained materials from the screen and sand pack. Due to the small amount of groundwater present in the wells following installation, the wells were developed using a disposable bailer. A minimum of the equivalent of three submerged well casing volumes of groundwater was removed from each of the wells during well development, as feasible. Initially, monitoring well MW-7 was not developed because no measurable groundwater was encountered in the well. However, 3 weeks after installation approximately 2 feet of groundwater was measured in monitoring well MW-7 and it was then developed using a submersible bladder pump. Monitoring well MW-8 was also further developed using a submersible bladder pump at that time.

2.1.3 Waste Handling

The soil cuttings, decontamination water, and development water generated during the monitoring well and remediation well installation were stored on-site in 55-gallon drums pending disposal. Kleen Environmetal Technologies, Inc of Seattle, Washington subsequently transported the drummed waste materials to a licensed disposal facility.

2.2 SUBSURFACE CONDITIONS

The geologic conditions encountered in the borings were consistent with those observed in previous subsurface investigations at the Facility. Soil generally consisted of fine- to coarsegrained, poorly graded sand with varying amounts silt (trace to 10 percent silt), and poorly graded gravel with sand to depths ranging from 58 to 60 feet bgs where a silt and sandy silt layer of variable thickness ranging from 6 feet to over 8 feet thick was found. Saturated conditions were typically identified as a thin zone perched above the silt and sandy silt layer. Groundwater was encountered in the borings at depths ranging from 54 to 59 feet bgs. Static groundwater levels in the wells measured following well installation were observed at 53 feet below the top of the well casing in remediation well AS-3, 59 feet in below the top of the well casing in monitoring well MW-6, and 55 feet below the top of the well casing in monitoring well MW-8. Although wet to saturated conditions were observed in soil samples collected during the boring for monitoring well MW-7, no groundwater accumulation was observed in the well immediately after drilling. Subsequent measurements approximately 3 weeks following the installation of MW-7 indicated that approximately 2 feet of groundwater had accumulated in the monitoring well.

Petroleum-like odors were first encountered in the borings for the wells MW-6, MW-7, and AS-3 at approximately 54 to 55 feet bgs, coinciding with the depth of first encountered groundwater in the borings. The petroleum-like odors observed in the borings for wells MW-6, MW-7, and AS-3 typically became stronger with depth until the first silt layer was encountered. The petroleum-like odors began to diminish or became nonexistent in samples collected below the upper portion of the silt. Petroleum-like odors were also encountered in the boring for remediation well SVE-4 at approximately 49.5 feet bgs to the termination of the boring as 56 feet bgs. Slightly elevated PID readings were also detected in some of the soil samples where petroleum-like odors were observed.

2.3 MONITORING WELL AND REMEDIATION WELL CONSTRUCTION

The new monitoring and remediation wells were constructed using 2-inch diameter schedule 40 polyvinyl chloride 0.010-inch slotted well screen that was flush threaded to 2-inch diameter blank casing. Details of the well installation are provided on the boring and well installation logs provided in Appendix A. Monitoring wells MW-6 and MW-8 were installed with a screened interval extending from 51 to 61 feet bgs and monitoring well MW-7 was installed with a screened interval extending from 49 to 59 feet bgs. Remediation well SVE-4 was installed with a screened interval extending from 40 to 50 feet bgs. Remediation well AS-3 was constructed for use as an air sparge well with a short screened interval from 56 to 57 feet bgs. The wells were all completed using traffic-rated flush-mount well monuments.

2.4 SOIL ANALYTICAL RESULTS

The analytical results for the soil samples collected from the borings for the monitoring and remediation wells installed March 24 through 26, 2008 are presented below. A summary of the results is shown on Table 1 along with the corresponding Washington State Model Toxics Control Act Cleanup Regulation (MTCA) Method A cleanup levels for soil. The laboratory analytical report is provided as Appendix B.

Soil samples were submitted for laboratory analysis from the boring for monitoring well MW-6 from depths of 55 feet bgs, 58 feet bgs, and 59.5 feet bgs. GRO was detected in the soil sample collected from 59.5 feet bgs at a concentration of 45 milligrams per kilogram (mg/kg) and benzene was detected at a concentration of 1.3 mg/kg, both of which are above the MTCA Method A cleanup levels of 30 mg/kg and 0.03 mg/kg, respectively. GRO or BTEX constituents were not detected above the MTCA Method A cleanup levels for soil in any of the other soil samples analyzed from the soil boring for monitoring well MW-6.

Soil samples were retained for chemical analysis from the boring for monitoring well MW-7 from depths of 56.5 feet bgs and 64.5 feet bgs. GRO was detected in the sample collected from

56.7 feet bgs at a concentration of 580 mg/kg, which is above the MTCA Method A cleanup level for soil of 30 mg/kg. Benzene, toluene, and xylenes were also detected at concentrations above there respective MTCA Method A cleanup levels for soil in the sample collected from 56.7 feet bgs. Benzene was detected in the sample collected from 64.5 feet bgs at a concentration above the MTCA Method A cleanup level for soil.

Soil samples were retained for chemical analysis from the boring for monitoring well MW-8 from depths of 57 feet bgs and 75 feet bgs. Benzene was detected at a concentration of 0.05 mg/kg in the sample collected from 75 feet bgs, slightly above the MTCA Method A cleanup level for soil of 0.03 mg/kg. No GRO or BTEX constituents were detected in the soil sample collected from 57 feet bgs at concentrations above their respective MTCA Method A cleanup levels for soil or the laboratory reporting limits.

Soil samples were submitted for laboratory analysis from the boring for remediation well AS-3 from depths of 55 feet bgs and 57.2 feet bgs. GRO was detected at a concentration of 58 mg/kg in the sample collected from 55 feet bgs which exceeds the MTCA Method A cleanup level for soil. Benzene, toluene, and xylenes were also detected above their respective MTCA Method A cleanup levels in the soil sample collected from 55 feet bgs, with benzene detected at a concentration of 1.3 mg/kg, toluene at a concentration of 9.9 mg/kg, and xylenes at a concentration of 17 mg/kg. There were no GRO or BTEX constituents detected above their respective MTCA Method A cleanup levels for soil or the laboratory reporting limits in the soil sample collected from 57.2 feet bgs.

2.5 SURVEYING

Following the completion of the well installation activities, the new monitoring wells were survey by Thatcher & Morrison, Inc. of Freeland, Washington. Discussions with the surveyor revealed that the previous survey conducted at the Facility which included monitoring well MW-4, provided the ground surface elevation instead of the top of casing elevation as directed. As a result of the erroneous survey information provided by the surveyors, the ground surface elevation was used as the reference point for groundwater elevation determinations for March through December 2007, rather than the top of casing elevation. To verify top of casing elevations, Farallon used a laser level to re-survey all of the monitoring wells. The top of casing elevations from the latest survey are provided on Table 2.

3.0 GROUNDWATER MONITORING

The groundwater monitoring conducted at the Facility on April 24 and 25, 2008 included obtaining depth to groundwater measurements and collecting groundwater samples from monitoring wells MW-1 through MW-4 and MW-6 through MW-8 (Figure 2). Monitoring well MW-5 was dry at the time of the April 2008 monitoring event. The April 2008 groundwater monitoring and sampling event was the sixth event conducted following start-up of the SVE system in September 2006. Details of the field activities and the results for the April 2008 monitoring and sampling event are presented below.

3.1 FIELD METHODS

Prior to sampling, Farallon measured the depth to groundwater in each monitoring well using an electronic water-level indicator. The monitoring wells were opened and the water levels were allowed to equilibrate before measurement. The groundwater level in each monitoring well was measured to the surveyed reference point on the top of the well casing to derive the groundwater elevation at each location.

Groundwater was purged from each monitoring well at a flow rate of approximately 200 milliliters per minute using a bladder pump, where feasible. Field measurements were collected for pH, temperature, specific conductivity, dissolved oxygen, and oxidation/reduction potential during groundwater purging using a YSI Model 600XL water quality analyzer equipped with a flow-through cell. Groundwater samples were collected after the temperature, conductivity, and pH parameters stabilized. Stabilization was determined as a relative percent difference of less than 3 percent for temperature and conductivity, and a change of ± 0.1 pH unit between readings for three consecutive measurements. The samples were collected by pumping groundwater directly from each well through dedicated polyethylene tubing into laboratory-prepared containers. There was not sufficient groundwater in monitoring well MW-6 at the time of sampling to utilize the bladder pump so a disposable bailer was used to purge and collect the groundwater samples from monitoring well MW-6. The samples were labeled, placed on ice, and transported to CCI Analytical Laboratories, Inc. in Everett, Washington for analysis following chain-of-custody protocols.

3.2 ANALYTICAL METHODS

The groundwater samples were analyzed for total petroleum hydrocarbons as GRO by Northwest Method NWTPH-Gx and for BTEX by U.S. Environmental Protection Agency Method 8021B.

3.3 GROUNDWATER MONITORING RESULTS

Table 2 presents a summary of the groundwater elevation data for the Facility. A summary of the groundwater quality parameters measured in the field during sampling is summarized in Table 3. Table 4 presents the groundwater analytical results for April 2008 and previous quarterly monitoring events, including a comparison to the corresponding MTCA Method A

groundwater cleanup levels. A copy of the laboratory analytical report for the April 2008 groundwater monitoring event is provided in Appendix B.

3.3.1 Groundwater Elevation

Groundwater elevations measured at the Facility on April 17, 2008 ranged from 65.35 feet above mean sea level (msl) in monitoring well MW-1 to 56.72 feet above msl in monitoring well MW-6 (Table 2). Monitoring well MW-5 has been dry each time it has been monitored from the time it was installed in February 2007 through the April 2008 monitoring event. Groundwater elevations measured in monitoring wells MW-1 through MW-4 were approximately 0.7 to 0.8 feet higher than those measured during the previous monitoring event in December 2007. Figure 3 depicts the groundwater elevation contours for the Facility based on the water levels measured on April 17, 2008. As shown on Figure 3, the general groundwater flow direction at the Facility is to the west, with a hydraulic gradient of approximately 0.02 foot per foot in the eastern area of the Facility and a considerably steeper gradient of 0.14 foot per foot to the west.

3.3.2 Analytical Results

The groundwater analytical data for the samples collected on April 18, 2008 are summarized in Table 4 along with the previous analytical results for samples collected at the Facility. GRO was detected in the groundwater samples collected from monitoring wells MW-2, MW-4, MW-6, MW-7, and MW-8 at concentrations exceeding the MTCA Method A cleanup level for groundwater of 800 μ g/l. The groundwater sample collected from monitoring well MW-2 contained GRO at a concentration of 3,700 μ g/l. The highest detected concentration of GRO was detected in the groundwater sample collected from monitoring well MW-4 at 140,000 μ g/l. Samples collected from newly installed monitoring wells MW-6, MW-7, and MW-8 contained GRO concentrations above the MTCA Method A cleanup level at 23,000 μ g/l, 54,000 μ g/l, and 5,400 μ g/l, respectively. GRO was also detected in the duplicate sample collected from monitoring well MW-7 at a concentration of 5,600 μ g/l. GRO was not detected above the MTCA Method A cleanup level in the groundwater samples collected from monitoring wells MW-7, wells MW-1 or MW-3. This is the fourth consecutive groundwater monitoring event in which GRO was not detected above the MTCA Method A cleanup level at monitoring well MW-1, which was installed proximal to suspected source area.

BTEX constituents were detected above their respective MTCA Method A cleanup levels in the groundwater sample collected from monitoring well MW-4. The detected BTEX concentrations from the sample collected from monitoring well MW-4 were 530 μ g/l for benzene, 42,000 μ g/l for toluene, 1,600 μ g/l for ethylbenzene, and 9,400 μ g/l for xylenes. Benzene, toluene, and xylenes were also detected above their respective MTCA Method A cleanup levels for groundwater in the samples collected from newly installed monitoring wells MW-6 and MW-7. The highest detected concentration of benzene was detected in the sample collected from monitoring well MW-7 at 13,000 μ g/l. BTEX constituents were not detected above their respective MTCA Method A cleanup levels in the groundwater samples collected from monitoring wells MW-1, MW-2, MW-3, or newly installed monitoring well MW-8 during the April 2008 monitoring event.

3.3.3 Purge Water Handling

The purge water generated during the April 2008 monitoring event is being stored at the Facility in a 55-gallon drum. A total of approximately 5 gallons of purge and decontamination water was generated during the April 2008 sampling event.

4.0 SVE SYSTEM OPERATION AND MAINTENANCE ACTIVITIES

Continuous operation of the SVE system at the Facility began on September 13, 2006. SVE treatment system monitoring requirements are specified in the Order of Approval to Construct #960 issued by the Northwest Clean Air Agency. During the period covered by this progress report, Facility visits were conducted by Farallon on February 8, March 21, April 17, and May 14, 2008.

When Farallon mobilized to the Facility to conduct a routine monitoring event on February 8, 2008, the treatment system was not running and had apparently shut down the previous evening as a result of a power disruption during a wind storm. The system was successfully restarted on February 8, 2008. Prior to the February 8, 2008 monitoring event, the Facility owner notified Farallon that the system was down January 26 through January 28, 2008 due to power disruptions during a wind storm. The system was off beginning February 18, 2008 due to electrical problems associated with corroded wiring terminals in the heater relay to the Catox unit. Pacific Crest Electric of Lake Stevens, Washington repaired the terminals and wiring and the treatment system was re-started the on March 20, 2008. The system was operating normally when Farallon mobilized to the Facility on both the March 21 and April 17, 2008 routine monitoring events. The system was not running when Farallon mobilized to the Facility for routine monitoring on May 14, 2008. The Facility owner notified Farallon that the system had been down for approximately 1 week due to power disruptions. The system was operating normally when Farallon departed the Facility on May 14, 2008.

The operating temperature for the catalyst beds in the Catox unit is set at 550 degrees Fahrenheit (°F), with the high temperature alarm set at 1,150°F. The catalyst bed temperatures recorded during Facility visits over this monitoring period ranged from 562 to 636°F. The SVE system operation monitoring data are summarized in Table 5.

The SVE system currently extracts soil vapor from each of the four SVE wells at the Facility. The system operates with the air dilution valve located upstream of the SVE blower fully closed so that all influent vapor to the Catox system is derived from the subsurface soil beneath the Facility. As measured with the PID, influent vapor concentrations to the Catox unit have ranged from 105 to 162 parts per million over this monitoring period, with treatment system air flow rates ranging from 159.5 to 386.4 standard cubic feet per minute. The system air flow rate is measured upstream of the SVE blower and downstream of the water knockout assembly.

Influent gasoline vapor concentrations to the Catox unit have ranged from 30 to 60 parts per million vapor over the monitoring period, as measured with colorimetric tubes for gasoline. The sampling pump for the colorimetric gas detection tubes appears to have been malfunctioning during the February 8, 2008 monitoring event and has since been replaced. Influent vapor samples were collected for laboratory analysis on February 8, March 26, April 17, and May 14, 2008 using Tedlar bags. The analytical results for the Tedlar bag influent vapor samples for GRO ranged from 110 to 1,200 μ g/l. The GRO and BTEX analytical results for the influent vapor samples are provided in Table 6. Benzene concentrations for the Tedlar bag influent vapor samples ranged from 1 to 4 μ g/l over the monitoring period covered by this report. Toluene

concentrations in the influent vapor samples ranged from 6 to 9 μ g/l, ethylbenzene concentrations ranged from 2 to 4 μ g/l, and total xylenes concentrations ranged from 13 to 26 μ g/l over the reporting period. Copies of the laboratory analytical reports are provided in Appendix B.

Based on the measured air flow and influent GRO vapor concentrations, contaminant removal rates ranging from 1.6 to 38.7 pounds per day were calculated over the period of SVE system operation from January 11 through May 14, 2008. Contaminant mass removal calculations and results are presented in Table 7. An estimated total mass of 11,035 pounds of gasoline-range petroleum hydrocarbon constituents have been removed in the period from system start-up through May 14, 2008.

5.0 SITE CONCEPTUAL MODEL

The following section presents an updated site conceptual model for the Facility.

5.1 GEOLOGY

The geologic units beneath the Facility consist of 1 to 2 feet of near-surface sand and gravel fill overlying a thick sequence of sand with some interbedded silt. The sand unit consists of fine to coarse-grained sand with trace to minor silt and trace gravel extending from beneath the thin fill layer at the surface to the maximum depth explored of 125 feet bgs. The sand was dry to moist from the top of the unit to approximately 55 feet bgs. A zone of silt interbeds of variable thickness was encountered at depths generally between 55 and 68 feet bgs in most of the borings. Silts were encountered at shallower depths in boring B-7 and monitoring well MW-4. Silt interbeds were also encountered at depths of 81 and 87.5 feet bgs in the boring for monitoring well MW-1. Silt beds greater than 1 foot in thickness were encountered in borings advanced at or near the Facility at the following depth intervals:

- Monitoring well MW-1—61.5 to 63 feet bgs, 64.5 to 68 feet bgs; 81 to 82 feet bgs, and 87.5 to 89 feet bgs;
- Monitoring well MW-2—65 to 66.5 feet bgs (the total depth of the boring);
- Monitoring well MW-3—60.5 to 61.5 feet bgs (the total depth of the boring);
- Monitoring well MW-4—49 to 50 feet bgs and 55.5 to 58 feet bgs (the total depth of the boring);
- Monitoring well MW-5—58 to 59 feet bgs and 59.5 to 65 feet bgs;
- Monitoring Well MW-6 59 to 64.5 feet bgs (the total depth of the boring);
- Monitoring Well MW-7 57.4 to 65 feet bgs (the total depth of the boring);
- Monitoring Well MW-8 52 to 53.5 and 60.8 to 66 feet bgs;
- Remediation well AS-2—56.5 to 58 feet bgs;
- Remediation well AS-3 48.2 to 49.6 and 58 to 60 feet bgs (the total depth of the boring); and
- Boring B-7—51 to 66.5 feet bgs.

Most of the silt beds beneath the Facility are located between 55 and 68 feet bgs. A site plan showing the elevation of the top of the silt beds is provided as Figure 4. Characterization of the zone of interbedded silt and sand is critical because a perched saturated zone of variable thickness exists beneath a portion of the Facility, directly above the silt beds, and the thickness of the saturated zone and direction of groundwater flow at the Facility are directly related to the relief of the silt beds. The hydrogeologic conditions are discussed in greater detail below.

5.2 HYDROGEOLOGY

A perched saturated zone exists immediately above the silt interbeds in the southern and northeastern areas of the Facility. The thickness of the perched groundwater zone ranges from approximately 10 feet thick in the areas of monitoring wells MW-1 and MW-2 to 1 to 2 feet thick in the area of monitoring well MW-4, and less than 1 foot thick near monitoring wells The approximate thickness of the saturated perched zone using the MW-6 and MW-7. groundwater elevations determined for the April 17, 2008 monitoring event is shown on Figure 5. The perched groundwater zone is not continuous; saturated conditions were not encountered at comparable depths in boring B-7, located in the northwestern area of the Facility or in monitoring well MW-5, located approximately 200 feet west of the Facility. The perched groundwater zone appears to be absent in the area of boring B-7 due to the presence of a 15-footthick sequence of low permeability silt beds that extend above the elevation of the top of the saturated zone as measured in groundwater monitoring wells located elsewhere at the Facility. The lack of groundwater in monitoring well MW-5 suggests that the silt beds underlying the perched zone at the Facility may not be continuous to the west, even though silts were encountered at comparable depths (58 to 65 feet bgs) in the boring for monitoring well MW-5.

The groundwater flow direction in the perched zone is to the west, with a variable hydraulic gradient that is steeper in the western area of the Facility. Groundwater elevation contours for the perched zone measured during the April 17, 2008 monitoring event are shown on Figure 3. Groundwater flow direction in the perched zone is likely controlled by the subsurface topography of the upper silt layers that underlie the perched groundwater.

Saturated conditions were also encountered at greater depths, beginning at approximately 115 feet bgs in the boring for monitoring well MW-1. The depth of the deeper saturated zone correlates with the sea level aquifer in the area in which the majority of the local drinking water wells are installed.

5.3 CONTAMINANT DISTRIBUTION

A release of gasoline occurred to subsurface soil from Tank 2 approximately September 2005. The area of the release is thought to be at the southern end of UST, below the fill port. The primary path of migration appears to have been downward through the sandy vadose zone soils. The field investigations completed to date have not found significant lateral migration of petroleum hydrocarbons in the vadose zone. However, the relatively high concentrations of GRO and BTEX in groundwater samples collected from monitoring wells MW-4, MW-6 and MW-7 relative to the considerably lower concentrations detected in recent groundwater samples from monitoring wells MW-2 and MW-8 suggest that impacts to groundwater and possibly vadose zone soil may extend to the south beyond the current monitoring well network at the Facility. The extent of impacts to perched groundwater in the down-gradient direction of groundwater flow from monitoring wells MW-6 and MW-8 has not been delineated.

The highest concentrations of GRO and BTEX in the perched groundwater are found in areas where the saturated thickness is very thin. The conditions encountered during the recent installation of monitoring wells MW-6 and MW-7 indicate that the saturated thickness of the

perched zone is less than 1 foot thick in these areas. The saturated thickness of the perched zone is about 2 feet thick near monitoring well MW-4.

The vertical migration of petroleum hydrocarbons appears to have been impeded by the presence of the saturated perched zone. Borings that have been advanced into the silt layers within the perched zone have shown significantly decreasing concentrations of volatile organic compounds with depth, as measured with a PID. The soil boring for monitoring well MW-1 was advanced to 125 feet bgs and none of the soil samples collected below the silt layers underlying the perched water-bearing zone (i.e., at depths greater than 65 feet bgs) contained either GRO or BTEX constituents at concentrations above MTCA cleanup levels. Further, laboratory results for reconnaissance groundwater samples collected from the sea level aquifer at approximately 118 feet bgs during boring for monitoring well MW-1 did not detect GRO or BTEX constituents at levels at or above the laboratory reporting limits.

Light nonaqueous-phase liquid has not been observed in any of the monitoring wells at the Facility. The highest concentrations of GRO and BTEX constituents in groundwater have been from samples collected from monitoring well MW-4, suggesting that some of the gasoline from the UST release may have migrated downward in a westerly or southwesterly direction. A steep concentration gradient of two to three orders of magnitude for GRO and BTEX in groundwater exists between monitoring wells MW-2 and MW-4, which are located approximately 25 feet from each other. GRO and BTEX constituents in groundwater samples from monitoring well MW-1 (which had the highest concentrations of GRO and BTEX constituents detected in groundwater samples collected prior to installation of monitoring well MW-4) have not exceeded MTCA Method A cleanup levels for four consecutive quarterly monitoring events. This observed decrease in petroleum hydrocarbon concentrations in groundwater samples from monitoring well MW-1 may be a result of the SVE system effectively removing petroleum hydrocarbon vapors from the vadose zone soils above the perched groundwater zone near the monitoring well. The reduction in GRO and BTEX concentrations in groundwater samples from monitoring well MW-1 may be attributed also to the ongoing hydrologic processes of advection, dispersion, and diffusion in the absence of an ongoing primary contaminant source.

6.0 SUMMARY AND CONCLUSIONS

The groundwater elevations measured in April 2008 were slightly higher than the December 2007 data, and show a general westerly direction of groundwater flow. Depth to groundwater measurements indicate that perched saturated zone of groundwater diminishes to the west and south of the Facility boundary.

The analytical results of the April 2008 groundwater monitoring event indicate that elevated concentrations of GRO and BTEX constituents are present in groundwater in the southwestern portion of the Facility and in groundwater on the southeastern portion of the west-adjacent property. The highest concentrations of GRO and BTEX constituents were detected in groundwater in the vicinity of groundwater monitoring well MW-4 and in the newly installed groundwater monitoring wells MW-6 and MW-7. In March 2007, concentrations of GRO and BTEX constituents in groundwater near the source area declined to below MTCA Method A cleanup levels, and have continued to decline as shown by the analytical results for the April 2008 groundwater sample from monitoring well MW-1.

The SVE system is effectively removing and treating vapor-phase petroleum hydrocarbons from subsurface soil at the Facility. Contaminant extraction rates were estimated to be between 1.6 and 38.7 pounds per day over the period of operation of the treatment system, and currently are at the lower end of this range. Contaminant extractions rates are decreasing as the bulk of the contaminant mass is removed from subsurface soil. All four of the SVE wells at the Facility currently are being used for extraction of vapors from the vadose zone in the area of the release.

Farallon had anticipated contracting of the installation of AS and SVE piping to connect AS-1 through AS-3 and SVE-4 to the treatment system. However, given the very thin amount of groundwater encountered in monitoring wells MW-6 and MW-7, chemical oxidation may be a more viable treatment alternative for the perched groundwater. Air sparging in such a thin saturated zone will have a very small radius of influence and may not be the most effective treatment technology based on the site conditions. Farallon is currently in discussion with chemical oxidant vendors to assess the feasibility of chemical oxidation as a treatment alternative. The SVE system will continue to be operated during this assessment. Farallon has also prepared an access agreement for installation of monitoring wells on the property to the west of monitoring wells MW-6 through 8 (Island County tax parcel R229911-093-1210) and is in ongoing negotiations with Island County regarding installation of monitoring wells within the South Harbor Avenue and Main Street right-of-ways.

FIGURES

CLEANUP ACTION PROGRESS REPORT MAY 2008 WHIDBEY MARINE & AUTO SUPPLY FACILITY 1689 Main Street Freeland, Washington

Farallon PN: 454-001











TABLES

CLEANUP ACTION PROGRESS REPORT MAY 2008 WHIDBEY MARINE & AUTO SUPPLY FACILITY 1689 Main Street Freeland, Washington

Farallon PN: 454-001

Table 1Summary of Laboratory Analytical Results for SoilWhidbey Marine & Auto SupplyFreeland, WashingtonFarallon PN: 454-001

				Analytical Results (milligrams per kilogram)				
Sample Identification	Sample Date	Sample Location	Depth (feet) ¹	GRO ²	Benzene ³	Toluene ³	Ethylbenzene ³	Xylenes ³
MW6-55	3/24/2008	MW-6	55	<3	< 0.03	< 0.05	< 0.05	< 0.2
MW6-58	3/24/2008	MW-6	58	9	< 0.03	0.3	0.1	0.8
MW6-59.5	3/24/2008	MW-6	59.5	45	1.3	4.8	0.8	4.3
MW7-56.5	3/25/2008	MW-7	56.5	580	1.3	9.9	1.8	17
MW7-64.5	3/25/2008	MW-7	64.5	12	2.2	0.08	0.4	1.9
MW8-57	3/26/2008	MW-8	57	<3	< 0.03	< 0.05	< 0.05	< 0.2
MW8-75	3/26/2008	MW-8	75	3	0.05	0.1	0.07	0.4
AS3-55	3/24/2008	AS-3	55	58	0.4	10	0.6	6.2
AS3-57.2	3/24/2008	AS-3	57.2	<3	< 0.03	< 0.05	< 0.05	< 0.2
MTCA Method A (Cleanup Levels	for Soil ⁴		30	0.03	7	6	9

NOTES:

<Indicates analyte not detected at or above the stated laboratory practical quantitation limit.

Results in **Bold** indicate concentration exceeds Washington State Department of Ecology Model Toxics Control Act Cleanup Regulation (MTCA) Method A cleanup levels for soil.

¹Depth of sample collected in feet below ground surface.

²Analyzed by Northwest Method NWTPH-Gx.

³Analyzed by U.S. Environmental Protection Agency Method 8021B.

⁴MTCA Method A Soil Cleanup Levels for Unrestricted Land Uses, Table 740-1 of Section 900 of Chapter 173-340 of the Washington Administrative Code, as amended November 2007.

GRO = total petroleum hydrocarbons as gasoline-range organics

Table 2Groundwater Elevation DataWhidbey Marine & Auto SupplyFreeland, WashingtonFarallon PN: 454-001

		Top of Well Casing	Depth to Water	Groundwater
Well Identification	Date	Elevation (feet) ¹	(feet) ²	Elevation (feet) ¹
	12/5/05	116.64	52.54	64.10
	6/7/06		52.67	63.78
	10/9/06		51.93	64.52
\mathbf{MW} 1 ³	1/9/07		51.80	64.65
101 00 - 1	3/27/07	116.45	51.50	64.95
	6/19/07		51.66	64.79
	12/7/07		51.98	64.47
	4/17/08		51.10	65.35
	12/5/05		55.06	62.43
	6/7/06		55.56	61.93
	10/9/06		54.69	62.80
MW 2	1/9/07	117.40	54.60	62.89
141 44 -2	3/27/07	117.49	54.44	63.05
	6/19/07		54.50	62.99
	12/7/07		54.81	62.68
	4/17/08		54.06	63.43
	12/5/05		53.48	63.99
	6/7/06		53.96	63.51
	10/9/06		53.26	64.21
MW-3	1/9/07	117 47	53.02	64.45
141 44 - 5	3/27/07	117.47	52.82	64.65
	6/19/07		52.70	64.77
	12/7/07		53.33	64.14
	4/17/08		52.50	64.97
	3/27/07		53.94	63.33
MW 4	6/19/07	117 27	54.02	63.25
141 44 -4	12/7/07	11/.2/	54.28	62.99
	4/17/08		53.58	63.69
MW-6	4/17/08	116.56	59.84	56.72
MW-7	4/17/08	116.82	56.98	59.84
MW-8	4/17/08	117.23	55.29	61.94

NOTES:

¹Feet above mean sea level, based on May 2008 survey data.

²Feet below top of well casing.

³Top of well casing elevation adjusted using change in total depth measurements before and after change in well casing length following soil vapor extraction system installation.

Table 3Summary of Field Parameter Measurements in GroundwaterWhidbey Marine Auto SupplyFreeland, WashingtonFarallon PN: 454-001

		Field Measurements							
Well			Temp.	Conductivity					
Identification	Date	pН	(°C)	(mS/cm)	DO (mg/l)	ORP (mV)			
	12/5/05	7.06	11.5	0.248	5.80	234.8			
	6/7/06	5.20	13.4	0.373	14.95	473.9			
	10/9/06	6.43	13.25	0.691	6.01	236.9			
MW 1	1/9/07	6.35	11.27	0.368	6.96	239.0			
101 00 - 1	3/37/07	6.74	12.24	0.332	8.28	238.3			
	6/19/07	5.22	18.46	0.384	9.23	525.7			
	12/7/07	7.12	11.03	0.367	13.03	239.7			
	4/18/08	6.17	10.80	0.352	6.72	181.5			
	12/5/05	7.17	12.06	0.233	5.91	224.5			
	6/7/06	5.59	15.4	0.340	11.15	487.9			
	10/9/06	6.86	13.87	0.594	14.94	284.3			
MW 2	1/9/07	6.41	12.34	0.394	6.42	260.0			
IVI VV -2	3/37/07	6.55	13.51	0.409	6.97	197.4			
	6/19/07	4.26	17.09	0.398	7.42	556.3			
	12/7/07	7.07	11.88	0.410	10.88	245.4			
	4/18/08	6.03	12.39	0.426	2.74	89.5			
	12/5/05	7.31	11.00	0.304	2.02	180.9			
	6/7/06	5.51	13.9	0.337	11.80	488.2			
	10/9/06	6.95	12.42	0.465	4.24	291.8			
MW 3	1/9/07	6.95	10.73	0.333	3.38	254.2			
101 00 -5	3/27/07	7.28	11.74	0.336	1.71	169.3			
	6/19/07	4.24	14.64	0.325	2.52	503.9			
	12/7/07	7.16	11.31	0.313	3.07	210.8			
	4/18/08	6.73	10.15	0.334	1.77	110.6			
	3/27/07	6.53	13	0.354	1.26	219.6			
MW-4	6/19/07	4.7	16.61	0.283	1.55	523.5			
111 11	12/7/07	6.38	10.20	0.242	3.58	246.5			
	4/18/08	5.93	10.33	0.274	1.66	73.3			
MW-7	4/18/08	6.07	11.99	0.562	4.26	162.2			
MW-8	4/18/08	6.06	12.49	0.431	5.32	209.8			

NOTES:

pH, temperature, conductivity, DO, and ORP measured in the field using YSI 600 XL with flow-through cell.

°C = degrees Celsius DO = dissolved oxygen mg/l = milligrams per liter

mV = millivolts

ORP = oxidation/reduction potential mS/cm = millisiemens per centimeter

Table 4Summary of Laboratory Analytical Results for GroundwaterWhidbey Marine & Auto SupplyFreeland, WashingtonFarallon PN: 454-001

			Analytical Results (micrograms per liter)					
Sample	Sample		anal	D 2	T 1 2	D (1) D (2)	2	
Location	Identification	Sample Date	GRO	Benzene	Toluene	Ethylbenzene	Xylenes ⁻	
	MW1-120505	12/5/05	4,200	480	770	65	318	
	MW1-060706	6/7/06	5,800	500	1,000	70	780	
	MW-1-100906	10/9/06	17,000	2,400	3,800	270	2,200	
	MW1-010907	1/9/07	1,500	14	6	11	120	
MW-1	QA/QC-010907	1/9/07	1,500	11	6	10	110	
	MW1-032707	3/27/07	290	1	1	<1	17	
	QA/QC-032707	3/27/07	320	1	<1	<1	19	
	MW1-061907	6/19/07	73	<1	<1	<1	<3	
	MW1-120707	12/7/07	110	<1	<1	<1	<3	
	MW1-041808	4/18/08	74	<1	<1	<1	<3	
	MW2-120505	12/5/05	570	110	110	2.8	50	
	MW2-060706	6/7/06	2,800	440	540	15	430	
	MW2-100906	10/9/06	370	20	44	1	77	
MW-2	MW2-010907	1/9/07	730	35	69	11	150	
141 44 -22	MW2-032707	3/27/07	610	6	9	<1	150	
	MW2-061907	6/19/07	1,000	17	52	22	200	
	MW2-120707	12/7/07	2,300	7	310	36	270	
	MW2-041808	4/18/08	3,700	<1	57	33	890	
	MW3-120505	12/5/05	<100	<1.0	<1.0	<1.0	<2.0	
	FD-120505	12/5/05	<100	<1.0	<1.0	<1.0	<2.0	
	MW3-060706	6/7/06	<50	<1	<1	<1	<3	
	MW3-100906	10/9/06	<50	<1	<1	<1	<3	
MW-3	MW3-010907	1/9/07	<50	<1	<1	<1	<3	
101 00 -5	MW3-032707	3/27/07	<50	<1	<1	<1	<3	
	MW3-061907	6/19/07	<50	<1	<1	<1	<3	
	QA/QC-061907	6/19/07	<50	<1	<1	<1	<3	
	MW3-120707	12/7/07	<50	<1	<1	<1	<3	
	MW3-041808	4/18/08	<50	<1	<1	<1	<3	
	MW4-032707	3/27/07	99,000	31,000	32,000	970	6,000	
	MW4-061907	6/19/07	110,000	22,000	36,000	1,600	8,200	
MW-4	MW4-120707	12/7/07	39,000	7,600	12,000	300	2,400	
	QA/QC-120707	12/7/07	60,000	9,500	18,000	710	4,700	
	MW4-041808	4/18/08	140,000	530	42,000	1,600	9,400	
MW-6	MW6-041708	4/18/08	23,000	260	1,500	530	3,600	
MW-7	MW7-041808	4/18/08	54,000	13,000	17,000	420	3,700	
MW 8	MW8-041808	4/18/08	5,400	<1	57	57	890	
141 44 -0	QA/QC-1-041808	4/18/08	5,600	<1	42	55	930	
MTCA Metho	d A Cleanup Levels	for						
Groundwater	3		800	5	1,000	700	1,000	

Table 4Summary of Laboratory Analytical Results for GroundwaterWhidbey Marine & Auto SupplyFreeland, WashingtonFarallon PN: 454-001

NOTES:

<Indicates analyte not detected at or above the stated laboratory practical quantitation limit.

GRO = total petroleum hydrocarbons as gasoline-range organics

Results in Bold indicate concentration exceeds Washington State Department of Ecology Model Toxics

Control Act Cleanup Regulation (MTCA) Method A cleanup levels for groundwater.

¹Analyzed by Northwest Method NWTPH-Gx.

²Analyzed by U.S. Environmental Protection Agency Method 8021B.

³MTCA Method A Cleanup Levels for Groundwater, Table 720-1 of Section 900 of Chapter 173-340 of the Washington Administrative Code, as amended February 2001.

Table 5Soil Vapor Extraction System Operation Monitoring ResultsWhidbey Marine & Auto SupplyFreeland, WashingtonFarallon PN: 454-001

	Air Flow			Flow Bates³ (sofm)				Influent Concentrations						Catalyst
	Rate ¹	Vacuum ²		Flow Kat	es (sciiii)	-	SVE Syste	m (ppmv) ⁴	pmv) ⁴ PID Measurements (ppm)					Temperature
Date	(scfm)	(iow)	MW-1	SVE-2D	SVE-2S	SVE-3	Gasoline	Benzene	Catox Inlet ⁵	MW-1 ⁶	SVE-2D ⁶	SVE-2S ⁶	SVE-3 ⁶	(°F)
9/8/06	177.0	17.5	NM	NO	NO	NO	1,700	NM	1,320	NM	NO	NO	NO	909
9/13/06	167.0	NM	NM	NO	NO	NO	NM	NM	843	NM	NO	NO	NO	792
9/20/06	179.0	NM	NM	NO	NO	NO	NM	NM	1,248	NM	NO	NO	NO	980
9/27/06	185.2	17.0	18.73	NO	NO	NO	2,200	NM	1,865	NM	NO	NO	NO	984
10/04/06	179.1	18.5	24.77	NO	NO	NO	2,200	NM	NM	NM	NO	NO	NO	1,075
10/09/06	188.1	18.0	26.48	NO	NO	NO	2,000	15	1,909	NM	NO	NO	NO	1,048
11/06/06	172.8	19.0	11.84	25.12	20.51	NO	800	4	1,230	20-79	4,160	>9,999	NO	879
11/20/06	172.8	16.0	11.84	34.53	11.84	NO	500	1	1,200	450-1,000	4,950	900-1,200	3,320	845
12/19/06	176.0	26.0	13.24	49.50	32.43	33.5	200	1	1,050	400-700	1,050	600	475-700	930
1/9/07	166.3	28.5	13.24	57.4	8.37	47.7	100	1	1,750	210	1,950	110	1,200	900
2/6/07	169.6	38.5	5.92	83.7	11.84	71.3	80	0.5	1,489	130	946	65.9	425	723
3/12/07	154.2	38.5	14.5	83.7	11.84	70.1	150	<1	645	14.1	600	22.5	230	663
3/27/07	154.2	38.5	11.84	82.7	22.93	71.3	175	<1	415	7.9	7.8	1.6	1.5	660
5/18/07	159.5	36.0	10.26	82.7	5.92	70.1	50	<1	335	3.5	1.6	1.7	2.3	642
6/19/07	166.3	34.5	11.84	79.4	10.26	74.9	60	<1	435	0	0.0	0	0.0	647
7/16/07	156.0	38.0	10.26	87.8	10.26	74	100	<1	350	0.03	0.2	0.3	0.3	641
8/16/07	166.3	38.0	8.37	74.9	26.48	79.4	150	<1	288	1	1.1	1.3	1.1	646
9/14/07	210.3	39.0	26.48	85.8	25.12	74.9	30	< 0.2	244	0.6	0.5	0.18	1.6	571
10/22/07	135.1	40.0	42.7	85.8	45.9	70.1	<30	< 0.2	258	0	0.0	0	0.0	578
12/6/07	182.2	40.0	41.87	83.7	73.7	68.8	<30	< 0.2	282	0.9	0.3	0.7	0.5	618
1/10/08	157.8	40.2	13.24	81.6	8.37	70.1	NM	NM	184	0.2	0.2	0.4	0.3	646
2/8/08	172.8	43.0	16.75	102.56	99.09	72.5	NM	NM	162	0	1.5	0.3	0.7	636
3/21/08	386.4	43.0	29.01	132.4	39.72	70.1	40	< 0.1	127	1.3	0.9	0.5	1.1	574
4/17/08	182.2	42.0	32.43	81.6	41.87	83.7	60	0.1	105	0	0.1	0.2	0.0	571
5/14/08	159.5	40.0	11.84	87.8	11.84	79.4	30	< 0.1	106	0.6	0.4	0.8	0.7	562

Table 5Soil Vapor Extraction System Operation Monitoring ResultsWhidbey Marine & Auto SupplyFreeland, WashingtonFarallon PN: 454-001

NOTES:

¹Soil vapor extraction (SVE) remediation system influent air flow rate measured upstream of blower.

²Vacuum measurement collected downstream of water knockout and upstream of SVE blower.

³Air flow rates as measured at individual SVE pipes at piping array control manifold.

⁴Air concentrations measured using compound-specific Gastec colorimetric detection tubes and pump as measured through sampling port located downstream of SVE system blower at flame arrestor.

measured through sampling port located downstream of SVE system blower at frame artestor.

⁵Catox inlet concentrations measured at sampling port located downstream of SVE system blower at flame arrestor.

⁶Concentrations at wells measured with PID at individual SVE pipes at piping aray control manifold.

> = concentration greater than instrument reporting range

^o F = degrees Fahrenheit
iow = inches of water
NM = not measured
NO = well not online
PID = photoionization detector
ppm = parts per million (PID units)
ppmv = parts per million volume
scfm = standard cubic feet per minute
SVE = soil vapor extraction

Table 6Summary of Laboratory Analytical Results for Vapor SamplesWhidbey Marine & Auto SupplyFreeland, WashingtonFarallon PN: 454-001

			Analytical Results (micrograms per liter)						
Sample Identification	Sample Date	GRO ¹	Benzene ²	Toluene ²	Ethylbenzene ²	Xylenes ²			
Influent - 092006	9/20/06	600	84	25	10	40			
Influent - 100906	10/9/06	2,700	330	200	21	78			
Influent -121906	12/19/06	1,500	130	86	33	120			
Influent - 010907	1/9/07	1,600	100	320	38	140			
Influent - 020607	2/6/07	710	34	160	26	100			
Influent - 031207	3/12/07	630	23	93	27	130			
Influent - 032707	3/27/07	400	16	49	15	68			
Influent - 051807	5/18/07	560	14	65	30	160			
Influent - 061907	6/19/07	430	7	25	12	46			
Influent-071607	7/16/07	350	10	32	18	95			
Influent-081607	8/16/07	320	11	27	13	83			
Influent-091707	9/14/07	230	9	18	8	48			
Influent-102207	10/22/07	260	10	10	5	28			
Influent-120607	12/6/07	440	11	20	8	49			
Influent-11008	1/10/08	420	6	10	6	34			
Influent-020808	2/8/08	110	4	9	4	26			
Influent-032608	3/26/08	1,200	2	7	4	22			
Influent-041708	4/17/08	440	3	6	4	19			
Influent-051408	5/14/08	270	1	4	2	13			

NOTES:

¹Analyzed by Northwest Method NWTPH-Gx.

GRO = total petroleum hydrocarbons as gasoline-range organics

²Analyzed by U.S. Environmental Protection Agency Method 8021.

Table 7Contaminant Mass Removal CalculationsWhidbey Marine & Auto SupplyFreeland, WashingtonFarallon PN: 454-001

		Influent				Mass	
	Flow Rate	Concentration ¹	Conversion	Extraction Rate	Number	Removed ³	
Date	(scfm)	(ppmv)	Factor ²	(pounds/day)	of Days	(pounds)	Notes
9/13/06	167	1,700	0.000379	107.6	-	-	Using 9/8/06 influent data
9/20/06	179	1,700	0.000379	115.3	7	753	Using 9/8/06 influent data
9/27/06	185.2	2,200	0.000379	154.4	7	807	
10/04/06	179.1	2,200	0.000379	149.3	7	1,081	
10/09/06	188.1	2,000	0.000379	142.6	5	747	
11/06/06	172.8	800	0.000379	52.4	25	3,564	3 days down time this period
11/20/06	172.8	500	0.000379	32.7	13	681	1 day down time this period
12/19/06	176.0	200	0.000379	13.3	26	851	3 days down time this period
1/9/07	166.3	100	0.000379	6.3	21	280	
2/6/07	169.6	80	0.000379	5.1	28	176	
3/12/07	154.22	150	0.000379	8.8	33	170	1 day down time this period
3/27/07	154.22	175	0.000379	10.2	15	132	
5/18/07	159.5	50	0.000379	3.0	17	174	35 days down time this period
6/19/07	166.3	60	0.000379	3.8	32	97	
7/16/07	156	100	0.000379	5.9	27	102	
8/16/07	166.3	150	0.000379	9.5	31	183	
9/14/07	210.3	30	0.000379	2.4	29	274	
10/22/07	135.1	57	0.000379	2.9	30	72	Using Tedlar bag lab data
12/6/07	182.2	97	0.000379	6.7	10	67	35 days down time this period, bag data
1/10/08	157.8	92	0.000379	5.5	33	182	3 days down time this period, bag data
2/8/08	172.8	24	0.000379	1.6	26	41	3 days down time, Tedlar bag data
3/21/08	386.4	264	0.000379	38.7	9	348	31 days down time this period, bag data
4/17/08	182.2	97	0.000379	6.7	27	181	Using Tedlar bag lab data
5/14/08	159.5	59	0.000379	3.6	20	72	7 days down time this period, bag data

Total Mass in Pounds Removed Between Start-up and 4/17/08 11,035

Table 7Contaminant Mass Removal CalculationsWhidbey Marine & Auto SupplyFreeland, WashingtonFarallon PN: 454-001

NOTES:

¹Measured by Gastec gasoline colorimetric detection tubes as ppmv or laboratory bag sample in $\mu g/L$ using the following conversion: Influent concentration in ppmv = (influent concentration in $\mu g/L$ *liters of gas per mole)/molecular weight of gasoline Where:

> liters of gas per mole = 22.4133 liters molecular weitht of gasoline = 102^4

²Conversion factor = density of air *minutes per day*molecular weight of gasoline/(molecular weight of air*1,000,000)

Where:

density of air = 0.0748 pounds/cubic foot; minutes per day = 1,440; molecular weight of gasoline = 102^4 ; and molecular weight of air = 28.96^5 . NR = system not running ppmv = parts per million volume scfm = standard cubic feet per minute µg/L = micrograms per liter

³Mass removed = flow rate (scfm)*influent concentration (ppmv)*0.000379*extraction rate (pounds/day)*number of days since last reading.

⁴Reference: U.S. Department of Army Corps of Engineers, Environmental Engineering Manual EM 1110-1-4001,

Appendix B - Properties of Common Organic Pollutants

⁵Reference: *Handbook of Chemistry and Physics*, 80th ed., Section 14, page 16.

APPENDIX A BORING AND WELL INSTALLATION LOGS

CLEANUP ACTION PROGRESS REPORT MAY 2008 WHIDBEY MARINE & AUTO SUPPLY FACILITY 1689 Main Street Freeland, Washington

Farallon PN: 454-001

FARALLON CONSULTE 975 5th Avenue Northwes Issaquah, WA 98027	NG st	USCS	Classification and Graphic Legend
Major Divisions	USCS Graphic Symbol	USCS Letter Symbol	Lithologic Description

Coarse-	GRAVEL	CLEAN GRAVEL (Little	O Pad	GW	Well graded GRAVEL, well graded GRAVEL with sand
Grained Soil (More	AND GRAVELLY	or no fines)	8.8.	GP	Poorly graded GRAVEL, GRAVEL with sand
than 50% of material	SOIL (More than 50% of	GRAVEL WITH FINES	0.0.1	GP-GM	Poorly graded GRAVEL - GRAVEL with sand and silt
than No.	coarse fraction	(Appreciable amount of fines)	······ ······	GM	Silty GRAVEL
200 sieve size)	No. 4 sieve)		1.1.1.1.	GC	Clayey GRAVEL
	SAND AND	CLEAN SAND (Little or		sw	Well graded SAND
	SOIL (More	no intes)		SP	Poorly graded SAND
	coarse fraction	SAND WITH FINES		SP-SM	Poorly graded SAND - silty SAND
	passed	fines)		SM	Silty SAND
	4 sieve)		///	SC	Clayey SAND
				SM-ML	SILT - Silty SAND
Fine-	SILT AND	AND		ML	SILT
Soil (More	limit less		144	CL	CLAY
of material	than 507			OL	Organic SILT
than No.	SILT AND			МН	Inorganic SILT
size)	limit greater	ater	~~~	СН	Inorganic CLAY
	than 50y		\sim	ОН	Organic CLAY
		Highly Organic Soil		PT	Peat
	PAVEMENT			AC	Asphalt concrete
MATERIALS				со	Concrete
	OTHER			RK	Bedrock
				WD	Wood Debris
			77	DB	Debris (Miscellaneous)
				PC	Portland cement

	Sample Interval		Legend								
		O as	Cement Grout	Solid line indicates sharp contact between units well defined.							
		2		Dashed line indicates gradational							
-			Bentonite	contact between units.							
	water level at time of sampling		Sand Back	teet bgs = teet below ground surface NE = Not Encountered							
	Blank Casing			NA = Not Applicable							
B	Servered Casing		Well Cap	PN = Project Number							
E	Screened Gasing			units = PID units calibrated to 100 ppm isobutylene							
E:\Forms\Boilerplates\L	ogPlot\Lithology\Coverpage			0000 - Onned Oon Glassification System							
	Y	FARALLON CONSULTING 975 5th Avenue Northwest Issaquah, WA 98027	•	Lo	g o	f E	Bori	ng:	MW-6		Page 1 of 3
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Clie Pro Loc Far	ent jec all allo	: Marty Winn ct: Whidbey Marine & Auto ion: Freeland, Washington on PN: 454-001 ed By: T. Mulhern	Date/Time Started Date/Time Comple Equipment: Drilling Company Drilling Foreman: Drilling Method:	l: eted: :	3/24/08 0930 d: 3/24/08 1430 CME Cascade Drillin Andy Hollow Stem An			Sampler Type: D& Drive Hammer (Ibs.) Depth of Water ATD ing Total Boring Depth f Total Well Depth (ft Auger			18" 300 s): 59): 64.5 61
Depth (feet bgs.)	Sample Interval	Lithologic Descript	ion	uscs	USGS Graphic	% Recovery	Blow Counts 8/8/8	PID (units)	Sample ID	Sample Analyzed	Boring/Well Construction Details
0		0-0.3' Asphalt. 0.3'-4' Poorly graded gravel with silt and sand (60% sand/10% silt), fine gravel, fine to medium sand, lig estimated loose, moist, no odor, gravel is rounded.	gravel/30% ht brown,	AC GP-GN							Concrete
5		 4'-4.5' Poorly graded sand with gravel (60% sand/4 coarse sand, fine gravel, light brown, moist, medium rounded gravel. 4.5'-5.5' Poorly graded sand with silt (90% sand/10' olive gray, medium dense, moist, no odor. 	0% gravel), fine to n dense, no odor, % silt), fine sand,	SP-SN		90	5/5/6	0.0			
10-	X	9'-10.5' Poorly graded sand with silt and gravel (70' gravel/10% silt), fine to coarse sand, fine gravel, oli medium dense, moist, no odor.	% sand/20% ve gray-brown,	SP-SN	л <i>.</i> ///	90	6/6/9	0.0			Bentonite
	X	14'-14.5' Same as above. 14.5'-15.5' Poorly graded sand (95% sand/5% silt), gray, medium dense, moist, no odor.	fine sand, dark	SP-SN SP	N///	100	8/8/8	0.5			
		10/0	Il Construction	Infor	matic	n	• •				
Monu Casir Scree Scree	imei ng D en S ened	nt Type: Flush iameter (inches): 2 Iot Size (inches): 0.010 I Interval (ft bgs): 51-61 Annular S	k: #2/12 Lapis Lu eal: Concrete Geal: Bentonite	stre	Su	rvey	Gr To Bo ed Loca	ound S p of C ring A tion:	Surface Elevatio asing Elevation bandonment: X: N/A	n (ft): (ft): Y: N	N/A Bentonite //A

	FARALLON CONSULTING 975 5th Avenue Northwest Issaquah, WA 98027	Lc	og (of	Bor	ing	:MW-6	Page 2 of 3
Samole Interval	Lithologic Description	uscs	USGS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Well Constructio Details
-	19'-20.5' Poorly graded sand (90% sand/5% gravel/5% silt), fine to coarse sand, fine gravel, dark gray, medium dense, moist, no odor, rounded gravel.	SP		100	6/7/8	0.0		
	24'-25' Poorly graded gravel with sand (70% gravel/25% sand/5% silt), fine gravel, fine to coarse sand, dark gray, dense, moist, no odor, rounded gravel. 25'-25.5' Poorly graded sand (100% sand), fine sand, dark gray, dense, moist, no odor.	GP	2.12	100	11/16/16	0.0	•	
	29'-30.5' Poorly graded sand with gravel (65% sand/30% gravel/5% silt), fine to coarse sand, fine gravel, dark gray, medium dense, moist, no odor, rounded gravel.	SP		100	5/6/6	0.4		Bentonit
	34'-34.5' Same as above. 34.5'-35.2' Silty sand (80% sand/20% silt), fine sand, dark gray, dense, moist, no odor. 35.2'-35.5' Sandy silt (60% silt/40% sand), fine sand, dark gray, very stiff, moist, no odor.	SP SM ML		100	5/10/11	0.0		
	39'-40.5' Poorly graded sand (95% sand/5% silt), fine sand, dark gray, dense, moist, no odor.	SP		100	6/13/18	0.0	•	

	Farallon Consulting 975 5th Avenue Northwest Issaquah, WA 98027 Page 3 of 3											
Depth (feet bgs.)	Sample Interval	Lithologic Description	Uscs	USGS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Well Construction Details		
- - 45 -	X	44'-45.5' Same as above, becomes medium dense.	SP		100	10/13/14	0.0					
		49'-50.5' Same as above.	SP		100	13/14/15	0.4					
-					1							
- 55	X	54'-55.2' Same as above, slight petroleum-like odor. 55.2'-55.5' Silty sand (65% sand/35% silt), fine to coarse sand, dark gray, medium dense, moist to wet, no odor.	SP SM	Ref.	100 80	10/11/12 6/11/21	0.0 0.0	MW6-55	x	Sand		
-	X	55.5'-57' Poorly graded sand with silt (80% sand/10 % grave!/10% silt), fine to medium sand, fine gravel, dark gray-brown, dense, moist to wet, slight petroleum-like odor. 57'-58.5' Poorly graded sand with gravel (80% sand/15% gravel/5% silt), fine to coarse sand, fine gravel, dense, moist, moderate	SP-SN		70	11/18/19	0.0	MW6-58	×	Screen		
- 60 —		petroleum-like odor, rounded gravel. 58.5'-59' Poorly graded sand with gravel (75% sand/30 % gravel/5% silt), fine to medium sand, fine to coarse gravel, dark gray, medium dense, wet to saturated, strong petroleum-like odor. 59'-60' Silt (95% silt/5% sand), fine sand, light brown, hard, moist,	ML ML		95	8/10/20	0.0	MW6-59.5	x			
	$\left \right\rangle$	slight petroleum-like odor. 60'-61.5' Same as above, becomes rust-brown, slight petroleum-like odor. 61.5'-63' Same as above, light brown, moist to wet, slight petroleum- like odor.	ML		100 100	10/18/21	0.0					
Monu Casin Scree	umer ng D en S ened	63'-64.5' Same as above, moist, no odor. Mat Type: Flush iameter (inches): 2 Int Size (inches): 0.010 Interval (ft bgs): 51-61 Mell Construction Filter Pack: #2/12 Lapis Lu Surface Seal: Concrete Annular Seal: Bentonite	Inforr	natio	on	Gr To Bo ved Loca	ound S p of Ca ring Al tion:	Surface Elevation asing Elevation (bandonment: X: N/A	n (ft) (ft): Y:	Bentonite N/A Bentonite N/A		

FARALLON CONSULTING 975 5th Avenue Northwest Issaquah, WA 98027	Lo	g of	Borii	ng:	MW-7	Page 1 of 3
Client: Marty Winn Project: Whidbey Marine & Auto Location: Freeland, Washington Farallon PN: 454-001 Logged By: T. Mulhern	Date/Time Started: Date/Time Completed: Equipment: Drilling Company: Drilling Foreman: Drilling Method:	3/25/08 3/25/08 CME Cascade Andy Hollow S	1010 1400 Drilling Stem Auge	Sam Driv Dep Tota Tota	apler Type: D&N re Hammer (lbs.): th of Water ATD al Boring Depth (f al Well Depth (ft b	M SS 18" 300 (ft bgs): 58 ft bgs): 64.5 pgs): 59
Depth (feet bgs.) Sample Interval Cithologic Descripti	on SS	USGS Graphic % Recovery	Blow Counts 8/8/8	PID (units)	Sample ID	Boring/Well Construction Details
0 0-0.3' Asphalt. 4'-5.5'Poorly graded sand with silt (90% sand/10% s brown with rust mottling, medium dense, moist, no of 9'-10.5' Poorly graded sand with silt (90% sand/10% medium sand, fine gravel, brown, medium dense, m	AC silt), fine sand, odor. 6 silt), fine to noist, no odor. SP-S SP-S SP-S SP-S CR	M 90	0 3/4/6	0.4		Bentonite
15	nedium dense,					
Monument Type:FlushWeilCasing Diameter (inches):2Filter PaciScreen Slot Size (inches):0.010Surface SScreened Interval (ft bgs):49-59Annular S	Il Construction Infor k: #2/12 Lapis Lustre eal: Concrete feal: Bentonite	mation Surve	Gr To Bo yed Loca	ound S p of Ca ring Al tion:	Surface Elevation asing Elevation (f pandonment: X: N/A	(ft): N/A t): N/A Bentonite Y: N/A

	Ň	FARALLON CONSULTING 975 5th Avenue Northwest Issaquah, WA 98027		Lo	og o	of	Bori	ng	:MW-7	P	age 2 of 3
Depth (feet bgs.)	Sample Interval	Lithologic Description		uscs	USGS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	comple Analyzed	Well struction Details
20		19'-19.5' Same as above. 19.5'-20.5' Poorly graded sand (95% sand/5% silt), fine sand, gray-brown, medium dense, moist, no odor.	to medium	GP SP		100	10/10/11	0.0			
- 25		24'-24.5' Poorly graded gravel with sand (60%gravel/40 coarse gravel, fine to coarse sand, gray, very dense, m rounded to subrounded gravel.)%sand), fine to oist, no odor,	GP	S .	30	50 for 6"	0.0			
30-		29'-29.5' Same as above. 29.5'-30.5' Poorly graded sand (95% sand/5% silt), fine medium dense, moist, no odor.	e sand, gray,	GP SP	8	90	4/9/10	0.0			Bentonite
35		34'-34.2' Same as above. 34.2'-35.5' Poorly graded gravel with sand (60% gravel fine to coarse gravel, fine to medium sand, gray, dense no odor, rounded gravel.	/40% sand), e, dry to moist, /	GP	2 2 2 2	100	12/16/21	0.0			
40-		39'-39.3' Same as above. 39.3'-40.5' Poorly graded sand (95% sand/5% silt), fine medium dense, moist, no odor.	e sand, gray,	GP SP		100	9/12/9	0.0			
Mon Casi Scre	ume ing E en S ene	Well C nt Type: Flush Diameter (inches): 2 Slot Size (inches): 0.010 Surface Seal Interval (ft bgs): 49-59	Construction #2/12 Lapis Lu Concrete Bentonite	Inforn stre	natio Su	on irvey	Gr To Bo ved Loca	ound S p of C ring A tion:	Surface Elevation asing Elevation (fi bandonment: X: N/A	(ft): N//): N// Be Y: N/A	A A ntonite

	Ì	FARALLON CONSULTING 975 5th Avenue Northwest Issaquah, WA 98027	Lc	og (of	Bori	ing	:MW-7		Page 3 of 3
Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USGS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Well construction Details
- - 45 —	X	44'-45.5' Same as above.	SP		100	7/12/13	0.0			
-	$\left \right\rangle$	45.5'-46' Same as above.	SP		90	7/8/9	0.0			
-	\bigcirc	46'-47' Poorly graded sand (75% sand/10% gravel/5% silt), fine sand, fine to coarse gravel, gray, medium dense, moist, no odor, rounded gravel.	SP SP		100	8/10/12	1.2			
-	\bigwedge	47'-48.5' Poorly graded sand (95% sand/5% silt), fine sand, gray, medium dense, moist, no odor. 48.5'-50' Same as above, becomes dense.	SP		90	8/18/20	1.5			
50 —	\bigwedge	50'-51.5' Poorly graded sand (85% sand/10% gravel/5% silt), fine to	SP		95	13/19/19	0.0			
-	Å	medium sand, fine gravel, gray, dense, moist, no odor, rounded gravel.	90		100	7/16/17	1.1			
-	X	silt), fine to medium sand, fine to coarse gravel, gray, dense, moist no odor, angular to rounded gravel.	J			10/10/11	0.4			
-	X	53'-54.5' Poorly graded sand (95% sand/5% silt), fine sand, gray, medium dense, moist, no odor. Layer of sandy silt (50% silt/50% sand) from 54'-54.1', fine sand, stiff, wet, no odor.	SP		50	10/10/11	0.4			
55 —	X	54.5'-56' Poorly graded sand (95% sand/5% silt), fine to medium sand, gray, dense, moist, moderate petroleum-like odor.	SP		100	7/16/18	2.4			Sand
-	\square	56'-57' Same as above, strong petroleum-like odor.	SP		100	18/20/21	0.0	MW7-56.5	x	Screen
-	$\langle \rangle$	57'-57.4' Same as above, brown, moderate petroleum-like odor. 57.4'-59' Sandy silt (70%silt/30% sand), fine sand, brown, hard, moist, no odor, saturated from 58'-58 5'	SP ML		100	14/19/19	0.7	MW7-58		×
-	$\langle \rangle$	59'-60' Same as above.	ML		100	6/8/10	0.8			
60 — -	\square	60'-60.5' Silt (100% silt), gray, very stiff, moist, no odor.			100	9/14/18	0.4			
-	\bigwedge	62'-63.5' Silt (95% silt/5% sand), fine sand, brown, very stiff, moist to	ML		100	6/14/15	0.4			
-	Å	63 5'-65' Same as above	MI		100	9/14/16	0.4	·		
65	X							MW7-64.5	x	Bentonite
Monu Casin Scree	Wonument Type: Flush Well Construction Information Ground Surface Elevation (ft): N/A Casing Diameter (inches): 2 Filter Pack: #2/12 Lapis Lustre Top of Casing Elevation (ft): N/A Screen Slot Size (inches): 0.010 Surface Seal: Concrete Boring Abandonment: Bentonite									

	ARALLON CONSULTING 975 5th Avenue Northwest Issaquah, WA 98027		Lo	g o	f E	Borir	ıg:	MW-8		Page 1 of 4
Client: Marty Project: Whid Location: Free Farallon PN: 4 Logged By: T	/ Winn bey Marine & Auto land, Washington 54-001 . Mulhern	Date/Time Started Date/Time Comple Equipment: Drilling Company: Drilling Foreman: Drilling Method:	: eted:	3/26/0 3/26/0 CME Casca Andy Hollov	08 08 08 14 ade E w Ste	30 00 Drilling em Auge	San Driv Dep Tota Tota	npler Type: D& ve Hammer (Ibs.) oth of Water ATD al Boring Depth al Well Depth (ft	M SS 1 : (ft bgs (ft bgs) bgs):	8" 300): 55 : 75.5 61
Depth (feet bgs.) Sample Interval	Lithologic Descript	ion	uscs	USGS Graphic	% Recovery	Blow Counts 8/8/8	PID (units)	Sample ID	Sample Analyzed	Boring/Well Construction Details
0 0-0.3' Asph - 4'-5.5'Poorf fine to coar rounded gra - - - - - - - - - - - - -	alt. y graded sand with gravel (65% sand/30 se sand, fine gravel, brown, medium del avel. me as above, light brown. poorly graded sand with gravel (60% san and, fine to coarse gravel, light brown, r dor, subrounded gravel.	0% gravel/5% silt), nse, moist, no odor, d/40% gravel), fine nedium dense,	AC SP SP		95	4/6/6 5/8/10 5/9/10	0.2			Concrete
Monument Type: Fi Casing Diameter (inc Screen Slot Size (inc Screened Interval (ft	ush We hes): 2 Filter Pac hes): 0.010 Surface S bgs): 51-61 Annular S	Il Construction k: #2/12 Lapis Lu Seal: Concrete Seal: Bentonite	Infori stre	matic Su	on rvey	Gr To Bo ed Loca	ound s p of C ring A tion:	Surface Elevatio asing Elevation bandonment: X: N/A	n (ft): (ft): Y: N/	N/A N/A Bentonite ⁄A

Farallon Consulting 975 5th Avenue Northwest Issaquah, WA 98027										Page 2 of 4	
Depth (feet bgs.)	Sample Interval	Lithologic Description		uscs	USGS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed O	Well onstruction Details
- 20		19'-20.5' Poorly graded sand (95% sand/5% silt), fine sand, gra medium dense, moist, no odor.	ay,	SP		90	6/10/11	0.2			
25 –		24'-25.5' Same as above.		SP		95	5/8/9	0.2			
30 –		29'-30.5' Poorly graded gravel with sand (70% gravel/25% san silt), fine to coarse gravel, fine to coarse sand, light gray, dens moist, no odor, rounded to subrounded gravel.	nd/5% se, dry to	GP		100	12/16/16	0.2			Bentonite
35 -	-	34'-35.5' Poorly graded sand (95% sand/5% silt), fine to media gray, medium dense, moist, no odor.	um sand,	SP		100	6/12/12	0.2			
Mon Cas Scre Scre	iume ing E een S eeneo	Well Construction Diameter (inches): 2 Slot Size (inches): 0.010 Glinterval (ft bgs): 51-61	ruction Ir 2 Lapis Lust crete onite	n forn ire	natio Su	rvey	Gr To Bo red Loca	ound s p of C ring A tion:	Surface Elevation asing Elevation bandonment: X: N/A	n (ft): (ft): Y: N//	N/A N/A Bentonite A

	Faralion Consulting 975 5th Avenue Northwest Issaquah, WA 98027 Page 3 of 4										
Depth (feet bgs.)	Sample Interval	Lithologic Description	nscs	USGS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Well Construction Details	
		39'-40.5' Poorly graded sand with silt (90% sand/10% silt), fine sand, gray, medium dense, moist, no odor.	SP-SM		100	5/8/9	0.3				
		44'-45.5' Same as above.	SP-SN	N///	80	6/8/11	0.1				
-		45.5'-47' Poorly graded sand (95% sand/5% silt), fine sand, gray, dense, moist, no odor. 47'-48 5' Poorly graded sand with silt (90% sand/10% silt), fine sand	SP SP-SN		95 90	7/16/17 11/10/13	0.2				
-		47-46.5 Fooling graded sand with sin (90% sand/10% sin), line sand, gray, medium dense, moist, no odor. 48.5'-50' Same as above.	SP-SN		90	9/10/10	0.6				
50		50'-51.5' Same as above.	SP-SN	N	100	5/6/10	0.9				
-		51.5'-52' Silty sand (70% sand/20% silt/10% gravel), fine sand, fine to coarse gravel, brown medium dense, moist, no odor. 52'-53' Silt with gravel (85% silt/15% gravel), fine to coarse gravel, brown, medium dense, moist, no odor, angular to subrounded gravel.	SM ML		100	6/7/10	0.1				
- 55 -		53'-53.5' Same as above. 53.5'-54.5' Poorly graded sand (95% sand/5% silt), fine to medium sand, gray, dense, moist, no odor. 54.5'-56' Poorly graded sand with gravel(80% sand/20% gravel), fine to coarse sand, fine to coarse gravel, gray, estimated dense, moist, no	SP SP		90	7/22/24	0.2			Sand	
Mon Casi Scre Scre	ume ng D en S enec	odor. Well Construction nt Type: Flush iameter (inches): 2 lot Size (inches): 0.010 Interval (ft bgs): 51-61	u Infori ustre	natio Su	on	Gr To Bo /ed Loca	round op of C oring A ation:	Surface Elevation asing Elevation bandonment: X: N/A	on (fl (ft): Y	Jiiiildiiiil): N/A N/A Bentonite : N/A	

FARALLON CONSULTING 975 5th Avenue Northwest Issaquoh, WA 98027 Page 4 of										Page 4 of 4	
Depth (feet bgs.)	Sample Interval	Lithologic Description		USCS	USGS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Well Construction Details
		56'-57' Pooriy graded gravel with sand (60% gravel/40% sand), coarse gravel, fine to coarse sand, medium dense, wet, no odor 57'-57.5' Silty sand (60% sand/40% silt), fine sand, gray, medius dense, wet, no odor. 57.5'-59' Same as above.	fine to	GP SM SM		95 100	- 9/14/16	0.3 0.3	MW8-57	x	Screen
60		59'-60.3' Poorly graded sand with silt (85% sand/10% silt/5% gr fine to medium sand, fine gravel, gray, medium dense, wet, no	avel), odor.	SP		100	9/13/13	0.5			
		60.3'-60.5' Sandy silt (80% silt/20% sand), brown, stiff, moist, no 60.5'-60.8' Silty sand (65% sand/35% silt), fine sand. 60.8'-61.9' Sandy silt (70% silt/30% sand), fine sand.	o odor.	ML SM /		100	11/20/21	0.5			
		61.9'-62' Silt (100% silt), gray-blue, stiff, no odor. 62'-63' Same as above. 63'-63.5' Silt (95% silt/5% sand), fine sand, brown, stiff, moist, n				100	7/13/14	1.1			
65 -		63.5'-65' Same as above. 65'-66' Silt (100% silt), brown with rust mottling, stiff, dry to mois	/_ st, no	ML ML		100	7/22/24	4.3			Bentonite
		66'-66.5' Sand (100% sand), fine to coarse, dark gray, dense, n slight petroleum-like odor. 66.5'-68' Same as above.	noist,	SP		100	10/21/23	1.1	MW8-66.3		
		68'-69.5' Same as above, becomes fine to medium sand, gray, moist, slight petroleum-like odor.	dry to	SP		100	10/20/22	3.4			
70-	-	69.5'-71' Same as above.		SP		100	12/20/28	5 0.8			
		71'-72.5' Same as above, moderate petroleum-like odor.		SP		100	15/20/24	1 1.3	MW8-72		
		72.5'-74' Same as above, moderate petroleum-like odor.		SP		90	13/32/3	5 1.2			
75-				<u>.</u>					MW8-75	x	
Mor Cas Scre	iume ing I een S eene	Well Construction ent Type: Flush Diameter (inches): 2 Slot Size (inches): 0.010 d Interval (ft bgs): 51-61	uction In Lapis Lustr ete nite	iforr e	natio Su	on	Gr To Bo ved Loca	ound op of C oring A ation:	Surface Elevatio asing Elevation bandonment: X: N/A	n (ft (ft): Y	t): N/A N/A Bentonite : N/A

FARALLON CONSULTING 975 5th Avenue Northwest Issaquah, WA 98027	Lo	g of Bori	ng: AS-3	Page 1 of 3		
Client: Marty Winn Project: Whidbey Marine & Auto Location: Freeland, Washington Farallon PN: 454-001 Logged By: T. Mulhern	Date/Time Started: Date/Time Completed: Equipment: Drilling Company: Drilling Foreman: Drilling Method:	3/24/08 1430 3/24/08 1730 CME Cascade Drilling Andy Hollow Stem Aug	Sampler Type: D&M SS 18" Drive Hammer (Ibs.): 300 Depth of Water ATD (ft bgs): 54 g Total Boring Depth (ft bgs): 60 Total Well Depth (ft bgs): 57 uger			
Depth (feet bgs.) Sample Interval Fithologic Descripti	ion	USGS Graphic % Recovery Blow Counts 8/8/8	PID (units) Samble ID Analyzed	Boring/Well Construction Details		
0 0-0.3' Asphalt. 5 5 10 10 15	AC	mation		Concrete Bentonite		
Monument Type:FlushWellCasing Diameter (inches):2Filter PackScreen Slot Size (inches):0.010Surface SoScreened Interval (ft bgs):56-57Annular So	Il Construction Infor k: #2/12 Lapis Lustre eal: Concrete Seal: Bentonite	mation G T B Surveyed Loc	iround Surface Elevation (op of Casing Elevation (ft) oring Abandonment: ation: X: N/A	ft): N/A): N/A Bentonite Y: N/A		

			FARALLON CONSU 975 5th Avenue Nor Issaquah, WA 980	ILTING thwest)27	Log of Boring:AS-3							Page 2 of 3
Depth (feet bgs.)	Sample Interval		Lithologic De	escription		uscs	USGS Graphic	% Recovery	Blow Counts 8/8/8	PlD (mpm)	Sample ID	Vell Construction Details
20			Fluch	Well C	Construction	Inform	natio	n	G	round s	Surface Elevatio	Bentonite
Mon Cas	ume ing [ent Type: Diameter (i	Flush nches): 2	Filter Pack:	#2/12 Lapis Lus	stre			Gi To	round \$ op of C	surface Elevatio	n (π): Ν/Α (ft): Ν/Α
Scre	en S	Slot Size (ii	nches): 0.010	Surface Seal:	Concrete		e.		Bo	oring A	bandonment:	Bentonite Y· N/A
Scre	ene	d Interval (ft bgs): 56-57	Annular Seal:	: Bentonite		SL	irvey	rea Loca	ation:	A; jN/A	1. N/A

		FARALLON CONSULTING 975 5th Avenue Northwest Issaquah, WA 98027	Lc	og (of	Bori	ng	:AS-3	Page 3 of 3
Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USGS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Well Construction Details
40									
45 —		 44'-45.5' Poorly graded sand with gravel (65% sand/30% gravel/5% silt), fine to medium sand, fine gravel, gray-brown, dense, moist, no odor. 45.5'-47' Poorly graded sand (85% sand/10% gravel/5% silt), fine to medium sand, gray-brown, medium dense, moist, no odor. 	SP SP		100 100	8/16/17 7/11/15	0.0 0.0		
-		 47'-48.2' Same as above. 48.2'-48.5' Silt (90% silt/10% sand), fine to coarse sand, brown, very stiff, moist, no odor. 48.5'-49.6' Silt with gravelt (65% silt/30% gravel/5% sand), fine to 	SP ML ML		100 100	10/10/16 011/15/16	0.0	AS3-48.5	
50 —		coarse gravel, fine to medium sand, dark gray-brown, hard, no odor, rounded gravel. 49.6'-50' Poorly graded sand (95% sand/5% silt), fine sand, gray, dense, moist, no odor.	SP						
55 —		54'-55.5' Poorly graded sand (85% sand/10% gravel/ 5% silt), fine to medium sand, fine to coarse gravel, dark gray, dense, wet, strong- petroleum like odor, rounded gravel.	SP		90	16/19/18	9.8	AS3-55	×
		55.5'-56' Same as above. 56'-57' Poorly graded sand (95% sand/5% silt), fine to medium sand, dark gray, dense, strong petroleum-like odor.	SP SP MI		90 10(0 18/21/23 0 18/21/31	8.3 0.0	AS3-57 2	Sand Screen
		57'-57.5' Sandy silt (55% silt/45% sand), fine sand, medium brown with rust mottling, stiff, wet, no odor. 57.5'-58' Poorly graded sand (90% sand/5% silt), fine to medium sand, gray-brown, dense, wet, slight petroleum-like odor.	SP ML		100	0 8/20/26	0.0	no - 01.2	Bentonite
 60-	Ń	58'-60' Sandy silt (65% silt/45% sand), fine sand, gray, hard, wet, no odor.			1				

		Well C	onstruction Infor	mation	Ground Surface Elevation (
Monument Type: Flush		Filter Pack:	#2/12 Lapis Lustre		Gibulla Sui lace Elevation (i.g. 10/2
Casing Diameter (inches):	2	T IIICE T GORI	·····		Top of Casing Elevation (ft)	: N/A
Screen Slot Size (inches):	0.010	Surface Seal:	Concrete		Boring Abandonment:	Bentonite
Screened Interval (ft bgs):	56-57	Annular Seal:	Bentonite	Surveyed	Location: X: N/A	Y : N/A

		FARA 975 5 Iss	LLON CONSU 5th Avenue Nor aquah, WA 980	JLTING thwest 327		Lo	g o	f B	Bori	ng:	SVE-4		Page 1 of 3
Clic Pro Loc Fai	ent ojec cat rall	Marty Win ct: Whidbey M ion: Freeland, on PN: 454-00 ed By: T. Mull	n /larine & Auto Washington)1 hern	,	Date/Time Started: 3/25/08 0800 Sampler Type: D&M SS 18" Date/Time Completed: 3/25/08 1000 Drive Hammer (lbs.): Equipment: CME Depth of Water ATD (ft bgs): Drilling Company: Cascade Drilling Total Boring Depth (ft bgs): Drilling Foreman: Andy Total Well Depth (ft bgs): Drilling Method: Hollow Stem Auger			300 gs): 54 s): 56 50					
Depth (feet bgs.)	Sample Interval		Lithologic D	escript	ion	USCS	USGS Graphic	% Recovery	Blow Counts 8/8/8	PID (units)	Sample ID	Sample Analyzed	Boring/Well Construction Details
0 - - - - - - - - - - - - - - - - - - -		0-0.3' Asphalt.											Concrete Bentonite
Mon Cas Scre Scre	iume ing l een s	ent Type: Flush Diameter (inches): Slot Size (inches): d Interval (ft bgs):	2 0.010 40-50	We Filter Pac Surface S Annular S	ell Construction k: #2/12 Lapis I Seal: Concrete Seal: Bentonite	n Infor	matio Su	on Irvey	G To Bi ed Loc	round op of C oring A ation:	Surface Elevati asing Elevatior bandonment: X: N/A	on (ft) n (ft <u>)</u> : Y:	: N/A N/A Bentonite N/A

		FARA 975	LLON (5th Aven saquah, '	CONSULTIN ue Northwes WA 98027	IG t		Lc	g (of	Bor	ing	SVE-4		Page 2 of 3
Depth (feet bgs.) Samole Interval			Litholo	gic Descri	ption		USCS	USGS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Well Construction Details
					Well Co	onstruction	Inform	natia						Bentonite
Monum Casing	nent Type: 9 Diameter (Flush (inches):	2	Filter	Pack: ce Seal·	#2/12 Lapis Lu Concrete	stre			Gi To	ound a pop of C	asing Elevation	יי (ת): (ft):	N/A Bentopite
Screen	r olor olze (ned Interval	(ft bgs):	40-50	Annu	lar Seal:	Bentonite		Su	ırvey	red Loca	ation:	X: N/A	Y: I	N/A

		FARALLON CONSULTING 975 5th Avenue Northwest Issaquah, WA 98027		Lo	g	of	Bori	ng	SVE-4	Page 3 of 3
Depth (feet bgs.)	Sample Interval	Lithologic Description		nscs	USGS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Well Construction Details
40				,						Sand
45 —		44'-45.5' Poorly graded sand with silt (90% sand/10% silt), fine medium sand, gray, medium dense, moist, no odor.	to S	P-SM		100	11/12/12	0.5		Screen
-		45.5'-47' Same as above.	S	P-SM		95	4/11/18	0.3		
		47'-48.5' Silty sand (85% sand/15% silt), fine to medium sand, g medium dense, moist, no odor. 48.5'-48.7' Same as above, moist to wet.	gray,	SM SM /		100	6/8/9	0.8		
50 —		48.7'-49.5' Poorly graded sand with silt (90% sand/10% silt), fin medium sand, brown, medium dense, moist, no odor. 49.5'-50' Same as above, fine sand, slight petroleum-like odor.	e to	SP-SM		95	6/22/25	0,7	SVE4-49.5	
		50-51.5 Poony graded sand (95% sand/5% siit), fine to coarse gray, dense, moist, slight petroleum-like odor. 51.5'-53' Poony graded gravel with sand (80% gravel/20% sand to coarse gravel, fine to coarse sand, light gray, dense, moist, r	d), fine no odor.	GP	2 2 2 2	100	12/27/28	0.0		
		53'-54.5' Poorly graded sand (95% sand/5% silt) fine to medium dark gray, dense, moist, wet at 54.3.	n sand,	SP		100	12/17/17	0.1	SVE4-54	Bentonite
55		54.5'-56' Same as above, wet, strong petroluem-like odor.		SP		100	12/1//18	10.2		
Mon Casi Scre	V Image: Supervised Interval (ft bgs): Output Descent Supervised Interval (ft bgs): N/A									

APPENDIX B LABORATORY ANALYTICAL REPORTS

CLEANUP ACTION PROGRESS REPORT MAY 2008 WHIDBEY MARINE & AUTO SUPPLY FACILITY 1689 Main Street Freeland, Washington

Farallon PN: 454-001



CLIENT: FARALLON CONSULTING	DATE:	3/31/2008
1201 CORNWALL AVE. #105	CCIL JOB #:	0803158
BELLINGHAM, WA 98225	DATE RECEIVED:	3/26/2008
	WDOE ACCREDITATION #:	C1336

CLIENT CONTACT:PAUL GRABAUCLIENT PROJECT ID:WHIDBEY MARINE & AUTO/PO# 454-001CLIENT SAMPLE ID:3/24/2008CCIL SAMPLE #:-01

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	ND(<3)	MG/KG	3/28/2008	DLC
Benzene	EPA-8021	ND(<0.03)	MG/KG	3/28/2008	DLC
Toluene	EPA-8021	ND(<0.05)	MG/KG	3/28/2008	DLC
Ethylbenzene	EPA-8021	ND(<0.05)	MG/KG	3/28/2008	DLC
Xylenes	EPA-8021	ND(<0.2)	MG/KG	3/28/2008	DLC

* *ND* INDICATES ANALYZE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES.

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

Pal to



CLIENT: FARALLON CONSULTING	DATE:	3/31/2008
1201 CORNWALL AVE. #105	CCIL JOB #:	0803158
BELLINGHAM, WA 98225	DATE RECEIVED: WDOE ACCREDITATION #:	3/26/2008 C1336

CLIENT CONTACT:PAUL GRABAUCLIENT PROJECT ID:WHIDBEY MARINE & AUTO/PO# 454-001CLIENT SAMPLE ID:3/24/2008CCIL SAMPLE #:-03

DATA RESULTS

ANALYTE	METHOD	RESULTS *	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	9	MG/KG	3/28/2008	DLC
Benzene	EPA-8021	ND(<0.03)	MG/KG	3/28/2008	DLC
Toluene	EPA-8021	0.3	MG/KG	3/28/2008	DLC
Ethylbenzene	EPA-8021	0.1	MG/KG	3/28/2008	DLC
Xylenes	EPA-8021	0.8	MG/KG	3/28/2008	DLC

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY WEATHERED GASOLINE.

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

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

Mal Ano



CLIENT: FARALLON CONSULTING	DATE:	3/31/2008
1201 CORNWALL AVE. #105	CCIL JOB #:	0803158
BELLINGHAM, WA 98225	DATE RECEIVED: WDOE ACCREDITATION #:	3/26/2008 C1336

CLIENT CONTACT:PAUL GRABAUCLIENT PROJECT ID:WHIDBEY MARINE & AUTO/PO# 454-001CLIENT SAMPLE ID:3/24/2008CCIL SAMPLE #:-04

DATA RESULTS

ANALYTE	METHOD	RESULTS *	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	45	MG/KG	3/28/2008	DLC
Benzene	EPA-8021	1.3	MG/KG	3/28/2008	DLC
Toluene	EPA-8021	4.8	MG/KG	3/28/2008	DLC
Ethylbenzene	EPA-8021	0.8	MG/KG	3/28/2008	DLC
Xylenes	EPA-8021	4.3	MG/KG	3/28/2008	DLC

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY LIGHTLY WEATHERED GASOLINE.

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

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

APPROVED BY:

Mal Ano



CLIENT: FARALLON CONSULTING	DATE:	3/31/2008
1201 CORNWALL AVE. #105	CCIL JOB #:	0803158
BELLINGHAM, WA 98225	DATE RECEIVED: WDOE ACCREDITATION #:	3/26/2008 C1336

CLIENT CONTACT:PAUL GRABAUCLIENT PROJECT ID:WHIDBEY MARINE & AUTO/PO# 454-001CLIENT SAMPLE ID:3/24/200815:30 AS3-55-06

DATA RESULTS

ANALYTE	METHOD	RESULTS *	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	58	MG/KG	3/31/2008	DLC
Benzene	EPA-8021	0.4	MG/KG	3/31/2008	DLC
Toluene	EPA-8021	10	MG/KG	3/28/2008	DLC
Ethylbenzene	EPA-8021	0.6	MG/KG	3/31/2008	DLC
Xylenes	EPA-8021	6.2	MG/KG	3/31/2008	DLC

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY LIGHTLY WEATHERED GASOLINE.

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

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

Pul to



CLIENT: FARALLON CONSULTING 1201 CORNWALL AVE. #105 BELLINGHAM, WA 98225
 DATE:
 3/31/2008

 CCIL JOB #:
 0803158

 DATE RECEIVED:
 3/26/2008

 WDOE ACCREDITATION #:
 C1336

CLIENT CONTACT:PAUL GRABAUCLIENT PROJECT ID:WHIDBEY MARINE & AUTO/PO# 454-001CLIENT SAMPLE ID:3/24/2008CCIL SAMPLE #:-07

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	ND(<3)	MG/KG	3/28/2008	DLC
Benzene	EPA-8021	ND(<0.03)	MG/KG	3/28/2008	DLC
Toluene	EPA-8021	ND(<0.05)	MG/KG	3/28/2008	DLC
Ethylbenzene	EPA-8021	ND(<0.05)	MG/KG	3/28/2008	DLC
Xylenes	EPA-8021	ND(<0.2)	MG/KG	3/28/2008	DLC

* *ND* INDICATES ANALYZE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES.

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

Mal Ano



CLIENT: FARALLON CONSULTING	DATE:	3/31/2008
1201 CORNWALL AVE. #105	CCIL JOB #:	0803158
BELLINGHAM, WA 98225	DATE RECEIVED: WDOE ACCREDITATION #:	3/26/2008 C1336

CLIENT CONTACT:PAUL GRABAUCLIENT PROJECT ID:WHIDBEY MARINE & AUTO/PO# 454-001CLIENT SAMPLE ID:3/25/2008CCIL SAMPLE #:-10

DATA RESULTS

ANALYTE	METHOD	RESULTS *	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	580	MG/KG	3/28/2008	DLC
Benzene	EPA-8021	1.3	MG/KG	3/28/2008	DLC
Toluene	EPA-8021	9.9	MG/KG	3/28/2008	DLC
Ethylbenzene	EPA-8021	1.8	MG/KG	3/28/2008	DLC
Xylenes	EPA-8021	17	MG/KG	3/28/2008	DLC

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY HIGHLY WEATHERED GASOLINE.

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

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

Mal Ano



CLIENT: FARALLON CONSULTING 1201 CORNWALL AVE. #105 BELLINGHAM, WA 98225
 DATE:
 3/31/2008

 CCIL JOB #:
 0803158

 DATE RECEIVED:
 3/26/2008

 WDOE ACCREDITATION #:
 C1336

CLIENT CONTACT:PAUL GRABAUCLIENT PROJECT ID:WHIDBEY MARINE & AUTO/PO# 454-001CLIENT SAMPLE ID:3/26/20089:45MW8-57CCIL SAMPLE #:-12

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	ND(<3)	MG/KG	3/28/2008	DLC
Benzene	EPA-8021	ND(<0.03)	MG/KG	3/28/2008	DLC
Toluene	EPA-8021	ND(<0.05)	MG/KG	3/28/2008	DLC
Ethylbenzene	EPA-8021	ND(<0.05)	MG/KG	3/28/2008	DLC
Xylenes	EPA-8021	ND(<0.2)	MG/KG	3/28/2008	DLC

* "ND" INDICATES ANALYZE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES.

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

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CLIENT: FARALLON CONSULTING	DATE:	3/31/2008
1201 CORNWALL AVE. #105	CCIL JOB #:	0803158
BELLINGHAM, WA 98225	DATE RECEIVED: WDOE ACCREDITATION #:	3/26/2008 C1336

CLIENT CONTACT:PAUL GRABAUCLIENT PROJECT ID:WHIDBEY MARINE & AUTO/PO# 454-001CLIENT SAMPLE ID:3/26/20083/26/200810:45 MW8-75CCIL SAMPLE #:-15

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	3	MG/KG	3/28/2008	DLC
Benzene	EPA-8021	0.05	MG/KG	3/28/2008	DLC
Toluene	EPA-8021	0.1	MG/KG	3/28/2008	DLC
Ethylbenzene	EPA-8021	0.07	MG/KG	3/28/2008	DLC
Xylenes	EPA-8021	0.4	MG/KG	3/28/2008	DLC

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY LIGHTLY WEATHERED GASOLINE.

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

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

APPROVED BY:

Mal Ano



 CLIENT:
 FARALLON CONSULTING
 DATE:
 3/31/2008

 1201 CORNWALL AVE. #105
 CCIL JOB #:
 0803158

 BELLINGHAM, WA 98225
 DATE RECEIVED:
 3/26/2008

 WDOE ACCREDITATION #:
 C1336

CLIENT CONTACT:PAUL GRABAUCLIENT PROJECT ID:WHIDBEY MARINE & AUTO/PO# 454-001CLIENT SAMPLE ID:3/26/2008CCIL SAMPLE #:-16

DATA RESULTS

ANALYTE	METHOD	RESULTS *	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	1200	UG/L	3/28/2008	DLC
Benzene	EPA-8021	2	UG/L	3/28/2008	DLC
Toluene	EPA-8021	7	UG/L	3/28/2008	DLC
Ethylbenzene	EPA-8021	4	UG/L	3/28/2008	DLC
Xylenes	EPA-8021	22	UG/L	3/28/2008	DLC

NOTE: SAMPLE INTEGRATED USING AVIATION GAS CALIBRATION CURVE DUE TO EARLY VOLATILE RANGE PEAKS TYPICAL OF AN AIR MATRIX.

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

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



CLIENT: FARALLON CONSULTING	DATE:	3/31/2008
1201 CORNWALL AVE. #105	CCIL JOB #:	0803158
BELLINGHAM, WA 98225	DATE RECEIVED: WDOE ACCREDITATION #:	3/26/2008 C1336

CLIENT CONTACT:PAUL GRABAUCLIENT PROJECT ID:WHIDBEY MARINE & AUTO/PO# 454-001CLIENT SAMPLE ID:3/25/2008CCIL SAMPLE #:-17

DATA RESULTS

ANALYTE	METHOD	RESULTS *	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	12	MG/KG	3/28/2008	DLC
Benzene	EPA-8021	2.2	MG/KG	3/28/2008	DLC
Toluene	EPA-8021	0.08	MG/KG	3/28/2008	DLC
Ethylbenzene	EPA-8021	0.4	MG/KG	3/28/2008	DLC
Xylenes	EPA-8021	1.9	MG/KG	3/28/2008	DLC

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY WEATHERED GASOLINE.

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

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

Mal Ano



CLIENT: FARALLON CONSULTING 1201 CORNWALL AVE. #105 BELLINGHAM, WA 98225
 DATE:
 3/31/2008

 CCIL JOB #:
 0803158

 DATE RECEIVED:
 3/26/2008

 WDOE ACCREDITATION #:
 C1336

CLIENT CONTACT: PAUL GRABAU CLIENT PROJECT ID: WHIDBEY MARINE & AUTO/PO# 454-001

QUALITY CONTROL RESULTS

SURROGATE RECOVERY

CCIL SAMPLE ID		METHOD	SUR ID	% RECV
0803158-01		NWTPH-GX	TFT	85
0803158-01		EPA-8021	TFT	81
0803158-03		NWTPH-GX	TFT	97
0803158-03		EPA-8021	TFT	90
0803158-04		NWTPH-GX	TFT	91
0803158-04		EPA-8021	TFT	89
0803158-06		NWTPH-GX	TFT	82
0803158-06		EPA-8021	TFT	82
0803158-06 D	ILUTION	EPA-8021	TFT	*
0803158-07		NWTPH-GX	TFT	76
0803158-07		EPA-8021	TFT	67
0803158-10 0803158-10		NWTPH-GX EPA-8021	TFT TFT	*
0803158-12		NWTPH-GX	TFT	73
0803158-12		EPA-8021	TFT	61
0803158-15		NWTPH-GX	TFT	104
0803158-15		EPA-8021	TFT	93
0803158-16		NWTPH-GX	TFT	94
0803158-16		EPA-8021	TFT	96
0803158-17		NWTPH-GX	TFT	90
0803158-17		EPA-8021	TFT	78

* SURROGATE DILUTED OUT OF CALIBRATION RANGE.



CLIENT: FARALLON CONSULTING 1201 CORNWALL AVE. #105 BELLINGHAM, WA 98225

DATE: 3/31/2008 CCIL JOB #: 0803158 DATE RECEIVED: 3/26/2008 WDOE ACCREDITATION #: C1336

CLIENT CONTACT: PAUL GRABAU CLIENT PROJECT ID: WHIDBEY MAR

T ID: WHIDBEY MARINE & AUTO/PO# 454-001

QUALITY CONTROL RESULTS

BLANK RESULTS

MATRIX	QC BATCH ID	ASSOCIATED SAMPLES	ANALYTE	RESULT	UNITS
Gas	GA032108	0803158-16	TPH-Volatile Range	ND(<50)	UG/L
Gas	GA032108	0803158-16	Benzene	ND(<1)	UG/L
Gas	GA032108	0803158-16	Toluene	ND(<1)	UG/L
Gas	GA032108	0803158-16	Ethylbenzene	ND(<1)	UG/L
Gas	GA032108	0803158-16	Xylenes	ND(<3)	UG/L
Soil	GS032708	0803158-SOILS	TPH-Volatile Range	ND(<3)	MG/KG
Soil	GS032708	0803158-SOILS	Benzene	ND(<0.03)	MG/KG
Soil	GS032708	0803158-SOILS	Toluene	ND(<0.05)	MG/KG
Soil	GS032708	0803158-SOILS	Ethylbenzene	ND(<0.05)	MG/KG
Soil	GS032708	0803158-SOILS	Xylenes	ND(<0.2)	MG/KG
	MATRIX Gas Gas Gas Gas Soil Soil Soil Soil Soil	MATRIXQC BATCH IDGasGA032108GasGA032108GasGA032108GasGA032108GasGA032108SoilGS032708SoilGS032708SoilGS032708SoilGS032708SoilGS032708SoilGS032708SoilGS032708SoilGS032708SoilGS032708	MATRIX QC BATCH ID ASSOCIATED SAMPLES Gas GA032108 0803158-16 Soil GS032708 0803158-SOILS Soil GS032708 0803158-SOILS	MATRIXQC BATCH IDASSOCIATED SAMPLESANALYTEGasGA0321080803158-16TPH-Volatile RangeGasGA0321080803158-16BenzeneGasGA0321080803158-16TolueneGasGA0321080803158-16TolueneGasGA0321080803158-16XylenesGasGA0321080803158-16XylenesSoilGS0327080803158-SOILSTPH-Volatile RangeSoilGS0327080803158-SOILSBenzeneSoilGS0327080803158-SOILSTolueneSoilGS0327080803158-SOILSTolueneSoilGS0327080803158-SOILSSthylbenzeneSoilGS0327080803158-SOILSXylenesSoilGS0327080803158-SOILSEthylbenzeneSoilGS0327080803158-SOILSXylenes	MATRIXQC BATCH IDASSOCIATED SAMPLESANALYTERESULTGasGA0321080803158-16TPH-Volatile RangeND(<50)



CLIENT: FARALLON CONSULTING 1201 CORNWALL AVE. #105 BELLINGHAM, WA 98225

DATE: 3/31/2008 CCIL JOB #: 0803158 DATE RECEIVED: 3/26/2008 WDOE ACCREDITATION #: C1336

CLIENT CONTACT: PAUL GRABAU CLIENT PROJECT ID: WHIDBEY MARINE & AUTO/PO# 454-001

QUALITY CONTROL RESULTS

SPIKE/SPIKE DUPLICATE RESULTS

METHOD	MATRIX	QC BATCH ID	ASSOCIATED SAMPLES	ANALYTE	SPIKE RECOVERY	SPIKE DUP RECOVERY	RPD
NWTPH-GX	Gas	GA032108	0803158-16	TPH-Volatile Range	104 %	107 %	3
EPA-8021	Gas	GA032108	0803158-16	Benzene	103 %	103 %	0
EPA-8021	Gas	GA032108	0803158-16	Toluene	101 %	102 %	1
EPA-8021	Gas	GA032108	0803158-16	Ethylbenzene	99 %	97 %	2
EPA-8021	Gas	GA032108	0803158-16	Xylenes	104 %	105 %	1
NWTPH-GX	Soil	GS032708	0803158-SOILS	TPH-Volatile Range	79 %	77 %	3
EPA-8021	Soil	GS032708	0803158-SOILS	Benzene	90 %	88 %	2
EPA-8021	Soil	GS032708	0803158-SOILS	Toluene	94 %	93 %	1
EPA-8021	Soil	GS032708	0803158-SOILS	Ethylbenzene	92 %	91 %	1
EPA-8021	Soil	GS032708	0803158-SOILS	Xylenes	94 %	94 %	0

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CLIENT: FARALLON CONSULTING	DATE:	3/31/2008
1201 CORNWALL AVE. #105	CCIL JOB #:	0803158
BELLINGHAM, WA 98225	DATE RECEIVED:	3/26/2008
	WDOE ACCREDITATION #:	C1336

CLIENT CONTACT:PAUL GRABAUCLIENT PROJECT ID:WHIDBEY MARINE & AUTO/PO# 454-001CLIENT SAMPLE ID:3/24/2008CCIL SAMPLE #:-01

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	ND(<3)	MG/KG	3/28/2008	DLC
Benzene	EPA-8021	ND(<0.03)	MG/KG	3/28/2008	DLC
Toluene	EPA-8021	ND(<0.05)	MG/KG	3/28/2008	DLC
Ethylbenzene	EPA-8021	ND(<0.05)	MG/KG	3/28/2008	DLC
Xylenes	EPA-8021	ND(<0.2)	MG/KG	3/28/2008	DLC

* *ND* INDICATES ANALYZE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES.

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

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CLIENT: FARALLON CONSULTING	DATE:	3/31/2008
1201 CORNWALL AVE. #105	CCIL JOB #:	0803158
BELLINGHAM, WA 98225	DATE RECEIVED: WDOE ACCREDITATION #:	3/26/2008 C1336

CLIENT CONTACT:PAUL GRABAUCLIENT PROJECT ID:WHIDBEY MARINE & AUTO/PO# 454-001CLIENT SAMPLE ID:3/24/2008CCIL SAMPLE #:-03

DATA RESULTS

ANALYTE	METHOD	RESULTS *	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	9	MG/KG	3/28/2008	DLC
Benzene	EPA-8021	ND(<0.03)	MG/KG	3/28/2008	DLC
Toluene	EPA-8021	0.3	MG/KG	3/28/2008	DLC
Ethylbenzene	EPA-8021	0.1	MG/KG	3/28/2008	DLC
Xylenes	EPA-8021	0.8	MG/KG	3/28/2008	DLC

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY WEATHERED GASOLINE.

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

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

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CLIENT: FARALLON CONSULTING	DATE:	3/31/2008
1201 CORNWALL AVE. #105	CCIL JOB #:	0803158
BELLINGHAM, WA 98225	DATE RECEIVED: WDOE ACCREDITATION #:	3/26/2008 C1336

CLIENT CONTACT:PAUL GRABAUCLIENT PROJECT ID:WHIDBEY MARINE & AUTO/PO# 454-001CLIENT SAMPLE ID:3/24/2008CCIL SAMPLE #:-04

DATA RESULTS

ANALYTE	METHOD	RESULTS *	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	45	MG/KG	3/28/2008	DLC
Benzene	EPA-8021	1.3	MG/KG	3/28/2008	DLC
Toluene	EPA-8021	4.8	MG/KG	3/28/2008	DLC
Ethylbenzene	EPA-8021	0.8	MG/KG	3/28/2008	DLC
Xylenes	EPA-8021	4.3	MG/KG	3/28/2008	DLC

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY LIGHTLY WEATHERED GASOLINE.

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

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

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CLIENT: FARALLON CONSULTING	DATE:	3/31/2008
1201 CORNWALL AVE. #105	CCIL JOB #:	0803158
BELLINGHAM, WA 98225	DATE RECEIVED: WDOE ACCREDITATION #:	3/26/2008 C1336

CLIENT CONTACT:PAUL GRABAUCLIENT PROJECT ID:WHIDBEY MARINE & AUTO/PO# 454-001CLIENT SAMPLE ID:3/24/200815:30 AS3-55-06

DATA RESULTS

ANALYTE	METHOD	RESULTS *	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	58	MG/KG	3/31/2008	DLC
Benzene	EPA-8021	0.4	MG/KG	3/31/2008	DLC
Toluene	EPA-8021	10	MG/KG	3/28/2008	DLC
Ethylbenzene	EPA-8021	0.6	MG/KG	3/31/2008	DLC
Xylenes	EPA-8021	6.2	MG/KG	3/31/2008	DLC

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY LIGHTLY WEATHERED GASOLINE.

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

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

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CLIENT: FARALLON CONSULTING 1201 CORNWALL AVE. #105 BELLINGHAM, WA 98225
 DATE:
 3/31/2008

 CCIL JOB #:
 0803158

 DATE RECEIVED:
 3/26/2008

 WDOE ACCREDITATION #:
 C1336

CLIENT CONTACT:PAUL GRABAUCLIENT PROJECT ID:WHIDBEY MARINE & AUTO/PO# 454-001CLIENT SAMPLE ID:3/24/2008CCIL SAMPLE #:-07

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	ND(<3)	MG/KG	3/28/2008	DLC
Benzene	EPA-8021	ND(<0.03)	MG/KG	3/28/2008	DLC
Toluene	EPA-8021	ND(<0.05)	MG/KG	3/28/2008	DLC
Ethylbenzene	EPA-8021	ND(<0.05)	MG/KG	3/28/2008	DLC
Xylenes	EPA-8021	ND(<0.2)	MG/KG	3/28/2008	DLC

* *ND* INDICATES ANALYZE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES.

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

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CLIENT: FARALLON CONSULTING	DATE:	3/31/2008
1201 CORNWALL AVE. #105	CCIL JOB #:	0803158
BELLINGHAM, WA 98225	DATE RECEIVED: WDOE ACCREDITATION #:	3/26/2008 C1336

CLIENT CONTACT:PAUL GRABAUCLIENT PROJECT ID:WHIDBEY MARINE & AUTO/PO# 454-001CLIENT SAMPLE ID:3/25/2008CCIL SAMPLE #:-10

DATA RESULTS

ANALYTE	METHOD	RESULTS *	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	580	MG/KG	3/28/2008	DLC
Benzene	EPA-8021	1.3	MG/KG	3/28/2008	DLC
Toluene	EPA-8021	9.9	MG/KG	3/28/2008	DLC
Ethylbenzene	EPA-8021	1.8	MG/KG	3/28/2008	DLC
Xylenes	EPA-8021	17	MG/KG	3/28/2008	DLC

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY HIGHLY WEATHERED GASOLINE.

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

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

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CLIENT: FARALLON CONSULTING 1201 CORNWALL AVE. #105 BELLINGHAM, WA 98225
 DATE:
 3/31/2008

 CCIL JOB #:
 0803158

 DATE RECEIVED:
 3/26/2008

 WDOE ACCREDITATION #:
 C1336

CLIENT CONTACT:PAUL GRABAUCLIENT PROJECT ID:WHIDBEY MARINE & AUTO/PO# 454-001CLIENT SAMPLE ID:3/26/20089:45MW8-57CCIL SAMPLE #:-12

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	ND(<3)	MG/KG	3/28/2008	DLC
Benzene	EPA-8021	ND(<0.03)	MG/KG	3/28/2008	DLC
Toluene	EPA-8021	ND(<0.05)	MG/KG	3/28/2008	DLC
Ethylbenzene	EPA-8021	ND(<0.05)	MG/KG	3/28/2008	DLC
Xylenes	EPA-8021	ND(<0.2)	MG/KG	3/28/2008	DLC

* "ND" INDICATES ANALYZE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES.

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

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CLIENT: FARALLON CONSULTING	DATE:	3/31/2008
1201 CORNWALL AVE. #105	CCIL JOB #:	0803158
BELLINGHAM, WA 98225	DATE RECEIVED: WDOE ACCREDITATION #:	3/26/2008 C1336

CLIENT CONTACT:PAUL GRABAUCLIENT PROJECT ID:WHIDBEY MARINE & AUTO/PO# 454-001CLIENT SAMPLE ID:3/26/20083/26/200810:45 MW8-75CCIL SAMPLE #:-15

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	3	MG/KG	3/28/2008	DLC
Benzene	EPA-8021	0.05	MG/KG	3/28/2008	DLC
Toluene	EPA-8021	0.1	MG/KG	3/28/2008	DLC
Ethylbenzene	EPA-8021	0.07	MG/KG	3/28/2008	DLC
Xylenes	EPA-8021	0.4	MG/KG	3/28/2008	DLC

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY LIGHTLY WEATHERED GASOLINE.

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

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

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Mal Ano



 CLIENT:
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 DATE:
 3/31/2008

 1201 CORNWALL AVE. #105
 CCIL JOB #:
 0803158

 BELLINGHAM, WA 98225
 DATE RECEIVED:
 3/26/2008

 WDOE ACCREDITATION #:
 C1336

CLIENT CONTACT:PAUL GRABAUCLIENT PROJECT ID:WHIDBEY MARINE & AUTO/PO# 454-001CLIENT SAMPLE ID:3/26/2008CCIL SAMPLE #:-16

DATA RESULTS

ANALYTE	METHOD	RESULTS *	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	1200	UG/L	3/28/2008	DLC
Benzene	EPA-8021	2	UG/L	3/28/2008	DLC
Toluene	EPA-8021	7	UG/L	3/28/2008	DLC
Ethylbenzene	EPA-8021	4	UG/L	3/28/2008	DLC
Xylenes	EPA-8021	22	UG/L	3/28/2008	DLC

NOTE: SAMPLE INTEGRATED USING AVIATION GAS CALIBRATION CURVE DUE TO EARLY VOLATILE RANGE PEAKS TYPICAL OF AN AIR MATRIX.

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

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



CLIENT: FARALLON CONSULTING	DATE:	3/31/2008
1201 CORNWALL AVE. #105	CCIL JOB #:	0803158
BELLINGHAM, WA 98225	DATE RECEIVED: WDOE ACCREDITATION #:	3/26/2008 C1336

CLIENT CONTACT:PAUL GRABAUCLIENT PROJECT ID:WHIDBEY MARINE & AUTO/PO# 454-001CLIENT SAMPLE ID:3/25/2008CCIL SAMPLE #:-17

DATA RESULTS

ANALYTE	METHOD	RESULTS *	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	12	MG/KG	3/28/2008	DLC
Benzene	EPA-8021	2.2	MG/KG	3/28/2008	DLC
Toluene	EPA-8021	0.08	MG/KG	3/28/2008	DLC
Ethylbenzene	EPA-8021	0.4	MG/KG	3/28/2008	DLC
Xylenes	EPA-8021	1.9	MG/KG	3/28/2008	DLC

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY WEATHERED GASOLINE.

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

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

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CLIENT: FARALLON CONSULTING 1201 CORNWALL AVE. #105 BELLINGHAM, WA 98225
 DATE:
 3/31/2008

 CCIL JOB #:
 0803158

 DATE RECEIVED:
 3/26/2008

 WDOE ACCREDITATION #:
 C1336

CLIENT CONTACT: PAUL GRABAU CLIENT PROJECT ID: WHIDBEY MARINE & AUTO/PO# 454-001

QUALITY CONTROL RESULTS

SURROGATE RECOVERY

CCIL SAMPLE ID		METHOD	SUR ID	% RECV
0803158-01		NWTPH-GX	TFT	85
0803158-01		EPA-8021	TFT	81
0803158-03		NWTPH-GX	TFT	97
0803158-03		EPA-8021	TFT	90
0803158-04		NWTPH-GX	TFT	91
0803158-04		EPA-8021	TFT	89
0803158-06		NWTPH-GX	TFT	82
0803158-06		EPA-8021	TFT	82
0803158-06 D	ILUTION	EPA-8021	TFT	*
0803158-07		NWTPH-GX	TFT	76
0803158-07		EPA-8021	TFT	67
0803158-10 0803158-10		NWTPH-GX EPA-8021	TFT TFT	*
0803158-12		NWTPH-GX	TFT	73
0803158-12		EPA-8021	TFT	61
0803158-15		NWTPH-GX	TFT	104
0803158-15		EPA-8021	TFT	93
0803158-16		NWTPH-GX	TFT	94
0803158-16		EPA-8021	TFT	96
0803158-17		NWTPH-GX	TFT	90
0803158-17		EPA-8021	TFT	78

* SURROGATE DILUTED OUT OF CALIBRATION RANGE.



CLIENT: FARALLON CONSULTING 1201 CORNWALL AVE. #105 BELLINGHAM, WA 98225

DATE: 3/31/2008 CCIL JOB #: 0803158 DATE RECEIVED: 3/26/2008 WDOE ACCREDITATION #: C1336

CLIENT CONTACT: PAUL GRABAU CLIENT PROJECT ID: WHIDBEY MAR

T ID: WHIDBEY MARINE & AUTO/PO# 454-001

QUALITY CONTROL RESULTS

BLANK RESULTS

MATRIX	QC BATCH ID	ASSOCIATED SAMPLES	ANALYTE	RESULT	UNITS
Gas	GA032108	0803158-16	TPH-Volatile Range	ND(<50)	UG/L
Gas	GA032108	0803158-16	Benzene	ND(<1)	UG/L
Gas	GA032108	0803158-16	Toluene	ND(<1)	UG/L
Gas	GA032108	0803158-16	Ethylbenzene	ND(<1)	UG/L
Gas	GA032108	0803158-16	Xylenes	ND(<3)	UG/L
Soil	GS032708	0803158-SOILS	TPH-Volatile Range	ND(<3)	MG/KG
Soil	GS032708	0803158-SOILS	Benzene	ND(<0.03)	MG/KG
Soil	GS032708	0803158-SOILS	Toluene	ND(<0.05)	MG/KG
Soil	GS032708	0803158-SOILS	Ethylbenzene	ND(<0.05)	MG/KG
Soil	GS032708	0803158-SOILS	Xylenes	ND(<0.2)	MG/KG
	MATRIX Gas Gas Gas Gas Soil Soil Soil Soil Soil	MATRIXQC BATCH IDGasGA032108GasGA032108GasGA032108GasGA032108GasGA032108SoilGS032708SoilGS032708SoilGS032708SoilGS032708SoilGS032708SoilGS032708SoilGS032708SoilGS032708SoilGS032708	MATRIX QC BATCH ID ASSOCIATED SAMPLES Gas GA032108 0803158-16 Soil GS032708 0803158-SOILS Soil GS032708 0803158-SOILS	MATRIXQC BATCH IDASSOCIATED SAMPLESANALYTEGasGA0321080803158-16TPH-Volatile RangeGasGA0321080803158-16BenzeneGasGA0321080803158-16TolueneGasGA0321080803158-16TolueneGasGA0321080803158-16XylenesGasGA0321080803158-16XylenesSoilGS0327080803158-SOILSTPH-Volatile RangeSoilGS0327080803158-SOILSBenzeneSoilGS0327080803158-SOILSTolueneSoilGS0327080803158-SOILSTolueneSoilGS0327080803158-SOILSSthylbenzeneSoilGS0327080803158-SOILSXylenesSoilGS0327080803158-SOILSEthylbenzeneSoilGS0327080803158-SOILSXylenes	MATRIXQC BATCH IDASSOCIATED SAMPLESANALYTERESULTGasGA0321080803158-16TPH-Volatile RangeND(<50)



CLIENT: FARALLON CONSULTING 1201 CORNWALL AVE. #105 BELLINGHAM, WA 98225

DATE: 3/31/2008 CCIL JOB #: 0803158 DATE RECEIVED: 3/26/2008 WDOE ACCREDITATION #: C1336

CLIENT CONTACT: PAUL GRABAU CLIENT PROJECT ID: WHIDBEY MARINE & AUTO/PO# 454-001

QUALITY CONTROL RESULTS

SPIKE/SPIKE DUPLICATE RESULTS

METHOD	MATRIX	QC BATCH ID	ASSOCIATED SAMPLES	ANALYTE	SPIKE RECOVERY	SPIKE DUP RECOVERY	RPD
NWTPH-GX	Gas	GA032108	0803158-16	TPH-Volatile Range	104 %	107 %	3
EPA-8021	Gas	GA032108	0803158-16	Benzene	103 %	103 %	0
EPA-8021	Gas	GA032108	0803158-16	Toluene	101 %	102 %	1
EPA-8021	Gas	GA032108	0803158-16	Ethylbenzene	99 %	97 %	2
EPA-8021	Gas	GA032108	0803158-16	Xylenes	104 %	105 %	1
NWTPH-GX	Soil	GS032708	0803158-SOILS	TPH-Volatile Range	79 %	77 %	3
EPA-8021	Soil	GS032708	0803158-SOILS	Benzene	90 %	88 %	2
EPA-8021	Soil	GS032708	0803158-SOILS	Toluene	94 %	93 %	1
EPA-8021	Soil	GS032708	0803158-SOILS	Ethylbenzene	92 %	91 %	1
EPA-8021	Soil	GS032708	0803158-SOILS	Xylenes	94 %	94 %	0

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MIL ATS



 CLIENT: FARALLON CONSULTING
 DATE:
 4/22/2008

 1201 CORNWALL AVE. #105
 CCIL JOB #:
 0804090

 BELLINGHAM, WA 98225
 DATE RECEIVED:
 4/21/2008

 WDOE ACCREDITATION #:
 C1336

CLIENT CONTACT:PAUL GRABAUCLIENT PROJECT ID:WHIDBEY MARINE & AUTOCLIENT SAMPLE ID:4/17/2008CCIL SAMPLE #:-01

DATA RESULTS

ANALYTE	METHOD	RESULTS *	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	440	UG/L	4/21/2008	DLC
Benzene	EPA-8021	3	UG/L	4/21/2008	DLC
Toluene	EPA-8021	6	UG/L	4/21/2008	DLC
Ethylbenzene	EPA-8021	4	UG/L	4/21/2008	DLC
Xylenes	EPA-8021	19	UG/L	4/21/2008	DLC

* "ND" INDICATES ANALYZE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES.

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

NOTE: SAMPLE INTEGRATED USING AVIATION GAS CALIBRATION CURVE DUE TO EARLY VOLATILE RANGE PEAKS TYPICAL OF AN AIR MATRIX.





CLIENT: FARALLON CONSULTING 1201 CORNWALL AVE. #105 BELLINGHAM, WA 98225
 DATE:
 4/22/2008

 CCIL JOB #:
 0804090

 DATE RECEIVED:
 4/21/2008

 WDOE ACCREDITATION #:
 C1336

CLIENT CONTACT: PAUL GRABAU CLIENT PROJECT ID: WHIDBEY MARINE & AUTO

QUALITY CONTROL RESULTS

SURROGATE RECOVERY

CCIL SAMPLE ID	METHOD	SUR ID	% RECV
0804090-01	NWTPH-GX	TFT	81
0804090-01	EPA-8021	TFT	91



CLIENT: FARALLON CONSULTING 1201 CORNWALL AVE. #105 BELLINGHAM, WA 98225

DATE:	4/22/2008
CCIL JOB #:	0804090
DATE RECEIVED:	4/21/2008
WDOE ACCREDITATION #:	C1336

CLIENT CONTACT: PAUL GRABAU CLIENT PROJECT ID: WHIDBEY MARINE & AUTO

QUALITY CONTROL RESULTS

BLANK RESULTS

METHOD	MATRIX	QC BATCH ID	ASSOCIATED SAMPLES	ANALYTE	RESULT	UNITS
NWTPH-GX	Gas	GA042108	0804090-01	TPH-Volatile Range	ND(<50)	UG/L
EPA-8021	Gas	GA042108	0804090-01	Benzene	ND(<1)	UG/L
EPA-8021	Gas	GA042108	0804090-01	Toluene	ND(<1)	UG/L
EPA-8021	Gas	GA042108	0804090-01	Ethylbenzene	ND(<1)	UG/L
EPA-8021	Gas	GA042108	0804090-01	Xylenes	ND(<3)	UG/L



CLIENT: FARALLON CONSULTING 1201 CORNWALL AVE. #105 BELLINGHAM, WA 98225

DATE:	4/22/2008
CCIL JOB #:	0804090
DATE RECEIVED:	4/21/2008
WDOE ACCREDITATION #:	C1336

CLIENT CONTACT: PAUL GRABAU CLIENT PROJECT ID: WHIDBEY MARINE & AUTO

QUALITY CONTROL RESULTS

SPIKE/SPIKE DUPLICATE RESULTS

METHOD	MATRIX	QC BATCH ID	ASSOCIATED SAMPLES	ANALYTE	SPIKE RECOVERY	SPIKE DUP RECOVERY	RPD
NWTPH-GX	Gas	GA042108	0804090-01	TPH-Volatile Range	104 %	102 %	2
EPA-8021	Gas	GA042108	0804090-01	Benzene	118 %	114 %	3
EPA-8021	Gas	GA042108	0804090-01	Toluene	113 %	108 %	5
EPA-8021	Gas	GA042108	0804090-01	Ethylbenzene	108 %	104 %	4
EPA-8021	Gas	GA042108	0804090-01	Xylenes	111 %	107 %	4





CLIENT: FARALLON CONSULTING 1201 CORNWALL AVE. #105 BELLINGHAM, WA 98225

DATE:	4/22/2008
CCIL JOB #:	0804088
DATE RECEIVED:	4/18/2008
WDOE ACCREDITATION #:	C1336

CLIENT CONTACT:PAUL GRABAUCLIENT PROJECT ID:454-001CLIENT SAMPLE ID:4/17/200812:45 DRUM-041708CCIL SAMPLE #:-01

DATA RESULTS

ANALYTE	METHOD	RESULTS *	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	3400	UG/L	4/21/2008	DLC
Benzene	EPA-8021	17	UG/L	4/21/2008	DLC
Toluene	EPA-8021	560	UG/L	4/21/2008	DLC
Ethylbenzene	EPA-8021	45	UG/L	4/21/2008	DLC
Xylenes	EPA-8021	250	UG/L	4/21/2008	DLC

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY LIGHTLY WEATHERED GASOLINE.

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

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

Pol Bagun



CLIENT: FARALLON CONSULTING 1201 CORNWALL AVE. #105 BELLINGHAM, WA 98225

DATE:	4/22/2008
CCIL JOB #:	0804088
DATE RECEIVED:	4/18/2008
WDOE ACCREDITATION #:	C1336

CLIENT CONTACT:PAUL GRABAUCLIENT PROJECT ID:454-001CLIENT SAMPLE ID:4/18/200812:37 MW1-041808CCIL SAMPLE #:-02

DATA RESULTS

ANALYTE	METHOD	RESULTS *	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	74	UG/L	4/18/2008	DLC
Benzene	EPA-8021	ND(<1)	UG/L	4/18/2008	DLC
Toluene	EPA-8021	ND(<1)	UG/L	4/18/2008	DLC
Ethylbenzene	EPA-8021	ND(<1)	UG/L	4/18/2008	DLC
Xylenes	EPA-8021	ND(<3)	UG/L	4/18/2008	DLC

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY HIGHLY WEATHERED GASOLINE.

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

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

APPROVED BY:

Por Bagun



CLIENT: FARALLON CONSULTING 1201 CORNWALL AVE. #105 BELLINGHAM, WA 98225

DATE:	4/22/2008
CCIL JOB #:	0804088
DATE RECEIVED:	4/18/2008
WDOE ACCREDITATION #:	C1336

CLIENT CONTACT:PAUL GRABAUCLIENT PROJECT ID:454-001CLIENT SAMPLE ID:4/18/200810:55 MW2-041808CCIL SAMPLE #:-03

DATA RESULTS

ANALYTE	METHOD	RESULTS *	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	3700	UG/L	4/21/2008	DLC
Benzene	EPA-8021	ND(<1)	UG/L	4/18/2008	DLC
Toluene	EPA-8021	57	UG/L	4/18/2008	DLC
Ethylbenzene	EPA-8021	33	UG/L	4/18/2008	DLC
Xylenes	EPA-8021	890	UG/L	4/21/2008	DLC

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY WEATHERED GASOLINE.

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

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

Por Bagun



CLIENT: FARALLON CONSULTING 1201 CORNWALL AVE. #105 BELLINGHAM, WA 98225

DATE:	4/22/2008
CCIL JOB #:	0804088
DATE RECEIVED:	4/18/2008
WDOE ACCREDITATION #:	C1336

CLIENT CONTACT:PAUL GRABAUCLIENT PROJECT ID:454-001CLIENT SAMPLE ID:4/18/200811:45 MW3-041808CCIL SAMPLE #:-04

DATA RESULTS

ANALYTE	METHOD	RESULTS *	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	ND(<50)	UG/L	4/18/2008	DLC
Benzene	EPA-8021	ND(<1)	UG/L	4/18/2008	DLC
Toluene	EPA-8021	ND(<1)	UG/L	4/18/2008	DLC
Ethylbenzene	EPA-8021	ND(<1)	UG/L	4/18/2008	DLC
Xylenes	EPA-8021	ND(<3)	UG/L	4/18/2008	DLC

* "ND" INDICATES ANALYZE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES.

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

APPROVED BY:

for Bayon



CLIENT: FARALLON CONSULTING 1201 CORNWALL AVE. #105 BELLINGHAM, WA 98225

DATE:	4/22/2008
CCIL JOB #:	0804088
DATE RECEIVED:	4/18/2008
WDOE ACCREDITATION #:	C1336

CLIENT CONTACT:PAUL GRABAUCLIENT PROJECT ID:454-001CLIENT SAMPLE ID:4/18/2008CCIL SAMPLE #:-05

DATA RESULTS

ANALYTE	METHOD	RESULTS *	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	140000	UG/L	4/21/2008	DLC
Benzene	EPA-8021	530	UG/L	4/21/2008	DLC
Toluene	EPA-8021	42000	UG/L	4/21/2008	DLC
Ethylbenzene	EPA-8021	1600	UG/L	4/21/2008	DLC
Xylenes	EPA-8021	9400	UG/L	4/21/2008	DLC

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY LIGHTLY WEATHERED GASOLINE.

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

APPROVED BY:

Por Bagun



CLIENT: FARALLON CONSULTING 1201 CORNWALL AVE. #105 BELLINGHAM, WA 98225

DATE:	4/22/2008
CCIL JOB #:	0804088
DATE RECEIVED:	4/18/2008
WDOE ACCREDITATION #:	C1336

CLIENT CONTACT:PAUL GRABAUCLIENT PROJECT ID:454-001CLIENT SAMPLE ID:4/17/200816:00 MW6-041708CCIL SAMPLE #:-06

DATA RESULTS

ANALYTE	METHOD	RESULTS *	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	23000	UG/L	4/21/2008	DLC
Benzene	EPA-8021	260	UG/L	4/21/2008	DLC
Toluene	EPA-8021	1500	UG/L	4/21/2008	DLC
Ethylbenzene	EPA-8021	530	UG/L	4/21/2008	DLC
Xylenes	EPA-8021	3600	UG/L	4/21/2008	DLC

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY WEATHERED GASOLINE.

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

APPROVED BY:

Por Bagun



CLIENT: FARALLON CONSULTING 1201 CORNWALL AVE. #105 BELLINGHAM, WA 98225

DATE:	4/22/2008
CCIL JOB #:	0804088
DATE RECEIVED:	4/18/2008
WDOE ACCREDITATION #:	C1336

CLIENT CONTACT:PAUL GRABAUCLIENT PROJECT ID:454-001CLIENT SAMPLE ID:4/18/200810:12 MW7-041808CCIL SAMPLE #:-07

DATA RESULTS

ANALYTE	METHOD	RESULTS *	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	54000	UG/L	4/21/2008	DLC
Benzene	EPA-8021	13000	UG/L	4/21/2008	DLC
Toluene	EPA-8021	17000	UG/L	4/21/2008	DLC
Ethylbenzene	EPA-8021	420	UG/L	4/21/2008	DLC
Xylenes	EPA-8021	3700	UG/L	4/21/2008	DLC

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY LIGHTLY WEATHERED GASOLINE.

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

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

APPROVED BY:

Pol Bagun



CLIENT: FARALLON CONSULTING 1201 CORNWALL AVE. #105 BELLINGHAM, WA 98225

DATE:	4/22/2008
CCIL JOB #:	0804088
DATE RECEIVED:	4/18/2008
WDOE ACCREDITATION #:	C1336

CLIENT CONTACT:PAUL GRABAUCLIENT PROJECT ID:454-001CLIENT SAMPLE ID:4/18/20088:50MW8-041808CCIL SAMPLE #:-08

DATA RESULTS

ANALYTE	METHOD	RESULTS *	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	5400	UG/L	4/21/2008	DLC
Benzene	EPA-8021	ND(<1)	UG/L	4/21/2008	DLC
Toluene	EPA-8021	57	UG/L	4/21/2008	DLC
Ethylbenzene	EPA-8021	57	UG/L	4/21/2008	DLC
Xylenes	EPA-8021	890	UG/L	4/21/2008	DLC

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY WEATHERED GASOLINE.

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

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

APPROVED BY:

Por Bagun



CLIENT: FARALLON CONSULTING 1201 CORNWALL AVE. #105 BELLINGHAM, WA 98225

DATE:	4/22/2008
CCIL JOB #:	0804088
DATE RECEIVED:	4/18/2008
WDOE ACCREDITATION #:	C1336

CLIENT CONTACT:PAUL GRABAUCLIENT PROJECT ID:454-001CLIENT SAMPLE ID:4/18/200816:00 QA/QC-1-041808CCIL SAMPLE #:-09

DATA RESULTS

ANALYTE	METHOD	RESULTS *	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	5600	UG/L	4/21/2008	DLC
Benzene	EPA-8021	ND(<1)	UG/L	4/21/2008	DLC
Toluene	EPA-8021	42	UG/L	4/21/2008	DLC
Ethylbenzene	EPA-8021	55	UG/L	4/21/2008	DLC
Xylenes	EPA-8021	930	UG/L	4/21/2008	DLC

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY WEATHERED GASOLINE.

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

APPROVED BY:

Por Bagun



CLIENT: FARALLON CONSULTING 1201 CORNWALL AVE. #105 BELLINGHAM, WA 98225

DATE:	4/22/2008
CCIL JOB #:	0804088
DATE RECEIVED:	4/18/2008
WDOE ACCREDITATION #:	C1336

CLIENT CONTACT: PAUL GRABAU CLIENT PROJECT ID: 454-001

QUALITY CONTROL RESULTS

SURROGATE RECOVERY

CCIL SAMPLE ID		METHOD	SUR ID	% RECV
0804088-01		NWTPH-GX	TFT	94
0804088-01		EPA-8021	TFT	96
0804088-02		NWTPH-GX	TFT	87
0804088-02		EPA-8021	TFT	89
0804088-03		NWTPH-GX	TFT	87
0804088-03		EPA-8021	TFT	82
0804088-03	DILUTION	EPA-8021	TFT	87
0804088-04		NWTPH-GX	TFT	82
0804088-04		EPA-8021	TFT	83
0804088-05		NWTPH-GX	TFT	81
0804088-05		EPA-8021	TFT	85
0804088-06		NWTPH-GX	TFT	92
0804088-06		EPA-8021	TFT	95
0804088-07		NWTPH-GX	TFT	93
0804088-07		EPA-8021	TFT	91
0804088-08		NWTPH-GX	TFT	94
0804088-08		EPA-8021	TFT	99
0804088-08	DILUTION	EPA-8021	TFT	87
0804088-09		NWTPH-GX	TFT	87
0804088-09		EPA-8021	TFT	85
0804088-09	DILUTION	EPA-8021	TFT	79



CLIENT: FARALLON CONSULTING 1201 CORNWALL AVE. #105 BELLINGHAM, WA 98225

DATE:	4/22/2008
CCIL JOB #:	0804088
DATE RECEIVED:	4/18/2008
WDOE ACCREDITATION #:	C1336

CLIENT CONTACT: PAUL GRABAU CLIENT PROJECT ID: 454-001

QUALITY CONTROL RESULTS

BLANK RESULTS

METHOD	MATRIX	QC BATCH ID	ASSOCIATED SAMPLES	ANALYTE	RESULT	UNITS
NWTPH-GX	Water	GW041808	0804088-01 to 09	TPH-Volatile Range	ND(<50)	UG/L
EPA-8021	Water	GW041808	0804088-01 to 09	Benzene	ND(<1)	UG/L
EPA-8021	Water	GW041808	0804088-01 to 09	Toluene	ND(<1)	UG/L
EPA-8021	Water	GW041808	0804088-01 to 09	Ethylbenzene	ND(<1)	UG/L
EPA-8021	Water	GW041808	0804088-01 to 09	Xylenes	ND(<3)	UG/L



CLIENT: FARALLON CONSULTING 1201 CORNWALL AVE. #105 BELLINGHAM, WA 98225
 DATE:
 4/22/2008

 CCIL JOB #:
 0804088

 DATE RECEIVED:
 4/18/2008

 WDOE ACCREDITATION #:
 C1336

CLIENT CONTACT: PAUL GRABAU CLIENT PROJECT ID: 454-001

QUALITY CONTROL RESULTS

SPIKE/SPIKE DUPLICATE RESULTS

METHOD	MATRIX	QC BATCH ID	ASSOCIATED SAMPLES	ANALYTE	SPIKE RECOVERY	SPIKE DUP RECOVERY	RPD
NWTPH-GX	Water	GW041808	0804088-01 to 09	TPH-Volatile Range	85 %	88 %	4
EPA-8021	Water	GW041808	0804088-01 to 09	Benzene	90 %	93 %	3
EPA-8021	Water	GW041808	0804088-01 to 09	Toluene	91 %	95 %	4
EPA-8021	Water	GW041808	0804088-01 to 09	Ethylbenzene	89 %	92 %	3
EPA-8021	Water	GW041808	0804088-01 to 09	Xylenes	91 %	95 %	4

APPROVED BY:

Port Bagun



CLIENT: FARALLON CONSULTING 975 5th AVE. NW SUITE 100 ISSAQUAH, WA 98027

DATE:	5/20/2008
CCIL JOB #:	0805087
DATE RECEIVED:	5/14/2008
WDOE ACCREDITATION #:	C1336

CLIENT CONTACT:PAUL GRABAUCLIENT PROJECT ID:454-001CLIENT SAMPLE ID:5/14/200814:40 INFLUENT-051408CCIL SAMPLE #:-01

DATA RESULTS

ANALYTE	METHOD	RESULTS *	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	270	UG/L	5/16/2008	DLC
Benzene	EPA-8021	1	UG/L	5/16/2008	DLC
Toluene	EPA-8021	4	UG/L	5/16/2008	DLC
Ethylbenzene	EPA-8021	2	UG/L	5/16/2008	DLC
Xylenes	EPA-8021	13	UG/L	5/16/2008	DLC

* "ND" INDICATES ANALYZE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES.

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

NOTE: SAMPLE INTEGRATED USING AVIATION GAS CALIBRATION CURVE DUE TO EARLY VOLATILE RANGE PEAKS TYPICAL OF AN AIR MATRIX.





CLIENT: FARALLON CONSULTING 975 5th AVE. NW SUITE 100 ISSAQUAH, WA 98027
 DATE:
 5/20/2008

 CCIL JOB #:
 0805087

 DATE RECEIVED:
 5/14/2008

 WDOE ACCREDITATION #:
 C1336

CLIENT CONTACT: PAUL GRABAU CLIENT PROJECT ID: 454-001

QUALITY CONTROL RESULTS

SURROGATE RECOVERY

CCIL SAMPLE ID	METHOD	SUR ID	% RECV
0805087-01	NWTPH-GX	TFT	97
0805087-01	EPA-8021	TFT	111



CLIENT: FARALLON CONSULTING 975 5th AVE. NW SUITE 100 ISSAQUAH, WA 98027
 DATE:
 5/20/2008

 CCIL JOB #:
 0805087

 DATE RECEIVED:
 5/14/2008

 WDOE ACCREDITATION #:
 C1336

CLIENT CONTACT: PAUL GRABAU CLIENT PROJECT ID: 454-001

QUALITY CONTROL RESULTS

BLANK RESULTS

METHOD	MATRIX	QC BATCH ID	ASSOCIATED SAMPLES	ANALYTE	RESULT	UNITS
NWTPH-GX	Gas	GA051608	0805087-01	TPH-Volatile Range	ND(<50)	UG/L
EPA-8021	Gas	GA051608	0805087-01	Benzene	ND(<1)	UG/L
EPA-8021	Gas	GA051608	0805087-01	Toluene	ND(<1)	UG/L
EPA-8021	Gas	GA051608	0805087-01	Ethylbenzene	ND(<1)	UG/L
EPA-8021	Gas	GA051608	0805087-01	Xylenes	ND(<3)	UG/L



CLIENT: FARALLON CONSULTING 975 5th AVE. NW SUITE 100 ISSAQUAH, WA 98027
 DATE:
 5/20/2008

 CCIL JOB #:
 0805087

 DATE RECEIVED:
 5/14/2008

 WDOE ACCREDITATION #:
 C1336

CLIENT CONTACT: PAUL GRABAU CLIENT PROJECT ID: 454-001

QUALITY CONTROL RESULTS

SPIKE/SPIKE DUPLICATE RESULTS

METHOD	MATRIX	QC BATCH ID	ASSOCIATED SAMPLES	ANALYTE	SPIKE RECOVERY	SPIKE DUP RECOVERY	RPD
NWTPH-GX	Gas	GA051608	0805087-01	TPH-Volatile Range	92 %	94 %	2
EPA-8021	Gas	GA051608	0805087-01	Benzene	108 %	111 %	3
EPA-8021	Gas	GA051608	0805087-01	Toluene	100 %	103 %	3
EPA-8021	Gas	GA051608	0805087-01	Ethylbenzene	98 %	102 %	4
EPA-8021	Gas	GA051608	0805087-01	Xylenes	102 %	106 %	4

APPROVED BY:



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