

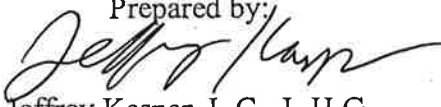
SUBSURFACE INVESTIGATION AND SOIL VAPOR EXTRACTION FEASIBILITY PILOT TEST

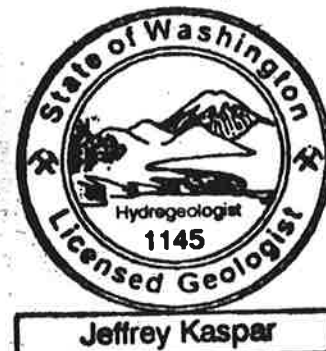
**FORMER CITY HAND LAUNDRY
1002 4TH STREET
BREMERTON, WASHINGTON**

Submitted by:
Farallon Consulting, L.L.C.
320 3rd Avenue Northeast
Issaquah, Washington 98027
Farallon PN: 603-001

For:
Stuart and Patricia Milbrad
1270 McGonagle Road
Selah, Washington 98942

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Prepared by:

Jeffrey Kaspar, L.G., L.H.G.
Senior Project Manager



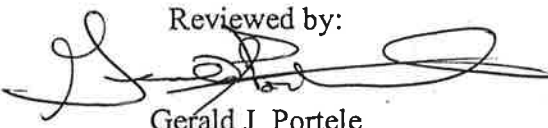
Reviewed by:

Gerald J. Portele
Principal



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EXECUTIVE SUMMARY

Farallon Consulting, L.L.C. (Farallon) has prepared this report to document the results of the subsurface investigation and soil vapor extraction (SVE) feasibility pilot test conducted at the former City Hand Laundry business, which is currently the Land Title Building parking lot, located in Bremerton, Washington (herein referred to as the Site). Previous subsurface investigations by Farallon and others have determined that releases of tetrachloroethene (PCE) to soil have occurred in the northern and southern portions of the eastern parking area at the Site, where the former City Hand Laundry facility was located. The purpose of the subsurface investigation was to assess the vertical and lateral extent of concentrations of PCE in the soil on the Site, and to assess whether concentrations of PCE are present in groundwater. The limited focused feasibility study was conducted to evaluate the technical feasibility of using SVE for cleanup of PCE identified in the vadose zone soils at the Site.

The subsurface investigation included installation of three groundwater monitoring wells (MW-1 through MW-3) in the north-central, southeast, and south-central portions of the Site to assess the lateral and vertical distribution of PCE in soil, and to assess whether the releases of PCE had affected groundwater. Five vapor extraction wells (VE-1 through VE-5) were installed in the northern and southeastern portions of the Site near the suspected source areas of the PCE releases. These vapor extraction wells were installed to facilitate the pilot testing of the SVE technology. Soil samples were collected from the monitoring well and vapor extraction well borings and were analyzed for halogenated volatile organic compounds. Groundwater monitoring and sampling was performed in July 2000 and in April 2003. The SVE pilot test was performed at the Site in July 2000.

The results of the subsurface investigation indicated that the PCE releases in the north-central and southeastern areas of the Site extend to at least 45.5 feet below the ground surface (bgs) and have reached groundwater. The concentrations of PCE decreased significantly with depth in all monitoring well and vapor extraction well borings, falling below 0.5 milligrams per kilogram (mg/kg) between 16 and 45.5 feet bgs. The Washington State Model Toxics Control Act (MTCA) Method A soil cleanup level of 0.05 mg/kg was used as the preliminary screening level for evaluation of the soil analytical results. Concentrations of PCE exceeded this screening level from depths of 2.5 feet to 45.5 feet bgs at all three monitoring well boring locations, and from depths of 5 feet to 16.5 feet in the vapor extraction well borings.

Groundwater was encountered in the monitoring well borings at depths ranging from 47 to 49.5 feet bgs. The groundwater analytical results for both July 2000 and April 2003 confirmed the presence of PCE in all three monitoring wells. Concentrations of PCE ranged from 560 to 1,300 micrograms per liter ($\mu\text{g/l}$) for the July 2000 sampling event, and from 1,600 to 3,700 $\mu\text{g/l}$ for the April 2003 sampling event. The MTCA Method A groundwater cleanup level 5.0 $\mu\text{g/l}$ for PCE was used as the preliminary screening level for evaluation of the groundwater analytical results. The concentrations of PCE in groundwater have increased from July 2000 to April 2003.



The results of the feasibility pilot testing indicate that SVE would be an effective remedial technology for treating concentrations of PCE in soil underlying the Site. The estimated radius of influence for the SVE pilot tests ranged from approximately 40 to 63 feet from the extraction point(s). Sufficient information is available to support the design of an SVE system to remediate the concentrations of PCE in the vadose zone. The groundwater analytical data indicate that technically feasible remedial alternatives for groundwater also will need to be evaluated.

The distribution of the PCE releases in soil at the Site is characterized sufficiently to proceed with developing a cleanup action plan. The remaining data gap with respect to characterization of the PCE releases in the vadose zone is whether concentrations of PCE extend off of the Site. There also are data gaps in the characterization of the distribution of the PCE releases in groundwater. All three monitoring wells contained concentrations of PCE above the preliminary screening level of 5.0 $\mu\text{g/l}$; therefore, the up-gradient and down-gradient limits of the PCE releases in groundwater require further characterization prior to developing a cleanup action plan. Further, the vertical distribution of the PCE releases in groundwater requires additional characterization to assess the depth that future cleanup actions will target. Remediation of soil and groundwater will be necessary to meet the requirements for issuance of a No Further Action determination from the Washington State Department of Ecology under MTCA.



1.0 INTRODUCTION

Farallon Consulting, L.L.C. (Farallon) has prepared this report to document the results of the subsurface investigation and soil vapor extraction (SVE) feasibility pilot test conducted at the former City Hand Laundry business, which is currently the Land Title Building parking lot, located in Bremerton, Washington (herein referred to as the Site). The portion of the Site that is the focus of the work completed is the location of the former City Hand Laundry dry cleaning facility, which includes the parking area on the eastern portion of the Site. The subsurface investigation activities included collection of soil and groundwater samples for laboratory analysis, completion of an SVE pilot test, and analysis of the technical feasibility of implementing the SVE technology for Site remediation. The purpose of the subsurface investigation was to continue the assessment of the vertical and lateral distribution of concentrations of tetrachloroethene (PCE) in soil at the Site, and to assess whether concentrations of PCE are present in groundwater. The limited focused feasibility study was conducted to evaluate the technical feasibility of using SVE for cleanup of the PCE identified in the vadose zone soils at the Site. The scope of work was completed between July 2000 and April 2003 in accordance with the proposals prepared by Farallon dated December 6, 1999, and December 5, 2002. The scope of work was completed.



2.0 SITE BACKGROUND

The Site, located at 1002 4th Street in Bremerton, Washington (Figure 1), is currently an asphalt-paved parking lot for the Land Title Building located on the east side of Warren Avenue (Figure 2). The Site includes two parking areas, eastern and western, which are divided by a planter strip located in the central portion of the Site. An underground electric line that supplies power to the lighting system in the parking area is located beneath the planter strip divider.

The properties surrounding the Site include the following: residences to the west; a concrete-paved alley, residences, and a church to the north; Warren Avenue and the Land Title Building to the east; and 4th Street, a church, and a parking lot to the south. The general topography of the area near the Site slopes to the east, toward the Land Title Building and Puget Sound beyond. The topography of the Site slopes toward the north to an existing catch basin in the northeast quadrant of the eastern parking area.

The Site was occupied by a dry cleaning establishment from approximately 1940 to 1985. Background information provided to Farallon included a schematic site plan showing the approximate location of a Stoddard solvent dry cleaning machine, two locations for PCE-based dry cleaning machines, a dry cleaning machine sump and associated drain lines, a heating oil tank for a former boiler, and two former underground storage tanks (USTs) that were used for storage of gasoline, and later, diesel fuel, for City Hand Laundry vehicle use. All former site improvements reportedly have been removed. The historic site plan information was used to select soil boring locations for investigations conducted by SECOR International Incorporated (SECOR) in May 1998, and by Farallon in September 1999.

A limited site investigation report entitled *Land Title Building Site Investigation*, dated June 12, 1998, was completed by SECOR. The limited site investigation included the collection of soil vapor samples from depths of approximately 5 feet below ground surface (bgs) at 16 soil vapor sample locations (borings SV-1 through SV-16), and soil matrix samples from 8 to 9 feet bgs from four borings (borings SV-2, SV-7, SV-12, and SV-16; Figure 3). PCE concentrations in the soil vapor samples ranged from 5.7 to 1,240 parts per million volume (ppmv). PCE concentrations in the soil matrix samples ranged from 0.27 to 0.68 milligrams per kilogram (mg/kg). The limited Site investigation also included analyses of benzene, toluene, ethylbenzene, and xylenes (BTEX) due to the presence of the former Stoddard solvent dry cleaning machine and the USTs. The BTEX concentrations reported for these samples were near or below the laboratory method reporting limits in the vicinity of the Stoddard solvent dry cleaning machine, and also very low near the former UST locations. The soil vapor sample results suggested that two potential source areas of PCE releases were present on the Site, including the following locations:

- The vicinity of the north end of the former laundry machine sump and drains (former Site features 4 and 5, Figure 2); and
- The southeast portion of the Site near the location of the dry cleaning machine that operated from 1961 to 1972 (former Site feature 1, Figure 2).



Based on the results of the limited site investigation, Farallon subsequently conducted a Phase II Subsurface Investigation (Phase II) in September 1999. The purpose of this investigation was to provide additional characterization data on the distribution of the chlorinated solvent, PCE, as well as its potential degradation products trichloroethene (TCE); cis-1,2-dichloroethene (DCE); 1,1-DCE; trans-1,2-DCE; and vinyl chloride. Supplemental analyses were not conducted to further assess the presence of petroleum hydrocarbons in the subsurface soil due to the results of the June 12, 1998, *Land Title Building Site Investigation*. The Phase II included drilling 12 soil borings (GP-1 to GP-12) to depths of up to 34 feet bgs, and collecting of 37 soil samples for laboratory analysis.

The results of the Phase II indicated that concentrations of PCE are widespread in the soil at the Site and may extend to groundwater, which is present at a depth of 40 to 50 bgs at the Site. All 37 soil samples analyzed contained concentrations of PCE above the laboratory practical quantitation limit (PQL) of 0.05 mg/kg, and 14 of the 37 soil samples contained concentrations of TCE above the PQL of 0.05 mg/kg. The highest concentration of PCE in soil was 7,200 mg/kg in the sample collected from 6 feet bgs at boring GP-1 in the northwest corner of the eastern parking area.

The data collected during the Phase I and II investigations were not sufficient to delineate the vertical distribution of PCE in the soil, or to determine if groundwater beneath the Site contained detectable concentrations of PCE. Therefore, Farallon proposed a scope of work that included additional soil sampling to assess the vertical distribution of PCE, to assess whether the PCE releases had reached groundwater beneath the Site, and to assess whether SVE was a technically feasible remedial alternative for treatment of the vadose zone soil affected by the releases of PCE. SVE was selected for evaluation because of its acceptance by the Washington State Department of Ecology (Ecology), its proven success in remediating volatile organic compounds, and the extensive thickness of the vadose zone soil affected by releases of PCE at the Site.



3.0 SCOPE OF WORK

The scope of work for the subsurface investigation program included the following elements:

- Installation of three groundwater monitoring wells (MW-1 through MW-3) in the north-central, southeast and south-central portions of the Site (Figure 2);
- Installation of five vapor extraction wells (VE-1 through VE-5) in the northern and southeastern source areas identified in the Phase II for pilot testing of SVE as a potential cleanup alternative (Figure 4);
- Collection of soil samples for lithologic description and possible laboratory analysis;
- Submittal of selected soil samples for laboratory analysis of PCE and associated degradation compounds using U.S. Environmental Protection Agency (EPA) Method 8260B;
- Measurement of groundwater levels and collection of groundwater samples from groundwater monitoring wells MW-1 through MW-3 on both July 19, 2000, and April 25, 2003;
- Submittal of groundwater samples for laboratory analysis of PCE and associated degradation compounds using EPA Method 8260B;
- Performance of SVE pilot testing at select locations to evaluate the technical feasibility of using SVE for Site cleanup; and
- Preparation of this report to document the results of the subsurface investigation activities and SVE pilot test.

The initial field sampling and pilot testing were conducted between July 7 and August 19, 2000, under the supervision of a Farallon field scientist. A second groundwater monitoring and sampling event was conducted on April 25, 2003. Prior to starting the fieldwork in July 2000, a private utility location survey was conducted by Applied Professional Services, Incorporated, of Issaquah, Washington, to locate on-site utilities. Eight soil borings were subsequently advanced by Cascade Drilling, Inc., of Bothell, Washington, using hollow-stem auger drilling methods. Farallon selected the boring locations to further assess the on-site distribution of PCE in soil, to assess the potential for PCE in groundwater, and to facilitate evaluation of SVE in the suspected source areas of the PCE releases. The eight soil borings included groundwater monitoring wells MW-1 through MW-3 and vapor extraction wells VE-1 through VE-5. The approximate locations of the borings are shown on Figure 4.

Farallon collected soil samples at 2.5- to 5-foot sample intervals at each boring to screen for evidence of contamination, and to generate a lithologic description of subsurface soil conditions. The soil samples were collected in accordance with the American Society for Testing and Materials and EPA standard protocols. A Farallon scientist documented the soil lithology in accordance with the Unified Soil Classification System. The soil samples were screened in the field for the presence of volatile organic vapors using a photoionization detector (PID) and were



examined for obvious signs of contamination, including visible discoloration, sheens, and odors. The detailed lithologic descriptions and PID readings for each sample interval are presented in the soil boring logs in Appendix A.

The soil samples collected for potential laboratory analysis were transferred directly from the split-spoon sampling device into a laboratory-prepared sample container using a clean stainless steel spoon. All non-dedicated sampling equipment and supplies were decontaminated between uses. The labeled sample containers were completely filled to preclude the loss of volatile constituents to headspace, and were immediately sealed with Teflon-lined screw caps and placed on ice in a cooler pending delivery to OnSite Environmental, Inc., of Redmond, Washington, for laboratory analysis. Chain-of-custody procedures were followed during transport of the samples from the Site to the laboratory. Based on field observations and PID readings, Farallon selected 19 soil samples for laboratory analysis of halogenated volatile organic compounds (HVOCs) by EPA Method 8260B. Analyses for petroleum hydrocarbon constituents were not performed during this subsurface investigation.

Farallon installed groundwater monitoring wells MW-1, MW-2, and MW-3 (Figure 4) to evaluate groundwater conditions in proximity to the suspected source areas (Figure 2), and to obtain information pertaining to the groundwater gradient and flow direction. The groundwater wells were installed to depths up to 55 feet bgs, and were constructed in accordance with Chapter 173-160 of the Washington Administrative Code (WAC 173-160) guidelines. The wells consisted of 2-inch diameter polyvinyl chloride (PVC) casing with flush-mounted monuments. The well screen intervals in the monitoring wells extended from approximately 45 to 55 feet bgs, and were constructed with 0.020-inch slotted PVC. Detailed logs for the monitoring well construction are included in Appendix A.

The groundwater monitoring wells were developed using a surge block and bailer following installation, and the top of the well casings were surveyed with respect to an arbitrary datum of 100 feet using differential leveling techniques. The groundwater levels in the monitoring wells were subsequently measured in July 2000 and April 2003 to assess the approximate direction of groundwater flow and the hydraulic gradient. The groundwater level in each monitoring well was measured from the surveyed reference point on the top of the well casing using an electronic water level measurement instrument. Prior to measurement, the water level was allowed to equilibrate to atmospheric conditions for a minimum period of 15 minutes after the well was opened. Each monitoring well was then purged of 3 to 5 saturated well casing volumes of water using a disposable plastic bailer. Water quality parameters were collected during purging to assess basic groundwater geochemistry, and to determine when groundwater that was representative of the surrounding formation had entered the monitoring well, as indicated by stabilization of the water quality parameters. The water quality parameters measured included pH, temperature, specific conductance, oxidation-reduction potential (ORP), turbidity, and dissolved-oxygen content.

Following purging, the groundwater samples were collected by decanting the groundwater from a clean plastic disposable bailer directly into laboratory-prepared containers. The groundwater samples were then transported under chain-of-custody protocols to OnSite Environmental, Inc., for analysis of HVOCs using EPA Method 8260B.



From July 5 to July 7, 2000, vapor extraction wells VE-1 through VE-5 (Figure 4) were installed on the Site near the source areas of PCE identified during previous investigations (Figure 2). The vapor extraction wells were installed to depths ranging from 16.8 to 21.5 feet bgs, and consisted of 2-inch diameter PVC casing with 10 feet of 0.020-inch slotted PVC well screen and flush-mounted steel monuments. Detailed logs of the vapor extraction well construction are included in Appendix A.

SVE pilot tests were subsequently performed at vapor extraction wells VE-1, VE-2, and VE-3 (Figure 4). The vapor extraction wells not used for pilot testing were used as observation points to assess the approximate radius of influence observed during each test. A vacuum of 16 to 17 inches of water (IOW) was applied during the SVE pilot tests performed at vapor extraction wells VE-1 and VE-3. An applied vacuum of 34 IOW was applied during the test performed at vapor extraction well VE-2 and the final portion of the test at vapor extraction well VE-3. A Rotron Model 404 regenerative blower was connected to a 55-gallon capacity moisture knockout tank equipped with a vacuum gauge and air dilution valve, which was connected to the pilot test well. The observed vacuum in the surrounding vapor extraction wells was measured using magnehelic vacuum gauges. A PID was used throughout the testing to screen the off-gas emissions during each pilot test for concentrations of volatile organic compounds. The pilot tests were conducted for a period of approximately two hours each, or until the observed vacuum readings stabilized. Off-gas vapor samples were collected from each extraction well for laboratory analysis at the beginning and near the end of each pilot test. To estimate the radius of influence at the applied vacuum for each extraction pilot test well, the ratio of the observed vacuum at the vapor extraction observation well to the applied vacuum at the pilot test well was calculated. A ratio value meeting or exceeding 0.01 (i.e., 1 percent of the applied vacuum, as measured at the observation point) is generally considered to be within a zone of influence that will result in effective contaminant removal.



4.0 RESULTS

The results of the subsurface investigation and SVE pilot test are presented in the sections that follow. The standard Model Toxics Control Act (MTCA) WAC 173-340 Method A soil and groundwater cleanup levels have been used as the preliminary screening levels for comparative analysis of all soil and groundwater analytical data. Where no MTCA Method A cleanup level exists for a contaminant of potential concern, the standard MTCA Method B cleanup level was used as the preliminary screening level. The final cleanup levels that are appropriate to the Site will be evaluated and selected prior to implementing a cleanup action.

4.1 GEOLOGY AND HYDROGEOLOGY

The boreholes drilled encountered medium dense to dense sand and silty sand, with lenses of silt from beneath the asphalt and subgrade materials to a depth ranging from 25 to 31 feet bgs. Beneath the sand and silty sand was a gravelly sand to sandy gravel unit in which groundwater was encountered. The gravelly sand and sandy gravel unit extended below the deepest soil samples collected at approximately 55 feet bgs. Cross-section A – A' (Figure 5) illustrates the soil lithology underlying the Site from the northwest to the southeast corners. All logs for the borings completed in 2000 are presented in Appendix A.

The groundwater level measurements and calculated groundwater elevations are summarized in Table 1. On July 19, 2000, the groundwater elevations ranged from 49.37 feet at monitoring well MW-1, to 48.34 feet at monitoring well MW-2. The groundwater elevations were calculated with respect to the arbitrary datum of 100 feet based on a surveyed point on the northern portion of each monitoring well casing. The groundwater elevation measurements indicated that the approximate direction of groundwater flow beneath the Site was to the east (Figure 6). The average horizontal hydraulic gradient across the Site was estimated to be 0.03 foot/foot.

On April 25, 2003, the measured groundwater elevations ranged from 48.61 feet at monitoring well MW-1, to 47.52 feet at monitoring well MW-2. The groundwater level measurements again indicated that the approximate direction of groundwater flow was to the east. The average horizontal hydraulic gradient across the Site was estimated to be 0.02 foot/foot.

Farallon also measured basic water quality parameters, including temperature, specific conductance, pH, dissolved-oxygen content, ORP, and turbidity. The results were used to assess when sufficient groundwater had been purged from the monitoring wells prior to collecting representative groundwater samples. These results were also used to assess groundwater geochemistry, and whether the subsurface environment is conducive to natural attenuation via biodegradation of the PCE releases in groundwater. The results for the water quality parameter measurements are summarized in Table 2. The results indicate that the ranges of temperature and pH are within the ranges in which biodegradation processes may occur. The dissolved oxygen and ORP data indicate that groundwater conditions are aerobic and oxidizing. These conditions are not conducive to the biodegradation of PCE or of the degradation compound TCE.



4.2 DISTRIBUTION OF PCE IN SOIL

A summary of the analytical results for soil samples collected during the previous investigations and this subsurface investigation is presented in Table 3 and on Figure 5. The analytical results for PCE for the soil samples collected during this subsurface investigation are presented on Figure 4. The laboratory analytical reports for this subsurface investigation are presented in Appendix B.

PCE was the only HVOC detected in the soil samples collected during the 2000 subsurface investigation. Concentrations of TCE; cis-1,2-DCE; 1,1-DCE; trans-1,2-DCE; and vinyl chloride all were below their respective laboratory PQLs.

Borings MW-1, VE-1, VE-2, and VE-5 are located in the vicinity of suspected source areas 4 and 5, specifically, the former laundry machine sump and drains in the northern portion of the Site (Figures 2 and 4). Analytical results for the soil samples collected from these borings indicate that concentrations of PCE exceed the MTCA Method A soil cleanup level of 0.05 mg/kg from a depth of 2.5 bgs to at least 45.5 feet bgs (Figures 4 and 5). The highest concentration of PCE detected in soil from these borings was 230 mg/kg in the sample collected from a depth of 5 to 6.5 feet bgs at boring VE-2.

Borings MW-2, VE-3, and VE-4 are located near suspected source area 1, the former PCE dry cleaning machine, located in the southeast portion of the Site (Figures 2 and 4). Analytical results for soil samples collected from these borings indicate that concentrations of PCE exceed the MTCA Method A soil cleanup level of 0.05 mg/kg from a depth of 2.5 feet bgs to a depth of at least 45.5 feet bgs (Figures 4 and 5). The highest concentration of PCE detected in these borings was 6,900 mg/kg in the sample collected from 10 to 11.5 feet bgs at boring MW-2.

Boring MW-3 is located northeast of source area 3, the former Stoddard solvent UST (Figures 2 and 4). PCE concentrations in the soil samples collected from boring MW-3 were low, with a maximum detected concentration of 0.14 mg/kg at an approximate depth of 45 feet bgs. A soil sample collected from an approximate depth of 7.5 to 9 feet bgs was submitted for analysis of Stoddard solvent through Method NWTPH-Dx. The analytical results indicated no detection of petroleum hydrocarbons above the laboratory PQL.

4.3 DISTRIBUTION OF PCE IN GROUNDWATER

The concentrations of PCE in groundwater samples from all three on-site monitoring wells exceeded the MTCA Method A groundwater cleanup level of 5.0 micrograms/liter ($\mu\text{g/l}$). The groundwater analytical results are summarized in Table 4 and are presented on Figures 6 and 7. The concentrations of PCE ranged from 560 $\mu\text{g/l}$ in the groundwater sample collected from monitoring well MW-1, to 1,300 $\mu\text{g/l}$ in the groundwater sample collected from monitoring well MW-3 for the July 19, 2000, groundwater monitoring and sampling event. The concentrations of PCE ranged from 1,600 $\mu\text{g/l}$ in the groundwater sample collected from monitoring well MW-1, to 3,700 $\mu\text{g/l}$ in the groundwater sample collected from monitoring well MW-2 for the April 25,



2003, groundwater monitoring and sampling event. The associated laboratory analytical reports are presented in Appendix B.

PCE was the only HVOC detected in the groundwater samples collected during the July 19, 2000, sampling event. Concentrations of cis-1,2-DCE; 1,1-DCE; trans-1,2-DCE; and vinyl chloride all were below their respective laboratory PQLs.

The groundwater sample collected from monitoring well MW-2 for the April 25, 2003, groundwater monitoring and sampling event had a concentration of TCE at 5.6 µg/l, which slightly exceeds the MTCA Method A cleanup level of 5 µg/l. Concentrations of the HVOCs cis-1,2-DCE; trans-1,2-DCE; 1,1,1-trichloroethane; trichlorofluoromethane; and chloroform were detected at concentrations above the laboratory PQLs, but below their respective MTCA groundwater cleanup levels. The source(s) of the 1,1,1-trichloroethane; trichlorofluoromethane; and chloroform is not known. The HVOCs TCE; cis-1,2-DCE; and trans-1,2-DCE are degradation products of PCE.

The groundwater sample collected from monitoring well MW-3 was submitted for analysis of petroleum hydrocarbons by Method NWTPH-Gx, and BTEX by EPA Method 8021 to assess the potential for Stoddard solvent in groundwater. The laboratory analytical results indicated that gasoline-range organics were present in the groundwater sample at a concentration of 1,000 µg/l, which is equivalent to the MTCA Method A groundwater cleanup level. The laboratory noted that the petroleum product detected did not appear to be gasoline, but could not specify which petroleum standard the chromatogram resembled. Concentrations of the BTEX compounds all were below the laboratory PQLs. No further evaluation of petroleum hydrocarbons in groundwater was performed for this investigation.

4.4 WASTE DISPOSAL

The waste soil generated during the drilling activities for the 2000 subsurface investigation was accepted for disposal at Waste Management, Inc.'s Subtitle C landfill facility located in Arlington, Oregon. Based on the analytical information obtained from the soil samples, the waste soil was designated as an F002 dangerous waste in accordance with WAC 173-303. The waste disposal documentation is included in Appendix C.

The decontamination and purge water generated during the 2000 subsurface investigation was accepted for disposal at the Spring Grove Resources Recovery, Inc., treatment storage and disposal facility located in Cincinnati, Ohio. The wastewater was designated as an F002 dangerous waste. The purge water generated during the 2003 groundwater sampling event was accepted for disposal at Waste Management, Inc.'s Subtitle C landfill facility in Arlington, Oregon. The wastewater was designated as an F002 dangerous waste. The waste disposal documentation for the wastewater generated at the Site in 2000 is included in Appendix C. The waste disposal documentation for the 2003 groundwater sampling event is not included with this report.



5.0 SOIL VAPOR EXTRACTION PILOT TESTING

Farallon conducted pilot tests to assess the feasibility of applying SVE technology to remediate vadose zone soil at the Site. This soil remediation technology was selected based on previous Site assessment data that indicated that subsurface conditions and contaminant distribution are favorable for SVE. The specific conditions that indicate that SVE is a favorable remedial technology for the Site include the following:

- The vertical extent of soil contamination extended below the practical limit for soil remediation by excavation and off-site treatment and disposal;
- The depth to groundwater was unknown at the time of the investigation, but was anticipated to be greater than 34 feet bgs based on previous Site investigation data;
- Site soils consist of medium dense sand with intermittent layers of silt, which are favorable for application of SVE;
- The release of PCE does not appear to be adversely affecting human health or the environment in a manner that would warrant implementation of a more rapid remedial alternative such as excavation of the affected soil; and
- In situ remedial alternatives were preferred by the Site owner to minimize disturbance of the parking area for Land Title Building tenants.

Source removal by excavation also was considered as an alternative soil remedial technology, but was not preferred due to the high concentrations of PCE in the shallow soil and the vertical extent of contamination. The concentrations of PCE in the shallow soil would likely result in generation of a designated dangerous waste material that would substantially increase the soil disposal and Site restoration costs beyond those projected for SVE. Groundwater remedial technologies were not considered during this phase of the assessment pending the findings of the initial assessment of groundwater conditions and quality beneath the Site.

The SVE pilot test data are summarized in Tables 5 through 9, and the associated laboratory analytical reports are presented in Appendix B. These data were used to estimate extraction rates for PCE from the vadose zone if an SVE remediation system was installed at the Site.

The SVE pilot test at vapor extraction well VE-1 was conducted for a period of 155 minutes at an average applied vacuum of 16 IOW and an estimated flow of 28 cubic feet per minute (cfm). Observed vacuums in vapor extraction wells VE-2 through VE-5 ranged from 0.35 to 2.3 IOW (Table 6). The ratio of the observed vacuum to the applied vacuum ranged from 0.02 to 0.14 at the observation wells. This ratio indicates that the radius of influence exceeded the maximum distance of the furthest observation point from the test point of 63 feet at vapor extraction well VE-3. The PID readings for the off-gas organic vapor emissions ranged from 1,110 to 1,467 units (Table 6). Laboratory analytical results for off-gas emission samples collected near the beginning and end of the pilot test at extraction well VE-1 indicated that the concentrations of PCE were 2,300 µg/l and 5,300 µg/l, respectively (Table 5). The initial off-gas sample also contained concentrations of TCE at 25 µg/l, and cis-1,2-DCE at 29 µg/l. The increase in PCE



concentrations during the pilot test suggests that vapor extraction well VE-1 was not located in the area of highest subsurface HVOC contamination.

The SVE pilot test at vapor extraction well VE-2 was conducted for a period of 125 minutes at an average applied vacuum of 34 IOW and an estimated flow of 56 cfm. Observed vacuums in vapor extraction wells VE-1 and VE-3 through VE-5 ranged from 0.18 IOW to 9.5 IOW (Table 7). The ratio of the observed vacuum to the applied vacuum ranged from 0.005 to 0.28, indicating that the radius of influence was substantially less than the 63 feet observed during the pilot test at vapor extraction well VE-1, despite the increased vacuum applied. The radius of influence derived from the test at vapor extraction well VE-2 is estimated to be approximately 35 to 40 feet at the applied vacuum of 34 IOW. The initial PID reading for the off-gas organic vapor emissions was 1,886 units, but PID readings exceeded the maximum limit of 2,000 units throughout the remainder of the pilot test (Table 7). Laboratory analytical results for off-gas emission samples collected near the beginning and end of the pilot test at extraction well VE-1 indicated that the concentrations of PCE were 7,800 $\mu\text{g/l}$ and 9,500 $\mu\text{g/l}$, respectively (Table 5). No other PCE degradation compounds were reported to be present in either sample. The increase in PCE concentrations during the pilot test suggests that vapor extraction well VE-2 was not located in the area of highest subsurface contamination at source area 1.

The SVE pilot test at vapor extraction well VE-3 was conducted for a period of 120 minutes at an average applied vacuum of 17 IOW and an estimated flow of 28 cfm. The test was continued for an additional 30 minutes at an applied vacuum of 34 IOW and a flow of 56 cfm. Observed vacuums in vapor extraction wells VE-1, VE-2, VE-4, and VE-5 ranged from 0.11 to 1.4 IOW (Table 8). The ratio of the observed vacuum to the applied vacuum ranged from 0.006 to 0.082, indicating that the radius of influence was at least 58 feet. Once the vacuum was increased to 34 IOW, the observed vacuum readings doubled; however, the estimated radius of influence did not appear to increase significantly.

The PID reading of the off-gas organic vapor emissions exceeded the PID's maximum limit of 2,000 units throughout the pilot test at vapor extraction well VE-3 (Table 8). Off-gas emission samples were collected near the beginning and end of the pilot test at the applied vacuum of 17 IOW, and at the end of the test at the applied vacuum of 34 IOW. Laboratory analytical results for the off-gas samples collected at the beginning and end of the initial test at the applied vacuum of 17 IOW indicated that the concentrations of PCE were 7,300 $\mu\text{g/l}$ and 10,000 $\mu\text{g/l}$, respectively (Table 5). The laboratory analytical results for the off-gas sample collected approximately 30 minutes following the initial test at the applied vacuum of 34 IOW indicated that the concentration of PCE decreased to 8,000 $\mu\text{g/l}$ (Table 5). No other PCE degradation compounds were present in the off-gas samples.

Farallon performed calculations to estimate the pounds of PCE per day and per year that would be removed if an SVE system was installed (Table 9). The calculations indicate that the estimated PCE mass removal ranges from 19.83 to 55.09 pounds per day, and 7,237 to 20,108 pounds per year.



6.0 CONCLUSIONS

Prior subsurface investigations at the Site confirmed that a release of PCE to soil occurred from at least two suspected source areas, including the former PCE dry cleaning machine located in the southeastern portion of the Site (designated as source area 1), and the former laundry machine sump and drains located in the northern portion of the Site (designated as source areas 4 and 5). This subsurface investigation assessed the basic Site hydrogeology, characterized the on-site distribution of PCE concentrations in soil and groundwater, and assessed the technical feasibility of SVE for in situ treatment of contaminated soil in the vadose zone. Farallon also identified data gaps that should be addressed prior to implementing a final remedial action for soil and groundwater impacted by releases of PCE to the subsurface at the Site.

Soil underlying the Site is comprised of medium dense to dense sand and silty sand, with lenses of silt that extend from beneath the asphalt and subgrade materials to a depth ranging from 25 to 31 feet bgs. Beneath the sand and silty sand is a gravelly sand and sandy gravel unit within which groundwater is present. The gravelly sand and sandy gravel unit extended to the deepest samples collected during the investigation at approximately 55 feet bgs. The soil encountered did not consist of materials such as uniform layers of silt, clay, or organic-rich soils that would typically retard the movement of PCE in the subsurface. The organic content of the soil, which directly affects contaminant mobility, was not assessed for this phase of subsurface investigation.

The analytical results for the soil matrix samples indicate that PCE was released to the subsurface soil in the north-central and southeastern areas of the Site. The source area in the northern portion of the Site was likely associated with the former sump and drain lines for the former laundry machines (source areas 4 and 5). The source area on the southeastern portion of the Site was likely associated with the former PCE dry cleaning machine (source area 1). The analytical results for PCE in soil vapor and soil matrix samples collected from the south-central portion of the Site near monitoring well MW-3, were not indicative of a PCE release in this area. Analytical results for soil samples collected from borings at the Site indicate that concentrations of PCE exceed the MTCA Method A soil cleanup level of 0.05 mg/kg from near the ground surface to a depth of at least 45.5 feet bgs. The highest PCE concentrations in soil in the northern and southeastern areas of the Site were 7,200 mg/kg detected at 6 feet bgs in a soil sample from boring GP-1, advanced during the 1999 Phase II investigation, and 6,900 mg/kg in the sample collected from 10 to 11.5 feet bgs at boring MW-2 during the 2000 subsurface investigation. Concentrations of TCE; cis- and trans-1,2-DCE; and vinyl chloride all were below their respective PQLs in the soil samples collected during the 2000 subsurface investigation, suggesting that biodegradation of PCE in the vadose zone is negligible.

The extent of PCE in soil at the Site has been relatively well defined by the existing soil analytical data. However, the relatively high concentrations of PCE detected in the soil matrix samples collected from borings VE-2 and MW-2, which were located less than 10 feet from the northern and eastern Site property lines, respectively, suggest that concentrations of PCE in soil may extend off of the Site.



The assessment of petroleum hydrocarbons has been limited, based on the soil vapor and soil matrix analytical data from the previous investigation, which did not indicate that a significant release of petroleum hydrocarbons has occurred at the Site. Further, field observations during completion of soil borings and monitoring well borings have not been indicative of a petroleum release. The groundwater analytical data are insufficient to determine whether the source of the total petroleum hydrocarbons as gasoline-range organics was associated with a release of Stoddard solvent. The cleanup alternatives being considered to address the releases of PCE will also be effective for petroleum hydrocarbons. Therefore, petroleum hydrocarbons that may be present to a lesser extent will be addressed by future cleanup actions. Confirmation soil and groundwater sampling following cleanup may be required by Ecology to confirm that residual petroleum hydrocarbons are not present in the vicinity of the former potential source areas, including the Stoddard solvent dry cleaning machine, the gasoline/diesel UST, and the heating oil UST.

The groundwater elevation data for the July 2000 and April 2003 groundwater monitoring and sampling events were relatively consistent, and indicated that the approximate direction of groundwater flow beneath the Site is to the east. The average horizontal hydraulic gradient across the Site ranged from 0.02 to 0.03 foot/foot. Additional groundwater monitoring will be required to determine whether there are seasonal effects on groundwater flow and elevation. The thickness of the initial water-bearing zone underlying the Site that was encountered during this subsurface investigation was not assessed. The initial water-bearing zone appears to be unconfined, based on the absence of a layer of soil that was of lower permeability than the overlying soil. Additional hydrogeologic assessment may be required to assess the vertical distribution and fate and transport characteristics of the PCE releases within the aquifer beneath the Site.

Concentrations of PCE and TCE in groundwater beneath the Site exceed their respective MTCA Method A cleanup levels of 5 µg/l. Concentrations of PCE in the groundwater samples collected from all three monitoring wells increased between the July 2000 and April 2003 monitoring and sampling events. The presence of PCE degradation compounds in all three monitoring wells indicates that natural attenuation of PCE is occurring in groundwater. However, the rate of natural attenuation does not appear to be significant, based on the observed ratio of the concentrations of PCE to those of the degradation compounds (Table 4). The water quality parameters such as dissolved oxygen and ORP (Table 3) indicate that groundwater conditions are more aerobic than anaerobic, a condition that is not conducive to the biodegradation of PCE.

The previous soil vapor data and soil matrix analytical data for this investigation suggest that PCE concentrations in groundwater should be highest in the vicinity of the southeastern corner or the north-central portion of the Site. However, the concentrations of PCE from up-gradient monitoring well MW-3 in the southwestern portion of the eastern parking area were higher than what was expected, given the concentrations of PCE detected in the overlying soil. The previous soil vapor data and current soil matrix analytical data collected in the vicinity of monitoring well MW-3 were not indicative of a release of PCE in this area. Additional groundwater monitoring and sampling data and characterization of the distribution of PCE in groundwater will be required to assess whether concentrations of PCE in groundwater at monitoring well MW-3 are due to a seasonal shift in the groundwater gradient, and whether a source area exists near or



up-gradient of monitoring well MW-3. Additional characterization will also be required to assess the up-gradient and down-gradient distribution of PCE in the vicinity of the Site.

SVE pilot tests were conducted at three of the five vapor extraction wells that were installed at the Site. The estimated radius of influence for the SVE pilot tests ranged from approximately 40 to 63 feet from the extraction points. Results of the SVE pilot tests indicate that SVE would be an effective remedial technology for concentrations of PCE in the vadose zone soil underlying the Site. SVE also may be used to address PCE concentrations, if present, that may extend off of the Site. Sufficient information is available at this time to support the design of an SVE system. The groundwater analytical data indicate that technically feasible remedial alternatives for groundwater also will need to be evaluated to meet the requirements for a No Further Action determination under MTCA.

Based on the available information, Farallon has identified the following data gaps in the characterization of the Site:

- Insufficient data are available to determine if concentrations of PCE in soil extend to the west, north, or east of the Site;
- The lateral and vertical distribution of PCE in groundwater has not been defined;
- The source of PCE affecting groundwater quality at monitoring well MW-3 has not been identified;
- Further assessment of petroleum hydrocarbons in soil and groundwater may be required prior to requesting a No Further Action determination from Ecology; and
- Soil and groundwater physical characteristics such as organic carbon content, vertical hydraulic gradient, thickness of the water-bearing zone and vertical distribution of PCE in groundwater, and hydraulic conductivity may require additional assessment prior to developing a cleanup action plan.

These data gaps should be addressed to support the design and implementation of a final remedial action for soil and groundwater contamination resulting from releases of PCE at the Site.



7.0 REFERENCES

- Farallon Consulting, L.L.C. 1999. Phase II Subsurface Investigation, Land Title Building Parking Lot. December 6.
- SECOR International Incorporated. 1998. *Land Title Building Site Investigation Report*. June 12.
- Washington State Department of Ecology. 2001. *Model Toxics Control Act Cleanup Regulation*. Chapters 173-340 of the Washington Administrative Code. February 12.
- Washington State Department of Ecology. 2001. *Cleanup Levels and Risk Calculations under the Model Toxics Control Act Cleanup Regulation, Version 3.1*. November.



8.0 LIMITATIONS

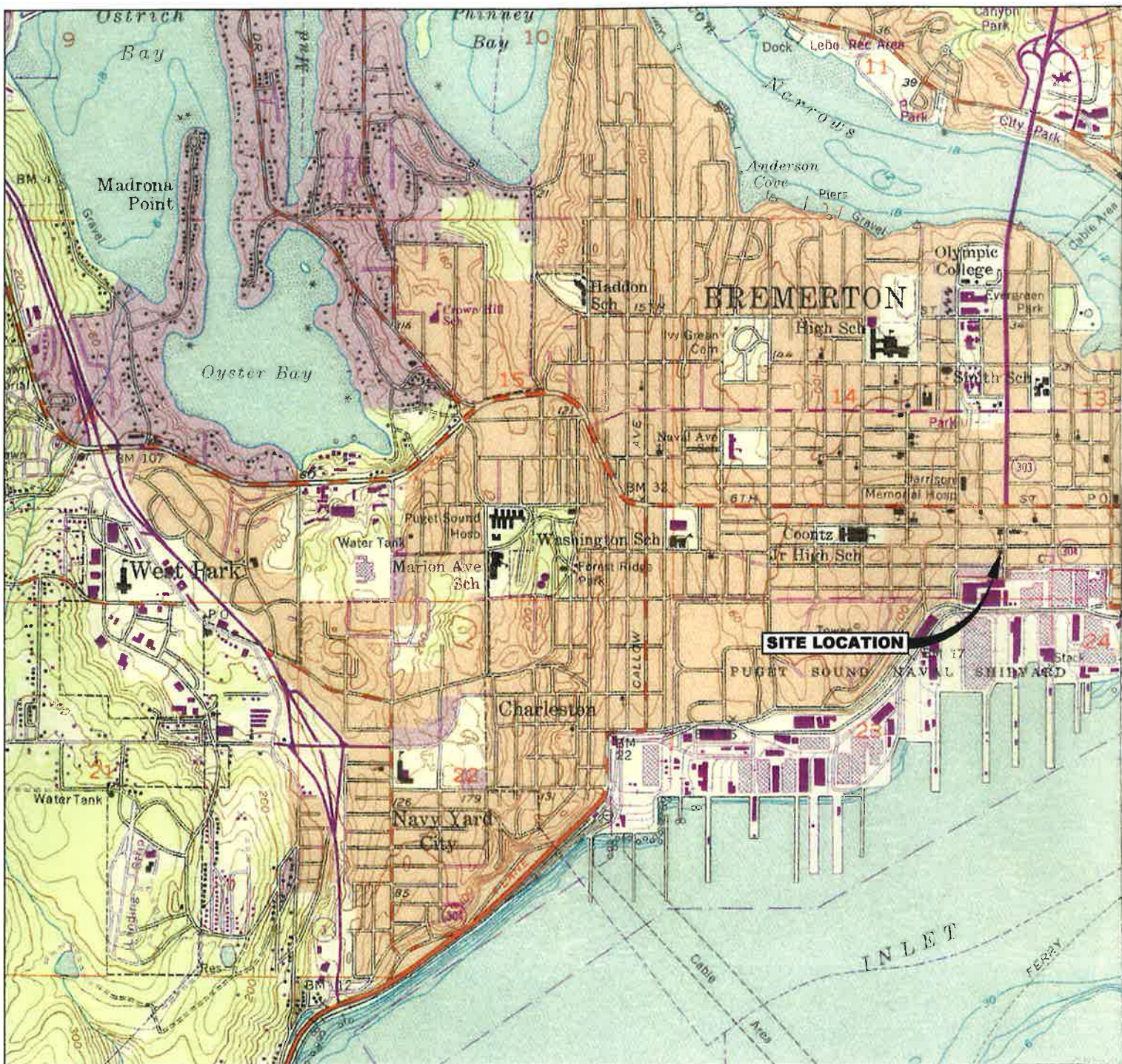
The conclusions and recommendations contained in this report/assessment are based on professional opinions with regard to the subject matter. These opinions have been arrived at in accordance with currently accepted hydrogeologic and engineering standards and practices applicable to this location, and are subject to the following inherent limitations:

- **Accuracy of Information.** Certain information utilized by Farallon in this report/assessment has been obtained, reviewed, and evaluated from various sources believed to be reliable, including the local health districts, fire departments, and the previously discussed interviews. Although Farallon's conclusions, opinions, and recommendations are based in part on such information, Farallon's services did not include the verification of its accuracy or authenticity. Should such information prove to be inaccurate or unreliable, Farallon reserves the right to amend or revise its conclusions, opinions, and/or recommendations.
- **Reconnaissance.** Farallon performed a reconnaissance of the Site that is the subject of this report/assessment to document current conditions. Farallon focused on areas deemed more likely to exhibit hazardous materials conditions, while other areas received limited attention or were inaccessible at the time of our reconnaissance.

FIGURES

**Subsurface Investigation and
Soil Vapor Extraction Feasibility Pilot Test
Former City Hand Laundry
1002 4th Street
Bremerton, Washington**

Farallon PN: 603-001



REFERENCE: 7.5 MINUTE USGS QUADRANGLE BREMERTON WEST, WASHINGTON. DATED 1953 AND PHOTOREVISED 1981



WASHINGTON



FARALLON CONSULTING
320 3rd Ave. NE, Suite 200
Issaquah, WA 98027

FIGURE 1

SITE LOCATION MAP
FORMER CITY HAND LAUNDRY SITE
1002 4TH STREET
BREMERTON, WASHINGTON

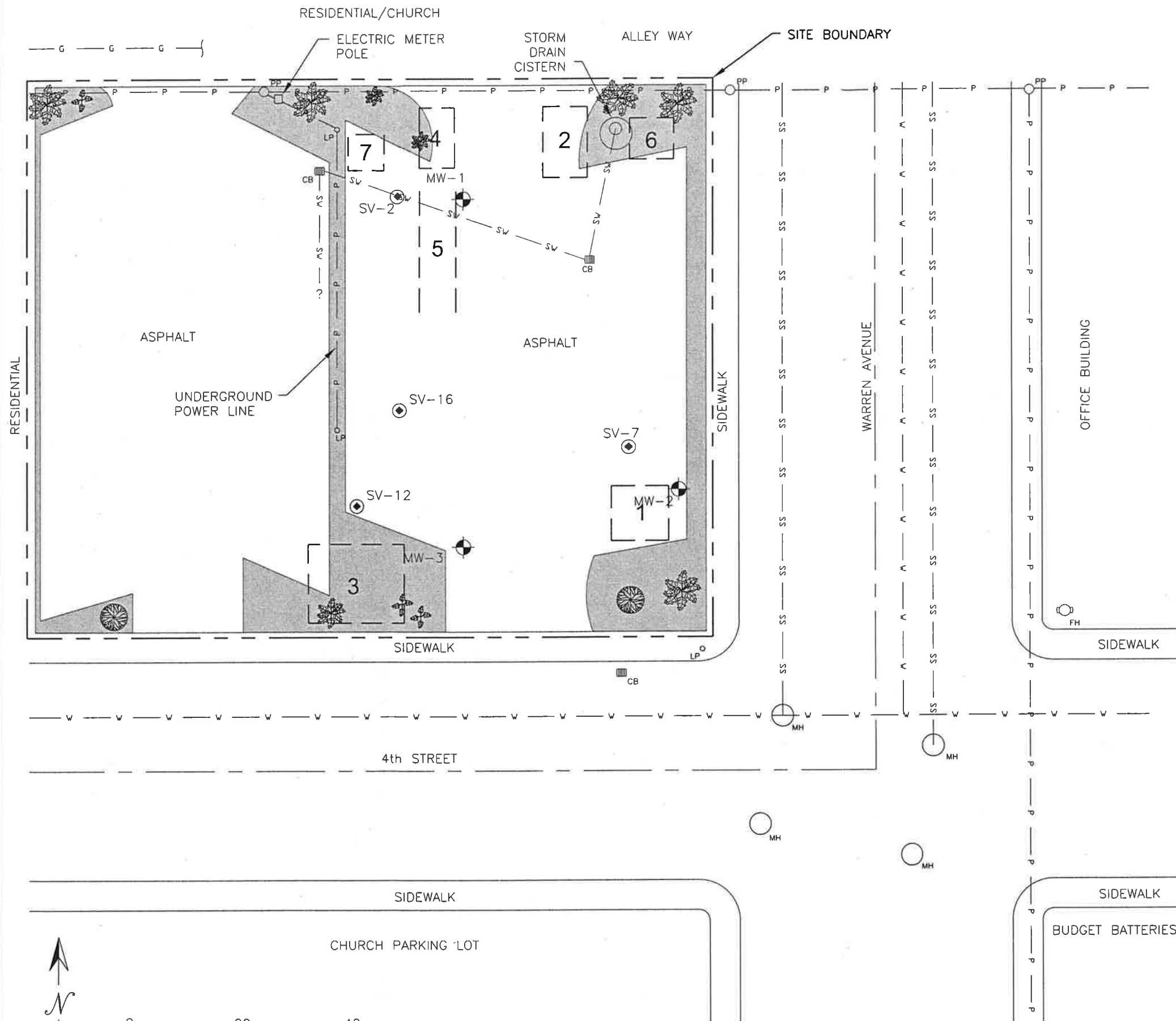
FARALLON PN: 603-001

Drawn By: QDD

Checked By: PJ

Date: 6/17/03

Disk Reference: 603001



FORMER POTENTIAL SOURCE AREA EXPLANATION (LOCATIONS APPROX.)

- 1 PCE DRY CLEANING MACHINE (1961-1972)
- 2 PCE DRY CLEANING MACHINE (1972-1985)
- 3 STODDARD DRY CLEANING MACHINE (1940-1945)
- 4 SUMP FOR LAUNDRY MACHINE DRAINS
- 5 LAUNDRY MACHINE DRAINS
- 6 OIL TANK FOR BOILER (REMODELED 1985)
- 7 GASOLINE THEN DIESEL TANKS FOR TRUCKS

LEGEND

- MW-3 GROUNDWATER MONITORING WELL LOCATION FARALLON (JULY 5-7, 2000)
- SS SS SANITARY SEWER LINE
- SW SW STORMWATER LINE
- W W WATER LINE
- P P POWER LINE
- G G GAS LINE
- MH MAN HOLE
- FH FIRE HYDRANT
- LP LIGHT POLE
- PP POWER POLE
- CB CATCH BASIN
- VEGETATION
- POTENTIAL SOURCE AREA

NOTE: (1) FORMER SITE FEATURES BASED ON INFORMATION PROVIDED BY SECOR INTERNATIONAL INCORPORATED.
(2) UTILITY LOCATIONS ARE APPROXIMATE.



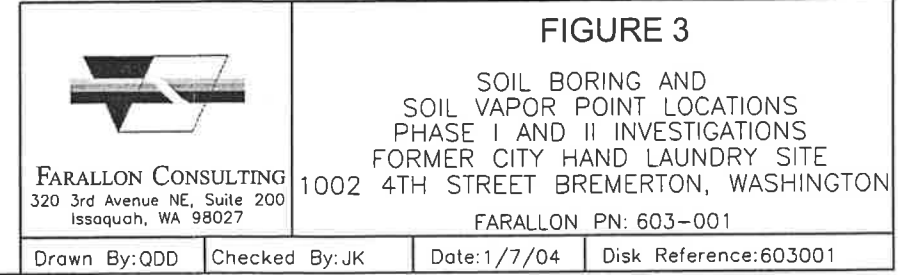
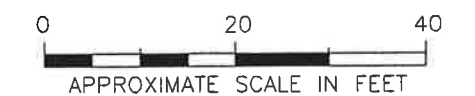
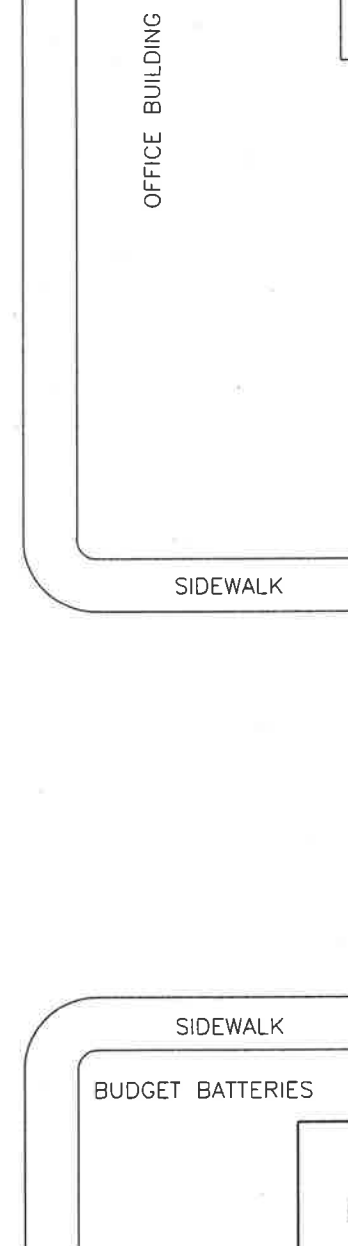
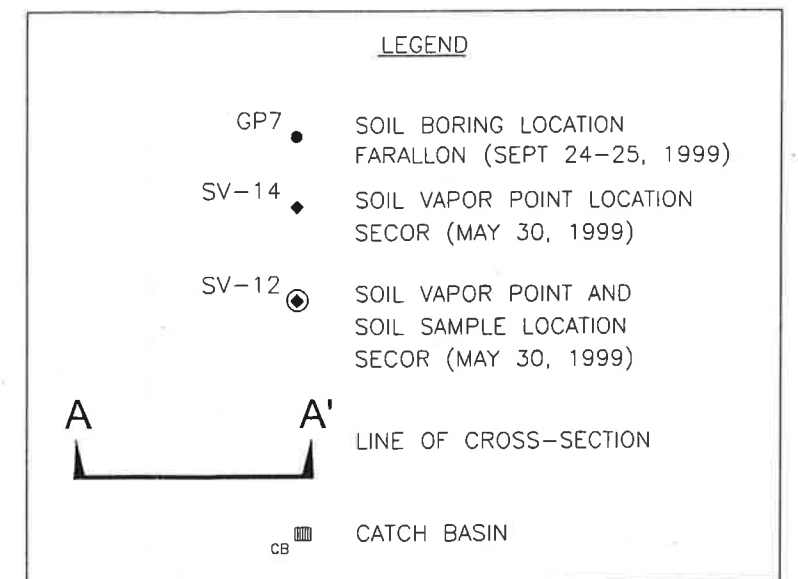
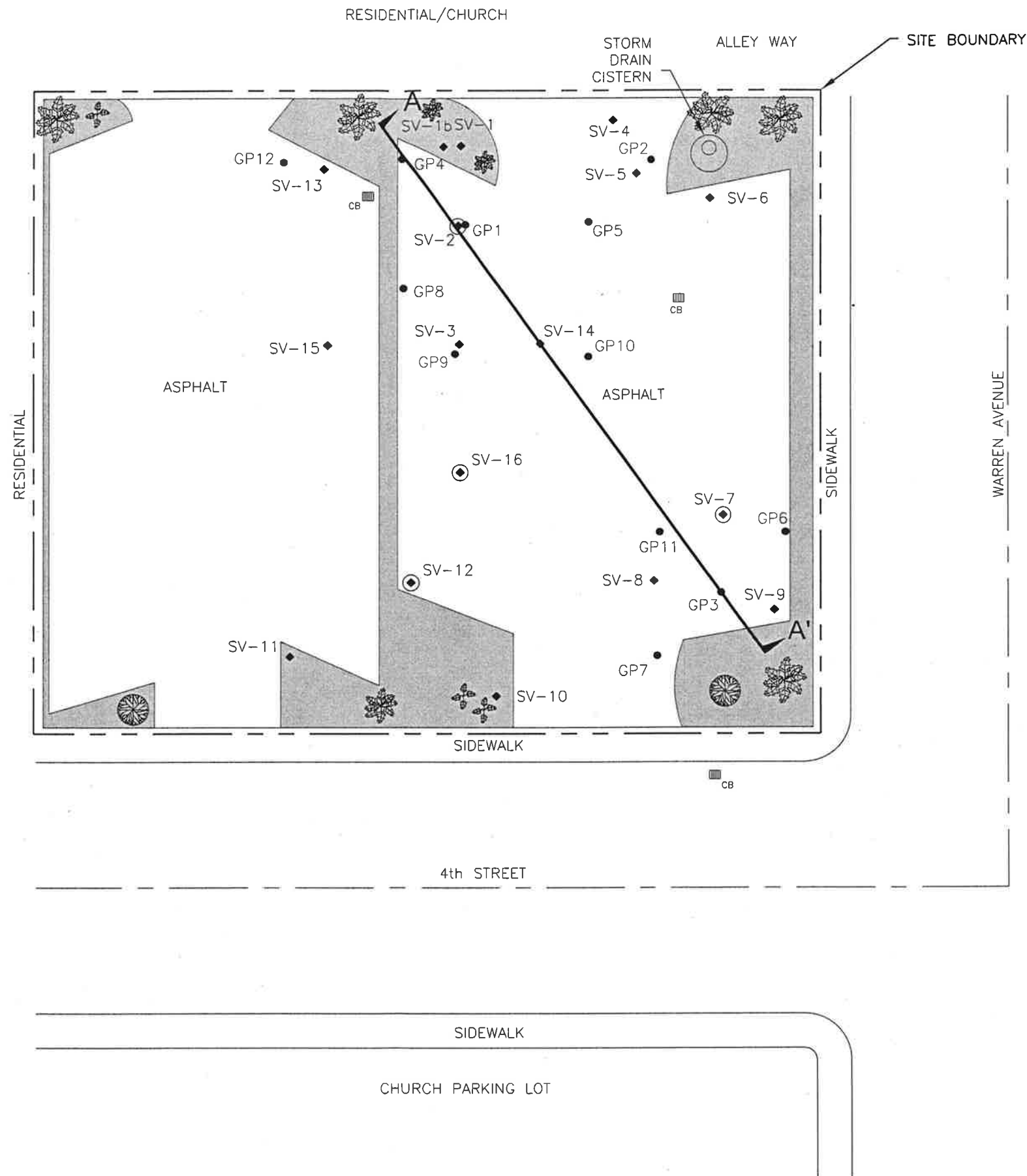
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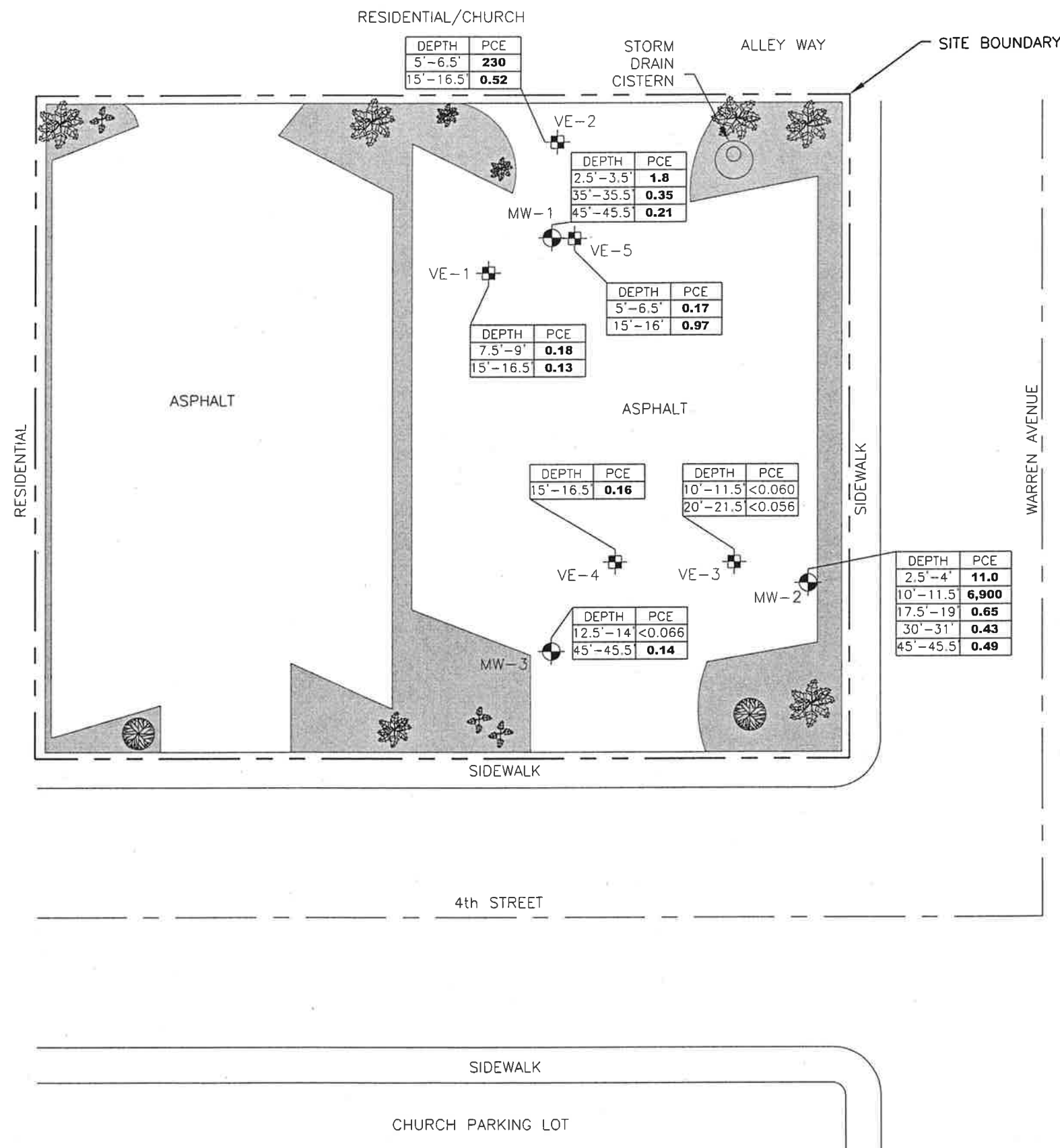
FIGURE 2

EXISTING SITE FEATURES
& FORMER POTENTIAL SOURCE AREAS
FORMER CITY HAND LAUNDRY SITE
1002 4TH STREET
BREMERTON, WASHINGTON

FARALLON PN: 603-001

Drawn By: QDD Checked By: PJ Date: 1/7/04 Disk Reference: 603001





LEGEND

MW-3 GROUNDWATER MONITORING WELL LOCATION FARALLON (JULY 5-7, 2000)

VE-1 SOIL VAPOR EXTRACTION WELL LOCATION FARALLON (JULY 5-7, 2000)

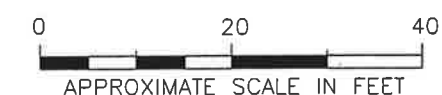
DEPTH = DEPTH BELOW GROUND SURFACE IN FEET


ALL RESULTS IN MILLIGRAMS PER KILOGRAM (mg/kg)

PCE = TETRACHLOROETHENE

<0.052 = NOT DETECTED ABOVE THE LABORATORY REPORTING LIMITS SHOWN

BOLD CONCENTRATION EXCEEDS THE MODEL TOXICS CONTROL ACT (MTCA) CHAPTER 173-340 WAC METHOD A SOIL CLEANUP LEVEL FOR PCE



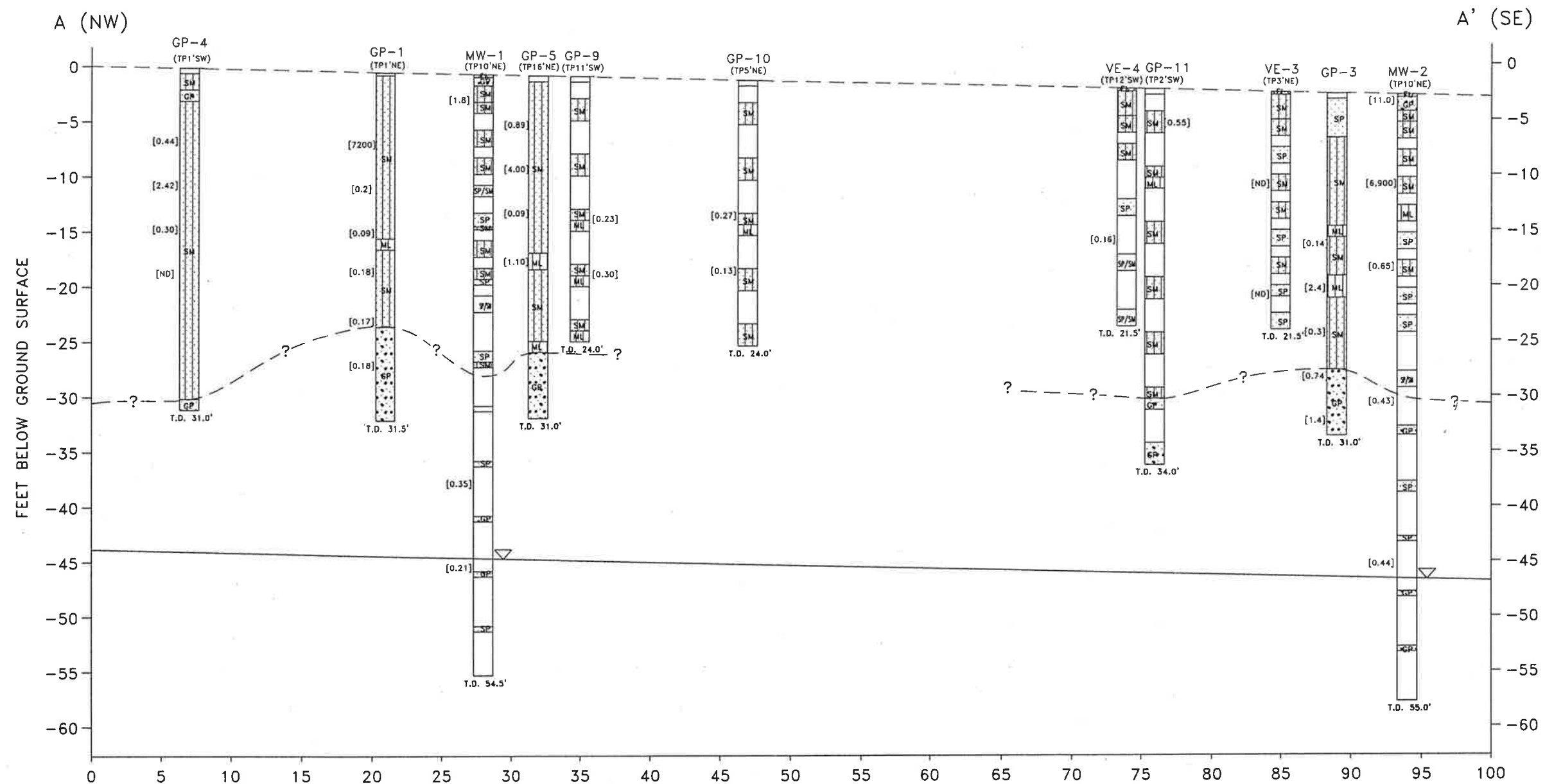


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FIGURE 4

SOIL SAMPLE LOCATION AND PCE ANALYTICAL RESULTS FOR JUNE 7, 2000
FORMER CITY HAND LAUNDRY SITE
1002 4TH STREET
BREMERTON, WASHINGTON
FARALLON PN: 603-001

Drawn By: QDD
Checked By: PJ
Date: 1/7/04
Disk Reference: 603001

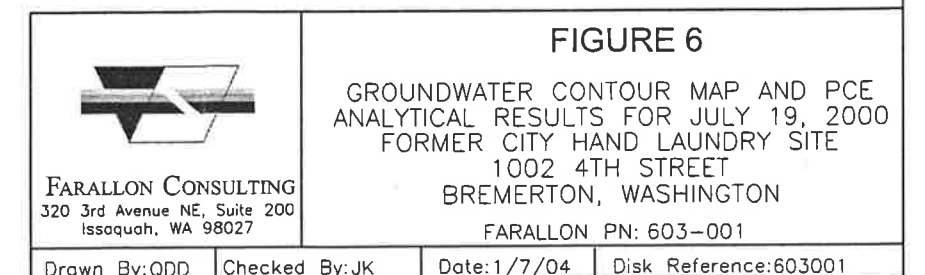
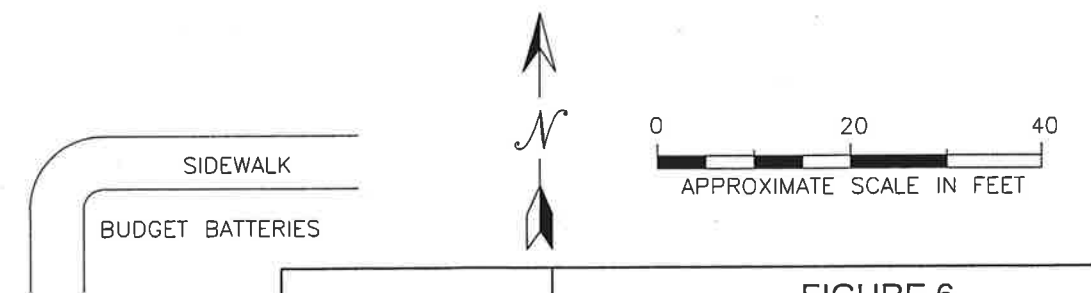
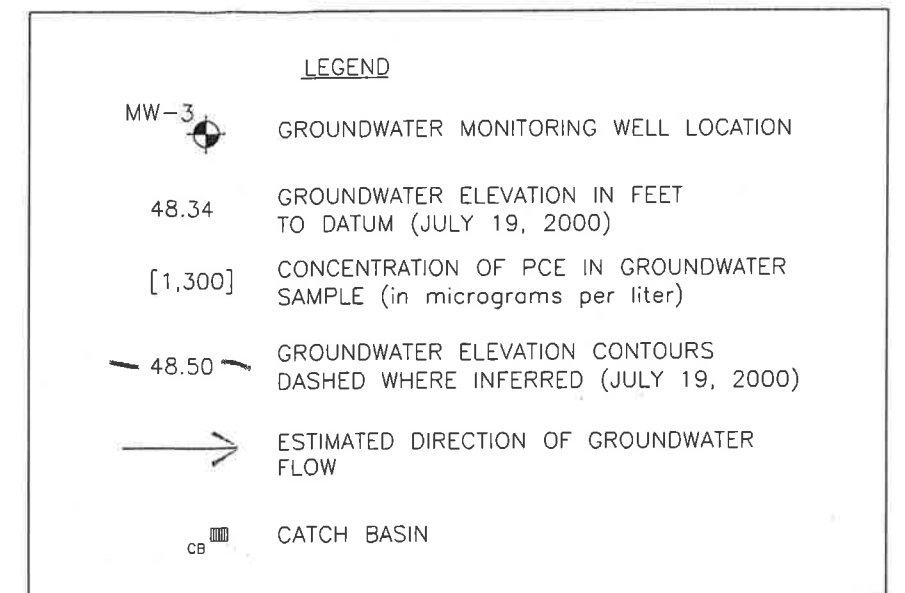
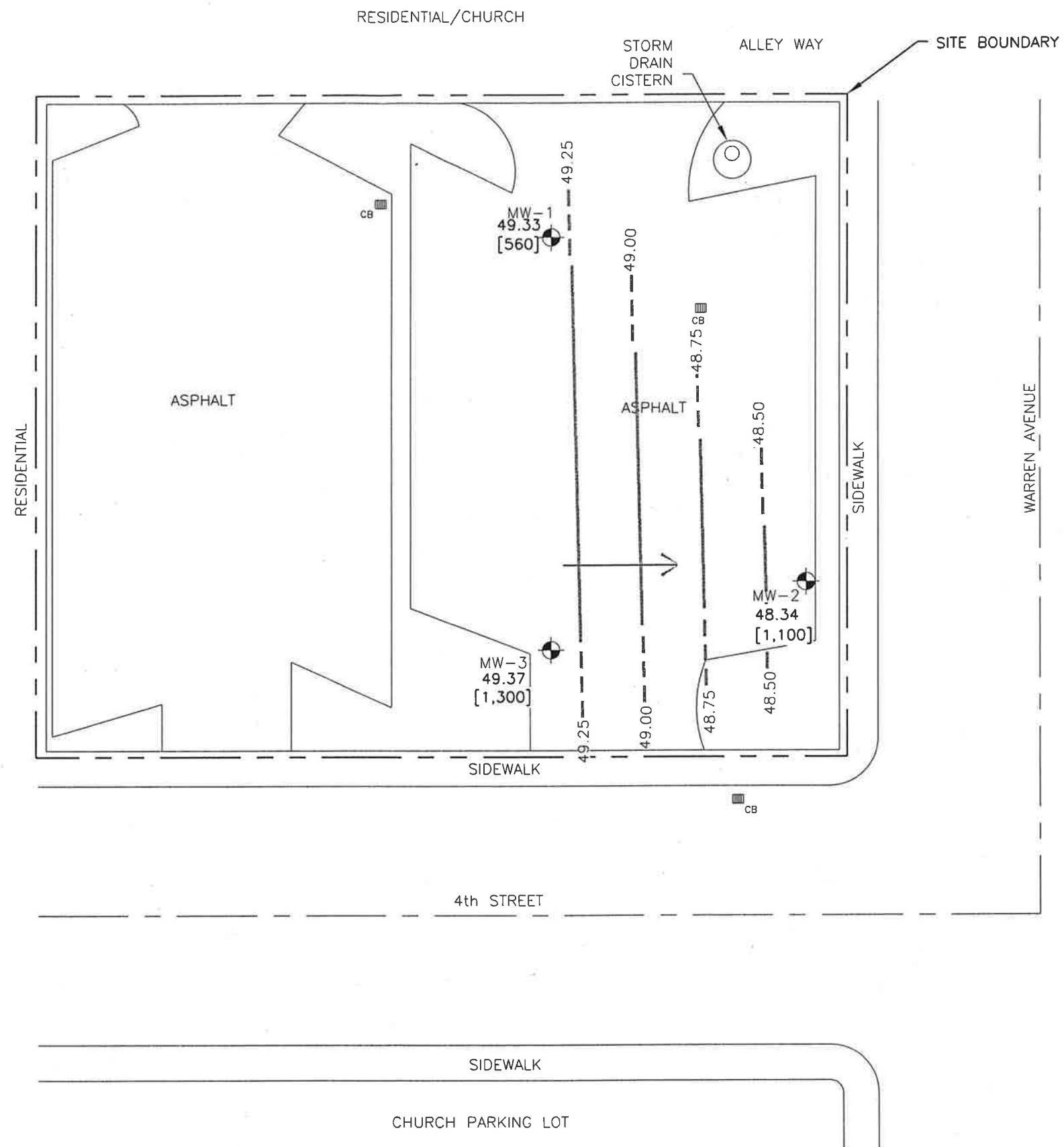


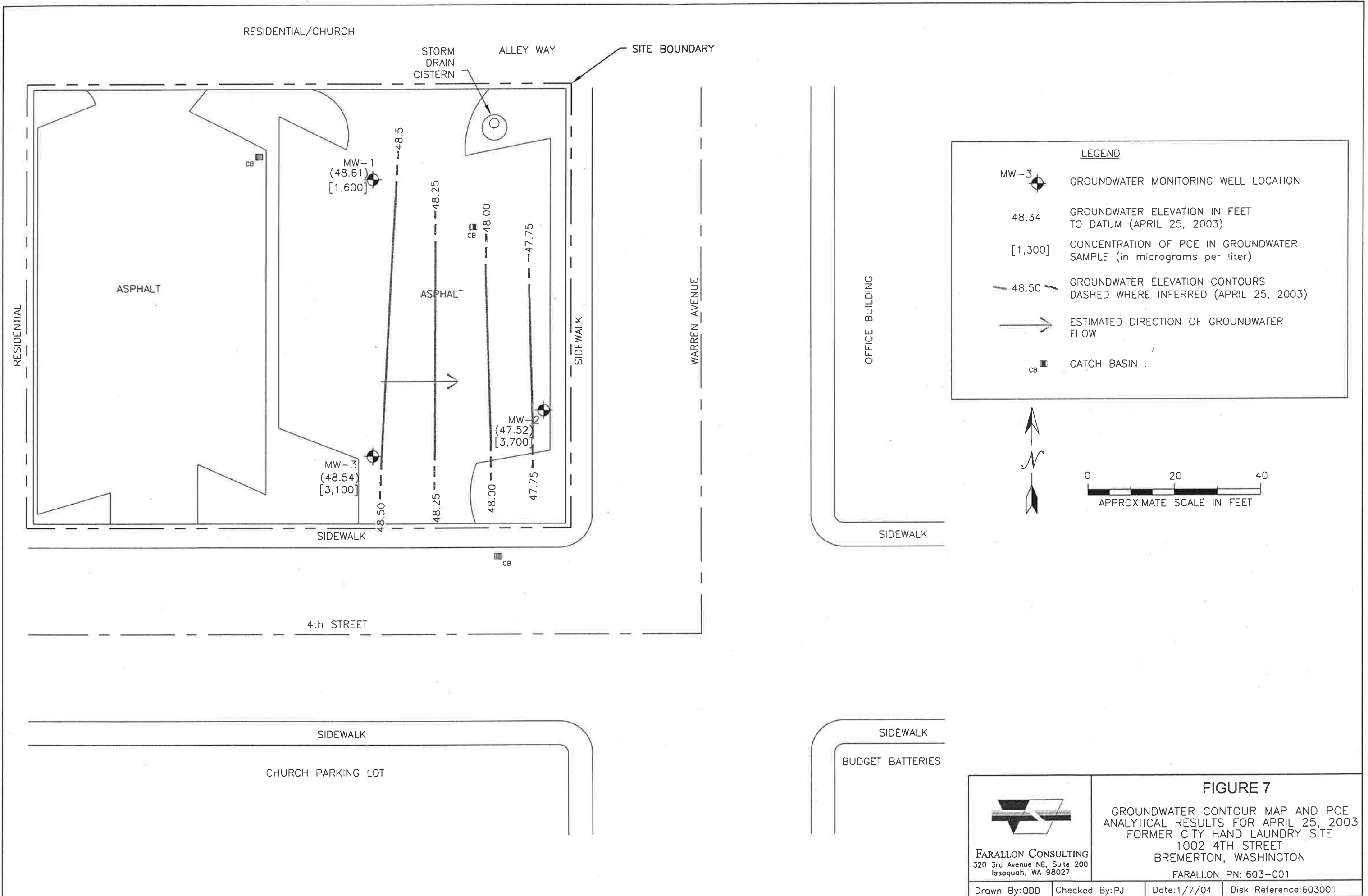
NOTE: THE MODEL TOXICS CONTROL ACT METHOD A CLEANUP LEVEL FOR PCE IN SOIL IS 0.05 MILLIGRAMS PER KILOGRAM.

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FIGURE 5
 CROSS SECTION
 A (NW) - A' (SE)
 FORMER CITY HAND LAUNDRY SITE
 1002 NE 4TH STREET
 BREMEROTN, WASHINGTON
 FARALLON PN: 603-001

Drawn By: QDD Checked By: JK Date: 1/7/04 Disk Reference: 603001





TABLES

Subsurface Investigation and
Soil Vapor Extraction Feasibility Pilot Test
Former City Hand Laundry
1002 4th Street
Bremerton, Washington

Farallon PN: 603-001

Table 1
Summary of Groundwater Surface Elevations
Former City Hand Laundry Property
Bremerton, Washington
Farallon PN: 603-001

Monitoring Well Number	Date Measured	Depth to Water (feet) ¹	Well Casing Elevation (feet) ²	Groundwater Elevation (feet) ²
MW-1	7/19/2000	44.47	93.84	49.37
	4/25/2003	45.23	93.84	48.61
MW-2	7/19/2000	46.90	95.24	48.34
	4/25/2003	47.72	95.24	47.52
MW-3	7/19/2000	46.85	96.18	49.33
	4/25/2003	47.64	96.18	48.54

NOTES:

¹Depth below top of well casing in feet

²Relative to arbitrary datum of 100.00 feet

Table 2
Summary of Groundwater Quality Parameters
Former City Hand Laundry Property
Bremerton, Washington
Farallon PN: 603-001

Monitoring Well Number	Date Sampled	Temperature (°C)	Specific Conductance (mS/cm)	pH	Dissolved Oxygen (mg/l)	Turbidity (NTUs)	Oxidation Reduction Potential (mV)
MW-1	7/19/2000	IE	0.8	6.3	8.5	-	155.0
	4/25/2003	13.1	0.2	6.6	13.3	0.1	102.0
MW-2	7/19/2000	IE	0.8	5.6	7.6	-	190.0
	4/25/2003	14.0	0.2	6.3	15.2	0.2	99.3
MW-3	7/19/2000	IE	3.6	6.4	6.7	-	161.0
	4/25/2003	13.4	0.2	6.3	13.1	0.1	128.6

NOTES:

- indicates parameter not measured.

IE denotes instrument error.

°C = degrees Celsius

mS/cm = microseimens per centimeter

mg/l = milligrams per liter

NTU = nephelometric turbidity units

mV = millivolts

Table 3
Summary of Soil Analytical Results
Former City Hand Laundry Property
Bremerton, Washington
Farallon PN: 603-001

Sample Location	Sample Number	Sampled By	Date Sampled	Depth (feet) ¹	Analytical Results (milligrams per kilogram)							
					PCE ²	TCE ²	cis-1,2 DCE ²	trans-1,2 DCE ²	1,1 DCE ²	Vinyl Chloride ²	DRO/ORO ³	BTEX ⁴
1998 to 1999 Site Investigations												
SV-2	SV-2	SECOR	5/30/1998	8	0.43	ND	ND	ND	ND	ND	-	ND
SV-7	SV-7	SECOR	5/30/1998	9	0.68	ND	ND	ND	ND	ND	-	ND
SV-12	SV-12	SECOR	5/30/1998	8	0.27	ND	ND	ND	ND	ND	-	ND
SV-16	SV-16	SECOR	5/30/1998	8	0.4	ND	ND	ND	ND	ND	-	ND
GP-1	GP1-6	Farallon	9/24/1999	6	7,200	30	14	0.32	ND	ND	-	-
GP-1	GP1-10	Farallon	9/24/1999	10	0.2	ND	ND	ND	ND	ND	-	-
GP-1	GP1-14	Farallon	9/24/1999	14	0.09	0.17	ND	0.08	ND	ND	-	-
GP-1	GP1-17.5	Farallon	9/24/1999	17.5	0.18	ND	ND	ND	ND	ND	-	-
GP-1	GP1-22	Farallon	9/24/1999	22	0.17	ND	0.16	ND	ND	ND	-	-
GP-1	GP1-26	Farallon	9/24/1999	26	0.18	0.16	ND	0.07	ND	ND	-	-
GP-2	GP2-6	Farallon	9/24/1999	6	0.45	ND	ND	ND	ND	ND	-	-
GP-2	GP2-10	Farallon	9/24/1999	10	0.46	ND	ND	ND	ND	ND	-	-
GP-2	GP2-14	Farallon	9/24/1999	14	0.15	0.19	0.11	ND	ND	ND	-	-
GP-2	GP2-18	Farallon	9/24/1999	18	0.4	0.24	ND	ND	ND	ND	-	-
GP-2	GP2-22	Farallon	9/24/1999	22	0.28	0.12	ND	0.07	ND	ND	-	-
GP-2	GP2-26	Farallon	9/24/1999	26	0.28	0.07	ND	ND	ND	ND	-	-
GP-3	GP3-14	Farallon	9/24/1999	14	0.14	0.19	0.06	ND	ND	ND	-	-
GP-3	GP3-18	Farallon	9/24/1999	18	2.4	0.1	ND	0.07	ND	ND	-	-
GP-3	GP3-22	Farallon	9/24/1999	22	0.3	0.07	ND	0.07	ND	ND	-	-
GP-3	GP3-26	Farallon	9/24/1999	26	0.74	0.17	ND	0.08	ND	ND	-	-
GP-3	GP3-30	Farallon	9/24/1999	30	1.4	ND	ND	ND	ND	ND	-	-
GP-4	GP4-6	Farallon	9/24/1999	6	0.44	ND	0.07	ND	ND	ND	-	-
GP-4	GP4-10	Farallon	9/24/1999	10	2.42	0.24	ND	ND	ND	ND	-	-
GP-4	GP4-14	Farallon	9/24/1999	14	0.30	ND	ND	ND	ND	ND	-	-
GP-4	GP4-18	Farallon	9/24/1999	18	ND	ND	ND	ND	ND	ND	-	-
GP-5	GP5-6	Farallon	9/24/1999	6	0.89	ND	ND	ND	ND	ND	-	-
GP-5	GP5-10	Farallon	9/24/1999	10	4.00	0.08	ND	ND	ND	ND	-	-
GP-5	GP5-14	Farallon	9/24/1999	14	0.09	ND	ND	ND	ND	ND	-	-
GP-5	GP5-18	Farallon	9/25/1999	18	1.10	ND	ND	ND	ND	ND	-	-
GP-6	GP6-17	Farallon	9/25/1999	17	0.36	0.10	ND	ND	ND	ND	-	-
GP-6	GP6-22	Farallon	9/25/1999	22	0.35	ND	ND	ND	ND	ND	-	-
GP-6	GP6-27	Farallon	9/25/1999	27	0.42	ND	ND	ND	ND	ND	-	-
GP-7	GP7-27	Farallon	9/25/1999	27	0.27	ND	ND	ND	ND	ND	-	-
GP-7	GP7-32	Farallon	9/25/1999	32	0.31	ND	ND	ND	ND	ND	-	-
GP-8	GP8-12	Farallon	9/25/1999	12	0.30	ND	ND	ND	ND	ND	-	-
GP-8	GP8-17	Farallon	9/25/1999	17	0.14	ND	ND	ND	ND	ND	-	-
GP9	GP9-12	Farallon	9/25/1999	12	0.23	ND	ND	ND	ND	ND	-	-
GP9	GP9-17	Farallon	9/25/1999	17	0.30	ND	ND	ND	ND	ND	-	-
GP10	GP10-12	Farallon	9/25/1999	12	0.27	ND	ND	ND	ND	ND	-	-
GP10	GP10-17	Farallon	9/25/1999	17	0.13	ND	ND	ND	ND	ND	-	-
GP11	GP11-7	Farallon	9/25/1999	7	0.55	ND	ND	ND	ND	ND	-	-

Table 3
Summary of Soil Analytical Results
Former City Hand Laundry Property
Bremerton, Washington
Farallon PN: 603-001

Sample Location	Sample Number	Sampled By	Date Sampled	Depth (feet) ¹	Analytical Results (milligrams per kilogram)							
					PCE ²	TCE ²	cis-1,2 DCE ²	trans-1,2 DCE ²	1,1 DCE ²	Vinyl Chloride ²	DRO/ORO ³	BTEX ⁴
2000 Site Investigation												
MW-1	MW1-2.5 - 3.5	Farallon	7/7/2000	2.5 - 3.5	1.8	ND	ND	ND	ND	ND	-	-
MW-1	MW1-35 - 35.5	Farallon	7/7/2000	35 - 35.5	0.35	ND	ND	ND	ND	ND	-	-
MW-1	MW1-45 - 45.5	Farallon	7/7/2000	45 - 45.5	0.21	ND	ND	ND	ND	ND	-	-
MW-2	MW2-2.5 - 4	Farallon	7/6/2000	2.5 - 4	11.0	ND	ND	ND	ND	ND	-	-
MW-2	MW2-10 - 11.5	Farallon	7/6/2000	10 - 11.5	6,900	ND	ND	ND	ND	ND	-	-
MW-2	MW2-17.5 - 19	Farallon	7/6/2000	17.5 - 19	0.65	ND	ND	ND	ND	ND	-	-
MW-2	MW2-30 - 31	Farallon	7/6/2000	30 - 31	0.43	ND	ND	ND	ND	ND	-	-
MW-2	MW2-45-45.5	Farallon	7/6/2000	45 - 45.5	0.49	ND	ND	ND	ND	ND	-	-
MW-3	MW3-7.5 - 9	Farallon	7/5/2000	7.5 - 9	-	-	-	-	-	-	ND	-
MW-3	MW3-12.5 - 14	Farallon	7/5/2000	12.5 - 14	ND	ND	ND	ND	ND	ND	-	-
MW-3	MW3-45 - 45.5	Farallon	7/5/2000	45 - 45.5	0.14	ND	ND	ND	ND	ND	-	-
VE-1	VE1- 7.5 - 9	Farallon	7/7/2000	7.5 - 9	0.18	ND	ND	ND	ND	ND	-	-
VE-1	VE1- 15 - 16.5	Farallon	7/7/2000	15 - 16.5	0.13	ND	ND	ND	ND	ND	-	-
VE-2	VE2- 5 - 6.5	Farallon	7/6/2000	5 - 6.5	230	ND	ND	ND	ND	ND	-	-
VE-2	VE2- 15 - 16.5	Farallon	7/6/2000	15 - 16.5	0.52	ND	ND	ND	ND	ND	-	-
VE-3	VE3- 10 - 11.5	Farallon	7/5/2000	10 - 11.5	ND	ND	ND	ND	ND	ND	-	-
VE-3	VE3- 20 - 21.5	Farallon	7/5/2000	20 - 21.5	ND	ND	ND	ND	ND	ND	-	-
VE-4	VE4-15 - 16.5	Farallon	7/6/2000	15 - 16.5	0.16	ND	ND	ND	ND	ND	-	-
VE-5	VE5- 5 - 6.5	Farallon	7/6/2000	5 - 6.5	0.17	ND	ND	ND	ND	ND	-	-
VE-5	VE5 - 15 - 16	Farallon	7/6/2000	15 - 16	0.97	ND	ND	ND	ND	ND	-	-
MTCA Cleanup Levels					0.05 ⁵	0.03 ⁵	800 ⁶	1,600 ⁶	1.67 ⁶	0.667 ⁶	2,000 ⁵	0.03/7/6/9 ⁵

NOTES:

¹Depth in feet below ground surface.

²Analyzed by United States Environmental Protection Agency (EPA) Method 8021B or 8260.

³Analyzed by Ecology-approved Method NWTPH-Dx.

⁴Analyzed by EPA Method 8020.

⁵Model Toxics Control Act (MTCA) Cleanup Regulation Method A Cleanup Levels, Chapter 173-340 WAC.

⁶MTCA Cleanup Levels and Risk Calculations (CLARC) Standard Method B Cleanup Level Values.

Results in **BOLD** denote concentrations above MTCA cleanup levels.

- = not analyzed

DCE = dichloroethene

PCE = tetrachloroethene

TCE = trichloroethene

ND = Not detected above laboratory practical quantitation limit

Table 4
Summary of Groundwater Analytical Results
Former City Hand Laundry Property
Bremerton, Washington
Farallon PN: 603-001

Monitoring Well Identification	Date Sampled	Analytical Results (micrograms per liter)								
		PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Trichlorofluoromethane	1,1,1-TCA	Chloroform	GRO	BTEX
MW-1	7/19/2000	560	<10	<10	<10	<10	<10	<10	-	-
	04/25/03	1,600	5.6	8.1	0.87	<0.20	<0.20	0.26	-	-
MW-2	7/19/2000	1,100	<10	<10	<10	<10	<10	<10	-	-
	04/25/03	3,700	3.0	1.0	<0.20	0.27	0.32	0.61	-	-
MW-3	7/19/2000	1,300	<10	<10	<10	<10	<10	<10	1,000 ¹	<1.0
	04/25/03	3,100	2.2	0.42	<0.20	0.33	0.40	0.61	-	-
MTCA Cleanup Level		5 ²	5 ²	80 ³	160 ³	2,400 ³	200 ²	7.17 ³	1,000 ²	5/1,000/700/1,000 ²

NOTES:

< denotes analyte not detected above the specified laboratory practical quantitation limit.

- indicates sample not analyzed

Results in **BOLD** denote concentrations above the specified MTCA cleanup level.

¹Laboratory report indicates that chromatogram is not similar to a typical gasoline product.

²Washington State Department of Ecology (Ecology) Model Toxics Control Act (MTCA), WAC 173-340 WAC MTCA Method A cleanup level, as amended February 2001.

³Ecology *Cleanup Levels and Risk Calculations* (CLARC) Version 3.1, updated November 2001, MTCA Method B cleanup levels.

PCE = tetrachloroethene

TCE = trichloroethene

DCE = dichloroethene

1,1,1-TCA = 1,1,1-trichloroethane

GRO = Total petroleum hydrocarbons as gasoline-range organics

BTEX = Benzene, toluene, ethylbenzene, and total xylenes.

Table 5
Summary of Soil Vapor Extraction Pilot Test Analytical Results
Former City Hand Laundry Property
Bremerton, Washington
Farallon PN: 603-001

Test Location	Sample Number	Date Collected	Sample Time ¹	Analytical Results (µg/l) ²				Analytical Results (ppmv) ³			
				PCE ⁴	TCE ⁴	cis-1,2 DCE ⁴	VC ⁴	PCE ⁴	TCE ⁴	cis-1,2 DCE ⁴	VC ⁴
Well VE-1	VE1-EFF-1	8/15/2000	Initial Sample @ 20 Minutes	2,300	25	29	<1.0 ⁵	339	5	7	<0.39
Well VE-1	VE1-EFF-2	8/15/2000	Final Sample @ 155 Minutes	5,300	<100	<100	<100	782	<19	<25	<39
Well VE-2	VE2-EFF-1	8/15/2000	Initial Sample @ 5 Minutes	7,800	<100	<100	<100	1,150	<19	<25	<39
Well VE-2	VE2-EFF-2	8/15/2000	Final Sample @ 125 Minutes	9,500	<100	<100	<100	1,401	<19	<25	<39
Well VE-3	VE3-EFF-1	8/15/2000	Initial Sample @ 10 Minutes	7,300	<100	<100	<100	1,077	<19	<25	<39
Well VE-3	VE3-EFF-2	8/15/2000	Final Sample @ 120 Minutes	10,000	<100	<100	<100	1,475	<19	<25	<39
Well VE-3	VE3-EFF-4	8/15/2000	Final Sample (Maximum Vacuum) @ 150 Minutes	8,000	<100	<100	<100	1,180	<19	<25	<39

NOTES

¹Refers to time since initiating the soil vapor test at test location

²Results presented as micrograms per liter (µg/l)

³ppmv = parts per million volume concentrations equivalent to microliters per liter (µl/l)

⁴Analyzed by U.S. Environmental Protection Agency Method 8260B

⁵<1.0 = Not detected above the laboratory reporting limits shown

PCE = Tetrachloroethene

TCE = Trichloroethene

cis-1,2 DCE = cis-1,2-Dichloroethene

VC = Vinyl Chloride

Table 6
Summary of Soil Vapor Extraction Pilot Testing Results For Well VE-1
Former City Hand Laundry Property
Bremerton, Washington
Farallon PN: 603-001

Sample Time (Minutes) ¹	Observed Vacuum (Inches of Water)					PID Units	Total HVOCs ($\mu\text{g/l}$) ³	Total HVOCs (ppmv) ⁴
	VE-1 Distance = 0 ft ²	VE-2 Distance = 26 ft	VE-3 Distance = 63 ft	VE-4 Distance = 55 ft	VE-5 Distance = 24 ft			
20	15	1.1	0.3	0.34	2.2	1,110	2,354	351
40	17	1.1	0.36	0.39	2.3	1,390	NS ⁵	NS
70	17	1.1	0.35	0.37	2.2	1,461	NS	NS
105	16	1.1	0.34	0.35	2.3	1,487	NS	NS
130	16	1.1	0.37	0.34	2.3	1,478	NS	NS
155	16	1.2	0.35	0.37	2.3	1,467	5,300	782
Average Value	16	1.1	0.35	0.36	2.3			
Observed Vacuum/Applied Vacuum Ratio		0.07	0.02	0.02	0.14			

NOTES:

¹ Sample time refers to number of minutes following initiation of the pilot test

² Distance refers to distance from the pilot test well in feet

³ Results presented as micrograms per liter ($\mu\text{g/l}$); derived from Table 5 HVOC data

⁴ ppmv = parts per million volume concentrations equivalent to microliters per liter ($\mu\text{l/l}$); derived from Table 5 HVOC data

⁵ Not sampled. No sample was collected at this time in the pilot test

HVOCs = halogenated volatile organic compounds

Table 7
Summary of Soil Vapor Extraction Pilot Testing Results for Well VE-2
Former City Hand Laundry Property
Bremerton, Washington
Farallon PN: 603-001

Sample Time (Minutes) ¹	Observed Vacuum (Inches of Water)					PID Units	Total HVOCs (µg/l) ³	Total HVOCs (ppmv) ⁴
	VE-2 Distance = 0 ft ²	VE-1 Distance = 26 ft	VE-3 Distance = 70 ft	VE-4 Distance = 65 ft	VE-5 Distance = 15 ft			
5	34	2.1	0.16	0.13	10.0	1,866	7,800	1,150
35	35	2.0	0.24	0.19	10.0	> 2,000	NS ⁵	NS
65	34	1.9	0.22	0.20	9.5	> 2,000	NS	NS
95	33	1.9	0.19	0.16	9.0	> 2,000	NS	NS
125	33	2.0	0.22	0.20	9.0	>2,000	9,500	1,401
Average Value	34	1.97	0.20	0.18	9.5			
Observed Vacuum/Applied Vacuum Ratio		0.058	0.006	0.005	0.28			

NOTES:

¹ Sample time refers to number of minutes following initiation of the pilot test

HVOCs = halogenated volatile organic compounds

² Distance refers to distance from the pilot test well in feet

³ Results presented as micrograms per liter (µg/l); derived from Table 5 HVOC data

⁴ ppmv = parts per million volume concentrations equivalent to microliters per liter (µl/l); derived from Table 5 HVOC data

⁵ Not sampled. No sample was collected at this time in the pilot test

Table 8
Summary of Soil Vapor Extraction Pilot Testing Results for Well VE-3
Former City Hand Laundry Property
Bremerton, Washington
Farallon PN: 603-001

Sample Time (Minutes) ¹	Observed Vacuum (Inches of Water)					PID Units	Total HVOCs (µg/l) ³	Total HVOCs (ppmv) ⁴
	VE-3 Distance = 0 ft ²	VE-1 Distance = 58 ft	VE-2 Distance = 70 ft	VE-4 Distance = 18 ft	VE-5 Distance = 55 ft			
10	16	0.28	0.13	1.6	0.27	> 2,000	7,300	1,077
40	17	0.28	0.12	1.5	0.25	> 2,000	NS ⁵	NS
65	17	0.27	0.11	1.4	0.26	> 2,000	NS	NS
90	17	0.23	0.11	1.3	0.24	> 2,000	NS	NS
120	18	0.23	0.08	1.3	0.22	> 2,000	10,000	1,475
Average Value	17	0.26	0.11	1.4	0.25			
Observed Vacuum/Applied Vacuum Ratio		0.015	0.006	0.082	0.015			
Supplemental test at increased applied vacuum of 34 inches of water.								
120	34	0.23	0.08	1.3	0.22	> 2,000	10,000	1,475
155	34	0.34	0.15	2.4	0.37	> 2,000	NS	NS
170	34	0.42	0.16	2.6	0.44	> 2,000	8,000	1,180
Average Value	34	0.33	0.13	2.08	0.34			
Observed Vacuum/Applied Vacuum Ratio		0.010	0.004	0.061	0.010			

NOTES:

¹Sample time refers to number of minutes following initiation of the pilot test

²Distance refers to distance from the pilot test well in feet

³Results presented as micrograms per liter (µg/l); derived from Table 5 HVOC data

⁴ppmv = parts per million volume concentrations equivalent to microliters per liter (µl/l); derived from Table 5 HVOC data

⁵Not sampled. No sample was collected at this time in the pilot test

HVOCs = halogenated volatile organic compounds

Table 9
Discharge Calculations for Tetrachlorethene
Soil Vapor Extraction Pilot Test
Former City Hand Laundry Property
Bremerton, Washington
Farallon PN: 603-001

CALCULATION OF HALOGENATED VOLATILE ORGANIC COMPOUND DISCHARGE AS PCE									
Source ¹	Average PCE Concentration (ppmv) ²	Accuracy Factor ³	Flow (cfm)	Air Density (lb/cf)	Minutes per Day	PCE Molecular Weight	Air Molecular Weight	Emissions (Pounds per day)	Emissions (Pounds per year)
VE-1									
Blower Discharge @ 28 cfm ⁴	561	1.25	28	0.0748	1,440	165.83	28.96	12.11	4,420.31
Source ¹	Average PCE Concentration (ppmv) ²	Accuracy Factor ³	Flow (cfm)	Air Density (lb/cf)	Minutes per Day	PCE Molecular Weight	Air Molecular Weight	Emissions (Pounds per day)	Emissions (Pounds per year)
VE-2									
Blower Discharge @ 56 cfm ⁴	1,276	1.25	56	0.0748	1,440	165.83	28.96	55.09	20,108.06
Source ¹	Average PCE Concentration (ppmv) ²	Accuracy Factor ³	Flow (cfm)	Air Density (lb/cf)	Minutes per Day	PCE Molecular Weight	Air Molecular Weight	Emissions (Pounds per day)	Emissions (Pounds per year)
VE-3									
Blower Discharge @ 28 cfm ⁴	1,276	1.25	28	0.0748	1,440	165.83	28.96	27.55	10,054.03
ESTIMATED AVERAGE DISCHARGE @ 28 cfm⁵								19.83	7,237.17
ESTIMATED AVERAGE DISCHARGE @ 56 cfm⁵								55.09	20,108.06

NOTES:

¹Source is the designated vapor extraction test well (VE-1, VE-2, or VE-3)

²ppmv = parts per million volume concentrations equivalent to microliters per liter (μl/l)

³Accuracy Factor = Relative reliability of analytical results. Values >1.00 indicate lower reliability. The value 1.00 is 100% reliability.

Accuracy factor of 1.25 is estimated for sampling method.

⁴Blower discharge based on field measurements and manufacturer's performance data for a Rotron DR 404 Model Regenerative Blower.

⁵Based on the following calculation:

ppmv x accuracy factor x flow (cfm) x air density (lb/cf) x minutes/day x PCE molecular weight

air molecular weight x 1,000,000

= discharge as pounds per day (lbs/day)

discharge as pounds per year (lbs/year) = 365 x (lbs/day)

⁴cfm = cubic feet per minute

⁵lb/cf = pounds per cubic foot

PCE = tetrachlorethene

APPENDIX A
BORING LOGS

Subsurface Investigation and
Soil Vapor Extraction Feasibility Pilot Test
Former City Hand Laundry
1002 4th Street
Bremerton, Washington

Farallon PN: 603-001



FARALLON CONSULTING
320 3rd Ave. NE, Suite 200
Issaquah, WA 98027

LOG OF WELL MW-1

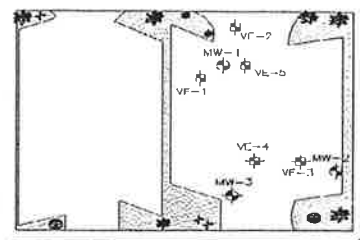
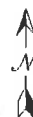
(Page 1 of 3)

LAND TITLE BUILDING PARKING LOT
1002 4th Street
Bremerton, WA

Farallon PN: 603-001

Logged By: Tim Brown

Date/Time Started : 7/7/00 08:00am
Date/Time Completed : 7/7/00 10:50am
Equipment : CME-75
Drilling Company : Cascade Drilling Inc.
Depth to Water ATD : 49.5 Feet
Total Depth : 54.5 Feet



Depth in Feet	Samples	% Rec- overy	Blow Count 6/6/6	USCS	GRAPHIC	DESCRIPTION	Sample ID	PID (ppm)	Well: MW-1 Elev.: NA
0				FL GP		ASPHALT			Cover Asphalt
				SM		Sandy GRAVEL, poorly graded, fine to medium grained, fine sand, trace silt, brown, moist			Grout
		100		SM		Silty SAND, fine grained, trace fine to medium gravel, mottled brown-orange, slightly moist to moist.	MW1-2.5-3.5	196	
5						Silty SAND, fine grained, trace fine to medium gravel, mottled brown-orange, slightly moist to moist.			
		100	10/21/32	SM		Silty SAND, fine grained, trace fine to medium gravel, medium dense, mottled brown-orange, moist.	MW1-5-6.5	145	
		100	23/25/30	SM		Silty SAND, very fine to fine grained, trace fine to medium gravel, medium dense, brown, moist.	MW1-7.5-9	130	
10									
		100	30/50 for 6"	SP/SM		SAND, poorly-graded and Silty SAND lenses, fine to medium grained, dense, light brown, moist.	MW1-10-11	24.0	
		100	26/25/30	SP		SAND, poorly-graded, fine to medium grained, minor silt, medium dense, brown, moist.	MW1-12.5-14	12.8	
				SM		Silty SAND, fine grained, medium dense, brown, moist.			Seal
15									
		100	18/23/24	SM		Silty SAND, very fine grained, medium dense, mottled brown-orange, moist	MW1-15-16.5	43.7	
		100	20/40/50	SM		Silty SAND, very fine grained, dense, mottled brown-orange, moist	MW1-17.5-19	4.2	
				SP		SAND, poorly-graded, fine to medium grained, minor silt, dense, brown, moist.			
20									
		100	25/27/30	SP/SM		SAND, poorly-graded and Silty SAND lenses, very fine to medium grained, medium dense, brown, moist.	MW1-20-21.5	11.3	
25									

CASING: 2 INCH PVC
SCREEN: 0.010 SLOTTED PVC
SAND PACK: 2/12 SAND
SEAL: GOLDSEAL BENTONITE CHIPS
SAMPLER TYPE: D&M SAMPLER 140 LB HAMMER

LOG OF WELL MW-1

(Page 1 of 3)

D:\QUANTUM\FARALLON\603\MW1.BOR 10-23-2000

FARALLON CONSULTING
320 3rd Ave. NE, Suite 200
Issaquah, WA 98027

LOG OF WELL MW-1

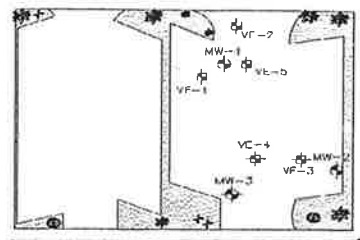
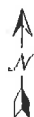
(Page 2 of 3)

LAND TITLE BUILDING PARKING LOT
1002 4th Street
Bremerton, WA

Farallon PN: 603-001

Logged By: Tim Brown

Date/Time Started : 7/7/00 08:00am
Date/Time Completed : 7/7/00 10:50am
Equipment : CME-75
Drilling Company : Cascade Drilling Inc.
Depth to Water ATD : 49.5 Feet
Total Depth : 54.5 Feet



Depth in Feet	Samples	% Rec- overy	Blow Count 6/6/6	USCS	GRAPHIC	DESCRIPTION	Sample ID	PID (ppm)
25	X	100	28/30/35	SP		SANDY, poorly-graded, fine to medium grained, trace medium gravelly minor silt, medium dense, brown, moist.	MW1-25-26.5	5.0
	X			SM		Silty SAND, fine grained, medium dense, brown, moist.		
30	X	0	70 for 6"			No sample recovered.	MW1-30-30.5	0.0
35	X	100	70 for 6"	SP		Gravelly SAND, poorly-graded, fine to medium grained, fine to medium subrounded to angular gravel, trace silt, very dense, brown, moist.	MW1-35-35.5	0.0
40	X	100	100 for 6"	GP		Sandy GRAVEL, poorly-graded, fine to medium grained, fine to coarse sand, trace silt, very dense brown, moist.	MW1-40-40.5	0.0
45	X	100	100 for 6"	GP		Sandy GRAVEL, poorly-graded, fine to medium grained, fine to coarse sand, trace silt, very dense brown, moist to very moist.	MW1-45-45.5	0.0

Well: MW-1
 Elev.: NA

Seal

Sand
 Screen

CASING: 2 INCH PVC
SCREEN: 0.010 SLOTTED PVC
SAND PACK: 2/12 SAND
SEAL: GOLDSEAL BENTONITE CHIPS
SAMPLER TYPE: D&M SAMPLER 140 LB HAMMER

LOG OF WELL MW-1

(Page 2 of 3)

10-23-2000 D:\QUANTUM\FARALLON\603\MMW1.BOR



FARALLON CONSULTING
320 3rd Ave. NE, Suite 200
Issaquah, WA 98027

LAND TITLE BUILDING PARKING LOT
1002 4th Street
Bremerton, WA

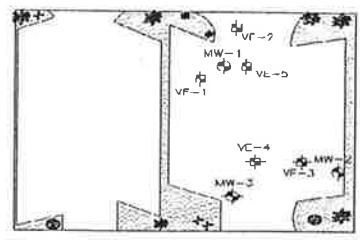
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Logged By: Tim Brown

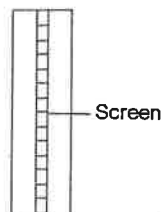
LOG OF WELL MW-1

(Page 3 of 3)

Date/Time Started : 7/7/00 08:00am
Date/Time Completed : 7/7/00 10:50am
Equipment : CME-75
Drilling Company : Cascade Drilling Inc.
Depth to Water ATD : 49.5 Feet
Total Depth : 54.5 Feet



Depth in Feet	Samples	% Rec- overy	Blow Count 6/6/6	USCS	GRAPHIC	DESCRIPTION	Sample ID	PID (ppm)	Well: MW-1 Elev.: NA
50	X	100	70 for 6"	SP		Sandy GRAVEL, poorly-graded, fine to medium grained, fine to coarse sand, trace silt, very dense brown, wet.	MW1-50-50.5	0.0	
55						Total depth = 54.5 feet below ground surface			
60									
65									
70									
75									



CASING: 2 INCH PVC
SCREEN: 0.010 SLOTTED PVC
SAND PACK: 2/12 SAND
SEAL: GOLDSEAL BENTONITE CHIPS
SAMPLER TYPE: D&M SAMPLER 140 LB HAMMER

LOG OF WELL MW-1

(Page 3 of 3)



FARALLON CONSULTING
320 3rd Ave. NE, Suite 200
Issaquah, WA 98027

LOG OF WELL MW-2

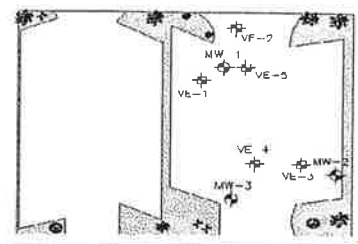
(Page 1 of 3)

LAND TITLE BUILDING PARKING LOT
1002 4th Street
Bremerton, WA

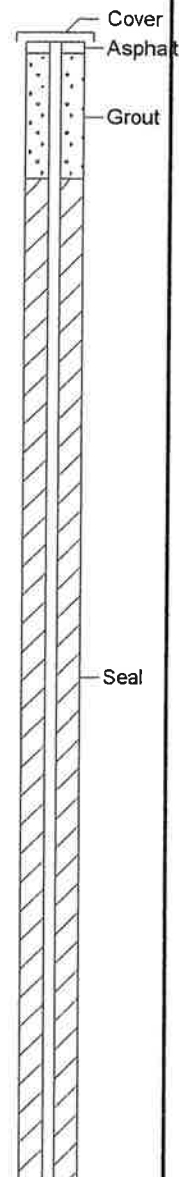
Farallon PN: 603-001

Logged By: Tim Brown

Date/Time Started : 7/6/00 08:15am
Date/Time Completed : 7/6/00 12:30pm
Equipment : CME-75
Drilling Company : Cascade Drilling Inc.
Depth to Water ATD : 48.5 Feet
Total Depth : 55 Feet



Depth in Feet	Samples	% Rec- overy	Blow Count 6/6/6	USCS	GRAPHIC	DESCRIPTION	Sample ID	PID (ppm)	
0				FI		ASPHALT			Cover
				GP		Sandy GRAVEL, poorly-graded, fine to medium grained, fine sand, trace silt, brown, moist.			Asphalt
		100	4/4/4	SM		Silty SAND, fine grained, trace medium gravel, brown, slightly moist.			Grout
				SM		Silty SAND, fine grained, trace fine to medium gravel, very loose, brown, moist, sweet-like odor.	MW2-2.5-4	628	
5		100	6/5/10	SM		Silty SAND, fine grained, trace fine to medium gravel, loose, brown, moist.	MW2-5-6.5	2000+	
		100	12/19/30	SM		Silty SAND, very fine grained, trace fine to medium gravel, medium dense, brown, moist.	MW2-7.5-9	2000+	
10		100	15/15/25	ML		SILT, minor clay, trace fine sand, very stiff, brown, moist, cohesive.	MW2-10-11.5	2000+	
		100	25/30/25	SP		SAND, poorly-graded, fine to medium grained, minor silt, medium dense, light brown, moist.	MW2-12.5-14	54.0	
15		100	15/18/20	SM		Silty SAND, very fine grained, trace fine to medium gravel, medium dense, brown, moist.	MW2-15-16.5	51.7	
		100	20/40/50	SP		SAND, poorly-graded, fine to medium grained, minor silt, dense, brown, moist.	MW2-17.5-19	280	
20		100	20/25/33	SP		SAND, poorly-graded, fine to medium grained, minor silt, medium dense, brown, moist.	MW2-20-21.5	180	
25									Seal



CASING: 2 INCH PVC
SCREEN: 0.010 SLOTTED PVC
SAND PACK: 2/12 SAND
SEAL: GOLDSEAL BENTONITE CHIPS
SAMPLER TYPE: D&M SAMPLER/140 LB HAMMER

LOG OF WELL MW-2

(Page 1 of 3)

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LOG OF WELL MW-2

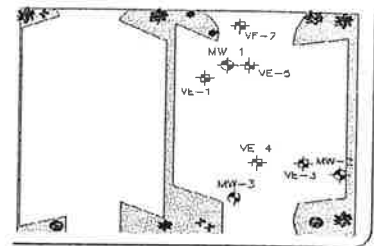
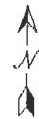
(Page 2 of 3)

LAND TITLE BUILDING PARKING LOT
1002 4th Street
Bremerton, WA

Farallon PN: 603-001

Logged By: Tim Brown

Date/Time Started : 7/6/00 08:15am
Date/Time Completed : 7/6/00 12:30pm
Equipment : CME-75
Drilling Company : Cascade Drilling Inc.
Depth to Water ATD : 48.5 Feet
Total Depth : 55 Feet



Depth in Feet	Samples	% Rec- overy	Blow Count 6/6/6	USCS	GRAPHIC	DESCRIPTION	Sample ID	PID (ppm)	Well: MW-2 Elev.: NA
25	X	100	25/33/45	SP/SM		SAND, poorly-graded and Silty SAND lenses, fine to medium grained, dense, brown, moist.	MW2-25-26.5	124	
30	X	100	30/50 for 5"	GP		Sandy GRAVEL, poorly-graded, fine to medium subrounded to angular gravel, fine to coarse sand, trace silt, very dense, brown, moist.	MW2-30-31	155	
35	X	100	40/50 for 5"	SP		Gravelly SAND, poorly-graded, fine to medium grained, fine to medium gravel, trace silt, very dense, brown, moist.	MW2-35-36	27.9	
40	X	100	50 for 6"	SP		Gravelly SAND, poorly-graded, fine to medium grained, fine to medium gravel, trace silt, dense, brown, moist.	MW2-40-40.5	237	
45	X	100	50 for 4"	GP		Sandy GRAVEL, poorly-graded, fine to medium subrounded to angular gravel, fine to coarse sand, trace silt, very dense, brown, moist.	MW2-45-45.5	14.7	
50									

CASING: 2 INCH PVC
SCREEN: 0.010 SLOTTED PVC
SAND PACK: 2/12 SAND
SEAL: GOLDSEAL BENTONITE CHIPS
SAMPLER TYPE: D&M SAMPLER/140 LB HAMMER

LOG OF WELL MW-2

(Page 2 of 3)



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Issaquah, WA 98027

LAND TITLE BUILDING PARKING LOT
1002 4th Street
Bremerton, WA

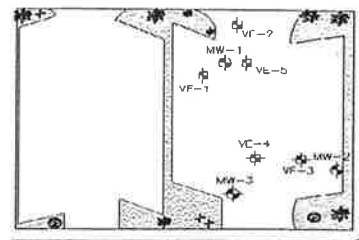
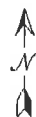
Farallon PN: 603-001

Logged By: Tim Brown

LOG OF WELL MW-2

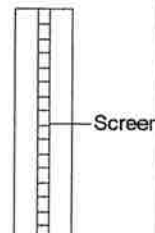
(Page 3 of 3)

Date/Time Started : 7/6/00 08:15am
Date/Time Completed : 7/6/00 12:30pm
Equipment : CME-75
Drilling Company : Cascade Drilling Inc.
Depth to Water ATD : 48.5 Feet
Total Depth : 55 Feet



Depth in Feet	Samples	% Rec- overy	Blow Count 6/6/6	USCS	GRAPHIC	DESCRIPTION	Sample ID	PID (ppm)	Well: MW-2 Elev.: NA
50	X	100	50 for 6"	GP		Sandy GRAVEL, poorly-graded, fine to medium subrounded to angular gravel, fine to coarse sand, trace silt, dense, brown, wet.	MW2-50-50.5	196	
55									
60									
65									
70									
75									

Total depth = 55.0 feet below ground surface.



CASING: 2 INCH PVC
SCREEN: 0.010 SLOTTED PVC
SAND PACK: 2/12 SAND
SEAL: GOLDSEAL BENTONITE CHIPS
SAMPLER TYPE: D&M SAMPLER/140 LB HAMMER

LOG OF WELL MW-2

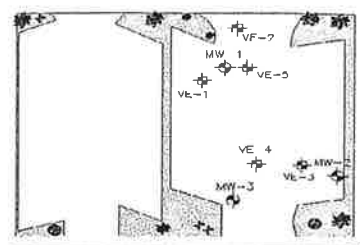
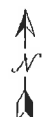
(Page 3 of 3)

FARALLON CONSULTING
320 3rd Ave. NE, Suite 200
Issaquah, WA 98027

LOG OF WELL MW-3

(Page 1 of 3)

Date/Time Started : 7/5/00 08:25am
Date/Time Completed : 7/5/00 3:00pm
Equipment : CME-75
Drilling Company : Cascade Drilling Inc.
Depth to Water ATD : 47 Feet
Total Depth : 53.0 Feet



LAND TITLE BUILDING PARKING LOT
1002 4th Street
Bremerton, WA

Farallon PN: 603-001

Logged By: Tim Brown

[illegible]

CASING: 2 INCH PVC
SCREEN: 0.010 SLOTTED PVC
SAND PACK: 2/12 SAND
SEAL: GOLDSEAL BENTONITE CHIPS
SAMPLER TYPE: D&M SAMPLER/140 LB HAMMER

LOG OF WELL MW-3

(Page 1 of 3)

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LAND TITLE BUILDING PARKING LOT
1002 4th Street
Bremerton, WA

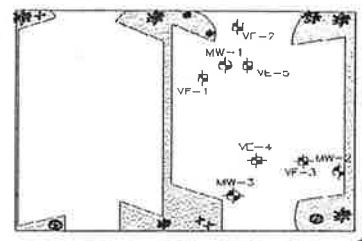
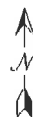
Farallon PN: 603-001

Logged By: Tim Brown

LOG OF WELL MW-3

(Page 2 of 3)

Date/Time Started : 7/5/00 08:25am
Date/Time Completed : 7/5/00 3:00pm
Equipment : CME-75
Drilling Company : Cascade Drilling Inc.
Depth to Water ATD : 47 Feet
Total Depth : 53.0 Feet



Well: MW-3
Elev.: NA

Depth in Feet	Samples	% Rec- overy	Blow Count 6/6/6	USCS	GRAPHIC	DESCRIPTION	Sample ID	PID (ppm)
25	X	100	33/33/46	SP		SAND, poorly-graded, fine to medium grained, minor silt, trace fine gravel, dense, brown, slightly moist.	MW3-25-26.5	6.2
30	X	100	30/45/50	GP		Sandy GRAVEL, poorly-graded, fine to medium subrounded gravel, fine to coarse sand, trace silt, dense, brown, moist.	MW3-30-31.5	0.5
35	X	100	50 for 4"	GP		Sandy GRAVEL, poorly-graded, fine to medium subrounded gravel, fine to coarse sand, trace silt, very dense, brown, moist.	MW3-35-35.5	0.0
40	X	100	50 for 5"	SP		SAND, poorly-graded, fine to medium grained, minor silt, trace fine gravel, very dense, brown, slightly moist.	MW3-40-40.5	0.0
45	X	100	50 for 3"	GP		Sandy GRAVEL, poorly-graded, fine to medium subrounded gravel, fine to coarse sand, trace silt, very dense, brown, wet.	MW3-45-45.5	0.0
50								

Seal

Sand Pack
Screen

CASING: 2 INCH PVC
SCREEN: 0.010 SLOTTED PVC
SAND PACK: 2/12 SAND
SEAL: GOLDSEAL BENTONITE CHIPS
SAMPLER TYPE: D&M SAMPLER/140 LB HAMMER

LOG OF WELL MW-3

(Page 2 of 3)



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LAND TITLE BUILDING PARKING LOT
1002 4th Street
Bremerton, WA

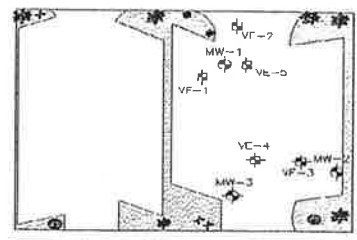
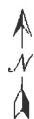
Farallon PN: 603-001

Logged By: Tim Brown

LOG OF WELL MW-3

(Page 3 of 3)

Date/Time Started : 7/5/00 08:25am
Date/Time Completed : 7/5/00 3:00pm
Equipment : CME-75
Drilling Company : Cascade Drilling Inc.
Depth to Water ATD : 47 Feet
Total Depth : 53.0 Feet



Well: MW-3
Elev.: NA

Depth
in
Feet

Samples

%
Rec-
overy

Blow
Count
6/6/6

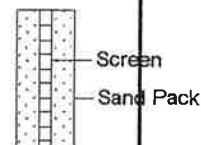
USCS

GRAPHIC

DESCRIPTION

Sample ID

PID
(ppm)



50



100

50 for 3"

GP

Sandy GRAVEL, poorly-graded, fine to medium
subrounded gravel, fine to coarse sand, trace silt, very
dense, brown, wet.

MW3-50-50.5

0.0

Total depth = 53.0 feet below ground surface.

55

60

65

70

75

CASING: 2 INCH PVC
SCREEN: 0.010 SLOTTED PVC
SAND PACK: 2/12 SAND
SEAL: GOLDSEAL BENTONITE CHIPS
SAMPLER TYPE: D&M SAMPLER/140 LB HAMMER

LOG OF WELL MW-3

(Page 3 of 3)



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LAND TITLE BUILDING PARKING LOT
1002 4th Street
Bremerton, WA

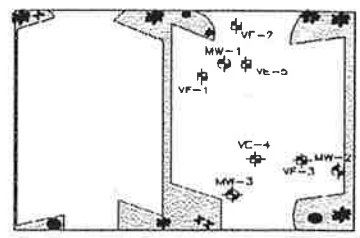
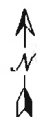
Farallon PN: 603-001

Logged By: Tim Brown

LOG OF WELL VE-1

(Page 1 of 1)

Date/Time Started : 7/7/00 10:55am
Date/Time Completed : 7/7/00 12:40pm
Equipment : CME-75
Drilling Company : Cascade Drilling Inc.
Drill Forman : Cody Pulis
Total Depth : 17.0 Feet



Depth in Feet	Samples	% Rec- overy	Blow Count 6/6/6	USCS	GRAPHIC	DESCRIPTION	Sample ID	PID (ppm)	Well: VE-1 Elev.: NA
0				FL		ASPHALT			Cover
				GP		Sandy GRAVEL, poorly-graded, fine to medium grained, fine sand, trace silt, brown, moist.			Asphalt
		100		SM		Silty SAND, fine to medium grained, trace fine to medium gravel, brown, moist.	VE1-2.5-3.5	199	Grout
				SM		Silty SAND, fine to medium grained, trace fine to medium gravel, brown, moist.			
5		100	8/10/10	SM		Silty SAND, fine grained, loose, mottled brown-orange, moist.	VE1-5-6.5	35.9	Seal
		100	15/25/45	SM		Silty SAND, fine grained, medium dense, mottled brown-orange, moist.	VE1-7.5-9	470	
				SP		SAND, poorly-graded, fine to medium grained, trace silt, medium dense, light brown, moist.			
10		100	23/35/50	SP		SAND, poorly-graded, fine to medium grained, trace silt, dense, light brown, moist.	VE1-10-11.5	32.3	
		100	16/20/25	SM		Silty SAND, very fine grained, medium dense, mottled brown, very moist, slightly cohesive.	VE1-12.5-14	8.9	Sand Pack
				SP		SAND, poorly-graded, fine to medium grained, trace silt, medium dense, light brown, moist.			Screener
15		100	16/18/20	SM		Silty SAND, very fine to fine grained, medium dense, brown, moist.	VE1-15-16.5	8.2	
Total depth = 17.0 feet below ground surface									
20									
25									

CASING: 2 INCH PVC
SCREEN: 0.020 SLOTTED PVC
SAND PACK: 2/12 SAND
SEAL: GOLDSEAL BENTONITE CHIPS
SAMPLER TYPE: D&M SAMPLER/140 LB HAMMER

LOG OF WELL VE-1

(Page 1 of 1)

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10-01-2000



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LAND TITLE BUILDING PARKING LOT
1002 4th Street
Bremerton, WA

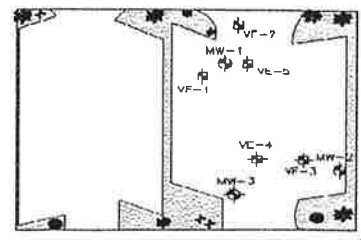
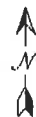
Farallon PN: 603-001

Logged By: Tim Brown

LOG OF WELL VE-2

(Page 1 of 1)

Date/Time Started : 7/6/00 3:30pm
Date/Time Completed : 7/6/00 5:15pm
Equipment : CME-75
Drilling Company : Cascade Drilling Inc.
Drill Forman : Cody Pulis
Total Depth : 17.0 Feet



Depth in Feet	Samples	% Rec- overy	Blow Count 6/6/6	USCS	GRAPHIC	DESCRIPTION	Sample ID	PID (ppm)	Well: VE-2 Elev.: NA
0				FL GP		ASPHALT			Cover Asphalt
				SM		Sandy GRAVEL, poorly-graded, fine to medium grained, fine sand, trace silt, brown, moist.			Grout
		100		SM		Silty SAND, fine grained, trace fine to medium gravel, brown, slightly moist.	VE2-2.5-3.5	0.0	
						Silty SAND, fine grained, trace fine to medium gravel, brown, slightly moist.			
5				SM		Silty SAND, fine grained, loose, brown, slightly moist to moist.	VE2-5-6.5	2000+	Seal
		100	19/22/22						
				SM/SP		Silty SAND and SAND lenses, poorly-graded, fine grained, medium dense, brown, moist.	VE2-7.5-9	784	
		100	15/19/28						
10				SM/SP		Silty SAND and SAND lenses, poorly-graded, fine grained, medium dense, brown, moist.	VE2-10-11.5	256	
		100	28/29/39						
				SP		SAND, poorly-graded, fine grained, minor silt, dense, light brown, moist.	VE2-12.5-14	36.8	Sand Pack Screener
		100	23/35/41						
15				SM		Silty SAND, fine grained, medium dense, brown, moist.	VE2-15-16.5	16.6	
		100	20/20/31						
Total depth = 17.0 feet below ground surface									
20									
25									

CASING: 2 INCH PVC
SCREEN: 0.020 SLOTTED PVC
SAND PACK: 2/12 SAND
SEAL: GOLDSEAL BENTONITE CHIPS
SAMPLER TYPE: D&M SAMPLER/140 LB HAMMER

LOG OF WELL VE-2

(Page 1 of 1)

10-01-2000 D:\QUANTUM\FARALLON\603\VE2.BOR



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LAND TITLE BUILDING PARKING LOT
1002 4th Street
Bremerton, WA

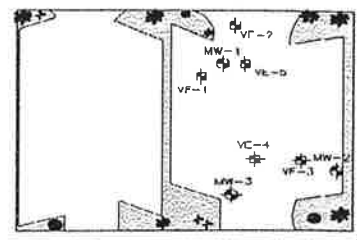
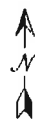
Farallon PN: 603-001

Logged By: Tim Brown

LOG OF WELL VE-3

(Page 1 of 1)

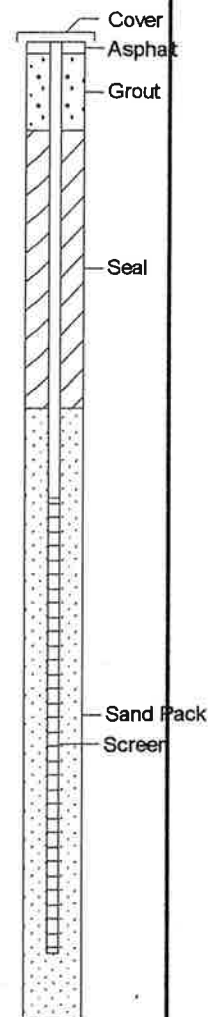
Date/Time Started : 7/5/00 3:30pm
Date/Time Completed : 7/5/00 5:00pm
Equipment : CME-75
Drilling Company : Cascade Drilling Inc.
Drill Forman : Cody Pulis
Total Depth : 21.5 Feet



Well: VE-3
Elev.: NA

Depth in Feet	Samples	% Rec- overy	Blow Count 6/6/6	USCS	GRAPHIC	DESCRIPTION	Sample ID	PID (ppm)
0				FL		ASPHALT		
		100	4/6/10	SM		Silty SAND, very fine grained, trace fine to medium gravel, brown, slightly moist.	VE3-2.5-4	263
5		100	11/17/23	SP		SAND, poorly-graded, fine grained, minor silt, medium dense, light brown, slightly moist.	VE3-5-6.5	58.1
		100	17/23/27	SM		Silty SAND, fine grained, trace fine to medium gravel, medium dense, brown, slightly moist.	VE3-7.5-9	131
10		100	18/27/40	SM		Silty SAND, fine grained, trace fine to medium gravel, medium dense, brown, moist to wet.	VE3-10-11.5	428
		100	18/20/25	SP		SAND, poorly-graded, fine grained, minor silt, medium dense, mottled brown-gray, slightly moist.	VE3-12.5-14	20.5
15		100	18/18/20	SM		Silty SAND, very fine grained, trace fine to medium gravel, medium dense, brown, slightly moist.	VE3-15-16.5	10.6
		100	20/50 for 6"	SP		SAND, poorly-graded, fine grained, minor silt, dense, brown, slightly moist.	VE3-17.5-18.5	15.6
20		100	23/30/45	SP		SAND, poorly-graded, fine grained, minor silt, dense, brown, slightly moist.	VE3-20-21.5	15.2
25								

Total depth = 21.5 feet below ground surface



CASING: 2 INCH PVC
SCREEN: 0.010 SLOTTED PVC
SAND PACK: 2/12 SAND
SEAL: GOLDSEAL BENTONITE CHIPS
SAMPLER TYPE: D&M SAMPLER/140 LB HAMMER

LOG OF WELL VE-3

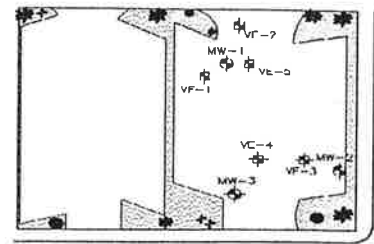
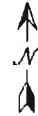
(Page 1 of 1)

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LOG OF WELL VE-4

(Page 1 of 1)

Date/Time Started : 7/6/00 1:00pm
Date/Time Completed : 7/6/00 3:00pm
Equipment : CME-75
Drilling Company : Cascade Drilling Inc.
Drill Forman : Cody Pulis
Total Depth : 21.5 Feet



LAND TITLE BUILDING PARKING LOT
1002 4th Street
Bremerton, WA

Farallon PN: 603-001

Logged By: Tim Brown

Depth in Feet	Samples	% Rec- overy	Blow Count 6/6/6	USCS	GRAPHIC	DESCRIPTION	Sample ID	PID (ppm)
0				FL		ASPHALT		
		100	7/7/10	SM		Silty SAND, very fine grained, trace fine to medium gravel, brown, slightly moist.	VE4-2.5-4	26.8
				SM		Silty SAND, very fine grained, loose, brown, moist.		
5		100	9/13/16	SM		Silty SAND, very fine grained, loose, brown, moist.	VE4-5-6.5	13.6
10		100	18/21/27	SP		SAND, poorly-graded, fine to medium grained, trace silt, medium dense, light brown, moist.	VE4-10-11.5	12.0
15		100	15/27/50	SP/SM		SAND, poorly-graded and Silty SAND lenses, fine to medium grained, dense, light brown to brown, moist.	VE4-15-16.5	1.5
20		100	20/23/29	SP/SM		SAND, poorly-graded and Silty SAND lenses, fine to medium grained, medium dense, light brown to brown, moist.	VE4-20-21.5	0.0

Total depth = 21.5 feet below ground surface

Well: VE-4
Elev.: NA

The well diagram shows a vertical cross-section of the well casing. From top to bottom, it includes: a 'Cover' at the surface, 'Asphalt' lining the upper section, 'Grout' filling the annulus around the casing, a 'Seal' (indicated by diagonal hatching), a 'Screen' (indicated by horizontal lines) located between depths 15 and 20 feet, and a 'Sand Pack' (indicated by stippling) surrounding the screen.

CASING: 2 INCH PVC
SCREEN: 0.020 SLOTTED PVC
SAND PACK: 2/12 SAND
SEAL: GOLDSEAL BENTONITE CHIPS
SAMPLER TYPE: D&M SAMPLER/140 LB HAMMER

LOG OF WELL VE-4

(Page 1 of 1)



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LAND TITLE BUILDING PARKING LOT
1002 4th Street
Bremerton, WA

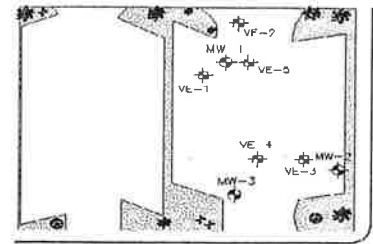
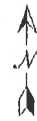
Farallon PN: 603-001

Logged By: Tim Brown

LOG OF WELL VE-5

(Page 1 of 1)

Date/Time Started : 7/6/00 5:30pm
Date/Time Completed : 7/6/00 7:00pm
Equipment : CME-75
Drilling Company : Cascade Drilling Inc.
Drill Forman : Cody Pulis
Total Depth : 16.8 Feet



Depth in Feet	Samples	% Rec- overy	Blow Count 6/6/6	USCS	GRAPHIC	DESCRIPTION	Sample ID	PID (ppm)	Well: VE-5 Elev.: NA
0				FL		ASPHALT			Cover
				GP		Sandy GRAVEL, poorly-graded, fine to medium grained, fine sand, trace silt, brown, moist			Asphalt
		100		SM		Silty SAND, very fine to fine grained, trace fine to medium gravel, mottled brown-orange, slightly moist to moist.	VE5-2.5-3.5	28.3	Grout
				SM		Silty SAND, very fine to fine grained, trace fine to medium gravel, mottled brown-orange, slightly moist to moist.			
5		100	12/17/30	SM		Silty SAND, very fine grained, medium dense, mottled brown-orange, moist.	VE5-5-6.5	74.3	Seal
10		100	21/30/40	SP		SAND, poorly-graded, fine to medium grained, trace silt, medium dense, light brown, moist.	VE5-10-11.5	4.1	
15		100	27/50 for 6"	SM		Silty SAND, very fine grained, dense, brown, moist.	VE5-15-16	2.6	Sand Pack
									Screen
Total depth = 16.5 feet below ground surface									
20									
25									

CASING: 2 INCH PVC
SCREEN: 0.020 SLOTTED PVC
SAND PACK: 2/12 SAND
SEAL: GOLDSEAL BENTONITE CHIPS
SAMPLER TYPE: D&M SAMPLER/140 LB HAMMER

LOG OF WELL VE-5

(Page 1 of 1)

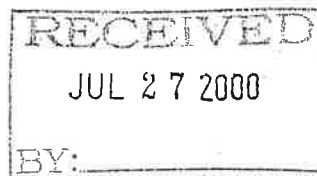
APPENDIX B
LABORATORY ANALYTICAL REPORTS

Subsurface Investigation and
Soil Vapor Extraction Feasibility Pilot Test
Former City Hand Laundry
1002 4th Street
Bremerton, Washington

Farallon PN: 603-001



**OnSite
Environmental Inc.**
Analytical Testing and Mobile Laboratory Services



July 26, 2000

Jeff Kaspar
Farallon Consulting, LLC
320 3rd Avenue NE, Suite 200
Issaquah, WA 98027

Re: Analytical Data for Project 603-001
Laboratory Reference No. 0007-041

Dear Jeff:

Enclosed are the analytical results and associated quality control data for samples submitted on July 10, 2000.

The standard policy of OnSite Environmental Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

David Baumeister
Project Manager

Enclosures

Date of Report: July 26, 2000
Samples Submitted: July 10, 2000
Lab Traveler: 07-041
Project: 603-001

NWTPH-Dx

Date Extracted: 7-12-00
Date Analyzed: 7-12-00

Matrix: Soil
Units: mg/Kg (ppm)

Client ID:	MW3-7.5-9	MW3-12.5-14
Lab ID:	07-041-03	07-041-05

Diesel Fuel:	ND	ND
PQL:	28	33

Heavy Oil:	ND	ND
PQL:	56	66

Surrogate Recovery:		
o-Terphenyl	96%	74%

Flags:

Date of Report: July 26, 2000
Samples Submitted: July 10, 2000
Lab Traveler: 07-041
Project: 603-001

NWTPH-Dx
METHOD BLANK QUALITY CONTROL

Date Extracted: 7-12-00
Date Analyzed: 7-12-00

Matrix: Soil
Units: mg/Kg (ppm)

Lab ID: MB0712S1

Diesel Fuel: ND
PQL: 25

Heavy Oil: ND
PQL: 50

Surrogate Recovery:
o-Terphenyl 82%

Flags:

Date of Report: July 26, 2000
Samples Submitted: July 10, 2000
Lab Traveler: 07-041
Project: 603-001

NWTPH-Dx
DUPLICATE QUALITY CONTROL

Date Extracted: 7-12-00
Date Analyzed: 7-12-00

Matrix: Soil
Units: mg/Kg (ppm)

Lab ID: 07-041-03 07-041-03 DUP

Diesel Fuel: ND ND
PQL: 25 25

RPD: N/A

Surrogate Recovery:
o-Terphenyl 96% 64%

Flags:

Date of Report: July 26, 2000
Samples Submitted: July 10, 2000
Lab Traveler: 07-041
Project: 603-001

HALOGENATED VOLATILES by EPA 8260B
page 1 of 2

Date Extracted: 7-19-00
Date Analyzed: 7-19-00

Matrix: Soil
Units: mg/Kg (ppm)

Lab ID: 07-041-05
Client ID: MW3-12.5-14

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		0.066
Chloromethane	ND		0.066
Vinyl Chloride	ND		0.066
Bromomethane	ND		0.066
Chloroethane	ND		0.066
Trichlorofluoromethane	ND		0.066
1,1-Dichloroethene	ND		0.066
Methylene Chloride	ND		0.33
(trans) 1,2-Dichloroethene	ND		0.066
1,1-Dichloroethane	ND		0.066
2,2-Dichloropropane	ND		0.066
(cis) 1,2-Dichloroethene	ND		0.066
Chloroform	ND		0.066
1,1,1-Trichloroethane	ND		0.066
Carbon Tetrachloride	ND		0.066
1,1-Dichloropropene	ND		0.066
1,2-Dichloroethane	ND		0.066
Trichloroethene	ND		0.066
1,2-Dichloropropane	ND		0.066
Dibromomethane	ND		0.066
Bromodichloromethane	ND		0.066
2-Chloroethyl Vinyl Ether	ND		0.33
(cis) 1,3-Dichloropropene	ND		0.066
(trans) 1,3-Dichloropropene	ND		0.066
1,1,2-Trichloroethane	ND		0.066
Tetrachloroethene	ND		0.066
1,3-Dichloropropane	ND		0.066

Date of Report: July 26, 2000
 Samples Submitted: July 10, 2000
 Lab Traveler: 07-041
 Project: 603-001

HALOGENATED VOLATILES by EPA 8260B

page 2 of 2

Lab ID: 07-041-05
 Client ID: MW3-12.5-14

Compound	Results	Flags	PQL
Dibromochloromethane	ND		0.066
1,2-Dibromoethane	ND		0.066
Chlorobenzene	ND		0.066
1,1,1,2-Tetrachloroethane	ND		0.066
Bromoform	ND		0.066
Bromobenzene	ND		0.066
1,1,2,2-Tetrachloroethane	ND		0.066
1,2,3-Trichloropropane	ND		0.066
2-Chlorotoluene	ND		0.066
4-Chlorotoluene	ND		0.066
1,3-Dichlorobenzene	ND		0.066
1,4-Dichlorobenzene	ND		0.066
1,2-Dichlorobenzene	ND		0.066
1,2-Dibromo-3-chloropropane	ND		0.33
1,2,4-Trichlorobenzene	ND		0.066
Hexachlorobutadiene	ND		0.33
1,2,3-Trichlorobenzene	ND		0.066

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	106	65-125
Toluene-d8	97	77-116
4-Bromofluorobenzene	101	67-133

Date of Report: July 26, 2000
Samples Submitted: July 10, 2000
Lab Traveler: 07-041
Project: 603-001

HALOGENATED VOLATILES by EPA 8260B
page 1 of 2

Date Extracted: 7-19-00
Date Analyzed: 7-19-00

Matrix: Soil
Units: mg/Kg (ppm)

Lab ID: 07-041-14
Client ID: MW3-45-45.5

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		0.058
Chloromethane	ND		0.058
Vinyl Chloride	ND		0.058
Bromomethane	ND		0.058
Chloroethane	ND		0.058
Trichlorofluoromethane	ND		0.058
1,1-Dichloroethene	ND		0.058
Methylene Chloride	ND		0.29
(trans) 1,2-Dichloroethene	ND		0.058
1,1-Dichloroethane	ND		0.058
2,2-Dichloropropane	ND		0.058
(cis) 1,2-Dichloroethene	ND		0.058
Chloroform	ND		0.058
1,1,1-Trichloroethane	ND		0.058
Carbon Tetrachloride	ND		0.058
1,1-Dichloropropene	ND		0.058
1,2-Dichloroethane	ND		0.058
Trichloroethene	ND		0.058
1,2-Dichloropropane	ND		0.058
Dibromomethane	ND		0.058
Bromodichloromethane	ND		0.058
2-Chloroethyl Vinyl Ether	ND		0.29
(cis) 1,3-Dichloropropene	ND		0.058
(trans) 1,3-Dichloropropene	ND		0.058
1,1,2-Trichloroethane	ND		0.058
Tetrachloroethene	0.14		0.058
1,3-Dichloropropane	ND		0.058

Date of Report: July 26, 2000
Samples Submitted: July 10, 2000
Lab Traveler: 07-041
Project: 603-001

HALOGENATED VOLATILES by EPA 8260B

page 2 of 2

Lab ID: 07-041-14
Client ID: MW3-45-45.5

Compound	Results	Flags	PQL
Dibromochloromethane	ND		0.058
1,2-Dibromoethane	ND		0.058
Chlorobenzene	ND		0.058
1,1,1,2-Tetrachloroethane	ND		0.058
Bromoform	ND		0.058
Bromobenzene	ND		0.058
1,1,2,2-Tetrachloroethane	ND		0.058
1,2,3-Trichloropropane	ND		0.058
2-Chlorotoluene	ND		0.058
4-Chlorotoluene	ND		0.058
1,3-Dichlorobenzene	ND		0.058
1,4-Dichlorobenzene	ND		0.058
1,2-Dichlorobenzene	ND		0.058
1,2-Dibromo-3-chloropropane	ND		0.29
1,2,4-Trichlorobenzene	ND		0.058
Hexachlorobutadiene	ND		0.29
1,2,3-Trichlorobenzene	ND		0.058

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	106	65-125
Toluene-d8	98	77-116
4-Bromofluorobenzene	105	67-133

Date of Report: July 26, 2000
Samples Submitted: July 10, 2000
Lab Traveler: 07-041
Project: 603-001

HALOGENATED VOLATILES by EPA 8260B
page 1 of 2

Date Extracted: 7-19-00
Date Analyzed: 7-19-00

Matrix: Soil
Units: mg/Kg (ppm)

Lab ID: 07-041-19
Client ID: VE3-10-11.5

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		0.060
Chloromethane	ND		0.060
Vinyl Chloride	ND		0.060
Bromomethane	ND		0.060
Chloroethane	ND		0.060
Trichlorofluoromethane	ND		0.060
1,1-Dichloroethene	ND		0.060
Methylene Chloride	ND		0.30
(trans) 1,2-Dichloroethene	ND		0.060
1,1-Dichloroethane	ND		0.060
2,2-Dichloropropane	ND		0.060
(cis) 1,2-Dichloroethene	ND		0.060
Chloroform	ND		0.060
1,1,1-Trichloroethane	ND		0.060
Carbon Tetrachloride	ND		0.060
1,1-Dichloropropene	ND		0.060
1,2-Dichloroethane	ND		0.060
Trichloroethene	ND		0.060
1,2-Dichloropropane	ND		0.060
Dibromomethane	ND		0.060
Bromodichloromethane	ND		0.060
2-Chloroethyl Vinyl Ether	ND		0.30
(cis) 1,3-Dichloropropene	ND		0.060
(trans) 1,3-Dichloropropene	ND		0.060
1,1,2-Trichloroethane	ND		0.060
Tetrachloroethene	ND		0.060
1,3-Dichloropropane	ND		0.060

Date of Report: July 26, 2000
Samples Submitted: July 10, 2000
Lab Traveler: 07-041
Project: 603-001

HALOGENATED VOLATILES by EPA 8260B

page 2 of 2

Lab ID: 07-041-19
Client ID: VE3-10-11.5

Compound	Results	Flags	PQL
Dibromochloromethane	ND		0.060
1,2-Dibromoethane	ND		0.060
Chlorobenzene	ND		0.060
1,1,1,2-Tetrachloroethane	ND		0.060
Bromoform	ND		0.060
Bromobenzene	ND		0.060
1,1,2,2-Tetrachloroethane	ND		0.060
1,2,3-Trichloropropane	ND		0.060
2-Chlorotoluene	ND		0.060
4-Chlorotoluene	ND		0.060
1,3-Dichlorobenzene	ND		0.060
1,4-Dichlorobenzene	ND		0.060
1,2-Dichlorobenzene	ND		0.060
1,2-Dibromo-3-chloropropane	ND		0.30
1,2,4-Trichlorobenzene	ND		0.060
Hexachlorobutadiene	ND		0.30
1,2,3-Trichlorobenzene	ND		0.060

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	106	65-125
Toluene-d8	101	77-116
4-Bromofluorobenzene	108	67-133

Date of Report: July 26, 2000
 Samples Submitted: July 10, 2000
 Lab Traveler: 07-041
 Project: 603-001

HALOGENATED VOLATILES by EPA 8260B
 page 1 of 2

Date Extracted: 7-19-00
 Date Analyzed: 7-19-00

 Matrix: Soil
 Units: mg/Kg (ppm)

 Lab ID: 07-041-23
 Client ID: VE3-20-21.5

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND	"	0.056
Chloromethane	ND		0.056
Vinyl Chloride	ND		0.056
Bromomethane	ND		0.056
Chloroethane	ND		0.056
Trichlorofluoromethane	ND		0.056
1,1-Dichloroethene	ND		0.056
Methylene Chloride	ND		0.28
(trans) 1,2-Dichloroethene	ND		0.056
1,1-Dichloroethane	ND		0.056
2,2-Dichloropropane	ND		0.056
(cis) 1,2-Dichloroethene	ND		0.056
Chloroform	ND		0.056
1,1,1-Trichloroethane	ND		0.056
Carbon Tetrachloride	ND		0.056
1,1-Dichloropropene	ND		0.056
1,2-Dichloroethane	ND		0.056
Trichloroethene	ND		0.056
1,2-Dichloropropane	ND		0.056
Dibromomethane	ND		0.056
Bromodichloromethane	ND		0.056
2-Chloroethyl Vinyl Ether	ND		0.28
(cis) 1,3-Dichloropropene	ND		0.056
(trans) 1,3-Dichloropropene	ND		0.056
1,1,2-Trichloroethane	ND		0.056
Tetrachloroethene	ND		0.056
1,3-Dichloropropane	ND		0.056

Date of Report: July 26, 2000
 Samples Submitted: July 10, 2000
 Lab Traveler: 07-041
 Project: 603-001

HALOGENATED VOLATILES by EPA 8260B

page 2 of 2

Lab ID: 07-041-23
 Client ID: VE3-20-21.5

Compound	Results	Flags	PQL
Dibromochloromethane	ND		0.056
1,2-Dibromoethane	ND		0.056
Chlorobenzene	ND		0.056
1,1,1,2-Tetrachloroethane	ND		0.056
Bromoform	ND		0.056
Bromobenzene	ND		0.056
1,1,2,2-Tetrachloroethane	ND		0.056
1,2,3-Trichloropropane	ND		0.056
2-Chlorotoluene	ND		0.056
4-Chlorotoluene	ND		0.056
1,3-Dichlorobenzene	ND		0.056
1,4-Dichlorobenzene	ND		0.056
1,2-Dichlorobenzene	ND		0.056
1,2-Dibromo-3-chloropropane	ND		0.28
1,2,4-Trichlorobenzene	ND		0.056
Hexachlorobutadiene	ND		0.28
1,2,3-Trichlorobenzene	ND		0.056

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	106	65-125
Toluene-d8	100	77-116
4-Bromofluorobenzene	110	67-133

Date of Report: July 26, 2000
 Samples Submitted: July 10, 2000
 Lab Traveler: 07-041
 Project: 603-001

HALOGENATED VOLATILES by EPA 8260B
 page 1 of 2

Date Extracted: 7-19-00
 Date Analyzed: 7-19-00

 Matrix: Soil
 Units: mg/Kg (ppm)

 Lab ID: 07-041-24
 Client ID: MW2-2.5-4

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		0.056
Chloromethane	ND		0.056
Vinyl Chloride	ND		0.056
Bromomethane	ND		0.056
Chloroethane	ND		0.056
Trichlorofluoromethane	ND		0.056
1,1-Dichloroethene	ND		0.056
Methylene Chloride	ND		0.28
(trans) 1,2-Dichloroethene	ND		0.056
1,1-Dichloroethane	ND		0.056
2,2-Dichloropropane	ND		0.056
(cis) 1,2-Dichloroethene	ND		0.056
Chloroform	ND		0.056
1,1,1-Trichloroethane	ND		0.056
Carbon Tetrachloride	ND		0.056
1,1-Dichloropropene	ND		0.056
1,2-Dichloroethane	ND		0.056
Trichloroethene	ND		0.056
1,2-Dichloropropane	ND		0.056
Dibromomethane	ND		0.056
Bromodichloromethane	ND		0.056
2-Chloroethyl Vinyl Ether	ND		0.28
(cis) 1,3-Dichloropropene	ND		0.056
(trans) 1,3-Dichloropropene	ND		0.056
1,1,2-Trichloroethane	ND		0.056
Tetrachloroethene	11		0.056
1,3-Dichloropropane	ND		0.056

Date of Report: July 26, 2000
Samples Submitted: July 10, 2000
Lab Traveler: 07-041
Project: 603-001

HALOGENATED VOLATILES by EPA 8260B

page 2 of 2

Lab ID: 07-041-24
Client ID: MW2-2.5-4

Compound	Results	Flags	PQL
Dibromochloromethane	ND		0.056
1,2-Dibromoethane	ND		0.056
Chlorobenzene	ND		0.056
1,1,1,2-Tetrachloroethane	ND		0.056
Bromoform	ND		0.056
Bromobenzene	ND		0.056
1,1,2,2-Tetrachloroethane	ND		0.056
1,2,3-Trichloropropane	ND		0.056
2-Chlorotoluene	ND		0.056
4-Chlorotoluene	ND		0.056
1,3-Dichlorobenzene	ND		0.056
1,4-Dichlorobenzene	ND		0.056
1,2-Dichlorobenzene	ND		0.056
1,2-Dibromo-3-chloropropane	ND		0.28
1,2,4-Trichlorobenzene	ND		0.056
Hexachlorobutadiene	ND		0.28
1,2,3-Trichlorobenzene	ND		0.056

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	107	65-125
Toluene-d8	101	77-116
4-Bromofluorobenzene	102	67-133

Date of Report: July 26, 2000
 Samples Submitted: July 10, 2000
 Lab Traveler: 07-041
 Project: 603-001

HALOGENATED VOLATILES by EPA 8260B
 page 1 of 2

Date Extracted: 7-19-00
 Date Analyzed: 7-22-00

Matrix: Soil
 Units: mg/Kg (ppm)

Lab ID: 07-041-27
 Client ID: MW2-10-11.5

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		32
Chloromethane	ND		32
Vinyl Chloride	ND		32
Bromomethane	ND		32
Chloroethane	ND		32
Trichlorofluoromethane	ND		32
1,1-Dichloroethene	ND		32
Methylene Chloride	160	H	160
(trans) 1,2-Dichloroethene	ND		32
1,1-Dichloroethane	ND		32
2,2-Dichloropropane	ND		32
(cis) 1,2-Dichloroethene	ND		32
Chloroform	ND		32
1,1,1-Trichloroethane	ND		32
Carbon Tetrachloride	ND		32
1,1-Dichloropropene	ND		32
1,2-Dichloroethane	ND		32
Trichloroethene	ND		32
1,2-Dichloropropane	ND		32
Dibromomethane	ND		32
Bromodichloromethane	ND		32
2-Chloroethyl Vinyl Ether	ND		160
(cis) 1,3-Dichloropropene	ND		32
(trans) 1,3-Dichloropropene	ND		32
1,1,2-Trichloroethane	ND		32
Tetrachloroethene	6900		320
1,3-Dichloropropane	ND		32

Date of Report: July 26, 2000
Samples Submitted: July 10, 2000
Lab Traveler: 07-041
Project: 603-001

HALOGENATED VOLATILES by EPA 8260B
page 2 of 2

Lab ID: 07-041-27
Client ID: MW2-10-11.5

Compound	Results	Flags	PQL
Dibromochloromethane	ND		32
1,2-Dibromoethane	ND		32
Chlorobenzene	ND		32
1,1,1,2-Tetrachloroethane	ND		32
Bromoform	ND		32
Bromobenzene	ND		32
1,1,2,2-Tetrachloroethane	ND		32
1,2,3-Trichloropropane	ND		32
2-Chlorotoluene	ND		32
4-Chlorotoluene	ND		32
1,3-Dichlorobenzene	ND		32
1,4-Dichlorobenzene	ND		32
1,2-Dichlorobenzene	ND		32
1,2-Dibromo-3-chloropropane	ND		160
1,2,4-Trichlorobenzene	ND		32
Hexachlorobutadiene	ND		160
1,2,3-Trichlorobenzene	ND		32

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	97	65-125
Toluene-d8	98	77-116
4-Bromofluorobenzene	100	67-133

Date of Report: July 26, 2000
Samples Submitted: July 10, 2000
Lab Traveler: 07-041
Project: 603-001

HALOGENATED VOLATILES by EPA 8260B
page 1 of 2

Date Extracted: 7-19-00
Date Analyzed: 7-21-00

Matrix: Soil
Units: mg/Kg (ppm)

Lab ID: 07-041-30
Client ID: MW2-17.5-19

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		0.052
Chloromethane	ND		0.052
Vinyl Chloride	ND		0.052
Bromomethane	ND		0.052
Chloroethane	ND		0.052
Trichlorofluoromethane	ND		0.052
1,1-Dichloroethene	ND		0.052
Methylene Chloride	0.30	H	0.26
(trans) 1,2-Dichloroethene	ND		0.052
1,1-Dichloroethane	ND		0.052
2,2-Dichloropropane	ND		0.052
(cis) 1,2-Dichloroethene	ND		0.052
Chloroform	ND		0.052
1,1,1-Trichloroethane	ND		0.052
Carbon Tetrachloride	ND		0.052
1,1-Dichloropropene	ND		0.052
1,2-Dichloroethane	ND		0.052
Trichloroethene	ND		0.052
1,2-Dichloropropane	ND		0.052
Dibromomethane	ND		0.052
Bromodichloromethane	ND		0.052
2-Chloroethyl Vinyl Ether	ND		0.26
(cis) 1,3-Dichloropropene	ND		0.052
(trans) 1,3-Dichloropropene	ND		0.052
1,1,2-Trichloroethane	ND		0.052
Tetrachloroethene	0.65		0.052
1,3-Dichloropropane	ND		0.052

Date of Report: July 26, 2000
 Samples Submitted: July 10, 2000
 Lab Traveler: 07-041
 Project: 603-001

HALOGENATED VOLATILES by EPA 8260B

page 2 of 2

Lab ID: 07-041-30
 Client ID: MW2-17.5-19

Compound	Results	Flags	PQL
Dibromochloromethane	ND		0.052
1,2-Dibromoethane	ND		0.052
Chlorobenzene	ND		0.052
1,1,1,2-Tetrachloroethane	ND		0.052
Bromoform	ND		0.052
Bromobenzene	ND		0.052
1,1,2,2-Tetrachloroethane	ND		0.052
1,2,3-Trichloropropane	ND		0.052
2-Chlorotoluene	ND		0.052
4-Chlorotoluene	ND		0.052
1,3-Dichlorobenzene	ND		0.052
1,4-Dichlorobenzene	ND		0.052
1,2-Dichlorobenzene	ND		0.052
1,2-Dibromo-3-chloropropane	ND		0.26
1,2,4-Trichlorobenzene	ND		0.052
Hexachlorobutadiene	ND		0.26
1,2,3-Trichlorobenzene	ND		0.052

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	97	65-125
Toluene-d8	96	77-116
4-Bromofluorobenzene	104	67-133

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Date Extracted: 7-19-00
 Date Analyzed: 7-21-00
 Matrix: Soil
 Units: mg/Kg (ppm)
 Lab ID: 07-041-33
 Client ID: MW2-30-31

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		0.053
Chloromethane	ND		0.053
Vinyl Chloride	ND		0.053
Bromomethane	ND		0.053
Chloroethane	ND		0.053
Trichlorofluoromethane	ND		0.053
1,1-Dichloroethene	ND		0.053
Methylene Chloride	0.29	H	0.26
(trans) 1,2-Dichloroethene	ND		0.053
1,1-Dichloroethane	ND		0.053
2,2-Dichloropropane	ND		0.053
(cis) 1,2-Dichloroethene	ND		0.053
Chloroform	ND		0.053
1,1,1-Trichloroethane	ND		0.053
Carbon Tetrachloride	ND		0.053
1,1-Dichloropropene	ND		0.053
1,2-Dichloroethane	ND		0.053
Trichloroethene	ND		0.053
1,2-Dichloropropane	ND		0.053
Dibromomethane	ND		0.053
Bromodichloromethane	ND		0.053
2-Chloroethyl Vinyl Ether	ND		0.26
(cis) 1,3-Dichloropropene	ND		0.053
(trans) 1,3-Dichloropropene	ND		0.053
1,1,2-Trichloroethane	ND		0.053
Tetrachloroethene	0.43		0.053
1,3-Dichloropropane	ND		0.053

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Lab ID: 07-041-33
 Client ID: MW2-30-31

Compound	Results	Flags	PQL
Dibromochloromethane	ND		0.053
1,2-Dibromoethane	ND		0.053
Chlorobenzene	ND		0.053
1,1,1,2-Tetrachloroethane	ND		0.053
Bromoform	ND		0.053
Bromobenzene	ND		0.053
1,1,2,2-Tetrachloroethane	ND		0.053
1,2,3-Trichloropropane	ND		0.053
2-Chlorotoluene	ND		0.053
4-Chlorotoluene	ND		0.053
1,3-Dichlorobenzene	ND		0.053
1,4-Dichlorobenzene	ND		0.053
1,2-Dichlorobenzene	ND		0.053
1,2-Dibromo-3-chloropropane	ND		0.26
1,2,4-Trichlorobenzene	ND		0.053
Hexachlorobutadiene	ND		0.26
1,2,3-Trichlorobenzene	ND		0.053

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	99	65-125
Toluene-d8	99	77-116
4-Bromofluorobenzene	103	67-133

Date of Report: July 26, 2000
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Date Extracted: 7-19-00
Date Analyzed: 7-21-00

Matrix: Soil
Units: mg/Kg (ppm)

Lab ID: 07-041-36
Client ID: MW2-45-45.5

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		0.052
Chloromethane	ND		0.052
Vinyl Chloride	ND		0.052
Bromomethane	ND		0.052
Chloroethane	ND		0.052
Trichlorofluoromethane	ND		0.052
1,1-Dichloroethene	ND		0.052
Methylene Chloride	0.31	H	0.26
(trans) 1,2-Dichloroethene	ND		0.052
1,1-Dichloroethane	ND		0.052
2,2-Dichloropropane	ND		0.052
(cis) 1,2-Dichloroethene	ND		0.052
Chloroform	ND		0.052
1,1,1-Trichloroethane	ND		0.052
Carbon Tetrachloride	ND		0.052
1,1-Dichloropropene	ND		0.052
1,2-Dichloroethane	ND		0.052
Trichloroethene	ND		0.052
1,2-Dichloropropane	ND		0.052
Dibromomethane	ND		0.052
Bromodichloromethane	ND		0.052
2-Chloroethyl Vinyl Ether	ND		0.26
(cis) 1,3-Dichloropropene	ND		0.052
(trans) 1,3-Dichloropropene	ND		0.052
1,1,2-Trichloroethane	ND		0.052
Tetrachloroethene	0.49		0.052
1,3-Dichloropropane	ND		0.052

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Lab ID: 07-041-36
Client ID: MW2-45-45.5

Compound	Results	Flags	PQL
Dibromochloromethane	ND		0.052
1,2-Dibromoethane	ND		0.052
Chlorobenzene	ND		0.052
1,1,1,2-Tetrachloroethane	ND		0.052
Bromoform	ND		0.052
Bromobenzene	ND		0.052
1,1,2,2-Tetrachloroethane	ND		0.052
1,2,3-Trichloropropane	ND		0.052
2-Chlorotoluene	ND		0.052
4-Chlorotoluene	ND		0.052
1,3-Dichlorobenzene	ND		0.052
1,4-Dichlorobenzene	ND		0.052
1,2-Dichlorobenzene	ND		0.052
1,2-Dibromo-3-chloropropane	ND		0.26
1,2,4-Trichlorobenzene	ND		0.052
Hexachlorobutadiene	ND		0.26
1,2,3-Trichlorobenzene	ND		0.052

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	97	65-125
Toluene-d8	98	77-116
4-Bromofluorobenzene	103	67-133

Date of Report: July 26, 2000
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Date Extracted: 7-19-00
 Date Analyzed: 7-21-00

 Matrix: Soil
 Units: mg/Kg (ppm)

 Lab ID: 07-041-41
 Client ID: VE4-15-16.5

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		0.061
Chloromethane	ND		0.061
Vinyl Chloride	ND		0.061
Bromomethane	ND		0.061
Chloroethane	ND		0.061
Trichlorofluoromethane	ND		0.061
1,1-Dichloroethene	ND		0.061
Methylene Chloride	0.39	H	0.30
(trans) 1,2-Dichloroethene	ND		0.061
1,1-Dichloroethane	ND		0.061
2,2-Dichloropropane	ND		0.061
(cis) 1,2-Dichloroethene	ND		0.061
Chloroform	ND		0.061
1,1,1-Trichloroethane	ND		0.061
Carbon Tetrachloride	ND		0.061
1,1-Dichloropropene	ND		0.061
1,2-Dichloroethane	ND		0.061
Trichloroethene	ND		0.061
1,2-Dichloropropane	ND		0.061
Dibromomethane	ND		0.061
Bromodichloromethane	ND		0.061
2-Chloroethyl Vinyl Ether	ND		0.30
(cis) 1,3-Dichloropropene	ND		0.061
(trans) 1,3-Dichloropropene	ND		0.061
1,1,2-Trichloroethane	ND		0.061
Tetrachloroethene	0.16		0.061
1,3-Dichloropropane	ND		0.061

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Project: 603-001

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Lab ID: 07-041-41
Client ID: VE4-15-16.5

Compound	Results	Flags	PQL
Dibromochloromethane	ND		0.061
1,2-Dibromoethane	ND		0.061
Chlorobenzene	ND		0.061
1,1,1,2-Tetrachloroethane	ND		0.061
Bromoform	ND		0.061
Bromobenzene	ND		0.061
1,1,2,2-Tetrachloroethane	ND		0.061
1,2,3-Trichloropropane	ND		0.061
2-Chlorotoluene	ND		0.061
4-Chlorotoluene	ND		0.061
1,3-Dichlorobenzene	ND		0.061
1,4-Dichlorobenzene	ND		0.061
1,2-Dichlorobenzene	ND		0.061
1,2-Dibromo-3-chloropropane	ND		0.30
1,2,4-Trichlorobenzene	ND		0.061
Hexachlorobutadiene	ND		0.30
1,2,3-Trichlorobenzene	ND		0.061

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	97	65-125
Toluene-d8	96	77-116
4-Bromofluorobenzene	92	67-133

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Date Extracted: 7-19-00
 Date Analyzed: 7-21-00

Matrix: Soil
 Units: mg/Kg (ppm)

Lab ID: 07-041-44
 Client ID: VE2-5-6.5

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		6.2
Chloromethane	ND		6.2
Vinyl Chloride	ND		6.2
Bromomethane	ND		6.2
Chloroethane	ND		6.2
Trichlorofluoromethane	ND		6.2
1,1-Dichloroethene	ND		6.2
Methylene Chloride	33	H	31
(trans) 1,2-Dichloroethene	ND		6.2
1,1-Dichloroethane	ND		6.2
2,2-Dichloropropane	ND		6.2
(cis) 1,2-Dichloroethene	ND		6.2
Chloroform	ND		6.2
1,1,1-Trichloroethane	ND		6.2
Carbon Tetrachloride	ND		6.2
1,1-Dichloropropene	ND		6.2
1,2-Dichloroethane	ND		6.2
Trichloroethene	ND		6.2
1,2-Dichloropropane	ND		6.2
Dibromomethane	ND		6.2
Bromodichloromethane	ND		6.2
2-Chloroethyl Vinyl Ether	ND		31
(cis) 1,3-Dichloropropene	ND		6.2
(trans) 1,3-Dichloropropene	ND		6.2
1,1,2-Trichloroethane	ND		6.2
Tetrachloroethene	230		6.2
1,3-Dichloropropane	ND		6.2

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Lab ID: 07-041-44
 Client ID: VE2-5-6.5

Compound	Results	Flags	PQL
Dibromochloromethane	ND		6.2
1,2-Dibromoethane	ND		6.2
Chlorobenzene	ND		6.2
1,1,1,2-Tetrachloroethane	ND		6.2
Bromoform	ND		6.2
Bromobenzene	ND		6.2
1,1,2,2-Tetrachloroethane	ND		6.2
1,2,3-Trichloropropane	ND		6.2
2-Chlorotoluene	ND		6.2
4-Chlorotoluene	ND		6.2
1,3-Dichlorobenzene	ND		6.2
1,4-Dichlorobenzene	ND		6.2
1,2-Dichlorobenzene	ND		6.2
1,2-Dibromo-3-chloropropane	ND		31
1,2,4-Trichlorobenzene	ND		6.2
Hexachlorobutadiene	ND		31
1,2,3-Trichlorobenzene	ND		6.2

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	99	65-125
Toluene-d8	98	77-116
4-Bromofluorobenzene	101	67-133

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Date Extracted: 7-19-00
 Date Analyzed: 7-21-00

Matrix: Soil
 Units: mg/Kg (ppm)

Lab ID: 07-041-48
 Client ID: VE2-15-16.5

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		0.063
Chloromethane	ND		0.063
Vinyl Chloride	ND		0.063
Bromomethane	ND		0.063
Chloroethane	ND		0.063
Trichlorofluoromethane	ND		0.063
1,1-Dichloroethene	ND		0.063
Methylene Chloride	0.37	H	0.32
(trans) 1,2-Dichloroethene	ND		0.063
1,1-Dichloroethane	ND		0.063
2,2-Dichloropropane	ND		0.063
(cis) 1,2-Dichloroethene	ND		0.063
Chloroform	ND		0.063
1,1,1-Trichloroethane	ND		0.063
Carbon Tetrachloride	ND		0.063
1,1-Dichloropropene	ND		0.063
1,2-Dichloroethane	ND		0.063
Trichloroethene	ND		0.063
1,2-Dichloropropane	ND		0.063
Dibromomethane	ND		0.063
Bromodichloromethane	ND		0.063
2-Chloroethyl Vinyl Ether	ND		0.32
(cis) 1,3-Dichloropropene	ND		0.063
(trans) 1,3-Dichloropropene	ND		0.063
1,1,2-Trichloroethane	ND		0.063
Tetrachloroethene	0.52		0.063
1,3-Dichloropropane	ND		0.063

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Lab ID: 07-041-48
 Client ID: VE2-15-16.5

Compound	Results	Flags	PQL
Dibromochloromethane	ND		0.063
1,2-Dibromoethane	ND		0.063
Chlorobenzene	ND		0.063
1,1,1,2-Tetrachloroethane	ND		0.063
Bromoform	ND		0.063
Bromobenzene	ND		0.063
1,1,2,2-Tetrachloroethane	ND		0.063
1,2,3-Trichloropropane	ND		0.063
2-Chlorotoluene	ND		0.063
4-Chlorotoluene	ND		0.063
1,3-Dichlorobenzene	ND		0.063
1,4-Dichlorobenzene	ND		0.063
1,2-Dichlorobenzene	ND		0.063
1,2-Dibromo-3-chloropropane	ND		0.32
1,2,4-Trichlorobenzene	ND		0.063
Hexachlorobutadiene	ND		0.32
1,2,3-Trichlorobenzene	ND		0.063

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	97	65-125
Toluene-d8	97	77-116
4-Bromofluorobenzene	102	67-133

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Date Extracted: 7-19-00
 Date Analyzed: 7-21-00

Matrix: Soil
 Units: mg/Kg (ppm)

Lab ID: 07-041-50
 Client ID: VE5-5-6.5

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		0.062
Chloromethane	ND		0.062
Vinyl Chloride	ND		0.062
Bromomethane	ND		0.062
Chloroethane	ND		0.062
Trichlorofluoromethane	ND		0.062
1,1-Dichloroethene	ND		0.062
Methylene Chloride	0.38	H	0.31
(trans) 1,2-Dichloroethene	ND		0.062
1,1-Dichloroethane	ND		0.062
2,2-Dichloropropane	ND		0.062
(cis) 1,2-Dichloroethene	ND		0.062
Chloroform	ND		0.062
1,1,1-Trichloroethane	ND		0.062
Carbon Tetrachloride	ND		0.062
1,1-Dichloropropene	ND		0.062
1,2-Dichloroethane	ND		0.062
Trichloroethene	ND		0.062
1,2-Dichloropropane	ND		0.062
Dibromomethane	ND		0.062
Bromodichloromethane	ND		0.062
2-Chloroethyl Vinyl Ether	ND		0.31
(cis) 1,3-Dichloropropene	ND		0.062
(trans) 1,3-Dichloropropene	ND		0.062
1,1,2-Trichloroethane	ND		0.062
Tetrachloroethene	0.17		0.062
1,3-Dichloropropane	ND		0.062

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Lab ID: 07-041-50
Client ID: VE5-5-6.5

Compound	Results	Flags	PQL
Dibromochloromethane	ND		0.062
1,2-Dibromoethane	ND		0.062
Chlorobenzene	ND		0.062
1,1,1,2-Tetrachloroethane	ND		0.062
Bromoform	ND		0.062
Bromobenzene	ND		0.062
1,1,2,2-Tetrachloroethane	ND		0.062
1,2,3-Trichloropropane	ND		0.062
2-Chlorotoluene	ND		0.062
4-Chlorotoluene	ND		0.062
1,3-Dichlorobenzene	ND		0.062
1,4-Dichlorobenzene	ND		0.062
1,2-Dichlorobenzene	ND		0.062
1,2-Dibromo-3-chloropropane	ND		0.31
1,2,4-Trichlorobenzene	ND		0.062
Hexachlorobutadiene	ND		0.31
1,2,3-Trichlorobenzene	ND		0.062

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	98	65-125
Toluene-d8	99	77-116
4-Bromofluorobenzene	106	67-133

Date of Report: July 26, 2000
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Date Extracted: 7-19-00
 Date Analyzed: 7-21-00

 Matrix: Soil
 Units: mg/Kg (ppm)

 Lab ID: 07-041-52
 Client ID: VE5-15-16

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		0.063
Chloromethane	ND		0.063
Vinyl Chloride	ND		0.063
Bromomethane	ND		0.063
Chloroethane	ND		0.063
Trichlorofluoromethane	ND		0.063
1,1-Dichloroethene	ND		0.063
Methylene Chloride	0.36	H	0.32
(trans) 1,2-Dichloroethene	ND		0.063
1,1-Dichloroethane	ND		0.063
2,2-Dichloropropane	ND		0.063
(cis) 1,2-Dichloroethene	ND		0.063
Chloroform	ND		0.063
1,1,1-Trichloroethane	ND		0.063
Carbon Tetrachloride	ND		0.063
1,1-Dichloropropene	ND		0.063
1,2-Dichloroethane	ND		0.063
Trichloroethene	ND		0.063
1,2-Dichloropropane	ND		0.063
Dibromomethane	ND		0.063
Bromodichloromethane	ND		0.063
2-Chloroethyl Vinyl Ether	ND		0.32
(cis) 1,3-Dichloropropene	ND		0.063
(trans) 1,3-Dichloropropene	ND		0.063
1,1,2-Trichloroethane	ND		0.063
Tetrachloroethene	0.97		0.063
1,3-Dichloropropane	ND		0.063

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Lab ID: 07-041-52
Client ID: VE5-15-16

Compound	Results	Flags	PQL
Dibromochloromethane	ND		0.063
1,2-Dibromoethane	ND		0.063
Chlorobenzene	ND		0.063
1,1,1,2-Tetrachloroethane	ND		0.063
Bromoform	ND		0.063
Bromobenzene	ND		0.063
1,1,2,2-Tetrachloroethane	ND		0.063
1,2,3-Trichloropropane	ND		0.063
2-Chlorotoluene	ND		0.063
4-Chlorotoluene	ND		0.063
1,3-Dichlorobenzene	ND		0.063
1,4-Dichlorobenzene	ND		0.063
1,2-Dichlorobenzene	ND		0.063
1,2-Dibromo-3-chloropropane	ND		0.32
1,2,4-Trichlorobenzene	ND		0.063
Hexachlorobutadiene	ND		0.32
1,2,3-Trichlorobenzene	ND		0.063

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	96	65-125
Toluene-d8	97	77-116
4-Bromofluorobenzene	97	67-133

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Date Extracted: 7-19-00
 Date Analyzed: 7-21-00

Matrix: Soil
 Units: mg/Kg (ppm)

Lab ID: 07-041-53
 Client ID: MW1-2.5-3.5

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		0.060
Chloromethane	ND		0.060
Vinyl Chloride	ND		0.060
Bromomethane	ND		0.060
Chloroethane	ND		0.060
Trichlorofluoromethane	ND		0.060
1,1-Dichloroethene	ND		0.060
Methylene Chloride	0.38	H	0.30
(trans) 1,2-Dichloroethene	ND		0.060
1,1-Dichloroethane	ND		0.060
2,2-Dichloropropane	ND		0.060
(cis) 1,2-Dichloroethene	ND		0.060
Chloroform	ND		0.060
1,1,1-Trichloroethane	ND		0.060
Carbon Tetrachloride	ND		0.060
1,1-Dichloropropene	ND		0.060
1,2-Dichloroethane	ND		0.060
Trichloroethene	ND		0.060
1,2-Dichloropropane	ND		0.060
Dibromomethane	ND		0.060
Bromodichloromethane	ND		0.060
2-Chloroethyl Vinyl Ether	ND		0.30
(cis) 1,3-Dichloropropene	ND		0.060
(trans) 1,3-Dichloropropene	ND		0.060
1,1,2-Trichloroethane	ND		0.060
Tetrachloroethene	1.8		0.060
1,3-Dichloropropane	ND		0.060

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Lab ID: 07-041-53
Client ID: MW1-2.5-3.5

Compound	Results	Flags	PQL
Dibromochloromethane	ND		0.060
1,2-Dibromoethane	ND		0.060
Chlorobenzene	ND		0.060
1,1,1,2-Tetrachloroethane	ND		0.060
Bromoform	ND		0.060
Bromobenzene	ND		0.060
1,1,2,2-Tetrachloroethane	ND		0.060
1,2,3-Trichloropropane	ND		0.060
2-Chlorotoluene	ND		0.060
4-Chlorotoluene	ND		0.060
1,3-Dichlorobenzene	ND		0.060
1,4-Dichlorobenzene	ND		0.060
1,2-Dichlorobenzene	ND		0.060
1,2-Dibromo-3-chloropropane	ND		0.30
1,2,4-Trichlorobenzene	ND		0.060
Hexachlorobutadiene	ND		0.30
1,2,3-Trichlorobenzene	ND		0.060

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	100	65-125
Toluene-d8	99	77-116
4-Bromofluorobenzene	105	67-133

Date of Report: July 26, 2000
 Samples Submitted: July 10, 2000
 Lab Traveler: 07-041
 Project: 603-001

HALOGENATED VOLATILES by EPA 8260B
 page 1 of 2

Date Extracted: 7-19-00
 Date Analyzed: 7-21-00

Matrix: Soil
 Units: mg/Kg (ppm)

Lab ID: 07-041-62
 Client ID: MW1-35-35.5

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		0.052
Chloromethane	ND		0.052
Vinyl Chloride	ND		0.052
Bromomethane	ND		0.052
Chloroethane	ND		0.052
Trichlorofluoromethane	ND		0.052
1,1-Dichloroethene	ND		0.052
Methylene Chloride	0.31	H	0.26
(trans) 1,2-Dichloroethene	ND		0.052
1,1-Dichloroethane	ND		0.052
2,2-Dichloropropane	ND		0.052
(cis) 1,2-Dichloroethene	ND		0.052
Chloroform	ND		0.052
1,1,1-Trichloroethane	ND		0.052
Carbon Tetrachloride	ND		0.052
1,1-Dichloropropene	ND		0.052
1,2-Dichloroethane	ND		0.052
Trichloroethene	ND		0.052
1,2-Dichloropropane	ND		0.052
Dibromomethane	ND		0.052
Bromodichloromethane	ND		0.052
2-Chloroethyl Vinyl Ether	ND		0.26
(cis) 1,3-Dichloropropene	ND		0.052
(trans) 1,3-Dichloropropene	ND		0.052
1,1,2-Trichloroethane	ND		0.052
Tetrachloroethene	0.35		0.052
1,3-Dichloropropane	ND		0.052

Date of Report: July 26, 2000
Samples Submitted: July 10, 2000
Lab Traveler: 07-041
Project: 603-001

HALOGENATED VOLATILES by EPA 8260B

page 2 of 2

Lab ID: 07-041-62
Client ID: MW1-35-35.5

Compound	Results	Flags	PQL
Dibromochloromethane	ND		0.052
1,2-Dibromoethane	ND		0.052
Chlorobenzene	ND		0.052
1,1,1,2-Tetrachloroethane	ND		0.052
Bromoform	ND		0.052
Bromobenzene	ND		0.052
1,1,2,2-Tetrachloroethane	ND		0.052
1,2,3-Trichloropropane	ND		0.052
2-Chlorotoluene	ND		0.052
4-Chlorotoluene	ND		0.052
1,3-Dichlorobenzene	ND		0.052
1,4-Dichlorobenzene	ND		0.052
1,2-Dichlorobenzene	ND		0.052
1,2-Dibromo-3-chloropropane	ND		0.26
1,2,4-Trichlorobenzene	ND		0.052
Hexachlorobutadiene	ND		0.26
1,2,3-Trichlorobenzene	ND		0.052

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	100	65-125
Toluene-d8	102	77-116
4-Bromofluorobenzene	103	67-133

Date of Report: July 26, 2000
 Samples Submitted: July 10, 2000
 Lab Traveler: 07-041
 Project: 603-001

HALOGENATED VOLATILES by EPA 8260B
 page 1 of 2

Date Extracted: 7-19-00
 Date Analyzed: 7-21-00

Matrix: Soil
 Units: mg/Kg (ppm)

Lab ID: 07-041-64
 Client ID: MW1-45-45.5

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		0.054
Chloromethane	ND		0.054
Vinyl Chloride	ND		0.054
Bromomethane	ND		0.054
Chloroethane	ND		0.054
Trichlorofluoromethane	ND		0.054
1,1-Dichloroethene	ND		0.054
Methylene Chloride	0.33	H	0.27
(trans) 1,2-Dichloroethene	ND		0.054
1,1-Dichloroethane	ND		0.054
2,2-Dichloropropane	ND		0.054
(cis) 1,2-Dichloroethene	ND		0.054
Chloroform	ND		0.054
1,1,1-Trichloroethane	ND		0.054
Carbon Tetrachloride	ND		0.054
1,1-Dichloropropene	ND		0.054
1,2-Dichloroethane	ND		0.054
Trichloroethene	ND		0.054
1,2-Dichloropropane	ND		0.054
Dibromomethane	ND		0.054
Bromodichloromethane	ND		0.054
2-Chloroethyl Vinyl Ether	ND		0.27
(cis) 1,3-Dichloropropene	ND		0.054
(trans) 1,3-Dichloropropene	ND		0.054
1,1,2-Trichloroethane	ND		0.054
Tetrachloroethene	0.21		0.054
1,3-Dichloropropane	ND		0.054

Date of Report: July 26, 2000
Samples Submitted: July 10, 2000
Lab Traveler: 07-041
Project: 603-001

HALOGENATED VOLATILES by EPA 8260B

page 2 of 2

Lab ID: 07-041-64
Client ID: MW1-45-45.5

Compound	Results	Flags	PQL
Dibromochloromethane	ND		0.054
1,2-Dibromoethane	ND		0.054
Chlorobenzene	ND		0.054
1,1,1,2-Tetrachloroethane	ND		0.054
Bromoform	ND		0.054
Bromobenzene	ND		0.054
1,1,2,2-Tetrachloroethane	ND		0.054
1,2,3-Trichloropropane	ND		0.054
2-Chlorotoluene	ND		0.054
4-Chlorotoluene	ND		0.054
1,3-Dichlorobenzene	ND		0.054
1,4-Dichlorobenzene	ND		0.054
1,2-Dichlorobenzene	ND		0.054
1,2-Dibromo-3-chloropropane	ND		0.27
1,2,4-Trichlorobenzene	ND		0.054
Hexachlorobutadiene	ND		0.27
1,2,3-Trichlorobenzene	ND		0.054

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	98	65-125
Toluene-d8	97	77-116
4-Bromofluorobenzene	100	67-133

Date of Report: July 26, 2000
 Samples Submitted: July 10, 2000
 Lab Traveler: 07-041
 Project: 603-001

HALOGENATED VOLATILES by EPA 8260B
 page 1 of 2

Date Extracted: 7-19-00
 Date Analyzed: 7-21-00

Matrix: Soil
 Units: mg/Kg (ppm)

Lab ID: 07-041-68
 Client ID: VE1-7.5-9

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		0.057
Chloromethane	ND		0.057
Vinyl Chloride	ND		0.057
Bromomethane	ND		0.057
Chloroethane	ND		0.057
Trichlorofluoromethane	ND		0.057
1,1-Dichloroethene	ND		0.057
Methylene Chloride	0.37	H	0.28
(trans) 1,2-Dichloroethene	ND		0.057
1,1-Dichloroethane	ND		0.057
2,2-Dichloropropane	ND		0.057
(cis) 1,2-Dichloroethene	ND		0.057
Chloroform	ND		0.057
1,1,1-Trichloroethane	ND		0.057
Carbon Tetrachloride	ND		0.057
1,1-Dichloropropene	ND		0.057
1,2-Dichloroethane	ND		0.057
Trichloroethene	ND		0.057
1,2-Dichloropropane	ND		0.057
Dibromomethane	ND		0.057
Bromodichloromethane	ND		0.057
2-Chloroethyl Vinyl Ether	ND		0.28
(cis) 1,3-Dichloropropene	ND		0.057
(trans) 1,3-Dichloropropene	ND		0.057
1,1,2-Trichloroethane	ND		0.057
Tetrachloroethene	0.18		0.057
1,3-Dichloropropane	ND		0.057

Date of Report: July 26, 2000
 Samples Submitted: July 10, 2000
 Lab Traveler: 07-041
 Project: 603-001

HALOGENATED VOLATILES by EPA 8260B

page 2 of 2

Lab ID: 07-041-68
 Client ID: VE1-7.5-9

Compound	Results	Flags	PQL
Dibromochloromethane	ND		0.057
1,2-Dibromoethane	ND		0.057
Chlorobenzene	ND		0.057
1,1,1,2-Tetrachloroethane	ND		0.057
Bromoform	ND		0.057
Bromobenzene	ND		0.057
1,1,2,2-Tetrachloroethane	ND		0.057
1,2,3-Trichloropropane	ND		0.057
2-Chlorotoluene	ND		0.057
4-Chlorotoluene	ND		0.057
1,3-Dichlorobenzene	ND		0.057
1,4-Dichlorobenzene	ND		0.057
1,2-Dichlorobenzene	ND		0.057
1,2-Dibromo-3-chloropropane	ND		0.28
1,2,4-Trichlorobenzene	ND		0.057
Hexachlorobutadiene	ND		0.28
1,2,3-Trichlorobenzene	ND		0.057

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	99	65-125
Toluene-d8	99	77-116
4-Bromofluorobenzene	101	67-133

Date of Report: July 26, 2000
 Samples Submitted: July 10, 2000
 Lab Traveler: 07-041
 Project: 603-001

HALOGENATED VOLATILES by EPA 8260B

page 1 of 2

Date Extracted: 7-19-00
 Date Analyzed: 7-21-00
 Matrix: Soil
 Units: mg/Kg (ppm)
 Lab ID: 07-041-71
 Client ID: VE1-15-16.5

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		0.057
Chloromethane	ND		0.057
Vinyl Chloride	ND		0.057
Bromomethane	ND		0.057
Chloroethane	ND		0.057
Trichlorofluoromethane	ND		0.057
1,1-Dichloroethene	ND		0.057
Methylene Chloride	0.35	H	0.29
(trans) 1,2-Dichloroethene	ND		0.057
1,1-Dichloroethane	ND		0.057
2,2-Dichloropropane	ND		0.057
(cis) 1,2-Dichloroethene	ND		0.057
Chloroform	ND		0.057
1,1,1-Trichloroethane	ND		0.057
Carbon Tetrachloride	ND		0.057
1,1-Dichloropropene	ND		0.057
1,2-Dichloroethane	ND		0.057
Trichloroethene	ND		0.057
1,2-Dichloropropane	ND		0.057
Dibromomethane	ND		0.057
Bromodichloromethane	ND		0.057
2-Chloroethyl Vinyl Ether	ND		0.29
(cis) 1,3-Dichloropropene	ND		0.057
(trans) 1,3-Dichloropropene	ND		0.057
1,1,2-Trichloroethane	ND		0.057
Tetrachloroethene	0.13		0.057
1,3-Dichloropropane	ND		0.057

Date of Report: July 26, 2000
Samples Submitted: July 10, 2000
Lab Traveler: 07-041
Project: 603-001

HALOGENATED VOLATILES by EPA 8260B

page 2 of 2

Lab ID: 07-041-71
Client ID: VE1-15-16.5

Compound	Results	Flags	PQL
Dibromochloromethane	ND		0.057
1,2-Dibromoethane	ND		0.057
Chlorobenzene	ND		0.057
1,1,1,2-Tetrachloroethane	ND		0.057
Bromoform	ND		0.057
Bromobenzene	ND		0.057
1,1,2,2-Tetrachloroethane	ND		0.057
1,2,3-Trichloropropane	ND		0.057
2-Chlorotoluene	ND		0.057
4-Chlorotoluene	ND		0.057
1,3-Dichlorobenzene	ND		0.057
1,4-Dichlorobenzene	ND		0.057
1,2-Dichlorobenzene	ND		0.057
1,2-Dibromo-3-chloropropane	ND		0.29
1,2,4-Trichlorobenzene	ND		0.057
Hexachlorobutadiene	ND		0.29
1,2,3-Trichlorobenzene	ND		0.057

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	98	65-125
Toluene-d8	100	77-116
4-Bromofluorobenzene	101	67-133

Date of Report: July 26, 2000
 Samples Submitted: July 10, 2000
 Lab Traveler: 07-041
 Project: 603-001

**HALOGENATED VOLATILES by EPA 8260B
 METHOD BLANK QUALITY CONTROL**

page 1 of 2

Date Extracted: 7-19-00
 Date Analyzed: 7-19-00

Matrix: Soil
 Units: mg/Kg (ppm)

Lab ID: MB0719S1

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		0.050
Chloromethane	ND		0.050
Vinyl Chloride	ND		0.050
Bromomethane	ND		0.050
Chloroethane	ND		0.050
Trichlorofluoromethane	ND		0.050
1,1-Dichloroethene	ND		0.050
Methylene Chloride	ND		0.25
(trans) 1,2-Dichloroethene	ND		0.050
1,1-Dichloroethane	ND		0.050
2,2-Dichloropropane	ND		0.050
(cis) 1,2-Dichloroethene	ND		0.050
Chloroform	ND		0.050
1,1,1-Trichloroethane	ND		0.050
Carbon Tetrachloride	ND		0.050
1,1-Dichloropropene	ND		0.050
1,2-Dichloroethane	ND		0.050
Trichloroethene	ND		0.050
1,2-Dichloropropane	ND		0.050
Dibromomethane	ND		0.050
Bromodichloromethane	ND		0.050
2-Chloroethyl Vinyl Ether	ND		0.25
(cis) 1,3-Dichloropropene	ND		0.050
(trans) 1,3-Dichloropropene	ND		0.050
1,1,2-Trichloroethane	ND		0.050
Tetrachloroethene	ND		0.050
1,3-Dichloropropane	ND		0.050

Date of Report: July 26, 2000
 Samples Submitted: July 10, 2000
 Lab Traveler: 07-041
 Project: 603-001

HALOGENATED VOLATILES by EPA 8260B
METHOD BLANK QUALITY CONTROL
 page 2 of 2

Lab ID: MB0719S1

Compound	Results	Flags	PQL
Dibromochloromethane	ND		0.050
1,2-Dibromoethane	ND		0.050
Chlorobenzene	ND		0.050
1,1,1,2-Tetrachloroethane	ND		0.050
Bromoform	ND		0.050
Bromobenzene	ND		0.050
1,1,2,2-Tetrachloroethane	ND		0.050
1,2,3-Trichloropropane	ND		0.050
2-Chlorotoluene	ND		0.050
4-Chlorotoluene	ND		0.050
1,3-Dichlorobenzene	ND		0.050
1,4-Dichlorobenzene	ND		0.050
1,2-Dichlorobenzene	ND		0.050
1,2-Dibromo-3-chloropropane	ND		0.25
1,2,4-Trichlorobenzene	ND		0.050
Hexachlorobutadiene	ND		0.25
1,2,3-Trichlorobenzene	ND		0.050

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	108	65-125
Toluene-d8	100	77-116
4-Bromofluorobenzene	104	67-133

Date of Report: July 26, 2000
Samples Submitted: July 10, 2000
Lab Traveler: 07-041
Project: 603-001

**HALOGENATED VOLATILES by EPA 8260B
MS/MSD QUALITY CONTROL**

Date Extracted: 7-19-00
Date Analyzed: 7-26-00

Matrix: Soil
Units: mg/Kg (ppm)

Lab ID: 07-041-05

Compound	Spike Amount	MS	Percent Recovery	MSD	Percent Recovery	RPD	Flags
1,1-Dichloroethene	2.50	2.35	94	2.37	95	0.83	
Benzene	2.50	2.49	100	2.55	102	2.3	
Trichloroethene	2.50	2.35	94	2.35	94	0.094	
Toluene	2.50	2.48	99	2.44	98	1.6	
Chlorobenzene	2.50	2.43	97	2.47	99	1.3	

Date of Report: July 26, 2000
Samples Submitted: July 10, 2000
Lab Traveler: 07-041
Project: 603-001

Date Analyzed: 7-12-00

% MOISTURE

Client ID	Lab ID	% Moisture
MW3-7.5-9	07-041-03	11
MW3-12.5-14	07-041-05	24
MW3-45-45.5	07-041-14	14
VE3-10-11.5	07-041-19	17
VE3-20-21.5	07-041-23	10
MW2-2.5-4	07-041-24	10
MW2-10-11.5	07-041-27	21
MW2-17.5-19	07-041-30	4.0
MW2-30-31	07-041-33	5.0
MW2-45-45.5	07-041-36	4.0
VE4-15-6.5	07-041-41	18
VE2-5-6.5	07-041-44	19
VE2-15-16.5	07-041-48	21
VE5-5-6.5	07-041-50	19
VE5-15-16	07-041-52	21
MW1-2.5-3.5	07-041-53	16
MW1-35-35.5	07-041-62	3.0
MW1-45-45.5	07-041-64	8.0
VE1-7.5-9	07-041-68	12
VE1-15-16.5	07-041-71	13



DATA QUALIFIERS AND ABBREVIATIONS

A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.

B - The analyte indicated was also found in the blank sample.

C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.

D - Data from 1:_____ dilution.

E - The value reported exceeds the quantitation range, and is an estimate.

F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.

G - Insufficient sample quantity for duplicate analysis.

H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.

I - Compound recovery is outside of the control limits.

J - The value reported was below the practical quantitation limit. The value is an estimate.

K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.

L - The RPD is outside of the control limits.

M - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.

O - Hydrocarbons outside the defined gasoline range are present in the sample; NWTPH-Dx recommended.

P - The RPD of the detected concentrations between the two columns is greater than 40.

Q - Surrogate recovery is outside of the control limits.

S - Surrogate recovery data is not available due to the necessary dilution of the sample.

T - The sample chromatogram is not similar to a typical _____.

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.

W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.

X - Sample extract treated with a silica gel cleanup procedure.

Y - Sample extract treated with an acid cleanup procedure.

Z -

ND - Not Detected at PQL

MRL - Method Reporting Limit

PQL - Practical Quantitation Limit

RPD - Relative Percent Difference

Chain of Custody

Company: Farallon Consulting L.L.C.

Project No.: 603-001

Project Name: Land Title Building Parking Lot

Project Manager: Jeff Kaspar

**Turnaround Request
(in working days)**

(Check One)

☐ Same Day ☐ 1 Day

☐ 2 Day ☐ 3 Day

☒ Standard
(Hydrocarbon analyses: 5 days,
All other analyses: 7 days)

☐ _____
(other)

Project Chemist: DB

Laboratory No. 07-041

Requested Analysis

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	# of Cont.	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Dx	Volatiles by 8260B	Halogenated Volatiles by 8260B	Semivolatiles by 8270C	PAHs by 8270C	PCB's by 8082	Pesticides by 8081	Total RCRA Metals (8)	TCLP Metals	VPH	EPH	% Moisture
1	MW3-2.5-4	7/5/00	08:45	S	1														
2	MW3-5-6.5		0848																
3	MW3-7.5-9		0855					X											X
4	MW3-10-11.5		0907																
5	MW3-12.5-14		0911					X	X										X
6	MW3-15-16.5		0915																
7	MW3-17.5-19		0917																
8	MW3-20-21.5		0921																
9	MW3-22.5-24		0930																
10	MW3-25-26.5		0934																
11	MW3-30-31.5		0939																
12	MW3-35-35.5		0950																

RELINQUISHED BY <u>Jeff Kaspar</u>	DATE <u>7/10/00</u>	RECEIVED BY <u>MAM</u>	DATE <u>7/10/00</u>
FIRM <u>Farallon</u>	TIME <u>1505</u>	FIRM <u>SPEED</u>	TIME <u>1505</u>
RELINQUISHED BY <u>MAM</u>	DATE <u>7/10/00</u>	RECEIVED BY <u>OSE</u>	DATE <u>7/10/00</u>
FIRM <u>S ALV</u>	TIME <u>1600</u>	FIRM <u>OSE</u>	TIME <u>4:05</u>
REVIEWED BY	DATE REVIEWED		

COMMENTS:

Chromatographs with final report ☐

Chain of Custody

Company: Favallan Consulting L.L.C.

Project No.: 603-001

Project Name: Land Title Building Parking Lot

Project Manager: Jeff Kaspar

Turnaround Request (in working days)		Project Chemist: <u>DR</u>	Laboratory No. <u>07-041</u>															
(Check One)		Requested Analysis																
<input type="checkbox"/> Same Day	<input type="checkbox"/> 1 Day																	
<input type="checkbox"/> 2 Day	<input type="checkbox"/> 3 Day																	
<input checked="" type="checkbox"/> Standard (Hydrocarbon analyses: 5 days, All other analyses: 7 days)																		
<input type="checkbox"/> _____ (other)																		

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	# of Cont.	NWTPH-HCID	NWTPH-GXBTEX	NWTPH-DX	Volatiles by 8260B	Halogenated Volatiles by 8260B	Semivolatiles by 8270C	PAHs by 8270C	PCB's by 8082	Pesticides by 8081	Total RCRA Metals (8)	TCLP Metals	VPH	EPH	% Moisture
13	MW3-40-40.5	7/5/00	1000	S	1														
14	MW3-45-45.5	↓	1305	↓	↓					X									X
15	MW3-50-50.5	↓	1315	↓	↓														
16	VE3-2.5-4	7/5/00	1545	S	1														
17	VE3-5-6.5	↓	1550	↓	↓														
19	VE3-7.5-9	↓	1555	↓	↓														
19	VE3-10-11.5	↓	1602	↓	↓					X									X
20	VE3-12.5-14	↓	1608	↓	↓														
21	VE3-15-16.5	↓	1612	↓	↓														
22	VE3-17.5-18.5	↓	1619	↓	↓														
23	VE3-20-21.5	↓	1623	↓	↓					X									X
24	MW2-2.5-4	7/6/00	0827	S	1					X									X

RELINQUISHED BY: <u>Samuel D. Kaspar</u>	DATE: <u>7/10/00</u>	RECEIVED BY: <u>Mam Bann</u>	DATE: <u>7 10 00</u>
FIRM: <u>Favallan</u>	TIME: <u>1505</u>	FIRM: <u>S NEOY</u>	TIME: <u>1500</u>
RELINQUISHED BY: <u>Mam Bann</u>	DATE: <u>7 10 00</u>	RECEIVED BY: <u>OGU</u>	DATE: <u>7/10/00</u>
FIRM: <u>S NEOY</u>	TIME: <u>1600</u>	FIRM: <u>OGU</u>	TIME: <u>4:05</u>
REVIEWED BY: _____		DATE REVIEWED: _____	

COMMENTS:

Chromatographs with final report ☐



OnSite Environmental Inc.

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Chain of Custody

Page 3 of 6

Company: Favallin Consulting L.L.C.

Project No.: 603-001

Project Name: Land Title Building Parking Lot

Project Manager: Jeff Kasper

Turnaround Request
(in working days)

(Check One)

☐ Same Day ☐ 1 Day

☐ 2 Day ☐ 3 Day

☒ Standard
(Hydrocarbon analyses: 5 days,
All other analyses: 7 days)

☐ _____
(other)

Project Chemist: DB

Laboratory No. 07-041

						Requested Analysis													
Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	# of Cont.	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Dx	Volatiles by 8260B	Halogenated Volatiles by 8260B	Semivolatiles by 8270C	PAHs by 8270C	PCB's by 8082	Pesticides by 8081	Total RCRA Metals (8)	TCLP Metals	VPH	EPH	% Moisture
25	MW2-5-6.5	7/10/00	0831	S	1														
26	MW2-7.5-9		0836																
27	MW2-10-11.5		0841							X									X
28	MW2-12.5-14		0846																
29	MW2-15-16.5		0851																
30	MW2-17.5-19		0857							X									X
31	MW2-20-21.5		0902																
32	MW2-25-26.5		0926																
33	MW2-30-31		0930							X									X
34	MW2-35-36		0933																
35	MW2-40-40.5		0947																
36	MW2-45-45.5		0951							X									X

RELINQUISHED BY <u>S. J. B.</u>	DATE <u>7/10/00</u>	RECEIVED BY <u>THAM BOM</u>	DATE <u>7 10 00</u>
FIRM <u>Favallin</u>	TIME <u>1505</u>	FIRM <u>SPLD</u>	TIME <u>1507</u>
RELINQUISHED BY <u>THAM BOM</u>	DATE <u>7 10 00</u>	RECEIVED BY <u>W. C. C.</u>	DATE <u>7/12/00</u>
FIRM <u>SPLD</u>	TIME <u>1000</u>	FIRM <u>OSE</u>	TIME <u>4:05</u>

REVIEWED BY _____ DATE REVIEWED _____

COMMENTS:

Chromatographs with final report ☐



OnSite Environmental Inc.

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Chain of Custody

Page 4 of 6

Company: Fennell Consulting L.L.C.
Project No.: 603-001
Project Name: Land Title Building Parking Lot
Project Manager: Jeff Kasper

Turnaround Request
(in working days)

(Check One)

☐ Same Day ☐ 1 Day
☐ 2 Day ☐ 3 Day
☒ Standard
(Hydrocarbon analyses: 5 days,
All other analyses: 7 days)
☐ _____
(other)

Project Chemist: DB
Laboratory No. 07-041
Requested Analysis

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	# of Cont.	NWTPH-HCID	NWTPH-GXBTEX	NWTPH-DX	Volatiles by 8260B	Halogenated Volatiles by 8260B	Semivolatiles by 8270C	PAHs by 8270C	PCB's by 8082	Pesticides by 8081	Total RCRA Metals (8)	TCLP Metals	VPH	EPH	% Moisture
37	11102-50-50.5	7/6/00	1003	S	2														
38	VE4-2.5-4	7/6/00	1319	S	2														
39	VE4-5-6.5	↓	1323	↓	↓														
40	VE4-10-11.5	↓	1330	↓	↓														
41	VE4-15-16.5	↓	1335	↓	↓					X									X
42	VE4-20-21.5	↓	1343	↓	↓														
43	VE2-2.5-3.5	7/6/00	1545	S	1														
44	VE2-5-6.5	↓	1552	↓	↓					X									X
45	VE2-7.5-9	↓	1556	↓	↓														
46	VE2-10-11.5	↓	1602	↓	↓														
47	VE2-12.5-14	↓	1609	↓	↓														
48	VE2-15-16.5	↓	1615	↓	↓					X									X

RELINQUISHED BY <u>Sally J. Kasper</u>	DATE <u>7/10/00</u>	RECEIVED BY <u>Mam Bm</u>	DATE <u>7/10/00</u>
FIRM <u>Fennell</u>	TIME <u>1505</u>	FIRM <u>SPEEDY</u>	TIME <u>1508</u>
RELINQUISHED BY <u>Mam Bm</u>	DATE <u>7/10/00</u>	RECEIVED BY <u>Clara</u>	DATE <u>7/10/00</u>
FIRM <u>SPEEDY INC</u>	TIME <u>1600</u>	FIRM <u>SEA</u>	TIME <u>4:05</u>
REVIEWED BY		DATE REVIEWED	

COMMENTS:

Chromatographs with final report ☐

Chain of Custody

Company: Farallur Consulting L.L.C.
 Project No.: 603-001
 Project Name: Land Title Building Parking Lot
 Project Manager:

Turn Around Requested (Check One)	Project Chemist: <u>DB</u>	Laboratory No. <u>07-041</u>
<input type="checkbox"/> Same Day <input type="checkbox"/> 24 Hours <input type="checkbox"/> 48 Hours <input checked="" type="checkbox"/> Standard <input type="checkbox"/> (other)	Requested Analysis	

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	# of Cont.	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Dx	Volatiles by 8260B	Halogenated Volatiles by 8260B	Semivolatiles by 8270C	PAHs by 8270C	PCBs by 8082	Pesticides by 8081	Total RCRA Metals (8)	TCLP Metals	VPH	EPH	% Moisture
49	VE5-2.5-3.5	7/6/00	1738	S	1														
50	VE5-5-6.5	↓	1745	↓	↓					X									X
51	VE5-10-11.5	↓	1750	↓	↓														
52	VE5-15-16	↓	1757	↓	↓					X									X
53	MW1-2.5-3.5	7/7/00	0808	S	1					X									X
54	MW1-5-6.5	↓	0812	↓	↓														
55	MW1-7.5-9	↓	0816	↓	↓														
56	MW1-10-11	↓	0820	↓	↓														
57	MW1-12.5-14	↓	0824	↓	↓														
58	MW1-15-16.5	↓	0829	↓	↓														
59	MW1-17.5-19	↓	0833	↓	↓														
60	MW1-20-21.5	↓	0838	↓	↓														

RELINQUISHED BY <u>Sally K</u>	DATE <u>7/10/00</u>	RECEIVED BY <u>Mark Barr</u>	DATE <u>7 10 00</u>	COMMENTS:
FIRM <u>Farallur</u>	TIME <u>1505</u>	FIRM <u>SPELLO</u>	TIME <u>1508</u>	
RELINQUISHED BY <u>Mark Barr</u>	DATE <u>7 10 00</u>	RECEIVED BY <u>Ullrich</u>	DATE <u>7/10/00</u>	
FIRM <u>SPELLO LLC</u>	TIME <u>1600</u>	FIRM <u>USE</u>	TIME <u>4:05</u>	
REVIEWED BY		DATE REVIEWED		

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Chain of Custody

Page 6 of 6

Company: Farallon Consulting L.L.C.
Project No.: 603-001
Project Name: Land Title Building Parking Lot
Project Manager: Jeff Kaspar

Turn Around Requested
(Check One)
☐ Same Day
☐ 24 Hours
☐ 48 Hours
☒ Standard
☐ (other)

Project Chemist: DB
Laboratory No. 07-041

						Requested Analysis													
Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	# of Cont.	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Dx	Volatiles by 8260B	Halogenated Volatiles by 8260B	Semivolatiles by 8270C	PAHs by 8270C	PCB's by 8082	Pesticides by 8081	Total RCRA Metals (8)	TCLP Metals	VPH	EPH	% Moisture
61	MW1-25-26.5	7/7/00	0843	S	1														
	MW1-30-30.5																		
62	MW1-35-35.5		0855							X									X
63	MW1-40-40.5		0900																
64	MW1-45-45.5		0908							X									X
65	MW1-50-50.5	↓	0917	↓	↓														
66	VE1-2.5-3.5	7/7/00	1105	S	1														
67	VE1-5-6.5		1114																
68	VE1-7.5-9		1119							X									X
69	VE1-10-11.5		1129																
70	VE1-12.5-14		1133																
71	VE1-15-16.5	↓	1138	↓	↓					X									X

RELINQUISHED BY <u>Jeff Kaspar</u>	DATE <u>7/10/00</u>	RECEIVED BY <u>MAM BMT</u>	DATE <u>7/10/00</u>
FIRM <u>Farallon</u>	TIME <u>1505</u>	FIRM <u>SPEEDY</u>	TIME <u>1509</u>
RELINQUISHED BY <u>MAM BMT</u>	DATE <u>7/10/00</u>	RECEIVED BY <u>Jeff Kaspar</u>	DATE <u>7/10/00</u>
FIRM <u>SPEEDY</u>	TIME <u>1600</u>	FIRM <u>JEFF</u>	TIME <u>4:05</u>
REVIEWED BY		DATE REVIEWED	

COMMENTS:
Note: MW1-30-30.5 - not collected



**OnSite
Environmental Inc.**

Analytical Testing and Mobile Laboratory Services

July 31, 2000

Jeff Kaspar
Farallon Consulting, LLC
320 3rd Avenue NE, Suite 200
Issaquah, WA 98027

Re: Analytical Data for Project 603-001
Laboratory Reference No. 0007-138

Dear Jeff:

Enclosed are the analytical results and associated quality control data for samples submitted on July 20, 2000.

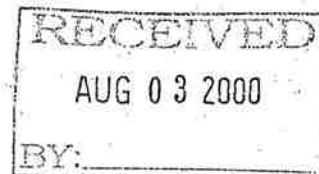
The standard policy of OnSite Environmental Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

David Baumeister
Project Manager

Enclosures



Date of Report: July 31, 2000
Samples Submitted: July 20, 2000
Lab Traveler: 07-138
Project: 603-001

NWTPH-Gx/BTEX

Date Extracted: 7-24-00
Date Analyzed: 7-24-00

Matrix: Water
Units: ug/L (ppb)

Client ID: MW-3
Lab ID: 07-138-03

	Result	Flags	PQL
Benzene	ND		1.0
Toluene	ND		1.0
Ethyl Benzene	ND		1.0
m,p-Xylene	ND		1.0
o-Xylene	ND		1.0
TPH-Gas	1000	T	100
Surrogate Recovery: Fluorobenzene	104%		

Date of Report: July 31, 2000
Samples Submitted: July 20, 2000
Lab Traveler: 07-138
Project: 603-001

**NWTPH-Gx/BTEX
METHOD BLANK QUALITY CONTROL**

Date Extracted: 7-24-00
Date Analyzed: 7-24-00

Matrix: Water
Units: ug/L (ppb)

Lab ID: MB0724W1

	Result	Flags	PQL
Benzene	ND		1.0
Toluene	ND		1.0
Ethyl Benzene	ND		1.0
m,p-Xylene	ND		1.0
o-Xylene	ND		1.0
TPH-Gas	ND		100
Surrogate Recovery:			
Fluorobenzene	97%		

Date of Report: July 31, 2000
Samples Submitted: July 20, 2000
Lab Traveler: 07-138
Project: 603-001

**NWTPH-Gx/BTEX
MS/MSD QUALITY CONTROL**

Date Extracted: 7-24-00
Date Analyzed: 7-24-00

Matrix: Water
Units: ug/L (ppb)

Spike Level: 50.0 ppb

Lab ID:	07-148-05 MS	Percent Recovery	07-148-05 MSD	Percent Recovery	RPD	Flags
Benzene	55.9	112	55.4	111	0.92	
Toluene	54.4	109	54.0	108	0.79	
Ethyl Benzene	53.1	106	52.7	105	0.76	
m,p-Xylene	54.6	109	54.4	109	0.48	
o-Xylene	54.4	109	54.0	108	0.70	

Surrogate Recovery:

Fluorobenzene	107%	106%
---------------	------	------

Date of Report: July 31, 2000
 Samples Submitted: July 20, 2000
 Lab Traveler: 07-138
 Project: 603-001

HALOGENATED VOLATILES by EPA 8260B

Page 1 of 2

Date Extracted: 7-24-00
 Date Analyzed: 7-24-00

Matrix: Water
 Units: ug/L (ppb)

Lab ID: 07-138-01
 Client ID: MW-1

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		10
Chloromethane	ND		10
Vinyl Chloride	ND		10
Bromomethane	ND		10
Chloroethane	ND		10
Trichlorofluoromethane	ND		10
1,1-Dichloroethene	ND		10
Methylene Chloride	57	H	50
(trans) 1,2-Dichloroethene	ND		10
1,1-Dichloroethane	ND		10
2,2-Dichloropropane	ND		10
(cis) 1,2-Dichloroethene	ND		10
Chloroform	ND		10
1,1,1-Trichloroethane	ND		10
Carbon Tetrachloride	ND		10
1,1-Dichloropropene	ND		10
1,2-Dichloroethane	ND		10
Trichloroethene	ND		10
1,2-Dichloropropane	ND		10
Dibromomethane	ND		10
Bromodichloromethane	ND		10
2-Chloroethyl Vinyl Ether	ND		250
(cis) 1,3-Dichloropropene	ND		10
(trans) 1,3-Dichloropropene	ND		10
1,1,2-Trichloroethane	ND		10
Tetrachloroethene	560		10
1,3-Dichloropropane	ND		10

Date of Report: July 31, 2000
Samples Submitted: July 20, 2000
Lab Traveler: 07-138
Project: 603-001

HALOGENATED VOLATILES by EPA 8260B

Page 2 of 2

Lab ID: 07-138-01
Client ID: MW-1

Compound	Results	Flags	PQL
Dibromochloromethane	ND		10
1,2-Dibromoethane	ND		10
Chlorobenzene	ND		10
1,1,1,2-Tetrachloroethane	ND		10
Bromoform	ND		50
Bromobenzene	ND		10
1,1,2,2-Tetrachloroethane	ND		10
1,2,3-Trichloropropane	ND		10
2-Chlorotoluene	ND		10
4-Chlorotoluene	ND		10
1,3-Dichlorobenzene	ND		10
1,4-Dichlorobenzene	ND		10
1,2-Dichlorobenzene	ND		10
1,2-Dibromo-3-chloropropane	ND		250
1,2,4-Trichlorobenzene	ND		10
Hexachlorobutadiene	ND		10
1,2,3-Trichlorobenzene	ND		10

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	128	71-133
Toluene-d8	105	80-151
4-Bromofluorobenzene	106	75-139

Date of Report: July 31, 2000
 Samples Submitted: July 20, 2000
 Lab Traveler: 07-138
 Project: 603-001

HALOGENATED VOLATILES by EPA 8260B

Page 1 of 2

Date Extracted: 7-24-00
 Date Analyzed: 7-24-00
 Matrix: Water
 Units: ug/L (ppb)
 Lab ID: 07-138-02
 Client ID: MW-2

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		10
Chloromethane	ND		10
Vinyl Chloride	ND		10
Bromomethane	ND		10
Chloroethane	ND		10
Trichlorofluoromethane	ND		10
1,1-Dichloroethene	ND		10
Methylene Chloride	50	H	50
(trans) 1,2-Dichloroethene	ND		10
1,1-Dichloroethane	ND		10
2,2-Dichloropropane	ND		10
(cis) 1,2-Dichloroethene	ND		10
Chloroform	ND		10
1,1,1-Trichloroethane	ND		10
Carbon Tetrachloride	ND		10
1,1-Dichloropropene	ND		10
1,2-Dichloroethane	ND		10
Trichloroethene	ND		10
1,2-Dichloropropane	ND		10
Dibromomethane	ND		10
Bromodichloromethane	ND		10
2-Chloroethyl Vinyl Ether	ND		250
(cis) 1,3-Dichloropropene	ND		10
(trans) 1,3-Dichloropropene	ND		10
1,1,2-Trichloroethane	ND		10
Tetrachloroethene	1100		10
1,3-Dichloropropane	ND		10

Date of Report: July 31, 2000
 Samples Submitted: July 20, 2000
 Lab Traveler: 07-138
 Project: 603-001

HALOGENATED VOLATILES by EPA 8260B

Page 2 of 2

Lab ID: 07-138-02
 Client ID: MW-2

Compound	Results	Flags	PQL
Dibromochloromethane	ND		10
1,2-Dibromoethane	ND		10
Chlorobenzene	ND		10
1,1,1,2-Tetrachloroethane	ND		10
Bromoform	ND		50
Bromobenzene	ND		10
1,1,2,2-Tetrachloroethane	ND		10
1,2,3-Trichloropropane	ND		10
2-Chlorotoluene	ND		10
4-Chlorotoluene	ND		10
1,3-Dichlorobenzene	ND		10
1,4-Dichlorobenzene	ND		10
1,2-Dichlorobenzene	ND		10
1,2-Dibromo-3-chloropropane	ND		250
1,2,4-Trichlorobenzene	ND		10
Hexachlorobutadiene	ND		10
1,2,3-Trichlorobenzene	ND		10

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	132	71-133
Toluene-d8	104	80-151
4-Bromofluorobenzene	105	75-139

Date of Report: July 31, 2000
 Samples Submitted: July 20, 2000
 Lab Traveler: 07-138
 Project: 603-001

HALOGENATED VOLATILES by EPA 8260B
 Page 1 of 2

Date Extracted: 7-24-00
 Date Analyzed: 7-25-00

Matrix: Water
 Units: ug/L (ppb)

Lab ID: 07-138-03
 Client ID: MW-3

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		10
Chloromethane	ND		10
Vinyl Chloride	ND		10
Bromomethane	ND		10
Chloroethane	ND		10
Trichlorofluoromethane	ND		10
1,1-Dichloroethene	ND		10
Methylene Chloride	59	H	50
(trans) 1,2-Dichloroethene	ND		10
1,1-Dichloroethane	ND		10
2,2-Dichloropropane	ND		10
(cis) 1,2-Dichloroethene	ND		10
Chloroform	ND		10
1,1,1-Trichloroethane	ND		10
Carbon Tetrachloride	ND		10
1,1-Dichloropropene	ND		10
1,2-Dichloroethane	ND		10
Trichloroethene	ND		10
1,2-Dichloropropane	ND		10
Dibromomethane	ND		10
Bromodichloromethane	ND		10
2-Chloroethyl Vinyl Ether	ND		250
(cis) 1,3-Dichloropropene	ND		10
(trans) 1,3-Dichloropropene	ND		10
1,1,2-Trichloroethane	ND		10
Tetrachloroethene	1300		10
1,3-Dichloropropane	ND		10

Date of Report: July 31, 2000
 Samples Submitted: July 20, 2000
 Lab Traveler: 07-138
 Project: 603-001

HALOGENATED VOLATILES by EPA 8260B
 Page 2 of 2

Lab ID: 07-138-03
 Client ID: MW-3

Compound	Results	Flags	PQL
Dibromochloromethane	ND		10
1,2-Dibromoethane	ND		10
Chlorobenzene	ND		10
1,1,1,2-Tetrachloroethane	ND		10
Bromoform	ND		50
Bromobenzene	ND		10
1,1,2,2-Tetrachloroethane	ND		10
1,2,3-Trichloropropane	ND		10
2-Chlorotoluene	ND		10
4-Chlorotoluene	ND		10
1,3-Dichlorobenzene	ND		10
1,4-Dichlorobenzene	ND		10
1,2-Dichlorobenzene	ND		10
1,2-Dibromo-3-chloropropane	ND		250
1,2,4-Trichlorobenzene	ND		10
Hexachlorobutadiene	ND		10
1,2,3-Trichlorobenzene	ND		10

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	131	71-133
Toluene-d8	102	80-151
4-Bromofluorobenzene	103	75-139

Date of Report: July 31, 2000
Samples Submitted: July 20, 2000
Lab Traveler: 07-138
Project: 603-001

HALOGENATED VOLATILES by EPA 8260B

Page 1 of 2

Date Extracted: 7-26-00
Date Analyzed: 7-26-00

Matrix: Water
Units: ug/L (ppb)

Lab ID: 07-138-04
Client ID: 071900-QC-1

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		10
Chloromethane	ND		10
Vinyl Chloride	ND		10
Bromomethane	ND		10
Chloroethane	ND		10
Trichlorofluoromethane	ND		10
1,1-Dichloroethene	ND		10
Methylene Chloride	ND		50
(trans) 1,2-Dichloroethene	ND		10
1,1-Dichloroethane	ND		10
2,2-Dichloropropane	ND		10
(cis) 1,2-Dichloroethene	ND		10
Chloroform	ND		10
1,1,1-Trichloroethane	ND		10
Carbon Tetrachloride	ND		10
1,1-Dichloropropene	ND		10
1,2-Dichloroethane	ND		10
Trichloroethene	ND		10
1,2-Dichloropropane	ND		10
Dibromomethane	ND		10
Bromodichloromethane	ND		10
2-Chloroethyl Vinyl Ether	ND		250
(cis) 1,3-Dichloropropene	ND		10
(trans) 1,3-Dichloropropene	ND		10
1,1,2-Trichloroethane	ND		10
Tetrachloroethene	930		10
1,3-Dichloropropane	ND		10

Date of Report: July 31, 2000
Samples Submitted: July 20, 2000
Lab Traveler: 07-138
Project: 603-001

HALOGENATED VOLATILES by EPA 8260B

Page 2 of 2

Lab ID: 07-138-04
Client ID: 071900-QC-1

Compound	Results	Flags	PQL
Dibromochloromethane	ND		10
1,2-Dibromoethane	ND		10
Chlorobenzene	ND		10
1,1,1,2-Tetrachloroethane	ND		10
Bromoform	ND		50
Bromobenzene	ND		10
1,1,2,2-Tetrachloroethane	ND		10
1,2,3-Trichloropropane	ND		10
2-Chlorotoluene	ND		10
4-Chlorotoluene	ND		10
1,3-Dichlorobenzene	ND		10
1,4-Dichlorobenzene	ND		10
1,2-Dichlorobenzene	ND		10
1,2-Dibromo-3-chloropropane	ND		250
1,2,4-Trichlorobenzene	ND		10
Hexachlorobutadiene	ND		10
1,2,3-Trichlorobenzene	ND		10

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	99	71-133
Toluene-d8	94	80-151
4-Bromofluorobenzene	101	75-139

Date of Report: July 31, 2000
Samples Submitted: July 20, 2000
Lab Traveler: 07-138
Project: 603-001

HALOGENATED VOLATILES by EPA 8260B

Page 1 of 2

Date Extracted: 7-24-00
Date Analyzed: 7-24-00

Matrix: Water
Units: ug/L (ppb)

Lab ID: 07-138-05
Client ID: 071900-QC-TB

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		0.20
Chloromethane	ND		0.20
Vinyl Chloride	ND		0.20
Bromomethane	ND		0.20
Chloroethane	ND		0.20
Trichlorofluoromethane	ND		0.20
1,1-Dichloroethene	ND		0.20
Methylene Chloride	ND		1.0
(trans) 1,2-Dichloroethene	ND		0.20
1,1-Dichloroethane	ND		0.20
2,2-Dichloropropane	ND		0.20
(cis) 1,2-Dichloroethene	ND		0.20
Chloroform	ND		0.20
1,1,1-Trichloroethane	ND		0.20
Carbon Tetrachloride	ND		0.20
1,1-Dichloropropene	ND		0.20
1,2-Dichloroethane	ND		0.20
Trichloroethene	ND		0.20
1,2-Dichloropropane	ND		0.20
Dibromomethane	ND		0.20
Bromodichloromethane	ND		0.20
2-Chloroethyl Vinyl Ether	ND		5.0
(cis) 1,3-Dichloropropene	ND		0.20
(trans) 1,3-Dichloropropene	ND		0.20
1,1,2-Trichloroethane	ND		0.20
Tetrachloroethene	ND		0.20
1,3-Dichloropropane	ND		0.20

Date of Report: July 31, 2000
Samples Submitted: July 20, 2000
Lab Traveler: 07-138
Project: 603-001

HALOGENATED VOLATILES by EPA 8260B
Page 2 of 2

Lab ID: 07-138-05
Client ID: 071900-QC-TB

Compound	Results	Flags	PQL
Dibromochloromethane	ND		0.20
1,2-Dibromoethane	ND		0.20
Chlorobenzene	ND		0.20
1,1,1,2-Tetrachloroethane	ND		0.20
Bromoform	ND		1.0
Bromobenzene	ND		0.20
1,1,2,2-Tetrachloroethane	ND		0.20
1,2,3-Trichloropropane	ND		0.20
2-Chlorotoluene	ND		0.20
4-Chlorotoluene	ND		0.20
1,3-Dichlorobenzene	ND		0.20
1,4-Dichlorobenzene	ND		0.20
1,2-Dichlorobenzene	ND		0.20
1,2-Dibromo-3-chloropropane	ND		5.0
1,2,4-Trichlorobenzene	ND		0.20
Hexachlorobutadiene	ND		0.20
1,2,3-Trichlorobenzene	ND		0.20

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	130	71-133
Toluene-d8	107	80-151
4-Bromofluorobenzene	109	75-139

Date of Report: July 31, 2000
Samples Submitted: July 20, 2000
Lab Traveler: 07-138
Project: 603-001

HALOGENATED VOLATILES by EPA 8260B
METHOD BLANK QUALITY CONTROL

Page 1 of 2

Date Extracted: 7-24-00
Date Analyzed: 7-24-00

Matrix: Water
Units: ug/L (ppb)

Lab ID: MB0724W1

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		0.20
Chloromethane	ND		0.20
Vinyl Chloride	ND		0.20
Bromomethane	ND		0.20
Chloroethane	ND		0.20
Trichlorofluoromethane	ND		0.20
1,1-Dichloroethene	ND		0.20
Methylene Chloride	ND		1.0
(trans) 1,2-Dichloroethene	ND		0.20
1,1-Dichloroethane	ND		0.20
2,2-Dichloropropane	ND		0.20
(cis) 1,2-Dichloroethene	ND		0.20
Chloroform	ND		0.20
1,1,1-Trichloroethane	ND		0.20
Carbon Tetrachloride	ND		0.20
1,1-Dichloropropene	ND		0.20
1,2-Dichloroethane	ND		0.20
Trichloroethene	ND		0.20
1,2-Dichloropropane	ND		0.20
Dibromomethane	ND		0.20
Bromodichloromethane	ND		0.20
2-Chloroethyl Vinyl Ether	ND		5.0
(cis) 1,3-Dichloropropene	ND		0.20
(trans) 1,3-Dichloropropene	ND		0.20
1,1,2-Trichloroethane	ND		0.20
Tetrachloroethene	ND		0.20
1,3-Dichloropropane	ND		0.20

Date of Report: July 31, 2000
 Samples Submitted: July 20, 2000
 Lab Traveler: 07-138
 Project: 603-001

HALOGENATED VOLATILES by EPA 8260B
METHOD BLANK QUALITY CONTROL
 Page 2 of 2

Lab ID: MB0724W1

Compound	Results	Flags	PQL
Dibromochloromethane	ND		0.20
1,2-Dibromoethane	ND		0.20
Chlorobenzene	ND		0.20
1,1,1,2-Tetrachloroethane	ND		0.20
Bromoform	ND		1.0
Bromobenzene	ND		0.20
1,1,2,2-Tetrachloroethane	ND		0.20
1,2,3-Trichloropropane	ND		0.20
2-Chlorotoluene	ND		0.20
4-Chlorotoluene	ND		0.20
1,3-Dichlorobenzene	ND		0.20
1,4-Dichlorobenzene	ND		0.20
1,2-Dichlorobenzene	ND		0.20
1,2-Dibromo-3-chloropropane	ND		5.0
1,2,4-Trichlorobenzene	ND		0.20
Hexachlorobutadiene	ND		0.20
1,2,3-Trichlorobenzene	ND		0.20

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	131	71-133
Toluene-d8	103	80-151
4-Bromofluorobenzene	109	75-139

Date of Report: July 31, 2000
Samples Submitted: July 20, 2000
Lab Traveler: 07-138
Project: 603-001

HALOGENATED VOLATILES by EPA 8260B
METHOD BLANK QUALITY CONTROL
Page 1 of 2

Date Extracted: 7-26-00
Date Analyzed: 7-26-00

Matrix: Water
Units: ug/L (ppb)

Lab ID: MB0726W1

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		0.20
Chloromethane	ND		0.20
Vinyl Chloride	ND		0.20
Bromomethane	ND		0.20
Chloroethane	ND		0.20
Trichlorofluoromethane	ND		0.20
1,1-Dichloroethene	ND		0.20
Methylene Chloride	ND		1.0
(trans) 1,2-Dichloroethene	ND		0.20
1,1-Dichloroethane	ND		0.20
2,2-Dichloropropane	ND		0.20
(cis) 1,2-Dichloroethene	ND		0.20
Chloroform	ND		0.20
1,1,1-Trichloroethane	ND		0.20
Carbon Tetrachloride	ND		0.20
1,1-Dichloropropene	ND		0.20
1,2-Dichloroethane	ND		0.20
Trichloroethene	ND		0.20
1,2-Dichloropropane	ND		0.20
Dibromomethane	ND		0.20
Bromodichloromethane	ND		0.20
2-Chloroethyl Vinyl Ether	ND		5.0
(cis) 1,3-Dichloropropene	ND		0.20
(trans) 1,3-Dichloropropene	ND		0.20
1,1,2-Trichloroethane	ND		0.20
Tetrachloroethene	ND		0.20
1,3-Dichloropropane	ND		0.20

Date of Report: July 31, 2000
Samples Submitted: July 20, 2000
Lab Traveler: 07-138
Project: 603-001

HALOGENATED VOLATILES by EPA 8260B
METHOD BLANK QUALITY CONTROL

Page 2 of 2

Lab ID: MB0726W1

Compound	Results	Flags	PQL
Dibromochloromethane	ND		0.20
1,2-Dibromoethane	ND		0.20
Chlorobenzene	ND		0.20
1,1,1,2-Tetrachloroethane	ND		0.20
Bromoform	ND		1.0
Bromobenzene	ND		0.20
1,1,2,2-Tetrachloroethane	ND		0.20
1,2,3-Trichloropropane	ND		0.20
2-Chlorotoluene	ND		0.20
4-Chlorotoluene	ND		0.20
1,3-Dichlorobenzene	ND		0.20
1,4-Dichlorobenzene	ND		0.20
1,2-Dichlorobenzene	ND		0.20
1,2-Dibromo-3-chloropropane	ND		5.0
1,2,4-Trichlorobenzene	ND		0.20
Hexachlorobutadiene	ND		0.20
1,2,3-Trichlorobenzene	ND		0.20

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	131	71-133
Toluene-d8	103	80-151
4-Bromofluorobenzene	109	75-139

Date of Report: July 31, 2000
Samples Submitted: July 20, 2000
Lab Traveler: 07-138
Project: 603-001

HALOGENATED VOLATILES by EPA 8260B
SB/SBD QUALITY CONTROL

Date Extracted: 7-24-00
Date Analyzed: 7-24-00

Matrix: Water
Units: ug/L (ppb)

Lab ID: SB0724W1

Compound	Spike Amount	SB	Percent Recovery	SBD	Percent Recovery	RPD	Flags
1,1-Dichloroethene	10.0	11.21	112	11.07	111	1.3	
Benzene	10.0	12.20	122	11.60	116	4.7	
Trichloroethene	10.0	11.10	111	10.80	108	2.4	
Toluene	10.0	10.60	106	10.30	103	3.1	
Chlorobenzene	10.0	10.13	101	10.27	103	1.4	



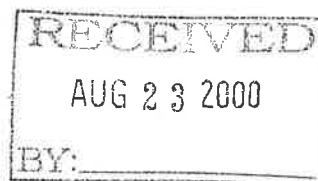
DATA QUALIFIERS AND ABBREVIATIONS

- A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.
- B - The analyte indicated was also found in the blank sample.
- C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.
- D - Data from 1:____ dilution.
- E - The value reported exceeds the quantitation range, and is an estimate.
- F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.
- G - Insufficient sample quantity for duplicate analysis.
- H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.
- I - Compound recovery is outside of the control limits.
- J - The value reported was below the practical quantitation limit. The value is an estimate.
- K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.
- L - The RPD is outside of the control limits.
- M - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.
- O - Hydrocarbons outside the defined gasoline range are present in the sample; NWTPH-Dx recommended.
- P - The RPD of the detected concentrations between the two columns is greater than 40.
- Q - Surrogate recovery is outside of the control limits.
- S - Surrogate recovery data is not available due to the necessary dilution of the sample.
- T - The sample chromatogram is not similar to a typical gas.
- U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.
- W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.
- X - Sample extract treated with a silica gel cleanup procedure.
- Y - Sample extract treated with an acid cleanup procedure.
- Z -
- ND - Not Detected at PQL
- MRL - Method Reporting Limit
- PQL - Practical Quantitation Limit
- RPD - Relative Percent Difference



**OnSite
Environmental Inc.**

Analytical Testing and Mobile Laboratory Services



August 18, 2000

Jeff Kaspar
Farallon Consulting, LLC
320 3rd Avenue NE, Suite 200
Issaquah, WA 98027

Re: Analytical Data for Project 603-001
Laboratory Reference No. 0008-161

Dear Jeff:

Enclosed are the analytical results and associated quality control data for samples submitted on August 16, 2000.

The standard policy of OnSite Environmental Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

David Baumeister
Project Manager

Enclosures

Date of Report: August 18, 2000
Samples Submitted: August 16, 2000
Lab Traveler: 08-161
Project: 603-001

HALOGENATED VOLATILES by EPA 8260B

Page 1 of 2

Date Extracted: 8-17-00
Date Analyzed: 8-17-00

Matrix: Air
Units: ug/L (ppb)

Lab ID: 08-161-01
Client ID: VE1-EFF-1

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		1.0
Chloromethane	ND		1.0
Vinyl Chloride	ND		1.0
Bromomethane	ND		1.0
Chloroethane	ND		1.0
Trichlorofluoromethane	ND		1.0
1,1-Dichloroethene	ND		1.0
Methylene Chloride	ND		5.0
(trans) 1,2-Dichloroethene	ND		1.0
1,1-Dichloroethane	ND		1.0
2,2-Dichloropropane	ND		1.0
(cis) 1,2-Dichloroethene	29		1.0
Chloroform	ND		1.0
1,1,1-Trichloroethane	ND		1.0
Carbon Tetrachloride	ND		1.0
1,1-Dichloropropene	ND		1.0
1,2-Dichloroethane	ND		1.0
Trichloroethene	25		1.0
1,2-Dichloropropane	ND		1.0
Dibromomethane	ND		1.0
Bromodichloromethane	ND		1.0
2-Chloroethyl Vinyl Ether	ND		5.0
(cis) 1,3-Dichloropropene	ND		1.0
(trans) 1,3-Dichloropropene	ND		1.0
1,1,2-Trichloroethane	ND		1.0
Tetrachloroethene	2300		100
1,3-Dichloropropane	ND		1.0

Date of Report: August 18, 2000
Samples Submitted: August 16, 2000
Lab Traveler: 08-161
Project: 603-001

HALOGENATED VOLATILES by EPA 8260B

Page 2 of 2

Lab ID: 08-161-01
Client ID: VE1-EFF-1

Compound	Results	Flags	PQL
Dibromochloromethane	ND		1.0
1,2-Dibromoethane	ND		1.0
Chlorobenzene	ND		1.0
1,1,1,2-Tetrachloroethane	ND		1.0
Bromoform	ND		1.0
Bromobenzene	ND		1.0
1,1,2,2-Tetrachloroethane	ND		1.0
1,2,3-Trichloropropane	ND		1.0
2-Chlorotoluene	ND		1.0
4-Chlorotoluene	ND		1.0
1,3-Dichlorobenzene	ND		1.0
1,4-Dichlorobenzene	ND		1.0
1,2-Dichlorobenzene	ND		1.0
1,2-Dibromo-3-chloropropane	ND		5.0
1,2,4-Trichlorobenzene	ND		1.0
Hexachlorobutadiene	ND		5.0
1,2,3-Trichlorobenzene	ND		1.0

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	91	71-133
Toluene-d8	98	80-151
4-Bromofluorobenzene	93	75-139

Date of Report: August 18, 2000
Samples Submitted: August 16, 2000
Lab Traveler: 08-161
Project: 603-001

HALOGENATED VOLATILES by EPA 8260B

Page 1 of 2

Date Extracted: 8-17-00
Date Analyzed: 8-17-00

Matrix: Air
Units: ug/L (ppb)

Lab ID: 08-161-02
Client ID: VE1-EFF-2

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		100
Chloromethane	ND		100
Vinyl Chloride	ND		100
Bromomethane	ND		100
Chloroethane	ND		100
Trichlorofluoromethane	ND		100
1,1-Dichloroethene	ND		100
Methylene Chloride	ND		500
(trans) 1,2-Dichloroethene	ND		100
1,1-Dichloroethane	ND		100
2,2-Dichloropropane	ND		100
(cis) 1,2-Dichloroethene	ND		100
Chloroform	ND		100
1,1,1-Trichloroethane	ND		100
Carbon Tetrachloride	ND		100
1,1-Dichloropropene	ND		100
1,2-Dichloroethane	ND		100
Trichloroethene	ND		100
1,2-Dichloropropane	ND		100
Dibromomethane	ND		100
Bromodichloromethane	ND		100
2-Chloroethyl Vinyl Ether	ND		500
(cis) 1,3-Dichloropropene	ND		100
(trans) 1,3-Dichloropropene	ND		100
1,1,2-Trichloroethane	ND		100
Tetrachloroethene	5300		100
1,3-Dichloropropane	ND		100

Date of Report: August 18, 2000
Samples Submitted: August 16, 2000
Lab Traveler: 08-161
Project: 603-001

HALOGENATED VOLATILES by EPA 8260B

Page 2 of 2

Lab ID: 08-161-02
Client ID: VE1-EFF-2

Compound	Results	Flags	PQL
Dibromochloromethane	ND		100
1,2-Dibromoethane	ND		100
Chlorobenzene	ND		100
1,1,1,2-Tetrachloroethane	ND		100
Bromoform	ND		100
Bromobenzene	ND		100
1,1,2,2-Tetrachloroethane	ND		100
1,2,3-Trichloropropane	ND		100
2-Chlorotoluene	ND		100
4-Chlorotoluene	ND		100
1,3-Dichlorobenzene	ND		100
1,4-Dichlorobenzene	ND		100
1,2-Dichlorobenzene	ND		100
1,2-Dibromo-3-chloropropane	ND		500
1,2,4-Trichlorobenzene	ND		100
Hexachlorobutadiene	ND		500
1,2,3-Trichlorobenzene	ND		100

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	92	71-133
Toluene-d8	99	80-151
4-Bromofluorobenzene	94	75-139

Date of Report: August 18, 2000
Samples Submitted: August 16, 2000
Lab Traveler: 08-161
Project: 603-001

HALOGENATED VOLATILES by EPA 8260B

Page 1 of 2

Date Extracted: 8-17-00
Date Analyzed: 8-17-00

Matrix: Air
Units: ug/L (ppb)

Lab ID: 08-161-03
Client ID: VE2-EFF-1

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		100
Chloromethane	ND		100
Vinyl Chloride	ND		100
Bromomethane	ND		100
Chloroethane	ND		100
Trichlorofluoromethane	ND		100
1,1-Dichloroethene	ND		100
Methylene Chloride	ND		500
(trans) 1,2-Dichloroethene	ND		100
1,1-Dichloroethane	ND		100
2,2-Dichloropropane	ND		100
(cis) 1,2-Dichloroethene	ND		100
Chloroform	ND		100
1,1,1-Trichloroethane	ND		100
Carbon Tetrachloride	ND		100
1,1-Dichloropropene	ND		100
1,2-Dichloroethane	ND		100
Trichloroethene	ND		100
1,2-Dichloropropane	ND		100
Dibromomethane	ND		100
Bromodichloromethane	ND		100
2-Chloroethyl Vinyl Ether	ND		500
(cis) 1,3-Dichloropropene	ND		100
(trans) 1,3-Dichloropropene	ND		100
1,1,2-Trichloroethane	ND		100
Tetrachloroethene	7800		100
1,3-Dichloropropane	ND		100

Date of Report: August 18, 2000
Samples Submitted: August 16, 2000
Lab Traveler: 08-161
Project: 603-001

HALOGENATED VOLATILES by EPA 8260B

Page 2 of 2

Lab ID: 08-161-03
Client ID: VE2-EFF-1

Compound	Results	Flags	PQL
Dibromochloromethane	ND		100
1,2-Dibromoethane	ND		100
Chlorobenzene	ND		100
1,1,1,2-Tetrachloroethane	ND		100
Bromoform	ND		100
Bromobenzene	ND		100
1,1,2,2-Tetrachloroethane	ND		100
1,2,3-Trichloropropane	ND		100
2-Chlorotoluene	ND		100
4-Chlorotoluene	ND		100
1,3-Dichlorobenzene	ND		100
1,4-Dichlorobenzene	ND		100
1,2-Dichlorobenzene	ND		100
1,2-Dibromo-3-chloropropane	ND		500
1,2,4-Trichlorobenzene	ND		100
Hexachlorobutadiene	ND		500
1,2,3-Trichlorobenzene	ND		100

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	92	71-133
Toluene-d8	96	80-151
4-Bromofluorobenzene	95	75-139

Date of Report: August 18, 2000
Samples Submitted: August 16, 2000
Lab Traveler: 08-161
Project: 603-001

HALOGENATED VOLATILES by EPA 8260B

Page 1 of 2

Date Extracted: 8-17-00
Date Analyzed: 8-17-00

Matrix: Air
Units: ug/L (ppb)

Lab ID: 08-161-04
Client ID: VE2-EFF-2

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		100
Chloromethane	ND		100
Vinyl Chloride	ND		100
Bromomethane	ND		100
Chloroethane	ND		100
Trichlorofluoromethane	ND		100
1,1-Dichloroethene	ND		100
Methylene Chloride	ND		500
(trans) 1,2-Dichloroethene	ND		100
1,1-Dichloroethane	ND		100
2,2-Dichloropropane	ND		100
(cis) 1,2-Dichloroethene	ND		100
Chloroform	ND		100
1,1,1-Trichloroethane	ND		100
Carbon Tetrachloride	ND		100
1,1-Dichloropropene	ND		100
1,2-Dichloroethane	ND		100
Trichloroethene	ND		100
1,2-Dichloropropane	ND		100
Dibromomethane	ND		100
Bromodichloromethane	ND		100
2-Chloroethyl Vinyl Ether	ND		500
(cis) 1,3-Dichloropropene	ND		100
(trans) 1,3-Dichloropropene	ND		100
1,1,2-Trichloroethane	ND		100
Tetrachloroethene	9500		100
1,3-Dichloropropane	ND		100

Date of Report: August 18, 2000
Samples Submitted: August 16, 2000
Lab Traveler: 08-161
Project: 603-001

HALOGENATED VOLATILES by EPA 8260B

Page 2 of 2

Lab ID: 08-161-04
Client ID: VE2-EFF-2

Compound	Results	Flags	PQL
Dibromochloromethane	ND		100
1,2-Dibromoethane	ND		100
Chlorobenzene	ND		100
1,1,1,2-Tetrachloroethane	ND		100
Bromoform	ND		100
Bromobenzene	ND		100
1,1,2,2-Tetrachloroethane	ND		100
1,2,3-Trichloropropane	ND		100
2-Chlorotoluene	ND		100
4-Chlorotoluene	ND		100
1,3-Dichlorobenzene	ND		100
1,4-Dichlorobenzene	ND		100
1,2-Dichlorobenzene	ND		100
1,2-Dibromo-3-chloropropane	ND		500
1,2,4-Trichlorobenzene	ND		100
Hexachlorobutadiene	ND		500
1,2,3-Trichlorobenzene	ND		100

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	92	71-133
Toluene-d8	90	80-151
4-Bromofluorobenzene	92	75-139

Date of Report: August 18, 2000
Samples Submitted: August 16, 2000
Lab Traveler: 08-161
Project: 603-001

HALOGENATED VOLATILES by EPA 8260B

Page 1 of 2

Date Extracted: 8-17-00
Date Analyzed: 8-17-00

Matrix: Air
Units: ug/L (ppb)

Lab ID: 08-161-05
Client ID: VE3-EFF-1

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		100
Chloromethane	ND		100
Vinyl Chloride	ND		100
Bromomethane	ND		100
Chloroethane	ND		100
Trichlorofluoromethane	ND		100
1,1-Dichloroethene	ND		100
Methylene Chloride	ND		500
(trans) 1,2-Dichloroethene	ND		100
1,1-Dichloroethane	ND		100
2,2-Dichloropropane	ND		100
(cis) 1,2-Dichloroethene	ND		100
Chloroform	ND		100
1,1,1-Trichloroethane	ND		100
Carbon Tetrachloride	ND		100
1,1-Dichloropropene	ND		100
1,2-Dichloroethane	ND		100
Trichloroethene	ND		100
1,2-Dichloropropane	ND		100
Dibromomethane	ND		100
Bromodichloromethane	ND		100
2-Chloroethyl Vinyl Ether	ND		500
(cis) 1,3-Dichloropropene	ND		100
(trans) 1,3-Dichloropropene	ND		100
1,1,2-Trichloroethane	ND		100
Tetrachloroethene	7300		100
1,3-Dichloropropane	ND		100

Date of Report: August 18, 2000
 Samples Submitted: August 16, 2000
 Lab Traveler: 08-161
 Project: 603-001

HALOGENATED VOLATILES by EPA 8260B

Page 2 of 2

Lab ID: 08-161-05
 Client ID: VE3-EFF-1

Compound	Results	Flags	PQL
Dibromochloromethane	ND		100
1,2-Dibromoethane	ND		100
Chlorobenzene	ND		100
1,1,1,2-Tetrachloroethane	ND		100
Bromoform	ND		100
Bromobenzene	ND		100
1,1,2,2-Tetrachloroethane	ND		100
1,2,3-Trichloropropane	ND		100
2-Chlorotoluene	ND		100
4-Chlorotoluene	ND		100
1,3-Dichlorobenzene	ND		100
1,4-Dichlorobenzene	ND		100
1,2-Dichlorobenzene	ND		100
1,2-Dibromo-3-chloropropane	ND		500
1,2,4-Trichlorobenzene	ND		100
Hexachlorobutadiene	ND		500
1,2,3-Trichlorobenzene	ND		100

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	93	71-133
Toluene-d8	99	80-151
4-Bromofluorobenzene	94	75-139

Date of Report: August 18, 2000
Samples Submitted: August 16, 2000
Lab Traveler: 08-161
Project: 603-001

HALOGENATED VOLATILES by EPA 8260B

Page 1 of 2

Date Extracted: 8-17-00
Date Analyzed: 8-17-00

Matrix: Air
Units: ug/L (ppb)

Lab ID: 08-161-06
Client ID: VE3-EFF-2

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		100
Chloromethane	ND		100
Vinyl Chloride	ND		100
Bromomethane	ND		100
Chloroethane	ND		100
Trichlorofluoromethane	ND		100
1,1-Dichloroethene	ND		100
Methylene Chloride	ND		500
(trans) 1,2-Dichloroethene	ND		100
1,1-Dichloroethane	ND		100
2,2-Dichloropropane	ND		100
(cis) 1,2-Dichloroethene	ND		100
Chloroform	ND		100
1,1,1-Trichloroethane	ND		100
Carbon Tetrachloride	ND		100
1,1-Dichloropropene	ND		100
1,2-Dichloroethane	ND		100
Trichloroethene	ND		100
1,2-Dichloropropane	ND		100
Dibromomethane	ND		100
Bromodichloromethane	ND		100
2-Chloroethyl Vinyl Ether	ND		500
(cis) 1,3-Dichloropropene	ND		100
(trans) 1,3-Dichloropropene	ND		100
1,1,2-Trichloroethane	ND		100
Tetrachloroethene	10000		100
1,3-Dichloropropane	ND		100

Date of Report: August 18, 2000
Samples Submitted: August 16, 2000
Lab Traveler: 08-161
Project: 603-001

HALOGENATED VOLATILES by EPA 8260B

Page 2 of 2

Lab ID: 08-161-06
Client ID: VE3-EFF-2

Compound	Results	Flags	PQL
Dibromochloromethane	ND		100
1,2-Dibromoethane	ND		100
Chlorobenzene	ND		100
1,1,1,2-Tetrachloroethane	ND		100
Bromoform	ND		100
Bromobenzene	ND		100
1,1,2,2-Tetrachloroethane	ND		100
1,2,3-Trichloropropane	ND		100
2-Chlorotoluene	ND		100
4-Chlorotoluene	ND		100
1,3-Dichlorobenzene	ND		100
1,4-Dichlorobenzene	ND		100
1,2-Dichlorobenzene	ND		100
1,2-Dibromo-3-chloropropane	ND		500
1,2,4-Trichlorobenzene	ND		100
Hexachlorobutadiene	ND		500
1,2,3-Trichlorobenzene	ND		100

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	93	71-133
Toluene-d8	95	80-151
4-Bromofluorobenzene	95	75-139

Date of Report: August 18, 2000
Samples Submitted: August 16, 2000
Lab Traveler: 08-161
Project: 603-001

HALOGENATED VOLATILES by EPA 8260B

Page 1 of 2

Date Extracted: 8-17-00
Date Analyzed: 8-17-00

Matrix: Air
Units: ug/L (ppb)

Lab ID: 08-161-07
Client ID: VE3-EFF-4

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		100
Chloromethane	ND		100
Vinyl Chloride	ND		100
Bromomethane	ND		100
Chloroethane	ND		100
Trichlorofluoromethane	ND		100
1,1-Dichloroethene	ND		100
Methylene Chloride	ND		500
(trans) 1,2-Dichloroethene	ND		100
1,1-Dichloroethane	ND		100
2,2-Dichloropropane	ND		100
(cis) 1,2-Dichloroethene	ND		100
Chloroform	ND		100
1,1,1-Trichloroethane	ND		100
Carbon Tetrachloride	ND		100
1,1-Dichloropropene	ND		100
1,2-Dichloroethane	ND		100
Trichloroethene	ND		100
1,2-Dichloropropane	ND		100
Dibromomethane	ND		100
Bromodichloromethane	ND		100
2-Chloroethyl Vinyl Ether	ND		500
(cis) 1,3-Dichloropropene	ND		100
(trans) 1,3-Dichloropropene	ND		100
1,1,2-Trichloroethane	ND		100
Tetrachloroethene	8000		100
1,3-Dichloropropane	ND		100

Date of Report: August 18, 2000
Samples Submitted: August 16, 2000
Lab Traveler: 08-161
Project: 603-001

HALOGENATED VOLATILES by EPA 8260B

Page 2 of 2

Lab ID: 08-161-07
Client ID: VE3-EFF-4

Compound	Results	Flags	PQL
Dibromochloromethane	ND		100
1,2-Dibromoethane	ND		100
Chlorobenzene	ND		100
1,1,1,2-Tetrachloroethane	ND		100
Bromoform	ND		100
Bromobenzene	ND		100
1,1,2,2-Tetrachloroethane	ND		100
1,2,3-Trichloropropane	ND		100
2-Chlorotoluene	ND		100
4-Chlorotoluene	ND		100
1,3-Dichlorobenzene	ND		100
1,4-Dichlorobenzene	ND		100
1,2-Dichlorobenzene	ND		100
1,2-Dibromo-3-chloropropane	ND		500
1,2,4-Trichlorobenzene	ND		100
Hexachlorobutadiene	ND		500
1,2,3-Trichlorobenzene	ND		100

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	92	71-133
Toluene-d8	99	80-151
4-Bromofluorobenzene	95	75-139

Date of Report: August 18, 2000
Samples Submitted: August 16, 2000
Lab Traveler: 08-161
Project: 603-001

**HALOGENATED VOLATILES by EPA 8260B
METHOD BLANK QUALITY CONTROL**

Page 1 of 2

Date Extracted: 8-17-00
Date Analyzed: 8-17-00

Matrix: Air
Units: ug/L (ppb)

Lab ID: MB0817A1

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		1.0
Chloromethane	ND		1.0
Vinyl Chloride	ND		1.0
Bromomethane	ND		1.0
Chloroethane	ND		1.0
Trichlorofluoromethane	ND		1.0
1,1-Dichloroethene	ND		1.0
Methylene Chloride	ND		5.0
(trans) 1,2-Dichloroethene	ND		1.0
1,1-Dichloroethane	ND		1.0
2,2-Dichloropropane	ND		1.0
(cis) 1,2-Dichloroethene	ND		1.0
Chloroform	ND		1.0
1,1,1-Trichloroethane	ND		1.0
Carbon Tetrachloride	ND		1.0
1,1-Dichloropropene	ND		1.0
1,2-Dichloroethane	ND		1.0
Trichloroethene	ND		1.0
1,2-Dichloropropane	ND		1.0
Dibromomethane	ND		1.0
Bromodichloromethane	ND		1.0
2-Chloroethyl Vinyl Ether	ND		5.0
(cis) 1,3-Dichloropropene	ND		1.0
(trans) 1,3-Dichloropropene	ND		1.0
1,1,2-Trichloroethane	ND		1.0
Tetrachloroethene	ND		1.0
1,3-Dichloropropane	ND		1.0

Date of Report: August 18, 2000
Samples Submitted: August 16, 2000
Lab Traveler: 08-161
Project: 603-001

HALOGENATED VOLATILES by EPA 8260B
METHOD BLANK QUALITY CONTROL
Page 2 of 2

Lab ID: MB0817A1

Compound	Results	Flags	PQL
Dibromochloromethane	ND		1.0
1,2-Dibromoethane	ND		1.0
Chlorobenzene	ND		1.0
1,1,1,2-Tetrachloroethane	ND		1.0
Bromoform	ND		1.0
Bromobenzene	ND		1.0
1,1,2,2-Tetrachloroethane	ND		1.0
1,2,3-Trichloropropane	ND		1.0
2-Chlorotoluene	ND		1.0
4-Chlorotoluene	ND		1.0
1,3-Dichlorobenzene	ND		1.0
1,4-Dichlorobenzene	ND		1.0
1,2-Dichlorobenzene	ND		1.0
1,2-Dibromo-3-chloropropane	ND		5.0
1,2,4-Trichlorobenzene	ND		1.0
Hexachlorobutadiene	ND		5.0
1,2,3-Trichlorobenzene	ND		1.0

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	93	71-133
Toluene-d8	97	80-151
4-Bromofluorobenzene	96	75-139

Date of Report: August 18, 2000
 Samples Submitted: August 16, 2000
 Lab Traveler: 08-161
 Project: 603-001

**HALOGENATED VOLATILES by EPA 8260B
 DUPLICATE QUALITY CONTROL**

Page 1 of 2

Date Extracted: 8-17-00
 Date Analyzed: 8-17-00
 Matrix: Air
 Units: ug/L (ppb)
 Lab ID: 08-161-02

Compound	Sample Results	Duplicate Results	Flags	RPD
Dichlorodifluoromethane	ND	ND		NA
Chloromethane	ND	ND		NA
Vinyl Chloride	ND	ND		NA
Bromomethane	ND	ND		NA
Chloroethane	ND	ND		NA
Trichlorofluoromethane	ND	ND		NA
1,1-Dichloroethene	ND	ND		NA
Methylene Chloride	ND	ND		NA
(trans) 1,2-Dichloroethene	ND	ND		NA
1,1-Dichloroethane	ND	ND		NA
2,2-Dichloropropane	ND	ND		NA
(cis) 1,2-Dichloroethene	ND	ND		NA
Chloroform	ND	ND		NA
1,1,1-Trichloroethane	ND	ND		NA
Carbon Tetrachloride	ND	ND		NA
1,1-Dichloropropene	ND	ND		NA
1,2-Dichloroethane	ND	ND		NA
Trichloroethene	ND	ND		NA
1,2-Dichloropropane	ND	ND		NA
Dibromomethane	ND	ND		NA
Bromodichloromethane	ND	ND		NA
2-Chloroethyl Vinyl Ether	ND	ND		NA
(cis) 1,3-Dichloropropene	ND	ND		NA
(trans) 1,3-Dichloropropene	ND	ND		NA
1,1,2-Trichloroethane	ND	ND		NA
Tetrachloroethene	5300	5300		0
1,3-Dichloropropane	ND	ND		NA

Date of Report: August 18, 2000
 Samples Submitted: August 16, 2000
 Lab Traveler: 08-161
 Project: 603-001

HALOGENATED VOLATILES by EPA 8260B
DUPLICATE QUALITY CONTROL
 Page 2 of 2

Lab ID: 08-161-02

Compound	Duplicate Results	Duplicate Results	Flags	RPD
Dibromochloromethane	ND	ND		NA
1,2-Dibromoethane	ND	ND		NA
Chlorobenzene	ND	ND		NA
1,1,1,2-Tetrachloroethane	ND	ND		NA
Bromoform	ND	ND		NA
Bromobenzene	ND	ND		NA
1,1,2,2-Tetrachloroethane	ND	ND		NA
1,2,3-Trichloropropane	ND	ND		NA
2-Chlorotoluene	ND	ND		NA
4-Chlorotoluene	ND	ND		NA
1,3-Dichlorobenzene	ND	ND		NA
1,4-Dichlorobenzene	ND	ND		NA
1,2-Dichlorobenzene	ND	ND		NA
1,2-Dibromo-3-chloropropane	ND	ND		NA
1,2,4-Trichlorobenzene	ND	ND		NA
Hexachlorobutadiene	ND	ND		NA
1,2,3-Trichlorobenzene	ND	ND		NA

Surrogate	Duplicate Recovery	Percent Recovery	Control Limits
Dibromofluoromethane	92	91	71-133
Toluene-d8	99	98	80-151
4-Bromofluorobenzene	94	93	75-139



DATA QUALIFIERS AND ABBREVIATIONS

- A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.
- B - The analyte indicated was also found in the blank sample.
- C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.
- D - Data from 1:_____ dilution.
- E - The value reported exceeds the quantitation range, and is an estimate.
- F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.
- G - Insufficient sample quantity for duplicate analysis.
- H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.
- I - Compound recovery is outside of the control limits.
- J - The value reported was below the practical quantitation limit. The value is an estimate.
- K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.
- L - The RPD is outside of the control limits.
- M - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.
- O - Hydrocarbons outside the defined gasoline range are present in the sample; NWTPH-Dx recommended.
- P - The RPD of the detected concentrations between the two columns is greater than 40.
- Q - Surrogate recovery is outside of the control limits.
- S - Surrogate recovery data is not available due to the necessary dilution of the sample.
- T - The sample chromatogram is not similar to a typical _____.
- U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.
- W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.
- X - Sample extract treated with a silica gel cleanup procedure.
- Y - Sample extract treated with an acid cleanup procedure.
- Z -
- ND - Not Detected at PQL
- MRL - Method Reporting Limit
- PQL - Practical Quantitation Limit
- RPD - Relative Percent Difference



Chain of Custody

Company:	Farallon Consulting, L.L.C.
Project No.:	603-001
Project Name:	Land Title Building Parking Lot
Project Manager:	Jeff Kaspar

Turnaround Request
(in working days)

(Check One)

☐ Same Day , ☐ 1 Day☐ 2 Day *8/1/2* ☐ 3 Day

☐ Standard *170*
(Hydrocarbon analyses: 5 days,
All other analyses: 7 days)

☒ Standard for Air Sample
(other)Project Chemist: DB

Laboratory No. 08-161

Requested Analysis

[illegible]

RELINQUISHED BY

DATE 8/16/00

RECEIVED BY

DATE 8/16/00

COMMENTS:

FIRM

TIME	1000
------	------

FIRM

TIME 10:00

RELINQUISHED BY

DATE _____

RECEIVED BY

DATE _____

FIRM

TIME

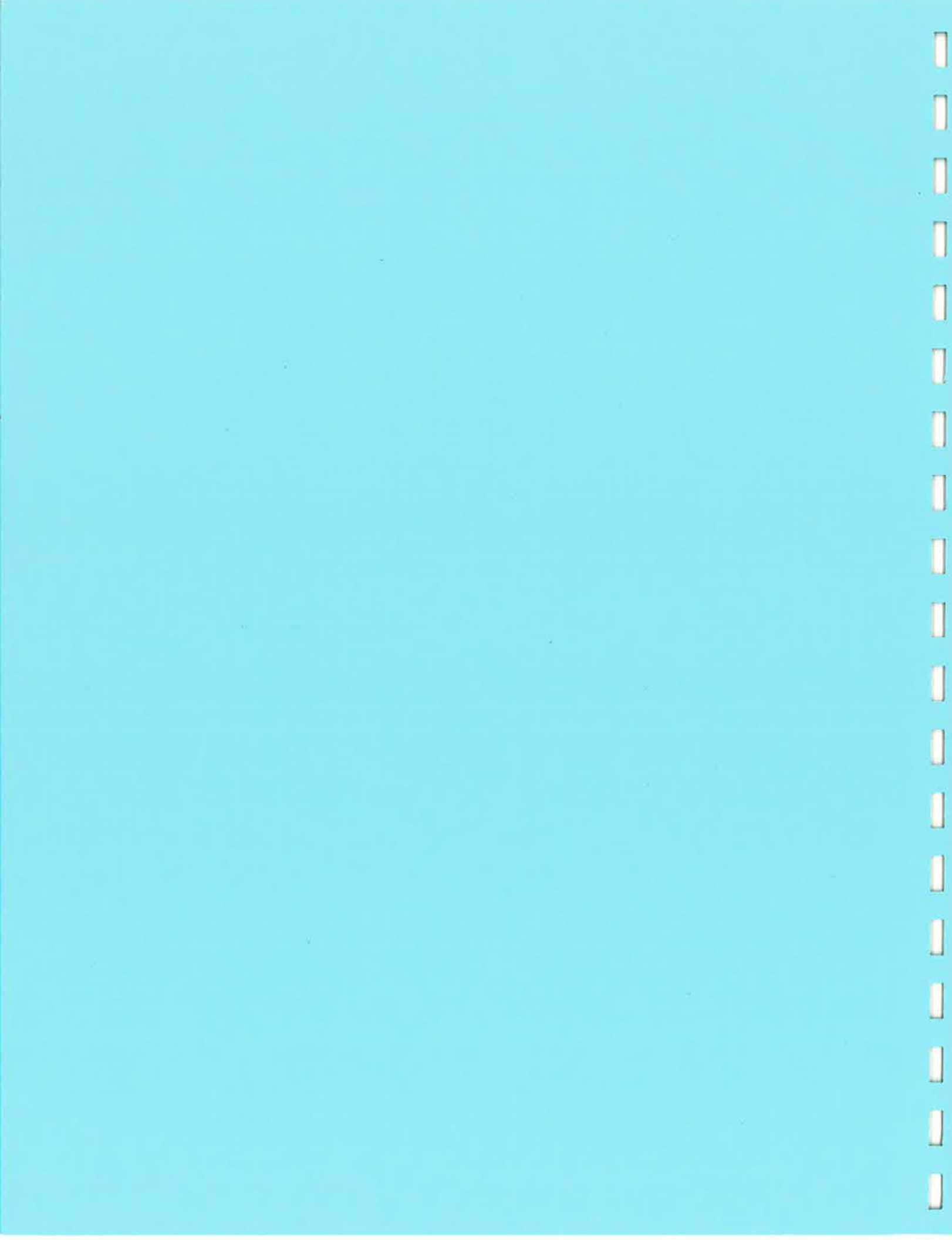
FIRM

TIME

REVIEWED BY

DATE REVIEWED

Chromatographs with final report ☐





ADMIN

May 7, 2003

Jeff Kaspar
Farallon Consulting, LLC
320 3rd Avenue NE, Suite 200
Issaquah, WA 98027

Re: Analytical Data for Project 603-001
Laboratory Reference No. 0304-183

Dear Jeff:

Enclosed are the analytical results and associated quality control data for samples submitted on April 25, 2003.

The standard policy of OnSite Environmental Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

David Baumeister
Project Manager

Enclosures

Date of Report: May 7, 2003
Samples Submitted: April 25, 2003
Lab Reference: 04-183
Project: 603-001

Case Narrative

Samples were collected on April 25, 2003. Samples were maintained at the laboratory at 4°C and followed SW846 analysis and extraction methods.

Halogenated Volatiles EPA 8260B Analysis

Any QA/QC issues associated with this extraction and analysis will be indicated with a footnote reference and discussed in detail on the Data Qualifier page.

Date of Report: May 7, 2003
 Samples Submitted: April 25, 2003
 Lab Reference: 04-183
 Project: 603-001

HALOGENATED VOLATILES by EPA 8260B

Page 1 of 2

Date Extracted: 4-29-03
 Date Analyzed: 4-29-03

Matrix: Water
 Units: ug/L (ppb)

Lab ID: 04-183-01
 Client ID: MW-1

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		0.20
Chloromethane	ND		0.20
Vinyl Chloride	ND		0.20
Bromomethane	ND		0.20
Chloroethane	ND		0.20
Trichlorofluoromethane	ND		0.20
1,1-Dichloroethene	ND		0.20
Iodomethane	ND		1.0
Methylene Chloride	ND		1.0
(trans) 1,2-Dichloroethene	0.87		0.20
1,1-Dichloroethane	ND		0.20
2,2-Dichloropropane	ND		0.20
(cis) 1,2-Dichloroethene	8.1		0.20
Bromochloromethane	ND		0.20
Chloroform	0.26		0.20
1,1,1-Trichloroethane	ND		0.20
Carbon Tetrachloride	ND		0.20
1,1-Dichloropropene	ND		0.20
1,2-Dichloroethane	ND		0.20
Trichloroethene	5.6		0.20
1,2-Dichloropropane	ND		0.20
Dibromomethane	ND		0.20
Bromodichloromethane	ND		0.20
2-Chloroethyl Vinyl Ether	ND		1.0
(cis) 1,3-Dichloropropene	ND		0.20
(trans) 1,3-Dichloropropene	ND		0.20

Date of Report: May 7, 2003
 Samples Submitted: April 25, 2003
 Lab Reference: 04-183
 Project: 603-001

HALOGENATED VOLATILES by EPA 8260B

Page 2 of 2

Lab ID: 04-183-01
 Client ID: MW-1

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.20
Tetrachloroethene	1600		200
1,3-Dichloropropane	ND		0.20
Dibromochloromethane	ND		0.20
1,2-Dibromoethane	ND		0.20
Chlorobenzene	ND		0.20
1,1,1,2-Tetrachloroethane	ND		0.20
Bromoform	ND		1.0
Bromobenzene	ND		0.20
1,1,2,2-Tetrachloroethane	ND		0.20
1,2,3-Trichloropropane	ND		0.20
2-Chlorotoluene	ND		0.20
4-Chlorotoluene	ND		0.20
1,3-Dichlorobenzene	ND		0.20
1,4-Dichlorobenzene	ND		0.20
1,2-Dichlorobenzene	ND		0.20
1,2-Dibromo-3-chloropropane	ND		1.0
1,2,4-Trichlorobenzene	ND		0.20
Hexachlorobutadiene	ND		0.20
1,2,3-Trichlorobenzene	ND		0.20
Surrogate	Percent Recovery	Control Limits	
Dibromofluoromethane	111	63-130	
Toluene, d8	97	78-113	
4-Bromofluorobenzene	101	77-109	

Date of Report: May 7, 2003
 Samples Submitted: April 25, 2003
 Lab Reference: 04-183
 Project: 603-001

HALOGENATED VOLATILES by EPA 8260B

Page 1 of 2

Date Extracted: 4-29-03
 Date Analyzed: 4-29-03

Matrix: Water
 Units: ug/L (ppb)

Lab ID: 04-183-02
 Client ID: MW-2

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		0.20
Chloromethane	ND		0.20
Vinyl Chloride	ND		0.20
Bromomethane	ND		0.20
Chloroethane	ND		0.20
Trichlorofluoromethane	0.27		0.20
1,1-Dichloroethene	ND		0.20
Iodomethane	ND		1.0
Methylene Chloride	ND		1.0
(trans) 1,2-Dichloroethene	ND		0.20
1,1-Dichloroethane	ND		0.20
2,2-Dichloropropane	ND		0.20
(cis) 1,2-Dichloroethene	1.0		0.20
Bromochloromethane	ND		0.20
Chloroform	0.61		0.20
1,1,1-Trichloroethane	0.32		0.20
Carbon Tetrachloride	ND		0.20
1,1-Dichloropropene	ND		0.20
1,2-Dichloroethane	ND		0.20
Trichloroethene	3.0		0.20
1,2-Dichloropropane	ND		0.20
Dibromomethane	ND		0.20
Bromodichloromethane	ND		0.20
2-Chloroethyl Vinyl Ether	ND		1.0
(cis) 1,3-Dichloropropene	ND		0.20
(trans) 1,3-Dichloropropene	ND		0.20

Date of Report: May 7, 2003
 Samples Submitted: April 25, 2003
 Lab Reference: 04-183
 Project: 603-001

HALOGENATED VOLATILES by EPA 8260B

Page 2 of 2

Lab ID: 04-183-02
 Client ID: MW-2

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.20
Tetrachloroethene	3700		200
1,3-Dichloropropane	ND		0.20
Dibromochloromethane	ND		0.20
1,2-Dibromoethane	ND		0.20
Chlorobenzene	ND		0.20
1,1,1,2-Tetrachloroethane	ND		0.20
Bromoform	ND		1.0
Bromobenzene	ND		0.20
1,1,2,2-Tetrachloroethane	ND		0.20
1,2,3-Trichloropropane	ND		0.20
2-Chlorotoluene	ND		0.20
4-Chlorotoluene	ND		0.20
1,3-Dichlorobenzene	ND		0.20
1,4-Dichlorobenzene	ND		0.20
1,2-Dichlorobenzene	ND		0.20
1,2-Dibromo-3-chloropropane	ND		1.0
1,2,4-Trichlorobenzene	ND		0.20
Hexachlorobutadiene	ND		0.20
1,2,3-Trichlorobenzene	ND		0.20

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	114	63-130
Toluene, d8	97	78-113
4-Bromofluorobenzene	101	77-109

Date of Report: May 7, 2003
 Samples Submitted: April 25, 2003
 Lab Reference: 04-183
 Project: 603-001

HALOGENATED VOLATILES by EPA 8260B
 Page 1 of 2

Date Extracted: 4-29-03
 Date Analyzed: 4-29-03
 Matrix: Water
 Units: ug/L (ppb)
 Lab ID: 04-183-03
 Client ID: MW-3

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		0.20
Chloromethane	ND		0.20
Vinyl Chloride	ND		0.20
Bromomethane	ND		0.20
Chloroethane	ND		0.20
Trichlorofluoromethane	0.33		0.20
1,1-Dichloroethene	ND		0.20
Iodomethane	ND		1.0
Methylene Chloride	ND		1.0
(trans) 1,2-Dichloroethene	ND		0.20
1,1-Dichloroethane	ND		0.20
2,2-Dichloropropane	ND		0.20
(cis) 1,2-Dichloroethene	0.42		0.20
Bromochloromethane	ND		0.20
Chloroform	0.61		0.20
1,1,1-Trichloroethane	0.40		0.20
Carbon Tetrachloride	ND		0.20
1,1-Dichloropropene	ND		0.20
1,2-Dichloroethane	ND		0.20
Trichloroethene	2.2		0.20
1,2-Dichloropropane	ND		0.20
Dibromomethane	ND		0.20
Bromodichloromethane	ND		0.20
2-Chloroethyl Vinyl Ether	ND		1.0
(cis) 1,3-Dichloropropene	ND		0.20
(trans) 1,3-Dichloropropene	ND		0.20

Date of Report: May 7, 2003
 Samples Submitted: April 25, 2003
 Lab Reference: 04-183
 Project: 603-001

HALOGENATED VOLATILES by EPA 8260B

Page 2 of 2

Lab ID: 04-183-03
 Client ID: MW-3

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.20
Tetrachloroethene	3100		200
1,3-Dichloropropane	ND		0.20
Dibromochloromethane	ND		0.20
1,2-Dibromoethane	ND		0.20
Chlorobenzene	ND		0.20
1,1,1,2-Tetrachloroethane	ND		0.20
Bromoform	ND		1.0
Bromobenzene	ND		0.20
1,1,2,2-Tetrachloroethane	ND		0.20
1,2,3-Trichloropropane	ND		0.20
2-Chlorotoluene	ND		0.20
4-Chlorotoluene	ND		0.20
1,3-Dichlorobenzene	ND		0.20
1,4-Dichlorobenzene	ND		0.20
1,2-Dichlorobenzene	ND		0.20
1,2-Dibromo-3-chloropropane	ND		1.0
1,2,4-Trichlorobenzene	ND		0.20
Hexachlorobutadiene	ND		0.20
1,2,3-Trichlorobenzene	ND		0.20

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	114	63-130
Toluene, d8	100	78-113
4-Bromofluorobenzene	105	77-109

Date of Report: May 7, 2003
 Samples Submitted: April 25, 2003
 Lab Reference: 04-183
 Project: 603-001

**HALOGENATED VOLATILES by EPA 8260B
 METHOD BLANK QUALITY CONTROL**

Page 1 of 2

Date Extracted: 4-29-03

Date Analyzed: 4-29-03

Matrix: Water

Units: ug/L (ppb)

Lab ID: MB0429W1

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		0.20
Chloromethane	ND		0.20
Vinyl Chloride	ND		0.20
Bromomethane	ND		0.20
Chloroethane	ND		0.20
Trichlorofluoromethane	ND		0.20
1,1-Dichloroethene	ND		0.20
Iodomethane	ND		1.0
Methylene Chloride	ND		1.0
(trans) 1,2-Dichloroethene	ND		0.20
1,1-Dichloroethane	ND		0.20
2,2-Dichloropropane	ND		0.20
(cis) 1,2-Dichloroethene	ND		0.20
Bromochloromethane	ND		0.20
Chloroform	ND		0.20
1,1,1-Trichloroethane	ND		0.20
Carbon Tetrachloride	ND		0.20
1,1-Dichloropropene	ND		0.20
1,2-Dichloroethane	ND		0.20
Trichloroethene	ND		0.20
1,2-Dichloropropane	ND		0.20
Dibromomethane	ND		0.20
Bromodichloromethane	ND		0.20
2-Chloroethyl Vinyl Ether	ND		1.0
(cis) 1,3-Dichloropropene	ND		0.20
(trans) 1,3-Dichloropropene	ND		0.20

Date of Report: May 7, 2003
 Samples Submitted: April 25, 2003
 Lab Reference: 04-183
 Project: 603-001

**HALOGENATED VOLATILES by EPA 8260B
 METHOD BLANK QUALITY CONTROL**

Page 2 of 2

Lab ID: MB0429W1

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.20
Tetrachloroethene	ND		0.20
1,3-Dichloropropane	ND		0.20
Dibromochloromethane	ND		0.20
1,2-Dibromoethane	ND		0.20
Chlorobenzene	ND		0.20
1,1,1,2-Tetrachloroethane	ND		0.20
Bromoform	ND		1.0
Bromobenzene	ND		0.20
1,1,2,2-Tetrachloroethane	ND		0.20
1,2,3-Trichloropropane	ND		0.20
2-Chlorotoluene	ND		0.20
4-Chlorotoluene	ND		0.20
1,3-Dichlorobenzene	ND		0.20
1,4-Dichlorobenzene	ND		0.20
1,2-Dichlorobenzene	ND		0.20
1,2-Dibromo-3-chloropropane	ND		1.0
1,2,4-Trichlorobenzene	ND		0.20
Hexachlorobutadiene	ND		0.20
1,2,3-Trichlorobenzene	ND		0.20
Surrogate	Percent Recovery		Control Limits
Dibromofluoromethane	109		63-130
Toluene, d8	97		78-113
4-Bromofluorobenzene	103		77-109

Date of Report: May 7, 2003
 Samples Submitted: April 25, 2003
 Lab Reference: 04-183
 Project: 603-001

**HALOGENATED VOLATILES by EPA 8260B
 MS/MSD QUALITY CONTROL**

Date Extracted: 4-29-03
 Date Analyzed: 4-29-03

Matrix: Water
 Units: ug/L (ppb)

Lab ID: 04-191-18

Compound	Sample Amount	Spike Amount	MS	Percent Recovery	MSD	Percent Recovery	Recovery Limits	Flags
1,1-Dichloroethene	ND	10.0	10.4	104	10.4	104	69-113	
Benzene	ND	10.0	10.6	106	11.5	115	71-128	
Trichloroethene	ND	10.0	9.74	97	10.0	100	82-122	
Toluene	ND	10.0	9.76	98	10.2	102	54-118	
Chlorobenzene	ND	10.0	8.97	90	9.40	94	85-103	

	RPD	RPD Limit	Flags
1,1-Dichloroethene	0.68	15	
Benzene	8.2	9.6	
Trichloroethene	2.7	12	
Toluene	4.1	15	
Chlorobenzene	4.6	5.8	



Data Qualifiers and Abbreviations

- A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.
- B - The analyte indicated was also found in the blank sample.
- C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.
- D - Data from 1:____ dilution.
- E - The value reported exceeds the quantitation range, and is an estimate.
- F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.
- G - Insufficient sample quantity for duplicate analysis.
- H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.
- I - Compound recovery is outside of the control limits.
- J - The value reported was below the practical quantitation limit. The value is an estimate.
- K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.
- L - The RPD is outside of the control limits.
- M - Hydrocarbons in the gasoline range (toluene-napthalene) are present in the sample.
- O - Hydrocarbons outside the defined gasoline range are present in the sample.
- P - The RPD of the detected concentrations between the two columns is greater than 40.
- Q - Surrogate recovery is outside of the control limits.
- S - Surrogate recovery data is not available due to the necessary dilution of the sample.
- T - The sample chromatogram is not similar to a typical _____.
- U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.
- W - Matrix Spike/Matrix Spike Duplicate RPD is outside control limits due to sample inhomogeneity.
- X - Sample extract treated with a silica gel cleanup procedure.
- Y - Sample extract treated with a silica gel/acid cleanup procedure.
- Z -
- ND - Not Detected at PQL
- MRL - Method Reporting Limit
- PQL - Practical Quantitation Limit
- RPD - Relative Percent Difference

Chain of Custody

Page 1 of 1

Laboratory Number: **04-183**

Company: **Farallon**
 Project Number: **002**
 Project Name: **Former City Hand Laundry**
603-001
 Project Manager: **Jeff Kasper**
 Sampled by: **Sarah Wright**

Turnaround Request (In working days)

(Check One)

☐ Same Day ☐ 1 Day
☐ 2 Day ☐ 3 Day
☒ Standard (7 working days)
☐ (other) _____

Requested Analysis														
NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Dx	Volatiles by 8260B	Halogenated Volatiles by 8260B	Semivolatiles by 8270C	PAHs by 8270C	PCB's by 8082	Pesticides by 8081	Herbicides by 8151A	Total RCRA Metals (8)	TCLP Metals	HEM by 1664	VPH	EPH
				X										
				1										

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	# of Cont.
1	MW-1	4-25-03	1115	W	3
2	MW-2	↓	1155	↓	↓
3	MW-3	↓	1300	↓	↓
<div style="text-align: center;"> <p>SU</p> <p>4-25-03</p> </div>					

Signature	Company	Date	Time	Comments/Special Instructions:
<i>[Signature]</i>	Farallon	4-25-03	1115	
<i>[Signature]</i>	OE	4/25/03	4.15	
Relinquished by				
Received by				
Relinquished by				
Received by				
Reviewed by/Date	Reviewed by/Date	Chromatograms with final report <input type="checkbox"/>		

APPENDIX C
WASTE DISPOSAL DOCUMENTATION

Subsurface Investigation and
Soil Vapor Extraction Feasibility Pilot Test
Former City Hand Laundry
1002 4th Street
Bremerton, Washington

Farallon PN: 603-001

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. WAD98097827401087		Manifest Document No.		2. Page 1 of 12		Information in the shaded areas is not required by Federal law.	
3. Generator's Name and Mailing Address PARALLON CONSULTING L.L.C. City hand laundry 1002 4TH ST. BREMERTON, WA 98337 4. Generator's Phone (425) 427-0061		5. Transporter 1 Company Name VOPAK USA INC.		6. US EPA ID Number WAD067548966		7. State Manifest Document Number		8. State Generator's ID	
9. Designated Facility Name and Site Address SPRING GROVE RESOURCES RECOVERY INC. 4879 SPRING GROVE AVE CINCINNATI, OH 45232		7. Transporter 2 Company Name SLT EXPRESS, INC.		8. US EPA ID Number UTD981552425		9. State Transporter's ID		10. State Transporter's Phone 253-872-5022	
				10. US EPA ID Number DHD000816629		11. State Transporter's ID		12. State Facility's ID	
						13. Facility's Phone 513-681-5738			
11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)		12. Containers No. Type		13. Total Quantity		14. Unit Wt/Vol		15. Waste No.	
a. X RQ, HAZARDOUS WASTE, LIQUID, N.O.S (TETRACHLOROETHYLENE) 9, NA3082, PG III, (RQ=100), (EPA F002), (ERG 171)		004 DM		00220 G				F002	
b.									
c.									
d.									
J. Additional Descriptions for Materials Listed Above		K. Handling Codes for Wastes Listed Above							
11a. CH1464 TETRACHLOROETHYLENE CONTAMINATED WATER. W.O. # NB332868									
15. Special Handling Instructions and Additional Information WEAR APPROPRIATE PROTECTIVE GEAR WHEN HANDLING. EMERGENCY CONTACT: CHEMTREC: 1-800-424-9300. CALLER MUST IDENTIFY VOPAK USA AS SHIPPER.		CR							
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.		CR							
Printed/Typed Name SG M. L. B. A. A.		Signature S. L. Mulholland		Month Day Year 4/23/91					
17. Transporter 1 Acknowledgement of Receipt of Materials		Signature Daniel L. Elverston		Month Day Year 4/23/91					
18. Transporter 2 Acknowledgement of Receipt of Materials		Signature Jim Engel		Month Day Year 4/23/91					
19. Discrepancy Indication Space									
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.		Signature Diane Lee							
Printed/Typed Name Diane Lee		Signature Diane Lee		Month Day Year 4/23/91					

UNIFORM HAZARDOUS WASTE MANIFEST (Continuation Sheet)		21. Generator's US EPA ID No.		Manifest Document No.		22. Page		Information in the shaded areas is not required by Federal law.									
		WA0980978274		01087		2 of 2											
23. Generator's Name <i>City Hand Laundry</i>						L. State Manifest Document Number											
						M. State Generator's ID											
24. Transporter <i>3</i> Company Name		25. US EPA ID Number				N. State Transporter's ID											
<i>DART Trucking Company INC</i>		<i>OH0009865825</i>				<i>856-8930</i>											
26. Transporter _____ Company Name		27. US EPA ID Number				O. Transporter's Phone											
						<i>330-544-9841</i>											
						P. State Transporter's ID											
						Q. Transporter's Phone											
28. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)						29. Containers		30. Total		31. Unit		R. Waste No.					
						No. Type		Quantity		Wt/Vol							
a.																	
b.																	
c.																	
d.																	
e.																	
f.																	
g.																	
h.																	
i.																	
S. Additional Descriptions for Materials Listed Above						T. Handling Codes for Wastes Listed Above											
32. Special Handling Instructions and Additional Information																	
33. Transporter <i>3</i> Acknowledgement of Receipt of Materials										Date							
Printed/Typed Name <i>David McCaughy</i>										Signature <i>David McCaughy</i>				Month Day Year <i>06 06 09</i>			
34. Transporter _____ Acknowledgement of Receipt of Materials										Date							
Printed/Typed Name										Signature				Month Day Year			
35. Discrepancy Indication Space																	

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. HA028027827401087	Manifest Document No.	2. Page 1 of 1	Information in the shaded areas is not required by Federal law.	
3. Generator's Name and Mailing Address PARADISE CONSULTING - L.L.C. (City) and (County) 1002 4TH ST. BREMERTON, WA 98337				A. State Manifest Document Number		
4. Generator's Phone (425) 427-0061 EMERGENCY CONTACT: BOB 15				B. State Generator's ID		
5. Transporter 1 Company Name VOPAK USA INC.		6. US EPA ID Number HA0067548966		C. State Transporter's ID		
7. Transporter 2 Company Name SLT EXPRESS, INC.		8. US EPA ID Number ITD981552425		D. Transporter's Phone 253-872-5022		
9. Designated Facility Name and Site Address SPRING GROVE RESOURCES RECOVERY INC. 4879 SPRING GROVE AVE CINCINNATI, OH 45232		10. US EPA ID Number OH0000816629		E. State Transporter's ID		
				F. Transporter's Phone 800-627-3047		
				G. State Facility's ID		
				H. Facility's Phone 513-681-5738		
11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)		12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	15. Waste No.
a. <input checked="" type="checkbox"/> HM RQ, HAZARDOUS WASTE, LIQUID, N.O.S. (TETRACHLOROETHYLENE) 9, NA3082, PG III, (RQ-100), (EPA F002), (ERG 171)		004	DM	002206		F002
b.						
c.						
d.						
J. Additional Descriptions for Materials Listed Above				K. Handling Codes for Wastes Listed Above		
11a. CH11464 TETRACHLOROETHYLENE CONTAMINATED WATER						
15. Special Handling Instructions and Additional Information WEAR APPROPRIATE PROTECTIVE GEAR WHEN HANDLING. EMERGENCY CONTACT: CHEMTREC: 1-800-424-9300. CALLER MUST IDENTIFY VOPAK USA AS SHIPPER.						
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.						
Printed/Typed Name		Signature		Month Day Year 9/27/91		
17. Transporter 1 Acknowledgement of Receipt of Materials		Printed/Typed Name Daniel L Elverston		Signature Daniel L Elverston		Month Day Year 9/27/91
18. Transporter 2 Acknowledgement of Receipt of Materials		Printed/Typed Name		Signature		Month Day Year
19. Discrepancy Indication Space						
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.						
Printed/Typed Name		Signature		Month Day Year		





RECYCLING/TSD HANDLING AGREEMENT

(GENERATOR AND RECYCLING/TSD CONTRACTOR)



WHEREAS, Generator produces spent chemicals which may be considered to be "hazardous" or "toxic" within the meaning of applicable federal and state laws ("Spent Chemicals") and which therefore must be transported, stored, disposed of, recycled, treated or re-used ("Handled") in accordance with applicable laws pertaining to hazardous or toxic chemicals;

WHEREAS, Recycling/TSD Contractor owns or controls facilities which are capable of Handling Spent Chemicals in accordance with all applicable laws pertaining to such activities;

WHEREAS, the parties desire to enter into an arrangement for the Handling of Spent Chemicals, all on the terms and conditions hereinafter set forth;

NOW, THEREFORE, in consideration of the covenants and agreements contained herein, the undersigned agree to the following terms and conditions of this Recycling/TSD Handling Agreement as well as to the Standard Terms and Conditions Governing the Handling of Spent Chemicals ("Standard Terms and Conditions"), which are attached to the Generator copy of this Agreement and are incorporated herein by reference. All capitalized terms not otherwise defined herein shall have the meanings set forth in the Standard Terms and Conditions.

1. SPENT CHEMICALS SHIPMENT. The completed Uniform Hazardous Waste Manifest or appropriate state manifest which is identified by the reference number appearing in a space below the signatures to this Agreement and which pertains to the Spent Chemicals Shipment Handled under this Agreement is hereby incorporated herein by reference. Such manifest describes certain Spent Chemicals which Generator hereby agrees to ship to Recycling/TSD Contractor and which Recycling/TSD Contractor agrees to Handle at the facility named in such manifest ("Designated Facility").

2. COLLECTION, TRANSPORTATION, STORAGE AND DELIVERY. All Spent Chemicals Shipments shall be transported to Recycling/TSD Contractor by Van Waters & Rogers Inc., a Washington Corporation ("VW&R"), or an entity designated by VW&R to provide transportation and temporary storage services.

3. PAYMENT. It is understood that VW&R shall pay Recycling/TSD Contractor for Handling the Spent Chemicals Shipment (or, where money is owed to Generator, VW&R shall pay Generator for the Spent Chemicals Shipment) according to the terms of a certain Master Spent Chemicals Handling Agreement between Recycling/TSD Contractor and VW&R. Recycling/TSD Contractor shall not look to Generator for payment for Handling the Spent Chemicals Shipment, except for certain extraordinary charges incurred in connection with Non-conforming Spent Chemicals as set forth in the Standard Terms and Conditions.

4. INDEMNIFIED PARTY. As used in the Standard Terms and Conditions, the term "Indemnified Party" shall mean either Recycling/TSD Contractor or Generator, depending upon which party claims indemnification under this Agreement.

5. GENERATOR INDEMNIFICATION. Generator shall defend, indemnify and hold harmless Recycling/TSD Contractor, its past, present and future officers, directors, employees, agents, insurers and successors (hereinafter in this Paragraph referred to collectively as "Recycling/TSD Contractor") from and against any and all Loss which Recycling/TSD Contractor may sustain or incur, be responsible for or pay out as a result of:

(a) Generator's breach of any representation, warranty, term or provision of this Agreement; or

(b) The negligence or intentional misconduct of Generator, its employees, agents, representatives or subcontractors in the performance of this Agreement, provided that such indemnification shall not apply to the extent such liabilities result from Recycling/TSD Contractor's negligence or intentional misconduct or from a breach of this Agreement by Recycling/TSD Contractor.

6. NAMES AND ADDRESSES OF PERSONS TO WHOM NOTICE IS TO BE GIVEN. The name of the person to whom notice is to be given on behalf of Generator appears on the Uniform Hazardous Waste Manifest in Item 16 or the appropriate state manifest. The name of the person to whom notice is to be given on behalf of Recycling/TSD Contractor appears on the Uniform Hazardous Waste Manifest in Item 20 or the appropriate state manifest. The addresses of the persons to whom notice is to be given appear on the Uniform Hazardous Waste Manifest under Item 3 (for Generator) and Item 9 (for Recycling/TSD Contractor) or the appropriate state manifest.

RECYCLING/TSD HANDLING AGREEMENT

(GENERATOR AND RECYCLING/TSD CONTRACTOR)

The undersigned hereby agree that, upon execution of this Recycling/TSD Handling Agreement, there is a binding contract between them according to the above terms and conditions, as of the day and year appearing below.

GENERATOR EPA ID#: WA D980978274

RECYCLING/TSD CONTRACTOR:

FACILITY: Clothing hand laundry

PRINT NAME: George L. Curtis TITLE: Vice President

PRINT NAME: _____ TITLE: _____

SIGNATURE: [Signature]

RECYCLING/TSD CONTRACTOR SHIPMENT APPROVAL NUMBER: _____

SIGNATURE: _____ DATE: _____

UNIFORM HAZARDOUS WASTE MANIFEST DOCUMENT NUMBER: 04007

STATE HAZARDOUS WASTE MANIFEST DOCUMENT NUMBER: _____

CHE-12113-C

TRANSPORTATION/HANDLING AGREEMENT (GENERATOR AND VW&R)

WHEREAS, Generator has made arrangements with a Recycling/TSD Contractor to transport, store, treat, dispose of, recycle, or re-use (which terms are hereinafter referred to as to "Handle") certain spent chemicals which it has generated and which may be considered to be "hazardous" or "toxic" within the meaning of applicable federal and state laws ("Spent Chemicals");

WHEREAS, Van Waters & Rogers Inc. ("VW&R") is in a position to transport and otherwise assist in the Handling of such Spent Chemicals;

NOW, THEREFORE, in consideration of the covenants and agreements contained herein, the aforementioned parties agree to the following terms and conditions as well as to the Standard Terms and Conditions Governing the Handling of Spent Chemicals ("Standard Terms and Conditions"), which are attached to the Generator Copy of this Agreement and are incorporated herein by reference. All capitalized terms not otherwise defined herein shall have the meanings set forth in the Standard Terms and Conditions.

1. **DELIVERY.** Prior to the execution of this Agreement, Generator has selected the Designated Facility set forth in the Uniform Hazardous Waste Manifest or appropriate state manifest for the Handling of the Spent Chemicals Shipment, which manifest is identified by the reference number appearing above the signatures to this Agreement. Generator has also completed all necessary arrangements for the Handling of such Spent Chemicals Shipment, including the execution of a Recycling/TSD Handling Agreement. VW&R shall deliver the Spent Chemicals Shipment to such Designated Facility.

2. **CHARGES.** The amount to be paid by Generator to VW&R for the services to be rendered hereunder is set forth on VW&R's Standard Schedule of Posted Prices for the Approved Spent Chemicals Stream to which the Spent Chemicals Shipment belongs, subject to all terms, conditions, and credit provisions contained therein. VW&R shall pay Recycling/TSD Contractor for all services in connection with the Handling of the Spent Chemicals Shipment, except for certain extraordinary charges incurred in connection with all or any portion of a Nonconforming Spent Chemicals Shipment, which Generator has agreed to pay.

3. **WORK ON GENERATOR'S PREMISES.** Generator agrees to provide VW&R, its employees, agents, and subcontractors, a safe working environment for any work, in performing this Transportation/Handling Agreement which must be undertaken on premises owned or controlled by Generator, except for hazardous environmental work conditions resulting from spills or other accidents which VW&R has caused.

4. **INDEMNIFICATION.** As used in the Standard Terms and Conditions, the term "Indemnified Party" shall mean either VW&R or Generator, depending upon which party claims indemnification under this Agreement. Generator and VW&R shall each defend, indemnify, and hold harmless the other, its past, present and future officers, directors, employees, agents, insurers and successors (hereinafter in this Paragraph referred to collectively as "VW&R" or "Generator") from and against any and all Loss which VW&R or Generator may sustain or incur, be responsible for or pay out as a result of the other's breach of any representation, warranty, term, or provision of this Agreement.

5. **VW&R INDEMNIFICATION.** VW&R shall defend, indemnify and hold harmless Generator from and against any and all Loss which Generator may sustain or incur, be responsible for, or pay out as a result of:

(a) VW&R's breach of any representation, warranty, term or provision of this Agreement;

(b) any action or failure to act in connection with a Spent Chemicals Shipment which occurs during the period of time when such Shipment is in the possession of VW&R or VW&R's agents, employees or subcontractors regardless of whether VW&R or such persons are at fault with respect to such Loss, except where:

(i) such Loss arises from the action or the failure to act of Generator or any of its agents or employees,

(ii) a Nonconforming Spent Chemicals Shipment is being returned to Generator or disposed of in some alternate manner following the giving of a Rescission Notice, or

(iii) Generator is transporting the Spent Chemicals Shipment, either as a subcontractor to VW&R or otherwise;

(c) the negligence or intentional misconduct of VW&R, its employees, agents, representatives or subcontractors in the performance of this Agreement, provided that such indemnification shall not apply to the extent such liabilities result from Recycling/TSD Contractor's negligence or intentional misconduct or from a breach of this Agreement by Recycling/TSD Contractor.

STANDARD TERMS AND CONDITIONS GOVERNING THE HANDLING OF SPENT CHEMICALS

These Standard Terms and Conditions are to be incorporated by reference into the Master Spent Chemicals Handling Agreement made between Van Waters & Rogers Inc., a Washington corporation ("VW&R") and Recycling/TSD Contractors, the Recycling/TSD Handling Agreement made between Generator and Recycling/TSD Contractor and the Transportation/Handling Agreement made between Generator and VW&R, all relating to the Handling of Spent Chemicals, and shall govern the Handling of such Spent Chemicals. When so incorporated, the particular agreement into which these Standard Terms and Conditions have been so incorporated shall hereinafter be referred to as the "Agreement." All capitalized terms not otherwise defined herein shall have the meanings set forth in the Agreement. Whenever the rights and obligations of a person not party to the Agreement are described herein, such description is intended for informational purposes only, in order to reflect the rights and obligations of such person under one or more other agreements which are related to the Agreement.

1. **SPENT CHEMICALS STREAM INFORMATION.** VW&R shall function as a conduit whereby Generator shall, from time to time, provide to Recycling/TSD Contractor samples, forms, and other information ("Spent Chemicals Information") pertaining to types, categories, or streams of Spent Chemicals ("Spent Chemicals Stream") which Recycling/TSD Contractor may use in (a) determining whether such Spent Chemicals can be Handled by Recycling/TSD Contractor, (b) preparing any laboratory analysis of such Spent Chemicals or a report to the Generator thereon (the "Lab Report"), and (c) establishing the price(s) to be charged therefor. Spent Chemicals Information shall be periodically updated by Generator to meet regulatory requirements and the reasonable needs of Recycling/TSD Contractor. All Spent Chemicals Streams which Recycling/TSD Contractor has agreed to Handle pursuant to this Agreement are hereinafter referred to as "Approved Spent Chemicals Streams." Generator, and not VW&R, shall be responsible for the accuracy and completeness of all Spent Chemicals Information. Recycling/TSD Contractor shall look solely to Generator, not to VW&R, and shall in no way hold VW&R responsible, should any Spent Chemicals Information provided by a Generator (and in no manner commingled, mixed, changed or in any way altered by VW&R) prove to be other than true, accurate, and complete.

2. **TRANSPORTATION SERVICES: ACCEPTANCE AND DELIVERY.** In connection with each Spent Chemicals Shipment, VW&R shall execute with Generator a Transportation/Handling Agreement relating to such Shipment ("Transportation/Handling Agreement"). Whenever VW&R is obligated pursuant to a Transportation/Handling Agreement to transport a shipment of Spent Chemicals ("Spent Chemicals Shipment"), VW&R shall collect such Spent Chemicals Shipment from Generator, transport it to Recycling/TSD Contractor (subject to such intermediate storage at VW&R or other facilities as shall, in VW&R's sole judgment, be necessary or desirable), and deliver such Spent Chemicals Shipment to Recycling/TSD Contractor in the same condition as received from Generators, reasonable wear and tear to containers excepted. Likewise, Generator and Recycling/TSD Contractor shall execute a Recycling/TSD Handling Agreement relating to such Shipment ("Recycling/TSD Handling Agreement"). The two aforementioned agreements, in combination with a completed Uniform Hazardous Waste Manifest are hereinafter referred to as "Handling Documents". Spent Chemicals Shipments shall be delivered to Recycling/TSD Contractor accompanied by the appropriate counterpart copies of the Uniform Hazardous Waste Manifest and the executed Recycling/TSD Handling Agreement. VW&R or Recycling/TSD Contractor (at the option of Recycling/TSD Contractor) shall assign a unique identification number for each Approved Spent Chemicals Stream ("Approved Spent Chemicals Stream Number") which number shall be supplied to the other parties and shall be included with the USDOT description (Item 11) on each Uniform Hazardous Waste Manifest prepared in connection with each Spent Chemicals Shipment. VW&R shall have no obligation to accept delivery of any shipment of Spent Chemicals unless: (a) Generator executes all shipping manifests required by Recycling/TSD Contractor and federal and state authorities ("Uniform Hazardous Waste Manifests") and completed Handling Documents, (b) the Spent Chemicals Shipment has been properly prepared for shipment, including the affixation of required labels, and (c) there is no visual, apparent indication that any container is not suitable for shipment. VW&R shall not commingle, mix, change or in any way alter the composition of any Spent Chemicals to be sent to Recycling/TSD Contractor under this Agreement. VW&R's acceptance of delivery of any Spent Chemicals Shipment shall not release or absolve Generator from fulfilling its obligations under this Paragraph and in no event shall Generator or Recycling/TSD Contractor hold VW&R responsible should any of Generator's obligations hereunder not be met (except to the extent that VW&R is itself responsible for Generator's failure to perform its obligations under this Agreement). Subject to any special provisions in the Agreement, VW&R may utilize the services of subcontractors to perform transportation and/or storage services hereunder.

3. **TITLE TO SPENT CHEMICALS.** Title, risk of loss, and all other incidents of ownership of Spent Chemicals Shipments shall be transferred from Generator and vested in Recycling/TSD Contractor at the point in time when the Spent Chemicals Shipment departs from the Generator's facility on VW&R's or VW&R's subcontractor's vehicle(s) and Generator has signed the Uniform Hazardous Waste Manifest, subject to revocation of acceptance and title reversion, as provided in Paragraph 5 herein. Any marketable or usable material Recycling/TSD Contractor may recover from the Spent Chemicals Shipment shall be the sole property of Recycling/TSD Contractor.

4. **RECYCLING/TSD CONTRACTOR'S HANDLING OF SPENT CHEMICALS.** Recycling/TSD Contractor shall Handle each Spent Chemicals Shipment at the Available Facility agreed to by Recycling/TSD Contractor and

designate another facility or means for further Handling. Any reasonable incremental cost of such further Handling (over and above the original contract price) and any other reasonable costs incidental thereto, including, without limitation, additional transportation costs, shall be Recycling/TSD Contractor's sole obligation.

5. NONCONFORMING SPENT CHEMICALS.

(a) **Definition of Nonconformance.** A Spent Chemicals Shipment shall be considered nonconforming ("Nonconforming"), for the purposes of this Agreement, if:

(i) **Nonconformity with Spent Chemicals Information.** The Spent Chemicals contained therein do not conform to the Spent Chemicals Information supplied by Generator with respect to an Approved Spent Chemicals Stream or to the Lab Report or the Spent Chemicals contain constituents or components not listed in the Spent Chemicals Information which increase the nature or extent of the hazard, risk or cost undertaken by Recycling/TSD Contractor; or

(ii) **Manifest Information.** The Uniform Hazardous Waste Manifest signed by the Generator does not conform to the Spent Chemicals Information, does not conform to all requirements of law, or does not otherwise contain complete and accurate information relating to such Spent Chemicals Shipment.

(iii) **Containers.** The containers for the Spent Chemicals Shipment are incompatible with the Spent Chemicals, are damaged, leaking, improperly closed or improperly prepared for shipment, pose an undue hazard to the health or safety of personnel or the facility in connection with the Handling or transportation of the Spent Chemicals, or do not conform to requirements of state, federal or other pertinent law.

(b) **Notification of Nonconformance.** At any point in the Handling process, but only for 30 days following Recycling/TSD Contractor's acceptance of a Spent Chemicals Shipment at its or its subsidiary's facility (the time of acceptance being the time of Recycling/TSD Contractor's execution at its or its subsidiary's facility of the Uniform Hazardous Waste Manifest relating to such Shipment), both VW&R and the Recycling/TSD Contractor shall have an independent right to determine when a Spent Chemicals Shipment is Nonconforming, each in the exercise of its sole discretion. Whenever it is determined that all or a portion of a Spent Chemicals Shipment is Nonconforming, the party which makes such determination shall immediately notify the other and VW&R shall thereupon immediately notify Generator. At the time of such notification and at any time thereafter until such Nonconformance has been cured, VW&R may, and at Recycling/TSD Contractor's request shall, by notice to Generator ("Rescission Notice"), rescind any prior acceptance by VW&R or Recycling/TSD Contractor of delivery of any Spent Chemicals Shipment.

(c) **Reversion of Title to Nonconforming Spent Chemicals.** Upon the giving of a Rescission Notice, title, risk of loss, and all other incidents of ownership shall revert to Generator as of the point in time such title, risk of loss, and other incidents of ownership originally vested in Recycling/TSD Contractor as if title had never transferred to Recycling/TSD Contractor in the first instance.

(d) **Return or Alternate Disposal of Nonconforming Spent Chemicals.** Following the giving of a Rescission Notice, VW&R or the Recycling/TSD Contractor (whichever has possession) shall properly store, prepare for lawful transportation, and return to Generator (through VW&R) such Nonconforming Spent Chemicals within a reasonable time, not to exceed ten (10) days after the giving of the Rescission Notice, unless within such time the parties agree to some alternate lawful manner of disposition. The parties' agreement to an alternative manner of disposition or acceptance of a Nonconforming Spent Chemicals Shipment shall not be deemed a waiver of the right of VW&R and/or the Recycling/TSD Contractor to reject any other Nonconforming Spent Chemicals Shipment. Generator shall accept possession of any rejected Nonconforming Spent Chemicals Shipment returned to Generator and shall sign all required shipping papers and the Uniform Hazardous Waste Manifest(s) which accompany the Nonconforming Spent Chemicals Shipment. If Generator refuses to Handle such Nonconforming Spent Chemicals Shipment, including without limitation shipment elsewhere for Handling, then VW&R or Recycling/TSD Contractor (whichever party has possession) shall thereupon be authorized to act as Generator's agent to take all steps, including execution of documents, deemed by VW&R in its sole judgment to be appropriate or necessary to Handle such Spent Chemicals Shipment. Generator shall pay Recycling/TSD Contractor and/or VW&R all of their respective reasonable expenses and charges associated with handling, loading, preparing, transporting, storing, caring for, sampling, analyzing, or otherwise Handling Nonconforming Spent Chemicals under this Agreement so long as VW&R notifies Generator of the Nonconformity.

6. **BILLING AND PAYMENT.** VW&R, Generator, and Recycling/TSD Con-

(d) All containers in the Spent Chemicals Shipment are marked, labeled, and are otherwise in conformance with governmental laws, regulations, and orders;

(e) Generator holds clear title to the Spent Chemicals Shipment;

(f) Generator is under no legal restraint or order which would prohibit transfer of title of the Spent Chemicals Shipment to Recycling/TSD Contractor and

(g) Generator has filed or will file with the appropriate governmental agency any preliminary notification required under applicable law for shipment of the Spent Chemicals Shipment.

VW&R'S AND RECYCLING/TSD CONTRACTOR'S RESPECTIVE REPRESENTATIONS AND WARRANTIES. The parties hereto make the following representations and warranties:

(a) Recycling/TSD Contractor hereby represents and warrants as follows:

(i) All information supplied by Recycling/TSD Contractor, its employees, agents, directors, officers, and representatives to VW&R concerning the Available Facilities, including all information set forth on the List

Available Facilities, any information furnished or to be furnished in connection with Recycling/TSD Contractor's obligations under the Agreement is (or, in the case of information furnished hereafter by Recycling/TSD Contractor, shall be) true, complete, and accurate, and there has been and shall be no material omission or misrepresentation in connection therewith; and

(ii) Recycling/TSD Contractor has obtained all necessary permits and licenses required in connection with its performance under the Agreement.

(b) VW&R hereby represents and warrants that all information supplied by VW&R, its employees, agents, directors, officers, and representatives Recycling/TSD Contractor in connection with VW&R's obligations under the Agreement is (or, in the case of information furnished hereafter by VW&R, shall be) true, complete, and accurate, and there has been and shall be no material omission or misrepresentation in connection therewith.

Each and every representation and warranty made by either party in connection with the Handling of Spent Chemicals Shipments pursuant to the Agreement shall survive completion of performance under the Agreement.

INDEMNIFICATION PROVISIONS: DEFINITIONS. The following terms used herein and in the Agreement have the meanings set forth below:

(a) "CERCLA" means the Federal Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. § 9601 *et seq.*, and all regulations thereunder, both as amended from time to time.

(b) "RCRA" means the Resource Conservation and Recovery Act, 42 U.S.C. § 6901 *et seq.*, and all regulations thereunder, both as amended from time to time.

(c) "Other Enactment" means any federal, state, or local statute, ordinance, order, rule, or regulation of any type other than CERCLA and RCRA, including without limitation those relating to the Handling of Spent Chemicals, the contamination of the environment, any removal of such contamination or remediation thereof, or endangerment of human health.

(d) "Loss" means any and all of the following, whether the result of any action of any governmental agency or any third party: liabilities, penalties, forfeitures, suits, losses, damages, fines, expenses, debts, obligations, claims, including, without limitation, fines, liabilities, or losses arising out of CERCLA, RCRA, or any and all Other Enactments, costs (including costs of investigation, defense, settlement and attorneys' and other professional fees whether or not litigation is instituted), costs and capital expenditures required for compliance with CERCLA, RCRA, or any and all Other Enactments, any losses related to death, bodily injury, property damage or destruction, damage to the environment, losses which any Indemnified Party may sustain as a result of any investigation, removal, remediation, cleanup, or decontamination arising out of any contamination of or discharge or threatened discharge into the environment, whether liquidated or unliquidated, fixed or contingent, known or unknown, but in no event shall include damages for loss of use, income or profits.

(e) "Indemnified Party" and "Indemnified Parties" shall mean the party or parties defined as the "Indemnified Party" or "Indemnified Parties" in the Agreement and shall include the respective past, present, and future officers, directors, employees, agents, insurers, and successors of such party or parties.

10. RECYCLING/TSD CONTRACTOR INDEMNIFICATION. Recycling/TSD Contractor shall defend, indemnify, and hold harmless each and every Indemnified Party from and against any and all Loss which such Indemnified Party may sustain or incur, be responsible for or pay out (except to the extent that such Indemnified Party is itself at fault with respect to such Loss) as a result of:

(a) Recycling/TSD Contractor's breach of any representation, warranty, term, or provision of the Agreement, or

(b) Recycling/TSD Contractor's or any other person's Handling of Spent Chemicals, containers, and residues once such Spent Chemicals have been accepted by Recycling/TSD Contractor at its facilities (as provided in Paragraph 5(b) of these Standard Terms and Conditions), regardless of whether Recycling/TSD Contractor is without fault with respect to such Loss.

(c) The negligence or intentional misconduct of Recycling/TSD Contractor, its employees, agents, representatives or subcontractors in the performance of the Agreement.

Spent Chemicals under the Agreement except as specifically provided to the contrary in the Agreement.

12. NOTICE AND COOPERATION. The following procedures shall apply to indemnification under the Agreement:

(a) In the event that any Indemnified Party shall have a claim made or threatened against it as to which the Indemnified Party believes it is entitled to indemnification under the Agreement, it shall promptly notify the party against whom indemnification is sought and VW&R. The notice shall specify the party from which indemnification is sought, and provide available material details of the claim, with copies of any relevant documents. Failure to notify the above party(ies) of any claim shall relieve such party of its obligation to indemnify any Loss related to that particular claim.

(b) Within ten (10) days after receipt of a notice asserting a right to indemnification, the party from which indemnification is sought shall notify all other Indemnified Parties whether it undertakes the defense and disposition of the claim or declines responsibility for the claim. A party which undertakes the defense and disposition of a claim may reserve its right to decline responsibility if facts subsequently come to its attention which indicate that it is not obligated to indemnify.

(c) A party which undertakes the defense and disposition of a claim shall have control of the defense and disposition, so long as such party's ability to perform its obligations under this Agreement relating to indemnification shall not suffer any material adverse change. The Indemnified Parties shall cooperate in the defense as reasonably requested by, and at the expense of, the undertaking party. The other Indemnified Parties may further participate in the defense at their own expense, but shall not have control of the defense.

(d) If a party declines responsibility for a tendered claim and the parties cannot resolve the dispute within thirty (30) days, the question of responsibility to indemnify shall be submitted to arbitration under Paragraph 19 of these Standard Terms and Conditions. Pending such arbitration, the Indemnified Party against which the claim was asserted shall act to protect the interests of the parties with respect to the claim, subject to reimbursement of all costs and expenses by any party which is thereafter determined to have responsibility for conducting such defense.

13. NONEXCLUSIVITY. The parties acknowledge that the arrangements contemplated under the Agreement are nonexclusive and that any Generator may, in its sole discretion, select persons and facilities other than Recycling/TSD Contractor to Handle Spent Chemicals, including but not limited to persons who are affiliates of VW&R, and that VW&R may utilize the services of persons and facilities other than Recycling/TSD Contractor to Handle Spent Chemicals, including but not limited to VW&R's own affiliates.

14. ENTIRE AGREEMENT. The Agreement represents the entire understanding between the parties hereto relating to the matters addressed herein. The Agreement supersedes any and all prior agreements, whether written or oral, which may exist between the parties.

15. AMENDMENT. The Agreement may be amended from time to time only by an express instrument in writing signed by the parties.

16. SAVINGS CLAUSE. If any one or more of the provisions contained in the Agreement shall, for any reason, be held to be invalid, illegal, or unenforceable in any respect, such invalidity, illegality, or unenforceability shall not affect any other provisions of the Agreement and the Agreement shall be construed as if such invalid, illegal, or unenforceable provision had never been contained herein.

17. SCOPE AND SURVIVAL. The obligations of the parties to indemnify under the Agreement shall survive the expiration or termination of this Agreement.

18. EXCUSE OF PERFORMANCE. The performance of this Agreement, except for the payment of money for services already rendered, may be suspended by any party in the event performance is prevented by causes beyond the reasonable control of such party. Such causes shall include, but not be limited to, acts of God, acts of war, riot, fire, explosion, accident, flood or sabotage, governmental laws, regulations, requirements, orders, lock-outs, or strikes.

19. MANDATORY ARBITRATION. Any controversy or claim arising out of or relating to the Agreement or breach of the Agreement shall be settled by arbitration in accordance with the Commercial Arbitration Rules of the American Arbitration Association. The award resulting from the arbitration shall be final and binding upon the parties and judgment on the award rendered may be entered in any court having jurisdiction. The place of arbitration shall be mutually agreed upon by the parties to the arbitration or, if the parties are unable to agree, St. Louis, Missouri.

20. ATTORNEYS' FEES AND EXPENSES. If any action or proceeding shall be commenced before any court or governmental agency to enforce the terms of the Agreement, or if any arbitration shall take place pursuant to Paragraph 19 of these Standard Terms and Conditions, then the prevailing party shall be entitled to recover from the other party the reasonable attorneys' fees, costs, and expenses incurred by such prevailing party in connection with such action, proceeding, or arbitration.

21. NOTICES. Except as otherwise provided, any notice to be given under

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved, OMB No. 2050-0039.

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. HA D 9 8 0 9 7 8 2 7 4 0 1 0 8 8		Manifest Document No.		2. Page 1 of 1		Information in the shaded areas is not required by Federal law.	
		3. Generator's Name and Mailing Address PARALLON CONSULTING L.L.C 1002 4TH ST. BREMERTON, WA 98337		6. US EPA ID Number WA D 0 6 7 5 4 8 9 6 6		A. State Manifest Document Number			
4. Generator's Phone (425) 427-0061		EMERGENCY CONTACT: BOB 13		7. Transporter 1 Company Name VOPAK USA INC.		8. US EPA ID Number UT D 9 8 1 5 5 2 4 2 5		B. State Generator's ID	
5. Transporter 2 Company Name SLT EXPRESS, INC.		9. Designated Facility Name and Site Address CWM ARLINGTON CWM/OF THE NORTHWEST ARLI 17629 CEDAR SPRINGS LAWR ARLINGTON, OR 97812		10. US EPA ID Number BR D 0 8 9 4 5 2 3 5 3		C. State Transporter's ID		D. Transporter's Phone 253-872-5022	
						E. State Transporter's ID		F. Transporter's Phone 800-627-3047	
						G. State Facility's ID NA		H. Facility's Phone 541-454-2643	
11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)		12. Containers		13. Total Quantity		14. Unit Wt/Vol		15. Waste No.	
a. <input checked="" type="checkbox"/> HAZARDOUS WASTE, SOLID, N.O.S. (TETRACHLOROETHYLENE) 9, NA3077, PG III, (EPA F002)		611		3700 P				F002	
b. <input checked="" type="checkbox"/> HAZARDOUS WASTE, SOLID, N.O.S. (TETRACHLOROETHYLENE) 9, NA3077, PG III, (EPA F002)		2060 M		4200 P				F002	
c.									
d.									
J. Additional Descriptions for Materials Listed Above		K. Handling Codes for Wastes Listed Above							
11a. CN7401		11b. CUL640		11c. TETRACHLOROETHYLENE SOIL MEETS STANDARD		11d. TETRACHLOROETHYLENE CONT. SOIL			
15. Special Handling Instructions and Additional Information WEAR APPROPRIATE PROTECTIVE GEAR WHEN HANDLING. EMERGENCY CONTACT: CHEMTREC: 1-800-424-9300. CALLER MUST IDENTIFY VOPAK USA AS SHIPPER.									
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.									
Printed/Typed Name					Signature				
17. Transporter 1 Acknowledgement of Receipt of Materials									
Printed/Typed Name					Signature				
Daniel L Elverston					Daniel L Elverston				
18. Transporter 2 Acknowledgement of Receipt of Materials									
Printed/Typed Name					Signature				
19. Discrepancy Indication Space									
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.									
Printed/Typed Name					Signature				

GENERATOR COPYPRINTED ON RECYCLED PAPER
USING SOYBEAN INK

6/04/99

LAND DISPOSAL NOTIFICATION AND CERTIFICATION FORM (PHASE II)

Generator Name:

City hand laundry

Manifest Doc. No.: 01088

Profile Number:

CU1690

State Manifest No:

1. Is this waste a non-wastewater or wastewater? (See 40 CFR 268.2) Check ONE: ☒ Non-wastewater ☐ Wastewater
2. If this waste is subject to any California List restrictions enter the letter from below (either A, B.1, or B.2) next to each restriction that is applicable:
HOCs, PCBs, Acid, Metals, Cyanides
- Identify ALL USEPA hazardous waste codes that apply to this waste shipment, as defined by 40 CFR 261. For each waste code, identify the corresponding subcategory, or check NONE if the waste code has no subcategory. Spent solvent and California List treatment standards are listed on the following page. If F039, multi-source leachate applies those constituents must be listed and attached by the generator. If D001-D043 requires treatment of the characteristic and meet 268.48 standards, then the underlying hazardous constituent(s) present in the waste must be listed and attached.

REF #	4. US EPA HAZARDOUS WASTE CODE(S)	5. SUBCATEGORY ENTER THE SUBCATEGORY DESCRIPTION. IF NOT APPLICABLE, SIMPLY CHECK NONE		6. HOW MUST THE WASTE BE MANAGED? ENTER LETTER FROM BELOW
		DESCRIPTION	NONE	
1	F002			A
2				
3				
4				

To identify F039 or D001-D043 underlying hazardous constituent(s), use the "F039/Underlying Hazardous Constituent Form" provided (CWM-2004) and check here:
If no UHCs are present in the waste upon its initial generation check here: ☒
To list additional USEPA waste code(s) and subcategory(s), use the supplemental sheet provided (CWM-2005-B) and check here:

HOW MUST THE WASTE BE MANAGED? In column 6 above, enter the letter (A, B1, B2, B3, B4, C, D or E) below that describes how the waste must be managed to comply with the land disposal regulations (40 CFR 268.7). Please understand that if you enter the letter B1, B2, B3, B4 or D, you are making the appropriate certification as provided below. (States authorized by EPA to manage the LDR program may have regulatory citations different from the 40 CFR citations listed below. Where these regulatory citations differ, your certification will be deemed to refer to those state citations instead of the 40 CFR citations.)

A. RESTRICTED WASTE REQUIRES TREATMENT

This waste must be treated to the applicable treatment standards set forth in 40 CFR Part 268 Subpart D, 268.32, or RCRA Section 3004(d).

For Hazardous Debris: "This hazardous debris is subject to the alternative treatment standards of 40 CFR Part 268.45."

B.1 RESTRICTED WASTE TREATED TO PERFORMANCE STANDARDS

"I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification and that, based upon my inquiry of those individuals immediately responsible for obtaining this information, I believe that the treatment process has been operated and maintained properly so as to comply with the performance levels specified in 40 CFR part 268 Subpart D and all applicable prohibitions set forth in 40 CFR 268.32 or RCRA Section 3004(d) without impermissible dilution of the prohibited waste. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment."

B.2 RESTRICTED WASTES FOR WHICH THE TREATMENT STANDARD IS EXPRESSED AS A SPECIFIED TECHNOLOGY (AND THE WASTE HAS BEEN TREATED BY THAT TECHNOLOGY)

"I certify under penalty of the law that the waste has been treated in accordance with the requirements of 40 CFR 268.42. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment."

B.3 GOOD FAITH ANALYTICAL CERTIFICATION FOR INCINERATED ORGANICS

"I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification and that, based upon my inquiry of those individuals immediately responsible for obtaining this information, I believe that the nonwastewater organic constituents have been treated by incineration in units operated in accordance with 40 CFR Part 264 Subpart O or Part 265 Subpart O, or by combustion in fuel substitution units operating in accordance with applicable technical requirements, and I have been unable to detect the nonwastewater organic constituents despite having used best good faith efforts to analyze for such constituents. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment."

B.4 DECHARACTERIZED WASTE REQUIRES TREATMENT FOR UNDERLYING HAZARDOUS CONSTITUENTS

"I certify under penalty of law that the waste has been treated in accordance with the requirements of 40 CFR 268.40 to remove the hazardous characteristic. This decharacterized waste contains underlying hazardous constituents that require further treatment to meet universal treatment standards. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment."

C. RESTRICTED WASTE SUBJECT TO A VARIANCE

This waste is subject to a national capacity variance, a treatability variance, or a case-by-case extension. Enter the effective date of prohibition in column 6 above.

For Hazardous Debris: "This hazardous debris is subject to the alternative treatment standards of 40 CFR Part 268.45."

D. RESTRICTED WASTE CAN BE LAND DISPOSED WITHOUT FURTHER TREATMENT

"I have determined that this waste meets all applicable treatment standards set forth in 40 CFR Part 268 Subpart D, and all applicable prohibition levels set forth in Section 268.32 or RCRA Section 3004(d), and therefore, can be land disposed without further treatment. A copy of all applicable treatment standards and specified treatment methods is maintained at the treatment, storage and disposal facility named above." "I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that the waste complies with the treatment standards specified in 40 CFR Part 268 Subpart D and all applicable prohibitions set forth on 40 CFR 268.32 or RCRA section 3004(d). I believe that the information I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting false certifications, including the possibility of a fine and imprisonment."

E. WASTE IS NOT CURRENTLY SUBJECT TO PART 268 RESTRICTIONS

This waste is a newly identified waste that is not currently subject to any 40 CFR Part 268 restrictions.

I hereby certify that all information submitted in this and all associated documents is complete and accurate, to the best of my knowledge and information.

Signature

A. L. Mulholland

Title

owner

Date

5/11/01

6/04/99

LAND DISPOSAL NOTIFICATION AND CERTIFICATION FORM (PHASE II)

Generator Name:

City hand Laundry
CN7401

Manifest Doc. No.: 01088

Profile Number:

State Manifest No:

1. Is this waste a non-wastewater or wastewater? (See 40 CFR 268.2) Check ONE: Nonwastewater ☒ Wastewater ☐
2. If this waste is subject to any California List restrictions enter the letter from below (either A, B.1, or B.2) next to each restriction that is applicable:
HOCs, PCBs, Acid, Metals, Cyanides
- Identify ALL USEPA hazardous waste codes that apply to this waste shipment, as defined by 40 CFR 261. For each waste code, identify the corresponding subcategory, or check NONE if the waste code has no subcategory. Spent solvent and California List treatment standards are listed on the following page. If F039, multi-source leachate applies those constituents must be listed and attached by the generator. If D001-D043 requires treatment of the characteristic and meet 268.48 standards, then the underlying hazardous constituent(s) present in the waste must be listed and attached.

REF #	4. US EPA HAZARDOUS WASTE CODE(S)	5. SUBCATEGORY ENTER THE SUBCATEGORY DESCRIPTION. IF NOT APPLICABLE, SIMPLY CHECK NONE		6. HOW MUST THE WASTE BE MANAGED? ENTER LETTER FROM BELOW
		DESCRIPTION	NONE	
1	F002			D
2				
3				
4				

To identify F039 or D001-D043 underlying hazardous constituent(s), use the "F039/Underlying Hazardous Constituent Form" provided (CWM-2004) and check here: ☒

If no HOCs are present in the waste upon its initial generation check here: ☒

To list additional USEPA waste code(s) and subcategory(ies), use the supplemental sheet provided (CWM-2005-B) and check here: ☐

HOW MUST THE WASTE BE MANAGED? In column 6 above, enter the letter (A, B1, B2, B3, B4, C, D or E) below that describes how the waste must be managed to comply with the land disposal regulations (40 CFR 268.7). Please understand that if you enter the letter B1, B2, B3, B4 or D, you are making the appropriate certification as provided below. (States authorized by EPA to manage the IDR program may have regulatory citations different from the 40 CFR citations listed below. Where these regulatory citations differ, your certification will be deemed to refer to those state citations instead of the 40 CFR citations.)

A. RESTRICTED WASTE REQUIRES TREATMENT

This waste must be treated to the applicable treatment standards set forth in 40 CFR Part 268 Subpart D, 268.32, or RCRA Section 3004(d).

For Hazardous Debris: "This hazardous debris is subject to the alternative treatment standards of 40 CFR Part 268.45."

B.1 RESTRICTED WASTE TREATED TO PERFORMANCE STANDARDS

"I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification and that, based upon my inquiry of those individuals immediately responsible for obtaining this information, I believe that the treatment process has been operated and maintained properly so as to comply with the performance levels specified in 40 CFR part 268 Subpart D and all applicable prohibitions set forth in 40 CFR 268.32 or RCRA Section 3004(d) without impermissible dilution of the prohibited waste. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment."

B.2 RESTRICTED WASTES FOR WHICH THE TREATMENT STANDARD IS EXPRESSED AS A SPECIFIED TECHNOLOGY (AND THE WASTE HAS BEEN TREATED BY THAT TECHNOLOGY)

"I certify under penalty of the law that the waste has been treated in accordance with the requirements of 40 CFR 268.42. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment."

B.3 GOOD FAITH ANALYTICAL CERTIFICATION FOR INCINERATED ORGANICS

"I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification and that, based upon my inquiry of those individuals immediately responsible for obtaining this information, I believe that the nonwastewater organic constituents have been treated by incineration in units operated in accordance with 40 CFR Part 264 Subpart O or Part 265 Subpart O, or by combustion in fuel substitution units operating in accordance with applicable technical requirements, and I have been unable to detect the nonwastewater organic constituents despite having used best good faith efforts to analyze for such constituents. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment."

B.4 DECHARACTERIZED WASTE REQUIRES TREATMENT FOR UNDERLYING HAZARDOUS CONSTITUENTS

"I certify under penalty of law that the waste has been treated in accordance with the requirements of 40 CFR 268.40 to remove the hazardous characteristic. This decharacterized waste contains underlying hazardous constituents that require further treatment to meet universal treatment standards. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment."

C. RESTRICTED WASTE SUBJECT TO A VARIANCE

This waste is subject to a national capacity variance, a treatability variance, or a case-by-case extension. Enter the effective date of prohibition in column 6 above.

For Hazardous Debris: "This hazardous debris is subject to the alternative treatment standards of 40 CFR Part 268.45."

D. RESTRICTED WASTE CAN BE LAND DISPOSED WITHOUT FURTHER TREATMENT

"I have determined that this waste meets all applicable treatment standards set forth in 40 CFR Part 268 Subpart D, and all applicable prohibition levels set forth in Section 268.32 or RCRA Section 3004(d), and therefore, can be land disposed without further treatment. A copy of all applicable treatment standards and specified treatment methods is maintained at the treatment, storage and disposal facility named above." "I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that the waste complies with the treatment standards specified in 40 CFR Part 268 Subpart D and all applicable prohibitions set forth in 40 CFR 268.32 or RCRA section 3004(d). I believe that the information I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting false certifications, including the possibility of a fine and imprisonment."

E. WASTE IS NOT CURRENTLY SUBJECT TO PART 268 RESTRICTIONS

This waste is a newly identified waste that is not currently subject to any 40 CFR Part 268 restrictions.

I hereby certify that all information submitted in this and all associated documents is complete and accurate, to the best of my knowledge and information.

Signature

J. J. McElhargh

Title

owner

Date

5/4/01

358233

ORDER # 184153

Form Approved, OMB No. 2050-0039.

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. W A D 9 8 0 9 7 8 2 7 4 0 1 0 8 8		Manifest Document No.		2. Page 1 of 1		Information in the shaded areas is not required by Federal law.	
3. Generator's Name and Mailing Address PARALLON CONSULTING L.L.C 1002 4TH ST. BREMERTON, WA 98337		City hand Laundry MAIL TO: 320 3rd AVE NE STE 200 ISSAQUANA WA, 98027		A. State Manifest Document Number		B. State Generator's ID			
4. Generator's Phone (425) 427-0061		EMERGENCY CONTACT: BOX 15		C. State Transporter's ID		D. Transporter's Phone 253-872-5022			
5. Transporter 1 Company Name VOPAK USA INC.		6. US EPA ID Number W A D 0 6 7 5 4 8 9 6 6		E. State Transporter's ID		F. Transporter's Phone 800-627-3047			
7. Transporter 2 Company Name SLT EXPRESS, INC.		8. US EPA ID Number U T D 9 8 1 5 5 2 4 2 5		G. State Facility's ID NA		H. Facility's Phone 541-454-2643			
9. Designated Facility Name and Site Address CWM ARLINGTON CWM/OF THE NORTHWEST ARLI 17629 CEDAR SPRINGS LANE ARLINGTON, OR 97812		10. US EPA ID Number b R D 0 8 9 4 5 2 3 5 3		11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)		12. Containers No. Type		13. Total Quantity	
a. X HAZARDOUS WASTE, SOLID, N.O.S. (TETRACHLOROETHYLENE) 9, NA3077, PG III, (EPA F002)		b. X HAZARDOUS WASTE, SOLID, N.O.S. (TETRACHLOROETHYLENE) 9, NA3077, PG III, (EPA F002)		c.		d.			
J. Additional Descriptions for Materials Listed Above 11a. CN7401 TETRACHLOROETHYLENE SOIL MEETS STANDARD 11b. CU1640 TETRACHLOROETHYLENE CONT. SOIL		K. Handling Codes for Wastes Listed Above							
15. Special Handling Instructions and Additional Information WEAR APPROPRIATE PROTECTIVE GEAR WHEN HANDLING. EMERGENCY CONTACT: CHEMTREC: 1-800-424-9300. CALLER MUST IDENTIFY VOPAK USA AS SHIPPER.									
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.									
Printed/Typed Name SG MILBRAD		Signature [Signature]		Month Day Year 10/23/01					
17. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name Daniel L Elverston		Signature [Signature]		Month Day Year 10/23/01					
18. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name Jim Engel		Signature [Signature]		Month Day Year 10/23/01					
19. Discrepancy Indication Space									
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19. Printed/Typed Name Francie Bailey									
Signature [Signature]		Month Day Year 10/23/01							

ORIGINAL-RETURN TO GENERATOR

PRINTED ON RECYCLED PAPER
USING SOYBEAN INK

BMS



CWM OF THE NORTHWEST
Federal EPA ID: ORD089452353
17629 CEDAR SPRINGS LANE
ARLINGTON, OR 97812

CITY HAND LAUNDRY
ATTN: MANIFEST SECTION
WAD980978274
1002 4TH ST
BREMERTON WA 98337-1429

CERTIFICATE OF DISPOSAL

Chemical Waste Management, Inc. has received waste material from CITY HAND LAUNDRY on 06/05/01 as described on [State Manifest or Uniform] Hazardous Waste Manifest number 01088.

Profile Number: CN7401
CWM Tracking ID: 35823301
Process: LANDFILL
Treatment Date: 06/06/01

I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all applicable laws, regulations, permits and licenses on the date listed above.

Becky Sumner

LYNN MURRILL
RECORDS MANAGER
Certificate # 89075
06/13/01

RECYCLING/TSD HANDLING AGREEMENT
(GENERATOR AND RECYCLING/TSD CONTRACTOR)

WHEREAS, Generator produces spent chemicals which may be considered to be "hazardous" or "toxic" within the meaning of applicable federal and state laws ("Spent Chemicals") and which therefore must be transported, stored, disposed of, recycled, treated or re-used ("Handled") in accordance with applicable laws pertaining to hazardous or toxic chemicals;

WHEREAS, Recycling/TSD Contractor owns or controls facilities which are capable of Handling Spent Chemicals in accordance with all applicable laws pertaining to such activities;

WHEREAS, the parties desire to enter into an arrangement for the Handling of Spent Chemicals, all on the terms and conditions hereinafter set forth;

NOW, THEREFORE, in consideration of the covenants and agreements contained herein, the undersigned agree to the following terms and conditions of this Recycling/TSD Handling Agreement as well as to the Standard Terms and Conditions Governing the Handling of Spent Chemicals ("Standard Terms and Conditions"), which are attached to the Generator copy of this Agreement and are incorporated herein by reference. All capitalized terms not otherwise defined herein shall have the meanings set forth in the Standard Terms and Conditions.

1. SPENT CHEMICALS SHIPMENT. The completed Uniform Hazardous Waste Manifest or appropriate state manifest which is identified by the reference number appearing in a space below the signatures to this Agreement and which pertains to the Spent Chemicals Shipment Handled under this Agreement is hereby incorporated herein by reference. Such manifest describes certain Spent Chemicals which Generator hereby agrees to ship to Recycling/TSD Contractor and which Recycling/TSD Contractor agrees to Handle at the facility named in such manifest ("Designated Facility").

2. COLLECTION, TRANSPORTATION, STORAGE AND DELIVERY. All Spent Chemicals Shipments shall be transported to Recycling/TSD Contractor by Van Waters & Rogers Inc., a Washington Corporation ("VW&R"), or an entity designated by VW&R to provide transportation and temporary storage services.

3. PAYMENT. It is understood that VW&R shall pay Recycling/TSD Contractor for Handling the Spent Chemicals Shipment (or, where money is owed to Generator, VW&R shall pay Generator for the Spent Chemicals Shipment) according to the terms of a certain Master Spent Chemicals Handling Agreement between Recycling/TSD Contractor and VW&R. Recycling/TSD Contractor shall not look to Generator for payment for Handling the Spent Chemicals Shipment, except for certain extraordinary charges incurred in connection with Non-conforming Spent Chemicals as set forth in the Standard Terms and Conditions.

4. INDEMNIFIED PARTY. As used in the Standard Terms and Conditions, the term "Indemnified Party" shall mean either Recycling/TSD Contractor or Generator, depending upon which party claims indemnification under this Agreement.

5. GENERATOR INDEMNIFICATION. Generator shall defend, indemnify and hold harmless Recycling/TSD Contractor, its past, present and future officers, directors, employees, agents, insurers and successors (hereinafter in this Paragraph referred to collectively as "Recycling/TSD Contractor") from and against any and all Loss which Recycling/TSD Contractor may sustain or incur, be responsible for or pay out as a result of:

(a) Generator's breach of any representation, warranty, term or provision of this Agreement; or

(b) The negligence or intentional misconduct of Generator, its employees, agents, representatives or subcontractors in the performance of this Agreement, provided that such indemnification shall not apply to the extent such liabilities result from Recycling/TSD Contractor's negligence or intentional misconduct or from a breach of this Agreement by Recycling/TSD Contractor.

6. NAMES AND ADDRESSES OF PERSONS TO WHOM NOTICE IS TO BE GIVEN. The name of the person to whom notice is to be given on behalf of Generator appears on the Uniform Hazardous Waste Manifest in Item 16 or the appropriate state manifest. The name of the person to whom notice is to be given on behalf of Recycling/TSD Contractor appears on the Uniform Hazardous Waste Manifest in Item 20 or the appropriate state manifest. The addresses of the persons to whom notice is to be given appear on the Uniform Hazardous Waste Manifest under Item 3 (for Generator) and Item 9 (for Recycling/TSD Contractor) or the appropriate state manifest.

RECYCLING/TSD HANDLING AGREEMENT
(GENERATOR AND RECYCLING/TSD CONTRACTOR)

The undersigned hereby agree that, upon execution of this Recycling/TSD Handling Agreement, there is a binding contract between them according to the above terms and conditions, as of the day and year appearing below.

GENERATOR EPA ID#: WAD980978274

FACILITY: City hand laundry

PRINT NAME: TITLE:

SIGNATURE: DATE:

UNIFORM HAZARDOUS WASTE MANIFEST DOCUMENT NUMBER: 01000

STATE HAZARDOUS WASTE MANIFEST DOCUMENT NUMBER:

RECYCLING/TSD CONTRACTOR:

PRINT NAME: Ty A Harter TITLE: Director - National Accounts
Industrial Sales & Service

SIGNATURE: Ty A. Harter

RECYCLING/TSD CONTRACTOR
SHIPMENT APPROVAL NUMBER:

WM- 23250-C

TRANSPORTATION / HANDLING AGREEMENT
(GENERATOR AND VW&R)

The undersigned hereby acknowledge that Generator and Recycling/TSD Contractor have entered into the above Recycling/TSD Handling Agreement. The undersigned hereby agree that, upon execution of this Transportation/Handling Agreement, there is a binding contract between them according to the terms and conditions appearing on the reverse side hereof, effective on the same date as the Recycling/TSD Handling Agreement.

GENERATOR EPA ID#: WAD980978274

FACILITY: City hand laundry

PRINT NAME: TITLE:

SIGNATURE: DATE:

Van Waters & Rogers Inc.
A ROYAL PAKHOED COMPANY

FACILITY:

PRINT NAME: TITLE:

SIGNATURE: DATE:

TRANSPORTATION/HANDLING AGREEMENT
(GENERATOR AND VW&R)

WHEREAS, Generator has made arrangements with a Recycling/TSD Contractor to transport, store, treat, dispose of, recycle, or re-use (which terms are hereinafter referred to as to "Handle") certain spent chemicals which it has generated and which may be considered to be "hazardous" or "toxic" within the meaning of applicable federal and state laws ("Spent Chemicals");

WHEREAS, Van Waters & Rogers Inc. ("VW&R") is in a position to transport and otherwise assist in the Handling of such Spent Chemicals;

NOW, THEREFORE, in consideration of the covenants and agreements contained herein, the aforementioned parties agree to the following terms and conditions as well as to the Standard Terms and Conditions Governing the Handling of Spent Chemicals ("Standard Terms and Conditions"), which are attached to the Generator Copy of this Agreement and are incorporated herein by reference. All capitalized terms not otherwise defined herein shall have the meanings set forth in the Standard Terms and Conditions.

1. **DELIVERY.** Prior to the execution of this Agreement, Generator has selected the Designated Facility set forth in the Uniform Hazardous Waste Manifest or appropriate state manifest for the Handling of the Spent Chemicals Shipment, which manifest is identified by the reference number appearing above the signatures to this Agreement. Generator has also completed all necessary arrangements for the Handling of such Spent Chemicals Shipment, including the execution of a Recycling/TSD Handling Agreement. VW&R shall deliver the Spent Chemicals Shipment to such Designated Facility.

2. **CHARGES.** The amount to be paid by Generator to VW&R for the services to be rendered hereunder is set forth on VW&R's Standard Schedule of Posted Prices for the Approved Spent Chemicals Stream to which the Spent Chemicals Shipment belongs, subject to all terms, conditions, and credit provisions contained therein. VW&R shall pay Recycling/TSD Contractor for all services in connection with the Handling of the Spent Chemicals Shipment, except for certain extraordinary charges incurred in connection with all or any portion of a Nonconforming Spent Chemicals Shipment, which Generator has agreed to pay.

3. **WORK ON GENERATOR'S PREMISES.** Generator agrees to provide VW&R, its employees, agents, and subcontractors, a safe working environment for any work, in performing this Transportation/Handling Agreement which must be undertaken on premises owned or controlled by Generator, except for hazardous environmental work conditions resulting from spills or other accidents which VW&R has caused.

4. **INDEMNIFICATION.** As used in the Standard Terms and Conditions, the term "Indemnified Party" shall mean either VW&R or Generator, depending upon which party claims indemnification under this Agreement. Generator and VW&R shall each defend, indemnify, and hold harmless the other, its past, present and future officers, directors, employees, agents, insurers and successors (hereinafter in this Paragraph referred to collectively as "VW&R" or "Generator") from and against any and all Loss which VW&R or Generator may sustain or incur, be responsible for or pay out as a result of the other's breach of any representation, warranty, term, or provision of this Agreement.

5. **VW&R INDEMNIFICATION.** VW&R shall defend, indemnify and hold harmless Generator from and against any and all Loss which Generator may sustain or incur, be responsible for, or pay out as a result of:

(a) VW&R's breach of any representation, warranty, term or provision of this Agreement;

(b) any action or failure to act in connection with a Spent Chemicals Shipment which occurs during the period of time when such Shipment is in the possession of VW&R or VW&R's agents, employees or subcontractors regardless of whether VW&R or such persons are at fault with respect to such Loss, except where:

(i) such Loss arises from the action or the failure to act of Generator or any of its agents or employees,

(ii) a Nonconforming Spent Chemicals Shipment is being returned to Generator or disposed of in some alternate manner following the giving of a Rescission Notice, or

(iii) Generator is transporting the Spent Chemicals Shipment, either as a subcontractor to VW&R or otherwise;

(c) the negligence or intentional misconduct of VW&R, its employees, agents, representatives or subcontractors in the performance of this Agreement, provided that such indemnification shall not apply to the extent such liabilities result from Recycling/TSD Contractor's negligence or intentional misconduct or from a breach of this Agreement by Recycling/TSD Contractor.

6. **NAMES AND ADDRESSES OF PERSONS TO WHOM NOTICE IS TO BE GIVEN.** The name of the person to whom notice is to be given on behalf of Generator appears on the Uniform Hazardous Waste Manifest in Item 16 or the appropriate state manifest and the address of such person appears on the Uniform Hazardous Waste Manifest in Item 3 or the appropriate state manifest. The name and address of the person to whom notice is to be given on behalf of VW&R is as follows:

Director of Chemcare
Van Waters & Rogers Inc.
6100 Carillon Point
Kirkland, WA 98033

With a copy to:

Legal Services Department
Van Waters & Rogers Inc.
6100 Carillon Point
Kirkland, WA 98033

STANDARD TERMS AND CONDITIONS GOVERNING THE HANDLING OF SPENT CHEMICALS

These Standard Terms and Conditions are to be incorporated by reference into the Master Spent Chemicals Handling Agreement made between Van Waters & Rogers Inc., a Washington corporation ("VW&R") and Recycling/TSD Contractors, the Recycling/TSD Handling Agreement made between Generator and Recycling/TSD Contractor and the Transportation/Handling Agreement made between Generator and VW&R, all relating to the Handling of Spent Chemicals, and shall govern the Handling of such Spent Chemicals. When so incorporated, the particular agreement into which these Standard Terms and Conditions have been so incorporated shall hereinafter be referred to as the "Agreement." All capitalized terms not otherwise defined herein shall have the meanings set forth in the Agreement. Whenever the rights and obligations of a person not party to the Agreement are described herein, such description is intended for informational purposes only, in order to reflect the rights and obligations of such person under one or more other agreements which are related to the Agreement.

1. **SPENT CHEMICALS STREAM INFORMATION.** VW&R shall function as a conduit whereby Generator shall, from time to time, provide to Recycling/TSD Contractor samples, forms, and other information ("Spent Chemicals Information") pertaining to types, categories, or streams of Spent Chemicals ("Spent Chemicals Stream") which Recycling/TSD Contractor may use in (a) determining whether such Spent Chemicals can be handled by Recycling/TSD Contractor, (b) preparing any laboratory analysis of such Spent Chemicals or a report to the Generator thereon (the "Lab Report"), and (c) establishing the price(s) to be charged therefor. Spent Chemicals Information shall be periodically updated by Generator to meet regulatory requirements and the reasonable needs of Recycling/TSD Contractor. All Spent Chemicals Streams which Recycling/TSD Contractor has agreed to handle pursuant to this Agreement are hereinafter referred to as "Approved Spent Chemicals Streams." Generator, and not VW&R, shall be responsible for the accuracy and completeness of all Spent Chemicals Information. Recycling/TSD Contractor shall look solely to Generator, not to VW&R, and shall in no way hold VW&R responsible, should any Spent Chemicals Information provided by a Generator (and in no manner commingled, mixed, changed or in any way altered by VW&R) prove to be other than true, accurate, and complete.

2. **TRANSPORTATION SERVICES: ACCEPTANCE AND DELIVERY.** In connection with each Spent Chemicals Shipment, VW&R shall execute with Generator a Transportation/Handling Agreement relating to such Shipment ("Transportation/Handling Agreement"). Whenever VW&R is obligated pursuant to a Transportation/Handling Agreement to transport a shipment of Spent Chemicals ("Spent Chemicals Shipment"), VW&R shall collect such Spent Chemicals Shipment from Generator, transport it to Recycling/TSD Contractor (subject to such intermediate storage at VW&R or other facilities as shall, in VW&R's sole judgment, be necessary or desirable), and deliver such Spent Chemicals Shipment to Recycling/TSD Contractor in the same condition as received from Generators, reasonable wear and tear to containers excepted. Likewise, Generator and Recycling/TSD Contractor shall execute a Recycling/TSD Handling Agreement relating to such Shipment ("Recycling/TSD Handling Agreement"). The two aforementioned agreements, in combination with a completed Uniform Hazardous Waste Manifest are hereinafter referred to as "Handling Documents". Spent Chemicals Shipments shall be delivered to Recycling/TSD Contractor accompanied by the appropriate counterpart copies of the Uniform Hazardous Waste Manifest and the executed Recycling/TSD Handling Agreement. VW&R or Recycling/TSD Contractor (at the option of Recycling/TSD Contractor) shall assign a unique identification number for each Approved Spent Chemicals Stream ("Approved Spent Chemicals Stream Number") which number shall be supplied to the other parties and shall be included with the USDOT description (Item 11) on each Uniform Hazardous Waste Manifest prepared in connection with each Spent Chemicals Shipment. VW&R shall have no obligation to accept delivery of any shipment of Spent Chemicals unless: (a) Generator executes all shipping manifests required by Recycling/TSD Contractor and federal and state authorities ("Uniform Hazardous Waste Manifests") and completed Handling Documents, (b) the Spent Chemicals Shipment has been properly prepared for shipment, including the affixation of required labels, and (c) there is no visual, apparent indication that any container is not suitable for shipment. VW&R shall not commingle, mix, change or in any way alter the composition of any Spent Chemicals to be sent to Recycling/TSD Contractor under this Agreement. VW&R's acceptance of delivery of any Spent Chemicals Shipment shall not release or absolve Generator from fulfilling its obligations under this Paragraph and in no event shall Generator or Recycling/TSD Contractor hold VW&R responsible should any of Generator's obligations hereunder not be met (except to the extent that VW&R is itself responsible for Generator's failure to perform its obligations under this Agreement). Subject to any special provisions in the Agreement, VW&R may utilize the services of subcontractors to perform transportation and/or storage services hereunder.

3. **TITLE TO SPENT CHEMICALS.** Title, risk of loss, and all other incidents of ownership of Spent Chemicals Shipments shall be transferred from Generator and vested in Recycling/TSD Contractor at the point in time when the Spent Chemicals Shipment departs from the Generator's facility on VW&R's or VW&R's subcontractor's vehicle(s) and Generator has signed the Uniform Hazardous Waste Manifest, subject to revocation of acceptance and title reversion, as provided in Paragraph 5 herein. Any marketable or usable material Recycling/TSD Contractor may recover from the Spent Chemicals Shipment shall be the sole property of Recycling/TSD Contractor.

4. **RECYCLING/TSD CONTRACTOR'S HANDLING OF SPENT CHEMICALS.** Recycling/TSD Contractor shall handle each Spent Chemicals Shipment at the Available Facility agreed to by Recycling/TSD Contractor and designated by Generator on the Uniform Hazardous Waste Manifest prepared in connection with such Spent Chemicals Shipment ("Designated Facility") using the method described in the List of Available Facilities and in compliance with all local, state, and federal laws governing such activities. Recycling/TSD Contractor shall use due care and prudence in: (a) Handling all Spent Chemicals Shipments so as to prevent injury to persons, contamination, or threatened contamination of the environment, and any liability to VW&R or Generators, and (b) selecting any method or person to dispose of empty containers, still bottoms, and other residues, so as to prevent injury to persons, contamination, or threatened contamination of the environment, and any liability to VW&R or Generators. When Recycling/TSD Contractor has become obligated to handle a Conforming Spent Chemicals Shipment (which are not Nonconforming, as defined below), that obligation is absolute, subject only to the terms hereof, including the excuses of performance set forth in Paragraph 18 of these Standard Terms and Conditions. Accordingly, should Recycling/TSD Contractor not be able to perform its obligations to handle a Conforming Spent Chemicals Shipment pursuant to a Recycling/TSD Handling Agreement, Recycling/TSD Contractor shall immediately notify VW&R and shall include with such notification a proposal to Generator of one or more alternate facilities or means of Handling such Conforming Spent Chemicals Shipment. VW&R shall immediately thereupon transmit such notification to Generator. Generator shall have ten (10) days following notification by VW&R in which to either accept such alternate facility or means or to

designate another facility or means for further Handling. Any reasonable incremental cost of such further Handling (over and above the original contract price) and any other reasonable costs incidental thereto, including, without limitation, additional transportation costs, shall be Recycling/TSD Contractor's sole obligation.

5. NONCONFORMING SPENT CHEMICALS.

(a) **Definition of Nonconformance.** A Spent Chemicals Shipment shall be considered nonconforming ("Nonconforming"), for the purposes of this Agreement, if:

(i) **Nonconformity with Spent Chemicals Information.** The Spent Chemicals contained therein do not conform to the Spent Chemicals Information supplied by Generator with respect to an Approved Spent Chemicals Stream or to the Lab Report or the Spent Chemicals contain constituents or components not listed in the Spent Chemicals Information which increase the nature or extent of the hazard, risk or cost undertaken by Recycling/TSD Contractor; or

(ii) **Manifest Information.** The Uniform Hazardous Waste Manifest signed by the Generator does not conform to the Spent Chemicals Information, does not conform to all requirements of law, or does not otherwise contain complete and accurate information relating to such Spent Chemicals Shipment.

(iii) **Containers.** The containers for the Spent Chemicals Shipment are incompatible with the Spent Chemicals, are damaged, leaking, improperly closed or improperly prepared for shipment, pose an undue hazard to the health or safety of personnel or the facility in connection with the Handling or transportation of the Spent Chemicals, or do not conform to requirements of state, federal or other pertinent law.

(b) **Notification of Nonconformance.** At any point in the Handling process, but only for 30 days following Recycling/TSD Contractor's acceptance of a Spent Chemicals Shipment at its or its subsidiary's facility (the time of acceptance being the time of Recycling/TSD Contractor's execution at its or its subsidiary's facility of the Uniform Hazardous Waste Manifest relating to such Shipment), both VW&R and the Recycling/TSD Contractor shall have an independent right to determine when a Spent Chemicals Shipment is Nonconforming, each in the exercise of its sole discretion. Whenever it is determined that all or a portion of a Spent Chemicals Shipment is Nonconforming, the party which makes such determination shall immediately notify the other and VW&R shall thereupon immediately notify Generator. At the time of such notification and at any time thereafter until such Nonconformance has been cured, VW&R may, and at Recycling/TSD Contractor's request shall, by notice to Generator ("Rescission Notice"), rescind any prior acceptance by VW&R or Recycling/TSD Contractor of delivery of any Spent Chemicals Shipment.

(c) **Reversion of Title to Nonconforming Spent Chemicals.** Upon the giving of a Rescission Notice, title, risk of loss, and all other incidents of ownership shall revert to Generator as of the point in time such title, risk of loss, and other incidents of ownership originally vested in Recycling/TSD Contractor as if title had never transferred to Recycling/TSD Contractor in the first instance.

(d) **Return or Alternate Disposal of Nonconforming Spent Chemicals.** Following the giving of a Rescission Notice, VW&R or the Recycling/TSD Contractor (whichever has possession) shall properly store, prepare for lawful transportation, and return to Generator (through VW&R) such Nonconforming Spent Chemicals within a reasonable time, not to exceed ten (10) days after the giving of the Rescission Notice, unless within such time the parties agree to some alternate lawful manner of disposition. The parties' agreement to an alternative manner of disposition or acceptance of a Nonconforming Spent Chemicals Shipment shall not be deemed a waiver of the right of VW&R and/or the Recycling/TSD Contractor to reject any other Nonconforming Spent Chemicals Shipment. Generator shall accept possession of any rejected Nonconforming Spent Chemicals Shipment returned to Generator and shall sign all required shipping papers and the Uniform Hazardous Waste Manifest(s) which accompany the Nonconforming Spent Chemicals Shipment. If Generator refuses to handle such Nonconforming Spent Chemicals Shipment, including without limitation shipment elsewhere for Handling, then VW&R or Recycling/TSD Contractor (whichever party has possession) shall thereupon be authorized to act as Generator's agent to take all steps, including execution of documents, deemed by VW&R in its sole judgment to be appropriate or necessary to handle such Spent Chemicals Shipment. Generator shall pay Recycling/TSD Contractor and/or VW&R all of their respective reasonable expenses and charges associated with handling, loading, preparing, transporting, storing, caring for, sampling, analyzing, or otherwise Handling Nonconforming Spent Chemicals under this Agreement so long as VW&R notifies Generator of the Nonconformity.

6. **BILLING AND PAYMENT.** VW&R, Generator, and Recycling/TSD Contractor shall submit invoices for charges and fees which any party may owe to the others under the Agreement. Payment shall be made within thirty (30) days following receipt of a billing invoice. Any sums not paid when due shall bear interest at the rate of 18% per annum, or the maximum amount permitted by law, whichever is lower.

7. **GENERATOR'S REPRESENTATIONS AND WARRANTIES.** Generator hereby represents and warrants as follows:

(a) All Spent Chemicals Information delivered to Recycling/TSD Contractor pertaining to the Spent Chemicals Shipment or the Spent Chemicals Stream to which it belongs and all information appearing on the Uniform Hazardous Waste Manifest or appropriate state manifest are complete, true, and correct;

(b) The description and specifications contained in the Spent Chemicals Information delivered to Recycling/TSD Contractor fairly advises Recycling/TSD Contractor of the hazards and risks known by Generator to be incident to the Handling of the Spent Chemicals;

(c) The Spent Chemicals Shipment conforms to the Spent Chemicals Information, the Lab Report, the Approved Spent Chemicals Stream Number, and the Uniform Hazardous Waste Manifest or appropriate state manifest;

(d) All containers in the Spent Chemicals Shipment are marked, labeled, and are otherwise in conformance with governmental laws, regulations, and orders;

(e) Generator holds clear title to the Spent Chemicals Shipment;

(f) Generator is under no legal restraint or order which would prohibit transfer of title of the Spent Chemicals Shipment to Recycling/TSD Contractor; and

(g) Generator has filed or will file with the appropriate governmental agency any preliminary notification required under applicable law for shipment of the Spent Chemicals Shipment.

1. **VW&R'S AND RECYCLING/TSD CONTRACTOR'S RESPECTIVE REPRESENTATIONS AND WARRANTIES.** The parties hereto make the following representations and warranties:

(a) Recycling/TSD Contractor hereby represents and warrants as follows:

(i) All information supplied by Recycling/TSD Contractor, its employees, agents, directors, officers, and representatives to VW&R concerning the Available Facilities, including all information set forth on the List of Available Facilities, any information furnished or to be furnished in connection with Recycling/TSD Contractor's obligations under the Agreement is (or, in the case of information furnished hereafter by Recycling/TSD Contractor, shall be) true, complete, and accurate, and there has been and shall be no material omission or misrepresentation in connection therewith; and

(ii) Recycling/TSD Contractor has obtained all necessary permits and licenses required in connection with its performance under the Agreement.

(b) VW&R hereby represents and warrants that all information supplied by VW&R, its employees, agents, directors, officers, and representatives to Recycling/TSD Contractor in connection with VW&R's obligations under the Agreement is (or, in the case of information furnished hereafter by VW&R, shall be) true, complete, and accurate, and there has been and shall be no material omission or misrepresentation in connection therewith.

Each and every representation and warranty made by either party in connection with the Handling of Spent Chemicals Shipments pursuant to the Agreement shall survive completion of performance under the Agreement.

9. **INDEMNIFICATION PROVISIONS: DEFINITIONS.** The following terms used herein and in the Agreement have the meanings set forth below:

(a) "CERCLA" means the Federal Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. § 9601 et seq., and all regulations thereunder, both as amended from time to time.

(b) "RCRA" means the Resource Conservation and Recovery Act, 42 U.S.C. § 6901 et seq., and all regulations thereunder, both as amended from time to time.

(c) "Other Enactment" means any federal, state, or local statute, ordinance, order, rule, or regulation of any type other than CERCLA and RCRA, including without limitation those relating to the Handling of Spent Chemicals, the contamination of the environment, any removal of such contamination or remediation thereof, or endangerment of human health.

(d) "Loss" means any and all of the following, whether the result of any action of any governmental agency or any third party: liabilities, penalties, forfeitures, suits, losses, damages, fines, expenses, debts, obligations, claims, including without limitation, fines, liabilities, or losses arising out of CERCLA, RCRA, or any and all Other Enactments, costs (including costs of investigation, defense, settlement and attorneys' and other professional fees whether or not litigation is instituted), costs and capital expenditures required for compliance with CERCLA, RCRA, or any and all Other Enactments, any losses related to death, bodily injury, property damage or destruction, damage to the environment, losses which any Indemnified Party may sustain as a result of any investigation, removal, remediation, cleanup, or decontamination arising out of any contamination of or discharge or threatened discharge into the environment, whether liquidated or unliquidated, fixed or contingent, known or unknown, but in no event shall include damages for loss of use, income or profits.

(e) "Indemnified Party" and "Indemnified Parties" shall mean the party or parties defined as the "Indemnified Party" or "Indemnified Parties" in the Agreement and shall include the respective past, present, and future officers, directors, employees, agents, insurers, and successors of such party or parties.

10. **RECYCLING/TSD CONTRACTOR INDEMNIFICATION.** Recycling/TSD Contractor shall defend, indemnify, and hold harmless each and every Indemnified Party from and against any and all Loss which such Indemnified Party may sustain or incur, be responsible for or pay out (except to the extent that such Indemnified Party is itself at fault with respect to such Loss) as a result of:

(a) Recycling/TSD Contractor's breach of any representation, warranty, term, or provision of the Agreement, or

(b) Recycling/TSD Contractor's or any other person's Handling of Spent Chemicals, containers, and residues once such Spent Chemicals have been accepted by Recycling/TSD Contractor at its facilities (as provided in Paragraph 5(b) of these Standard Terms and Conditions), regardless of whether Recycling/TSD Contractor is without fault with respect to such Loss.

(c) The negligence or intentional misconduct of Recycling/TSD Contractor, its employees, agents, representatives or subcontractors in the performance of this Agreement, provided that such indemnification shall not apply to the extent such liabilities result from Indemnified Party's negligence or intentional misconduct or from a breach of this Agreement by Indemnified Party.

VW&R's indemnification of Recycling/TSD Contractor is provided by separate agreement.

11. **INDEPENDENT CONTRACTORS.** Each party is and shall be an independent contractor in the Handling of Spent Chemicals under the Agreement. No party or anyone employed by any party shall be the agent, representative, employee or servant of any other party in the Handling of

Spent Chemicals under the Agreement except as specifically provided to the contrary in the Agreement.

12. **NOTICE AND COOPERATION.** The following procedures shall apply to indemnification under the Agreement:

(a) In the event that any Indemnified Party shall have a claim made or threatened against it as to which the Indemnified Party believes it is entitled to indemnification under the Agreement, it shall promptly notify the party against whom indemnification is sought and VW&R. The notice shall specify the party from which indemnification is sought, and provide available material details of the claim, with copies of any relevant documents. Failure to notify the above party(ies) of any claim shall relieve such party of its obligation to indemnify any Loss related to that particular claim.

(b) Within ten (10) days after receipt of a notice asserting a right to indemnification, the party from which indemnification is sought shall notify all other Indemnified Parties whether it undertakes the defense and disposition of the claim or declines responsibility for the claim. A party which undertakes the defense and disposition of a claim may reserve its right to decline responsibility if facts subsequently come to its attention which indicate that it is not obligated to indemnify.

(c) A party which undertakes the defense and disposition of a claim shall have control of the defense and disposition, so long as such party's ability to perform its obligations under this Agreement relating to indemnification shall not suffer any material adverse change. The Indemnified Parties shall cooperate in the defense as reasonably requested by, and at the expense of, the undertaking party. The other Indemnified Parties may further participate in the defense at their own expense, but shall not have control of the defense.

(d) If a party declines responsibility for a tendered claim and the parties cannot resolve the dispute within thirty (30) days, the question of responsibility to indemnify shall be submitted to arbitration under Paragraph 19 of these Standard Terms and Conditions. Pending such arbitration, the Indemnified Party against which the claim was asserted shall act to protect the interests of the parties with respect to the claim, subject to reimbursement of all costs and expenses by any party which is thereafter determined to have responsibility for conducting such defense.

13. **NONEXCLUSIVITY.** The parties acknowledge that the arrangements contemplated under the Agreement are nonexclusive and that any Generator may, in its sole discretion, select persons and facilities other than Recycling/TSD Contractor to Handle Spent Chemicals, including but not limited to persons who are affiliates of VW&R, and that VW&R may utilize the services of persons and facilities other than Recycling/TSD Contractor to Handle Spent Chemicals, including but not limited to VW&R's own affiliates.

14. **ENTIRE AGREEMENT.** The Agreement represents the entire understanding between the parties hereto relating to the matters addressed herein. The Agreement supersedes any and all prior agreements, whether written or oral, which may exist between the parties.

15. **AMENDMENT.** The Agreement may be amended from time to time only by an express instrument in writing signed by the parties.

16. **SAVINGS CLAUSE.** If any one or more of the provisions contained in the Agreement shall, for any reason, be held to be invalid, illegal, or unenforceable in any respect, such invalidity, illegality, or unenforceability shall not affect any other provisions of the Agreement and the Agreement shall be construed as if such invalid, illegal, or unenforceable provision had never been contained herein.

17. **SCOPE AND SURVIVAL.** The obligations of the parties to indemnify under the Agreement shall survive the expiration or termination of this Agreement.

18. **EXCUSE OF PERFORMANCE.** The performance of this Agreement, except for the payment of money for services already rendered, may be suspended by any party in the event performance is prevented by causes beyond the reasonable control of such party. Such causes shall include, but not be limited to, acts of God, acts of war, riot, fire, explosion, accident, flood or sabotage, governmental laws, regulations, requirements, orders, lock-outs, or strikes.

19. **MANDATORY ARBITRATION.** Any controversy or claim arising out of or relating to the Agreement or breach of the Agreement shall be settled by arbitration in accordance with the Commercial Arbitration Rules of the American Arbitration Association. The award resulting from the arbitration shall be final and binding upon the parties and judgment on the award rendered may be entered in any court having jurisdiction. The place of arbitration shall be mutually agreed upon by the parties to the arbitration or, if the parties are unable to agree, St. Louis, Missouri.

20. **ATTORNEYS' FEES AND EXPENSES.** If any action or proceeding shall be commenced before any court or governmental agency to enforce the terms of the Agreement, or if any arbitration shall take place pursuant to Paragraph 19 of these Standard Terms and Conditions, then the prevailing party shall be entitled to recover from the other party the reasonable attorneys' fees, costs, and expenses incurred by such prevailing party in connection with such action, proceeding, or arbitration.

21. **NOTICES.** Except as otherwise provided, any notice to be given under the Agreement shall be in writing and shall become effective when delivered to a party (with appropriate copies to other persons as indicated in the Agreement) at the address of the party as indicated in the Agreement or at such other address as shall be designated by such party in a written notice to the other party(ies). In the cases of: (a) notice required to be given of Non-conforming Spent Chemicals Shipment or (b) a Rescission Notice, notice is deemed to have been given at the time the notifying party informs the party to be notified by telephone, provided that written confirmation is mailed to the party to be notified, postage prepaid, within seventy-two (72) hours thereafter.