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Supplemental Characterization, Groundwater Monitoring Well Installation and July 2005 Groundwater Quality Monitoring Report Former Automotive Tire Service Facility 1132 Thorne Road Tacoma, WA 98421

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Appendix E – Laboratory Analytical Report /Chain of Custody F orms

LSI Adapt, Inc. (Adapt), is pleased to provide you with the following results of our Supplemental Characterization work for the above referenced site. This report is provided for Goodstein Law Group, PLLC. and their agents. If this report is to be reproduced and/or transmitted to a third party, it must be reproduced and/or transmitted in its entirety. Any exceptions will be made only with the written permission of Adapt.

1.0 INTRODUCTION

1.1 Background

Adapt understands that previous environmental work including a Phase I Environmental site Assessment, and subsurface investigations has been completed at this site by others. Adapt was provided copies of the following Environmental Associates, Inc. (EAI) reports:

- Preliminary Subsurface Exploration, RevChem Plastics, Inc., 1132 Thorne Road, Tacoma Washington dated June 10, 2004, prepared for Mr. Doug Dennis of RevChem Plastics.
- Groundwater Plume Delineation, RevChem Plastics, Inc., 1132 Thorne Road, Tacoma Washington dated July 23, 2004 prepared for Mr. Doug Dennis of RevChem Plastics.; and
- Offsite Groundwater Plume Delineation, Former Automotive Tire Service Facility, 1132 Thorne Road, Tacoma, Washington, dated February 11, 2005 prepared for Mr. Steve Shaub of Shaub Ellison Company, Inc.

Adapt understands that the subject site was formerly occupied by an automotive tire service facility. According to the February 11, 2005 EAI report subsurface investigations have documented halogenated volatile organic compounds (HVOCs) in groundwater beneath the subject site at minimal levels and the immediately adjacent northwest property at elevated levels. Data collected to date has approximately delineated the northeastern and southeastern portion of the groundwater contamination. In addition, according to the EAI report the south and southwest portion of the subject site have not been fully assessed.

The EAI report stated that up to 8 groundwater wells have been placed on and off the subject site during previous investigations. According to the February 11, 2005 EAI report, groundwater is gradually flowing to the north at a shallow gradient of approximately 0.004 to 0.008 ft/ft (based on Adapt's calculations using EAI's Plate 3) and may be influenced by tidal actions which may impact contaminant transport dynamics. Analytical results from the initial groundwater sampling event indicated that tetrachloroethene (PCE) is present above current cleanup levels in four monitoring wells (two on-site and two off-site). The analytical results from the remaining monitoring wells reported other HVOCs (trichloroethene, cis and trans-dichloroethene and vinyl chloride) as below cleanup levels or below laboratory detection levels.

1.3 Purpose

The purpose of this assessment is to address data gaps including further assessment of the soil and groundwater south of Monitoring well MW-2, document groundwater gradient and collect representative groundwater samples obtained from State approved groundwater-monitoring

wells.

1.4 Scope of Work and Authorization

The scope of work for this project consisted of the collection of groundwater samples from the existing monitoring wells to document current conditions including groundwater migration direction and contaminant levels, collection of soil and groundwater samples from the area to the south of Monitoring Well MW-2, and the installation and sampling of one new well MW-9 south of MW-2. The samples were tested for halogenated volatile organic compounds. Authorization to perform this supplemental characterization was given by Mr. Steve Shaub of Shaub Ellison in the form of a signed Adapt proposal (LSI Adapt Proposal Number P2607-Modifed) dated July 27, 2005.

2.0 FIELD ACTIVIES

2.1 Groundwater Monitoring Well Sampling (Task 1)

On July 7, 2005 the eight groundwater monitoring wells were purged using low flow methods, with a GeoPump 2 Peristaltic pump, with disposable ¼-inch polyethylene tubing, until temperature, conductivity, and pH were stabilized and then sampled using a peristaltic pump. Generally the end of the tube was set approximately 1 to 1.5 feet above the bottom of the well approximately 0.5 to 1-foot above the reported top of the underlying silt layer. Prior to purging, the depth to water in all wells was recorded to evaluate the flow direction at time of sampling. During purging flow rate of the pump was approximately 0.125 to 0.20 Liters per minute (Lpm) and approximately 3.0 to 5.8-liters were purged from each well prior to sampling. Groundwater field sampling sheets are attached in Appendix D.

Samples were collected with the peristaltic pump and placed into laboratory prepared containers. The filled containers were placed in a chilled cooler at approximately 4 degrees Celsius for transport to OnSite Environmental Inc. (OnSite) for analytical testing for halogenated volatile organic compounds (HVOCs) using EPA Method 8260B. Laboratory analytical results are summarized in Table 2. Laboratory reports and the completed chain of custody forms are attached in Appendix E.

Environmental Management Services, LLC (environmental consultant for the adjacent property) collected groundwater samples from the four wells located on the adjacent property. The groundwater samples collected by EMS were analyzed by Libby Environmental. EMS provided Adapt with the analytical results which are presented on Table 2 for comparison.

2.1.1 Groundwater Elevation and Flow Direction

Depth to water was measured in the wells to evaluate the groundwater elevations beneath the subject site. Depth to groundwater ranged from 6.11 in the monitoring well MW-7 to 7.80 in MW-4 as measured from the top of casing at the time of monitoring/sampling (July 7, 2005). Based on the observed elevations, groundwater migration direction appears to be towards the north beneath the subject site and adjacent property at a gradient ranging from approximately 0.004 to 0.008 ft/ft. Fluid levels are summarized on Table 1 attached in Appendix A, and estimated groundwater migration direction is graphically depicted on Figure 3 attached in Appendix B.

2.1.2 Groundwater Analytical Results

Eight groundwater samples, one duplicate groundwater sample and one trip blank were submitted to OnSite for analytical testing for HVOCs using EPA Method 8260B. The samples were collected using low flow-sampling procedures designed to minimize agitation of the water. Monitoring wells were purged at approximately 0.20 Lpm and sampled at approximately 0.10 Lpm. Field parameters were monitored during purging and samples were collected after stable reading for pH, temperature, Dissolved oxygen and mV were obtained. Groundwater sampling field parameter notes are presented in Appendix D. Analytical results have been summarized in Table 2 attached in Appendix A and depicted on Figures 4 through 7 attached in A ppendix B.

Based on the results summarized in Table 2, tetrachloroethene (PCE) was exhibited in MW-1, MW-2, MW-5 through MW-8 above the Washington State Model Toxics Control Act (MTCA) Method A Cleanup level of 5.0 parts per billion (ppb). PCE was exhibited in the remaining two wells above the laboratory reporting limit but below MTCA Method A Cleanup levels. Trichloroethene was exhibited above laboratory reporting limits in the same wells and above the MTCA Method A Cleanup levels of 5.0 ppb only in MW-8. Vinyl Chloride was exhibited above the MTCA Method A Cleanup Level of 0.2 ppb in MW-6. (cis) and (trans) 1,2 Dichloroethene were exhibited in Monitoring wells MW-2, and MW-6 through MW-8 at levels above laboratory reporting limits but below MTCA Method B Cleanup levels with the exception of MW-6 which exceeded the MTCA Method B Cleanup level of 80 ppb for (cis) 1,2 Dichloroethene. Copies of laboratory results and chain-of-custody documents have been included in Appendix E.

2.2 Supplemental Characterization Sample Collection and Observations (Task 2)

On August 23, 20005, Adapt advanced four Strataprobe borings to depths of approximately 16 feet below ground surface (bgs). The borings were advanced using a Strataprobe rig, owned and operated by Environmental Services Network, Inc. (ESN), under subcontract to Adapt. All borings were supervised, sampled, and logged by an Adapt Licensed Geologist.

The borings were located based on data collected from previous studies and groundwater migration direction, field observations, and site access. The four borings were advanced south of Monitoring Well MW-2 and north of the former marine service building (Castan Trucking). All borings were advanced to a silt layer located at an approximate depth between 14.5 to 15.5 feet below ground surface (bgs). Figure 2 shows the approximate locations of the borings, site boundaries, and other pertinent site features. Subsurface exploration and soil sampling procedures are described in Appendix C.

Soil samples were generally collected in the borings from continuous probing at approximate intervals, of 4 feet, using a four-foot long core soil sampler with an acetate liner, which is pushed as the lead section of the tool string.

Discrete soil samples for halogenated volatile organic compounds were collected in compliance with EPA Method 5035A. A "QuickDraw" syringe was used to collect the core samples from the undisturbed split spoon sampler. The approximate 5-gram core sample was then placed in a pre-tared 40ml vial for transport to the laboratory. Based on laboratory and analytical requirements up to three core samples were collected from each interval to be analyzed. A separate 4-ounce glass jar with a Teflon® lined lid was collected from each interval for moisture

content. The soil samples were stored in a cooler at approximately 4 degrees Celsius for transport to the project analytical laboratory. All samples were collected, stored and transported under standard Chain of Custody (COC) procedures. A completed COC form is presented in Appendix E.

All soil samples were field screened using a MiniRae 10.6ev Photoionization Detector (PID). Field screen samples were collected from the remaining soil in the sampled interval. A representative soil sample was placed in a Ziplock® type plastic bag and sealed. The sample was allowed to volatilize for at least 10 minutes prior to obtaining a reading. The PID tip was inserted in small hole poked in the bag just prior to reading. The highest PID reading observed was recorded on the boring log sheet, as were any subjective olfactory impressions of the sample by the on-site geologist.

Groundwater samples were collected by advancing probe rods and a 3 or 4-foot screen sampler assembly to the desired depth, exposing the screen, and allowing water to flow into the screen assembly. One end of new polyethylene tubing was lowered through the rods to the screened interval and the other end was attached to a peristaltic pump. The screen sampler was placed from approximately 10 to 14 feet bgs. Groundwater samples were collected in laboratory supplied containers including 40 millimeter VOA vials.

Upon completion, the test borings were abandoned by placing dry bentonite into the borings, which was then hydrated. The borings were sealed to match the existing surface.

2.2.1 Results

2.2.1.1 Subsurface Conditions: Soil

Soils encountered in the borings generally consisted of approximately 3 to 4-inches of asphalt overlying approximately 2 to 2.5-feet of moist, brown, silty gravelly sand that has been interpreted as fill material. Underlying the fill material in the borings was a loose, moist becoming wet/saturated with depth, gray brown to dark brown, fine to medium sand with occasional fine to coarse sand layers to a depth of approximately 14 to 15 feet bgs. Underlying the sands was a wet, dark brown, silt with trace fine sand to the total depth explored of approximately 16 feet bgs. Figure 2 shows the approximate locations of the borings, site boundaries, and other pertinent site features. Subsurface exploration and soil sampling procedures are described in Appendix B.

All soil samples were field screened using a MiniRae Photoionization Detector (PID). No field evidence of environmental impacts, such as staining or odors, were noted in the borings. PID readings for soil samples collected from the borings ranged from 0.0 parts per million (ppm) to 2.4 ppm. Background readings ranged from 0.0 ppm to 1.3 ppm. No petroleum or chemical odors were noted in any of the soil samples.

2.2.1.2 Subsurface Conditions: Groundwater

Groundwater was encountered in the borings at approximately 7 to 7.5 feet bgs. No field evidence of environmental impacts such as sheens, odors or free product were observed in the groundwater.

2.2.2 Quantitative Analyses

The analytical testing was performed by OnSite Environmental Services (OnSite), which is a Washington certified laboratory.

2.2.2.1 Quantitative Analyses- Soil

Selected soil samples were submitted to OnSite for analytical testing. The soil samples were analyzed for halogenated volatile organic compounds (HVOCs) using EPA Method 8260B. Since no field evidence of impact was noted in the borings, the soil samples were selected from the interval just above the silt layer present at approximately 14 to 14.5 feet bgs. The analytical results have been summarized below in Table 3, and the laboratory certificates and chain of custody forms are included in Appendix E.

Based on the analytical results provided in Table 3, halogenated volatile organic compounds were not exhibited in the soil samples tested. Methylene Chloride was exhibited in the soil samples and based on laboratory QAQC documents is considered a laboratory contaminant. Copies of laboratory results and chain-of-custody documents have been included in Appendix E. Specific sampling locations and analytical results are depicted on Figure 2a.

2.2.2.2 Quantitative Analyses- Groundwater

Four groundwater samples were submitted to OnSite for selected analytical testing. The groundwater samples were analyzed for halogenated volatile organic compounds using EPA Method 8260B. The analytical results have been summarized below in Table 4, and the laboratory certificates and chain of custody forms are included in Appendix E.

Based on the analytical results provided in Table 4, tetrachloroethene was exhibited in borings SC-1, SC-2 and SC-4 above the laboratory reporting limit but below current Washington State Model Toxics Control Act (MTCA) Method A Cleanup level of 5 parts per billion. No other halogenated volatile organic compounds were exhibited in the groundwater samples tested. Copies of laboratory results and chain-of-custody documents have been included in Appendix E. Specific sampling locations and analytical results are depicted on Figure 2a.

2.3 Monitoring Well MW-9 Installation (Task 3)

2.3.1 Monitoring Well Installation

On September 21, 2005 Adapt advanced one direct push borings to a depth of approximately 15.5 feet ground surface (bgs). The boring, was converted to a monitoring well. The boring was advanced using a Strataprobe drill rig, owned and operated by Environmental Services Network, Inc. (ESN), under subcontract to our firm. All borings were supervised, sampled, and logged by an Adapt Licensed Geologist.

The boring was located based on the results of the supplemental characterization, reported groundwater migration direction and data collected from previous studies and site access limitations. Soil Boring MW-9 was advanced to approximately 15.5 feet bgs and was located approximately 45 feet south-southeast of Monitoring Well MW-2. Figure 3a shows the approximate locations of MW-9 and the previous eight monitoring wells, existing building, site

boundaries, and other pertinent site features. Subsurface exploration and soil sampling procedures are described in Appendix C.

Soil samples were generally collected in the borings from continuous probing at approximately 4 foot intervals, using a four-foot long core soil sampler with an acetate liner, which is pushed as the lead section of the tool string.

Discrete soil samples for halogenated volatile organic compounds were collected in compliance with EPA Method 5035A. A "QuickDraw" syringe was used to collect the core samples from the undisturbed split spoon sampler. The approximate 5-gram core sample was then placed in a pre-tared 40ml vial for transport to the laboratory. Based on laboratory and analytical requirements up to three core samples were collected from each interval to be analyzed. A separate 4-ounce glass jar with a Teflon® lined lid was collected from each interval for moisture content. The soil samples were stored in a cooler at approximately 4 degrees Celsius for transport to the project analytical laboratory. All samples were collected, stored and transported under standard Chain of Custody (COC) procedures. A completed COC form is presented in Appendix E.

All soil samples were field screened using a MiniRae 10.6ev Photoionization Detector (PID). Field screen samples were collected from the remaining soil in the sampled interval. A representative soil sample was placed in a Ziplock® type plastic bag and sealed. The sample was allowed to volatilize for at least 10 minutes prior to obtaining a reading. The PID tip was inserted in small hole poked in the bag just prior to reading. The highest PID reading observed was recorded on the boring log sheet, as were any subjective olfactory impressions of the sample by the on-site geologist.

The monitoring well was completed with 5.5 feet of 2-inch I.D., Schedule-40, PVC, blank casing thread fit to 10 feet of 2-inch I.D., Schedule-40, PVC, machine slotted well screen (0.10 inch slots). Each well was installed with a graded Colorado silica sand filter pack, with a bentonite and concrete surface seal and a flush mounted traffic rated vault.

The monitoring well was developed approximately 24 hours after installation. The well was developed using a disposable bailer. The monitoring well was alternately surged and bailed to clear the casing and filter sand of silt and clay particles and then bailed until the discharge was clear. Approximately 15 gallons of water were bailed from MW-9 during the development.

All soil cuttings, decontamination water, purge water, and development water were placed in labeled 55-gallon drums for temporary storage prior to evaluation for appropriate disposal.

2.3.2 Monitoring Well Survey

During the July 2005 groundwater sampling event, Adapt observed that the top of the casing of Monitoring Well MW-1 was damaged and the well cap and surface seal did not provide a adequate seal that may allow infiltration of surface water during storm events. On August 23, 2005, Adapt recut the top of the casing to remove the damaged portion, provided a new well cap and repaired the surface seal. Monitoring Well MW-1 was resurveyed during the survey for MW-9 on September 27, 2005 to obtain a new top of casing elevation to assess groundwater elevations. Top of casing and ground surface elevations of Monitoring Well MW-9 was established using optical differential leveling techniques relative to elevation from Monitoring

Well MW-2. The elevation for MW-2, established by EAI, was used to resurvey MW-1 and survey MW-9. Monitoring Well MW-4 was also resurveyed for comparison to previous surveys.

2.3.3 Monitoring Well Sampling

Monitoring Well MW-9 was sampled at least 48 hours after development to allow any residual particulate material to settle to the bottom of the well. Monitoring Well MW-1 was sampled to assess any changes in contaminant concentrations after repairing the casing and surface seal. MW-2 was sampled as comparison/control sample to identify potential normal fluctuations of contaminant level in the groundwater. Monitoring wells MW-1, MW-2 and MW-9 were sampled according to Adapt's standard procedures for low flow purging and sampling. The wells were sampled using a GeoTech Geopump 2 peristaltic pump with disposable ¼-inch outside diameter tubing. The lower end of the tubing was placed approximately 0.5 to 1.0 feet above the sand/silt interface at approximately 13.5 feet bgs. Low flow purging and sampling was conducted at a flow rate designed to avoid mobilizing particulate matter from the formation. Adapt purged the monitoring wells at a flow rate of approximately 0.20 liters per minute (Lpm) in all wells with no apparent water level drawdown.

2.3.3 Results

2.3.3.1 Subsurface Conditions: Soil

Soils encountered in the boring generally consisted of approximately 3 to 4-inches of asphalt overlying approximately 2 to 2.5-feet of moist, brown, silty gravelly sand that has been interpreted as fill material. Underlying the fill material in the boring was a loose, moist becoming wet/saturated with depth, gray brown to dark brown, fine to medium sand with occasional fine to coarse sand layers to a depth of approximately 14.5 feet bgs. Underlying the sands was a wet, dark brown, silt with trace fine sand to the total depth explored of approximately 15.5 feet bgs. Figure 2 shows the approximate locations of the boring/well, site boundaries, and other pertinent site features. Subsurface exploration and soil sampling procedures are described in Appendix C.

All soil samples were field screened using a MiniRae Photoionization Detector (PID). No field evidence of environmental impacts, such as staining or odors, were noted in the borings. PID readings for soil samples collected from the borings ranged from 0.0 parts per million (ppm) to 2.4 ppm. Background readings ranged from 0.0 ppm to 1.3 ppm. No petroleum or chemical odors were noted in any of the soil samples.

2.3.3.2 Subsurface Conditions: Groundwater

Groundwater was encountered in the borings at approximately 7 to 7.5 feet bgs. No field evidence of environmental impacts were observed in the borings.

2.3.4 Quantitative Analyses

The analytical testing was performed by OnSite Environmental Services (OnSite), which is a Washington certified laboratory.

2.3.4.1 Quantitative Analyses- Soil-MW-9

One soil sample was submitted to OnSite for analytical testing. The soil sample was analyzed for halogenated volatile organic compounds (HVOCs) using EPA Method 8260B. Since no field evidence of impact was noted in the borings, the soil sample was selected from the interval just above the silt layer present at approximately 14.5 feet bgs. The analytical results have been summarized below in Table 3, and the laboratory certificates and chain of custody forms are included in Appendix E.

Based on the analytical results provided in Table 3, halogenated volatile organic compounds were not exhibited in the soil sample tested. Copies of laboratory results and chain-of-custody documents have been included in Appendix E. Specific sampling locations are depicted on Figure 4a.

2.3.4.2 Quantitative Analyses- Groundwater

Three groundwater samples and one duplicate sample were submitted to OnSite for selected analytical testing. The groundwater samples were analyzed for halogenated volatile organic compounds using EPA Method 8260B. The analytical results have been summarized below in Table 2, and the laboratory certificates and chain of custody forms are included in Appendix E.

Based on the analytical results provided in Table 2, tetrachloroethene (PCE) was exhibited Monitoring Well MW-9 above the laboratory reporting limit but below current Washington State Model Toxics Control Act (MTCA) Method A Cleanup levels. Monitoring wells MW-1 and MW-2 exhibited PCE above MTCA Method A Cleanup level. Monitoring Wells MW-1 and MW-2 also exhibited trichloroethene (TCE) above laboratory cleanup levels but below MTCA Cleanup levels. Trans and Cis-Dichloroethene were exhibited in MW-2 above laboratory cleanup levels but below MTCA Cleanup levels. Copies of laboratory results and chain-of-custody documents have been included in Appendix E. Specific sampling locations are depicted on Figure 4a.

3.0 DISCUSSION

Based on the analytical data collected during previous subsurface investigations by EAI and LSI Adapt's current supplemental characterization, PCE has been documented in on and off-site monitoring wells above State of Washington Model Toxics Control Act (MTCA) Method A Cleanup levels. EAI's previous studies did not identify a source area on-site. Suspect areas in the former service bay associated with parts washers and a lube pit were assessed by EAI and did not appear to have been identified as the potential source for the observed PCE. EAI collected data from the former service bays and the adjacent property to the south. However, a data gap immediately north of the Castan Trucking building and immediately to the south of Monitoring well MW-2 appeared to exist. The Castan Trucking building was used by a marine service company for a few years. Because it is possible the marine service company used chlorinated solvents in its operation this area was investigated. The building is located in the reported upgradient direction from the area off-site with the highest concentrations of PCE in groundwater. To address this data gap, Adapt advanced five direct push borings (four borings and one monitoring well MW-9) in the area to the south of Monitoring Well MW-2 and north of the adjacent building. Analytical results documented PCE in groundwater in the four borings and MW-9 at levels well below the current MTCA Method A Cleanup levels. No PCE was

documented in soil in any of the five borings.

Groundwater elevation measurements from both EAI and Adapt sampling events in January, July and September 2005 have documented a northward groundwater migration direction at a shallow gradient.

Groundwater quality monitoring data from both on and off-site monitoring wells suggests that the highest documented contaminant level of PCE is located off-site to the northwest of the subject site in the vicinity of MW-6, MW-7 and MW-8, in an apparent crossgradient direction from the subject site. On-site data appears to suggest that the highest on-site concentrations are located in the vicinity of MW-2 and not near the suspected source MW-1 (corner of the former service bay) or downgradient of the former service bay (MW-4. The analytical data from MW-9 indicates that it is unlikely that the source zone is south of MW-2.

4.0 CONCLUSIONS AND RECOMMENDATIONS

Soil and groundwater analytical data, and reported groundwater migration direction data collected to date do not indicate an apparent residual source zone on the subject site.

Current groundwater elevation data suggests that groundwater is gradually migrating to the north. Given the flow dynamics and estimated gradient is possible that seasonal or tidal influences may alter the groundwater migration direction. Fluctuating groundwater migration directions would affect the shape and location of the dissolved plume and potentially make identification of a source zone difficult. Adapt believes that investigation of potential seasonal and/or tidal influences on groundwater migration direction both on, and adjacent to, the subject site may assist in evaluating possible source location(s).

Given the recalcitrant nature of chlorinated solvents to attenuate, a significant on-site residual source zone, if present, would likely impact the groundwater beneath and to the north of the subject site to a greater degree than currently observed. The presence of daughter products (TCE, trans- and cis-DCE and vinyl chloride) in groundwater appears to indicate that some natural attenuation is occurring at the site. However, if significant on-site attenuation has occurred (enough to reduce a potential on-site source), it is likely that higher levels of daughter products would be present in on-and off-site wells. Current evidence suggests an off-site source is more likely, based on the observed contaminant concentrations in the subject site's groundwater and the reported groundwater migration direction.

5.0 LIMITATIONS

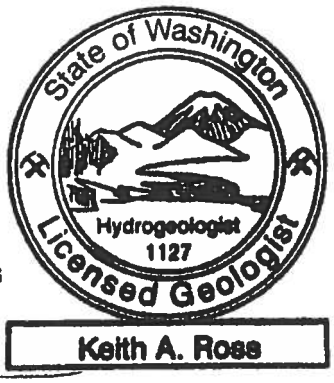
Information contained in this report is based upon site characterization, field observations, and the laboratory analyses completed for this study. Conclusions presented are professional opinions based upon our interpretation of the analytical laboratory test results, as well as our experience and observations during the field activities. The number, locations, and depth of the explorations, as well as the analytical scope were completed within the site and proposal constraints. Adapt's observations and the analytical data are limited to the vicinity of each test probe and do not necessarily reflect conditions across the site. No other warranty, express or implied is made. In the event that additional information regarding either the site or surrounding properties becomes known, or changes to existing conditions occurs, the conclusions in this report should be reviewed, and if necessary, revised to reflect the updated information. Project specific limitations are presented in the appropriate sections of this report.

This report has been prepared for the exclusive use of Goodstein Law Group, LLC and their agents for specific application to the project site. Use or reliance upon this report by a third is at their own risk. Adapt does not make any representation or warranty, express or implied, to such other parties as to the accuracy or completeness of this report or the suitability of its use by such other parties for any purpose whatever, known or unknown, to Adapt.

Adapt appreciates the opportunity to work with you on this project. If you have any questions, or if we can be of further assistance to you, please contact us at (206) 654-7045.

Respectfully Submitted,

LSI Adapt, Inc.



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Attachments:

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Appendix E – Laboratory Analytical Report /Chain of Custody Forms

APPENDIX A

TABLES

Table 1: Summary of Fluid Measurements					
Well Number	Top of Casing Elevation (ft)	Date Measured	Depth to Product (ft)	Depth to Water (ft)	Groundwater Elevation (ft)
MW-1	15.00	7/12/04	NA	7.76	7.24
		1/27/05	NA	7.43	7.57
		7/7/05	NA	7.54	7.46
	14.94*	9/27/05	NA	8.13	6.81
MW-2	13.88	7/12/04	NA	6.48	7.39
		1/27/05	NA	6.11	7.77
		7/7/05	NA	6.22	7.66
		9/27/05	NA	6.96	6.92
MW-3	14.93	7/12/04	NA	7.46	7.47
		1/27/05	NA	7.11	7.82
		7/7/05	NA	7.22	7.71
		9/27/05	NA	7.95	6.98
MW-4	15.10	7/12/04	NA	7.99	7.12
		1/27/05	NA	7.68	7.42
		7/7/05	NA	7.80	7.30
		9/27/05	NM	8.40	6.70
MW-5	13.33	Not installed			
		1/27/05	NA	6.06	7.27
		7/7/05	NA	6.21	7.12
		9/27/05	NM	NM	NA
MW-6	13.51	Not installed			
		1/27/05	NA	6.18	7.33
		7/7/05	NA	6.29	7.22
		9/27/05	NM	NM	NA
MW-7	13.64	Not installed			
		1/27/05	NA	5.98	7.66
		7/7/05	NA	6.11	7.53
		9/27/05	NM	NM	NA

Table 1: Summary of Fluid Measurements					
Well Number	Top of Casing Elevation (ft)	Date Measured	Depth to Product (ft)	Depth to Water (ft)	Groundwater Elevation (ft)
MW-8	13.68	Not installed			
		1/27/05	NA	6.18	7.50
		7/7/05	NA	6.27	7.41
		9/27/05	NM	NM	NA
MW-9	13.57	9/2705	NA	6.46	7.11

Notes: Wells were surveyed using an assumed elevation of Monitoring Well MW-1 as 15 feet.
July 12, 2004 and January 27, 2005 were measured by Environmental Associates.

* MW-1 casing was repaired and resurveyed.

Table 2: Summary of Groundwater Analytical Results (µg/L)[1]						
Sample		Tetrachloroethene (PCE)	Trichloroethene (TCE)	(cis) 1,2 Dichloroethene (c-DCE)	(trans) 1,2 Dichloroethene (t-DCE)	Vinyl Chloride (VC)
Sample ID	Date					
MW-1	7/12/04[2]	4.1	<1.0[3]	<1.0	<1.0	<1.0
	1/24/05[2]	**6.2**[4]	<1.0	<1.0	<1.0	<5.0
	7/7/05	**13(13)**[5]	0.69 (0.69)	<0.20	<0.20	<0.20
	9/27/05	6.6(6.2)	0.48 (0.46)	<0.20	<0.20	<0.20
MW-2	7/12/04	<1.0	<1.0	<1.0	<1.0	<1.0
	1/24/05	**9.9**	3.5	3.2	<1.0	<5.0
	7/7/05	**29**	4.5	1.3	0.26	<0.20
	9/27/05	**23**	4.2	2.4	0.58	<0.20
MW-3	7/12/04	<1.0	<1.0	<1.0	<1.0	<1.0
	1/24/05	<1.0	<1.0	<1.0	<1.0	<1.0
	7/7/05[6]	1.9	<0.20	<0.20	<0.20	<0.20
	9/27/05	NS	NS	NS	NS	NS
MW-4	5/04	1	ND	ND	ND	ND
	1/24/05	1.6	<1.0	<1.0	<1.0	<5.0
	7/7/05	2.7	<0.20	<0.20	<0.20	<0.20
	9/27/05	NS	NS	NS	NS	NS
MW-5[7]	1/27/05	1.9	0.57	0.29	0.20	<0.20
	7/7/05	**6.0 [5.9]**[9]	0.82 [1.0]	<0.20 [<1.0]	<0.20 [<1.0]	<0.20 [<0.2]
	9/27/05	NS	NS	NS	NS	NS
MW-6[7]	1/27/05	**53**	**12**	75	6.9	**0.63**
	7/7/05	**11 [9.7]**	2.3 [2.8]	**91 [64]**	9.1 [5.7]	**1.3 [0.48]**
	9/27/05	NS	NS	NS	NS	NS
MW-7[7]	1/27/05	3.3	0.93	3.8	0.95	<0.20
	7/7/05	**33 [27]**	3.1 [3.1]	2.8 [2.3]	0.96 [<1.0]	<0.20 [<0.2]
	9/27/05	NS	NS	NS	NS	NS

Table 2: Summary of Groundwater Analytical Results (µg/L)[1]						
Sample		Tetrachloroethene (PCE)	Trichloroethene (TCE)	(cis) 1,2 Dichloroethene (c-DCE)	(trans) 1,2 Dichloroethene (t-DCE)	Vinyl Chloride (VC)
Sample ID	Date					
MW-8[7]	1/27/05	**21**	3.9	15	1.8	<0.20
	7/7/05	**100 [79]**	**6.6 [7.4]**	10 [7.5]	1.4 [1.2]	<0.20 [<0.2]
	9/27/05	NS	NS	NS	NS	NS
MW-9[8]	9/27/05	0.56	0.24	<0.20	<0.20	<0.20
MTCA Method "A or B" Clean up Level		5.0	5.0	80 (Method B)	160 (Method B)	0.2

1: µg/L = micrograms per Liter
2: July 12, 2004 and January 27, 2005 were measured by Environmental Associates.
3: <0.20= listed analyte not detected above standard laboratory reporting limits.
4: **Bolded values exceed MTCA Cleanup Levels**
5: (13) Duplicate sample collected from MW-1
6: 1,1 Dichloroethane in MW-3 at 0.35 µg/L
7: MW-5 through MW-8 installed January 2005
8: MW-9 installed September 21, 2005
9: Analytical results from EMS split sampling July 2005

Table 3: Analytical Results: Soil (mg/kg)				
Sample				EPA Method 8260B Halogenated VOCs
Sample ID	Date	Depth (ft)	PID (ppm)	
SC1-4	8/23/05	3.5-4	0.0	--
SC1-7	8/23/05	6.5-7	1.5	--
SC1-12	8/23/05	11.5-12	1.4	--
SC1-14.5	8/23/05	14-14.5	1.1	<0.0012
SC2-4	8/23/05	3.5-4	0.0	--
SC2-7	8/23/05	6.5-7	1.5	--
SC2-12	8/23/05	11.5-12	0.5	--
SC2-14.5	8/23/05	14-14.5	1.8	<0.0012
SC3-4	8/23/05	3.5-4	0.0	--
SC3-7	8/23/05	6.5-7	0.4	--
SC3-11.5	8/23/05	11.5-11.5	0.6	--
SC3-14.5	8/23/05	14-14.5	0.5	<0.0012
SC-4-4	8/23/05	3.5-4	0.7	--
SC4-7.5	8/23/05	6.5-7	1.3	--
SC4-12	8/23/05	11.5-12	2.5	--
SC4-14.5	8/23/05	14-14.5	2.4	<0.0012
MW-9/7	9/21/05	6.5-7	0.0	--
MW-9/12	9/21/05	11.5-12	0.0	--
MW9/14.5	9/21/05	14-14.5	0.0	<
MTCA Method A Cleanup Levels				Various

mg/kg = milligrams per kilogram
--= not tested
<20 = listed analyte was not detected above listed laboratory reporting levels

Table 4: Analytical Results: Groundwater-Probe Borings						
Sample		EPA 8260B (HVOCs) (µg/L)				
Sample ID	Date	PCE	TCE	c-DCE	t-DCE	VC
SC1-W	9/27/05	0.26	<0.20	<0.20	<0.20	<0.20
SC2-W	9/27/05	0.23	<0.20	<0.20	<0.20	<0.20
SC3-W	9/27/05	<0.20	<0.20	<0.20	<0.20	<0.20
SC4-W	9/27/05	0.26	<0.20	<0.20	<0.20	<0.20
MTCA Method A Cleanup Levels		5.0	5.0	Method B-8.0	Method B-160	0.2

µg/L = micrograms per liter (parts per billion)
mg/L = milligrams per liter (parts per million)
--= not tested
<0.25 = listed analyte was not detected above listed laboratory reporting levels

APPENDIX B

FIGURES

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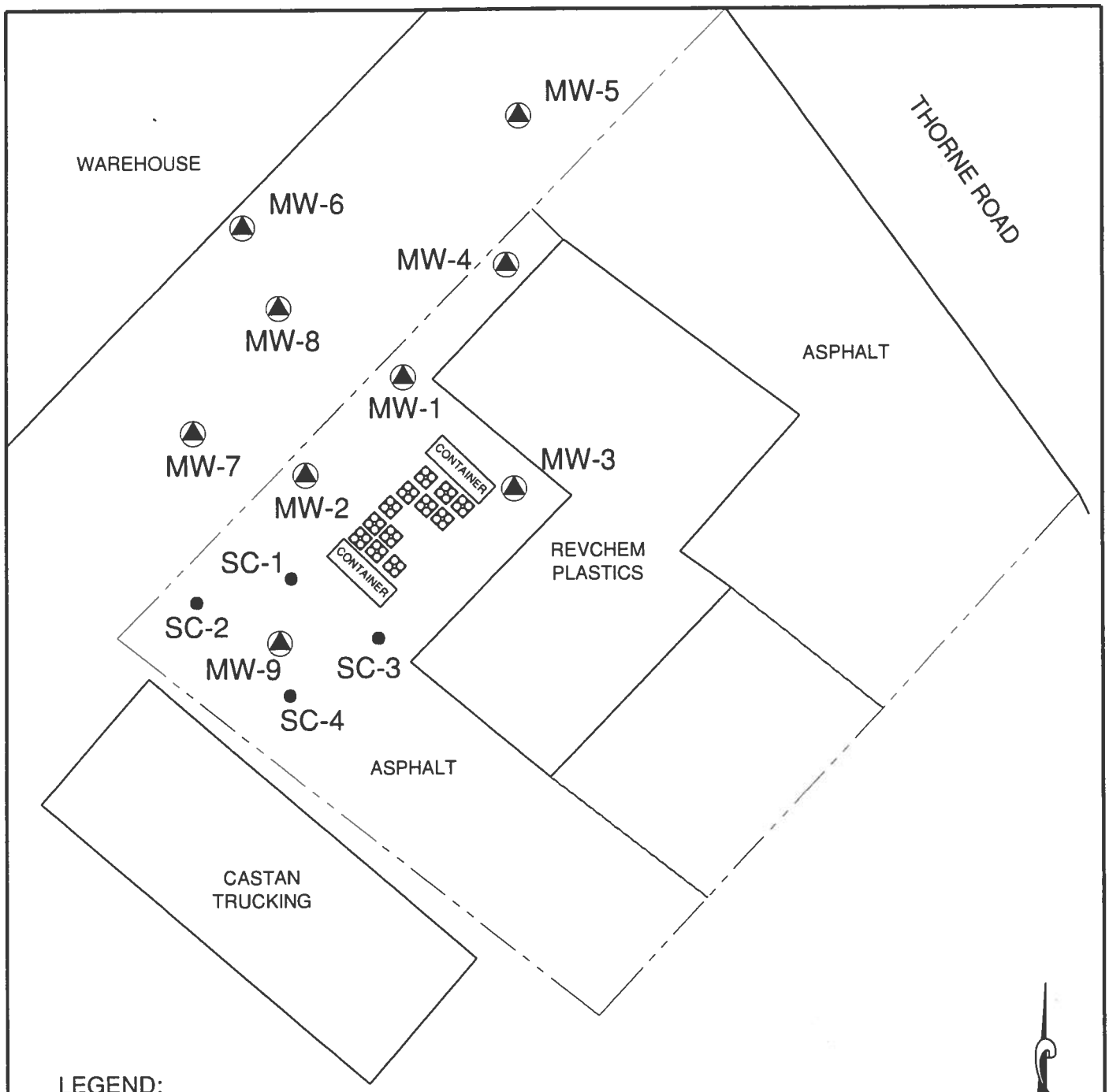
FIGURE 1 - Location/Topographic Map

Project : Former Automotive Tire Service Facility
Location : 1132 Thorne Road
Tacoma, WA
Client : Goodstein Law Group, PLLC
Date : 07/12/05 **Project No** :WA05-12704-ESA



LEGEND:

MW-1 - MONITORING WELLS MW-1 THROUGH MW-4 INSTALLED BY EAI IN JULY 2004.
MONITORING WELLS MW-5 THROUGH MW-8 INSTALLED BY EAI IN JANUARY 2005.
MONITORING WELL MW9 INSTALLED 9/21/05 BY ADAPT.

SC-1 ● - APPROXIMATE LOCATION OF SUPPLEMENTAL PROBE BORING 08/05

0 40 80

APPROXIMATE SCALE IN FEET

REFERENCE MAP: ENVIRONMENTAL ASSOC.

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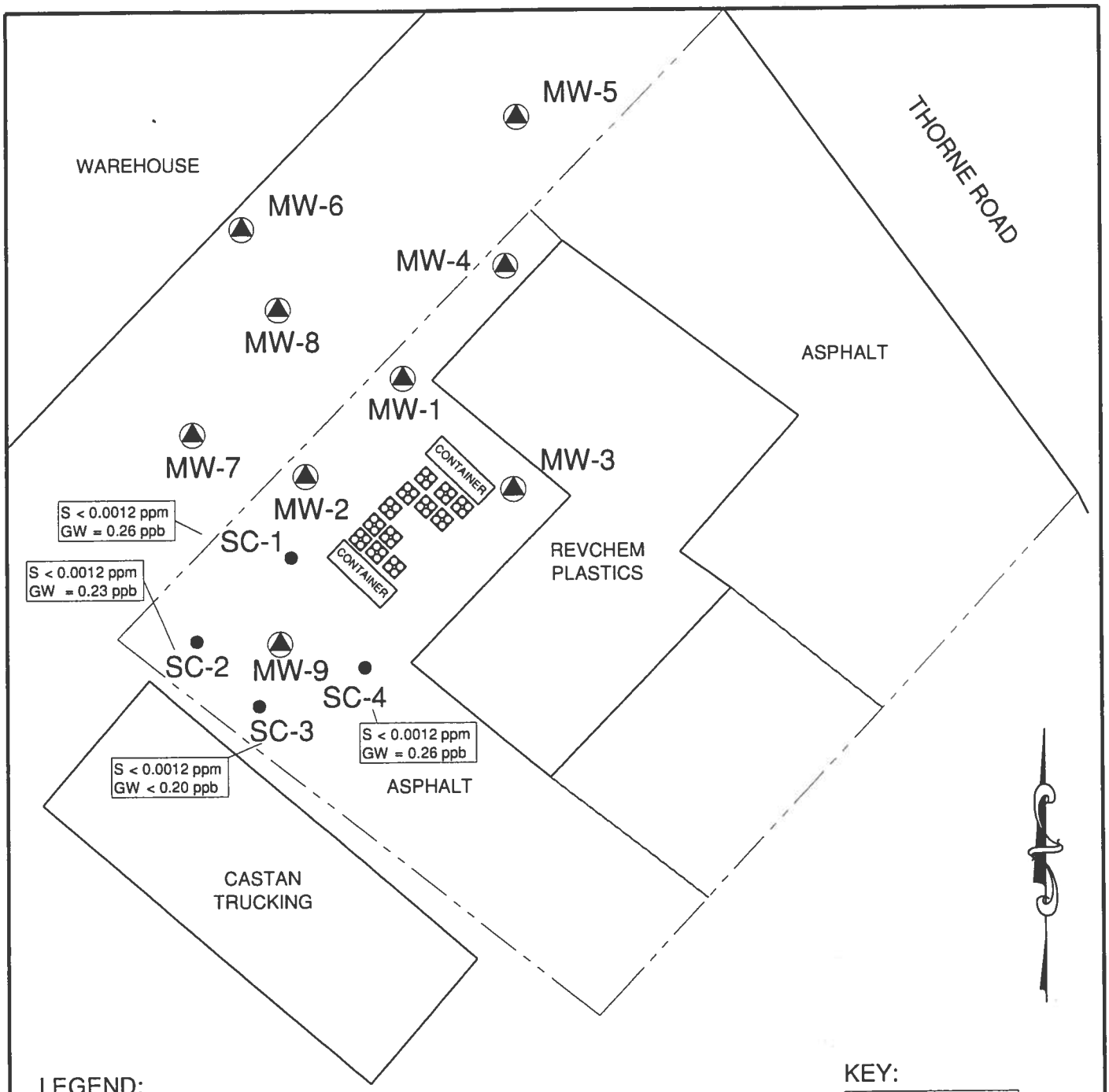
FIGURE 2 - Site Plan

Project : Former Automotive Tire Service Facility
Location : 1132 Thorne Road
Tacoma, WA
Client : Goodstein Law Group, PLLC
Date : 07/12/05 **Project No** :WA05-12704-ESA



LEGEND:

MW-1 - MONITORING WELLS MW-1 THROUGH MW-4 INSTALLED BY EAI IN JULY 2004.
MONITORING WELLS MW-5 THROUGH MW-8 INSTALLED BY EAI IN JANUARY 2005.
MONITORING WELL MW9 INSTALLED 9/21/05 BY ADAPT.

SC-1 ● - APPROXIMATE LOCATION OF SUPPLEMENTAL PROBE BORING 08/05

KEY:

S	= SOIL
GW	=GROUNDWATER

ppm -PARTS PER MILLION
ppb -PARTS PER BILLION

0 40 80
APPROXIMATE SCALE IN FEET

REFERENCE MAP: ENVIRONMENTAL ASSOC.

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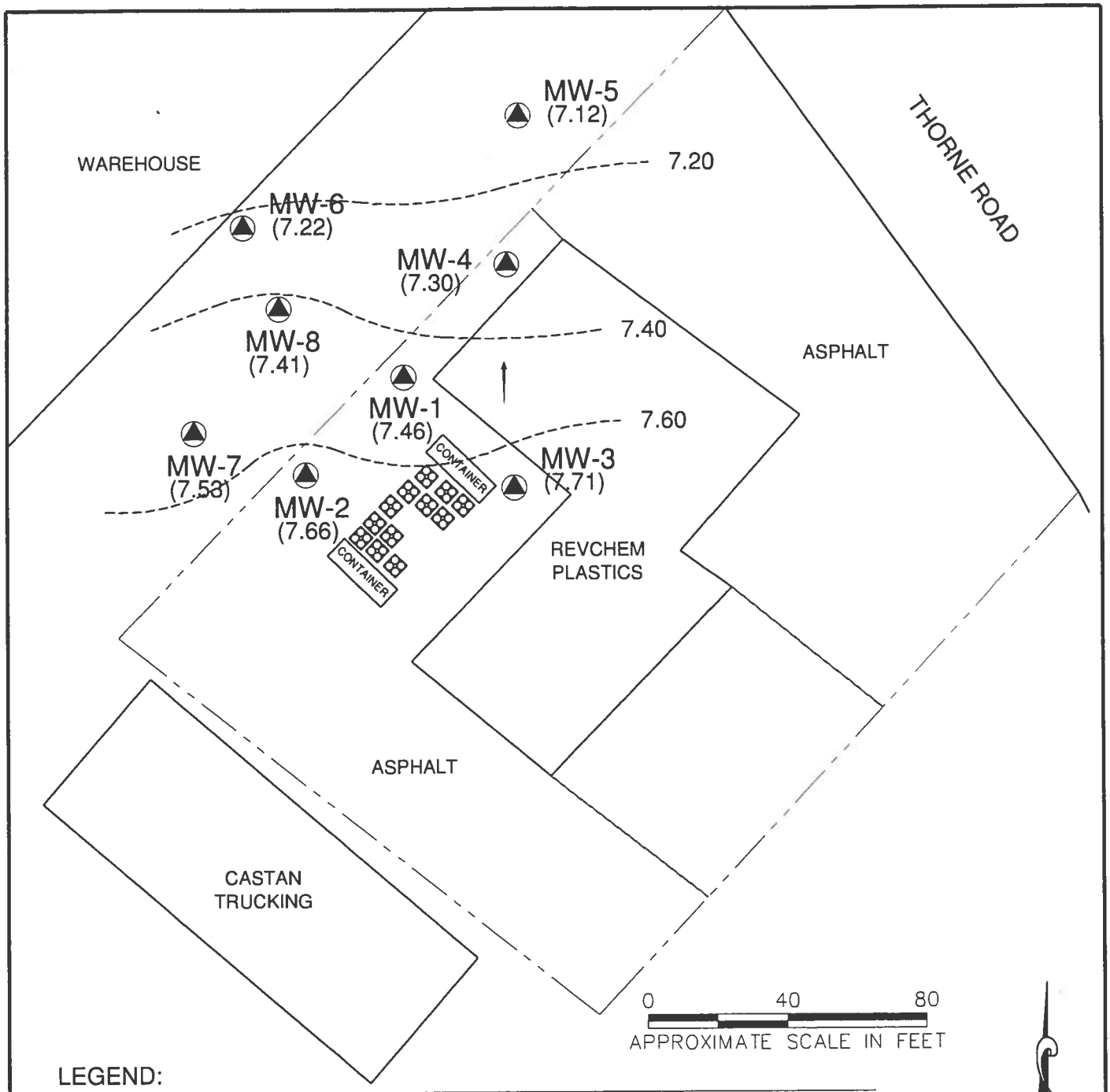
FIGURE 2a- Analysis Results: Soil/Groundwater (08/23/05)

Project : Former Automotive Tire Service Facility
Location : 1132 Thorne Road
Tacoma, WA
Client : Goodstein Law Group, PLLC
Date : 07/12/05 **Project No** :WA05-12704-ESA



LEGEND:

MW-1 ▲ MONITORING WELLS MW-1 THROUGH MW-4 INSTALLED BY EAI IN JULY 2004. MONITORING WELLS MW-5 THROUGH MW-8 INSTALLED BY EAI IN JANUARY 2005.

WATER TABLE CONTOUR LINES. WATER TABLE ELEVATIONS ARE IN FEET AND ASSUME AN ARBITRARY GROUND SURFACE ELEVATION OF APPROXIMATELY 15 FEET IN THE VICINITY OF MW-1. GROUNDWATER FLOW APPEARS TO BE NORTHERLY.

← ESTIMATED GROUNDWATER MIGRATION DIRECTION

REFERENCE MAP: ENVIRONMENTAL ASSOC.

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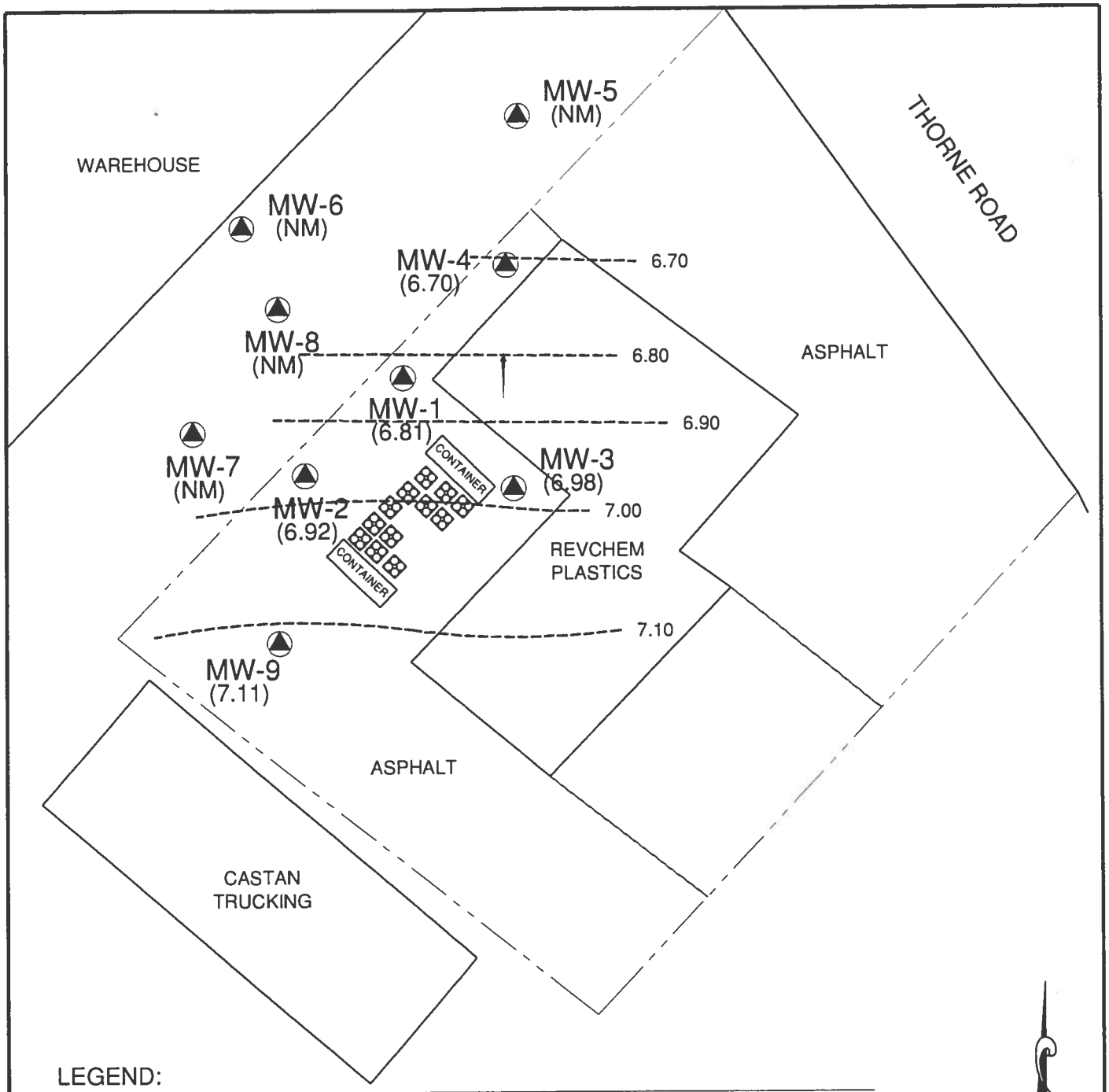
FIGURE 3 - Groundwater Contour Map (07/07/05)

Project : Former Automotive Tire Service Facility
Location : 1132 Thorne Road
Tacoma, WA
Client : Goodstein Law Group, PLLC
Date : 07/12/05 **Project No** : WA05-12704-ESA



LEGEND:

MW-1 -MONITORING WELLS MW-1 THROUGH MW-4 INSTALLED BY EAI IN JULY 2004. MONITORING WELLS MW-5 THROUGH MW-8 INSTALLED BY EAI IN JANUARY 2005. MONITORING WELL MW-9 INSTALLED 09/21/05 BY ADAPT

-ESTIMATED GROUNDWATER MIGRATION DIRECTION

(NM) -NOT MEASURED

0 40 80

APPROXIMATE SCALE IN FEET

REFERENCE MAP: ENVIRONMENTAL ASSOC.

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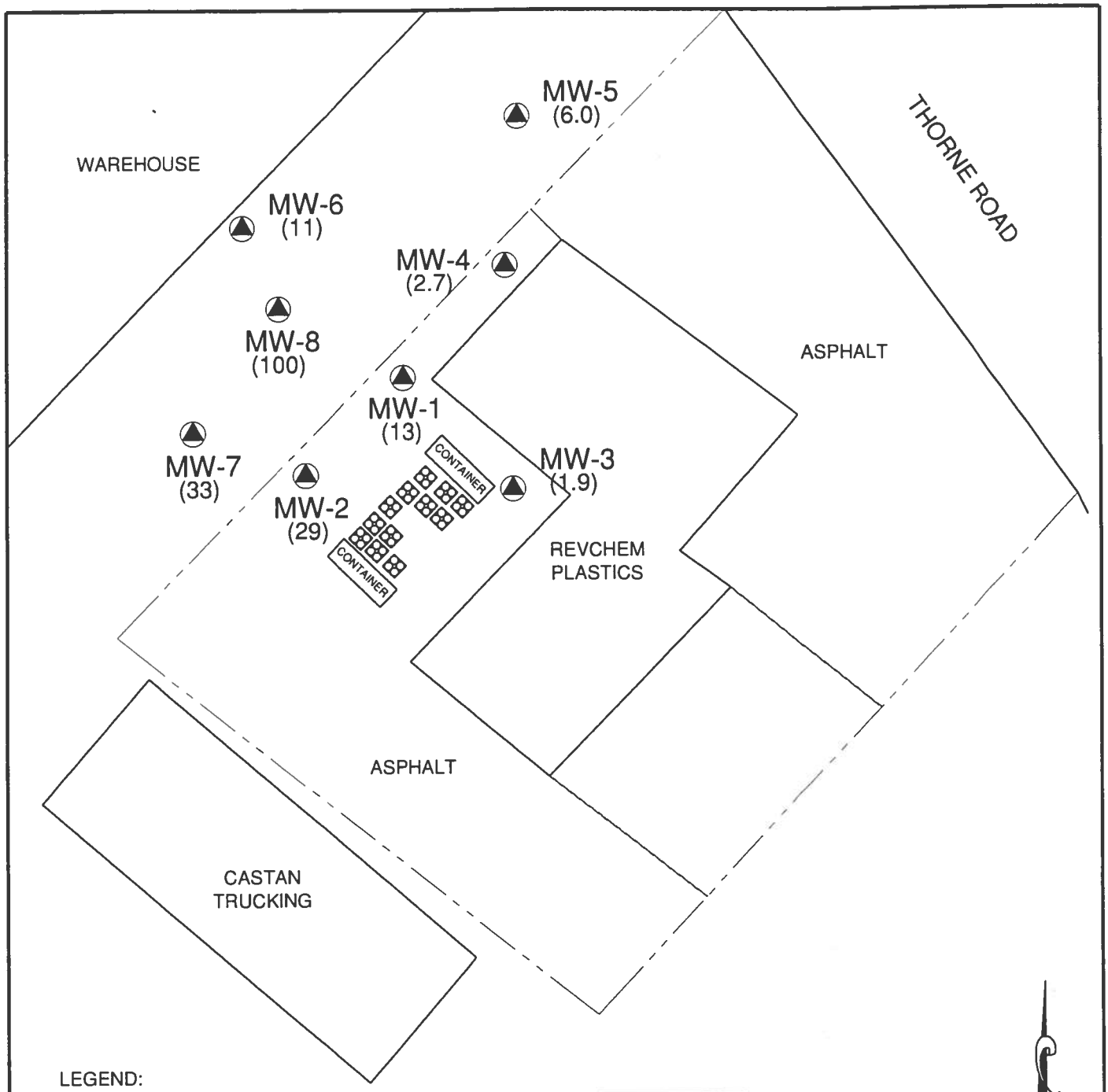
FIGURE 3a - Groundwater Contour Map (09/27/05)

Project : Former Automotive Tire Service Facility
Location : 1132 Thorne Road
Tacoma, WA
Client : Goodstein Law Group, PLLC
Date : 07/12/05 **Project No** :WA05-12704-ESA



LEGEND:

MW-1 — MONITORING WELLS MW-1 THROUGH MW-4 INSTALLED BY EAI IN JULY 2004.
MONITORING WELLS MW-5 THROUGH MW-8 INSTALLED BY EAI IN JANUARY 2005.

NOTE:

ALL CONCENTRATIONS IN PPB

0 40 80

APPROXIMATE SCALE IN FEET

REFERENCE MAP: ENVIRONMENTAL ASSOC.

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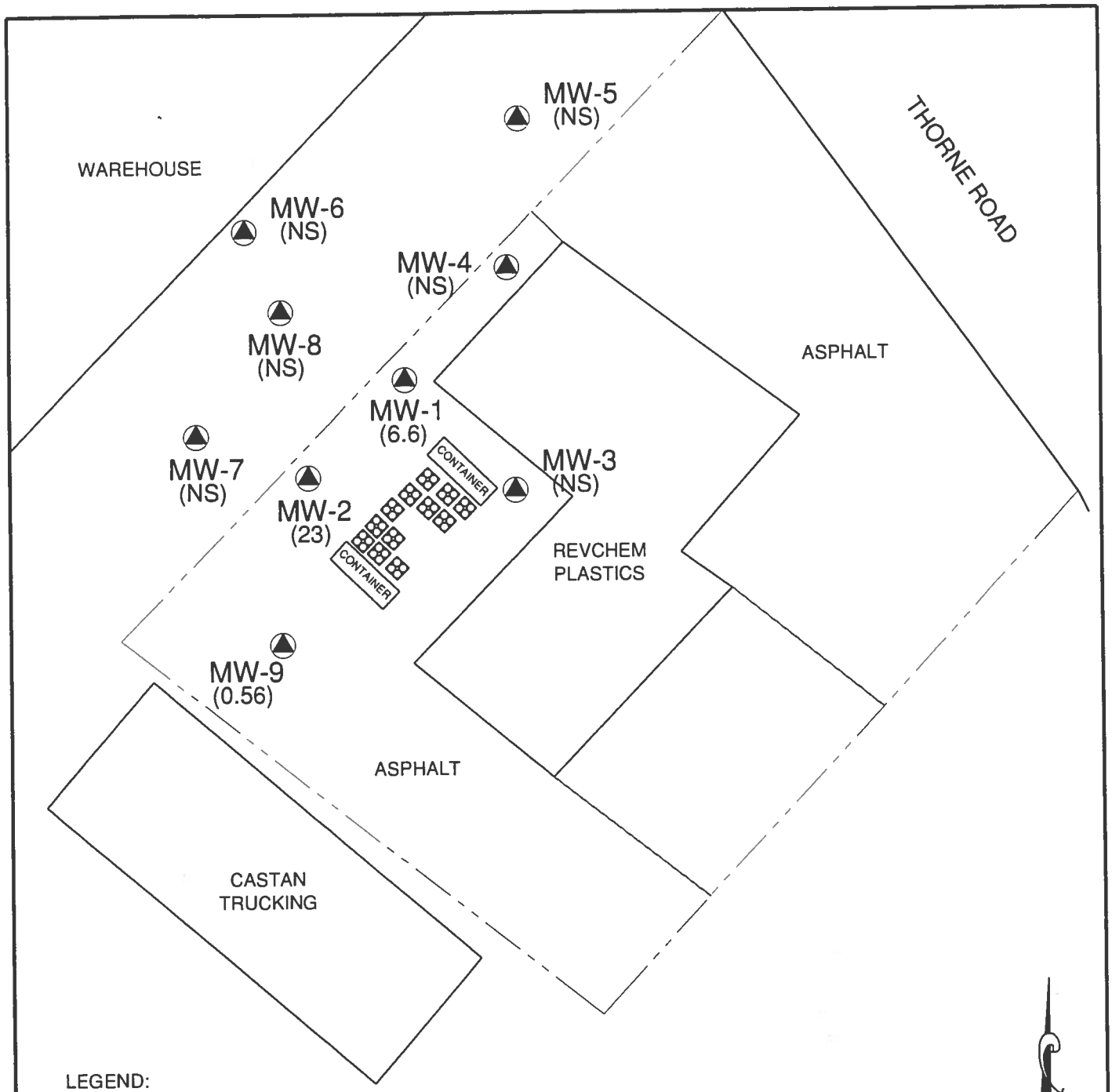
FIGURE 4 - Tetrachloroethene In Groundwater (07/07/05)

Project : Former Automotive Tire Service Facility
Location : 1132 Thorne Road
Tacoma, WA
Client : Goodstein Law Group, PLLC
Date : 07/12/05 **Project No** : WA05-12704-ESA



LEGEND:

MW-1 MONITORING WELLS MW-1 THROUGH MW-4 INSTALLED BY EAI IN JULY 2004.
MONITORING WELLS MW-5 THROUGH MW-8 INSTALLED BY EAI IN JANUARY 2005.
MONITORING WELL MW-9 INSTALLED 09/21/05 BY ADAPT.

NOTE:

ALL CONCENTRATIONS IN PPB

0 40 80

APPROXIMATE SCALE IN FEET

REFERENCE MAP: ENVIRONMENTAL ASSOC.

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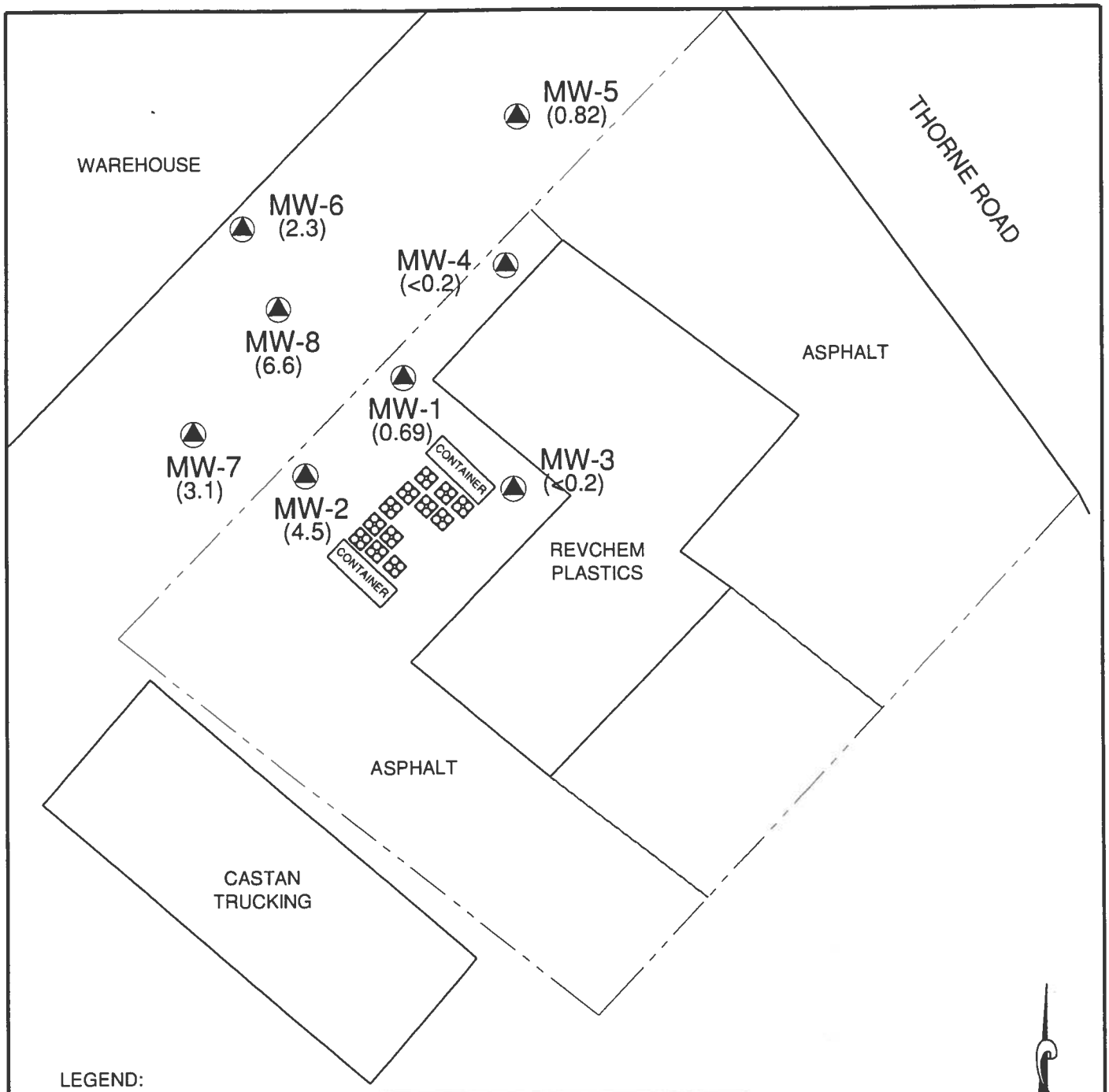
FIGURE 4a - Tetrachloroethene in Groundwater (09/27/05)

Project : Former Automotive Tire Service Facility
Location : 1132 Thorne Road
Tacoma, WA
Client : Goodstein Law Group, PLLC
Date : 07/12/05 **Project No** : WA05-12704-ESA



LEGEND:

MW-1 — MONITORING WELLS MW-1 THROUGH MW-4 INSTALLED BY EAI IN JULY 2004.
MONITORING WELLS MW-5 THROUGH MW-8 INSTALLED BY EAI IN JANUARY 2005.

NOTE:

ALL CONCENTRATIONS IN PPB

0 40 80

APPROXIMATE SCALE IN FEET

REFERENCE MAP: ENVIRONMENTAL ASSOC.

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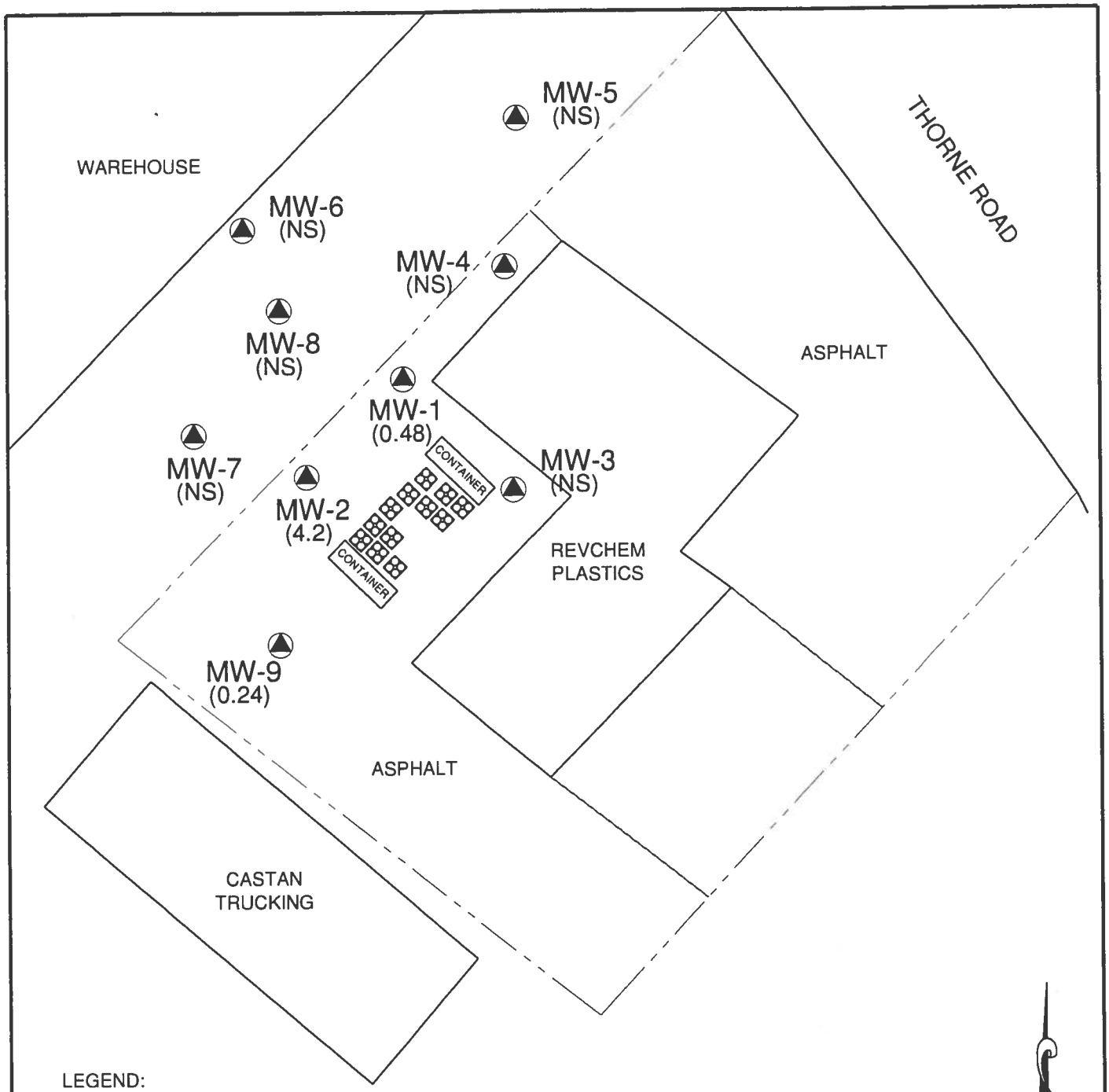
FIGURE 5 - Trichloroethene in Groundwater (07/07/05)

Project : Former Automotive Tire Service Facility
Location : 1132 Thorne Road
Tacoma, WA
Client : Goodstein Law Group, PLLC
Date : 07/12/05 **Project No** : WA05-12704-ESA



LEGEND:

MW-1 — MONITORING WELLS MW-1 THROUGH MW-4 INSTALLED BY EAI IN JULY 2004.
MONITORING WELLS MW-5 THROUGH MW-8 INSTALLED BY EAI IN JANUARY 2005.
MONITORING WELL MW-9 INSTALLED 09/21/05 BY ADAPT.

NOTE:

ALL CONCENTRATIONS IN PPB

0 40 80

APPROXIMATE SCALE IN FEET

REFERENCE MAP: ENVIRONMENTAL ASSOC.

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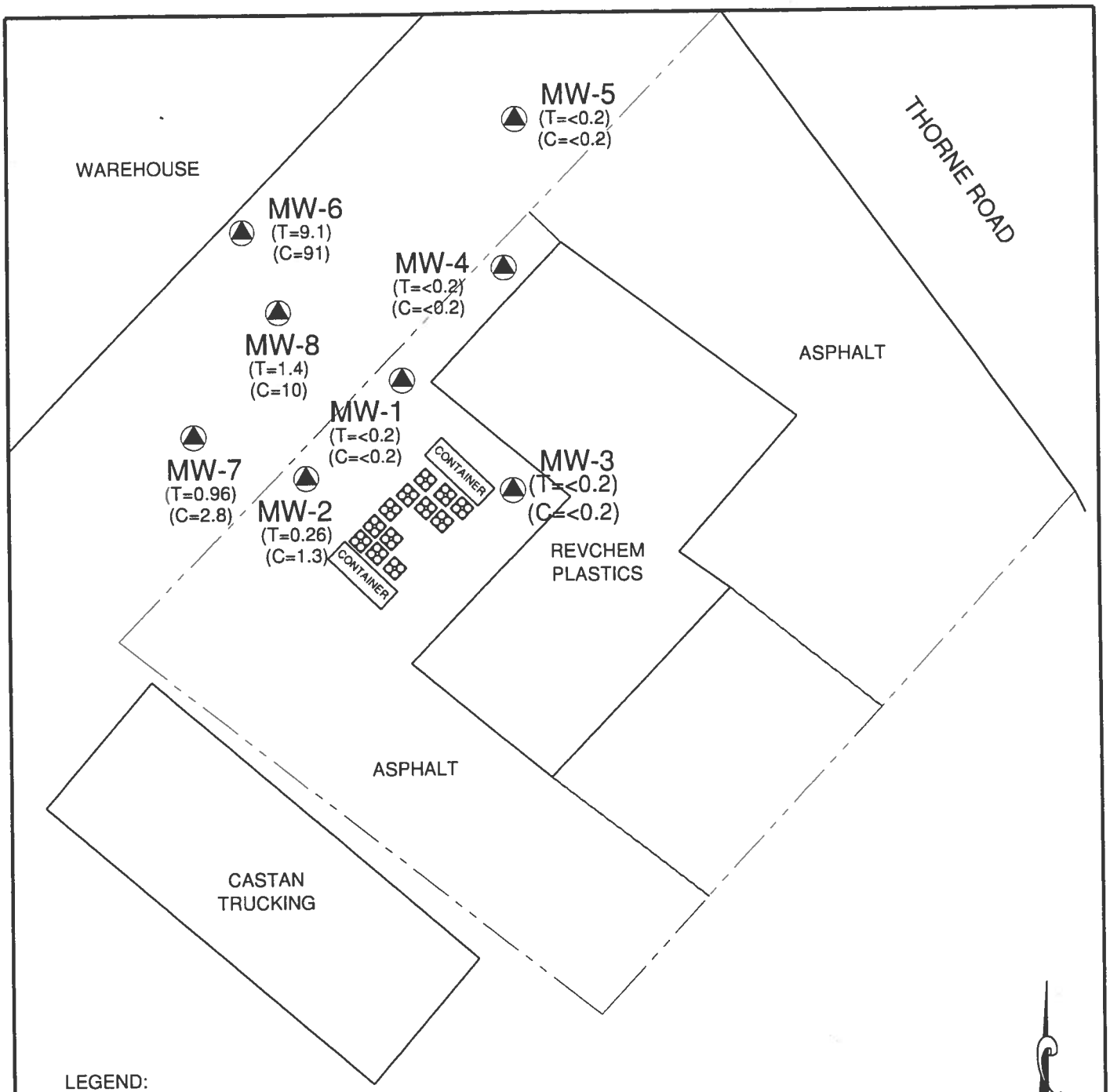
FIGURE 5a - Trichloroethene in Groundwater (09/27/05)

Project : Former Automotive Tire Service Facility
Location : 1132 Thorne Road
Tacoma, WA
Client : Goodstein Law Group, PLLC
Date : 07/12/05 **Project No** :WA05-12704-ESA



LEGEND:

MW-1 — MONITORING WELLS MW-1 THROUGH MW-4 INSTALLED BY EAI IN JULY 2004.
MONITORING WELLS MW-5 THROUGH MW-8 INSTALLED BY EAI IN JANUARY 2005.

NOTE:

ALL CONCENTRATIONS IN PPB
T - TRANS DICHLOROETHENE
C - CIS 1, 2 DICHLOROETHENE

0 40 80
APPROXIMATE SCALE IN FEET

REFERENCE MAP: ENVIRONMENTAL ASSOC.

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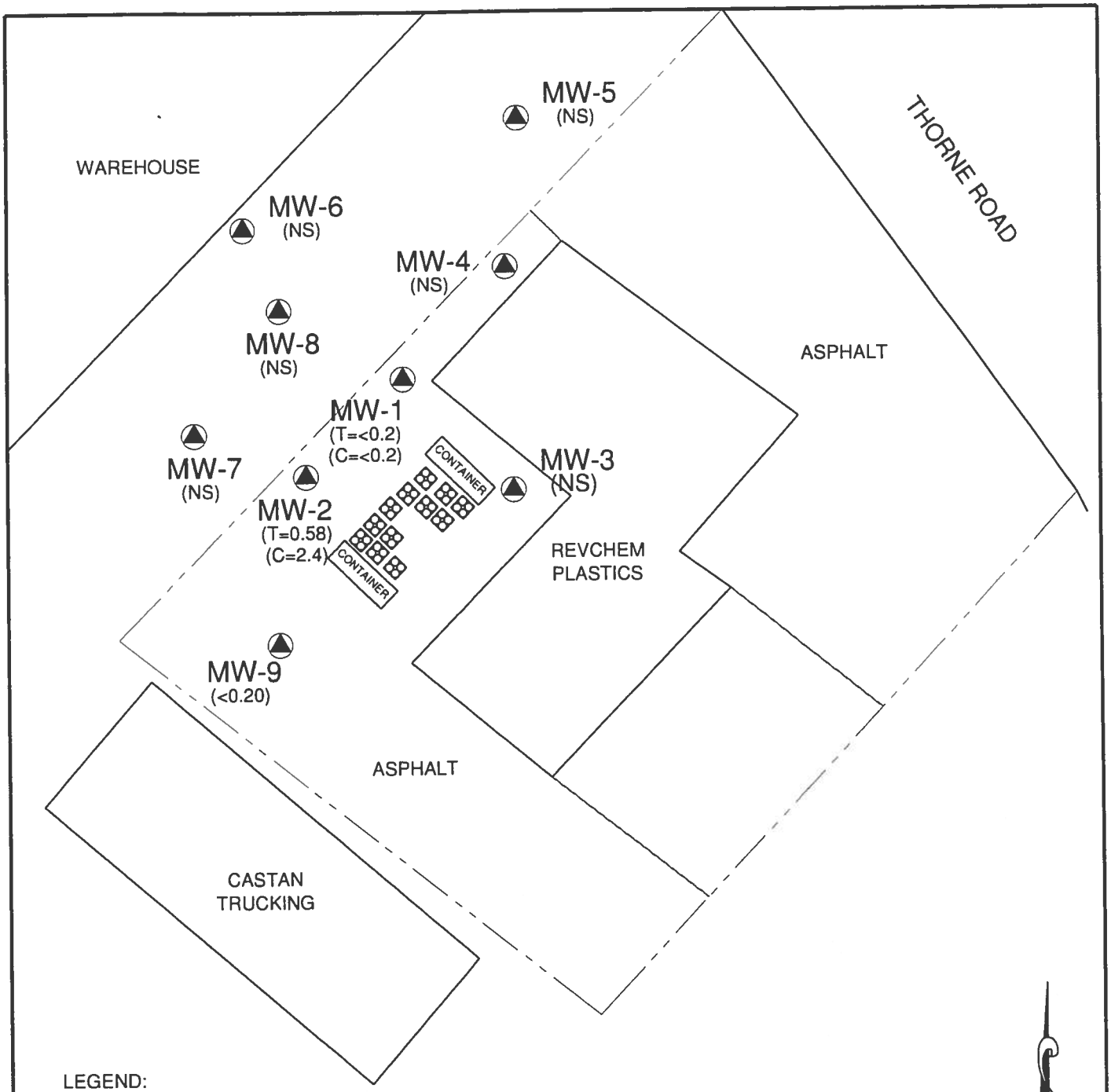
FIGURE 6 - 1,2 Dichloroethene in Groundwater (07/07/05)

Project : Former Automotive Tire Service Facility
Location : 1132 Thorne Road
Tacoma, WA
Client : Goodstein Law Group, PLLC
Date : 07/12/05 **Project No** :WA05-12704-ESA



LEGEND:

MW-1 — MONITORING WELLS MW-1 THROUGH MW-4 INSTALLED BY EAI IN JULY 2004.
MONITORING WELLS MW-5 THROUGH MW-8 INSTALLED BY EAI IN JANUARY 2005.
MONITORING WELL MW-9 INSTALLED 09/21/05 BY ADAPT.

NOTE:

ALL CONCENTRATIONS IN PPB
T - TRANS DICHLOROETHENE
C - CIS 1, 2 DICHLOROETHENE

0 40 80
APPROXIMATE SCALE IN FEET

REFERENCE MAP: ENVIRONMENTAL ASSOC.

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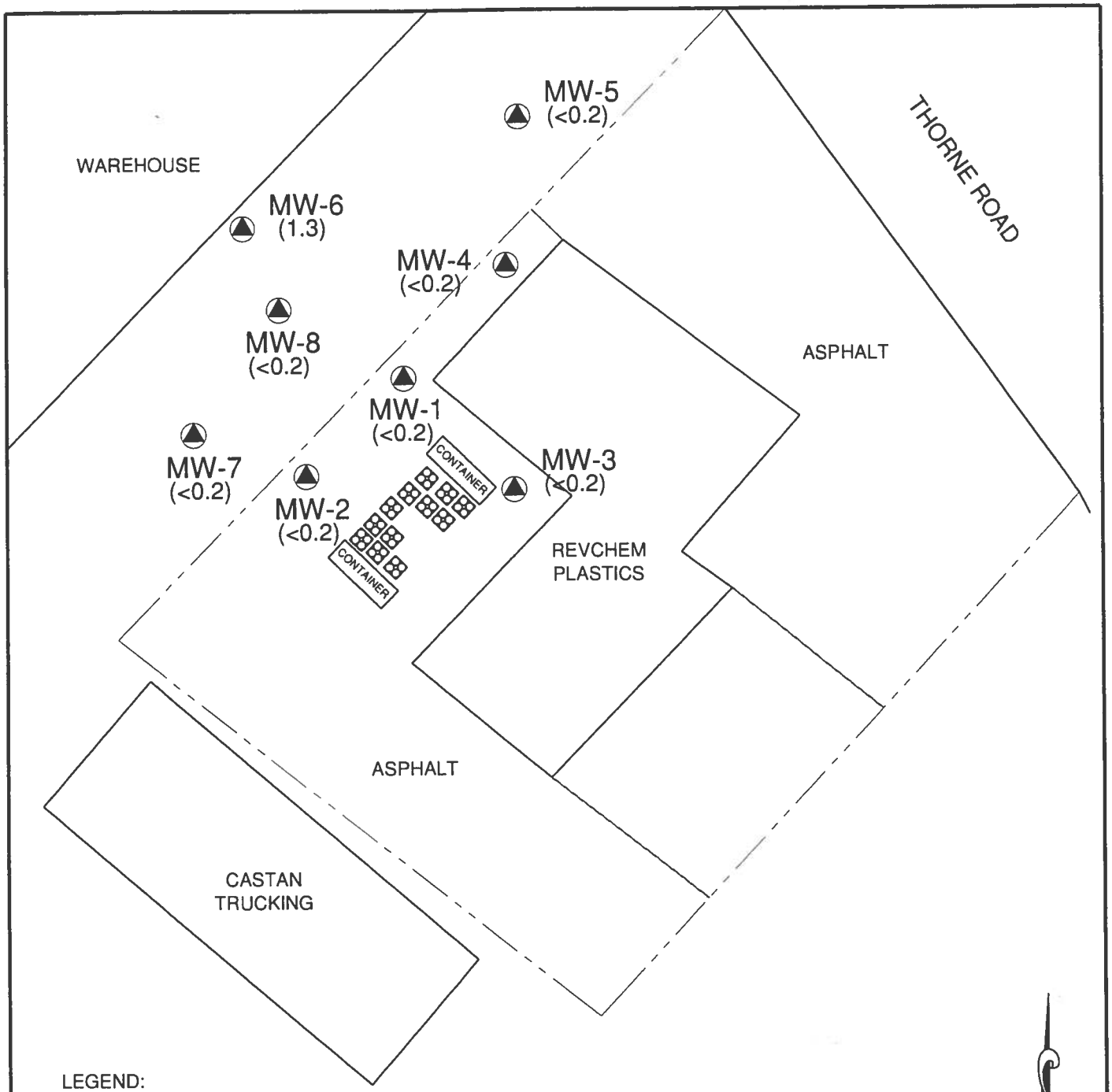
FIGURE 6a - 1,2 Dichloroethene in Groundwater (09/27/05)

Project : Former Automotive Tire Service Facility
Location : 1132 Thorne Road
Tacoma, WA
Client : Goodstein Law Group, PLLC
Date : 07/12/05 **Project No** : WA05-12704-ESA



LEGEND:

MW-1 — MONITORING WELLS MW-1 THROUGH MW-4 INSTALLED BY EAI IN JULY 2004.
MONITORING WELLS MW-5 THROUGH MW-8 INSTALLED BY EAI IN JANUARY 2005.

NOTE:

ALL CONCENTRATIONS IN PPB

0 40 80

APPROXIMATE SCALE IN FEET

REFERENCE MAP: ENVIRONMENTAL ASSOC.

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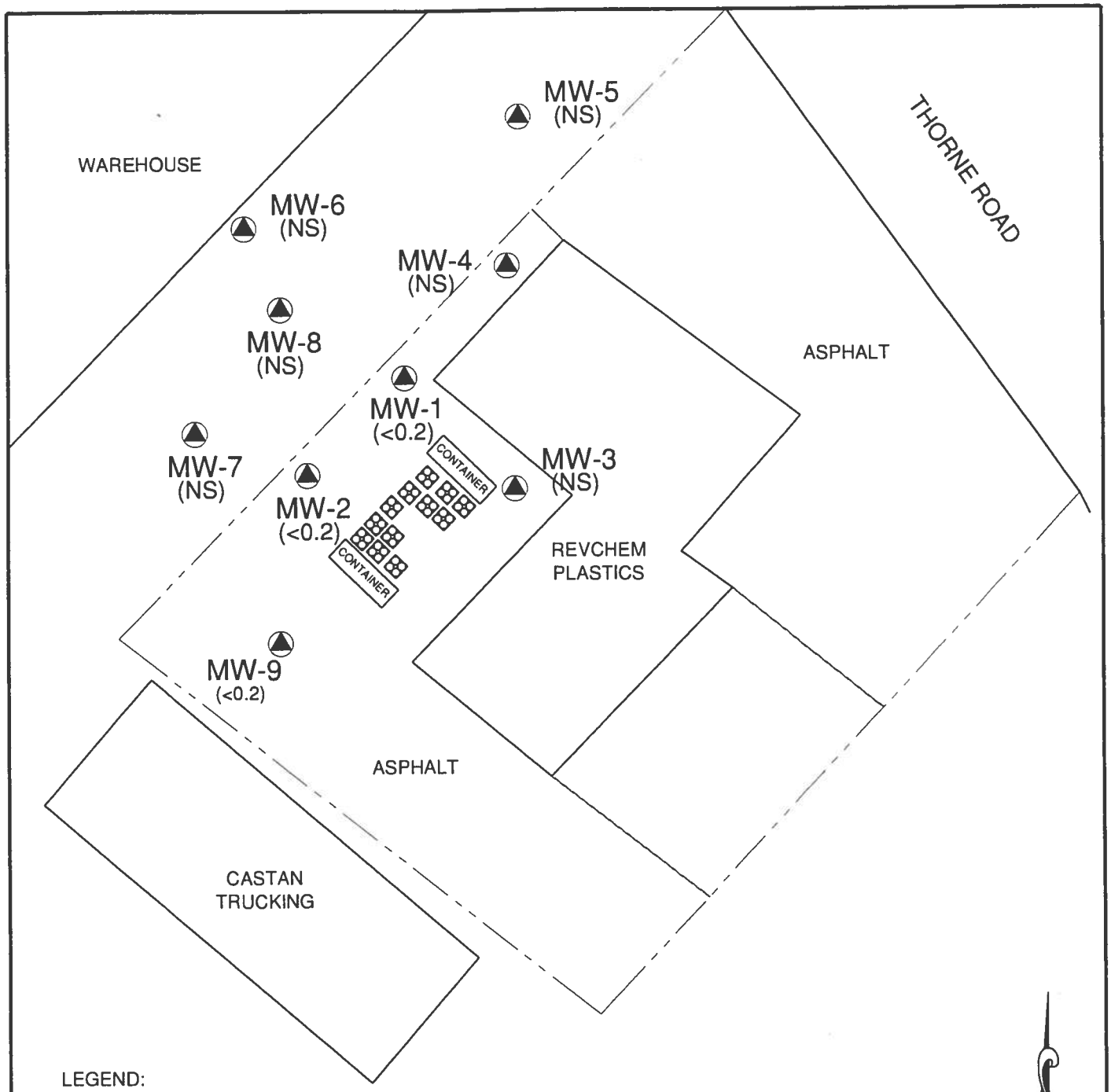
FIGURE 7 - Vinyl Chloride in Groundwater (07/07/05)

Project : Former Automotive Tire Service Facility
Location : 1132 Thorne Road
Tacoma, WA
Client : Goodstein Law Group, PLLC
Date : 07/12/05 **Project No** : WA05-12704-ESA



LEGEND:

MW-1 MONITORING WELLS MW-1 THROUGH MW-4 INSTALLED BY EAI IN JULY 2004.
MONITORING WELLS MW-5 THROUGH MW-8 INSTALLED BY EAI IN JANUARY 2005.
MONITORING WELL MW-9 INSTALLED 09/21/05 BY ADAPT.

NOTE:

ALL CONCENTRATIONS IN PPB

0 40 80

APPROXIMATE SCALE IN FEET

REFERENCE MAP: ENVIRONMENTAL ASSOC.

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FIGURE 7a - Vinyl Chloride in Groundwater (09/27/05)

Project : Former Automotive Tire Service Facility
Location : 1132 Thorne Road
Tacoma, WA
Client : Goodstein Law Group, PLLC
Date : 07/12/05 **Project No** :WA05-12704-ESA

APPENDIX C

SUBSURFACE EXPLORATION PROCEDURES AND BORING LOGS

SUBSURFACE EXPLORATION PROCEDURES AND BORING LOGS

Soil Borings/Monitoring Wells

The field exploration program conducted for this study consisted of advancing a series of five direct push (Strataprobe) borings one of which was completed as 2-inch ground monitoring wells. The approximate locations are illustrated on the Site Plan, Figure 1. These locations were obtained in the field by taping and pacing from existing site features.

The borings were advanced on August 23, 2005 and September 21, 2005 by Environmental Services Network (ESN), Inc., a local exploration drilling company under subcontract to our firm. Each boring consisted of driving a 1.5-Inch outside diameter drill rod and attached sample barrel and probe tip with a truck-mounted drill rig. The drill rod was pushed to the desired sampling depth then the sample barrel was pushed either two-feet or four feet dependant on soil sampler length. Soil samples were continuously obtained using either a two-foot or four-foot long sampler. Borings were continuously observed and logged in the field by a geologist from our firm. Prior to each boring, the drilli ng equipment and sampling tools were decontaminated.

Soil Sampling Procedures

Relatively undisturbed soil samples were collected at either two-foot of four-foot intervals by using a two-foot or four-foot long split spoon sample barrel lined with an acetate liner. The split spoon sample barrel was pushed to the desired depth and then pushed into undisturbed soil at the bottom of the boring.

Discrete soil samples for halogenated volatile organic compounds were collected in compliance with EPA Method 5035A. A "QuickDraw" syringe was used to collect the core samples from the undisturbed split spoon sampler. The approximate 5-gram core sample was then placed in a pre-tared 40ml vial for transport to the laboratory. Based on laboratory and analytical requirements up to three core samples were collected from each interval to be analyzed. A separate 4-ounce glass jar with a Teflon® lined lid was collected from each interval for moisture content.

Samples were stored and transported in a chilled-cooler throughout the field program. All retained soil samples were subsequently transferred to the chemical testing laboratory in accordance with Adapt, chain-of-custody procedures.

Characterization of Soil

The soil samples were characterized by an experienced geologist from Adapt. The samples were visually classified and screened using a photoionzation detector in t he field.

Groundwater Sampling Procedures

Following completion of the boring a five foot temporary screen was installed in the boring and a 1/4-inch ID polyethylene tubing inserted into the temporary well. The wells were then developed by pumping until relatively clear with a peristaltic pump.
Field splits of the soil samples were characterized by an ex perienced geologist from Adapt.

Fluid Level Measurements

Fluid levels (water and/or immiscible free-phase liquids) are obtained prior to purging and sampling of any well at a project site. The periodicity of recording fluid levels at a site is project

specific and may not necessarily coincide with the periodicity of groundwater sampling. This is necessary sometimes to obtain data in respect to factors which may affect groundwater levels on a more periodic basis such as tides, irrigation or water supply well interference, surface water bodies, or seasonal fluctuations. Fluid levels are necessary to:

- Detect the presence of LNAPLs and DNAPLs;
- Detect changes in horizontal and vertical hydraulic gradients and flow directions;
- Detect influences due to factors such as those stated above (tides.. .)and;
- Collect feasibility/performance data during aquifer testing.

Adapt shall utilize direct reading instruments calibrated to a precision of 0.01 foot. These instruments include:

- The interface probe - capable of detecting and measuring both immiscible contaminants (LNAPLs and DNAPLs) and water levels and
- Solinst Water Level Probe - capable of detecting water levels only.

The calibrated markings on all Adapt instruments are to be checked on a quarterly basis for indications of stretching.

All measurements shall be made in respect to a specific marked section of the well casing. Adapt personnel shall mark the north side of all well casings with a small notch at the time of well installation to indicate the exact position which all measurements are to be taken.

- The cap from the well casing is unlocked and removed, allowing the pressure to equalize in well.

- Measurements are taken from cleanest to most heavily contaminated wells if this information is available.

- The sensor head is lowered into the well opening until a signal is obtained. The sensor is slightly raised and lowered to determine the loudest signal

- The measurement is read off the tape at the point, which corresponds to the survey mark on top of well casing, or the highest point on the casing if there is no survey mark.

- If the instrument has a direct reading measuring tape, the depth measurement is recorded at the survey mark. If the tape is marked at five-foot intervals, use a tape measure or ruler is used to measure from the point on the tape held at the survey mark to the nearest increment marker.

- The exposed tape is not reeled back into the instrument until it has been decontaminated.

Well Development Procedures

Monitoring wells must be developed after installation in order to ensure collection of a sample representative of true groundwater quality around a well . Well development:

- establishes an effective, graded filter pack around the wel l;
- may repair the damage/disturbance created by drilling to the form ation(s);
- removes fine-grained materials around the well, allowing for low turbidity samples to be obtained and;
- restores the natural water quality by removing foreign materials such as water/drilling muds introduced during install ation.

Development may be performed immediately following installation of the well, however, both EPA guidelines state that it is preferential to allow sufficient time for the well materials to settle and cure. The method of development should include a two directional flow in and out of the filter pack/well screen so that fines are drawn into the well and removed and that clogging/bridging of the filter pack is avoided. This generally involves pumping or bailing of the well to remove the fines and surging of the well to stabilize the filter pack.

The basic method of development that will be employed by Adapt will involve either the use of a pump or stainless steel/PVC bailers coupled with use of a surge block. The general procedure will be as follows:

1. Record static water level, total depth of well, and any observations (odors, positive pressure release...) and calculate purge volum e(s).

2. Pump or bail well until several well volumes of groundwater have been r emoved;

3. Use surge block to surge the screened interval of the w ell;

4. Continue pumping or bailing until the turbidity/fines in the well are minimized. Generally this occurs between 6 to 10 well casing volumes but additional volumes should be removed if well is still very turbid, or if fluids were introduced during drilling (the volume of added fluids should be rem oved during development);

5. Repeat surging and removal until the turbidity of the well is adequate. If the turbidity of the well is not observed to decrease as development continues this may be due to either a poor well installation or the general characteristics of the formation.

6. Water quality parameters such as pH, Conductivity, and Temperature should be recorded in order to establish data supporting the restoration of groundwater quality to natural conditions;

7. All observations and measurements should be recorded on the standard Adapt Groundwater Monitoring F orm and in the D aily Field Report.

Wells, which continuously yield turbid samples, may be indicative of poor installation, poor development, or formations characterized by the presence of large quantities of fine-grained

materials. The project manager will utilize all information available to determine which factor(s) are applicable from the boring logs and field reports. If poor well installation is the contributing factor, it may be necessary to re-install another well, however, Ecology may be consulted to determine whether this would be a requirement. All development water, which has not been properly characterized, will be containerized on site and properly labeled.

Well Micro-Purging Procedures

Prior to sample collection, all wells must be purged. Purging of the stagnant water from a well is necessary prior to sampling to obtain a groundwater sample representative of the surrounding formation. Water, which has been standing in the well casing, is not necessarily representative of formation water since it has been exposed to conditions/materials not normally encountered in the formation (such as the atmosphere and the well casing).

Adapt personnel shall purge at a minimum 3 well casing volumes of groundwater or until temperature, pH, conductivity, and dissolved oxygen readings do not vary by more than 10 percent for three consecutive readings whichever is less. Purging of the well(s) will be considered complete when these readings have stabilized within at least 10% of the two preceding measurement over a time period at least three minutes apart (USEPA,1992). If these readings are not being taken, Adapt personnel will remove at least 3 well casing volumes of water to ensure that the amount of water removed was adequate. All readings and observations (turbidity, color, odors...) should be recorded in the field notebook/file and transposed in accordance with the documentation standards.

Wells which are purged dry shall be allowed to recover for at least two hours or until the water level is at least 80% of the original level. If water level measurements indicate that the well has not recovered to within 80% in the two hour time frame then groundwater samples should be collected as soon as there is enough water in the well(s) to obtain the necessary samples.

Purging of the wells should be accomplished using a low flow pump. Purge rates should be performed at substantially lower rates than development to avoid overdevelopment, volatilization of organics and, mobilization of otherwise stable areas of contaminants in the surrounding formation. Low flow pumping is preferential to bailing; however if using a bailer, surging of the well should be minimized by gently lowering the bailer just below the air/water interface. When using either method, wells should not be purged dry if water is observed to be cascading down the sides of the screen. This action would result in the loss of volatile components and thus a nonrepresentative groundwater sample. All materials which can be reused (bailers, pumps, discharge hoses ...) must be decontaminated between locations if more than one well is being purged. If known, or suspected, wells should be purged in order of increasing contamination to prevent risk of cross contamination.

All purge water shall be placed in containers as indicated in until it is properly characterized for disposal purposes. All equipment used for purging will be decontaminated accordingly to standard procedures. Purging of the wells should be in order of increasing contamination to minimize the risk of cross contamination.

POST SAMPLING ACTIVITIES

Once the sample is collected into the appropriate container, the outside of the bottle should be

wiped with a clean paper towel to remove excess sampling material. If necessary, a clean paper towel moistened with alconox solution is used.

The sample bottle is then properly labeled, covering both the lid and the container so the seal has to be broken to open it. The sample is placed in a plastic bag and preserved at approximately 4°C in a cooler with ice. Information such as sample number, location, collection time and sample description is be recorded in the field logbook. Associated paperwork (e.g. Chain of Custody forms, Sample Analysis Request forms) is completed and stays with the sample. The samples are packaged in a manner that will allow the appropriate storage temperature to be maintained during shipment to the lab. Samples should be delivered to the lab within 24 hours so that proper temperature maintenance is assured and analytical holding times are not exceeded.

SURVEYING

In order to establish a groundwater gradient, or direction of groundwater migration, it is necessary to obtain the relative elevation differences among all the monitoring wells on a site. For Initial site Investigations and determination of potentiometric gradient, Adapt may perform its own surveying. In the case of remediation system designs, professional surveying services should be contracted.

When using the surveying equipment, one should follow the procedures outlined below:

- Set up tripod and level. Adjust level until air bubble is in the center of the black circle. Rotate the level 90° -bubble should still be in the center of the circle. Rotate another 90° assure bubble is still in the center of the circle. If using a self leveling transit step one will not be required.

- Second person holding stadia rod should set the rod on the highest point of the well casing and mark this spot with a waterproof marker.

- Look through level viewfinder toward the stadia rod. Focus until numbers on rod are readable. Read the number on the engineering rod that coincides with the middle crosshair.

- When using the extendable engineering rod, the measurements can be read directly from the stadia rod and recorded in the field notebook for each well location. The markings on the rod are in Increments of 0.01 feet.

- Measurements are collected from the center of the well vault lid and from a marked location at the top of the casing.

- The first measurement is the obtained from the assigned datum location. All future measurements will be compared to the assigned datum.

- Proceed to obtain measurements from all wells with visual site of the assigned datum. If necessary the transit may need to be moved to obtain measurement from wells not visible from the first location.

- To move the transit identify a second (temporary) datum point. Obtain measurement of this point.

- Move transit to new location where additional wells can be measured. Obtain reading of second datum and primary datum and if possible one of the previous wells.

- Complete measurements of all wells and calculate the relative elevation using the following formula.

  Assign datum elevation + rod reading at assigned datum – rod reading at well = elevation

- Repeat calculation for vault elevation and top of casing elevation.

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GEOPROBE LOG

Project : Former Automotive Tire Service Facility
Location : 1132 Thorne Road
Tacoma, WA
Client : Goodstein Law Group, PLLC
Project No : WA05-12704-ESA

Geoprobe No. : **SC-1**

Ground Surface Elevation : N/A **Casing Elevation :** N/A
Elevation Reference : N/A

Page : 01 of 01

DEPTH (feet)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NUMBER	BLOW COUNT	PID READING	GROUND WATER	AS-BUILT WELL DESIGN	LABORATORY TESTING
0	Asphalt		SC-1					
	Moist, brown, silty gravelly SAND (Fill)		4					
	Moist, gray brown to dark gray brown				0.0			
5			SC-1					
			7					
	Becomes saturated at ~7 feet				1.5	08/23 2005		
			SC-1					
10			t2					
	3 inch gravelly fine to coarse SAND layer at 10 ft				1.4			
			SC-1					
			14.5					
15	Wet to saturated, dark brown, silt with sand				1.1			
	End hole at ~16 feet Water at ~7 feet Temp. screen at ~11-14 feet							
20								
25								
30								

LEGEND

- GeoProbe Sampler
- Sample not Recovered
- TV Torvane Reading (tsf)
- PP Pocket Pentetrometer Reading (tsf)
- ATD Static Water Level at Time of Drilling
- DATE Static Water Level Reading
- Perched Groundwater
- D.O.T. Approved Flush-Mounted Well Monument with Concrete Seal
- 2" I.D. Schedule 40 PVC with Bentonite Backfill
- 2" Schedule 40 PVC with 0.20-inch slots and Select 10-20 Sand Backfill
- Bentonite Backfill
- WTPH G Ext 8010 Type of Analytical Testing Performed

File Name : Boring & Monitoring Well Log.dwg

Start Date : 08/23/05 Completion Date : 08/23/05 Logged By : K.A.R.

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GEOPROBE LOG

Project : Former Automotive Tire Service Facility
Location : 1132 Thorne Road
Tacoma, WA
Client : Goodstein Law Group, PLLC
Project No : WA05-12704-ESA

Geoprobe No. : **SC-2**

Ground Surface Elevation : N/A **Casing Elevation :** N/A
Elevation Reference : N/A

DEPTH (feet)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NUMBER	BLOW COUNT	PID READING	GROUND WATER	AS-BUILT WELL DESIGN	LABORATORY TESTING
0	3 inches asphalt		SC-2 4					
	Moist, brown, silty SAND with gravel (Fill)							
	Moist, gray brown to dark gray brown, fine to medium SAND with fine to coarse SAND layers				0.0			
5			SC-2 7					
	Becomes saturated at ~7 feet				t.5	08/23 2005		
			SC-2 t2					
10					0.5			
			SC-2 14.5					
15	Saturated, dark brown, silt with trace sand				1.8			
	End hole at ~16 feet Water at ~7 feet Temp. screen at ~11-14 feet							
20								
25								
30								

LEGEND

- GeoProbe Sampler
- Sample not Recovered
- TV Torvane Reading (tsf)
- PP Pocket Penetrometer Reading (tsf)
- ATD Static Water Level at Time of Drilling
- DATE Static Water Level Reading
- Perched Groundwater
- D.O.T. Approved Flush-Mounted Well Monument with Concrete Seal
- 2" I.D. Schedule 40 PVC with Bentonite Backfill
- 2" Schedule 40 PVC with 0.20-inch slots and Select 10-20 Sand Backfill
- Bentonite Backfill
- NTPH-D Ext / 8010 Type of Analytical Testing Performed

File Name : Boring & Monitoring Well Log.dwg

Start Date : 08/23/05 Completion Date : 08/23/05 Logged By : K.A.R.

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GEOPROBE LOG

Project : Former Automotive Tire Service Facility
Location : 1132 Thorne Road
Tacoma, WA
Client : Goodstein Law Group, PLLC
Project No : WA05-12704-ESA

Geoprobe No. : **SC-3**

Ground Surface Elevation : N/A **Casing Elevation :** N/A
Elevation Reference : N/A

Page : 01 of 01

DEPTH (feet)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NUMBER	BLOW COUNT	PID READING	GROUND WATER	AS-BUILT WELL DESIGN	LABORATORY TESTING
0	3 inches asphalt		SC-3 4					
	Moist, brown, silty SAND with gravel (Fill)							
	Moist, gray brown, fine to medium SAND with occasional layers of fine to coarse SAND				0.0			
5			SC-3 7					
	Becomes saturated at ~7 feet				0.4	08/23 2005		
			SC-3 11.5					
10					0.6			
	Saturated interlayers fine and coarse SAND and silt		SC-t 14.5					
	Saturated dark brown, fine to medium/fine to coarse SAND							
15	Saturated dark brown, silt with SAND				0.5			
	End hole at ~16 feet Water at ~7 feet Temp. screen at ~11-13 feet							
20								
25								
30								

LEGEND

- GeoProbe Sampler
- Sample not Recovered
- TV Torvane Reading (tsf)
- PP Pocket Penetrometer Reading (tsf)
- ATD Static Water Level at Time of Drilling
- DATE Static Water Level Reading
- Perched Groundwater
- D.O.T. Approved Flush-Mounted Well Monument with Concrete Seal
- 2" I.D. Schedule 40 PVC with Bentonite Backfill
- 2" Schedule 40 PVC with 0.20-inch slots and Select 10-20 Sand Backfill
- Bentonite Backfill
- NTPH-D Ext 8010 Type of Analytical Testing Performed

File Name : Boring & Monitoring Well Log.dwg

Start Date : 08/23/05 Completion Date : 08/23/05 Logged By : K.A.R.

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GEOPROBE LOG

Project : Former Automotive Tire Service Facility
Location : 1132 Thorne Road
Tacoma, WA
Client : Goodstein Law Group, PLLC
Project No : WA05-12704-ESA

Geoprobe No. : **SC-4**

Ground Surface Elevation : N/A **Casing Elevation :** N/A
Elevation Reference : N/A

Page : 01 of 01

DEPTH (feet)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NUMBER	BLOW COUNT	PID READING	GROUND WATER	AS-BUILT WELL DESIGN	LABORATORY TESTING
0	3 inches asphalt		SC-4 4					
	Moist, brown, silty SAND with gravel (Fill)							
	Moist, gray brown, fine to medium SAND with interlayers of fine to coarse SAND below 4 feet				0.7			
5			SC-4 7.5					
	Becomes saturated at ~7.5 feet				t.3	08/23 2005		
			SC-4 t2					
10					2.5			
			SC-1 t4.5					
15	Saturated, dark brown, silt with sand				2.4			
	End hole at ~16 feet Water at ~7.5 feet Temp. screen at ~10-13 feet							
20								
25								
30								

LEGEND

- GeoProbe Sampler
- Sample not Recovered
- TV Torvane Reading (tsf)
- PP Pocket Pentetrometer Reading (tsf)
- ATD Static Water Level at Time of Drilling
- DATE Static Water Level Reading
- Perched Groundwater
- D.O.T. Approved Flush-Mounted Well Monument with Concrete Seal
- 2" I.D. Schedule 40 PVC with Bentonite Backfill
- 2" Schedule 40 PVC with 0.20-inch slots and Select 10-20 Sand Backfill
- Bentonite Backfill
- WTPH D Ext / 8010 Type of Analytical Testing Performed

File Name : Boring & Monitoring Well Log.dwg

Start Date : 08/23/05 Completion Date : 08/23/05 Logged By : K.A.R.

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GEOPROBE LOG

Project : Former Automotive Tire Service Facility
Location : 1132 Thorne Road
Tacoma, WA
Client : Goodstein Law Group, PLLC
Project No : WA05-12704-ESA

Geoprobe No. : **MW-9**

Ground Surface Elevation : N/A **Casing Elevation :** N/A
Elevation Reference : N/A

DEPTH (feet)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NUMBER	BLOW COUNT	PID READING	GROUND WATER	AS-BUILT WELL DESIGN	LABORATORY TESTING
0	3 inches asphalt						SURFACE SEAL	
	Moist, brown, silty SAND with gravel (Fill)							
			MW-9 4				BENTONITE GROUT	
	Moist, dark brown to grey brown, fine to medium SAND, with trace silt							
5			MW-9 7				2 INCH PVC CASINS	
					0.0	08/23 2005		
			MW-9 12					
10					0.0		2 INCH PVC SCREEN	
			MW-9 14.5					
							COLORADO SAND PACK	
15	Saturated, dark brown, silt with fine sand				0.0			
	End hole at ~15.5 feet Water at ~7.5 feet							
20								
25								
30								

LEGEND

- GeoProbe Sampler
- Sample not Recovered
- TV Torvane Reading (tsf)
- PP Pocket Penetrometer Reading (tsf)
- ATD Static Water Level at Time of Drilling
- DATE Static Water Level Reading
- Perched Groundwater
- D.O.T. Approved Flush-Mounted Well Monument with Concrete Seal
- 2" I.D. Schedule 40 PVC with Bentonite Backfill
- 2" Schedule 40 PVC with 0.20-inch slots and Select 10-20 Sand Backfill
- Bentonite Backfill
- NTPH G Ext SGC Type of Analytical Testing Performed

File Name : Boring & Monitoring Well Log.dwg

Start Date : 09/21/05 **Completion Date :** 09/21/05 **Logged By :** K.A.R.

APPENDIX D

GROUNDWATER SAMPLING FIELD FORMS

Groundwater Sample Collection Log

Project Name: Former Automotive Tire Service Facility Project No: WA05-12704-ESA
Monitor Well Number: MW-1 Sampler: KEITH ROSS Date: 7/7/04
Top of Casing Elevation: 15.00 Groundwater Elevation: 7.46
Weather: Sunny

Water Level Measurement:

(a) Depth to Water: 7.54 ft (c) Height of water (b-a = c): ft
(b) Total Depth of Well: 14.70 ft Equipment:
Casing Size: inches (d) Casing volume: gal/ft (2in-0.163: 4in-0.653: 6in-1.469)
(e) 1 Casing Volume (c x d = e): gals (f) Purge volume (3 x e = f): gals
Depth to Product: NA ft PID Reading: units

Purge data:

Purge Equipment: Geo Pump 2
Purge Procedure: Low Flow Bend end of Sample Tube at ~1 ft off TD

Flow Rate: 0.15 (LPM)/GPM How determined: WATER & DEPTH

Comments: Clear & slightly cloudy No odor - inner controlled

Start Time: 1300 End Time: 1330
Volume Purged: 4.5 Liters/Gallons Time Purged: 30 min

Time	pH	Temperature	mV	DO	Total Volume Pumped (Liters)
1302	7.74	18.5	-44.6	1.50	0.30
1306	7.71	17.9	-40.3	1.31	0.9
1310	7.69	17.3	-33.9	1.54	1.5
1314	7.52	17.2	-29.9	1.53	2.1
1318	7.47	17.2	-26.6	1.83	2.7
1322	7.41	17.0	-23.7	1.70	3.3
1326	7.41	17.3	-23.1	1.86	3.9
1330	7.37	17.8	-21.4	1.73	4.5

Sampling:

Sample Number: MW-1 Sampling Equipment: SAME
Sampling Procedure: Sample Rate 100 mL/min

Time of sample: 1335
Duplicate Sample taken: (yes) no: If yes Sample ID: MW-9 Sample Time: 1335
DTW at time of sampling: 7.71

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Groundwater Sample Collection Log

Project Name: Former Automotive Tire Service Facility Project No: WA05-12704-ESA
Monitor Well Number: MW-2 Sampler: KEITH ROSS Date: 7/7/05
Top of Casing Elevation: 13.88 Groundwater Elevation: 7.66
Weather: PARTIALLY CLOUDY

Water Level Measurement:

(a) Depth to Water: 6.22 ft (c) Height of water (b-a = c): _____ ft
(b) Total Depth of Well: 14.6 ft Equipment: _____
Casing Size: 2 inches (d) Casing volume: .163 gal/ft (2in-0.163: 4in-0.653: 6in-1.469)
(e) 1 Casing Volume (c x d = e): _____ gals (f) Purge volume (3 x e = f): _____ gals
Depth to Product: N/A ft PID Reading: _____ units

Purge data:

Purge Equipment: GEO PUMP 2
Purge Procedure: LOW FLOW END OF SAMPLE TUBE SET AT ~1 ft OFF TD

Flow Rate: 0.15 (LPM)/GPM How determined: _____

Comments: CLEAR TO SLIGHTLY

Start Time: 1348 End Time: 1428
Volume Purged: 4.5 (Liters)/Gallons Time Purged: 30 min

Time	pH	Temperature	mV	DO	Total Volume Pumped (Liters)
1350	7.41	18.1	-24.0	1.73	0.3
1354	7.37	17.4	-21.5	1.56	0.9
1358	7.34	17.3	-19.3	1.43	1.5
1402	7.29	17.4	-18.1	1.47	2.1
1406	7.24	18.2	-13.2	~~1.32~~ 1.32	2.7
1410	7.21	17.9	-12.1	1.36	3.3
1414	7.18	17.9	-10.5	1.39	3.9
1418	7.19	17.8	-11.2	1.50	4.5

Sampling:

Sample Number: MW-2 Sampling Equipment: SAME
Sampling Procedure: SAMPLE RATE 100 mL/min

Time of sample: 1420
Duplicate Sample taken: yes (no) If yes Sample ID: _____ Sample Time: _____
DTW at time of sampling: 6.30

Groundwater Sample Collection Log

Project Name: Former Automotive Tire Service Facility Project No: WA05-12704-ESA
Monitor Well Number: MW-3 Sampler: KEITH ROE Date: 7/7/05
Top of Casing Elevation: 14.93 Groundwater Elevation: 7.71
Weather: SUNNY

Water Level Measurement:

(a) Depth to Water: 7.22 ft (c) Height of water (b-a = c): 7.78 ft
(b) Total Depth of Well: 15 ft Equipment:
Casing Size: 2 inches (d) Casing volume: .163 gal/ft (2in-0.163: 4in-0.653: 6in-1.469)
(e) 1 Casing Volume (c x d = e): gals (f) Purge volume (3 x e = f): gals
Depth to Product: NA ft PID Reading: units

Purge data:

Purge Equipment: GROUNDFOS
Purge Procedure: LOW FLOW TUBE END OF SAMPLE TUBE @ 1-1.5 FT OFF BOTTOM

Flow Rate: 0.125 (LPM)/GPM How determined: WATCH & BEAKER

Comments: SLIGHTLY CLOUDY TRACE PARTICULATE MATERIAL AT INITIAL START SLIGHT ORGANIC/SEPTIC ODOR

Start Time: 934 End Time: 1006
Volume Purged: 3.5 Liters/Gallons Time Purged: 32 min

Time	pH	Temperature	mV	DO	Total Volume Pumped (Liters)
936	7.11	16.2	-11.2	1.79	0.250
944	7.20	16.0	-10.9	1.49	~~0.7~~0.775
946	7.23	16.1	-12.9	1.47	1.30
950	7.20	16.1	-11.1	1.70	1.80
954	7.16	16.3	-9.1	1.62	2.30
958	7.12	17.1	-7.3	1.64	2.80
1002	7.11	16.8	-8.0	1.71	3.30
1006	7.12	16.7	-7.8	1.54	3.80

Sampling:

Sample Number: MW-3 Sampling Equipment: SAME
Sampling Procedure: SAME RATE 100 ML/MIN

Time of sample: 1010 Sample Time:
Duplicate Sample taken: yes (no:) If yes Sample ID:
DTW at time of sampling: 7.32

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Groundwater Sample Collection Log

Project Name: Former Automotive Tire Service Facility Project No: WA05-12704-ESA
Monitor Well Number: MW-4 Sampler: Kristi Ross Date: 7/7/05
Top of Casing Elevation: 15.10 Groundwater Elevation: 7.30
Weather: Sunny

Water Level Measurement:

(a) Depth to Water: 7.80 ft (c) Height of water (b-a = c): _____ ft
(b) Total Depth of Well: 14.9 ft Equipment: _____
Casing Size: 2 inches (d) Casing volume: _____ gal/ft (2in-0.163: 4in-0.653: 6in-1.469)
(e) 1 Casing Volume (c x d = e): _____ gals (f) Purge volume (3 x e = f): _____ gals
Depth to Product: _____ ft PID Reading: _____ units

Purge data:

Purge Equipment: Geopump 2
Purge Procedure: Low flow using Sample Hose ~ 1 ft off of TD of well

Flow Rate: 0.150 (LPM) GPM How determined: WATCH & BUCKET

Comments: clear no odor
↳ very slight cloudy

Start Time: 1021 End Time: 1101
Volume Purged: 5.85 Liters/Gallons Time Purged: 40 min

Time	pH	Temperature	mV	DO	Total Volume Pumped (Liters)
1023	7.36	15.7	-21.3	1.75	0.3
1027	7.43	15.2	-24.2	1.23	0.9
1031	7.43	15.1	-23.4	1.31	1.5
1035	7.40	15.0	-21.4	1.15	1.9 2.1
1039	7.30	15.0	-17.1	1.38	2.5 2.7
1043	7.26	14.8	-15.0	1.49	3.3
1047	7.26	14.8	-12.4	1.67	3.9
1051	7.24	14.9	-13.6	1.74	4.5
1055	7.25	15.0	-14.5	1.60	5.1
to 1101	7.22	15.0	-12.8	1.53	5.850

Sampling:

Sample Number: MW-4 Sampling Equipment: SAMPLE
Sampling Procedure: Sample RATE 100 ml/min

Time of sample: 1105 Sample Time: ~
Duplicate Sample taken: yes (no) If yes Sample ID: _____
DTW at time of sampling: 7.91

Groundwater Sample Collection Log

Project Name: Former Automotive Tire Service Facility Project No: WA05-12704-ESA
Monitor Well Number: MW-5 Sampler: Kelly Ross Date: 7/12/05
Top of Casing Elevation: 13.33 Groundwater Elevation: 7.12
Weather: Sunny

Water Level Measurement:

(a) Depth to Water: 6.21 ft (c) Height of water (b-a = c): _____ ft
(b) Total Depth of Well: 14.65 ft Equipment: _____
Casing Size: _____ inches (d) Casing volume: _____ gal/ft (2in-0.163: 4in-0.653: 6in-1.469)
(e) 1 Casing Volume (c x d = e): _____ gals (f) Purge volume (3 x e = f): _____ gals
Depth to Product: N/A ft PID Reading: _____ units

Purge data:

Purge Equipment: QED Pump 2
Purge Procedure: Low flow 1/2 min of Sample tube at ~1 ft off TD

Flow Rate: 0.175 (LPM)/GPM How determined: WATER & BUCKET

Comments: Slightly cloudy trace particulate matter
No odor

Start Time: 1120 End Time: _____
Volume Purged: _____ Liters/Gallons Time Purged: _____ min

Time	pH	Temperature	mV	DO	Total Volume Pumped (Liters)
1122	7.30	17.0	-19.2	1.74	0.35
1128	7.45	16.5	-26.9	1.33	1.4
1131	7.51	16.6	-29.7	1.65	1.95
1135	7.56	17.1	-30.8	1.44	2.7
1139	7.55	17.0	-31.6	1.69	3.45
1143	7.53	17.1	-30.7	1.48	4.2
1147	7.50	17.3	-28.9	1.61	4.95

Sampling:

Sample Number: MW-5 Sampling Equipment: SAME
Sampling Procedure: Sample RATE 100 mL/min

Time of sample: 1150
Duplicate Sample taken: yes (no) If yes Sample ID: _____ Sample Time: _____
DTW at time of sampling: 6.32

Groundwater Sample Collection Log

Project Name: Former Automotive Tire Service Facility Project No: WA05-12704-ESA
Monitor Well Number: MW-6 Sampler: KEITH ROSS Date: 7/7/05
Top of Casing Elevation: 13.51 Groundwater Elevation: 7.22
Weather: Sunny

Water Level Measurement:

(a) Depth to Water: 6.29 ft (c) Height of water (b-a = c): _____ ft
(b) Total Depth of Well: 14.1 ft Equipment: _____
Casing Size: 2 inches (d) Casing volume: _____ gal/ft (2in-0.163: 4in-0.653: 6in-1.469)
(e) 1 Casing Volume (c x d = e): _____ gals (f) Purge volume (3 x e = f): _____ gals
Depth to Product: _____ ft PID Reading: _____ units

Purge data:

Purge Equipment: GEOPUMP 2
Purge Procedure: LOW FLOW END OF SAMPLE TUBE AT ~14 FT OR TD

Flow Rate: 0.15 (LPM)/GPM How determined: WATER & BEAKER

Comments: CLEAR WITH SLIGHTLY CLOUDY START ORGANIC / SHEEN ODOR

Start Time: 1518 End Time: _____
Volume Purged: _____ Liters/Gallons Time Purged: _____ min

Time	pH	Temperature	mV	DO	Total Volume Pumped (Liters)
1520	7.29	18.5	-19.7	1.13	0.30
1524	7.48	17.5	-28.3	1.18	0.9
1528	7.55	17.2	-32.4	1.25	1.5
1532	7.64	17.2	-36.9	1.42	2.1
1536	7.67	17.2	-38.8	1.26	2.7
1540	7.67	17.4	-38.8	1.56	3.3
1544	7.67	17.5	-38.9	1.28	3.9
1548	7.68	17.2	-39.8	1.21	4.5

Sampling:

Sample Number: MW-6 Sampling Equipment: SAME
Sampling Procedure: SAMPLE RATE ~100 mL/min

Time of sample: 1550
Duplicate Sample taken: yes (no:) If yes Sample ID: _____ Sample Time: _____
DTW at time of sampling: 6.35

Groundwater Sample Collection Log

Project Name: Former Automotive Tire Service Facility Project No: WA05-12704-ESA
Monitor Well Number: MW-7 Sampler: KEITH Rod Date:
Top of Casing Elevation: 13.64 Groundwater Elevation: 7.53
Weather:

Water Level Measurement:

(a) Depth to Water: 6.11 ft (c) Height of water (b-a = c): ft
(b) Total Depth of Well: 14.70 ft Equipment:
Casing Size: inches (d) Casing volume: gal/ft (2in-0.163: 4in-0.653: 6in-1.469)
(e) 1 Casing Volume (c x d = e): gals (f) Purge volume (3 x e = f): gals
Depth to Product: ft PID Reading: units

Purge data:

Purge Equipment: Geo Pump 2
Purge Procedure: Low flow using bottom of Sample TUBE at ~ 1 ft off TD

Flow Rate: 0.15 (LPM)/GPM How determined: WATER & BEAKER

Comments: Slightly Cloudy No odor

Start Time: 1206 End Time:
Volume Purged: Liters/Gallons Time Purged: min

Time	pH	Temperature	mV	DO	Total Volume Pumped (Liters)
1208	7.58	15.6	-34.2	1.58	0.3
1212	7.65	17.7	-39.5	1.43	0.9
1216	7.72	17.8	-42.2	1.43	1.5
1220	7.76	17.3	-44.6	1.19	2.1
1224	7.78	17.2	-45.0	1.21	2.7
1228	7.80	17.3	-45.6	1.22	3.3

Sampling:

Sample Number: MW-7 Sampling Equipment: SAME
Sampling Procedure: Sample Rate 100 mL/min

Time of sample: 1230
Duplicate Sample taken: yes (no.) If yes Sample ID: Sample Time:
DTW at time of sampling:

Groundwater Sample Collection Log

Project Name: Former Automotive Tire Service Facility Project No: WA05-12704-ESA
Monitor Well Number: MW-8 Sampler: KEITH RUSS Date: 7/7/05
Top of Casing Elevation: 13.68 Groundwater Elevation: 7.41
Weather: Sunny

Water Level Measurement:

(a) Depth to Water: 6.27 ft (c) Height of water (b-a = c): ft
(b) Total Depth of Well: 14.45 ft Equipment:
Casing Size: inches (d) Casing volume: gal/ft (2in-0.163: 4in-0.653: 6in-1.469)
(e) 1 Casing Volume (c x d = e): gals (f) Purge volume (3 x e = f): gals
Depth to Product: NA ft PID Reading: units

Purge data:

Purge Equipment: GRUNDFOS 2
Purge Procedure: LOW FLOW END OF SAMPLE TUBE AT ~14 FT BGS TD

Flow Rate: 0.2 (LPM)/GPM How determined: WATCH & BEAKER

Comments: SLIGHTLY CLOUDY NO ODOR
↳ CLEARING UP AFTER ~2.5 LITERS

Start Time: 1436 End Time:
Volume Purged: Liters/Gallons Time Purged: min

Time	pH	Temperature	mV	DO	Total Volume Pumped (Liters)
1437	7.20	17.6	-11.8	1.53	0.2
1440	7.18	17.2	-7.7	1.26	0.8
1443	7.15	17.0	-8.2	1.16	1.4
1446	7.09	17.0	-5.6	1.30	2.0
1449	7.06	17.0	-4.2	1.12	2.6
1452	7.07	17.0	-4.5	1.13	3.2
1455	7.09	16.9	-5.6	1.07	3.8
1458	7.11	16.9	-6.9	1.03	4.4
1501	7.12	16.9	-7.7	1.10	5.0

Sampling:

Sample Number: MW-8 Sampling Equipment: SAME
Sampling Procedure: SAMPLE RATE ~ 100 ml/min

Time of sample: 1505
Duplicate Sample taken: yes (no) If yes Sample ID: Sample Time:
DTW at time of sampling: 6.34

Groundwater Sample Collection Log

Project Name: Former Automotive Tire Service Facility Project No: WA05-12704-ESA
Monitor Well Number: MW-1 Sampler: ICHIRO ROSS Date: 9/27/05
Top of Casing Elevation: 15.00 Groundwater Elevation: _____
Weather: PARTLY CLOUDY

Water Level Measurement:

(a) Depth to Water: 8.13 ft (c) Height of water (b-a = c): _____ ft
(b) Total Depth of Well: _____ ft Equipment: _____
Casing Size: _____ inches (d) Casing volume: _____ gal/ft (2in-0.163: 4in-0.653: 6in-1.469)
(e) 1 Casing Volume (c x d = e): _____ gals (f) Purge volume (3 x e = f): _____ gals
Depth to Product: _____ ft PID Reading: _____ units

Purge data:

Purge Equipment: GEO PUMP 2
Purge Procedure: LOW FLOW VIAL VIA SAMPLE HOSE AT ~ 1 to 1.5 FEET ABOVE BOTTOM OF WELL

Flow Rate: 0.10 (LPM)/GPM How determined: WATCH & BUCKET

Comments: CLEAR SLIGHT ORGANIC ODOR

Start Time: 11:03 End Time: _____
Volume Purged: _____ Liters/Gallons Time Purged: _____ min

Time	pH	Temperature	mV	DO	Total Volume Pumped (Liters)
1105	6.91	18.5	~~-32.8~~		0.2
1110	~~7.38~~	18.5	-34.0		0.7
1115	7.41	18.5	-35.5		1.2
1120	7.34	18.7	-34.1		1.7
1125	7.36	18.7	-33.6		2.2
1130	7.36	18.2	-33.9		2.7

Sampling:

Sample Number: MW-1 Sampling Equipment: SAME
Sampling Procedure: SAMPLE FLOW @ 100mL/MIN

Time of sample: _____
Duplicate Sample taken: (yes) no: If yes Sample ID: MW-10 Sample Time: 1230
DTW at time of sampling: 8.26

Groundwater Sample Collection Log

Project Name: Former Automotive Tire Service Facility Project No: WA05-12704-ESA
Monitor Well Number: MW-2 Sampler: KEITH RISU Date: 9/27/05
Top of Casing Elevation: 13.88 Groundwater Elevation: _____
Weather: PARTLY CLOUDY / SUNNY

Water Level Measurement:

(a) Depth to Water: 6.96 ft (c) Height of water (b-a = c): _____ ft
(b) Total Depth of Well: _____ ft Equipment: _____
Casing Size: _____ inches (d) Casing volume: _____ gal/ft (2in-0.163: 4in-0.653: 6in-1.469)
(e) 1 Casing Volume (c x d = e): _____ gals (f) Purge volume (3 x e = f): _____ gals
Depth to Product: _____ ft PID Reading: _____ units

Purge data:

Purge Equipment: GEOPUMP 2
Purge Procedure: LOW FLOW ENDS OF SAMPLE TUBE AT ~10.15 ft ABOVE BOTTOM OF WELL

Flow Rate: 0.10 (LPM)/GPM How determined: WATCH + BEAKER

Comments: CLEAR NO ODOR

Start Time: 1150 End Time: _____
Volume Purged: _____ Liters/Gallons Time Purged: _____ min

Time	pH	Temperature	mV	DO	Total Volume Pumped (Liters)
1152	7.40	19.3	-35.8		0.2
1157	7.35	19.0	-32.9		0.7
1202	7.30	18.7	-30.4		1.2
1207	7.28	18.8	-28.9		1.7
1212	7.25	18.8	-27.2		2.2
1217	7.22	18.7	-25.6		2.7
1222	7.19	18.5	-24.2		3.2

Sampling:

Sample Number: MW-2 Sampling Equipment: SAME
Sampling Procedure: SAME RATE: ~100 mL/MIN

Time of sample: 1225
Duplicate Sample taken: yes (no) If yes Sample ID: _____ Sample Time: _____
DTW at time of sampling: 7.05

615 8th Avenue South
Seattle, Washington, 98104

LSI Adapt

Tel (206)-654-7045
Fax (206) 654-7048
www.lsiadapt.com

Groundwater Sample Collection Log

Project Name: Former Automotive Tire Service Facility Project No: WA05-12704-ESA
Monitor Well Number: MW-3 Sampler: _____ Date: 9/27/05
Top of Casing Elevation: 14.93 Groundwater Elevation: _____
Weather: _____

Water Level Measurement:

(a) Depth to Water: 7.95 ft (c) Height of water (b-a = c): _____ ft
(b) Total Depth of Well: _____ ft Equipment: _____
Casing Size: _____ inches (d) Casing volume: _____ gal/ft (2in-0.163: 4in-0.653: 6in-1.469)
(e) 1 Casing Volume (c x d = e): _____ gals (f) Purge volume (3 x e = f): _____ gals
Depth to Product: _____ ft PID Reading: _____ units

Purge data:

Purge Equipment: _____
Purge Procedure: _____

Flow Rate: _____ LPM/GPM How determined: _____

Comments: Not Sampled

Start Time: _____ End Time: _____
Volume Purged: _____ Liters/Gallons Time Purged: _____ min

Time	pH	Temperature	mV	DO	Total Volume Pumped (Liters)

Sampling:

Sample Number: _____ Sampling Equipment: _____
Sampling Procedure: _____

Time of sample: _____ Sample Time: _____
Duplicate Sample taken: yes no: If yes Sample ID: _____
DTW at time of sampling: _____

Groundwater Sample Collection Log

Project Name: Former Automotive Tire Service Facility Project No: WA05-12704-ESA
Monitor Well Number: MW-4 Sampler: _____ Date: 9/27/05
Top of Casing Elevation: 15.10 Groundwater Elevation: _____
Weather: _____

Water Level Measurement:

(a) Depth to Water: 8.40 ft (c) Height of water (b-a = c): _____ ft
(b) Total Depth of Well: _____ ft Equipment: _____
Casing Size: _____ inches (d) Casing volume: _____ gal/ft (2in-0.163: 4in-0.653: 6in-1.469)
(e) I Casing Volume (c x d = e): _____ gals (f) Purge volume (3 x e = f): _____ gals
Depth to Product: _____ ft PID Reading: _____ units

Purge data:

Purge Equipment: _____
Purge Procedure: _____

Flow Rate: _____ LPM/GPM How determined: _____

Comments: N.S Sampled

Start Time: _____ End Time: _____
Volume Purged: _____ Liters/Gallons Time Purged: _____ min

Time	pH	Temperature	mV	DO	Total Volume Pumped (Liters)

Sampling:

Sample Number: _____ Sampling Equipment: _____
Sampling Procedure: _____

Time of sample: _____
Duplicate Sample taken: yes no: If yes Sample ID: _____ Sample Time: _____
DTW at time of sampling: _____

Groundwater Sample Collection Log

Project Name: Former Automotive Tire Service Facility Project No: WA05-12704-ESA
Monitor Well Number: MW-9 Sampler: CHRISTY RUSS Date: 9/27/05
Top of Casing Elevation: _____ Groundwater Elevation: _____
Weather: Cloudy misty

Water Level Measurement:

(a) Depth to Water: 6.46 ft (c) Height of water (b-a = c): _____ ft
(b) Total Depth of Well: 15.0 ft Equipment: _____
Casing Size: _____ inches (d) Casing volume: _____ gal/ft (2in-0.163: 4in-0.653: 6in-1.469)
(e) 1 Casing Volume (c x d = e): _____ gals (f) Purge volume (3 x e = f): _____ gals
Depth to Product: _____ ft PID Reading: _____ units

Purge data:

Purge Equipment: GeoPump 2 Peristaltic
Purge Procedure: Low Flow Rate of Sample Tube at ~ 1 to 1.5 ft off Bottom of well

Flow Rate: 0.100 LPM/GPM How determined: WATCH & BEAKER

Comments: CLEAR NO ODOR

Start Time: 1000 End Time: 1050
Volume Purged: _____ Liters/Gallons Time Purged: _____ min

Time	pH	Temperature	mV	DO	Total Volume Pumped (Liters)
1002	7.16	16.7	-19.5		0.200
1007	7.03	16.8	-13.9		0.700
1012	6.94	16.7	-9.2		1.200
1017	6.86	17.0	-5.6		1.700
1022	6.79	17.2	-2.8		2.20
1027	6.83	17.4	-4.5		2.7
1032	6.85	17.5	-5.1		3.2
1037	6.88	17.5	-6.6		3.7
1042	6.91	17.4	-8.7		4.2
1047	6.93	17.5	-9.6		4.7
					5.0

Sampling:

Sample Number: MW-9 Sampling Equipment: SAME
Sampling Procedure: Sample from ~ 100 mL/min

Time of sample: 1050
Duplicate Sample taken: yes (no) If yes Sample ID: _____ Sample Time: _____
DTW at time of sampling: 6.56

APPENDIX E
LABORATORY ANALYTICAL REPORT /CHAIN OF CUSTODY FORM

OnSite Environmental Inc.
14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

July 15, 2005

Keith Ross
LSI-Adapt
615 8th Avenue S
Seattle, WA 98104

Re: Analytical Data for Project WA05-12704-ESA
Laboratory Reference No. 0507-049

Dear Keith:

Enclosed are the analytical results and associated quality control data for samples submitted on July 8, 2005.

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 15, 2005
Samples Submitted: July 8, 2005
Laboratory Reference: 0507-049
Project: WA05-12704-ESA

Case Narrative

Samples were collected on July 7, 2005 and received by the laboratory on July 8, 2005. They were maintained at the laboratory at a temperature of 2°C to 6°C except as noted below.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

Date of Report: July 15, 2005
Samples Submitted: July 8, 2005
Laboratory Reference: 0507-049
Project: WA05-12704-ESA

HALOGENATED VOLATILES by EPA 8260B

Date Extracted:	7-12-05
Date Analyzed:	7-12-05
Matrix:	Water
Units:	ug/L (ppb)
Lab ID:	07-049-01
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	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	0.35		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: July 15, 2005
Samples Submitted: July 8, 2005
Laboratory Reference: 0507-049
Project: WA05-12704-ESA

HALOGENATED VOLATILES by EPA 8260B

Lab ID: 07-049-01
Client ID: **MW-3**

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.20
Tetrachloroethene	1.9		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	104	70-123
Toluene, d8	102	70-119
4-Bromofluorobenzene	102	70-119

Date of Report: July 15, 2005
Samples Submitted: July 8, 2005
Laboratory Reference: 0507-049
Project: WA05-12704-ESA

HALOGENATED VOLATILES by EPA 8260B

Date Extracted:	7-12-05
Date Analyzed:	7-12-05
Matrix:	Water
Units:	ug/L (ppb)
Lab ID:	07-049-02
Client ID:	**MW-4**

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: July 15, 2005
Samples Submitted: July 8, 2005
Laboratory Reference: 0507-049
Project: WA05-12704-ESA

HALOGENATED VOLATILES by EPA 8260B

Page 2 of 2

Lab ID: 07-049-02
Client ID: MW-4

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.20
Tetrachloroethene	2.7		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	103	70-123
Toluene, d8	102	70-119
4-Bromofluorobenzene	109	70-119

Date of Report: July 15, 2005
Samples Submitted: July 8, 2005
Laboratory Reference: 0507-049
Project: WA05-12704-ESA

HALOGENATED VOLATILES by EPA 8260B
Page 1 of 2

Date Extracted:	7-12-05
Date Analyzed:	7-12-05
Matrix:	Water
Units:	ug/L (ppb)
Lab ID:	07-049-03
Client ID:	**MW-5**

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	0.82		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: July 15, 2005
Samples Submitted: July 8, 2005
Laboratory Reference: 0507-049
Project: WA05-12704-ESA

HALOGENATED VOLATILES by EPA 8260B
Page 2 of 2

Lab ID: 07-049-03
Client ID: MW-5

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.20
Tetrachloroethene	6.0		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	103	70-123
Toluene, d8	101	70-119
4-Bromofluorobenzene	91	70-119

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Project: WA05-12704-ESA

HALOGENATED VOLATILES by EPA 8260B

Date Extracted:	7-12-05
Date Analyzed:	7-12-05
Matrix:	Water
Units:	ug/L (ppb)
Lab ID:	07-049-04
Client ID:	**MW-7**

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	0.96		0.20
1,1-Dichloroethane	ND		0.20
2,2-Dichloropropane	ND		0.20
(cis) 1,2-Dichloroethene	2.8		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	3.1		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

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Lab ID: 07-049-04
Client ID: MW-7

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.20
Tetrachloroethene	33		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	104	70-123
Toluene, d8	103	70-119
4-Bromofluorobenzene	103	70-119

Date of Report: July 15, 2005
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HALOGENATED VOLATILES by EPA 8260B

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Date Extracted:	7-12-05
Date Analyzed:	7-12-05
Matrix:	Water
Units:	ug/L (ppb)
Lab ID:	07-049-05
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	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	0.69		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

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HALOGENATED VOLATILES by EPA 8260B

Lab ID: 07-049-05
Client ID: MW-1

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.20
Tetrachloroethene	13		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	100	70-123
Toluene, d8	109	70-119
4-Bromofluorobenzene	107	70-119

Date of Report: July 15, 2005
Samples Submitted: July 8, 2005
Laboratory Reference: 0507-049
Project: WA05-12704-ESA

HALOGENATED VOLATILES by EPA 8260B

Date Extracted:	7-12-05
Date Analyzed:	7-12-05
Matrix:	Water
Units:	ug/L (ppb)
Lab ID:	07-049-06
Client ID:	**MW-9**

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	0.69		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

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Lab ID: 07-049-06
Client ID: MW-9

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.20
Tetrachloroethene	13		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	100	70-123
Toluene, d8	107	70-119
4-Bromofluorobenzene	107	70-119

Date of Report: July 15, 2005
Samples Submitted: July 8, 2005
Laboratory Reference: 0507-049
Project: WA05-12704-ESA

HALOGENATED VOLATILES by EPA 8260B

Date Extracted:	7-12-05
Date Analyzed:	7-12-05
Matrix:	Water
Units:	ug/L (ppb)
Lab ID:	07-049-07
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	ND		0.20
1,1-Dichloroethene	ND		0.20
Iodomethane	ND		1.0
Methylene Chloride	ND		1.0
(trans) 1,2-Dichloroethene	0.26		0.20
1,1-Dichloroethane	ND		0.20
2,2-Dichloropropane	ND		0.20
(cis) 1,2-Dichloroethene	1.3		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	4.5		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

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Lab ID: 07-049-07
Client ID: MW-2

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.20
Tetrachloroethene	29		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	103	70-123
Toluene, d8	107	70-119
4-Bromofluorobenzene	106	70-119

Date of Report: July 15, 2005
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Date Extracted:	7-12-05
Date Analyzed:	7-12-05
Matrix:	Water
Units:	ug/L (ppb)
Lab ID:	07-049-08
Client ID:	**MW-8**

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		0.40
Chloromethane	ND		0.40
Vinyl Chloride	ND		0.40
Bromomethane	ND		0.40
Chloroethane	ND		0.40
Trichlorofluoromethane	ND		0.40
1,1-Dichloroethene	ND		0.40
Iodomethane	ND		2.0
Methylene Chloride	ND		2.0
(trans) 1,2-Dichloroethene	1.4		0.40
1,1-Dichloroethane	ND		0.40
2,2-Dichloropropane	ND		0.40
(cis) 1,2-Dichloroethene	10		0.40
Bromochloromethane	ND		0.40
Chloroform	ND		0.40
1,1,1-Trichloroethane	ND		0.40
Carbon Tetrachloride	ND		0.40
1,1-Dichloropropene	ND		0.40
1,2-Dichloroethane	ND		0.40
Trichloroethene	6.6		0.40
1,2-Dichloropropane	ND		0.40
Dibromomethane	ND		0.40
Bromodichloromethane	ND		0.40
2-Chloroethyl Vinyl Ether	ND		2.0
(cis) 1,3-Dichloropropene	ND		0.40
(trans) 1,3-Dichloropropene	ND		0.40

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Samples Submitted: July 8, 2005
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Lab ID: 07-049-08
Client ID: **MW-8**

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.40
Tetrachloroethene	100		0.40
1,3-Dichloropropane	ND		0.40
Dibromochloromethane	ND		0.40
1,2-Dibromoethane	ND		0.40
Chlorobenzene	ND		0.40
1,1,1,2-Tetrachloroethane	ND		0.40
Bromoform	ND		2.0
Bromobenzene	ND		0.40
1,1,2,2-Tetrachloroethane	ND		0.40
1,2,3-Trichloropropane	ND		0.40
2-Chlorotoluene	ND		0.40
4-Chlorotoluene	ND		0.40
1,3-Dichlorobenzene	ND		0.40
1,4-Dichlorobenzene	ND		0.40
1,2-Dichlorobenzene	ND		0.40
1,2-Dibromo-3-chloropropane	ND		2.0
1,2,4-Trichlorobenzene	ND		0.40
Hexachlorobutadiene	ND		0.40
1,2,3-Trichlorobenzene	ND		0.40

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	105	70-123
Toluene, d8	103	70-119
4-Bromofluorobenzene	110	70-119

Date of Report: July 15, 2005
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Date Extracted:	7-12-05
Date Analyzed:	7-12-05
Matrix:	Water
Units:	ug/L (ppb)
Lab ID:	07-049-09
Client ID:	**MW-6**

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		0.40
Chloromethane	ND		0.40
Vinyl Chloride	1.3		0.40
Bromomethane	ND		0.40
Chloroethane	ND		0.40
Trichlorofluoromethane	ND		0.40
1,1-Dichloroethene	ND		0.40
Iodomethane	ND		2.0
Methylene Chloride	ND		2.0
(trans) 1,2-Dichloroethene	9.1		0.40
1,1-Dichloroethane	ND		0.40
2,2-Dichloropropane	ND		0.40
(cis) 1,2-Dichloroethene	91		0.40
Bromochloromethane	ND		0.40
Chloroform	ND		0.40
1,1,1-Trichloroethane	ND		0.40
Carbon Tetrachloride	ND		0.40
1,1-Dichloropropene	ND		0.40
1,2-Dichloroethane	ND		0.40
Trichloroethene	2.3		0.40
1,2-Dichloropropane	ND		0.40
Dibromomethane	ND		0.40
Bromodichloromethane	ND		0.40
2-Chloroethyl Vinyl Ether	ND		2.0
(cis) 1,3-Dichloropropene	ND		0.40
(trans) 1,3-Dichloropropene	ND		0.40

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Lab ID: 07-049-09
Client ID: MW-6

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.40
Tetrachloroethene	11		0.40
1,3-Dichloropropane	ND		0.40
Dibromochloromethane	ND		0.40
1,2-Dibromoethane	ND		0.40
Chlorobenzene	ND		0.40
1,1,1,2-Tetrachloroethane	ND		0.40
Bromoform	ND		2.0
Bromobenzene	ND		0.40
1,1,2,2-Tetrachloroethane	ND		0.40
1,2,3-Trichloropropane	ND		0.40
2-Chlorotoluene	ND		0.40
4-Chlorotoluene	ND		0.40
1,3-Dichlorobenzene	ND		0.40
1,4-Dichlorobenzene	ND		0.40
1,2-Dichlorobenzene	ND		0.40
1,2-Dibromo-3-chloropropane	ND		2.0
1,2,4-Trichlorobenzene	ND		0.40
Hexachlorobutadiene	ND		0.40
1,2,3-Trichlorobenzene	ND		0.40

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	103	70-123
Toluene, d8	101	70-119
4-Bromofluorobenzene	108	70-119

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Date Extracted:	7-12-05
Date Analyzed:	7-12-05
Matrix:	Water
Units:	ug/L (ppb)
Lab ID:	07-049-10
Client ID:	**TRIP BLANK**

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

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Lab ID: 07-049-10
Client ID: TRIP BLANK

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	104	70-123
Toluene, d8	101	70-119
4-Bromofluorobenzene	104	70-119

Date of Report: July 15, 2005
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HALOGENATED VOLATILES by EPA 8260B
METHOD BLANK QUALITY CONTROL
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Date Extracted:	7-12-05
Date Analyzed:	7-12-05
Matrix:	Water
Units:	ug/L (ppb)
Lab ID:	MB0712W1

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

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Laboratory Reference: 0507-049
Project: WA05-12704-ESA

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

Lab ID: MB0712W1

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	101	70-123
Toluene, d8	103	70-119
4-Bromofluorobenzene	106	70-119

Date of Report: July 15, 2005
Samples Submitted: July 8, 2005
Laboratory Reference: 0507-049
Project: WA05-12704-ESA

HALOGENATED VOLATILES by EPA 8260B
SB/SBD QUALITY CONTROL

Date Extracted: 7-12-05
Date Analyzed: 7-12-05

Matrix: Water
Units: ug/L (ppb)

Lab ID: SB0712W1

Compound	Spike Amount	SB	Percent Recovery	SBD	Percent Recovery	Recovery Limits	Flags
1,1-Dichloroethene	10.0	9.56	96	10.7	107	70-130	
Benzene	10.0	9.98	100	10.6	106	70-130	
Trichloroethene	10.0	9.81	98	10.1	101	70-130	
Toluene	10.0	10.5	105	11.3	113	70-130	
Chlorobenzene	10.0	9.88	99	10.8	108	70-130	

	RPD	RPD Limit	Flags
1,1-Dichloroethene	12	17	
Benzene	6	13	
Trichloroethene	3	12	
Toluene	8	14	
Chlorobenzene	9	9	

OnSite Environmental Inc.

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.

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 indicative of diesel fuel are present in the sample and are impacting the gasoline result.

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/silica gel cleanup procedure.

Z -

ND - Not Detected at PQL
PQL - Practical Quantitation Limit
RPD - Relative Percent Difference

Chain of Custody

OnSite Environmental Inc.
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • Fax: (425) 885-4603

Company: LSI Adapt
Project Number: WA05-12704-ESA
Project Name: Thorne Road Project
Project Manager: Keith Ross
Sampled by: Keith Ross

Turnaround Request (in working days)

(Check One)

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

Laboratory Number: 07-049

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 / SIM	PCBs by 8082	Pesticides by 8081A	Herbicides by 8151A	Total RCRA Metals (8)	TCLP Metals	HEM by 1664	VPH	EPH	% Moisture
1	MW-3	7/7/05	1010	W	3					X											
2	MW-4		1105	W	3					X											
3	MW-5		1150	W	3					X											
4	MW-7		1230	W	3					X											
5	MW-1		1335	W	3					X											
6	MW-9		1355	W	3					X											
7	MW-2		1420	W	3					X											
8	MW-8		1505	W	3					X											
9	MW-6		1550	W	3					X											
10	MTP BLANK				3					X											

	Signature	Company	Date	Time
Relinquished by		LSI Adapt	7/8/05	0900
Received by		OSE	7-8-05	8:00
Relinquished by				
Received by				
Relinquished by				
Received by				
Reviewed by/Date		Reviewed by/Date		

Comments/Special Instructions:

Chromatograms with final report ☐

DISTRIBUTION LEGEND: White - OnSite Copy Yellow - Report Copy Pink - Client Copy

OnSite Environmental Inc.
14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

September 2, 2005

Keith Ross
LSI-Adapt
615 8th Avenue S
Seattle, WA 98104

Re: Analytical Data for Project WA05-12704-ESA
Laboratory Reference No. 0508-229

Dear Keith:

Enclosed are the analytical results and associated quality control data for samples submitted on August 24, 2005.

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: September 2, 2005
Samples Submitted: August 24, 2005
Laboratory Reference: 0508-229
Project: WA05-12704-ESA

Case Narrative

Samples were collected on August 23, 2005 and received by the laboratory on August 24, 2005. They were maintained at the laboratory at a temperature of 2°C to 6°C except as noted below.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

Halogenated Volatiles (Soil) EPA 8260B Analysis

Per EPA Method 5035A, samples were received by the laboratory in pre-weighed 40 mL VOA vials within 48 hours of sample collection. They were stored in a freezer at between -7°C and -20°C until extraction or analysis.

Internal Standards Chlorobenzene-d5 and 1,4-Dichlorobenzene-d4 do not meet acceptance criteria for sample SC4-14.5 due to sample matrix effects. The sample was reanalyzed with similar results. All results, including Practical Quantitation Limits, from (trans) 1,3-Dichloropropene forward should be considered estimates.

Any other 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: September 2, 2005
Samples Submitted: August 24, 2005
Laboratory Reference: 0508-229
Project: WA05-12704-ESA

HALOGENATED VOLATILES by EPA 8260B

Date Extracted:	8-30-05
Date Analyzed:	8-30-05
Matrix:	Soil
Units:	mg/kg (ppm)
Lab ID:	08-229-04
Client ID:	**SC1-14.5**

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		0.0012
Chloromethane	ND		0.0012
Vinyl Chloride	ND		0.0012
Bromomethane	ND		0.0012
Chloroethane	ND		0.0012
Trichlorofluoromethane	ND		0.0012
1,1-Dichloroethene	ND		0.0012
Iodomethane	ND		0.0058
Methylene Chloride	0.012	H	0.0058
(trans) 1,2-Dichloroethene	ND		0.0012
1,1-Dichloroethane	ND		0.0012
2,2-Dichloropropane	ND		0.0012
(cis) 1,2-Dichloroethene	ND		0.0012
Bromochloromethane	ND		0.0012
Chloroform	ND		0.0012
1,1,1-Trichloroethane	ND		0.0012
Carbon Tetrachloride	ND		0.0012
1,1-Dichloropropene	ND		0.0012
1,2-Dichloroethane	ND		0.0012
Trichloroethene	ND		0.0012
1,2-Dichloropropane	ND		0.0012
Dibromomethane	ND		0.0012
Bromodichloromethane	ND		0.0012
2-Chloroethyl Vinyl Ether	ND		0.0058
(cis) 1,3-Dichloropropene	ND		0.0012
(trans) 1,3-Dichloropropene	ND		0.0012

Date of Report: September 2, 2005
Samples Submitted: August 24, 2005
Laboratory Reference: 0508-229
Project: WA05-12704-ESA

HALOGENATED VOLATILES by EPA 8260B

Lab ID: 08-229-04
Client ID: SC1-14.5

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.0012
Tetrachloroethene	ND		0.0012
1,3-Dichloropropane	ND		0.0012
Dibromochloromethane	ND		0.0012
1,2-Dibromoethane	ND		0.0012
Chlorobenzene	ND		0.0012
1,1,1,2-Tetrachloroethane	ND		0.0012
Bromoform	ND		0.0012
Bromobenzene	ND		0.0012
1,1,2,2-Tetrachloroethane	ND		0.0012
1,2,3-Trichloropropane	ND		0.0012
2-Chlorotoluene	ND		0.0012
4-Chlorotoluene	ND		0.0012
1,3-Dichlorobenzene	ND		0.0012
1,4-Dichlorobenzene	ND		0.0012
1,2-Dichlorobenzene	ND		0.0012
1,2-Dibromo-3-chloropropane	ND		0.0058
1,2,4-Trichlorobenzene	ND		0.0012
Hexachlorobutadiene	ND		0.0058
1,2,3-Trichlorobenzene	ND		0.0012

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	103	71-126
Toluene, d8	108	73-130
4-Bromofluorobenzene	110	70-130

Date of Report: September 2, 2005
Samples Submitted: August 24, 2005
Laboratory Reference: 0508-229
Project: WA05-12704-ESA

HALOGENATED VOLATILES by EPA 8260B

page 1 of 2

Date Extracted:	8-30-05
Date Analyzed:	8-30-05
Matrix:	Soil
Units:	mg/kg (ppm)
Lab ID:	08-229-08
Client ID:	**SC2-14.5**

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		0.0011
Chloromethane	ND		0.0011
Vinyl Chloride	ND		0.0011
Bromomethane	ND		0.0011
Chloroethane	ND		0.0011
Trichlorofluoromethane	ND		0.0011
1,1-Dichloroethene	ND		0.0011
Iodomethane	ND		0.0054
Methylene Chloride	0.0098	H	0.0054
(trans) 1,2-Dichloroethene	ND		0.0011
1,1-Dichloroethane	ND		0.0011
2,2-Dichloropropane	ND		0.0011
(cis) 1,2-Dichloroethene	ND		0.0011
Bromochloromethane	ND		0.0011
Chloroform	ND		0.0011
1,1,1-Trichloroethane	ND		0.0011
Carbon Tetrachloride	ND		0.0011
1,1-Dichloropropene	ND		0.0011
1,2-Dichloroethane	ND		0.0011
Trichloroethene	ND		0.0011
1,2-Dichloropropane	ND		0.0011
Dibromomethane	ND		0.0011
Bromodichloromethane	ND		0.0011
2-Chloroethyl Vinyl Ether	ND		0.0054
(cis) 1,3-Dichloropropene	ND		0.0011
(trans) 1,3-Dichloropropene	ND		0.0011

Date of Report: September 2, 2005
Samples Submitted: August 24, 2005
Laboratory Reference: 0508-229
Project: WA05-12704-ESA

HALOGENATED VOLATILES by EPA 8260B
page 2 of 2

Lab ID: 08-229-08
Client ID: SC2-14.5

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.0011
Tetrachloroethene	ND		0.0011
1,3-Dichloropropane	ND		0.0011
Dibromochloromethane	ND		0.0011
1,2-Dibromoethane	ND		0.0011
Chlorobenzene	ND		0.0011
1,1,1,2-Tetrachloroethane	ND		0.0011
Bromoform	ND		0.0011
Bromobenzene	ND		0.0011
1,1,2,2-Tetrachloroethane	ND		0.0011
1,2,3-Trichloropropane	ND		0.0011
2-Chlorotoluene	ND		0.0011
4-Chlorotoluene	ND		0.0011
1,3-Dichlorobenzene	ND		0.0011
1,4-Dichlorobenzene	ND		0.0011
1,2-Dichlorobenzene	ND		0.0011
1,2-Dibromo-3-chloropropane	ND		0.0054
1,2,4-Trichlorobenzene	ND		0.0011
Hexachlorobutadiene	ND		0.0054
1,2,3-Trichlorobenzene	ND		0.0011

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	102	71-126
Toluene, d8	111	73-130
4-Bromofluorobenzene	113	70-130

Date of Report: September 2, 2005
Samples Submitted: August 24, 2005
Laboratory Reference: 0508-229
Project: WA05-12704-ESA

HALOGENATED VOLATILES by EPA 8260B

Date Extracted:	8-30-05
Date Analyzed:	8-30-05
Matrix:	Soil
Units:	mg/kg (ppm)
Lab ID:	08-229-12
Client ID:	**SC3-14.5**

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		0.0012
Chloromethane	ND		0.0012
Vinyl Chloride	ND		0.0012
Bromomethane	ND		0.0012
Chloroethane	ND		0.0012
Trichlorofluoromethane	ND		0.0012
1,1-Dichloroethene	ND		0.0012
Iodomethane	ND		0.0058
Methylene Chloride	0.013	H	0.0058
(trans) 1,2-Dichloroethene	ND		0.0012
1,1-Dichloroethane	ND		0.0012
2,2-Dichloropropane	ND		0.0012
(cis) 1,2-Dichloroethene	ND		0.0012
Bromochloromethane	ND		0.0012
Chloroform	ND		0.0012
1,1,1-Trichloroethane	ND		0.0012
Carbon Tetrachloride	ND		0.0012
1,1-Dichloropropene	ND		0.0012
1,2-Dichloroethane	ND		0.0012
Trichloroethene	ND		0.0012
1,2-Dichloropropane	ND		0.0012
Dibromomethane	ND		0.0012
Bromodichloromethane	ND		0.0012
2-Chloroethyl Vinyl Ether	ND		0.0058
(cis) 1,3-Dichloropropene	ND		0.0012
(trans) 1,3-Dichloropropene	ND		0.0012

Date of Report: September 2, 2005
Samples Submitted: August 24, 2005
Laboratory Reference: 0508-229
Project: WA05-12704-ESA

HALOGENATED VOLATILES by EPA 8260B
page 2 of 2

Lab ID: 08-229-12
Client ID: SC3-14.5

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.0012
Tetrachloroethene	ND		0.0012
1,3-Dichloropropane	ND		0.0012
Dibromochloromethane	ND		0.0012
1,2-Dibromoethane	ND		0.0012
Chlorobenzene	ND		0.0012
1,1,1,2-Tetrachloroethane	ND		0.0012
Bromoform	ND		0.0012
Bromobenzene	ND		0.0012
1,1,2,2-Tetrachloroethane	ND		0.0012
1,2,3-Trichloropropane	ND		0.0012
2-Chlorotoluene	ND		0.0012
4-Chlorotoluene	ND		0.0012
1,3-Dichlorobenzene	ND		0.0012
1,4-Dichlorobenzene	ND		0.0012
1,2-Dichlorobenzene	ND		0.0012
1,2-Dibromo-3-chloropropane	ND		0.0058
1,2,4-Trichlorobenzene	ND		0.0012
Hexachlorobutadiene	ND		0.0058
1,2,3-Trichlorobenzene	ND		0.0012

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	106	71-126
Toluene, d8	99	73-130
4-Bromofluorobenzene	112	70-130

Date of Report: September 2, 2005
Samples Submitted: August 24, 2005
Laboratory Reference: 0508-229
Project: WA05-12704-ESA

HALOGENATED VOLATILES by EPA 8260B

page 1 of 2

Date Extracted:	8-30-05
Date Analyzed:	8-30-05
Matrix:	Soil
Units:	mg/kg (ppm)
Lab ID:	08-229-16
Client ID:	**SC4-14.5**

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		0.0014
Chloromethane	ND		0.0014
Vinyl Chloride	ND		0.0014
Bromomethane	ND		0.0014
Chloroethane	ND		0.0014
Trichlorofluoromethane	ND		0.0014
1,1-Dichloroethene	ND		0.0014
Iodomethane	ND		0.0069
Methylene Chloride	0.012	H	0.0069
(trans) 1,2-Dichloroethene	ND		0.0014
1,1-Dichloroethane	ND		0.0014
2,2-Dichloropropane	ND		0.0014
(cis) 1,2-Dichloroethene	ND		0.0014
Bromochloromethane	ND		0.0014
Chloroform	ND		0.0014
1,1,1-Trichloroethane	ND		0.0014
Carbon Tetrachloride	ND		0.0014
1,1-Dichloropropene	ND		0.0014
1,2-Dichloroethane	ND		0.0014
Trichloroethene	ND		0.0014
1,2-Dichloropropane	ND		0.0014
Dibromomethane	ND		0.0014
Bromodichloromethane	ND		0.0014
2-Chloroethyl Vinyl Ether	ND		0.0069
(cis) 1,3-Dichloropropene	ND		0.0014
(trans) 1,3-Dichloropropene	ND		0.0014

Date of Report: September 2, 2005
Samples Submitted: August 24, 2005
Laboratory Reference: 0508-229
Project: WA05-12704-ESA

HALOGENATED VOLATILES by EPA 8260B
page 2 of 2

Lab ID: 08-229-16
Client ID: SC4-14.5

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.0014
Tetrachloroethene	ND		0.0014
1,3-Dichloropropane	ND		0.0014
Dibromochloromethane	ND		0.0014
1,2-Dibromoethane	ND		0.0014
Chlorobenzene	ND		0.0014
1,1,1,2-Tetrachloroethane	ND		0.0014
Bromoform	ND		0.0014
Bromobenzene	ND		0.0014
1,1,2,2-Tetrachloroethane	ND		0.0014
1,2,3-Trichloropropane	ND		0.0014
2-Chlorotoluene	ND		0.0014
4-Chlorotoluene	ND		0.0014
1,3-Dichlorobenzene	ND		0.0014
1,4-Dichlorobenzene	ND		0.0014
1,2-Dichlorobenzene	ND		0.0014
1,2-Dibromo-3-chloropropane	ND		0.0069
1,2,4-Trichlorobenzene	ND		0.0014
Hexachlorobutadiene	ND		0.0069
1,2,3-Trichlorobenzene	ND		0.0014

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	97	71-126
Toluene, d8	100	73-130
4-Bromofluorobenzene	103	70-130

Date of Report: September 2, 2005
Samples Submitted: August 24, 2005
Laboratory Reference: 0508-229
Project: WA05-12704-ESA

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

Date Extracted:	8-30-05
Date Analyzed:	8-30-05
Matrix:	Soil
Units:	mg/kg (ppm)
Lab ID:	MB0830S1

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		0.0010
Chloromethane	ND		0.0010
Vinyl Chloride	ND		0.0010
Bromomethane	ND		0.0010
Chloroethane	ND		0.0010
Trichlorofluoromethane	ND		0.0010
1,1-Dichloroethene	ND		0.0010
Iodomethane	ND		0.0050
Methylene Chloride	ND		0.0050
(trans) 1,2-Dichloroethene	ND		0.0010
1,1-Dichloroethane	ND		0.0010
2,2-Dichloropropane	ND		0.0010
(cis) 1,2-Dichloroethene	ND		0.0010
Bromochloromethane	ND		0.0010
Chloroform	ND		0.0010
1,1,1-Trichloroethane	ND		0.0010
Carbon Tetrachloride	ND		0.0010
1,1-Dichloropropene	ND		0.0010
1,2-Dichloroethane	ND		0.0010
Trichloroethene	ND		0.0010
1,2-Dichloropropane	ND		0.0010
Dibromomethane	ND		0.0010
Bromodichloromethane	ND		0.0010
2-Chloroethyl Vinyl Ether	ND		0.0050
(cis) 1,3-Dichloropropene	ND		0.0010
(trans) 1,3-Dichloropropene	ND		0.0010

Date of Report: September 2, 2005
Samples Submitted: August 24, 2005
Laboratory Reference: 0508-229
Project: WA05-12704-ESA

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

Lab ID: MB0830S1

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.0010
Tetrachloroethene	ND		0.0010
1,3-Dichloropropane	ND		0.0010
Dibromochloromethane	ND		0.0010
1,2-Dibromoethane	ND		0.0010
Chlorobenzene	ND		0.0010
1,1,1,2-Tetrachloroethane	ND		0.0010
Bromoform	ND		0.0010
Bromobenzene	ND		0.0010
1,1,2,2-Tetrachloroethane	ND		0.0010
1,2,3-Trichloropropane	ND		0.0010
2-Chlorotoluene	ND		0.0010
4-Chlorotoluene	ND		0.0010
1,3-Dichlorobenzene	ND		0.0010
1,4-Dichlorobenzene	ND		0.0010
1,2-Dichlorobenzene	ND		0.0010
1,2-Dibromo-3-chloropropane	ND		0.0050
1,2,4-Trichlorobenzene	ND		0.0010
Hexachlorobutadiene	ND		0.0050
1,2,3-Trichlorobenzene	ND		0.0010

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	98	71-126
Toluene, d8	105	73-130
4-Bromofluorobenzene	112	70-130

Date of Report: September 2, 2005
Samples Submitted: August 24, 2005
Laboratory Reference: 0508-229
Project: WA05-12704-ESA

HALOGENATED VOLATILES by EPA 8260B
SB/SBD QUALITY CONTROL

Date Extracted: 8-30-05
Date Analyzed: 8-30-05

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: SB0830S1

Compound	Spike Amount	SB	Percent Recovery	SBD	Percent Recovery	Recovery Limits	Flags
1,1-Dichloroethene	0.0500	0.0554	111	0.0553	111	70-130	
Benzene	0.0500	0.0464	93	0.0461	92	70-130	
Trichloroethene	0.0500	0.0524	105	0.0542	108	70-130	
Toluene	0.0500	0.0483	97	0.0492	98	70-130	
Chlorobenzene	0.0500	0.0537	107	0.0521	104	70-130	

	RPD	RPD Limit	Flags
1,1-Dichloroethene	0	11	
Benzene	0	11	
Trichloroethene	3	13	
Toluene	2	11	
Chlorobenzene	3	12	

Date of Report: September 2, 2005
Samples Submitted: August 24, 2005
Laboratory Reference: 0508-229
Project: WA05-12704-ESA

HALOGENATED VOLATILES by EPA 8260B

Date Extracted:	8-25-05
Date Analyzed:	8-25-05
Matrix:	Water
Units:	ug/L (ppb)
Lab ID:	08-229-17
Client ID:	**SC1-W**

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: September 2, 2005
Samples Submitted: August 24, 2005
Laboratory Reference: 0508-229
Project: WA05-12704-ESA

HALOGENATED VOLATILES by EPA 8260B

Lab ID: 08-229-17
Client ID: SC1-W

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.20
Tetrachloroethene	0.26		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	93	70-123
Toluene, d8	92	70-119
4-Bromofluorobenzene	87	70-119

Date of Report: September 2, 2005
Samples Submitted: August 24, 2005
Laboratory Reference: 0508-229
Project: WA05-12704-ESA

HALOGENATED VOLATILES by EPA 8260B

Date Extracted:	8-25-05
Date Analyzed:	8-25-05
Matrix:	Water
Units:	ug/L (ppb)
Lab ID:	08-229-18
Client ID:	**SC2-W**

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: September 2, 2005
Samples Submitted: August 24, 2005
Laboratory Reference: 0508-229
Project: WA05-12704-ESA

HALOGENATED VOLATILES by EPA 8260B
page 2 of 2

Lab ID: 08-229-18
Client ID: SC2-W

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.20
Tetrachloroethene	0.23		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	95	70-123
Toluene, d8	91	70-119
4-Bromofluorobenzene	86	70-119

Date of Report: September 2, 2005
Samples Submitted: August 24, 2005
Laboratory Reference: 0508-229
Project: WA05-12704-ESA

HALOGENATED VOLATILES by EPA 8260B

Date Extracted:	8-25-05
Date Analyzed:	8-25-05
Matrix:	Water
Units:	ug/L (ppb)
Lab ID:	08-229-19
Client ID:	**SC3-W**

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: September 2, 2005
Samples Submitted: August 24, 2005
Laboratory Reference: 0508-229
Project: WA05-12704-ESA

HALOGENATED VOLATILES by EPA 8260B
page 2 of 2

Lab ID: 08-229-19
Client ID: SC3-W

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	93	70-123
Toluene, d8	93	70-119
4-Bromofluorobenzene	86	70-119

Date of Report: September 2, 2005
Samples Submitted: August 24, 2005
Laboratory Reference: 0508-229
Project: WA05-12704-ESA

HALOGENATED VOLATILES by EPA 8260B

Date Extracted:	8-25-05
Date Analyzed:	8-25-05
Matrix:	Water
Units:	ug/L (ppb)
Lab ID:	08-229-20
Client ID:	**SC4-W**

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: September 2, 2005
Samples Submitted: August 24, 2005
Laboratory Reference: 0508-229
Project: WA05-12704-ESA

HALOGENATED VOLATILES by EPA 8260B
page 2 of 2

Lab ID: 08-229-20
Client ID: SC4-W

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.20
Tetrachloroethene	0.26		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	94	70-123
Toluene, d8	93	70-119
4-Bromofluorobenzene	86	70-119

Date of Report: September 2, 2005
Samples Submitted: August 24, 2005
Laboratory Reference: 0508-229
Project: WA05-12704-ESA

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

Date Extracted:	8-25-05
Date Analyzed:	8-25-05
Matrix:	Water
Units:	ug/L (ppb)
Lab ID:	MB0825W1

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: September 2, 2005
Samples Submitted: August 24, 2005
Laboratory Reference: 0508-229
Project: WA05-12704-ESA

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

Lab ID: MB0825W1

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	93	70-123
Toluene, d8	91	70-119
4-Bromofluorobenzene	86	70-119

Date of Report: September 2, 2005
Samples Submitted: August 24, 2005
Laboratory Reference: 0508-229
Project: WA05-12704-ESA

HALOGENATED VOLATILES by EPA 8260B
SB/SBD QUALITY CONTROL

Date Extracted: 8-25-05
Date Analyzed: 8-25-05

Matrix: Water
Units: ug/L (ppb)

Lab ID: SB0825W1

Compound	Spike Amount	SB	Percent Recovery	SBD	Percent Recovery	Recovery Limits	Flags
1,1-Dichloroethene	10.0	10.6	106	10.0	100	70-130	
Benzene	10.0	10.4	104	9.5	95	70-130	
Trichloroethene	10.0	9.63	96	8.96	90	70-130	
Toluene	10.0	10.8	108	9.98	100	70-130	
Chlorobenzene	10.0	11.5	115	10.5	105	70-130	

	RPD	RPD Limit	Flags
1,1-Dichloroethene	5	17	
Benzene	9	13	
Trichloroethene	7	12	
Toluene	8	14	
Chlorobenzene	9	9	

Date of Report: September 2, 2005
Samples Submitted: August 24, 2005
Laboratory Reference: 0508-229
Project: WA05-12704-ESA

% MOISTURE

Date Analyzed: 8-30-05

Client ID	Lab ID	% Moisture
SC1-14.5	08-229-04	19
SC2-14.5	08-229-08	18
SC3-14.5	08-229-12	22
SC4-14.5	08-229-16	29

OnSite Environmental Inc.

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.

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 indicative of diesel fuel are present in the sample and are impacting the gasoline result.

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/silica gel cleanup procedure.

Z -

ND - Not Detected at PQL
PQL - Practical Quantitation Limit
RPD - Relative Percent Difference

Chain of Custody

Page 1 of 2

OnSite Environmental Inc.
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • Fax: (425) 885-4603

Company: LSI Adapt
Project Number: WA05-12704-ESA
Project Name: Morne Road
Project Manager: Keith A. Ross
Sampled by: Keith A Ross

Turnaround Request (in working days)

(Check One)

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

Laboratory Number: 08-229

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 / SIM	PCBs by 8082	Pesticides by 8081A	Herbicides by 8151A	Total RCRA Metals (8)	TCLP Metals	HEM by 1664	VPH	EPH					% Moisture
1	SC1-4	8/23/05	920	S	1																				
2	SC1-7		925	S	4																				
3	SC1-12		930		1																				
4	SC1-14.5		940		4					X															X
5	SC2-4		1005		1																				
6	SC2-7		1020		4																				
7	SC2-12		1025		1																				
8	SC2-14.5		1030		4					X															X
9	SC3-4		1050		1																				
10	SC7-7		1055		4																				

	Signature	Company	Date	Time
Relinquished by		LSI Adapt	8/24/05	920
Received by	Jed Hegel	Speedy Messenger	8/24/05	920
Relinquished by	Jed Hegel	Speedy Messenger	8/24/05	1035
Received by	Kelley Hunt	OnSite Env.	8/24/05	10:35
Relinquished by				
Received by				
Reviewed by/Date		Reviewed by/Date		

Comments/Special Instructions:

Chromatograms with final report ☐

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Chain of Custody

OnSite Environmental Inc.
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • Fax: (425) 885-4603

Company: LSI Adapt
Project Number: WA05-12704-ESA
Project Name: Thorne Road
Project Manager: Kristy Ross
Sampled by: Kristy Ross

Turnaround Request (in working days)

(Check One)

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

Laboratory Number: 08-229

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 / SIM	PCBs by 8082	Pesticides by 8081A	Herbicides by 8151A	Total RCRA Metals (8)	TCLP Metals	HEM by 1664	VPH	EPH					% Moisture
11	SC3-11.5	8/23/05	1100	S	1																				
12	SC3-14.5		1105		4					X															X
13	SC4-4		1120		1																				
14	SC4-7.5		1125		4																				
15	SC4-12		1130		1																				
16	SC4-14.5		1140		4					X															X
17	SC1-W		1000	W	3					X															
18	SC2-W		1040	W	3					X															
19	SC3-W		1110	W	3					X															
20	SC4-W		1150	W	3					X															

	Signature	Company	Date	Time
Relinquished by		LSI Adapt	8/24/05	920
Received by		OnSite	8/24	9:20
Relinquished by		OnSite	8/24	1035
Received by		OnSite ENV.	8/24/05	10:35
Relinquished by				
Received by				
Reviewed by/Date		Reviewed by/Date		

Comments/Special Instructions:

Chromatograms with final report ☐

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OnSite Environmental Inc.
14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

September 30, 2005

Keith Ross
LSI-Adapt
615 8th Avenue S
Seattle, WA 98104

Re: Analytical Data for Project WA05-12704 ESA
Laboratory Reference No. 0509-171

Dear Keith:

Enclosed are the analytical results and associated quality control data for samples submitted on September 22, 2005.

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: September 30, 2005
Samples Submitted: September 22, 2005
Laboratory Reference: 0509-171
Project: WA05-12704 ESA

Case Narrative

Samples were collected on September 21, 2005 and received by the laboratory on September 22, 2005. They were maintained at the laboratory at a temperature of 2°C to 6°C except as noted below.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

Halogenated Volatiles EPA 8260B Analysis

Per EPA Method 5035A, samples were received by the laboratory in pre-weighed 40 mL VOA vials within 48 hours of sample collection. They were stored in a freezer at between -7°C and -20°C until extraction or analysis.

Any other 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: September 30, 2005
Samples Submitted: September 22, 2005
Laboratory Reference: 0509-171
Project: WA05-12704 ESA

HALOGENATED VOLATILES by EPA 8260B

Date Extracted:	9-27-05
Date Analyzed:	9-27-05
Matrix:	Soil
Units:	mg/kg (ppm)
Lab ID:	09-171-03
Client ID:	**MW9/14.5**

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		0.0012
Chloromethane	ND		0.0012
Vinyl Chloride	ND		0.0012
Bromomethane	ND		0.0012
Chloroethane	ND		0.0012
Trichlorofluoromethane	ND		0.0012
1,1-Dichloroethene	ND		0.0012
Iodomethane	ND		0.0061
Methylene Chloride	ND		0.0061
(trans) 1,2-Dichloroethene	ND		0.0012
1,1-Dichloroethane	ND		0.0012
2,2-Dichloropropane	ND		0.0012
(cis) 1,2-Dichloroethene	ND		0.0012
Bromochloromethane	ND		0.0012
Chloroform	ND		0.0012
1,1,1-Trichloroethane	ND		0.0012
Carbon Tetrachloride	ND		0.0012
1,1-Dichloropropene	ND		0.0012
1,2-Dichloroethane	ND		0.0012
Trichloroethene	ND		0.0012
1,2-Dichloropropane	ND		0.0012
Dibromomethane	ND		0.0012
Bromodichloromethane	ND		0.0012
2-Chloroethyl Vinyl Ether	ND		0.0061
(cis) 1,3-Dichloropropene	ND		0.0012
(trans) 1,3-Dichloropropene	ND		0.0012

Date of Report: September 30, 2005
Samples Submitted: September 22, 2005
Laboratory Reference: 0509-171
Project: WA05-12704 ESA

HALOGENATED VOLATILES by EPA 8260B

Lab ID: 09-171-03
Client ID: MW9/14.5

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.0012
Tetrachloroethene	ND		0.0012
1,3-Dichloropropane	ND		0.0012
Dibromochloromethane	ND		0.0012
1,2-Dibromoethane	ND		0.0012
Chlorobenzene	ND		0.0012
1,1,1,2-Tetrachloroethane	ND		0.0012
Bromoform	ND		0.0012
Bromobenzene	ND		0.0012
1,1,2,2-Tetrachloroethane	ND		0.0012
1,2,3-Trichloropropane	ND		0.0012
2-Chlorotoluene	ND		0.0012
4-Chlorotoluene	ND		0.0012
1,3-Dichlorobenzene	ND		0.0012
1,4-Dichlorobenzene	ND		0.0012
1,2-Dichlorobenzene	ND		0.0012
1,2-Dibromo-3-chloropropane	ND		0.0061
1,2,4-Trichlorobenzene	ND		0.0012
Hexachlorobutadiene	ND		0.0061
1,2,3-Trichlorobenzene	ND		0.0012

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	107	71-126
Toluene, d8	111	73-130
4-Bromofluorobenzene	125	70-130

Date of Report: September 30, 2005
Samples Submitted: September 22, 2005
Laboratory Reference: 0509-171
Project: WA05-12704 ESA

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

Date Extracted: 9-27-05
Date Analyzed: 9-27-05

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: MB0927S1

Compound	Results	Flags	PQL
Dichlorodifluoromethane	ND		0.0010
Chloromethane	ND		0.0010
Vinyl Chloride	ND		0.0010
Bromomethane	ND		0.0010
Chloroethane	ND		0.0010
Trichlorofluoromethane	ND		0.0010
1,1-Dichloroethene	ND		0.0010
Iodomethane	ND		0.0050
Methylene Chloride	ND		0.0050
(trans) 1,2-Dichloroethene	ND		0.0010
1,1-Dichloroethane	ND		0.0010
2,2-Dichloropropane	ND		0.0010
(cis) 1,2-Dichloroethene	ND		0.0010
Bromochloromethane	ND		0.0010
Chloroform	ND		0.0010
1,1,1-Trichloroethane	ND		0.0010
Carbon Tetrachloride	ND		0.0010
1,1-Dichloropropene	ND		0.0010
1,2-Dichloroethane	ND		0.0010
Trichloroethene	ND		0.0010
1,2-Dichloropropane	ND		0.0010
Dibromomethane	ND		0.0010
Bromodichloromethane	ND		0.0010
2-Chloroethyl Vinyl Ether	ND		0.0050
(cis) 1,3-Dichloropropene	ND		0.0010
(trans) 1,3-Dichloropropene	ND		0.0010

Date of Report: September 30, 2005
Samples Submitted: September 22, 2005
Laboratory Reference: 0509-171
Project: WA05-12704 ESA

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

Lab ID: MB0927S1

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.0010
Tetrachloroethene	ND		0.0010
1,3-Dichloropropane	ND		0.0010
Dibromochloromethane	ND		0.0010
1,2-Dibromoethane	ND		0.0010
Chlorobenzene	ND		0.0010
1,1,1,2-Tetrachloroethane	ND		0.0010
Bromoform	ND		0.0010
Bromobenzene	ND		0.0010
1,1,2,2-Tetrachloroethane	ND		0.0010
1,2,3-Trichloropropane	ND		0.0010
2-Chlorotoluene	ND		0.0010
4-Chlorotoluene	ND		0.0010
1,3-Dichlorobenzene	ND		0.0010
1,4-Dichlorobenzene	ND		0.0010
1,2-Dichlorobenzene	ND		0.0010
1,2-Dibromo-3-chloropropane	ND		0.0050
1,2,4-Trichlorobenzene	ND		0.0010
Hexachlorobutadiene	ND		0.0050
1,2,3-Trichlorobenzene	ND		0.0010

Surrogate	Percent Recovery	Control Limits
Dibromofluoromethane	106	71-126
Toluene, d8	117	73-130
4-Bromofluorobenzene	117	70-130

Date of Report: September 30, 2005
Samples Submitted: September 22, 2005
Laboratory Reference: 0509-171
Project: WA05-12704 ESA

HALOGENATED VOLATILES by EPA 8260B
SB/SBD QUALITY CONTROL

Date Extracted: 9-27-05
Date Analyzed: 9-27-05

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: SB0927S1

Compound	Spike Amount	SB	Percent Recovery	SBD	Percent Recovery	Recovery Limits	Flags
1,1-Dichloroethene	0.0500	0.0424	85	0.0448	90	70-130	
Benzene	0.0500	0.0528	106	0.0555	111	70-130	
Trichloroethene	0.0500	0.0496	99	0.0501	100	70-130	
Toluene	0.0500	0.0550	110	0.0567	113	70-130	
Chlorobenzene	0.0500	0.0540	108	0.0542	108	70-130	

	RPD	RPD Limit	Flags
1,1-Dichloroethene	5	11	
Benzene	5	11	
Trichloroethene	1	13	
Toluene	3	11	
Chlorobenzene	0	12	

Date of Report: September 30, 2005
Samples Submitted: September 22, 2005
Laboratory Reference: 0509-171
Project: WA05-12704 ESA

% MOISTURE

Date Analyzed: 9-27-05

Client ID	Lab ID	% Moisture
MW9/14.5	09-171-03	23

OnSite Environmental Inc.

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.

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 indicative of diesel fuel are present in the sample and are impacting the gasoline result.

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/silica gel cleanup procedure.

Z -

ND - Not Detected at PQL
PQL - Practical Quantitation Limit
RPD - Relative Percent Difference

Chain of Custody

Page 1 of 1

OnSite Environmental Inc.
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • Fax: (425) 885-4603

Company: LSI AdapT
Project Number: WA05-12704-ESA
Project Name: Thorne Rd
Project Manager: Keith Russ
Sampled by: Keith Russ

Turnaround Request (in working days)

(Check One)

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

Laboratory Number: 09-171

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 / SIM	PCBs by 8082	Pesticides by 8081A	Herbicides by 8151A	Total RCRA Metals (8)	TCLP Metals	HEM by 1664	VPH	EPH	% Moisture
1	MW9/7	9/21/05	1415	Soil	3																
2	MW9/12	"	1420	"	2																
3	MW9/14.5	"	1425	"	4					X											X

	Signature	Company	Date	Time
Relinquished by		LSI AdapT	9/22/05	1025
Received by		Specialty	9-22-05	1025
Relinquished by		Specialty	9-22-05	1130
Received by		CTS	9/22/05	1130
Relinquished by				
Received by				

Comments/Special Instructions:

Reviewed by/Date

Reviewed by/Date

Chromatograms with final report ☐

DISTRIBUTION LEGEND: White - OnSite Copy Yellow - Report Copy Pink - Client Copy

OnSite Environmental Inc.
14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

October 6, 2005

Keith Ross
LSI-Adapt
615 8th Avenue S
Seattle, WA 98104

Re: Analytical Data for Project WA05-12704-ESA
Laboratory Reference No. 0509-227

Dear Keith:

Enclosed are the analytical results and associated quality control data for samples submitted on September 28, 2005.

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: October 6, 2005
Samples Submitted: September 28, 2005
Laboratory Reference: 0509-227
Project: WA05-12704-ESA

Case Narrative

Samples were collected on September 27, 2005 and received by the laboratory on September 28, 2005. They were maintained at the laboratory at a temperature of 2°C to 6°C except as noted below.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

Date of Report: October 6, 2005
Samples Submitted: September 28, 2005
Laboratory Reference: 0509-227
Project: WA05-12704-ESA

HALOGENATED VOLATILES by EPA 8260B

Date Extracted:	10-3-05
Date Analyzed:	10-3-05
Matrix:	Water
Units:	ug/L (ppb)
Lab ID:	09-227-01
Client ID:	**MW-9**

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	0.24		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: October 6, 2005
Samples Submitted: September 28, 2005
Laboratory Reference: 0509-227
Project: WA05-12704-ESA

HALOGENATED VOLATILES by EPA 8260B
Page 2 of 2

Lab ID: 09-227-01
Client ID: MW-9

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.20
Tetrachloroethene	0.56		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	89	70-123
Toluene, d8	92	70-119
4-Bromofluorobenzene	88	70-119

Date of Report: October 6, 2005
Samples Submitted: September 28, 2005
Laboratory Reference: 0509-227
Project: WA05-12704-ESA

HALOGENATED VOLATILES by EPA 8260B

Date Extracted:	10-3-05
Date Analyzed:	10-3-05
Matrix:	Water
Units:	ug/L (ppb)
Lab ID:	09-227-02
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	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	0.48		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: October 6, 2005
Samples Submitted: September 28, 2005
Laboratory Reference: 0509-227
Project: WA05-12704-ESA

HALOGENATED VOLATILES by EPA 8260B

Lab ID: 09-227-02
Client ID: **MW-1**

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.20
Tetrachloroethene	6.6		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	87	70-123
Toluene, d8	91	70-119
4-Bromofluorobenzene	87	70-119

Date of Report: October 6, 2005
Samples Submitted: September 28, 2005
Laboratory Reference: 0509-227
Project: WA05-12704-ESA

HALOGENATED VOLATILES by EPA 8260B

Date Extracted:	10-3-05
Date Analyzed:	10-3-05
Matrix:	Water
Units:	ug/L (ppb)
Lab ID:	09-227-03
Client ID:	**MW-10**

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	0.46		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: October 6, 2005
Samples Submitted: September 28, 2005
Laboratory Reference: 0509-227
Project: WA05-12704-ESA

HALOGENATED VOLATILES by EPA 8260B
Page 2 of 2

Lab ID: 09-227-03
Client ID: MW-10

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.20
Tetrachloroethene	6.2		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	91	70-123
Toluene, d8	92	70-119
4-Bromofluorobenzene	88	70-119

Date of Report: October 6, 2005
Samples Submitted: September 28, 2005
Laboratory Reference: 0509-227
Project: WA05-12704-ESA

HALOGENATED VOLATILES by EPA 8260B
Page 1 of 2

Date Extracted:	10-3-05
Date Analyzed:	10-3-05
Matrix:	Water
Units:	ug/L (ppb)
Lab ID:	09-227-04
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	ND		0.20
1,1-Dichloroethene	ND		0.20
Iodomethane	ND		1.0
Methylene Chloride	ND		1.0
(trans) 1,2-Dichloroethene	0.58		0.20
1,1-Dichloroethane	ND		0.20
2,2-Dichloropropane	ND		0.20
(cis) 1,2-Dichloroethene	2.4		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	4.2		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: October 6, 2005
Samples Submitted: September 28, 2005
Laboratory Reference: 0509-227
Project: WA05-12704-ESA

HALOGENATED VOLATILES by EPA 8260B

Page 2 of 2

Lab ID: 09-227-04
Client ID: MW-2

Compound	Results	Flags	PQL
1,1,2-Trichloroethane	ND		0.20
Tetrachloroethene	23		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	92	70-123
Toluene, d8	92	70-119
4-Bromofluorobenzene	89	70-119

Date of Report: October 6, 2005
Samples Submitted: September 28, 2005
Laboratory Reference: 0509-227
Project: WA05-12704-ESA

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

Date Extracted:	10-3-05
Date Analyzed:	10-3-05
Matrix:	Water
Units:	ug/L (ppb)
Lab ID:	MB1003W1

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: October 6, 2005
Samples Submitted: September 28, 2005
Laboratory Reference: 0509-227
Project: WA05-12704-ESA

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

Lab ID: MB1003W1

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	86	70-123
Toluene, d8	90	70-119
4-Bromofluorobenzene	87	70-119

Date of Report: October 6, 2005
Samples Submitted: September 28, 2005
Laboratory Reference: 0509-227
Project: WA05-12704-ESA

HALOGENATED VOLATILES by EPA 8260B
SB/SBD QUALITY CONTROL

Date Extracted: 10-3-05
Date Analyzed: 10-3-05

Matrix: Water
Units: ug/L (ppb)

Lab ID: SB1003W1

Compound	Spike Amount	SB	Percent Recovery	SBD	Percent Recovery	Recovery Limits	Flags
1,1-Dichloroethene	10.0	9.62	96	9.74	97	70-130	
Benzene	10.0	9.45	94	9.39	94	70-130	
Trichloroethene	10.0	9.52	95	9.20	92	70-130	
Toluene	10.0	10.2	102	10.2	102	70-130	
Chlorobenzene	10.0	10.4	104	10.1	101	70-130	

	RPD	RPD Limit	Flags
1,1-Dichloroethene	1	17	
Benzene	1	13	
Trichloroethene	3	12	
Toluene	0	14	
Chlorobenzene	2	9	

OnSite Environmental Inc.

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.

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 indicative of diesel fuel are present in the sample and are impacting the gasoline result.

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/silica gel cleanup procedure.

Z -

ND - Not Detected at PQL
PQL - Practical Quantitation Limit
RPD - Relative Percent Difference

Chain of Custody

OnSite Environmental Inc.
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • Fax: (425) 885-4603

Company: LSI Adapt
Project Number: WA05-12704-ESA
Project Name: Thorne Rd
Project Manager: Keith Rus
Sampled by: Keith Rus

Turnaround Request (in working days)

(Check One)

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

Laboratory Number: 09-227

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 / SIM	PCBs by 8082	Pesticides by 8081A	Herbicides by 8151A	Total RCRA Metals (8)	TCLP Metals	HEM by 1664	VPH	EPH					% Moisture
1	MW-9	9/27/05	1050	W	3					X															
2	MW-1		1130	W	3					X															
3	MW-10		1230	W	3					X															
4	MW-2		1225	W	3					X															

	Signature	Company	Date	Time
Relinquished by		LSI Adapt	9/28/05	
Received by	Art Speedy 4	Speedy	9/28/05	1230
Relinquished by				
Received by		OSE	9/28/05	1230
Relinquished by				
Received by				

Comments/Special Instructions:

Reviewed by/Date

Reviewed by/Date

Chromatograms with final report ☐

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