

December 2009 Groundwater Monitoring
LeatherCare, Inc.
901/921 Elliott Avenue West
Seattle, Washington
VCP # NW1805

May 18, 2010

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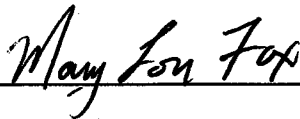
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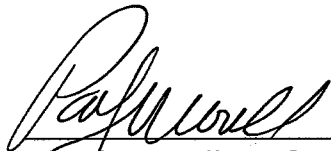
A Report Prepared For:
LeatherCare, Inc.
901 Elliott Avenue West
Seattle, Washington 98119

**DECEMBER 2009 GROUNDWATER MONITORING
LEATHERCARE, INC
901/921 ELLIOTT AVENUE W
SEATTLE, WASHINGTON
VCP #NW1805**

May 18, 2010



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Section 1

Introduction

1.1 General

This report presents the results of the fourteenth round (December 2009) of ongoing groundwater monitoring for the LeatherCare, Inc. site located at 901 & 921 Elliott Avenue West in Seattle, Washington (Figure 1). Camp Dresser & McKee Inc. (CDM) is conducting this work on behalf of LeatherCare, Inc. (LeatherCare) in accordance with the Master Environmental Services Agreement dated March 18, 2007 between LeatherCare and CDM, and CDM's proposal dated September 12, 2008. Site work is being conducted under the Washington State Department of Ecology (Ecology) Voluntary Cleanup Program (VCP). The VCP site number is NW1805.

1.2 Background

LeatherCare is a large, industrial dry cleaning facility that has occupied this location since 1985. LeatherCare initially used tetrachloroethene (PCE) as a dry cleaning solvent. PCE use was discontinued in phases beginning in March 2000. The replacement of PCE dry cleaning machines was completed in October 2005.

In July 2006, CDM completed an assessment of volatile organic compounds (VOCs) and petroleum hydrocarbons throughout the LeatherCare parcel (LC parcel), an adjacent parcel referred to as the GTP parcel to the northwest (also owned by Mr. Ritt), West Roy Street to the southwest, and the former Darigold property (also formerly referred to as WestFarm Foods) north and central parking lots. (CDM, 2006). In March 2009, CDM also completed an offsite investigation on the Burlington Northern Santa Fe (BNSF) railroad property to the west (CDM, 2009).

The Darigold property is currently owned by Elliott Holding Company, Inc. (Elliott Holding) and has been redeveloped. The two Ritt-owned parcels and W Roy Street are collectively referred to as the "Subject Property." Figure 2 shows the layout of the Subject Property and the former layout of the former Darigold property (prior to redevelopment). These two areas and the adjacent BNSF railroad property are collectively referred to as the "Investigation Area".

The chlorinated volatile organic compounds (cVOCs) PCE and/or its degradation products were identified in groundwater in areas of the Subject Property at relatively low concentrations. PCE concentrations detected in soil and groundwater at the Subject Property are not indicative of the presence of free phase product.

Elliott Holding began redevelopment of the Darigold property in 2007. According to a Cleanup Action Plan completed by ENTRIX, Inc., the development includes two 4-story commercial buildings, a plaza, and an underground parking structure beneath the entire complex. The parking level foundation is as much as 20 feet below former grade. The excavation support system that was utilized to enable below grade construction is the Cutter Soil Mixing (CSM) method. The CSM wall, shown on

Figure 2, entirely encircles the Elliott Holding property and keys into the underlying glacial till at depths of 40 to 57 feet below ground surface.

CDM's investigations show that biological degradation processes are actively occurring to reduce cVOC concentrations. Field monitoring and chemical data for soil and groundwater, along with historical groundwater chemical data collected throughout the Investigation Area, show that all degradation products of PCE are present and the chemistry necessary for biological degradation is present at the site. Biological testing has shown that the bacterium *Dehalococcoides ethenogenes*, which is known to reductively dechlorinate vinyl chloride to ethene, is present at the site.

1.3 Purpose and Scope of Work

The purpose of continued groundwater monitoring over time is to establish the natural variation in contaminant concentrations (i.e., seasonal), to confirm that the plume is continuing to collapse, to characterize degradation processes, and to empirically demonstrate the biological degradation of cVOCs.

During the first three groundwater monitoring rounds, CDM collected samples from monitoring wells in the Darigold north parking lot. After that, these wells were dropped from the monitoring schedule due to imminent construction activities and limitations on access. ENTRIX continued to sample these wells for a period of time, but it is presumed that groundwater monitoring ceased on the Darigold site by December 2007 when construction began.

The scope of work completed during the December 2009 event consisted of the following:

- Conducted one complete round of water level measurements for all existing monitoring wells throughout the Subject Property.
- Purged each groundwater monitoring well on the Subject Property and collected data on field measured parameters.
- Collected groundwater samples and submitted them for laboratory analysis of selected cVOCs and dissolved gasses (ethane, ethene, and methane).
- Evaluated the data and prepared this report documenting our findings and conclusions.

Section 2

Field Investigation Methods

2.1 Groundwater Sampling

Groundwater monitoring was conducted on December 16 and 17, 2009. Monitored wells included GT1 through GT3, LC1 through LC3, LC4R, LC5R, and LC6. This section describes the field and analytical methods employed.

2.1.1 Water Levels

Water levels were measured in all monitoring wells throughout the Subject Property between 7:53 am and 8:28 am on December 16, 2009. Water levels were measured using a SINCO electronic sounder.

2.1.2 Water Sampling

Each monitoring well/piezometer was purged prior to collecting groundwater samples using dedicated stainless steel bladder pumps with Teflon lined tubing. Each well was purged at a rate of approximately 100 to 200 milliliters per minute (ml/min). Physical parameters were monitored during purging using a YSI meter. In order to minimize contact with ambient air, the YSI meter was secured in a flow-through cell that was situated after the pump and before the purge water tubing discharge. Parameters measured during purging included: pH, temperature, specific conductance (SC), oxidation-reduction potential (ORP), turbidity, and dissolved oxygen (DO). The wells were purged until the physical parameter measurements stabilized.

The samples were collected by disconnecting the tubing from the flow-through cell and directly discharging the water into laboratory-supplied containers appropriate for the analyses to be conducted. Collected samples were stored in chilled coolers and delivered under chain-of-custody protocol to the analytical laboratories described in Section 2.1.3.

2.1.3 Laboratory Analysis

CDM submitted the groundwater samples to Analytical Resources Inc. (ARI) in Tukwila, Washington and MicroSeeps in Pittsburgh, Pennsylvania.

ARI conducted analyses for cVOCs by EPA Method 8260B (using a 10-milliliter purge volume for groundwater in order to reach detection limits of 0.2 micrograms per liter [$\mu\text{g/L}$]). Specifically, the analytes included PCE, trichloroethene (TCE), *cis*-1,2-dichloroethene (*c*-1,2-DCE), *trans*-1,2-dichloroethene (*t*-1,2-DCE), 1,1-dichloroethene (1,1-DCE), and vinyl chloride (VC).

MicroSeeps conducted analyses of the dissolved gasses methane, ethane, and ethene by method AM20GAX on all of the groundwater samples.

Section 3

Findings and Discussion

3.1 Water Levels

Depths to water and water table elevations are summarized on Table 1. During the December monitoring, water levels ranged between 1.00 and 4.99 feet below the top of the well casings (the well casings start approximately 3 to 6 inches below ground surface). Water levels rose in all wells between the September 2009 and December 2009 sampling events, differing by between 0.78 to 1.12 feet. These changes are consistent with fluctuations due to the amount of seasonal precipitation. The wells with the highest fluctuation are LC4R and LC5R, located on the south side of W Roy Street.

Figure 3 shows the potentiometric surface on December 16. There continues to be a northerly gradient under the LC and GTP parcels consistent with prior sampling events. Interestingly, while the very flat, slight westerly gradient still appears in the southern portion of the LC Parcel and northern portion of W Roy Street, there appears to be groundwater recharge occurring along the southern portion of W Roy Street that is causing the gradient to be northerly, consistent with that seen on the LC and GT parcels.

3.2 Field Monitored Parameters

A discussion of field measured parameters is provided below and the data are summarized in Table 2.

Temperature: As expected, temperatures in the groundwater decreased between the September and December sampling events. Between the September and December sampling events, the temperatures decreased 5.1 Celsius (°C) to as much as 10.2 °C in the individual wells. These temperatures are consistent with the cooler winter temperatures.

Dissolved Oxygen: Dissolved oxygen (DO) concentrations ranged from approximately 0.17 to 2.33 milligrams per liter (mg/L). DO concentrations less than 0.5 mg/L are indicative of anoxic conditions, which are conducive for reductive dechlorination. DO concentrations were less than 0.5 mg/L at GT1, LC1, LC4R, LC5R, and LC6. LC2 contained the highest DO concentration (2.33 mg/L) and GT2 the next highest at 1.58 mg/L. LC2 has consistently shown DO concentrations over 1 mg/L during the winter/early spring months, indicating a seasonal influence. GT2 showed similarly high DO concentrations during most of 2008. DO concentrations over 1 mg/L may indicate transitory conditions of a fresh flush of water into the system.

The less oxidized chlorinated compounds (e.g., *c*-1,2-DCE and VC) can be used as a primary substrate in biologically mediated oxidation reduction reactions and aerobic conditions appear to be optimal for VC degradation. This is demonstrated by the fact

that the largest overall decline in VC concentrations has been observed at GT2, and at LC2 vinyl chloride concentrations have been 0.2 µg/L or less during every December sampling round. Alternating oxic and anoxic conditions appear to have optimized the degradation of PCE.

Oxidation-Reduction Potential: The oxidation-reduction potential (ORP) meter was not functioning correctly at GT1-GT3 and LC1. At the remaining wells ORP values ranged between 15 and -96 millivolts (mV). ORP values increased by 34 to 100 mV, which is consistent with the higher DO readings. Low ORP values are similarly conducive for reductive dechlorination.

Specific Conductance: Specific Conductance values ranged between 299 and 1,011 microsiemens per centimeter (µS/cm). Overall, the data are consistent with historical site data.

pH: The pH values ranged between approximately 7.16 and 7.77 standard units for all wells, which are consistent with previous rounds.

Ferrous Iron: Ferrous iron concentrations were all low, ranging between 0 and 0.6 parts per million (ppm). No specific increasing or decreasing trends were evident. VC is biodegradable by iron-reducing bacteria and the presence of ferrous iron is a sign of the presence of iron reducing bacteria.

Turbidity: Turbidity values were less than 10 nephelometric turbidity units (NTU) for all of the wells at the time of sampling.

3.3 Groundwater Analytical Results

Copies of the analytical reports are included in **Appendix A**. Current and historical groundwater analytical data, as well as field measured and general groundwater chemistry data, are summarized in **Table 2**. Contaminant concentrations are compared against Model Toxics Control Act (MTCA) Method A groundwater cleanup levels. In the absence of Method A cleanup levels, contaminant concentrations are compared against Method B cleanup levels as obtained from Ecology's Cleanup Levels and Risk Calculations (CLARC) database.

3.3.1 PCE

PCE was detected in four of the seven groundwater samples. PCE concentrations ranged between 0.4 and 3.8 micrograms per liter (µg/L). None of these concentrations exceed the Method A cleanup level of 5 µg/L, and in fact, this is the second quarter in a row that PCE concentrations have not exceeded the Method A cleanup level at any location.

3.3.2 TCE

TCE was detected in all groundwater samples except GT1. Concentrations ranged between 0.3 and 2.5 µg/L. All detected concentrations were below the MTCA

Method A cleanup level of 5 µg/L and have been throughout 2009 (four consecutive quarters).

3.3.3 *c*-1,2-DCE, *t*-1,2-DCE, 1,1-DCE

Of these degradation products of PCE, *c*-1,2-DCE was detected in all nine wells during both sampling events, *t*-1,2-DCE in three wells, and 1,1-DCE was not detected in any sample. Concentrations ranged between 0.2 and 6.4 µg/L when detected. The concentrations of *c*-1,2-DCE and *t*-1,2-DCE did not and have never exceeded their Method B cleanup levels (80 and 160 µg/L, respectively) in any samples.

3.3.4 Vinyl Chloride

Vinyl chloride was detected in seven of the nine monitoring wells. VC concentrations ranged between 0.2 and 3.7 µg/L when detected. VC continues to be below detection limits in the most downgradient well on the GTP parcel (GT1). VC concentrations were dramatically lower in nearly all wells as compared to the September 2009 data. Compared to the September sampling round, VC concentrations decreased in GT2, GT3, LC1, LC2, LC3, LC4R, and LC5R by 46%, 47%, 75%, 83%, 50%, 14%, and 42%, respectively.

3.3.5 Dissolved Gasses

Methane was detected in every groundwater sample ranging between 53 and 5,400 µg/L. The presence of methane is indicative of methanogenesis, which is an indicator for reductive dechlorination. Ethene, an end product of the reductive dechlorination of PCE, was detected in five of the groundwater samples. Ethene concentrations ranged between 0.026 and 0.90 µg/L. Ethane was detected in all nine of the monitoring wells at concentrations ranging between 0.079 and 2.70 µg/L.

Methane/ethane/ethene concentrations at LC4R and LC5R were abnormally high. Because of this, CDM had the laboratory rerun the analyses using the additional sample vials and the second set of data was comparable to the first. At this time, the data are anomalous.

3.4 cVOC Trends

CDM applied the Mann-Kendall statistical test to the cVOCs on the Subject Property. The Mann-Kendall test indicates the presence or absence of a statistically significant increasing or decreasing trend in concentrations at a monitoring point. The results of the Mann-Kendall trend analysis are summarized on Table 3.

Decreasing trends are noted for VC concentrations at all of the wells. The probability values for a decreasing trend for VC at five of the eight wells — GT2, LC1, LC2, LC3, and LC6 (GT1 is not counted since VC is not detected) — are significant (i.e., $p \leq 0.1$). Previously, this trend was significant (i.e., $p \leq 0.1$) at four of the wells.

Decreasing trends for *c*-1,2-DCE and *t*-1,2-DCE, are also noted at all wells. The probability values for these decreasing trends are significant for all except *c*-1,2-DCE

at LC5. A build-up of DCE concentrations is often observed at sites where conditions are not suitable for the natural degradation of this particular compound and this shows that this condition is not occurring.

The Mann-Kendall test loses statistical robustness for PCE and TCE due to the lack of detections and overall low concentrations (i.e., no statistical trend for PCE can be calculated at five of the nine monitoring wells due to the lack of detections). Decreasing trends are generally noted; however, increasing trends are indicated for PCE at LC1 and LC3, but these wells do not exceed the Method A cleanup level. For TCE an increasing trend is indicated at LC5 and LC6, but these wells do not exceed the Method A cleanup level.

Statistical models aside, PCE concentrations have not exceeded the Method A cleanup in any well over the past two quarters. More specifically, PCE concentrations have not exceeded the Method A cleanup level in LC1 the past three consecutive quarters and in LC3 during the past two consecutive quarters. PCE concentrations have not exceeded the Method A cleanup level in the remaining wells for a period of 2 years or longer.

TCE concentrations have not exceeded the Method A cleanup level in any well for the past year. Considering that the maximum TCE concentration at LC5 has been 1.5 µg/L and in LC6 is 0.3 µg/L, there is negligible concern that these "increasing trends" on the Mann Kendal test are valid or that the cleanup level will ever be exceeded.

Section 4

Conclusions and Recommendations

The data continue to show that PCE is being naturally attenuated via biological degradation and that monitored natural attenuation (MNA) is appropriate for this site. This conclusion is substantiated by the following:

- All of the degradation products of PCE from TCE through ethene are present at the site.
- The concentrations of PCE and its degradation products are not particularly high and are far less than at most PCE contaminated sites where active remediation would have already been stopped and switched to MNA.
- PCE concentrations have not exceeded the Method A cleanup level at any monitoring location for the past two quarters.
- TCE concentrations have not exceeded the Method A cleanup level at any monitoring location over the past year (4 quarters).
- The DCE compounds have never exceeded their respective Method B cleanup levels at any monitoring location.
- VC, the last degradation product of PCE before it is degraded to non toxic ethene, is the only degradation product that currently exceeds the Method A cleanup level. Even so, concentrations of this compound are relatively low.
- Continued monitoring empirically demonstrates that VC concentrations are declining throughout the site.

Given the low cVOC concentrations and continuing indications that natural attenuation is occurring, cVOCs are expected to continue to degrade fully and the plume will continue to collapse. Based on these findings, CDM continues to recommend implementation of MNA for this site.

Section 5

References

CDM. 2006. Contamination Assessment, LeatherCare, Inc. 901/921 Elliott Avenue, Seattle, Washington. CDM Project No. 38057-47522. July 25.

CDM. 2009. Off-Site Investigation Report, LeatherCare, Inc. 901/921 Elliott Avenue West, Seattle, Washington. VCP #NW1805. CDM Project No. 56498-68247. March 31.

ENTRIX, Inc. 2007. Cleanup Action Plan, Darigold Facility - VCP NW 1267, 635 Elliott Avenue West, Seattle, WA. Prepared for Elliott Holding Company, L.L.C. Seattle, WA. July 2007.

Distribution

5 Copies

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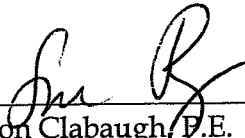
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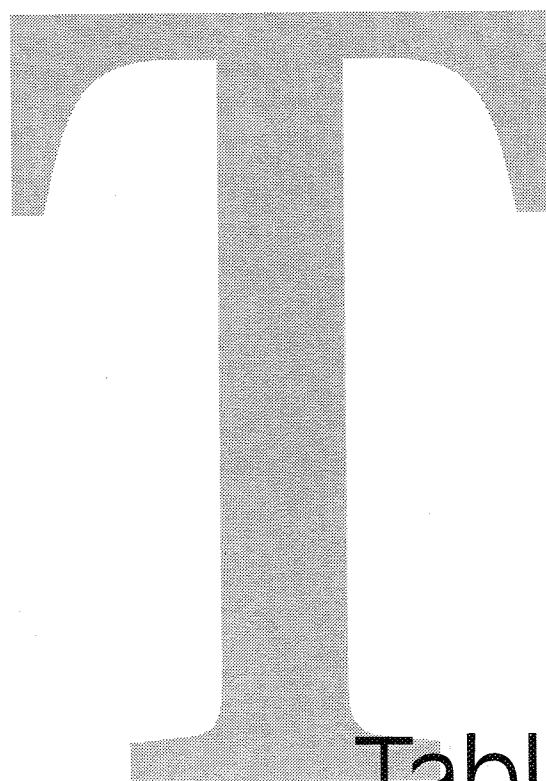
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Don Clabaugh, P.E.
Principal Engineer



Tables

Table 1
Groundwater Elevation Data

LeatherCare, Inc.
Seattle, Washington

Monitoring Well I.D.	Date Measured	Time (hours)	Top of Casing Elevation ^a (feet)	Depth to Groundwater (ft below TOC)	Groundwater Elevation (feet)
GT1	05/10/06	0912	12.74	1.84	10.90
	09/05/06	0955		2.46	10.28
	02/12/07	0918		1.69	11.05
	06/20/07	0857		2.13	10.61
	09/19/07	0904		2.46	10.28
	12/19/07	0940		1.20	11.54
	03/19/08	0908		1.80	10.94
	06/18/08	0825		1.95	10.79
	09/24/08	1005		2.22	10.52
	12/29/08	0758		1.49	11.25
	02/11/09	--		--	--
	03/25/09	0837		1.58	11.16
	06/29/09	0757		1.97	10.77
	09/09/09	1012		2.39	10.35
	12/16/09	0828		1.59	11.15
GT2	05/10/06	0910	12.45	1.23	11.22
	09/05/06	1000		1.99	10.46
	02/12/07	0920		1.09	11.36
	06/20/07	0853		2.56	9.89 NU
	09/19/07	0911		1.94	10.51
	12/19/07	0936		0.67	11.78
	03/19/08	0904		1.18	11.27
	06/18/08	0822		1.35	11.10
	09/24/08	1015		1.63	10.82
	12/29/08	0802		0.84	11.61
	02/11/09	--		--	--
	03/25/09	0850		0.95	11.50
	06/29/09	0759		1.35	11.10
	09/09/09	1010		1.78	10.67
	12/16/09	0823		1.00	11.45
GT3	05/10/06	0909	13.36	2.18	11.18
	09/05/06	1004		2.91	10.45
	02/12/07	0922		1.95	11.41
	06/20/07	0851		2.49	10.87
	09/19/07	0907		2.94	10.42
	12/19/07	0916		1.64	11.72
	03/19/08	0914		2.12	11.24

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Seattle, Washington

Monitoring Well I.D.	Date Measured	Time (hours)	Top of Casing Elevation ^a (feet)	Depth to Groundwater (ft below TOC)	Groundwater Elevation (feet)
GT3 (cont.)	06/18/08	0820		2.21	11.15
	09/24/08	1020		2.54	10.82
	12/29/08	0804		1.80	11.56
	02/11/09	--		--	--
	03/25/09	0820		1.87	11.49
	06/29/09	0803		2.24	11.12
	09/09/09	1006		2.79	10.57
	12/16/09	0819		1.89	11.47
LC1	05/10/06	0916	13.17	1.57	11.60
	09/05/06	1010		2.43	10.74
	02/12/07	0941		1.40	11.77
	06/20/07	0844		1.99	11.18
	09/19/07	0904		2.46	10.71
	12/19/07	0954		1.01	12.16
	03/19/08	0857		1.54	11.63
	06/18/08	0836		1.55	11.62
	09/24/08	1034		1.89	11.28
	12/29/08	0809		1.20	11.97
	02/11/09	--		--	--
	03/25/09	0811		1.28	11.89
	06/29/09	0753		1.63	11.54
	09/09/09	0956		2.10	11.07
	12/16/09	0810		1.27	11.90
LC2	05/10/06	0919	13.41	2.01	11.40
	09/05/06	1012		2.74	10.67
	02/12/07	0943		1.80	11.61
	06/20/07			2.35	11.06
	09/19/07	0901		2.75	10.66
	12/19/07	0948		1.23	12.18
	03/19/08	0859		1.90	11.51
	06/18/08	0832		2.05	11.36
	09/24/08	1030		2.30	11.11
	12/29/08	0812		1.59	11.82
	02/11/09	--		--	--
	03/25/09	0807		1.87	11.54
	06/29/09	0750		2.13	11.28
	09/09/09	1001		2.57	10.84
	12/16/09	0813		1.66	11.75

Table 1
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 LeatherCare, Inc.
 Seattle, Washington

Monitoring Well I.D.	Date Measured	Time (hours)	Top of Casing Elevation ^a (feet)	Depth to Groundwater (ft below TOC)	Groundwater Elevation (feet)
LC3	05/10/06	0925	14.16	2.56	11.60
	09/05/06	1014		3.41	10.75
	02/12/07			2.37	11.79
	06/20/07	0837		2.98	11.18
	09/19/07	0853		3.48	10.68
	12/19/07	0906		1.99	12.17
	03/19/08	0847		2.55	11.61
	06/18/08	0839		2.58	11.58
	09/24/08	1038		2.84	11.32
	12/29/08	0815		2.21	11.95
	02/11/09	--		--	--
	03/25/09	0802		2.28	11.88
	06/29/09	0742		2.67	11.49
	09/09/09	0950		3.14	11.02
	12/16/09	0804		2.30	11.86
LC4	05/10/06	0921	14.72	3.16	11.56
	09/05/06	1026		3.99	10.73
	02/12/07			2.93	11.79
	06/20/07	0832		3.59	11.13
	09/19/07	0845		4.09	10.63
	12/19/07	0856		2.48	12.24
	03/19/08 ^b	--		--	--
	12/29/08	--		--	--
	02/11/09	--		--	--
	03/25/09	0957		3.03	11.74
LC4R	06/29/09	0840	14.77	3.45	11.32
	09/09/09	1050		3.85	10.92
	12/16/09	0753		2.73	12.04
LC5	05/10/06	0922	14.13	2.57	11.56
	09/05/06	1030		3.46	10.67
	02/12/07			2.37	11.76
	06/20/07	0834		2.97	11.16
	09/19/07	0858		3.48	10.65
	12/19/07	0901		1.89	12.24
	03/19/08	1114		2.49	11.64
	06/18/08 ^b	--		--	--
	12/29/08	--		--	--
	02/11/09	--		--	--

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LeatherCare, Inc.
Seattle, Washington

Monitoring Well I.D.	Date Measured	Time (hours)	Top of Casing Elevation ^a (feet)	Depth to Groundwater (ft below TOC)	Groundwater Elevation (feet)
LC5R	03/25/09	1125	14.34	2.46	11.88
	06/29/09	1000		2.93	11.41
	09/09/09	1230		3.39	10.95
	12/16/09	0758		2.31	12.03
LC6	05/10/06	0928	16.85	5.26	11.59
	09/05/06	1022		6.10	10.75
	02/12/07	0933		5.03	11.82
	06/20/07	0839		5.68	11.17
	09/19/07	0850		6.19	10.66
	12/19/07	0911		4.67	12.18
	03/19/08	0852		5.24	11.61
	06/18/08	0844		5.22	11.63
	09/24/08	1042		5.55	11.30
	12/29/08	0819		4.89	11.96
	02/11/09	--		--	--
	03/25/09	0759		4.93	11.92
	06/29/09	0742		5.33	11.52
	09/09/09	0952		5.78	11.07
	12/16/09	0801		4.99	11.86
LC7	02/11/09	0912	15.34	7.64	7.70
LC8	02/11/09	0910	15.50	7.10	8.40
LC9	02/11/09	0909	15.27	6.67	8.60

Notes:

a) Top of casing elevations in feet relative to a brass monument located at the south corner of Elliot Avenue W. and W. Roy Street, marked as Elevation 19.78 feet. No verifiable City of Seattle datum could be found in the site area.

b) Well believed to have been destroyed by construction on adjacent property.
ft bgs - feet below ground surface.

-- not measured.

NU - Data not used; measurement believed to have been misread.

TOC - top of casing.

Table 2
Groundwater Analytical Summary - LeatherCare, Greg Thompson Productions, and W. Roy Street Properties
 LeatherCare, Inc.
 Seattle, Washington

			Monitoring Well LD. ^b													
	Date	Method A Cleanup Levels ^a	GT1	GT2	GT3	LC1	LC2	LC3	LC4 ¹ /LC4R	LC5 ¹ /LC5R	LC6	LC7	LC8	LC9	Field Blank	Trip Blank
Analyte	Sampled															
Field-Measured Parameters																
pH	05/06	N/A	7.23	7.03	7.10	7.05	7.43	6.95	7.18	6.95	6.99	--	--	--	--	--
	09/06		7.33	7.19	7.13	7.19	7.26	7.07	7.03	7.05	7.07	--	--	--	--	--
	02/07		6.64	6.57	6.57	6.46	6.42	6.62	6.06	6.43	6.70	--	--	--	--	--
	06/07		7.15	7.01	6.95	6.99	7.23	7.00	6.97	6.91	6.90	--	--	--	--	--
	09/07		7.11	7.00	6.88	7.00	7.16	6.92	6.83	6.88	6.91	--	--	--	--	--
	12/07		7.47	7.42	7.30	6.50	7.36	7.45	6.42	6.59	7.02	--	--	--	--	--
	03/08		7.75	7.77	7.51	7.67	8.04	8.36	--	8.42	8.19	--	--	--	--	--
	06/08		7.23	6.89	6.97	**	6.96	6.70	--	--	6.96	--	--	--	--	--
	09/08		**	6.59	6.55	6.62	6.72	6.58	--	--	6.66	--	--	--	--	--
	12/08		7.06	6.75	6.79	6.98	7.54	6.82	--	--	6.95	--	--	--	--	--
	02/09		--	--	--	--	--	--	--	--	--	**	**	**	--	--
	03/09		7.26	6.96	6.92	7.07	7.13	6.99	6.96	6.97	7.07	--	--	--	--	--
	06/09		7.44	7.18	7.16	7.27	7.07	7.18	7.37	7.25	7.19	--	--	--	--	--
	09/09		7.37	7.11	7.03	7.06	7.19	7.05	7.12	7.08	7.07	--	--	--	--	--
	12/09		7.61	7.42	7.33	7.20	7.73	7.16	7.77	7.52	7.27	--	--	--	--	--
ORP ^d (mV)	05/06	N/A	-33	-27	-56	-72	-152	-33	-50	-82	-50	--	--	--	--	--
	09/06		-119	-97	-68	-113	-90	-71	-50	-107	-78	--	--	--	--	--
	02/07		-33	-2	17	-60	-32	56	80	-30	31	--	--	--	--	--
	06/07		-211	-171	-38	-61	-162	-183	-116	-214	-111	--	--	--	--	--
	09/07		-96	-95	-71	-125	-132	-83	-75	-126	-95	--	--	--	--	--
	12/07		**	**	**	**	**	**	**	**	**	--	--	--	--	--
	03/08		-54	-27	10	-28	-30	-59	--	-107	-43	--	--	--	--	--
	06/08		-57	-49	142	**	112	-17	--	--	-17	--	--	--	--	--
	09/08		--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/08		-52	-16	43	-22	40	-44	--	--	0.7	--	--	--	--	--
	02/09		--	--	--	--	--	--	--	--	--	--	--	--	--	--
	03/09		--	**	**	**	**	**	**	**	**	--	--	--	--	--
	06/09		-90	-78	13	-57	-78	-42	-92	-80	-50	--	--	--	--	--
	09/09		-148	-140	-73	-188	-115	-89	-130	-136	-103	--	--	--	--	--
	12/09		**	**	**	**	15	6	-96	-60	-2	--	--	--	--	--
Temperature (°C)	05/06	N/A	16.0	16.2	15.1	18.3	18.2	15.9	14.1	13.8	14.2	--	--	--	--	--
	09/06		20.0	21.3	20.8	23.1	22.6	22.6	22.2	22.5	20.6	--	--	--	--	--
	02/07		13.6	9.3	10.0	16.8	16.2	11.4	9.7	10.0	11.8	--	--	--	--	--
	06/07		17.8	20.2	18.7	20.7	20.0	19.3	18.6	18.0	17.6	--	--	--	--	--
	09/07		19.3	19.4	19.2	22.3	21.7	22.2	20.2	20.4	20.0	--	--	--	--	--
	12/07		11.9	8.8	9.3	17.3	15.5	11.6	12.3	11.4	12.6	--	--	--	--	--
	03/08		13.0	10.3	9.5	15.9	16.3	11.8	--	11.3	12.4	--	--	--	--	--
	06/08		16.1	17.0	17.2	18.3	19.8	16.4	--	--	16.3	--	--	--	--	--
	09/08		18.7	17.9	17.8	22.1	21.8	19.6	--	--	17.6	--	--	--	--	--
	12/08		11.2	7.6	6.9	14.6	15.0	9.8	--	--	11.5	--	--	--	--	--
	02/09		--	--	--	--	--	--	--	--	--	13.0	11.0	9.7	--	--
	03/09		13.0	9.0	9.0	14.6	16.5	10.9	8.7	9.0	10.5	--	--	--	--	--
	06/09		17.9	21.5	19.2	20.8	20.5	19.9	16.7	17.3	17.3	--	--	--	--	--
	09/09		19.3	18.4	19.0	22.2	21.4	20.1	17.8	18.2	19.3	--	--	--	--	--
	12/09		13.5	7.9	9.0	15.5	16.3	10.8	9.5	9.3	11.3	--	--	--	--	--
Specific Conductivity (µS/cm)	05/06	N/A	1,243	1,283	1,264	1,190	1,183	1,345	1,360	1,322	1,281	--	--	--	--	--
	09/06		811	856	864	866	736	870	853	856	856	--	--	--	--	--
	02/07		831	971	915	951	519	1,020	496	795	948	--	--	--	--	--
	06/07		786	813	833	836	676	820	808	804	842	--	--	--	--	--
	09/07		808	844	879	873	622	841	737	824	828	--	--	--	--	--
	12/07		732	706	829	1,017	181	778	553	543	920	--	--	--	--	--
	03/08		637	915	926	928	518	902	--	114 ^j	--	--	--	--	--	--
	06/08		998	1,701	1,471	1,561	1,490	1,493	--	--	1,363	--	--	--	--	--
	09/08		774	1,236	798	1,318	963	1,269	--	--	1,353	--	--	--	--	--
	12/08		**	**	**	**	671	**	--	--	**	--	--	--	--	--
	02/09		--	--	--	--	--	--	--	--	--	836	1,090	1,828	--	--

Table 2
Groundwater Analytical Summary - LeatherCare, Greg Thompson Productions, and W. Roy Street Properties
 LeatherCare, Inc.
 Seattle, Washington

Analyte	Date Sampled	Method A Cleanup Levels ^a	Monitoring Well I.D. ^b												Field Blank	Trip Blank
			GT1	GT2	GT3	LC1	LC2	LC3	LC4 /LC4R	LC5 /LC5R	LC6	LC7	LC8	LC9		
Specific Conductivity (µS/cm) (cont.)	03/09		587	861	824	864	648	825	--	--	--	--	--	--	--	--
	06/09		748	1,006	991	993	875	995	856	914	1,007	--	--	--	--	--
	09/09		636	947	944	966	629	986	976	997	1,002	--	--	--	--	--
	12/09		584	872	857	1,011	299	939	487	664	854	--	--	--	--	--
Dissolved Oxygen (mg/L)	05/06	N/A	0.70	0.34	0.70	0.24	0.40	0.42	0.43	0.33	0.39	--	--	--	--	--
	09/06		0.15	0.17	0.14	0.20	0.35	0.23	0.19	0.09	0.09	--	--	--	--	--
	02/07		0.31 ^g	0.13 ^g	-- ^g	-- ^g	-- ^g	-- ^g	-- ^g	-- ^g	-- ^g	--	--	--	--	--
	06/07		0.19	0.22	0.24	0.34	0.91	0.35	0.47	0.39	1.13	--	--	--	--	--
	09/07		0.41	0.34	0.27	0.24	0.25	0.58	0.78	0.55	0.58	--	--	--	--	--
	12/07		0.33	0.47	0.17	0.72	3.05	1.44	1.00	0.29	0.28	--	--	--	--	--
	03/08		0.34	0.34	1.28	0.31	1.12	0.44	--	0.37	0.34	--	--	--	--	--
	06/08		0.20	1.09	0.71	0.29	0.35	0.71	--	--	0.28	--	--	--	--	--
	09/08		1.32	1.12	1.06	0.08	0.84	1.36	--	--	1.34	--	--	--	--	--
	12/08		0.90	2.11	2.17	0.61	2.47	1.60	--	--	0.87	--	--	--	--	--
	02/09		--	--	--	--	--	--	--	--	--	4.74	4.73	8.05	--	--
	03/09		0.19	0.13	0.42	0.10	0.11	0.71	0.25	0.33	0.17	--	--	--	--	--
	06/09		0.23	0.13	0.28	0.15	0.14	0.27	0.52	0.33	0.21	--	--	--	--	--
	09/09		0.42	0.20	0.37	0.22	0.21	0.31	0.35	0.36	0.29	--	--	--	--	--
	12/09		0.17	0.74	0.53	0.22	2.33	0.89	0.43	0.48	0.35	--	--	--	--	--
Turbidity (NTU)	05/06	N/A	1.76	0.83	0.66	5.76	62 ^c	1.05	1.79	2.82	2.01	--	--	--	--	--
	09/06		*	0.47	0.70	0.7	*	5.5	2.4	1.8	*	--	--	--	--	--
	02/07		3.1 ^h	0.0 ^h	>999 ^h	0.0 ^h	0.0 ^h	22.4 ^h	0.0 ^h	16.3 ^h	26 ^h	--	--	--	--	--
	06/07		0.7	1.1	2.2	0.9	1.9	2.6	1.8	0.2	3.8	--	--	--	--	--
	09/07	N/A	0.9	0.9	1.6	*	0.5	2.3	6.5	0.14	3.8	--	--	--	--	--
	12/07		--	--	--	--	--	--	--	--	--	--	--	--	--	--
	03/08		16.9	8.8	168 ^k	2.3	0.7	20.9	--	9.6	4.4	--	--	--	--	--
	06/08		0.7	1.8	34.5/227 ^k	0.5	0.0 ^m	1.1	--	--	-- ^m	--	--	--	--	--
	09/08		54.8 ^h	53.2 ^h	187 ^h	18.2 ^h	48.2 ^h	179 ^h	--	--	-- ^h	--	--	--	--	--
	12/08		2.90	39.6 ^k	10.29 ^k	0.0 ^m	0.0 ^m	-- ^m	--	--	--	--	--	--	--	--
	02/09		--	--	--	--	--	--	--	--	--	7.40	5.69	7.90	--	--
	03/09		0.0	0.0	0.0	0.0	0.0	0.2	9.3	1.5	0.0	--	--	--	--	--
	06/09		2.6	1.5	1.4	0.1	1.7	3.1	1.9	23	0.95	--	--	--	--	--
	09/09		4.2	2.1	1.3	1.2	0.93	0.87	0.98	0.92	1.1	--	--	--	--	--
	12/09		6.2	5.8	0.8	0.0	1.48	2.90	3.64	4.64	6.2	--	--	--	--	--
Ferrous Iron (ppm)	05/06	N/A	0.1	0.2	0.2	0.5	0.3	0.3	0.2	1	0.5	--	--	--	--	--
	09/06		0.3	0.2	0.6	--	0.1	0.6	0.4	1	1	--	--	--	--	--
	02/07		0.4	0.6	0.3	0.6	--	0.2	0.1	1	0.4	--	--	--	--	--
	06/07		0.3	0.4	0.2	0.5	0	0.2	0.6	0.1	0.3	--	--	--	--	--
	09/07		0.2	0.3	0.2	0.4	0.2	0.4	0.6	0.8	0.8	--	--	--	--	--
	12/07		0.1	0	0	0.6	0	0.2	0.1	0.8	0.3	--	--	--	--	--
	03/08		0.3	0.8	0.4	0.4	0.1	0.4	--	0.8	0.4	--	--	--	--	--
	06/08		0.2	1	0	0.6	0	1	--	--	0.6	--	--	--	--	--
	09/08		--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/08		0.2	0.3	0.1	0.4	0	1	--	--	0.3	--	--	--	--	--
	02/09		--	--	--	--	--	--	--	--	--	--	--	--	--	--
	03/09		--	0.4	--	--	--	0.2	--	--	--	--	--	--	--	--
	06/09		0.4	0.6	0	0.4	0.8	0.6	0.4	0.6	0.6	--	--	--	--	--
	09/09		0	0.4	0.2	0.6	0.8	0.6	1.0	0.6	0.6	--	--	--	--	--
	12/09		0.1	0.1	0	0.6	0	0.6	0.1	0.2	0.2	--	--	--	--	--
Manganese (ppm)	06/07	N/A	0	0	0	0	0	0	0	0	0	--	--	--	--	--
Sulfide (ppm)	06/07	N/A	0	0	0	0	0	0	0	0	0	--	--	--	--	--

Table 2
Groundwater Analytical Summary - LeatherCare, Greg Thompson Productions, and W. Roy Street Properties
 LeatherCare, Inc.
 Seattle, Washington

Analyte	Date Sampled	Method A Cleanup Levels ^a	Monitoring Well L.D. ^b													
			GT1	GT2	GT3	LC1	LC2	LC3	LC4 ¹ /LC4R	LC5 ¹ /LC5R	LC6	LC7	LC8	LC9	Field Blank	Trip Blank
General Groundwater Chemistry																
Chloride (EPA Method 325.2) (mg/L)	05/06	N/A	7.4	7.9	16.5	20.5	8.8	16.1	6.8/6.7	14.0	17.5	--	--	--	--	--
Sulfate (EPA Method 375.2) (mg/L)	05/06	N/A	62.3	64.4	77.8	88.9	52.7	69.7	39.3/39.5	39.5	54.2	--	--	--	--	--
Chemical Oxygen Demand (EPA Method 410.4) (mg/L)	05/06	N/A	6.18	5.68	9.29	12.8	12.4	7.71	10.1/6.87	10.1	12.8	--	--	--	--	--
Alkalinity (SM 2320) (mg/L CaCO3)	05/06	N/A	336	406	358	368	309	398	233/233	372	401	--	--	--	--	--
Carbonate (SM 2320) (mg/L CaCO3)	05/06	N/A	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0/<1.0	<1.0	<1.0	--	--	--	--	--
Bicarbonate (SM 2320) (mg/L CaCO3)	05/06	N/A	336	406	358	368	309	398	233/233	372	401	--	--	--	--	--
Hydroxide (SM 2320) (mg/L CaCO3)	05/06	N/A	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0/<1.0	<1.0	<1.0	--	--	--	--	--
Dehalococcoides spp. (QCPR) ^a	05/06	N/A	-	+	+	+	-	+	-/-	+	+	--	--	--	--	--
Reductive Dechlorination End Products (µg/L)																
Methane	05/06	N/A	98	140	100	110	590	33	98/87	220	77	--	--	--	--	--
	09/06	N/A	160	1,400	140/130	94	310	28	130	170	92	--	--	--	--	--
	02/07	N/A	150	510	51/50	45	710	96	88	140	150	--	--	--	--	--
	06/07	N/A	150	200	110	46	870	24	100/140	310	99	--	--	--	--	--
	09/07	N/A	130	2,100	120	86	520	100	130/130	500	28	--	--	--	--	--
	12/07	N/A	110	100	91	51	58	16	94/99	530	360	--	--	--	--	--
	03/08	N/A	170	120	76/56	33	73	23	--	160	120	--	--	--	--	--
	06/08	N/A	180	170	27	110	20	140	--	--	370	--	--	--	--	--
	09/08	N/A	150	260	73	150	260	120	--	--	370	--	--	--	--	--
	12/08	N/A	200	110	34/33	200	40	86	--	--	450	--	--	--	--	--
	02/09	N/A	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	03/09	N/A	150	140	34/36	240	200	86	390	330	300	--	--	--	--	--
	06/09	N/A	160	230	140/150	260	340	110	430	220	400	--	--	--	--	--
	09/09	N/A	210	170	270/270	220	480	120	390	340	610	--	--	--	--	--
	12/09	N/A	260	170	53/64	230	110	110	5,400	1,300	530	--	--	--	--	--
Ethane	05/06	N/A	<12	<12	<12	<12	<12	<12	<12	<12	<12	--	--	--	--	--
	09/06	N/A	0.49	0.34	0.05/0.045	0.24	0.22	0.04	0.11	0.21	0.097	--	--	--	--	--
	02/07	N/A	0.18	0.37	0.088/0.087	0.093	0.42	0.078	0.054	0.14	0.12	--	--	--	--	--
	06/07	N/A	0.24	0.30	0.054	0.034	0.32	0.033	0.10/0.11	0.21	0.088	--	--	--	--	--
	09/07	N/A	0.3	0.29	0.034	0.33	0.21	<0.025	0.052/0.052	0.22	<0.025	--	--	--	--	--
	12/07	N/A	0.22	0.15	0.059	0.091	<0.025	0.030	0.081/0.084	0.28	0.058	--	--	--	--	--
	03/08	N/A	0.098	0.23	0.052/0.045	0.040	0.038	0.026	--	0.16	0.065	--	--	--	--	--
	06/08	N/A	0.22	0.29	0.037	0.087	0.053	0.044	--	--	0.067	--	--	--	--	--
	09/08	N/A	0.18	0.27	0.068	0.11	0.073	0.064	--	--	0.11	--	--	--	--	--
	12/08	N/A	0.12	0.12	<0.025/0.028	0.13	<0.025	0.044	--	--	0.11	--	--	--	--	--
	02/09	N/A	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	03/09	N/A	0.096	0.17	0.032/0.034	0.14	0.037	0.048	0.240	0.14	0.092	--	--	--	--	--
	06/09	N/A	0.11	0.20	0.070/0.068	0.17	0.11	0.059	0.290	0.099	0.16	--	--	--	--	--
	09/09	N/A	0.22	0.15	0.12/0.15	0.17	0.15	0.089	0.250	0.14	0.20	--	--	--	--	--
	12/09	N/A	0.13	0.12	0.079/0.094	0.17	0.044	0.062	2.70	0.87	0.19	--	--	--	--	--
Ethene	05/06	N/A	<11	<11	<11	<11	<11	<11	<11/<11	<11	<11	--	--	--	--	--
	09/06	N/A	0.041	1.8	0.21/0.19	0.82	0.46	<0.025	0.05	0.31	<0.025	--	--	--	--	--
	02/07	N/A	0.031	1.2	0.079/0.072	0.034	0.92	0.035	0.046	0.21	0.046	--	--	--	--	--
	06/07	N/A	0.083	1.4	0.15	0.11	0.29	0.10	0.15/0.080	0.29	0.094	--	--	--	--	--
	09/07	N/A	<0.025	1.9	0.08	0.35	0.35	0.051	0.039/0.036	0.23	<0.025	--	--	--	--	--
	12/07	N/A	<0.025	0.81	0.51	0.027	<0.025	0.22	0.029/0.034	0.18	<0.025	--	--	--	--	--
	03/08	N/A	<0.025	0.9	0.16/0.13	0.028	<0.025	<0.025	--	0.12	<0.025	--	--	--	--	--
	06/08	N/A	<0.025	0.65	0.1	<0.025	0.079	<0.025	--	--	<0.025	--	--	--	--	--
	09/08	N/A	0.035	1.0	0.14	0.11	0.071	0.044	--	--	0.034	--	--	--	--	--
	12/08	N/A	<0.025	0.5	0.1/0.085	0.039	<0.025	<0.025	--	--	<0.025	--	--	--	--	--
	02/09	N/A	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	03/09	N/A	<0.025	0.51	0.066/0.070	<0.025	0.035	<0.025	0.072	0.12	<0.025	--	--	--	--	--
	06/09	N/A	<0.025	0.71	0.12/0.13	<0.025	0.072	0.026	0.15	0.19	0.026	--	--	--	--	--
	09/09	N/A	0.026	0.68	0.25/0.28	0.37	0.150	0.035	0.16	0.24	0.048	--	--	--	--	--
	12/09	N/A	<0.025	0.26	0.096/0.110	<0.025	0.026	<0.025	0.90	0.43	<0.025	--	--	--	--	--

Table 2

Groundwater Analytical Summary - LeatherCare, Greg Thompson Productions, and W. Roy Street Properties

LeatherCare, Inc.
Seattle, Washington

Analyte	Date Sampled	Method A Cleanup Levels ^a	Monitoring Well I.D. ^b													
			GT1	GT2	GT3	LC1	LC2	LC3	LC4 ^c /LC4R	LC5 ^c /LC5R	LC6	LC7	LC8	LC9	Field Blank	Trip Blank
Petroleum Hydrocarbons (NWTPH-Dx) (mg/L)																
Diesel	05/06	0.50	<0.25	0.32	<0.25	<0.25	<0.25	<0.25	<0.25/<0.25	0.35	0.35	--	--	--	--	--
	09/06	0.50	<0.25	<0.25	<0.25/<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	--	--	--	--	--
	02/07	0.50	--	--	--	--	--	0.28	<0.25	0.42/<0.25 ⁱ	0.76/<0.25 ⁱ	--	--	--	--	--
	02/09	0.50	--	--	--	--	--	--	--	--	--	<0.25	<0.25	<0.25	--	--
Motor Oil	05/06	0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50/<0.50	<0.50	<0.50	--	--	--	--	--
	09/06	0.50	<0.50	<0.50	<0.50/0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	--	--	--	--	--
	02/07	0.50	--	--	--	--	--	<0.50	<0.50	<0.50/<0.5 ⁱ	<0.50/<0.5 ⁱ	--	--	--	--	--
	02/09	0.50	--	--	--	--	--	--	--	--	--	<0.50	<0.50	<0.50	--	--
Detected Volatile Organic Compounds (EPA SW8260B) (µg/L)																
Tetrachloroethene	05/06	5	<0.2	<0.2	0.4	2.0	9.4	2.9	14/14	0.4	<0.2	--	--	--	<0.2	<0.2
	09/06	5	<0.2	<0.2	<0.2/<0.2	4.4	9.3	2.8	8.6	<0.2	<0.2	--	--	--	--	--
	02/07	5	<0.2	<0.2	0.4/0.4	2.2	2.5	5.9	20 ^D	0.3	<0.2	--	--	--	--	<0.2
	06/07	5	<0.2	<0.2	<0.2	1.4	1.5	2.6	9.8/9.9	0.2	<0.2	--	--	--	--	--
	09/07	5	<0.2	<0.2	<0.2	5.2	1.9	3.0	7.9/7.4	<0.2	<0.2	--	--	--	--	--
	12/07	5	<0.2	<0.2	<0.2	4.5	2.7	6.8	25/23 ^D	1.0	<0.2	--	--	--	--	--
	03/08	5	<0.2	<0.2	<0.2/<0.2	3.6	2.6	3.0	--	<0.2	<0.2	--	--	--	--	--
	06/08	5	<0.2	<0.2	<0.2	6.2	3.3	6.8	--	<0.2	<0.2	--	--	--	--	--
	09/08	5	<0.2	<0.2	<0.2/<0.2	5.8	3.2	5.1	--	--	<0.2	--	--	--	--	--
	12/08	5	<0.2	<0.2	<0.2/<0.2	8.2	1.3	4.2	--	--	<0.2	--	--	--	--	--
	02/09	5	--	--	--	--	--	--	--	--	--	<0.2	<0.2	<0.2	--	--
	03/09	5	<0.2	<0.2	<0.2/<0.2	6.0	1.0	5.6	0.4	<0.2	<0.2	--	--	--	--	--
	06/09	5	<0.2	<0.2	<0.2/<0.2	2.3	1.1	5.6	<0.2	<0.2	<0.2	--	--	--	--	--
	09/09	5	<0.2	<0.2	<0.2/<0.2	3.4	0.2	3.3	<0.2	<0.2	<0.2	--	--	--	--	--
	12/09	5	<0.2	<0.2	<0.2/<0.2	1.8	1.0	3.8	0.4	<0.2	<0.2	--	--	--	--	--
Trichloroethene	05/06	5	0.4	0.6	11	2.8	4	0.6	2.4/2.4	0.5	<0.2	--	--	--	<0.2	<0.2
	09/06	5	0.3	0.6	1.2/1.2	6.5	3	1.2	2.9	0.4	0.3	--	--	--	--	--
	02/07	5	0.4	0.4	6.3/6.9	2.8	1.4	1.2	3.8	1.0	0.2	--	--	--	--	<0.2
	06/07	5	0.2	0.5	2.8	3.2	2.5	1.0	4.8/5.0	0.4	0.3	--	--	--	--	--
	09/07	5	<0.2	0.5	0.6	4.8	1.7	1.8	3.2/3.1	0.4	0.2	--	--	--	--	--
	12/07	5	<0.2	0.5	1.4	6.1	0.5	2.2	1.8/1.8	1.2	<0.2	--	--	--	--	--
	03/08	5	<0.2	0.6	2.6/2.6	4.6	1.3	0.8	--	0.8	<0.2	--	--	--	--	--
	06/08	5	<0.2	0.6	1.5	4.8	4.1	1.6	--	--	0.3	--	--	--	--	--
	09/08	5	<0.2	0.5	1.1/1.0	5.1	2.2	1.2	--	--	0.2	--	--	--	--	--
	12/08	5	<0.2	0.3	0.6/0.6	5.6	0.4	1.2	--	--	0.3	--	--	--	--	--
	02/09	5	--	--	--	--	--	--	--	--	--	<0.2	<0.2	<0.2	--	--
	03/09	5	<0.2	0.3	0.8/0.9	3.9	0.7	1.0	0.7	0.4	0.2	--	--	--	--	--
	06/09	5	<0.2	0.5	1.0/1.1	2.8	1.0	0.8	0.9	0.5	0.2	--	--	--	--	--
	09/09	5	<0.2	0.4	0.8/0.8	2.7	0.9	0.7	0.6	0.5	<0.2	--	--	--	--	--
	12/09	5	<0.2	0.3	0.5/0.5	2.5	0.3	1.1	1.7	1.5	0.3	--	--	--	--	--
cis-1,2-Dichloroethene	05/06	80 ^f	4.2	16	49 ^D	5.9	14	2.4	7.6/7.9	3.4	2.4	--	--	--	<0.2	<0.2
	09/06	80 ^f	3.7	24 ^D	13/13	15	15	4.3	10	2.5	2.6	--	--	--	--	--
	02/07	80 ^f	4.9	10	35/34 ^D	6.3	8.4	2.4	7.7	4.9	2.5	--	--	--	--	<0.2
	06/07	80 ^f	3.0	22 ^D	16	7.6	5.0	2.4	8.6/9.0	1.6	1.8	--	--	--	--	--
	09/07	80 ^f	2.3	18 ^D	5.0	9.7	6.9	6.4	11/11	1.7	1.7	--	--	--	--	--
	12/07	80 ^f	1.8	12	14	9.9	1.2	8.0	7.7/7.7	4.6	1.7	--	--	--	--	--
	03/08	80 ^f	1.8	18 ^D	19/19	6.6	2.5	2.1	--	3.3	1.5	--	--	--	--	--
	06/08	80 ^f	2.0	11	15	4.6	7.0	2.7	--	--	1.3	--	--	--	--	--
	09/08	80 ^f	2.1	8.2	20	7.9	5.2	2.9	--	--	1.0	--	--	--	--	--
	12/08	80 ^f	1.9	6.4	9.2/9.8	6.2	1.2	1.6	--	--	0.8	--	--	--	--	--
	02/09	80 ^f	--	--	--	--	--	--	--	--	--	<0.2	<0.2	<0.2	--	--

Table 2

Groundwater Analytical Summary - LeatherCare, Greg Thompson Productions, and W. Roy Street Properties

LeatherCare, Inc.
Seattle, Washington

Analyte	Date Sampled	Method A Cleanup Levels ^a	Monitoring Well I.D. ^b													
			GT1	GT2	GT3	LC1	LC2	LC3	LC4 ¹ /LC4R	LC5 ¹ /LC5R	LC6	LC7	LC8	LC9	Field Blank	Trip Blank
cis-1,2-Dichloroethene (cont.)	03/09	80	1.7	8.4	6.7/6.8	3.6	1.4	1.0	2.3	1.2	0.5	--	--	--	--	--
	06/09	80	1.7	12	8.9/9.0	4.1	2.9	1.4	2.6	1.5	0.6	--	--	--	--	--
	09/09	80	0.9	5.2	7.1/7.4	8.4	4.4	1.8	2.6	1.7	0.7	--	--	--	--	--
	12/09	80	0.8	2.5	6.4/6.4	4.0	1.3	1.2	2.2	2.2	0.8	--	--	--	--	--
trans-1,2-Dichloroethene	05/06	160	<0.2	5	9.4	<0.2	0.9	<0.2	0.4/0.4	0.2	<0.2	--	--	--	<0.2	<0.2
	09/06	160	<0.2	6.9	5.4/5.4	0.4	1.3	<0.2	0.5	<0.2	<0.2	--	--	--	--	--
	02/07	160	0.2	3.3	5.1/5.2	<0.2	0.5	<0.20	0.3	0.3	<0.2	--	--	--	--	<0.2
	06/07	160	<0.2	4.8	4.5	<0.2	0.6	<0.2	0.4/0.5	<0.2	<0.2	--	--	--	--	--
	09/07	160	<0.2	5.3	2.4	<0.2	0.5	<0.2	0.3/0.4	<0.2	<0.2	--	--	--	--	--
	12/07	160	<0.2	2.9	4.2	<0.2	<0.2	<0.2	0.2/0.2	0.3	<0.2	--	--	--	--	--
	03/08	160	<0.2	3.1	3.3/3.1	<0.2	<0.2	<0.2	--	<0.2	<0.2	--	--	--	--	--
	06/08	160	<0.2	3.9	4.6	<0.2	<0.2	<0.2	--	--	<0.2	--	--	--	--	--
	09/08	160	<0.2	2.9	5.9/5.2	0.4	0.3	<0.2	--	--	<0.2	--	--	--	--	--
	12/08	160	<0.2	1.8	2.3/2.6	0.2	<0.2	<0.2	--	--	<0.2	--	--	--	--	--
	02/09	160	--	--	--	--	--	--	--	--	--	<0.2	<0.2	<0.2	--	--
	03/09	160	<0.2	2.0	1.9/2.0	<0.2	<0.2	<0.2	0.2	<0.2	<0.2	--	--	--	--	--
	06/09	160	<0.2	3.2	4.2/4.3	<0.2	0.2	<0.2	0.2	<0.2	<0.2	--	--	--	--	--
	09/09	160	<0.2	1.7	3.9/3.9	<0.2	0.3	<0.2	0.3	<0.2	<0.2	--	--	--	--	--
	12/09	80	<0.2	1.0	1.6/1.5	<0.2	<0.2	<0.2	0.2	<0.2	<0.2	--	--	--	--	--
1,1-Dichloroethene	05/06	0.073	<0.2	<0.2	0.3	<0.2	<0.2	<0.2	<0.2/<0.2	<0.2	<0.2	--	--	--	<0.2	<0.2
	09/06	0.073	<0.2	<0.2	<0.2/<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	--	--	--	--	--
	02/07	0.073	<0.2	<0.2	<0.2/<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	--	--	--	--	<0.2
	06/07	0.073	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2/<0.2	<0.2	<0.2	--	--	--	--	--
	09/07	0.073	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2/<0.2	<0.2	<0.2	--	--	--	--	--
	12/07	0.073	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2/<0.2	<0.2	<0.2	--	--	--	--	--
	03/08	0.073	<0.2	<0.2	<0.2/<0.2	<0.2	<0.2	<0.2	--	<0.2	<0.2	--	--	--	--	--
	06/08	0.073	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	--	--	<0.2	--	--	--	--	--
	09/08	0.073	<0.2	<0.2	<0.2/<0.2	<0.2	<0.2	<0.2	--	--	<0.2	--	--	--	--	--
	12/08	0.073	<0.2	<0.2	<0.2/<0.2	<0.2	<0.2	<0.2	--	--	<0.2	--	--	--	--	--
	02/09	0.073	--	--	--	--	--	--	--	--	--	<0.2	<0.2	<0.2	--	--
	03/09	0.073	<0.2	<0.2	<0.2/<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	--	--	--	--	--
	06/09	0.073	<0.2	<0.2	<0.2/<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	--	--	--	--	--
	09/09	0.073	<0.2	<0.2	<0.2/<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	--	--	--	--	--
Vinyl Chloride	12/09	80	<0.2	<0.2	<0.2/<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	--	--	--	--	--
	05/06	0.2	<0.2	19 D	9.7	1.1	2.8	2	2.6/2.6	4.8	1.2	--	--	--	<0.2	<0.2
	09/06	0.2	0.2	35 D	5.7/5.4	3.0	3.8	1.6	1.6	2.4	1.0	--	--	--	--	--
	02/07	0.2	<0.2	14	1.9/1.6	0.7	3.1	1.8	1.2	3.3	1.9	--	--	--	--	<0.2
	06/07	0.2	<0.2	12	2.3	0.9	1.8	0.6	1.2/1.2	1.5	0.7	--	--	--	--	--
	09/07	0.2	<0.2	22 D	2.1	1.4	1.4	1.0	0.8/0.8	1.3	0.3	--	--	--	--	--
	12/07	0.2	<0.2	13	16	1.4	<0.2	5.6	1.2/1.1	3.5	1.8	--	--	--	--	--
	03/08	0.2	<0.2	12	2.8/2.4	0.7	0.3	0.8	--	1.9	1.1	--	--	--	--	--
	06/08	0.2	<0.2	18	4.8	0.3	0.5	0.9	--	--	0.2	--	--	--	--	--
	09/08	0.2	<0.2	16	5.2/4.6	0.9	1.1	0.9	--	--	0.2	--	--	--	--	--
	12/08	0.2	<0.2	11	1.7/1.8	0.6	<0.2	0.8	--	--	<0.2	--	--	--	--	--
	02/09	0.2	--	--	--	--	--	--	--	--	--	<0.2	<0.2	<0.2	--	--
	03/09	0.2	<0.2	9.2	1.0/1.0	0.4	0.3	0.3	1.3	1.6	<0.2	--	--	--	--	--

Table 2

Groundwater Analytical Summary - LeatherCare, Greg Thompson Productions, and W. Roy Street Properties

LeatherCare, Inc.
Seattle, Washington

			Monitoring Well I.D. ^b													
	Date	Method A														
	Sampled	Cleanup														
		Levels ^a	GT1	GT2	GT3	LC1	LC2	LC3	LC4 ¹ /LC4R	LC5 ¹ /LC5R	LC6	LC7	LC8	LC9	Field	Trip
Analyte															Blank	Blank
Vinyl Chloride (cont.)	06/09	0.2	<0.2	17	3.8/4.7	0.8	1.0	0.3	1.5	2.2	<0.2	--	--	--	--	--
	09/09	0.2	<0.2	6.9	4.9/4.9	1.6	1.2	0.6	1.4	2.4	<0.2	--	--	--	--	--
	12/09	0.2	<0.2	3.7	2.5/2.6	0.4	0.2	0.3	1.2	1.4	<0.2	--	--	--	--	--
1,1,1-Trichloroethane	05/06	200	<0.2	<0.2	<0.2	<0.2	<0.2	0.2	<0.2/<0.2	<0.2	<0.2	--	--	--	<0.2	<0.2
1,1,2-Trichloroethane	05/06	0.77 ^f	0.3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2/<0.2	<0.2	<0.2	--	--	--	<0.2	<0.2
1,1-Dichloroethane	05/06	800 ^f	<0.2	<0.2	<0.2	<0.2	0.9	<0.2	0.4/0.4	<0.2	<0.2	--	--	--	<0.2	<0.2
Benzene	05/06	5	<0.2	1.5	1.4	<0.2	0.4	<0.2	0.7/0.6	<0.2	<0.2	--	--	--	<0.2	<0.2
Toluene	05/06	1,000	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2/<0.2	<0.2	<0.2	--	--	--	0.4	<0.2
Dibromochloromethane	05/06	0.52 ^f	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2/<0.2	<0.2	<0.2	--	--	--	<0.2	<0.2
tert-Butylbenzene	05/06	N/A	0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2/<0.2	<0.2	<0.2	--	--	--	<0.2	<0.2
Acetone	05/06	800 ^f	3.4 M	5.3 M	<1.0	1.5	2.3	1.3	1.5/1.7	2.1	1.7	--	--	--	5.2	1.5
Methylene Chloride	05/06	5	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3/<0.3	<0.3	<0.3	--	--	--	<0.3	0.4

Notes:

Bold and boxed values exceed Method A/B cleanup level.

^a Turbidity meter malfunctioned; judged to be <10 NTU prior to sampling based on clarity of water.

^{**} Data not usable due to meter malfunction.

a) Washington Administrative Code Chapter 173-340, Model Toxics Control Act Cleanup Regulation, promulgated August 15, 2001. Method A suggested groundwater cleanup level used when available.

b) Second set of concentrations are from blind duplicate samples.

c) Water in LC2 had a strong hydrogen sulfide odor and would not clear up fully; suspect turbidity is suspended organics.

d) Silver-silver chloride reference electrode.

e) + means dehalococoides detected; - means dehalococoides not detected.

f) Method B cleanup level from Washington Dept. of Ecology's Cleanup Levels and Risk Calculations (CLARC) tables.

g) Dissolved oxygen meter not working correctly. Measurements, when provided, were taken on 2/20/07 and were in situ down hole measurements.

h) Turbidity readings taken from flow-cell and high turbidity readings influenced by biofloc.

i) Resampled and reanalyzed for TPH on February 20, 2007. The TPH analyses were run with a silica gel cleanup to remove interference by potential naturally occurring organics.

j) Value believed to be incorrect.

k) Turbidity influenced by biofloc.

l) Destroyed by construction.

m) "10" standard was checked and confirmed the correct instrument reading.

°C - degrees Celsius.

mV - millivolts.

NTU - Nephelometric turbidity units.

ORP - oxidation reduction potential.

N/A - not applicable.

µS/cm - microsiemens per centimeter.

µg/L - micrograms per liter.

mg/L - milligrams per liter.

ppm - parts per million.

J - estimated value.

D - value from a diluted sample.

M - estimated amount of analyte found and confirmed by analyst but with low GC/MS spectral match.

-- not analyzed or not measured.

< - analyte not detected at or greater than the listed concentration.

Table 3
Mann-Kendall Statistical Summary
LeatherCare, Inc.
Seattle, Washington

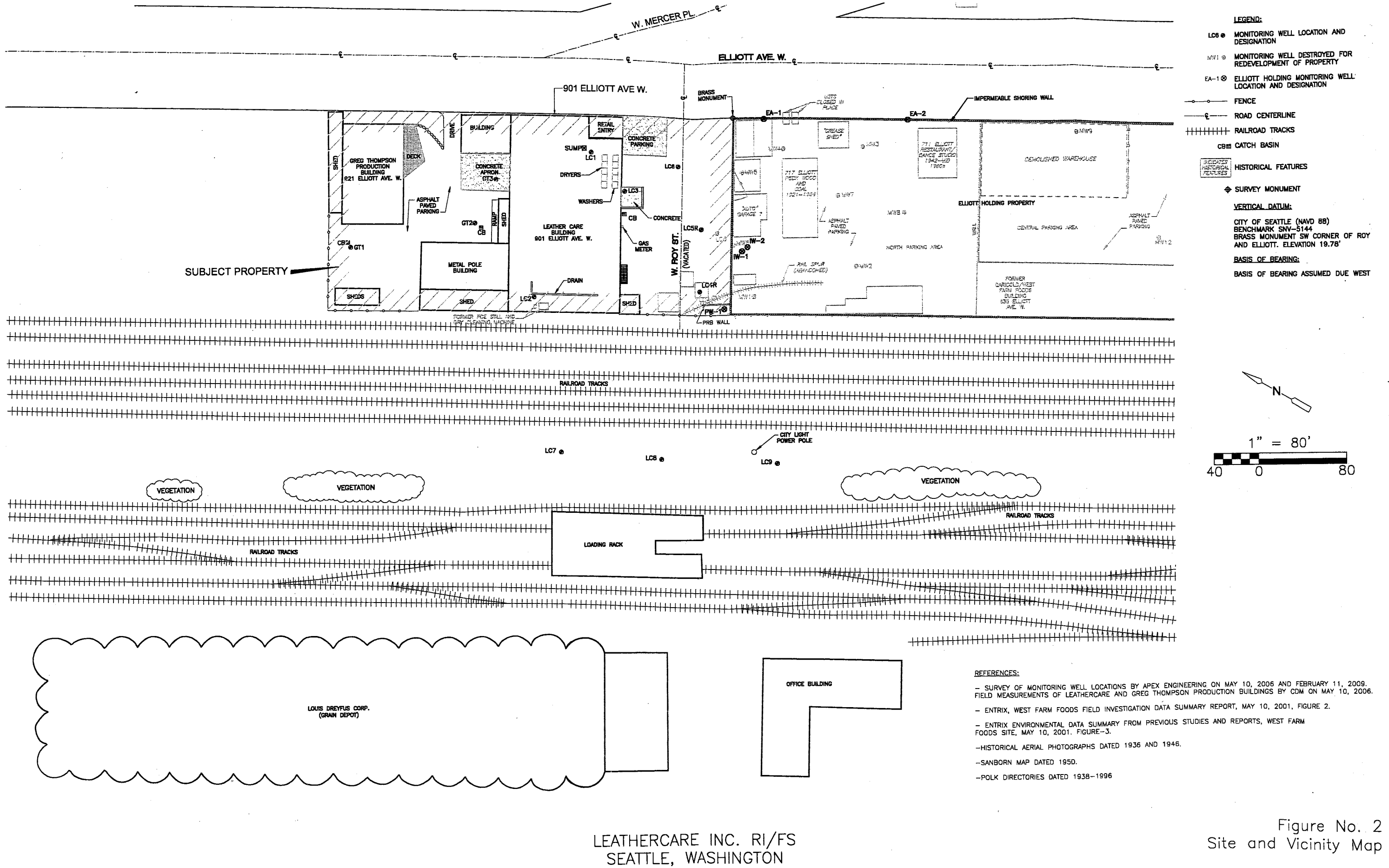
		GT1 Monitoring Well	GT2 Monitoring Well	GT3 Monitoring Well	LC1 Monitoring Well	LC2 Monitoring Well	LC3 Monitoring Well	LC4 Monitoring Well	LC5 Monitoring Well	LC6 Monitoring Well
1,1-Dichloroethene	Count (data)	14	14	14	14	14	14	10	11	14
	Count (nondetects)	14	14	13	14	14	14	10	11	14
	S Statistic	NC	NC	NC	NC	NC	NC	NC	NC	NC
	Var(S)	NC	NC	NC	NC	NC	NC	NC	NC	NC
	Trend	NC	NC	NC	NC	NC	NC	NC	NC	NC
	Probability (of no real trend)	NC	NC	NC	NC	NC	NC	NC	NC	NC
cis-1,2-Dichloroethene	Count (data)	14	14	14	14	14	14	10	11	14
	Count (nondetects)	0	0	0	0	0	0	0	0	0
	S Statistic	-71	-55	-43	-29	-44	-40	-21	-16	-73
	Var(S)	332	332	334	334	333	330	123	164	332
	Trend	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Probability (of no real trend)	0.01%	0.15%	1.07%	6.27%	0.92%	1.59%	3.57%	12.07%	0.00%
Tetrachloroethene	Count (data)	14	14	14	14	14	14	10	11	14
	Count (nondetects)	14	14	12	0	0	0	2	7	14
	S Statistic	NC	NC	NC	13	-52	20	-23	NC	NC
	Var(S)	NC	NC	NC	334	333	331	123	NC	NC
	Trend	NC	NC	NC	Increasing	Decreasing	Increasing	Decreasing	NC	NC
	Probability (of no real trend)	NC	NC	NC	25.56%	0.26%	14.80%	2.36%	NC	NC
trans-1,2-Dichloroethene	Count (data)	14	14	14	14	14	14	10	11	14
	Count (nondetects)	13	0	0	11	6	14	0	8	14
	S Statistic	NC	-61	-48	NC	-46	NC	-25	NC	NC
	Var(S)	NC	332	333	NC	287	NC	112	NC	NC
	Trend	NC	Decreasing	Decreasing	NC	Decreasing	NC	Decreasing	NC	NC
	Probability (of no real trend)	NC	0.05%	0.50%	NC	0.40%	NC	1.16%	NC	NC
Trichloroethene	Count (data)	14	14	14	14	14	14	10	11	14
	Count (nondetects)	10	0	0	0	0	0	0	0	4
	S Statistic	NC	-37	-52	-21	-47	-15	-21	12	1
	Var(S)	NC	304	331	329	334	323	125	153	225
	Trend	NC	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing
	Probability (of no real trend)	NC	1.94%	0.25%	13.51%	0.59%	21.80%	3.68%	18.67%	50.00%
Vinyl Chloride	Count (data)	14	14	14	14	14	14	10	11	14
	Count (nondetects)	13	0	0	0	2	0	0	0	5
	S Statistic	NC	-50	-15	-27	-43	-55	-7	-16	-52
	Var(S)	NC	333	334	330	329	327	116	164	289
	Trend	NC	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Probability (of no real trend)	NC	0.36%	22.17%	7.61%	1.03%	0.14%	28.90%	12.07%	0.14%

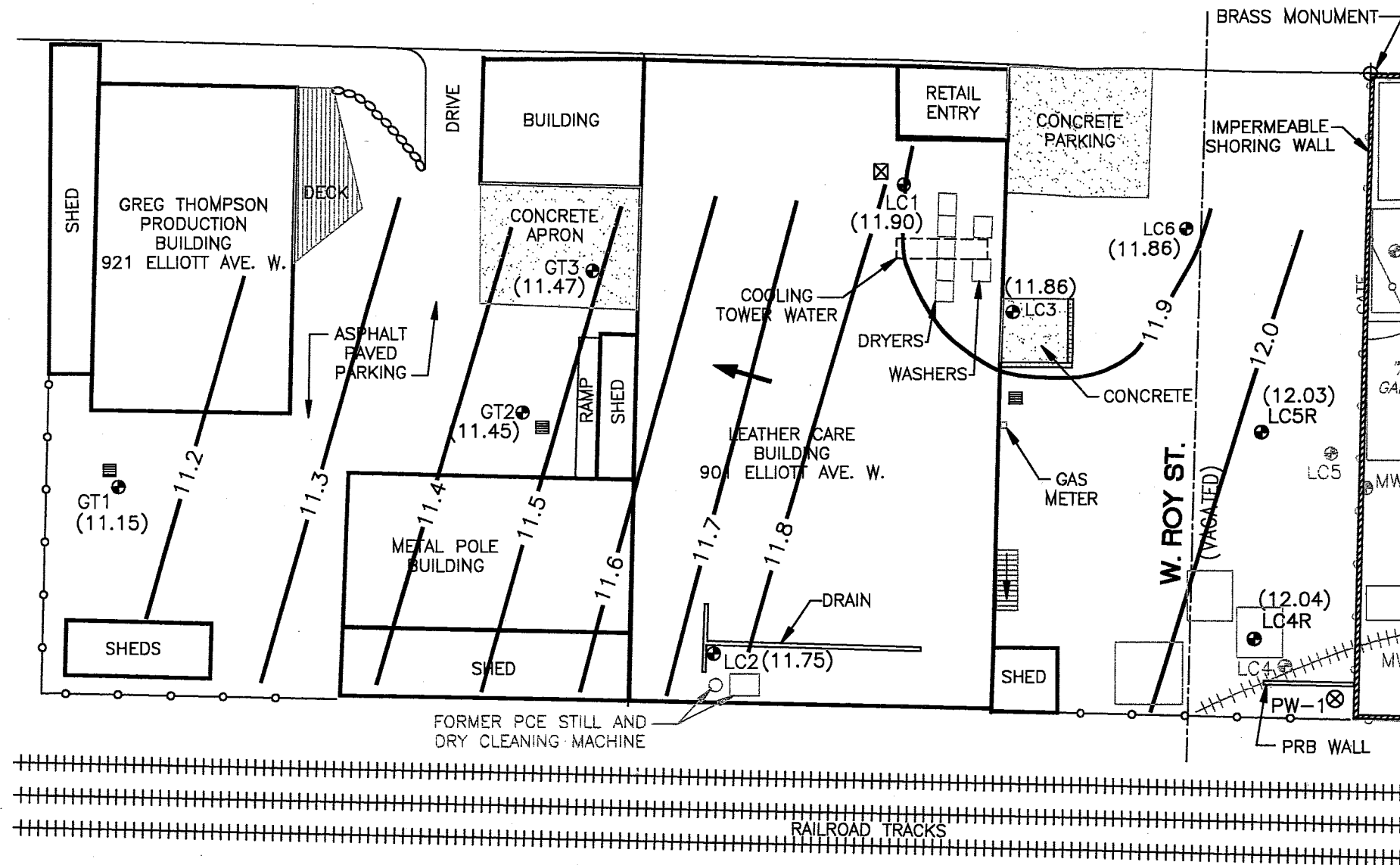
F

Figures

[illegible]

P:\56498\68247\ Fig-2-Dec 16 2009 01/22/10 08:34 riehepj XREFS: Dec 16 2009 site, Dec 16 2009 11X17BDR





REFERENCES:

- SURVEY OF MONITORING WELL LOCATIONS BY APEX ENGINEERING ON MAY 10, 2006 AND FEBRUARY 11, 2009. FIELD MEASUREMENTS OF LEATHERCARE AND GREG THOMPSON PRODUCTION BUILDINGS BY CDM ON MAY 10, 2006.
- ENTRIX, WEST FARM FOODS FIELD INVESTIGATION DATA SUMMARY REPORT, MAY 10, 2001, FIGURE 2.
- ENTRIX ENVIRONMENTAL DATA SUMMARY FROM PREVIOUS STUDIES AND REPORTS, WEST FARM FOODS SITE, MAY 10, 2001, FIGURE-3.
- HISTORICAL AERIAL PHOTOGRAPHS DATED 1936 AND 1946.
- SANBORN MAP DATED 1950.
- POLK DIRECTORIES DATED 1938-1996

LEGEND:

- LC6 (11.86) ● MONITORING WELL LOCATION AND DESIGNATION WITH GROUNDWATER ELEVATION IN FEET
- 11.5 — POTENTIOMETRIC CONTOURS, CONTOUR INTERVAL IS 0.1 FT. (AVERAGE)
- ← DIRECTION OF GROUNDWATER FLOW
- FENCE
- ++++ RAILROAD TRACKS
- CATCH BASIN
- INDICATES HISTORICAL FEATURES
- ⊕ SURVEY MONUMENT
- CSM IMPERMEABLE WALL

VERTICAL DATUM:

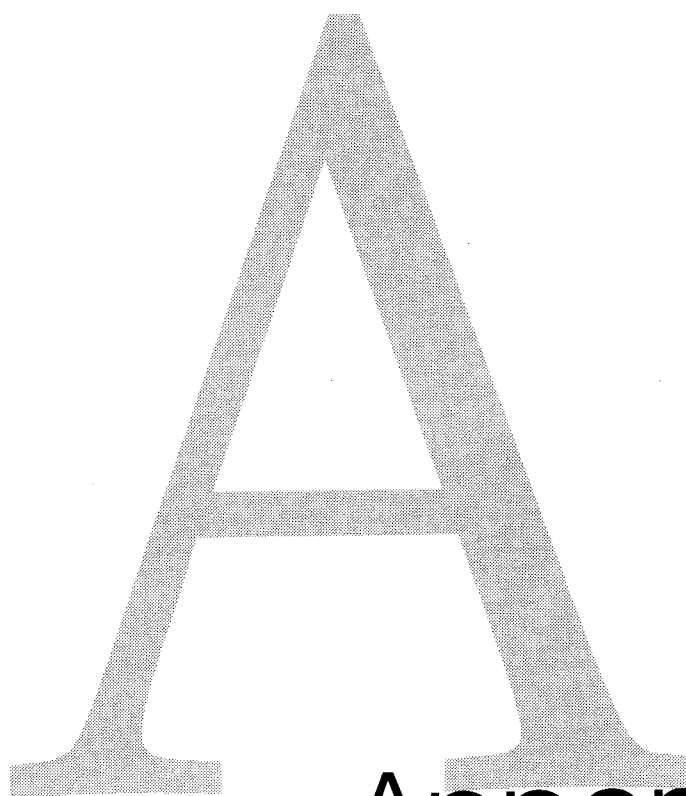
CITY OF SEATTLE (NAVD 88)
BENCHMARK SNV-5144
BRASS MONUMENT SW CORNER OF ROY
AND ELLIOTT. ELEVATION 19.78'

BASIS OF BEARING:

BASIS OF BEARING ASSUMED DUE WEST

LEATHERCARE INC. RI/FS
SEATTLE, WASHINGTON

Figure No. 3
Potentiometric Surface Map
December 16, 2009



Appendix A

Appendix A

Analytical Laboratory Reports



Analytical Resources, Incorporated
Analytical Chemists and Consultants

December 29, 2009

Pam Morrill
CDM
11811 NE 1st, Suite 201
Bellevue, WA 98005

RE: Project ID: Leathercare, 56498-68247
ARI Job No: QB95

Dear Pam:

Please find enclosed the original Chain-of-Custody (COC) record, sample receipt documentation, and the final results for samples from the project referenced above. Analytical Resources Inc. (ARI) accepted five water samples and a trip blank on December 16, 2009, under ARI job QB95. The trip blank held upon receipt, as requested on the COC. For further details regarding sample receipt, please refer to the enclosed Cooler Receipt Form.

The samples were analyzed for Volatile Organics by SW8260C, as requested.

There were no anomalies associated with the analysis of these samples.

An electronic copy of this report as well as all supporting data will remain on file with ARI. If you have any questions or require additional information, please contact me at your convenience.

Sincerely,

ANALYTICAL RESOURCES, INC.

Cheronne Oreiro
Project Manager
(206) 695-6214
cheronneo@arilabs.com
www.arilabs.com

cc: eFile QB95

Enclosures



CHAIN-OF-CUSTODY

Date

12/17/09

Page

of

1

PROJECT INFORMATION					ANALYSIS REQUEST																			
Project Manager: <u>Pam Merrill</u>					Laboratory Number:																			
Project Name: <u>Leathercare</u>					PETROLEUM HYDROCARBONS																			
Project Number: <u>56498-68247</u>					ORGANIC COMPOUNDS																			
Site Location: <u>Ellis Ave W NW Mercer WA</u>					PESTS/PCBs																			
Sampled By: <u>MLF</u>					METALS																			
DISPOSAL INFORMATION					LEACHING TESTS																			
☒ Lab Disposal (return if not indicated)					OTHER																			
Disposal Method: _____					NUMBER OF CONTAINERS																			
Disposed by: _____ Disposal Date: _____																								
QC INFORMATION (check one)																								
☐ SW-846 ☐ CLP ☐ Screening ☒ CDM Std. ☐ Special																								
SAMPLE ID					DATE					TIME					MATRIX					LAB ID				
LC1-12/09					12/17/09					0820					Water									
GT3-12/09					12/17/09					0930														
GT2-12/09					12/17/09					1110														
GT1-12/09					12/17/09					1220														
GT20-12/09					12/17/09					1330														
Trip Blank					12/17/09					—					Water									

LAB INFORMATION		SAMPLE RECEIPT		RELINQUISHED BY: 1.		RELINQUISHED BY: 2.		RELINQUISHED BY: 3.	
Lab Name: <u>ART</u>		Total Number of Containers: _____		Signature: <u>Mary Lou Fox</u> Time: <u>1430</u>		Signature: _____ Time: _____		Signature: _____ Time: _____	
Lab Address: <u>4611 134th Place S</u>		Chain-of-Custody Seals: Y/N/NA		Printed Name: <u>Mary Lou Fox</u> Date: <u>12/17/09</u>		Printed Name: _____ Date: _____		Printed Name: _____ Date: _____	
Via: <u>Tok mail WA</u>		Intact?: Y/N/NA		Company: <u>CDM</u>		Company: _____		Company: _____	
Turn Around Time: ☒ Standard ☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 1 wk.		Received in Good Condition/Cold: _____		RECEIVED BY: 1.		RECEIVED BY: 2.		RECEIVED BY: 3.	
PRIOR AUTHORIZATION IS REQUIRED FOR RUSH DATA				Signature: <u>A. Valgardsen</u> Time: <u>1430</u>		Signature: _____ Time: _____		Signature: _____ Time: _____	
Special Instructions: <u>-Please analyze for Leathercare</u>				Printed Name: <u>A. Valgardsen</u> Date: <u>12/17/09</u>		Printed Name: _____ Date: _____		Printed Name: _____ Date: _____	
<u>1st of chlorinated volatiles</u>				Company: <u>ART</u>		Company: _____		Company: _____	
<u>10mL purge volume</u>									



Cooler Receipt Form

ARI Client: CDM

Project Name: Leathercare

COC No(s): _____ (NA)

Delivered by: Fed-Ex UPS Courier Hand Delivered Other: _____

Assigned ARI Job No: QB95

Tracking No: _____ (NA)

Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of to cooler? YES NO
Were custody papers included with the cooler? YES NO
Were custody papers properly filled out (ink, signed, etc.) YES NO
Temperature of Cooler(s) (°C) (recommended 2.0-6.0 °C for chemistry)..... 5.3
If cooler temperature is out of compliance fill out form 00070F Temp Gun ID#: 909411019

Cooler Accepted by: AV Date: 12/17/09 Time: 1430

Complete custody forms and attach all shipping documents

Log-In Phase:

Was a temperature blank included in the cooler? YES NO
What kind of packing material was used? ... Bubble Wrap Wet Ice Gel Packs Baggies Foam Block Paper Other: _____
Was sufficient ice used (if appropriate)? NA YES NO
Were all bottles sealed in individual plastic bags? YES NO
Did all bottles arrive in good condition (unbroken)? YES NO
Were all bottle labels complete and legible? YES NO
Did the number of containers listed on COC match with the number of containers received? YES NO
Did all bottle labels and tags agree with custody papers? YES NO
Were all bottles used correct for the requested analyses? YES NO
Do any of the analyses (bottles) require preservation? (attach preservation sheet, excluding VOCs)... NA YES NO
Were all VOC vials free of air bubbles? NA YES NO
Was sufficient amount of sample sent in each bottle? YES NO
Date VOC Trip Blank was made at ARI..... NA 12/7/09

Samples Logged by: JP Date: 12/17/09 Time: 1705

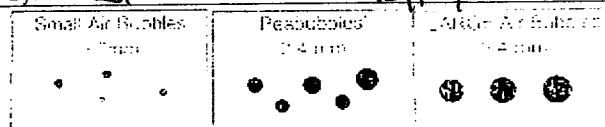
**** Notify Project Manager of discrepancies or concerns ****

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

Additional Notes, Discrepancies, & Resolutions:

"Sm" bubbles in 1 of 3 HCl vial vials for both samples
GT2-12/09 and GT20-12/09 "Sm" bubble in 1 of 2 Trip Blanks

By: JP Date: 12/17/09



Small → "sm"
Peabubbles → "pb"
Large → "lg"
Headspace → "hs"

ORGANICS ANALYSIS DATA SHEET

Volatiles by Purge & Trap GC/MS-Method SW8260C

Sample ID: LC1-12/09

Page 1 of 1

SAMPLE

Lab Sample ID: QB95A

QC Report No: QB95-CDM, Inc.

LIMS ID: 09-31101

Project: Leathercare

Matrix: Water

56498-68247

Data Release Authorized: 

Date Sampled: 12/17/09

Reported: 12/29/09

Date Received: 12/17/09

Instrument/Analyst: NT5/PKC

Sample Amount: 10.0 mL

Date Analyzed: 12/24/09 14:22

Purge Volume: 10.0 mL

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	0.2	0.4	
75-35-4	1,1-Dichloroethene	0.2	< 0.2	U
156-60-5	trans-1,2-Dichloroethene	0.2	< 0.2	U
156-59-2	cis-1,2-Dichloroethene	0.2	4.0	
79-01-6	Trichloroethene	0.2	2.5	
127-18-4	Tetrachloroethene	0.2	1.8	

Reported in $\mu\text{g/L}$ (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	92.5%
d8-Toluene	97.0%
Bromofluorobenzene	92.7%

ORGANICS ANALYSIS DATA SHEET

Volatiles by Purge & Trap GC/MS-Method SW8260C

Sample ID: GT3-12/09

Page 1 of 1

SAMPLE

Lab Sample ID: QB95B

QC Report No: QB95-CDM, Inc.

LIMS ID: 09-31102

Project: Leathercare

Matrix: Water

56498-68247

Data Release Authorized: 

Date Sampled: 12/17/09

Reported: 12/29/09

Date Received: 12/17/09

Instrument/Analyst: NT5/PKC

Sample Amount: 10.0 mL

Date Analyzed: 12/24/09 14:48

Purge Volume: 10.0 mL

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	0.2	2.5	
75-35-4	1,1-Dichloroethene	0.2	< 0.2	U
156-60-5	trans-1,2-Dichloroethene	0.2	1.6	
156-59-2	cis-1,2-Dichloroethene	0.2	6.4	
79-01-6	Trichloroethene	0.2	0.5	
127-18-4	Tetrachloroethene	0.2	< 0.2	U

Reported in $\mu\text{g/L}$ (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	93.0%
d8-Toluene	98.5%
Bromofluorobenzene	94.0%

ORGANICS ANALYSIS DATA SHEET

Volatiles by Purge & Trap GC/MS-Method SW8260C

Sample ID: GT2-12/09

Page 1 of 1

SAMPLE

Lab Sample ID: QB95C

QC Report No: QB95-CDM, Inc.

LIMS ID: 09-31103

Project: Leathercare

Matrix: Water

56498-68247

Data Release Authorized: 

Date Sampled: 12/17/09

Reported: 12/29/09

Date Received: 12/17/09

Instrument/Analyst: NT5/PKC

Sample Amount: 10.0 mL

Date Analyzed: 12/24/09 15:14

Purge Volume: 10.0 mL

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	0.2	3.7	
75-35-4	1,1-Dichloroethene	0.2	< 0.2	U
156-60-5	trans-1,2-Dichloroethene	0.2	1.0	
156-59-2	cis-1,2-Dichloroethene	0.2	2.5	
79-01-6	Trichloroethene	0.2	0.3	
127-18-4	Tetrachloroethene	0.2	< 0.2	U

Reported in $\mu\text{g/L}$ (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	88.4%
d8-Toluene	97.9%
Bromofluorobenzene	93.9%

ORGANICS ANALYSIS DATA SHEET

Volatiles by Purge & Trap GC/MS-Method SW8260C

Sample ID: GT1-12/09

Page 1 of 1

SAMPLE

Lab Sample ID: QB95D

QC Report No: QB95-CDM, Inc.

LIMS ID: 09-31104

Project: Leathercare

Matrix: Water

56498-68247

Data Release Authorized: 

Date Sampled: 12/17/09

Reported: 12/29/09

Date Received: 12/17/09

Instrument/Analyst: NT5/PKC

Sample Amount: 10.0 mL

Date Analyzed: 12/24/09 15:39

Purge Volume: 10.0 mL

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	0.2	< 0.2	U
75-35-4	1,1-Dichloroethene	0.2	< 0.2	U
156-60-5	trans-1,2-Dichloroethene	0.2	< 0.2	U
156-59-2	cis-1,2-Dichloroethene	0.2	0.8	
79-01-6	Trichloroethene	0.2	< 0.2	U
127-18-4	Tetrachloroethene	0.2	< 0.2	U

Reported in $\mu\text{g/L}$ (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	92.5%
d8-Toluene	98.8%
Bromofluorobenzene	96.3%

ORGANICS ANALYSIS DATA SHEET

Volatiles by Purge & Trap GC/MS-Method SW8260C

Sample ID: GT20-12/09

Page 1 of 1

SAMPLE

Lab Sample ID: QB95E

QC Report No: QB95-CDM, Inc.

LIMS ID: 09-31105

Project: Leathercare

Matrix: Water

56498-68247

Data Release Authorized: 

Date Sampled: 12/17/09

Reported: 12/29/09

Date Received: 12/17/09

Instrument/Analyst: NT5/PKC

Sample Amount: 10.0 mL

Date Analyzed: 12/24/09 16:05

Purge Volume: 10.0 mL

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	0.2	2.6	
75-35-4	1,1-Dichloroethene	0.2	< 0.2	U
156-60-5	trans-1,2-Dichloroethene	0.2	1.5	
156-59-2	cis-1,2-Dichloroethene	0.2	6.4	
79-01-6	Trichloroethene	0.2	0.5	
127-18-4	Tetrachloroethene	0.2	< 0.2	U

Reported in $\mu\text{g/L}$ (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	93.6%
d8-Toluene	99.0%
Bromofluorobenzene	93.3%

VOA SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: QB95-CDM, Inc.
Project: Leathercare
56498-68247

ARI ID	Client ID	PV	DCE	TOL	BFB	DCB	TOT OUT
MB-122409	Method Blank	10	91.5%	98.6%	95.2%	NA	0
LCS-122409	Lab Control	10	90.7%	100%	96.1%	NA	0
LCSD-122409	Lab Control Dup	10	90.5%	99.4%	99.3%	NA	0
QB95A	LC1-12/09	10	92.5%	97.0%	92.7%	NA	0
QB95B	GT3-12/09	10	93.0%	98.5%	94.0%	NA	0
QB95C	GT2-12/09	10	88.4%	97.9%	93.9%	NA	0
QB95D	GT1-12/09	10	92.5%	98.8%	96.3%	NA	0
QB95E	GT20-12/09	10	93.6%	99.0%	93.3%	NA	0

LCS/MB LIMITS

QC LIMITS

SW8260C

(DCE) = d4-1,2-Dichloroethane
(TOL) = d8-Toluene
(BFB) = Bromofluorobenzene
(DCB) = d4-1,2-Dichlorobenzene

70-132
80-120
80-120
80-120

80-143
80-120
80-120
80-120

Prep Method: SW5030B
Log Number Range: 09-31101 to 09-31105

ORGANICS ANALYSIS DATA SHEET

Volatiles by Purge & Trap GC/MS-Method SW8260C
Page 1 of 1Sample ID: MB-122409
METHOD BLANK

Lab Sample ID: MB-122409

LIMS ID: 09-31101

Matrix: Water

Data Release Authorized: *BB*

Reported: 12/29/09

QC Report No: QB95-CDM, Inc.

Project: Leathercare

56498-68247

Date Sampled: NA

Date Received: NA

Instrument/Analyst: NT5/PKC

Date Analyzed: 12/24/09 11:12

Sample Amount: 10.0 mL

Purge Volume: 10.0 mL

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	0.2	< 0.2	U
75-35-4	1,1-Dichloroethene	0.2	< 0.2	U
156-60-5	trans-1,2-Dichloroethene	0.2	< 0.2	U
156-59-2	cis-1,2-Dichloroethene	0.2	< 0.2	U
79-01-6	Trichloroethene	0.2	< 0.2	U
127-18-4	Tetrachloroethene	0.2	< 0.2	U

Reported in $\mu\text{g/L}$ (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	91.5%
d8-Toluene	98.6%
Bromofluorobenzene	95.2%



Analytical Resources, Incorporated
Analytical Chemists and Consultants

DEC 30 2009

December 28, 2009

Pam Morrill
CDM
11811 NE 1st, Suite 201
Bellevue, WA 98005

RE: Project ID: Leathercare, 56498-68247
ARI Job No: QB73

Dear Pam:

Please find enclosed the original Chain-of-Custody (COC) record, sample receipt documentation, and the final results for samples from the project referenced above. Analytical Resources Inc. (ARI) accepted five water samples and a trip blank on December 16, 2009, under ARI job QB73. For further details regarding sample receipt, please refer to the enclosed Cooler Receipt Form.

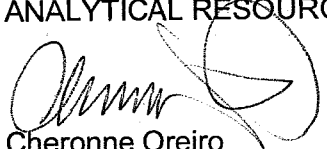
The samples were analyzed for Volatile Organics by SW8260C, as requested.

There were no anomalies associated with the analysis of these samples.

An electronic copy of this report as well as all supporting data will remain on file with ARI. If you have any questions or require additional information, please contact me at your convenience.

Sincerely,

ANALYTICAL RESOURCES, INC.


Cheronne Oreiro
Project Manager
(206) 695-6214
cheronneo@arilabs.com
www.arilabs.com

cc: eFile QB73

Enclosures

Page 1 of 15



Cooler Receipt Form

ARI Client: CDM

Project Name: Leather Care

COC No(s): _____ (NA)

Delivered by: Fed-Ex UPS Courier (Hand Delivered Other: _____)

Assigned ARI Job No: QB73

Tracking No: _____ (NA)

Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of to cooler? _____

YES (NO)

Were custody papers included with the cooler? _____

(YES) NO

Were custody papers properly filled out (ink, signed, etc.) _____

(YES) NO

Temperature of Cooler(s) (°C) (recommended 2.0-6.0 °C for chemistry)..... 3.5

If cooler temperature is out of compliance fill out form 00070F

Temp Gun ID#: 90877952

Cooler Accepted by: JP Date: 12/16/09 Time: 1625

Complete custody forms and attach all shipping documents

Log-In Phase:

Was a temperature blank included in the cooler? _____

YES (NO)

What kind of packing material was used? ... Bubble Wrap (Wet Ice Gel Packs Baggies Foam Block Paper Other: _____)

Was sufficient ice used (if appropriate)? _____

NA (YES) NO

Were all bottles sealed in individual plastic bags? _____

YES (NO)

Did all bottles arrive in good condition (unbroken)? _____

(YES) NO

Were all bottle labels complete and legible? _____

(YES) NO

Did the number of containers listed on COC match with the number of containers received? _____

(YES) NO

Did all bottle labels and tags agree with custody papers? _____

(YES) NO

Were all bottles used correct for the requested analyses? _____

(YES) NO

Do any of the analyses (bottles) require preservation? (attach preservation sheet, excluding VOCs)...

NA YES (NO)

Were all VOC vials free of air bubbles? _____

NA (YES) NO

Was sufficient amount of sample sent in each bottle? _____

(YES) NO

Date VOC Trip Blank was made at ARI.....

NA 12/7/09

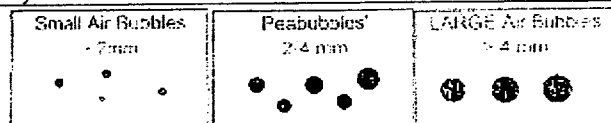
Samples Logged by: JP Date: 12/17/09 Time: 9:45

**** Notify Project Manager of discrepancies or concerns ****

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

Additional Notes, Discrepancies, & Resolutions:

By: _____ Date: _____



Small → "sm"

Peabubbles → "pb"

Large → "lg"

Headspace → "hs"

ORGANICS ANALYSIS DATA SHEET

Volatiles by Purge & Trap GC/MS-Method SW8260C

Sample ID: LC4R-12/09

Page 1 of 1

SAMPLE

Lab Sample ID: QB73A

QC Report No: QB73-CDM, Inc.

LIMS ID: 09-31004

Project: Leathercare

Matrix: Water

56498-68247

Data Release Authorized: 

Date Sampled: 12/16/09

Reported: 12/23/09

Date Received: 12/16/09

Instrument/Analyst: NT5/PKC

Sample Amount: 10.0 mL

Date Analyzed: 12/21/09 18:36

Purge Volume: 10.0 mL

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	0.2	1.2	
75-35-4	1,1-Dichloroethene	0.2	< 0.2	U
156-60-5	trans-1,2-Dichloroethene	0.2	0.2	
156-59-2	cis-1,2-Dichloroethene	0.2	2.2	
79-01-6	Trichloroethene	0.2	1.7	
127-18-4	Tetrachloroethene	0.2	0.4	

Reported in $\mu\text{g/L}$ (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	88.6%
d8-Toluene	99.4%
Bromofluorobenzene	105%

ORGANICS ANALYSIS DATA SHEET

Volatiles by Purge & Trap GC/MS-Method SW8260C

Sample ID: LC5R-12/09
SAMPLE

Page 1 of 1

Lab Sample ID: QB73B

QC Report No: QB73-CDM, Inc.

LIMS ID: 09-31005

Project: Leathercare

Matrix: Water

56498-68247

Data Release Authorized: 

Date Sampled: 12/16/09

Reported: 12/23/09

Date Received: 12/16/09

Instrument/Analyst: NT5/PKC

Sample Amount: 10.0 mL

Date Analyzed: 12/21/09 19:02

Purge Volume: 10.0 mL

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	0.2	1.4	
75-35-4	1,1-Dichloroethene	0.2	< 0.2	U
156-60-5	trans-1,2-Dichloroethene	0.2	< 0.2	U
156-59-2	cis-1,2-Dichloroethene	0.2	2.2	
79-01-6	Trichloroethene	0.2	1.5	
127-18-4	Tetrachloroethene	0.2	< 0.2	U

Reported in $\mu\text{g/L}$ (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	90.7%
d8-Toluene	98.8%
Bromofluorobenzene	106%

ORGANICS ANALYSIS DATA SHEET

Volatiles by Purge & Trap GC/MS-Method SW8260C
Page 1 of 1Sample ID: LC6-12/09
SAMPLE

Lab Sample ID: QB73C

LIMS ID: 09-31006

Matrix: Water

Data Release Authorized: 

Reported: 12/23/09

QC Report No: QB73-CDM, Inc.

Project: Leathercare

56498-68247

Date Sampled: 12/16/09

Date Received: 12/16/09

Instrument/Analyst: NT5/PKC

Date Analyzed: 12/21/09 19:27

Sample Amount: 10.0 mL

Purge Volume: 10.0 mL

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	0.2	< 0.2	U
75-35-4	1,1-Dichloroethene	0.2	< 0.2	U
156-60-5	trans-1,2-Dichloroethene	0.2	< 0.2	U
156-59-2	cis-1,2-Dichloroethene	0.2	0.8	
79-01-6	Trichloroethene	0.2	0.3	
127-18-4	Tetrachloroethene	0.2	< 0.2	U

Reported in $\mu\text{g/L}$ (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	90.6%
d8-Toluene	100%
Bromofluorobenzene	104%

ORGANICS ANALYSIS DATA SHEET

Volatiles by Purge & Trap GC/MS-Method SW8260C
Page 1 of 1Sample ID: LC3-12/09
SAMPLE

Lab Sample ID: QB73D

LIMS ID: 09-31007

Matrix: Water

Data Release Authorized: 

Reported: 12/23/09

QC Report No: QB73-CDM, Inc.

Project: Leathercare

56498-68247

Date Sampled: 12/16/09

Date Received: 12/16/09

Instrument/Analyst: NT5/PKC

Date Analyzed: 12/21/09 19:53

Sample Amount: 10.0 mL

Purge Volume: 10.0 mL

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	0.2	0.3	
75-35-4	1,1-Dichloroethene	0.2	< 0.2	U
156-60-5	trans-1,2-Dichloroethene	0.2	< 0.2	U
156-59-2	cis-1,2-Dichloroethene	0.2	1.2	
79-01-6	Trichloroethene	0.2	1.1	
127-18-4	Tetrachloroethene	0.2	3.8	

Reported in $\mu\text{g/L}$ (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	91.4%
d8-Toluene	99.6%
Bromofluorobenzene	103%

ORGANICS ANALYSIS DATA SHEET

Volatiles by Purge & Trap GC/MS-Method SW8260C
Page 1 of 1Sample ID: LC2-12/09
SAMPLE

Lab Sample ID: QB73E

LIMS ID: 09-31008

Matrix: Water

Data Release Authorized: 

Reported: 12/23/09

QC Report No: QB73-CDM, Inc.

Project: Leathercare

56498-68247

Date Sampled: 12/16/09

Date Received: 12/16/09

Instrument/Analyst: NT5/PKC

Date Analyzed: 12/21/09 20:19

Sample Amount: 10.0 mL

Purge Volume: 10.0 mL

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	0.2	0.2	
75-35-4	1,1-Dichloroethene	0.2	< 0.2	U
156-60-5	trans-1,2-Dichloroethene	0.2	< 0.2	U
156-59-2	cis-1,2-Dichloroethene	0.2	1.3	
79-01-6	Trichloroethene	0.2	0.3	
127-18-4	Tetrachloroethene	0.2	1.0	

Reported in $\mu\text{g/L}$ (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	89.4%
d8-Toluene	100%
Bromofluorobenzene	104%

ORGANICS ANALYSIS DATA SHEET

Volatiles by Purge & Trap GC/MS-Method SW8260C

Sample ID: Trip Blank
SAMPLE

Page 1 of 1

Lab Sample ID: QB73F

LIMS ID: 09-31009

Matrix: Water

Data Release Authorized: 

Reported: 12/23/09

QC Report No: QB73-CDM, Inc.

Project: Leathercare

56498-68247

Date Sampled: 12/16/09

Date Received: 12/16/09

Instrument/Analyst: NT5/PKC

Date Analyzed: 12/21/09 16:02

Sample Amount: 10.0 mL

Purge Volume: 10.0 mL

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	0.2	< 0.2	U
75-35-4	1,1-Dichloroethene	0.2	< 0.2	U
156-60-5	trans-1,2-Dichloroethene	0.2	< 0.2	U
156-59-2	cis-1,2-Dichloroethene	0.2	< 0.2	U
79-01-6	Trichloroethene	0.2	< 0.2	U
127-18-4	Tetrachloroethene	0.2	< 0.2	U

Reported in $\mu\text{g/L}$ (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	90.3%
d8-Toluene	100%
Bromofluorobenzene	102%

VOA SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: QB73-CDM, Inc.
Project: Leathercare
56498-68247

ARI ID	Client ID	PV	DCE	TOL	BFB	DCB	TOT OUT
MB-122109	Method Blank	10	90.9%	99.7%	96.2%	NA	0
LCS-122109	Lab Control	10	91.7%	98.5%	99.4%	NA	0
LCSD-122109	Lab Control Dup	10	90.7%	98.0%	97.9%	NA	0
QB73A	LC4R-12/09	10	88.6%	99.4%	105%	NA	0
QB73B	LC5R-12/09	10	90.7%	98.8%	106%	NA	0
QB73C	LC6-12/09	10	90.6%	100%	104%	NA	0
QB73D	LC3-12/09	10	91.4%	99.6%	103%	NA	0
QB73DMS	LC3-12/09	10	87.8%	98.5%	106%	NA	0
QB73DMSD	LC3-12/09	10	88.3%	98.4%	106%	NA	0
QB73E	LC2-12/09	10	89.4%	100%	104%	NA	0
QB73F	Trip Blank	10	90.3%	100%	102%	NA	0

LCS/MB LIMITS

QC LIMITS

SW8260C

(DCE) = d4-1,2-Dichloroethane
(TOL) = d8-Toluene
(BFB) = Bromofluorobenzene
(DCB) = d4-1,2-Dichlorobenzene

70-132
80-120
80-120
80-120

80-143
80-120
80-120
80-120

Prep Method: SW5030B
Log Number Range: 09-31004 to 09-31009

ORGANICS ANALYSIS DATA SHEET

Volatiles by Purge & Trap GC/MS-Method SW8260C

Page 1 of 1

Sample ID: LC3-12/09

MATRIX SPIKE

Lab Sample ID: QB73D

LIMS ID: 09-31007

Matrix: Water

Data Release Authorized: 

Reported: 12/23/09

QC Report No: QB73-CDM, Inc.

Project: Leathercare

56498-68247

Date Sampled: 12/16/09

Date Received: 12/16/09

Instrument/Analyst MS: NT5/PKC

MSD: NT5/PKC

Date Analyzed MS: 12/21/09 20:44

MSD: 12/21/09 21:10

Sample Amount MS: 10.0 mL

MSD: 10.0 mL

Purge Volume MS: 10.0 mL

MSD: 10.0 mL

Analyte	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
Vinyl Chloride	0.3	11.5	10.0	112%	11.4	10.0	111%	0.9%
1,1-Dichloroethene	< 0.2 U	11.7	10.0	117%	11.8	10.0	118%	0.9%
trans-1,2-Dichloroethene	< 0.2 U	11.0	10.0	110%	11.0	10.0	110%	0.0%
cis-1,2-Dichloroethene	1.2	12.5	10.0	113%	12.4	10.0	112%	0.8%
Trichloroethene	1.1	11.3	10.0	102%	11.7	10.0	106%	3.5%
Tetrachloroethene	3.8	13.2	10.0	94.0%	13.2	10.0	94.0%	0.0%

Reported in $\mu\text{g/L}$ (ppb)

RPD calculated using sample concentrations per SW846.

ORGANICS ANALYSIS DATA SHEET

Volatiles by Purge & Trap GC/MS-Method SW8260C
Page 1 of 1Sample ID: LC3-12/09
MATRIX SPIKE

Lab Sample ID: QB73D

LIMS ID: 09-31007

Matrix: Water

Data Release Authorized: 

Reported: 12/23/09

QC Report No: QB73-CDM, Inc.

Project: Leathercare

56498-68247

Date Sampled: 12/16/09

Date Received: 12/16/09

Instrument/Analyst: NT5/PKC
Date Analyzed: 12/21/09 20:44Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	0.2	---	
75-35-4	1,1-Dichloroethene	0.2	---	
156-60-5	trans-1,2-Dichloroethene	0.2	---	
156-59-2	cis-1,2-Dichloroethene	0.2	---	
79-01-6	Trichloroethene	0.2	---	
127-18-4	Tetrachloroethene	0.2	---	

Reported in $\mu\text{g/L}$ (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	87.8%
d8-Toluene	98.5%
Bromofluorobenzene	106%

ORGANICS ANALYSIS DATA SHEET

Volatiles by Purge & Trap GC/MS-Method SW8260C
Page 1 of 1

Sample ID: MB-122109
METHOD BLANK

Lab Sample ID: MB-122109
LIMS ID: 09-31004
Matrix: Water
Data Release Authorized: 
Reported: 12/23/09

QC Report No: QB73-CDM, Inc.
Project: Leathercare
56498-68247
Date Sampled: NA
Date Received: NA

Instrument/Analyst: NT5/PKC
Date Analyzed: 12/21/09 12:51

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	0.2	< 0.2	U
75-35-4	1,1-Dichloroethene	0.2	< 0.2	U
156-60-5	trans-1,2-Dichloroethene	0.2	< 0.2	U
156-59-2	cis-1,2-Dichloroethene	0.2	< 0.2	U
79-01-6	Trichloroethene	0.2	< 0.2	U
127-18-4	Tetrachloroethene	0.2	< 0.2	U

Reported in $\mu\text{g/L}$ (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	90.9%
d8-Toluene	99.7%
Bromofluorobenzene	96.2%



Client Name: Camp Dresser and McKee
Contact: Pam Morrill
Address: 11811 Northeast First Street
Suite 201
Bellevue, WA 98005

Page: Page 1 of 11
Lab Proj #: P0912274
Report Date: 12/23/09
Client Proj Name: Leathercare
Client Proj #: 56498-68247

Laboratory Results

Total pages in data package: 13

<u>Lab Sample #</u>	<u>Client Sample ID</u>
P0912274-01	LC4R-12/09
P0912274-02	LC5R-12/09
P0912274-03	LC6-12/09
P0912274-04	LC3-12/09
P0912274-05	LC2-12/09
P0912274-06	LC1-12/09
P0912274-07	GT3-12/09
P0912274-08	GT2-12/09
P0912274-09	GT1-12/09
P0912274-10	GT20-12/09

Microseeps test results meet all the requirements of the NELAC standards or provide reasons and/or justification if they do not.

Approved By: Debbie Hallo (HHP) **Date:** 12.23.09

Project Manager: Debbie Hallo

The analytical results reported here are reliable and usable to the precision expressed in this report. As required by some regulating authorities, a full discussion of the uncertainty in our analytical results can be obtained at our web site or through customer service. Unless otherwise specified, all results are reported on a wet weight basis.

*As a valued client we would appreciate your comments on our service.
Please call customer service at (412)826-5245 or email customerservice@microseeps.com.*

Case Narrative:

Client Name: Camp Dresser and McKee
Contact: Pam Morrill
Address: 11811 Northeast First Street
Suite 201
Bellevue, WA 98005

Page: Page 2 of 11
Lab Proj #: P0912274
Report Date: 12/23/09
Client Proj Name: Leathercare
Client Proj #: 56498-68247

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>		
LC4R-12/09	Water	P0912274-01	16 Dec. 09 9:30	18 Dec. 09 12:13		
<u>Analyte(s)</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<u>Risk Analysis</u>						
N Ethane	2.700	0.025	ug/L	AM20GAX	12/22/09	rw
N Ethene	0.900	0.025	ug/L	AM20GAX	12/22/09	rw
N Methane	5400.000	0.100	ug/L	AM20GAX	12/22/09	rw



Client Name: Camp Dresser and McKee
Contact: Pam Morrill
Address: 11811 Northeast First Street
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Bellevue, WA 98005

Page: Page 3 of 11
Lab Proj #: P0912274
Report Date: 12/23/09
Client Proj Name: Leathercare
Client Proj #: 56498-68247

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>		
LC5R-12/09	Water	P0912274-02	16 Dec. 09 10:35	18 Dec. 09 12:13		
<u>Analyte(s)</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<u>RiskAnalysis</u>						
N Ethane	0.870	0.025	ug/L	AM20GAX	12/22/09	rw
N Ethene	0.430	0.025	ug/L	AM20GAX	12/22/09	rw
N Methane	1300.000	0.100	ug/L	AM20GAX	12/22/09	rw



Client Name: Camp Dresser and McKee
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Page: Page 4 of 11
Lab Proj #: P0912274
Report Date: 12/23/09
Client Proj Name: Leathercare
Client Proj #: 56498-68247

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>		
LC6-12/09	Water	P0912274-03	16 Dec. 09 11:45	18 Dec. 09 12:13		
<u>Analyte(s)</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<u>Risk Analysis</u>						
N Ethane	0.190	0.025	ug/L	AM20GAX	12/22/09	rw
N Ethene	<0.025	0.025	ug/L	AM20GAX	12/22/09	rw
N Methane	530.000	0.100	ug/L	AM20GAX	12/22/09	rw



Client Name: Camp Dresser and McKee
Contact: Pam Morrill
Address: 11811 Northeast First Street
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Lab Proj #: P0912274
Report Date: 12/23/09
Client Proj Name: Leathercare
Client Proj #: 56498-68247

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>		
LC3-12/09	Water	P0912274-04	16 Dec. 09 12:55	18 Dec. 09 12:13		
<u>Analyte(s)</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<u>RiskAnalysis</u>						
N Ethane	0.062	0.025	ug/L	AM20GAX	12/22/09	rw
N Ethene	<0.025	0.025	ug/L	AM20GAX	12/22/09	rw
N Methane	110.000	0.100	ug/L	AM20GAX	12/22/09	rw



Client Name: Camp Dresser and McKee
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Page: Page 6 of 11
Lab Proj #: P0912274
Report Date: 12/23/09
Client Proj Name: Leathercare
Client Proj #: 56498-68247

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>		
LC2-12/09	Water	P0912274-05	16 Dec. 09 15:00	18 Dec. 09 12:13		
<u>Analyte(s)</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<u>Risk Analysis</u>						
N Ethane	0.044	0.025	ug/L	AM20GAX	12/22/09	rw
N Ethene	0.026	0.025	ug/L	AM20GAX	12/22/09	rw
N Methane	110.000	0.100	ug/L	AM20GAX	12/22/09	rw



Client Name: Camp Dresser and McKee
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Page: Page 7 of 11
Lab Proj #: P0912274
Report Date: 12/23/09
Client Proj Name: Leathercare
Client Proj #: 56498-68247

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>		
LC1-12/09	Water	P0912274-06	17 Dec. 09 8:20	18 Dec. 09 12:13		
<u>Analyte(s)</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<u>RiskAnalysis</u>						
N Ethane	0.170	0.025	ug/L	AM20GAX	12/22/09	rw
N Ethene	<0.025	0.025	ug/L	AM20GAX	12/22/09	rw
N Methane	230.000	0.100	ug/L	AM20GAX	12/22/09	rw



Client Name: Camp Dresser and McKee
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Page: Page 8 of 11
Lab Proj #: P0912274
Report Date: 12/23/09
Client Proj Name: Leathercare
Client Proj #: 56498-68247

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>		
GT3-12/09	Water	P0912274-07	17 Dec. 09 9:30	18 Dec. 09 12:13		
<u>Analyte(s)</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<u>Risk Analysis</u>						
N Ethane	0.079	0.025	ug/L	AM20GAX	12/22/09	rw
N Ethene	0.096	0.025	ug/L	AM20GAX	12/22/09	rw
N Methane	53.000	0.100	ug/L	AM20GAX	12/22/09	rw



Client Name: Camp Dresser and McKee
Contact: Pam Morrill
Address: 11811 Northeast First Street
Suite 201
Bellevue, WA 98005

Page: Page 9 of 11
Lab Proj #: P0912274
Report Date: 12/23/09
Client Proj Name: Leathercare
Client Proj #: 56498-68247

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>		
GT2-12/09	Water	P0912274-08	17 Dec. 09 11:10	18 Dec. 09 12:13		
<u>Analyte(s)</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<u>RiskAnalysis</u>						
N Ethane	0.120	0.025	ug/L	AM20GAX	12/22/09	rw
N Ethene	0.260	0.025	ug/L	AM20GAX	12/22/09	rw
N Methane	170.000	0.100	ug/L	AM20GAX	12/22/09	rw



Client Name: Camp Dresser and McKee
Contact: Pam Morrill
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Suite 201
Bellevue, WA 98005

Page: Page 10 of 11
Lab Proj #: P0912274
Report Date: 12/23/09
Client Proj Name: Leathercare
Client Proj #: 56498-68247

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>		
GT1-12/09	Water	P0912274-09	17 Dec. 09 12:20	18 Dec. 09 12:13		
<u>Analyte(s)</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<u>RiskAnalysis</u>						
N Ethane	0.130	0.025	ug/L	AM20GAX	12/22/09	rw
N Ethene	<0.025	0.025	ug/L	AM20GAX	12/22/09	rw
N Methane	260.000	0.100	ug/L	AM20GAX	12/22/09	rw



Client Name: Camp Dresser and McKee
Contact: Pam Morrill
Address: 11811 Northeast First Street
Suite 201
Bellevue, WA 98005

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Lab Proj #: P0912274
Report Date: 12/23/09
Client Proj Name: Leathercare
Client Proj #: 56498-68247

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>		
GT20-12/09	Water	P0912274-10	17 Dec. 09 13:30	18 Dec. 09 12:13		
<u>Analyte(s)</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<u>RiskAnalysis</u>						
N Ethane	0.094	0.025	ug/L	AM20GAX	12/22/09	rw
N Ethene	0.110	0.025	ug/L	AM20GAX	12/22/09	rw
N Methane	64.000	0.100	ug/L	AM20GAX	12/22/09	rw





P0912774

CHAIN-OF-CUSTODY

Date

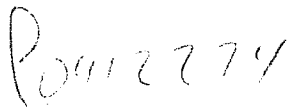
12/17/09

Page

1 of 2

PROJECT INFORMATION					ANALYSIS REQUEST																			
Project Manager: <u>Pam Merrill</u>					Laboratory Number:																			
Project Name: <u>Lezharrie</u>					PETROLEUM HYDROCARBONS																			
Project Number: <u>56498-68247</u>					ORGANIC COMPOUNDS																			
Site Location: <u>Elm Hill Ave & W. Morris Pkwy</u>					PESTS/PCBs																			
Sampled By: <u>MW</u>					METALS																			
					LEACHING TESTS																			
					OTHER																			
					NUMBER OF CONTAINERS																			
DISPOSAL INFORMATION																								
☒ Lab Disposal (return if not indicated)																								
Disposal Method: _____																								
Disposed by: _____ Disposal Date: _____																								
QC INFORMATION (check one)																								
☐ SW-846 ☐ CLP ☐ Screening ☒ CDM Std. ☐ Special																								
SAMPLE ID					DATE					TIME					MATRIX					LAB ID				
1C4R-12/09					12/16/09					0930					Water									
1C5R-12/09					12/16/09					1035														
1C6-12/09					12/16/09					1145														
1C3-12/09					12/16/09					1255														
1C2-12/09					12/16/09					1500														
1C1-12/09					12/17/09					0820														
GT3-12/09					12/17/09					0930														
GT2-12/09					12/17/09					1110														

LAB INFORMATION		SAMPLE RECEIPT		RELINQUISHED BY: 1.		RELINQUISHED BY: 2.		RELINQUISHED BY: 3.	
Lab Name: <u>Macro Seeps</u>	Total Number of Containers: _____	Signature: <u>Mary Lou Fox</u>	Time: <u>12/17/09</u>	Signature: _____	Time: _____	Signature: _____	Time: _____		
Lab Address: <u>220 William Pitt Way</u>	Chain-of-Custody Seals: Y/N/NA	Printed Name: <u>Mary Lou Fox</u>	Date: <u>12/17/09</u>	Printed Name: _____	Date: _____	Printed Name: _____	Date: _____		
<u>Pittsburgh, PA</u>	Intact?: Y/N/NA	Company: <u>CDM</u>	Company: _____	Company: _____	Company: _____	Company: _____	Company: _____		
Via: <u>Fed Ex Priority overnight</u>	Received in Good Condition/Cold: _____								
Turn Around Time: ☒ Standard ☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 1 wk.									
PRIOR AUTHORIZATION IS REQUIRED FOR RUSH DATA									
Special Instructions: _____									



Date 12/1/09 Page 2 of 2

CDM OFFICES: Bellevue: (206) 453-8383
rev. 2/02 Portland: (503) 232-1800

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Client Name: Camp Dresser and McKee
Contact: Pam Morrill
Address: 11811 Northeast First Street
Suite 201
Bellevue, WA 98005

Page: Page 1 of 3
Lab Proj #: P0912349
Report Date: 12/31/09
Client Proj Name: Leathercare
Client Proj #: 56498-68247

Laboratory Results

Total pages in data package: 4

Lab Sample #

P0912349-01

P0912349-02

Client Sample ID

LC4R-12/09

LC5R-12/09

Microseeps test results meet all the requirements of the NELAC standards or provide reasons and/or justification if they do not.

Approved By: Debbie Hallo

Date: 12/31/09

Project Manager: Debbie Hallo

The analytical results reported here are reliable and usable to the precision expressed in this report. As required by some regulating authorities, a full discussion of the uncertainty in our analytical results can be obtained at our web site or through customer service. Unless otherwise specified, all results are reported on a wet weight basis.

*As a valued client we would appreciate your comments on our service.
Please call customer service at (412)826-5245 or email customerservice@microseeps.com.*

Case Narrative:

Client Name: Camp Dresser and McKee
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Address: 11811 Northeast First Street
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Bellevue, WA 98005

Page: Page 2 of 3
Lab Proj #: P0912349
Report Date: 12/31/09
Client Proj Name: Leathercare
Client Proj #: 56498-68247

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>		
LC4R-12/09	Water	P0912349-01	16 Dec. 09 9:30	28 Dec. 09 16:04		
<u>Analyte(s)</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<u>Risk Analysis</u>						
N Ethane	2.500	0.025	ug/L	AM20GAX	12/30/09	rw
N Ethene	0.870	0.025	ug/L	AM20GAX	12/30/09	rw
√ Methane	5000.000	0.100	ug/L	AM20GAX	12/30/09	rw

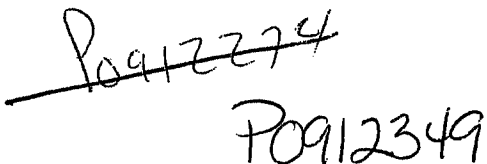


Client Name: Camp Dresser and McKee
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Page: Page 3 of 3
Lab Proj #: P0912349
Report Date: 12/31/09
Client Proj Name: Leathercare
Client Proj #: 56498-68247

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>		
LC5R-12/09	Water	P0912349-02	16 Dec. 09 10:35	28 Dec. 09 16:04		
<u>Analyte(s)</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<u>RiskAnalysis</u>						
N Ethane	0.820	0.025	ug/L	AM20GAX	12/30/09	rw
N Ethene	0.440	0.025	ug/L	AM20GAX	12/30/09	rw
N Methane	1300.000	0.100	ug/L	AM20GAX	12/30/09	rw





CHAIN-OF-CUSTODY

Date 12/17/09 Page 1 of 2

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