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September 2010 Groundwater Monitoring LeatherCare, Inc. 901/921 Elliott Avenue West Seattle, Washington VCP # NW1805

November 15, 2010

Prepared For:

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SEPTEMBER 2010 GROUNDWATER MONITORING LEATHERCARE, INC 901/921 ELLIOTT AVENUE W SEATTLE, WASHINGTON VCP #NW1805

November 15, 2010

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### **Contents**

Section 1	Introduction	
1.	.1 General	1-1
1.	2 Background	1-1
1.	3 Purpose and Scope of Work	1-2
Section 2	Field Investigation Methods	
2.	1 Groundwater Sampling	2-1
ă.	2.1.1 Water Levels	2-1
	2.1.2 Water Sampling	
	2.1.3 Laboratory Analysis	2-1
Section 3	Findings and Discussion	
3.	· <del>-</del>	
3.5	· · · · · · · · · · · · · · · · · · ·	
3.	· · · · · · · · · · · · · · · · · · ·	
	3.3.1 PCE	
	3.3.2 TCE	
	3.3.3 <i>c</i> -1,2-DCE, <i>t</i> -1,2-DCE, 1,1-DCE	
	3.3.4 Vinyl Chloride	
	3.3.5 Dissolved Gasses	
3.	4 cVOC Trends	3-4
Section 4	Conclusions and Recommendations	4-1
Section 5	References	5-1
Distribution	on	
Tables		
Figures		
Appendix		
Арр	pendix A Historical Potentiometric Surface Maps	
Арр	pendix B Analytical Laboratory Reports	



### **Tables**

Table 1 Groundwater Elevation Data
 Table 2 Groundwater Analytical Summary – LeatherCare, Greg Thompson Productions, and W. Roy Street Properties
 Table 3 Mann-Kendall Statistical Summary

### **Figures**

Figure 1 Location Map

Figure 2 Site and Vicinity Map

Figure 3 Potentiometric Surface Map – September 1, 2010



## Section 1 Introduction

#### 1.1 General

This report presents the results of the sixteenth round (September 2010) 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 April 5, 2010. 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 compound (cVOC) 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. 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. An impermeable shoring wall constructed by the Cutter Soil Mixing (CSM) method was utilized to enable below grade construction. 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 (Malcolm Drilling, 2009).

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 September 2010 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 September 1 and 2, 2010. 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 8:29 am and 8:58 am on September 1, 2010. 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 Pittsburg, 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 [ $\mu$ 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.** Water levels ranged between 1.18 and 5.13 feet below the top of the well casings (the well casings start approximately 3 to 6 inches below ground surface). Water levels between the May 2010 and September 2010 sampling events rose in all wells by 0.04 ft to 0.25 ft.

Figure 3 shows the potentiometric surface on September 1, 2010, which shows the groundwater flow direction as being toward the north. While this is generally consistent with historical data, a notable change has occurred in the groundwater potentiometric surface across the Subject Property since completion of the CSM wall on the neighboring property.

During initial investigations potentiometric surface data showed a mound that formed a groundwater divide in West Roy Street and the Darigold north parking lot. The source of the mound was likely caused by groundwater flowing off the adjacent hill that West Mercer Street is located on. After the CSM wall was completed the mound was still observed on the Subject Property. Over the past 18 months the mound has receded until currently there is no apparent mounding effect. Historical potentiometric surface maps that show this transition over time are included in **Appendix A**.

#### 3.2 Field Monitored Parameters

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

*Temperature:* Temperatures in the groundwater generally increased between the May and September sampling events, consistent with the warmer weather over summer. Between May and September, the groundwater temperatures increased by as much as 7.9 degrees Celsius (°C). All of the monitoring wells showed temperatures between 18.4 and 21.3 °C.

Dissolved Oxygen: Dissolved oxygen (DO) concentrations ranged from approximately 0.22 to 1.40 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, GT2, LC2, LC3 and LC6. All DO concentration except the concentration in LC5R (1.40 mg/L) were less than 1 mg/L. The concentration of 1.40 mg/L in LC5R was consistent with its DO concentration in May of 1.47 mg/L. However,, recent DO concentrations above 1 mg/L in LC5R are not consistent with DO concentrations prior to May 2010. The reason for this is unclear, but is possibly related to the fact that LC5R is close to an underground utility corridor that was installed in conjunction with development on the Elliott Holding property



Oxidation-Reduction Potential: ORP values ranged between -130 and 19 millivolts (mV). The ORP values measured during the September 2010 round are consistent with the ORP values during rounds prior to the May 2010. During the May 2010 round all ORP values were positive and ranged between 80 and 166 mV. This difference in the range of values may be due to the use of different YSI instrument models, rather than differing site conditions. A YSI-556 model was used in rounds prior to the May 2010 and a YSI-650 model was used during the May 2010 round. A YSI-556 model was again used during the September 2010 round.

Specific Conductance: Specific Conductance values ranged between 786 and 931 microsiemens per centimeter ( $\mu$ S/cm). Overall, the data are consistent with historical site data.

*pH*: The pH values ranged between approximately 7.04 and 7.40 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, however LC3 has shown a ferrous iron value of 0.6 mg/L for the past 5 rounds since June 2009. 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 nephalometric 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 B**. 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 at three of the nine monitoring wells. The PCE concentrations (i.e., greater than 0.2  $\mu$ g/L) ranged between 0.7 and 4.8 micrograms per liter ( $\mu$ g/L). PCE concentrations at all wells except LC3 have been below the Method A cleanup level of 5.0  $\mu$ g/L for a year or longer. The PCE concentration at LC3 has been less than the cleanup level three out of the past four sampling rounds. In May 2010 the exceedance (5.1  $\mu$ g/L) was insignificant and was within the range of analytical variation



#### 3.3.2 TCE

TCE was detected at eight of the nine monitoring wells. The eight TCE detections ranged between 0.4 and 1.7  $\mu$ g/L. All detected concentrations were below the MTCA Method A cleanup level of 5  $\mu$ g/L and have been throughout all of 2009 and 2010.

#### 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 at all nine monitoring wells, t-1,2-DCE at three wells, and 1,1-DCE was not detected in any sample. Concentrations ranged between 0.2 and 12  $\mu$ g/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  $\mu$ g/L, respectively) in any samples.

#### 3.3.4 Vinyl Chloride

Vinyl chloride (VC) was detected at eight of the nine monitoring wells. Detections of VC ranged between 0.4 and 5.8  $\mu$ g/L. The detected VC concentrations all exceeded the Method A cleanup level of 0.2  $\mu$ g/L. The September 2010 VC concentrations were consistent with or lower than the fall 2009 concentrations in seven of the eight wells in which it was detected.

In GT1, VC concentrations have been  $\leq$ 0.2 µg/L between May 2006 and December 2009. In May 2010 VC was first detected at a concentration that exceeded the Method A cleanup level. In September 2010, the VC concentration in GT1 was 1.0 µg/L. As was noted in Section 3.1, the groundwater flow patterns at the Site have changed since completion of the CSM wall, suggesting a change that may explain the recent trend of VC in GT1.

#### 3.3.5 Dissolved Gasses

Methane was detected in every groundwater sample ranging between 110 and 710  $\mu g/L$ . 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 all nine of the monitoring wells. Ethene concentrations ranged between 0.029 and 0.47  $\mu g/L$ . Ethane was detected in all nine of the monitoring wells at concentrations ranging between 0.068 and 0.76  $\mu g/L$ .

Methane/ethane/ethene concentrations at LC4R have declined from the unusually high concentrations observed in December 2009 and May 2009, but are still higher than typically observed prior to December 2009.

Methane/ethane/ethene concentrations at LC5R have declined to the lowest levels observed prior to, and since, the unusually high concentration observed in December 2009.

The September 2010 methane concentration at GT1 has about doubled compared to that observed for prior sampling events. Most notably, however, are the higher ethene and ethane concentrations at GT1. As VC concentrations have risen at GT1, so



have ethene and ethane concentrations, which shows that even though VC is currently migrating to this area, it is also completely degrading.

#### 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 eight of the wells (GT1 is not calculated as there have been only 3 detections. The probability values remained significant (i.e.,  $p \le 0.1$ ) at six of the wells. The probability values for a decreasing trend for VC at four of the eight wells have improved even more and at LC3 it was unchanged.

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 at all wells. A build-up of DCE concentrations is often observed at sites where naturally occurring conditions are not suitable for the complete 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). Significant decreasing trends are noted at LC2 and LC4 and decreasing (although not significant) trends are indicated for PCE at LC1 and LC3. PCE has not exceeded its cleanup level at LC1 for the last five consecutive sampling rounds. At LC3 we continue to see normal variation in PCE concentrations, which sometimes exceed the cleanup level. The PCE concentration at LC3 has been below the cleanup level during three of the last four sampling rounds, and the exceedance in May 2010 was only very slight (2%). The PCE concentrations at LC1 and LC3 decreased slightly between May and September, improving their statistical data.

An increasing trend for TCE is again indicated at LC5 and LC6, but TCE has not ever exceeded the Method A cleanup level. It remains unlikely that the cleanup level will be exceeded at these two wells.



## 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 relatively low throughout and active remediation would not be more effective than MNA.
- Over the past five sampling rounds, PCE concentrations have only ever exceeded the Method A cleanup level at one monitoring location. The exceedances at this one location have only occurred twice out of the last five sampling rounds and have only been on the order of 2 to 12% higher than the cleanup level.
- TCE concentrations have not exceeded the Method A cleanup level at any monitoring location since December 2008.
- 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 consistently exceeds the Method A cleanup level. Even so, concentrations of this compound are relatively low and statistical evaluation shows that VC concentrations are declining.
- Continued monitoring empirically demonstrates that VC concentrations are declining throughout the Subject Property.

The presence of VC at GT1, located at the downgradient edge of the Subject Property, is a recent occurrence. The concurrent change in groundwater flow directions for the Subject Property, which occurred subsequent to installation of the CSM wall indicates that the changing groundwater flow patterns have influenced the contaminant migration. CDM expects re-equilibration of the plume will occur shortly, and likely has occurred at this time.

Given that VC concentrations at the next upgradient well, GT2, have declined from a high of 35  $\mu$ g/L in 2006 to an average of 4.5  $\mu$ g/L (past four sampling rounds), these higher VC concentrations observed at GT1 are expected to be transitory as the plume continues to collapse.



## **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.

Malcolm Drilling. 2009. Soil Mixing Systems. www.malcolmdrilling.com/images/printable\_pdfs/soilmixing.pdf



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Principal Engineer

## **Tables**



Table 1
Groundwater Elevation Data

Monitoring Well I.D.	Date Measured	Time (hours)	Top of Casing Elevation <sup>a</sup> (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			<b></b>	
	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
	05/04/10	0809		1.54	11.20
	09/01/10	0858		1.73	11.01
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
	05/04/10	0807		0.94	11.51
СТО	09/01/10	0848	42.20	1.18	11.27
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

Table 1
Groundwater Elevation Data

(cont.) 09/24/08 1020 2.54 100 12/29/08 0804 0.2/11/09	Monitoring Well L.D.	Date Measured	Time (hours)	Top of Casing Elevation <sup>a</sup> (feet)	Depth to Groundwater (ft below TOC)	Groundwater Elevation (feet)
12/29/08 0804 1.80 11 02/11/109		06/18/08			1	11.15
02/11/09	(cont.)	09/24/08	1020			10.82
03/25/09 0820 1.87 11 06/29/09 0803 2.24 11 06/29/09 0803 2.79 10 12/16/09 0819 1.89 11 05/04/10 0.0805 1.93 11 09/01/10 0848 2.09 11  LC1 05/10/06 0916 13.17 1.57 11 09/05/06 1010 2.43 10 02/12/07 0941 1.40 11 06/20/07 0844 1.99 11 09/19/07 0904 2.46 10 12/19/07 0954 1.01 12 03/19/08 0857 1.54 11 06/24/08 1034 1.89 11 12/29/08 0809 1.20 11 06/29/09 0753 1.63 11 06/29/09 0956 2.10 11 06/29/09 0810 1.27 11 06/20/07 0943 1.63 11 06/20/07 0944 1.55 11 LC2 05/10/06 0919 13.41 2.01 11 06/20/07 0948 1.27 11 06/20/07 0949 1.27 11 06/20/07 0956 1.55 11 1.28 11 06/20/09 0753 1.63 11 1.28 11 06/29/09 0753 1.63 11 1.28 11 06/29/09 0753 1.63 11 1.28 11 06/29/09 0753 1.63 11 1.28 11 06/29/09 0753 1.63 11 08/05/06 1012 2.74 11 09/05/06 1012 2.74 10 09/05/06 1012 2.74 10 09/05/06 1012 2.75 10 09/19/07 0943 1.80 11 06/20/07 2.35 11 09/19/07 0943 1.23 12 03/19/08 0859 1.90 11 06/29/09 0850 1.59 11 06/29/09 0750 2.30 11			0804		1.80	11.56
06/29/09 0803 2.24 11 09/09/09 1006 2.79 10 12/16/09 0819 1.89 11 05/04/10 0.0805 1.93 11 09/01/10 0848 2.09 11  LC1 05/10/06 0916 13.17 1.57 11 09/05/06 1010 2.43 10 02/12/07 0941 1.40 11 06/20/07 0844 1.99 11 09/19/07 0904 2.46 10 12/19/07 0954 1.01 12 03/19/08 0857 1.54 11 06/18/08 0836 1.55 11 06/18/08 0836 1.55 11 06/18/09 0811 1.20 11 06/29/09 0753 1.63 11 06/29/09 0753 1.63 11 06/29/09 0811 1.28 11 06/29/09 0856 2.10 11 12/16/09 0810 1.27 11 05/04/10 0804 1.55 11 09/01/10 0804 1.55 11 09/01/10 0804 1.55 11 09/01/10 0800 1.30 11 09/01/10 0800 1.30 11 09/01/10 0800 1.30 11 09/01/10 0800 1.30 11 09/01/10 0800 1.30 11 09/01/10 0800 1.30 11 09/01/10 0800 1.30 11 09/01/10 0800 1.30 11 09/01/10 0800 1.30 11 09/01/10 0800 1.30 11 09/01/10 0800 1.30 11 09/01/10 0800 1.30 11 09/01/10 0800 1.30 11 09/01/10 0800 1.30 11 09/01/10 0800 1.30 11 09/01/10 0800 1.30 11 09/01/10 0800 1.30 11 09/05/06 1012 2.74 10 09/05/06 1012 2.74 10 09/05/06 1012 2.75 11 09/19/07 0948 1.23 12 03/19/08 0859 1.90 11 06/29/09 0750 11.87 11 06/29/09 0750 1.87 11 06/29/09 0750 1.87 11						
09/09/09					ł	11.49
12/16/09 0819 1.89 11 05/04/10 0.0805 1.93 11 05/04/10 0.0805 1.93 11 09/01/10 0848 2.09 11  LC1 05/10/06 0916 13.17 1.57 11 09/05/06 1010 2.43 10 02/12/07 0941 1.40 11 06/20/07 0844 1.99 11 09/19/07 0904 2.46 10 12/19/07 0954 1.01 12 03/19/08 0857 1.54 11 06/18/08 0836 1.55 11 09/24/08 1034 1.89 11 12/29/08 0809 1.20 11 02/11/09 03/25/09 0811 1.28 11 06/29/09 0753 1.63 11 09/09/09 0956 2.10 11 05/04/10 0800 1.30 11 09/01/10 0844 1.55 11 09/05/06 1012 2.74 10 09/05/06 1012 2.74 10 09/05/06 1012 2.74 10 09/05/06 1012 2.75 10 09/19/07 0943 1.80 11 06/20/07 0948 1.23 12 06/18/08 0859 1.90 11 06/18/08 0859 1.90 11 06/18/08 0859 1.90 11 06/18/08 0859 1.90 11 06/18/08 0859 1.90 11 06/18/08 0859 1.90 11 06/18/08 0859 1.90 11 06/18/08 0859 1.90 11 06/18/08 0859 1.90 11 06/18/08 0859 1.90 11 06/18/08 0859 1.90 11 06/18/08 0859 1.90 11 06/18/08 0859 1.90 11 06/18/08 0859 1.90 11 06/18/08 0859 1.90 11 06/18/08 0859 1.90 11 06/29/09 0750 2.13 11					l	11.12
05/04/10						10.57
09/01/10					1	11.47
LC1						11.43
09/05/06 1010 2.43 10 02/12/07 0941 1.40 11 06/20/07 0844 1.99 11 09/19/07 0904 2.46 10 12/19/07 0954 1.01 12 03/19/08 0857 1.54 11 06/18/08 0836 1.55 11 09/24/08 1034 1.89 11 12/29/08 0809 1.20 11 02/11/09 03/25/09 0811 1.28 11 06/29/09 0753 1.63 11 06/29/09 0753 1.63 11 09/09/09 0956 2.10 11 12/16/09 0810 1.27 11 05/04/10 0800 1.30 11 09/01/10 0844 1.55 11 09/05/06 1012 2.74 10 09/05/06 1012 2.74 10 09/05/06 1012 2.74 10 09/05/06 1012 2.75 10 09/19/07 0943 1.80 11 06/20/07 0943 1.80 11 06/20/07 0948 1.23 12 03/19/08 0859 1.90 11 06/18/08 0832 2.05 11 09/24/08 1030 2.30 11 12/29/08 0812 02/11/09 03/25/09 0807 1.87 11 06/29/09 0750 2.13 11						11.27
02/12/07 0941 1.40 11 06/20/07 0844 1.99 11 09/19/07 0904 2.46 10 12/19/07 0954 1.01 12 03/19/08 0857 1.54 11 06/18/08 0836 1.55 11 09/24/08 1034 1.89 11 12/29/08 0809 1.20 11 06/29/09 0753 1.63 11 09/09/09 0956 2.10 11 05/04/10 0800 1.27 11 05/04/10 0800 1.30 11 09/01/10 0844 1.55 11 09/05/06 1012 0.74 10 02/12/07 0943 1.80 11 06/20/07 0901 2.75 10 05/19/07 0901 1.23 12 03/19/08 0859 1.90 11 06/18/08 0832 0.07 1.87 11 06/29/09 0750 0807 1.87 11 06/29/09 0807 1.87 11	LC1			13.17		11.60
06/20/07 0844 1.99 11 09/19/07 0904 2.46 10 12/19/07 0954 1.01 12 03/19/08 0857 1.54 11 06/18/08 0836 1.55 11 09/24/08 1034 1.89 11 12/29/08 0809 1.20 11 03/25/09 0811 1.28 11 06/29/09 0753 1.63 11 09/09/09 0956 2.10 11 12/16/09 0810 1.27 11 05/04/10 0800 1.30 11 09/01/10 0844 1.55 11 09/05/06 1012 0.74 10 02/12/07 0943 1.80 11 06/20/07 2.35 11 06/20/07 0901 2.75 10 03/19/08 0859 1.90 11 06/18/08 0832 0.07 1.87 11 06/29/09 0807 1.87 11 06/29/09 0807 1.87 11 06/29/09 0750 2.13 11						10.74
09/19/07 0904 2.46 10 12/19/07 0954 1.01 12 03/19/08 0857 1.54 11 06/18/08 0836 1.55 11 09/24/08 1034 1.89 11 12/29/08 0809 1.20 11 06/29/09 0753 1.63 11 09/09/09/09 0956 2.10 11 12/16/09 0810 1.27 11 05/04/10 0800 1.30 11 09/01/10 0844 1.55 11 09/05/06 1012 2.74 10 09/05/06 1012 2.74 10 09/05/07 0943 1.80 11 06/20/07 0943 1.80 11 06/20/07 0948 1.23 12 03/19/08 0859 1.90 11 06/18/08 0832 2.05 11 06/18/08 0832 2.05 11 09/24/08 1030 2.30 11 12/29/08 0812 1.59 11 09/24/08 1030 2.30 11 12/29/08 0812 1.59 11 09/25/09 0807 1.87 11						11.77
12/19/07 0954 1.01 12 03/19/08 0857 1.54 11 06/18/08 0836 1.55 11 09/24/08 1034 1.89 11 12/29/08 0809 1.20 11 02/11/09 03/25/09 0811 1.28 11 06/29/09 0753 1.63 11 09/09/09 0956 2.10 11 12/16/09 0810 1.27 11 05/04/10 0800 1.30 11 09/01/10 0844 1.55 11  LC2 05/10/06 0919 13.41 2.01 11 09/05/06 1012 2.74 10 09/05/06 1012 2.74 10 09/19/07 0943 1.80 11 06/20/07 0948 1.23 12 03/19/08 0859 1.90 11 06/18/08 0832 2.05 11 09/24/08 1030 2.30 11 12/29/08 0812 02/11/09 03/25/09 0807 1.87 11 06/29/09 0750 1.87 11						11.18
03/19/08 0857 1.54 11 06/18/08 0836 1.55 11 09/24/08 1034 1.89 11 12/29/08 0809 1.20 11 02/11/09						10.71
06/18/08 0836 1.55 11 09/24/08 1034 1.89 11 12/29/08 0809 1.20 11 02/11/09		•				12.16
09/24/08       1034       1.89       11         12/29/08       0809       1.20       11         02/11/09            03/25/09       0811       1.28       11         06/29/09       0753       1.63       11         09/09/09       0956       2.10       11         12/16/09       0810       1.27       11         05/04/10       0800       1.30       11         05/04/10       0800       1.30       11         09/05/04/10       0844       1.55       11         LC2       05/10/06       0919       13.41       2.01       11         09/05/06       1012       2.74       10         02/12/07       0943       1.80       11         06/20/07       2.35       11         09/19/07       0901       2.75       10         12/19/07       0948       1.23       12         03/19/08       0859       1.90       11         06/18/08       0832       2.05       11         09/24/08       1030       2.30       11         12/29/08       0812       1.59       11     <						11.63
12/29/08 0809 1.20 11 02/11/09						11.62
02/11/09					l .	11.28
03/25/09 0811 1.28 11 06/29/09 0753 1.63 11 09/09/09 0956 2.10 11 12/16/09 0810 1.27 11 05/04/10 0800 1.30 11 09/01/10 0844 1.55 11 09/05/06 1012 2.74 10 02/12/07 0943 1.80 11 06/20/07 2.35 11 09/19/07 0901 2.75 10 12/19/07 0948 1.23 12 03/19/08 0859 1.90 11 06/18/08 0832 2.05 11 09/24/08 1030 2.30 11 12/29/08 0812 1.59 11 02/11/09 03/25/09 0807 1.87 11 06/29/09 0750 2.13 11			0809		1.20	11.97
06/29/09 0753 1.63 11 09/09/09 0956 2.10 11 12/16/09 0810 1.27 11 05/04/10 0800 1.30 11 09/01/10 0844 1.55 11  LC2 05/10/06 0919 13.41 2.01 11 06/20/07 0943 1.80 11 09/19/07 0901 2.75 10 12/19/07 0948 1.23 12 03/19/08 0859 1.90 11 06/18/08 0832 2.05 11 09/24/08 1030 2.30 11 12/29/08 0812 1.59 11 02/11/09 03/25/09 0807 1.87 11 06/29/09 0750 2.13 11						
09/09/09 0956 2.10 11 12/16/09 0810 1.27 11 05/04/10 0800 1.30 11 09/01/10 0844 1.55 11  LC2 05/10/06 0919 13.41 2.01 11 09/05/06 1012 2.74 10 02/12/07 0943 1.80 11 06/20/07 2.35 11 09/19/07 0901 2.75 10 12/19/07 0948 1.23 12 03/19/08 0859 1.90 11 06/18/08 0832 2.05 11 09/24/08 1030 2.30 11 12/29/08 0812 1.59 11 02/11/09 03/25/09 0807 1.87 11 06/29/09 0750 2.13 11					· ·	11.89
12/16/09 0810 1.27 11 05/04/10 0800 1.30 11 09/01/10 0844 1.55 11  LC2 05/10/06 0919 13.41 2.01 11 09/05/06 1012 2.74 10 02/12/07 0943 1.80 11 06/20/07 2.35 11 09/19/07 0901 2.75 10 12/19/07 0948 1.23 12 03/19/08 0859 1.90 11 06/18/08 0832 2.05 11 09/24/08 1030 2.30 11 12/29/08 0812 1.59 11 02/11/09 03/25/09 0807 1.87 11 06/29/09 0750 2.13 11					<b>!</b>	11.54
05/04/10 0800 1.30 11 09/01/10 0844 1.55 11  LC2 05/10/06 0919 13.41 2.01 11 09/05/06 1012 2.74 10 02/12/07 0943 1.80 11 06/20/07 2.35 11 09/19/07 0901 2.75 10 12/19/07 0948 1.23 12 03/19/08 0859 1.90 11 06/18/08 0832 2.05 11 09/24/08 1030 2.30 11 12/29/08 0812 1.59 11 02/11/09 03/25/09 0807 1.87 11 06/29/09 0750 2.13 11					i	11.07
09/01/10     0844     1.55     11       LC2     05/10/06     0919     13.41     2.01     11       09/05/06     1012     2.74     10       02/12/07     0943     1.80     11       06/20/07     2.35     11       09/19/07     0901     2.75     10       12/19/07     0948     1.23     12       03/19/08     0859     1.90     11       06/18/08     0832     2.05     11       09/24/08     1030     2.30     11       12/29/08     0812     1.59     11       02/11/09          03/25/09     0807     1.87     11       06/29/09     0750     2.13     11						11.90
LC2 05/10/06 0919 13.41 2.01 11 09/05/06 1012 2.74 10 02/12/07 0943 1.80 11 06/20/07 2.35 11 09/19/07 0901 2.75 10 12/19/07 0948 1.23 12 03/19/08 0859 1.90 11 06/18/08 0832 2.05 11 09/24/08 1030 2.30 11 12/29/08 0812 1.59 11 02/11/09 03/25/09 0807 1.87 11 06/29/09 0750 2.13 11						11.87
09/05/06       1012       2.74       10         02/12/07       0943       1.80       11         06/20/07       2.35       11         09/19/07       0901       2.75       10         12/19/07       0948       1.23       12         03/19/08       0859       1.90       11         06/18/08       0832       2.05       11         09/24/08       1030       2.30       11         12/29/08       0812       1.59       11         02/11/09            03/25/09       0807       1.87       11         06/29/09       0750       2.13       11				40.44		11.62
02/12/07       0943       1.80       11         06/20/07       2.35       11         09/19/07       0901       2.75       10         12/19/07       0948       1.23       12         03/19/08       0859       1.90       11         06/18/08       0832       2.05       11         09/24/08       1030       2.30       11         12/29/08       0812       1.59       11         02/11/09            03/25/09       0807       1.87       11         06/29/09       0750       2.13       11	LC2			13.41		11.40
06/20/07       2.35       11         09/19/07       0901       2.75       10         12/19/07       0948       1.23       12         03/19/08       0859       1.90       11         06/18/08       0832       2.05       11         09/24/08       1030       2.30       11         12/29/08       0812       1.59       11         02/11/09            03/25/09       0807       1.87       11         06/29/09       0750       2.13       11						10.67
09/19/07     0901     2.75     10       12/19/07     0948     1.23     12       03/19/08     0859     1.90     11       06/18/08     0832     2.05     11       09/24/08     1030     2.30     11       12/29/08     0812     1.59     11       02/11/09          03/25/09     0807     1.87     11       06/29/09     0750     2.13     11			0943			11.61
12/19/07     0948     1.23     12       03/19/08     0859     1.90     11       06/18/08     0832     2.05     11       09/24/08     1030     2.30     11       12/29/08     0812     1.59     11       02/11/09          03/25/09     0807     1.87     11       06/29/09     0750     2.13     11			0004			11.06
03/19/08     0859     1.90     11       06/18/08     0832     2.05     11       09/24/08     1030     2.30     11       12/29/08     0812     1.59     11       02/11/09          03/25/09     0807     1.87     11       06/29/09     0750     2.13     11						10.66
06/18/08     0832     2.05     11       09/24/08     1030     2.30     11       12/29/08     0812     1.59     11       02/11/09          03/25/09     0807     1.87     11       06/29/09     0750     2.13     11						12.18
09/24/08     1030     2.30     11       12/29/08     0812     1.59     11       02/11/09          03/25/09     0807     1.87     11       06/29/09     0750     2.13     11						11.51
12/29/08     0812     1.59     11       02/11/09          03/25/09     0807     1.87     11       06/29/09     0750     2.13     11						11.36
02/11/09        03/25/09     0807       06/29/09     0750       1.87     11       2.13     11						11.11
03/25/09     0807     1.87     11       06/29/09     0750     2.13     11					1.59	11.82
06/29/09 0750 2.13 11					4.07	11 54
					l	11.54
1 09/09/09   1001     2.5/   10		· ·				11.28
1 1 1					l	10.84
1 1 1 1					•	11.75
						11.64 11.54



Table 1
Groundwater Elevation Data

Monitoring Well I.D.	Date Measured	Time (hours)	Top of Casing Elevation <sup>a</sup> (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			2.20	44.00
	03/25/09	0802		2.28	11.88
	06/29/09 09/09/09	0742		2.67	11.49
		0950		3.14	11.02
	12/16/09 05/04/10	0804 0752		2.30 2.37	11.86 11.79
LC4	09/01/10 05/10/06	0838 0921	14.72	2.49 3.16	11.67 11.56
LOT	09/05/06	1026	17.72	3.99	10.73
	02/12/07	1020		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 <sup>b</sup>				
	12/29/08				
	02/11/09				
LC4R	03/25/09	0957	14.77	3.03	11.74
	06/29/09	0840	·	3.45	11.32
	09/09/09	1050		3.85	10.92
	12/16/09	0753		2.73	12.04
	05/04/10	0747		2.83	11.94
	09/01/10	0829		2.94	11.83
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 <sup>b</sup>			<del></del>	
	12/29/08			<b></b>	



Table 1
Groundwater Elevation Data

Monitoring Well I.D.	Date Measured	Time (hours)	Top of Casing Elevation <sup>a</sup> (feet)	Depth to Groundwater (ft below TOC)	Groundwater Elevation (feet)
LC5 (cont.)	02/11/09				
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
	05/04/10	0750		2.38	11.96
	09/01/10	0831		2.45	11.89
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
	05/04/10	0754		5.09	11.76
	09/01/10	0835		5.13	11.72
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

		Method A							Monitoring Well	LO. <sup>6</sup>						
Analyte	Date Sampled	Cleanup Levels	GT1	GT2	GT3	LC1	LC2	LC3	LC4 /LC4R	LC5 /LC5R	LC6	LC7	LCB	LC9	Field Blank	Trip Blank
Field-Measured Parameters pH	05/06	N/A	7.23	7.03	7.10	7,05	7.43		740	2.05					T	
lpn	09/06	N/A N/A	7.23	7.03	7.10 7.13	7.05	7.43	6.95 7.07	7.18 7.03	6.95 7.05	6.99 7.07		_		_	
	02/07	N/A	6.77	6.64	6.57	6.46	6.42	6.62	6.06	6,43	6.70	_		_	_	
	06/07	N/A	7.15	7.01	6.95	6.99	7.23	7.00	6.97	6.91	6.90	-	-	-	-	-
·	09/07 12/07	N/A N/A	7.11 7.47	7.00 7.42	6.88 7.30	7,00 6,50	7.16 7.36	6.92 7.45	6.83 6.42	6.88 6.59	6.91 7.02		_		_	-
	03/08	N/A	7.75	7.77	7.51	7.67	8.04	8.36	-	8.42	8.19			_	_	_
	06/08	N/A	7.23	6.89	6.97	**	6.96	6.70	-	-	6.96	-	-	-	-	-
	09/08 12/08	N/A N/A	7.06	6.59 6.75	6.55 6.79	6.62 6.98	6.72 7.54	6.58 6.82	_		6.66 6.95			_	-	-
	02/09	N/A		-	- 0.75	-		-	-	_	0.55	**	••	- ·-	_	-
	03/09	N/A	7.26	6.96	6.92	7.07	7.13	6.99	6.96	6.97	7.07	-	-	_	-	-
	06/09	N/A N/A	7.44 7.37	7.18 7.11	7.16 7.03	7.27 7.06	7.07 7.19	7.18 7.05	7.37	7.25	7.19	-	-	-	-	
	12/09	N/A	7.61	7.11	7.03	7.06	7.19	7.05	7.12 7.77	7.08 7.52	7.07 7.27	_	_	_	_	_
	05/10	N/A	7.41	7.16	7.07	7.04	7.42	7.06	7.71	7.37	7.16	_	-	_	_	
CODIAL NO	09/10	N/A	7.40	7.19	7.14	7.08	7.16	7.04	7.19	7.18	7.05	<u> </u>		-		
ORP d (mV)	05/06 09/06	N/A N/A	-33 -119	-27 -97	-56 -68	-72 -113	-152 -90	-33 -71	-50 -50	-82 -107	-50 -78	-	_	-	_	-
	02/07	N/A	-33	-2	17	-60	-32	56	80	-30	31		_		-	
	06/07	N/A	-211	-171	-38	-61	-162	-183	-116	-214	-111	_	-		-	-
	09/07 12/07	N/A N/A	-96	-95 **	-71 **	-125	-132	-83	-75 **	-126	-95 **	-	-	-	-	-
	03/08	N/A	-54	-27	10	-28	-30	-59	_	-107	-43		_		_	-
	06/08	N/A	-57	-49	142	**	112	-17	-	_	-17	_	_		_	-
	09/08	N/A	-			_	-	-	-	-	-		-	-	-	-
	12/08 02/09	N/A N/A	-52 	-16 	43 -	-22	40	-44	-	_	0.7	_	-	_	_	-
	03/09	N/A	**	**	**	**	**		**		••	_	_	_	-	-
	06/09	N/A	-90	-78	13	-57	-78	-42	-92	-80	-50	_		-	-	-
	09/09 12/09	N/A N/A	-148 **	-140 **	-73 **	-188 ++	-115 15	-89 6	-130 -96	-136	-103	_	-	-	-	-
	05/10	N/A	145	166	163	158	111	108	80	-60 107	-2 115	_	-	-		-
	09/10	N/A	-130	-64	19	-72	-101	-58	-63	-79	-74	_	_	-		- 1
Temperature (°C)	05/06 09/06	N/A	16.0 20.0	16.2	15.1	18.3	18.2	15.9	14.1	13.8	14.2	-	-	-	-	-
	02/07	N/A N/A	13.6	21.3 9.3	20.8 10.0	23.1 16.8	22.6 16.2	22.6 11.4	22.2 9.7	22.5 10.0	20.6 11.8	_				-
	06/07	N/A	17.8	20.2	18.7	20.7	20.0	19.3	18.6	18.0	17.6	_	_	_	_	-
	09/07	N/A	19.3	19.4	19.2	22.3	21.7	22.2	20.2	20.4	20.0	-	_	-	-	-
	12/07 03/08	N/A N/A	11.9 13.0	8,8 10,3	9.3 9.5	17.3 15.9	15.5 16.3	11.6 11.8	12.3	11.4 11.3	12.6 12.4	_	_	_	_	-
	06/08	N/A	16.1	17.0	17.2	18.3	19.8	16.4	-	-	16.3	-	_	_	_	
	09/08	N/A	18.7	17.9	17.8	22.1	21.8	19.6	-	_	17.6	-	-	-	-	-
	12/08 02/09	N/A N/A	11.2	7.6	6.9	14.6	15.0	9.8		_	11.5	420			-	-
	03/09	N/A	13.0	9.0	9.0	14.6	16.5	10.9	8.7	9.0	10.5	13.0	11.0	9.7	_	
	06/09	N/A	17.9	21.5	19.2	20.8	20.5	19.9	16.7	17.3	17.3	-		-	-	-
	09/09	N/A	19.3	16.4	19.0	22.2	21.4	20.1	17.8	18.2	19.3	-	-	-	-	-
	12/09 05/10	N/A N/A	13.5 13.5	7.9 12.6	9.0 13.6	15.5 17.6	16.3 17.3	10.8 13.2	9.5 11.3	9.3 11.6	11.3 12.1	_	_	_	_	-
	09/10	N/A	20.1	20.4	19.4	21.3	21.1	20.2	19.2	19.5	18.4		_	_		-
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 02/07	N/A N/A	811 831	856 971	864 915	866 951	736 519	870 1,020	853 496	856 795	856 948		_	_	_	-
	06/07	N/A	786	813	833	836	676	820	808	804	842	_	-	_	-	-
	09/07	N/A	808	844	879	873	622	841	737	824	828	_	-	_	-	-
	12/07 03/08	N/A N/A	732 637	706 915	829 926	1,017 928	181 518	778 902	553	543	920	-	-		-	-
	06/08	N/A N/A	998	1,701	926 1,471	1,561	1,490	1,493	_	114 1	1,363		-	_	_	-
	09/08	N/A	774	1,236	798	1,318	963	1,269	_	-	1,353	_		_	_	_
	12/08	N/A	**	**	**	**	671	**	_		1,505	_	_	_	_	_
	02/09	N/A						<u> </u>				836	1,090	1,828		_



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

#88 H. W. Stille		Method A							Monitoring Well	LD. b						
	Date	Cleanup													Field	Trip
Analyte	Sampled	Levels	GT1	GT2	GT3	LC1	LC2	LC3	LC4 /LC4R	LC5 /LC5R	LC6	LC7	LC8	LC9	Blank	Blank
Specific Conductivity (µS/cm) (cont.)	03/09 06/09	N/A N/A	587 748	861 1,006	824 991	864 993	648 875	825 995	856	914	1,007	_	-	-	_	-
(6011.)	09/09	N/A	636	947	944	966	629	986	976	997	1,007	_	_	_	_	-
	12/09	N/A	584	872	857	1,011	299	939	487	664	854		_	_	_	_
	05/10	N/A	663	839	854	1,014	525	958	458	812	956			_	_	_
*	09/10	N/A	788	915	884	873	786	904	872	931	916	_	_	_	_	_
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	N/A	0.15	0.17	0.14	0.20	0.35	0.23	0.19	0.09	0.09	-	-	-	-	-
	02/07	N/A	0.31 <sup>g</sup>	0.13 <sup>g</sup>	9	_ 9	9	g	_ g	9	_ g	-	-	-	-	-
	06/07 09/07	N/A N/A	0.19 0.41	0.22 0.34	0,24 0,27	0.34 0.24	0.91 0.25	0.35 0.58	0.47 0.78	0,39 0.55	1.13 0.58		-	_	-	-
	12/07	N/A	0.33	0.47	0.17	0.72	3.05	1.44	1.00	0.55	0.38	_	_	_	-	_
	03/08	N/A	0.34	0.34	1.28	0.31	1.12	0.44	1.00	0.37	0.34	-		_	_	_
	06/08	N/A	0.20	1.09	0.71	0.29	0.35	0.71	-	_	0.28	_	_	_	_	_
	09/08	N/A	1.32	1.12	1.06	0.08	0.84	1.36	_	-	1.34	_	-	-	-	-
	12/08	N/A	0.90	2.11	2,17	0.61	2.47	1.60	_	-	0.87	_	-	-	-	-
	02/09	N/A	0.40		- 0.42	0.10	-	-		-		4.74	4.73	8.05	-	-
	03/09 06/09	N/A N/A	0.19 0.23	0.13 0.13	0.42 0.28	0.10 0.15	0.11 0.14	0.71 0.27	0.25 0.52	0.33 0.33	0.17 0.21	-	-	-	-	-
	09/09	N/A N/A	0.23	0.13	0.28	0.15	0.14	0.27	0.52	0.33	0.21		_	_	_	-
	12/09	N/A	0.17	0.74	0.53	0.22	2.33	0.89	0.43	0.48	0.35	-	-		_	_
	05/10	N/A	0.27	0.51	0.38	0.21	0.37	1.55	0.64	1.47	0.64	-		_	_	_
	09/10	N/A	0.22	0.29	0.97	0.83	0.45	0.39	0.93	1.40	0.37		_		-	-
Turbidity (NTU)	05/06	N/A	1.76	0.83	0.66	5.76	62 °	1.05	1.79	2.82	2.01	-	-	-	-	_
	09/06	N/A		0.47	0.70	0.7	l *.	5.5	2.4	1,8	· .	-	-	-	-	-
	02/07	N/A	3.1 h	0.0 "	>999 <sup>n</sup>	0.0 <sup>h</sup>	0.0 h	22.4 h	0,0 h	16.3 <sup>h</sup>	26 <sup>h</sup>	-	-	-	-	-
	06/07	N/A	0.7 0.9	1.1	2.2	0.9	1.9	2.6	1.8	0.2	3.8	-	-	-	-	-
	09/07 12/07	N/A N/A	0.9	0.9	1.6	_	0.5 	2.3	6.5	0.14	3.8	_		_	-	-
	03/08	N/A	16.9	8.8	168 k	2.3	0.7	20,9	_	9.6		_		i	-	
	06/08	N/A	0.7	1.8	34.5/227 <sup>k</sup>	0.5	0.7 0.0 <sup>m</sup>	1.1			4.4 m			-	-	-
	09/08	N/A	54.8 h	53.2 h	187 <sup>h</sup>	18.2 h	48.2 h	179 h		_	- h	1	-	-	-	-
	12/08	N/A N/A	2.90	39.6 k	10,29 k	0.0 m	0.0 <sup>m</sup>	- m	_			· -	-	-	-	-
	02/09	N/A	2.90	39.0	10.29	0.0	0.0		_		-	7.0	-	-	-	
	02/09	N/A N/A	0.0	0.0	0.0		0,0	I			-	7.40	5.69	7.90	-	
	1			1	l	0.0	į.	0.2	9,3	1.5	0.0	-	-	-	_	
	06/09	N/A	2.6	1.5	1.4	0.1	1.7	3.1	1.9 ·	23	0,95	-	-	_	-	-
	09/09 12/09	N/A N/A	4.2	2.1	1.3	1.2	0.93	0.87	0.98	0.92	1.1	-	-	-	-	-
	05/10	N/A N/A	6.2 5.4	5.8 9.6	0.8	0.0 2.0	1.48 0.0	2.90	3.64	4.64	6.2	-	-	-	-	-
	05/10	N/A N/A	5.4 0.1	1	1.8	l .	1	4.49	3.20	3.13	4.9	-	-	-	-	-
Ferrous Iron (ppm)	05/06	N/A N/A	0.1	4.3 0.2	0.4 0.2	0.0	0.0	9.93 0,3	0.00	0.24	0.0 0.5	-	-	<u> </u>	-	
r chous non (ppm)	09/06	N/A	0.3	0.2	0.6	-	0.1	0.6	0.4		1			_	_	
	02/07	N/A	0.4	0.6	0,3	0,6	-	0.2	0.1	l i	0.4			_		_
	06/07	N/A	0.3	0.4	0.2	0.5	0	0.2	0.6	0.1	0.3		-	_		-
	09/07	N/A	0.2	0.3	0.2	0.4	0.2	0.4	0.6	0.8	0.8	-	-	-		-
	12/07	N/A	0.1	0	0	0.6	0	0.2	0.1	0.8	0.3	-	-		-	-
	03/08 06/08	N/A	0.3	0.8	0.4	0.4	0.1 0	0.4	_	0.8	0.4	-	-	-	-	-
	09/08	N/A N/A	0.2	1 _	0 -	0.6	-	1 _	_	-	0.6	-	-	-	_	-
	12/08	N/A	0.2	0.3	0.1	0.4	0	1		_	0.3		_	_	-	_
	02/09	N/A	_			-	_		_	-		-	_		1 -	1 -
	03/09	N/A	-	0.4	_	-		0,2	-	- '	-	_	-	_	-	-
	06/09	N/A	0.4	0.6	0	0.4	0.8	0.6	0.4	0.6	0.6	-	-		-	_
	09/09	N/A	0	0.4	0.2	0.6	0.8	0.6	1.0	0.6	0.6	-	-	-	-	
	12/09 05/10	N/A N/A	0.1 0.2	0.1 0.1	0 0.1	0.6 0.4	0	0.6 0.6	0.1 0.1	0.2 0.2	0.2	-	_	-	-	-
	09/10	N/A N/A	0.2	0.1	0.1	0.4	0.3	0.6	0.1	0.2 0.3	0.3 0.6		_		_	_
Manganese (ppm)	06/07	N/A	0	0.5	ō	0.4	0.5	0.0	0.0	0.3	0.8				-	
Sulfide (ppm)	06/07	N/A	0	0	0	0	0	0	0	0	0	-	-	-	-	
	1			<u> </u>		L		L	L	<u> </u>		L	İ	L		1



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

and the supplemental and the s		Method A							Monitoring Well	LD. <sup>6</sup>						
	Date	Cleanup													Field	Trip
Analyte	Sampled	Levels "	GT1	GT2	GT3	LC1	LC2	LC3	LC4 /LC4R	LC5 /LC5R	LC6	LC7	LC8	LC9	Blank	Blank
General Groundwater Chemistry				Į					1							
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	-	- 1	-	-	-
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	_	-		-	- 1
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	-	-	-	-	- 1
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			-	-	- 1
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) *	05/06	N/A	-	+	+	+	.	+	-/-	+	+	-		-	-	_
Reductive Dechlorination End Products (µg/L)	<b></b>						1									
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				-	-	i -	-	-	-		-	-	-	-
	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	-	-	-	-	- 1
	05/10	N/A	240	160	190	230	400	140	2,700	540	730	_	-	-	-	-
P.4	09/10	N/A	420	310	110/130	210	660	140	630	140	710	_	-	-	_	
Ethane	05/06	N/A	<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	-	-	-	-	-
1	09/07	N/A	0.3	0,29	0.034	0.33	0.21	<0.025	0.052/0.052	0.22	<0.025	] -	-	-	- 1	
	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	i -	-	-	-	
}	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		l <u>.</u>			<del>-</del>		-	-	-	-	-	-	-	
	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	-	-	-	-	-
	05/10	N/A	0.54	0.085	0.180	0.16	0.049	0.037	1.10	0.31	0.19	-	-		-	-
Ethono	09/10	N/A	0.76	0.24	0.075/0.074	0.13	0.16	0.068	0.39	0.076	0.22	-				
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	-	-	-	-	- 1
	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 09/07	N/A	0.083	1.4	0.15	0.11	0.29	0.10	0.15/0.080	0.29	0.094	-	-		-	-
		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	j -		-	-	-
	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		l				-			-		-	-	-	
	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	-	-	-	-	-
	05/10	N/A	0.030	0.13	0.073	<0.025	0.032	0.073	0.26	0.16	<0.025		_		-	-
	09/10	N/A	0.094	0.47	0.12/0.15	<0.025	0.083	0.029	0.14	0.11	0.034				_	- 1



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

		Method A							Monitoring Wel	ILD. <sup>b</sup>						
Analyte	Date Sampled	Cleanup Levels **	GT1	GT2	GT3	LC1	LC2		LC4 /LC4R	LC5 LC5R					Field	Trip
Petroleum Hydrocarbons (NWTPH-Dx) (mg/L)	запіріво	Levels	511	GIZ	GIS	LCI	LC2	LC3	LU4 /LU4K	LC5 /LC5R	LC6	LC7	LC8	LC9	Blank	Blank
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		_	_	_	_ [
1	02/07	0.50	_		_		_	0.28	<0.25	0.42/<0,25 i	0.76/<0.25 i	_	_		_	
	02/09	0.50	_					Į.								, "I
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	<0.25	<0.25	<0.25		
	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	_							1 :				_	i I	
	02/07	0.50	_		-	_	_	<0.50	<0.50	<0.50/<0.5	<0.50/<0.5	-0.50	-0.50	-050	-	-
Detected Volatile Organic Compounds (EPA SW8260E		0.50	-	<del></del>				-	-			<0.50	<0.50	<0.50	-	
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	l –	-	i -	_	-
	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 09/07	5	<0.2	<0.2	<0.2	1.4 5.2	1.5	2.6	9.8/9,9	0.2	<0.2	-	-	-	-	-
	12/07	5	<0.2 <0.2	<0.2 <0.2	<0.2 <0.2	4.5	1,9 2.7	3.0 6.8	7,9/7,4 25/23 D	<0.2	<0.2	-	-	-	-	-
	03/08	5	<0.2	<0.2	<0.2/<0.2	3.6	2.7	3.0	23/23	1.0 <0.2	<0.2 <0.2	_	_	<u>-</u>	-	_ [
	06/08	5	<0.2	<0.2	<0.2	6.2	3.3	6.8	-	-	<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 03/09	5 5	-02			6.0		<del></del>	l <u>-</u> -	1 .=	_	<0.2	<0.2	<0.2	-	
	06/09	5	<0.2 <0.2	<0.2 <0.2	<0.2/<0.2 <0.2/<0.2	2.3	1.0 1.1	5.6 5.6	0.4 <0.2	<0.2 <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 <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		-		_	_
	05/10	5	0.2	<0.2	<0.2/<0.2	1.6	0.7	5.1	0.4	<0.2	<0.2	_		_	_	<0.2
Table and	09/10	5	<0.2	<0.2	<0.2/<0.2	0.8	0.7	4.8	<0.2	<0.2	<0.2				-	
Trichloroethene	05/06 09/06	5 5	0.4 0.3	0.6 0.6	1.2/1.2	2.8 6.5	4 3	0.6	2.4/2.4	0.5	<0.2	-	-	-	<0.2	<0.2
	02/07	5	0.3	0.4	6,3/6,9	2.8	1.4	1.2 1.2	2.9 3.8	0.4 1.0	0.3 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	_		_	-	<0.2
	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	-	i -	_	-	-
	06/08	5	<0.2	0.6	1.5	4.8	4.1	1.6	-	-	0.3	-	-	-	-	-
	09/08 12/08	5 5	<0.2 <0.2	0.5 0.3	1.1/1.0	5.1	2.2	1.2	-	-	0.2	-	-	-		-
	02/09	5	<0.2	0.3	0.6/0.6	5.6	0.4	1.2	_	-	0,3	-				-
	02/09	5	<0.2	0.3	0,8/0,9	3.9	0.7	1.0	0.7	0.4	0.2	<0.2	<0.2	<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	-	_	-	-	_
	05/10	5	0.3	0.5	0.6/0.5	2.1	0.5	0.7	1.1	0.7	0.3		-	-	-	<0.2
=	09/10	5	0.4	0.5	0.6/0.6	1.7	0.5	0.8	0.6	0.5	<0.2	-		-		
cis-1,2-Dichloroethene	05/06	80	4.2	16	49 D	5.9	14	2.4	7.6/7.9	3.4	2,4	-	-	<u> -                                   </u>	<0.2	<0.2
	09/06	80 '	3.7	24 D	13/13	15	15	4.3	10	2.5	2.6	-	_	-	-	
	02/07	80	4.9	10	35/34 D	6.3	8.4	2.4	7.7	4.9	2.5	-	_	-	l - i	<0.2
1	06/07	80 '	3.0	22 D	16	7.6	5.0	2.4	8.6/9.0	1.6	1.8	-	-	-		- [
	09/07	80 '	2.3	18 D	5.0	9.7	6.9	6.4	11/11	1.7	1.7	-	-	-	-	-
	12/07	80 1	1.8	12	14	9.9	1.2	8.0	7.7/7.7	4.6	1.7	_	-	_	-	
	03/08	80 <sup>f</sup>	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	-	-	5.23.0	- 0.2	-	-	_	_	- 0.6				( I	_ [
······································	1 02/05	L OU	·	-					<del>-</del>		-	<0.2	<0.2	<0.2		



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

		Method A		,		,		,	Monitoring Wel	I LD. b						
Analyte	Date Sampled	Cleanup Levels *	GT1	GT2	GT3	LC1	LC2	LC3	LC4 /LC4R	LC5 /LC5R	LC6				Field	Trip
cis-1,2-Dichloroethene	03/09	80 1	1.7	8.4	6.7/6.8	3.6	1.4	1.0	2.3	1.2	0,5	LC7	LC8	LC9	Blank	Blank
(cont.)	06/09	80 f	1.7	12	8.8/9.0	4.1	2.9	1.4	2.6	1.5	0.6	_	_	_	_	
	09/09	80 f	0.9	5.2	7.1/7.4	8.4	4.4	1.8	2.6	1.7	0.7	_	_	_	_	_
	12/09	80 1	0.8	2.5	6.4/6.4	4.0	1.3	1.2	2.2	2.2	0.7	_	_	_	_	-
	05/10	80 f	1.0	2.6	15/15	3.8	1.4	0.9	1.6	1.4	0.5	_	_	_	_	<0.2
	09/10	80 f	1.4	12	9,8/9,6	4.6	1.9	1.5	2.4	1.1	0.6	_			_	₹0.2
trans-1,2-Dichloroethene	05/06	160 <sup>f</sup>	<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 <sup>f</sup>	<0.2	6.9	5.4/5.4	0.4	1.3	<0.2	0.5	<0.2	<0.2	_	_	_	-0.2	- 0.2
	02/07	160 <sup>f</sup>	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 <sup>f</sup>	<0.2	5.3	2.4	<0.2	0.5	<0.2	0.3/0.4	<0.2	<0.2	_	_	_	_	
	12/07	160 <sup>f</sup>	<0.2	2.9	4.2	<0.2	<0.2	<0.2	0.2/0.2	0.3	<0.2	_	_	-	_	_
	03/08	160 <sup>f</sup>	<0.2	3.1	3.3/3.1	<0.2	<0.2	<0.2		<0.2	<0.2		_	_		
	06/08	160 <sup>f</sup>	<0.2	3.9	4.6	<0.2	<0.2	<0.2	_	-	<0.2	_		_		
	09/08	160 <sup>f</sup>	<0.2	2.9	5.9/5.2	0.4	0.3	<0.2	-	_	<0.2	_		_	_	
	12/08	160 <sup>f</sup>	<0.2	1.8	2.3/2.6	0.2	<0.2	<0.2	-	_	<0.2			_	-	
	02/09	160 <sup>f</sup>	-	_		_	-	_	-	_	_	<0.2	<0.2	<0.2	_	
1	03/09	160 <sup>f</sup>	<0.2	2,0	1.9/2.0	<0.2	<0.2	<0.2	0.2	<0.2	<0.2	_	_	-	l _	
	06/09	160 <sup>f</sup>	<0.2	3.2	4.2/4.3	<0.2	0.2	<0.2	0.2	<0.2	<0.2	_	-			_
	09/09	160 <sup>f</sup>	<0.2	1.7	3.9/3.9	<0,2	0.3	<0.2	0.3	<0.2	<0.2	_			l _	_
	12/09	80 <sup>f</sup>	<0.2	1.0	1.6/1.5	<0.2	<0.2	<0.2	0.2	<0.2	<0.2		_	_		_
	05/10	80 <sup>f</sup>	<0.2	1.1	2.6/2.6	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		_	_	_	<0.2
to.	09/10	80 <sup>f</sup>	<0.2	2.1	2.1/2.2	<0.2	<0.2	<0.2	0.2	<0.2	<0.2	_	_		_	"
1,1-Dichloroethene	05/06	0.073 <sup>f</sup>	<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 <sup>f</sup>	<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 <sup>f</sup>	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2/<0.2	<0.2	<0.2	_	-	_	- '-	_
	09/07	0.073 <sup>f</sup>	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2<0,2	<0.2	<0.2		-	_	-	_
	12/07	0.073 <sup>f</sup>	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2/<0.2	<0.2	<0.2	_	_		_	_
	03/08	0.073 <sup>f</sup>	<0.2	<0.2	<0.2/<0.2	<0.2	<0.2	<0.2		<0.2	<0.2	-		_	_	_
	06/08	0.073 <sup>f</sup>	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		_	<0.2	_	_	_		
i	09/08	0.073 <sup>f</sup>	<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 <sup>f</sup>	-	-	-	-	-	-	_	_	_	<0.2	<0.2	<0.2	_	_
	03/09	0.073 <sup>f</sup>	<0.2	<0.2	<0.2/<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	_	_	_	_	_
	06/09	0.073 <sup>f</sup>	<0.2	<0.2	<0.2/<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2			_	_	_
	09/09	0.073 <sup>f</sup>	<0.2	<0.2	<0.2/<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	_		_	_	_
	12/09	80 <sup>f</sup>	<0.2	<0.2	<0.2/<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	-		_	_
	05/10	80 <sup>f</sup>	<0.2	<0.2	<0.2/<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	_	_	_	_	<0.2
	09/10	80 f	<0.2	<0.2	<0.2/<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		_	_	_	
Vinyl Chloride	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 06/07	0.2 0.2	<0.2 <0.2	14	1.9/1.6 2.3	0.7	3.1 1.8	1.8 0.6	1.2 1.2/1.2	3.3 1.5	1.9 0.7	_	_	-	_	<0.2
	09/07	0.2	<0.2	22 D	2.1	1.4	1.4	1.0	0.8/0.8	1.3	0.7		_	-		-
	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 09/08	0.2 0.2	<0.2 <0.2	18 16	4.8 5.2/4.6	0.3	0.5	0.9	-	-	0.2	-	-		-	-
	12/08	0.2	<0.2 <0.2	11	5.2/4.6 1.7/1.8	0.9	1.1 <0.2	0.9	-	_	0.2 <0.2	_	-	-	-	-
	02/09	0.2						<u>U.8</u> ]	-	_	<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

		Method A							Monitoring Well	I.D. <sup>b</sup>						
The second secon	Date	Cleanup								I					Field	Trip
Analyte	Sampled	Levels "	GT1	GT2	GT3	LC1	LC2	LC3	LC4 '/LC4R	LC5'/LC5R	LC6	LC7	LC8	LC9	Blank	Blank
Vinyl Chloride	06/09	0.2	<0.2	17	3.8/4.7	0.8	1.0	0.3	1.5	2.2	<0.2	_		_		_
(cont.)	09/09	0.2	<0.2	6.9	4.9/4.9	1.6	1.2	0.6	1.4	2.4	<0.2		-	l -	_	
	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 _	l	_	
	05/10	0.2	0.5	1.7	1.7/1.6	0.4	0.4	0.2	0.9	1.1	<0.2		_	l _	_	<0.2
	09/10	0.2	1.0	5.8	4.4/4.4	0.4	0.7	0.4	1.4	1.1	<0.2	_		l _	۱ _	
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	Per			<0.2	<0.2
1,1,2-Trichloroethane	05/06	0.77	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			<u> </u>	<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	_		<b>-</b>	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

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

- \* 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 dehalococcoides detected; means dehalococcoides 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.
- I) 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 par 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.

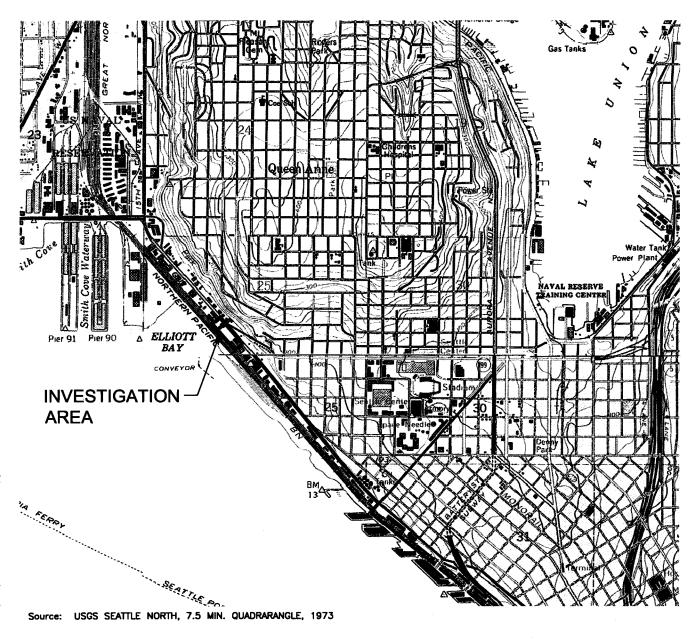
Seattle, Washington

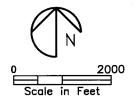
	***aomington	GT1	GT2	GT3	LC1	LC2	LC3	LC4	LC5	LC6
		Monitoring Well	Monitoring Well	Monitoring Well	Monitoring Well	Monitoring Well	Monitoring Well	Monitoring Well	Monitoring Well	Monitoring Well
	Count (data)	16	16	16	46	40	40	40	40	
1,1-Dichloroethene	Count (nondetects)	16	16		16	16	16	12	13	16
	S Statistic	NC	NC	15 NG	16 NG	16 NO	16 NO	12	13	16
	Var(S)			NC	NC NC	NC NC	NC NC	NC	NC	NC
	Trend	NC NC	NC NC	NC	NC NC	NC NO	NC	NC	NC	NC
	Probability (of no real trend)	NC NC	NC NC	NC NC	NC NC	NC NC	NC NC	NC	NC	NC
	Count (data)			· · · · · · · · · · · · · · · · · · ·	NC	NC	NC	NC	NC	NC
cis-1,2- Dichloroethene	Count (nondetects)	16	16	16	16	16	16	12	13	16
	S Statistic	0	0	0	0 '	0	0	0	0	0
	Var(S)	-90	-64	-43	-47	-56	-61	-36	-37	-96
		491	489	492	492	491	490	211	268	489
	Trend	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Probability (of no real trend)	0.00%	0.22%	2.92%	1.91%	0.65%	0.33%	0.79%	1.39%	0.00%
Tetrachloroethene	Count (data)	16	16	16	16	16	16	12	13	16
	Count (nondetects)	15	16	14	0	0	0	3	9	16
	S Statistic	NC	NC	NC	-14	-76	24	-36	NC	NC
	Var(S)	NC	NC	NC	493	491	489	205	NC	NC
	Trend	NC	NC	NC	Decreasing	Decreasing	Increasing	Decreasing	NC	NC
	Probability (of no real trend)	NC NC	NC	NC	27.92%	0.04%	14.92%	0.73%	NC	NC
trans-1,2- Dichloroethene	Count (data)	16	16	16	16	16	16	12	13	16
	Count (nondetects)	15	0	0	13	8	16	1	9	16
	S Statistic	NC	-78	-70	NC	-60	NC	-37	NC	NC
	Var(S)	NC	491	491	NC	399	NC	180	NC	NC
	Trend	NC	Decreasing	Decreasing	NC	Decreasing	NC	Decreasing	NC	NC
	Probability (of no real trend)	NC	0.03%	0.09%	NC	0.16%	NC	0.36%	NC	NC
Trichloroethene	Count (data)	16	16	16	16	16	16	12	13	16
	Count (nondetects)	10	0	0	0	0	0	0	0	5
	S Statistic	NC	-46	-72	-50	-65	-33	-35	14	4
	Var(S)	NC	447	483	489	490	479	212	251	340
	Trend	NC	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Increasing	Increasing
	Probability (of no real trend)	NC	1.66%	0.06%	1.33%	0.19%	7.19%	0.97%	20.61%	43.54%
Vinyl Chloride	Count (data)	16	16	16	16	16	16	12	13	16
	Count (nondetects)	13	0	0	. 0	2	0	0	0	7
	S Statistic	NC	-75	-23	-47	-48	-76	-11	-38	-66
	Var(S)	NC	492	492	482	489	487	203	267	401
	Trend	NC	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Probability (of no real trend)	NC	0.04%	16.07%	1.80%	1.67%	0.03%	24.14%	1.17%	0.06%



## **Figures**



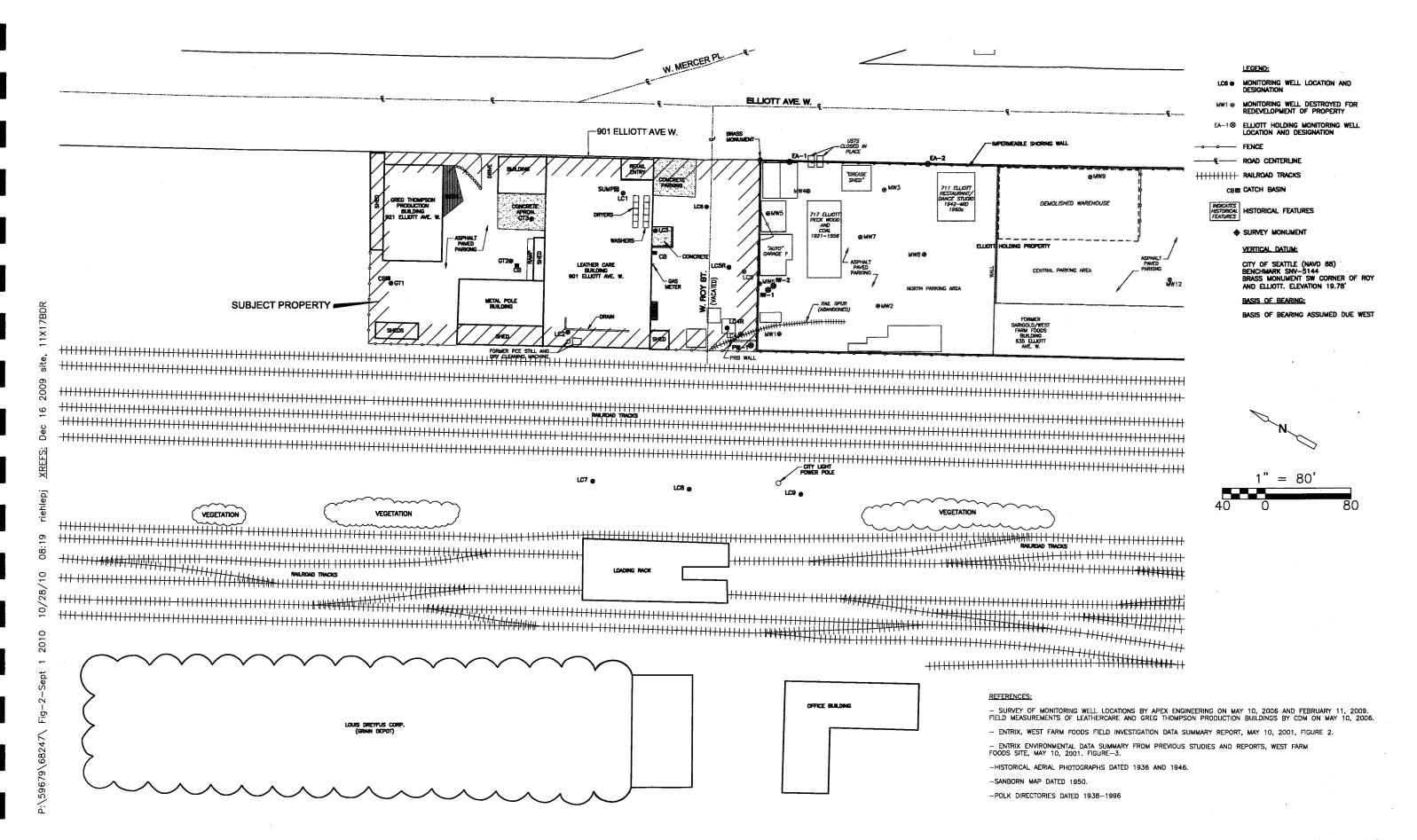






LEATHERCARE INC. SEATTLE, WASHINGTON

Figure No. 1 Location Map



LEATHERCARE INC. SEATTLE, WASHINGTON Figure No. 2 Site and Vicinity Map GREG THOMPSON PRODUCTION

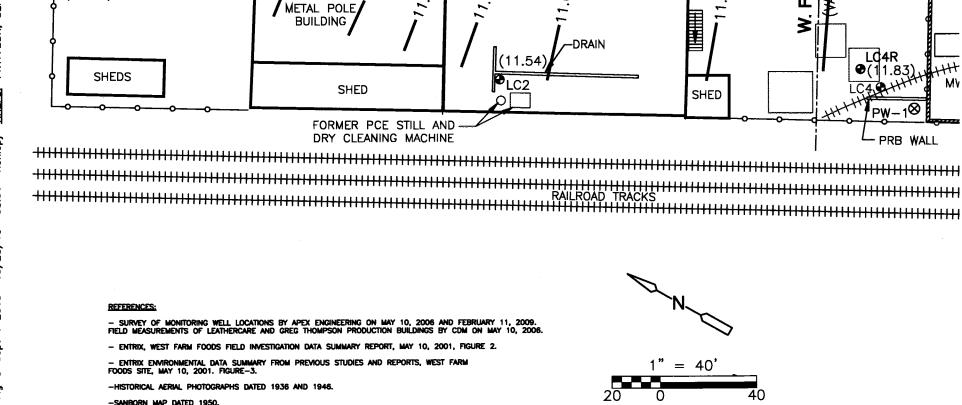
BUILDING

-POLK DIRECTORIES DATED 1938-1998

921 ELLIOTT AVE. W

GT1<sup>♠</sup>

(11.01)



BUILDING

CONCRETE

APRON

(11.27)

GT2**⊕** (11.27)<sup>□</sup>

**ASPHALT** 

PAVED

PARKING

1.2

GT3 🍙

**LEGEND:** 

LC6 MONITORING WELL LOCATION AND
(11.72) DESIGNATION WITH GROUNDWATER ELEVATION
IN FEET

→ DIRECTION OF GROUNDWATER FLOW

FENCE
HHHHHHHH RAILROAD TRACKS

**■ CATCH BASIN** 



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

Figure No. 3 Potentiometric Surface Map September 1, 2010

LEATHERCARE INC. SEATTLE, WASHINGTON

BRASS MONUMENT-

(11.89)

LC5

WM

LC5R

IMPERMEABLE -

SHORING WALL

RETAIL ENTRY

(11.62)

WASHERS

DRYERS4

COOLING — TOWER WATER

LEATHER CARE

BUILDING

901 ELLIOTT AVE. W.

CONCRETE

PARKING

(11.67)

LC3

LC6 🗭

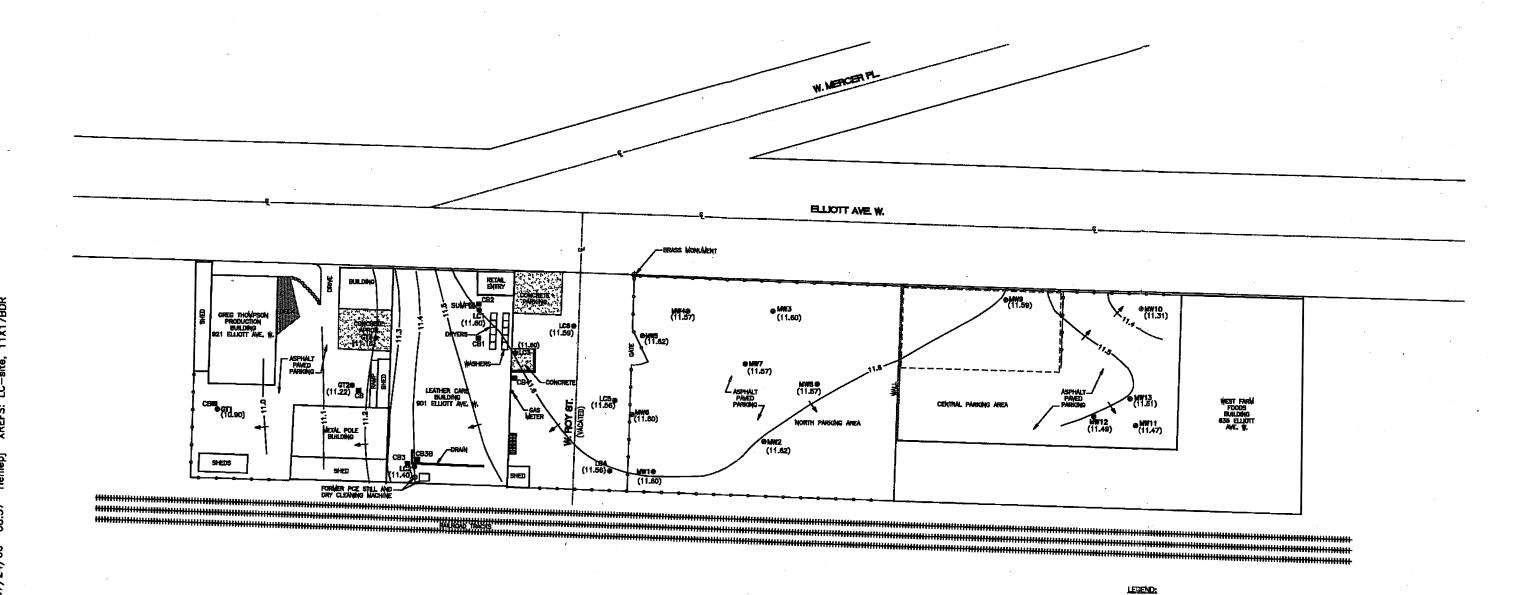
(11.72)

- CONCRETE!

S

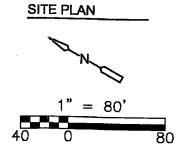
## Appendix A

**Historical Potentiometric Surface Maps** 



#### REFERENCES

- 10, 2006 USING AN ASSUMED VERTICAL DATUM AND BASIS OF BEARING.
- FIELD MEASUREMENTS OF LEATHERCARE AND GREG THOMPSON PRODUCTION BUILDINGS BY COM ON MAY 10, 2008.
- ENTROX, WEST FARM FOCOS FIELD IMPESTIGATION DATA SUMMARY REPORT, MAY 10, 2001. FIGURE 2.



YERTICAL DATUM:

STAMPED ON BRASS MONUMENT NOT TIED TO CITY OF SEATTLE (NOT PUBLISHED)

BASIS OF BEARING:

BASIS OF BEARING ASSUMED DUE WEST

HHH RAILROAD TRACKS

COM CATCH BASIN

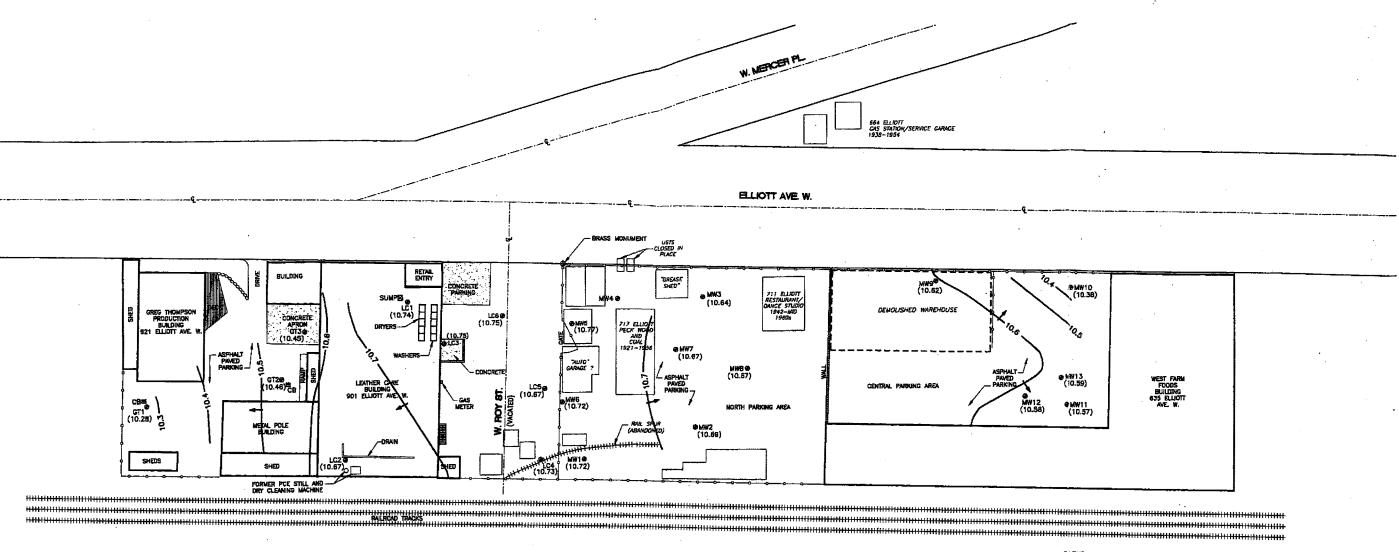
MCNITORING WELL LOCATION AND DESIGNATION AND ELEVATION IN FEET POTENTIOMETRIC CONTOUR, CONTOUR INTERVAL IS 0.1 FT. (AVERAGE)

DIFFECTION OF GROUNDWATER FLOW

RYAN SWANSON & CLEVELAND PLLC LEATHERCARE SEATTLE, WASHINGTON

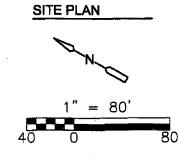
Figure No. 3
POTENTIOMETRIC SURFACE MAP
MAY 10, 2006

CDM



#### REFERENCES:

- -HISTORICAL AERIAL PHOTOGRAPHS DATED 1936 AND 1948. -SANBORN MAP DATED 1950.
- -POLK DIRECTORIES DATED 1938-1996



RYAN SWANSON & CLEVELAND PLLC LEATHERCARE SEATTLE, WASHINGTON

#### LEGEND:

MW1 • MONITORING WELL LOCATION AND (10.72) DESIGNATION AND ELEVATION IN FEET

10.6 — POTENTIOMETRIC CONTOURS; CONTOUR INTERVAL IS 0.1 FT (AVERAGE)

-- DIRECTION OF GROUNDWATER FLOW

--- FENCE

HILLIHIH RAILROAD TRACKS

CBE CATCH BASIN



INDICATES
HISTORICAL FEATURES
FEATURES

♦ SURY CY MONUMENT

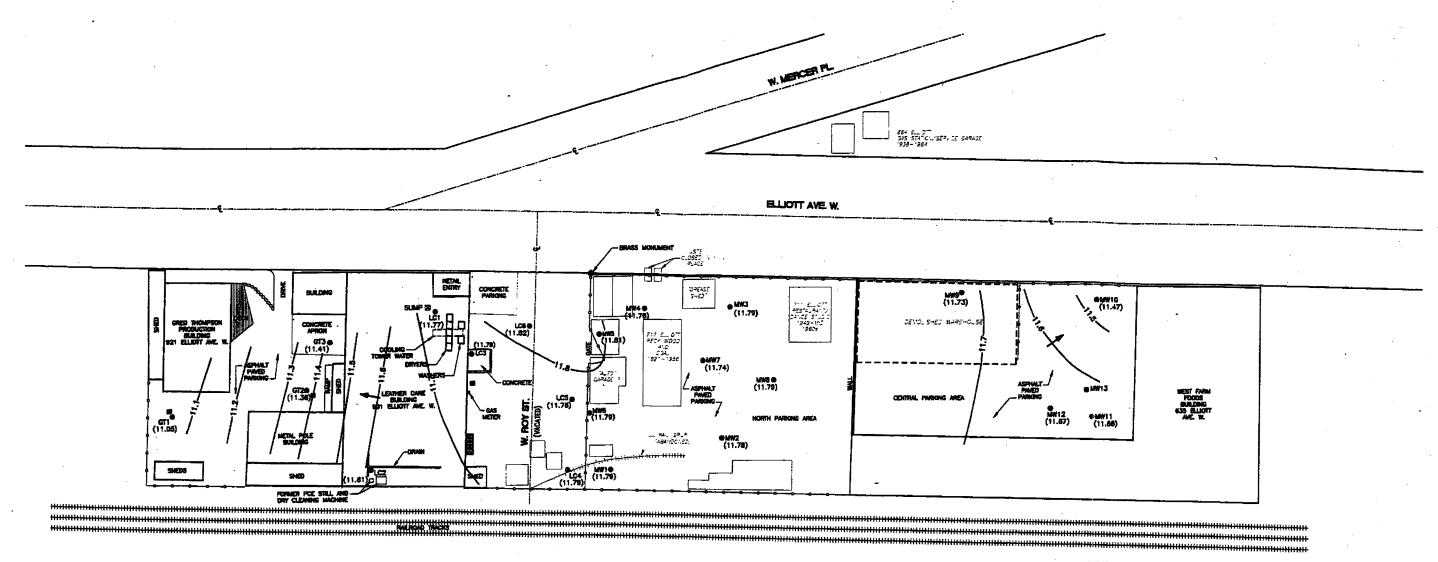
VERTICAL DATUM:

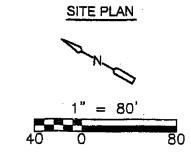
STAMPED ON BRASS MONUMENT INC. TIED TO CITY OF SEATTLE (NOT PUBLISHED)

SASIS OF BEARING ASSUMED DUE WEST

Figure No. 3 POTENTIOMETRIC SURFACE MAP SEPTEMBER 5, 2006

CDM





RYAN SWANSON & CLEVELAND PLLC LEATHERCARE SEATTLE, WASHINGTOM

POTENTIOMETRIC CONTOURS, CONTOUR INTERVAL IS 0.1 FT (AVERAGE)

--- DIRECTION OF GROUNDWATER FLOW

CHE CATCH BASIN

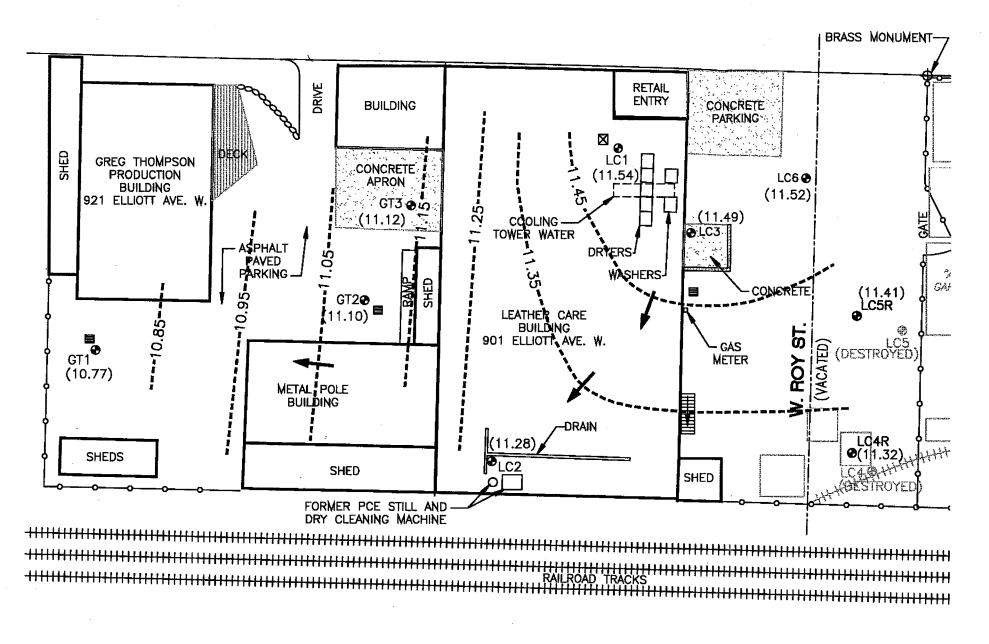


-5729-CAL HISTORICAL FEATURES

SURVEY MONUMENT

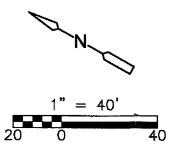
MASS OF BEARING ASSUMED DUE WEST

Figure No. 4
POTENTIOMETRIC SURFACE MAP
FEBRUARY 12, 2007



#### REFERENCES:

- SURVEY OF MONITORING WELL LOCATIONS BY APEX ENGINEERING ON MAY 10, 2006 USING AN ASSUMED VERTICAL DATUM AND BASIS OF BEARING.
- 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



LEATHERCARE SEATTLE, WASHINGTON

#### LEGEND:

LC6 MONITORING WELL LOCATION AND
(11.52) DESIGNATION WITH GROUNDWATER ELEVATION
IN FEET

----11.05---- POTENTIOMETRIC CONTOURS,
CONTOUR INTERVAL IS 0.1 FT. (AVERAGE)
OR 0.05 FT.

DIRECTION OF GROUNDWATER FLOW

- FENCE

**■ CATCH BASIN** 

INDICATES
HISTORICAL FEATURES
HISTORICAL FEATURES

SURVEY MONUMENT

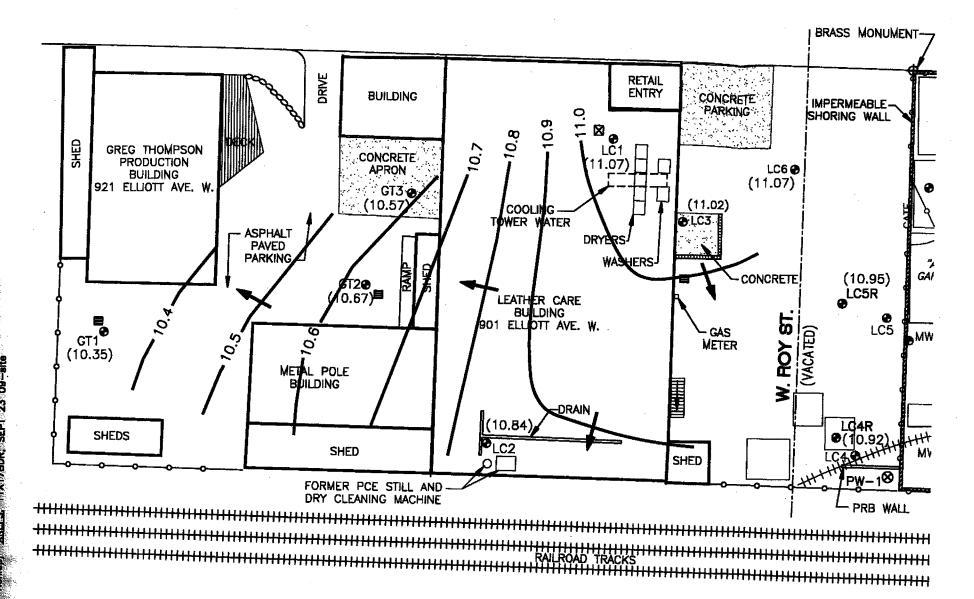
#### **VERTICAL DATUM:**

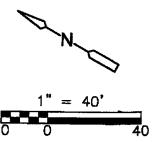
STAMPED ON BRASS MONUMENT NOT TIED TO CITY OF SEATTLE (NOT PUBLISHED)

BASIS OF BEARING:

BASIS OF BEARING ASSUMED DUE WEST

Potentiometric Surface Map June 29, 2009





LEATHERCARE INC. RI/FS SEATTLE, WASHINGTÓN

### **LEGEND:**

- MONITORING WELL LOCATION AND DESIGNATION WITH GROUNDWATER ELEVATION IN FEET
- -11.5 --- POTENTIOMETRIC CONTOURS, CONTOUR INTERVAL IS 0.1 FT. (AVERAGE) OR 0.05 FT.
  - DIRECTION OF GROUNDWATER FLOW
- **FENCE** 
  - E CATCH BASIN

INDICATES HISTORICAL FEATURES

**+** SURVEY MONUMENT

CSM IMPERMEABLE WALL

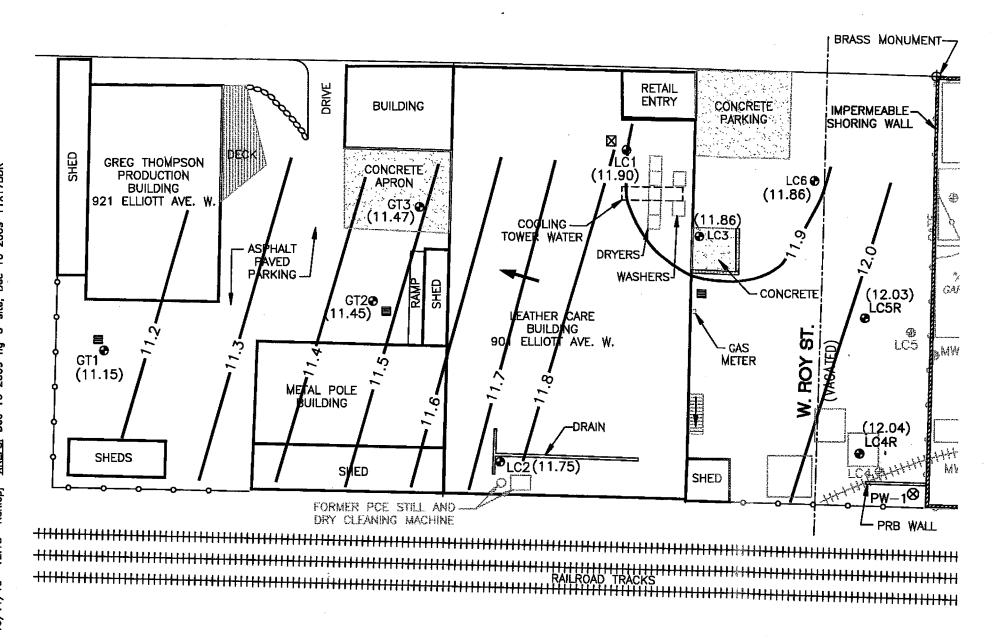
**VERTICAL DATUM:** 

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

BASIS OF BEARING:

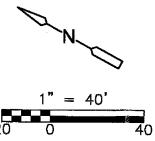
BASIS OF BEARING ASSUMED DUE WEST

Figure No. 5m Potentiometric Surface Map September 23, 2009



#### 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 1935 AND 1946.
- -SANBORN MAP DATED 1950.
- -POLK DIRECTORIES DATED 1938-1996



LEATHERCARE INC. RI/FS SEATTLE, WASHINGTON

### LEGEND:

LC6 MONITORING WELL LOCATION AND
(11.86) DESIGNATION WITH GROUNDWATER ELEVATION
IN FEET

DIRECTION OF GROUNDWATER FLOW

+++++++++++++- RAILROAD TRACKS

**FENCE** 

**國 CATCH BASIN** 

INDICATES HISTORICAL FEATURES

HISTORICAL FEATURES

**♦** SURVEY MONUMENT

CSM IMPERMEABLE WALL

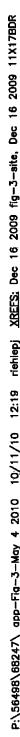
#### **VERTICAL DATUM:**

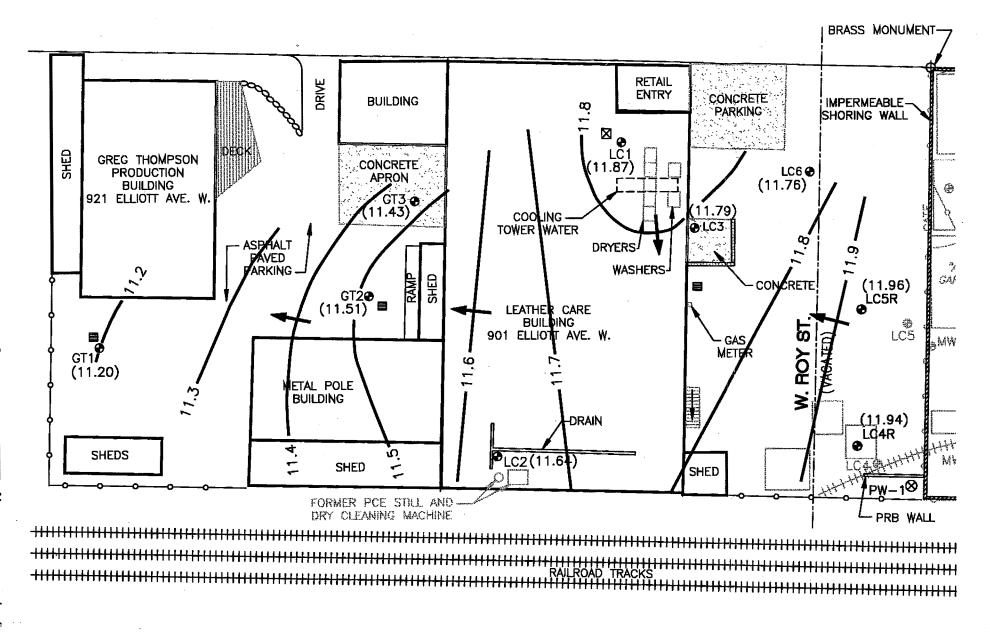
CITY OF SEATTLE (NAVD 88)
BENCHMARK SNV-5144
BRASS MONUMENT SW CORNER OF ROY
AND ELLIOTT. ELEVATION 19.78'

BASIS OF BEARING:

BASIS OF BEARING ASSUMED DUE WEST

Potentiometric Surface Map December 16, 2009

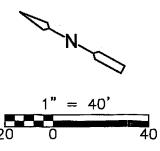




#### REFERENCES

- Survey of monitoring well locations by Afex Engineering on May 10, 2006 and February 11, 2009. FIELD MEASUREMENTS OF LEATHERCARE AND GREG THOMPSON PRODUCTION BUILDINGS BY COM ON MAY 10, 2006.

- ENTRIX, WEST FARM FOODS FIELD INVESTIGATION DATA SUMMARY REPORT, MAY 10, 2001, FIGURE 2.
- ENTRIX ENTRONMENTAL DATA SUMMARY FROM PREVIOUS STUDIES AND REPORTS, WEST FARI FOODS SITE, MAY 10, 2001. FIGURE—3.
- -HISTORICAL AERIAL PHOTOGRAPHS DATED 1936 AND 1948.
- -SANBORN MAP DATED 1950.
- -POLK DIRECTORIES DATED 1938-1996



LEATHERCARE INC. RI/FS SEATTLE, WASHINGTON

#### LEGEND:

LC6 MONITORING WELL LOCATION AND

(11.76) DESIGNATION WITH GROUNDWATER ELEVATION
IN FEET

-11.5 ---- POTENTIOMETRIC CONTOURS,

CONTOUR INTERVAL IS 0.1 FT. (AVERAGE)

DIRECTION OF GROUNDWATER FLOW

FENCE
HHHHHHHH RAILROAD TRACKS

**■ CATCH BASIN** 

INDICATES HISTORICAL FEATURES

HISTORICAL FEATURES

→ SURVEY MONUMENT

CSM IMPERMEABLE WALL

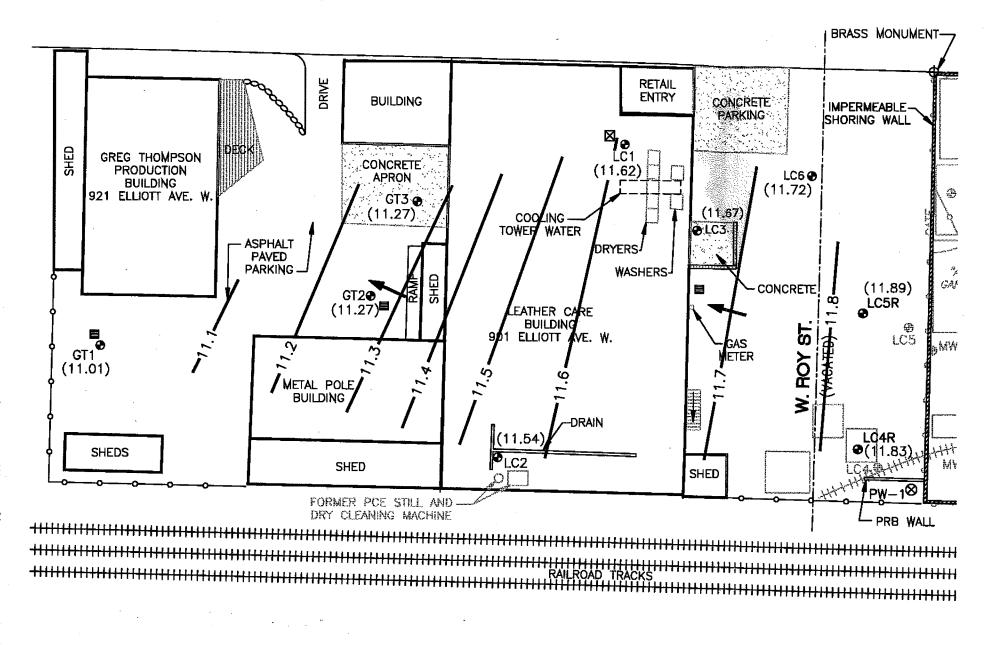
#### VERTICAL DATUM:

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

BASIS OF BEARING:

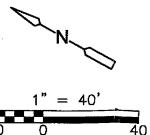
BASIS OF BEARING ASSUMED DUE WEST

Potentiometric Surface Map May 4, 2010



#### REFERENCES:

- SURVEY OF MONITORING WELL LOCATIONS BY APEX ENGINEERING ON MAY 10, 2006 AND FEBRUARY 11, 2008. 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.
- ENTROX 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 1938-1995



LEATHERCARE INC. RI/FS SEATTLE, WASHINGTON

#### LEGEND:

- LC6 MONITORING WELL LOCATION AND
  (11.72) DESIGNATION WITH GROUNDWATER ELEVATION
  IN FEET
- -----11.5 ------ POTENTIOMETRIC CONTOURS,

  CONTOUR INTERVAL IS 0.1 FT. (AVERAGE)

  OR 0.05 FT.
  - DIRECTION OF GROUNDWATER FLOW
- FENCE
  HHHHHHH RAILROAD TRACKS
  - **CATCH BASIN**

INDICATES HISTORICAL FEATURES

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

Potentiometric Surface Map September 1, 2010

# **Appendix B**Analytical Laboratory Reports





September 15, 2010

Pam Morrill CDM 14432 SE Eastgate Way, Suite 100 Bellevue, WA 98007

RE: Project ID: Leathercare, 56498-68247 ARI Job No: RL50

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 September 1, 2010, under ARI job RL50. The trip blank was 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 RL50

**Enclosures** 

<b>Chain of Custod</b>	y Record & Laborato	ry Analysis Reques
------------------------	---------------------	--------------------

ARI Assigned Number: 0250	Turn-around I		V-1		Page:		of	/		4			eal Resources, Incorporated al Chemists and Consultants
ARI Client Company:		Phone: 425-51	19-830	D	Date:	11/10		ni? Ve		1		4611 So Tukwila,	outh 134th Place, Suite 100 , WA 98168
Client Spintact: -//					No. of Coolers.		Coole Temps	7.8				206-695	6-6200 206-695-6201 (fax)
Client Project Name: Letmercz	re				~			Analysis F	Requested				Notes/Comments
	Samplers:	mur			's \$266	-				:		:	·
Sample ID	Date	Time	Matrix	No. Containers	VOA'	HA	,		·				
LC4R-09/10	9/1/10	1010	Weter	3	1								10-ml purge for
LC5R-09/10		1125		3	1								10-ml purge for lower reporting
102-09/10		1300	:	3	V,							·	Gmit 5
16-09/10		1400		3	1								
LC3-09/10		1445		9	V	1							Extra virils for
Trip Blank	<u>v</u>		*	2		$\sqrt{}$							LC3-09/16 for
													ms/ms0
·													/
			1									ļ. 	
Comments/Special Instructions	Relinquished by:	La	Tent	Received by: (Signature)	1./	40	In-	Relinquished (Signature)	l by:			Received by (Signature)	
Vaul charide 1,1-DCE, trans-1,2-DCE, as-1,2- DCE, TCE, & PCE	(Signatural) a	LOVE F	ix	Printed Name:	Ter	Mill	00	Printed Nam	e:	· · · · · · · · · · · · · · · · · · ·		Printed Nam	e:
note TOE & DEE	Company:		-/-	Company:	IT	1 -111	<del>- r</del>	Company:			<del>-</del>	Company:	
Vie, Ico, : I co	Date & Time:	DM 16	26	Date & Time	110	16	20	Date & Time				Date & Time	

Limits of Liability: ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the Invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or cosigned agreement between ARI and the Client.

Sample Retention Policy: All samples submitted to ARI will be appropriately discarded no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer, unless alternate retention schedules have been established by work-order or contract.

70000 : 05 TX



# **Cooler Receipt Form**

ARI Client: CDM	·	Project Name: Leathor	care	
	NA	Delivered by: Fed-Ex UPS Cour	ier Aand Delivered Oth	ner
COC No(s):RC57		•		(NA)
	<del></del> .	Tracking No:		
Preliminary Examination Phase:		ar a sure to a fact a section	YES	(NO)
Were intact, properly signed and			153	(NO)
Were custody papers included wit			YES	NO
Were custody papers properly fille			YES	NO
Temperature of Cooler(s) (°C) (re	commended 2.0-6.0 °C for chem	nistry) <u>, ) , 8</u>		77057
If cooler temperature is out of con Cooler Accepted by:	npliance fill out form 00070F		Temp Gun ID#: <u>908</u>	
	Complete custody forms a	and attach all shipping documents		
Log-In Phase:		:		
<u> </u>	d in the england		YES	(NO)
Was a temperature blank include		Wet Ice Gel Packs Baggies Foam	_	(19)
What kind of packing material v Was sufficient ice used (if approp			NA (YES	) NO
Were all bottles sealed in individu			(YES	) NO
Did all bottles arrive in good cond			(YES	ON C
			(YES	NO
		er of containers received?	WES	) NO
			YES	) NO
Were all bottles used correct for t			(FES	
		servation sheet, excluding VOCs)	(NA) YES	•
Were all VOC vials free of air but			NA YES	-
Was sufficient amount of sample			VES	1 / NO
			NA S	130/10
Was Sample Split by ARI:	<		Split b	v:
was cample opile by Arti.	) 120 2007,1110			
Samples Logged by:s	JMDate	: <u>4/1//0</u> Time:_	1745	-
	** Notify Project Manage	r of discrepancies or concerns **		
Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on	COC
Additional Notes, Discrepancie	_	LC3-09/10=ph	in 40f6	
LC5R-09/10= 50 LC2-09/10= pb LC6-09/10= pb	in lof3	TE.		
	in 10+3 ate: 9/1/10		<u> </u>	
By: Da Peabub		Small → "sm"	· · · · · · · · · · · · · · · · · · ·	
2mm 2-4 m		Peabubbles → "pb"		
	. 8 6 6	Large → "ig"		
		Headspace → "hs"		



Volatiles by Purge & Trap GC/MS-Method SW8260C

Page 1 of 1

Sample ID: LC4R-09/10 SAMPLE

Lab Sample ID: RL50A LIMS ID: 10-22201

Matrix; Water
Data Release Authorized:
Reported: 09/14/10

Instrument/Analyst: NT5/PKC

Date Analyzed: 09/13/10 16:51

QC Report No: RL50-CDM, Inc.

Project: Leathercare

56498-68247

Date Sampled: 09/01/10 Date Received: 09/01/10

Sample Amount: 10.0 mL 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	Ü
156-60-5	trans-1,2-Dichloroethene	0.2	0.2	
156-59-2	cis-1,2-Dichloroethene	0.2	2.4	
79-01-6	Trichloroethene	0.2	0.6	
127-18-4	Tetrachloroethene	0.2	< 0.2	U

Reported in µg/L (ppb)

#### Volatile Surrogate Recovery

d4-1,2-Dichloroethane	102%
d8-Toluene	97.6%
Bromofluorobenzene	95.8%

RL50:00004

FORM I



Volatiles by Purge & Trap GC/MS-Method SW8260C

Page 1 of 1

Lab Sample ID: RL50B

LIMS ID: 10-22202 Matrix: Water

Data Release Authorized: Reported: 09/14/10

Instrument/Analyst: NT5/PKC Date Analyzed: 09/13/10 17:18 Sample ID: LC5R-09/10

QC Report No: RL50-CDM, Inc.

Project: Leathercare

56498-68247

Date Sampled: 09/01/10 Date Received: 09/01/10

Sample Amount: 10.0 mL Purge Volume: 10.0 mL

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	0.2	1.1	
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	1.1	
79-01-6	Trichloroethene	0.2	0.5	
127-18-4	Tetrachloroethene	0.2	< 0.2	U

Reported in µg/L (ppb)

#### Volatile Surrogate Recovery

d4-1,2-Dichloroethane	100%
d8-Toluene	99.2%
Bromofluorobenzene	95.1%



Sample ID: LC2-09/10 Volatiles by Purge & Trap GC/MS-Method SW8260C

Page 1 of 1

Lab Sample ID: RL50C LIMS ID: 10-22203

Matrix: Water

Data Release Authorized: A Reported: 09/14/10

Instrument/Analyst: NT5/PKC

Date Analyzed: 09/13/10 17:46

QC Report No: RL50-CDM, Inc. Project: Leathercare

56498-68247

Date Sampled: 09/01/10 Date Received: 09/01/10

Sample Amount: 10.0 mL Purge Volume: 10.0 mL

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	0.2	0.7	
75-35-4	1,1-Dichloroethene	0.2	< 0.2	U
156-60-5	trans-1,2-Dichloroethene	0.2	< 0.2	Ŭ
156-59-2	cis-1,2-Dichloroethene	0.2	1.9	
79-01-6	Trichloroethene	0.2	0.5	
127-18-4	Tetrachloroethene	0.2	0.7	

Reported in µg/L (ppb)

#### Volatile Surrogate Recovery

d4-1,2-Dichloroethane	99.2%
d8-Toluene	98.2%
Bromofluorobenzene	97.2%



Volatiles by Purge & Trap GC/MS-Method SW8260C Sample ID: LC6-09/10

Page 1 of 1

Lab Sample ID: RL50D LIMS ID: 10-22204

Matrix: Water

Data Release Authorized: //

Reported: 09/14/10

Instrument/Analyst: NT5/PKC
Date Analyzed: 09/13/10 18:14

QC Report No: RL50-CDM, Inc.

Project: Leathercare

56498-68247

Date Sampled: 09/01/10 Date Received: 09/01/10

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	Ü
156-60-5	trans-1,2-Dichloroethene	0.2	< 0.2	U
156-59-2	cis-1,2-Dichloroethene	0.2	0.6	
79-01-6	Trichloroethene	0.2	< 0.2	U
127-18-4	Tetrachloroethene	0.2	< 0.2	U

Reported in µg/L (ppb)

#### Volatile Surrogate Recovery

d4-1,2-Dichloroethane	98.8号
d8-Toluene	99.4%
Bromofluorobenzene	94.6%



Volatiles by Purge & Trap GC/MS-Method SW8260C

Page 1 of 1

Sample ID: LC3-09/10

SAMPLE

Lab Sample ID: RL50E

LIMS ID: 10-22205 Matrix: Water

Data Release Authorized:

Instrument/Analyst: NT5/PKC

Date Analyzed: 09/13/10 18:42

Reported: 09/14/10

QC Report No: RL50-CDM, Inc. Project: Leathercare

56498-68247

Date Sampled: 09/01/10 Date Received: 09/01/10

Sample Amount: 10.0 mL 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	Ū
156-60-5	trans-1,2-Dichloroethene	0.2	< 0.2	U
156-59-2	cis-1,2-Dichloroethene	0.2	1.5	
79-01-6	Trichloroethene	0.2	0.8	
127-18-4	Tetrachloroethene	0.2	4.8	

Reported in µg/L (ppb)

#### Volatile Surrogate Recovery

d4-1,2-Dichloroethane	99.4%
d8-Toluene	98.4%
Bromofluorobenzene	94.0%

FORM I

#### ANALYTICAL RESOURCES INCORPORATED

#### VOA SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: RL50-CDM, Inc. Project: Leathercare

56498-68247

ARI ID	Client ID	PV	DCE	TOL	BFB	DCB	TOT OUT
MD 001310	Method Blank	10	95.4%	97.4%	97.3%	NA	0
MB-091310	Lab Control	10	92.4%	99.4%	103%	NA	Ö
LCS-091310		10	93.4%	98.2%	102%	NA	Õ
LCSD-091310	Lab Control Dup	10	102%	97.6%	95.8%	NA	Ö
RL50A	LC4R-09/10	10	1028	99.2%	95.1%	NA	Ö
RL50B	LC5R-09/10	10	99.2%	98.2%	97.2%	NA ·	ő
RL50C	LC2-09/10	10	98.8%	99.4%	94.6%	NA.	Ö
RL50D	LC6-09/10	10	99.4%	98.4%	94.0%	NA	0
RL50E	LC3-09/10		91.9%	98.0%	100%	NA	Ö
RL50EMS	LC3-09/10	10	91.96	97.7%	102%	NA	0
RL50EMSD	LC3-09/10	10	93.08	91.16	1023	IVA	U
		LCS	/MB LIM	ITS		QC LIMI	TS
SW8260C							
(DCE) = d4-1	,2-Dichloroethane		80-120			80-12	
(TOL) = d8-Te	oluene		80-120			80-12	0
, ,	ofluorobenzene		80-120		,	80-12	0
, <del></del> ,	,2-Dichlorobenzene		80-120			80-12	0

Prep Method: SW5030B Log Number Range: 10-22201 to 10-22205



Volatiles by Purge & Trap GC/MS-Method SW8260C

Page 1 of 1

Sample ID: LC3-09/10

MATRIX SPIKE

Lab Sample ID: RL50E

LIMS ID: 10-22205 Matrix: Water

Data Release Authorized:

Reported: 09/14/10

QC Report No: RL50-CDM, Inc.

Project: Leathercare

56498-68247

Date Sampled: 09/01/10

Date Received: 09/01/10

Instrument/Analyst MS: NT5/PKC

MSD: NT5/PKC

Date Analyzed MS: 09/13/10 20:05

MSD: 09/13/10 20:33

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 1,1-Dichloroethene trans-1,2-Dichloroethene cis-1,2-Dichloroethene Trichloroethene Tetrachloroethene	0.4 < 0.2 U < 0.2 U 1.5 0.8 4.8	11.2 8.8 8.9 10.2 9.9 14.0	10.0 10.0 10.0 10.0 10.0	108% 88.0% 89.0% 87.0% 91.0%	11.1 8.8 8.9 10.2 10.1 14.3	10.0 10.0 10.0 10.0 10.0	107% 88.0% 89.0% 87.0% 93.0% 95.0%	0.9% 0.0% 0.0% 0.0% 2.0% 2.1%

Reported in µg/L (ppb)

RPD calculated using sample concentrations per SW846.

FORM III



Volatiles by Purge & Trap GC/MS-Method SW8260C

Page 1 of 1

Sample ID: LC3-09/10

MATRIX SPIKE

Lab Sample ID: RL50E LIMS ID: 10-22205

Matrix: Water

Data Release Authorized:/

Instrument/Analyst: NT5/PKC

Date Analyzed: 09/13/10 20:05

Reported: 09/14/10

QC Report No: RL50-CDM, Inc.

Project: Leathercare

56498-68247

Date Sampled: 09/01/10 Date Received: 09/01/10

Sample 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	e:	€ 0.2		
79-01-6	Trichloroethene		0.2		
127-18-4	Tetrachloroethene		0.2		

Reported in µg/L (ppb)

#### Volatile Surrogate Recovery

***	
d4-1,2-Dichloroethane	91.9%
d4-1,2-Dichiordechane	21.26
	98.0%
d8-Toluene	20.08
5 £1	100%
Bromofluorobenzene	1009

FORM I



Volatiles by Purge & Trap GC/MS-Method SW8260C

Page 1 of 1

Sample ID: LC3-09/10

MATRIX SPIKE DUP

Lab Sample ID: RL50E

LIMS ID: 10-22205

Matrix: Water Data Release Authorized:/

Reported: 09/14/10

QC Report No: RL50-CDM, Inc.

Project: Leathercare

56498-68247

Date Sampled: 09/01/10

Date Received: 09/01/10

Instrument/Analyst: NT5/PKC

Date Analyzed: 09/13/10 20:33

Sample 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 µg/L (ppb)

#### Volatile Surrogate Recovery

d4-1,2-Dichloroethane	93.8%
d8-Toluene	97.7%
Bromofluorobenzene	102%



#### ORGANICS ANALYSIS DATA SHEET Volatiles by Purge & Trap GC/MS-Method SW8260C

Page 1 of 1

Sample ID: LCS-091310

LAB CONTROL SAMPLE

Lab Sample ID: LCS-091310

LIMS ID: 10-22201

Matrix: Water

Data Release Authorized:

Reported: 09/14/10

QC Report No: RL50-CDM, Inc. Project: Leathercare

56498-68247

Date Sampled: NA Date Received: NA

Sample Amount LCS: 10.0 mL

LCSD: 10.0 mL

Purge Volume LCS: 10.0 mL

LCSD: 10.0 mL

Instrument/Analyst LCS: NT5/PKC

LCSD: NT5/PKC

Date Analyzed LCS: 09/13/10 10:45

LCSD: 09/13/10 11:13

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Vinyl Chloride	10.7	10.0	107%	10.5	10.0	105%	1.9%
1,1-Dichloroethene	9.2	10.0	92.0%	8.9	10.0	89.0%	3.3%
trans-1,2-Dichloroethene	8.9	10.0	89.0%	8.8	10.0	88.0%	1.1%
cis-1,2-Dichloroethene	8.6	10.0	86.0%	8.5	10.0	85.0%	1.2%
Trichloroethene	9.1	10.0	91.0%	9.0	10.0	90.0%	1.1%
Tetrachloroethene	9.3	10.0	93.0%	9.0	10.0	90.0%	3.3%

Reported in µg/L (ppb)

RPD calculated using sample concentrations per SW846.

#### Volatile Surrogate Recovery

	LCS	LCSD
d4-1,2-Dichloroethane	92.4%	93.4%
d8-Toluene	99.4%	98.2%
Bromofluorobenzene	103%	102%

FORM III



Volatiles by Purge & Trap GC/MS-Method SW8260C

Page 1 of 1

Sample ID: MB-091310

METHOD BLANK

Lab Sample ID: MB-091310

LIMS ID: 10-22201

Matrix: Water Data Release Authorized: 18 Reported: 09/14/10

Instrument/Analyst: NT5/PKC

Date Analyzed: 09/13/10 11:41

QC Report No: RL50-CDM, Inc. Project: Leathercare

56498-68247

Date Sampled: NA Date Received: NA

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 µg/L (ppb)

#### Volatile Surrogate Recovery

d4-1,2-Dichloroethane	95.4%
d8-Toluene	97.4%
Bromofluorobenzene	97.3%



Contact Pam Morrill

Address: 11811 Northeast First Street

Suite 201

Bellevue, WA 98005

Page: Page 1 of 11

Lab Proj #: P1009053

Report Date: 09/21/10

Client Proj Name: Leathercare

Client Proj #: 56498-68247

#### **Laboratory Results**

Total pages in data package:

Lab Sample #	Client Sample ID
P1009053-01	LC4R-09/10
P1009053-02	LC5R-09/10
P1009053-03	LC6-09/10
P1009053-04	LC2-09/10
P1009053-05	LC3-09/10
P1009053-06	LC1-09/10
P1009053-07	GT3-09/10
P1009053-08	GT2-09/10
P1009053-09	GT1-09/10
P1009053-10	GT20-09/10

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

Approved By:	Dibbu Hallo	(HH)	Date:	9.21.10	
Proiect 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:

Contact: Pam Morrill

Address: 11811 Northeast First Street

Suite 201

Bellevue, WA 98005

Page: Page 2 of 11
Lab Proj #: P1009053
Report Date: 09/21/10
Client Proj Name: Leathercare

Sample Description LC4R-09/10	<u>Matrix</u> Water	<u>Lab Sample</u> P1009053-		Sampled Date/Time 01 Sep. 10 10:10	<u>Received</u> 03 Sep. 10 11:0	06
Analyte(s)	Result	PQL	Units	Method #	Analysis Date	Ву
RiskAnalysis N Ethane N Ethene N Methane	0.390 0.140 630.000	0.025 0.025 0.100	ug/L ug/L ug/L	AM20GAX AM20GAX AM20GAX	9/14/10 9/14/10 9/14/10	rw rw rw

Client Name: Camp Dresser & McKee Contact: Pam Morrill

Address: 11811 Northeast First Street

Suite 201

Bellevue, WA 98005

Page: Page 3 of 11

Lab Proj #: P1009053 Report Date: 09/21/10

Client Proj Name: Leathercare

Sample Description LC5R-09/10	<u>Matrix</u> Water	<u>Lab Sample #</u> P1009053-02	<del>-</del>	Sampled Date/Time 01 Sep. 10 11:25	<u>Received</u> 03 Sep. 10 11:0	)6
Analyte(s)	Result	PQL	Units	Method #	Analysis Date	Ву
RiskAnalysis N Ethane N Ethene N Methane	0.076 0.110 140.000	0.025 0.025 0.100	ug/L ug/L ug/L	AM20GAX AM20GAX AM20GAX	9/14/10 9/14/10 9/14/10	rw rw rw

Client Name: Camp Dresser & McKee Contact: Pam Morrill

Address: 11811 Northeast First Street

Suite 201

Bellevue, WA 98005

Page: Page 4 of 11 Lab Proj #: P1009053 Report Date: 09/21/10 Client Proj Name: Leathercare

Sample Description LC6-09/10	<u>Matrix</u> Water	Lab Sample P1009053-0	<del></del>	Sampled Date/Time 01 Sep. 10 14:00	<u>Received</u> 03 Sep. 10 11:6	06
Analyte(s)	Result	PQL	Units	Method #	Analysis Date	Ву
RiskAnalysis N Ethane N Ethene N Methane	0.220 0.034 710.000	0.025 0.025 0.100	ug/L ug/L ug/L	AM20GAX AM20GAX AM20GAX	9/14/10 9/14/10 9/14/10	rw rw

Client Name: Camp Dresser & McKee Contact: Pam Morrill

Address: 11811 Northeast First Street

Suite 201

Bellevue, WA 98005

Page: Page 5 of 11 Lab Proj #: P1009053 Report Date: 09/21/10

Client Proj Name: Leathercare

Sample Description LC2-09/10	<u>Matrix</u> Water	<u>Lab Sample</u> P1009053-0		Sampled Date/Time 01 Sep. 10 13:00	<u>Received</u> 03 Sep. 10 11:0	06
Analyte(s)	Result	PQL	Units	Method #	Analysis Date	Ву
RiskAnalysis N Ethane N Ethene N Methane	0.160 0.083 660.000	0.025 0.025 0.100	ug/L ug/L ug/L	AM20GAX AM20GAX AM20GAX	9/14/10 9/14/10 9/14/10	rw rw rw

Contact: Pam Morrill

Address: 11811 Northeast First Street

Suite 201

Bellevue, WA 98005

Page: Page 6 of 11 Lab Proj #: P1009053 Report Date: 09/21/10

Client Proj Name: Leathercare Client Proj #. 56498-68247

Sample Description LC3-09/10	<u>Matrix</u> Water	<u>Lab Sample</u> P1009053-		Sampled Date/Time 01 Sep. 10 14:45	<u>Received</u> 03 Sep. 10 11:0	06
Analyte(s)	Result	PQL	Units	Method #	Analysis Date	Ву
<u>RiskAnalysis</u> N Ethane	0.068	0.025	ug/L	AM20GAX	9/14/10	rw
N Ethene	0.029	0.025	ug/L	AM20GAX	9/14/10	rw ••••
N Methane	140.000	0.100	ug/L	AM20GAX	9/14/10	fW

Contact: Pam Morrill

Address: 11811 Northeast First Street

Suite 201

Bellevue, WA 98005

Page: Page 7 of 11 Lab Proj #: P1009053

Report Date: 09/21/10 Client Proj Name: Leathercare

Client	Proj#:	56498-68247

Sample Description LC1-09/10	<u>Matrix</u> Water	<u>Lab Sample</u> P1009053-		Sampled Date/Time 02 Sep. 10 8:30	<u>Received</u> 03 Sep. 10 11:	06
Analyte(s)	Result	PQL	Units	Method #	Analysis Date	Ву
RiskAnalysis N Ethane N Ethene N Methane	0.130 <0.025 210.000	0.025 0.025 0.100	ug/L ug/L ug/L	AM20GAX AM20GAX AM20GAX	9/16/10 9/16/10 9/16/10	si si si

Contact: Pam Morrill

Address: 11811 Northeast First Street

Suite 201

Bellevue, WA 98005

Page: Page 8 of 11 Lab Proj #: P1009053

Report Date: 09/21/10 Client Proj Name: Leathercare

Sample Description GT3-09/10	<u>Matrix</u> Water	<u>Lab Sample</u> P1009053-0		Sampled Date/Time         Re           02 Sep. 10         9:45         03 Sep		06
Analyte(s)	Result	PQL	Units	Method #	Analysis Date	Ву
RiskAnalysis	0.075	2.005	0	AMOOOAY	0/46/40	
N Ethane	0.075	0.025	ug/L	AM20GAX	9/16/10	si
N Ethene	0.120	0.025	ug/L	AM20GAX	9/16/10	si
N Methane	110.000	0.100	ug/L	AM20GAX	9/16/10	sl

Contact: Pam Morrill

Address: 11811 Northeast First Street

Suite 201

Believue, WA 98005

Page: Page 9 of 11
Lab Proj #: P1009053
Report Date: 09/21/10
Client Proj Name: Leathercare
Client Proj #: 56498-68247

Sample Description GT2-09/10	<u>Matrix</u> Water	<u>Lab Sample</u> P1009053-		Sampled Date/Time 02 Sep. 10 10:55	<u>Received</u> 03 Sep. 10 11:	06
Analyte(s)	Result	PQL	Units	Method #	Analysis Date	Ву
RiskAnalysis N Ethane N Ethene N Methane	0.240 0.470 310.000	0.025 0.025 0.100	ug/L ug/L ug/L	AM20GAX AM20GAX AM20GAX	9/16/10 9/16/10 9/16/10	rw rw rw

Contact: Pam Morrill

Address: 11811 Northeast First Street

Suite 201

Bellevue, WA 98005

Page: Page 10 of 11 Lab Proj #: P1009053

Report Date: 09/21/10

Client Proj Name: Leathercare Client Proj #: 56498-68247

Sample Description GT1-09/10	<u>Matrix</u> Water	<u>Lab Sample</u> P1009053-		Sampled Date/Time 02 Sep. 10 12:00	<u>Received</u> 03 Sep. 10 11:0	06
Analyte(s)	Result	PQL	Units	Method #	Analysis Date	Ву
RiskAnalysis N Ethane	0.760	0.025	ug/L	AM20GAX	9/16/10	rw
N Ethene	0.094	0.025	ug/L	AM20GAX	9/16/10	rw
N Methane	420.000	0.100	ug/L	AM20GAX	9/16/10	rw .

Contact: Pam Morrill

Address: 11811 Northeast First Street

Suite 201

Bellevue, WA 98005

Page: Page 11 of 11

Lab Proj #: P1009053 Report Date: 09/21/10

Client Proj Name: Leathercare

Sample Description GT20-09/10	<u>Matrix</u> Water	<u>Lab Sample</u> P1009053-		Sampled Date/Time 02 Sep. 10 13:05	<u>Received</u> 03 Sep. 10 11:0	06
Analyte(s)	Result	PQL	Units	Method #	Analysis Date	Ву
RiskAnalysis N Ethane N Ethene N Methane	0.074 0.150 130.000	0.025 0.025 0.100	ug/L ug/L ug/L	AM20GAX AM20GAX AM20GAX	9/16/10 9/16/10 9/16/10	rw rw rw



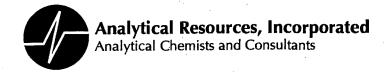
Microseeps Lab. Proj. #

# Proogos 5 CHAIN - OF CUSTODY RECORD

Microseeps COC cont.#

510

Phone: (412) 826-5245	Microseeps, inc	220 '	William	Pitt	Vay -	Pittsbi	irgh. P	A 152	38		Fax t	lo. : (412) 82	6-3 <b>43</b> 3	
Company: CDM						Para	meters F	eque	ted			Results to:	Pen M	on II
Co. Address : 14432 SE	Erstorte Wzy	Suite	100	<u>.</u>										
Phone #: 425-519-83	300 Fax#:			Lihmo	)									
Proj. Manager: Pan Marril	<u> </u>											***************************************		
Proj. Name/Number: Letter cue	156498-68247	7	12	mp du								nvoice to:	SZMP	
Sampler's signature : May Lon Fo	х		Cooler 7.	*********	VI I						-			
Sample ID Sample Des	Sample Type scription WaterVapor Solid	Date	tefeleteteteletetetetete	2								Ren	iarks :	
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LC5R-09/10				21	<b>'</b>							VIS Feart	····· /	
16-09/10			1400	2/1/										
162-09/10			1300	2 1										-
103-09/10		<u>u</u>	1445	Ø v										
LC1-09/10		9/2/10	0830	3 V		,•								·
673-09/19			0945	2 0										
GT2-09/10			1055	2 V	/									1 2
671-09/10			1250	2 V	'					·			1	-
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Mary London	ompany :	Date : 9/2/10.	Time :	Rece	ived b	y : \			Com	pany	/: /	7 (2/	ate :	Time:
Relinquished by:	ompany :	Date:	Time :	Rece	ived b	y:			Com	pany	<b>/</b> :		Date :	Time :
Relinquished by : C	ompany :	Date :	Time :	Rece	ived b	у:			Com	pany	/:		Date:	Time :



September 14, 2010

Pam Morrill CDM 14432 SE Eastgate Way, Suite 100 Bellevue, WA 98007

RE: Project ID: Leathercare, 56498-68247 ARI Job No: RL62

#### 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 September 2, 2010, under ARI job RL62. The trip blank was 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 RL62

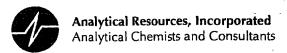
**Enclosures** 

#### Chain of Custody Record & Laboratory Analysis Request

	Turn-around I	Requested:	Sta		Page:	//	of	/ Wat 100	12712024 (1642)		Analytic	cal Resources, Incorporated cal Chemists and Consultants
ARI Client Company: CDM		42	5-519-	8300		1/2/10		ir Vec	State and the st		Tukwila	outh 134th Place, Suite 100 , WA 98168
Client Contact: Pen Morrill		•			No. of Coolers:		Cooler Temps				206-695	5-6200 206-695-6201 (fax)
Client Project Name: Lorther C	210				9	1		Analysis F	Requested			Notes/Comments
Client Project #: 56498 - 68247	Samplers:	mV=			VGA'S EPA 826CB							
Sample ID	Date	Time	Matrix	No. Containers	VIA'S	1/36						
LC1-09/10,	9/2/10	6830	Water	3	<b>√</b>							10-ml punce
673-09/10		0945	18	3	<b>√</b>						, `.	volume
GT2-09/10		1055		3	<b>V</b>							
GT1-19/10	,	1200		3	`\				·			·
6720-09/70	Y	1305		3	J	,						
Trip Blank	9/2/10		-	2		$\sqrt{}$						
	, ,			<u> </u>								
									·			
Comments/Special Instructions	Relinquished by:	PZ		Received by:	1./	110		Relinquished	by:	<u> </u>	Received by	
Vinyl chloride, I,I-DCE, brans 1,2-DCE, TCE, PCE	(Signary) Printed Mama	LOUF	Toy	(Signature) Printed Name:	Ser.	Mills	W)	(Signature) Printed Nam	e:		(Signature) Printed Nam	De:
1.2-DLE, TCE, PEL	Company:	DM		Company:	LI			Company:		· · · · · · · · · · · · · · · · · · ·	Company:	i i
·/-	Date & T/me: 9/2/	10 /4	135	Date & Time:	10	1439	5	Date & Time	•		Date & Time	):

Limits of Liability: ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the Invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or cosigned agreement between ARI and the Client.

Sample Retention Policy: All samples submitted to ARI will be appropriately discarded no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer, unless alternate retention schedules have been established by work-order or contract.



## **Cooler Receipt Form**

ARI Client: DM		Project Name: LeatherCo	ere		
COC No(s):	(NA)	Delivered by: Fed-Ex UPS Cour	ier Hand Deliv	ered Other:	
Assigned ARI Job No:		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				YES)	NO
Were custody papers properly filled			(	ŶES	NO
Temperature of Cooler(s) (°C) (re					
If cooler temperature is out of con			Temp Gun ID	#: 9084	11619
Cooler Accepted by:	100	Date: 9/2/10 Time	1440		
Coolei Accepted by.		and attach all shipping documents			
Log-In Phase:				٠.	
Was a temperature blank include	d in the cooler?			YES	NO
		Vet Ice Gel Packs Baggies Foam	Block Paper C	Other:	
Was sufficient ice used (if approp			NA	YES	(NO)
Were all bottles sealed in individu	ıal plastic bags?			YES	(VO)
Did all bottles arrive in good cond				(ES)	NO
				(YES)	NO
		ber of containers received?		YES	NO
				(ES)	NO
Were all bottles used correct for t				(YES)	NO
		eservation sheet, excluding VOCs)	(NA)	YES	NO
Were all VOC vials free of air but			NA	YES	NO
Was sufficient amount of sample			s.c.a.c.	8/2	NO
	<b>~</b>		NA <sup>c</sup>	Split by:	2119
Was Sample Split by ARI: N	A YES Date/Time:	Equipment:		Spiit by	
Samples Logged by:	Date	e: $\frac{9/2/10}{}$ Time:	17:20		
	** Notify Project Manage	er of discrepancies or concerns **			
		Sample ID on Rottle	Samo	le ID on CC	OC
Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Cump		
			<u> </u>		
Additional Notes, Discrepanci	es, & Resolutions:				
		•			
		•	,		
<del></del>	ate:				
Small Air Bubbles Peabub	1 - 1 - 1 - 1 - 1	Small → "sm"			
		Peabubbles → "pb"		<del></del>	
•		Large → "lg"			
		Headspace → "hs"			· <del></del>

Revision 014



Volatiles by Purge & Trap GC/MS-Method SW8260C

Page 1 of 1

Sample ID: LC1-09/10

SAMPLE

Lab Sample ID: RL62A LIMS ID: 10-22281

Matrix: Water

Data Release Authorized:

Instrument/Analyst: NT5/PKC Date Analyzed: 09/10/10 18:54

Reported: 09/14/10

QC Report No: RL62-CDM, Inc.

Project: Leathercare

56498-68247

Date Sampled: 09/02/10 Date Received: 09/02/10

Sample Amount: 10.0 mL 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	4.6	
79-01-6	Trichloroethene	0.2	1.7	
127-18-4	Tetrachloroethene	0.2	0.8	

Reported in µg/L (ppb)

#### Volatile Surrogate Recovery

d4-1,2-Dichloroethane	100%
d8-Toluene	96.6%
Bromofluorobenzene	96.7%

FORM I



Volatiles by Purge & Trap GC/MS-Method SW8260C

Page 1 of 1

Sample ID: GT3-09/10

SAMPLE

Lab Sample ID: RL62B LIMS ID: 10-22282

Matrix: Water

Data Release Authorized:/

Instrument/Analyst: NT5/PKC

Date Analyzed: 09/10/10 19:24

Reported: 09/14/10

QC Report No: RL62-CDM, Inc. Project: Leathercare

56498-68247

Date Sampled: 09/02/10 Date Received: 09/02/10

Sample Amount: 10.0 mL Purge Volume: 10.0 mL

CAS Number	Analyte	RL	Result Q
75-01-4	Vinyl Chloride	0.2	4.4
75-35-4	1,1-Dichloroethene	0.2	< 0.2 U
156-60-5	trans-1,2-Dichloroethene	0.2	2.1
156-59-2	cis-1,2-Dichloroethene	0.2	9.8
79-01-6	Trichloroethene	0.2	0.6
127-18-4	Tetrachloroethene	0.2	< 0.2 U

Reported in µg/L (ppb)

#### Volatile Surrogate Recovery

d4-1,2-Dichloroethane	97.8%
d8-Toluene	98.6%
Bromofluorobenzene	95.8%



Volatiles by Purge & Trap GC/MS-Method SW8260C

Page 1 of 1

Lab Sample ID: RL62C LIMS ID: 10-22283

Matrix: Water

Data Release Authorized:

Reported: 09/14/10

Instrument/Analyst: NT5/PKC Date Analyzed: 09/10/10 19:54 QC Report No: RL62-CDM, Inc.

Project: Leathercare

56498-68247

Sample ID: GT2-09/10

Date Sampled: 09/02/10 Date Received: 09/02/10

Sample Amount: 10.0 mL Purge Volume: 10.0 mL

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	0.2	5.8	
75-35-4	1,1-Dichloroethene	0.2	< 0.2	U
156-60-5	trans-1,2-Dichloroethene	0.2	2.1	*
156-59-2	cis-1,2-Dichloroethene	0.2	12	
79-01-6	Trichloroethene	0.2	0.5	
127-18-4	Tetrachloroethene	0.2	< 0.2	Ū

Reported in µg/L (ppb)

#### Volatile Surrogate Recovery

d4-1,2-Dichloroethane	101%
d8-Toluene	96.1%
Bromofluorobenzene	98.1%

FORM I



Volatiles by Purge & Trap GC/MS-Method SW8260C

Sample ID: GT1-09/10 Page 1 of 1 SAMPLE

Lab Sample ID: RL62D LIMS ID: 10-22284

Matrix: Water

Data Release Authorized:

Reported: 09/14/10 Instrument/Analyst: NT5/PKC

Date Analyzed: 09/10/10 20:24

QC Report No: RL62-CDM, Inc. Project: Leathercare

56498-68247

Date Sampled: 09/02/10 Date Received: 09/02/10

Sample Amount: 10.0 mL Purge Volume: 10.0 mL

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	0.2	1.0	
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	1.4	
79-01-6	Trichloroethene	0.2	0.4	
127-18-4	Tetrachloroethene	0.2	< 0.2	U

Reported in  $\mu g/L$  (ppb)

#### Volatile Surrogate Recovery

d4-1,2-Dichloroethane	101%
d8-Toluene	98.5%
Bromofluorobenzene	95.3%

FORM I



Volatiles by Purge & Trap GC/MS-Method SW8260C Sample ID: GT20-09/10 Page 1 of 1

Lab Sample ID: RL62E LIMS ID: 10-22285

Matrix: Water

Data Release Authorized: // Reported: 09/14/10

Instrument/Analyst: NT5/PKC

Date Analyzed: 09/10/10 20:54

QC Report No: RL62-CDM, Inc. Project: Leathercare

56498-68247

Date Sampled: 09/02/10 Date Received: 09/02/10

Sample Amount: 10.0 mL Purge Volume: 10.0 mL

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	0.2	4.4	
75-35-4	1,1-Dichloroethene	0.2	< 0.2	U
156-60-5	trans-1,2-Dichloroethene	0.2	2.2	
156-59-2	cis-1,2-Dichloroethene	0.2	9.6	
79-01-6	Trichloroethene	0.2	0.6	
127-18-4	Tetrachloroethene	0.2	< 0.2	U

Reported in µg/L (ppb)

#### Volatile Surrogate Recovery

d4-1,2-Dichloroethane	99.4%
d8-Toluene	99.5%
Bromofluorobenzene	95.9%

## ANALYTICAL RESOURCES INCORPORATED

#### VOA SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: RL62-CDM, Inc. Project: Leathercare 56498-68247

ARI ID	Client ID	PV	DCE	TOL	BFB	DCB	TOT OUT
MB-091010	Method Blank	. 10	96.0%	98.5%	96.3%	NA	0
LCS-091010	Lab Control	10	102%	98.8%	102%	NA	Ö
LCSD-091010	Lab Control Dup	10	97.4%	98.6%	102%	NA	Ö
RL62A	LC1-09/10	10	100%	96.6%	96.7%	NA	ő
RL62A RL62B	GT3-09/10	10	97.B%	98.6%	95.B%	NA	Ö
RL62C	GT2-09/10	10	101%	96.1%	98.1%	NA	Ö
RL62D	GT1-09/10	10	101%	98.5%	95.3%	NΑ	0
RL62E	GT20-09/10	10	99.4%	99.5%	95.9%	NA	0
		LCS	/MB LIM	ITS		QC LIMI	TS
SW8260C							
	,2-Dichloroethane	80-120		80-120		.0	
(TOL) = d8-Te	•		80-120			80-12	0
(/	ofluorobenzene		80-120			80-12	.0
· ·	,2-Dichlorobenzene		80-120			80-12	0

Prep Method: SW5030B Log Number Range: 10-22281 to 10-22285



Volatiles by Purge & Trap GC/MS-Method SW8260C

Page 1 of 1

Sample ID: LCS-091010

LAB CONTROL SAMPLE

Lab Sample ID: LCS-091010

LIMS ID: 10-22281

Matrix: Water
Data Release Authorized:

Reported: 09/14/10

QC Report No: RL62-CDM, Inc.

Project: Leathercare

56498-68247

Date Sampled: NA Date Received: NA

Instrument/Analyst LCS: NT5/PKC

LCSD: NT5/PKC

Date Analyzed LCS: 09/10/10 10:35

LCSD: 09/10/10 11:03

Sample Amount LCS: 10.0 mL

LCSD: 10.0 mL

Purge Volume LCS: 10.0 mL

LCSD: 10.0 mL

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Vinyl Chloride	11.8	10.0	118%	11.1	10.0	111%	6.1%
1,1-Dichloroethene	10.1	10.0	101%	9.6	10.0	96.0%	5.1%
trans-1,2-Dichloroethene	10.0	10.0	100%	9.5	10.0	95.0%	5.1%
cis-1,2-Dichloroethene	9.6	10.0	96.0%	9.3	10.0	93.0%	3.2%
Trichloroethene	9.4	10.0	94.0%	9.3	10.0	93.0%	1.1%
Tetrachloroethene	9.4	10.0	94.0%	9.2	10.0	92.0%	2.2%

Reported in µg/L (ppb)

RPD calculated using sample concentrations per SW846.

#### Volatile Surrogate Recovery

•	LCS	LCSD
d4-1,2-Dichloroethane	102%	97.4%
d8-Toluene	98.8%	98.6%
Bromofluorobenzene	102%	102%

FORM III



Volatiles by Purge & Trap GC/MS-Method SW8260C

Sample ID: MB-091010 METHOD BLANK Page 1 of 1

Lab Sample ID: MB-091010 LIMS ID: 10-22281

Matrix: Water Data Release Authorized: Reported: 09/14/10

Instrument/Analyst: NT5/PKC

Date Analyzed: 09/10/10 11:31

Project: Leathercare 56498-68247 Date Sampled: NA Date Received: NA

Sample Amount: 10.0 mL Purge Volume: 10.0 mL

QC Report No: RL62-CDM, Inc.

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 µg/L (ppb)

#### Volatile Surrogate Recovery

d4-1,2-Dichloroethane	96.0%
d8-Toluene	98.5%
Bromofluorobenzene	96.3%

FORM I

