

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

July 6, 2009

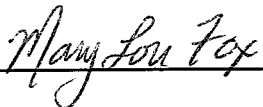
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**MARCH 2009 GROUNDWATER MONITORING
LEATHERCARE INC
901/921 ELLIOTT AVENUE W
SEATTLE, WASHINGTON
VCP #NW1805**

July 6, 2009



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CDM Project No. 56498-68247

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Section 1

Introduction

1.1 General

This report presents the results of the eleventh round (March 2009) of ongoing groundwater monitoring for the LeatherCare, Inc. site located at 901 & 921 Elliott Avenue West in Seattle, Washington (**Figure 1**). Camp Dresser & McKee Inc. (CDM) is conducting this work on behalf of LeatherCare, Inc. (LeatherCare) in accordance with the Master Environmental Services Agreement dated March 18, 2007 between LeatherCare and CDM, and CDM's proposal dated September 12, 2008. Site work is being conducted under the Washington State Department of Ecology's (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, an adjacent parcel to the northwest (also owned by Mr. Ritt), West Roy Street to the southwest, and the Darigold property (formerly referred to as WestFarm Foods) north and central parking lots. (CDM, 2006) The Darigold property is currently owned by Elliott Holding Company, Inc. (Elliott Holding) and is undergoing redevelopment. 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 Darigold property (prior to current ongoing redevelopment activities), collectively referred to as the "Investigation Area".

PCE and/or its degradation products were identified in groundwater in areas of the Subject Property, but at relatively low concentrations. The contaminant profile across the Subject Property was found to be indicative of small, incidental releases that may have occurred at several locations. PCE concentrations are not high enough to be indicative of the presence of free phase product.

Low concentrations of chlorinated VOCs (cVOCs), in particular, vinyl chloride, which is the last degradation product of PCE prior to degradation into nontoxic compounds, also occurred in groundwater at the former north parking lot area of the Darigold property where there was also petroleum hydrocarbon contaminated soil and groundwater that originated on the Darigold property.

In March 2009 CDM completed an offsite investigation to delineate the westerly bounds of the cVOC plume. Three monitoring wells were installed on the Burlington Northern Santa Fe (BNSF) Railroad-owned property to the west (**Figure 2**). None of

the cVOC contaminants of concern were detected in groundwater sampled from these three wells, effectively determining the cVOC plume limits.

CDM's investigations indicate that biological degradation processes are actively occurring to reduce cVOC concentrations, as based on field monitoring and chemical and biological testing data conducted in soil and groundwater, along with historical groundwater chemical data collected throughout the Investigation Area.

Elliott Holding began redevelopment of the Darigold property in 2007. According to a Cleanup Action Plan completed by ENTRIX, Inc., the planned development includes two 4-story commercial buildings, a plaza, and an underground parking structure beneath the entire complex. The parking level foundation will be as much as 20 feet below existing grade. A subsurface impermeable cutoff pile wall has been installed to enable construction of the below ground parking structure. At the time of CDM's March 2009 groundwater monitoring round, construction continued to occur on Elliott Holding's property.

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 confirm natural attenuation 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 this sampling event consisted of the following:

- Conducted a complete round of water level measurements for all existing monitoring wells throughout the Subject Property.
- Purged each of the groundwater monitoring wells 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.

In February ENTRIX replaced monitoring wells LC4 and LC5, which had been destroyed during earlier stages of the construction activities. CDM oversaw the monitoring well installation.

Section 2

Field Investigation Methods

2.1 Monitoring Well Installation

On February 24 and 25, 2009, Cascade Drilling of Woodinville, Washington, under contract to ENTRIX, drilled and installed the replacement wells for LC4 and LC5 using hollow-stem auger (HSA) drilling methods. These replacement wells have been designated LC4R and LC5R and their original and current locations are shown on Figures 2 and 3. A CDM geologist oversaw all drilling and well installation activities.

Each boring was drilled to 14 feet below ground surface. A 2-inch diameter 13 foot deep monitoring well was installed in each borehole. The bottom 10 feet of each monitoring well was completed with Schedule 40, 0.10 inch factory slotted PVC screen and #2/12 silica sand pack. The upper two feet of each monitoring well was completed with a bentonite chip seal and a traffic rated monument set in concrete. Well construction details and boring logs are provided in Appendix A.

ENTRIX developed LC-4R and LC-5R on February 26, 2009. A submersible pump was used to surge the well and evacuate the water. Thirty gallons were purged from LC-4R and 30 gallons were purged from LC-5R (Shatt, 2009).

ENTRIX had Apex Engineering survey the locations and elevations of LC4R and LC5R. Apex Engineering conducted the original survey work for the LeatherCare monitoring wells.

2.2 Groundwater Sampling

Groundwater monitoring was conducted on March 25 and 26, 2009. Monitored wells included GT1 through GT3, LC1 through LC3, LC4R, LC5R, and LC6. This section describes the field and analytical methods employed.

2.2.1 Water Levels

Water levels were measured in all monitoring wells throughout the Subject Property between 0759 am and 1125 am on March 25, 2009. Water levels were measured using a SINCO electronic sounder.

2.2.2 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 2.2.3.

2.2.3 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 20-milliliter purge volume for groundwater in order to reach detection limits of 0.2 micrograms per liter [$\mu\text{g/L}$]). Specifically, the analytes included PCE, trichloroethene (TCE), *cis*-1,2-dichloroethene (*c*-1,2-DCE), *trans*-1,2-dichloroethene (*t*-1,2-DCE), 1,1-dichloroethene (1,1-DCE), and vinyl chloride (VC).

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

Section 3

Findings and Discussion

3.1 Drilling Observations

Groundwater was encountered at approximately 3 feet below ground surface (ft bgs) in both borings. Similar to previous conditions encountered during drilling, the site appears to be underlain by approximately 14 ft of fill followed by tideflat sediments. Fill materials consist of varying mixtures of gravel, sand, silt and clay. In LC5R sandy gravel was encountered to a depth of 8 ft bgs, followed by layers of silt, clay and silty sand, and at approximately 12 ft bgs, heaving sands were encountered. At LC4R the first 8 feet was predominantly sand with some gravel, followed by clay and sandy clay to 9 ft bgs, and then silty sand which extended to approximately 14 ft bgs where the original tideflat appeared to have been encountered. No apparent contamination was observed at either boring.

3.2 Water Levels

Depths to water and water table elevations are summarized on Table 1. Water levels ranged between 0.84 and 4.89 feet below the top of the well casings (the well casings start approximately 3 to 6 inches below ground surface), which correspond to the water table elevations ranging from 11.25 to 12.16 feet. Water levels declined in all wells, differing by between 0.04 and 0.28 feet between the December 2008 and March 2009 sampling rounds. This is expected during the transition from winter to spring.

Figure 3 shows the potentiometric surface on March 25, 2009, which indicates a northwesterly gradient. Whereas previously the water table in W. Roy Street was very flat, the current data indicates that the groundwater flow direction is towards the northwest, consistent with the rest of the site.

3.3 Field Monitored Parameters

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

Temperature: Groundwater temperatures varied between 9.0 and 16.5 degrees Celsius (°C). As expected, groundwater temperatures are generally higher following the winter lows.

Dissolved Oxygen: DO concentrations ranged from approximately 0.10 to 0.71 milligrams per liter (mg/L). DO concentrations less than 0.5 mg/L are indicative of anoxic conditions, which may be conducive for reductive dechlorination. Overall, the DO values were among the lowest concentrations observed. DO values for all wells except LC3, were less than 0.5 mg/L, with the value for LC3 exceeding 0.5 mg/L only slightly at 0.71 mg/L.

Oxidation-Reduction Potential: The ORP probe was malfunctioning and no usable data was generated.

Specific Conductance: The conductivity probe was malfunctioning during the purging of wells LC4R, LC5R, and LC6. A check of a calibration standard confirmed that the meter was reading a low value, outside the range of acceptance. A separate conductivity meter was used for the remaining wells and the conductivity values for these wells were consistent with previous sampling rounds.

pH: The pH values ranged between approximately 6.92 and 7.26 standard units (SU) for all wells, which are consistent with previous rounds.

Ferrous Iron: Ferrous iron was analyzed in two wells, GT2 and LC3. Both values were low at 0.4 and 0.2 mg/L, respectively. VC is biodegradable by iron reducing bacteria and the presence of ferrous iron is a sign of the presence of iron reducing bacteria.

Turbidity: Turbidity values were less than 10 nephelometric turbidity units (NTU) for all of the wells. GT3 contained orange or brown biofloc as it has in the past and small amounts of biofloc were noted initially in LC3 and LC6 at the beginning of purging.

3.4 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.

3.4.1 PCE

PCE was detected in three of the seven groundwater samples and ranged from 0.4 to 6.0 µg/L when detected. The detections of 6.0 µg/L in the LC1 sample and 5.6 µg/L in the LC3 sample exceeded the Method A cleanup level of 5 µg/L. These concentrations are consistent with previous rounds. The concentration of PCE in sample LC4R at 0.4 µg/L is significantly lower than in LC4 prior to its destruction; previously, PCE concentrations in LC4 ranged as high as 25 µg/L.

3.4.2 TCE

TCE was detected in all groundwater samples, except GT1. Concentrations ranged between 0.2 and 3.9 µg/L. All detected concentrations were below the MTCA Method A cleanup level of 5 µg/L.

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

Of these degradation products of PCE, *c*-1,2-DCE was detected in all nine groundwater samples, *t*-1,2-DCE in two samples, and 1,1-DCE was not detected in any sample. Concentrations ranged between 0.2 and 8.4 µg/L when detected. The

concentrations of *c*-1,2-DCE and *t*-1,2-DCE did not exceed their Method B cleanup levels (80 and 160 µg/L, respectively) in any samples.

3.4.4 Vinyl Chloride

Vinyl chloride was detected in seven of the nine groundwater samples ranging between 0.3 and 9.2 µg/L when detected. VC continues to be below detection limits in the most downgradient well on the GTP parcel (GT1), even with the site's highest VC concentration being observed at the next upgradient well (GT2), only 110 feet away. The VC concentrations in the newly installed wells, LC4R and LC5R, at 1.3 and 1.6 µg/L, respectively, are consistent with earlier concentrations in LC4 and LC5.

3.4.5 Dissolved Gasses

Methane was detected in every groundwater sample, ranging between 34 µg/L and 390 µg/L. The presence of methane is indicative of methanogenesis—a favorable condition for reductive dechlorination. Ethene, the end product of the reductive dechlorination of PCE, was detected in five of the groundwater samples at concentrations ranging between 0.035 µg/L and 0.51 µg/L. Ethane was detected in all nine of the groundwater samples at concentrations ranging between 0.032 µg/L and 0.240 µg/L.

Ethene concentrations remain the highest at GT2 where the VC concentrations are the highest, indicating complete natural breakdown of PCE to nontoxic compounds and elements. The second highest ethene concentration is at LC5R, which had the second highest vinyl chloride concentration.

3.5 cVOC Trends

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

Decreasing trends are noted for VC concentrations at all of the wells and probability values for the decreasing trends at all of the wells continue to improve. The probability values for a decreasing trend for VC at GT2, LC1, LC2, LC3, and LC6 remain significant (i.e. $p \leq 0.1$).

The Mann-Kendall is losing relevancy for PCE and TCE due to overall low concentrations and lack of detections. In nearly 3 years of monitoring, the cleanup level for PCE has never been exceeded at GT1, GT2, GT3, LC5/LC5R or LC6 and there is no reason to expect this will change. LC2 also has over 2 years of data where PCE concentrations have not exceeded the cleanup level. At LC1 and LC3 where PCE is consistently detected and sometimes exceeds the cleanup level, increasing trends are noted. However, the average PCE concentration at LC1 is 4.5 µg/L and at LC3, it is 4.4 µg/L, both below the Method A cleanup level. The PCE concentration at

LC4/LC4R declined substantially between December 2007 and March 2009 and is now below the cleanup level.

Similar to PCE, in nearly 3 years of monitoring, TCE has never exceeded its cleanup level at GT1, GT2, and LC2 through LC6 and there is no reason to expect this will change. Similarly, GT3 also has over 2 years of data where TCE concentrations have not exceeded the cleanup level. While an increasing trend for TCE is indicated at LC1, the average concentration is 4.6 µg/L, below the Method A cleanup level.

Section 4

Conclusions and Recommendations

VC concentrations continue to show decreasing trends. Of the nine wells on the subject property, PCE concentrations in two wells and TCE concentrations in one of the same two wells continue to fluctuate around their respective cleanup levels; however, the average PCE and TCE concentrations in these wells are below their respective Method A cleanup levels. The PCE concentration detected in LC4R was significantly lower than the PCE concentration in LC4 prior to its destruction - and is now below the Method A cleanup level. Given the low concentrations and continuing groundwater data that favor natural attenuation, PCE will continue to degrade and the VC plume will continue to collapse.

Based on these findings, CDM continues to recommend implementation of a program of regular groundwater sampling to ensure that monitored natural attenuation is a viable remedial approach for this site.

Section 5

References

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

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

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Distribution

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Tables

Table 1
Groundwater Elevation Data
 LeatherCare, Inc.
 Seattle, Washington

Monitoring Well I.D.	Date Measured	Time (hours)	Top of Casing Elevation ^a (feet)	Depth to Groundwater (ft below TOC)	Groundwater Elevation (feet)
GT1	05/10/06	0912	12.74	1.84	10.90
	09/05/06	0955		2.46	10.28
	02/12/07	0918		1.69	11.05
	06/20/07	0857		2.13	10.61
	09/19/07	0904		2.46	10.28
	12/19/07	0940		1.20	11.54
	03/19/08	0908		1.80	10.94
	06/18/08	0825		1.95	10.79
	09/24/08	1005		2.22	10.52
	12/29/08	0758		1.49	11.25
	02/11/09	--		--	--
	03/25/09	0837		1.58	11.16
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
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	0918		1.64	11.72
	03/19/08	0914		2.12	11.24
	06/18/08	0820		2.21	11.15
	09/24/08	1020		2.54	10.82
	12/29/08	0804		1.80	11.56
	02/11/09	--		--	--
	03/25/09	0820		1.87	11.49
LC1	05/10/06	0916	13.17	1.57	11.60
	09/05/06	1010		2.43	10.74
	02/12/07	0941		1.40	11.77
	06/20/07	0844		1.99	11.18
	09/19/07	0904		2.46	10.71
	12/19/07	0954		1.01	12.16
	03/19/08	0857		1.54	11.63
	06/18/08	0836		1.55	11.62
	09/24/08	1034		1.89	11.28
	12/29/08	0809		1.20	11.97
	02/11/09	--		--	--
	03/25/09	0811		1.28	11.89
LC2	05/10/06	0919	13.41	2.01	11.40
	09/05/06	1012		2.74	10.67
	02/12/07	0943		1.80	11.61
	06/20/07			2.35	11.06
	09/19/07	0901		2.75	10.66
	12/19/07	0948		1.23	12.18
	03/19/08	0859		1.90	11.51
	06/18/08	0832		2.05	11.36
	09/24/08	1030		2.30	11.11
	12/29/08	0812		1.59	11.82
	02/11/09	--		--	--
	03/25/09	0807		1.87	11.54

Table 1
Groundwater Elevation Data
 LeatherCare, Inc.
 Seattle, Washington

Monitoring Well I.D.	Date Measured	Time (hours)	Top of Casing Elevation ^a (feet)	Depth to Groundwater (ft below TOC)	Groundwater Elevation (feet)
LC3	05/10/06	0925	14.16	2.56	11.60
	09/05/06	1014		3.41	10.75
	02/12/07			2.37	11.79
	06/20/07	0837		2.98	11.18
	09/19/07	0853		3.48	10.68
	12/19/07	0906		1.99	12.17
	03/19/08	0847		2.55	11.61
	06/18/08	0839		2.58	11.58
	09/24/08	1038		2.84	11.32
	12/29/08	0815		2.21	11.95
	02/11/09	--		--	--
	03/25/09	0802		2.28	11.88
LC4	05/10/06	0921	14.72	3.16	11.56
	09/05/06	1026		3.99	10.73
	02/12/07			2.93	11.79
	06/20/07	0832		3.59	11.13
	09/19/07	0845		4.09	10.63
	12/19/07	0856		2.48	12.24
	03/19/08 ^b	--		--	--
	12/29/08	--		--	--
	02/11/09	--		--	--
LC4R	03/25/09	0957	14.96	3.03	11.93
LC5	05/10/06	0922	14.13	2.57	11.56
	09/05/06	1030		3.46	10.67
	02/12/07			2.37	11.76
	06/20/07	0834		2.97	11.16
	09/19/07	0858		3.48	10.65
	12/19/07	0901		1.89	12.24
	03/19/08	1114		2.49	11.64
	06/18/08 ^b	--		--	--
	12/29/08	--		--	--
	02/11/09	--		--	--
LC5R	03/25/09	1125	14.62	2.46	12.16
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
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.
- c) Needs new survey.
- 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

Analyte	Date Sampled	Method A Cleanup Levels ^a	Monitoring Well I.D. ^b												Field Blank	Trip Blank
			GT1	GT2	GT3	LC1	LC2	LC3	LC4 /LC4R	LC5 /LC5R	LC6	LC7	LC8	LC9		
Field-Measured Parameters																
pH	05/06	N/A	7.23	7.03	7.10	7.05	7.43	8.95	7.18	6.95	6.99	--	--	--	--	--
	09/06		7.33	7.19	7.13	7.19	7.26	7.07	7.03	7.05	7.07	--	--	--	--	--
	02/07		6.77	6.64	6.57	6.48	6.42	6.82	6.06	6.43	6.70	--	--	--	--	--
	06/07		7.15	7.01	6.95	6.99	7.23	7.00	6.97	6.91	6.90	--	--	--	--	--
	09/07		7.11	7.00	6.88	7.00	7.16	6.92	8.83	6.88	6.91	--	--	--	--	--
	12/07		7.47	7.42	7.30	6.50	7.36	7.45	6.42	6.59	7.02	--	--	--	--	--
	03/08		7.75	7.77	7.51	7.87	8.04	8.36	--	8.42	8.19	--	--	--	--	--
	06/08		7.23	6.89	8.97	**	8.96	8.70	--	--	6.96	--	--	--	--	--
	09/08		**	8.59	6.55	6.62	6.72	6.58	--	--	6.66	--	--	--	--	--
	12/08		7.06	6.75	6.79	6.98	7.54	6.82	--	--	6.95	--	--	--	--	--
	02/09		--	--	--	--	--	--	--	--	--	**	**	**	--	--
	03/09		7.26	6.96	6.92	7.07	7.13	6.99	6.96	6.97	7.07	--	--	--	--	--
	ORP ^d (mV)		05/06	N/A	-33	-27	-56	-72	-152	-33	-50	-82	-50	--	--	--
09/06		-119	-97		-88	-113	-90	-71	-50	-107	-78	--	--	--	--	--
02/07		-33	-2		17	-60	-32	56	80	-30	31	--	--	--	--	--
06/07		-211	-171		-38	-81	-162	-183	-116	-214	-111	--	--	--	--	--
09/07		-96	-95		-71	-125	-132	-83	-75	-126	-95	--	--	--	--	--
12/07		**	**		**	**	**	**	**	**	**	--	--	--	--	--
03/08		-54	-27		10	-28	-30	-59	--	-107	-43	--	--	--	--	--
06/08		-57	-49		142	**	112	-17	--	--	-17	--	--	--	--	--
09/08		--	--		--	--	--	--	--	--	--	--	--	--	--	--
12/08		-52	-18		43	-22	40	-44	--	--	0.7	--	--	--	--	--
02/09		--	--		--	--	--	--	--	--	--	--	--	--	--	--
03/09		**	**		**	**	**	**	**	**	**	--	--	--	--	--
Temperature (°C)		05/06	N/A		16.0	16.2	15.1	18.3	18.2	15.9	14.1	13.8	14.2	--	--	--
	09/06	20.0		21.3	20.8	23.1	22.6	22.8	22.2	22.5	20.6	--	--	--	--	--
	02/07	13.6		9.3	10.0	16.8	16.2	11.4	9.7	10.0	11.8	--	--	--	--	--
	06/07	17.8		20.2	18.7	20.7	20.0	19.3	18.8	18.0	17.8	--	--	--	--	--
	09/07	19.3		19.4	19.2	22.3	21.7	22.2	20.2	20.4	20.0	--	--	--	--	--
	12/07	11.9		8.8	9.3	17.3	15.5	11.6	12.3	11.4	12.6	--	--	--	--	--
	03/08	13.0		10.3	9.5	15.9	16.3	11.8	--	11.3	12.4	--	--	--	--	--
	06/08	18.1		17.0	17.2	18.3	19.8	16.4	--	--	16.3	--	--	--	--	--
	09/08	18.7		17.9	17.8	22.1	21.8	19.6	--	--	17.6	--	--	--	--	--
	12/08	11.2		7.6	6.9	14.6	15.0	9.8	--	--	11.5	--	--	--	--	--
	02/09	--		--	--	--	--	--	--	--	--	13.0	11.0	9.7	--	--
	03/09	13.0		9.0	9.0	14.6	16.5	10.9	8.7	9.0	10.5	--	--	--	--	--
	Specific Conductivity (µS/cm)	05/06		N/A	1,243	1,283	1,264	1,190	1,183	1,345	1,360	1,322	1,281	--	--	--
09/06		811	856		884	888	736	870	853	856	856	--	--	--	--	--
02/07		831	971		915	951	519	1,020	496	795	948	--	--	--	--	--
06/07		788	813		833	836	676	820	808	804	842	--	--	--	--	--
09/07		808	844		879	873	622	841	737	824	828	--	--	--	--	--
12/07		732	706		829	1,017	181	778	553	543	920	--	--	--	--	--
03/08		637	915		926	928	518	902	--	114	970	--	--	--	--	--
06/08		998	1,701		1,471	1,561	1,490	1,493	--	--	1,363	--	--	--	--	--
09/08		774	1,236		798	1,318	963	1,289	--	--	1,353	--	--	--	--	--
12/08		**	**		**	**	671	**	--	--	**	--	--	--	--	--
02/09		--	--		--	--	--	--	--	--	--	836	1,090	1,828	--	--
03/09		587	861		824	864	648	825	**	**	**	--	--	--	--	--

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

LeatherCare, Inc.
 Seattle, Washington

Analyte	Date Sampled	Method A Cleanup Levels ^a	Monitoring Well I.D. ^b												Field Blank	Trip Blank
			GT1	GT2	GT3	LC1	LC2	LC3	LC4 /LC4R	LC5 /LC5R	LC6	LC7	LC8	LC9		
Dissolved Oxygen (mg/L)	05/06	N/A	0.70	0.34	0.70	0.24	0.40	0.42	0.43	0.33	0.39	--	--	--	--	--
	09/06		0.15	0.17	0.14	0.20	0.35	0.23	0.19	0.09	0.09	--	--	--	--	--
	02/07		0.31 ^g	0.13 ^g	-- ^g	-- ^g	-- ^g	1.18 ^g	1.14 ^g	0.14 ^g	0.28 ^g	--	--	--	--	--
	08/07		0.19	0.22	0.24	0.34	0.91	0.35	0.47	0.39	1.13	--	--	--	--	--
	09/07		0.41	0.34	0.27	0.24	0.25	0.58	0.78	0.55	0.58	--	--	--	--	--
	12/07		0.33	0.47	0.17	0.72	3.05	1.44	1.00	0.29	0.28	--	--	--	--	--
	03/08		0.34	0.34	1.28	0.31	1.12	0.44	--	0.37	0.34	--	--	--	--	--
	06/08		0.20	1.09	0.71	0.29	0.35	0.71	--	--	0.28	--	--	--	--	--
	09/08		1.32	1.12	1.08	0.08	0.84	1.36	--	--	1.34	--	--	--	--	--
	12/08		0.90	2.11	2.17	0.61	2.47	1.80	--	--	0.87	--	--	--	--	--
	02/09		--	--	--	--	--	--	--	--	--	4.74	4.73	8.05	--	--
	03/09		0.19	0.13	0.42	0.10	0.11	0.71	0.25	0.33	0.17	--	--	--	--	--
Turbidity (NTU)	05/06	N/A	1.76	0.83	0.66	5.76	82 ^o	1.05	1.79	2.82	2.01	--	--	--	--	--
	09/06		--	0.47	0.70	0.7	--	5.5	2.4	1.8	--	--	--	--	--	--
	02/07		3.1 ^h	0.0 ^h	>999 ^h	0.0 ^h	0.0 ^h	22.4 ^h	0.0 ^h	16.3 ^h	26 ^h	--	--	--	--	--
	06/07		0.7	1.1	2.2	0.9	1.9	2.6	1.8	0.2	3.8	--	--	--	--	--
	09/07	N/A	0.9	0.9	1.6	--	0.5	2.3	6.5	0.14	3.8	--	--	--	--	--
	12/07		--	--	--	--	--	--	--	--	--	--	--	--	--	--
	03/08		16.9	8.8	168 ^k	2.3	0.7	20.9	--	9.6	4.4	--	--	--	--	--
	06/08		0.7	1.8	34.5/227 ^k	0.5	0.0 ^m	1.1	--	--	-- ^m	--	--	--	--	--
	09/08		54.8 ^h	53.2 ^h	187 ^h	18.2 ^h	48.2 ^h	179 ^h	--	--	-- ^h	--	--	--	--	--
	12/08		2.90	39.8 ^k	10.29 ^k	0.0 ^m	0.0 ^m	-- ^m	--	--	--	--	--	--	--	--
	02/09		--	--	--	--	--	--	--	--	--	7.40	5.69	7.90	--	--
	03/09		0.0	0.0	0.0	0.0	0.0	0.2	9.3	1.5	0.0	--	--	--	--	--
Ferrous Iron (ppm)	05/06	N/A	0.1	0.2	0.2	0.5	0.3	0.3	0.2	1	0.5	--	--	--	--	--
	09/06		0.3	0.2	0.6	--	0.1	0.6	0.4	1	1	--	--	--	--	--
	02/07		0.4	0.6	0.3	0.6	--	0.2	0.1	1	0.4	--	--	--	--	--
	06/07		0.3	0.4	0.2	0.5	0	0.2	0.6	0.1	0.3	--	--	--	--	--
	09/07		0.2	0.3	0.2	0.4	0.2	0.4	0.6	0.8	0.8	--	--	--	--	--
	12/07		0.1	0	0	0.8	0	0.2	0.1	0.8	0.3	--	--	--	--	--
	03/08		0.3	0.8	0.4	0.4	0.1	0.4	--	0.8	0.4	--	--	--	--	--
	06/08		0.2	1	0	0.6	0	1	--	--	0.8	--	--	--	--	--
	09/08		--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/08		0.2	0.3	0.1	0.4	0	1	--	--	0.3	--	--	--	--	--
	02/09		--	--	--	--	--	--	--	--	--	--	--	--	--	--
	03/09		--	0.4	--	--	--	0.2	--	--	--	--	--	--	--	--
Manganese (ppm)	06/07	N/A	0	0	0	0	0	0	0	0	0	--	--	--	--	--
Sulfide (ppm)	06/07	N/A	0	0	0	0	0	0	0	0	0	--	--	--	--	--
General Groundwater Chemistry																
Chloride (EPA Method 325.2) (mg/L)	05/06	N/A	7.4	7.9	16.5	20.5	8.8	18.1	6.8/6.7	14.0	17.5	--	--	--	--	--
Sulfate (EPA Method 375.2) (mg/L)	05/06	N/A	62.3	64.4	77.8	88.9	52.7	69.7	39.3/39.5	39.5	54.2	--	--	--	--	--
Chemical Oxygen Demand (EPA Method 410.4) (mg/L)	05/06	N/A	6.18	5.68	9.29	12.8	12.4	7.71	10.1/6.87	10.1	12.8	--	--	--	--	--
Alkalinity (SM 2320) (mg/L CaCO3)	05/06	N/A	338	406	358	388	309	398	233/233	372	401	--	--	--	--	--
Carbonate (SM 2320) (mg/L CaCO3)	05/06	N/A	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0/<1.0	<1.0	<1.0	--	--	--	--	--
Bicarbonate (SM 2320) (mg/L CaCO3)	05/06	N/A	336	406	358	368	309	398	233/233	372	401	--	--	--	--	--
Hydroxide (SM 2320) (mg/L CaCO3)	05/06	N/A	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0/<1.0	<1.0	<1.0	--	--	--	--	--
<i>Dehalococcoides spp.</i> (QCPR) ^a	05/06	N/A	-	+	+	+	-	+	-/-	+	+	--	--	--	--	--

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

Analyte	Date Sampled	Method A Cleanup Levels ^a	Monitoring Well I.D. ^b													Field Blank	Trip Blank
			GT1	GT2	GT3	LC1	LC2	LC3	LC4 /LC4R	LC5 /LC5R	LC6	LC7	LC8	LC9			
Reductive Dechlorination End Products (ug/L)																	
Methane	05/06	N/A	98	140	100	110	590	33	98/87	220	77	--	--	--	--	--	
	09/06	N/A	160	1,400	140/130	94	310	28	130	170	92	--	--	--	--	--	
	02/07	N/A	150	510	51/50	45	710	96	88	140	150	--	--	--	--	--	
	06/07	N/A	150	200	110	46	870	24	100/140	310	99	--	--	--	--	--	
	09/07	N/A	130	2,100	120	86	520	100	130/130	500	28	--	--	--	--	--	
	12/07	N/A	110	100	91	51	58	18	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	88	--	--	450	--	--	--	--	--	
	02/09	N/A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	03/09	N/A	150	140	34/36	240	200	86	390	330	300	--	--	--	--	--	
Ethane	05/06	N/A	<12	<12	<12	<12	<12	<12	<12/<12	<12	<12	--	--	--	--	--	
	09/06	N/A	0.49	0.34	0.05/0.045	0.24	0.22	0.04	0.11	0.21	0.097	--	--	--	--	--	
	02/07	N/A	0.18	0.37	0.088/0.087	0.093	0.42	0.078	0.054	0.14	0.12	--	--	--	--	--	
	06/07	N/A	0.24	0.30	0.054	0.034	0.32	0.033	0.10/0.11	0.21	0.086	--	--	--	--	--	
	09/07	N/A	0.3	0.29	0.034	0.33	0.21	<0.025	0.052/0.052	0.22	<0.025	--	--	--	--	--	
	12/07	N/A	0.22	0.15	0.059	0.091	<0.025	0.030	0.081/0.084	0.28	0.058	--	--	--	--	--	
	03/08	N/A	0.098	0.23	0.052/0.045	0.040	0.038	0.028	--	0.16	0.065	--	--	--	--	--	
	06/08	N/A	0.22	0.29	0.037	0.087	0.053	0.044	--	--	0.067	--	--	--	--	--	
	09/08	N/A	0.18	0.27	0.068	0.11	0.073	0.064	--	--	0.11	--	--	--	--	--	
	12/08	N/A	0.12	0.12	<0.025/0.028	0.13	<0.025	0.044	--	--	0.11	--	--	--	--	--	
	02/09	N/A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	03/09	N/A	0.096	0.17	0.032/0.034	0.14	0.037	0.048	0.240	0.14	0.092	--	--	--	--	--	
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	0.48	<0.025	0.05	0.31	<0.025	--	--	--	--	--	
	02/07	N/A	0.031	1.2	0.079/0.072	0.034	0.92	0.035	0.046	0.21	0.046	--	--	--	--	--	
	06/07	N/A	0.083	1.4	0.15	0.11	0.29	0.10	0.15/0.080	0.29	0.094	--	--	--	--	--	
	09/07	N/A	<0.025	1.9	0.08	0.35	0.35	0.051	0.039/0.036	0.23	<0.025	--	--	--	--	--	
	12/07	N/A	<0.025	0.81	0.51	0.027	<0.025	0.22	0.029/0.034	0.18	<0.025	--	--	--	--	--	
	03/08	N/A	<0.025	0.9	0.16/0.13	0.028	<0.025	<0.025	--	0.12	<0.025	--	--	--	--	--	
	06/08	N/A	<0.025	0.65	0.1	<0.025	0.079	<0.025	--	--	<0.025	--	--	--	--	--	
	09/08	N/A	0.035	1.0	0.14	0.11	0.071	0.044	--	--	0.034	--	--	--	--	--	
	12/08	N/A	<0.025	0.5	0.1/0.085	0.039	<0.025	<0.025	--	--	<0.025	--	--	--	--	--	
	02/09	N/A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	03/09	N/A	<0.025	0.51	0.066/0.070	<0.025	0.035	<0.025	0.072	0.12	<0.025	--	--	--	--	--	
Petroleum Hydrocarbons (NWTPH-Dx) (mg/L)																	
Diesel	05/06	0.50	<0.25	0.32	<0.25	<0.25	<0.25	<0.25	<0.25/<0.25	0.35	0.35	--	--	--	--	--	
	09/08	0.50	<0.25	<0.25	<0.25/<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	--	--	--	--	--	
	02/07	0.50	--	--	--	--	--	0.28	<0.25	0.42/<0.25 ⁱ	0.76/<0.25 ⁱ	--	--	--	--	--	
	02/09	0.50	--	--	--	--	--	--	--	--	--	<0.25	<0.25	<0.25	--	--	
Motor Oil	05/06	0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50/<0.50	<0.50	<0.50	--	--	--	--	--	
	09/06	0.50	<0.50	<0.50	<0.50/0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	--	--	--	--	--	
	02/07	0.50	--	--	--	--	--	<0.50	<0.50	<0.50/<0.5 ⁱ	<0.50/<0.5 ⁱ	--	--	--	--	--	
	02/09	0.50	--	--	--	--	--	--	--	--	--	<0.50	<0.50	<0.50	--	--	

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

Analyte	Date Sampled	Method A Cleanup Levels ^a	Monitoring Well I.D. ^b													Field Blank	Trip Blank
			GT1	GT2	GT3	LC1	LC2	LC3	LC4 /LC4R	LC5 /LC5R	LC6	LC7	LC8	LC9			
Detected Volatile Organic Compounds (EPA SW8260B) (ug/L)																	
Tetrachloroethene	05/06	5	<0.2	<0.2	0.4	2.0	9.4	2.9	14/14	0.4	<0.2	--	--	--	<0.2	<0.2	
	09/06	5	<0.2	<0.2	<0.2/<0.2	4.4	9.3	2.8	8.6	<0.2	<0.2	--	--	--	--	--	
	02/07	5	<0.2	<0.2	0.4/0.4	2.2	2.5	5.9	20 D	0.3	<0.2	--	--	--	--	<0.2	
	06/07	5	<0.2	<0.2	<0.2	1.4	1.5	2.6	9.8/9.9	0.2	<0.2	--	--	--	--	--	
	09/07	5	<0.2	<0.2	<0.2	5.2	1.9	3.0	7.9/7.4	<0.2	<0.2	--	--	--	--	--	
	12/07	5	<0.2	<0.2	<0.2	4.5	2.7	6.8	25/23 D	1.0	<0.2	--	--	--	--	--	
	03/08	5	<0.2	<0.2	<0.2/<0.2	3.6	2.6	3.0	--	<0.2	<0.2	--	--	--	--	--	
	06/08	5	<0.2	<0.2	<0.2	6.2	3.3	6.8	--	--	<0.2	--	--	--	--	--	
	09/08	5	<0.2	<0.2	<0.2/<0.2	5.8	3.2	5.1	--	--	<0.2	--	--	--	--	--	
	12/08	5	<0.2	<0.2	<0.2/<0.2	8.2	1.3	4.2	--	--	<0.2	--	--	--	--	--	
	02/09	5	--	--	--	--	--	--	--	--	--	<0.2	<0.2	<0.2	--	--	
	03/09	5	<0.2	<0.2	<0.2/<0.2	6.0	1.0	5.6	0.4	<0.2	<0.2	--	--	--	--	--	
	Trichloroethene	05/06	5	0.4	0.6	11	2.8	4	0.6	2.4/2.4	0.5	<0.2	--	--	--	<0.2	<0.2
		09/06	5	0.3	0.6	1.2/1.2	6.5	3	1.2	2.9	0.4	0.3	--	--	--	--	--
02/07		5	0.4	0.4	6.3/6.9	2.8	1.4	1.2	3.8	1.0	0.2	--	--	--	--	<0.2	
06/07		5	0.2	0.5	2.8	3.2	2.5	1.0	4.8/5.0	0.4	0.3	--	--	--	--	--	
09/07		5	<0.2	0.5	0.6	4.8	1.7	1.8	3.2/3.1	0.4	0.2	--	--	--	--	--	
12/07		5	<0.2	0.5	1.4	6.1	0.5	2.2	1.8/1.8	1.2	<0.2	--	--	--	--	--	
03/08		5	<0.2	0.6	2.6/2.6	4.6	1.3	0.8	--	0.8	<0.2	--	--	--	--	--	
06/08		5	<0.2	0.6	1.5	4.8	4.1	1.6	--	--	0.3	--	--	--	--	--	
09/08		5	<0.2	0.5	1.1/1.0	5.1	2.2	1.2	--	--	0.2	--	--	--	--	--	
12/08		5	<0.2	0.3	0.6/0.6	5.6	0.4	1.2	--	--	0.3	--	--	--	--	--	
02/09		5	--	--	--	--	--	--	--	--	--	<0.2	<0.2	<0.2	--	--	
03/09		5	<0.2	0.3	0.8/0.9	3.9	0.7	1.0	0.7	0.4	0.2	--	--	--	--	--	
cis-1,2-Dichloroethene		05/06	80 ^f	4.2	16	49 D	5.9	14	2.4	7.6/7.9	3.4	2.4	--	--	--	<0.2	<0.2
		09/06	80 ^f	3.7	24 D	13/13	15	15	4.3	10	2.5	2.6	--	--	--	--	--
	02/07	80 ^f	4.9	10	35/34 D	6.3	8.4	2.4	7.7	4.9	2.5	--	--	--	--	<0.2	
	06/07	80 ^f	3.0	22 D	16	7.6	5.0	2.4	8.6/9.0	1.6	1.8	--	--	--	--	--	
	09/07	80 ^f	2.3	18 D	5.0	9.7	6.9	6.4	11/11	1.7	1.7	--	--	--	--	--	
	12/07	80 ^f	1.8	12	14	9.9	1.2	8.0	7.7/7.7	4.6	1.7	--	--	--	--	--	
	03/08	80 ^f	1.8	18 D	19/19	6.6	2.5	2.1	--	3.3	1.5	--	--	--	--	--	
	06/08	80 ^f	2.0	11	15	4.6	7.0	2.7	--	--	1.3	--	--	--	--	--	
	09/08	80 ^f	2.1	8.2	20	7.9	5.2	2.9	--	--	1.0	--	--	--	--	--	
	12/08	80 ^f	1.9	6.4	9.2/9.8	6.2	1.2	1.6	--	--	0.8	--	--	--	--	--	
	02/09	80 ^f	--	--	--	--	--	--	--	--	--	<0.2	<0.2	<0.2	--	--	
	03/09	80 ^f	1.7	8.4	6.7/6.8	3.6	1.4	1.0	2.3	1.2	0.5	--	--	--	--	--	
	trans-1,2-Dichloroethene	05/06	160 ^f	<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 ^f	<0.2	6.9	5.4/5.4	0.4	1.3	<0.2	0.5	<0.2	<0.2	--	--	--	--	--
02/07		160 ^f	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 ^f	<0.2	4.8	4.5	<0.2	0.6	<0.2	0.4/0.5	<0.2	<0.2	--	--	--	--	--	
09/07		160 ^f	<0.2	5.3	2.4	<0.2	0.5	<0.2	0.3/0.4	<0.2	<0.2	--	--	--	--	--	
12/07		160 ^f	<0.2	2.9	4.2	<0.2	<0.2	<0.2	0.2/0.2	0.3	<0.2	--	--	--	--	--	
03/08		160 ^f	<0.2	3.1	3.3/3.1	<0.2	<0.2	<0.2	--	<0.2	<0.2	--	--	--	--	--	
06/08		160 ^f	<0.2	3.9	4.6	<0.2	<0.2	<0.2	--	--	<0.2	--	--	--	--	--	

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

LeatherCare, Inc.
 Seattle, Washington

Analyte	Date Sampled	Method A Cleanup Levels ^a	Monitoring Well I.D. ^b												Field Blank	Trip Blank
			GT1	GT2	GT3	LC1	LC2	LC3	LC4 /LC4R	LC5 /LC5R	LC6	LC7	LC8	LC9		
trans-1,2-Dichloroethene (cont.)	09/08	160 f	<0.2	2.9	5.9/5.2	0.4	0.3	<0.2	--	--	<0.2	--	--	--	--	--
	12/08	160 f	<0.2	1.8	2.3/2.6	0.2	<0.2	<0.2	--	--	<0.2	--	--	--	--	--
	02/09	160 f	--	--	--	--	--	--	--	--	--	<0.2	<0.2	<0.2	--	--
	03/09	160 f	<0.2	2.0	1.9/2.0	<0.2	<0.2	<0.2	0.2	<0.2	<0.2	--	--	--	--	--
1,1-Dichloroethene	05/06	0.073 f	<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 f	<0.2	<0.2	<0.2/<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	--	--	--	--	--
	02/07	0.073 f	<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 f	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2/<0.2	<0.2	<0.2	--	--	--	--	--
	09/07	0.073 f	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2/<0.2	<0.2	<0.2	--	--	--	--	--
	12/07	0.073 f	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2/<0.2	<0.2	<0.2	--	--	--	--	--
	03/08	0.073 f	<0.2	<0.2	<0.2/<0.2	<0.2	<0.2	<0.2	--	<0.2	<0.2	--	--	--	--	--
	06/08	0.073 f	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	--	--	<0.2	--	--	--	--	--
	09/08	0.073 f	<0.2	<0.2	<0.2/<0.2	<0.2	<0.2	<0.2	--	--	<0.2	--	--	--	--	--
	12/08	0.073 f	<0.2	<0.2	<0.2/<0.2	<0.2	<0.2	<0.2	--	--	<0.2	--	--	--	--	--
	02/09	0.073 f	--	--	--	--	--	--	--	--	--	<0.2	<0.2	<0.2	--	--
	03/09	0.073 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	0.2	<0.2	14	1.9/1.6	0.7	3.1	1.8	1.2	3.3	1.9	--	--	--	--	<0.2
	06/07	0.2	<0.2	12	2.3	0.9	1.8	0.6	1.2/1.2	1.5	0.7	--	--	--	--	--
	09/07	0.2	<0.2	22 D	2.1	1.4	1.4	1.0	0.8/0.8	1.3	0.3	--	--	--	--	--
	12/07	0.2	<0.2	13	16	1.4	<0.2	5.6	1.2/1.1	3.5	1.8	--	--	--	--	--
	03/08	0.2	<0.2	12	2.8/2.4	0.7	0.3	0.8	--	1.9	1.1	--	--	--	--	--
	06/08	0.2	<0.2	18	4.8	0.3	0.5	0.9	--	--	0.2	--	--	--	--	--
	09/08	0.2	<0.2	16	5.2/4.6	0.9	1.1	0.9	--	--	0.2	--	--	--	--	--
	12/08	0.2	<0.2	11	1.7/1.8	0.6	<0.2	0.8	--	--	<0.2	--	--	--	--	--
	02/09	0.2	--	--	--	--	--	--	--	--	--	<0.2	<0.2	<0.2	--	--
	03/09	0.2	<0.2	9.2	1.0/1.0	0.4	0.3	0.3	1.3	1.6	<0.2	--	--	--	--	--
1,1,1-Trichloroethane	05/06	200	<0.2	<0.2	<0.2	<0.2	<0.2	0.2	<0.2/<0.2	<0.2	<0.2	--	--	--	<0.2	<0.2
1,1,2-Trichloroethane	05/06	0.77 f	0.3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2/<0.2	<0.2	<0.2	--	--	--	<0.2	<0.2
1,1-Dichloroethane	05/06	800	<0.2	<0.2	<0.2	<0.2	0.9	<0.2	0.4/0.4	<0.2	<0.2	--	--	--	<0.2	<0.2
Benzene	05/06	5	<0.2	1.5	1.4	<0.2	0.4	<0.2	0.7/0.6	<0.2	<0.2	--	--	--	<0.2	<0.2
Toluene	05/06	1,000	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2/<0.2	<0.2	<0.2	--	--	--	0.4	<0.2
Dibromochloromethane	05/06	0.52 f	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2/<0.2	<0.2	<0.2	--	--	--	<0.2	<0.2
tert-Butylbenzene	05/06	N/A	0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2/<0.2	<0.2	<0.2	--	--	--	<0.2	<0.2
Acetone	05/06	800 f	3.4 M	5.3 M	<1.0	1.5	2.3	1.3	1.5/1.7	2.1	1.7	--	--	--	5.2	1.5
Methylene Chloride	05/06	5	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3/<0.3	<0.3	<0.3	--	--	--	<0.3	0.4

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

Notes:

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 dehalococoides detected; - means dehalococoides not detected.

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

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

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

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

j) Value believed to be incorrect.

k) Turbidity influenced by biofloc.

l) Destroyed by construction.

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

°C - degrees Celsius.

mV - millivolts.

NTU - Nephelometric turbidity units.

ORP - oxidation reduction potential.

N/A - not applicable.

µS/cm - microsiemens per centimeter.

µg/L - micrograms per liter.

mg/L - milligrams per liter.

ppm - parts per million.

J - estimated value.

D - value from a diluted sample.

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

-- not analyzed or not measured.

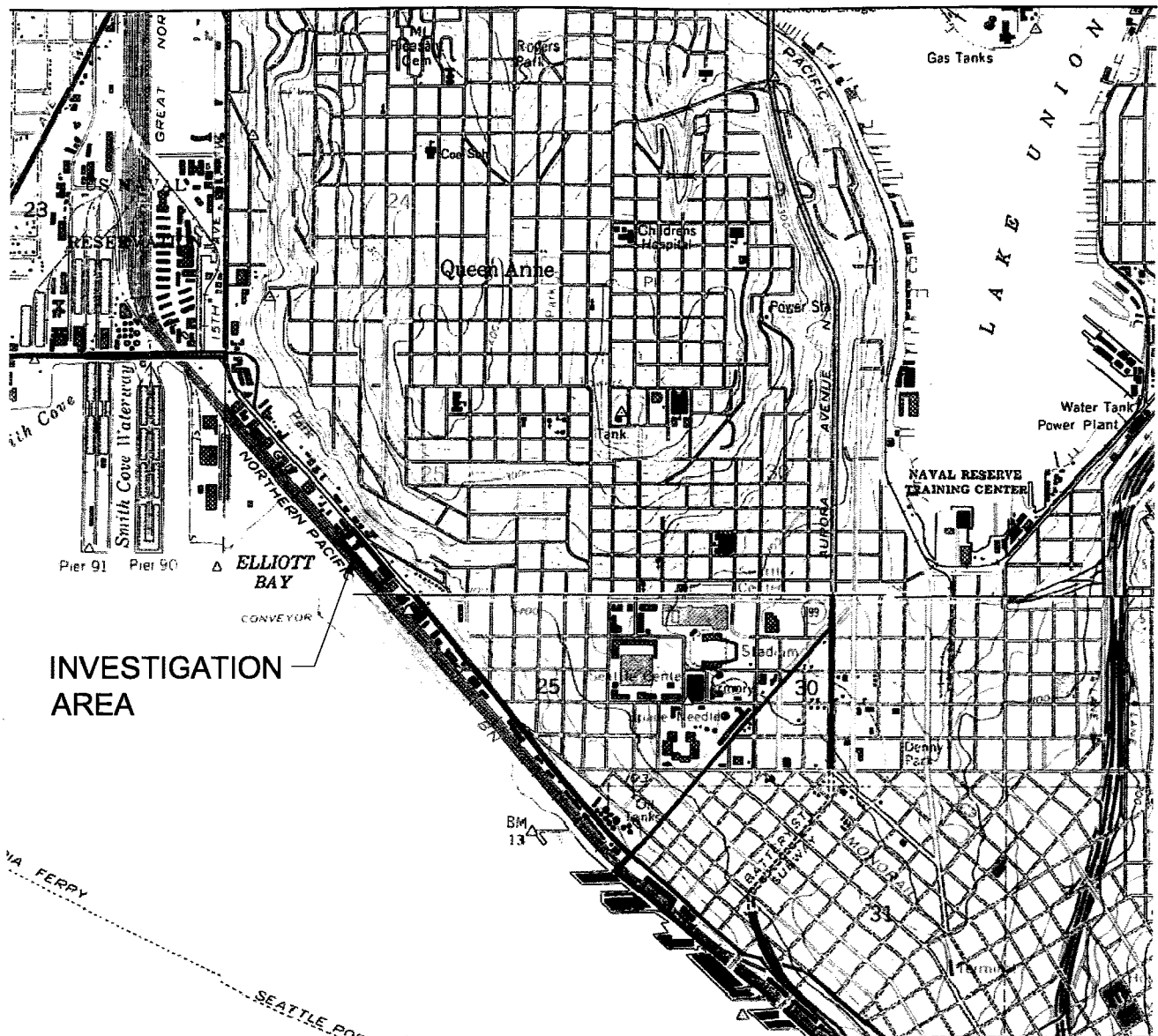
< - analyte not detected at or greater than the listed concentration.

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

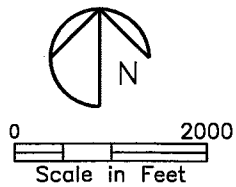
		GT1 Monitoring Well	GT2 Monitoring Well	GT3 Monitoring Well	LC1 Monitoring Well	LC2 Monitoring Well	LC3 Monitoring Well	LC4 Monitoring Well	LC5 Monitoring Well	LC6 Monitoring Well
1,1-Dichloroethene	Count (data)	11	11	11	11	11	11	7	8	11
	Count (nondetects)	11	11	10	11	11	11	7	8	11
	S Statistic	NC	NC	NC	NC	NC	NC	NC	NC	NC
	Var(S)	NC	NC	NC	NC	NC	NC	NC	NC	NC
	Trend	NC	NC	NC	NC	NC	NC	NC	NC	NC
	Probability (of no real trend)	NC	NC	NC	NC	NC	NC	NC	NC	NC
cis-1,2-Dichloroethene	Count (data)	11	11	11	11	11	11	7	8	11
	Count (nondetects)	0	0	0	0	0	0	0	0	0
	S Statistic	-36	-30	-17	-15	-30	-14	-2	-8	-50
	Var(S)	164	164	165	165	164	161	43	65	164
	Trend	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Probability (of no real trend)	0.31%	1.18%	10.65%	13.79%	1.18%	15.30%	43.96%	19.32%	0.01%
Tetrachloroethene	Count (data)	11	11	11	11	11	11	7	8	11
	Count (nondetects)	11	11	9	0	0	0	0	4	11
	S Statistic	NC	NC	NC	33	-21	19	-5	-6	NC
	Var(S)	NC	NC	NC	165	165	163	44	49	NC
	Trend	NC	NC	NC	Increasing	Decreasing	Increasing	Decreasing	Decreasing	NC
	Probability (of no real trend)	NC	NC	NC	0.64%	5.97%	7.93%	27.40%	23.68%	NC
trans-1,2-Dichloroethene	Count (data)	11	11	11	11	11	11	7	8	11
	Count (nondetects)	10	0	0	8	5	11	0	5	11
	S Statistic	NC	-37	-29	NC	-34	NC	-14	NC	NC
	Var(S)	NC	163	165	NC	147	NC	41	NC	NC
	Trend	NC	Decreasing	Decreasing	NC	Decreasing	NC	Decreasing	NC	NC
	Probability (of no real trend)	NC	0.24%	1.48%	NC	0.33%	NC	2.16%	NC	NC
Trichloroethene	Count (data)	11	11	11	11	11	11	7	8	11
	Count (nondetects)	7	0	0	0	0	0	0	0	3
	S Statistic	NC	-18	-27	13	-23	4	-5	0	0
	Var(S)	NC	147	163	163	165	155	44	57	112
	Trend	NC	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	None	None
	Probability (of no real trend)	NC	8.02%	2.09%	17.36%	4.34%	40.49%	27.40%	50.00%	50.00%
Vinyl Chloride	Count (data)	11	11	11	11	11	11	7	8	11
	Count (nondetects)	10	0	0	0	2	0	0	0	2
	S Statistic	NC	-28	-17	-26	-33	-27	-8	-10	-31
	Var(S)	NC	164	165	162	163	163	41	65	156
	Trend	NC	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Probability (of no real trend)	NC	1.75%	10.65%	2.48%	0.61%	2.09%	13.62%	13.28%	0.82%

Figures

Figures



Source: USGS SEATTLE NORTH, 7.5 MIN. QUADRANGLE, 1973

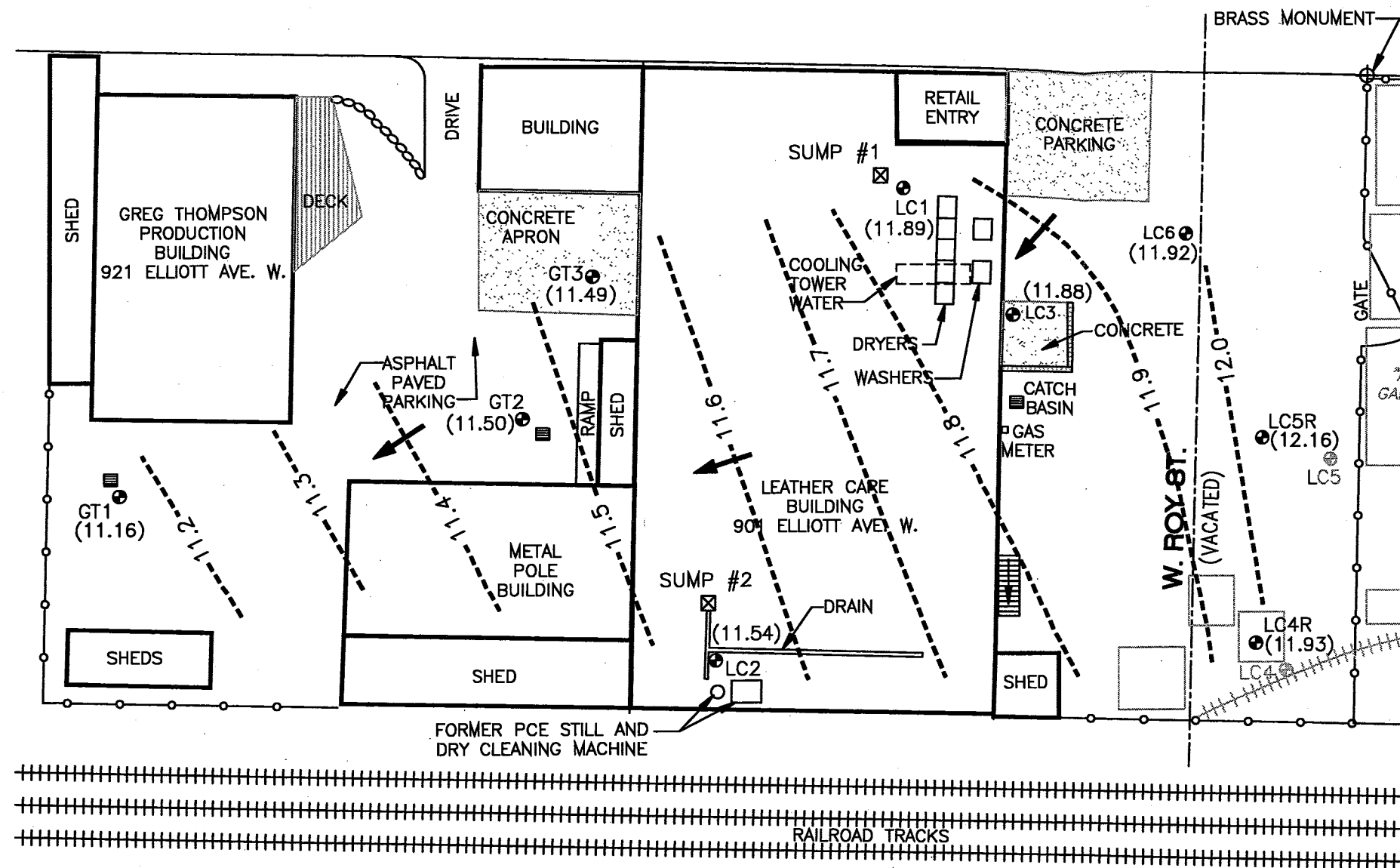


LEATHERCARE INC.
SEATTLE, WASHINGTON

Figure No. 1
VICINITY MAP



P:\56498\68247\ Fig-3 March 25 2009 06/29/09 11:27 rlehlajp XRES: 11X17BDR, DEC 12 07-site



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

LEGEND:

- LC6 (11.92) ● MONITORING WELL LOCATION AND DESIGNATION WITH GROUNDWATER ELEVATION IN FEET
- LC5 ● MONITORING WELL DESTROYED
- 11.2 --- POTENTIOMETRIC CONTOURS, CONTOUR INTERVAL IS 0.1 FT.
- ← DIRECTION OF GROUNDWATER FLOW
- FENCE
- +++++ RAILROAD TRACKS
- CATCH BASIN
- INDICATES 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

LEATHERCARE INC.
SEATTLE, WASHINGTON

Figure No. 3
Potentiometric Surface Map
March 25, 2009

A

Appendix A

Appendix A

Boring Logs and Well Construction Details

SOIL CLASSIFICATION LEGEND

MAJOR DIVISIONS			TYPICAL NAMES		SAMPLE TYPE SYMBOLS		
COARSE GRAINED SOILS More than half is larger than No. 200 sieve	GRAVELS More than half coarse fraction is larger than No. 4 sieve size	Clean gravels with little or no fines	GW		Well graded gravels, gravel-sand mixtures		Disturbed bag or jar sample
			GP		Poorly graded gravels, gravel-sand mixtures		Std. Penetration Test (2.0" OD)
		Gravel with over 12% fines	GM		Silty gravels, gravel-sand-silt mixtures		Type U Ring Sampler (3.25" OD)
			GC		Clayey gravels, gravel-sand-clay mixtures		California Sampler (3.0" OD)
	SANDS More than half coarse fraction is smaller than No. 4 sieve size	Clean sands with little or no fines	SW		Well graded sands, gravelly sands		Undisturbed Tube Sample
			SP		Poorly graded sands, gravelly sands		Grab Sample
		Sands with over 12% fines	SM		Silty sand, sand-silt mixtures		Core Run
			SC		Clayey sands, sand-clay mixtures		Non-standard Penetration Test (with split spoon sampler)
FINE GRAINED SOILS More than half is smaller than No. 200 sieve	SILTS AND CLAYS Liquid limit less than 50	ML		Inorganic silts and very fine sands, rock flour, silty or clayey fine sands, or clayey silts with slight plasticity	CONTACT BETWEEN UNITS		
		CL		Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays			
		OL		Organic clays and organic silty clays of low plasticity			
	SILTS AND CLAYS Liquid limit greater than 50	MH		Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts			
		CH		Inorganic clays of high plasticity, fat clays			
		OH		Organic clays of medium to high plasticity, organic silts			
	HIGHLY ORGANIC SOILS	PT		Peat and other highly organic soils	MOISTURE DESCRIPTION		

General Thickness or Spacing	Parting:	less than 1/16 in. (1/6 cm)	Structure	Pocket:	Erratic, discontinuous deposit of limited extent	General Altitude	Near horizontal:	0 to 10 deg.
	Seam:	1/16 to 1/2 in. (1/6 to 1 1/4 cm)		Lens:	Lenticular deposit		Low angle:	10 to 45 deg.
	Layer:	1/2 to 12 in. (1 1/4 to 30 1/2 cm)		Varved:	Alternating seams of silt and clay		High angle:	45 to 80 deg.
	Stratum:	> 12 in. (30 1/2 cm)		Laminated:	Alternating seams		Near Vertical:	80 to 90 deg.
	Scattered:	< 1 per ft. (30 1/2 cm)		Interbedded:	Alternating layers			
	Numerous:	> 1 per ft. (30 1/2 cm)						

STRUCTURE DESCRIPTION (cont.)

Fractured	Breaks easily along definite fractured planes
Slickensided	Polished, glossy, fractured planes
Blocky, Diced	Breaks easily into small angular lumps
Sheared	Disturbed texture, mix of strengths
Homogeneous	Same color and appearance throughout

RELATIVE DENSITY OR CONSISTENCY VS. SPT N-VALUE

COARSE GRAINED			FINE GRAINED		
Density	N (blows/ft)	Approx. Relative Density (%)	Consistency	N (blows/ft)	Approx. Undrained Shear Str. (psf)
Very Loose	0 to 4	0 - 15	Very Soft	0 to 2	<250
Loose	4 to 10	15 - 35	Soft	2 to 4	250 - 500
Medium Dense	10 to 30	35 - 65	Medium Stiff	4 to 8	500 - 1000
Dense	30 to 50	65 - 85	Stiff	8 to 15	1000 - 2000
Very Dense	Over 50	85 - 100	Very Stiff	15 to 30	2000 - 4000
			Hard	over 30	>4000

Notes:

1. Sample descriptions in this report are based on visual field and laboratory observations, which include density/consistency, moisture condition, grain size, and plasticity estimates, and should not be construed to imply field or laboratory testing unless presented herein. Visual-manual classification methods in accordance with ASTM D 2488 were used as an identification guide. Where laboratory data are available, soil classifications are in general accordance with ASTM D 2487.

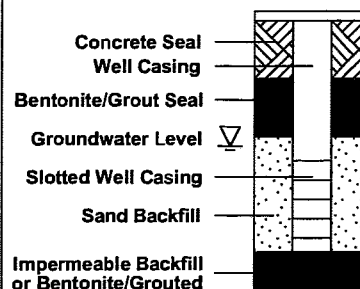
2. Dual symbols are used to indicate gravel and sand units with 5 to 12 percent fines.

3. WOR = weight of rod.

MOISTURE DESCRIPTION

Dry - Free of moisture, dusty
Moist - Damp but no visible free water
Wet - Visible free water, saturated

WELL COMPLETIONS



PHYSICAL PROPERTY TEST

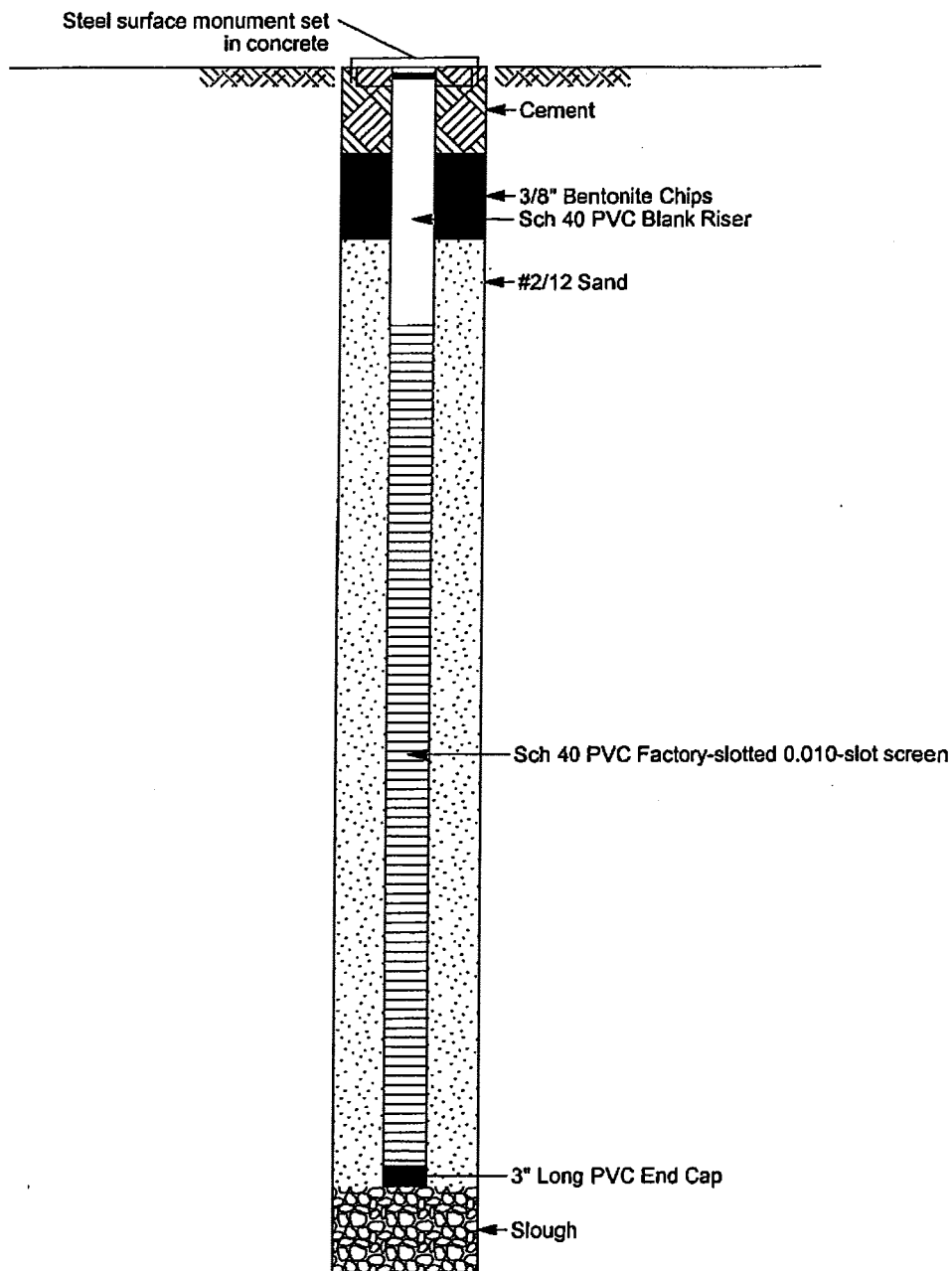
AL	-	Atterberg Limits
FC	-	Fines Content
GSD	-	Grain Size Distribution
MC	-	Moisture Content
MD	-	Moisture Content/Dry Density
Comp	-	Compaction Test (Proctor)
SG	-	Specific Gravity
CBR	-	California Bearing Ratio
RM	-	Resilient Modulus
Perm	-	Permeability
TXP	-	Triaxial Permeability
Cons	-	Consolidation
Chem	-	Analytical Chemical Analysis
Corr	-	Corrosion
VS	-	Vane Shear
DS	-	Direct Shear
UC	-	Unconfined Compression
TX	-	Triaxial Compression
UU	-	Unconsolidated, Undrained
CU	-	Consolidated, Undrained
CD	-	Consolidated, Drained

LeatherCare, Inc.
Groundwater Monitoring
Seattle, Washington

Project No: 56498.68247

Figure: A1

MONITORING WELL CONSTRUCTION 56498-68247-LOGS FEB 2009.GPJ CDM_BLLV.GDT 5/12/09 REV.



TYPICAL MONITORING WELL CONSTRUCTION

LeatherCare, Inc.
Groundwater Monitoring
Seattle, Washington

Project No: 56498.68247 Figure: A2
1 of 1

Other Tests	Sample No.	Moisture Content (%)	Dry Density (pcf)	PID (ppm)	Penetration Resistance (blows / 6 in.)	Depth (feet)	Sample	USCS	Symbol	Boring Log LC-5R	Elev. (feet)	Well or Piezometer Completion
										DESCRIPTION		
										Air vac'd to 4.5 ft bgs. No sample recovery.		
						2						
						3						
						4						
						5						
						6						
						7						
						8						
						9						
						10						
						11						
						12						
						13						
						14						

Location: _____
 Surface Elevation: _____
 Logged By: KMB

Drill Rig: HSA LAR
 Equipment/Hammer: 3" Split Spoon/
 Date Completed: 2-25-09

B

Appendix
B

Appendix B

Analytical Laboratory Reports



Analytical Resources, Incorporated
Analytical Chemists and Consultants

Received
APR 09 2009

April 3, 2009

Ms. Pam Morrill
CDM
11811 NE 1st, Suite 201
Bellevue, WA 98009

RE: Project ID: Leathercare, 56498-68247
ARI Job No: OS43

Dear Pam:

Please find enclosed the original Chain-of-Custody (COC) records, sample receipt documentation, and the final results for the samples from the project referenced above. Analytical Resources Inc. (ARI) accepted ten water samples and a trip blank on March 26, 2009 under ARI job OS43. The trip blank was put on hold 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 SW8260B, as requested on the COC.

The matrix spike duplicate percent recovery of Vinyl Chloride fell outside the advisory control limits for sample **LC3-03/09**. No corrective action is required for matrix QC.

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 OS43

Enclosures



CHAIN-OF-CUSTODY

OS43

Date 3/26/09 Page 1 of 2

PROJECT INFORMATION					ANALYSIS REQUEST																																
Project Manager: <u>Pam Merrill</u>					Laboratory Number:																																
Project Name: <u>Leathercare</u>					ANALYSIS REQUEST																																
Project Number: <u>56498-68247</u>																																					
Site Location: <u>Elliott Ave W, Mercer N.</u> Sampled By: <u>ms</u>																																					
DISPOSAL INFORMATION																																					
<input checked="" type="checkbox"/> Lab Disposal (return if not indicated)																																					
Disposal Method: _____																																					
Disposed by: _____ Disposal Date: _____																																					
QC INFORMATION (check one)																																					
<input type="checkbox"/> SW-846 <input type="checkbox"/> CLP <input type="checkbox"/> Screening <input type="checkbox"/> CDM Std. <input type="checkbox"/> Special																																					
SAMPLE ID	DATE	TIME	MATRIX	LAB ID	PETROLEUM HYDROCARBONS	ORGANIC COMPOUNDS	PESTS/PCBs	METALS	LEACHING TESTS	OTHER	NUMBER OF CONTAINERS																										
GT1-03/09	3/26/09	1245	Water		TPH-HCID	TPH-D	TPH-G	TPH-418.1	8015M Fuel Hydrocarbon	TPH Special Instructions	8010 Halogenated VOCs	8020 Aromatic VOCs	8020M - BETX only	8240 GC/MS Volatiles	8270 GC/MS Semivolatiles	8310 PAHs	8040 Phenols	DWS - Volatiles and Semivolatiles	8080 OC Pest/PCBs	8080M PCBs only	8140 OP Pesticides	8150 OC Herbicides	DWS - Herb/Pest	Selected Metals - list	Organic Lead (Ca)	TCL Metals (23)	Priority Poll. Metals (13)	DWS - Metals	MFSP - Metals (Ma)	TCLP - Volatiles (ZHE)	TCLP - Semivolatiles	TCLP - Pesticides	TCLP - Metals				
GT2-03/09	3/26/09	1000	Water																																		3
GT3-03/09	3/26/09	1115	Water																																	3	
GT10-03/09	3/26/09	1345	Water																																	3	
LC1-03/09	3/26/09	0820	Water																																	3	
LC2-03/09	3/25/09	1610	Water																																	3	
LC3-03/09	3/25/09	1500	Water																																	8	
LC42-03/09	3/25/09	1070	Water																																	3	

LAB INFORMATION		SAMPLE RECEIPT		RELINQUISHED BY: 1.		RELINQUISHED BY: 2.		RELINQUISHED BY: 3.			
Lab Name: <u>ART</u>	Total Number of Containers: _____	Signature: <u>Mary Lou Fox</u>	Time: <u>1545</u>	Signature: <u>Jonathan Walker</u>	Time: <u>1505</u>	Signature: _____	Time: _____	Signature: _____	Time: _____		
Lab Address: <u>4611 S. 134th Pl</u>	Chain-of-Custody Seals: Y/N/NA	Printed Name: <u>Mary Lou Fox</u>	Date: <u>3/26/09</u>	Printed Name: <u>Jonathan Walker</u>	Date: <u>3/26/09</u>	Printed Name: _____	Date: _____	Printed Name: _____	Date: _____		
Tokwa, WA	Intact?: Y/N/NA	Company: <u>CDM</u>		Company: <u>ART</u>		Company: _____		Company: _____			
Via: <u>Hand delivered</u>	Received in Good Condition/Cold: _____										
Turn Around Time: <input checked="" type="checkbox"/> Standard <input type="checkbox"/> 24 hr. <input type="checkbox"/> 48 hr. <input type="checkbox"/> 72 hr. <input type="checkbox"/> 1 wk.	RECEIVED BY: 1.		RECEIVED BY: 2.		RECEIVED BY: 3.						
PRIOR AUTHORIZATION IS REQUIRED FOR RUSH DATA		Signature: _____		Signature: _____		Signature: _____		Signature: _____		Signature: _____	
Special Instructions: <u>Halogenated VOC test for Leathercare</u>		Printed Name: _____		Printed Name: _____		Printed Name: _____		Printed Name: _____		Printed Name: _____	
<u>Additional vials for LC3-03/09 for ms/msp</u>		Date: _____		Date: _____		Date: _____		Date: _____		Date: _____	
		Company: _____		Company: _____		Company: _____		Company: _____		Company: _____	

CHAIN-OF-CUSTODY

Date 3/26/09 Page 2 of 2

[illegible]

LAB INFORMATION		SAMPLE RECEIPT		RELINQUISHED BY: 1.		RELINQUISHED BY: 2.		RELINQUISHED BY: 3.	
Lab Name: <i>ARF</i>		Total Number of Containers:		Signature: <i>Matthew Fox</i>	Time: <i>1505</i>	Signature:	Time:	Signature:	Time:
Lab Address: <i>4611 S. 134th Pl</i>		Chain-of-Custody Seals: Y/N/NA		Printed Name: <i>Matthew Fox</i>	Date: <i>3/26/09</i>	Printed Name:	Date:	Printed Name:	Date:
<i>Tulworth, WA</i>		Intact?: Y/N/NA		Company: <i>CDM</i>		Company:		Company:	
Via: <i>Air delivered</i>		Received in Good Condition/Cold:							
Turn Around Time: <input type="checkbox"/> Standard <input type="checkbox"/> 24 hr. <input type="checkbox"/> 48 hr. <input type="checkbox"/> 72 hr. <input type="checkbox"/> 1 wk.				RECEIVED BY: 1.		RECEIVED BY: 2.		RECEIVED BY: 3.	
PRIOR AUTHORIZATION IS REQUIRED FOR RUSH DATA				Signature: <i>Jon Walter</i>		Signature:		Signature:	
Special Instructions:				Time: <i>1505</i>		Time:		Time:	
				Printed Name: <i>Jonathan Walter</i>		Printed Name:		Printed Name:	
				Date: <i>3/26/09</i>		Date:		Date:	
				Company: <i>ART</i>		Company:		Company:	



Analytical Resources, Incorporated
Analytical Chemists and Consultants

Cooler Receipt Form

ARI Client: CDM

COC No(s): NA

Assigned ARI Job No: OS43

Project Name: Leathercare

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

Tracking No: NA

Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of to cooler? YES NO

Were custody papers included with the cooler? YES NO

Were custody papers properly filled out (ink, signed, etc.) YES NO

Temperature of Cooler(s) (°C) (recommended 2.0-6.0 °C for chemistry) 3.0

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

Temp Gun ID#: 101886

Cooler Accepted by: TW Date: 3/26/09 Time: 1505

Complete custody forms and attach all shipping documents

Log-In Phase:

Was a temperature blank included in the cooler? YES NO

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

Was sufficient ice used (if appropriate)? YES NO

Were all bottles sealed in individual plastic bags? YES NO

Did all bottles arrive in good condition (unbroken)? YES NO

Were all bottle labels complete and legible? YES NO

Did the number of containers listed on COC match with the number of containers received? YES NO

Did all bottle labels and tags agree with custody papers? YES NO

Were all bottles used correct for the requested analyses? YES NO

Do any of the analyses (bottles) require preservation? (attach preservation sheet, excluding VOCs)... NA YES NO

Were all VOC vials free of air bubbles? NA YES NO

Was sufficient amount of sample sent in each bottle? YES NO

Samples Logged by: AV Date: 3/27/09 Time: 835

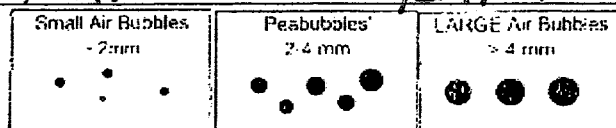
**** Notify Project Manager of discrepancies or concerns ****

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

Additional Notes, Discrepancies, & Resolutions:

LC3-03/09 = 1 Pb Tripblanks = 3pb
LC4R-03/09 = 1 Sm

By: AV Date: 3/27/09



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


ORGANICS ANALYSIS DATA SHEET

Volatiles by Purge & Trap GC/MS-Method SW8260B
Page 1 of 1Sample ID: GT1-03/09
SAMPLE

Lab Sample ID: OS43A

LIMS ID: 09-7500

Matrix: Water

Data Release Authorized: 

Reported: 04/10/09

QC Report No: OS43-CDM, Inc.

Project: LEATHER CARE

56498-68247

Date Sampled: 03/26/09

Date Received: 03/26/09

Instrument/Analyst: NT5/JZ

Date Analyzed: 03/30/09 12:57

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	1.7	
79-01-6	Trichloroethene	0.2	< 0.2	U
127-18-4	Tetrachloroethene	0.2	< 0.2	U

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

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	97.5%
Bromofluorobenzene	98.8%


ORGANICS ANALYSIS DATA SHEET

Volatiles by Purge & Trap GC/MS-Method SW8260B
Page 1 of 1Sample ID: GT2-03/09
SAMPLE

Lab Sample ID: OS43B

LIMS ID: 09-7501

Matrix: Water

Data Release Authorized: 

Reported: 04/10/09

QC Report No: OS43-CDM, Inc.

Project: LEATHER CARE

56498-68247

Date Sampled: 03/26/09

Date Received: 03/26/09

Instrument/Analyst: NT5/JZ

Date Analyzed: 03/30/09 13:24

Sample Amount: 10.0 mL

Purge Volume: 10.0 mL

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	0.2	9.2	
75-35-4	1,1-Dichloroethene	0.2	< 0.2	U
156-60-5	trans-1,2-Dichloroethene	0.2	2.0	
156-59-2	cis-1,2-Dichloroethene	0.2	8.4	
79-01-6	Trichloroethene	0.2	0.3	
127-18-4	Tetrachloroethene	0.2	< 0.2	U

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

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	100%
Bromofluorobenzene	95.3%


ORGANICS ANALYSIS DATA SHEET

Volatiles by Purge & Trap GC/MS-Method SW8260B
Page 1 of 1Sample ID: GT3-03/09
SAMPLE

Lab Sample ID: OS43C

LIMS ID: 09-7502

Matrix: Water

Data Release Authorized: 

Reported: 04/10/09

QC Report No: OS43-CDM, Inc.

Project: LEATHER CARE

56498-68247

Date Sampled: 03/26/09

Date Received: 03/26/09

Instrument/Analyst: NT5/JZ

Date Analyzed: 03/30/09 13:52

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	1.9	
156-59-2	cis-1,2-Dichloroethene	0.2	6.7	
79-01-6	Trichloroethene	0.2	0.8	
127-18-4	Tetrachloroethene	0.2	< 0.2	U

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

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	98.5%
Bromofluorobenzene	97.1%


ORGANICS ANALYSIS DATA SHEET

Volatiles by Purge & Trap GC/MS-Method SW8260B
Page 1 of 1Sample ID: GT10-03/09
SAMPLE

Lab Sample ID: OS43D

LIMS ID: 09-7503

Matrix: Water

Data Release Authorized: 

Reported: 04/10/09

QC Report No: OS43-CDM, Inc.

Project: LEATHER CARE

56498-68247

Date Sampled: 03/26/09

Date Received: 03/26/09

Instrument/Analyst: NT5/JZ

Date Analyzed: 03/30/09 14:19

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	2.0	
156-59-2	cis-1,2-Dichloroethene	0.2	6.8	
79-01-6	Trichloroethene	0.2	0.9	
127-18-4	Tetrachloroethene	0.2	< 0.2	U

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

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	99.1%
Bromofluorobenzene	96.3%


ORGANICS ANALYSIS DATA SHEET

Volatiles by Purge & Trap GC/MS-Method SW8260B
Page 1 of 1Sample ID: LC1-03/09
SAMPLE

Lab Sample ID: OS43E

LIMS ID: 09-7504

Matrix: Water

Data Release Authorized: 

Reported: 04/10/09

QC Report No: OS43-CDM, Inc.

Project: LEATHER CARE

56498-68247

Date Sampled: 03/26/09

Date Received: 03/26/09

Instrument/Analyst: NT5/JZ

Date Analyzed: 03/30/09 14:46

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	3.6	
79-01-6	Trichloroethene	0.2	3.9	
127-18-4	Tetrachloroethene	0.2	6.0	

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

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	106%
Bromofluorobenzene	96.2%

ORGANICS ANALYSIS DATA SHEET

Volatiles by Purge & Trap GC/MS-Method SW8260B
Page 1 of 1Sample ID: LC2-03/09
SAMPLE

Lab Sample ID: OS43F

LIMS ID: 09-7505

Matrix: Water

Data Release Authorized: *AB*

Reported: 04/10/09

QC Report No: OS43-CDM, Inc.

Project: LEATHER CARE

56498-68247

Date Sampled: 03/25/09

Date Received: 03/26/09

Instrument/Analyst: NT5/JZ

Date Analyzed: 03/30/09 15:13

Sample Amount: 10.0 mL

Purge Volume: 10.0 mL

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	0.2	0.3	
75-35-4	1,1-Dichloroethene	0.2	< 0.2	U
156-60-5	trans-1,2-Dichloroethene	0.2	< 0.2	U
156-59-2	cis-1,2-Dichloroethene	0.2	1.4	
79-01-6	Trichloroethene	0.2	0.7	
127-18-4	Tetrachloroethene	0.2	1.0	

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

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	101%
Bromofluorobenzene	97.1%

ORGANICS ANALYSIS DATA SHEET

Volatiles by Purge & Trap GC/MS-Method SW8260B
Page 1 of 1Sample ID: LC3-03/09
SAMPLE

Lab Sample ID: OS43G

LIMS ID: 09-7506

Matrix: Water

Data Release Authorized: *AB*

Reported: 04/10/09

QC Report No: OS43-CDM, Inc.

Project: LEATHER CARE

56498-68247

Date Sampled: 03/25/09

Date Received: 03/26/09

Instrument/Analyst: NT5/JZ

Date Analyzed: 03/30/09 15:40

Sample Amount: 10.0 mL

Purge Volume: 10.0 mL

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	0.2	0.3	
75-35-4	1,1-Dichloroethene	0.2	< 0.2	U
156-60-5	trans-1,2-Dichloroethene	0.2	< 0.2	U
156-59-2	cis-1,2-Dichloroethene	0.2	1.0	
79-01-6	Trichloroethene	0.2	1.0	
127-18-4	Tetrachloroethene	0.2	5.6	

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

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	101%
Bromofluorobenzene	94.1%


ORGANICS ANALYSIS DATA SHEET

Volatiles by Purge & Trap GC/MS-Method SW8260B
Page 1 of 1Sample ID: LC4R-03/09
SAMPLE

Lab Sample ID: OS43H

LIMS ID: 09-7507

Matrix: Water

Data Release Authorized: 

Reported: 04/10/09

QC Report No: OS43-CDM, Inc.

Project: LEATHER CARE

56498-68247

Date Sampled: 03/25/09

Date Received: 03/26/09

Instrument/Analyst: NT5/JZ

Date Analyzed: 03/30/09 16:07

Sample Amount: 10.0 mL

Purge Volume: 10.0 mL

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	0.2	1.3	
75-35-4	1,1-Dichloroethene	0.2	< 0.2	U
156-60-5	trans-1,2-Dichloroethene	0.2	0.2	
156-59-2	cis-1,2-Dichloroethene	0.2	2.3	
79-01-6	Trichloroethene	0.2	0.7	
127-18-4	Tetrachloroethene	0.2	0.4	

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

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	102%
Bromofluorobenzene	94.0%

ORGANICS ANALYSIS DATA SHEET

Volatiles by Purge & Trap GC/MS-Method SW8260B
Page 1 of 1Sample ID: LC5R-03/09
SAMPLE

Lab Sample ID: OS43I

LIMS ID: 09-7508

Matrix: Water

Data Release Authorized: 

Reported: 04/10/09

QC Report No: OS43-CDM, Inc.

Project: LEATHER CARE

56498-68247

Date Sampled: 03/25/09

Date Received: 03/26/09

Instrument/Analyst: NT5/JZ

Date Analyzed: 03/30/09 16:34

Sample Amount: 10.0 mL

Purge Volume: 10.0 mL

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	0.2	1.6	
75-35-4	1,1-Dichloroethene	0.2	< 0.2	U
156-60-5	trans-1,2-Dichloroethene	0.2	< 0.2	U
156-59-2	cis-1,2-Dichloroethene	0.2	1.2	
79-01-6	Trichloroethene	0.2	0.4	
127-18-4	Tetrachloroethene	0.2	< 0.2	U

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

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	99.9%
Bromofluorobenzene	97.5%


ORGANICS ANALYSIS DATA SHEET

Volatiles by Purge & Trap GC/MS-Method SW8260B
Page 1 of 1Sample ID: LC6-03/09
SAMPLE

Lab Sample ID: OS43J

LIMS ID: 09-7509

Matrix: Water

Data Release Authorized: 

Reported: 04/10/09

QC Report No: OS43-CDM, Inc.

Project: LEATHER CARE

56498-68247

Date Sampled: 03/25/09

Date Received: 03/26/09

Instrument/Analyst: NT5/JZ

Date Analyzed: 03/30/09 17:01

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	0.5	
79-01-6	Trichloroethene	0.2	0.2	
127-18-4	Tetrachloroethene	0.2	< 0.2	U

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

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	102%
Bromofluorobenzene	96.4%

VOA SURROGATE RECOVERY SUMMARY



Matrix: Water

QC Report No: OS43-CDM, Inc.
Project: LEATHER CARE
56498-68247

ARI ID	Client ID	PV	DCE	TOL	BFB	DCB	TOT OUT
MB-033009	Method Blank	10	99.1%	NA	97.7%	NA	0
LCS-033009	Lab Control	10	96.7%	NA	102%	NA	0
LCSD-033009	Lab Control Dup	10	97.0%	NA	100%	NA	0
OS43A	GT1-03/09	10	97.5%	NA	98.8%	NA	0
OS43B	GT2-03/09	10	100%	NA	95.3%	NA	0
OS43C	GT3-03/09	10	98.5%	NA	97.1%	NA	0
OS43D	GT10-03/09	10	99.1%	NA	96.3%	NA	0
OS43E	LC1-03/09	10	106%	NA	96.2%	NA	0
OS43F	LC2-03/09	10	101%	NA	97.1%	NA	0
OS43G	LC3-03/09	10	101%	NA	94.1%	NA	0
OS43GMS	LC3-03/09	10	98.6%	NA	98.7%	NA	0
OS43GMSD	LC3-03/09	10	104%	NA	98.0%	NA	0
OS43H	LC4R-03/09	10	102%	NA	94.0%	NA	0
OS43I	LC5R-03/09	10	99.9%	NA	97.5%	NA	0
OS43J	LC6-03/09	10	102%	NA	96.4%	NA	0

LCS/MB LIMITS

QC LIMITS

SW8260B

(DCE) = d4-1,2-Dichloroethane
(TOL) = d8-Toluene
(BFB) = Bromofluorobenzene
(DCB) = d4-1,2-Dichlorobenzene70-130
70-130
70-130
70-13070-130
70-130
70-130
70-130Prep Method: SW5030B
Log Number Range: 09-7500 to 09-7509


ORGANICS ANALYSIS DATA SHEET

Volatiles by Purge & Trap GC/MS-Method SW8260B
Page 1 of 1Sample ID: LC3-03/09
MATRIX SPIKE

Lab Sample ID: OS43G

LIMS ID: 09-7506

Matrix: Water

Data Release Authorized: 

Reported: 04/10/09

QC Report No: OS43-CDM, Inc.

Project: LEATHER CARE

56498-68247

Date Sampled: 03/25/09

Date Received: 03/26/09

Instrument/Analyst MS: NT5/JZ

MSD: NT5/JZ

Date Analyzed MS: 03/30/09 17:28

MSD: 03/30/09 17:55

Sample Amount MS: 10.0 mL

MSD: 10.0 mL

Purge Volume MS: 10.0 mL

MSD: 10.0 mL

Analyte	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
Vinyl Chloride	0.3	12.3	10.0	120%	13.7	10.0	134%	10.8%
1,1-Dichloroethene	< 0.2 U	11.0	10.0	110%	12.3	10.0	123%	11.2%
trans-1,2-Dichloroethene	< 0.2 U	10.6	10.0	106%	11.9	10.0	119%	11.6%
cis-1,2-Dichloroethene	1.0	11.5	10.0	105%	12.9	10.0	119%	11.5%
Trichloroethene	1.0	11.2	10.0	102%	12.1	10.0	111%	7.7%
Tetrachloroethene	5.6	15.8	10.0	102%	16.9	10.0	113%	6.7%

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

RPD calculated using sample concentrations per SW846.


ORGANICS ANALYSIS DATA SHEET

Volatiles by Purge & Trap GC/MS-Method SW8260B
Page 1 of 1Sample ID: LC3-03/09
MATRIX SPIKE

Lab Sample ID: OS43G

LIMS ID: 09-7506

Matrix: Water

Data Release Authorized: 

Reported: 04/10/09

QC Report No: OS43-CDM, Inc.

Project: LEATHER CARE

56498-68247

Date Sampled: 03/25/09

Date Received: 03/26/09

Instrument/Analyst: NT5/JZ

Date Analyzed: 03/30/09 17:28

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

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	98.6%
Bromofluorobenzene	98.7%


ORGANICS ANALYSIS DATA SHEET

Volatiles by Purge & Trap GC/MS-Method SW8260B
Page 1 of 1Sample ID: LC3-03/09
MATRIX SPIKE DUP

Lab Sample ID: OS43G

LIMS ID: 09-7506

Matrix: Water

Data Release Authorized: 

Reported: 04/10/09

QC Report No: OS43-CDM, Inc.

Project: LEATHER CARE

56498-68247

Date Sampled: 03/25/09

Date Received: 03/26/09

Instrument/Analyst: NT5/JZ

Date Analyzed: 03/30/09 17:55

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

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	104%
Bromofluorobenzene	98.0%

ORGANICS ANALYSIS DATA SHEET

Volatiles by Purge & Trap GC/MS-Method SW8260B
Page 1 of 1

Sample ID: LCS-033009
LAB CONTROL SAMPLE

Lab Sample ID: LCS-033009
LIMS ID: 09-7500
Matrix: Water
Data Release Authorized: *[Signature]*
Reported: 04/10/09

QC Report No: OS43-CDM, Inc.
Project: LEATHER CARE
56498-68247
Date Sampled: NA
Date Received: NA

Instrument/Analyst LCS: NT5/JZ
LCSD: NT5/JZ
Date Analyzed LCS: 03/30/09 11:36
LCSD: 03/30/09 12:03

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	9.8	10.0	98.0%	10.4	10.0	104%	5.9%
1,1-Dichloroethene	9.3	10.0	93.0%	9.7	10.0	97.0%	4.2%
trans-1,2-Dichloroethene	9.3	10.0	93.0%	9.7	10.0	97.0%	4.2%
cis-1,2-Dichloroethene	9.3	10.0	93.0%	9.6	10.0	96.0%	3.2%
Trichloroethene	9.0	10.0	90.0%	9.4	10.0	94.0%	4.3%
Tetrachloroethene	9.0	10.0	90.0%	9.3	10.0	93.0%	3.3%

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

RPD calculated using sample concentrations per SW846.

Volatile Surrogate Recovery

	LCS	LCSD
d4-1,2-Dichloroethane	96.7%	97.0%
Bromofluorobenzene	102%	100%

ORGANICS ANALYSIS DATA SHEET

Volatiles by Purge & Trap GC/MS-Method SW8260B
Page 1 of 1Sample ID: MB-033009
METHOD BLANK

Lab Sample ID: MB-033009

LIMS ID: 09-7500

Matrix: Water

Data Release Authorized: *AB*

Reported: 04/10/09

QC Report No: OS43-CDM, Inc.

Project: LEATHER CARE

56498-68247

Date Sampled: NA

Date Received: NA

Instrument/Analyst: NT5/JZ

Date Analyzed: 03/30/09 12:30

Sample Amount: 10.0 mL

Purge Volume: 10.0 mL

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

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

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	99.1%
Bromofluorobenzene	97.7%



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

Page: Page 1 of 11
Lab Proj #: P0903363
Report Date: 04/07/09
Client Proj Name: Leathercare
Client Proj #: 56498-68247

Laboratory Results

Total pages in data package: 13

<u>Lab Sample #</u>	<u>Client Sample ID</u>
P0903363-01	GT1-03/09
P0903363-02	GT2-03/09
P0903363-03	GT3-03/09
P0903363-04	GT10-03/09
P0903363-05	LC1-03/09
P0903363-06	LC2-03/09
P0903363-07	LC3-03/09
P0903363-08	LC4R-03/09
P0903363-09	LC5R-03/09
P0903363-10	LC6-03/09

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

Approved By:

Debbie Hallo

Date:

4-7-09

Project Manager:

Debbie Hallo

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

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

Case Narrative:

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

Page: Page 2 of 11
Lab Proj #: P0903363
Report Date: 04/07/09
Client Proj Name: Leathercare
Client Proj #: 56498-68247

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>		
GT1-03/09	Water	P0903363-01	26 Mar. 09 12:45	30 Mar. 09 9:19		
<u>Analyte(s)</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<u>RiskAnalysis</u>						
√ Ethane	0.096	0.025	ug/L	AM20GAX	4/6/09	rw
N Ethene	<0.025	0.025	ug/L	AM20GAX	4/6/09	rw
√ Methane	150.000	0.100	ug/L	AM20GAX	4/6/09	rw



N - NELAC certified analysis

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

Page: Page 3 of 11
Lab Proj #: P0903363
Report Date: 04/07/09
Client Proj Name: Leathercare
Client Proj #: 56498-68247

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>		
GT2-03/09	Water	P0903363-02	26 Mar. 09 10:00	30 Mar. 09 9:19		
<u>Analyte(s)</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<u>RiskAnalysis</u>						
N Ethane	0.170	0.025	ug/L	AM20GAX	4/6/09	rw
N Ethene	0.510	0.025	ug/L	AM20GAX	4/6/09	rw
N Methane	140.000	0.100	ug/L	AM20GAX	4/6/09	rw



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Lab Proj #: P0903363
Report Date: 04/07/09
Client Proj Name: Leathercare
Client Proj #: 56498-68247

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>		
GT3-03/09	Water	P0903363-03	26 Mar. 09 11:15	30 Mar. 09 9:19		
<u>Analyte(s)</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<u>Risk Analysis</u>						
N Ethane	0.032	0.025	ug/L	AM20GAX	4/6/09	rw
N Ethene	0.066	0.025	ug/L	AM20GAX	4/6/09	rw
N Methane	34.000	0.100	ug/L	AM20GAX	4/6/09	rw



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Lab Proj #: P0903363
Report Date: 04/07/09
Client Proj Name: Leathercare
Client Proj #: 56498-68247

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>		
LC1-03/09	Water	P0903363-05	26 Mar. 09 8:20	30 Mar. 09 9:19		
Analyte(s)	Result	PQL	Units	Method #	Analysis Date	By
<u>Risk Analysis</u>						
N Ethane	0.140	0.025	ug/L	AM20GAX	4/6/09	rw
N Ethene	<0.025	0.025	ug/L	AM20GAX	4/6/09	rw
N Methane	240.000	0.100	ug/L	AM20GAX	4/6/09	rw



Client Name: Camp Dresser and McKee
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Lab Proj #: P0903363
Report Date: 04/07/09
Client Proj Name: Leathercare
Client Proj #: 56498-68247

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>		
LC2-03/09	Water	P0903363-06	25 Mar. 09 16:10	30 Mar. 09 9:19		
<u>Analyte(s)</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<u>Risk Analysis</u>						
N Ethane	0.037	0.025	ug/L	AM20GAX	4/6/09	rw
N Ethene	0.035	0.025	ug/L	AM20GAX	4/6/09	rw
√ Methane	200.000	0.100	ug/L	AM20GAX	4/6/09	rw



Client Name: Camp Dresser and McKee
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Lab Proj #: P0903363
Report Date: 04/07/09
Client Proj Name: Leathercare
Client Proj #: 56498-68247

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>		
LC3-03/09	Water	P0903363-07	25 Mar. 09 15:00	30 Mar. 09 9:19		
<u>Analyte(s)</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<u>RiskAnalysis</u>						
N Ethane	0.048	0.025	ug/L	AM20GAX	4/6/09	rw
N Ethene	<0.025	0.025	ug/L	AM20GAX	4/6/09	rw
N Methane	86.000	0.100	ug/L	AM20GAX	4/6/09	rw



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Lab Proj #: P0903363
Report Date: 04/07/09
Client Proj Name: Leathercare
Client Proj #: 56498-68247

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>		
LC4R-03/09	Water	P0903363-08	25 Mar. 09 10:40	30 Mar. 09 9:19		
<u>Analyte(s)</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<u>Risk Analysis</u>						
N Ethane	0.240	0.025	ug/L	AM20GAX	4/6/09	rw
N Ethene	0.072	0.025	ug/L	AM20GAX	4/6/09	rw
N Methane	390.000	0.100	ug/L	AM20GAX	4/6/09	rw



Client Name: Camp Dresser and McKee
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Page: Page 10 of 11
Lab Proj #: P0903363
Report Date: 04/07/09
Client Proj Name: Leathercare
Client Proj #: 56498-68247

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>		
LC5R-03/09	Water	P0903363-09	25 Mar. 09 12:15	30 Mar. 09 9:19		
<u>Analyte(s)</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<u>RiskAnalysis</u>						
N Ethane	0.140	0.025	ug/L	AM20GAX	4/6/09	rw
N Ethene	0.120	0.025	ug/L	AM20GAX	4/6/09	rw
✓ Methane	330.000	0.100	ug/L	AM20GAX	4/6/09	rw



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Lab Proj #: P0903363
Report Date: 04/07/09
Client Proj Name: Leathercare
Client Proj #: 56498-68247

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>		
LC6-03/09	Water	P0903363-10	25 Mar. 09 13:45	30 Mar. 09 9:19		
<u>Analyte(s)</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<u>Risk Analysis</u>						
N Ethane	0.092	0.025	ug/L	AM20GAX	4/6/09	rw
N Ethene	<0.025	0.025	ug/L	AM20GAX	4/6/09	rw
N Methane	300.000	0.100	ug/L	AM20GAX	4/6/09	rw

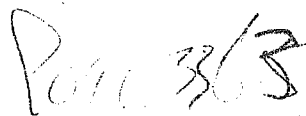




Date 3/26/09 Page 1 of 2

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rev. 2/02 Portland: (503) 232-1800

DISTRIBUTION: White, Canary to Analytical Laboratory; Pink to CDM Project Files; Gold to CDM Disposal Files



Date 3/26/09 Page 2 of 2

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Printed Name: _____ Date: _____

Company: _____



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