CDM

December 2008 Groundwater Monitoring
LeatherCare, Inc.
901/921 Elliott Avenue West
Seattle, Washington
VCP # NW1805

February 25, 2009

Prepared For:

LeatherCare, Inc.
901 Elliott Avenue West
Seattle, Washington 98119

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CDM Project No. 56498-68247

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

DECEMBER 2008 GROUNDWATER MONITORING
LEATHERCARE INC
901/921 ELLIOTT AVENUE W
SEATTLE, WASHINGTON
VCP #NW1805

February 25, 2009

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Section 1
Introduction

1.1 General

This report presents the results of the tenth round (December 2008) 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.

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. in July 2007, the redevelopment was intended to be completed in 2008, but it is apparent that this schedule will not be met. 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 December 2008 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.

Section 2
Field Investigation Methods

Groundwater monitoring was conducted on December 29 and 30, 2008. Monitored wells included GT1 through GT3, LC1 through LC3, and LC6. Monitoring wells LC4 and LC5 have apparently been destroyed by Elliot Holding's construction activities. This section describes the field and analytical methods employed.

2.1 Water Levels

Water levels were measured in all monitoring wells throughout the Subject Property between 0758 am and 0819 am on December 29, 2008. Water levels were measured using a SINCO electronic sounder.

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 150 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 2.3.

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 [µg/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

Water levels 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 11.97 feet. Water levels rose in all wells by between 0.63 and 0.79 feet between the September 2008 and December 2008 sampling rounds. This is consistent with a winter seasonal high water table.

Figure 3 shows the potentiometric surface on December 29, 2008. Groundwater contours for December 29, 2008 are consistent with those observed during prior sampling rounds. From the LeatherCare building, the groundwater flow direction is toward the north. Without LC4 and/or LC5, no gradient can be ascertained for W. Roy Street.

3.2 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 6.9 and 15.0 degrees Celsius (°C). As expected, temperatures in the groundwater are cooler during the winter months.

Dissolved Oxygen: DO concentrations ranged from approximately 0.61 to 2.47 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. The DO values for all wells exceeded 0.5 mg/L, with concentrations at three of the wells (GT1, LC1, and LC6) between 0.5 mg/L and 1.0 mg/L. While higher DO concentrations are not conducive for reductive dechlorination, they can be conducive for degradation of VC via oxidation.

Oxidation-Reduction Potential: The ORP values for four wells were negative and ranged between -16 and -52 millivolts (mV). Low ORP values are conducive for reductive dechlorination. The ORP values for GT3, LC2, and LC6 were positive at 43mV, 40 mV, and 0.7 mV, respectively.

Specific Conductance: Except for LC2, SC values were found to be significantly higher than previous rounds. A check of a calibration standard confirmed that the meter was reading a high value, outside the range of acceptance. LC2 was the last well sampled on the last day. This appears to indicate a bad connection in the meter, but the exact cause of the malfunction was not ascertained. In any event, the SC data were rejected, except for LC2.

pH: The pH values ranged between approximately 6.75 and 7.54 standard units (SU) for all wells, which are consistent with previous rounds.

Ferrous Iron: Ferrous iron was detected in six wells. Ferrous iron concentrations were all low, ranging between 0.1 and 1.0 mg/L. No specific increasing or decreasing trends are evident. VC is biodegradable by iron reducing bacteria and the presence of ferrous iron is a sign of the presence of iron reducing bacteria.

Turbidity: Turbidity values were less than 10 nephalometric turbidity units (NTU), except for GT3 (10.29 NTU) and GT2 (39.6 NTU). GT3 and GT2 consistently contain an orange or brown biofloc which is the source of the turbidity. Similarly, biofloc was noted in LC3 at the beginning of purging.

3.3 Groundwater Analytical Results

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

3.3.1 PCE

PCE was detected in three of the seven groundwater samples and ranged from 1.3 to 8.2 µg/L when detected. The detection of 8.2 µg/L in the LC1 sample exceeded the Method A cleanup level of 5 µg/L and was slightly higher than the concentration reported in the September 2008 round. It is noteworthy that the Method A cleanup level for PCE was exceeded in only one of the seven monitoring wells.

3.3.2 TCE

TCE was detected in all of the seven groundwater samples, except GT1. The TCE concentration in one of the samples, LC1, exceeded the Method A cleanup level (5 µg/L) only slightly at 5.6 µg/L.

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

Of these degradation products of PCE, *c*-1,2-DCE was detected in all seven groundwater samples, *t*-1,2-DCE in three samples, and 1,1-DCE was not detected in any sample. Concentrations ranged between 0.2 and 9.2 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.

3.3.4 Vinyl Chloride

Vinyl chloride was detected in four groundwater samples ranging between 0.6 and 11 µg/L when detected. VC continues to be below detection limits in the most downgradient well on the GTP parcel, even with the site's highest VC concentration

being observed at the next upgradient well (GT2), only 110 feet away. The VC concentrations at all four of the wells in which it was detected were slightly lower than the levels from the September 2008 sampling round.

3.3.5 Dissolved Gasses

Methane was detected in every groundwater sample, ranging between 34 µg/L and 450 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 three of the wells at concentrations ranging between 0.039 µg/L and 0.5 µg/L. Ethane was detected in five groundwater samples at concentrations ranging between 0.044 µg/L and 0.13 µg/L.

Ethene concentrations remain the highest at GT2 and GT3 where the VC concentrations are the highest, indicating complete natural breakdown of PCE to nontoxic compounds and elements.

3.4 cVOC Trends

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

Decreasing trends are noted for VC concentrations at all of the wells. Probability values for the decreasing trends at GT2, LC1, LC2, LC3 and LC6 improved. The trend at GT3 changed from increasing in the September 2008 sampling round to decreasing. The probability values for a decreasing trend for VC at GT2, LC1, LC2, LC3, and LC6 have become significant (i.e. $p \leq 0.1$).

PCE and TCE concentrations continue to show a mix of decreasing and increasing trends. Trends for PCE at LC1, LC2, and LC3 remain unchanged from the September 2008 sampling round with the probability value for the decreasing trend at LC2 improving, the probability value for the increasing trend at LC1 losing value, and the probability value for the increasing trend at LC3 improving slightly. The trend at GT2 for TCE changed from no trend with a probability value of $p=0.5$ in the September 2008 round to decreasing. The trend at LC6 for TCE changed from decreasing to increasing. The probability values for the decreasing trends for TCE at GT3 and LC2 became significant (i.e. $p \leq 0.1$).

Beyond the Mann-Kendall, simply reviewing the PCE and TCE data shows some obvious trends. For PCE, the Method A cleanup level has never been exceeded in four of the wells. In the fifth well PCE has not exceeded the cleanup level since 2006. This leaves two wells (LC1 and LC3), both of which have exceeded the PCE cleanup level only 4 out of ten sampling rounds. In one of these wells (LC3), the exceedances appear sporadic. At the other well (LC1), exceedances occurred during the last three consecutive sampling rounds. These exceedances have never been substantial (never more than 2 times the cleanup level).

Similarly, TCE has only ever exceeded its cleanup level in two of the seven wells and in one of those wells the cleanup level has not been exceeded since 2006. At the remaining well, LC1, similar to PCE, the cleanup level is sporadically exceeded (five out of ten sampling rounds). For TCE, the cleanup level exceedance has always been minor (less than 50% of the cleanup level). The fact that TCE, along with cis-1,2-DCE, is being observed is positive in that it shows that PCE is being degraded.

Section 4
Conclusions and Recommendations

Overall, VC concentrations continue to show decreasing trends. Of the seven wells on the subject property, PCE concentrations in two wells and the TCE concentration in one of the same two wells continue to fluctuate around their respective cleanup levels. The data indicate alternating favorable conditions for the degradation of the more highly chlorinated compounds, versus the lesser chlorinated compounds. 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.

Distribution

5 Copies

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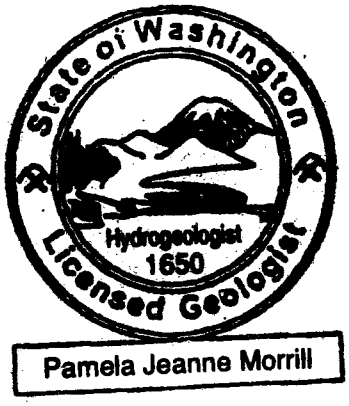


Tables

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
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
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
	06/18/08	0820		2.21	11.15
	09/24/08	1020		2.54	10.82
	12/29/08	0804		1.80	11.56
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
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

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
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	--		--	--
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	--		--	--
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

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

Analyte	Date Sampled	Method A Cleanup Levels [a]	Monitoring Well I.D. [b] GT1	GT2	GT3	LC1	LC2	LC3	LC4 [i]	LC5 [i]	LC6	Field Blank	Trip Blank
Field-Measured Parameters													
pH	05/06	N/A	7.23	7.03	7.10	7.05	7.43	6.95	7.18	6.95	6.99	--	--
	09/06		7.33	7.19	7.13	7.19	7.26	7.07	7.03	7.05	7.07	--	--
	02/07		6.77	6.64	6.57	6.46	6.42	6.62	6.06	6.43	6.70	--	--
	06/07		7.15	7.01	6.95	6.99	7.23	7.00	6.97	6.91	6.90	--	--
	09/07		7.11	7.00	6.88	7.00	7.16	6.92	6.83	6.88	6.91	--	--
	12/07		7.47	7.42	7.30	6.50	7.36	7.45	6.42	6.59	7.02	--	--
	03/08		7.75	7.77	7.51	7.67	8.04	8.36	--	8.42	8.19	--	--
	06/08		7.23	6.89	6.97	**	6.96	6.70	--	--	6.96	--	--
	09/08		**	6.59	6.55	6.62	6.72	6.58	--	--	6.66	--	--
	12/08		7.06	6.75	6.79	6.98	7.54	6.82	--	--	6.95	--	--
ORP [d] (mV)	05/06	N/A	-33	-27	-56	-72	-152	-33	-50	-82	-50	--	--
	09/06		-119	-97	-68	-113	-90	-71	-50	-107	-78	--	--
	02/07		-33	-2	17	-60	-32	56	80	-30	31	--	--
	06/07		-211	-171	-38	-61	-162	-183	-116	-214	-111	--	--
	09/07		-96	-95	-71	-125	-132	-83	-75	-126	-95	--	--
	12/07		**	**	**	**	**	**	**	**	**	--	--
	03/08		-54	-27	10	-28	-30	-59	--	-107	-43	--	--
	06/08		-57	-49	142	**	112	-17	--	--	-17	--	--
	09/08		--	--	--	--	--	--	--	--	--	--	--
	12/08		-52	-16	43	-22	40	-44	--	--	0.7	--	--
Temperature (°C)	05/06	N/A	16.0	16.2	15.1	18.3	18.2	15.9	14.1	13.8	14.2	--	--
	09/06		20.0	21.3	20.8	23.1	22.6	22.6	22.2	22.5	20.6	--	--
	02/07		13.6	9.3	10.0	16.8	16.2	11.4	9.7	10.0	11.8	--	--
	06/07		17.8	20.2	18.7	20.7	20.0	19.3	18.6	18.0	17.6	--	--
	09/07		19.3	19.4	19.2	22.3	21.7	22.2	20.2	20.4	20.0	--	--
	12/07		11.9	8.8	9.3	17.3	15.5	11.6	12.3	11.4	12.6	--	--
	03/08		13.0	10.3	9.5	15.9	16.3	11.8	--	11.3	12.4	--	--
	06/08		16.1	17.0	17.2	18.3	19.8	16.4	--	--	16.3	--	--
	09/08		18.7	17.9	17.8	22.1	21.8	19.6	--	--	17.6	--	--
	12/08		11.2	7.6	6.9	14.6	15.0	9.8	--	--	11.5	--	--
Specific Conductivity (µS/cm)	05/06	N/A	1,243	1,283	1,264	1,190	1,183	1,345	1,360	1,322	1,281	--	--
	09/06		811	856	864	866	736	870	853	856	856	--	--
	02/07		831	971	915	951	519	1,020	496	795	948	--	--
	06/07		786	813	833	836	676	820	808	804	842	--	--
	09/07		808	844	879	873	622	841	737	824	828	--	--
	12/07		732	706	829	1,017	181	778	553	543	920	--	--
	03/08		637	915	926	928	518	902	--	114 [j]	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	1,269	--	--	1,353	--	--
	12/08		**	**	**	**	671	**	--	--	**	--	--
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]	--	--
	06/07		0.19	0.22	0.24	0.34	0.91	0.35	0.47	0.39	1.13	--	--
	09/07		0.41	0.34	0.27	0.24	0.25	0.58	0.78	0.55	0.58	--	--
	12/07		0.33	0.47	0.17	0.72	3.05	1.44	1.00	0.29	0.28	--	--

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

Analyte	Date Sampled	Method A Cleanup Levels [a]	Monitoring Well I.D. [b] GT1	GT2	GT3	LC1	LC2	LC3	LC4 [l]	LC5 [l]	LC6	Field Blank	Trip Blank
Dissolved Oxygen (mg/L) (cont.)	03/08		0.34	0.34	1.28	0.31	1.12	0.44	--	0.37	0.34	--	--
	06/08		0.20	1.09	0.71	0.29	0.35	0.71	--	--	0.28	--	--
	09/08		1.32	1.12	1.06	0.08	0.84	1.36	--	--	1.34	--	--
	12/08		0.90	2.11	2.17	0.61	2.47	1.60	--	--	0.87	--	--
Turbidity (NTU)	05/06	N/A	1.76	0.83	0.66	5.76	62 [c]	1.05	1.79	2.82	2.01	--	--
	09/06		*	0.47	0.70	0.7	*	5.5	2.4	1.8	*	--	--
	02/07		3.1 [h]	0.0 [h]	>999 [h]	0.0 [h]	0.0 [h]	22.4 [h]	0.0 [h]	16.3 [h]	26 [h]	--	--
	06/07		0.7	1.1	2.2	0.9	1.9	2.6	1.8	0.2	3.8	--	--
	09/07	N/A	0.9	0.9	1.6	*	0.5	2.3	6.5	0.14	3.8	--	--
	12/07		--	--	--	--	--	--	--	--	--	--	--
	03/08		16.9	8.8	168 [k]	2.3	0.7	20.9	--	9.6	4.4	--	--
	06/08		0.7	1.8	34.5/227 [k]	0.5	0.0 [m]	1.1	--	--	0.0 [m]	--	--
	09/08		54.8 [h]	53.2 [h]	187 [h]	18.2 [h]	48.2 [h]	179 [h]	--	--	44.6 [h]	--	--
	12/08		2.90	39.6 [k]	10.29 [k]	0.0 [m]	0.0 [m]	0.0 [m]	--	--	0.9	--	--
Ferrous Iron (ppm)	05/06	N/A	0.1	0.2	0.2	0.5	0.3	0.3	0.2	1	0.5	--	--
	09/06		0.3	0.2	0.6	--	0.1	0.6	0.4	1	1	--	--
	02/07		0.4	0.6	0.3	0.6	--	0.2	0.1	1	0.4	--	--
	06/07		0.3	0.4	0.2	0.5	0	0.2	0.6	0.1	0.3	--	--
	09/07		0.2	0.3	0.2	0.4	0.2	0.4	0.6	0.8	0.8	--	--
	12/07		0.1	0	0	0.6	0	0.2	0.1	0.8	0.3	--	--
	03/08		0.3	0.8	0.4	0.4	0.1	0.4	--	0.8	0.4	--	--
	06/08		0.2	1	0	0.6	0	1	--	--	0.6	--	--
	09/08		--	--	--	--	--	--	--	--	--	--	--
	12/08		0.2	0.3	0.1	0.4	0	1	--	--	0.3	--	--
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	16.1	6.8/6.7	14.0	17.5	--	--
Sulfate (EPA Method 375.2) (mg/L)	05/06	N/A	62.3	64.4	77.8	88.9	52.7	69.7	39.3/39.5	39.5	54.2	--	--
Chemical Oxygen Demand (EPA Method 410.4) (mg/L)	05/06	N/A	6.18	5.68	9.29	12.8	12.4	7.71	10.1/6.87	10.1	12.8	--	--
Alkalinity (SM 2320) (mg/L CaCO3)	05/06	N/A	336	406	358	368	309	398	233/233	372	401	--	--
Carbonate (SM 2320) (mg/L CaCO3)	05/06	N/A	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0/<1.0	<1.0	<1.0	--	--
Bicarbonate (SM 2320) (mg/L CaCO3)	05/06	N/A	336	406	358	368	309	398	233/233	372	401	--	--
Hydroxide (SM 2320) (mg/L CaCO3)	05/06	N/A	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0/<1.0	<1.0	<1.0	--	--
***Dehalococcoides spp.* (QCPR) [e]**	05/06	N/A	-	+	+	+	-	+	-/-	+	+	--	--
Reductive Dechlorination End Products (µg/L)													
Methane	05/06	N/A	98	140	100	110	590	33	98/87	220	77	--	--
	09/06		160	1,400	140/130	94	310	28	130	170	92	--	--
	02/07		150	510	51/50	45	710	96	88	140	150	--	--
	06/07		150	200	110	46	870	24	100/140	310	99	--	--
	09/07		130	2,100	120	86	520	100	130/130	500	28	--	--
	12/07		110	100	91	51	58	16	94/99	530	360	--	--

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

Analyte	Date Sampled	Method A Cleanup Levels [a]	Monitoring Well I.D. [b] GT1	GT2	GT3	LC1	LC2	LC3	LC4 [l]	LC5 [l]	LC6	Field Blank	Trip Blank
Methane	03/08		170	120	76/56	33	73	23	--	160	120	--	--
(cont.)	06/08		180	170	27	110	20	140	--	--	370	--	--
	09/08		150	260	73	150	260	120	--	--	370	--	--
	12/08		200	110	34/33	200	40	86	--	--	450	--	--
Ethane	05/06	N/A	<12	<12	<12	<12	<12	<12	<12/<12	<12	<12	--	--
	09/06		0.49	0.34	0.05/0.045	0.24	0.22	0.04	0.11	0.21	0.097	--	--
	02/07		0.18	0.37	0.088/0.087	0.093	0.42	0.078	0.054	0.14	0.12	--	--
	06/07		0.24	0.30	0.054	0.034	0.32	0.033	0.10/0.11	0.21	0.088	--	--
	09/07		0.3	0.29	0.034	0.33	0.21	<0.025	0.052/0.052	0.22	<0.025	--	--
	12/07		0.22	0.15	0.059	0.091	<0.025	0.030	0.081/0.084	0.28	0.058	--	--
	03/08		0.098	0.23	0.052/0.045	0.040	0.038	0.026	--	0.16	0.065	--	--
	06/08		0.22	0.29	0.037	0.087	0.053	0.044	--	--	0.067	--	--
	09/08		0.18	0.27	0.068	0.11	0.073	0.064	--	--	0.11	--	--
	12/08		0.12	0.12	<0.025/0.028	0.13	<0.025	0.044	--	--	0.11	--	--
Ethene	05/06	N/A	<11	<11	<11	<11	<11	<11	<11/<11	<11	<11	--	--
	09/06		0.041	1.8	0.21/0.19	0.82	0.46	<0.025	0.05	0.31	<0.025	--	--
	02/07		0.031	1.2	0.079/0.072	0.034	0.92	0.035	0.046	0.21	0.046	--	--
	06/07		0.083	1.4	0.15	0.11	0.29	0.10	0.15/0.080	0.29	0.094	--	--
	09/07		<0.025	1.9	0.08	0.35	0.35	0.051	0.039/0.036	0.23	<0.025	--	--
	12/07		<0.025	0.81	0.51	0.027	<0.025	0.22	0.029/0.034	0.18	<0.025	--	--
	03/08		<0.025	0.9	0.16/0.13	0.028	<0.025	<0.025	--	0.12	<0.025	--	--
	06/08		<0.025	0.65	0.1	<0.025	0.079	<0.025	--	--	<0.025	--	--
	09/08		0.035	1.0	0.14	0.11	0.071	0.044	--	--	0.034	--	--
	12/08		<0.025	0.5	0.1/0.085	0.039	<0.025	<0.025	--	--	<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	--	--
	09/06	0.50	<0.25	<0.25	<0.25/<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	--	--
	02/07	0.50	--	--	--	--	--	0.28	<0.25	0.42/<0.25 [i]	0.76/<0.25 [i]	--	--
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]	--	--
Detected Volatile Organic Compounds (EPA SW8260B) (µg/L)													
Tetrachloroethene	05/06	5	<0.2	<0.2	0.4	2.0	9.4	2.9	14/14	0.4	<0.2	<0.2	<0.2
	09/06	5	<0.2	<0.2	<0.2/<0.2	4.4	9.3	2.8	8.6	<0.2	<0.2	--	--
	02/07	5	<0.2	<0.2	0.4/0.4	2.2	2.5	5.9	20 D	0.3	<0.2	--	<0.2
	06/07	5	<0.2	<0.2	<0.2	1.4	1.5	2.6	9.8/9.9	0.2	<0.2	--	--
	09/07	5	<0.2	<0.2	<0.2	5.2	1.9	3.0	7.9/7.4	<0.2	<0.2	--	--
	12/07	5	<0.2	<0.2	<0.2	4.5	2.7	6.8	25/23 D	1.0	<0.2	--	--
	03/08	5	<0.2	<0.2	<0.2/<0.2	3.6	2.6	3.0	--	<0.2	<0.2	--	--
	06/08	5	<0.2	<0.2	<0.2	6.2	3.3	6.8	--	--	<0.2	--	--
	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	--	--
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

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

Analyte	Date Sampled	Method A Cleanup Levels [a]	Monitoring Well I.D. [b] GT1	GT2	GT3	LC1	LC2	LC3	LC4 [l]	LC5 [l]	LC6	Field Blank	Trip Blank
Trichloroethene (cont.)	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	--	--
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	--	--
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	--	--
	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	--	--
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	--	--
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	--	--

CDM

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

Analyte	Date Sampled	Method A Cleanup Levels [a]	Monitoring Well I.D. [b] GT1	GT2	GT3	LC1	LC2	LC3	LC4 [l]	LC5 [l]	LC6	Field Blank	Trip Blank
Vinyl Chloride	09/07	0.2	<0.2	22 D	2.1	1.4	1.4	1.0	0.8/0.8	1.3	0.3	--	--
(cont.)	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	--	--
1,1,1-Trichloroethane	05/06	200	<0.2	<0.2	<0.2	<0.2	<0.2	0.2	<0.2/<0.2	<0.2	<0.2	<0.2	<0.2
1,1,2-Trichloroethane	05/06	0.77 [f]	0.3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2/<0.2	<0.2	<0.2	<0.2	<0.2
1,1-Dichloroethane	05/06	800 [f]	<0.2	<0.2	<0.2	<0.2	0.9	<0.2	0.4/0.4	<0.2	<0.2	<0.2	<0.2
Benzene	05/06	5	<0.2	1.5	1.4	<0.2	0.4	<0.2	0.7/0.6	<0.2	<0.2	<0.2	<0.2
Toluene	05/06	1,000	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2/<0.2	<0.2	<0.2	0.4	<0.2
Dibromochloromethane	05/06	0.52 [f]	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2/<0.2	<0.2	<0.2	<0.2	<0.2
tert-Butylbenzene	05/06	N/A	0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2/<0.2	<0.2	<0.2	<0.2	<0.2
Acetone	05/06	800 [f]	3.4 M	5.3 M	<1.0	1.5	2.3	1.3	1.5/1.7	2.1	1.7	5.2	1.5
Methylene Chloride	05/06	5	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3/<0.3	<0.3	<0.3	<0.3	0.4

Notes:

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

		GT1 Monitoring Well	GT2 Monitoring Well	GT3 Monitoring Well	LC1 Monitoring Well	LC2 Monitoring Well	LC3 Monitoring Well	LC6 Monitoring Well
Tetrachloroethene	Count (data)	10	10	10	10	10	10	10
	Count (nondetects)	10	10	8	0	0	0	10
	S Statistic	NC	NC	NC	27	-11	15	NC
	Var(S)	NC	NC	NC	125	125	123	NC
	Trend	NC	NC	NC	Increasing	Decreasing	Increasing	NC
	Probability (of no real trend)	NC	NC	NC	1.00%	18.55%	10.34%	NC
Trichloroethene	Count (data)	10	10	10	10	10	10	10
	Count (nondetects)	6	0	0	0	0	0	3
	S Statistic	NC	-9	-21	17	-17	9	4
	Var(S)	NC	108	123	123	125	116	88
	Trend	NC	Decreasing	Decreasing	Increasing	Decreasing	Increasing	Increasing
	Probability (of no real trend)	NC	22.04%	3.57%	7.46%	7.62%	22.91%	37.46%
cis-1,2-Dichloroethene	Count (data)	10	10	10	10	10	10	10
	Count (nondetects)	0	0	0	0	0	0	0
	S Statistic	-26	-24	-9	-5	-24	-4	-40
	Var(S)	124	124	125	125	124	121	124
	Trend	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Probability (of no real trend)	1.24%	1.94%	23.71%	36.03%	1.94%	39.27%	0.02%
trans-1,2-Dichloroethene	Count (data)	10	10	10	10	10	10	10
	Count (nondetects)	9	0	0	7	4	10	10
	S Statistic	NC	-29	-19	NC	-28	NC	NC
	Var(S)	NC	123	125	NC	115	NC	NC
	Trend	NC	Decreasing	Decreasing	NC	Decreasing	NC	NC
	Probability (of no real trend)	NC	0.58%	5.37%	NC	0.60%	NC	NC
1,1-Dichloroethene	Count (data)	10	10	10	10	10	10	10
	Count (nondetects)	10	10	9	10	10	10	10
	S Statistic	NC	NC	NC	NC	NC	NC	NC
	Var(S)	NC	NC	NC	NC	NC	NC	NC
	Trend	NC	NC	NC	NC	NC	NC	NC
	Probability (of no real trend)	NC	NC	NC	NC	NC	NC	NC
Vinyl Chloride	Count (data)	10	10	10	10	10	10	10
	Count (nondetects)	9	0	0	0	2	0	1
	S Statistic	NC	-18	-7	-18	-28	-17	-24
	Var(S)	NC	124	125	122	124	123	121
	Trend	NC	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
	Probability (of no real trend)	NC	6.34%	29.58%	6.19%	0.77%	7.46%	1.84%

Figures

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

N

0 2000

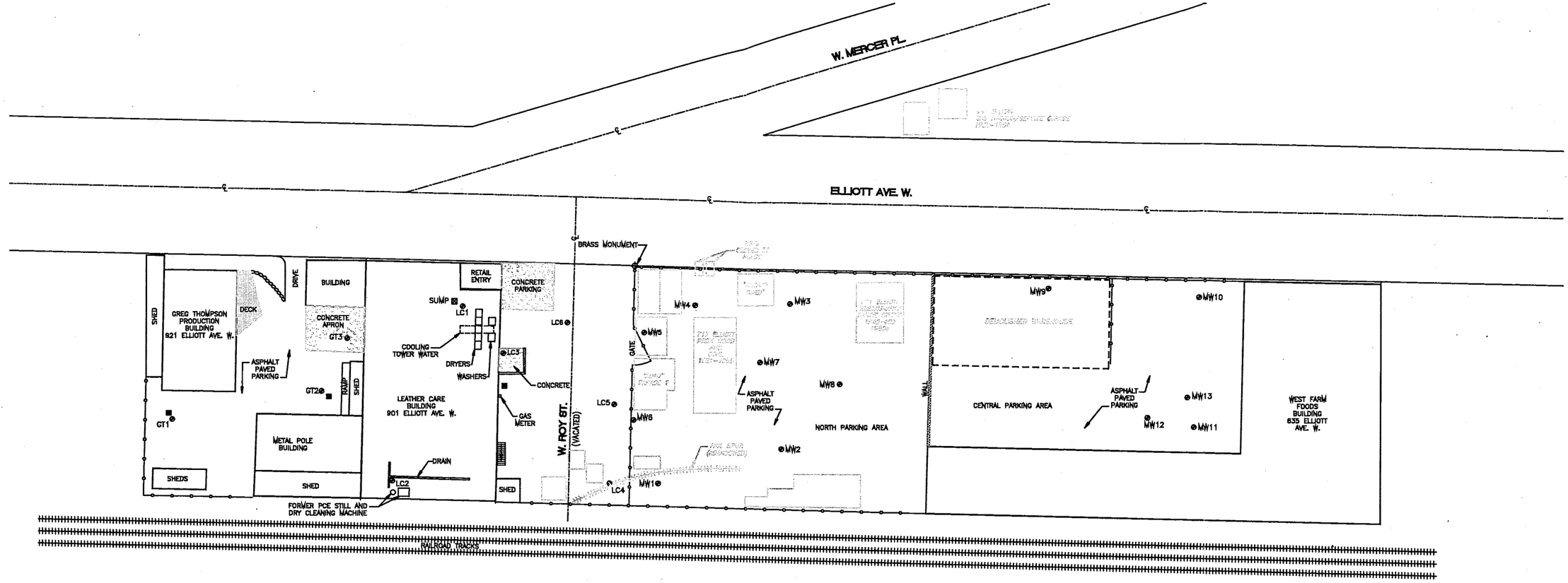
Scale in Feet

P:\56498\68247\ Fig-1 02/02/09 08:05 riehlepj

CDM

LEATHERCARE INC.
SEATTLE, WASHINGTON

Figure No. 1
VICINITY MAP



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

N

1" = 80'

40 0 80

LEGEND:

- MW1 ⊕ MONITORING WELL LOCATION AND DESIGNATION AND ELEVATION IN FEET
- FENCE
- RAILROAD TRACKS
- CATCH BASIN
- HISTORICAL FEATURES
- SURVEY MONUMENT

VERTICAL DATUM:

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

BASIS OF BEARING:

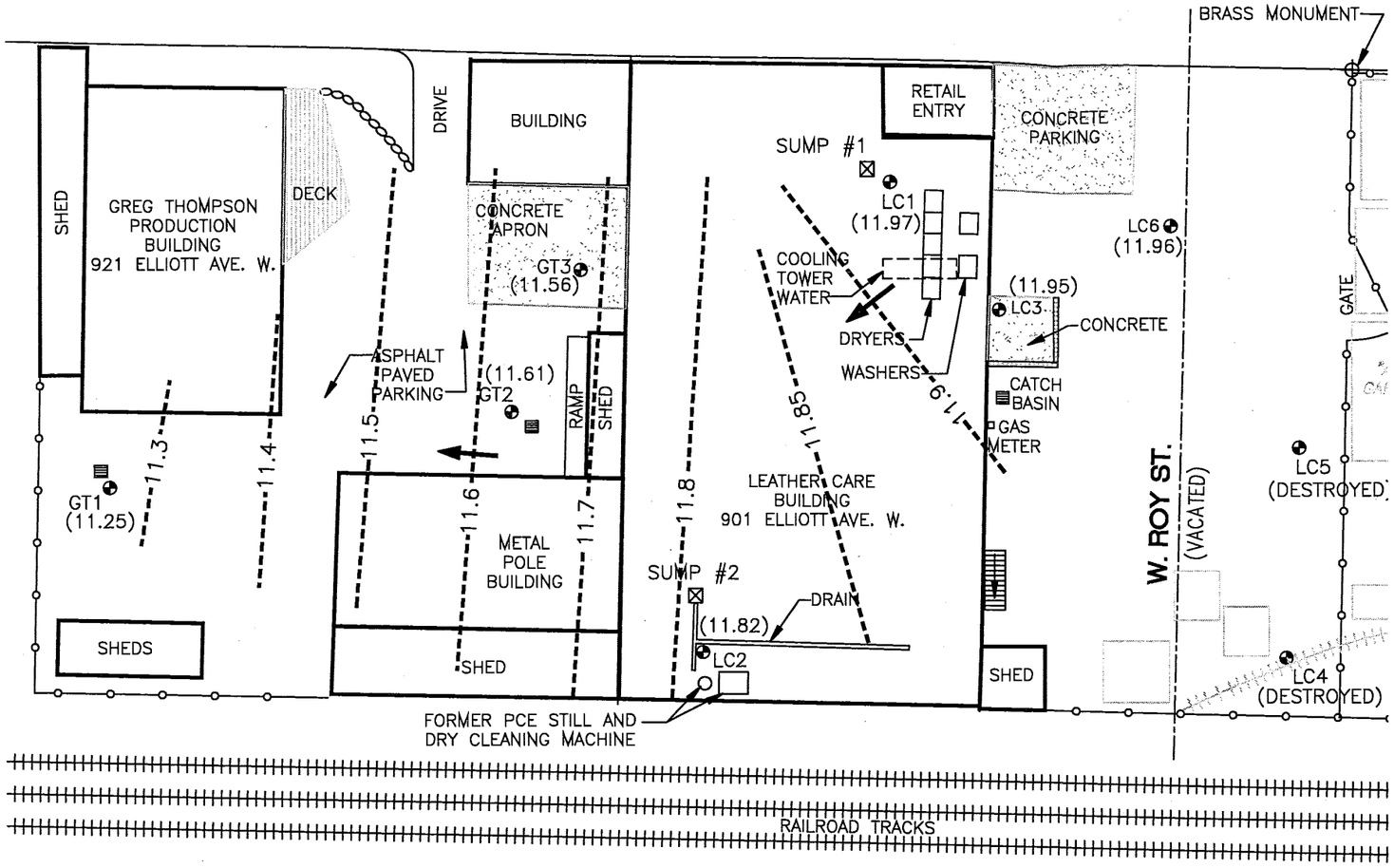
BASIS OF BEARING ASSUMED DUE WEST

LEATHERCARE INC.
SEATTLE, WASHINGTON

Figure No. 2
Site Plan

CDM

P:\56498\68247\ Fig-2 01/28/09 09:36 riehlepj XREFS: Site, 11X17BDR



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.
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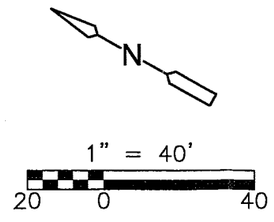
- –HISTORICAL AERIAL PHOTOGRAPHS DATED 1936 AND 1946.
- –SANBORN MAP DATED 1950.
- –POLK DIRECTORIES DATED 1938–1996



LEGEND:

- LC6 (11.96) — MONITORING WELL LOCATION AND DESIGNATION WITH GROUNDWATER ELEVATION IN FEET
- 11.8 — POTENTIOMETRIC CONTOURS, CONTOUR INTERVAL IS 0.1 FT. (AVERAGE) OR 0.05 FT.
- DIRECTION OF GROUNDWATER FLOW
- FENCE
- RAILROAD TRACKS
- 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:

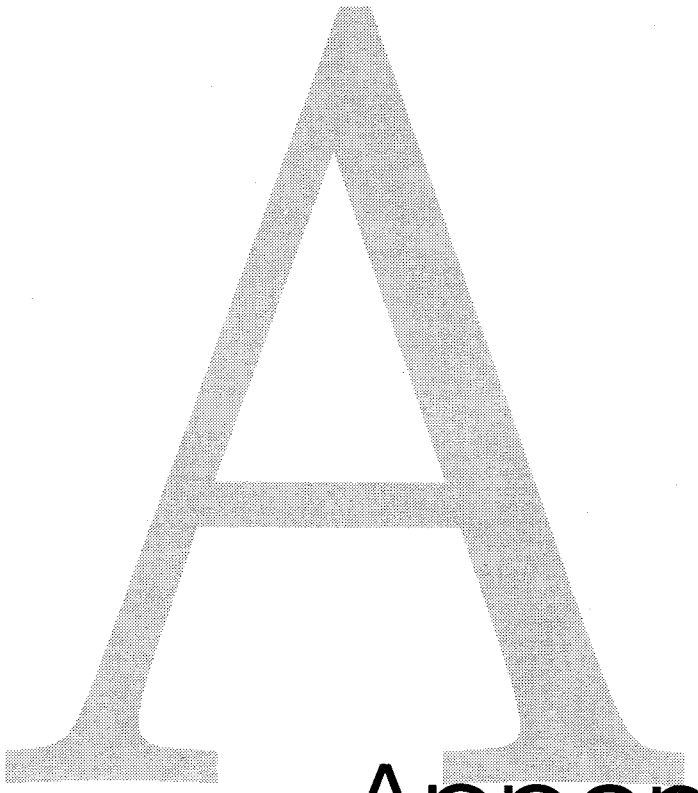
BASIS OF BEARING ASSUMED DUE WEST

LEATHERCARE INC.
SEATTLE, WASHINGTON

Figure No. 3
Potentiometric Surface Map
December 29, 2008

CDM

P:\56498\68247\ Fig–3 DEC 29 2008 01/28/09 09:27 richlepj XREFS: 11X17BDR, DEC 12 07–site



Appendix A

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Received
JAN 16 2009

January 8, 2009

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

RE: Project ID: Leathercare, 56498-68247
ARI Job No: OF75

Dear Pam:

Please find enclosed the original Chain-of-Custody (COC) record, sample receipt documentation, and the final results for the samples from the project referenced above. Analytical Resources Inc. (ARI) accepted eight water samples and a trip blank on December 30, 2008. Please note that the trip blank was put on hold upon receipt as requested on the COC. For further detail 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 recoveries of 1,1-Dichloroethene and trans-1,2-Dichloroethene were outside the advisory control limits high for sample **LC3-12-08**. The matrix spike percent recoveries were within advisory control limits. No further corrective action was required.

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 OF75

Enclosures

CDM

CHAIN-OF-CUSTODY

OF75

Date 12/30/08 Page 1 of 2

PROJECT INFORMATION

Project Manager: Pam Merrill

Project Name: Leatherczre

Project Number: 56498 - 68247

Site Location: Elliott Ave W & Mercer Pl Sampled By: MLF

DISPOSAL INFORMATION

☒ Lab Disposal (return if not indicated)

Disposal Method: _____

Disposed by: _____ Disposal Date: _____

QC INFORMATION (check one)

☐ SW-846 ☐ CLP ☐ Screening ☒ CDM Std. ☐ Special

Laboratory Number:

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB ID	PETROLEUM HYDROCARBONS: TPH-HCID State:	TPH-G State:	TPH-D State:	TPH-418.1 State:	8015M Fuel Hydrocarbon	TPH Special Instructions	ORGANIC COMPOUNDS: 8010 Halogenated VOCs	8020 Aromatic VOCs	8020M - BETX only	8260 GC/MS Volatiles	8270 GC/MS Semivolatiles	8310 PAHs	8040 Phenols	DWS - Volatiles and Semivolatiles	PESTS/PCBs: 8080 OC Pest/PCBs	8080M PCBs only	8140 OP Pesticides	8150 OC Herbicides	DWS - Herb/Pest	METALS: Selected Metals: list	Organic Lead (Ca)	TCL Metals (23)	Priority Poll. Metals (13)	DWS - Metals	MFSP - Metals (Wa)	LEACHING TESTS: TCLP - Volatiles (ZHE)	TCLP - Semivolatiles	TCLP - Pesticides	TCLP - Metals	OTHER	NUMBER OF CONTAINERS
GT1-12/08	12/29/08	0925	Water											✓																					3
GT2-12/08	12/29/08	1120	Water											✓																					3
GT3-12/08	12/29/08	1250	Water											✓																					3
GT10-12/08	12/29/08	1315	Water											✓																					3
LC6-12/08	12/29/08	1410	Water											✓																					3
LC2-12/08	12/29/08	1525	Water											✓																					3
LC1-12/08	12/30/08	0825	Water											✓																					3
LC3-12/08	12/30/08	0925	Water											✓																					9

LAB INFORMATION

Lab Name: Analytical Resources

Lab Address: 4611 South 134th Place

Ste 100, Tukwila WA 98168

Via: Hand delivered

SAMPLE RECEIPT

Total Number of Containers:

Chain-of-Custody Seals: Y/N/NA

Intact?: Y/N/NA

Received in Good Condition/Cold:

Turn Around Time: ☐ Standard ☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 1 wk.

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH DATA

Special Instructions: Chlorinated Volatiles, Extra volume for LC3-12/08 for MS/MSD 20-mL purge

RELINQUISHED BY: 1.	RELINQUISHED BY: 2.	RELINQUISHED BY: 3.
Signature: Mary Lou Fox Time: 1120	Signature: Time:	Signature: Time:
Printed Name: Mary Lou Fox Date: 12/30/08	Printed Name: Date:	Printed Name: Date:
Company: CDM	Company:	Company:
RECEIVED BY: 1.	**RECEIVED BY: 2.**	**RECEIVED BY: 3.**
Signature: Jami Hayes Time: 1120	Signature: Time:	Signature: Time:
Printed Name: Jami Hayes Date: 12/30/08	Printed Name: Date:	Printed Name: Date:
Company: ARI	Company:	Company:

CDM OFFICES: Bellevue: (206) 453-8383
Portland: (503) 232-1800

rev. 2/02

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

forms\field\chain of custody.p65

CDM

CHAIN-OF-CUSTODY

Date 12/30/08 Page 2 of 2

0F75

PROJECT INFORMATION

Project Manager: Pam Marrill
Project Name: Leathercare
Project Number: 56498-68247
Site Location: Ellis Ave W Mercer Place Sampled By: MLF

DISPOSAL INFORMATION

☒ Lab Disposal (return if not indicated)
Disposal Method: _____
Disposed by: _____ Disposal Date: _____

QC INFORMATION (check one)

☐ SW-846 ☐ CLP ☐ Screening ☒ CDM Std. ☐ Special

Laboratory Number:

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB ID
Trip Blank	12/30/08		Water	

PETROLEUM HYDROCARBONS							ORGANIC COMPOUNDS										PESTS/PCBs						METALS							LEACHING TESTS				OTHER						NUMBER OF CONTAINERS
TPH-HCID State:	TPH-G State:	TPH-D State:	TPH-418.1 State:	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 (Wa)		TCLP - Volatiles (ZHE)	TCLP - Semivolatiles	TCLP - Pesticides	TCLP - Metals							
																																						2

LAB INFORMATION

Lab Name: Analytical Resources
Lab Address: 4611 South 134th Place
Ste 100 Tukwila WA 98168
Via: Hand delivered

SAMPLE RECEIPT

Total Number of Containers:
Chain-of-Custody Seals: Y/N/NA
Intact?: Y/N/NA
Received in Good Condition/Cold:

Turn Around Time: ☒ Standard ☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 1 wk.

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH DATA

Special Instructions:

RELINQUISHED BY: 1.	RELINQUISHED BY: 2.	RELINQUISHED BY: 3.
Signature: Mary Lou Fox Time: 1120	Signature: Time:	Signature: Time:
Printed Name: Mary Lou Fox Date: 12/30/08	Printed Name: Date:	Printed Name: Date:
Company: CDM	Company:	Company:
RECEIVED BY: 1.	**RECEIVED BY: 2.**	**RECEIVED BY: 3.**
Signature: Jami Hayes Time: 11:20	Signature: Time:	Signature: Time:
Printed Name: Jami Hayes Date: 12/30/08	Printed Name: Date:	Printed Name: Date:
Company: ARI	Company:	Company:

CDM OFFICES: Bellevue: (206) 453-8383
Portland: (503) 232-1800

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

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Cooler Receipt Form

ARI Client: CDM
COC No: _____
Assigned ARI Job No: OF75

Project Name: _____
Delivered by: Hand
Tracking No: _____

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
Record cooler temperature (recommended 2.0-6.0 °C for chemistry	5.8 °C	

Cooler Accepted by: JH Date: 12/30/08 Time: 11:20

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?	Ice	
Was sufficient ice used (if appropriate)?	(YES)	NO
Were all bottles sealed in individual plastic bags?	(YES)	NO
Did all bottle arrive in good condition (unbroken)?	(YES)	NO
Were all bottle labels complete and legible?	(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 checklist)	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: JH Date: 12/30/08 Time: 1420

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

Explain discrepancies or negative responses:
small peabubbles in 2of3 LC3-12/08 VOA vials

By: Date:

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: GT1-12/08**
SAMPLE
Page 1 of 1

Lab Sample ID: OF75A
LIMS ID: 08-34826
Matrix: Water
Data Release Authorized: VTS
Reported: 01/08/09

QC Report No: OF75-CDM, Inc.
Project: LEATHERCARE
56498-68247
Date Sampled: 12/29/08
Date Received: 12/30/08

Instrument/Analyst: NT7/PAB
Date Analyzed: 01/05/09 17:47

Sample Amount: 20.0 mL
Purge Volume: 20.0 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**	**1.9**	
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	122%
d8-Toluene	104%
Bromofluorobenzene	102%
d4-1,2-Dichlorobenzene	102%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: GT2-12/08 SAMPLE**
Page 1 of 1

Lab Sample ID: OF75B
LIMS ID: 08-34827
Matrix: Water
Data Release Authorized: VTS
Reported: 01/08/09

QC Report No: OF75-CDM, Inc.
Project: LEATHERCARE 56498-68247
Date Sampled: 12/29/08
Date Received: 12/30/08

Instrument/Analyst: NT7/PAB
Date Analyzed: 01/05/09 18:13

Sample Amount: 20.0 mL
Purge Volume: 20.0 mL

CAS Number	Analyte	RL	Result	Q
75-01-4	**Vinyl Chloride**	**0.2**	**11**	
75-35-4	1,1-Dichloroethene	0.2	< 0.2	U
156-60-5	**trans-1,2-Dichloroethene**	**0.2**	**1.8**	
156-59-2	**cis-1,2-Dichloroethene**	**0.2**	**6.4**	
79-01-6	**Trichloroethene**	**0.2**	**0.3**	
127-18-4	Tetrachloroethene	0.2	< 0.2	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	118%
d8-Toluene	101%
Bromofluorobenzene	96.5%
d4-1,2-Dichlorobenzene	99.8%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: GT10-12/08 SAMPLE**
Page 1 of 1

Lab Sample ID: OF75D
LIMS ID: 08-34829
Matrix: Water
Data Release Authorized: VTS
Reported: 01/08/09

QC Report No: OF75-CDM, Inc.
Project: LEATHERCARE 56498-68247
Date Sampled: 12/29/08
Date Received: 12/30/08

Instrument/Analyst: NT7/PAB
Date Analyzed: 01/05/09 19:04

Sample Amount: 20.0 mL
Purge Volume: 20.0 mL

CAS Number	Analyte	RL	Result	Q
75-01-4	**Vinyl Chloride**	**0.2**	**1.8**	
75-35-4	1,1-Dichloroethene	0.2	< 0.2	U
156-60-5	**trans-1,2-Dichloroethene**	**0.2**	**2.6**	
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	120%
d8-Toluene	102%
Bromofluorobenzene	99.0%
d4-1,2-Dichlorobenzene	98.0%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: LC6-12/08 SAMPLE**
Page 1 of 1

Lab Sample ID: OF75E
LIMS ID: 08-34830
Matrix: Water
Data Release Authorized: VTS
Reported: 01/08/09

QC Report No: OF75-CDM, Inc.
Project: LEATHERCARE 56498-68247
Date Sampled: 12/29/08
Date Received: 12/30/08

Instrument/Analyst: NT7/PAB
Date Analyzed: 01/05/09 19:31

Sample Amount: 20.0 mL
Purge Volume: 20.0 mL

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

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	122%
d8-Toluene	101%
Bromofluorobenzene	93.5%
d4-1,2-Dichlorobenzene	99.2%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B
Page 1 of 1

Sample ID: LC2-12/08 SAMPLE

Lab Sample ID: OF75F
LIMS ID: 08-34831
Matrix: Water
Data Release Authorized: VTS
Reported: 01/08/09

QC Report No: OF75-CDM, Inc.
Project: LEATHERCARE 56498-68247
Date Sampled: 12/29/08
Date Received: 12/30/08

Instrument/Analyst: NT7/PAB
Date Analyzed: 01/05/09 19:56

Sample Amount: 20.0 mL
Purge Volume: 20.0 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**	**1.2**	
79-01-6	**Trichloroethene**	**0.2**	**0.4**	
127-18-4	**Tetrachloroethene**	**0.2**	**1.3**	

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	124%
d8-Toluene	99.5%
Bromofluorobenzene	95.8%
d4-1,2-Dichlorobenzene	103%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: LC1-12/08 SAMPLE**
Page 1 of 1

Lab Sample ID: OF75G
LIMS ID: 08-34832
Matrix: Water
Data Release Authorized: VTS
Reported: 01/08/09

QC Report No: OF75-CDM, Inc.
Project: LEATHERCARE 56498-68247
Date Sampled: 12/30/08
Date Received: 12/30/08

Instrument/Analyst: NT7/PAB
Date Analyzed: 01/05/09 20:22

Sample Amount: 20.0 mL
Purge Volume: 20.0 mL

CAS Number	Analyte	RL	Result	Q
75-01-4	**Vinyl Chloride**	**0.2**	**0.6**	
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**	**6.2**	
79-01-6	**Trichloroethene**	**0.2**	**5.6**	
127-18-4	**Tetrachloroethene**	**0.2**	**8.2**	

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	117%
d8-Toluene	102%
Bromofluorobenzene	97.5%
d4-1,2-Dichlorobenzene	102%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: LC3-12/08 SAMPLE**
Page 1 of 1

Lab Sample ID: OF75H
LIMS ID: 08-34833
Matrix: Water
Data Release Authorized: VTS
Reported: 01/08/09

QC Report No: OF75-CDM, Inc.
Project: LEATHERCARE 56498-68247
Date Sampled: 12/30/08
Date Received: 12/30/08

Instrument/Analyst: NT7/PAB
Date Analyzed: 01/05/09 20:48

Sample Amount: 20.0 mL
Purge Volume: 20.0 mL

CAS Number	Analyte	RL	Result	Q
75-01-4	**Vinyl Chloride**	**0.2**	**0.8**	
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**	**1.6**	
79-01-6	**Trichloroethene**	**0.2**	**1.2**	
127-18-4	**Tetrachloroethene**	**0.2**	**4.2**	

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	124%
d8-Toluene	103%
Bromofluorobenzene	97.8%
d4-1,2-Dichlorobenzene	100%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: LC3-12/08**
MATRIX SPIKE

Lab Sample ID: OF75H
LIMS ID: 08-34833
Matrix: Water
Data Release Authorized: VTS
Reported: 01/08/09

QC Report No: OF75-CDM, Inc.
Project: LEATHERCARE
56498-68247
Date Sampled: 12/30/08
Date Received: 12/30/08

Instrument/Analyst: NT7/PAB
Date Analyzed: 01/05/09 21:13

Sample Amount: 20.0 mL
Purge Volume: 20.0 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	119%
d8-Toluene	104%
Bromofluorobenzene	103%
d4-1,2-Dichlorobenzene	102%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: LC3-12/08 MATRIX SPIKE DUP**
Page 1 of 1

Lab Sample ID: OF75H
LIMS ID: 08-34833
Matrix: Water
Data Release Authorized: VTS
Reported: 01/08/09

QC Report No: OF75-CDM, Inc.
Project: LEATHERCARE
56498-68247
Date Sampled: 12/30/08
Date Received: 12/30/08

Instrument/Analyst: NT7/PAB
Date Analyzed: 01/05/09 21:40

Sample Amount: 20.0 mL
Purge Volume: 20.0 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	114%
d8-Toluene	102%
Bromofluorobenzene	101%
d4-1,2-Dichlorobenzene	99.2%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: LCS-010509**
LAB CONTROL SAMPLE

Lab Sample ID: LCS-010509
LIMS ID: 08-34826
Matrix: Water
Data Release Authorized: VTS
Reported: 01/08/09

QC Report No: OF75-CDM, Inc.
Project: LEATHERCARE
56498-68247
Date Sampled: NA
Date Received: NA

Instrument/Analyst LCS: NT7/JZ
LCSD: NT7/JZ
Date Analyzed LCS: 01/05/09 14:46
LCSD: 01/05/09 16:19

Sample Amount LCS: 20.0 mL
LCSD: 20.0 mL
Purge Volume LCS: 20.0 mL
LCSD: 20.0 mL

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Vinyl Chloride	3.7	4.0	92.5%	4.1	4.0	102%	10.3%
1,1-Dichloroethene	4.0	4.0	100%	4.0	4.0	100%	0.0%
trans-1,2-Dichloroethene	4.1	4.0	102%	4.2	4.0	105%	2.4%
cis-1,2-Dichloroethene	4.0	4.0	100%	4.2	4.0	105%	4.9%
Trichloroethene	3.8	4.0	95.0%	4.1	4.0	102%	7.6%
Tetrachloroethene	3.3	4.0	82.5%	3.7	4.0	92.5%	11.4%

Reported in µg/L (ppb)

RPD calculated using sample concentrations per SW846.

Volatile Surrogate Recovery

	LCS	LCSD
d4-1,2-Dichloroethane	116%	109%
d8-Toluene	104%	104%
Bromofluorobenzene	105%	105%
d4-1,2-Dichlorobenzene	102%	102%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: MB-010509**
METHOD BLANK

Lab Sample ID: MB-010509
LIMS ID: 08-34826
Matrix: Water
Data Release Authorized: VTS
Reported: 01/08/09

QC Report No: OF75-CDM, Inc.
Project: LEATHERCARE
56498-68247
Date Sampled: NA
Date Received: NA

Instrument/Analyst: NT7/JZ
Date Analyzed: 01/05/09 16:56

Sample Amount: 20.0 mL
Purge Volume: 20.0 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	112%
d8-Toluene	103%
Bromofluorobenzene	101%
d4-1,2-Dichlorobenzene	100%

ANALYTICAL RESOURCES INCORPORATED

VOA SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: OF75-CDM, Inc.
Project: LEATHERCARE
56498-68247

ARI ID	Client ID	PV	DCE	TOL	BFB	DCB	TOT OUT
MB-010509	Method Blank	20	112%	103%	101%	100%	0
LCS-010509	Lab Control	20	116%	104%	105%	102%	0
LCSD-010509	Lab Control Dup	20	109%	104%	105%	102%	0
OF75A	GT1-12/08	20	122%	104%	102%	102%	0
OF75B	GT2-12/08	20	118%	101%	96.5%	99.8%	0
OF75C	GT3-12/08	20	118%	102%	101%	101%	0
OF75D	GT10-12/08	20	120%	102%	99.0%	98.0%	0
OF75E	LC6-12/08	20	122%	101%	93.5%	99.2%	0
OF75F	LC2-12/08	20	124%	99.5%	95.8%	103%	0
OF75G	LC1-12/08	20	117%	102%	97.5%	102%	0
OF75H	LC3-12/08	20	124%	103%	97.8%	100%	0
OF75HMS	LC3-12/08	20	119%	104%	103%	102%	0
OF75HMSD	LC3-12/08	20	114%	102%	101%	99.2%	0

SW8260B	LCS/MB LIMITS	QC LIMITS
(DCE) = d4-1,2-Dichloroethane	70-131	64-146
(TOL) = d8-Toluene	80-120	78-125
(BFB) = Bromofluorobenzene	74-121	71-120
(DCB) = d4-1,2-Dichlorobenzene	80-120	80-121

Prep Method: SW5030B
Log Number Range: 08-34826 to 08-34833

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: LC3-12/08**
MATRIX SPIKE

Lab Sample ID: OF75H
LIMS ID: 08-34833
Matrix: Water
Data Release Authorized: VTS
Reported: 01/08/09

QC Report No: OF75-CDM, Inc.
Project: LEATHERCARE
56498-68247
Date Sampled: 12/30/08
Date Received: 12/30/08

Instrument/Analyst MS: NT7/PAB
MSD: NT7/PAB
Date Analyzed MS: 01/05/09 21:13
MSD: 01/05/09 21:40

Sample Amount MS: 20.0 mL
MSD: 20.0 mL
Purge Volume MS: 20.0 mL
MSD: 20.0 mL

Analyte	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
Vinyl Chloride	0.8	5.5	4.0	118%	5.8	4.0	125%	5.3%
1,1-Dichloroethene	< 0.2 U	4.9	4.0	122%	5.2	4.0	130%	5.9%
trans-1,2-Dichloroethene	< 0.2 U	5.0	4.0	125%	5.1	4.0	128%	2.0%
cis-1,2-Dichloroethene	1.6	6.4	4.0	120%	6.3	4.0	118%	1.6%
Trichloroethene	1.2	5.6	4.0	110%	5.7	4.0	112%	1.8%
Tetrachloroethene	4.2	8.2	4.0	100%	8.8	4.0	115%	7.1%

Reported in µg/L (ppb)

RPD calculated using sample concentrations per SW846.

Received

JAN 16 2009

Received

JAN 16 2009

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

Page: Page 1 of 9
Lab Proj #: P0812410
Report Date: 01/07/09
Client Proj Name: Leathercare
Client Proj #: 56498-68247

Laboratory Results

Total pages in data package: 10

Lab Sample #	Client Sample ID
P0812410-01	GT1-12/08
P0812410-02	GT2-12/08
P0812410-03	GT3-12/08
P0812410-04	GT10-12/08
P0812410-05	LC6-12/08
P0812410-06	LC2-12/08
P0812410-07	LC1-12/08
P0812410-08	LC3-12/08

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:*** 1-7-09

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

Lab Proj #: P0812410
Report Date: 01/07/09
Client Proj Name: Leathercare
Client Proj #: 56498-68247

Sample Description	Matrix	Lab Sample #	Sampled Date/Time	Received
GT1-12/08	Water	P0812410-01	29 Dec. 08 9:25	31 Dec. 08 10:32

Analyte(s)	Result	PQL	Units	Method #	Analysis Date	By
RiskAnalysis						
N Ethane	0.120	0.025	ug/L	AM20GAX	1/6/09	rw
N Ethene	<0.025	0.025	ug/L	AM20GAX	1/6/09	rw
N Methane	200.000	0.100	ug/L	AM20GAX	1/6/09	rw

N - NELAC certified analysis

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

Lab Proj #: P0812410
Report Date: 01/07/09
Client Proj Name: Leathercare
Client Proj #: 56498-68247

Sample Description	Matrix	Lab Sample #	Sampled Date/Time	Received
GT2-12/08	Water	P0812410-02	29 Dec. 08 11:20	31 Dec. 08 10:32

Analyte(s)	Result	PQL	Units	Method #	Analysis Date	By
RiskAnalysis						
N Ethane	0.120	0.025	ug/L	AM20GAX	1/6/09	rw
N Ethene	0.500	0.025	ug/L	AM20GAX	1/6/09	rw
N Methane	110.000	0.100	ug/L	AM20GAX	1/6/09	rw

N - NELAC certified analysis

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

Lab Proj #: P0812410
Report Date: 01/07/09
Client Proj Name: Leathercare
Client Proj #: 56498-68247

Sample Description	Matrix	Lab Sample #	Sampled Date/Time	Received
GT3-12/08	Water	P0812410-03	29 Dec. 08 12:50	31 Dec. 08 10:32

Analyte(s)	Result	PQL	Units	Method #	Analysis Date	By
RiskAnalysis						
N Ethane	<0.025	0.025	ug/L	AM20GAX	1/6/09	rw
N Ethene	0.100	0.025	ug/L	AM20GAX	1/6/09	rw
N Methane	34.000	0.100	ug/L	AM20GAX	1/6/09	rw

N - NELAC certified analysis

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

Lab Proj #: P0812410
Report Date: 01/07/09
Client Proj Name: Leathercare
Client Proj #: 56498-68247

Sample Description	Matrix	Lab Sample #	Sampled Date/Time	Received
GT10-12/08	Water	P0812410-04	29 Dec. 08 13:15	31 Dec. 08 10:32

Analyte(s)	Result	PQL	Units	Method #	Analysis Date	By
RiskAnalysis						
N Ethane	0.028	0.025	ug/L	AM20GAX	1/6/09	rw
N Ethene	0.085	0.025	ug/L	AM20GAX	1/6/09	rw
N Methane	33.000	0.100	ug/L	AM20GAX	1/6/09	rw

N - NELAC certified analysis

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

Lab Proj #: P0812410
Report Date: 01/07/09
Client Proj Name: Leathercare
Client Proj #: 56498-68247

Sample Description	Matrix	Lab Sample #	Sampled Date/Time	Received
LC6-12/08	Water	P0812410-05	29 Dec. 08 14:10	31 Dec. 08 10:32

Analyte(s)	Result	PQL	Units	Method #	Analysis Date	By
RiskAnalysis						
N Ethane	0.110	0.025	ug/L	AM20GAX	1/6/09	rw
N Ethene	<0.025	0.025	ug/L	AM20GAX	1/6/09	rw
N Methane	450.000	0.100	ug/L	AM20GAX	1/6/09	rw

N - NELAC certified analysis

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

Lab Proj #: P0812410
Report Date: 01/07/09
Client Proj Name: Leathercare
Client Proj #: 56498-68247

Sample Description	Matrix	Lab Sample #	Sampled Date/Time	Received
LC2-12/08	Water	P0812410-06	29 Dec. 08 15:25	31 Dec. 08 10:32

Analyte(s)	Result	PQL	Units	Method #	Analysis Date	By
RiskAnalysis						
N Ethane	<0.025	0.025	ug/L	AM20GAX	1/6/09	rw
N Ethene	<0.025	0.025	ug/L	AM20GAX	1/6/09	rw
N Methane	40.000	0.100	ug/L	AM20GAX	1/6/09	rw

N - NELAC certified analysis

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

Lab Proj #: P0812410
Report Date: 01/07/09
Client Proj Name: Leathercare
Client Proj #: 56498-68247

Sample Description	Matrix	Lab Sample #	Sampled Date/Time	Received
LC1-12/08	Water	P0812410-07	30 Dec. 08 8:25	31 Dec. 08 10:32

Analyte(s)	Result	PQL	Units	Method #	Analysis Date	By
RiskAnalysis						
N Ethane	0.130	0.025	ug/L	AM20GAX	1/6/09	rw
N Ethene	0.039	0.025	ug/L	AM20GAX	1/6/09	rw
N Methane	200.000	0.100	ug/L	AM20GAX	1/6/09	rw

N - NELAC certified analysis

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

Lab Proj #: P0812410
Report Date: 01/07/09
Client Proj Name: Leathercare
Client Proj #: 56498-68247

Sample Description	Matrix	Lab Sample #	Sampled Date/Time	Received
LC3-12/08	Water	P0812410-08	30 Dec. 08 9:25	31 Dec. 08 10:32

Analyte(s)	Result	PQL	Units	Method #	Analysis Date	By
RiskAnalysis						
N Ethane	0.044	0.025	ug/L	AM20GAX	1/6/09	rw
N Ethene	<0.025	0.025	ug/L	AM20GAX	1/6/09	rw
N Methane	86.000	0.100	ug/L	AM20GAX	1/6/09	rw

N - NELAC certified analysis

P0812410

CDM

CHAIN-OF-CUSTODY

Date 12/30/08 Page 1 of [illegible]

Laboratory Number:

PROJECT INFORMATION

Project Manager: Jon Morrill

Project Name: Leatherizer

Project Number: 56498-68247

Site Location: Elliott Ave WC Marine Sampled By: MLF

DISPOSAL INFORMATION

☐ Lab Disposal (return if not indicated)

Disposal Method: ____________

Disposed by: ____________ Disposal Date: ____________

QC INFORMATION (check one)

☐ SW-846 ☐ CLP ☐ Screening ☒ CDM Std. ☐ Special

ANALYSIS REQUEST

					PETROLEUM HYDROCARBONS						ORGANIC COMPOUNDS								PESTS/PCBs					METALS						LEACHING TESTS				OTHER					
SAMPLE ID	DATE	TIME	MATRIX	LAB ID	TPH-HCID State:	TPH-G State:	TPH-D State:	TPH-418.1 State:	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 (Wa)	TCLP - Volatiles (ZHE)	TCLP - Semivolatiles	TCLP - Pesticides	TCLP - Metals	Methane, Ethane, Ethene					NUMBER OF CONTAINERS
GT1-12/08	12/29/08	0935	Water																															✓					2
GT2-12/08	12/29/08	1120	Water																															✓					2
GT3-12/08	12/29/08	1250	Water																															✓					2
GT10-12/08	12/29/08	1315	Water																															✓					2
LC6-12/08	12/29/08	1410	Water																															✓					2
LC7-12/08	12/29/08	1525	Water																															✓					2
LC1-12/08	12/30/08	0825	Water																															✓					2
LC3-12/08	12/30/08	0925	Water																															✓					2

LAB INFORMATION

Lab Name: Microseeps

Lab Address: 220 William Pitt Way, Pittsburgh PA 15238

Via: FedEx overnight

SAMPLE RECEIPT

Total Number of Containers:	
Chain-of-Custody Seals: Y/N/NA	
Intact?: Y/N/NA	
Received in Good Condition/Cold:	

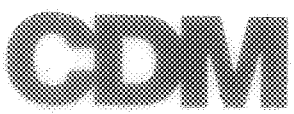
Turn Around Time: ☒ Standard ☐ 24 hr. ☐ 48 hr. ☐ 72 hr. ☐ 1 wk.

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH DATA

Special Instructions: Attn: Debbie Hallo

RELINQUISHED BY: 1.	RELINQUISHED BY: 2.	RELINQUISHED BY: 3.
Signature: Mary Lou Fox Time:	Signature: Time:	Signature: Time:
Printed Name: Mary Lou Fox Date:	Printed Name: Date:	Printed Name: Date:
Company: CDM	Company:	Company: [illegible]

RECEIVED BY: 1.	RECEIVED BY: 2.	RECEIVED BY: 3.
Signature: Time:	Signature: Time:	Signature: Time:
Printed Name: Date:	Printed Name: Date:	Printed Name: Date:
Company:	Company:	Company:



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CDM Transmittal

CDM

P.O. Box 3885
Bellevue, Washington 98009-3885
Telephone - (425) 453-8383
Fax (425) 646-9523

To:	Mr. Dale Meyers	**From:**	Pam Morrill
Organization/ Address:	Washington Dept. of Ecology 3190 160th Avenue SE Bellevue, WA 98008	**Date:**	February 27, 2009
Re:	LeatherCare		
Job #:	56498-68247		

Via: *Mail:* X *Overnight:* *Courier:*

Enclosed please find: 1 copy, December 2008 Groundwater Sampling Round Report

For your information	X	**Approved**	
For your review		**Approved as noted**	
For your signature		**Returned to you for correction**	

Message:

Dale,
Enclosed is the December 2008 groundwater sampling report for the LeatherCare site in Seattle. CDM recently completed installation and sampling of the three monitoring wells on the BNSF property. The report from that investigation will be forthcoming shortly.

cc: Ms. Jo Flannery, Ryan Swanson & Cleveland, PLLC (5 copies)

Signed