CDM

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

June 2, 2008

Prepared For:

LeatherCare, Inc.
901 Elliott Avenue West
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Prepared By:

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CDM Project No. 56498-59679.TK5.GW

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

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

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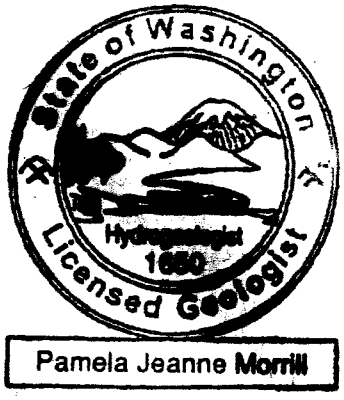
Pamela J. Morrill, LHG
Project Manager



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CDM Project No. 56498-59679.TK5.GW

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Section 1
Introduction

1.1 General

This report presents the results of the seventh round of ongoing groundwater monitoring for the LeatherCare, Inc. site located at 901 & 921 Elliott Avenue West in Seattle, Washington (**Figure 1**). Camp Dresser & McKee Inc. (CDM) is conducting this work on behalf of LeatherCare, Inc. (LeatherCare) in accordance with the Master Environmental Services Agreement dated March 18, 2007 between LeatherCare and CDM, and CDM's proposal dated April 17, 2007. 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 Holdings). 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).

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 occur in the former north parking lot area of the Darigold property where there is also a petroleum hydrocarbon plume that originates 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 Holdings began redevelopment of the Darigold property in 2007. According to a Cleanup Action Plan completed by ENTRIX, Inc. in July 2007, the redevelopment should be completed in 2008. The planned development will include 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. Development plans include installation of a subsurface impermeable cutoff pile wall to enable construction of the below ground parking structure. Petroleum-contaminated soil will be excavated and appropriately disposed of in conjunction with the construction earthwork. Dewatering, which will be necessary as a part of the earthwork, will also serve to remove the hydrocarbon plume and any residual cVOCs in groundwater at the Darigold site. Redevelopment work also includes installation of subgrade utilities through the south side of W. Roy Street.

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 March 19 and 20, 2008. 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 0847 am and 1114 am on March 19, 2008. Water levels were measured using a SINCO electronic sounder. At this time, it was determined that monitoring well LC4 had been destroyed without LeatherCare's consent or permission during construction on the neighboring property, LC5 had not been destroyed, although it is inside the construction fencing. With the contractor's permission, CDM was able to access this well.

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 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), turbidity, dissolved oxygen (DO), and oxidation-reduction potential (ORP). In addition, at the conclusion of purging, ferrous iron was tested using a Hach field test kit. 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 Renton, Washington and MicroSeeps in Pittsburg, Pennsylvania.

ARI conducted analyses for cVOCs by EPA Method 8260 (using a 20-milliliter purge 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 elevations are summarized on **Table 1.** Water levels ranged between 1.18 and 5.24 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 10.94 to 11.64 feet. Water levels dropped by 0.48 to 0.67 feet between the December 2007 and March 2008 sampling rounds, an expected occurrence during the transition from winter into spring.

Figure 3 shows the potentiometric surface on March 19, 2008. Groundwater contours for March 2008 are consistent with those observed during prior sampling rounds. There is essentially no gradient in the area of W Roy Street. From the LeatherCare building, the groundwater flow direction is toward the north.

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 9.5 and 16.3 degrees Celsius (°C). As expected, temperatures in the groundwater are generally on the increase since the winter lows, but in some instances the temperatures declined slightly.

Dissolved Oxygen: DO concentrations ranged from approximately 0.31 to 1.28 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. GT3 and LC2 were the only two wells where the DO concentrations exceeded 0.5 mg/L. While higher DO concentrations are not conducive for reductive dechlorination, they can be conducive for degradation of VC via oxidation. It is notable that VC concentrations at LC2 have shown remarkable declines. The September 2007 VC concentration of 1.4 micrograms per liter (µg/L) declined to <0.2 µg/L in December when the DO concentration was 3.05 mg/L and was slightly higher at 0.3 µg/L in March 2008 when the DO concentration had lowered to 1.12 mg/L. Similarly, at GT3, during the December 2007 sampling round when the DO concentration was 0.17 mg/L, the VC concentration was the highest ever recorded at 16 µg/L, but during the March sampling round, when the DO had increased to 1.28 mg/L, the VC concentration dropped back down to 2.8 µg/L.

Oxidation-Reduction Potential: The ORP values are mostly negative and ranged between 10 and -107 millivolts (mV). The ORP values were within the ranges typically observed at the site, although not among the lowest observed. Low ORP values are conducive for reductive dechlorination.

Specific Conductance: SC values ranged between 114 and 970 microsiemens per centimeter (µS/cm). The low SC value at LC2 in December 2007 increased to a more typical value of 518 µS/cm. However, an unusually low reading of 114 µS/cm was recorded at LC5, which is believed to be due to an equipment malfunction at the time. Otherwise SC values appeared similar to historical readings.

pH: The pH values ranged between approximately 7.51 and 8.42 standard units (SU). Overall, these values appear somewhat higher than normal, and it appears that the meter may have been slipping in its calibration with pH values progressively rising at each subsequent well.

Ferrous Iron: Ferrous iron was detected in all eight wells. Ferrous iron concentrations were all low, ranging between 0.1 and 0.8 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.

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 the 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 eight groundwater samples and ranged from 2.6 to 3.6 µg/L when detected. None of the samples exceeded the Method A cleanup level of 5 µg/L. Typically, PCE detections at LC1, LC2, and LC3 have sporadically exceeded the Method A cleanup level and this is the second time that concentrations were below 5 µg/L in all three wells at the same time. Unfortunately, the loss of LC4 makes it impossible to confirm declining PCE concentrations at this only location where PCE concentrations consistently exceeded the Method A cleanup level. Again, the loss of LC4 is due to the neighboring redevelopment activities, without the consent or permission of LeatherCare.

3.3.2 TCE

TCE was detected in six of the eight groundwater samples, similar to previous sample data, with concentrations ranging between 0.6 and 4.6 µg/L when detected. The same as for PCE, TCE did not exceed its Method A cleanup level (5 µg/L) at any location.

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 eight groundwater samples, *t*-1,2-DCE in two samples, and 1,1-DCE was not detected in any sample. Concentrations ranged between 1.5 and 19 µg/L when detected. The

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

3.3.4 Vinyl Chloride

Vinyl chloride was detected in seven groundwater samples ranging between 0.3 and 12 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 second highest VC concentration being observed at the next upgradient well (GT2), only 110 feet away. Compared to the December 2007 sampling round, VC concentrations declined in every well except LC2 where it increased slightly from being below the detection limit to just above it at 0.3 µg/L. See the discussion on DO concentrations for further discussion on VC concentrations.

3.3.5 Dissolved Gasses

Methane was detected in every groundwater sample, ranging between 23 µg/L and 170 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 GT2, GT3, LC1, and LC5 at concentrations ranging between 0.028 µg/L and 0.9 µg/L. Ethane was detected in all groundwater samples at concentrations ranging between 0.026 µg/L and 0.23 µg/L.

Ethene concentrations are highest at the three wells that have the correspondingly highest VC concentrations. Methane and ethane concentrations do not follow the same trend.

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 at all of the wells and are significant (i.e. $p \leq 0.1$) at GT2 and LC2. The probability values for these decreasing trends for VC improved for GT2, LC1, LC2, and LC3 between the December and March sampling rounds and remained essentially unchanged for GT3 and LC6. PCE and TCE show a mix of decreasing and increasing trends. The decreasing trend for TCE at LC2 appears significant. Because the Mann Kendall does not account for seasonal variations, it is not going to accurately predict the PCE and TCE trends until there is a sufficient amount of data to overcome bias from the seasonal high fluctuations. It is important to note that neither of these compounds have exceeded their respective cleanup levels more than twice in any given well over the past 7 sampling rounds and, except for one sample on the first sampling round, concentrations have never been more than twice the cleanup levels.

Section 4
Conclusions and Recommendations

As expected, PCE and TCE concentrations have generally declined following the winter high water levels. VC concentrations are showing stronger decreasing trends, and in some instances, significant concentration reductions.

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. Unfortunately, monitoring well LC4 cannot be replaced until after the construction activities have ceased in this area, which is not expected to occur for another 6 to 10 months.

Section 5
References

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

Entrix. 2007. Request for Contained-In Determination, West Roy Street Excavation Adjacent to Darigold Facility, 635 Elliott Avenue West, Seattle, Washington 98119. Letter addressed to mer. Dean Yasuda at Washington State Department of Ecology. August 31.

Distribution

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Tables

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
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
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
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
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
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

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)
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]	--		--	--
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
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

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 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	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		
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	17.0	-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		
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		
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		
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	--	--
	03/08		0.34	0.34	1.28	0.31	1.12	0.44	--	0.37	0.34		
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		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		

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	LC6	Field Blank	Trip Blank
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		
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		
	03/08		170	120	76/56	33	73	23	--	160	120		
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		
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		

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	LC6	Field Blank	Trip Blank
Petroleum Hydrocarbons (NWTPH-Dx) (mg/L)													
Diesel	05/06	0.50	<0.25	0.32	<0.25	<0.25	<0.25	<0.25	<0.25/<0.25	0.35	0.35	--	--
	09/06	0.50	<0.25	<0.25	<0.25/<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	--	--
	02/07	0.50	--	--	--	--	--	0.28	<0.25	0.42/<0.25 [i]	**0.76**/<0.25 [i]	--	--
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	--	--
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	--	--
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	--	--
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	<0.20	--	<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	--	--

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	LC6	Field Blank	Trip Blank
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
	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	--	--
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**	--	--
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.
** ORP meter malfunctioned.
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 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) Wells purged by ENTRIX. 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) LC4 destroyed by construction as of 02/07.
°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.

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

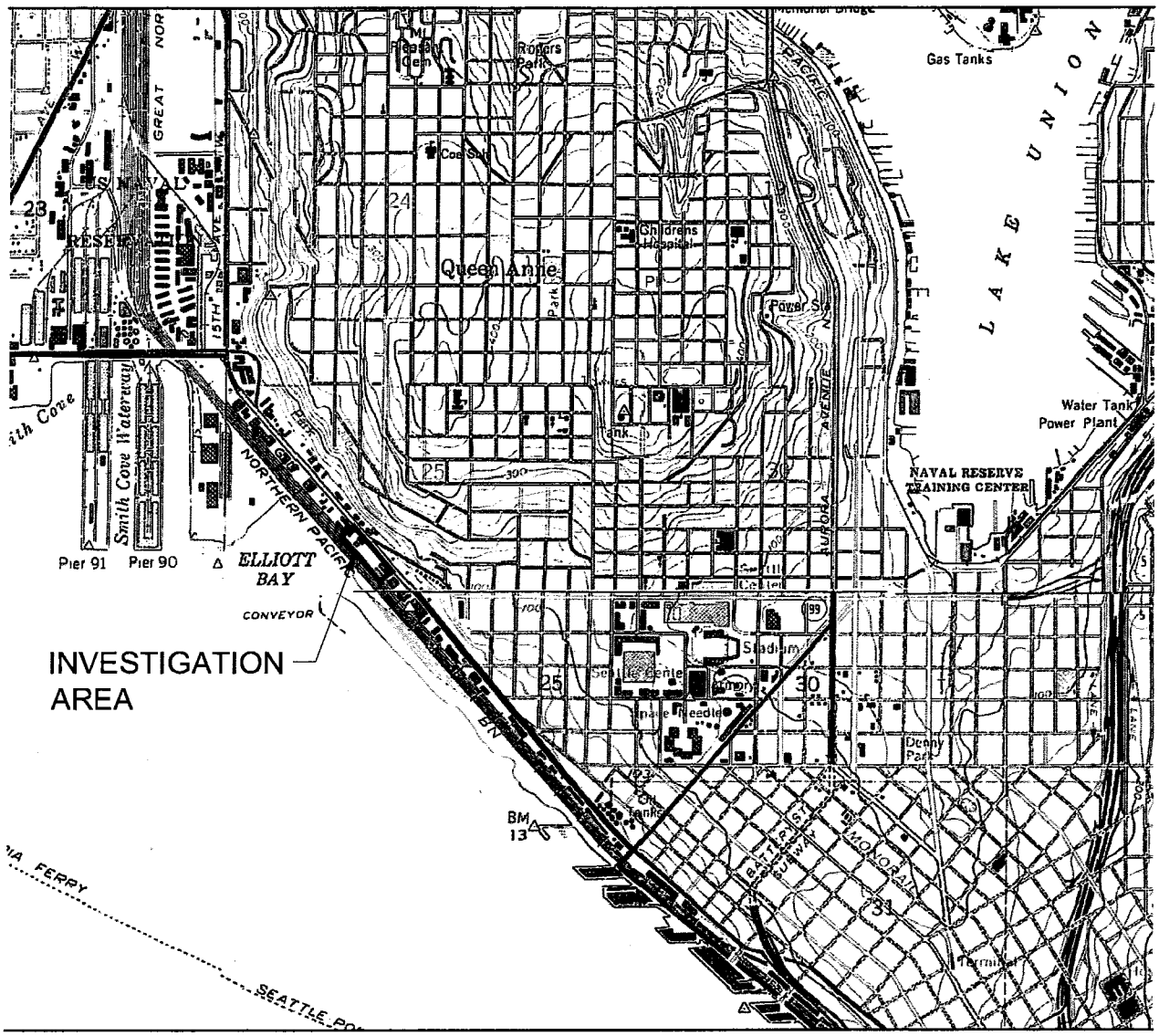
		GT1 Monitoring Well	GT2 Monitoring Well	GT3 Monitoring Well	LC1 Monitoring Well	LC2 Monitoring Well
Tetrachloroethene	Count (data)	7	7	7	7	7
	Count (nondetects)	7	7	5	0	0
	S Statistic	NC	NC	NC	5	-7
	Var(S)	NC	NC	NC	44	44
	Trend	NC	NC	NC	Increasing	Decreasing
	Probability (of no real trend)	NC	NC	NC	27.40%	18.38%
Trichloroethene	Count (data)	7	7	7	7	7
	Count (nondetects)	3	0	0	0	0
	S Statistic	-12	-1	-7	6	-15
	Var(S)	35	37	44	43	44
	Trend	Decreasing	Decreasing	Decreasing	Increasing	Decreasing
	Probability (of no real trend)	3.09%	50.00%	18.38%	22.38%	1.77%
cis-1,2-Dichloroethene	Count (data)	7	7	7	7	7
	Count (nondetects)	0	0	0	0	0
	S Statistic	-16	-2	-5	5	-15
	Var(S)	43	43	44	44	44
	Trend	Decreasing	Decreasing	Decreasing	Increasing	Decreasing
	Probability (of no real trend)	1.13%	43.96%	27.40%	27.40%	1.77%
trans-1,2-Dichloroethene	Count (data)	7	7	7	7	7
	Count (nondetects)	6	0	0	6	2
	S Statistic	NC	-9	-17	NC	-15
	Var(S)	NC	44	44	NC	42
	Trend	NC	Decreasing	Decreasing	NC	Decreasing
	Probability (of no real trend)	NC	11.48%	0.81%	NC	1.57%
1,1-Dichloroethene	Count (data)	7	7	7	7	7
	Count (nondetects)	7	7	6	7	7
	S Statistic	NC	NC	NC	NC	NC
	Var(S)	NC	NC	NC	NC	NC
	Trend	NC	NC	NC	NC	NC
	Probability (of no real trend)	NC	NC	NC	NC	NC
Vinyl Chloride	Count (data)	7	7	7	7	7
	Count (nondetects)	6	0	0	0	1
	S Statistic	NC	-10	-1	-3	-15
	Var(S)	NC	43	44	42	44
	Trend	NC	Decreasing	Decreasing	Decreasing	Decreasing
	Probability (of no real trend)	NC	8.58%	50.00%	37.93%	1.77%

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

		LC3 Monitoring Well	LC5 Monitoring Well	LC6 Monitoring Well
Tetrachloroethene	Count (data)	7	7	7
	Count (nondetects)	0	3	7
	S Statistic	6	-3	NC
	Var(S)	43	36	NC
	Trend	Increasing	Decreasing	NC
	Probability (of no real trend)	22.38%	36.89%	NC
Trichloroethene	Count (data)	7	7	7
	Count (nondetects)	0	0	3
	S Statistic	6	4	-4
	Var(S)	43	41	27
	Trend	Increasing	Increasing	Decreasing
	Probability (of no real trend)	22.38%	31.90%	28.06%
cis-1,2-Dichloroethene	Count (data)	7	7	7
	Count (nondetects)	0	0	0
	S Statistic	2	-1	-16
	Var(S)	41	44	43
	Trend	Increasing	Decreasing	Decreasing
	Probability (of no real trend)	43.77%	50.00%	1.13%
trans-1,2-Dichloroethene	Count (data)	7	7	7
	Count (nondetects)	7	4	7
	S Statistic	NC	NC	NC
	Var(S)	NC	NC	NC
	Trend	NC	NC	NC
	Probability (of no real trend)	NC	NC	NC
1,1-Dichloroethene	Count (data)	7	7	7
	Count (nondetects)	7	7	7
	S Statistic	NC	NC	NC
	Var(S)	NC	NC	NC
	Trend	NC	NC	NC
	Probability (of no real trend)	NC	NC	NC
Vinyl Chloride	Count (data)	7	7	7
	Count (nondetects)	0	0	0
	S Statistic	-5	-7	-3
	Var(S)	44	44	44
	Trend	Decreasing	Decreasing	Decreasing
	Probability (of no real trend)	27.40%	18.38%	38.19%

Figures

Figures



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

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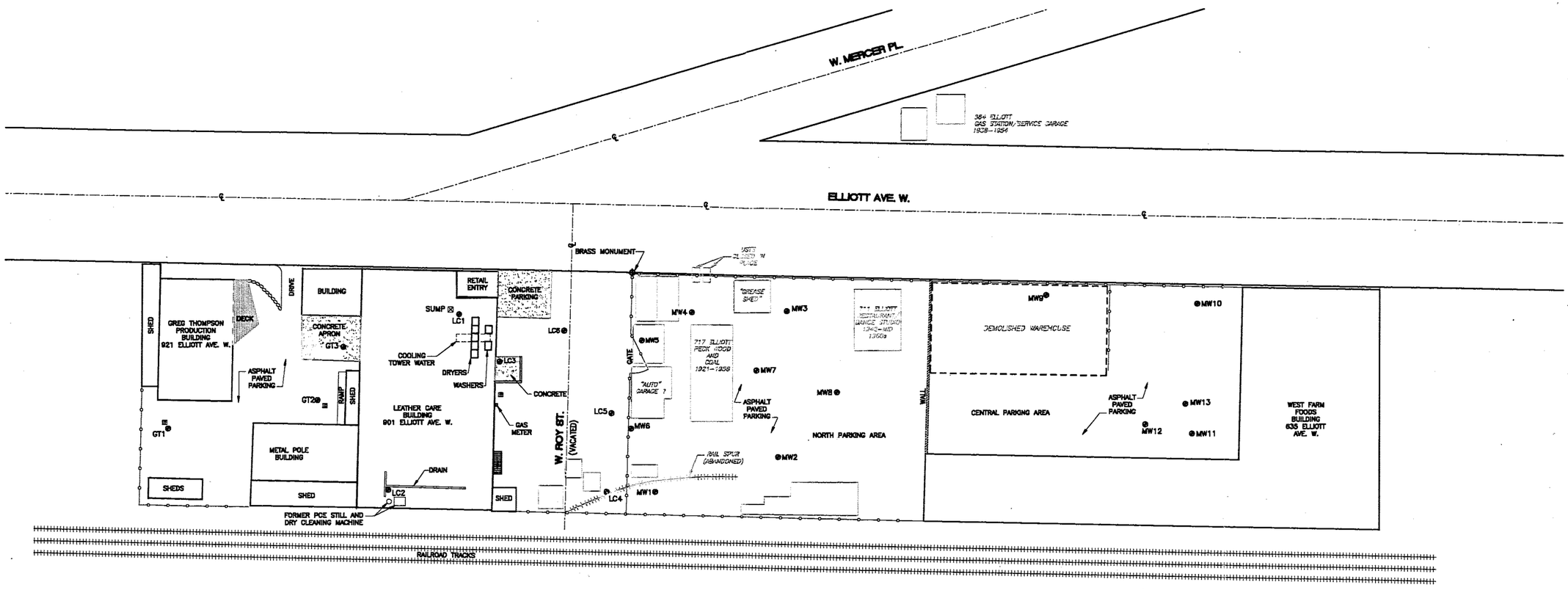
CDM

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)

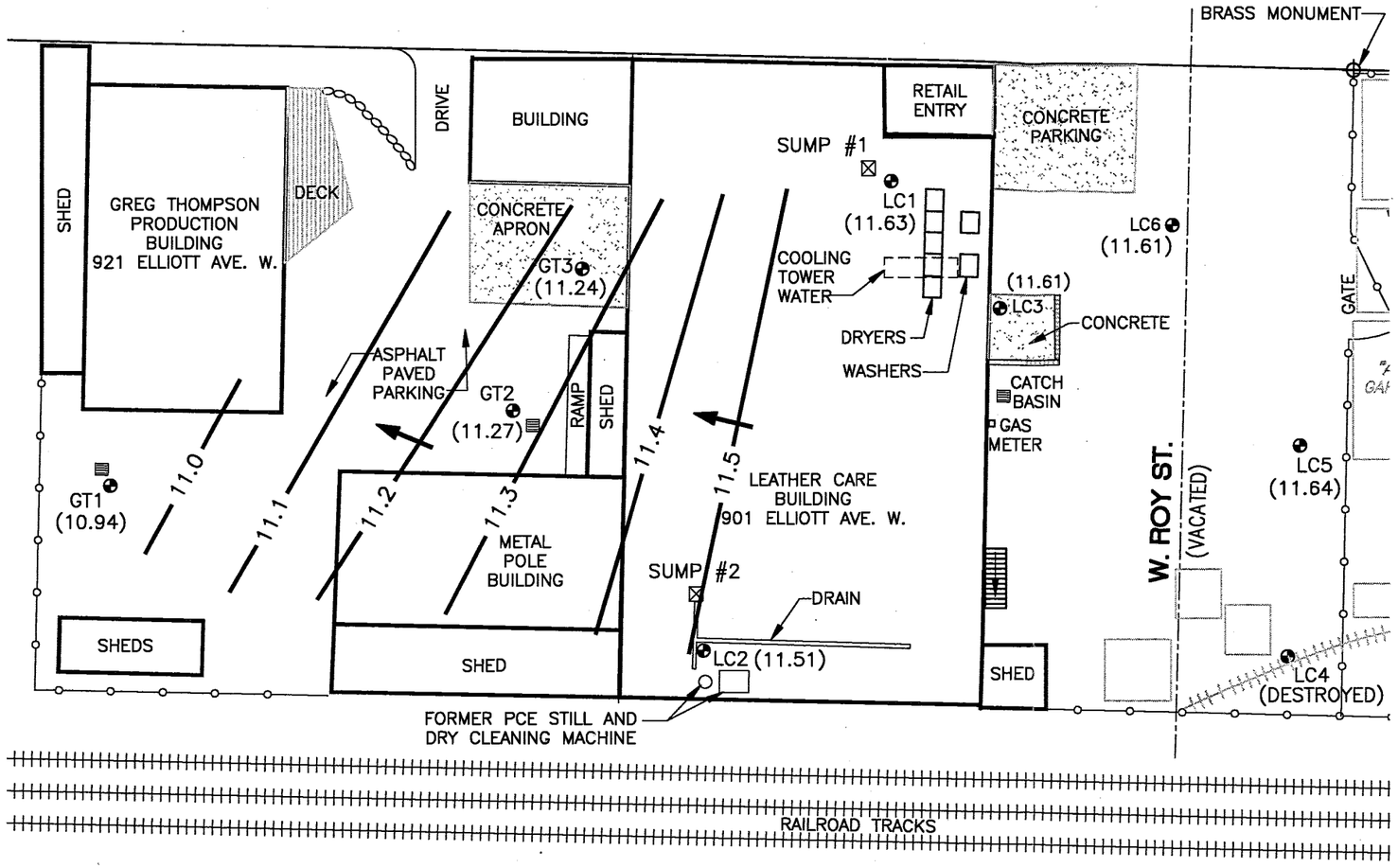
BASIS OF BEARING:

BASIS OF BEARING ASSUMED DUE WEST

LEATHERCARE INC.
SEATTLE, WASHINGTON

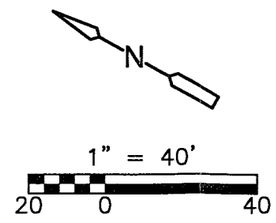
Figure No. 2
SITE PLAN

CDM



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 (12.18) — MONITORING WELL LOCATION AND DESIGNATION WITH GROUNDWATER ELEVATION IN FEET
- 11.9 — 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:

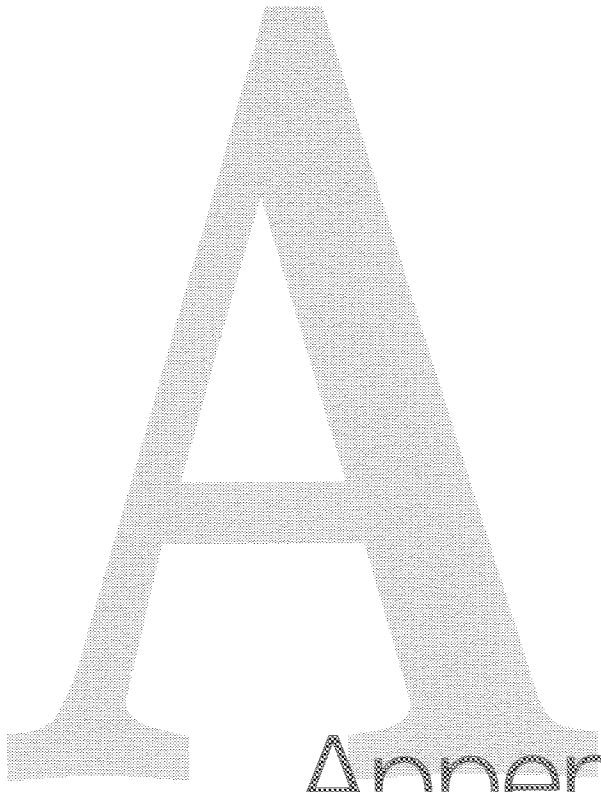
BASIS OF BEARING ASSUMED DUE WEST

LEATHERCARE
SEATTLE, WASHINGTON

Figure No. 3
Potentiometric Surface Map
March 19, 2008

CDM

P:\56498\59679\Ryan Swanson\ Fig-3 MAR 19 08 04/30/08 11:15 muglerrm XREFS: 11X17BDR, DEC 12 07-site



Appendix A

Appendix A
Analytical Laboratory Reports

Analytical Resources, Incorporated
Analytical Chemists and Consultants

April 3, 2008

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

RE: Project ID: Leathercare
ARI Job No: MO16 and MO39

Dear Pam:

Please find enclosed the original chain of custody documentation (COCs) and the final results for the samples from the project referenced above. Analytical Resources Inc. (ARI) accepted four water samples in good condition on March 19, 2008. The associated Trip Blank was placed on hold. An addition shipment of five samples and a Trip Blank were received on March 20, 2008.

The samples were analyzed for Volatiles by 8260B. Analysis met all requirements for calibration and laboratory QC.

There were no anomalies associated with these analyses.

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

Sincerely,

ANALYTICAL RESOURCES, INC.

Susan D. Dunnihoo
Director, Client Services
206-695-6207
sue@arilabs.com

cc: Efile MO16

Enclosures

CDM

m016 08-5788 to 08-5792

CHAIN-OF-CUSTODY

Date 3/19/08 Page 1 of 1

PROJECT INFORMATION	Laboratory Number:
Project Manager: Pam Marrill	
Project Name: Leatherczee	
Project Number: 56498 - 59678	
Site Location: Elliott Ave W & 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	

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	8240 GC/MS Volatiles (20 mL purge)	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
LCS-03/08	3/19/08	1105	Water											✓																					3
LC 3-03/08	3/19/08	1240	Water											✓																					4
LC 6-03/08	3/19/08	1410	Water											✓																					3
LC 2-03/08	3/19/08	1520	Water											✓																					3
Trip Blank	3/19/08		Water											Hold																					2

LAB INFORMATION	SAMPLE RECEIPT
Lab Name: Analytical Resources	Total Number of Containers:
Lab Address: 4611 SW 134th Place Tukwila	Chain-of-Custody Seals: Y/N/NA
	Intact?: Y/N/NA
Via: Hand-delivered	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: 20mL purge for chlorinated volatiles

Extra vials for MS/MSD on LC3-03/08

RELINQUISHED BY: 1.	RELINQUISHED BY: 2.	RELINQUISHED BY: 3.
Signature: Mary Lou Fox Time: 1643	Signature: Time:	Signature: Time:
Printed Name: Mary Lou Fox Date: 3/19/08	Printed Name: Date:	Printed Name: Date:
Company: COM	Company:	Company:
RECEIVED BY: 1.	**RECEIVED BY: 2.**	**RECEIVED BY: 3.**
Signature: Time: 1645	Signature: Time:	Signature: Time:
Printed Name: Ashley Cormount Date: 3/19/08	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
Project Name: Leathers Gate
COC No: NA
Delivered by: Hand-delivered
Assigned ARI Job No: m016
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
Record cooler temperature (recommended 2.0-6.0 °C for chemistry	3.0 °C	

Cooler Accepted by: [signature] Date: 3/19/08 Time: 1645

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?	BF	
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: E Joshi Date: 3/20/08 Time: 1342

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

Explain discrepancies or negative responses:

By: Date:

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B Sample ID: LC5-03/08
Page 1 of 1 SAMPLE

Lab Sample ID: MO16A
LIMS ID: 08-5788
Matrix: Water
Data Release Authorized:
Reported: 03/24/08

QC Report No: MO16-CDM, Inc.
Project: Leathercare
56498-59678
Date Sampled: 03/19/08
Date Received: 03/19/08

Instrument/Analyst: NT7/JZ
Date Analyzed: 03/21/08 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**	**1.9**	
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**	**3.3**	
79-01-6	**Trichloroethene**	**0.2**	**0.8**	
127-18-4	Tetrachloroethene	0.2	< 0.2	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	99.0%
d8-Toluene	96.0%
Bromofluorobenzene	97.8%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: LC3-03/08**
Page 1 of 1 **SAMPLE**

Lab Sample ID: MO16B
LIMS ID: 08-5789
Matrix: Water
Data Release Authorized:
Reported: 03/24/08

QC Report No: MO16-CDM, Inc.
Project: Leathercare
56498-59678
Date Sampled: 03/19/08
Date Received: 03/19/08

Instrument/Analyst: NT7/JZ
Date Analyzed: 03/21/08 20:47

Sample Amount: 20.0 mL
Purge Volume: 20.0 mL

CAS Number	Analyte	RL	Result	Q
75-01-4	**Vinyl Chloride**	**0.2**	**0.8**	
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**	**2.1**	
79-01-6	**Trichloroethene**	**0.2**	**0.8**	
127-18-4	**Tetrachloroethene**	**0.2**	**3.0**	

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	95.5%
d8-Toluene	99.5%
Bromofluorobenzene	97.5%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B Sample ID: LC6-03/08
Page 1 of 1 SAMPLE

Lab Sample ID: MO16C
LIMS ID: 08-5790
Matrix: Water
Data Release Authorized:
Reported: 03/24/08

QC Report No: MO16-CDM, Inc.
Project: Leathercare
56498-59678
Date Sampled: 03/19/08
Date Received: 03/19/08

Instrument/Analyst: NT7/JZ
Date Analyzed: 03/21/08 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**	**1.1**	
75-35-4	1,1-Dichloroethene	0.2	< 0.2	U
156-60-5	trans-1,2-Dichloroethene	0.2	< 0.2	U
156-59-2	**cis-1,2-Dichloroethene**	**0.2**	**1.5**	
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	102%
d8-Toluene	95.2%
Bromofluorobenzene	89.2%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: LC2-03/08**
Page 1 of 1 **SAMPLE**

Lab Sample ID: MO16D
LIMS ID: 08-5791
Matrix: Water
Data Release Authorized:
Reported: 03/24/08

QC Report No: MO16-CDM, Inc.
Project: Leathercare
56498-59678
Date Sampled: 03/19/08
Date Received: 03/19/08

Instrument/Analyst: NT7/JZ
Date Analyzed: 03/21/08 21:39

Sample Amount: 20.0 mL
Purge Volume: 20.0 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**	**2.5**	
79-01-6	**Trichloroethene**	**0.2**	**1.3**	
127-18-4	**Tetrachloroethene**	**0.2**	**2.6**	

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	97.5%
d8-Toluene	101%
Bromofluorobenzene	96.2%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: LC3-03/08**
Page 1 of 1 **MATRIX SPIKE**

Lab Sample ID: MO16B
LIMS ID: 08-5789
Matrix: Water
Data Release Authorized:
Reported: 03/24/08

QC Report No: MO16-CDM, Inc.
Project: Leathercare
56498-59678
Date Sampled: 03/19/08
Date Received: 03/19/08

Instrument/Analyst MS: NT7/JZ
MSD: NT7/JZ
Date Analyzed MS: 03/22/08 01:02
MSD: 03/22/08 01:27

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	5.1	4.0	108%	4.8	4.0	100%	6.1%
1,1-Dichloroethene	< 0.2 U	4.1	4.0	102%	4.0	4.0	100%	2.5%
trans-1,2-Dichloroethene	< 0.2 U	4.5	4.0	112%	4.1	4.0	102%	9.3%
cis-1,2-Dichloroethene	2.1	6.5	4.0	110%	6.4	4.0	108%	1.6%
Trichloroethene	0.8	5.2	4.0	110%	4.9	4.0	102%	5.9%
Tetrachloroethene	3.0	7.1	4.0	102%	7.0	4.0	100%	1.4%

Reported in µg/L (ppb)

RPD calculated using sample concentrations per SW846.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: LC3-03/08**
Page 1 of 1 **MATRIX SPIKE**

Lab Sample ID: MO16B
LIMS ID: 08-5789
Matrix: Water
Data Release Authorized:
Reported: 03/24/08

QC Report No: MO16-CDM, Inc.
Project: Leathercare
56498-59678
Date Sampled: 03/19/08
Date Received: 03/19/08

Instrument/Analyst: NT7/JZ
Date Analyzed: 03/22/08 01:02

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	94.2%
d8-Toluene	98.5%
Bromofluorobenzene	105%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: LC3-03/08**
Page 1 of 1 **MATRIX SPIKE DUP**

Lab Sample ID: MO16B
LIMS ID: 08-5789
Matrix: Water
Data Release Authorized:
Reported: 03/24/08

QC Report No: MO16-CDM, Inc.
Project: Leathercare
56498-59678
Date Sampled: 03/19/08
Date Received: 03/19/08

Instrument/Analyst: NT7/JZ
Date Analyzed: 03/22/08 01:27

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	93.2%
d8-Toluene	96.8%
Bromofluorobenzene	103%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: MB-032108**
Page 1 of 1 **METHOD BLANK**

Lab Sample ID: MB-032108
LIMS ID: 08-5789
Matrix: Water
Data Release Authorized:
Reported: 03/24/08

QC Report No: MO16-CDM, Inc.
Project: Leathercare
56498-59678
Date Sampled: NA
Date Received: NA

Instrument/Analyst: NT7/JZ
Date Analyzed: 03/21/08 19:06

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	98.2%
d8-Toluene	98.5%
Bromofluorobenzene	89.0%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B Sample ID: LCS-032108
  LAB CONTROL SAMPLE

Lab Sample ID: LCS-032108 QC Report No: MO16-CDM, Inc.
LIMS ID: 08-5789 Project: Leathercare
Matrix: Water 56498-59678
Data Release Authorized: Date Sampled: NA
Reported: 03/24/08 Date Received: NA

Instrument/Analyst LCS: NT7/JZ Sample Amount LCS: 20.0 mL
LCSD: NT7/JZ LCSD: 20.0 mL
Date Analyzed LCS: 03/21/08 18:02 Purge Volume LCS: 20.0 mL
LCSD: 03/21/08 18:40 LCSD: 20.0 mL

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Vinyl Chloride	3.6	4.0	90.0%	3.6	4.0	90.0%	0.0%
1,1-Dichloroethene	3.5	4.0	87.5%	3.7	4.0	92.5%	5.6%
trans-1,2-Dichloroethene	3.6	4.0	90.0%	3.8	4.0	95.0%	5.4%
cis-1,2-Dichloroethene	3.8	4.0	95.0%	4.0	4.0	100%	5.1%
Trichloroethene	3.8	4.0	95.0%	3.8	4.0	95.0%	0.0%
Tetrachloroethene	3.8	4.0	95.0%	3.8	4.0	95.0%	0.0%

Reported in µg/L (ppb)

RPD calculated using sample concentrations per SW846.

Volatile Surrogate Recovery

	LCS	LCSD
d4-1,2-Dichloroethane	92.0%	94.5%
d8-Toluene	101%	100%
Bromofluorobenzene	104%	105%

ANALYTICAL RESOURCES INCORPORATED

VOA SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: MO16-CDM, Inc.
Project: Leathercare
56498-59678

ARI ID	Client ID	PV	DCE	TOL	BFB	DCB	TOT OUT
MO16A	LC5-03/08	20	99.0%	96.0%	97.8%	NA	0
MB-032108	Method Blank	20	98.2%	98.5%	89.0%	NA	0
LCS-032108	Lab Control	20	92.0%	101%	104%	NA	0
LCSD-032108	Lab Control Dup	20	94.5%	100%	105%	NA	0
MO16B	LC3-03/08	20	95.5%	99.5%	97.5%	NA	0
MO16BMS	LC3-03/08	20	94.2%	98.5%	105%	NA	0
MO16BMSD	LC3-03/08	20	93.2%	96.8%	103%	NA	0
MO16C	LC6-03/08	20	102%	95.2%	89.2%	NA	0
MO16D	LC2-03/08	20	97.5%	101%	96.2%	NA	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: 08-5788 to 08-5791

08-5805 to 08-5808
3.4

CDM

MO39

CHAIN-OF-CUSTODY

Date 3/20/08 Page 1 of 1

PROJECT INFORMATION

Project Manager: Pam Morrill
Project Name: Leathercare
Project Number: 56498-59679
Site Location: Elliott Ave W. Mercer Sampled By: MF

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

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 (20ml purge); 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

SAMPLE ID	DATE	TIME	MATRIX	LAB ID	8260 GC/MS Volatiles	NUMBER OF CONTAINERS
LC1-03/08	3/20/08	0820	Water		✓	3
GT10-03/08	3/20/08	1000	Water		✓	3
GT3-03/08	3/20/08	1250	Water		✓	3
GT2-03/08	3/20/08	1435	Water		✓	3
GT1-03/08	3/20/08	1600	Water		✓	3
Trip Blank	3/20/08		Water		MF Hold	2

LAB INFORMATION

Lab Name: ARI
Lab Address: 4611 SW 134th Place Tukwila, WA 98134
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: 20ml purge for chlorinated volatiles

	1.	2.	3.
RELINQUISHED BY:	Signature: Mary Lou Fox Time: 1742 Printed Name: Mary Lou Fox Date: 3/20/08 Company: CDM	Signature: Time: Printed Name: Date: Company:	Signature: Time: Printed Name: Date: Company:
RECEIVED BY:	Signature: Ashley [illegible] Time: 1742 Printed Name: Ashley Lamountain Date: 3/20/08 Company: ARI	Signature: Time: Printed Name: Date: Company:	Signature: Time: Printed Name: Date: Company:

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Cooler Receipt Form

ARI Client: CDM | Project Name: LEATHERCHARE

COC No: NA | Delivered by: HAND-DELIVERED

Assigned ARI Job No: NL039 | 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
Record cooler temperature (recommended 2.0-6.0 °C for chemistry	3.4 °C	

Cooler Accepted by: [signature] Date: 3/20/08 Time: 1742

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?	BI	
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: [signature] Date: 3/21/08 Time: 1031

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

Explain discrepancies or negative responses:

GT1-03/08 1/3 vials has pea bubble

By: [signature] Date: 3/21/08

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B Sample ID: LC1-03/08
  SAMPLE

Lab Sample ID: MO39A
LIMS ID: 08-5883
Matrix: Water
Data Release Authorized:
Reported: 03/28/08

QC Report No: MO39-CDM, Inc.
Project: Leathercare
56498-59679
Date Sampled: 03/20/08
Date Received: 03/20/08

Instrument/Analyst: NT7/JZ
Date Analyzed: 03/21/08 22:05

Sample Amount: 20.0 mL
Purge Volume: 20.0 mL

CAS Number	Analyte	RL	Result	Q
75-01-4	**Vinyl Chloride**	**0.2**	**0.7**	
75-35-4	1,1-Dichloroethene	0.2	< 0.2	U
156-60-5	trans-1,2-Dichloroethene	0.2	< 0.2	U
156-59-2	**cis-1,2-Dichloroethene**	**0.2**	**6.6**	
79-01-6	**Trichloroethene**	**0.2**	**4.6**	
127-18-4	**Tetrachloroethene**	**0.2**	**3.6**	

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	94.2%
d8-Toluene	97.0%
Bromofluorobenzene	96.2%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: GT10-03/08**
Page 1 of 1 **SAMPLE**

Lab Sample ID: MO39B
LIMS ID: 08-5884
Matrix: Water
Data Release Authorized:
Reported: 03/28/08

QC Report No: MO39-CDM, Inc.
Project: Leathercare
56498-59679
Date Sampled: 03/20/08
Date Received: 03/20/08

Instrument/Analyst: NT7/JZ
Date Analyzed: 03/21/08 22:30

Sample Amount: 20.0 mL
Purge Volume: 20.0 mL

CAS Number	Analyte	RL	Result	Q
75-01-4	**Vinyl Chloride**	**0.2**	**2.4**	
75-35-4	1,1-Dichloroethene	0.2	< 0.2	U
156-60-5	**trans-1,2-Dichloroethene**	**0.2**	**3.1**	
156-59-2	**cis-1,2-Dichloroethene**	**0.2**	**17**	**E**
79-01-6	**Trichloroethene**	**0.2**	**2.6**	
127-18-4	Tetrachloroethene	0.2	< 0.2	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	95.8%
d8-Toluene	97.5%
Bromofluorobenzene	95.0%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B Sample ID: GT10-03/08
  DILUTION

Lab Sample ID: MO39B
LIMS ID: 08-5884
Matrix: Water
Data Release Authorized:
Reported: 03/28/08

QC Report No: MO39-CDM, Inc.
Project: Leathercare
56498-59679
Date Sampled: 03/20/08
Date Received: 03/20/08

Instrument/Analyst: NT7/JZ
Date Analyzed: 03/26/08 20:25

Sample Amount: 6.67 mL
Purge Volume: 20.0 mL

CAS Number	Analyte	RL	Result	Q
75-01-4	**Vinyl Chloride**	**0.6**	**3.8**	
75-35-4	1,1-Dichloroethene	0.6	< 0.6	U
156-60-5	**trans-1,2-Dichloroethene**	**0.6**	**3.9**	
156-59-2	**cis-1,2-Dichloroethene**	**0.6**	**19**	
79-01-6	**Trichloroethene**	**0.6**	**3.2**	
127-18-4	Tetrachloroethene	0.6	< 0.6	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	100%
d8-Toluene	98.8%
Bromofluorobenzene	96.8%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: GT3-03/08**
Page 1 of 1 **SAMPLE**

Lab Sample ID: MO39C
LIMS ID: 08-5885
Matrix: Water
Data Release Authorized:
Reported: 03/28/08

QC Report No: MO39-CDM, Inc.
Project: Leathercare
56498-59679
Date Sampled: 03/20/08
Date Received: 03/20/08

Instrument/Analyst: NT7/JZ
Date Analyzed: 03/21/08 22:56

Sample Amount: 20.0 mL
Purge Volume: 20.0 mL

CAS Number	Analyte	RL	Result	Q
75-01-4	**Vinyl Chloride**	**0.2**	**2.8**	
75-35-4	1,1-Dichloroethene	0.2	< 0.2	U
156-60-5	**trans-1,2-Dichloroethene**	**0.2**	**3.3**	
156-59-2	**cis-1,2-Dichloroethene**	**0.2**	**17**	**E**
79-01-6	**Trichloroethene**	**0.2**	**2.6**	
127-18-4	Tetrachloroethene	0.2	< 0.2	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	96.0%
d8-Toluene	98.0%
Bromofluorobenzene	94.2%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B Sample ID: GT3-03/08
  DILUTION

Lab Sample ID: MO39C
LIMS ID: 08-5885
Matrix: Water
Data Release Authorized:
Reported: 03/28/08

QC Report No: MO39-CDM, Inc.
Project: Leathercare
56498-59679
Date Sampled: 03/20/08
Date Received: 03/20/08

Instrument/Analyst: NT7/JZ
Date Analyzed: 03/26/08 20:50

Sample Amount: 6.67 mL
Purge Volume: 20.0 mL

CAS Number	Analyte	RL	Result	Q
75-01-4	**Vinyl Chloride**	**0.6**	**4.4**	
75-35-4	1,1-Dichloroethene	0.6	< 0.6	U
156-60-5	**trans-1,2-Dichloroethene**	**0.6**	**4.2**	
156-59-2	**cis-1,2-Dichloroethene**	**0.6**	**19**	
79-01-6	**Trichloroethene**	**0.6**	**3.2**	
127-18-4	Tetrachloroethene	0.6	< 0.6	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	101%
d8-Toluene	99.0%
Bromofluorobenzene	99.8%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: GT2-03/08**
Page 1 of 1 **SAMPLE**

Lab Sample ID: MO39D
LIMS ID: 08-5886
Matrix: Water
Data Release Authorized:
Reported: 03/28/08

QC Report No: MO39-CDM, Inc.
Project: Leathercare
56498-59679
Date Sampled: 03/20/08
Date Received: 03/20/08

Instrument/Analyst: NT7/JZ
Date Analyzed: 03/21/08 23:21

Sample Amount: 20.0 mL
Purge Volume: 20.0 mL

CAS Number	Analyte	RL	Result	Q
75-01-4	**Vinyl Chloride**	**0.2**	**12**	
75-35-4	1,1-Dichloroethene	0.2	< 0.2	U
156-60-5	**trans-1,2-Dichloroethene**	**0.2**	**3.1**	
156-59-2	**cis-1,2-Dichloroethene**	**0.2**	**16**	**E**
79-01-6	**Trichloroethene**	**0.2**	**0.6**	
127-18-4	Tetrachloroethene	0.2	< 0.2	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	102%
d8-Toluene	94.0%
Bromofluorobenzene	92.0%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B Sample ID: GT2-03/08
  DILUTION

Lab Sample ID: MO39D
LIMS ID: 08-5886
Matrix: Water
Data Release Authorized:
Reported: 03/28/08

QC Report No: MO39-CDM, Inc.
Project: Leathercare
56498-59679
Date Sampled: 03/20/08
Date Received: 03/20/08

Instrument/Analyst: NT7/JZ
Date Analyzed: 03/26/08 21:15

Sample Amount: 6.67 mL
Purge Volume: 20.0 mL

CAS Number	Analyte	RL	Result	Q
75-01-4	**Vinyl Chloride**	**0.6**	**17**	
75-35-4	1,1-Dichloroethene	0.6	< 0.6	U
156-60-5	**trans-1,2-Dichloroethene**	**0.6**	**3.6**	
156-59-2	**cis-1,2-Dichloroethene**	**0.6**	**18**	
79-01-6	**Trichloroethene**	**0.6**	**0.6**	
127-18-4	Tetrachloroethene	0.6	< 0.6	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	104%
d8-Toluene	94.0%
Bromofluorobenzene	91.2%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: GT1-03/08**
Page 1 of 1 **SAMPLE**

Lab Sample ID: MO39E
LIMS ID: 08-5887
Matrix: Water
Data Release Authorized:
Reported: 03/28/08

QC Report No: MO39-CDM, Inc.
Project: Leathercare
56498-59679
Date Sampled: 03/20/08
Date Received: 03/20/08

Instrument/Analyst: NT7/JZ
Date Analyzed: 03/21/08 23:46

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**	**1.8**	
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	99.8%
d8-Toluene	102%
Bromofluorobenzene	104%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: MB-032108**
Page 1 of 1 **METHOD BLANK**

Lab Sample ID: MB-032108 QC Report No: MO39-CDM, Inc.
LIMS ID: 08-5883 Project: Leathercare
Matrix: Water 56498-59679
Data Release Authorized: Date Sampled: NA
Reported: 03/28/08 Date Received: NA

Instrument/Analyst: NT7/JZ Sample Amount: 20.0 mL
Date Analyzed: 03/21/08 19:06 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	98.2%
d8-Toluene	98.5%
Bromofluorobenzene	89.0%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: MB-032608**
Page 1 of 1 **METHOD BLANK**

Lab Sample ID: MB-032608
LIMS ID: 08-5884
Matrix: Water
Data Release Authorized:
Reported: 03/28/08

QC Report No: MO39-CDM, Inc.
Project: Leathercare
56498-59679
Date Sampled: NA
Date Received: NA

Instrument/Analyst: NT7/JZ
Date Analyzed: 03/26/08 19:06

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	107%
d8-Toluene	100%
Bromofluorobenzene	98.0%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B Sample ID: LCS-032108
  LAB CONTROL SAMPLE

Lab Sample ID: LCS-032108 QC Report No: MO39-CDM, Inc.
LIMS ID: 08-5883 Project: Leathercare
Matrix: Water 56498-59679
Data Release Authorized: Date Sampled: NA
Reported: 03/28/08 Date Received: NA

Instrument/Analyst LCS: NT7/JZ Sample Amount LCS: 20.0 mL
LCSD: NT7/JZ LCSD: 20.0 mL
Date Analyzed LCS: 03/21/08 18:02 Purge Volume LCS: 20.0 mL
LCSD: 03/21/08 18:40 LCSD: 20.0 mL

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Vinyl Chloride	3.6	4.0	90.0%	3.6	4.0	90.0%	0.0%
1,1-Dichloroethene	3.5	4.0	87.5%	3.7	4.0	92.5%	5.6%
trans-1,2-Dichloroethene	3.6	4.0	90.0%	3.8	4.0	95.0%	5.4%
cis-1,2-Dichloroethene	3.8	4.0	95.0%	4.0	4.0	100%	5.1%
Trichloroethene	3.8	4.0	95.0%	3.8	4.0	95.0%	0.0%
Tetrachloroethene	3.8	4.0	95.0%	3.8	4.0	95.0%	0.0%

Reported in µg/L (ppb)

RPD calculated using sample concentrations per SW846.

Volatile Surrogate Recovery

	LCS	LCSD
d4-1,2-Dichloroethane	92.0%	94.5%
d8-Toluene	101%	100%
Bromofluorobenzene	104%	105%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: LCS-032608**
Page 1 of 1 **LAB CONTROL SAMPLE**

Lab Sample ID: LCS-032608
LIMS ID: 08-5884
Matrix: Water
Data Release Authorized:
Reported: 03/28/08

QC Report No: MO39-CDM, Inc.
Project: Leathercare
56498-59679
Date Sampled: NA
Date Received: NA

Instrument/Analyst LCS: NT7/JZ
LCSD: NT7/JZ
Date Analyzed LCS: 03/26/08 18:39
LCSD: 03/26/08 19:34

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	3.8	4.0	95.0%	3.8	4.0	95.0%	0.0%
1,1-Dichloroethene	4.2	4.0	105%	4.0	4.0	100%	4.9%
trans-1,2-Dichloroethene	3.8	4.0	95.0%	3.8	4.0	95.0%	0.0%
cis-1,2-Dichloroethene	3.9	4.0	97.5%	3.7	4.0	92.5%	5.3%
Trichloroethene	4.0	4.0	100%	3.8	4.0	95.0%	5.1%
Tetrachloroethene	4.2	4.0	105%	3.8	4.0	95.0%	10.0%

Reported in µg/L (ppb)

RPD calculated using sample concentrations per SW846.

Volatile Surrogate Recovery

	LCS	LCSD
d4-1,2-Dichloroethane	98.0%	100%
d8-Toluene	99.2%	99.2%
Bromofluorobenzene	97.8%	100%

ANALYTICAL RESOURCES INCORPORATED

VOA SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: MO39-CDM, Inc.
Project: Leathercare
56498-59679

ARI ID	Client ID	PV	DCE	TOL	BFB	DCB	TOT OUT
MB-032108	Method Blank	20	98.2%	98.5%	89.0%	NA	0
LCS-032108	Lab Control	20	92.0%	101%	104%	NA	0
LCSD-032108	Lab Control Dup	20	94.5%	100%	105%	NA	0
MO39A	LC1-03/08	20	94.2%	97.0%	96.2%	NA	0
MB-032608	Method Blank	20	107%	100%	98.0%	NA	0
LCS-032608	Lab Control	20	98.0%	99.2%	97.8%	NA	0
LCSD-032608	Lab Control Dup	20	100%	99.2%	100%	NA	0
MO39B	GT10-03/08	20	95.8%	97.5%	95.0%	NA	0
MO39BDL	GT10-03/08	20	100%	98.8%	96.8%	NA	0
MO39C	GT3-03/08	20	96.0%	98.0%	94.2%	NA	0
MO39CDL	GT3-03/08	20	101%	99.0%	99.8%	NA	0
MO39D	GT2-03/08	20	102%	94.0%	92.0%	NA	0
MO39DDL	GT2-03/08	20	104%	94.0%	91.2%	NA	0
MO39E	GT1-03/08	20	99.8%	102%	104%	NA	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: 08-5883 to 08-5887

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

Lab Proj #: P0803278
Report Date: 04/02/08
Client Proj Name: Leathercare
Client Proj #: 56498-59679

Laboratory Results

Total pages in data package: 12

Lab Sample #	Client Sample ID
P0803278-01	LC5-03/08
P0803278-02	LC3-03/08
P0803278-03	LC6-03/08
P0803278-04	LC2-03/08
P0803278-05	LC1-03/08
P0803278-06	GT10-03/08
P0803278-07	GT3-03/08
P0803278-08	GT2-03/08
P0803278-09	GT1-03/08

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:*** 4-2-08

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 #: P0803278
Report Date: 04/02/08
Client Proj Name: Leathercare
Client Proj #: 56498-59679

Sample Description	Matrix	Lab Sample #	Sampled Date/Time	Received
LC5-03/08	Water	P0803278-01	19 Mar. 08 11:05	21 Mar. 08 10:16

Analyte(s)	Result	PQL	Units	Method #	Analysis Date	By
RiskAnalysis						
N Ethane	0.160	0.025	ug/L	AM20GAX	4/1/08	sl
N Ethene	0.120	0.025	ug/L	AM20GAX	4/1/08	sl
N Methane	160.000	0.100	ug/L	AM20GAX	4/1/08	sl

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 #: P0803278
Report Date: 04/02/08
Client Proj Name: Leathercare
Client Proj #: 56498-59679

Sample Description	Matrix	Lab Sample #	Sampled Date/Time	Received
LC3-03/08	Water	P0803278-02	19 Mar. 08 12:40	21 Mar. 08 10:16

Analyte(s)	Result	PQL	Units	Method #	Analysis Date	By
RiskAnalysis						
N Ethane	0.026	0.025	ug/L	AM20GAX	4/1/08	sl
N Ethene	<0.025	0.025	ug/L	AM20GAX	4/1/08	sl
N Methane	23.000	0.100	ug/L	AM20GAX	4/1/08	sl

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 #: P0803278
Report Date: 04/02/08
Client Proj Name: Leathercare
Client Proj #: 56498-59679

Sample Description	Matrix	Lab Sample #	Sampled Date/Time	Received
LC6-03/08	Water	P0803278-03	19 Mar. 08 14:10	21 Mar. 08 10:16

Analyte(s)	Result	PQL	Units	Method #	Analysis Date	By
RiskAnalysis						
N Ethane	0.065	0.025	ug/L	AM20GAX	4/1/08	sl
N Ethene	<0.025	0.025	ug/L	AM20GAX	4/1/08	sl
N Methane	120.000	0.100	ug/L	AM20GAX	4/1/08	sl

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 #: P0803278
Report Date: 04/02/08
Client Proj Name: Leathercare
Client Proj #: 56498-59679

Sample Description	Matrix	Lab Sample #	Sampled Date/Time	Received
LC2-03/08	Water	P0803278-04	19 Mar. 08 15:20	21 Mar. 08 10:16

Analyte(s)	Result	PQL	Units	Method #	Analysis Date	By
RiskAnalysis						
N Ethane	0.038	0.025	ug/L	AM20GAX	4/1/08	sl
N Ethene	<0.025	0.025	ug/L	AM20GAX	4/1/08	sl
N Methane	73.000	0.100	ug/L	AM20GAX	4/1/08	sl

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 #: P0803278
Report Date: 04/02/08
Client Proj Name: Leathercare
Client Proj #: 56498-59679

Sample Description	Matrix	Lab Sample #	Sampled Date/Time	Received
LC1-03/08	Water	P0803278-05	20 Mar. 08 8:20	21 Mar. 08 10:16

Analyte(s)	Result	PQL	Units	Method #	Analysis Date	By
RiskAnalysis						
N Ethane	0.040	0.025	ug/L	AM20GAX	4/1/08	sl
N Ethene	0.028	0.025	ug/L	AM20GAX	4/1/08	sl
N Methane	33.000	0.100	ug/L	AM20GAX	4/1/08	sl

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 #: P0803278
Report Date: 04/02/08
Client Proj Name: Leathercare
Client Proj #: 56498-59679

Sample Description	Matrix	Lab Sample #	Sampled Date/Time	Received
GT10-03/08	Water	P0803278-06	20 Mar. 08 10:00	21 Mar. 08 10:16

Analyte(s)	Result	PQL	Units	Method #	Analysis Date	B
RiskAnalysis						
N Ethane	0.045	0.025	ug/L	AM20GAX	4/1/08	sl
N Ethene	0.130	0.025	ug/L	AM20GAX	4/1/08	sl
N Methane	56.000	0.100	ug/L	AM20GAX	4/1/08	sl

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 #: P0803278
Report Date: 04/02/08
Client Proj Name: Leathercare
Client Proj #: 56498-59679

Sample Description	Matrix	Lab Sample #	Sampled Date/Time	Received
GT3-03/08	Water	P0803278-07	20 Mar. 08 12:50	21 Mar. 08 10:16

Analyte(s)	Result	PQL	Units	Method #	Analysis Date	By
RiskAnalysis						
N Ethane	0.052	0.025	ug/L	AM20GAX	4/1/08	sl
N Ethene	0.160	0.025	ug/L	AM20GAX	4/1/08	sl
N Methane	76.000	0.100	ug/L	AM20GAX	4/1/08	sl

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 #: P0803278
Report Date: 04/02/08
Client Proj Name: Leathercare
Client Proj #: 56498-59679

Sample Description	Matrix	Lab Sample #	Sampled Date/Time	Received
GT2-03/08	Water	P0803278-08	20 Mar. 08 14:35	21 Mar. 08 10:16

Analyte(s)	Result	PQL	Units	Method #	Analysis Date	By
RiskAnalysis						
N Ethane	0.230	0.025	ug/L	AM20GAX	4/1/08	sl
N Ethene	0.900	0.025	ug/L	AM20GAX	4/1/08	sl
N Methane	120.000	0.100	ug/L	AM20GAX	4/1/08	sl

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 #: P0803278
Report Date: 04/02/08
Client Proj Name: Leathercare
Client Proj #: 56498-59679

Sample Description	Matrix	Lab Sample #	Sampled Date/Time	Received
GT1-03/08	Water	P0803278-09	20 Mar. 08 0:00	21 Mar. 08 10:16

Analyte(s)	Result	PQL	Units	Method #	Analysis Date	By
RiskAnalysis						
N Ethane	0.098	0.025	ug/L	AM20GAX	4/1/08	sl
N Ethene	<0.025	0.025	ug/L	AM20GAX	4/1/08	sl
N Methane	170.000	0.100	ug/L	AM20GAX	4/1/08	sl

N - NELAC certified analysis

P0803278

CDM

CHAIN-OF-CUSTODY

Date 3/20/08 Page 1 of 2

PROJECT INFORMATION

Project Manager: Pam Morrill
Project Name: Leathercare
Project Number: 56498-59679
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

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 | 8240 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: Methane Ethane Ethene

	SAMPLE ID	DATE	TIME	MATRIX	LAB ID	Methane Ethane Ethene	NUMBER OF CONTAINERS
1	LC5-03/08	3/19/08	1105	Water		✓	2
2	LC3-03/08	3/19/08	1240	Water		✓	2
3	LC6-03/08	3/19/08	1410	Water		✓	2
4	LC2-03/08	3/19/08	1520	Water		✓	2
5	LC1-03/08	3/20/08	0820	Water		✓	2
6	GT10-03/08	3/20/08	1000	Water		✓	2
7	GT3-03/08	3/20/08	1250	Water		✓	2
8	GT2-03/08	3/20/08	1435	Water		✓	2

LAB INFORMATION

Lab Name: Microseeps
Lab Address: 220 William Pitt Way
Pittsburgh PA 15238
Via: FedEx

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

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH DATA

Special Instructions:

SAMPLE RECEIPT

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

RELINQUISHED BY: 1.

Signature: Mary Lou Fox Time: 1645
Printed Name: Mary Lou Fox Date: 3/20/08
Company: CDM

RELINQUISHED BY: 2.

Signature: Time:
Printed Name: Date:
Company:

RELINQUISHED BY: 3.

Signature: Time:
Printed Name: Date:
Company:

RECEIVED BY: 1.

Signature: Time:
Printed Name: Date:
Company:

RECEIVED BY: 2.

Signature: Time:
Printed Name: Date:
Company:

RECEIVED BY: 3.

Signature: Time:
Printed Name: Date:
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

CDM

P0803278

CHAIN-OF-CUSTODY

Date 3/20/08 Page 2 of 2

PROJECT INFORMATION

Project Manager: Pam Morrill

Project Name: Leatherczo

Project Number: 56498 - 59679

Site Location: Elliott Ave WC Mercer Sampled By: MG

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						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	Methane, Ethane, Ethene						
9 GTI-03/08	3/20/08		Water																																				7

LAB INFORMATION

Lab Name: Mwoseeps

Lab Address: 220 William Pitt Way

Pittsburgh PA 15238

Via: Fed Ex

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: MaryLou Fox Time: 1615	Signature: Time:	Signature: Time:
Printed Name: MaryLou Fox Date: 3/20/08	Printed Name: Date:	Printed Name: Date:
Company: CDM	Company:	Company:
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:

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

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CDM Transmittal

CDM
11811 NE First Street, Suite 201
Bellevue WA 98005
Tel: (425) 453-8383
Fax: (425) 646-9523

To: Ms. Jo M. Flannery

From: Pam Morrill

Organization/ Address: Ryan Swanson & Cleveland, PLLC
1201 Third Avenue, Suite 3400
Seattle, Washington 98101-3034

Date: June 2, 2008

Re: LeatherCare

Job #: 56498-59679

Via: *Mail:* XX *FedEx:* *Courier:*

Enclosed please find: 1 original and 4 copies of the March 2008 Groundwater Monitoring Report for LeatherCare, Inc.

For your information	XX	**Approved**	
For your review		**Approved as noted**	
For your signature		**Returned to you with Signature**	

● **Message:**

cc: Mr. Dale Myers, Department of Ecology (1 copy)

Signed

CDM®

consulting • engineering • construction • operations