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former LeatherCare Inc.

No WAD #

HZW 5-4.1 Contained Out Determination

B.C. 014200

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JUL - 3 2006

DEPT. OF ECOLOGY

June 30, 2006

Mr. Dean Yasuda
Washington State Department of Ecology, Toxics Cleanup
Northwest Regional Office
3190-160th Avenue SE
Bellevue, Washington 98009-5452

Subject: Request for "Contained-Out" Determination
LeatherCare, Inc.
901/921 Elliott Ave. W
Seattle, Washington

Dear Mr. Yasuda:

This letter follows up our conversation on June 29, 2006 regarding a "Contained-Out" determination for contaminated soil generated during monitoring well installation at the LeatherCare, Inc. site in Seattle, Washington. LeatherCare is a dry cleaning facility that formerly used tetrachloroethene (PCE) as its dry cleaning solvent. LeatherCare, at 901 Elliott Avenue W, and the adjacent property at 921 Elliott Avenue, which is currently occupied by Greg Thompson Productions, are owned by Mr. Steven Ritt.

In May 2006 Camp Dresser & McKee Inc. (CDM) conducted an investigation of soil and groundwater. This investigation included installation and sampling of two piezometers and seven monitoring wells at LeatherCare, Greg Thompson Productions, and in the adjacent W Roy Street. CDM also collected groundwater samples from existing monitoring wells located in WestFarm Foods' parking lot located just to the south of W Roy Street. The attached Figure 3 shows site and area features, monitoring well locations, and groundwater contours on May 10, 2006.

Soil samples were collected from the borings using EPA Method 5035A methods. Six 55-gallon drums of soil cuttings were generated during this investigation. Table 1 summarizes soil analytical data and copies of the analytical reports are attached. The highest concentration of PCE in soil was 0.11 milligrams per kilogram (mg/kg). This particular sample was collected from LC1, a piezometer in which only about one 5-gallon pail of soil cuttings was generated. The next highest concentration of PCE in any given sample was 0.019 mg/kg. The highest concentration of trichlorethene (TCE) was 0.015 mg/kg. Vinyl chloride



Mr. Dean Yasuda

June 30, 2006

Page 2

was detected in only two samples with the highest concentration being 0.002 mg/kg. As you requested, we have also include groundwater data as summarized in Tables 2 and 3.

In all, concentrations of the chlorinated volatile organic compounds (cVOCs) are relatively low and CDM found no large "source area." Based on the relatively low concentrations of cVOCs in drill cuttings, CDM is requesting that Ecology make a "Contained-Out" determination for the soil. If Ecology determines that the soil no longer contains a hazardous or dangerous waste, it will be disposed of either at Waste Management Inc.'s Columbia Ridge Landfill in Arlington, Oregon, or Rabanco Regional Disposal Company's landfill in Roosevelt, Washington.

Please contact me at (425) 453-8383 if you have any questions regarding this request.

Very truly yours,

A handwritten signature in black ink, appearing to read 'Pamela J. Morrill'.

Pamela J. Morrill, CHMM, LHG
Project Manager
Camp Dresser & McKee Inc.

Attachments

cc: Ms. Jo Flannery, Ryan Swanson & Cleveland PLLC

Table 1

Soil Analytical Summary

Ryan, Swanson & Cleveland, PLLC/LeatherCare, Inc.
Seattle, Washington

Analyte	Method A Cleanup Levels	Soil Boring Location, Sample Depths, and Date Sampled										
		GT1 6'	GT2 2'	LC1 2'	LC1 8'	LC2 4.5'	LC3 2.5'	LC4 6'	LC5 2.5'	LC5 8-11'	LC6 2.5'	LC8 8'
		5/5/2006	5/5/2006	5/5/2006	5/3/2006	5/3/2006	5/4/2006	5/4/2006	5/4/2006	5/4/2006	5/4/2006	5/4/2006
Detected Volatile Organic Compounds (EPA SW8260B) (µg/kg)												
Tetrachloroethene	50 ^a	<1.1	2.4	110	--	<86/4.0J	2.2	12	19	--	2.5	--
Trichloroethene	30 ^a	<1.1	14	15	--	<86/1.5J	<1.1	7.0	3.4	--	<1.2	--
cis-1,2-Dichloroethene	800,000 ^b	<1.1	24	5.1	--	190/7.6J	<1.1	3.4	6.2	--	<1.2	--
trans-1,2-Dichloroethene	1,600,000 ^b	<1.1	9.4	<1.1	--	<86/<1.2J	<1.1	<1.3	<1.1	--	<1.2	--
1,1-Dichloroethene	1,670 ^b	<1.1	<1.0	<1.1	--	<86/<1.2J	<1.1	<1.3	<1.1	--	<1.2	--
Vinyl Chloride	667 ^b	<1.1	<1.0	<1.1	--	<86/<1.2J	<1.1	2.0 M	1.5	--	<1.2	--
Metals (BAFeII) (mg/kg)												
Bio-Available Ferric Iron		--	--	--	<5.0	--	--	--	--	1,350.0	--	<5.0
Bio-Available Manganese		--	--	--	<5.0	--	--	--	--	<5.0	--	<5.0
Oxidized Iron		--	--	--	238.0	--	--	--	--	<5.0	--	533.0
Total Organic Carbon (Percent)		0.129	--	0.150	--	0.230	--	0.136	--	--	--	--

Notes:

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

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

b) Method B cleanup level from Washington Dept. of Ecology's Cleanup Levels and Risk Calculations (CLARC) tables. Soil cleanup levels based on direct contact (ingestion); not to be used for protection of groundwater.

J - value from sample out of holding time; estimated value.

N/A - not applicable.

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

-- not analyzed.

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

Table 2

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

Ryan, Swanson & Cleveland, PLLC/LeatherCare, Inc.

Seattle, Washington

Analyte	Date Sampled	Method A Cleanup Levels ^a	Monitoring Well I.D.									Field Blank	Trip Blank
			GT1	GT2	GT3	LC1	LC2 ^b	LC3	LC4 ^c	LC5	LC6		
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	--	--
ORP ^d (mV)	05/06	N/A	-33.2	-27.3	-56.0	-72.1	-151.5	-33.3	-49.6	-81.6	-49.7	--	--
Temperature (°C)	05/06	N/A	15.96	16.19	15.08	18.34	18.17	15.92	14.07	13.79	14.24	--	--
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	--	--
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	--	--
Turbidity (NTU)	05/06	N/A	1.76	0.83	0.66	5.76	62.0	1.05	1.79	2.82	2.01	--	--
Ferrous Iron (ppm)	05/06	N/A	0.1	0.2	0.2	0.5	0.3	0.3	0.2	1	0.5	--	--
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 CaCO ₃)	05/06	N/A	336	406	358	368	309	398	233/233	372	401	--	--
Carbonate (SM 2320) (mg/L CaCO ₃)	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 CaCO ₃)	05/06	N/A	336	406	358	368	309	398	233/233	372	401	--	--
Hydroxide (SM 2320) (mg/L CaCO ₃)	05/06	N/A	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0/<1.0	<1.0	<1.0	--	--
<i>Dehalococcoides</i> (QCPR) ^e	05/06	N/A	-	+	+	+	-	+	-/-	+	+	--	--
Reductive Dechlorination End Products (RSK 175) (µg/L)													
Methane	05/06	N/A	98	140	100	110	590	33	98/87	220	77	--	--
Ethane	05/06	N/A	<12	<12	<12	<12	<12	<12	<12/<12	<12	<12	--	--
Ethene	05/06	N/A	<11	<11	<11	<11	<11	<11	<11/<11	<11	<11	--	--
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	--	--
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	--	--
Detected Volatile Organic Compounds (EPA SW8260B) (µg/L)													
Tetrachloroethene	05/06	5	<0.2	<0.2	0.4	2	9.4	2.9	14/14	0.4	<0.2	<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
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
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
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
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
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

CDM

Table 2

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

Ryan, Swanson & Cleveland, PLLC/LeatherCare, Inc.

Seattle, Washington

Analyte	Date Sampled	Method A Cleanup Levels ^a	Monitoring Well I.D.										Field Blank	Trip Blank
			GT1	GT2	GT3	LC1	LC2 ^b	LC3	LC4 ^c	LC5	LC6			
Dibromochloromethane	05/06	0.52 ^f	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2/<0.2	<0.2	<0.2	<0.2	<0.2	
tert-Butylbenzene	05/06	N/A	0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2/<0.2	<0.2	<0.2	<0.2	<0.2	
Acetone	05/06	800 ^f	3.4 M	5.3 M	<1.0	1.5	2.3	1.3	1.5/1.7	2.1	1.7	5.2	1.5	
Methylene Chloride	05/06	5	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3/<0.3	<0.3	<0.3	<0.3	0.4	

Notes:

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

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

c) Second set of concentrations are from a blind duplicate sample.

d) Silver-silver chloride reference electrode.

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

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

°C - degrees Celsius.

mV - millivolts.

NTU - Nephelometric turbidity units.

ORP - oxidation reduction potential.

N/A - not applicable.

µS/cm - microsiemens per centimeter.

µg/L - micrograms per liter.

mg/L - milligrams per liter.

ppm - parts per million

J - estimated value.

D - value from a diluted sample.

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

-- not analyzed.

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

Table 3
Groundwater Analytical Summary - WestFarm Foods Property
 Ryan, Swanson & Cleveland, PLLC/LeatherCare, Inc.
 Seattle, Washington

Analyte	Date Sampled	Method A Cleanup Levels ^a	Monitoring Well I.D.									
			MW1	MW2	MW3	MW4	MW5	MW6	MW7	MW8	MW12	
Field-Measured Parameters												
pH	05/06	N/A	7.39	7.31	7.09	6.99	7.01	7.03	6.93	6.89	7.20	
ORP ^b (mV)	05/06	N/A	96.6	-32.0	-156.2	-37.8	-95.3	-75.6	-94.0	-84.0	-16.5	
Temperature (°C)	05/06	N/A	15.22	16.10	14.73	15.27	15.55	13.77	14.18	14.18	12.36	
Specific Conductivity (µS/cm)	05/06	N/A	1322	1244	1277	1251	1261	1332	1296	1302	1358	
Dissolved Oxygen (mg/L)	05/06	N/A	0.89	0.17	0.22	0.38	0.32	0.26	0.52	0.32	0.58	
Turbidity (NTU)	05/06	N/A	0.89	1.06	0.86	1.54	1.47	3.54	2.43	2.46	0.47	
Ferrous Iron (ppm)	05/06	N/A	0	0.10	0.50	0.9	2	0.9	0.6	0.8	0	
General Groundwater Chemistry												
Chloride (EPA Method 325.2) (mg/L)	05/06	N/A	4.8	7.7	19.7	14.3	17.6	13.3	15.5	12.7	10.2	
Sulfate (EPA Method 375.2) (mg/L)	05/06	N/A	30.0	32.1	56.1	47.4	48.7	42.8	13.6	24.1	31.7	
Chemical Oxygen Demand (EPA Method 410.4) (mg/L)	05/06	N/A	7.56	<5.0	28.6	57.1	17.2	12.7	41.4	36.2	11.7	
Alkalinity (SM 2320) (mg/L CaCO ₃)	05/06	N/A	161	190	416	407	405	344	450	427	296	
Carbonate (SM 2320) (mg/L CaCO ₃)	05/06	N/A	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
Bicarbonate (SM 2320) (mg/L CaCO ₃)	05/06	N/A	161	190	416	407	405	344	450	427	296	
Hydroxide (SM 2320) (mg/L CaCO ₃)	05/06	N/A	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
<i>Dehalococcoides</i> (QCPR) ^d		N/A	-	-	-	-	-	+	-	-	-	
Reductive Dechlorination End Products (RSK 175) (µg/L)												
Methane	05/06	N/A	12	10	250	250	190	120	700	540	180	
Ethane	05/06	N/A	<12	<12	<12	<12	<12	<12	<12	<12	<12	
Ethene	05/06	N/A	<11	<11	<11	<11	<11	<11	<11	<11	<11	
NWTPH-Dx (mg/L)												
Diesel	03/01	0.50	<0.25	<0.25	6.44	<0.25	<0.25	<0.25	19.6	<0.25	<0.25	
	05/03	0.50	0.325	0.789	12.9 *	0.954	0.765	0.752	8.0	6.43	1.76	
	10/03	0.50	0.317	0.488	209 *	2.7	<0.25	0.289	2.31	0.82	1.34	
	05/04	0.50	0.271	0.498	FP	2.83	0.381	0.394	4.37	4.0	0.626	
	11/04	0.50	<0.25	<0.25	FP	<0.25	0.27	<0.25	1.4	0.75	0.48	
	03/05	0.50	<0.25	<0.25	4.7	1.0	0.43	0.37	3.7	1.8/1.8	<0.25	
	08/05	0.50	0.390	0.86	13 *	1.9	0.68	0.28	2.1	1.3	<0.25	
	10/05	0.50	0.310	0.52	4.1	1.4/1.7	0.64	0.42	2.8	1.7	0.27	
	12/05	0.50	<0.25/<0.25	--	13	3.4	1.1	0.38	2.6	1.8	0.33	
	03/06	0.50	0.330	0.59	4.4	1.3	1.2	1.2	0.30	0.52	<0.25	
	05/06	0.50	<0.25	<0.25	0.61	2.3	0.66	0.5	2.6	1.6	<0.25	
	Motor Oil	03/01	0.50	<0.50	<0.50	15.4	<0.50	<0.50	<0.50	3.51	<0.50	<0.50
		05/03	0.50	<0.50	<0.50	26.2 *	<0.50	<0.50	<0.50	1.05	0.538	<0.50
		10/03	0.50	<0.50	<0.50	705 *	<0.50	<0.50	0.289	0.71	<0.50	<0.50
		05/04	0.50	<0.50	<0.50	FP	0.501	<0.50	<0.50	0.89	<0.50	<0.50
11/04		0.50	<0.50	<0.50	FP	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
03/05		0.50	<0.50	<0.50	15	<0.50	<0.50	<0.50	0.90	<0.50/<0.50	<0.50	
08/05		0.50	<0.50	0.68	49 *	0.98	<0.50	<0.50	0.54	<0.50	<0.50	
10/05		0.50	<0.50	<0.50	16	0.68/0.92	<0.50	<0.50	0.82	<0.50	<0.50	
12/05		0.50	<0.50/<0.50	--	50	0.95	<0.50	<0.50	<0.50	<0.50	<0.50	
03/06		0.50	<0.50	0.68	17	<0.50	<0.50	<0.50	1.4	<0.50	<0.50	
05/06		0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	

Table 3
Groundwater Analytical Summary - WestFarm Foods Property
 Ryan, Swanson & Cleveland, PLLC/LeatherCare, Inc.
 Seattle, Washington

Analyte	Date Sampled	Method A Cleanup Levels ^a	Monitoring Well I.D.								
			MW1	MW2	MW3	MW4	MW5	MW6	MW7	MW8	MW12
Detected Volatile Organic Compounds (EPA SW8260B) (µg/L)											
Tetrachloroethene	03/01	5	--	--	<0.1	--	<0.1	2.48	<0.1	--	--
	05/03	5	12.8	--	--	--	--	2.25	--	--	--
	10/03	5	4.84	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	11/04	5	12	<0.2	<0.2	<0.2	<0.2	2.1/0.3	<0.2	<0.2	<0.2
	03/05	5	19	<0.2	<0.2	<0.2	<0.2	1.5	<0.2	<0.2/<0.2	0.3/0.4 ^c
	08/05	5	18	<0.2	<0.6	<0.2	<0.2	0.8	<0.2	<0.2	<0.2
	10/05	5	8.2	<0.2	<0.2	<0.2	<0.2	0.4	<0.2	<0.2	<0.2
	12/05	5	17	--	<0.2	<0.2	<0.2	0.6	<0.2	<0.2	0.2 J
	03/06	5	2.6	<0.2	<0.2	<0.2	<0.2	0.7	<0.2	<0.2	<0.2
05/06	5	4.1	<0.2	<0.2	<0.2	<0.2	1	<0.2	<0.2	<0.2	
Trichloroethene	03/01	5	--	--	<0.1	--	<0.1	1.37	<0.1	--	--
	05/03	5	2.59	--	--	--	--	1.23	--	--	--
	10/03	5	2.79	1.08	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	11/04	5	2.4	0.8	<0.2	<0.2	<0.2	0.7/0.3	<0.2	<0.2	<0.2
	03/05	5	2.4	0.8	<0.2	<0.2	0.2 J	0.4	0.2 J	<0.2/<0.2	<0.2/<0.2 ^c
	08/05	5	3.3	0.8	<0.6	<0.2	<0.2	0.5	<0.2	<0.2	<0.2
	10/05	5	3.0	1.0	<0.2	<0.2	0.2	0.4	<0.2	<0.2	<0.2
	12/05	5	2.5	--	<0.2	<0.2	0.1 J	0.3	0.1 J	<0.2	<0.2
	03/06	5	1.1	0.3	<0.2	<0.2	<0.2	0.5	<0.2	<0.2	<0.2
05/06	5	1.5	0.3	<0.2	<0.2	<0.2	0.4	<0.2	<0.2	<0.2	
cis-1,2-Dichloroethene	03/01	80 ^e	--	--	<0.1	--	<0.1	<0.1	<0.1	--	--
	05/03	80 ^e	7.62	--	--	--	--	7.4	--	--	--
	10/03	80 ^e	13.8	12	<0.1	<0.1	1.17	13	<0.1	1.55	<0.1
	11/04	80 ^e	6.8	6.8	<0.2	<0.2	3.0	4.2/2.4	1.4	1.8	<0.2
	03/05	80 ^e	4.2	6.2	0.2 J	0.2	1.4	3.0	1.8	1.4/1.3	<0.2/<0.2 ^c
	08/05	80 ^e	5.6	7.1	<0.6	<0.2	1.3	3.7	0.6	1.0	<0.2
	10/05	80 ^e	8.6	7.4	0.2	<0.2	3.1	3.6	2.2	1.4	0.2
	12/05	80 ^e	4.7/4.5	--	0.2 J	0.1 J	1.9	2.9	1.6	1.4	0.1
	03/06	80 ^e	2.4	2.6	<0.2	<0.2	1.5	4.0	1.0	1.4	0.2
05/06	80 ^e	3.1	2.4	0.2	0.3	0.8	2.7	0.7	1.3	<0.2	
trans-1,2-Dichloroethene	03/01	160 ^e	--	--	<0.1	--	<0.1	<0.1	<0.1	--	--
	05/03	160 ^e	<0.1	--	--	--	--	0.5	--	--	--
	10/03	160 ^e	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	11/04	160 ^e	0.2	0.3	<0.2	<0.2	<0.2	0.3/0.2	<0.2	<0.2	<0.2
	03/05	160 ^e	0.2	0.4	<0.2	<0.2	<0.2	0.3	<0.2	<0.2/<0.2	<0.2/<0.2 ^c
	08/05	160 ^e	0.4	0.4	<0.6	<0.2	<0.2	0.3	<0.2	<0.2	<0.2
	10/05	160 ^e	0.6	0.4	<0.2	<0.2	<0.2	0.3	<0.2	<0.2	<0.2
	12/05	160 ^e	0.3/0.3	--	<0.2	<0.2	<0.2	0.3	1.1 J	<0.2	<0.2
	03/06	160 ^e	0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
05/06	N/A ^e	0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	

Table 3
Groundwater Analytical Summary - WestFarm Foods Property
 Ryan, Swanson & Cleveland, PLLC/LeatherCare, Inc.
 Seattle, Washington

Analyte	Date Sampled	Method A Cleanup Levels ^a	Monitoring Well I.D.								
			MW1	MW2	MW3	MW4	MW5	MW6	MW7	MW8	MW12
1,1-Dichloroethene	03/01	0.073 ^e	--	--	<0.1	--	<0.1	2.02	<0.1	--	--
	05/03	0.073 ^e	<0.1	--	--	--	--	<0.1	--	--	--
	10/03	0.073 ^e	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	11/04	0.073 ^e	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2/<0.2	<0.2	<0.2	<0.2
	03/05	0.073 ^e	0.2 J	0.1 J	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2/<0.2	<0.2/<0.2 ^c
	08/05	0.073 ^e	<0.4	<0.2	<0.6	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	10/05	0.073 ^e	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	12/05	0.073 ^e	<0.2/<0.2	--	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	03/06	0.073 ^e	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	05/06	0.073 ^e	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Vinyl Chloride	03/01	0.20	--	--	<0.1	--	<0.1	3.21	<0.1	--	--
	05/03	0.20	0.665	--	--	--	--	11.1	--	--	--
	10/03	0.20	1.21	20.4	<0.1	<0.1	<0.1	41.2	1.74	1.38	<0.1
	11/04	0.20	0.5	5.8	<0.2	<0.2	2.1	7.9/8.8	1.4	1.7	<0.2
	03/05	0.20	0.5	3.3	<0.2	<0.2	0.4	6.1	1.6	1.3/1.1	<0.2/<0.2 ^c
	08/05	0.20	0.7	2.0	<0.6	<0.2	0.3	7.7	0.2	0.4	<0.2
	10/05	0.20	2.1	4.1	<0.2	<0.2	1.3	9.2	1.4	0.8	<0.2
	12/05	0.20	1.2/1.0	--	<0.2	<0.2	0.6	11	1.0	1.0	<0.2
	03/06	0.20	0.3	0.2	<0.2	<0.2	0.8	3.5	0.7	0.7	<0.2
	05/06	0.20	0.4	0.2	<0.2	<0.2	0.2	3.2	0.4	0.4	<0.2
1,1,1-Trichloroethane	03/01	200	--	--	<0.1	--	<0.1	<0.1	<0.1	--	--
	05/03	200	<0.1	--	--	--	--	<0.1	--	--	--
	10/03	200	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	05/06	200	<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 ^e	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,1-Dichloroethane	05/06	800 ^e	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Benzene	05/06	5	<0.2	<0.2	<0.2	<0.2	<0.2	<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
Dibromochloromethane	05/06	0.52 ^e	<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
Acetone	05/06	800 ^e	<1.0	<1.0	1.2	2	<1.0	1.4	3.3	<1.0	1.8
Methylene Chloride	05/06	5	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3

Notes:

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

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) Silver-silver chloride reference electrode.

c) MW12 was resampled on 4/4/05.

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

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

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

°C - degrees Celsius.

mV - millivolts.

NTU - Nephelometric turbidity units.

ORP - oxidation reduction potential.

µS/cm - microsiemens per centimeter.

µg/L - micrograms per liter.

ppm - parts per million

mg/L - milligrams per liter.

J - estimated value.

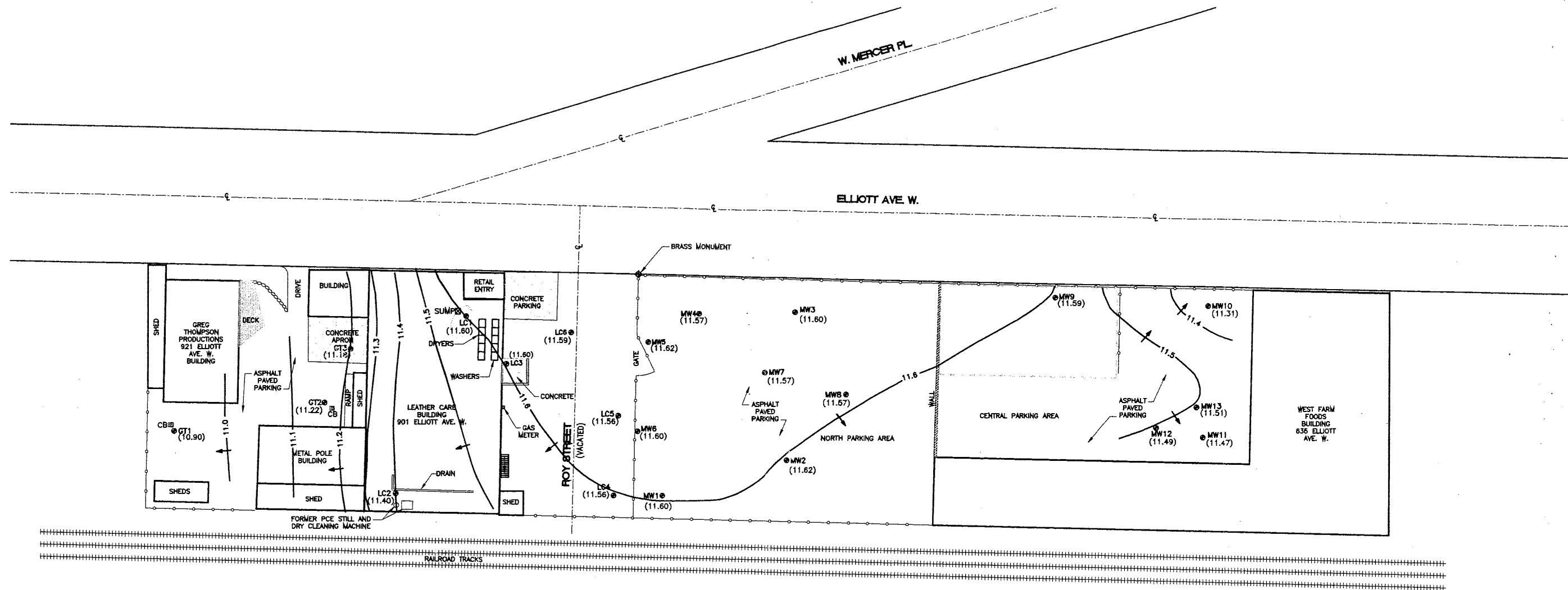
< - analyte not detected at or greater than the listed concentration.

D - value from a diluted sample.

-- not analyzed.

FP - not sampled due to free product.

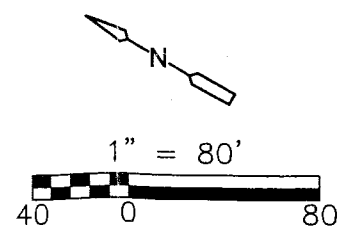
* free product present.



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.

SITE PLAN



LEGEND:

- MW1 (11.60) MONITORING WELL LOCATION AND DESIGNATION AND ELEVATION IN FEET
- 11.6 POTENTIOMETRIC CONTOUR, CONTOUR INTERVAL IS 0.1 FT. (AVERAGE)
- DIRECTION OF GROUNDWATER FLOW
- FENCE
- RAILROAD TRACKS
- CB CATCH BASIN

VERTICAL DATUM:

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

BASIS OF BEARINGS:

ASSUMED BASIS OF BEARING ASSUMED DUE WEST

RYAN SWANSON & CLEVELAND PLLC
LEATHERCARE
SEATTLE, WASHINGTON

Figure No. 3
POTENTIOMETRIC SURFACE MAP
MAY 10, 2006



Analytical Resources, Incorporated
Analytical Chemists and Consultants

June 1, 2006

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

RE: Project ID: 38057-47522 Leathercare
ARI Job No: JI38

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 six soil samples and one Trip Blank on May 4, 2006. The samples were received in good condition with no discrepancies in paperwork, with the exception that the Trip Blank was not listed on the COC. Samples were taken using 5035 sampling techniques.

The samples were analyzed for volatile organic compounds 8260B as instructed on the COC, for a short list of compounds, confirmed by telephone between Sue Dunnihoo and Pam Morrill.

Because of unusual samples foaming during the purge, the soil instrument was compromised before analyses were completed. Sample LC2-4.5' was run at medium level on the water instrument, and rerun at low levels outside holding times, once the soil instrument was functional. Results for the two analyses vary greatly, thought to be due to the discreet sampling method required. The difference between Methanol and sodium bisulfate might be a factor for samples with high content of organic matter. Acceptable surrogate recoveries for both levels of analysis indicate that this is not an issue.

There were no other anomalies associated with this set of samples.

A copy of these reports and the 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
Project Manager
Phone: 206-695-6207
sue@arilabs.com

Enclosures

Chain of Custody Record & Laboratory Analysis Request

ARI Assigned Number: SI38		Turn-around Requested: sta - 2 week			Page: 1 of 1		
ARI Client Company: CDM		Phone: 425-453-8383			Date: 5/4/06	Ice Present? YES	
Client Contact: Pam Morrill					No. of Coolers: 1	Cooler Temps: 1.8	
Client Project Name: Leathercare					Analysis Requested		
Client Project #: 38057-47522		Samplers: PSM & MCF			Notes/Comments		
Sample ID	Date	Time	Matrix	No. Containers			
LC1-2'	5/3/06	1700	soil	4	✓		
LC2-4.5'	5/3/06	1845	soil	4	✓		
LC4-6'	5/4/06	0925	soil	4	✓		
LC5-2.5'	5/4/06	1100	soil	4	✓		
LC6-2.5'	5/4/06	1235	soil	4	✓		
LC3-2.5'	5/4/06	1415	soil	5	✓		
Comments/Special Instructions		Relinquished by:		Received by:		Relinquished by:	
		(Signature) Mary Lou Fox		(Signature) Eric Branson		(Signature)	
		Printed Name: Mary Lou Fox		Printed Name: ERIC BRANSON		Printed Name:	
		Company: ARI		Company: ARI		Company:	
		Date & Time: 5/4/06 1652		Date & Time: 5/4/06 1652		Date & Time:	



Analytical Resources, Incorporated
Analytical Chemists and Consultants
4611 South 134th Place, Suite 100
Tukwila, WA 98168
206-695-6200 206-695-6201 (fax)

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

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

ORGANICS ANALYSIS DATA SHEET

Volatiles by Purge & Trap GC/MS-Method SW8260B

Sample ID: LC1-2'

Page 1 of 1

SAMPLE

Lab Sample ID: JI38A

QC Report No: JI38-CDM

LIMS ID: 06-7751

Project: Leathercare

Matrix: Soil

38057-47522

Data Release Authorized:

Date Sampled: 05/03/06

Reported: 05/25/06

Date Received: 05/04/06

Instrument/Analyst: FINN5/JLM

Sample Amount: 4.69 g-dry-wt

Date Analyzed: 05/16/06 22:44

Purge Volume: 5.0 mL

Moisture: 13.7%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	1.1	< 1.1	U
75-35-4	1,1-Dichloroethene	1.1	< 1.1	U
156-60-5	trans-1,2-Dichloroethene	1.1	< 1.1	U
156-59-2	cis-1,2-Dichloroethene	1.1	5.1	
79-01-6	Trichloroethene	1.1	15	
127-18-4	Tetrachloroethene	1.1	110	

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

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	100%
d8-Toluene	108%
Bromofluorobenzene	101%
d4-1,2-Dichlorobenzene	106%

ORGANICS ANALYSIS DATA SHEET

Volatiles by Purge & Trap GC/MS-Method SW8260B

Sample ID: LC2-4.5'

Page 1 of 1

SAMPLE

Lab Sample ID: JI38B

QC Report No: JI38-CDM

LIMS ID: 06-7752

Project: Leathercare

Matrix: Soil

38057-47522

Data Release Authorized:

Date Sampled: 05/03/06

Reported: 05/25/06

Date Received: 05/04/06

Instrument/Analyst: NT3/JLM

Sample Amount: 58.4 mg-dry-wt

Date Analyzed: 05/17/06 21:07

Purge Volume: 5.0 mL

Moisture: 18.9%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	86	< 86	U
75-35-4	1,1-Dichloroethene	86	< 86	U
156-60-5	trans-1,2-Dichloroethene	86	< 86	U
156-59-2	cis-1,2-Dichloroethene	86	190	
79-01-6	Trichloroethene	86	< 86	U
127-18-4	Tetrachloroethene	86	< 86	U

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

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	100%
d8-Toluene	101%
Bromofluorobenzene	98.7%
d4-1,2-Dichlorobenzene	111%

ORGANICS ANALYSIS DATA SHEET

Volatiles by Purge & Trap GC/MS-Method SW8260B

Sample ID: LC2-4.5'

Page 1 of 1

REANALYSIS

Lab Sample ID: JI38B

QC Report No: JI38-CDM

LIMS ID: 06-7752

Project: Leathercare

Matrix: Soil

38057-47522

Data Release Authorized:

Date Sampled: 05/03/06

Reported: 05/25/06

Date Received: 05/04/06

Instrument/Analyst: FINN1/JLM

Sample Amount: 4.05 g-dry-wt

Date Analyzed: 05/18/06 17:15

Purge Volume: 5.0 mL

Moisture: 18.9%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	1.2	< 1.2	U
75-35-4	1,1-Dichloroethene	1.2	< 1.2	U
156-60-5	trans-1,2-Dichloroethene	1.2	< 1.2	U
156-59-2	cis-1,2-Dichloroethene	1.2	7.6	
79-01-6	Trichloroethene	1.2	1.5	
127-18-4	Tetrachloroethene	1.2	4.0	

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

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	102%
d8-Toluene	89.9%
Bromofluorobenzene	91.7%
d4-1,2-Dichlorobenzene	95.1%

ORGANICS ANALYSIS DATA SHEET

Volatiles by Purge & Trap GC/MS-Method SW8260B

Sample ID: LC4-6'

Page 1 of 1

SAMPLE

Lab Sample ID: JI38C

QC Report No: JI38-CDM

LIMS ID: 06-7753

Project: Leathercare

Matrix: Soil

38057-47522

Data Release Authorized:

Date Sampled: 05/04/06

Reported: 05/25/06

Date Received: 05/04/06

Instrument/Analyst: FINN5/JLM

Sample Amount: 3.92 g-dry-wt

Date Analyzed: 05/16/06 23:42

Purge Volume: 5.0 mL

Moisture: 19.5%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	1.3	2.0	M
75-35-4	1,1-Dichloroethene	1.3	< 1.3	U
156-60-5	trans-1,2-Dichloroethene	1.3	< 1.3	U
156-59-2	cis-1,2-Dichloroethene	1.3	3.4	
79-01-6	Trichloroethene	1.3	7.0	
127-18-4	Tetrachloroethene	1.3	12	

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

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	100%
d8-Toluene	109%
Bromofluorobenzene	99.4%
d4-1,2-Dichlorobenzene	108%

ORGANICS ANALYSIS DATA SHEET

Volatiles by Purge & Trap GC/MS-Method SW8260B

Sample ID: LC5-2.5'

Page 1 of 1

SAMPLE

Lab Sample ID: JI38D

QC Report No: JI38-CDM

LIMS ID: 06-7754

Project: Leathercare

Matrix: Soil

38057-47522

Data Release Authorized:

Date Sampled: 05/04/06

Reported: 05/25/06

Date Received: 05/04/06

Instrument/Analyst: FINN5/JLM

Sample Amount: 4.58 g-dry-wt

Date Analyzed: 05/17/06 00:11

Purge Volume: 5.0 mL

Moisture: 10.5%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	1.1	1.5	
75-35-4	1,1-Dichloroethene	1.1	< 1.1	U
156-60-5	trans-1,2-Dichloroethene	1.1	< 1.1	U
156-59-2	cis-1,2-Dichloroethene	1.1	6.2	
79-01-6	Trichloroethene	1.1	3.4	
127-18-4	Tetrachloroethene	1.1	19	

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

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	102%
d8-Toluene	110%
Bromofluorobenzene	104%
d4-1,2-Dichlorobenzene	105%

ORGANICS ANALYSIS DATA SHEET

Volatiles by Purge & Trap GC/MS-Method SW8260B

Sample ID: LC6-2.5'

Page 1 of 1

SAMPLE

Lab Sample ID: JI38E

QC Report No: JI38-CDM

LIMS ID: 06-7755

Project: Leathercare

Matrix: Soil

38057-47522

Data Release Authorized:

Date Sampled: 05/04/06

Reported: 05/25/06

Date Received: 05/04/06

Instrument/Analyst: FINN1/JLM

Sample Amount: 4.23 g-dry-wt

Date Analyzed: 05/18/06 17:42

Purge Volume: 5.0 mL

Moisture: 15.8%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	1.2	< 1.2	U
75-35-4	1,1-Dichloroethene	1.2	< 1.2	U
156-60-5	trans-1,2-Dichloroethene	1.2	< 1.2	U
156-59-2	cis-1,2-Dichloroethene	1.2	< 1.2	U
79-01-6	Trichloroethene	1.2	< 1.2	U
127-18-4	Tetrachloroethene	1.2	2.5	

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

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	116%
d8-Toluene	91.1%
Bromofluorobenzene	90.9%
d4-1,2-Dichlorobenzene	100%

ORGANICS ANALYSIS DATA SHEET

Volatiles by Purge & Trap GC/MS-Method SW8260B

Sample ID: LC3-2.5'

Page 1 of 1

SAMPLE

Lab Sample ID: JI38F

QC Report No: JI38-CDM

LIMS ID: 06-7756

Project: Leathercare

Matrix: Soil

38057-47522

Data Release Authorized:

Date Sampled: 05/04/06

Reported: 05/25/06

Date Received: 05/04/06

Instrument/Analyst: FINN1/JLM

Sample Amount: 4.47 g-dry-wt

Date Analyzed: 05/18/06 21:39

Purge Volume: 5.0 mL

Moisture: 12.6%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	1.1	< 1.1	U
75-35-4	1,1-Dichloroethene	1.1	< 1.1	U
156-60-5	trans-1,2-Dichloroethene	1.1	< 1.1	U
156-59-2	cis-1,2-Dichloroethene	1.1	< 1.1	U
79-01-6	Trichloroethene	1.1	< 1.1	U
127-18-4	Tetrachloroethene	1.1	2.2	

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

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	107%
d8-Toluene	93.7%
Bromofluorobenzene	97.4%
d4-1,2-Dichlorobenzene	96.3%

ORGANICS ANALYSIS DATA SHEET

Volatiles by Purge & Trap GC/MS-Method SW8260B

Sample ID: TRIP BLANK

Page 1 of 1

SAMPLE

Lab Sample ID: JI38G

QC Report No: JI38-CDM

LIMS ID: 06-7757

Project: Leathercare

Matrix: Water

38057-47522

Data Release Authorized: 

Date Sampled: 03/08/06

Reported: 05/25/06

Date Received: 05/04/06

Instrument/Analyst: FINN1/JLM

Sample Amount: 5.00 mL

Date Analyzed: 05/18/06 16:41

Purge Volume: 5.0 mL

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

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

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	100%
d8-Toluene	90.4%
Bromofluorobenzene	92.1%
d4-1,2-Dichlorobenzene	97.3%

VOA SURROGATE RECOVERY SUMMARY

Matrix: Soil

QC Report No: JI38-CDM
Project: Leathercare
38057-47522

ARI ID	Client ID	Level	DCE	TOL	BFB	DCB	TOT OUT
MB-051606	Method Blank	Low	111%	108%	107%	105%	0
LCS-051606	Lab Control	Low	96.1%	106%	103%	103%	0
LCSD-051606	Lab Control Dup	Low	97.6%	105%	107%	104%	0
JI38A	LC1-2'	Low	100%	108%	101%	106%	0
MB-051706	Method Blank	Med	91.9%	98.3%	96.0%	107%	0
LCS-051706	Lab Control	Med	93.1%	103%	103%	99.1%	0
LCSD-051706	Lab Control Dup	Med	95.9%	108%	108%	107%	0
JI38B	LC2-4.5'	Med	100%	101%	98.7%	111%	0
JI38BDL	LC2-4.5'	Low	102%	89.9%	91.7%	95.1%	0
JI38C	LC4-6'	Low	100%	109%	99.4%	108%	0
JI38D	LC5-2.5'	Low	102%	110%	104%	105%	0
JI38E	LC6-2.5'	Low	116%	91.1%	90.9%	100%	0
MB-051806	Method Blank	Low	102%	92.7%	96.5%	97.4%	0
LCS-051806	Lab Control	Low	90.2%	93.0%	95.6%	92.9%	0
LCSD-051806	Lab Control Dup	Low	95.1%	94.3%	99.3%	97.6%	0
JI38F	LC3-2.5'	Low	107%	93.7%	97.4%	96.3%	0

	LCS/MB LIMITS		QC LIMITS	
	Low	Med	Low	Med
SW8260B				
(DCE) = d4-1,2-Dichloroethane	68-140	71-131	67-161	66-146
(TOL) = d8-Toluene	84-116	80-116	82-118	86-123
(BFB) = Bromofluorobenzene	79-114	82-114	63-122	82-130
(DCB) = d4-1,2-Dichlorobenzene	77-113	84-116	74-112	90-112

Log Number Range: 06-7751 to 06-7756

VOA SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: JI38-CDM
Project: Leathercare
38057-47522

ARI ID	Client ID	PV	DCE	TOL	BFB	DCB	TOT OUT
JI38G	TRIP BLANK	5	100%	90.4%	92.1%	97.3%	0

	LCS/MB LIMITS		QC LIMITS	
SW8260B	5mL Purge	20mL Purge	5mL Purge	20mL Purge
(DCE) = d4-1,2-Dichloroethane	70-134	63-127	66-142	66-139
(TOL) = d8-Toluene	78-123	77-117	75-124	82-123
(BFB) = Bromofluorobenzene	78-121	68-116	75-121	71-113
(DCB) = d4-1,2-Dichlorobenzene	79-116	79-113	78-124	84-125

Prep Method: SW5030B
Log Number Range: 06-7757 to 06-7757

ORGANICS ANALYSIS DATA SHEET

Volatiles by Purge & Trap GC/MS-Method SW8260B

Sample ID: LCS-051606

Page 1 of 1

LAB CONTROL SAMPLE

Lab Sample ID: LCS-051606

QC Report No: JI38-CDM

LIMS ID: 06-7751

Project: Leathercare

Matrix: Soil

38057-47522

Data Release Authorized:

Date Sampled: NA

Reported: 05/25/06

Date Received: NA

Instrument/Analyst LCS: FINN5/JLM

Sample Amount LCS: 5.00 g-dry-wt

LCSD: FINN5/JLM

LCSD: 5.00 g-dry-wt

Date Analyzed LCS: 05/16/06 17:46

Purge Volume LCS: 5.0 mL

LCSD: 05/16/06 18:29

LCSD: 5.0 mL

Moisture: NA

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Vinyl Chloride	57.6	50.0	115%	58.6	50.0	117%	1.7%
1,1-Dichloroethene	53.3	50.0	107%	54.5	50.0	109%	2.2%
trans-1,2-Dichloroethene	54.4	50.0	109%	54.9	50.0	110%	0.9%
cis-1,2-Dichloroethene	52.8	50.0	106%	53.6	50.0	107%	1.5%
Trichloroethene	58.0	50.0	116%	55.8	50.0	112%	3.9%
Tetrachloroethene	58.0	50.0	116%	58.3	50.0	117%	0.5%

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

RPD calculated using sample concentrations per SW846.

Volatile Surrogate Recovery

	LCS	LCSD
d4-1,2-Dichloroethane	96.1%	97.6%
d8-Toluene	106%	105%
Bromofluorobenzene	103%	107%
d4-1,2-Dichlorobenzene	103%	104%

ORGANICS ANALYSIS DATA SHEET

Volatiles by Purge & Trap GC/MS-Method SW8260B

Page 1 of 1

Sample ID: LCS-051706

LAB CONTROL SAMPLE

Lab Sample ID: LCS-051706

LIMS ID: 06-7752

Matrix: Soil

Data Release Authorized:

Reported: 05/25/06

QC Report No: JI38-CDM

Project: Leathercare

38057-47522

Date Sampled: NA

Date Received: NA

Instrument/Analyst LCS: NT3/JLM

LCSD: NT3/JLM

Date Analyzed LCS: 05/17/06 10:07

LCSD: 05/17/06 10:34

Sample Amount LCS: 100 mg-dry-wt

LCSD: 100 mg-dry-wt

Purge Volume LCS: 5.0 mL

LCSD: 5.0 mL

Moisture: NA

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Vinyl Chloride	2360	2500	94.4%	2540	2500	102%	7.3%
1,1-Dichloroethene	2260	2500	90.4%	2320	2500	92.8%	2.6%
trans-1,2-Dichloroethene	2230	2500	89.2%	2300	2500	92.0%	3.1%
cis-1,2-Dichloroethene	2180	2500	87.2%	2300	2500	92.0%	5.4%
Trichloroethene	2150	2500	86.0%	2300	2500	92.0%	6.7%
Tetrachloroethene	2380	2500	95.2%	2500	2500	100%	4.9%

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

RPD calculated using sample concentrations per SW846.

Volatile Surrogate Recovery

	LCS	LCSD
d4-1,2-Dichloroethane	93.1%	95.9%
d8-Toluene	103%	108%
Bromofluorobenzene	103%	108%
d4-1,2-Dichlorobenzene	99.1%	107%

ORGANICS ANALYSIS DATA SHEET

Volatiles by Purge & Trap GC/MS-Method SW8260B

Sample ID: LCS-051806

Page 1 of 1

LAB CONTROL SAMPLE

Lab Sample ID: LCS-051806

QC Report No: JI38-CDM

LIMS ID: 06-7756

Project: Leathercare

Matrix: Soil

38057-47522

Data Release Authorized: 

Date Sampled: NA

Reported: 05/25/06

Date Received: NA

Instrument/Analyst LCS: FINN1/JLM

Sample Amount LCS: 5.00 g-dry-wt

LCSD: FINN1/JLM

LCSD: 5.00 g-dry-wt

Date Analyzed LCS: 05/18/06 15:07

Purge Volume LCS: 5.0 mL

LCSD: 05/18/06 15:42

LCSD: 5.0 mL

Moisture: NA

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Vinyl Chloride	43.6	50.0	87.2%	42.8	50.0	85.6%	1.9%
1,1-Dichloroethene	48.2	50.0	96.4%	46.9	50.0	93.8%	2.7%
trans-1,2-Dichloroethene	48.2	50.0	96.4%	48.2	50.0	96.4%	0.0%
cis-1,2-Dichloroethene	49.8	50.0	99.6%	48.4	50.0	96.8%	2.9%
Trichloroethene	47.8	50.0	95.6%	46.3	50.0	92.6%	3.2%
Tetrachloroethene	53.9	50.0	108%	53.6	50.0	107%	0.6%

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

RPD calculated using sample concentrations per SW846.

Volatile Surrogate Recovery

	LCS	LCSD
d4-1,2-Dichloroethane	90.2%	95.1%
d8-Toluene	93.0%	94.3%
Bromofluorobenzene	95.6%	99.3%
d4-1,2-Dichlorobenzene	92.9%	97.6%

ORGANICS ANALYSIS DATA SHEET

Volatiles by Purge & Trap GC/MS-Method SW8260B

Sample ID: MB-051606

Page 1 of 1

METHOD BLANK

Lab Sample ID: MB-051606

QC Report No: JI38-CDM

LIMS ID: 06-7751

Project: Leathercare

Matrix: Soil

38057-47522

Data Release Authorized: 

Date Sampled: NA

Reported: 05/25/06

Date Received: NA

Instrument/Analyst: FINN5/JLM

Sample Amount: 5.00 g-dry-wt

Date Analyzed: 05/16/06 19:21

Purge Volume: 5.0 mL

Moisture: NA

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

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

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	111%
d8-Toluene	108%
Bromofluorobenzene	107%
d4-1,2-Dichlorobenzene	105%

ORGANICS ANALYSIS DATA SHEET

Volatiles by Purge & Trap GC/MS-Method SW8260B

Sample ID: MB-051706

Page 1 of 1

METHOD BLANK

Lab Sample ID: MB-051706

QC Report No: JI38-CDM

LIMS ID: 06-7752

Project: Leathercare

Matrix: Soil

38057-47522

Data Release Authorized:

Date Sampled: NA

Reported: 05/25/06

Date Received: NA

Instrument/Analyst: NT3/JLM

Sample Amount: 100 mg-dry-wt

Date Analyzed: 05/17/06 11:01

Purge Volume: 5.0 mL

Moisture: NA

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	50	< 50	U
75-35-4	1,1-Dichloroethene	50	< 50	U
156-60-5	trans-1,2-Dichloroethene	50	< 50	U
156-59-2	cis-1,2-Dichloroethene	50	< 50	U
79-01-6	Trichloroethene	50	< 50	U
127-18-4	Tetrachloroethene	50	< 50	U

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

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	91.9%
d8-Toluene	98.3%
Bromofluorobenzene	96.0%
d4-1,2-Dichlorobenzene	107%

ORGANICS ANALYSIS DATA SHEET

Volatiles by Purge & Trap GC/MS-Method SW8260B

Sample ID: MB-051806

Page 1 of 1

METHOD BLANK

Lab Sample ID: MB-051806

QC Report No: JI38-CDM

LIMS ID: 06-7756

Project: Leathercare

Matrix: Soil

38057-47522

Data Release Authorized:

Date Sampled: NA

Reported: 05/25/06

Date Received: NA

Instrument/Analyst: FINN1/JLM

Sample Amount: 5.00 g-dry-wt

Date Analyzed: 05/18/06 16:08

Purge Volume: 5.0 mL

Moisture: NA

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

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

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	102%
d8-Toluene	92.7%
Bromofluorobenzene	96.5%
d4-1,2-Dichlorobenzene	97.4%

Volatiles Total Solids-voats
Data By: Jean Muramoto
Created: 5/21/06

Worklist: 571
Analyst: JLM
Comments:

ARI ID	Tare Wt (g)	Wet Wt (g)	Dry Wt (g)	% Solids
1. JI38A 06-7751	1.44	14.66	12.85	86.31
2. JI38B 06-7752	1.62	16.68	13.83	81.08
3. JI38C 06-7753	1.41	11.40	9.45	80.48
4. JI38D 06-7754	1.34	13.67	12.37	89.46
5. JI38E 06-7755	1.65	20.83	17.80	84.20
6. JI38F 06-7756	1.30	16.85	14.89	87.40



Analytical Resources, Incorporated
Analytical Chemists and Consultants

June 2, 2006

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

RE: Project ID: 38057-47522 Leathercare
ARI Job No: JI39

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 two soil samples on May 5, 2006. The samples were received in good condition with no discrepancies in paperwork. Samples were taken using 5035 sampling techniques.

The samples were analyzed for volatile organic compounds 8260B as instructed on the COC, for a short list of compounds, confirmed by telephone between Sue Dunnihoo and Pam Morrill.

There were no other anomalies associated with this set of samples.

A copy of these reports and the 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
Project Manager
Phone: 206-695-6207
sue@arilabs.com

cc: Efile JI39

Enclosures

Chain of Custody Record & Laboratory Analysis Request

ARI Assigned Number: 3I39		Turn-around Requested: std 2 wk		Page: 1 of 1	
ARI Client Company: CDM		Phone:		Date: 5/5/06	Ice Present? YES
Client Contact: Pam Morrill				No. of Coolers:	Cooler Temps: 3.4
Client Project Name: Leathercare				Analysis Requested	
Client Project #: 36657-47522		Samplers: PJM EMLF		Notes/Comments	
Sample ID	Date	Time	Matrix	No. Containers	
GT2-2'	5/5/06	0940	soil	4	Not accepted 5/5/06 82600
GT1-6'	5/5/06	1115	soil	4	
Comments/Special Instructions		Relinquished by: (Signature) Mary Lou Fox Printed Name: Mary Lou Fox Company: CDM Date & Time: 5/5/06 1735		Received by: (Signature) Eric Branson Printed Name: ERIC BRANSON Company: ARI Date & Time: 5/5/06 - 1735	
		Relinquished by: (Signature) _____ Printed Name: _____ Company: _____ Date & Time: _____		Received by: (Signature) _____ Printed Name: _____ Company: _____ Date & Time: _____	



Analytical Resources, Incorporated
 Analytical Chemists and Consultants
 4611 South 134th Place, Suite 100
 Tukwila, WA 98168
 206-695-6200 206-695-6201 (fax)

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

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

ORGANICS ANALYSIS DATA SHEET

Volatiles by Purge & Trap GC/MS-Method SW8260B

Sample ID: GT2-2'

Page 1 of 1

SAMPLE

Lab Sample ID: JI39A

QC Report No: JI39-CDM

LIMS ID: 06-7758

Project: Leathercare

Matrix: Soil

38057-47522

Data Release Authorized: 

Date Sampled: 05/05/06

Reported: 05/23/06

Date Received: 05/05/06

Instrument/Analyst: FINN1/JLM

Sample Amount: 5.16 g-dry-wt

Date Analyzed: 05/18/06 20:46

Purge Volume: 5.0 mL

Moisture: 10.7%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	1.0	< 1.0	U
75-35-4	1,1-Dichloroethene	1.0	< 1.0	U
156-60-5	trans-1,2-Dichloroethene	1.0	9.4	
156-59-2	cis-1,2-Dichloroethene	1.0	24	
79-01-6	Trichloroethene	1.0	14	
127-18-4	Tetrachloroethene	1.0	2.4	

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

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	112%
d8-Toluene	90.2%
Bromofluorobenzene	94.2%
d4-1,2-Dichlorobenzene	103%

ORGANICS ANALYSIS DATA SHEET

Volatiles by Purge & Trap GC/MS-Method SW8260B

Sample ID: GT1-6'

Page 1 of 1

SAMPLE

Lab Sample ID: JI39B

QC Report No: JI39-CDM

LIMS ID: 06-7759

Project: Leathercare

Matrix: Soil

38057-47522

Data Release Authorized: 

Date Sampled: 05/05/06

Reported: 05/23/06

Date Received: 05/05/06

Instrument/Analyst: FINN1/JLM

Sample Amount: 4.49 g-dry-wt

Date Analyzed: 05/18/06 21:13

Purge Volume: 5.0 mL

Moisture: 14.6%

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

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

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	118%
d8-Toluene	91.9%
Bromofluorobenzene	98.9%
d4-1,2-Dichlorobenzene	101%

VOA SURROGATE RECOVERY SUMMARY

Matrix: Soil

QC Report No: JI39-CDM
Project: Leathercare
38057-47522

ARI ID	Client ID	Level	DCE	TOL	BFB	DCB	TOT OUT
MB-051806	Method Blank	Low	102%	92.7%	96.5%	97.4%	0
LCS-051806	Lab Control	Low	90.2%	93.0%	95.6%	92.9%	0
LCSD-051806	Lab Control Dup	Low	95.1%	94.3%	99.3%	97.6%	0
JI39A	GT2-2'	Low	112%	90.2%	94.2%	103%	0
JI39B	GT1-6'	Low	118%	91.9%	98.9%	101%	0

SW8260B	LCS/MB LIMITS		QC LIMITS	
	Low	Med	Low	Med
(DCE) = d4-1,2-Dichloroethane	68-140	71-131	67-161	66-146
(TOL) = d8-Toluene	84-116	80-116	82-118	86-123
(BFB) = Bromofluorobenzene	79-114	82-114	63-122	82-130
(DCB) = d4-1,2-Dichlorobenzene	77-113	84-116	74-112	90-112

Log Number Range: 06-7758 to 06-7759

ORGANICS ANALYSIS DATA SHEET

Volatiles by Purge & Trap GC/MS-Method SW8260B

Sample ID: LCS-051806

Page 1 of 1

LAB CONTROL SAMPLE

Lab Sample ID: LCS-051806

QC Report No: JI39-CDM

LIMS ID: 06-7758

Project: Leathercare

Matrix: Soil

38057-47522

Data Release Authorized:

Date Sampled: NA

Reported: 05/23/06

Date Received: NA

Instrument/Analyst LCS: FINN1/JLM

Sample Amount LCS: 5.00 g-dry-wt

LCSD: FINN1/JLM

LCSD: 5.00 g-dry-wt

Date Analyzed LCS: 05/18/06 15:07

Purge Volume LCS: 5.0 mL

LCSD: 05/18/06 15:42

LCSD: 5.0 mL

Moisture: NA

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Vinyl Chloride	43.6	50.0	87.2%	42.8	50.0	85.6%	1.9%
1,1-Dichloroethene	48.2	50.0	96.4%	46.9	50.0	93.8%	2.7%
trans-1,2-Dichloroethene	48.2	50.0	96.4%	48.2	50.0	96.4%	0.0%
cis-1,2-Dichloroethene	49.8	50.0	99.6%	48.4	50.0	96.8%	2.9%
Trichloroethene	47.8	50.0	95.6%	46.3	50.0	92.6%	3.2%
Tetrachloroethene	53.9	50.0	108%	53.6	50.0	107%	0.6%

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

RPD calculated using sample concentrations per SW846.

Volatile Surrogate Recovery

	LCS	LCSD
d4-1,2-Dichloroethane	90.2%	95.1%
d8-Toluene	93.0%	94.3%
Bromofluorobenzene	95.6%	99.3%
d4-1,2-Dichlorobenzene	92.9%	97.6%

ORGANICS ANALYSIS DATA SHEET

Volatiles by Purge & Trap GC/MS-Method SW8260B

Sample ID: MB-051806

Page 1 of 1

METHOD BLANK

Lab Sample ID: MB-051806

QC Report No: JI39-CDM

LIMS ID: 06-7758

Project: Leathercare

Matrix: Soil

38057-47522

Data Release Authorized:

Date Sampled: NA

Reported: 05/23/06

Date Received: NA

Instrument/Analyst: FINN1/JLM

Sample Amount: 5.00 g-dry-wt

Date Analyzed: 05/18/06 16:08

Purge Volume: 5.0 mL

Moisture: NA

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

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

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	102%
d8-Toluene	92.7%
Bromofluorobenzene	96.5%
d4-1,2-Dichlorobenzene	97.4%



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