A Department of Ecology Report

WASHINGTON STATE DEPARTMENT OF ECOLOGY

Lakewood/Plaza Cleaners
July 11, 12 & 14, 1995

Introduction

This document is one in a series describing the results of ground water sampling at Lakewood/Plaza Cleaners. The sampling program was designed by U.S. Environmental Protection Agency's contractor, CH2M Hill, as part of the Lakewood Remedial Action (CH2M Hill 1990a, b). Ecology has conducted the semi-annual ground water sampling at the site since 1991. The objective of this sampling is to collect ground water quality data for the Toxics Cleanup Program to evaluate the effectiveness of Lakewood supply wells H1 and H2 (Figure 1) to contain and remove contaminated ground water caused by Plaza Cleaners. Samples were collected on July 11,12 and 14, 1995 from one municipal well (H1) and eleven monitoring wells: MW-16A, MW-19A, MW-20A, MW-20B, MW-27, MW-28, MW-31, MW-32, MW-33, MW-40, and MW-41 (Figure 1). All samples were analyzed for volatile organics (VOAs). The quality assurance review and laboratory reporting sheets are presented in Appendix A.

Results

Field Observations

Table 1 lists field observation data for each of the sampled wells: static water level, pH, specific conductance, temperature, purged volume, well depth, and the geologic unit. Well MW-20A had a pH reading of 8.5 standard units, which is consistent with previous measurements. The high pH readings in MW-20A are most likely related to well construction. This is most likely caused by bentonite inadvertently being placed within the screened interval during well construction. The specific conductance in well MW-20B (530 umhos/cm), which is screened in a fine-grained till unit, was two times greater than the other wells. Specific conductance readings are typically higher for water from fine-grained units.

by Pamela B. Marti
November 1995

Waterbody No. WA-12-1115GW
(Segment No. 05-12-GW)

Ecology Report #95-359

Laboratory Results

Table 2 summarizes laboratory results. The highest concentrations of tetrachloroethene (PERC), trichloroethene (TCE), and cis-1,2-dichloroethene (cis-1,2-DCE) occurred in well MW-20B with 340 ppb, 8.4 ppb, and 17 ppb, respectively. PERC was also detected in MW-16A and municipal well H1 with 27 ppb and 9 ppb, respectively. Well H1 is one of three wells recently added to the monitoring network. PERC and/or cis-1,2-DCE were detected in wells MW-16A, MW-20A, MW-31, and MW-32 at concentrations below the practical quantitation limit of 1 ppb. TCE was detected in wells MW-16A, H1, and upgradient well MW-19A below the quantitation limit of 1 ppb.

Table 3 shows PERC, TCE, and cis-1,2-DCE concentrations for January 1991 through July 1995. PERC and cis-1,2-DCE continue to be detected at or near the detection limit in most of the wells screened in the Advance Outwash (refer to Figure 1 for typical site stratigraphy). Well MW-20B, which is screened in the Vashon Till, continues to have the highest concentrations.

Figure 2 shows PERC concentrations at wells MW-20B and MW-16A between 1984 and 1995, respectively. Since 1984, PERC concentrations in both wells have varied substantially. PERC concentrations decreased initially in MW-20B from March 1985 (4800 ppb) to May 1985 (570 ppb). After May 1985, concentrations ranged between 86 ppb and 1200 ppb. Over the monitoring period PERC concentrations in MW-16A have varied between 3 ppb and 110 ppb.

Methods

Ground Water Sampling

Samples were collected on July 11, 12 and 14, 1995 from one municipal well H1 and eleven monitoring wells: MW-16A, MW-19A, MW-20A, MW-20B, MW-27, MW-28, MW-31, MW-32, MW-33, MW-40, and MW-41 (Figure 1). Prior to sample collection, static water level measurements were obtained using an electronic water level indicator. The meter was rinsed with deionized water after each use. All monitoring wells were purged a minimum of three well volumes and until pH, temperature, and specific conductance readings stabilized. Purge water was discharged to storm drains or to the ground near each well. All monitoring wells were purged and sampled using dedicated bladder pumps, except for MW-20B. Well MW-20B was purged and sampled with a decontaminated teflon bailer. Municipal well H1 was sampled from a tap nearest to the well.

Wells were sampled in order from the least to most contaminated. Samples collected for volatile organics were free of headspace and preserved with two drops of 1:1 hydrochloric acid.

The bailer was pre-cleaned with a Liquinox® wash and sequential rinses of hot tap water, 10% nitric acid, distilled/deionized water, and pesticide-grade acetone. After cleaning, the bailer was air-dried and wrapped in aluminum foil. Chain-of-custody procedures were followed in accordance with Manchester Laboratory protocol (Ecology, 1994).

Quality Assurance Samples

Quality control samples collected in the field for the ground water monitoring consisted of a transfer blank, a blind duplicate, and a replicate sample. A transfer blank was collected by pouring organic-free water through a decontaminated bailer. A blind duplicate sample was collected from well MW-16A. Duplicate samples are two sets of samples collected from a well simultaneously and submitted to the laboratory with different identification. A replicate sample was collected from well MW-20A. Replicate samples are two sets of samples collected from a well at different times. In addition to quality control samples collected in the field, laboratory quality control samples consisted of matrix spikes, matrix spike duplicates and surrogate compound recoveries. Volatile organic samples were analyzed using EPA SW-846 Method 8260 (U.S. EPA, 1986).

In general the quality of the data is acceptable for use. Volatile organic analyses were performed by the Manchester Laboratory. Dickey Huntamer of the Manchester Laboratory conducted the quality assurance review. Low levels of common laboratory solvents such as acetone and methylene chloride were detected in the laboratory blanks. However, these analytes were not detected in the field samples.

Duplicate samples collected at MW-16A provide an estimate of combined sampling and laboratory precision. The numeric comparison of duplicate results is expressed as the relative percent difference or RPD. RPDs are the ratio of the difference and the mean of the duplicate results expressed as a percentage. The RPDs for tetrachloroethylene, trichloroethylene and cis-1,2-dichloroethylene were 4%, 8%, and 5%, respectively. Matrix spike and spike duplicate recoveries for volatile organics are within the QC limits of ±25% for water sample analysis.

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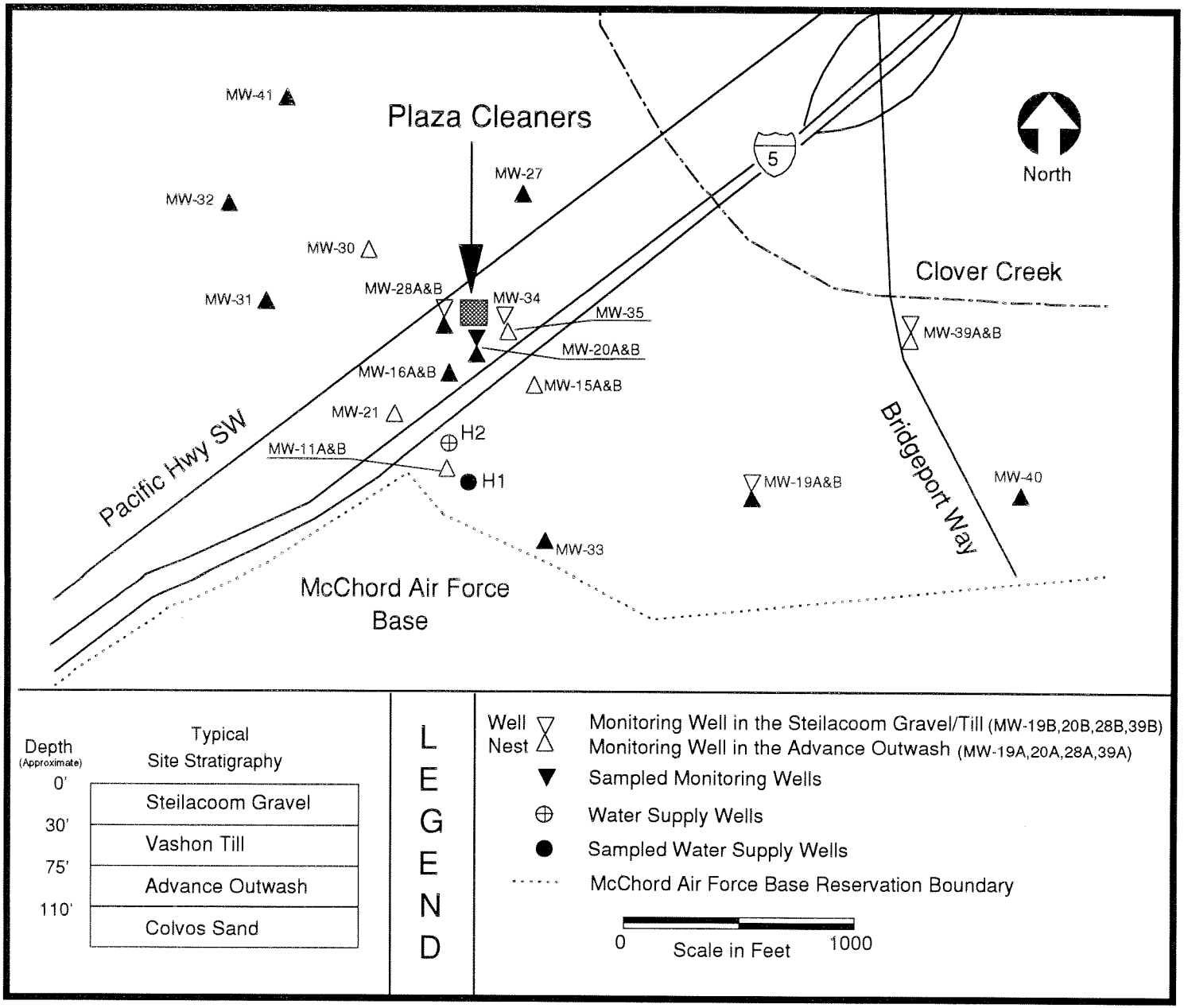


Figure 1: Well Location Map - Lakewood/Plaza Cleaners

Table 1: Field Parameter Results for July 11,12 & 14, 1995

Monitoring Well	Total Depth (Feet)	Geologic Unit Screened	Depth to Water (Feet)	pH (standard units)	Specific Conductance (umhos/cm)	Temperature (°C)	Purge Volume (gallons)
MW-40	75.1	Advance Outwash	35.25	7.2	275	11.3	21
MW-19A	97.5	Advance Outwash	39.42	6.8	200	11.6	30
MW-33	99.3	Advance Outwash	++	7.1	215	11.7	30
MW-41	96.8	Advance Outwash	30.17	7.0	210	12.0	30
MW-27	96.4	Advance Outwash	++	6.7	200	12.3	30
MW-20A	97.3	Advance Outwash	34.51	8.5	230	12.9	30
MW-28A	98	Advance Outwash	++	7.1	250	13.1	30
MW-32	114.4	Advance Outwash	62.31	6.9	200	12.1	25
MW-31	91.5	Advance Outwash	++	6.8	190	11.8	25
MW-16A	109	Advance Outwash	42.34	7.2	230	11.8	130
MW-20B	50.4	Vashon Till	36.48	6.6	530	14.2	7

++ = Dedicated pump obstructs water-level measurement.

Table 2: Summary of Analytes Detected in Samples Collected July 11,12 & 14, 1995

Geologic Unit Screened	Vashon Till	Advance Outwash												
Monitoring Well	MW-20B	MW-16A	MW-16B (Duplicate)	MW-20A	MW-20AR (Replicate)	MW-27	MW-28A	MW-31	MW-32	MW-41	Upgradient Wells MW-19A	Upgradient Wells MW-40	Upgradient Wells MW-33	Municipal Well H1
Volatile Organics: (ug/L)														
Tetrachloroethene (PERC)	340	26	27	0.44 J	0.81 J	1 U	1 U	0.59 J	0.71 J	1 U	1 U	1 U	1 U	9
Trichloroethene (TCE)	8.4	0.45 J	0.49 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.43 J	1 U	1 U	0.28 J
cis-1,2-Dichloroethene (cis-1,2-DCE)	17	0.8 J	0.84 J	1 U	1 U	1 U	1 U	0.53 J	0.46 J	1 U	1 U	1 U	1 U	1 U

U = The analyte was not detected at or above the reported value.
J = The analyte was positively identified. The associated numerical result is an estimate.

Table 3: Summary of Sample Results (ug/L) from January 1991 to July 1995

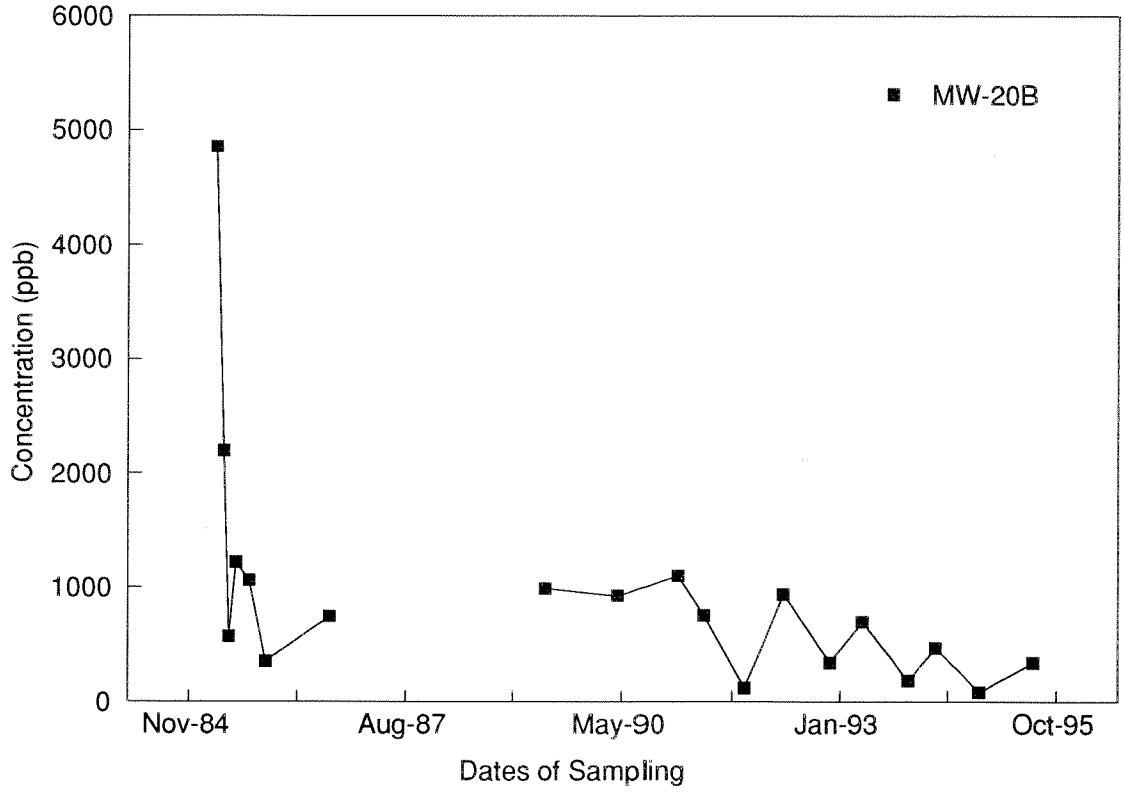
Well Number	January 1991			May 1991			November 1991			May 1992			December 1992		
	PERC	TCE	cis-1,2-DCE	PERC	TCE	cis-1,2-DCE	PERC	TCE	cis-1,2-DCE	PERC	TCE	cis-1,2-DCE	PERC	TCE	cis-1,2-DCE
MW-16A	28	1 J	2.4 J	26	0.6 J	2	2.7 J	1 U	0.6 J	7	1 U	1	9 J	0.3 J	0.8 J
MW-20A	1 U	1 U	1 U	0.4 J	1 U	1 U	0.4 J	1 U	1 U	0.5 J	1 U	1 U	0.8 J	1 UJ	1 UJ
MW-20B	1100 D	18	33	752	16	30	120	2.6 J	6.7	940	13	32	340 J	14 J	20 J
MW-21	2.1 J	1 U	1 J	2	1 U	0.7 J	2.2 J	1 U	1.0 J	2	1 U	0.6 J	2	0.2 J	0.3 J
MW-27	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ
MW-31	1 J	1 U	1.9 J	0.6 J	1 U	2	0.9 J	1 U	2.2 J	0.8 J	1 U	1	0.5 J	1 UJ	0.9 J
MW-32	1 J	1 U	1.1 J	1	1 U	2	0.6 J	1 U	0.6 J	0.7 J	1 U	1	0.7 J	1 UJ	0.5 J
MW-41	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ
MW-19A	--	--	--	--	--	--	1 U	0.5 J	1 U	--	--	--	1 U	1 UJ	1 UJ
MW-40	1 U	1 U	1 U	--	--	--	1 U	1 U	1 U	--	--	--	1 U	1 UJ	1 UJ

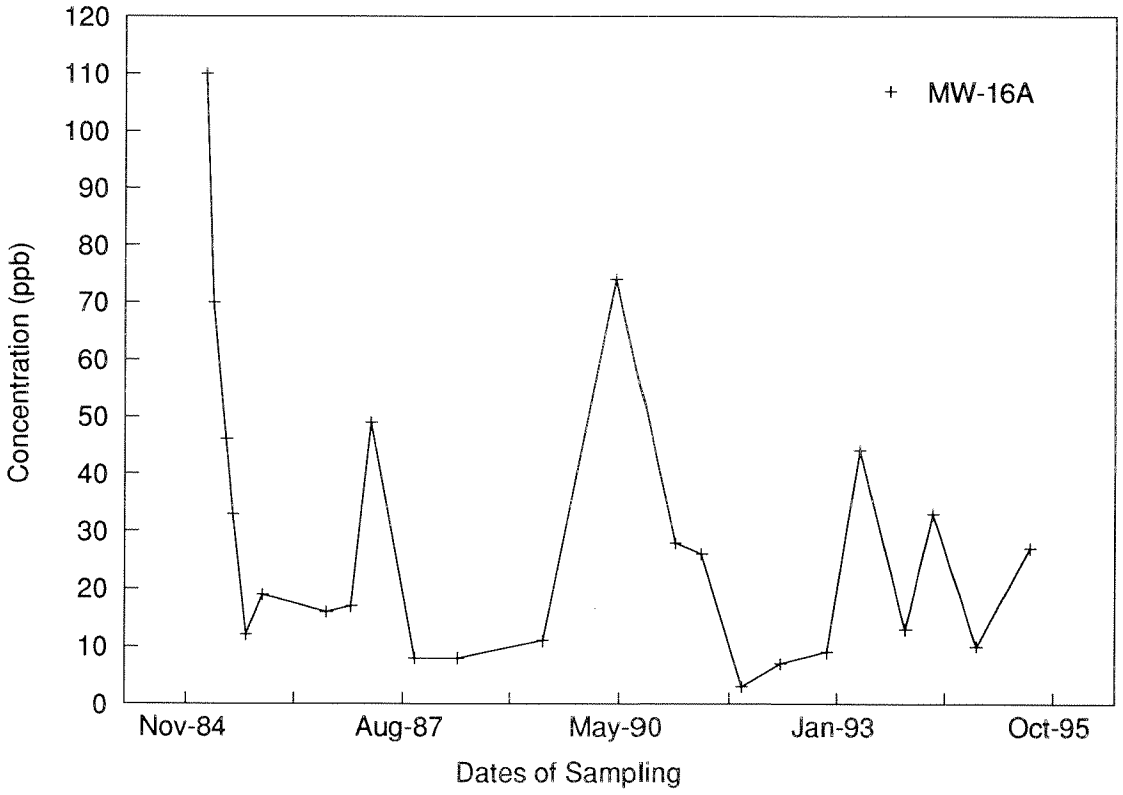
Well Number	May 1993			December 1993			April 1994			November 1994			July 1995		
	PERC	TCE	cis-1,2-DCE	PERC	TCE	cis-1,2-DCE	PERC	TCE	cis-1,2-DCE	PERC	TCE	cis-1,2-DCE	PERC	TCE	cis-1,2-DCE
MW-16A	44	10 U	2 J	13	0.3 J	0.7 J	33	0.6	1.4	9.7	0.3 J	0.5 J	27	0.5 J	0.8 J
MW-20A	10 U	10 U	10 U	0.3 J	1 U	1 U	0.4	0.2 U	0.2 U	0.3 J	1 U	1 U	0.4 J	1 U	1 U
MW-20B	700 D	12	21	187	50 U	8.2 J	472	8.6 J	12.6	86	50 U	3 J	340 D	8.4	17
MW-21	1 J	10 U	10 U	1.6	1 U	0.4 J	1.5	0.2 J	0.3	1.8	0.2 J	0.3 J	--	--	--
MW-27	10 U	10 U	10 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-31	10 U	10 U	10 U	0.8 J	1 U	1.2 J	0.7	0.2 U	1.0	0.8 J	1 U	1	0.6 J	1 U	0.5 J
MW-32	10 U	10 U	10 U	0.7 J	1 U	0.6 J	0.7	0.2 U	0.6	0.6 J	1 U	0.5 J	0.7 J	1 U	0.5 J
MW-41	10 U	10 U	10 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U
MW-19A	--	--	--	1 U	0.4	1 U	0.2 U	0.5	0.2 U	--	--	--	1 U	0.4 J	1 U
MW-40	--	--	--	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	--	--	--	1 U	1 U	1 U

U = The analyte was not detected at or above the reported result.
J = The analyte was positively identified. The associated numerical result is an estimate.
UJ = The analyte was not detected at or above the reported estimated result.
D = Analysis performed at secondary dilution.
-- = Not Tested

Figure 2

PERC Concentrations for Wells MW-20B and MW-16A from 1984 to 1995





APPENDIX A

Analytical Results
Lakewood/Plaza Cleaners
July 11, 12 & 14, 1995

MANCHESTER ENVIRONMENTAL LABORATORY

7411 Beach Drive E , Port Orchard Washington 98366

CASE NARRATIVE

August 28, 1995

Subject: Lakewood Plaza Cleaners

Samples: 95 - 288130 to -288144

Case No. 1995 - 95

Officer: Pam Marti

By: Dickey D. Huntamer
Organics Analysis Unit

VOLATILE ORGANIC ANALYSIS

ANALYTICAL METHODS:

Volatile organic compounds were analyzed using Manchester modification of the EPA SW 846 Method 8260 purge-trap procedure with capillary GC/MS analysis. Normal QA/QC procedures were performed on the samples.

BLANKS:

Low levels of the common laboratory solvents acetone and methylene chloride were detected in the laboratory blanks The EPA five times rule was applied to all target compounds which were found in the blank. Compounds that were found in the sample and in the blank were considered real and not the result of contamination if the levels in the sample are greater than or equal to five times the amount of compounds in the associated method blank.

SURROGATES:

Surrogate recoveries were within acceptable limits for water samples except for p-bromofluorobenzene which was consistently about 10% low. The low p-bromofluorobenzene recoveries are due to interaction with the capillary column which had no effect on the compounds detected. No qualifiers were added because of the low p-bromofluorobenzene recoveries.

HOLDING TIMES:

The water samples were analyzed within the recommended 14 day holding time.

MATRIX SPIKE AND MATRIX SPIKE DUPLICATE:

Water matrix spikes were within acceptable QC limits for both percent recovery and RPD for all compounds except 2-butanone, 2-hexanone and naphthalene. These three compounds had low recoveries and all results were qualified as estimates, "J".

ANALYTICAL COMMENTS:

No analytical problems were encountered in the analysis other than low recoveries for p-bromofluorobenzene. The data is acceptable for use as qualified.

DATA QUALIFIER CODES:

U	-	The analyte was not detected at or above the reported value.
J	-	The analyte was positively identified. The associated numerical value is an estimate.
UJ	-	The analyte was not detected at or above the reported estimated result.
REJ	-	The data are unusable for all purposes.
EXP	-	The result is equal to the number before EXP times 10 to the power of the number after EXP. As an example 3EXP6 equals 3×10^6.
NAF	-	Not analyzed for.
N	-	For organic analytes there is evidence the analyte is present in this sample.
NJ	-	There is evidence that the analyte is present. The associated numerical result is an estimate.
E	-	This qualifier is used when the concentration of the associated value exceeds the known calibration range.
bold	-	The analyte was present in the sample. (Visual Aid to locate detected compound on report sheet.)

Manchester Environmental Laboratory

Department of Ecology

Analysis Report for

Volatile Organic Analysis

Project Name: Lakewood/Plaza Cleaners **LIMS Project ID:** 1995-95

Sample: 95288130 **Date Received:** 07/13/95 **Method:** SW8260
Field ID: MW-40 **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 07/18/95 **Units:** ug/L

Analyte	Result	Qualifier	Analyte	Result	Qualifier
Dichlorodifluoromethane	1	U	Ethylbenzene	1	U
Chloromethane	1	U	m & p-Xylene	2	U
Vinyl Chloride	1	U	o-Xylene	2	U
Bromomethane	2	U	Total Xylenes	3	U
Chloroethane	1	U	Benzene, Ethenyl-(Styrene)	2	U
Trichlorofluoromethane	1	U	Bromoform	1	U
Acetone	2	UJ	Isopropylbenzene (Cumene)	1	U
1,1-Dichloroethene	1	U	Ethane, 1,1,2,2-Tetrachloro-	1	U
Carbon Disulfide	1	U	1,2,3-Trichloropropane	1	U
Methylene Chloride	2	U	Bromobenzene	1	U
Trans-1,2-Dichloroethene	1	U	n-Propylbenzene	1	U
1,1-Dichloroethane	1	U	2-Chlorotoluene	1	U
2-Butanone	5	UJ	1,3,5-Trimethylbenzene	1	U
Cis-1,2-Dichloroethene	1	U	4-Chlorotoluene	1	U
2,2-Dichloropropane	1	U	Tert-Butylbenzene	1	U
Bromochloromethane	1	U	1,2,4-Trimethylbenzene	1	U
Chloroform	1	U	Sec-Butylbenzene	1	U
1,1,1-Trichloroethane	1	U	p-Isopropyltoluene	1	U
1,1-Dichloropropene	1	U	1,3-Dichlorobenzene	1	U
Carbon Tetrachloride	1	U	1,4-Dichlorobenzene	1	U
1,2-Dichloroethane	1	U	Butylbenzene	1	U
Benzene	1	U	1,2-Dichlorobenzene	1	U
Trichloroethene	1	U	1,2-Dibromo-3-Chloropropane	5	U
1,2-Dichloropropane	1	U	1,2,4-Trichlorobenzene	5	U
Dibromomethane	1	U	Hexachlorobutadiene	2	UJ
Bromodichloromethane	1	U	Naphthalene	10	UJ
Cis-1,3-Dichloropropene	1.1	U	1,2,3-Trichlorobenzene	5	U
4-Methyl-2-Pentanone	1	U			
Toluene	1	U	**Surrogate Recoveries**		
Trans-1,3-Dichloropropene	.94	U			
1,1,2-Trichloroethane	1	U	**1,2-Dichloroethane-D4**	**100**	%
1,3-Dichloropropane	1	U	**Fluorobenzene**	**97**	%
2-Hexanone	1	UJ	**D8-Toluene**	**96**	%
Tetrachloroethene	1	U	**p-Bromofluorobenzene**	**76**	%
Dibromochloromethane	1	U	**D4-1,2-Dichlorobenzene**	**110**	%
1,2-Dibromoethane (EDB)	1	U			
Chlorobenzene	1	U			
Ethane, 1,1,1,2-Tetrachloro-	1	U			

Authorized By: O. Hunter Release Date: 8/28/95 Page: 1

Manchester Environmental Laboratory

Department of Ecology

Analysis Report for

Volatile Organic Analysis

Project Name: Lakewood/Plaza Cleaners **LIMS Project ID:** 1995-95

Sample: 95288130 (Matrix Spike - LMX1) **Date Received:** 07/13/95 **Method:** SW8260
Field ID: MW-40 **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 07/18/95 **Units:** % Recovery

Analyte	Result	Qualifier	Analyte	Result	Qualifier
Dichlorodifluoromethane	94		Ethylbenzene	79	
Chloromethane	100		m & p-Xylene	81	
Vinyl Chloride	98		o-Xylene	75	
Bromomethane	110		Total Xylenes	79	
Chloroethane	92		Benzene, Ethenyl-(Styrene)	68	
Trichlorofluoromethane	100		Bromoform	92	
Acetone	79		Isopropylbenzene (Cumene)	79	
1,1-Dichloroethene	100		Ethane, 1,1,2,2-Tetrachloro-	87	
Carbon Disulfide	96		1,2,3-Trichloropropane	97	
Methylene Chloride	110		Bromobenzene	100	
Trans-1,2-Dichloroethene	89		n-Propylbenzene	85	
1,1-Dichloroethane	92		2-Chlorotoluene	91	
2-Butanone	45		1,3,5-Trimethylbenzene	81	
Cis-1,2-Dichloroethene	85		4-Chlorotoluene	78	
2,2-Dichloropropane	70		Tert-Butylbenzene	75	
Bromochloromethane	94		1,2,4-Trimethylbenzene	78	
Chloroform	94		Sec-Butylbenzene	74	
1,1,1-Trichloroethane	95		p-Isopropyltoluene	72	
1,1-Dichloropropene	73		1,3-Dichlorobenzene	95	
Carbon Tetrachloride	96		1,4-Dichlorobenzene	99	
1,2-Dichloroethane	91		Butylbenzene	65	
Benzene	88		1,2-Dichlorobenzene	95	
Trichloroethene	89		1,2-Dibromo-3-Chloropropane	84	
1,2-Dichloropropane	90		1,2,4-Trichlorobenzene	57	
Dibromomethane	92		Hexachlorobutadiene	87	
Bromodichloromethane	89		Naphthalene	48	
Cis-1,3-Dichloropropene	66		1,2,3-Trichlorobenzene	66	
4-Methyl-2-Pentanone	63				
Toluene	89		Surrogate Recoveries		
Trans-1,3-Dichloropropene	64				
1,1,2-Trichloroethane	96		1,2-Dichloroethane-D4	99	%
1,3-Dichloropropane	85		Fluorobenzene	95	%
2-Hexanone	43		D8-Toluene	95	%
Tetrachloroethene	90		p-Bromofluorobenzene	88	%
Dibromochloromethane	90		D4-1,2-Dichlorobenzene	100	%
1,2-Dibromoethane (EDB)	84				
Chlorobenzene	96				
Ethane, 1,1,1,2-Tetrachloro-	95				

Authorized By: _____ Release Date: 8/25/95

Manchester Environmental Laboratory

Department of Ecology

Analysis Report for

Volatile Organic Analysis

Project Name: Lakewood/Plaza Cleaners **LIMS Project ID:** 1995-95

Sample: 95288130 (Matrix Spike - LMX2) **Date Received:** 07/13/95 **Method:** SW8260
Field ID: MW-40 **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 07/18/95 **Units:** % Recovery

Analyte	Result	Qualifier	Analyte	Result	Qualifier
Dichlorodifluoromethane	94		Ethylbenzene	77	
Chloromethane	98		m & p-Xylene	78	
Vinyl Chloride	98		o-Xylene	74	
Bromomethane	98		Total Xylenes	77	
Chloroethane	96		Benzene, Ethenyl-(Styrene)	70	
Trichlorofluoromethane	97		Bromoform	99	
Acetone	73		Isopropylbenzene (Cumene)	79	
1,1-Dichloroethene	110		Ethane, 1,1,2,2-Tetrachloro-	87	
Carbon Disulfide	93		1,2,3-Trichloropropane	100	
Methylene Chloride	98		Bromobenzene	94	
Trans-1,2-Dichloroethene	90		n-Propylbenzene	83	
1,1-Dichloroethane	90		2-Chlorotoluene	84	
2-Butanone	50		1,3,5-Trimethylbenzene	83	
Cis-1,2-Dichloroethene	85		4-Chlorotoluene	90	
2,2-Dichloropropane	70		Tert-Butylbenzene	77	
Bromochloromethane	97		1,2,4-Trimethylbenzene	80	
Chloroform	92		Sec-Butylbenzene	74	
1,1,1-Trichloroethane	96		p-Isopropyltoluene	74	
1,1-Dichloropropene	75		1,3-Dichlorobenzene	93	
Carbon Tetrachloride	92		1,4-Dichlorobenzene	100	
1,2-Dichloroethane	88		Butylbenzene	66	
Benzene	88		1,2-Dichlorobenzene	95	
Trichloroethene	91		1,2-Dibromo-3-Chloropropane	80	
1,2-Dichloropropane	89		1,2,4-Trichlorobenzene	58	
Dibromomethane	87		Hexachlorobutadiene	85	
Bromodichloromethane	86		Naphthalene	54	
Cis-1,3-Dichloropropene	71		1,2,3-Trichlorobenzene	62	
4-Methyl-2-Pentanone	69				
Toluene	84		Surrogate Recoveries		
Trans-1,3-Dichloropropene	68				
1,1,2-Trichloroethane	93		1,2-Dichloroethane-D4	99	%
1,3-Dichloropropane	81		Fluorobenzene	95	%
2-Hexanone	45		D8-Toluene	96	%
Tetrachloroethene	93		p-Bromofluorobenzene	87	%
Dibromochloromethane	90		D4-1,2-Dichlorobenzene	99	%
1,2-Dibromoethane (EDB)	86				
Chlorobenzene	91				
Ethane, 1,1,1,2-Tetrachloro-	96				

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Analysis Report for

Volatile Organic Analysis

Project Name: Lakewood/Plaza Cleaners **LIMS Project ID:** 1995-95

Sample: 95288131 **Date Received:** 07/13/95 **Method:** SW8260
Field ID: MW-19A **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 07/18/95 **Units:** ug/L

Analyte	Result	Qualifier	Analyte	Result	Qualifier
Dichlorodifluoromethane	1	U	Ethylbenzene	1	U
Chloromethane	1	U	m & p-Xylene	2	U
Vinyl Chloride	1	U	o-Xylene	2	U
Bromomethane	2	U	Total Xylenes	3	U
Chloroethane	1	U	Benzene, Ethenyl-(Styrene)	2	U
Trichlorofluoromethane	1	U	Bromoform	1	U
Acetone	2	UJ	Isopropylbenzene (Cumene)	1	U
1,1-Dichloroethene	1	U	Ethane, 1,1,2,2-Tetrachloro-	1	U
Carbon Disulfide	1	U	1,2,3-Trichloropropane	1	U
Methylene Chloride	2	U	Bromobenzene	1	U
Trans-1,2-Dichloroethene	1	U	n-Propylbenzene	1	U
1,1-Dichloroethane	1	U	2-Chlorotoluene	1	U
2-Butanone	5	UJ	1,3,5-Trimethylbenzene	1	U
Cis-1,2-Dichloroethene	1	U	4-Chlorotoluene	1	U
2,2-Dichloropropane	1	U	Tert-Butylbenzene	1	U
Bromochloromethane	1	U	1,2,4-Trimethylbenzene	1	U
Chloroform	1	U	Sec-Butylbenzene	1	U
1,1,1-Trichloroethane	1	U	p-Isopropyltoluene	1	U
1,1-Dichloropropene	1	U	1,3-Dichlorobenzene	1	U
Carbon Tetrachloride	1	U	1,4-Dichlorobenzene	1	U
1,2-Dichloroethane	1	U	Butylbenzene	1	U
Benzene	1	U	1,2-Dichlorobenzene	1	U
Trichloroethene	**.43**	**J**	1,2-Dibromo-3-Chloropropane	5	U
1,2-Dichloropropane	1	U	1,2,4-Trichlorobenzene	5	U
Dibromomethane	1	U	Hexachlorobutadiene	2	UJ
Bromodichloromethane	1	U	Naphthalene	10	UJ
Cis-1,3-Dichloropropene	1.1	U	1,2,3-Trichlorobenzene	5	U
4-Methyl-2-Pentanone	1	U			
Toluene	1	U	**Surrogate Recoveries**		
Trans-1,3-Dichloropropene	.94	U			
1,1,2-Trichloroethane	1	U	**1,2-Dichloroethane-D4**	**100**	**%**
1,3-Dichloropropane	1	U	**Fluorobenzene**	**96**	**%**
2-Hexanone	1	UJ	**D8-Toluene**	**97**	**%**
Tetrachloroethene	1	U	**p-Bromofluorobenzene**	**78**	**%**
Dibromochloromethane	1	U	**D4-1,2-Dichlorobenzene**	**110**	**%**
1,2-Dibromoethane (EDB)	1	U			
Chlorobenzene	1	U			
Ethane, 1,1,1,2-Tetrachloro-	1	U			

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Analysis Report for

Volatile Organic Analysis

Project Name: Lakewood/Plaza Cleaners **LIMS Project ID:** 1995-95

Sample: 95288132 **Date Received:** 07/13/95 **Method:** SW8260
Field ID: MW-33 **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 07/18/95 **Units:** ug/L

Analyte	Result	Qualifier	Analyte	Result	Qualifier
Dichlorodifluoromethane	1	U	Ethylbenzene	1	U
Chloromethane	1	U	m & p-Xylene	2	U
Vinyl Chloride	1	U	o-Xylene	2	U
Bromomethane	2	U	Total Xylenes	3	U
Chloroethane	1	U	Benzene, Ethenyl-(Styrene)	2	U
Trichlorofluoromethane	1	U	Bromoform	1	U
Acetone	2	UJ	Isopropylbenzene (Cumene)	1	U
1,1-Dichloroethene	1	U	Ethane, 1,1,2,2-Tetrachloro-	1	U
Carbon Disulfide	1	U	1,2,3-Trichloropropane	1	U
Methylene Chloride	2	U	Bromobenzene	1	U
Trans-1,2-Dichloroethene	1	U	n-Propylbenzene	1	U
1,1-Dichloroethane	1	U	2-Chlorotoluene	1	U
2-Butanone	5	UJ	1,3,5-Trimethylbenzene	1	U
Cis-1,2-Dichloroethene	1	U	4-Chlorotoluene	1	U
2,2-Dichloropropane	1	U	Tert-Butylbenzene	1	U
Bromochloromethane	1	U	1,2,4-Trimethylbenzene	1	U
Chloroform	1	U	Sec-Butylbenzene	1	U
1,1,1-Trichloroethane	1	U	p-Isopropyltoluene	1	U
1,1-Dichloropropene	1	U	1,3-Dichlorobenzene	1	U
Carbon Tetrachloride	1	U	1,4-Dichlorobenzene	1	U
1,2-Dichloroethane	1	U	Butylbenzene	1	U
Benzene	1	U	1,2-Dichlorobenzene	1	U
Trichloroethene	1	U	1,2-Dibromo-3-Chloropropane	5	U
1,2-Dichloropropane	1	U	1,2,4-Trichlorobenzene	5	U
Dibromomethane	1	U	Hexachlorobutadiene	2	UJ
Bromodichloromethane	1	U	Naphthalene	10	UJ
Cis-1,3-Dichloropropene	1.1	U	1,2,3-Trichlorobenzene	5	U
4-Methyl-2-Pentanone	1	U			
Toluene	1	U	**Surrogate Recoveries**		
Trans-1,3-Dichloropropene	.94	U			
1,1,2-Trichloroethane	1	U	**1,2-Dichloroethane-D4**	**99**	**%**
1,3-Dichloropropane	1	U	**Fluorobenzene**	**97**	**%**
2-Hexanone	1	UJ	**D8-Toluene**	**96**	**%**
Tetrachloroethene	1	U	**p-Bromofluorobenzene**	**76**	**%**
Dibromochloromethane	1	U	**D4-1,2-Dichlorobenzene**	**110**	**%**
1,2-Dibromoethane (EDB)	1	U			
Chlorobenzene	1	U			
Ethane, 1,1,1,2-Tetrachloro-	1	U			

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Analysis Report for

Volatile Organic Analysis

Project Name: Lakewood/Plaza Cleaners **LIMS Project ID:** 1995-95

Sample: 95288133 **Date Received:** 07/13/95 **Method:** SW8260
Field ID: MW-41 **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 07/18/95 **Units:** ug/L

Analyte	Result	Qualifier	Analyte	Result	Qualifier
Dichlorodifluoromethane	1	U	Ethylbenzene	1	U
Chloromethane	1	U	m & p-Xylene	2	U
Vinyl Chloride	1	U	o-Xylene	2	U
Bromomethane	2	U	Total Xylenes	3	U
Chloroethane	1	U	Benzene, Ethenyl-(Styrene)	2	U
Trichlorofluoromethane	1	U	Bromoform	1	U
Acetone	2	UJ	Isopropylbenzene (Cumene)	1	U
1,1-Dichloroethene	1	U	Ethane, 1,1,2,2-Tetrachloro-	1	U
Carbon Disulfide	1	U	1,2,3-Trichloropropane	1	U
Methylene Chloride	2	U	Bromobenzene	1	U
Trans-1,2-Dichloroethene	1	U	n-Propylbenzene	1	U
1,1-Dichloroethane	1	U	2-Chlorotoluene	1	U
2-Butanone	5	UJ	1,3,5-Trimethylbenzene	1	U
Cis-1,2-Dichloroethene	1	U	4-Chlorotoluene	1	U
2,2-Dichloropropane	1	U	Tert-Butylbenzene	1	U
Bromochloromethane	1	U	1,2,4-Trimethylbenzene	1	U
Chloroform	1	U	Sec-Butylbenzene	1	U
1,1,1-Trichloroethane	1	U	p-Isopropyltoluene	1	U
1,1-Dichloropropene	1	U	1,3-Dichlorobenzene	1	U
Carbon Tetrachloride	1	U	1,4-Dichlorobenzene	1	U
1,2-Dichloroethane	1	U	Butylbenzene	1	U
Benzene	**.21**	**J**	1,2-Dichlorobenzene	1	U
Trichloroethene	1	U	1,2-Dibromo-3-Chloropropane	5	U
1,2-Dichloropropane	1	U	1,2,4-Trichlorobenzene	5	U
Dibromomethane	1	U	Hexachlorobutadiene	2	UJ
Bromodichloromethane	1	U	Naphthalene	10	UJ
Cis-1,3-Dichloropropene	1.1	U	1,2,3-Trichlorobenzene	5	U
4-Methyl-2-Pentanone	1	U			
Toluene	1	U	**Surrogate Recoveries**		
Trans-1,3-Dichloropropene	.94	U			
1,1,2-Trichloroethane	1	U	**1,2-Dichloroethane-D4**	**100**	%
1,3-Dichloropropane	1	U	**Fluorobenzene**	**96**	%
2-Hexanone	1	UJ	**D8-Toluene**	**94**	%
Tetrachloroethene	1	U	**p-Bromofluorobenzene**	**75**	%
Dibromochloromethane	1	U	**D4-1,2-Dichlorobenzene**	**110**	%
1,2-Dibromoethane (EDB)	1	U			
Chlorobenzene	1	U			
Ethane, 1,1,1,2-Tetrachloro-	1	U			

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Analysis Report for

Volatile Organic Analysis

Project Name: Lakewood/Plaza Cleaners **LIMS Project ID:** 1995-95

Sample: 95288134 **Date Received:** 07/13/95 **Method:** SW8260
Field ID: MW-27 **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 07/18/95 **Units:** ug/L

Analyte	Result	Qualifier	Analyte	Result	Qualifier
Dichlorodifluoromethane	1	U	Ethylbenzene	1	U
Chloromethane	1	U	m & p-Xylene	2	U
Vinyl Chloride	1	U	o-Xylene	2	U
Bromomethane	2	U	Total Xylenes	3	U
Chloroethane	1	U	Benzene, Ethenyl-(Styrene)	2	U
Trichlorofluoromethane	1	U	Bromoform	1	U
Acetone	2	UJ	Isopropylbenzene (Cumene)	1	U
1,1-Dichloroethene	1	U	Ethane, 1,1,2,2-Tetrachloro-	1	U
Carbon Disulfide	1	U	1,2,3-Trichloropropane	1	U
Methylene Chloride	2	U	Bromobenzene	1	U
Trans-1,2-Dichloroethene	1	U	n-Propylbenzene	1	U
1,1-Dichloroethane	1	U	2-Chlorotoluene	1	U
2-Butanone	5	UJ	1,3,5-Trimethylbenzene	1	U
Cis-1,2-Dichloroethene	1	U	4-Chlorotoluene	1	U
2,2-Dichloropropane	1	U	Tert-Butylbenzene	1	U
Bromochloromethane	1	U	1,2,4-Trimethylbenzene	1	U
Chloroform	1	U	Sec-Butylbenzene	1	U
1,1,1-Trichloroethane	1	U	p-Isopropyltoluene	1	U
1,1-Dichloropropene	1	U	1,3-Dichlorobenzene	1	U
Carbon Tetrachloride	1	U	1,4-Dichlorobenzene	1	U
1,2-Dichloroethane	1	U	Butylbenzene	1	U
Benzene	1	U	1,2-Dichlorobenzene	1	U
Trichloroethene	1	U	1,2-Dibromo-3-Chloropropane	5	U
1,2-Dichloropropane	1	U	1,2,4-Trichlorobenzene	5	U
Dibromomethane	1	U	Hexachlorobutadiene	2	UJ
Bromodichloromethane	1	U	Naphthalene	10	UJ
Cis-1,3-Dichloropropene	1.1	U	1,2,3-Trichlorobenzene	5	U
4-Methyl-2-Pentanone	1	U			
Toluene	1	U	**Surrogate Recoveries**		
Trans-1,3-Dichloropropene	.94	U			
1,1,2-Trichloroethane	1	U	**1,2-Dichloroethane-D4**	**100**	**%**
1,3-Dichloropropane	1	U	**Fluorobenzene**	**95**	**%**
2-Hexanone	1	UJ	**D8-Toluene**	**95**	**%**
Tetrachloroethene	1	U	**p-Bromofluorobenzene**	**78**	**%**
Dibromochloromethane	1	U	**D4-1,2-Dichlorobenzene**	**110**	**%**
1,2-Dibromoethane (EDB)	1	U			
Chlorobenzene	1	U			
Ethane, 1,1,1,2-Tetrachloro-	1	U			

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Analysis Report for

Volatile Organic Analysis

Project Name: Lakewood/Plaza Cleaners **LIMS Project ID:** 1995-95

Sample: 95288135 **Date Received:** 07/13/95 **Method:** SW8260
Field ID: MW-20A **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 07/18/95 **Units:** ug/L

Analyte	Result	Qualifier	Analyte	Result	Qualifier
Dichlorodifluoromethane	1	U	Ethylbenzene	1	U
Chloromethane	1	U	m & p-Xylene	2	U
Vinyl Chloride	1	U	o-Xylene	2	U
Bromomethane	2	U	Total Xylenes	3	U
Chloroethane	1	U	Benzene, Ethenyl-(Styrene)	2	U
Trichlorofluoromethane	1	U	Bromoform	1	U
Acetone	2	UJ	Isopropylbenzene (Cumene)	1	U
1,1-Dichloroethene	1	U	Ethane, 1,1,2,2-Tetrachloro-	1	U
Carbon Disulfide	1	U	1,2,3-Trichloropropane	1	U
Methylene Chloride	2	U	Bromobenzene	1	U
Trans-1,2-Dichloroethene	1	U	n-Propylbenzene	1	U
1,1-Dichloroethane	1	U	2-Chlorotoluene	1	U
2-Butanone	5	UJ	1,3,5-Trimethylbenzene	1	U
Cis-1,2-Dichloroethene	1	U	4-Chlorotoluene	1	U
2,2-Dichloropropane	1	U	Tert-Butylbenzene	1	U
Bromochloromethane	1	U	1,2,4-Trimethylbenzene	1	U
Chloroform	1	U	Sec-Butylbenzene	1	U
1,1,1-Trichloroethane	1	U	p-Isopropyltoluene	1	U
1,1-Dichloropropene	1	U	1,3-Dichlorobenzene	1	U
Carbon Tetrachloride	1	U	1,4-Dichlorobenzene	1	U
1,2-Dichloroethane	1	U	Butylbenzene	1	U
Benzene	1	U	1,2-Dichlorobenzene	1	U
Trichloroethene	1	U	1,2-Dibromo-3-Chloropropane	5	U
1,2-Dichloropropane	1	U	1,2,4-Trichlorobenzene	5	U
Dibromomethane	1	U	Hexachlorobutadiene	2	UJ
Bromodichloromethane	1	U	Naphthalene	10	UJ
Cis-1,3-Dichloropropene	1.1	U	1,2,3-Trichlorobenzene	5	U
4-Methyl-2-Pentanone	1	U			
Toluene	1	U	**Surrogate Recoveries**		
Trans-1,3-Dichloropropene	.94	U			
1,1,2-Trichloroethane	1	U	**1,2-Dichloroethane-D4**	**100**	%
1,3-Dichloropropane	1	U	**Fluorobenzene**	**95**	%
2-Hexanone	1	UJ	**D8-Toluene**	**96**	%
Tetrachloroethene	**.44**	**J**	**p-Bromofluorobenzene**	**75**	%
Dibromochloromethane	1	U	**D4-1,2-Dichlorobenzene**	**100**	%
1,2-Dibromoethane (EDB)	1	U			
Chlorobenzene	1	U			
Ethane, 1,1,1,2-Tetrachloro-	1	U			

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Analysis Report for

Volatile Organic Analysis

Project Name: Lakewood/Plaza Cleaners **LIMS Project ID:** 1995-95

Sample: 95288136 **Date Received:** 07/13/95 **Method:** SW8260
Field ID: MW-28A **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 07/18/95 **Units:** ug/L

Analyte	Result	Qualifier	Analyte	Result	Qualifier
Dichlorodifluoromethane	1	U	Ethylbenzene	1	U
Chloromethane	1	U	m & p-Xylene	2	U
Vinyl Chloride	1	U	o-Xylene	2	U
Bromomethane	2	U	Total Xylenes	3	U
Chloroethane	1	U	Benzene, Ethenyl-(Styrene)	2	U
Trichlorofluoromethane	1	U	Bromoform	1	U
Acetone	2	UJ	Isopropylbenzene (Cumene)	1	U
1,1-Dichloroethene	1	U	Ethane, 1,1,2,2-Tetrachloro-	1	U
Carbon Disulfide	1	U	1,2,3-Trichloropropane	1	U
Methylene Chloride	2	U	Bromobenzene	1	U
Trans-1,2-Dichloroethene	1	U	n-Propylbenzene	1	U
1,1-Dichloroethane	1	U	2-Chlorotoluene	1	U
2-Butanone	5	UJ	1,3,5-Trimethylbenzene	1	U
Cis-1,2-Dichloroethene	1	U	4-Chlorotoluene	1	U
2,2-Dichloropropane	1	U	Tert-Butylbenzene	1	U
Bromochloromethane	1	U	1,2,4-Trimethylbenzene	1	U
Chloroform	1	U	Sec-Butylbenzene	1	U
1,1,1-Trichloroethane	1	U	p-Isopropyltoluene	1	U
1,1-Dichloropropene	1	U	1,3-Dichlorobenzene	1	U
Carbon Tetrachloride	1	U	1,4-Dichlorobenzene	1	U
1,2-Dichloroethane	1	U	Butylbenzene	1	U
Benzene	1	U	1,2-Dichlorobenzene	1	U
Trichloroethene	1	U	1,2-Dibromo-3-Chloropropane	5	U
1,2-Dichloropropane	1	U	1,2,4-Trichlorobenzene	5	U
Dibromomethane	1	U	Hexachlorobutadiene	2	UJ
Bromodichloromethane	1	U	Naphthalene	10	UJ
Cis-1,3-Dichloropropene	1.1	U	1,2,3-Trichlorobenzene	5	U
4-Methyl-2-Pentanone	1	U			
Toluene	1	U	**Surrogate Recoveries**		
Trans-1,3-Dichloropropene	.94	U			
1,1,2-Trichloroethane	1	U	**1,2-Dichloroethane-D4**	**100**	%
1,3-Dichloropropane	1	U	**Fluorobenzene**	**95**	%
2-Hexanone	1	UJ	**D8-Toluene**	**98**	%
Tetrachloroethene	1	U	**p-Bromofluorobenzene**	**78**	%
Dibromochloromethane	1	U	**D4-1,2-Dichlorobenzene**	**110**	%
1,2-Dibromoethane (EDB)	1	U			
Chlorobenzene	1	U			
Ethane, 1,1,1,2-Tetrachloro-	1	U			

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Analysis Report for

Volatile Organic Analysis

Project Name: Lakewood/Plaza Cleaners **LIMS Project ID:** 1995-95

Sample: 95288137 **Date Received:** 07/13/95 **Method:** SW8260
Field ID: MW-32 **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 07/18/95 **Units:** ug/L

Analyte	Result	Qualifier	Analyte	Result	Qualifier
Dichlorodifluoromethane	1	U	Ethylbenzene	1	U
Chloromethane	1	U	m & p-Xylene	2	U
Vinyl Chloride	1	U	o-Xylene	2	U
Bromomethane	2	U	Total Xylenes	3	U
Chloroethane	1	U	Benzene, Ethenyl-(Styrene)	2	U
Trichlorofluoromethane	1	U	Bromoform	1	U
Acetone	2	UJ	Isopropylbenzene (Cumene)	1	U
1,1-Dichloroethene	1	U	Ethane, 1,1,2,2-Tetrachloro-	1	U
Carbon Disulfide	1	U	1,2,3-Trichloropropane	1	U
Methylene Chloride	2	U	Bromobenzene	1	U
Trans-1,2-Dichloroethene	1	U	n-Propylbenzene	1	U
1,1-Dichloroethane	1	U	2-Chlorotoluene	1	U
2-Butanone	5	UJ	1,3,5-Trimethylbenzene	1	U
Cis-1,2-Dichloroethene	**.46**	**J**	4-Chlorotoluene	1	U
2,2-Dichloropropane	1	U	Tert-Butylbenzene	1	U
Bromochloromethane	1	U	1,2,4-Trimethylbenzene	1	U
Chloroform	1	U	Sec-Butylbenzene	1	U
1,1,1-Trichloroethane	1	U	p-Isopropyltoluene	1	U
1,1-Dichloropropene	1	U	1,3-Dichlorobenzene	1	U
Carbon Tetrachloride	1	U	1,4-Dichlorobenzene	1	U
1,2-Dichloroethane	1	U	Butylbenzene	1	U
Benzene	1	U	1,2-Dichlorobenzene	1	U
Trichloroethene	1	U	1,2-Dibromo-3-Chloropropane	5	U
1,2-Dichloropropane	1	U	1,2,4-Trichlorobenzene	5	U
Dibromomethane	1	U	Hexachlorobutadiene	2	UJ
Bromodichloromethane	1	U	Naphthalene	10	UJ
Cis-1,3-Dichloropropene	1.1	U	1,2,3-Trichlorobenzene	5	U
4-Methyl-2-Pentanone	1	U			
Toluene	1	U	**Surrogate Recoveries**		
Trans-1,3-Dichloropropene	.94	U			
1,1,2-Trichloroethane	1	U	**1,2-Dichloroethane-D4**	**99**	**%**
1,3-Dichloropropane	1	U	**Fluorobenzene**	**93**	**%**
2-Hexanone	1	UJ	**D8-Toluene**	**98**	**%**
Tetrachloroethene	**.71**	**J**	**p-Bromofluorobenzene**	**77**	**%**
Dibromochloromethane	1	U	**D4-1,2-Dichlorobenzene**	**110**	**%**
1,2-Dibromoethane (EDB)	1	U			
Chlorobenzene	1	U			
Ethane, 1,1,1,2-Tetrachloro-	1	U			

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Analysis Report for

Volatile Organic Analysis

Project Name: Lakewood/Plaza Cleaners **LIMS Project ID:** 1995-95

Sample: 95288138 **Date Received:** 07/13/95 **Method:** SW8260
Field ID: MW-31 **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 07/18/95 **Units:** ug/L

Analyte	Result	Qualifier	Analyte	Result	Qualifier
Dichlorodifluoromethane	1	U	Ethylbenzene	1	U
Chloromethane	1	U	m & p-Xylene	2	U
Vinyl Chloride	1	U	o-Xylene	2	U
Bromomethane	2	U	Total Xylenes	3	U
Chloroethane	1	U	Benzene, Ethenyl-(Styrene)	2	U
Trichlorofluoromethane	1	U	Bromoform	1	U
Acetone	2	UJ	Isopropylbenzene (Cumene)	1	U
1,1-Dichloroethene	1	U	Ethane, 1,1,2,2-Tetrachloro-	1	U
Carbon Disulfide	1	U	1,2,3-Trichloropropane	1	U
Methylene Chloride	2	U	Bromobenzene	1	U
Trans-1,2-Dichloroethene	1	U	n-Propylbenzene	1	U
1,1-Dichloroethane	1	U	2-Chlorotoluene	1	U
2-Butanone	5	UJ	1,3,5-Trimethylbenzene	1	U
Cis-1,2-Dichloroethene	**.53**	**J**	4-Chlorotoluene	1	U
2,2-Dichloropropane	1	U	Tert-Butylbenzene	1	U
Bromochloromethane	1	U	1,2,4-Trimethylbenzene	1	U
Chloroform	1	U	Sec-Butylbenzene	1	U
1,1,1-Trichloroethane	1	U	p-Isopropyltoluene	1	U
1,1-Dichloropropene	1	U	1,3-Dichlorobenzene	1	U
Carbon Tetrachloride	1	U	1,4-Dichlorobenzene	1	U
1,2-Dichloroethane	1	U	Butylbenzene	1	U
Benzene	1	U	1,2-Dichlorobenzene	1	U
Trichloroethene	1	U	1,2-Dibromo-3-Chloropropane	5	U
1,2-Dichloropropane	1	U	1,2,4-Trichlorobenzene	5	U
Dibromomethane	1	U	Hexachlorobutadiene	2	UJ
Bromodichloromethane	1	U	Naphthalene	10	UJ
Cis-1,3-Dichloropropene	1.1	U	1,2,3-Trichlorobenzene	5	U
4-Methyl-2-Pentanone	1	U			
Toluene	1	U	**Surrogate Recoveries**		
Trans-1,3-Dichloropropene	.94	U			
1,1,2-Trichloroethane	1	U	**1,2-Dichloroethane-D4**	**100**	**%**
1,3-Dichloropropane	1	U	**Fluorobenzene**	**95**	**%**
2-Hexanone	1	UJ	**D8-Toluene**	**97**	**%**
Tetrachloroethene	**.59**	**J**	**p-Bromofluorobenzene**	**74**	**%**
Dibromochloromethane	1	U	**D4-1,2-Dichlorobenzene**	**110**	**%**
1,2-Dibromoethane (EDB)	1	U			
Chlorobenzene	1	U			
Ethane, 1,1,1,2-Tetrachloro-	1	U			

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Analysis Report for

Volatile Organic Analysis

Project Name: Lakewood/Plaza Cleaners **LIMS Project ID:** 1995-95

Sample: 95288139 **Date Received:** 07/13/95 **Method:** SW8260
Field ID: MW-16A **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 07/18/95 **Units:** ug/L

Analyte	Result	Qualifier	Analyte	Result	Qualifier
Dichlorodifluoromethane	1	U	Ethylbenzene	1	U
Chloromethane	1	U	m & p-Xylene	2	U
Vinyl Chloride	1	U	o-Xylene	2	U
Bromomethane	2	U	Total Xylenes	3	U
Chloroethane	1	U	Benzene, Ethenyl-(Styrene)	2	U
Trichlorofluoromethane	1	U	Bromoform	1	U
Acetone	2	UJ	Isopropylbenzene (Cumene)	1	U
1,1-Dichloroethene	1	U	Ethane, 1,1,2,2-Tetrachloro-	1	U
Carbon Disulfide	1	U	1,2,3-Trichloropropane	1	U
Methylene Chloride	2	U	Bromobenzene	1	U
Trans-1,2-Dichloroethene	1	U	n-Propylbenzene	1	U
1,1-Dichloroethane	1	U	2-Chlorotoluene	1	U
2-Butanone	5	UJ	1,3,5-Trimethylbenzene	1	U
Cis-1,2-Dichloroethene	**.8**	**J**	4-Chlorotoluene	1	U
2,2-Dichloropropane	1	U	Tert-Butylbenzene	1	U
Bromochloromethane	1	U	1,2,4-Trimethylbenzene	1	U
Chloroform	1	U	Sec-Butylbenzene	1	U
1,1,1-Trichloroethane	1	U	p-Isopropyltoluene	1	U
1,1-Dichloropropene	1	U	1,3-Dichlorobenzene	1	U
Carbon Tetrachloride	1	U	1,4-Dichlorobenzene	1	U
1,2-Dichloroethane	1	U	Butylbenzene	1	U
Benzene	**.19**	**J**	1,2-Dichlorobenzene	1	U
Trichloroethene	**.45**	**J**	1,2-Dibromo-3-Chloropropane	5	U
1,2-Dichloropropane	1	U	1,2,4-Trichlorobenzene	5	U
Dibromomethane	1	U	Hexachlorobutadiene	2	UJ
Bromodichloromethane	1	U	Naphthalene	10	UJ
Cis-1,3-Dichloropropene	1.1	U	1,2,3-Trichlorobenzene	5	U
4-Methyl-2-Pentanone	1	U			
Toluene	1	U	**Surrogate Recoveries**		
Trans-1,3-Dichloropropene	.94	U			
1,1,2-Trichloroethane	1	U	**1,2-Dichloroethane-D4**	**100**	**%**
1,3-Dichloropropane	1	U	**Fluorobenzene**	**93**	**%**
2-Hexanone	1	UJ	**D8-Toluene**	**96**	**%**
Tetrachloroethene	**26**		**p-Bromofluorobenzene**	**74**	**%**
Dibromochloromethane	1	U	**D4-1,2-Dichlorobenzene**	**110**	**%**
1,2-Dibromoethane (EDB)	1	U			
Chlorobenzene	1	U			
Ethane, 1,1,1,2-Tetrachloro-	1	U			

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Analysis Report for

Volatile Organic Analysis

Project Name: Lakewood/Plaza Cleaners **LIMS Project ID:** 1995-95

Sample: 95288140 **Date Received:** 07/13/95 **Method:** SW8260
Field ID: MW-16B **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 07/18/95 **Units:** ug/L

Analyte	Result	Qualifier	Analyte	Result	Qualifier
Dichlorodifluoromethane	1	U	Ethylbenzene	1	U
Chloromethane	1	U	m & p-Xylene	2	U
Vinyl Chloride	1	U	o-Xylene	2	U
Bromomethane	2	U	Total Xylenes	3	U
Chloroethane	1	U	Benzene, Ethenyl-(Styrene)	2	U
Trichlorofluoromethane	1	U	Bromoform	1	U
Acetone	2	UJ	Isopropylbenzene (Cumene)	1	U
1,1-Dichloroethene	1	U	Ethane, 1,1,2,2-Tetrachloro-	1	U
Carbon Disulfide	1	U	1,2,3-Trichloropropane	1	U
Methylene Chloride	2	U	Bromobenzene	1	U
Trans-1,2-Dichloroethene	1	U	n-Propylbenzene	1	U
1,1-Dichloroethane	1	U	2-Chlorotoluene	1	U
2-Butanone	5	UJ	1,3,5-Trimethylbenzene	1	U
Cis-1,2-Dichloroethene	**.84**	**J**	4-Chlorotoluene	1	U
2,2-Dichloropropane	1	U	Tert-Butylbenzene	1	U
Bromochloromethane	1	U	1,2,4-Trimethylbenzene	1	U
Chloroform	1	U	Sec-Butylbenzene	1	U
1,1,1-Trichloroethane	1	U	p-Isopropyltoluene	1	U
1,1-Dichloropropene	1	U	1,3-Dichlorobenzene	1	U
Carbon Tetrachloride	1	U	1,4-Dichlorobenzene	1	U
1,2-Dichloroethane	1	U	Butylbenzene	1	U
Benzene	1	U	1,2-Dichlorobenzene	1	U
Trichloroethene	**.49**	**J**	1,2-Dibromo-3-Chloropropane	5	U
1,2-Dichloropropane	1	U	1,2,4-Trichlorobenzene	5	U
Dibromomethane	1	U	Hexachlorobutadiene	2	UJ
Bromodichloromethane	1	U	Naphthalene	10	UJ
Cis-1,3-Dichloropropene	1.1	U	1,2,3-Trichlorobenzene	5	U
4-Methyl-2-Pentanone	1	U			
Toluene	1	U	**Surrogate Recoveries**		
Trans-1,3-Dichloropropene	.94	U			
1,1,2-Trichloroethane	1	U	**1,2-Dichloroethane-D4**	**96**	%
1,3-Dichloropropane	1	U	**Fluorobenzene**	**93**	%
2-Hexanone	1	UJ	**D8-Toluene**	**97**	%
Tetrachloroethene	**27**		**p-Bromofluorobenzene**	**75**	%
Dibromochloromethane	1	U	**D4-1,2-Dichlorobenzene**	**110**	%
1,2-Dibromoethane (EDB)	1	U			
Chlorobenzene	1	U			
Ethane, 1,1,1,2-Tetrachloro-	1	U			

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Analysis Report for

Volatile Organic Analysis

Project Name: Lakewood/Plaza Cleaners **LIMS Project ID:** 1995-95

Sample: 95288141
Field ID: MW-20B
Project Officer: Pam Marti

Date Received: 07/13/95
Date Analyzed: 07/18/95

Method: SW8260
Matrix: Water
Units: ug/L

Analyte	Result	Qualifier	Analyte	Result	Qualifier
Dichlorodifluoromethane	1	U	Ethylbenzene	1	U
Chloromethane	1	U	m & p-Xylene	2	U
Vinyl Chloride	1	U	o-Xylene	2	U
Bromomethane	2	U	Total Xylenes	3	U
Chloroethane	1	U	Benzene, Ethenyl-(Styrene)	2	U
Trichlorofluoromethane	1	U	Bromoform	1	U
Acetone	2	UJ	Isopropylbenzene (Cumene)	1	U
1,1-Dichloroethene	1	U	Ethane, 1,1,2,2-Tetrachloro-	1	U
Carbon Disulfide	1	U	1,2,3-Trichloropropane	1	U
Methylene Chloride	2	U	Bromobenzene	1	U
Trans-1,2-Dichloroethene	1	U	n-Propylbenzene	1	U
1,1-Dichloroethane	1	U	2-Chlorotoluene	1	U
2-Butanone	5	UJ	1,3,5-Trimethylbenzene	1	U
Cis-1,2-Dichloroethene	**17**		4-Chlorotoluene	1	U
2,2-Dichloropropane	1	U	Tert-Butylbenzene	1	U
Bromochloromethane	1	U	1,2,4-Trimethylbenzene	1	U
Chloroform	1	U	Sec-Butylbenzene	1	U
1,1,1-Trichloroethane	1	U	p-Isopropyltoluene	1	U
1,1-Dichloropropene	1	U	1,3-Dichlorobenzene	1	U
Carbon Tetrachloride	1	U	1,4-Dichlorobenzene	1	U
1,2-Dichloroethane	1	U	Butylbenzene	1	U
Benzene	1	U	1,2-Dichlorobenzene	1	U
Trichloroethene	**8.4**		1,2-Dibromo-3-Chloropropane	5	U
1,2-Dichloropropane	1	U	1,2,4-Trichlorobenzene	5	U
Dibromomethane	1	U	Hexachlorobutadiene	2	UJ
Bromodichloromethane	1	U	Naphthalene	10	UJ
Cis-1,3-Dichloropropene	1.1	U	1,2,3-Trichlorobenzene	5	U
4-Methyl-2-Pentanone	1	U			
Toluene	1	U	**Surrogate Recoveries**		
Trans-1,3-Dichloropropene	.94	U			
1,1,2-Trichloroethane	1	U	**1,2-Dichloroethane-D4**	**99**	**%**
1,3-Dichloropropane	1	U	**Fluorobenzene**	**94**	**%**
2-Hexanone	1	UJ	**D8-Toluene**	**95**	**%**
Tetrachloroethene	**530**	**E**	**p-Bromofluorobenzene**	**75**	**%**
Dibromochloromethane	1	U	**D4-1,2-Dichlorobenzene**	**110**	**%**
1,2-Dibromoethane (EDB)	1	U			
Chlorobenzene	1	U			
Ethane, 1,1,1,2-Tetrachloro-	1	U			

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Analysis Report for

Volatile Organic Analysis

Project Name: Lakewood/Plaza Cleaners **LIMS Project ID:** 1995-95

Sample: 95288141 (Dilution - DIL1) **Date Received:** 07/13/95 **Method:** SW8260
Field ID: MW-20B **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 07/18/95 **Units:** ug/L

Analyte	Result	Qualifier	Analyte	Result	Qualifier
Dichlorodifluoromethane		NAF	Ethylbenzene		NAF
Chloromethane		NAF	m & p-Xylene		NAF
Vinyl Chloride		NAF	o-Xylene		NAF
Bromomethane		NAF	Total Xylenes		NAF
Chloroethane		NAF	Benzene, Ethenyl-(Styrene)		NAF
Trichlorofluoromethane		NAF	Bromoform		NAF
Acetone		NAF	Isopropylbenzene (Cumene)		NAF
1,1-Dichloroethene		NAF	Ethane, 1,1,2,2-Tetrachloro-		NAF
Carbon Disulfide		NAF	1,2,3-Trichloropropane		NAF
Methylene Chloride		NAF	Bromobenzene		NAF
Trans-1,2-Dichloroethene		NAF	n-Propylbenzene		NAF
1,1-Dichloroethane		NAF	2-Chlorotoluene		NAF
2-Butanone		NAF	1,3,5-Trimethylbenzene		NAF
Cis-1,2-Dichloroethene		NAF	4-Chlorotoluene		NAF
2,2-Dichloropropane		NAF	Tert-Butylbenzene		NAF
Bromochloromethane		NAF	1,2,4-Trimethylbenzene		NAF
Chloroform		NAF	Sec-Butylbenzene		NAF
1,1,1-Trichloroethane		NAF	p-Isopropyltoluene		NAF
1,1-Dichloropropene		NAF	1,3-Dichlorobenzene		NAF
Carbon Tetrachloride		NAF	1,4-Dichlorobenzene		NAF
1,2-Dichloroethane		NAF	Butylbenzene		NAF
Benzene		NAF	1,2-Dichlorobenzene		NAF
Trichloroethene		NAF	1,2-Dibromo-3-Chloropropane		NAF
1,2-Dichloropropane		NAF	1,2,4-Trichlorobenzene		NAF
Dibromomethane		NAF	Hexachlorobutadiene		NAF
Bromodichloromethane		NAF	Naphthalene		NAF
Cis-1,3-Dichloropropene		NAF	1,2,3-Trichlorobenzene		NAF
4-Methyl-2-Pentanone		NAF			
Toluene		NAF	**Surrogate Recoveries**		
Trans-1,3-Dichloropropene		NAF			
1,1,2-Trichloroethane		NAF	**1,2-Dichloroethane-D4**	**99**	%
1,3-Dichloropropane		NAF	**Fluorobenzene**	**100**	%
2-Hexanone		NAF	**D8-Toluene**	**100**	%
Tetrachloroethene	**340**		**p-Bromofluorobenzene**	**99**	%
Dibromochloromethane		NAF	**D4-1,2-Dichlorobenzene**	**100**	%
1,2-Dibromoethane (EDB)		NAF			
Chlorobenzene		NAF			
Ethane, 1,1,1,2-Tetrachloro-		NAF			

Authorized By: D. Hutton Release Date: 8/18/95 Page: 2

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Analysis Report for

Volatile Organic Analysis

Project Name: Lakewood/Plaza Cleaners **LIMS Project ID:** 1995-95

Sample: 95288142 **Date Received:** 07/13/95 **Method:** SW8260
Field ID: MW-20AR **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 07/18/95 **Units:** ug/L

Analyte	Result	Qualifier	Analyte	Result	Qualifier
Dichlorodifluoromethane	1	U	Ethylbenzene	1	U
Chloromethane	1	U	m & p-Xylene	2	U
Vinyl Chloride	1	U	o-Xylene	2	U
Bromomethane	2	U	Total Xylenes	3	U
Chloroethane	1	U	Benzene, Ethenyl-(Styrene)	2	U
Trichlorofluoromethane	1	U	Bromoform	1	U
Acetone	2	UJ	Isopropylbenzene (Cumene)	1	U
1,1-Dichloroethene	1	U	Ethane, 1,1,2,2-Tetrachloro-	1	U
Carbon Disulfide	1	U	1,2,3-Trichloropropane	1	U
Methylene Chloride	2	U	Bromobenzene	1	U
Trans-1,2-Dichloroethene	1	U	n-Propylbenzene	1	U
1,1-Dichloroethane	1	U	2-Chlorotoluene	1	U
2-Butanone	5	UJ	1,3,5-Trimethylbenzene	1	U
Cis-1,2-Dichloroethene	1	U	4-Chlorotoluene	1	U
2,2-Dichloropropane	1	U	Tert-Butylbenzene	1	U
Bromochloromethane	1	U	1,2,4-Trimethylbenzene	1	U
Chloroform	1	U	Sec-Butylbenzene	1	U
1,1,1-Trichloroethane	1	U	p-Isopropyltoluene	1	U
1,1-Dichloropropene	1	U	1,3-Dichlorobenzene	1	U
Carbon Tetrachloride	1	U	1,4-Dichlorobenzene	1	U
1,2-Dichloroethane	1	U	Butylbenzene	1	U
Benzene	1	U	1,2-Dichlorobenzene	1	U
Trichloroethene	1	U	1,2-Dibromo-3-Chloropropane	5	U
1,2-Dichloropropane	1	U	1,2,4-Trichlorobenzene	5	U
Dibromomethane	1	U	Hexachlorobutadiene	2	UJ
Bromodichloromethane	1	U	Naphthalene	10	UJ
Cis-1,3-Dichloropropene	1.1	U	1,2,3-Trichlorobenzene	5	U
4-Methyl-2-Pentanone	1	U			
Toluene	1	U	**Surrogate Recoveries**		
Trans-1,3-Dichloropropene	.94	U			
1,1,2-Trichloroethane	1	U	**1,2-Dichloroethane-D4**	**97**	%
1,3-Dichloropropane	1	U	**Fluorobenzene**	**94**	%
2-Hexanone	1	UJ	**D8-Toluene**	**96**	%
Tetrachloroethene	**.81**	**J**	**p-Bromofluorobenzene**	**74**	%
Dibromochloromethane	1	U	**D4-1,2-Dichlorobenzene**	**110**	%
1,2-Dibromoethane (EDB)	1	U			
Chlorobenzene	1	U			
Ethane, 1,1,1,2-Tetrachloro-	1	U			

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Analysis Report for

Volatile Organic Analysis

Project Name: Lakewood/Plaza Cleaners **LIMS Project ID:** 1995-95

Sample: 95288143 **Date Received:** 07/13/95 **Method:** SW8260
Field ID: H1 **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 07/18/95 **Units:** ug/L

Analyte	Result	Qualifier	Analyte	Result	Qualifier
Dichlorodifluoromethane	1	U	Ethylbenzene	1	U
Chloromethane	1	U	m & p-Xylene	2	U
Vinyl Chloride	1	U	o-Xylene	2	U
Bromomethane	2	U	Total Xylenes	3	U
Chloroethane	1	U	Benzene, Ethenyl-(Styrene)	2	U
Trichlorofluoromethane	1	U	Bromoform	1	U
Acetone	2	UJ	Isopropylbenzene (Cumene)	1	U
1,1-Dichloroethene	1	U	Ethane, 1,1,2,2-Tetrachloro-	1	U
Carbon Disulfide	1	U	1,2,3-Trichloropropane	1	U
Methylene Chloride	2	U	Bromobenzene	1	U
Trans-1,2-Dichloroethene	1	U	n-Propylbenzene	1	U
1,1-Dichloroethane	1	U	2-Chlorotoluene	1	U
2-Butanone	5	UJ	1,3,5-Trimethylbenzene	1	U
Cis-1,2-Dichloroethene	1	U	4-Chlorotoluene	1	U
2,2-Dichloropropane	1	U	Tert-Butylbenzene	1	U
Bromochloromethane	1	U	1,2,4-Trimethylbenzene	1	U
Chloroform	1	U	Sec-Butylbenzene	1	U
1,1,1-Trichloroethane	1	U	p-Isopropyltoluene	1	U
1,1-Dichloropropene	1	U	1,3-Dichlorobenzene	1	U
Carbon Tetrachloride	1	U	1,4-Dichlorobenzene	1	U
1,2-Dichloroethane	1	U	Butylbenzene	1	U
Benzene	1	U	1,2-Dichlorobenzene	1	U
Trichloroethene	**.28**	**J**	1,2-Dibromo-3-Chloropropane	5	U
1,2-Dichloropropane	1	U	1,2,4-Trichlorobenzene	5	U
Dibromomethane	1	U	Hexachlorobutadiene	2	UJ
Bromodichloromethane	1	U	Naphthalene	10	UJ
Cis-1,3-Dichloropropene	1.1	U	1,2,3-Trichlorobenzene	5	U
4-Methyl-2-Pentanone	1	U			
Toluene	1	U	**Surrogate Recoveries**		
Trans-1,3-Dichloropropene	.94	U			
1,1,2-Trichloroethane	1	U	**1,2-Dichloroethane-D4**	**100**	%
1,3-Dichloropropane	1	U	**Fluorobenzene**	**94**	%
2-Hexanone	1	UJ	**D8-Toluene**	**98**	%
Tetrachloroethene	**9**		**p-Bromofluorobenzene**	**74**	%
Dibromochloromethane	1	U	**D4-1,2-Dichlorobenzene**	**110**	%
1,2-Dibromoethane (EDB)	1	U			
Chlorobenzene	1	U			
Ethane, 1,1,1,2-Tetrachloro-	1	U			

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Analysis Report for

Volatile Organic Analysis

Project Name: Lakewood/Plaza Cleaners **LIMS Project ID:** 1995-95

Sample: 95288144 **Date Received:** 07/13/95 **Method:** SW8260
Field ID: TRANSFER **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 07/18/95 **Units:** ug/L

Analyte	Result	Qualifier	Analyte	Result	Qualifier
Dichlorodifluoromethane	1	U	Ethylbenzene	1	U
Chloromethane	1	U	m & p-Xylene	2	U
Vinyl Chloride	1	U	o-Xylene	2	U
Bromomethane	2	U	Total Xylenes	3	U
Chloroethane	1	U	Benzene, Ethenyl-(Styrene)	2	U
Trichlorofluoromethane	1	U	Bromoform	1	U
Acetone	2	UJ	Isopropylbenzene (Cumene)	1	U
1,1-Dichloroethene	1	U	Ethane, 1,1,2,2-Tetrachloro-	1	U
Carbon Disulfide	1	U	1,2,3-Trichloropropane	1	U
Methylene Chloride	2	U	Bromobenzene	1	U
Trans-1,2-Dichloroethene	1	U	n-Propylbenzene	1	U
1,1-Dichloroethane	1	U	2-Chlorotoluene	1	U
2-Butanone	5	UJ	1,3,5-Trimethylbenzene	1	U
Cis-1,2-Dichloroethene	1	U	4-Chlorotoluene	1	U
2,2-Dichloropropane	1	U	Tert-Butylbenzene	1	U
Bromochloromethane	1	U	1,2,4-Trimethylbenzene	1	U
Chloroform	1	U	Sec-Butylbenzene	1	U
1,1,1-Trichloroethane	1	U	p-Isopropyltoluene	1	U
1,1-Dichloropropene	1	U	1,3-Dichlorobenzene	1	U
Carbon Tetrachloride	1	U	1,4-Dichlorobenzene	1	U
1,2-Dichloroethane	1	U	Butylbenzene	1	U
Benzene	1	U	1,2-Dichlorobenzene	1	U
Trichloroethene	1	U	1,2-Dibromo-3-Chloropropane	5	U
1,2-Dichloropropane	1	U	1,2,4-Trichlorobenzene	5	U
Dibromomethane	1	U	Hexachlorobutadiene	2	UJ
Bromodichloromethane	1	U	Naphthalene	10	UJ
Cis-1,3-Dichloropropene	1.1	U	1,2,3-Trichlorobenzene	5	U
4-Methyl-2-Pentanone	1	U			
Toluene	1.0	UJ	**Surrogate Recoveries**		
Trans-1,3-Dichloropropene	.94	U			
1,1,2-Trichloroethane	1	U	**1,2-Dichloroethane-D4**	**100**	%
1,3-Dichloropropane	1	U	**Fluorobenzene**	**98**	%
2-Hexanone	1	UJ	**D8-Toluene**	**95**	%
Tetrachloroethene	1	U	**p-Bromofluorobenzene**	**76**	%
Dibromochloromethane	1	U	**D4-1,2-Dichlorobenzene**	**100**	%
1,2-Dibromoethane (EDB)	1	U			
Chlorobenzene	1	U			
Ethane, 1,1,1,2-Tetrachloro-	1	U			

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Manchester Environmental Laboratory

Department of Ecology

Analysis Report for

Volatile Organic Analysis

Project Name: Lakewood/Plaza Cleaners **LIMS Project ID:** 1995-95

Sample: **BLN52819**
Blank ID: DBW5199
Project Officer: Pam Marti **Date Analyzed:** 07/18/95

Method: SW8260
Matrix: Water
Units: ug/L

Analyte	Result	Qualifier	Analyte	Result	Qualifier
Dichlorodifluoromethane	1	U	Ethylbenzene	1	U
Chloromethane	1	U	m & p-Xylene	2	U
Vinyl Chloride	1	U	o-Xylene	2	U
Bromomethane	2	U	Total Xylenes	3	U
Chloroethane	1	U	Benzene, Ethenyl-(Styrene)	2	U
Trichlorofluoromethane	1	U	Bromoform	1	U
Acetone	2	UJ	Isopropylbenzene (Cumene)	1	U
1,1-Dichloroethene	1	U	Ethane, 1,1,2,2-Tetrachloro-	1	U
Carbon Disulfide	1	U	1,2,3-Trichloropropane	1	U
Methylene Chloride	**.38**	**J**	Bromobenzene	1	U
Trans-1,2-Dichloroethene	1	U	n-Propylbenzene	1	U
1,1-Dichloroethane	1	U	2-Chlorotoluene	1	U
2-Butanone	5	UJ	1,3,5-Trimethylbenzene	1	U
Cis-1,2-Dichloroethene	1	U	4-Chlorotoluene	1	U
2,2-Dichloropropane	1	U	Tert-Butylbenzene	1	U
Bromochloromethane	1	U	1,2,4-Trimethylbenzene	1	U
Chloroform	1	U	Sec-Butylbenzene	1	U
1,1,1-Trichloroethane	1	U	p-Isopropyltoluene	1	U
1,1-Dichloropropene	1	U	1,3-Dichlorobenzene	1	U
Carbon Tetrachloride	1	U	1,4-Dichlorobenzene	1	U
1,2-Dichloroethane	1	U	Butylbenzene	1	U
Benzene	1	U	1,2-Dichlorobenzene	1	U
Trichloroethene	1	U	1,2-Dibromo-3-Chloropropane	5	U
1,2-Dichloropropane	1	U	1,2,4-Trichlorobenzene	5	U
Dibromomethane	1	U	Hexachlorobutadiene	2	UJ
Bromodichloromethane	1	U	Naphthalene	10	UJ
Cis-1,3-Dichloropropene	1.1	U	1,2,3-Trichlorobenzene	5	U
4-Methyl-2-Pentanone	1	U			
Toluene	**.09**	**J**	**Surrogate Recoveries**		
Trans-1,3-Dichloropropene	.94	U			
1,1,2-Trichloroethane	1	U	**1,2-Dichloroethane-D4**	**100**	%
1,3-Dichloropropane	1	U	**Fluorobenzene**	**99**	%
2-Hexanone	1	U	**D8-Toluene**	**95**	%
Tetrachloroethene	1	U	**p-Bromofluorobenzene**	**75**	%
Dibromochloromethane	1	U	**D4-1,2-Dichlorobenzene**	**100**	%
1,2-Dibromoethane (EDB)	1	U			
Chlorobenzene	1	U			
Ethane, 1,1,1,2-Tetrachloro-	1	U			

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Manchester Environmental Laboratory

Department of Ecology

Analysis Report for

Volatile Organic Analysis

Project Name: Lakewood/Plaza Cleaners **LIMS Project ID:** 1995-95

Sample: BLN52820 **Method:** SW8260
Blank ID: KBW5212 **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 07/31/95 **Units:** ug/L

Analyte	Result	Qualifier	Analyte	Result	Qualifier
Dichlorodifluoromethane	1	U	Ethylbenzene	1	U
Chloromethane	1	U	m & p-Xylene	2	U
Vinyl Chloride	1	U	o-Xylene	1	U
Bromomethane	1	U	Total Xylenes	3	U
Chloroethane	1	U	Benzene, Ethenyl-(Styrene)	1	U
Trichlorofluoromethane	1	UJ	Bromoform	1	U
Acetone	**2.2**	**J**	Isopropylbenzene (Cumene)	1	U
1,1-Dichloroethene	1	UJ	Ethane, 1,1,2,2-Tetrachloro-	1	U
Carbon Disulfide	1	UJ	1,2,3-Trichloropropane	1	U
Methylene Chloride	**.18**	**J**	Bromobenzene	1	U
Trans-1,2-Dichloroethene	1	U	n-Propylbenzene	1	U
1,1-Dichloroethane	1	UJ	2-Chlorotoluene	1	U
2-Butanone	**.69**	**J**	1,3,5-Trimethylbenzene	1	U
Cis-1,2-Dichloroethene	1	U	4-Chlorotoluene	1	U
2,2-Dichloropropane	1	U	Tert-Butylbenzene	1	U
Bromochloromethane	1	U	1,2,4-Trimethylbenzene	1	U
Chloroform	1	U	Sec-Butylbenzene	1	U
1,1,1-Trichloroethane	1	U	p-Isopropyltoluene	1	U
1,1-Dichloropropene	1	U	1,3-Dichlorobenzene	1	U
Carbon Tetrachloride	1	U	1,4-Dichlorobenzene	1	U
1,2-Dichloroethane	1	U	Butylbenzene	1	U
Benzene	**.035**	**J**	1,2-Dichlorobenzene	1	U
Trichloroethene	1	U	1,2-Dibromo-3-Chloropropane	1	U
1,2-Dichloropropane	1	U	1,2,4-Trichlorobenzene	1	U
Dibromomethane	1	U	Hexachlorobutadiene	1	U
Bromodichloromethane	1	U	Naphthalene	1	U
Cis-1,3-Dichloropropene	1.1	U	1,2,3-Trichlorobenzene	1	U
4-Methyl-2-Pentanone	1	U			
Toluene	1	U	**Surrogate Recoveries**		
Trans-1,3-Dichloropropene	.94	U			
1,1,2-Trichloroethane	1	U	**1,2-Dichloroethane-D4**	**100**	%
1,3-Dichloropropane	1	U	**Fluorobenzene**	**100**	%
2-Hexanone	1	U	**D8-Toluene**	**100**	%
Tetrachloroethene	1	U	**p-Bromofluorobenzene**	**98**	%
Dibromochloromethane	1	U	**D4-1,2-Dichlorobenzene**	**100**	%
1,2-Dibromoethane (EDB)	1	U			
Chlorobenzene	1	U			
Ethane, 1,1,1,2-Tetrachloro-	1	U			

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