

Lakewood/Plaza Cleaners January 17-18, 1996

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 January 17-18, 1996 from one municipal well (H1) and eight monitoring wells: MW-16A, MW-20A, MW-20B, MW-27, MW-28A, MW-31, MW-32, 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 8.3 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 (395 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.

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 353 ppb, 7.2 ppb, and 15 ppb, respectively. PERC and TCE were also detected in MW-16A and municipal well H1. PERC concentrations were 47 ppb and 8.4 ppb, respectively. TCE was detected below the practical quantitation limit of 1 ppb. PERC and/or cis-1,2-DCE were detected in wells H1, MW-16A, MW-20A, MW-31, and MW-32 at concentrations near the quantitation limit of 1 ppb. Trans-1,2-dichloroethene was detected in MW-20B below the quantitation limit.

Table 3 shows PERC, TCE, and cis-1,2-DCE concentrations for January 1991 through January 1996. 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 1996. 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 January 17-18, 1996 from one municipal well H1 and eight monitoring wells: MW-16A, MW-20A, MW-20B, MW-27, MW-28A, MW-31, MW-32, 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. 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 blind duplicate and a replicate sample. 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. Greg Perez of the Manchester Laboratory conducted the quality assurance review. PERC values for samples from well MW-16A are qualified as estimates because they slightly exceeded the upper calibration limit.

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 tetrachloroethene, trichloroethene and cis-1,2-dichloroethene were 2%, 6%, and 0%, respectively. Matrix spike and spike duplicate target compounds not within acceptable QC limits were rejected since they were not considered to be of primary interest for this project. All other matrix spike and spike duplicate recoveries are within the QC limits of "25% for water sample analysis.

Bibliography

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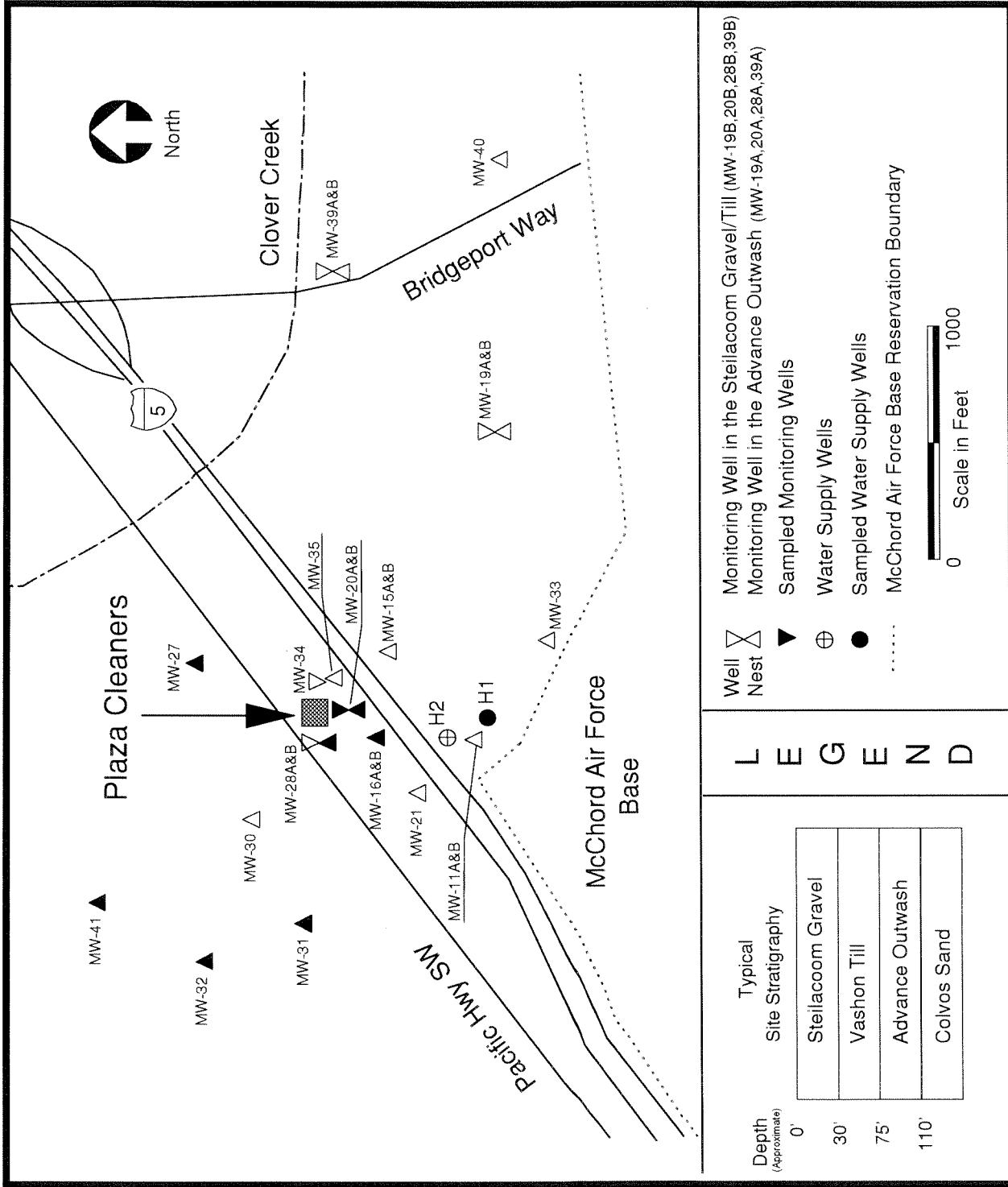


Figure 1: Well Location Map - Lakewood/Plaza Cleaners

Table 1: Field Parameter Results for January 17-18, 1996

Monitoring Well	Total Depth (Feet)	Geologic Unit Screened	Depth to Water (Feet)	pH (s.u.)	Specific Conductance (umhos/cm)	Temperature (°C)	Purge Volume (gallons)
MW-41	96.8	Advance Outwash	25.87	6.9	144	10.9	35
MW-27	96.4	Advance Outwash	++	6.7	146	11.8	30
MW-20A	97.3	Advance Outwash	27.89	8.3	165	11.6	35
MW-28A	98	Advance Outwash	27.89	7.0	178	12.1	25
MW-32	114.4	Advance Outwash	57.20	7.2	145	10.4	27
MW-31	91.5	Advance Outwash	++	7.0	135	11.0	30
MW-16A	109	Advance Outwash	36.03	7.4	161	12.0	143
MW-20B	50.4	Vashon Till	27.90	6.8	395	12.2	10
H1		Advance Outwash	++	7.1	130	11.3	>1000

++ = Dedicated pump obstructs water-level measurement.

Table 2: Summary of Analytes Detected in Samples Collected January 17-18, 1996

Geologic Unit Screened	Vashon Till	Advance Outwash															
		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 MW-40 MW-33		Municipal Well H1			
<u>Volatle Organics: (ug/L)</u>																	
Tetrachloroethene (PERC)	353	47 E	46 E	0.24 J	0.17 J	1 U	1 U	0.56 J	0.78 J	1 U	--	--	--	--	--	8.4	
Trichloroethene (TCE)	7.2	0.79 J	0.74 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	--	--	--	--	0.24 J	
cis-1,2-Dichloroethene (cis-1,2-DCE)	15	1.5	1.5	1 U	1 U	1 U	1 U	0.66 J	0.58 J	1 U	--	--	--	--	--	0.18 J	
Trans-1,2-Dichloroethene	0.33 J	1 U	1 U	1 U	1 U	1 U	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.

E = The concentration of the associated value exceeds the known calibration range.

-- = Not Tested

Table 3: Summary of Sample Results (ug/L) from January 1991 to January 1996

Well Number	January 1991			May 1991			November 1991			May 1992			December 1992			May 1993		
	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	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	44	10 U	2 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 U	1 U	10 U	10 U	10 U
MW-20B	1100 D	18	33	752	16	30	120	2.6 J	6.7	940	13	32	340 J	14 J	20 J	700 D	12	21
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	1 J	10 U	10 U
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 U	1 U	10 U	10 U	10 U
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 U	0.9 J	10 U	10 U	10 U
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 U	0.5 J	10 U	10 U	10 U
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 U	1 U	10 U	10 U	10 U
MW-19A	--	---	---	--	---	---	1 U	0.5 J	1 U	--	---	---	1 U	1 U	1 U	--	--	--
MW-40	1 U	1 U	1 U	--	--	--	1 U	1 U	1 U	--	--	--	1 U	1 U	1 U	--	--	--

Well Number	December 1993			April 1994			November 1994			July 1995			January 1996		
	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	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	47 E	0.8 J	1.5
MW-20A	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	0.2 J	1 U	1 U
MW-20B	187	50 U	8.2 J	472	8.6 J	12.6	86	50 U	3 J	340 D	8.4	17	353	7.2	15
MW-21	1.6	1 U	0.4 J	1.5	0.2 J	0.3	1.8	0.2 J	0.3 J	--	---	---	--	---	---
MW-27	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	1 U	1 U	1 U
MW-28A	--	---	---	--	---	---	--	---	---	1 U	1 U	1 U	1 U	1 U	1 U
MW-31	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	0.6 J	1 U	0.7 J
MW-32	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	0.8 J	1 U	0.6 J
MW-41	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	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-33	--	---	---	--	---	---	--	---	---	1 U	1 U	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	--	---	---
Well H1	--	---	---	--	---	---	--	---	---	9	0.3 J	1 U	8.4	0.2 J	0.2 J

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.

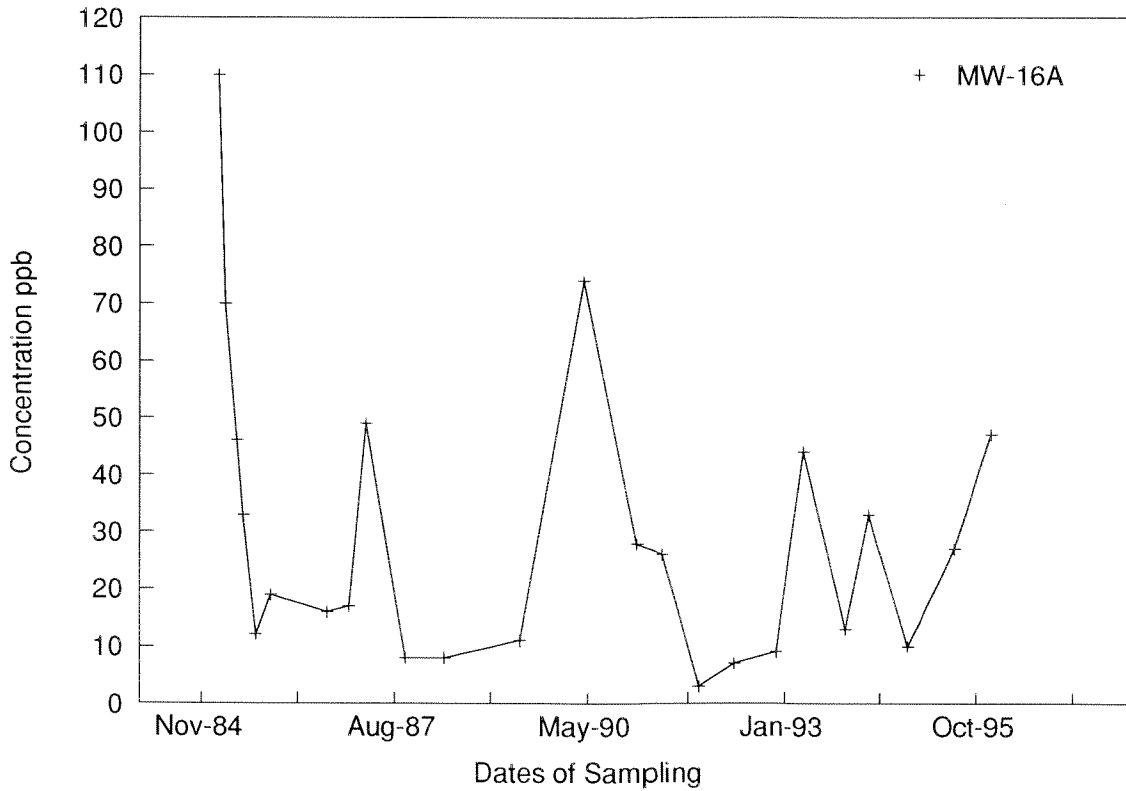
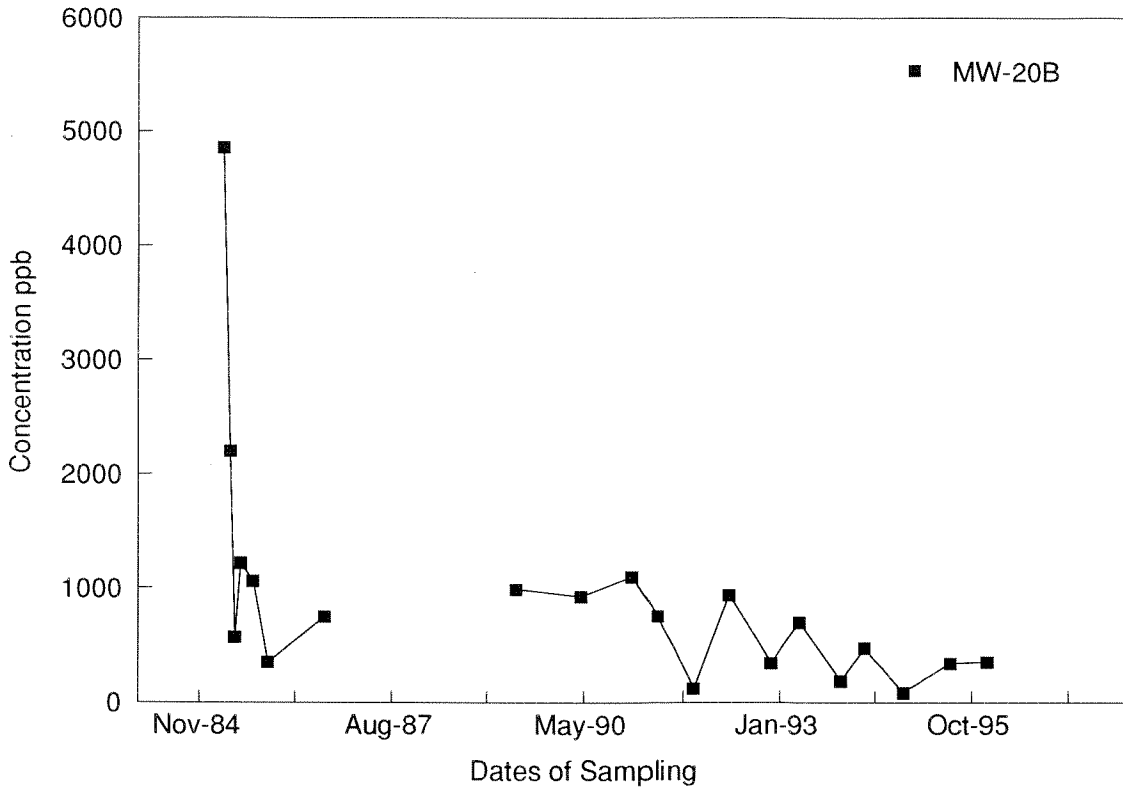
D = Analysis performed at secondary dilution.

E = The concentration of the associated value exceeds the known calibration range.

--- = Not Tested

Figure 2

PERC Concentrations for Wells MW-20B and MW-16A from 1984 to 1996



APPENDIX A

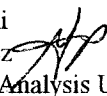
Analytical Results
Lakewood/Plaza Cleaners
January 17-18, 1996

Manchester Environmental Laboratory

7411 Beach Dr E, Port Orchard Washington 98366

CASE NARRATIVE

February 13, 1996

Subject: Lakewood Plaza Cleaners
Samples: 96038080 - 090
Case No. 103496
Officer: Pam Marti
By: Greg Perez 
Organics Analysis Unit

VOLATILE ORGANIC ANALYSIS

SUMMARY:

The values for tetrachloroethylene in samples 038089 and 090 were qualified as estimates because they exceeded the upper limit of the initial calibration. Normally the initial calibration extends to 80 ug/L. In this case, because of an error in the making of that standard this initial calibration only extended to 40 ug/l. These two samples were just above that level.

There is enough historical data to demonstrate linearity at the concentrations found in these samples and provide confidence in the results. Technical guidelines required qualification.

The value for tetrachloroethylene for sample 038087 should be taken from the dilution.

ANALYTICAL METHODS:

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

BLANKS:

Low levels of certain target compounds were detected in the laboratory blanks. If the concentrations of the compounds in the sample are greater than or equal to five times the concentrations of the compounds in the associated method blank, they are considered native to the sample.

SURROGATES:

Surrogate recoveries were within acceptable limits for the water samples..

HOLDING TIMES:

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

MATRIX SPIKE AND MATRIX SPIKE DUPLICATE:

Any target compounds not within acceptable QC limits for both percent recovery and relative percent differences (RPD) have been rejected on the sample associated with the matrix spikes. The compounds affected were not considered to be of primary interest in this project.

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.
- 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: 1034-96

Sample: 96038080

Date Received: 01/19/96

Method: SW8260

Field ID: MW-27

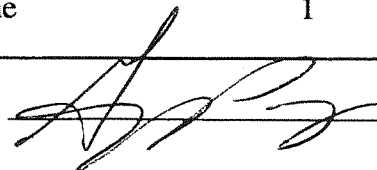
Date Analyzed: 01/24/96

Matrix: Water

Project Officer: Pam Marti

Units: ug/L

Analyte	Result	Qualifier	Analyte	Result	Qualifier
Dichlorodifluoromethane	5	U	Chloroacetonitrile	1	U
Chloromethane	1	U	Cis-1,3-Dichloropropene	2	U
Vinyl Chloride	2	U	4-Methyl-2-Pentanone	1	U
Bromomethane	1	U	1,1-Dichloropropanone	1	U
Chloroethane	1	U	Toluene	1	U
Trichlorofluoromethane	1	U	Trans-1,3-Dichloropropene	1	U
Ethyl Ether	2	U	Ethylmethacrylate	1	U
1,1-Dichloroethene	2	U	1,1,2-Trichloroethane	1	U
Methyl Iodide	1	U	Tetrachloroethene	1	U
Acetone	5	U	1,3-Dichloropropane	1	U
Carbon Disulfide	5	U	2-Hexanone	2	U
Allyl Chloride	2	U	Dibromochloromethane	1	U
Methylene Chloride	1	U	1,2-Dibromoethane (EDB)	1	U
Trans-1,2-Dichloroethene	1	U	Chlorobenzene	1	U
Acrylonitrile	1	U	1,1,1,2-Tetrachloroethane	1	U
2-Methoxy-2-Methylpropane	1	U	Ethylbenzene	1	U
1,1-Dichloroethane	1	U	m & p-Xylene	1	U
2,2-Dichloropropane	1	U	o-Xylene	1	U
Cis-1,2-Dichloroethene	1	U	Total Xylenes	1	U
2-Butanone	1	U	Styrene	2	U
Methyl acrylate	1	U	Bromoform	2	U
Propionitrile	10	UJ	Isopropylbenzene (Cumene)	1	U
Bromochloromethane	1	U	Bromobenzene	1	U
Methacrylonitrile	1	U	1,1,2,2-Tetrachloroethane	1	U
Tetrahydrofuran	2	U	1,2,3-Trichloropropane	1	U
Chloroform	1	U	Trans-1,4-Dichloro-2-butene	2	U
1,1,1-Trichloroethane	1	U	n-Propylbenzene	1	U
1-Chlorobutane	1	U	2-Chlorotoluene	1	U
Carbon Tetrachloride	1	U	1,3,5-Trimethylbenzene	1	U
1,1-Dichloropropene	1	U	4-Chlorotoluene	1	U
Benzene	1	U	Tert-Butylbenzene	1	U
1,2-Dichloroethane	1	U	Pentachloroethane	1	U
Trichloroethene	1	U	1,2,4-Trimethylbenzene	1	U
1,2-Dichloropropane	1	U	Sec-Butylbenzene	1	U
Methyl Methacrylate	5	UJ	1,3-Dichlorobenzene	1	U
Dibromomethane	1	U	p-Isopropyltoluene	1	U
Bromodichloromethane	1	U	1,4-Dichlorobenzene	1	U
2-Nitropropane	1	U	n-Butylbenzene	1	U

Authorized By: 

Release Date: 2/14/96

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Manchester Environmental Laboratory

Department of Ecology

Analysis Report for

Volatile Organic Analysis

Project Name: Lakewood Plaza Cleaners

LIMS Project ID: 1034-96

Sample: 96038080

Date Received: 01/19/96

Method: SW8260

Field ID: MW-27

Matrix: Water

Project Officer: Pam Marti

Date Analyzed: 01/24/96

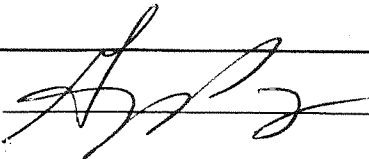
Units: ug/L

Analyte	Result	Qualifier
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1,2-Dichlorobenzene	1	U
Hexachloroethane	1	U
1,2-Dibromo-3-Chloropropane	1	U
Nitrobenzene	5	U
1,2,4-Trichlorobenzene	1	U
Hexachlorobutadiene	1	U
Naphthalene	2	U
1,2,3-Trichlorobenzene	2	U

Surrogate Recoveries

1,2-Dichloroethane-D4	97	%
1,4-Difluorobenzene	99	%
Toluene-D8	101	%
p-Bromofluorobenzene	92	%
1,2-Dichlorobenzene-D4	100	%

Authorized By: 

Release Date: 2/14/96

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Manchester Environmental Laboratory

Department of Ecology

Analysis Report for

Volatile Organic Analysis

Project Name: Lakewood Plaza Cleaners

LIMS Project ID: 1034-96

Sample: 96038081

Date Received: 01/19/96

Method: SW8260

Field ID: MW-41

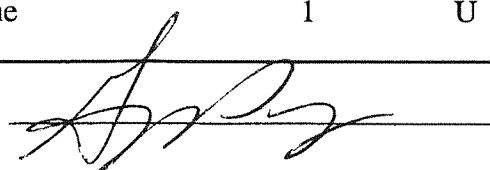
Matrix: Water

Project Officer: Pam Marti

Date Analyzed: 01/24/96

Units: ug/L

Analyte	Result	Qualifier	Analyte	Result	Qualifier
Dichlorodifluoromethane	5	U	Chloroacetonitrile	1	U
Chloromethane	1	U	Cis-1,3-Dichloropropene	2	U
Vinyl Chloride	2	U	4-Methyl-2-Pentanone	1	U
Bromomethane	1	U	1,1-Dichloropropanone	1	U
Chloroethane	1	U	Toluene	1	U
Trichlorofluoromethane	1	U	Trans-1,3-Dichloropropene	1	U
Ethyl Ether	2	U	Ethylmethacrylate	1	U
1,1-Dichloroethene	2	U	1,1,2-Trichloroethane	1	U
Methyl Iodide	1	U	Tetrachloroethene	1	U
Acetone	5	U	1,3-Dichloropropane	1	U
Carbon Disulfide	5	U	2-Hexanone	2	U
Allyl Chloride	2	U	Dibromochloromethane	1	U
Methylene Chloride	1	U	1,2-Dibromoethane (EDB)	1	U
Trans-1,2-Dichloroethene	1	U	Chlorobenzene	1	U
Acrylonitrile	1	U	1,1,1,2-Tetrachloroethane	1	U
2-Methoxy-2-Methylpropane	1	U	Ethylbenzene	1	U
1,1-Dichloroethane	1	U	m & p-Xylene	1	U
2,2-Dichloropropane	1	U	o-Xylene	1	U
Cis-1,2-Dichloroethene	1	U	Total Xylenes	1	U
2-Butanone	1	U	Styrene	2	U
Methyl acrylate	1	U	Bromoform	2	U
Propionitrile	10	UJ	Isopropylbenzene (Cumene)	1	U
Bromochloromethane	1	U	Bromobenzene	1	U
Methacrylonitrile	1	U	1,1,2,2-Tetrachloroethane	1	U
Tetrahydrofuran	2	U	1,2,3-Trichloropropane	1	U
Chloroform	1	U	Trans-1,4-Dichloro-2-butene	2	U
1,1,1-Trichloroethane	1	U	n-Propylbenzene	1	U
1-Chlorobutane	1	U	2-Chlorotoluene	1	U
Carbon Tetrachloride	1	U	1,3,5-Trimethylbenzene	1	U
1,1-Dichloropropene	1	U	4-Chlorotoluene	1	U
Benzene	1	U	Tert-Butylbenzene	1	U
1,2-Dichloroethane	1	U	Pentachloroethane	1	U
Trichloroethene	1	U	1,2,4-Trimethylbenzene	1	U
1,2-Dichloropropane	1	U	Sec-Butylbenzene	1	U
Methyl Methacrylate	5	UJ	1,3-Dichlorobenzene	1	U
Dibromomethane	1	U	p-Isopropyltoluene	1	U
Bromodichloromethane	1	U	1,4-Dichlorobenzene	1	U
2-Nitropropane	1	U	n-Butylbenzene	1	U

Authorized By: 

Release Date: 2/14/96

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Manchester Environmental Laboratory

Department of Ecology

Analysis Report for

Volatile Organic Analysis

Project Name: Lakewood Plaza Cleaners

LIMS Project ID: 1034-96

Sample: 96038081

Date Received: 01/19/96

Method: SW8260

Field ID: MW-41

Matrix: Water

Project Officer: Pam Marti

Date Analyzed: 01/24/96

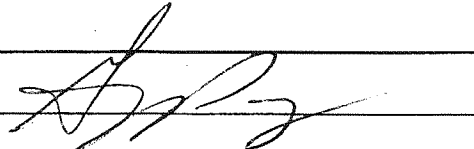
Units: ug/L

Analyte	Result	Qualifier
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1,2-Dichlorobenzene	1	U
Hexachloroethane	1	U
1,2-Dibromo-3-Chloropropane	1	U
Nitrobenzene	5	U
1,2,4-Trichlorobenzene	1	U
Hexachlorobutadiene	1	U
Naphthalene	2	U
1,2,3-Trichlorobenzene	2	U

Surrogate Recoveries

1,2-Dichloroethane-D4	98	%
1,4-Difluorobenzene	99	%
Toluene-D8	100	%
p-Bromofluorobenzene	93	%
1,2-Dichlorobenzene-D4	101	%

Authorized By: 

Release Date: 2/14/96

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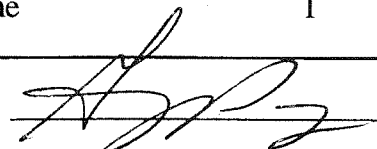
Department of Ecology

Analysis Report for

Volatile Organic Analysis

Project Name: Lakewood Plaza Cleaners	LIMS Project ID: 1034-96
Sample: 96038082	Date Received: 01/19/96
Field ID: MW-28A	Method: SW8260
Project Officer: Pam Marti	Matrix: Water
	Date Analyzed: 01/24/96
	Units: ug/L

Analyte	Result	Qualifier	Analyte	Result	Qualifier
Dichlorodifluoromethane	5	U	Chloroacetonitrile	1	U
Chloromethane	1	U	Cis-1,3-Dichloropropene	2	U
Vinyl Chloride	2	U	4-Methyl-2-Pentanone	1	U
Bromomethane	1	U	1,1-Dichloropropanone	1	U
Chloroethane	1	U	Toluene	1	U
Trichlorofluoromethane	1	U	Trans-1,3-Dichloropropene	1	U
Ethyl Ether	2	U	Ethylmethacrylate	1	U
1,1-Dichloroethene	2	U	1,1,2-Trichloroethane	1	U
Methyl Iodide	1	U	Tetrachloroethene	1	U
Acetone	5	U	1,3-Dichloropropane	1	U
Carbon Disulfide	5	U	2-Hexanone	2	U
Allyl Chloride	2	U	Dibromochloromethane	1	U
Methylene Chloride	1	U	1,2-Dibromoethane (EDB)	1	U
Trans-1,2-Dichloroethene	1	U	Chlorobenzene	1	U
Acrylonitrile	1	U	1,1,1,2-Tetrachloroethane	1	U
2-Methoxy-2-Methylpropane	1	U	Ethylbenzene	1	U
1,1-Dichloroethane	1	U	m & p-Xylene	1	U
2,2-Dichloropropane	1	U	o-Xylene	1	U
Cis-1,2-Dichloroethene	1	U	Total Xylenes	1	U
2-Butanone	1	U	Styrene	2	U
Methyl acrylate	1	U	Bromoform	2	U
Propionitrile	10	UJ	Isopropylbenzene (Cumene)	1	U
Bromochloromethane	1	U	Bromobenzene	1	U
Methacrylonitrile	1	U	1,1,2,2-Tetrachloroethane	1	U
Tetrahydrofuran	2	U	1,2,3-Trichloropropane	1	U
Chloroform	1	U	Trans-1,4-Dichloro-2-butene	2	U
1,1,1-Trichloroethane	1	U	n-Propylbenzene	1	U
1-Chlorobutane	1	U	2-Chlorotoluene	1	U
Carbon Tetrachloride	1	U	1,3,5-Trimethylbenzene	1	U
1,1-Dichloropropene	1	U	4-Chlorotoluene	1	U
Benzene	1	U	Tert-Butylbenzene	1	U
1,2-Dichloroethane	1	U	Pentachloroethane	1	U
Trichloroethene	1	U	1,2,4-Trimethylbenzene	1	U
1,2-Dichloropropane	1	U	Sec-Butylbenzene	1	U
Methyl Methacrylate	5	UJ	1,3-Dichlorobenzene	1	U
Dibromomethane	1	U	p-Isopropyltoluene	1	U
Bromodichloromethane	1	U	1,4-Dichlorobenzene	1	U
2-Nitropropane	1	U	n-Butylbenzene	1	U

Authorized By: 

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Department of Ecology

Analysis Report for

Volatile Organic Analysis

Project Name: Lakewood Plaza Cleaners

LIMS Project ID: 1034-96

Sample: 96038082

Date Received: 01/19/96

Method: SW8260

Field ID: MW-28A

Date Analyzed: 01/24/96

Matrix: Water

Project Officer: Pam Marti


Units: ug/L

Analyte	Result	Qualifier
---------	--------	-----------

1,2-Dichlorobenzene	1	U
Hexachloroethane	1	U
1,2-Dibromo-3-Chloropropane	1	U
Nitrobenzene	5	U
1,2,4-Trichlorobenzene	1	U
Hexachlorobutadiene	1	U
Naphthalene	2	U
1,2,3-Trichlorobenzene	2	U

Surrogate Recoveries

1,2-Dichloroethane-D4	98	%
1,4-Difluorobenzene	100	%
Toluene-D8	100	%
p-Bromofluorobenzene	92	%
1,2-Dichlorobenzene-D4	102	%

Authorized By: 

Release Date: 2/14/96

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Analysis Report for

Volatile Organic Analysis

Project Name: Lakewood Plaza Cleaners

LIMS Project ID: 1034-96

Sample: 96038083

Date Received: 01/19/96

Method: SW8260

Field ID: MW-20A

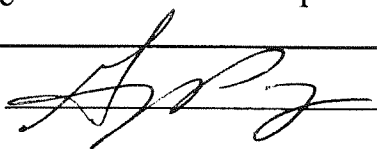
Date Analyzed: 01/24/96

Matrix: Water

Project Officer: Pam Marti

Units: ug/L

Analyte	Result	Qualifier	Analyte	Result	Qualifier
Dichlorodifluoromethane	5	U	Chloroacetonitrile	1	U
Chloromethane	1	U	Cis-1,3-Dichloropropene	2	U
Vinyl Chloride	2	U	4-Methyl-2-Pentanone	1	U
Bromomethane	1	U	1,1-Dichloropropanone	1	U
Chloroethane	1	U	Toluene	1	U
Trichlorofluoromethane	1	U	Trans-1,3-Dichloropropene	1	U
Ethyl Ether	2	U	Ethylmethacrylate	1	U
1,1-Dichloroethene	2	U	1,1,2-Trichloroethane	1	U
Methyl Iodide	1	U	Tetrachloroethene	.24	J
Acetone	5	U	1,3-Dichloropropane	1	U
Carbon Disulfide	5	U	2-Hexanone	2	U
Allyl Chloride	2	U	Dibromochloromethane	1	U
Methylene Chloride	1	U	1,2-Dibromoethane (EDB)	1	U
Trans-1,2-Dichloroethene	1	U	Chlorobenzene	1	U
Acrylonitrile	1	U	1,1,1,2-Tetrachloroethane	1	U
2-Methoxy-2-Methylpropane	1	U	Ethylbenzene	1	U
1,1-Dichloroethane	1	U	m & p-Xylene	1	U
2,2-Dichloropropane	1	U	o-Xylene	1	U
Cis-1,2-Dichloroethene	1	U	Total Xylenes	1	U
2-Butanone	1	U	Styrene	2	U
Methyl acrylate	1	U	Bromoform	2	U
Propionitrile	10	UJ	Isopropylbenzene (Cumene)	1	U
Bromochloromethane	1	U	Bromobenzene	1	U
Methacrylonitrile	1	U	1,1,2,2-Tetrachloroethane	1	U
Tetrahydrofuran	2	U	1,2,3-Trichloropropane	1	U
Chloroform	1	U	Trans-1,4-Dichloro-2-butene	2	U
1,1,1-Trichloroethane	1	U	n-Propylbenzene	1	U
1-Chlorobutane	1	U	2-Chlorotoluene	1	U
Carbon Tetrachloride	1	U	1,3,5-Trimethylbenzene	1	U
1,1-Dichloropropene	1	U	4-Chlorotoluene	1	U
Benzene	1	U	Tert-Butylbenzene	1	U
1,2-Dichloroethane	1	U	Pentachloroethane	1	U
Trichloroethene	1	U	1,2,4-Trimethylbenzene	1	U
1,2-Dichloropropane	1	U	Sec-Butylbenzene	1	U
Methyl Methacrylate	5	UJ	1,3-Dichlorobenzene	1	U
Dibromomethane	1	U	p-Isopropyltoluene	1	U
Bromodichloromethane	1	U	1,4-Dichlorobenzene	1	U
2-Nitropropane	1	U	n-Butylbenzene	1	U

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Department of Ecology

Analysis Report for

Volatile Organic Analysis

Project Name: Lakewood Plaza Cleaners

LIMS Project ID: 1034-96

Sample: 96038083

Date Received: 01/19/96

Method: SW8260

Field ID: MW-20A

Matrix: Water

Project Officer: Pam Marti

Date Analyzed: 01/24/96

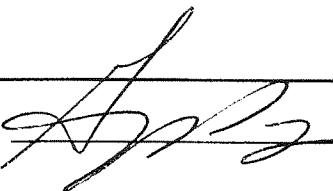
Units: ug/L

Analyte	Result	Qualifier
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1,2-Dichlorobenzene	1	U
Hexachloroethane	1	U
1,2-Dibromo-3-Chloropropane	1	U
Nitrobenzene	5	U
1,2,4-Trichlorobenzene	1	U
Hexachlorobutadiene	1	U
Naphthalene	2	U
1,2,3-Trichlorobenzene	2	U

Surrogate Recoveries

1,2-Dichloroethane-D4	99	%
1,4-Difluorobenzene	102	%
Toluene-D8	101	%
p-Bromofluorobenzene	90	%
1,2-Dichlorobenzene-D4	102	%

Authorized By: 

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Analysis Report for

Volatile Organic Analysis

Project Name: Lakewood Plaza Cleaners

LIMS Project ID: 1034-96

Sample: 96038084

Date Received: 01/19/96

Method: SW8260

Field ID: H1

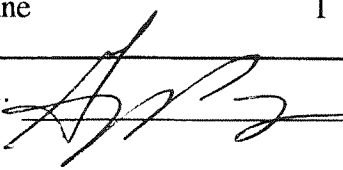
Date Analyzed: 01/24/96

Matrix: Water

Project Officer: Pam Marti

Units: ug/L

Analyte	Result	Qualifier	Analyte	Result	Qualifier
Dichlorodifluoromethane	5	U	Chloroacetonitrile	1	U
Chloromethane	1	U	Cis-1,3-Dichloropropene	2	U
Vinyl Chloride	2	U	4-Methyl-2-Pentanone	1	U
Bromomethane	1	U	1,1-Dichloropropanone	1	U
Chloroethane	1	U	Toluene	1	U
Trichlorofluoromethane	1	U	Trans-1,3-Dichloropropene	1	U
Ethyl Ether	2	U	Ethylmethacrylate	1	U
1,1-Dichloroethene	2	U	1,1,2-Trichloroethane	1	U
Methyl Iodide	1	U	Tetrachloroethene	8.4	
Acetone	5	U	1,3-Dichloropropane	1	U
Carbon Disulfide	5	U	2-Hexanone	2	U
Allyl Chloride	2	U	Dibromochloromethane	1	U
Methylene Chloride	1	U	1,2-Dibromoethane (EDB)	1	U
Trans-1,2-Dichloroethene	1	U	Chlorobenzene	1	U
Acrylonitrile	1	U	1,1,1,2-Tetrachloroethane	1	U
2-Methoxy-2-Methylpropane	1	U	Ethylbenzene	1	U
1,1-Dichloroethane	1	U	m & p-Xylene	1	U
2,2-Dichloropropane	1	U	o-Xylene	1	U
Cis-1,2-Dichloroethene	.18	J	Total Xylenes	1	U
2-Butanone	1	U	Styrene	2	U
Methyl acrylate	1	U	Bromoform	2	U
Propionitrile	10	UJ	Isopropylbenzene (Cumene)	1	U
Bromochloromethane	1	U	Bromobenzene	1	U
Methacrylonitrile	1	U	1,1,2,2-Tetrachloroethane	1	U
Tetrahydrofuran	2	U	1,2,3-Trichloropropane	1	U
Chloroform	1	U	Trans-1,4-Dichloro-2-butene	2	U
1,1,1-Trichloroethane	1	U	n-Propylbenzene	1	U
1-Chlorobutane	1	U	2-Chlorotoluene	1	U
Carbon Tetrachloride	1	U	1,3,5-Trimethylbenzene	1	U
1,1-Dichloropropene	1	U	4-Chlorotoluene	1	U
Benzene	1	U	Tert-Butylbenzene	1	U
1,2-Dichloroethane	1	U	Pentachloroethane	1	U
Trichloroethene	.24	J	1,2,4-Trimethylbenzene	1	U
1,2-Dichloropropane	1	U	Sec-Butylbenzene	1	U
Methyl Methacrylate	5	UJ	1,3-Dichlorobenzene	1	U
Dibromomethane	1	U	p-Isopropyltoluene	1	U
Bromodichloromethane	1	U	1,4-Dichlorobenzene	1	U
2-Nitropropane	1	U	n-Butylbenzene	1	U

Authorized By: 

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Manchester Environmental Laboratory

Department of Ecology

Analysis Report for

Volatile Organic Analysis

Project Name: Lakewood Plaza Cleaners

LIMS Project ID: 1034-96

Sample: 96038084

Date Received: 01/19/96

Method: SW8260

Field ID: H1

Matrix: Water

Project Officer: Pam Marti

Date Analyzed: 01/24/96

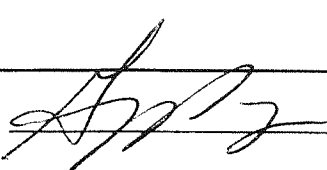
Units: ug/L

Analyte	Result	Qualifier
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1,2-Dichlorobenzene	1	U
Hexachloroethane	1	U
1,2-Dibromo-3-Chloropropane	1	U
Nitrobenzene	5	U
1,2,4-Trichlorobenzene	1	U
Hexachlorobutadiene	1	U
Naphthalene	2	U
1,2,3-Trichlorobenzene	2	U

Surrogate Recoveries

1,2-Dichloroethane-D4	99	%
1,4-Difluorobenzene	99	%
Toluene-D8	101	%
p-Bromofluorobenzene	92	%
1,2-Dichlorobenzene-D4	100	%

Authorized By: 

Release Date: 2/14/96

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Manchester Environmental Laboratory

Department of Ecology

Analysis Report for

Volatile Organic Analysis

Project Name: Lakewood Plaza Cleaners

LIMS Project ID: 1034-96

Sample: 96038085

Date Received: 01/19/96

Method: SW8260

Field ID: MW-31

Date Analyzed: 01/24/96

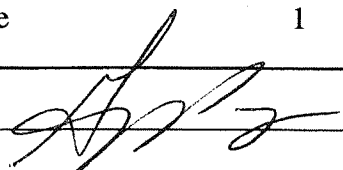
Matrix: Water

Project Officer: Pam Marti

Units: ug/L

Analyte	Result	Qualifier	Analyte	Result	Qualifier
Dichlorodifluoromethane	5	U	Chloroacetonitrile	1	U
Chloromethane	1	U	Cis-1,3-Dichloropropene	2	U
Vinyl Chloride	2	U	4-Methyl-2-Pentanone	1	U
Bromomethane	1	U	1,1-Dichloropropanone	1	U
Chloroethane	1	U	Toluene	1	U
Trichlorofluoromethane	1	U	Trans-1,3-Dichloropropene	1	U
Ethyl Ether	2	U	Ethylmethacrylate	1	U
1,1-Dichloroethene	2	U	1,1,2-Trichloroethane	1	U
Methyl Iodide	1	U	Tetrachloroethene	.56	J
Acetone	5	U	1,3-Dichloropropane	1	U
Carbon Disulfide	5	U	2-Hexanone	2	U
Allyl Chloride	2	U	Dibromochloromethane	1	U
Methylene Chloride	1	U	1,2-Dibromoethane (EDB)	1	U
Trans-1,2-Dichloroethene	1	U	Chlorobenzene	1	U
Acrylonitrile	1	U	1,1,1,2-Tetrachloroethane	1	U
2-Methoxy-2-Methylpropane	1	U	Ethylbenzene	1	U
1,1-Dichloroethane	1	U	m & p-Xylene	1	U
2,2-Dichloropropane	1	U	o-Xylene	1	U
Cis-1,2-Dichloroethene	.66	J	Total Xylenes	1	U
2-Butanone	1	U	Styrene	2	U
Methyl acrylate	1	U	Bromoform	2	U
Propionitrile	10	UJ	Isopropylbenzene (Cumene)	1	U
Bromochloromethane	1	U	Bromobenzene	1	U
Methacrylonitrile	1	U	1,1,2,2-Tetrachloroethane	1	U
Tetrahydrofuran	2	U	1,2,3-Trichloropropane	1	U
Chloroform	1	U	Trans-1,4-Dichloro-2-butene	2	U
1,1,1-Trichloroethane	1	U	n-Propylbenzene	1	U
1-Chlorobutane	1	U	2-Chlorotoluene	1	U
Carbon Tetrachloride	1	U	1,3,5-Trimethylbenzene	1	U
1,1-Dichloropropene	1	U	4-Chlorotoluene	1	U
Benzene	1	U	Tert-Butylbenzene	1	U
1,2-Dichloroethane	1	U	Pentachloroethane	1	U
Trichloroethene	1	U	1,2,4-Trimethylbenzene	1	U
1,2-Dichloropropane	1	U	Sec-Butylbenzene	1	U
Methyl Methacrylate	5	UJ	1,3-Dichlorobenzene	1	U
Dibromomethane	1	U	p-Isopropyltoluene	1	U
Bromodichloromethane	1	U	1,4-Dichlorobenzene	1	U
2-Nitropropane	1	U	n-Butylbenzene	1	U

Authorized By: _____



Release Date: _____

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Manchester Environmental Laboratory

Department of Ecology

Analysis Report for

Volatile Organic Analysis

Project Name: Lakewood Plaza Cleaners

LIMS Project ID: 1034-96

Sample: 96038085

Date Received: 01/19/96

Method: SW8260

Field ID: MW-31

Matrix: Water

Project Officer: Pam Marti

Date Analyzed: 01/24/96

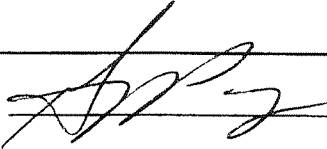
Units: ug/L

Analyte	Result	Qualifier
---------	--------	-----------

1,2-Dichlorobenzene	1	U
Hexachloroethane	1	U
1,2-Dibromo-3-Chloropropane	1	U
Nitrobenzene	5	U
1,2,4-Trichlorobenzene	1	U
Hexachlorobutadiene	1	U
Naphthalene	2	U
1,2,3-Trichlorobenzene	2	U

Surrogate Recoveries

1,2-Dichloroethane-D4	100	%
1,4-Difluorobenzene	99	%
Toluene-D8	103	%
p-Bromofluorobenzene	94	%
1,2-Dichlorobenzene-D4	102	%

Authorized By: 

Release Date: 2/14/96

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Analysis Report for

Volatile Organic Analysis

Project Name: Lakewood Plaza Cleaners

LIMS Project ID: 1034-96

Sample: 96038086

Date Received: 01/19/96

Method: SW8260

Field ID: MW-20AR

Date Analyzed: 01/24/96

Matrix: Water

Project Officer: Pam Marti

Units: ug/L

Analyte	Result	Qualifier	Analyte	Result	Qualifier
Dichlorodifluoromethane	5	U	Chloroacetonitrile	1	U
Chloromethane	1	U	Cis-1,3-Dichloropropene	2	U
Vinyl Chloride	2	U	4-Methyl-2-Pentanone	1	U
Bromomethane	1	U	1,1-Dichloropropanone	1	U
Chloroethane	1	U	Toluene	1	U
Trichlorofluoromethane	1	U	Trans-1,3-Dichloropropene	1	U
Ethyl Ether	2	U	Ethylmethacrylate	1	U
1,1-Dichloroethene	2	U	1,1,2-Trichloroethane	1	U
Methyl Iodide	1	U	Tetrachloroethene	.17	J
Acetone	5	U	1,3-Dichloropropane	1	U
Carbon Disulfide	5	U	2-Hexanone	2	U
Allyl Chloride	2	U	Dibromochloromethane	1	U
Methylene Chloride	1	U	1,2-Dibromoethane (EDB)	1	U
Trans-1,2-Dichloroethene	1	U	Chlorobenzene	1	U
Acrylonitrile	1	U	1,1,1,2-Tetrachloroethane	1	U
2-Methoxy-2-Methylpropane	1	U	Ethylbenzene	1	U
1,1-Dichloroethane	1	U	m & p-Xylene	1	U
2,2-Dichloropropane	1	U	o-Xylene	1	U
Cis-1,2-Dichloroethene	1	U	Total Xylenes	1	U
2-Butanone	1	U	Styrene	2	U
Methyl acrylate	1	U	Bromoform	2	U
Propionitrile	10	UJ	Isopropylbenzene (Cumene)	1	U
Bromochloromethane	1	U	Bromobenzene	1	U
Methacrylonitrile	1	U	1,1,2,2-Tetrachloroethane	1	U
Tetrahydrofuran	2	U	1,2,3-Trichloropropane	1	U
Chloroform	1	U	Trans-1,4-Dichloro-2-butene	2	U
1,1,1-Trichloroethane	1	U	n-Propylbenzene	1	U
1-Chlorobutane	1	U	2-Chlorotoluene	1	U
Carbon Tetrachloride	1	U	1,3,5-Trimethylbenzene	1	U
1,1-Dichloropropene	1	U	4-Chlorotoluene	1	U
Benzene	1	U	Tert-Butylbenzene	1	U
1,2-Dichloroethane	1	U	Pentachloroethane	1	U
Trichloroethene	1	U	1,2,4-Trimethylbenzene	1	U
1,2-Dichloropropane	1	U	Sec-Butylbenzene	1	U
Methyl Methacrylate	5	UJ	1,3-Dichlorobenzene	1	U
Dibromomethane	1	U	p-Isopropyltoluene	1	U
Bromodichloromethane	1	U	1,4-Dichlorobenzene	1	U
2-Nitropropane	1	U	n-Butylbenzene	1	U

Authorized By: 

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Analysis Report for

Volatile Organic Analysis

Project Name: Lakewood Plaza Cleaners

LIMS Project ID: 1034-96

Sample: 96038086

Date Received: 01/19/96

Method: SW8260

Field ID: MW-20AR

Matrix: Water

Project Officer: Pam Marti

Date Analyzed: 01/24/96

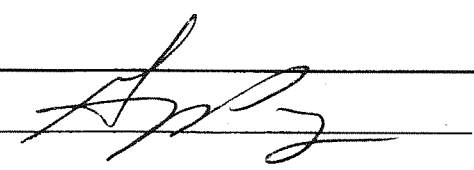
Units: ug/L

Analyte	Result	Qualifier
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1,2-Dichlorobenzene	1	U
Hexachloroethane	1	U
1,2-Dibromo-3-Chloropropane	1	U
Nitrobenzene	5	U
1,2,4-Trichlorobenzene	1	U
Hexachlorobutadiene	1	U
Naphthalene	2	U
1,2,3-Trichlorobenzene	2	U

Surrogate Recoveries

1,2-Dichloroethane-D4	99	%
1,4-Difluorobenzene	102	%
Toluene-D8	101	%
p-Bromofluorobenzene	91	%
1,2-Dichlorobenzene-D4	102	%

Authorized By: 

Release Date: 2/14/96

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Manchester Environmental Laboratory

Department of Ecology

Analysis Report for

Volatile Organic Analysis

Project Name: Lakewood Plaza Cleaners

LIMS Project ID: 1034-96

Sample: 96038087

Date Received: 01/19/96

Method: SW8260

Field ID: MW-20B

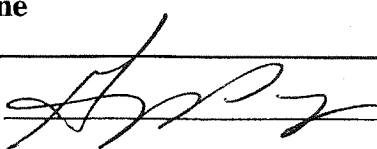
Date Analyzed: 01/24/96

Matrix: Water

Project Officer: Pam Marti

Units: ug/L

Analyte	Result	Qualifier	Analyte	Result	Qualifier
Dichlorodifluoromethane	5	UJ	Chloroacetonitrile		REJ
Chloromethane	1	U	Cis-1,3-Dichloropropene	2	UJ
Vinyl Chloride	2	U	4-Methyl-2-Pentanone	1	UJ
Bromomethane	1	U	1,1-Dichloropropanone		REJ
Chloroethane	1	U	Toluene	1	U
Trichlorofluoromethane	1	U	Trans-1,3-Dichloropropene	1	U
Ethyl Ether		REJ	Ethylmethacrylate		REJ
1,1-Dichloroethene	2	U	1,1,2-Trichloroethane	3.3	U
Methyl Iodide		REJ	Tetrachloroethene	466	E
Acetone		REJ	1,3-Dichloropropane	1	U
Carbon Disulfide	5	U	2-Hexanone	2	UJ
Allyl Chloride		REJ	Dibromochloromethane	1	U
Methylene Chloride	1	U	1,2-Dibromoethane (EDB)	1	U
Trans-1,2-Dichloroethene	.33	J	Chlorobenzene	1	U
Acrylonitrile		REJ	1,1,1,2-Tetrachloroethane	1	U
2-Methoxy-2-Methylpropane		REJ	Ethylbenzene	1	U
1,1-Dichloroethane	1	U	m & p-Xylene	1	U
2,2-Dichloropropane	1	UJ	o-Xylene	1	U
Cis-1,2-Dichloroethene	15		Total Xylenes	1	U
2-Butanone	1	UJ	Styrene	2	U
Methyl acrylate		REJ	Bromoform	2	U
Propionitrile		REJ	Isopropylbenzene (Cumene)	1	U
Bromochloromethane	1	U	Bromobenzene	1	U
Methacrylonitrile		REJ	1,1,2,2-Tetrachloroethane	1	U
Tetrahydrofuran		REJ	1,2,3-Trichloropropane	1	UJ
Chloroform	1	U	Trans-1,4-Dichloro-2-butene		REJ
1,1,1-Trichloroethane	1	U	n-Propylbenzene	1	U
1-Chlorobutane		REJ	2-Chlorotoluene	1	U
Carbon Tetrachloride	1	U	1,3,5-Trimethylbenzene	1	U
1,1-Dichloropropene	1	U	4-Chlorotoluene	1	U
Benzene	1	U	Tert-Butylbenzene	1	U
1,2-Dichloroethane	1	U	Pentachloroethane		REJ
Trichloroethene	7.2		1,2,4-Trimethylbenzene	1	U
1,2-Dichloropropane	1	U	Sec-Butylbenzene	1	U
Methyl Methacrylate		REJ	1,3-Dichlorobenzene	1	U
Dibromomethane	1	U	p-Isopropyltoluene	1	U
Bromodichloromethane	1	U	1,4-Dichlorobenzene	1	U
2-Nitropropane		REJ	n-Butylbenzene	1	U

Authorized By: 

Release Date: 2/14/96

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Manchester Environmental Laboratory

Department of Ecology

Analysis Report for

Volatile Organic Analysis

Project Name: Lakewood Plaza Cleaners

LIMS Project ID: 1034-96

Sample: 96038087

Date Received: 01/19/96

Method: SW8260

Field ID: MW-20B

Matrix: Water

Project Officer: Pam Marti

Date Analyzed: 01/24/96

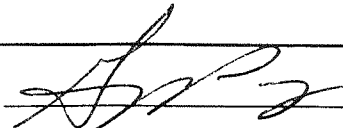
Units: ug/L

Analyte	Result	Qualifier
---------	--------	-----------

1,2-Dichlorobenzene	1	U
Hexachloroethane		REJ
1,2-Dibromo-3-Chloropropane	1	U
Nitrobenzene		REJ
1,2,4-Trichlorobenzene	1	UJ
Hexachlorobutadiene	1	U
Naphthalene	2	UJ
1,2,3-Trichlorobenzene	2	UJ

Surrogate Recoveries

1,2-Dichloroethane-D4	99	%
1,4-Difluorobenzene	101	%
Toluene-D8	100	%
p-Bromofluorobenzene	89	%
1,2-Dichlorobenzene-D4	102	%

Authorized By: 

Release Date: 2/14/96

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Manchester Environmental Laboratory

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Analysis Report for

Volatile Organic Analysis

Project Name: Lakewood Plaza Cleaners

LIMS Project ID: 1034-96

Sample: 96038087 (Dilution - DIL1)

Date Received: 01/19/96

Method: SW8260

Field ID: MW-20B

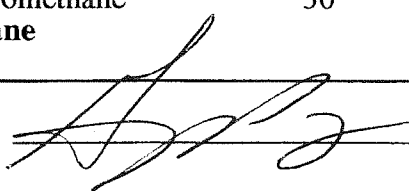
Matrix: Water

Project Officer: Pam Marti

Date Analyzed: 01/24/96

Units: ug/L

Analyte	Result	Qualifier	Analyte	Result	Qualifier
Dichlorodifluoromethane	250	UJ	Chloroacetonitrile		REJ
Chloromethane	50	U	Cis-1,3-Dichloropropene	100	UJ
Vinyl Chloride	100	U	4-Methyl-2-Pentanone	50	UJ
Bromomethane	50	U	1,1-Dichloropropanone		REJ
Chloroethane	50	U	Toluene	50	U
Trichlorofluoromethane	50	U	Trans-1,3-Dichloropropene	50	U
Ethyl Ether		REJ	Ethylmethacrylate		REJ
1,1-Dichloroethene	100	U	1,1,2-Trichloroethane	50	U
Methyl Iodide		REJ	Tetrachloroethene	353	
Acetone		REJ	1,3-Dichloropropane	50	U
Carbon Disulfide	250	U	2-Hexanone	100	UJ
Allyl Chloride		REJ	Dibromochloromethane	50	U
Methylene Chloride	50	U	1,2-Dibromoethane (EDB)	50	U
Trans-1,2-Dichloroethene	50	U	Chlorobenzene	50	U
Acrylonitrile		REJ	1,1,1,2-Tetrachloroethane	50	U
2-Methoxy-2-Methylpropane		REJ	Ethylbenzene	50	U
1,1-Dichloroethane	50	U	m & p-Xylene	50	U
2,2-Dichloropropane	50	UJ	o-Xylene	50	U
Cis-1,2-Dichloroethene	11	J	Total Xylenes	50	U
2-Butanone	50	UJ	Styrene	100	U
Methyl acrylate		REJ	Bromoform	100	U
Propionitrile		REJ	Isopropylbenzene (Cumene)	50	U
Bromochloromethane	50	U	Bromobenzene	50	U
Methacrylonitrile		REJ	1,1,2,2-Tetrachloroethane	50	U
Tetrahydrofuran		REJ	1,2,3-Trichloropropane	50	UJ
Chloroform	50	U	Trans-1,4-Dichloro-2-butene		REJ
1,1,1-Trichloroethane	50	U	n-Propylbenzene	50	U
1-Chlorobutane		REJ	2-Chlorotoluene	50	U
Carbon Tetrachloride	50	U	1,3,5-Trimethylbenzene	50	U
1,1-Dichloropropene	50	U	4-Chlorotoluene	50	U
Benzene	50	U	Tert-Butylbenzene	50	U
1,2-Dichloroethane	50	U	Pentachloroethane		REJ
Trichloroethene	50	U	1,2,4-Trimethylbenzene	50	U
1,2-Dichloropropane	50	U	Sec-Butylbenzene	50	U
Methyl Methacrylate		REJ	1,3-Dichlorobenzene	50	U
Dibromomethane	50	U	p-Isopropyltoluene	50	U
Bromodichloromethane	50	U	1,4-Dichlorobenzene	50	U
2-Nitropropane		REJ	n-Butylbenzene	50	U

Authorized By: 

Release Date: 2/14/96

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Manchester Environmental Laboratory

Department of Ecology

Analysis Report for

Volatile Organic Analysis

Project Name: Lakewood Plaza Cleaners

LIMS Project ID: 1034-96

Sample: 96038087 (Dilution - DIL1)

Date Received: 01/19/96

Method: SW8260

Field ID: MW-20B

Matrix: Water

Project Officer: Pam Marti

Date Analyzed: 01/24/96

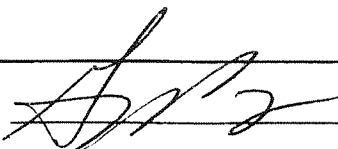
Units: ug/L

Analyte	Result	Qualifier
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1,2-Dichlorobenzene	50	U
Hexachloroethane		REJ
1,2-Dibromo-3-Chloropropane	50	U
Nitrobenzene		REJ
1,2,4-Trichlorobenzene	50	UJ
Hexachlorobutadiene	50	U
Naphthalene	100	UJ
1,2,3-Trichlorobenzene	100	UJ

Surrogate Recoveries

1,2-Dichloroethane-D4	94	%
1,4-Difluorobenzene	100	%
Toluene-D8	100	%
p-Bromofluorobenzene	90	%
1,2-Dichlorobenzene-D4	101	%

Authorized By: 

Release Date: 2/14/96

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Analysis Report for

Volatile Organic Analysis

Project Name: Lakewood Plaza Cleaners

LIMS Project ID: 1034-96

Sample: 96038087 (Matrix Spike - LMX1) Date Received: 01/19/96

Method: SW8260

Field ID: MW-20B

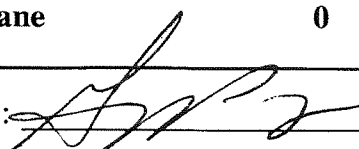
Matrix: Water

Project Officer: Pam Marti

Date Analyzed: 01/24/96

Units: % Recovery

Analyte	Result	Qualifier	Analyte	Result	Qualifier
Dichlorodifluoromethane	56		Chloroacetonitrile	0	
Chloromethane	98		Cis-1,3-Dichloropropene	79	
Vinyl Chloride	128		4-Methyl-2-Pentanone	53	
Bromomethane	113		1,1-Dichloropropanone	0	
Chloroethane	99		Toluene	96	
Trichlorofluoromethane	95		Trans-1,3-Dichloropropene	85	
Ethyl Ether	0		Ethylmethacrylate	0	
1,1-Dichloroethene	134		1,1,2-Trichloroethane	101	
Methyl Iodide	0		Tetrachloroethene	105	
Acetone	0		1,3-Dichloropropane	102	
Carbon Disulfide	95		2-Hexanone	45	
Allyl Chloride	0		Dibromochloromethane	92	
Methylene Chloride	105		1,2-Dibromoethane (EDB)	91	
Trans-1,2-Dichloroethene	119		Chlorobenzene	101	
Acrylonitrile	0		1,1,1,2-Tetrachloroethane	99	
2-Methoxy-2-Methylpropane	0		Ethylbenzene	93	
1,1-Dichloroethane	105		m & p-Xylene	95	
2,2-Dichloropropane	76		o-Xylene	89	
Cis-1,2-Dichloroethene	98		Total Xylenes	93	
2-Butanone	52		Styrene	91	
Methyl acrylate	0		Bromoform	89	
Propionitrile	0		Isopropylbenzene (Cumene)	86	
Bromochloromethane	104		Bromobenzene	95	
Methacrylonitrile	0		1,1,2,2-Tetrachloroethane	105	
Tetrahydrofuran	0		1,2,3-Trichloropropane	77	
Chloroform	100		Trans-1,4-Dichloro-2-butene	0	
1,1,1-Trichloroethane	99		n-Propylbenzene	88	
1-Chlorobutane	0		2-Chlorotoluene	90	
Carbon Tetrachloride	113		1,3,5-Trimethylbenzene	91	
1,1-Dichloropropene	84		4-Chlorotoluene	95	
Benzene	103		Tert-Butylbenzene	83	
1,2-Dichloroethane	99		Pentachloroethane	0	
Trichloroethene	94		1,2,4-Trimethylbenzene	92	
1,2-Dichloropropane	100		Sec-Butylbenzene	89	
Methyl Methacrylate	0		1,3-Dichlorobenzene	96	
Dibromomethane	98		p-Isopropyltoluene	89	
Bromodichloromethane	96		1,4-Dichlorobenzene	98	
2-Nitropropane	0		n-Butylbenzene	88	

Authorized By: 

Release Date: 2/14/96

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Manchester Environmental Laboratory

Department of Ecology

Analysis Report for

Volatile Organic Analysis

Project Name: Lakewood Plaza Cleaners

LIMS Project ID: 1034-96

Sample: 96038087 (Matrix Spike - LMX1) Date Received: 01/19/96

Method: SW8260

Field ID: MW-20B

Matrix: Water

Project Officer: Pam Marti

Date Analyzed: 01/24/96

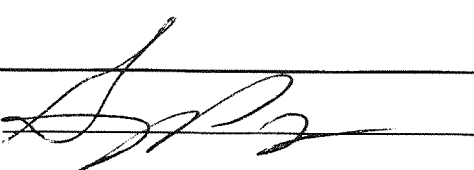
Units: % Recovery

Analyte	Result	Qualifier
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1,2-Dichlorobenzene	102	
Hexachloroethane	0	
1,2-Dibromo-3-Chloropropane	90	
Nitrobenzene	0	
1,2,4-Trichlorobenzene	78	
Hexachlorobutadiene	90	
Naphthalene	66	
1,2,3-Trichlorobenzene	77	

Surrogate Recoveries

1,2-Dichloroethane-D4	97	%
1,4-Difluorobenzene	100	%
Toluene-D8	102	%
p-Bromofluorobenzene	96	%
1,2-Dichlorobenzene-D4	101	%

Authorized By: 

Release Date: 2/14/96

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Manchester Environmental Laboratory

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Analysis Report for

Volatile Organic Analysis

Project Name: Lakewood Plaza Cleaners

LIMS Project ID: 1034-96

Sample: 96038087 (Matrix Spike - LMX2) **Date Received:** 01/19/96

Method: SW8260

Field ID: MW-20B

Matrix: Water

Project Officer: Pam Marti

Date Analyzed: 01/24/96

Units: % Recovery

Analyte	Result	Qualifier	Analyte	Result	Qualifier
Dichlorodifluoromethane	49		Chloroacetonitrile	0	
Chloromethane	95		Cis-1,3-Dichloropropene	80	
Vinyl Chloride	125		4-Methyl-2-Pentanone	52	
Bromomethane	107		1,1-Dichloropropanone	0	
Chloroethane	101		Toluene	94	
Trichlorofluoromethane	90		Trans-1,3-Dichloropropene	85	
Ethyl Ether	0		Ethylmethacrylate	0	
1,1-Dichloroethene	124		1,1,2-Trichloroethane	102	
Methyl Iodide	0		Tetrachloroethene	90	
Acetone	0		1,3-Dichloropropane	99	
Carbon Disulfide	88		2-Hexanone	0	
Allyl Chloride	0		Dibromochloromethane	91	
Methylene Chloride	98		1,2-Dibromoethane (EDB)	94	
Trans-1,2-Dichloroethene	115		Chlorobenzene	100	
Acrylonitrile	0		1,1,1,2-Tetrachloroethane	96	
2-Methoxy-2-Methylpropane	0		Ethylbenzene	90	
1,1-Dichloroethane	100		m & p-Xylene	94	
2,2-Dichloropropane	70		o-Xylene	89	
Cis-1,2-Dichloroethene	104		Total Xylenes	92	
2-Butanone	48		Styrene	88	
Methyl acrylate	0		Bromoform	84	
Propionitrile	0		Isopropylbenzene (Cumene)	84	
Bromochloromethane	99		Bromobenzene	94	
Methacrylonitrile	0		1,1,2,2-Tetrachloroethane	102	
Tetrahydrofuran	0		1,2,3-Trichloropropane	82	
Chloroform	97		Trans-1,4-Dichloro-2-butene	0	
1,1,1-Trichloroethane	97		n-Propylbenzene	87	
1-Chlorobutane	0		2-Chlorotoluene	89	
Carbon Tetrachloride	110		1,3,5-Trimethylbenzene	89	
1,1-Dichloropropene	85		4-Chlorotoluene	94	
Benzene	102		Tert-Butylbenzene	82	
1,2-Dichloroethane	97		Pentachloroethane	0	
Trichloroethene	94		1,2,4-Trimethylbenzene	92	
1,2-Dichloropropane	99		Sec-Butylbenzene	88	
Methyl Methacrylate	0		1,3-Dichlorobenzene	94	
Dibromomethane	99		p-Isopropyltoluene	87	
Bromodichloromethane	95		1,4-Dichlorobenzene	98	
2-Nitropropane	0		n-Butylbenzene	85	

Authorized By: 

Release Date: 2/14/96

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Analysis Report for

Volatile Organic Analysis

Project Name: Lakewood Plaza Cleaners

LIMS Project ID: 1034-96

Sample: 96038087 (Matrix Spike - LMX2) Date Received: 01/19/96

Method: SW8260

Field ID: MW-20B

Matrix: Water

Project Officer: Pam Marti

Date Analyzed: 01/24/96

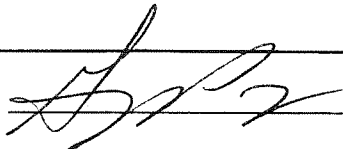
Units: % Recovery

Analyte	Result	Qualifier
---------	--------	-----------

1,2-Dichlorobenzene	102	
Hexachloroethane	0	
1,2-Dibromo-3-Chloropropane	91	
Nitrobenzene	0	
1,2,4-Trichlorobenzene	79	
Hexachlorobutadiene	84	
Naphthalene	68	
1,2,3-Trichlorobenzene	79	

Surrogate Recoveries

1,2-Dichloroethane-D4	96	%
1,4-Difluorobenzene	99	%
Toluene-D8	102	%
p-Bromofluorobenzene	97	%
1,2-Dichlorobenzene-D4	102	%

Authorized By: 

Release Date: 2/14/96

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Analysis Report for

Volatile Organic Analysis

Project Name: Lakewood Plaza Cleaners

LIMS Project ID: 1034-96

Sample: 96038088

Date Received: 01/19/96

Method: SW8260

Field ID: MW-32

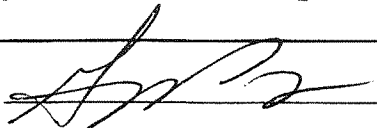
Matrix: Water

Project Officer: Pam Marti

Date Analyzed: 01/24/96

Units: ug/L

Analyte	Result	Qualifier	Analyte	Result	Qualifier
Dichlorodifluoromethane	5	U	Chloroacetonitrile	1	U
Chloromethane	1	U	Cis-1,3-Dichloropropene	2	U
Vinyl Chloride	2	U	4-Methyl-2-Pentanone	1	U
Bromomethane	1	U	1,1-Dichloropropanone	1	U
Chloroethane	1	U	Toluene	1	U
Trichlorofluoromethane	1	U	Trans-1,3-Dichloropropene	1	U
Ethyl Ether	2	U	Ethylmethacrylate	1	U
1,1-Dichloroethene	2	U	1,1,2-Trichloroethane	1	U
Methyl Iodide	1	U	Tetrachloroethene	.78	J
Acetone	5	U	1,3-Dichloropropane	1	U
Carbon Disulfide	5	U	2-Hexanone	2	U
Allyl Chloride	2	U	Dibromochloromethane	1	U
Methylene Chloride	1	U	1,2-Dibromoethane (EDB)	1	U
Trans-1,2-Dichloroethene	1	U	Chlorobenzene	1	U
Acrylonitrile	1	U	1,1,1,2-Tetrachloroethane	1	U
2-Methoxy-2-Methylpropane	1	U	Ethylbenzene	1	U
1,1-Dichloroethane	1	U	m & p-Xylene	1	U
2,2-Dichloropropane	1	U	o-Xylene	1	U
Cis-1,2-Dichloroethene	.58	J	Total Xylenes	1	U
2-Butanone	1	U	Styrene	2	U
Methyl acrylate	1	U	Bromoform	2	U
Propionitrile	10	UJ	Isopropylbenzene (Cumene)	1	U
Bromochloromethane	1	U	Bromobenzene	1	U
Methacrylonitrile	1	U	1,1,2,2-Tetrachloroethane	1	U
Tetrahydrofuran	2	U	1,2,3-Trichloropropane	1	U
Chloroform	1	U	Trans-1,4-Dichloro-2-butene	2	U
1,1,1-Trichloroethane	1	U	n-Propylbenzene	1	U
1-Chlorobutane	1	U	2-Chlorotoluene	1	U
Carbon Tetrachloride	1	U	1,3,5-Trimethylbenzene	1	U
1,1-Dichloropropene	1	U	4-Chlorotoluene	1	U
Benzene	1	U	Tert-Butylbenzene	1	U
1,2-Dichloroethane	1	U	Pentachloroethane	1	U
Trichloroethene	1	U	1,2,4-Trimethylbenzene	1	U
1,2-Dichloropropane	1	U	Sec-Butylbenzene	1	U
Methyl Methacrylate	5	UJ	1,3-Dichlorobenzene	1	U
Dibromomethane	1	U	p-Isopropyltoluene	1	U
Bromodichloromethane	1	U	1,4-Dichlorobenzene	1	U
2-Nitropropane	1	U	n-Butylbenzene	1	U

Authorized By: 

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Analysis Report for

Volatile Organic Analysis

Project Name: Lakewood Plaza Cleaners

LIMS Project ID: 1034-96

Sample: 96038088

Date Received: 01/19/96

Method: SW8260

Field ID: MW-32

Matrix: Water

Project Officer: Pam Marti

Date Analyzed: 01/24/96

Units: ug/L

Analyte	Result	Qualifier
---------	--------	-----------

1,2-Dichlorobenzene	1	U
Hexachloroethane	1	U
1,2-Dibromo-3-Chloropropane	1	U
Nitrobenzene	5	U
1,2,4-Trichlorobenzene	1	U
Hexachlorobutadiene	1	U
Naphthalene	2	U
1,2,3-Trichlorobenzene	2	U

Surrogate Recoveries

1,2-Dichloroethane-D4	100	%
1,4-Difluorobenzene	100	%
Toluene-D8	101	%
p-Bromofluorobenzene	91	%
1,2-Dichlorobenzene-D4	103	%

Authorized By: 

Release Date: 2/14/96

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Manchester Environmental Laboratory

Department of Ecology

Analysis Report for

Volatile Organic Analysis

Project Name: Lakewood Plaza Cleaners

LIMS Project ID: 1034-96

Sample: 96038089

Date Received: 01/19/96

Method: SW8260

Field ID: MW-16A

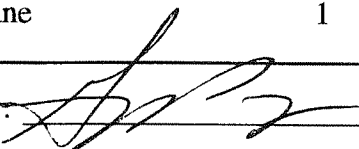
Matrix: Water

Project Officer: Pam Marti

Date Analyzed: 01/24/96

Units: ug/L

Analyte	Result	Qualifier	Analyte	Result	Qualifier
Dichlorodifluoromethane	5	U	Chloroacetonitrile	1	U
Chloromethane	1	U	Cis-1,3-Dichloropropene	2	U
Vinyl Chloride	2	U	4-Methyl-2-Pentanone	1	U
Bromomethane	1	U	1,1-Dichloropropanone	1	U
Chloroethane	1	U	Toluene	1	U
Trichlorofluoromethane	1	U	Trans-1,3-Dichloropropene	1	U
Ethyl Ether	2	U	Ethylmethacrylate	1	U
1,1-Dichloroethene	2	U	1,1,2-Trichloroethane	1	U
Methyl Iodide	1	U	Tetrachloroethene	47	E
Acetone	5	U	1,3-Dichloropropane	1	U
Carbon Disulfide	5	U	2-Hexanone	2	U
Allyl Chloride	2	U	Dibromochloromethane	1	U
Methylene Chloride	1	U	1,2-Dibromoethane (EDB)	1	U
Trans-1,2-Dichloroethene	1	U	Chlorobenzene	1	U
Acrylonitrile	1	U	1,1,1,2-Tetrachloroethane	1	U
2-Methoxy-2-Methylpropane	1	U	Ethylbenzene	1	U
1,1-Dichloroethane	1	U	m & p-Xylene	1	U
2,2-Dichloropropane	1	U	o-Xylene	1	U
Cis-1,2-Dichloroethene	1.5		Total Xylenes	1	U
2-Butanone	1	U	Styrene	2	U
Methyl acrylate	1	U	Bromoform	2	U
Propionitrile	10	UJ	Isopropylbenzene (Cumene)	1	U
Bromochloromethane	1	U	Bromobenzene	1	U
Methacrylonitrile	1	U	1,1,2,2-Tetrachloroethane	1	U
Tetrahydrofuran	2	U	1,2,3-Trichloropropane	1	U
Chloroform	1	U	Trans-1,4-Dichloro-2-butene	2	U
1,1,1-Trichloroethane	1	U	n-Propylbenzene	1	U
1-Chlorobutane	1	U	2-Chlorotoluene	1	U
Carbon Tetrachloride	1	U	1,3,5-Trimethylbenzene	1	U
1,1-Dichloropropene	1	U	4-Chlorotoluene	1	U
Benzene	1	U	Tert-Butylbenzene	1	U
1,2-Dichloroethane	1	U	Pentachloroethane	1	U
Trichloroethene	.79	J	1,2,4-Trimethylbenzene	1	U
1,2-Dichloropropane	1	U	Sec-Butylbenzene	1	U
Methyl Methacrylate	5	UJ	1,3-Dichlorobenzene	1	U
Dibromomethane	1	U	p-Isopropyltoluene	1	U
Bromodichloromethane	1	U	1,4-Dichlorobenzene	1	U
2-Nitropropane	1	U	n-Butylbenzene	1	U

Authorized By: 

Release Date: 2/14/96

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LIMS Project ID: 1034-96

Sample: 96038089

Date Received: 01/19/96

Method: SW8260

Field ID: MW-16A

Date Analyzed: 01/24/96

Matrix: Water

Project Officer: Pam Marti

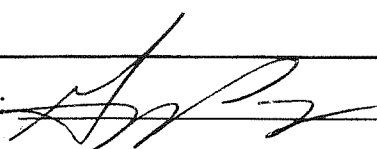
Units: ug/L

Analyte	Result	Qualifier
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1,2-Dichlorobenzene	1	U
Hexachloroethane	1	U
1,2-Dibromo-3-Chloropropane	1	U
Nitrobenzene	5	U
1,2,4-Trichlorobenzene	1	U
Hexachlorobutadiene	1	U
Naphthalene	2	U
1,2,3-Trichlorobenzene	2	U

Surrogate Recoveries

1,2-Dichloroethane-D4	98	%
1,4-Difluorobenzene	99	%
Toluene-D8	102	%
p-Bromofluorobenzene	91	%
1,2-Dichlorobenzene-D4	101	%

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Analysis Report for

Volatile Organic Analysis

Project Name: Lakewood Plaza Cleaners	LIMS Project ID: 1034-96
Sample: 96038090	Date Received: 01/19/96
Field ID: MW--16B	Method: SW8260
Project Officer: Pam Marti	Date Analyzed: 01/24/96
	Matrix: Water
	Units: ug/L

Analyte	Result	Qualifier	Analyte	Result	Qualifier
Dichlorodifluoromethane	5	U	Chloroacetonitrile	1	U
Chloromethane	1	U	Cis-1,3-Dichloropropene	2	U
Vinyl Chloride	2	U	4-Methyl-2-Pentanone	1	U
Bromomethane	1	U	1,1-Dichloropropanone	1	U
Chloroethane	1	U	Toluene	1	U
Trichlorofluoromethane	1	U	Trans-1,3-Dichloropropene	1	U
Ethyl Ether	2	U	Ethylmethacrylate	1	U
1,1-Dichloroethene	2	U	1,1,2-Trichloroethane	1	U
Methyl Iodide	1	U	Tetrachloroethene	46	E
Acetone	5	U	1,3-Dichloropropane	1	U
Carbon Disulfide	5	U	2-Hexanone	2	U
Allyl Chloride	2	U	Dibromochloromethane	1	U
Methylene Chloride	1	U	1,2-Dibromoethane (EDB)	1	U
Trans-1,2-Dichloroethene	1	U	Chlorobenzene	1	U
Acrylonitrile	1	U	1,1,1,2-Tetrachloroethane	1	U
2-Methoxy-2-Methylpropane	1	U	Ethylbenzene	1	U
1,1-Dichloroethane	1	U	m & p-Xylene	1	U
2,2-Dichloropropane	1	U	o-Xylene	1	U
Cis-1,2-Dichloroethene	1.5		Total Xylenes	1	U
2-Butanone	1	U	Styrene	2	U
Methyl acrylate	1	U	Bromoform	2	U
Propionitrile	10	UJ	Isopropylbenzene (Cumene)	1	U
Bromochloromethane	1	U	Bromobenzene	1	U
Methacrylonitrile	1	U	1,1,2,2-Tetrachloroethane	1	U
Tetrahydrofuran	2	U	1,2,3-Trichloropropane	1	U
Chloroform	1	U	Trans-1,4-Dichloro-2-butene	2	U
1,1,1-Trichloroethane	1	U	n-Propylbenzene	1	U
1-Chlorobutane	1	U	2-Chlorotoluene	1	U
Carbon Tetrachloride	1	U	1,3,5-Trimethylbenzene	1	U
1,1-Dichloropropene	1	U	4-Chlorotoluene	1	U
Benzene	1	U	Tert-Butylbenzene	1	U
1,2-Dichloroethane	1	U	Pentachloroethane	1	U
Trichloroethene	.74	J	1,2,4-Trimethylbenzene	1	U
1,2-Dichloropropane	1	U	Sec-Butylbenzene	1	U
Methyl Methacrylate	5	UJ	1,3-Dichlorobenzene	1	U
Dibromomethane	1	U	p-Isopropyltoluene	1	U
Bromodichloromethane	1	U	1,4-Dichlorobenzene	1	U
2-Nitropropane	1	U	n-Butylbenzene	1	U

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Analysis Report for

Volatile Organic Analysis

Project Name: Lakewood Plaza Cleaners

LIMS Project ID: 1034-96

Sample: 96038090

Date Received: 01/19/96

Method: SW8260

Field ID: MW--16B

Matrix: Water

Project Officer: Pam Marti

Date Analyzed: 01/24/96

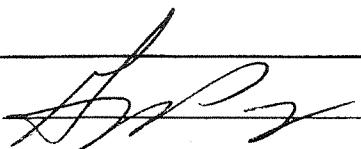
Units: ug/L

Analyte	Result	Qualifier
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1,2-Dichlorobenzene	1	U
Hexachloroethane	1	U
1,2-Dibromo-3-Chloropropane	1	U
Nitrobenzene	5	U
1,2,4-Trichlorobenzene	1	U
Hexachlorobutadiene	1	U
Naphthalene	2	U
1,2,3-Trichlorobenzene	2	U

Surrogate Recoveries

1,2-Dichloroethane-D4	99	%
1,4-Difluorobenzene	101	%
Toluene-D8	101	%
p-Bromofluorobenzene	91	%
1,2-Dichlorobenzene-D4	102	%

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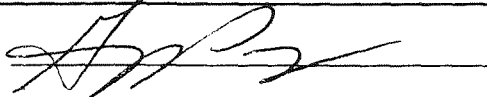
Department of Ecology

Analysis Report for

Volatile Organic Analysis

Project Name: Lakewood Plaza Cleaners	LIMS Project ID: 1034-96
Sample: BLN60225	Method: SW8260
Blank ID: DBW6024	Matrix: Water
Project Officer: Pam Marti	Date Analyzed: 01/24/96
	Units: ug/L

Analyte	Result	Qualifier	Analyte	Result	Qualifier
Dichlorodifluoromethane	5	U	Chloroacetonitrile	1	U
Chloromethane	1	U	Cis-1,3-Dichloropropene	2	U
Vinyl Chloride	2	U	4-Methyl-2-Pentanone	1	U
Bromomethane	1	U	1,1-Dichloropropanone	1	U
Chloroethane	1	U	Toluene	1	U
Trichlorofluoromethane	1	U	Trans-1,3-Dichloropropene	1	U
Ethyl Ether	2	U	Ethylmethacrylate	1	U
1,1-Dichloroethene	2	U	1,1,2-Trichloroethane	1	U
Methyl Iodide	1	U	Tetrachloroethene	1	U
Acetone	5	U	1,3-Dichloropropane	1	U
Carbon Disulfide	5	U	2-Hexanone	2	U
Allyl Chloride	2	U	Dibromochloromethane	1	U
Methylene Chloride	.056	J	1,2-Dibromoethane (EDB)	1	U
Trans-1,2-Dichloroethene	1	U	Chlorobenzene	1	U
Acrylonitrile	1	U	1,1,1,2-Tetrachloroethane	1	U
2-Methoxy-2-Methylpropane	1	U	Ethylbenzene	1	U
1,1-Dichloroethane	1	U	m & p-Xylene	1	U
2,2-Dichloropropane	1	U	o-Xylene	1	U
Cis-1,2-Dichloroethene	1	U	Total Xylenes	1	U
2-Butanone	1	U	Styrene	2	U
Methyl acrylate	1	U	Bromoform	2	U
Propionitrile	10	UJ	Isopropylbenzene (Cumene)	1	U
Bromochloromethane	1	U	Bromobenzene	1	U
Methacrylonitrile	1	U	1,1,2,2-Tetrachloroethane	1	U
Tetrahydrofuran	2	U	1,2,3-Trichloropropane	1	U
Chloroform	1	U	Trans-1,4-Dichloro-2-butene	2	U
1,1,1-Trichloroethane	1	U	n-Propylbenzene	1	U
1-Chlorobutane	1	U	2-Chlorotoluene	1	U
Carbon Tetrachloride	1	U	1,3,5-Trimethylbenzene	1	U
1,1-Dichloropropene	1	U	4-Chlorotoluene	1	U
Benzene	.052	J	Tert-Butylbenzene	1	U
1,2-Dichloroethane	1	U	Pentachloroethane	1	U
Trichloroethene	1	U	1,2,4-Trimethylbenzene	1	U
1,2-Dichloropropane	1	U	Sec-Butylbenzene	1	U
Methyl Methacrylate	5	UJ	1,3-Dichlorobenzene	1	U
Dibromomethane	1	U	p-Isopropyltoluene	1	U
Bromodichloromethane	1	U	1,4-Dichlorobenzene	1	U
2-Nitropropane	1	U	n-Butylbenzene	1	U

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Release Date: 2/14/96

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Analysis Report for

Volatile Organic Analysis

Project Name: Lakewood Plaza Cleaners

LIMS Project ID: 1034-96

Sample: BLN60225

Method: SW8260

Blank ID: DBW6024

Matrix: Water

Project Officer: Pam Marti

Date Analyzed: 01/24/96

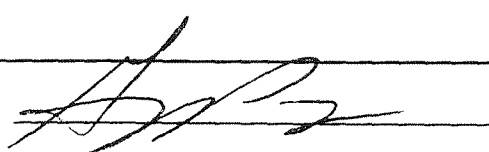
Units: ug/L

Analyte	Result	Qualifier
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1,2-Dichlorobenzene	1	U
Hexachloroethane	1	U
1,2-Dibromo-3-Chloropropane	1	U
Nitrobenzene	5	U
1,2,4-Trichlorobenzene	1	U
Hexachlorobutadiene	1	U
Naphthalene	.87	J
1,2,3-Trichlorobenzene	2	U

Surrogate Recoveries

1,2-Dichloroethane-D4	99	%
1,4-Difluorobenzene	101	%
Toluene-D8	99	%
p-Bromofluorobenzene	93	%
1,2-Dichlorobenzene-D4	99	%

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