A Department of Ecology Report

WASHINGTON STATE DEPARTMENT OF ECOLOGY

Argonne Road Ground Water Characterization of Organic Solvents November 1995 & May 1996

Summary

Ground water samples for volatile organic analysis (VOAs) were collected from nine monitoring wells and three private wells along Argonne Road to define the current distribution and concentrations of contaminants in a small alluvial aquifer east of Spokane. The suspected source is a sludge disposal area.

PERC, TCE, and cis-1,2,-DCE were detected in three of the monitoring wells (29P3, 32C4, 32M3) and one private well (32C1). The highest concentrations were detected in 29P3, which is a shallow well (~ 30 feet deep) located about 1000 feet downgradient of the sludge disposal area. PERC, TCE, and cis-1,2,-DCE concentrations in this well were 88 µg/L, 11 µg/L, and 21 µg/L in November 1995; and 90 µg/L, 17 µg/L, and 28 µg/L, respectively, in May 1996. Model Toxic Control Act (MTCA) cleanup levels were exceeded for PERC (5.0 µg/L) in wells 29P3, 32C4, 32C1, and 32M3. TCE cleanup levels (5.0 µg/L) were also slightly exceeded in wells 29P3 and 32C4.

Overall, concentrations have decreased since the detection of contamination in 1981. Although downgradient municipal wells drilled in the Spokane Valley-Rathdrum Prairie (SVRP) aquifer have not been affected, migration of contaminated ground water to these wells continues to be of concern. To reduce contaminant loading to the SVRP aquifer, a ground water remediation and monitoring program should be designed and implemented to remove and treat the organic compounds. Periodic ground water sampling should continue.

Background

In 1981 a small, unconfined alluvial aquifer east of Spokane, Washington was found to contain the dissolved organic compounds tetrachloroethene, trichloroethene, 1,1,1-trichloroethane, and trans-1,2-dichloroethene (Dion 1987). The contamination was discovered when the owner of a well near a sludge disposal site filed a complaint with county and state authorities. The disposal site was located in a 40-acre field at the

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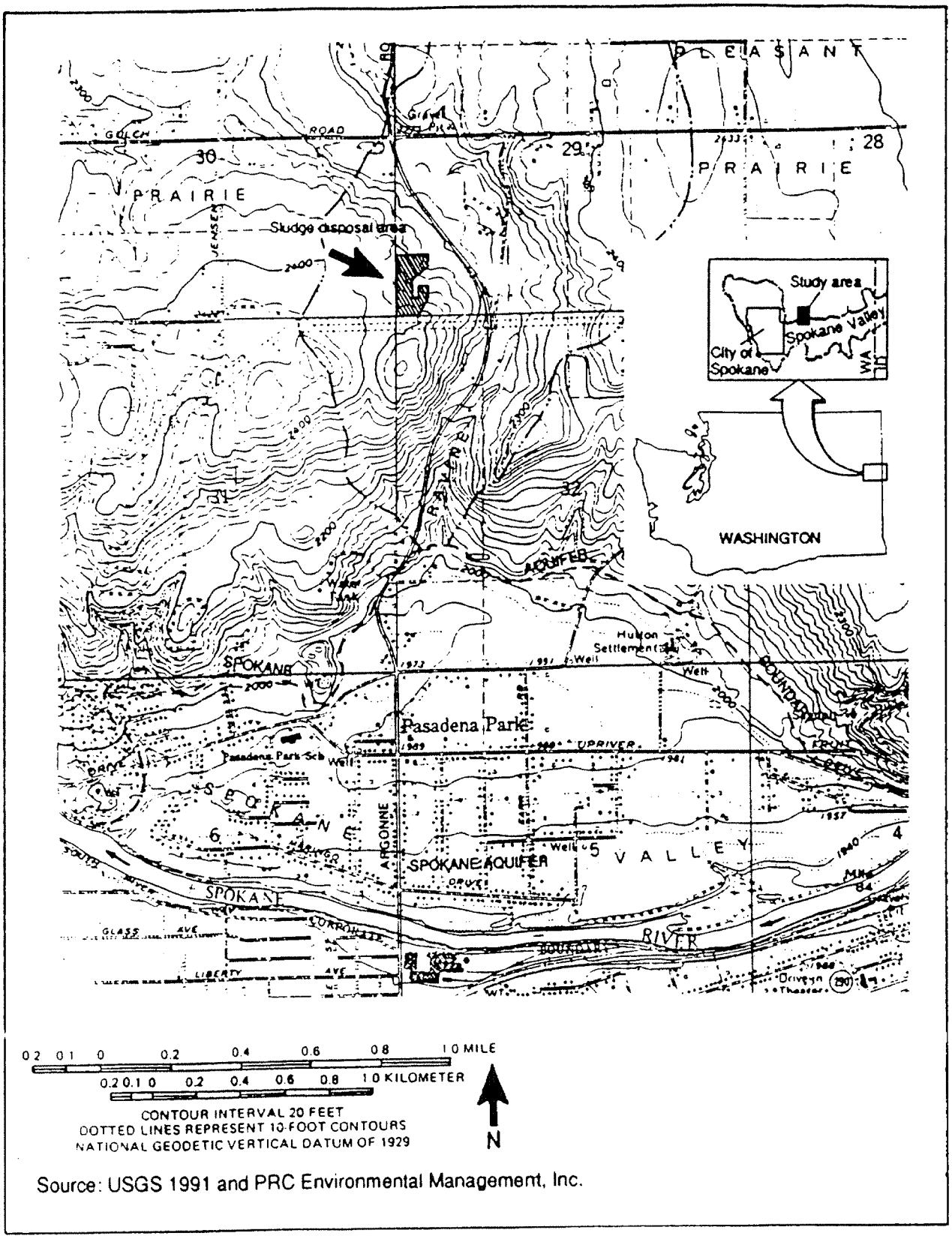
northwest edge of a small wooded ravine, west of Argonne Road (Figure 1). About 15 acres of the field were used for the disposal of septic tank sludge from the early 1970s until 1984. Surface elevations of the disposal area are approximately 2,380 to 2,320 feet above mean sea level, sloping to the northeast. Wastes were discharged directly onto the land surface with no containment. On an average day several truckloads of waste were dumped at the site. The chlorinated organic compounds detected in the alluvial aquifer are commonly used as industrial solvents, degreasing agents, dry cleaning solvents, and septic tank cleaners.

The primary concern in 1981 was that the contaminants in the alluvial aquifer would migrate south about one mile to the Spokane Valley-Rathdrum Prairie (SVRP) aquifer. The SVRP is designated a sole source aquifer and supplies most domestic and public-supply wells in the region. The alluvial aquifer which occurs in the ravine along Argonne Road is in direct hydraulic connection with the SVRP aquifer (Dion and Sumioka 1991).

In response to the homeowner complaint in 1981, Ecology implemented a sampling program between November 1981 and April 1984. Two separate studies were conducted by the USGS in cooperation with Ecology between 1985 and 1988 (Dion 1987; Dion and Sumioka 1991). Data showed that ground water contaminated with organic compounds extended into the SVRP aquifer, but had not affected local municipal wells. There were no ground water samples collected between 1988 and 1995.

Data collected by Ecology in 1995 indicate that contaminant concentrations in the affected alluvial wells have generally decreased (Broadhead 1995). Soil samples were collected from the sludge disposal area in 1982 and 1995 (Ecology files). All soil samples were collected between one and four feet below the ground surface. Low concentrations of PERC and TCE were detected in the four samples collected in 1982. The shallow soil samples Ecology collected in 1995 did not exhibit any residual contamination from volatile organics (Broadhead 1995).

The site geology has been thoroughly described in two USGS reports: Dion (1987), and Dion and Sumioka (1991). The alluvial aquifer is unconfined and exists in an alluvium-filled ravine that cuts into granitic bedrock. The aquifer consists of alluvial silt and sand, as well as weathered granite. Aquifer depth ranges from 20 to 120 feet below ground surface. Estimated hydraulic conductivity is approximately two to three feet per day. Direction of ground water flow is south. One mile downgradient of the alluvial aquifer is the SVRP aquifer which was accorded "Sole Source" status in 1978 by EPA. The SVRP aquifer is comprised of highly transmissive, glaciofluvial sand and gravel deposits. Ground water flows east to west and eventually discharges to the Spokane and Little Spokane Rivers.



Source: USGS 1991 and PRC Environmental Management, Inc.

Figure 1: Sludge Disposal Site Vicinity

Objectives

The Toxics Cleanup Program (TCP) requested that Environmental Investigations and Laboratory Services Program (EILS) conduct ground water sampling along Argonne Road to define the current distribution and concentrations of the contaminants in the alluvial aquifer. To meet these objectives, ground water samples for volatile organics analysis (VOAs) were collected from existing monitoring wells and private wells along Argonne Road.

Results

Field Observations

Ground water samples were collected from nine monitoring wells: 29M2, 29N3, 29N4, 29N2, 29N5, 29P3, 32C4, 32C3, and 32M3, and two private wells, 29P2 and 32C1, in November 1995 (Figure 2). In May, an additional private well (29P1) was sampled. Depth-to-water measurements, purge volume, pH, specific conductance, and temperature results for both sample events are listed in Table 1.

Water levels in wells 29M2, 29N5, 29N2, 29N4, and 32C4 dropped while purging, sometimes substantially. In some of these wells the water level dropped as much as 30 feet. Wells 29N3 and 32C3 were purged dry. Wells 29M2, 29N5, and 29N3 are screened in fine-grained sediments.

Analytical Results

Analytical results for volatile organics (VOAs) are summarized in Table 2 for both sample events. For comparison, results from the March 1995 sampling have also been included in Table 2. Laboratory reporting sheets and a quality assurance review are presented in Appendix A.

In both November 1995 and May 1996, tetrachloroethene (PERC), trichloroethene (TCE), and cis-1,2-dichloroethene (cis-1,2-DCE) were detected in four of the wells: 29P3, 32C4, 32C1, and 32M3. The highest concentrations occurred in well 29P3, with concentrations of 88 µg/L (PERC), 11 µg/L (TCE), and 21 µg/L (cis-1,2-DCE) in November samples, and 90 µg/L, 17 µg/L, and 28 µg/L, respectively, were reported in May samples. PERC and TCE were also detected in several other wells in November, but below the practical quantitation limit of 1 µg/L.

A summary of historical data for this project is presented in Appendix B.

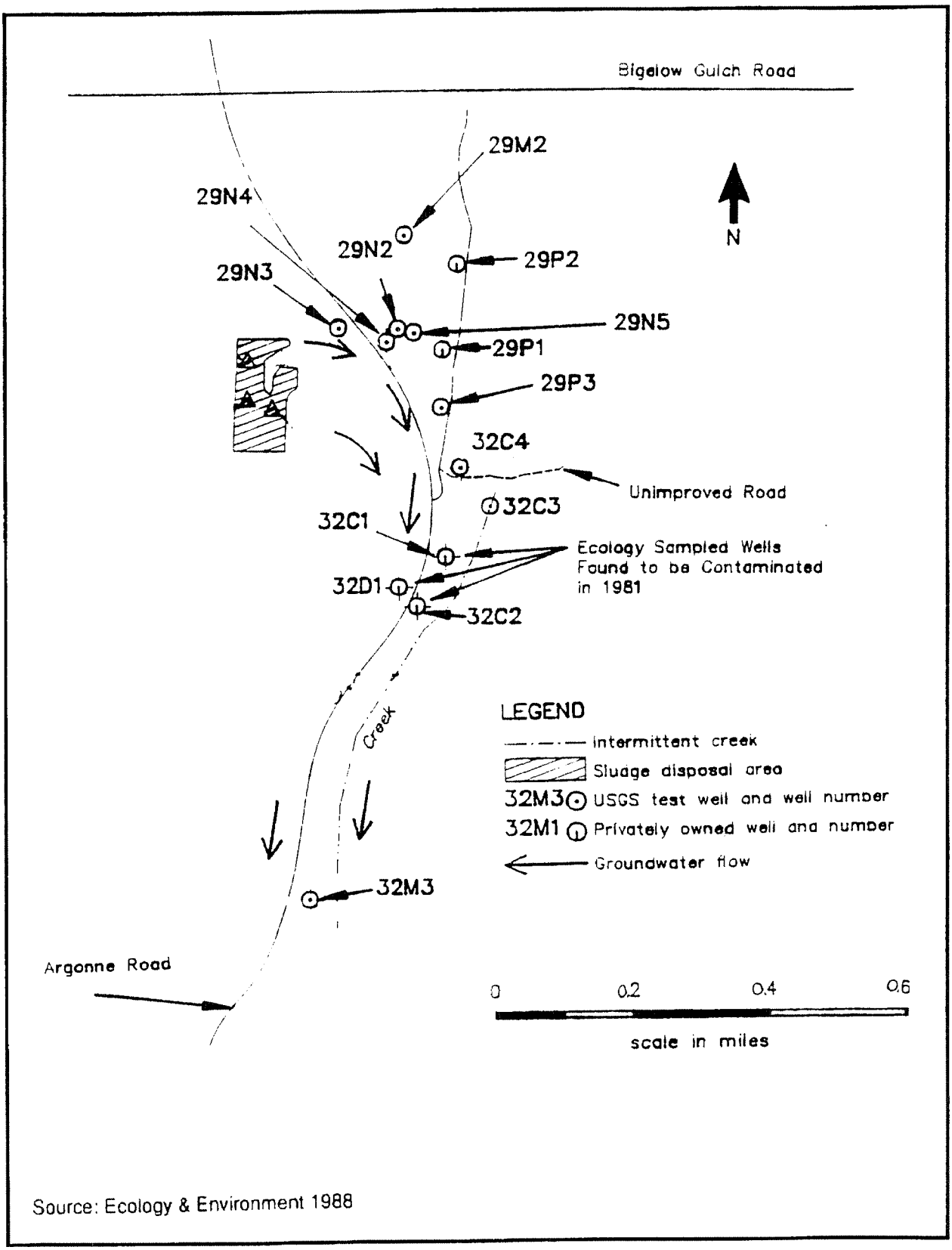


Figure 2: Argonne Road Well Locations

Table 1: Field Parameter Results for November 1995 and May 1996

Well Identification	Total Depth (Feet)	Depth to Water (Feet)		pH (standard units)		Specific Conductance (umhos/cm)		Temperature (°C)		Purge Volume (gallons)	
		November	May	November	May	November	May	November	May	November	May
										calculated/actual	calculated/actual
29M2	80.24	21.08	12.55	7.5	7.1	240	240	9.9	10.1	29/7[2]	34/15[2]
29P2	?	++	++	7.2	6.5	280	185	9.6	6.6	100	150
29N3	55.4	22.12	20.12	7.1	6.9	125	111	9.5	9.5	19/6[1]	20/7.3[1]
29N4	38.9	33.76	28.53	6.6	6.3	129	128	9.7	8.7	3/3[2]	5/5[2]
29N2	79.95	34.43	27.06	6.7	6.5	115	115	10.3	9.5	23/20[2]	27/30[2]
29N5	113.43	37.52	30.07	6.8	6.5	125	125	10.0	11.2	40/8[2]	42/8[2]
29P1	60	--	++	--	6.8	--	251	--	6.9	--	240/240
29P3	30	20.0	13.32	7.0	6.4	465	550	10.0	9.6	5/5	8/8
32C4	48.2	30.40	23.42	7.3	7.3	335	413	10.3	9.6	8/12[2]	13/20[2]
32C3	21.36	17.36	11.71	7.0	6.4	165	205	9.3	7.2	1.5/1.0[1]	4.8/2.5[1]
32C1	72	++	++	7.2	7.2	455	405	8.8	9.9	1200	200
32M3	223	111.83	102.33	7.3	7.3	480	415	11.1	11.2	217/220	236/225

++ = Dedicated pump obstructs water-level measurement.
1 = Well was purged dry
2 = Substantial water level drop during purging.
-- = Not sampled

Table 2: Summary of Volatile Organics (ug/L) Detected in Samples Collected March and November 1995 and May 1996

Well Identification	Total Depth (Feet)	Tetrachloroethene (PERC)			Trichloroethene (TCE)			cis-1,2-Dichloroethene (cis-1,2-DCE)		
		March	November	May	March	November	May	March	November	May
29M2	80.24	1 U	1 U	1 U	1 U	0.12 J	1 U	1 U	1 U	1 U
29P2	?	1 U	0.12 J	1 U	1 U	0.096 J	1 U	1 U	1 U	1 U
29N3	55.4	1 U	1 U	1 U	1 U	0.16 J	1 U	1 U	1 U	1 U
29N4	38.9	1.5	0.55 J	0.56 J	1 U	0.13 J	1 U	1 U	1 U	1 U
29N2	79.95	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
29N5	113.43	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
29P1	60	--	--	1 U	--	--	1 U	--	--	2 U
29P3	30	156 E	88	90	17.4	11	17	27.2	21	28
32C4	48.2	89.5 E	55	31	10.9	6.8	3.5	18.3	15	5.8
32C3	21.36	1 U	1 U	1 U	1 U	0.15 J	1 U	1 U	1 U	2 U
32C1	72	31.3	21	29	3.4	2.6	2.9	6.0	5.4	3.4
32M3	223	38.9	21	24	3.2	1.9	1.9	2.4	1.9	1.4 J

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 sampled.

Discussion and Conclusions

Volatile organic concentrations in the affected alluvial aquifer wells have generally decreased since sludge disposal ceased in 1984. This is most notable in well 32C1, where PERC concentrations decreased by more than 70% from approximately 730 ppb in 1984 to 200 ppb in 1985. In 1995, PERC concentrations in this well had decreased to about 30 ppb. Except for some inconsistencies in the initial analytical results of the 1980s, concentrations in monitoring wells 29P3, 32C4, and 32M3 have also decreased. Between March 1995 and May 1996, PERC concentrations for these three wells averaged 110 ppb, 60 ppb, and 30 ppb, respectively.

Model Toxic Control Act (MTCA) cleanup levels were exceeded for PERC (5.0 µg/L) in wells 29P3, 32C4, 32C1, and 32M3. TCE cleanup levels (5.0 µg/L) were also exceeded in wells 29P3 and 32C4.

Work conducted by the USGS (Dion and Sumioka 1991), showed that the alluvial aquifer along Argonne Road is in direct hydraulic connection with the SVRP aquifer. Data collected between 1986 and 1988 indicated that the organic compounds extended into the SVRP aquifer, but had not affected local municipal wells. Since 1980, the Spokane County Aquifer Protection Group has been monitoring target wells in the SVRP aquifer for VOAs on a quarterly basis (PRC, 1993). Organic compounds have not been detected in any municipal wells directly downgradient of the alluvial aquifer.

Although contaminant concentrations have decreased since 1984, concentrations continue to be elevated in wells 32C1 and 32M3, with the highest concentrations occurring in wells 29P3 and 32C4. While local municipal wells drilled downgradient in the SVRP aquifer have not been affected, migration of contaminated ground water into the SVRP aquifer from the small ravine continues to be of concern.

Recommendations

- A ground water remediation and monitoring program should be designed and implemented in the vicinity of wells 29P3 and 32C4 to capture and treat ground water in the ravine and to eliminate alluvial aquifer contaminant loading to the SVRP aquifer.

- Ground water flow beneath and immediately east of the disposal area should be characterized. Ground water samples and deeper soil samples should be collected to determine if solvents are still present beneath the disposal site.

- Periodic ground water sampling should be conducted on selected wells in the alluvial aquifer to determine long-term trends of the contaminant concentrations. At a minimum, wells 32M3, 32C4, 29P3, and 32C1 should continue to be sampled annually for VOAs. Samples should be collected in late summer or early fall, when water levels are the lowest.

- This report should be sent to homeowners in the area as well as to the Pasadena Water District.

Methods

Ground Water Sampling

Ground water samples were obtained twice over a one-year period to define the current distribution and concentration of the contaminant plume. Samples were collected for volatile organic analysis from nine monitoring wells and three private wells (Figure 2).

Prior to sampling, static water level measurements were obtained from monitoring wells using a commercial electric water level probe. The probe was rinsed with deionized water and wiped clean between measurements. Based on the purge volume, wells were purged with either a teflon bailer or submersible pump. Wells were purged until pH, specific conductance and temperature readings stabilized, and a minimum of three well volumes had been removed. The estimated purge volume was not achieved in wells 29M2 and 29N5 due to a substantial drop in the water level while purging. Wells 29N3 and 32C3 were purged dry. Based on the low concentrations of contaminants detected in 1995, all purge water was discharged to the ground near each well. The three private wells were purged using the existing pumps.

Monitoring well samples were collected using decontaminated, bottom-emptying teflon bailers. Bailers were pre-cleaned with sequential washes of Liquinox®, hot tap water, 10% nitric acid, distilled-deionized water and pesticide-grade acetone. After cleaning, bailers were air-dried and wrapped in aluminum foil. Samples from the private wells were collected from the tap nearest the wellhead prior to any water treatment. Samples for VOAs were collected free of headspace and preserved with 1:1 hydrochloric acid.

Chain-of-custody procedures were followed in accordance with Manchester Laboratory protocol (Ecology, 1994). All samples were analyzed by the Ecology/EPA Laboratory in Manchester.

Quality Assurance

In general, the quality of the data is acceptable for use for both sample rounds. Volatile organic samples were analyzed using EPA SW8260 (U.S. EPA, 1986). Quality control samples collected in the field consisted of a transfer blank and a blind duplicate sample. A transfer blank was collected by pouring organic-free water through a decontaminated bailer. Acetone was detected in the May transfer blank, but was not detected in any of the other samples. A blind duplicate sample was collected in May from monitoring well 32C4. Duplicate samples 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 7%, 6%, and 2%, respectively.

In addition to field quality control samples, surrogate compound recoveries, matrix spikes, and matrix spike duplicates were performed in the laboratory. Low levels of common laboratory solvents were detected in some of the laboratory blanks. However, these analytes were not detected in the field samples. Surrogate recoveries were within acceptable limits of ±25% for water samples. Overall, matrix spike and spike duplicate recoveries were within acceptable QC limits. 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. Greg Perez of the Manchester Laboratory conducted the quality assurance review, which has been included in Appendix A.

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APPENDIX A

Analytical Results
November 1995 and May 1996

Manchester Environmental Laboratory

7411 Beach Dr E, Port Orchard Washington 98366

CASE NARRATIVE

January 26, 1996

Subject: Argonne Road
Samples: 95488105 - 116
Case No. 236695
Officer: Pam Marti
By: Greg Perez
Organics Analysis Unit

VOLATILE ORGANIC ANALYSIS

SUMMARY:

No difficulties were encountered in the analysis of these samples. The data is usable as qualified.

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 qualified as estimates on the sample associated with the matrix spikes..

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: Argonne Road **LIMS Project ID:** 2366-95

Sample: 95488105 **Date Received:** 12/01/95 **Method:** SW8260
Field ID: 32M3 **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 12/07/95 **Units:** ug/L

Analyte	Result	Qualifier	Analyte	Result	Qualifier
Dichlorodifluoromethane	1	U	Chloroacetonitrile	2	UJ
Chloromethane	1	U	Cis-1,3-Dichloropropene	1.1	U
Vinyl Chloride	1	U	4-Methyl-2-Pentanone	2	U
Bromomethane	2	U	1,1-Dichloropropanone	1	U
Chloroethane	1	U	**Toluene**	**2.7**	
Trichlorofluoromethane	1	U	Trans-1,3-Dichloropropene	.94	U
Ethyl Ether	1	U	Ethylmethacrylate	1	U
1,1-Dichloroethene	1	UJ	1,1,2-Trichloroethane	1	U
Methyl Iodide	2	UJ	**Tetrachloroethene**	**21**	
Acetone	10	U	1,3-Dichloropropane	1	U
Carbon Disulfide	2	U	2-Hexanone	2	UJ
Allyl Chloride	1	UJ	Dibromochloromethane	1	UJ
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	UJ
2-Methyoxy-2-Methylpropane	1	U	Ethylbenzene	1	U
1,1-Dichloroethane	1	U	m & p-Xylene	2	U
2,2-Dichloropropane	1	U	o-Xylene	1	U
Cis-1,2-Dichloroethene	**1.9**		Total Xylenes	3	U
2-Butanone	2	U	Styrene	1	U
Methyl acrylate	1	U	Bromoform	1	U
Propionitrile	10	UJ	Isopropylbenzene (Cumene)	1	U
Bromochloromethane	1	U	Bromobenzene	1	U
Methyacrilonitrile	1	U	1,1,2,2-Tetrachloroethane	1	UJ
Tetrahydrofuran	5	U	1,2,3-Trichloropropane	1	U
Chloroform	1	U	Trans-1,4-Dichloro-2-butene	1	UJ
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	UJ	4-Chlorotoluene	1	U
Benzene	1	U	Tert-Butylbenzene	1	U
1,2-Dichloroethane	1	U	Pentachloroethane	1	U
Trichloroethene	**1.9**		1,2,4-Trimethylbenzene	1	U
1,2-Dichloropropane	1	U	Sec-Butylbenzene	1	U
Methyl Methacrylate	1	U	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: 1/25/96

Manchester Environmental Laboratory

Department of Ecology

Analysis Report for

Volatile Organic Analysis

Project Name: Argonne Road **LIMS Project ID:** 2366-95

Sample: 95488105 **Date Received:** 12/01/95 **Method:** SW8260
Field ID: 32M3 **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 12/07/95 **Units:** ug/L

Analyte	Result	Qualifier
1,2-Dichlorobenzene	1	U
Hexachloroethane	1	U
1,2-Dibromo-3-Chloropropane	1	U
Nitrobenzene	10	UJ
1,2,4-Trichlorobenzene	1	U
Hexachlorobutadiene	1	U
Naphthalene	1	U
1,2,3-Trichlorobenzene	1	U

Surrogate Recoveries

1,2-Dichloroethane-D4	**106**	%
1,4-Difluorobenzene	**100**	%
Toluene-D8	**101**	%
p-Bromofluorobenzene	**98**	%
1,2-Dichlorobenzene-D4	**97**	%

Authorized By: _____ Release Date: 1/25/96

Manchester Environmental Laboratory

Department of Ecology

Analysis Report for

Volatile Organic Analysis

Project Name: Argonne Road **LIMS Project ID:** 2366-95

Sample: 95488106 **Date Received:** 12/01/95 **Method:** SW8260
Field ID: 32C3 **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 12/07/95 **Units:** ug/L

Analyte	Result	Qualifier	Analyte	Result	Qualifier
Dichlorodifluoromethane	1	U	Chloroacetonitrile	2	UJ
Chloromethane	1	U	Cis-1,3-Dichloropropene	1.1	U
Vinyl Chloride	1	U	4-Methyl-2-Pentanone	2	U
Bromomethane	2	U	1,1-Dichloropropanone	1	U
Chloroethane	1	U	Toluene	1	U
Trichlorofluoromethane	1	U	Trans-1,3-Dichloropropene	.94	U
Ethyl Ether	1	U	Ethylmethacrylate	1	U
1,1-Dichloroethene	1	UJ	1,1,2-Trichloroethane	1	U
Methyl Iodide	2	UJ	Tetrachloroethene	1	U
Acetone	10	U	1,3-Dichloropropane	1	U
Carbon Disulfide	2	U	2-Hexanone	2	UJ
Allyl Chloride	1	UJ	Dibromochloromethane	1	UJ
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	UJ
2-Methyoxy-2-Methylpropane	1	U	Ethylbenzene	1	U
1,1-Dichloroethane	1	U	m & p-Xylene	2	U
2,2-Dichloropropane	1	U	o-Xylene	1	U
Cis-1,2-Dichloroethene	1	U	Total Xylenes	3	U
2-Butanone	2	U	Styrene	1	U
Methyl acrylate	1	U	Bromoform	1	U
Propionitrile	10	UJ	Isopropylbenzene (Cumene)	1	U
Bromochloromethane	1	U	Bromobenzene	1	U
Methyacrilonitrile	1	U	1,1,2,2-Tetrachloroethane	1	UJ
Tetrahydrofuran	5	U	1,2,3-Trichloropropane	1	U
Chloroform	1	U	Trans-1,4-Dichloro-2-butene	1	UJ
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	UJ	4-Chlorotoluene	1	U
Benzene	1	U	Tert-Butylbenzene	1	U
1,2-Dichloroethane	1	U	Pentachloroethane	1	U
Trichloroethene	**.15**	**J**	1,2,4-Trimethylbenzene	1	U
1,2-Dichloropropane	1	U	Sec-Butylbenzene	1	U
Methyl Methacrylate	1	U	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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Manchester Environmental Laboratory

Department of Ecology

Analysis Report for

Volatile Organic Analysis

Project Name: Argonne Road **LIMS Project ID:** 2366-95

Sample: 95488106 **Date Received:** 12/01/95 **Method:** SW8260
Field ID: 32C3 **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 12/07/95 **Units:** ug/L

Analyte	Result	Qualifier
1,2-Dichlorobenzene	1	U
Hexachloroethane	1	U
1,2-Dibromo-3-Chloropropane	1	U
Nitrobenzene	10	UJ
1,2,4-Trichlorobenzene	1	U
Hexachlorobutadiene	1	U
Naphthalene	1	U
1,2,3-Trichlorobenzene	1	U

Surrogate Recoveries

1,2-Dichloroethane-D4	**107**	**%**
1,4-Difluorobenzene	**100**	**%**
Toluene-D8	**98**	**%**
p-Bromofluorobenzene	**98**	**%**
1,2-Dichlorobenzene-D4	**99**	**%**

Authorized By: _____ Release Date: 1/25/96

Manchester Environmental Laboratory

Department of Ecology

Analysis Report for

Volatile Organic Analysis

Project Name: Argonne Road **LIMS Project ID:** 2366-95

Sample: 95488107 **Date Received:** 12/01/95 **Method:** SW8260
Field ID: 32C4 **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 12/07/95 **Units:** ug/L

Analyte	Result	Qualifier	Analyte	Result	Qualifier
Dichlorodifluoromethane	1	U	Chloroacetonitrile	2	UJ
Chloromethane	1	U	Cis-1,3-Dichloropropene	1.1	U
Vinyl Chloride	1	U	4-Methyl-2-Pentanone	2	U
Bromomethane	2	U	1,1-Dichloropropanone	1	U
Chloroethane	1	U	Toluene	1	U
Trichlorofluoromethane	1	U	Trans-1,3-Dichloropropene	.94	U
Ethyl Ether	1	U	Ethylmethacrylate	1	U
1,1-Dichloroethene	1	UJ	1,1,2-Trichloroethane	1	U
Methyl Iodide	2	UJ	**Tetrachloroethene**	**55**	
Acetone	10	U	1,3-Dichloropropane	1	U
Carbon Disulfide	2	U	2-Hexanone	2	UJ
Allyl Chloride	1	UJ	Dibromochloromethane	1	UJ
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	UJ
2-Methyoxy-2-Methylpropane	1	U	Ethylbenzene	1	U
1,1-Dichloroethane	1	U	m & p-Xylene	2	U
2,2-Dichloropropane	1	U	o-Xylene	1	U
Cis-1,2-Dichloroethene	**15**		Total Xylenes	3	U
2-Butanone	2	U	Styrene	1	U
Methyl acrylate	1	U	Bromoform	1	U
Propionitrile	10	UJ	Isopropylbenzene (Cumene)	1	U
Bromochloromethane	1	U	Bromobenzene	1	U
Methyacrilonitrile	1	U	1,1,2,2-Tetrachloroethane	1	UJ
Tetrahydrofuran	5	U	1,2,3-Trichloropropane	1	U
Chloroform	1	U	Trans-1,4-Dichloro-2-butene	1	UJ
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	UJ	4-Chlorotoluene	1	U
Benzene	1	U	Tert-Butylbenzene	1	U
1,2-Dichloroethane	1	U	Pentachloroethane	1	U
Trichloroethene	**6.8**		1,2,4-Trimethylbenzene	1	U
1,2-Dichloropropane	1	U	Sec-Butylbenzene	1	U
Methyl Methacrylate	1	U	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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Manchester Environmental Laboratory

Department of Ecology

Analysis Report for

Volatile Organic Analysis

Project Name: Argonne Road **LIMS Project ID:** 2366-95

Sample: 95488107 **Date Received:** 12/01/95 **Method:** SW8260
Field ID: 32C4 **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 12/07/95 **Units:** ug/L

Analyte	Result	Qualifier
1,2-Dichlorobenzene	1	U
Hexachloroethane	1	U
1,2-Dibromo-3-Chloropropane	1	U
Nitrobenzene	10	UJ
1,2,4-Trichlorobenzene	1	U
Hexachlorobutadiene	1	U
Naphthalene	1	U
1,2,3-Trichlorobenzene	1	U

Surrogate Recoveries

1,2-Dichloroethane-D4	**106**	**%**
1,4-Difluorobenzene	**100**	**%**
Toluene-D8	**101**	**%**
p-Bromofluorobenzene	**98**	**%**
1,2-Dichlorobenzene-D4	**98**	**%**

Authorized By: _____ Release Date: 1/25/96

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Analysis Report for

Volatile Organic Analysis

Project Name: Argonne Road **LIMS Project ID:** 2366-95

Sample: 95488108 **Date Received:** 12/01/95 **Method:** SW8260
Field ID: 29P3 **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 12/07/95 **Units:** ug/L

Analyte	Result	Qualifier	Analyte	Result	Qualifier
Dichlorodifluoromethane	1	U	Chloroacetonitrile	2	UJ
Chloromethane	1	U	Cis-1,3-Dichloropropene	1.1	U
Vinyl Chloride	1	U	4-Methyl-2-Pentanone	2	U
Bromomethane	2	U	1,1-Dichloropropanone	1	U
Chloroethane	1	U	Toluene	1	U
Trichlorofluoromethane	1	U	Trans-1,3-Dichloropropene	.94	U
Ethyl Ether	1	U	Ethylmethacrylate	1	U
1,1-Dichloroethene	1	UJ	1,1,2-Trichloroethane	1	U
Methyl Iodide	2	UJ	**Tetrachloroethene**	**87**	**E**
Acetone	10	U	1,3-Dichloropropane	1	U
Carbon Disulfide	2	U	2-Hexanone	2	UJ
Allyl Chloride	1	UJ	Dibromochloromethane	1	UJ
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	UJ
2-Methyoxy-2-Methylpropane	1	U	Ethylbenzene	1	U
1,1-Dichloroethane	1	U	m & p-Xylene	2	U
2,2-Dichloropropane	1	U	o-Xylene	1	U
Cis-1,2-Dichloroethene	**21**		Total Xylenes	3	U
2-Butanone	2	U	Styrene	1	U
Methyl acrylate	1	U	Bromoform	1	U
Propionitrile	10	UJ	Isopropylbenzene (Cumene)	1	U
Bromochloromethane	1	U	Bromobenzene	1	U
Methyacrilonitrile	1	U	1,1,2,2-Tetrachloroethane	1	UJ
Tetrahydrofuran	5	U	1,2,3-Trichloropropane	1	U
Chloroform	1	U	Trans-1,4-Dichloro-2-butene	1	UJ
1,1,1-Trichloroethane	**.26**	**J**	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	UJ	4-Chlorotoluene	1	U
Benzene	1	U	Tert-Butylbenzene	1	U
1,2-Dichloroethane	1	U	Pentachloroethane	1	U
Trichloroethene	**11**		1,2,4-Trimethylbenzene	1	U
1,2-Dichloropropane	1	U	Sec-Butylbenzene	1	U
Methyl Methacrylate	1	U	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: Argonne Road **LIMS Project ID:** 2366-95

Sample: 95488108 **Date Received:** 12/01/95 **Method:** SW8260
Field ID: 29P3 **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 12/07/95 **Units:** ug/L

Analyte	Result	Qualifier
1,2-Dichlorobenzene	1	U
Hexachloroethane	1	U
1,2-Dibromo-3-Chloropropane	1	U
Nitrobenzene	10	UJ
1,2,4-Trichlorobenzene	1	U
Hexachlorobutadiene	1	U
Naphthalene	1	U
1,2,3-Trichlorobenzene	1	U

Surrogate Recoveries

1,2-Dichloroethane-D4	**106**	**%**
1,4-Difluorobenzene	**101**	**%**
Toluene-D8	**98**	**%**
p-Bromofluorobenzene	**98**	**%**
1,2-Dichlorobenzene-D4	**99**	**%**

Authorized By: _____ Release Date: 1/25/96

Manchester Environmental Laboratory

Department of Ecology

Analysis Report for

Volatile Organic Analysis

Project Name: Argonne Road **LIMS Project ID:** 2366-95

Sample: 95488108 (Dilution - DIL1) **Date Received:** 12/01/95 **Method:** SW8260
Field ID: 29P3 **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 12/07/95 **Units:** ug/L

Analyte	Result	Qualifier	Analyte	Result	Qualifier
Dichlorodifluoromethane	10	U	Chloroacetonitrile	20	UJ
Chloromethane	10	U	Cis-1,3-Dichloropropene	10	U
Vinyl Chloride	10	U	4-Methyl-2-Pentanone	20	U
Bromomethane	20	U	1,1-Dichloropropanone	10	UJ
Chloroethane	10	U	Toluene	10	U
Trichlorofluoromethane	10	U	Trans-1,3-Dichloropropene	10	U
Ethyl Ether	10	U	Ethylmethacrylate	10	U
1,1-Dichloroethene	10	UJ	1,1,2-Trichloroethane	10	U
Methyl Iodide	20	UJ	**Tetrachloroethene**	**88**	
Acetone	100	U	1,3-Dichloropropane	10	U
Carbon Disulfide	20	U	2-Hexanone	20	UJ
Allyl Chloride	10	UJ	Dibromochloromethane	10	UJ
Methylene Chloride	**6**	**J**	1,2-Dibromoethane (EDB)	10	U
Trans-1,2-Dichloroethene	10	U	Chlorobenzene	10	U
Acrylonitrile	10	U	1,1,1,2-Tetrachloroethane	10	UJ
2-Methyoxy-2-Methylpropane	10	U	Ethylbenzene	10	U
1,1-Dichloroethane	10	U	m & p-Xylene	20	U
2,2-Dichloropropane	10	U	o-Xylene	10	U
Cis-1,2-Dichloroethene	**27**		Total Xylenes	30	U
2-Butanone	20	U	Styrene	10	U
Methyl acrylate	10	UJ	Bromoform	10	U
Propionitrile	100	U	Isopropylbenzene (Cumene)	10	U
Bromochloromethane	10	U	Bromobenzene	10	U
Methyacrilonitrile	10	U	1,1,2,2-Tetrachloroethane	10	UJ
Tetrahydrofuran	50	U	1,2,3-Trichloropropane	10	U
Chloroform	10	U	Trans-1,4-Dichloro-2-butene	10	UJ
1,1,1-Trichloroethane	10	U	n-Propylbenzene	10	U
1-Chlorobutane	10	U	2-Chlorotoluene	10	U
Carbon Tetrachloride	10	U	1,3,5-Trimethylbenzene	10	U
1,1-Dichloropropene	10	UJ	4-Chlorotoluene	10	U
Benzene	10	U	Tert-Butylbenzene	10	U
1,2-Dichloroethane	10	U	Pentachloroethane	10	U
Trichloroethene	**12**		1,2,4-Trimethylbenzene	10	U
1,2-Dichloropropane	10	U	Sec-Butylbenzene	10	U
Methyl Methacrylate	10	U	1,3-Dichlorobenzene	10	U
Dibromomethane	10	U	p-Isopropyltoluene	10	U
Bromodichloromethane	10	U	1,4-Dichlorobenzene	10	U
2-Nitropropane	10	U	n-Butylbenzene	10	U

Authorized By: _____ Release Date: 1/26/96

Manchester Environmental Laboratory

Department of Ecology

Analysis Report for

Volatile Organic Analysis

Project Name: Argonne Road **LIMS Project ID:** 2366-95

Sample: 95488108 (Dilution - DIL1) **Date Received:** 12/01/95 **Method:** SW8260
Field ID: 29P3 **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 12/07/95 **Units:** ug/L

Analyte	Result	Qualifier
1,2-Dichlorobenzene	10	U
Hexachloroethane	10	U
1,2-Dibromo-3-Chloropropane	10	U
Nitrobenzene	100	UJ
1,2,4-Trichlorobenzene	10	U
Hexachlorobutadiene	10	U
Naphthalene	10	U
1,2,3-Trichlorobenzene	10	U

Surrogate Recoveries

1,2-Dichloroethane-D4	**107**	%
1,4-Difluorobenzene	**101**	%
Toluene-D8	**100**	%
p-Bromofluorobenzene	**95**	%
1,2-Dichlorobenzene-D4	**99**	%

Authorized By: _____ Release Date: 1/26/96

Manchester Environmental Laboratory

Department of Ecology

Analysis Report for

Volatile Organic Analysis

Project Name: Argonne Road **LIMS Project ID:** 2366-95

Sample: 95488108 (Matrix Spike - LMX1) **Date Received:** 12/01/95 **Method:** SW8260
Field ID: 29P3 **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 12/07/95 **Units:** % Recovery

Analyte	Result	Qualifier	Analyte	Result	Qualifier
Dichlorodifluoromethane	86		Chloroacetonitrile	117	
Chloromethane	83		Cis-1,3-Dichloropropene	108	
Vinyl Chloride	88		4-Methyl-2-Pentanone	140	
Bromomethane	107		1,1-Dichloropropanone		NAF
Chloroethane	92		Toluene	86	
Trichlorofluoromethane	90		Trans-1,3-Dichloropropene	106	
Ethyl Ether	93		Ethylmethacrylate	100	
1,1-Dichloroethene	82		1,1,2-Trichloroethane	97	
Methyl Iodide	93		Tetrachloroethene	150	
Acetone	263		1,3-Dichloropropane	105	
Carbon Disulfide	86		2-Hexanone	124	
Allyl Chloride	178		Dibromochloromethane	114	
Methylene Chloride	89		1,2-Dibromoethane (EDB)	123	
Trans-1,2-Dichloroethene	91		Chlorobenzene	89	
Acrylonitrile	117		1,1,1,2-Tetrachloroethane	108	
2-Methyoxy-2-Methylpropane	100		Ethylbenzene	99	
1,1-Dichloroethane	92		m & p-Xylene	206	
2,2-Dichloropropane	96		o-Xylene	103	
Cis-1,2-Dichloroethene	112		Total Xylenes	323	
2-Butanone	181		Styrene	100	
Methyl acrylate	130		Bromoform	81	
Propionitrile		NAF	Isopropylbenzene (Cumene)	94	
Bromochloromethane	91		Bromobenzene	82	
Methyacrilonitrile	93		1,1,2,2-Tetrachloroethane	117	
Tetrahydrofuran	82		1,2,3-Trichloropropane	114	
Chloroform	93		Trans-1,4-Dichloro-2-butene	191	
1,1,1-Trichloroethane	91		n-Propylbenzene	92	
1-Chlorobutane	91		2-Chlorotoluene	88	
Carbon Tetrachloride	97		1,3,5-Trimethylbenzene	89	
1,1-Dichloropropene	85		4-Chlorotoluene	88	
Benzene	88		Tert-Butylbenzene	92	
1,2-Dichloroethane	98		Pentachloroethane	100	
Trichloroethene	89		1,2,4-Trimethylbenzene	90	
1,2-Dichloropropane	94		Sec-Butylbenzene	93	
Methyl Methacrylate	108		1,3-Dichlorobenzene	88	
Dibromomethane	95		p-Isopropyltoluene	94	
Bromodichloromethane	97		1,4-Dichlorobenzene	91	
2-Nitropropane	129		n-Butylbenzene	90	

Authorized By: _____ Release Date: 1/26/95

Manchester Environmental Laboratory

Department of Ecology

Analysis Report for

Volatile Organic Analysis

Project Name: Argonne Road **LIMS Project ID:** 2366-95

Sample: 95488108 (Matrix Spike - LMX1) **Date Received:** 12/01/95 **Method:** SW8260
Field ID: 29P3 **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 12/07/95 **Units:** % Recovery

Analyte	Result	Qualifier
1,2-Dichlorobenzene	**92**	
Hexachloroethane	**97**	
1,2-Dibromo-3-Chloropropane	**106**	
Nitrobenzene		NAF
1,2,4-Trichlorobenzene	**72**	
Hexachlorobutadiene	**64**	
Naphthalene	**71**	
1,2,3-Trichlorobenzene	**76**	

Surrogate Recoveries

1,2-Dichloroethane-D4	**107**	%
1,4-Difluorobenzene	**101**	%
Toluene-D8	**100**	%
p-Bromofluorobenzene	**101**	%
1,2-Dichlorobenzene-D4	**99**	%

Authorized By: _____ Release Date: 1/26/95

Manchester Environmental Laboratory

Department of Ecology

Analysis Report for

Volatile Organic Analysis

Project Name: Argonne Road **LIMS Project ID:** 2366-95

Sample: 95488108 (Matrix Spike - LMX2) **Date Received:** 12/01/95 **Method:** SW8260
Field ID: 29P3 **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 12/07/95 **Units:** % Recovery

Analyte	Result	Qualifier	Analyte	Result	Qualifier
Dichlorodifluoromethane	89		Chloroacetonitrile	107	
Chloromethane	93		Cis-1,3-Dichloropropene	94	
Vinyl Chloride	98		4-Methyl-2-Pentanone	127	
Bromomethane	111		1,1-Dichloropropanone		NAF
Chloroethane	92		Toluene	90	
Trichlorofluoromethane	96		Trans-1,3-Dichloropropene	89	
Ethyl Ether	94		Ethylmethacrylate	97	
1,1-Dichloroethene	96		1,1,2-Trichloroethane	96	
Methyl Iodide	105		Tetrachloroethene	170	
Acetone	286		1,3-Dichloropropane	98	
Carbon Disulfide	93		2-Hexanone	116	
Allyl Chloride	133		Dibromochloromethane	104	
Methylene Chloride	89		1,2-Dibromoethane (EDB)	109	
Trans-1,2-Dichloroethene	95		Chlorobenzene	92	
Acrylonitrile	114		1,1,1,2-Tetrachloroethane	102	
2-Methyoxy-2-Methylpropane	94		Ethylbenzene	97	
1,1-Dichloroethane	93		m & p-Xylene	200	
2,2-Dichloropropane	93		o-Xylene	99	
Cis-1,2-Dichloroethene	116		Total Xylenes	313	
2-Butanone	132		Styrene	100	
Methyl acrylate	125		Bromoform	72	
Propionitrile	160		Isopropylbenzene (Cumene)	94	
Bromochloromethane	90		Bromobenzene	87	
Methyacrilonitrile	90		1,1,2,2-Tetrachloroethane	104	
Tetrahydrofuran	83		1,2,3-Trichloropropane	111	
Chloroform	94		Trans-1,4-Dichloro-2-butene	149	
1,1,1-Trichloroethane	89		n-Propylbenzene	94	
1-Chlorobutane	91		2-Chlorotoluene	89	
Carbon Tetrachloride	91		1,3,5-Trimethylbenzene	92	
1,1-Dichloropropene	91		4-Chlorotoluene	90	
Benzene	91		Tert-Butylbenzene	95	
1,2-Dichloroethane	98		Pentachloroethane	101	
Trichloroethene	98		1,2,4-Trimethylbenzene	95	
1,2-Dichloropropane	93		Sec-Butylbenzene	98	
Methyl Methacrylate	97		1,3-Dichlorobenzene	91	
Dibromomethane	95		p-Isopropyltoluene	99	
Bromodichloromethane	90		1,4-Dichlorobenzene	93	
2-Nitropropane	95		n-Butylbenzene	96	

Authorized By: _____ Release Date: 1/24/97

Manchester Environmental Laboratory

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Analysis Report for

Volatile Organic Analysis

Project Name: Argonne Road **LIMS Project ID:** 2366-95

Sample: 95488108 (Matrix Spike - LMX2) **Date Received:** 12/01/95 **Method:** SW8260
Field ID: 29P3 **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 12/07/95 **Units:** % Recovery

Analyte	Result	Qualifier
1,2-Dichlorobenzene	**95**	
Hexachloroethane	**94**	
1,2-Dibromo-3-Chloropropane	**105**	
Nitrobenzene		NAF
1,2,4-Trichlorobenzene	**77**	
Hexachlorobutadiene	**71**	
Naphthalene	**76**	
1,2,3-Trichlorobenzene	**80**	

Surrogate Recoveries

1,2-Dichloroethane-D4	**105**	%
1,4-Difluorobenzene	**101**	%
Toluene-D8	**101**	%
p-Bromofluorobenzene	**99**	%
1,2-Dichlorobenzene-D4	**100**	%

Authorized By: _____ Release Date: 1/26/96

Manchester Environmental Laboratory

Department of Ecology

Analysis Report for

Volatile Organic Analysis

Project Name: Argonne Road **LIMS Project ID:** 2366-95

Sample: 95488109 **Date Received:** 12/01/95 **Method:** SW8260
Field ID: 29P2 **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 12/07/95 **Units:** ug/L

Analyte	Result	Qualifier	Analyte	Result	Qualifier
Dichlorodifluoromethane	1	U	Chloroacetonitrile	2	UJ
Chloromethane	1	U	Cis-1,3-Dichloropropene	1.1	U
Vinyl Chloride	1	U	4-Methyl-2-Pentanone	2	U
Bromomethane	2	U	1,1-Dichloropropanone	1	U
Chloroethane	1	U	Toluene	1	U
Trichlorofluoromethane	1	U	Trans-1,3-Dichloropropene	.94	U
Ethyl Ether	1	U	Ethylmethacrylate	1	U
1,1-Dichloroethene	1	UJ	1,1,2-Trichloroethane	1	U
Methyl Iodide	2	UJ	**Tetrachloroethene**	**.12**	**J**
Acetone	10	U	1,3-Dichloropropane	1	U
Carbon Disulfide	2	U	2-Hexanone	2	UJ
Allyl Chloride	1	UJ	Dibromochloromethane	1	UJ
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	UJ
2-Methyoxy-2-Methylpropane	1	U	Ethylbenzene	1	U
1,1-Dichloroethane	1	U	m & p-Xylene	2	U
2,2-Dichloropropane	1	U	o-Xylene	1	U
Cis-1,2-Dichloroethene	1	U	Total Xylenes	3	U
2-Butanone	2	U	Styrene	1	U
Methyl acrylate	1	U	Bromoform	1	U
Propionitrile	10	UJ	Isopropylbenzene (Cumene)	1	U
Bromochloromethane	1	U	Bromobenzene	1	U
Methyacrilonitrile	1	U	1,1,2,2-Tetrachloroethane	1	UJ
Tetrahydrofuran	5	U	1,2,3-Trichloropropane	1	U
Chloroform	1	U	Trans-1,4-Dichloro-2-butene	1	UJ
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	UJ	4-Chlorotoluene	1	U
Benzene	1	U	Tert-Butylbenzene	1	U
1,2-Dichloroethane	1	U	Pentachloroethane	1	U
Trichloroethene	**.096**	**J**	1,2,4-Trimethylbenzene	1	U
1,2-Dichloropropane	1	U	Sec-Butylbenzene	1	U
Methyl Methacrylate	1	U	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: Argonne Road **LIMS Project ID:** 2366-95

Sample: 95488109 **Date Received:** 12/01/95 **Method:** SW8260
Field ID: 29P2 **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 12/07/95 **Units:** ug/L

Analyte	Result	Qualifier
1,2-Dichlorobenzene	1	U
Hexachloroethane	1	U
1,2-Dibromo-3-Chloropropane	1	U
Nitrobenzene	10	UJ
1,2,4-Trichlorobenzene	1	U
Hexachlorobutadiene	1	U
Naphthalene	1	U
1,2,3-Trichlorobenzene	1	U

Surrogate Recoveries

1,2-Dichloroethane-D4	**107**	**%**
1,4-Difluorobenzene	**101**	**%**
Toluene-D8	**100**	**%**
p-Bromofluorobenzene	**98**	**%**
1,2-Dichlorobenzene-D4	**99**	**%**

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Analysis Report for

Volatile Organic Analysis

Project Name: Argonne Road **LIMS Project ID:** 2366-95

Sample: 95488110 **Date Received:** 12/01/95 **Method:** SW8260
Field ID: 29M2 **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 12/08/95 **Units:** ug/L

Analyte	Result	Qualifier	Analyte	Result	Qualifier
Dichlorodifluoromethane	1	U	Chloroacetonitrile	2	UJ
Chloromethane	1	U	Cis-1,3-Dichloropropene	1.1	U
Vinyl Chloride	1	U	4-Methyl-2-Pentanone	2	U
Bromomethane	2	U	1,1-Dichloropropanone	1	UJ
Chloroethane	1	U	Toluene	1	U
Trichlorofluoromethane	1	U	Trans-1,3-Dichloropropene	.94	U
Ethyl Ether	1	U	Ethylmethacrylate	1	U
1,1-Dichloroethene	1	UJ	1,1,2-Trichloroethane	1	U
Methyl Iodide	2	UJ	Tetrachloroethene	1	U
Acetone	10	U	1,3-Dichloropropane	1	U
Carbon Disulfide	2	U	2-Hexanone	2	UJ
Allyl Chloride	1	UJ	Dibromochloromethane	1	UJ
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	UJ
2-Methyoxy-2-Methylpropane	1	U	Ethylbenzene	1	U
1,1-Dichloroethane	1	U	m & p-Xylene	2	U
2,2-Dichloropropane	1	U	o-Xylene	1	U
Cis-1,2-Dichloroethene	1	U	Total Xylenes	3	U
2-Butanone	2	U	Styrene	1	U
Methyl acrylate	1	U	Bromoform	1	U
Propionitrile	10	UJ	Isopropylbenzene (Cumene)	1	U
Bromochloromethane	1	U	Bromobenzene	1	U
Methyacrilonitrile	1	U	1,1,2,2-Tetrachloroethane	1	UJ
Tetrahydrofuran	5	U	1,2,3-Trichloropropane	1	U
Chloroform	1	U	Trans-1,4-Dichloro-2-butene	1	UJ
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	UJ	4-Chlorotoluene	1	U
Benzene	1	U	Tert-Butylbenzene	1	U
1,2-Dichloroethane	1	U	Pentachloroethane	1	U
Trichloroethene	**.12**	**J**	1,2,4-Trimethylbenzene	1	U
1,2-Dichloropropane	1	U	Sec-Butylbenzene	1	U
Methyl Methacrylate	1	U	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: Argonne Road **LIMS Project ID:** 2366-95

Sample: 95488110 **Date Received:** 12/01/95 **Method:** SW8260
Field ID: 29M2 **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 12/08/95 **Units:** ug/L

Analyte	Result	Qualifier
1,2-Dichlorobenzene	1	U
Hexachloroethane	1	U
1,2-Dibromo-3-Chloropropane	1	U
Nitrobenzene	10	UJ
1,2,4-Trichlorobenzene	1	U
Hexachlorobutadiene	1	U
Naphthalene	1	U
1,2,3-Trichlorobenzene	1	U

Surrogate Recoveries

1,2-Dichloroethane-D4	**108**	%
1,4-Difluorobenzene	**102**	%
Toluene-D8	**98**	%
p-Bromofluorobenzene	**96**	%
1,2-Dichlorobenzene-D4	**99**	%

Authorized By: _____ Release Date: 1/26/96

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Analysis Report for

Volatile Organic Analysis

Project Name: Argonne Road **LIMS Project ID:** 2366-95

Sample: 95488111 **Date Received:** 12/01/95 **Method:** SW8260
Field ID: 29N3 **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 12/08/95 **Units:** ug/L

Analyte	Result	Qualifier	Analyte	Result	Qualifier
Dichlorodifluoromethane	1	U	Chloroacetonitrile	2	UJ
Chloromethane	1	U	Cis-1,3-Dichloropropene	1.1	U
Vinyl Chloride	1	U	4-Methyl-2-Pentanone	2	U
Bromomethane	2	U	1,1-Dichloropropanone	1	UJ
Chloroethane	1	U	Toluene	1	U
Trichlorofluoromethane	1	U	Trans-1,3-Dichloropropene	.94	U
Ethyl Ether	1	U	Ethylmethacrylate	1	U
1,1-Dichloroethene	1	UJ	1,1,2-Trichloroethane	1	U
Methyl Iodide	2	UJ	Tetrachloroethene	1	U
Acetone	10	U	1,3-Dichloropropane	1	U
Carbon Disulfide	2	U	2-Hexanone	2	UJ
Allyl Chloride	1	UJ	Dibromochloromethane	1	UJ
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	UJ
2-Methyoxy-2-Methylpropane	1	U	Ethylbenzene	1	U
1,1-Dichloroethane	1	U	m & p-Xylene	2	U
2,2-Dichloropropane	1	U	o-Xylene	1	U
Cis-1,2-Dichloroethene	1	U	Total Xylenes	3	U
2-Butanone	2	U	Styrene	1	U
Methyl acrylate	1	UJ	Bromoform	1	U
Propionitrile	10	U	Isopropylbenzene (Cumene)	1	U
Bromochloromethane	1	U	Bromobenzene	1	U
Methyacrilonitrile	1	U	1,1,2,2-Tetrachloroethane	1	UJ
Tetrahydrofuran	5	U	1,2,3-Trichloropropane	1	U
Chloroform	1	U	Trans-1,4-Dichloro-2-butene	1	UJ
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	UJ	4-Chlorotoluene	1	U
Benzene	1	U	Tert-Butylbenzene	1	U
1,2-Dichloroethane	1	U	Pentachloroethane	1	U
Trichloroethene	**.16**	**J**	1,2,4-Trimethylbenzene	1	U
1,2-Dichloropropane	1	U	Sec-Butylbenzene	1	U
Methyl Methacrylate	1	U	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: Argonne Road **LIMS Project ID:** 2366-95

Sample: 95488111 **Date Received:** 12/01/95 **Method:** SW8260
Field ID: 29N3 **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 12/08/95 **Units:** ug/L

Analyte	Result	Qualifier
1,2-Dichlorobenzene	1	U
Hexachloroethane	1	U
1,2-Dibromo-3-Chloropropane	1	U
Nitrobenzene	10	UJ
1,2,4-Trichlorobenzene	1	U
Hexachlorobutadiene	1	U
Naphthalene	1	U
1,2,3-Trichlorobenzene	1	U

Surrogate Recoveries

1,2-Dichloroethane-D4	**105**	**%**
1,4-Difluorobenzene	**99**	**%**
Toluene-D8	**100**	**%**
p-Bromofluorobenzene	**99**	**%**
1,2-Dichlorobenzene-D4	**99**	**%**

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Analysis Report for

Volatile Organic Analysis

Project Name: Argonne Road **LIMS Project ID:** 2366-95

Sample: 95488112 **Date Received:** 12/01/95 **Method:** SW8260
Field ID: 32C1 **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 12/08/95 **Units:** ug/L

Analyte	Result	Qualifier	Analyte	Result	Qualifier
Dichlorodifluoromethane	1	U	Chloroacetonitrile	2	UJ
Chloromethane	1	U	Cis-1,3-Dichloropropene	1.1	U
Vinyl Chloride	1	U	4-Methyl-2-Pentanone	2	U
Bromomethane	2	U	1,1-Dichloropropanone	1	UJ
Chloroethane	1	U	Toluene	1	U
Trichlorofluoromethane	1	U	Trans-1,3-Dichloropropene	.94	U
Ethyl Ether	1	U	Ethylmethacrylate	1	U
1,1-Dichloroethene	1	UJ	1,1,2-Trichloroethane	1	U
Methyl Iodide	2	UJ	**Tetrachloroethene**	**21**	
Acetone	10	U	1,3-Dichloropropane	1	U
Carbon Disulfide	2	U	2-Hexanone	2	UJ
Allyl Chloride	1	UJ	Dibromochloromethane	1	UJ
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	UJ
2-Methyoxy-2-Methylpropane	1	U	Ethylbenzene	1	U
1,1-Dichloroethane	1	U	m & p-Xylene	2	U
2,2-Dichloropropane	1	U	o-Xylene	1	U
Cis-1,2-Dichloroethene	**5.4**		Total Xylenes	3	U
2-Butanone	2	U	Styrene	1	U
Methyl acrylate	1	UJ	Bromoform	1	U
Propionitrile	10	U	Isopropylbenzene (Cumene)	1	U
Bromochloromethane	1	U	Bromobenzene	1	U
Methyacrilonitrile	1	U	1,1,2,2-Tetrachloroethane	1	UJ
Tetrahydrofuran	5	U	1,2,3-Trichloropropane	1	U
Chloroform	**.18**	**J**	Trans-1,4-Dichloro-2-butene	1	UJ
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	UJ	4-Chlorotoluene	1	U
Benzene	1	U	Tert-Butylbenzene	1	U
1,2-Dichloroethane	1	U	Pentachloroethane	1	U
Trichloroethene	**2.6**		1,2,4-Trimethylbenzene	1	U
1,2-Dichloropropane	1	U	Sec-Butylbenzene	1	U
Methyl Methacrylate	1	U	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: Argonne Road **LIMS Project ID:** 2366-95

Sample: 95488112 **Date Received:** 12/01/95 **Method:** SW8260
Field ID: 32C1 **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 12/08/95 **Units:** ug/L

Analyte	Result	Qualifier
1,2-Dichlorobenzene	1	U
Hexachloroethane	1	U
1,2-Dibromo-3-Chloropropane	1	U
Nitrobenzene	10	UJ
1,2,4-Trichlorobenzene	1	U
Hexachlorobutadiene	1	U
Naphthalene	1	U
1,2,3-Trichlorobenzene	1	U

Surrogate Recoveries

1,2-Dichloroethane-D4	**105**	**%**
1,4-Difluorobenzene	**100**	**%**
Toluene-D8	**100**	**%**
p-Bromofluorobenzene	**96**	**%**
1,2-Dichlorobenzene-D4	**98**	**%**

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Analysis Report for

Volatile Organic Analysis

Project Name: Argonne Road **LIMS Project ID:** 2366-95

Sample: 95488113 **Date Received:** 12/01/95 **Method:** SW8260
Field ID: 29N2 **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 12/08/95 **Units:** ug/L

Analyte	Result	Qualifier	Analyte	Result	Qualifier
Dichlorodifluoromethane	1	U	Chloroacetonitrile	2	UJ
Chloromethane	1	U	Cis-1,3-Dichloropropene	1.1	U
Vinyl Chloride	1	U	4-Methyl-2-Pentanone	2	U
Bromomethane	2	U	1,1-Dichloropropanone	1	UJ
Chloroethane	1	U	Toluene	1	U
Trichlorofluoromethane	1	U	Trans-1,3-Dichloropropene	.94	U
Ethyl Ether	1	U	Ethylmethacrylate	1	U
1,1-Dichloroethene	1	UJ	1,1,2-Trichloroethane	1	U
Methyl Iodide	2	UJ	Tetrachloroethene	1	U
Acetone	10	U	1,3-Dichloropropane	1	U
Carbon Disulfide	2	U	2-Hexanone	2	UJ
Allyl Chloride	1	UJ	Dibromochloromethane	1	UJ
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	UJ
2-Methyoxy-2-Methylpropane	1	U	Ethylbenzene	1	U
1,1-Dichloroethane	1	U	m & p-Xylene	2	U
2,2-Dichloropropane	1	U	o-Xylene	1	U
Cis-1,2-Dichloroethene	1	U	Total Xylenes	3	U
2-Butanone	2	U	Styrene	1	U
Methyl acrylate	1	U	Bromoform	1	U
Propionitrile	10	UJ	Isopropylbenzene (Cumene)	1	U
Bromochloromethane	1	U	Bromobenzene	1	U
Methyacrilonitrile	1	U	1,1,2,2-Tetrachloroethane	1	UJ
Tetrahydrofuran	5	U	1,2,3-Trichloropropane	1	U
Chloroform	1	U	Trans-1,4-Dichloro-2-butene	1	UJ
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	UJ	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	1	U	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: Argonne Road **LIMS Project ID:** 2366-95

Sample: 95488113 **Date Received:** 12/01/95 **Method:** SW8260
Field ID: 29N2 **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 12/08/95 **Units:** ug/L

Analyte	Result	Qualifier
1,2-Dichlorobenzene	1	U
Hexachloroethane	1	U
1,2-Dibromo-3-Chloropropane	1	U
Nitrobenzene	10	UJ
1,2,4-Trichlorobenzene	1	U
Hexachlorobutadiene	1	U
Naphthalene	1	U
1,2,3-Trichlorobenzene	1	U

Surrogate Recoveries

1,2-Dichloroethane-D4	**104**	%
1,4-Difluorobenzene	**102**	%
Toluene-D8	**100**	%
p-Bromofluorobenzene	**96**	%
1,2-Dichlorobenzene-D4	**99**	%

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Analysis Report for

Volatile Organic Analysis

Project Name: Argonne Road **LIMS Project ID:** 2366-95

Sample: 95488114 **Date Received:** 12/01/95 **Method:** SW8260
Field ID: 29N4 **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 12/08/95 **Units:** ug/L

Analyte	Result	Qualifier	Analyte	Result	Qualifier
Dichlorodifluoromethane	1	U	Chloroacetonitrile	2	UJ
Chloromethane	1	U	Cis-1,3-Dichloropropene	1.1	U
Vinyl Chloride	1	U	4-Methyl-2-Pentanone	2	U
Bromomethane	2	U	1,1-Dichloropropanone	1	UJ
Chloroethane	1	U	**Toluene**	**.82**	**J**
Trichlorofluoromethane	1	U	Trans-1,3-Dichloropropene	.94	U
Ethyl Ether	1	U	Ethylmethacrylate	1	U
1,1-Dichloroethene	1	UJ	1,1,2-Trichloroethane	1	U
Methyl Iodide	2	UJ	**Tetrachloroethene**	**.55**	**J**
Acetone	10	U	1,3-Dichloropropane	1	U
Carbon Disulfide	2	U	2-Hexanone	2	UJ
Allyl Chloride	1	UJ	Dibromochloromethane	1	UJ
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	UJ
2-Methyoxy-2-Methylpropane	1	U	Ethylbenzene	1	U
1,1-Dichloroethane	1	U	m & p-Xylene	2	U
2,2-Dichloropropane	1	U	o-Xylene	1	U
Cis-1,2-Dichloroethene	1	U	Total Xylenes	3	U
2-Butanone	2	U	Styrene	1	U
Methyl acrylate	1	UJ	Bromoform	1	U
Propionitrile	10	U	Isopropylbenzene (Cumene)	1	U
Bromochloromethane	1	U	Bromobenzene	1	U
Methyacrilonitrile	1	U	1,1,2,2-Tetrachloroethane	1	UJ
Tetrahydrofuran	5	U	1,2,3-Trichloropropane	1	U
Chloroform	1	U	Trans-1,4-Dichloro-2-butene	1	UJ
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	UJ	4-Chlorotoluene	1	U
Benzene	1	U	Tert-Butylbenzene	1	U
1,2-Dichloroethane	1	U	Pentachloroethane	1	U
Trichloroethene	**.13**	**J**	1,2,4-Trimethylbenzene	1	U
1,2-Dichloropropane	1	U	Sec-Butylbenzene	1	U
Methyl Methacrylate	1	U	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: Argonne Road **LIMS Project ID:** 2366-95

Sample: 95488114 **Date Received:** 12/01/95 **Method:** SW8260
Field ID: 29N4 **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 12/08/95 **Units:** ug/L

Analyte	Result	Qualifier
1,2-Dichlorobenzene	1	U
Hexachloroethane	1	U
1,2-Dibromo-3-Chloropropane	1	U
Nitrobenzene	10	UJ
1,2,4-Trichlorobenzene	1	U
Hexachlorobutadiene	1	U
Naphthalene	1	U
1,2,3-Trichlorobenzene	1	U

Surrogate Recoveries

1,2-Dichloroethane-D4	**107**	%
1,4-Difluorobenzene	**101**	%
Toluene-D8	**100**	%
p-Bromofluorobenzene	**96**	%
1,2-Dichlorobenzene-D4	**100**	%

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Analysis Report for

Volatile Organic Analysis

Project Name: Argonne Road **LIMS Project ID:** 2366-95

Sample: 95488115 **Date Received:** 12/01/95 **Method:** SW8260
Field ID: 29N5 **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 12/08/95 **Units:** ug/L

Analyte	Result	Qualifier	Analyte	Result	Qualifier
Dichlorodifluoromethane	1	U	Chloroacetonitrile	2	UJ
Chloromethane	1	U	Cis-1,3-Dichloropropene	1.1	U
Vinyl Chloride	1	U	4-Methyl-2-Pentanone	2	U
Bromomethane	2	U	1,1-Dichloropropanone	1	UJ
Chloroethane	1	U	Toluene	1	U
Trichlorofluoromethane	1	U	Trans-1,3-Dichloropropene	.94	U
Ethyl Ether	1	U	Ethylmethacrylate	1	U
1,1-Dichloroethene	1	UJ	1,1,2-Trichloroethane	1	U
Methyl Iodide	2	UJ	Tetrachloroethene	1	U
Acetone	10	U	1,3-Dichloropropane	1	U
Carbon Disulfide	2	U	2-Hexanone	2	UJ
Allyl Chloride	1	UJ	Dibromochloromethane	1	UJ
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	UJ
2-Methyoxy-2-Methylpropane	1	U	Ethylbenzene	1	U
1,1-Dichloroethane	1	U	m & p-Xylene	2	U
2,2-Dichloropropane	1	U	o-Xylene	1	U
Cis-1,2-Dichloroethene	1	U	Total Xylenes	3	U
2-Butanone	2	U	Styrene	1	U
Methyl acrylate	1	UJ	Bromoform	1	U
Propionitrile	10	U	Isopropylbenzene (Cumene)	1	U
Bromochloromethane	1	U	Bromobenzene	1	U
Methyacrilonitrile	1	U	1,1,2,2-Tetrachloroethane	1	UJ
Tetrahydrofuran	5	U	1,2,3-Trichloropropane	1	U
Chloroform	1	U	Trans-1,4-Dichloro-2-butene	1	UJ
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	UJ	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	1	U	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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Manchester Environmental Laboratory

Department of Ecology

Analysis Report for

Volatile Organic Analysis

Project Name: Argonne Road **LIMS Project ID:** 2366-95

Sample: 95488115 **Date Received:** 12/01/95 **Method:** SW8260
Field ID: 29N5 **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 12/08/95 **Units:** ug/L

Analyte	Result	Qualifier
1,2-Dichlorobenzene	1	U
Hexachloroethane	1	U
1,2-Dibromo-3-Chloropropane	1	U
Nitrobenzene	10	UJ
1,2,4-Trichlorobenzene	1	U
Hexachlorobutadiene	1	U
Naphthalene	1	U
1,2,3-Trichlorobenzene	1	U

Surrogate Recoveries

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

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Analysis Report for

Volatile Organic Analysis

Project Name: Argonne Road **LIMS Project ID:** 2366-95

Sample: 95488116 **Date Received:** 12/01/95 **Method:** SW8260
Field ID: TRANSFER **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 12/07/95 **Units:** ug/L

Analyte	Result	Qualifier	Analyte	Result	Qualifier
Dichlorodifluoromethane	2	U	Chloroacetonitrile	4	UJ
Chloromethane	2	U	Cis-1,3-Dichloropropene	2.1	U
Vinyl Chloride	2	U	4-Methyl-2-Pentanone	4	U
Bromomethane	4	U	1,1-Dichloropropanone	2	U
Chloroethane	2	U	Toluene	2	U
Trichlorofluoromethane	2	U	Trans-1,3-Dichloropropene	1.9	U
Ethyl Ether	2	U	Ethylmethacrylate	2	U
1,1-Dichloroethene	2	UJ	1,1,2-Trichloroethane	2	U
Methyl Iodide	4	UJ	Tetrachloroethene	2	U
Acetone	20	U	1,3-Dichloropropane	2	U
Carbon Disulfide	4	U	2-Hexanone	4	UJ
Allyl Chloride	2	UJ	Dibromochloromethane	2	UJ
Methylene Chloride	2	U	1,2-Dibromoethane (EDB)	2	U
Trans-1,2-Dichloroethene	2	U	Chlorobenzene	2	U
Acrylonitrile	2	U	1,1,1,2-Tetrachloroethane	2	UJ
2-Methyoxy-2-Methylpropane	2	U	Ethylbenzene	2	U
1,1-Dichloroethane	2	U	m & p-Xylene	4	U
2,2-Dichloropropane	2	U	o-Xylene	2	U
Cis-1,2-Dichloroethene	2	U	Total Xylenes	6	U
2-Butanone	4	U	Styrene	2	U
Methyl acrylate	2	U	Bromoform	2	U
Propionitrile	20	UJ	Isopropylbenzene (Cumene)	2	U
Bromochloromethane	2	U	Bromobenzene	2	U
Methyacrilonitrile	2	U	1,1,2,2-Tetrachloroethane	2	UJ
Tetrahydrofuran	10	U	1,2,3-Trichloropropane	2	U
Chloroform	2	U	Trans-1,4-Dichloro-2-butene	2	UJ
1,1,1-Trichloroethane	2	U	n-Propylbenzene	2	U
1-Chlorobutane	2	U	2-Chlorotoluene	2	U
Carbon Tetrachloride	2	U	1,3,5-Trimethylbenzene	2	U
1,1-Dichloropropene	2	UJ	4-Chlorotoluene	2	U
Benzene	2	U	Tert-Butylbenzene	2	U
1,2-Dichloroethane	2	U	Pentachloroethane	2	U
Trichloroethene	2	U	1,2,4-Trimethylbenzene	2	U
1,2-Dichloropropane	2	U	Sec-Butylbenzene	2	U
Methyl Methacrylate	2	U	1,3-Dichlorobenzene	2	U
Dibromomethane	2	U	p-Isopropyltoluene	2	U
Bromodichloromethane	2	U	1,4-Dichlorobenzene	2	U
2-Nitropropane	2	U	n-Butylbenzene	2	U

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Department of Ecology

Analysis Report for

Volatile Organic Analysis

Project Name: Argonne Road **LIMS Project ID:** 2366-95

Sample: 95488116 **Date Received:** 12/01/95 **Method:** SW8260
Field ID: TRANSFER **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 12/07/95 **Units:** ug/L

Analyte	Result	Qualifier
1,2-Dichlorobenzene	2	U
Hexachloroethane	2	U
1,2-Dibromo-3-Chloropropane	2	U
Nitrobenzene	20	UJ
1,2,4-Trichlorobenzene	2	U
Hexachlorobutadiene	2	U
Naphthalene	2	U
1,2,3-Trichlorobenzene	2	U

Surrogate Recoveries

1,2-Dichloroethane-D4	**105**	**%**
1,4-Difluorobenzene	**100**	**%**
Toluene-D8	**101**	**%**
p-Bromofluorobenzene	**99**	**%**
1,2-Dichlorobenzene-D4	**97**	**%**

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Department of Ecology

Analysis Report for

Volatile Organic Analysis

Project Name: Argonne Road **LIMS Project ID:** 2366-95

Sample: BLN60174 **Method:** SW8260
Blank ID: DBW5341 **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 12/07/95 **Units:** ug/L

Analyte	Result	Qualifier	Analyte	Result	Qualifier
Dichlorodifluoromethane	1	U	Chloroacetonitrile	2	UJ
Chloromethane	1	U	Cis-1,3-Dichloropropene	1.1	U
Vinyl Chloride	1	U	4-Methyl-2-Pentanone	2	U
Bromomethane	2	U	1,1-Dichloropropanone	1	U
Chloroethane	1	U	Toluene	1	U
Trichlorofluoromethane	1	U	Trans-1,3-Dichloropropene	.94	U
Ethyl Ether	1	U	Ethylmethacrylate	1	U
1,1-Dichloroethene	1	UJ	1,1,2-Trichloroethane	1	U
Methyl Iodide	2	UJ	Tetrachloroethene	1	U
Acetone	10	U	1,3-Dichloropropane	1	U
Carbon Disulfide	2	U	2-Hexanone	2	UJ
Allyl Chloride	1	UJ	Dibromochloromethane	1	UJ
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	UJ
2-Methyoxy-2-Methylpropane	1	U	Ethylbenzene	1	U
1,1-Dichloroethane	1	U	m & p-Xylene	2	U
2,2-Dichloropropane	1	U	o-Xylene	1	U
Cis-1,2-Dichloroethene	1	U	Total Xylenes	3	U
2-Butanone	2	U	Styrene	1	U
Methyl acrylate	1	U	Bromoform	1	U
Propionitrile	10	UJ	Isopropylbenzene (Cumene)	1	U
Bromochloromethane	1	U	Bromobenzene	1	U
Methyacrilonitrile	1	U	1,1,2,2-Tetrachloroethane	1	UJ
Tetrahydrofuran	5	U	1,2,3-Trichloropropane	1	U
Chloroform	1	U	Trans-1,4-Dichloro-2-butene	1	UJ
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	UJ	4-Chlorotoluene	1	U
Benzene	1	U	**Tert-Butylbenzene**	**.19**	**J**
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	1	U	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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Manchester Environmental Laboratory

Department of Ecology

Analysis Report for

Volatile Organic Analysis

Project Name: Argonne Road **LIMS Project ID:** 2366-95

Sample: BLN60174 **Method:** SW8260
Blank ID: DBW5341 **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 12/07/95 **Units:** ug/L

Analyte	Result	Qualifier
1,2-Dichlorobenzene	1	U
Hexachloroethane	1	U
1,2-Dibromo-3-Chloropropane	1	U
Nitrobenzene	10	UJ
1,2,4-Trichlorobenzene	1	U
Hexachlorobutadiene	1	U
Naphthalene	1	U
1,2,3-Trichlorobenzene	1	U

Surrogate Recoveries

1,2-Dichloroethane-D4	**103**	%
1,4-Difluorobenzene	**100**	%
Toluene-D8	**100**	%
p-Bromofluorobenzene	**96**	%
1,2-Dichlorobenzene-D4	**97**	%

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Department of Ecology

Analysis Report for

Volatile Organic Analysis

Project Name: Argonne Road **LIMS Project ID:** 2366-95

Sample: BLN60175 **Method:** SW8260
Blank ID: DBW5342 **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 12/07/95 **Units:** ug/L

Analyte	Result	Qualifier	Analyte	Result	Qualifier
Dichlorodifluoromethane	1	U	Chloroacetonitrile	2	UJ
Chloromethane	1	U	Cis-1,3-Dichloropropene	1.1	U
Vinyl Chloride	1	U	4-Methyl-2-Pentanone	2	U
Bromomethane	2	U	1,1-Dichloropropanone	1	UJ
Chloroethane	1	U	Toluene	1	U
Trichlorofluoromethane	1	U	Trans-1,3-Dichloropropene	.94	U
Ethyl Ether	1	U	Ethylmethacrylate	1	U
1,1-Dichloroethene	1	UJ	1,1,2-Trichloroethane	1	U
Methyl Iodide	2	UJ	Tetrachloroethene	1	U
Acetone	10	U	1,3-Dichloropropane	1	U
Carbon Disulfide	2	U	2-Hexanone	2	UJ
Allyl Chloride	1	UJ	Dibromochloromethane	1	UJ
Methylene Chloride	**.62**	**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	UJ
2-Methyoxy-2-Methylpropane	1	U	Ethylbenzene	1	U
1,1-Dichloroethane	1	U	m & p-Xylene	2	U
2,2-Dichloropropane	1	U	o-Xylene	1	U
Cis-1,2-Dichloroethene	1	U	Total Xylenes	3	U
2-Butanone	2	U	Styrene	1	U
Methyl acrylate	1	U	Bromoform	1	U
Propionitrile	10	UJ	Isopropylbenzene (Cumene)	1	U
Bromochloromethane	1	U	Bromobenzene	1	U
Methyacrilonitrile	1	U	1,1,2,2-Tetrachloroethane	1	UJ
Tetrahydrofuran	5	U	1,2,3-Trichloropropane	1	U
Chloroform	1	U	Trans-1,4-Dichloro-2-butene	1	UJ
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	UJ	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	1	U	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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Manchester Environmental Laboratory

Department of Ecology

Analysis Report for

Volatile Organic Analysis

Project Name: Argonne Road **LIMS Project ID:** 2366-95

Sample: BLN60175 **Method:** SW8260
Blank ID: DBW5342 **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 12/07/95 **Units:** ug/L

Analyte	Result	Qualifier
1,2-Dichlorobenzene	1	U
Hexachloroethane	1	U
1,2-Dibromo-3-Chloropropane	1	U
Nitrobenzene	10	UJ
1,2,4-Trichlorobenzene	1	U
Hexachlorobutadiene	1	U
Naphthalene	1	U
1,2,3-Trichlorobenzene	1	U

Surrogate Recoveries

1,2-Dichloroethane-D4	**105**	**%**
1,4-Difluorobenzene	**101**	**%**
Toluene-D8	**104**	**%**
p-Bromofluorobenzene	**97**	**%**
1,2-Dichlorobenzene-D4	**98**	**%**

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Manchester Environmental Laboratory

7411 Beach Dr E, Port Orchard Washington 98366

CASE NARRATIVE

June 10, 1996

Subject:	Argonne Road
Samples:	96198081 - 095
Case No.	131996
Officer:	Pam Marti
By:	Greg Perez
	Organics Analysis Unit

VOLATILE ORGANIC ANALYSIS

SUMMARY:

No difficulties were encountered in the analysis of these samples. The data is usable as qualified.

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 qualified as estimates on the sample associated with the matrix spikes..

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: Argonne Rd. **LIMS Project ID:** 1319-96

Sample: 96198081 **Date Received:** 05/10/96 **Method:** SW8260
Field ID: 32M3 **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 05/13/96 **Units:** ug/L

Analyte	Result	Qualifier	Analyte	Result	Qualifier
Dichlorodifluoromethane	1	U	Chloroacetonitrile	10	U
Chloromethane	1	U	Cis-1,3-Dichloropropene	2.1	UJ
Vinyl Chloride	1	U	4-Methyl-2-Pentanone	2	U
Bromomethane	1	U	1,1-Dichloropropanone	1	U
Chloroethane	2	U	Toluene	1	UJ
Trichlorofluoromethane	1	U	Trans-1,3-Dichloropropene	1.9	U
1,1,2 Trichlorotrifluoroethane	1	U	Ethylmethacrylate	2	U
Ethyl Ether	5	U	1,1,2-Trichloroethane	1	U
1,1-Dichloroethene	1	U	**Tetrachloroethene**	**24**	
Methyl Iodide	1	U	1,3-Dichloropropane	1	U
Acetone	5	U	2-Hexanone	4	UJ
Carbon Disulfide	2	U	Dibromochloromethane	1	U
Allyl Chloride	2	U	1,2-Dibromoethane (EDB)	1	U
Methylene Chloride	2	U	Chlorobenzene	1	U
Trans-1,2-Dichloroethene	1	U	1,1,1,2-Tetrachloroethane	1	U
Acrylonitrile	1	U	Ethylbenzene	2	U
2-Methyoxy-2-Methylpropane	1	U	m & p-Xylene	4	UJ
1,1-Dichloroethane	1	U	o-Xylene	2	U
2,2-Dichloropropane	1	U	Styrene	2	U
Cis-1,2-Dichloroethene	**1.4**	**J**	Bromoform	1	U
2-Butanone	2	U	Isopropylbenzene (Cumene)	1	U
Methyl acrylate	1	U	Bromobenzene	1	U
Bromochloromethane	1	U	1,1,2,2-Tetrachloroethane	1	U
Methyacrilonitrile	1	U	1,2,3-Trichloropropane	1	U
Tetrahydrofuran	**12**		Trans-1,4-Dichloro-2-butene	1	U
Chloroform	1	U	n-Propylbenzene	1	U
1,1,1-Trichloroethane	1	U	2-Chlorotoluene	1	U
1-Chlorobutane	1	U	1,3,5-Trimethylbenzene	2	U
Carbon Tetrachloride	1	U	4-Chlorotoluene	1	U
1,1-Dichloropropene	1	U	Tert-Butylbenzene	1	U
Benzene	1	U	Pentachloroethane	1	U
1,2-Dichloroethane	1	U	1,2,4-Trimethylbenzene	2	UJ
Trichloroethene	**1.9**		Sec-Butylbenzene	2	U
1,2-Dichloropropane	1	U	1,3-Dichlorobenzene	1	U
Methyl Methacrylate	2	U	p-Isopropyltoluene	2	U
Dibromomethane	1	U	1,4-Dichlorobenzene	1	U
Bromodichloromethane	1	U	n-Butylbenzene	2	U
2-Nitropropane	1	U	1,2-Dichlorobenzene	1	U

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Manchester Environmental Laboratory

Department of Ecology

Analysis Report for

Volatile Organic Analysis

Project Name: Argonne Rd. **LIMS Project ID:** 1319-96

Sample: 96198081 **Date Received:** 05/10/96 **Method:** SW8260
Field ID: 32M3 **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 05/13/96 **Units:** ug/L

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

Surrogate Recoveries

1,2-Dichloroethane-D4	**107**	**%**
1,4-Difluorobenzene	**100**	**%**
Toluene-D8	**102**	**%**
p-Bromofluorobenzene	**93**	**%**
1,2-Dichlorobenzene-D4	**104**	**%**

Authorized By: _____ Release Date: 6/7/96

Manchester Environmental Laboratory

Department of Ecology

Analysis Report for

Volatile Organic Analysis

Project Name: Argonne Rd. **LIMS Project ID:** 1319-96

Sample: 96198082 **Date Received:** 05/10/96 **Method:** SW8260
Field ID: 32C1 **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 05/13/96 **Units:** ug/L

Analyte	Result	Qualifier	Analyte	Result	Qualifier
Dichlorodifluoromethane	1	U	Chloroacetonitrile	10	U
Chloromethane	1	U	Cis-1,3-Dichloropropene	2.1	UJ
Vinyl Chloride	1	U	4-Methyl-2-Pentanone	2	U
Bromomethane	1	U	1,1-Dichloropropanone	1	U
Chloroethane	2	U	Toluene	1	U
Trichlorofluoromethane	1	U	Trans-1,3-Dichloropropene	1.9	U
1,1,2 Trichlorotrifluoroethane	1	U	Ethylmethacrylate	2	U
Ethyl Ether	5	U	1,1,2-Trichloroethane	1	U
1,1-Dichloroethene	1	U	**Tetrachloroethene**	**29**	
Methyl Iodide	1	U	1,3-Dichloropropane	1	U
Acetone	5	U	2-Hexanone	4	UJ
Carbon Disulfide	2	U	Dibromochloromethane	1	U
Allyl Chloride	2	U	1,2-Dibromoethane (EDB)	1	U
Methylene Chloride	2	U	Chlorobenzene	1	U
Trans-1,2-Dichloroethene	1	U	1,1,1,2-Tetrachloroethane	1	U
Acrylonitrile	1	U	Ethylbenzene	2	U
2-Methyoxy-2-Methylpropane	1	U	m & p-Xylene	4	UJ
1,1-Dichloroethane	1	U	o-Xylene	2	U
2,2-Dichloropropane	1	U	Styrene	2	U
Cis-1,2-Dichloroethene	**3.4**		Bromoform	1	U
2-Butanone	2	U	Isopropylbenzene (Cumene)	1	U
Methyl acrylate	1	U	Bromobenzene	1	U
Bromochloromethane	1	U	1,1,2,2-Tetrachloroethane	1	U
Methyacrilonitrile	1	U	1,2,3-Trichloropropane	1	U
Tetrahydrofuran	2	U	Trans-1,4-Dichloro-2-butene	1	U
Chloroform	**.14**	**J**	n-Propylbenzene	1	U
1,1,1-Trichloroethane	1	U	2-Chlorotoluene	1	U
1-Chlorobutane	1	U	1,3,5-Trimethylbenzene	2	U
Carbon Tetrachloride	1	U	4-Chlorotoluene	1	U
1,1-Dichloropropene	1	U	Tert-Butylbenzene	1	U
Benzene	1	U	Pentachloroethane	1	U
1,2-Dichloroethane	1	U	1,2,4-Trimethylbenzene	2	UJ
Trichloroethene	**2.9**		Sec-Butylbenzene	2	U
1,2-Dichloropropane	1	U	1,3-Dichlorobenzene	1	U
Methyl Methacrylate	2	U	p-Isopropyltoluene	2	U
Dibromomethane	1	U	1,4-Dichlorobenzene	1	U
Bromodichloromethane	1	U	n-Butylbenzene	2	U
2-Nitropropane	1	U	1,2-Dichlorobenzene	1	U

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Analysis Report for

Volatile Organic Analysis

Project Name: Argonne Rd. **LIMS Project ID:** 1319-96

Sample: 96198082 **Date Received:** 05/10/96 **Method:** SW8260
Field ID: 32C1 **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 05/13/96 **Units:** ug/L

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

Surrogate Recoveries

1,2-Dichloroethane-D4	**108**	**%**
1,4-Difluorobenzene	**101**	**%**
Toluene-D8	**99**	**%**
p-Bromofluorobenzene	**87**	**%**
1,2-Dichlorobenzene-D4	**105**	**%**

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Analysis Report for

Volatile Organic Analysis

Project Name: Argonne Rd. **LIMS Project ID:** 1319-96

Sample: 96198083 **Date Received:** 05/10/96 **Method:** SW8260
Field ID: 32C3 **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 05/13/96 **Units:** ug/L

Analyte	Result	Qualifier	Analyte	Result	Qualifier
Dichlorodifluoromethane	1	U	Chloroacetonitrile	10	U
Chloromethane	1	U	Cis-1,3-Dichloropropene	2.1	UJ
Vinyl Chloride	1	U	4-Methyl-2-Pentanone	2	U
Bromomethane	1	U	1,1-Dichloropropanone	1	U
Chloroethane	2	U	Toluene	1	U
Trichlorofluoromethane	1	U	Trans-1,3-Dichloropropene	1.9	U
1,1,2 Trichlorotrifluoroethane	1	U	Ethylmethacrylate	2	U
Ethyl Ether	5	U	1,1,2-Trichloroethane	1	U
1,1-Dichloroethene	1	U	Tetrachloroethene	1	U
Methyl Iodide	1	U	1,3-Dichloropropane	1	U
Acetone	5	U	2-Hexanone	4	UJ
Carbon Disulfide	2	U	Dibromochloromethane	1	U
Allyl Chloride	2	U	1,2-Dibromoethane (EDB)	1	U
Methylene Chloride	2	U	Chlorobenzene	1	U
Trans-1,2-Dichloroethene	1	U	1,1,1,2-Tetrachloroethane	1	U
Acrylonitrile	1	U	Ethylbenzene	2	U
2-Methyoxy-2-Methylpropane	1	U	m & p-Xylene	4	UJ
1,1-Dichloroethane	1	U	o-Xylene	2	U
2,2-Dichloropropane	1	U	Styrene	2	U
Cis-1,2-Dichloroethene	2	U	Bromoform	1	U
2-Butanone	2	U	Isopropylbenzene (Cumene)	1	U
Methyl acrylate	1	U	Bromobenzene	1	U
Bromochloromethane	1	U	1,1,2,2-Tetrachloroethane	1	U
Methyacrilonitrile	1	U	1,2,3-Trichloropropane	1	U
Tetrahydrofuran	2	U	Trans-1,4-Dichloro-2-butene	1	U
Chloroform	1	U	n-Propylbenzene	1	U
1,1,1-Trichloroethane	1	U	2-Chlorotoluene	1	U
1-Chlorobutane	1	U	1,3,5-Trimethylbenzene	2	U
Carbon Tetrachloride	1	U	4-Chlorotoluene	1	U
1,1-Dichloropropene	1	U	Tert-Butylbenzene	1	U
Benzene	1	U	Pentachloroethane	1	U
1,2-Dichloroethane	1	U	1,2,4-Trimethylbenzene	2	U
Trichloroethene	1	U	Sec-Butylbenzene	2	UJ
1,2-Dichloropropane	1	U	1,3-Dichlorobenzene	1	U
Methyl Methacrylate	2	U	**p-Isopropyltoluene**	**1.2**	**J**
Dibromomethane	1	U	1,4-Dichlorobenzene	1	U
Bromodichloromethane	1	U	n-Butylbenzene	2	U
2-Nitropropane	1	U	1,2-Dichlorobenzene	1	U

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Analysis Report for

Volatile Organic Analysis

Project Name: Argonne Rd. **LIMS Project ID:** 1319-96

Sample: 96198083 **Date Received:** 05/10/96 **Method:** SW8260
Field ID: 32C3 **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 05/13/96 **Units:** ug/L

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

Surrogate Recoveries

1,2-Dichloroethane-D4	**110**	**%**
1,4-Difluorobenzene	**102**	**%**
Toluene-D8	**102**	**%**
p-Bromofluorobenzene	**90**	**%**
1,2-Dichlorobenzene-D4	**106**	**%**

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Analysis Report for

Volatile Organic Analysis

Project Name: Argonne Rd. **LIMS Project ID:** 1319-96

Sample: 96198084 **Date Received:** 05/10/96 **Method:** SW8260
Field ID: 32C4 **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 05/13/96 **Units:** ug/L

Analyte	Result	Qualifier	Analyte	Result	Qualifier
Dichlorodifluoromethane	1	U	Chloroacetonitrile	10	U
Chloromethane	1	U	Cis-1,3-Dichloropropene	2.1	UJ
Vinyl Chloride	1	U	4-Methyl-2-Pentanone	2	U
Bromomethane	1	U	1,1-Dichloropropanone	1	U
Chloroethane	2	U	Toluene	1	U
Trichlorofluoromethane	1	U	Trans-1,3-Dichloropropene	1.9	U
1,1,2 Trichlorotrifluoroethane	1	UJ	Ethylmethacrylate	2	U
Ethyl Ether	5	U	1,1,2-Trichloroethane	1	U
1,1-Dichloroethene	1	U	**Tetrachloroethene**	**31**	
Methyl Iodide	1	U	1,3-Dichloropropane	1	U
Acetone	5	U	2-Hexanone	4	UJ
Carbon Disulfide	2	U	Dibromochloromethane	1	U
Allyl Chloride	2	U	1,2-Dibromoethane (EDB)	1	U
Methylene Chloride	2	U	Chlorobenzene	1	U
Trans-1,2-Dichloroethene	1	U	1,1,1,2-Tetrachloroethane	1	U
Acrylonitrile	1	U	Ethylbenzene	2	U
2-Methyoxy-2-Methylpropane	1	U	m & p-Xylene	4	UJ
1,1-Dichloroethane	1	U	o-Xylene	2	U
2,2-Dichloropropane	1	U	Styrene	2	U
Cis-1,2-Dichloroethene	**5.8**		Bromoform	1	U
2-Butanone	2	U	Isopropylbenzene (Cumene)	1	U
Methyl acrylate	1	U	Bromobenzene	1	U
Bromochloromethane	1	U	1,1,2,2-Tetrachloroethane	1	U
Methyacrilonitrile	1	U	1,2,3-Trichloropropane	1	U
Tetrahydrofuran	2	U	Trans-1,4-Dichloro-2-butene	1	U
Chloroform	1	U	n-Propylbenzene	1	U
1,1,1-Trichloroethane	1	U	2-Chlorotoluene	1	U
1-Chlorobutane	1	U	1,3,5-Trimethylbenzene	2	U
Carbon Tetrachloride	1	U	4-Chlorotoluene	1	U
1,1-Dichloropropene	1	U	Tert-Butylbenzene	1	U
Benzene	1	U	Pentachloroethane	1	U
1,2-Dichloroethane	1	U	1,2,4-Trimethylbenzene	2	UJ
Trichloroethene	**3.5**		Sec-Butylbenzene	2	U
1,2-Dichloropropane	1	U	1,3-Dichlorobenzene	1	U
Methyl Methacrylate	2	U	p-Isopropyltoluene	2	U
Dibromomethane	1	U	1,4-Dichlorobenzene	1	U
Bromodichloromethane	1	U	n-Butylbenzene	2	U
2-Nitropropane	1	U	1,2-Dichlorobenzene	1	U

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Analysis Report for

Volatile Organic Analysis

Project Name: Argonne Rd. **LIMS Project ID:** 1319-96

Sample: 96198084 **Date Received:** 05/10/96 **Method:** SW8260
Field ID: 32C4 **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 05/13/96 **Units:** ug/L

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

Surrogate Recoveries

1,2-Dichloroethane-D4	**107**	**%**
1,4-Difluorobenzene	**101**	**%**
Toluene-D8	**100**	**%**
p-Bromofluorobenzene	**89**	**%**
1,2-Dichlorobenzene-D4	**106**	**%**

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Analysis Report for

Volatile Organic Analysis

Project Name: Argonne Rd. **LIMS Project ID:** 1319-96

Sample: 96198084 (Matrix Spike - LMX1) **Date Received:** 05/10/96 **Method:** SW8260
Field ID: 32C4 **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 05/13/96 **Units:** % Recovery

Analyte	Result	Qualifier	Analyte	Result	Qualifier
Dichlorodifluoromethane	37		Chloroacetonitrile	136	
Chloromethane	96		Cis-1,3-Dichloropropene	91	
Vinyl Chloride	104		4-Methyl-2-Pentanone	109	
Bromomethane	97		1,1-Dichloropropanone	87	
Chloroethane	105		Toluene	97	
Trichlorofluoromethane	81		Trans-1,3-Dichloropropene	83	
1,1,2 Trichlorotrifluoroethane	0		Ethylmethacrylate	85	
Ethyl Ether	92		1,1,2-Trichloroethane	100	
1,1-Dichloroethene	108		Tetrachloroethene	47	
Methyl Iodide	100		1,3-Dichloropropane	104	
Acetone	97		2-Hexanone	84	
Carbon Disulfide	101		Dibromochloromethane	97	
Allyl Chloride	95		1,2-Dibromoethane (EDB)	97	
Methylene Chloride	94		Chlorobenzene	99	
Trans-1,2-Dichloroethene	97		1,1,1,2-Tetrachloroethane	98	
Acrylonitrile	97		Ethylbenzene	92	
2-Methyoxy-2-Methylpropane	92		m & p-Xylene	92	
1,1-Dichloroethane	101		o-Xylene	89	
2,2-Dichloropropane	87		Styrene	88	
Cis-1,2-Dichloroethene	96		Bromoform	91	
2-Butanone	93		Isopropylbenzene (Cumene)	93	
Methyl acrylate	90		Bromobenzene	97	
Bromochloromethane	99		1,1,2,2-Tetrachloroethane	98	
Methyacrilonitrile	88		1,2,3-Trichloropropane	97	
Tetrahydrofuran	91		Trans-1,4-Dichloro-2-butene	93	
Chloroform	103		n-Propylbenzene	96	
1,1,1-Trichloroethane	97		2-Chlorotoluene	93	
1-Chlorobutane	95		1,3,5-Trimethylbenzene	91	
Carbon Tetrachloride	95		4-Chlorotoluene	98	
1,1-Dichloropropene	89		Tert-Butylbenzene	92	
Benzene	103		Pentachloroethane	93	
1,2-Dichloroethane	104		1,2,4-Trimethylbenzene	99	
Trichloroethene	89		Sec-Butylbenzene	94	
1,2-Dichloropropane	100		1,3-Dichlorobenzene	97	
Methyl Methacrylate	102		p-Isopropyltoluene	88	
Dibromomethane	102		1,4-Dichlorobenzene	97	
Bromodichloromethane	102		n-Butylbenzene	82	
2-Nitropropane	93		1,2-Dichlorobenzene	97	

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Analysis Report for

Volatile Organic Analysis

Project Name: Argonne Rd. **LIMS Project ID:** 1319-96

Sample: 96198084 (Matrix Spike - LMX1) **Date Received:** 05/10/96 **Method:** SW8260
Field ID: 32C4 **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 05/13/96 **Units:** % Recovery

Analyte	Result	Qualifier
Hexachloroethane	92	
1,2-Dibromo-3-Chloropropane	81	
1,2,4-Trichlorobenzene	90	
Hexachlorobutadiene	93	
Naphthalene	80	
1,2,3-Trichlorobenzene	93	

Surrogate Recoveries

1,2-Dichloroethane-D4	105	%
1,4-Difluorobenzene	101	%
Toluene-D8	104	%
p-Bromofluorobenzene	98	%
1,2-Dichlorobenzene-D4	103	%

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Analysis Report for

Volatile Organic Analysis

Project Name: Argonne Rd. **LIMS Project ID:** 1319-96

Sample: 96198084 (Matrix Spike - LMX2) **Date Received:** 05/10/96 **Method:** SW8260
Field ID: 32C4 **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 05/13/96 **Units:** % Recovery

Analyte	Result	Qualifier	Analyte	Result	Qualifier
Dichlorodifluoromethane	40		Chloroacetonitrile	109	
Chloromethane	99		Cis-1,3-Dichloropropene	97	
Vinyl Chloride	115		4-Methyl-2-Pentanone	112	
Bromomethane	105		1,1-Dichloropropanone	86	
Chloroethane	103		Toluene	103	
Trichlorofluoromethane	89		Trans-1,3-Dichloropropene	84	
1,1,2 Trichlorotrifluoroethane	0		Ethylmethacrylate	86	
Ethyl Ether	99		1,1,2-Trichloroethane	103	
1,1-Dichloroethene	111		Tetrachloroethene	62	
Methyl Iodide	99		1,3-Dichloropropane	108	
Acetone	98		2-Hexanone	90	
Carbon Disulfide	106		Dibromochloromethane	99	
Allyl Chloride	99		1,2-Dibromoethane (EDB)	101	
Methylene Chloride	99		Chlorobenzene	102	
Trans-1,2-Dichloroethene	100		1,1,1,2-Tetrachloroethane	102	
Acrylonitrile	100		Ethylbenzene	96	
2-Methyoxy-2-Methylpropane	93		m & p-Xylene	96	
1,1-Dichloroethane	104		o-Xylene	91	
2,2-Dichloropropane	94		Styrene	92	
Cis-1,2-Dichloroethene	97		Bromoform	92	
2-Butanone	94		Isopropylbenzene (Cumene)	96	
Methyl acrylate	96		Bromobenzene	95	
Bromochloromethane	103		1,1,2,2-Tetrachloroethane	98	
Methyacrilonitrile	91		1,2,3-Trichloropropane	96	
Tetrahydrofuran	92		Trans-1,4-Dichloro-2-butene	93	
Chloroform	105		n-Propylbenzene	97	
1,1,1-Trichloroethane	102		2-Chlorotoluene	95	
1-Chlorobutane	102		1,3,5-Trimethylbenzene	93	
Carbon Tetrachloride	99		4-Chlorotoluene	99	
1,1-Dichloropropene	100		Tert-Butylbenzene	96	
Benzene	104		Pentachloroethane	90	
1,2-Dichloroethane	104		1,2,4-Trimethylbenzene	101	
Trichloroethene	95		Sec-Butylbenzene	98	
1,2-Dichloropropane	102		1,3-Dichlorobenzene	98	
Methyl Methacrylate	101		p-Isopropyltoluene	91	
Dibromomethane	102		1,4-Dichlorobenzene	97	
Bromodichloromethane	104		n-Butylbenzene	87	
2-Nitropropane	92		1,2-Dichlorobenzene	96	

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Analysis Report for

Volatile Organic Analysis

Project Name: Argonne Rd. **LIMS Project ID:** 1319-96

Sample: 96198084 (Matrix Spike - LMX2) **Date Received:** 05/10/96 **Method:** SW8260
Field ID: 32C4 **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 05/13/96 **Units:** % Recovery

Analyte	Result	Qualifier
Hexachloroethane	96	
1,2-Dibromo-3-Chloropropane	78	
1,2,4-Trichlorobenzene	92	
Hexachlorobutadiene	98	
Naphthalene	82	
1,2,3-Trichlorobenzene	94	

Surrogate Recoveries

1,2-Dichloroethane-D4	104	%
1,4-Difluorobenzene	101	%
Toluene-D8	104	%
p-Bromofluorobenzene	100	%
1,2-Dichlorobenzene-D4	100	%

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Analysis Report for

Volatile Organic Analysis

Project Name: Argonne Rd. **LIMS Project ID:** 1319-96

Sample: 96198085 **Date Received:** 05/10/96 **Method:** SW8260
Field ID: 32C4D **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 05/13/96 **Units:** ug/L

Analyte	Result	Qualifier	Analyte	Result	Qualifier
Dichlorodifluoromethane	1	U	Chloroacetonitrile	10	U
Chloromethane	1	U	Cis-1,3-Dichloropropene	2.1	UJ
Vinyl Chloride	1	U	4-Methyl-2-Pentanone	2	U
Bromomethane	1	U	1,1-Dichloropropanone	1	U
Chloroethane	2	U	Toluene	1	U
Trichlorofluoromethane	1	U	Trans-1,3-Dichloropropene	1.9	U
1,1,2 Trichlorotrifluoroethane	1	U	Ethylmethacrylate	2	U
Ethyl Ether	5	U	1,1,2-Trichloroethane	1	U
1,1-Dichloroethene	1	U	**Tetrachloroethene**	**29**	
Methyl Iodide	1	U	1,3-Dichloropropane	1	U
Acetone	5	U	2-Hexanone	4	UJ
Carbon Disulfide	2	U	Dibromochloromethane	1	U
Allyl Chloride	2	U	1,2-Dibromoethane (EDB)	1	U
Methylene Chloride	2	U	Chlorobenzene	1	U
Trans-1,2-Dichloroethene	1	U	1,1,1,2-Tetrachloroethane	1	U
Acrylonitrile	1	U	Ethylbenzene	2	U
2-Methyoxy-2-Methylpropane	1	U	m & p-Xylene	4	UJ
1,1-Dichloroethane	1	U	o-Xylene	2	U
2,2-Dichloropropane	1	U	Styrene	2	U
Cis-1,2-Dichloroethene	**5.7**		Bromoform	1	U
2-Butanone	2	U	Isopropylbenzene (Cumene)	1	U
Methyl acrylate	1	U	Bromobenzene	1	U
Bromochloromethane	1	U	1,1,2,2-Tetrachloroethane	1	U
Methyacrilonitrile	1	U	1,2,3-Trichloropropane	1	U
Tetrahydrofuran	2	U	Trans-1,4-Dichloro-2-butene	1	U
Chloroform	1	U	n-Propylbenzene	1	U
1,1,1-Trichloroethane	1	U	2-Chlorotoluene	1	U
1-Chlorobutane	1	U	1,3,5-Trimethylbenzene	2	U
Carbon Tetrachloride	1	U	4-Chlorotoluene	1	U
1,1-Dichloropropene	1	U	Tert-Butylbenzene	1	U
Benzene	1	U	Pentachloroethane	1	U
1,2-Dichloroethane	1	U	1,2,4-Trimethylbenzene	2	U
Trichloroethene	**3.3**		Sec-Butylbenzene	2	U
1,2-Dichloropropane	1	U	1,3-Dichlorobenzene	1	U
Methyl Methacrylate	2	U	p-Isopropyltoluene	2	U
Dibromomethane	1	U	1,4-Dichlorobenzene	1	U
Bromodichloromethane	1	U	n-Butylbenzene	2	U
2-Nitropropane	1	U	1,2-Dichlorobenzene	1	U

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Analysis Report for

Volatile Organic Analysis

Project Name: Argonne Rd. **LIMS Project ID:** 1319-96

Sample: 96198085 **Date Received:** 05/10/96 **Method:** SW8260
Field ID: 32C4D **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 05/13/96 **Units:** ug/L

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

Surrogate Recoveries

1,2-Dichloroethane-D4	**107**	**%**
1,4-Difluorobenzene	**102**	**%**
Toluene-D8	**102**	**%**
p-Bromofluorobenzene	**88**	**%**
1,2-Dichlorobenzene-D4	**108**	**%**

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Analysis Report for

Volatile Organic Analysis

Project Name: Argonne Rd. **LIMS Project ID:** 1319-96

Sample: 96198086 **Date Received:** 05/10/96 **Method:** SW8260
Field ID: 29P3 **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 05/13/96 **Units:** ug/L

Analyte	Result	Qualifier	Analyte	Result	Qualifier
Dichlorodifluoromethane	1	U	Chloroacetonitrile	10	U
Chloromethane	1	U	Cis-1,3-Dichloropropene	2.1	UJ
Vinyl Chloride	1	U	4-Methyl-2-Pentanone	2	U
Bromomethane	1	U	1,1-Dichloropropanone	1	U
Chloroethane	2	U	Toluene	1	U
Trichlorofluoromethane	1	U	Trans-1,3-Dichloropropene	1.9	U
1,1,2 Trichlorotrifluoroethane	1	U	Ethylmethacrylate	2	U
Ethyl Ether	5	U	1,1,2-Trichloroethane	2	U
1,1-Dichloroethene	1	U	**Tetrachloroethene**	**146**	**E**
Methyl Iodide	1	U	1,3-Dichloropropane	1	U
Acetone	5	U	2-Hexanone	4	UJ
Carbon Disulfide	2	U	Dibromochloromethane	1	U
Allyl Chloride	2	U	1,2-Dibromoethane (EDB)	1	U
Methylene Chloride	2	U	Chlorobenzene	1	U
Trans-1,2-Dichloroethene	1	U	1,1,1,2-Tetrachloroethane	1	U
Acrylonitrile	1	U	Ethylbenzene	2	U
2-Methyoxy-2-Methylpropane	1	U	m & p-Xylene	4	UJ
1,1-Dichloroethane	1	U	o-Xylene	2	U
2,2-Dichloropropane	1	U	Styrene	2	U
Cis-1,2-Dichloroethene	**28**		Bromoform	1	U
2-Butanone	2	U	Isopropylbenzene (Cumene)	1	U
Methyl acrylate	1	U	Bromobenzene	1	U
Bromochloromethane	1	U	1,1,2,2-Tetrachloroethane	1	U
Methyacrilonitrile	1	U	1,2,3-Trichloropropane	1	U
Tetrahydrofuran	2	U	Trans-1,4-Dichloro-2-butene	1	U
Chloroform	1	U	n-Propylbenzene	1	U
1,1,1-Trichloroethane	1	U	2-Chlorotoluene	1	U
1-Chlorobutane	1	U	1,3,5-Trimethylbenzene	2	U
Carbon Tetrachloride	1	U	4-Chlorotoluene	1	U
1,1-Dichloropropene	1	U	Tert-Butylbenzene	1	U
Benzene	1	UJ	Pentachloroethane	1	U
1,2-Dichloroethane	1	U	1,2,4-Trimethylbenzene	2	UJ
Trichloroethene	**17**		Sec-Butylbenzene	2	U
1,2-Dichloropropane	1	U	1,3-Dichlorobenzene	1	U
Methyl Methacrylate	2	U	p-Isopropyltoluene	2	U
Dibromomethane	1	U	1,4-Dichlorobenzene	1	U
Bromodichloromethane	1	U	n-Butylbenzene	2	U
2-Nitropropane	1	U	1,2-Dichlorobenzene	1	U

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Analysis Report for

Volatile Organic Analysis

Project Name: Argonne Rd. **LIMS Project ID:** 1319-96

Sample: 96198086 **Date Received:** 05/10/96 **Method:** SW8260
Field ID: 29P3 **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 05/13/96 **Units:** ug/L

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

Surrogate Recoveries

1,2-Dichloroethane-D4	**109**	**%**
1,4-Difluorobenzene	**102**	**%**
Toluene-D8	**97**	**%**
p-Bromofluorobenzene	**83**	**%**
1,2-Dichlorobenzene-D4	**109**	**%**

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Department of Ecology

Analysis Report for

Volatile Organic Analysis

Project Name: Argonne Rd. **LIMS Project ID:** 1319-96

Sample: 96198086 (Dilution - DIL1) **Date Received:** 05/10/96 **Method:** SW8260
Field ID: 29P3 **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 05/13/96 **Units:** ug/L

Analyte	Result	Qualifier	Analyte	Result	Qualifier
Dichlorodifluoromethane	10	U	Chloroacetonitrile	100	U
Chloromethane	10	U	Cis-1,3-Dichloropropene	21	UJ
Vinyl Chloride	10	U	4-Methyl-2-Pentanone	20	U
Bromomethane	10	U	1,1-Dichloropropanone	10	U
Chloroethane	20	U	Toluene	10	U
Trichlorofluoromethane	10	U	Trans-1,3-Dichloropropene	19	U
1,1,2 Trichlorotrifluoroethane	10	U	Ethylmethacrylate	20	U
Ethyl Ether	50	U	1,1,2-Trichloroethane	10	U
1,1-Dichloroethene	10	U	**Tetrachloroethene**	**90**	
Methyl Iodide	10	U	1,3-Dichloropropane	10	U
Acetone	50	U	2-Hexanone	40	UJ
Carbon Disulfide	20	U	Dibromochloromethane	10	U
Allyl Chloride	20	U	1,2-Dibromoethane (EDB)	10	U
Methylene Chloride	20	U	Chlorobenzene	10	U
Trans-1,2-Dichloroethene	10	U	1,1,1,2-Tetrachloroethane	10	U
Acrylonitrile	10	U	Ethylbenzene	20	U
2-Methyoxy-2-Methylpropane	10	U	m & p-Xylene	40	UJ
1,1-Dichloroethane	10	U	o-Xylene	20	U
2,2-Dichloropropane	10	U	Styrene	20	U
Cis-1,2-Dichloroethene	**18**	J	Bromoform	10	U
2-Butanone	20	U	Isopropylbenzene (Cumene)	10	U
Methyl acrylate	10	U	Bromobenzene	10	U
Bromochloromethane	10	U	1,1,2,2-Tetrachloroethane	10	U
Methyacrilonitrile	10	U	1,2,3-Trichloropropane	10	U
Tetrahydrofuran	20	U	Trans-1,4-Dichloro-2-butene	10	U
Chloroform	10	U	n-Propylbenzene	10	U
1,1,1-Trichloroethane	10	U	2-Chlorotoluene	10	U
1-Chlorobutane	10	U	1,3,5-Trimethylbenzene	20	U
Carbon Tetrachloride	10	U	4-Chlorotoluene	10	U
1,1-Dichloropropene	10	U	Tert-Butylbenzene	10	U
Benzene	10	U	Pentachloroethane	10	U
1,2-Dichloroethane	10	U	1,2,4-Trimethylbenzene	20	UJ
Trichloroethene	**12**		Sec-Butylbenzene	20	U
1,2-Dichloropropane	10	U	1,3-Dichlorobenzene	10	U
Methyl Methacrylate	20	U	p-Isopropyltoluene	20	U
Dibromomethane	10	U	1,4-Dichlorobenzene	10	U
Bromodichloromethane	10	U	n-Butylbenzene	20	U
2-Nitropropane	10	U	1,2-Dichlorobenzene	10	U

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Analysis Report for

Volatile Organic Analysis

Project Name: Argonne Rd. **LIMS Project ID:** 1319-96

Sample: 96198086 (Dilution - DIL1) **Date Received:** 05/10/96 **Method:** SW8260
Field ID: 29P3 **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 05/13/96 **Units:** ug/L

Analyte	Result	Qualifier
Hexachloroethane	10	U
1,2-Dibromo-3-Chloropropane	10	U
1,2,4-Trichlorobenzene	10	U
Hexachlorobutadiene	10	U
Naphthalene	50	U
1,2,3-Trichlorobenzene	10	U

Surrogate Recoveries

1,2-Dichloroethane-D4	**108**	**%**
1,4-Difluorobenzene	**104**	**%**
Toluene-D8	**101**	**%**
p-Bromofluorobenzene	**81**	**%**
1,2-Dichlorobenzene-D4	**111**	**%**

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Analysis Report for

Volatile Organic Analysis

Project Name: Argonne Rd. **LIMS Project ID:** 1319-96

Sample: 96198087 **Date Received:** 05/10/96 **Method:** SW8260
Field ID: 29P2 **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 05/16/96 **Units:** ug/L

Analyte	Result	Qualifier	Analyte	Result	Qualifier
Dichlorodifluoromethane	1	U	Chloroacetonitrile	10	U
Chloromethane	1	U	Cis-1,3-Dichloropropene	1	UJ
Vinyl Chloride	1	U	4-Methyl-2-Pentanone	2	U
Bromomethane	1	U	1,1-Dichloropropanone	1	U
Chloroethane	1	U	Toluene	1	U
Trichlorofluoromethane	1	U	Trans-1,3-Dichloropropene	1	U
1,1,2 Trichlorotrifluoroethane	1	U	Ethylmethacrylate	2	U
Ethyl Ether	1	U	1,1,2-Trichloroethane	1	U
1,1-Dichloroethene	2	U	Tetrachloroethene	1	U
Methyl Iodide	1	U	1,3-Dichloropropane	1	U
Acetone	40	U	2-Hexanone	10	UJ
Carbon Disulfide	2	U	Dibromochloromethane	1	U
Allyl Chloride	1	U	1,2-Dibromoethane (EDB)	1	U
Methylene Chloride	1	U	Chlorobenzene	1	U
Trans-1,2-Dichloroethene	1	U	1,1,1,2-Tetrachloroethane	1	U
Acrylonitrile	1	U	Ethylbenzene	1	U
2-Methyoxy-2-Methylpropane	1	U	m & p-Xylene	2	UJ
1,1-Dichloroethane	1	U	o-Xylene	2	U
2,2-Dichloropropane	1	U	Styrene	2	U
Cis-1,2-Dichloroethene	1	U	Bromoform	1	U
2-Butanone	10	U	Isopropylbenzene (Cumene)	2	U
Methyl acrylate	1	U	Bromobenzene	1	U
Bromochloromethane	1	U	1,1,2,2-Tetrachloroethane	1	U
Methyacrilonitrile	1	U	1,2,3-Trichloropropane	1	U
Tetrahydrofuran	2	U	Trans-1,4-Dichloro-2-butene	1	U
Chloroform	1	U	n-Propylbenzene	2	U
1,1,1-Trichloroethane	1	U	2-Chlorotoluene	2	U
1-Chlorobutane	1	U	1,3,5-Trimethylbenzene	2	U
Carbon Tetrachloride	1	U	4-Chlorotoluene	2	U
1,1-Dichloropropene	1	U	Tert-Butylbenzene	5	U
Benzene	1	U	Pentachloroethane	1	U
1,2-Dichloroethane	1	U	1,2,4-Trimethylbenzene	5	UJ
Trichloroethene	1	U	Sec-Butylbenzene	2	U
1,2-Dichloropropane	1	U	1,3-Dichlorobenzene	2	U
Methyl Methacrylate	10	U	p-Isopropyltoluene	2	U
Dibromomethane	1	U	1,4-Dichlorobenzene	1	U
Bromodichloromethane	1	U	n-Butylbenzene	2	U
2-Nitropropane	1	U	1,2-Dichlorobenzene	1	U

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Analysis Report for

Volatile Organic Analysis

Project Name: Argonne Rd. **LIMS Project ID:** 1319-96

Sample: 96198087 **Date Received:** 05/10/96 **Method:** SW8260
Field ID: 29P2 **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 05/16/96 **Units:** ug/L

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

Surrogate Recoveries

1,2-Dichloroethane-D4	**102**	**%**
1,4-Difluorobenzene	**101**	**%**
Toluene-D8	**100**	**%**
p-Bromofluorobenzene	**94**	**%**
1,2-Dichlorobenzene-D4	**102**	**%**

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Analysis Report for

Volatile Organic Analysis

Project Name: Argonne Rd. **LIMS Project ID:** 1319-96

Sample: 96198088 **Date Received:** 05/10/96 **Method:** SW8260
Field ID: 29N3 **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 05/16/96 **Units:** ug/L

Analyte	Result	Qualifier	Analyte	Result	Qualifier
Dichlorodifluoromethane	1	U	Chloroacetonitrile	10	U
Chloromethane	1	U	Cis-1,3-Dichloropropene	1	UJ
Vinyl Chloride	1	U	4-Methyl-2-Pentanone	2	U
Bromomethane	1	U	1,1-Dichloropropanone	1	U
Chloroethane	1	U	Toluene	1	U
Trichlorofluoromethane	1	U	Trans-1,3-Dichloropropene	1	U
1,1,2 Trichlorotrifluoroethane	1	U	Ethylmethacrylate	2	U
Ethyl Ether	1	U	1,1,2-Trichloroethane	1	U
1,1-Dichloroethene	2	U	Tetrachloroethene	1	U
Methyl Iodide	1	U	1,3-Dichloropropane	1	U
Acetone	40	U	2-Hexanone	10	UJ
Carbon Disulfide	2	U	Dibromochloromethane	1	U
Allyl Chloride	1	U	1,2-Dibromoethane (EDB)	1	U
Methylene Chloride	1	U	Chlorobenzene	1	U
Trans-1,2-Dichloroethene	1	U	1,1,1,2-Tetrachloroethane	1	U
Acrylonitrile	1	U	Ethylbenzene	1	U
2-Methyoxy-2-Methylpropane	1	U	m & p-Xylene	2	UJ
1,1-Dichloroethane	1	U	o-Xylene	2	U
2,2-Dichloropropane	1	U	Styrene	2	U
Cis-1,2-Dichloroethene	1	U	Bromoform	1	U
2-Butanone	10	U	Isopropylbenzene (Cumene)	2	U
Methyl acrylate	1	U	Bromobenzene	1	U
Bromochloromethane	1	U	1,1,2,2-Tetrachloroethane	1	U
Methyacrilonitrile	1	U	1,2,3-Trichloropropane	1	U
Tetrahydrofuran	2	U	Trans-1,4-Dichloro-2-butene	1	U
Chloroform	1	U	n-Propylbenzene	2	U
1,1,1-Trichloroethane	1	U	2-Chlorotoluene	2	U
1-Chlorobutane	1	U	1,3,5-Trimethylbenzene	2	U
Carbon Tetrachloride	1	U	4-Chlorotoluene	2	U
1,1-Dichloropropene	1	U	Tert-Butylbenzene	5	U
Benzene	1	U	Pentachloroethane	1	U
1,2-Dichloroethane	1	U	1,2,4-Trimethylbenzene	5	UJ
Trichloroethene	1	U	Sec-Butylbenzene	2	U
1,2-Dichloropropane	1	U	1,3-Dichlorobenzene	2	U
Methyl Methacrylate	10	U	p-Isopropyltoluene	2	U
Dibromomethane	1	U	1,4-Dichlorobenzene	1	U
Bromodichloromethane	1	U	n-Butylbenzene	2	U
2-Nitropropane	1	U	1,2-Dichlorobenzene	1	U

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Analysis Report for

Volatile Organic Analysis

Project Name: Argonne Rd. **LIMS Project ID:** 1319-96

Sample: 96198088 **Date Received:** 05/10/96 **Method:** SW8260
Field ID: 29N3 **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 05/16/96 **Units:** ug/L

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

Surrogate Recoveries

1,2-Dichloroethane-D4	**104**	**%**
1,4-Difluorobenzene	**101**	**%**
Toluene-D8	**102**	**%**
p-Bromofluorobenzene	**93**	**%**
1,2-Dichlorobenzene-D4	**102**	**%**

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Analysis Report for

Volatile Organic Analysis

Project Name: Argonne Rd. **LIMS Project ID:** 1319-96

Sample: 96198089 **Date Received:** 05/10/96 **Method:** SW8260
Field ID: 29M2 **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 05/16/96 **Units:** ug/L

Analyte	Result	Qualifier	Analyte	Result	Qualifier
Dichlorodifluoromethane	1	U	Chloroacetonitrile	10	U
Chloromethane	1	U	Cis-1,3-Dichloropropene	1	UJ
Vinyl Chloride	1	U	4-Methyl-2-Pentanone	2	U
Bromomethane	1	U	1,1-Dichloropropanone	1	U
Chloroethane	1	U	Toluene	1	U
Trichlorofluoromethane	1	U	Trans-1,3-Dichloropropene	1	U
1,1,2 Trichlorotrifluoroethane	1	U	Ethylmethacrylate	2	U
Ethyl Ether	1	U	1,1,2-Trichloroethane	1	U
1,1-Dichloroethene	2	U	Tetrachloroethene	1	U
Methyl Iodide	1	U	1,3-Dichloropropane	1	U
Acetone	40	U	2-Hexanone	10	UJ
Carbon Disulfide	2	U	Dibromochloromethane	1	U
Allyl Chloride	1	U	1,2-Dibromoethane (EDB)	1	U
Methylene Chloride	1	U	Chlorobenzene	1	U
Trans-1,2-Dichloroethene	1	U	1,1,1,2-Tetrachloroethane	1	U
Acrylonitrile	1	U	Ethylbenzene	1	U
2-Methyoxy-2-Methylpropane	1	U	m & p-Xylene	2	UJ
1,1-Dichloroethane	1	U	o-Xylene	2	U
2,2-Dichloropropane	1	U	Styrene	2	U
Cis-1,2-Dichloroethene	1	U	Bromoform	1	U
2-Butanone	10	U	Isopropylbenzene (Cumene)	2	U
Methyl acrylate	1	U	Bromobenzene	1	U
Bromochloromethane	1	U	1,1,2,2-Tetrachloroethane	1	U
Methyacrilonitrile	1	U	1,2,3-Trichloropropane	1	U
Tetrahydrofuran	2	U	Trans-1,4-Dichloro-2-butene	1	U
Chloroform	1	U	n-Propylbenzene	2	U
1,1,1-Trichloroethane	1	U	2-Chlorotoluene	2	U
1-Chlorobutane	1	U	1,3,5-Trimethylbenzene	2	U
Carbon Tetrachloride	1	U	4-Chlorotoluene	2	U
1,1-Dichloropropene	1	U	Tert-Butylbenzene	5	U
Benzene	1	U	Pentachloroethane	1	U
1,2-Dichloroethane	1	U	1,2,4-Trimethylbenzene	5	UJ
Trichloroethene	1	U	Sec-Butylbenzene	2	U
1,2-Dichloropropane	1	U	1,3-Dichlorobenzene	2	U
Methyl Methacrylate	10	U	p-Isopropyltoluene	2	U
Dibromomethane	1	U	1,4-Dichlorobenzene	1	U
Bromodichloromethane	1	U	n-Butylbenzene	2	U
2-Nitropropane	1	U	1,2-Dichlorobenzene	1	U

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Analysis Report for

Volatile Organic Analysis

Project Name: Argonne Rd. **LIMS Project ID:** 1319-96

Sample: 96198089 **Date Received:** 05/10/96 **Method:** SW8260
Field ID: 29M2 **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 05/16/96 **Units:** ug/L

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

Surrogate Recoveries

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

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Analysis Report for

Volatile Organic Analysis

Project Name: Argonne Rd. **LIMS Project ID:** 1319-96

Sample: 96198090 **Date Received:** 05/10/96 **Method:** SW8260
Field ID: 29N2 **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 05/16/96 **Units:** ug/L

Analyte	Result	Qualifier	Analyte	Result	Qualifier
Dichlorodifluoromethane	1	U	Chloroacetonitrile	10	U
Chloromethane	1	U	Cis-1,3-Dichloropropene	1	UJ
Vinyl Chloride	1	U	4-Methyl-2-Pentanone	2	U
Bromomethane	1	U	1,1-Dichloropropanone	1	U
Chloroethane	1	U	Toluene	1	U
Trichlorofluoromethane	1	U	Trans-1,3-Dichloropropene	1	U
1,1,2 Trichlorotrifluoroethane	1	U	Ethylmethacrylate	2	U
Ethyl Ether	1	U	1,1,2-Trichloroethane	1	U
1,1-Dichloroethene	2	U	Tetrachloroethene	1	U
Methyl Iodide	1	U	1,3-Dichloropropane	1	U
Acetone	40	U	2-Hexanone	10	UJ
Carbon Disulfide	2	U	Dibromochloromethane	1	U
Allyl Chloride	1	U	1,2-Dibromoethane (EDB)	1	U
Methylene Chloride	1	U	Chlorobenzene	1	U
Trans-1,2-Dichloroethene	1	U	1,1,1,2-Tetrachloroethane	1	U
Acrylonitrile	1	U	Ethylbenzene	1	U
2-Methyoxy-2-Methylpropane	1	U	m & p-Xylene	2	UJ
1,1-Dichloroethane	1	U	o-Xylene	2	U
2,2-Dichloropropane	1	U	Styrene	2	U
Cis-1,2-Dichloroethene	1	U	Bromoform	1	U
2-Butanone	10	U	Isopropylbenzene (Cumene)	2	U
Methyl acrylate	1	U	Bromobenzene	1	U
Bromochloromethane	1	U	1,1,2,2-Tetrachloroethane	1	U
Methyacrilonitrile	1	U	1,2,3-Trichloropropane	1	U
Tetrahydrofuran	2	U	Trans-1,4-Dichloro-2-butene	1	U
Chloroform	1	U	n-Propylbenzene	2	U
1,1,1-Trichloroethane	1	U	2-Chlorotoluene	2	U
1-Chlorobutane	1	U	1,3,5-Trimethylbenzene	2	U
Carbon Tetrachloride	1	U	4-Chlorotoluene	2	U
1,1-Dichloropropene	1	U	Tert-Butylbenzene	5	U
Benzene	1	U	Pentachloroethane	1	U
1,2-Dichloroethane	1	U	1,2,4-Trimethylbenzene	5	UJ
Trichloroethene	1	U	Sec-Butylbenzene	2	U
1,2-Dichloropropane	1	U	1,3-Dichlorobenzene	2	U
Methyl Methacrylate	10	U	p-Isopropyltoluene	2	U
Dibromomethane	1	U	1,4-Dichlorobenzene	1	U
Bromodichloromethane	1	U	n-Butylbenzene	2	U
2-Nitropropane	1	U	1,2-Dichlorobenzene	1	U

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Analysis Report for

Volatile Organic Analysis

Project Name: Argonne Rd. **LIMS Project ID:** 1319-96

Sample: 96198090 **Date Received:** 05/10/96 **Method:** SW8260
Field ID: 29N2 **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 05/16/96 **Units:** ug/L

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

Surrogate Recoveries

1,2-Dichloroethane-D4	**101**	**%**
1,4-Difluorobenzene	**100**	**%**
Toluene-D8	**101**	**%**
p-Bromofluorobenzene	**91**	**%**
1,2-Dichlorobenzene-D4	**104**	**%**

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Analysis Report for

Volatile Organic Analysis

Project Name: Argonne Rd. **LIMS Project ID:** 1319-96

Sample: 96198091 **Date Received:** 05/10/96 **Method:** SW8260
Field ID: 29N4 **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 05/16/96 **Units:** ug/L

Analyte	Result	Qualifier	Analyte	Result	Qualifier
Dichlorodifluoromethane	1	U	Chloroacetonitrile	10	U
Chloromethane	1	U	Cis-1,3-Dichloropropene	1	UJ
Vinyl Chloride	1	U	4-Methyl-2-Pentanone	2	U
Bromomethane	1	U	1,1-Dichloropropanone	1	U
Chloroethane	1	U	Toluene	1	U
Trichlorofluoromethane	1	U	Trans-1,3-Dichloropropene	1	U
1,1,2 Trichlorotrifluoroethane	1	U	Ethylmethacrylate	2	U
Ethyl Ether	1	U	1,1,2-Trichloroethane	1	U
1,1-Dichloroethene	2	U	**Tetrachloroethene**	**.56**	**J**
Methyl Iodide	1	U	1,3-Dichloropropane	1	U
Acetone	40	U	2-Hexanone	10	UJ
Carbon Disulfide	2	U	Dibromochloromethane	1	U
Allyl Chloride	1	U	1,2-Dibromoethane (EDB)	1	U
Methylene Chloride	1	U	Chlorobenzene	1	U
Trans-1,2-Dichloroethene	1	U	1,1,1,2-Tetrachloroethane	1	U
Acrylonitrile	1	U	Ethylbenzene	1	U
2-Methyoxy-2-Methylpropane	1	U	m & p-Xylene	2	UJ
1,1-Dichloroethane	1	U	o-Xylene	2	U
2,2-Dichloropropane	1	U	Styrene	2	U
Cis-1,2-Dichloroethene	1	U	Bromoform	1	U
2-Butanone	10	U	Isopropylbenzene (Cumene)	2	U
Methyl acrylate	1	U	Bromobenzene	1	U
Bromochloromethane	1	U	1,1,2,2-Tetrachloroethane	1	U
Methyacrilonitrile	1	U	1,2,3-Trichloropropane	1	U
Tetrahydrofuran	2	U	Trans-1,4-Dichloro-2-butene	1	U
Chloroform	1	U	n-Propylbenzene	2	U
1,1,1-Trichloroethane	1	U	2-Chlorotoluene	2	U
1-Chlorobutane	1	U	1,3,5-Trimethylbenzene	2	U
Carbon Tetrachloride	1	U	4-Chlorotoluene	2	U
1,1-Dichloropropene	1	U	Tert-Butylbenzene	5	U
Benzene	1	U	Pentachloroethane	1	U
1,2-Dichloroethane	1	U	1,2,4-Trimethylbenzene	5	UJ
Trichloroethene	1	U	Sec-Butylbenzene	2	U
1,2-Dichloropropane	1	U	1,3-Dichlorobenzene	2	U
Methyl Methacrylate	10	U	p-Isopropyltoluene	2	U
Dibromomethane	1	U	1,4-Dichlorobenzene	1	U
Bromodichloromethane	1	U	n-Butylbenzene	2	U
2-Nitropropane	1	U	1,2-Dichlorobenzene	1	U

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Volatile Organic Analysis

Project Name: Argonne Rd. **LIMS Project ID:** 1319-96

Sample: 96198091 **Date Received:** 05/10/96 **Method:** SW8260
Field ID: 29N4 **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 05/16/96 **Units:** ug/L

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

Surrogate Recoveries

1,2-Dichloroethane-D4	**102**	**%**
1,4-Difluorobenzene	**101**	**%**
Toluene-D8	**101**	**%**
p-Bromofluorobenzene	**88**	**%**
1,2-Dichlorobenzene-D4	**103**	**%**

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Analysis Report for

Volatile Organic Analysis

Project Name: Argonne Rd. **LIMS Project ID:** 1319-96

Sample: 96198092 **Date Received:** 05/10/96 **Method:** SW8260
Field ID: 29N5 **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 05/16/96 **Units:** ug/L

Analyte	Result	Qualifier	Analyte	Result	Qualifier
Dichlorodifluoromethane	1	U	Chloroacetonitrile	10	U
Chloromethane	1	U	Cis-1,3-Dichloropropene	1	UJ
Vinyl Chloride	1	U	4-Methyl-2-Pentanone	2	U
Bromomethane	1	U	1,1-Dichloropropanone	1	U
Chloroethane	1	U	Toluene	1	U
Trichlorofluoromethane	1	U	Trans-1,3-Dichloropropene	1	U
1,1,2 Trichlorotrifluoroethane	1	U	Ethylmethacrylate	2	U
Ethyl Ether	1	U	1,1,2-Trichloroethane	1	U
1,1-Dichloroethene	2	U	Tetrachloroethene	1	U
Methyl Iodide	1	U	1,3-Dichloropropane	1	U
Acetone	40	U	2-Hexanone	10	UJ
Carbon Disulfide	2	U	Dibromochloromethane	1	U
Allyl Chloride	1	U	1,2-Dibromoethane (EDB)	1	U
Methylene Chloride	1	U	Chlorobenzene	1	U
Trans-1,2-Dichloroethene	1	U	1,1,1,2-Tetrachloroethane	1	U
Acrylonitrile	1	U	Ethylbenzene	1	U
2-Methyoxy-2-Methylpropane	1	U	m & p-Xylene	2	UJ
1,1-Dichloroethane	1	U	o-Xylene	2	U
2,2-Dichloropropane	1	U	Styrene	2	U
Cis-1,2-Dichloroethene	1	U	Bromoform	1	U
2-Butanone	10	U	Isopropylbenzene (Cumene)	2	U
Methyl acrylate	1	U	Bromobenzene	1	U
Bromochloromethane	1	U	1,1,2,2-Tetrachloroethane	1	U
Methyacrilonitrile	1	U	1,2,3-Trichloropropane	1	U
Tetrahydrofuran	2	U	Trans-1,4-Dichloro-2-butene	1	U
Chloroform	1	U	n-Propylbenzene	2	U
1,1,1-Trichloroethane	1	U	2-Chlorotoluene	2	U
1-Chlorobutane	1	U	1,3,5-Trimethylbenzene	2	U
Carbon Tetrachloride	1	U	4-Chlorotoluene	2	U
1,1-Dichloropropene	1	U	Tert-Butylbenzene	5	U
Benzene	1	U	Pentachloroethane	1	U
1,2-Dichloroethane	1	U	1,2,4-Trimethylbenzene	5	UJ
Trichloroethene	1	U	Sec-Butylbenzene	2	U
1,2-Dichloropropane	1	U	1,3-Dichlorobenzene	2	U
Methyl Methacrylate	10	U	p-Isopropyltoluene	2	U
Dibromomethane	1	U	1,4-Dichlorobenzene	1	U
Bromodichloromethane	1	U	n-Butylbenzene	2	U
2-Nitropropane	1	U	1,2-Dichlorobenzene	1	U

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Volatile Organic Analysis

Project Name: Argonne Rd. **LIMS Project ID:** 1319-96

Sample: 96198092 **Date Received:** 05/10/96 **Method:** SW8260
Field ID: 29N5 **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 05/16/96 **Units:** ug/L

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

Surrogate Recoveries

1,2-Dichloroethane-D4	**104**	**%**
1,4-Difluorobenzene	**102**	**%**
Toluene-D8	**102**	**%**
p-Bromofluorobenzene	**90**	**%**
1,2-Dichlorobenzene-D4	**109**	**%**

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Analysis Report for

Volatile Organic Analysis

Project Name: Argonne Rd. **LIMS Project ID:** 1319-96

Sample: 96198093 **Date Received:** 05/10/96 **Method:** SW8260
Field ID: TRANSFER **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 05/14/96 **Units:** ug/L

Analyte	Result	Qualifier	Analyte	Result	Qualifier
Dichlorodifluoromethane	1	U	Chloroacetonitrile	10	U
Chloromethane	1	U	Cis-1,3-Dichloropropene	2.1	UJ
Vinyl Chloride	1	U	4-Methyl-2-Pentanone	2	U
Bromomethane	1	U	1,1-Dichloropropanone	1	U
Chloroethane	2	U	Toluene	1	U
Trichlorofluoromethane	1	U	Trans-1,3-Dichloropropene	1.9	U
1,1,2 Trichlorotrifluoroethane	1	U	Ethylmethacrylate	2	U
Ethyl Ether	5	U	1,1,2-Trichloroethane	1	U
1,1-Dichloroethene	1	U	Tetrachloroethene	1	U
Methyl Iodide	1	U	1,3-Dichloropropane	1	U
Acetone	**5.5**		2-Hexanone	4	UJ
Carbon Disulfide	2	U	Dibromochloromethane	1	U
Allyl Chloride	2	U	1,2-Dibromoethane (EDB)	1	U
Methylene Chloride	2	U	Chlorobenzene	1	U
Trans-1,2-Dichloroethene	1	U	1,1,1,2-Tetrachloroethane	1	U
Acrylonitrile	1	U	Ethylbenzene	2	U
2-Methyoxy-2-Methylpropane	1	U	m & p-Xylene	4	UJ
1,1-Dichloroethane	1	U	o-Xylene	2	U
2,2-Dichloropropane	1	U	Styrene	2	U
Cis-1,2-Dichloroethene	2	U	Bromoform	1	U
2-Butanone	**4.6**		Isopropylbenzene (Cumene)	1	U
Methyl acrylate	1	U	Bromobenzene	1	U
Bromochloromethane	1	U	1,1,2,2-Tetrachloroethane	1	U
Methyacrilonitrile	1	U	1,2,3-Trichloropropane	1	U
Tetrahydrofuran	2	U	Trans-1,4-Dichloro-2-butene	1	U
Chloroform	1	U	n-Propylbenzene	1	U
1,1,1-Trichloroethane	1	U	2-Chlorotoluene	1	U
1-Chlorobutane	1	U	1,3,5-Trimethylbenzene	2	U
Carbon Tetrachloride	1	U	4-Chlorotoluene	1	U
1,1-Dichloropropene	1	U	Tert-Butylbenzene	1	U
Benzene	1	U	Pentachloroethane	1	U
1,2-Dichloroethane	1	U	1,2,4-Trimethylbenzene	2	UJ
Trichloroethene	1	U	Sec-Butylbenzene	2	U
1,2-Dichloropropane	1	U	1,3-Dichlorobenzene	1	U
Methyl Methacrylate	2	U	p-Isopropyltoluene	2	U
Dibromomethane	1	U	1,4-Dichlorobenzene	1	U
Bromodichloromethane	1	U	n-Butylbenzene	2	U
2-Nitropropane	1	U	1,2-Dichlorobenzene	1	U

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Analysis Report for

Volatile Organic Analysis

Project Name: Argonne Rd. **LIMS Project ID:** 1319-96

Sample: 96198093 **Date Received:** 05/10/96 **Method:** SW8260
Field ID: TRANSFER **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 05/14/96 **Units:** ug/L

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

Surrogate Recoveries

1,2-Dichloroethane-D4	**107**	**%**
1,4-Difluorobenzene	**104**	**%**
Toluene-D8	**99**	**%**
p-Bromofluorobenzene	**84**	**%**
1,2-Dichlorobenzene-D4	**109**	**%**

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Project Name: Argonne Rd. **LIMS Project ID:** 1319-96

Sample: 96198094 **Date Received:** 05/10/96 **Method:** SW8260
Field ID: 32M3D **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 05/16/96 **Units:** ug/L

Analyte	Result	Qualifier	Analyte	Result	Qualifier
Dichlorodifluoromethane	1	U	Chloroacetonitrile	10	U
Chloromethane	1	U	Cis-1,3-Dichloropropene	1	UJ
Vinyl Chloride	1	U	4-Methyl-2-Pentanone	2	U
Bromomethane	1	U	1,1-Dichloropropanone	1	U
Chloroethane	1	U	Toluene	1	U
Trichlorofluoromethane	1	U	Trans-1,3-Dichloropropene	1	U
1,1,2 Trichlorotrifluoroethane	1	U	Ethylmethacrylate	1	U
Ethyl Ether	1	U	1,1,2-Trichloroethane	1	U
1,1-Dichloroethene	2	U	**Tetrachloroethene**	**25**	
Methyl Iodide	1	U	1,3-Dichloropropane	1	U
Acetone	40	U	2-Hexanone	10	UJ
Carbon Disulfide	2	U	Dibromochloromethane	1	U
Allyl Chloride	1	U	1,2-Dibromoethane (EDB)	1	U
Methylene Chloride	1	U	Chlorobenzene	1	U
Trans-1,2-Dichloroethene	1	U	1,1,1,2-Tetrachloroethane	1	U
Acrylonitrile	1	U	Ethylbenzene	1	U
2-Methyoxy-2-Methylpropane	1	U	m & p-Xylene	2	UJ
1,1-Dichloroethane	1	U	o-Xylene	2	U
2,2-Dichloropropane	1	U	Styrene	2	U
Cis-1,2-Dichloroethene	**1.4**		Bromoform	1	U
2-Butanone	10	U	Isopropylbenzene (Cumene)	2	U
Methyl acrylate	1	U	Bromobenzene	1	U
Bromochloromethane	1	U	1,1,2,2-Tetrachloroethane	1	U
Methyacrilonitrile	1	U	1,2,3-Trichloropropane	1	U
Tetrahydrofuran	2	U	Trans-1,4-Dichloro-2-butene	1	U
Chloroform	1	U	n-Propylbenzene	2	U
1,1,1-Trichloroethane	1	U	2-Chlorotoluene	2	U
1-Chlorobutane	1	U	1,3,5-Trimethylbenzene	2	U
Carbon Tetrachloride	1	U	4-Chlorotoluene	2	U
1,1-Dichloropropene	1	U	Tert-Butylbenzene	5	U
Benzene	1	U	Pentachloroethane	1	U
1,2-Dichloroethane	1	U	1,2,4-Trimethylbenzene	5	UJ
Trichloroethene	**2.1**		Sec-Butylbenzene	2	U
1,2-Dichloropropane	1	U	1,3-Dichlorobenzene	2	U
Methyl Methacrylate	10	U	p-Isopropyltoluene	2	U
Dibromomethane	1	U	1,4-Dichlorobenzene	1	U
Bromodichloromethane	1	U	n-Butylbenzene	2	U
2-Nitropropane	1	U	1,2-Dichlorobenzene	1	U

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Project Name: Argonne Rd. **LIMS Project ID:** 1319-96

Sample: 96198094 **Date Received:** 05/10/96 **Method:** SW8260
Field ID: 32M3D **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 05/16/96 **Units:** ug/L

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

Surrogate Recoveries

1,2-Dichloroethane-D4	**104**	**%**
1,4-Difluorobenzene	**103**	**%**
Toluene-D8	**102**	**%**
p-Bromofluorobenzene	**89**	**%**
1,2-Dichlorobenzene-D4	**106**	**%**

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Project Name: Argonne Rd. **LIMS Project ID:** 1319-96

Sample: 96198095 **Date Received:** 05/10/96 **Method:** SW8260
Field ID: 29P1 **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 05/13/96 **Units:** ug/L

Analyte	Result	Qualifier	Analyte	Result	Qualifier
Dichlorodifluoromethane	1	U	Chloroacetonitrile	10	U
Chloromethane	1	U	Cis-1,3-Dichloropropene	2.1	UJ
Vinyl Chloride	1	U	4-Methyl-2-Pentanone	2	U
Bromomethane	1	U	1,1-Dichloropropanone	1	U
Chloroethane	2	U	Toluene	1	U
Trichlorofluoromethane	1	U	Trans-1,3-Dichloropropene	1.9	U
1,1,2 Trichlorotrifluoroethane	1	U	Ethylmethacrylate	2	U
Ethyl Ether	5	U	1,1,2-Trichloroethane	1	U
1,1-Dichloroethene	1	U	Tetrachloroethene	1	U
Methyl Iodide	1	U	1,3-Dichloropropane	1	U
Acetone	5	U	2-Hexanone	4	UJ
Carbon Disulfide	2	U	Dibromochloromethane	1	U
Allyl Chloride	2	U	1,2-Dibromoethane (EDB)	1	U
Methylene Chloride	2	U	Chlorobenzene	1	U
Trans-1,2-Dichloroethene	1	U	1,1,1,2-Tetrachloroethane	1	U
Acrylonitrile	1	U	Ethylbenzene	2	U
2-Methyoxy-2-Methylpropane	1	U	m & p-Xylene	4	UJ
1,1-Dichloroethane	1	U	o-Xylene	2	U
2,2-Dichloropropane	1	U	Styrene	2	U
Cis-1,2-Dichloroethene	2	U	Bromoform	1	U
2-Butanone	2	U	Isopropylbenzene (Cumene)	1	U
Methyl acrylate	1	U	Bromobenzene	1	U
Bromochloromethane	1	U	1,1,2,2-Tetrachloroethane	1	U
Methyacrilonitrile	1	U	1,2,3-Trichloropropane	1	U
Tetrahydrofuran	2	U	Trans-1,4-Dichloro-2-butene	1	U
Chloroform	1	U	n-Propylbenzene	1	U
1,1,1-Trichloroethane	1	U	2-Chlorotoluene	1	U
1-Chlorobutane	1	U	1,3,5-Trimethylbenzene	2	U
Carbon Tetrachloride	1	U	4-Chlorotoluene	1	U
1,1-Dichloropropene	1	U	Tert-Butylbenzene	1	U
Benzene	1	U	Pentachloroethane	1	U
1,2-Dichloroethane	1	U	1,2,4-Trimethylbenzene	2	UJ
Trichloroethene	1	U	Sec-Butylbenzene	2	U
1,2-Dichloropropane	1	U	1,3-Dichlorobenzene	1	U
Methyl Methacrylate	2	U	p-Isopropyltoluene	2	U
Dibromomethane	1	U	1,4-Dichlorobenzene	1	U
Bromodichloromethane	1	U	n-Butylbenzene	2	U
2-Nitropropane	1	U	1,2-Dichlorobenzene	1	U

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Volatile Organic Analysis

Project Name: Argonne Rd. **LIMS Project ID:** 1319-96

Sample: 96198095 **Date Received:** 05/10/96 **Method:** SW8260
Field ID: 29P1 **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 05/13/96 **Units:** ug/L

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

Surrogate Recoveries

1,2-Dichloroethane-D4	**105**	**%**
1,4-Difluorobenzene	**101**	**%**
Toluene-D8	**102**	**%**
p-Bromofluorobenzene	**95**	**%**
1,2-Dichlorobenzene-D4	**106**	**%**

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Analysis Report for

Volatile Organic Analysis

Project Name: Argonne Rd. **LIMS Project ID:** 1319-96

Sample: BLN61552 **Method:** SW8260
Blank ID: DBW6134 **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 05/13/96 **Units:** ug/L

Analyte	Result	Qualifier	Analyte	Result	Qualifier
Dichlorodifluoromethane	1	U	Chloroacetonitrile	10	U
Chloromethane	1	U	Cis-1,3-Dichloropropene	2.1	UJ
Vinyl Chloride	1	U	4-Methyl-2-Pentanone	2	U
Bromomethane	1	U	1,1-Dichloropropanone	1	U
Chloroethane	2	U	**Toluene**	**.1**	**J**
Trichlorofluoromethane	1	U	Trans-1,3-Dichloropropene	1.9	U
1,1,2 Trichlorotrifluoroethane	1	U	Ethylmethacrylate	2	U
Ethyl Ether	5	U	1,1,2-Trichloroethane	1	U
1,1-Dichloroethene	1	U	Tetrachloroethene	1	U
Methyl Iodide	1	U	1,3-Dichloropropane	1	U
Acetone	5	U	2-Hexanone	4	UJ
Carbon Disulfide	2	U	Dibromochloromethane	1	U
Allyl Chloride	2	U	1,2-Dibromoethane (EDB)	1	U
Methylene Chloride	2	U	Chlorobenzene	1	U
Trans-1,2-Dichloroethene	1	U	1,1,1,2-Tetrachloroethane	1	U
Acrylonitrile	1	U	Ethylbenzene	2	U
2-Methyoxy-2-Methylpropane	**.12**	**J**	**m & p-Xylene**	**1.8**	**J**
1,1-Dichloroethane	1	U	o-Xylene	2	U
2,2-Dichloropropane	1	U	Styrene	2	U
Cis-1,2-Dichloroethene	2	U	Bromoform	1	U
2-Butanone	2	U	Isopropylbenzene (Cumene)	1	U
Methyl acrylate	1	U	Bromobenzene	1	U
Bromochloromethane	1	U	1,1,2,2-Tetrachloroethane	1	U
Methyacrilonitrile	1	U	1,2,3-Trichloropropane	1	U
Tetrahydrofuran	2	U	Trans-1,4-Dichloro-2-butene	1	U
Chloroform	1	U	n-Propylbenzene	1	U
1,1,1-Trichloroethane	1	U	2-Chlorotoluene	1	U
1-Chlorobutane	1	U	1,3,5-Trimethylbenzene	2	U
Carbon Tetrachloride	1	U	4-Chlorotoluene	1	U
1,1-Dichloropropene	1	U	Tert-Butylbenzene	1	U
Benzene	**.1**	**J**	Pentachloroethane	1	U
1,2-Dichloroethane	1	U	1,2,4-Trimethylbenzene	2	UJ
Trichloroethene	1	U	**Sec-Butylbenzene**	**.11**	**J**
1,2-Dichloropropane	1	U	1,3-Dichlorobenzene	1	U
Methyl Methacrylate	2	U	p-Isopropyltoluene	2	U
Dibromomethane	1	U	1,4-Dichlorobenzene	1	U
Bromodichloromethane	1	U	n-Butylbenzene	2	U
2-Nitropropane	1	U	1,2-Dichlorobenzene	1	U

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Analysis Report for

Volatile Organic Analysis

Project Name: Argonne Rd. **LIMS Project ID:** 1319-96

Sample: BLN61552 **Method:** SW8260
Blank ID: DBW6134 **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 05/13/96 **Units:** ug/L

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

Surrogate Recoveries

1,2-Dichloroethane-D4	**105**	**%**
1,4-Difluorobenzene	**100**	**%**
Toluene-D8	**104**	**%**
p-Bromofluorobenzene	**94**	**%**
1,2-Dichlorobenzene-D4	**105**	**%**

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Project Officer: Pam Marti **Date Analyzed:** 05/14/96 **Units:** ug/L

Analyte	Result	Qualifier	Analyte	Result	Qualifier
Dichlorodifluoromethane	1	U	Chloroacetonitrile	10	U
Chloromethane	1	U	Cis-1,3-Dichloropropene	2.1	UJ
Vinyl Chloride	1	U	4-Methyl-2-Pentanone	2	U
Bromomethane	1	U	1,1-Dichloropropanone	1	U
Chloroethane	2	U	Toluene	1	U
Trichlorofluoromethane	1	U	Trans-1,3-Dichloropropene	1.9	U
1,1,2 Trichlorotrifluoroethane	1	U	Ethylmethacrylate	2	U
Ethyl Ether	5	U	1,1,2-Trichloroethane	1	U
1,1-Dichloroethene	1	U	Tetrachloroethene	1	U
Methyl Iodide	1	U	1,3-Dichloropropane	1	U
Acetone	5	U	2-Hexanone	4	UJ
Carbon Disulfide	2	U	Dibromochloromethane	1	U
Allyl Chloride	2	U	1,2-Dibromoethane (EDB)	1	U
Methylene Chloride	2	U	Chlorobenzene	1	U
Trans-1,2-Dichloroethene	1	U	1,1,1,2-Tetrachloroethane	1	U
Acrylonitrile	1	U	Ethylbenzene	2	U
2-Methyoxy-2-Methylpropane	1	U	m & p-Xylene	4	UJ
1,1-Dichloroethane	1	U	o-Xylene	2	U
2,2-Dichloropropane	1	U	Styrene	2	U
Cis-1,2-Dichloroethene	2	U	Bromoform	1	U
2-Butanone	2	U	Isopropylbenzene (Cumene)	1	U
Methyl acrylate	1	U	Bromobenzene	1	U
Bromochloromethane	1	U	1,1,2,2-Tetrachloroethane	1	U
Methyacrilonitrile	1	U	1,2,3-Trichloropropane	1	U
Tetrahydrofuran	2	U	Trans-1,4-Dichloro-2-butene	1	U
Chloroform	1	U	n-Propylbenzene	1	U
1,1,1-Trichloroethane	1	U	2-Chlorotoluene	1	U
1-Chlorobutane	1	U	1,3,5-Trimethylbenzene	2	U
Carbon Tetrachloride	1	U	4-Chlorotoluene	1	U
1,1-Dichloropropene	1	U	Tert-Butylbenzene	1	U
Benzene	1	U	Pentachloroethane	1	U
1,2-Dichloroethane	1	U	1,2,4-Trimethylbenzene	2	UJ
Trichloroethene	1	U	Sec-Butylbenzene	2	U
1,2-Dichloropropane	1	U	1,3-Dichlorobenzene	1	U
Methyl Methacrylate	2	U	p-Isopropyltoluene	2	U
Dibromomethane	1	U	1,4-Dichlorobenzene	1	U
Bromodichloromethane	1	U	n-Butylbenzene	2	U
2-Nitropropane	1	U	1,2-Dichlorobenzene	1	U

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Sample: BLN61553 **Method:** SW8260
Blank ID: DBW6135 **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 05/14/96 **Units:** ug/L

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

Surrogate Recoveries

1,2-Dichloroethane-D4	**106**	**%**
1,4-Difluorobenzene	**103**	**%**
Toluene-D8	**99**	**%**
p-Bromofluorobenzene	**84**	**%**
1,2-Dichlorobenzene-D4	**105**	**%**

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Analysis Report for

Volatile Organic Analysis

Project Name: Argonne Rd. **LIMS Project ID:** 1319-96

Sample: BLN61554 **Method:** SW8260
Blank ID: DBW6137B **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 05/16/96 **Units:** ug/L

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

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Sample: BLN61554 **Method:** SW8260
Blank ID: DBW6137B **Matrix:** Water
Project Officer: Pam Marti **Date Analyzed:** 05/16/96 **Units:** ug/L

Analyte	Result	Qualifier
Hexachloroethane	1	U
1,2-Dibromo-3-Chloropropane	1	U
1,2,4-Trichlorobenzene	2	U
Hexachlorobutadiene	1	U
Naphthalene	**2**	
1,2,3-Trichlorobenzene	**.7**	**J**

Surrogate Recoveries

1,2-Dichloroethane-D4	**100**	**%**
1,4-Difluorobenzene	**98**	**%**
Toluene-D8	**102**	**%**
p-Bromofluorobenzene	**95**	**%**
1,2-Dichlorobenzene-D4	**104**	**%**

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