ARCS

Remedial Planning Activities at Selected Uncontrolled Hazardous Substance Disposal Sites in Region I

Environmental Protection Agency
Region I

ARCS Work Assignment No. 06-1JZZ

K.J. Quinn & Co., Inc.
Seabrook, NH
NHD048722466

Screening Site Inspection
Final Report

November 1991

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TRC Companies, Inc.

Alliance Technologies Corporation
TRC Environmental Consultants, Inc.

TAMS Consultants, Inc.
PEI Associates, Inc.
Jordan Communications, Inc.

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SCREENING SITE INSPECTION
K.J. QUINN & CO., INC.
SEABROOK, NEW HAMPSHIRE

NHD048722466

FINAL REPORT

Prepared for

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Region I
90 Canal Street
Boston, Massachusetts 02203-2211

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TRCC Work Assignment Manager:	Diane Stallings
TRCC Task Manager:	Tod Perkins
Telephone No.:	(508) 970-5600
EPA Work Assignment Manager:	Sharon Hayes
Telephone No.:	(617) 573-5709
Date Prepared:	November 15, 1991

TRC COMPANIES, INC.
Boott Mills South
Foot of John Street
Lowell, Massachusetts 01852
(508) 970-5600

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INTRODUCTION

TRC Companies, Inc. (TRCC) was contracted by the U.S. Environmental Protection Agency (EPA), Region I to perform a Screening Site Inspection (SSI) of the K.J. Quinn & Company, Inc. facility in Seabrook, New Hampshire (the site is listed as Quinn, K.J. and Co. on CERCLIS, but is referred to as K.J. Quinn in this report). All tasks were conducted in accordance with Work Assignment No. 06-1JZZ, under EPA Contract No. 68-W9-0033.

A Preliminary Assessment of site conditions was conducted by New Hampshire Department of Environmental Services (NHDES) personnel in July 1980. In addition, an assessment of the Town of Salisbury's municipal wells (located 1200 feet downgradient of the site) was conducted by Massachusetts Department of Environmental Quality Engineering (MADEQE) personnel in March 1989. On the basis of the conclusions drawn from these studies, an SSI at the K.J. Quinn facility was initiated.

Information concerning the history of the site was collected at the NHDES offices, EPA offices, and the K.J. Quinn & Company, Inc. office. Information concerning local drinking water supplies, and other potential receptors of contamination was collected from state and local officials. Current site conditions were documented during TRCC's reconnaissance conducted on July 10, 1991.

This report follows guidelines developed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, commonly referred to as Superfund. However, this report does not necessarily fulfill the requirements of other EPA regulations such as those under the Resource Conservation and Recovery Act (RCRA), or other Federal, State or local regulations. Screening Site Inspections are intended to provide a preliminary screening of sites to facilitate EPA's assignment of site priorities. They are limited efforts and are not intended to supersede more detailed investigations.

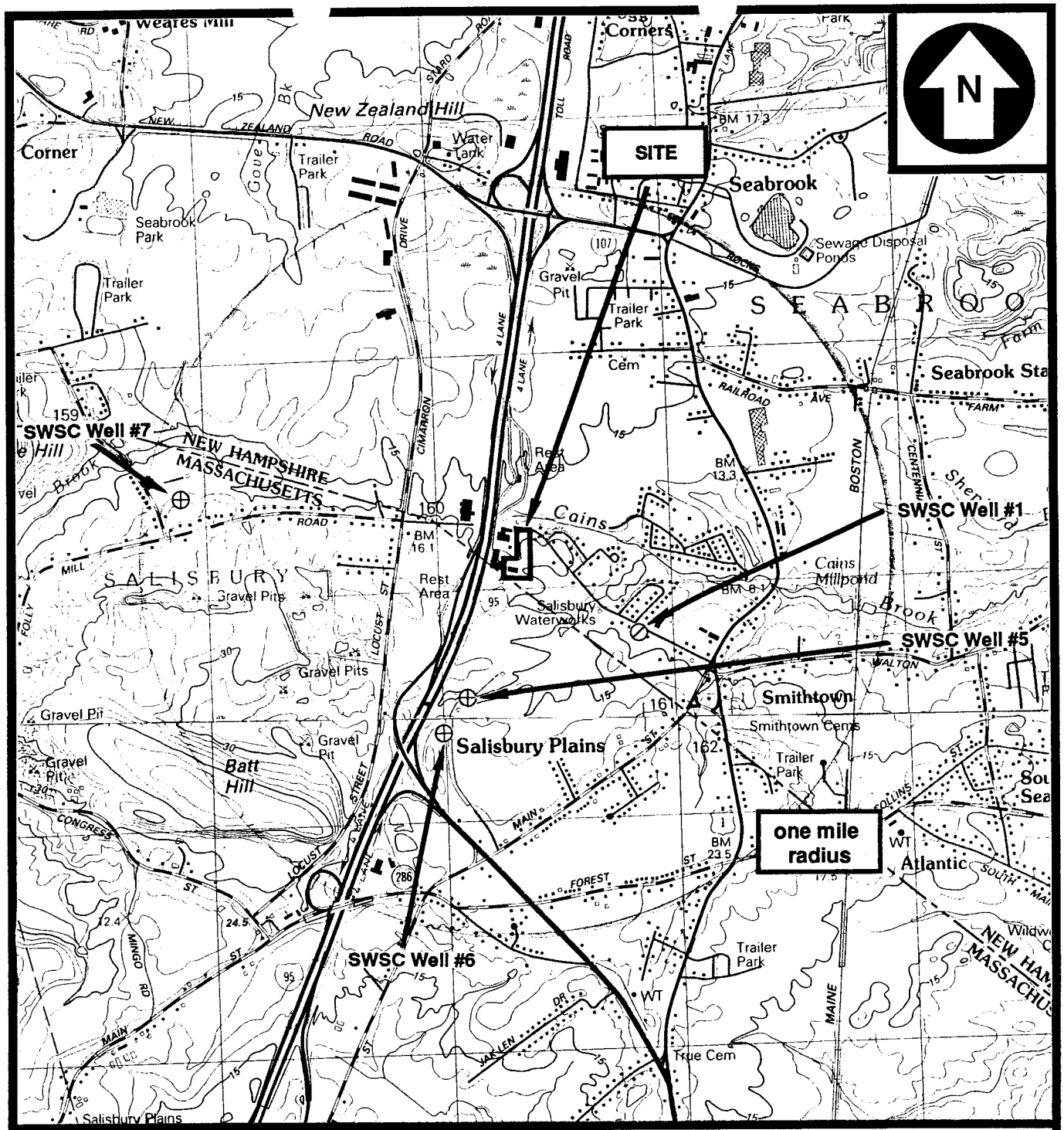
SITE DESCRIPTION

The K.J. Quinn & Co., Inc site ("the site") is situated on a three acre parcel of land located at 42°53′2″ north latitude and 70°52′56″ west longitude in the Town of Seabrook, Rockingham County, New Hampshire (Figure 1). The area in which the site is located is primarily residential, but small businesses and industries are interspersed throughout the area. Interstate 95 is located approximately 500 feet west of the site. Key features in the area include Cains Brook, which flows in an easterly direction 500 feet north of the site, and a system of public ground water wells located within one mile of the site. The Massachusetts State border bisects the southwestern corner of the site.

The property on which the site is located is used for industrial purposes only. K.J. Quinn & Co., Inc. (K.J. Quinn) manufactures urethane elastomers in pellet and granular form, as well as solvent and water-based decorative and protective wood coatings (Yergeau, 1983).

The southeastern half of the site is covered by mixed deciduous/evergreen forest. The rest of the site has been developed by K.J. Quinn. A large office building housing the K.J. Quinn and Morton International offices; a warehouse occupied by K.J. Quinn's manufacturing operations; and a small wooden shed housing a ground water recovery and air-stripping unit were the only buildings noted onsite by TRCC during reconnaissance (Figure 2)(TRCC, 1991). The only other permanent structures noted onsite were three, 11,000 gallon, above-ground chemical storage tanks containing xylenes, ethyl alcohol, and methyl ethyl ketone, which are three of the principal additives used to produce urethane resins (TRCC, 1991). The tanks are encircled by a barbed-wire fence and a concrete dike. A small picnic area (four tables), located south of the office building's parking lot, was also noted during site reconnaissance.

The southern half of the site's western property boundary is marked by an eight-foot high chain-link fence. The fence was installed by Morton International (Morton), the current



BASE MAP IS A PORTION OF THE FOLLOWING 7.5' x 15' U.S.G.S. QUADRANGLE(S): EXETER, NH; NEWBURYPORT, MA, 1985

0 1000 2000 3000 feet

QUADRANGLE LOCATION

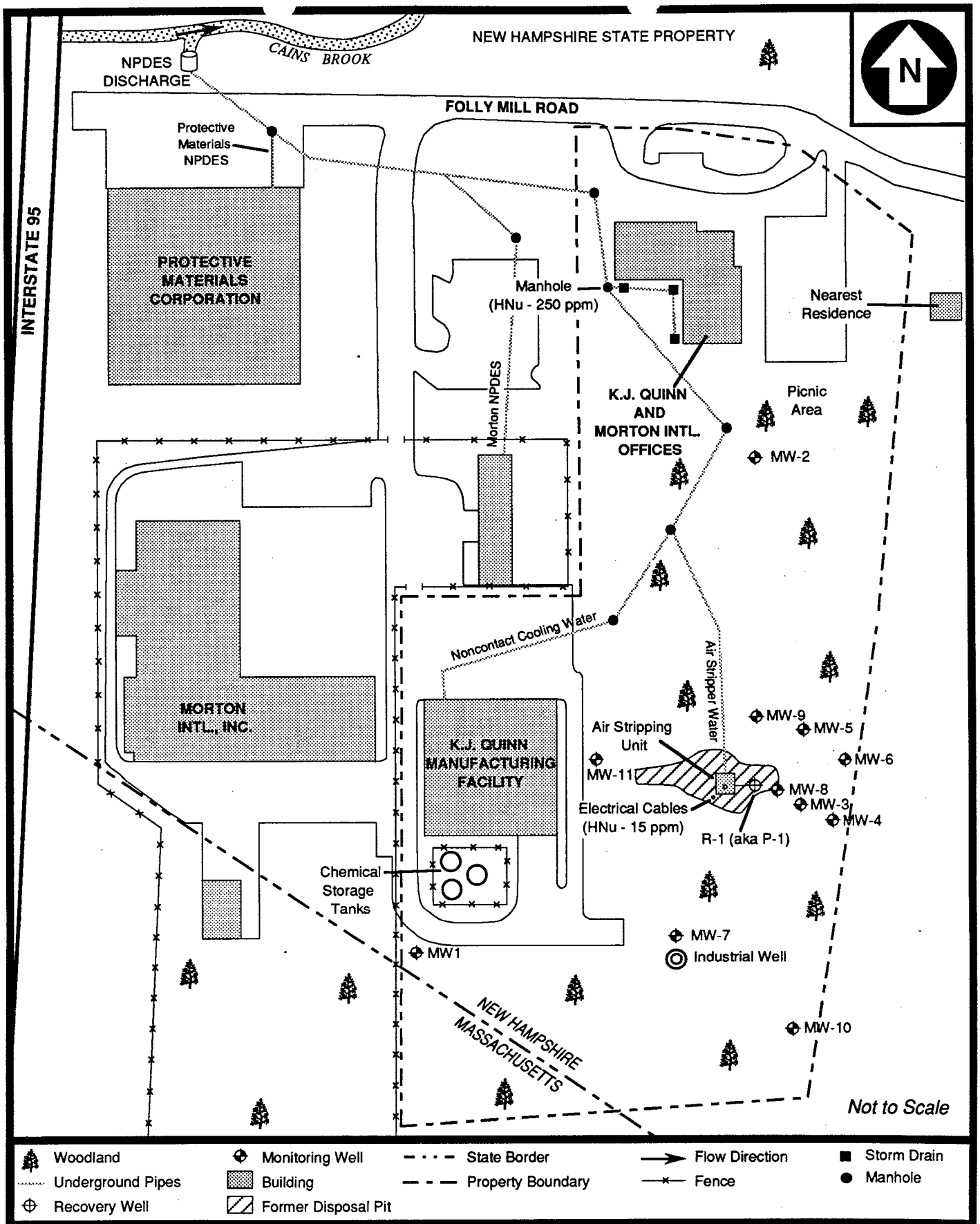
LOCATION MAP

LOCATION OF THE K.J. QUINN & CO., INC. SITE
SEABROOK, NEW HAMPSHIRE

TRC Companies, Inc.

Figure 1.

MS34/2/1



SITE MAP

LOCATION OF THE K.J. QUINN & CO., INC. SITE
SEABROOK, NEW HAMPSHIRE

TRC Companies, Inc.

Figure 2.

MS33/1/J

owners of the manufacturing facility abutting the western boundary of the site. The Morton facility was owned and operated by K.J. Quinn until July 1988, when Morton began leasing the buildings. Morton bought the facility in June 1991 (TRCC, 1991). Currently, K.J. Quinn owns and operates only one manufacturing warehouse while Morton owns and operates the second warehouse (see Figure 2). The southern and eastern site boundaries are demarcated by dilapidated stone walls, and the northern edge of the site is bounded by Folly Mill Road.

One of the three onsite buildings houses an air-stripping unit, which was installed to recover contaminated ground water. A thirty-foot, vertical air-stripping column protrudes through the roof of this small shed. Upon inspection of the system, TRCC noted that the pipes leading from the recovery well to the air stripper leaked over their entire length. At the time of TRCC's reconnaissance, the unit was pumping ground water of a rate of 7 gallons per minute (gpm). According to the Director of Environmental Affairs at K.J. Quinn, to work effectively, the unit should pump at a rate of 25 gpm (TRCC, 1991).

A series of underground pipes traverse the property. The pipes' contents include noncontact cooling water, used in the manufacturing process; recovered ground water from the air-stripping unit; and storm runoff collected from the vicinity of the office building. The pipe discharges into Cains Brook through an NPDES outfall (NPDES Permit No. NH0001091). K.J. Quinn's NPDES discharge is mixed with wastewater from the two adjacent manufacturing facilities, Morton and Protective Coating Manufacturers, before it is released into Cains Brook. All three companies retain separate NPDES permits but share the same outfall (TRCC, 1991). Manholes mark the path of the underground pipes, and collection grates indicate the path of the storm water pipes.

TRCC also noted approximately twelve monitoring wells on the K.J. Quinn property, some rusted shut and others uncapped. The wells are monitored periodically by K.J. Quinn's contractor.

According to EPA's Hazardous Waste Data Management System (HWDMS), twenty RCRA facilities are located within one mile of the site (EPA, 1991a). Table 1 lists each of these

TABLE 1. RCRA FACILITIES WITHIN ONE MILE OF THE K.J. QUINN SITE

Facility Name	Address	EPA I.D. Number
Seabrook, New Hampshire		
Bailey Corp.	Rte. 1	NHD048729685
Bocca Industries, Inc.	140 Batchelder Road	NHD982749772
Express 10-Minute Lube Center	467 Lafayette Road	NHD982749442
Fays Seabrook Tire	58 Lafayette Road	NHD982753816
Getty Petroleum Corp.	Lafayette Road	NHD982746786
Halliburton Services	Lafayette Road	NHD092056175
JJS Auto Body	107 Lafayette Road	NHD982202624
Johnson Matthey, Inc.	892 Lafayette Road	NHD118345685
Midas Muffler	Rte. 1	NHD982200578
Morton International, Inc.	135 Folly Mill Road	NHD982763575
Perko Engineering, Inc.	146 Batchelder Road	NHD981210099
Protective Materials Co., Inc.	Folly Mill Road	NHD088577903
Sunoco Service Station	Rte. 1	NHD000845628
Thermoforming Tech., Inc.	142 Batchelder Road	NHD091494971
Salisbury, Massachusetts		
Buddy's Garage	121 Lafayette Road	MAD982543415
G&G Cycle Sales	226 Lafayette Road	MAD108851338
G&G Machine Tech., Inc.	226 Lafayette Road	MAD134024766
Gloucester Dispatch, Inc.	180 Main Street	MAD049442056
New England Rebuilt	321 Lafayette Road	MAD981073208
Utility Trailers of New England	180 Main Street	MAD118850049

Source: EPA, 1991a.

facilities. In addition, EPA's Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) lists the Salisbury Wells #1, 5, and 6 (EPA I.D. # MAD980909220), located in Salisbury, Massachusetts, as the only CERCLA site within one mile of the K.J. Quinn site (EPA, 1991b).

SITE ACTIVITY/HISTORY

The property on which the site is located has been owned by K.J. Quinn since 1967. Prior to that, it was undeveloped (Winterholer, 1991). When K.J. Quinn bought the property, the parcel included the land immediately west of the site, which is currently owned by Morton International. Initially, K.J. Quinn's operations were conducted in both manufacturing facilities. In July 1988, Morton began leasing one of the facilities, and in June 1991, they bought it (TRCC, 1991).

The only processes known to have been conducted onsite are the production of thermoplastic urethane resins in pellet and granular form and liquid phase urethane elastomers. The urethane resins are used to manufacture protective and decorative wood coatings and seamless floors, and the elastomers are used to manufacture adhesives for glass and food wraps (NHDES, 1983a; NHBSWM, 1980). Thermoplastic resins were apparently manufactured in the facility that was sold to Morton (Yergeau, 1983) so K.J. Quinn currently manufactures only liquid phase urethane.

In 1983, K.J. Quinn reported that the chemicals used at the site in the production of resins and in cleaning machinery include:

- xylenes, 1,1,1-trichloroethane, methyl ethyl ketone (MEK), isopropanol, toluene, m-pyrol, ethyl alcohol, methyl cellusolve, cellusolve acetate, methylene chloride, butyl acetate, dimethyl formamide, and tetrahydrofuran (THF) (K.J. Quinn, 1983).

In 1983, K.J. Quinn also reported the offsite disposal of approximately 30 drums of hazardous waste per month through All County Environmental, a licensed hazardous waste transporter. Typical wastes generated include mixed flammable solvents (butyl acetate, MEK, xylol, toluol, cellusolve acetate, and dimethyl formamide) and waste urethane residue in solid form (Yergeau, 1983). Currently, K.J. Quinn disposes of their hazardous waste through Browning-Ferris, Ind. (Winterholer, 1991).

In May 1980, a former K.J. Quinn employee reported to the New Hampshire Bureau of Solid Waste Management (NHBSWM) that, in the fall and winter of 1978, K.J. Quinn personnel dumped more than 100 barrels of liquid and solid waste into a pit on the K.J. Quinn property (NHBSWM, 1980). Upon inspection of the site, NHBSWM personnel found a 21,000 cubic foot pit containing buried 55-gallon drums. More than 20 drums of flammable solvents (MEK, xylene), 11 drums of butyl acetate, and 20 drums of paint cans and solidified urethane waste were removed from the pit between June and August 1980. Many of the drums were dumped open-topped into the pit, therefore inspectors suspected that the waste seeped into the ground (NHBSWM, 1980). In August 1980, the drums were removed, clean fill was imported, and ground water monitoring wells were installed by Roy F. Weston, Inc. (Weston) under contract to K.J. Quinn.

In 1983, K.J. Quinn began routine monitoring of eleven onsite and four offsite ground water wells. In addition to sampling monitoring wells, K.J. Quinn also sampled the Salisbury Water Supply Company's (SWSC) Well #1, located 1,200 feet southeast of the site. Initial sampling results indicated that the well was contaminated with trichloroethylene, 1,1,1 trichloroethane, and tetrahydrofuran (MA DEQE, 1989).

Inspections, studies, and remedial activities conducted at the site since the discovery of the illegal disposal activities are summarized below:

- July 7, 1980. A Preliminary Assessment was conducted by NHBSWM inspector, Stephen Mangion.
- July 25, 1980. K.J. Quinn Notification of Hazardous Waste Activity Report, was submitted to EPA.
- June 17, 1981. Part A Application Inspection Summary was filed by New Hampshire Division of Public Health Service, Bureau of Hazardous Waste Inspectors, Don Granz and Susan Hanamoto.
- June 14, 1983. Report on analysis of ground water samples were collected at K.J. Quinn by NH Water Supply and Pollution Control Commission (NHWSPCC) on May 20.

- August 30, 1983. RCRA Inspection Report was submitted by Sharon Yergeau and Jan Paterson, NHBSWM.

- September 8, 1983. A report from Weston was submitted to K.J. Quinn regarding the start-up of ground water cleanup operations.

- October 19, 1983. A report was submitted to NHWSPCC from Weston regarding air stripper start-up and ground water sampling.

- November 1983 - May 1984. Periodic analyses of air stripper influent and effluent and monitoring well samples were conducted. Samples were analyzed by Resource Analysts, Inc. for K.J. Quinn.

- August 31, 1984. A report from Weston was submitted to NHWSPCC regarding ground water cleanup; analysis of influent, effluent, and monitoring well samples was conducted.

- June 1985 - December 1990. Periodic analyses of monitoring well samples were conducted by K.J. Quinn and Resource Analysts, Inc.

- April 4, 1988. Report of Soil Gas Survey, conducted by Goldberg-Zoino, and Associates was submitted to K.J. Quinn.

- March 17, 1989. Preliminary Assessment of Salisbury Wells #1, 5, and 6 was conducted by MADEQE.

K.J. Quinn currently has a permitted NPDES outfall and maintains large quantity RCRA generator status. No other permits have been held by K.J. Quinn.

ENVIRONMENTAL SETTING

The K.J. Quinn Site is located in the Town of Seabrook, Rockingham County, New Hampshire. The southwest corner of the site, however, extends into the Town of Salisbury, Massachusetts (USGS, 1985a,b). Land use in the area of the site is a mixture of residential and industrial, with interspersed areas of undeveloped woodlands.

Overburden in the area of the site generally consists of fine to coarse brown or gray sand and gravel, overlain by a thin layer of peat. The depth of the bedrock exceeds fifty feet in the

area of the site (MADEQE, 1989). Bedrock consists of gray, medium-grained porphyritic granite with microcline phenocrysts of the Newburyport Complex. This complex intrudes the Kittery Formation (Zen, 1983).

The depth to ground water is approximately ten to twenty feet in the area of the site (Weston, 1983). According to NHDES the site may be located within a 100-year flood plain. The direction of ground water flow is unknown but, based on previous contaminant migration pathways, ground water is expected to flow to the east.

Sections of six towns fall within a four-mile radius of the site. All of Seabrook, and most of Salisbury, Massachusetts and Hampton Falls, New Hampshire are located within four miles of the site. In addition, small portions of Amesbury, Massachusetts and South Hampton, Kensington, and Hampton, New Hampshire are located within the site's four-mile radius. The town of Hampton is serviced by the Hampton Water Supply Company, whose wells are located north of the site's four-mile radius (Perkins, 1991a). Four private wells in Hampton are known to be located within four miles of the site (NHDES, 1991). Residents of Amesbury are serviced largely by the town's public water supply. However, the town wells are located southwest of the four-mile radius. No private wells are known to be located in Amesbury (Perkins, 1991b). SWSC services most of the town of Salisbury's 6,000 year-round residents. In the summer, SWSC estimates the number of customers to exceed 22,000 (Perkins, 1991c). All three of SWSC's functional wells are located within one mile of the site and are noted on Figure 1. One of SWSC's wells was closed in 1983 due to chemical contamination suspected to have leached from the site (MADEQE, 1989). To supplement their water supply in the summer, SWSC buys water from the town of Amesbury. Between ten and twenty residences maintain private wells in Salisbury (Perkins, 1991d). The towns of South Hampton, Kensington, and Hampton Falls do not maintain public water supplies (Perkins, 1991e,f, and g). Approximately eighty houses in South Hampton and 360 houses in Hampton Falls are located within a four-mile radius of the site. The town of Seabrook provides water to approximately 8,500 year-round residents from three overburden and four bedrock wells located within two miles of the site. According to the Seabrook Water

Superintendent, approximately five private wells are known to be in use throughout the town (Perkins, 1991h). Table 2 and Table 3 list public and private well usage, respectively, within four miles of the site.

TABLE 2. PUBLIC WELL USAGE WITHIN A FOUR-MILE RADIUS OF THE K.J. QUINN SITE.

Town	Source Name	Distance/Direction From Site	Approximate Population Served*	Source Type
Salisbury	Well #5	0.4 mi/SSW	6,000	overburden
	Well #6	0.5 mi/SSW	6,000	overburden
	Well #7	0.9 mi/W	6,000	overburden
Seabrook	Weare Mill Lane Wells (4)	2.5 mi/NW	8,500	bedrock
	Snake Road Wells (2)	0.9 mi/W	8, 500	overburden

*Wellwater is mixed so each well contributes to the whole population.
Source: (Perkins, 1991d, h)

TABLE 3. PRIVATE WELL USAGE WITHIN A FOUR-MILE RADIUS OF THE K.J. QUINN SITE

Town	Approximate Population Served *
Hampton, NH	11
South Hampton, NH	216
Kensington, NH	405
Salisbury, MA	54
Seabrook, NH	14
Hampton Falls, NH	945

*NHDES Engineering Resources assumes 2.7 people per household.
Source: (Perkins, 1991a-h)

A total of approximately 14,500 (36,000 in summer) and 1,645 year-round residents are serviced by public and private water supplies, respectively, within four miles of the site.

Surface water from the site is expected to drain northeasterly into Cains Brook. The majority of surface water most likely drains into Cains Brook through the storm water grates. Cains Brook flows easterly through Cains Millpond, 0.8 miles from site. Approximately 1.8 miles downstream of the site, Cains Brook flows into Shepherd Brook to become Mill Creek. Approximately 2.8 miles east of the site, Mill Creek empties into Hampton Harbor. Hampton Harbor empties, via the Hampton Harbor Inlet, into the Atlantic Ocean approximately five miles downstream of the site.

Cains Brook is designated by the U.S. Fish and Wildlife Services as a palustrine forested wetland until immediately before its confluence with Shepherd Brook. At this point, to the mouth of the Hampton Harbor inlet, the wetlands associated with the site's surface water pathway are designated as estuarine intertidal systems (U.S. FWS, 1990).

Six species or communities are listed by the New Hampshire Natural Heritage Inventory as endangered, threatened or potentially threatened along the site's 15-mile surface water pathway. Four of these species are considered to be state threatened (protected under the New Hampshire Native Plant Protection Act), one is a Federal Candidate Species (imperiled throughout its habitat range), and one is state and federally endangered (NHDRED, 1991). Table 4 lists these species and their current status.

RESULTS

The ground water at and in the area of the K.J. Quinn site has been sampled extensively since 1983. Analytical data from previous studies collected by TRCC were limited to volatile organic compound (VOC) analysis. No data regarding analyses for semi-volatile organic compounds, polychlorinated biphenyls, pesticides, or metals were located. In 1980, overburden ground water monitoring wells were installed on the K.J. Quinn property.

TABLE 4. SPECIES OF CONCERN KNOWN TO INHABIT THE 15-MILE SURFACE WATER DRAINAGE PATHWAY OF THE K.J. QUINN SITE

Common Name	Scientific Name	Rank
Eaton's Quill wort	*Isoetes eatonii*	Federal Candidate Species
Salt-marsh Gerardia	*Agalinus maritima*	State Threatened
Small Spike-Rush	*Eleocharis parvula*	State Threatened
Beech grass	*Ammophila breviligulata*	State Threatened
Sand Drop-seed	*Sporobolus cryptandrus*	State Threatened
Piping Plover	*Charadrius melodus*	State and Federally Endangered

Source: (NHDRED, 1991)

The earliest ground water sampling results found in available files pertain to samples collected on May 14, 1982 by NHDES Ground Water Division personnel from monitoring wells numbered 1 to 5 (MW-1 through 5). Samples were collected using a stainless steel bailer and placed in 40 milliliter (ml) vials. A duplicate/replicate sample was collected from MW-2 (NHDES, 1983b). Samples were analyzed for headspace using an Organic Vapor Analyzer (OVA) 128 by the NHWSPCC Organic Laboratory. Two Volatile Organic Compounds (VOCs) were detected at concentrations as high as 25 micrograms per liter (µg/l) in samples collected from MW-3 (NHDES, 1983b). On May 20, 1983, NHDES personnel collected groundwater samples from MW-1 through 5. A duplicate/replicate sample was collected from MW-2 and a trip blank sample was also collected. Split samples were collected by Weston for K.J. Quinn (NHDES, 1983b). The samples were analyzed for VOCs by the NHWSPCC Organic Laboratory on May 27, 1983 using a gas chromatograph/mass spectrometer. Five VOCs, at concentrations up to 906 µg/l were detected in samples collected from MW-3 and MW-4 (NHDES, 1983b). Complete analytical results are included in Appendix A.

Available file information indicates that Weston personnel collected samples from selected monitoring wells on at least seven occasions between November 1983 to May 1984. These

samples were analyzed by Resource Analysts, Inc. using ASTM Method D 3781-79, with the exception of a sample collected from MW-16, which was analyzed on May 30, 1984 using EPA Method 624 (Resource Analysts, 1983). No record of duplicate or trip blank sample analysis is included in these results. Ten VOCs were detected at concentrations up to 360 µg/l during this period (Resource Analysts, 1984). Complete analytical results are included in Appendix B.

A summary of sampling results for MW-6, 10, 15, 16, and 17, covering samples collected between March 28, 1984 to June 6, 1985, was compiled by K.J. Quinn personnel. No information regarding the total number of samples collected, trip blank samples, method of analysis, or companies responsible for sampling and analysis was included in the summary. Twelve VOCs were detected in samples collected during this period at concentrations up to 11,500 parts per billion (ppb) (K.J. Quinn, undated a). The complete summary is included as Appendix C.

On August 10, 1984, Weston collected samples from MW-2, 6, 7, 10, and 11. Samples were analyzed for VOCs using Method ASTM D 3781-79 by an unspecified laboratory (Weston, 1984). No record of a trip blank or a duplicate sample is included in the results. Nine VOCs were detected at concentrations as high as 460 µg/l (Weston, 1984). Complete analytical results are included in Appendix D.

Resource Analysts collected groundwater samples from monitoring wells on the property at unknown dates. Analyses of these samples were conducted on December 10, 1986, November 13-14, 1987, and November 15, 1990 (Resource Analysts, 1986, 1987, 1990). A matrix spike sample was analyzed with the November 13-14, 1987 samples and field blank and trip blank samples were collected during the November 15, 1990 sampling activity. Samples were analyzed for VOCs using EPA Method 624. Four VOCs at concentrations as high as 160 µg/l were detected in the samples analyzed on December 14, 1986; two VOCs were detected at concentrations as high as 23 µg/l in the samples analyzed on November 13-14, 1987; and one VOC was detected at a concentration of 35 µg/l in the samples analyzed on

November 15, 1990 (Resource Analysts, 1986, 1987, 1990). Complete analytical results of these samples are included in Appendix E.

Table 5 summarizes the maximum concentrations of VOCs detected in groundwater samples collected from monitoring wells on the K.J. Quinn property from May 28, 1982 to November 15, 1990. The compound, its maximum detected concentration, the sample location, the date of collection or analysis, and the Maximum Contaminant Level (MCL) for that compound (if established), is included in the table.

Since the installation of the groundwater remediation system on the property in September 1983, the influent for the recovery well (R-1, formerly P-1) and the discharge from the air stripper have been sampled regularly. The first sampling of groundwater collected from the recovery well occurred on September 22, 1983. A trip blank sample and multiple samples of influent and effluent were collected by Weston personnel. Samples were analyzed on September 23, 1983 by Resource Analysts for VOCs using ASTM Method 3781-79. Four VOCs were detected at concentrations as high as 5600 ppb (Weston, 1983). After the initial analysis, samples of influent and effluent were collected weekly until November 21, 1983, after which samples were collected monthly until May 4, 1984 (Resource Analysts, 1984). No sampling information from January to March 1984 is available. Influent samples were analyzed by ASTM Method 3781-79 and effluent samples were analyzed by EPA Method 624 (Resource Analysts, 1984). During this period, thirteen VOCs were detected at concentrations up to 12,000 μg/l in the influent (Resource Analysts, 1984). Concentrations in the effluent were considerably lower. Complete analytical information is included in Appendix F.

Weekly recovery well (R-1) sampling results from March 28, 1986 to April 26, 1988 and monthly recovery well sampling results, from May 10, 1988 to December 17, 1990 (except for November 1989 to May 1990) were provided to TRCC by K.J. Quinn personnel. Levels of 1,1,1-trichloroethane and THF were consistently high. The complete analytical results are included in Appendix G.

TABLE 5. VOLATILE ORGANIC COMPOUNDS DETECTED IN SAMPLES COLLECTED FROM GROUNDWATER MONITORING WELLS

Compound	Maximum Concentration	Sample Location	Sample Date	MCL
Acetone	300 µg/l	MW-11	Nov. 4, 1983*	
Chloroethane	6 µg/l	MW-7	Aug. 10, 1984	
Chloroform	42 µg/l	MW-11	Nov. 4, 1983*	100µg/l
1,1-Dichloroethane	1300 ppb	MW-17	Nov. 13, 1984*	
1,2-Dichloroethane	58 µg/l	MW-11	Nov. 4, 1983*	5 µg/l
1,1-Dichloroethylene	50 ppb	MW-17	June 7, 1985*	7 µg/l
Ethylbenzene	11 µg/l	MW-3	May 20, 1983	
Methyl ethyl ketone	870 µg/l	MW-3	May 20, 1983	
Methyl isobutyl ketone	11 µg/l	MW-11	Nov. 4, 1983*	
Methylene chloride	35 µg/l	MW-6	Nov. 15, 1990*	
Tetrachloroethylene	11 µg/l	MW-10	Mar. 30, 1984*	
Tetrahydrofuran	11,500 ppb	MW-17	Nov. 13, 1984*	
1,1,1-Trichloroethane	1100 ppb	MW-17	Nov. 13, 1984*	200µg/l
Trichloroethylene	5 µg/l	MW-11	Nov. 4, 1983*	5 µg/l
Toluene	36 ppb	MW-15	June 6, 1985*	
m-Xylenes	12 µg/l	MW-3	May 20, 1983	
p-Xylenes	12 µg/l	MW-3	May 20, 1983	

µg/l - micrograms per liter
ppb - parts per billion
* - date of sample analysis; sample collection date unknown
(K.J. Quinn, undated b; NHDES, 1983b; Resources Analysts, 1984, 1986, 1987, 1990; Weston, 1984)

K.J. Quinn Company personnel graphed the analytical results for seventeen selected VOCs detected in samples collected from R-1 between 1987 and 1990. Appendix H contains the graphed analytical results of the samples collected in this time period. According to the graphs, samples were collected and analyzed between November 1989 and May 1990,. however, data for this time period were not located. The graphs indicate that concentrations of nine of the seventeen VOCs detected in late 1989 had increased by early 1990. The units of measurement for contaminant concentrations are not indicated on the graphs, but comparison with Resource Analysts results indicate that the units are milligrams per liter (mg/l). During the period from November 1989 to May 1990, ten of the seventeen VOCs detected in recovery well samples were present at concentrations higher than 1.000 mg/l (K.J. Quinn, undated b).

Table 6 summarizes the highest concentrations of VOCs detected in samples collected from the recovery well (R-1) from September 22, 1983 to December 17, 1990. Included in this table are the compound, its maximum detected concentration, the date of collection or analysis, its Maximum Contaminant Level (MCL) (if established), and the Appendix in which the complete data are located.

In 1984, Weston labelled MW-11 as the background well. However, because samples from the well consistently contained high levels of contaminants, TRCC felt that this was inappropriate. For the purposes of this report, MW-1, which is ostensibly located hydraulically upgradient of the source area and has never contained significant contaminants, is being referred to as the background sample by TRCC.

The primary contaminants detected in the ground water at the site were 1,1,1-trichloroethane, toluene, MEK, and tetrahydrofuran (THF). Dichloroethane (1,1- and 1,2-), methylene chloride, and several other chlorinated solvents were also frequently detected. In 1983, 2,400 µg/l 1,1,1-trichloroethane, 4,700 µg/l THF, 820 µg/l MEK, and 660 µg/l 1,1-dichloroethane were detected in one sample collected from the recovery well (Resource Analysts, 1984).

TABLE 6. VOLATILE ORGANIC COMPOUNDS DETECTED IN SAMPLES COLLECTED FROM K.J.QUINN RECOVERY WELL

Compound	Maximum Concentration	Sample Date	MCL	Attachment
Acetone	140 µg/l	Nov. 4, 1983*		G
Chlorobenzene	Trace**	Apr. 29, 1987*		H
Chloroethane	440 µg/l	Nov. 21, 1983*		C
Chloroform	Trace**	May 12, 1987*	100 µg/l	H
Chloromethane	13 µg/l	Mar. 14, 1988*		H
1,1-Dichloroethane	700 µg/l	Nov. 15, 1983*		C
1,2-Dichloroethane	140 µg/l	Nov. 15, 1983*	5 µg/l	C
1,1-Dichloroethene	26 µg/l	Jun. 16, 1987*		H
1,1-Dichloroethylene	10 µg/l	Nov. 4, 1983*	7 µg/l	C
Ethylbenzene	500 µg/l	Sep. 22, 1983	700 µg/l	G
Methyl ethyl ketone	2500 µg/l	Mar. 26, 1988*		H
Methyl isobutyl ketone	70 µg/l	May 4, 1984*		C
Methylene chloride	160 µg/l	May 12, 1987*		H
Tetrachloroethylene	350 µg/l	May 12, 1987*	5 µg/l	H
Tetrahydrofuran	12,000 µg/l	Nov. 21, 1983*		C
Toluene	900 µg/l	Sep. 22, 1983	1000 µg/l	G
1,1,1-Trichloroethane	5600 µg/l	Sep. 22, 1983	200 µg/l	G
Vinyl acetate	62 µg/l	Jan. 26, 1987*		H
Xylenes	180 µg/l	May 4, 1984*	10,000 µg/l	C

µg/l - micrograms per liter
* - sample analysis date; sample collection date unknown
** - Method detection limit for substance is 5 µg/l
(Resource Analysts, 1984, 1986, 1987, 1988, 1989, 1990; Weston, 1983b)

Each of these concentrations exceeds the Federally established MCL. Samples collected from monitoring wells located outside of the source area (MW-1, -10, and -2) contained very little contamination.

In 1986, MW-1 (potentially upgradient) contained no contaminants. Three months later, a sample collected from recovery well R-1 contained 200 µg/l 1,1,1-trichloroethane, 2,500 µg/l MEK, and 30 µg/l 1,1-dichloroethane (Resource Analysis, 1986). In the following three years, these three compounds, as well as five other VOCs, were detected in samples collected from R-1 in varying concentrations. In 1986 and 1987, 1,1,1-trichloroethane was the most abundant contaminant. After August 1988, concentrations of 1,1,1-trichloroethane began to diminish and levels of THF and 1,1-dichloroethane began to increase. According to K.J. Quinn's data graphs, contaminant concentration peaked for most compounds between June and September 1987. Concentrations of THF, chloroethane, and 1,1-dichloroethane peaked again in January-March 1990 (K.J. Quinn, undated b) (see Appendix H).

In addition to onsite wells, samples from offsite ground water wells have been collected during studies at and in the area of the K.J. Quinn Site. The Salisbury Water Supply Company (SWSC) owns three wells, the closest of which is located approximately 1200 feet southeast of the K.J. Quinn property. Resource Analysts analyzed samples collected from SWSC Well #1 by Weston personnel on August 23, 1983 (MA DEQE, 1989). Results indicated that the sample contained 1,1,1-trichloroethane at 6 µg/l. In a followup study, MA DEQE collected water samples from Salisbury Wells #1, #5, and #6 on August 23, 1983. These samples were analyzed on the same day for purgeable organics by gas chromatograph/mass spectrometer at the MA DEQE Lawrence Experiment Station. Three VOCs were detected in the sample collected from Salisbury Well #1 at concentrations up to 6.8 µg/l. No VOCs were detected in samples collected from Salisbury Wells #5 or #6 (MA DEQE, 1989).

Samples from the SWSC wells were then collected monthly from February to October 1987 for the SWSC by Belleville Laboratory. No VOCs were detected in samples collected from

SWSC Wells #5 and #6. Inorganic analysis was performed on samples collected from SWSC Wells #5 and #6 on June 10, 1987. Manganese was detected in both samples at concentrations above Secondary MCLs. Secondary MCLs are criteria developed to control the taste and odor on drinking water.

On January 18, 1988, Goldberg Zoino & Associates (GZA) conducted a soil gas survey of the K.J. Quinn property at the request of the owner. Twelve soil gas samples were collected from the area of the former disposal pit and were analyzed on a Photovac 10S10 gas chromatograph. No VOCs were detected at any of the sample locations during the survey (GZA, 1988).

On July 10, 1991, TRCC personnel conducted an onsite reconnaissance at the K.J. Quinn facility. Per EPA direction, no samples were collected. An Hnu photoionizer and a Century Organic Vapor Analyzer (OVA) were used to monitor ambient air conditions during reconnaissance. Prior to reconnaissance, the HNu was calibrated with 100 ppm isobutylene to 56 ppm at a span setting of 0.15. The OVA was calibrated using 10.3 ppm and 100 ppm methane standards. Background concentrations were zero for both instruments. During reconnaissance, TRCC recorded HNu readings over background in two areas. A PVC pipe containing electrical cables was noted protruding from the ground, two feet southwest of the air stripping unit. The ambient air over the PVC pipe produced a sustained reading of 13 ppm on the HNu.

The second reading occurred over a storm sewer grate located fifteen feet southwest of the K.J. Quinn office building. The storm sewer collects runoff from the vicinity of the office building. A sustained reading of 250 ppm was noted on the HNu immediately over the sewer grate. The storm sewer is connected to the K.J. Quinn NPDES outfall. No readings above background were noted at the outfall or at any of the other grates or manholes (TRCC, 1991).

SUMMARY

The K.J. Quinn Co., Inc. site is located on Folly Mill Road in Seabrook , New Hampshire. The site is situated on a three-acre parcel of land that was initially developed in 1967 by K.J. Quinn.

K.J. Quinn has historically disposed of numerous flammable solvents, chlorinated solvents, and solid waste urethanes through licensed hazardous waste transporters. Currently, K.J. Quinn disposes of their waste through Browning-Ferris, Ind., a licensed hazardous waste transporter, and is a RCRA large quantity generator.

In 1980, a former K.J. Quinn employee reported to the New Hampshire Bureau of Solid Waste Management (NHBSWM) that K.J. Quinn personnel dumped more than 100 barrels of hazardous waste into a pit on the site in 1978. Upon inspection of the site in 1980, NHBSWM personnel uncovered more than twenty drums of mixed flammable solvents (methyl ethyl ketone, xylenes, tetrahydrofuran), eleven drums of butyl acetate, and more than twenty drums of paint cans and solid waste urethanes. Subsequently, the drums were removed, clean fill was introduced and eleven onsite monitoring wells were installed.

In 1983, the Salisbury Water Supply Company's (SWSC's) Well #1, which is located 1200 feet from the site, was found to be contaminated with trichloroethylene (TCE), 1,1,1-trichloroethane, and tetrahydrofuron (THF). The well was closed and studies into ground water contamination in the area were initiated.

Between 1983 and 1990, numerous ground water sampling activities have been conducted at and in the vicinity of the site. Concentrations of 1,1,1-trichloroethane, THF, 1,1-dichloroethane (a breakdown product of 1,1,1-trichloroethane), and methyl ethyl ketone have all exceeded 1,000 µg/l during that period. As recently as April 1990, concentrations of THF have exceeded 1000 µg/l and, in April 1989, 1,1,1-trichloroethane was present in the ground water at a concentration of over 3,000 µg/l. By comparison, in 1987 a potentially

upgradient monitoring well (MW-1) contained no detectable contamination. Four contaminants regularly exceeded Federal Maximum Contaminant Levels (MCLs) in samples collected from the recovery well R-1.

Approximately 16,145 (37,645 in the summer) residents consume drinking water from wells located within four miles of the site. Two of SWSC's three wells are located within one mile of the site. In addition to drinking water wells, six endangered or threatened species, and many acres of federally regulated wetlands are potentially affected by the site.

Based on the concentrations of hazardous compounds recently detected in the ground water at levels exceeding current MCLs, and based on the number of potential receptors, TRCC recommends that further remedial activities under CERCLA be conducted at the K.J. Quinn site.

REFERENCES

EPA 1991a. Hazardous Waste Data Management System; RCRA Generators by Town. 1991.

EPA 1991b. Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS). 1991.

GZA, 1988. Analysis of soil gas samples; conducted by Goldberg-Zoino & Associates for K.J. Quinn. January 18, 1988.

K.J. Quinn, undated a. Monitoring Well Data Tabulation. undated.

K.J. Quinn, undated b. Graphs of selected VOCs detected in the Recovery Well. Undated.

K.J. Quinn, 1983. Contingency Plan for Fire, Explosion, or Spill; List of Material Safety Data Sheets for the K.J. Quinn Facility, 135 Folly Mill Road. November, 1983.

MA DEQE, 1989. Preliminary Assessment of Salisbury Wells #1, 5, and 6; Massachusetts Department of Environmental Quality Engineering, Northeast Region. March 17, 1989.

NHBSWM, 1980. Potential Hazardous Waste Site Identification and Preliminary Assessment form; prepared by Stephen Mangion, New Hampshire Bureau of Solid Waste Management. August 7, 1980.

NHDES, 1983. New Hampshire Water Supply and Pollution Control Commission letter to K.J. Quinn regarding sampling event. June 14, 1983.

NHDES, 1991. NHDES Water Resources Division, Summary of Private Wells in the towns of Seabrook, Hampton, South Hampton, Hampton Falls, and Kensington. July 30, 1991.

NHDRED, 1991. New Hampshire Department of Resources and Economic Development's Natural Heritage Inventory List of Species and Communities of Concern. June 3, 1991.

Perkins, 1991a. Telecon for conversation between Hampton Water Supply Company's Process Manager and T. Perkins, TRCC. September 17, 1991.

Perkins, 1991b. Telecon for conversation between Amesbury Water Department personnel and T. Perkins, TRCC. September 17, 1991.

Perkins, 1991c. Telecon for conversation between SWSC Process Manager and T. Perkins, TRCC. September 17, 1991.

Perkins, 1991d. Telecon for conversation between Salisbury Board of Health personnel and T. Perkins, TRCC. September 17, 1991.

Perkins, 1991e. Telecon for conversation between South Hampton Selectman's office and T. Perkins, TRCC. September 17, 1991.

Perkins, 1991f. Telecon for conversation between Kensington Town Clerk and T. Perkins, TRCC. September 17, 1991.

Perkins, 1991g. Telecon for conversation between Mark Coellner, Hampton Falls Health Offices and T. Perkins, TRCC. September 17, 1991.

Perkins, 1991h. Telecon for conversation between Seabrook Water Superintendent and T. Perkins, TRCC. September 17, 1991.

Resource Analysts, 1984. Data compiled from ground water sampling at K.J. Quinn in 1983 and 1984. November 1983 - May 1984.

Resource Analysts, 1986. Analytical results of samples collected on December 10, 1986.

Resource Analysts, 1987. Analytical results of samples collected on November 13, 1987.

Resource Analysts, 1990. Analytical results of samples collected on November 15, 1990.

TRCC, 1991. Logbook of Site Reconnaissance of the K.J. Quinn facility (EPA ID # NHD48722466) conducted by TRCC. July 9, 1991.

US FWS, 1990. National Wetland Inventory of the Hampton, New Hampshire Quadrangle. 1990.

USGS, 1985a. United States Geologic Survey of the Exeter New Hampshire Quadrangle. 1985.

USGS, 1985b. United States Geologic Survey of the Newburyport, Massachusetts Quadrangle. 1985.

Weston, 1983. Letter from Richard Kraybill, Roy F. Weston, to Michael Donahue, NHWSPCC includes sampling results. October 19, 1983.

Weston, 1984. Letter from John Gilbert to Michael Donahue, NHWSPCC, concerning sampling of K.J. Quinn. August 31, 1984.

Winterholer, 1991. Telecon for conversations between Bryant Winterholer (K.J. Quinn) and T. Perkins, TRCC. September 17, 1991.

Yergeau, 1983. RCRA Inspection Checklist of K.J. Quinn Facility, conducted by Sharon Yergeau and Jan Paterson, NHBSWM. August 30, 1983.

Zen, 1983. E-an Zen, Bedrock Geologic Map of Massachusetts. 1983.

APPENDIX A

NH DES 1982 AND 1983 GROUND WATER SAMPLING DATA

6-16-83

The State of New Hampshire

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Deputy Executive Director &
Chief Engineer

Water Supply and Pollution Control Commission
Hazen Drive — P.O. Box 95
Concord, N.H. 03301

FILE
K J Quinn

June 14, 1983

RECEIVED
JUN 16 1983
WASTE RESPONSE &
COMPLIANCE BRANCH

Mr. Marvin Feldman
K. J. Quinn & Company, Inc.
Folly Mills Road
Seabrook, New Hampshire 03874

Dear Mr. Feldman:

On May 20, 1983 Mr. David J. Allain of this agency collected samples from K. J. Quinn monitoring wells in Seabrook. These samples were split with Quinn's consultants, Weston, Inc. The samples Mr. Allain collected were analyzed by gas chromatograph/mass spectrometer for volatile organic compounds. The analytical results are enclosed herewith. Results from May 14, 1982 are enclosed for your convenience.

Because some of these results indicate substantial increases in concentration of pollutants compared to reports from sampling on May 14, 1982, we request that you forward to this office copies of results obtained by your consultants from the recent monitoring.

The fact that levels of contamination have increased is of concern, since a water supply well is reported to exist down-gradient from this site. We, therefore, urge expeditious response to this request.

Very truly yours,

Dan H. Allen, P.E., Director
Ground Water Permit Division

DHA/bb
Enclosures
cc: Mr. John F. Zipeto, EPA, w/enc.
Brian C. Strohm, Ph.D., Office of Waste Management, w/enc.

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The State of New Hampshire

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Executive Director

DANIEL COLLINS, P.E.
Deputy Executive Director and
Chief Engineer

Water Supply and Pollution Control Commission
Hazen Drive — P.O. Box 95
Concord, N.H. 03301

DATE: 5/20/83

SUBJECT: K.J. Quinn monitoring well sampling (split with Weston)

FROM: David J. Allain

TO:

COPIES TO: Dan Allen

ANALYTICAL PROCEDURES:
GCMS - VOA
Method 624

METHOD OF QUANTIFICATION:
Internal Standard

CHAIN OF CUSTODY

DATE SAMPLE(S) RECEIVED 5/23/83

SAMPLE #	TYPE OF ANALYSES DESIRED
TRIP a) MAY2383 12261	
b) MAY2383 12262 well #1 KS.Quin	VOA
c) MAY2383 12263 well #2	"
d) MAY2383 12264 well #2	"
e) MAY2383 12265 well # 4	"
f) MAY2383 12266 well # 5	"
g) MAY2383 12267 well #3	"

PERSON(S) AND DIVISION RELINQUISHING SAMPLES

David J. Allain for Don Allen Ground Water

PERSON(S) RECEIVING SAMPLES Barbara J. McKay 5-23-83

DATE SAMPLES ANALYZED 5-27-83

ANALYST(S) Ken Hagne

NOTEBOOK AND/OR REFERENCE NUMBER

ADDITIONAL COMMENTS

K.J. QUINN
SEABROOK

NEW HAMPSHIRE WATER SUPPLY AND POLLUTION CONTROL COMMISSION
ORAGNICS/PRIORITY POLLUTANTS ANALYSIS

(ALL CONC. IN µg/liter)

	TRIP BLANK	WELL #1	WELL #2	WELL #4	WELL #5	WELL #3
SAMPLE NUMBERS	12261	12262	12263	12265	12266	12267
HALOGENATED ALIPHATICS						
Methane, dichloro-	ND	ND	ND		ND	
Methane, chlorodibromo-	↓	↓	↓		↓	
Methane, dichlorobromo-	↓	↓	↓		↓	
Methane, tribromo-	↓	↓	↓		↓	
Methane, trichloro-	↓	↓	↓		↓	
Methane, tetrachloro-	↓	↓	↓		↓	
Ethane, chloro-	↓	↓	↓		↓	
Ethane, 1,1 dichloro	↓	↓	↓	44	↓	78
Ethane, 1,2-dichloro-	↓	↓	↓		↓	
Ethane, 1,1,1-trichloro-	↓	↓	↓	>250	↓	>800
Ethane, 1,1,2-trichloro-	↓	↓	↓		↓	
Ethane, 1,1,2,2-tetrachloro-	↓	↓	↓		↓	
Ethylene, 1,1-dichloro-	↓	↓	↓		↓	
Ethylene, trans-dichloro-	↓	↓	↓		↓	
Ethylene, trichloro-	↓	↓	↓		↓	
Ethylene, tetrachloro-	↓	↓	↓		↓	
Propane, 1,2-dichloro-	↓	↓	↓		↓	
Propene, 1,3-dichloro (c & t)	↓	↓	↓		↓	
MONOCYLIC AROMATICS						
Benzene	ND	ND	ND	ND	ND	
Benzene, chloro-	↓	↓	↓	↓	↓	
Benzenes, dichloro	↓	↓	↓	↓	↓	
Benzene, ethyl-	↓	↓	↓	↓	↓	11
Toluene	↓	↓	↓	↓	↓	20
Xylenes (m-isomer)	↓	↓	↓	↓	↓	12
(o+p isomers)	↓	↓	↓	↓	↓	25
BY REQUEST ONLY						
Acrolein						
Acrylonitrile						
Ether, 2 chloro ethyl vinyl						
Ethylene, chloro (vinyl chloride)						
Methane, bromo						
Methane, chloro						
Methane. trichlorofluoro						
THF	—	—	—	339	<10	906
MEK	—	—	—	330	<10	870
ACETONE	—	—	—	—	—	39

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The State of New Hampshire

STAFF

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Executive Director

DANIEL COLLINS, P.E.
Deputy Executive Director
Chief Engineer

Water Supply and Pollution Control Commission
Hazen Drive — P.O. Box 95
Concord, N.H. 03301

DATE: 5-14-82

SUBJECT: Monitoring Wells - Immediate vicinity of Disposal Area - K.J. Quinn Company Folly Mills Rd. Seabrook, N.H.

FROM:
R. L. Wickson
Ground Water Division

TO:
Organic Laboratory

COPIES TO:
D. Allen P.E.
Director Groundwater Permits.

ANALYTICAL PROCEDURES:
Screening Only
OUA-128 Headspace Technique (10ml)

METHOD OF QUANTIFICATION:

CHAIN OF CUSTODY

DATE SAMPLE RECEIVED

5-14-82.

PERSON(S) RELINQUISHING SAMPLES

Ralph L Wickson

PERSON(S) RECEIVING SAMPLES

Sheila Heath

DATE SAMPLES ANALYZED

5/24/82 - 5/28/82

ANALYST(S)

Sheila Heath

NOTEBOOK NUMBER

Pgs. 75 - 78 Vol II

ADDITIONAL COMMENTS

Samples obtained from monitoring wells via stainless steel Bail
wells evacuated prior to sampling.

40 ml vials preserved with HgCl2.
Blank from clean gallon jug.

47088 - Blank - 140 ml vial
47089 - monitor well #1 - 1 40 ml vial.
47090 } - monitor well #2 - 2 40 ml vials.
47091 }
47092 - monitor well #3 - 1 40 ml vial.
47093 - monitor well #4 - 1 40 ml vial.
47094 - monitor well #5 - 1 40 ml vial.

#47088 - Trip Blank
(Not Run)

SAMPLE NO. 47089-47094

NEW HAMPSHIRE WATER SUPPLY AND POLLUTION CONTROL COMMISSION
ORGANICS/PRIORITY POLLUTANTS ANALYSIS

(ALL CONC. IN µg/l)

	MW 1	MW-2	MW-2	MW-3	MW-4	MW-5
	47089	47090	47091	47092	47093	47094
PESTICIDES						
Acrolein						
Aldrin						
α-BHC (Alpha)						
β-BHC (Beta)						
γ-BHC (Lindane) (gamma)						
δ-BHC (Delta)						
Chlordane						
DDD						
DDE						
DDT						
Dieldrin						
α-Endosulfan (Alpha)						
β-Endosulfan Sulfate (Beta)						
Endosulfan sulfate						
Endrin						
Endrin aldehyde						
Heptachlor						
Heptachlor epoxide						
Isophorone						
TCDD						
Toxaphene						
PCB's						
PCB-1016 (Aroclor 1016)						
PCB-1221 (Aroclor 1221)						
PCB-1232 (Aroclor 1232)						
PCB-1242 (Aroclor 1242)						
PCB-1248 (Aroclor 1248)						
PCB-1254 (Aroclor 1254)						
PCB-1260 (Aroclor 1260)						
2-Chloronaphthalene						
HALOGENATED ALIPHATICS						
Methane, bromo-	↑	↑	↑	↑	↑	
Methane, chloro-						
Methane, dichloro-						
Methane, chlorodibromo-						
Methane, dichlorobromo-						
Methane, tribromo-	ND	ND	ND	ND	ND	
Methane, trichloro-						
Methane, tetrachloro-						
* Methane, trichlorofluoro-	↓	↓	↓	↓	↓	48000
Methane, dichlorodifluoro-						

* Please note - a Trichlorofluoromethane Standard was not available, therefore a chloroform Standard was used to quantitate the concentration in sample # 47094

HALOGENATED ALIPHATICS
continued

	Well #1	Well #2	Well #2	Well #3	Well #4	Well #5
	47089	47090	47091	47092	47093	47094
Ethane, chloro-				ND		
Ethane, 1,2-dichloro-				ND		
Ethane, 1,1,1-trichloro-				20		
Ethane, 1,1,2-trichloro-				ND		
Ethane, 1,1,2,2-tetrachloro-						
Ethane, hexachloro-						
Ethene, chloro- (vinyl chloride)						
Ethene, 1,1-dichloro-						
Ethene, trans-dichloro-	ND	ND	ND	ND	ND	ND
Ethene, trichloro-						
Ethene, tetrachloro-						
Propane, 1,2-dichloro-						
Propene, 1,3-dichloro-						
Butadiene, hexachloro-						
Cyclopentadiene, hexachloro-						

ETHERS

Ether, bis (choromethyl)						
Ether, bis (2-chloroethyl)						
Ether, bis (2-chloroisopropyl)						
Ether, 2-chloroethyl vinyl						
Ether, 4-bromophenyl phenyl						
Ether, 4-chlorophenyl phenyl						
Bis (2-chloroethoxy) methane						

MONOCYCLIC AROMATICS

Benzene						
Benzene, chloro-						
Benzene, 1,2-dichloro-						
Benzene, 1,3-dichloro-						
Benzene, 1,4-dichloro-						
Benzene, 1,2,4-trichloro-						
Benzene, hexachloro-						
Benzene, ethyl-						
Benzene, nitro-						
Toluene	ND	ND	ND	ND	ND	ND
Toluene, 2,4-dinitro-						
Toluene, 2,6-dinitro						

PHENOLS AND CRESOLS

Phenol						
Phenol, 2-chloro-						
Phenol, 2,4-dichloro-						
Phenol, 2,4,6-trichloro-						
Phenol, pentachloro-						
Phenol, 2-nitro-						
Phenol, 4-nitro						
Phenol, 2,4-dinitro-						
Phenol, 2,4,-dimethyl-						
m-Cresol, p-chloro-						
o-Cresol, 4,6-dinitro-						

APPENDIX B

RESOURCE ANALYSTS 1983 AND 1984 SAMPLING DATA

Resource Analysts, Incorporated
Box 4778 Hampton, NH 03842
(603) 926-7777

VOLATILE PRIOTITY POLLUTANT DETERMINATION

Lab No. 2806 Analyst RDF Date Analyzed 11-4-83

EPA Method 624 [x] ASTM Method D 3781-79 [ ]

Parameter	Sample Designation			
	Discharge			
Acrolein				
Acrylonitrile				
Benzene				
Bis(chloromethyl)ether				
Bromoform				
Carbon Tetrachloride				
Chlorobenzene				
Chlorodibromomethane				
Chloroethane				
2-Chlorovinylether				
Chloroform				
Dichlorobromomethane				
Dichlorodifluromethane				
1,1-Dichloroethane				
1,2-Dichloroethane				
1,1-Dichloroethylene				
1,2-Dichloropropane				
1,3-Dichloropropylene				
Ethylbenzene				
Methyl bromide				
Methyl chloride				
Methylene chloride				
1,1,2,2-Tetrachloroethane				
Tetrachloroethylene				
Toluene				
1,2-trans-Dichloroethylene				
1,1,1-Trichloroethane				
1,1,2-Trichloroethane				
Trichloroethylene				
Trichlorofluoromethane				
Vinyl chloride				
MEK	400			
THF	730			

Method Detection Limit: 5 ug/L

NOTES: All results are expressed as ug/L. No entry denotes "not detected".

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(603) 926-7777

VOLATILE PRIOTITY POLLUTANT DETERMINATION

Lab No. 2806 Analyst LJC Date Analyzed 11-4-83

EPA Method 624 [ ] ASTM Method D 3781-79 [x]

Parameter	Sample Designation			
	R-1	MW-11	MW-2	MW-6
Acrolein				
Acrylonitrile				
Benzene				
Bis(chloromethyl)ether				
Bromoform				
Carbon Tetrachloride				
Chlorobenzene				
Chlorodibromomethane				
Chloroethane				
2-Chlorovinylether				
Chloroform		42		
Dichlorobromomethane				
Dichlorodifluromethane				
1,1-Dichloroethane	660	9		100
1,2-Dichloroethane	140	58		
1,1-Dichloroethylene	10			
1,2-Dichloropropane				
1,3-Dichloropropylene				
Ethylbenzene	80			
Methyl bromide				
Methyl chloride				
Methylene chloride		10		
1,1,2,2-Tetrachloroethane				
Tetrachloroethylene	16			
Toluene	190			
1,2-trans-Dichloroethylene				
1,1,1-Trichloroethane	2400	38		130
1,1,2-Trichloroethane				
Trichloroethylene		5		
Trichlorofluoromethane				
Vinyl chloride				
Acetone	140	300		
MEK	820	330		
THF	4700	62		360
MIBK		11		
Method Detection Limit:	5 ug/L	5 ug/L	5 ug/L	5 ug/L

NOTES: No entry denotes "not detected". This method cannot distinguish between 1,1-Dichloroethane and THF or between 1,2-Dichloroethane and MEK. Maximum possible values for both compounds have been calculated for this report. Values for these compounds should be interpreted as "less than or equal to" the values reported.

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VOLATILE PRIOTITY POLLUTANT DETERMINATION

Lab No. 2806 Analyst LJC Date Analyzed 11-4-83

EPA Method 624 [ ] ASTM Method D 3781-79 [X]

Parameter	Sample Designation			
	MW-7	Discharge	MW-10	
Acrolein				
Acrylonitrile				
Benzene				
Bis(chloromethyl)ether				
Bromoform				
Carbon Tetrachloride				
Chlorobenzene				
Chlorodibromomethane				
Chloroethane				
2-Chlorovinylether				
Chloroform				
Dichlorobromomethane				
Dichlorodifluromethane				
1,1-Dichloroethane		100		
1,2-Dichloroethane		61		
1,1-Dichloroethylene	Trace			
1,2-Dichloropropane				
1,3-Dichloropropylene				
Ethylbenzene				
Methyl bromide				
Methyl chloride				
Methylene chloride				
1,1,2,2-Tetrachloroethane				
Tetrachloroethylene				
Toluene				
1,2-trans-Dichloroethylene				
1,1,1-Trichloroethane	39	Trace		
1,1,2-Trichloroethane				
Trichloroethylene				
Trichlorofluoromethane				
Vinyl chloride				
Acetone		54		
MEK		350		
THF		700		
Method Detection Limit:	5 ug/L	5 ug/L	5 ug/L	

NOTES: No entry denotes "not detected". This method cannot distinguish 1,1,-Dichloroe from THF and 1,2-Dichloroethane from MEK. Maximum possible values fro both compounds have been calculated fro this report. Values should be interpreted as "less than or equal to" the values reported.

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Resource Analysts, Incorporated
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(603) 926-7777

VOLATILE PRIOTITY POLLUTANT DETERMINATION

Lab No. 2835 Analyst RDF Date Analyzed 11-15-83

EPA Method 624 [X] ASTM Method D 3781-79 []

Parameter	Sample Designation			
	Discharge			
Acrolein				
Acrylonitrile				
Benzene				
Bis(chloromethyl)ether				
Bromoform				
Carbon Tetrachloride				
Chlorobenzene				
Chlorodibromomethane				
Chloroethane				
2-Chlorovinylether				
Chloroform				
Dichlorobromomethane				
Dichlorodifluromethane				
1,1-Dichloroethane				
1,2-Dichloroethane				
1,1-Dichloroethylene				
1,2-Dichloropropane				
1,3-Dichloropropylene				
Ethylbenzene				
Methyl bromide				
Methyl chloride				
Methylene chloride				
1,1,2,2-Tetrachloroethane				
Tetrachloroethylene				
Toluene				
1,2-trans-Dichloroethylene				
1,1,1-Trichloroethane				
1,1,2-Trichloroethane				
Trichloroethylene				
Trichlorofluoromethane				
Vinyl chloride				
MEK	470			
THF	300			

Method Detection Limit: 5 ug/L

NOTES: All results are expresses as ug/L no entry denotes "not detected".

RAI

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(603) 926-7777

VOLATILE PRIOTITY POLLUTANT DETERMINATION

Lab No. 2835 Analyst RDF Date Analyzed 11-15-83

EPA Method 624 [ ] ASTM Method D 3781-79 [x]

Parameter	Sample Designation			
	R-1	MW-7	MW-11	
Acrolein				
Acrylonitrile				
Benzene				
Bis(chloromethyl)ether				
Bromoform				
Carbon Tetrachloride				
Chlorobenzene				
Chlorodibromomethane				
Chloroethane	100			
2-Chlorovinylether				
Chloroform				
Dichlorobromomethane				
Dichlorodifluromethane				
1,1-Dichloroethane	700*	Trace *		
1,2-Dichloroethane	90*			
1,1-Dichloroethylene	9	10*		
1,2-Dichloropropane				
1,3-Dichloropropylene				
Ethylbenzene	110			
Methyl bromide				
Methyl chloride				
Methylene chloride	Trace			
1,1,2,2-Tetrachloroethane				
Tetrachloroethylene				
Toluene	340			
1,2-trans-Dichloroethylene				
1,1,1-Trichloroethane	5100	92		
1,1,2-Trichloroethane				
Trichloroethylene				
Trichlorofluoromethane				
Vinyl chloride				
MEK (to 50 ug/L)	640			
THF (to 50 ug/L)	5900	14		
Method Detection Limit:	10 ug/L	10 ug/L	10 ug/L	

NOTES:* Possible Interference present. All results are expressed as ug/L. This meth cannot distinguish THF from 1,1-Dichloroethane and MEK from 1,2-Dichloroethane. M possible values for both compounds have been calculated. Values should be interpr

[illegible] equal to" those reported.

Resource Analysts, Incorporated
Box 4778 Hampton, NH 03842
(603) 926-7777

VOLATILE PRIOTITY POLLUTANT DETERMINATION

Lab No. 2859 Analyst RDF Date Analyzed 11-21-83

EPA Method 624 [X] ASTM Method D 3781-79 [ ]

Parameter	Sample Designation			
	Discharge			
Acrolein				
Acrylonitrile				
Benzene				
Bis(chloromethyl)ether				
Bromoform				
Carbon Tetrachloride				
Chlorobenzene				
Chlorodibromomethane				
Chloroethane				
2-Chlorovinylether				
Chloroform				
Dichlorobromomethane				
Dichlorodifluromethane				
1,1-Dichloroethane				
1,2-Dichloroethane				
1,1-Dichloroethylene				
1,2-Dichloropropane				
1,3-Dichloropropylene				
Ethylbenzene				
Methyl bromide				
Methyl chloride				
Methylene chloride				
1,1,2,2-Tetrachloroethane				
Tetrachloroethylene				
Toluene				
1,2-trans-Dichloroethylene				
1,1,1-Trichloroethane	Trace			
1,1,2-Trichloroethane				
Trichloroethylene				
Trichlorofluoromethane				
Vinyl chloride				
THF	520			
MEK	350			

Method Detection Limit: 5 ug/L

NOTES: All results are expressed as ug/L. No entry denotes "not detected". Trace denotes compound observed below the method detection limit.

RAI

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VOLATILE PRIOTITY POLLUTANT DETERMINATION

Lab No. 2859 Analyst LJC Date Analyzed 11-21-83

EPA Method 624 [ ] ASTM Method D 3781-79 [X]

Parameter	Sample Designation			
	R-1	MW-7	MW-11	
Acrolein				
Acrylonitrile				
Benzene				
Bis(chloromethyl)ether				
Bromoform				
Carbon Tetrachloride				
Chlorobenzene				
Chlorodibromomethane				
Chloroethane	440			
2-Chlorovinylether				
Chloroform				
Dichlorobromomethane				
Dichlorodifluromethane				
1,1-Dichloroethane	1400			
1,2-Dichloroethane	140			
1,1-Dichloroethylene				
1,2-Dichloropropane				
1,3-Dichloropropylene				
Ethylbenzene	240			
Methyl bromide				
Methyl chloride				
Methylene chloride				
1,1,2,2-Tetrachloroethane				
Tetrachloroethylene				
Toluene	810			
1,2-trans-Dichloroethylene				
1,1,1-Trichloroethane	2300	55		
1,1,2-Trichloroethane				
Trichloroethylene				
Trichlorofluoromethane				
Vinyl chloride				
THF	12,000			
MEK	970			
Xylenes	approx. 50			
Method Detection Limit:	100 ug/L	5 ug/L	5 ug/L	

NOTES: This method cannot distinguish THF from 1,1-Dichloroethane and MEK from 1,2-Dichloroethane. Maximum possible values for both compounds have been calculated Values should be interpreted as less than or equal to values reported.

All results are expressed as ug/L. No entry denotes "not detected".

KAI

Resource Analysts, Incorporated
Box 4778 Hampton, NH 03842
(603) 926-7777

VOLATILE PRIOTITY POLLUTANT DETERMINATION

Lab No. 2913 Analyst RDF Date Analyzed 12-14-83

EPA Method 624 [X] ASTM Method D 3781-79 [ ]

Parameter	Sample Designation			
	Discharge			
Acrolein				
Acrylonitrile				
Benzene				
Bis(chloromethyl)ether				
Bromoform				
Carbon Tetrachloride				
Chlorobenzene	Trace			
Chlorodibromomethane				
Chloroethane				
2-Chlorovinylether				
Chloroform				
Dichlorobromomethane				
Dichlorodifluromethane				
1,1-Dichloroethane	10			
1,2-Dichloroethane				
1,1-Dichloroethylene				
1,2-Dichloropropane				
1,3-Dichloropropylene				
Ethylbenzene	Trace			
Methyl bromide				
Methyl chloride				
Methylene chloride				
1,1,2,2-Tetrachloroethane				
Tetrachloroethylene				
Toluene	11			
1,2-trans-Dichloroethylene				
1,1,1-Trichloroethane	9			
1,1,2-Trichloroethane				
Trichloroethylene				
Trichlorofluoromethane				
Vinyl chloride				
THF (to 50 ug/L)	130			

Method Detection Limit: 5 ug/L

NOTES: All results are expressed as ug/L. No entry dneotes "not detected"

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(603) 926-777

VOLATILE PRIOTITY POLLUTANT DETERMINATION

Lab No. 2913 Analyst LJC Date Analyzed 12-14-83

EPA Method 624 [ ] ASTM Method D 3781-79 [x]

Parameter	Sample Designation			
	MW 6	MW 10	R 1	
Acrolein				
Acrylonitrile				
Benzene				
Bis(chloromethyl)ether				
Bromoform				
Carbon Tetrachloride				
Chlorobenzene				
Chlorodibromomethane				
Chloroethane				
2-Chlorovinylether				
Chloroform				
Dichlorobromomethane				
Dichlorodifluromethane				
1,1-Dichloroethane	52			
1,2-Dichloroethane			270	
1,1-Dichloroethylene			8	
1,2-Dichloropropane				
1,3-Dichloropropylene				
Ethylbenzene				
Methyl bromide			120	
Methyl chloride				
Methylene chloride				
1,1,2,2-Tetrachloroethane				
Tetrachloroethylene				
Toluene				
1,2-trans-Dichloroethylene			350	
1,1,1-Trichloroethane	110			
1,1,2-Trichloroethane			500	
Trichloroethylene				
Trichlorofluoromethane				
Vinyl chloride				
THF	300			
MEK			1500	
			Trace	
Method Detection Limit:	5 ug/L	5 ug/L	5 ug/L	

NOTES: This method cannot distinguish 1,1-Dichloroethane from THF and 1,2-Dichloroeth from MEK. Maximum possible values for both compounds have been calculated. These values should be interpreted as less than or equal to. No entry denotes "not detetce

All results are expressed as ug/L.

Resource Analysts, Incorporated
Box 4778 Hampton, NH 03842
(603) 926-7777

VOLATILE PRIOTITY POLLUTANT DETERMINATION

Lab No. 2940 Analyst RDF Date Analyzed 12-30-83

EPA Method 624 [X] ASTM Method D 3781-79 [ ]

Parameter	Sample Designation			
	R-1			
Acrolein				
Acrylonitrile				
Benzene				
Bis(chloromethyl)ether				
Bromoform				
Carbon Tetrachloride				
Chlorobenzene				
Chlorodibromomethane				
Chloroethane	43			
2-Chlorovinylether				
Chloroform				
Dichlorobromomethane				
Dichlorodifluromethane				
1,1-Dichloroethane	58			
1,2-Dichloroethane				
1,1-Dichloroethylene				
1,2-Dichloropropane				
1,3-Dichloropropylene				
Ethylbenzene	18			
Methyl bromide				
Methyl chloride				
Methylene chloride				
1,1,2,2-Tetrachloroethane				
Tetrachloroethylene				
Toluene	65			
1,2-trans-Dichloroethylene				
1,1,1-Trichloroethane	212			
1,1,2-Trichloroethane				
Trichloroethylene				
Trichlorofluoromethane				
Vinyl chloride				
THF	300			

Method Detection Limit: 5 ug/L

NOTES: All results are expressed as ug/L. No entry denotes "not detetced".

Resource Analysts, Incorporated
Box 4778 Hampton, NH 03842
(603) 926-7777

VOLATILE PRIOTITY POLLUTANT DETERMINATION

Lab No. 2940 Analyst LJC Date Analyzed 12-29-83

EPA Method 624 [ ] ASTM Method D 3781-79 [X]

Parameter	Sample Designation			
	Discharge	MW6	MW10	R-1
Acrolein				
Acrylonitrile				
Benzene				
Bis(chloromethyl)ether				
Bromoform				
Carbon Tetrachloride				
Chlorobenzene				
Chlorodibromomethane				
Chloroethane				
2-Chlorovinylether				
Chloroform				
Dichlorobromomethane				
Dichlorodifluromethane				
1,1-Dichloroethane	76	42		
1,2-Dichloroethane				110
1,1-Dichloroethylene				Trace
1,2-Dichloropropane				
1,3-Dichloropropylene				
Ethylbenzene	15			
Methyl bromide				24
Methyl chloride				
Methylene chloride				
1,1,2,2-Tetrachloroethane				
Tetrachloroethylene				
Toluene	44			
1,2-trans-Dichloroethylene				66
1,1,1-Trichloroethane	140	69		
1,1,2-Trichloroethane				180
Trichloroethylene				
Trichlorofluoromethane				
Vinyl chloride				
Acetone		220		
Static Level		5.3'	5.4'	10.2'
Method Detection Limit:	5 ug/L	5 ug/L	5 ug/L	10 ug/L

NOTES: This method cannot distinguish THF from 1,1-Dichloroethane and MEK from 1,2-Dichloroethane. Maximum possible values for both compounds have been calculated. These values should be interpreted as less than or equal to. All results are expressed as ug/L. No entry denotes "not detected".

KAI

Resource Analysts, Incorpor
Box 4778 Hampton, NH (
(603) 926-

TO:

Mr. Munch Feldman
KJ Quinn and Company
Folly Mill Road
Seabrook, NH 03874

PO # verbal

Date Received: 3-28-84

Lab Number: 3262

Date Reported: 4-9-84

IDENTIFICATION

Water Samples

PARAMETER	SAMPLE DESIGNATION
please see attachment	

Swifalski/Moore
ANALYST

DIRECTOR

RAI

Resource Analysts, Incorpor
Box 4778 Hampton, NH
(603) 926-

VOLATILE PRIORITY POLLUTANT DETERMINATION

Lab No. 3262 Analyst REM Date Analyzed 3-30-84

EPA Method 624 [X] ASTM Method D 3781-79 [ ]

Parameter	Sample Designation			
	Discharge	MW-16		
Acrolein				
Acrylonitrile				
Benzene				
Bis(chloromethyl)ether				
Bromoform				
Carbon tetrachloride				
Chlorobenzene				
Chlorodibromomethane				
Chloroethane				
2-Chlorovinylether				
Chloroform				
Dichlorobromomethane				
Dichlorodifluromethane				
1,1-Dichloroethane	20			
1,2-Dichloroethane				
1,1-Dichloroethylene				
1,2-Dichloropropane				
1,3-Dichloropropylene				
Ethylbenzene	6			
Methyl bromide				
Methyl chloride				
Methylene chloride				
1,1,2,2-Tetrachloroethane				
Tetrachloroethylene				
Toluene	18	Trace		
1,2-trans-Dichloroethylene				
1,1,1-Trichlornethane	28			
1,1,2-Trichloroethane				
Trichloroethylene				
Trichlorofluoromethane				
Vinyl chloride				
Acetone (to 50 ug/L)		160		
MEK (to 50 ug/L)		100		
Method Detection Limit:	5 ug/L	5 ug/L		

NOTES: All results are expressed as ug/L. No entry denotes "not detected".

R.A1

Resource Analysts, Incorpora
Box 4778 Hampton, NH 0
(603) 926-7

VOLATILE PRIORITY POLLUTANT DETERMINATION

Lab No. 3262 Analyst GJS Date Analyzed 3-30-84

EPA Method 624 [ ] ASTM Method D 3781-79 [X]

Parameter	Sample Designation			
	MW-7	MW-11		
Acrolein				
Acrylonitrile				
Benzene				
Bis(chloromethyl)ether				
Bromoform				
Carbon Tetrachloride				
Chlorobenzene				
Chlorodibromomethane				
Chloroethane				
2-Chlorovinylether				
Chloroform				
Dichlorobromomethane				
Dichlorodifluromethane				
1,1-Dichloroethane	5			
1,2-Dichloroethane				
1,1-Dichloroethylene				
1,2-Dichloropropane				
1,3-Dichloropropylene				
Ethylbenzene				
Methyl bromide				
Methyl chloride				
Methylene chloride				
1,1,2,2-Tetrachloroethane				
Tetrachloroethylene				
Toluene	Trace			
1,2-trans-Dichloroethylene				
1,1,1-Trichloroethane	16			
1,1,2-Trichloroethane				
Trichloroethylene				
Trichlorofluoromethane				
Vinyl chloride				
Acetone (to 25 ug/L)	90			
THF (to 25 ug/L)	29			
Method Detection Limit:	5 ug/L	5 ug/L		

NOTES: This method cannot distinguish 1,1-Dichloroethane from THF. Maximum possib values for both compounds have been calculated. The values should be intreprated a "less than or equal to". All results are expressed as ug/L. "0" entry denotes "not detected".

RAI

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Box 4778 Hampton, NH
(603) 926

VOLATILE PRIORITY POLLUTANT DETERMINATION

Lab No. 3262 Analyst GJS Date Analyzed 3-30-84

EPA Method 624 [ ] ASTM Method D 3781-79 [X]

Parameter	Sample Designation			
	MW-2	MW-6	Intake	MW-10
Acrolein				
Acrylonitrile				
Benzene				
Bis(chloromethyl)ether				
Bromoform				
Carbon Tetrachloride				
Chlorobenzene				
Chlorodibromomethane				
Chloroethane				
2-Chlorovinylether			11	
Chloroform				
Dichlorobromomethane				
Dichlorodifluromethane				
1,1-Dichloroethane				
1,2-Dichloroethane			62	
1,1-Dichloroethylene				
1,2-Dichloropropane				
1,3-Dichloropropylene				
Ethylbenzene				
Methyl bromide			39	
Methyl chloride				
Methylene chloride				
1,1,2,2-Tetrachloroethane				
Tetrachloroethylene				
Toluene	Trace	Trace		11
1,2-trans-Dichloroethylene			88	Trace
1,1,1-Trichloroethane				
1,1,2-Trichloroethane			380	
Trichloroethylene				
Trichlorofluoromethane				
Vinyl chloride				
Acetone (to 25 ug/L)		Trace	120	30
THF (to 25 ug/L)			430	
Xylenes			60	
Method Detection Limit:	10 ug/L	10 ug/L	5 ug/L	5 ug/L

NOTES: * This method cannot distinguish 1,1-Dichloroethane from THF. Maximum values for both compounds have been calculated. These values should be interpreted as "less than or equal to". No entry denotes "not detected".

RAI

Resource Analysts, Incorporated
Box 4778 Hampton, NH 03842
(603) 926-7777

TO:

Mr. Munch Feldman
KJ Quinn and Company
Folly Mill Road
Seabrook, NH 03874

PO # verbal

Date Received: 4-9-84

Lab Number: 3287

Date Reported: 4-12-84

IDENTIFICATION

Water Sample

PARAMETER	SAMPLE DESIGNATION

please see attachment

Robert E. Moore
ANALYST

DIRECTOR

RAI

Resource Analysts, Incorpo
Box 4778 Hampton, NH
(603) 926

VOLATILE PRIORITY POLLUTANT DETERMINATION

Lab No. 3287 Analyst REM Date Analyzed 4-10-84

EPA Method 624 [X] ASTM Method D 3781-79 [ ]

Parameter	Sample Designation			
	Discharge			
Acrolein				
Acrylonitrile				
Benzene				
Bis(chloromethyl)ether				
Bromoform				
Carbon Tetrachloride				
Chlorobenzene				
Chlorodibromomethane				
Chloroethane				
2-Chlorovinylether				
Chloroform				
Dichlorobromomethane				
Dichlorodifluromethane				
1,1-Dichloroethane	41			
1,2-Dichloroethane				
1,1-Dichloroethylene				
1,2-Dichloropropane				
1,3-Dichloropropylene				
Ethylbenzene				
Methyl bromide				
Methyl chloride				
Methylene chloride				
1,1,2,2-Tetrachloroethane				
Tetrachloroethylene				
Toluene				
1,2-trans-Dichloroethylene				
1,1,1-Trichloroethane	46			
1,1,2-Trichloroethane				
Trichloroethylene				
Trichlorofluoromethane				
Vinyl chloride				
THF (to 25 ug/L)	220			

Method Detection Limit: 5 ug/L

NOTES: All results are expressed as ug/L. No entry denotes "not detected".

RAI

RECEIVED

APR 23 1984

ROY F. WESTON, INC.
CONCORD OFFICE

Resource Analysts, Incorporated
Box 4778 Hampton, NH 0384
(603) 926-777

TO:

KJ Quinn and COmpany
Mr. Munch Feldman
Folly Mill ROad
Seabrook, NH 03874

PO #

Date Received: 4-17-84

Lab Number: 3312

Date Reported: 4-20-84

IDENTIFICATION

Water Sample

PARAMETER	SAMPLE DESIGNATION

please see attachemnt

Robert E. Moore
ANALYST

DIRECTOR

Resource Analysts, Incorporate
Box 4778 Hampton, NH 038
(603) 926-777

VOLATILE PRIORITY POLLUTANT DETERMINATION

Lab No. 3312 Analyst REM Date Analyzed 17 April 1984

EPA Method 624 [X] ASTM Method D 3781-79 [ ]

	SAMPLE DESIGNATION			
	Discharge			
Acrolein				
Acrylonitrile				
Benzene				
Bromoform				
Carbon Tetrachloride				
Chlorobenzene				
Chlorodibromomethane				
Chloroethane				
2-Chloroethylvinylether				
Chloroform				
Dichlorobromomethane				
Dichlorodifluoromethane				
1,1-Dichloroethane				
1,2-Dichloroethane				
1,1-Dichloroethylene				
1,2-Dichloropropane				
1,3-Dichloropropylene				
Ethylbenzene	Trace			
Methyl bromide				
Methyl chloride				
Methylene chloride	Trace			
1,1,2,2-Tetrachloroethane				
Tetrachloroethylene				
Toluene	Trace			
1,2-trans-Dichloroethylene				
1,1,1-Trichloroethane	Trace			
1,1,2-Trichloroethane				
Trichloroethylene				
Trichlorofluoromethane				
Vinyl chloride				
Method Detection Limit:	5 ug/L			
THF	100			
Xylenes	present			

NOTES: All results are expressed as ug/L. No entry denotes "not detected".

RAI

Resource Analysts, Incorpor
Box 4778 Hampton, NH
(603) 926-

VOLATILE PRIORITY POLLUTANT DETERMINATION

Lab No. 3356 Analyst REM Date Analyzed 5-4-84

EPA Method 624 [X] ASTM Method D 3781-79 [ ]

	SAMPLE DESIGNATION			
	Discharge			
Acrolein				
Acrylonitrile				
Benzene				
Bromoform				
Carbon Tetrachloride				
Chlorobenzene				
Chlorodibromomethane				
Chloroethane				
2-Chloroethylvinylether				
Chloroform				
Dichlorobromomethane				
Dichlorodifluoromethane				
1,1-Dichloroethane				
1,2-Dichloroethane				
1,1-Dichloroethylene				
1,2-Dichloropropane				
1,3-Dichloropropylene				
Ethylbenzene				
Methyl bromide				
Methyl chloride				
Methylene chloride				
1,1,2,2-Tetrachloroethane				
Tetrachloroethylene				
Toluene				
1,2-trans-Dichloroethylene	Trace			
1,1,1-Trichloroethane				
1,1,2-Trichloroethane				
Trichloroethylene				
Trichlorofluoromethane				
Vinyl chloride				
Method Detection Limit:	5 ug/L			
Acetone (to 50 ug/L)				
THF (to 50 ug/L)	120			
MIBK (to 50 ug/L)				
Xylenes (to 50 ug/L)				

NOTES: All results are expressed as ug/L. No entry denotes "not detected".

RAI

Resource Analysts, Incorporat
Box 4778 Hampton, NH 03
(603) 926-77

VOLATILE PRIORITY POLLUTANT DETERMINATION

Lab No. 3356 Analyst REM Date Analyzed 5-4-84

EPA Method 624 [ ] ASTM Method D 3781-79 [X]

	SAMPLE DESIGNATION			
	MW-6	MW-10	R-1/Intake	
Acrolein				
Acrylonitrile				
Benzene				
Bromoform				
Carbon Tetrachloride				
Chlorobenzene				
Chlorodibromomethane				
Chloroethane				
2-Chloroethylvinylether				
Chloroform				
Dichlorobromomethane				
Dichlorodifluoromethane				
1,1-Dichloroethane				
1,2-Dichloroethane			47	
1,1-Dichloroethylene				
1,2-Dichloropropane				
1,3-Dichloropropylene				
Ethylbenzene				
Methyl bromide			50	
Methyl chloride				
Methylene chloride				
1,1,2,2-Tetrachloroethane				
Tetrachloroethylene				
Toluene				
1,2-trans-Dichloroethylene			93	
1,1,1-Trichloroethane				
1,1,2-Trichloroethane			250	
Trichloroethylene				
Trichlorofluoromethane				
Vinyl chloride				
Method Detection Limit:				
Acetone (to 50 ug/L)	5 ug/L	5 ug/L	5 ug/L	
THF (to 50 ug/L)			90	
MIBK (to 50 ug/L)			260	
MEK (to 50 ug/L)			70	
Xylenes (to 50 ug/L)			180	

NOTES:

This method cannot distinguish 1,1-Dichloroethane from THF. Maximum possible values for both compounds have been calculated. These values should be interpreted as less than or equal to. All results are expressed as ug/L. No entry denotes "not detected".

APPENDIX C

K.J. QUINN 1984 AND 1985 TABULATED DATA

K.J. QUINN & CO., INC.
SEABROOK, NH

MONITOR WELL DATA TABULATION

PPB

* Denotes "Nothing"

MONITORING WELL #6	3/28/84	5/17/84	6/29/84	8/10/84	11/13/84	6/6/85
Toluene	Trace					*
Acetone	Trace			40		*
1,1-Dichloroethane		Trace	Trace	15	60	*
1,1-Dichloroethylene					Trace	*
Chloroethane					Trace	*
1,1,1-Trichloroethane		Trace	Trace	50	90	*
T H F			Trace	70	520	*
Methylene Chloride		Trace				*
Trichloroethylene		Trace				*

MONITORING WELL #10	3/28/84	5/17/84	6/29/84	8/10/84	11/13/84
Tetrachloroethylene	11		*	*	*
Toluene	Trace		*	*	*
Acetone	30	Trace	*	*	*

MONITORING WELL #15	8/10/84	1/13/85	6/6/85
Methylene Chloride	9		
1,1,1-Trichloroethane	30	59	
1,2-trans-Dichloroethylene			Trace
Toluene		Trace	36

MONITORING WELL #16	3/28/84	8/10/84	1/30/85	6/5/85
Toluene	Trace	*	6	*
Acetone	160			
MEK	100			

MONITORING WELL #17	8/10/84	11/13/84	1/16/85	6/7/85
Chloroethane	5			
1,1-Dichloroethylene	Trace	20	20	50
1,1-Dichloroethane	140	1300	70	90
1,1,1-Trichloroethane	960	1100	680	730
T H F	4000	11,500		1900
Toluene			10	

APPENDIX D

WESTON 1984 GROUND WATER SAMPLING DATA

WESTON
CONSULTANTS
2 CHENELL DRIVE
CONCORD, NEW HAMPSHIRE 03301
PHONE: 603-228-1334

JAM X
WG
LP RJF 9-18
KH 9/24
K.J. QUINN
FILE SEABROOK

31 August 1984

FILE COPY

Mr. Michael P. Donahue, P.E.
Assistant Chief Engineeer,
Administrator
New Hampshire Water Supply and
Pollution Control Commission
P.O. Box 95, Hazen Drive
Concord, New Hampshire 03301

Re: Groundwater Cleanup
K.J. Quinn, Seabrook
WO 2160-01-04

Dear Mr. Donahue:

This letter is to inform you of the status of the groundwater clean-up operations at K.J. Quinn Company in Seabrook. The discharge sample collected on 10 August 1984 showed the system to be operating at the expected removal efficiencies for all compounds of interest with the exception of an apparently anomalous result for THF showing a higher concentration in the discharge than the intake. There are two possible explanations for this result. The first is that there is a 30 to 45 minute lag time between influent and effluent grab samples due to the residence time for the water in passing through the column and sump tank.

The second explanation involves the fact that different analytical methods are used for the intake and discharge samples. The discharge sample is tested by a GC-MS technique since unequivocal identification of all compounds in the effluent is desired. The intake sample is tested by a GC technique where quantitation is carried out by measurement of area under a tracing peak. For THF, the technique response factor is such that a relatively small peak area is generated by relatively high concentrations of THF. It is possible that a slight variation in GC conditions or detector response could have a slight effect on the THF peak response resulting in a quantitation error. Essentially, small variations in peaks result in large differences in quantitation results.

WESTON

No compounds were detected in MW-11 (background), MW-10, and MW-2. Well MW-6 at the property boundary showed 15 ppb of 1,1-dichloroethane, 50 ppb of 1,1,1-trichloroethane, 70 ppb of THF, and 40 ppb of acetone. Well MW-7 showed 6 ppb of chloroethane, 20 ppb of 1,1-dichloroethane, 120 ppb of 1,1,1-trichloroethane, 100 ppb of THF, and 7 ppb of acetone. The levels observed in wells MW-6 and MW-7 may reflect the effects of mounding from the groundwater recharge in the vicinity of the plume for a prolonged period. This concern will be eliminated as a result of the recently approved NPDES surface water discharge permit.

It is our understanding that the New Hampshire Water Supply and Pollution Control Commission has certified the draft NPDES permit for a surface water discharge of the stripping column subject to certain provisions for additional stream impact testing. Conversations with EPA indicate that the final permit has been issued. As soon as we receive a copy, we plan to meet with K.J. Quinn to plan the background testing required by the permit conditions. Start-up of off-site discharge will be initiated as soon as possible.

Please feel free to contact us if you have any questions regarding the contents of this report.

Sincerely yours,

ROY F. WESTON, INC.

John A. Gilbert

John A. Gilbert, P.E.
Associate Project Engineer

JAG:kj

Enclosures

cc: RLK

WESTON

WATER LEVEL DATA 8/10/84

WELL	WATER LEVEL, FEET
MW-2	39.10
MW-6	40.44
MW-7	41.38
MW-10	41.01
MW-11	43.11

Lab Number: 3647-1
Sample Designation: MW-2
Date: 8-13-84

	VOLATILE ORGANICS	CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1V.	CHLOROMETHANE	BDL	5
2V.	VINYL CHLORIDE	BDL	5
3V.	CHLOROETHANE	BDL	5
4V.	BROMOMETHANE	BDL	5
5V.	ACROLEIN	BDL	50
6V.	ACRYLONITRILE	BDL	50
7V.	METHYLENE CHLORIDE	BDL	5
8V.	TRICHLOROFLUOROMETHANE	BDL	5
9V.	1,1-DICHLOROETHYLENE	BDL	5
10V.	1,1-DICHLOROETHANE	BDL	5
11V.	1,2-trans-DICHLOROETHYLENE	BDL	5
12V.	CHLOROFORM	BDL	5
13V.	1,2-DICHLOROETHANE	BDL	5
14V.	1,1,1-TRICHLOROETHANE	BDL	5
15V.	CARBON TETRACHLORIDE	BDL	5
16V.	BROMODICHLOROMETHANE	BDL	5
17V.	1,2-DICHLOROPROPANE	BDL	5
18V.	1,3-trans-DICHLOROPROPENE	BDL	5
19V.	TRICHLOROETHYLENE	BDL	5
20V.	BENZENE	BDL	5
21V.	1,3-cis-DICHLOROPROPENE	BDL	5
22V.	1,1,2-TRICHLOROETHANE	BDL	5
23V.	DIBROMOCHLOROMETHANE	BDL	5
24V.	BROMOFORM	BDL	5
25V.	TETRACHLOROETHYLENE	BDL	5
26V.	1,1,2,2-TETRACHLOROETHANE	BDL	5
27V.	TOLUENE	BDL	5
28V.	CHLOROBENZENE	BDL	5
29V.	ETHYLBENZENE	BDL	5
30V.	2-CHLOROETHYL VINYL ETHER	BDL	5
	THF	BDL	25
	MEK	BDL	25
	ACETONE	TRACE	25
	Static Level	9'4"	

BDL = BELOW DETECTION LIMIT
METHOD REFERENCE ASTM D 3781-79

This method cannot distinguish 1,1-Dichloroethane from THF. Maximum possible values for both compounds have been calculated. These values should be interpreted as less than or equal to.

Lab Number: 3647-2
Sample Designation: MW-6
Date: 8-13-84

VOLATILE ORGANICS	CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
CHLOROMETHANE	BDL	5
VINYL CHLORIDE	BDL	5
CHLOROETHANE	BDL	5
BROMOMETHANE	BDL	5
ACROLEIN	BDL	50
ACRYLONITRILE	BDL	50
METHYLENE CHLORIDE	BDL	5
TRICHLOROFLUOROMETHANE	BDL	5
1,1-DICHLOROETHYLENE	BDL	5
1,1-DICHLOROETHANE	15	5
1,2-trans-DICHLOROETHYLENE	BDL	5
CHLOROFORM	BDL	5
1,2-DICHLOROETHANE	BDL	5
1,1,1-TRICHLOROETHANE	50	5
CARBON TETRACHLORIDE	BDL	5
BROMODICHLOROMETHANE	BDL	5
1,2-DICHLOROPROPANE	BDL	5
1,3-trans-DICHLOROPROPENE	BDL	5
TRICHLOROETHYLENE	BDL	5
BENZENE	BDL	5
1,3-cis-DICHLOROPROPENE	BDL	5
1,1,2-TRICHLOROETHANE	BDL	5
DIBROMOCHLOROMETHANE	BDL	5
BROMOFORM	BDL	5
TETRACHLOROETHYLENE	BDL	5
1,1,2,2-TETRACHLOROETHANE	BDL	5
TOLUENE	BDL	5
CHLOROBENZENE	BDL	5
ETHYLBENZENE	BDL	5
2-CHLOROETHYL VINYL ETHER	BDL	5
THF	70	25
MEK	BDL	25
ACETONE	40	25
Static Level	8'1"	

BDL = BELOW DETECTION LIMIT
METHOD REFERENCE ASTM D 3761-79

This method cannot distinguish 1,1-Dichloroethane from THF. Maximum possible values for both compounds have been calculated. These values should be interpreted as less than or equal to.

Lab Number: 3647-3
Sample Designation: MW-10
Date: 8-13-84

	VOLATILE ORGANICS	CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1V.	CHLOROMETHANE	BDL	5
2V.	VINYL CHLORIDE	BDL	5
3V.	CHLOROETHANE	BDL	5
4V.	BROMOMETHANE	BDL	5
5V.	ACROLEIN	BDL	50
6V.	ACRYLONITRILE	BDL	50
7V.	METHYLENE CHLORIDE	BDL	5
8V.	TRICHLOROFLUOROMETHANE	BDL	5
9V.	1,1-DICHLOROETHYLENE	BDL	5
10V.	1,1-DICHLOROETHANE	BDL	5
11V.	1,2-trans-DICHLOROETHYLENE	BDL	5
12V.	CHLOROFORM	BDL	5
13V.	1,2-DICHLOROETHANE	BDL	5
14V.	1,1,1-TRICHLOROETHANE	BDL	5
15V.	CARBON TETRACHLORIDE	BDL	5
16V.	BROMODICHLOROMETHANE	BDL	5
17V.	1,2-DICHLOROPROPANE	BDL	5
18V.	1,3-trans-DICHLOROPROPENE	BDL	5
19V.	TRICHLOROETHYLENE	BDL	5
20V.	BENZENE	BDL	5
21V.	1,3-cis-DICHLOROPROPENE	BDL	5
22V.	1,1,2-TRICHLOROETHANE	BDL	5
23V.	DIBROMOCHLOROMETHANE	BDL	5
24V.	BROMOFORM	BDL	5
25V.	TETRACHLOROETHYLENE	BDL	5
26V.	1,1,2,2-TETRACHLOROETHANE	BDL	5
27V.	TOLUENE	BDL	5
28V.	CHLOROBENZENE	BDL	5
29V.	ETHYLBENZENE	BDL	5
30V.	2-CHLOROETHYL VINYL ETHER	BDL	5
	THF	BDL	25
	MEK	BDL	25
	ACETONE	BDL	25
	Static Level	8'2"	

BDL = BELOW DETECTION LIMIT
METHOD REFERENCE ASTM D 3781-79

This method cannot distinguish 1,1-Dichloroethane from THF. Maximum possible values for both compounds have been calculated. These values should be interpreted as less than or equal to.

Lab Number: 3647-4
Sample Designation: MW-11
Date: 8-13-84

	VOLATILE ORGANICS	CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1V.	CHLOROMETHANE	BDL	5
2V.	VINYL CHLORIDE	BDL	5
3V.	CHLOROETHANE	BDL	5
4V.	BROMOMETHANE	BDL	5
5V.	ACROLEIN	BDL	50
6V.	ACRYLONITRILE	BDL	50
7V.	METHYLENE CHLORIDE	BDL	5
8V.	TRICHLOROFLUOROMETHANE	BDL	5
9V.	1,1-DICHLOROETHYLENE	BDL	5
10V.	1,1-DICHLOROETHANE	BDL	5
11V.	1,2-trans-DICHLOROETHYLENE	BDL	5
12V.	CHLOROFORM	BDL	5
13V.	1,2-DICHLOROETHANE	BDL	5
14V.	1,1,1-TRICHLOROETHANE	BDL	5
15V.	CARBON TETRACHLORIDE	BDL	5
16V.	BROMODICHLOROMETHANE	BDL	5
17V.	1,2-DICHLOROPROPANE	BDL	5
18V.	1,3-trans-DICHLOROPROPENE	BDL	5
19V.	TRICHLOROETHYLENE	BDL	5
20V.	BENZENE	BDL	5
21V.	1,3-cis-DICHLOROPROPENE	BDL	5
22V.	1,1,2-TRICHLOROETHANE	BDL	5
23V.	DIBROMOCHLOROMETHANE	BDL	5
24V.	BROMOFORM	BDL	5
25V.	TETRACHLOROETHYLENE	BDL	5
26V.	1,1,2,2-TETRACHLOROETHANE	BDL	5
27V.	TOLUENE	BDL	5
28V.	CHLOROBENZENE	BDL	5
29V.	ETHYLBENZENE	BDL	5
30V.	2-CHLOROETHYL VINYL ETHER	BDL	5
	THF	BDL	25
	MEK	BDL	25
	ACETONE	BDL	25
	Static Level	10'3"	

BDL = BELOW DETECTION LIMIT
METHOD REFERENCE ASTM D 3781-79

This method cannot distinguish 1,1-Dichloroethane from THF. Maximum possible values for both compounds have been calculated. These values should be interpreted as less than or equal to.

Lab Number: 3647-6
Sample Designation: Intake
Date: 8-13-84

	VOLATILE ORGANICS	CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1V.	CHLOROMETHANE	BDL	5
2V.	VINYL CHLORIDE	BDL	5
3V.	CHLOROETHANE	30	5
4V.	BROMOMETHANE	BDL	5
5V.	ACROLEIN	BDL	50
6V.	ACRYLONITRILE	BDL	50
7V.	METHYLENE CHLORIDE	7	5
8V.	TRICHLOROFLUOROMETHANE	BDL	5
9V.	1,1-DICHLOROETHYLENE	TRACE	5
10V.	1,1-DICHLOROETHANE	50	5
11V.	1,2-trans-DICHLOROETHYLENE	BDL	5
12V.	CHLOROFORM	BDL	5
13V.	1,2-DICHLOROETHANE	TRACE	5
14V.	1,1,1-TRICHLOROETHANE	460	5
15V.	CARBON TETRACHLORIDE	BDL	5
16V.	BROMODICHLOROMETHANE	BDL	5
17V.	1,2-DICHLOROPROPANE	BDL	5
18V.	1,3-trans-DICHLOROPROPENE	BDL	5
19V.	TRICHLOROETHYLENE	BDL	5
20V.	BENZENE	BDL	5
21V.	1,3-cis-DICHLOROPROPENE	BDL	5
22V.	1,1,2-TRICHLOROETHANE	BDL	5
23V.	DIBROMOCHLOROMETHANE	BDL	5
24V.	BROMOFORM	BDL	5
25V.	TETRACHLOROETHYLENE	BDL	5
26V.	1,1,2,2-TETRACHLOROETHANE	BDL	5
27V.	TOLUENE	70	5
28V.	CHLOROBENZENE	BDL	5
29V.	ETHYLBENZENE	50	5
30V.	2-CHLOROETHYL VINYL ETHER	BDL	5
	THF	230	25
	MEK	TRACE	25
	ACETONE	10	25
	Static Level	16'10.5"	
	XYLENES	160	25
	BDL = BELOW DETECTION LIMIT		
	METHOD REFERENCE ASTM D 3781-79	9'3.5"	

This method cannot distinguish 1,1-Dichloroethane from THF. Maximum possible values for both compounds have been calculated. These values should be interpreted as less than or equal to.

Lab Number: 3647-5
Sample Designation: MW-7
Date: 8-13-84

	VOLATILE ORGANICS	CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1V.	CHLOROMETHANE	BDL	5
2V.	VINYL CHLORIDE	BDL	5
3V.	CHLOROETHANE	6	5
4V.	BROMOMETHANE	BDL	5
5V.	ACROLEIN	BDL	5
6V.	ACRYLONITRILE	BDL	50
7V.	METHYLENE CHLORIDE	BDL	50
8V.	TRICHLOROFLUOROMETHANE	BDL	5
9V.	1,1-DICHLOROETHYLENE	BDL	5
10V.	1,1-DICHLOROETHANE	20	5
11V.	1,2-trans-DICHLOROETHYLENE	BDL	5
12V.	CHLOROFORM	BDL	5
13V.	1,2-DICHLOROETHANE	BDL	5
14V.	1,1,1-TRICHLOROETHANE	120	5
15V.	CARBON TETRACHLORIDE	BDL	5
16V.	BROMODICHLOROMETHANE	BDL	5
17V.	1,2-DICHLOROPROPANE	BDL	5
18V.	1,3-trans-DICHLOROPROPENE	BDL	5
19V.	TRICHLOROETHYLENE	BDL	5
20V.	BENZENE	BDL	5
21V.	1,3-cis-DICHLOROPROPENE	BDL	5
22V.	1,1,2-TRICHLOROETHANE	BDL	5
23V.	DIBROMOCHLOROMETHANE	BDL	5
24V.	BROMOFORM	BDL	5
25V.	TETRACHLOROETHYLENE	BDL	5
26V.	1,1,2,2-TETRACHLOROETHANE	BDL	5
27V.	TOLUENE	BDL	5
28V.	CHLOROBENZENE	BDL	5
29V.	ETHYLBENZENE	BDL	5
30V.	2-CHLOROETHYL VINYL ETHER	BDL	5
	THF	100	25
	MEK	BDL	25
	ACETONE	7	25
	Static Level	8'8"	

BDL = BELOW DETECTION LIMIT
METHOD REFERENCE ASTM D 3781-79

This method cannot distinguish 1,1-Dichloroethane from THF. Maximum possible values for both compounds have been calculated. These values should be interpreted as less than or equal to.

Lab Number: 3647-10
Sample Designation: Discharge
Date: 8-13-84

	VOLATILE ORGANICS	CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1V.	CHLOROMETHANE	BDL	5
2V.	VINYL CHLORIDE	BDL	5
3V.	CHLOROETHANE	BDL	5
4V.	BROMOMETHANE	BDL	5
5V.	ACROLEIN	BDL	50
6V.	ACRYLONITRILE	BDL	50
7V.	METHYLENE CHLORIDE	BDL	5
8V.	TRICHLOROFLUOROMETHANE	BDL	5
9V.	1,1-DICHLOROETHYLENE	BDL	5
10V.	1,1-DICHLOROETHANE	BDL	5
11V.	1,2-trans-DICHLOROETHYLENE	BDL	5
12V.	CHLOROFORM	BDL	5
13V.	1,2-DICHLOROETHANE	BDL	5
14V.	1,1,1-TRICHLOROETHANE	BDL	5
15V.	CARBON TETRACHLORIDE	BDL	5
16V.	BROMODICHLOROMETHANE	BDL	5
17V.	1,2-DICHLOROPROPANE	BDL	5
18V.	1,3-trans-DICHLOROPROPENE	BDL	5
19V.	TRICHLOROETHYLENE	BDL	5
20V.	BENZENE	BDL	5
21V.	1,3-cis-DICHLOROPROPENE	BDL	5
22V.	1,1,2-TRICHLOROETHANE	BDL	5
23V.	DIBROMOCHLOROMETHANE	BDL	5
24V.	BROMOFORM	BDL	5
25V.	TETRACHLOROETHYLENE	BDL	5
26V.	1,1,2,2-TETRACHLOROETHANE	BDL	5
27V.	TOLUENE	BDL	5
28V.	CHLOROBENZENE	BDL	5
29V.	ETHYLBENZENE	BDL	5
30V.	2-CHLOROETHYL VINYL ETHER	BDL	5
	THF	830	25
	MEK	BDL	25
	ACETONE	BDL	25

BDL = BELOW DETECTION LIMIT
METHOD REFERENCE: EPA 600/4-79-020 METHOD 624

RECEIVED

JAN 1 3 1984

ROY F. WESTON, INC.
CONCORD OFFICE

QUINN®

CERTIFIED MAIL NO. 252656
RETURN RECEIPT REQUESTED

January 16, 1984

RECEIVED

Ms. Alison Brewster
Water Quality Branch
USEPA Region 1
J.F.K. Federal Building
Boston, MA 02203

RE: NPDES Permit Modification NH00010901

Dear Ms. Brewster:

Enclosed is the revised application for modification of NPDES Permit NH00010901 issued to K. J. Quinn & Co., Inc. of Seabrook, New Hampshire. The revisions to the application include addition of results of GC-MS testing for Acid Compounds, Base/Neutral Compounds and Pesticides. It should be noted that the testing was performed on contaminated groundwater which is influent to the air stripping treatment. None of the Acid and Base/Neutral Compounds and Pesticides were detected. The concentration values reported are the analytical method detection limit for each compound.

Air stripping is a process which requires no chemical addition of any kind. Since air stripping is the only treatment of the contaminated groundwater prior to discharge, there is no mechanism by which any of these compounds can be introduced into the groundwater, and they will not, therefore, be found in the effluent discharged from the treatment system.

Please feel free to contact us if you require any further information or clarification of any material submitted. Thank you in advance for your assistance.

Sincerely,

K. J. QUINN & CO., INC.

Samuel P. M. Gray
Vice President

SPMG/aj
Encl.

cc: John A. Gilbert, Weston
M. Feldman
R. Karcher

A. FI[illegible] (specify) Chemical and [illegible]lied Products

B. SECOND (specify)

C. THIRD (specify)

D. FOURTH (specify)

[illegible]. OPERATOR INFORMATION

A. NAME: K. J. Quinn Company Inc.

B. Is the name li[illegible] Item VIII-A [illegible] owner? [X] YES [ ]

C. STATUS OF OPERATOR (Enter the appropriate letter into the answer box; if "Other", specify.)
F = FEDERAL
S = STATE
P = PRIVATE
M = PUBLIC (other than federal or state)
O = OTHER (specify)
Answer: P (specify)

D. PHONE (area code & no.): A 603 474 210

E. STREET OR P.O. BOX: Folly Mill Road

F. CITY OR TOWN: Seabrook

G. STATE: NH

H. ZIP CODE: 03874

IX. INDIAN LAND

Is the facility located on Indian lands? [ ] YES [X] NO

X. EXISTING ENVIRONMENTAL PERMITS

A. NPDES (Discharges to Surface Water): 9 N NH 0001091

B. UIC (Underground Injection of Fluids): 9 U

C. RCRA (Hazardous Wastes): 9 R

D. PSD (Air Emissions from Proposed Sources): 9 P

E. OTHER (specify): 9 (specify)

E. OTHER (specify): 9 (specify)

XI. MAP

Attach to this application a topographic map of the area extending to at least one mile beyond property bounderies. The map must show the outline of the facility, the location of each of its existing and proposed intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities, and each well where it injects fluids underground. Include all springs, rivers and other surface water bodies in the map area. See instructions for precise requirements.

XII. NATURE OF BUSINESS (provide a brief description)

Coatings and polymers production for extrusion, injection molding, calendaring, coatings, and other specialty uses.

XIII. CERTIFICATION (see instructions)

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those persons immediately responsible for obtaining the information contained in the application, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

A. NAME & OFFICIAL TITLE (type or print): Samuel P.M. Gray, Vice President

B. SIGNATURE: SPM Gray

C. DATE SIGNED: 11/28/8[illegible]

COMMENTS FOR OFFICIAL USE ONLY

FORM 1 GENERAL

EPA

U.S. ENVIRONMENTAL PROTECTION AGENCY

GENERAL INFORMATION

Consolidated Permits Program

(Read the "General Instructions" before starting.)

I. EPA I.D. NUMBER

F N H 0 0 0 1

LABEL ITEMS	PLEASE PLACE LABEL IN THIS SPACE
I. EPA I.D. NUMBER	
III. FACILITY NAME	
V. FACILITY MAILING ADDRESS	
VI. FACILITY LOCATION	

GENERAL INSTRU

If a preprinted label has been it in the designated space. Revi ation carefully; if any of it is in through it and enter the correct appropriate fill—in area below. Also, the preprinted data is absent *(the are left of the label space lists the infor that should appear)*, please provide it i proper fill—in area*(s)* below. If the label complete and correct, you need not compl Items I, III, V, and VI *(except VI-B wh must be completed regardless)*. Complete items if no label has been provided. Refer the instructions for detailed item descr tions and for the legal authorizations un which this data is collected.

II. POLLUTANT CHARACTERISTICS

INSTRUCTIONS: Complete A through J to determine whether you need to submit any permit application forms to the EPA. If you answer "yes" to any questions, you must submit this form and the supplemental form listed in the parenthesis following the question. Mark "X" in the box in the third column if the supplemental form is attached. If you answer "no" to each question, you need not submit any of these forms. You may answer "no" if your activity is excluded from permit requirements; see Section C of the instructions. See also, Section D of the instructions for definitions of bold-faced terms.

SPECIFIC QUESTIONS	MARK 'X' YES	MARK 'X' NO	MARK 'X' FORM ATTACHED
A. Is this facility a **publicly owned treatment works** which results in a **discharge** to **waters of the U.S.**? (FORM 2A)		X	
B. Does or will this facility *(either existing or proposed)* include a **concentrated animal feeding operation** or **aquatic animal production facility** which results in a **discharge** to **waters of the U.S.**? (FORM 2B)		X	
C. Is this a facility which currently results in **discharges** to **waters of the U.S.** other than those described in A or B above? (FORM 2C)	X		
D. Is this a proposed facility *(other than those described in A or B above)* which will result in a **discharge** to **waters of the U.S.**? (FORM 2D)		X	
E. Does or will this facility treat, store, or dispose of **hazardous wastes**? (FORM 3)		X	
F. Do you or will you inject at this facility industrial or municipal effluent below the lowermost stratum containing, within one quarter mile of the well bore, underground sources of drinking water? (FORM 4)		X	
G. Do you or will you inject at this facility any produced water or other fluids which are brought to the surface in connection with conventional oil or natural gas production, inject fluids used for enhanced recovery of oil or natural gas, or inject fluids for storage of liquid hydrocarbons? (FORM 4)		X	
H. Do you or will you inject at this facility fluids for special processes such as mining of sulfur by the Frasch process, solution mining of minerals, in situ combustion of fossil fuel, or recovery of geothermal energy? (FORM 4)		X	
I. Is this facility a proposed **stationary source** which is one of the 28 industrial categories listed in the instructions and which will potentially emit 100 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an **attainment area**? (FORM 5)		X	
J. Is this facility a proposed **stationary source** which is NOT one of the 28 industrial categories listed in the instructions and which will potentially emit 250 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an **attainment area**? (FORM 5)		X	

III. NAME OF FACILITY

1 SKIP K . J . Q u i n n C o m p a n y I n c .

IV. FACILITY CONTACT

A. NAME & TITLE *(last, first, & title)*	B. PHONE *(area code & no.)*
2 F e l d m a n M a r n i n C h i e f E n g i n e e r	6 1 7 3 2 1 3 2 0 0

V. FACILITY MAILING ADDRESS

A. STREET OR P.O. BOX

3 1 9 5 C a n a l S t r e e t

B. CITY OR TOWN	C. STATE	D. ZIP CODE
4 M a l d e n	M A	0 2 1 4 8

VI. FACILITY LOCATION

A. STREET, ROUTE NO. OR OTHER SPECIFIC IDENTIFIER

5 F o l l y M i l l R o a d

B. COUNTY NAME

R o c k i n g h a m

C. CITY OR TOWN	D. STATE	E. ZIP CODE	F. COUNTY CODE *(if known)*
6 S e a b r o o k	N H	0 3 8 7 4	

CONTINUE ON REVE

[illegible]RONT

[illegible]f, leaks, or spills, are a[illegible] discharges described in Items II-A or B intermittent [illegible]easonal?
[illegible]plete the following tabl[illegible] [X] NO [illegible]tion III)

[illegible]	2. OPERATION(s) CONTRIBUTING FLOW (list)	3. FREQUENCY a. DAYS PER WEEK (specify average)	3. FREQUENCY b. MONTHS PER YEAR (specify average)	4. FLOW a. FLOW RATE (in mgd) 1. LONG TERM AVERAGE	4. FLOW a. FLOW RATE (in mgd) 2. MAXIMUM DAILY	4. FLOW b. TOTAL VOLUME (specify with units) 1. LONG TERM AVERAGE	4. FLOW b. TOTAL VOLUME (specify with units) 2. MAXIMUM DAILY	4. FLOW c. DURATION (in days)
[illegible]01	cooling water	7	12	0.040	0.050	0.040 (mgd)	0.050 (mgd)	365
001	ground water treatment	7	12	0.029	0.058	**	**	

*Currently permitted discharge
**Proposed discharge requiring permit amendment

I. MAXIMUM PRODUCTION

A. Does an effluent guideline limitation promulgated by EPA under Section 304 of the Clean Water Act apply to your facility?
[ ] YES (complete Item III-B) [XX] NO (to to Section IV)

B. Are the limitations in the applicable effluent guideline expressed in terms of production (or other measure of operation)?
[ ] YES (complete Item III-C) [ ] NO (go to Section IV)

C. If you answered "Yes" to Item III-B, list the quantity which represents an actual measurement of your maximum level of production, expressed in the terms and units used in the applicable effluent guideline, and indicate the affected outfalls.

1. MAXIMUM QUANTITY a. QUANTITY PER DAY	b. UNITS OF MEASURE	c. OPERATION, PRODUCT, MATERIAL, ETC. (specify)	2. AFFECTED OUTFALLS (list outfall number)

V. IMPROVEMENTS

A. Are you now required by any Federal, State or local authority to meet any implementation schedule for the construction, upgrading or operation [illegible] water treatment equipment or practices or any other environmental programs which may affect the discharges described in this application? [illegible] but is not limited to, permit conditions, administrative or enforcement orders, enforcement compliance schedule letters, stipulations, court orders [illegible] or loan conditions.
[X] YES (complete the following table) [ ] NO (go to Item IV-B)

IDENTIFICATION OF CONDITION, AGREEMENT, ETC.	2. AFFECTED OUTFALLS a. NO.	2. AFFECTED OUTFALLS b. SOURCE OF DISCHARGE	3. BRIEF DESCRIPTION OF PROJECT	4. FINAL COMPLIANCE DATE a. REQUIRED	4. FINAL COMPLIANCE DATE b. PROJECTED
Agreement with State of New Hampshire Water Supply and Pollution Control Commission	001	Ground water	Treatment of contaminated ground water by air stripping with discharge of treated effluent	12/85	12/85

[illegible] may attach additional sheets describing any [illegible] you now have underway or which you [illegible] schedules for construction. [X] MARK "X" IF DESCRIPTION OF ADDITIONAL CONTROL PROGRAMS IS ATTACHED

Please print or type in the unshaded areas only | NPDES NH0001091 | Form Approved

FORM 2C NPDES

EPA

U.S. ENVIRONMENTAL PROTECTION AGENCY
APPLICATION FOR PERMIT TO DISCHARGE WASTEWATER
EXISTING MANUFACTURING, COMMERCIAL, MINING AND SILVICULTURAL
Consolidated Permits Program

I. OUTFALL LOCATION

For each outfall, list the latitude and longitude of its location to the nearest 15 seconds and the name of the receiving water.

A. OUTFALL NUMBER (list)	B. LATITUDE 1. DEG.	2. MIN.	3. SEC.	C. LONGITUDE 1. DEG.	2. MIN.	3. SEC.	D. RECEIVING WATER (name)
001	42	53	00	70	52	45	Folly Mill Brook

II. FLOWS, SOURCES OF POLLUTION, AND TREATMENT TECHNOLOGIES

A. Attach a line drawing showing the water flow through the facility. Indicate sources of intake water, operations contributing wastewater to the effluent, and treatment units labeled to correspond to the more detailed descriptions in Item B. Construct a water balance on the line drawing by showing flows between intakes, operations, treatment units, and outfalls. If a water balance cannot be determined *(e.g., for certain mining activities)* provide a pictorial description of the nature and amount of any sources of water and any collection or treatment measures.

B. For each outfall, provide a description of: (1) All operations contributing wastewater to the effluent, including process wastewater, sanitary, cooling water, and storm water runoff; (2) The average flow contributed by each operation; and (3) The treatment received by the wastewater. Attach on additional sheets if necessary.

1. OUTFALL NO. (list)	2. OPERATION(S) CONTRIBUTING FLOW a. OPERATION (list)	b. AVERAGE FLOW (include units)	3. TREATMENT a. DESCRIPTION	b. LIST CODES FROM TABLE
001	cooling water*	40,000 gpd	non-contact cooling water	
	ground water treatment**	28,800 gpd	treated ground water	
	*currently permitted discharge			
	**proposed discharge for which permit amendment is required			

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edge or reason to belie that any biological test for acute or chronic toxicity has been made on any of your discharges or on a ion to your discharge h the last 3 years?

☐ YES (identify the test(s) and describe their purposes below) XX NO (go to Section VIII)

VIII CONTRACT ANALYSIS INFORMATION

Were any of the analyses reported in Item V performed by a contract laboratory or consulting firm?

☒ YES (list the name, address, and telephone number of, and pollutants analyzed by, each such laboratory or firm below) ☐ NO (go to Section IX)

A. NAME	B. ADDRESS	C. TELEPHONE (area code & no.)	D. POLLUTANTS ANALYZED (list)
Resource Analysts, Inc.	Box 4778 (Lafayette Road) Hampton Falls, NH 03842	(603)926-7777	COD, TOC, TSS, ammonia-N, Nitrate/ Nitrite-N, Total phosphorus, Sulfate total iron, Total manganese
Normandeau Associates, Inc.	25 Nashua Road Bedford, NH 03102	(603)472-5191	BOD, total organic nitrogen

X. CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

A. NAME & OFFICIAL TITLE (type or print)
SAMUEL P.M. GRAY
Vice President

B. PHONE NO.
(617)321-3200

C. SIGNATURE
SPM Gray

D. DATE SIGNED
1/5/1984

CONTINUED FROM PAGE 2

Form Approved OMB No.

V. INTAKE AND EFFLUENT CHARACTERISTICS

A, B, & C: See instructions before proceeding – Complete one set of tables for each outfall – Annotate the outfall number in the space provided.
NOTE: Tables V-A, V-B, and V-C are included on separate sheets numbered V-1 through V-9.

D. Use the space below to list any of the pollutants listed in Table 2c-3 of the instructions, which you know or have reason to believe is discharged or may be discharged from any outfall. For every pollutant you list, briefly describe the reasons you believe it to be present and report any analytical data in your possession.

1. POLLUTANT	2. SOURCE	1. POLLUTANT	2. SOURCE

VI. POTENTIAL DISCHARGES NOT COVERED BY ANALYSIS

A. Is any pollutant listed in Item V-C a substance or a component of a substance which you do or expect that you will over the next 5 years use or manufacture as an intermediate or final product or byproduct?

☐ YES *(list all such pollutants below)* ☒ NO *(go to Item VI-B)*

B. Are your operations such that your raw materials, processes, or products can reasonably be expected to vary so that your discharges of pollutants in the next 5 years exceed two times the maximum values reported in Item V?

☐ YES *(complete Item VI-C below)* ☒ NO *(go to Section VII)*

C. If you answered "Yes" to Item VI-B, explain below and describe in detail the sources and expected levels of such pollutants which you anticipate will be discharged from each outfall over the next 5 years, to the best of your ability at this time. Continue on additional sheets if you need more space.

LEASE PRINT OR TYPE IN THE UNSHADED AREAS ONLY. You may report some or all of [illegible] on separate sheets (use the same format) instead of completing these pages. [illegible] INSTRUCTIONS

[illegible] NUMBER (copy from Item 1 of Form 1)

NPDES NH0001091

Form Approved O[illegible]

[illegible] EFFLUENT CHARACTERISTICS (continued from page 3 of Form 2-C)

[illegible] must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

1. POLLUTANT	2. EFFLUENT a. MAXIMUM DAILY VALUE (1) CONCENTRATION	(2) MASS	b. MAXIMUM 30 DAY VALUE (if available) (1) CONCENTRATION	(2) MASS	c. LONG TERM AVRG. VALUE (if available) (1) CONCENTRATION	(2) MASS	d. NO. OF ANALYSES	3. UNITS (specify if blank) a. CONCENTRATION	b. MASS	4. INTAKE (optional) a. LONG TERM AVERAGE VALUE (1) CONCENTRATION	(2) MASS	b. NO. OF ANALYSES
[illegible]	18	3.92					1	mg/l	kg			
[illegible]	39	8.50					1	mg/l	kg			
[illegible]	16	3.49					1	mg/l	kg			
[illegible]	18	3.92					1	mg/l	kg			
[illegible]	< 0.2						1	mg/l				
[illegible]	VALUE 240.2		VALUE		VALUE		1		ton	VALUE		
[illegible]	VALUE 13.5		VALUE		VALUE		1	°C		VALUE		
[illegible]	VALUE 13.5		VALUE		VALUE		1	°C		VALUE		
[illegible]	MINIMUM 6.9	MAXIMUM	MINIMUM	MAXIMUM			1	STANDARD UNITS				

[illegible] "X" in column 2-a for each pollutant you know or have reason to believe is present. Mark "X" in column 2-b for each pollutant you believe to be absent. If you mark [illegible] 2-a for any pollutant, you must provide the results of at least one analysis for that pollutant. Complete one table for each outfall. See the instructions for additional [illegible] and requirements.

1. POLLUTANT AND CAS NO. (if available)	MARK "X" a. [illegible]	b. [illegible]	3. EFFLUENT a. MAXIMUM DAILY VALUE (1) CONCENTRATION	(2) MASS	b. MAXIMUM 30 DAY VALUE (if available) (1) CONCENTRATION	(2) MASS	c. LONG TERM AVRG. VALUE (if available) (1) CONCENTRATION	(2) MASS	d. NO. OF ANALYSES	4. UNITS a. CONCENTRATION	b. MASS	5. INTAKE (optional) a. LONG TERM AVERAGE VALUE (1) CONCENTRATION	(2) MASS	b. NO. OF ANALYSES
[illegible]		X												
Chlorine Total Residual		X												
Color		X												
[illegible]		X												
[illegible]		X												
Nitrate [illegible]	X		1.9	414					1	mg/l	g			

CONTINUED FROM FRONT

1.	2. MARK "X"		3. EFFLUENT							4. UNITS		5. INTAKE (optional)		
			a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
g. Fecal Coliform	X		0.25	54.5					1	mg/l	g			
h. Oil and Grease		X												
i. Phosphorus (as P), Total	X		0.58	126					1	mg/l	g			
j. Radioactivity														
(1) Alpha Total		X												
(2) Beta Total		X												
(3) Radium Total		X												
(4) Radium 226 Total		X												
k. Sulfate (as SO_4) (14808-79-8)	X		18	3.92					1	mg/l	kg			
l. Sulfide (as S)		X												
m. Sulfite (as SO_3) (14265-45-3)		X												
n. Surfactants		X												
o. Aluminum, Total (7429-90-5)		X												
p. Barium, Total (7440-39-3)		X												
q. Boron Total (7440-42-8)		X												
r. Cobalt Total (7440-48-4)		X												
s. Iron, Total (7439-89-6)	X		17	3.71					1	mg/l	kg			
t. Magnesium, Total (7439-95-4)		X												
u. Molybdenum Total (7439-98-7)		X												
v. Manganese Total (7439-96-5)	X		4.1	894					1	mg/l	g			
w. Tin Total (7440-31-5)		X												
x. Titanium Total (7440-32-6)		X												

CONTINUED ON BACK

EPA I.D. NUMBER (copy from Item 1 of Form 1)	OUTFALL NUMBER
NPDES NH0001091	001

CONTINUED FROM PAGE 3 OF FORM 2-C

Form Approved OMB No. 158-R0173

PART C — If you are a primary industry and this outfall contains process wastewater, refer to Table 2c-2 in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in column 2-a for all such GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. If you are not required to mark column 2-a *(secondary industries, non-process wastewater outfalls, and non-required GC/MS fractions)*, mark "X" in column 2-b for each pollutant you know or have reason to believe is present. Mark "X" in column 2-c for each pollutant you believe to be absent. If you mark either columns 2-a or 2-b for any pollutant, you must provide the results of at least one analysis for that pollutant. Note that there are seven pages to this part; please review each carefully. Complete one table *(all seven pages)* for each outfall. See instructions for additional details and requirements.

1. POLLUTANT AND CAS NUMBER	2. MARK "X" a. BASE/NEUTRAL	b. ACID	c. PESTICIDES AND PCB	3. EFFLUENT a. MAXIMUM DAILY VALUE (1) CONCENTRATION	(2) MASS	b. MAXIMUM 30 DAY VALUE (if available) (1) CONCENTRATION	(2) MASS	c. LONG TERM AVRG. VALUE (if available) (1) CONCENTRATION	(2) MASS	d. NO. OF ANALYSES	4. UNITS a. CONCENTRATION	b. MASS	5. INTAKE (optional) a. LONG TERM AVERAGE VALUE (1) CONCENTRATION	(2) MASS	b. NO. OF ANALYSES
METALS, CYANIDE, AND TOTAL PHENOLS															
1M Antimony, Total (7440-36-0)			X												
2M Arsenic, Total (7440-38-2)			X												
3M Beryllium, Total (7440-41-7)			X												
4M Cadmium, Total (7440-43-9)			X												
5M Chromium, Total (7440-47-3)			X												
6M Copper, Total (7440-50-8)			X												
7M Lead, Total (7439-92-1)			X												
8M Mercury, Total (7439-97-6)			X												
9M Nickel, Total (7440-02-0)			X												
10 [illegible]			X												
11 [illegible]			X												
12 [illegible]			X												
			X												
			X												
			X												
			X												
			X												

CONTINUED FROM THE FRONT

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X" a. BELIEVED PRESENT	b. BELIEVED ABSENT	c. LIMITED OR NO DATA AVAILABLE	3. EFFLUENT a. MAXIMUM DAILY VALUE (1) CONCENTRATION	(2) MASS	b. MAXIMUM 30 DAY VALUE (if available) (1) CONCENTRATION	(2) MASS	c. LONG TERM AVRG. VALUE (if available) (1) CONCENTRATION	(2) MASS	d. NO. OF ANALYSES	4. UNITS a. CONCENTRATION	b. MASS	5. INTAKE (optional) a. LONG TERM AVERAGE VALUE (1) CONCENTRATION	(2) MASS	b. NO. OF ANALYSES
GC/MS FRACTION – VOLATILE COMPOUNDS															
1V. Acrolein (107 02 8)			X												
2V. Acrylonitrile (107 13 1)			X												
3V. Benzene (71 43 2)		X		< 5	*	*concentration quantified as "trace" in most contaminated influent sample - calculation of mass value not possible					ug/l				
4V. Bis (Chloromethyl) Ether (542 88 1)			X												
5V. Bromoform (75 25 2)			X												
6V. Carbon Tetrachloride (56 23 5)			X												
7V. Chlorobenzene (108 90 7)			X												
8V. Chlorodibromomethane (124 48 1)			X												
9V. Chloroethane (75 00 3)		X		< 5	1.09						ug/l	g			
10V. 2-Chloroethylvinyl Ether (110 75 8)			X												
11V. Chloroform (67 66 3)		X			1.09						ug/l	g			
12V. Dichlorobromomethane (75 27 4)			X												
13V. Dichlorodifluoromethane (75 71 8)			X												
14V. 1,1-Dichloroethane (75 34 3)		X		< 5	4.36						ug/l	g			
15V. 1,2-Dichloroethane (107 06 2)		X		< 5	2.18						ug/l	g			
16V. 1,1-Dichloroethylene		X		< 5	43.6						ug/l	g			
[illegible]			X												
[illegible]			X												
[illegible]		X		< 5	76.3						ug/l	g			
[illegible]			X												
[illegible]			X												

CONTINUED FROM PAGE V-6

EPA I.D. NUMBER (copy from Item 1 of Form 1)	OUTFALL NUMBER
NPDES NH0001091	001

Form Approved

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X" a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	3. EFFLUENT a. MAXIMUM DAILY VALUE (1) CONCENTRATION	(2) MASS	b. MAXIMUM 30 DAY VALUE (if available) (1) CONCENTRATION	(2) MASS	c. LONG TERM AVRG. VALUE (if available) (1) CONCENTRATION	(2) MASS	d. NO OF ANALYSES	4. UNITS a. CONCENTRATION	b. MASS	5. INT... a. LONG TE... AVERAGE VAL... (1) CONCENTRATION	(2) MAS...
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS *(continued)*														
22B. 1,4-Dichlorobenzene (106-46-7)	X			< 10	*					1	ug/l			
23B. 3,3'-Dichlorobenzidine (91-94-1)	X			< 50	*					1	ug/l			
24B. Diethyl Phthalate (84-66-2)	X			< 10	*					1	ug/l			
25B. Dimethyl Phthalate (131-11-3)	X			< 20	*					1	ug/l			
26B. Di-N-Butyl Phthalate (84-74-2)	X			< 10	*					1	ug/l			
27B. 2,4-Dinitrotoluene (121-14-2)	X			< 40	*					1	ug/l			
28B. 2,6-Dinitrotoluene (606-20-2)	X			< 40	*					1	ug/l			
29B. Di-N-Octyl Phthalate (117-84-0)	X			< 20	*					1	ug/l			
30B. 1,2-Diphenylhydrazine (as Azobenzene) (122-66-7)	X			< 20	*					1	ug/l			
31B. Fluoranthene (206-44-0)	X			< 20	*	*	Compound not detected - mass calculation not possible.			1	ug/l			
32B. Fluorene (86-73-7)	X			< 20	*					1	ug/l			
33B. Hexachlorobenzene (118-71-1)	X			< 20	*					1	ug/l			
34B. Hexachlorobutadiene (87-68-3)	X			< 20	*					1	ug/l			
35B. Hexachlorocyclopentadiene (77-47-4)	X			< 20	*					1	ug/l			
36B. Hexachloroethane (67-72-1)	X			< 20	*					1	ug/l			
37B. Indeno (1,2,3-cd) Pyrene (193-39-5)	X			< 50	*					1	ug/l			
38B. Isophorone (78-59-1)	X			< 20	*					1	ug/l			
39B. Naphthalene (91-20-3)	X			< 10	*					1	ug/l			
40B. [illegible]	X			< 20	*					1	ug/l			
[illegible]	X			< 20	*					1	ug/l			
[illegible]										1	ug/l			

CONTINUED FROM THE FRONT

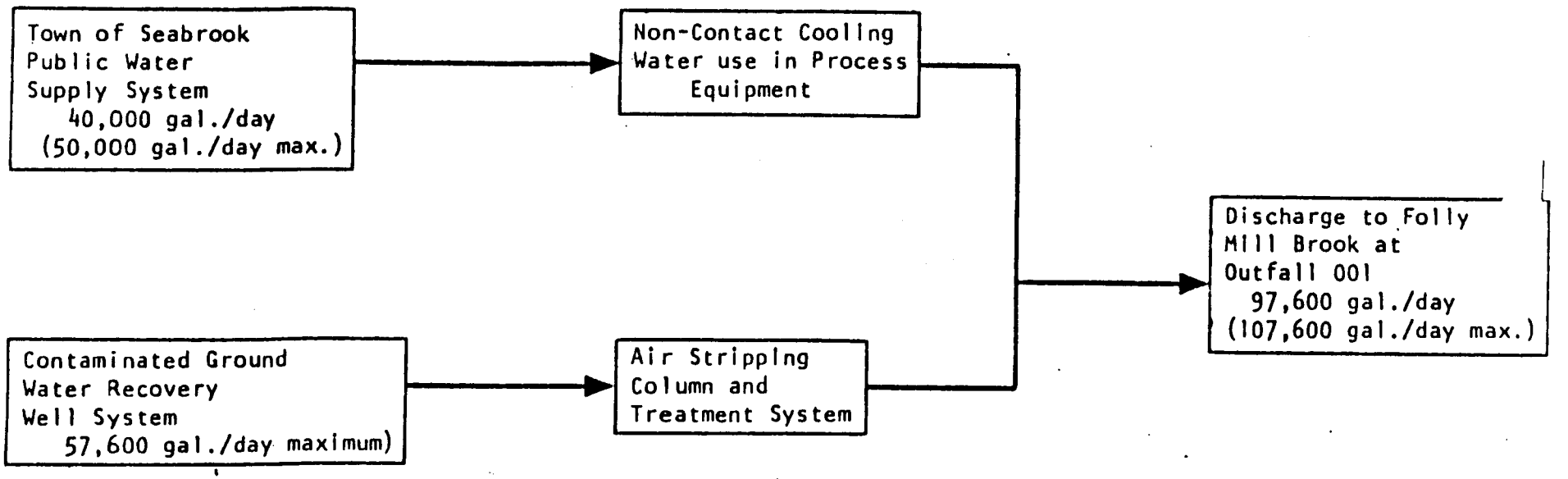
1. POLLUTANT AND CAS NUMBER	2. MARK "X"			3. EFFLUENT							4. UNITS		5. INTAKE (optional)		
	a. Test Method	b. Bel. Det. Level	c. Bel. Det. Level Absent	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS (continued)															
43B. N Nitrosodiphenylamine (86-30-6)	X			< 20	*					1	ug/l				
44B. Phenanthrene (85-01-8)	X			< 20	*					1	ug/l				
45B. Pyrene (129-00-0)	X			< 20	*					1	ug/l				
46B. 1,2,4-Trichlorobenzene (120-82-1)	X			< 10	*					1	ug/l				
GC/MS FRACTION – PESTICIDES															
1P. Aldrin (309-00-2)	X			< 0.003	*					1	ug/l				
2P. α BHC (319-84-6)	X			< 0.004	*					1	ug/l				
3P. β BHC (319-85-7)	X			< 0.004	*					1	ug/l				
4P. γ BHC (58-89-9)	X			< 0.004	*					1	ug/l				
5P. δ BHC (319-86-8)	X			< 0.004	*					1	ug/l				
6P. Chlordane (57-74-9)	X			< 0.08	*	*	Compound not detected - mass calculation not possible.			1	ug/l				
7P. 4,4' DDT (50-29-3)	X			< 0.02	*					1	ug/l				
8P. 4,4' DDE (72-55-9)	X			< 0.02	*					1	ug/l				
9P. 4,4' DDD (72-54-8)	X			< 0.02	*					1	ug/l				
10P. Dieldrin (60-57-1)	X			< 0.01	*					1	ug/l				
11P. α Endosulfan (115-29-7)	X			< 0.01	*					1	ug/l				
12P. β Endosulfan (115-29-7)	X			< 0.01	*					1	ug/l				
13P. Endosulfan sulfate [illegible]	X			< 0.05	*					1	ug/l				
[illegible]	X			< 0.009	*					1	ug/l				
[illegible]	X			< 0.05	*					1	ug/l				
16P. Heptachlor [illegible]					*					1	ug/l				

EPA I.D. NUMBER (copy from Item 1 of Form 1)	OUTFALL NUMBER
NPDES NH0001091	001

Form Approved OMB No. 158-R0173

POLLUTANTS AND CAS NUMBER	2. MARK "X" a. PRESENT IN EFFLUENT	b. PRESENT IN EFFLUENT BELIEVED ABSENT	c. BELIEVED ABSENT	3. EFFLUENT a. MAXIMUM DAILY VALUE (1) CONCENTRATION	(2) MASS	b. MAXIMUM 30 DAY VALUE (if available) (1) CONCENTRATION	(2) MASS	c. LONG TERM AVRG. VALUE (if available) (1) CONCENTRATION	(2) MASS	d. NO OF ANALYSES	4. UNITS a. CONCENTRATION	b. MASS	5. INTAKE (optional) a. LONG TERM AVERAGE VALUE (1) CONCENTRATION	(2) MASS	b. NO OF ANALYSES
PESTICIDES (continued)															
P. Heptachlor (024 57 9)	X			< 0.01	*					1	ug/l				
P. PCB 1242 (3409 21 9)	X			< 0.1	*					1	ug/l				
P. PCB 1254 (1097 69 1)	X			< 0.1	*					1	ug/l				
P. PCB 1221 (0104 28 2)	X			< 0.1	*					1	ug/l				
P. PCB 1232 (1336 36 5)	X			< 0.1	*	*	Compound not detected - mass calculation not possible.			1	ug/l				
P. PCB 1248 (672 29 6)	X			< 0.1	*					1	ug/l				
P. PCB 1260 (096 82 5)	X			< 0.1	*					1	ug/l				
P. PCB 1016 (674 11 2)	X			< 0.1	*					1	ug/l				
P. Toxaphene (01 35 2)	X			< 0.4	*					1	ug/l				

NOTE: All concentrations for Acid Compounds, Base/Neutral Compounds and Pesticides were determined from a sample of contaminated groundwater influent to the air stripping system. Since no chemicals are added during the stripping process, there is no mechanism by which any of these compounds can be introduced into the discharge and the effluent will, therefore, also be free of these materials.



SCHEMATIC ILLUSTRATING
WATER SOURCES AND USAGE
AT
K.J. QUINN CO., INC.
SEABROOK, NEW HAMPSHIRE

Resource Analysts, Incorporated
Box 4778 Hampton, NH 03842

(603) 926-7777

VOLATILE PRIOTITY POLLUTANT DETERMINATION

Lab No. 2806 Analyst RDF Date Analyzed 11-4-83

EPA Method 624 [x] ASTM Method D 3781-79 [ ]

Parameter	Sample Designation			
	Discharge			
Acrolein				
Acrylonitrile				
Benzene				
Bis(chloromethyl)ether				
Bromoform				
Carbon Tetrachloride				
Chlorobenzene				
Chlorodibromomethane				
Chloroethane				
2-Chlorovinylether				
Chloroform				
Dichlorobromomethane				
Dichlorodifluromethane				
1,1-Dichloroethane				
1,2-Dichloroethane				
1,1-Dichloroethylene				
1,2-Dichloropropane				
1,3-Dichloropropylene				
Ethylbenzene				
Methyl bromide				
Methyl chloride				
Methylene chloride				
1,1,2,2-Tetrachloroethane				
Tetrachloroethylene				
Toluene				
1,2-trans-Dichloroethylene				
1,1,1-Trichloroethane				
1,1,2-Trichloroethane				
Trichloroethylene				
Trichlorofluoromethane				
Vinyl chloride				
MEK	400			
THF	730			

Method Detection Limit: 5 ug/L

NOTES: All results are expressed as ug/L. No entry denotes "not detected".

APPENDIX E

RESOURCE ANALYSTS 1986-1990 GROUND WATER SAMPLING DATA

Lab Number: 6489-1
Sample Designation: Intake
Date analyzed: 3-28-86
Matrix: water

VOLATILE ORGANICS	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
CHLOROMETHANE	BDL	10
VINYL CHLORIDE	BDL	10
CHLOROETHANE	20	5
BROMOMETHANE	BDL	10
METHYLENE CHLORIDE	BDL	5
1,1-DICHLOROETHYLENE	BDL	5
1,1-DICHLOROETHANE	30	5
1,2-trans-DICHLOROETHYLENE	BDL	5
CHLOROFORM	BDL	5
1,2-DICHLOROETHANE	BDL	5
1,1,1-TRICHLOROETHANE	200	5
CARBON TETRACHLORIDE	BDL	5
BROMODICHLOROMETHANE	BDL	5
1,2-DICHLOROPROPANE	BDL	5
1,3-trans-DICHLOROPROPENE	BDL	5
TRICHLOROETHYLENE	BDL	5
BENZENE	BDL	5
1,3-cis-DICHLOROPROPENE	BDL	5
1,1,2-TRICHLOROETHANE	BDL	5
2-CHLOROETHYL VINYL ETHER	BDL	5
DIBROMOCHLOROMETHANE	BDL	5
BROMOFORM	BDL	5
TETRACHLOROETHYLENE	BDL	5
1,1,2,2-TETRACHLOROETHANE	BDL	5
TOLUENE	BDL	5
CHLOROBENZENE	23	5
ETHYLBENZENE	BDL	5
	17	5
ACETONE	BDL	25
CARBON DISULFIDE	BDL	5
THF	BDL	25
MEK	2500	25
VINYL ACETATE	BDL	10
MIBK	BDL	25
2-HEXANONE	BDL	25
STYRENE	BDL	5
XYLENES	14	5

BDL = BELOW DETECTION LIMIT
METHOD REFERENCE: EPA 600/4-82-057 METHOD 624

Resource Analysts, Incorporated

Lab Number:	8439-1
Sample Designation:	MW-1
Date Analyzed:	12/10/86
Matrix:	Water

VOLATILE ORGANICS	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
CHLOROMETHANE	BDL	10
VINYL CHLORIDE	BDL	10
CHLOROETHANE	BDL	5
BROMOMETHANE	BDL	10
METHYLENE CHLORIDE	BDL	5
1,1-DICHLOROETHYLENE	BDL	5
1,1-DICHLOROETHANE	BDL	5
1,2-trans-DICHLOROETHYLENE	BDL	5
CHLOROFORM	BDL	5
1,2-DICHLOROETHANE	BDL	5
1,1,1-TRICHLOROETHANE	BDL	5
CARBON TETRACHLORIDE	BDL	5
BROMODICHLOROMETHANE	BDL	5
1,2-DICHLOROPROPANE	BDL	5
1,3-trans-DICHLOROPROPENE	BDL	5
TRICHLOROETHYLENE	BDL	5
BENZENE	BDL	5
1,3-cis-DICHLOROPROPENE	BDL	5
1,1,2-TRICHLOROETHANE	BDL	5
2-CHLOROETHYL VINYL ETHER	BDL	5
DIBROMOCHLOROMETHANE	BDL	5
BROMOFORM	BDL	5
TETRACHLOROETHYLENE	BDL	5
1,1,2,2-TETRACHLOROETHANE	BDL	5
TOLUENE	BDL	5
CHLOROBENZENE	BDL	5
ETHYLBENZENE	BDL	5
	BDL	5
ACETONE	BDL	25
CARBON DISULFIDE	BDL	5
THF	BDL	25
MEK	BDL	25
VINYL ACETATE	BDL	10
MIBK	BDL	25
2-HEXANONE	BDL	25
STYRENE	BDL	5
XYLENES	BDL	5

BDL = BELOW DETECTION LIMIT
METHOD REFERENCE: EPA 600/4-82-057 METHOD 624

Lab Number:	8439-2
Sample Designation:	MW-2
Date Analyzed:	12/10/86
Matrix:	Water

VOLATILE ORGANICS	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
CHLOROMETHANE	BDL	10
VINYL CHLORIDE	BDL	10
CHLOROETHANE	BDL	5
BROMOMETHANE	BDL	10
METHYLENE CHLORIDE	BDL	5
1,1-DICHLOROETHYLENE	BDL	5
1,1-DICHLOROETHANE	BDL	5
1,2-trans-DICHLOROETHYLENE	BDL	5
CHLOROFORM	BDL	5
1,2-DICHLOROETHANE	BDL	5
1,1,1-TRICHLOROETHANE	BDL	5
CARBON TETRACHLORIDE	BDL	5
BROMODICHLOROMETHANE	BDL	5
1,2-DICHLOROPROPANE	BDL	5
1,3-trans-DICHLOROPROPENE	BDL	5
TRICHLOROETHYLENE	BDL	5
BENZENE	BDL	5
1,3-cis-DICHLOROPROPENE	BDL	5
1,1,2-TRICHLOROETHANE	BDL	5
2-CHLOROETHYL VINYL ETHER	BDL	5
DIBROMOCHLOROMETHANE	BDL	5
BROMOFORM	BDL	5
TETRACHLOROETHYLENE	BDL	5
1,1,2,2-TETRACHLOROETHANE	BDL	5
TOLUENE	BDL	5
CHLOROBENZENE	BDL	5
ETHYLBENZENE	BDL	5
	BDL	5
ACETONE	BDL	25
CARBON DISULFIDE	BDL	5
THF	BDL	25
MEK	BDL	25
VINYL ACETATE	BDL	10
MIBK	BDL	25
2-HEXANONE	BDL	25
STYRENE	BDL	5
XYLENES	BDL	5

BDL = BELOW DETECTION LIMIT
METHOD REFERENCE: EPA 600/4-82-057 METHOD 624

Resource Analysts, Incorporated

Lab Number:	8439-3
Sample Designation:	MW-6
Date Analyzed:	12/13/86
Matrix:	Water

VOLATILE ORGANICS	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
CHLOROMETHANE	BDL	10
VINYL CHLORIDE	BDL	10
CHLOROETHANE	BDL	5
BROMOMETHANE	BDL	10
METHYLENE CHLORIDE	BDL	5
1,1-DICHLOROETHYLENE	BDL	5
1,1-DICHLOROETHANE	BDL	5
1,2-trans-DICHLOROETHYLENE	BDL	5
CHLOROFORM	BDL	5
1,2-DICHLOROETHANE	BDL	5
1,1,1-TRICHLOROETHANE	BDL	5
CARBON TETRACHLORIDE	BDL	5
BROMODICHLOROMETHANE	BDL	5
1,2-DICHLOROPROPANE	BDL	5
1,3-trans-DICHLOROPROPENE	BDL	5
TRICHLOROETHYLENE	BDL	5
BENZENE	BDL	5
1,3-cis-DICHLOROPROPENE	BDL	5
1,1,2-TRICHLOROETHANE	BDL	5
2-CHLOROETHYL VINYL ETHER	BDL	5
DIBROMOCHLOROMETHANE	BDL	5
BROMOFORM	BDL	5
TETRACHLOROETHYLENE	BDL	5
1,1,2,2-TETRACHLOROETHANE	BDL	5
TOLUENE	BDL	5
CHLOROBENZENE	BDL	5
ETHYLBENZENE	BDL	5
	BDL	5
ACETONE	BDL	25
CARBON DISULFIDE	BDL	5
THF	BDL	25
MEK	BDL	25
VINYL ACETATE	BDL	10
MIBK	BDL	25
2-HEXANONE	BDL	25
STYRENE	BDL	5
XYLENES	BDL	5

BDL = BELOW DETECTION LIMIT
METHOD REFERENCE: EPA 600/4-82-057 METHOD 624

Resource Analysts, Incorporated

Lab Number:	8439-4
Sample Designation:	MW-10
Date Analyzed:	12/13/86
Matrix:	Water

VOLATILE ORGANICS	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
CHLOROMETHANE	BDL	10
VINYL CHLORIDE	BDL	10
CHLOROETHANE	BDL	5
BROMOMETHANE	BDL	10
METHYLENE CHLORIDE	BDL	5
1,1-DICHLOROETHYLENE	BDL	5
1,1-DICHLOROETHANE	BDL	5
1,2-trans-DICHLOROETHYLENE	BDL	5
CHLOROFORM	BDL	5
1,2-DICHLOROETHANE	BDL	5
1,1,1-TRICHLOROETHANE	BDL	5
CARBON TETRACHLORIDE	BDL	5
BROMODICHLOROMETHANE	BDL	5
1,2-DICHLOROPROPANE	BDL	5
1,3-trans-DICHLOROPROPENE	BDL	5
TRICHLOROETHYLENE	BDL	5
BENZENE	BDL	5
1,3-cis-DICHLOROPROPENE	BDL	5
1,1,2-TRICHLOROETHANE	BDL	5
2-CHLOROETHYL VINYL ETHER	BDL	5
DIBROMOCHLOROMETHANE	BDL	5
BROMOFORM	BDL	5
TETRACHLOROETHYLENE	BDL	5
1,1,2,2-TETRACHLOROETHANE	BDL	5
TOLUENE	BDL	5
CHLOROBENZENE	BDL	5
ETHYLBENZENE	BDL	5
	BDL	5
ACETONE	BDL	25
CARBON DISULFIDE	BDL	5
THF	BDL	25
MEK	BDL	25
VINYL ACETATE	BDL	10
MIBK	BDL	25
2-HEXANONE	BDL	25
STYRENE	BDL	5
XYLENES	BDL	5

BDL = BELOW DETECTION LIMIT
METHOD REFERENCE: EPA 600/4-82-057 METHOD 624

Resource Analysts, Incorporated

Lab Number:	8439-5
Sample Designation:	MW-15
Date Analyzed:	12/13/86
Matrix:	Water

VOLATILE ORGANICS	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
CHLOROMETHANE	BDL	10
VINYL CHLORIDE	BDL	10
CHLOROETHANE	BDL	5
BROMOMETHANE	BDL	10
METHYLENE CHLORIDE	BDL	5
1,1-DICHLOROETHYLENE	BDL	5
1,1-DICHLOROETHANE	BDL	5
1,2-trans-DICHLOROETHYLENE	BDL	5
CHLOROFORM	BDL	5
1,2-DICHLOROETHANE	BDL	5
1,1,1-TRICHLOROETHANE	15	5
CARBON TETRACHLORIDE	BDL	5
BROMODICHLOROMETHANE	BDL	5
1,2-DICHLOROPROPANE	BDL	5
1,3-trans-DICHLOROPROPENE	BDL	5
TRICHLOROETHYLENE	BDL	5
BENZENE	BDL	5
1,3-cis-DICHLOROPROPENE	BDL	5
1,1,2-TRICHLOROETHANE	BDL	5
2-CHLOROETHYL VINYL ETHER	BDL	5
DIBROMOCHLOROMETHANE	BDL	5
BROMOFORM	BDL	5
TETRACHLOROETHYLENE	BDL	5
1,1,2,2-TETRACHLOROETHANE	BDL	5
TOLUENE	BDL	5
CHLOROBENZENE	BDL	5
ETHYLBENZENE	BDL	5
ACETONE	Trace	25
CARBON DISULFIDE	BDL	5
THF	BDL	25
MEK	BDL	25
VINYL ACETATE	BDL	10
MIBK	BDL	25
2-HEXANONE	BDL	25
STYRENE	BDL	5
XYLENES	BDL	5

"Trace" denotes probable presence below listed detection limit.

BDL = BELOW DETECTION LIMIT
METHOD REFERENCE: EPA 600/4-82-057 METHOD 624

Resource Analysts, Incorporated

Lab Number:	8439-6
Sample Designation:	MW-16
Date Analyzed:	12/13/86
Matrix:	Water

VOLATILE ORGANICS	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
CHLOROMETHANE	BDL	10
VINYL CHLORIDE	BDL	10
CHLOROETHANE	BDL	5
BROMOMETHANE	BDL	10
METHYLENE CHLORIDE	BDL	5
1,1-DICHLOROETHYLENE	BDL	5
1,1-DICHLOROETHANE	BDL	5
1,2-trans-DICHLOROETHYLENE	BDL	5
CHLOROFORM	BDL	5
1,2-DICHLOROETHANE	BDL	5
1,1,1-TRICHLOROETHANE	BDL	5
CARBON TETRACHLORIDE	BDL	5
BROMODICHLOROMETHANE	BDL	5
1,2-DICHLOROPROPANE	BDL	5
1,3-trans-DICHLOROPROPENE	BDL	5
TRICHLOROETHYLENE	BDL	5
BENZENE	BDL	5
1,3-cis-DICHLOROPROPENE	BDL	5
1,1,2-TRICHLOROETHANE	BDL	5
2-CHLOROETHYL VINYL ETHER	BDL	5
DIBROMOCHLOROMETHANE	BDL	5
BROMOFORM	BDL	5
TETRACHLOROETHYLENE	BDL	5
1,1,2,2-TETRACHLOROETHANE	BDL	5
TOLUENE	BDL	5
CHLOROBENZENE	BDL	5
ETHYLBENZENE	BDL	5
	BDL	5
ACETONE	BDL	25
CARBON DISULFIDE	BDL	5
THF	BDL	25
MEK	BDL	25
VINYL ACETATE	BDL	10
MIBK	BDL	25
2-HEXANONE	BDL	25
STYRENE	BDL	5
XYLENES	BDL	5

BDL = BELOW DETECTION LIMIT
METHOD REFERENCE: EPA 600/4-82-057 METHOD 624

Resource Analysts, Incorporated

Lab Number:	8439-7
Sample Designation:	MW-17
Date Analyzed:	12/13/86
Matrix:	Water

VOLATILE ORGANICS	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
CHLOROMETHANE	BDL	10
VINYL CHLORIDE	BDL	10
CHLOROETHANE	BDL	5
BROMOMETHANE	BDL	10
METHYLENE CHLORIDE	BDL	5
1,1-DICHLOROETHYLENE	7	5
1,1-DICHLOROETHANE	5	5
1,2-trans-DICHLOROETHYLENE	BDL	5
CHLOROFORM	BDL	5
1,2-DICHLOROETHANE	BDL	5
1,1,1-TRICHLOROETHANE	72	5
CARBON TETRACHLORIDE	BDL	5
BROMODICHLOROMETHANE	BDL	5
1,2-DICHLOROPROPANE	BDL	5
1,3-trans-DICHLOROPROPENE	BDL	5
TRICHLOROETHYLENE	BDL	5
BENZENE	BDL	5
1,3-cis-DICHLOROPROPENE	BDL	5
1,1,2-TRICHLOROETHANE	BDL	5
2-CHLOROETHYL VINYL ETHER	BDL	5
DIBROMOCHLOROMETHANE	BDL	5
BROMOFORM	BDL	5
TETRACHLOROETHYLENE	BDL	5
1,1,2,2-TETRACHLOROETHANE	BDL	5
TOLUENE	BDL	5
CHLOROBENZENE	BDL	5
ETHYLBENZENE	BDL	5
ACETONE	BDL	25
CARBON DISULFIDE	BDL	5
THF	160	25
MEK	BDL	25
VINYL ACETATE	BDL	10
MIBK	BDL	25
2-HEXANONE	BDL	25
STYRENE	BDL	5
XYLENES	BDL	5

BDL = BELOW DETECTION LIMIT
METHOD REFERENCE: EPA 600/4-82-057 METHOD 624

Resource Analysts, Incorporated

Lab Number:	8676-1
Sample Designation:	Intake
Date Analyzed:	1/8/87
Matrix:	Water

VOLATILE ORGANICS	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
CHLOROMETHANE	BDL	10
VINYL CHLORIDE	BDL	10
CHLOROETHANE	7	5
BROMOMETHANE	BDL	10
METHYLENE CHLORIDE	BDL	5
1,1-DICHLOROETHYLENE	BDL	5
1,1-DICHLOROETHANE	25	5
1,2-trans-DICHLOROETHYLENE	BDL	5
CHLOROFORM	BDL	5
1,2-DICHLOROETHANE	BDL	5
1,1,1-TRICHLOROETHANE	100	5
CARBON TETRACHLORIDE	BDL	5
BROMODICHLOROMETHANE	BDL	5
1,2-DICHLOROPROPANE	BDL	5
1,3-trans-DICHLOROPROPENE	BDL	5
TRICHLOROETHYLENE	BDL	5
BENZENE	BDL	5
1,3-cis-DICHLOROPROPENE	BDL	5
1,1,2-TRICHLOROETHANE	BDL	5
2-CHLOROETHYL VINYL ETHER	BDL	5
DIBROMOCHLOROMETHANE	BDL	5
BROMOFORM	BDL	5
TETRACHLOROETHYLENE	BDL	5
1,1,2,2-TETRACHLOROETHANE	BDL	5
TOLUENE	16	5
CHLOROBENZENE	BDL	5
ETHYLBENZENE	18	5
ACETONE	BDL	25
CARBON DISULFIDE	BDL	5
THF	BDL	25
MEK	BDL	25
VINYL ACETATE	BDL	10
MIBK	BDL	25
2-HEXANONE	BDL	25
STYRENE	BDL	5
XYLENES	46	5

BDL = BELOW DETECTION LIMIT
METHOD REFERENCE: EPA 600/4-82-057 METHOD 624

Lab Number:	8709-1
Sample Designation:	Intake
Date Analyzed:	1/15/87
Matrix:	Water

VOLATILE ORGANICS	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
CHLOROMETHANE	BDL	10
VINYL CHLORIDE	BDL	10
CHLOROETHANE	8	5
BROMOMETHANE	BDL	10
METHYLENE CHLORIDE	BDL	5
1,1-DICHLOROETHYLENE	BDL	5
1,1-DICHLOROETHANE	26	5
1,2-trans-DICHLOROETHYLENE	BDL	5
CHLOROFORM	BDL	5
1,2-DICHLOROETHANE	BDL	5
1,1,1-TRICHLOROETHANE	93	5
CARBON TETRACHLORIDE	BDL	5
BROMODICHLOROMETHANE	BDL	5
1,2-DICHLOROPROPANE	BDL	5
1,3-trans-DICHLOROPROPENE	BDL	5
TRICHLOROETHYLENE	BDL	5
BENZENE	BDL	5
1,3-cis-DICHLOROPROPENE	BDL	5
1,1,2-TRICHLOROETHANE	BDL	5
2-CHLOROETHYL VINYL ETHER	BDL	5
DIBROMOCHLOROMETHANE	BDL	5
BROMOFORM	BDL	5
TETRACHLOROETHYLENE	BDL	5
1,1,2,2-TETRACHLOROETHANE	BDL	5
TOLUENE	15	5
CHLOROBENZENE	BDL	5
ETHYLBENZENE	7	5
ACETONE	BDL	25
CARBON DISULFIDE	BDL	5
THF	67	25
MEK	BDL	25
VINYL ACETATE	BDL	10
MIBK	BDL	25
2-HEXANONE	BDL	25
STYRENE	BDL	5
XYLENES	38	5

BDL = BELOW DETECTION LIMIT
METHOD REFERENCE: EPA 600/4-82-057 METHOD 624

Lab Number:	8753-1
Sample Designation:	Intake
Date Analyzed:	1/26/87
Matrix:	Water

VOLATILE ORGANICS	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
CHLOROMETHANE	BDL	10
VINYL CHLORIDE	BDL	10
CHLOROETHANE	7	5
BROMOMETHANE	BDL	10
METHYLENE CHLORIDE	BDL	5
1,1-DICHLOROETHYLENE	BDL	5
1,1-DICHLOROETHANE	28	5
1,2-trans-DICHLOROETHYLENE	BDL	5
CHLOROFORM	BDL	5
1,2-DICHLOROETHANE	BDL	5
1,1,1-TRICHLOROETHANE	68	5
CARBON TETRACHLORIDE	BDL	5
BROMODICHLOROMETHANE	BDL	5
1,2-DICHLOROPROPANE	BDL	5
1,3-trans-DICHLOROPROPENE	BDL	5
TRICHLOROETHYLENE	BDL	5
BENZENE	BDL	5
1,3-cis-DICHLOROPROPENE	BDL	5
1,1,2-TRICHLOROETHANE	BDL	5
2-CHLOROETHYL VINYL ETHER	BDL	5
DIBROMOCHLOROMETHANE	BDL	5
BROMOFORM	BDL	5
TETRACHLOROETHYLENE	BDL	5
1,1,2,2-TETRACHLOROETHANE	BDL	5
TOLUENE	11	5
CHLOROBENZENE	BDL	5
ETHYLBENZENE	8	5
ACETONE	BDL	25
CARBON DISULFIDE	BDL	5
THF	85	25
MEK	BDL	25
VINYL ACETATE	62	10
MIBK	BDL	25
2-HEXANONE	BDL	25
STYRENE	BDL	5
XYLENES	18	5

BDL = BELOW DETECTION LIMIT
METHOD REFERENCE: 40 CFR PART 136, FRIDAY, OCTOBER 26, 1984
METHOD 624

Resource Analysts, Incorporated

Lab Number:	8839-1
Sample Designation:	Intake
Date Analyzed:	2/3/87
Matrix:	Water

VOLATILE ORGANICS	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
CHLOROMETHANE	BDL	10
VINYL CHLORIDE	BDL	10
CHLOROETHANE	8	5
BROMOMETHANE	BDL	10
METHYLENE CHLORIDE	BDL	5
1,1-DICHLOROETHYLENE	BDL	5
1,1-DICHLOROETHANE	20	5
1,2-trans-DICHLOROETHYLENE	BDL	5
CHLOROFORM	BDL	5
1,2-DICHLOROETHANE	BDL	5
1,1,1-TRICHLOROETHANE	62	5
CARBON TETRACHLORIDE	BDL	5
BROMODICHLOROMETHANE	BDL	5
1,2-DICHLOROPROPANE	BDL	5
1,3-trans-DICHLOROPROPENE	BDL	5
TRICHLOROETHYLENE	BDL	5
BENZENE	BDL	5
1,3-cis-DICHLOROPROPENE	BDL	5
1,1,2-TRICHLOROETHANE	BDL	5
2-CHLOROETHYL VINYL ETHER	BDL	5
DIBROMOCHLOROMETHANE	BDL	5
BROMOFORM	BDL	5
TETRACHLOROETHYLENE	BDL	5
1,1,2,2-TETRACHLOROETHANE	BDL	5
TOLUENE	BDL	5
CHLOROBENZENE	BDL	5
ETHYLBENZENE	BDL	5
	14	5
ACETONE	BDL	25
CARBON DISULFIDE	BDL	5
THF	Trace	25
MEK	BDL	25
VINYL ACETATE	BDL	10
MIBK	BDL	25
2-HEXANONE	BDL	25
STYRENE	BDL	5
XYLENES	25	5

"Trace" denotes probable presence below listed detection limit.

BDL = BELOW DETECTION LIMIT
METHOD REFERENCE: 40 CFR PART 136, FRIDAY, OCTOBER 26, 1984
METHOD 624

Resource Analysts, Incorporated

Lab Number: 8847-1
Sample Designation: Intake
Date Analyzed: 2/5/87
Matrix: Water

VOLATILE ORGANICS

	CONCENTRATION REP. 1 (ug/L)	REP. 2 (ug/L)	DETECTION LIMIT (ug/L)
CHLOROMETHANE	BDL	BDL	10
VINYL CHLORIDE	BDL	BDL	10
CHLOROETHANE	16	15	5
BROMOMETHANE	BDL	BDL	10
METHYLENE CHLORIDE	BDL	BDL	5
1,1-DICHLOROETHYLENE	BDL	BDL	5
1,1-DICHLOROETHANE	24	17	5
1,2-trans-DICHLOROETHYLENE	BDL	BDL	5
CHLOROFORM	BDL	BDL	5
1,2-DICHLOROETHANE	BDL	BDL	5
1,1,1-TRICHLOROETHANE	60	55	5
CARBON TETRACHLORIDE	BDL	BDL	5
BROMODICHLOROMETHANE	BDL	BDL	5
1,2-DICHLOROPROPANE	BDL	BDL	5
1,3-trans-DICHLOROPROPENE	BDL	BDL	5
TRICHLOROETHYLENE	BDL	BDL	5
BENZENE	BDL	BDL	5
1,3-cis-DICHLOROPROPENE	BDL	BDL	5
1,1,2-TRICHLOROETHANE	BDL	BDL	5
2-CHLOROETHYL VINYL ETHER	BDL	BDL	5
DIBROMOCHLOROMETHANE	BDL	BDL	5
BROMOFORM	BDL	BDL	5
TETRACHLOROETHYLENE	BDL	BDL	5
1,1,2,2-TETRACHLOROETHANE	BDL	BDL	5
TOLUENE	BDL	BDL	5
CHLOROBENZENE	11	10	5
ETHYLBENZENE	BDL	BDL	5
	12	12	5
ACETONE	BDL	BDL	5
CARBON DISULFIDE	BDL	BDL	25
THF	56	33	5
MEK	78	55	25
VINYL ACETATE	BDL	BDL	25
MIBK	BDL	BDL	10
2-HEXANONE	BDL	BDL	25
STYRENE	BDL	BDL	25
XYLENES	45	47	5
			5

BDL = BELOW DETECTION LIMIT
METHOD REFERENCE: 40 CFR PART 136, FRIDAY, OCTOBER 26, 1984
METHOD 624

Resource Analysts, Incorporated

Lab Number: 8894-1
Sample Designation: Intake
Date Analyzed: 2/12/87
Matrix: Water

VOLATILE ORGANICS	CONCENTRATION REP. 1 (ug/L)	REP. 2 (ug/L)	DETECTION LIMIT (ug/L)
CHLOROMETHANE	BDL	BDL	10
VINYL CHLORIDE	BDL	BDL	10
CHLOROETHANE	12	17	5
BROMOMETHANE	BDL	BDL	10
METHYLENE CHLORIDE	BDL	BDL	5
1,1-DICHLOROETHYLENE	BDL	BDL	5
1,1-DICHLOROETHANE	31	29	5
1,2-trans-DICHLOROETHYLENE	BDL	BDL	5
CHLOROFORM	BDL	BDL	5
1,2-DICHLOROETHANE	BDL	BDL	5
1,1,1-TRICHLOROETHANE	92	89	5
CARBON TETRACHLORIDE	BDL	BDL	5
BROMODICHLOROMETHANE	BDL	BDL	5
1,2-DICHLOROPROPANE	BDL	BDL	5
1,3-trans-DICHLOROPROPENE	BDL	BDL	5
TRICHLOROETHYLENE	BDL	BDL	5
BENZENE	BDL	BDL	5
1,3-cis-DICHLOROPROPENE	BDL	BDL	5
1,1,2-TRICHLOROETHANE	BDL	BDL	5
2-CHLOROETHYL VINYL ETHER	BDL	BDL	5
DIBROMOCHLOROMETHANE	BDL	BDL	5
BROMOFORM	BDL	BDL	5
TETRACHLOROETHYLENE	BDL	BDL	5
1,1,2,2-TETRACHLOROETHANE	BDL	BDL	5
TOLUENE	9	9	5
CHLOROBENZENE	BDL	BDL	5
ETHYLBENZENE	BDL	BDL	5
ACETONE	BDL	BDL	25
CARBON DISULFIDE	BDL	BDL	5
THF	31	Trace	25
MEK	BDL	BDL	25
VINYL ACETATE	BDL	BDL	10
MIBK	BDL	BDL	25
2-HEXANONE	BDL	BDL	25
STYRENE	BDL	BDL	5
XYLENES	16	17	5

"Trace" denotes probable presence below listed detection limit.

BDL = BELOW DETECTION LIMIT
METHOD REFERENCE: 40 CFR PART 136, FRIDAY, OCTOBER 26, 1984
METHOD 624

Resource Analysts, Incorporated

Lab Number: 8965-1
Sample Designation: Intake 2/19/87
Date Analyzed: 2/25/87
Matrix: Water

VOLATILE ORGANICS	CONCENTRATION REP. 1 (ug/L)	REP. 2 (ug/L)	DETECTION LIMIT (ug/L)
CHLOROMETHANE	BDL	BDL	10
VINYL CHLORIDE	BDL	BDL	10
CHLOROETHANE	BDL	BDL	5
BROMOMETHANE	BDL	BDL	10
METHYLENE CHLORIDE	BDL	BDL	5
1,1-DICHLOROETHYLENE	BDL	BDL	5
1,1-DICHLOROETHANE	17	19	5
1,2-trans-DICHLOROETHYLENE	BDL	BDL	5
CHLOROFORM	BDL	BDL	5
1,2-DICHLOROETHANE	BDL	BDL	5
1,1,1-TRICHLOROETHANE	72	72	5
CARBON TETRACHLORIDE	BDL	BDL	5
BROMODICHLOROMETHANE	BDL	BDL	5
1,2-DICHLOROPROPANE	BDL	BDL	5
1,3-trans-DICHLOROPROPENE	BDL	BDL	5
TRICHLOROETHYLENE	BDL	BDL	5
BENZENE	BDL	BDL	5
1,3-cis-DICHLOROPROPENE	BDL	BDL	5
1,1,2-TRICHLOROETHANE	BDL	BDL	5
2-CHLOROETHYL VINYL ETHER	BDL	BDL	5
DIBROMOCHLOROMETHANE	BDL	BDL	5
BROMOFORM	BDL	BDL	5
TETRACHLOROETHYLENE	BDL	BDL	5
1,1,2,2-TETRACHLOROETHANE	BDL	BDL	5
TOLUENE	BDL	BDL	5
CHLOROBENZENE	BDL	BDL	5
ETHYLBENZENE	BDL	BDL	5
ACETONE	BDL	BDL	25
CARBON DISULFIDE	BDL	BDL	5
THF	BDL	BDL	25
MEK	BDL	BDL	25
VINYL ACETATE	BDL	BDL	10
MIBK	BDL	BDL	25
2-HEXANONE	BDL	BDL	25
STYRENE	BDL	BDL	5
XYLENES	10	9	5

BDL = BELOW DETECTION LIMIT
METHOD REFERENCE: 40 CFR PART 136, FRIDAY, OCTOBER 26, 1984
METHOD 624

Resource Analysts, Incorporated

Lab Number: 9002-1
Sample Designation: Intake
Date Analyzed: 2/25/87
Matrix: Water

VOLATILE ORGANICS	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
CHLOROMETHANE	BDL	10
VINYL CHLORIDE	BDL	10
CHLOROETHANE	14	5
BROMOMETHANE	BDL	10
METHYLENE CHLORIDE	BDL	5
1,1-DICHLOROETHYLENE	BDL	5
1,1-DICHLOROETHANE	42	5
1,2-trans-DICHLOROETHYLENE	BDL	5
CHLOROFORM	BDL	5
1,2-DICHLOROETHANE	BDL	5
1,1,1-TRICHLOROETHANE	340	5
CARBON TETRACHLORIDE	BDL	5
BROMODICHLOROMETHANE	BDL	5
1,2-DICHLOROPROPANE	BDL	5
1,3-trans-DICHLOROPROPENE	BDL	5
TRICHLOROETHYLENE	BDL	5
BENZENE	BDL	5
1,3-cis-DICHLOROPROPENE	BDL	5
1,1,2-TRICHLOROETHANE	BDL	5
2-CHLOROETHYL VINYL ETHER	BDL	5
DIBROMOCHLOROMETHANE	BDL	5
BROMOFORM	BDL	5
TETRACHLOROETHYLENE	BDL	5
1,1,2,2-TETRACHLOROETHANE	BDL	5
TOLUENE	22	5
CHLOROBENZENE	BDL	5
ETHYLBENZENE	22	5
ACETONE	BDL	25
CARBON DISULFIDE	BDL	5
THF	180	25
MEK	300	25
VINYL ACETATE	BDL	10
MIBK	BDL	25
2-HEXANONE	BDL	25
STYRENE	BDL	5
XYLENES	34	5

BDL = BELOW DETECTION LIMIT
METHOD REFERENCE: 40 CFR PART 136, FRIDAY, OCTOBER 26, 1984
METHOD 624

Resource Analysts, Incorporated

Lab Number:	9068-1
Sample Designation:	Intake
Date Analyzed:	3/11/87
Matrix:	Water

VOLATILE ORGANICS	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
CHLOROMETHANE	BDL	10
VINYL CHLORIDE	BDL	10
CHLOROETHANE	Trace	5
BROMOMETHANE	BDL	10
METHYLENE CHLORIDE	BDL	5
1,1-DICHLOROETHYLENE	BDL	5
1,1-DICHLOROETHANE	29	5
1,2-trans-DICHLOROETHYLENE	BDL	5
CHLOROFORM	BDL	5
1,2-DICHLOROETHANE	BDL	5
1,1,1-TRICHLOROETHANE	76	5
CARBON TETRACHLORIDE	BDL	5
BROMODICHLOROMETHANE	BDL	5
1,2-DICHLOROPROPANE	BDL	5
1,3-trans-DICHLOROPROPENE	BDL	5
TRICHLOROETHYLENE	BDL	5
BENZENE	BDL	5
1,3-cis-DICHLOROPROPENE	BDL	5
1,1,2-TRICHLOROETHANE	BDL	5
2-CHLOROETHYL VINYL ETHER	BDL	5
DIBROMOCHLOROMETHANE	BDL	5
BROMOFORM	BDL	5
TETRACHLOROETHYLENE	BDL	5
1,1,2,2-TETRACHLOROETHANE	BDL	5
TOLUENE	8	5
CHLOROBENZENE	BDL	5
ETHYLBENZENE	BDL	5
ACETONE	BDL	25
CARBON DISULFIDE	BDL	5
THF	150	25
MEK	67	25
VINYL ACETATE	BDL	10
MIBK	BDL	25
2-HEXANONE	BDL	25
STYRENE	BDL	5
XYLENES	10	5

"Trace" denotes probable presence below listed detection limit.

BDL = BELOW DETECTION LIMIT
METHOD REFERENCE: 40 CFR PART 136, FRIDAY, OCTOBER 26, 1984
METHOD 624

Resource Analysts, Incorporated

Lab Number:	9100-1
Sample Designation:	Intake 3/9/87
Date Analyzed:	3/13/87
Matrix:	Water

VOLATILE ORGANICS	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
CHLOROMETHANE	BDL	10
VINYL CHLORIDE	BDL	10
CHLOROETHANE	11	5
BROMOMETHANE	BDL	10
METHYLENE CHLORIDE	BDL	5
1,1-DICHLOROETHYLENE	BDL	5
1,1-DICHLOROETHANE	37	5
1,2-trans-DICHLOROETHYLENE	BDL	5
CHLOROFORM	BDL	5
1,2-DICHLOROETHANE	BDL	5
1,1,1-TRICHLOROETHANE	140	5
CARBON TETRACHLORIDE	BDL	5
BROMODICHLOROMETHANE	BDL	5
1,2-DICHLOROPROPANE	BDL	5
1,3-trans-DICHLOROPROPENE	BDL	5
TRICHLOROETHYLENE	BDL	5
BENZENE	BDL	5
1,3-cis-DICHLOROPROPENE	BDL	5
1,1,2-TRICHLOROETHANE	BDL	5
2-CHLOROETHYL VINYL ETHER	BDL	5
DIBROMOCHLOROMETHANE	BDL	5
BROMOFORM	BDL	5
TETRACHLOROETHYLENE	BDL	5
1,1,2,2-TETRACHLOROETHANE	BDL	5
TOLUENE	10	5
CHLOROBENZENE	BDL	5
ETHYLBENZENE	7	5
ACETONE	BDL	25
CARBON DISULFIDE	BDL	5
THF	120	25
MEK	97	25
VINYL ACETATE	BDL	10
MIBK	BDL	25
2-HEXANONE	BDL	25
STYRENE	BDL	5
XYLENES	11	5

BDL = BELOW DETECTION LIMIT
METHOD REFERENCE: 40 CFR PART 136, FRIDAY, OCTOBER 26, 1984
METHOD 624

Resource Analysts, Incorporated

Lab Number:	9156-1
Sample Designation:	Intake
Date Analyzed:	3/18/87
Matrix:	Water

VOLATILE ORGANICS	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
CHLOROMETHANE	BDL	10
VINYL CHLORIDE	BDL	10
CHLOROETHANE	BDL	5
BROMOMETHANE	BDL	10
METHYLENE CHLORIDE	BDL	5
1,1-DICHLOROETHYLENE	BDL	5
1,1-DICHLOROETHANE	21	5
1,2-trans-DICHLOROETHYLENE	BDL	5
CHLOROFORM	BDL	5
1,2-DICHLOROETHANE	BDL	5
1,1,1-TRICHLOROETHANE	110	5
CARBON TETRACHLORIDE	BDL	5
BROMODICHLOROMETHANE	BDL	5
1,2-DICHLOROPROPANE	BDL	5
1,3-trans-DICHLOROPROPENE	BDL	5
TRICHLOROETHYLENE	BDL	5
BENZENE	BDL	5
1,3-cis-DICHLOROPROPENE	BDL	5
1,1,2-TRICHLOROETHANE	BDL	5
2-CHLOROETHYL VINYL ETHER	BDL	5
DIBROMOCHLOROMETHANE	BDL	5
BROMOFORM	BDL	5
TETRACHLOROETHYLENE	BDL	5
1,1,2,2-TETRACHLOROETHANE	BDL	5
TOLUENE	8	5
CHLOROBENZENE	BDL	5
ETHYLBENZENE	BDL	5
ACETONE	BDL	25
CARBON DISULFIDE	BDL	5
THF	74	25
MEK	28	25
VINYL ACETATE	BDL	10
MIBK	BDL	25
2-HEXANONE	BDL	25
STYRENE	BDL	5
XYLENES	BDL	5

BDL = BELOW DETECTION LIMIT
METHOD REFERENCE: 40 CFR PART 136, FRIDAY, OCTOBER 26, 1984
METHOD 624

Resource Analysts, Incorporated

Lab Number:	9222-1
Sample Designation:	Intake 3/23/87
Date Analyzed:	3/24/87
Matrix:	Water

VOLATILE ORGANICS	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
CHLOROMETHANE	BDL	10
VINYL CHLORIDE	BDL	10
CHLOROETHANE	5.4	5
BROMOMETHANE	BDL	10
METHYLENE CHLORIDE	BDL	5
1,1-DICHLOROETHYLENE	BDL	5
1,1-DICHLOROETHANE	22	5
1,2-trans-DICHLOROETHYLENE	BDL	5
CHLOROFORM	BDL	5
1,2-DICHLOROETHANE	BDL	5
1,1,1-TRICHLOROETHANE	130	5
CARBON TETRACHLORIDE	BDL	5
BROMODICHLOROMETHANE	BDL	5
1,2-DICHLOROPROPANE	BDL	5
1,3-trans-DICHLOROPROPENE	BDL	5
TRICHLOROETHYLENE	BDL	5
BENZENE	BDL	5
1,3-cis-DICHLOROPROPENE	BDL	5
1,1,2-TRICHLOROETHANE	BDL	5
2-CHLOROETHYL VINYL ETHER	BDL	5
DIBROMOCHLOROMETHANE	BDL	5
BROMOFORM	BDL	5
TETRACHLOROETHYLENE	BDL	5
1,1,2,2-TETRACHLOROETHANE	BDL	5
TOLUENE	BDL	5
CHLOROBENZENE	11	5
ETHYLBENZENE	BDL	5
	6.4	5
ACETONE	BDL	25
CARBON DISULFIDE	BDL	5
THF	81	25
MEK	42	25
VINYL ACETATE	BDL	10
MIBK	BDL	25
2-HEXANONE	BDL	25
STYRENE	BDL	5
XYLENES	11	5

BDL = BELOW DETECTION LIMIT
METHOD REFERENCE: 40 CFR PART 136, FRIDAY, OCTOBER 26, 1984
METHOD 624

Resource Analysts, Incorporated

Lab Number:	9303-1
Sample Designation:	Intake
Date Analyzed:	4/6/87
Matrix:	Water

VOLATILE ORGANICS	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
CHLOROMETHANE	BDL	10
VINYL CHLORIDE	BDL	10
CHLOROETHANE	7.9	5
BROMOMETHANE	BDL	10
METHYLENE CHLORIDE	BDL	5
1,1-DICHLOROETHYLENE	BDL	5
1,1-DICHLOROETHANE	47	5
1,2-trans-DICHLOROETHYLENE	BDL	5
CHLOROFORM	BDL	5
1,2-DICHLOROETHANE	BDL	5
1,1,1-TRICHLOROETHANE	200	5
CARBON TETRACHLORIDE	BDL	5
BROMODICHLOROMETHANE	BDL	5
1,2-DICHLOROPROPANE	BDL	5
1,3-trans-DICHLOROPROPENE	BDL	5
TRICHLOROETHYLENE	BDL	5
BENZENE	BDL	5
1,3-cis-DICHLOROPROPENE	BDL	5
1,1,2-TRICHLOROETHANE	BDL	5
2-CHLOROETHYL VINYL ETHER	BDL	5
DIBROMOCHLOROMETHANE	BDL	5
BROMOFORM	BDL	5
TETRACHLOROETHYLENE	BDL	5
1,1,2,2-TETRACHLOROETHANE	BDL	5
TOLUENE	BDL	5
CHLOROBENZENE	BDL	5
ETHYLBENZENE	BDL	5
	BDL	5
ACETONE	BDL	25
CARBON DISULFIDE	BDL	5
THF	110	25
MEK	BDL	25
VINYL ACETATE	BDL	10
MIBK	BDL	25
2-HEXANONE	BDL	25
STYRENE	BDL	5
XYLENES	5.5	5

BDL = BELOW DETECTION LIMIT
METHOD REFERENCE: 40 CFR PART 136, FRIDAY, OCTOBER 26, 1984
METHOD 624

Resource Analysts, Incorporated

Lab Number:	9369-1
Sample Designation:	Intake 4/7/87
Date Analyzed:	4/8/87
Matrix:	Water

VOLATILE ORGANICS	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
CHLOROMETHANE	BDL	10
VINYL CHLORIDE	BDL	10
CHLOROETHANE	5	5
BROMOMETHANE	BDL	10
METHYLENE CHLORIDE	BDL	5
1,1-DICHLOROETHYLENE	BDL	5
1,1-DICHLOROETHANE	50	5
1,2-trans-DICHLOROETHYLENE	BDL	5
CHLOROFORM	BDL	5
1,2-DICHLOROETHANE	BDL	5
1,1,1-TRICHLOROETHANE	130	5
CARBON TETRACHLORIDE	BDL	5
BROMODICHLOROMETHANE	BDL	5
1,2-DICHLOROPROPANE	BDL	5
1,3-trans-DICHLOROPROPENE	BDL	5
TRICHLOROETHYLENE	BDL	5
BENZENE	BDL	5
1,3-cis-DICHLOROPROPENE	BDL	5
1,1,2-TRICHLOROETHANE	BDL	5
2-CHLOROETHYL VINYL ETHER	BDL	5
DIBROMOCHLOROMETHANE	BDL	5
BROMOFORM	BDL	5
TETRACHLOROETHYLENE	BDL	5
1,1,2,2-TETRACHLOROETHANE	BDL	5
TOLUENE	7.0	5
CHLOROBENZENE	BDL	5
ETHYLBENZENE	BDL	5
ACETONE	BDL	25
CARBON DISULFIDE	BDL	5
THF	30	25
MEK	BDL	25
VINYL ACETATE	BDL	10
MIBK	BDL	25
2-HEXANONE	BDL	25
STYRENE	BDL	5
XYLENES	BDL	5

BDL = BELOW DETECTION LIMIT
METHOD REFERENCE: 40 CFR PART 136, FRIDAY, OCTOBER 26, 1984
METHOD 624

Resource Analysts, Incorporated

Lab Number:	9455-1
Sample Designation:	Intake
Date Analyzed:	4/17/87
Matrix:	Water

VOLATILE ORGANICS	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
CHLOROMETHANE	BDL	10
VINYL CHLORIDE	BDL	10
CHLOROETHANE	BDL	5
BROMOMETHANE	BDL	10
METHYLENE CHLORIDE	BDL	5
1,1-DICHLOROETHYLENE	BDL	5
1,1-DICHLOROETHANE	36	5
1,2-trans-DICHLOROETHYLENE	BDL	5
CHLOROFORM	BDL	5
1,2-DICHLOROETHANE	BDL	5
1,1,1-TRICHLOROETHANE	180	5
CARBON TETRACHLORIDE	BDL	5
BROMODICHLOROMETHANE	BDL	5
1,2-DICHLOROPROPANE	BDL	5
1,3-trans-DICHLOROPROPENE	BDL	5
TRICHLOROETHYLENE	BDL	5
BENZENE	BDL	5
1,3-cis-DICHLOROPROPENE	BDL	5
1,1,2-TRICHLOROETHANE	BDL	5
2-CHLOROETHYL VINYL ETHER	BDL	5
DIBROMOCHLOROMETHANE	BDL	5
BROMOFORM	BDL	5
TETRACHLOROETHYLENE	BDL	5
1,1,2,2-TETRACHLOROETHANE	BDL	5
TOLUENE	BDL	5
CHLOROBENZENE	16	5
ETHYLBENZENE	BDL	5
	5	5
ACETONE	BDL	25
CARBON DISULFIDE	BDL	5
THF	160	25
MEK	BDL	25
VINYL ACETATE	BDL	10
MIBK	BDL	25
2-HEXANONE	BDL	25
STYRENE	BDL	5
XYLENES	16	5

BDL = BELOW DETECTION LIMIT
METHOD REFERENCE: 40 CFR PART 136, FRIDAY, OCTOBER 26, 1984
METHOD 624

Resource Analysts, Incorporated

Lab Number:	9550-1
Sample Designation:	Intake 4/24/87
Date Analyzed:	5/5/87
Matrix:	Water

VOLATILE ORGANICS	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
CHLOROMETHANE	BDL	10
VINYL CHLORIDE	BDL	10
CHLOROETHANE	BDL	5
BROMOMETHANE	BDL	10
METHYLENE CHLORIDE	BDL	5
1,1-DICHLOROETHYLENE	BDL	5
1,1-DICHLOROETHANE	14	5
1,2-trans-DICHLOROETHYLENE	BDL	5
CHLOROFORM	BDL	5
1,2-DICHLOROETHANE	BDL	5
1,1,1-TRICHLOROETHANE	140	5
CARBON TETRACHLORIDE	BDL	5
BROMODICHLOROMETHANE	BDL	5
1,2-DICHLOROPROPANE	BDL	5
1,3-trans-DICHLOROPROPENE	BDL	5
TRICHLOROETHYLENE	BDL	5
BENZENE	BDL	5
1,3-cis-DICHLOROPROPENE	BDL	5
1,1,2-TRICHLOROETHANE	BDL	5
2-CHLOROETHYL VINYL ETHER	BDL	5
DIBROMOCHLOROMETHANE	BDL	5
BROMOFORM	BDL	5
TETRACHLOROETHYLENE	BDL	5
1,1,2,2-TETRACHLOROETHANE	BDL	5
TOLUENE	7	5
CHLOROBENZENE	BDL	5
ETHYLBENZENE	BDL	5
ACETONE	BDL	25
CARBON DISULFIDE	BDL	5
THF	170	25
MEK	BDL	25
VINYL ACETATE	BDL	10
MIBK	BDL	25
2-HEXANONE	BDL	25
STYRENE	BDL	5
XYLENES	10	5

BDL = BELOW DETECTION LIMIT
METHOD REFERENCE: 40 CFR PART 136, FRIDAY, OCTOBER 26, 1984
METHOD 624

Resource Analysts, Incorporated

Lab Number: 9568-1
Sample Designation: Intake 4/29/87
Date Analyzed: 5/8/87
Matrix: Water

VOLATILE ORGANICS	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
CHLOROMETHANE	BDL	10
VINYL CHLORIDE	BDL	10
CHLOROETHANE	6.2	5
BROMOMETHANE	BDL	10
METHYLENE CHLORIDE	BDL	5
1,1-DICHLOROETHYLENE	BDL	5
1,1-DICHLOROETHANE	28	5
1,2-trans-DICHLOROETHYLENE	BDL	5
CHLOROFORM	BDL	5
1,2-DICHLOROETHANE	BDL	5
1,1,1-TRICHLOROETHANE	140	5
CARBON TETRACHLORIDE	BDL	5
BROMODICHLOROMETHANE	BDL	5
1,2-DICHLOROPROPANE	BDL	5
1,3-trans-DICHLOROPROPENE	BDL	5
TRICHLOROETHYLENE	BDL	5
BENZENE	BDL	5
1,3-cis-DICHLOROPROPENE	BDL	5
1,1,2-TRICHLOROETHANE	BDL	5
2-CHLOROETHYL VINYL ETHER	BDL	5
DIBROMOCHLOROMETHANE	BDL	5
BROMOFORM	BDL	5
TETRACHLOROETHYLENE	BDL	5
1,1,2,2-TETRACHLOROETHANE	BDL	5
TOLUENE	7.9	5
CHLOROBENZENE	Trace	5
ETHYLBENZENE	Trace	5
ACETONE	BDL	25
CARBON DISULFIDE	BDL	5
THF	140	25
MEK	BDL	25
VINYL ACETATE	BDL	10
MIBK	BDL	25
2-HEXANONE	BDL	25
STYRENE	BDL	5
XYLENES	12	5

"Trace" denotes probable presence below listed detection limit.

BDL = BELOW DETECTION LIMIT
METHOD REFERENCE: 40 CFR PART 136, FRIDAY, OCTOBER 26, 1984
METHOD 624

Resource Analysts, Incorporated

Lab Number:	9614-1
Sample Designation:	Intake
Date Analyzed:	5/12/87
Matrix:	Water

VOLATILE ORGANICS	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
CHLOROMETHANE	BDL	10
VINYL CHLORIDE	BDL	10
CHLOROETHANE	8	5
BROMOMETHANE	BDL	10
METHYLENE CHLORIDE	160	5
1,1-DICHLOROETHYLENE	5	5
1,1-DICHLOROETHANE	24	5
1,2-trans-DICHLOROETHYLENE	BDL	5
CHLOROFORM	Trace	5
1,2-DICHLOROETHANE	BDL	5
1,1,1-TRICHLOROETHANE	200	5
CARBON TETRACHLORIDE	BDL	5
BROMODICHLOROMETHANE	BDL	5
1,2-DICHLOROPROPANE	BDL	5
1,3-trans-DICHLOROPROPENE	BDL	5
TRICHLOROETHYLENE	BDL	5
BENZENE	BDL	5
1,3-cis-DICHLOROPROPENE	BDL	5
1,1,2-TRICHLOROETHANE	BDL	5
2-CHLOROETHYL VINYL ETHER	BDL	5
DIBROMOCHLOROMETHANE	BDL	5
BROMOFORM	BDL	5
TETRACHLOROETHYLENE	BDL	5
1,1,2,2-TETRACHLOROETHANE	350	5
TOLUENE	BDL	5
CHLOROBENZENE	18	5
ETHYLBENZENE	BDL	5
	BDL	5
ACETONE	BDL	25
CARBON DISULFIDE	BDL	5
THF	90	25
MEK	BDL	25
VINYL ACETATE	BDL	10
MIBK	BDL	25
2-HEXANONE	BDL	25
STYRENE	BDL	5
XYLENES	11	5

"Trace" denotes probable presence below listed detection limit.

BDL = BELOW DETECTION LIMIT
METHOD REFERENCE: 40 CFR PART 136, FRIDAY, OCTOBER 26, 1984
METHOD 624

Resource Analysts, Incorporated

Lab Number:	9668-1
Sample Designation:	Intake 5/12/87
Date Analyzed:	5/22/87
Matrix:	Water

VOLATILE ORGANICS	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
CHLOROMETHANE	BDL	10
VINYL CHLORIDE	BDL	10
CHLOROETHANE	BDL	5
BROMOMETHANE	BDL	10
METHYLENE CHLORIDE	BDL	5
1,1-DICHLOROETHYLENE	BDL	5
1,1-DICHLOROETHANE	21	5
1,2-trans-DICHLOROETHYLENE	BDL	5
CHLOROFORM	BDL	5
1,2-DICHLOROETHANE	BDL	5
1,1,1-TRICHLOROETHANE	200	5
CARBON TETRACHLORIDE	BDL	5
BROMODICHLOROMETHANE	BDL	5
1,2-DICHLOROPROPANE	BDL	5
1,3-trans-DICHLOROPROPENE	BDL	5
TRICHLOROETHYLENE	BDL	5
BENZENE	BDL	5
1,3-cis-DICHLOROPROPENE	BDL	5
1,1,2-TRICHLOROETHANE	BDL	5
2-CHLOROETHYL VINYL ETHER	BDL	5
DIBROMOCHLOROMETHANE	BDL	5
BROMOFORM	BDL	5
TETRACHLOROETHYLENE	BDL	5
1,1,2,2-TETRACHLOROETHANE	BDL	5
TOLUENE	BDL	5
CHLOROBENZENE	BDL	5
ETHYLBENZENE	BDL	5
	BDL	5
ACETONE	BDL	25
CARBON DISULFIDE	BDL	5
THF	120	25
MEK	BDL	25
VINYL ACETATE	BDL	10
MIBK	BDL	25
2-HEXANONE	BDL	25
STYRENE	BDL	5
XYLENES	BDL	5

BDL = BELOW DETECTION LIMIT
METHOD REFERENCE: 40 CFR PART 136, FRIDAY, OCTOBER 26, 1984
METHOD 624

Resource Analysts, Incorporated

Lab Number: 9746-1
Sample Designation: Intake
Date Analyzed: 6/2/87
Matrix: Water

VOLATILE ORGANICS	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
CHLOROMETHANE	BDL	10
VINYL CHLORIDE	BDL	10
CHLOROETHANE	7	5
BROMOMETHANE	BDL	10
METHYLENE CHLORIDE	BDL	5
1,1-DICHLOROETHYLENE	BDL	5
1,1-DICHLOROETHANE	24	5
1,2-trans-DICHLOROETHYLENE	BDL	5
CHLOROFORM	BDL	5
1,2-DICHLOROETHANE	BDL	5
1,1,1-TRICHLOROETHANE	190	5
CARBON TETRACHLORIDE	BDL	5
BROMODICHLOROMETHANE	BDL	5
1,2-DICHLOROPROPANE	BDL	5
1,3-trans-DICHLOROPROPENE	BDL	5
TRICHLOROETHYLENE	BDL	5
BENZENE	BDL	5
1,3-cis-DICHLOROPROPENE	BDL	5
1,1,2-TRICHLOROETHANE	BDL	5
2-CHLOROETHYL VINYL ETHER	BDL	5
DIBROMOCHLOROMETHANE	BDL	5
BROMOFORM	BDL	5
TETRACHLOROETHYLENE	BDL	5
1,1,2,2-TETRACHLOROETHANE	BDL	5
TOLUENE	12	5
CHLOROBENZENE	BDL	5
ETHYLBENZENE	BDL	5
ACETONE	BDL	25
CARBON DISULFIDE	BDL	5
THF	108	25
MEK	BDL	25
VINYL ACETATE	BDL	10
MIBK	BDL	25
2-HEXANONE	BDL	25
STYRENE	BDL	5
XYLENES	9	5

BDL = BELOW DETECTION LIMIT
METHOD REFERENCE: 40 CFR PART 136, FRIDAY, OCTOBER 26, 1984
METHOD 624

Resource Analysts, Incorporated

Lab Number: 10,008-1
Sample Designation: Intake
Date Analyzed: 6/22/87
Matrix: Water

VOLATILE ORGANICS	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
CHLOROMETHANE	BDL	10
VINYL CHLORIDE	BDL	10
CHLOROETHANE	BDL	5
BROMOMETHANE	BDL	5
METHYLENE CHLORIDE	BDL	5
1,1-DICHLOROETHYLENE	BDL	5
1,1-DICHLOROETHANE	26	5
1,2-trans-DICHLOROETHYLENE	BDL	5
CHLOROFORM	BDL	5
1,2-DICHLOROETHANE	BDL	5
1,1,1-TRICHLOROETHANE	170	5
CARBON TETRACHLORIDE	BDL	5
BROMODICHLOROMETHANE	BDL	5
1,2-DICHLOROPROPANE	BDL	5
1,3-trans-DICHLOROPROPENE	BDL	5
TRICHLOROETHYLENE	BDL	5
BENZENE	BDL	5
1,3-cis-DICHLOROPROPENE	BDL	5
1,1,2-TRICHLOROETHANE	BDL	5
2-CHLOROETHYL VINYL ETHER	BDL	5
DIBROMOCHLOROMETHANE	BDL	5
BROMOFORM	BDL	5
TETRACHLOROETHYLENE	BDL	5
1,1,2,2-TETRACHLOROETHANE	BDL	5
TOLUENE	BDL	5
CHLOROBENZENE	BDL	5
ETHYLBENZENE	BDL	5
ACETONE	BDL	25
CARBON DISULFIDE	BDL	5
THF	87	25
MEK	BDL	25
VINYL ACETATE	BDL	10
MIBK	BDL	25
2-HEXANONE	BDL	25
STYRENE	BDL	5
XYLENES	BDL	5

BDL = BELOW DETECTION LIMIT
METHOD REFERENCE: 40 CFR PART 136, FRIDAY, OCTOBER 26, 1984
METHOD 624

Resource Analysts, Incorporated

Laboratory #: 10096-1
Field Identification: INTAKE
Date analyzed: 7/06/87

Data file id:>10181

Matrix: Water

Volatile Compounds	Concentration (ug/L)	Detection limit (ug/L).
CHLOROMETHANE	BDL	10
BROMOMETHANE	BDL	10
VINYL CHLORIDE	BDL	10
CHLOROETHANE	BDL	5
METHYLENE CHLORIDE	BDL	10
ACETONE	BDL	25
CARBON DISULFIDE	BDL	5
1,1-DICHLOROETHENE	BDL	5
TETRAHYDROFURAN	140	25
1,1-DICHLOROETHANE	31	5
TRANS-1,2-DICHLOROETHENE	BDL	5
CHLOROFORM	BDL	5
2-BUTANONE	BDL	25
1,2-DICHLOROETHANE	BDL	5
1,1,1-TRICHLOROETHANE	400	5
CARBON TETRACHLORIDE	BDL	5
VINYL ACETATE	BDL	10
BROMODICHLOROMETHANE	BDL	5
CIS-1,3-DICHLOROPROPENE	BDL	5
TRANS-1,3-DICHLOROPROPENE	BDL	5
TRICHLOROETHENE	BDL	5
BENZENE	BDL	5
DIBROMOCHLOROMETHANE	BDL	5
1,1,2-TRICHLOROETHANE	BDL	5
1,2-DICHLOROPROPANE	BDL	5
2-CHLOROETHYLVINYL ETHER	BDL	5
BROMOFORM	BDL	5
4-METHYL-2-PENTANONE	BDL	25
2-HEXANONE	BDL	25
1,1,2,2-TETRACHLOROETHANE	BDL	5
TETRACHLOROETHENE	BDL	5
TOLUENE	BDL	5
CHLOROBENZENE	BDL	5
ETHYL BENZENE	BDL	5
m-XYLENE	BDL	5
o,p-XYLENES	BDL	5
STYRENE	BDL	5

DL= Below detection limit
ethod Reference: 40 CFR Part 136, Friday, October 26, 1984
Method 624

oratory #: 10207-1
ield Identification: INTAKE
Date analyzed: 7/13/87

Data file id:>10309

Matrix: Water

olatile Compounds

	Concentration (ug/L)	Detection limit (ug/L)
HLOROMETHANE	BDL	10
ROMOMETHANE	BDL	10
INYL CHLORIDE	BDL	10
HLOROETHANE	18	5
ETHYLENE CHLORIDE	15	10
CETONE	BDL	25
ARBON DISULFIDE	BDL	5
,1-DICHLOROETHENE	9	5
ETRAHYDROFURAN	110	25
,1-DICHLOROETHANE	69	5
RANS-1,2-DICHLOROETHENE	BDL	5
HLOROFORM	BDL	5
-BUTANONE	BDL	25
,2-DICHLOROETHANE	BDL	5
,1,1-TRICHLOROETHANE	320	5
ARBON TETRACHLORIDE	BDL	5
INYL ACETATE	BDL	10
ROMODICHLOROMETHANE	BDL	5
IS-1,3-DICHLOROPROPENE	BDL	5
RANS-1,3-DICHLOROPROPENE	BDL	5
ICHLOROETHENE	BDL	5
NZENE	BDL	5
BROMOCHLOROMETHANE	BDL	5
1,2-TRICHLOROETHANE	BDL	5
2-DICHLOROPROPANE	BDL	5
CHLOROETHYLVINYL ETHER	BDL	5
OMOFORM	BDL	5
METHYL-2-PENTANONE	BDL	25
HEXANONE	BDL	25
1,2,2-TETRACHLOROETHANE	BDL	5
TRACHLOROETHENE	BDL	5
LUENE	31	5
LOROBENZENE	BDL	5
HYL BENZENE	BDL	5
XYLENE	32	5
-XYLENES	19	5
RENE	BDL	5

= Below detection limit
hod Reference: 40 CFR Part 136, Friday, October 26, 1984
Method 624

Resource Analysts, Incorporated

Laboratory #: 10258-1
Field Identification: INTAKE
Date analyzed: 7/16/87

Data file id:>10380

Matrix: Water

Volatile Compounds	Concentration (ug/L)	Detection limit (ug/L)
CHLOROMETHANE	BDL	10
BROMOMETHANE	BDL	10
VINYL CHLORIDE	BDL	10
CHLOROETHANE	13	5
METHYLENE CHLORIDE	BDL	10
ACETONE	37	25
CARBON DISULFIDE	BDL	5
1,1-DICHLOROETHENE	12	5
TETRAHYDROFURAN	110	25
1,1-DICHLOROETHANE	84	5
TRANS-1,2-DICHLOROETHENE	BDL	5
CHLOROFORM	BDL	5
2-BUTANONE	BDL	25
1,2-DICHLOROETHANE	BDL	5
1,1,1-TRICHLOROETHANE	420	5
CARBON TETRACHLORIDE	BDL	5
VINYL ACETATE	BDL	10
BROMODICHLOROMETHANE	BDL	5
CIS-1,3-DICHLOROPROPENE	BDL	5
TRANS-1,3-DICHLOROPROPENE	BDL	5
TRICHLOROETHENE	BDL	5
BENZENE	BDL	5
DIBROMOCHLOROMETHANE	BDL	5
1,1,2-TRICHLOROETHANE	BDL	5
1,2-DICHLOROPROPANE	BDL	5
2-CHLOROETHYLVINYL ETHER	BDL	5
BROMOFORM	BDL	5
4-METHYL-2-PENTANONE	BDL	5
2-HEXANONE	BDL	25
1,1,2,2-TETRACHLOROETHANE	BDL	25
TETRACHLOROETHENE	BDL	5
TOLUENE	BDL	5
CHLOROBENZENE	28	5
ETHYL BENZENE	BDL	5
m-XYLENE	15	5
o,p-XYLENES	20	5
STYRENE	17	5
	BDL	5

BDL= Below detection limit
Method Reference: 40 CFR Part 136, Friday, October 26, 1984
Method 624

aboratory #: 10350-1
field Identification: INTAKE
Date analyzed: 7/16/87

Data file id:>10396

Matrix: Water

Volatile Compounds	Concentration (ug/L)	Detection limit (ug/L)
CHLOROMETHANE	BDL	10
BROMOMETHANE	BDL	10
VINYL CHLORIDE	BDL	10
CHLOROETHANE	25	5
METHYLENE CHLORIDE	BDL	10
ACETONE	BDL	25
CARBON DISULFIDE	BDL	5
1,1-DICHLOROETHENE	26	5
TETRAHYDROFURAN	130	25
1,1-DICHLOROETHANE	130	5
TRANS-1,2-DICHLOROETHENE	BDL	5
CHLOROFORM	BDL	5
2-BUTANONE	BDL	25
1,2-DICHLOROETHANE	BDL	5
1,1,1-TRICHLOROETHANE	1200	5
CARBON TETRACHLORIDE	BDL	5
VINYL ACETATE	BDL	10
BROMODICHLOROMETHANE	BDL	5
CIS-1,3-DICHLOROPROPENE	BDL	5
TRANS-1,3-DICHLOROPROPENE	BDL	5
TRICHLOROETHENE	BDL	5
BENZENE	BDL	5
DIBROMOCHLOROMETHANE	BDL	5
,1,2-TRICHLOROETHANE	BDL	5
,2-DICHLOROPROPANE	BDL	5
-CHLOROETHYLVINYL ETHER	BDL	5
ROMOFORM	BDL	5
-METHYL-2-PENTANONE	BDL	25
-HEXANONE	BDL	25
,1,2,2-TETRACHLOROETHANE	BDL	5
ETRACHLOROETHENE	BDL	5
OLUENE	88	5
HLOROBENZENE	BDL	5
THYL BENZENE	70	5
-XYLENE	90	5
,p-XYLENES	55	5
TYRENE	BDL	5

DL= Below detection limit
ethod Reference: 40 CFR Part 136, Friday, October 26, 1984
Method 624

Number: 10470-1
ple Designation: Intake
ate Analyzed: 8/7/87
Matrix: Water

VOLATILE ORGANICS	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
CHLOROMETHANE	BDL	10
VINYL CHLORIDE	BDL	10
CHLOROETHANE	7	5
BROMOMETHANE	BDL	5
METHYLENE CHLORIDE	80	5
1,1-DICHLOROETHYLENE	BDL	5
1,1-DICHLOROETHANE	76	5
1,2-trans-DICHLOROETHYLENE	BDL	5
CHLOROFORM	BDL	5
1,2-DICHLOROETHANE	BDL	5
1,1,1-TRICHLOROETHANE	340	5
CARBON TETRACHLORIDE	BDL	5
BROMODICHLOROMETHANE	BDL	5
1,2-DICHLOROPROPANE	BDL	5
1,3-trans-DICHLOROPROPENE	BDL	5
TRICHLOROETHYLENE	BDL	5
BENZENE	BDL	5
1,3-cis-DICHLOROPROPENE	BDL	5
1,1,2-TRICHLOROETHANE	BDL	5
2-CHLOROETHYL VINYL ETHER	BDL	5
DIBROMOCHLOROMETHANE	BDL	5
BROMOFORM	BDL	5
TETRACHLOROETHYLENE	BDL	5
1,1,2,2-TETRACHLOROETHANE	BDL	5
TOLUENE	BDL	5
CHLOROBENZENE	BDL	5
ETHYLBENZENE	BDL	5
ACETONE	BDL	25
CARBON DISULFIDE	BDL	5
THF	BDL	25
MEK	300	25
VINYL ACETATE	BDL	10
MIBK	BDL	25
2-HEXANONE	BDL	25
STYRENE	BDL	5
XYLENES	BDL	5

BDL = BELOW DETECTION LIMIT
METHOD REFERENCE: 40 CFR PART 136, FRIDAY, OCTOBER 26, 1984
METHOD 624

Lab Number: 10,470-1
Sample Designation: Intake
Date Analyzed: 8/07/87
Matrix: Water

VOLATILE ORGANICS	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
CHLOROMETHANE	BDL	10
VINYL CHLORIDE	BDL	10
CHLOROETHANE	7	5
BROMOMETHANE	BDL	5
METHYLENE CHLORIDE	80	5
1,1-DICHLOROETHYLENE	BDL	5
1,1-DICHLOROETHANE	76	5
1,2-DICHLOROETHYLENE	BDL	5
CHLOROFORM	BDL	5
1,2-DICHLOROETHANE	BDL	5
1,1,1-TRICHLOROETHANE	340	5
CARBON TETRACHLORIDE	BDL	5
BROMODICHLOROMETHANE	BDL	5
1,2-DICHLOROPROPANE	BDL	5
1,3-trans-DICHLOROPROPENE	BDL	5
TRICHLOROETHYLENE	BDL	5
BENZENE	BDL	5
1,3-cis-DICHLOROPROPENE	BDL	5
1,1,2-TRICHLOROETHANE	BDL	5
2-CHLOROETHYL VINYL ETHER	BDL	5
DIBROMOCHLOROMETHANE	BDL	5
BROMOFORM	BDL	5
TETRACHLOROETHYLENE	BDL	5
1,1,2,2-TETRACHLOROETHANE	BDL	5
TOLUENE	BDL	5
CHLOROBENZENE	BDL	5
ETHYLBENZENE	BDL	5
ACETONE	BDL	25
CARBON DISULFIDE	BDL	5
THF	140	25
MEK	BDL	25
VINYL ACETATE	BDL	10
MIBK	BDL	25
2-HEXANONE	BDL	25
STYRENE	BDL	5
XYLENES	BDL	5

BDL = BELOW DETECTION LIMIT
METHOD REFERENCE: 40 CFR PART 136, FRIDAY, OCTOBER 26, 1984
METHOD 624

Lab Number: 10,511-1
Sample Designation: Intake
Date Analyzed: 8/11/87
Matrix: Water

VOLATILE ORGANICS	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
CHLOROMETHANE	BDL	10
VINYL CHLORIDE	BDL	10
CHLOROETHANE	24	5
BROMOMETHANE	BDL	5
METHYLENE CHLORIDE	BDL	5
1,1-DICHLOROETHYLENE	13	5
1,1-DICHLOROETHANE	180	5
1,2-trans-DICHLOROETHYLENE	BDL	5
CHLOROFORM	BDL	5
1,2-DICHLOROETHANE	BDL	5
1,1,1-TRICHLOROETHANE	800	5
CARBON TETRACHLORIDE	BDL	5
BROMODICHLOROMETHANE	BDL	5
1,2-DICHLOROPROPANE	BDL	5
1,3-trans-DICHLOROPROPENE	BDL	5
TRICHLOROETHYLENE	BDL	5
BENZENE	BDL	5
1,3-cis-DICHLOROPROPENE	BDL	5
1,1,2-TRICHLOROETHANE	BDL	5
2-CHLOROETHYL VINYL ETHER	BDL	5
DIBROMOCHLOROMETHANE	BDL	5
BROMOFORM	BDL	5
TETRACHLOROETHYLENE	BDL	5
1,1,2,2-TETRACHLOROETHANE	BDL	5
TOLUENE	41	5
CHLOROBENZENE	BDL	5
ETHYLBENZENE	6	5
ACETONE	BDL	25
CARBON DISULFIDE	BDL	5
THF	68	25
MEK	BDL	25
VINYL ACETATE	BDL	10
MIBK	BDL	25
2-HEXANONE	BDL	25
STYRENE	BDL	5
XYLENES	68	5

BDL = BELOW DETECTION LIMIT
METHOD REFERENCE: 40 CFR PART 136, FRIDAY, OCTOBER 26, 1984
METHOD 624

Lab Number: 10,572-1
Sample Designation: Intake
Date Analyzed: 8/12/87
Matrix: Water

VOLATILE ORGANICS	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
CHLOROMETHANE	BDL	10
VINYL CHLORIDE	BDL	10
CHLOROETHANE	21	5
BROMOMETHANE	BDL	5
METHYLENE CHLORIDE	BDL	5
1,1-DICHLOROETHYLENE	BDL	5
1,1-DICHLOROETHANE	180	5
1,2-DICHLOROETHYLENE	BDL	5
CHLOROFORM	BDL	5
1,2-DICHLOROETHANE	BDL	5
1,1,1-TRICHLOROETHANE	820	5
CARBON TETRACHLORIDE	BDL	5
BROMODICHLOROMETHANE	BDL	5
1,2-DICHLOROPROPANE	BDL	5
1,3-trans-DICHLOROPROPENE	BDL	5
TRICHLOROETHYLENE	BDL	5
BENZENE	BDL	5
1,3-cis-DICHLOROPROPENE	BDL	5
1,1,2-TRICHLOROETHANE	BDL	5
2-CHLOROETHYL VINYL ETHER	BDL	5
DIBROMOCHLOROMETHANE	BDL	5
BROMOFORM	BDL	5
TETRACHLOROETHYLENE	BDL	5
1,1,2,2-TETRACHLOROETHANE	BDL	5
TOLUENE	BDL	5
CHLOROBENZENE	BDL	5
ETHYLBENZENE	BDL	5
ACETONE	BDL	25
CARBON DISULFIDE	BDL	5
THF	48	25
MEK	BDL	25
VINYL ACETATE	BDL	10
MIBK	BDL	25
2-HEXANONE	BDL	25
STYRENE	BDL	5
XYLENES	BDL	5

BDL = BELOW DETECTION LIMIT
METHOD REFERENCE: 40 CFR PART 136, FRIDAY, OCTOBER 26, 1984
METHOD 624

Laboratory #: 11072-2
Field Identification: Intake VOA
Date analyzed: 10/01/87

Data file id:>D0896::

Matrix: Water

Volatile Compounds	Concentration (ug/L)	Detection limit (ug/L)
CHLOROMETHANE	BDL	10
BROMOMETHANE	BDL	10
VINYL CHLORIDE	BDL	10
CHLOROETHANE	9	5
METHYLENE CHLORIDE	BDL	10
ACETONE	BDL	25
CARBON DISULFIDE	BDL	5
1,1-DICHLOROETHENE	10	5
TETRAHYDROFURAN	39	25
1,1-DICHLOROETHANE	90	5
1,2-DICHLOROETHENE (total)	BDL	5
CHLOROFORM	BDL	5
METHYL ETHYL KETONE	BDL	25
1,2-DICHLOROETHANE	BDL	5
1,1,1-TRICHLOROETHANE	440	5
CARBON TETRACHLORIDE	BDL	5
VINYL ACETATE	BDL	10
BROMODICHLOROMETHANE	BDL	5
CIS-1,3-DICHLOROPROPENE	BDL	5
TRANS-1,3-DICHLOROPROPENE	BDL	5
TRICHLOROETHENE	BDL	5
BENZENE	BDL	5
DIBROMOCHLOROMETHANE	BDL	5
1,1,2-TRICHLOROETHANE	BDL	5
1,2-DICHLOROPROPANE	BDL	5
2-CHLOROETHYLVINYLETHER	BDL	5
BROMOFORM	BDL	5
METHYL ISOBUTYL KETONE	BDL	25
2-HEXANONE	BDL	25
1,1,2,2-TETRACHLOROETHANE	BDL	5
TETRACHLOROETHENE	BDL	5
TOLUENE	40	5
CHLOROBENZENE	BDL	5
ETHYLBENZENE	37	5
o-XYLENE	52	5
m,p-XYLENES	31	5
STYRENE	BDL	5

BDL= Below detection limit
Method Reference: 40 CFR Part 136, Friday, October 26, 1984
Method 624

Laboratory #: 11103-5
Field Identification: 10-1-87
Date analyzed: 10/07/87

Data file id:>10799::

Matrix: Water

Volatile Compounds	Concentration (ug/L)	Detection limit (ug/L)
CHLOROMETHANE	BDL	10
BROMOMETHANE	BDL	10
VINYL CHLORIDE	BDL	10
CHLOROETHANE	BDL	5
METHYLENE CHLORIDE	BDL	10
ACETONE	BDL	25
CARBON DISULFIDE	BDL	5
1,1-DICHLOROETHENE	BDL	5
TETRAHYDROFURAN	BDL	25
1,1-DICHLOROETHANE	BDL	5
1,2-DICHLOROETHENE (total)	BDL	5
CHLOROFORM	BDL	5
METHYL ETHYL KETONE	BDL	25
1,2-DICHLOROETHANE	BDL	5
1,1,1-TRICHLOROETHANE	BDL	5
CARBON TETRACHLORIDE	BDL	5
VINYL ACETATE	BDL	10
BROMODICHLOROMETHANE	BDL	5
CIS-1,3-DICHLOROPROPENE	BDL	5
TRANS-1,3-DICHLOROPROPENE	BDL	5
TRICHLOROETHENE	BDL	5
BENZENE	BDL	5
DIBROMOCHLOROMETHANE	BDL	5
1,1,2-TRICHLOROETHANE	BDL	5
1,2-DICHLOROPROPANE	BDL	5
2-CHLOROETHYLVINYLETHER	BDL	5
BROMOFORM	BDL	5
METHYL ISOBUTYL KETONE	BDL	25
2-HEXANONE	BDL	25
1,1,2,2-TETRACHLOROETHANE	BDL	5
TETRACHLOROETHENE	BDL	5
TOLUENE	BDL	5
CHLOROBENZENE	BDL	5
ETHYLBENZENE	BDL	5
o-XYLENE	BDL	5
m,p-XYLENES	BDL	5
STYRENE	BDL	5

BDL= Below detection limit
Method Reference: 40 CFR Part 136, Friday, October 26, 1984
Method 624

Laboratory #: 11137-3
Field Identification: Intake VOA
Date analyzed: 10/10/87

Data file id:>D1087::

Matrix: Water

Volatile Compounds	Concentration (ug/L)	Detection limit (ug/L)
CHLOROMETHANE	BDL	10
BROMOMETHANE	BDL	10
VINYL CHLORIDE	BDL	10
CHLOROETHANE	21	5
METHYLENE CHLORIDE	BDL	10
ACETONE	BDL	25
CARBON DISULFIDE	BDL	5
1,1-DICHLOROETHENE	10	5
TETRAHYDROFURAN	Trace	25
1,1-DICHLOROETHANE	84	5
1,2-DICHLOROETHENE (total)	BDL	5
CHLOROFORM	BDL	5
METHYL ETHYL KETONE	BDL	25
1,2-DICHLOROETHANE	BDL	5
1,1,1-TRICHLOROETHANE	460	5
CARBON TETRACHLORIDE	BDL	5
VINYL ACETATE	BDL	10
BROMODICHLOROMETHANE	BDL	5
CIS-1,3-DICHLOROPROPENE	BDL	5
TRANS-1,3-DICHLOROPROPENE	BDL	5
TRICHLOROETHENE	BDL	5
BENZENE	BDL	5
DIBROMOCHLOROMETHANE	BDL	5
1,1,2-TRICHLOROETHANE	BDL	5
1,2-DICHLOROPROPANE	BDL	5
2-CHLOROETHYLVINYLETHER	BDL	5
BROMOFORM	BDL	5
METHYL ISOBUTYL KETONE	BDL	25
2-HEXANONE	BDL	25
1,1,2,2-TETRACHLOROETHANE	BDL	5
TETRACHLOROETHENE	BDL	5
TOLUENE	57	5
CHLOROBENZENE	BDL	5
ETHYLBENZENE	12	5
o-XYLENE	38	5
m,p-XYLENES	13	5
STYRENE	BDL	5

"Trace" denotes probable presence below listed detection limits.

BDL= Below detection limit
Method Reference: 40 CFR Part 136, Friday, October 26, 1984
Method 624

Laboratory #: 11223-4
Field Identification: Intake VOA
Date analyzed: 10/14/87

Data file id:>10885::

Matrix: Water

Volatile Compounds	Concentration (ug/L)	Detection limit (ug/L)
CHLOROMETHANE	BDL	10
BROMOMETHANE	BDL	10
VINYL CHLORIDE	BDL	10
CHLOROETHANE	BDL	5
METHYLENE CHLORIDE	BDL	10
ACETONE	BDL	25
CARBON DISULFIDE	BDL	5
1,1-DICHLOROETHENE	8	5
TETRAHYDROFURAN	48	25
1,1-DICHLOROETHANE	71	5
1,2-DICHLOROETHENE (total)	BDL	5
CHLOROFORM	BDL	5
METHYL ETHYL KETONE	BDL	25
1,2-DICHLOROETHANE	BDL	5
1,1,1-TRICHLOROETHANE	300	5
CARBON TETRACHLORIDE	BDL	5
VINYL ACETATE	BDL	10
BROMODICHLOROMETHANE	BDL	5
CIS-1,3-DICHLOROPROPENE	BDL	5
TRANS-1,3-DICHLOROPROPENE	BDL	5
TRICHLOROETHENE	BDL	5
BENZENE	BDL	5
DIBROMOCHLOROMETHANE	BDL	5
1,1,2-TRICHLOROETHANE	BDL	5
1,2-DICHLOROPROPANE	BDL	5
2-CHLOROETHYLVINYLETHER	BDL	5
BROMOFORM	BDL	5
METHYL ISOBUTYL KETONE	BDL	25
2-HEXANONE	BDL	25
1,1,2,2-TETRACHLOROETHANE	BDL	5
TETRACHLOROETHENE	BDL	5
TOLUENE	13	5
CHLOROBENZENE	BDL	5
ETHYLBENZENE	19	5
o-XYLENE	23	5
m,p-XYLENES	16	5
STYRENE	BDL	5

BDL= Below detection limit
Method Reference: 40 CFR Part 136, Friday, October 26, 1984
Method 624

ratory #: 11286-2
eld Identification: Intake VOA
te analyzed: 10/23/87

Data file id:>10987::

Matrix: Water

Volatile Compounds	Concentration (ug/L)	Detection limit (ug/L)
CHLOROMETHANE	BDL	10
BROMOMETHANE	BDL	10
VINYL CHLORIDE	BDL	10
CHLOROETHANE	35	5
METHYLENE CHLORIDE	BDL	10
ACETONE	BDL	25
CARBON DISULFIDE	BDL	5
1,1-DICHLOROETHENE	BDL	5
TETRAHYDROFURAN	70	25
1,1-DICHLOROETHANE	110	5
1,2-DICHLOROETHENE (total)	BDL	5
CHLOROFORM	BDL	5
METHYL ETHYL KETONE	BDL	25
1,2-DICHLOROETHANE	BDL	5
1,1,1-TRICHLOROETHANE	360	5
CARBON TETRACHLORIDE	BDL	5
VINYL ACETATE	BDL	10
BROMODICHLOROMETHANE	BDL	5
CIS-1,3-DICHLOROPROPENE	BDL	5
TRANS-1,3-DICHLOROPROPENE	BDL	5
TRICHLOROETHENE	BDL	5
BENZENE	BDL	5
DIBROMOCHLOROMETHANE	BDL	5
1,1,2-TRICHLOROETHANE	BDL	5
1,2-DICHLOROPROPANE	BDL	5
2-CHLOROETHYLVINYLETHER	BDL	5
BROMOFORM	BDL	5
METHYL ISOBUTYL KETONE	BDL	25
2-HEXANONE	BDL	25
1,1,2,2-TETRACHLOROETHANE	BDL	5
TETRACHLOROETHENE	BDL	5
TOLUENE	5	5
CHLOROBENZENE	BDL	5
ETHYLBENZENE	BDL	5
m-XYLENE	BDL	5
o,p-XYLENES	BDL	5
STYRENE	BDL	5

BDL= Below detection limit
Method Reference: 40 CFR Part 136, Friday, October 26, 1984
Method 624

Laboratory #: 11365-3
Field Identification: Intake VOA
Date analyzed: 10/30/87

Data file id:>C4774::

Matrix: Water

Volatile Compounds	Concentration (ug/L)	Detection limit (ug/L)
CHLOROMETHANE	BDL	10
BROMOMETHANE	BDL	10
VINYL CHLORIDE	BDL	10
CHLOROETHANE	14	5
METHYLENE CHLORIDE	BDL	10
ACETONE	BDL	25
CARBON DISULFIDE	BDL	5
1,1-DICHLOROETHENE	BDL	5
TETRAHYDROFURAN	20	25
1,1-DICHLOROETHANE	43	5
1,2-DICHLOROETHENE (total)	BDL	5
CHLOROFORM	BDL	5
METHYL ETHYL KETONE	BDL	25
1,2-DICHLOROETHANE	BDL	5
1,1,1-TRICHLOROETHANE	180	5
CARBON TETRACHLORIDE	BDL	5
VINYL ACETATE	BDL	10
BROMODICHLOROMETHANE	BDL	5
CIS-1,3-DICHLOROPROPENE	BDL	5
TRANS-1,3-DICHLOROPROPENE	BDL	5
TRICHLOROETHENE	BDL	5
BENZENE	BDL	5
DIBROMOCHLOROMETHANE	BDL	5
1,1,2-TRICHLOROETHANE	BDL	5
1,2-DICHLOROPROPANE	BDL	5
2-CHLOROETHYLVINYLETHER	BDL	5
BROMOFORM	BDL	5
METHYL ISOBUTYL KETONE	BDL	25
2-HEXANONE	BDL	25
1,1,2,2-TETRACHLOROETHANE	BDL	5
TETRACHLOROETHENE	BDL	5
TOLUENE	13	5
CHLOROBENZENE	BDL	5
ETHYLBENZENE	12	5
m-XYLENE	16	5
o,p-XYLENES	10	5
STYRENE	BDL	5

BDL= Below detection limit
Method Reference: 40 CFR Part 136, Friday, October 26, 1984
Method 624

Laboratory #: 11452-1
Field Identification: KJ QUINN INTAKE VOA
Date analyzed: 11/09/87

Data file id:>11144::

Matrix: Water

Volatile Compounds	Concentration (ug/L)	Detection limit (ug/L)
CHLOROMETHANE	BDL	10
BROMOMETHANE	BDL	10
VINYL CHLORIDE	BDL	10
CHLOROETHANE	8	5
METHYLENE CHLORIDE	BDL	10
ACETONE	BDL	25
CARBON DISULFIDE	BDL	5
1,1-DICHLOROETHENE	BDL	5
TETRAHYDROFURAN	30	25
1,1-DICHLOROETHANE	40	5
1,2-DICHLOROETHENE (total)	BDL	5
CHLOROFORM	BDL	5
METHYL ETHYL KETONE	BDL	25
1,2-DICHLOROETHANE	BDL	5
1,1,1-TRICHLOROETHANE	120	5
CARBON TETRACHLORIDE	BDL	5
VINYL ACETATE	BDL	10
BROMODICHLOROMETHANE	BDL	5
CIS-1,3-DICHLOROPROPENE	BDL	5
TRANS-1,3-DICHLOROPROPENE	BDL	5
TRICHLOROETHENE	BDL	5
BENZENE	BDL	5
DIBROMOCHLOROMETHANE	BDL	5
1,1,2-TRICHLOROETHANE	BDL	5
1,2-DICHLOROPROPANE	BDL	5
2-CHLOROETHYLVINYLETHER	BDL	5
BROMOFORM	BDL	5
METHYL ISOBUTYL KETONE	BDL	25
2-HEXANONE	BDL	25
1,1,2,2-TETRACHLOROETHANE	BDL	5
TETRACHLOROETHENE	BDL	5
TOLUENE	7	5
CHLOROBENZENE	BDL	5
ETHYLBENZENE	7	5
m-XYLENE	11	5
o,p-XYLENES	7	5
STYRENE	BDL	5

BDL= Below detection limit
Method Reference: 40 CFR Part 136, Friday, October 26, 1984
Method 624

Laboratory #: 11472-1
Field Identification: MW-1
Date analyzed: 11/13/87

Data file id:>D1665::

Matrix: Water

Volatile Compounds	Concentration (ug/L)	Detection limit (ug/L)
CHLOROMETHANE	BDL	10
BROMOMETHANE	BDL	10
VINYL CHLORIDE	BDL	10
CHLOROETHANE	BDL	5
METHYLENE CHLORIDE	BDL	10
ACETONE	BDL	25
CARBON DISULFIDE	BDL	5
1,1-DICHLOROETHENE	BDL	5
TETRAHYDROFURAN	BDL	25
1,1-DICHLOROETHANE	BDL	5
1,2-DICHLOROETHENE (total)	BDL	5
CHLOROFORM	BDL	5
METHYL ETHYL KETONE	BDL	25
1,2-DICHLOROETHANE	BDL	5
1,1,1-TRICHLOROETHANE	BDL	5
CARBON TETRACHLORIDE	BDL	5
VINYL ACETATE	BDL	10
BROMODICHLOROMETHANE	BDL	5
CIS-1,3-DICHLOROPROPENE	BDL	5
TRANS-1,3-DICHLOROPROPENE	BDL	5
TRICHLOROETHENE	BDL	5
BENZENE	BDL	5
DIBROMOCHLOROMETHANE	BDL	5
1,1,2-TRICHLOROETHANE	BDL	5
1,2-DICHLOROPROPANE	BDL	5
2-CHLOROETHYLVINYLETHER	BDL	5
BROMOFORM	BDL	5
METHYL ISOBUTYL KETONE	BDL	25
2-HEXANONE	BDL	25
1,1,2,2-TETRACHLOROETHANE	BDL	5
TETRACHLOROETHENE	BDL	5
TOLUENE	BDL	5
CHLOROBENZENE	BDL	5
ETHYLBENZENE	BDL	5
m-XYLENE	BDL	5
o,p-XYLENES	BDL	5
STYRENE	BDL	5

BDL= Below detection limit
Method Reference: 40 CFR Part 136, Friday, October 26, 1984
Method 624

Laboratory #: 11472-2
Field Identification: MW-3
Date analyzed: 11/13/87

Data file id:>D1666::

Matrix: Water

Volatile Compounds	Concentration (ug/L)	Detection limit (ug/L)
CHLOROMETHANE	BDL	10
BROMOMETHANE	BDL	10
VINYL CHLORIDE	BDL	10
CHLOROETHANE	BDL	5
METHYLENE CHLORIDE	BDL	10
ACETONE	BDL	25
CARBON DISULFIDE	BDL	5
1,1-DICHLOROETHENE	BDL	5
TETRAHYDROFURAN	BDL	25
1,1-DICHLOROETHANE	BDL	5
1,2-DICHLOROETHENE (total)	BDL	5
CHLOROFORM	BDL	5
METHYL ETHYL KETONE	BDL	25
1,2-DICHLOROETHANE	BDL	5
1,1,1-TRICHLOROETHANE	BDL	5
CARBON TETRACHLORIDE	BDL	5
VINYL ACETATE	BDL	10
BROMODICHLOROMETHANE	BDL	5
CIS-1,3-DICHLOROPROPENE	BDL	5
TRANS-1,3-DICHLOROPROPENE	BDL	5
TRICHLOROETHENE	BDL	5
BENZENE	BDL	5
DIBROMOCHLOROMETHANE	BDL	5
1,1,2-TRICHLQROETHANE	BDL	5
1,2-DICHLOROPROPANE	BDL	5
2-CHLOROETHYLVINYLETHER	BDL	5
BROMOFORM	BDL	5
METHYL ISOBUTYL KETONE	BDL	25
2-HEXANONE	BDL	25
1,1,2,2-TETRACHLOROETHANE	BDL	5
TETRACHLOROETHENE	BDL	5
TOLUENE	BDL	5
CHLOROBENZENE	BDL	5
ETHYLBENZENE	BDL	5
m-XYLENE	BDL	5
o,p-XYLENES	BDL	5
STYRENE	BDL	5

BDL= Below detection limit
Method Reference: 40 CFR Part 136, Friday, October 26, 1984
Method 624

Laboratory #: 11472-3
Field Identification: MW-4
Date analyzed: 11/13/87

Data file id:>D1667::

Matrix: Water

Volatile Compounds	Concentration (ug/L)	Detection limit (ug/L)
CHLOROMETHANE	BDL	10
BROMOMETHANE	BDL	10
VINYL CHLORIDE	BDL	10
CHLOROETHANE	BDL	5
METHYLENE CHLORIDE	BDL	10
ACETONE	BDL	25
CARBON DISULFIDE	BDL	5
1,1-DICHLOROETHENE	BDL	5
TETRAHYDROFURAN	BDL	25
1,1-DICHLOROETHANE	BDL	5
1,2-DICHLOROETHENE (total)	BDL	5
CHLOROFORM	BDL	5
METHYL ETHYL KETONE	BDL	25
1,2-DICHLOROETHANE	BDL	5
1,1,1-TRICHLOROETHANE	Trace	5
CARBON TETRACHLORIDE	BDL	5
VINYL ACETATE	BDL	10
BROMODICHLOROMETHANE	BDL	5
CIS-1,3-DICHLOROPROPENE	BDL	5
TRANS-1,3-DICHLOROPROPENE	BDL	5
TRICHLOROETHENE	BDL	5
BENZENE	BDL	5
DIBROMOCHLOROMETHANE	BDL	5
1,1,2-TRICHLOROETHANE	BDL	5
1,2-DICHLOROPROPANE	BDL	5
2-CHLOROETHYLVINYLETHER	BDL	5
BROMOFORM	BDL	5
METHYL ISOBUTYL KETONE	BDL	25
2-HEXANONE	BDL	25
1,1,2,2-TETRACHLOROETHANE	BDL	5
TETRACHLOROETHENE	BDL	5
TOLUENE	BDL	5
CHLOROBENZENE	BDL	5
ETHYLBENZENE	BDL	5
m-XYLENE	BDL	5
o,p-XYLENES	BDL	5
STYRENE	BDL	5

"Trace" denotes probable presence below listed detection limits.

BDL= Below detection limit
Method Reference: 40 CFR Part 136, Friday, October 26, 1984
Method 624

Laboratory #: 11472-4
Field Identification: MW-13
Date analyzed: 11/13/87

Data file id:>D1668::

Matrix: Water

Volatile Compounds	Concentration (ug/L)	Detection limit (ug/L)
CHLOROMETHANE	BDL	10
BROMOMETHANE	BDL	10
VINYL CHLORIDE	BDL	10
CHLOROETHANE	BDL	5
METHYLENE CHLORIDE	BDL	10
ACETONE	BDL	25
CARBON DISULFIDE	BDL	5
1,1-DICHLOROETHENE	BDL	5
TETRAHYDROFURAN	BDL	25
1,1-DICHLOROETHANE	23	5
1,2-DICHLOROETHENE (total)	BDL	5
CHLOROFORM	BDL	5
METHYL ETHYL KETONE	BDL	25
1,2-DICHLOROETHANE	BDL	5
1,1,1-TRICHLOROETHANE	9	5
CARBON TETRACHLORIDE	BDL	5
VINYL ACETATE	BDL	10
BROMODICHLOROMETHANE	BDL	5
CIS-1,3-DICHLOROPROPENE	BDL	5
TRANS-1,3-DICHLOROPROPENE	BDL	5
TRICHLOROETHENE	BDL	5
BENZENE	BDL	5
DIBROMOCHLOROMETHANE	BDL	5
1,1,2-TRICHLOROETHANE	BDL	5
1,2-DICHLOROPROPANE	BDL	5
2-CHLOROETHYLVINYLETHER	BDL	5
BROMOFORM	BDL	5
METHYL ISOBUTYL KETONE	BDL	25
2-HEXANONE	BDL	25
1,1,2,2-TETRACHLOROETHANE	BDL	5
TETRACHLOROETHENE	BDL	5
TOLUENE	BDL	5
CHLOROBENZENE	BDL	5
ETHYLBENZENE	BDL	5
m-XYLENE	BDL	5
o,p-XYLENES	BDL	5
STYRENE	BDL	5

"Trace" denotes probable presence below listed detection limits.

BDL= Below detection limit
Method Reference: 40 CFR Part 136, Friday, October 26, 1984
Method 624

Laboratory #: 11472-5
Field Identification: MW-15
Date analyzed: 11/14/87

Data file id:>D1669::

Matrix: Water

Volatile Compounds	Concentration (ug/L)	Detection limit (ug/L)
CHLOROMETHANE	BDL	10
BROMOMETHANE	BDL	10
VINYL CHLORIDE	BDL	10
CHLOROETHANE	BDL	5
METHYLENE CHLORIDE	BDL	10
ACETONE	BDL	25
CARBON DISULFIDE	BDL	5
1,1-DICHLOROETHENE	BDL	5
TETRAHYDROFURAN	BDL	25
1,1-DICHLOROETHANE	BDL	5
1,2-DICHLOROETHENE (total)	BDL	5
CHLOROFORM	BDL	5
METHYL ETHYL KETONE	BDL	25
1,2-DICHLOROETHANE	BDL	5
1,1,1-TRICHLOROETHANE	Trace	5
CARBON TETRACHLORIDE	BDL	5
VINYL ACETATE	BDL	10
BROMODICHLOROMETHANE	BDL	5
CIS-1,3-DICHLOROPROPENE	BDL	5
TRANS-1,3-DICHLOROPROPENE	BDL	5
TRICHLOROETHENE	BDL	5
BENZENE	BDL	5
DIBROMOCHLOROMETHANE	BDL	5
1,1,2-TRICHLOROETHANE	BDL	5
1,2-DICHLOROPROPANE	BDL	5
2-CHLOROETHYLVINYLETHER	BDL	5
BROMOFORM	BDL	5
METHYL ISOBUTYL KETONE	BDL	25
2-HEXANONE	BDL	25
1,1,2,2-TETRACHLOROETHANE	BDL	5
TETRACHLOROETHENE	BDL	5
TOLUENE	BDL	5
CHLOROBENZENE	BDL	5
ETHYLBENZENE	BDL	5
m-XYLENE	BDL	5
o,p-XYLENES	BDL	5
STYRENE	BDL	5

"Trace" denotes probable presence below listed detection limits.

BDL= Below detection limit
Method Reference: 40 CFR Part 136, Friday, October 26, 1984
Method 624

MATRIX SPIKE DUPLICATE RECOVERY

Laboratory Number: 11,472-5
Sample Designation: MW 15
Date Analyzed: 11/14/87
Matrix: Water

COMPOUND	ug/L IN SAMPLE	ug/L SPIKE	REPLICATE 1 ug/L FOUND	REPLICATE 1 %REC-OVERY	REPLICATE 2 ug/L FOUND	REPLICATE 2 % REC-OVERY	RELATI RANGE %
1,1-DICHLOROETHENE	0	54	61	113	53	98	14
TRICHLOROETHYLENE	0	53	56	106	55	104	2
BENZENE	0	59	62	105	60	102	3
TOLUENE	0	50	58	116	58	116	0
CHLOROBENZENE	0	50	54	108	53	106	2

METHOD REFERENCE: 40 CFR PART 136, FRIDAY, OCTOBER 26, 1984
METHOD 624

Laboratory #: 11472-6
Field Identification: MW-16
Date analyzed: 11/14/87

Data file id:>D1671::

Matrix: Water

Volatile Compounds	Concentration (ug/L)	Detection limit (ug/L)
CHLOROMETHANE	BDL	10
BROMOMETHANE	BDL	10
VINYL CHLORIDE	BDL	10
CHLOROETHANE	BDL	5
METHYLENE CHLORIDE	BDL	10
ACETONE	BDL	25
CARBON DISULFIDE	BDL	5
1,1-DICHLOROETHENE	BDL	5
TETRAHYDROFURAN	BDL	25
1,1-DICHLOROETHANE	BDL	5
1,2-DICHLOROETHENE (total)	BDL	5
CHLOROFORM	BDL	5
METHYL ETHYL KETONE	BDL	25
1,2-DICHLOROETHANE	BDL	5
1,1,1-TRICHLOROETHANE	BDL	5
CARBON TETRACHLORIDE	BDL	5
VINYL ACETATE	BDL	10
BROMODICHLOROMETHANE	BDL	5
CIS-1,3-DICHLOROPROPENE	BDL	5
TRANS-1,3-DICHLOROPROPENE	BDL	5
TRICHLOROETHENE	BDL	5
BENZENE	BDL	5
DIBROMOCHLOROMETHANE	BDL	5
1,1,2-TRICHLOROETHANE	BDL	5
1,2-DICHLOROPROPANE	BDL	5
2-CHLOROETHYLVINYLETHER	BDL	5
BROMOFORM	BDL	5
METHYL ISOBUTYL KETONE	BDL	25
2-HEXANONE	BDL	25
1,1,2,2-TETRACHLOROETHANE	BDL	5
TETRACHLOROETHENE	BDL	5
TOLUENE	BDL	5
CHLOROBENZENE	BDL	5
ETHYLBENZENE	BDL	5
m-XYLENE	BDL	5
o,p-XYLENES	BDL	5
STYRENE	BDL	5

BDL= Below detection limit
Method Reference: 40 CFR Part 136, Friday, October 26, 1984
Method 624

Laboratory #: 11472-7
Field Identification: MW-17
Date analyzed: 11/14/87

Data file id:>D1673::

Matrix: Water

Volatile Compounds	Concentration (ug/L)	Detection limit (ug/L)
CHLOROMETHANE	BDL	10
BROMOMETHANE	BDL	10
VINYL CHLORIDE	BDL	10
CHLOROETHANE	BDL	5
METHYLENE CHLORIDE	BDL	10
ACETONE	BDL	25
CARBON DISULFIDE	BDL	5
1,1-DICHLOROETHENE	BDL	5
TETRAHYDROFURAN	BDL	25
1,1-DICHLOROETHANE	BDL	5
1,2-DICHLOROETHENE (total)	BDL	5
CHLOROFORM	BDL	5
METHYL ETHYL KETONE	BDL	25
1,2-DICHLOROETHANE	BDL	5
1,1,1-TRICHLOROETHANE	15	5
CARBON TETRACHLORIDE	BDL	5
VINYL ACETATE	BDL	10
BROMODICHLOROMETHANE	BDL	5
CIS-1,3-DICHLOROPROPENE	BDL	5
TRANS-1,3-DICHLOROPROPENE	BDL	5
TRICHLOROETHENE	BDL	5
BENZENE	BDL	5
DIBROMOCHLOROMETHANE	BDL	5
1,1,2-TRICHLOROETHANE	BDL	5
1,2-DICHLOROPROPANE	BDL	5
2-CHLOROETHYLVINYLETHER	BDL	5
BROMOFORM	BDL	5
METHYL ISOBUTYL KETONE	BDL	25
2-HEXANONE	BDL	25
1,1,2,2-TETRACHLOROETHANE	BDL	5
TETRACHLOROETHENE	BDL	5
TOLUENE	BDL	5
CHLOROBENZENE	BDL	5
ETHYLBENZENE	BDL	5
m-XYLENE	BDL	5
o,p-XYLENES	BDL	5
STYRENE	BDL	5

BDL= Below detection limit
Method Reference: 40 CFR Part 136, Friday, October 26, 1984
Method 624

Laboratory #: 11517-1
Field Identification: KJ Quinn VOA Intake
Date analyzed: 11/16/87

Data file id:>C4975::

Matrix: Water

Volatile Compounds	Concentration (ug/L)	Detection limit (ug/L)
CHLOROMETHANE	BDL	10
BROMOMETHANE	BDL	10
VINYL CHLORIDE	BDL	10
CHLOROETHANE	12	5
METHYLENE CHLORIDE	BDL	10
ACETONE	BDL	25
CARBON DISULFIDE	BDL	5
1,1-DICHLOROETHENE	BDL	5
TETRAHYDROFURAN	23	25
1,1-DICHLOROETHANE	45	5
1,2-DICHLOROETHENE (total)	BDL	5
CHLOROFORM	BDL	5
METHYL ETHYL KETONE	BDL	25
1,2-DICHLOROETHANE	BDL	5
1,1,1-TRICHLOROETHANE	130	5
CARBON TETRACHLORIDE	BDL	5
VINYL ACETATE	BDL	10
BROMODICHLOROMETHANE	BDL	5
CIS-1,3-DICHLOROPROPENE	BDL	5
TRANS-1,3-DICHLOROPROPENE	BDL	5
TRICHLOROETHENE	BDL	5
BENZENE	BDL	5
DIBROMOCHLOROMETHANE	BDL	5
1,1,2-TRICHLOROETHANE	BDL	5
1,2-DICHLOROPROPANE	BDL	5
2-CHLOROETHYLVINYLETHER	BDL	5
BROMOFORM	BDL	5
METHYL ISOBUTYL KETONE	BDL	25
2-HEXANONE	BDL	25
1,1,2,2-TETRACHLOROETHANE	BDL	5
TETRACHLOROETHENE	BDL	5
TOLUENE	BDL	5
CHLOROBENZENE	BDL	5
ETHYLBENZENE	BDL	5
m-XYLENE	BDL	5
o,p-XYLENES	BDL	5
STYRENE	BDL	5

BDL= Below detection limit
Method Reference: 40 CFR Part 136, Friday, October 26, 1984
Method 624

Laboratory #: 11684-1
Field Identification: INTAKE 11/25 1005
Date analyzed: 12/02/87

Data file id:>D2014::

Matrix: Water

Volatile Compounds	Concentration (ug/L)	Detection limit (ug/L)
CHLOROMETHANE	BDL	10
BROMOMETHANE	BDL	10
VINYL CHLORIDE	BDL	10
CHLOROETHANE	BDL	5
METHYLENE CHLORIDE	BDL	10
ACETONE	BDL	25
CARBON DISULFIDE	BDL	5
1,1-DICHLOROETHENE	8	5
TETRAHYDROFURAN	BDL	25
1,1-DICHLOROETHANE	31	5
1,2-DICHLOROETHENE (total)	BDL	5
CHLOROFORM	BDL	5
METHYL ETHYL KETONE	BDL	25
1,2-DICHLOROETHANE	BDL	5
1,1,1-TRICHLOROETHANE	330	5
CARBON TETRACHLORIDE	BDL	5
VINYL ACETATE	BDL	10
BROMODICHLOROMETHANE	BDL	5
CIS-1,3-DICHLOROPROPENE	BDL	5
TRANS-1,3-DICHLOROPROPENE	BDL	5
TRICHLOROETHENE	BDL	5
BENZENE	BDL	5
DIBROMOCHLOROMETHANE	BDL	5
1,1,2-TRICHLOROETHANE	BDL	5
1,2-DICHLOROPROPANE	BDL	5
2-CHLOROETHYLVINYLETHER	BDL	5
BROMOFORM	BDL	5
METHYL ISOBUTYL KETONE	BDL	25
2-HEXANONE	BDL	25
1,1,2,2-TETRACHLOROETHANE	BDL	5
TETRACHLOROETHENE	BDL	5
TOLUENE	12	5
CHLOROBENZENE	BDL	5
ETHYLBENZENE	24	5
m-XYLENE	10	5
o,p-XYLENES	16	5
STYRENE	BDL	5

BDL= Below detection limit
Method Reference: 40 CFR Part 136, Friday, October 26, 1984
Method 624

umber: 11,708-1
le Designation: K. J. Quinn Influent
te Analyzed: 12/03/87
atrix: Water

VOLATILE ORGANICS	CONCENTRATION REP. 1 (ug/L)	REP. 2 (ug/L)	DETECTION LIMIT (ug/L)
CHLOROMETHANE	BDL	BDL	10
VINYL CHLORIDE	BDL	BDL	10
CHLOROETHANE	12	13	5
BROMOMETHANE	BDL	BDL	5
METHYLENE CHLORIDE	BDL	BDL	10
1,1-DICHLOROETHYLENE	BDL	BDL	5
1,1-DICHLOROETHANE	31	34	5
1,2-DICHLOROETHYLENE (total)	BDL	BDL	5
CHLOROFORM	BDL	BDL	5
1,2-DICHLOROETHANE	BDL	BDL	5
1,1,1-TRICHLOROETHANE	130	140	5
CARBON TETRACHLORIDE	BDL	BDL	5
BROMODICHLOROMETHANE	BDL	BDL	5
1,2-DICHLOROPROPANE	BDL	BDL	5
1,3-trans-DICHLOROPROPENE	BDL	BDL	5
TRICHLOROETHYLENE	BDL	BDL	5
BENZENE	BDL	BDL	5
1,3-cis-DICHLOROPROPENE	BDL	BDL	5
1,1,2-TRICHLOROETHANE	BDL	BDL	5
2-CHLOROETHYL VINYL ETHER	BDL	BDL	5
DIBROMOCHLOROMETHANE	BDL	BDL	5
BROMOFORM	BDL	BDL	5
TETRACHLOROETHYLENE	BDL	BDL	5
1,1,2,2-TETRACHLOROETHANE	BDL	BDL	5
TOLUENE	BDL	BDL	5
CHLOROBENZENE	11	11	5
ETHYLBENZENE	BDL	BDL	5
	8	8	5
ACETONE	BDL	BDL	25
CARBON DISULFIDE	BDL	BDL	5
THF	BDL	BDL	25
MEK	BDL	BDL	25
VINYL ACETATE	BDL	BDL	10
MIBK	BDL	BDL	25
2-HEXANONE	BDL	BDL	25
STYRENE	BDL	BDL	5
m-XYLENE	13	13	5
o,p-XYLENES	7	7	5

BDL = BELOW DETECTION LIMIT
METHOD REFERENCE: 40 CFR PART 136, FRIDAY, OCTOBER 26, 1984
METHOD 624

Laboratory #: 11776-3
Field Identification: Intake 12-7-87
Date analyzed: 12/14/87

Data file id:>11484::

Matrix: Water

Volatile Compounds	Concentration (ug/L)	Detection limit (ug/L)
CHLOROMETHANE	BDL	10
BROMOMETHANE	BDL	10
VINYL CHLORIDE	BDL	10
CHLOROETHANE	10	5
METHYLENE CHLORIDE	BDL	10
ACETONE	BDL	25
CARBON DISULFIDE	BDL	5
1,1-DICHLOROETHENE	BDL	5
TETRAHYDROFURAN	32	25
1,1-DICHLOROETHANE	38	5
1,2-DICHLOROETHENE (total)	BDL	5
CHLOROFORM	BDL	5
METHYL ETHYL KETONE	BDL	25
1,2-DICHLOROETHANE	BDL	5
1,1,1-TRICHLOROETHANE	150	5
CARBON TETRACHLORIDE	BDL	5
VINYL ACETATE	BDL	10
BROMODICHLOROMETHANE	BDL	5
CIS-1,3-DICHLOROPROPENE	BDL	5
TRANS-1,3-DICHLOROPROPENE	BDL	5
TRICHLOROETHENE	BDL	5
BENZENE	BDL	5
DIBROMOCHLOROMETHANE	BDL	5
1,1,2-TRICHLOROETHANE	BDL	5
1,2-DICHLOROPROPANE	BDL	5
2-CHLOROETHYLVINYLETHER	BDL	5
BROMOFORM	BDL	5
METHYL ISOBUTYL KETONE	BDL	25
2-HEXANONE	BDL	25
1,1,2,2-TETRACHLOROETHANE	BDL	5
TETRACHLOROETHENE	BDL	5
TOLUENE	10	5
CHLOROBENZENE	BDL	5
ETHYLBENZENE	BDL	5
m-XYLENE	9	5
o,p-XYLENES	9	5
STYRENE	BDL	5

BDL= Below detection limit
Method Reference: 40 CFR Part 136, Friday, October 26, 1984
Method 624

Laboratory #: 11846-1
Field Identification: KJ QUINN INTAKE VOA
Date analyzed: 12/14/87

Data file id:>D2244::

Matrix: Water

Volatile Compounds	Concentration (ug/L)	Detection limit (ug/L)
CHLOROMETHANE	BDL	10
BROMOMETHANE	BDL	10
VINYL CHLORIDE	BDL	10
CHLOROETHANE	11	5
METHYLENE CHLORIDE	BDL	10
ACETONE	BDL	25
CARBON DISULFIDE	BDL	5
1,1-DICHLOROETHENE	BDL	5
TETRAHYDROFURAN	BDL	25
1,1-DICHLOROETHANE	45	5
1,2-DICHLOROETHENE (total)	BDL	5
CHLOROFORM	BDL	5
METHYL ETHYL KETONE	BDL	25
1,2-DICHLOROETHANE	BDL	5
1,1,1-TRICHLOROETHANE	110	5
CARBON TETRACHLORIDE	BDL	5
VINYL ACETATE	BDL	10
BROMODICHLOROMETHANE	BDL	5
CIS-1,3-DICHLOROPROPENE	BDL	5
TRANS-1,3-DICHLOROPROPENE	BDL	5
TRICHLOROETHENE	BDL	5
BENZENE	BDL	5
DIBROMOCHLOROMETHANE	BDL	5
1,1,2-TRICHLOROETHANE	BDL	5
1,2-DICHLOROPROPANE	BDL	5
2-CHLOROETHYLVINYLETHER	BDL	5
BROMOFORM	BDL	5
METHYL ISOBUTYL KETONE	BDL	25
2-HEXANONE	BDL	25
1,1,2,2-TETRACHLOROETHANE	BDL	5
TETRACHLOROETHENE	BDL	5
TOLUENE	17	5
CHLOROBENZENE	BDL	5
ETHYLBENZENE	11	5
m-XYLENE	22	5
o,p-XYLENES	10	5
STYRENE	BDL	5

BDL= Below detection limit
Method Reference: 40 CFR Part 136, Friday, October 26, 1984
Method 624

Laboratory #: 12001-4
Field Identification: KJ Quinn/Intake VOA
Date analyzed: 1/06/88

Data file id:>11704::

Matrix: Water

Volatile Compounds	Concentration (ug/L)	Detection limit (ug/L)
CHLOROMETHANE	BDL	10
BROMOMETHANE	BDL	10
VINYL CHLORIDE	BDL	10
CHLOROETHANE	19	5
METHYLENE CHLORIDE	BDL	10
ACETONE	BDL	25
CARBON DISULFIDE	BDL	5
1,1-DICHLOROETHENE	BDL	5
TETRAHYDROFURAN	27	25
1,1-DICHLOROETHANE	52	5
1,2-DICHLOROETHENE (total)	BDL	5
CHLOROFORM	BDL	5
METHYL ETHYL KETONE	BDL	25
1,2-DICHLOROETHANE	BDL	5
1,1,1-TRICHLOROETHANE	190	5
CARBON TETRACHLORIDE	BDL	5
VINYL ACETATE	BDL	10
BROMODICHLOROMETHANE	BDL	5
CIS-1,3-DICHLOROPROPENE	BDL	5
TRANS-1,3-DICHLOROPROPENE	BDL	5
TRICHLOROETHENE	BDL	5
BENZENE	BDL	5
DIBROMOCHLOROMETHANE	BDL	5
1,1,2-TRICHLOROETHANE	BDL	5
1,2-DICHLOROPROPANE	BDL	5
2-CHLOROETHYLVINYLETHER	BDL	5
BROMOFORM	BDL	5
METHYL ISOBUTYL KETONE	BDL	25
2-HEXANONE	BDL	25
1,1,2,2-TETRACHLOROETHANE	BDL	5
TETRACHLOROETHENE	BDL	5
TOLUENE	18	5
CHLOROBENZENE	BDL	5
ETHYLBENZENE	15	5
m-XYLENE	25	5
o,p-XYLENES	11	5
STYRENE	BDL	5

BDL= Below detection limit
Method Reference: 40 CFR Part 136, Friday, October 26, 1984
Method 624

Number: 12024-1
ple Designation: KJ QUINN INTAKE
ate Analyzed: 1/6/88
Matrix: Water

VOLATILE ORGANICS	CONCENTRATION REP. 1 (ug/L)	REP. 2 (ug/L)	DETECTION LIMIT (ug/L)
CHLOROMETHANE	BDL	BDL	10
VINYL CHLORIDE	BDL	BDL	10
CHLOROETHANE	13	14	5
BROMOMETHANE	BDL	BDL	5
METHYLENE CHLORIDE	BDL	BDL	10
1,1-DICHLOROETHYLENE	BDL	BDL	5
1,1-DICHLOROETHANE	43	44	5
1,2-DICHLOROETHYLENE (total)	BDL	BDL	5
CHLOROFORM	BDL	BDL	5
1,2-DICHLOROETHANE	BDL	BDL	5
1,1,1-TRICHLOROETHANE	120	120	5
CARBON TETRACHLORIDE	BDL	BDL	5
BROMODICHLOROMETHANE	BDL	BDL	5
1,2-DICHLOROPROPANE	BDL	BDL	5
1,3-trans-DICHLOROPROPENE	BDL	BDL	5
TRICHLOROETHYLENE	BDL	BDL	5
BENZENE	BDL	BDL	5
1,3-cis-DICHLOROPROPENE	BDL	BDL	5
1,1,2-TRICHLOROETHANE	BDL	BDL	5
2-CHLOROETHYL VINYL ETHER	BDL	BDL	5
DIBROMOCHLOROMETHANE	BDL	BDL	5
BROMOFORM	BDL	BDL	5
TETRACHLOROETHYLENE	BDL	BDL	5
1,1,2,2-TETRACHLOROETHANE	BDL	BDL	5
TOLUENE	19	19	5
CHLOROBENZENE	BDL	BDL	5
ETHYLBENZENE	16	16	5
ACETONE	BDL	BDL	25
CARBON DISULFIDE	BDL	BDL	5
THF	33	39	25
MEK	BDL	BDL	25
VINYL ACETATE	BDL	BDL	10
MIBK	BDL	BDL	25
2-HEXANONE	BDL	BDL	25
STYRENE	BDL	BDL	5
m-XYLENE	25	25	5
o,p-XYLENES	9	9	5

BDL = BELOW DETECTION LIMIT
METHOD REFERENCE: 40 CFR PART 136, FRIDAY, OCTOBER 26, 1984
METHOD 624

Laboratory #: 12001-4 Data file id:>11704::
Field Identification: KJ Quinn/Intake VOA
Date analyzed: 1/06/88 Matrix: Water

Volatile Compounds	Concentration (ug/L)	Detection limit (ug/L)
CHLOROMETHANE	BDL	10
BROMOMETHANE	BDL	10
VINYL CHLORIDE	BDL	10
CHLOROETHANE	19	5
METHYLENE CHLORIDE	BDL	10
ACETONE	BDL	25
CARBON DISULFIDE	BDL	5
1,1-DICHLOROETHENE	BDL	5
TETRAHYDROFURAN	27	25
1,1-DICHLOROETHANE	52	5
1,2-DICHLOROETHENE (total)	BDL	5
CHLOROFORM	BDL	5
METHYL ETHYL KETONE	BDL	25
1,2-DICHLOROETHANE	BDL	5
1,1,1-TRICHLOROETHANE	190	5
CARBON TETRACHLORIDE	BDL	5
VINYL ACETATE	BDL	10
BROMODICHLOROMETHANE	BDL	5
CIS-1,3-DICHLOROPROPENE	BDL	5
TRANS-1,3-DICHLOROPROPENE	BDL	5
TRICHLOROETHENE	BDL	5
BENZENE	BDL	5
DIBROMOCHLOROMETHANE	BDL	5
1,1,2-TRICHLOROETHANE	BDL	5
1,2-DICHLOROPROPANE	BDL	5
2-CHLOROETHYLVINYLETHER	BDL	5
BROMOFORM	BDL	5
METHYL ISOBUTYL KETONE	BDL	25
2-HEXANONE	BDL	25
1,1,2,2-TETRACHLOROETHANE	BDL	5
TETRACHLOROETHENE	BDL	5
TOLUENE	18	5
CHLOROBENZENE	BDL	5
ETHYLBENZENE	15	5
m-XYLENE	25	5
o,p-XYLENES	11	5
STYRENE	BDL	5

BDL= Below detection limit
Method Reference: 40 CFR Part 136, Friday, October 26, 1984
Method 624

Laboratory #: 12081-4 Data file id:>D2672::
Field Identification: KJ QUINN/INTAKE VOA
Date analyzed: 1/11/88 Matrix: Water

Volatile Compounds	Concentration (ug/L)	Detection limit (ug/L)
CHLOROMETHANE	BDL	10
BROMOMETHANE	BDL	10
VINYL CHLORIDE	BDL	10
CHLOROETHANE	22	5
METHYLENE CHLORIDE	BDL	10
ACETONE	BDL	25
CARBON DISULFIDE	BDL	5
1,1-DICHLOROETHENE	BDL	5
TETRAHYDROFURAN	65	25
1,1-DICHLOROETHANE	55	5
1,2-DICHLOROETHENE (total)	BDL	5
CHLOROFORM	BDL	5
METHYL ETHYL KETONE	BDL	25
1,2-DICHLOROETHANE	BDL	5
1,1,1-TRICHLOROETHANE	100	5
CARBON TETRACHLORIDE	BDL	5
VINYL ACETATE	BDL	10
BROMODICHLOROMETHANE	BDL	5
CIS-1,3-DICHLOROPROPENE	BDL	5
TRANS-1,3-DICHLOROPROPENE	BDL	5
TRICHLOROETHENE	BDL	5
BENZENE	BDL	5
DIBROMOCHLOROMETHANE	BDL	5
1,1,2-TRICHLOROETHANE	BDL	5
1,2-DICHLOROPROPANE	BDL	5
2-CHLOROETHYLVINYLETHER	BDL	5
BROMOFORM	BDL	5
METHYL ISOBUTYL KETONE	BDL	25
2-HEXANONE	BDL	25
1,1,2,2-TETRACHLOROETHANE	BDL	5
TETRACHLOROETHENE	BDL	5
TOLUENE	10	5
CHLOROBENZENE	BDL	5
ETHYLBENZENE	5	5
m-XYLENE	12	5
o,p-XYLENES	9	5
STYRENE	BDL	5

BDL= Below detection limit
Method Reference: 40 CFR Part 136, Friday, October 26, 1984
Method 624

Lab Number: 12146-1
Sample Designation: KJ QUINN VOA INTAKE
Date Analyzed: 1/19/88
Matrix: Water

VOLATILE ORGANICS	CONCENTRATION REP. 1 (ug/L)	CONCENTRATION REP. 2 (ug/L)	DETECTION LIMIT (ug/L)
CHLOROMETHANE	BDL	BDL	10
VINYL CHLORIDE	BDL	BDL	10
CHLOROETHANE	BDL	BDL	5
BROMOMETHANE	BDL	BDL	5
METHYLENE CHLORIDE	BDL	BDL	10
1,1-DICHLOROETHYLENE	BDL	BDL	5
1,1-DICHLOROETHANE	BDL	BDL	5
1,2-DICHLOROETHYLENE (total)	BDL	BDL	5
CHLOROFORM	BDL	BDL	5
1,2-DICHLOROETHANE	BDL	BDL	5
1,1,1-TRICHLOROETHANE	BDL	BDL	5
CARBON TETRACHLORIDE	BDL	BDL	5
BROMODICHLOROMETHANE	BDL	BDL	5
1,2-DICHLOROPROPANE	BDL	BDL	5
1,3-trans-DICHLOROPROPENE	BDL	BDL	5
TRICHLOROETHYLENE	BDL	BDL	5
BENZENE	BDL	BDL	5
1,3-cis-DICHLOROPROPENE	BDL	BDL	5
1,1,2-TRICHLOROETHANE	BDL	BDL	5
2-CHLOROETHYL VINYL ETHER	BDL	BDL	5
DIBROMOCHLOROMETHANE	BDL	BDL	5
BROMOFORM	BDL	BDL	5
TETRACHLOROETHYLENE	BDL	BDL	5
1,1,2,2-TETRACHLOROETHANE	BDL	BDL	5
TOLUENE	BDL	BDL	5
CHLOROBENZENE	BDL	BDL	5
ETHYLBENZENE	BDL	BDL	5
ACETONE	BDL	BDL	25
CARBON DISULFIDE	BDL	BDL	5
THF	BDL	BDL	25
MEK	BDL	BDL	25
VINYL ACETATE	BDL	BDL	10
MIBK	BDL	BDL	25
2-HEXANONE	BDL	BDL	25
STYRENE	BDL	BDL	5
m-XYLENE	BDL	BDL	5
o,p-XYLENES	BDL	BDL	5

BDL = BELOW DETECTION LIMIT
METHOD REFERENCE: 40 CFR PART 136, FRIDAY, OCTOBER 26, 1984
METHOD 624

Number: 12,238-1
ple Designation: Intake-VOA
te Analyzed: 1/26/88
atrix: Water

VOLATILE ORGANICS	CONCENTRATION REP. 1 (ug/L)	REP. 2 (ug/L)	DETECTION LIMIT (ug/L)
CHLOROMETHANE	BDL	BDL	10
VINYL CHLORIDE	BDL	BDL	10
CHLOROETHANE	36	33	5
BROMOMETHANE	BDL	BDL	5
METHYLENE CHLORIDE	BDL	BDL	10
1,1-DICHLOROETHYLENE	BDL	BDL	5
1,1-DICHLOROETHANE	80	79	5
1,2-DICHLOROETHYLENE (total)	BDL	BDL	5
CHLOROFORM	BDL	BDL	5
1,2-DICHLOROETHANE	BDL	BDL	5
1,1,1-TRICHLOROETHANE	200	200	5
CARBON TETRACHLORIDE	BDL	BDL	5
BROMODICHLOROMETHANE	BDL	BDL	5
1,2-DICHLOROPROPANE	BDL	BDL	5
1,3-trans-DICHLOROPROPENE	BDL	BDL	5
TRICHLOROETHYLENE	BDL	BDL	5
BENZENE	BDL	BDL	5
1,3-cis-DICHLOROPROPENE	BDL	BDL	5
1,1,2-TRICHLOROETHANE	BDL	BDL	5
2-CHLOROETHYL VINYL ETHER	BDL	BDL	5
DIBROMOCHLOROMETHANE	BDL	BDL	5
BROMOFORM	BDL	BDL	5
TETRACHLOROETHYLENE	BDL	BDL	5
1,1,2,2-TETRACHLOROETHANE	BDL	BDL	5
TOLUENE	8	8	5
CHLOROBENZENE	BDL	BDL	5
ETHYLBENZENE	BDL	BDL	5
ACETONE	BDL	BDL	25
CARBON DISULFIDE	BDL	BDL	5
THF	210	220	25
MEK	BDL	BDL	25
VINYL ACETATE	BDL	BDL	10
MIBK	BDL	BDL	25
2-HEXANONE	BDL	BDL	25
STYRENE	BDL	BDL	5
m-XYLENE	37	35	5
o,p-XYLENES	13	14	5

BDL = BELOW DETECTION LIMIT
METHOD REFERENCE: 40 CFR PART 136, FRIDAY, OCTOBER 26, 1984
METHOD 624

ry #: 12441-1
Identification: KJ QUINN/VOA/INTAKE
Analyzed: 2/18/88

Data file id:>B2043::

Matrix: Water

Volatile Compounds	Concentration (ug/L)	Detection limit (ug/L)
CHLOROMETHANE	BDL	10
BROMOMETHANE	BDL	10
VINYL CHLORIDE	BDL	10
CHLOROETHANE	28	5
METHYLENE CHLORIDE	BDL	10
ACETONE	BDL	25
CARBON DISULFIDE	BDL	5
1,1-DICHLOROETHENE	Trace	5
TETRAHYDROFURAN	120	25
1,1-DICHLOROETHANE	110	5
1,2-DICHLOROETHENE (total)	BDL	5
CHLOROFORM	BDL	5
METHYL ETHYL KETONE	BDL	25
1,2-DICHLOROETHANE	BDL	5
1,1,1-TRICHLOROETHANE	400	5
CARBON TETRACHLORIDE	BDL	5
VINYL ACETATE	BDL	10
BROMODICHLOROMETHANE	BDL	5
CIS-1,3-DICHLOROPROPENE	BDL	5
TRANS-1,3-DICHLOROPROPENE	BDL	5
TRICHLOROETHENE	BDL	5
BENZENE	BDL	5
DIBROMOCHLOROMETHANE	BDL	5
1,1,2-TRICHLOROETHANE	BDL	5
1,2-DICHLOROPROPANE	BDL	5
2-CHLOROETHYLVINYLETHER	BDL	5
BROMOFORM	BDL	5
METHYL ISOBUTYL KETONE	BDL	25
2-HEXANONE	BDL	25
1,1,2,2-TETRACHLOROETHANE	BDL	5
TETRACHLOROETHENE	BDL	5
TOLUENE	50	5
CHLOROBENZENE	BDL	5
ETHYLBENZENE	45	5
m-XYLENE	55	5
o,p-XYLENES	26	5
STYRENE	BDL	5

"Trace" denotes probable presence below listed detection limits.

BDL= Below detection limit
Method Reference: 40 CFR Part 136, Friday, October 26, 1984
Method 624

ratory #: 12302-1
eld Identification: KJ QUINN/INTAKE/VOA
te analyzed: 2/04/88

Data file id:>B1947::

Matrix: Water

Volatile Compounds	Concentration (ug/L)	Detection limit (ug/L)
CHLOROMETHANE	BDL	10
BROMOMETHANE	BDL	10
VINYL CHLORIDE	BDL	10
CHLOROETHANE	22	5
METHYLENE CHLORIDE	BDL	10
ACETONE	BDL	25
CARBON DISULFIDE	BDL	5
1,1-DICHLOROETHENE	BDL	5
TETRAHYDROFURAN	100	25
1,1-DICHLOROETHANE	73	5
1,2-DICHLOROETHENE (total)	BDL	5
CHLOROFORM	BDL	5
METHYL ETHYL KETONE	BDL	25
1,2-DICHLOROETHANE	BDL	5
1,1,1-TRICHLOROETHANE	190	5
CARBON TETRACHLORIDE	BDL	5
VINYL ACETATE	BDL	10
BROMODICHLOROMETHANE	BDL	5
CIS-1,3-DICHLOROPROPENE	BDL	5
TRANS-1,3-DICHLOROPROPENE	BDL	5
TRICHLOROETHENE	BDL	5
BENZENE	BDL	5
DIBROMOCHLOROMETHANE	BDL	5
1,1,2-TRICHLOROETHANE	BDL	5
1,2-DICHLOROPROPANE	BDL	5
2-CHLOROETHYLVINYLETHER	BDL	5
BROMOFORM	BDL	5
METHYL ISOBUTYL KETONE	BDL	25
2-HEXANONE	BDL	25
1,1,2,2-TETRACHLOROETHANE	BDL	5
TETRACHLOROETHENE	BDL	5
TOLUENE	18	5
CHLOROBENZENE	BDL	5
ETHYLBENZENE	15	5
m-XYLENE	22	5
o,p-XYLENES	13	5
STYRENE	BDL	5

BDL= Below detection limit
Method Reference: 40 CFR Part 136, Friday, October 26, 1984
Method 624

Laboratory #: 12371-1 Data file id:>D2971::
Field Identification: KJ QUINN VOA INTAKE
Date analyzed: 2/09/88 Matrix: Water

Volatile Compounds	Concentration (ug/L)	Detection limit (ug/L)
CHLOROMETHANE	BDL	10
BROMOMETHANE	BDL	10
VINYL CHLORIDE	BDL	10
CHLOROETHANE	38	5
METHYLENE CHLORIDE	BDL	10
ACETONE	BDL	25
CARBON DISULFIDE	BDL	5
1,1-DICHLOROETHENE	Trace	5
TETRAHYDROFURAN	270	25
1,1-DICHLOROETHANE	110	5
1,2-DICHLOROETHENE (total)	BDL	5
CHLOROFORM	BDL	5
METHYL ETHYL KETONE	BDL	25
1,2-DICHLOROETHANE	BDL	5
1,1,1-TRICHLOROETHANE	240	5
CARBON TETRACHLORIDE	BDL	5
VINYL ACETATE	BDL	10
BROMODICHLOROMETHANE	BDL	5
CIS-1,3-DICHLOROPROPENE	BDL	5
TRANS-1,3-DICHLOROPROPENE	BDL	5
TRICHLOROETHENE	BDL	5
BENZENE	BDL	5
DIBROMOCHLOROMETHANE	BDL	5
1,1,2-TRICHLOROETHANE	BDL	5
1,2-DICHLOROPROPANE	BDL	5
2-CHLOROETHYLVINYLETHER	BDL	5
BROMOFORM	BDL	5
METHYL ISOBUTYL KETONE	BDL	25
2-HEXANONE	BDL	25
1,1,2,2-TETRACHLOROETHANE	BDL	5
TETRACHLOROETHENE	BDL	5
TOLUENE	BDL	5
CHLOROBENZENE	BDL	5
ETHYLBENZENE	BDL	5
m-XYLENE	Trace	5
o,p-XYLENES	5	5
STYRENE	BDL	5

"Trace" denotes probable presence below listed detection limits.

BDL= Below detection limit
Method Reference: 40 CFR Part 136, Friday, October 26, 1984
Method 624

COPY

Laboratory #: 12441-1 Data file id:>B2043::
Field Identification: KJ QUINN/VOA/INTAKE
Date analyzed: 2/18/88 Matrix: Water

Volatile Compounds	Concentration (ug/L)	Detection limit (ug/L)
CHLOROMETHANE	BDL	10
BROMOMETHANE	BDL	10
VINYL CHLORIDE	BDL	10
CHLOROETHANE	28	5
METHYLENE CHLORIDE	BDL	10
ACETONE	BDL	25
CARBON DISULFIDE	BDL	5
1,1-DICHLOROETHENE	Trace	5
TETRAHYDROFURAN	120	25
1,1-DICHLOROETHANE	110	5
1,2-DICHLOROETHENE (total)	BDL	5
CHLOROFORM	BDL	5
METHYL ETHYL KETONE	BDL	25
1,2-DICHLOROETHANE	BDL	5
1,1,1-TRICHLOROETHANE	400	5
CARBON TETRACHLORIDE	BDL	5
VINYL ACETATE	BDL	10
BROMODICHLOROMETHANE	BDL	5
CIS-1,3-DICHLOROPROPENE	BDL	5
TRANS-1,3-DICHLOROPROPENE	BDL	5
TRICHLOROETHENE	BDL	5
BENZENE	BDL	5
DIBROMOCHLOROMETHANE	BDL	5
1,1,2-TRICHLOROETHANE	BDL	5
1,2-DICHLOROPROPANE	BDL	5
2-CHLOROETHYLVINYLETHER	BDL	5
BROMOFORM	BDL	5
METHYL ISOBUTYL KETONE	BDL	25
2-HEXANONE	BDL	25
1,1,2,2-TETRACHLOROETHANE	BDL	5
TETRACHLOROETHENE	BDL	5
TOLUENE	50	5
CHLOROBENZENE	BDL	5
ETHYLBENZENE	45	5
m-XYLENE	55	5
o,p-XYLENES	26	5
STYRENE	BDL	5

"Trace" denotes probable presence below listed detection limits.

BDL= Below detection limit
Method Reference: 40 CFR Part 136, Friday, October 26, 1984
Method 624

MATRIX SPIKE DUPLICATE RECOVERY

Laboratory Number: 12,511-1
Sample Designation: K. J. Quinn VOA Intake
Date Analyzed: 3/02/88
Matrix: Water

COMPOUND	ug/L IN SAMPLE	ug/L SPIKE	REPLICATE 1 ug/L FOUND	REPLICATE 1 %REC-OVERY	REPLICATE 2 ug/L FOUND	REPLICATE 2 % REC-OVERY	RELATIVE RANGE %
1,1-DICHLOROETHENE	0	53	45	85	45	85	0
TRICHLOROETHYLENE	0	55	53	96	53	96	0
BENZENE	0	55	53	96	54	98	2
TOLUENE	16	54	60	81	61	83	2
CHLOROBENZENE	0	59	56	95	58	98	4

METHOD REFERENCE: 40 CFR PART 136, FRIDAY, OCTOBER 26, 1984
METHOD 624

Laboratory #: 12555-1 Data file id:>D3281::
Field Identification: KJ QUINN INTAKE VOA
Date analyzed: 3/04/88 Matrix: Water

Volatile Compounds	Concentration (ug/L)	Detection limit (ug/L)
CHLOROMETHANE	BDL	10
BROMOMETHANE	BDL	10
VINYL CHLORIDE	BDL	10
CHLOROETHANE	12	5
METHYLENE CHLORIDE	BDL	10
ACETONE	BDL	25
CARBON DISULFIDE	BDL	5
1,1-DICHLOROETHENE	BDL	5
TETRAHYDROFURAN	110	25
1,1-DICHLOROETHANE	61	5
1,2-DICHLOROETHENE (total)	BDL	5
CHLOROFORM	BDL	5
METHYL ETHYL KETONE	BDL	25
1,2-DICHLOROETHANE	BDL	5
1,1,1-TRICHLOROETHANE	310	5
CARBON TETRACHLORIDE	BDL	5
VINYL ACETATE	BDL	10
BROMODICHLOROMETHANE	BDL	5
CIS-1,3-DICHLOROPROPENE	BDL	5
TRANS-1,3-DICHLOROPROPENE	BDL	5
TRICHLOROETHENE	BDL	5
BENZENE	BDL	5
DIBROMOCHLOROMETHANE	BDL	5
1,1,2-TRICHLOROETHANE	BDL	5
1,2-DICHLOROPROPANE	BDL	5
2-CHLOROETHYLVINYLETHER	BDL	5
BROMOFORM	BDL	5
METHYL ISOBUTYL KETONE	BDL	25
2-HEXANONE	BDL	25
1,1,2,2-TETRACHLOROETHANE	BDL	5
TETRACHLOROETHENE	BDL	5
TOLUENE	BDL	5
CHLOROBENZENE	BDL	5
ETHYLBENZENE	BDL	5
m-XYLENE	BDL	5
o,p-XYLENES	BDL	5
STYRENE	BDL	5

BDL= Below detection limit
Method Reference: 40 CFR Part 136, Friday, October 26, 1984
Method 624

Lab Number: 12654-1
Sample Designation: KJ QUINN VOA INTAKE
Date Analyzed: 3/14/88
Matrix: Water

VOLATILE ORGANICS	CONCENTRATION REP. 1 (ug/L)	CONCENTRATION REP. 2 (ug/L)	DETECTION LIMIT (ug/L)
CHLOROMETHANE	13	13	10
BROMOMETHANE	BDL	BDL	10
VINYL CHLORIDE	BDL	BDL	10
CHLOROETHANE	BDL	BDL	5
METHYLENE CHLORIDE	BDL	BDL	10
ACETONE	BDL	BDL	25
CARBON DISULFIDE	BDL	BDL	5
1,1-DICHLOROETHENE	BDL	BDL	5
TETRAHYDROFURAN	BDL	BDL	25
1,1-DICHLOROETHANE	75	71	5
1,2-DICHLOROETHENE (total)	BDL	BDL	5
CHLOROFORM	BDL	BDL	5
METHYL ETHYL KETONE	BDL	BDL	25
1,2-DICHLOROETHANE	BDL	BDL	5
1,1,1-TRICHLOROETHANE	150	160	5
CARBON TETRACHLORIDE	BDL	BDL	5
VINYL ACETATE	BDL	BDL	10
BROMODICHLOROMETHANE	BDL	BDL	5
CIS-1,3-DICHLOROPROPENE	BDL	BDL	5
TRANS-1,3-DICHLOROPROPENE	BDL	BDL	5
TRICHLOROETHENE	BDL	BDL	5
BENZENE	BDL	BDL	5
DIBROMOCHLOROMETHANE	BDL	BDL	5
1,1,2-TRICHLOROETHANE	BDL	BDL	5
1,2-DICHLOROPROPANE	BDL	BDL	5
2-CHLOROETHYL VINYL ETHER	BDL	BDL	5
BROMOFORM	BDL	BDL	5
METHYL ISOBUTYL KETONE	BDL	BDL	25
2-HEXANONE	BDL	BDL	25
1,1,2,2-TETRACHLOROETHANE	BDL	BDL	5
TETRACHLOROETHENE	BDL	BDL	5
TOLUENE	23	25	5
CHLOROBENZENE	BDL	BDL	5
ETHYLBENZENE	25	25	5
m-XYLENE	37	38	5
o,p-XYLENES	15	15	5
STYRENE	BDL	BDL	5

BDL = BELOW DETECTION LIMIT
METHOD REFERENCE: 40 CFR PART 136, FRIDAY, OCTOBER 26, 1984
METHOD 624

Laboratory #: 12715-1 Data file id:>C5969::
Field Identification: KJ QUINN VOA INTAKE
Date analyzed: 3/18/88 Matrix: Water

Volatile Compounds	Concentration (ug/L)	Detection limit (ug/L)
CHLOROMETHANE	BDL	10
BROMOMETHANE	BDL	10
VINYL CHLORIDE	BDL	10
CHLOROETHANE	6	5
METHYLENE CHLORIDE	BDL	10
ACETONE	BDL	25
CARBON DISULFIDE	BDL	5
1,1-DICHLOROETHENE	BDL	5
TETRAHYDROFURAN	BDL	25
1,1-DICHLOROETHANE	42	5
1,2-DICHLOROETHENE (total)	BDL	5
CHLOROFORM	BDL	5
METHYL ETHYL KETONE	BDL	25
1,2-DICHLOROETHANE	BDL	5
1,1,1-TRICHLOROETHANE	100	5
CARBON TETRACHLORIDE	BDL	5
VINYL ACETATE	BDL	10
BROMODICHLOROMETHANE	BDL	5
CIS-1,3-DICHLOROPROPENE	BDL	5
TRANS-1,3-DICHLOROPROPENE	BDL	5
TRICHLOROETHENE	BDL	5
BENZENE	BDL	5
DIBROMOCHLOROMETHANE	BDL	5
1,1,2-TRICHLOROETHANE	BDL	5
1,2-DICHLOROPRQPANE	BDL	5
2-CHLOROETHYLVINYLETHER	BDL	5
BROMOFORM	BDL	5
METHYL ISOBUTYL KETONE	BDL	25
2-HEXANONE	BDL	25
1,1,2,2-TETRACHLOROETHANE	BDL	5
TETRACHLOROETHENE	BDL	5
TOLUENE	18	5
CHLOROBENZENE	BDL	5
ETHYLBENZENE	15	5
m-XYLENE	24	5
o,p-XYLENES	10	5
STYRENE	BDL	5

BDL= Below detection limit
Method Reference: 40 CFR Part 136, Friday, October 26, 1984
Method 624

Lab Number: 12829-2
Sample Designation: KJ QUINN INTAKE
Date Analyzed: 3/31/88
Matrix: Water

VOLATILE ORGANICS	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
CHLOROMETHANE	BDL	10
BROMOMETHANE	BDL	10
VINYL CHLORIDE	BDL	10
CHLOROETHANE	BDL	5
METHYLENE CHLORIDE	BDL	10
ACETONE	BDL	25
CARBON DISULFIDE	BDL	5
1,1-DICHLOROETHENE	BDL	5
TETRAHYDROFURAN	11	25
1,1-DICHLOROETHANE	40	5
1,2-DICHLOROETHENE (total)	BDL	5
CHLOROFORM	BDL	5
METHYL ETHYL KETONE	BDL	25
1,2-DICHLOROETHANE	BDL	5
1,1,1-TRICHLOROETHANE	110	5
CARBON TETRACHLORIDE	BDL	5
VINYL ACETATE	BDL	10
BROMODICHLOROMETHANE	BDL	5
CIS-1,3-DICHLOROPROPENE	BDL	5
TRANS-1,3-DICHLOROPROPENE	BDL	5
TRICHLOROETHENE	BDL	5
BENZENE	BDL	5
DIBROMOCHLOROMETHANE	BDL	5
1,1,2-TRICHLOROETHANE	BDL	5
1,2-DICHLOROPROPANE	BDL	5
2-CHLOROETHYL VINYL ETHER	BDL	5
BROMOFORM	BDL	5
METHYL ISOBUTYL KETONE	BDL	25
2-HEXANONE	BDL	25
1,1,2,2-TETRACHLOROETHANE	BDL	5
TETRACHLOROETHENE	BDL	5
TOLUENE	15	5
CHLOROBENZENE	BDL	5
ETHYLBENZENE	6	5
m-XYLENE	19	5
o,p-XYLENES	8	5
STYRENE	BDL	5

BDL = BELOW DETECTION LIMIT
METHOD REFERENCE: 40 CFR PART 136, FRIDAY, OCTOBER 26, 1984
METHOD 624

Lab Number: 12859-1
Sample Designation: KJ QUINN INTAKE
Date Analyzed: 4/1/88
Matrix: Water

VOLATILE ORGANICS	CONCENTRATION REP. 1 (ug/L)	REP. 2 (ug/L)	DETECTION LIMIT (ug/L)
CHLOROMETHANE	BDL	BDL	10
BROMOMETHANE	BDL	BDL	10
VINYL CHLORIDE	BDL	BDL	10
CHLOROETHANE	BDL	BDL	5
METHYLENE CHLORIDE	BDL	BDL	10
ACETONE	BDL	BDL	25
CARBON DISULFIDE	BDL	BDL	5
1,1-DICHLOROETHENE	BDL	BDL	5
TETRAHYDROFURAN	53	48	25
1,1-DICHLOROETHANE	63	63	5
1,2-DICHLOROETHENE (total)	BDL	BDL	5
CHLOROFORM	BDL	BDL	5
METHYL ETHYL KETONE	BDL	BDL	25
1,2-DICHLOROETHANE	BDL	BDL	5
1,1,1-TRICHLOROETHANE	200	200	5
CARBON TETRACHLORIDE	BDL	BDL	5
VINYL ACETATE	BDL	BDL	10
BROMODICHLOROMETHANE	BDL	BDL	5
CIS-1,3-DICHLOROPROPENE	BDL	BDL	5
TRANS-1,3-DICHLOROPROPENE	BDL	BDL	5
TRICHLOROETHENE	BDL	BDL	5
BENZENE	BDL	BDL	5
DIBROMOCHLOROMETHANE	BDL	BDL	5
1,1,2-TRICHLOROETHANE	BDL	BDL	5
1,2-DICHLOROPROPANE	BDL	BDL	5
2-CHLOROETHYL VINYL ETHER	BDL	BDL	5
BROMOFORM	BDL	BDL	5
METHYL ISOBUTYL KETONE	BDL	BDL	25
2-HEXANONE	BDL	BDL	25
1,1,2,2-TETRACHLOROETHANE	BDL	BDL	5
TETRACHLOROETHENE	BDL	BDL	5
TOLUENE	31	32	5
CHLOROBENZENE	BDL	BDL	5
ETHYLBENZENE	45	45	5
m-XYLENE	53	53	5
o,p-XYLENES	20	19	5
STYRENE	BDL	BDL	5

BDL = BELOW DETECTION LIMIT
METHOD REFERENCE: 40 CFR PART 136, FRIDAY, OCTOBER 26, 1984
METHOD 624

Lab Number: 12,979-1
Sample Designation: KJ QUINN/INTAKE
Date Analyzed: 4/13/88
Matrix: Water

VOLATILE ORGANICS	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
CHLOROMETHANE	BDL	10
BROMOMETHANE	BDL	10
VINYL CHLORIDE	BDL	10
CHLOROETHANE	7	5
METHYLENE CHLORIDE	BDL	10
ACETONE	BDL	25
CARBON DISULFIDE	BDL	5
1,1-DICHLOROETHENE	BDL	5
TETRAHYDROFURAN	35	25
1,1-DICHLOROETHANE	32	5
1,2-DICHLOROETHENE (total)	BDL	5
CHLOROFORM	BDL	5
METHYL ETHYL KETONE	BDL	25
1,2-DICHLOROETHANE	BDL	5
1,1,1-TRICHLOROETHANE	100	5
CARBON TETRACHLORIDE	BDL	5
VINYL ACETATE	BDL	10
BROMODICHLOROMETHANE	BDL	5
CIS-1,3-DICHLOROPROPENE	BDL	5
TRANS-1,3-DICHLOROPROPENE	BDL	5
TRICHLOROETHENE	BDL	5
BENZENE	BDL	5
DIBROMOCHLOROMETHANE	BDL	5
1,1,2-TRICHLOROETHANE	BDL	5
1,2-DICHLOROPROPANE	BDL	5
2-CHLOROETHYL VINYL ETHER	BDL	5
BROMOFORM	BDL	5
METHYL ISOBUTYL KETONE	BDL	25
2-HEXANONE	BDL	25
1,1,2,2-TETRACHLOROETHANE	BDL	5
TETRACHLOROETHENE	BDL	5
TOLUENE	18	5
CHLOROBENZENE	BDL	5
ETHYLBENZENE	8	5
m-XYLENE	8	5
o,p-XYLENES	13	5
STYRENE	BDL	5

BDL = BELOW DETECTION LIMIT
METHOD REFERENCE: 40 CFR PART 136, FRIDAY, OCTOBER 26, 1984
METHOD 624

Lab Number: 13,028-1
Sample Designation: KJ QUINN INTAKE
Date Analyzed: 4/20/88
Matrix: Water

VOLATILE ORGANICS	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
CHLOROMETHANE	BDL	10
BROMOMETHANE	BDL	10
VINYL CHLORIDE	BDL	10
CHLOROETHANE	BDL	5
METHYLENE CHLORIDE	BDL	10
ACETONE	BDL	25
CARBON DISULFIDE	BDL	5
1,1-DICHLOROETHENE	BDL	5
TETRAHYDROFURAN	Trace	25
1,1-DICHLOROETHANE	17	5
1,2-DICHLOROETHENE (total)	BDL	5
CHLOROFORM	BDL	5
METHYL ETHYL KETONE	BDL	25
1,2-DICHLOROETHANE	BDL	5
1,1,1-TRICHLOROETHANE	71	5
CARBON TETRACHLORIDE	BDL	5
VINYL ACETATE	BDL	10
BROMODICHLOROMETHANE	BDL	5
CIS-1,3-DICHLOROPROPENE	BDL	5
TRANS-1,3-DICHLOROPROPENE	BDL	5
TRICHLOROETHENE	BDL	5
BENZENE	BDL	5
DIBROMOCHLOROMETHANE	BDL	5
1,1,2-TRICHLOROETHANE	BDL	5
1,2-DICHLOROPROPANE	BDL	5
2-CHLOROETHYL VINYL ETHER	BDL	5
BROMOFORM	BDL	5
METHYL ISOBUTYL KETONE	BDL	5
2-HEXANONE	BDL	25
1,1,2,2-TETRACHLOROETHANE	BDL	25
TETRACHLOROETHENE	BDL	5
TOLUENE	BDL	5
CHLOROBENZENE	10	5
ETHYLBENZENE	BDL	5
m-XYLENE	7	5
o,p-XYLENES	13	5
STYRENE	6	5
	BDL	5

"Trace" denotes probable presence below listed detection limit.

BDL = BELOW DETECTION LIMIT
METHOD REFERENCE: 40 CFR PART 136, FRIDAY, OCTOBER 26, 1984
METHOD 624

Lab Number: 13,100-1
Sample Designation: KJ QUINN INTAKE
Date Analyzed: 4/26/88
Matrix: Water

VOLATILE ORGANICS	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
CHLOROMETHANE	BDL	10
BROMOMETHANE	BDL	10
VINYL CHLORIDE	BDL	10
CHLOROETHANE	5	5
METHYLENE CHLORIDE	BDL	10
ACETONE	BDL	25
CARBON DISULFIDE	BDL	5
1,1-DICHLOROETHENE	BDL	5
TETRAHYDROFURAN	BDL	25
1,1-DICHLOROETHANE	26	5
1,2-DICHLOROETHENE (total)	BDL	5
CHLOROFORM	BDL	5
METHYL ETHYL KETONE	BDL	25
1,2-DICHLOROETHANE	BDL	5
1,1,1-TRICHLOROETHANE	110	5
CARBON TETRACHLORIDE	BDL	5
VINYL ACETATE	BDL	10
BROMODICHLOROMETHANE	BDL	5
CIS-1,3-DICHLOROPROPENE	BDL	5
TRANS-1,3-DICHLOROPROPENE	BDL	5
TRICHLOROETHENE	BDL	5
BENZENE	BDL	5
DIBROMOCHLOROMETHANE	BDL	5
1,1,2-TRICHLOROETHANE	BDL	5
1,2-DICHLOROPROPANE	BDL	5
2-CHLOROETHYL VINYL ETHER	BDL	5
BROMOFORM	BDL	5
METHYL ISOBUTYL KETONE	BDL	25
2-HEXANONE	BDL	25
1,1,2,2-TETRACHLOROETHANE	BDL	5
TETRACHLOROETHENE	BDL	5
TOLUENE	11	5
CHLOROBENZENE	BDL	5
ETHYLBENZENE	12	5
m-XYLENE	19	5
o,p-XYLENES	7	5
STYRENE	BDL	5

BDL = BELOW DETECTION LIMIT
METHOD REFERENCE: 40 CFR PART 136, FRIDAY, OCTOBER 26, 1984
METHOD 624

Lab Number:	13,109-1
Sample Designation:	KJ QUINN/INTAKE
Date Analyzed:	4/26/88
Matrix:	Water

VOLATILE ORGANICS	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
CHLOROMETHANE	BDL	10
BROMOMETHANE	BDL	10
VINYL CHLORIDE	BDL	10
CHLOROETHANE	BDL	5
METHYLENE CHLORIDE	BDL	10
ACETONE	BDL	25
CARBON DISULFIDE	BDL	5
1,1-DICHLOROETHENE	BDL	5
TETRAHYDROFURAN	77	25
1,1-DICHLOROETHANE	35	5
1,2-DICHLOROETHENE (total)	BDL	5
CHLOROFORM	BDL	5
METHYL ETHYL KETONE	BDL	25
1,2-DICHLOROETHANE	BDL	5
1,1,1-TRICHLOROETHANE	140	5
CARBON TETRACHLORIDE	BDL	5
VINYL ACETATE	BDL	10
BROMODICHLOROMETHANE	BDL	5
CIS-1,3-DICHLOROPROPENE	BDL	5
TRANS-1,3-DICHLOROPROPENE	BDL	5
TRICHLOROETHENE	BDL	5
BENZENE	BDL	5
DIBROMOCHLOROMETHANE	BDL	5
1,1,2-TRICHLOROETHANE	BDL	5
1,2-DICHLOROPROPANE	BDL	5
2-CHLOROETHYL VINYL ETHER	BDL	5
BROMOFORM	BDL	5
METHYL ISOBUTYL KETONE	BDL	25
2-HEXANONE	BDL	25
1,1,2,2-TETRACHLOROETHANE	BDL	5
TETRACHLOROETHENE	BDL	5
TOLUENE	6	5
CHLOROBENZENE	BDL	5
ETHYLBENZENE	6	5
m-XYLENE	15	5
o,p-XYLENES	7	5
STYRENE	BDL	5

BDL = BELOW DETECTION LIMIT
METHOD REFERENCE: 40 CFR PART 136, FRIDAY, OCTOBER 26, 1984
METHOD 624

Lab Number: 13,237-2
Sample Designation: K. J. Quinn Intake
Date Analyzed: 5/10/88
Matrix: Water

VOLATILE ORGANICS	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
CHLOROMETHANE	BDL	10
BROMOMETHANE	BDL	10
VINYL CHLORIDE	BDL	10
CHLOROETHANE	BDL	5
METHYLENE CHLORIDE	BDL	10
ACETONE	BDL	25
CARBON DISULFIDE	BDL	5
1,1-DICHLOROETHENE	BDL	5
TETRAHYDROFURAN	35	25
1,1-DICHLOROETHANE	28	5
1,2-DICHLOROETHENE (total)	BDL	5
CHLOROFORM	BDL	5
METHYL ETHYL KETONE	BDL	25
1,2-DICHLOROETHANE	BDL	5
1,1,1-TRICHLOROETHANE	135	5
CARBON TETRACHLORIDE	BDL	5
VINYL ACETATE	BDL	10
BROMODICHLOROMETHANE	BDL	5
CIS-1,3-DICHLOROPROPENE	BDL	5
TRANS-1,3-DICHLOROPROPENE	BDL	5
TRICHLOROETHENE	BDL	5
BENZENE	BDL	5
DIBROMOCHLOROMETHANE	BDL	5
1,1,2-TRICHLOROETHANE	BDL	5
1,2-DICHLOROPROPANE	BDL	5
2-CHLOROETHYL VINYL ETHER	BDL	5
BROMOFORM	BDL	5
METHYL ISOBUTYL KETONE	BDL	25
2-HEXANONE	BDL	25
1,1,2,2-TETRACHLOROETHANE	BDL	5
TETRACHLOROETHENE	BDL	5
TOLUENE	10	5
CHLOROBENZENE	BDL	5
ETHYLBENZENE	6	5
m-XYLENE	12	5
o,p-XYLENES	7	5
STYRENE	BDL	5

BDL = BELOW DETECTION LIMIT
METHOD REFERENCE: 40 CFR PART 136, FRIDAY, OCTOBER 26, 1984
METHOD 624

Lab Number: 13,528-2
Sample Designation: KJ QUINN/INTAKE
Date Analyzed: 6/3/88
Matrix: Water

VOLATILE ORGANICS	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
CHLOROMETHANE	BDL	10
BROMOMETHANE	BDL	10
VINYL CHLORIDE	BDL	10
CHLOROETHANE	6	5
METHYLENE CHLORIDE	BDL	10
ACETONE	BDL	25
CARBON DISULFIDE	BDL	5
1,1-DICHLOROETHENE	BDL	5
TETRAHYDROFURAN	59	25
1,1-DICHLOROETHANE	49	5
1,2-DICHLOROETHENE (total)	BDL	5
CHLOROFORM	BDL	5
METHYL ETHYL KETONE	BDL	25
1,2-DICHLOROETHANE	BDL	5
1,1,1-TRICHLOROETHANE	190	5
CARBON TETRACHLORIDE	BDL	5
VINYL ACETATE	BDL	10
BROMODICHLOROMETHANE	BDL	5
CIS-1,3-DICHLOROPROPENE	BDL	5
TRANS-1,3-DICHLOROPROPENE	BDL	5
TRICHLOROETHENE	BDL	5
BENZENE	BDL	5
DIBROMOCHLOROMETHANE	BDL	5
1,1,2-TRICHLOROETHANE	BDL	5
1,2-DICHLOROPROPANE	BDL	5
2-CHLOROETHYL VINYL ETHER	BDL	5
BROMOFORM	BDL	5
METHYL ISOBUTYL KETONE	BDL	25
2-HEXANONE	BDL	25
1,1,2,2-TETRACHLOROETHANE	BDL	5
TETRACHLOROETHENE	BDL	5
TOLUENE	20	5
CHLOROBENZENE	BDL	5
ETHYLBENZENE	14	5
m-XYLENE	21	5
o,p-XYLENES	8	5
STYRENE	BDL	5

BDL = BELOW DETECTION LIMIT
METHOD REFERENCE: 40 CFR PART 136, FRIDAY, OCTOBER 26, 1984
METHOD 624

Lab Number: 13,856-2
Sample Designation: K. J. Quinn Intake
Date Analyzed: 7/14/88
Matrix: Water

VOLATILE ORGANICS	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
CHLOROMETHANE	10	10
BROMOMETHANE	BDL	10
VINYL CHLORIDE	BDL	10
CHLOROETHANE	BDL	5
METHYLENE CHLORIDE	BDL	10
ACETONE	BDL	25
CARBON DISULFIDE	BDL	5
1,1-DICHLOROETHENE	BDL	5
TETRAHYDROFURAN	42	25
1,1-DICHLOROETHANE	76	5
1,2-DICHLOROETHENE (total)	BDL	5
CHLOROFORM	BDL	5
METHYL ETHYL KETONE	BDL	25
1,2-DICHLOROETHANE	BDL	5
1,1,1-TRICHLOROETHANE	130	5
CARBON TETRACHLORIDE	BDL	5
VINYL ACETATE	BDL	10
BROMODICHLOROMETHANE	BDL	5
CIS-1,3-DICHLOROPROPENE	BDL	5
TRANS-1,3-DICHLOROPROPENE	BDL	5
TRICHLOROETHENE	BDL	5
BENZENE	BDL	5
DIBROMOCHLOROMETHANE	BDL	5
1,1,2-TRICHLOROETHANE	BDL	5
1,2-DICHLOROPROPANE	BDL	5
2-CHLOROETHYL VINYL ETHER	BDL	5
BROMOFORM	BDL	5
METHYL ISOBUTYL KETONE	BDL	25
2-HEXANONE	BDL	25
1,1,2,2-TETRACHLOROETHANE	BDL	5
TETRACHLOROETHENE	BDL	5
TOLUENE	12	5
CHLOROBENZENE	BDL	5
ETHYLBENZENE	BDL	5
m-XYLENE	11	5
o,p-XYLENES	6	5
STYRENE	BDL	5

BDL = BELOW DETECTION LIMIT
METHOD REFERENCE: 40 CFR PART 136, FRIDAY, OCTOBER 26, 1984
METHOD 624

Lab Number: 14,120-1
Sample Designation: K. J. Quinn - Intake - VOA
Date Analyzed: 8/05/88
Matrix: Water

VOLATILE ORGANICS	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
CHLOROMETHANE	BDL	10
BROMOMETHANE	BDL	10
VINYL CHLORIDE	BDL	10
CHLOROETHANE	10	5
METHYLENE CHLORIDE	BDL	10
ACETONE	BDL	25
CARBON DISULFIDE	BDL	5
1,1-DICHLOROETHENE	BDL	5
TETRAHYDROFURAN	28	25
1,1-DICHLOROETHANE	56	5
1,2-DICHLOROETHENE (total)	BDL	5
CHLOROFORM	BDL	5
METHYL ETHYL KETONE	BDL	25
1,2-DICHLOROETHANE	BDL	5
1,1,1-TRICHLOROETHANE	71	5
CARBON TETRACHLORIDE	BDL	5
VINYL ACETATE	BDL	10
BROMODICHLOROMETHANE	BDL	5
CIS-1,3-DICHLOROPROPENE	BDL	5
TRANS-1,3-DICHLOROPROPENE	BDL	5
TRICHLOROETHENE	BDL	5
BENZENE	BDL	5
DIBROMOCHLOROMETHANE	BDL	5
1,1,2-TRICHLOROETHANE	BDL	5
1,2-DICHLOROPROPANE	BDL	5
2-CHLOROETHYL VINYL ETHER	BDL	5
BROMOFORM	BDL	5
METHYL ISOBUTYL KETONE	BDL	25
2-HEXANONE	BDL	25
1,1,2,2-TETRACHLOROETHANE	BDL	5
TETRACHLOROETHENE	BDL	5
TOLUENE	15	5
CHLOROBENZENE	BDL	5
ETHYLBENZENE	12	5
m-XYLENE	19	5
o,p-XYLENES	BDL	5
STYRENE	BDL	5

BDL = BELOW DETECTION LIMIT
METHOD REFERENCE: 40 CFR PART 136, FRIDAY, OCTOBER 26, 1984
METHOD 624

Lab Number: 14,120-1
Sample Designation: K. J. Quinn - Intake - VOA
Date Analyzed: 08/05/88
Matrix: Water

VOLATILE ORGANICS	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
CHLOROMETHANE	BDL	10
BROMOMETHANE	BDL	10
VINYL CHLORIDE	BDL	10
CHLOROETHANE	10	5
METHYLENE CHLORIDE	BDL	10
ACETONE	BDL	25
CARBON DISULFIDE	BDL	5
1,1-DICHLOROETHENE	BDL	5
TETRAHYDROFURAN	55	25
1,1-DICHLOROETHANE	56	5
1,2-DICHLOROETHENE (total)	BDL	5
CHLOROFORM	BDL	5
METHYL ETHYL KETONE	BDL	25
1,2-DICHLOROETHANE	BDL	5
1,1,1-TRICHLOROETHANE	71	5
CARBON TETRACHLORIDE	BDL	5
VINYL ACETATE	BDL	10
BROMODICHLOROMETHANE	BDL	5
CIS-1,3-DICHLOROPROPENE	BDL	5
TRANS-1,3-DICHLOROPROPENE	BDL	5
TRICHLOROETHENE	BDL	5
BENZENE	BDL	5
DIBROMOCHLOROMETHANE	BDL	5
1,1,2-TRICHLOROETHANE	BDL	5
1,2-DICHLOROPROPANE	BDL	5
2-CHLOROETHYL VINYL ETHER	BDL	5
BROMOFORM	BDL	5
METHYL ISOBUTYL KETONE	BDL	25
2-HEXANONE	BDL	25
1,1,2,2-TETRACHLOROETHANE	BDL	5
TETRACHLOROETHENE	BDL	5
TOLUENE	15	5
CHLOROBENZENE	BDL	5
ETHYLBENZENE	12	5
m-XYLENE	19	5
o,p-XYLENES	BDL	5
STYRENE	BDL	5

BDL = BELOW DETECTION LIMIT
METHOD REFERENCE: 40 CFR PART 136, FRIDAY, OCTOBER 26, 1984
METHOD 624

Lab Number: 14,501-1
Sample Designation: KJ Quinn Intake
Date Analyzed: 09/08/88
Matrix: Water

VOLATILE ORGANICS	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
CHLOROMETHANE	BDL	10
BROMOMETHANE	BDL	10
VINYL CHLORIDE	BDL	10
CHLOROETHANE	BDL	5
METHYLENE CHLORIDE	BDL	10
ACETONE	BDL	25
CARBON DISULFIDE	BDL	5
1,1-DICHLOROETHENE	BDL	5
TETRAHYDROFURAN	38	25
1,1-DICHLOROETHANE	27	5
1,2-DICHLOROETHENE (total)	BDL	5
CHLOROFORM	BDL	5
METHYL ETHYL KETONE	BDL	25
1,2-DICHLOROETHANE	BDL	5
1,1,1-TRICHLOROETHANE	21	5
CARBON TETRACHLORIDE	BDL	5
VINYL ACETATE	BDL	10
BROMODICHLOROMETHANE	BDL	5
CIS-1,3-DICHLOROPROPENE	BDL	5
TRANS-1,3-DICHLOROPROPENE	BDL	5
TRICHLOROETHENE	BDL	5
BENZENE	BDL	5
DIBROMOCHLOROMETHANE	BDL	5
1,1,2-TRICHLOROETHANE	BDL	5
1,2-DICHLOROPROPANE	BDL	5
2-CHLOROETHYL VINYL ETHER	BDL	5
BROMOFORM	BDL	5
METHYL ISOBUTYL KETONE	BDL	25
2-HEXANONE	BDL	25
1,1,2,2-TETRACHLOROETHANE	BDL	5
TETRACHLOROETHENE	BDL	5
TOLUENE	Trace	5
CHLOROBENZENE	BDL	5
ETHYLBENZENE	Trace	5
m-XYLENE	6	5
o,p-XYLENES	Trace	5
STYRENE	BDL	5

"Trace" denotes probable presence below listed detection limit.

BDL = BELOW DETECTION LIMIT
METHOD REFERENCE: 40 CFR PART 136, FRIDAY, OCTOBER 26, 1984
METHOD 624

Lab Number: 14,849-1
Sample Designation: Intake 10/5
Date Analyzed: 10/06/88
Matrix: Water

VOLATILE ORGANICS	CONCENTRATION REP. 1 (ug/L)	CONCENTRATION REP. 2 (ug/L)	DETECTION LIMIT (ug/L)
CHLOROMETHANE	BDL	BDL	10
BROMOMETHANE	BDL	BDL	10
VINYL CHLORIDE	BDL	BDL	10
CHLOROETHANE	15	13	5
METHYLENE CHLORIDE	BDL	BDL	10
ACETONE	BDL	BDL	25
CARBON DISULFIDE	BDL	BDL	5
1,1-DICHLOROETHENE	BDL	BDL	5
TETRAHYDROFURAN	78	110	25
1,1-DICHLOROETHANE	34	32	5
1,2-DICHLOROETHENE (total)	BDL	BDL	5
CHLOROFORM	BDL	BDL	5
METHYL ETHYL KETONE	BDL	BDL	25
1,2-DICHLOROETHANE	BDL	BDL	5
1,1,1-TRICHLOROETHANE	13	14	5
CARBON TETRACHLORIDE	BDL	BDL	5
VINYL ACETATE	BDL	BDL	10
BROMODICHLOROMETHANE	BDL	BDL	5
CIS-1,3-DICHLOROPROPENE	BDL	BDL	5
TRANS-1,3-DICHLOROPROPENE	BDL	BDL	5
TRICHLOROETHENE	BDL	BDL	5
BENZENE	BDL	BDL	5
DIBROMOCHLOROMETHANE	BDL	BDL	5
1,1,2-TRICHLOROETHANE	BDL	BDL	5
1,2-DICHLOROPROPANE	BDL	BDL	5
2-CHLOROETHYL VINYL ETHER	BDL	BDL	5
BROMOFORM	BDL	BDL	5
METHYL ISOBUTYL KETONE	BDL	BDL	25
2-HEXANONE	BDL	BDL	25
1,1,2,2-TETRACHLOROETHANE	BDL	BDL	5
TETRACHLOROETHENE	BDL	BDL	5
TOLUENE	5	5	5
CHLOROBENZENE	BDL	BDL	5
ETHYLBENZENE	Trace	Trace	5
m-XYLENE	8	8	5
o,p-XYLENES	Trace	Trace	5
STYRENE	BDL	BDL	5

"Trace" denotes probable presence below listed detection limit.

BDL = BELOW DETECTION LIMIT
METHOD REFERENCE: 40 CFR PART 136, FRIDAY, OCTOBER 26, 1984
METHOD 624

Lab Number: 15,132-1
Sample Designation: Intake 11/01/88
Date Analyzed: 11/09/88
Matrix: Water

VOLATILE ORGANICS	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
CHLOROMETHANE	BDL	10
BROMOMETHANE	BDL	10
VINYL CHLORIDE	BDL	10
CHLOROETHANE	21	5
METHYLENE CHLORIDE	BDL	10
ACETONE	BDL	25
CARBON DISULFIDE	BDL	5
1,1-DICHLOROETHENE	BDL	5
TETRAHYDROFURAN	Trace	25
1,1-DICHLOROETHANE	15	5
1,2-DICHLOROETHENE (total)	BDL	5
CHLOROFORM	BDL	5
METHYL ETHYL KETONE	BDL	25
1,2-DICHLOROETHANE	BDL	5
1,1,1-TRICHLOROETHANE	Trace	5
CARBON TETRACHLORIDE	BDL	5
VINYL ACETATE	BDL	10
BROMODICHLOROMETHANE	BDL	5
CIS-1,3-DICHLOROPROPENE	BDL	5
TRANS-1,3-DICHLOROPROPENE	BDL	5
TRICHLOROETHENE	BDL	5
BENZENE	BDL	5
DIBROMOCHLOROMETHANE	BDL	5
,1,2-TRICHLOROETHANE	BDL	5
,2-DICHLOROPROPANE	BDL	5
-CHLOROETHYL VINYL ETHER	BDL	5
ROMOFORM	BDL	5
ETHYL ISOBUTYL KETONE	BDL	25
-HEXANONE	BDL	25
,1,2,2-TETRACHLOROETHANE	BDL	5
ETRACHLOROETHENE	BDL	5
OLUENE	BDL	5
HLOROBENZENE	BDL	5
THYLBENZENE	BDL	5
-XYLENE	BDL	5
p-XYLENES	BDL	5
YRENE	BDL	5

"race" denotes probable presence below listed detection limit.

L = BELOW DETECTION LIMIT
THOD REFERENCE: 40 CFR PART 136, FRIDAY, OCTOBER 26, 1984
METHOD 624

Lab Number: 15,486-1
Sample Designation: K.J. Quinn Intake
Date Analyzed: 12/05/88
Matrix: Water

VOLATILE ORGANICS	CONCENTRATION REP. 1 (ug/L)	CONCENTRATION REP. 2 (ug/L)	DETECTION LIMIT (ug/L)
CHLOROMETHANE	BDL	BDL	10
BROMOMETHANE	BDL	BDL	10
VINYL CHLORIDE	BDL	BDL	10
CHLOROETHANE	25	27	5
METHYLENE CHLORIDE	BDL	BDL	10
ACETONE	BDL	BDL	25
CARBON DISULFIDE	BDL	BDL	5
1,1-DICHLOROETHENE	BDL	BDL	5
TETRAHYDROFURAN	93	96	25
1,1-DICHLOROETHANE	19	20	5
1,2-DICHLOROETHENE (total)	BDL	BDL	5
CHLOROFORM	BDL	BDL	5
METHYL ETHYL KETONE	BDL	BDL	25
1,2-DICHLOROETHANE	BDL	BDL	5
1,1,1-TRICHLOROETHANE	12	13	5
CARBON TETRACHLORIDE	BDL	BDL	5
VINYL ACETATE	BDL	BDL	10
BROMODICHLOROMETHANE	BDL	BDL	5
CIS-1,3-DICHLOROPROPENE	BDL	BDL	5
TRANS-1,3-DICHLOROPROPENE	BDL	BDL	5
TRICHLOROETHENE	BDL	BDL	5
BENZENE	BDL	BDL	5
DIBROMOCHLOROMETHANE	BDL	BDL	5
1,1,2-TRICHLOROETHANE	BDL	BDL	5
1,2-DICHLOROPROPANE	BDL	BDL	5
2-CHLOROETHYL VINYL ETHER	BDL	BDL	5
BROMOFORM	BDL	BDL	5
METHYL ISOBUTYL KETONE	BDL	BDL	25
2-HEXANONE	BDL	BDL	25
1,1,2,2-TETRACHLOROETHANE	BDL	BDL	5
TETRACHLOROETHENE	BDL	BDL	5
TOLUENE	6	6	5
CHLOROBENZENE	BDL	BDL	5
ETHYLBENZENE	2	2	5
m-XYLENE	6	6	5
o,p-XYLENES	4	4	5
STYRENE	BDL	BDL	5

BDL = BELOW DETECTION LIMIT
METHOD REFERENCE: 40 CFR PART 136, FRIDAY, OCTOBER 26, 1984
METHOD 624

Lab Number:	15,834-1
Sample Designation:	K J Quinn-Intake
Date Analyzed:	1/05/89
Matrix:	Water

VOLATILE ORGANICS	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
CHLOROMETHANE	BDL	10
BROMOMETHANE	BDL	10
VINYL CHLORIDE	BDL	10
CHLOROETHANE	BDL	5
METHYLENE CHLORIDE	BDL	10
ACETONE	BDL	25
CARBON DISULFIDE	BDL	5
1,1-DICHLOROETHENE	BDL	5
TETRAHYDROFURAN	BDL	25
1,1-DICHLOROETHANE	BDL	5
1,2-DICHLOROETHENE (total)	BDL	5
CHLOROFORM	BDL	5
METHYL ETHYL KETONE	BDL	25
1,2-DICHLOROETHANE	BDL	5
1,1,1-TRICHLOROETHANE	BDL	5
CARBON TETRACHLORIDE	BDL	5
VINYL ACETATE	BDL	10
BROMODICHLOROMETHANE	BDL	5
CIS-1,3-DICHLOROPROPENE	BDL	5
TRANS-1,3-DICHLOROPROPENE	BDL	5
TRICHLOROETHENE	BDL	5
BENZENE	BDL	5
DIBROMOCHLOROMETHANE	BDL	5
1,1,2-TRICHLOROETHANE	BDL	5
1,2-DICHLOROPROPANE	BDL	5
2-CHLOROETHYL VINYL ETHER	BDL	5
BROMOFORM	BDL	5
METHYL ISOBUTYL KETONE	BDL	25
2-HEXANONE	BDL	25
1,1,2,2-TETRACHLOROETHANE	BDL	5
TETRACHLOROETHENE	BDL	5
TOLUENE	BDL	5
CHLOROBENZENE	BDL	5
ETHYLBENZENE	BDL	5
m-XYLENE	BDL	5
o,p-XYLENES	BDL	5
STYRENE	BDL	5

BDL = BELOW DETECTION LIMIT
METHOD REFERENCE: 40 CFR PART 136, FRIDAY, OCTOBER 26, 1984
METHOD 624

Lab Number: 10,611-1
Sample Designation: Intake 8/10/87
Date Analyzed: 8/18/87
Matrix: Water

VOLATILE ORGANICS	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
CHLOROMETHANE	BDL	10
VINYL CHLORIDE	BDL	10
CHLOROETHANE	14	5
BROMOMETHANE	BDL	5
METHYLENE CHLORIDE	BDL	5
1,1-DICHLOROETHYLENE	BDL	5
1,1-DICHLOROETHANE	110	5
1,2-DICHLOROETHYLENE	BDL	5
CHLOROFORM	BDL	5
1,2-DICHLOROETHANE	BDL	5
1,1,1-TRICHLOROETHANE	380	5
CARBON TETRACHLORIDE	BDL	5
BROMODICHLOROMETHANE	BDL	5
1,2-DICHLOROPROPANE	BDL	5
1,3-trans-DICHLOROPROPENE	BDL	5
TRICHLOROETHYLENE	BDL	5
BENZENE	BDL	5
1,3-cis-DICHLOROPROPENE	BDL	5
1,1,2-TRICHLOROETHANE	BDL	5
2-CHLOROETHYL VINYL ETHER	BDL	5
DIBROMOCHLOROMETHANE	BDL	5
BROMOFORM	BDL	5
TETRACHLOROETHYLENE	BDL	5
1,1,2,2-TETRACHLOROETHANE	BDL	5
TOLUENE	BDL	5
CHLOROBENZENE	38	5
ETHYLBENZENE	BDL	5
	24	5
ACETONE	BDL	25
CARBON DISULFIDE	BDL	5
THF	28	25
MEK	BDL	25
VINYL ACETATE	BDL	10
MIBK	BDL	25
2-HEXANONE	BDL	25
STYRENE	BDL	5
XYLENES	64	5

BDL = BELOW DETECTION LIMIT
METHOD REFERENCE: 40 CFR PART 136, FRIDAY, OCTOBER 26, 1984
METHOD 624

Resource Analysts, Incorporated

Lab Number: 10,700-1
Sample Designation: Intake 8/19/87
Date Analyzed: 8/21/87
Matrix: Water

VOLATILE ORGANICS	CONCENTRATION REP. 1 (ug/L)	CONCENTRATION REP. 2 (ug/L)	DETECTION LIMIT (ug/L)
CHLOROMETHANE	BDL	BDL	10
VINYL CHLORIDE	BDL	BDL	10
CHLOROETHANE	14	15	5
BROMOMETHANE	BDL	BDL	5
METHYLENE CHLORIDE	BDL	BDL	5
1,1-DICHLOROETHYLENE	5	5	5
1,1-DICHLOROETHANE	91	94	5
1,2-trans-DICHLOROETHYLENE	BDL	BDL	5
CHLOROFORM	BDL	BDL	5
1,2-DICHLOROETHANE	BDL	BDL	5
1,1,1-TRICHLOROETHANE	260	270	5
CARBON TETRACHLORIDE	BDL	BDL	5
BROMODICHLOROMETHANE	BDL	BDL	5
1,2-DICHLOROPROPANE	BDL	BDL	5
1,3-trans-DICHLOROPROPENE	BDL	BDL	5
TRICHLOROETHYLENE	BDL	BDL	5
BENZENE	BDL	BDL	5
1,3-cis-DICHLOROPROPENE	BDL	BDL	5
1,1,2-TRICHLOROETHANE	BDL	BDL	5
2-CHLOROETHYL VINYL ETHER	BDL	BDL	5
DIBROMOCHLOROMETHANE	BDL	BDL	5
BROMOFORM	BDL	BDL	5
TETRACHLOROETHYLENE	BDL	6	5
1,1,2,2-TETRACHLOROETHANE	BDL	BDL	5
TOLUENE	BDL	BDL	5
CHLOROBENZENE	BDL	BDL	5
ETHYLBENZENE	BDL	BDL	5
ACETONE	BDL	BDL	25
CARBON DISULFIDE	BDL	BDL	5
THF	Trace	Trace	25
MEK	BDL	BDL	25
VINYL ACETATE	BDL	BDL	10
MIBK	BDL	BDL	25
2-HEXANONE	BDL	BDL	25
STYRENE	BDL	BDL	5
XYLENES	BDL	BDL	5

"Trace" denotes probable presence below listed detection limit.

BDL = BELOW DETECTION LIMIT
METHOD REFERENCE: 40 CFR PART 136, FRIDAY, OCTOBER 26, 1984
METHOD 624

Resource Analysts, Incorporated

Lab Number:	10,735-1
Sample Designation:	Intake
Date Analyzed:	8/25/87
Matrix:	Water

VOLATILE ORGANICS	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
CHLOROMETHANE	6	10
VINYL CHLORIDE	BDL	10
CHLOROETHANE	BDL	5
BROMOMETHANE	BDL	5
METHYLENE CHLORIDE	BDL	5
1,1-DICHLOROETHYLENE	7	5
1,1-DICHLOROETHANE	68	5
1,2-DICHLOROETHYLENE	BDL	5
CHLOROFORM	BDL	5
1,2-DICHLOROETHANE	BDL	5
1,1,1-TRICHLOROETHANE	300	5
CARBON TETRACHLORIDE	BDL	5
BROMODICHLOROMETHANE	BDL	5
1,2-DICHLOROPROPANE	BDL	5
1,3-trans-DICHLOROPROPENE	BDL	5
TRICHLOROETHYLENE	BDL	5
BENZENE	BDL	5
1,3-cis-DICHLOROPROPENE	BDL	5
1,1,2-TRICHLOROETHANE	BDL	5
2-CHLOROETHYL VINYL ETHER	BDL	5
DIBROMOCHLOROMETHANE	BDL	5
BROMOFORM	BDL	5
TETRACHLOROETHYLENE	BDL	5
1,1,2,2-TETRACHLOROETHANE	BDL	5
TOLUENE	BDL	5
CHLOROBENZENE	BDL	5
ETHYLBENZENE	BDL	5
ACETONE	BDL	25
CARBON DISULFIDE	BDL	5
THF	BDL	25
MEK	BDL	25
VINYL ACETATE	BDL	10
MIBK	BDL	25
2-HEXANONE	BDL	25
STYRENE	BDL	5
XYLENES	BDL	5

BDL = BELOW DETECTION LIMIT
METHOD REFERENCE: 40 CFR PART 136, FRIDAY, OCTOBER 26, 1984
METHOD 624

Resource Analysts, Incorporated

Lab Number: 10804-1
Sample Designation: Intake VOA
Date Analyzed: 8/31/87
Matrix: Water

VOLATILE ORGANICS	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
CHLOROMETHANE	BDL	10
VINYL CHLORIDE	BDL	10
CHLOROETHANE	24	5
BROMOMETHANE	BDL	5
METHYLENE CHLORIDE	BDL	5
1,1-DICHLOROETHYLENE	7	5
1,1-DICHLOROETHANE	120	5
1,2-trans-DICHLOROETHYLENE	BDL	5
CHLOROFORM	BDL	5
1,2-DICHLOROETHANE	BDL	5
1,1,1-TRICHLOROETHANE	420	5
CARBON TETRACHLORIDE	BDL	5
BROMODICHLOROMETHANE	BDL	5
1,2-DICHLOROPROPANE	BDL	5
1,3-trans-DICHLOROPROPENE	BDL	5
TRICHLOROETHYLENE	BDL	5
BENZENE	BDL	5
1,3-cis-DICHLOROPROPENE	BDL	5
1,1,2-TRICHLOROETHANE	BDL	5
2-CHLOROETHYL VINYL ETHER	BDL	5
DIBROMOCHLOROMETHANE	BDL	5
BROMOFORM	BDL	5
TETRACHLOROETHYLENE	BDL	5
1,1,2,2-TETRACHLOROETHANE	BDL	5
TOLUENE	BDL	5
CHLOROBENZENE	BDL	5
ETHYLBENZENE	BDL	5
ACETONE	BDL	25
CARBON DISULFIDE	BDL	5
THF	BDL	25
MEK	Trace	25
VINYL ACETATE	BDL	10
MIBK	BDL	25
2-HEXANONE	BDL	25
STYRENE	BDL	5
XYLENES	BDL	5

"Trace" denotes probable presence below listed detection limit.

BDL = BELOW DETECTION LIMIT
METHOD REFERENCE: 40 CFR PART 136, FRIDAY, OCTOBER 26, 1984
METHOD 624

Lab Number: 10875-3
Sample Designation: Intake VOA
Date Analyzed: 9/9/87
Matrix: Water

VOLATILE ORGANICS	CONCENTRATION REP. 1 (ug/L)	CONCENTRATION REP. 2 (ug/L)	DETECTION LIMIT (ug/L)
CHLOROMETHANE	BDL	BDL	10
VINYL CHLORIDE	BDL	BDL	10
CHLOROETHANE	15	16	5
BROMOMETHANE	BDL	BDL	5
METHYLENE CHLORIDE	BDL	BDL	5
1,1-DICHLOROETHYLENE	7	Trace	5
1,1-DICHLOROETHANE	56	62	5
1,2-trans-DICHLOROETHYLENE	BDL	BDL	5
CHLOROFORM	BDL	BDL	5
1,2-DICHLOROETHANE	BDL	BDL	5
1,1,1-TRICHLOROETHANE	380	410	5
CARBON TETRACHLORIDE	BDL	BDL	5
BROMODICHLOROMETHANE	BDL	BDL	5
1,2-DICHLOROPROPANE	BDL	BDL	5
1,3-trans-DICHLOROPROPENE	BDL	BDL	5
TRICHLOROETHYLENE	BDL	BDL	5
BENZENE	BDL	BDL	5
1,3-cis-DICHLOROPROPENE	BDL	BDL	5
1,1,2-TRICHLOROETHANE	BDL	BDL	5
2-CHLOROETHYL VINYL ETHER	BDL	BDL	5
DIBROMOCHLOROMETHANE	BDL	BDL	5
BROMOFORM	BDL	BDL	5
TETRACHLOROETHYLENE	BDL	BDL	5
1,1,2,2-TETRACHLOROETHANE	BDL	BDL	5
TOLUENE	25	27	5
CHLOROBENZENE	BDL	BDL	5
ETHYLBENZENE	14	12	5
ACETONE	BDL	BDL	25
CARBON DISULFIDE	BDL	BDL	5
THF	25	17	25
MEK	BDL	BDL	25
VINYL ACETATE	BDL	BDL	10
MIBK	BDL	BDL	25
2-HEXANONE	BDL	BDL	25
STYRENE	BDL	BDL	5
XYLENES	45	50	5

"Trace" denotes probable presence below listed detection limit.

BDL = BELOW DETECTION LIMIT
METHOD REFERENCE: 40 CFR PART 136, FRIDAY, OCTOBER 26, 1984
METHOD 624

Resource Analysts, Incorporated

Lab Number: 10,929-3
Sample Designation: Intake VOA
Date Analyzed: 9/17/87
Matrix: Water

VOLATILE ORGANICS	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
CHLOROMETHANE	BDL	10
VINYL CHLORIDE	BDL	10
CHLOROETHANE	14	5
BROMOMETHANE	BDL	5
METHYLENE CHLORIDE	BDL	5
1,1-DICHLOROETHYLENE	6	5
1,1-DICHLOROETHANE	83	5
1,2-DICHLOROETHYLENE (total)	BDL	5
CHLOROFORM	BDL	5
1,2-DICHLOROETHANE	BDL	5
1,1,1-TRICHLOROETHANE	240	5
CARBON TETRACHLORIDE	BDL	5
BROMODICHLOROMETHANE	BDL	5
1,2-DICHLOROPROPANE	BDL	5
1,3-trans-DICHLOROPROPENE	BDL	5
TRICHLOROETHYLENE	BDL	5
BENZENE	BDL	5
1,3-cis-DICHLOROPROPENE	BDL	5
1,1,2-TRICHLOROETHANE	BDL	5
2-CHLOROETHYL VINYL ETHER	BDL	5
DIBROMOCHLOROMETHANE	BDL	5
BROMOFORM	BDL	5
TETRACHLOROETHYLENE	BDL	5
1,1,2,2-TETRACHLOROETHANE	BDL	5
TOLUENE	13	5
CHLOROBENZENE	BDL	5
ETHYLBENZENE	7	5
ACETONE	BDL	25
CARBON DISULFIDE	BDL	5
THF	35	25
MEK	BDL	25
VINYL ACETATE	BDL	10
MIBK	BDL	25
2-HEXANONE	BDL	25
STYRENE	BDL	5
XYLENES	19	5

BDL = BELOW DETECTION LIMIT
METHOD REFERENCE: 40 CFR PART 136, FRIDAY, OCTOBER 26, 1984
METHOD 624

ber: 10,989-3
Designation: Intake VOA
Analyzed: 9/24/87
rix: Water

VOLATILE ORGANICS	CONCENTRATION REP. 1 (ug/L)	CONCENTRATION REP. 2 (ug/L)	DETECTION LIMIT (ug/L)
CHLOROMETHANE	BDL	BDL	10
VINYL CHLORIDE	BDL	BDL	10
CHLOROETHANE	66	60	5
BROMOMETHANE	BDL	BDL	5
METHYLENE CHLORIDE	BDL	BDL	5
1,1-DICHLOROETHYLENE	11	10	5
1,1-DICHLOROETHANE	290	250	5
1,2-DICHLOROETHYLENE (total)	BDL	BDL	5
CHLOROFORM	BDL	BDL	5
1,2-DICHLOROETHANE	BDL	BDL	5
1,1,1-TRICHLOROETHANE	460	470	5
CARBON TETRACHLORIDE	BDL	BDL	5
BROMODICHLOROMETHANE	BDL	BDL	5
1,2-DICHLOROPROPANE	BDL	BDL	5
1,3-trans-DICHLOROPROPENE	BDL	BDL	5
TRICHLOROETHYLENE	BDL	BDL	5
BENZENE	BDL	BDL	5
1,3-cis-DICHLOROPROPENE	BDL	BDL	5
1,1,2-TRICHLOROETHANE	BDL	BDL	5
2-CHLOROETHYL VINYL ETHER	BDL	BDL	5
DIBROMOCHLOROMETHANE	BDL	BDL	5
BROMOFORM	BDL	BDL	5
TETRACHLOROETHYLENE	BDL	BDL	5
1,1,2,2-TETRACHLOROETHANE	BDL	BDL	5
TOLUENE	BDL	BDL	5
CHLOROBENZENE	BDL	BDL	5
ETHYLBENZENE	BDL	BDL	5
ACETONE	BDL	BDL	25
CARBON DISULFIDE	BDL	BDL	5
THF	120	110	25
MEK	BDL	BDL	25
VINYL ACETATE	BDL	BDL	10
MIBK	BDL	BDL	25
2-HEXANONE	BDL	BDL	25
STYRENE	BDL	BDL	5
XYLENES	30	30	5

BDL = BELOW DETECTION LIMIT
METHOD REFERENCE: 40 CFR PART 136, FRIDAY, OCTOBER 26, 1984
METHOD 624

Lab Number: 16,424-1
Sample Designation: K.J.Quinn Intake
Date Analyzed: 03/02/89
Matrix: Water

VOLATILE ORGANICS	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
CHLOROMETHANE	BDL	10
BROMOMETHANE	BDL	10
VINYL CHLORIDE	BDL	10
CHLOROETHANE	30	5
METHYLENE CHLORIDE	BDL	10
ACETONE	BDL	25
CARBON DISULFIDE	BDL	5
1,1-DICHLOROETHENE	BDL	5
TETRAHYDROFURAN	80	25
1,1-DICHLOROETHANE	28	5
1,2-DICHLOROETHENE (total)	BDL	5
CHLOROFORM	BDL	5
METHYL ETHYL KETONE	BDL	25
1,2-DICHLOROETHANE	BDL	5
1,1,1-TRICHLOROETHANE	25	5
CARBON TETRACHLORIDE	BDL	5
VINYL ACETATE	BDL	10
BROMODICHLOROMETHANE	BDL	5
CIS-1,3-DICHLOROPROPENE	BDL	5
TRANS-1,3-DICHLOROPROPENE	BDL	5
TRICHLOROETHENE	BDL	5
BENZENE	BDL	5
DIBROMOCHLOROMETHANE	BDL	5
1,1,2-TRICHLOROETHANE	BDL	5
1,2-DICHLOROPROPANE	BDL	5
2-CHLOROETHYL VINYL ETHER	BDL	5
BROMOFORM	BDL	5
METHYL ISOBUTYL KETONE	BDL	25
2-HEXANONE	BDL	25
1,1,2,2-TETRACHLOROETHANE	BDL	5
TETRACHLOROETHENE	BDL	5
TOLUENE	7	5
CHLOROBENZENE	BDL	5
ETHYLBENZENE	Trace	5
m-XYLENE	6	5
o,p-XYLENES	BDL	5
STYRENE	BDL	5

"Trace" denotes probable presence below listed detection limit.

BDL = BELOW DETECTION LIMIT
METHOD REFERENCE: 40 CFR PART 136, FRIDAY, OCTOBER 26, 1984
METHOD 624

Lab Number: 16159-1
Sample Designation: KJ Quinn-Intake
Date Analyzed: 02/08/89
Matrix: Water

VOLATILE ORGANICS	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
CHLOROMETHANE	BDL	10
BROMOMETHANE	BDL	10
VINYL CHLORIDE	BDL	10
CHLOROETHANE	25	5
METHYLENE CHLORIDE	BDL	10
ACETONE	BDL	25
CARBON DISULFIDE	BDL	5
1,1-DICHLOROETHENE	BDL	5
TETRAHYDROFURAN	34	25
1,1-DICHLOROETHANE	12	5
1,2-DICHLOROETHENE (total)	BDL	5
CHLOROFORM	BDL	5
METHYL ETHYL KETONE	BDL	25
1,2-DICHLOROETHANE	BDL	5
1,1,1-TRICHLOROETHANE	7	5
CARBON TETRACHLORIDE	BDL	5
VINYL ACETATE	BDL	10
BROMODICHLOROMETHANE	BDL	5
CIS-1,3-DICHLOROPROPENE	BDL	5
TRANS-1,3-DICHLOROPROPENE	BDL	5
TRICHLOROETHENE	BDL	5
BENZENE	BDL	5
DIBROMOCHLOROMETHANE	BDL	5
1,1,2-TRICHLOROETHANE	BDL	5
1,2-DICHLOROPROPANE	BDL	5
2-CHLOROETHYL VINYL ETHER	BDL	5
BROMOFORM	BDL	5
METHYL ISOBUTYL KETONE	BDL	25
2-HEXANONE	BDL	25
1,1,2,2-TETRACHLOROETHANE	BDL	5
TETRACHLOROETHENE	BDL	5
TOLUENE	BDL	5
CHLOROBENZENE	BDL	5
ETHYLBENZENE	BDL	5
m-XYLENE	BDL	5
o,p-XYLENES	BDL	5
STYRENE	BDL	5

BDL = BELOW DETECTION LIMIT
METHOD REFERENCE: 40 CFR PART 136, FRIDAY, OCTOBER 26, 1984
METHOD 624

624

Lab Number: 16852-1
Sample Designation: Intake
Date Analyzed: 04/10/89
Matrix: Water

VOLATILE ORGANICS	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
CHLOROMETHANE	BDL	10
BROMOMETHANE	BDL	10
VINYL CHLORIDE	BDL	10
CHLOROETHANE	Trace	5
METHYLENE CHLORIDE	65	10
ACETONE	BDL	25
CARBON DISULFIDE	BDL	5
1,1-DICHLOROETHENE	BDL	5
TETRAHYDROFURAN	140	25
1,1-DICHLOROETHANE	26	5
1,2-DICHLOROETHENE (total)	BDL	5
CHLOROFORM	BDL	5
METHYL ETHYL KETONE	BDL	25
1,2-DICHLOROETHANE	BDL	5
1,1,1-TRICHLOROETHANE	25	5
CARBON TETRACHLORIDE	BDL	5
VINYL ACETATE	BDL	5
BROMODICHLOROMETHANE	BDL	10
CIS-1,3-DICHLOROPROPENE	BDL	5
TRANS-1,3-DICHLOROPROPENE	BDL	5
TRICHLOROETHENE	BDL	5
BENZENE	BDL	5
DIBROMOCHLOROMETHANE	BDL	5
1,1,2-TRICHLOROETHANE	BDL	5
1,2-DICHLOROPROPANE	BDL	5
2-CHLOROETHYL VINYL ETHER	BDL	5
BROMOFORM	BDL	5
METHYL ISOBUTYL KETONE	BDL	5
2-HEXANONE	BDL	25
1,1,2,2-TETRACHLOROETHANE	BDL	25
TETRACHLOROETHENE	BDL	5
TOLUENE	7	5
CHLOROBENZENE	BDL	5
ETHYLBENZENE	BDL	5
m-XYLENE	7	5
o,p-XYLENES	Trace	5
STYRENE	BDL	5

"Trace" denotes probable presence below listed detection limit.

BDL = BELOW DETECTION LIMIT
METHOD REFERENCE: 40 CFR PART 136, FRIDAY, OCTOBER 26, 1984
METHOD 624

Lab Number: 17,194-1
Sample Designation: K.J. Quinn-Intake
Date Analyzed: 05/10/89
Matrix: Water

VOLATILE ORGANICS	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
CHLOROMETHANE	BDL	10
BROMOMETHANE	BDL	10
VINYL CHLORIDE	BDL	10
CHLOROETHANE	Trace	5
METHYLENE CHLORIDE	BDL	10
ACETONE	BDL	25
CARBON DISULFIDE	BDL	5
1,1-DICHLOROETHENE	BDL	5
TETRAHYDROFURAN	120	25
1,1-DICHLOROETHANE	37	5
1,2-DICHLOROETHENE (total)	BDL	5
CHLOROFORM	BDL	5
METHYL ETHYL KETONE	BDL	25
1,2-DICHLOROETHANE	BDL	5
1,1,1-TRICHLOROETHANE	40	5
CARBON TETRACHLORIDE	BDL	5
VINYL ACETATE	BDL	10
BROMODICHLOROMETHANE	BDL	5
CIS-1,3-DICHLOROPROPENE	BDL	5
TRANS-1,3-DICHLOROPROPENE	BDL	5
TRICHLOROETHENE	BDL	5
BENZENE	BDL	5
DIBROMOCHLOROMETHANE	BDL	5
1,1,2-TRICHLOROETHANE	BDL	5
1,2-DICHLOROPROPANE	BDL	5
2-CHLOROETHYL VINYL ETHER	BDL	5
BROMOFORM	BDL	5
METHYL ISOBUTYL KETONE	BDL	25
2-HEXANONE	BDL	25
1,1,2,2-TETRACHLOROETHANE	BDL	5
TETRACHLOROETHENE	BDL	5
TOLUENE	7	5
CHLOROBENZENE	BDL	5
ETHYLBENZENE	BDL	5
m-XYLENE	BDL	5
o,p-XYLENES	BDL	5
STYRENE	BDL	5

"Trace" denotes probable presence below listed detection limit.

BDL = BELOW DETECTION LIMIT
METHOD REFERENCE: 40 CFR PART 136, FRIDAY, OCTOBER 26, 1984
METHOD 624

Lab Number: 17,632-2
Sample Designation: K.J.Quinn Intake
Date Analyzed: 06/05/89
Matrix: Water

VOLATILE ORGANICS	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
CHLOROMETHANE	BDL	10
BROMOMETHANE	BDL	10
VINYL CHLORIDE	BDL	10
CHLOROETHANE	BDL	5
METHYLENE CHLORIDE	BDL	10
ACETONE	BDL	25
CARBON DISULFIDE	BDL	5
1,1-DICHLOROETHENE	BDL	5
TETRAHYDROFURAN	720	25
1,1-DICHLOROETHANE	45	5
1,2-DICHLOROETHENE (total)	BDL	5
CHLOROFORM	BDL	5
METHYL ETHYL KETONE	BDL	25
1,2-DICHLOROETHANE	BDL	5
1,1,1-TRICHLOROETHANE	39	5
CARBON TETRACHLORIDE	BDL	5
VINYL ACETATE	BDL	10
BROMODICHLOROMETHANE	BDL	5
CIS-1,3-DICHLOROPROPENE	BDL	5
TRANS-1,3-DICHLOROPROPENE	BDL	5
TRICHLOROETHENE	BDL	5
BENZENE	BDL	5
DIBROMOCHLOROMETHANE	BDL	5
1,1,2-TRICHLOROETHANE	BDL	5
1,2-DICHLOROPROPANE	BDL	5
2-CHLOROETHYL VINYL ETHER	BDL	5
BROMOFORM	BDL	5
METHYL ISOBUTYL KETONE	BDL	25
2-HEXANONE	BDL	25
1,1,2,2-TETRACHLOROETHANE	BDL	5
TETRACHLOROETHENE	BDL	5
TOLUENE	5	5
CHLOROBENZENE	BDL	5
ETHYLBENZENE	BDL	5
m-XYLENE	5	5
o,p-XYLENES	BDL	5
STYRENE	BDL	5

BDL: BELOW DETECTION LIMIT
METHOD REFERENCE: 40 CFR PART 136, FRIDAY, OCTOBER 26, 1984
METHOD 624

Lab Number: 18109-2
Sample Designation: Intake
Date Analyzed: 07/11/89
Matrix: Water

VOLATILE ORGANICS	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
CHLOROMETHANE	BDL	10
BROMOMETHANE	BDL	10
VINYL CHLORIDE	BDL	10
CHLOROETHANE	BDL	5
METHYLENE CHLORIDE	BDL	10
ACETONE	BDL	25
CARBON DISULFIDE	BDL	5
1,1-DICHLOROETHENE	BDL	5
TETRAHYDROFURAN	110	25
1,1-DICHLOROETHANE	25	5
1,2-DICHLOROETHENE (total)	BDL	5
CHLOROFORM	BDL	5
METHYL ETHYL KETONE	BDL	25
1,2-DICHLOROETHANE	BDL	5
1,1,1-TRICHLOROETHANE	32	5
CARBON TETRACHLORIDE	BDL	5
VINYL ACETATE	BDL	10
BROMODICHLOROMETHANE	BDL	5
CIS-1,3-DICHLOROPROPENE	BDL	5
TRANS-1,3-DICHLOROPROPENE	BDL	5
TRICHLOROETHENE	BDL	5
BENZENE	BDL	5
DIBROMOCHLOROMETHANE	BDL	5
1,1,2-TRICHLOROETHANE	BDL	5
1,2-DICHLOROPROPANE	BDL	5
2-CHLOROETHYL VINYL ETHER	BDL	5
BROMOFORM	BDL	5
METHYL ISOBUTYL KETONE	BDL	25
2-HEXANONE	BDL	25
1,1,2,2-TETRACHLOROETHANE	BDL	5
TETRACHLOROETHENE	BDL	5
TOLUENE	Trace	5
CHLOROBENZENE	BDL	5
ETHYLBENZENE	Trace	5
m-XYLENE	Trace	5
o,p-XYLENES	Trace	5
STYRENE	BDL	5

"Trace" denotes probable presence below listed detection limit.
BDL: BELOW DETECTION LIMIT
METHOD REFERENCE: 40 CFR PART 136, FRIDAY, OCTOBER 26, 1984
METHOD 624

Lab Number: 18529-2
Sample Designation: KJ Quinn Intake
Date Analyzed: 08/09/89
Matrix: Water

VOLATILE ORGANICS	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
CHLOROMETHANE	BDL	10
BROMOMETHANE	BDL	10
VINYL CHLORIDE	BDL	10
CHLOROETHANE	13	5
METHYLENE CHLORIDE	BDL	10
ACETONE	BDL	25
CARBON DISULFIDE	BDL	5
1,1-DICHLOROETHENE	BDL	5
TETRAHYDROFURAN	64	25
1,1-DICHLOROETHANE	55	5
1,2-DICHLOROETHENE (total)	BDL	5
CHLOROFORM	BDL	5
METHYL ETHYL KETONE	BDL	25
1,2-DICHLOROETHANE	BDL	5
1,1,1-TRICHLOROETHANE	28	5
CARBON TETRACHLORIDE	BDL	5
VINYL ACETATE	BDL	10
BROMODICHLOROMETHANE	BDL	5
CIS-1,3-DICHLOROPROPENE	BDL	5
TRANS-1,3-DICHLOROPROPENE	BDL	5
TRICHLOROETHENE	BDL	5
BENZENE	BDL	5
DIBROMOCHLOROMETHANE	BDL	5
1,1,2-TRICHLOROETHANE	BDL	5
1,2-DICHLOROPROPANE	BDL	5
2-CHLOROETHYL VINYL ETHER	BDL	5
BROMOFORM	BDL	5
METHYL ISOBUTYL KETONE	BDL	25
2-HEXANONE	BDL	25
1,1,2,2-TETRACHLOROETHANE	BDL	5
TETRACHLOROETHENE	BDL	5
TOLUENE	BDL	5
CHLOROBENZENE	BDL	5
ETHYLBENZENE	BDL	5
m-XYLENE	BDL	5
o,p-XYLENES	BDL	5
STYRENE	BDL	5

BDL: BELOW DETECTION LIMIT
METHOD REFERENCE: 40 CFR PART 136, FRIDAY, OCTOBER 26, 1984
METHOD 624

Lab Number: 18971-1
Sample Designation: KJ Quinn Intake
Date Analyzed: 09/25/89
Matrix: Water

VOLATILE ORGANICS	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
CHLOROMETHANE	BDL	10
BROMOMETHANE	BDL	10
VINYL CHLORIDE	BDL	10
CHLOROETHANE	BDL	5
METHYLENE CHLORIDE	BDL	10
ACETONE	BDL	25
CARBON DISULFIDE	BDL	5
1,1-DICHLOROETHENE	BDL	5
TETRAHYDROFURAN	43	25
1,1-DICHLOROETHANE	17	5
1,2-DICHLOROETHENE (total)	BDL	5
CHLOROFORM	BDL	5
METHYL ETHYL KETONE	BDL	25
1,2-DICHLOROETHANE	BDL	5
1,1,1-TRICHLOROETHANE	14	5
CARBON TETRACHLORIDE	BDL	5
VINYL ACETATE	BDL	10
BROMODICHLOROMETHANE	BDL	5
CIS-1,3-DICHLOROPROPENE	BDL	5
TRANS-1,3-DICHLOROPROPENE	BDL	5
TRICHLOROETHENE	BDL	5
BENZENE	BDL	5
DIBROMOCHLOROMETHANE	BDL	5
1,1,2-TRICHLOROETHANE	BDL	5
1,2-DICHLOROPROPANE	BDL	5
2-CHLOROETHYL VINYL ETHER	BDL	5
BROMOFORM	BDL	5
METHYL ISOBUTYL KETONE	BDL	25
2-HEXANONE	BDL	25
1,1,2,2-TETRACHLOROETHANE	BDL	5
TETRACHLOROETHENE	BDL	5
TOLUENE	BDL	5
CHLOROBENZENE	BDL	5
ETHYLBENZENE	BDL	5
m-XYLENE	BDL	5
o,p-XYLENES	BDL	5
STYRENE	BDL	5

BDL = BELOW DETECTION LIMIT
METHOD REFERENCE: 40 CFR PART 136, FRIDAY, OCTOBER 26, 1984
METHOD 624

umber: 19138-1
le Designation: Intake
e Analyzed: 10/05/89
atrix: Water

VOLATILE ORGANICS	CONCENTRATION REP. 1 (ug/L)	REP. 2 (ug/L)	DETECTION LIMIT (ug/L)
CHLOROMETHANE	BDL	BDL	10
BROMOMETHANE	BDL	BDL	10
VINYL CHLORIDE	BDL	BDL	10
CHLOROETHANE	14	13	5
METHYLENE CHLORIDE	BDL	BDL	10
ACETONE	BDL	BDL	25
CARBON DISULFIDE	BDL	BDL	5
1,1-DICHLOROETHENE	BDL	BDL	5
TETRAHYDROFURAN	47	37	25
1,1-DICHLOROETHANE	46	44	5
1,2-DICHLOROETHENE (total)	BDL	BDL	5
CHLOROFORM	BDL	BDL	5
METHYL ETHYL KETONE	BDL	BDL	25
1,2-DICHLOROETHANE	BDL	BDL	5
1,1,1-TRICHLOROETHANE	19	17	5
CARBON TETRACHLORIDE	BDL	BDL	5
VINYL ACETATE	BDL	BDL	10
BROMODICHLOROMETHANE	BDL	BDL	5
CIS-1,3-DICHLOROPROPENE	BDL	BDL	5
TRANS-1,3-DICHLOROPROPENE	BDL	BDL	5
TRICHLOROETHENE	BDL	BDL	5
BENZENE	BDL	BDL	5
DIBROMOCHLOROMETHANE	BDL	BDL	5
1,1,2-TRICHLOROETHANE	BDL	BDL	5
1,2-DICHLOROPROPANE	BDL	BDL	5
2-CHLOROETHYL VINYL ETHER	BDL	BDL	5
BROMOFORM	BDL	BDL	5
METHYL ISOBUTYL KETONE	BDL	BDL	25
2-HEXANONE	BDL	BDL	25
1,1,2,2-TETRACHLOROETHANE	BDL	BDL	5
TETRACHLOROETHENE	BDL	BDL	5
TOLUENE	BDL	BDL	5
CHLOROBENZENE	BDL	BDL	5
ETHYLBENZENE	BDL	BDL	5
m-XYLENE	BDL	BDL	5
o,p-XYLENES	BDL	BDL	5
STYRENE	BDL	BDL	5

DL = BELOW DETECTION LIMIT
ETHOD REFERENCE: 40 CFR PART 136, FRIDAY, OCTOBER 26, 1984
METHOD 624

Laboratory number: 19522 -001
Sample Designation: INTAKE
Date Analyzed: 891116
Matrix: WATER

VOLATILE ORGANICS	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Chloromethane	BDL	10
Bromomethane	BDL	10
Vinyl chloride	BDL	10
Chloroethane	48	5
Methylene chloride	BDL	10
Acetone	BDL	25
Carbon disulfide	BDL	5
1,1-Dichloroethene	BDL	5
Tetrahydrofuran	340	5
1,1-Dichloroethane	95	5
1,2-Dichloroethene (total)	BDL	5
Chloroform	BDL	5
Methyl ethyl ketone	BDL	25
1,2-Dichloroethane	BDL	5
1,1,1-Trichloroethane	120	5
Carbon Tetrachloride	BDL	5
Vinyl acetate	BDL	10
Bromodichloromethane	BDL	5
cis-1,3-Dichloropropene	BDL	5
trans-1,3-Dichloropropene	BDL	5
Trichloroethene	BDL	5
Benzene	BDL	5
Dibromochloromethane	BDL	5
1,1,2-Trichloroethane	BDL	5
1,2-Dichloropropane	BDL	5
2-Chloroethyl vinyl ether	BDL	5
Bromoform	BDL	5
Methyl isobutyl ketone	BDL	25
2-Hexanone	BDL	25
1,1,2,2-Tetrachloroethane	BDL	5
Tetrachloroethene	BDL	5
Toluene	13	5
Chlorobenzene	BDL	5
Ethylbenzene	BDL	5
m-Xylene	34	5
o,p-Xylene	23	5
Styrene	BDL	5

METHOD REFERENCE: 40 CFR PART 136, FRIDAY, OCTOBER 26, 1984
METHOD 624

BDL = Below detection limit

Lab Number: 19880-1
Sample Designation: INTAKE
Date Analyzed: 12/21/89
Matrix: WATER

VOLATILE ORGANICS	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
CHLOROMETHANE	BDL	10
BROMOMETHANE	BDL	10
VINYL CHLORIDE	BDL	10
CHLOROETHANE	BDL	5
METHYLENE CHLORIDE	BDL	10
ACETONE	BDL	25
CARBON DISULFIDE	BDL	5
1,1-DICHLOROETHENE	BDL	5
TETRAHYDROFURAN	290	25
1,1-DICHLOROETHANE	63	5
1,2-DICHLOROETHENE (total)	BDL	5
CHLOROFORM	BDL	5
METHYL ETHYL KETONE	BDL	25
1,2-DICHLOROETHANE	BDL	5
1,1,1-TRICHLOROETHANE	60	5
CARBON TETRACHLORIDE	BDL	5
VINYL ACETATE	BDL	10
BROMODICHLOROMETHANE	BDL	5
CIS-1,3-DICHLOROPROPENE	BDL	5
TRANS-1,3-DICHLOROPROPENE	BDL	5
TRICHLOROETHENE	BDL	5
BENZENE	BDL	5
DIBROMOCHLOROMETHANE	BDL	5
1,1,2-TRICHLOROETHANE	BDL	5
1,2-DICHLOROPROPANE	BDL	5
2-CHLOROETHYL VINYL ETHER	BDL	5
BROMOFORM	BDL	5
METHYL ISOBUTYL KETONE	BDL	25
2-HEXANONE	BDL	25
1,1,2,2-TETRACHLOROETHANE	BDL	5
TETRACHLOROETHENE	BDL	5
TOLUENE	9	5
CHLOROBENZENE	BDL	5
ETHYLBENZENE	11	5
m-XYLENE	12	5
o,p-XYLENES	BDL	5
STYRENE	BDL	5

BDL = BELOW DETECTION LIMIT
METHOD REFERENCE: 40 CFR PART 136, FRIDAY, OCTOBER 26, 1984
METHOD 624

Laboratory number: 22077 -002
Sample Designation: INTAKE
Date Analyzed: 06/06/90
Matrix: WATER

VOLATILE ORGANICS	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Chloromethane	BDL	10
Bromomethane	BDL	10
Vinyl chloride	BDL	10
Chloroethane	5	5
Methylene chloride	BDL	10
Acetone	BDL	25
Carbon disulfide	BDL	5
1,1-Dichloroethene	BDL	5
Tetrahydrofuran	210	25
1,1-Dichloroethane	75	5
1,2-Dichloroethene (total)	BDL	5
Chloroform	BDL	5
Methyl ethyl ketone	BDL	25
1,2-Dichloroethane	BDL	5
1,1,1-Trichloroethane	66	5
Carbon Tetrachloride	BDL	5
Vinyl acetate	BDL	10
Bromodichloromethane	BDL	5
cis-1,3-Dichloropropene	BDL	5
trans-1,3-Dichloropropene	BDL	5
Trichloroethene	BDL	5
Benzene	BDL	5
Dibromochloromethane	BDL	5
1,1,2-Trichloroethane	BDL	5
1,2-Dichloropropane	BDL	5
2-Chloroethyl vinyl ether	BDL	5
Bromoform	BDL	5
Methyl isobutyl ketone	BDL	25
2-Hexanone	BDL	25
1,1,2,2-Tetrachloroethane	BDL	5
Tetrachloroethene	BDL	5
Toluene	TRACE	5
Chlorobenzene	BDL	5
Ethylbenzene	BDL	5
m-Xylene	TRACE	5
o,p-Xylene	BDL	5
Styrene	BDL	5

METHOD REFERENCE: 40 CFR PART 136, FRIDAY, OCTOBER 26, 1984
METHOD 624

BDL = Below detection limit

'RACE" denotes probable presence below listed detection limit.

Laboratory number: 22903 -002
Sample Designation: INTAKE
Date Analyzed: 07/31/90
Matrix: WATER

Instrument File Name: >C5135

VOLATILE ORGANICS	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Chloromethane	BDL	10
Bromomethane	BDL	10
Vinyl chloride	BDL	10
Chloroethane	BDL	5
Methylene chloride	BDL	10
Acetone	BDL	25
Carbon disulfide	BDL	5
1,1-Dichloroethene	BDL	5
Tetrahydrofuran	BDL	25
1,1-Dichloroethane	BDL	5
1,2-Dichloroethene (total)	BDL	5
Chloroform	BDL	5
Methyl ethyl ketone	BDL	25
1,2-Dichloroethane	BDL	5
1,1,1-Trichloroethane	BDL	5
Carbon Tetrachloride	BDL	5
Vinyl acetate	BDL	10
Bromodichloromethane	BDL	5
cis-1,3-Dichloropropene	BDL	5
trans-1,3-Dichloropropene	BDL	5
Trichloroethene	BDL	5
Benzene	BDL	5
Dibromochloromethane	BDL	5
1,1,2-Trichloroethane	BDL	5
1,2-Dichloropropane	BDL	5
2-Chloroethyl vinyl ether	BDL	5
Bromoform	BDL	5
Methyl isobutyl ketone	BDL	25
2-Hexanone	BDL	25
1,1,2,2-Tetrachloroethane	BDL	5
Tetrachloroethene	BDL	5
Toluene	BDL	5
Chlorobenzene	BDL	5
Ethylbenzene	BDL	5
m-Xylene	BDL	5
o,p-Xylene	BDL	5
Styrene	BDL	5

METHOD REFERENCE: 40 CFR PART 136, FRIDAY, OCTOBER 26, 1984
METHOD 624

BDL = Below detection limit

Laboratory number: 23378 -001
Sample Designation: INTAKE
Date Analyzed: 08/30/90
Matrix: WATER

Instrument File Name: >E5892

VOLATILE ORGANICS	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Chloromethane	BDL	10
Bromomethane	BDL	10
Vinyl chloride	BDL	10
Chloroethane	13	5
Methylene chloride	BDL	10
Acetone	BDL	25
Carbon disulfide	BDL	5
1,1-Dichloroethene	BDL	5
Tetrahydrofuran	TRACE	25
1,1-Dichloroethane	110	5
1,2-Dichloroethene (total)	BDL	5
Chloroform	BDL	5
Methyl ethyl ketone	BDL	25
1,2-Dichloroethane	BDL	5
1,1,1-Trichloroethane	340	5
Carbon Tetrachloride	BDL	5
Vinyl acetate	BDL	10
Bromodichloromethane	BDL	5
cis-1,3-Dichloropropene	BDL	5
trans-1,3-Dichloropropene	BDL	5
Trichloroethene	BDL	5
Benzene	BDL	5
Dibromochloromethane	BDL	5
1,1,2-Trichloroethane	BDL	5
1,2-Dichloropropane	BDL	5
2-Chloroethyl vinyl ether	BDL	5
Bromoform	BDL	5
Methyl isobutyl ketone	BDL	25
2-Hexanone	BDL	25
1,1,2,2-Tetrachloroethane	BDL	5
Tetrachloroethene	BDL	5
Toluene	6	5
Chlorobenzene	BDL	5
Ethylbenzene	BDL	5
m-Xylene	19	5
o,p-Xylene	13	5
Styrene	BDL	5

METHOD REFERENCE: 40 CFR PART 136, FRIDAY, OCTOBER 26, 1984
METHOD 624

BDL = Below detection limit

"TRACE" denotes probable presence below listed detection limit.

Laboratory number: 23448 -001
Sample Designation: INTAKE
Date Analyzed: 09/07/90
Matrix: WATER

Instrument File Name: >D2951

VOLATILE ORGANICS	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Chloromethane	BDL	10
Bromomethane	BDL	10
Vinyl chloride	BDL	10
Chloroethane	14	5
Methylene chloride	BDL	10
Acetone	BDL	25
Carbon disulfide	BDL	5
1,1-Dichloroethene	BDL	5
Tetrahydrofuran	BDL	25
1,1-Dichloroethane	120	5
1,2-Dichloroethene (total)	BDL	5
Chloroform	BDL	5
Methyl ethyl ketone	BDL	25
1,2-Dichloroethane	BDL	5
1,1,1-Trichloroethane	280	5
Carbon Tetrachloride	BDL	5
Vinyl acetate	BDL	10
Bromodichloromethane	BDL	5
cis-1,3-Dichloropropene	BDL	5
trans-1,3-Dichloropropene	BDL	5
Trichloroethene	BDL	5
Benzene	BDL	5
Dibromochloromethane	BDL	5
1,1,2-Trichloroethane	BDL	5
1,2-Dichloropropane	BDL	5
2-Chloroethyl vinyl ether	BDL	5
Bromoform	BDL	5
Methyl isobutyl ketone	BDL	25
2-Hexanone	BDL	25
1,1,2,2-Tetrachloroethane	BDL	5
Tetrachloroethene	BDL	5
Toluene	22	5
Chlorobenzene	BDL	5
Ethylbenzene	10	5
m-Xylene	19	5
o,p-Xylene	BDL	5
Styrene	BDL	5

METHOD REFERENCE: 40 CFR PART 136, FRIDAY, OCTOBER 26, 1984
METHOD 624

BDL = Below detection limit

"TRACE" denotes probable presence below listed detection limit.

Laboratory number: 24951 -001
Sample Designation: INTAKE
Date Analyzed: 12/17/90
Matrix: WATER

Instrument File Name: >C6465

VOLATILE ORGANICS	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Chloromethane	BDL	10
Bromomethane	BDL	10
Vinyl chloride	BDL	10
Chloroethane	26	5
Methylene chloride	BDL	10
Acetone	BDL	25
Carbon disulfide	BDL	5
1,1-Dichloroethene	BDL	5
Tetrahydrofuran	BDL	25
1,1-Dichloroethane	46	5
1,2-Dichloroethene (total)	BDL	5
Chloroform	BDL	5
Methyl ethyl ketone	BDL	25
1,2-Dichloroethane	BDL	5
1,1,1-Trichloroethane	16	5
Carbon Tetrachloride	BDL	5
Vinyl acetate	BDL	10
Bromodichloromethane	BDL	5
cis-1,3-Dichloropropene	BDL	5
trans-1,3-Dichloropropene	BDL	5
Trichloroethene	BDL	5
Benzene	BDL	5
Dibromochloromethane	BDL	5
1,1,2-Trichloroethane	BDL	5
1,2-Dichloropropane	BDL	5
2-Chloroethyl vinyl ether	BDL	5
Bromoform	BDL	5
Methyl isobutyl ketone	BDL	25
2-Hexanone	BDL	25
1,1,2,2-Tetrachloroethane	BDL	5
Tetrachloroethene	BDL	5
Toluene	BDL	5
Chlorobenzene	BDL	5
Ethylbenzene	BDL	5
m-Xylene	BDL	5
o,p-Xylene	BDL	5
Styrene	BDL	5

METHOD REFERENCE: 40 CFR PART 136, FRIDAY, OCTOBER 26, 1984
METHOD 624

BDL = Below detection limit

APPENDIX F

RESOURCE ANALYSTS 1983 AND 1984 INFLUENT AND EFFLUENT SAMPLING DATA

RAI

Table 4

Resource Analysts, Incorporated
Box 4778 Hampton, NH 03842
(603) 926-7777

VOLATILE PRIOTITY POLLUTANT DETERMINATION

Lab No. 2694 Analyst LJC Date Analyzed 9-23-83

EPA Method 624 [ ] ASTM Method D 3781-79 [X]

Parameter	Sample Designation			
	Influent #1	Effluent #1	Influent #2	Effluent #2
Acrolein				
Acrylonitrile				
Benzene				
Bis(chloromethyl)ether				
Bromoform				
Carbon Tetrachloride				
Chlorobenzene				
Chlorodibromomethane				
Chloroethane				
2-Chlorovinylether				
Chloroform				
Dichlorobromomethane				
Dichlorodifluromethane				
1,1-Dichloroethane	---------- THF INTERFERENCE ----------			
1,2-Dichloroethane	---------- MEK INTERFERENCE ----------			
1,1-Dichloroethylene				
1,2-Dichloropropane				
1,3-Dichloropropylene				
Ethylbenzene	500	Tr	410	
Methyl bromide				
Methyl chloride				
Methylene chloride				
1,1,2,2-Tetrachloroethane				
Tetrachloroethylene				
Toluene	900	Tr	690	TR
1,2-trans-Dichloroethylene				
1,1,1-Trichloroethane	4900	90*	4600	TR
1,1,2-Trichloroethane				
Trichloroethylene				
Trichlorofluoromethane				
Vinyl chloride				
Xylenes	Present		Present	

Method Detection Limit:

NOTES: *Possible Interference Present. No entry denotes "not detected".

Resource Analysts, Incorporated
Box 4778 Hampton, NH 03842
(603) 926-7777

VOLATILE PRIOTITY POLLUTANT DETERMINATION

Lab No. 2694 Analyst LJC Date Analyzed 9-23-83

EPA Method 624 [ ] ASTM Method D 3781-79 [X]

Parameter	Sample Designation			
	Influent #3	Effluent #3	Influent #4	Effluent #4
Acrolein				
Acrylonitrile				
Benzene				
Bis(chloromethyl)ether				
Bromoform				
arbon Tetrachloride				
hlorobenzene				
hlorodibromomethane				
hloroethane				
-Chlorovinylether				
hloroform				
ichlorobromomethane				
ichlorodifluromethane				
,1-Dichloroethane				
2-Dichloroethane	----------THF INTERFERENCE----------			
1-Dichloroethylene	----------MEK INTERFERENCE----------			
2-Dichloropropane				
3-Dichloropropylene				
hylbenzene				
thyl bromide	500			
hyl chloride			390	
hylene chloride				
,2,2-Tetrachloroethane				
rachloroethylene				
uene				
-trans-Dichloroethylene	900	Tr		
,1-Trichloroethane			570	Tr
,2-Trichloroethane	5600			
hloroethylene			5600	27
hlorofluoromethane				
l chloride				
Xylenes	Present			
			Present	

d Detection Limit:

: No entry denotes "not detected".

Resource Analysts, Incorporated
Box 4778 Hampton, NH 03842
(603) 926-77

VOLATILE PRIOTITY POLLUTANT DETERMINATION

Lab No. 2694 Analyst LJC Date Analyzed 9-23-83

EPA Method 624 [ ] ASTM Method D 3781-79 [x]

Parameter	Sample Designation			
	Influent #5	Effluent #5	Influent #6	Effluent #6
crolein				
crylonitrile				
enzene				
is(chloromethyl)ether				
romoform				
arbon Tetrachloride				
hlorobenzene				
hlorodibromomethane				
hloroethane				
-Chlorovinylether				
loroform				
chlorobromomethane				
chlorodifluromethane				
,1-Dichloroethane	----------THF INTERFERENCE----------			
,2-Dichloroethane	----------MEK INTERFERENCE----------			
1-Dichloroethylene				
2-Dichloropropane				
3-Dichloropropylene				
hylbenzene				
thyl bromide				
thyl chloride				
thylene chloride				
1,2,2-Tetrachloroethane				
trachloroethylene				
luene	Tr			
2-trans-Dichloroethylene				
1,1-Trichloroethane	50	44	88	Tr
1,2-Trichloroethane				
chloroethylene				
chlorofluoromethane				
yl chloride				

hod Detection Limit:

ES: No entry denotes "not detected".

R.H

Table 4
(Continued)

Resource Analysts, Incorporated
Box 4778 Hampton, NH 03842
(603) 926-7777

VOLATILE PRIOTITY POLLUTANT DETERMINATION

Lab No. 2694 Analyst LJC Date Analyzed 9-23-83

EPA Method 624 [ ] ASTM Method D 3781-79 [X]

Parameter	Sample Designation			
	Trip Blank			
Acrolein				
Acrylonitrile				
Benzene				
Bis(chloromethyl)ether				
Bromoform				
Carbon Tetrachloride				
Chlorobenzene				
Chlorodibromomethane				
Chloroethane				
2-Chlorovinylether				
Chloroform				
Dichlorobromomethane				
Dichlorodifluromethane				
1,1-Dichloroethane				
,2-Dichloroethane				
,1-Dichloroethylene				
,2-Dichloropropane				
,3-Dichloropropylene				
thylbenzene				
thyl bromide				
thyl chloride				
thylene chloride				
1,2,2-Tetrachloroethane				
trachloroethylene				
luene				
2-trans-Dichloroethylene				
1,1-Trichloroethane				
1,2-Trichloroethane				
chloroethylene				
chlorofluoromethane				
yl chloride				
od Detection Limit:				

S: No entry denotes "not detected".

R.A.I

Table 4
(Continued)

Resource Analysts, Incorporated
Box 4778 Hampton, NH 03842

VOLATILE PRIOTITY POLLUTANT DETERMINATION

Lab No. 2694 Analyst RDF Date Analyzed 9-23-83 (603) 926-7777

EPA Method 624 [X] ASTM Method D 3781-79 [ ]

Parameter	Sample Designation			
	Effluent #3			
Acrolein				
Acrylonitrile				
Benzene				
Bis(chloromethyl)ether				
Bromoform				
Carbon Tetrachloride				
Chlorobenzene				
Chlorodibromomethane				
Chloroethane				
2-Chlorovinylether				
Chloroform				
Dichlorobromomethane				
Dichlorodifluromethane				
1,1-Dichloroethane	Tr			
1,2-Dichloroethane				
1,1-Dichloroethylene				
1,2-Dichloropropane				
1,3-Dichloropropylene				
Ethylbenzene				
Methyl bromide				
Methyl chloride				
Methylene chloride				
1,1,2,2-Tetrachloroethane				
Tetrachloroethylene				
Toluene				
1,2-trans-Dichloroethylene				
1,1,1-Trichloroethane	Tr			
1,1,2-Trichloroethane				
Trichloroethylene				
Trichlorofluoromethane				
Vinyl chloride				
Methyl ethyl ketone	5000			
Tetra hydro furan	3000			

Method Detection Limit:

NOTES: No entry denotes "not detected".

TABLE 5

SUMMARY OF MEK AND THF QUANTIFICATION

SAMPLE	MEK CONC., PPM	THF CONC., PPM
Influent #1	11.6	21.4
Effluent #1	15.6	7.6
Influent #2	7.8	14.2
Effluent #2	9.5	3.6
Influent #3	29.8	21.4
Effluent #3	8.4	3.7
Influent #4	1.5	10.4
Effluent #4	3.3	3.6
Influent #5	5.7	2.4
Effluent #5	9.4	3.5
Influent #6	16.2	6.25
Effluent #6	3.8	1.49

TABLE 6

CONTAMINANT REMOVAL IN SOIL

CONTAMINANT	DISCHARGE CONCENTRATION, ppb	LYSIMETER CONCENTRATION, ppb	REMOVAL
Acetone	1800	90	95.0%
Methyl Ethyl Ketone	6600	1100	83.3%
Tetrahydrofuran	3300	1300	60.6%

*Note: Two discharge samples were collected. The removal figures in the table were calculated from the lower discharge concentrations observed in order to give a conservative estimate of contamination removal.

APPENDIX G

K.J. QUINN TABULATED RECOVERY WELL SAMPLING DATA

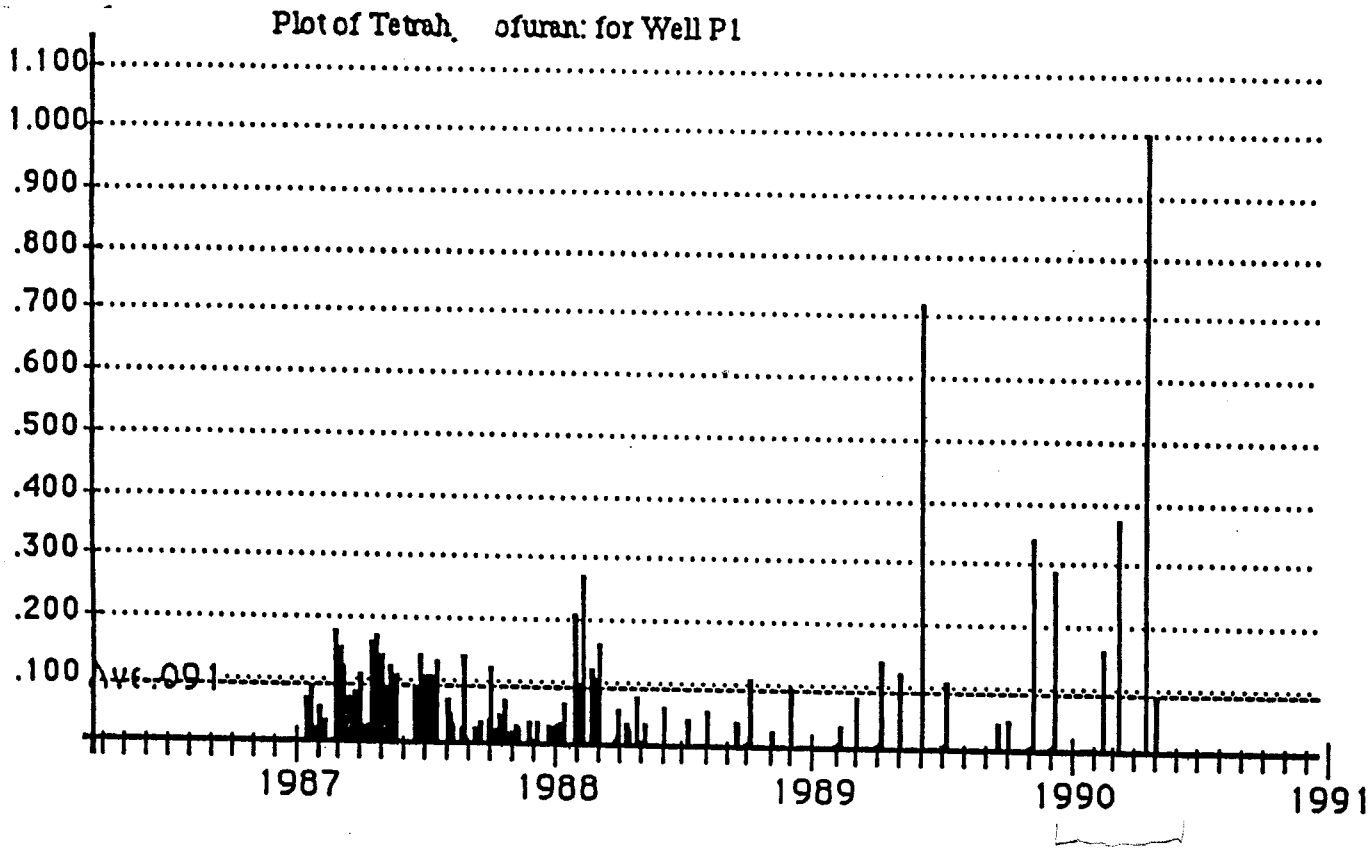
COMPOUND	12/4/86 MW 15	12/4/86 MW 17	INFLUENT [ ] (µg/L) INFLUENT SAMPLE 12-7	12-14	12-20	12-30	1-4 #1	1-4 #2	1-11	1-25 #1	1-25 #2	2-1	2-8	11/4/87 MW 4	MW 13	MW 17
CHLORODETHANE			10	11	19	19	13	14	22	36	33	22	38			
TETRAHYDROFURAN		160	32	BDL	27	27	33	39	65	210	220	100	270			
1,1,1 - TRICHLOROETHANE	15	72	150	110	190	190	120	120	100	200	200	190	240	Tr	9	15
1,1 - DICHLOROETHANE		5	38	45	52	52	43	44	55	80	79	73	110		23	
TOLUENE			10	17	18	18	19	19	10	8	8	18	BDL			
ETHYLBENZENE			BDL	11	15	15	16	16	5	BDL	BDL	15	BDL			
m,p - XYLENE			4	22	25	25	25	25	12	37	35	22	Tr			
o - XYLENES			9	10	11	11	9	9	9	13	14	13	5			

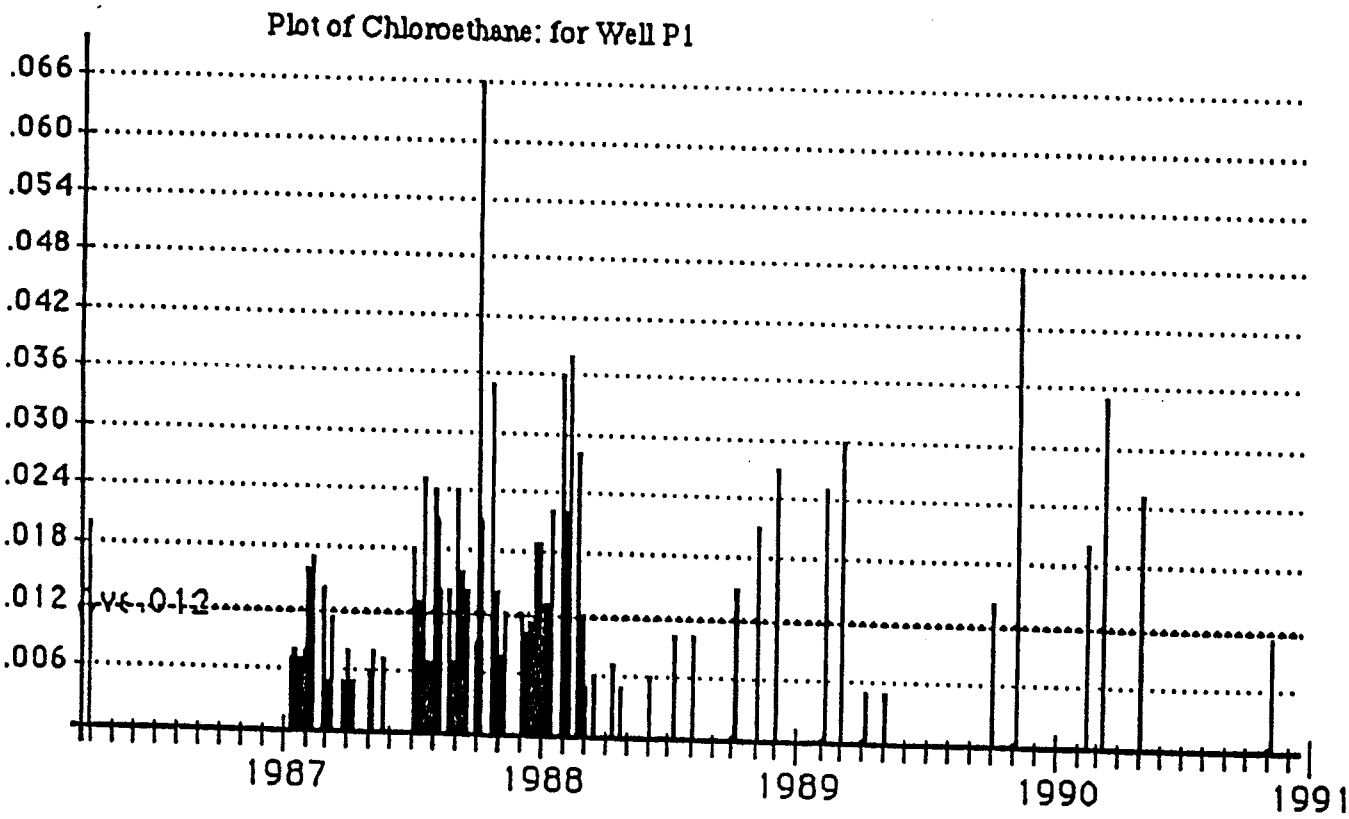
SAME SAMPLE?

K. QUINN
3/14/88
JEF

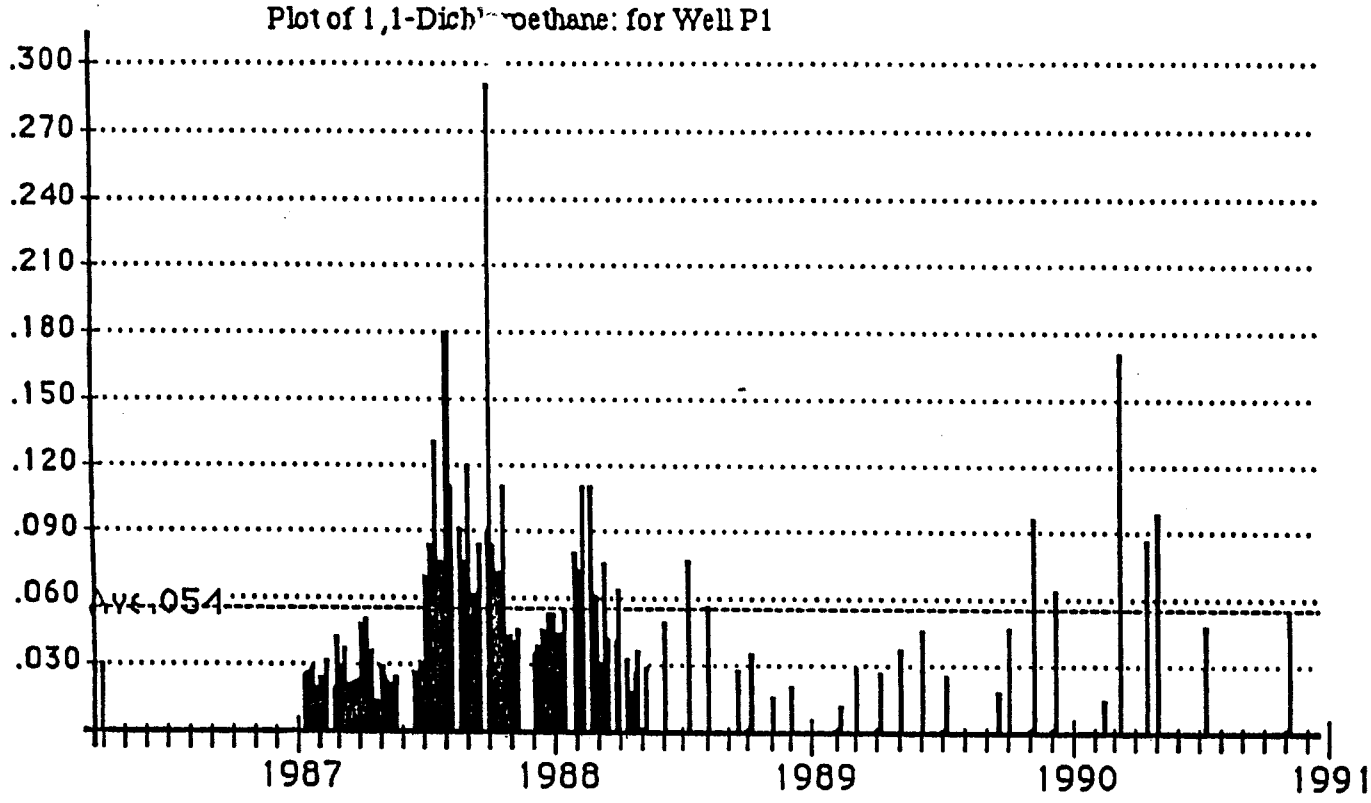
APPENDIX H

K.J. QUINN GRAPHED SAMPLING DATA, 1987 TO 1990 FROM RECOVERY WELL

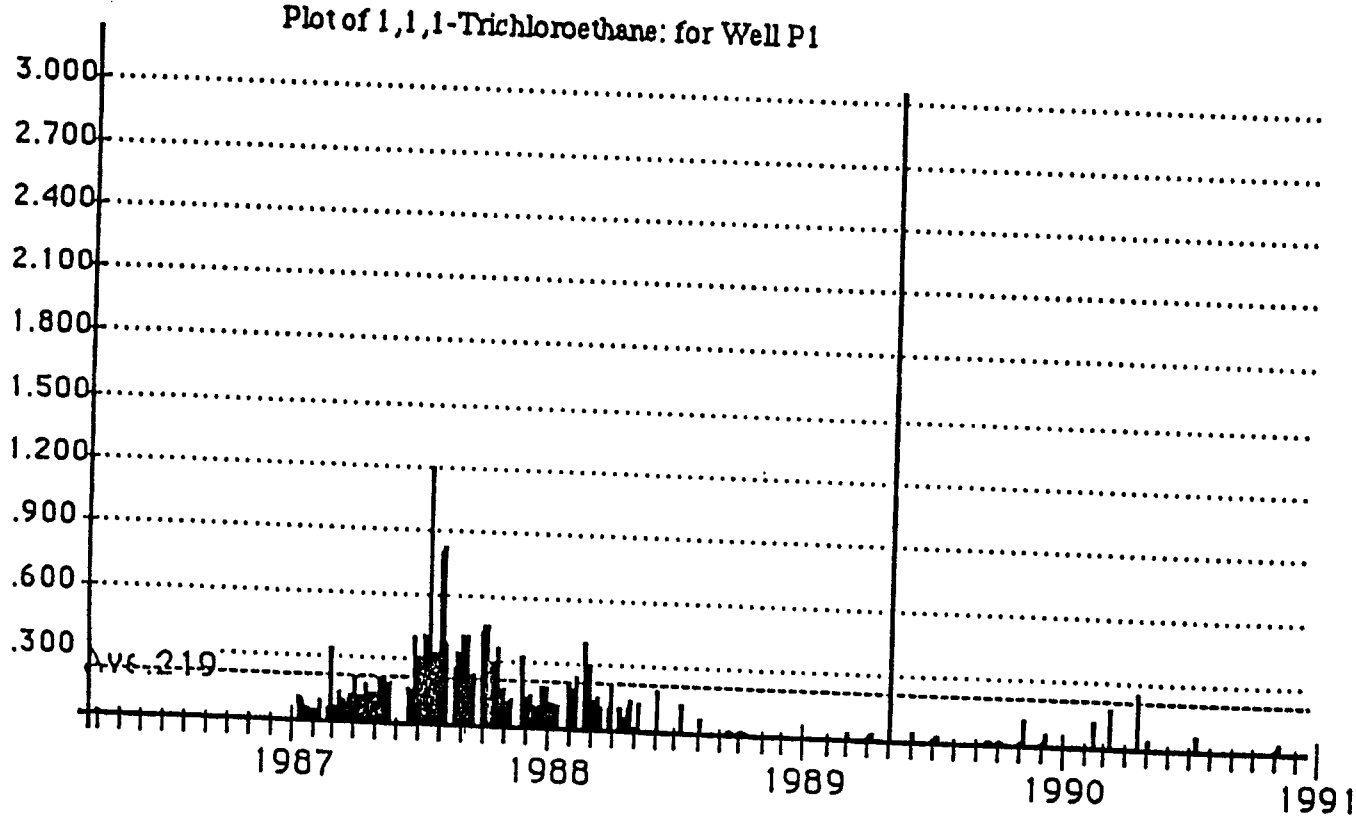

Plot of Tetrah ofuran: for Well P1
1.100
1.000
.900
.800
.700
.600
.500
.400
.300
.200
.100
VC .091
1987
1988
1989
1990
1991

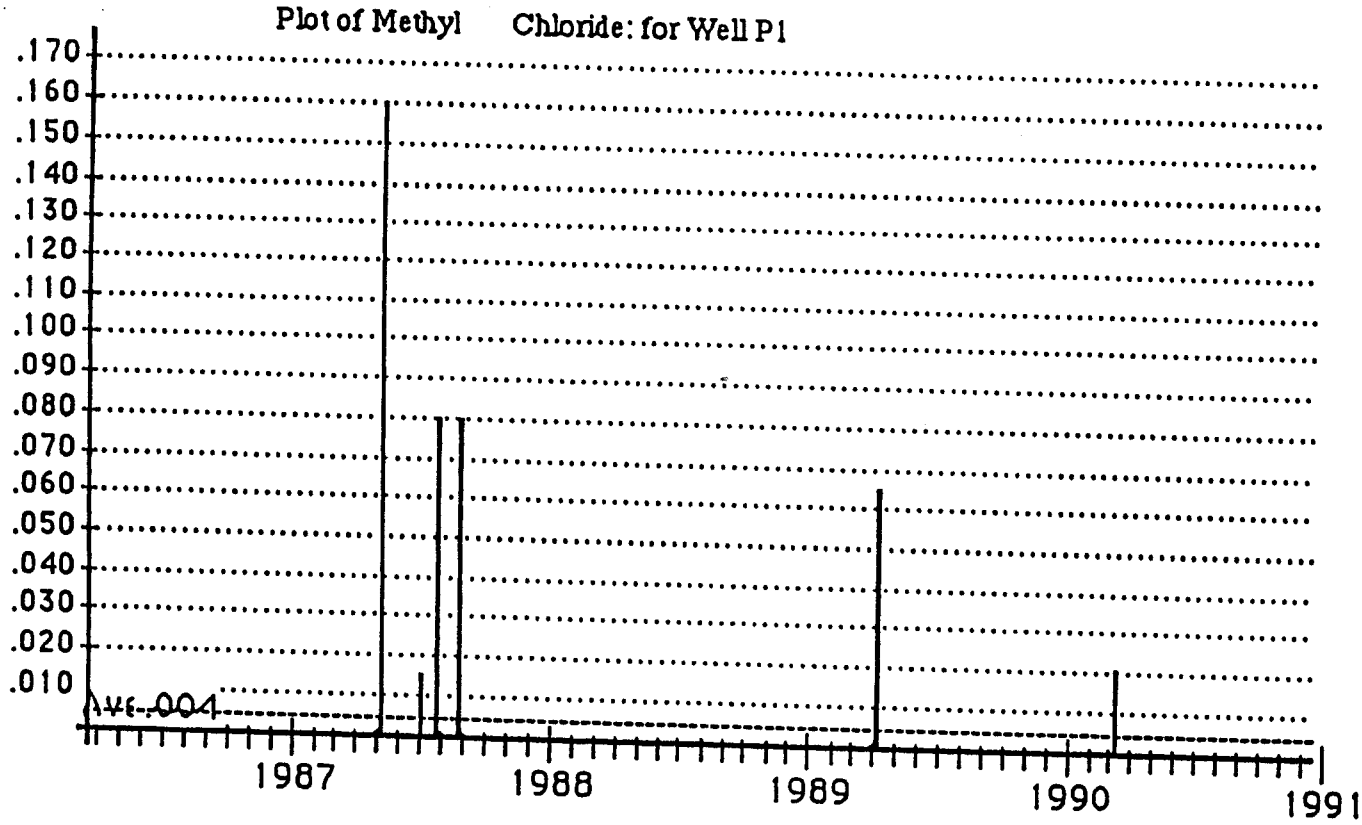

Plot of Chloroethane: for Well P1
.066
.060
.054
.048
.042
.036
.030
.024
.018
.012
.006
VC .012
1987
1988
1989
1990
1991

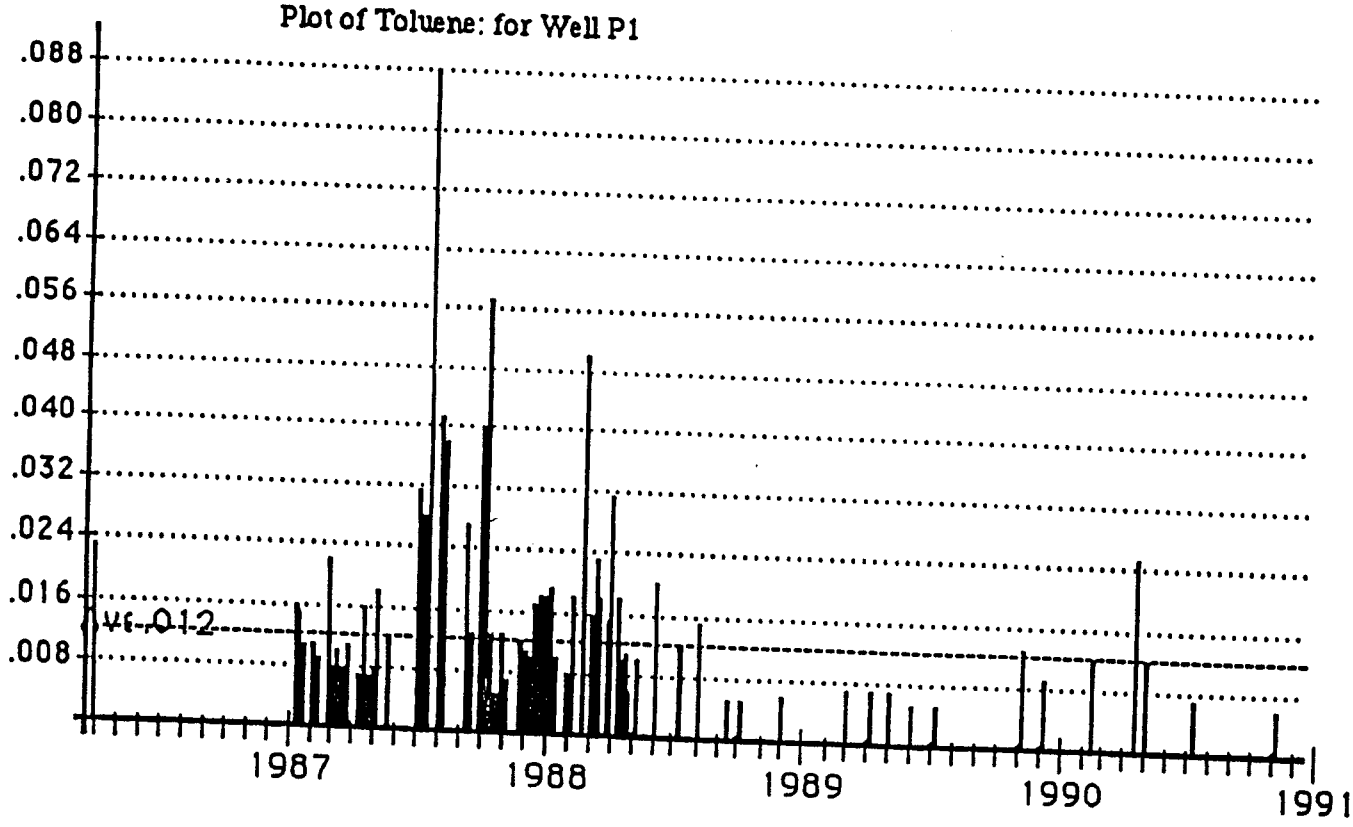
Plot of 1,1-Dich'oroethane: for Well P1

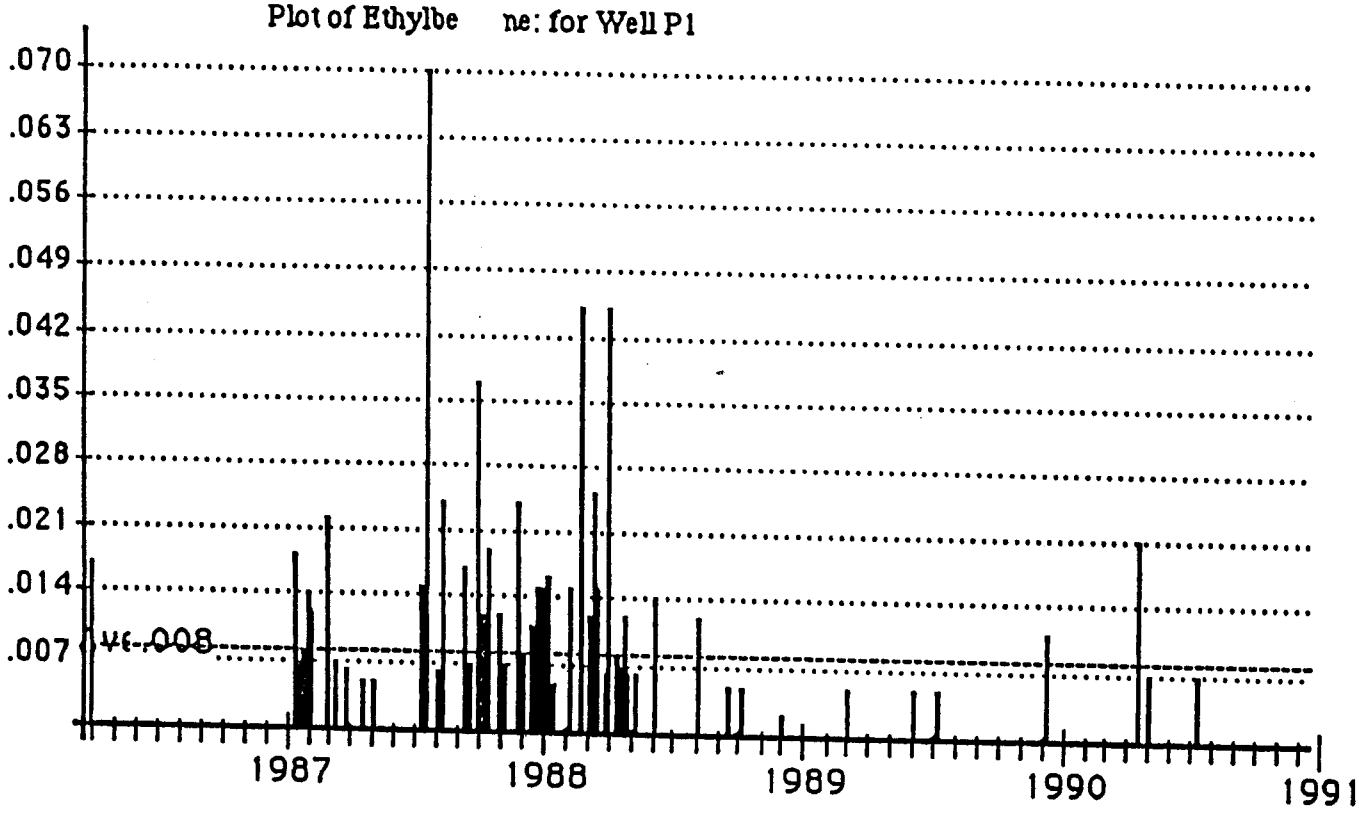


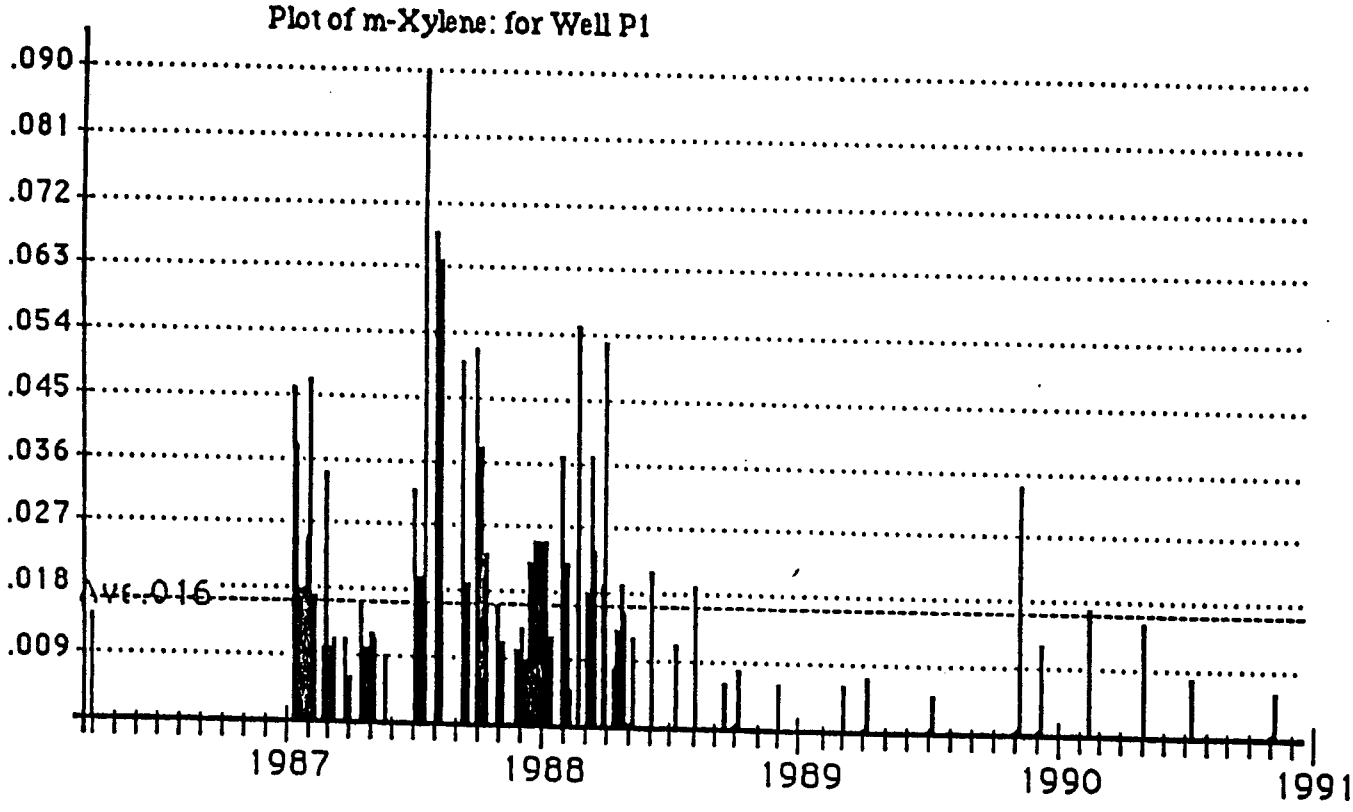
Plot of 1,1,1-Trichloroethane: for Well P1

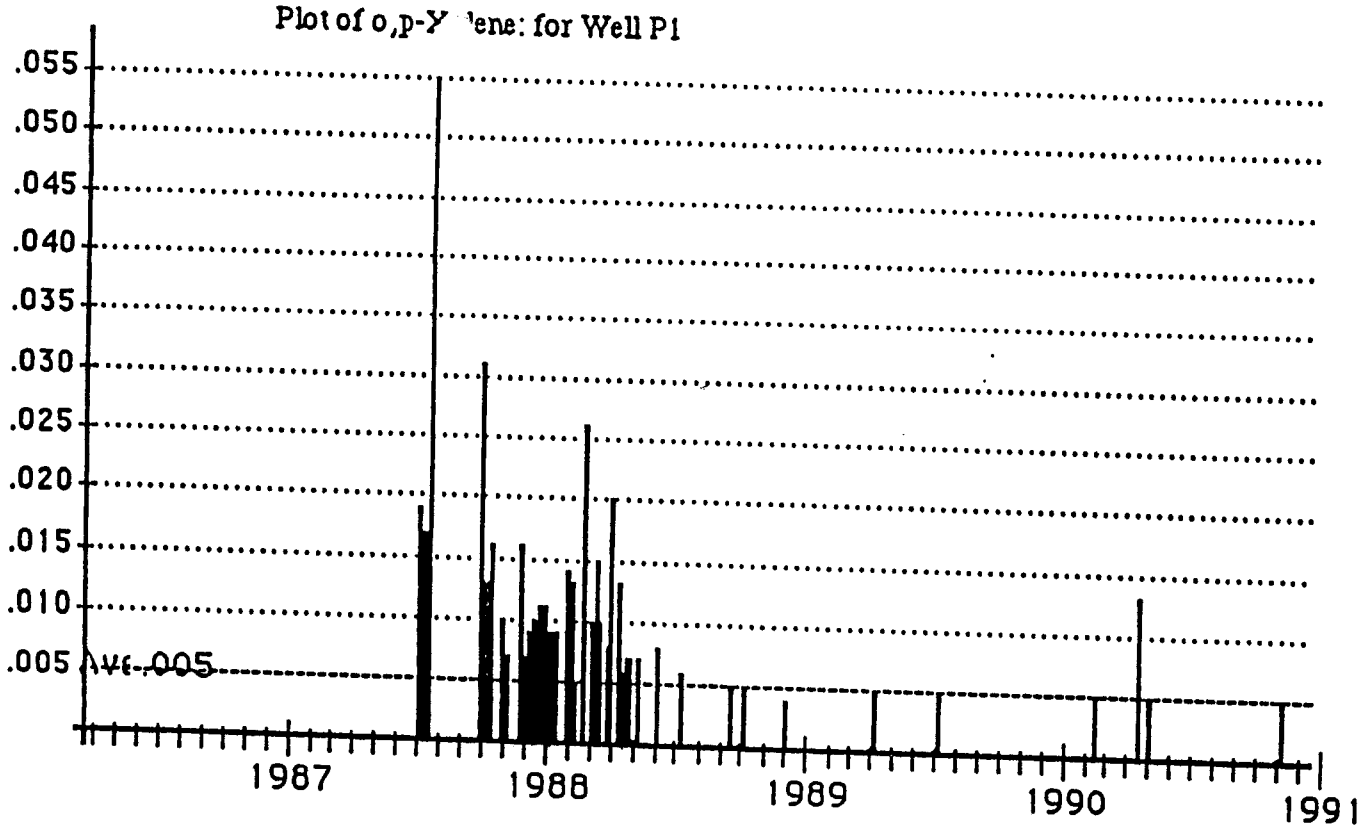


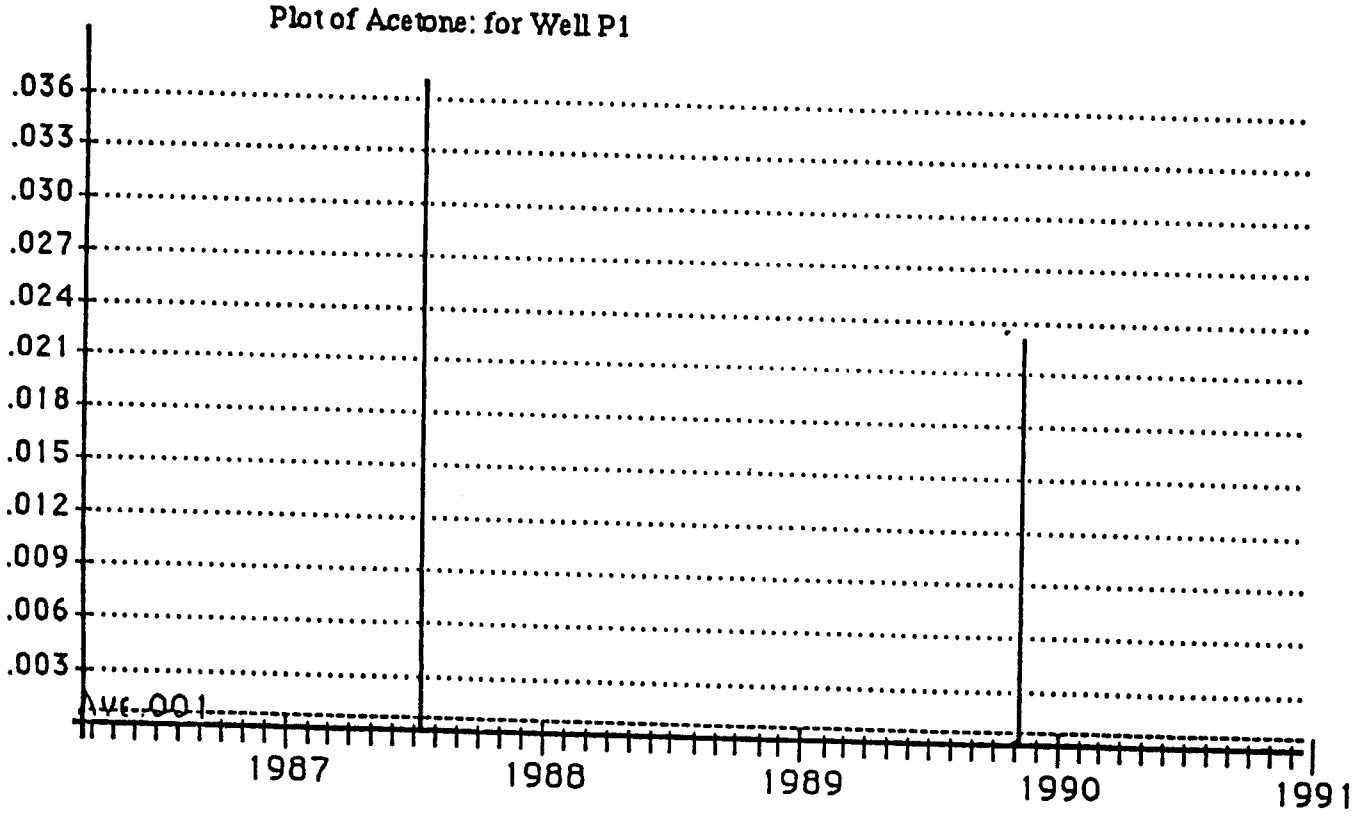

Plot of Methyl Chloride: for Well P1
.170
.160
.150
.140
.130
.120
.110
.100
.090
.080
.070
.060
.050
.040
.030
.020
.010
.004
1987
1988
1989
1990
1991

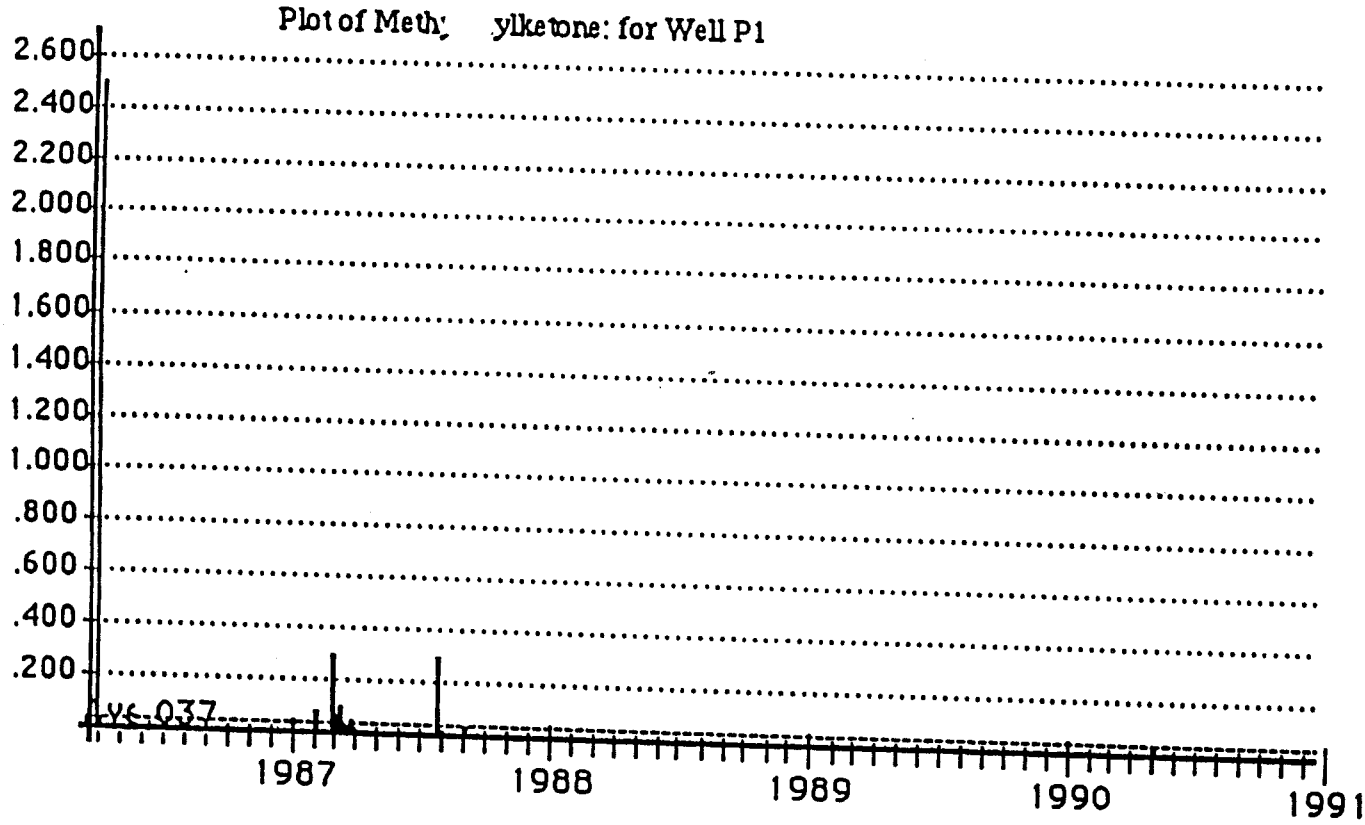

Plot of Toluene: for Well P1
.088
.080
.072
.064
.056
.048
.040
.032
.024
.016
.008
.012
1987
1988
1989
1990
1991

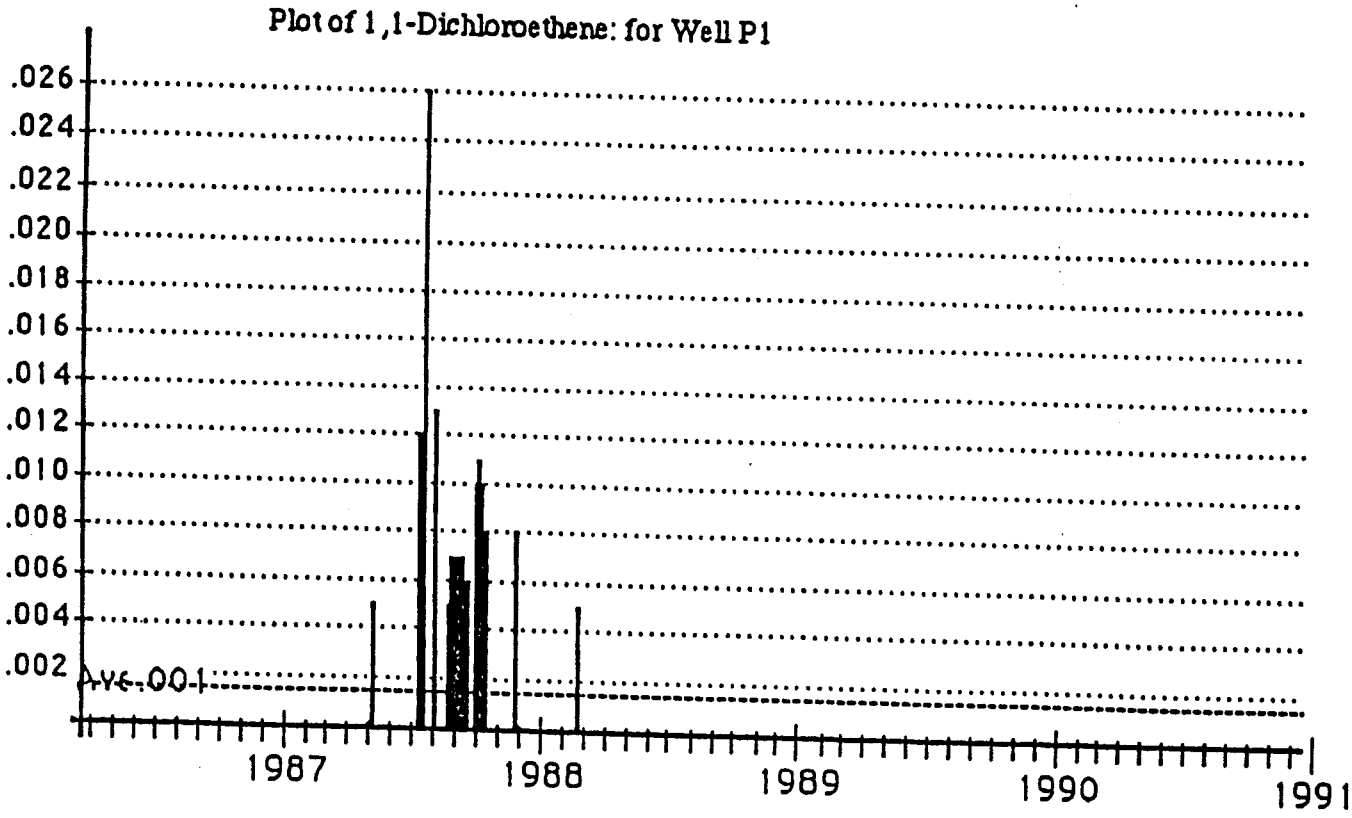

Plot of Ethylbe ne: for Well P1
.070
.063
.056
.049
.042
.035
.028
.021
.014
.007
ve-.008
1987
1988
1989
1990
1991

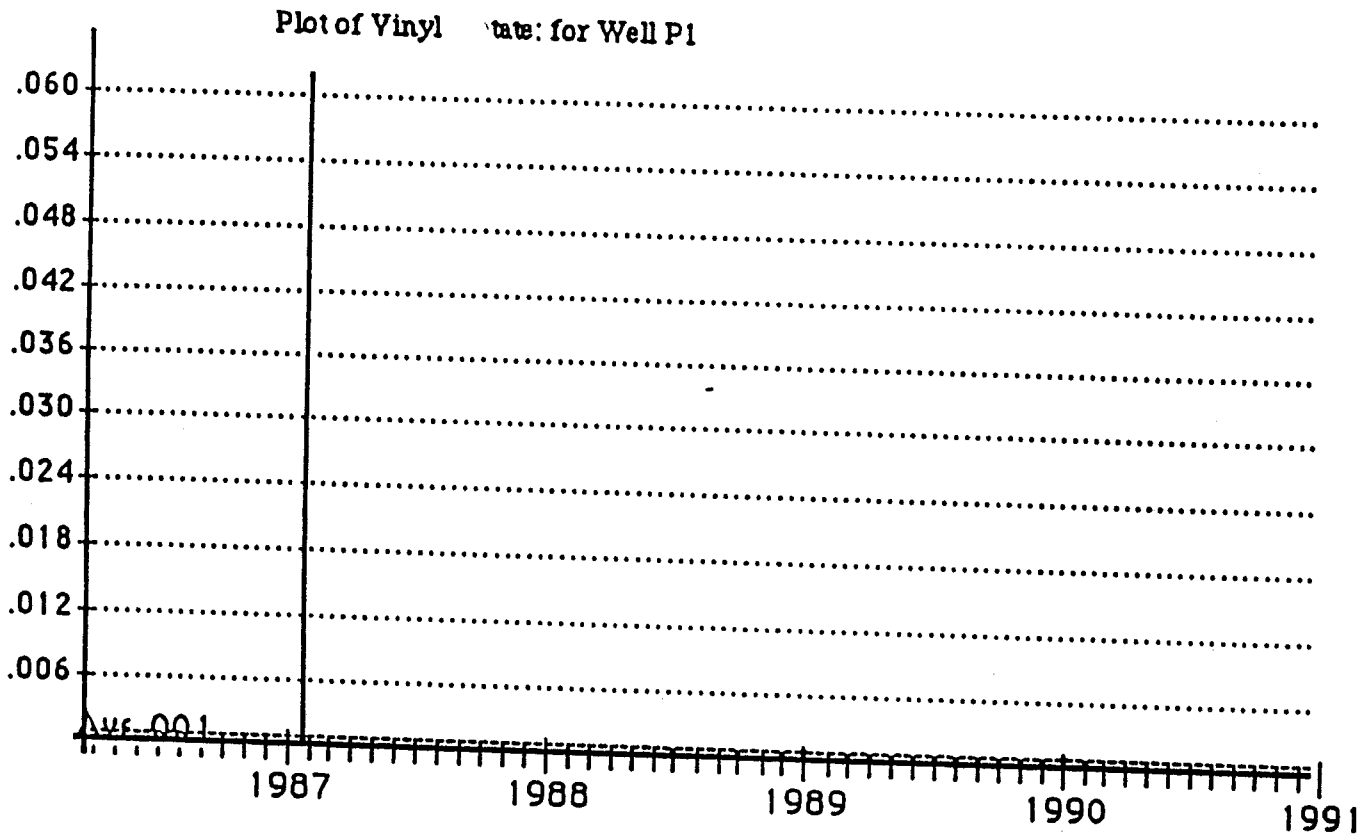

Plot of m-Xylene: for Well P1
.090
.081
.072
.063
.054
.045
.036
.027
.018
.009
ve-.016
1987
1988
1989
1990
1991

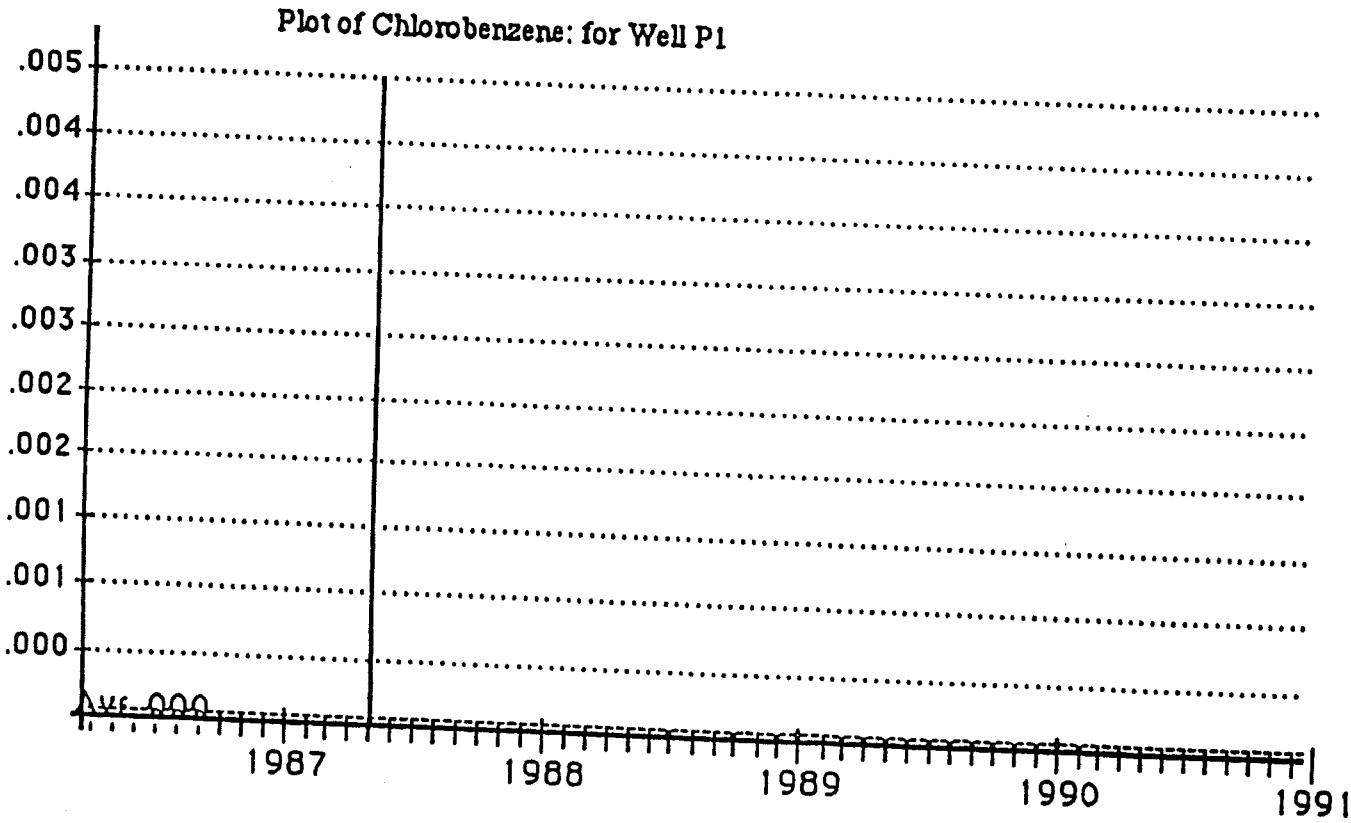

Plot of o,p-Y 'ene: for Well P1
.055
.050
.045
.040
.035
.030
.025
.020
.015
.010
.005
Ave.005
1987
1988
1989
1990
1991

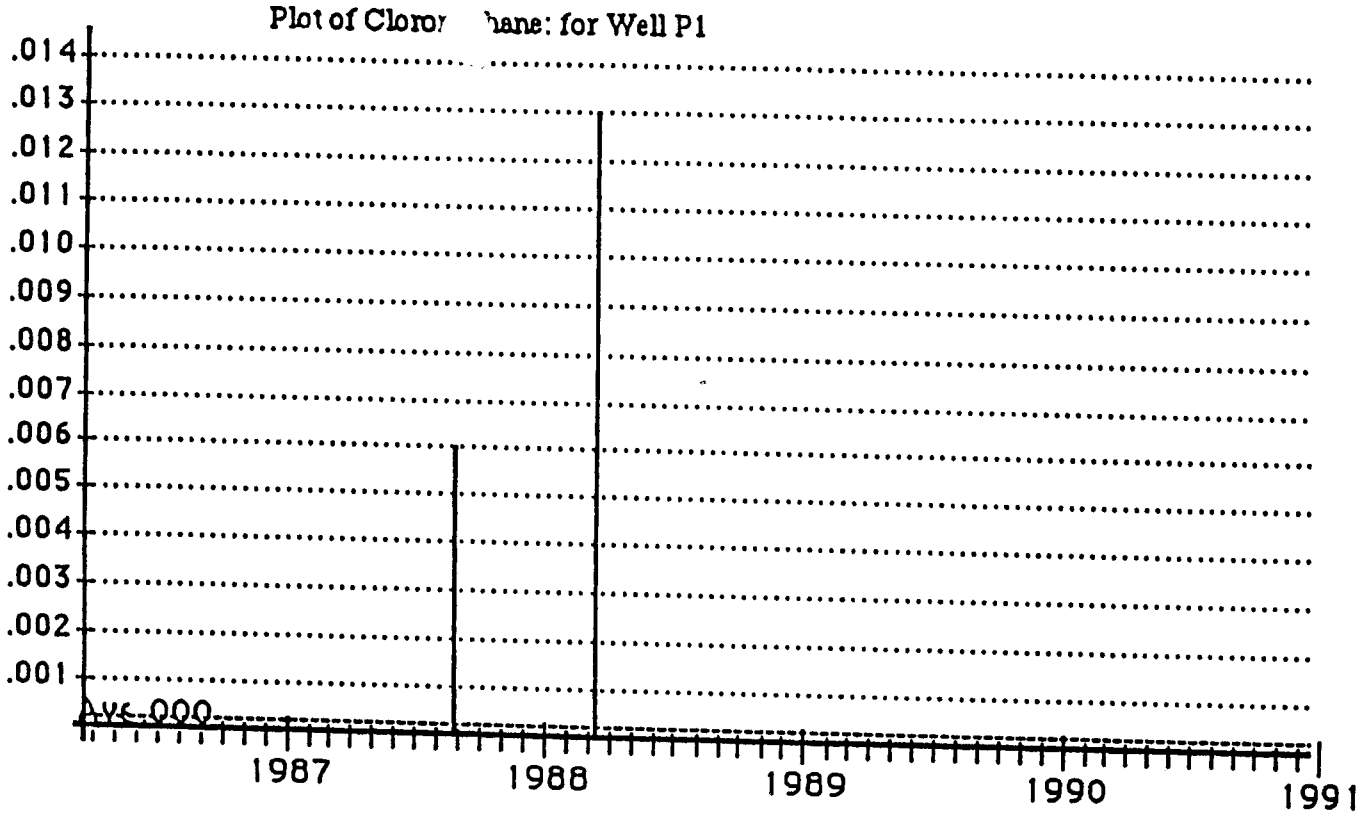

Plot of Acetone: for Well P1
.036
.033
.030
.027
.024
.021
.018
.015
.012
.009
.006
.003
Ave.001
1987
1988
1989
1990
1991

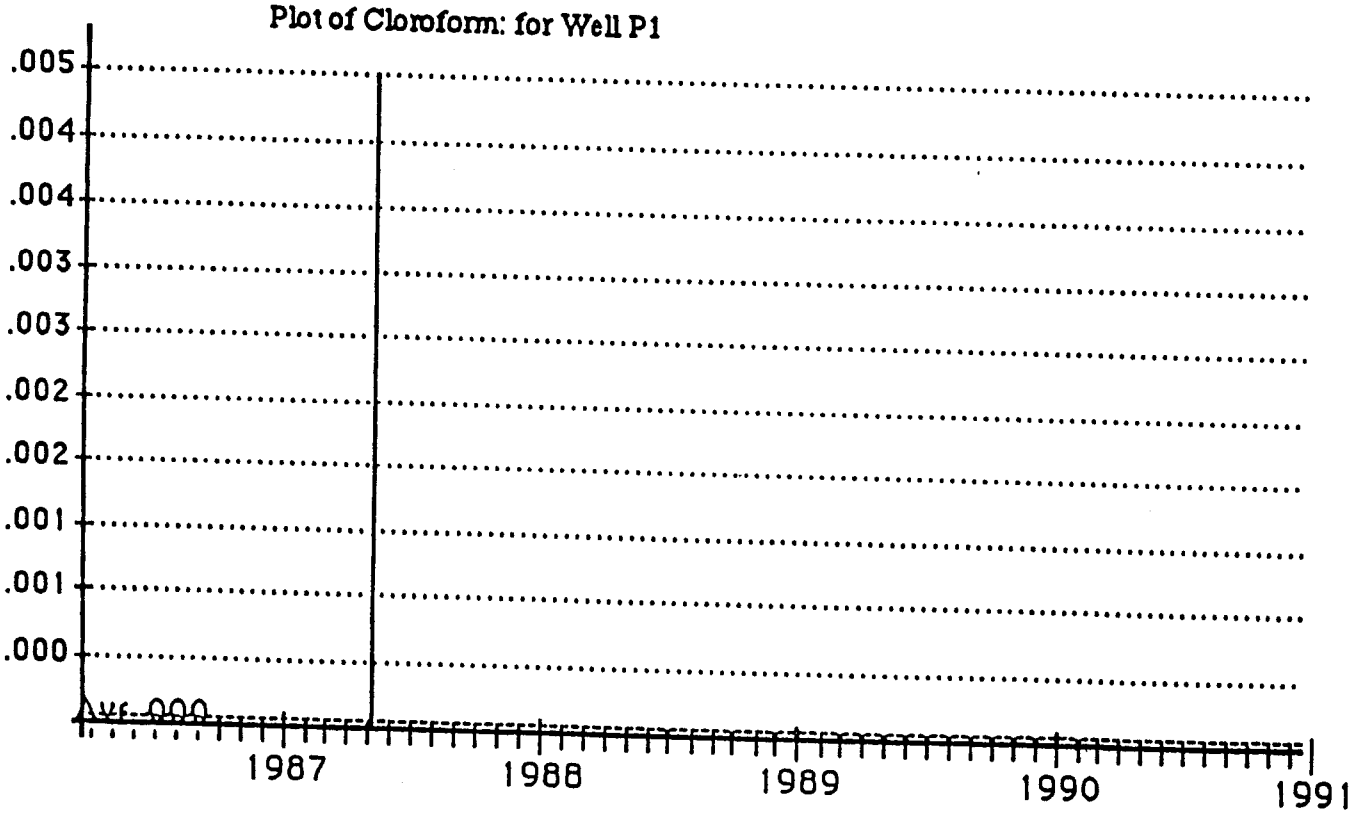

Plot of Meth; ylketone: for Well P1
2.600
2.400
2.200
2.000
1.800
1.600
1.400
1.200
1.000
.800
.600
.400
.200
AVE=.037
1987
1988
1989
1990
1991

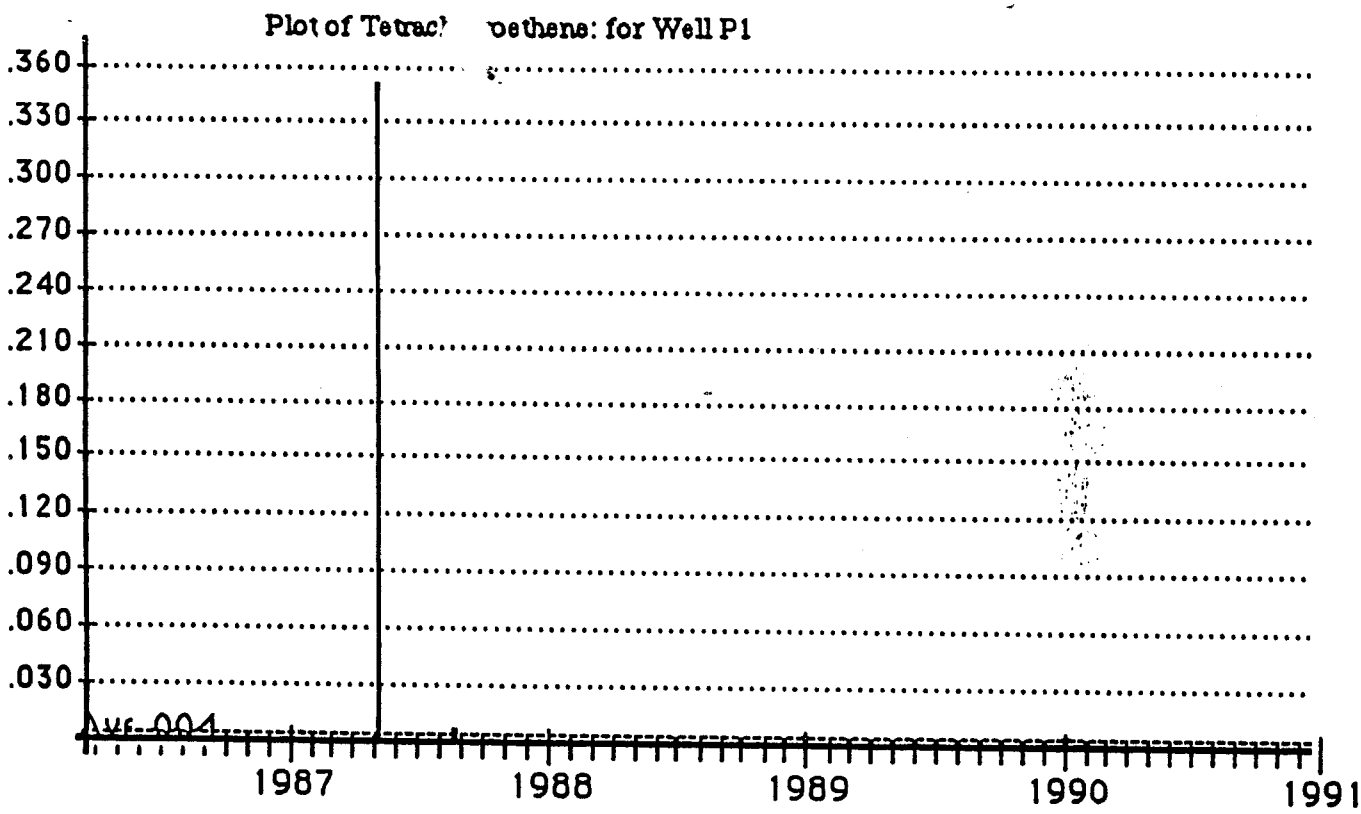

Plot of 1,1-Dichloroethene: for Well P1
.026
.024
.022
.020
.018
.016
.014
.012
.010
.008
.006
.004
.002
AVE=.001
1987
1988
1989
1990
1991


Plot of Vinyl tate: for Well P1
.060
.054
.048
.042
.036
.030
.024
.018
.012
.006
Ave-001
1987
1988
1989
1990
1991


Plot of Chlorobenzene: for Well P1
.005
.004
.004
.003
.003
.002
.002
.001
.001
.000
Ave-000
1987
1988
1989
1990
1991


Plot of Cloro hane: for Well P1
.014
.013
.012
.011
.010
.009
.008
.007
.006
.005
.004
.003
.002
.001
Avg .000
1987
1988
1989
1990
1991


Plot of Cloroform: for Well P1
.005
.004
.004
.003
.003
.002
.002
.001
.001
.000
Avg .000
1987
1988
1989
1990
1991


Plot of Tetrac' oethene: for Well P1
.360
.330
.300
.270
.240
.210
.180
.150
.120
.090
.060
.030
1987
1988
1989
1990
1991