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VOLATILE ORGANIC COMPOUNDS IN NARRAGANSETT BAY, RHODE ISLAND

by

Stuart G. Wakeham, Jeffrey T. Goodwin
and
Alan C. Davis

WOODS HOLE OCEANOGRAPHIC INSTITUTION
Woods Hole, Massachusetts 02543

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Approved for Distribution:

Robert B. Gagosian, Acting Chairman
Department of Chemistry

ABSTRACT

Volatile organic compounds (VOC) have been determined in Narragansett Bay, Rhode Island, water samples as part of an investigation into the sources, fates, and transport of volatile organic compounds in estuarine and coastal seawater. This report tabulates the concentrations of a wide range of VOC along a transect in Narragansett Bay for two summer and two winter sampling cruises.

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INTRODUCTION

Coastal waters receive a variety of organic pollutants from municipal and industrial sources. A subset of these chemicals, volatile organic compounds (VOC or "volatiles") are defined operationally: They must be of sufficient low water solubility and high vapor pressure to be purged (stripped) from a water sample by a stream of finely divided gas bubbles; they must be adsorbable from the gas stream onto a trap; and they must be amenable to gas chromatographic analysis. Thus VOC have a variety of molecular structures of low to medium polarity in the volatility range bracketed by n-hexane and n-octadecane. Several major structural classes are included: alkanes, alkenes, aromatic hydrocarbons; halogenated alkanes, alkenes, and aromatic hydrocarbons; aldehydes, and organic sulfur compounds. Many of these compounds are toxic and thus potentially harmful to marine ecosystems, so there is substantial interest in elucidating the sources, persistence, fates, and transport mechanisms for these chemicals in coastal areas.

Several approaches have been taken to study VOC in the coastal environment. A single site in Vineyard Sound, Mass., has been intensively monitored over a two year period to evaluate sources and sinks of alkanes, alkylaromatic hydrocarbons, aldehydes, alkylsulfides (Gschwend, 1979; Schwarzenbach et al., 1978; Gschwend et al., 1982; Mantoura et al., 1982). Alternatively, Sauer (Sauer et al., 1978; Sauer, 1978, 1980, 1981) measured volatile liquid hydrocarbons (C_6-C_{14}) at a number of coastal, shelf, and open ocean sites in the Gulf of Mexico, but on a more limited time scale. Helz and Hsu (1978) determined C_1 - and C_2 -halocarbons in Chesapeake Bay along a salinity and pollution gradient from a point source. Field measurements such as these are necessary

to verify the fate of volatiles predicted by laboratory studies and model calculations (e.g. Mackay, 1978; Smith et al., 1980; Dilling, 1977; Bouwer et al., 1981).

We have been addressing the sources, fates, and transport of volatile organic compounds in the coastal environment via a dual approach. To assess spatial and temporal variations in volatiles distributions in an estuary, we have made a series of field measurements on a transect along a salinity/pollution gradient in Narragansett Bay, Rhode Island. As field studies alone cannot lead to a complete understanding of the biogeochemistry of VOC, we have also been conducting controlled microcosm VOC experiments at the Marine Ecosystems Research Laboratory (MERL), University of Rhode Island (Pilson et al., 1977; Santschi, 1982). These experiments help to define better the fate and persistence of volatiles in the estuary and to verify conclusions drawn from field observations.

This report is primarily a tabulation of an extensive set of volatile organic compound concentration data obtained in Narragansett Bay over two years. A detailed discussion of the data and its geochemical interpretation has been presented elsewhere (Wakeham et al., 1982).

METHODS

Narragansett Bay is a temperate, well-mixed, plankton-based estuarine ecosystem on the Rhode Island coast (Fig. 1). Its physical and biological characteristics are described by Hicks (1959) and Kremer and Nixon (1978). Narragansett Bay has a length of about 45 km and a maximum width of 18 km, an area of 270 km², and a volume of ca. 2.6×10^9 m³. Mean depth in the bay is 9 m, and averages 7.5 m and 15.2 m in West and East Passages, respectively.

Figure 1. Narragansett Bay, Rhode Island, and sampling locations for volatile organic compounds.

Tides are semidiurnal with a mean of 1.1 m at the mouth of the bay and 1.4 m at the head of the bay. The tidal prism is about 13% of the mean volume of Narragansett Bay and greater than 250 times the mean total river inflow over a tidal cycle. Residence time for water in the bay is estimated at about 30 days, and outflow into Rhode Island Sound is split ca. 40% through West Passage and 60% through East Passage. The bay is well-mixed by a combination of winds and tides, so that only in summer is there a significant thermocline and salinity gradient, and then only in the upper bay (Table 1). Annual water temperatures range from about $-0.5 - 24^{\circ}\text{C}$, and salinities vary from about $20^{\circ}/\text{oo}$ in the Providence River to $32-33^{\circ}/\text{oo}$ at the mouth of the bay.

The dominant freshwater input to Narragansett Bay is the Providence River with a mean annual flow of $1 \times 10^9 \text{ m}^3$, ca. 10% of the total freshwater input to the bay. Three sewage treatment facilities discharge combined municipal, industrial, and stormwater effluents into the Providence River and upper Narragansett Bay. The largest is at Fields Point and delivers $8.4 \times 10^7 \text{ m}^3/\text{yr}$, or 60% of the total sewage effluent entering the bay. Analysis of this effluent indicated that 100-500 metric tons of petroleum hydrocarbons enter the Providence River annually (Farrington and Quinn, 1973; Van Vleet and Quinn, 1977, 1978); however there are no reports in the literature of annual inputs of other organic compounds via the Fields Point effluent. Effluents from a small chemical specialties manufacturing plant also enter Narragansett Bay between Sabin Point and Conimicut Point via the Pawtuxet River.

Sampling

Water samples for analysis of volatile organic compounds were collected along a transect in Narragansett Bay (Fig. 1) during two summers (1 August

Table 1

Table 1. Hydrographic Data for Narragansett Bay Sampling Cruises.

Station	8/1/79		2/25/80		7/21/80		2/23/81	
	T(°C)	S(‰)	T(°C)	S(‰)	T(°C)	S(‰)	T(°C)	S(‰)
I. Narragansett Bay								
Providence River								
1 m	--	--	1.8	25.4	26.1	23.3	5.0	10.0
4 m	--	--	1.1	29.2	--	--	--	--
Fields Point Outfall								
1 m	--	--	2.0	26.0	--	--	--	--
Fields Point								
0 m	26.0	21.6	1.5	26.6	26.3	24.0	4.1	15.0
3 m	--	--	--	--	24.2	26.7	3.6	25.6
5 m	23.3	27.2	1.1	29.5	22.8	28.6	--	--
7 m	--	--	--	--	22.4	29.3	--	--
11 m	--	--	1.1	30.8	20.6	31.1	--	--
Sabin Point								
0 m	27.2	20.9	1.7	27.0	26.4	24.9	3.6	25.2
3 m	26.8	24.3	--	--	24.2	27.0	3.8	26.9
5 m	25.3	26.9	1.0	30.2	22.5	29.8	3.4	28.7
7 m	--	--	--	--	21.4	30.2	--	--
10 m	--	--	--	--	20.8	30.8	--	--
Conimicut Point								
0 m	26.8	25.5	1.9	26.9	26.2	27.7	4.3	22.4
3 m	26.0	26.8	--	--	25.0	29.1	3.2	29.3
5 m	25.0	27.5	1.2	30.0	22.1	30.4	--	--
7 m	22.1	28.8	--	--	--	--	--	--
Ohio Ledge								
0 m	--	--	1.5	29.0	27.0	29.2	3.5	27.2
3 m	--	--	--	--	25.7	29.8	3.3	28.5
5 m	--	--	1.4	30.4	22.6	30.8	3.3	28.9
Conanicut Point								
0 m	25.5	29.6	1.4	30.3	24.3	31.3	3.2	29.7
3 m	25.3	29.7	--	--	24.1	31.4	3.3	29.4
5 m	22.0	30.0	2.0	31.2	23.9	31.5	3.2	29.4
7 m	20.6	30.2	1.8	31.7	21.1	31.7	--	--

Table 1 (Continued)

Station	8/1/79		2/25/80		7/21/80		2/23/81	
	T(°C)	S(‰)	T(°C)	S(‰)	T(°C)	S(‰)	T(°C)	S(‰)
MERL								
0 m	22.5	30.4	--	--	22.3	31.9	3.6	29.0
3 m	22.2	30.4	--	--	21.9	31.9	3.4	29.4
5 m	21.1	30.5	--	--	21.3	31.8	2.7	30.3
7 m	19.3	30.6	--	--	20.7	32.0	2.2	31.0
10 m	19.1	30.6	--	--	19.8	32.1	--	--
13 m	18.8	30.8	--	--	19.6	32.1	--	--

II. Rhode Island Sound

7/22/81

Station 2

1 m
19 m
32 m

20.5 32.5
13.1 32.8
11.2 32.9

Station 1

1 m
10 m
20 m
30 m
40 m

21.5 32.7
20.3 32.7
12.5 33.0
11.3 33.1
10.7 33.1

III. Oceanus Cruise 86/2 (9/14/80)
(40°42'N, 71°21'W)

Station 11

1 m
50 m

T(°C) S(‰)
20.2 --
9.5 --

1979 and 22 July 1980) and two winters (25 February 1980 and 23 February 1981). Stations were occupied at low tide $\pm$ 1 hour. Samples were also obtained at two locations in Rhode Island Sound on 21 July 1980, and at a station about 70 km offshore (OC 86/2-11) on 14 September 1980. Near-surface and near-bottom samples were collected at all stations.

All Narragansett Bay samples and the surface samples from Rhode Island Sound were collected by lowering a clean, stoppered, and air-filled 2- or 5-liter glass bottle on a hand line to the prescribed depth, at which the stopper was removed by pulling a cord attached to the stopper. Sampling bottles were carefully rinsed with water from the depth being sampled before collection of the sample for analysis. The filled bottle was recovered and quickly stoppered without headspace. Near-bottom samples in Rhode Island Sound and both samples at the offshore station were collected with a glass Bodman sampler (Gagosian et al., 1979) and carefully transferred to clean, rinsed 5-liter bottles. All samples were returned to the laboratory as soon as possible for analysis within 72 hours; any storage was at 4°C. Care was taken during all sampling to minimize contamination from the sea-surface microlayer and from fuel and exhaust from the ship by sampling about 0.5 m below the water surface and on the windward side of the boat. At the time of sampling, temperature and salinity measurements were made (Table 1).

Analysis

Volatile organic compounds were isolated from unfiltered water samples and enriched by the closed-loop gas stripping/adsorption technique of Grob and Zürcher (1976). The volatile components were purged (stripped) in the sampling bottles by large volumes of headspace air as finely divided bubbles and ad-

sorbed from the gas stream onto a trap containing 1.5 mg of activated charcoal. Stripping was for 2 hours during which the sample was heated to 35°C to enhance volatilization and the gas stream leading to the charcoal trap was heated to 65°C to lower its relative humidity and thus optimize adsorption. The charcoal trap was subsequently extracted with about 15 μ l of distilled carbon disulfide. An aliquot of the CS₂ extract was analyzed by high resolution glass capillary gas chromatography (GC) using a Carlo Erba FTV 2150 gas chromatograph modified for simultaneous flame ionization (FID) and electron capture (ECD; Carlo Erba ECD-HT 20 and 250 Control Module) detection. Gas chromatographic separations of the VOC mixtures were made with a 40 m x 0.3 mm i.d. capillary pretreated with barium carbonate and coated with Pluronic 121 (Grob and Grob, 1977). Splitless injections were made with the column held at about 5°C in an ice bath. Following elution of the solvent, the column oven was programmed at 2°/min up to 180°C. Hydrogen was used as carrier gas at 0.5 kg/cm² back pressure (about 1.5 ml/min or a linear velocity of about 0.3 m/sec at 35°C) so that n-octadecane eluted at about the maximum column temperature. The injector temperature was 225°C and FID and ECD temperatures were 250°C. Argon/methane make-up gas was used with the ECD.

Identification of the major volatile organic compounds was by co-injection experiments using authentic standards and/or by computerized glass capillary gas chromatography/mass spectrometry (GC/MS). The same Pluronic column was directly interfaced to a Finnigan 3200 quadrupole mass spectrometer using a glass capillary interface designed by Blum and Richter (1977; Frew and Sawdo, 1980). Electron impact and methane chemical ionization mass spectra were obtained. Mass spectral data were acquired and processed with Finnigan 6000 and, more recently, Incos 2300 data systems.

The VOC were quantified using electronically-measured (Columbia Scientific Instruments Supergrator 3) peak heights from the FID signal. Peak heights were preferred to peak areas because even with the high resolution capillary column, many components were under-resolved, resulting in inaccurate areas. Concentrations of sample components were calculated relative to chloroalkane internal standards (1-chlorohexane, 1-chlorodecane, and 1-chlorotetradecane) which were added to the water samples prior to stripping to correct for variations in stripping efficiency. A second set of standards (1-chlorooctane and 1-chlorododecane) was spiked onto the charcoal traps after stripping but before extraction to monitor stripping efficiency. FID response factors were determined using synthetic mixtures of a variety of volatiles. Recoveries were determined by spiking pre-stripped seawater with a suite of representative compounds at levels of 5, 10, and 50 ng/L per component and were usually better than 80% with reproducibilities of about $\pm 15\%$. Detection limits by FID were about 0.5 ng/L for most VOC, with major exceptions being the halocarbons which had higher FID detection limits but much lower ECD detection limits. Laboratory blanks were routinely processed with the samples to ensure that there was no interfering contamination.

DISCUSSION (For details see Wakeham et al., 1982)

Volatile organic compounds recovered from Narragansett Bay water samples consisted of several hundred components. Typical flame ionization detector chromatograms of VOC from samples at Fields Point and MERL during summer and winter are compared in Fig. 2. The major components are listed in Table 2. The dominant compound classes observed were: chlorinated C_2 -hydrocarbons, chlorinated benzenes and toluenes, aromatic and alkylaromatic hydrocarbons, aliphatic hydrocarbons, and alkylsulfides. Both anthropogenic and biogenic

Figure 2a. Gas chromatograms of VOC at Fields Point and MERL, 7/22/80; 80 ng/l and 10 ng/l chloroalkane standards at Fields Point and MERL, respectively.

Figure 2b. Gas chromatograms of VOC at Fields Point and MERL, 2/23/81; 80 ng/l and 10 ng/l chloroalkane standards at Fields Point and MERL, respectively.

Table 2. Major Volatile Organic Compounds in
Narragansett Bay.

Peak Number	Compound	Peak Number	Compound
1	1,1,1-Trichloroethane	30	Dimethyltrisulfide (DMTS)
2	Carbon tetrachloride	31	1-Chlorooctane ^b
3	Benzene	32	Bromoform
4	Bromochloromethane	33	1,2,3-Trichloropropane
5	Trichloroethylene	34	1,2,3-Trimethylbenzene
6	Dimethyldisulfide (DMDS)	35	1,3-Dichlorobenzene
7	Toluene	36	C ₄ -Benzene
8	Bromotrichloromethane	37	1,4-Dichlorobenzene
9	Tetrachloroethylene	38	1,2-Dichlorobenzene
10	Octatriene ^a	39	C ₄ -Benzene
11	1-Chlorohexane ^b	40	1-Chlorodecane ^b
12	Dibromomethane	41	1,2,4-Trichlorobenzene
13	Bromodichloromethane	42	Naphthalene
14	Ethylbenzene	43	n-Tetradecane
15	1,4-Dimethylbenzene	44	1,2,3-Trichlorobenzene
16	1,3-Dimethylbenzene	45	n-Pentadecane
17	2-Chlorothiophene	46	2-Methylnaphthalene
18	Chlorobenzene	47	1-Methylnaphthalene
19	1,2-Dimethylbenzene	48	1-Chlorododecane ^b
20	Isopropylbenzene	49	n-Hexadecane
21	Dibromochloromethane	50	Pristane
22	n-Propylbenzene	51	n-Heptadecane
23	1-Ethyl-4-methylbenzene	52	1-Chlorotetradecane ^b
24	1-Ethyl-3-methylbenzene	53	1-Methyl-2-(4-methylphenoxy) benzene
25	Decahydronaphthalene		
26	1,3,5-Trimethylbenzene	54	Phytane
27	1-Ethyl-2-methylbenzene	55	n-Octadecane
28	1-Chloro-4-methylbenzene	56	1-Methyl-3-(4-methylphenoxy) benzene
29	1,2,4-Trimethylbenzene	57	n-Nonadecane

a. C₈H₁₂ exact structure not known.

b. Chloroalkane internal standards.

sources are indicated. Distributions of VOC along the transect in the bay indicate that industrial and municipal sewage effluents discharged into the head of the bay is a major source of these compounds, especially the chlorinated and aromatic hydrocarbons. Additional non-point source inputs of aromatic hydrocarbons are also likely. Most of the alkyl sulfides and the aliphatic hydrocarbons probably are mostly biogenic in origin.

Concentration trends in the bay result from a balance between source and removal functions. Less information is available regarding input rates than removal processes and rates. Dilution of VOC-rich upper bay water by volatiles-poor water from Rhode Island Sound cannot account for the observed volatiles distributions. Sorption onto suspended particulate matter and subsequent sedimentation may be important only for aliphatic hydrocarbons. On the other hand, volatilization from the water column is probably the major process removing all classes of VOC from the bay. Biodegradation appears to be a very important process controlling aromatic hydrocarbon distributions in summer.

PRESENTATION FORMAT

VOC concentration data for the four sampling periods are presented chronologically and in tabular form. Several samples not collected during the transect study are included: 1) water from Chemotaxis Dock, 8/10/79 (Vineyard Sound, MA); 2) water from MERL tank 1, 2/25/80; 3) samples collected off the MERL facility over a tidal cycle, 3/2-3/82. While these samples do not relate directly to the transect samples, they were collected for comparison and are thus included.

In the tables which follow, a blank indicates that a compound was not quantified, either because it was not present, because it could not be identified with reasonable assurance, or merely because that compound was not being quantified at that time. Concentrations listed as < 1 ng/l often were initially quantified at lower levels, but lower concentrations probably are not meaningful.

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Sample - Fields Point - 0m
Date - 8/1/79
Standards Added - 107 ng/L

Sample - Fields Point - 4m
Date - 8/1/79
Standards Added - 80 ng/L

Compound	Conc (ng/L)	Compound	Conc (ng/L)
1,1,1-Trichloroethane	15200	1,1,1-Trichloroethane	5500
Carbon tetrachloride		Carbon tetrachloride	
Benzene		Benzene	
Trichloroethylene	18800	Trichloroethylene	7900
Dimethyldisulfide (DMDS)	63	Dimethyldisulfide (DMDS)	12
Toluene	26	Toluene	22
Tetrachloroethylene	4500	Tetrachloroethylene	3600
Octatriene	19	Octatriene	19
Ethylbenzene	21	Ethylbenzene	*
p-Xylene	11	p-Xylene	*
m-Xylene	11	m-Xylene	*
Chlorobenzene	17	Chlorobenzene	25
o-Xylene	14	o-Xylene	*
Isopropylbenzene	1	Isopropylbenzene	
n-Propylbenzene	1	n-Propylbenzene	
1-Ethyl-4-methylbenzene	2	1-Ethyl-4-methylbenzene	
1-Ethyl-3-methylbenzene	1	1-Ethyl-3-methylbenzene	
1,3,5-Trimethylbenzene	5	1,3,5-Trimethylbenzene	
1-Ethyl-2-methylbenzene	3	1-Ethyl-2-methylbenzene	5
1-Chloro-4-methylbenzene		1-Chloro-4-methylbenzene	
1,2,4-Trimethylbenzene	3	1,2,4-Trimethylbenzene	
Dimethyltrisulfide (DMTS)		Dimethyltrisulfide (DMTS)	
Bromoform		Bromoform	
1,2,3-Trimethylbenzene	2	1,2,3-Trimethylbenzene	4
1,3-Dichlorobenzene	9	1,3-Dichlorobenzene	3
1,4-Dichlorobenzene	51	1,4-Dichlorobenzene	24
n-Dodecane		n-Dodecane	16
1,2-Dichlorobenzene	32	1,2-Dichlorobenzene	
n-Tridecane		n-Tridecane	
1,2,4-Trichlorobenzene	300	1,2,4-Trichlorobenzene	98
Naphthalene	4	Naphthalene	
n-Tetradecane	5	n-Tetradecane	
1,2,3-Trichlorobenzene	29	1,2,3-Trichlorobenzene	18
n-Pentadecane	14	n-Pentadecane	7
2-Methylnaphthalene		2-Methylnaphthalene	
1-Methylnaphthalene		1-Methylnaphthalene	
n-Hexadecane	32	n-Hexadecane	18
Pristane	30	Pristane	18
n-Heptadecane	75	n-Heptadecane	35
Phytane	27	Phytane	24
n-Octadecane	44	n-Octadecane	25

* = 55 ng/L total for these compounds
(estimated).

Sample - Sabin Point - 0m
Date - 8/1/79
Standards Added - 80 ng/L

Compound	Conc (ng/L)
1,1,1-Trichloroethane	4700
Carbon tetrachloride	
Benzene	
Trichloroethylene	10100
Dimethyldisulfide (DMDS)	100
Toluene	25
Tetrachloroethylene	600
Octatriene	20
Ethylbenzene	3
p-Xylene	5
m-Xylene	7
Chlorobenzene	32
o-Xylene	7
Isopropylbenzene	< 1
n-Propylbenzene	< 1
1-Ethyl-4-methylbenzene	1
1-Ethyl-3-methylbenzene	1
1,3,5-Trimethylbenzene	3
1-Ethyl-2-methylbenzene	2
1-Chloro-4-methylbenzene	
1,2,4-Trimethylbenzene	2
Dimethyltrisulfide (DMTS)	< 1
Bromoform	
1,2,3-Trimethylbenzene	3
1,3-Dichlorobenzene	2
1,4-Dichlorobenzene	14
n-Dodecane	
1,2-Dichlorobenzene	12
n-Tridecane	
1,2,4-Trichlorobenzene	50
Naphthalene	3
n-Tetradecane	3
1,2,3-Trichlorobenzene	9
n-Pentadecane	8
2-Methylnaphthalene	
1-Methylnaphthalene	
n-Hexadecane	22
Pristane	17
n-Heptadecane	35
Phytane	20
n-Octadecane	20

Sample -Sabin Point - bottom - 4m
Date - 8/1/79
Standards Added - 80 ng/L

Compound	Conc (ng/L)
1,1,1-Trichloroethane	2200
Carbon tetrachloride	
Benzene	
Trichloroethylene	4700
Dimethyldisulfide (DMDS)	50
Toluene	36
Tetrachloroethylene	255
Octatriene	4
Ethylbenzene	6
p-Xylene	5
m-Xylene	7
Chlorobenzene	15
o-Xylene	2
Isopropylbenzene	
n-Propylbenzene	
1-Ethyl-4-methylbenzene	< 1
1-Ethyl-3-methylbenzene	< 1
1,3,5-Trimethylbenzene	2
1-Ethyl-2-methylbenzene	3
1-Chloro-4-methylbenzene	
1,2,4-Trimethylbenzene	1
Dimethyltrisulfide (DMTS)	2
Bromoform	
1,2,3-Trimethylbenzene	2
1,3-Dichlorobenzene	1
1,4-Dichlorobenzene	10
n-Dodecane	
1,2-Dichlorobenzene	7
n-Tridecane	
1,2,4-Trichlorobenzene	32
Naphthalene	2
n-Tetradecane	3
1,2,3-Trichlorobenzene	8
n-Pentadecane	7
2-Methylnaphthalene	
1-Methylnaphthalene	
n-Hexadecane	< 1
Pristane	15
n-Heptadecane	32
Phytane	< 1
n-Octadecane	19

Sample - Cominicut Point - 0m
Date - 8/1/79
Standards Added - 80 ng/L

Compound	Conc (ng/L)
1,1,1-Trichloroethane	2000
Carbon tetrachloride	
Benzene	
Trichloroethylene	4600
Dimethyldisulfide (DMDS)	97
Toluene	44
Tetrachloroethylene	685
Octatriene	< 1
Ethylbenzene	2
p-Xylene	6
m-Xylene	6
Chlorobenzene	48
o-Xylene	8
Isopropylbenzene	
n-Propylbenzene	
1-Ethyl-4-methylbenzene	
1-Ethyl-3-methylbenzene	
1,3,5-Trimethylbenzene	10
1-Ethyl-2-methylbenzene	4
1-Chloro-4-methylbenzene	
1,2,4-Trimethylbenzene	
Dimethyltrisulfide (DMTS)	17
Bromoform	
1,2,3-Trimethylbenzene	
1,3-Dichlorobenzene	< 1
1,4-Dichlorobenzene	17
n-Dodecane	
1,2-Dichlorobenzene	14
n-Tridecane	
1,2,4-Trichlorobenzene	66
Naphthalene	
n-Tetradecane	
1,2,3-Trichlorobenzene	13
n-Pentadecane	10
2-Methylnaphthalene	
1-Methylnaphthalene	
n-Hexadecane	17
Pristane	< 1
n-Heptadecane	34
Phytane	< 1
n-Octadecane	< 1

Sample - Conimicut Point - 3.5m
Date - 8/1/79
Standards Added - 40 ng/L

Compound	Conc (ng/L)
1,1,1-Trichloroethane	1640
Carbon tetrachloride	
Benzene	
Trichloroethylene	4600
Dimethyldisulfide (DMDS)	31
Toluene	24
Tetrachloroethylene	430
Octatriene	8
Ethylbenzene	2
p-Xylene	2
m-Xylene	6
Chlorobenzene	25
o-Xylene	5
Isopropylbenzene	
n-Propylbenzene	
1-Ethyl-4-methylbenzene	5
1-Ethyl-3-methylbenzene	< 1
1,3,5-Trimethylbenzene	3
1-Ethyl-2-methylbenzene	< 1
1-Chloro-4-methylbenzene	
1,2,4-Trimethylbenzene	
Dimethyltrisulfide (DMTS)	9
Bromoform	
1,2,3-Trimethylbenzene	
1,3-Dichlorobenzene	2
1,4-Dichlorobenzene	10
n-Dodecane	
1,2-Dichlorobenzene	8
n-Tridecane	
1,2,4-Trichlorobenzene	40
Naphthalene	2
n-Tetradecane	3
1,2,3-Trichlorobenzene	7
n-Pentadecane	5
2-Methylnaphthalene	
1-Methylnaphthalene	
n-Hexadecane	17
Pristane	8
n-Heptadecane	21
Phytane	8
n-Octadecane	9

Sample - Conimicut Point - 6m
Date - 8/1/79
Standards Added - 10 ng/L

Compound	Conc (ng/L)
1,1,1-Trichloroethane	83
Carbon tetrachloride	
Benzene	
Trichloroethylene	3400
Dimethyldisulfide (DMDS)	3
Toluene	16
Tetrachloroethylene	415
Octatriene	< 1
Ethylbenzene	1
p-Xylene	2
m-Xylene	5
Chlorobenzene	21
o-Xylene	4
Isopropylbenzene	
n-Propylbenzene	
1-Ethyl-4-methylbenzene	
1-Ethyl-3-methylbenzene	
1,3,5-Trimethylbenzene	3
1-Ethyl-2-methylbenzene	
1-Chloro-4-methylbenzene	
1,2,4-Trimethylbenzene	
Dimethyltrisulfide (DMTS)	1
Bromoform	
1,2,3-Trimethylbenzene	
1,3-Dichlorobenzene	2
1,4-Dichlorobenzene	6
n-Dodecane	
1,2-Dichlorobenzene	4
n-Tridecane	
1,2,4-Trichlorobenzene	19
Naphthalene	< 1
n-Tetradecane	< 1
1,2,3-Trichlorobenzene	3
n-Pentadecane	2
2-Methylnaphthalene	
1-Methylnaphthalene	
n-Hexadecane	4
Pristane	5
n-Heptadecane	16
Phytane	< 1
n-Octadecane	< 1

Sample - Conanicut Point - 0m
Date - 8/1/79
Standards Added - 10 ng/L

Compound	Conc (ng/L)
1,1,1-Trichloroethane	61
Carbon tetrachloride	
Benzene	
Trichloroethylene	58
Dimethyldisulfide (DMDS)	12
Toluene	20
Tetrachloroethylene	29
Octatriene	< 1
Ethylbenzene	3
p-Xylene	4
m-Xylene	8
Chlorobenzene	1
o-Xylene	9
Isopropylbenzene	< 1
n-Propylbenzene	< 1
1-Ethyl-4-methylbenzene	1
1-Ethyl-3-methylbenzene	2
1,3,5-Trimethylbenzene	< 1
1-Ethyl-2-methylbenzene	2
1-Chloro-4-methylbenzene	
1,2,4-Trimethylbenzene	5
Dimethyltrisulfide (DMTS)	12
Bromoform	
1,2,3-Trimethylbenzene	3
1,3-Dichlorobenzene	3
1,4-Dichlorobenzene	2
n-Dodecane	
1,2-Dichlorobenzene	1
n-Tridecane	
1,2,4-Trichlorobenzene	2
Naphthalene	1
n-Tetradecane	2
1,2,3-Trichlorobenzene	1
n-Pentadecane	19
2-Methylnaphthalene	< 1
1-Methylnaphthalene	
n-Hexadecane	2
Pristane	
n-Heptadecane	31
Phytane	< 1
n-Octadecane	4

Sample - Conanicut Point - 8m
Date - 8/1/79
Standards Added - 10 ng/L

Sample - MERL - 0m
Date - 8/1/79
Standards Added - 10 ng/L

Compound	Conc (ng/L)
1,1,1-Trichloroethane	39
Carbon tetrachloride	
Benzene	
Trichloroethylene	20
Dimethyldisulfide (DMDS)	18
Toluene	23
Tetrachloroethylene	25
Octatriene	11
Ethylbenzene	3
p-Xylene	4
m-Xylene	9
Chlorobenzene	1
o-Xylene	8
Isopropylbenzene	
n-Propylbenzene	
1-Ethyl-4-methylbenzene	1
1-Ethyl-3-methylbenzene	2
1,3,5-Trimethylbenzene	< 1
1-Ethyl-2-methylbenzene	2
1-Chloro-4-methylbenzene	
1,2,4-Trimethylbenzene	5
Dimethyltrisulfide (DMTS)	5
Bromoform	
1,2,3-Trimethylbenzene	4
1,3-Dichlorobenzene	4
1,4-Dichlorobenzene	3
n-Dodecane	
1,2-Dichlorobenzene	1
n-Tridecane	
1,2,4-Trichlorobenzene	2
Naphthalene	1
n-Tetradecane	2
1,2,3-Trichlorobenzene	1
n-Pentadecane	10
2-Methylnaphthalene	< 1
1-Methylnaphthalene	
n-Hexadecane	20
Pristane	3
n-Heptadecane	13
Phytane	< 1
n-Octadecane	4

Compound	Conc (ng/L)
1,1,1-Trichloroethane	59
Carbon tetrachloride	
Benzene	
Trichloroethylene	10
Dimethyldisulfide (DMDS)	7
Toluene	31
Tetrachloroethylene	9
Octatriene	6
Ethylbenzene	6
p-Xylene	9
m-Xylene	23
Chlorobenzene	1
o-Xylene	9
Isopropylbenzene	< 1
n-Propylbenzene	1
1-Ethyl-4-methylbenzene	2
1-Ethyl-3-methylbenzene	5
1,3,5-Trimethylbenzene	3
1-Ethyl-2-methylbenzene	2
1-Chloro-4-methylbenzene	
1,2,4-Trimethylbenzene	8
Dimethyltrisulfide (DMTS)	6
Bromoform	
1,2,3-Trimethylbenzene	6
1,3-Dichlorobenzene	5
1,4-Dichlorobenzene	3
n-Dodecane	
1,2-Dichlorobenzene	< 1
n-Tridecane	
1,2,4-Trichlorobenzene	1
Naphthalene	1
n-Tetradecane	3
1,2,3-Trichlorobenzene	
n-Pentadecane	21
2-Methylnaphthalene	2
1-Methylnaphthalene	< 1
n-Hexadecane	10
Pristane	2
n-Heptadecane	21
Phytane	1
n-Octadecane	< 1

Sample - MERL - 13m
Date - 8/2/79
Standards Added - 10 ng/L

Compound	Conc (ng/L)
1,1,1-Trichloroethane	26
Carbon tetrachloride	
Benzene	
Trichloroethylene	< 1
Dimethyldisulfide (DMDS)	< 1
Toluene	22
Tetrachloroethylene	6
Octatriene	1
Ethylbenzene	2
p-Xylene	5
m-Xylene	12
Chlorobenzene	< 1
o-Xylene	7
Isopropylbenzene	
n-Propylbenzene	
1-Ethyl-4-methylbenzene	2
1-Ethyl-3-methylbenzene	3
1,3,5-Trimethylbenzene	2
1-Ethyl-2-methylbenzene	1
1-Chloro-4-methylbenzene	
1,2,4-Trimethylbenzene	6
Dimethyltrisulfide (DMTS)	1
Bromoform	
1,2,3-Trimethylbenzene	5
1,3-Dichlorobenzene	5
1,4-Dichlorobenzene	3
n-Dodecane	
1,2-Dichlorobenzene	1
n-Tridecane	
1,2,4-Trichlorobenzene	1
Naphthalene	1
n-Tetradecane	2
1,2,3-Trichlorobenzene	
n-Pentadecane	8
2-Methylnaphthalene	1
1-Methylnaphthalene	
n-Hexadecane	2
Pristane	
n-Heptadecane	5
Phytane	
n-Octadecane	2

Sample - Chemotaxis Dock - 0m
Date - 8/10/79
Standards Added - 10 ng/L

Compound	Conc (ng/L)
1,1,1-Trichloroethane	
Carbon tetrachloride	
Benzene	
Trichloroethylene	
Dimethyldisulfide (DMDS)	24
Toluene	37
Tetrachloroethylene	5
Octatriene	
Ethylbenzene	4
p-Xylene	5
m-Xylene	13
Chlorobenzene	1
o-Xylene	12
Isopropylbenzene	2
n-Propylbenzene	2
1-Ethyl-4-methylbenzene	2
1-Ethyl-3-methylbenzene	3
1,3,5-Trimethylbenzene	3
1-Ethyl-2-methylbenzene	2
1-Chloro-4-methylbenzene	
1,2,4-Trimethylbenzene	8
Dimethyltrisulfide (DMTS)	2
Bromoform	
1,2,3-Trimethylbenzene	6
1,3-Dichlorobenzene	6
1,4-Dichlorobenzene	2
n-Dodecane	
1,2-Dichlorobenzene	1
n-Tridecane	
1,2,4-Trichlorobenzene	
Naphthalene	1
n-Tetradecane	2
1,2,3-Trichlorobenzene	
n-Pentadecane	15
2-Methylnaphthalene	1
1-Methylnaphthalene	< 1
n-Hexadecane	1
Pristane	12
n-Heptadecane	17
Phytane	1
n-Octadecane	2

Sample - Providence River - 0m
Date - 2/25/80
Standards Added - 80 ng/L

Compound	Conc (ng/L)
1,1,1-Trichloroethane	370
Carbon tetrachloride	
Benzene	116
Trichloroethylene	1000
Dimethyldisulfide (DMDS)	1100
Toluene	520
Tetrachloroethylene	650
Octatriene	56
Ethylbenzene	175
p-Xylene	103
m-Xylene	390
Chlorobenzene	31
o-Xylene	215
Isopropylbenzene	14
n-Propylbenzene	18
1-Ethyl-4-methylbenzene	20
1-Ethyl-3-methylbenzene	43
1,3,5-Trimethylbenzene	34
1-Ethyl-2-methylbenzene	82
1-Chloro-4-methylbenzene	
1,2,4-Trimethylbenzene	67
Dimethyltrisulfide (DMTS)	17
Bromoform	
1,2,3-Trimethylbenzene	48
1,3-Dichlorobenzene	24
1,4-Dichlorobenzene	17
n-Dodecane	
1,2-Dichlorobenzene	10
n-Tridecane	
1,2,4-Trichlorobenzene	30
Naphthalene	14
n-Tetradecane	
1,2,3-Trichlorobenzene	18
n-Pentadecane	10
2-Methylnaphthalene	12
1-Methylnaphthalene	6
n-Hexadecane	25
Pristane	17
n-Heptadecane	45
Phytane	19
n-Octadecane	16

Sample - Providence River - 4m
Date - 2/25/80
Standards Added - 80 ng/L

Compound	Conc (ng/L)
1,1,1-Trichloroethane	660
Carbon tetrachloride	
Benzene	87
Trichloroethylene	810
Dimethyldisulfide (DMDS)	3200
Toluene	760
Tetrachloroethylene	640
Octatriene	80
Ethylbenzene	105
p-Xylene	72
m-Xylene	250
Chlorobenzene	37
o-Xylene	140
Isopropylbenzene	13
n-Propylbenzene	17
1-Ethyl-4-methylbenzene	18
1-Ethyl-3-methylbenzene	34
1,3,5-Trimethylbenzene	25
1-Ethyl-2-methylbenzene	65
1-Chloro-4-methylbenzene	
1,2,4-Trimethylbenzene	68
Dimethyltrisulfide (DMTS)	40
Bromoform	
1,2,3-Trimethylbenzene	61
1,3-Dichlorobenzene	35
1,4-Dichlorobenzene	23
n-Dodecane	
1,2-Dichlorobenzene	12
n-Tridecane	
1,2,4-Trichlorobenzene	27
Naphthalene	25
n-Tetradecane	
1,2,3-Trichlorobenzene	16
n-Pentadecane	4
2-Methylnaphthalene	19
1-Methylnaphthalene	9
n-Hexadecane	31
Pristane	22
n-Heptadecane	33
Phytane	23
n-Octadecane	28

Sample - Fields Point - outfall
Date - 2/25/80
Standards Added - 1000 ng/L

Sample - Fields Point - 0m
Date - 2/25/80
Standards Added - 80 ng/L

Compound	Conc (ng/L)
1,1,1-Trichloroethane	82400
Carbon tetrachloride	
Benzene	1140
Trichloroethylene	48100
Dimethyldisulfide (DMDS)	12300
Toluene	1830
Tetrachloroethylene	48200
Octatriene	
Ethylbenzene	1250
p-Xylene	910
m-Xylene	2430
Chlorobenzene	310
o-Xylene	1200
Isopropylbenzene	220
n-Propylbenzene	200
1-Ethyl-4-methylbenzene	190
1-Ethyl-3-methylbenzene	345
1,3,5-Trimethylbenzene	330
1-Ethyl-2-methylbenzene	300
1-Chloro-4-methylbenzene	
1,2,4-Trimethylbenzene	850
Dimethyltrisulfide (DMTS)	150
Bromoform	
1,2,3-Trimethylbenzene	490
1,3-Dichlorobenzene	250
1,4-Dichlorobenzene	105
n-Dodecane	
1,2-Dichlorobenzene	90
n-Tridecane	
1,2,4-Trichlorobenzene	180
Naphthalene	210
n-Tetradecane	
1,2,3-Trichlorobenzene	170
n-Pentadecane	73
2-Methylnaphthalene	270
1-Methylnaphthalene	110
n-Hexadecane	230
Pristane	115
n-Heptadecane	325
Phytane	230
n-Octadecane	165

Compound	Conc (ng/L)
1,1,1-Trichloroethane	830
Carbon tetrachloride	
Benzene	80
Trichloroethylene	1170
Dimethyldisulfide (DMDS)	185
Toluene	530
Tetrachloroethylene	760
Octatriene	75
Ethylbenzene	150
p-Xylene	95
m-Xylene	350
Chlorobenzene	41
o-Xylene	170
Isopropylbenzene	16
n-Propylbenzene	17
1-Ethyl-4-methylbenzene	18
1-Ethyl-3-methylbenzene	32
1,3,5-Trimethylbenzene	24
1-Ethyl-2-methylbenzene	57
1-Chloro-4-methylbenzene	
1,2,4-Trimethylbenzene	53
Dimethyltrisulfide (DMTS)	17
Bromoform	
1,2,3-Trimethylbenzene	71
1,3-Dichlorobenzene	33
1,4-Dichlorobenzene	25
n-Dodecane	
1,2-Dichlorobenzene	14
n-Tridecane	
1,2,4-Trichlorobenzene	37
Naphthalene	42
n-Tetradecane	
1,2,3-Trichlorobenzene	16
n-Pentadecane	39
2-Methylnaphthalene	19
1-Methylnaphthalene	9
n-Hexadecane	45
Pristane	15
n-Heptadecane	70
Phytane	11
n-Octadecane	22

Sample - Fields Point - 4m
Date - 2/25/80
Standards Added - 80 ng/L

Sample - Pautuxet River - 0m
Date - 2/25/80
Standards Added - 80 ng/L

Compound	Conc (ng/L)	Compound	Conc (ng/L)
1,1,1-Trichloroethane	630	1,1,1-Trichloroethane	3400
Carbon tetrachloride		Carbon tetrachloride	
Benzene	88	Benzene	110
Trichloroethylene	830	Trichloroethylene	2930
Dimethyldisulfide (DMDS)	135	Dimethyldisulfide (DMDS)	7900
Toluene	580	Toluene	
Tetrachloroethylene	560	Tetrachloroethylene	2290
Octatriene	82	Octatriene	60
Ethylbenzene	115	Ethylbenzene	1400
p-Xylene	99	p-Xylene	950
m-Xylene	340	m-Xylene	3100
Chlorobenzene	61	Chlorobenzene	2200
o-Xylene	150	o-Xylene	1400
Isopropylbenzene	16	Isopropylbenzene	50
n-Propylbenzene	18	n-Propylbenzene	20
1-Ethyl-4-methylbenzene	19	1-Ethyl-4-methylbenzene	20
1-Ethyl-3-methylbenzene	36	1-Ethyl-3-methylbenzene	38
1,3,5-Trimethylbenzene	28	1,3,5-Trimethylbenzene	25
1-Ethyl-2-methylbenzene	58	1-Ethyl-2-methylbenzene	1170
1-Chloro-4-methylbenzene		1-Chloro-4-methylbenzene	
1,2,4-Trimethylbenzene	62	1,2,4-Trimethylbenzene	64
Dimethyltrisulfide (DMTS)	10	Dimethyltrisulfide (DMTS)	35
Bromoform		Bromoform	
1,2,3-Trimethylbenzene	40	1,2,3-Trimethylbenzene	61
1,3-Dichlorobenzene	23	1,3-Dichlorobenzene	34
1,4-Dichlorobenzene	16	1,4-Dichlorobenzene	23
n-Dodecane		n-Dodecane	
1,2-Dichlorobenzene	8	1,2-Dichlorobenzene	105
n-Tridecane		n-Tridecane	
1,2,4-Trichlorobenzene	18	1,2,4-Trichlorobenzene	37
Naphthalene	19	Naphthalene	32
n-Tetradecane		n-Tetradecane	
1,2,3-Trichlorobenzene	9	1,2,3-Trichlorobenzene	15
n-Pentadecane	10	n-Pentadecane	5
2-Methylnaphthalene	14	2-Methylnaphthalene	26
1-Methylnaphthalene	7	1-Methylnaphthalene	12
n-Hexadecane	13	n-Hexadecane	34
Pristane	7	Pristane	15
n-Heptadecane	17	n-Heptadecane	40
Phytane	5	Phytane	24
n-Octadecane	6	n-Octadecane	14

Sample - Sabin Point - 0m
Date - 2/25/80
Standards Added - 80 ng/L

Compound	Conc (ng/L)
1,1,1-Trichloroethane	1300
Carbon tetrachloride	
Benzene	84
Trichloroethylene	1370
Dimethyldisulfide (DMDS)	265
Toluene	520
Tetrachloroethylene	1050
Octatriene	62
Ethylbenzene	170
p-Xylene	120
m-Xylene	420
Chlorobenzene	48
o-Xylene	260
Isopropylbenzene	19
n-Propylbenzene	19
1-Ethyl-4-methylbenzene	20
1-Ethyl-3-methylbenzene	43
1,3,5-Trimethylbenzene	33
1-Ethyl-2-methylbenzene	70
1-Chloro-4-methylbenzene	
1,2,4-Trimethylbenzene	80
Dimethyltrisulfide (DMTS)	26
Bromoform	
1,2,3-Trimethylbenzene	85
1,3-Dichlorobenzene	45
1,4-Dichlorobenzene	31
n-Dodecane	
1,2-Dichlorobenzene	16
n-Tridecane	
1,2,4-Trichlorobenzene	40
Naphthalene	33
n-Tetradecane	
1,2,3-Trichlorobenzene	21
n-Pentadecane	20
2-Methylnaphthalene	36
1-Methylnaphthalene	18
n-Hexadecane	39
Pristane	25
n-Heptadecane	70
Phytane	24
n-Octadecane	19

Sample - Sabin Point - 7m #1
Date - 2/25/80
Standards Added - 80 ng/L

Compound	Conc (ng/L)
1,1,1-Trichloroethane	600
Carbon tetrachloride	
Benzene	54
Trichloroethylene	690
Dimethyldisulfide (DMDS)	930
Toluene	500
Tetrachloroethylene	540
Octatriene	80
Ethylbenzene	70
p-Xylene	49
m-Xylene	150
Chlorobenzene	25
o-Xylene	87
Isopropylbenzene	10
n-Propylbenzene	11
1-Ethyl-4-methylbenzene	13
1-Ethyl-3-methylbenzene	25
1,3,5-Trimethylbenzene	18
1-Ethyl-2-methylbenzene	46
1-Chloro-4-methylbenzene	
1,2,4-Trimethylbenzene	44
Dimethyltrisulfide (DMTS)	16
Bromoform	
1,2,3-Trimethylbenzene	45
1,3-Dichlorobenzene	24
1,4-Dichlorobenzene	16
n-Dodecane	
1,2-Dichlorobenzene	8
n-Tridecane	
1,2,4-Trichlorobenzene	14
Naphthalene	12
n-Tetradecane	
1,2,3-Trichlorobenzene	7
n-Pentadecane	4
2-Methylnaphthalene	10
1-Methylnaphthalene	5
n-Hexadecane	10
Pristane	8
n-Heptadecane	17
Phytane	11
n-Octadecane	7

Sample - Sabin Point - 7m #2
Date - 2/25/80
Standards Added - 80 ng/L

Sample - Conimicut Point - 0m
Date - 2/25/80
Standards Added - 40 ng/L

Compound	Conc (ng/L)
1,1,1-Trichloroethane	480
Carbon tetrachloride	
Benzene	53
Trichloroethylene	660
Dimethyldisulfide (DMDS)	310
Toluene	450
Tetrachloroethylene	510
Octatriene	80
Ethylbenzene	78
p-Xylene	57
m-Xylene	190
Chlorobenzene	27
o-Xylene	100
Isopropylbenzene	8
n-Propylbenzene	11
1-Ethyl-4-methylbenzene	14
1-Ethyl-3-methylbenzene	26
1,3,5-Trimethylbenzene	18
1-Ethyl-2-methylbenzene	44
1-Chloro-4-methylbenzene	
1,2,4-Trimethylbenzene	41
Dimethyltrisulfide (DMTS)	9
Bromoform	
1,2,3-Trimethylbenzene	43
1,3-Dichlorobenzene	23
1,4-Dichlorobenzene	15
n-Dodecane	
1,2-Dichlorobenzene	7
n-Tridecane	
1,2,4-Trichlorobenzene	12
Naphthalene	10
n-Tetradecane	
1,2,3-Trichlorobenzene	7
n-Pentadecane	3
2-Methylnaphthalene	9
1-Methylnaphthalene	4
n-Hexadecane	7
Pristane	7
n-Heptadecane	14
Phytane	12
n-Octadecane	7

Compound	Conc (ng/L)
1,1,1-Trichloroethane	1700
Carbon tetrachloride	
Benzene	65
Trichloroethylene	1700
Dimethyldisulfide (DMDS)	120
Toluene	2500
Tetrachloroethylene	1200
Octatriene	71
Ethylbenzene	255
p-Xylene	170
m-Xylene	630
Chlorobenzene	280
o-Xylene	300
Isopropylbenzene	17
n-Propylbenzene	17
1-Ethyl-4-methylbenzene	19
1-Ethyl-3-methylbenzene	36
1,3,5-Trimethylbenzene	27
1-Ethyl-2-methylbenzene	140
1-Chloro-4-methylbenzene	
1,2,4-Trimethylbenzene	70
Dimethyltrisulfide (DMTS)	< 1
Bromoform	
1,2,3-Trimethylbenzene	100
1,3-Dichlorobenzene	54
1,4-Dichlorobenzene	37
n-Dodecane	
1,2-Dichlorobenzene	38
n-Tridecane	
1,2,4-Trichlorobenzene	50
Naphthalene	34
n-Tetradecane	
1,2,3-Trichlorobenzene	18
n-Pentadecane	12
2-Methylnaphthalene	34
1-Methylnaphthalene	14
n-Hexadecane	16
Pristane	12
n-Heptadecane	30
Phytane	13
n-Octadecane	12

Sample - Conimicut Point - 3m
Date - 2/25/80
Standards Added - 10 ng/L

Compound	Conc (ng/L)
1,1,1-Trichloroethane	1000
Carbon tetrachloride	
Benzene	40
Trichloroethylene	1070
Dimethyldisulfide (DMDS)	120
Toluene	820
Tetrachloroethylene	820
Octatriene	735
Ethylbenzene	90
p-Xylene	61
m-Xylene	230
Chlorobenzene	50
o-Xylene	145
Isopropylbenzene	15
n-Propylbenzene	15
1-Ethyl-4-methylbenzene	19
1-Ethyl-3-methylbenzene	33
1,3,5-Trimethylbenzene	28
1-Ethyl-2-methylbenzene	68
1-Chloro-4-methylbenzene	
1,2,4-Trimethylbenzene	63
Dimethyltrisulfide (DMTS)	< 1
Bromoform	
1,2,3-Trimethylbenzene	47
1,3-Dichlorobenzene	25
1,4-Dichlorobenzene	17
n-Dodecane	
1,2-Dichlorobenzene	11
n-Tridecane	
1,2,4-Trichlorobenzene	17
Naphthalene	22
n-Tetradecane	
1,2,3-Trichlorobenzene	10
n-Pentadecane	4
2-Methylnaphthalene	17
1-Methylnaphthalene	9
n-Hexadecane	5
Pristane	4
n-Heptadecane	8
Phytane	4
n-Octadecane	4

Sample - Conimicut Point - 6m
Date - 2/25/80
Standards Added - 10 ng/L

Compound	Conc (ng/L)
1,1,1-Trichloroethane	450
Carbon tetrachloride	
Benzene	36
Trichloroethylene	630
Dimethyldisulfide (DMDS)	81
Toluene	490
Tetrachloroethylene	470
Octatriene	150
Ethylbenzene	81
p-Xylene	60
m-Xylene	175
Chlorobenzene	33
o-Xylene	100
Isopropylbenzene	7
n-Propylbenzene	12
1-Ethyl-4-methylbenzene	15
1-Ethyl-3-methylbenzene	26
1,3,5-Trimethylbenzene	21
1-Ethyl-2-methylbenzene	40
1-Chloro-4-methylbenzene	
1,2,4-Trimethylbenzene	44
Dimethyltrisulfide (DMTS)	6
Bromoform	
1,2,3-Trimethylbenzene	44
1,3-Dichlorobenzene	22
1,4-Dichlorobenzene	14
n-Dodecane	
1,2-Dichlorobenzene	8
n-Tridecane	
1,2,4-Trichlorobenzene	13
Naphthalene	18
n-Tetradecane	
1,2,3-Trichlorobenzene	9
n-Pentadecane	3
2-Methylnaphthalene	12
1-Methylnaphthalene	6
n-Hexadecane	3
Pristane	3
n-Heptadecane	7
Phytane	5
n-Octadecane	4

Sample - Ohio Ledge - 0m
Date - 2/25/80
Standards Added - 10 ng/L

Sample - Ohio Ledge - 5m
Date - 2/25/80
Standards Added - 10 ng/L

Compound	Conc (ng/L)
1,1,1-Trichloroethane	1300
Carbon tetrachloride	
Benzene	43
Trichloroethylene	1250
Dimethyldisulfide (DMDS)	
Toluene	1670
Tetrachloroethylene	1170
Octatriene	120
Ethylbenzene	190
p-Xylene	125
m-Xylene	460
Chlorobenzene	135
o-Xylene	230
Isopropylbenzene	12
n-Propylbenzene	16
1-Ethyl-4-methylbenzene	19
1-Ethyl-3-methylbenzene	37
1,3,5-Trimethylbenzene	28
1-Ethyl-2-methylbenzene	100
1-Chloro-4-methylbenzene	
1,2,4-Trimethylbenzene	70
Dimethyltrisulfide (DMTS)	< 1
Bromoform	
1,2,3-Trimethylbenzene	57
1,3-Dichlorobenzene	28
1,4-Dichlorobenzene	19
n-Dodecane	
1,2-Dichlorobenzene	17
n-Tridecane	
1,2,4-Trichlorobenzene	26
Naphthalene	34
n-Tetradecane	
1,2,3-Trichlorobenzene	18
n-Pentadecane	7
2-Methylnaphthalene	31
1-Methylnaphthalene	16
n-Hexadecane	7
Pristane	5
n-Heptadecane	12
Phytane	7
n-Octadecane	4

Compound	Conc (ng/L)
1,1,1-Trichloroethane	220
Carbon tetrachloride	
Benzene	27
Trichloroethylene	260
Dimethyldisulfide (DMDS)	75
Toluene	250
Tetrachloroethylene	190
Octatriene	150
Ethylbenzene	50
p-Xylene	38
m-Xylene	120
Chlorobenzene	18
o-Xylene	76
Isopropylbenzene	8
n-Propylbenzene	13
1-Ethyl-4-methylbenzene	16
1-Ethyl-3-methylbenzene	29
1,3,5-Trimethylbenzene	19
1-Ethyl-2-methylbenzene	27
1-Chloro-4-methylbenzene	
1,2,4-Trimethylbenzene	44
Dimethyltrisulfide (DMTS)	6
Bromoform	
1,2,3-Trimethylbenzene	47
1,3-Dichlorobenzene	27
1,4-Dichlorobenzene	18
n-Dodecane	
1,2-Dichlorobenzene	6
n-Tridecane	
1,2,4-Trichlorobenzene	11
Naphthalene	21
n-Tetradecane	
1,2,3-Trichlorobenzene	8
n-Pentadecane	2
2-Methylnaphthalene	10
1-Methylnaphthalene	5
n-Hexadecane	3
Pristane	1
n-Heptadecane	6
Phytane	3
n-Octadecane	3

Sample - Conanicut Point - 0m #1
Date - 2/25/80
Standards Added - 10 ng/L

Compound	Conc (ng/L)
1,1,1-Trichloroethane	175
Carbon tetrachloride	
Benzene	35
Trichloroethylene	175
Dimethyldisulfide (DMDS)	24
Toluene	285
Tetrachloroethylene	165
Octatriene	195
Ethylbenzene	60
p-Xylene	51
m-Xylene	155
Chlorobenzene	14
o-Xylene	90
Isopropylbenzene	5
n-Propylbenzene	11
1-Ethyl-4-methylbenzene	14
1-Ethyl-3-methylbenzene	28
1,3,5-Trimethylbenzene	17
1-Ethyl-2-methylbenzene	26
1-Chloro-4-methylbenzene	
1,2,4-Trimethylbenzene	46
Dimethyltrisulfide (DMTS)	4
Bromoform	
1,2,3-Trimethylbenzene	29
1,3-Dichlorobenzene	19
1,4-Dichlorobenzene	15
n-Dodecane	
1,2-Dichlorobenzene	4
n-Tridecane	
1,2,4-Trichlorobenzene	6
Naphthalene	20
n-Tetradecane	
1,2,3-Trichlorobenzene	4
n-Pentadecane	2
2-Methylnaphthalene	13
1-Methylnaphthalene	6
n-Hexadecane	4
Pristane	2
n-Heptadecane	6
Phytane	3
n-Octadecane	3

Sample - Conanicut Point - 0m #2
Date - 2/25/80
Standards Added - 10 ng/L

Compound	Conc (ng/L)
1,1,1-Trichloroethane	220
Carbon tetrachloride	
Benzene	43
Trichloroethylene	185
Dimethyldisulfide (DMDS)	48
Toluene	280
Tetrachloroethylene	165
Octatriene	165
Ethylbenzene	62
p-Xylene	50
m-Xylene	150
Chlorobenzene	14
o-Xylene	86
Isopropylbenzene	5
n-Propylbenzene	11
1-Ethyl-4-methylbenzene	13
1-Ethyl-3-methylbenzene	26
1,3,5-Trimethylbenzene	17
1-Ethyl-2-methylbenzene	25
1-Chloro-4-methylbenzene	
1,2,4-Trimethylbenzene	46
Dimethyltrisulfide (DMTS)	7
Bromoform	
1,2,3-Trimethylbenzene	29
1,3-Dichlorobenzene	15
1,4-Dichlorobenzene	10
n-Dodecane	
1,2-Dichlorobenzene	3
n-Tridecane	
1,2,4-Trichlorobenzene	6
Naphthalene	22
n-Tetradecane	
1,2,3-Trichlorobenzene	7
n-Pentadecane	6
2-Methylnaphthalene	13
1-Methylnaphthalene	6
n-Hexadecane	5
Pristane	1
n-Heptadecane	18
Phytane	3
n-Octadecane	3

Sample - Conanicut Point - 0m #3
Date - 2/25/80
Standards Added - 10 ng/L

Compound	Conc (ng/L)
1,1,1-Trichloroethane	305
Carbon tetrachloride	
Benzene	50
Trichloroethylene	210
Dimethyldisulfide (DMDS)	< 1
Toluene	265
Tetrachloroethylene	155
Octatriene	190
Ethylbenzene	62
p-Xylene	46
m-Xylene	155
Chlorobenzene	14
o-Xylene	81
Isopropylbenzene	6
n-Propylbenzene	12
1-Ethyl-4-methylbenzene	12
1-Ethyl-3-methylbenzene	25
1,3,5-Trimethylbenzene	18
1-Ethyl-2-methylbenzene	25
1-Chloro-4-methylbenzene	
1,2,4-Trimethylbenzene	46
Dimethyltrisulfide (DMTS)	< 1
Bromoform	
1,2,3-Trimethylbenzene	25
1,3-Dichlorobenzene	16
1,4-Dichlorobenzene	11
n-Dodecane	
1,2-Dichlorobenzene	3
n-Tridecane	
1,2,4-Trichlorobenzene	6
Naphthalene	15
n-Tetradecane	
1,2,3-Trichlorobenzene	6
n-Pentadecane	2
2-Methylnaphthalene	10
1-Methylnaphthalene	4
n-Hexadecane	2
Pristane	1
n-Heptadecane	6
Phytane	2
n-Octadecane	2

Sample - Conanicut Point - 6m
Date - 2/25/80
Standards Added - 10 ng/L

Compound	Conc (ng/L)
1,1,1-Trichloroethane	62
Carbon tetrachloride	
Benzene	28
Trichloroethylene	55
Dimethyldisulfide (DMDS)	85
Toluene	64
Tetrachloroethylene	47
Octatriene	97
Ethylbenzene	14
p-Xylene	12
m-Xylene	30
Chlorobenzene	4
o-Xylene	24
Isopropylbenzene	3
n-Propylbenzene	5
1-Ethyl-4-methylbenzene	6
1-Ethyl-3-methylbenzene	10
1,3,5-Trimethylbenzene	8
1-Ethyl-2-methylbenzene	7
1-Chloro-4-methylbenzene	
1,2,4-Trimethylbenzene	14
Dimethyltrisulfide (DMTS)	7
Bromoform	
1,2,3-Trimethylbenzene	12
1,3-Dichlorobenzene	8
1,4-Dichlorobenzene	5
n-Dodecane	
1,2-Dichlorobenzene	2
n-Tridecane	
1,2,4-Trichlorobenzene	4
Naphthalene	10
n-Tetradecane	
1,2,3-Trichlorobenzene	3
n-Pentadecane	1
2-Methylnaphthalene	5
1-Methylnaphthalene	2
n-Hexadecane	2
Pristane	1
n-Heptadecane	3
Phytane	1
n-Octadecane	1

Sample - MERL - 0m
Date - 2/25/80
Standards Added - 10 ng/L

Sample - MERL - 8m
Date - 2/25/80
Standards Added - 10 ng/L

Compound	Conc (ng/L)
1,1,1-Trichloroethane	80
Carbon tetrachloride	
Benzene	31
Trichloroethylene	110
Dimethyldisulfide (DMDS)	85
Toluene	140
Tetrachloroethylene	53
Octatriene	120
Ethylbenzene	45
p-Xylene	29
m-Xylene	77
Chlorobenzene	5
o-Xylene	50
Isopropylbenzene	3
n-Propylbenzene	7
1-Ethyl-4-methylbenzene	8
1-Ethyl-3-methylbenzene	16
1,3,5-Trimethylbenzene	10
1-Ethyl-2-methylbenzene	12
1-Chloro-4-methylbenzene	
1,2,4-Trimethylbenzene	25
Dimethyltrisulfide (DMTS)	6
Bromoform	
1,2,3-Trimethylbenzene	15
1,3-Dichlorobenzene	8
1,4-Dichlorobenzene	5
n-Dodecane	
1,2-Dichlorobenzene	2
n-Tridecane	
1,2,4-Trichlorobenzene	3
Naphthalene	11
n-Tetradecane	
1,2,3-Trichlorobenzene	3
n-Pentadecane	1
2-Methylnaphthalene	6
1-Methylnaphthalene	3
n-Hexadecane	2
Pristane	1
n-Heptadecane	4
Phytane	2
n-Octadecane	1

Compound	Conc (ng/L)
1,1,1-Trichloroethane	60
Carbon tetrachloride	
Benzene	27
Trichloroethylene	60
Dimethyldisulfide (DMDS)	51
Toluene	70
Tetrachloroethylene	32
Octatriene	110
Ethylbenzene	17
p-Xylene	17
m-Xylene	35
Chlorobenzene	3
o-Xylene	25
Isopropylbenzene	2
n-Propylbenzene	4
1-Ethyl-4-methylbenzene	4
1-Ethyl-3-methylbenzene	9
1,3,5-Trimethylbenzene	6
1-Ethyl-2-methylbenzene	5
1-Chloro-4-methylbenzene	
1,2,4-Trimethylbenzene	13
Dimethyltrisulfide (DMTS)	5
Bromoform	
1,2,3-Trimethylbenzene	8
1,3-Dichlorobenzene	5
1,4-Dichlorobenzene	3
n-Dodecane	
1,2-Dichlorobenzene	1
n-Tridecane	
1,2,4-Trichlorobenzene	2
Naphthalene	7
n-Tetradecane	
1,2,3-Trichlorobenzene	2
n-Pentadecane	1
2-Methylnaphthalene	4
1-Methylnaphthalene	2
n-Hexadecane	1
Pristane	1
n-Heptadecane	2
Phytane	1
n-Octadecane	1

Sample - MERL Facility - Tank #1
Date - 2/25/80
Standards Added - 10 ng/L

Sample - Providence River - 0m
Date - 7/22/80
Standards Added - 80 ng/L

Compound	Conc (ng/L)
1,1,1-Trichloroethane	14
Carbon tetrachloride	
Benzene	21
Trichloroethylene	14
Dimethyldisulfide (DMDS)	79
Toluene	820
Tetrachloroethylene	6
Octatriene	17
Ethylbenzene	17
p-Xylene	9
m-Xylene	22
Chlorobenzene	1
o-Xylene	16
Isopropylbenzene	2
n-Propylbenzene	3
1-Ethyl-4-methylbenzene	2
1-Ethyl-3-methylbenzene	4
1,3,5-Trimethylbenzene	3
1-Ethyl-2-methylbenzene	2
1-Chloro-4-methylbenzene	
1,2,4-Trimethylbenzene	6
Dimethyltrisulfide (DMTS)	9
Bromoform	
1,2,3-Trimethylbenzene	4
1,3-Dichlorobenzene	2
1,4-Dichlorobenzene	1
n-Dodecane	
1,2-Dichlorobenzene	< 1
n-Tridecane	
1,2,4-Trichlorobenzene	1
Naphthalene	6
n-Tetradecane	
1,2,3-Trichlorobenzene	2
n-Pentadecane	< 1
2-Methylnaphthalene	3
1-Methylnaphthalene	2
n-Hexadecane	3
Pristane	< 1
n-Heptadecane	4
Phytane	1
n-Octadecane	1

Compound	Conc (ng/L)
1,1,1-Trichloroethane	90
Carbon tetrachloride	600
Benzene	170
Trichloroethylene	910
Dimethyldisulfide (DMDS)	1900
Toluene	70
Tetrachloroethylene	610
Octatriene	4
Ethylbenzene	4
p-Xylene	5
m-Xylene	8
Chlorobenzene	12
o-Xylene	2
Isopropylbenzene	2
n-Propylbenzene	< 1
1-Ethyl-4-methylbenzene	11
1-Ethyl-3-methylbenzene	
1,3,5-Trimethylbenzene	3
1-Ethyl-2-methylbenzene	1
1-Chloro-4-methylbenzene	
1,2,4-Trimethylbenzene	2
Dimethyltrisulfide (DMTS)	190
Bromoform	
1,2,3-Trimethylbenzene	4
1,3-Dichlorobenzene	4
1,4-Dichlorobenzene	20
n-Dodecane	1
1,2-Dichlorobenzene	13
n-Tridecane	1
1,2,4-Trichlorobenzene	34
Naphthalene	4
n-Tetradecane	3
1,2,3-Trichlorobenzene	9
n-Pentadecane	12
2-Methylnaphthalene	2
1-Methylnaphthalene	< 1
n-Hexadecane	21
Pristane	5
n-Heptadecane	16
Phytane	8
n-Octadecane	6

Sample - Fields Point - outfall
Date - 7/22/80
Standards Added - 1000 ng/L

Sample - Fields Point - 0m
Date - 7/22/80
Standards Added - 80 ng/L

Compound	Conc (ng/L)
1,1,1-Trichloroethane	1200
Carbon tetrachloride	2700
Benzene	920
Trichloroethylene	3500
Dimethyldisulfide (DMDS)	950
Toluene	5600
Tetrachloroethylene	3600
Octatriene	65
Ethylbenzene	200
p-Xylene	160
m-Xylene	200
Chlorobenzene	65
o-Xylene	720
Isopropylbenzene	95
n-Propylbenzene	115
1-Ethyl-4-methylbenzene	260
1-Ethyl-3-methylbenzene	
1,3,5-Trimethylbenzene	110
1-Ethyl-2-methylbenzene	640
1-Chloro-4-methylbenzene	
1,2,4-Trimethylbenzene	310
Dimethyltrisulfide (DMTS)	800
Bromoform	
1,2,3-Trimethylbenzene	2450
1,3-Dichlorobenzene	620
1,4-Dichlorobenzene	340
n-Dodecane	38
1,2-Dichlorobenzene	220
n-Tridecane	47
1,2,4-Trichlorobenzene	560
Naphthalene	290
n-Tetradecane	75
1,2,3-Trichlorobenzene	280
n-Pentadecane	28
2-Methylnaphthalene	120
1-Methylnaphthalene	240
n-Hexadecane	37
Pristane	67
n-Heptadecane	100
Phytane	280
n-Octadecane	41

Compound	Conc (ng/L)
1,1,1-Trichloroethane	310
Carbon tetrachloride	1250
Benzene	170
Trichloroethylene	2300
Dimethyldisulfide (DMDS)	2900
Toluene	44
Tetrachloroethylene	2600
Octatriene	6
Ethylbenzene	6
p-Xylene	6
m-Xylene	6
Chlorobenzene	7
o-Xylene	6
Isopropylbenzene	6
n-Propylbenzene	6
1-Ethyl-4-methylbenzene	6
1-Ethyl-3-methylbenzene	6
1,3,5-Trimethylbenzene	6
1-Ethyl-2-methylbenzene	6
1-Chloro-4-methylbenzene	
1,2,4-Trimethylbenzene	6
Dimethyltrisulfide (DMTS)	290
Bromoform	
1,2,3-Trimethylbenzene	6
1,3-Dichlorobenzene	5
1,4-Dichlorobenzene	30
n-Dodecane	3
1,2-Dichlorobenzene	16
n-Tridecane	5
1,2,4-Trichlorobenzene	61
Naphthalene	8
n-Tetradecane	7
1,2,3-Trichlorobenzene	12
n-Pentadecane	15
2-Methylnaphthalene	5
1-Methylnaphthalene	4
n-Hexadecane	15
Pristane	11
n-Heptadecane	27
Phytane	19
n-Octadecane	20

Sample - Fields Point - 7.5m
Date - 7/22/80
Standards Added - 40 ng/L

Sample - Sabin Point - 0m
Date - 7/22/80
Standards Added - 40 ng/L

Compound	Conc (ng/L)
1,1,1-Trichloroethane	65
Carbon tetrachloride	340
Benzene	95
Trichloroethylene	370
Dimethyldisulfide (DMDS)	600
Toluene	55
Tetrachloroethylene	420
Octatriene	2
Ethylbenzene	12
p-Xylene	5
m-Xylene	14
Chlorobenzene	6
o-Xylene	13
Isopropylbenzene	1
n-Propylbenzene	1
1-Ethyl-4-methylbenzene	5
1-Ethyl-3-methylbenzene	
1,3,5-Trimethylbenzene	2
1-Ethyl-2-methylbenzene	1
1-Chloro-4-methylbenzene	
1,2,4-Trimethylbenzene	3
Dimethyltrisulfide (DMTS)	190
Bromoform	
1,2,3-Trimethylbenzene	2
1,3-Dichlorobenzene	1
1,4-Dichlorobenzene	7
n-Dodecane	2
1,2-Dichlorobenzene	4
n-Tridecane	1
1,2,4-Trichlorobenzene	13
Naphthalene	2
n-Tetradecane	2
1,2,3-Trichlorobenzene	3
n-Pentadecane	2
2-Methylnaphthalene	1
1-Methylnaphthalene	1
n-Hexadecane	16
Pristane	2
n-Heptadecane	11
Phytane	3
n-Octadecane	11

Compound	Conc (ng/L)
1,1,1-Trichloroethane	950
Carbon tetrachloride	
Benzene	140
Trichloroethylene	1400
Dimethyldisulfide (DMDS)	180
Toluene	65
Tetrachloroethylene	1100
Octatriene	35
Ethylbenzene	7
p-Xylene	5
m-Xylene	8
Chlorobenzene	6
o-Xylene	6
Isopropylbenzene	1
n-Propylbenzene	< 1
1-Ethyl-4-methylbenzene	2
1-Ethyl-3-methylbenzene	
1,3,5-Trimethylbenzene	6
1-Ethyl-2-methylbenzene	2
1-Chloro-4-methylbenzene	
1,2,4-Trimethylbenzene	5
Dimethyltrisulfide (DMTS)	170
Bromoform	
1,2,3-Trimethylbenzene	4
1,3-Dichlorobenzene	2
1,4-Dichlorobenzene	14
n-Dodecane	1
1,2-Dichlorobenzene	10
n-Tridecane	1
1,2,4-Trichlorobenzene	28
Naphthalene	3
n-Tetradecane	1
1,2,3-Trichlorobenzene	5
n-Pentadecane	4
2-Methylnaphthalene	1
1-Methylnaphthalene	1
n-Hexadecane	5
Pristane	3
n-Heptadecane	16
Phytane	3
n-Octadecane	2

Sample - Sabin Point - 10m #1
Date - 7/22/80
Standards Added - 40 ng/L

Compound	Conc (ng/L)
1,1,1-Trichloroethane	120
Carbon tetrachloride	170
Benzene	
Trichloroethylene	230
Dimethyldisulfide (DMDS)	140
Toluene	80
Tetrachloroethylene	490
Octatriene	1
Ethylbenzene	8
p-Xylene	6
m-Xylene	11
Chlorobenzene	4
o-Xylene	8
Isopropylbenzene	2
n-Propylbenzene	1
1-Ethyl-4-methylbenzene	1
1-Ethyl-3-methylbenzene	2
1,3,5-Trimethylbenzene	4
1-Ethyl-2-methylbenzene	2
1-Chloro-4-methylbenzene	
1,2,4-Trimethylbenzene	4
Dimethyltrisulfide (DMTS)	25
Bromoform	
1,2,3-Trimethylbenzene	3
1,3-Dichlorobenzene	2
1,4-Dichlorobenzene	5
n-Dodecane	1
1,2-Dichlorobenzene	3
n-Tridecane	2
1,2,4-Trichlorobenzene	8
Naphthalene	1
n-Tetradecane	2
1,2,3-Trichlorobenzene	2
n-Pentadecane	1
2-Methylnaphthalene	1
1-Methylnaphthalene	1
n-Hexadecane	6
Pristane	1
n-Heptadecane	6
Phytane	2
n-Octadecane	1

Sample - Sabin Point - 10m #2
Date - 7/22/80
Standards Added - 40 ng/L

Compound	Conc (ng/L)
1,1,1-Trichloroethane	30
Carbon tetrachloride	230
Benzene	80
Trichloroethylene	300
Dimethyldisulfide (DMDS)	1900
Toluene	50
Tetrachloroethylene	390
Octatriene	2
Ethylbenzene	5
p-Xylene	3
m-Xylene	7
Chlorobenzene	4
o-Xylene	5
Isopropylbenzene	1
n-Propylbenzene	1
1-Ethyl-4-methylbenzene	5
1-Ethyl-3-methylbenzene	
1,3,5-Trimethylbenzene	4
1-Ethyl-2-methylbenzene	7
1-Chloro-4-methylbenzene	
1,2,4-Trimethylbenzene	2
Dimethyltrisulfide (DMTS)	175
Bromoform	
1,2,3-Trimethylbenzene	3
1,3-Dichlorobenzene	1
1,4-Dichlorobenzene	5
n-Dodecane	< 1
1,2-Dichlorobenzene	3
n-Tridecane	< 1
1,2,4-Trichlorobenzene	7
Naphthalene	2
n-Tetradecane	1
1,2,3-Trichlorobenzene	2
n-Pentadecane	4
2-Methylnaphthalene	1
1-Methylnaphthalene	6
n-Hexadecane	3
Pristane	3
n-Heptadecane	8
Phytane	1
n-Octadecane	2

Sample - Conimicut Point - 0m
Date - 7/22/80
Standards Added - 40 ng/L

Compound	Conc (ng/L)
1,1,1-Trichloroethane	190
Carbon tetrachloride	580
Benzene	110
Trichloroethylene	670
Dimethyldisulfide (DMDS)	860
Toluene	140
Tetrachloroethylene	880
Octatriene	6
Ethylbenzene	38
p-Xylene	9
m-Xylene	10
Chlorobenzene	13
o-Xylene	13
Isopropylbenzene	2
n-Propylbenzene	2
1-Ethyl-4-methylbenzene	2
1-Ethyl-3-methylbenzene	3
1,3,5-Trimethylbenzene	2
1-Ethyl-2-methylbenzene	14
1-Chloro-4-methylbenzene	
1,2,4-Trimethylbenzene	4
Dimethyltrisulfide (DMTS)	70
Bromoform	
1,2,3-Trimethylbenzene	3
1,3-Dichlorobenzene	2
1,4-Dichlorobenzene	7
n-Dodecane	2
1,2-Dichlorobenzene	6
n-Tridecane	1
1,2,4-Trichlorobenzene	14
Naphthalene	2
n-Tetradecane	2
1,2,3-Trichlorobenzene	3
n-Pentadecane	17
2-Methylnaphthalene	4
1-Methylnaphthalene	2
n-Hexadecane	1
Pristane	3
n-Heptadecane	5
Phytane	3
n-Octadecane	4

Sample - Conimicut Point - 3.5 m
Date - 7/22/80
Standards Added - 40 ng/L

Compound	Conc (ng/L)
1,1,1-Trichloroethane	60
Carbon tetrachloride	300
Benzene	60
Trichloroethylene	340
Dimethyldisulfide (DMDS)	130
Toluene	110
Tetrachloroethylene	2100
Octatriene	3
Ethylbenzene	4
p-Xylene	5
m-Xylene	10
Chlorobenzene	4
o-Xylene	8
Isopropylbenzene	1
n-Propylbenzene	1
1-Ethyl-4-methylbenzene	1
1-Ethyl-3-methylbenzene	2
1,3,5-Trimethylbenzene	5
1-Ethyl-2-methylbenzene	2
1-Chloro-4-methylbenzene	
1,2,4-Trimethylbenzene	3
Dimethyltrisulfide (DMTS)	10
Bromoform	
1,2,3-Trimethylbenzene	2
1,3-Dichlorobenzene	2
1,4-Dichlorobenzene	6
n-Dodecane	1
1,2-Dichlorobenzene	4
n-Tridecane	< 1
1,2,4-Trichlorobenzene	9
Naphthalene	2
n-Tetradecane	1
1,2,3-Trichlorobenzene	6
n-Pentadecane	1
2-Methylnaphthalene	1
1-Methylnaphthalene	1
n-Hexadecane	2
Pristane	1
n-Heptadecane	4
Phytane	2
n-Octadecane	1

Sample - Conimicut Point - 5 m
Date - 7/22/80
Standards Added - 10 ng/L

Sample - Ohio Ledge - 0m
Date - 7/22/80
Standards Added - 10 ng/L

Compound	Conc (ng/L)
1,1,1-Trichloroethane	45
Carbon tetrachloride	110
Benzene	200
Trichloroethylene	170
Dimethyldisulfide (DMDS)	150
Toluene	50
Tetrachloroethylene	690
Octatriene	< 1
Ethylbenzene	3
p-Xylene	5
m-Xylene	7
Chlorobenzene	2
o-Xylene	2
Isopropylbenzene	1
n-Propylbenzene	1
1-Ethyl-4-methylbenzene	1
1-Ethyl-3-methylbenzene	2
1,3,5-Trimethylbenzene	2
1-Ethyl-2-methylbenzene	1
1-Chloro-4-methylbenzene	
1,2,4-Trimethylbenzene	3
Dimethyltrisulfide (DMTS)	6
Bromoform	
1,2,3-Trimethylbenzene	1
1,3-Dichlorobenzene	1
1,4-Dichlorobenzene	3
n-Dodecane	< 1
1,2-Dichlorobenzene	1
n-Tridecane	< 1
1,2,4-Trichlorobenzene	3
Naphthalene	< 1
n-Tetradecane	1
1,2,3-Trichlorobenzene	2
n-Pentadecane	1
2-Methylnaphthalene	< 1
1-Methylnaphthalene	< 1
n-Hexadecane	1
Pristane	< 1
n-Heptadecane	1
Phytane	< 1
n-Octadecane	1

Compound	Conc (ng/L)
1,1,1-Trichloroethane	63
Carbon tetrachloride	180
Benzene	27
Trichloroethylene	110
Dimethyldisulfide (DMDS)	390
Toluene	17
Tetrachloroethylene	90
Octatriene	3
Ethylbenzene	1
p-Xylene	1
m-Xylene	1
Chlorobenzene	1
o-Xylene	1
Isopropylbenzene	< 1
n-Propylbenzene	< 1
1-Ethyl-4-methylbenzene	< 1
1-Ethyl-3-methylbenzene	< 1
1,3,5-Trimethylbenzene	3
1-Ethyl-2-methylbenzene	< 1
1-Chloro-4-methylbenzene	
1,2,4-Trimethylbenzene	< 1
Dimethyltrisulfide (DMTS)	70
Bromoform	
1,2,3-Trimethylbenzene	3
1,3-Dichlorobenzene	1
1,4-Dichlorobenzene	7
n-Dodecane	1
1,2-Dichlorobenzene	2
n-Tridecane	1
1,2,4-Trichlorobenzene	11
Naphthalene	1
n-Tetradecane	1
1,2,3-Trichlorobenzene	2
n-Pentadecane	3
2-Methylnaphthalene	1
1-Methylnaphthalene	< 1
n-Hexadecane	4
Pristane	1
n-Heptadecane	5
Phytane	1
n-Octadecane	1

Sample - Ohio Ledge - 5m
Date - 7/22/80
Standards Added - 10 ng/L

Sample - Conanicut Point - 0m #1
Date - 7/22/80
Standards Added - 10 ng/L

Compound	Conc (ng/L)
1,1,1-Trichloroethane	15
Carbon tetrachloride	36
Benzene	17
Trichloroethylene	41
Dimethyldisulfide (DMDS)	490
Toluene	14
Tetrachloroethylene	35
Octatriene	2
Ethylbenzene	1
<u>p</u> -Xylene	1
<u>m</u> -Xylene	2
Chlorobenzene	3
<u>o</u> -Xylene	1
Isopropylbenzene	< 1
<u>n</u> -Propylbenzene	1
1-Ethyl-4-methylbenzene	< 1
1-Ethyl-3-methylbenzene	< 1
1,3,5-Trimethylbenzene	2
1-Ethyl-2-methylbenzene	< 1
1-Chloro-4-methylbenzene	
1,2,4-Trimethylbenzene	1
Dimethyltrisulfide (DMTS)	36
Bromoform	
1,2,3-Trimethylbenzene	< 1
1,3-Dichlorobenzene	1
1,4-Dichlorobenzene	4
<u>n</u> -Dodecane	1
1,2-Dichlorobenzene	2
<u>n</u> -Tridecane	1
1,2,4-Trichlorobenzene	3
Naphthalene	< 1
<u>n</u> -Tetradecane	< 1
1,2,3-Trichlorobenzene	< 1
<u>n</u> -Pentadecane	< 1
2-Methylnaphthalene	< 1
1-Methylnaphthalene	< 1
<u>n</u> -Hexadecane	2
Pristane	1
<u>n</u> -Heptadecane	4
Phytane	1
<u>n</u> -Octadecane	1

Compound	Conc (ng/L)
1,1,1-Trichloroethane	23
Carbon tetrachloride	17
Benzene	20
Trichloroethylene	19
Dimethyldisulfide (DMDS)	150
Toluene	22
Tetrachloroethylene	6
Octatriene	10
Ethylbenzene	2
<u>p</u> -Xylene	3
<u>m</u> -Xylene	6
Chlorobenzene	3
<u>o</u> -Xylene	4
Isopropylbenzene	< 1
<u>n</u> -Propylbenzene	< 1
1-Ethyl-4-methylbenzene	1
1-Ethyl-3-methylbenzene	2
1,3,5-Trimethylbenzene	2
1-Ethyl-2-methylbenzene	1
1-Chloro-4-methylbenzene	
1,2,4-Trimethylbenzene	2
Dimethyltrisulfide (DMTS)	36
Bromoform	
1,2,3-Trimethylbenzene	2
1,3-Dichlorobenzene	2
1,4-Dichlorobenzene	2
<u>n</u> -Dodecane	< 1
1,2-Dichlorobenzene	1
<u>n</u> -Tridecane	< 1
1,2,4-Trichlorobenzene	1
Naphthalene	< 1
<u>n</u> -Tetradecane	1
1,2,3-Trichlorobenzene	< 1
<u>n</u> -Pentadecane	2
2-Methylnaphthalene	< 1
1-Methylnaphthalene	< 1
<u>n</u> -Hexadecane	1
Pristane	< 1
<u>n</u> -Heptadecane	7
Phytane	< 1
<u>n</u> -Octadecane	< 1

Sample - Conanicut Point - 0m #2
Date - 7/22/80
Standards Added - 10 ng/L

Compound	Conc (ng/L)
1,1,1-Trichloroethane	13
Carbon tetrachloride	14
Benzene	21
Trichloroethylene	21
Dimethyldisulfide (DMDS)	200
Toluene	24
Tetrachloroethylene	11
Octatriene	13
Ethylbenzene	3
p-Xylene	4
m-Xylene	7
Chlorobenzene	4
o-Xylene	5
Isopropylbenzene	1
n-Propylbenzene	1
1-Ethyl-4-methylbenzene	1
1-Ethyl-3-methylbenzene	2
1,3,5-Trimethylbenzene	4
1-Ethyl-2-methylbenzene	2
1-Chloro-4-methylbenzene	
1,2,4-Trimethylbenzene	3
Dimethyltrisulfide (DMTS)	50
Bromoform	
1,2,3-Trimethylbenzene	< 1
1,3-Dichlorobenzene	2
1,4-Dichlorobenzene	1
n-Dodecane	< 1
1,2-Dichlorobenzene	2
n-Tridecane	< 1
1,2,4-Trichlorobenzene	1
Naphthalene	1
n-Tetradecane	< 1
1,2,3-Trichlorobenzene	< 1
n-Pentadecane	2
2-Methylnaphthalene	< 1
1-Methylnaphthalene	< 1
n-Hexadecane	1
Pristane	< 1
n-Heptadecane	2
Phytane	1
n-Octadecane	< 1

Sample - Conanicut Point - 8m
Date - 7/22/80
Standards Added - 10 ng/L

Compound	Conc (ng/L)
1,1,1-Trichloroethane	9
Carbon tetrachloride	16
Benzene	18
Trichloroethylene	21
Dimethyldisulfide (DMDS)	120
Toluene	22
Tetrachloroethylene	12
Octatriene	6
Ethylbenzene	2
p-Xylene	2
m-Xylene	4
Chlorobenzene	2
o-Xylene	3
Isopropylbenzene	< 1
n-Propylbenzene	< 1
1-Ethyl-4-methylbenzene	1
1-Ethyl-3-methylbenzene	1
1,3,5-Trimethylbenzene	3
1-Ethyl-2-methylbenzene	1
1-Chloro-4-methylbenzene	
1,2,4-Trimethylbenzene	2
Dimethyltrisulfide (DMTS)	40
Bromoform	
1,2,3-Trimethylbenzene	2
1,3-Dichlorobenzene	1
1,4-Dichlorobenzene	2
n-Dodecane	< 1
1,2-Dichlorobenzene	1
n-Tridecane	< 1
1,2,4-Trichlorobenzene	1
Naphthalene	< 1
n-Tetradecane	< 1
1,2,3-Trichlorobenzene	< 1
n-Pentadecane	1
2-Methylnaphthalene	< 1
1-Methylnaphthalene	< 1
n-Hexadecane	1
Pristane	1
n-Heptadecane	3
Phytane	1
n-Octadecane	< 1

Sample - MERL - 0m
Date - 7/22/80
Standards Added - 10 ng/L

Sample - MERL - 13m
Date - 7/22/80
Standards Added - 10 ng/L

Compound	Conc (ng/L)
1,1,1-Trichloroethane	9
Carbon tetrachloride	8
Benzene	18
Trichloroethylene	14
Dimethyldisulfide (DMDS)	270
Toluene	14
Tetrachloroethylene	5
Octatriene	10
Ethylbenzene	1
p-Xylene	2
m-Xylene	3
Chlorobenzene	2
o-Xylene	2
Isopropylbenzene	1
n-Propylbenzene	1
1-Ethyl-4-methylbenzene	1
1-Ethyl-3-methylbenzene	1
1,3,5-Trimethylbenzene	3
1-Ethyl-2-methylbenzene	1
1-Chloro-4-methylbenzene	
1,2,4-Trimethylbenzene	1
Dimethyltrisulfide (DMTS)	50
Bromoform	
1,2,3-Trimethylbenzene	1
1,3-Dichlorobenzene	1
1,4-Dichlorobenzene	1
n-Dodecane	< 1
1,2-Dichlorobenzene	1
n-Tridecane	< 1
1,2,4-Trichlorobenzene	< 1
Naphthalene	1
n-Tetradecane	< 1
1,2,3-Trichlorobenzene	< 1
n-Pentadecane	1
2-Methylnaphthalene	< 1
1-Methylnaphthalene	< 1
n-Hexadecane	1
Pristane	< 1
n-Heptadecane	3
Phytane	1
n-Octadecane	< 1

Compound	Conc (ng/L)
1,1,1-Trichloroethane	11
Carbon tetrachloride	10
Benzene	17
Trichloroethylene	12
Dimethyldisulfide (DMDS)	130
Toluene	16
Tetrachloroethylene	300
Octatriene	4
Ethylbenzene	1
p-Xylene	1
m-Xylene	2
Chlorobenzene	2
o-Xylene	2
Isopropylbenzene	< 1
n-Propylbenzene	< 1
1-Ethyl-4-methylbenzene	1
1-Ethyl-3-methylbenzene	1
1,3,5-Trimethylbenzene	2
1-Ethyl-2-methylbenzene	1
1-Chloro-4-methylbenzene	
1,2,4-Trimethylbenzene	1
Dimethyltrisulfide (DMTS)	35
Bromoform	
1,2,3-Trimethylbenzene	2
1,3-Dichlorobenzene	1
1,4-Dichlorobenzene	1
n-Dodecane	< 1
1,2-Dichlorobenzene	< 1
n-Tridecane	< 1
1,2,4-Trichlorobenzene	< 1
Naphthalene	< 1
n-Tetradecane	< 1
1,2,3-Trichlorobenzene	< 1
n-Pentadecane	1
2-Methylnaphthalene	< 1
1-Methylnaphthalene	< 1
n-Hexadecane	1
Pristane	< 1
n-Heptadecane	2
Phytane	2
n-Octadecane	1

Sample - Rhode Island Sound Sta. 2 - 0m
Date - 7/22/80
Standards Added - 10 ng/L

Compound	Conc (ng/L)
1,1,1-Trichloroethane	24
Carbon tetrachloride	12
Benzene	23
Trichloroethylene	7
Dimethyldisulfide (DMDS)	56
Toluene	34
Tetrachloroethylene	3
Octatriene	17
Ethylbenzene	9
p-Xylene	5
m-Xylene	20
Chlorobenzene	1
o-Xylene	10
Isopropylbenzene	1
n-Propylbenzene	1
1-Ethyl-4-methylbenzene	2
1-Ethyl-3-methylbenzene	3
1,3,5-Trimethylbenzene	2
1-Ethyl-2-methylbenzene	2
1-Chloro-4-methylbenzene	
1,2,4-Trimethylbenzene	5
Dimethyltrisulfide (DMTS)	20
Bromoform	
1,2,3-Trimethylbenzene	12
1,3-Dichlorobenzene	2
1,4-Dichlorobenzene	1
n-Dodecane	1
1,2-Dichlorobenzene	< 1
n-Tridecane	1
1,2,4-Trichlorobenzene	8
Naphthalene	< 1
n-Tetradecane	< 1
1,2,3-Trichlorobenzene	< 1
n-Pentadecane	2
2-Methylnaphthalene	< 1
1-Methylnaphthalene	< 1
n-Hexadecane	1
Pristane	1
n-Heptadecane	7
Phytane	2
n-Octadecane	1

Sample - R. I. Sound Sta. 2 - 30m
Date - 7/22/80
Standards Added - 10 ng/L

Compound	Conc (ng/L)
1,1,1-Trichloroethane	100
Carbon tetrachloride	140
Benzene	160
Trichloroethylene	65
Dimethyldisulfide (DMDS)	120
Toluene	180
Tetrachloroethylene	34
Octatriene	9
Ethylbenzene	11
p-Xylene	18
m-Xylene	43
Chlorobenzene	5
o-Xylene	19
Isopropylbenzene	1
n-Propylbenzene	2
1-Ethyl-4-methylbenzene	3
1-Ethyl-3-methylbenzene	7
1,3,5-Trimethylbenzene	32
1-Ethyl-2-methylbenzene	3
1-Chloro-4-methylbenzene	
1,2,4-Trimethylbenzene	12
Dimethyltrisulfide (DMTS)	90
Bromoform	
1,2,3-Trimethylbenzene	1
1,3-Dichlorobenzene	1
1,4-Dichlorobenzene	1
n-Dodecane	< 1
1,2-Dichlorobenzene	< 1
n-Tridecane	< 1
1,2,4-Trichlorobenzene	< 1
Naphthalene	< 1
n-Tetradecane	< 1
1,2,3-Trichlorobenzene	< 1
n-Pentadecane	1
2-Methylnaphthalene	< 1
1-Methylnaphthalene	< 1
n-Hexadecane	1
Pristane	1
n-Heptadecane	3
Phytane	1
n-Octadecane	< 1

Sample - R. I. Sound Sta. 1 - 0m #2
Date - 7/22/80
Standards Added - 10 ng/L

Compound	Conc (ng/L)
1,1,1-Trichloroethane	11
Carbon tetrachloride	13
Benzene	18
Trichloroethylene	4
Dimethyldisulfide (DMDS)	65
Toluene	31
Tetrachloroethylene	3
Octatriene	5
Ethylbenzene	5
<u>p</u> -Xylene	6
<u>m</u> -Xylene	16
Chlorobenzene	< 1
<u>o</u> -Xylene	7
Isopropylbenzene	< 1
<u>n</u> -Propylbenzene	< 1
<u>l</u> -Ethyl-4-methylbenzene	2
<u>l</u> -Ethyl-3-methylbenzene	5
1,3,5-Trimethylbenzene	3
<u>l</u> -Ethyl-2-methylbenzene	2
<u>l</u> -Chloro-4-methylbenzene	
1,2,4-Trimethylbenzene	6
Dimethyltrisulfide (DMTS)	24
Bromoform	
1,2,3-Trimethylbenzene	3
1,3-Dichlorobenzene	2
1,4-Dichlorobenzene	2
<u>n</u> -Dodecane	< 1
<u>l</u> ,2-Dichlorobenzene	< 1
<u>n</u> -Tridecane	< 1
<u>l</u> ,2,4-Trichlorobenzene	< 1
Naphthalene	< 1
<u>n</u> -Tetradecane	< 1
<u>l</u> ,2,3-Trichlorobenzene	< 1
<u>n</u> -Pentadecane	2
<u>2</u> -Methylnaphthalene	< 1
<u>1</u> -Methylnaphthalene	< 1
<u>n</u> -Hexadecane	1
Pristane	3
<u>n</u> -Heptadecane	3
Phytane	< 1
<u>n</u> -Octadecane	< 1

Sample - R. I. Sound Sta. 1 - 0m #1
Date - 7/22/80
Standards Added - 10 ng/L

Compound	Conc (ng/L)
1,1,1-Trichloroethane	11
Carbon tetrachloride	7
Benzene	
Trichloroethylene	3
Dimethyldisulfide (DMDS)	26
Toluene	19
Tetrachloroethylene	245
Octatriene	2
Ethylbenzene	3
<u>p</u> -Xylene	3
<u>m</u> -Xylene	7
Chlorobenzene	< 1
<u>o</u> -Xylene	6
Isopropylbenzene	< 1
<u>n</u> -Propylbenzene	1
<u>l</u> -Ethyl-4-methylbenzene	1
<u>l</u> -Ethyl-3-methylbenzene	2
1,3,5-Trimethylbenzene	1
<u>l</u> -Ethyl-2-methylbenzene	4
<u>l</u> -Chloro-4-methylbenzene	
1,2,4-Trimethylbenzene	3
Dimethyltrisulfide (DMTS)	12
Bromoform	
1,2,3-Trimethylbenzene	2
1,3-Dichlorobenzene	1
1,4-Dichlorobenzene	1
<u>n</u> -Dodecane	< 1
<u>l</u> ,2-Dichlorobenzene	1
<u>n</u> -Tridecane	< 1
<u>l</u> ,2,4-Trichlorobenzene	< 1
Naphthalene	< 1
<u>n</u> -Tetradecane	< 1
<u>l</u> ,2,3-Trichlorobenzene	< 1
<u>n</u> -Pentadecane	2
<u>2</u> -Methylnaphthalene	< 1
<u>1</u> -Methylnaphthalene	< 1
<u>n</u> -Hexadecane	< 1
Pristane	1
<u>n</u> -Heptadecane	1
Phytane	< 1
<u>n</u> -Octadecane	< 1

Sample - R. I. Sound Sta. 1 - 35m #1
Date - 7/22/80
Standards Added - 10 ng/L

Sample - R.I. Sound Sta. 1 - 35m #2
Date - 7/22/80
Standards Added - 10 ng/L

Compound	Conc (ng/L)
1,1,1-Trichloroethane	6
Carbon tetrachloride	6
Benzene	18
Trichloroethylene	11
Dimethyldisulfide (DMDS)	14
Toluene	14
Tetrachloroethylene	3
Octatriene	1
Ethylbenzene	1
p-Xylene	3
m-Xylene	2
Chlorobenzene	< 1
o-Xylene	1
Isopropylbenzene	< 1
n-Propylbenzene	< 1
1-Ethyl-4-methylbenzene	1
1-Ethyl-3-methylbenzene	< 1
1,3,5-Trimethylbenzene	3
1-Ethyl-2-methylbenzene	< 1
1-Chloro-4-methylbenzene	
1,2,4-Trimethylbenzene	< 1
Dimethyltrisulfide (DMTS)	5
Bromoform	
1,2,3-Trimethylbenzene	1
1,3-Dichlorobenzene	< 1
1,4-Dichlorobenzene	1
n-Dodecane	< 1
1,2-Dichlorobenzene	< 1
n-Tridecane	< 1
1,2,4-Trichlorobenzene	< 1
Naphthalene	< 1
n-Tetradecane	< 1
1,2,3-Trichlorobenzene	< 1
n-Pentadecane	1
2-Methylnaphthalene	< 1
1-Methylnaphthalene	< 1
n-Hexadecane	1
Pristane	< 1
n-Heptadecane	2
Phytane	1
n-Octadecane	< 1

Compound	Conc (ng/L)
1,1,1-Trichloroethane	10
Carbon tetrachloride	11
Benzene	27
Trichloroethylene	16
Dimethyldisulfide (DMDS)	17
Toluene	17
Tetrachloroethylene	3
Octatriene	1
Ethylbenzene	1
p-Xylene	1
m-Xylene	2
Chlorobenzene	1
o-Xylene	1
Isopropylbenzene	< 1
n-Propylbenzene	< 1
1-Ethyl-4-methylbenzene	< 1
1-Ethyl-3-methylbenzene	< 1
1,3,5-Trimethylbenzene	< 1
1-Ethyl-2-methylbenzene	< 1
1-Chloro-4-methylbenzene	
1,2,4-Trimethylbenzene	1
Dimethyltrisulfide (DMTS)	8
Bromoform	
1,2,3-Trimethylbenzene	1
1,3-Dichlorobenzene	< 1
1,4-Dichlorobenzene	1
n-Dodecane	< 1
1,2-Dichlorobenzene	< 1
n-Tridecane	< 1
1,2,4-Trichlorobenzene	< 1
Naphthalene	< 1
n-Tetradecane	< 1
1,2,3-Trichlorobenzene	< 1
n-Pentadecane	1
2-Methylnaphthalene	< 1
1-Methylnaphthalene	< 1
n-Hexadecane	1
Pristane	1
n-Heptadecane	2
Phytane	< 1
n-Octadecane	< 1

Sample - R.I. Sound Sta. 1 - 35m #3
Date - 7/22/80
Standards Added - 10 ng/L

Compound	Conc (ng/L)
1,1,1-Trichloroethane	6
Carbon tetrachloride	7
Benzene	
Trichloroethylene	12
Dimethyldisulfide (DMDS)	22
Toluene	24
Tetrachloroethylene	4
Octatriene	1
Ethylbenzene	1
p-Xylene	1
m-Xylene	3
Chlorobenzene	1
o-Xylene	2
Isopropylbenzene	< 1
n-Propylbenzene	< 1
1-Ethyl-4-methylbenzene	1
1-Ethyl-3-methylbenzene	< 1
1,3,5-Trimethylbenzene	2
1-Ethyl-2-methylbenzene	1
1-Chloro-4-methylbenzene	
1,2,4-Trimethylbenzene	< 1
Dimethyltrisulfide (DMTS)	12
Bromoform	
1,2,3-Trimethylbenzene	1
1,3-Dichlorobenzene	1
1,4-Dichlorobenzene	1
n-Dodecane	< 1
1,2-Dichlorobenzene	< 1
n-Tridecane	< 1
1,2,4-Trichlorobenzene	< 1
Naphthalene	< 1
n-Tetradecane	< 1
1,2,3-Trichlorobenzene	< 1
n-Pentadecane	1
2-Methylnaphthalene	< 1
1-Methylnaphthalene	< 1
n-Hexadecane	1
Pristane	1
n-Heptadecane	3
Phytane	1
n-Octadecane	< 1

Sample - Oceanus 86/2 Sta. 11 - 3m
Date - 9/15/80
Standards Added - 5 ng/L

Compound	Conc (ng/L)
1,1,1-Trichloroethane	75
Carbon tetrachloride	
Benzene	5
Trichloroethylene	
Dimethyldisulfide (DMDS)	1
Toluene	17
Tetrachloroethylene	1
Octatriene	32
Ethylbenzene	< 1
p-Xylene	1
m-Xylene	1
Chlorobenzene	< 1
o-Xylene	< 1
Isopropylbenzene	< 1
n-Propylbenzene	< 1
1-Ethyl-4-methylbenzene	< 1
1-Ethyl-3-methylbenzene	< 1
1,3,5-Trimethylbenzene	< 1
1-Ethyl-2-methylbenzene	< 1
1-Chloro-4-methylbenzene	
1,2,4-Trimethylbenzene	< 1
Dimethyltrisulfide (DMTS)	< 1
Bromoform	
1,2,3-Trimethylbenzene	1
1,3-Dichlorobenzene	< 1
1,4-Dichlorobenzene	< 1
n-Dodecane	< 1
1,2-Dichlorobenzene	< 1
n-Tridecane	< 1
1,2,4-Trichlorobenzene	< 1
Naphthalene	< 1
n-Tetradecane	< 1
1,2,3-Trichlorobenzene	< 1
n-Pentadecane	2
2-Methylnaphthalene	< 1
1-Methylnaphthalene	< 1
n-Hexadecane	< 1
Pristane	1
n-Heptadecane	< 1
Phytane	< 1
n-Octadecane	< 1

Sample - Oceanus 86/2 Sta. 11 - 49m
 Date - 9/15/80
 Standards Added - 5 ng/L

Compound	Conc (ng/L)/L)
1,1,1-Trichloroethane	75
Carbon tetrachloride	
Benzene	2
Trichloroethylene	
Dimethyldisulfide (DMDS)	1
Toluene	5
Tetrachloroethylene	1
Octatriene	1
Ethylbenzene	< 1
p-Xylene	< 1
m-Xylene	1
Chlorobenzene	< 1
o-Xylene	1
Isopropylbenzene	< 1
n-Propylbenzene	< 1
1-Ethyl-4-methylbenzene	< 1
1-Ethyl-3-methylbenzene	< 1
1,3,5-Trimethylbenzene	< 1
1-Ethyl-2-methylbenzene	< 1
1-Chloro-4-methylbenzene	
1,2,4-Trimethylbenzene	< 1
Dimethyltrisulfide (DMTS)	< 1
Bromoform	
1,2,3-Trimethylbenzene	< 1
1,3-Dichlorobenzene	< 1
1,4-Dichlorobenzene	< 1
n-Dodecane	< 1
1,2-Dichlorobenzene	< 1
n-Tridecane	< 1
1,2,4-Trichlorobenzene	< 1
Naphthalene	< 1
n-Tetradecane	< 1
1,2,3-Trichlorobenzene	< 1
n-Pentadecane	< 1
2-Methylnaphthalene	< 1
1-Methylnaphthalene	< 1
n-Hexadecane	< 1
Pristane	1
n-Heptadecane	< 1
Phytane	< 1
n-Octadecane	< 1

Sample - Providence River - 0m
Date - 2/23/81
Standards Added - 50 ng/L

Sample - Fields Point - outfall
Date - 2/23/81
Standards Added - 1000 ng/L

Compound	Conc (ng/L)
1,1,1-Trichloroethane	1300
Carbon tetrachloride	
Benzene	75
Trichloroethylene	400
Dimethyldisulfide (DMDS)	40
Toluene	150
Tetrachloroethylene	240
Octatriene	38
Ethylbenzene	50
p-Xylene	35
m-Xylene	90
Chlorobenzene	6
o-Xylene	50
Isopropylbenzene	7
n-Propylbenzene	7
1-Ethyl-4-methylbenzene	7
1-Ethyl-3-methylbenzene	11
1,3,5-Trimethylbenzene	9
1-Ethyl-2-methylbenzene	14
1-Chloro-4-methylbenzene	8
1,2,4-Trimethylbenzene	19
Dimethyltrisulfide (DMTS)	
Bromoform	160
1,2,3-Trimethylbenzene	16
1,3-Dichlorobenzene	1
1,4-Dichlorobenzene	1
n-Dodecane	14
1,2-Dichlorobenzene	1
n-Tridecane	
1,2,4-Trichlorobenzene	100
Naphthalene	5
n-Tetradecane	2
1,2,3-Trichlorobenzene	20
n-Pentadecane	7
2-Methylnaphthalene	5
1-Methylnaphthalene	3
n-Hexadecane	28
Pristane	36
n-Heptadecane	65
Phytane	< 1
n-Octadecane	< 1

Compound	Conc (ng/L)
1,1,1-Trichloroethane	46000
Carbon tetrachloride	
Benzene	1100
Trichloroethylene	50000
Dimethyldisulfide (DMDS)	1200
Toluene	5500
Tetrachloroethylene	19000
Octatriene	1100
Ethylbenzene	3400
p-Xylene	1600
m-Xylene	7800
Chlorobenzene	350
o-Xylene	4000
Isopropylbenzene	460
n-Propylbenzene	400
1-Ethyl-4-methylbenzene	440
1-Ethyl-3-methylbenzene	700
1,3,5-Trimethylbenzene	740
1-Ethyl-2-methylbenzene	720
1-Chloro-4-methylbenzene	890
1,2,4-Trimethylbenzene	1600
Dimethyltrisulfide (DMTS)	
Bromoform	2500
1,2,3-Trimethylbenzene	970
1,3-Dichlorobenzene	
1,4-Dichlorobenzene	
n-Dodecane	520
1,2-Dichlorobenzene	
n-Tridecane	520
1,2,4-Trichlorobenzene	540
Naphthalene	340
n-Tetradecane	280
1,2,3-Trichlorobenzene	430
n-Pentadecane	300
2-Methylnaphthalene	450
1-Methylnaphthalene	310
n-Hexadecane	320
Pristane	170
n-Heptadecane	520
Phytane	200
n-Octadecane	210

Sample - Fields Point - 0m
Date - 2/23/80
Standards Added - 50 ng/L

Sample - Fields Point - 3m
Date - 2/23/81
Standards Added - 100 ng/L

Compound	Conc (ng/L)
1,1,1-Trichloroethane	1400
Carbon tetrachloride	40
Benzene	95
Trichloroethylene	680
Dimethyldisulfide (DMDS)	31
Toluene	210
Tetrachloroethylene	350
Octatriene	48
Ethylbenzene	86
p-Xylene	62
m-Xylene	170
Chlorobenzene	11
o-Xylene	100
Isopropylbenzene	11
n-Propylbenzene	11
1-Ethyl-4-methylbenzene	11
1-Ethyl-3-methylbenzene	21
1,3,5-Trimethylbenzene	19
1-Ethyl-2-methylbenzene	24
1-Chloro-4-methylbenzene	17
1,2,4-Trimethylbenzene	32
Dimethyltrisulfide (DMTS)	
Bromoform	< 1
1,2,3-Trimethylbenzene	35
1,3-Dichlorobenzene	
1,4-Dichlorobenzene	
n-Dodecane	29
1,2-Dichlorobenzene	
n-Tridecane	
1,2,4-Trichlorobenzene	97
Naphthalene	11
n-Tetradecane	6
1,2,3-Trichlorobenzene	22
n-Pentadecane	10
2-Methylnaphthalene	12
1-Methylnaphthalene	5
n-Hexadecane	37
Pristane	25
n-Heptadecane	44
Phytane	< 1
n-Octadecane	11

Compound	Conc (ng/L)
1,1,1-Trichloroethane	1200
Carbon tetrachloride	
Benzene	95
Trichloroethylene	570
Dimethyldisulfide (DMDS)	77
Toluene	310
Tetrachloroethylene	280
Octatriene	140
Ethylbenzene	98
p-Xylene	87
m-Xylene	210
Chlorobenzene	10
o-Xylene	110
Isopropylbenzene	9
n-Propylbenzene	9
1-Ethyl-4-methylbenzene	10
1-Ethyl-3-methylbenzene	21
1,3,5-Trimethylbenzene	19
1-Ethyl-2-methylbenzene	26
1-Chloro-4-methylbenzene	8
1,2,4-Trimethylbenzene	37
Dimethyltrisulfide (DMTS)	
Bromoform	350
1,2,3-Trimethylbenzene	34
1,3-Dichlorobenzene	9
1,4-Dichlorobenzene	< 1
n-Dodecane	18
1,2-Dichlorobenzene	< 1
n-Tridecane	1
1,2,4-Trichlorobenzene	42
Naphthalene	16
n-Tetradecane	6
1,2,3-Trichlorobenzene	< 1
n-Pentadecane	6
2-Methylnaphthalene	15
1-Methylnaphthalene	17
n-Hexadecane	< 1
Pristane	< 1
n-Heptadecane	< 1
Phytane	< 1
n-Octadecane	< 1

Sample - Sabin Point - 0m
Date - 2/23/81
Standards Added - 100 ng/L

Sample - Sabin Point - 4m
Date - 2/23/81
Standards Added - 100 ng/L

Compound	Conc (ng/L)
1,1,1-Trichloroethane	590
Carbon tetrachloride	
Benzene	74
Trichloroethylene	220
Dimethyldisulfide (DMDS)	37
Toluene	190
Tetrachloroethylene	140
Octatriene	50
Ethylbenzene	57
p-Xylene	49
m-Xylene	130
Chlorobenzene	5
o-Xylene	66
Isopropylbenzene	6
n-Propylbenzene	8
1-Ethyl-4-methylbenzene	9
1-Ethyl-3-methylbenzene	17
1,3,5-Trimethylbenzene	14
1-Ethyl-2-methylbenzene	17
1-Chloro-4-methylbenzene	10
1,2,4-Trimethylbenzene	28
Dimethyltrisulfide (DMTS)	
Bromoform	210
1,2,3-Trimethylbenzene	28
1,3-Dichlorobenzene	2
1,4-Dichlorobenzene	3
n-Dodecane	25
1,2-Dichlorobenzene	7
n-Tridecane	16
1,2,4-Trichlorobenzene	49
Naphthalene	11
n-Tetradecane	3
1,2,3-Trichlorobenzene	10
n-Pentadecane	7
2-Methylnaphthalene	13
1-Methylnaphthalene	5
n-Hexadecane	27
Pristane	46
n-Heptadecane	48
Phytane	< 1
n-Octadecane	< 1

Compound	Conc (ng/L)
1,1,1-Trichloroethane	940
Carbon tetrachloride	140
Benzene	160
Trichloroethylene	430
Dimethyldisulfide (DMDS)	45
Toluene	340
Tetrachloroethylene	200
Octatriene	190
Ethylbenzene	85
p-Xylene	82
m-Xylene	210
Chlorobenzene	5
o-Xylene	110
Isopropylbenzene	7
n-Propylbenzene	8
1-Ethyl-4-methylbenzene	12
1-Ethyl-3-methylbenzene	26
1,3,5-Trimethylbenzene	19
1-Ethyl-2-methylbenzene	25
1-Chloro-4-methylbenzene	15
1,2,4-Trimethylbenzene	41
Dimethyltrisulfide (DMTS)	
Bromoform	250
1,2,3-Trimethylbenzene	30
1,3-Dichlorobenzene	< 1
1,4-Dichlorobenzene	< 1
n-Dodecane	25
1,2-Dichlorobenzene	6
n-Tridecane	15
1,2,4-Trichlorobenzene	31
Naphthalene	17
n-Tetradecane	4
1,2,3-Trichlorobenzene	6
n-Pentadecane	6
2-Methylnaphthalene	16
1-Methylnaphthalene	10
n-Hexadecane	19
Pristane	31
n-Heptadecane	43
Phytane	< 1
n-Octadecane	< 1

Sample - Conimicut Point - 0m #1
Date - 2/23/81
Standards Added - 50 ng/L

Compound	Conc (ng/L)
1,1,1-Trichloroethane	800
Carbon tetrachloride	21
Benzene	100
Trichloroethylene	990
Dimethyldisulfide (DMDS)	210
Toluene	920
Tetrachloroethylene	440
Octatriene	87
Ethylbenzene	280
p-Xylene	270
m-Xylene	790
Chlorobenzene	34
o-Xylene	490
Isopropylbenzene	18
n-Propylbenzene	21
1-Ethyl-4-methylbenzene	25
1-Ethyl-3-methylbenzene	51
1,3,5-Trimethylbenzene	42
1-Ethyl-2-methylbenzene	98
1-Chloro-4-methylbenzene	33
1,2,4-Trimethylbenzene	100
Dimethyltrisulfide (DMTS)	
Bromoform	260
1,2,3-Trimethylbenzene	47
1,3-Dichlorobenzene	5
1,4-Dichlorobenzene	6
n-Dodecane	26
1,2-Dichlorobenzene	8
n-Tridecane	25
1,2,4-Trichlorobenzene	27
Naphthalene	18
n-Tetradecane	14
1,2,3-Trichlorobenzene	16
n-Pentadecane	23
2-Methylnaphthalene	22
1-Methylnaphthalene	11
n-Hexadecane	25
Pristane	14
n-Heptadecane	41
Phytane	14
n-Octadecane	15

Sample - Conimicut Point - 0m #2
Date - 2/23/81
Standards Added - 50 ng/L

Compound	Conc (ng/L)
1,1,1-Trichloroethane	
Carbon tetrachloride	
Benzene	110
Trichloroethylene	1100
Dimethyldisulfide (DMDS)	140
Toluene	1200
Tetrachloroethylene	3100
Octatriene	88
Ethylbenzene	560
p-Xylene	480
m-Xylene	1300
Chlorobenzene	51
o-Xylene	800
Isopropylbenzene	31
n-Propylbenzene	22
1-Ethyl-4-methylbenzene	25
1-Ethyl-3-methylbenzene	47
1,3,5-Trimethylbenzene	41
1-Ethyl-2-methylbenzene ^a	120
1-Chloro-4-methylbenzene	28
1,2,4-Trimethylbenzene	100
Dimethyltrisulfide (DMTS)	
Bromoform	170
1,2,3-Trimethylbenzene	27
1,3-Dichlorobenzene	4
1,4-Dichlorobenzene	5
n-Dodecane	25
1,2-Dichlorobenzene	8
n-Tridecane	26
1,2,4-Trichlorobenzene	25
Naphthalene	19
n-Tetradecane	10
1,2,3-Trichlorobenzene	16
n-Pentadecane	25
2-Methylnaphthalene	25
1-Methylnaphthalene	12
n-Hexadecane	33
Pristane	16
n-Heptadecane	48
Phytane	18
n-Octadecane	18

^aContains some 1-chloro-2-methylbenzene

Sample - Conimicut Point - 0m #3
Date - 2/23/81
Standards Added - 48 ng/L

Sample - Conimicut Point - 3m
Date - 2/23/81
Standards Added - 50 ng/L

Compound	Conc (ng/L)
1,1,1-Trichloroethane	760
Carbon tetrachloride	30
Benzene	88
Trichloroethylene	360
Dimethyldisulfide (DMDS)	41
Toluene	1000
Tetrachloroethylene	410
Octatriene	57
Ethylbenzene	400
p-Xylene	360
m-Xylene	1000
Chlorobenzene	44
o-Xylene	300
Isopropylbenzene	21
n-Propylbenzene	22
1-Ethyl-4-methylbenzene	23
1-Ethyl-3-methylbenzene	46
1,3,5-Trimethylbenzene	37
1-Ethyl-2-methylbenzene ^a	120
1-Chloro-4-methylbenzene	37
1,2,4-Trimethylbenzene	95
Dimethyltrisulfide (DMTS)	
Bromoform	180
1,2,3-Trimethylbenzene	51
1,3-Dichlorobenzene	4
1,4-Dichlorobenzene	< 1
n-Dodecane	28
1,2-Dichlorobenzene	9
n-Tridecane	41
1,2,4-Trichlorobenzene	32
Naphthalene	33
n-Tetradecane	19
1,2,3-Trichlorobenzene	25
n-Pentadecane	32
2-Methylnaphthalene	37
1-Methylnaphthalene	16
n-Hexadecane	27
Pristane	12
n-Heptadecane	44
Phytane	15
n-Octadecane	17

Compound	Conc (ng/L)
1,1,1-Trichloroethane	890
Carbon tetrachloride	50
Benzene	55
Trichloroethylene	230
Dimethyldisulfide (DMDS)	150
Toluene	260
Tetrachloroethylene	160
Octatriene	110
Ethylbenzene	72
p-Xylene	72
m-Xylene	190
Chlorobenzene	5
o-Xylene	90
Isopropylbenzene	6
n-Propylbenzene	8
1-Ethyl-4-methylbenzene	10
1-Ethyl-3-methylbenzene	22
1,3,5-Trimethylbenzene	16
1-Ethyl-2-methylbenzene	20
1-Chloro-4-methylbenzene	11
1,2,4-Trimethylbenzene	36
Dimethyltrisulfide (DMTS)	
Bromoform	150
1,2,3-Trimethylbenzene	19
1,3-Dichlorobenzene	< 1
1,4-Dichlorobenzene	< 1
n-Dodecane	17
1,2-Dichlorobenzene	3
n-Tridecane	1
1,2,4-Trichlorobenzene	19
Naphthalene	3
n-Tetradecane	1
1,2,3-Trichlorobenzene	4
n-Pentadecane	6
2-Methylnaphthalene	8
1-Methylnaphthalene	3
n-Hexadecane	28
Pristane	17
n-Heptadecane	30
Phytane	1
n-Octadecane	11

^aContains some 1-chloro-2-methylbenzene

Sample - Conimicut Point - 6m
Date - 2/23/81
Standards Added - 50 ng/L

Sample - Ohio Ledge - 0m
Date - 2/23/81
Standards Added - 25 ng/L

Compound	Conc (ng/L)
1,1,1-Trichloroethane	280
Carbon tetrachloride	20
Benzene	40
Trichloroethylene	120
Dimethyldisulfide (DMDS)	63
Toluene	220
Tetrachloroethylene	93
Octatriene	75
Ethylbenzene	38
<u>p</u> -Xylene	41
<u>m</u> -Xylene	110
Chlorobenzene	2
<u>o</u> -Xylene	54
Isopropylbenzene	5
<u>n</u> -Propylbenzene	6
<u>l</u> -Ethyl-4-methylbenzene	9
<u>l</u> -Ethyl-3-methylbenzene	19
<u>l</u> ,3,5-Trimethylbenzene	14
<u>l</u> -Ethyl-2-methylbenzene	12
<u>l</u> -Chloro-4-methylbenzene	8
<u>l</u> ,2,4-Trimethylbenzene	29
Dimethyltrisulfide (DMTS)	
Bromoform	170
<u>l</u> ,2,3-Trimethylbenzene	15
<u>l</u> ,3-Dichlorobenzene	< 1
<u>l</u> ,4-Dichlorobenzene	< 1
<u>n</u> -Dodecane	18
<u>l</u> ,2-Dichlorobenzene	3
<u>n</u> -Tridecane	
<u>l</u> ,2,4-Trichlorobenzene	9
Naphthalene	4
<u>n</u> -Tetradecane	2
<u>l</u> ,2,3-Trichlorobenzene	1
<u>n</u> -Pentadecane	3
<u>2</u> -Methylnaphthalene	5
<u>1</u> -Methylnaphthalene	3
<u>n</u> -Hexadecane	9
Pristane	14
<u>n</u> -Heptadecane	17
Phytane	< 1
<u>n</u> -Octadecane	< 1

Compound	Conc (ng/L)
1,1,1-Trichloroethane	280
Carbon tetrachloride	24
Benzene	94
Trichloroethylene	290
Dimethyldisulfide (DMDS)	42
Toluene	660
Tetrachloroethylene	280
Octatriene	200
Ethylbenzene	180
<u>p</u> -Xylene	190
<u>m</u> -Xylene	480
Chlorobenzene	20
<u>o</u> -Xylene	320
Isopropylbenzene	17
<u>n</u> -Propylbenzene	25
<u>l</u> -Ethyl-4-methylbenzene	29
<u>l</u> -Ethyl-3-methylbenzene	66
<u>l</u> ,3,5-Trimethylbenzene	48
<u>l</u> -Ethyl-2-methylbenzene	65
<u>l</u> -Chloro-4-methylbenzene	13
<u>l</u> ,2,4-Trimethylbenzene	120
Dimethyltrisulfide (DMTS)	
Bromoform	170
<u>l</u> ,2,3-Trimethylbenzene	43
<u>l</u> ,3-Dichlorobenzene	< 1
<u>l</u> ,4-Dichlorobenzene	< 1
<u>n</u> -Dodecane	28
<u>l</u> ,2-Dichlorobenzene	11
<u>n</u> -Tridecane	
<u>l</u> ,2,4-Trichlorobenzene	47
Naphthalene	20
<u>n</u> -Tetradecane	4
<u>l</u> ,2,3-Trichlorobenzene	13
<u>n</u> -Pentadecane	7
<u>2</u> -Methylnaphthalene	19
<u>1</u> -Methylnaphthalene	9
<u>n</u> -Hexadecane	8
Pristane	5
<u>n</u> -Heptadecane	16
Phytane	5
<u>n</u> -Octadecane	6

Sample - Ohio Ledge - 5m
Date - 2/23/81
Standards Added - 25 ng/L

Compound	Conc (ng/L)
1,1,1-Trichloroethane	94
Carbon tetrachloride	12
Benzene	81
Trichloroethylene	80
Dimethyldisulfide (DMDS)	
Toluene	420
Tetrachloroethylene	120
Octatriene	160
Ethylbenzene	120
p-Xylene	120
m-Xylene	330
Chlorobenzene	10
o-Xylene	170
Isopropylbenzene	9
n-Propylbenzene	16
1-Ethyl-4-methylbenzene	20
1-Ethyl-3-methylbenzene	45
1,3,5-Trimethylbenzene	30
1-Ethyl-2-methylbenzene	33
1-Chloro-4-methylbenzene	8
1,2,4-Trimethylbenzene	80
Dimethyltrisulfide (DMTS)	
Bromoform	160
1,2,3-Trimethylbenzene	32
1,3-Dichlorobenzene	< 1
1,4-Dichlorobenzene	< 1
n-Dodecane	25
1,2-Dichlorobenzene	5
n-Tridecane	
1,2,4-Trichlorobenzene	28
Naphthalene	10
n-Tetradecane	
1,2,3-Trichlorobenzene	6
n-Pentadecane	7
2-Methylnaphthalene	14
1-Methylnaphthalene	7
n-Hexadecane	8
Pristane	4
n-Heptadecane	11
Phytane	2
n-Octadecane	4

Sample - Conanicut Point - 0m
Date - 2/23/81
Standards Added - 25 ng/L

Compound	Conc (ng/L)
1,1,1-Trichloroethane	
Carbon tetrachloride	
Benzene	19
Trichloroethylene	31
Dimethyldisulfide (DMDS)	7
Toluene	230
Tetrachloroethylene	78
Octatriene	87
Ethylbenzene	89
p-Xylene	88
m-Xylene	230
Chlorobenzene	6
o-Xylene	150
Isopropylbenzene	8
n-Propylbenzene	15
1-Ethyl-4-methylbenzene	17
1-Ethyl-3-methylbenzene	36
1,3,5-Trimethylbenzene	25
1-Ethyl-2-methylbenzene	27
1-Chloro-4-methylbenzene	8
1,2,4-Trimethylbenzene	69
Dimethyltrisulfide (DMTS)	
Bromoform	92
1,2,3-Trimethylbenzene	63
1,3-Dichlorobenzene	< 1
1,4-Dichlorobenzene	< 1
n-Dodecane	24
1,2-Dichlorobenzene	6
n-Tridecane	
1,2,4-Trichlorobenzene	24
Naphthalene	15
n-Tetradecane	6
1,2,3-Trichlorobenzene	2
n-Pentadecane	11
2-Methylnaphthalene	13
1-Methylnaphthalene	6
n-Hexadecane	8
Pristane	3
n-Heptadecane	9
Phytane	2
n-Octadecane	2

Sample - Conanicut Point - Om #1
Date - 2/23/81
Standards Added - 50 ng/L

Sample - Conanicut Point - Om #2
Date - 2/23/81
Standards Added - 50 ng/L

Compound	Conc (ng/L)
1,1,1-Trichloroethane	45
Carbon tetrachloride	
Benzene	40
Trichloroethylene	57
Dimethyldisulfide (DMDS)	11
Toluene	300
Tetrachloroethylene	88
Octatriene	78
Ethylbenzene	63
p-Xylene	61
m-Xylene	170
Chlorobenzene	6
o-Xylene	120
Isopropylbenzene	8
n-Propylbenzene	11
1-Ethyl-4-methylbenzene	14
1-Ethyl-3-methylbenzene	30
1,3,5-Trimethylbenzene	20
1-Ethyl-2-methylbenzene	22
1-Chloro-4-methylbenzene	11
1,2,4-Trimethylbenzene	50
Dimethyltrisulfide (DMTS)	
Bromoform	80
1,2,3-Trimethylbenzene	19
1,3-Dichlorobenzene	< 1
1,4-Dichlorobenzene	< 1
n-Dodecane	12
1,2-Dichlorobenzene	3
n-Tridecane	
1,2,4-Trichlorobenzene	16
Naphthalene	14
n-Tetradecane	4
1,2,3-Trichlorobenzene	4
n-Pentadecane	6
2-Methylnaphthalene	13
1-Methylnaphthalene	11
n-Hexadecane	8
Pristane	4
n-Heptadecane	12
Phytane	3
n-Octadecane	4

Compound	Conc (ng/L)
1,1,1-Trichloroethane	130
Carbon tetrachloride	23
Benzene	42
Trichloroethylene	99
Dimethyldisulfide (DMDS)	48
Toluene	220
Tetrachloroethylene	68
Octatriene	55
Ethylbenzene	59
p-Xylene	56
m-Xylene	140
Chlorobenzene	5
o-Xylene	86
Isopropylbenzene	6
n-Propylbenzene	8
1-Ethyl-4-methylbenzene	10
1-Ethyl-3-methylbenzene	22
1,3,5-Trimethylbenzene	16
1-Ethyl-2-methylbenzene	17
1-Chloro-4-methylbenzene	8
1,2,4-Trimethylbenzene	45
Dimethyltrisulfide (DMTS)	
Bromoform	440
1,2,3-Trimethylbenzene	< 1
1,3-Dichlorobenzene	< 1
1,4-Dichlorobenzene	< 1
n-Dodecane	16
1,2-Dichlorobenzene	1
n-Tridecane	
1,2,4-Trichlorobenzene	22
Naphthalene	8
n-Tetradecane	11
1,2,3-Trichlorobenzene	3
n-Pentadecane	15
2-Methylnaphthalene	10
1-Methylnaphthalene	6
n-Hexadecane	11
Pristane	5
n-Heptadecane	13
Phytane	< 1
n-Octadecane	4

Sample - Conanicut Point - 0m #3

Date - 2/23/81

Standards Added - 50 ng/L

Compound	Conc (ng/L)
1,1,1-Trichloroethane	120
Carbon tetrachloride	27
Benzene	47
Trichloroethylene	94
Dimethyldisulfide (DMDS)	52
Toluene	230
Tetrachloroethylene	73
Octatriene	57
Ethylbenzene	52
p-Xylene	55
m-Xylene	150
Chlorobenzene	5
o-Xylene	100
Isopropylbenzene	9
n-Propylbenzene	10
1-Ethyl-4-methylbenzene	11
1-Ethyl-3-methylbenzene	25
1,3,5-Trimethylbenzene	18
1-Ethyl-2-methylbenzene	21
1-Chloro-4-methylbenzene	11
1,2,4-Trimethylbenzene	46
Dimethyltrisulfide (DMTS)	
Bromoform	340
1,2,3-Trimethylbenzene	25
1,3-Dichlorobenzene	< 1
1,4-Dichlorobenzene	< 1
n-Dodecane	14
1,2-Dichlorobenzene	< 1
n-Tridecane	
1,2,4-Trichlorobenzene	18
Naphthalene	18
n-Tetradecane	11
1,2,3-Trichlorobenzene	5
n-Pentadecane	17
2-Methylnaphthalene	17
1-Methylnaphthalene	8
n-Hexadecane	15
Pristane	5
n-Heptadecane	16
Phytane	4
n-Octadecane	6

Sample - Conanicut Point - 8m

Date - 2/23/81

Standards Added - 25 ng/L

Compound	Conc (ng/L)
1,1,1-Trichloroethane	33
Carbon tetrachloride	20
Benzene	45
Trichloroethylene	35
Dimethyldisulfide (DMDS)	15
Toluene	170
Tetrachloroethylene	33
Octatriene	37
Ethylbenzene	33
p-Xylene	36
m-Xylene	90
Chlorobenzene	3
o-Xylene	62
Isopropylbenzene	4
n-Propylbenzene	6
1-Ethyl-4-methylbenzene	7
1-Ethyl-3-methylbenzene	15
1,3,5-Trimethylbenzene	11
1-Ethyl-2-methylbenzene	9
1-Chloro-4-methylbenzene	4
1,2,4-Trimethylbenzene	28
Dimethyltrisulfide (DMTS)	
Bromoform	140
1,2,3-Trimethylbenzene	10
1,3-Dichlorobenzene	< 1
1,4-Dichlorobenzene	< 1
n-Dodecane	8
1,2-Dichlorobenzene	1
n-Tridecane	
1,2,4-Trichlorobenzene	6
Naphthalene	7
n-Tetradecane	4
1,2,3-Trichlorobenzene	1
n-Pentadecane	3
2-Methylnaphthalene	5
1-Methylnaphthalene	3
n-Hexadecane	2
Pristane	2
n-Heptadecane	4
Phytane	1
n-Octadecane	2

Sample - MERL - 0m
Date - 2/23/81
Standards Added - 25 ng/L

Compound	Conc (ng/L)
1,1,1-Trichloroethane	320
Carbon tetrachloride	9
Benzene	14
Trichloroethylene	22
Dimethyldisulfide (DMDS)	4
Toluene	200
Tetrachloroethylene	440
Octatriene	79
Ethylbenzene	58
p-Xylene	60
m-Xylene	160
Chlorobenzene	4
o-Xylene	100
Isopropylbenzene	7
n-Propylbenzene	12
1-Ethyl-4-methylbenzene	14
1-Ethyl-3-methylbenzene	30
1,3,5-Trimethylbenzene	19
1-Ethyl-2-methylbenzene	19
1-Chloro-4-methylbenzene	10
1,2,4-Trimethylbenzene	50
Dimethyltrisulfide (DMTS)	
Bromoform	50
1,2,3-Trimethylbenzene	17
1,3-Dichlorobenzene	< 1
1,4-Dichlorobenzene	< 1
n-Dodecane	13
1,2-Dichlorobenzene	< 1
n-Tridecane	
1,2,4-Trichlorobenzene	9
Naphthalene	6
n-Tetradecane	3
1,2,3-Trichlorobenzene	2
n-Pentadecane	6
2-Methylnaphthalene	6
1-Methylnaphthalene	3
n-Hexadecane	9
Pristane	3
n-Heptadecane	9
Phytane	3
n-Octadecane	3

Sample - MERL - 10m
Date - 2/23/81
Standards Added - 25 ng/L

Compound	Conc (ng/L)
1,1,1-Trichloroethane	49
Carbon tetrachloride	14
Benzene	20
Trichloroethylene	32
Dimethyldisulfide (DMDS)	10
Toluene	160
Tetrachloroethylene	25
Octatriene	31
Ethylbenzene	30
p-Xylene	32
m-Xylene	82
Chlorobenzene	2
o-Xylene	49
Isopropylbenzene	3
n-Propylbenzene	5
1-Ethyl-4-methylbenzene	6
1-Ethyl-3-methylbenzene	12
1,3,5-Trimethylbenzene	9
1-Ethyl-2-methylbenzene	8
1-Chloro-4-methylbenzene	4
1,2,4-Trimethylbenzene	25
Dimethyltrisulfide (DMTS)	
Bromoform	88
1,2,3-Trimethylbenzene	6
1,3-Dichlorobenzene	< 1
1,4-Dichlorobenzene	< 1
n-Dodecane	8
1,2-Dichlorobenzene	< 1
n-Tridecane	
1,2,4-Trichlorobenzene	4
Naphthalene	8
n-Tetradecane	5
1,2,3-Trichlorobenzene	4
n-Pentadecane	6
2-Methylnaphthalene	6
1-Methylnaphthalene	3
n-Hexadecane	6
Pristane	2
n-Heptadecane	6
Phytane	1
n-Octadecane	2

Sample - MERL - 0m
Date - 3/2/82, 1800hrs, low tide
Standards Added - 25 ng/L

Compound	Conc (ng/L)
1,1,1-Trichloroethane	
Carbon tetrachloride	
Benzene	42
Trichloroethylene	17
Dimethyldisulfide (DMDS)	
Toluene	64
Tetrachloroethylene	16
Octatriene	
Ethylbenzene	5
p-Xylene	6
m-Xylene	12
Chlorobenzene	5
o-Xylene	10
Isopropylbenzene	
n-Propylbenzene	
1-Ethyl-4-methylbenzene	4
1-Ethyl-3-methylbenzene	5
1,3,5-Trimethylbenzene	6
1-Ethyl-2-methylbenzene	1
1-Chloro-4-methylbenzene	6
1,2,4-Trimethylbenzene	11
Dimethyltrisulfide (DMTS)	
Bromoform	
1,2,3-Trimethylbenzene	4
1,3-Dichlorobenzene	7
1,4-Dichlorobenzene	8
n-Dodecane	4
1,2-Dichlorobenzene	
n-Tridecane	4
1,2,4-Trichlorobenzene	5
Naphthalene	4
n-Tetradecane	5
1,2,3-Trichlorobenzene	
n-Pentadecane	10
2-Methylnaphthalene	4
1-Methylnaphthalene	3
n-Hexadecane	7
Pristane	1
n-Heptadecane	7
Phytane	1
n-Octadecane	3

Sample - MERL - 0m
Date - 3/3/82, 0120hrs, high tide
Standards Added - 25 ng/L

Compound	Conc (ng/L)
1,1,1-Trichloroethane	
Carbon tetrachloride	
Benzene	25
Trichloroethylene	10
Dimethyldisulfide (DMDS)	
Toluene	17
Tetrachloroethylene	11
Octatriene	
Ethylbenzene	4
p-Xylene	4
m-Xylene	8
Chlorobenzene	3
o-Xylene	5
Isopropylbenzene	
n-Propylbenzene	
1-Ethyl-4-methylbenzene	2
1-Ethyl-3-methylbenzene	3
1,3,5-Trimethylbenzene	6
1-Ethyl-2-methylbenzene	1
1-Chloro-4-methylbenzene	29
1,2,4-Trimethylbenzene	6
Dimethyltrisulfide (DMTS)	
Bromoform	
1,2,3-Trimethylbenzene	2
1,3-Dichlorobenzene	4
1,4-Dichlorobenzene	6
n-Dodecane	3
1,2-Dichlorobenzene	
n-Tridecane	2
1,2,4-Trichlorobenzene	4
Naphthalene	3
n-Tetradecane	3
1,2,3-Trichlorobenzene	
n-Pentadecane	5
2-Methylnaphthalene	3
1-Methylnaphthalene	3
n-Hexadecane	5
Pristane	1
n-Heptadecane	5
Phytane	1
n-Octadecane	2

Sample - MERL - 0m
Date - 3/3/82, 0730hrs, low tide
Standards Added - 25 ng/L

Sample - MERL - 0m
Date - 3/3/82, 1400hrs, high tide
Standards Added - 25 ng/L

Compound	Conc (ng/L)
1,1,1-Trichloroethane	
Carbon tetrachloride	
Benzene	41
Trichloroethylene	22
Dimethyldisulfide (DMDS)	
Toluene	35
Tetrachloroethylene	21
Octatriene	
Ethylbenzene	6
p-Xylene	8
m-Xylene	16
Chlorobenzene	5
o-Xylene	11
Isopropylbenzene	
n-Propylbenzene	
1-Ethyl-4-methylbenzene	4
1-Ethyl-3-methylbenzene	5
1,3,5-Trimethylbenzene	5
1-Ethyl-2-methylbenzene	1
1-Chloro-4-methylbenzene	6
1,2,4-Trimethylbenzene	14
Dimethyltrisulfide (DMTS)	
Bromoform	
1,2,3-Trimethylbenzene	4
1,3-Dichlorobenzene	8
1,4-Dichlorobenzene	9
n-Dodecane	5
1,2-Dichlorobenzene	
n-Tridecane	3
1,2,4-Trichlorobenzene	6
Naphthalene	3
n-Tetradecane	4
1,2,3-Trichlorobenzene	
n-Pentadecane	10
2-Methylnaphthalene	4
1-Methylnaphthalene	4
n-Hexadecane	7
Pristane	3
n-Heptadecane	9
Phytane	2
n-Octadecane	4

Compound	Conc (ng/L)
1,1,1-Trichloroethane	
Carbon tetrachloride	
Benzene	30
Trichloroethylene	13
Dimethyldisulfide (DMDS)	
Toluene	16
Tetrachloroethylene	8
Octatriene	
Ethylbenzene	5
p-Xylene	7
m-Xylene	17
Chlorobenzene	5
o-Xylene	13
Isopropylbenzene	
n-Propylbenzene	
1-Ethyl-4-methylbenzene	4
1-Ethyl-3-methylbenzene	5
1,3,5-Trimethylbenzene	5
1-Ethyl-2-methylbenzene	6
1-Chloro-4-methylbenzene	6
1,2,4-Trimethylbenzene	11
Dimethyltrisulfide (DMTS)	
Bromoform	
1,2,3-Trimethylbenzene	4
1,3-Dichlorobenzene	7
1,4-Dichlorobenzene	7
n-Dodecane	6
1,2-Dichlorobenzene	
n-Tridecane	5
1,2,4-Trichlorobenzene	2
Naphthalene	3
n-Tetradecane	4
1,2,3-Trichlorobenzene	
n-Pentadecane	8
2-Methylnaphthalene	4
1-Methylnaphthalene	3
n-Hexadecane	5
Pristane	1
n-Heptadecane	6
Phytane	1
n-Octadecane	2

Sample - MERL - 0m
Date - 3/3/82, 1400 hrs, high tide
Standards Added - 25 ng/L

Compound	Conc (ng/L)
1,1,1-Trichloroethane	
Carbon tetrachloride	
Benzene	35
Trichloroethylene	22
Dimethyldisulfide (DMDS)	
Toluene	51
Tetrachloroethylene	12
Octatriene	
Ethylbenzene	7
p-Xylene	8
m-Xylene	17
Chlorobenzene	4
o-Xylene	10
Isopropylbenzene	
n-Propylbenzene	
1-Ethyl-4-methylbenzene	3
1-Ethyl-3-methylbenzene	5
1,3,5-Trimethylbenzene	4
1-Ethyl-2-methylbenzene	4
1-Chloro-4-methylbenzene	10
1,2,4-Trimethylbenzene	14
Dimethyltrisulfide (DMTS)	
Bromoform	
1,2,3-Trimethylbenzene	4
1,3-Dichlorobenzene	8
1,4-Dichlorobenzene	8
n-Dodecane	10
1,2-Dichlorobenzene	
n-Tridecane	10
1,2,4-Trichlorobenzene	6
Naphthalene	7
n-Tetradecane	14
1,2,3-Trichlorobenzene	
n-Pentadecane	29
2-Methylnaphthalene	10
1-Methylnaphthalene	9
n-Hexadecane	20
Pristane	4
n-Heptadecane	18
Phytane	3
n-Octadecane	9

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Hoods Hole Oceanographic Institution WHOI-82-36 VOLATILE ORGANIC COMPOUNDS IN NARRAGANSETT BAY, RHODE ISLAND by Stuart G. Wakeham, Jeffrey T. Goodwin and Alan C. Davis. 62 pages, August 1982. Funding was provided by the U.S. Environmental Protection Agency under Grants R80607212 and CR807795 to the Marine Ecosystems Research Laboratory, University of Rhode Island. Volatile organic compounds (VOC) have been determined in Narragansett Bay, Rhode Island, water samples as part of an investigation into the sources, fates, and transport of volatile organic compounds in estuarine and coastal seawater. This report tabulates the concentrations of a wide range of VOC along a transect in Narragansett Bay for two summer and two winter sampling cruises.	1. Volatile organic compounds 2. Narragansett Bay, Rhode Island 3. Purgable organics I. Wakeham, Stuart G. II. Goodwin, Jeffrey T. III. Davis, Alan C. IV. R80607212 V. CR807795 This card is UNCLASSIFIED	Hoods Hole Oceanographic Institution WHOI-82-36 VOLATILE ORGANIC COMPOUNDS IN NARRAGANSETT BAY, RHODE ISLAND by Stuart G. Wakeham, Jeffrey T. Goodwin and Alan C. Davis. 62 pages, August 1982. Funding was provided by the U.S. Environmental Protection Agency under Grants R80607212 and CR807795 to the Marine Ecosystems Research Laboratory, University of Rhode Island. Volatile organic compounds (VOC) have been determined in Narragansett Bay, Rhode Island, water samples as part of an investigation into the sources, fates, and transport of volatile organic compounds in estuarine and coastal seawater. This report tabulates the concentrations of a wide range of VOC along a transect in Narragansett Bay for two summer and two winter sampling cruises.	1. Volatile organic compounds 2. Narragansett Bay, Rhode Island 3. Purgable organics I. Wakeham, Stuart G. II. Goodwin, Jeffrey T. III. Davis, Alan C. IV. R80607212 V. CR807795 This card is UNCLASSIFIED	Hoods Hole Oceanographic Institution WHOI-82-36 VOLATILE ORGANIC COMPOUNDS IN NARRAGANSETT BAY, RHODE ISLAND by Stuart G. Wakeham, Jeffrey T. Goodwin and Alan C. Davis. 62 pages, August 1982. Funding was provided by the U.S. Environmental Protection Agency under Grants R80607212 and CR807795 to the Marine Ecosystems Research Laboratory, University of Rhode Island. Volatile organic compounds (VOC) have been determined in Narragansett Bay, Rhode Island, water samples as part of an investigation into the sources, fates, and transport of volatile organic compounds in estuarine and coastal seawater. This report tabulates the concentrations of a wide range of VOC along a transect in Narragansett Bay for two summer and two winter sampling cruises.	1. Volatile organic compounds 2. Narragansett Bay, Rhode Island 3. Purgable organics I. Wakeham, Stuart G. II. Goodwin, Jeffrey T. III. Davis, Alan C. IV. R80607212 V. CR807795 This card is UNCLASSIFIED	Hoods Hole Oceanographic Institution WHOI-82-36 VOLATILE ORGANIC COMPOUNDS IN NARRAGANSETT BAY, RHODE ISLAND by Stuart G. Wakeham, Jeffrey T. Goodwin and Alan C. Davis. 62 pages, August 1982. Funding was provided by the U.S. Environmental Protection Agency under Grants R80607212 and CR807795 to the Marine Ecosystems Research Laboratory, University of Rhode Island. Volatile organic compounds (VOC) have been determined in Narragansett Bay, Rhode Island, water samples as part of an investigation into the sources, fates, and transport of volatile organic compounds in estuarine and coastal seawater. This report tabulates the concentrations of a wide range of VOC along a transect in Narragansett Bay for two summer and two winter sampling cruises.	1. Volatile organic compounds 2. Narragansett Bay, Rhode Island 3. Purgable organics I. Wakeham, Stuart G. II. Goodwin, Jeffrey T. III. Davis, Alan C. IV. R80607212 V. CR807795 This card is UNCLASSIFIED	Hoods Hole Oceanographic Institution WHOI-82-36 VOLATILE ORGANIC COMPOUNDS IN NARRAGANSETT BAY, RHODE ISLAND by Stuart G. Wakeham, Jeffrey T. Goodwin and Alan C. Davis. 62 pages, August 1982. Funding was provided by the U.S. Environmental Protection Agency under Grants R80607212 and CR807795 to the Marine Ecosystems Research Laboratory, University of Rhode Island. Volatile organic compounds (VOC) have been determined in Narragansett Bay, Rhode Island, water samples as part of an investigation into the sources, fates, and transport of volatile organic compounds in estuarine and coastal seawater. This report tabulates the concentrations of a wide range of VOC along a transect in Narragansett Bay for two summer and two winter sampling cruises.	1. Volatile organic compounds 2. Narragansett Bay, Rhode Island 3. Purgable organics I. Wakeham, Stuart G. II. Goodwin, Jeffrey T. III. Davis, Alan C. IV. R80607212 V. CR807795 This card is UNCLASSIFIED