File
10/27/98

US ENVIRONMENTAL PROTECTION AGENCY
60 Westview Street
Lexington, MA. 02173

Sheila
cc Patty Whittimore HBT
Rob
Peg

DATE: October 16, 1998

SUBJECT: **Naval Weapons Industrial Reserve Plant (NWIRP), Bedford, MA**
Water - Volatile Organic Analysis by GC/MS

Samples Received: 60212, 60213, 60214, 60215, 66264

Samples Analyzed by GC/MS: Same

FROM: Joseph Montanaro, EIA

TO: Patty Marajh-Whittimore, HBT

THRU: William J. Andrade, Ph.D., Analytical Specialist Wm J. Andrade 10/26/98

PROJECT NUMBER: 99014

DATE(S) SAMPLES RECEIVED BY THE LABORATORY: 10/9/98

ANALYTICAL PROCEDURE:

Aqueous Samples: Method SW-846, Method 8260B, SW-846, Rev 0, January 1995, VOA GCMS1.SOP - 8/97. Equivalent to CFR, Volume 40, Chapter 1.

QUALITY CONTROL:

1. A laboratory blank was analyzed prior to sample analysis.
2. Each sample was spiked with three surrogate compounds at 25 ppb concentration. The results for the surrogate recoveries are reported for each sample.
3. Sample 60213 was spiked with matrix spike compounds and analyzed in duplicate to determine laboratory precision and accuracy.

DATA FILE: J:\CHEMSTRY\REPORTS\VOA\99014HW.WK4

SEMS DocID 623161

ANALYTICAL PARAMETERS
PURGEABLE ORGANIC ANALYSIS

INSTRUMENTS: Tekmar ALS 2016 Purge and Trap Autosampler
Tekmar LSC-2000
Finnigan INCOS-50 B

PURGE CONDITIONS:

Gas:	Helium
Purge Time and Flow:	8 min., 40 ml/min
Dry Purge:	4 min., 40 ml/min
Trap:	25 cm stainless steel (1/8 in.OD) packed with Carbopack B (10 cm) Carboxen 1000 (6 cm), and Carboxen 1001 (1 cm)
Desorption Time,Flow, Temperature:	1 min, 40 ml/min., 250 C
Bake out cycle:	8 min. at 260 C

CHROMATOGRAPHIC CONDITIONS:

Column:	Restek - 502.2 40 M length, 0.18 mm id, 1.0 df (um)
Program:	Initial 35 C. (hold 4 min), programmed at 6 C/min to 150 C, programmed at 8 C/min to 220 C. (hold 8 min)
Injector and Transfer Temperatures:	220 C
Carrier Gas and Flow:	Helium, 15 ml/min

MASS SPECTROMETER CONDITIONS:

Electron Energy:	70 V
Mass Range:	35,300
Scan Rate:	1.5 seconds

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
PROJECT AND REPORT FORM

Chemist Reviewing Data: Dan Boudreau

Method Modifications: None

Limitations of Data: None

Laboratory Blank Problems:

Trace levels of 6 target compounds were observed in the Laboratory Blank sample.

Instrument Performance Problems: None

Surrogate or Spike Recovery Problems: None

Additional Comments: None

MATRIX SPIKE DUPLICATE ANALYSIS

FACILITY SAMPLED: NWIRP
SAMPLE ID: 60213
FILE NAME(S): 10158F16 & 10158F17
DATE OF ANALYSIS: 10/15/98

ACCURACY

COMPOUND	AVERAGE % RECOVERY	ACCEPTABLE RANGE[2]
1,1 Dichloroethylene	107	48-161
Chloroform	96	58-140
1,2 Dichloroethane	98	66-134
1,1,1 Trichloroethane	98	48-154
Carbon tetrachloride	98	65-140
Bromodichloromethane	95	55-129
Trichloroethylene	108	49-154
Benzene	100	68-129
Dibromochloromethane	83	50-114
Bromoform	83	46-105
1,4 Dichlorobenzene	104	67-119
Vinyl chloride	108	78-200

PRECISION

COMPOUND	#1 % RECOVERY	#2 % RECOVERY	RPD	ACCEPTABLE RANGE[2]
1,1 Dichloroethylene	106	108	2	0-29
Chloroform	96	97	1	0-14
1,2 Dichloroethane	94	103	9	0-23
1,1,1 Trichloroethane	98	99	1	0-22
Carbon tetrachloride	96	99	3	0-12
Bromodichloromethane	93	97	4	0-16
Trichloroethylene	105	112	6	0-22
Benzene	99	102	3	0-16
Dibromochloromethane	82	85	4	0-30
Bromoform	85	81	5	0-15
1,4 Dichlorobenzene	105	104	1	0-22
Vinyl chloride	112	105	6	0-23

1 = out of range
2 = Quality Control Acceptance Criteria as per Laboratory

FACILITY SAMPLED: NWIRP

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
GC/MS PURGEABLE ORGANIC ANALYSIS

SAMPLE ID: Lab Blank
FILE NAME(S): 10158F08
DATE OF ANALYSIS: 10/15/98

DILUTION FACTOR: 1

SAMPLE RESULTS:

CAS NO.	STORET NO.	Compound	Conc. (ug/L)	Reporting Level (ug/L)	Comments
		TARGET COMPOUNDS			
74-87-3	34418	Chloromethane	ND	5	
74-83-9	34413	Bromomethane	ND	5	
75-01-4	39175	Vinyl Chloride	ND	5	
75-00-3	34311	Chloroethane	ND	5	
75-09-2	34423	Methylene Chloride	ND	5	
75-69-4	**34488**	**Trichlorofluoromethane**	**1**	**5**	**L**
75-35-4	34501	1,1-Dichloroethylene	ND	5	
75-34-3	34496	1,1-Dichloroethane	ND	5	
156-60-5	34546	1,2-Dichloroethylene isomers	ND	5	
67-66-3	**32106**	**Chloroform**	**2**	**5**	**L**
107-06-2	34531	1,2-Dichloroethane	ND	5	
71-55-6	34506	1,1,1-Trichloroethane	ND	5	
56-23-5	32102	Carbon Tetrachloride	ND	5	
75-27-4	32101	Bromodichloromethane	ND	5	
78-87-5	34541	1,2-Dichloropropane	ND	5	
10061-02-6	34699	t-1,3-Dichloropropene	ND	5	
79-01-6	**39180**	**Trichloroethylene**	**1**	**5**	**L**
124-48-1	32105	Dibromochloromethane	ND	5	
10061-01-5	34704	c-1,3-Dichloropropene and/or 1,1-Dichloropropene	ND	5	
79-00-5	34511	1,1,2-Trichloroethane	ND	5	
71-43-2	**34030**	**Benzene**	**2**	**5**	**L**
110-75-8	34576	2-Chloroethylvinyl ether	ND	15	
75-25-2	32104	Bromoform	ND	5	
127-18-4	34475	Tetrachloroethylene	ND	5	
630-20-6		1,1,1,2-Tetrachloroethane	ND	5	
79-34-5	34516	1,1,2,2-Tetrachloroethane	ND	5	
108-88-3	**34010**	**Toluene**	**1**	**5**	**L**
108-90-7	34301	Chlorobenzene	ND	5	
100-41-4	34371	Ethylbenzene	ND	5	
107-02-8	34210	Acrolein	ND	50	
107-13-1	34215	Acrylonitrile	ND	25	
		Dichlorobenzene isomers	ND	5	
		1,1,2-Trichloro-1,2,2-trifluoroethane	ND	5	
67-64-1	81552	Acetone	ND	10	
75-15-0	77041	Carbon Disulfide	ND	15	

(con't)

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
GC/MS PURGEABLE ORGANIC ANALYSIS

SAMPLE ID: Lab Blank
Sample Results Continued:

CAS NO.	STORET NO.	Compound	Conc. (ug/L)	Reporting Level (ug/L)	Comments
78-93-3	81595	2-Butanone (MEK)	ND	20	
108-05-4	77057	Vinyl Acetate	ND	15	
591-10-6	77103	2-Hexanone	ND	3	
108-10-1	81596	4-Methyl-2-Pentanone(MIBK)	ND	3	
100-42-5	81708	Styrene	ND	5	
133-02-7	81551	Xylenes (total)	ND	5	
		1,2-Dibromoethane	ND	5	
		Tetrahydrofuran	ND	35	
		Ethyl ether	ND	15	
		Naphthalene	**2**	**5**	**L**
		Methyl-t-butyl Ether	ND	5	

Other Compounds
Tentatively Identified

Other Compounds Quantitated

Sample Recoveries for Surrogate Compounds:		Observed Recoveries	99% Confidence Limits
	1,2-Dichloroethane,d4	101	76-139
	Toluene,d8	96	74-116
	1,4-Bromofluorobenzene	103	79-117

Notes:

ND=none detected above the reporting limit
RL=Reporting Limit
J=approximate
NA=not available due to dilution or interference
E=estimated value exceeds the calibration range
L=estimated value is below the calibration range
B=analyte is associated with lab blank
1=out of range

FACILITY SAMPLED: NWIRP

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
GC/MS PURGEABLE ORGANIC ANALYSIS

SAMPLE ID: 60212 (FBK01)
FILE NAME(S): 10158F10
DATE OF COLLECTION: 10/9/98
DATE OF ANALYSIS: 10/15/98

DILUTION FACTOR: 1
PRESERVATIVE: Cool to 4 C

SAMPLE RESULTS:

CAS NO.	STORET NO.	Compound	Conc. (ug/L)	Reporting Level (ug/L)	Comments
		TARGET COMPOUNDS			
74-87-3	34418	Chloromethane	ND	5	
74-83-9	34413	Bromomethane	ND	5	
75-01-4	39175	Vinyl Chloride	ND	5	
75-00-3	34311	Chloroethane	ND	5	
75-09-2	34423	Methylene Chloride	ND	5	
75-69-4	34488	Trichlorofluoromethane	ND	5	
75-35-4	34501	1,1-Dichloroethylene	ND	5	
75-34-3	34496	1,1-Dichloroethane	ND	5	
156-60-5	34546	1,2-Dichloroethylene isomers	ND	5	
67-66-3	**32106**	**Chloroform**	**15**	**5**	**B**
107-06-2	34531	1,2-Dichloroethane	ND	5	
71-55-6	34506	1,1,1-Trichloroethane	ND	5	
56-23-5	32102	Carbon Tetrachloride	ND	5	
75-27-4	32101	Bromodichloromethane	ND	5	
78-87-5	34541	1,2-Dichloropropane	ND	5	
10061-02-6	34699	t-1,3-Dichloropropene	ND	5	
79-01-6	39180	Trichloroethylene	ND	5	
124-48-1	32105	Dibromochloromethane	ND	5	
10061-01-5	34704	c-1,3-Dichloropropene and/or 1,1-Dichloropropene	ND	5	
79-00-5	34511	1,1,2-Trichloroethane	ND	5	
71-43-2	**34030**	**Benzene**	**2**	**5**	**L,B**
110-75-8	34576	2-Chloroethylvinyl ether	ND	15	
75-25-2	32104	Bromoform	ND	5	
127-18-4	34475	Tetrachloroethylene	ND	5	
630-20-6		1,1,1,2-Tetrachloroethane	ND	5	
79-34-5	34516	1,1,2,2-Tetrachloroethane	ND	5	
108-88-3	34010	Toluene	ND	5	
108-90-7	34301	Chlorobenzene	ND	5	
100-41-4	34371	Ethylbenzene	ND	5	
107-02-8	34210	Acrolein	ND	50	
107-13-1	34215	Acrylonitrile	ND	25	
		Dichlorobenzene isomers	ND	5	
		1,2,2-Trichloro-1,2,2 trifluoroethane	ND	5	
67-64-1	**81552**	**Acetone**	**5**	**10**	**L**
75-15-0	77041	Carbon Disulfide	ND	15	

(con't)

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
GC/MS PURGEABLE ORGANIC ANALYSIS

SAMPLE ID: 60212 (FBK01)
Sample Results Continued:

CAS NO.	STORET NO.	Compound	Conc. (ug/L)	Reporting Level (ug/L)	Comments
78-93-3	81595	2-Butanone (MEK)	ND	20	
108-05-4	77057	Vinyl Acetate	ND	15	
591-10-6	77103	2-Hexanone	ND	3	
108-10-1	81596	4-Methyl-2-Pentanone(MIBK)	ND	3	
100-42-5	81708	Styrene	ND	5	
133-02-7	81551	Xylenes (total)	ND	5	
		1,2-Dibromoethane (EDB)	ND	5	
		Tetrahydrofuran	ND	35	
		Ethyl ether	ND	15	
		Naphthalene	ND	5	
		Methyl-t-butyl Ether	ND	5	

Other Compounds
Tentatively Identified

Other Compounds Quantitated

Sample Recoveries for Surrogate Compounds:		Observed Recoveries	99% Confidence Limits
	1,2-Dichloroethane,d4	100	76-139
	Toluene,d8	99	74-116
	1,4-Bromofluorobenzene	98	79-117

Notes:

ND=none detected above the reporting limit
RL=Reporting Limit
J=approximate
NA=not available due to dilution or interference
E=estimated value exceeds the calibration range
L=estimated value is below the calibration range
B=analyte is associated with lab blank
1=out of range

FACILITY SAMPLED: NWIRP

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
GC/MS PURGEABLE ORGANIC ANALYSIS

SAMPLE ID: 60213 (MW29S)
FILE NAME(S): 10158F11
DATE OF COLLECTION: 10/9/98
DATE OF ANALYSIS: 10/15/98

DILUTION FACTOR: 1
PRESERVATIVE: Cool to 4 C

SAMPLE RESULTS:

CAS NO.	STORET NO.	Compound	Conc. (ug/L)	Reporting Level (ug/L)	Comments
		TARGET COMPOUNDS			
74-87-3	34418	Chloromethane	ND	5	
74-83-9	34413	Bromomethane	ND	5	
75-01-4	39175	Vinyl Chloride	ND	5	
75-00-3	34311	Chloroethane	ND	5	
75-09-2	34423	Methylene Chloride	ND	5	
75-69-4	34488	Trichlorofluoromethane	ND	5	
75-35-4	34501	1,1-Dichloroethylene	ND	5	
75-34-3	34496	1,1-Dichloroethane	ND	5	
156-60-5	34546	1,2-Dichloroethylene isomers	ND	5	
67-66-3	32106	Chloroform	ND	5	
107-06-2	34531	1,2-Dichloroethane	ND	5	
71-55-6	34506	1,1,1-Trichloroethane	ND	5	
56-23-5	32102	Carbon Tetrachloride	ND	5	
75-27-4	32101	Bromodichloromethane	ND	5	
78-87-5	34541	1,2-Dichloropropane	ND	5	
10061-02-6	34699	t-1,3-Dichloropropene	ND	5	
79-01-6	**39180**	**Trichloroethylene**	**5**	**5**	**B**
124-48-1	32105	Dibromochloromethane	ND	5	
10061-01-5	34704	c-1,3-Dichloropropene and/or 1,1-Dichloropropene	ND	5	
79-00-5	34511	1,1,2-Trichloroethane	ND	5	
71-43-2	34030	Benzene	ND	5	
110-75-8	34576	2-Chloroethylvinyl ether	ND	15	
75-25-2	32104	Bromoform	ND	5	
127-18-4	34475	Tetrachloroethylene	ND	5	
630-20-6		1,1,1,2-Tetrachloroethane	ND	5	
79-34-5	34516	1,1,2,2-Tetrachloroethane	ND	5	
108-88-3	34010	Toluene	ND	5	
108-90-7	34301	Chlorobenzene	ND	5	
100-41-4	34371	Ethylbenzene	ND	5	
107-02-8	34210	Acrolein	ND	50	
107-13-1	34215	Acrylonitrile	ND	25	
		Dichlorobenzene isomers	ND	5	
		1,1,2-Trichloro-1,2,2 trifluoroethane	ND	5	
67-64-1	**81552**	**Acetone**	**12**	**10**	
75-15-0	77041	Carbon Disulfide	ND	15	

(con't)

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
GC/MS PURGEABLE ORGANIC ANALYSIS

SAMPLE ID: 60213 (MW29S)
Sample Results Continued:

CAS NO.	STORET NO.	Compound	Conc. (ug/L)	Reporting Level (ug/L)	Comments
78-93-3	81595	2-Butanone(MEK)	ND	20	
108-05-4	77057	Vinyl Acetate	ND	15	
591-10-6	77103	2-Hexanone	ND	3	
108-10-1	81596	4-Methyl-2-Pentanone (MIBK)	ND	3	
100-42-5	81708	Styrene	ND	5	
133-02-7	81551	Xylenes (total)	ND	5	
		1,2-Dibromoethane (EDB)	ND	5	
		Tetrahydrofuran	ND	35	
		Ethyl ether	ND	15	
		Naphthalene	ND	5	
		Methyl-t-butyl Ether	ND	5	

Other Compounds
Tentatively Identified

Other Compounds Quantitated

Sample Recoveries for Surrogate Compounds:		Observed Recoveries	99% Confidence Limits
	1,2-Dichloroethane,d4	106	76-139
	Toluene,d8	99	74-116
	1,4-Bromofluorobenzene	99	79-117

Notes:

ND=none detected above the reporting limit
RL=Reporting Limit
J=approximate
NA=not available due to dilution or interference
E=estimated value exceeds the calibration range
L=estimated value is below the calibration range
B=analyte is associated with lab blank
I=out of range

FACILITY SAMPLED: NWIRP

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
GC/MS PURGEABLE ORGANIC ANALYSIS

SAMPLE ID: 60214 (MW28S)
FILE NAME(S): *10158F12 & 10158F14
DATE OF COLLECTION: 10/9/98
DATE OF ANALYSIS: 10/15/98

DILUTION FACTOR: 25 & *100
PRESERVATIVE: Cool to 4 C

SAMPLE RESULTS:

CAS NO.	STORET NO.	Compound	Conc. (ug/L)	Reporting Level (ug/L)	Comments
		TARGET COMPOUNDS			
74-87-3	**34418**	**Chloromethane**	**25**	**125**	**L**
74-83-9	34413	Bromomethane	ND	125	
75-01-4	39175	Vinyl Chloride	ND	125	
75-00-3	34311	Chloroethane	ND	125	
75-09-2	34423	Methylene Chloride	ND	125	
75-69-4	34488	Trichlorofluoromethane	ND	125	
75-35-4	**34501**	**1,1-Dichloroethylene**	**550**	**125**	
75-34-3	**34496**	**1,1-Dichloroethane**	**450**	**125**	
156-60-5	**34546**	**1,2-Dichloroethylene isomers**	**390**	**125**	
67-66-3	32106	Chloroform	ND	125	
107-06-2	34531	1,2-Dichloroethane	ND	125	
71-55-6	**34506**	**1,1,1-Trichloroethane**	**40**	**125**	**L**
56-23-5	32102	Carbon Tetrachloride	ND	125	
75-27-4	32101	Bromodichloromethane	ND	125	
78-87-5	34541	1,2-Dichloropropane	ND	125	
10061-02-6	34699	t-1,3-Dichloropropene	ND	125	
79-01-6	**39180**	**Trichloroethylene**	***7300**	**500**	
124-48-1	**32105**	Dibromochloromethane	ND	125	
10061-01-5	**34704**	c-1,3-Dichloropropene and/or 1,1-Dichloropropene	ND	125	
79-00-5	34511	1,1,2-Trichloroethane	ND	125	
71-43-2	**34030**	**Benzene**	**80**	**125**	**L,B**
110-75-8	34576	2-Chloroethylvinyl ether	ND	375	
75-25-2	32104	Bromoform	ND	125	
127-18-4	**34475**	**Tetrachloroethylene**	**640**	**125**	
630-20-6		1,1,1,2-Tetrachloroethane	ND	125	
79-34-5	34516	1,1,2,2-Tetrachloroethane	ND	125	
108-88-3	34010	Toluene	ND	125	
108-90-7	34301	Chlorobenzene	ND	125	
100-41-4	34371	Ethylbenzene	ND	125	
107-02-8	34210	Acrolein	ND	1250	
107-13-1	34215	Acrylonitrile	ND	625	
		Dichlorobenzene isomers	ND	125	
		1,1,2-Trichloro-1,2,2-trifluoroethane	ND	125	
67-64-1	**81552**	**Acetone**	**220**	**250**	**L**
75-15-0	77041	Carbon Disulfide	ND	375	

(con't)

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
GC/MS PURGEABLE ORGANIC ANALYSIS

SAMPLE ID: 60214 (MW28S)
Sample Results Continued:

CAS NO.	STORET NO.	Compound	Conc. (ug/L)	Reporting Level (ug/L)	Comments
78-93-3	81595	2-Butanone(MEK)	ND	500	
108-05-4	77057	Vinyl Acetate	ND	375	
591-10-6	77103	2-Hexanone	ND	75	
108-10-1	81596	4-Methyl-2-Pentanone(MIBK)	ND	75	
100-42-5	81708	Styrene	ND	125	
133-02-7	81551	Xylenes (total)	ND	125	
		1,2-Dibromoethane (EDB)	ND	125	
		Tetrahydrofuran	ND	875	
		Ethyl ether	ND	375	
		Naphthalene	ND	125	
		Methyl-t-butyl Ether	ND	125	

Other Compounds
Tentatively Identified

Other Compounds Quantitated

Sample Recoveries for Surrogate Compounds:		Observed Recoveries	99% Confidence Limits
	1,2-Dichloroethane,d4	102	76-139
	Toluene,d8	95	74-116
	1,4-Bromofluorobenzene	101	79-117

Notes:

ND=none detected above the reporting limit
RL=Reporting Limit
J=approximate
NA=not available due to dilution or interference
E=estimated value exceeds the calibration range
L=estimated value is below the calibration range
B=analyte is associated with lab blank
1=out of range

FACILITY SAMPLED: NWIRP

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
GC/MS PURGEABLE ORGANIC ANALYSIS

SAMPLE ID: 60215 (MW48S)
FILE NAME(S): *10158F13 & 10158F15
DATE OF COLLECTION: 10/9/98
DATE OF ANALYSIS: 10/15/98

DILUTION FACTOR: 25 & *100
PRESERVATIVE: Cool to 4 C

SAMPLE RESULTS:

CAS NO.	STORET NO.	Compound	Conc. (ug/L)	Reporting Level (ug/L)	Comments
		TARGET COMPOUNDS			
74-87-3	34418	Chloromethane	ND	125	
74-83-9	34413	Bromomethane	ND	125	
75-01-4	39175	Vinyl Chloride	ND	125	
75-00-3	34311	Chloroethane	ND	125	
75-09-2	34423	Methylene Chloride	ND	125	
75-69-4	34488	Trichlorofluoromethane	ND	125	
75-35-4	**34501**	**1,1-Dichloroethylene**	**600**	**125**	
75-34-3	**34496**	**1,1-Dichloroethane**	**460**	**125**	
156-60-5	**34546**	**1,2-Dichloroethylene isomers**	**420**	**125**	
67-66-3	32106	Chloroform	ND	125	
107-06-2	34531	1,2-Dichloroethane	ND	125	
71-55-6	**34506**	**1,1,1-Trichloroethane**	**40**	**125**	**L**
56-23-5	32102	Carbon Tetrachloride	ND	125	
75-27-4	32101	Bromodichloromethane	ND	125	
78-87-5	34541	1,2-Dichloropropane	ND	125	
10061-02-6	34699	t-1,3-Dichloropropene	ND	125	
79-01-6	**39180**	**Trichloroethylene**	***7700**	**500**	
124-48-1	32105	Dibromochloromethane	ND	125	
10061-01-5	34704	c-1,3-Dichloropropene and/or 1,1-Dichloropropene	ND	125	
79-00-5	34511	1,1,2-Trichloroethane	ND	125	
71-43-2	**34030**	**Benzene**	**50**	**125**	**L,B**
110-75-8	34576	2-Chloroethylvinyl ether	ND	375	
75-25-2	32104	Bromoform	ND	125	
127-18-4	**34475**	**Tetrachloroethylene**	**670**	**125**	
630-20-6		1,1,1,2-Tetrachloroethane	ND	125	
79-34-5	34516	1,1,2,2-Tetrachloroethane	ND	125	
108-88-3	34010	Toluene	ND	125	
108-90-7	34301	Chlorobenzene	ND	125	
100-41-4	34371	Ethylbenzene	ND	125	
107-02-8	34210	Acrolein	ND	1250	
107-13-1	34215	Acrylonitrile	ND	625	
		Dichlorobenzene isomers	ND	125	
		1,1,2-Trichloro-1,2,2 trifluoroethane	ND	125	
67-64-1	**81552**	**Acetone**	**360**	**250**	
75-15-0	77041	Carbon Disulfide	ND	375	

(con't)

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
GC/MS PURGEABLE ORGANIC ANALYSIS

SAMPLE ID: 60215 (MW48S)
Sample Results Continued:

CAS NO.	STORET NO.	Compound	Conc. (ug/L)	Reporting Level (ug/L)	Comments
78-93-3	81595	2-Butanone(MEK)	ND	500	
108-05-4	77057	Vinyl Acetate	ND	375	
591-10-6	77103	2-Hexanone	ND	75	
108-10-1	81596	4-Methyl-2-Pentanone(MIBK)	ND	75	
100-42-5	81708	Styrene	ND	125	
133-02-7	81551	Xylenes (total)	ND	125	
		1,2-Dibromoethane (EDB)	ND	125	
		Tetrahydrofuran	ND	875	
		Ethyl ether	ND	375	
		Naphthalene	ND	125	
		Methyl-t-butyl Ether	ND	125	

Other Compounds
Tentatively Identified

Other Compounds Quantitated

Sample Recoveries for Surrogate Compounds:		Observed Recoveries	99% Confidence Limits
	1,2-Dichloroethane,d4	103	76-139
	Toluene,d8	96	74-116
	1,4-Bromofluorobenzene	95	79-117

Notes:

ND=none detected above the reporting limit
RL=Reporting Limit
J=approximate
NA=not available due to dilution or interference
E=estimated value exceeds the calibration range
L=estimated value is below the calibration range
B=analyte is associated with lab blank
I=out of range

FACILITY SAMPLED: NWIRP

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
GC/MS PURGEABLE ORGANIC ANALYSIS

SAMPLE ID: 66264 (TB01)
FILE NAME(S): 10158F09
DATE OF COLLECTION: 10/8/98
DATE OF ANALYSIS: 10/15/98

DILUTION FACTOR: 1
PRESERVATIVE: Cool to 4 C

SAMPLE RESULTS:

CAS NO.	STORET NO.	Compound	Conc. (ug/L)	Reporting Level (ug/L)	Comments
		TARGET COMPOUNDS			
74-87-3	34418	Chloromethane	ND	5	
74-83-9	34413	Bromomethane	ND	5	
75-01-4	39175	Vinyl Chloride	ND	5	
75-00-3	34311	Chloroethane	ND	5	
75-09-2	34423	Methylene Chloride	ND	5	
75-69-4	34488	Trichlorofluoromethane	ND	5	
75-35-4	34501	1,1-Dichloroethylene	ND	5	
75-34-3	34496	1,1-Dichloroethane	ND	5	
156-60-5	34546	1,2-Dichloroethylene isomers	ND	5	
67-66-3	32106	Chloroform	ND	5	
107-06-2	34531	1,2-Dichloroethane	ND	5	
71-55-6	34506	1,1,1-Trichloroethane	ND	5	
56-23-5	32102	Carbon Tetrachloride	ND	5	
75-27-4	32101	Bromodichloromethane	ND	5	
78-87-5	34541	1,2-Dichloropropane	ND	5	
10061-02-6	34699	t-1,3-Dichloropropene	ND	5	
79-01-6	39180	Trichloroethylene	ND	5	
124-48-1	32105	Dibromochloromethane	ND	5	
10061-01-5	34704	c-1,3-Dichloropropene and/or 1,1-Dichloropropene	ND	5	
79-00-5	34511	1,1,2-Trichloroethane	ND	5	
71-43-2	34030	Benzene	ND	5	
110-75-8	34576	2-Chloroethylvinyl ether	ND	15	
75-25-2	32104	Bromoform	ND	5	
127-18-4	34475	Tetrachloroethylene	ND	5	
630-20-6		1,1,1,2-Tetrachloroethane	ND	5	
79-34-5	34516	1,1,2,2-Tetrachloroethane	ND	5	
108-88-3	34010	Toluene	ND	5	
108-90-7	34301	Chlorobenzene	ND	5	
100-41-4	34371	Ethylbenzene	ND	5	
107-02-8	34210	Acrolein	ND	50	
107-13-1	34215	Acrylonitrile	ND	25	
		Dichlorobenzene isomers	ND	5	
		1,1,2-Trichloro-1,2,2 trifluoroethane	ND	5	
67-64-1	81552	Acetone	ND	10	
75-15-0	77041	Carbon Disulfide	ND	15	

(con't)

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
GC/MS PURGEABLE ORGANIC ANALYSIS

SAMPLE ID: 66264 (TB01)
Sample Results Continued:

CAS NO.	STORET NO.	Compound	Conc. (ug/L)	Reporting Level (ug/L)	Comments
78-93-3	81595	2-Butanone(MEK)	ND	20	
108-05-4	77057	Vinyl Acetate	ND	15	
591-10-6	77103	2-Hexanone	ND	3	
108-10-1	81596	4-Methyl-2-Pentanone(MIBK)	ND	3	
100-42-5	81708	Styrene	ND	5	
133-02-7	81551	Xylenes (total)	ND	5	
		1,2-Dibromoethane (EDB)	ND	5	
		Tetrahydrofuran	ND	35	
		Ethyl ether	ND	15	
		Naphthalene	ND	5	
		Methyl-t-butyl Ether	ND	5	

Other Compounds
Tentatively Identified

Other Compounds Quantitated

Sample Recoveries for Surrogate Compounds:	Observed Recoveries	99% Confidence Limits
1,2-Dichloroethane,d4	102	76-139
Toluene,d8	97	74-116
1,4-Bromofluorobenzene	98	79-117

Notes:

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