

SAMPLE DATA SUMMARY PACKAGE



CASE NARRATIVE

Laboratory Name: Recra Environmental, Inc.

Laboratory Code: RECNV

Case Number: RH990

Contract Number: C001741

SDG Number: 0531

Sample Identifications:

RH990-0531-932902
Trip Blank

VOLATILE DATA

Volatile sample and standard areas are listed on the corresponding data system printouts.

Volatile data was processed utilizing Finnigan Autoquantitation and QA Formaster software. Compounds not listed on the quantitation report were deleted if contract laboratory protocol criteria were not met.

One milliliter of sample RH990-0531-932902 was analyzed instead of five due to the high concentration of HSL compound Total Xylenes.

Minor contamination by HSL compound Methylene Chloride was identified in method blank VBLK59.

SEMIVOLATILE DATA

Semivolatile sample and standard areas are listed on the corresponding data system printouts.

Semivolatile data was processed utilizing Finnigan Autoquantitation and QA Formaster software. Compounds not listed on the quantitation report were deleted if contract laboratory protocol criteria were not met.

Scan averaging was utilized in obtaining Decafluorotriphenylphosphine (DFTPP) Tuning and Mass Calibration 4172X.

Minor contamination by HSL compound Di-n-Butylphthalate was identified in method blank SBLK36.



INORGANIC DATA

The values reported as "less than" (<) indicate the working detection limit for the particular sample and/or parameter.

"Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or her designee, as verified by the following signature."

Deborah J. Travis
Deborah J. Travis

6/26/90
Date



1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

02

Lab Name: RECRA ENVIRON Contract: C001741

Lab Code: RECNY Case No.: 1042 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: 02

Sample wt/vol: 1.0 (g/mL) ML Lab File ID: 7871E

Level: (low/med) LOW Date Received: 05/31/90

% Moisture: not dec. _____ Date Analyzed: 06/02/90

Column: (pack/cap) PACK Dilution Factor: 1.0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NO. COMPOUND UG/L Q

CAS NO.	COMPOUND	UG/L	Q
74-87-3	Chloromethane	50	U
74-83-9	Bromomethane	50	U
75-01-4	Vinyl Chloride	50	U
75-00-3	Chloroethane	50	U
75-09-2	Methylene Chloride	26	B
67-64-1	Acetone	50	U
75-15-0	Carbon Disulfide	25	U
75-35-4	1,1-Dichloroethene	25	U
75-34-3	1,1-Dichloroethane	25	U
540-59-0	1,2-Dichloroethene (total)	25	U
67-66-3	Chloroform	25	U
107-06-2	1,2-Dichloroethane	25	U
78-93-3	2-Butanone	50	U
71-55-6	1,1,1-Trichloroethane	25	U
56-23-5	Carbon Tetrachloride	25	U
108-05-4	Vinyl Acetate	50	U
75-27-4	Bromodichloromethane	25	U
78-87-5	1,2-Dichloropropane	25	U
10061-01-5	cis-1,3-dichloropropene	25	U
79-01-6	Trichloroethene	25	U
124-48-1	Dibromochloromethane	25	U
79-00-5	1,1,2-Trichloroethane	25	U
71-43-2	Benzene	25	U
10061-02-6	trans-1,3-dichloropropene	25	U
75-25-2	Bromoform	25	U
108-10-1	4-Methyl-2-Pentanone	50	U
591-78-6	2-Hexanone	50	U
127-18-4	Tetrachloroethene	25	U
79-34-5	1,1,2,2-Tetrachloroethane	25	U
108-88-3	Toluene	31	GP 50
108-90-7	Chlorobenzene	25	U
100-41-4	Ethylbenzene	150	GP 50
100-42-5	Styrene	25	U
1330-20-7	Total Xylenes	1100	GP 50

1E
 VOLATILE ORGANICS ANALYSIS DATA SHEET
 TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO. 005

02

Lab Name: RECRA ENVIRON Contract: C001741

Lab Code: RECNY Case No.: 1042 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: 02

Sample wt/vol: 1.0 (g/mL) ML Lab File ID: 7871E

Level: (low/med) LOW Date Received: 05/31/90

% Moisture: not dec. _____ Date Analyzed: 06/02/90

Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS:
 (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TRIPBLANK

Lab Name: RECRA ENVIRON Contract: C001741

Lab Code: RECNY Case No.: 1042 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: TRIPBLANK

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 7870E

Level: (low/med) LOW Date Received: 05/31/90

% Moisture: not dec. _____ Date Analyzed: 06/02/90

Column: (pack/cap) PACK Dilution Factor: 1.0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NO.

COMPOUND

Q

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	6	B
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total Xylenes	5	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: RECRA ENVIRONMENTAL, INC.

EPA Sample No. TRIP BLANK

Lab Code: RECNY Case No: 1042 SAS No:

Contract: C001741

Matrix (Soil/Water): WATER

SDG No:

Lab Sample Id: TRIP BLANK

Sample wt/vol: 5.0 (g/ml): ML

Lab File Id: 7870E

Level (low/med): LOW

Date Received: 05-31-90

% Moisture not Dec:

Date Analyzed: 06-02-90

Column: (pack/cap): PACK

Dilution Factor: 1.0

Number TICs Found: 1

Concentration Units:

(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1	UNKNOWN	12.25	18	J
2				
3				
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1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

02

Lab Name: RECRA ENVIRON Contract: C001741

Lab Code: RECNY Case No.: 1042 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: 02

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 4176X

Level: (low/med) LOW Date Received: 05/31/90

% Moisture: not dec. _____ dec. _____ Date Extracted: 06/05/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/06/90

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>	Q	
108-95-2	Phenol	6800	E	ST 1
111-44-4	bis(2-Chloroethyl) Ether	10	U	
95-57-8	2-Chlorophenol	10	U	
541-73-1	1,3-Dichlorobenzene	10	U	
106-46-7	1,4-Dichlorobenzene	16		ST 4.7
100-51-6	Benzyl Alcohol	10	U	Sum of 1,2 & 1,4
95-50-1	1,2-Dichlorobenzene	17		
95-48-7	2-Methylphenol	170		
108-60-1	bis(2-Chloroisopropyl) Ether	10	U	
106-44-5	4-Methylphenol	51		N/A
621-64-7	N-Nitroso-Di-n-Propylamine	10	U	
67-72-1	Hexachloroethane	10	U	
98-95-3	Nitrobenzene	10	U	
78-59-1	Isophorone	10	U	
88-75-5	2-Nitrophenol	710	E	N/A
105-67-9	2,4-Dimethylphenol	10	U	
65-85-0	Benzoic Acid	120		N/A
111-91-1	bis(2-Chloroethoxy) Methane	10	U	
120-83-2	2,4-Dichlorophenol	10	U	
120-82-1	1,2,4-Trichlorobenzene	10	U	
91-20-3	Naphthalene	8	J	GD 10
106-47-8	4-Chloroaniline	10	U	
87-68-3	Hexachlorobutadiene	10	U	
59-50-7	4-Chloro-3-Methylphenol	10	U	
91-57-6	2-Methylnaphthalene	10	U	
77-47-4	Hexachlorocyclopentadiene	10	U	
88-06-2	2,4,6-Trichlorophenol	10	U	
95-95-4	2,4,5-Trichlorophenol	50	U	
91-58-7	2-Chloronaphthalene	10	U	
88-74-4	2-Nitroaniline	50	U	
131-11-3	Dimethyl Phthalate	10	U	
208-96-8	Acenaphthylene	10	U	
606-20-2	2,6-Dinitrotoluene	10	U	

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

02

Lab Name: RECRA ENVIRON Contract: C001741

Lab Code: RECNY Case No.: 1042 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: 02

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 4176X

Level: (low/med) LOW Date Received: 05/31/90

% Moisture: not dec. _____ dec. _____ Date Extracted: 06/05/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/06/90

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1.0

CAS NO. COMPOUND CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L Q

99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	50	U
100-02-7	4-Nitrophenol	1900	E
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	50	U
534-52-1	4,6-Dinitro-2-Methylphenol	50	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	36	B
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)Anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	Bis(2-Ethylhexyl) Phthalate	10	U
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b) Fluoranthene	10	U
207-08-9	Benzo(k) Fluoranthene	10	U
50-32-8	Benzo(a) Pyrene	10	U
193-39-5	Indeno(1,2,3-cd) Pyrene	10	U
53-70-3	Dibenz(a,h) Anthracene	10	U
191-24-2	Benzo(g,h,i) Perylene	10	U

N/A

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: RECRA ENVIRONMENTAL, INC.

EPA Sample No. 02

Lab Code: RECNY Case No: 1042 SAS No:

Contract: C001741

Matrix (Soil/Water): WATER

SDG No:

Sample wt/vol: 1000 (g/ml): ML

Lab Sample Id: 02

Level (low/med): LOW

Lab File Id: 4176X

% Moisture not Dec: Dec:

Date Received: 05-31-90

Date Extracted: 06-05-90

Extraction: (SepF/Cont/Sonc): SEPF

Date Analyzed: 06-06-90

GPC Cleanup: (Y/N): N pH: 7.0

Dilution Factor: 1.0

Number TICs Found: 20

Concentration Units:

(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1	CYCLOHEXADIENE DERIVATIVE	9.50	50	J
2	UNKNOWN	10.37	140	J
3	UNKNOWN	10.55	39	J
4	NITROPHENOL ISOMER	12.07	170	J
5	UNKNOWN	12.53	1000	J
6	TRIMETHYLPHENOL ISOMER	13.40	37	J
7	UNKNOWN	13.60	60	J
8	ALKYLPHENOL ISOMER	13.80	14	J
9	UNKNOWN	14.00	240	J
10	ALKYLPHENOL DERIVATIVE	14.23	77	J
11	ALKYLPHENOL DERIVATIVE	14.58	22	J
12	UNKNOWN	15.90	66	J
13	UNKNOWN	16.07	83	J
14	UNKNOWN	16.85	55	J
15	UNKNOWN	17.52	36	J
16	UNKNOWN	18.27	40	J
17	UNKNOWN	19.48	18	J
18	UNKNOWN	21.77	34	J
19	UNKNOWN	29.07	45	J
20	UNKNOWN	31.38	32	J
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1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

02DL

Lab Name: RECRA ENVIRON Contract: C001741

Lab Code: RECNY Case No.: 1042 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: 02DL

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 4240X

Level: (low/med) LOW Date Received: 05/31/90

% Moisture: not dec. _____ dec. _____ Date Extracted: 06/05/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/15/90

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 100

CAS NO. COMPOUND CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L Q

108-95-2-----	Phenol	7800	D
111-44-4-----	bis(2-Chloroethyl) Ether	1000	U
95-57-8-----	2-Chlorophenol	1000	U
541-73-1-----	1,3-Dichlorobenzene	1000	U
106-46-7-----	1,4-Dichlorobenzene	1000	U
100-51-6-----	Benzyl Alcohol	1000	U
95-50-1-----	1,2-Dichlorobenzene	1000	U
95-48-7-----	2-Methylphenol	240	DJ
108-60-1-----	bis(2-Chloroisopropyl) Ether	1000	U
106-44-5-----	4-Methylphenol	1000	U
621-64-7-----	N-Nitroso-Di-n-Propylamine	1000	U
67-72-1-----	Hexachloroethane	1000	U
98-95-3-----	Nitrobenzene	1000	U
78-59-1-----	Isophorone	1000	U
88-75-5-----	2-Nitrophenol	2000	D
105-67-9-----	2,4-Dimethylphenol	1000	U
65-85-0-----	Benzoic Acid	5000	U
111-91-1-----	bis(2-Chloroethoxy) Methane	1000	U
120-83-2-----	2,4-Dichlorophenol	1000	U
120-82-1-----	1,2,4-Trichlorobenzene	1000	U
91-20-3-----	Naphthalene	1000	U
106-47-8-----	4-Chloroaniline	1000	U
87-68-3-----	Hexachlorobutadiene	1000	U
59-50-7-----	4-Chloro-3-Methylphenol	1000	U
91-57-6-----	2-Methylnaphthalene	1000	U
77-47-4-----	Hexachlorocyclopentadiene	1000	U
88-06-2-----	2,4,6-Trichlorophenol	1000	U
95-95-4-----	2,4,5-Trichlorophenol	5000	U
91-58-7-----	2-Chloronaphthalene	1000	U
88-74-4-----	2-Nitroaniline	5000	U
131-11-3-----	Dimethyl Phthalate	1000	U
208-96-8-----	Acenaphthylene	1000	U
606-20-2-----	2,6-Dinitrotoluene	1000	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

02DL

Lab Name: RECRA ENVIRON Contract: C001741

Lab Code: RECNY Case No.: 1042 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: 02DL

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 4240X

Level: (low/med) LOW Date Received: 05/31/90

% Moisture: not dec. _____ dec. _____ Date Extracted: 06/05/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/15/90

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 100

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L Q

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>	Q
99-09-2-----	3-Nitroaniline	5000	U
83-32-9-----	Acenaphthene	1000	U
51-28-5-----	2,4-Dinitrophenol	5000	U
100-02-7-----	4-Nitrophenol	1300	DJ
132-64-9-----	Dibenzofuran	1000	U
121-14-2-----	2,4-Dinitrotoluene	1000	U
84-66-2-----	Diethylphthalate	1000	U
7005-72-3-----	4-Chlorophenyl-phenylether	1000	U
86-73-7-----	Fluorene	1000	U
100-01-6-----	4-Nitroaniline	5000	U
534-52-1-----	4,6-Dinitro-2-Methylphenol	5000	U
86-30-6-----	N-Nitrosodiphenylamine (1)	1000	U
101-55-3-----	4-Bromophenyl-phenylether	1000	U
118-74-1-----	Hexachlorobenzene	1000	U
87-86-5-----	Pentachlorophenol	5000	U
85-01-8-----	Phenanthrene	1000	U
120-12-7-----	Anthracene	1000	U
84-74-2-----	Di-n-Butylphthalate	1000	U
206-44-0-----	Fluoranthene	1000	U
129-00-0-----	Pyrene	1000	U
85-68-7-----	Butylbenzylphthalate	1000	U
91-94-1-----	3,3'-Dichlorobenzidine	2000	U
56-55-3-----	Benzo(a)Anthracene	1000	U
218-01-9-----	Chrysene	1000	U
117-81-7-----	Bis(2-Ethylhexyl) Phthalate	1000	U
117-84-0-----	Di-n-Octyl Phthalate	1000	U
205-99-2-----	Benzo(b) Fluoranthene	1000	U
207-08-9-----	Benzo(k) Fluoranthene	1000	U
50-32-8-----	Benzo(a) Pyrene	1000	U
193-39-5-----	Indeno(1,2,3-cd) Pyrene	1000	U
53-70-3-----	Dibenz(a,h) Anthracene	1000	U
191-24-2-----	Benzo(g,h,i) Perylene	1000	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

013

Lab Name: RECRA ENVIRONMENTAL, INC.

EPA Sample No. 02DL

Lab Code: RECNY Case No: 1042 SAS No:

Contract: C001741

Matrix (Soil/Water): WATER

SDG No:

Sample wt/vol: 1000 (g/ml): ML

Lab Sample Id: 02DL

Level (low/med): LOW

Lab File Id: 4240X

% Moisture not Dec: Dec:

Date Received: 05-31-90

Date Extracted: 06-05-90

Extraction: (SepF/Cont/Sonc): SEPF

Date Analyzed: 06-15-90

GPC Cleanup: (Y/N): N pH: 7.0

Dilution Factor: 100

Number TICs Found: 3

Concentration Units:

(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1	UNKNOWN	11.73	5400	J
2	ALKYLPHENOL ISOMER	14.47	900	J
3	UNKNOWN	17.18	1200	J
4				
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AQUEOUS MATRIX
TOTAL METALS

PARAMETER (Units of Measure = mg/l)	METHOD NUMBER	ANALYSIS DATE	SAMPLE IDENTIFICATION (DATE)	ST
			RH990-0531-932902 (5/31/90)	
Total Aluminum	202.1	6/5/90	0.50	
Total Antimony	204.2	6/5/90	<0.010	
Total Arsenic	206.2	6/13/90	<0.005	
Total Barium	208.1	6/5/90	0.10	1.0
Total Beryllium	210.1	6/5/90	<0.005	
Total Cadmium	213.1	6/6/90	0.007	0.01
Total Calcium	215.1	6/5/90	114	
Total Chromium	218.1	6/5/90	<0.010	
Total Cobalt	219.1	6/5/90	<0.03	
Total Copper	220.1	6/5/90	0.011	1.0
Total Iron	236.1	6/6/90	3.6	0.3
Total Lead	239.2	6/11/90	0.0068	0.025
Total Magnesium	242.1	6/5/90	13.0	
Total Manganese	243.1	6/5/90	0.57	0.3
Total Mercury	245.1	6/12/90	<0.0002	
Total Nickel	249.1	6/5/90	<0.04	
Total Potassium	258.1	6/21/90	10.3	
Total Selenium	270.2	6/13/90	<0.005	
Total Silver	272.1	6/5/90	<0.010	
Total Sodium	273.1	6/21/90	63	
Total Thallium	279.2	6/15/90	<0.005	
Total Vanadium	286.1	6/6/90	<0.05	
Total Zinc	289.1	6/6/90	0.19	5.0



2A
WATER VOLATILE SURROGATE RECOVERY

Lab Name: RECRA ENVIRON Contract: C001741

Lab Code: RECNY Case No.: 1042 SAS No.: _____ SDG No.: _____

	EPA SAMPLE NO.	S1 (TOL) #	S2 (BFB) #	S3 (DCE) #	OTHER	TOT OUT
01	02	105	109	98	0	0
02	TRIPBLANK	103	109	97	0	0
03	VBLK59	100	97	100	0	0

QC LIMITS

S1 (TOL) = Toluene-d8 (88-110)
 S2 (BFB) = Bromofluorobenzene (86-115)
 S3 (DCE) = 1,2-Dichloroethane-d4 (76-114)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogates diluted out

2C
WATER SEMIVOLATILE SURROGATE RECOVERY

016

Lab Name: RECRA ENVIRON Contract: C001741

Lab Code: RECNY Case No.: 1042 SAS No.: _____ SDG No.: _____

	EPA SAMPLE NO.	S1 (NBZ) #	S2 (FBP) #	S3 (TPH) #	S4 (PHL) #	S5 (2FP) #	S6 (TBP) #	OTHER	TOT OUT
01	02	112	101	61	44	54	85	0	0
02	02DL	112	149 *	59	40	48	63	0	1
03	SBLK36	93	85	92	46	71	83	0	0

QC LIMITS

S1 (NBZ) = Nitrobenzene-d5 (35-114)
 S2 (FBP) = 2-Fluorobiphenyl (43-116)
 S3 (TPH) = Terphenyl (33-141)
 S4 (PHL) = Phenol-d5 (10-94)
 S5 (2FP) = 2-Fluorophenol (21-100)
 S6 (TBP) = 2,4,6-Tribromophenol (10-123)

Column to be used to flag recovery values
 * Values outside of contract required QC limits
 D Surrogates diluted out

4A
VOLATILE METHOD BLANK SUMMARY

017

Lab Name: RECRA ENVIRON Contract: C001741
 Lab Code: RECNY Case No.: 1042 SAS No.: _____ SDG No.: _____
 Lab File ID: 7869E Lab Sample ID: VBLK59
 Date Analyzed: 06/02/90 Time Analyzed: 1209
 Matrix: (soil/water) WATER Level: (low/med) LOW
 Instrument ID: 51E

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	02	02	7871E	1330
02	TRIPBLANK	TRIPBLANK	7870E	1247

COMMENTS: VBLK59
51E

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK59

Lab Name: RECRA ENVIRON Contract: C001741

Lab Code: RECNY Case No.: 1042 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: VBLK59

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 7869E

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 06/02/90

Column: (pack/cap) PACK Dilution Factor: 1.0

CAS NO. COMPOUND CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L Q

74-87-3	-----Chloromethane	10	U
74-83-9	-----Bromomethane	10	U
75-01-4	-----Vinyl Chloride	10	U
75-00-3	-----Chloroethane	10	U
75-09-2	-----Methylene Chloride	10	
67-64-1	-----Acetone	10	U
75-15-0	-----Carbon Disulfide	5	U
75-35-4	-----1,1-Dichloroethene	5	U
75-34-3	-----1,1-Dichloroethane	5	U
540-59-0	-----1,2-Dichloroethene (total)	5	U
67-66-3	-----Chloroform	5	U
107-06-2	-----1,2-Dichloroethane	5	U
78-93-3	-----2-Butanone	10	U
71-55-6	-----1,1,1-Trichloroethane	5	U
56-23-5	-----Carbon Tetrachloride	5	U
108-05-4	-----Vinyl Acetate	10	U
75-27-4	-----Bromodichloromethane	5	U
78-87-5	-----1,2-Dichloropropane	5	U
10061-01-5	-----cis-1,3-dichloropropene	5	U
79-01-6	-----Trichloroethene	5	U
124-48-1	-----Dibromochloromethane	5	U
79-00-5	-----1,1,2-Trichloroethane	5	U
71-43-2	-----Benzene	5	U
10061-02-6	-----trans-1,3-dichloropropene	5	U
75-25-2	-----Bromoform	5	U
108-10-1	-----4-Methyl-2-Pentanone	10	U
591-78-6	-----2-Hexanone	10	U
127-18-4	-----Tetrachloroethene	5	U
79-34-5	-----1,1,2,2-Tetrachloroethane	5	U
108-88-3	-----Toluene	5	U
108-90-7	-----Chlorobenzene	5	U
100-41-4	-----Ethylbenzene	5	U
100-42-5	-----Styrene	5	U
1330-20-7	-----Total Xylenes	5	U

1E
 VOLATILE ORGANICS ANALYSIS DATA SHEET
 TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO. **019**

VBLK59

Lab Name: RECRA ENVIRON Contract: C001741

Lab Code: RECNY Case No.: 1042 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: VBLK59

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: 7869E

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 06/02/90

Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 0 CONCENTRATION UNITS:
 (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====

4B
SEMIVOLATILE METHOD BLANK SUMMARY

Lab Name: RECRA ENVIRON Contract: C001741
 Lab Code: RECNY Case No.: 1042 SAS No.: _____ SDG No.: _____
 Lab File ID: 4175X Lab Sample ID: SBLK36
 Date Extracted: 06/05/90 Extraction: (SepF/Cont/Sonc) SEPF
 Date Analyzed: 06/06/90 Time Analyzed: 1028
 Matrix: (soil/water) WATER Level: (low/med) LOW
 Instrument ID: I50X

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	=====	=====	=====	=====
01	02	02	4176X	06/06/90
02	02DL	02DL	4240X	06/15/90

COMMENTS: SBLK36 JOB 1042 BN1518/19
AUTOSAMPLR I50X

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

021
EPA SAMPLE NO.

SBLK36

Lab Name: RECRA ENVIRON Contract: C001741

Lab Code: RECNY Case No.: 1042 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: SBLK36

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 4175X

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ dec. _____ Date Extracted: 06/05/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/06/90

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1.0

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q

108-95-2-----Phenol	10	U
111-44-4-----bis(2-Chloroethyl)Ether	10	U
95-57-8-----2-Chlorophenol	10	U
541-73-1-----1,3-Dichlorobenzene	10	U
106-46-7-----1,4-Dichlorobenzene	10	U
100-51-6-----Benzyl Alcohol	10	U
95-50-1-----1,2-Dichlorobenzene	10	U
95-48-7-----2-Methylphenol	10	U
108-60-1-----bis(2-Chloroisopropyl)Ether	10	U
106-44-5-----4-Methylphenol	10	U
621-64-7-----N-Nitroso-Di-n-Propylamine	10	U
67-72-1-----Hexachloroethane	10	U
98-95-3-----Nitrobenzene	10	U
78-59-1-----Isophorone	10	U
88-75-5-----2-Nitrophenol	10	U
105-67-9-----2,4-Dimethylphenol	10	U
65-85-0-----Benzoic Acid	50	U
111-91-1-----bis(2-Chloroethoxy)Methane	10	U
120-83-2-----2,4-Dichlorophenol	10	U
120-82-1-----1,2,4-Trichlorobenzene	10	U
91-20-3-----Naphthalene	10	U
106-47-8-----4-Chloroaniline	10	U
87-68-3-----Hexachlorobutadiene	10	U
59-50-7-----4-Chloro-3-Methylphenol	10	U
91-57-6-----2-Methylnaphthalene	10	U
77-47-4-----Hexachlorocyclopentadiene	10	U
88-06-2-----2,4,6-Trichlorophenol	10	U
95-95-4-----2,4,5-Trichlorophenol	50	U
91-58-7-----2-Chloronaphthalene	10	U
88-74-4-----2-Nitroaniline	50	U
131-11-3-----Dimethyl Phthalate	10	U
208-96-8-----Acenaphthylene	10	U
606-20-2-----2,6-Dinitrotoluene	10	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK36

Lab Name: RECRA ENVIRON Contract: C001741

Lab Code: RECNY Case No.: 1042 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: SBLK36

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 4175X

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ dec. _____ Date Extracted: 06/05/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/06/90

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1.0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L Q

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>	Q
99-09-2-----	3-Nitroaniline	50	U
83-32-9-----	Acenaphthene	10	U
51-28-5-----	2,4-Dinitrophenol	50	U
100-02-7-----	4-Nitrophenol	50	U
132-64-9-----	Dibenzofuran	10	U
121-14-2-----	2,4-Dinitrotoluene	10	U
84-66-2-----	Diethylphthalate	10	U
7005-72-3-----	4-Chlorophenyl-phenylether	10	U
86-73-7-----	Fluorene	10	U
100-01-6-----	4-Nitroaniline	50	U
534-52-1-----	4,6-Dinitro-2-Methylphenol	50	U
86-30-6-----	N-Nitrosodiphenylamine (1)	10	U
101-55-3-----	4-Bromophenyl-phenylether	10	U
118-74-1-----	Hexachlorobenzene	10	U
87-86-5-----	Pentachlorophenol	50	U
85-01-8-----	Phenanthrene	10	U
120-12-7-----	Anthracene	10	U
84-74-2-----	Di-n-Butylphthalate	5	J
206-44-0-----	Fluoranthene	10	U
129-00-0-----	Pyrene	10	U
85-68-7-----	Butylbenzylphthalate	10	U
91-94-1-----	3,3'-Dichlorobenzidine	20	U
56-55-3-----	Benzo(a)Anthracene	10	U
218-01-9-----	Chrysene	10	U
117-81-7-----	Bis(2-Ethylhexyl)Phthalate	10	U
117-84-0-----	Di-n-Octyl Phthalate	10	U
205-99-2-----	Benzo(b)Fluoranthene	10	U
207-08-9-----	Benzo(k)Fluoranthene	10	U
50-32-8-----	Benzo(a)Pyrene	10	U
193-39-5-----	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3-----	Dibenz(a,h)Anthracene	10	U
191-24-2-----	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: RECRA ENVIRONMENTAL, INC.	EPA Sample No. SBLK36
Lab Code: RECNY Case No: 1042 SAS No:	Contract: C001741
Matrix (Soil/Water): WATER	SDG No:
Sample wt/vol: 1000 (g/ml): ML	Lab Sample Id: SBLK36
Level (low/med): LOW	Lab File Id: 4175X
% Moisture not Dec: Dec:	Date Received:
Extraction: (SepF/Cont/Sonc): SEPF	Date Extracted: 06-05-90
GPC Cleanup: (Y/N): N pH: 7.0	Date Analyzed: 06-06-90
Number TICs Found: 1	Dilution Factor: 1.0
	Concentration Units: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1	OXYGENATED COMPOUND	8.40	140	J
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

8A
VOLATILE INTERNAL STANDARD AREA SUMMARY

024

Lab Name: RECRA ENVIRON- Contract: C001741
 Lab Code: RECNY Case No.: 1042 SAS No.: _____ SDG No.: _____
 Lab File ID (Standard): 7862E Date Analyzed: 06/02/90
 Instrument ID: 51E Time Analyzed: 0734
 Matrix: (soil/water) WATER Level: (low/med) LOW Column: (pack/cap) PACK

	IS1 (BCM) AREA #	RT	IS2 (DFB) AREA #	RT	IS3 (CBZ) AREA #	RT
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	25500	7.78	120000	17.79	96300	22.64
=====	=====	=====	=====	=====	=====	=====
UPPER LIMIT	51000		240000		192600	
=====	=====	=====	=====	=====	=====	=====
LOWER LIMIT	12750		60000		48150	
=====	=====	=====	=====	=====	=====	=====
EPA SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 02	24200	7.78	112000	17.80	91700	22.67
02 TRIPBLANK	23800	7.77	109000	17.80	90100	22.67
03 VBLK59	22600	7.78	103000	17.79	87800	22.67

IS1 (BCM) = Bromochloromethane
 IS2 (DFB) = 1,4-Difluorobenzene
 IS3 (CBZ) = Chlorobenzene

UPPER LIMIT = + 100%
 of internal standard area.
 LOWER LIMIT = - 50%
 of internal standard area.

Column used to flag internal standard area values with an asterisk

8B
SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

025

Lab Name: RECRA ENVIRON Contract: C001741
 Lab Code: RECNY Case No.: 1042 SAS No.: _____ SDG No.: _____
 Lab File ID (Standard): 4173X Date Analyzed: 06/06/90
 Instrument ID: I50X Time Analyzed: 0840

	IS1 (DCB) AREA #	RT	IS2 (NPT) AREA #	RT	IS3 (ANT) AREA #	RT
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	12900	9.24	57800	12.89	32000	18.24
=====	=====	=====	=====	=====	=====	=====
UPPER LIMIT	25800		115600		64000	
=====	=====	=====	=====	=====	=====	=====
LOWER LIMIT	6450		28900		16000	
=====	=====	=====	=====	=====	=====	=====
EPA SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 02	12000	9.29	51900	12.95	28800	18.30
02 SBLK36	11000	9.22	49500	12.87	27700	18.22

IS1 (DCB) = 1,4-Dichlorobenzene-d4
 IS2 (NPT) = Naphthalene-d8
 IS3 (ANT) = Acenaphthene-d10

UPPER LIMIT = + 100%
 of internal standard area.
 LOWER LIMIT = - 50%
 of internal standard area.

Column used to flag internal standard area values with an asterisk

8C
SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

026

Lab Name: RECRA ENVIRON Contract: C001741
 Lab Code: RECNV Case No.: 1042 SAS No.: _____ SDG No.: _____
 Lab File ID (Standard): 4173X Date Analyzed: 06/06/90
 Instrument ID: I50X Time Analyzed: 0840

	IS4 (PHN) AREA #	RT	IS5 (CRY) AREA #	RT	IS6 (PRY) AREA #	RT
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	53000	22.82	74500	31.07	75600	35.26
=====	=====	=====	=====	=====	=====	=====
UPPER LIMIT	106000		149000		151200	
=====	=====	=====	=====	=====	=====	=====
LOWER LIMIT	26500		37250		37800	
=====	=====	=====	=====	=====	=====	=====
EPA SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 02	44400	22.84	50100	31.06	46800	35.26
02 SBLK36	44700	22.80	48300	31.02	52100	35.22

IS4 (PHN) = Phenanthrene-d10
 IS5 (CRY) = Chrysene-d12
 IS6 (PRY) = Perylene-d12

UPPER LIMIT = + 100%
 of internal standard area.
 LOWER LIMIT = - 50%
 of internal standard area.

Column used to flag internal standard area values with an asterisk

8B
SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

027

Lab Name: RECRA ENVIRON Contract: C001741
 Lab Code: RECNY Case No.: 1042 SAS No.: _____ SDG No.: _____
 Lab File ID (Standard): 4237X Date Analyzed: 06/15/90
 Instrument ID: I50X Time Analyzed: 0851

	IS1 (DCB) AREA #	RT	IS2 (NPT) AREA #	RT	IS3 (ANT) AREA #	RT
12 HOUR STD	21700	8.75	79500	12.39	38600	17.72
UPPER LIMIT	43400		159000		77200	
LOWER LIMIT	10850		39750		19300	
EPA SAMPLE NO.						
01 02DL	24000	8.75	86300	12.37	42300	17.72

IS1 (DCB) = 1,4-Dichlorobenzene-d4
 IS2 (NPT) = Naphthalene-d8
 IS3 (ANT) = Acenaphthene-d10

UPPER LIMIT = + 100%
 of internal standard area.
 LOWER LIMIT = - 50%
 of internal standard area.

Column used to flag internal standard area values with an asterisk

CHAIN OF CUSTODY DOCUMENTS



**NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
CONTRACT LAB SAMPLE INFORMATION SHEET**

Print legibly

030

COLLECTED BY: <i>Glenn M. [Redacted]</i>		TELEPHONE NUMBER: <i>847-4585</i>		REGION NO: <i>9</i>	
CONTRACT LAB: <i>RECR [Redacted]</i>		COUNTY: <i>Niagara</i>	SAMPLING DATE: <i>5-31-90</i>		MILITARY TIME: <i>1335</i>
SAMPLING POINT: <i>[Redacted]</i>			OUTFALL NUMBER		CHECK IF SAMPLING IS PART OF INSPECTION <input type="checkbox"/>
			SPDES NUMBER		FLOW MGD
CASE NUMBER <i>RH990</i>	SDG NUMBER <i>05 31</i>	SAMPLE NUMBER <i>932902</i>		CHECK FOR MS/MD <input type="checkbox"/> This Sample	TYPE OF SAMPLE: <input type="checkbox"/> Composite <input checked="" type="checkbox"/> Grab <input type="checkbox"/> Term _____ hrs
SAMPLE MATRIX: <input checked="" type="checkbox"/> Air <input type="checkbox"/> Soil/Sediment <input checked="" type="checkbox"/> Groundwater <input type="checkbox"/> Surface Water <input type="checkbox"/> Wastewater <input type="checkbox"/> Other (Specify) _____					
CHECK THE BOX PRECEDING THE REQUESTED ANALYSIS					
PRIORITY POLLUTANTS (Water Part 136)—SPDES					
<input type="checkbox"/> 1. All (SPDES)—includes 2-6	<input type="checkbox"/> 2. 13 PP Metals	<input type="checkbox"/> 3. Volatiles—USEPA 624 (GC/MS)			
<input type="checkbox"/> 4. Acids Base/Neutrals (USEPA 825-GC/MS)	<input type="checkbox"/> 5. Cyanide	<input type="checkbox"/> 6. Pesticides/PCB's (USEPA 608-GC)			
<input type="checkbox"/> 7. Halogenated Volatiles (USEPA 601-GC)	<input type="checkbox"/> 8. Aromatic Volatiles (USEPA 602-GC)	<input type="checkbox"/> 9. BOD			
<input type="checkbox"/> 10. pH	<input type="checkbox"/> 11. COD	<input type="checkbox"/> 12. TSS			
<input type="checkbox"/> 13. Settleable Solids	<input type="checkbox"/> 14. TKN	<input type="checkbox"/> 15. Ammonia			
<input type="checkbox"/> 16. Nitrate/Nitrite	<input type="checkbox"/> 17. Total Phosphorous	<input type="checkbox"/> 18. Reactive Phosphorous			
<input type="checkbox"/> 19. Oil/Grease	<input type="checkbox"/> 20. TOC	<input type="checkbox"/> 21. Total Phenols			
<input type="checkbox"/> 22. Other _____	<input type="checkbox"/> 29. PCB's at 0.065 ug/L	<input type="checkbox"/> 60. PCB's congener _____			
CONTRACT LABORATORY PROTOCOLS					
<input type="checkbox"/> 23. (ALL)—Water—Includes 24-28	<input type="checkbox"/> 29. (ALL)—Soil/Sediments—Includes 30-34				
<input type="checkbox"/> 24. Base/Neutral/Acid (B/N/A)—Water—GC-MS	<input type="checkbox"/> 30. B/N/A—Soils/Sediment—GC-MS				
<input type="checkbox"/> 25. Volatile Organic Analysis VOA—Water—GC-MS	<input type="checkbox"/> 31. VOA—Soils/Sediments—GC-MS				
<input type="checkbox"/> 26. Pesticides/PCB's—Water—GC	<input type="checkbox"/> 32. Pesticides/PCB's—Soils/Sediment—GC				
<input type="checkbox"/> 27. Metals—Water	<input type="checkbox"/> 33. Metals—Soil/Sediment				
<input type="checkbox"/> 28. Cyanide—Water	<input type="checkbox"/> 34. Cyanide—Soils/Sediment				
		<input type="checkbox"/> 35. Other _____			
HAZARDOUS WASTES/RCRA ANALYSIS SW-846					
<input type="checkbox"/> 36. EP Toxicity	<input type="checkbox"/> 37. EP Toxicity (Metals Only)	<input type="checkbox"/> 38. Ignitability			
<input type="checkbox"/> 39. Corrosivity	<input checked="" type="checkbox"/> 40. VOA—(USEPA 8240)	<input checked="" type="checkbox"/> 41. BNA—(USEPA 8270)			
<input type="checkbox"/> 42. Pesticides/PCB's (USEPA 8060)	<input type="checkbox"/> 43. TCLP	<input type="checkbox"/> 44. TCLP (Metals Only)			
<input type="checkbox"/> 45. Reactivity	<input type="checkbox"/> 46. Dioxin (USEPA 8280)	<input type="checkbox"/> 47. Appendix IX			
<input type="checkbox"/> 48. Other <i>Metals - T-HSL METALS</i>					
MUNICIPAL SOLID WASTE ANALYSIS					
<input type="checkbox"/> 49. RSGB-01	<input type="checkbox"/> 52. RSRB-01	<input type="checkbox"/> 53. RSRI-01 (EP Toxicity-Metals only + RSRR-01)			
<input type="checkbox"/> 54. RSRO-01	<input type="checkbox"/> 57. RSRR-02	<input type="checkbox"/> 58. Other _____			
<p>(applicable)</p> <p>are expected to use caution when handling DEC samples, however, please use special precautions when handling this sample since it is believed to contain significant concentrations of hazardous and/or toxic material(s).</p> <p align="center">Place QA Label Here</p>					

