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HEARTLAND ENVIRONMENTAL SERVICES, INC.
P.O. BOX 163 ST. PETERS MO 63376
(314) 278-8232

REGION II SVOA DATA VALIDATION

NAVAL WEAPONS STATION - COLTSNECK

ROY F. WESTON CASE 9103L947

Coltsneck ID	R.F. Weston ID	Coltsneck ID	R.F. Weston ID
	Water Samples (all)		
11-001-M001	9103L947-001	11-002-M001	9103L947-002
11-002-M001	9103L947-002MS	11-002-M001	9103L947-002MSD
11-003-M001	9103L947-003	11-004-M001	9103L947-004
11-004-M101	9103L947-005	11-004-M201	9103L947-006
11-005-M001	9103L947-007	02-001-M001	9103L947-008
02-002-M001	9103L947-009	02-003-M001	9103L947-010
02-003-M101	9103L947-011	02-003-M201	9103L947-012
02-004-M001	9103L947-013	02-005-M001	9103L947-014
02-006-M001	9103L947-015	02-007-M001	9103L947-016
04-003-M001	9103L947-018	04-004-M001	9103L947-019
04-004-M001	9103L947-019MS	04-004-M001	9103L947-019MSD

PREPARED BY: Eugene M. Watson DATE: 8-4-91

VERIFIED BY: Paul B. Humburg DATE: 9/5/91

HEARTLAND ENVIRONMENTAL SERVICES, INC.

DATA ASSESSMENT AND NARRATIVE

General

The organic findings offered in this screening report assumes that all analytical results are correct as reported and is based upon the examination of the reported holding times, blank analysis results, surrogate and matrix spike recoveries, GC/MS performance, tuning results, calibration results and internal standard areas. This report was prepared in compliance relative to the analytical and deliverable requirements specified in the U.S. EPA CLP and Region II SOP No. HW-6, Revision 7. All comments made within this report should be considered when examining the analytical results (Form I's).

Holding Times

Seven (7) samples were extracted outside the holding times (7 days from collection) required by the Region II protocol. In addition, these samples were extracted within the holding times set forth in the CLP protocol (5 days from VTSR). It is Heartland ESI's professional opinion that the data is not compromised by exceeding the extraction time of the Region II protocol and it should not be qualified. However, Heartland ESI will follow the guidelines set forth in the Region II SOP and qualify the data.

Specific Findings:

1. For samples 02-003-M001, 03-003-M101, 02-003-M201, 02-004-M001, 02-005-M001, 02-006-M001, and 02-007-M001, the extraction holding time specified by Region II has been exceeded. Per the SOP, Heartland ESI must qualify the sample results as estimated (J/UJ).

Blanks:

The laboratory did not identify trip or field blanks on the Chain-of-Custody, so Heartland ESI must assume that blanks were not submitted with the SVOA samples.

The two (2) method blanks that were extracted and analyzed did not exhibit contamination for TCLs. No qualifications are needed.

Tuning

All the DFTPP tunes met the tuning criteria set forth by Region II and the Functional Guidelines.

Calibrations - Relative Response Factors (RRFs)

All of the initial and continuing calibrations met the Region II r quirements for RRFs.

DATA ASSESSMENT AND NARRATIVE

Calibrations - %RSDs and %Ds

The initial and continuing calibrations were very good for the majority of the compounds. However, the laboratory did encounter some difficulties with the initial and continuing calibrations of certain compounds.

Specific findings:

2. For samples SBLKLE0126-MB1, 11-001-M001, 11-002-M001, 11-002-M001MS, 11-002-M001MSD, 11-003-M001, 11-004-M001, 11-004-M101, 11-004-M201, SBLKGB0126-MB1 BS, and SBLKGB0126-MB1 BSD, the continuing calibration on 03/28/91 on instrument GCL#4 contained the following compounds with %Ds above 25% D, but less than 50% D. Qualify all positive results as estimated (J).
   a) pentachlorophenol *

   * continuing calibration compound

3. For samples SBLKLE0126-MB1, 11-001-M001, 11-002-M001, 11-002-M001MS, 11-002-M001MSD, 11-003-M001, 11-004-M001, 11-004-M101, 11-004-M201, SBLKGB0126-MB1 BS, and SBLKGB0126-MB1 BSD, the continuing calibration on 03/28/91 on instrument GCL#4 contained the following compounds with %Ds above 50% D, but less than 90% D. Qualify all positive results as estimated (J) and all non detects as estimated (UJ).
   a) benzoic acid

4. For samples 11-005-M001, 02-001-M001, and 02-002-M001, the continuing calibration on 03/30/91 on instrument GCL#4 contained the following compounds with %Ds above 25% D, but less than 50% D. Qualify all positive results as estimated (J).
   a) 2-nitroaniline
   b) 2,4-dinitroaniline
   c) diethylphthalate
   d) pyrene
   e) butylbenzylphthalate
   f) * terphenyl-d_{14}

   * Normally a surrogate with a %D greater than 25% would result in the qualification of all positive results in the associated samples. However, all the surrogate recoveries for terphenyl-d_{14} are within QA/QC limits, so Heartland ESI will not qualify the data for the high surrogate %D.

DATA ASSESSMENT AND NARRATIVE

Calibrations - %RSDs and %Ds (continued)

5. For samples 11-005-M001, 02-001-M001, and 02-002-M001, the continuing calibration on 03/30/91 on instrument GCL#4 contained the following compounds with %Ds above 50% D, but less than 90% D. Qualify all positive results as estimated (J) and all non detects as estimated.
   a) benzoic acid
   b) 4-nitrophenol

6. For samples SBLKLE0132-MB1, 02-003-M001, 02-003-M101, 02-003-M201, SBLKLE0132-MB1 SB, SBLKLE0132-MB1 SBD, 02-004-M001-, 02-005-M001, 02-006-M001, 02-007-M001, 04-003-M001, 04-004-M001, 04-004-M001MS, and 04-004-M001MSD, the continuing calibration on 03/30/91 on instrument GCL#1 contained the following compounds with %Ds above 25% D, but less than 50% D. Qualify all positive results as estimated (J).
   a) 4,6-dinitro-2-methylphenol
   b) indeno(1,2,3-cd)pyrene
   c) dibenzo(a,h)anthracene
   d) benzo(g,h,i)perylene

7. For samples SBLKLE0132-MB1, 02-003-M001, 02-003-M101, 02-003-M201, SBLKLE0132-MB1 SB, SBLKLE0132-MB1 SBD, 02-004-M001-, 02-005-M001, 02-006-M001, 02-007-M001, 04-003-M001, 04-004-M001, 04-004-M001MS, and 04-004-M001MSD, the continuing calibration on 03/30/91 on instrument GCL#1 contained the following compounds with %Ds above 50% D, but less than 90% D. Qualify all positive results as estimated (J) and all non detects as estimated.
   a) 2,4-dinitrophenol

Surrogates

All of the samples contained surrogate recoveries that were within the CLP QA/QC criteria.

Internal Standards

One (1) sample exhibited EICP internal standard areas which were out of QA/QC limits. However, the sample was a blank spike duplicate (BSD) and all of the spike recoveries were within QA/QC limits. No qualifications are needed.

Compound Identification/Quantitation

All of the spectra submitted by the laboratory met the Region II guidelines. No qualifications are needed.

DATA ASSESSMENT AND NARRATIVE

Matrix Spike/Matrix Spike Duplicate

The water MS/MSD did not require any qualifications.

System Performance and Overall Assessment

The overall performance of the GC/MS system was acceptable. The quality of the data package was acceptable. Heartland ESI estimates that greater than 5% of the data is qualified.

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GLOSSARY OF DATA QUALIFIERS

QUALIFICATION CODES

U = Not detected

J = Estimated value

UJ = Reported quantitation limit is qualified as estimated

R = Result is rejected and unusable

NJ = Presumptive evidence for the presence of the material at an estimated value

Heartland ESI specific findings will be noted in numerical form on the Form Is in this data validation report. These specific finding footnotes will reflect the conclusions found in the data validation process that resulted in the qualification of the data.

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SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL	SPECIFIC FINDINGS
02-003-M001,03-003-M101 02-003-M201,02-004-001, 02-005-M001,02-006-M001 02-007-M001	all analytes	+/-	J/UJ	1
SBLKLE0126-MB1 SBLKLE0126-MB1 SB SBLKLE0126-MB1 SBD 11-001-M001,11-002-M001, 11-002-M001MS,11-002-001MSD, 11-003-M001,11-004-M001, 11-004-M101,11-004-M201	pentachloro- phenol	+	J	2
SBLKLE0126-MB1 SBLKLE0126-MB1 SB SBLKLE0126-MB1 SBD 11-001-M001,11-002-M001, 11-002-M001MS,11-002-001MSD, 11-003-M001,11-004-M001, 11-004-M101,11-004-M201	benzoic acid	+	J	3
11-005-M001,02-001-M001 02-002-M001	2-nitroaniline 2,4-dinitroaniline diethylphthalate pyrene butylbenzylphthalate	+	J	4
11-005-M001,02-001-M001 02-002-M001	benzoic aicd 4-nitrophenol	+/-	J/UJ	5

* DL denotes the Form I qualifier supplied by the laboratory

QL denotes the qualifier used by Heartland ESI

\+ in the DL/QL column denotes a positive result

\- in the DL/QL column denotes a negative result

HEARTLAND ENVIRONMENTAL SERVICES, INC.

SUMMARY OF DATA QUALIFICATIONS

SAMPLE ID	ANALYTE ID	DL	QL	SPECIFIC FINDINGS
SBLKLE0132-MB1 SBLKLE0132-MB1 SB SBLKLE0132-MB1 SBD 02-003-M001,02-003-M101 02-003-M201,02-004-M001, 02-005-M001,02-006-M001, 02-007-M001,04-003-M001, 04-004-M001,04-004-M001MS, 04-004-M001MSD	4,6-dinitro- 2-methylphenol indeno(1,2,3-cd)pyrene benzo(g,h,i)perylene	+	J	6
SBLKLE0132-MB1 SBLKLE0132-MB1 SB SBLKLE0132-MB1 SBD 02-003-M001,02-003-M101 02-003-M201,02-004-M001, 02-005-M001,02-006-M001, 02-007-M001,04-003-M001, 04-004-M001,04-004-M001MS, 04-004-M001MSD	2,4-dinitro- phenol	+/-	J/UJ	7

* DL denotes the Form I qualifier supplied by the laboratory

QL denotes the qualifier used by Heartland ESI

\+ in the DL/QL column denotes a positive result

\- in the DL/QL column denotes a negative result

1B
SEMIVOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

11-001-M001

Lab Name: Roy F. Weston, Inc. Work Order: 1771-15-03-0000

Client: Naval Weapons Station

Matrix: WATER Lab Sample ID: 9103L947-001

Sample wt/vol: 950 (g/mL) ML Lab File ID: DBA043

Level: (low/med) LOW Date Received: 03/16/91

% Moisture: not dec. _____ dec. Date Extracted: 03/19/91

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 03/29/91

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

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

CAS NO.	COMPOUND		
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	52	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	52	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	52	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

1C
SEMIVOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

11-001-M001

Lab Name: Roy F. Weston, Inc. Work Order: 1771-15-03-0000

Client: Naval Weapons Station

Matrix: WATER Lab Sample ID: 9103L947-001

Sample wt/vol: 950 (g/mL) ML Lab File ID: DBA043

Level: (low/med) LOW Date Received: 03/16/91

% Moisture: not dec. _____ dec. Date Extracted: 03/19/91

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 03/29/91

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

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

CAS NO.	COMPOUND		
99-09-2	3-Nitroaniline	52	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	52	U
100-02-7	4-Nitrophenol	52	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	52	U
534-52-1	4,6-Dinitro-2-methylphenol	52	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	52	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	21	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	3	J
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	Dibenzo(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 SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

11-001-M001

Lab Name: Roy F. Weston, Inc. Work Order: 1771-15-03-0000

Client: Naval Weapons Station

Matrix: WATER Lab Sample ID: 9103L947-001

Sample wt/vol: 950 (g/mL) ML Lab File ID: DBAQ43

Level: (low/med) LOW Date Received: 03/16/91

% Moisture: not dec. _____ dec. Date Extracted: 03/19/91

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 03/29/91

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

Number TICs found: 9

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	28.40	5	J NJ
2.	UNKNOWN HYDROCARBON	32.11	6	J
3.	UNKNOWN HYDROCARBON	33.15	10	J
4.	UNKNOWN HYDROCARBON	34.15	20	J
5.	UNKNOWN HYDROCARBON	35.18	20	J
6.	UNKNOWN HYDROCARBON	36.34	30	J
7.	UNKNOWN HYDROCARBON	37.64	20	J
8.	UNKNOWN HYDROCARBON	39.16	10	J
9.	UNKNOWN HYDROCARBON	40.95	7	J

1B
SEMIVOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

11-002-M001

Lab Name: Roy F. Weston, Inc. Work Order: 1771-15-03-0000

Client: Naval Weapons Station

Matrix: WATER Lab Sample ID: 9103L947-002

Sample wt/vol: 1050 (g/mL) ML Lab File ID: DBA044

Level: (low/med) LOW Date Received: 03/16/91

% Moisture: not dec. _____ dec. Date Extracted: 03/19/91

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 03/29/91

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

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

CAS NO.	COMPOUND		
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	48	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	48	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	48	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

1C
SEMIVOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

11-002-M001

Lab Name: Roy F. Weston, Inc. Work Order: 1771-15-03-0000

Client: Naval Weapons Station

Matrix: WATER Lab Sample ID: 9103L947-002

Sample wt/vol: 1050 (g/mL) ML Lab File ID: DBA044

Level: (low/med) LOW Date Received: 03/16/91

% Moisture: not dec. _____ dec. Date Extracted: 03/19/91

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 03/29/91

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

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

CAS NO.	COMPOUND		
99-09-2	3-Nitroaniline	48	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	48	U
100-02-7	4-Nitrophenol	48	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	48	U
534-52-1	4,6-Dinitro-2-methylphenol	48	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	48	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	19	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	1	J
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	Dibenzo(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 SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

11-002-M001

Lab Name: Roy F. Weston, Inc. Work Order: 1771-15-03-0000

Client: Naval Weapons Station

Matrix: WATER Lab Sample ID: 9103L947-002

Sample wt/vol: 1050 (g/mL) ML Lab File ID: DBA044

Level: (low/med) LOW Date Received: 03/16/91

% Moisture: not dec. _____ dec. Date Extracted: 03/19/91

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 03/29/91

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				

1B
SEMIVOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

11-003-M001

Lab Name: Roy F. Weston, Inc. Work Order: 1771-15-03-0000

Client: Naval Weapons Station

Matrix: WATER Lab Sample ID: 9103L947-003

Sample wt/vol: 980 (g/mL) ML Lab File ID: DBAQ47

Level: (low/med) LOW Date Received: 03/16/91

% Moisture: not dec. _____ dec. Date Extracted: 03/19/91

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 03/29/91

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

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

CAS NO.	COMPOUND		
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	51	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	51	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	51	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

1C
SEMIVOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

11-003-M001

Lab Name: Roy F. Weston, Inc. Work Order: 1771-15-03-0000

Client: Naval Weapons Station

Matrix: WATER Lab Sample ID: 9103L947-003

Sample wt/vol: 980 (g/mL) ML Lab File ID: DBAQ47

Level: (low/med) LOW Date Received: 03/16/91

% Moisture: not dec. _____ dec. Date Extracted: 03/19/91

Extraction: (SepF/Cont/Sonc) SEPF Date
Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 03/29/91

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

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

CAS NO.	COMPOUND		
99-09-2	3-Nitroaniline	51	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	51	U
100-02-7	4-Nitrophenol	51	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	51	U
534-52-1	4,6-Dinitro-2-methylphenol	51	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	51	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	10	U
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	1	J
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	Dibenzo(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 SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

11-003-M001

Lab Name: Roy F. Weston, Inc. Work Order: 1771-15-03-0000

Client: Naval Weapons Station

Matrix: WATER Lab Sample ID: 9103L947-003

Sample wt/vol: 980 (g/mL) ML Lab File ID: DBAQ47

Level: (low/med) LOW Date Received: 03/16/91

% Moisture: not dec. _____ dec. Date Extracted: 03/19/91

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 03/29/91

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				

82

1B
SEMIVOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

11-004-M001

Lab Name: Roy F. Weston, Inc. Work Order: 1771-15-03-0000

Client: Naval Weapons Station

Matrix: WATER Lab Sample ID: 9103L947-004

Sample wt/vol: 1020 (g/mL) ML Lab File ID: DBA048

Level: (low/med) LOW Date Received: 03/16/91

% Moisture: not dec. _____ dec. Date Extracted: 03/19/91

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 03/29/91

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

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

CAS NO.	COMPOUND		
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	49	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	49	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	49	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

88

1C
SEMIVOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

11-004-M001

Lab Name: Roy F. Weston, Inc. Work Order: 1771-15-03-0000

Client: Naval Weapons Station

Matrix: WATER Lab Sample ID: 9103L947-004

Sample wt/vol: 1020 (g/mL) ML Lab File ID: DBA048

Level: (low/med) LOW Date Received: 03/16/91

% Moisture: not dec. _____ dec.__ Date Extracted: 03/19/91

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 03/29/91

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

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

CAS NO.	COMPOUND		
99-09-2	3-Nitroaniline	49	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	49	U
100-02-7	4-Nitrophenol	49	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	49	U
534-52-1	4,6-Dinitro-2-methylphenol	49	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	49	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	10	U
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	Dibenzo(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 SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

11-004-M001

Lab Name: Roy F. Weston, Inc. Work Order: 1771-15-03-0000

Client: Naval Weapons Station

Matrix: WATER Lab Sample ID: 9103L947-004

Sample wt/vol: 1020 (g/mL) ML Lab File ID: DBAQ48

Level: (low/med) LOW Date Received: 03/16/91

% Moisture: not dec. _____ dec. Date Extracted: 03/19/91

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 03/29/91

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				

1B
SEMIVOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

11-004-M101

Lab Name: Roy F. Weston, Inc. Work Order: 1771-15-03-0000

Client: Naval Weapons Station

Matrix: WATER Lab Sample ID: 9103L947-005

Sample wt/vol: 1010 (g/mL) ML Lab File ID: DBAQ49

Level: (low/med) LOW Date Received: 03/16/91

% Moisture: not dec. _____ dec. Date Extracted: 03/19/91

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 03/29/91

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

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

CAS NO.	COMPOUND		
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	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

1C
SEMIVOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

11-004-M101

Lab Name: Roy F. Weston, Inc. Work Order: 1771-15-03-0000

Client: Naval Weapons Station

Matrix: WATER Lab Sample ID: 9103L947-005

Sample wt/vol: 1010 (g/mL) ML Lab File ID: DBA049

Level: (low/med) LOW Date Received: 03/16/91

% Moisture: not dec. _____ dec. Date Extracted: 03/19/91

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 03/29/91

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

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

CAS NO.	COMPOUND		
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	10	U
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	Dibenzo(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 SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

11-004-M101

Lab Name: Roy F. Weston, Inc. Work Order: 1771-15-03-0000

Client: Naval Weapons Station

Matrix: WATER Lab Sample ID: 9103L947-005

Sample wt/vol: 1010 (g/mL) ML Lab File ID: DBA049

Level: (low/med) LOW Date Received: 03/16/91

% Moisture: not dec. _____ dec. Date Extracted: 03/19/91

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 03/29/91

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1..				

1B
SEMIVOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

11-004-M201

Lab Name: Roy F. Weston, Inc. Work Order: 1771-15-03-0000

Client: Naval Weapons Station

Matrix: WATER Lab Sample ID: 9103L947-006

Sample wt/vol.: 920 (g/mL) ML Lab File ID: DBAR01

Level: (low/med) LOW Date Received: 03/16/91

% Moisture: not dec. _____ dec. Date Extracted: 03/19/91

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 03/29/91

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

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

CAS NO.	COMPOUND		
108-95-2	Phenol	11	U
111-44-4	bis(2-Chloroethyl)ether	11	U
95-57-8	2-Chlorophenol	11	U
541-73-1	1,3-Dichlorobenzene	11	U
106-46-7	1,4-Dichlorobenzene	11	U
100-51-6	Benzyl alcohol	11	U
95-50-1	1,2-Dichlorobenzene	11	U
95-48-7	2-Methylphenol	11	U
108-60-1	bis(2-Chloroisopropyl)ether	11	U
106-44-5	4-Methylphenol	11	U
621-64-7	N-Nitroso-Di-n-propylamine	11	U
67-72-1	Hexachloroethane	11	U
98-95-3	Nitrobenzene	11	U
78-59-1	Isophorone	11	U
88-75-5	2-Nitrophenol	11	U
105-67-9	2,4-Dimethylphenol	11	U
65-85-0	Benzoic acid	54	U
111-91-1	bis(2-Chloroethoxy)methane	11	U
120-83-2	2,4-Dichlorophenol	11	U
120-82-1	1,2,4-Trichlorobenzene	11	U
91-20-3	Naphthalene	11	U
106-47-8	4-Chloroaniline	11	U
87-68-3	Hexachlorobutadiene	11	U
59-50-7	4-Chloro-3-methylphenol	11	U
91-57-6	2-Methylnaphthalene	11	U
77-47-4	Hexachlorocyclopentadiene	11	U
88-06-2	2,4,6-Trichlorophenol	11	U
95-95-4	2,4,5-Trichlorophenol	54	U
91-58-7	2-Chloronaphthalene	11	U
88-74-4	2-Nitroaniline	54	U
131-11-3	Dimethylphthalate	11	U
208-96-8	Acenaphthylene	11	U
606-20-2	2,6-Dinitrotoluene	11	U

1C
SEMIVOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

11-004-M201

Lab Name: Roy F. Weston, Inc. Work Order: 1771-15-03-0000

Client: Naval Weapons Station

Matrix: WATER Lab Sample ID: 9103L947-006

Sample wt/vol: 920 (g/mL) ML Lab File ID: DBAR01

Level: (low/med) LOW Date Received: 03/16/91

% Moisture: not dec. _____ dec. Date Extracted: 03/19/91

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 03/29/91

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

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

CAS NO.	COMPOUND		
99-09-2	3-Nitroaniline	54	U
83-32-9	Acenaphthene	11	U
51-28-5	2,4-Dinitrophenol	54	U
100-02-7	4-Nitrophenol	54	U
132-64-9	Dibenzofuran	11	U
121-14-2	2,4-Dinitrotoluene	11	U
84-66-2	Diethylphthalate	11	U
7005-72-3	4-Chlorophenyl-phenylether	11	U
86-73-7	Fluorene	11	U
100-01-6	4-Nitroaniline	54	U
534-52-1	4,6-Dinitro-2-methylphenol	54	U
86-30-6	N-Nitrosodiphenylamine (1)	11	U
101-55-3	4-Bromophenyl-phenylether	11	U
118-74-1	Hexachlorobenzene	11	U
87-86-5	Pentachlorophenol	54	U
85-01-8	Phenanthrene	11	U
120-12-7	Anthracene	11	U
84-74-2	Di-n-Butylphthalate	11	U
206-44-0	Fluoranthene	11	U
129-00-0	Pyrene	11	U
85-68-7	Butylbenzylphthalate	11	U
91-94-1	3,3'-Dichlorobenzidine	22	U
56-55-3	Benzo(a)anthracene	11	U
218-01-9	Chrysene	11	U
117-81-7	bis(2-Ethylhexyl)phthalate	11	U
117-84-0	Di-n-Octyl phthalate	11	U
205-99-2	Benzo(b)fluoranthene	11	U
207-08-9	Benzo(k)fluoranthene	11	U
50-32-8	Benzo(a)pyrene	11	U
193-39-5	Indeno(1,2,3-cd)pyrene	11	U
53-70-3	Dibenzo(a,h)anthracene	11	U
191-24-2	Benzo(g,h,i)perylene	11	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

11-004-M201

Lab Name: Roy F. Weston, Inc. Work Order: 1771-15-03-0000

Client: Naval Weapons Station

Matrix: WATER Lab Sample ID: 9103L947-006

Sample wt/vol: 920 (g/mL) ML Lab File ID: DBAR01

Level: (low/med) LOW Date Received: 03/16/91

% Moisture: not dec. _____ dec. Date Extracted: 03/19/91

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 03/29/91

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				

1B
SEMIVOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

11-005-M001

Lab Name: Roy F. Weston, Inc. Work Order: 1771-15-03-0000

Client: Naval Weapons Station

Matrix: WATER Lab Sample ID: 9103L947-007

Sample wt/vol: 940 (g/mL) ML Lab File ID: DBAR19

Level: (low/med) LOW Date Received: 03/16/91

% Moisture: not dec. _____ dec. Date Extracted: 03/19/91

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 03/30/91

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

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

CAS NO.	COMPOUND		
108-95-2	Phenol	11	U
111-44-4	bis(2-Chloroethyl)ether	11	U
95-57-8	2-Chlorophenol	11	U
541-73-1	1,3-Dichlorobenzene	11	U
106-46-7	1,4-Dichlorobenzene	11	U
100-51-6	Benzyl alcohol	11	U
95-50-1	1,2-Dichlorobenzene	11	U
95-48-7	2-Methylphenol	11	U
108-60-1	bis(2-Chloroisopropyl)ether	11	U
106-44-5	4-Methylphenol	11	U
621-64-7	N-Nitroso-Di-n-propylamine	11	U
67-72-1	Hexachloroethane	11	U
98-95-3	Nitrobenzene	11	U
78-59-1	Isophorone	11	U
88-75-5	2-Nitrophenol	11	U
105-67-9	2,4-Dimethylphenol	11	U
65-85-0	Benzoic acid	53	U
111-91-1	bis(2-Chloroethoxy)methane	11	U
120-83-2	2,4-Dichlorophenol	11	U
120-82-1	1,2,4-Trichlorobenzene	11	U
91-20-3	Naphthalene	11	U
106-47-8	4-Chloroaniline	11	U
87-68-3	Hexachlorobutadiene	11	U
59-50-7	4-Chloro-3-methylphenol	11	U
91-57-6	2-Methylnaphthalene	11	U
77-47-4	Hexachlorocyclopentadiene	11	U
88-06-2	2,4,6-Trichlorophenol	11	U
95-95-4	2,4,5-Trichlorophenol	53	U
91-58-7	2-Chloronaphthalene	11	U
88-74-4	2-Nitroaniline	53	U
131-11-3	Dimethylphthalate	11	U
208-96-8	Acenaphthylene	11	U
606-20-2	2,6-Dinitrotoluene	11	U

109

1C
SEMIVOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

11-005-M001

Lab Name: Roy F. Weston, Inc. Work Order: 1771-15-03-0000

Client: Naval Weapons Station

Matrix: WATER Lab Sample ID: 9103L947-007

Sample wt/vol: 940 (g/mL) ML Lab File ID: DBAR19

Level: (low/med) LOW Date Received: 03/16/91

% Moisture: not dec. _____ dec. Date Extracted: 03/19/91

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 03/30/91

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

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

CAS NO.	COMPOUND		
99-09-2	3-Nitroaniline	53	U
83-32-9	Acenaphthene	11	U
51-28-5	2,4-Dinitrophenol	53	U
100-02-7	4-Nitrophenol	53	U
132-64-9	Dibenzofuran	11	U
121-14-2	2,4-Dinitrotoluene	11	U
84-66-2	Diethylphthalate	11	U
7005-72-3	4-Chlorophenyl-phenylether	11	U
86-73-7	Fluorene	11	U
100-01-6	4-Nitroaniline	53	U
534-52-1	4,6-Dinitro-2-methylphenol	53	U
86-30-6	N-Nitrosodiphenylamine (1)	11	U
101-55-3	4-Bromophenyl-phenylether	11	U
118-74-1	Hexachlorobenzene	11	U
87-86-5	Pentachlorophenol	53	U
85-01-8	Phenanthrene	11	U
120-12-7	Anthracene	11	U
84-74-2	Di-n-Butylphthalate	11	U
206-44-0	Fluoranthene	11	U
129-00-0	Pyrene	11	U
85-68-7	Butylbenzylphthalate	11	U
91-94-1	3,3'-Dichlorobenzidine	21	U
56-55-3	Benzo(a)anthracene	11	U
218-01-9	Chrysene	11	U
117-81-7	bis(2-Ethylhexyl)phthalate	3	J
117-84-0	Di-n-Octyl phthalate	11	U
205-99-2	Benzo(b)fluoranthene	11	U
207-08-9	Benzo(k)fluoranthene	11	U
50-32-8	Benzo(a)pyrene	11	U
193-39-5	Indeno(1,2,3-cd)pyrene	11	U
53-70-3	Dibenzo(a,h)anthracene	11	U
191-24-2	Benzo(g,h,i)perylene	11	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

11-005-M001

Lab Name: Roy F. Weston, Inc. Work Order: 1771-15-03-0000

Client: Naval Weapons Station

Matrix: WATER Lab Sample ID: 9103L947-007

Sample wt/vol: 940 (g/mL) ML Lab File ID: DBAR19

Level: (low/med) LOW Date Received: 03/16/91

% Moisture: not dec. _____ dec. Date Extracted: 03/19/91

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 03/30/91

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				

111

1B
SEMIVOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

02-001-M001

Lab Name: Roy F. Weston, Inc. Work Order: 1771-15-03-0000

Client: Naval Weapons Station

Matrix: WATER Lab Sample ID: 9103L947-008

Sample wt/vol: 970 (g/mL) ML Lab File ID: DBAR20

Level: (low/med) LOW Date Received: 03/16/91

% Moisture: not dec. _____ dec. Date Extracted: 03/19/91

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 03/30/91

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

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

CAS NO.	COMPOUND		
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	52	U J 5
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	52	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	52	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

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1C
SEMIVOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

02-001-M001

Lab Name: Roy F. Weston, Inc. Work Order: 1771-15-03-0000

Client: Naval Weapons Station

Matrix: WATER Lab Sample ID: 9103L947-008

Sample wt/vol: 970 (g/mL) ML Lab File ID: DBAR20

Level: (low/med) LOW Date Received: 03/16/91

% Moisture: not dec. _____ dec. Date Extracted: 03/19/91

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 03/30/91

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

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

CAS NO.	COMPOUND		
99-09-2	3-Nitroaniline	52	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	52	U
100-02-7	4-Nitrophenol	52	U J 5
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	52	U
534-52-1	4,6-Dinitro-2-methylphenol	52	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	52	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	21	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	1	J
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	Dibenzo(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 SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

02-001-M001

Lab Name: Roy F. Weston, Inc. Work Order: 1771-15-03-0000

Client: Naval Weapons Station

Matrix: WATER

Lab Sample ID: 9103L947-008

Sample wt/vol: 970 (g/mL) ML

Lab File ID: DBAR20

Level: (low/med) LOW

Date Received: 03/16/91

% Moisture: not dec. _____ dec.

Date Extracted: 03/19/91

Extraction: (SepF/Cont/Sonc) SEPF

Date Analyzed: 03/30/91

GPC Cleanup: (Y/N) N pH: 6.0

Dilution Factor: 1.00

Number TICs found: 4

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN HYDROCARBON	34.12	7	J
2.	UNKNOWN HYDROCARBON	35.15	7	J
3.	UNKNOWN HYDROCARBON	36.29	10	J
4.	UNKNOWN HYDROCARBON	37.59	9	J

1B
SEMIVOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

02-002-M001

Lab Name: Roy F. Weston, Inc. Work Order: 1771-15-03-0000

Client: Naval Weapons Station

Matrix: WATER Lab Sample ID: 9103L947-009

Sample wt/vol: 820 (g/mL) ML Lab File ID: DBAR21

Level: (low/med) LOW Date Received: 03/16/91

% Moisture: not dec. _____ dec. Date Extracted: 03/19/91

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 03/30/91

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

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

CAS NO.	COMPOUND		
108-95-2	Phenol	12	U
111-44-4	bis(2-Chloroethyl)ether	12	U
95-57-8	2-Chlorophenol	12	U
541-73-1	1,3-Dichlorobenzene	12	U
106-46-7	1,4-Dichlorobenzene	12	U
100-51-6	Benzyl alcohol	12	U
95-50-1	1,2-Dichlorobenzene	12	U
95-48-7	2-Methylphenol	12	U
108-60-1	bis(2-Chloroisopropyl)ether	12	U
106-44-5	4-Methylphenol	12	U
621-64-7	N-Nitroso-Di-n-propylamine	12	U
67-72-1	Hexachloroethane	12	U
98-95-3	Nitrobenzene	12	U
78-59-1	Isophorone	12	U
88-75-5	2-Nitrophenol	12	U
105-67-9	2,4-Dimethylphenol	12	U
65-85-0	Benzoic acid	61	U J 5
111-91-1	bis(2-Chloroethoxy)methane	12	U
120-83-2	2,4-Dichlorophenol	12	U
120-82-1	1,2,4-Trichlorobenzene	12	U
91-20-3	Naphthalene	12	U
106-47-8	4-Chloroaniline	12	U
87-68-3	Hexachlorobutadiene	12	U
59-50-7	4-Chloro-3-methylphenol	12	U
91-57-6	2-Methylnaphthalene	12	U
77-47-4	Hexachlorocyclopentadiene	12	U
88-06-2	2,4,6-Trichlorophenol	12	U
95-95-4	2,4,5-Trichlorophenol	61	U
91-58-7	2-Chloronaphthalene	12	U
88-74-4	2-Nitroaniline	61	U
131-11-3	Dimethylphthalate	12	U
208-96-8	Acenaphthylene	12	U
606-20-2	2,6-Dinitrotoluene	12	U

1C
SEMIVOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

02-002-M001

Lab Name: Roy F. Weston, Inc. Work Order: 1771-15-03-0000

Client: Naval Weapons Station

Matrix: WATER Lab Sample ID: 9103L947-009

Sample wt/vol: 820 (g/mL) ML Lab File ID: DBAR21

Level: (low/med) LOW Date Received: 03/16/91

% Moisture: not dec. _____ dec. Date Extracted: 03/19/91

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 03/30/91

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

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

CAS NO.	COMPOUND		
99-09-2	3-Nitroaniline	61	U
83-32-9	Acenaphthene	12	U
51-28-5	2,4-Dinitrophenol	61	U
100-02-7	4-Nitrophenol	61	U J
132-64-9	Dibenzofuran	12	U
121-14-2	2,4-Dinitrotoluene	12	U
84-66-2	Diethylphthalate	12	U
7005-72-3	4-Chlorophenyl-phenylether	12	U
86-73-7	Fluorene	12	U
100-01-6	4-Nitroaniline	61	U
534-52-1	4,6-Dinitro-2-methylphenol	61	U
86-30-6	N-Nitrosodiphenylamine (1)	12	U
101-55-3	4-Bromophenyl-phenylether	12	U
118-74-1	Hexachlorobenzene	12	U
87-86-5	Pentachlorophenol	61	U
85-01-8	Phenanthrene	12	U
120-12-7	Anthracene	12	U
84-74-2	Di-n-Butylphthalate	12	U
206-44-0	Fluoranthene	12	U
129-00-0	Pyrene	12	U
85-68-7	Butylbenzylphthalate	12	U
91-94-1	3,3'-Dichlorobenzidine	24	U
56-55-3	Benzo(a)anthracene	12	U
218-01-9	Chrysene	12	U
117-81-7	bis(2-Ethylhexyl)phthalate	1	J
117-84-0	Di-n-Octyl phthalate	12	U
205-99-2	Benzo(b)fluoranthene	12	U
207-08-9	Benzo(k)fluoranthene	12	U
50-32-8	Benzo(a)pyrene	12	U
193-39-5	Indeno(1,2,3-cd)pyrene	12	U
53-70-3	Dibenzo(a,h)anthracene	12	U
191-24-2	Benzo(g,h,i)perylene	12	U

(1) - Cannot be separated from Diphenylamine

FORM 1 SV-2 12/88 Rev.

1F
SEMIVOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

02-002-M001

Lab Name: Roy F. Weston, Inc. Work Order: 1771-15-03-0000

Client: Naval Weapons Station

Matrix: WATER Lab Sample ID: 9103L947-009

Sample wt/vol: 820 (g/mL) ML Lab File ID: DBAR21

Level: (low/med) LOW Date Received: 03/16/91

% Moisture: not dec. _____ dec. Date Extracted: 03/19/91

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 03/30/91

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

Number TICs found: 3

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	31.69	6	J NJ
2.	UNKNOWN	34.45	10	J
3.	UNKNOWN HYDROCARBON	37.58	20	J

1B
SEMIVOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

02-003-M001

Lab Name: Roy F. Weston, Inc. Work Order: 1771-15-03-0000

Client: Naval Weapons Station

Matrix: WATER Lab Sample ID: 9103L947-010

Sample wt/vol: 840 (g/mL) ML Lab File ID: AAAP96

Level: (low/med) LOW Date Received: 03/16/91

% Moisture: not dec. _____ dec. Date Extracted: 03/21/91

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 03/30/91

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

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

CAS NO.	COMPOUND		
108-95-2	Phenol	12	U
111-44-4	bis(2-Chloroethyl)ether	12	U
95-57-8	2-Chlorophenol	12	U
541-73-1	1,3-Dichlorobenzene	12	U
106-46-7	1,4-Dichlorobenzene	12	U
100-51-6	Benzyl alcohol	12	U
95-50-1	1,2-Dichlorobenzene	12	U
95-48-7	2-Methylphenol	12	U
108-60-1	bis(2-Chloroisopropyl)ether	12	U
106-44-5	4-Methylphenol	12	U
621-64-7	N-Nitroso-Di-n-propylamine	12	U
67-72-1	Hexachloroethane	12	U
98-95-3	Nitrobenzene	12	U
78-59-1	Isophorone	12	U
88-75-5	2-Nitrophenol	12	U
105-67-9	2,4-Dimethylphenol	12	U
65-85-0	Benzoic acid	60	U
111-91-1	bis(2-Chloroethoxy)methane	12	U
120-83-2	2,4-Dichlorophenol	12	U
120-82-1	1,2,4-Trichlorobenzene	12	U
91-20-3	Naphthalene	12	U
106-47-8	4-Chloroaniline	12	U
87-68-3	Hexachlorobutadiene	12	U
59-50-7	4-Chloro-3-methylphenol	12	U
91-57-6	2-Methylnaphthalene	12	U
77-47-4	Hexachlorocyclopentadiene	12	U
88-06-2	2,4,6-Trichlorophenol	12	U
95-95-4	2,4,5-Trichlorophenol	60	U
91-58-7	2-Chloronaphthalene	12	U
88-74-4	2-Nitroaniline	60	U
131-11-3	Dimethylphthalate	12	U
208-96-8	Acenaphthylene	12	U
606-20-2	2,6-Dinitrotoluene	12	U

1C
SEMIVOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

02-003-M001

Lab Name: Roy F. Weston, Inc. Work Order: 1771-15-03-0000

Client: Naval Weapons Station

Matrix: WATER Lab Sample ID: 9103L947-010

Sample wt/vol: 840 (g/mL) ML Lab File ID: AAAP96

Level: (low/med) LOW Date Received: 03/16/91

% Moisture: not dec. _____ dec. Date Extracted: 03/21/91

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 03/30/91

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

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

CAS NO.	COMPOUND		
99-09-2	3-Nitroaniline	60	U
83-32-9	Acenaphthene	12	U
51-28-5	2,4-Dinitrophenol	60	U
100-02-7	4-Nitrophenol	60	U
132-64-9	Dibenzofuran	12	U
121-14-2	2,4-Dinitrotoluene	12	U
84-66-2	Diethylphthalate	12	U
7005-72-3	4-Chlorophenyl-phenylether	12	U
86-73-7	Fluorene	12	U
100-01-6	4-Nitroaniline	60	U
534-52-1	4,6-Dinitro-2-methylphenol	60	U
86-30-6	N-Nitrosodiphenylamine (1)	12	U
101-55-3	4-Bromophenyl-phenylether	12	U
118-74-1	Hexachlorobenzene	12	U
87-86-5	Pentachlorophenol	60	U
85-01-8	Phenanthrene	12	U
120-12-7	Anthracene	12	U
84-74-2	Di-n-Butylphthalate	12	U
206-44-0	Fluoranthene	12	U
129-00-0	Pyrene	12	U
85-68-7	Butylbenzylphthalate	12	U
91-94-1	3,3'-Dichlorobenzidine	24	U
56-55-3	Benzo(a)anthracene	12	U
218-01-9	Chrysene	12	U
117-81-7	bis(2-Ethylhexyl)phthalate	1	J
117-84-0	Di-n-Octyl phthalate	12	U
205-99-2	Benzo(b)fluoranthene	12	U
207-08-9	Benzo(k)fluoranthene	12	U
50-32-8	Benzo(a)pyrene	12	U
193-39-5	Indeno(1,2,3-cd)pyrene	12	U
53-70-3	Dibenzo(a,h)anthracene	12	U
191-24-2	Benzo(g,h,i)perylene	12	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

02-003-M001

Lab Name: Roy F. Weston, Inc. Work Order: 1771-15-03-0000

Client: Naval Weapons Station

Matrix: WATER

Lab Sample ID: 9103L947-010

Sample wt/vol: 840 (g/mL) ML

Lab File ID: AAAP96

Level: (low/med) LOW

Date Received: 03/16/91

% Moisture: not dec. _____ dec.

Date Extracted: 03/21/91

Extraction: (SepF/Cont/Sonc) SEPF

Date Analyzed: 03/30/91

GPC Cleanup: (Y/N) N pH: 6.0

Dilution Factor: 1.00

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				

1B
SEMIVOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

02-003-M101

Lab Name: Roy F. Weston, Inc. Work Order: 1771-15-03-0000

Client: Naval Weapons Station

Matrix: WATER Lab Sample ID: 9103L947-011

Sample wt/vol: 850 (g/mL) ML Lab File ID: AAAP97

Level: (low/med) LOW Date Received: 03/16/91

% Moisture: not dec. _____ dec. Date Extracted: 03/21/91

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 03/30/91

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

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

CAS NO.	COMPOUND		
108-95-2	Phenol	12	U
111-44-4	bis(2-Chloroethyl)ether	12	U
95-57-8	2-Chlorophenol	12	U
541-73-1	1,3-Dichlorobenzene	12	U
106-46-7	1,4-Dichlorobenzene	12	U
100-51-6	Benzyl alcohol	12	U
95-50-1	1,2-Dichlorobenzene	12	U
95-48-7	2-Methylphenol	12	U
108-60-1	bis(2-Chloroisopropyl)ether	12	U
106-44-5	4-Methylphenol	12	U
621-64-7	N-Nitroso-Di-n-propylamine	12	U
67-72-1	Hexachloroethane	12	U
98-95-3	Nitrobenzene	12	U
78-59-1	Isophorone	12	U
88-75-5	2-Nitrophenol	12	U
105-67-9	2,4-Dimethylphenol	12	U
65-85-0	Benzoic acid	59	U
111-91-1	bis(2 Chloroethoxy)methane	12	U
120-83-2	2,4-Dichlorophenol	12	U
120-82-1	1,2,4-Trichlorobenzene	12	U
91-20-3	Naphthalene	12	U
106-47-8	4-Chloroaniline	12	U
87-68-3	Hexachlorobutadiene	12	U
59-50-7	4-Chloro-3-methylphenol	12	U
91-57-6	2-Methylnaphthalene	12	U
77-47-4	Hexachlorocyclopentadiene	12	U
88-06-2	2,4,6-Trichlorophenol	12	U
95-95-4	2,4,5-Trichlorophenol	59	U
91-58-7	2-Chloronaphthalene	12	U
88-74-4	2-Nitroaniline	59	U
131-11-3	Dimethylphthalate	12	U
208-96-8	Acenaphthylene	12	U
606-20-2	2,6-Dinitrotoluene	12	U

1C
SEMIVOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

02-003-M101

Lab Name: Roy F. Weston, Inc. Work Order: 1771-15-03-0000

Client: Naval Weapons Station

Matrix: WATER Lab Sample ID: 9103L947-011

Sample wt/vol: 850 (g/mL) ML Lab File ID: AAAP97

Level: (low/med) LOW Date Received: 03/16/91

% Moisture: not dec. _____ dec. Date Extracted: 03/21/91

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 03/30/91

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

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

CAS NO.	COMPOUND		
99-09-2	3-Nitroaniline	59	U
83-32-9	Acenaphthene	12	U
51-28-5	2,4-Dinitrophenol	59	U
100-02-7	4-Nitrophenol	59	U
132-64-9	Dibenzofuran	12	U
121-14-2	2,4-Dinitrotoluene	12	U
84-66-2	Diethylphthalate	12	U
7005-72-3	4-Chlorophenyl-phenylether	12	U
86-73-7	Fluorene	12	U
100-01-6	4-Nitroaniline	59	U
534-52-1	4,6-Dinitro-2-methylphenol	59	U
86-30-6	N-Nitrosodiphenylamine (1)	12	U
101-55-3	4-Bromophenyl-phenylether	12	U
118-74-1	Hexachlorobenzene	12	U
87-86-5	Pentachlorophenol	59	U
85-01-8	Phenanthrene	12	U
120-12-7	Anthracene	12	U
84-74-2	Di-n-Butylphthalate	12	U
206-44-0	Fluoranthene	12	U
129-00-0	Pyrene	12	U
85-68-7	Butylbenzylphthalate	12	U
91-94-1	3,3'-Dichlorobenzidine	24	U
56-55-3	Benzo(a)anthracene	12	U
218-01-9	Chrysene	12	U
117-81-7	bis(2-Ethylhexyl)phthalate	1	J
117-84-0	Di-n-Octyl phthalate	12	U
205-99-2	Benzo(b)fluoranthene	12	U
207-08-9	Benzo(k)fluoranthene	12	U
50-32-8	Benzo(a)pyrene	12	U
193-39-5	Indeno(1,2,3-cd)pyrene	12	U
53-70-3	Dibenzo(a,h)anthracene	12	U
191-24-2	Benzo(g,h,i)perylene	12	U

(1) - Cannot be separated from Diphenylamine

FORM 1 SV-2 12/88 Rev.

1F
SEMIVOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

02-003-M101

Lab Name: Roy F. Weston, Inc. Work Order: 1771-15-03-0000

Client: Naval Weapons Station

Matrix: WATER Lab Sample ID: 9103L947-011

Sample wt/vol: 850 (g/mL) ML Lab File ID: AAAP97

Level: (low/med) LOW Date Received: 03/16/91

% Moisture: not dec. _____ dec. Date Extracted: 03/21/91

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 03/30/91

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

Number TICs found: 2

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN HYDROCARBON	35.04	6	J NJ
2.	UNKNOWN HYDROCARBON	36.14	5	J NJ

1B
SEMIVOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

02-003-M201

Lab Name: Roy F. Weston, Inc. Work Order: 1771-15-03-0000

Client: Naval Weapons Station

Matrix: WATER Lab Sample ID: 9103L947-012

Sample wt/vol: 810 (g/mL) ML Lab File ID: AAAP98

Level: (low/med) LOW Date Received: 03/16/91

% Moisture: not dec. _____ dec. Date Extracted: 03/21/91

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 03/30/91

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

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

CAS NO.	COMPOUND		
108-95-2	Phenol	12	U
111-44-4	bis(2-Chloroethyl)ether	12	U
95-57-8	2-Chlorophenol	12	U
541-73-1	1,3-Dichlorobenzene	12	U
106-46-7	1,4-Dichlorobenzene	12	U
100-51-6	Benzyl alcohol	12	U
95-50-1	1,2-Dichlorobenzene	12	U
95-48-7	2-Methylphenol	12	U
108-60-1	bis(2-Chloroisopropyl)ether	12	U
106-44-5	4-Methylphenol	12	U
621-64-7	N-Nitroso-Di-n-propylamine	12	U
67-72-1	Hexachloroethane	12	U
98-95-3	Nitrobenzene	12	U
78-59-1	Isophorone	12	U
88-75-5	2-Nitrophenol	12	U
105-67-9	2,4-Dimethylphenol	12	U
65-85-0	Benzoic acid	62	U
111-91-1	bis(2-Chloroethoxy)methane	12	U
120-83-2	2,4-Dichlorophenol	12	U
120-82-1	1,2,4-Trichlorobenzene	12	U
91-20-3	Naphthalene	12	U
106-47-8	4-Chloroaniline	12	U
87-68-3	Hexachlorobutadiene	12	U
59-50-7	4-Chloro-3-methylphenol	12	U
91-57-6	2-Methylnaphthalene	12	U
77-47-4	Hexachlorocyclopentadiene	12	U
88-06-2	2,4,6-Trichlorophenol	12	U
95-95-4	2,4,5-Trichlorophenol	62	U
91-58-7	2-Chloronaphthalene	12	U
88-74-4	2-Nitroaniline	62	U
131-11-3	Dimethylphthalate	12	U
208-96-8	Acenaphthylene	12	U
606-20-2	2,6-Dinitrotoluene	12	U

1C
SEMIVOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

02-003-M201

Lab Name: Roy F. Weston, Inc. Work Order: 1771-15-03-0000

Client: Naval Weapons Station

Matrix: WATER Lab Sample ID: 9103L947-012

Sample wt/vol: 810 (g/mL) ML Lab File ID: AAAP98

Level: (low/med) LOW Date Received: 03/16/91

% Moisture: not dec. _____ dec. Date Extracted: 03/21/91

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 03/30/91

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

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

CAS NO.	COMPOUND		
99-09-2	3-Nitroaniline	62	U
83-32-9	Acenaphthene	12	U
51-28-5	2,4-Dinitrophenol	62	U
100-02-7	4-Nitrophenol	62	U
132-64-9	Dibenzofuran	12	U
121-14-2	2,4-Dinitrotoluene	12	U
84-66-2	Diethylphthalate	12	U
7005-72-3	4-Chlorophenyl-phenylether	12	U
86-73-7	Fluorene	12	U
100-01-6	4-Nitroaniline	62	U
534-52-1	4,6-Dinitro-2-methylphenol	62	U
86-30-6	N-Nitrosodiphenylamine (1)	12	U
101-55-3	4-Bromophenyl-phenylether	12	U
118-74-1	Hexachlorobenzene	12	U
87-86-5	Pentachlorophenol	62	U
85-01-8	Phenanthrene	12	U
120-12-7	Anthracene	12	U
84-74-2	Di-n-Butylphthalate	12	U
206-44-0	Fluoranthene	12	U
129-00-0	Pyrene	12	U
85-68-7	Butylbenzylphthalate	12	U
91-94-1	3,3'-Dichlorobenzidine	25	U
56-55-3	Benzo(a)anthracene	12	U
218-01-9	Chrysene	12	U
117-81-7	bis(2-Ethylhexyl)phthalate	12	U
117-84-0	Di-n-Octyl phthalate	12	U
205-99-2	Benzo(b)fluoranthene	12	U
207-08-9	Benzo(k)fluoranthene	12	U
50-32-8	Benzo(a)pyrene	12	U
193-39-5	Indeno(1,2,3-cd)pyrene	12	U
53-70-3	Dibenzo(a,h)anthracene	12	U
191-24-2	Benzo(g,h,i)perylene	12	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

02-003-M201

Lab Name: Roy F. Weston, Inc. Work Order: 1771-15-03-0000

Client: Naval Weapons Station

Matrix: WATER Lab Sample ID: 9103L947-012

Sample wt/vol: 810 (g/mL) ML Lab File ID: AAAP98

Level: (low/med) LOW Date Received: 03/16/91

% Moisture: not dec. _____ dec. Date Extracted: 03/21/91

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 03/30/91

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				

1B
SEMIVOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

02-004-M001

Lab Name: Roy F. Weston, Inc. Work Order: 1771-15-03-0000

Client: Naval Weapons Station

Matrix: WATER Lab Sample ID: 9103L947-013

Sample wt/vol: 900 (g/mL) ML Lab File ID: AAAP99

Level: (low/med) LOW Date Received: 03/16/91

% Moisture: not dec. _____ dec. Date Extracted: 03/21/91

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 03/30/91

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

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

CAS NO.	COMPOUND		
108-95-2	Phenol	11	U
111-44-4	bis(2-Chloroethyl)ether	11	U
95-57-8	2-Chlorophenol	11	U
541-73-1	1,3-Dichlorobenzene	11	U
106-46-7	1,4-Dichlorobenzene	11	U
100-51-6	Benzyl alcohol	11	U
95-50-1	1,2-Dichlorobenzene	11	U
95-48-7	2-Methylphenol	11	U
108-60-1	bis(2-Chloroisopropyl)ether	11	U
106-44-5	4-Methylphenol	11	U
621-64-7	N-Nitroso-Di-n-propylamine	11	U
67-72-1	Hexachloroethane	11	U
98-95-3	Nitrobenzene	11	U
78-59-1	Isophorone	11	U
88-75-5	2-Nitrophenol	11	U
105-67-9	2,4-Dimethylphenol	11	U
65-85-0	Benzoic acid	56	U
111-91-1	bis(2-Chloroethoxy)methane	11	U
120-83-2	2,4-Dichlorophenol	11	U
120-82-1	1,2,4-Trichlorobenzene	11	U
91-20-3	Naphthalene	11	U
106-47-8	4-Chloroaniline	11	U
87-68-3	Hexachlorobutadiene	11	U
59-50-7	4-Chloro-3-methylphenol	11	U
91-57-6	2-Methylnaphthalene	11	U
77-47-4	Hexachlorocyclopentadiene	11	U
88-06-2	2,4,6-Trichlorophenol	11	U
95-95-4	2,4,5-Trichlorophenol	56	U
91-58-7	2-Chloronaphthalene	11	U
88-74-4	2-Nitroaniline	56	U
131-11-3	Dimethylphthalate	11	U
208-96-8	Acenaphthylene	11	U
606-20-2	2,6-Dinitrotoluene	11	U

1C
SEMIVOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

02-004-M001

Lab Name: Roy F. Weston, Inc. Work Order: 1771-15-03-0000

Client: Naval Weapons Station

Matrix: WATER Lab Sample ID: 9103L947-013

Sample wt/vol: 900 (g/mL) ML Lab File ID: AAAP99

Level: (low/med) LOW Date Received: 03/16/91

% Moisture: not dec. _____ dec. Date Extracted: 03/21/91

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 03/30/91

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

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

CAS NO.	COMPOUND		
99-09-2	3-Nitroaniline	56	U
83-32-9	Acenaphthene	11	U
51-28-5	2,4-Dinitrophenol	56	U
100-02-7	4-Nitrophenol	56	U
132-64-9	Dibenzofuran	11	U
121-14-2	2,4-Dinitrotoluene	11	U
84-66-2	Diethylphthalate	11	U
7005-72-3	4-Chlorophenyl-phenylether	11	U
86-73-7	Fluorene	11	U
100-01-6	4-Nitroaniline	56	U
534-52-1	4,6-Dinitro-2-methylphenol	56	U
86-30-6	N-Nitrosodiphenylamine (1)	11	U
101-55-3	4-Bromophenyl-phenylether	11	U
118-74-1	Hexachlorobenzene	11	U
87-86-5	Pentachlorophenol	56	U
85-01-8	Phenanthrene	11	U
120-12-7	Anthracene	11	U
84-74-2	Di-n-Butylphthalate	11	U
206-44-0	Fluoranthene	11	U
129-00-0	Pyrene	11	U
85-68-7	Butylbenzylphthalate	11	U
91-94-1	3,3'-Dichlorobenzidine	22	U
56-55-3	Benzo(a)anthracene	11	U
218-01-9	Chrysene	11	U
117-81-7	bis(2-Ethylhexyl)phthalate	11	U
117-84-0	Di-n-Octyl phthalate	11	U
205-99-2	Benzo(b)fluoranthene	11	U
207-08-9	Benzo(k)fluoranthene	11	U
50-32-8	Benzo(a)pyrene	11	U
193-39-5	Indeno(1,2,3-cd)pyrene	11	U
53-70-3	Dibenzo(a,h)anthracene	11	U
191-24-2	Benzo(g,h,i)perylene	11	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

02-004-M001

Lab Name: Roy F. Weston, Inc. Work Order: 1771-15-03-0000

Client: Naval Weapons Station

Matrix: WATER Lab Sample ID: 9103L947-013

Sample wt/vol: 900 (g/mL) ML Lab File ID: AAAP99

Level: (low/med) LOW Date Received: 03/16/91

% Moisture: not dec. _____ dec. Date Extracted: 03/21/91

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 03/30/91

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				

1B
SEMIVOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

02-005-M001

Lab Name: Roy F. Weston, Inc. Work Order: 1771-15-03-0000

Client: Naval Weapons Station

Matrix: WATER Lab Sample ID: 9103L947-014

Sample wt/vol: 900 (g/mL) ML Lab File ID: AAA001

Level: (low/med) LOW Date Received: 03/16/91

% Moisture: not dec. _____ dec. Date Extracted: 03/21/91

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 03/30/91

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

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

CAS NO.	COMPOUND		
108-95-2	Phenol	11	U
111-44-4	bis(2-Chloroethyl)ether	11	U
95-57-8	2-Chlorophenol	11	U
541-73-1	1,3-Dichlorobenzene	11	U
106-46-7	1,4-Dichlorobenzene	11	U
100-51-6	Benzyl alcohol	11	U
95-50-1	1,2-Dichlorobenzene	11	U
95-48-7	2-Methylphenol	11	U
108-60-1	bis(2-Chloroisopropyl)ether	11	U
106-44-5	4-Methylphenol	11	U
621-64-7	N-Nitroso-Di-n-propylamine	11	U
67-72-1	Hexachloroethane	11	U
98-95-3	Nitrobenzene	11	U
78-59-1	Isophorone	11	U
88-75-5	2-Nitrophenol	11	U
105-67-9	2,4-Dimethylphenol	11	U
65-85-0	Benzoic acid	56	U
111-91-1	bis(2-Chloroethoxy)methane	11	U
120-83-2	2,4-Dichlorophenol	11	U
120-82-1	1,2,4-Trichlorobenzene	11	U
91-20-3	Naphthalene	11	U
106-47-8	4-Chloroaniline	11	U
87-68-3	Hexachlorobutadiene	11	U
59-50-7	4-Chloro-3-methylphenol	11	U
91-57-6	2-Methylnaphthalene	11	U
77-47-4	Hexachlorocyclopentadiene	11	U
88-06-2	2,4,6-Trichlorophenol	11	U
95-95-4	2,4,5-Trichlorophenol	56	U
91-58-7	2-Chloronaphthalene	11	U
88-74-4	2-Nitroaniline	56	U
131-11-3	Dimethylphthalate	11	U
208-96-8	Acenaphthylene	11	U
606-20-2	2,6-Dinitrotoluene	11	U

FORM 1 SV-1 12/88 Rev.

1C
SEMIVOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

02-005-M001

Lab Name: Roy F. Weston, Inc. Work Order: 1771-15-03-0000

Client: Naval Weapons Station

Matrix: WATER Lab Sample ID: 9103L947-014

Sample wt/vol: 900 (g/mL) ML Lab File ID: AAA001

Level: (low/med) LOW Date Received: 03/16/91

% Moisture: not dec. _____ dec. Date Extracted: 03/21/91

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 03/30/91

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

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

CAS NO.	COMPOUND		
99-09-2	3-Nitroaniline	56	U
83-32-9	Acenaphthene	11	U
51-28-5	2,4-Dinitrophenol	56	U
100-02-7	4-Nitrophenol	56	U
132-64-9	Dibenzofuran	11	U
121-14-2	2,4-Dinitrotoluene	11	U
84-66-2	Diethylphthalate	11	U
7005-72-3	4-Chlorophenyl-phenylether	11	U
86-73-7	Fluorene	11	U
100-01-6	4-Nitroaniline	56	U
534-52-1	4,6-Dinitro-2-methylphenol	56	U
86-30-6	N-Nitrosodiphenylamine (1)	11	U
101-55-3	4-Bromophenyl-phenylether	11	U
118-74-1	Hexachlorobenzene	11	U
87-86-5	Pentachlorophenol	56	U
85-01-8	Pheranthrene	11	U
120-12-7	Anthracene	11	U
84-74-2	Di-n-Butylphthalate	11	U
206-44-0	Fluoranthene	11	U
129-00-0	Pyrene	11	U
85-68-7	Butylbenzylphthalate	11	U
91-94-1	3,3'-Dichlorobenzidine	22	U
56-55-3	Benzo(a)anthracene	11	U
218-01-9	Chrysene	11	U
117-81-7	bis(2-Ethylhexyl)phthalate	1	J
117-84-0	Di-n-Octyl phthalate	11	U
205-99-2	Benzo(b)fluoranthene	11	U
207-08-9	Benzo(k)fluoranthene	11	U
50-32-8	Benzo(a)pyrene	11	U
193-39-5	Indeno(1,2,3-cd)pyrene	11	U
53-70-3	Dibenzo(a,h)anthracene	11	U
191-24-2	Benzo(g,h,i)perylene	11	U

(1) - Cannot be separated from Diphenylamine

FORM 1 SV-2 12/88 Rev.

1F
SEMIVOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

02-005-M001

Lab Name: Roy F. Weston, Inc. Work Order: 1771-15-03-0000

Client: Naval Weapons Station

Matrix: WATER

Lab Sample ID: 9103L947-014

Sample wt/vol: 900 (g/mL) ML

Lab File ID: AAA001

Level: (low/med) LOW

Date Received: 03/16/91

% Moisture: not dec. _____ dec.

Date Extracted: 03/21/91

Extraction: (SepF/Cont/Sonc) SEPF

Date Analyzed: 03/30/91

GPC Cleanup: (Y/N) N pH: 6.0

Dilution Factor: 1.00

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				

1B
SEMIVOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

02-006-M001

Lab Name: Roy F. Weston, Inc. Work Order: 1771-15-03-0000

Client: Naval Weapons Station

Matrix: WATER Lab Sample ID: 9103L947-015

Sample wt/vol: 990 (g/mL) ML Lab File ID: AAAQ02

Level: (low/med) LOW Date Received: 03/16/91

% Moisture: not dec. _____ dec. Date Extracted: 03/21/91

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 03/30/91

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

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

CAS NO.	COMPOUND		
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	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

1C
SEMIVOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

02-006-M001

Lab Name: Roy F. Weston, Inc. Work Order: 1771-15-03-0000

Client: Naval Weapons Station

Matrix: WATER Lab Sample ID: 9103L947-015

Sample wt/vol: 990 (g/mL) ML Lab File ID: AAAQ02

Level: (low/med) LOW Date Received: 03/16/91

% Moisture: not dec. _____ dec. Date Extracted: 03/21/91

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 03/30/91

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

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

CAS NO.	COMPOUND		
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	10	U
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	Dibenzo(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 SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

02-006-M001

Lab Name: Roy F. Weston, Inc. Work Order: 1771-15-03-0000

Client: Naval Weapons Station

Matrix: WATER Lab Sample ID: 9103L947-015

Sample wt/vol: 990 (g/mL) ML Lab File ID: AAA002

Level: (low/med) LOW Date Received: 03/16/91

% Moisture: not dec. _____ dec. Date Extracted: 03/21/91

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 03/30/91

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				

1B
SEMIVOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

02-007-M001

Lab Name: Roy F. Weston, Inc. Work Order: 1771-15-03-0000

Client: Naval Weapons Station

Matrix: WATER Lab Sample ID: 9103L947-016

Sample wt/vol: 910 (g/mL) ML Lab File ID: AAAQ03

Level: (low/med) LOW Date Received: 03/16/91

% Moisture: not dec. _____ dec. Date Extracted: 03/21/91

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 03/30/91

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

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

CAS NO.	COMPOUND		
108-95-2	Phenol	11	U
111-44-4	bis(2-Chloroethyl)ether	11	U
95-57-8	2-Chlorophenol	11	U
541-73-1	1,3-Dichlorobenzene	11	U
106-46-7	1,4-Dichlorobenzene	11	U
100-51-6	Benzyl alcohol	11	U
95-50-1	1,2-Dichlorobenzene	11	U
95-48-7	2-Methylphenol	11	U
108-60-1	bis(2-Chloroisopropyl)ether	11	U
106-44-5	4-Methylphenol	11	U
621-64-7	N-Nitroso-Di-n-propylamine	11	U
67-72-1	Hexachloroethane	11	U
98-95-3	Nitrobenzene	11	U
78-59-1	Isophorone	11	U
88-75-5	2-Nitrophenol	11	U
105-67-9	2,4-Dimethylphenol	11	U
65-85-0	Benzoic acid	55	U
111-91-1	bis(2-Chloroethoxy)methane	11	U
120-83-2	2,4-Dichlorophenol	11	U
120-82-1	1,2,4-Trichlorobenzene	11	U
91-20-3	Naphthalene	11	U
106-47-8	4-Chloroaniline	11	U
87-68-3	Hexachlorobutadiene	11	U
59-50-7	4-Chloro-3-methylphenol	11	U
91-57-6	2-Methylnaphthalene	11	U
77-47-4	Hexachlorocyclopentadiene	11	U
88-06-2	2,4,6-Trichlorophenol	11	U
95-95-4	2,4,5-Trichlorophenol	55	U
91-58-7	2-Chloronaphthalene	11	U
88-74-4	2-Nitroaniline	55	U
131-11-3	Dimethylphthalate	11	U
208-96-8	Acenaphthylene	11	U
606-20-2	2,6-Dinitrotoluene	11	U

1C
SEMIVOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

02-007-M001

Lab Name: Roy F. Weston, Inc. Work Order: 1771-15-03-0000

Client: Naval Weapons Station

Matrix: WATER Lab Sample ID: 9103L947-016

Sample wt/vol: 910 (g/mL) ML Lab File ID: AAAQ03

Level: (low/med) LOW Date Received: 03/16/91

% Moisture: not dec. _____ dec. Date Extracted: 03/21/91

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 03/30/91

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

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

CAS NO.	COMPOUND		
99-09-2	3-Nitroaniline	55	U
83-32-9	Acenaphthene	11	U
51-28-5	2,4-Dinitrophenol	55	U
100-02-7	4-Nitrophenol	55	U
132-64-9	Dibenzofuran	11	U
121-14-2	2,4-Dinitrotoluene	11	U
84-66-2	Diethylphthalate	11	U
7005-72-3	4-Chlorophenyl-phenylether	11	U
86-73-7	Fluorene	11	U
100-01-6	4-Nitroaniline	55	U
534-52-1	4,6-Dinitro-2-methylphenol	55	U
86-30-6	N-Nitrosodiphenylamine (1)	11	U
101-55-3	4-Bromophenyl-phenylether	11	U
118-74-1	Hexachlorobenzene	11	U
87-86-5	Pentachlorophenol	55	U
85-01-8	Phenanthrene	11	U
120-12-7	Anthracene	11	U
84-74-2	Di-n-Butylphthalate	11	U
206-44-0	Fluoranthene	11	U
129-00-0	Pyrene	11	U
85-68-7	Butylbenzylphthalate	11	U
91-94-1	3,3'-Dichlorobenzidine	22	U
56-55-3	Benzo(a)anthracene	11	U
218-01-9	Chrysene	11	U
117-81-7	bis(2-Ethylhexyl)phthalate	1	J
117-84-0	Di-n-Octyl phthalate	11	U
205-99-2	Benzo(b)fluoranthene	11	U
207-08-9	Benzo(k)fluoranthene	11	U
50-32-8	Benzo(a)pyrene	11	U
193-39-5	Indeno(1,2,3-cd)pyrene	11	U
53-70-3	Dibenzo(a,h)anthracene	11	U
191-24-2	Benzo(g,h,i)perylene	11	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

02-007-M001

Lab Name: Roy F. Weston, Inc. Work Order: 1771-15-03-0000

Client: Naval Weapons Station

Matrix: WATER Lab Sample ID: 9103L947-016

Sample wt/vol: 910 (g/mL) ML Lab File ID: AAAQ03

Level: (low/med) LOW Date Received: 03/16/91

% Moisture: not dec. _____ dec. Date Extracted: 03/21/91

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 03/30/91

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

Number TICs found: 5

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	30.57	5	J
2.	UNKNOWN HYDROCARBON	33.09	6	J
3.	UNKNOWN HYDROCARBON	34.05	8	J
4.	UNKNOWN HYDROCARBON	35.05	10	J
5.	UNKNOWN HYDROCARBON	36.15	10	J

1B
SEMIVOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

04-003-M001

Lab Name: Roy F. Weston, Inc. Work Order: 1771-15-03-0000

Client: Naval Weapons Station

Matrix: WATER Lab Sample ID: 9103L947-018

Sample wt/vol: 820 (g/mL) ML Lab File ID: AAAQ04

Level: (low/med) LOW Date Received: 03/16/91

% Moisture: not dec. _____ dec. Date Extracted: 03/21/91

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 03/30/91

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

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

CAS NO.	COMPOUND		
108-95-2	Phenol	12	U
111-44-4	bis(2-Chloroethyl)ether	12	U
95-57-8	2-Chlorophenol	12	U
541-73-1	1,3-Dichlorobenzene	12	U
106-46-7	1,4-Dichlorobenzene	12	U
100-51-6	Benzyl alcohol	12	U
95-50-1	1,2-Dichlorobenzene	12	U
95-48-7	2-Methylphenol	12	U
108-60-1	bis(2-Chloroisopropyl)ether	12	U
106-44-5	4-Methylphenol	12	U
621-64-7	N-Nitroso-Di-n-propylamine	12	U
67-72-1	Hexachloroethane	12	U
98-95-3	Nitrobenzene	12	U
78-59-1	Isophorone	12	U
88-75-5	2-Nitrophenol	12	U
105-67-9	2,4-Dimethylphenol	12	U
65-85-0	Benzoic acid	61	U
111-91-1	bis(2-Chloroethoxy)methane	12	U
120-83-2	2,4-Dichlorophenol	12	U
120-82-1	1,2,4-Trichlorobenzene	12	U
91-20-3	Naphthalene	12	U
106-47-8	4-Chloroaniline	12	U
87-68-3	Hexachlorobutadiene	12	U
59-50-7	4-Chloro-3-methylphenol	12	U
91-57-6	2-Methylnaphthalene	12	U
77-47-4	Hexachlorocyclopentadiene	12	U
88-06-2	2,4,6-Trichlorophenol	12	U
95-95-4	2,4,5-Trichlorophenol	61	U
91-58-7	2-Chloronaphthalene	12	U
88-74-4	2-Nitroaniline	61	U
131-11-3	Dimethylphthalate	12	U
208-96-8	Acenaphthylene	12	U
606-20-2	2,6-Dinitrotoluene	12	U

1C
SEMIVOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

04-003-M001

Lab Name: Roy F. Weston, Inc. Work Order: 1771-15-03-0000

Client: Naval Weapons Station

Matrix: WATER Lab Sample ID: 9103L947-018

Sample wt/vol: 820 (g/mL) ML Lab File ID: AAA004

Level: (low/med) LOW Date Received: 03/16/91

% Moisture: not dec. _____ dec. Date Extracted: 03/21/91

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 03/30/91

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

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

CAS NO.	COMPOUND		
99-09-2	3-Nitroaniline	61	U
83-32-9	Acenaphthene	12	U
51-28-5	2,4-Dinitrophenol	61	U J 7
100-02-7	4-Nitrophenol	61	U
132-64-9	Dibenzofuran	12	U
121-14-2	2,4-Dinitrotoluene	12	U
84-66-2	Diethylphthalate	12	U
7005-72-3	4-Chlorophenyl-phenylether	12	U
86-73-7	Fluorene	12	U
100-01-6	4-Nitroaniline	61	U
534-52-1	4,6-Dinitro-2-methylphenol	61	U
86-30-6	N-Nitrosodiphenylamine (1)	12	U
101-55-3	4-Bromophenyl-phenylether	12	U
118-74-1	Hexachlorobenzene	12	U
87-86-5	Pentachlorophenol	61	U
85-01-8	Phenanthrene	12	U
120-12-7	Anthracene	12	U
84-74-2	Di-n-Butylphthalate	12	U
206-44-0	Fluoranthene	12	U
129-00-0	Pyrene	12	U
85-68-7	Butylbenzylphthalate	12	U
91-94-1	3,3'-Dichlorobenzidine	24	U
56-55-3	Benzo(a)anthracene	12	U
218-01-9	Chrysene	12	U
117-81-7	bis(2-Ethylhexyl)phthalate	12	U
117-84-0	Di-n-Octyl phthalate	12	U
205-99-2	Benzo(b)fluoranthene	12	U
207-08-9	Benzo(k)fluoranthene	12	U
50-32-8	Benzo(a)pyrene	12	U
193-39-5	Indeno(1,2,3-cd)pyrene	12	U
53-70-3	Dibenzo(a,h)anthracene	12	U
191-24-2	Benzo(g,h,i)perylene	12	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

04-003-M001

Lab Name: Roy F. Weston, Inc. Work Order: 1771-15-03-0000

Client: Naval Weapons Station

Matrix: WATER Lab Sample ID: 9103L947-018

Sample wt/vol: 820 (g/mL) ML Lab File ID: AAA004

Level: (low/med) LOW Date Received: 03/16/91

% Moisture: not dec. _____ dec. Date Extracted: 03/21/91

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 03/30/91

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

Number TICs found: 6

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN HYDROCARBON	33.09	10	J NF
2.	UNKNOWN HYDROCARBON	34.05	10	J
3.	UNKNOWN HYDROCARBON	35.04	20	J
4.	UNKNOWN HYDROCARBON	36.14	10	J
5.	UNKNOWN HYDROCARBON	37.43	8	J
6.	UNKNOWN HYDROCARBON	38.94	5	J

1B
SEMIVOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

04-004-M001

Lab Name: Roy F. Weston, Inc. Work Order: 1771-15-03-0000

Client: Naval Weapons Station

Matrix: WATER Lab Sample ID: 9103L947-019

Sample wt/vol: 800 (g/mL) ML Lab File ID: AAAQ05

Level: (low/med) LOW Date Received: 03/16/91

% Moisture: not dec. _____ dec. Date Extracted: 03/21/91

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 03/30/91

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

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

CAS NO.	COMPOUND		
108-95-2	Phenol	12	U
111-44-4	bis(2-Chloroethyl)ether	12	U
95-57-8	2-Chlorophenol	12	U
541-73-1	1,3-Dichlorobenzene	12	U
106-46-7	1,4-Dichlorobenzene	12	U
100-51-6	Benzyl alcohol	12	U
95-50-1	1,2-Dichlorobenzene	12	U
95-48-7	2-Methylphenol	12	U
108-60-1	bis(2-Chloroisopropyl)ether	12	U
106-44-5	4-Methylphenol	12	U
621-64-7	N-Nitroso-Di-n-propylamine	12	U
67-72-1	Hexachloroethane	12	U
98-95-3	Nitrobenzene	12	U
78-59-1	Isophorone	12	U
88-75-5	2-Nitrophenol	12	U
105-67-9	2,4-Dimethylphenol	12	U
65-85-0	Benzoic acid	62	U
111-91-1	bis(2-Chloroethoxy)methane	12	U
120-83-2	2,4-Dichlorophenol	12	U
120-82-1	1,2,4-Trichlorobenzene	12	U
91-20-3	Naphthalene	12	U
106-47-8	4-Chloroaniline	12	U
87-68-3	Hexachlorobutadiene	12	U
59-50-7	4-Chloro-3-methylphenol	12	U
91-57-6	2-Methylnaphthalene	12	U
77-47-4	Hexachlorocyclopentadiene	12	U
88-06-2	2,4,6-Trichlorophenol	12	U
95-95-4	2,4,5-Trichlorophenol	62	U
91-58-7	2-Chloronaphthalene	12	U
88-74-4	2-Nitroaniline	62	U
131-11-3	Dimethylphthalate	12	U
208-96-8	Acenaphthylene	12	U
606-20-2	2,6-Dinitrotoluene	12	U

1C
SEMIVOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

04-004-M001

Lab Name: Roy F. Weston, Inc. Work Order: 1771-15-03-0000

Client: Naval Weapons Station

Matrix: WATER Lab Sample ID: 9103L947-019

Sample wt/vol: 800 (g/mL) ML Lab File ID: AAA005

Level: (low/med) LOW Date Received: 03/16/91

% Moisture: not dec. _____ dec. Date Extracted: 03/21/91

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 03/30/91

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

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

CAS NO.	COMPOUND		
99-09-2	3-Nitroaniline	62	U
83-32-9	Acenaphthene	12	U
51-28-5	2,4-Dinitrophenol	62	U J 7
100-02-7	4-Nitrophenol	62	U
132-64-9	Dibenzofuran	12	U
121-14-2	2,4-Dinitrotoluene	12	U
84-66-2	Diethylphthalate	12	U
7005-72-3	4-Chlorophenyl-phenylether	12	U
86-73-7	Fluorene	12	U
100-01-6	4-Nitroaniline	62	U
534-52-1	4,6-Dinitro-2-methylphenol	62	U
86-30-6	N-Nitrosodiphenylamine (1)	12	U
101-55-3	4-Bromophenyl-phenylether	12	U
118-74-1	Hexachlorobenzene	12	U
87-86-5	Pentachlorophenol	62	U
85-01-8	Phenanthrene	12	U
120-12-7	Anthracene	12	U
84-74-2	Di-n-Butylphthalate	12	U
206-44-0	Fluoranthene	12	U
129-00-0	Pyrene	12	U
85-68-7	Butylbenzylphthalate	12	U
91-94-1	3,3'-Dichlorobenzidine	25	U
56-55-3	Benzo(a)anthracene	12	U
218-01-9	Chrysene	12	U
117-81-7	bis(2-Ethylhexyl)phthalate	2	J
117-84-0	Di-n-Octyl phthalate	12	U
205-99-2	Benzo(b)fluoranthene	12	U
207-08-9	Benzo(k)fluoranthene	12	U
50-32-8	Benzo(a)pyrene	12	U
193-39-5	Indeno(1,2,3-cd)pyrene	12	U
53-70-3	Dibenzo(a,h)anthracene	12	U
191-24-2	Benzo(g,h,i)perylene	12	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

04-004-M001

Lab Name: Roy F. Weston, Inc. Work Order: 1771-15-03-0000

Client: Naval Weapons Station

Matrix: WATER Lab Sample ID: 9103L947-019

Sample wt/vol: 800 (g/mL) ML Lab File ID: AAA005

Level: (low/med) LOW Date Received: 03/16/91

% Moisture: not dec. _____ dec. Date Extracted: 03/21/91

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 03/30/91

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

Number TICs found: 6

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN HYDROCARBON	33.08	10	J
2.	UNKNOWN HYDROCARBON	34.06	20	J
3.	UNKNOWN HYDROCARBON	35.04	20	J
4.	UNKNOWN HYDROCARBON	36.16	20	J
5.	UNKNOWN HYDROCARBON	37.42	10	J
6.	UNKNOWN HYDROCARBON	38.93	6	J

PACKAGE COMPLETENESS AND DELIVERABLES

CASE NUMBER: 91031947

LAB: R.F WESTON - GULF COAST LABS

SITE: COLTSNECK NAVAL WEAPONS STATION

1.0 Data Completeness and Deliverables	YES	NO	N/A
1.1 Have any missing deliverables been received and added to the data package.	[✓]		
ACTION: Call lab for explanation / resubmittal of any missing deliverables. If lab cannot provide them, note the effect on review of the package under the "Contract Problems/Non-compliance" section of reviewer narrative.			
1.2 Was SMO CCS checklist included with package?	[ ]	✓	
2.0 Cover Letter/Case Narrative			
2.1 Is the Narrative or Cover Letter present?	[✓]		
2.2 Are Case Number and/or SAS number contained in the Narrative or Cover Letter?	[✓]		

3.0 Data Validation Checklist

The following checklist is divided into three parts. Part A is filled out if the data package contains any VOA analyses, Part B for any BNA analyses and Part C for Pesticide/PCBs.

Does this package contain:

VOA data?		✓
BNA data?	✓	
Pesticide/PCB data?		✓

ACTION: Complete corresponding parts of checklist.

	YES	NO	N/A

PART B: BNA ANALYSES

1.0 Traffic Reports and Laboratory Narrative

1.1 Are the Traffic Report Forms present for all samples? [✓] ___ ___

ACTION: If no, contact lab for replacement of missing or illegible copies.

1.2 Do the Traffic Reports or Lab Narrative indicate any problems with sample receipt, condition of samples, analytical problems or special notations affecting the quality of the data? ___ [✓] ___

ACTION: Use professional judgement to evaluate the effect on the quality of the data.

ACTION: If any sample analyzed as a soil contains more than 50% water, all data should be flagged as estimated (J).

2.0 Holding Times

2.1 Have any BNA holding times, determined from date of collection to date of extraction, been exceeded? [✓] [___] ___

Samples for BNA analysis, both soils and waters, must be extracted within seven days of the date of collection. Extracts must be analyzed within 40 days of the date of extraction.

Table of Holding Time Violations

Sample	Sample Matrix	Date Sampled	(See Traffic Report) Date Lab Received	Date Extracted	Date Analyzed
02-003-M001	~~Water~~	3-13-91	3-16-91	3-21-91	3-30-91
02-003M101					
02-003-M201					
02-004-M001					
02-005-M001					
02-006-M001					
02-007-M001					

ACTION: If holding times are exceeded, flag all positive results as estimated ("J") and sample quantitation limits as estimated ("UJ"), and document in the narrative that holding times were exceeded.

	YES	NO	N/A
If analyses were done more than 14 days beyond holding time, either on the first analysis or upon reanalysis, the reviewer must use professional judgement to determine the reliability of the data and the effects of additional storage on the sample results. The reviewer may determine that non-detect data are unusable ("R").			
.0 Surrogate Recovery (Form II)			
3.1 Are the BNA Surrogate Recovery Summaries (Form II) present for each of the following matrices:			
a. Low Water	✓		
b. Med Water			✓
c. Low Soil			✓
d. Med Soil			✓
3.2 Are all the BNA samples listed on the appropriate Surrogate Recovery Summaries for each of the following matrices:			
a. Low Water	✓		
b. Med Water			✓
c. Low Soil			✓
d. Med Soil			✓
ACTION: Call lab for explanation / resubmittals. If missing deliverables are unavailable, document effect on data under "Conclusions" section of reviewer narrative.			
3.3 Were outliers marked correctly with an asterisk?			✓
ACTION: Circle all outliers in red.			
3.4 Were two or more base-neutral OR acid surrogate recoveries out of specification for any sample or method blank?			✓
If yes, were samples reanalyzed?			✓
Were method blanks reanalyzed?			✓
ACTION: If all BNA surrogate recoveries are > 10% but two within the base-neutral or acid fraction do not meet SOW specifications, for the affected fraction only (i.e. base-neutral OR acid compounds): 1. Flag all positive results as estimated ("J"). 2. Flag all non-detects as estimated detection limits ("UJ").			

	YES	NO	N/A
If any base-neutral or acid surrogate has a recovery of <10% : 1. Flag all positive results for that fraction (i.e. all acid or base-neutral compounds) "J". 2. Flag all non-detects for that fraction "R".			
Professional judgement should be used to qualify data that have method blank surrogate recoveries out of specification in both original and re-analyses. Check the internal standard areas.			
3.5 Are there any transcription/calculation errors between raw data and Form II?	___	[✓]	___
ACTION: If large errors exist, call lab for explanation / resubmittal, make any necessary corrections and note errors under "Conclusions".			
.0 Matrix Spikes (Form III)			
4.1 Is the Matrix Spike Duplicate/Recovery Form (Form III) present?	[✓]	___	___
4.2 Were matrix spikes analyzed at the required frequency for each of the following matrices:			
a. Low Water	[✓]	___	___
b. Med Water	[___]	___	✓
c. Low Soil	[___]	___	✓
d. Med Soil	[___]	___	✓
ACTION: If any matrix spike data are missing, take the action specified in 3.2 above.			

4.3 How many BNA spike recoveries are outside QC limits?

Water	Soils
0 out of 22	N/A out of 22

4.4 How many RPD's for matrix spike and matrix spike duplicate recoveries are outside QC limits?

Water	Soils
0 out of 11	N/A out of 11

ACTION: If MS and MSD both have less than 10% recovery for an analyte, negative results for that analyte should be rejected, and positive results should be flagged "J". The above applies only to the sample used for MS/MSD analysis. Use professional judgement in applying this criterion to other samples.

	YES	NO	N/A
5.0 Blanks (Form IV)			
5.1 Is the Method Blank Summary (Form IV) present?	[✓]	___	___
5.2 Frequency of Analysis: for the analysis of BNA TCL compounds, has a reagent/method blank been analyzed for each set of samples or every 20 samples of similar matrix (low water, med water, low soil, medium soil), whichever is more frequent?	[✓]	___	___
5.3 Has a BNA ~~instrument~~ Method blank been analyzed for each GS/MS system used.	[✓]	___	___
ACTION: If any method blank data are missing, call lab for explanation/resubmittal. If not available, reject all associated positive data ("R").			
5.4 Chromatography: review the blank raw data - chromatograms (RICs), quant reports or data system printouts and spectra.			
Is the chromatographic performance (baseline stability) for each instrument acceptable for VOAs?	[✓]	___	___
ACTION: Use professional judgement to determine the effect on the data.			
6.0 Contamination			
NOTE: "Water blanks" and "distilled water blanks" are validated like any other sample and are not used to qualify data. Do not confuse them with the other QC blanks discussed below.			
6.1 Do any method/instrument/reagent blanks have positive results (TCL and/or TIC) for BNAs? When applied as described below, the contaminant concentration in these blanks are multiplied by the sample Dilution Factor.	___	[✓]	___
6.2 Do any field/rinse blanks have positive BNA results (TCL and/or TIC)?	___	[___]	✓
ACTION: Prepare a list of the samples associated with each of the contaminated blanks. (Attach a separate sheet.)		Not identified	
NOTE: Only field/rinse blanks taken the same day as the samples are used to qualify data. Blanks may not be qualified because of contamination in another blank. Blanks may be qualified for surrogate, spectral, tuning or calibration QC problems.			

YES NO N/A

ACTION: Follow the directions in the table below to qualify TCL results due to contamination. Use the largest value from all the associated blanks.

	Sample conc > CRQL but < 10x blank	Sample conc < CRQL & is < 10x blank value	Sample conc > CRQL value & >10x blank value
Common Phthalate Esters	Flag sample result with a 'U'; cross out 'B' flag	Reject sample result and report CRQL; cross out 'B' flag	No qualification is needed

	Sample conc > CRQL but < 5x blank	Sample conc < CRQL & is < 5x blank value	Sample conc > CRQL value & > 5 blank value
Other Contaminants	Flag sample result with a 'U'; cross out 'B' flag	Reject sample result and report CRQL; cross out 'B' flag	No qualification is needed

ACTION: For TIC compounds, if the concentration in the sample is less than five times the concentration in the most contaminated associated blank, flag the sample data "R" (unusable).

6.3 Are there field/rinse/equipment blanks associated with every sample? [ ] [✓] ___

ACTION: For low level samples, note in data assessment that there is no associated field/rinse/equipment blank. Exception: samples taken from a drinking water tap do not have associated field blanks. Not identified.

0 GC/MS Tuning and Mass Calibration (Form V)

7.1 Are the GC/MS Tuning and Mass Calibration Forms (Form V) present for Decafluorotriphenylphosphine (DFTPP)? [✓] ___ ___

7.2 Are the enhanced bar graph spectrum and mass/charge (m/z) listing for the DFTPP provided for each twelve hour shift? [✓] ___ ___

7.3 Has a tuning performance compound been analyzed for every twelve hours of sample analysis per instrument? [✓] ___ ___

ACTION: If any tuning data are missing, take action specified in 3.2 above.

ACTION: List date, time, instrument ID, and sample analyses for which no associated GC/MS tuning data are available.

DATE	TIME	INSTRUMENT	SAMPLE NUMBERS

ACTION: If lab cannot provide missing data, reject ("R") all data generated outside an acceptable twelve hour calibration interval.

	YES	NO	N/A
7.4 Have the ion abundance criteria been met for each instrument used?	[✓]		

ACTION: List all data which do not meet ion abundance criteria (attach a separate sheet).

ACTION: If tuning calibration is in error, flag all associated sample data as unusable ("R"). However, if expanded ion criteria are met (See 1988 Functional Guidelines), the data reviewer may accept data with appropriate qualifiers.

7.5 Are there any transcription / calculation errors between mass lists and Form Vs? (Check at least two values but if errors are found, check more.)		[✓]	
7.6 Have the appropriate number of significant figures (two) been reported? (Check at least two values, but if errors are found check more values.)	[✓]		

ACTION: If large errors exist, call lab for explanation / resubmittal, make necessary corrections and note errors under "Conclusions".

7.7 Are the spectra of the mass calibration compound acceptable?	[✓]		

ACTION: Use professional judgement to determine whether associated data should be accepted, qualified, or rejected.

8.0 Target Compound List (TCL) Analytes

8.1 Are the Organic Analysis Data Sheets (Form I BNA) present with required header information on each page, for each of the following:			
a. Samples and/or fractions as appropriate	[✓]		
b. Matrix spikes and matrix spike duplicates	[✓]		
c. Blanks	[✓]		

	YES	NO	N/A
8.2 Are the BNA Reconstructed Ion Chromatograms, the mass spectra for the identified compounds, and the data system printouts (Quant Reports) included in the sample package for each of the following?			
a. Samples and/or fractions as appropriate	[✓]	___	___
b. Matrix spikes and matrix spike duplicates (Mass spectra not required)	[✓]	___	___
c. Blanks	[✓]	___	___
ACTION: If any data are missing, take action specified in 3.2 above.			
8.3 Are the response factors shown in the Quant Report?	[ ]	✓	___
8.4 Is chromatographic performance acceptable with respect to:	Quant ion		
Baseline stability	[✓]	___	___
Resolution	[✓]	___	___
Peak shape	[✓]	___	___
Full-scale graph (attenuation)	[✓]	___	___
Other:_____	[ ]	___	✓
ACTION: Use professional judgement to determine the acceptability of the data.			
8.5 Are the lab-generated standard mass spectra of the identified BNA compounds present for each sample?	✓ [ ]	___	___
ACTION: If any mass spectra are missing, take action specified in 3.2 above. If Lab does not generate their own standard spectra, make note in "Contract Problems/Non-compliance".			
8.6 Is the RRT of each reported compound within 0.06 RRT units of the standard RRT in the continuing calibration?	✓ [ ]	___	___
8.7 Are all ions present in the standard mass spectrum at a relative intensity greater than 10% also present in the sample mass spectrum?	[✓]	___	___
8.8 Do sample and standard relative ion intensities agree within 20%?	[✓]	___	___
ACTION: Use professional judgement to determine acceptability of data. If it is determined that incorrect identifications were made, all such data should be rejected, flagged "N" (presumptive evidence of the presence of the compound) or changed to not detected (at the calculated detection limit).			

	YES	NO	N/A
9.0 Tentatively Identified Compounds (TIC)			
9.1 Are all Tentatively Identified Compound Forms (Form I, Part B) present; and do listed TICs include scan number or retention time, estimated concentration and "J" qualifier?	✓		
9.2 Are the mass spectra for the tentatively identified compounds and associated "best match" spectra included in the sample package for each of the following:			
a. Samples and/or fractions as appropriate	✓		
b. Blanks	✓		
ACTION: If any TIC data are missing, take action specified in 3.2 above.			
ACTION: Add "J" qualifier if missing and "N" qualifier to all identified TIC compounds on Form I, Part B.			
9.3 Are any TCL compounds (from any fraction) listed as TIC compounds (example: 1,2-dimethylbenzene is xylene—a VOA TCL—and should not be reported as a TIC)?		✓	
ACTION: Flag with "R" any TCL compound listed as a TIC.			
9.4 Are all ions present in the reference mass spectrum with a relative intensity greater than 10% also present in the sample mass spectrum?	✓		
9.5 Do TIC and "best match" standard relative ion intensities agree within 20%?	✓		
ACTION: Use professional judgement to determine acceptability of TIC identifications. If it is determined that an incorrect identification was made, change identification to "unknown" or to some less specific identification (example: "C3 substituted benzene") as appropriate.			
10.0 Compound Quantitation and Reported Detection Limits			
10.1 Are there any transcription / calculation errors in Form I results? Check at least two positive values. Verify that the correct internal standard, quantitation ion, and RRF were used to calculate Form I result. Were any errors found?		✓	
10.2 Are the CRQLs adjusted to reflect sample dilutions and, for soils, sample moisture?	✓		

	YES	NO	N/A
ACTION: If errors are large, call lab for explanation / resubmittal, make any necessary corrections and note errors under "Conclusions".			
ACTION: When a sample is analyzed at more than one dilution, the lowest CRQLs are used (unless a QC exceedance dictates the use of the higher CRQL data from the diluted sample analysis). Replace concentrations that exceed the calibration range in the original analysis by crossing out the "E" value on the original Form I and substituting it with data from the analysis of diluted sample. Specify which Form I is to be used, then draw a red "X" across the entire page of all Form I's that should not be used, including any in the summary package.			
11.0 Standards Data (GC/MS)			
11.1 Are the Reconstructed Ion Chromatograms, and data system printouts (Quant. Reports) present for initial and continuing calibration?	[✓]	___	___
ACTION: If any calibration standard data are missing, take action specified in 3.2 above.			
12.0 GC/MS Initial Calibration (Form VI)			
12.1 Are the Initial Calibration Forms (Form VI) present and complete for the BNA fraction?	[✓]	___	___
ACTION: If any calibration standard forms are missing, take action specified in 3.2 above.			
12.2 Are response factors stable for BNAs over the concentration range of the calibration (RSD <30%)?	[✓]	___	___
ACTION: Circle all outliers in red.			
ACTION: When RSD >30%, non-detects may be qualified using professional judgement. Flag all positive results "J". When RSD >90%, flag all non-detects as unusable ("R"). (Region II policy.)			
12.3 Do any compounds have a RRF < 0.05?	___	[✓]	___
ACTION: Circle all outliers in red.			
ACTION: If any BNA compound has an average RRF < 0.05, flag positive results for that compound as estimated ("J"), and flag non-detects for that compound as unusable ("R").			

	YES	NO	N/A
12.4 Are there any transcription / calculation errors in the reporting of average response factors (RRF) or %RSD? (Check at least two values but if errors are found, check more.)		✓	

ACTION: Circle errors in red.

ACTION: If errors are large, call lab for explanation / resubmittal, make any necessary corrections and note errors under "Conclusions".

13.0 GC/MS Continuing Calibration (Form VII)

13.1 Are the Continuing Calibration Forms (Form VII) present and complete for the BNA fraction?	✓		
13.2 Has a continuing calibration standard been analyzed for every twelve hours of sample analysis per instrument?	✓		

ACTION: List below all sample analyses that were not within twelve hours of the previous continuing calibration analysis.

Blank spikes & Blank spike Dups are out of 12 hour clock - OK - for internal QA/QC

ACTION: If any forms are missing or no continuing calibration standard has been analyzed within twelve hours of every sample analysis, call lab for explanation / resubmittal. If continuing calibration data are not available, flag all associated sample data as unusable ("R").

13.3 Do any continuing calibration standard compounds have a RRF < 0.05?		✓	

ACTION: Circle all outliers in red.

ACTION: If any BNA compound has a RRF < 0.05, flag positive results for that compound as estimated ("J"), and flag non-detects for that compound as unusable ("R").

13.4 Do any compounds have a % difference between initial and continuing calibration RRF > 25%?	✓		

ACTION: Circle all outliers in red and qualify associated sample data as outlined in the table below:

YES NO N/A

% DIFFERENCE

25-50	50-90	>90
'J' positive results, no action for non detects	'J' positive results, 'UJ' non detects	'J' positive results, "R" non detects

13.5 Are there any transcription / calculation errors in the reporting of average response factors (RRF) or difference (%D) between initial and continuing RRFs? (Check at least two values but if errors are found, check more.) ___ [✓] ___

ACTION: Circle errors in red.

ACTION: If errors are large, call lab for explanation / resubmittal, make any necessary corrections and note errors under "Conclusions".

14.0 Internal Standards (Form VIII)

14.1 Are the internal standard areas (Form VIII) of every sample and blank within the upper and lower limits for each continuing calibration? [___] [✓] ___

ACTION: List all the outliers below.

Sample #	Internal Std	Area	Lower Limit	Upper Limit
0126BSD	all	low areas —		
	no action required, for			
	internal QA/QC purposes.			

(Attach additional sheets if necessary.)

ACTION: If the internal standard area count is outside the upper or lower limit, flag with "J" all positive results and non-detects (U values) quantitated with this internal standard. If extremely low area counts are reported, or if performance exhibits a major abrupt drop off, flag all associated non-detects as unusable ("R").

14.2 Are the retention times of the internal standards within 30 seconds of the associated calibration standard? [✓] ___ ___

ACTION: Professional judgement should be used to qualify data if the retention times differ by more than 30 seconds.

	YES	NO	N/A
15.0 Field Duplicates			
15.1 Were any field duplicates submitted for BNA analysis?	[ ]	✓	

ACTION: Compare the reported results for field duplicates and calculate the relative percent difference.

ACTION: Any gross variation between field duplicate results must be addressed in the reviewer narrative. However, if large differences exist, identification of field duplicates should be confirmed by contacting the sampler.

Not identified or Submitted.

ATTACHMENT 1
SOP NO. HW-6

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TOTAL REVIEW

CLP DATA ASSESSMENT

Functional Guidelines for Evaluating Organics Analysis

Case No. 91031L947 SDG No. —— LABORATORY R.F. WESTON GULF COAST SITE COLTSNECK.

DATA ASSESSMENT:

The current functional guidelines for evaluating organic data have been applied.

All data are valid and acceptable except those analytes which have been qualified with a "J" (estimated), "U" (non-detects), "R" (unusable), or "NJ" (presumptive evidence for the presence of the material at an estimated value). All action is detailed on the attached sheets.

Reviewer's Signature: [signature] Date: 9/3/1991

Verified By: [signature] Date: 9/5/1991

DATA ASSESSMENT:

1. HOLDING TIME:

The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the specified holding time is exceeded, the data may not be valid. Those analytes detected in the samples will be qualified as estimated, "J". The non-detects sample quantitation limits will be flagged as estimated, "J", or unusable, "R", if the holding times are grossly exceeded.

The following action was taken in the samples and analytes shown due to excessive holding time.

Samples 02-003-M001, 02-003-M101, 02-003-M201, 02-004-M001, 02-005-M001, 02-006-M001, 02-007-M001. were sampled on 3-13-91 and were extracted on 3-21-91. However, the lab recieved the samples on 3-16-91 and extracted them on 3-21-91. 6 days VTSR per USEPA CLP. Heartland ESI will qualify the data per Region II protocol, although HESI does not feel the data has been compromised.

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SOP NO. HW-6

DATA ASSESSMENT:

2. BLANK CONTAMINATION:

Quality assurance (QA) blanks, i.e., method, trip field, rinse and water blanks are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Trip blanks measure cross-contamination of samples during shipment. Field blanks measure cross- contamination of samples during field operations. Water blanks measure potential contamination of the distilled water used used during decontamination of field equipment. If the concentration of the analyte is less than 5 times (10 times for the common contaminants), the analytes are qualified as non- detects, "U". The following analytes in the samples shown were qualified with "U" for these reasons:

A) Method blank contamination

91GB0126-MB1 - No contamination

91GB0132-MB1 - No contamination

B) Field or rinse blank contamination

None submitted or identified

C) Water blank contamination

See above

D) Trip blank contamination

None submitted or identified

ATTACHMENT 1
SOP NO. HW-6

DATA ASSESSMENT:

3. SPECTROMETER TUNING:

Tuning and performance criteria are established to ensure mass resolution, identification of compounds, and to some degree, the instrument sensitivity. These criteria are not sample specific. Instrument performance is determined using standard materials. Therefore, these criteria should be met in all circumstances. The tuning standard for volatile organics is bromofluorobenzene and for semi-volatiles is decafluorotriphenyl- phosphine.

If the mass calibration is in error, all associated data will be classified as unusable, "R".

No Action

EMM
9-3-91

DATA ASSESSMENT:

4. CALIBRATION:

Satisfactory instrument calibration is established to insure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of giving acceptable performance in the beginning of an experimental sequence. The continuing calibration checks document that the instrument is giving satisfactory daily performance.

A) RESPONSE FACTOR:

The response factor measures the instrument's response to specific chemical compounds. The response factor for the Target Compound List (TCL) must be $\geq$ 0.05 either in the initial or continuing calibration. A value < 0.05 indicates a serious detection and quantitation problem. Analytes detected in the sample will be qualified as estimated, "J". All non-detects for that compound will be qualified as rejected, "R".

No Action

SMW
9-3-91

DATA ASSESSMENT:

5. CALIBRATION:

A) PERCENT RELATIVE STANDARD DEVIATION (%RSD) AND PERCENT DIFFERENCE (%D):

Percent RSD is calculated from the initial calibration and is used to indicate the stability of the specific compound response factor over increasing concentration. Percent D compares the response factor to the mean response factor (RRF) from the initial calibration. Percent D is a measure of the instrument's daily performance. Percent RSD must be <30% and %D must be <25%. A value outside of these limits indicates potential detection and quantitation errors. For these reasons, all positive results are flagged as estimated, "J" and non-detects are flagged "UJ". If there is a gross deviation of %RSD and %D, the non-detects may be qualified as rejected, "R".

For the PCB/PESTICIDE fraction, %RSD for aldrin, endrin, DDT, and dibutylchlorendate must not exceed 10%. Percent D must be within 15% on the quantitation column and 20% on the confirmation column.

* Int Cal 3-26-91 GCL#4 - No Samples - No Action.
* Int Cal 3-21-91 GCL#1 - No Samples - No Action.
* Cont Cal 3-28-91 GCL#4 - SBLKGB0126-MB1, 11-001-M001, 11-002-M001, MS, MSD, 11-003-M001, 11-004-M001, 11-004-M101, 11-004-M201, SBLKGB0126-MB1 BS, BSD

J pos (>25% - <50%) Pentachlorophenol (ccc)
J pos, UJ NDs (>50% - <90%) Benzoic Acid.

* Cont Cal 3-30-91 GCL#4 - 11-005-M001, 02-001-M001, 02-002-M001

J pos (>25% - <50%) 2-Nitroaniline, 2,4-Dinitrotoluene, Diethylphthalate, Fluorene, Butylbenzylphthalate, Terphenyl-d14 *
* Surrogate.

J pos, UJ NDs (>50% - <90%) Benzoic Acid, 4-Nitrophenol,

* Cont Cal 3-30-91 - GCL#1, SBLK0132MB1, 02-003-M001, 02-003-M101, 02-003-M201, +BS+BSD 02-004-M001, 02-005-M001, 02-006-M001, 02-007-M001, 04-003-M001, 04-004-M001, MS, MSD

J pos (>25% - <50%) 4,6-dinitro-2-methylphenol, Indeno(1,2,3-cd)pyrene, dibenz(a,h)anthracene, benzo(g,h,i)perylene

J pos, UJ NDs (>50% - <90%) 2,4-Dinitrophenol

DATA ASSESSMENT:

6. SURROGATES:

All samples are spiked with surrogate compounds prior to sample preparation in order to evaluate the laboratory performance and to estimate the efficiency of the analytical technique. If the measured surrogate concentration is outside of the contract specifications, qualifications were applied to the samples and analytes as shown below.

No Action

EMM
9-3-91

DATA ASSESSMENT:

7. INTERNAL STANDARDS PERFORMANCE:

Internal standard (IS) performance criteria ensure that the GC/MS sensitivity and response are stable during every experimental run. The internal standard area count must not vary by more than a factor of 2 (-50% to +100%) from the associated calibration standard. The retention time of the internal standard must not vary more than ±30 seconds from the associated calibration standard. If the area count is outside the (-50% to +100%) range of the associated standard, all of the positive results for compounds quantitated using that IS are to be qualified as estimated, "J", and all non-detects as "UJ" or "R" if there is a severe loss of sensitivity.

If an internal standard retention time varies by more than 30 seconds, the reviewer will use professional judgment to determine either partial or total rejection of the data for that sample fraction.

SBLKG0126-MB BSD has all int. stds out low. No action is required since the BSD is for internal QA/QC purposes.

8-3-91

DATA ASSESSMENT:

8. COMPOUND IDENTIFICATION:

A) VOLATILE AND SEMI-VOLATILE FRACTIONS:

TCL compounds are identified on the GC/MS by using the analytes relative retention time (RRT) and by comparison to the ion spectra obtained from known standards. For the results to be a positive hit, the sample peak must be within ± 0.06 RRT units of the standard compound and have an ion spectra which has a ratio of the primary and secondary M/E lines within 20% of that in the standard compound. For the tentatively identified compounds, TIC, the ion spectra must match accurately. In the cases where there is not a perfect ion spectrum match, the laboratory may have provided false positive identifications.

B) PESTICIDE FRACTION:

The retention times of reported compounds must fall within the calculated retention time windows for the two chromatographic columns and a GC/MS confirmation is required if the concentration exceeds 10 ng/uL in the final sample extract.

No Action

SMM
9-3-91

DATA ASSESSMENT:

9. MATRIX SPIKE/SPIKE DUPLICATE, MS/MSD:

The MS/MSD data are generated to determine the long-term precision and accuracy of the analytical method in various matrices. The MS/MSD may be used in conjunction with other QC criteria for some additional qualification of the data.

No Action

9-3-91

ATTACHMENT 1
SOP NO. HW-6

PAGE__OF__

DATA ASSESSMENT:

10. OTHER QC DATA OUT OF SPECIFICATION:

None.

11. SYSTEM PERFORMANCE AND OVERALL ASSESSMENT:

System performance and overall assessment — very good - see narrative.

12. CONTRACT PROBLEMS Ø NON-COMPLIANCE:

9-3-91

13. This package contains re-extraction, re-analysis or dilution. Upon reviewing the QA results, the following form I(s) are identified to be used.

9-3-91

DPO: [ ] ACTION [ ] FYI Region_____

ORGANIC REGIONAL DATA ASSESSMENT SUMMARY

CASE NO. 91031C947 LABORATORY R.F. WESTON-GULF COAST

SDG NO. — DATA USER R.F. WESTON

SOW 2/88 CLP/REGION II REVIEW COMPLETION DATE 9-3-91

NO. OF SAMPLES 18 WATER _____ SOIL _____ OTHER

REVIEWER [ ] ESD [ ] ESAT [X] OTHER, CONTRACT/CONTRACTOR HEARTLAND ESF

	VOA	BNA	PEST	OTHER
1. HOLDING TIMES		M		
2. GC-MS TUNE/ GC PERFORMANCE		O		
3. INITIAL CALIBRATIONS		O		
4. CONTINUING CALIBRATIONS		X		
5. FIELD BLANKS ("F" = not applicable)		F		
6. LABORATORY BLANKS		O		
7. SURROGATES		O		
8. MATRIX SPIKE/DUPLICATES		O		
9. REGIONAL QC ("F" = not applicable)		F		
10. INTERNAL STANDARDS		O		
11. COMPOUND IDENTIFICATION		O		
12. COMPOUND QUANTITATION		O		
13. SYSTEM PERFORMANCE		O		
14. OVERALL ASSESSMENT		M		

O = No problems or minor problems that do not affect data usability.
X = No more than *about* 5% of the data points are qualified as either estimated or unusable.
M = More than *about* 5% of the data points are qualified as estimated.
Z = More than *about* 5% of the data points are qualified as unusable.

DPO ACTION ITEMS: _____

AREAS OF CONCERN: _____

00087

489

Attachment 3

REJECTION SUMMARY FORM
(No. of Compounds/No. of Fractions (Samples))

SOP NO: HW-6
Date: February 1989

Type of Review: EPA CLP/REGION II VALIDATION Date: 9-3-91

Project: COLBNECK NAVAL WEAPONS STATION

Case #: 9103L947

Reviewer's Initials: SMM

Lab Name: R.E. WESTON - GULF COAST

Number of Samples: 18

Analytes Rejected Due to Exceeding Review Criteria:

	Surrogates	Holding Time	Calibration	Contamination	ID	Other	Total # Samples	Total # Rejected/ Total # in all Samples
Acids (15)	0	0	0	0	0	0	18	0/270
B/N (50)	0	0	0	0	0	0	18	0/900
VOA (35)								
PEST (20)								
PCB (7)								
TCDD (1)								

Analytes Estimated Due to Exceeding Review Criteria for:

Acids (15)	0	105	14	0	0	0	18	119/270
B/N (50)	0	350	0	0	0	0	18	350/900
VOA (35)								
PEST (20)								
PCB (7)								
TCDD (1)								

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