Site # 2040

ENGINEERING INVESTIGATIONS AT INACTIVE HAZARDOUS WASTE SITES IN THE STATE OF NEW YORK PHASE II INVESTIGATIONS

Hudson Oil Refinery NYD980534499

(Quanta Resources)
Long Island City, Queens County
NYSDEC I.D. No. 241005

Volume III - Appendices I and J

Prepared for

DIVISION OF HAZARDOUS WASTE REMEDIATION
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
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May 1990

324479

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SW-1MS

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) WATER Lab Sample ID: 320975

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN020975C12

Level: (low/med) LOW Date Received: 02/22/90

% Moisture: not dec. ____ Date Analyzed: 02/23/90

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

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

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SW-1MSD

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) WATER Lab Sample ID: 320976

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN020976C12

Level: (low/med) LOW Date Received: 02/22/90

% Moisture: not dec. ____ Date Analyzed: 02/23/90

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

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

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TRIPBLANK

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) WATER Lab Sample ID: 321580

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN021580A12

Level: (low/med) LOW Date Received: 02/23/90

% Moisture: not dec. ____ Date Analyzed: 02/25/90

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

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

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1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

TRIPBLANK

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) WATER Lab Sample ID: 321580

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN021580A12

Level: (low/med) LOW Date Received: 02/23/90

% Moisture: not dec. ____ Date Analyzed: 02/25/90

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SW-1

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) WATER Lab Sample ID: 320974

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN020974C12

Level: (low/med) LOW Date Received: 02/22/90

% Moisture: not dec. ____ Date Analyzed: 02/23/90

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

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

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1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SW-1

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) WATER Lab Sample ID: 320974

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN020974C12

Level: (low/med) LOW Date Received: 02/22/90

% Moisture: not dec. ____ Date Analyzed: 02/23/90

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I VOA-TIC 1/87 Rev.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GW-3

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) WATER Lab Sample ID: 320984

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CR020984A12

Level: (low/med) LOW Date Received: 02/22/90

% Moisture: not dec. ____ Date Analyzed: 02/23/90

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

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

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	20	
75-00-3	Chloroethane	36	
75-09-2	Methylene Chloride	4	J
67-64-1	Acetone	9	J
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	21	
540-59-0	1,2-Dichloroethene (total)	53	
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	2	J
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	18	
10061-02-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	10	
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	4	J
100-42-5	Styrene	5	U
1330-20-7	Total Xylenes	7	

FORM I VOA 1/87 Rev.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GW-3

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) WATER Lab Sample ID: 320984

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CR020984A12

Level: (low/med) LOW Date Received: 02/22/90

% Moisture: not dec. ____ Date Analyzed: 02/23/90

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 10

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 108-87-2	CYCLOHEXANE,METHYL-	7.33	39	J
2. 592-13-2	HEXANE,2,5-DIMETHYL-	8.67	18	J
3. 589-81-1	HEPTANE,3-METHYL-	8.90	23	J
4.	ETHYLMETHYLCYCLOHEXANE + UNK	12.17	14	J
5. 2051-30-1	OCTANE,2,6-DIMETHYL-	13.40	18	J
6. 17301-94-9	NONANE,4-METHYL-	14.15	25	J
7. 5911-04-6	NONANE,3-METHYL-	14.40	15	J
8.	UNKNOWN HYDROCARBON	14.74	15	J
9. 17302-28-2	NONANE,2,6-DIMETHYL-	15.67	13	J
10.	SUBSTITUTED CYCLOHEXANE	15.95	11	J

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GW-2

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) WATER Lab Sample ID: 321342

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN021342A12

Level: (low/med) LOW Date Received: 02/23/90

% Moisture: not dec. ____ Date Analyzed: 02/25/90

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	60	
75-09-2	Methylene Chloride	4	BJ
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	10	
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	15	
10061-02-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	1	J
100-42-5	Styrene	5	U
1330-20-7	Total Xylenes	3	J

FORM I VOA 1/87 Rev.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GW-2

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) WATER Lab Sample ID: 321342

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN021342A12

Level: (low/med) LOW Date Received: 02/23/90

% Moisture: not dec. ____ Date Analyzed: 02/25/90

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 5

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 108-87-2	CYCLOHEXANE,METHYL-	7.35	12	J
2.	UNKNOWN	14.19	6.0	J
3. 103-65-1	BENZENE,PROPYL-	14.45	6.0	J
4. 611-14-3	BENZENE,1-ETHYL-2-METHYL-	15.17	9.0	J
5. 526-73-8	BENZENE,1,2,3-TRIMETHYL-	15.54	5.0	J

FORM I VOA-TIC 1/87 Rev.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GW-1

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) WATER Lab Sample ID: 321344

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CR021344A12

Level: (low/med) LOW Date Received: 02/23/90

% Moisture: not dec. ____ Date Analyzed: 02/25/90

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

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

FORM I VOA 1/87 Rev.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GW-1

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) WATER Lab Sample ID: 321344

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CR021344A12

Level: (low/med) LOW Date Received: 02/23/90

% Moisture: not dec. ____ Date Analyzed: 02/25/90

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 10

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 110-82-7	CYCLOHEXANE	5.47	20	J
2. 108-87-2	CYCLOHEXANE,METHYL-	7.32	45	J
3. 5145-99-3	PROPANE,2-(ETHYLTHIO)-	8.74	7.0	J
4. 638-04-0	CYCLOHEXANE,1,3-DIMETHYL-,CI	9.00	9.0	J
5. 1678-91-7	CYCLOHEXANE,ETHYL-	10.65	12	J
6.	SUBSTITUTED CYCLOHEXANE	13.35	9.0	J
7. 17301-94-9	NONANE,4-METHYL-	14.17	14	J
8.	TRIMETHYLBENZENE	14.85	33	J
9. 611-14-3	BENZENE, 1-ETHYL-2-METHYL-	15.19	7.0	J
10.	TRIMETHYLBENZENE	15.54	56	J

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FIELDBLANK

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) WATER Lab Sample ID: 321292

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN021292A12

Level: (low/med) LOW Date Received: 02/23/90

% Moisture: not dec. ____ Date Analyzed: 02/25/90

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

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

FORM I VOA 1/87 Rev.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

FIELDBLANK

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) WATER Lab Sample ID: 321292

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN021292A12

Level: (low/med) LOW Date Received: 02/23/90

% Moisture: not dec. ____ Date Analyzed: 02/25/90

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I VOA-TIC 1/87 Rev.

LABORATORY NOTICE

On June 15, 1985 CompuChem Laboratories began adding D3-2,4-Dinitrophenol to all standards and samples. The purpose of this addition is to enable the laboratory to have higher and more consistent analytical sensitivity for the native 2,4-Dinitrophenol. The peak corresponding to the deuterated analog is clearly labeled on each RIC as D3#1 and will not be searched and reported as a tentatively identified compound (TIC). This compound is not being used as an internal or surrogate standard.

L. Richard Flynn,
Development Chemist

Bob Meierer,
Director of Quality Assurance

2. By fraction (VOA, SV, PEST) and by sample within each fraction – tabulated target compound results (Form I) and tentatively identified compounds (Form I, TIC) (VOA and SV only)

COMPUCHEM LABORATORIES

QUALITY ASSURANCE NOTICE

With the advent of the new organics Statement of Work (SOW 2/88, Revision: 9/88) participants in EPA's Contract Laboratory Program (CLP) are required to provide hard copy and diskette deliverables. CompuChem employs the Finnigan QA Formaster Program (Format A) to generate these requirements using data files from our analytical instrumentation. Currently, and independently, quantitation reports are generated by the instruments and are used with CompuChem-developed software to calculate results. The GC and GC/MS quantitation routines employ the convention of carrying at least one extra significant figure until the mathematical computations are completed. Then, the quantitative results are rounded to the SOW-required number of significant figures for reporting. In addition, the algorithm used by the Formaster Program is slightly different than that employed in Compuchem's software routines. Therefore, results presented in the supportive data supplied with our deliverables packages may be slightly different than those which appear on the hard copy forms generated via Formaster.

This notice serves to alert the end users of these data packages as to the reason why slight differences may be observed.

Robert E. Meierer

Robert E. Meierer
Director of Quality Assurance

COMPUCHEM LABORATORIES, INC. P.O. Box 12652 3308 Chapel Hill/Nelson Highway Research Triangle Park, NC 27709 (919) 549-8263

QUALITY ASSURANCE NOTICE

Specific guidelines are presented in the EPA CLP Organic Statement of Work for the positive qualitative identification of compounds through mass spectral interpretation. Applying these guidelines absolutely may not be possible when the nature of the sample is less than pure reference material. Where the mass spectral pattern of a compound to be identified demonstrates interferences or coelution from one or more additional compounds, either unknowns, internal standards, or surrogate standards, the "+" sign is added to the top of the dual spectra page.

Linda Fowler 4/10/89

Linda Fowler
Sr. Quality Assurance Specialist

Robert E. Meierer 4/12/89

Robert E. Meierer
Vice President, Quality Assurance

DATA REPORTING QUALIFIERS

For reporting results to EPA, the following result qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

VALUE - If the result is a value greater than or equal to the detection limit, report the value.

U - Indicates compound was analyzed but not detected. The sample quantitation limit must be corrected for dilution and for percent moisture. For example, 10 U for phenol in water if the sample final volume is the protocol-specified final volume. If a 1 to 10 dilution of extract is necessary, the reported limit is 100 U. For a soil sample, the value must also be adjusted for percent moisture. For example, if the sample had 24% moisture and a 1 to 10 dilution factor, the sample quantitation limit for phenol (330 U) would be corrected to:

$$\frac{(330\ U)}{D} \times df \qquad \text{where } D = \frac{100 - \%\ \text{moisture}}{100}$$

and df = dilution factor

$$\text{at 24\% moisture, } D = \frac{100-24}{100} = 0.76$$

$$\frac{(330\ U)}{.76} \times 10 = 4300\ U$$ rounded to the appropriate number of significant figures

For soil sample subjected to GPC clean-up procedures, the CRQL is also multiplied by 2, to account for the fact that only half of the extract is recovered.

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed, or when the mass spectral data indicate the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero. For example, if the sample quantitation limit is 10 ug/L, but a concentration is 3 ug/L is calculated, report it as 3J. The sample quantitation limit must be adjusted for both dilution and percent moisture as discussed for the U flag, so that if a sample with 24% moisture and a 1 to 10 dilution factor has a calculated concentration of 300 ug/L and a sample quantitation limit of 430 ug/kg, report the concentration as 300J on Form 1.

C - This flag applies to pesticide results where the identification has been confirmed by GC/MS. Single component pesticides ≥10 ng/ul in the final extract shall be confirmed by GC/MS.

B - This flag is used when the analyte is found in the associated blank as well as in the sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action. This flag must be used for a TIC as well as for a positively identified TCL compound.

E - This flag identifies compounds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis. This flag will not apply to pesticides/PCBs analyzed by GC/EC methods. If one or more compounds have a response greater than full scale, the sample or extract must be diluted and re-analyzed according to the specifications. All such compounds with a response greater than full scale should have the concentration flagged with an "E" on the Form I for the original analysis. If the dilution of the extract causes any compounds identified in the first analysis to be below the calibration range in the second analysis, then the results of both analyses shall be reported on separate Forms I. The Form I for the diluted sample shall have the "DL" suffix appended to the sample number.

D - This flag identifies all compounds identified in an analysis at a secondary dilution factor. If a sample or extract is re-analyzed at a higher dilution factor, as in the "E" flag above, the "DL" suffix is appended to the sample number on the Form I for the diluted sample and all concentration values reported on that Form I are flagged with the "D" flag.

A - This flag indicates that TIC is a suspected aldol-condensation product.

X - Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the Sample Data Summary Package and the Case Narrative. If more than one is required, use "Y" and "Z", as needed. If more than five qualifiers are required for a sample result, use the "X" flag to combine several flags, as needed. For instance, the "X" flag might combine the "A", "B", and "D" flags for some sample.

COMPUCHEM LABORATORIES

CHANGES TO THE EPA'S ORGANIC STATEMENT OF WORK (SOW) FOR THE CONTRACT LABORATORY PROGRAM (CLP)

Effective with samples received at CompuChem Laboratories, Inc. on April 3, 1989, the new "SOW for Organics Analysis; Multi-Media, Multi-Concentration" will be in effect. The new SOW is dated 2/88 with revisions dated 9/88.

EPA introduces modifications to the CLP SOW for a variety of reasons. They are:

- as a result of technical caucuses attended by representatives from EPA regional laboratories and the CLP, new or modified analytical methods are required,
- as a result of analytical data being supplied to the Agency by the CLP laboratories, QC acceptance criteria are updated and made a requirement of the program,
- as a result of requirements by the end users of the data (the EPA regions and the Program Office), changes to the deliverable requirements of the CLP are necessary.

As a service to our clients utilizing the EPA CLP SOW for their analytical needs, the following information is provided to point out the substantive changes between the new SOW and the previous one (10/86 with revisions through 8/87).

"KEY" CHANGES TO THE ORGANIC SOW

1) Wide bore capillary columns (internal diameter greater than 0.32 mm) are allowed for pesticide/PCB analysis in addition to packed columns. Fused silica capillary columns remain an optional confirmation column.

COMPUCHEM LABORATORIES, INC. P.O. Box 12652 3308 Chapel Hill/Nelson Highway Research Triangle Park, NC 27709 (919) 549-8263

2) The Sample Data Summary Package (SDSP) was introduced in the 10/86 SOW. The SDSP consists of copies of specific summary forms. In the 2/88 SOW, Form VIII, the Internal Standard Area Summary Form for volatile and semi-volatile analyses, has been added to the SDSP. Form VIII for volatiles and semi-volatiles is also to be included in the QC Summary Package.

3) A clarification for dealing with the three xylene isomers has been added. For total xylenes, where three isomers are quantified as two peaks, the calibration range of each peak should be considered separately, e.g., a diluted analysis is not required for total xylenes unless the concentration of either peak exceeds 200 ug/l.

4) The volatile target analyte, 2-butanone, is to be quantified against the first internal standard, bromochloromethane. In the prior SOW, 2-butanone was quantified against the second internal standard, 1,4-difluorobenzene.

5) Turnaround time for the delivery of data has been lowered from 40 days to 35 days for routine analytical service (RAS) work associated with the Superfund program. The turnaround time is calculated from the Validated Time of Sample Receipt (VTSR) of the last sample in the Sample Delivery Group (SDG).

The above represents the major changes in the new organic SOW for EPA's CLP. There are, of course, other minor changes which have not been addressed in this announcement. Of note, the hardcopy deliverable forms have not changed and, in fact, retain the same revision dates as the prior SOW.

If there are any questions concerning the information presented, please feel free to contact your account administrator at 1-800-833-3097.

Robert E. Meierer
Vice President of Quality Assurance

COMPUCHEM LABORATORIES, INC. P.O. Box 12652 3308 Chapel Hill/Nelson Highway Research Triangle Park, NC 27709 (919) 549-8263

PESTICIDES:
ALL SAMPLE AND QC FRACTIONS WERE EXTRACTED WITHIN HOLDING TIMES. NO TCLs WERE CONFIRMED BY DUAL COLUMN ANALYSES IN THESE SAMPLES. ALL SAMPLE AND QC FRACTIONS MET THE SURROGATE RECOVERY CRITERIA; HOWEVER, GW-2 AND GW-3 HAD NO SURROGATE RECOVERY DATA AVAILABLE DUE TO MATRIX EFFECTS.
THE MATRIX SPIKE DUPLICATES MET OVERALL ACCURACY AND PRECISION; HOWEVER, THE RELATIVE PERCENT DIFFERENCES FOR DIELDRIN AND HEPTACHLOR WERE JUST HIGH.

NOTE THAT THIS DATA PACKAGE WAS PAGINATED FOR REFERENCE AND ACCOUNTABILITY IN DECREASING NUMERICAL SEQUENCE.

NOTE THAT THE "X" FOOTNOTE DENOTES THE COELUTION OF INDISTINGUISHABLE ISOMERS.

Elisabeth R Nowell

ELISABETH ROBINS NOWELL
TECHNICAL REVIEWER
3-15-90

COMPUCHEM LABORATORIES

DETECTION LIMIT CALCULATION CLARIFICATION

To protect our G C columns from unnecessary contamination, soil samples prepared according to Caucus Protocol methods are routinely diluted 5 : 1. Through a series of experiments we have determined that our Instrument Detection Limit for pesticides is 5X lower than the EPA Contract Required Quantitation Limit (CRQL). We, therefore, only adjust our detection limits if the dilution necessary to analyze the sample is greater than 5 : 1. If the sample is diluted by a factor of X the detection limit is adjusted by X/5 instead of X.

Doug McCormack

Doug McCormack
Manager, GC Laboratory

Robert E. Meierer

Robert E. Meierer
Vice - President, Quality Assurance

COMPUCHEM LABORATORIES, INC. P.O. Box 12652 3308 Chapel Hill/Nelson Highway Research Triangle Park, NC 27709 (919) 549-8263

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SED-1MS

Lab Name: COMPUCHEM LABS Contract: (10-86)-REV

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) SOIL Lab Sample ID: 235796

Sample wt/vol: 30.0 (g/mL) G Lab File ID: GRD35796C21

Level: (low/med) LOW Date Received: 12/14/88

% Moisture: not dec. 65 dec. ____ Date Extracted: 12/29/88

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 01/04/89

GPC Cleanup: (Y/N) N pH: 7.8 Dilution Factor: 2.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	1900	U
111-44-4	bis(2-Chloroethyl)Ether	1900	U
95-57-8	2-Chlorophenol	1900	U
541-73-1	1,3-Dichlorobenzene	1900	U
106-46-7	1,4-Dichlorobenzene	1900	U
100-51-6	Benzyl Alcohol	1900	U
95-50-1	1,2-Dichlorobenzene	550	J
95-48-7	2-Methylphenol	1900	U
39638-32-9	bis(2-Chloroisopropyl)Ether	1900	U
106-44-5	4-Methylphenol	590	J
621-64-7	N-Nitroso-Di-n-Propylamine	1900	U
67-72-1	Hexachloroethane	1900	U
98-95-3	Nitrobenzene	1900	U
78-59-1	Isophorone	1900	U
88-75-5	2-Nitrophenol	1900	U
105-67-9	2,4-Dimethylphenol	1900	U
65-85-0	Benzoic Acid	310	J
111-91-1	bis(2-Chloroethoxy)Methane	1900	U
120-83-2	2,4-Dichlorophenol	1900	U
120-82-1	1,2,4-Trichlorobenzene	1900	U
91-20-3	Naphthalene	900	J
106-47-8	4-Chloroaniline	1900	U
87-68-3	Hexachlorobutadiene	1900	U
59-50-7	4-Chloro-3-Methylphenol	1900	U
91-57-6	2-Methylnaphthalene	630	J
77-47-4	Hexachlorocyclopentadiene	1900	U
88-06-2	2,4,6-Trichlorophenol	1900	U
95-95-4	2,4,5-Trichlorophenol	9100	U
91-58-7	2-Chloronaphthalene	1900	U
88-74-4	2-Nitroaniline	9100	U
131-11-3	Dimethyl Phthalate	1900	U
208-96-8	Acenaphthylene	1900	U
606-20-2	2,6-Dinitrotoluene	1900	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SED-1MS

Lab Name: COMPUCHEM LABS Contract: (10-86)-REV

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) SOIL Lab Sample ID: 235796

Sample wt/vol: 30.0 (g/mL) G Lab File ID: GRD35796C21

Level: (low/med) LOW Date Received: 12/14/88

% Moisture: not dec. 65 dec. ____ Date Extracted: 12/29/88

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 01/04/89

GPC Cleanup: (Y/N) N pH: 7.8 Dilution Factor: 2.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	9100	U
83-32-9	Acenaphthene	1900	U
51-28-5	2,4-Dinitrophenol	9100	U
100-02-7	4-Nitrophenol	9100	U
132-64-9	Dibenzofuran	1900	U
121-14-2	2,4-Dinitrotoluene	1900	U
84-66-2	Diethylphthalate	1900	U
7005-72-3	4-Chlorophenyl-phenylether	1900	U
86-73-7	Fluorene	350	J
100-01-6	4-Nitroaniline	9100	U
534-52-1	4,6-Dinitro-2-Methylphenol	9100	U
86-30-6	N-Nitrosodiphenylamine (1)	1900	U
101-55-3	4-Bromophenyl-phenylether	1900	U
118-74-1	Hexachlorobenzene	1900	U
87-86-5	Pentachlorophenol	9100	U
85-01-8	Phenanthrene	1300	J
120-12-7	Anthracene	1900	U
84-74-2	Di-n-Butylphthalate	1900	U
206-44-0	Fluoranthene	2200	
129-00-0	Pyrene	1900	U
85-68-7	Butylbenzylphthalate	1900	U
91-94-1	3,3'-Dichlorobenzidine	3800	U
56-55-3	Benzo(a)Anthracene	1100	J
218-01-9	Chrysene	1800	J
117-81-7	bis(2-Ethylhexyl)Phthalate	19000	B
117-84-0	Di-n-Octyl Phthalate	400	J
205-99-2	Benzo(b)Fluoranthene	4200	X
207-08-9	Benzo(k)Fluoranthene	4200	X
50-32-8	Benzo(a)Pyrene	1900	
193-39-5	Indeno(1,2,3-cd)Pyrene	1200	J
53-70-3	Dibenzo(a,h)Anthracene	640	J
191-24-2	Benzo(g,h,i)Perylene	2100	

(1) - Cannot be separated from Diphenylamine

FORM I SV-2 1/87 Rev.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SED-1MSD

Lab Name: COMPUCHEM LABS Contract: (10-86)-REV

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) SOIL Lab Sample ID: 235797

Sample wt/vol: 30.0 (g/mL) G Lab File ID: GDJ35797A20

Level: (low/med) LOW Date Received: 12/14/88

% Moisture: not dec. 65 dec. ____ Date Extracted: 01/05/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 01/06/89

GPC Cleanup: (Y/N) N pH: 7.8 Dilution Factor: 2.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	1900	U
111-44-4	bis(2-Chloroethyl)Ether	1900	U
95-57-8	2-Chlorophenol	1900	U
541-73-1	1,3-Dichlorobenzene	1900	U
106-46-7	1,4-Dichlorobenzene	1900	U
100-51-6	Benzyl Alcohol	1900	U
95-50-1	1,2-Dichlorobenzene	420	J
95-48-7	2-Methylphenol	1900	U
39638-32-9	bis(2-Chloroisopropyl)Ether	1900	U
106-44-5	4-Methylphenol	1900	U
621-64-7	N-Nitroso-Di-n-Propylamine	1900	U
67-72-1	Hexachloroethane	1900	U
98-95-3	Nitrobenzene	1900	U
78-59-1	Isophorone	1900	U
88-75-5	2-Nitrophenol	1900	U
105-67-9	2,4-Dimethylphenol	1900	U
65-85-0	Benzoic Acid	1200	J
111-91-1	bis(2-Chloroethoxy)Methane	1900	U
120-83-2	2,4-Dichlorophenol	1900	U
120-82-1	1,2,4-Trichlorobenzene	1900	U
91-20-3	Naphthalene	700	J
106-47-8	4-Chloroaniline	1900	U
87-68-3	Hexachlorobutadiene	1900	U
59-50-7	4-Chloro-3-Methylphenol	1900	U
91-57-6	2-Methylnaphthalene	460	J
77-47-4	Hexachlorocyclopentadiene	1900	U
88-06-2	2,4,6-Trichlorophenol	1900	U
95-95-4	2,4,5-Trichlorophenol	9100	U
91-58-7	2-Chloronaphthalene	1900	U
88-74-4	2-Nitroaniline	9100	U
131-11-3	Dimethyl Phthalate	1900	U
208-96-8	Acenaphthylene	210	J
606-20-2	2,6-Dinitrotoluene	1900	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SED-1MSD

Lab Name: COMPUCHEM LABS Contract: (10-86)-REV

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) SOIL Lab Sample ID: 235797

Sample wt/vol: 30.0 (g/mL) G Lab File ID: GDJ35797A20

Level: (low/med) LOW Date Received: 12/14/88

% Moisture: not dec. 65 dec. ____ Date Extracted: 01/05/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 01/06/89

GPC Cleanup: (Y/N) N pH: 7.8 Dilution Factor: 2.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	9100	U
83-32-9	Acenaphthene	1900	U
51-28-5	2,4-Dinitrophenol	9100	U
100-02-7	4-Nitrophenol	9100	U
132-64-9	Dibenzofuran	1900	U
121-14-2	2,4-Dinitrotoluene	1900	U
84-66-2	Diethylphthalate	1900	U
7005-72-3	4-Chlorophenyl-phenylether	1900	U
86-73-7	Fluorene	380	J
100-01-6	4-Nitroaniline	9100	U
534-52-1	4,6-Dinitro-2-Methylphenol	9100	U
86-30-6	N-Nitrosodiphenylamine (1)	1900	U
101-55-3	4-Bromophenyl-phenylether	1900	U
118-74-1	Hexachlorobenzene	1900	U
87-86-5	Pentachlorophenol	9100	U
85-01-8	Phenanthrene	830	J
120-12-7	Anthracene	310	J
84-74-2	Di-n-Butylphthalate	1900	U
206-44-0	Fluoranthene	1800	J
129-00-0	Pyrene	1900	U
85-68-7	Butylbenzylphthalate	1900	U
91-94-1	3,3'-Dichlorobenzidine	3800	U
56-55-3	Benzo(a)Anthracene	1200	J
218-01-9	Chrysene	2500	
117-81-7	bis(2-Ethylhexyl)Phthalate	19000	
117-84-0	Di-n-Octyl Phthalate	1900	U
205-99-2	Benzo(b)Fluoranthene	5300	X
207-08-9	Benzo(k)Fluoranthene	5300	X
50-32-8	Benzo(a)Pyrene	1100	J
193-39-5	Indeno(1,2,3-cd)Pyrene	740	J
53-70-3	Dibenzo(a,h)Anthracene	470	J
191-24-2	Benzo(g,h,i)Perylene	1200	J

(1) - Cannot be separated from Diphenylamine

COMPUCHEM LABORATORIES

20/MAR/90

Lawler Matusky & Skelly (LMS)
12th floor
One Blue Hill Plaza
PO BOX 1509
Pearl River, NY 10965

Subject: Report of Data - Account Number 273801

Enclosed herewith are the results of analytical work performed in accordance with the referenced account number.

This report covers 5 sample(s) appearing on the attached listing and their associated Quality Control Data.

Thank you for selecting CompuChem@ Laboratories for your sample analysis. If you should have questions or require additional analytical services please contact your representative at 1-919-549-8263.

Sincerely,

Elise L. Cobb

Elise L. Cobb
Supervisor, Report Deliverables

Attachment

COMPUCHEM LABORATORIES

20/MAR/90

Lawler Matusky & Skelly (LMS)
12th floor
One Blue Hill Plaza
PO BOX 1509
Pearl River, NY 10965

ACCOUNT #: 273801

CC#	SAMPLE-ID	RECEIPT DATE
320985	SW-1	2/22/90
320992	GW-3	2/22/90
321339	FIELDBLANK	2/23/90
321343	GW-2	2/23/90
321347	GW-1	2/23/90

TOTAL NUMBER OF SAMPLES = 5

COMPUCHEM LABORATORIES, INC. P.O. Box 12652 3308 Chapel Hill/Nelson Highway Research Triangle Park, NC 27709 (919) 549-8263

CASE NARRATIVE
Case No. 27380 SDG No. 193002
Contract No. 788

Client Sample No.: FIELD BLANK, GW-1, GW-2, GW-3, SW-1

This case consisted of five water samples analyzed for Total Analyte List (TAL) metals and cyanide. The samples were received intact on February 22 and 23, 1990 with the Chain-of-Custody Records. The enclosed cover page reflects Lawler Matusky & Skelly and CompuChem sample identifiers.

The associated quality control sample spike, SW-1S, was outside the control limits for arsenic, lead, selenium, and thallium. These analytes received the 'N' for all samples. Iron fell outside of the duplicate, SW-1D, control limits, therefore all of the samples were flagged with an '*' for iron.

A serial dilution was performed on sample GW-1L. The adjusted sample concentrations were within 10% of the original concentrations for all analytes whose initial sample result was greater than fifty times the Instrument Detection Limit.

The concentration of lead was determined by Method of Standard Addition in samples GW-3 and SW-1, therefore the concentrations were flagged with an 'S'.

In one or more of the samples, the concentrations of analytes fell between, below, and above the Instrument Detection Limits (IDLs) and the Contract Required Detection Limits (CRDLs).

Anna Feather
Anna Feather
Technical Reviewer
March 20, 1990

Note: This report is paginated for reference and accountability in numerical sequence.

U.S. EPA - CLP
COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: COMPUCHEM LABORATORIES Contract: 788

Lab Code: COMPU Case No.: 27380 SAS No.: _____ SDG No.: 193002

SOW No.: 7/88

Client Sample No.	Lab Sample ID
FIELDBLANK	321339
GW-1	321347
GW-2	321343
GW-3	320992
LCS	320988
Prep Blank	322426
Prep Blank	322429
SW-1	320985
SW-1D	320987
SW-1D	320990
SW-1S	320989
SW-1S	320986

Were ICP interelement corrections applied? Yes/No YES
Were ICP background corrections applied? Yes/No YES
If yes-were raw data generated before application of background corrections? Yes/No NO

Comments:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: [signature] for RLB Name: Richard L. Bloom

Date: 3/12/90 Title: Director Env. Operations

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

FIELDBLANK

Lab Name: COMPUCHEM LABORATORIES Contract: 788

Lab Code: COMPU Case No.: 27380 SAS No.: _____ SDG No.: 193002

Matrix (soil/water): WATER Lab Sample ID: 321339

Level (low/med): LOW Date Received: 02/23/90

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	16.0	U		P
7440-36-0	Antimony	21.0	U		P
7440-38-2	Arsenic	3.0	U	N	F
7440-39-3	Barium	1.0	U		P
7440-41-7	Beryllium	1.0	U		P
7440-43-9	Cadmium	5.0	U		P
7440-70-2	Calcium	36.3	B		P
7440-47-3	Chromium	5.0	U		P
7440-48-4	Cobalt	10.7	B		P
7440-50-8	Copper	4.0	U		P
7439-89-6	Iron	20.1	B	*	P
7439-92-1	Lead	2.0	U	N	F
7439-95-4	Magnesium	56.0	U		P
7439-96-5	Manganese	3.0	B		P
7439-97-6	Mercury	.20	U		CV
7440-02-0	Nickel	29.0	U		P
7440-09-7	Potassium	1260	U		P
7782-49-2	Selenium	2.0	U	N	F
7440-22-4	Silver	4.0	U		P
7440-23-5	Sodium	1490	U		P
7440-28-0	Thallium	2.0	U	N	F
7440-62-2	Vanadium	8.2	B		P
7440-66-6	Zinc	9.9	B		P
	Cyanide	10.0	U		AS

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

FORM 1 - PAGE 1

FORM I - IN 7/88

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

GW-1

Lab Name: COMPUCHEM LABORATORIES Contract: 788

Lab Code: COMPU Case No.: 27380 SAS No.: _____ SDG No.: 193002

Matrix (soil/water): WATER Lab Sample ID: 321347

Level (low/med): LOW Date Received: 02/23/90

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4130			P
7440-36-0	Antimony	28.7	B		P
7440-38-2	Arsenic	3.7	B	N	F
7440-39-3	Barium	200	B		P
7440-41-7	Beryllium	1.0	U		P
7440-43-9	Cadmium	5.0	U		P
7440-70-2	Calcium	85600			P
7440-47-3	Chromium	11.3			P
7440-48-4	Cobalt	19.8	B		P
7440-50-8	Copper	31.7			P
7439-89-6	Iron	62400		*	P
7439-92-1	Lead	10.6		N	F
7439-95-4	Magnesium	27100			P
7439-96-5	Manganese	2550			P
7439-97-6	Mercury	.20	U		CV
7440-02-0	Nickel	29.0	U		P
7440-09-7	Potassium	3030	B		P
7782-49-2	Selenium	10.0	U	EN	F
7440-22-4	Silver	4.0	U		P
7440-23-5	Sodium	42400			P
7440-28-0	Thallium	2.0	U	WN	F
7440-62-2	Vanadium	21.7	B		P
7440-66-6	Zinc	55.3			P
	Cyanide	10.0	U		AS

Color Before: YELLOW Clarity Before: CLOUDY Texture: _____

Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:

FORM 1 - PAGE 2

THE FOLLOWING FURNACE ANALYTES ARE ESTIMATED DUE TO INTERFERENCE:

SELENIUM

FORM I - IN 7/88

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

GW-2

Lab Name: COMPUCHEM LABORATORIES Contract: 788

Lab Code: COMPU Case No.: 27380 SAS No.: _____ SDG No.: 193002

Matrix (soil/water): WATER Lab Sample ID: 321343

Level (low/med): LOW Date Received: 02/23/90

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2450			P
7440-36-0	Antimony	38.2	B		P
7440-38-2	Arsenic	3.0	U	N	F
7440-39-3	Barium	927			P
7440-41-7	Beryllium	1.0	U		P
7440-43-9	Cadmium	5.0	U		P
7440-70-2	Calcium	269000			P
7440-47-3	Chromium	13.1			P
7440-48-4	Cobalt	10.4	B		P
7440-50-8	Copper	4.0	U		P
7439-89-6	Iron	18400		*	P
7439-92-1	Lead	15.5		N	F
7439-95-4	Magnesium	40000			P
7439-96-5	Manganese	2260			P
7439-97-6	Mercury	.20	U		CV
7440-02-0	Nickel	29.0	U		P
7440-09-7	Potassium	47000			P
7782-49-2	Selenium	10.0	U	EN	F
7440-22-4	Silver	5.7	B		P
7440-23-5	Sodium	89600			P
7440-28-0	Thallium	2.0	U	WN	F
7440-62-2	Vanadium	23.6	B		P
7440-66-6	Zinc	34.9			P
	Cyanide	10.0	U		AS

Color Before: YELLOW Clarity Before: CLOUDY Texture: _____

Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:

FORM 1 - PAGE 3

THE FOLLOWING FURNACE ANALYTES ARE ESTIMATED DUE TO INTERFERENCE:

SELENIUM

FORM I - IN 7/88

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

GW-3

Lab Name: COMPUCHEM LABORATORIES Contract: 788

Lab Code: COMPU Case No.: 27380 SAS No.: _____ SDG No.: 193002

Matrix (soil/water): WATER Lab Sample ID: 320992

Level (low/med): LOW Date Received: 02/22/90

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3220			P
7440-36-0	Antimony	21.0	U		P
7440-38-2	Arsenic	3.0	B	N	F
7440-39-3	Barium	881			P
7440-41-7	Beryllium	1.0	U		P
7440-43-9	Cadmium	5.0	U		P
7440-70-2	Calcium	188000			P
7440-47-3	Chromium	8.6	B		P
7440-48-4	Cobalt	6.0	B		P
7440-50-8	Copper	4.0	U		P
7439-89-6	Iron	22900		*	P
7439-92-1	Lead	12.0		SN	F
7439-95-4	Magnesium	46700			P
7439-96-5	Manganese	2130			P
7439-97-6	Mercury	.20	U		CV
7440-02-0	Nickel	29.0	U		P
7440-09-7	Potassium	144000			P
7782-49-2	Selenium	10.0	U	EN	F
7440-22-4	Silver	4.0	U		P
7440-23-5	Sodium	147000			P
7440-28-0	Thallium	2.0	U	WN	F
7440-62-2	Vanadium	21.5	B		P
7440-66-6	Zinc	44.0			P
	Cyanide	10.0	U		AS

Color Before: YELLOW Clarity Before: CLOUDY Texture: ___

Color After: YELLOW Clarity After: CLEAR Artifacts: ___

Comments:

FORM 1 - PAGE 4

THE FOLLOWING FURNACE ANALYTES ARE ESTIMATED DUE TO INTERFERENCE:

SELENIUM

FORM I - IN 7/88

COMPUCHEM LABORATORIES

RECEIVED
MAR 16 1990
LMS ENGINEERS

15/MAR/90

Lawler Matusky & Skelly (LMS)
12th floor
One Blue Hill Plaza
PO BOX 1509
Pearl River, NY 10965

Subject: Report of Data - Account Number 273801

Enclosed herewith are the results of analytical work and associated Quality Control data for the samples received by CompuChem@ under the referenced account number.

As you know, CLP service is performed in accordance with EPA methodologies as defined for the National Contract Laboratory Program; 'SOW For Organic Analysis; Multi-Media, Multi-Concentration' effective 2/88, revision 9/88. Your original data has been stored and is available for future reference.

Thank you for selecting CompuChem@ Laboratories for your sample analysis. We would like to continue providing you analytical support and services in the future. If you should have questions or require additional analytical services, please contact your representative at 1-919-549-8263.

Sincerely,

Elise L. Cobb

Elise L. Cobb
Supervisor, Report Deliverables

Attachment

COMPUCHEM LABORATORIES

15/MAR/90

Lawler Matusky & Skelly (LMS)
12th floor
One Blue Hill Plaza
PO BOX 1509
Pearl River, NY 10965

ACCOUNT #: 273801

CC#	SAMPLE-ID	RECEIPT DATE
320974	SW-1	2/22/90
320984	GW-3	2/22/90
321292	FIELDBLANK	2/23/90
321342	GW-2	2/23/90
321344	GW-1	2/23/90
321580	TRIPBLANK	2/23/90

TOTAL NUMBER OF SAMPLES = 6

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

SW-1

Lab Name: COMPUCHEM LABORATORIES Contract: 788

Lab Code: COMPU Case No.: 27380 SAS No.: _____ SDG No.: 193002

Matrix (soil/water): WATER Lab Sample ID: 320985

Level (low/med): LOW Date Received: 02/22/90

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	475			P
7440-36-0	Antimony	21.0	U		P
7440-38-2	Arsenic	3.0	U	N	F
7440-39-3	Barium	101	B		P
7440-41-7	Beryllium	1.0	U		P
7440-43-9	Cadmium	5.0	U		P
7440-70-2	Calcium	88300			P
7440-47-3	Chromium	5.0	U		P
7440-48-4	Cobalt	3.3	B		P
7440-50-8	Copper	8.7	B		P
7439-89-6	Iron	1140		*	P
7439-92-1	Lead	69.5		SN	F
7439-95-4	Magnesium	8760			P
7439-96-5	Manganese	27.4			P
7439-97-6	Mercury	.20	U		CV
7440-02-0	Nickel	29.0	U		P
7440-09-7	Potassium	23000			P
7782-49-2	Selenium	10.0	U	WN	F
7440-22-4	Silver	4.0	U		P
7440-23-5	Sodium	14200			P
7440-28-0	Thallium	2.0	U	WN	F
7440-62-2	Vanadium	4.1	B		P
7440-66-6	Zinc	113			P
	Cyanide	10.0	U		AS

Color Before: YELLOW Clarity Before: CLOUDY Texture: _____

Color After: YELLOW Clarity After: CLEAR Artifacts: _____

Comments:

FORM 1 - PAGE 5

FORM I - IN 7/88

COMPUCHEM LABORATORIES, INC. P.O. Box 12652 3308 Chapel Hill/Nelson Highway Research Triangle Park, NC 27709 (919) 549-8263

CLP CASE NARRATIVE CASE # 19300
CONTRACT # 2-88 (REVS) SDG# 01
COMPUCHEM LABORATORIES INC.

SAMPLES: FIELD BLANK, GW-1, GW-2, GW-3, SW-1, TRIP BLANK

This portion of Case # 19300 consisted of six liquid samples for volatile analysis and five samples for semivolatile and pesticide analysis. They were received intact on 2/22/90 and 2/23/90 via Federal Express in properly sealed shipping containers with traffic reports.

This narrative is concerned only with the volatile fractions of the above samples.

VOLATILES:
All volatile fractions were analyzed within holding time requirements. Samples FIELD BLANK and TRIP BLANK contained only methylene chloride, which was also detected in the associated instrument blank. Sample GW-1 contained methylene chloride, total 1,2-dichloroethene, 1,2-dichloropropane, benzene, and xylenes. Sample GW-2 contained chloroethane, methylene chloride, 1,1-dichloroethane, benzene, ethylbenzene, and xylenes. Sample GW-3 contianed vinyl chloride, chloroethane, 1,1-dichloroethane, 1,2-dichloroethane, total 1,2-dichloroethene, benzene, toluene, and xylenes. Sample SW-1 contained acetone, 1,1-dichloroethane, trichloroethene, and total 1,2-dichloroethene. All surrogates met recovery criteria. The matrix spike/matrix spike duplicate results were acceptable.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Note: This report was paginated for reference and accountability in decreasing numerical sequence.

Sarah A. Hubbard 3/9/90
Technical Reviewer

COMPUCHEM LABORATORIES, INC. P.O. Box 12652 3308 Chapel Hill/Nelson Highway Research Triangle Park, NC 27709 (919) 549-8263

CASE NARRATIVE CASE #19300
SDG #01 CONTRACT #(2-88)REVS
COMPUCHEM LABORATORIES, IN.

SAMPLE NUMBERS: FIELD BLANK GW-1 GW-2 GW -3 SW-1

FOR THE RECEIVING INFORMATION SEE THE NARRATIVE SUMMARIZING THE VOLATILE ANALYSES. THIS NARRATIVE PERTAINS TO THE SEMIVOLATILE AND PESTICIDE ANALYSES.

SEMIVOLATILES:
ALL SAMPLE AND QC FRACTIONS WERE EXTRACTED WITHIN HOLDING TIMES; EXCEPT SAMPLE GW-3 WHICH FAILED INITIALLY TO MEET QC CRITERIA. SAMPLE GW-3 COULD NOT BE RE-EXTRACTED WITHIN HOLDING TIMES. THOSE SAMPLES WHICH CONTAINED TARGET LIST COMPOUNDS (TCLs) CONTAINED A VARIETY OF COMPOUNDS INCLUDING: POLYAROMATIC HYDROCARBONS, BENZOIC ACID, DICHLOROBENZENE, ALKYL PHENOLS, AND PHTHALATES. SAMPLE GW-3 CONTAINED TCLs AT LEVELS OUTSIDE THE ANALYTICAL RANGE AND REQUIRED ANALYSIS AT A 10 TO 1 DILUTION. THE LESS DILUTE ANALYSIS WAS ALSO REPORTED IN ORDER TO PROVIDE AS MUCH INFORMATION AS POSSIBLE. FURTHERMORE IN THE LESS DILUTE ANALYSIS THE RECONSTRUCTED ION CHROMATOGRAM WAS SATURATED FROM 900 TO 1200 SCANS; THEREFORE, THE TENTATIVELY IDENTIFIED COMPOUNDS (TICs) ELUTING WITHIN THIS RANGE SHOULD BE IGNORED, AND THOSE FROM THE DILUTE ANALYSIS SHOULD BE SUBSTITUTED. ONLY SAMPLES GW-1, GW-2, AND GW-3 CONTAINED NUMEROUS TICs. ALL SAMPLE AND QC FRACTIONS MET THE SURROGATE RECOVERY CRITERIA EXCEPT GW-1 WHICH FAILED ACID SURROGATE RECOVERY CRITERIA DUE TO A MATRIX EFFECT. ALSO GW2, GW3, GW3DL, HAD HIGH RECOVERIES FOR D5-NITROBENZENE. ALSO GW-2 HAD A HIGH RECOVERY FOR TRIBROMOPHENOL. THE MATRIX SPIKE DUPLICATES MET ALL ACCURACY AND PRECISION CRITERIA; HOWEVER, PENTACHLOROPHENOL HAD A SLIGHTLY HIGH PERCENT RECOVERY IN THE MATRIX SPIKE DUPLICATE. ALSO THE RELATIVE PERCENT DIFFERENCES FOR 1,4-DICHLOROBENZENE, N-NITROSO-DI-N-PROPYLAMINE, 1,2,4-TRICHLOROBENZENE, ACENAPHTHENE, AND PYRENE JUST SLIGHTLY HIGH. FOR 4-CHLORO-3-METHYLPHENOL THE RELATIVE PERCENT DIFFERENCE REPRESENTED IS INCORRECT. THE ACTUAL RELATIVE PERCENT DIFFERENCE OF 42 PASSES. THE DESCREPANCY IS DUE TO THE DIFFERENT ROUNDING PROCEDURES USED BY FORMASTER THE PROGRAM USED IN PREPARING THE DELIVERABLES.

I. SAMPLE DATA SUMMARY PACKAGE

The Sample Data Summary Package shall contain data for samples in one Sample Delivery Group of the Case, as follows:

1. Case Narrative

2. By fraction (VOA, SV, PEST) and by sample within each fraction – tabulated target compound results (Form I) and tentatively identified compounds (Form I, TIC) (VOA and SV only)

3. By fraction (VOA, SV, PEST) – surrogate spike analysis results (Form II) by matrix (Water and/or Soil) and for soil, by concentration (Low or Medium)

4. By fraction (VOA, SV, PEST) – matrix spike/matrix spike duplicate results (Form III)

5. By fraction (VOA, SV, PEST) – blank data (Form IV) and tabulated results (Form I) including tentatively identified compounds (Form I, TIC) (VOA and SV only)

6. By fraction (VOA and SV only) – internal standard area data (Form VIII)

CASE#: 19300 SDG#: 01 SAS#:

1. Case Narrative

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SED-1

Lab Name: COMPUCHEM LABS Contract: (10-86)-REV

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) SOIL Lab Sample ID: 235795

Sample wt/vol: 30.0 (g/mL) G Lab File ID: GRD35795C21

Level: (low/med) LOW Date Received: 12/14/88

% Moisture: not dec. 65 dec. ____ Date Extracted: 12/29/88

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 01/04/89

GPC Cleanup: (Y/N) N pH: 7.8 Dilution Factor: 2.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	9100	U
83-32-9	Acenaphthene	1900	U
51-28-5	2,4-Dinitrophenol	9100	U
100-02-7	4-Nitrophenol	9100	U
132-64-9	Dibenzofuran	1900	U
121-14-2	2,4-Dinitrotoluene	1900	U
84-66-2	Diethylphthalate	1900	U
7005-72-3	4-Chlorophenyl-phenylether	1900	U
86-73-7	Fluorene	1900	U
100-01-6	4-Nitroaniline	9100	U
534-52-1	4,6-Dinitro-2-Methylphenol	9100	U
86-30-6	N-Nitrosodiphenylamine (1)	1900	U
101-55-3	4-Bromophenyl-phenylether	1900	U
118-74-1	Hexachlorobenzene	1900	U
87-86-5	Pentachlorophenol	9100	U
85-01-8	Phenanthrene	700	J
120-12-7	Anthracene	1900	U
84-74-2	Di-n-Butylphthalate	1900	U
206-44-0	Fluoranthene	1500	J
129-00-0	Pyrene	2600	
85-68-7	Butylbenzylphthalate	1900	U
91-94-1	3,3'-Dichlorobenzidine	3800	U
56-55-3	Benzo(a)Anthracene	860	J
218-01-9	Chrysene	1300	J
117-81-7	bis(2-Ethylhexyl)Phthalate	14000	B
117-84-0	Di-n-Octyl Phthalate	1900	U
205-99-2	Benzo(b)Fluoranthene	2800	X
207-08-9	Benzo(k)Fluoranthene	2800	X
50-32-8	Benzo(a)Pyrene	1100	J
193-39-5	Indeno(1,2,3-cd)Pyrene	880	J
53-70-3	Dibenzo(a,h)Anthracene	1900	U
191-24-2	Benzo(g,h,i)Perylene	1600	J

(1) - Cannot be separated from Diphenylamine

FORM I SV-2 1/87 Rev.

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SED-1

Lab Name: COMPUCHEM LABS Contract: (10-86)-REV

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) SOIL Lab Sample ID: 235795

Sample wt/vol: 30.0 (g/mL) G Lab File ID: GRD35795C21

Level: (low/med) LOW Date Received: 12/14/88

% Moisture: not dec. 65 dec. ____ Date Extracted: 12/29/88

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 01/04/89

GPC Cleanup: (Y/N) N pH: 7.8 Dilution Factor: 2.0

Number TICs found: 20

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 6 @	UNKNOWN HYDROCARBON	13.42	11000	J
2. 700,000	UNKNOWN HYDROCARBON	15.22	55000	J
3.	UNKNOWN	15.34	93000	J
4.	UNKNOWN	15.45	97000	J
5.	UNKNOWN HYDROCARBON	15.60	230000	J
6.	UNKNOWN HYDROCARBON	15.72	150000	J
7.	UNKNOWN	15.87	160000	J
8. 14 @	UNKNOWN	15.92	120000	J
9.	UNKNOWN	16.00	150000	J
10. 1,772,000	UNKNOWN	16.15	290000	J
11.	UNKNOWN	16.27	290000	J
12.	UNKNOWN HYDROCARBON	16.44	270000	J
13.	UNKNOWN	16.60	160000	J
14.	UNKNOWN	16.72	99000	J
15.	UNKNOWN	16.97	170000	J
16.	UNKNOWN	17.17	42000	J
17.	UNKNOWN	17.22	38000	J
18.	UNKNOWN HYDROCARBON	17.30	74000	J
19.	UNKNOWN	17.79	34000	J
20.	UNKNOWN	18.00	30000	J

FORM I SV-TIC 1/87 Rev.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SED-1

Lab Name: COMPUCHEM LABS Contract: (10-86)-REV

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) SOIL Lab Sample ID: 235795

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GR035795A18

Level: (low/med) LOW Date Received: 12/14/88

% Moisture: not dec. 65 Date Analyzed: 12/18/88

Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 354-23-4	ETHANE,1,2-DICHLORO-1,1,2-TR	9.25	29	J

FORM I VOA-TIC 1/87 Rev.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SED-1

Lab Name: COMPUCHEM LABS Contract: (10-86)-REV

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) SOIL Lab Sample ID: 235795

Sample wt/vol: 30.0 (g/mL) G Lab File ID: GRD35795C21

Level: (low/med) LOW Date Received: 12/14/88

% Moisture: not dec. 65 dec. ____ Date Extracted: 12/29/88

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 01/04/89

GPC Cleanup: (Y/N) N pH: 7.8 Dilution Factor: 2.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	1900	U
111-44-4	bis(2-Chloroethyl)Ether	1900	U
95-57-8	2-Chlorophenol	1900	U
541-73-1	1,3-Dichlorobenzene	1900	U
106-46-7	1,4-Dichlorobenzene	1900	U
100-51-6	Benzyl Alcohol	1900	U
95-50-1	1,2-Dichlorobenzene	350	J
95-48-7	2-Methylphenol	1900	U
39638-32-9	bis(2-Chloroisopropyl)Ether	1900	U
106-44-5	4-Methylphenol	1900	U
621-64-7	N-Nitroso-Di-n-Propylamine	1900	U
67-72-1	Hexachloroethane	1900	U
98-95-3	Nitrobenzene	1900	U
78-59-1	Isophorone	1900	U
88-75-5	2-Nitrophenol	1900	U
105-67-9	2,4-Dimethylphenol	1900	U
65-85-0	Benzoic Acid	9100	U
111-91-1	bis(2-Chloroethoxy)Methane	1900	U
120-83-2	2,4-Dichlorophenol	1900	U
120-82-1	1,2,4-Trichlorobenzene	1900	U
91-20-3	Naphthalene	530	J
106-47-8	4-Chloroaniline	1900	U
87-68-3	Hexachlorobutadiene	1900	U
59-50-7	4-Chloro-3-Methylphenol	1900	U
91-57-6	2-Methylnaphthalene	360	J
77-47-4	Hexachlorocyclopentadiene	1900	U
88-06-2	2,4,6-Trichlorophenol	1900	U
95-95-4	2,4,5-Trichlorophenol	9100	U
91-58-7	2-Chloronaphthalene	1900	U
88-74-4	2-Nitroaniline	9100	U
131-11-3	Dimethyl Phthalate	1900	U
208-96-8	Acenaphthylene	1900	U
606-20-2	2,6-Dinitrotoluene	1900	U

FORM I SV-1 1/87 Rev.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SS-2MSD

Lab Name: COMPUCHEM LABORATORIES Contract: (10-86)-REV

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 1

Matrix: (soil/water) SOIL Lab Sample ID: 232977

Sample wt/vol: 30.0 (g/mL) G Lab File ID: _____

Level: (low/med) LOW Date Received: 12/03/88

% Moisture: not dec. 25 dec. ____ Date Extracted: 12/06/88

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 12/17/88

GPC Cleanup: (Y/N) N pH: 8.5 Dilution Factor: 20.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	210	U
319-85-7	beta-BHC	210	U
319-86-8	delta-BHC	210	U
58-89-9	gamma-BHC (Lindane)	210	U
76-44-8	Heptachlor	210	U
309-00-2	Aldrin	210	U
1024-57-3	Heptachlor epoxide	210	U
959-98-8	Endosulfan I	210	U
60-57-1	Dieldrin	430	U
72-55-9	4,4'-DDE	430	U
72-20-8	Endrin	430	U
33213-65-9	Endosulfan II	430	U
72-54-8	4,4'-DDD	430	U
1031-07-8	Endosulfan sulfate	430	U
50-29-3	4,4'-DDT	430	U
72-43-5	Methoxychlor	2100	U
53494-70-5	Endrin ketone	430	U
5103-71-9	alpha-Chlordane	2100	U
5103-74-2	gamma-Chlordane	2100	U
8001-35-2	Toxaphene	4300	U
12674-11-2	Aroclor-1016	2100	U
11104-28-2	Aroclor-1221	2100	U
11141-16-5	Aroclor-1232	2100	U
53469-21-9	Aroclor-1242	2100	U
12672-29-6	Aroclor-1248	2100	U
11097-69-1	Aroclor-1254	4300	U
11096-82-5	Aroclor-1260	20000	

FORM I PEST 1/87 Rev.

SAMPLE DATA SUMMARY

UMS Rec'd 1-3-89

RECRA ENVIRONMENTAL, INC.

CHAIN OF CUSTODY RECORD

PROJECT NO: 576-002

SITE NAME: Quanta Resources

SAMPLERS (SIGNATURE): [signature]

STATION NO	DATE	TIME	COMP	GRAB	STATION LOCATION	NO OF CONTAINERS	VOCs TCL+10	Epto Metals only	RCB 80880	Ignitability		REMARKS
SS-1	12-1-88	1006		✓	Quanta Resources Soil	4	2	2	232968 232981			Recra #s: 12711, 12712, 12713, 12714
SS-2		1100-1156		✓		4	2	2	232975	232982		Recra #: 12716, 12717, 12718, 12725
SS-2 MS				✓		4	2	2				Recra # 12721, 12722, 12720, 12726
SS-2 MSD				✓		4	2	2				RECRA # 12723, 12724, 12719, 12727
SS-3		1430-1440		✓		4	2	2	232979	232989		Recra # 12732, 12733, 12734, 12735
SS-4		1520-1530		✓		4	2	2	232980	232990		Recra # 12736, 12737, 12738, 12739
Drummed cuttings		1305-1335	✓		Quanta Resources Well Cuttings	3		1	1	1	232991	Recra # 12728, 12729, 12730 232997 232998
Drummed Decon H_2O		1350	✓		Quanta Resources Decon H_2O	1			1			Recra # 12731 232999

Received as one sample under SS-

Id used for Drummed cuttings is Drum Cut and id used for Drummed Decon is Drum Decon 12-3-88

RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED BY (SIGNATURE)	RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED BY (SIGNATURE)
[signature]	12-2-88	1455					
RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED BY (SIGNATURE)	RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED BY (SIGNATURE)
RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED FOR LABORATORY BY (SIGNATURE) Joan Purdie	DATE 12-3-88	TIME 0900	REMARKS Samples received in good condition 12-3-88	

Distribution: Original accompanies shipment; copy to coordinator field files

10

PESTICIDE/PCB IDENTIFICATION

EPA SAMPLE NO.

SS-4

Lab Name: COMPUCHEM LABORATORIES Contract: (10-86)-REV

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 1

GC Column ID (1): 2250/2401 GC Column ID (2): OV-101

Instrument ID (1): 12 Instrument ID (2): 02

Lab Sample ID: 232980

Lab File ID: 35032980C06 (only if confirmed by GC/MS)

PESTICIDE/PCB	RETENTION TIME		RT WINDOW OF STANDARD FROM	TO	QUANT? (Y/N)	GC/MS? (Y/N)
01 Aroclor-1260	Column 1	19.46	19.00	19.78	Y	~~N~~ Y
02	Column 2	18.70	18.28	19.03	N	~~N~~ Y

Comments: _____

page 1 of 1

FORM X PEST 1/87 Rev.

SAMPLE DATA SUMMARY

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SS-2MS

Lab Name: COMPUCHEM LABORATORIES Contract: (10-86)-REV

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 1

Matrix: (soil/water) SOIL Lab Sample ID: 232976

Sample wt/vol: 30.0 (g/mL) G Lab File ID: _____

Level: (low/med) LOW Date Received: 12/03/88

% Moisture: not dec. 25 dec. ____ Date Extracted: 12/06/88

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 12/17/88

GPC Cleanup: (Y/N) N pH: 8.5 Dilution Factor: 20.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	210	U
319-85-7	beta-BHC	210	U
319-86-8	delta-BHC	210	U
58-89-9	gamma-BHC (Lindane)	210	U
76-44-8	Heptachlor	210	U
309-00-2	Aldrin	210	U
1024-57-3	Heptachlor epoxide	210	U
959-98-8	Endosulfan I	210	U
60-57-1	Dieldrin	430	U
72-55-9	4,4'-DDE	430	U
72-20-8	Endrin	430	U
33213-65-9	Endosulfan II	430	U
72-54-8	4,4'-DDD	430	U
1031-07-8	Endosulfan sulfate	430	U
50-29-3	4,4'-DDT	430	U
72-43-5	Methoxychlor	2100	U
53494-70-5	Endrin ketone	430	U
5103-71-9	alpha-Chlordane	2100	U
5103-74-2	gamma-Chlordane	2100	U
8001-35-2	Toxaphene	4300	U
12674-11-2	Aroclor-1016	2100	U
11104-28-2	Aroclor-1221	2100	U
11141-16-5	Aroclor-1232	2100	U
53469-21-9	Aroclor-1242	2100	U
12672-29-6	Aroclor-1248	2100	U
11097-69-1	Aroclor-1254	4300	U
11096-82-5	Aroclor-1260	18000	

FORM I PEST 1/87 Rev.

10

PESTICIDE/PCB IDENTIFICATION

EPA SAMPLE NO.

SS-3

Lab Name: COMPUCHEM LABORATORIES Contract: (10-86)-REV

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 1

GC Column ID (1): 2250/2401 GC Column ID (2): OV-101

Instrument ID (1): 12 Instrument ID (2): 02

Lab Sample ID: 232979

Lab File ID: _____ (only if confirmed by GC/MS)

PESTICIDE/PCB	RETENTION TIME		RT WINDOW OF STANDARD FROM	TO	QUANT? (Y/N)	GC/MS? (Y/N)
01 4,4'-DDE	Column 1	7.27	7.10	7.39	N	N
02	Column 2	7.00	6.88	7.16	Y	N
03 Aroclor-1260	Column 1	18.99	18.45	19.21	Y	N
04	Column 2	18.59	18.19	18.93	N	N

Comments: _____

page 1 of 1

FORM X PEST 1/87 Rev.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SS-4

Lab Name: COMPUCHEM LABORATORIES Contract: (10-86)-REV

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 1

Matrix: (soil/water) SOIL Lab Sample ID: 232980

Sample wt/vol: 30.0 (g/mL) G Lab File ID: PJ0398OC06

Level: (low/med) LOW Date Received: 12/03/88

% Moisture: not dec. 37 dec. ____ Date Extracted: 12/06/88

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 12/13/88

GPC Cleanup: (Y/N) N pH: 9.3 Dilution Factor: 20.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	250	U
319-85-7	beta-BHC	250	U
319-86-8	delta-BHC	250	U
58-89-9	gamma-BHC (Lindane)	250	U
76-44-8	Heptachlor	250	U
309-00-2	Aldrin	250	U
1024-57-3	Heptachlor epoxide	250	U
959-98-8	Endosulfan I	250	U
60-57-1	Dieldrin	510	U
72-55-9	4,4'-DDE	510	U
72-20-8	Endrin	510	U
33213-65-9	Endosulfan II	510	U
72-54-8	4,4'-DDD	510	U
1031-07-8	Endosulfan sulfate	510	U
50-29-3	4,4'-DDT	510	U
72-43-5	Methoxychlor	2500	U
53494-70-5	Endrin ketone	510	U
5103-71-9	alpha-Chlordane	2500	U
5103-74-2	gamma-Chlordane	2500	U
8001-35-2	Toxaphene	5100	U
12674-11-2	Aroclor-1016	2500	U
11104-28-2	Aroclor-1221	2500	U
11141-16-5	Aroclor-1232	2500	U
53469-21-9	Aroclor-1242	2500	U
12672-29-6	Aroclor-1248	2500	U
11097-69-1	Aroclor-1254	5100	U
11096-82-5	Aroclor-1260	19000	C 1/4/89

FORM I PEST 1/87 Rev.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SS-2

Lab Name: COMPUCHEM LABORATORIES Contract: (10-86)-REV

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 1

Matrix: (soil/water) SOIL Lab Sample ID: 232975

Sample wt/vol: 30.0 (g/mL) G Lab File ID: PC032975C06

Level: (low/med) LOW Date Received: 12/03/88

% Moisture: not dec. 25 dec. ____ Date Extracted: 12/06/88

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 12/13/88

GPC Cleanup: (Y/N) N pH: 8.5 Dilution Factor: 20.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	210	U
319-85-7	beta-BHC	210	U
319-86-8	delta-BHC	210	U
58-89-9	gamma-BHC (Lindane)	210	U
76-44-8	Heptachlor	210	U
309-00-2	Aldrin	210	U
1024-57-3	Heptachlor epoxide	210	U
959-98-8	Endosulfan I	210	U
60-57-1	Dieldrin	430	U
72-55-9	4,4'-DDE	430	U
72-20-8	Endrin	430	U
33213-65-9	Endosulfan II	430	U
72-54-8	4,4'-DDD	430	U
1031-07-8	Endosulfan sulfate	430	U
50-29-3	4,4'-DDT	430	U
72-43-5	Methoxychlor	2100	U
53494-70-5	Endrin ketone	430	U
5103-71-9	alpha-Chlordane	2100	U
5103-74-2	gamma-Chlordane	2100	U
8001-35-2	Toxaphene	4300	U
12674-11-2	Aroclor-1016	2100	U
11104-28-2	Aroclor-1221	2100	U
11141-16-5	Aroclor-1232	2100	U
53469-21-9	Aroclor-1242	2100	U
12672-29-6	Aroclor-1248	2100	U
11097-69-1	Aroclor-1254	4300	U
11096-82-5	Aroclor-1260	13000	C

1/4/89

FORM I PEST 1/87 Rev.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SS-3

Lab Name: COMPUCHEM LABORATORIES Contract: (10-86)-REV

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 1

Matrix: (soil/water) SOIL Lab Sample ID: 232979

Sample wt/vol: 30.0 (g/mL) G Lab File ID: PC03297G604

Level: (low/med) LOW Date Received: 12/03/88

% Moisture: not dec. 14 dec. ____ Date Extracted: 12/06/88

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 12/21/88

GPC Cleanup: (Y/N) N pH: 6.9 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	9.3	U
319-85-7	beta-BHC	9.3	U
319-86-8	delta-BHC	9.3	U
58-89-9	gamma-BHC (Lindane)	9.3	U
76-44-8	Heptachlor	9.3	U
309-00-2	Aldrin	9.3	U
1024-57-3	Heptachlor epoxide	9.3	U
959-98-8	Endosulfan I	9.3	U
60-57-1	Dieldrin	19.	U
72-55-9	4,4'-DDE	730	U SR 1.4.89
72-20-8	Endrin	19.	U
33213-65-9	Endosulfan II	19.	U
72-54-8	4,4'-DDD	19.	U
1031-07-8	Endosulfan sulfate	19.	U
50-29-3	4,4'-DDT	19.	U
72-43-5	Methoxychlor	93.	U
53494-70-5	Endrin ketone	19.	U
5103-71-9	alpha-Chlordane	93.	U
5103-74-2	gamma-Chlordane	93.	U
8001-35-2	Toxaphene	190	U
12674-11-2	Aroclor-1016	93.	U
11104-28-2	Aroclor-1221	93.	U
11141-16-5	Aroclor-1232	93.	U
53469-21-9	Aroclor-1242	93.	U
12672-29-6	Aroclor-1248	93.	U
11097-69-1	Aroclor-1254	190	U
11096-82-5	Aroclor-1260	2600	

FORM I PEST 1/87 Rev.

10

PESTICIDE/PCB IDENTIFICATION

EPA SAMPLE NO.

SS-1

Lab Name: COMPUCHEM LABORATORIES Contract: (10-86)-REV

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 1

GC Column ID (1): 2250/2401 GC Column ID (2): OV-101

Instrument ID (1): 12 Instrument ID (2): 02

Lab Sample ID: 232968

Lab File ID: PC032915A04 (only if confirmed by GC/MS)

PESTICIDE/PCB	RETENTION TIME		RT WINDOW OF STANDARD FROM	TO	QUANT? (Y/N)	GC/MS? (Y/N)
01 Aroclor-1242	Column 1	3.07	3.00	3.13	N	N
02	Column 2	2.91	2.86	2.98	Y	N
03 Aroclor-1260	Column 1	18.85	18.45	19.21	N	N
04	Column 2	18.53	18.19	18.93	Y	N

Comments: _____

page 1 of 1

FORM X PEST 1/87 Rev.

10

PESTICIDE/PCB IDENTIFICATION

EPA SAMPLE NO.

SS-2

Lab Name: COMPUCHEM LABORATORIES Contract: (10-86)-REV

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 1

GC Column ID (1): 2250/2401 GC Column ID (2): OV-101

Instrument ID (1): 12 Instrument ID (2): 02

Lab Sample ID: 232975

Lab File ID: PC032975C06 (only if confirmed by GC/MS)

PESTICIDE/PCB	RETENTION TIME		RT WINDOW OF STANDARD FROM	TO	QUANT? (Y/N)	GC/MS? (Y/N)
01 Aroclor-1260	Column 1	19.42	19.00	19.78	N	Y
02	Column 2	18.72	18.28	19.03	Y	Y

Comments: _____

page 1 of 1

FORM X PEST 1/87 Rev.

SAMPLE DATA SUMMARY

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SS-2MSD

Lab Name: COMPUCHEM LABS Contract: (10-86)REV

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) SOIL Lab Sample ID: 233559

Sample wt/vol: 1.0 (g/mL) G Lab File ID: GH033559A20

Level: (low/med) MED Date Received: 12/03/88

% Moisture: not dec. 25 dec. ____ Date Extracted: 12/07/88

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 12/10/88

GPC Cleanup: (Y/N) N pH: 8.5 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	130000	U
83-32-9	Acenaphthene	26000	U
51-28-5	2,4-Dinitrophenol	130000	U
100-02-7	4-Nitrophenol	130000	U
132-64-9	Dibenzofuran	11000	J
121-14-2	2,4-Dinitrotoluene	26000	U
84-66-2	Diethylphthalate	26000	U
7005-72-3	4-Chlorophenyl-phenylether	26000	U
86-73-7	Fluorene	13000	J
100-01-6	4-Nitroaniline	130000	U
534-52-1	4,6-Dinitro-2-Methylphenol	130000	U
86-30-6	N-Nitrosodiphenylamine (1)	26000	U
101-55-3	4-Bromophenyl-phenylether	26000	U
118-74-1	Hexachlorobenzene	26000	U
87-86-5	Pentachlorophenol	130000	U
85-01-8	Phenanthrene	34000	
120-12-7	Anthracene	8100	J
84-74-2	Di-n-Butylphthalate	26000	U
206-44-0	Fluoranthene	21000	J
129-00-0	Pyrene	26000	U
85-68-7	Butylbenzylphthalate	26000	U
91-94-1	3,3'-Dichlorobenzidine	53000	U
56-55-3	Benzo(a)Anthracene	7900	J
218-01-9	Chrysene	9900	J
117-81-7	bis(2-Ethylhexyl)Phthalate	75000	
117-84-0	Di-n-Octyl Phthalate	8900	J
205-99-2	Benzo(b)Fluoranthene	9700	JX
207-08-9	Benzo(k)Fluoranthene	9700	JX
50-32-8	Benzo(a)Pyrene	5200	J
193-39-5	Indeno(1,2,3-cd)Pyrene	26000	U
53-70-3	Dibenzo(a,h)Anthracene	26000	U
191-24-2	Benzo(g,h,i)Perylene	26000	U

(1) - Cannot be separated from Diphenylamine

FORM I SV-2 1/87 Rev.

SAMPLE DATA SUMMARY

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SS-1

Lab Name: COMPUCHEM LABORATORIES Contract: (10-86)-REV

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 1

Matrix: (soil/water) SOIL Lab Sample ID: 232968

Sample wt/vol: 30.0 (g/mL) G Lab File ID: PC032968A04

Level: (low/med) LOW Date Received: 12/03/88

% Moisture: not dec. 24 dec. ____ Date Extracted: 12/06/88

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 12/22/88

GPC Cleanup: (Y/N) N pH: 4.5 Dilution Factor: 10.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	100	U
319-85-7	beta-BHC	100	U
319-86-8	delta-BHC	100	U
58-89-9	gamma-BHC (Lindane)	100	U
76-44-8	Heptachlor	100	U
309-00-2	Aldrin	100	U
1024-57-3	Heptachlor epoxide	100	U
959-98-8	Endosulfan I	100	U
60-57-1	Dieldrin	210	U
72-55-9	4,4'-DDE	210	U
72-20-8	Endrin	210	U
33213-65-9	Endosulfan II	210	U
72-54-8	4,4'-DDD	210	U
1031-07-8	Endosulfan sulfate	210	U
50-29-3	4,4'-DDT	210	U
72-43-5	Methoxychlor	1000	U
53494-70-5	Endrin ketone	210	U
5103-71-9	alpha-Chlordane	1000	U
5103-74-2	gamma-Chlordane	1000	U
8001-35-2	Toxaphene	2100	U
12674-11-2	Aroclor-1016	1000	U
11104-28-2	Aroclor-1221	1000	U
11141-16-5	Aroclor-1232	1000	U
53469-21-9	Aroclor-1242	10000	U
12672-29-6	Aroclor-1248	1000	U
11097-69-1	Aroclor-1254	2100	U
11096-82-5	Aroclor-1260	7300	U

FORM I PEST 1/87 Rev.

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SS-2MS

Lab Name: COMPUCHEM LABS Contract: (10-86)REV

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) SOIL Lab Sample ID: 233558

Sample wt/vol: 1.0 (g/mL) G Lab File ID: GH033558A20

Level: (low/med) MED Date Received: 12/03/88

% Moisture: not dec. 25 dec. ____ Date Extracted: 12/07/88

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 12/10/88

GPC Cleanup: (Y/N) N pH: 8.5 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	130000	U
83-32-9	Acenaphthene	26000	U
51-28-5	2,4-Dinitrophenol	130000	U
100-02-7	4-Nitrophenol	130000	U
132-64-9	Dibenzofuran	9900	J
121-14-2	2,4-Dinitrotoluene	26000	U
84-66-2	Diethylphthalate	26000	U
7005-72-3	4-Chlorophenyl-phenylether	26000	U
86-73-7	Fluorene	11000	J
100-01-6	4-Nitroaniline	130000	U
534-52-1	4,6-Dinitro-2-Methylphenol	130000	U
86-30-6	N-Nitrosodiphenylamine (1)	26000	U
101-55-3	4-Bromophenyl-phenylether	26000	U
118-74-1	Hexachlorobenzene	26000	U
87-86-5	Pentachlorophenol	130000	U
85-01-8	Phenanthrene	38000	
120-12-7	Anthracene	9300	J
84-74-2	Di-n-Butylphthalate	26000	U
206-44-0	Fluoranthene	20000	J
129-00-0	Pyrene	26000	U
85-68-7	Butylbenzylphthalate	26000	U
91-94-1	3,3'-Dichlorobenzidine	53000	U
56-55-3	Benzo(a)Anthracene	8700	J
218-01-9	Chrysene	11000	J
117-81-7	bis(2-Ethylhexyl)Phthalate	61000	
117-84-0	Di-n-Octyl Phthalate	26000	U
205-99-2	Benzo(b)Fluoranthene	9700	JX
207-08-9	Benzo(k)Fluoranthene	9700	JX
50-32-8	Benzo(a)Pyrene	4900	J
193-39-5	Indeno(1,2,3-cd)Pyrene	26000	U
53-70-3	Dibenzo(a,h)Anthracene	26000	U
191-24-2	Benzo(g,h,i)Perylene	26000	U

(1) - Cannot be separated from Diphenylamine

FORM I SV-2 1/87 Rev.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SS-2MSD

Lab Name: COMPUCHEM LABS Contract: (10-86)REV

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) SOIL Lab Sample ID: 233559

Sample wt/vol: 1.0 (g/mL) G Lab File ID: GH033559A20

Level: (low/med) MED Date Received: 12/03/88

% Moisture: not dec. 25 dec. _____ Date Extracted: 12/07/88

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 12/10/88

GPC Cleanup: (Y/N) N pH: 8.5 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	26000	U
111-44-4	bis(2-Chloroethyl)Ether	26000	U
95-57-8	2-Chlorophenol	26000	U
541-73-1	1,3-Dichlorobenzene	26000	U
106-46-7	1,4-Dichlorobenzene	26000	U
100-51-6	Benzyl Alcohol	26000	U
95-50-1	1,2-Dichlorobenzene	9700	J
95-48-7	2-Methylphenol	26000	U
39638-32-9	bis(2-Chloroisopropyl)Ether	26000	U
106-44-5	4-Methylphenol	26000	U
621-64-7	N-Nitroso-Di-n-Propylamine	26000	U
67-72-1	Hexachloroethane	26000	U
98-95-3	Nitrobenzene	26000	U
78-59-1	Isophorone	26000	U
88-75-5	2-Nitrophenol	26000	U
105-67-9	2,4-Dimethylphenol	26000	U
65-85-0	Benzoic Acid	130000	U
111-91-1	bis(2-Chloroethoxy)Methane	26000	U
120-83-2	2,4-Dichlorophenol	26000	U
120-82-1	1,2,4-Trichlorobenzene	26000	U
91-20-3	Naphthalene	48000	
106-47-8	4-Chloroaniline	26000	U
87-68-3	Hexachlorobutadiene	26000	U
59-50-7	4-Chloro-3-Methylphenol	26000	U
91-57-6	2-Methylnaphthalene	60000	
77-47-4	Hexachlorocyclopentadiene	26000	U
88-06-2	2,4,6-Trichlorophenol	26000	U
95-95-4	2,4,5-Trichlorophenol	130000	U
91-58-7	2-Chloronaphthalene	26000	U
88-74-4	2-Nitroaniline	130000	U
131-11-3	Dimethyl Phthalate	26000	U
208-96-8	Acenaphthylene	26000	U
606-20-2	2,6-Dinitrotoluene	26000	U

FORM I SV-1 1/87 Rev.

SAMPLE DATA SUMMARY

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SS-4RE

Lab Name: COMPUCHEM LABS Contract: (10-86)REV

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) SOIL Lab Sample ID: 232980

Sample wt/vol: 1.0 (g/mL) G Lab File ID: GK032980A21

Level: (low/med) MED Date Received: 12/03/88

% Moisture: not dec. 37 dec. ____ Date Extracted: 12/18/88

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 12/19/88

GPC Cleanup: (Y/N) N pH: 9.3 Dilution Factor: 1.0

Number TICs found: 20

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	16747-33-4	PENTANE, 3-ETHYL-2,3-DIMETHY	6.27	160000	J
2.	17301-32-5	UNDECANE, 4,7-DIMETHYL-	7.35	160000	J
3.	62238-15-7	DECANE, 2,3,4-TRIMETHYL-	9.30	300000	J
4.	31295-56-4	DODECANE, 2,6,11-TRIMETHYL-	10.20	220000	J
5.	17301-31-4	UNDECANE, 3,9-DIMETHYL-	11.05	160000	J
6.	3913-02-8	1-OCTANOL, 2-BUTYL-	11.85	280000	J
7.	629-97-0	DOCOSANE	13.34	170000	J
8.		UNKNOWN	16.04	170000	J
9.		UNKNOWN	17.10	280000	J
10.		UNKNOWN	17.25	160000	J
11.		UNKNOWN	17.80	270000	J
12.		UNKNOWN	17.94	300000	J
13.		UNKNOWN	18.30	300000	J
14.		UNKNOWN	18.47	160000	J
15.		UNKNOWN	18.82	350000	J
16.		UNKNOWN	18.97	260000	J
17.		UNKNOWN	19.30	280000	J
18.		UNKNOWN	19.74	170000	J
19.		UNKNOWN	19.99	280000	J
20.		UNKNOWN	20.40	350000	J

FORM I SV-TIC 1/87 Rev.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SS-2MS

Lab Name: COMPUCHEM LABS Contract: (10-86)REV

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) SOIL Lab Sample ID: 233558

Sample wt/vol: 1.0 (g/mL) G Lab File ID: GH033558A20

Level: (low/med) MED Date Received: 12/03/88

% Moisture: not dec. 25 dec. ____ Date Extracted: 12/07/88

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 12/10/88

GPC Cleanup: (Y/N) N pH: 8.5 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	26000	U
111-44-4	bis(2-Chloroethyl)Ether	26000	U
95-57-8	2-Chlorophenol	26000	U
541-73-1	1,3-Dichlorobenzene	26000	U
106-46-7	1,4-Dichlorobenzene	26000	U
100-51-6	Benzyl Alcohol	26000	U
95-50-1	1,2-Dichlorobenzene	10000	J
95-48-7	2-Methylphenol	26000	U
39638-32-9	bis(2-Chloroisopropyl)Ether	26000	U
106-44-5	4-Methylphenol	26000	U
621-64-7	N-Nitroso-Di-n-Propylamine	26000	U
67-72-1	Hexachloroethane	26000	U
98-95-3	Nitrobenzene	26000	U
78-59-1	Isophorone	26000	U
88-75-5	2-Nitrophenol	26000	U
105-67-9	2,4-Dimethylphenol	26000	U
65-85-0	Benzoic Acid	130000	U
111-91-1	bis(2-Chloroethoxy)Methane	26000	U
120-83-2	2,4-Dichlorophenol	26000	U
120-82-1	1,2,4-Trichlorobenzene	26000	U
91-20-3	Naphthalene	47000	
106-47-8	4-Chloroaniline	26000	U
87-68-3	Hexachlorobutadiene	26000	U
59-50-7	4-Chloro-3-Methylphenol	26000	U
91-57-6	2-Methylnaphthalene	50000	
77-47-4	Hexachlorocyclopentadiene	26000	U
88-06-2	2,4,6-Trichlorophenol	26000	U
95-95-4	2,4,5-Trichlorophenol	130000	U
91-58-7	2-Chloronaphthalene	26000	U
88-74-4	2-Nitroaniline	130000	U
131-11-3	Dimethyl Phthalate	26000	U
208-96-8	Acenaphthylene	26000	U
606-20-2	2,6-Dinitrotoluene	26000	U

FORM I SV-1 1/87 Rev.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SS-4RE

Lab Name: COMPUCHEM LABS Contract: (10-86)REV

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) SOIL Lab Sample ID: 232980

Sample wt/vol: 1.0 (g/mL) G Lab File ID: GR032980A21

Level: (low/med) MED Date Received: 12/03/88

% Moisture: not dec. 37 dec. ____ Date Extracted: 12/18/88

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 12/19/88

GPC Cleanup: (Y/N) N pH: 9.3 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	31000	U
111-44-4	bis(2-Chloroethyl)Ether	31000	U
95-57-8	2-Chlorophenol	31000	U
541-73-1	1,3-Dichlorobenzene	31000	U
106-46-7	1,4-Dichlorobenzene	31000	U
100-51-6	Benzyl Alcohol	31000	U
95-50-1	1,2-Dichlorobenzene	6700	J
95-48-7	2-Methylphenol	31000	U
39638-32-9	bis(2-Chloroisopropyl)Ether	31000	U
106-44-5	4-Methylphenol	31000	U
621-64-7	N-Nitroso-Di-n-Propylamine	31000	U
67-72-1	Hexachloroethane	31000	U
98-95-3	Nitrobenzene	31000	U
78-59-1	Isophorone	31000	U
88-75-5	2-Nitrophenol	31000	U
105-67-9	2,4-Dimethylphenol	31000	U
65-85-0	Benzoic Acid	150000	U
111-91-1	bis(2-Chloroethoxy)Methane	31000	U
120-83-2	2,4-Dichlorophenol	31000	U
120-82-1	1,2,4-Trichlorobenzene	31000	U
91-20-3	Naphthalene	16000	J
106-47-8	4-Chloroaniline	31000	U
87-68-3	Hexachlorobutadiene	31000	U
59-50-7	4-Chloro-3-Methylphenol	31000	U
91-57-6	2-Methylnaphthalene	21000	J
77-47-4	Hexachlorocyclopentadiene	31000	U
88-06-2	2,4,6-Trichlorophenol	31000	U
95-95-4	2,4,5-Trichlorophenol	150000	U
91-58-7	2-Chloronaphthalene	31000	U
88-74-4	2-Nitroaniline	150000	U
131-11-3	Dimethyl Phthalate	31000	U
208-96-8	Acenaphthylene	9600	J
606-20-2	2,6-Dinitrotoluene	31000	U

FORM I SV-1 1/87 Rev.

SAMPLE DATA SUMMARY

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SS-4RE

Lab Name: COMPUCHEM LABS Contract: (10-86)REV

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) SOIL Lab Sample ID: 232980

Sample wt/vol: 1.0 (g/mL) G Lab File ID: GR032980A21

Level: (low/med) MED Date Received: 12/03/88

% Moisture: not dec. 37 dec. ____ Date Extracted: 12/18/88

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 12/19/88

GPC Cleanup: (Y/N) N pH: 9.3 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	150000	U
83-32-9	Acenaphthene	31000	U
51-28-5	2,4-Dinitrophenol	150000	U
100-02-7	4-Nitrophenol	150000	U
132-64-9	Dibenzofuran	31000	U
121-14-2	2,4-Dinitrotoluene	31000	U
84-66-2	Diethylphthalate	31000	U
7005-72-3	4-Chlorophenyl-phenylether	31000	U
86-73-7	Fluorene	8100	J
100-01-6	4-Nitroaniline	150000	U
534-52-1	4,6-Dinitro-2-Methylphenol	150000	U
86-30-6	N-Nitrosodiphenylamine (1)	31000	U
101-55-3	4-Bromophenyl-phenylether	31000	U
118-74-1	Hexachlorobenzene	31000	U
87-86-5	Pentachlorophenol	150000	U
85-01-8	Phenanthrene	27000	J
120-12-7	Anthracene	10000	J
84-74-2	Di-n-Butylphthalate	4800	J
206-44-0	Fluoranthene	11000	J
129-00-0	Pyrene	14000	J
85-68-7	Butylbenzylphthalate	31000	U
91-94-1	3,3'-Dichlorobenzidine	63000	U
56-55-3	Benzo(a)Anthracene	7700	J
218-01-9	Chrysene	12000	J
117-81-7	bis(2-Ethylhexyl)Phthalate	15000	J
117-84-0	Di-n-Octyl Phthalate	31000	U
205-99-2	Benzo(b)Fluoranthene	7200	JX
207-08-9	Benzo(k)Fluoranthene	7200	JX
50-32-8	Benzo(a)Pyrene	6400	J
193-39-5	Indeno(1,2,3-cd)Pyrene	31000	U
53-70-3	Dibenzo(a,h)Anthracene	31000	U
191-24-2	Benzo(g,h,i)Perylene	4000	J

(1) - Cannot be separated from Diphenylamine

FORM I SV-2 1/87 Rev.

FORM I

Client Sample No.
SED-1

DATE 12/22/88

INORGANIC ANALYSIS DATA SHEET

LAB NAME: CompuChem Laboratories

CASE NO: 273801 15767

SOW NO: 785

Lab Receipt Date 12/14/88

LAB SAMPLE ID. NO. 235799

QC REPORT NO 15767B

ELEMENTS IDENTIFIED AND MEASURED

CONCENTRATION: LOW XXX MEDIUM

MATRIX: WATER SOIL XXX SLUDGE OTHER

UNITS: mg/kg

1.	Aluminum	7930		P	13.	Magnesium	8490	E	P
2.	Antimony	24U	N	P	14.	Manganese	282	N	P
3.	Arsenic	8.9		F	15.	Mercury	.62	N	CV
4.	Barium	655	N	P	16.	Nickel	84		P
5.	Beryllium	[1.6]		P	17.	Potassium	[1800]		P
6.	Cadmium	5.6	N	P	18.	Selenium	6.0U	EN	F
7.	Calcium	110000		P	19.	Silver	2.4U		P
8.	Chromium	138		P	20.	Sodium	1080U		P
9.	Cobalt	[11]		P	21.	Thallium	[1.2]		F
10.	Copper	254	E	P	22.	Vanadium	41		P
11.	Iron	18900		P	23.	Zinc	1050		P
12.	Lead	8000	*	P					

Cyanide Not Required ~~N~~ BHE 12-22-88

Percent Solids(%) 35

Footnotes: For reporting results, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definitions of such flags must be explicit and contained on Cover Page, however.

Comments: BLACK,OPQUE

LAB MANAGER BHRolubach

C

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SED-1

Lab Name: COMPUCHEM LABS Contract: (10-86)-REV

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) SOIL Lab Sample ID: 235795

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GR035795A18

Level: (low/med) LOW Date Received: 12/14/88

% Moisture: not dec. 65 Date Analyzed: 12/18/88

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	29	U
74-83-9	Bromomethane	29	U
75-01-4	Vinyl Chloride	29	U
75-00-3	Chloroethane	29	U
75-09-2	Methylene Chloride	44	B
67-64-1	Acetone	210	B
75-15-0	Carbon Disulfide	5	J
75-35-4	1,1-Dichloroethene	14	U
75-34-3	1,1-Dichloroethane	9	J
540-59-0	1,2-Dichloroethene (total)	14	U
67-66-3	Chloroform	14	U
107-06-2	1,2-Dichloroethane	14	U
78-93-3	2-Butanone	29	U
71-55-6	1,1,1-Trichloroethane	14	U
56-23-5	Carbon Tetrachloride	14	U
108-05-4	Vinyl Acetate	29	U
75-27-4	Bromodichloromethane	14	U
78-87-5	1,2-Dichloropropane	14	U
10061-01-5	cis-1,3-Dichloropropene	14	U
79-01-6	Trichloroethene	14	U
124-48-1	Dibromochloromethane	14	U
79-00-5	1,1,2-Trichloroethane	14	U
71-43-2	Benzene	4	J
10061-02-6	Trans-1,3-Dichloropropene	14	U
75-25-2	Bromoform	14	U
108-10-1	4-Methyl-2-Pentanone	29	U
591-78-6	2-Hexanone	29	U
127-18-4	Tetrachloroethene	14	U
79-34-5	1,1,2,2-Tetrachloroethane	14	U
108-88-3	Toluene	9	J
108-90-7	Chlorobenzene	6	J
100-41-4	Ethylbenzene	340	
100-42-5	Styrene	7	J
1330-20-7	Total Xylenes	360	

FORM I VOA 1/87 Rev.

FORM I

Client Sample No.
SS-3

DATE 12/20/88

INORGANIC ANALYSIS DATA SHEET

LAB NAME: CompuChem Laboratories CASE NO: 273801 15767

SOW NO: 785 Lab Receipt Date 12/03/88

LAB SAMPLE ID. NO. 232989 QC REPORT NO 15767A

ELEMENTS IDENTIFIED AND MEASURED

CONCENTRATION: LOW XXX MEDIUM ____

MATRIX: WATER ____ SOIL XXX SLUDGE ____ OTHER ____

UNITS: mg/kg

1.	Aluminum	4190		P	13.	Magnesium	13700	E	P
2.	Antimony	10U	N	P	14.	Manganese	125	N	P
3.	Arsenic	29		F	15.	Mercury	1.1	N	CV
4.	Barium	768	N	P	16.	Nickel	28		P
5.	Beryllium	[.88]		P	17.	Potassium	549U		P
6.	Cadmium	5.3	N	P	18.	Selenium	4.7U	N	F
7.	Calcium	28900		P	19.	Silver	1.0U		P
8.	Chromium	35		P	20.	Sodium	440U		P
9.	Cobalt	[9.0]		P	21.	Thallium	.45U		F
10.	Copper	312		P	22.	Vanadium	52	E	P
11.	Iron	18000		P	23.	Zinc	988		P
12.	Lead	2000	*	P					

Cyanide .58U N* Percent Solids(%) 86

Footnotes: For reporting results, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definitions of such flags must be explicit and contained on Cover Page, however.

Comments: BLACK,MEDIUM

LAB MANAGER Bth Rolowback

C

FORM I

Client Sample No.
SS-4

DATE 12/20/88

INORGANIC ANALYSIS DATA SHEET

LAB NAME: CompuChem Laboratories

CASE NO: 273801 15767

SOW NO: 785

Lab Receipt Date 12/03/88

LAB SAMPLE ID. NO. 232990

QC REPORT NO 15767A

ELEMENTS IDENTIFIED AND MEASURED

CONCENTRATION: LOW XXX MEDIUM _____

MATRIX: WATER _____ SOIL XXX SLUDGE _____ OTHER _____

UNITS: mg/kg

1.	Aluminum	9320		P	13.	Magnesium	11700	E	P
2.	Antimony	[17]	N	P	14.	Manganese	201	N	P
3.	Arsenic	[23]		F	15.	Mercury	1.6	N	CV
4.	Barium	3490	N	P	16.	Nickel	55		P
5.	Beryllium	[.63]		P	17.	Potassium	744U		P
6.	Cadmium	12	N	P	18.	Selenium	6.3U	EN	F
7.	Calcium	161000		P	19.	Silver	1.4U		P
8.	Chromium	96		P	20.	Sodium	596U		P
9.	Cobalt	[10]		P	21.	Thallium	[2.0]		F
10.	Copper	634		P	22.	Vanadium	37	E	P
11.	Iron	24200		P	23.	Zinc	1170		P
12.	Lead	16600	*	P					

Cyanide 5.0 N*

Percent Solids(%) 63

Footnotes: For reporting results, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definitions of such flags must be explicit and contained on Cover Page, however.

Comments: BLACK,MEDIUM-FINE

LAB MANAGER: BH Polokach

C

FORM I

Client Sample No.
SS-1

DATE 12/20/88

INORGANIC ANALYSIS DATA SHEET

LAB NAME: CompuChem Laboratories

CASE NO: 273801 15767

SOW NO: 785

Lab Receipt Date 12/03/88

LAB SAMPLE ID. NO. 232981

QC REPORT NO 15767A

ELEMENTS IDENTIFIED AND MEASURED

CONCENTRATION: LOW XXX MEDIUM _____

MATRIX: WATER _____ SOIL XXX SLUDGE _____ OTHER _____

UNITS: mg/kg

1.	Aluminum	18800		P	13.	Magnesium	1750	E	P
2.	Antimony	11U	N	P	14.	Manganese	197	N	P
3.	Arsenic	[17]		F	15.	Mercury	1.9	N	CV
4.	Barium	1570	N	P	16.	Nickel	65		P
5.	Beryllium	[.52]		P	17.	Potassium	591U		P
6.	Cadmium	14	N	P	18.	Selenium	5.2U	EN	F
7.	Calcium	13500		P	19.	Silver	1.1U		P
8.	Chromium	108		P	20.	Sodium	473U		P
9.	Cobalt	[12]		P	21.	Thallium	5.0U		F
10.	Copper	1070		P	22.	Vanadium	143	E	P
11.	Iron	48000		P	23.	Zinc	2270		P
12.	Lead	116000	*	P					

Cyanide 2.2 N*

Percent Solids(%) 76

Footnotes: For reporting results, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definitions of such flags must be explicit and contained on Cover Page, however.

Comments: BLACK,FINE

LAB MANAGER BHPlaback

C

FORM I

Client Sample No.
SS-2

DATE 12/20/88

INORGANIC ANALYSIS DATA SHEET

LAB NAME: CompuChem Laboratories

CASE NO: 273801 15767

SOW NO: 785

Lab Receipt Date 12/03/88

LAB SAMPLE ID. NO. 232982

QC REPORT NO 15767A

ELEMENTS IDENTIFIED AND MEASURED

CONCENTRATION: LOW XXX MEDIUM _____

MATRIX: WATER _____ SOIL XXX SLUDGE _____ OTHER _____

UNITS: mg/kg

1.	Aluminum	9490		P	13.	Magnesium	10300	E	P
2.	Antimony	11U	N	P	14.	Manganese	315	N	P
3.	Arsenic	[16]		F	15.	Mercury	.74	N	CV
4.	Barium	1650	N	P	16.	Nickel	188		P
5.	Beryllium	[.94]		P	17.	Potassium	3340		P
6.	Cadmium	11	N	P	18.	Selenium	5.6U	EN	F
7.	Calcium	129000		P	19.	Silver	[2.0]		P
8.	Chromium	417		P	20.	Sodium	[514]		P
9.	Cobalt	19		P	21.	Thallium	[1.0]		F
10.	Copper	561		P	22.	Vanadium	51	E	P
11.	Iron	23500		P	23.	Zinc	2190		P
12.	Lead	27000	*	P					

Cyanide 4.8 N*

Percent Solids(%) 75

Footnotes: For reporting results, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definitions of such flags must be explicit and contained on Cover Page, however.

Comments: BLACK, FINE & CLUMPY

LAB MANAGER: BthPolsbach

C

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SS-4

Lab Name: COMPUCHEM LABS Contract: (10-86)REV

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) SOIL Lab Sample ID: 232980

Sample wt/vol: 1.0 (g/mL) G Lab File ID: GH032980A20

Level: (low/med) MED Date Received: 12/03/88

% Moisture: not dec. 37 dec. ____ Date Extracted: 12/07/88

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 12/10/88

GPC Cleanup: (Y/N) N pH: 9.3 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	150000	U
83-32-9	Acenaphthene	5300	J
51-28-5	2,4-Dinitrophenol	150000	U
100-02-7	4-Nitrophenol	150000	U
132-64-9	Dibenzofuran	3600	J
121-14-2	2,4-Dinitrotoluene	31000	U
84-66-2	Diethylphthalate	31000	U
7005-72-3	4-Chlorophenyl-phenylether	31000	U
86-73-7	Fluorene	10000	J
100-01-6	4-Nitroaniline	150000	U
534-52-1	4,6-Dinitro-2-Methylphenol	150000	U
86-30-6	N-Nitrosodiphenylamine (1)	31000	U
101-55-3	4-Bromophenyl-phenylether	31000	U
118-74-1	Hexachlorobenzene	31000	U
87-86-5	Pentachlorophenol	150000	U
85-01-8	Phenanthrene	29000	J
120-12-7	Anthracene	8400	J
84-74-2	Di-n-Butylphthalate	31000	U
206-44-0	Fluoranthene	12000	J
129-00-0	Pyrene	16000	J
85-68-7	Butylbenzylphthalate	31000	U
91-94-1	3,3'-Dichlorobenzidine	63000	U
56-55-3	Benzo(a)Anthracene	13000	J
218-01-9	Chrysene	13000	J
117-81-7	bis(2-Ethylhexyl)Phthalate	29000	J
117-84-0	Di-n-Octyl Phthalate	31000	U
205-99-2	Benzo(b)Fluoranthene	19000	JX
207-08-9	Benzo(k)Fluoranthene	19000	JX
50-32-8	Benzo(a)Pyrene	13000	J
193-39-5	Indeno(1,2,3-cd)Pyrene	31000	U
53-70-3	Dibenzo(a,h)Anthracene	31000	U
191-24-2	Benzo(g,h,i)Perylene	31000	U

(1) - Cannot be separated from Diphenylamine

FORM I SV-2 1/87 Rev.

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SS-4

Lab Name: COMPUCHEM LABS Contract: (10-86)REV

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) SOIL Lab Sample ID: 232980

Sample wt/vol: 1.0 (g/mL) G Lab File ID: GH032980A20

Level: (low/med) MED Date Received: 12/03/88

% Moisture: not dec. 37 dec. _____ Date Extracted: 12/07/88

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 12/10/88

GPC Cleanup: (Y/N) N pH: 9.3 Dilution Factor: 1.0

Number TICs found: 20

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 629-59-4	TETRADECANE	9.64	230000	J
2. 629-78-7	HEPTADECANE	11.80	110000	J
3. 630-06-8	HEXATRIACONTANE	15.44	230000	J
4.	UNKNOWN	15.74	160000	J
5.	UNKNOWN	15.85	110000	J
6.	UNKNOWN	15.90	160000	J
7.	UNKNOWN	16.04	130000	J
8.	UNKNOWN	16.22	310000	J
9.	UNKNOWN	16.69	260000	J
10.	UNKNOWN	16.82	310000	J
11.	UNKNOWN	16.95	220000	J
12.	UNKNOWN	17.02	120000	J
13.	UNKNOWN	17.14	120000	J
14.	UNKNOWN	17.25	350000	J
15.	UNKNOWN	17.40	310000	J
16.	UNKNOWN	17.67	380000	J
17.	UNKNOWN	17.80	350000	J
18.	UNKNOWN	17.97	250000	J
19.	UNKNOWN	18.07	640000	J
20.	UNKNOWN	18.37	160000	J

FORM I SV-TIC 1/87 Rev.

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SS-3

Lab Name: COMPUCHEM LABS Contract: (10-86)REV

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) SOIL Lab Sample ID: 232979

Sample wt/vol: 1.0 (g/mL) G Lab File ID: GH032979A20

Level: (low/med) MED Date Received: 12/03/88

% Moisture: not dec. 14 dec. ____ Date Extracted: 12/07/88

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 12/10/88

GPC Cleanup: (Y/N) N pH: 6.9 Dilution Factor: 1.0

Number TICs found: 20

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN HYDROCARBON	15.80	49000	J
2.	UNKNOWN HYDROCARBON	16.87	60000	J
3.	UNKNOWN	17.10	110000	J
4.	UNKNOWN	17.24	100000	J
5.	UNKNOWN	17.30	63000	J
6.	UNKNOWN	17.47	70000	J
7.	UNKNOWN	17.65	56000	J
8.	UNKNOWN	17.82	88000	J
9.	UNKNOWN	17.87	130000	J
10.	UNKNOWN	17.99	170000	J
11.	UNKNOWN	18.09	150000	J
12.	UNKNOWN	18.15	200000	J
13.	UNKNOWN	18.42	58000	J
14.	UNKNOWN	18.54	53000	J
15.	UNKNOWN	18.70	74000	J
16.	UNKNOWN	18.75	53000	J
17.	UNKNOWN	18.94	65000	J
18.	UNKNOWN	19.00	51000	J
19.	UNKNOWN	19.09	120000	J
20.	UNKNOWN	19.62	140000	J

FORM I SV-TIC 1/87 Rev.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SS-4

Lab Name: COMPUCHEM LABS Contract: (10-86)REV

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) SOIL Lab Sample ID: 232980

Sample wt/vol: 1.0 (g/mL) G Lab File ID: GH032980A20

Level: (low/med) MED Date Received: 12/03/88

% Moisture: not dec. 37 dec. ____ Date Extracted: 12/07/88

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 12/10/88

GPC Cleanup: (Y/N) N pH: 9.3 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	31000	U
111-44-4	bis(2-Chloroethyl)Ether	31000	U
95-57-8	2-Chlorophenol	31000	U
541-73-1	1,3-Dichlorobenzene	31000	U
106-46-7	1,4-Dichlorobenzene	31000	U
100-51-6	Benzyl Alcohol	31000	U
95-50-1	1,2-Dichlorobenzene	9800	J
95-48-7	2-Methylphenol	31000	U
39638-32-9	bis(2-Chloroisopropyl)Ether	31000	U
106-44-5	4-Methylphenol	31000	U
621-64-7	N-Nitroso-Di-n-Propylamine	31000	U
67-72-1	Hexachloroethane	31000	U
98-95-3	Nitrobenzene	31000	U
78-59-1	Isophorone	31000	U
88-75-5	2-Nitrophenol	31000	U
105-67-9	2,4-Dimethylphenol	31000	U
65-85-0	Benzoic Acid	150000	U
111-91-1	bis(2-Chloroethoxy)Methane	31000	U
120-83-2	2,4-Dichlorophenol	31000	U
120-82-1	1,2,4-Trichlorobenzene	3800	J
91-20-3	Naphthalene	24000	J
106-47-8	4-Chloroaniline	31000	U
87-68-3	Hexachlorobutadiene	31000	U
59-50-7	4-Chloro-3-Methylphenol	31000	U
91-57-6	2-Methylnaphthalene	49000	
77-47-4	Hexachlorocyclopentadiene	31000	U
88-06-2	2,4,6-Trichlorophenol	31000	U
95-95-4	2,4,5-Trichlorophenol	150000	U
91-58-7	2-Chloronaphthalene	31000	U
88-74-4	2-Nitroaniline	150000	U
131-11-3	Dimethyl Phthalate	31000	U
208-96-8	Acenaphthylene	11000	J
606-20-2	2,6-Dinitrotoluene	31000	U

FORM I SV-1 1/87 Rev.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SS-3

Lab Name: COMPUCHEM LABS Contract: (10-86)REV

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) SOIL Lab Sample ID: 232979

Sample wt/vol: 1.0 (g/mL) G Lab File ID: GH032979A20

Level: (low/med) MED Date Received: 12/03/88

% Moisture: not dec. 14 dec. ____ Date Extracted: 12/07/88

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 12/10/88

GPC Cleanup: (Y/N) N pH: 6.9 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	23000	U
111-44-4	bis(2-Chloroethyl)Ether	23000	U
95-57-8	2-Chlorophenol	23000	U
541-73-1	1,3-Dichlorobenzene	23000	U
106-46-7	1,4-Dichlorobenzene	23000	U
100-51-6	Benzyl Alcohol	23000	U
95-50-1	1,2-Dichlorobenzene	23000	U
95-48-7	2-Methylphenol	23000	U
39638-32-9	bis(2-Chloroisopropyl)Ether	23000	U
106-44-5	4-Methylphenol	23000	U
621-64-7	N-Nitroso-Di-n-Propylamine	23000	U
67-72-1	Hexachloroethane	23000	U
98-95-3	Nitrobenzene	23000	U
78-59-1	Isophorone	23000	U
88-75-5	2-Nitrophenol	23000	U
105-67-9	2,4-Dimethylphenol	23000	U
65-85-0	Benzoic Acid	110000	U
111-91-1	bis(2-Chloroethoxy)Methane	23000	U
120-83-2	2,4-Dichlorophenol	23000	U
120-82-1	1,2,4-Trichlorobenzene	23000	U
91-20-3	Naphthalene	5000	J
106-47-8	4-Chloroaniline	23000	U
87-68-3	Hexachlorobutadiene	23000	U
59-50-7	4-Chloro-3-Methylphenol	23000	U
91-57-6	2-Methylnaphthalene	5000	J
77-47-4	Hexachlorocyclopentadiene	23000	U
88-06-2	2,4,6-Trichlorophenol	23000	U
95-95-4	2,4,5-Trichlorophenol	110000	U
91-58-7	2-Chloronaphthalene	23000	U
88-74-4	2-Nitroaniline	110000	U
131-11-3	Dimethyl Phthalate	23000	U
208-96-8	Acenaphthylene	23000	U
606-20-2	2,6-Dinitrotoluene	23000	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SS-3

Lab Name: COMPUCHEM LABS Contract: (10-86)REV

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) SOIL Lab Sample ID: 232979

Sample wt/vol: 1.0 (g/mL) G Lab File ID: GH032979A20

Level: (low/med) MED Date Received: 12/03/88

% Moisture: not dec. 14 dec. _____ Date Extracted: 12/07/88

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 12/10/88

GPC Cleanup: (Y/N) N pH: 6.9 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	110000	U
83-32-9	Acenaphthene	6400	J
51-28-5	2,4-Dinitrophenol	110000	U
100-02-7	4-Nitrophenol	110000	U
132-64-9	Dibenzofuran	23000	U
121-14-2	2,4-Dinitrotoluene	23000	U
84-66-2	Diethylphthalate	23000	U
7005-72-3	4-Chlorophenyl-phenylether	23000	U
86-73-7	Fluorene	6200	J
100-01-6	4-Nitroaniline	110000	U
534-52-1	4,6-Dinitro-2-Methylphenol	110000	U
86-30-6	N-Nitrosodiphenylamine (1)	23000	U
101-55-3	4-Bromophenyl-phenylether	23000	U
118-74-1	Hexachlorobenzene	23000	U
87-86-5	Pentachlorophenol	110000	U
85-01-8	Phenanthrene	5700	J
120-12-7	Anthracene	23000	U
84-74-2	Di-n-Butylphthalate	3900	J
206-44-0	Fluoranthene	5800	J
129-00-0	Pyrene	10000	J
85-68-7	Butylbenzylphthalate	23000	U
91-94-1	3,3'-Dichlorobenzidine	46000	U
56-55-3	Benzo(a)Anthracene	23000	U
218-01-9	Chrysene	4400	J
117-81-7	bis(2-Ethylhexyl)Phthalate	16000	J
117-84-0	Di-n-Octyl Phthalate	23000	U
205-99-2	Benzo(b)Fluoranthene	7000	JX
207-08-9	Benzo(k)Fluoranthene	7000	JX
50-32-8	Benzo(a)Pyrene	23000	U
193-39-5	Indeno(1,2,3-cd)Pyrene	23000	U
53-70-3	Dibenzo(a,h)Anthracene	23000	U
191-24-2	Benzo(g,h,i)Perylene	23000	U

(1) - Cannot be separated from Diphenylamine

FORM I SV-2 1/87 Rev.

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SS-2

Lab Name: COMPUCHEM LABS Contract: (10-86)REV

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) SOIL Lab Sample ID: 232975

Sample wt/vol: 1.0 (g/mL) G Lab File ID: G2J32975C20

Level: (low/med) MED Date Received: 12/03/88

% Moisture: not dec. 25 dec. ____ Date Extracted: 12/07/88

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 12/14/88

GPC Cleanup: (Y/N) N pH: 8.5 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	130000	U
83-32-9	Acenaphthene	30000	
51-28-5	2,4-Dinitrophenol	130000	U
100-02-7	4-Nitrophenol	130000	U
132-64-9	Dibenzofuran	14000	J
121-14-2	2,4-Dinitrotoluene	26000	U
84-66-2	Diethylphthalate	26000	U
7005-72-3	4-Chlorophenyl-phenylether	26000	U
86-73-7	Fluorene	21000	J
100-01-6	4-Nitroaniline	130000	U
534-52-1	4,6-Dinitro-2-Methylphenol	130000	U
86-30-6	N-Nitrosodiphenylamine (1)	26000	U
101-55-3	4-Bromophenyl-phenylether	26000	U
118-74-1	Hexachlorobenzene	26000	U
87-86-5	Pentachlorophenol	130000	U
85-01-8	Phenanthrene	59000	
120-12-7	Anthracene	17000	J
84-74-2	Di-n-Butylphthalate	26000	U
206-44-0	Fluoranthene	32000	
129-00-0	Pyrene	21000	J
85-68-7	Butylbenzylphthalate	26000	U
91-94-1	3,3'-Dichlorobenzidine	53000	U
56-55-3	Benzo(a)Anthracene	26000	U
218-01-9	Chrysene	16000	J
117-81-7	bis(2-Ethylhexyl)Phthalate	26000	U
117-84-0	Di-n-Octyl Phthalate	26000	U
205-99-2	Benzo(b)Fluoranthene	8500	JX
207-08-9	Benzo(k)Fluoranthene	8500	JX
50-32-8	Benzo(a)Pyrene	8700	J
193-39-5	Indeno(1,2,3-cd)Pyrene	26000	U
53-70-3	Dibenzo(a,h)Anthracene	26000	U
191-24-2	Benzo(g,h,i)Perylene	26000	U

(1) - Cannot be separated from Diphenylamine

FORM I SV-2 1/87 Rev.

SAMPLE DATA SUMMARY

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SS-2

Lab Name: COMPUCHEM LABS Contract: (10-86)REV

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) SOIL Lab Sample ID: 232975

Sample wt/vol: 1.0 (g/mL) G Lab File ID: G2J32975C20

Level: (low/med) MED Date Received: 12/03/88

% Moisture: not dec. 25 dec. ____ Date Extracted: 12/07/88

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 12/14/88

GPC Cleanup: (Y/N) N pH: 8.5 Dilution Factor: 1.0

Number TICs found: 20

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN HYDROCARBON	9.10	140000	J
2.	UNKNOWN HYDROCARBON	10.00	140000	J
3.	UNKNOWN HYDROCARBON	10.84	180000	J
4.	UNKNOWN HYDROCARBON	11.64	130000	J
5.	UNKNOWN HYDROCARBON	13.09	140000	J
6.	UNKNOWN HYDROCARBON	13.75	200000	J
7.	UNKNOWN HYDROCARBON	14.39	120000	J
8.	UNKNOWN HYDROCARBON	14.99	130000	J
9.	UNKNOWN	16.67	130000	J
10.	UNKNOWN	17.12	170000	J
11.	UNKNOWN	17.29	100000	J
12.	UNKNOWN	17.62	210000	J
13.	UNKNOWN	17.79	160000	J
14.	UNKNOWN	17.90	180000	J
15.	UNKNOWN	18.09	140000	J
16.	UNKNOWN	18.27	220000	J
17.	UNKNOWN	18.54	210000	J
18.	UNKNOWN	18.67	150000	J
19.	UNKNOWN	18.97	170000	J
20.	UNKNOWN	20.00	200000	J

FORM I SV-TIC 1/87 Rev.

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SS-1

Lab Name: COMPUCHEM LABS Contract: (10-86)REV

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) SOIL Lab Sample ID: 232968

Sample wt/vol: 1.0 (g/mL) G Lab File ID: G2J32968C20

Level: (low/med) MED Date Received: 12/03/88

% Moisture: not dec. 24 dec. ____ Date Extracted: 12/07/88

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 12/14/88

GPC Cleanup: (Y/N) N pH: 4.5 Dilution Factor: 1.0

Number TICs found: 20

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 694-87-1	BICYCLO[4.2.0]OCTA-1,3,5-TRI	4.52	370000	J
2.	UNKNOWN HYDROCARBON	8.13	120000	J
3. 629-59-4	TETRADECANE	10.00	140000	J
4. 569-41-5	NAPHTHALENE, 1,8-DIMETHYL-	10.29	110000	J
5. 54105-67-8	HEPTADECANE, 2,6-DIMETHYL-	10.84	120000	J
6. 20071-09-4	BENZENE, 1,1'-(1,2-CYCLOBUTA	12.90	680000	J
7. 54105-67-8	HEPTADECANE, 2,6-DIMETHYL-	13.10	450000	J
8. 54105-67-8	HEPTADECANE, 2,6-DIMETHYL-	13.77	450000	J
9.	UNKNOWN	14.40	580000	J
10. 629-99-2	PENTACOSANE	15.00	370000	J
11.	UNKNOWN HYDROCARBON	16.12	240000	J
12.	UNKNOWN AROMATIC	17.05	500000	J
13.	UNKNOWN HYDROCARBON	17.14	790000	J
14.	UNKNOWN HYDROCARBON	17.32	470000	J
15.	UNKNOWN AROMATIC	17.57	680000	J
16.	UNKNOWN AROMATIC	17.64	1100000	J
17.	UNKNOWN AROMATIC	17.70	240000	J
18. 629-99-2	PENTACOSANE	17.79	500000	J
19. 629-99-2	PENTACOSANE	18.09	550000	J
20.	UNKNOWN HYDROCARBON	18.24	630000	J

FORM I SV-TIC 1/87 Rev.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SS-2

Lab Name: COMPUCHEM LABS Contract: (10-86)REV

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) SOIL Lab Sample ID: 232975

Sample wt/vol: 1.0 (g/mL) G Lab File ID: G2J32975C20

Level: (low/med) MED Date Received: 12/03/88

% Moisture: not dec. 25 dec. ____ Date Extracted: 12/07/88

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 12/14/88

GPC Cleanup: (Y/N) N pH: 8.5 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	26000	U
111-44-4	bis(2-Chloroethyl)Ether	26000	U
95-57-8	2-Chlorophenol	26000	U
541-73-1	1,3-Dichlorobenzene	26000	U
106-46-7	1,4-Dichlorobenzene	26000	U
100-51-6	Benzyl Alcohol	26000	U
95-50-1	1,2-Dichlorobenzene	11000	J
95-48-7	2-Methylphenol	26000	U
39638-32-9	bis(2-Chloroisopropyl)Ether	26000	U
106-44-5	4-Methylphenol	26000	U
621-64-7	N-Nitroso-Di-n-Propylamine	26000	U
67-72-1	Hexachloroethane	26000	U
98-95-3	Nitrobenzene	26000	U
78-59-1	Isophorone	26000	U
88-75-5	2-Nitrophenol	26000	U
105-67-9	2,4-Dimethylphenol	26000	U
65-85-0	Benzoic Acid	130000	U
111-91-1	bis(2-Chloroethoxy)Methane	26000	U
120-83-2	2,4-Dichlorophenol	26000	U
120-82-1	1,2,4-Trichlorobenzene	4000	J
91-20-3	Naphthalene	58000	
106-47-8	4-Chloroaniline	26000	U
87-68-3	Hexachlorobutadiene	26000	U
59-50-7	4-Chloro-3-Methylphenol	26000	U
91-57-6	2-Methylnaphthalene	71000	
77-47-4	Hexachlorocyclopentadiene	26000	U
88-06-2	2,4,6-Trichlorophenol	26000	U
95-95-4	2,4,5-Trichlorophenol	130000	U
91-58-7	2-Chloronaphthalene	26000	U
88-74-4	2-Nitroaniline	130000	U
131-11-3	Dimethyl Phthalate	26000	U
208-96-8	Acenaphthylene	3500	J
606-20-2	2,6-Dinitrotoluene	26000	U

FORM I SV-1 1/87 Rev.

SAMPLE DATA SUMMARY

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SS-1

Lab Name: COMPUCHEM LABS Contract: (10-86)REV

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) SOIL Lab Sample ID: 232968

Sample wt/vol: 1.0 (g/mL) G Lab File ID: G2J32968C20

Level: (low/med) MED Date Received: 12/03/88

% Moisture: not dec. 24 dec. ____ Date Extracted: 12/07/88

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 12/14/88

GPC Cleanup: (Y/N) N pH: 4.5 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	42000	
111-44-4	bis(2-Chloroethyl)Ether	26000	U
95-57-8	2-Chlorophenol	26000	U
541-73-1	1,3-Dichlorobenzene	26000	U
106-46-7	1,4-Dichlorobenzene	26000	U
100-51-6	Benzyl Alcohol	26000	U
95-50-1	1,2-Dichlorobenzene	17000	J
95-48-7	2-Methylphenol	26000	U
39638-32-9	bis(2-Chloroisopropyl)Ether	26000	U
106-44-5	4-Methylphenol	14000	J
621-64-7	N-Nitroso-Di-n-Propylamine	26000	U
67-72-1	Hexachloroethane	26000	U
98-95-3	Nitrobenzene	26000	U
78-59-1	Isophorone	26000	U
88-75-5	2-Nitrophenol	26000	U
105-67-9	2,4-Dimethylphenol	26000	U
65-85-0	Benzoic Acid	130000	U
111-91-1	bis(2-Chloroethoxy)Methane	26000	U
120-83-2	2,4-Dichlorophenol	26000	U
120-82-1	1,2,4-Trichlorobenzene	7800	J
91-20-3	Naphthalene	110000	
106-47-8	4-Chloroaniline	26000	U
87-68-3	Hexachlorobutadiene	26000	U
59-50-7	4-Chloro-3-Methylphenol	26000	U
91-57-6	2-Methylnaphthalene	250000	
77-47-4	Hexachlorocyclopentadiene	26000	U
88-06-2	2,4,6-Trichlorophenol	26000	U
95-95-4	2,4,5-Trichlorophenol	130000	U
91-58-7	2-Chloronaphthalene	26000	U
88-74-4	2-Nitroaniline	130000	U
131-11-3	Dimethyl Phthalate	26000	U
208-96-8	Acenaphthylene	8300	J
606-20-2	2,6-Dinitrotoluene	26000	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SS-1

Lab Name: COMPUCHEM LABS Contract: (10-86)REV

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) SOIL Lab Sample ID: 232968

Sample wt/vol: 1.0 (g/mL) G Lab File ID: G2J32968C20

Level: (low/med) MED Date Received: 12/03/88

% Moisture: not dec. 24 dec. ____ Date Extracted: 12/07/88

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 12/14/88

GPC Cleanup: (Y/N) N pH: 4.5 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	130000	U
83-32-9	Acenaphthene	14000	J
51-28-5	2,4-Dinitrophenol	130000	U
100-02-7	4-Nitrophenol	130000	U
132-64-9	Dibenzofuran	11000	J
121-14-2	2,4-Dinitrotoluene	26000	U
84-66-2	Diethylphthalate	26000	U
7005-72-3	4-Chlorophenyl-phenylether	26000	U
86-73-7	Fluorene	25000	J
100-01-6	4-Nitroaniline	130000	U
534-52-1	4,6-Dinitro-2-Methylphenol	130000	U
86-30-6	N-Nitrosodiphenylamine (1)	26000	U
101-55-3	4-Bromophenyl-phenylether	26000	U
118-74-1	Hexachlorobenzene	26000	U
87-86-5	Pentachlorophenol	130000	U
85-01-8	Phenanthrene	58000	
120-12-7	Anthracene	26000	U
84-74-2	Di-n-Butylphthalate	6200	J
206-44-0	Fluoranthene	22000	J
129-00-0	Pyrene	24000	J
85-68-7	Butylbenzylphthalate	26000	U
91-94-1	3,3'-Dichlorobenzidine	52000	U
56-55-3	Benzo(a)Anthracene	10000	J
218-01-9	Chrysene	20000	J
117-81-7	bis(2-Ethylhexyl)Phthalate	61000	
117-84-0	Di-n-Octyl Phthalate	26000	U
205-99-2	Benzo(b)Fluoranthene	22000	JX
207-08-9	Benzo(k)Fluoranthene	22000	JX
50-32-8	Benzo(a)Pyrene	13000	J
193-39-5	Indeno(1,2,3-cd)Pyrene	6500	J
53-70-3	Dibenzo(a,h)Anthracene	26000	U
191-24-2	Benzo(g,h,i)Perylene	10000	J

(1) - Cannot be separated from Diphenylamine

FORM I SV-2 1/87 Rev.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SS-3MS

Lab Name: COMPUCHEM LABS Contract: (10-86)REV

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) SOIL Lab Sample ID: 232969

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GR032969A12

Level: (low/med) LOW Date Received: 12/03/88

% Moisture: not dec. 14 Date Analyzed: 12/09/88

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	12	U
74-83-9	Bromomethane	12	U
75-01-4	Vinyl Chloride	12	U
75-00-3	Chloroethane	12	U
75-09-2	Methylene Chloride	17	B
67-64-1	Acetone	78	B
75-15-0	Carbon Disulfide	6	U
75-35-4	1,1-Dichloroethene	6	U
75-34-3	1,1-Dichloroethane	2	J
540-59-0	1,2-Dichloroethene (total)	6	U
67-66-3	Chloroform	1	J
107-06-2	1,2-Dichloroethane	6	U
78-93-3	2-Butanone	12	
71-55-6	1,1,1-Trichloroethane	6	U
56-23-5	Carbon Tetrachloride	6	U
108-05-4	Vinyl Acetate	12	U
75-27-4	Bromodichloromethane	6	U
78-87-5	1,2-Dichloropropane	6	U
10061-01-5	cis-1,3-Dichloropropene	6	U
79-01-6	Trichloroethene	6	U
124-48-1	Dibromochloromethane	6	U
79-00-5	1,1,2-Trichloroethane	6	U
71-43-2	Benzene	6	U
10061-02-6	Trans-1,3-Dichloropropene	6	U
75-25-2	Bromoform	6	U
108-10-1	4-Methyl-2-Pentanone	12	U
591-78-6	2-Hexanone	12	U
127-18-4	Tetrachloroethene	2	J
79-34-5	1,1,2,2-Tetrachloroethane	6	U
108-88-3	Toluene	6	U
108-90-7	Chlorobenzene	6	U
100-41-4	Ethylbenzene	4	J
100-42-5	Styrene	6	U
1330-20-7	Total Xylenes	32	

FORM I VOA 1/87 Rev.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SS-3MSD

Lab Name: COMPUCHEM LABS Contract: (10-86)REV

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) SOIL Lab Sample ID: 232970

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GR032970A12

Level: (low/med) LOW Date Received: 12/03/88

% Moisture: not dec. 14 Date Analyzed: 12/09/88

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	12	U
74-83-9	Bromomethane	12	U
75-01-4	Vinyl Chloride	12	U
75-00-3	Chloroethane	12	U
75-09-2	Methylene Chloride	18	B
67-64-1	Acetone	67	B
75-15-0	Carbon Disulfide	6	U
75-35-4	1,1-Dichloroethene	6	U
75-34-3	1,1-Dichloroethane	2	J
540-59-0	1,2-Dichloroethene (total)	1	J
67-66-3	Chloroform	1	J
107-06-2	1,2-Dichloroethane	6	U
78-93-3	2-Butanone	12	U
71-55-6	1,1,1-Trichloroethane	6	U
56-23-5	Carbon Tetrachloride	6	U
108-05-4	Vinyl Acetate	12	U
75-27-4	Bromodichloromethane	6	U
78-87-5	1,2-Dichloropropane	6	U
10061-01-5	cis-1,3-Dichloropropene	6	U
79-01-6	Trichloroethene	6	U
124-48-1	Dibromochloromethane	6	U
79-00-5	1,1,2-Trichloroethane	6	U
71-43-2	Benzene	6	U
10061-02-6	Trans-1,3-Dichloropropene	6	U
75-25-2	Bromoform	6	U
108-10-1	4-Methyl-2-Pentanone	12	U
591-78-6	2-Hexanone	12	U
127-18-4	Tetrachloroethene	2	J
79-34-5	1,1,2,2-Tetrachloroethane	6	U
108-88-3	Toluene	6	U
108-90-7	Chlorobenzene	6	U
100-41-4	Ethylbenzene	3	J
100-42-5	Styrene	6	U
1330-20-7	Total Xylenes	32	

FORM I VOA 1/87 Rev.

SAMPLE DATA SUMMARY

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SS-2MS

Lab Name: COMPUCHEM LABS Contract: (10-86)REV

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) SOIL Lab Sample ID: 233490

Sample wt/vol: 4.0 (g/mL) G Lab File ID: CN033490C12

Level: (low/med) MED Date Received: 12/03/88

% Moisture: not dec. 25 Date Analyzed: 12/08/88

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	1700	U
74-83-9	Bromomethane	1700	U
75-01-4	Vinyl Chloride	1700	U
75-00-3	Chloroethane	1700	U
75-09-2	Methylene Chloride	950	B
67-64-1	Acetone	1200	J
75-15-0	Carbon Disulfide	830	U
75-35-4	1,1-Dichloroethene	830	U
75-34-3	1,1-Dichloroethane	1000	
540-59-0	1,2-Dichloroethene (total)	570	J
67-66-3	Chloroform	830	U
107-06-2	1,2-Dichloroethane	830	U
78-93-3	2-Butanone	1700	U
71-55-6	1,1,1-Trichloroethane	8500	
56-23-5	Carbon Tetrachloride	830	U
108-05-4	Vinyl Acetate	1700	U
75-27-4	Bromodichloromethane	830	U
78-87-5	1,2-Dichloropropane	830	U
10061-01-5	cis-1,3-Dichloropropene	830	U
79-01-6	Trichloroethene	830	U
124-48-1	Dibromochloromethane	830	U
79-00-5	1,1,2-Trichloroethane	830	U
71-43-2	Benzene	830	U
10061-02-6	Trans-1,3-Dichloropropene	830	U
75-25-2	Bromoform	830	U
108-10-1	4-Methyl-2-Pentanone	9700	
591-78-6	2-Hexanone	1700	U
127-18-4	Tetrachloroethene	8900	
79-34-5	1,1,2,2-Tetrachloroethane	830	U
108-88-3	Toluene	830	U
108-90-7	Chlorobenzene	830	U
100-41-4	Ethylbenzene	8200	
100-42-5	Styrene	830	U
1330-20-7	Total Xylenes	37000	E

FORM I VOA 1/87 Rev.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SS-2MSD

Lab Name: COMPUCHEM LABS Contract: (10-86)REV

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) SOIL Lab Sample ID: 233491

Sample wt/vol: 4.0 (g/mL) G Lab File ID: CN033491C12

Level: (low/med) MED Date Received: 12/03/88

% Moisture: not dec. 25 Date Analyzed: 12/08/88

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	1700	U
74-83-9	Bromomethane	1700	U
75-01-4	Vinyl Chloride	1700	U
75-00-3	Chloroethane	1700	U
75-09-2	Methylene Chloride	940	B
67-64-1	Acetone	1400	J
75-15-0	Carbon Disulfide	830	U
75-35-4	1,1-Dichloroethene	830	U
75-34-3	1,1-Dichloroethane	1200	
540-59-0	1,2-Dichloroethene (total)	600	J
67-66-3	Chloroform	830	U
107-06-2	1,2-Dichloroethane	830	U
78-93-3	2-Butanone	1700	U
71-55-6	1,1,1-Trichloroethane	9100	
56-23-5	Carbon Tetrachloride	830	U
108-05-4	Vinyl Acetate	1700	U
75-27-4	Bromodichloromethane	830	U
78-87-5	1,2-Dichloropropane	830	U
10061-01-5	cis-1,3-Dichloropropene	830	U
79-01-6	Trichloroethene	830	U
124-48-1	Dibromochloromethane	830	U
79-00-5	1,1,2-Trichloroethane	830	U
71-43-2	Benzene	830	U
10061-02-6	Trans-1,3-Dichloropropene	830	U
75-25-2	Bromoform	830	U
108-10-1	4-Methyl-2-Pentanone	11000	
591-78-6	2-Hexanone	1700	U
127-18-4	Tetrachloroethene	9900	
79-34-5	1,1,2,2-Tetrachloroethane	830	U
108-88-3	Toluene	830	U
108-90-7	Chlorobenzene	830	U
100-41-4	Ethylbenzene	8900	
100-42-5	Styrene	830	U
1330-20-7	Total Xylenes	40000	E

FORM I VOA 1/87 Rev.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SS-4

Lab Name: COMPUCHEM LABS Contract: (10-86)REV

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) SOIL Lab Sample ID: 232980

Sample wt/vol: 4.0 (g/mL) G Lab File ID: C3R32980B12

Level: (low/med) MED Date Received: 12/03/88

% Moisture: not dec. 37 Date Analyzed: 12/07/88

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	2000	U
74-83-9	Bromomethane	2000	U
75-01-4	Vinyl Chloride	2000	U
75-00-3	Chloroethane	2000	U
75-09-2	Methylene Chloride	720	BJ
67-64-1	Acetone	2000	U
75-15-0	Carbon Disulfide	990	U
75-35-4	1,1-Dichloroethene	990	U
75-34-3	1,1-Dichloroethane	990	U
540-59-0	1,2-Dichloroethene (total)	990	U
67-66-3	Chloroform	990	U
107-06-2	1,2-Dichloroethane	990	U
78-93-3	2-Butanone	2000	U
71-55-6	1,1,1-Trichloroethane	990	U
56-23-5	Carbon Tetrachloride	990	U
108-05-4	Vinyl Acetate	2000	U
75-27-4	Bromodichloromethane	990	U
78-87-5	1,2-Dichloropropane	990	U
10061-01-5	cis-1,3-Dichloropropene	990	U
79-01-6	Trichloroethene	1400	
124-48-1	Dibromochloromethane	990	U
79-00-5	1,1,2-Trichloroethane	990	U
71-43-2	Benzene	220	J
10061-02-6	Trans-1,3-Dichloropropene	990	U
75-25-2	Bromoform	990	U
108-10-1	4-Methyl-2-Pentanone	2000	U
591-78-6	2-Hexanone	2000	U
127-18-4	Tetrachloroethene	1800	
79-34-5	1,1,2,2-Tetrachloroethane	990	U
108-88-3	Toluene	1400	
108-90-7	Chlorobenzene	990	U
100-41-4	Ethylbenzene	560	J
100-42-5	Styrene	990	U
1330-20-7	Total Xylenes	4600	

FORM I VOA 1/87 Rev.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SS-4

Lab Name: COMPUCHEM LABS Contract: (10-86)REV

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) SOIL Lab Sample ID: 232980

Sample wt/vol: 4.0 (g/mL) G Lab File ID: C3R32980B12

Level: (low/med) MED Date Received: 12/03/88

% Moisture: not dec. 37 Date Analyzed: 12/07/88

Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 3

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	INSTRUMENT ARTIFACT	1.92	4000	J
2.	UNKNOWN	25.97	1600	J
3.	UNKNOWN	32.27	2800	J

FORM I VOA-TIC 1/87 Rev.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SS-3

Lab Name: COMPUCHEM LABS Contract: (10-86)REV

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) SOIL Lab Sample ID: 232979

Sample wt/vol: 5.0 (g/mL) G Lab File ID: G2R32979C12

Level: (low/med) LOW Date Received: 12/03/88

% Moisture: not dec. 14 Date Analyzed: 12/09/88

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	12	U
74-83-9	Bromomethane	12	U
75-01-4	Vinyl Chloride	12	U
75-00-3	Chloroethane	12	U
75-09-2	Methylene Chloride	13	B
67-64-1	Acetone	55	B
75-15-0	Carbon Disulfide	6	U
75-35-4	1,1-Dichloroethene	6	U
75-34-3	1,1-Dichloroethane	2	J
540-59-0	1,2-Dichloroethene (total)	6	U
67-66-3	Chloroform	2	J
107-06-2	1,2-Dichloroethane	6	U
78-93-3	2-Butanone	12	U
71-55-6	1,1,1-Trichloroethane	6	U
56-23-5	Carbon Tetrachloride	6	U
108-05-4	Vinyl Acetate	12	U
75-27-4	Bromodichloromethane	6	U
78-87-5	1,2-Dichloropropane	6	U
10061-01-5	cis-1,3-Dichloropropene	6	U
79-01-6	Trichloroethene	6	U
124-48-1	Dibromochloromethane	6	U
79-00-5	1,1,2-Trichloroethane	6	U
71-43-2	Benzene	2	BJ
10061-02-6	Trans-1,3-Dichloropropene	6	U
75-25-2	Bromoform	6	U
108-10-1	4-Methyl-2-Pentanone	12	U
591-78-6	2-Hexanone	12	U
127-18-4	Tetrachloroethene	1	J
79-34-5	1,1,2,2-Tetrachloroethane	6	U
108-88-3	Toluene	4	J
108-90-7	Chlorobenzene	3	J
100-41-4	Ethylbenzene	3	J
100-42-5	Styrene	6	U
1330-20-7	Total Xylenes	25	

FORM I VOA 1/87 Rev.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SS-3

Lab Name: COMPUCHEM LABS Contract: (10-86)REV

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) SOIL Lab Sample ID: 232979

Sample wt/vol: 5.0 (g/mL) G Lab File ID: G2R32979C12

Level: (low/med) LOW Date Received: 12/03/88

% Moisture: not dec. 14 Date Analyzed: 12/09/88

Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I VOA-TIC 1/87 Rev.

SAMPLE DATA SUMMARY

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SS-2

Lab Name: COMPUCHEM LABS Contract: (10-86)REV

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) SOIL Lab Sample ID: 232975

Sample wt/vol: 4.0 (g/mL) G Lab File ID: CR032975A12

Level: (low/med) MED Date Received: 12/03/88

% Moisture: not dec. 25 Date Analyzed: 12/07/88

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	1700	U
74-83-9	Bromomethane	1700	U
75-01-4	Vinyl Chloride	1700	U
75-00-3	Chloroethane	1700	U
75-09-2	Methylene Chloride	1200	B
67-64-1	Acetone	1000	BJ
75-15-0	Carbon Disulfide	830	U
75-35-4	1,1-Dichloroethene	830	U
75-34-3	1,1-Dichloroethane	1300	
540-59-0	1,2-Dichloroethene (total)	650	J
67-66-3	Chloroform	830	U
107-06-2	1,2-Dichloroethane	830	U
78-93-3	2-Butanone	1700	U
71-55-6	1,1,1-Trichloroethane	10000	
56-23-5	Carbon Tetrachloride	830	U
108-05-4	Vinyl Acetate	1700	U
75-27-4	Bromodichloromethane	830	U
78-87-5	1,2-Dichloropropane	830	U
10061-01-5	cis-1,3-Dichloropropene	830	U
79-01-6	Trichloroethene	16000	
124-48-1	Dibromochloromethane	830	U
79-00-5	1,1,2-Trichloroethane	830	U
71-43-2	Benzene	600	J
10061-02-6	Trans-1,3-Dichloropropene	830	U
75-25-2	Bromoform	830	U
108-10-1	4-Methyl-2-Pentanone	13000	
591-78-6	2-Hexanone	1700	U
127-18-4	Tetrachloroethene	9700	
79-34-5	1,1,2,2-Tetrachloroethane	830	U
108-88-3	Toluene	32000	
108-90-7	Chlorobenzene	830	U
100-41-4	Ethylbenzene	9200	
100-42-5	Styrene	830	U
1330-20-7	Total Xylenes	44000	E

FORM I VOA 1/87 Rev.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SS-2

Lab Name: COMPUCHEM LABS Contract: (10-86)REV

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) SOIL Lab Sample ID: 232975

Sample wt/vol: 4.0 (g/mL) G Lab File ID: CR032975A12

Level: (low/med) MED Date Received: 12/03/88

% Moisture: not dec. 25 Date Analyzed: 12/07/88

Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 5

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	INSTRUMENT ARATIFACT	2.03	4000	J
2. 76-13-1	ETHANE,1,1,2-TRICHLORO-1,2,2	11.29	830	J
3.	UNKNOWN ALCOHOL	21.45	1000	J
4.	UNKNOWN	25.97	6500	J
5.	UNKNOWN CYCLIC ALKANE	26.32	1000	J

FORM I VOA-TIC 1/87 Rev.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SS-1

Lab Name: COMPUCHEM LABS Contract: (10-86)REV

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) SOIL Lab Sample ID: 232968

Sample wt/vol: 4.0 (g/mL) G Lab File ID: C2R32968B12

Level: (low/med) MED Date Received: 12/03/88

% Moisture: not dec. 24 Date Analyzed: 12/07/88

Column: (pack/cap) PACK Dilution Factor: 2.5

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	4100	U
74-83-9	Bromomethane	4100	U
75-01-4	Vinyl Chloride	4100	U
75-00-3	Chloroethane	4100	U
75-09-2	Methylene Chloride	1500	BJ
67-64-1	Acetone	4100	U
75-15-0	Carbon Disulfide	2100	U
75-35-4	1,1-Dichloroethene	2100	U
75-34-3	1,1-Dichloroethane	2100	U
540-59-0	1,2-Dichloroethene (total)	2100	U
67-66-3	Chloroform	2100	U
107-06-2	1,2-Dichloroethane	2100	U
78-93-3	2-Butanone	4100	U
71-55-6	1,1,1-Trichloroethane	1900	J
56-23-5	Carbon Tetrachloride	2100	U
108-05-4	Vinyl Acetate	4100	U
75-27-4	Bromodichloromethane	2100	U
78-87-5	1,2-Dichloropropane	2100	U
10061-01-5	cis-1,3-Dichloropropene	2100	U
79-01-6	Trichloroethene	6400	
124-48-1	Dibromochloromethane	2100	U
79-00-5	1,1,2-Trichloroethane	2100	U
71-43-2	Benzene	890	J
10061-02-6	Trans-1,3-Dichloropropene	2100	U
75-25-2	Bromoform	2100	U
108-10-1	4-Methyl-2-Pentanone	4100	U
591-78-6	2-Hexanone	4100	U
127-18-4	Tetrachloroethene	4800	
79-34-5	1,1,2,2-Tetrachloroethane	2100	U
108-88-3	Toluene	11000	
108-90-7	Chlorobenzene	2100	U
100-41-4	Ethylbenzene	11000	
100-42-5	Styrene	76000	
1330-20-7	Total Xylenes	33000	

FORM I VOA 1/87 Rev.

SAMPLE DATA SUMMARY

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SS-1

Lab Name: COMPUCHEM LABS Contract: (10-86)REV

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) SOIL Lab Sample ID: 232968

Sample wt/vol: 4.0 (g/mL) G Lab File ID: C2R32968B12

Level: (low/med) MED Date Received: 12/03/88

% Moisture: not dec. 24 Date Analyzed: 12/07/88

Column (pack/cap) PACK Dilution Factor: 2.5

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I VOA-TIC 1/87 Rev.

SAMPLE IDENTIFIER: GW-3
COMPUCHEM SAMPLE NUMBER: 235831

INORGANICS CONVENTIONALS	CONCENTRATION (mg/kg)	DETECTION LIMIT (mg/kg)
OIL & GREASE	300000	25

RECRA ENVIRONMENTAL, INC.

CHAIN OF CUSTODY RECORD

PROJECT NO: 576-002

SITE NAME: Quanta Resources

SAMPLERS (SIGNATURE): [signature]

STATION NO	DATE	TIME	COMP	GRAB	STATION LOCATION	NO OF CONTAINERS	VOCs TCL+10	EPTOX Metals only	~~EPTOX~~ PCB 80/80	Ignitability		REMARKS
SS-1	12-1-88	1006		✓	Quanta Resources Soil	4	2	2	232968 232981			Recra #s: 12711, 12712, 12713, 12714
SS-2		1100-1156		✓		4	2	2	232975	232982		Recra #: 12716, 12717, 12718, 12725
SS-2 MS				✓		4	2	2				Recra # 12721, 12722, 12720, 12726
SS-2 MSD				✓		4	2	2				RECRA # 12723, 12724, 12719, 12727
SS-3		1430-1440		✓		4	2	2	232979	232989		Recra # 12732, 12733, 12734, 12735
SS-4		1520-1530		✓		4	2	2	232980	232990		Recra # 12736, 12737, 12738, 12739
Drummed cuttings		1305-1335	✓		Quanta Resources Well Cuttings	3		1	1	1	232991	Recra #: 12728, 12729, 12730 232997 232998
Drummed Decon H2O		1350	✓		Quanta Resources Decon H2O	1			1			Recra # 12731 232999

Receiv as o Sampl under SS-

Id used for Drummed cuttings is Drum Cut and id used for Drummed Decon is Drum Decon JP 12-3-88

RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED BY (SIGNATURE)	RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED BY (SIGNATURE)
[signature]	12-2-88	1455					
RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED BY (SIGNATURE)	RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED BY (SIGNATURE)
RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED FOR LABORATORY BY (SIGNATURE)	DATE	TIME	REMARKS	
			Joan Purdie	12-3-88	0900	Samples received in good condition JP 12-3-88	

Distribution: Original accompanies shipment; copy to coordinator field files

SAMPLE IDENTIFIER: DRUM CUT
COMPUCHEM SAMPLE NUMBER: 232998

	CONCENTRATION (60°-212°F)
Ignitability	>212°F

COMPUCHEM LABORATORIES

ANALYTICAL REPORT OF DATA
SUBMITTED TO:

Ms. Deborah Wright
Lawler Matusky & Skelly (LMS)
One Blue Hill Plaza
P.O. Box 1509
Pearl River, NY 10965

CHRONICLE

ITEM NO.	SAMPLE IDENTIFIER	COMPUCHEM® NUMBER	DATE SAMPLE RECEIVED	DATE OIL & GREASE ANALYZED
1.	GW-3	235831	12/14/88	12/19/88

SAMPLE IDENTIFIER: GW-2
COMPUCHEM SAMPLE NUMBER: 235839

INORGANICS CONVENTIONALS	CONCENTRATION (mg/L)	DETECTION LIMIT (mg/L)
OIL & GREASE	120	1.0

COMPUCHEM LABORATORIES

ANALYTICAL REPORT OF DATA
SUBMITTED TO:

Ms. Deborah Wright
Lawler Matusky & Skelly (LMS)
One Blue Hill Plaza
P.O. Box 1509
Pearl River, NY 10965

CHRONICLE

ITEM NO.	SAMPLE IDENTIFIER	COMPUCHEM® NUMBER	DATE SAMPLE RECEIVED	DATE IGNITABILITY ANALYZED
1.	DRUM CUT	232998	12/03/88	12/19/88

SAMPLE IDENTIFIER: GW-1
COMPUCHEM SAMPLE NUMBER: 235836

INORGANICS CONVENTIONALS	CONCENTRATION (mg/L)	DETECTION LIMIT (mg/L)
OIL & GREASE	250	1.0

SAMPLE IDENTIFIER: SW-1
COMPUCHEM SAMPLE NUMBER: 235834

INORGANICS CONVENTIONALS	CONCENTRATION (mg/L)	DETECTION LIMIT (mg/L)
OIL & GREASE	1.3	1.0

SAMPLE IDENTIFIER: GW-3
COMPUCHEM SAMPLE NUMBER: 235821

INORGANICS CONVENTIONALS	CONCENTRATION (umhos/cm)	DETECTION LIMIT (umhos/cm)
SPECIFIC CONDUCTANCE	2300	10

COMPUCHEM LABORATORIES

ANALYTICAL REPORT OF DATA
SUBMITTED TO:

Ms. Deborah Wright
Lawler Matusky & Skelly (LMS)
One Blue Hill Plaza
P.O. Box 1509
Pearl River, NY 10965

CHRONICLE

ITEM NO.	SAMPLE IDENTIFIER	COMPUCHEM® NUMBER	DATE SAMPLE RECEIVED	DATE OIL & GREASE ANALYZED
1.	GW-1	235836	12/14/88	12/19/89
2.	SW-1	235834	12/14/88	12/19/89
3.	GW-2	235839	12/14/88	12/19/89

SAMPLE IDENTIFIER: GW-1
COMPUCHEM SAMPLE NUMBER: 235837

INORGANICS CONVENTIONALS	CONCENTRATION (umhos/cm)	DETECTION LIMIT (umhos/cm)
SPECIFIC CONDUCTANCE	700	10

SAMPLE IDENTIFIER: GW-2
COMPUCHEM SAMPLE NUMBER: 235840

INORGANICS CONVENTIONALS	CONCENTRATION (umhos/cm)	DETECTION LIMIT (umhos/cm)
SPECIFIC CONDUCTANCE	2100	10

COMPUCHEM LABORATORIES

ANALYTICAL REPORT OF DATA
SUBMITTED TO:

Ms. Deborah Wright
Lawler Matusky & Skelly (LMS)
One Blue Hill Plaza
P.O. Box 1509
Pearl River, NY 10965

CHRONICLE

ITEM NO.	SAMPLE IDENTIFIER	COMPUCHEM® NUMBER	DATE SAMPLE RECEIVED	DATE SPECIFIC CONDUCTANCE PERFORMED
1.	SW-1	235835	12/14/88	12/19/88
2.	GW-1	235837	12/14/88	12/19/88
3.	GW-2	235840	12/14/88	12/19/88
4.	GW-3	235821	12/14/88	12/19/88

SAMPLE IDENTIFIER: SW-1
COMPUCHEM SAMPLE NUMBER: 235835

INORGANICS CONVENTIONALS	CONCENTRATION (umhos/cm)	DETECTION LIMIT (umhos/cm)
SPECIFIC CONDUCTANCE	470	10

SAMPLE IDENTIFIER: GW-3
COMPUCHEM SAMPLE NUMBER: 235830

INORGANICS CONVENTIONALS	CONCENTRATION (68 - 212 °F)
IGNITABILITY	>212

SAMPLE IDENTIFIER: GW-2
COMPUCHEM SAMPLE NUMBER: 235845

INORGANICS CONVENTIONALS	CONCENTRATION (68 - 212 °F)
IGNITABILITY	>212

COMPOUND LIST - PCBs METHOD 8080

SAMPLE IDENTIFIER: DRUM CUT
COMPUCHEM® SAMPLE NUMBER: 232991

		CONCENTRATION (ug/kg)	DETECTION† LIMIT (ug/kg)
1P.	PCB-1016	BDL	100
2P.	PCB-1221	BDL	100
3P.	PCB-1232	BDL	100
4P.	PCB-1242	BDL	100
5P.	PCB-1248	BDL	100
6P.	PCB-1254	BDL	100
7P.	PCB-1260	BDL	100

Surrogate Recovery - Introduced at the beginning of the extraction, the surrogate standard is a select compound that analytically mimics the response of certain analytes. A known concentration of this surrogate is added to the sample and a percent recovery is calculated. This recovery acts as a barometer of extraction efficiency and analytical response for the individual sample.

	% Recovery	Control Range %
Dibutylchlorendate	85	(20-150)*

*Advisory surrogate; with the exception of dilutions recovery below 10% requires action step (re-extraction and re-analysis).

BDL=BELOW DETECTION LIMIT

†Sample analyzed using a dilution to properly evaluate the GC Chromatogram, thus the higher than normal detection limits.

COMPUCHEM LABORATORIES

ANALYTICAL REPORT OF DATA
SUBMITTED TO:

Ms. Deborah Wright
Lawler Matusky & Skelly (LMS)
One Blue Hill Plaza
P.O. Box 1509
Pearl River, NY 10965

CHRONICLE

ITEM NO.	SAMPLE IDENTIFIER	COMPUCHEM® NUMBER	DATE SAMPLE RECEIVED	DATE IGNITABILITY PERFORMED
1.	GW-3	235830	12/14/88	12/20/88
2.	GW-2	235845	12/14/88	12/20/88

COMPUCHEM LABORATORIES

December 22, 1988

Ms. Deborah Wright
Lawler Matusky & Skelly (LMS)
One Blue Hill Plaza
P.O. Box 1509
Pearl River, NY 10965

Dear Ms. Wright:

We at CompuChem® are pleased to provide our report for the analysis you requested. Data for the following sample are enclosed:

Your ID Number	Our ID Number	Analysis Code	Order Number	Description of Work Requested	Report Format
DRUM CUT	232991	749	15767	PCB's - Method 8080	Style 9
DRUMDECON	232999				

In this report we have included the analytical results, the method reference, and the quality control summary. If any anomalies were encountered in this analysis, they would be referenced in an attached Quality Assurance Notice(s). Instrument documentation is provided with reports purchased in our Gold Report format.

To obtain additional technical information concerning this report, please contact your Sales Representative. In addition to resolving your questions, they can provide you with a complete overview of our line of services and assist you in identifying those services which will effectively and efficiently support your monitoring program.

For your convenience, your Customer Service Representative can help you place a new order, obtain information about a sample's status or obtain assistance with sample logistics. Your Sales Representative and your Customer Service Representative can be reached at 1/919-549-8263.

Thank you for choosing CompuChem®. We would like to continue providing you analytical support and services. We would appreciate your comments regarding the quality of services you have received from CompuChem®; client satisfaction is important to us. Please address your comments to your Sales or Customer Service Representative at the address given below.

Sincerely,

for A. Byd
Mary E. Mitchell
Supervisor, Report Deliverables

cc: Accounting
(Cover letter only)

COMPOUND LIST - PCBs METHOD 8080

SAMPLE IDENTIFIER: DRUMDECON
COMPUCHEM® SAMPLE NUMBER: 232999

		CONCENTRATION (ug/kg)	DETECTION LIMIT (ug/kg)
1P.	PCB-1016	BDL	20
2P.	PCB-1221	BDL	20
3P.	PCB-1232	BDL	20
4P.	PCB-1242	BDL	20
5P.	PCB-1248	BDL	20
6P.	PCB-1254	BDL	20
7P.	PCB-1260	BDL	20

Surrogate Recovery - Introduced at the beginning of the extraction, the surrogate standard is a select compound that analytically mimics the response of certain analytes. A known concentration of this surrogate is added to the sample and a percent recovery is calculated. This recovery acts as a barometer of extraction efficiency and analytical response for the individual sample.

	% Recovery	Control Range %
Dibutylchlorendate	77	(20-150)*

*Advisory surrogate; with the exception of dilutions recovery below 10% requires action step (re-extraction and re-analysis).

BDL=BELOW DETECTION LIMIT

COMPOUND LIST - PCBs METHOD 8080

COMPUCHEM BLANK ID: 237158

SAMPLE IDENTIFIER: GW-3, GW-2
COMPUCHEM® SAMPLE NUMBER: 235825, 235841

		CONCENTRATION (ug/kg)	DETECTION LIMIT (ug/kg)
1P.	PCB-1016	BDL	20
2P.	PCB-1221	BDL	20
3P.	PCB-1232	BDL	20
4P.	PCB-1242	BDL	20
5P.	PCB-1248	BDL	20
6P.	PCB-1254	BDL	20
7P.	PCB-1260	BDL	20

Surrogate Recovery - Introduced at the beginning of the extraction, the surrogate standard is a select compound that analytically mimics the response of certain analytes. A known concentration of this surrogate is added to the sample and a percent recovery is calculated. This recovery acts as a barometer of extraction efficiency and analytical response for the individual sample.

	% Recovery	Control Range %
Dibutylchlorendate	146	(20-150)*

*Advisory surrogate; with the exception of dilutions recovery below 10% requires action step (re-extraction and re-analysis).

BDL=BELOW DETECTION LIMIT

COMPOUND LIST - PCBs METHOD 8080

SAMPLE IDENTIFIER: GW-3
COMPUCHEM® SAMPLE NUMBER: 235825

		CONCENTRATION (ug/kg)	DETECTION† LIMIT (ug/kg)
1P.	PCB-1016	BDL	200
2P.	PCB-1221	BDL	200
3P.	PCB-1232	BDL	200
4P.	PCB-1242	1800	200
5P.	PCB-1248	BDL	200
6P.	PCB-1254	BDL	200
7P.	PCB-1260	BDL	200

Surrogate Recovery - Introduced at the beginning of the extraction, the surrogate standard is a select compound that analytically mimics the response of certain analytes. A known concentration of this surrogate is added to the sample and a percent recovery is calculated. This recovery acts as a barometer of extraction efficiency and analytical response for the individual sample.

	% Recovery	Control Range %
Dibutylchlorendate	**	(20-150)*

*Advisory surrogate; with the exception of dilutions recovery below 10% requires action step (re-extraction and re-analysis).

BDL=BELOW DETECTION LIMIT

†Sample analyzed using a dilution to properly evaluate the GC Chromatogram, thus the higher than normal detection limits.

**No surrogate recovery data available due to a dilution and/or matrix interference.

COMPOUND LIST - PCBs METHOD 8080

SAMPLE IDENTIFIER: GW-2
COMPUCHEM® SAMPLE NUMBER: 235841

		CONCENTRATION (ug/kg)	DETECTION LIMIT (ug/kg)
1P.	PCB-1016	BDL	20
2P.	PCB-1221	BDL	20
3P.	PCB-1232	BDL	20
4P.	PCB-1242	BDL	20
5P.	PCB-1248	BDL	20
6P.	PCB-1254	BDL	20
7P.	PCB-1260	BDL	20

Surrogate Recovery - Introduced at the beginning of the extraction, the surrogate standard is a select compound that analytically mimics the response of certain analytes. A known concentration of this surrogate is added to the sample and a percent recovery is calculated. This recovery acts as a barometer of extraction efficiency and analytical response for the individual sample.

	% Recovery	Control Range %
Dibutylchlorendate	23	(20-150)*

*Advisory surrogate; with the exception of dilutions recovery below 10% requires action step (re-extraction and re-analysis).

BDL=BELOW DETECTION LIMIT

FORM I

Client Sample No.
GW-1

DATE 1/ 5/89

INORGANIC ANALYSIS DATA SHEET

LAB NAME: CompuChem Laboratories

CASE NO: 273801 15767

SOW NO: 785

Lab Receipt Date 12/14/88

LAB SAMPLE ID. NO. 235838

QC REPORT NO 15767C

ELEMENTS IDENTIFIED AND MEASURED

CONCENTRATION: LOW XXX MEDIUM ____

MATRIX: WATER XXX SOIL ____ SLUDGE ____ OTHER ____

UNITS: ug/l

1.	Aluminum	1060		P	13.	Magnesium	18100		P
2.	Antimony	43U		P	14.	Manganese	1800		P
3.	Arsenic	[3.6]	N	F	15.	Mercury	.20U		CV
4.	Barium	313		P	16.	Nickel	24U		P
5.	Beryllium	1.1U		P	17.	Potassium	11000		P
6.	Cadmium	4.3U		P	18.	Selenium	21U	N	F
7.	Calcium	64800		P	19.	Silver	4.3U		P
8.	Chromium	5.0U		P	20.	Sodium	28100		P
9.	Cobalt	2.5U		P	21.	Thallium	2.0U		F
10.	Copper	29	*	P	22.	Vanadium	[3.6]		P
11.	Iron	44000	*	P	23.	Zinc	31		P
12.	Lead	[2.7]		F					

Cyanide 10U

Percent Solids(%)

Footnotes: For reporting results, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definitions of such flags must be explicit and contained on Cover Page, however.

Comments: CLEAR, COLORLESS

C

LAB MANAGER [signature]

FORM I

Client Sample No.
GW-2

DATE 1/ 5/89

INORGANIC ANALYSIS DATA SHEET

LAB NAME: CompuChem Laboratories

CASE NO: 273801 15767

SOW NO: 785

Lab Receipt Date 12/14/88

LAB SAMPLE ID. NO. 235846

QC REPORT NO 15767C

ELEMENTS IDENTIFIED AND MEASURED

CONCENTRATION: LOW XXX MEDIUM _____

MATRIX: WATER XXX SOIL _____ SLUDGE _____ OTHER _____

UNITS: ug/l

1.	Aluminum	10500		P	13.	Magnesium	41500	P
2.	Antimony	43U		P	14.	Manganese	3420	P
3.	Arsenic	[7.6]	N	F	15.	Mercury	.20U	CV
4.	Barium	928		P	16.	Nickel	[31]	P
5.	Beryllium	[1.9]		P	17.	Potassium	50400	P
6.	Cadmium	4.3U		P	18.	Selenium	21U EN	F
7.	Calcium	253000		P	19.	Silver	4.3U	P
8.	Chromium	27		P	20.	Sodium	140000	P
9.	Cobalt	2.5U		P	21.	Thallium	2.0U	F
10.	Copper	41	*	P	22.	Vanadium	[31]	P
11.	Iron	52100	*	P	23.	Zinc	112	P
12.	Lead	61		F				

Cyanide 10U

Percent Solids(%)

Footnotes: For reporting results, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definitions of such flags must be explicit and contained on Cover Page, however.

Comments: GREY, CLOUDY

LAB MANAGER BHRobach

C

FORM I

Client Sample No.
FIELD BLANK

DATE 1/ 5/89

INORGANIC ANALYSIS DATA SHEET

LAB NAME: CompuChem Laboratories

CASE NO: 273801 15767

SOW NO: 785

Lab Receipt Date 12/14/88

LAB SAMPLE ID. NO. 235832

QC REPORT NO 15767C

ELEMENTS IDENTIFIED AND MEASURED

CONCENTRATION: LOW XXX MEDIUM _____

MATRIX: WATER XXX SOIL _____ SLUDGE _____ OTHER _____

UNITS: ug/l

1.	Aluminum	[30]		P	13.	Magnesium	133U		P
2.	Antimony	43U		P	14.	Manganese	1.7U		P
3.	Arsenic	1.6U	N	F	15.	Mercury	.20U		CV
4.	Barium	.85U		P	16.	Nickel	24U		P
5.	Beryllium	1.1U		P	17.	Potassium	2360U		P
6.	Cadmium	4.3U		P	18.	Selenium	2.1U	N	F
7.	Calcium	[302]		P	19.	Silver	4.3U		P
8.	Chromium	5.0U		P	20.	Sodium	1890U		P
9.	Cobalt	2.5U		P	21.	Thallium	2.0U		F
10.	Copper	[8.0]	*	P	22.	Vanadium	2.3U		P
11.	Iron	[6.8]	*	P	23.	Zinc	[4.8]		P
12.	Lead	79		F					

Cyanide 10U

Percent Solids(%)

Footnotes: For reporting results, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definitions of such flags must be explicit and contained on Cover Page, however.

Comments: CLEAR, COLORLESS

LAB MANAGER B H Rohrbach

C

FORM I

Client Sample No.
SW-1

DATE 1/ 5/89

INORGANIC ANALYSIS DATA SHEET

LAB NAME: CompuChem Laboratories

CASE NO: 273801 15767

SOW NO: 785

Lab Receipt Date 12/14/88

LAB SAMPLE ID. NO. 235833

QC REPORT NO 15767C

ELEMENTS IDENTIFIED AND MEASURED

CONCENTRATION: LOW XXX MEDIUM

MATRIX: WATER XXX SOIL SLUDGE OTHER

UNITS: ug/l

1.	Aluminum	[55]		P	13.	Magnesium	7150		P
2.	Antimony	43U		P	14.	Manganese	[14]		P
3.	Arsenic	[2.6]	N	F	15.	Mercury	.20U		CV
4.	Barium	[67]		P	16.	Nickel	24U		P
5.	Beryllium	1.1U		P	17.	Potassium	17700		P
6.	Cadmium	4.3U		P	18.	Selenium	21U	N	F
7.	Calcium	67800		P	19.	Silver	4.3U		P
8.	Chromium	5.0U		P	20.	Sodium	13400		P
9.	Cobalt	2.5U		P	21.	Thallium	[2.4]		F
10.	Copper	29	*	P	22.	Vanadium	2.3U		P
11.	Iron	292	*	P	23.	Zinc	306		P
12.	Lead	79		F					

Cyanide 10U

Percent Solids(%)

Footnotes: For reporting results, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definitions of such flags must be explicit and contained on Cover Page, however.

Comments: CLEAR, COLORLESS

C

LAB MANAGER Bill Polubach

Form VI

Q. C. Report No. 15767C

DUPLICATES

LAB NAME COMPUCHEM LABORATORIES

CASE NO. 273801 15767

EPA Sample No. SW-1

DATE 1/ 5/89

Lab Sample ID No. 235823

Units: ug/L

Matrix WATER

Compound	Control Limit(1)	Sample(S)	Duplicate(D)	RPD(2)	
Metals:					
1. Aluminum		[55]	595.8	NC	
2. Antimony		43U	43U	NC	
3. Arsenic		[2.6]	1.6U	NC	
4. Barium		[67]	[65]	NC	
5. Beryllium		1.1U	1.1U	NC	
6. Cadmium		4.3U	4.3U	NC	
7. Calcium	+/- 20% RPD	67780	64960	4.2	
8. Chromium		5.0U	5.0U	NC	
9. Cobalt		2.5U	2.5U	NC	
10. Copper	+/- CRDL	29.2	95.4	106	*
11. Iron	+/- CRDL	291.6	715.6	84	*
12. Lead	+/- 20% RPD	79.0	83.0	4.9	
13. Magnesium	+/- CRDL	7148	7253	1.5	
14. Manganese		[14]	24.2	NC	
15. Mercury		.20U	.20U	NC	
16. Nickel		24U	[26]	NC	
17. Potassium	+/- CRDL	17670	16720	5.5	
18. Selenium		21U	21U	NC	
19. Silver		4.3U	4.3U	NC	
20. Sodium	+/- CRDL	13440	12230	9.4	
21. Thallium		[2.4]	2.0U	NC	
22. Vanadium		2.3U	2.3U	NC	
23. Zinc	+/- 20% RPD	306.3	330.6	7.6	
Other:					
Cyanide		10U		NC	

* Out of control
(1) To be added at a later date
(2) RPD = [|S - D|/((S + D)/2] x 100
NC - Non-calculable RPD due to value(s) less than CRDL

D

FORM I

Client Sample No.
GW-3

DATE 1/ 5/89

INORGANIC ANALYSIS DATA SHEET

LAB NAME: CompuChem Laboratories

CASE NO: 273801 15767

SOW NO: 785

Lab Receipt Date 12/14/88

LAB SAMPLE ID. NO. 235820

QC REPORT NO 15767C

ELEMENTS IDENTIFIED AND MEASURED

CONCENTRATION: LOW XXX MEDIUM

MATRIX: WATER XXX SOIL SLUDGE OTHER

UNITS: ug/l

1.	Aluminum	10600		P	13.	Magnesium	47700		P
2.	Antimony	43U		P	14.	Manganese	2760		P
3.	Arsenic	24	N	F	15.	Mercury	.20U		CV
4.	Barium	1260		P	16.	Nickel	[32]		P
5.	Beryllium	1.1U		P	17.	Potassium	205000		P
6.	Cadmium	4.3U		P	18.	Selenium	21U	EN	F
7.	Calcium	184000		P	19.	Silver	4.3U		P
8.	Chromium	22		P	20.	Sodium	197000		P
9.	Cobalt	[18]		P	21.	Thallium	2.0U		F
10.	Copper	76	*	P	22.	Vanadium	62		P
11.	Iron	54000	*	P	23.	Zinc	119		P
12.	Lead	130		F					

Cyanide 10U

Percent Solids(%)

Footnotes: For reporting results, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definitions of such flags must be explicit and contained on Cover Page, however.

Comments: OPAQUE, BROWN

LAB MANAGER BHRobbach

C

SW-846

Date Received: 12/03/88

uChem#: 232997

Date Completed: 12/12/88

r XXX Solids

LE ID: DRUM CUT

CompuChem Compound #	Compound Name	Result (circle one) (ug/l) mg/kg
0118	Aluminum,total.....( )	
0101	Antimony,total.....( )	
0102	Arsenic,total.....(F)	
0114	Barium,total.....(P)	31
0103	Beryllium,total.....( )	233
0129	Calcium,total.....( )	
0104	Cadmium,total.....(P)	
0120	Cobalt,total.....( )	4.3U
0105	Chromium,total.....(P)	
0106	Copper,total.....( )	47
0115	Iron,total.....( )	
0107	Lead,total.....(P)	
0121	Magnesium,total.....( )	281
0116	Manganese,total.....( )	
0109	Nickel,total.....( )	
0131	Potassium,total.....( )	
0110	Selenium,total.....(F)	
0111	Silver,total.....(P)	10U
0130	Sodium,total.....( )	4.3U
0112	Thallium,total.....( )	
0117	Vanadium,total.....( )	
0113	Zinc,total.....( )	
0108	Mercury,total.....(CV)	0.71

P = Inductively Coupled Plasma (Method 6010)
A = Flame-Atomic Absorption Spectrometer (7000 Series Methods)
F = Furnace-Atomic Absorption Spectrometer (7000 Series Methods)
CV= Cold Vapor (Method 7471)

U = Compound was analyzed for but not detected. Total reported is the Instrument Detection Limit
[ ]= Total is greater than Instrument Detection Limit but less than EPA Required Detection Limit

COMMENTS:

Form VI

Q. C. Report No. 15767C

DUPLICATES

LAB NAME COMPUCHEM LABORATORIES

CASE NO. 273801 15767

EPA Sample No. SW-1

DATE 1/ 5/89

Lab Sample ID No. 235828

Units: ug/L

Matrix WATER

Compound	Control Limit(1)	Sample(S)	Duplicate(D)	RPD(2)
Metals:				
1. Aluminum		[55]		NC
2. Antimony		43U		NC
3. Arsenic		[2.6]		NC
4. Barium		[67]		NC
5. Beryllium		1.1U		NC
6. Cadmium		4.3U		NC
7. Calcium		67780		NC
8. Chromium		5.0U		NC
9. Cobalt		2.5U		NC
10. Copper		29.2		NC
11. Iron		291.6		NC
12. Lead		79.0		NC
13. Magnesium		7148		NC
14. Manganese		[14]		NC
15. Mercury		.20U		NC
16. Nickel		24U		NC
17. Potassium		17670		NC
18. Selenium		21U		NC
19. Silver		4.3U		NC
20. Sodium		13440		NC
21. Thallium		[2.4]		NC
22. Vanadium		2.3U		NC
23. Zinc		306.3		NC
Other:				
Cyanide		10U	10U	NC

* Out of control
(1) To be added at a later date
(2) RPD = [|S - D|/((S + D)/2] x 100
NC - Non-calculable RPD due to value(s) less than CRDL

D

SW-846

Date Received: 12/14/88

CompuChem#: 235826

Date Completed: 1/ 9/89

Water XXX Solids

SAMPLE ID: GW-3

CompuChem Compound #	Compound Name		Result (circle one) (ug/l) mg/kg
0118	Aluminum,total.....	( )	
0101	Antimony,total.....	( )	
0102	Arsenic,total.....	(F)	11
0114	Barium,total.....	(P)	[171]
0103	Beryllium,total.....	( )	
0129	Calcium,total.....	( )	
0104	Cadmium,total.....	(P)	4.3U
0120	Cobalt,total.....	( )	
0105	Chromium,total.....	(P)	5.0U
0106	Copper,total.....	( )	
0115	Iron,total.....	( )	
0107	Lead,total.....	(F)	[1.9]
0121	Magnesium,total.....	( )	
0116	Manganese,total.....	( )	
0109	Nickel,total.....	( )	
0131	Potassium,total.....	( )	
0110	Selenium,total.....	(F)	2.1U
0111	Silver,total.....	(P)	4.3U
0130	Sodium,total.....	( )	
0112	Thallium,total.....	( )	
0117	Vanadium,total.....	( )	
0113	Zinc,total.....	( )	
0108	Mercury,total.....	(CV)	0.20U

P = Inductively Coupled Plasma (Method 6010)
A = Flame-Atomic Absorption Spectrometer (7000 Series Methods)
F = Furnace-Atomic Absorption Spectrometer (7000 Series Methods)
CV= Cold Vapor (Method 7471)

U = Compound was analyzed for but not detected. Total reported is the Instrument Detection Limit
[ ]= Total is greater than Instrument Detection Limit but less than EPA Required Detection Limit

COMMENTS:

SW-846

Date Received: 12/14/88

CompuChem#: 235842

Date Completed: 1/ 9/89

Water XXX Solids

SAMPLE ID: GW-2

CompuChem Compound #	Compound Name		Result (circle one) (ug/l) mg/kg
0118	Aluminum,total.....	( )	
0101	Antimony,total.....	( )	
0102	Arsenic,total.....	(F)	[6.3]
0114	Barium,total.....	(P)	[133]
0103	Beryllium,total.....	( )	
0129	Calcium,total.....	( )	
0104	Cadmium,total.....	(P)	4.3U
0120	Cobalt,total.....	( )	
0105	Chromium,total.....	(P)	5.0U
0106	Copper,total.....	( )	
0115	Iron,total.....	( )	
0107	Lead,total.....	(F)	[1.9]
0121	Magnesium,total.....	( )	
0116	Manganese,total.....	( )	
0109	Nickel,total.....	( )	
0131	Potassium,total.....	( )	
0110	Selenium,total.....	(F)	2.1U
0111	Silver,total.....	(P)	4.3U
0130	Sodium,total.....	( )	
0112	Thallium,total.....	( )	
0117	Vanadium,total.....	( )	
0113	Zinc,total.....	( )	
0108	Mercury,total.....	(CV)	0.20U

P = Inductively Coupled Plasma (Method 6010)
A = Flame-Atomic Absorption Spectrometer (7000 Series Methods)
F = Furnace-Atomic Absorption Spectrometer (7000 Series Methods)
CV= Cold Vapor (Method 7471)

U = Compound was analyzed for but not detected. Total reported is the Instrument Detection Limit
[]= Total is greater than Instrument Detection Limit but less than EPA Required Detection Limit

COMMENTS:

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SW-1MSD

Lab Name: COMPUCHEM LABORATORIES Contract: (10-86)-REV

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 35

Matrix: (soil/water) WATER Lab Sample ID: 235806

Sample wt/vol: 500 (g/mL) ML Lab File ID: _____

Level: (low/med) LOW Date Received: 12/14/88

% Moisture: not dec. _____ dec. _____ Date Extracted: 12/18/88

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 01/01/89

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 0.50

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
5103-71-9	alpha-Chlordane	0.50	U
5103-74-2	gamma-Chlordane	0.50	U
8001-35-2	Toxaphene	1.0	U
12674-11-2	Aroclor-1016	0.50	U
11104-28-2	Aroclor-1221	0.50	U
11141-16-5	Aroclor-1232	0.50	U
53469-21-9	Aroclor-1242	0.50	U
12672-29-6	Aroclor-1248	0.50	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

FORM I PEST 1/87 Rev.

SW-846

Date Received: 12/14/88

CompuChem#: 235800

Date Completed: 1/ 9/89

Water XXX Solids

SAMPLE ID: SED-1

CompuChem Compound #	Compound Name		Result (circle one) (ug/l) mg/kg
0118	Aluminum,total.....	( )	
0101	Antimony,total.....	( )	
0102	Arsenic,total.....	(F)	[3.0]
0114	Barium,total.....	(P)	[161]
0103	Beryllium,total.....	( )	
0129	Calcium,total.....	( )	
0104	Cadmium,total.....	(P)	4.3U
0120	Cobalt,total.....	( )	
0105	Chromium,total.....	(P)	5.0U
0106	Copper,total.....	( )	
0115	Iron,total.....	( )	
0107	Lead,total.....	(P)	429
0121	Magnesium,total.....	( )	
0116	Manganese,total.....	( )	
0109	Nickel,total.....	( )	
0131	Potassium,total.....	( )	
0110	Selenium,total.....	(F)	10U
0111	Silver,total.....	(P)	4.3U
0130	Sodium,total.....	( )	
0112	Thallium,total.....	( )	
0117	Vanadium,total.....	( )	
0113	Zinc,total.....	( )	
0108	Mercury,total.....	(CV)	0.20U

P = Inductively Coupled Plasma (Method 6010)
A = Flame-Atomic Absorption Spectrometer (7000 Series Methods)
F = Furnace-Atomic Absorption Spectrometer (7000 Series Methods)
CV= Cold Vapor (Method 7471)

U = Compound was analyzed for but not detected. Total reported is the Instrument Detection Limit
[]= Total is greater than Instrument Detection Limit but less than EPA Required Detection Limit

COMMENTS:

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SW-1

Lab Name: COMPUCHEM LABORATORIES Contract: (10-86)-REV

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 35

Matrix: (soil/water) WATER Lab Sample ID: 235812

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

Level: (low/med) LOW Date Received: 12/14/88

% Moisture: not dec. _____ dec. _____ Date Extracted: 12/18/88

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 01/01/89

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
5103-71-9	alpha-Chlordane	0.50	U
5103-74-2	gamma-Chlordane	0.50	U
8001-35-2	Toxaphene	1.0	U
12674-11-2	Aroclor-1016	0.50	U
11104-28-2	Aroclor-1221	0.50	U
11141-16-5	Aroclor-1232	0.50	U
53469-21-9	Aroclor-1242	0.50	U
12672-29-6	Aroclor-1248	0.50	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

FORM I PEST 1/87 Rev.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SW-1MS

Lab Name: COMPUCHEM LABORATORIES Contract: (10-86)-REV

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 35

Matrix: (soil/water) WATER Lab Sample ID: 235805

Sample wt/vol: 500 (g/mL) ML Lab File ID: _____

Level: (low/med) LOW Date Received: 12/14/88

% Moisture: not dec. _____ dec. _____ Date Extracted: 12/18/88

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 01/01/89

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 0.50

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.050	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.10	U
53494-70-5	Endrin ketone	0.50	U
5103-71-9	alpha-Chlordane	0.10	U
5103-74-2	gamma-Chlordane	0.50	U
8001-35-2	Toxaphene	0.50	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	0.50	U
11141-16-5	Aroclor-1232	0.50	U
53469-21-9	Aroclor-1242	0.50	U
12672-29-6	Aroclor-1248	0.50	U
11097-69-1	Aroclor-1254	0.50	U
11096-82-5	Aroclor-1260	1.0	U
		1.0	U

FORM I PEST

1/87 Rev.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GW-2

Lab Name: COMPUCHEM LABORATORIES Contract: (10--86 =

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 35

Matrix: (soil/water) WATER Lab Sample ID: 235816

Sample wt/vol: 500 (g/mL) ML Lab File ID: _____

Level: (low/med) LOW Date Received: 12/14/88

% Moisture: not dec. _____ dec. _____ Date Extracted: 12/18/88

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 01/05/89

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 0.50

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
5103-71-9	alpha-Chlordane	0.50	U
5103-74-2	gamma-Chlordane	0.50	U
8001-35-2	Toxaphene	1.0	U
12674-11-2	Aroclor-1016	0.50	U
11104-28-2	Aroclor-1221	0.50	U
11141-16-5	Aroclor-1232	0.50	U
53469-21-9	Aroclor-1242	0.50	U
12672-29-6	Aroclor-1248	0.50	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

FORM I PEST 1/87 Rev.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GW-3

Lab Name: COMPUCHEM LABORATORIES Contract: (10-86)-REV

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 35

Matrix: (soil/water) WATER Lab Sample ID: 235801

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

Level: (low/med) LOW Date Received: 12/14/88

% Moisture: not dec. _____ dec. _____ Date Extracted: 12/18/88

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 01/05/89

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
5103-71-9	alpha-Chlordane	0.50	U
5103-74-2	gamma-Chlordane	0.50	U
8001-35-2	Toxaphene	1.0	U
12674-11-2	Aroclor-1016	0.50	U
11104-28-2	Aroclor-1221	0.50	U
11141-16-5	Aroclor-1232	0.50	U
53469-21-9	Aroclor-1242	0.50	U
12672-29-6	Aroclor-1248	0.50	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

FORM I PEST 1/87 Rev.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FIELD BLANK

Lab Name: COMPUCHEM LABORATORIES Contract: (10-86)-REV

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 35

Matrix: (soil/water) WATER Lab Sample ID: 235811

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

Level: (low/med) LOW Date Received: 12/14/88

% Moisture: not dec. _____ dec. _____ Date Extracted: 12/18/88

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 01/01/89

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
5103-71-9	alpha-Chlordane	0.50	U
5103-74-2	gamma-Chlordane	0.50	U
8001-35-2	Toxaphene	1.0	U
12674-11-2	Aroclor-1016	0.50	U
11104-28-2	Aroclor-1221	0.50	U
11141-16-5	Aroclor-1232	0.50	U
53469-21-9	Aroclor-1242	0.50	U
12672-29-6	Aroclor-1248	0.50	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

FORM I PEST 1/87 Rev.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GW-1

Lab Name: COMPUCHEM LABORATORIES Contract: (10-86)-REV

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 35

Matrix: (soil/water) WATER Lab Sample ID: 235815

Sample wt/vol: 500 (g/mL) ML Lab File ID: _____

Level: (low/med) LOW Date Received: 12/14/88

% Moisture: not dec. _____ dec. _____ Date Extracted: 12/18/88

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 01/05/89

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 0.50

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
5103-71-9	alpha-Chlordane	0.50	U
5103-74-2	gamma-Chlordane	0.50	U
8001-35-2	Toxaphene	1.0	U
12674-11-2	Aroclor-1016	0.50	U
11104-28-2	Aroclor-1221	0.50	U
11141-16-5	Aroclor-1232	0.50	U
53469-21-9	Aroclor-1242	0.50	U
12672-29-6	Aroclor-1248	0.50	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

FORM I PEST 1/87 Rev.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SW-1MSD

Lab Name: COMPUCHEM LABS Contract: (10-86)-REV

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 35

Matrix: (soil/water) WATER Lab Sample ID: 235803

Sample wt/vol: 500 (g/mL) ML Lab File ID: GH035803C15

Level: (low/med) LOW Date Received: 12/14/88

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/19/88

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 12/20/88

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 0.50

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl Alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
39638-32-9	bis(2-Chloroisopropyl)Ether	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
65-85-0	Benzoic Acid	50	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

FORM I SV-1 1/87 Rev.

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SW-1MSD

Lab Name: COMPUCHEM LABS Contract: (10-86)-REV

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 35

Matrix: (soil/water) WATER Lab Sample ID: 235803

Sample wt/vol: 500 (g/mL) ML Lab File ID: GH035803C15

Level: (low/med) LOW Date Received: 12/14/88

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/19/88

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 12/20/88

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 0.50

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	50	U
100-02-7	4-Nitrophenol	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

FORM I SV-2 1/87 Rev.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SW-1MS

Lab Name: COMPUCHEM LABS Contract: (10-86)-REV

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 35

Matrix: (soil/water) WATER Lab Sample ID: 235802

Sample wt/vol: 500 (g/mL) ML Lab File ID: GH035802C15

Level: (low/med) LOW Date Received: 12/14/88

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/19/88

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 12/20/88

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 0.50

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl Alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
39638-32-9	bis(2-Chloroisopropyl)Ether	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
65-85-0	Benzoic Acid	50	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

FORM I SV-1 1/87 Rev.

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SW-1MS

Lab Name: COMPUCHEM LABS Contract: (10-86)-REV

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 35

Matrix: (soil/water) WATER Lab Sample ID: 235802

Sample wt/vol: 500 (g/mL) ML Lab File ID: GH035802C15

Level: (low/med) LOW Date Received: 12/14/88

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/19/88

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 12/20/88

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 0.50

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	50	U
100-02-7	4-Nitrophenol	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

FORM I SV-2 1/87 Rev.

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SW-1

Lab Name: COMPUCHEM LABS Contract: (10-86)-REV

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 35

Matrix: (soil/water) WATER Lab Sample ID: 235812

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GH035812C15

Level: (low/med) LOW Date Received: 12/14/88

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/19/88

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 12/20/88

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	50	U
100-02-7	4-Nitrophenol	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 DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SW-1

Lab Name: COMPUCHEM LABS Contract: (10-86)-REV

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 35

Matrix: (soil/water) WATER Lab Sample ID: 235812

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GH035812C15

Level: (low/med) LOW Date Received: 12/14/88

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/19/88

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 12/20/88

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

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I SV-TIC 1/87 Rev.

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GW-3

Lab Name: COMPUCHEM LABS Contract: (10-86)-REV

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 35

Matrix: (soil/water) WATER Lab Sample ID: 235801

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GH035801C15

Level: (low/med) LOW Date Received: 12/14/88

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/19/88

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 12/20/88

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

Number TICs found: 20

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN PHENOL	7.98	76	J
2.		UNKNOWN PHENOL	8.62	240	J
3.		UNKNOWN PHENOL	8.70	150	J
4.		UNKNOWN PHENOL	8.90	190	J
5.		UNKNOWN PHENOL	8.99	68	J
6.		UNKNOWN PHENOL	9.09	70	J
7.		UNKNOWN PHENOL	9.49	220	J
8.		UNKNOWN PHENOL	9.60	46	J
9.		UNKNOWN	9.69	100	J
10.		UNKNOWN	9.85	220	J
11.		UNKNOWN	9.94	38	J
12.	619-04-5	BENZOIC ACID, 3,4-DIMETHYL-	10.02	36	J
13.		UNKNOWN	10.22	68	J
14.		UNKNOWN	10.52	140	J
15.		UNKNOWN	10.64	110	J
16.		UNKNOWN	11.22	48	J
17.		UNKNOWN	11.29	84	J
18.		UNKNOWN	11.50	36	J
19.		UNKNOWN	11.84	54	J
20.		UNKNOWN	11.89	36	J

FORM I SV-TIC 1/87 Rev.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SW-1

Lab Name: COMPUCHEM LABS Contract: (10-86)-REV

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 35

Matrix: (soil/water) WATER Lab Sample ID: 235812

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GH035812C15

Level: (low/med) LOW Date Received: 12/14/88

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/19/88

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 12/20/88

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl Alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
39638-32-9	bis(2-Chloroisopropyl)Ether	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
65-85-0	Benzoic Acid	50	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

FORM I SV-1 1/87 Rev.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GW-3

Lab Name: COMPUCHEM LABS Contract: (10-86)-REV

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 35

Matrix: (soil/water) WATER Lab Sample ID: 235801

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GH035801C15

Level: (low/med) LOW Date Received: 12/14/88

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/19/88

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 12/20/88

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl Alcohol	10	U
95-50-1	1,2-Dichlorobenzene	2	J
95-48-7	2-Methylphenol	10	U
39638-32-9	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	120	
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	
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	12	
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

FORM I SV-1 1/87 Rev.

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GW-3

Lab Name: COMPUCHEM LABS Contract: (10-86)-REV

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 35

Matrix: (soil/water) WATER Lab Sample ID: 235801

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GH035801C15

Level: (low/med) LOW Date Received: 12/14/88

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/19/88

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 12/20/88

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	3	J
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	3	J
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	8	J
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	3	J
129-00-0	Pyrene	10	
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)Anthracene	16	
218-01-9	Chrysene	13	
117-81-7	bis(2-Ethylhexyl)Phthalate	10	U
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	3	JX
207-08-9	Benzo(k)Fluoranthene	3	JX
50-32-8	Benzo(a)Pyrene	6	J
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

FORM I SV-2 1/87 Rev.

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GW-2

Lab Name: COMPUCHEM LABS Contract: (10-86)-REV

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 35

Matrix: (soil/water) WATER Lab Sample ID: 235816

Sample wt/vol: 500 (g/mL) ML Lab File ID: GD035816A15

Level: (low/med) LOW Date Received: 12/14/88

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/19/88

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 12/20/88

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	100	U
83-32-9	Acenaphthene	20	U
51-28-5	2,4-Dinitrophenol	100	U
100-02-7	4-Nitrophenol	100	U
132-64-9	Dibenzofuran	20	U
121-14-2	2,4-Dinitrotoluene	20	U
84-66-2	Diethylphthalate	20	U
7005-72-3	4-Chlorophenyl-phenylether	20	U
86-73-7	Fluorene	20	U
100-01-6	4-Nitroaniline	100	U
534-52-1	4,6-Dinitro-2-Methylphenol	100	U
86-30-6	N-Nitrosodiphenylamine (1)	20	U
101-55-3	4-Bromophenyl-phenylether	20	U
118-74-1	Hexachlorobenzene	20	U
87-86-5	Pentachlorophenol	100	U
85-01-8	Phenanthrene	19	J
120-12-7	Anthracene	8	J
84-74-2	Di-n-Butylphthalate	20	U
206-44-0	Fluoranthene	6	J
129-00-0	Pyrene	12	J
85-68-7	Butylbenzylphthalate	20	U
91-94-1	3,3'-Dichlorobenzidine	40	U
56-55-3	Benzo(a)Anthracene	20	U
218-01-9	Chrysene	38	
117-81-7	bis(2-Ethylhexyl)Phthalate	20	U
117-84-0	Di-n-Octyl Phthalate	20	U
205-99-2	Benzo(b)Fluoranthene	6	JX
207-08-9	Benzo(k)Fluoranthene	6	JX
50-32-8	Benzo(a)Pyrene	5	J
193-39-5	Indeno(1,2,3-cd)Pyrene	20	U
53-70-3	Dibenzo(a,h)Anthracene	20	U
191-24-2	Benzo(g,h,i)Perylene	20	U

(1) - Cannot be separated from Diphenylamine

FORM I SV-2 1/87 Rev.

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GW-2

Lab Name: COMPUCHEM LABS Contract: (10-86)-REV

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 35

Matrix: (soil/water) WATER Lab Sample ID: 235816

Sample wt/vol: 500 (g/mL) ML Lab File ID: GD035816A15

Level: (low/med) LOW Date Received: 12/14/88

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/19/88

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 12/20/88

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

Number TICs found: 20

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	7.93	72	J
2.	UNKNOWN AROMATIC	8.47	120	J
3.	UNKNOWN	8.79	140	J
4.	UNKNOWN	9.00	100	J
5.	UNKNOWN	9.40	150	J
6.	UNKNOWN	9.52	110	J
7.	UNKNOWN	9.60	200	J
8.	UNKNOWN	9.79	390	J
9.	UNKNOWN	10.17	110	J
10.	UNKNOWN	10.39	84	J
11.	UNKNOWN	10.45	120	J
12.	UNKNOWN	10.50	200	J
13.	UNKNOWN	10.60	88	J
14.	UNKNOWN AROMATIC	10.69	76	J
15.	UNKNOWN	11.14	120	J
16.	UNKNOWN AROMATIC	11.22	160	J
17.	UNKNOWN	11.42	88	J
18.	UNKNOWN	11.75	140	J
19.	UNKNOWN	12.19	76	J
20.	UNKNOWN HYDROCARBON	12.30	72	J

FORM I SV-TIC 1/87 Rev.

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GW-1RE

Lab Name: COMPUCHEM LABS Contract: (10-86)-REV

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 35

Matrix: (soil/water) WATER Lab Sample ID: 235815

Sample wt/vol: 500 (g/mL) ML Lab File ID: GRJ35815A21

Level: (low/med) LOW Date Received: 12/14/88

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/29/88

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 01/05/89

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 0.50

Number TICs found: 20

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	492-37-5	BENZENEACETIC ACID, .ALPHA.-	9.89	78	J
2.		UNKNOWN	9.94	52	J
3.		UNKNOWN	10.72	200	J
4.		UNKNOWN HYDROCARBON	11.99	160	J
5.		UNKNOWN HYDROCARBON	12.34	100	J
6.		UNKNOWN HYDROCARBON	12.99	100	J
7.		UNKNOWN	13.59	48	J
8.		UNKNOWN	13.95	52	J
9.		UNKNOWN	14.14	60	J
10.		UNKNOWN	14.52	58	J
11.		UNKNOWN PNA	14.64	72	J
12.		UNKNOWN	15.34	110	J
13.		UNKNOWN	15.62	58	J
14.		UNKNOWN	15.84	64	J
15.		UNKNOWN	15.90	58	J
16.		UNKNOWN	16.05	130	J
17.		UNKNOWN	16.09	42	J
18.		UNKNOWN	16.30	110	J
19.		UNKNOWN	16.50	70	J
20.		UNKNOWN	16.82	80	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GW-2

Lab Name: COMPUCHEM LABS Contract: (10-86)-REV

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 35

Matrix: (soil/water) WATER Lab Sample ID: 235816

Sample wt/vol: 500 (g/mL) ML Lab File ID: GD035816A15

Level: (low/med) LOW Date Received: 12/14/88

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/19/88

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 12/20/88

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	20	U
111-44-4	bis(2-Chloroethyl)Ether	20	U
95-57-8	2-Chlorophenol	20	U
541-73-1	1,3-Dichlorobenzene	20	U
106-46-7	1,4-Dichlorobenzene	20	U
100-51-6	Benzyl Alcohol	20	U
95-50-1	1,2-Dichlorobenzene	20	U
95-48-7	2-Methylphenol	20	U
39638-32-9	bis(2-Chloroisopropyl)Ether	20	U
106-44-5	4-Methylphenol	20	U
621-64-7	N-Nitroso-Di-n-Propylamine	20	U
67-72-1	Hexachloroethane	20	U
98-95-3	Nitrobenzene	20	U
78-59-1	Isophorone	20	U
88-75-5	2-Nitrophenol	20	U
105-67-9	2,4-Dimethylphenol	20	U
65-85-0	Benzoic Acid	100	U
111-91-1	bis(2-Chloroethoxy)Methane	20	U
120-83-2	2,4-Dichlorophenol	20	U
120-82-1	1,2,4-Trichlorobenzene	20	U
91-20-3	Naphthalene	20	U
106-47-8	4-Chloroaniline	20	U
87-68-3	Hexachlorobutadiene	20	U
59-50-7	4-Chloro-3-Methylphenol	20	U
91-57-6	2-Methylnaphthalene	20	U
77-47-4	Hexachlorocyclopentadiene	20	U
88-06-2	2,4,6-Trichlorophenol	20	U
95-95-4	2,4,5-Trichlorophenol	100	U
91-58-7	2-Chloronaphthalene	20	U
88-74-4	2-Nitroaniline	100	U
131-11-3	Dimethyl Phthalate	20	U
208-96-8	Acenaphthylene	20	U
606-20-2	2,6-Dinitrotoluene	20	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GW-1RE

Lab Name: COMPUCHEM LABS Contract: (10-86)-REV

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 35

Matrix: (soil/water) WATER Lab Sample ID: 235815

Sample wt/vol: 500 (g/mL) ML Lab File ID: GRJ35815A21

Level: (low/med) LOW Date Received: 12/14/88

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/29/88

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 01/05/89

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 0.50

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl Alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
39638-32-9	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	4	J
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	15	
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

FORM I SV-1 1/87 Rev.

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GW-1RE

Lab Name: COMPUCHEM LABS Contract: (10-86)-REV

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 35

Matrix: (soil/water) WATER Lab Sample ID: 235815

Sample wt/vol: 500 (g/mL) ML Lab File ID: GRJ35815A21

Level: (low/med) LOW Date Received: 12/14/88

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/29/88

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 01/05/89

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 0.50

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	3	J
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	4	J
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	
120-12-7	Anthracene	10	
84-74-2	Di-n-Butylphthalate	3	J
206-44-0	Fluoranthene	8	J
129-00-0	Pyrene	16	
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)Anthracene	27	
218-01-9	Chrysene	33	
117-81-7	bis(2-Ethylhexyl)Phthalate	31	B
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	5	JX
207-08-9	Benzo(k)Fluoranthene	5	JX
50-32-8	Benzo(a)Pyrene	4	J
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

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GW-1

Lab Name: COMPUCHEM LABS Contract: (10-86)-REV

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 35

Matrix: (soil/water) WATER Lab Sample ID: 235815

Sample wt/vol: 500 (g/mL) ML Lab File ID: GR035815C21

Level: (low/med) LOW Date Received: 12/14/88

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/29/88

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 01/05/89

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 0.50

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	4	J
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	4	J
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	3	J
85-01-8	Phenanthrene	11	
120-12-7	Anthracene	10	
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	8	J
129-00-0	Pyrene	21	
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)Anthracene	28	
218-01-9	Chrysene	31	
117-81-7	bis(2-Ethylhexyl)Phthalate	32	B
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	7	JX
207-08-9	Benzo(k)Fluoranthene	7	JX
50-32-8	Benzo(a)Pyrene	7	J
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

FORM I SV-2 1/87 Rev.

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GW-1

Lab Name: COMPUCHEM LABS Contract: (10-86)-REV

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 35

Matrix: (soil/water) WATER Lab Sample ID: 235815

Sample wt/vol: 500 (g/mL) ML Lab File ID: GR035815C21

Level: (low/med) LOW Date Received: 12/14/88

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/29/88

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 01/05/89

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 0.50

Number TICs found: 20

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN HYDROCARBON	12.00	160	J
2.	UNKNOWN HYDROCARBON	12.35	80	J
3.	UNKNOWN	13.97	50	J
4.	UNKNOWN	14.17	64	J
5.	UNKNOWN HYDROCARBON	14.47	78	J
6.	UNKNOWN	14.54	54	J
7.	UNKNOWN PNA	14.65	66	J
8.	UNKNOWN	15.27	54	J
9.	UNKNOWN	15.45	48	J
10.	UNKNOWN	15.57	84	J
11.	UNKNOWN	15.64	220	J
12.	UNKNOWN	15.77	72	J
13.	UNKNOWN	15.85	100	J
14.	UNKNOWN	15.90	160	J
15.	UNKNOWN	16.05	130	J
16.	UNKNOWN	16.17	80	J
17.	UNKNOWN	16.22	56	J
18.	UNKNOWN	16.32	140	J
19.	UNKNOWN	16.50	86	J
20.	UNKNOWN	16.84	78	J

FORM I SV-TIC 1/87 Rev.

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

FIELD-BLANK

Lab Name: COMPUCHEM LABS Contract: (10-86)-REV

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 35

Matrix: (soil/water) WATER Lab Sample ID: 235811

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GH035811C15

Level: (low/med) LOW Date Received: 12/14/88

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/19/88

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 12/20/88

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

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GW-1

Lab Name: COMPUCHEM LABS Contract: (10-86)-REV

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 35

Matrix: (soil/water) WATER Lab Sample ID: 235815

Sample wt/vol: 500 (g/mL) ML Lab File ID: GR035815C21

Level: (low/med) LOW Date Received: 12/14/88

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/29/88

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 01/05/89

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 0.50

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl Alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
39638-32-9	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	14	J
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	15	
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FIELD-BLANK

Lab Name: COMPUCHEM LABS Contract: (10-86)-REV

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 35

Matrix: (soil/water) WATER Lab Sample ID: 235811

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GH035811C15

Level: (low/med) LOW Date Received: 12/14/88

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/19/88

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 12/20/88

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl Alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
39638-32-9	bis(2-Chloroisopropyl)Ether	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
65-85-0	Benzoic Acid	50	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

FORM I SV-1 1/87 Rev.

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FIELD-BLANK

Lab Name: COMPUCHEM LABS Contract: (10-86)-REV

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 35

Matrix: (soil/water) WATER Lab Sample ID: 235811

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GH035811C15

Level: (low/med) LOW Date Received: 12/14/88

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/19/88

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 12/20/88

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	50	U
100-02-7	4-Nitrophenol	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

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SW-1MS

Lab Name: COMPUCHEM LABS Contract: (10-86)-REV

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 35

Matrix: (soil/water) WATER Lab Sample ID: 235808

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN035808A03

Level: (low/med) LOW Date Received: 12/14/88

% Moisture: not dec. ____ Date Analyzed: 12/16/88

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

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

FORM I VOA 1/87 Rev.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SW-1MSD

Lab Name: COMPUCHEM LABS Contract: (10-86)-REV

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 35

Matrix: (soil/water) WATER Lab Sample ID: 235809

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN035809A03

Level: (low/med) LOW Date Received: 12/14/88

% Moisture: not dec. ____ Date Analyzed: 12/16/88

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

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

FORM I VOA 1/87 Rev.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TRIPBLANK

Lab Name: COMPUCHEM LABS Contract: (10-86)-REV

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 35

Matrix: (soil/water) WATER Lab Sample ID: 235819

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN035819A03

Level: (low/med) LOW Date Received: 12/14/88

% Moisture: not dec. ____ Date Analyzed: 12/16/88

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

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

FORM I VOA 1/87 Rev.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

TRIPBLANK

Lab Name: COMPUCHEM LABS Contract: (10-86)-REV

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 35

Matrix: (soil/water) WATER Lab Sample ID: 235819

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN035819A03

Level: (low/med) LOW Date Received: 12/14/88

% Moisture: not dec. ____ Date Analyzed: 12/16/88

Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I VOA-TIC

1/87 Rev.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GW-2

Lab Name: COMPUCHEM LABS Contract: (10-86)-REV

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 35

Matrix: (soil/water) WATER Lab Sample ID: 235816

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CR035816A03

Level: (low/med) LOW Date Received: 12/14/88

% Moisture: not dec. ____ Date Analyzed: 12/18/88

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	85	
75-09-2	Methylene Chloride	3	J
67-64-1	Acetone	20	B
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	10	
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	11	
10061-02-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	2	J
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	2	J
100-42-5	Styrene	5	U
1330-20-7	Total Xylenes	4	J

FORM I VOA 1/87 Rev.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GW-2

Lab Name: COMPUCHEM LABS Contract: (10-86)-REV

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 35

Matrix: (soil/water) WATER Lab Sample ID: 235816

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CR035816A03

Level: (low/med) LOW Date Received: 12/14/88

% Moisture: not dec. ____ Date Analyzed: 12/18/88

Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I VOA-TIC

1/87 Rev.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SW-1

Lab Name: COMPUCHEM LABS Contract: (10-86)-REV

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 35

Matrix: (soil/water) WATER Lab Sample ID: 235812

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN035812A03

Level: (low/med) LOW Date Received: 12/14/88

% Moisture: not dec. ____ Date Analyzed: 12/16/88

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

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

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

FORM I VOA 1/87 Rev.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SW-1

Lab Name: COMPUCHEM LABS Contract: (10-86)-REV

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 35

Matrix: (soil/water) WATER Lab Sample ID: 235812

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN035812A03

Level: (low/med) LOW Date Received: 12/14/88

% Moisture: not dec. ____ Date Analyzed: 12/16/88

Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I VOA-TIC 1/87 Rev.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GW-3

Lab Name: COMPUCHEM LABS Contract: (10-86)-REV

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 35

Matrix: (soil/water) WATER Lab Sample ID: 235801

Sample wt/vol: 0.10 (g/mL) ML Lab File ID: C2R35801A03

Level: (low/med) LOW Date Received: 12/14/88

% Moisture: not dec. ____ Date Analyzed: 12/17/88

Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 10

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	700	UNKNOWN	20.34	700	J
2.		UNNOWN CYCLIC ALKANE	24.80	850	J
3.	750	UNKNOWN	25.06	750	J
4.		UNKNOWN ALKANE	25.57	600	J
5.		UNKNOWN CYCLIC ALKANE	26.27	400	J
6.	750	UNKNOWN	27.09	750	J
7.	500	UNKNOWN	28.11	500	J
8.	[illegible]	UNKNOWN	28.97	1900	J
9.	[illegible]	UNKNOWN	31.01	1300	J
10.		UNKNOWN ALKANE 750	31.72	750	J

Total 5200

FORM I VOA-TIC 1/87 Rev.

LABORATORY NOTICE

CC # 235801

ID # GW-3

CASE # 15767 0035

The volatile fraction of this sample was analyzed as a Low Level Liquid. The analysis of 100 ul sample (50:1 dilution) did not meet the dilution criteria requiring that at least one analyte be present in the upper half of its analytical range. However, at this dilution, the presence of late-eluting compounds caused significant instrument downtime. In order to protect the instrumentation, the sample was not reanalyzed at a lesser dilution. The data is being reported with reference to this qualifier.

Sarah A. Hubbard

Sarah A. Hubbard

Senior Volatile Data Specialist

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FIELD-BLANK

Lab Name: COMPUCHEM LABS Contract: (10-86)-REV

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 35

Matrix: (soil/water) WATER Lab Sample ID: 235811

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN035811A03

Level: (low/med) LOW Date Received: 12/14/88

% Moisture: not dec. ____ Date Analyzed: 12/16/88

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	110	B
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total Xylenes	5	U

FORM I VOA 1/87 Rev.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

FIELD-BLANK

Lab Name: COMPUCHEM LABS Contract: (10-86)-REV

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 35

Matrix: (soil/water) WATER Lab Sample ID: 235811

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN035811A03

Level: (low/med) LOW Date Received: 12/14/88

% Moisture: not dec. ____ Date Analyzed: 12/16/88

Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I VOA-TIC 1/87 Rev.

LABORATORY NOTICE

CC # 235811

ID # FIELD BLANK

CASE # 15767 0035

The volatile fraction of this sample (identified as a Field blank) was prepared and analyzed as a Low Level ~~Solid~~ Liquid. The analysis of 5 ml sample gave the following results:

Compound	Quantitation Report Concentration,
methylene chloride	111 ug/L

Since the preceding sample did not contain elevated levels of these compounds, we do not believe the reported values to be the result of carryover. The data is being reported with reference to this qualifier.

Sarah A. Hubbard

Senior Volatile Data Specialist

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GW-1

Lab Name: COMPUCHEM LABS Contract: (10-86)-REV

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 35

Matrix: (soil/water) WATER Lab Sample ID: 235815

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: C2R35815A03

Level: (low/med) LOW Date Received: 12/14/88

% Moisture: not dec. ____ Date Analyzed: 12/18/88

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

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

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	3	J
67-64-1	Acetone	29	B
75-15-0	Carbon Disulfide	1	J
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	4	J
67-66-3	Chloroform	1	J
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	1	J
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	4	J
10061-02-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total Xylenes	17	

FORM I VOA 1/87 Rev.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GW-1

Lab Name: COMPUCHEM LABS Contract: (10-86)-REV

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 35

Matrix: (soil/water) WATER Lab Sample ID: 235815

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: C2R35815A03

Level: (low/med) LOW Date Received: 12/14/88

% Moisture: not dec. ____ Date Analyzed: 12/18/88

Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 5

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 110-82-7	CYCLOHEXANE	12.40	8.0	J
2.	UNKNOWN SULFUR CONTAINING AL	19.67	3.0	J
3.	UNKNOWN SULFUR CONTAINING AL	23.89	4.0	J
4.	UNKNOWN	24.09	4.0	J
5.	UNKNOWN CYCLIC ALKANE	24.70	5.0	J

FORM I VOA-TIC 1/87 Rev.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GW-3

Lab Name: COMPUCHEM LABS Contract: (10-86)-REV

Lab Code: COMPU Case No.: 15767 SAS No.: _____ SDG No.: 35

Matrix: (soil/water) WATER Lab Sample ID: 235801

Sample wt/vol: 0.10 (g/mL) ML Lab File ID: C2R35801A03

Level: (low/med) LOW Date Received: 12/14/88

% Moisture: not dec. ____ Date Analyzed: 12/17/88

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

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

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	500	U
74-83-9	Bromomethane	500	U
75-01-4	Vinyl Chloride	500	U
75-00-3	Chloroethane	500	U
75-09-2	Methylene Chloride	250	U
67-64-1	Acetone	500	U
75-15-0	Carbon Disulfide	250	U
75-35-4	1,1-Dichloroethene	250	U
75-34-3	1,1-Dichloroethane	250	U
540-59-0	1,2-Dichloroethene (total)	110	J
67-66-3	Chloroform	250	U
107-06-2	1,2-Dichloroethane	250	U
78-93-3	2-Butanone	500	U
71-55-6	1,1,1-Trichloroethane	250	U
56-23-5	Carbon Tetrachloride	250	U
108-05-4	Vinyl Acetate	500	U
75-27-4	Bromodichloromethane	250	U
78-87-5	1,2-Dichloropropane	250	U
10061-01-5	cis-1,3-Dichloropropene	250	U
79-01-6	Trichloroethene	250	U
124-48-1	Dibromochloromethane	250	U
79-00-5	1,1,2-Trichloroethane	250	U
71-43-2	Benzene	250	U
10061-02-6	Trans-1,3-Dichloropropene	250	U
75-25-2	Bromoform	250	U
108-10-1	4-Methyl-2-Pentanone	500	U
591-78-6	2-Hexanone	500	U
127-18-4	Tetrachloroethene	250	U
79-34-5	1,1,2,2-Tetrachloroethane	250	U
108-88-3	Toluene	160	J
108-90-7	Chlorobenzene	250	U
100-41-4	Ethylbenzene	130	J
100-42-5	Styrene	250	U
1330-20-7	Total Xylenes	390	

FORM I VOA 1/87 Rev.

APPENDIX I

ANALYTICAL DATA

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SS-1

Lab Name: COMPUCHEM LABORATORIES Contract: 787

Lab Code: COMPU Case No.: 334 2 SAS No.: _____ SDG No.: COM265

Matrix (soil/water): WATER Lab Sample ID: 256679

Level (low/med): LOW Date Received: 04/15/89

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				
7440-36-0	Antimony				
7440-38-2	Arsenic	5.4	B		F
7440-39-3	Barium	1170			P
7440-41-7	Beryllium				
7440-43-9	Cadmium	84.1			P
7440-70-2	Calcium				
7440-47-3	Chromium	63.9			P
7440-48-4	Cobalt				
7440-50-8	Copper				
7439-89-6	Iron				
7439-92-1	Lead	56800			P
7439-95-4	Magnesium				
7439-96-5	Manganese				
7439-97-6	Mercury	.20	U		CV
7440-02-0	Nickel				
7440-09-7	Potassium				
7782-49-2	Selenium	5.0	U		F
7440-22-4	Silver	4.9	U		P
7440-23-5	Sodium				
7440-28-0	Thallium				
7440-62-2	Vanadium				
7440-66-6	Zinc				
	Cyanide				

Color Before: BROWN Clarity Before: CLOUDY Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

FORM 1 - PAGE 1

U.S. EPA - CLP

1
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SS-2

Lab Name: COMPUCHEM LABORATORIES Contract: 787

Lab Code: COMPU Case No.: 334 2 SAS No.: _____ SDG No.: COM265

Matrix (soil/water): WATER Lab Sample ID: 256680

Level (low/med): LOW Date Received: 04/15/89

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				
7440-36-0	Antimony				
7440-38-2	Arsenic	3.4	B		F
7440-39-3	Barium	249			P
7440-41-7	Beryllium				
7440-43-9	Cadmium	4.2	U		P
7440-70-2	Calcium				
7440-47-3	Chromium	37.8			P
7440-48-4	Cobalt				
7440-50-8	Copper				
7439-89-6	Iron				
7439-92-1	Lead	4960			P
7439-95-4	Magnesium				
7439-96-5	Manganese				
7439-97-6	Mercury	.20	U		CV
7440-02-0	Nickel				
7440-09-7	Potassium				
7782-49-2	Selenium	5.0	U		F
7440-22-4	Silver	4.9	U		P
7440-23-5	Sodium				
7440-28-0	Thallium				
7440-62-2	Vanadium				
7440-66-6	Zinc				
	Cyanide				

Color Before: YELLOW Clarity Before: CLOUDY Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:
FORM 1 - PAGE 2

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SS-3

Lab Name: COMPUCHEM LABORATORIES Contract: 787

Lab Code: COMPU Case No.: 334 2 SAS No.: _____ SDG No.: COM265

Matrix (soil/water): WATER Lab Sample ID: 256681

Level (low/med): LOW Date Received: 04/15/89

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				
7440-36-0	Antimony				
7440-38-2	Arsenic	3.3	B		F
7440-39-3	Barium	119	B		P
7440-41-7	Beryllium				
7440-43-9	Cadmium	4.2	U		P
7440-70-2	Calcium				
7440-47-3	Chromium	13.1			P
7440-48-4	Cobalt				
7440-50-8	Copper				
7439-89-6	Iron				
7439-92-1	Lead	637			P
7439-95-4	Magnesium				
7439-96-5	Manganese				
7439-97-6	Mercury	.20	U		CV
7440-02-0	Nickel				
7440-09-7	Potassium				
7782-49-2	Selenium	5.0	U		F
7440-22-4	Silver	4.9	U		P
7440-23-5	Sodium				
7440-28-0	Thallium				
7440-62-2	Vanadium				
7440-66-6	Zinc				
	Cyanide				

Color Before: YELLOW Clarity Before: CLOUDY Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:
FORM 1 - PAGE 3

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SS-4

Lab Name: COMPUCHEM LABORATORIES Contract: 787

Lab Code: COMPU Case No.: 334 2 SAS No.: _____ SDG No.: COM265

Matrix (soil/water): WATER Lab Sample ID: 256683

Level (low/med): LOW Date Received: 04/15/89

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				
7440-36-0	Antimony				
7440-38-2	Arsenic	3.1	B		F
7440-39-3	Barium	379			P
7440-41-7	Beryllium				
7440-43-9	Cadmium	4.2	U		P
7440-70-2	Calcium				
7440-47-3	Chromium	8.2	B		P
7440-48-4	Cobalt				
7440-50-8	Copper				
7439-89-6	Iron				
7439-92-1	Lead	728			P
7439-95-4	Magnesium				
7439-96-5	Manganese				
7439-97-6	Mercury	.20	U		CV
7440-02-0	Nickel				
7440-09-7	Potassium				
7782-49-2	Selenium	5.0	U		F
7440-22-4	Silver	4.9	U		P
7440-23-5	Sodium				
7440-28-0	Thallium				
7440-62-2	Vanadium				
7440-66-6	Zinc				
	Cyanide				

Color Before: YELLOW Clarity Before: CLOUDY Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

FORM 1 - PAGE 4

DATA REPORTING QUALIFIERS - PAGE 2

B - This flag is used when the analyte is found in the associated blank as well as in the sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action. This flag must be used for a TIC as well as for a positively identified TCL compound.

E - This flag identifies compounds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis. This flag will not apply to pesticides/PCBs analyzed by GC/EC methods. If one or more compounds have a response greater than full scale, the sample or extract must be diluted and re-analyzed according to the specifications. All such compounds with a response greater than full scale should have the concentration flagged with an "E" on the Form I for the original analysis. If the dilution of the extract causes any compounds identified in the first analysis to be below the calibration range in the second analysis, then the results of both analyses shall be reported on separate Forms I. The Form I for the diluted sample shall have the "DL" suffix appended to the sample number.

D - This flag identifies all compounds identified in an analysis at a secondary dilution factor. If a sample or extract is re-analyzed at a higher dilution factor, as in the "E" flag above, the "DL" suffix is appended to the sample number on the Form I for the diluted sample and all concentration values reported on that Form I are flagged with the "D" flag.

A - This flag indicates that TIC is a suspected aldol-condensation product.

X - Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the Sample Data Summary Package and the Case Narrative. If more than one is required, use "Y" and "Z", as needed. If more than five qualifiers are required for a sample result, use the "X" flag to combine several flags, as needed. For instance, the "X" flag might combine the "A", "B", and "D" flags for some sample.

COMPUCHEM LABORATORIES

QUALITY ASSURANCE NOTICE

Specific guidelines are presented in the EPA CLP Organic Statement of Work for the positive qualitative identification of compounds through mass spectral interpretation. Applying these guidelines absolutely may not be possible when the nature of the sample is less than pure reference material. Where the mass spectral pattern of a compound to be identified demonstrates interferences or coelution from one or more additional compounds, either unknowns, internal standards, or surrogate standards, the "+" sign is added to the top of the dual spectra page.

Linda Fowler 4/10/89
Linda Fowler
Sr. Quality Assurance Specialist

Robert E. Meierer 4/12/89
Robert E. Meierer
Vice President, Quality Assurance

COMPUCHEM LABORATORIES, INC. P.O. Box 12652 3308 Chapel Hill/Nelson Highway Research Triangle Park, NC 27709 (919) 549-8263

COMPUCHEM LABORATORIES

All pesticide fractions were extracted and analyzed as Medium Level Solids within holding time requirements. Sample SED-1 contained arochlor-1260 at a level not requiring GC/MS confirmation. Sample SS-3 contained arochlor-1260, which was confirmed by GC/MS analysis. Because of the dilution required, there was no surrogate recovery data for sample SS-3. All other surrogates met recovery criteria. The matrix spike/matrix spike duplicate results were acceptable.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Note: This report was paginated for reference and accountability in decreasing numerical sequence.

Sarah A. Hubbard

Sarah A. Hubbard 4/2/90
Technical Reviewer

COMPUCHEM LABORATORIES

DATA REPORTING QUALIFIERS

For reporting results to EPA, the following result qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

VALUE - If the result is a value greater than or equal to the detection limit, report the value.

U - Indicates compound was analyzed but not detected. The sample quantitation limit must be corrected for dilution and for percent moisture. For example, 10 U for phenol in water if the sample final volume is the protocol-specified final volume. If a 1 to 10 dilution of extract is necessary, the reported limit is 100 U. For a soil sample, the value must also be adjusted for percent moisture. For example, if the sample had 24% moisture and a 1 to 10 dilution factor, the sample quantitation limit for phenol (330 U) would be corrected to:

$$\frac{(330\ U)}{D} \times df \qquad \text{where } D = \frac{100 - \%\ \text{moisture}}{100}$$

and df = dilution factor

$$\text{at 24\% moisture, } D = \frac{100-24}{100} - 0.76$$

$$\frac{(330\ U)}{.76} \times 10 = 4300\ U$$ rounded to the appropriate number of significant figures

For soil sample subjected to GPC clean-up procedures, the CRQL is also multiplied by 2, to account for the fact that only half of the extract is recovered.

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed, or when the mass spectral data indicate the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero. For example, if the sample quantitation limit is 10 ug/L, but a concentration is 3 ug/L is calculated, report it as 3J. The sample quantitation limit must be adjusted for both dilution and percent moisture as discussed for the U flag, so that if a sample with 24% moisture and a 1 to 10 dilution factor has a calculated concentration of 300 ug/L and a sample quantitation limit of 430 ug/kg, report the concentration as 300J on Form I.

C - This flag applies to pesticide results where the identification has been confirmed by GC/MS. Single component pesticides $\geq$10 ng/ul in the final extract shall be confirmed by GC/MS.

I. SAMPLE DATA SUMMARY PACKAGE

The Sample Data Summary Package shall contain data for samples in one Sample Delivery Group of the Case, as follows:

1. Case Narrative

2. By fraction (VOA, SV, PEST) and by sample within each fraction - tabulated target compound results (Form I) and tentatively identified compounds (Form I, TIC) (VOA and SV only)

3. By fraction (VOA, SV, PEST) - surrogate spike analysis results (Form II) by matrix (Water and/or Soil) and for soil, by concentration (Low or Medium)

4. By fraction (VOA, SV, PEST) - matrix spike/matrix spike duplicate results (Form III)

5. By fraction (VOA, SV, PEST) - blank data (Form IV) and tabulated results (Form I) including tentatively identified compounds (Form I, TIC) (VOA and SV only)

6. By fraction (VOA and SV only) - internal standard area data (Form VIII)

CASE#: 19300 SDG#: 05 SAS#: _____

COMPUCHEM LABORATORIES, INC. P.O. Box 12652 3308 Chapel Hill/Nelson Highway Research Triangle Park, NC 27709 (919) 549-8263

CLP CASE NARRATIVE CASE # 19300
CONTRACT # 2-88 (REVS) SDG# 05
COMPUCHEM LABORATORIES INC.

SAMPLES: GW-2-P-B, GW-2-P-S, GW-3-P-B, GW-3-P-S, SED-1, SS-3

This portion of Case # 19300 consisted of four oil samples for volatile and semivolatile analysis, and two for pesticide analysis. They were received intact on 2/22/90 via Federal Express in properly sealed shipping containers with traffic reports.

VOLATILES:
All volatile fractions were extracted and analyzed within holding time requirements as Medium Level Solids. Because the nature of the sample made instrument cleanup necessary after each analysis, the samples were all analyzed at a 2:1 dilution of the Medium Level extract, even though that did not meet the usual dilution criteria that at least one target compound be present in the upper half of its analytical range. The samples all contained most of the following compounds: chloroethane, 1,1-dichloroethane, total 1,2-dichloroethene, trichloroethene, tetrachloroethene, benzene, toluene, ethylbenzene, and total xylenes. Two analyses were reported for samples GW-2-P-S and GW-3-P-S to confirm a matrix effect which caused one or more surrogates to exceed QC limits. The surrogate recovery failures for sample GW-3-P-B were confirmed through the analysis of the sample spikes, which were prepared using that sample as the original. All other surrogates met recovery criteria. The matrix spike/matrix spike duplicate results were acceptable.

SEMIVOLATILES:
With the exception of sample GW-3-P-S and the sample spikes, all semivolatile fractions were extracted and analyzed as Medium Level Solids within holding time requirements. Two analyses were reported for sample GW-2-P-B due to the level of crysene present. The other samples were reported at dilutions only. All the samples contained a variety of polyaromatic hydrocarbons. The recovery for D5-nitrobenzene exceeded QC limits in samples GW-2-P-B (reanalysis) and GW-2-P-S. D5-phenol exceeded QC limits in sample GW-3-P-SMS. All other surrogates met recovery criteria. The matrix spike/matrix spike duplicate results were not acceptable because of sample matrix effects. A blank spike, prepared and analyzed along with the samples, met all QC requirements.

PESTICIDES:

COMPUCHEM
LABORATORIES, INC. P.O. Box 12652 3308 Chapel Hill/Nelson Highway Research Triangle Park, NC 27709 (919) 549-8263

30/MAR/90

Lawler Matusky & Skelly (LMS)
12th floor
One Blue Hill Plaza
PO BOX 1509
Pearl River, NY 10965

Subject. Report of Data - Account Number 273801

Enclosed herewith are the results of analytical work and associated Quality Control data for the samples received by CompuChem@ under the referenced account number.

As you know, CLP service is performed in accordance with EPA methodologies as defined for the National Contract Laboratory Program; 'SOW For Organic Analysis; Multi-Media, Multi-Concentration' effective 2/88, revision 9/88. Your original data has been stored and is available for future reference.

Thank you for selecting CompuChem@ Laboratories for your sample analysis. We would like to continue providing you analytical support and services in the future. If you should have questions or require additional analytical services, please contact your representative at 1-919-549-8263.

Sincerely,

For Elise L. Cobb
Supervisor, Report Deliverables

Attachment

COMPUCHEM LABORATORIES

30/MAR/90

Lawler Matusky & Skelly (LMS)
12th floor
One Blue Hill Plaza
PO BOX 1509
Pearl River, NY 10965

ACCOUNT #. 273801

CC#	SAMPLE-ID	RECEIPT DATE
320997	GW-2-P-B	2/22/90
321006	GW-2-P-S	2/22/90
321009	GW-3-P-B	2/22/90
321011	GW-3-P-S	2/22/90
321013	SED-1	2/22/90
321017	SS-3	2/22/90

TOTAL NUMBER OF SAMPLES = 6

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

GW-3-P-S

Lab Name: COMPUCHEM LABORATORIES Contract: 788

Lab Code: COMPU Case No.: 27380 SAS No.: _____ SDG No.: 193009

Matrix (soil/water): SOIL Lab Sample ID: 321028

Level (low/med): LOW Date Received: 02/22/90

% Solids: 100.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	9.9	B		P
7440-36-0	Antimony	4.2	U		P
7440-38-2	Arsenic	1.7	B	S	F
7440-39-3	Barium	4.2	B		P
7440-41-7	Beryllium	.20	U		P
7440-43-9	Cadmium	1.0	U		P
7440-70-2	Calcium	43.3	B		P
7440-47-3	Chromium	1.7	B		P
7440-48-4	Cobalt	.60	U		P
7440-50-8	Copper	.80	U		P
7439-89-6	Iron	13.4	B		P
7439-92-1	Lead	2.1			F
7439-95-4	Magnesium	11.2	U		P
7439-96-5	Manganese	2.1	B		P
7439-97-6	Mercury	.10	U	N	CV
7440-02-0	Nickel	5.8	U		P
7440-09-7	Potassium	252	U		P
7782-49-2	Selenium	2.0	U	EN	F
7440-22-4	Silver	.80	U		P
7440-23-5	Sodium	298	U		P
7440-28-0	Thallium	.40	U		F
7440-62-2	Vanadium	3.3	B		P
7440-66-6	Zinc	4.7			P
	Cyanide	.50	U		AS

Color Before: BLACK Clarity Before: _____ Texture: FINE

Color After: YELLOW Clarity After: _____ Artifacts: _____

Comments:

FORM 1 - PAGE 4

THE FOLLOWING FURNACE ANALYTES ARE ESTIMATED DUE TO INTERFERENCE:

SELENIUM

FORM I - IN 7/88

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

GW-2-P-S

Lab Name: COMPUCHEM LABORATORIES Contract: 788

Lab Code: COMPU Case No.: 27380 SAS No.: _____ SDG No.: 193009

Matrix (soil/water): SOIL Lab Sample ID: 321026

Level (low/med): LOW Date Received: 02/22/90

% Solids: 100.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	7.6	B		P
7440-36-0	Antimony	4.2	U		P
7440-38-2	Arsenic	1.8	B	S	F
7440-39-3	Barium	1.3	B		P
7440-41-7	Beryllium	.20	U		P
7440-43-9	Cadmium	1.0	U		P
7440-70-2	Calcium	20.9	B		P
7440-47-3	Chromium	1.3	B		P
7440-48-4	Cobalt	.60	U		P
7440-50-8	Copper	.80	U		P
7439-89-6	Iron	7.8	B		P
7439-92-1	Lead	.74			F
7439-95-4	Magnesium	11.2	U		P
7439-96-5	Manganese	.20	U		P
7439-97-6	Mercury	.10	U	N	CV
7440-02-0	Nickel	5.8	U		P
7440-09-7	Potassium	252	U		P
7782-49-2	Selenium	2.0	U	EN	F
7440-22-4	Silver	.80	U		P
7440-23-5	Sodium	298	U		P
7440-28-0	Thallium	.40	U	W	F
7440-62-2	Vanadium	3.0	B		P
7440-66-6	Zinc	3.3	B		P
	Cyanide	.50	U		AS

Color Before: BLACK Clarity Before: _____ Texture: FINE

Color After: YELLOW Clarity After: _____ Artifacts: _____

Comments:

FORM 1 - PAGE 2

THE FOLLOWING FURNACE ANALYTES ARE ESTIMATED DUE TO INTERFERENCE:

SELENIUM

FORM I - IN 7/88

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

GW-3-P-B

Lab Name: COMPUCHEM LABORATORIES Contract: 788

Lab Code: COMPU Case No.: 27380 SAS No.: _____ SDG No.: 193009

Matrix (soil/water): SOIL Lab Sample ID: 321027

Level (low/med): LOW Date Received: 02/22/90

% Solids: 100.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	12.7	B		P
7440-36-0	Antimony	4.2	U		P
7440-38-2	Arsenic	1.2	U	S	F
7440-39-3	Barium	3.2	B		P
7440-41-7	Beryllium	.20	U		P
7440-43-9	Cadmium	1.0	U		P
7440-70-2	Calcium	39.7	B		P
7440-47-3	Chromium	1.7	B		P
7440-48-4	Cobalt	.60	U		P
7440-50-8	Copper	.80	U		P
7439-89-6	Iron	13.2	B		P
7439-92-1	Lead	1.3			F
7439-95-4	Magnesium	11.2	U		P
7439-96-5	Manganese	1.9	B		P
7439-97-6	Mercury	.10	U	N	CV
7440-02-0	Nickel	5.8	U		P
7440-09-7	Potassium	252	U		P
7782-49-2	Selenium	2.0	U	EN	F
7440-22-4	Silver	.80	U		P
7440-23-5	Sodium	298	U		P
7440-28-0	Thallium	.40	U		F
7440-62-2	Vanadium	2.1	B		P
7440-66-6	Zinc	7.2			P
	Cyanide	.50	U		AS

Color Before: BLACK Clarity Before: _____ Texture: FINE

Color After: YELLOW Clarity After: _____ Artifacts: _____

Comments:

FORM 1 - PAGE 3

THE FOLLOWING FURNACE ANALYTES ARE ESTIMATED DUE TO INTERFERENCE:

SELENIUM

FORM I - IN 7/88

COMPUCHEM LABORATORIES, INC. P.O. Box 12652 3308 Chapel Hill/Nelson Highway Research Triangle Park, NC 27709 (919) 549-8263

CASE NARRATIVE
Case No. 27380 SDG No. 193009
Contract No. 788

Client Sample No.: GW-2-P-B, GW-2-P-S, GW-3-P-B, GW-3-P-S

This case consisted of four soil samples analyzed for Total Analyte List (TAL) metals and cyanide. The samples were received intact on February 22, 1990 with the Chain-of-Custody Records. The enclosed cover page reflects Lawler Matusky & Skelly and CompuChem sample identifiers.

The associated quality control sample spike, GW-2-P-BS, was outside the control limits for mercury and selenium, therefore the concentrations were flagged with an 'N. The duplicate, GW-2-P-BD, was within the control limits for all of the analytes tested.

The control limits of the potassium and sodium Laboratory Control Sample (LCS) are advisory as indicated on the enclosed solid LCS chart. Therefore, samples are not re-prepped when potassium and sodium LCS results fall outside the advisory control limits. The LCS percent recovery for sodium is 2643.6%. The field on Form VII is not large enough to report the results.

A serial dilution was done on sample GW-3-P-SL. The adjusted sample concentrations were within 10% of the original concentrations for all analytes whose initial sample result was greater than fifty times the Instrument Detection Limit.

The concentration of arsenic was determined by Method of Standard Addition in samples GW-2-P-S, GW-3-P-B, and GW-3-P-S, therefore the concentrations were flagged with an 'S'.

In one or more of the samples, the concentrations of analytes fell between, below, and above the Instrument Detection Limits (IDLs) and the Contract Required Detection Limits (CRDLs).

Anna Feather
Technical Reviewer
March 19, 1990

Note: This report is paginated for reference and accountability in numerical sequence.

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

GW-2-P-B

Lab Name: COMPUCHEM LABORATORIES Contract: 788

Lab Code: COMPU Case No.: 27380 SAS No.: _____ SDG No.: 193009

Matrix (soil/water): SOIL Lab Sample ID: 321018

Level (low/med): LOW Date Received: 02/22/90

% Solids: 100.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	8.5	B		P
7440-36-0	Antimony	4.2	U		P
7440-38-2	Arsenic	1.2	B	W	F
7440-39-3	Barium	1.0	B		P
7440-41-7	Beryllium	.20	U		P
7440-43-9	Cadmium	1.0	U		P
7440-70-2	Calcium	33.4	B		P
7440-47-3	Chromium	1.3	B		P
7440-48-4	Cobalt	.60	U		P
7440-50-8	Copper	.80	U		P
7439-89-6	Iron	12.1	B		P
7439-92-1	Lead	.45	B	W	F
7439-95-4	Magnesium	11.2	U		P
7439-96-5	Manganese	.36	B		P
7439-97-6	Mercury	.10	U	N	CV
7440-02-0	Nickel	5.8	U		P
7440-09-7	Potassium	252	U		P
7782-49-2	Selenium	2.0	U	EN	F
7440-22-4	Silver	.80	U		P
7440-23-5	Sodium	298	U		P
7440-28-0	Thallium	.40	U		F
7440-62-2	Vanadium	2.8	B		P
7440-66-6	Zinc	4.3			P
	Cyanide	.50	U		AS

Color Before: BLACK Clarity Before: _____ Texture: FINE

Color After: YELLOW Clarity After: _____ Artifacts: _____

Comments:

FORM 1 - PAGE 1

THE FOLLOWING FURNACE ANALYTES ARE ESTIMATED DUE TO INTERFERENCE:

SELENIUM

FORM I - IN 7/88

COMPUCHEM LABORATORIES

19/MAR/90

LAWLER, MATUSKY

Lawler Matusky & Skelly (LMS)
12th floor
One Blue Hill Plaza
PO BOX 1509
Pearl River, NY 10965

Subject: Report of Data - Account Number 273801

Enclosed herewith are the results of analytical work performed in accordance with the referenced account number.

This report covers 4 sample(s) appearing on the attached listing and their associated Quality Control Data.

Thank you for selecting CompuChem@ Laboratories for your sample analysis. If you should have questions or require additional analytical services please contact your representative at 1-919-549-8263.

Sincerely,

Elise L. Cobb
Supervisor, Report Deliverables

Attachment

COMPUCHEM LABORATORIES

19/MAR/90

Lawler Matusky & Skelly (LMS)
12th floor
One Blue Hill Plaza
PO BOX 1509
Pearl River, NY 10965

ACCOUNT #: 273801

CC#	SAMPLE-ID	RECEIPT DATE
321018	GW-2-P-B	2/22/90
321026	GW-2-P-S	2/22/90
321027	GW-3-P-B	2/22/90
321028	GW-3-P-S	2/22/90

TOTAL NUMBER OF SAMPLES = 4

8B
SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 01

Lab File ID (Standard): HH900305A15 Date Analyzed: 03/05/90

Instrument ID: 15 Time Analyzed: 1319

		IS1(DCB) AREA #	RT	IS2(NPT) AREA #	RT	IS3(ANT) AREA #	RT
	12 HOUR STD	153000	7.00	426000	8.87	216000	11.57
	UPPER LIMIT	306000		852000		432000	
	LOWER LIMIT	76500		213000		108000	
	EPA SAMPLE NO.						
01	GW-3DL	151000	6.93	372000	8.79	162000	11.47

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

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

Column used to flag internal standard area values with an asterisk

8C
SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 01

Lab File ID (Standard): HH900305A15 Date Analyzed: 03/05/90

Instrument ID: 15 Time Analyzed: 1319

		IS4(PHN) AREA #	RT	IS5(CRY) AREA #	RT	IS6(PRY) AREA #	RT
	12 HOUR STD	266000	13.84	161000	17.94	85300	20.50
	UPPER LIMIT	532000		322000		170600	
	LOWER LIMIT	133000		80500		42650	
	EPA SAMPLE NO.						
01	GW-3DL	207000	13.72	236000	17.80	159000	20.29

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

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

Column used to flag internal standard area values with an asterisk

8B
SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 01

Lab File ID (Standard): HG900303A15 Date Analyzed: 03/03/90

Instrument ID: 15 Time Analyzed: 0615

		IS1(DCB) AREA #	RT	IS2(NPT) AREA #	RT	IS3(ANT) AREA #	RT
	12 HOUR STD	172000	7.35	542000	9.22	342000	11.92
	UPPER LIMIT	344000		1084000		684000	
	LOWER LIMIT	86000		271000		171000	
	EPA SAMPLE NO.						
01	GW-3	139000	7.22	443000	9.12	456000	11.90

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

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

Column used to flag internal standard area values with an asterisk

8C

SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 01

Lab File ID (Standard): HG900303A15 Date Analyzed: 03/03/90

Instrument ID: 15 Time Analyzed: 0615

		IS4(PHN) AREA #	RT	IS5(CRY) AREA #	RT	IS6(PRY) AREA #	RT
	12 HOUR STD	434000	14.17	211000	18.27	119000	21.10
	UPPER LIMIT	868000		422000		238000	
	LOWER LIMIT	217000		105500		59500	
	EPA SAMPLE NO.						
01	GW-3	518000	14.24	197000	18.44	72000	21.17

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

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

Column used to flag internal standard area values with an asterisk

28/DEC/88

COMPUCHEM LABORATORIES

Lawler Matusky & Skelly (LMS)
One Blue Hill Plaza
PO Box 1509
Ms. Deborah Wright
Pearl River, NY 10965

ACCOUNT #: 273801

CC#	SAMPLE-ID	RECEIPT DATE
232981	SS-1	12/03/88
232982	SS-2	12/03/88
232989	SS-3	12/03/88
232990	SS-4	12/03/88

TOTAL NUMBER OF SAMPLES = 4

CompuChem Laboratories
P.O. Box 12652
3308 Chapel Hill/Nelson Highway
Research Triangle Park, NC 27709

Date 12/20/88

COVER PAGE
INORGANIC ANALYSES DATA PACKAGE

Lab Name Inorganics Laboratory

Case No. 273801 15767

SOW No. 785

Q.C. Report No. 15767A

Lab Receipt Date 12/03/88

Sample Numbers

Client ID No.	Lab ID No.	Client ID No.	Lab ID No.
SS-1	232981		
SS-2	232982		
SS-3	232989		
SS-4	232990		

Comments: 232983 SS(232982) 232985 LCS
232984 D(232982)
232986 SS(232982)
232987 D(232982)
232988 LCS

ICP interelement and background corrections applied? Yes X No ___.
If yes, corrections applied before X or ____ after generation of raw data.

Footnotes:
NR - Not required by contract at this time
FormI:
Value - If the result is a value greater than or equal to the instrument detection limit but less than the contract-required detection limit, report the value in brackets (i.e., [10]). Indicate the analytical method used with P (for ICP), A (for Flame AA), or F (for Furnace AA).
U - Indicates element was analyzed for but not detected. Report with the instrument detection limit value (e.g., 10U).
E - Indicates a value estimated or not reported due to the presence of interference. Explanatory note included on cover page.
S - Indicates value determined by Method of Standard Addition.
N - Indicates spike sample recovery is not within control limits.
* - Indicates duplicate analysis is not within control limits.
+ - Indicates the correlation coefficient for method of standard addition is less than 0.995
M - Indicates duplicate injection results exceeded control limits.

Indicate method used: P for ICP; A for Flame AA and F for Furnace.

8B
SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 01

Lab File ID (Standard): HG900223A15 Date Analyzed: 02/23/90

Instrument ID: 15 Time Analyzed: 0932

		IS1(DCB) AREA #	RT	IS2(NPT) AREA #	RT	IS3(ANT) AREA #	RT
	12 HOUR STD	120000	7.40	492000	9.20	256000	11.77
	UPPER LIMIT	240000		984000		512000	
	LOWER LIMIT	60000		246000		128000	
	EPA SAMPLE NO.						
01	SW-1	143000	7.40	537000	9.22	270000	11.79
02	SBLK91	144000	7.42	544000	9.22	265000	11.79

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

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

Column used to flag internal standard area values with an asterisk

page 1 of 1

FORM VIII SV-1 1/87 Rev.

8C
SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 01

Lab File ID (Standard): HG900223A15 Date Analyzed: 02/23/90

Instrument ID: 15 Time Analyzed: 0932

		IS4(PHN) AREA #	RT	IS5(CRY) AREA #	RT	IS6(PRY) AREA #	RT
	12 HOUR STD	373000	13.92	301000	17.85	267000	20.95
	UPPER LIMIT	746000		602000		534000	
	LOWER LIMIT	186500		150500		133500	
	EPA SAMPLE NO.						
01	SW-1	345000	13.95	263000	17.89	198000	20.95
02	SBLK91	362000	13.95	270000	17.89	221000	20.97

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

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

Column used to flag internal standard area values with an asterisk

8A
VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 01

Lab File ID (Standard): CS900223C12 Date Analyzed: 02/23/90

Instrument ID: 12 Time Analyzed: 0106

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) CAP

		IS1(BCM) AREA #	RT	IS2(DFB) AREA #	RT	IS3(CBZ) AREA #	RT
	12 HOUR STD	41300	5.22	194000	6.92	170000	11.60
	UPPER LIMIT	82600		388000		340000	
	LOWER LIMIT	20650		97000		85000	
	EPA SAMPLE NO.						
01	GW-3	44800	5.22	214000	6.92	171000	11.64
02	SW-1	44400	5.15	206000	6.87	178000	11.60
03	SW-1MS	45100	5.20	213000	6.90	173000	11.59
04	SW-1MSD	44000	5.17	192000	6.88	168000	11.62
05	VBLKLJ	45800	5.20	208000	6.92	181000	11.62

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

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

Column used to flag internal standard area values with an asterisk

8A
VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 01

Lab File ID (Standard): CS900225A12 Date Analyzed: 02/25/90

Instrument ID: 12 Time Analyzed: 0750

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) CAP

		IS1(BCM) AREA #	RT	IS2(DFB) AREA #	RT	IS3(CBZ) AREA #	RT
	12 HOUR STD	49300	5.20	235000	6.90	193000	11.64
	UPPER LIMIT	98600		470000		386000	
	LOWER LIMIT	24650		117500		96500	
	EPA SAMPLE NO.						
01	FIELDBLANK	46300	5.20	233000	6.90	193000	11.65
02	GW-1	48300	5.20	244000	6.92	200000	11.65
03	GW-2	47700	5.20	245000	6.93	193000	11.65
04	TRIPBLANK	47100	5.20	236000	6.92	195000	11.65
05	VBLKAR	47600	5.20	233000	6.90	191000	11.65

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

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

Column used to flag internal standard area values with an asterisk

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PBLK20

Lab Name: COMPUCHEM LABORATORIES Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 1

Matrix: (soil/water) WATER Lab Sample ID: 322073

Sample wt/vol: 500 (g/mL) ML Lab File ID: _____

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

% Moisture: not dec. _____ dec. _____ Date Extracted: 02/27/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 02/28/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 0.50

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
5103-71-9	alpha-Chlordane	0.50	U
5103-74-2	gamma-Chlordane	0.50	U
8001-35-2	Toxaphene	1.0	U
12674-11-2	Aroclor-1016	0.50	U
11104-28-2	Aroclor-1221	0.50	U
11141-16-5	Aroclor-1232	0.50	U
53469-21-9	Aroclor-1242	0.50	U
12672-29-6	Aroclor-1248	0.50	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

FORM I PEST 1/87 Rev.

6. By fraction (VOA, SV only) – Internal standard area data (Form VIII)

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PBLK3

Lab Name: COMPUCHEM LABORATORIES Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 1

Matrix: (soil/water) WATER Lab Sample ID: 321593

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

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

% Moisture: not dec. _____ dec. _____ Date Extracted: 02/24/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 02/27/90

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
5103-71-9	alpha-Chlordane	0.50	U
5103-74-2	gamma-Chlordane	0.50	U
8001-35-2	Toxaphene	1.0	U
12674-11-2	Aroclor-1016	0.50	U
11104-28-2	Aroclor-1221	0.50	U
11141-16-5	Aroclor-1232	0.50	U
53469-21-9	Aroclor-1242	0.50	U
12672-29-6	Aroclor-1248	0.50	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

FORM I PEST 1/87 Rev.

4C
PESTICIDE METHOD BLANK SUMMARY

Lab Name: COMPUCHEM LABORATORIES Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 1

Lab Sample ID: 322073 Lab File ID: _____

Matrix:(soil/water) WATER Level:(low/med) LOW

Date Extracted: 02/27/90 Extraction: (SepF/Cont/Sonc) SEPF

Date Analyzed (1): 02/28/90 Date Analyzed (2): 03/05/90

Time Analyzed (1): 1858 Time Analyzed (2): 0741

Instrument ID (1): 02 Instrument ID (2): 07

GC Column ID (1): OV-101 GC Column ID (2): 2250/2401

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

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	GW-3	320984	03/01/90	03/07/90
02				
03				
04				
05				
06				
07				
08				
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25				
26				

COMMENTS: _____

page 1 of 1 FORM IV PEST 1/87 Rev.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PBLK29

Lab Name: COMPUCHEM LABORATORIES Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 1

Matrix: (soil/water) WATER Lab Sample ID: 322310

Sample wt/vol: 500 (g/mL) ML Lab File ID: _____

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

% Moisture: not dec. _____ dec. _____ Date Extracted: 02/28/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 03/01/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 0.50

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
5103-71-9	alpha-Chlordane	0.50	U
5103-74-2	gamma-Chlordane	0.50	U
8001-35-2	Toxaphene	1.0	U
12674-11-2	Aroclor-1016	0.50	U
11104-28-2	Aroclor-1221	0.50	U
11141-16-5	Aroclor-1232	0.50	U
53469-21-9	Aroclor-1242	0.50	U
12672-29-6	Aroclor-1248	0.50	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

FORM I PEST 1/87 Rev.

4C
PESTICIDE METHOD BLANK SUMMARY

Lab Name: COMPUCHEM LABORATORIES Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 1

Lab Sample ID: 321593 Lab File ID: _____

Matrix:(soil/water) WATER Level:(low/med) LOW

Date Extracted: 02/24/90 Extraction: (SepF/Cont/Sonc) SEPF

Date Analyzed (1): 02/27/90 Date Analyzed (2): 02/28/90

Time Analyzed (1): 0147 Time Analyzed (2): 1326

Instrument ID (1): 10 Instrument ID (2): 07

GC Column ID (1): OV-101 GC Column ID (2): 2250/2401

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

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	SW-1	320974	02/27/90	03/01/90
02	FIELDBLANK	321292	02/27/90	
03	GW-1	321344	02/27/90	02/28/90
04	SW-1MSD	320982	02/27/90	
05	SW-1MS	320981	02/27/90	
06				
07				
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COMMENTS: _____

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SBLK29

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) WATER Lab Sample ID: SBLK29

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GH022910C15

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

% Moisture: not dec. ____ dec. ____ Date Extracted: 03/02/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 03/03/90

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

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I SV-TIC 1/87 Rev.

4C
PESTICIDE METHOD BLANK SUMMARY

Lab Name: COMPUCHEM LABORATORIES Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 1

Lab Sample ID: 322310 Lab File ID: _____

Matrix:(soil/water) WATER Level:(low/med) LOW

Date Extracted: 02/28/90 Extraction: (SepF/Cont/Sonc) SEPF

Date Analyzed (1): 03/01/90 Date Analyzed (2): 03/04/90

Time Analyzed (1): 1842 Time Analyzed (2): 2050

Instrument ID (1): 10 Instrument ID (2): 12

GC Column ID (1): OV-101 GC Column ID (2): 2250/2401

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

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	GW-2	321342	03/01/90	03/04/90
02				
03				
04				
05				
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				

COMMENTS: _____

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK29

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) WATER Lab Sample ID: SBLK29

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GH022910C15

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

% Moisture: not dec. ____ dec. ____ Date Extracted: 03/02/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 03/03/90

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl Alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
39638-32-9	bis(2-Chloroisopropyl)Ether	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
65-85-0	Benzoic Acid	50	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

FORM I SV-1 1/87 Rev.

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK29

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) WATER Lab Sample ID: SBLK29

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GH022910C15

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

% Moisture: not dec. ____ dec. ____ Date Extracted: 03/02/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 03/03/90

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	50	U
100-02-7	4-Nitrophenol	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

FORM I SV-2 1/87 Rev.

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SBLK23

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) WATER Lab Sample ID: SBLK23

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GH022363C15

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

% Moisture: not dec. ____ dec. ____ Date Extracted: 02/28/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 03/02/90

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

Number TICs found: 2

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	5.92	20	J
2. 4291-80-9	CYCLOHEXANE, 1-METHYL-3-PROP	6.28	10	J

FORM I SV-TIC 1/87 Rev.

4B
SEMIVOLATILE METHOD BLANK SUMMARY

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 01

Lab File ID: GH022910C15 Lab Sample ID: SBLK29

Date Extracted: 03/02/90 Extraction:(SepF/Cont/Sonc) SEPF

Date Analyzed: 03/03/90 Time Analyzed: 0055

Matrix: (soil/water) WATER Level:(low/med) LOW

Instrument ID: 15

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	GW-3	320984	G2R20984A15	03/03/90
02	GW-3DL	320984	G2R20984B15	03/05/90

COMMENTS: CLP , , , ,LOW,WATER,322910,BNA,BLANK,
TUNE: 0015 030390 0010

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK23

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) WATER Lab Sample ID: SBLK23

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GH022363C15

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

% Moisture: not dec. ____ dec. ____ Date Extracted: 02/28/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 03/02/90

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl Alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
39638-32-9	bis(2-Chloroisopropyl)Ether	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
65-85-0	Benzoic Acid	50	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

FORM I SV-1 1/87 Rev.

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK23

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) WATER Lab Sample ID: SBLK23

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GH022363C15

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

% Moisture: not dec. ____ dec. ____ Date Extracted: 02/28/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 03/02/90

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	50	U
100-02-7	4-Nitrophenol	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

FORM I SV-2 1/87 Rev.

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SBLK02

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) WATER Lab Sample ID: SBLK02

Sample wt/vol: 500 (g/mL) ML Lab File ID: GJ021748B15

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

% Moisture: not dec. ____ dec. ____ Date Extracted: 02/25/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 02/26/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 0.50

Number TICs found: 2

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN SUBSTITUTED ALKANE	5.92	42	J
2. 4291-79-6	CYCLOHEXANE, 1-METHYL-2-PROP	6.27	24	J

FORM I SV-TIC 1/87 Rev.

4B
SEMIVOLATILE METHOD BLANK SUMMARY

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 01

Lab File ID: GH022363C15 Lab Sample ID: SBLK23

Date Extracted: 02/28/90 Extraction:(SepF/Cont/Sonc) SEPF

Date Analyzed: 03/02/90 Time Analyzed: 0501

Matrix: (soil/water) WATER Level:(low/med) LOW

Instrument ID: 15

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	GW-1RE	321344	GR021344C15	03/02/90
02	GW-2	321342	GRD21342C15	03/02/90

COMMENTS: CLP , , , ,LOW,WATER,322363,BNA,BLANK,
TUNE: 0015 030290 0047

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK02

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) WATER Lab Sample ID: SBLK02

Sample wt/vol: 500 (g/mL) ML Lab File ID: GJ021748B15

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

% Moisture: not dec. ____ dec. ____ Date Extracted: 02/25/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 02/26/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 0.50

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl Alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
39638-32-9	bis(2-Chloroisopropyl)Ether	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
65-85-0	Benzoic Acid	50	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

FORM I SV-1 1/87 Rev.

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK02

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) WATER Lab Sample ID: SBLK02

Sample wt/vol: 500 (g/mL) ML Lab File ID: GJ021748B15

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

% Moisture: not dec. ____ dec. ____ Date Extracted: 02/25/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 02/26/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 0.50

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	50	U
100-02-7	4-Nitrophenol	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	16	
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

FORM I SV-2 1/87 Rev.

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SBLK91

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) WATER Lab Sample ID: SBLK91

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GH021195B15

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

% Moisture: not dec. ____ dec. ____ Date Extracted: 02/23/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 02/23/90

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

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I SV-TIC 1/87 Rev.

4B
SEMIVOLATILE METHOD BLANK SUMMARY

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 01

Lab File ID: GJ021748B15 Lab Sample ID: SBLK02

Date Extracted: 02/25/90 Extraction:(SepF/Cont/Sonc) SEPF

Date Analyzed: 02/26/90 Time Analyzed: 2013

Matrix: (soil/water) WATER Level:(low/med) LOW

Instrument ID: 15

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	FIELDBLANK	321292	GH021292C15	02/27/90
02	GW-1	321344	GH021344C15	02/27/90

COMMENTS: CLP , , , ,LOW,WATER,321748,BNA,BLANK,
TUNE: 0015 022690 1527

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK91

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) WATER Lab Sample ID: SBLK91

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GH021195B15

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

% Moisture: not dec. ____ dec. ____ Date Extracted: 02/23/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 02/23/90

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl Alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
39638-32-9	bis(2-Chloroisopropyl)Ether	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
65-85-0	Benzoic Acid	50	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

FORM I SV-1 1/87 Rev.

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK91

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) WATER Lab Sample ID: SBLK91

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GH021195B15

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

% Moisture: not dec. ____ dec. ____ Date Extracted: 02/23/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 02/23/90

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	50	U
100-02-7	4-Nitrophenol	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	4	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

FORM I SV-2 1/87 Rev.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLKAR

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 01

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

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CB900225A12

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

% Moisture: not dec. ____ Date Analyzed: 02/25/90

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I VOA-TIC 1/87 Rev.

4B
SEMIVOLATILE METHOD BLANK SUMMARY

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 01

Lab File ID: GH021195B15 Lab Sample ID: SBLK91

Date Extracted: 02/23/90 Extraction:(SepF/Cont/Sonc) SEPF

Date Analyzed: 02/23/90 Time Analyzed: 1945

Matrix: (soil/water) WATER Level:(low/med) LOW

Instrument ID: 15

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	SW-1	320974	GH020974B15	02/23/90
02	SW-1MS	320978	GJ020978C15	03/01/90
03	SW-1MSD	320979	GH020979B15	02/25/90

COMMENTS: CLP , , , ,LOW,WATER,321195,BNA,BLANK,
TUNE: 0015 022390 0912

4A
VOLATILE METHOD BLANK SUMMARY

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 01

Lab File ID: CB900225A12 Lab Sample ID: VBLKAR

Date Analyzed: 02/25/90 Time Analyzed: 0834

Matrix: (soil/water) WATER Level:(low/med) LOW

Instrument ID: 12

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	FIELDBLANK	321292	CN021292A12	0919
02	GW-1	321344	CR021344A12	1232
03	GW-2	321342	CN021342A12	1049
04	TRIPBLANK	321580	CN021580A12	0954

COMMENTS: CLP , , , , , , ,VOLATILE,BLANK,
TUNE: 0012 022590 0711

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKAR

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 01

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

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CB900225A12

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

% Moisture: not dec. ____ Date Analyzed: 02/25/90

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

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

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

FORM I VOA 1/87 Rev.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKLJ

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 01

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

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CB900223C12

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

% Moisture: not dec. ____ Date Analyzed: 02/23/90

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

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

FORM I VOA 1/87 Rev.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLKLJ

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 01

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

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CB900223C12

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

% Moisture: not dec. ____ Date Analyzed: 02/23/90

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I VOA-TIC 1/87 Rev.

5. By fraction (VOA, SV, PEST) – blank data (Form IV) and tabulated results (Form I) including tentatively identified compounds (Form I, TIC) (VOA and SV only)

4A
VOLATILE METHOD BLANK SUMMARY

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 01

Lab File ID: CB900223C12 Lab Sample ID: VBLKLJ

Date Analyzed: 02/23/90 Time Analyzed: 0211

Matrix: (soil/water) WATER Level:(low/med) LOW

Instrument ID: 12

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	GW-3	320984	CR020984A12	1021
02	SW-1	320974	CN020974C12	0502
03	SW-1MS	320975	CN020975C12	0554
04	SW-1MSD	320976	CN020976C12	0616

COMMENTS: CLP , , , , , , ,VOLATILE,BLANK,
TUNE: 0012 022390 0043

3C

WATER SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 01

Matrix Spike - EPA Sample No.: SW-1

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMITS REC.
Phenol	200	0	98.8	49	12- 86
2-Chlorophenol	200	0	125	63	27-123
1,4-Dichlorobenzene	100	0	50.2	50	36 97
N-Nitroso-di-n-prop.(1)	100	0	59.8	60	41 116
1,2,4-Trichlorobenzene	100	0	55.0	55	39 98
4-Chloro-3-methylphenol	200	0	117	59	23 97
Acenaphthene	100	0	54.2	54	46-118
4-Nitrophenol	200	0	104	52	10- 80
2,4-Dinitrotoluene	100	0	48.8	49	24- 96
Pentachlorophenol	200	0	137	69	9-103
Pyrene	100	0	56.2	56	26-127

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Phenol	200	132	66	-30	42	12- 86
2-Chlorophenol	200	168	84	-29	40	27-123
1,4-Dichlorobenzene	100	69.8	70	-33 *	28	36 97
N-Nitroso-di-n-prop.(1)	100	98.8	99	-49 *	38	41 116
1,2,4-Trichlorobenzene	100	74.6	75	-31 *	28	39 98
4-Chloro-3-methylphenol	200	181	91	-43 *	42	23 97
Acenaphthene	100	75.2	75	-33 *	31	46-118
4-Nitrophenol	200	126	63	-19	50	10- 80
2,4-Dinitrotoluene	100	70.2	70	-35	38	24- 96
Pentachlorophenol	200	216	108 *	-44	50	9-103
Pyrene	100	83.4	83	-39 *	31	26-127

(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 6 out of 11 outside limits
Spike Recovery: 1 out of 22 outside limits

COMMENTS: CLP ,1930,01, ,LOW,WATER,320974,BNA, ,
TUNE: 0015 022390 0912

FORM III SV-1 1/87 Rev.

3E
WATER PESTICIDE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: COMPUCHEM LABORATORIES Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 1

Matrix Spike - EPA Sample No.: SW-1

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMITS REC.
gamma-BHC (Lindane)	0.200	0.000	0.210	105	56-123
Heptachlor	0.200	0.000	0.160	80	40-131
Aldrin	0.200	0.000	0.170	85	40-120
Dieldrin	0.500	0.000	0.510	102	52-126
Endrin	0.500	0.000	0.600	120	56-121
4,4'-DDT	0.500	0.000	0.370	74	38-127

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
gamma-BHC (Lindane)	0.200	0.180	90	15	15	56-123
Heptachlor	0.200	0.130	65	21 *	20	40-131
Aldrin	0.200	0.170	85	0	22	40-120
Dieldrin	0.500	0.420	84	19 *	18	52-126
Endrin	0.500	0.490	98	20	21	56-121
4,4'-DDT	0.500	0.330	66	11	27	38-127

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 2 out of 6 outside limits
Spike Recovery: 0 out of 12 outside limits

COMMENTS: _____

FORM III PEST-1 8/87 Rev.

4. By fraction (VOA, SV, PEST) - matrix spike duplicate results (Form III)

3A

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 01

Matrix Spike - EPA Sample No.: SW-1

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMITS REC.
1,1-Dichloroethene	50.0	0	52.2	104	61-145
Trichloroethene	50.0	1.64	43.9	85	71-120
Benzene	50.0	0	50.6	101	76-127
Toluene	50.0	0	48.7	97	76-125
Chlorobenzene	50.0	0	47.5	95	75-130

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	50.0	50.5	101	3	14	61-145
Trichloroethene	50.0	43.9	85	0	14	71-120
Benzene	50.0	51.9	104	-3	11	76-127
Toluene	50.0	43.8	88	10	13	76-125
Chlorobenzene	50.0	46.3	93	2	13	75-130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

COMMENTS: CLP ,1930,01, ,LOW,WATER,320974,VOLATILE, ,
TUNE: 0012 022390 0043

FORM III VOA-1 1/87 Rev.

2C
WATER SEMIVOLATILE SURROGATE RECOVERY

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 01

	EPA SAMPLE NO.	S1 (NBZ)#	S2 (FBP)#	S3 (TPH)#	S4 (PHL)#	S5 (2FP)#	S6 (TBP)#	OTHER	TOT OUT
01	FIELDBLANK	51	57	72	50	62	60		0
02	GW-1	53	67	73	2 *	2 *	6 *		3
03	GW-1RE	88	76	116	0 *	1 *	11		2
04	GW-2	134 *	66	106	54	64	125 *		2
05	GW-3	106	58	95	37	44	90		0
06	GW-3DL	151 *	89	73	70	86	86		1
07	SW-1	86	97	85	45	59	73		0
08	SW-1MS	55	57	57	51	54	71		0
09	SW-1MSD	93	81	90	73	85	83		0
10	SBLK91	88	99	101	46	59	69		0
11	SBLK02	70	80	94	60	75	123		0
12	SBLK23	89	87	118	47	60	88		0
13	SBLK29	66	77	102	36	58	90		0

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

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

2E
WATER PESTICIDE SURROGATE RECOVERY

Lab Name: COMPUCHEM LABORATORIES Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 1

	EPA SAMPLE NO.	S1 (DBC)#	OTHER
01	PBLK20	97	0
02	GW-3	0 *	0
03	PBLK29	102	0
04	GW-2	0 *	0
05	PBLK03	78	0
06	SW-1	87	0
07	FIELDBLANK	96	0
08	GW-1	88	0
09	SW-1MSD	92	0
10	SW-1MS	124	0
11			
12			
13			
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26			
27			
28			
29			
30			

ADVISORY QC LIMITS (24-154)

S1 (DBC) = Dibutylchlorendate

Column used to flag recovery values

* Values outside of QC limits

D Surrogates diluted out

page 1 of 1

FORM II PEST-1 1/87 Rev.

3. By fraction (VOA, SV, PEST) - surrogate spike analysis results (Form II) by matrix (Water and/or Soil) and for soil, by concentration (Low or Medium)

2A
WATER VOLATILE SURROGATE RECOVERY

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 01

	EPA SAMPLE NO.	S1 (TOL) #	S2 (BFB) #	S3 (DCE) #	OTHER	TOT OUT
01	FIELDBLANK	101	101	112		0
02	GW-1	94	101	108		0
03	GW-2	97	98	106		0
04	GW-3	96	93	99		0
05	SW-1	98	90	101		0
06	TRIPBLANK	89	97	106		0
07	SW-1MS	99	92	99		0
08	SW-1MSD	97	93	98		0
09	VBLKLJ	98	94	103		0
10	VBLKAR	101	97	108		0

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

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogates diluted out

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SW-1MSD

Lab Name: COMPUCHEM LABORATORIES Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 1

Matrix: (soil/water) WATER Lab Sample ID: 320982

Sample wt/vol: 500 (g/mL) ML Lab File ID: _____

Level: (low/med) LOW Date Received: 02/22/90

% Moisture: not dec. _____ dec. _____ Date Extracted: 02/24/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 02/27/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 0.50

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
5103-71-9	alpha-Chlordane	0.50	U
5103-74-2	gamma-Chlordane	0.50	U
8001-35-2	Toxaphene	1.0	U
12674-11-2	Aroclor-1016	0.50	U
11104-28-2	Aroclor-1221	0.50	U
11141-16-5	Aroclor-1232	0.50	U
53469-21-9	Aroclor-1242	0.50	U
12672-29-6	Aroclor-1248	0.50	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

FORM I PEST 1/87 Rev.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SW-1MS

Lab Name: COMPUCHEM LABORATORIES Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 1

Matrix: (soil/water) WATER Lab Sample ID: 320981

Sample wt/vol: 500 (g/mL) ML Lab File ID: _____

Level: (low/med) LOW Date Received: 02/22/90

% Moisture: not dec. _____ dec. _____ Date Extracted: 02/24/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 02/27/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 0.50

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
5103-71-9	alpha-Chlordane	0.50	U
5103-74-2	gamma-Chlordane	0.50	U
8001-35-2	Toxaphene	1.0	U
12674-11-2	Aroclor-1016	0.50	U
11104-28-2	Aroclor-1221	0.50	U
11141-16-5	Aroclor-1232	0.50	U
53469-21-9	Aroclor-1242	0.50	U
12672-29-6	Aroclor-1248	0.50	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

FORM I PEST 1/87 Rev.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GW-3

Lab Name: COMPUCHEM LABORATORIES Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 1

Matrix: (soil/water) WATER Lab Sample ID: 320984

Sample wt/vol: 500 (g/mL) ML Lab File ID: _____

Level: (low/med) LOW Date Received: 02/22/90

% Moisture: not dec. _____ dec. _____ Date Extracted: 02/27/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 03/01/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 3.60

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.36	U
319-85-7	beta-BHC	0.36	U
319-86-8	delta-BHC	0.36	U
58-89-9	gamma-BHC (Lindane)	0.36	U
76-44-8	Heptachlor	0.36	U
309-00-2	Aldrin	0.36	U
1024-57-3	Heptachlor epoxide	0.36	U
959-98-8	Endosulfan I	0.36	U
60-57-1	Dieldrin	0.72	U
72-55-9	4,4'-DDE	0.72	U
72-20-8	Endrin	0.72	U
33213-65-9	Endosulfan II	0.72	U
72-54-8	4,4'-DDD	0.72	U
1031-07-8	Endosulfan sulfate	0.72	U
50-29-3	4,4'-DDT	0.72	U
72-43-5	Methoxychlor	3.6	U
53494-70-5	Endrin ketone	0.72	U
5103-71-9	alpha-Chlordane	3.6	U
5103-74-2	gamma-Chlordane	3.6	U
8001-35-2	Toxaphene	7.2	U
12674-11-2	Aroclor-1016	3.6	U
11104-28-2	Aroclor-1221	3.6	U
11141-16-5	Aroclor-1232	3.6	U
53469-21-9	Aroclor-1242	3.6	U
12672-29-6	Aroclor-1248	3.6	U
11097-69-1	Aroclor-1254	7.2	U
11096-82-5	Aroclor-1260	7.2	U

FORM I PEST 1/87 Rev.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SW-1

Lab Name: COMPUCHEM LABORATORIES Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 1

Matrix: (soil/water) WATER Lab Sample ID: 320974

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

Level: (low/med) LOW Date Received: 02/22/90

% Moisture: not dec. _____ dec. _____ Date Extracted: 02/24/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 02/27/90

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
5103-71-9	alpha-Chlordane	0.50	U
5103-74-2	gamma-Chlordane	0.50	U
8001-35-2	Toxaphene	1.0	U
12674-11-2	Aroclor-1016	0.50	U
11104-28-2	Aroclor-1221	0.50	U
11141-16-5	Aroclor-1232	0.50	U
53469-21-9	Aroclor-1242	0.50	U
12672-29-6	Aroclor-1248	0.50	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

FORM I PEST 1/87 Rev.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GW-1

Lab Name: COMPUCHEM LABORATORIES Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 1

Matrix: (soil/water) WATER Lab Sample ID: 321344

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

Level: (low/med) LOW Date Received: 02/23/90

% Moisture: not dec. _____ dec. _____ Date Extracted: 02/24/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 02/27/90

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
5103-71-9	alpha-Chlordane	0.50	U
5103-74-2	gamma-Chlordane	0.50	U
8001-35-2	Toxaphene	1.0	U
12674-11-2	Aroclor-1016	0.50	U
11104-28-2	Aroclor-1221	0.50	U
11141-16-5	Aroclor-1232	0.50	U
53469-21-9	Aroclor-1242	0.50	U
12672-29-6	Aroclor-1248	0.50	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

FORM I PEST 1/87 Rev.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GW-2

Lab Name: COMPUCHEM LABORATORIES Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 1

Matrix: (soil/water) WATER Lab Sample ID: 321342

Sample wt/vol: 500 (g/mL) ML Lab File ID: _____

Level: (low/med) LOW Date Received: 02/23/90

% Moisture: not dec. _____ dec. _____ Date Extracted: 02/28/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 03/01/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 3.90

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.39	U
319-85-7	beta-BHC	0.39	U
319-86-8	delta-BHC	0.39	U
58-89-9	gamma-BHC (Lindane)	0.39	U
76-44-8	Heptachlor	0.39	U
309-00-2	Aldrin	0.39	U
1024-57-3	Heptachlor epoxide	0.39	U
959-98-8	Endosulfan I	0.39	U
60-57-1	Dieldrin	0.78	U
72-55-9	4,4'-DDE	0.78	U
72-20-8	Endrin	0.78	U
33213-65-9	Endosulfan II	0.78	U
72-54-8	4,4'-DDD	0.78	U
1031-07-8	Endosulfan sulfate	0.78	U
50-29-3	4,4'-DDT	0.78	U
72-43-5	Methoxychlor	3.9	U
53494-70-5	Endrin ketone	0.78	U
5103-71-9	alpha-Chlordane	3.9	U
5103-74-2	gamma-Chlordane	3.9	U
8001-35-2	Toxaphene	7.8	U
12674-11-2	Aroclor-1016	3.9	U
11104-28-2	Aroclor-1221	3.9	U
11141-16-5	Aroclor-1232	3.9	U
53469-21-9	Aroclor-1242	3.9	U
12672-29-6	Aroclor-1248	3.9	U
11097-69-1	Aroclor-1254	7.8	U
11096-82-5	Aroclor-1260	7.8	U

FORM I PEST 1/87 Rev.

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SW-1MSD

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) WATER Lab Sample ID: 320979

Sample wt/vol: 500 (g/mL) ML Lab File ID: GH020979B15

Level: (low/med) LOW Date Received: 02/22/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 02/23/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 02/25/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 0.50

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	50	U
100-02-7	4-Nitrophenol	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	2	BJ
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

FORM I SV-2 1/87 Rev.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FIELD BLANK

Lab Name: COMPUCHEM LABORATORIES Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 1

Matrix: (soil/water) WATER Lab Sample ID: 321292

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

Level: (low/med) LOW Date Received: 02/23/90

% Moisture: not dec. _____ dec. _____ Date Extracted: 02/24/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 02/27/90

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
5103-71-9	alpha-Chlordane	0.50	U
5103-74-2	gamma-Chlordane	0.50	U
8001-35-2	Toxaphene	1.0	U
12674-11-2	Aroclor-1016	0.50	U
11104-28-2	Aroclor-1221	0.50	U
11141-16-5	Aroclor-1232	0.50	U
53469-21-9	Aroclor-1242	0.50	U
12672-29-6	Aroclor-1248	0.50	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

FORM I PEST 1/87 Rev.

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SW-1MS

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) WATER Lab Sample ID: 320978

Sample wt/vol: 500 (g/mL) ML Lab File ID: GJ020978C15

Level: (low/med) LOW Date Received: 02/22/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 02/23/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 03/01/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 0.50

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	50	U
100-02-7	4-Nitrophenol	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

FORM I SV-2 1/87 Rev.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SW-1MSD

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) WATER Lab Sample ID: 320979

Sample wt/vol: 500 (g/mL) ML Lab File ID: GH020979B15

Level: (low/med) LOW Date Received: 02/22/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 02/23/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 02/25/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 0.50

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl Alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
39638-32-9	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	10	J
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

FORM I SV-1 1/87 Rev.

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SW-1

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) WATER Lab Sample ID: 320974

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GH020974B15

Level: (low/med) LOW Date Received: 02/22/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 02/23/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 02/23/90

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

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	21.22	8.0	J

FORM I SV-TIC

1/87 Rev.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SW-1MS

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) WATER Lab Sample ID: 320978

Sample wt/vol: 500 (g/mL) ML Lab File ID: GJ020978C15

Level: (low/med) LOW Date Received: 02/22/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 02/23/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 03/01/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 0.50

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl Alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
39638-32-9	bis(2-Chloroisopropyl)Ether	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
65-85-0	Benzoic Acid	50	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

FORM I SV-1 1/87 Rev.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SW-1

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) WATER Lab Sample ID: 320974

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GH020974B15

Level: (low/med) LOW Date Received: 02/22/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 02/23/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 02/23/90

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl Alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
39638-32-9	bis(2-Chloroisopropyl)Ether	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
65-85-0	Benzoic Acid	50	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

FORM I SV-1 1/87 Rev.

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SW-1

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) WATER Lab Sample ID: 320974

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GH020974B15

Level: (low/med) LOW Date Received: 02/22/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 02/23/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 02/23/90

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	50	U
100-02-7	4-Nitrophenol	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	3	BJ
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

FORM I SV-2 1/87 Rev.

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GW-3DL

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) WATER Lab Sample ID: 320984

Sample wt/vol: 500 (g/mL) ML Lab File ID: G2R20984B15

Level: (low/med) LOW Date Received: 02/22/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 03/02/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 03/05/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: ~~5.0~~ 10 RV 3/15/90

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	500	U
83-32-9	Acenaphthene	21	J
51-28-5	2,4-Dinitrophenol	500	U
100-02-7	4-Nitrophenol	500	U
132-64-9	Dibenzofuran	100	U
121-14-2	2,4-Dinitrotoluene	100	U
84-66-2	Diethylphthalate	100	U
7005-72-3	4-Chlorophenyl-phenylether	100	U
86-73-7	Fluorene	37	J
100-01-6	4-Nitroaniline	500	U
534-52-1	4,6-Dinitro-2-Methylphenol	500	U
86-30-6	N-Nitrosodiphenylamine (1)	100	U
101-55-3	4-Bromophenyl-phenylether	100	U
118-74-1	Hexachlorobenzene	100	U
87-86-5	Pentachlorophenol	500	U
85-01-8	Phenanthrene	160	
120-12-7	Anthracene	51	J
84-74-2	Di-n-Butylphthalate	100	U
206-44-0	Fluoranthene	49	J
129-00-0	Pyrene	100	
85-68-7	Butylbenzylphthalate	100	U
91-94-1	3,3'-Dichlorobenzidine	200	U
56-55-3	Benzo(a)Anthracene	170	
218-01-9	Chrysene	220	
117-81-7	bis(2-Ethylhexyl)Phthalate	100	U
117-84-0	Di-n-Octyl Phthalate	100	U
205-99-2	Benzo(b)Fluoranthene	51	JX
207-08-9	Benzo(k)Fluoranthene	51	JX
50-32-8	Benzo(a)Pyrene	62	J
193-39-5	Indeno(1,2,3-cd)Pyrene	100	U
53-70-3	Dibenzo(a,h)Anthracene	100	U
191-24-2	Benzo(g,h,i)Perylene	100	U

(1) - Cannot be separated from Diphenylamine

FORM I SV-2 1/87 Rev.

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GW-3DL

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) WATER Lab Sample ID: 320984

Sample wt/vol: 500 (g/mL) ML Lab File ID: G2R20984B15

Level: (low/med) LOW Date Received: 02/22/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 03/02/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 03/05/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: ~~5.0~~ 10.0 RV 3/15/90

Number TICs found: 20

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN HYDROCARBON	12.49	900	J
2.	UNKNOWN HYDROCARBON	13.60	700	J
3.	UNKNOWN	14.90	920	J
4.	UNKNOWN	15.25	1400	J
5.	UNKNOWN	15.44	620	J
6.	UNKNOWN	16.00	600	J
7.	UNKNOWN HYDROCARBON	16.15	1000	J
8.	UNKNOWN	16.30	1400	J
9.	UNKNOWN	16.57	940	J
10.	UNKNOWN	16.62	1300	J
11.	UNKNOWN	16.80	760	J
12.	UNKNOWN HYDROCARBON	16.89	1100	J
13.	UNKNOWN	17.09	1400	J
14.	UNKNOWN	17.19	1400	J
15.	UNKNOWN	17.32	2800	J
16.	UNKNOWN	17.54	3000	J
17.	UNKNOWN	18.02	1500	J
18.	UNKNOWN	18.32	1500	J
19.	UNKNOWN	18.40	920	J
20.	UNKNOWN	18.47	940	J

FORM I SV-TIC 1/87 Rev.

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GW-3

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) WATER Lab Sample ID: 320984

Sample wt/vol: 500 (g/mL) ML Lab File ID: G2R20984A15

Level: (low/med) LOW Date Received: 02/22/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 03/02/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 03/03/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 0.50

Number TICs found: 20

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	8.79	540	J
2.	DIMETHYL UNDECANE	9.27	560	J
3.	METHYLNAPHTHALENE + UNKNOWN	10.40	680	J
4.	UNKNOWN	10.55	980	J
5.	UNKNOWN HYDROCARBON	10.65	760	J
6.	UNKNOWN HYDROCARBON	10.70	480	J
7.	TRIMETHYLDODECANE	10.77	760	J
8.	UNKNOWN	10.99	400	J
9.	DIMETHYLNAPHTHALENE	11.35	1000	J
10.	UNKNOWN	11.45	960	J
11.	UNKNOWN HYDROCARBON	12.15	480	J
12.	UNKNOWN	12.29	1500	J
13.	TRIMETHYLNAPHTHALENE + UNKNO	12.55	400	J
14.	UNKNOWN HYDROCARBON	12.94	1700	J
15.	UNKNOWN HYDROCARBON	13.35	1300	J
16.	UNKNOWN	13.54	480	J
17.	UNKNOWN HYDROCARBON	13.62	3200	J
18.	UNKNOWN	18.27	1500	J
19.	UNKNOWN	18.42	1200	J
20.	UNKNOWN	18.60	900	J

FORM I SV-TIC 1/87 Rev.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GW-3DL

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) WATER Lab Sample ID: 320984

Sample wt/vol: 500 (g/mL) ML Lab File ID: G2R20984B15

Level: (low/med) LOW Date Received: 02/22/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 03/02/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 03/05/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: ~~5.0~~ 10.0 RN 3/15/9

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

CAS NO.	COMPOUND		Q
108-95-2	Phenol	100	U
111-44-4	bis(2-Chloroethyl)Ether	100	U
95-57-8	2-Chlorophenol	100	U
541-73-1	1,3-Dichlorobenzene	100	U
106-46-7	1,4-Dichlorobenzene	100	U
100-51-6	Benzyl Alcohol	100	U
95-50-1	1,2-Dichlorobenzene	100	U
95-48-7	2-Methylphenol	100	U
39638-32-9	bis(2-Chloroisopropyl)Ether	100	U
106-44-5	4-Methylphenol	100	U
621-64-7	N-Nitroso-Di-n-Propylamine	100	U
67-72-1	Hexachloroethane	100	U
98-95-3	Nitrobenzene	100	U
78-59-1	Isophorone	100	U
88-75-5	2-Nitrophenol	100	U
105-67-9	2,4-Dimethylphenol	100	U
65-85-0	Benzoic Acid	500	U
111-91-1	bis(2-Chloroethoxy)Methane	100	U
120-83-2	2,4-Dichlorophenol	100	U
120-82-1	1,2,4-Trichlorobenzene	100	U
91-20-3	Naphthalene	100	U
106-47-8	4-Chloroaniline	100	U
87-68-3	Hexachlorobutadiene	100	U
59-50-7	4-Chloro-3-Methylphenol	100	U
91-57-6	2-Methylnaphthalene	22	J
77-47-4	Hexachlorocyclopentadiene	100	U
88-06-2	2,4,6-Trichlorophenol	100	U
95-95-4	2,4,5-Trichlorophenol	500	U
91-58-7	2-Chloronaphthalene	100	U
88-74-4	2-Nitroaniline	500	U
131-11-3	Dimethyl Phthalate	100	U
208-96-8	Acenaphthylene	100	U
606-20-2	2,6-Dinitrotoluene	100	U

FORM I SV-1 1/87 Rev.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GW-3

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) WATER Lab Sample ID: 320984

Sample wt/vol: 500 (g/mL) ML Lab File ID: G2R20984A15

Level: (low/med) LOW Date Received: 02/22/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 03/02/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 03/03/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 0.50

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl Alcohol	10	U
95-50-1	1,2-Dichlorobenzene	4	J
95-48-7	2-Methylphenol	6	J
39638-32-9	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	29	
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	38	
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

FORM I SV-1 1/87 Rev.

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GW-3

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) WATER Lab Sample ID: 320984

Sample wt/vol: 500 (g/mL) ML Lab File ID: G2R20984A15

Level: (low/med) LOW Date Received: 02/22/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 03/02/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 03/03/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 0.50

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	28	
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	32	
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	230	
120-12-7	Anthracene	58	
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	100	
129-00-0	Pyrene	310	
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)Anthracene	290	
218-01-9	Chrysene	240	
117-81-7	bis(2-Ethylhexyl)Phthalate	10	U
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	53	X
207-08-9	Benzo(k)Fluoranthene	53	X
50-32-8	Benzo(a)Pyrene	62	
193-39-5	Indeno(1,2,3-cd)Pyrene	12	
53-70-3	Dibenzo(a,h)Anthracene	28	
191-24-2	Benzo(g,h,i)Perylene	32	

(1) - Cannot be separated from Diphenylamine

FORM I SV-2 1/87 Rev.

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GW-2

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) WATER Lab Sample ID: 321342

Sample wt/vol: 500 (g/mL) ML Lab File ID: GRD21342C15

Level: (low/med) LOW Date Received: 02/23/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 02/28/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 03/02/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 2.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	200	U
83-32-9	Acenaphthene	47	
51-28-5	2,4-Dinitrophenol	200	U
100-02-7	4-Nitrophenol	200	U
132-64-9	Dibenzofuran	40	U
121-14-2	2,4-Dinitrotoluene	40	U
84-66-2	Diethylphthalate	40	U
7005-72-3	4-Chlorophenyl-phenylether	40	U
86-73-7	Fluorene	71	
100-01-6	4-Nitroaniline	200	U
534-52-1	4,6-Dinitro-2-Methylphenol	200	U
86-30-6	N-Nitrosodiphenylamine (1)	40	U
101-55-3	4-Bromophenyl-phenylether	40	U
118-74-1	Hexachlorobenzene	40	U
87-86-5	Pentachlorophenol	200	U
85-01-8	Phenanthrene	430	
120-12-7	Anthracene	170	
84-74-2	Di-n-Butylphthalate	40	U
206-44-0	Fluoranthene	110	
129-00-0	Pyrene	440	
85-68-7	Butylbenzylphthalate	40	U
91-94-1	3,3'-Dichlorobenzidine	80	U
56-55-3	Benzo(a)Anthracene	330	
218-01-9	Chrysene	500	
117-81-7	bis(2-Ethylhexyl)Phthalate	40	U
117-84-0	Di-n-Octyl Phthalate	40	U
205-99-2	Benzo(b)Fluoranthene	110	X
207-08-9	Benzo(k)Fluoranthene	110	X
50-32-8	Benzo(a)Pyrene	86	
193-39-5	Indeno(1,2,3-cd)Pyrene	40	U
53-70-3	Dibenzo(a,h)Anthracene	40	U
191-24-2	Benzo(g,h,i)Perylene	40	U

(1) - Cannot be separated from Diphenylamine

FORM I SV-2 1/87 Rev.

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GW-2

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) WATER Lab Sample ID: 321342

Sample wt/vol: 500 (g/mL) ML Lab File ID: GRD21342C15

Level: (low/med) LOW Date Received: 02/23/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 02/28/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 03/02/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 2.0

Number TICs found: 20

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	9.60	1800	J
2.	UNKNOWN	10.32	1800	J
3.	UNKNOWN	11.10	2700	J
4.	UNKNOWN HYDROCARBON	11.22	2600	J
5.	UNKNOWN	11.94	1800	J
6.	UNKNOWN	12.02	2100	J
7.	TRIMETHYL DECANE	12.65	4400	J
8.	DIMETHYL HEPTADECANE	13.07	4700	J
9.	DIMETHYL HEPTADECANE	13.34	1600	J
10.	UNKNOWN HYDROCARBON	13.39	1600	J
11.	DIMETHYL HEPTADECANE	13.79	5300	J
12.	DIMETHYL HEPTADECANE	14.34	3700	J
13.	UNKNOWN	14.47	2900	J
14.	METHYL ANTHRACENE + UNKNOWN	14.77	2000	J
15.	UNKNOWN	14.90	4200	J
16.	UNKNOWN HYDROCARBON	15.10	2500	J
17.	UNKNOWN HYDROCARBON	15.45	4300	J
18.	UNKNOWN	15.67	2800	J
19.	TRIMETHYL DODECANE	16.35	1800	J
20.	UNKNOWN	16.49	2500	J

FORM I SV-TIC 1/87 Rev.

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GW-1RE

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) WATER Lab Sample ID: 321344

Sample wt/vol: 500 (g/mL) ML Lab File ID: GR021344C15

Level: (low/med) LOW Date Received: 02/23/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 02/28/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 03/02/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 0.50

Number TICs found: 14

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	VOA TCL	5.28	12	J
2.	UNKNOWN	5.47	16	J
3.	UNKNOWN	5.83	16	J
4.	SOLVENT CONTAMINANT	5.92	36	BJ
5.	SOLVENT CONTAMINANT	6.30	22	BJ
6. 108-67-8	BENZENE, 1,3,5-TRIMETHYL-	6.53	12	J
7.	UNKNOWN	6.67	48	J
8. 95-63-6	BENZENE, 1,2,4-TRIMETHYL-	6.83	20	J
9.	ALKYLBENZENE	8.57	14	J
10.	UNKNOWN	9.04	30	J
11. 105-60-2	CAPROLACTAM	9.55	120	J
12.	METHYLBENZENEACETICACID	10.27	56	J
13.	METHYLBENZENEACETICACID	10.35	24	J
14.	UNKNOWN	10.77	20	J

FORM I SV-TIC 1/87 Rev.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GW-2

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) WATER Lab Sample ID: 321342

Sample wt/vol: 500 (g/mL) ML Lab File ID: GRD21342C15

Level: (low/med) LOW Date Received: 02/23/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 02/28/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 03/02/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 2.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	40	U
111-44-4	bis(2-Chloroethyl)Ether	40	U
95-57-8	2-Chlorophenol	40	U
541-73-1	1,3-Dichlorobenzene	40	U
106-46-7	1,4-Dichlorobenzene	40	U
100-51-6	Benzyl Alcohol	40	U
95-50-1	1,2-Dichlorobenzene	40	U
95-48-7	2-Methylphenol	40	U
39638-32-9	bis(2-Chloroisopropyl)Ether	40	U
106-44-5	4-Methylphenol	40	U
621-64-7	N-Nitroso-Di-n-Propylamine	40	U
67-72-1	Hexachloroethane	40	U
98-95-3	Nitrobenzene	40	U
78-59-1	Isophorone	40	U
88-75-5	2-Nitrophenol	40	U
105-67-9	2,4-Dimethylphenol	40	U
65-85-0	Benzoic Acid	200	U
111-91-1	bis(2-Chloroethoxy)Methane	40	U
120-83-2	2,4-Dichlorophenol	40	U
120-82-1	1,2,4-Trichlorobenzene	40	U
91-20-3	Naphthalene	40	U
106-47-8	4-Chloroaniline	40	U
87-68-3	Hexachlorobutadiene	40	U
59-50-7	4-Chloro-3-Methylphenol	40	U
91-57-6	2-Methylnaphthalene	40	U
77-47-4	Hexachlorocyclopentadiene	40	U
88-06-2	2,4,6-Trichlorophenol	40	U
95-95-4	2,4,5-Trichlorophenol	200	U
91-58-7	2-Chloronaphthalene	40	U
88-74-4	2-Nitroaniline	200	U
131-11-3	Dimethyl Phthalate	40	U
208-96-8	Acenaphthylene	40	U
606-20-2	2,6-Dinitrotoluene	40	U

FORM I SV-1 1/87 Rev.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GW-1RE

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) WATER Lab Sample ID: 321344

Sample wt/vol: 500 (g/mL) ML Lab File ID: GR021344C15

Level: (low/med) LOW Date Received: 02/23/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 02/28/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 03/02/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 0.50

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl Alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
39638-32-9	bis(2-Chloroisopropyl)Ether	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
65-85-0	Benzoic Acid	50	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

FORM I SV-1 1/87 Rev.

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GW-1RE

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) WATER Lab Sample ID: 321344

Sample wt/vol: 500 (g/mL) ML Lab File ID: GR021344C15

Level: (low/med) LOW Date Received: 02/23/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 02/28/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 03/02/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 0.50

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	50	U
100-02-7	4-Nitrophenol	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	3	J
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)Anthracene	3	J
218-01-9	Chrysene	3	J
117-81-7	bis(2-Ethylhexyl)Phthalate	4	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

FORM I SV-2 1/87 Rev.

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GW-1

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) WATER Lab Sample ID: 321344

Sample wt/vol: 500 (g/mL) ML Lab File ID: GH021344C15

Level: (low/med) LOW Date Received: 02/23/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 02/25/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 02/27/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 0.50

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	50	U
100-02-7	4-Nitrophenol	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	6	J
120-12-7	Anthracene	3	J
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	4	J
129-00-0	Pyrene	14	
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)Anthracene	15	
218-01-9	Chrysene	19	
117-81-7	bis(2-Ethylhexyl)Phthalate	6	BJ
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	3	JX
207-08-9	Benzo(k)Fluoranthene	3	JX
50-32-8	Benzo(a)Pyrene	3	J
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

FORM I SV-2 1/87 Rev.

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GW-1

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) WATER Lab Sample ID: 321344

Sample wt/vol: 500 (g/mL) ML Lab File ID: GH021344C15

Level: (low/med) LOW Date Received: 02/23/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 02/25/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 02/27/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 0.50

Number TICs found: 20

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	TRIMETHYLBENZENE	6.80	28	J
2.	METHYLPOPENYLBENZENE & UNKNO	8.45	42	J
3.	UNKNOWN	8.89	42	J
4.	UNKNOWN CYCLIC HYDROCARBON	9.20	32	J
5. 105-60-2	CAPROLACTAM	9.35	110	J
6. 492-37-5	BENZENEACETIC ACID, .ALPHA.-	10.00	66	J
7.	BENZENEACETIC ACID & UNKNOWN	10.09	72	J
8.	UNKNOWN	10.49	50	J
9.	UNKNOWN	10.84	44	J
10.	UNKNOWN	10.92	52	J
11. 629-78-7	HEPTADECANE	12.25	54	J
12.	DIMETHYLHEPTADECANE	12.64	58	J
13.	TRIMETHYLDODECANE	13.32	66	J
14.	UNKNOWN	14.55	40	J
15.	UNKNOWN	14.89	46	J
16.	UNKNOWN	14.95	40	J
17.	UNKNOWN PAH	15.05	82	J
18.	UNKNOWN	16.35	28	J
19.	UNKNOWN	16.42	30	J
20.	UNKNOWN	16.57	36	J

FORM I SV-TIC 1/87 Rev.

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

FIELDBLANK

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) WATER Lab Sample ID: 321292

Sample wt/vol: 500 (g/mL) ML Lab File ID: GH021292C15

Level: (low/med) LOW Date Received: 02/23/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 02/25/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 02/27/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 0.50

Number TICs found: 2

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	SOLVENT CONTAMINANT	5.93	34	BJ
2.	SOLVENT CONTAMINANT	6.30	20	BJ

FORM I SV-TIC

1/87 Rev.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GW-1

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) WATER Lab Sample ID: 321344

Sample wt/vol: 500 (g/mL) ML Lab File ID: GH021344C15

Level: (low/med) LOW Date Received: 02/23/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 02/25/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 02/27/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 0.50

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl Alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
39638-32-9	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	3	J
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

FORM I SV-1 1/87 Rev.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FIELDBLANK

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) WATER Lab Sample ID: 321292

Sample wt/vol: 500 (g/mL) ML Lab File ID: GH021292C15

Level: (low/med) LOW Date Received: 02/23/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 02/25/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 02/27/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 0.50

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl Alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
39638-32-9	bis(2-Chloroisopropyl)Ether	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
65-85-0	Benzoic Acid	50	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

FORM I SV-1 1/87 Rev.

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FIELDBLANK

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) WATER Lab Sample ID: 321292

Sample wt/vol: 500 (g/mL) ML Lab File ID: GH021292C15

Level: (low/med) LOW Date Received: 02/23/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 02/25/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 02/27/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 0.50

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	50	U
100-02-7	4-Nitrophenol	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

FORM I SV-2 1/87 Rev.

COMPUCHEM LABORATORIES

DETECTION LIMIT CALCULATION CLARIFICATION

To protect our G C columns from unnecessary contamination, soil samples prepared according to Caucus Protocol methods are routinely diluted 5 : 1. Through a series of experiments we have determined that our Instrument Detection Limit for pesticides is 5X lower than the EPA Contract Required Quantitation Limit (CRQL). We, therefore, only adjust our detection limits if the dilution necessary to analyze the sample is greater than 5 : 1. If the sample is diluted by a factor of X the detection limit is adjusted by X/5 instead of X.

Doug McCormack

Doug McCormack
Manager, GC Laboratory

Robert E. Meierer

Robert E. Meierer
Vice - President, Quality Assurance

COMPUCHEM LABORATORIES, INC. P.O. Box 12652 3308 Chapel Hill/Nelson Highway Research Triangle Park, NC 27709 (919) 549-8263
COMPUCHEM LABORATORIES, INC. P.O. Box 12652 3308 Chapel Hill/Nelson Highway Research Triangle Park, NC 27709 (919) 549-8263

COMPUCHEM LABORATORIES

LABORATORY NOTICE

On June 15, 1985 CompuChem Laboratories began adding D3-2,4-Dinitrophenol to all standards and samples. The purpose of this addition is to enable the laboratory to have higher and more consistent analytical sensitivity for the native 2,4-Dinitrophenol. The peak corresponding to the deuterated analog is clearly labeled on each RIC as D3#1 and will not be searched and reported as a tentatively identified compound (TIC). This compound is not being used as an internal or surrogate standard.

L. Richard Flynn,
Development Chemist

Bob Meierer,
Director of Quality Assurance

COMPUCHEM LABORATORIES, INC. P.O. Box 12652 3308 Chapel Hill/Nelson Highway Research Triangle Park, NC 27709 (919) 549-8263

COMPUCHEM LABORATORIES

QUALITY ASSURANCE NOTICE

With the advent of the new organics Statement of Work (SOW 2/88, Revision: 9/88) participants in EPA's Contract Laboratory Program (CLP) are required to provide hard copy and diskette deliverables. CompuChem employs the Finnigan QA Formaster Program (Format A) to generate these requirements using data files from our analytical instrumentation. Currently, and independently, quantitation reports are generated by the instruments and are used with CompuChem-developed software to calculate results. The GC and GC/MS quantitation routines employ the convention of carrying at least one extra significant figure until the mathematical computations are completed. Then, the quantitative results are rounded to the SOW-required number of significant figures for reporting. In addition, the algorithm used by the Formaster Program is slightly different than that employed in Compuchem's software routines. Therefore, results presented in the supportive data supplied with our deliverables packages may be slightly different than those which appear on the hard copy forms generated via Formaster.

This notice serves to alert the end users of these data packages as to the reason why slight differences may be observed.

Robert E. Meierer

Robert E. Meierer
Director of Quality Assurance

COMPUCHEM LABORATORIES, INC. P.O. Box 12652 3308 Chapel Hill/Nelson Highway Research Triangle Park, NC 27709 (919) 549-8263
COMPUCHEM LABORATORIES, INC. P.O. Box 12652 3308 Chapel Hill/Nelson Highway Research Triangle Park, NC 27709 (919) 549-8263

2. By fraction (VOA, SV, PEST) and by sample within each fraction – tabulated target compound results (Form I) and tentatively identified compounds (Form I, TIC) (VOA and SV only)

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GW-2-P-B

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 05

Matrix: (soil/water) SOIL Lab Sample ID: 320997

Sample wt/vol: 4.0 (g/mL) G Lab File ID: CR020997C12

Level: (low/med) MED Date Received: 02/22/90

% Moisture: not dec. ____ Date Analyzed: 02/27/90

Column: (pack/cap) CAP Dilution Factor: 2.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	2500	U
74-83-9	Bromomethane	2500	U
75-01-4	Vinyl Chloride	2500	U
75-00-3	Chloroethane	2500	
75-09-2	Methylene Chloride	470	BJ
67-64-1	Acetone	2500	U
75-15-0	Carbon Disulfide	1300	U
75-35-4	1,1-Dichloroethene	1300	U
75-34-3	1,1-Dichloroethane	660	J
540-59-0	1,2-Dichloroethene (total)	1300	U
67-66-3	Chloroform	1300	U
107-06-2	1,2-Dichloroethane	1300	U
78-93-3	2-Butanone	2500	U
71-55-6	1,1,1-Trichloroethane	1300	U
56-23-5	Carbon Tetrachloride	1300	U
108-05-4	Vinyl Acetate	2500	U
75-27-4	Bromodichloromethane	1300	U
78-87-5	1,2-Dichloropropane	1300	U
10061-01-5	cis-1,3-Dichloropropene	1300	U
79-01-6	Trichloroethene	1300	U
124-48-1	Dibromochloromethane	1300	U
79-00-5	1,1,2-Trichloroethane	1300	U
71-43-2	Benzene	1000	J
10061-02-6	Trans-1,3-Dichloropropene	1300	U
75-25-2	Bromoform	1300	U
108-10-1	4-Methyl-2-Pentanone	2500	U
591-78-6	2-Hexanone	2500	U
127-18-4	Tetrachloroethene	1300	U
79-34-5	1,1,2,2-Tetrachloroethane	1300	U
108-88-3	Toluene	500	J
108-90-7	Chlorobenzene	1300	U
100-41-4	Ethylbenzene	1900	
100-42-5	Styrene	1300	U
1330-20-7	Total Xylenes	4000	
107-02-8	Acrolein	22000	U
107-13-1	Acrylonitrile	30000	U

FORM I VOA 1/87 Rev.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GW-2-P-B

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 05

Matrix: (soil/water) SOIL Lab Sample ID: 320997

Sample wt/vol: 4.0 (g/mL) G Lab File ID: CR020997C12

Level: (low/med) MED Date Received: 02/22/90

% Moisture: not dec. ____ Date Analyzed: 02/27/90

Column (pack/cap) CAP Dilution Factor: 2.0

Number TICs found: 10

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 108-87-2	CYCLOHEXANE,METHYL-	7.33	28000	J
2.	UNKNOWN HYDROCARBON	8.65	21000	J
3.	UNKNOWN ALKENE	10.02	9300	J
4. 1678-91-7	CYCLOHEXANE,ETHYL-	10.62	35000	J
5.	UNKNOWN	11.47	11000	J
6.	UNKNOWN	14.10	13000	J
7. 103-65-1	BENZENE,PROPYL-	14.39	15000	J
8.	ETHYLMETHYLBENZENE	14.64	13000	J
9.	ETHYLMETHYLBENZENE	15.10	15000	J
10.	TRIMETHYLBENZENE	15.45	15000	J

FORM I VOA-TIC 1/87 Rev.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GW-2-P-S

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 05

Matrix: (soil/water) SOIL Lab Sample ID: 321006

Sample wt/vol: 4.0 (g/mL) G Lab File ID: CN021006C12

Level: (low/med) MED Date Received: 02/22/90

% Moisture: not dec. ____ Date Analyzed: 02/27/90

Column: (pack/cap) CAP Dilution Factor: 2.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	2500	U
74-83-9	Bromomethane	2500	U
75-01-4	Vinyl Chloride	2500	U
75-00-3	Chloroethane	2900	
75-09-2	Methylene Chloride	350	BJ
67-64-1	Acetone	2500	U
75-15-0	Carbon Disulfide	1300	U
75-35-4	1,1-Dichloroethene	1300	U
75-34-3	1,1-Dichloroethane	1500	
540-59-0	1,2-Dichloroethene (total)	1300	U
67-66-3	Chloroform	1300	U
107-06-2	1,2-Dichloroethane	1300	U
78-93-3	2-Butanone	2500	U
71-55-6	1,1,1-Trichloroethane	1300	U
56-23-5	Carbon Tetrachloride	1300	U
108-05-4	Vinyl Acetate	2500	U
75-27-4	Bromodichloromethane	1300	U
78-87-5	1,2-Dichloropropane	1300	U
10061-01-5	cis-1,3-Dichloropropene	1300	U
79-01-6	Trichloroethene	1300	U
124-48-1	Dibromochloromethane	1300	U
79-00-5	1,1,2-Trichloroethane	1300	U
71-43-2	Benzene	1200	J
10061-02-6	Trans-1,3-Dichloropropene	1300	U
75-25-2	Bromoform	1300	U
108-10-1	4-Methyl-2-Pentanone	2500	U
591-78-6	2-Hexanone	2500	U
127-18-4	Tetrachloroethene	1300	U
79-34-5	1,1,2,2-Tetrachloroethane	1300	U
108-88-3	Toluene	830	J
108-90-7	Chlorobenzene	1300	U
100-41-4	Ethylbenzene	7200	
100-42-5	Styrene	1300	U
1330-20-7	Total Xylenes	6200	
107-02-8	Acrolein	22000	U
107-13-1	Acrylonitrile	30000	U

FORM I VOA 1/87 Rev.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GW-2-P-S

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 05

Matrix: (soil/water) SOIL Lab Sample ID: 321006

Sample wt/vol: 4.0 (g/mL) G Lab File ID: CN021006C12

Level: (low/med) MED Date Received: 02/22/90

% Moisture: not dec. ____ Date Analyzed: 02/27/90

Column (pack/cap) CAP Dilution Factor: 2.0

Number TICs found: 10

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 108-87-2	CYCLOHEXANE,METHYL-	7.32	24000	J
2.	UNKNOWN ALKANE	8.69	17000	J
3. 1678-91-7	CYCLOHEXANE,ETHYL-	10.60	38000	J
4.	ETHYLMETHYLCYCLOHEXANE	12.69	23000	J
5.	UNKNOWN	13.29	35000	J
6.	UNKNOWN	14.10	22000	J
7. 103-65-1	BENZENE,PROPYL-	14.40	30000	J
8.	ETHYLMETHYLBENZENE	14.65	18000	J
9.	ETHYLMETHYLBENZENE	15.10	20000	J
10.	TRIMETHYLBENZENE	15.45	18000	J

FORM I VOA-TIC 1/87 Rev.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GW-2-P-SRE

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 05

Matrix: (soil/water) SOIL Lab Sample ID: 321006

Sample wt/vol: 4.0 (g/mL) G Lab File ID: CR021006A12

Level: (low/med) MED Date Received: 02/22/90

% Moisture: not dec. ____ Date Analyzed: 03/01/90

Column: (pack/cap) CAP Dilution Factor: 2.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	2500	U
74-83-9	Bromomethane	2500	U
75-01-4	Vinyl Chloride	2500	U
75-00-3	Chloroethane	2600	
75-09-2	Methylene Chloride	2700	B
67-64-1	Acetone	1100	J
75-15-0	Carbon Disulfide	1300	U
75-35-4	1,1-Dichloroethene	1300	U
75-34-3	1,1-Dichloroethane	1500	
540-59-0	1,2-Dichloroethene (total)	1300	U
67-66-3	Chloroform	1300	U
107-06-2	1,2-Dichloroethane	1300	U
78-93-3	2-Butanone	2500	U
71-55-6	1,1,1-Trichloroethane	1300	U
56-23-5	Carbon Tetrachloride	1300	U
108-05-4	Vinyl Acetate	2500	U
75-27-4	Bromodichloromethane	1300	U
78-87-5	1,2-Dichloropropane	1300	U
10061-01-5	cis-1,3-Dichloropropene	1300	U
79-01-6	Trichloroethene	1300	U
124-48-1	Dibromochloromethane	1300	U
79-00-5	1,1,2-Trichloroethane	1300	U
71-43-2	Benzene	1200	J
10061-02-6	Trans-1,3-Dichloropropene	1300	U
75-25-2	Bromoform	1300	U
108-10-1	4-Methyl-2-Pentanone	2500	U
591-78-6	2-Hexanone	2500	U
127-18-4	Tetrachloroethene	1300	U
79-34-5	1,1,2,2-Tetrachloroethane	1300	U
108-88-3	Toluene	720	J
108-90-7	Chlorobenzene	1300	U
100-41-4	Ethylbenzene	5400	
100-42-5	Styrene	1300	U
1330-20-7	Total Xylenes	4700	
107-02-8	Acrolein	22000	U
107-13-1	Acrylonitrile	30000	U

FORM I VOA 1/87 Rev.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GW-2-P-SRE

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 05

Matrix: (soil/water) SOIL Lab Sample ID: 321006

Sample wt/vol: 4.0 (g/mL) G Lab File ID: CR021006A12

Level: (low/med) MED Date Received: 02/22/90

% Moisture: not dec. ____ Date Analyzed: 03/01/90

Column (pack/cap) CAP Dilution Factor: 2.0

Number TICs found: 10

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	108-87-2	CYCLOHEXANE,METHYL-	7.17	19000	J
2.		UNKNOWN HYDROCARBON	8.50	15000	J
3.		HYDROCARBON + UNKNOWN	8.72	14000	J
4.	1678-91-7	CYCLOHEXANE,ETHYL-	10.50	30000	J
5.		ETHYLMETHY CYCLOHEXANE	12.04	21000	J
6.		UNKNOWN	14.00	13000	J
7.	103-65-1	BENZENE,PROPYL-	14.25	21000	J
8.		ETHYLMETHYLBENZENE	14.54	12000	J
9.		ETHYLMETHYLBENZENE	14.99	14000	J
10.		TRIMETHYLBENZENE	15.34	13000	J

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GW-3-P-B

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 05

Matrix: (soil/water) SOIL Lab Sample ID: 321009

Sample wt/vol: 4.0 (g/mL) G Lab File ID: C2R21009B12

Level: (low/med) MED Date Received: 02/22/90

% Moisture: not dec. ____ Date Analyzed: 03/01/90

Column: (pack/cap) CAP Dilution Factor: 2.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	2500	U
74-83-9	Bromomethane	2500	U
75-01-4	Vinyl Chloride	2500	U
75-00-3	Chloroethane	2500	U
75-09-2	Methylene Chloride	1500	B
67-64-1	Acetone	2500	U
75-15-0	Carbon Disulfide	1300	U
75-35-4	1,1-Dichloroethene	1300	U
75-34-3	1,1-Dichloroethane	740	J
540-59-0	1,2-Dichloroethene (total)	1300	
67-66-3	Chloroform	1300	U
107-06-2	1,2-Dichloroethane	1300	U
78-93-3	2-Butanone	2500	U
71-55-6	1,1,1-Trichloroethane	1300	U
56-23-5	Carbon Tetrachloride	1300	U
108-05-4	Vinyl Acetate	2500	U
75-27-4	Bromodichloromethane	1300	U
78-87-5	1,2-Dichloropropane	1300	U
10061-01-5	cis-1,3-Dichloropropene	1300	U
79-01-6	Trichloroethene	1300	U
124-48-1	Dibromochloromethane	1300	U
79-00-5	1,1,2-Trichloroethane	1300	U
71-43-2	Benzene	1200	J
10061-02-6	Trans-1,3-Dichloropropene	1300	U
75-25-2	Bromoform	1300	U
108-10-1	4-Methyl-2-Pentanone	2500	U
591-78-6	2-Hexanone	2500	U
127-18-4	Tetrachloroethene	1300	U
79-34-5	1,1,2,2-Tetrachloroethane	1300	U
108-88-3	Toluene	2500	
108-90-7	Chlorobenzene	1300	U
100-41-4	Ethylbenzene	2600	
100-42-5	Styrene	1300	U
1330-20-7	Total Xylenes	4500	
107-02-8	Acrolein	22000	U
107-13-1	Acrylonitrile	30000	U

FORM I VOA 1/87 Rev.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GW-3-P-B

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 05

Matrix: (soil/water) SOIL Lab Sample ID: 321009

Sample wt/vol: 4.0 (g/mL) G Lab File ID: C2R21009B12

Level: (low/med) MED Date Received: 02/22/90

% Moisture: not dec. ____ Date Analyzed: 03/01/90

Column (pack/cap) CAP Dilution Factor: 2.0

Number TICs found: 10

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 142-82-5	HEPTANE	6.60	15000	J
2. 108-87-2	CYCLOHEXANE,METHYL-	7.22	45000	J
3.	UNKNOWN	7.57	15000	J
4.	UNKNOWN HYDROCARBON	8.60	17000	J
5.	DIMETHYLCYCLOHEXANE	8.90	24000	J
6. 1678-91-7	CYCLOHEXANE,ETHYL-	10.52	48000	J
7.	ETHYLMETHYLCYCLOHEXANE + UNK	12.05	24000	J
8.	UNKNOWN	13.19	24000	J
9.	UNKNOWN	14.00	15000	J
10. 103-65-1	BENZENE,PROPYL-	14.30	18000	J

FORM I VOA-TIC 1/87 Rev.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GW-3-P-S

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 05

Matrix: (soil/water) SOIL Lab Sample ID: 321011

Sample wt/vol: 4.0 (g/mL) G Lab File ID: CR021011C12

Level: (low/med) MED Date Received: 02/22/90

% Moisture: not dec. ____ Date Analyzed: 03/02/90

Column: (pack/cap) CAP Dilution Factor: 2.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	2500	U
74-83-9	Bromomethane	2500	U
75-01-4	Vinyl Chloride	2500	U
75-00-3	Chloroethane	790	J
75-09-2	Methylene Chloride	1200	BJ
67-64-1	Acetone	2500	U
75-15-0	Carbon Disulfide	1300	U
75-35-4	1,1-Dichloroethene	1300	U
75-34-3	1,1-Dichloroethane	780	J
540-59-0	1,2-Dichloroethene (total)	1900	
67-66-3	Chloroform	1300	U
107-06-2	1,2-Dichloroethane	1300	U
78-93-3	2-Butanone	2500	U
71-55-6	1,1,1-Trichloroethane	1300	U
56-23-5	Carbon Tetrachloride	1300	U
108-05-4	Vinyl Acetate	2500	U
75-27-4	Bromodichloromethane	1300	U
78-87-5	1,2-Dichloropropane	1300	U
10061-01-5	cis-1,3-Dichloropropene	1300	U
79-01-6	Trichloroethene	320	J
124-48-1	Dibromochloromethane	1300	U
79-00-5	1,1,2-Trichloroethane	1300	U
71-43-2	Benzene	1700	
10061-02-6	Trans-1,3-Dichloropropene	1300	U
75-25-2	Bromoform	1300	U
108-10-1	4-Methyl-2-Pentanone	2500	U
591-78-6	2-Hexanone	2500	U
127-18-4	Tetrachloroethene	300	J
79-34-5	1,1,2,2-Tetrachloroethane	1300	U
108-88-3	Toluene	5700	
108-90-7	Chlorobenzene	1300	U
100-41-4	Ethylbenzene	5100	
100-42-5	Styrene	1300	U
1330-20-7	Total Xylenes	10000	

FORM I VOA 1/87 Rev.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GW-3-P-S

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 05

Matrix: (soil/water) SOIL Lab Sample ID: 321011

Sample wt/vol: 4.0 (g/mL) G Lab File ID: CR021011C12

Level: (low/med) MED Date Received: 02/22/90

% Moisture: not dec. ____ Date Analyzed: 03/02/90

Column (pack/cap) CAP Dilution Factor: 2.0

Number TICs found: 10

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 589-34-4	HEXANE,3-METHYL-	5.85	23000	J
2. 142-82-5	HEPTANE	6.60	16000	J
3. 108-87-2	CYCLOHEXANE,METHYL-	7.23	50000	J
4. 592-13-2	HEXANE,2,5-DIMETHYL-	8.57	21000	J
5. 638-04-0	CYCLOHEXANE,1,3-DIMETHYL-,CI	8.89	25000	J
6. 1678-91-7	CYCLOHEXANE,ETHYL-	10.50	50000	J
7. 53941-19-8	2-HEXENE,3,4,4-TRIMETHYL-	12.60	18000	J
8.	UNKNOWN	13.22	30000	J
9.	SUBSTITUTED BENZENE	14.32	20000	J
10.	SUBSTITUTED BENZENE	15.40	15000	J

FORM I VOA-TIC 1/87 Rev.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GW-3-P-SRE

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 05

Matrix: (soil/water) SOIL Lab Sample ID: 321011

Sample wt/vol: 4.0 (g/mL) G Lab File ID: C2R21011A12

Level: (low/med) MED Date Received: 02/22/90

% Moisture: not dec. ____ Date Analyzed: 03/02/90

Column: (pack/cap) CAP Dilution Factor: 2.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	2500	U
74-83-9	Bromomethane	2500	U
75-01-4	Vinyl Chloride	2500	U
75-00-3	Chloroethane	750	J
75-09-2	Methylene Chloride	1000	BJ
67-64-1	Acetone	2500	U
75-15-0	Carbon Disulfide	1300	U
75-35-4	1,1-Dichloroethene	1300	U
75-34-3	1,1-Dichloroethane	640	J
540-59-0	1,2-Dichloroethene (total)	1500	
67-66-3	Chloroform	1300	U
107-06-2	1,2-Dichloroethane	1300	U
78-93-3	2-Butanone	2500	U
71-55-6	1,1,1-Trichloroethane	1300	U
56-23-5	Carbon Tetrachloride	1300	U
108-05-4	Vinyl Acetate	2500	U
75-27-4	Bromodichloromethane	1300	U
78-87-5	1,2-Dichloropropane	1300	U
10061-01-5	cis-1,3-Dichloropropene	1300	U
79-01-6	Trichloroethene	1300	U
124-48-1	Dibromochloromethane	1300	U
79-00-5	1,1,2-Trichloroethane	1300	U
71-43-2	Benzene	1300	
10061-02-6	Trans-1,3-Dichloropropene	1300	U
75-25-2	Bromoform	1300	U
108-10-1	4-Methyl-2-Pentanone	2500	U
591-78-6	2-Hexanone	2500	U
127-18-4	Tetrachloroethene	270	J
79-34-5	1,1,2,2-Tetrachloroethane	1300	U
108-88-3	Toluene	4000	
108-90-7	Chlorobenzene	1300	U
100-41-4	Ethylbenzene	4300	
100-42-5	Styrene	1300	U
1330-20-7	Total Xylenes	8400	

FORM I VOA 1/87 Rev.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GW-3-P-SRE

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 05

Matrix: (soil/water) SOIL Lab Sample ID: 321011

Sample wt/vol: 4.0 (g/mL) G Lab File ID: C2R21011A12

Level: (low/med) MED Date Received: 02/22/90

% Moisture: not dec. ____ Date Analyzed: 03/02/90

Column (pack/cap) CAP Dilution Factor: 2.0

Number TICs found: 10

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 108-87-2	CYCLOHEXANE,METHYL-	7.22	43000	J
2. 592-13-2	HEXANE,2,5-DIMETHYL-	8.57	21000	J
3.	UNKNOWN	8.85	25000	J
4. 1678-91-7	CYCLOHEXANE,ETHYL-	10.50	55000	J
5.	UNKNOWN	12.05	38000	J
6. 6236-88-0	CYCLOHEXANE,1-ETHYL-4-METHYL	12.55	28000	J
7. 1678-92-8	CYCLOHEXANE,PROPYL-	13.19	38000	J
8.	UNKNOWN	14.00	23000	J
9. 103-65-1	BENZENE,PROPYL-	14.30	23000	J
10.	UNKNOWN	14.57	19000	J

FORM I VOA-TIC 1/87 Rev.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GW-3-P-BMS

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 05

Matrix: (soil/water) SOIL Lab Sample ID: 320999

Sample wt/vol: 4.0 (g/mL) G Lab File ID: CR020999B12

Level: (low/med) MED Date Received: 02/22/90

% Moisture: not dec. ____ Date Analyzed: 03/01/90

Column: (pack/cap) CAP Dilution Factor: 2.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	2500	U
74-83-9	Bromomethane	2500	U
75-01-4	Vinyl Chloride	2500	U
75-00-3	Chloroethane	2500	U
75-09-2	Methylene Chloride	1600	B
67-64-1	Acetone	2500	U
75-15-0	Carbon Disulfide	1300	U
75-35-4	1,1-Dichloroethene	1300	U
75-34-3	1,1-Dichloroethane	1200	J
540-59-0	1,2-Dichloroethene (total)	2000	
67-66-3	Chloroform	1300	U
107-06-2	1,2-Dichloroethane	1300	U
78-93-3	2-Butanone	2500	U
71-55-6	1,1,1-Trichloroethane	1300	U
56-23-5	Carbon Tetrachloride	1300	U
108-05-4	Vinyl Acetate	2500	U
75-27-4	Bromodichloromethane	1300	U
78-87-5	1,2-Dichloropropane	1300	U
10061-01-5	cis-1,3-Dichloropropene	1300	U
79-01-6	Trichloroethene	1300	U
124-48-1	Dibromochloromethane	1300	U
79-00-5	1,1,2-Trichloroethane	1300	U
71-43-2	Benzene	1300	U
10061-02-6	Trans-1,3-Dichloropropene	1300	U
75-25-2	Bromoform	1300	U
108-10-1	4-Methyl-2-Pentanone	2500	U
591-78-6	2-Hexanone	2500	U
127-18-4	Tetrachloroethene	1300	U
79-34-5	1,1,2,2-Tetrachloroethane	1300	U
108-88-3	Toluene	1300	U
108-90-7	Chlorobenzene	1300	U
100-41-4	Ethylbenzene	4200	
100-42-5	Styrene	1300	U
1330-20-7	Total Xylenes	7200	
107-02-8	Acrolein	22000	U
107-13-1	Acrylonitrile	30000	U

FORM I VOA 1/87 Rev.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GW-3-P-BMSD

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 05

Matrix: (soil/water) SOIL Lab Sample ID: 321000

Sample wt/vol: 4.0 (g/mL) G Lab File ID: CR021000B12

Level: (low/med) MED Date Received: 02/22/90

% Moisture: not dec. ____ Date Analyzed: 03/01/90

Column: (pack/cap) CAP Dilution Factor: 2.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	2500	U
74-83-9	Bromomethane	2500	U
75-01-4	Vinyl Chloride	2500	U
75-00-3	Chloroethane	2500	U
75-09-2	Methylene Chloride	1600	B
67-64-1	Acetone	2500	U
75-15-0	Carbon Disulfide	1300	U
75-35-4	1,1-Dichloroethene	1300	U
75-34-3	1,1-Dichloroethane	1200	J
540-59-0	1,2-Dichloroethene (total)	2200	
67-66-3	Chloroform	1300	U
107-06-2	1,2-Dichloroethane	1300	U
78-93-3	2-Butanone	2500	U
71-55-6	1,1,1-Trichloroethane	1300	U
56-23-5	Carbon Tetrachloride	1300	U
108-05-4	Vinyl Acetate	2500	U
75-27-4	Bromodichloromethane	1300	U
78-87-5	1,2-Dichloropropane	1300	U
10061-01-5	cis-1,3-Dichloropropene	1300	U
79-01-6	Trichloroethene	1300	U
124-48-1	Dibromochloromethane	1300	U
79-00-5	1,1,2-Trichloroethane	1300	U
71-43-2	Benzene	1300	U
10061-02-6	Trans-1,3-Dichloropropene	1300	U
75-25-2	Bromoform	1300	U
108-10-1	4-Methyl-2-Pentanone	2500	U
591-78-6	2-Hexanone	2500	U
127-18-4	Tetrachloroethene	1300	U
79-34-5	1,1,2,2-Tetrachloroethane	1300	U
108-88-3	Toluene	1300	U
108-90-7	Chlorobenzene	1300	U
100-41-4	Ethylbenzene	4700	
100-42-5	Styrene	1300	U
1330-20-7	Total Xylenes	7900	
107-02-8	Acrolein	22000	U
107-13-1	Acrylonitrile	30000	U

FORM I VOA 1/87 Rev.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GW-2-P-B

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 05

Matrix: (soil/water) SOIL Lab Sample ID: 320997

Sample wt/vol: 1.4 (g/mL) G Lab File ID: GH020997A15

Level: (low/med) MED Date Received: 02/22/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 02/26/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 02/27/90

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	14000	U
111-44-4	bis(2-Chloroethyl)Ether	14000	U
95-57-8	2-Chlorophenol	14000	U
541-73-1	1,3-Dichlorobenzene	14000	U
106-46-7	1,4-Dichlorobenzene	14000	U
100-51-6	Benzyl Alcohol	14000	U
95-50-1	1,2-Dichlorobenzene	4200	J
95-48-7	2-Methylphenol	14000	U
39638-32-9	bis(2-Chloroisopropyl)Ether	14000	U
106-44-5	4-Methylphenol	14000	U
621-64-7	N-Nitroso-Di-n-Propylamine	14000	U
67-72-1	Hexachloroethane	14000	U
98-95-3	Nitrobenzene	14000	U
78-59-1	Isophorone	14000	U
88-75-5	2-Nitrophenol	14000	U
105-67-9	2,4-Dimethylphenol	14000	U
65-85-0	Benzoic Acid	69000	U
111-91-1	bis(2-Chloroethoxy)Methane	14000	U
120-83-2	2,4-Dichlorophenol	14000	U
120-82-1	1,2,4-Trichlorobenzene	14000	U
91-20-3	Naphthalene	11000	J
106-47-8	4-Chloroaniline	14000	U
87-68-3	Hexachlorobutadiene	14000	U
59-50-7	4-Chloro-3-Methylphenol	14000	U
91-57-6	2-Methylnaphthalene	14000	U
77-47-4	Hexachlorocyclopentadiene	14000	U
88-06-2	2,4,6-Trichlorophenol	14000	U
95-95-4	2,4,5-Trichlorophenol	69000	U
91-58-7	2-Chloronaphthalene	14000	U
88-74-4	2-Nitroaniline	69000	U
131-11-3	Dimethyl Phthalate	14000	U
208-96-8	Acenaphthylene	14000	U
606-20-2	2,6-Dinitrotoluene	14000	U

FORM I SV-1 1/87 Rev.

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GW-2-P-B

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 05

Matrix: (soil/water) SOIL Lab Sample ID: 320997

Sample wt/vol: 1.4 (g/mL) G Lab File ID: GH020997A15

Level: (low/med) MED Date Received: 02/22/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 02/26/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 02/27/90

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	69000	U
83-32-9	Acenaphthene	14000	J
51-28-5	2,4-Dinitrophenol	69000	U
100-02-7	4-Nitrophenol	69000	U
132-64-9	Dibenzofuran	14000	U
121-14-2	2,4-Dinitrotoluene	14000	U
84-66-2	Diethylphthalate	14000	U
7005-72-3	4-Chlorophenyl-phenylether	14000	U
86-73-7	Fluorene	25000	
100-01-6	4-Nitroaniline	69000	U
534-52-1	4,6-Dinitro-2-Methylphenol	69000	U
86-30-6	N-Nitrosodiphenylamine (1)	14000	U
101-55-3	4-Bromophenyl-phenylether	14000	U
118-74-1	Hexachlorobenzene	14000	U
87-86-5	Pentachlorophenol	69000	U
85-01-8	Phenanthrene	140000	
120-12-7	Anthracene	29000	
84-74-2	Di-n-Butylphthalate	14000	U
206-44-0	Fluoranthene	34000	
129-00-0	Pyrene	150000	
85-68-7	Butylbenzylphthalate	14000	U
91-94-1	3,3'-Dichlorobenzidine	28000	U
56-55-3	Benzo(a)Anthracene	120000	
218-01-9	Chrysene	290000	E
117-81-7	bis(2-Ethylhexyl)Phthalate	14000	U
117-84-0	Di-n-Octyl Phthalate	14000	U
205-99-2	Benzo(b)Fluoranthene	23000	X
207-08-9	Benzo(k)Fluoranthene	23000	X
50-32-8	Benzo(a)Pyrene	26000	
193-39-5	Indeno(1,2,3-cd)Pyrene	3900	J
53-70-3	Dibenzo(a,h)Anthracene	8800	J
191-24-2	Benzo(g,h,i)Perylene	5500	J

(1) - Cannot be separated from Diphenylamine

FORM I SV-2 1/87 Rev.

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GW-2-P-B

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 05

Matrix: (soil/water) SOIL Lab Sample ID: 320997

Sample wt/vol: 1.4 (g/mL) G Lab File ID: GH020997A15

Level: (low/med) MED Date Received: 02/22/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 02/26/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 02/27/90

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

Number TICs found: 20

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	ETHYLDIMETHYLBENZENE	8.40	610000	J
2.	UNKNOWN SUBSTITUTED HYDROCAR	8.84	660000	J
3.	UNKNOWN CYCLYC HYDROCARBON	9.15	800000	J
4.	UNKNOWN HYDROCARBON	9.37	600000	J
5.	UNKNOWN PAH	9.69	540000	J
6.	UNKNOWN UBSTITUTED HYDROCARB	10.04	800000	J
7.	UNKNOWN HYDROCARBON	10.22	610000	J
8.	UNKNOWN HYDROCARBON	10.45	630000	J
9.	DIMETHYLNAPHTHALENE	10.80	1000000	J
10.	UNKNOWN SUBSTITUTED HYDROCAR	10.89	790000	J
11.	UNKNOWN SUBSTITUTED HYDROCAR	11.52	600000	J
12.	UNKNOWN SUBSTITUTED HYDROCAR	11.65	600000	J
13.	UNKNOWN SUBSTITUTED HYDROCAR	11.95	560000	J
14.	UNKNOWN	12.12	540000	J
15.	UNKNOWN HYDROCARBON	12.25	1600000	J
16.	UNKNOWN HYDROCARBON	12.64	2000000	J
17.	UNKNOWN SUBSTITUTED PAH	13.29	1400000	J
18.	UNKNOWN HYDROCARBON	17.90	1700000	J
19.	METHYLTRIPHENYLENE	18.04	1200000	J
20.	UNKNOWN HYDROCARBON	18.19	590000	J

FORM I SV-TIC 1/87 Rev.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GW-2-P-BDL

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 05

Matrix: (soil/water) SOIL Lab Sample ID: 320997

Sample wt/vol: 1.4 (g/mL) G Lab File ID: GDJ20997B15

Level: (low/med) MED Date Received: 02/22/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 02/26/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 02/28/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 4.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	57000	U
111-44-4	bis(2-Chloroethyl)Ether	57000	U
95-57-8	2-Chlorophenol	57000	U
541-73-1	1,3-Dichlorobenzene	57000	U
106-46-7	1,4-Dichlorobenzene	57000	U
100-51-6	Benzyl Alcohol	57000	U
95-50-1	1,2-Dichlorobenzene	57000	U
95-48-7	2-Methylphenol	57000	U
39638-32-9	bis(2-Chloroisopropyl)Ether	57000	U
106-44-5	4-Methylphenol	57000	U
621-64-7	N-Nitroso-Di-n-Propylamine	57000	U
67-72-1	Hexachloroethane	57000	U
98-95-3	Nitrobenzene	57000	U
78-59-1	Isophorone	57000	U
88-75-5	2-Nitrophenol	57000	U
105-67-9	2,4-Dimethylphenol	57000	U
65-85-0	Benzoic Acid	270000	U
111-91-1	bis(2-Chloroethoxy)Methane	57000	U
120-83-2	2,4-Dichlorophenol	57000	U
120-82-1	1,2,4-Trichlorobenzene	57000	U
91-20-3	Naphthalene	16000	DJ
106-47-8	4-Chloroaniline	57000	U
87-68-3	Hexachlorobutadiene	57000	U
59-50-7	4-Chloro-3-Methylphenol	57000	U
91-57-6	2-Methylnaphthalene	57000	U
77-47-4	Hexachlorocyclopentadiene	57000	U
88-06-2	2,4,6-Trichlorophenol	57000	U
95-95-4	2,4,5-Trichlorophenol	270000	U
91-58-7	2-Chloronaphthalene	57000	U
88-74-4	2-Nitroaniline	270000	U
131-11-3	Dimethyl Phthalate	57000	U
208-96-8	Acenaphthylene	57000	U
606-20-2	2,6-Dinitrotoluene	57000	U

FORM I SV-1 1/87 Rev.

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GW-2-P-BDL

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 05

Matrix: (soil/water) SOIL Lab Sample ID: 320997

Sample wt/vol: 1.4 (g/mL) G Lab File ID: GDJ20997B15

Level: (low/med) MED Date Received: 02/22/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 02/26/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 02/28/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 4.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	270000	U
83-32-9	Acenaphthene	21000	DJ
51-28-5	2,4-Dinitrophenol	270000	U
100-02-7	4-Nitrophenol	270000	U
132-64-9	Dibenzofuran	57000	U
121-14-2	2,4-Dinitrotoluene	57000	U
84-66-2	Diethylphthalate	57000	U
7005-72-3	4-Chlorophenyl-phenylether	57000	U
86-73-7	Fluorene	23000	DJ
100-01-6	4-Nitroaniline	270000	U
534-52-1	4,6-Dinitro-2-Methylphenol	270000	U
86-30-6	N-Nitrosodiphenylamine (1)	57000	U
101-55-3	4-Bromophenyl-phenylether	57000	U
118-74-1	Hexachlorobenzene	57000	U
87-86-5	Pentachlorophenol	270000	U
85-01-8	Phenanthrene	190000	D
120-12-7	Anthracene	70000	D
84-74-2	Di-n-Butylphthalate	57000	U
206-44-0	Fluoranthene	56000	DJ
129-00-0	Pyrene	200000	D
85-68-7	Butylbenzylphthalate	57000	U
91-94-1	3,3'-Dichlorobenzidine	110000	U
56-55-3	Benzo(a)Anthracene	150000	D
218-01-9	Chrysene	190000	D
117-81-7	bis(2-Ethylhexyl)Phthalate	57000	U
117-84-0	Di-n-Octyl Phthalate	57000	U
205-99-2	Benzo(b)Fluoranthene	48000	DJX
207-08-9	Benzo(k)Fluoranthene	48000	DJX
50-32-8	Benzo(a)Pyrene	42000	DJ
193-39-5	Indeno(1,2,3-cd)Pyrene	6600	DJ
53-70-3	Dibenzo(a,h)Anthracene	11000	DJ
191-24-2	Benzo(g,h,i)Perylene	10000	DJ

(1) - Cannot be separated from Diphenylamine

FORM I SV-2 1/87 Rev.

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GW-2-P-BDL

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 05

Matrix: (soil/water) SOIL Lab Sample ID: 320997

Sample wt/vol: 1.4 (g/mL) G Lab File ID: GDJ20997B15

Level: (low/med) MED Date Received: 02/22/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 02/26/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 02/28/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 4.0

Number TICs found: 20

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN CYCLIC HYDROCARBON	10.09	520000	J
2.	UNKNOWN	10.82	690000	J
3.	UNKNOWN HYDROCARBON	10.94	740000	J
4.	UNKNOWN	11.69	570000	J
5.	UNKNOWN HYDROCARBON	12.27	1200000	J
6.	UNKNOWN HYDROCARBON	12.65	1100000	J
7.	UNKNOWN HYDROCARBON	13.34	1500000	J
8.	UNKNOWN HYDROCARBON	13.49	800000	J
9.	UNKNOWN SUBSTITUTED HYDROCAR	13.84	970000	J
10.	UNKNOWN HYDROCARBON	13.99	570000	J
11.	UNKNOWN HYDROCARBON	14.37	690000	J
12.	UNKNOWN HYDROCARBON	14.59	690000	J
13.	UNKNOWN HYDROCARBON	14.92	1100000	J
14.	DIMETHYLPHENANTHRENE & UNKNO	15.07	800000	J
15.	UNKNOWN HYDROCARBON	15.20	510000	J
16.	UNKNOWN HYDROCARBON	15.90	970000	J
17.	UNKNOWN HYDROCARBON	16.17	740000	J
18.	UNKNOWN HYDROCARBON	17.04	1100000	J
19.	UNKNOWN	17.37	1800000	J
20.	UNKNOWN HYDROCARBON	17.52	690000	J

FORM I SV-TIC 1/87 Rev.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GW-2-P-S

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 05

Matrix: (soil/water) SOIL Lab Sample ID: 321006

Sample wt/vol: 1.1 (g/mL) G Lab File ID: GD021006A15

Level: (low/med) MED Date Received: 02/22/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 02/26/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 02/28/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 2.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	36000	U
111-44-4	bis(2-Chloroethyl)Ether	36000	U
95-57-8	2-Chlorophenol	36000	U
541-73-1	1,3-Dichlorobenzene	36000	U
106-46-7	1,4-Dichlorobenzene	36000	U
100-51-6	Benzyl Alcohol	36000	U
95-50-1	1,2-Dichlorobenzene	14000	J
95-48-7	2-Methylphenol	36000	U
39638-32-9	bis(2-Chloroisopropyl)Ether	36000	U
106-44-5	4-Methylphenol	36000	U
621-64-7	N-Nitroso-Di-n-Propylamine	36000	U
67-72-1	Hexachloroethane	36000	U
98-95-3	Nitrobenzene	36000	U
78-59-1	Isophorone	36000	U
88-75-5	2-Nitrophenol	36000	U
105-67-9	2,4-Dimethylphenol	36000	U
65-85-0	Benzoic Acid	170000	U
111-91-1	bis(2-Chloroethoxy)Methane	36000	U
120-83-2	2,4-Dichlorophenol	36000	U
120-82-1	1,2,4-Trichlorobenzene	36000	U
91-20-3	Naphthalene	36000	U
106-47-8	4-Chloroaniline	36000	U
87-68-3	Hexachlorobutadiene	36000	U
59-50-7	4-Chloro-3-Methylphenol	36000	U
91-57-6	2-Methylnaphthalene	36000	U
77-47-4	Hexachlorocyclopentadiene	36000	U
88-06-2	2,4,6-Trichlorophenol	36000	U
95-95-4	2,4,5-Trichlorophenol	170000	U
91-58-7	2-Chloronaphthalene	36000	U
88-74-4	2-Nitroaniline	170000	U
131-11-3	Dimethyl Phthalate	36000	U
208-96-8	Acenaphthylene	36000	U
606-20-2	2,6-Dinitrotoluene	36000	U

FORM I SV-1 1/87 Rev.

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GW-2-P-S

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 05

Matrix: (soil/water) SOIL Lab Sample ID: 321006

Sample wt/vol: 1.1 (g/mL) G Lab File ID: GD021006A15

Level: (low/med) MED Date Received: 02/22/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 02/26/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 02/28/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 2.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	170000	U
83-32-9	Acenaphthene	36000	J
51-28-5	2,4-Dinitrophenol	170000	U
100-02-7	4-Nitrophenol	170000	U
132-64-9	Dibenzofuran	36000	U
121-14-2	2,4-Dinitrotoluene	36000	U
84-66-2	Diethylphthalate	36000	U
7005-72-3	4-Chlorophenyl-phenylether	36000	U
86-73-7	Fluorene	37000	
100-01-6	4-Nitroaniline	170000	U
534-52-1	4,6-Dinitro-2-Methylphenol	170000	U
86-30-6	N-Nitrosodiphenylamine (1)	36000	U
101-55-3	4-Bromophenyl-phenylether	36000	U
118-74-1	Hexachlorobenzene	36000	U
87-86-5	Pentachlorophenol	170000	U
85-01-8	Phenanthrene	240000	
120-12-7	Anthracene	46000	
84-74-2	Di-n-Butylphthalate	36000	U
206-44-0	Fluoranthene	80000	
129-00-0	Pyrene	310000	
85-68-7	Butylbenzylphthalate	36000	U
91-94-1	3,3'-Dichlorobenzidine	72000	U
56-55-3	Benzo(a)Anthracene	220000	
218-01-9	Chrysene	270000	
117-81-7	bis(2-Ethylhexyl)Phthalate	36000	U
117-84-0	Di-n-Octyl Phthalate	36000	U
205-99-2	Benzo(b)Fluoranthene	60000	X
207-08-9	Benzo(k)Fluoranthene	60000	X
50-32-8	Benzo(a)Pyrene	53000	
193-39-5	Indeno(1,2,3-cd)Pyrene	10000	J
53-70-3	Dibenzo(a,h)Anthracene	18000	J
191-24-2	Benzo(g,h,i)Perylene	17000	J

(1) - Cannot be separated from Diphenylamine

FORM I SV-2 1/87 Rev.

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GW-2-P-S

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 05

Matrix: (soil/water) SOIL Lab Sample ID: 321006

Sample wt/vol: 1.1 (g/mL) G Lab File ID: GD021006A15

Level: (low/med) MED Date Received: 02/22/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 02/26/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 02/28/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 2.0

Number TICs found: 20

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN SUB. HYDROCARBON	8.82	580000	J
2.	UNKNOWN SUB. CYCLIC HYDROCAR	9.14	440000	J
3.	UNKNOWN HYDROCARBON	9.34	550000	J
4.	UNKNOWN SUB. CYCLIC HYDROCAR	10.02	580000	J
5.	TRIMETHYL DODECANE	10.22	550000	J
6.	UNKNOWN SUB. HYDROCARBON	10.42	620000	J
7.	UNKNOWN	10.77	550000	J
8.	UNKNOWN HYDROCARBON	10.87	840000	J
9.	UNKNOWN	11.64	550000	J
10.	UNKNOWN HYDROCARBON	12.22	1100000	J
11.	UNKNOWN HYDROCARBON	12.60	1400000	J
12.	UNKNOWN HYDROCARBON	13.29	1500000	J
13.	UNKNOWN SUB. HYDROCARBON	13.45	550000	J
14.	UNKNOWN SUB. HYDROCARBON	13.79	760000	J
15.	UNKNOWN HYDROCARBON	14.34	660000	J
16.	UNKNOWN HYDROCARBON	14.85	1000000	J
17.	UNKNOWN	15.05	470000	J
18.	UNKNOWN SUB. HYDROCARBON	16.12	580000	J
19.	UNKNOWN SUB. HYDROCARBON	17.00	690000	J
20.	UNKNOWN SUB. HYDROCARBON	17.47	550000	J

FORM I SV-TIC 1/87 Rev.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GW-3-P-B

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 05

Matrix: (soil/water) SOIL Lab Sample ID: 321009

Sample wt/vol: 1.0 (g/mL) G Lab File ID: GD021009A15

Level: (low/med) MED Date Received: 02/22/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 02/26/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 02/28/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 4.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	79000	U
111-44-4	bis(2-Chloroethyl)Ether	79000	U
95-57-8	2-Chlorophenol	79000	U
541-73-1	1,3-Dichlorobenzene	79000	U
106-46-7	1,4-Dichlorobenzene	79000	U
100-51-6	Benzyl Alcohol	79000	U
95-50-1	1,2-Dichlorobenzene	79000	U
95-48-7	2-Methylphenol	79000	U
39638-32-9	bis(2-Chloroisopropyl)Ether	79000	U
106-44-5	4-Methylphenol	79000	U
621-64-7	N-Nitroso-Di-n-Propylamine	79000	U
67-72-1	Hexachloroethane	79000	U
98-95-3	Nitrobenzene	79000	U
78-59-1	Isophorone	79000	U
88-75-5	2-Nitrophenol	79000	U
105-67-9	2,4-Dimethylphenol	79000	U
65-85-0	Benzoic Acid	380000	U
111-91-1	bis(2-Chloroethoxy)Methane	79000	U
120-83-2	2,4-Dichlorophenol	79000	U
120-82-1	1,2,4-Trichlorobenzene	79000	U
91-20-3	Naphthalene	28000	J
106-47-8	4-Chloroaniline	79000	U
87-68-3	Hexachlorobutadiene	79000	U
59-50-7	4-Chloro-3-Methylphenol	79000	U
91-57-6	2-Methylnaphthalene	49000	J
77-47-4	Hexachlorocyclopentadiene	79000	U
88-06-2	2,4,6-Trichlorophenol	79000	U
95-95-4	2,4,5-Trichlorophenol	380000	U
91-58-7	2-Chloronaphthalene	79000	U
88-74-4	2-Nitroaniline	380000	U
131-11-3	Dimethyl Phthalate	79000	U
208-96-8	Acenaphthylene	79000	U
606-20-2	2,6-Dinitrotoluene	79000	U

FORM I SV-1 1/87 Rev.

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GW-3-P-B

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 05

Matrix: (soil/water) SOIL Lab Sample ID: 321009

Sample wt/vol: 1.0 (g/mL) G Lab File ID: GD021009A15

Level: (low/med) MED Date Received: 02/22/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 02/26/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 02/28/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 4.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	380000	U
83-32-9	Acenaphthene	31000	J
51-28-5	2,4-Dinitrophenol	380000	U
100-02-7	4-Nitrophenol	380000	U
132-64-9	Dibenzofuran	79000	U
121-14-2	2,4-Dinitrotoluene	79000	U
84-66-2	Diethylphthalate	79000	U
7005-72-3	4-Chlorophenyl-phenylether	79000	U
86-73-7	Fluorene	37000	J
100-01-6	4-Nitroaniline	380000	U
534-52-1	4,6-Dinitro-2-Methylphenol	380000	U
86-30-6	N-Nitrosodiphenylamine (1)	79000	U
101-55-3	4-Bromophenyl-phenylether	79000	U
118-74-1	Hexachlorobenzene	79000	U
87-86-5	Pentachlorophenol	380000	U
85-01-8	Phenanthrene	220000	
120-12-7	Anthracene	81000	
84-74-2	Di-n-Butylphthalate	79000	U
206-44-0	Fluoranthene	72000	J
129-00-0	Pyrene	240000	
85-68-7	Butylbenzylphthalate	79000	U
91-94-1	3,3'-Dichlorobenzidine	160000	U
56-55-3	Benzo(a)Anthracene	250000	
218-01-9	Chrysene	340000	
117-81-7	bis(2-Ethylhexyl)Phthalate	79000	U
117-84-0	Di-n-Octyl Phthalate	79000	U
205-99-2	Benzo(b)Fluoranthene	73000	JX
207-08-9	Benzo(k)Fluoranthene	73000	JX
50-32-8	Benzo(a)Pyrene	65000	J
193-39-5	Indeno(1,2,3-cd)Pyrene	12000	J
53-70-3	Dibenzo(a,h)Anthracene	23000	J
191-24-2	Benzo(g,h,i)Perylene	25000	J

(1) - Cannot be separated from Diphenylamine

FORM I SV-2 1/87 Rev.

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GW-3-P-B

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 05

Matrix: (soil/water) SOIL Lab Sample ID: 321009

Sample wt/vol: 1.0 (g/mL) G Lab File ID: GD021009A15

Level: (low/med) MED Date Received: 02/22/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 02/26/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 02/28/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 4.0

Number TICs found: 20

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN SUB. CYCLOHEXANE	10.07	500000	J
2.	UNKNOWN HYDROCARBON	10.24	380000	J
3.	DIMETHYL NAPHTHALENE	10.80	500000	J
4.	UNKNOWN SUB. HYDROCARBON	10.89	620000	J
5.	UNKNOWN SUB. HYDROCARBON	11.52	340000	J
6.	UNKNOWN SUB. HEXANE	11.65	760000	J
7.	UNKNOWN HYDROCARBON	12.24	880000	J
8.	UNKNOWN HYDROCARBON	12.64	460000	J
9.	UNKNOWN HYDROCARBON	13.30	560000	J
10.	UNKNOWN HYDROCARBON	14.34	370000	J
11.	UNKNOWN HYDROCARBON	14.55	400000	J
12.	UNKNOWN HYDROCARBON	14.87	440000	J
13.	DIMETHYL PHENANTHRENE	15.09	440000	J
14.	UNKNOWN SUB. HYDROCARBON	15.87	540000	J
15.	UNKNOWN SUB. HYDROCARBON	16.15	500000	J
16.	UNKNOWN SUB. HYDROCARBON	16.35	340000	J
17.	UNKNOWN SUB. HYDROCARBON	16.44	380000	J
18.	UNKNOWN HYDROCARBON	16.87	1600000	J
19.	UNKNOWN HYDROCARBON	17.05	1700000	J
20.	UNKNOWN HYDROCARBON	17.50	770000	J

FORM I SV-TIC 1/87 Rev.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GW-3-P-S

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 05

Matrix: (soil/water) SOIL Lab Sample ID: 321011

Sample wt/vol: 1.0 (g/mL) G Lab File ID: GJD21011C15

Level: (low/med) MED Date Received: 02/22/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 03/02/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 03/07/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 4.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	79000	U
111-44-4	bis(2-Chloroethyl)Ether	79000	U
95-57-8	2-Chlorophenol	79000	U
541-73-1	1,3-Dichlorobenzene	79000	U
106-46-7	1,4-Dichlorobenzene	79000	U
100-51-6	Benzyl Alcohol	79000	U
95-50-1	1,2-Dichlorobenzene	79000	U
95-48-7	2-Methylphenol	79000	U
39638-32-9	bis(2-Chloroisopropyl)Ether	79000	U
106-44-5	4-Methylphenol	79000	U
621-64-7	N-Nitroso-Di-n-Propylamine	79000	U
67-72-1	Hexachloroethane	79000	U
98-95-3	Nitrobenzene	79000	U
78-59-1	Isophorone	79000	U
88-75-5	2-Nitrophenol	79000	U
105-67-9	2,4-Dimethylphenol	79000	U
65-85-0	Benzoic Acid	380000	U
111-91-1	bis(2-Chloroethoxy)Methane	79000	U
120-83-2	2,4-Dichlorophenol	79000	U
120-82-1	1,2,4-Trichlorobenzene	79000	U
91-20-3	Naphthalene	36000	J
106-47-8	4-Chloroaniline	79000	U
87-68-3	Hexachlorobutadiene	79000	U
59-50-7	4-Chloro-3-Methylphenol	79000	U
91-57-6	2-Methylnaphthalene	81000	
77-47-4	Hexachlorocyclopentadiene	79000	U
88-06-2	2,4,6-Trichlorophenol	79000	U
95-95-4	2,4,5-Trichlorophenol	380000	U
91-58-7	2-Chloronaphthalene	79000	U
88-74-4	2-Nitroaniline	380000	U
131-11-3	Dimethyl Phthalate	79000	U
208-96-8	Acenaphthylene	79000	U
606-20-2	2,6-Dinitrotoluene	79000	U

FORM I SV-1 1/87 Rev.

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GW-3-P-S

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 05

Matrix: (soil/water) SOIL Lab Sample ID: 321011

Sample wt/vol: 1.0 (g/mL) G Lab File ID: GJD21011C15

Level: (low/med) MED Date Received: 02/22/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 03/02/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 03/07/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 4.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	380000	U
83-32-9	Acenaphthene	31000	J
51-28-5	2,4-Dinitrophenol	380000	U
100-02-7	4-Nitrophenol	380000	U
132-64-9	Dibenzofuran	79000	U
121-14-2	2,4-Dinitrotoluene	79000	U
84-66-2	Diethylphthalate	79000	U
7005-72-3	4-Chlorophenyl-phenylether	79000	U
86-73-7	Fluorene	40000	J
100-01-6	4-Nitroaniline	380000	U
534-52-1	4,6-Dinitro-2-Methylphenol	380000	U
86-30-6	N-Nitrosodiphenylamine (1)	79000	U
101-55-3	4-Bromophenyl-phenylether	79000	U
118-74-1	Hexachlorobenzene	79000	U
87-86-5	Pentachlorophenol	380000	U
85-01-8	Phenanthrene	200000	
120-12-7	Anthracene	79000	J
84-74-2	Di-n-Butylphthalate	79000	U
206-44-0	Fluoranthene	90000	
129-00-0	Pyrene	220000	
85-68-7	Butylbenzylphthalate	79000	U
91-94-1	3,3'-Dichlorobenzidine	160000	U
56-55-3	Benzo(a)Anthracene	190000	
218-01-9	Chrysene	240000	
117-81-7	bis(2-Ethylhexyl)Phthalate	79000	U
117-84-0	Di-n-Octyl Phthalate	79000	U
205-99-2	Benzo(b)Fluoranthene	50000	J
207-08-9	Benzo(k)Fluoranthene	69000	J
50-32-8	Benzo(a)Pyrene	77000	J
193-39-5	Indeno(1,2,3-cd)Pyrene	18000	J
53-70-3	Dibenzo(a,h)Anthracene	25000	J
191-24-2	Benzo(g,h,i)Perylene	30000	J

(1) - Cannot be separated from Diphenylamine

FORM I SV-2 1/87 Rev.

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GW-3-P-S

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 05

Matrix: (soil/water) SOIL Lab Sample ID: 321011

Sample wt/vol: 1.0 (g/mL) G Lab File ID: GJD21011C15

Level: (low/med) MED Date Received: 02/22/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 03/02/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 03/07/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 4.0

Number TICs found: 20

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN CYCLIC HYDROCARBON	10.94	380000	J
2. 629-78-7	HEPTADECANE	12.37	800000	J
3.	TETRAMETHYLPENTDECANE	12.79	800000	J
4.	DIMETHYL HEPTADECANE	13.49	1100000	J
5.	UNKNOWN HYDROCARBON	14.02	490000	J
6.	UNKNOWN	14.15	610000	J
7.	UNKNOWN	14.59	670000	J
8.	UNKNOWN HYDROCARBON	14.79	750000	J
9.	UNKNOWN	14.94	430000	J
10.	UNKNOWN HYDROCARBON	15.14	880000	J
11.	UNKNOWN CYCLIC HYDROCARBON	15.20	490000	J
12.	UNKNOWN	15.39	490000	J
13.	UNKNOWN	15.79	550000	J
14.	UNKNOWN	15.97	400000	J
15.	UNKNOWN	16.05	620000	J
16.	UNKNOWN	16.19	880000	J
17.	UNKNOWN PAH	16.50	740000	J
18.	UNKNOWN	16.77	410000	J
19.	UNKNOWN	17.22	440000	J
20.	UNKNOWN	17.42	600000	J

FORM I SV-TIC 1/87 Rev.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GW-3-P-SMS

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 05

Matrix: (soil/water) SOIL Lab Sample ID: 321002

Sample wt/vol: 1.0 (g/mL) G Lab File ID: GJD21002C15

Level: (low/med) MED Date Received: 02/22/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 03/02/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 03/07/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 4.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	79000	U
111-44-4	bis(2-Chloroethyl)Ether	79000	U
95-57-8	2-Chlorophenol	79000	U
541-73-1	1,3-Dichlorobenzene	79000	U
106-46-7	1,4-Dichlorobenzene	79000	U
100-51-6	Benzyl Alcohol	79000	U
95-50-1	1,2-Dichlorobenzene	79000	U
95-48-7	2-Methylphenol	79000	U
39638-32-9	bis(2-Chloroisopropyl)Ether	79000	U
106-44-5	4-Methylphenol	79000	U
621-64-7	N-Nitroso-Di-n-Propylamine	79000	U
67-72-1	Hexachloroethane	79000	U
98-95-3	Nitrobenzene	79000	U
78-59-1	Isophorone	79000	U
88-75-5	2-Nitrophenol	79000	U
105-67-9	2,4-Dimethylphenol	79000	U
65-85-0	Benzoic Acid	380000	U
111-91-1	bis(2-Chloroethoxy)Methane	79000	U
120-83-2	2,4-Dichlorophenol	79000	U
120-82-1	1,2,4-Trichlorobenzene	79000	U
91-20-3	Naphthalene	21000	J
106-47-8	4-Chloroaniline	79000	U
87-68-3	Hexachlorobutadiene	79000	U
59-50-7	4-Chloro-3-Methylphenol	79000	U
91-57-6	2-Methylnaphthalene	50000	J
77-47-4	Hexachlorocyclopentadiene	79000	U
88-06-2	2,4,6-Trichlorophenol	79000	U
95-95-4	2,4,5-Trichlorophenol	380000	U
91-58-7	2-Chloronaphthalene	79000	U
88-74-4	2-Nitroaniline	380000	U
131-11-3	Dimethyl Phthalate	79000	U
208-96-8	Acenaphthylene	79000	U
606-20-2	2,6-Dinitrotoluene	79000	U

FORM I SV-1 1/87 Rev.

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GW-3-P-SMS

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 05

Matrix: (soil/water) SOIL Lab Sample ID: 321002

Sample wt/vol: 1.0 (g/mL) G Lab File ID: GJD21002C15

Level: (low/med) MED Date Received: 02/22/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 03/02/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 03/07/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 4.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	380000	U
83-32-9	Acenaphthene	79000	U
51-28-5	2,4-Dinitrophenol	380000	U
100-02-7	4-Nitrophenol	380000	U
132-64-9	Dibenzofuran	79000	U
121-14-2	2,4-Dinitrotoluene	79000	U
84-66-2	Diethylphthalate	79000	U
7005-72-3	4-Chlorophenyl-phenylether	79000	U
86-73-7	Fluorene	25000	J
100-01-6	4-Nitroaniline	380000	U
534-52-1	4,6-Dinitro-2-Methylphenol	380000	U
86-30-6	N-Nitrosodiphenylamine (1)	79000	U
101-55-3	4-Bromophenyl-phenylether	79000	U
118-74-1	Hexachlorobenzene	79000	U
87-86-5	Pentachlorophenol	380000	U
85-01-8	Phenanthrene	120000	
120-12-7	Anthracene	42000	J
84-74-2	Di-n-Butylphthalate	79000	U
206-44-0	Fluoranthene	28000	J
129-00-0	Pyrene	79000	U
85-68-7	Butylbenzylphthalate	79000	U
91-94-1	3,3'-Dichlorobenzidine	160000	U
56-55-3	Benzo(a)Anthracene	87000	
218-01-9	Chrysene	100000	
117-81-7	bis(2-Ethylhexyl)Phthalate	79000	U
117-84-0	Di-n-Octyl Phthalate	79000	U
205-99-2	Benzo(b)Fluoranthene	26000	JX
207-08-9	Benzo(k)Fluoranthene	26000	JX
50-32-8	Benzo(a)Pyrene	42000	J
193-39-5	Indeno(1,2,3-cd)Pyrene	79000	U
53-70-3	Dibenzo(a,h)Anthracene	9800	J
191-24-2	Benzo(g,h,i)Perylene	9000	J

(1) - Cannot be separated from Diphenylamine

FORM I SV-2 1/87 Rev.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GW-3-P-SMSD

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 05

Matrix: (soil/water) SOIL Lab Sample ID: 321004

Sample wt/vol: 1.0 (g/mL) G Lab File ID: GDR21004C15

Level: (low/med) MED Date Received: 02/22/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 03/02/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 03/06/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 4.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	79000	U
111-44-4	bis(2-Chloroethyl)Ether	79000	U
95-57-8	2-Chlorophenol	79000	U
541-73-1	1,3-Dichlorobenzene	79000	U
106-46-7	1,4-Dichlorobenzene	79000	U
100-51-6	Benzyl Alcohol	79000	U
95-50-1	1,2-Dichlorobenzene	79000	U
95-48-7	2-Methylphenol	79000	U
39638-32-9	bis(2-Chloroisopropyl)Ether	79000	U
106-44-5	4-Methylphenol	79000	U
621-64-7	N-Nitroso-Di-n-Propylamine	79000	U
67-72-1	Hexachloroethane	79000	U
98-95-3	Nitrobenzene	79000	U
78-59-1	Isophorone	79000	U
88-75-5	2-Nitrophenol	79000	U
105-67-9	2,4-Dimethylphenol	79000	U
65-85-0	Benzoic Acid	380000	U
111-91-1	bis(2-Chloroethoxy)Methane	79000	U
120-83-2	2,4-Dichlorophenol	79000	U
120-82-1	1,2,4-Trichlorobenzene	79000	U
91-20-3	Naphthalene	16000	J
106-47-8	4-Chloroaniline	79000	U
87-68-3	Hexachlorobutadiene	79000	U
59-50-7	4-Chloro-3-Methylphenol	79000	U
91-57-6	2-Methylnaphthalene	31000	J
77-47-4	Hexachlorocyclopentadiene	79000	U
88-06-2	2,4,6-Trichlorophenol	79000	U
95-95-4	2,4,5-Trichlorophenol	380000	U
91-58-7	2-Chloronaphthalene	79000	U
88-74-4	2-Nitroaniline	380000	U
131-11-3	Dimethyl Phthalate	79000	U
208-96-8	Acenaphthylene	79000	U
606-20-2	2,6-Dinitrotoluene	79000	U

FORM I SV-1 1/87 Rev.

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GW-3-P-SMSD

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 05

Matrix: (soil/water) SOIL Lab Sample ID: 321004

Sample wt/vol: 1.0 (g/mL) G Lab File ID: GDR21004C15

Level: (low/med) MED Date Received: 02/22/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 03/02/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 03/06/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 4.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	380000	U
83-32-9	Acenaphthene	79000	U
51-28-5	2,4-Dinitrophenol	380000	U
100-02-7	4-Nitrophenol	380000	U
132-64-9	Dibenzofuran	79000	U
121-14-2	2,4-Dinitrotoluene	79000	U
84-66-2	Diethylphthalate	79000	U
7005-72-3	4-Chlorophenyl-phenylether	79000	U
86-73-7	Fluorene	15000	J
100-01-6	4-Nitroaniline	380000	U
534-52-1	4,6-Dinitro-2-Methylphenol	380000	U
86-30-6	N-Nitrosodiphenylamine (1)	79000	U
101-55-3	4-Bromophenyl-phenylether	79000	U
118-74-1	Hexachlorobenzene	79000	U
87-86-5	Pentachlorophenol	380000	U
85-01-8	Phenanthrene	88000	
120-12-7	Anthracene	32000	J
84-74-2	Di-n-Butylphthalate	79000	U
206-44-0	Fluoranthene	22000	J
129-00-0	Pyrene	79000	U
85-68-7	Butylbenzylphthalate	79000	U
91-94-1	3,3'-Dichlorobenzidine	160000	U
56-55-3	Benzo(a)Anthracene	75000	J
218-01-9	Chrysene	91000	
117-81-7	bis(2-Ethylhexyl)Phthalate	79000	U
117-84-0	Di-n-Octyl Phthalate	79000	U
205-99-2	Benzo(b)Fluoranthene	14000	JX
207-08-9	Benzo(k)Fluoranthene	14000	JX
50-32-8	Benzo(a)Pyrene	24000	J
193-39-5	Indeno(1,2,3-cd)Pyrene	79000	U
53-70-3	Dibenzo(a,h)Anthracene	79000	U
191-24-2	Benzo(g,h,i)Perylene	79000	U

(1) - Cannot be separated from Diphenylamine

FORM I SV-2 1/87 Rev.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SED-1

Lab Name: COMPUCHEM LABORATORIES Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 5

Matrix: (soil/water) SOIL Lab Sample ID: 321013

Sample wt/vol: 1.0 (g/mL) G Lab File ID: _____

Level: (low/med) MED Date Received: 02/22/90

% Moisture: not dec. 0 dec. ____ Date Extracted: 02/26/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 03/05/90

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 0.50

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	60.	U
319-85-7	beta-BHC	60.	U
319-86-8	delta-BHC	60.	U
58-89-9	gamma-BHC (Lindane)	60.	U
76-44-8	Heptachlor	60.	U
309-00-2	Aldrin	60.	U
1024-57-3	Heptachlor epoxide	60.	U
959-98-8	Endosulfan I	60.	U
60-57-1	Dieldrin	120	U
72-55-9	4,4'-DDE	120	U
72-20-8	Endrin	120	U
33213-65-9	Endosulfan II	120	U
72-54-8	4,4'-DDD	120	U
1031-07-8	Endosulfan sulfate	120	U
50-29-3	4,4'-DDT	120	U
72-43-5	Methoxychlor	600	U
53494-70-5	Endrin ketone	120	U
5103-71-9	alpha-Chlordane	600	U
5103-74-2	gamma-Chlordane	600	U
8001-35-2	Toxaphene	1200	U
12674-11-2	Aroclor-1016	600	U
11104-28-2	Aroclor-1221	600	U
11141-16-5	Aroclor-1232	600	U
53469-21-9	Aroclor-1242	600	U
12672-29-6	Aroclor-1248	600	U
11097-69-1	Aroclor-1254	1200	U
11096-82-5	Aroclor-1260	6700	

FORM I PEST 1/87 Rev.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SS-3

Lab Name: COMPUCHEM LABORATORIES Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 5

Matrix: (soil/water) SOIL Lab Sample ID: 321017

Sample wt/vol: 1.0 (g/mL) G Lab File ID: PC021017B16

Level: (low/med) MED Date Received: 02/22/90

% Moisture: not dec. 0 dec. ____ Date Extracted: 02/26/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 03/02/90

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 4.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	480	U
319-85-7	beta-BHC	480	U
319-86-8	delta-BHC	480	U
58-89-9	gamma-BHC (Lindane)	480	U
76-44-8	Heptachlor	480	U
309-00-2	Aldrin	480	U
1024-57-3	Heptachlor epoxide	480	U
959-98-8	Endosulfan I	480	U
60-57-1	Dieldrin	960	U
72-55-9	4,4'-DDE	960	U
72-20-8	Endrin	960	U
33213-65-9	Endosulfan II	960	U
72-54-8	4,4'-DDD	960	U
1031-07-8	Endosulfan sulfate	960	U
50-29-3	4,4'-DDT	960	U
72-43-5	Methoxychlor	4800	U
53494-70-5	Endrin ketone	960	U
5103-71-9	alpha-Chlordane	4800	U
5103-74-2	gamma-Chlordane	4800	U
8001-35-2	Toxaphene	9600	U
12674-11-2	Aroclor-1016	4800	U
11104-28-2	Aroclor-1221	4800	U
11141-16-5	Aroclor-1232	4800	U
53469-21-9	Aroclor-1242	4800	U
12672-29-6	Aroclor-1248	4800	U
11097-69-1	Aroclor-1254	9600	U
11096-82-5	Aroclor-1260	60000	C

FORM I PEST 1/87 Rev.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SED-1MS

Lab Name: COMPUCHEM LABORATORIES Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 5

Matrix: (soil/water) SOIL Lab Sample ID: 321014

Sample wt/vol: 1.4 (g/mL) G Lab File ID: _____

Level: (low/med) MED Date Received: 02/22/90

% Moisture: not dec. 0 dec. ____ Date Extracted: 02/26/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 03/05/90

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 0.50

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	43.	U
319-85-7	beta-BHC	43.	U
319-86-8	delta-BHC	43.	U
58-89-9	gamma-BHC (Lindane)	43.	U
76-44-8	Heptachlor	43.	U
309-00-2	Aldrin	43.	U
1024-57-3	Heptachlor epoxide	43.	U
959-98-8	Endosulfan I	43.	U
60-57-1	Dieldrin	86.	U
72-55-9	4,4'-DDE	86.	U
72-20-8	Endrin	86.	U
33213-65-9	Endosulfan II	86.	U
72-54-8	4,4'-DDD	86.	U
1031-07-8	Endosulfan sulfate	86.	U
50-29-3	4,4'-DDT	86.	U
72-43-5	Methoxychlor	430	U
53494-70-5	Endrin ketone	86.	U
5103-71-9	alpha-Chlordane	430	U
5103-74-2	gamma-Chlordane	430	U
8001-35-2	Toxaphene	860	U
12674-11-2	Aroclor-1016	430	U
11104-28-2	Aroclor-1221	430	U
11141-16-5	Aroclor-1232	430	U
53469-21-9	Aroclor-1242	430	U
12672-29-6	Aroclor-1248	430	U
11097-69-1	Aroclor-1254	860	U
11096-82-5	Aroclor-1260	51000	

FORM I PEST 1/87 Rev.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SED-1MSD

Lab Name: COMPUCHEM LABORATORIES Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 5

Matrix: (soil/water) SOIL Lab Sample ID: 321015

Sample wt/vol: 1.4 (g/mL) G Lab File ID: _____

Level: (low/med) MED Date Received: 02/22/90

% Moisture: not dec. 0 dec. ____ Date Extracted: 02/26/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 03/05/90

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 0.50

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	43.	U
319-85-7	beta-BHC	43.	U
319-86-8	delta-BHC	43.	U
58-89-9	gamma-BHC (Lindane)	43.	U
76-44-8	Heptachlor	43.	U
309-00-2	Aldrin	43.	U
1024-57-3	Heptachlor epoxide	43.	U
959-98-8	Endosulfan I	43.	U
60-57-1	Dieldrin	86.	U
72-55-9	4,4'-DDE	86.	U
72-20-8	Endrin	86.	U
33213-65-9	Endosulfan II	86.	U
72-54-8	4,4'-DDD	86.	U
1031-07-8	Endosulfan sulfate	86.	U
50-29-3	4,4'-DDT	86.	U
72-43-5	Methoxychlor	430	U
53494-70-5	Endrin ketone	86.	U
5103-71-9	alpha-Chlordane	430	U
5103-74-2	gamma-Chlordane	430	U
8001-35-2	Toxaphene	860	U
12674-11-2	Aroclor-1016	430	U
11104-28-2	Aroclor-1221	430	U
11141-16-5	Aroclor-1232	430	U
53469-21-9	Aroclor-1242	430	U
12672-29-6	Aroclor-1248	430	U
11097-69-1	Aroclor-1254	860	U
11096-82-5	Aroclor-1260	43000	

FORM I PEST 1/87 Rev.

3. By fraction (VOA , SV , PEST) – surrogate spike analysis results (Form II) by matrix (Water and/or Soil) and for soil , by concentration (Low or Medium)

2B
SOIL VOLATILE SURROGATE RECOVERY

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 05

Level:(low/med) MED

	EPA SAMPLE NO.	S1 (TOL) #	S2 (BFB) #	S3 (DCE) #	OTHER	TOT OUT
01	GW-2-P-B	95	118	90		0
02	GW-2-P-S	107	156 *	118		1
03	GW-2-P-SRE	90	141 *	99		1
04	GW-3-P-B	79 *	148 *	96		2
05	GW-3-P-S	73 *	151 *	90		2
06	GW-3-P-SRE	66 *	153 *	97		2
07	GW-3-P-BMS	71 *	151 *	89		2
08	GW-3-P-BMSD	77 *	166 *	98		2
09	VBLKT2	115	101	121		0
10	VBLKW9	114	99	109		0
11	VBLKX1	101	93	103		0
12	VBLKT2	100	96	102		0

		QC LIMITS
S1 (TOL)	= Toluene-d8	(81-117)
S2 (BFB)	= Bromofluorobenzene	(74-121)
S3 (DCE)	= 1,2-Dichloroethane-d4	(70-121)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogates diluted out

2D
SOIL SEMIVOLATILE SURROGATE RECOVERY

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 05

Level:(low/med) MED

	EPA SAMPLE NO.	S1 (NBZ) #	S2 (FBP) #	S3 (TPH) #	S4 (PHL) #	S5 (2FP) #	S6 (TBP) #	OTHER	TOT OUT
01	GW-2-P-B	94	69	63	56	60	61		0
02	GW-2-P-BDL	131 *	93	108	70	67	73		1
03	GW-2-P-S	138 *	94	125	71	68	75		1
04	GW-3-P-B	109	74	84	52	46	38		0
05	GW-3-P-S	118	67	94	82	73	55		0
06	GW-3-P-SMS	119	55	44	156 *	120	88		1
07	GW-3-P-SMSD	98	44	31	113	121	79		0
08	SBLK87	31	38	43	33	36	30		0
09	SBLK28	75	93	86	88	99	106		0

		QC LIMITS
S1 (NBZ)	= Nitrobenzene-d5	(23-120)
S2 (FBP)	= 2-Fluorobiphenyl	(30-115)
S3 (TPH)	= Terphenyl	(18-137)
S4 (PHL)	= Phenol-d5	(24-113)
S5 (2FP)	= 2-Fluorophenol	(25-121)
S6 (TBP)	= 2,4,6-Tribromophenol	(19-122)

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

2F

SOIL PESTICIDE SURROGATE RECOVERY

Lab Name: COMPUCHEM LABORATORIES Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 5

Level:(low/med) MED

	EPA SAMPLE NO.	S1 (DBC)#	OTHER
01	PBLK97	101	0
02	SED-1MS	103	0
03	SED-1MSD	89	0
04	SS-3	0 D	0
05	SED-1	92	0
06			
07			
08			
09			
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25			
26			
27			
28			
29			
30			

ADVISORY QC LIMITS

S1 (DBC) = Dibutylchlorendate (20-150)

Column to be used to flag recovery values

* Values outside of QC limits

D Surrogates diluted out

page 1 of 1

FORM II PEST-2 1/87 Rev.

4. By fraction (VOA, SV, PEST) – matrix spike duplicate results (Form III)

3B

SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 05

Matrix Spike - EPA Sample No.: GW-3-P-B Level:(low/med) MED

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC LIMITS REC.
1,1-Dichloroethene	6250	0	5230	84	59-172
Trichloroethene	6250	0	4950	79	62-137
Benzene	6250	1190	6600	87	66-142
Toluene	6250	2460	7830	86	59-139
Chlorobenzene	6250	0	4930	79	60-133

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	6250	5230	84	0	22	59-172
Trichloroethene	6250	6100	98	-21	24	62-137
Benzene	6250	7530	101	-15	21	66-142
Toluene	6250	8580	98	-13	21	59-139
Chlorobenzene	6250	5530	88	-11	21	60-133

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

COMMENTS: CLP,1930,05,B, , ,321009,VOLATILE, ,
TUNE: 0012 030190 1033

FORM III VOA-2 1/87 Rev.

3D

SOIL SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 05

Matrix Spike - EPA Sample No.: GW-3-P-S Level:(low/med) MED

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC LIMITS REC.
Phenol	200000	0	266000	133 *	26- 90
2-Chlorophenol	200000	0	250000	125 *	25-102
1,4-Dichlorobenzene	100000	0	43000	43	28 104
N-Nitroso-di-n-prop.(1)	100000	0	152000	152 *	41 126
1,2,4-Trichlorobenzene	100000	0	40500	41	38 107
4-Chloro-3-methylphenol	200000	0	282000	141 *	26 103
Acenaphthene	100000	30600	55100	25 *	31-137
4-Nitrophenol	200000	0	615000	308 *	11-114
2,4-Dinitrotoluene	100000	0	120000	120 *	28- 89
Pentachlorophenol	200000	0	14800	7 *	17-109
Pyrene	100000	223000	150000	-73 *	35-142

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Phenol	200000	207000	104 *	24	35	26- 90
2-Chlorophenol	200000	218000	109 *	14	50	25-102
1,4-Dichlorobenzene	100000	38000	38	12	27	28 104
N-Nitroso-di-n-prop.(1)	100000	110000	110	32	38	41 126
1,2,4-Trichlorobenzene	100000	32800	33 *	22	23	38 107
4-Chloro-3-methylphenol	200000	233000	117 *	19	33	26 103
Acenaphthene	100000	0	-31 *	9999 *	19	31-137
4-Nitrophenol	200000	379000	190 *	47	50	11-114
2,4-Dinitrotoluene	100000	93600	94 *	24	47	28- 89
Pentachlorophenol	200000	116000	58	-157 *	47	17-109
Pyrene	100000	108000	-115 *	-45 *	36	35-142

(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 3 out of 11 outside limits
Spike Recovery: 17 out of 22 outside limits

COMMENTS: CLP ,1930,05,S, , ,321011,BNA, ,
TUNE: 0015 030790 0027

FORM III SV-2 1/87 Rev.

3F

SOIL PESTICIDE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: COMPUCHEM LABORATORIES Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 5

Matrix Spike - EPA Sample No.: SED-1 Level:(low/med) MED

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC LIMITS REC.
gamma-BHC (Lindane)	1428.571	0.000	1300.000	91	46-127
Heptachlor	1428.571	0.000	1390.000	97	35-130
Aldrin	1428.571	0.000	1310.000	92	34-132
Dieldrin	3571.428	0.000	3630.000	102	31-134
Endrin	3571.428	0.000	4670.000	131	42-139
4,4'-DDT	3571.428	0.000	4330.000	121	23-134

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
gamma-BHC (Lindane)	1428.571	1170.000	82	10	50	46-127
Heptachlor	1428.571	1220.000	85	13	31	35-130
Aldrin	1428.571	1120.000	78	16	43	34-132
Dieldrin	3571.428	3270.000	92	10	38	31-134
Endrin	3571.428	4240.000	119	10	45	42-139
4,4'-DDT	3571.428	3460.000	97	22	50	23-134

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 6 outside limits
Spike Recovery: 0 out of 12 outside limits

COMMENTS: _____

FORM III PEST-2 8/87 Rev.

5. By fraction (VOA , SV , PEST) - blank data (Form IV) and tabulated results (Form I) including tentatively identified compounds (Form I, TIC) (VOA and SV only)

4A
VOLATILE METHOD BLANK SUMMARY

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 05

Lab File ID: CN021371C12 Lab Sample ID: VBLKT2

Date Analyzed: 02/27/90 Time Analyzed: 0224

Matrix: (soil/water) SOIL Level:(low/med) MED

Instrument ID: 12

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	GW-2-P-B	320997	CR020997C12	0517
02	GW-2-P-S	321006	CN021006C12	0736

COMMENTS: CLP , , , , , ,321371,VOLATILE,BLANK,
TUNE: 0012 022790 0049

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKT2

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 05

Matrix: (soil/water) SOIL Lab Sample ID: VBLKT2

Sample wt/vol: 4.0 (g/mL) G Lab File ID: CN021371C12

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

% Moisture: not dec. _____ Date Analyzed: 02/27/90

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	1300	U
74-83-9	Bromomethane	1300	U
75-01-4	Vinyl Chloride	1300	U
75-00-3	Chloroethane	1300	U
75-09-2	Methylene Chloride	340	J
67-64-1	Acetone	1300	U
75-15-0	Carbon Disulfide	630	U
75-35-4	1,1-Dichloroethene	630	U
75-34-3	1,1-Dichloroethane	630	U
540-59-0	1,2-Dichloroethene (total)	630	U
67-66-3	Chloroform	630	U
107-06-2	1,2-Dichloroethane	630	U
78-93-3	2-Butanone	1300	U
71-55-6	1,1,1-Trichloroethane	630	U
56-23-5	Carbon Tetrachloride	630	U
108-05-4	Vinyl Acetate	1300	U
75-27-4	Bromodichloromethane	630	U
78-87-5	1,2-Dichloropropane	630	U
10061-01-5	cis-1,3-Dichloropropene	630	U
79-01-6	Trichloroethene	630	U
124-48-1	Dibromochloromethane	630	U
79-00-5	1,1,2-Trichloroethane	630	U
71-43-2	Benzene	630	U
10061-02-6	Trans-1,3-Dichloropropene	630	U
75-25-2	Bromoform	630	U
108-10-1	4-Methyl-2-Pentanone	1300	U
591-78-6	2-Hexanone	1300	U
127-18-4	Tetrachloroethene	630	U
79-34-5	1,1,2,2-Tetrachloroethane	630	U
108-88-3	Toluene	630	U
108-90-7	Chlorobenzene	630	U
100-41-4	Ethylbenzene	630	U
100-42-5	Styrene	630	U
1330-20-7	Total Xylenes	630	U

FORM I VOA 1/87 Rev.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLKT2

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 05

Matrix: (soil/water) SOIL Lab Sample ID: VBLKT2

Sample wt/vol: 4.0 (g/mL) G Lab File ID: CN021371C12

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

% Moisture: not dec. _____ Date Analyzed: 02/27/90

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I VOA-TIC 1/87 Rev.

4A
VOLATILE METHOD BLANK SUMMARY

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 05

Lab File ID: CR022113A12 Lab Sample ID: VBLKW9

Date Analyzed: 03/01/90 Time Analyzed: 1241

Matrix: (soil/water) SOIL Level:(low/med) MED

Instrument ID: 12

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	GW-2-P-SRE	321006	CR021006A12	1510
02	GW-3-P-B	321009	C2R21009B12	1816
03	GW-3-P-BMS	320999	CR020999B12	2032
04	GW-3-P-BMSD	321000	CR021000B12	2222

COMMENTS: CLP , , , , , ,322113,VOLATILE,BLANK,
TUNE: 0012 030190 1033

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKW9

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 05

Matrix: (soil/water) SOIL Lab Sample ID: VBLKW9

Sample wt/vol: 4.0 (g/mL) G Lab File ID: CR022113A12

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

% Moisture: not dec. _____ Date Analyzed: 03/01/90

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	1300	U
74-83-9	Bromomethane	1300	U
75-01-4	Vinyl Chloride	1300	U
75-00-3	Chloroethane	1300	U
75-09-2	Methylene Chloride	890	
67-64-1	Acetone	1300	U
75-15-0	Carbon Disulfide	630	U
75-35-4	1,1-Dichloroethene	630	U
75-34-3	1,1-Dichloroethane	630	U
540-59-0	1,2-Dichloroethene (total)	630	U
67-66-3	Chloroform	630	U
107-06-2	1,2-Dichloroethane	630	U
78-93-3	2-Butanone	1300	U
71-55-6	1,1,1-Trichloroethane	630	U
56-23-5	Carbon Tetrachloride	630	U
108-05-4	Vinyl Acetate	1300	U
75-27-4	Bromodichloromethane	630	U
78-87-5	1,2-Dichloropropane	630	U
10061-01-5	cis-1,3-Dichloropropene	630	U
79-01-6	Trichloroethene	630	U
124-48-1	Dibromochloromethane	630	U
79-00-5	1,1,2-Trichloroethane	630	U
71-43-2	Benzene	630	U
10061-02-6	Trans-1,3-Dichloropropene	630	U
75-25-2	Bromoform	630	U
108-10-1	4-Methyl-2-Pentanone	1300	U
591-78-6	2-Hexanone	1300	U
127-18-4	Tetrachloroethene	630	U
79-34-5	1,1,2,2-Tetrachloroethane	630	U
108-88-3	Toluene	630	U
108-90-7	Chlorobenzene	630	U
100-41-4	Ethylbenzene	630	U
100-42-5	Styrene	630	U
1330-20-7	Total Xylenes	630	U

FORM I VOA 1/87 Rev.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLKW9

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 05

Matrix: (soil/water) SOIL Lab Sample ID: VBLKW9

Sample wt/vol: 4.0 (g/mL) G Lab File ID: CR022113A12

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

% Moisture: not dec. ____ Date Analyzed: 03/01/90

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	LABORATORY ARTIFACT	14.95	750	J

FORM I VOA-TIC 1/87 Rev.

4A
VOLATILE METHOD BLANK SUMMARY

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 05

Lab File ID: CN022114C12 Lab Sample ID: VBLKX1

Date Analyzed: 03/02/90 Time Analyzed: 0303

Matrix: (soil/water) SOIL Level:(low/med) MED

Instrument ID: 12

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	GW-3-P-S	321011	CR021011C12	0456

COMMENTS: CLP , , , , , ,322114,VOLATILE,BLANK,
TUNE: 0012 030290 0132

FORM IV VOA 1/87 Rev.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKX1

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 05

Matrix: (soil/water) SOIL Lab Sample ID: VBLKX1

Sample wt/vol: 4.0 (g/mL) G Lab File ID: CN022114C12

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

% Moisture: not dec. ____ Date Analyzed: 03/02/90

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	1300	U
74-83-9	Bromomethane	1300	U
75-01-4	Vinyl Chloride	1300	U
75-00-3	Chloroethane	1300	U
75-09-2	Methylene Chloride	590	J
67-64-1	Acetone	1300	U
75-15-0	Carbon Disulfide	630	U
75-35-4	1,1-Dichloroethene	630	U
75-34-3	1,1-Dichloroethane	630	U
540-59-0	1,2-Dichloroethene (total)	630	U
67-66-3	Chloroform	630	U
107-06-2	1,2-Dichloroethane	630	U
78-93-3	2-Butanone	1300	U
71-55-6	1,1,1-Trichloroethane	630	U
56-23-5	Carbon Tetrachloride	630	U
108-05-4	Vinyl Acetate	1300	U
75-27-4	Bromodichloromethane	630	U
78-87-5	1,2-Dichloropropane	630	U
10061-01-5	cis-1,3-Dichloropropene	630	U
79-01-6	Trichloroethene	630	U
124-48-1	Dibromochloromethane	630	U
79-00-5	1,1,2-Trichloroethane	630	U
71-43-2	Benzene	630	U
10061-02-6	Trans-1,3-Dichloropropene	630	U
75-25-2	Bromoform	630	U
108-10-1	4-Methyl-2-Pentanone	1300	U
591-78-6	2-Hexanone	1300	U
127-18-4	Tetrachloroethene	630	U
79-34-5	1,1,2,2-Tetrachloroethane	630	U
108-88-3	Toluene	630	U
108-90-7	Chlorobenzene	630	U
100-41-4	Ethylbenzene	630	U
100-42-5	Styrene	630	U
1330-20-7	Total Xylenes	630	U

FORM I VOA 1/87 Rev.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLKX1

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 05

Matrix: (soil/water) SOIL Lab Sample ID: VBLKX1

Sample wt/vol: 4.0 (g/mL) G Lab File ID: CN022114C12

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

% Moisture: not dec. ____ Date Analyzed: 03/02/90

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	LAB. ARTIFACT	14.97	750	J

FORM I VOA-TIC 1/87 Rev.

4A
VOLATILE METHOD BLANK SUMMARY

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 05

Lab File ID: CR021371A12 Lab Sample ID: VBLKT2

Date Analyzed: 03/02/90 Time Analyzed: 1018

Matrix: (soil/water) SOIL Level:(low/med) MED

Instrument ID: 12

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	GW-3-P-SRE	321011	C2R21011A12	1303

COMMENTS: CLP , , , , , ,321371,VOLATILE,BLANK,
TUNE: 0012 030290 0132

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKT2

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 05

Matrix: (soil/water) SOIL Lab Sample ID: VBLKT2

Sample wt/vol: 4.0 (g/mL) G Lab File ID: CR021371A12

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

% Moisture: not dec. ____ Date Analyzed: 03/02/90

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	1300	U
74-83-9	Bromomethane	1300	U
75-01-4	Vinyl Chloride	1300	U
75-00-3	Chloroethane	1300	U
75-09-2	Methylene Chloride	450	J
67-64-1	Acetone	1300	U
75-15-0	Carbon Disulfide	630	U
75-35-4	1,1-Dichloroethene	630	U
75-34-3	1,1-Dichloroethane	630	U
540-59-0	1,2-Dichloroethene (total)	630	U
67-66-3	Chloroform	630	U
107-06-2	1,2-Dichloroethane	630	U
78-93-3	2-Butanone	1300	U
71-55-6	1,1,1-Trichloroethane	630	U
56-23-5	Carbon Tetrachloride	630	U
108-05-4	Vinyl Acetate	1300	U
75-27-4	Bromodichloromethane	630	U
78-87-5	1,2-Dichloropropane	630	U
10061-01-5	cis-1,3-Dichloropropene	630	U
79-01-6	Trichloroethene	630	U
124-48-1	Dibromochloromethane	630	U
79-00-5	1,1,2-Trichloroethane	630	U
71-43-2	Benzene	630	U
10061-02-6	Trans-1,3-Dichloropropene	630	U
75-25-2	Bromoform	630	U
108-10-1	4-Methyl-2-Pentanone	1300	U
591-78-6	2-Hexanone	1300	U
127-18-4	Tetrachloroethene	630	U
79-34-5	1,1,2,2-Tetrachloroethane	630	U
108-88-3	Toluene	630	U
108-90-7	Chlorobenzene	630	U
100-41-4	Ethylbenzene	630	U
100-42-5	Styrene	630	U
1330-20-7	Total Xylenes	630	U

FORM I VOA 1/87 Rev.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLKT2

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 05

Matrix: (soil/water) SOIL Lab Sample ID: VBLKT2

Sample wt/vol: 4.0 (g/mL) G Lab File ID: CR021371A12

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

% Moisture: not dec. ____ Date Analyzed: 03/02/90

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I VOA-TIC 1/87 Rev.

4B

SEMIVOLATILE METHOD BLANK SUMMARY

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 05

Lab File ID: GH021781C15 Lab Sample ID: SBLK87

Date Extracted: 02/26/90 Extraction:(SepF/Cont/Sonc) SONC

Date Analyzed: 02/27/90 Time Analyzed: 0730

Matrix: (soil/water) SOIL Level:(low/med) MED

Instrument ID: 15

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	GW-2-P-B	320997	GH020997A15	02/27/90
02	GW-2-P-BDL	320997	GDJ20997B15	02/28/90
03	GW-2-P-S	321006	GD021006A15	02/28/90
04	GW-3-P-B	321009	GD021009A15	02/28/90

COMMENTS: CLP , , , , , ,321781,BNA,BLANK,
TUNE: 0015 022790 0533

page 1 of 1

FORM IV SV 1/87 Rev.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK87

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 05

Matrix: (soil/water) SOIL Lab Sample ID: SBLK87

Sample wt/vol: 1.0 (g/mL) G Lab File ID: GH021781C15

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

% Moisture: not dec. ____ dec. ____ Date Extracted: 02/26/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 02/27/90

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	20000	U
111-44-4	bis(2-Chloroethyl)Ether	20000	U
95-57-8	2-Chlorophenol	20000	U
541-73-1	1,3-Dichlorobenzene	20000	U
106-46-7	1,4-Dichlorobenzene	20000	U
100-51-6	Benzyl Alcohol	20000	U
95-50-1	1,2-Dichlorobenzene	20000	U
95-48-7	2-Methylphenol	20000	U
39638-32-9	bis(2-Chloroisopropyl)Ether	20000	U
106-44-5	4-Methylphenol	20000	U
621-64-7	N-Nitroso-Di-n-Propylamine	20000	U
67-72-1	Hexachloroethane	20000	U
98-95-3	Nitrobenzene	20000	U
78-59-1	Isophorone	20000	U
88-75-5	2-Nitrophenol	20000	U
105-67-9	2,4-Dimethylphenol	20000	U
65-85-0	Benzoic Acid	96000	U
111-91-1	bis(2-Chloroethoxy)Methane	20000	U
120-83-2	2,4-Dichlorophenol	20000	U
120-82-1	1,2,4-Trichlorobenzene	20000	U
91-20-3	Naphthalene	20000	U
106-47-8	4-Chloroaniline	20000	U
87-68-3	Hexachlorobutadiene	20000	U
59-50-7	4-Chloro-3-Methylphenol	20000	U
91-57-6	2-Methylnaphthalene	20000	U
77-47-4	Hexachlorocyclopentadiene	20000	U
88-06-2	2,4,6-Trichlorophenol	20000	U
95-95-4	2,4,5-Trichlorophenol	96000	U
91-58-7	2-Chloronaphthalene	20000	U
88-74-4	2-Nitroaniline	96000	U
131-11-3	Dimethyl Phthalate	20000	U
208-96-8	Acenaphthylene	20000	U
606-20-2	2,6-Dinitrotoluene	20000	U

FORM I SV-1 1/87 Rev.

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK87

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 05

Matrix: (soil/water) SOIL Lab Sample ID: SBLK87

Sample wt/vol: 1.0 (g/mL) G Lab File ID: GH021781C15

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

% Moisture: not dec. ____ dec. ____ Date Extracted: 02/26/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 02/27/90

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	96000	U
83-32-9	Acenaphthene	20000	U
51-28-5	2,4-Dinitrophenol	96000	U
100-02-7	4-Nitrophenol	96000	U
132-64-9	Dibenzofuran	20000	U
121-14-2	2,4-Dinitrotoluene	20000	U
84-66-2	Diethylphthalate	20000	U
7005-72-3	4-Chlorophenyl-phenylether	20000	U
86-73-7	Fluorene	20000	U
100-01-6	4-Nitroaniline	96000	U
534-52-1	4,6-Dinitro-2-Methylphenol	96000	U
86-30-6	N-Nitrosodiphenylamine (1)	20000	U
101-55-3	4-Bromophenyl-phenylether	20000	U
118-74-1	Hexachlorobenzene	20000	U
87-86-5	Pentachlorophenol	96000	U
85-01-8	Phenanthrene	20000	U
120-12-7	Anthracene	20000	U
84-74-2	Di-n-Butylphthalate	20000	U
206-44-0	Fluoranthene	20000	U
129-00-0	Pyrene	20000	U
85-68-7	Butylbenzylphthalate	20000	U
91-94-1	3,3'-Dichlorobenzidine	40000	U
56-55-3	Benzo(a)Anthracene	20000	U
218-01-9	Chrysene	20000	U
117-81-7	bis(2-Ethylhexyl)Phthalate	20000	U
117-84-0	Di-n-Octyl Phthalate	20000	U
205-99-2	Benzo(b)Fluoranthene	20000	U
207-08-9	Benzo(k)Fluoranthene	20000	U
50-32-8	Benzo(a)Pyrene	20000	U
193-39-5	Indeno(1,2,3-cd)Pyrene	20000	U
53-70-3	Dibenzo(a,h)Anthracene	20000	U
191-24-2	Benzo(g,h,i)Perylene	20000	U

(1) - Cannot be separated from Diphenylamine

FORM I SV-2 1/87 Rev.

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SBLK87

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 05

Matrix: (soil/water) SOIL Lab Sample ID: SBLK87

Sample wt/vol: 1.0 (g/mL) G Lab File ID: GH021781C15

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

% Moisture: not dec. ____ dec. ____ Date Extracted: 02/26/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 02/27/90

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

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I SV-TIC 1/87 Rev.

4B
SEMIVOLATILE METHOD BLANK SUMMARY

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 05

Lab File ID: GJ022886B15 Lab Sample ID: SBLK28

Date Extracted: 03/02/90 Extraction:(SepF/Cont/Sonc) SONC

Date Analyzed: 03/05/90 Time Analyzed: 1928

Matrix: (soil/water) SOIL Level:(low/med) MED

Instrument ID: 15

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	GW-3-P-S	321011	GJD21011C15	03/07/90
02	GW-3-P-SMS	321002	GJD21002C15	03/07/90
03	GW-3-P-SMSD	321004	GDR21004C15	03/06/90

COMMENTS: CLP , , , , , ,322886,BNA,BLANK,
TUNE: 0015 030590 1221

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK28

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 05

Matrix: (soil/water) SOIL Lab Sample ID: SBLK28

Sample wt/vol: 1.0 (g/mL) G Lab File ID: GJ022886B15

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

% Moisture: not dec. ____ dec. ____ Date Extracted: 03/02/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 03/05/90

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	20000	U
111-44-4	bis(2-Chloroethyl)Ether	20000	U
95-57-8	2-Chlorophenol	20000	U
541-73-1	1,3-Dichlorobenzene	20000	U
106-46-7	1,4-Dichlorobenzene	20000	U
100-51-6	Benzyl Alcohol	20000	U
95-50-1	1,2-Dichlorobenzene	20000	U
95-48-7	2-Methylphenol	20000	U
39638-32-9	bis(2-Chloroisopropyl)Ether	20000	U
106-44-5	4-Methylphenol	20000	U
621-64-7	N-Nitroso-Di-n-Propylamine	20000	U
67-72-1	Hexachloroethane	20000	U
98-95-3	Nitrobenzene	20000	U
78-59-1	Isophorone	20000	U
88-75-5	2-Nitrophenol	20000	U
105-67-9	2,4-Dimethylphenol	20000	U
65-85-0	Benzoic Acid	96000	U
111-91-1	bis(2-Chloroethoxy)Methane	20000	U
120-83-2	2,4-Dichlorophenol	20000	U
120-82-1	1,2,4-Trichlorobenzene	20000	U
91-20-3	Naphthalene	20000	U
106-47-8	4-Chloroaniline	20000	U
87-68-3	Hexachlorobutadiene	20000	U
59-50-7	4-Chloro-3-Methylphenol	20000	U
91-57-6	2-Methylnaphthalene	20000	U
77-47-4	Hexachlorocyclopentadiene	20000	U
88-06-2	2,4,6-Trichlorophenol	20000	U
95-95-4	2,4,5-Trichlorophenol	96000	U
91-58-7	2-Chloronaphthalene	20000	U
88-74-4	2-Nitroaniline	96000	U
131-11-3	Dimethyl Phthalate	20000	U
208-96-8	Acenaphthylene	20000	U
606-20-2	2,6-Dinitrotoluene	20000	U

FORM I SV-1 1/87 Rev.

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK28

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 05

Matrix: (soil/water) SOIL Lab Sample ID: SBLK28

Sample wt/vol: 1.0 (g/mL) G Lab File ID: GJ022886B15

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

% Moisture: not dec. ____ dec. ____ Date Extracted: 03/02/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 03/05/90

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	96000	U
83-32-9	Acenaphthene	20000	U
51-28-5	2,4-Dinitrophenol	96000	U
100-02-7	4-Nitrophenol	96000	U
132-64-9	Dibenzofuran	20000	U
121-14-2	2,4-Dinitrotoluene	20000	U
84-66-2	Diethylphthalate	20000	U
7005-72-3	4-Chlorophenyl-phenylether	20000	U
86-73-7	Fluorene	20000	U
100-01-6	4-Nitroaniline	96000	U
534-52-1	4,6-Dinitro-2-Methylphenol	96000	U
86-30-6	N-Nitrosodiphenylamine (1)	20000	U
101-55-3	4-Bromophenyl-phenylether	20000	U
118-74-1	Hexachlorobenzene	20000	U
87-86-5	Pentachlorophenol	96000	U
85-01-8	Phenanthrene	20000	U
120-12-7	Anthracene	20000	U
84-74-2	Di-n-Butylphthalate	20000	U
206-44-0	Fluoranthene	20000	U
129-00-0	Pyrene	20000	U
85-68-7	Butylbenzylphthalate	20000	U
91-94-1	3,3'-Dichlorobenzidine	40000	U
56-55-3	Benzo(a)Anthracene	20000	U
218-01-9	Chrysene	20000	U
117-81-7	bis(2-Ethylhexyl)Phthalate	20000	U
117-84-0	Di-n-Octyl Phthalate	20000	U
205-99-2	Benzo(b)Fluoranthene	20000	U
207-08-9	Benzo(k)Fluoranthene	20000	U
50-32-8	Benzo(a)Pyrene	20000	U
193-39-5	Indeno(1,2,3-cd)Pyrene	20000	U
53-70-3	Dibenzo(a,h)Anthracene	20000	U
191-24-2	Benzo(g,h,i)Perylene	20000	U

(1) - Cannot be separated from Diphenylamine

FORM I SV-2 1/87 Rev.

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SBLK28

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 05

Matrix: (soil/water) SOIL Lab Sample ID: SBLK28

Sample wt/vol: 1.0 (g/mL) G Lab File ID: GJ022886B15

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

% Moisture: not dec. ____ dec. ____ Date Extracted: 03/02/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 03/05/90

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

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I SV-TIC 1/87 Rev.

4C
PESTICIDE METHOD BLANK SUMMARY

Lab Name: COMPUCHEM LABORATORIES Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 5

Lab Sample ID: 321782 Lab File ID: PC021782B16

Matrix:(soil/water) SOIL Level:(low/med) MED

Date Extracted: 02/26/90 Extraction: (SepF/Cont/Sonc) SONC

Date Analyzed (1): 02/27/90 Date Analyzed (2): 03/05/90

Time Analyzed (1): 1452 Time Analyzed (2): 2119

Instrument ID (1): 12 Instrument ID (2): 10

GC Column ID (1): 2250/2401 GC Column ID (2): OV-101

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

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	SED-1MS	321014	03/05/90	
02	SED-1MSD	321015	03/05/90	
03	SS-3	321017	03/02/90	03/05/90
04	SED-1	321013	03/05/90	03/05/90
05				
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				

COMMENTS: _____

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PBLK97

Lab Name: COMPUCHEM LABORATORIES Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 5

Matrix: (soil/water) SOIL Lab Sample ID: 321782

Sample wt/vol: 1.0 (g/mL) G Lab File ID: PC021782B16

Level: (low/med) MED Date Received: / /

% Moisture: not dec. _____ dec. _____ Date Extracted: 02/26/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 02/27/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 0.50

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	60.	U
319-85-7	beta-BHC	60.	U
319-86-8	delta-BHC	60.	U
58-89-9	gamma-BHC (Lindane)	60.	U
76-44-8	Heptachlor	60.	U
309-00-2	Aldrin	60.	U
1024-57-3	Heptachlor epoxide	60.	U
959-98-8	Endosulfan I	60.	U
60-57-1	Dieldrin	120	U
72-55-9	4,4'-DDE	120	U
72-20-8	Endrin	120	U
33213-65-9	Endosulfan II	120	U
72-54-8	4,4'-DDD	120	U
1031-07-8	Endosulfan sulfate	120	U
50-29-3	4,4'-DDT	120	U
72-43-5	Methoxychlor	600	U
53494-70-5	Endrin ketone	120	U
5103-71-9	alpha-Chlordane	600	U
5103-74-2	gamma-Chlordane	600	U
8001-35-2	Toxaphene	1200	U
12674-11-2	Aroclor-1016	600	U
11104-28-2	Aroclor-1221	600	U
11141-16-5	Aroclor-1232	600	U
53469-21-9	Aroclor-1242	600	U
12672-29-6	Aroclor-1248	600	U
11097-69-1	Aroclor-1254	1200	U
11096-82-5	Aroclor-1260	1200	U

FORM I PEST 1/87 Rev.

6. By fraction (VOA , SV only) - internal standard area data (Form VIII)

8A
VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 05

Lab File ID (Standard): CS900227C12 Date Analyzed: 02/27/90

Instrument ID: 12 Time Analyzed: 0117

Matrix:(soil/water) SOIL Level:(low/med) MED Column:(pack/cap) CAP

		IS1(BCM) AREA #	RT	IS2(DFB) AREA #	RT	IS3(CBZ) AREA #	RT
	12 HOUR STD	55100	5.25	251000	6.92	214000	11.57
	UPPER LIMIT	110200		502000		428000	
	LOWER LIMIT	27550		125500		107000	
	EPA SAMPLE NO.						
01	GW-2-P-B	53400	5.25	247000	6.93	233000	11.60
02	GW-2-P-S	46900	5.20	230000	6.92	207000	11.62
03	VBLKT2	51300	5.18	247000	6.83	209000	11.47

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

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

Column used to flag internal standard area values with an asterisk

8A
VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 05

Lab File ID (Standard): CT900301A12 Date Analyzed: 03/01/90

Instrument ID: 12 Time Analyzed: 1103

Matrix:(soil/water) SOIL Level:(low/med) MED Column:(pack/cap) CAP

		IS1(BCM) AREA #	RT	IS2(DFB) AREA #	RT	IS3(CBZ) AREA #	RT
	12 HOUR STD	44500	5.10	235000	6.80	185000	11.50
	UPPER LIMIT	89000		470000		370000	
	LOWER LIMIT	22250		117500		92500	
	EPA SAMPLE NO.						
01	GW-2-P-SRE	46800	5.07	213000	6.77	201000	11.49
02	GW-3-P-B	47200	5.10	234000	6.80	206000	11.50
03	GW-3-P-BMS	45600	5.05	225000	6.75	201000	11.49
04	GW-3-P-BMSD	42000	4.97	200000	6.70	188000	11.49
05	VBLKW9	48000	5.12	245000	6.82	189000	11.50

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

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

Column used to flag internal standard area values with an asterisk

8A
VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 05

Lab File ID (Standard): CS900302C12 Date Analyzed: 03/02/90

Instrument ID: 12 Time Analyzed: 0209

Matrix:(soil/water) SOIL Level:(low/med) MED Column:(pack/cap) CAP

		IS1(BCM) AREA #	RT	IS2(DFB) AREA #	RT	IS3(CBZ) AREA #	RT
	12 HOUR STD	38200	5.12	202000	6.83	166000	11.52
	UPPER LIMIT	76400		404000		332000	
	LOWER LIMIT	19100		101000		83000	
	EPA SAMPLE NO.						
01	GW-3-P-S	41100	5.13	212000	6.82	181000	11.54
02	GW-3-P-SRE	44200	5.13	218000	6.82	182000	11.50
03	VBLKX1	43500	5.15	228000	6.85	185000	11.55
04	VBLKT2	46200	5.10	243000	6.80	191000	11.49

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

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

Column used to flag internal standard area values with an asterisk

8B

SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 05

Lab File ID (Standard): HG900227C15 Date Analyzed: 02/27/90

Instrument ID: 15 Time Analyzed: 0548

		IS1(DCB) AREA #	RT	IS2(NPT) AREA #	RT	IS3(ANT) AREA #	RT
	12 HOUR STD	112000	6.92	344000	8.69	181000	11.25
	UPPER LIMIT	224000		688000		362000	
	LOWER LIMIT	56000		172000		90500	
	EPA SAMPLE NO.						
01	GW-2-P-B	167000	6.95	477000	8.74	274000	11.32
02	SBLK87	130000	6.93	392000	8.70	189000	11.27

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

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

Column used to flag internal standard area values with an asterisk

8C

SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 05

Lab File ID (Standard): HG900227C15 Date Analyzed: 02/27/90

Instrument ID: 15 Time Analyzed: 0548

		IS4(PHN) AREA #	RT	IS5(CRY) AREA #	RT	IS6(PRY) AREA #	RT
	12 HOUR STD	267000	13.40	234000	17.27	181000	19.89
	UPPER LIMIT	534000		468000		362000	
	LOWER LIMIT	133500		117000		90500	
	EPA SAMPLE NO.						
01	GW-2-P-B	476000	13.49	350000	17.42	225000	20.02
02	SBLK87	242000	13.40	165000	17.29	135000	19.89

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

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

Column used to flag internal standard area values with an asterisk

8B
SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 05

Lab File ID (Standard): HH900228A15 Date Analyzed: 02/28/90

Instrument ID: 15 Time Analyzed: 1221

		IS1(DCB) AREA #	RT	IS2(NPT) AREA #	RT	IS3(ANT) AREA #	RT
	12 HOUR STD	129000	6.88	421000	8.67	216000	11.24
	UPPER LIMIT	258000		842000		432000	
	LOWER LIMIT	64500		210500		108000	
	EPA SAMPLE NO.						
01	GW-2-P-BDL	168000	6.98	477000	8.79	225000	11.35
02	GW-2-P-S	103000	6.93	290000	8.72	141000	11.29
03	GW-3-P-B	153000	6.97	446000	8.77	215000	11.32

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

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

Column used to flag internal standard area values with an asterisk

FORM VIII SV-1 1/87 Rev.

8C

SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 05

Lab File ID (Standard): HH900228A15 Date Analyzed: 02/28/90

Instrument ID: 15 Time Analyzed: 1221

		IS4(PHN) AREA #	RT	IS5(CRY) AREA #	RT	IS6(PRY) AREA #	RT
	12 HOUR STD	269000	13.37	189000	17.25	165000	19.84
	UPPER LIMIT	538000		378000		330000	
	LOWER LIMIT	134500		94500		82500	
	EPA SAMPLE NO.						
01	GW-2-P-BDL	380000	13.49	279000	17.42	142000	20.10
02	GW-2-P-S	222000	13.45	134000	17.35	88000	20.00
03	GW-3-P-B	295000	13.49	253000	17.39	125000	20.05

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

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

Column used to flag internal standard area values with an asterisk

8B

SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 05

Lab File ID (Standard): HH900305A15 Date Analyzed: 03/05/90

Instrument ID: 15 Time Analyzed: 1319

		IS1(DCB) AREA #	RT	IS2(NPT) AREA #	RT	IS3(ANT) AREA #	RT
	12 HOUR STD	153000	7.00	426000	8.87	216000	11.57
	UPPER LIMIT	306000		852000		432000	
	LOWER LIMIT	76500		213000		108000	
	EPA SAMPLE NO.						
01	SBLK28	122000	6.95	303000	8.82	139000	11.50

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

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

Column used to flag internal standard area values with an asterisk

8C

SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 05

Lab File ID (Standard): HH900305A15 Date Analyzed: 03/05/90

Instrument ID: 15 Time Analyzed: 1319

		IS4(PHN) AREA #	RT	IS5(CRY) AREA #	RT	IS6(PRY) AREA #	RT
	12 HOUR STD	266000	13.84	161000	17.94	85300	20.50
	UPPER LIMIT	532000		322000		170600	
	LOWER LIMIT	133000		80500		42650	
	EPA SAMPLE NO.						
01	SBLK28	177000	13.75	114000	17.82	97700	20.30

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

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

Column used to flag internal standard area values with an asterisk

8B
SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 05

Lab File ID (Standard): HI900306C15 Date Analyzed: 03/06/90

Instrument ID: 15 Time Analyzed: 0334

		IS1(DCB) AREA #	RT	IS2(NPT) AREA #	RT	IS3(ANT) AREA #	RT
	12 HOUR STD	164000	6.88	446000	8.75	222000	11.42
	UPPER LIMIT	328000		892000		444000	
	LOWER LIMIT	82000		223000		111000	
	EPA SAMPLE NO.						
01	GW-3-P-SMSD	159000	6.82	420000	8.67	206000	11.35

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

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

Column used to flag internal standard area values with an asterisk

8C

SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 05

Lab File ID (Standard): HI900306C15 Date Analyzed: 03/06/90

Instrument ID: 15 Time Analyzed: 0334

		IS4(PHN) AREA #	RT	IS5(CRY) AREA #	RT	IS6(PRY) AREA #	RT
	12 HOUR STD	304000	13.67	200000	17.75	112000	20.17
	UPPER LIMIT	608000		400000		224000	
	LOWER LIMIT	152000		100000		56000	
	EPA SAMPLE NO.						
01	GW-3-P-SMSD	254000	13.62	169000	17.69	128000	20.09

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

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

Column used to flag internal standard area values with an asterisk

8B

SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 05

Lab File ID (Standard): HG900306B15 Date Analyzed: 03/06/90

Instrument ID: 15 Time Analyzed: 2030

		IS1(DCB) AREA #	RT	IS2(NPT) AREA #	RT	IS3(ANT) AREA #	RT
	12 HOUR STD	131000	6.88	356000	8.75	170000	11.44
	UPPER LIMIT	262000		712000		340000	
	LOWER LIMIT	65500		178000		85000	
	EPA SAMPLE NO.						
01	GW-3-P-S	150000	6.82	418000	8.67	203000	11.35
02	GW-3-P-SMS	207000	6.85	554000	8.70	239000	11.37

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

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

Column used to flag internal standard area values with an asterisk

8C
SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 05

Lab File ID (Standard): HG900306B15 Date Analyzed: 03/06/90

Instrument ID: 15 Time Analyzed: 2030

		IS4(PHN) AREA #	RT	IS5(CRY) AREA #	RT	IS6(PRY) AREA #	RT
	12 HOUR STD	210000	13.70	157000	17.80	132000	20.30
	UPPER LIMIT	420000		314000		264000	
	LOWER LIMIT	105000		78500		66000	
	EPA SAMPLE NO.						
01	GW-3-P-S	332000	13.60	267000	17.69	108000	20.09
02	GW-3-P-SMS	316000	13.62	228000	17.69	169000	20.10

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

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

Column used to flag internal standard area values with an asterisk

COMPUCHEM LABORATORIES, INC. P.O. Box 12652 3308 Chapel Hill/Nelson Highway Research Triangle Park, NC 27709 (919) 549-8263

RECEIVED
MAY 03 1990
LAWLER, MATUSKY & SKELLY ENGINEERS

02/MAY/90

Lawler Matusky & Skelly (LMS)
12th floor
One Blue Hill Plaza
PO BOX 1509
Pearl River, NY 10965

Subject: Report of Data - Account Number 273801

Enclosed herewith are the results of analytical work and associated Quality Control data for the samples received by CompuChem@ under the referenced account number.

As you know, CLP service is performed in accordance with EPA methodologies as defined for the National Contract Laboratory Program; 'SOW For Organic Analysis; Multi-Media, Multi-Concentration' effective 2/88, revision 9/88. Your original data has been stored and is available for future reference.

Thank you for selecting CompuChem@ Laboratories for your sample analysis. We would like to continue providing you analytical support and services in the future. If you should have questions or require additional analytical services, please contact your representative at 1-919-549-8263.

Sincerely,

for Elise L. Cobb
Supervisor, Report Deliverables

Attachment

COMPUCHEM
LABORATORIES, INC.

02/MAY/90

Lawler Matusky & Skelly (LMS)
12th floor
One Blue Hill Plaza
PO BOX 1509
Pearl River, NY 10965

ACCOUNT #: 273801

CC#	SAMPLE-ID	RECEIPT DATE
332806	GW-2-P-B	4/18/90
332810	GW-2-P-S	4/18/90
332811	GW-3-P-B	4/18/90
332812	GW-3-P-S	4/18/90

TOTAL NUMBER OF SAMPLES = 4

II. SAMPLE DATA PACKAGE

The Sample Data Package shall include data for analyses of all samples in one Sample Delivery Group, including field samples, reanalyses, blanks, matrix spikes and matrix spike duplicates. The Sample Data Package consists of the following:

1. CASE NARRATIVE
2. TRAFFIC REPORTS
3. VOLATILES DATA
4. SEMIVOLATILES DATA
5. PESTICIDE/PCB DATA

CASE#: 19300 SDG#: 1 SAS#

1. CASE NARRATIVE

This document shall be clearly labeled "Case Narrative" and shall contain: laboratory name; case number; sample numbers in the Sample Delivery Group (SDG), differentiating between initial analyses and re-analyses; SDG number; Contract number; and detailed documentation of any quality control, sample, shipment and/or analytical problems encountered in processing the samples reported in the data package.

Whenever data from sample re-analyses are submitted, the Contractor shall state in the Case Narrative for each re-analysis, whether it considers the re-analysis to be billable, and if so, why.

The contactor must also include documentation of any internal quality control processes used, a summary of corrective actions taken, and the resolution.

COMPUCHEM LABORATORIES, INC. P.O. Box 12652 3308 Chapel Hill/Nelson Highway Research Triangle Park, NC 27709 (919) 549-8263

CLP CASE NARRATIVE CASE # 19300
CONTRACT # 2-88 (REVS) SDG# 1
COMPUCHEM LABORATORIES INC.

SAMPLES: GW-2-P-B, GW-2-P-S, GW-3-P-B, GW-3-P-S

This portion of Case # 19300 consisted of four oily samples for pesticide analysis only. They were received intact on 4/18/90 via Federal Express in properly sealed shipping containers with traffic reports.

PESTICIDES:
All pesticide fractions were extracted and analyzed as Medium Levels within holding time requirements. None of the samples contained any target compounds. All surrogates met recovery criteria. The matrix spike/matrix spike duplicate results were acceptable.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Note: This report was paginated for reference and accountability in decreasing numerical sequence.

Sarah A. Hubbard 5/1/90
Technical Reviewer

COMPUCHEM LABORATORIES

QUALITY ASSURANCE NOTICE

With the advent of the new organics Statement of Work (SOW 2/88, Revision: 9/88) participants in EPA's Contract Laboratory Program (CLP) are required to provide hard copy and diskette deliverables. CompuChem employs the Finnigan QA Formaster Program (Format A) to generate these requirements using data files from our analytical instrumentation. Currently, and independently, quantitation reports are generated by the instruments and are used with CompuChem-developed software to calculate results. The GC and GC/MS quantitation routines employ the convention of carrying at least one extra significant figure until the mathematical computations are completed. Then, the quantitative results are rounded to the SOW-required number of significant figures for reporting. In addition, the algorithm used by the Formaster Program is slightly different than that employed in Compuchem's software routines. Therefore, results presented in the supportive data supplied with our deliverables packages may be slightly different than those which appear on the hard copy forms generated via Formaster.

This notice serves to alert the end users of these data packages as to the reason why slight differences may be observed.

Robert E. Meierer

Robert E. Meierer
Director of Quality Assurance

COMPUCHEM LABORATORIES, INC P.O Box 12652 3308 Chapel Hill/Nelson Highway Research Triangle Park, NC 27709 (919) 549-8263

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GW-2-P-B

Lab Name: COMPUCHEM LABORATORIES Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 1

Matrix: (soil/water) SOIL Lab Sample ID: 332806

Sample wt/vol: 1.0 (g/mL) G Lab File ID: _____

Level: (low/med) MED Date Received: 04/18/90

% Moisture: not dec. _____ dec. _____ Date Extracted: 04/18/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 04/20/90

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	120	U
319-85-7	beta-BHC	120	U
319-86-8	delta-BHC	120	U
58-89-9	gamma-BHC (Lindane)	120	U
76-44-8	Heptachlor	120	U
309-00-2	Aldrin	120	U
1024-57-3	Heptachlor epoxide	120	U
959-98-8	Endosulfan I	120	U
60-57-1	Dieldrin	240	U
72-55-9	4,4'-DDE	240	U
72-20-8	Endrin	240	U
33213-65-9	Endosulfan II	240	U
72-54-8	4,4'-DDD	240	U
1031-07-8	Endosulfan sulfate	240	U
50-29-3	4,4'-DDT	240	U
72-43-5	Methoxychlor	1200	U
53494-70-5	Endrin ketone	240	U
5103-71-9	alpha-Chlordane	1200	U
5103-74-2	gamma-Chlordane	1200	U
8001-35-2	Toxaphene	2400	U
12674-11-2	Aroclor-1016	1200	U
11104-28-2	Aroclor-1221	1200	U
11141-16-5	Aroclor-1232	1200	U
53469-21-9	Aroclor-1242	1200	U
12672-29-6	Aroclor-1248	1200	U
11097-69-1	Aroclor-1254	2400	U
11096-82-5	Aroclor-1260	2400	U

FORM I PEST 1/87 Rev.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GW-2-P-S

Lab Name: COMPUCHEM LABORATORIES Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 1

Matrix: (soil/water) SOIL Lab Sample ID: 332810

Sample wt/vol: 1.0 (g/mL) G Lab File ID: _____

Level: (low/med) MED Date Received: 04/18/90

% Moisture: not dec. _____ dec. _____ Date Extracted: 04/18/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 04/20/90

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	120	U
319-85-7	beta-BHC	120	U
319-86-8	delta-BHC	120	U
58-89-9	gamma-BHC (Lindane)	120	U
76-44-8	Heptachlor	120	U
309-00-2	Aldrin	120	U
1024-57-3	Heptachlor epoxide	120	U
959-98-8	Endosulfan I	120	U
60-57-1	Dieldrin	240	U
72-55-9	4,4'-DDE	240	U
72-20-8	Endrin	240	U
33213-65-9	Endosulfan II	240	U
72-54-8	4,4'-DDD	240	U
1031-07-8	Endosulfan sulfate	240	U
50-29-3	4,4'-DDT	240	U
72-43-5	Methoxychlor	1200	U
53494-70-5	Endrin ketone	240	U
5103-71-9	alpha-Chlordane	1200	U
5103-74-2	gamma-Chlordane	1200	U
8001-35-2	Toxaphene	2400	U
12674-11-2	Aroclor-1016	1200	U
11104-28-2	Aroclor-1221	1200	U
11141-16-5	Aroclor-1232	1200	U
53469-21-9	Aroclor-1242	1200	U
12672-29-6	Aroclor-1248	1200	U
11097-69-1	Aroclor-1254	2400	U
11096-82-5	Aroclor-1260	2400	U

FORM I PEST 1/87 Rev.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GW-3-P-B

Lab Name: COMPUCHEM LABORATORIES Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 1

Matrix: (soil/water) SOIL Lab Sample ID: 332811

Sample wt/vol: 1.0 (g/mL) G Lab File ID: _____

Level: (low/med) MED Date Received: 04/18/90

% Moisture: not dec. _____ dec. _____ Date Extracted: 04/18/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 04/20/90

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	120	U
319-85-7	beta-BHC	120	U
319-86-8	delta-BHC	120	U
58-89-9	gamma-BHC (Lindane)	120	U
76-44-8	Heptachlor	120	U
309-00-2	Aldrin	120	U
1024-57-3	Heptachlor epoxide	120	U
959-98-8	Endosulfan I	120	U
60-57-1	Dieldrin	240	U
72-55-9	4,4'-DDE	240	U
72-20-8	Endrin	240	U
33213-65-9	Endosulfan II	240	U
72-54-8	4,4'-DDD	240	U
1031-07-8	Endosulfan sulfate	240	U
50-29-3	4,4'-DDT	240	U
72-43-5	Methoxychlor	1200	U
53494-70-5	Endrin ketone	240	U
5103-71-9	alpha-Chlordane	1200	U
5103-74-2	gamma-Chlordane	1200	U
8001-35-2	Toxaphene	2400	U
12674-11-2	Aroclor-1016	1200	U
11104-28-2	Aroclor-1221	1200	U
11141-16-5	Aroclor-1232	1200	U
53469-21-9	Aroclor-1242	1200	U
12672-29-6	Aroclor-1248	1200	U
11097-69-1	Aroclor-1254	2400	U
11096-82-5	Aroclor-1260	2400	U

FORM I PEST 1/87 Rev.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GW-3-P-S

Lab Name: COMPUCHEM LABORATORIES Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 1

Matrix: (soil/water) SOIL Lab Sample ID: 332812

Sample wt/vol: 1.0 (g/mL) G Lab File ID: _____

Level: (low/med) MED Date Received: 04/18/90

% Moisture: not dec. _____ dec. _____ Date Extracted: 04/18/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 04/20/90

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	120	U
319-85-7	beta-BHC	120	U
319-86-8	delta-BHC	120	U
58-89-9	gamma-BHC (Lindane)	120	U
76-44-8	Heptachlor	120	U
309-00-2	Aldrin	120	U
1024-57-3	Heptachlor epoxide	120	U
959-98-8	Endosulfan I	120	U
60-57-1	Dieldrin	240	U
72-55-9	4,4'-DDE	240	U
72-20-8	Endrin	240	U
33213-65-9	Endosulfan II	240	U
72-54-8	4,4'-DDD	240	U
1031-07-8	Endosulfan sulfate	240	U
50-29-3	4,4'-DDT	240	U
72-43-5	Methoxychlor	1200	U
53494-70-5	Endrin ketone	240	U
5103-71-9	alpha-Chlordane	1200	U
5103-74-2	gamma-Chlordane	1200	U
8001-35-2	Toxaphene	2400	U
12674-11-2	Aroclor-1016	1200	U
11104-28-2	Aroclor-1221	1200	U
11141-16-5	Aroclor-1232	1200	U
53469-21-9	Aroclor-1242	1200	U
12672-29-6	Aroclor-1248	1200	U
11097-69-1	Aroclor-1254	2400	U
11096-82-5	Aroclor-1260	2400	U

FORM I PEST 1/87 Rev.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GW-2-P-BMSD

Lab Name: COMPUCHEM LABORATORIES Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 1

Matrix: (soil/water) SOIL Lab Sample ID: 332808

Sample wt/vol: 1.0 (g/mL) G Lab File ID: _____

Level: (low/med) MED Date Received: 04/18/90

% Moisture: not dec. _____ dec. _____ Date Extracted: 04/18/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 04/19/90

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	120	U
319-85-7	beta-BHC	120	U
319-86-8	delta-BHC	120	U
58-89-9	gamma-BHC (Lindane)	120	U
76-44-8	Heptachlor	120	U
309-00-2	Aldrin	120	U
1024-57-3	Heptachlor epoxide	120	U
959-98-8	Endosulfan I	120	U
60-57-1	Dieldrin	240	U
72-55-9	4,4'-DDE	240	U
72-20-8	Endrin	240	U
33213-65-9	Endosulfan II	240	U
72-54-8	4,4'-DDD	240	U
1031-07-8	Endosulfan sulfate	240	U
50-29-3	4,4'-DDT	240	U
72-43-5	Methoxychlor	1200	U
53494-70-5	Endrin ketone	240	U
5103-71-9	alpha-Chlordane	1200	U
5103-74-2	gamma-Chlordane	1200	U
8001-35-2	Toxaphene	2400	U
12674-11-2	Aroclor-1016	1200	U
11104-28-2	Aroclor-1221	1200	U
11141-16-5	Aroclor-1232	1200	U
53469-21-9	Aroclor-1242	1200	U
12672-29-6	Aroclor-1248	1200	U
11097-69-1	Aroclor-1254	2400	U
11096-82-5	Aroclor-1260	2400	U

FORM I PEST 1/87 Rev.

3. By fraction (VOA, SV, PEST) - surrogate spike analysis results (Form II) by matrix (Water and/or Soil) and for soil, by concentration (Low or Medium)

2F
SOIL PESTICIDE SURROGATE RECOVERY

Lab Name: COMPUCHEM LABORATORIES Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 1

Level:(low/med) MED

	EPA SAMPLE NO.	S1 (DBC)#	OTHER
01	PBLK79	75	0
02	GW-2-P-BMS	62	0
03	GW-2-P-BMSD	61	0
04	GW-3-P-B	104	0
05	GW-2-P-S	110	0
06	GW-3-P-S	102	0
07	GW-2-P-B	129	0
08			
09			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			

ADVISORY QC LIMITS (20-150)

S1 (DBC) = Dibutylchlorendate

Column to be used to flag recovery values

* Values outside of QC limits

D Surrogates diluted out

4. By fraction (VOA, SV, PEST) - matrix spike/matrix spike duplicate results (Form III)

5. By fraction (VOA, SV, PEST) - blank data (Form IV) and tabulated results (Form I) including tentatively identified compounds (Form I, TIC) (VOA and SV only).

4C

PESTICIDE METHOD BLANK SUMMARY

Lab Name: COMPUCHEM LABORATORIES Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 1

Lab Sample ID: 333073 Lab File ID: _____

Matrix:(soil/water) SOIL Level:(low/med) MED

Date Extracted: 04/18/90 Extraction: (SepF/Cont/Sonc) SONC

Date Analyzed (1): 04/19/90 Date Analyzed (2): 04/23/90

Time Analyzed (1): 1931 Time Analyzed (2): 1442

Instrument ID (1): 07 Instrument ID (2): 03

GC Column ID (1): 2250/2401 GC Column ID (2): OV-101

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

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	GW-2-P-BMS	332807	04/19/90	
02	GW-2-P-BMSD	332808	04/19/90	
03	GW-3-P-B	332811	04/20/90	04/23/90
04	GW-2-P-S	332810	04/20/90	04/23/90
05	GW-3-P-S	332812	04/20/90	04/23/90
06	GW-2-P-B	332806	04/20/90	04/23/90
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				

COMMENTS: _____

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PBLK79

Lab Name: COMPUCHEM LABORATORIES Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 1

Matrix: (soil/water) SOIL Lab Sample ID: 333073

Sample wt/vol: 1.0 (g/mL) G Lab File ID: _____

Level: (low/med) MED Date Received: / /

% Moisture: not dec. _____ dec. _____ Date Extracted: 04/18/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 04/19/90

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	120	U
319-85-7	beta-BHC	120	U
319-86-8	delta-BHC	120	U
58-89-9	gamma-BHC (Lindane)	120	U
76-44-8	Heptachlor	120	U
309-00-2	Aldrin	120	U
1024-57-3	Heptachlor epoxide	120	U
959-98-8	Endosulfan I	120	U
60-57-1	Dieldrin	240	U
72-55-9	4,4'-DDE	240	U
72-20-8	Endrin	240	U
33213-65-9	Endosulfan II	240	U
72-54-8	4,4'-DDD	240	U
1031-07-8	Endosulfan sulfate	240	U
50-29-3	4,4'-DDT	240	U
72-43-5	Methoxychlor	1200	U
53494-70-5	Endrin ketone	240	U
5103-71-9	alpha-Chlordane	1200	U
5103-74-2	gamma-Chlordane	1200	U
8001-35-2	Toxaphene	2400	U
12674-11-2	Aroclor-1016	1200	U
11104-28-2	Aroclor-1221	1200	U
11141-16-5	Aroclor-1232	1200	U
53469-21-9	Aroclor-1242	1200	U
12672-29-6	Aroclor-1248	1200	U
11097-69-1	Aroclor-1254	2400	U
11096-82-5	Aroclor-1260	2400	U

FORM I PEST 1/87 Rev.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GW-2-P-BMS

Lab Name: COMPUCHEM LABORATORIES Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 1

Matrix: (soil/water) SOIL Lab Sample ID: 332807

Sample wt/vol: 1.0 (g/mL) G Lab File ID: _____

Level: (low/med) MED Date Received: 04/18/90

% Moisture: not dec. _____ dec. _____ Date Extracted: 04/18/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 04/19/90

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	120	U
319-85-7	beta-BHC	120	U
319-86-8	delta-BHC	120	U
58-89-9	gamma-BHC (Lindane)	120	U
76-44-8	Heptachlor	120	U
309-00-2	Aldrin	120	U
1024-57-3	Heptachlor epoxide	120	U
959-98-8	Endosulfan I	120	U
60-57-1	Dieldrin	240	U
72-55-9	4,4'-DDE	240	U
72-20-8	Endrin	240	U
33213-65-9	Endosulfan II	240	U
72-54-8	4,4'-DDD	240	U
1031-07-8	Endosulfan sulfate	240	U
50-29-3	4,4'-DDT	240	U
72-43-5	Methoxychlor	1200	U
53494-70-5	Endrin ketone	240	U
5103-71-9	alpha-Chlordane	1200	U
5103-74-2	gamma-Chlordane	1200	U
8001-35-2	Toxaphene	2400	U
12674-11-2	Aroclor-1016	1200	U
11104-28-2	Aroclor-1221	1200	U
11141-16-5	Aroclor-1232	1200	U
53469-21-9	Aroclor-1242	1200	U
12672-29-6	Aroclor-1248	1200	U
11097-69-1	Aroclor-1254	2400	U
11096-82-5	Aroclor-1260	2400	U

FORM I PEST 1/87 Rev.

8B

SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 01

Lab File ID (Standard): HG900225B15 Date Analyzed: 02/25/90

Instrument ID: 15 Time Analyzed: 1731

		IS1(DCB) AREA #	RT	IS2(NPT) AREA #	RT	IS3(ANT) AREA #	RT
	12 HOUR STD	131000	7.12	465000	8.92	234000	11.50
	UPPER LIMIT	262000		930000		468000	
	LOWER LIMIT	65500		232500		117000	
	EPA SAMPLE NO.						
01	SW-1MSD	164000	7.07	571000	8.87	295000	11.44

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

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

Column used to flag internal standard area values with an asterisk

8C

SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 01

Lab File ID (Standard): HG900225B15 Date Analyzed: 02/25/90

Instrument ID: 15 Time Analyzed: 1731

		IS4(PHN) AREA #	RT	IS5(CRY) AREA #	RT	IS6(PRY) AREA #	RT
	12 HOUR STD	319000	13.67	256000	17.60	225000	20.45
	UPPER LIMIT	638000		512000		450000	
	LOWER LIMIT	159500		128000		112500	
	EPA SAMPLE NO.						
01	SW-1MSD	307000	13.62	253000	17.54	204000	20.35

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

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

Column used to flag internal standard area values with an asterisk

8B
SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 01

Lab File ID (Standard): HG900226B15 Date Analyzed: 02/26/90

Instrument ID: 15 Time Analyzed: 1553

		IS1(DCB) AREA #	RT	IS2(NPT) AREA #	RT	IS3(ANT) AREA #	RT
	12 HOUR STD	127000	6.95	388000	8.75	222000	11.32
	UPPER LIMIT	254000		776000		444000	
	LOWER LIMIT	63500		194000		111000	
	EPA SAMPLE NO.						
01	FIELDBLANK	125000	7.00	402000	8.80	208000	11.35
02	GW-1	160000	6.98	502000	8.79	260000	11.35
03	SBLK02	103000	6.98	321000	8.79	172000	11.35

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

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

Column used to flag internal standard area values with an asterisk

8C

SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 01

Lab File ID (Standard): HG900226B15 Date Analyzed: 02/26/90

Instrument ID: 15 Time Analyzed: 1553

		IS4(PHN) AREA #	RT	IS5(CRY) AREA #	RT	IS6(PRY) AREA #	RT
	12 HOUR STD	317000	13.47	267000	17.34	215000	19.99
	UPPER LIMIT	634000		534000		430000	
	LOWER LIMIT	158500		133500		107500	
	EPA SAMPLE NO.						
01	FIELDBLANK	278000	13.50	187000	17.40	147000	20.10
02	GW-1	372000	13.49	349000	17.39	274000	20.07
03	SBLK02	234000	13.49	219000	17.37	189000	20.04

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

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

Column used to flag internal standard area values with an asterisk

8B

SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 01

Lab File ID (Standard): HH900301C15 Date Analyzed: 03/01/90

Instrument ID: 15 Time Analyzed: 0212

		IS1(DCB) AREA #	RT	IS2(NPT) AREA #	RT	IS3(ANT) AREA #	RT
	12 HOUR STD	133000	7.10	423000	8.95	212000	11.64
	UPPER LIMIT	266000		846000		424000	
	LOWER LIMIT	66500		211500		106000	
	EPA SAMPLE NO.						
01	SW-1MS	134000	7.13	438000	9.02	224000	11.72

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

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

Column used to flag internal standard area values with an asterisk

8C
SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 01

Lab File ID (Standard): HH900301C15 Date Analyzed: 03/01/90

Instrument ID: 15 Time Analyzed: 0212

		IS4(PHN) AREA #	RT	IS5(CRY) AREA #	RT	IS6(PRY) AREA #	RT
	12 HOUR STD	313000	13.92	193000	18.00	140000	20.60
	UPPER LIMIT	626000		386000		280000	
	LOWER LIMIT	156500		96500		70000	
	EPA SAMPLE NO.						
01	SW-1MS	290000	13.97	215000	18.05	176000	20.74

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

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

Column used to flag internal standard area values with an asterisk

8B
SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 01

Lab File ID (Standard): HG900301B15 Date Analyzed: 03/01/90

Instrument ID: 15 Time Analyzed: 2049

		IS1(DCB) AREA #	RT	IS2(NPT) AREA #	RT	IS3(ANT) AREA #	RT
	12 HOUR STD	66000	6.98	192000	8.87	80800	11.57
	UPPER LIMIT	132000		384000		161600	
	LOWER LIMIT	33000		96000		40400	
	EPA SAMPLE NO.						
01	GW-1RE	76700	7.03	256000	8.92	120000	11.64
02	GW-2	63500	7.03	192000	8.94	103000	11.64
03	SBLK23	77700	7.03	227000	8.92	108000	11.64

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

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

Column used to flag internal standard area values with an asterisk

FORM VIII SV-1 1/87 Rev.

8C
SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 01

Lab File ID (Standard): HG900301B15 Date Analyzed: 03/01/90

Instrument ID: 15 Time Analyzed: 2049

		IS4(PHN) AREA #	RT	IS5(CRY) AREA #	RT	IS6(PRY) AREA #	RT
	12 HOUR STD	102000	13.84	70500	17.94	51500	20.52
	UPPER LIMIT	204000		141000		103000	
	LOWER LIMIT	51000		35250		25750	
	EPA SAMPLE NO.						
01	GW-1RE	162000	13.90	91900	18.00	71700	20.59
02	GW-2	148000	13.94	80400	18.05	34600	20.65
03	SBLK23	141000	13.89	86100	17.99	69200	20.59

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

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

Column used to flag internal standard area values with an asterisk

8B
SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 01

Lab File ID (Standard): HG900302B15 Date Analyzed: 03/02/90

Instrument ID: 15 Time Analyzed: 1628

		IS1(DCB) AREA #	RT	IS2(NPT) AREA #	RT	IS3(ANT) AREA #	RT
	12 HOUR STD	151000	7.05	478000	8.92	224000	11.64
	UPPER LIMIT	302000		956000		448000	
	LOWER LIMIT	75500		239000		112000	
	EPA SAMPLE NO.						
01	SBLK29	165000	7.03	475000	8.92	241000	11.62

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

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

Column used to flag internal standard area values with an asterisk

8C

SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 19300 SAS No.: _____ SDG No.: 01

Lab File ID (Standard): HG900302B15 Date Analyzed: 03/02/90

Instrument ID: 15 Time Analyzed: 1628

		IS4(PHN) AREA #	RT	IS5(CRY) AREA #	RT	IS6(PRY) AREA #	RT
	12 HOUR STD	306000	13.90	226000	18.00	192000	20.59
	UPPER LIMIT	612000		452000		384000	
	LOWER LIMIT	153000		113000		96000	
	EPA SAMPLE NO.						
01	SBLK29	277000	13.87	155000	17.97	121000	20.54

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

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

Column used to flag internal standard area values with an asterisk

APPENDIX J

QA/QC REPORTS

APPENDIX J

QA/QC REPORTS

Appendix J contains the case narratives from the data packages submitted by Compuchem for the samples originally collected in December 1988 and the additional samples collected in February 1990. The case narratives discuss any problems or unusual circumstances encountered during sample analysis.

The results of the original analyses were validated by NYtest Environmental Inc. (NEI) and are reproduced in this appendix. The results of the additional samples were reviewed by LMS' quality assurance officer. LMS' usability reports for both sets of data are also presented here.

NEI's validation of the original data concluded that a portion of the volatile, semivolatile, and pesticide fractions were noncompliant for various reasons cited in their report. Due to reporting errors, the metals data required resubmission; upon resubmission LMS concluded that the metals data are usable. A portion of the volatile and semivolatile samples found noncompliant were found unusable by LMS because of holding time problems. The reasoning for these determinations can be found in the usability report.

LMS' review concluded that the results from the additional samples are usable to indicate that major petroleum contamination exists on the site; however, because of poor QC results the data should not be used for strict quantitation.

COMPUCHEM LABORATORIES

10/JAN/89

Lawler Matusky & Skelly (LMS)
One Blue Hill Plaza
PO Box 1509
Ms. Deborah Wright
Pearl River, NY 10965

ACCOUNT #: 273801

CC#	SAMPLE-ID	RECEIPT DATE
235820	GW-3	12/14/88
235832	FIELD BLANK	12/14/88
235833	SW-1	12/14/88
235838	GW-1	12/14/88
235846	GW-2	12/14/88

TOTAL NUMBER OF SAMPLES = 5

Case Summary Narrative: Case #
Lawler Matusky & Skelly (LMS)
(273801-15767)

The samples were received intact on December 14, 1988 with the chain-of-custody. The case consists of five (5) water samples for complete HSL metals and cyanide analysis. The enclosed cover page reflects Lawler Matusky & Skeller (LMS) and CompuChem identifiers.

The associated quality control sample spike, SW-1/ CCN 235822, was outside the control limit for arsenic and selenium, therefore the concentrations were flagged with an 'N'. The associated quality control duplicate, SW-1/ CCN 235823 was outside the control limit for copper and iron, therefore the concentrations were flagged with an '*'.

A serial dilution was done on sample GW-2/ CCN 235846. The adjusted sample concentrations were within 10% of the original concentrations for all of the elements tested.

In one or more of the samples, the concentrations of cobalt and nickel fell between the Instrument Detection Limits (IDL) and the Contract Required Detection Limits (CRDL). The concentrations of antimony, beryllium, cadmium, mercury, selenium, silver, and thallium fell below the IDL, while the concentrations of the remaining elements were above the CRDL.

This report is paginated for reference and accountability in decreasing numerical sequence.

Anna Feather

Anna Feather
Technical Reviewer
January 10, 1989

COMPUCHEM LABORATORIES

17/JAN/89

Lawler Matusky & Skelly (LMS)
One Blue Hill Plaza
PO Box 1509
Ms. Deborah Wright
Pearl River, NY 10965

ACCOUNT #: 273801

CC#	SAMPLE-ID	RECEIPT DATE
235801	GW-3	12/14/88
235811	FIELD BLANK	12/14/88
235812	SW-1	12/14/88
235815	GW-1	12/14/88
235816	GW-2	12/14/88
235819	TRIP BLANK	12/14/88

TOTAL NUMBER OF SAMPLES = 6

Platinum Case Narrative-Case# 15767
Contract NO. 10-86-REV SDG NO. 35
CompuChem Laboratories, Inc.

SAMPLES: FIELDBLANK, GW-1, GW-2, GW-3, SW-1, TRIPBLANK

These water samples were received in good condition December 14, 1988. Volatile, semivolatile, and pesticide analyses were scheduled accordingly from the chain-of-custody. Holding time requirements were met for each analyses

VOLATILES

Samples GW-1 and GW-2 contained the largest number of target compound list (TCL) analytes above the contract require quantitation limits (CRQL). The number of analytes above CRQL range from two to four per sample respectfully.

Samples FIELDBLANK and TRIPBLANK contained Methylene Chloride significantly higher than the CRQL. Since the preceding analyses did not contain elavated levels of this analyte it is believed that the results are not due to carryover Methylene Chloride is native to these samples and is being reported with reference to this qualifier.

Sample GW-3 was analyzed as a low level volatile liquid. The analysis of this sample at a 50:1 dilution failed to yield at least one analyte in the upper half of the analytical range. At this dilution, the presence of late eluting compounds caused significant instrument downtime. In order to protect the instrumentation, the sample was not reanalyzed at a lesser dilution. The data is being reported with reference to this qualifier.

The method blanks associated with these samples contained either Methylene Chloride or Acetone, or both of these analytes. The samples associated with these method blanks that contain the previously mentioned analytes will have these compounds flagged with a "B".

All internal and surrogate standards were within quality control (QC) criteria for each sample. The matrix spike (MS) and matrix spike duplicate (MSD) also met QC requirements.

SEMIVOLATILES

TCL analytes were positively identified in all but two of the semivolatile sample as being above CRQL. Tentatively identified compounds were found in three of the samples. The "X" flag used in this fraction denotes analytes that are eluting as indisguishable isomers.

Sample GW-1 for the semivolatile fraction contained several outliers. The internal standards D12-Chrysene and D12-Perylene failed in the original analysis as did the surrogate standard 2-Fluorophenol. Reanalysis of the sample was required to confirm that the internal standard failures were due to a matrix effect. The surrogate outlier alone did not constituted a reanalysis, as one acid and one base surrogate standard are allowed to fail according to the current statement of work. This sample is reported with reference to the preceding statements.

Sample GW-3 had the surrogate standard 2-Fluorobiphenol flagged as an outlier. Reanalysis was not required as one acid and one base surrogate standard is allowed to fail according the current statement of work.

The method blanks associated with these sample were within QC limits. One method blank contained a low level of Bis (2-ethylhexyl) Phthalate. The samples associated with this blank should have the previously mentioned compound flagged with a "B" if it is present in the samples.

The MS and MSD met QC requirements. The percent recovery for 2,4-Dinitrotoluene was flagged as being high. This is acceptable as the MS and MSD are advisory, and the overall data demonstrated that the analytical system was in control.

PESTICIDES

No pesticide TCL analytes were confirmed in any of these samples. All of these samples were analyzed at a 5:1 dilutions, with the exception being the sample labeled FIELDBLANK. Many of the 5:1 dilutions were necessary due to the high levels of non-TCL analytes present in the extract.

The MS and MSD met all QC requirements. The presence of outliers for the relative percent difference of Heptachlor and 4,4'-DDT, as well as th percent recovery for 4,4'-DDT, is acceptable with QC criteria, nce the oveMSD are being reported with reference to this qualifer demonstrates that the analytical

The associated method blanks met all QC requirement The pesticide surrogate standard was with QC limits in each pesticide sample.

Release of the data contained in this hardcopy data package and in the computer-readable data submitted on the floppy diskette has been autherized by the Laboratory Manager or his designee, as verified by the following signature.

Daniel Boone Jr. 01/17/89

DANIEL E. BOONE, JR. DATE

TECHNICAL REVIEWER

Note: This report is paginated for reference and accountability in decreasing numerical sequence.

COMPUCHEM LABORATORIES

Quality Assurance Notice

With the advent of the new organics Statement of Work (SOW 10/86, Revisions: 1/87, 2/87, 7/87, 8/87) participants in EPA's Contract Laboratory Program (CLP) are required to provide hard copy and diskette deliverables. CompuChem employs the Finnigan QA Formaster Program (Format A) to generate these requirements using data files from our analytical instrumentation. Currently, and independently, quantitation reports are generated by the instruments and are used with CompuChem-developed software to calculate results. The GC and GC/MS quantitation routines employ the convention of carrying at least one extra significant figure until the mathematical computations are completed. Then, the quantitative results are rounded to the SOW-required number of significant figures for reporting. In addition, the algorithm used by the Formaster Program is slightly different than that employed in CompuChem's software routines. Therefore, results presented in the supportive data supplied with our deliverables packages may be slightly different than those which appear on the hard copy forms generated via Formaster. CompuChem is proceeding with modifications to eliminate these minor differences.

This notice serves to alert the end users of these data packages as to the reason why slight differences may be observed.

Robert E. Meierer

Robert E. Meierer
Director of Quality Assurance

BM:cf
12/21/87

COMPUCHEM LABORATORIES, INC. P.O. Box 12652 2308 Chapel Hill/Nelson Highway Research Triangle Park, NC 27709 (919) 549-8263

28/DEC/88

COMPUCHEM LABORATORIES

Lawler Matusky & Skelly (LMS)
One Blue Hill Plaza
PO Box 1509
Ms. Deborah Wright
Pearl River, NY 10965

ACCOUNT #: 273801

CC#	SAMPLE-ID	RECEIPT DATE
232981	SS-1	12/03/88
232982	SS-2	12/03/88
232989	SS-3	12/03/88
232990	SS-4	12/03/88

TOTAL NUMBER OF SAMPLES = 4

Case Summary Narrative: Case # Lawler Matusky & Skelly (LMS)
(273801-15767)

The samples were received intact on December 3, 1988 with the chain-of-custody. The case consists of four (4) soil samples for complete HSL metals and cyanide analysis. The enclosed cover page reflects Lawler Matusky & Skelly (LMS) and CompuChem identifiers.

The associated quality control sample spike, SS-2/ CCN 232983, was outside the control limit for antimony, barium, cadmium, manganese, mercury, and selenium, therefore the concentrations were flagged with an 'N'. The associated quality control duplicate, SS-2/ CCN 232984, was outside the control limit for lead, therefore the concentration was flagged with an '*'.

A serial dilution was done on sample SS-4/ CCN 232990. The adjusted sample concentrations of magnesium and vanadium were not within 10% of the original concentrations, therefore all of the data were flagged with an 'E'.

In one or more of the samples, the concentrations of arsenic, beryllium, silver, sodium, and thallium fell between the Instrument Detection Limits (IDL) and the Contract Required Detection Limits (CRDL). The concentrations of antimony and selenium fell below the IDL, while the concentrations of the remaining elements were above the CRDL.

This report is paginated for reference and accountability in decreasing numerical sequence.

Anna Feather

Anna Feather
Technical Reviewer
December 28, 1988

COMPUCHEM LABORATORIES

Case Narrative #16674
SDG #01
Contract #2-88-REVS
CompuChem Laboratories, Inc.

SAMPLE IDENTIFICATIONS: SSR-1-2-3, SSR-4

These samples were received in good condition, with the proper chains-of-custody (COC), sealed in a cooler on April 29th, 1989. Analyses were scheduled in accordance with the COC. Semivolatile analyses were performed as requested on these samples. Holding time requirements were met for all of these samples.

All pertinent Quality Assurance and Laboratory notices for CASE# 16674, SDG# 01 are included in the sample data package.

SEMIVOLATILES

One of these samples contained thirteen target compound list above the contract required quantitation limits. Tentatively identified compounds were detected in both samples.

The method blank, matrix spike, and matrix spike duplicate met all quality control requirements. The percent recovery of several analytes were flagged in the MS and MSD as outliers. The "X" flag is used to denote analytes which elute as indistinguishable isomers.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than conditions detailed above. Release of the data contained in the hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Daniel E. Boone 05/12/89

Daniel E. Boone, Jr. DATE 05/12/89
TECHNICAL REVIEWER

Note: This report is paginated for reference and accountability in decreasing numerical sequence.

COMPUCHEM LABORATORIES, INC. P.O. Box 12652 3308 Chapel Hill/Nelson Highway Research Triangle Park, NC 27709 (919) 549-8263

COMPUCHEM LABORATORIES

Quality Assurance Notice

With the advent of the new organics Statement of Work (SOW 10/86, Revisions: 1/87, 2/87, 7/87, 8/87) participants in EPA's Contract Laboratory Program (CLP) are required to provide hard copy and diskette deliverables. CompuChem employs the Finnigan QA Formaster Program (Format A) to generate these requirements using data files from our analytical instrumentation. Currently, and independently, quantitation reports are generated by the instruments and are used with CompuChem-developed software to calculate results. The GC and GC/MS quantitation routines employ the convention of carrying at least one extra significant figure until the mathematical computations are completed. Then, the quantitative results are rounded to the SOW-required number of significant figures for reporting. In addition, the algorithm used by the Formaster Program is slightly different than that employed in CompuChem's software routines. Therefore, results presented in the supportive data supplied with our deliverables packages may be slightly different than those which appear on the hard copy forms generated via Formaster. CompuChem is proceeding with modifications to eliminate these minor differences.

This notice serves to alert the end users of these data packages as to the reason why slight differences may be observed.

Robert E. Meierer

Robert E. Meierer
Director of Quality Assurance

BM:cf
12/21/87

COMPUCHEM LABORATORIES, INC. P.O. Box 12652 3308 Chapel Hill/Nelson Highway Research Triangle Park, NC 27709 (919) 549-8263

COMPUCHEM LABORATORIES, INC. P.O. Box 12652 3308 Chapel Hill/Nelson Highway Research Triangle Park, NC 27709 (919) 549-8263

CLP CASE NARRATIVE CASE # 19300
CONTRACT # 2-88 (REVS) SDG# 05
COMPUCHEM LABORATORIES INC.

SAMPLES: GW-2-P-B, GW-2-P-S, GW-3-P-B, GW-3-P-S, SED-1, SS-3

This portion of Case # 19300 consisted of four oil samples for volatile and semivolatile analysis, and two for pesticide analysis. They were received intact on 2/22/90 via Federal Express in properly sealed shipping containers with traffic reports.

VOLATILES:
All volatile fractions were extracted and analyzed within holding time requirements as Medium Level Solids. Because the nature of the sample made instrument cleanup necessary after each analysis, the samples were all analyzed at a 2:1 dilution of the Medium Level extract, even though that did not meet the usual dilution criteria that at least one target compound be present in the upper half of its analytical range. The samples all contained most of the following compounds: chloroethane, 1,1-dichloroethane, total 1,2-dichloroethene, trichloroethene, tetrachloroethene, benzene, toluene, ethylbenzene, and total xylenes. Two analyses were reported for samples GW-2-P-S and GW-3-P-S to confirm a matrix effect which caused one or more surrogates to exceed QC limits. The surrogate recovery failures for sample GW-3-P-B were confirmed through the analysis of the sample spikes, which were prepared using that sample as the original. All other surrogates met recovery criteria. The matrix spike/matrix spike duplicate results were acceptable.

SEMIVOLATILES:
With the exception of sample GW-3-P-S and the sample spikes, all semivolatile fractions were extracted and analyzed as Medium Level Solids within holding time requirements. Two analyses were reported for sample GW-2-P-B due to the level of crysene present. The other samples were reported at dilutions only. All the samples contained a variety of polyaromatic hydrocarbons. The recovery for D5-nitrobenzene exceeded QC limits in samples GW-2-P-B (reanalysis) and GW-2-P-S. D5-phenol exceeded QC limits in sample GW-3-P-SMS. All other surrogates met recovery criteria. The matrix spike/matrix spike duplicate results were not acceptable because of sample matrix effects. A blank spike, prepared and analyzed along with the samples, met all QC requirements.

PESTICIDES:

All pesticide fractions were extracted and analyzed as Medium Level Solids within holding time requirements. Sample SED-1 contained arochlor-1260 at a level not requiring GC/MS confirmation. Sample SS-3 contained arochlor-1260, which was confirmed by GC/MS analysis. Because of the dilution required, there was no surrogate recovery data for sample SS-3. All other surrogates met recovery criteria. The matrix spike/matrix spike duplicate results were acceptable.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Note: This report was paginated for reference and accountability in decreasing numerical sequence.

Sarah A. Hubbard 4/2/90
Technical Reviewer

COMPUCHEM LABORATORIES, INC. P.O. Box 12652 3308 Chapel Hill/Nelson Highway Research Triangle Park, NC 27709 (919) 549-8263

CLP CASE NARRATIVE CASE # 19300
CONTRACT # 2-88 (REVS) SDG# 01
COMPUCHEM LABORATORIES INC.

SAMPLES: FIELD BLANK, GW-1, GW-2, GW-3, SW-1, TRIP BLANK

This portion of Case # 19300 consisted of six liquid samples for volatile analysis and five samples for semivolatile and pesticide analysis. They were received intact on 2/22/90 and 2/23/90 via Federal Express in properly sealed shipping containers with traffic reports.

This narrative is concerned only with the volatile fractions of the above samples.

VOLATILES:
All volatile fractions were analyzed within holding time requirements. Samples FIELD BLANK and TRIP BLANK contained only methylene chloride, which was also detected in the associated instrument blank. Sample GW-1 contained methylene chloride, total 1,2-dichloroethene, 1,2-dichloropropane, benzene, and xylenes. Sample GW-2 contained chloroethane, methylene chloride, 1,1-dichloroethane, benzene, ethylbenzene, and xylenes. Sample GW-3 contianed vinyl chloride, chloroethane, 1,1-dichloroethane, 1,2-dichloroethane, total 1,2-dichloroethene, benzene, toluene, and xylenes. Sample SW-1 contained acetone, 1,1-dichloroethane, trichloroethene, and total 1,2-dichloroethene. All surrogates met recovery criteria. The matrix spike/matrix spike duplicate results were acceptable.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Note: This report was paginated for reference and accountability in decreasing numerical sequence.

Sarah A. Hubbard 3/9/90
Technical Reviewer

COMPUCHEM LABORATORIES, INC. P.O. Box 12652 3308 Chapel Hill/Nelson Highway Research Triangle Park, NC 27709 (919) 549-8263

CASE NARRATIVE CASE #19300
SDG #01 CONTRACT #(2-88)REVS
COMPUCHEM LABORATORIES, IN.

SAMPLE NUMBERS: FIELD BLANK GW-1 GW-2 GW -3 SW-1

FOR THE RECEIVING INFORMATION SEE THE NARRATIVE SUMMARIZING THE VOLATILE ANALYSES. THIS NARRATIVE PERTAINS TO THE SEMIVOLATILE AND PESTICIDE ANALYSES.

SEMIVOLATILES:
ALL SAMPLE AND QC FRACTIONS WERE EXTRACTED WITHIN HOLDING TIMES; EXCEPT SAMPLE GW-3 WHICH FAILED INITIALLY TO MEET QC CRITERIA. SAMPLE GW-3 COULD NOT BE RE-EXTRACTED WITHIN HOLDING TIMES. THOSE SAMPLES WHICH CONTAINED TARGET LIST COMPOUNDS (TCLs) CONTAINED A VARIETY OF COMPOUNDS INCLUDING: POLYAROMATIC HYDROCARBONS, BENZOIC ACID, DICHLOROBENZENE, ALKYL PHENOLS, AND PHTHALATES. SAMPLE GW-3 CONTAINED TCLs AT LEVELS OUTSIDE THE ANALYTICAL RANGE AND REQUIRED ANALYSIS AT A 10 TO 1 DILUTION. THE LESS DILUTE ANALYSIS WAS ALSO REPORTED IN ORDER TO PROVIDE AS MUCH INFORMATION AS POSSIBLE. FURTHERMORE IN THE LESS DILUTE ANALYSIS THE RECONSTRUCTED ION CHROMATOGRAM WAS SATURATED FROM 900 TO 1200 SCANS; THEREFORE, THE TENTATIVELY IDENTIFIED COMPOUNDS (TICs) ELUTING WITHIN THIS RANGE SHOULD BE IGNORED, AND THOSE FROM THE DILUTE ANALYSIS SHOULD BE SUBSTITUTED. ONLY SAMPLES GW-1, GW-2, AND GW-3 CONTAINED NUMEROUS TICs. ALL SAMPLE AND QC FRACTIONS MET THE SURROGATE RECOVERY CRITERIA EXCEPT GW-1 WHICH FAILED ACID SURROGATE RECOVERY CRITERIA DUE TO A MATRIX EFFECT. ALSO GW2, GW3, GW3DL, HAD HIGH RECOVERIES FOR D5-NITROBENZENE. ALSO GW-2 HAD A HIGH RECOVERY FOR TRIBROMOPHENOL. THE MATRIX SPIKE DUPLICATES MET ALL ACCURACY AND PRECISION CRITERIA; HOWEVER, PENTACHLOROPHENOL HAD A SLIGHTLY HIGH PERCENT RECOVERY IN THE MATRIX SPIKE DUPLICATE. ALSO THE RELATIVE PERCENT DIFFERENCES FOR 1,4-DICHLOROBENZENE, N-NITROSO-DI-N-PROPYLAMINE, 1,2,4-TRICHLOROBENZENE, ACENAPHTHENE, AND PYRENE JUST SLIGHTLY HIGH. FOR 4-CHLORO-3-METHYLPHENOL THE RELATIVE PERCENT DIFFERENCE REPRESENTED IS INCORRECT. THE ACTUAL RELATIVE PERCENT DIFFERENCE OF 42 PASSES. THE DESCREPANCY IS DUE TO THE DIFFERENT ROUNDING PROCEDURES USED BY FORMASTER THE PROGRAM USED IN PREPARING THE DELIVERABLES.

COMPUCHEM LABORATORIES, INC. P.O. Box 12652 3308 Chapel Hill/Nelson Highway Research Triangle Park, NC 27709 (919) 549-8263

PESTICIDES:
ALL SAMPLE AND QC FRACTIONS WERE EXTRACTED WITHIN HOLDING TIMES. NO TCLs WERE CONFIRMED BY DUAL COLUMN ANALYSES IN THESE SAMPLES. ALL SAMPLE AND QC FRACTIONS MET THE SURROGATE RECOVERY CRITERIA; HOWEVER, GW-2 AND GW-3 HAD NO SURROGATE RECOVERY DATA AVAILABLE DUE TO MATRIX EFFECTS.
THE MATRIX SPIKE DUPLICATES MET OVERALL ACCURACY AND PRECISION; HOWEVER, THE RELATIVE PERCENT DIFFERENCES FOR DIELDRIN AND HEPTACHLOR WERE JUST HIGH.

NOTE THAT THIS DATA PACKAGE WAS PAGINATED FOR REFERENCE AND ACCOUNTABILITY IN DECREASING NUMERICAL SEQUENCE.

NOTE THAT THE "X" FOOTNOTE DENOTES THE COELUTION OF INDISTINGUISHABLE ISOMERS.

Elisabeth R Nowell

ELISABETH ROBINS NOWELL
TECHNICAL REVIEWER
3-15-90

TOTAL ANALYTICAL SERVICES FOR A SAFE ENVIRONMENT
nytest environmental inc.

RECEIVED
JUL 10 1989
LAWLER, MATUSKY & SKELLY ENGINEERS

July 05, 1989

Mr. Ed Maikish
Lawler, Matusky & Skelly Engineers
One Blue Hill Plaza
P.O. Box 1509
Pearl River, NY 10965-8509

Re: Data Validation Report - Quanta Site - Compuchem Case 15767
SDG 35 NEI #1648,89-15883

Dear Mr. Maikish:

Enclosed please find our Data Validation Report for the Organic and Inorganic results for the Quanta Site. A list of the samples and their contract compliance is included.

Please note that NYSDEC sample tracking forms were not included in this data package. Perhaps, this NYSDEC requirement was not part of the contract with Compuchem.

If you have any questions concerning this report, please call me at 516-625-5500.

Very truly yours,

Douglas Sheeley
Laboratory Director

cc: Mike Komoroske
NYSDEC
50 Wolf Rd.
Albany, NY 12233

box 1518 □ 60 seaview blvd., port washington, ny 11050 □ (516) 625-5500

nytest environmental inc.

DATA VALIDATION

SITE: QUANTA
LAB: COMPUCHEM CASE #15767 SDG 01

SAMPLE #	METALS	CN	VOA	BNA	PEST
SS-1	R	OK	OK	R	OK
SS-2	R	OK	OK	R	OK
SS-3	R	OK	OK	R	NC
SS-4	R	OK	OK	NC	OK

NC = NOT COMPLIANT R= RESUBMIT

Comments on Case 15767 SDG 01:

A. Inorganics
1. The entire report is not paginated.
2. As values for SS-2 and SS-3 are not found in raw data.
3. Form II, Pb is absent, but run by ICP.
4. Form III, Pb is absent
5. Form IIb. is absent.

B. Semivolatile
1. Benzo(b)Fluoranthene and Benze(k)Fluoroanthene are flaged with "X" due to coelution. The response factors for these compounds are listed as being identical. The quantitative results for these compounds should be recalculated with correct response factors.

C. Pesticide/PCB
1. Endosulfan II, Methoxychlor, and Endrin have %D greater than 15% on both columns, in the ending INDA and INDB, p. 402,403 and p. 384,383. "Determination that no compounds were found above the CRQL is a form of quantitation, and therefore at least one column must meet the 15.0% criteria. This effects sample SS-3.

D. General VOA BNA: TIC listings are missing, can not verify TIC concentrations.

nytest environmental inc.

DATA VALIDATION

SITE: QUANTA
LAB: COMPUCHEM CASE #15767 SED-1

SAMPLE #	METALS	CN	VOA	BNA	PEST
SED-1	R	--	OK	R	--

NC = NOT COMPLIANT R= RESUBMIT

Comments on Case 15767 SED-1 :

A. Inorganics
1. The entire report is not paginated.
2. Form III, prep blank results do not match raw data.
3. Form IIb. is absent.
4. As and Se ICV and CCV values do not match raw data.

B. Semivolatile
1. Benzo(b)Fluoranthene and Benze(k)Fluoroanthene are flaged with "X" due to coelution. The response factors for these compounds are listed as being identical. The quantitative results for these compounds should be recalculated with correct response factors.

C. General VOA BNA: TIC listings are missing, can not verify TIC concentrations.

nytest environmental inc.

DATA VALIDATION

SITE: QUANTA MISC DATA
LAB: COMPUCHEM

SAMPLE	EP TOX METALS	OIL & GREASE	IGNIT	SPEC COND	PCB's
DRUM CUT	OK	-	OK	-	NC
DRUMDECON	-	-	-	-	NC
SW-1	-	OK	-	OK	-
GW-1	-	OK	-	OK	-
GW-2	OK	OK	OK	OK	OK
GW-3	OK	OK	OK	OK	OK
SED-1	OK	-	-	-	-

NC = NOT COMPLIANT

Comments on Misc. Data from Quanta Site:

1. PCB's were analyzed by method 8080, with appropriate raw data being supplied. The results are not compliant due to the samples being extracted outside holding times.
2. Raw data is not supplied for the other parameters. Our data review has assumed that the proper methods of analysis were used in conjunction with "Good Laboratory Practices".

nytest environmental inc

SITE: QUANTA
LAB: COMPUCHEM CASE #15767 SDG 35

89-16883(LI 1648)

SAMPLE #	METALS	CN	VOA	BNA	PEST
GW-3	R U	R U	RUN	R UN	NC U
FIELD BLANK	R U	R U	RUN	R UN	NC U
SW-1	R U	R U	RUN	R UN	NC U
GW-1	R U	R U	RUN	NC UN	NC U
GW-2	R U	R U	RUN	R UN	NC U
TRIP BLANK	-	-	RUN	-	-

NC = NOT COMPLIANT R= RESUBMIT

U= USABLE UN= NOT USABLE

nytest environmental inc.

DATA VALIDATION

SITE: QUANTA MISC DATA
LAB: COMPUCHEM

SAMPLE	EP TOX METALS	OIL & GREASE	IGNIT	SPEC COND	PCB's
DRUM CUT	OK	-	OK	-	NC U
DRUMDECON	-	-	-	-	NC U
SW-1	-	OK	-	OK	-
GW-1	-	OK	-	OK	-
GW-2	OK	OK	OK	OK	OK
GW-3	OK	OK	OK	OK	OK
SED-1	OK	-	-	-	-

NC = NOT COMPLIANT

U = Usable

Comments on Misc. Data from Quanta Site:

1. PCB's were analyzed by method 8080, with appropriate raw data being supplied. The results are not compliant due to the samples being extracted outside holding times.

2. Raw data is not supplied for the other parameters. Our data review has assumed that the proper methods of analysis were used in conjunction with "Good Laboratory Practices".

nytest environmental inc.

DATA VALIDATION

SITE: QUANTA
LAB: COMPUCHEM CASE #15767 SED-1

SAMPLE #	METALS	CN	VOA	BNA	PEST
SED-1	R U	--	OK	R U	--

NC = NOT COMPLIANT R= RESUBMIT

U = USABLE

Comments on Case 15767 SED-1 :

A. Inorganics
1. The entire report is not paginated.
2. Form III, prep blank results do not match raw data.
3. Form IIb. is absent.
4. As and Se ICV and CCV values do not match raw data.

B. Semivolatile
1. Benzo(b)Fluoranthene and Benze(k)Fluoroanthene are flaged with "X" due to coelution. The response factors for these compounds are listed as being identical. The quantitative results for these compounds should be recalculated with correct response factors.

C. General VOA BNA: TIC listings are missing, can not verify TIC concentrations.

nytest environmental inc.

DATA VALIDATION

SITE: QUANTA
LAB: COMPUCHEM CASE #15767 SDG 01

SAMPLE #	METALS	CN	VOA	BNA	PEST
SS-1	R U	OK	OK	R U	OK
SS-2	R U	OK	OK	R U	OK
SS-3	R U	OK	OK	R U	NC UN
SS-4	R U	OK	OK	NC U	OK

NC = NOT COMPLIANT R= RESUBMIT
U = USABLE UN = UNUSABLE

Comments on Case 15767 SDG 01:

A. Inorganics
1. The entire report is not paginated.
2. As values for SS-2 and SS-3 are not found in raw data.
3. Form II, Pb is absent, but run by ICP.
4. Form III, Pb is absent
5. Form IIb. is absent.

B. Semivolatile
1. Benzo(b)Fluoranthene and Benze(k)Fluoroanthene are flaged with "X" due to coelution. The response factors for these compounds are listed as being identical. The quantitative results for these compounds should be recalculated with correct response factors.

C. Pesticide/PCB
1. Endosulfan II, Methoxychlor, and Endrin have %D greater than 15% on both columns, in the ending INDA and INDB, p. 402,403 and p. 384,383. "Determination that no compounds were found above the CRQL is a form of quantitation, and therefore at least one column must meet the 15.0% criteria. This effects sample SS-3.

D. General VOA BNA: TIC listings are missing, can not verify TIC concentrations.

nytest environmental inc

SITE: QUANTA 89-16893(LI 1648)
LAB: COMPUCHEM CASE #15767 SDG 35

SAMPLE #	METALS	CN	VOA	BNA	PEST
GW-3	R	R	R	R	NC
FIELD BLANK	R	R	R	R	NC
SW-1	R	R	R	R	NC
GW-1	R	R	R	NC	NC
GW-2	R	R	R	R	NC
TRIP BLANK	-	-	R	-	-

NC = NOT COMPLIANT R= RESUBMIT

QUANTA
DATA USABILITY REPORT
Case 15767 & 27380

Most of the problems with the inorganics results from case 15767 appear to be reporting problems. Problems with report pagination, missing forms, and improper ICV and CCV values reported were corrected in the resubmission.

Problems with the volatile and semi-volatile fractions from case 15767 are with some procedures and holding times. The volatile analysis for GW-3 used the wrong dilution factor. The volatile and semi-volatile samples GW-3, GW-2, GW-1, SW-1, trip blank, and field blank were not logged in by the lab until 8 days after collection. This causes these results to be non-compliant and unusable. The remainder of the volatile and semi-volatile from case 15767 are usable as submitted.

The pesticide/PCB results from case 15767 did not meet QA/QC requirements. The nature of the problems effects the quantitation and identification of any hits. Endosulfan II, methoxychlor, and endrin have % Ds greater than 15% on both columns. At least one column must meet the 15% criteria. This problem causes sample ss-3 to be non-compliant and unusable. The remainder of the pesticide/ PCB results from case 15767 are usable as submitted.

The inorganics results from case 27380 are usable without qualification. The organics results from case 27380 are usable to indicate the high amount of petroleum contamination on the site. Due to the high amount of contamination the surrogate and matrix spike recoveries were not within required limits; therefore, the results should not be used for strict pollutant quantitation.