Versar INC.

ENVIRONMENTAL RISK MANAGEMENT

Versar INC.

441602

ORIGINAL (Red)

GC/MS ANALYSIS - TCLP
DATA SUMMARY PACKAGE

CLIENT : VERSAR DIV 31
SITE : CDM
PROJECT: 420.1 B#2&4
CONTROL: 2536/2565
DATE : 06/04/90

Versar INC.

June 4, 1990

Narrative
Versar Division 31 - CDM
Volatile and Semivolatile Organic Analysis
Toxicity Characteristic Leaching Procedure (TCLP)
Versar Project 420.1 - Batches 2 and 4
Control 2536/2565

This report contains the analytical data for the volatile and semivolatile organic analysis of two (2) soil samples. The samples were analyzed following EPA CLP protocol modified for Toxicity Characteristic Leaching Procedure (TCLP). The samples listed below arrived intact at Versar in two batch shipments on April 19 and 23, 1990. Although results for volatiles (VOA) and semivolatiles (BNA) are reported individually, this one narrative applies to both fractions. Results for other requested parameters are provided separately.

SAMPLE LIST

1 11

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It should be noted that 3-methylphenol and 4-methylphenol (m- and p- creosol) coelute and cannot be separated by the GC/MS system.

GC/MS instrument calibrations using BFB and DFTPP met requirements for volatile and semivolatile analyses, respectively. SPCC and CCC criteria were met for the volatile and semivolatile initial calibration curves and the continuing calibration standards.

Extractions and analyses for volatile and semivolatile organic compounds occurred within specified sample holding times. All GC/MS analyses occurred during the twelve hour period following daily instrument calibration. The TCLP leachates were analyzed following procedures developed for the water matrix.

Volatile surrogate standard recovery values for the leachate samples met requirements specified for the water matrix. Internal standard area abundances and associated relative retention times met established limits for all analyses. No matrix spike and matrix spike duplicate (MS/MSD) QC analyses for volatile organic compounds were performed for these batch shipments of samples. The samples were analyzed without dilution.

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Semivolatile surrogate compounds did not meet specified QC requirements for the initial sample analyses. Reextraction has been requested for the two samples and the results will be reported as soon as they become available. The QC analyses, the extraction blank and the TCLP blank all met specified surrogate recovery requirements. One set of semivolatile matrix spike/matrix spike duplicate analyses was performed using the TCLP target compounds as matrix spike compounds. All internal standard area abundances and associated relative retention times were within the specified limits.

No field sample required dilution prior to instrumental analysis in order to quantify semivolatile organic compounds within the range of the calibration curve.

Definitions of data qualifier flags used on the individual data summary pages are provided in the listing which immediately follows this case narrative.

Please contact Janet Beckman, Laboratory Project Coordinator, should you have any questions or require additional information pertaining to these analyses.

Data Release Approved By:

Linda E. Bock
GC/MS Data Quality Manager
Laboratory Operations

Narrative Reviewed By:

Lawrence P. Pollack
GC/MS Quality Assurance Manager

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Data Qualifier Flags

J For Target Compounds: This flag is used when mass spectral data indicates the presence of a compound but the result is less than the specified detection limit but still greater than zero.

For Non Target Compounds: This flag indicates that the concentration is an estimated value, assuming a 1 to 1 response with the internal standard.

B This flag is used when the analyte is found in the blank as well as in the sample. It indicates possible/probable contamination and warns the data user to take appropriate action.

u This flag states that the compound was analyzed for but was not detected. The number is the minimum attainable detection limit for the sample.

X or T This flag states that the mass spectrum does not meet EPA CLP criteria for confirmation, but compound presence is strongly suspected.

E This flag is used to indicate that the quantitation of the analyte is outside the linear calibration of the curve and that dilution was required in order to properly quantitate.

D This flag is used to indicate the value for the target analyte was calculated from a dilution (see "E" flag above).

Y This flag is used when a matrix spike compound is also confirmed present in the unspiked sample.

Flags excerpted from and established by the US EPA Contract Lab Program (CLP) protocol.

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2A
WATER VOLATILE SURROGATE RECOVERY

Lab Name: VERSAR INC Contract: _____

Lab Code: VERSAR Case No.: 2536 SAS No.: _____ SDG No.: 2_4

	EPA SAMPLE NO.	S1 (TOL) #	S2 (BFB) #	S3 (DCE) #	OTHER	TOT OUT
01	1	99	101	97	0	0
02	11	100	101	97	0	0
03	EXTBLK	101	102	95	0	0
04	VBLK74	100	102	96	0	0

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

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogates diluted out

FORM II VOA-1

1/87 Rev.

4A
VOLATILE METHOD BLANK SUMMARY

Lab Name: VERSAR INC Contract: _____

Lab Code: VERSAR Case No.: 2536 SAS No.: _____ SDG No.: 2_4

Lab File ID: W2274 Lab Sample ID: VBLK74

Date Analyzed: 05/02/90 Time Analyzed: 2345

Matrix: (soil/water) WATER Level:(low/med) LOW

Instrument ID: W

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	1	16425	W2277	0229
02	11	16961	W2280	0448
03	EXTBLK	EXTBLK	W2276	0144

COMMENTS: CLP,,,VBLK74,L,W,VBLK74,V,BLANK,,,5ML,
INST W:SP1000 COLUMN : 45C (3MIN) TO 225C @8C/MIN

FORM IV VOA

1/87 Rev.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

1

I Name: VERSAR INC Contract: _____

Lab Code: VERSAR Case No.: 2536 SAS No.: _____ SDG No.: 2 4

Matrix: (soil/water) WATER Lab Sample ID: 16425

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: W2277

Level: (low/med) LOW Date Received: 04/19/90

% Moisture: not dec. ____ Date Analyzed: 05/03/90

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-01-4	Vinyl Chloride	10	U
110-86-1	Pyridine	5	U
75-35-4	1,1-Dichloroethene	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	14	
56-23-5	Carbon Tetrachloride	5	U
79-01-6	Trichloroethene	5	U
71-43-2	Benzene	5	U
127-18-4	Tetrachloroethene	5	U
108-90-7	Chlorobenzene	5	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

1

I Name: VERSAR INC Contract: _____

Lab Code: VERSAR Case No.: 2536 SAS No.: _____ SDG No.: 2_4

Matrix: (soil/water) WATER Lab Sample ID: 16425

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: W2277

Level: (low/med) LOW Date Received: 04/19/90

% Moisture: not dec. ____ Date Analyzed: 05/03/90

Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

11 (Pad)

L Name: VERSAR INC Contract: _____

Lab Code: VERSAR Case No.: 2536 SAS No.: _____ SDG No.: 2_4

Matrix: (soil/water) WATER Lab Sample ID: 16961

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: W2280

Level: (low/med) LOW Date Received: 04/23/90

% Moisture: not dec. ____ Date Analyzed: 05/03/90

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-01-4	Vinyl Chloride	10	U
110-86-1	Pyridine	5	U
75-35-4	1,1-Dichloroethene	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	9	J
56-23-5	Carbon Tetrachloride	5	U
79-01-6	Trichloroethene	5	U
71-43-2	Benzene	5	U
127-18-4	Tetrachloroethene	5	U
108-90-7	Chlorobenzene	5	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

11

I Name: VERSAR INC Contract: _____

Lab Code: VERSAR Case No.: 2536 SAS No.: _____ SDG No.: 2_4

Matrix: (soil/water) WATER Lab Sample ID: 16961

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: W2280

Level: (low/med) LOW Date Received: 04/23/90

% Moisture: not dec. ____ Date Analyzed: 05/03/90

Column (pack/cap) PACK Dilution Factor: 1.0

mber TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EXTBLK

I Name: VERSAR INC Contract: _____

Lab Code: VERSAR Case No.: 2536 SAS No.: _____ SDG No.: 2_4

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

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: W2276

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

% Moisture: not dec. ____ Date Analyzed: 05/03/90

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-01-4	Vinyl Chloride	10	U
110-86-1	Pyridine	5	U
75-35-4	1,1-Dichloroethene	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	8	J
56-23-5	Carbon Tetrachloride	5	U
79-01-6	Trichloroethene	5	U
71-43-2	Benzene	5	U
127-18-4	Tetrachloroethene	5	U
108-90-7	Chlorobenzene	5	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EXTBLK

I Name: VERSAR INC Contract: _____

Lab Code: VERSAR Case No.: 2536 SAS No.: _____ SDG No.: 2_4

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

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: W2276

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

% Moisture: not dec. ____ Date Analyzed: 05/03/90

Column (pack/cap) PACK Dilution Factor: 1.0

ıber TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK74

I Name: VERSAR INC Contract: _____

Lab Code: VERSAR Case No.: 2536 SAS No.: _____ SDG No.: 2 4

Matrix: (soil/water) WATER Lab Sample ID: VBLK74

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: W2274

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

% Moisture: not dec. ____ Date Analyzed: 05/02/90

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-01-4	Vinyl Chloride	10	U
110-86-1	Pyridine	5	U
75-35-4	1,1-Dichloroethene	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
56-23-5	Carbon Tetrachloride	5	U
79-01-6	Trichloroethene	5	U
71-43-2	Benzene	5	U
127-18-4	Tetrachloroethene	5	U
108-90-7	Chlorobenzene	5	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLK74

I Name: VERSAR INC Contract: _____

Lab Code: VERSAR Case No.: 2536 SAS No.: _____ SDG No.: 2_4

Matrix: (soil/water) WATER Lab Sample ID: VBLK74

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: W2274

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

% Moisture: not dec. _____ Date Analyzed: 05/02/90

Column (pack/cap) PACK Dilution Factor: 1.0

nber TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

2C
WATER SEMIVOLATILE SURROGATE RECOVERY

ORIGINAL Pg 1

Lab Name: VERSAR INC Contract: _____

Lab Code: VERSAR Case No.: 2536 SAS No.: _____ SDG No.: 2_4

	EPA SAMPLE NO.	S1 (NBZ) #	S2 (FBP) #	S3 (TPH) #	S4 (PHL) #	S5 (2FP) #	S6 (TBP) #	OTHER	TOT OUT
01	1	77	58	71	0 *	1 *	5 *	0	3
02	11	79	64	73	0 *	1 *	6 *	0	3
03	EXTBLK1	86	71	73	38	40	28	0	0
04	1MS	87	75	83	14	22	26	0	0
05	1MSD	91	74	81	21	25	36	0	0
06	SBLK13	91	85	74	69	82	60	0	0

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

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

3C

WATER SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name:VERSAR Contract:_____

Lab Code:VERSAR Case No.:2536 SAS No.: _____ SDG No.: 2 4

Matrix Spike - EPA Sample No.: _____1

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #
1,4-Dichlorobenzene	100	0	74	74
2-Methylphenol	0	0		
4-Methylphenol	100	0	9	9
Hexachloroethane	100	0	81	81
Nitrobenzene	100	0	105	105
Hexachlorobutadiene	100	0	79	79
2,4,6-Trichlorophenol	200	0	92	46
2,4,5-Trichlorophenol	200	0	115	58
2,4-Dinitrotoluene	100	0	76	76
Hexachlorobenzene	100	0	93	93
Pentachlorophenol	200	0	66	33
3-Methylphenol	0	0		

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #
1,4-Dichlorobenzene	100	77	77	4
2-Methylphenol	0			
4-Methylphenol	100	16	16	54
Hexachloroethane	100	77	77	4
Nitrobenzene	100	108	108	4
Hexachlorobutadiene	100	81	81	2
2,4,6-Trichlorophenol	200	86	43	6
2,4,5-Trichlorophenol	200	102	51	12
2,4-Dinitrotoluene	100	70	70	8
Hexachlorobenzene	100	125	125	30
Pentachlorophenol	200	69	35	5
3-Methylphenol	0			

column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS: _____

FORM III SV-1

4B
SEMIVOLATILE METHOD BLANK SUMMARY

Lab Name: VERSAR INC Contract: _____

La. Code: VERSAR Case No.: 2536 SAS No.: _____ SDG No.: 2_4

Lab File ID: T2600 Lab Sample ID: SBLK13

Date Extracted: 05/03/90 Extraction:(SepF/Cont/Sonc) CONT

Date Analyzed: 05/16/90 Time Analyzed: 0057

Matrix: (soil/water) WATER Level:(low/med) LOW

Instrument ID: T

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	1	16418	T2601	05/16/90
02	11	16960	T2603	05/16/90
03	EXTBLK1	EXTBLK1	T2604	05/16/90
04	1MS	16418MS	T2602	05/16/90
05	1MSD	16418MSD	T2610	05/16/90

COMMENTS: CLP,VERSCDM,2536,SBLK13,L,W,RB8013,B,BLK,420.1 B#2&4,1UL,
INST T COLUMN=RESTEK 30M RTX-5 4MIN@38C TO 302@8C/MIN

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

1

La Name: VERSAR INC Contract: _____

Lab Code: VERSAR Case No.: 2536 SAS No.: _____ SDG No.: 2 4

Matrix: (soil/water) WATER Lab Sample ID: 16418

Sample wt/vol: 100 (g/mL) ML Lab File ID: T2601

Level: (low/med) LOW Date Received: 04/19/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 05/03/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 05/16/90

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
106-46-7	1,4-Dichlorobenzene	100	U
95-48-7	2-Methylphenol	100	U
106-44-5	4-Methylphenol	100	U
67-72-1	Hexachloroethane	100	U
98-95-3	Nitrobenzene	100	U
87-68-3	Hexachlorobutadiene	100	U
88-06-2	2,4,6-Trichlorophenol	100	U
95-95-4	2,4,5-Trichlorophenol	500	U
121-14-2	2,4-Dinitrotoluene	100	U
118-74-1	Hexachlorobenzene	100	U
87-86-5	Pentachlorophenol	500	U
108-39-4	3-Methylphenol	100	U

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

1 ORIGINAL (Red)

La Name: VERSAR INC Contract: _____

Lab Code: VERSAR Case No.: 2536 SAS No.: _____ SDG No.: 2 4

Matrix: (soil/water) WATER Lab Sample ID: 16418

Sample wt/vol: 100 (g/mL) ML Lab File ID: T2601

Level: (low/med) LOW Date Received: 04/19/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 05/03/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 05/16/90

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

Number TICs found: 8

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	5.32	1400	BJ
2.	UNKNOWN	5.67	100	BJ
3.	UNKNOWN	6.98	80	J
4.	UNKNOWN	17.19	80	J
5.	UNKNOWN SILOXANE	32.89	40	BJ
6.	UNKNOWN	34.14	100	J
7.	UNKNOWN SILOXANE	34.34	120	BJ
8.	UNKNOWN SILOXANE	36.12	120	BJ

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

11 ORIGINAL (Red)

La Name: VERSAR INC Contract: _____

Lab Code: VERSAR Case No.: 2536 SAS No.: _____ SDG No.: 2_4

Matrix: (soil/water) WATER Lab Sample ID: 16960

Sample wt/vol: 100 (g/mL) ML Lab File ID: T2603

Level: (low/med) LOW Date Received: 04/23/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 05/03/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 05/16/90

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
106-46-7	1,4-Dichlorobenzene	100	U
95-48-7	2-Methylphenol	100	U
106-44-5	4-Methylphenol	100	U
67-72-1	Hexachloroethane	100	U
98-95-3	Nitrobenzene	100	U
87-68-3	Hexachlorobutadiene	100	U
88-06-2	2,4,6-Trichlorophenol	100	U
95-95-4	2,4,5-Trichlorophenol	500	U
121-14-2	2,4-Dinitrotoluene	100	U
118-74-1	Hexachlorobenzene	100	U
87-86-5	Pentachlorophenol	500	U
108-39-4	3-Methylphenol	100	U

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

11 ORIGINAL (Red)

La Name: VERSAR INC Contract: _____

Lab Code: VERSAR Case No.: 2536 SAS No.: _____ SDG No.: 2 4

Matrix: (soil/water) WATER Lab Sample ID: 16960

Sample wt/vol: 100 (g/mL) ML Lab File ID: T2603

Level: (low/med) LOW Date Received: 04/23/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 05/03/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 05/16/90

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

Number TICs found: 6

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 141-78-6	ACETIC ACID, ETHYL ESTER	4.25	60	BJ
2.	UNKNOWN	5.32	1400	BJ
3.	UNKNOWN	5.68	80	BJ
4.	UNKNOWN	6.98	120	J
5.	UNKNOWN	17.19	60	J
6.	UNKNOWN SILOXANE	34.32	80	BJ

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EXTBLK1 ORIGINAL (Rec)

La Name: VERSAR INC Contract: _____

Lab Code: VERSAR Case No.: 2536 SAS No.: _____ SDG No.: 2_4

Matrix: (soil/water) WATER Lab Sample ID: EXTBLK1

Sample wt/vol: 100 (g/mL) ML Lab File ID: T2604

Level: (low/med) LOW Date Received: 04/19/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 05/03/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 05/16/90

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
106-46-7	1,4-Dichlorobenzene	100	U
95-48-7	2-Methylphenol	100	U
106-44-5	4-Methylphenol	100	U
67-72-1	Hexachloroethane	100	U
98-95-3	Nitrobenzene	100	U
87-68-3	Hexachlorobutadiene	100	U
88-06-2	2,4,6-Trichlorophenol	100	U
95-95-4	2,4,5-Trichlorophenol	500	U
121-14-2	2,4-Dinitrotoluene	100	U
118-74-1	Hexachlorobenzene	100	U
87-86-5	Pentachlorophenol	500	U
108-39-4	3-Methylphenol	100	U

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EXTBLK1 ORIGINAL (Red)

La Name: VERSAR INC Contract: _____

Lab Code: VERSAR Case No.: 2536 SAS No.: _____ SDG No.: 2_4

Matrix: (soil/water) WATER Lab Sample ID: EXTBLK1

Sample wt/vol: 100 (g/mL) ML Lab File ID: T2604

Level: (low/med) LOW Date Received: 04/19/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 05/03/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 05/16/90

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. 141-78-6	ACETIC ACID, ETHYL ESTER	4.23	80	BJ
2.	UNKNOWN	5.30	1500	BJ

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK13 ORIGINAL (Red)

Lab Name: VERSAR INC Contract: _____

Lab Code: VERSAR Case No.: 2536 SAS No.: _____ SDG No.: 2 4

Matrix: (soil/water) WATER Lab Sample ID: SBLK13

Sample wt/vol: 100 (g/mL) ML Lab File ID: T2600

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

% Moisture: not dec. _____ dec. _____ Date Extracted: 05/03/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 05/16/90

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
106-46-7	1,4-Dichlorobenzene	100	U
95-48-7	2-Methylphenol	100	U
106-44-5	4-Methylphenol	100	U
67-72-1	Hexachloroethane	100	U
98-95-3	Nitrobenzene	100	U
87-68-3	Hexachlorobutadiene	100	U
88-06-2	2,4,6-Trichlorophenol	100	U
95-95-4	2,4,5-Trichlorophenol	500	U
121-14-2	2,4-Dinitrotoluene	100	U
118-74-1	Hexachlorobenzene	100	U
87-86-5	Pentachlorophenol	500	U
108-39-4	3-Methylphenol	100	U

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SBLK13 ORIGINAL (Red)

Lab Name: VERSAR INC Contract: _____

Lab Code: VERSAR Case No.: 2536 SAS No.: _____ SDG No.: 2 4

Matrix: (soil/water) WATER Lab Sample ID: SBLK13

Sample wt/vol: 100 (g/mL) ML Lab File ID: T2600

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

% Moisture: not dec. ____ dec. ____ Date Extracted: 05/03/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 05/16/90

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

Number TICs found: 7

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 141-78-6	ACETIC ACID, ETHYL ESTER	4.20	80	J
2.	UNKNOWN	5.28	1400	J
3.	UNKNOWN	5.63	40	J
4.	UNKNOWN SILOXANE	32.86	40	J
5.	UNKNOWN SILOXANE	34.29	120	J
6.	UNKNOWN SILOXANE	36.09	120	J
7.	UNKNOWN SILOXANE	38.34	80	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

1MS ORIGINAL (Red)

Lab Name: VERSAR INC Contract: _____

Lab Code: VERSAR Case No.: 2536 SAS No.: _____ SDG No.: 2_4

Matrix: (soil/water) WATER Lab Sample ID: 16418MS

Sample wt/vol: 100 (g/mL) ML Lab File ID: T2602

Level: (low/med) LOW Date Received: 04/19/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 05/03/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 05/16/90

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
106-46-7	1,4-Dichlorobenzene	100	U
95-48-7	2-Methylphenol	100	U
106-44-5	4-Methylphenol	91	J
67-72-1	Hexachloroethane	800	
98-95-3	Nitrobenzene	1100	
87-68-3	Hexachlorobutadiene	740	
88-06-2	2,4,6-Trichlorophenol	930	
95-95-4	2,4,5-Trichlorophenol	1200	
121-14-2	2,4-Dinitrotoluene	100	U
118-74-1	Hexachlorobenzene	680	
87-86-5	Pentachlorophenol	500	U
108-39-4	3-Methylphenol	100	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

1MSD ORIGINAL (Red)

Lab Name: VERSAR INC Contract: _____

Lab Code: VERSAR Case No.: 2536 SAS No.: _____ SDG No.: 2 4

Matrix: (soil/water) WATER Lab Sample ID: 16418MSD

Sample wt/vol: 100 (g/mL) ML Lab File ID: T2610

Level: (low/med) LOW Date Received: 04/19/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 05/03/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 05/16/90

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
106-46-7	1,4-Dichlorobenzene	100	U
95-48-7	2-Methylphenol	100	U
106-44-5	4-Methylphenol	160	
67-72-1	Hexachloroethane	760	
98-95-3	Nitrobenzene	1100	
87-68-3	Hexachlorobutadiene	750	
88-06-2	2,4,6-Trichlorophenol	870	
95-95-4	2,4,5-Trichlorophenol	1100	
121-14-2	2,4-Dinitrotoluene	100	U
118-74-1	Hexachlorobenzene	920	
87-86-5	Pentachlorophenol	500	U
108-39-4	3-Methylphenol	100	U