100257

APPENDIX B

Data Summary Forms

AR301305

DATA SUMMARY FORM: Semi-volatiles

Name: Standard Chlorine

#: R3-2 **Sampling Date(s):** 11/27-29/89

WATER SAMPLES (ug/L)

+ Result from diluted analysis
To calculate sample quantitation limit: (CRQL * Dilution Factor)

CRQL	COMPOUND																				
	Sample No.	42184		42187		42188		45806		46996											
	Dilution Factor	0.9		0.9		0.9		0.9		0.9											
	Location	BB-5 Equipment Blank		SWR-8		SWT-9		SWD-18		BB-10 Field Blank											
10	1,2,3-Trichlorobenzene **		UL	44			UL		UL		UL										
10	1,2,4-Trichlorobenzene		UL	170			UL		UL		UL										
10	1,2,3,4-Tetrachlorobenzene		UL				UL		UL		UL										
10	1,2,4,5-Tetrachlorobenzene***		UL				UL		UL		UL										
10	Pentachlorobenzene		UL				UL		UL		UL										
10	Hexachlorobenzene		UL				UL		UL		UL										
10	1-Chloro-3-nitrobenzene		UJ		UJ		UL		UJ		UJ										
10	Nitrobenzene		UL				UL		UL		UL										

CRDL = Contract Required Detection Limit *Action Level Exists SEE NARRATIVE FOR CODE DEFINITIONS

revised 12/88

** 1,2,3-Trichlorobenzene and 1,3,5-Trichlorobenzene coelute. Results presented are for both isomers.

*** 1,2,3,5-Tetrachlorobenzene and 1,2,4,5-Tetrachlorobenzene coelute. Results presented are for both isomers.

DATA SUMMARY FORM: Semi-volatiles

Site Name: Standard Chlorine

Case #: R3-2 ~~N/A~~ **Sampling Date(s):** 12/4 & 12/6/89

WATER SAMPLES (ug/L)

+ Result from diluted analysis
To calculate sample quantitation limit: (CRQL * Dilution Factor)

AR301306

	Sample No.	42186	45809
	Dilution Factor	2/20	1
	Location	SWB-7	EQB-1 Equipment Blank
	COMPOUND		
10	1,2,3-Trichlorobenzene **	1600+	
10	1,2,4-Trichlorobenzene	1800+	
10	1,2,3,4-Tetrachlorobenzene	170	
10	1,2,4,5-Tetrachlorobenzene***	89	
10	Pentachlorobenzene	16 J	
10	Hexachlorobenzene	UJ	UJ
10	1-Chloro-3-nitrobenzene		
10	Nitrobenzene		

CRDL = Contract Required Detection Limit *Action Level Exists SEE NARRATIVE FOR CODE DEFINITIONS

revised 12/88

** 1,2,3-Trichlorobenzene and 1,3,5-Trichlorobenzene coelute. Results presented are for both isomers.

*** 1,2,3,5-Tetrachlorobenzene and 1,2,4,5-Tetrachlorobenzene coelute. Results presented are for both isomers.

DATA SUMMARY FORM: Semi-volatiles

Site Name: Standard Chlorine

Case #: R3-2 **Sampling Date(s):** 11/17, 11/20-21/89

SOIL SAMPLES (ug/Kg)

+ Result from diluted analysis
To calculate sample quantitation limit:
(CRQL * Dilution Factor) / ((100 - % moisture)/100)

R3 0 1 3 0 7

CRQL	COMPOUND																						
	Sample No.	40233		40225		40226		40227															
	Dilution Factor	54/273		1		1		1															
	% Moisture	30.6		17.4		20.2		12.8															
	Location	SP-1		SD-2		SD-3		SD-4															
330	1,2,3-Trichlorobenzene **	220000+	L		UL		UL		UL														
330	1,2,4-Trichlorobenzene	1100,000+	L		UL		UL		UL														
330	1,2,3,4-Tetrachlorobenzene	510,000+	L		UL		UL		UL														
330	1,2,4,5-Tetrachlorobenzene***	970,000+	L		UL		UL		UL														
330	Pentachlorobenzene	32000	L		UL		UL		UL														
330	Hexachlorobenzene		UJ		UL		UL		UL														
330	1-Chloro-3-nitrobenzene		UJ		UJ		UJ		UJ														
330	Nitrobenzene		UL		UL		UL		UL														

CRQL = [illegible]ract Required Quantitation Limit

SEE NARRATIVE FOR CODE DEFINITIONS

** 1,2,[illegible] Trichlorobenzene and 1,3,5- Trichlorobenzene coelute. Results presented are for both isomers

*** 1,2,3,5- Tetrachlorobenzene and 1,2,4,5-Tetrachlorobenzene coelute. Results presented [illegible] for both isomers.

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DATA SUMMARY FORM: Semi-volatiles

Site Name: Standard Chlorine

Case #: R3-2 **Sampling Date(s):** 11/27-29/89

SOIL SAMPLES (ug/Kg)

+ Result from diluted analysis

To calculate sample quantitation limit:
(CRQL * Dilution Factor) / ((100 - % moisture)/100)

AR301308

	Sample No.	42185		45807		45808		46997		46998	
	Dilution Factor	60/300		2		2		2/6		2	
	% Moisture	63.2		62.7		51.2		54.3		55.5	
	Location	SB-6		SR-13		SR-14		SR-11		SR-12	
CRQL	COMPOUND										
330	1,2,3-Trichlorobenzene **	650000+			UL	670	J	11000	L		UL
330	1,2,4-Trichlorobenzene	1900000+			UL	1400	L	26000+	L		UL
330	1,2,3,4-Tetrachlorobenzene	1100000+			UL	510	J	5200+	L		UL
330	1,2,4,5-Tetrachlorobenzene***	1900000+			UL		R	1200	J		UL
330	Pentachlorobenzene	270000			UL		R	640	J		UL
330	Hexachlorobenzene				UL		R		UL		UL
330	1-Chloro-3-nitrobenzene				UJ		R		UJ		UJ
330	Nitrobenzene				UL		R		UL		UL

CRQL = ntract Required Quantitation Limit

SEE NARRATIVE FOR CODE DEFINITIONS

** 1,2,3-Trichlorobenzene and 1,3,5-Trichlorobenzene coelute. Results presented are for both isomers

*** 1,2,3,5-Tetrachlorobenzene and 1,2,4,5-Tetrachlorobenzene coelute. Results presented are for both isomers.

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DATA SUMMARY FORM: Semi-volatiles

Site Name: Standard Chlorine

Case #: R3-2 **Sampling Date(s):** 12/4 & 12/6-7/89

SOIL SAMPLES (ug/Kg)

+ Result from diluted analysis
To calculate sample quantitation limit:
(CRQL * Dilution Factor) / ((100 - % moisture)/100)

R301306

CRQL	COMPOUND	45794		45795		45796		45797		45798									
	Dilution Factor	1		1		1		60		1/2									
	% Moisture	11.6		10.5		9.6		8.8		11.4									
	Location	DP-1		DP-2		DP-3		DP-4		DP-5									
330	1,2,3-Trichlorobenzene **	510	L		UL	190	J		UL										
330	1,2,4-Trichlorobenzene	820	L		UL	2200	L	12000	J										
330	1,2,3,4-Tetrachlorobenzene	430	L		UL	850	L		UL	620									
330	1,2,4,5-Tetrachlorobenzene***	310	L		UL	1200	L		UL	340	J								
330	Pentachlorobenzene		UL		UL	360	J		UL	6700+									
330	Hexachlorobenzene		UJ		UL	330	J		UL	310	J								
330	1-Chloro-3-nitrobenzene		UL		UL		UL		UL										
330	Nitrobenzene		UL		UL		UL		UL										

CRQL = [illegible]tract Required Quantitation Limit

SEE NARRATIVE FOR CODE DEFINITIONS

** 1,2 Trichlorobenzene and 1,3,5- Trichlorobenzene coelute. Results presented are for both isomers

*** 1,2,3,5- Tetrachlorobenzene and 1,2,4,5-Tetrachlorobenzene coelute. Results presented [illegible] for both isomers.

revised 12/88

AR301310

DATA SUMMARY FORM: Semi-volatiles

Site Name: Standard Chlorine

SOIL SAMPLES (ug/Kg)

Case #: R3-2 **Sampling Date(s):** 12/11-14/89

+ Result from diluted analysis

To calculate sample quantitation limit:
(CRQL * Dilution Factor) / ((100 - % moisture)/100)

	Sample No.	45799		45800		45801		45802		45803		45804											
	Dilution Factor	1/3		1/4		54/1085		54/363		53		49/100											
	% Moisture	17.8		28.2		25.4		7.8		35.7		46											
	Location	DP-6		DP-7		DP-8		DP-9		DP-10		DP-11											
CRQL	**COMPOUND**																						
330	1,2,3-Trichlorobenzene **	3900	L	1800	L	500000+		190000+		130000		160000+											
330	1,2,4-Trichlorobenzene	120	J	5200+	L	3800000+		830000+		270000		340000+											
330	1,2,3,4-Tetrachlorobenzene	5800+	L	8500+	L	230000+		410000+		180000		290000											
330	1,2,4,5-Tetrachlorobenzene***	3500	L	8700+	L	370000		86000		110000		150000											
330	Pentachlorobenzene	8100+	L	10000+	L	480000+		61000		25000	J	40000											
330	Hexachlorobenzene	210	J	1300+	L																		
330	1-Chloro-3-nitrobenzene		UL		UL																		
330	Nitrobenzene		UL		UL																		

CRQL = **tract Required Quantitation Limit**

SEE NARRATIVE FOR CODE DEFINITIONS

** 1, Trichlorobenzene and 1,3,5- Trichlorobenzene coelute. Results presented are for bc rmers

*** 1,2,3,5- Tetrachlorobenzene and 1,2,4,5-Tetrachlorobenzene coelute. Results presented are for both isomers.

revised 12/88

APPENDIX C

Results as reported by the laboratory for all target analytes

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

42184

Lab Name:VERSAR Contract:_____

Lab Code:VERSAR Case No.:420.1.0 SAS No.: _____ SDG No.: 3

Matrix: (soil/water)WATER Lab Sample ID: __89903

Sample wt/vol: 1060 (g/ml)ML Lab File ID: __Z3357

Level:(low/med) LOW Date Received: ___11/30/89

% Moisture: not dec._____ dec._____ Date Extracted: 12/04/89

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 12/29/89

GPC Cleanup: (Y/N)N pH:_____ Dilution Factor: _ 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	
98-95-3	Nitrobenzene	9	U
120-82-1	1,2,4-Trichlorobenzene	9	U
87-61-6	1,2,3-Trichlorobenzene	9	U
121-73-3	1-Chloro-3-Nitrobenzene	9	U
634-66-2	1,2,3,4-Tetrachlorobenzene	9	U
95-94-3	1,2,4,5-Tetrachlorobenzene	9	U
	Pentachlorobenzene	9	U
118-74-1	Hexachlorobenzene	9	U

1) 1,2,3-Trichlorobenzene and 1,3,5-Trichlorobenzene coelute and and cannot be quantified separately.

2) 1,2,3,5-Tetrachlorobenzene and 1,2,4,5-Tetrachlorobenzene coelute and cannot be quantified separately.

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

42187

Lab Name:VERSAR Contract:_____

Lab Code:VERSAR Case No.:420.1.0 SAS No.: _____ SDG No.: 3

Matrix: (soil/water)WATER Lab Sample ID: __89905

Sample wt/vol: 1060 (g/ml)ML Lab File ID: __Z3359

Level:(low/med) LOW Date Received: ___11/30/89

% Moisture: not dec._____ dec._____ Date Extracted: 12/04/89

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 12/30/89

GPC Cleanup: (Y/N)N pH:_____ Dilution Factor: _ 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	
98-95-3	Nitrobenzene	9	U
120-82-1	1,2,4-Trichlorobenzene	170	
87-61-6	1,2,3-Trichlorobenzene	44	
121-73-3	1-Chloro-3-Nitrobenzene	9	U
634-66-2	1,2,3,4-Tetrachlorobenzene	9	U
95-94-3	1,2,4,5-Tetrachlorobenzene	9	U
----------	Pentachlorobenzene	9	U
118-74-1	Hexachlorobenzene	9	U

1) 1,2,3-Trichlorobenzene and 1,3,5-Trichlorobenzene coelute and and cannot be quantified separately.

2) 1,2,3,5-Tetrachlorobenzene and 1,2,4,5-Tetrachlorobenzene coelute and cannot be quantified separately.

AR301313

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

42188

Lab Name:VERSAR Contract:_____

Lab Code:VERSAR Case No.:420.1.0 SAS No.: _____ SDG No.: 3

Matrix: (soil/water)WATER Lab Sample ID: __89902

Sample wt/vol: 1060 (g/ml)ML Lab File ID: __Z3362

Level:(low/med) LOW Date Received: ___11/30/89

% Moisture: not dec._____ dec._____ Date Extracted: 12/04/89

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 12/30/89

GPC Cleanup: (Y/N)N pH:_____ Dilution Factor: _ 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	
98-95-3	Nitrobenzene	9	U
120-82-1	1,2,4-Trichlorobenzene	9	U
87-61-6	1,2,3-Trichlorobenzene	9	U
121-73-3	1-Chloro-3-Nitrobenzene	9	U
634-66-2	1,2,3,4-Tetrachlorobenzene	9	U
95-94-3	1,2,4,5-Tetrachlorobenzene	9	U
----------	Pentachlorobenzene	9	U
118-74-1	Hexachlorobenzene	9	U

1) 1,2,3-Trichlorobenzene and 1,3,5-Trichlorobenzene coelute and and cannot be quantified separately.

2) 1,2,3,5-Tetrachlorobenzene and 1,2,4,5-Tetrachlorobenzene coelute and cannot be quantified separately.

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

45806

Lab Name:VERSAR Contract:_____

Lab Code:VERSAR Case No.:420.1.0 SAS No.: _____ SDG No.: 3

Matrix: (soil/water)WATER Lab Sample ID: __89906

Sample wt/vol: 1060 (g/ml)ML Lab File ID: __23360

Level:(low/med) LOW Date Received: ___11/30/89

% Moisture: not dec._____ dec._____ Date Extracted: 12/04/89

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 12/30/89

GPC Cleanup: (Y/N)N pH:_____ Dilution Factor: _ 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	
98-95-3	Nitrobenzene	9	U
120-82-1	1,2,4-Trichlorobenzene	9	U
87-61-6	1,2,3-Trichlorobenzene	9	U
121-73-3	1-Chloro-3-Nitrobenzene	9	U
634-66-2	1,2,3,4-Tetrachlorobenzene	9	U
95-94-3	1,2,4,5-Tetrachlorobenzene	9	U
	Pentachlorobenzene	9	U
118-74-1	Hexachlorobenzene	9	U

1) 1,2,3-Trichlorobenzene and 1,3,5-Trichlorobenzene coelute and and cannot be quantified separately.

2) 1,2,3,5-Tetrachlorobenzene and 1,2,4,5-Tetrachlorobenzene coelute and cannot be quantified separately.

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

46996

Name:VERSAR Contract:_____

Lab Code:VERSAR Case No.:420.1.0 SAS No.: _____ SDG No.: 3

Matrix: (soil/water)WATER Lab Sample ID: __89904

Sample wt/vol: 1060 (g/ml)ML Lab File ID: __Z3358

Level:(low/med) LOW Date Received: ___11/30/89

% Moisture: not dec._____ dec._____ Date Extracted: 12/04/89

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 12/30/89

GPC Cleanup: (Y/N)N pH:_____ Dilution Factor: _ 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	
98-95-3	Nitrobenzene	9	U
120-82-1	1,2,4-Trichlorobenzene	9	U
87-61-6	1,2,3-Trichlorobenzene	9	U
121-73-3	1-Chloro-3-Nitrobenzene	9	U
634-66-2	1,2,3,4-Tetrachlorobenzene	9	U
95-94-3	1,2,4,5-Tetrachlorobenzene	9	U
----------	Pentachlorobenzene	9	U
118-74-1	Hexachlorobenzene	9	U

1) 1,2,3-Trichlorobenzene and 1,3,5-Trichlorobenzene coelute and and cannot be quantified separately.

2) 1,2,3,5-Tetrachlorobenzene and 1,2,4,5-Tetrachlorobenzene coelute and cannot be quantified separately.

1R

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

42186

Lab Name:VERSAR Contract:_____

Lab Code:VERSAR Case No.:420.1.0 SAS No.: _____ SDG No.: 4

Matrix: (soil/water)WATER Lab Sample ID: __91451

Sample wt/vol: 1020 (g/ml)ML Lab File ID: __Z3397

Level:(low/med) LOW Date Received: ___12/06/89

% Moisture: not dec._____ dec._____ Date Extracted: 12/11/89

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 01/02/90

GPC Cleanup: (Y/N)N pH:_____ Dilution Factor: _ 2

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	
98-95-3	Nitrobenzene	20	U
120-82-1	1,2,4-Trichlorobenzene		ES
87-61-6	1,2,3-Trichlorobenzene		E
121-73-3	1-Chloro-3-Nitrobenzene	20	U
634-66-2	1,2,3,4-Tetrachlorobenzene	170	
95-94-3	1,2,4,5-Tetrachlorobenzene	89	
	Pentachlorobenzene	16	J
118-74-1	Hexachlorobenzene	20	U

1) 1,2,3-Trichlorobenzene and 1,3,5-Trichlorobenzene coelute and and cannot be quantified separately.

2) 1,2,3,5-Tetrachlorobenzene and 1,2,4,5-Tetrachlorobenzene coelute and cannot be quantified separately.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
42186DL

Lab Name:VERSAR Contract:_____

Lab Code:VERSAR Case No.:420.1.0 SAS No.: _____ SDG No.: 4

Matrix: (soil/water)WATER Lab Sample ID: __91451DL

Sample wt/vol: 1020 (g/ml)ML Lab File ID: __Z3396

Level:(low/med) LOW Date Received: ___12/06/89

% Moisture: not dec._____ dec._____ Date Extracted: 12/11/89

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 01/02/90

GPC Cleanup: (Y/N)N pH:_____ Dilution Factor: _ 20

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	
98-95-3	Nitrobenzene	200	U
120-82-1	1,2,4-Trichlorobenzene	1800	D
87-61-6	1,2,3-Trichlorobenzene	1600	D
121-73-3	1-Chloro-3-Nitrobenzene	200	U
634-66-2	1,2,3,4-Tetrachlorobenzene	200	U
95-94-3	1,2,4,5-Tetrachlorobenzene	200	U
	Pentachlorobenzene	200	U
118-74-1	Hexachlorobenzene	200	U

1) 1,2,3-Trichlorobenzene and 1,3,5-Trichlorobenzene coelute and and cannot be quantified separately.

2) 1,2,3,5-Tetrachlorobenzene and 1,2,4,5-Tetrachlorobenzene coelute and cannot be quantified separately.

Resubmitted

MAR 21 1990

AR301318

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

45809

Lab Name:VERSAR Contract:_____

Lab Code:VERSAR Case No.:420.1.0 SAS No.: _____ SDG No.: 5

Matrix: (soil/water)WATER Lab Sample ID: __92015

Sample wt/vol: 1020 (g/ml)ML Lab File ID: __Z3393

Level:(low/med) LOW Date Received: ___12/08/89

% Moisture: not dec._____ dec._____ Date Extracted: 12/11/89

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 01/02/90

GPC Cleanup: (Y/N)N pH:_____ Dilution Factor: _ 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	
98-95-3	Nitrobenzene	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
87-61-6	1,2,3-Trichlorobenzene	10	U
121-73-3	1-Chloro-3-Nitrobenzene	10	U
634-66-2	1,2,3,4-Tetrachlorobenzene	10	U
95-94-3	1,2,4,5-Tetrachlorobenzene	10	U
----------	Pentachlorobenzene	10	U
118-74-1	Hexachlorobenzene	10	U

1) 1,2,3-Trichlorobenzene and 1,3,5-Trichlorobenzene coelute and and cannot be quantified separately.

2) 1,2,3,5-Tetrachlorobenzene and 1,2,4,5-Tetrachlorobenzene coelute and cannot be quantified separately.

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

40223

Lab Name:VERSAR Contract:_____

Lab Code:VERSAR Case No.:420.1 SAS No.: _____ SDG No.: 1

Matrix: (soil/water)SOIL (g/ml)G Lab Sample ID: __88089

Sample wt/vol: 1.1 Lab File ID: __Z3406

Level:(low/med) MED Date Received: ___11/20/89

% Moisture: not dec. 30.6 dec._____ Date Extracted: 11/29/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 01/03/90

GPC Cleanup: (Y/N) N pH:_____ Dilution Factor: _ 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)_ug/Kg	
98-95-3	Nitrobenzene	26000	U
120-82-1	1,2,4-Trichlorobenzene		E
87-61-6	1,2,3-Trichlorobenzene	26000	U
121-73-3	1-Chloro-3-Nitrobenzene	26000	
634-66-2	1,2,3,4-Tetrachlorobenzene	210000	
95-94-3	1,2,4,5-Tetrachlorobenzene	400000	
	Pentachlorobenzene	32000	
118-74-1	Hexachlorbenzene	26000	U

1) 1,2,3-Trichlorobenzene and 1,3,5-Trichlorobenzene coelute and cannot be quantified separately.

2) 1,2,3,5-Tetrachlorobenzene and 1,2,4,5-Tetrachlorobenzene coelute and cannot be quantified separately.

Resubmitted
MAR 21 1990 CEL

AR301320

R100012

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

40223

Lab Name:VERSAR Contract:_____

Lab Code:VERSAR Case No.:420.1 SAS No.: _____ SDG No.: 1

Matrix: (soil/water)SOIL (g/ml)G Lab Sample ID: __88089

Sample wt/vol: 1.1 Lab File ID: __Z3406

Level:(low/med) MED Date Received: ___11/20/89

% Moisture: not dec. 30.6 dec._____ Date Extracted: 11/29/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 01/03/90

GPC Cleanup: (Y/N) N pH:_____ Dilution Factor: _ 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	
98-95-3	Nitrobenzene	26000	U
120-82-1	1,2,4-Trichlorobenzene		E
87-61-6	1,2,3-Trichlorobenzene	26000	U
121-73-3	1-Chloro-3-Nitrobenzene	26000	
634-66-2	1,2,3,4-Tetrachlorobenzene	210000	
95-94-3	1,2,4,5-Tetrachlorobenzene	400000	
----------	Pentachlorobenzene	32000	
118-74-1	Hexachlorbenzene	26000	U

CEU 4/2/90

1) 1,2,3-Trichlorobenzene and 1,3,5-Trichlorobenzene coelute and cannot be quantified separately.

2) 1,2,3,5-Tetrachlorobenzene and 1,2,4,5-Tetrachlorobenzene coelute and cannot be quantified separately.

AR301321

Resubmitted MAR 21 1990 CEU

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

40223DL

Lab Name:VERSAR Contract:_____

Lab Code:VERSAR Case No.:420.1 SAS No.: _____ SDG No.: 1

Matrix: (soil/water)SOIL (g/ml)G Lab Sample ID: __88089DL

Sample wt/vol: 1.1 Lab File ID: __Z3411

Level:(low/med) MED Date Received: ___11/20/89

% Moisture: not dec. 30.6 dec._____ Date Extracted: 11/29/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 01/03/90

GPC Cleanup: (Y/N) N pH:_____ Dilution Factor: _ 5

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	
98-95-3	Nitrobenzene	130000	U
120-82-1	1,2,4-Trichlorobenzene	1100000	D
87-61-6	1,2,3-Trichlorobenzene	220000	D
121-73-3	1-Chloro-3-Nitrobenzene	130000	U
634-66-2	1,2,3,4-Tetrachlorobenzene	510000	D
95-94-3	1,2,4,5-Tetrachlorobenzene	970000	D
----------	Pentachlorobenzene	130000	U
118-74-1	Hexachlorbenzene	130000	U

1) 1,2,3-Trichlorobenzene and 1,3,5-Trichlorobenzene coelute and cannot be quantified separately.

2) 1,2,3,5-Tetrachlorobenzene and 1,2,4,5-Tetrachlorobenzene coelute and cannot be quantified separately.

Resubmitted MAR 21 1990 CEK

AR301322

FORM I SV-1

R100036

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

40225

Lab Name:VERSAR Contract:_____

Lab Code:VERSAR Case No.:420.1 SAS No.: _____ SDG No.: 2

Matrix: (soil/water)SOIL (g/ml)G Lab Sample ID: __88787

Sample wt/vol: 30.41 Lab File ID: __Z3365

Level:(low/med) LOW Date Received: ___11/22/89

% Moisture: not dec. 17.4 dec._____ Date Extracted: 12/05/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 12/30/89

GPC Cleanup: (Y/N) N pH:_____ Dilution Factor: _ 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	
98-95-3	Nitrobenzene	400	U
120-82-1	1,2,4-Trichlorobenzene	400	U
87-61-6	1,2,3-Trichlorobenzene	400	U
121-73-3	1-Chloro-3-Nitrobenzene	400	U
634-66-2	1,2,3,4-Tetrachlorobenzene	400	U
95-94-3	1,2,4,5-Tetrachlorobenzene	400	U
	Pentachlorobenzene	400	U
118-74-1	Hexachlorbenzene	400	U

1) 1,2,3-Trichlorobenzene and 1,3,5-Trichlorobenzene coelute and cannot be quantified separately.

2) 1,2,3,5-Tetrachlorobenzene and 1,2,4,5-Tetrachlorobenzene coelute and cannot be quantified separately.

Resubmitted MAR 21 19 CSR

AR301323

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

40226

Lab Name:VERSAR Contract:_____

Lab Code:VERSAR Case No.:420.1 SAS No.: _____ SDG No.: 2

Matrix: (soil/water)SOIL (g/ml)G Lab Sample ID: __88788

Sample wt/vol: 29.91 Lab File ID: __Z3392

Level:(low/med) LOW Date Received: ___11/22/89

% Moisture: not dec. 20.2 dec._____ Date Extracted: 12/05/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 01/02/90

GPC Cleanup: (Y/N) N pH:_____ Dilution Factor: _ 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)_ug/Kg	
98-95-3	Nitrobenzene	420	U
120-82-1	1,2,4-Trichlorobenzene	420	U
87-61-6	1,2,3-Trichlorobenzene	420	U
121-73-3	1-Chloro-3-Nitrobenzene	420	U
634-66-2	1,2,3,4-Tetrachlorobenzene	420	U
95-94-3	1,2,4,5-Tetrachlorobenzene	420	U
	Pentachlorobenzene	420	U
118-74-1	Hexachlorbenzene	420	U

1) 1,2,3-Trichlorobenzene and 1,3,5-Trichlorobenzene coelute and cannot be quantified separately.

2) 1,2,3,5-Tetrachlorobenzene and 1,2,4,5-Tetrachlorobenzene coelute and cannot be quantified separately.

Resubmitted MAR 21 1990 CEN

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

40227

Lab Name:VERSAR Contract:_____

Lab Code:VERSAR Case No.:420.1 SAS No.: _____ SDG No.: 2

Matrix: (soil/water)SOIL (g/ml)G Lab Sample ID: __88789

Sample wt/vol: 30.32 Lab File ID: __Z3366

Level:(low/med) LOW Date Received: ___11/22/89

% Moisture: not dec. 20.2 dec._____ Date Extracted: 12/05/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 12/30/89

GPC Cleanup: (Y/N) N pH:_____ Dilution Factor: _ 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)_ug/Kg	
98-95-3	Nitrobenzene	380	U
120-82-1	1,2,4-Trichlorobenzene	380	U
87-61-6	1,2,3-Trichlorobenzene	380	U
121-73-3	1-Chloro-3-Nitrobenzene	380	U
634-66-2	1,2,3,4-Tetrachlorobenzene	380	U
95-94-3	1,2,4,5-Tetrachlorobenzene	380	U
	Pentachlorobenzene	380	U
118-74-1	Hexachlorbenzene	380	U

1) 1,2,3-Trichlorobenzene and 1,3,5-Trichlorobenzene coelute and cannot be quantified separately.

2) 1,2,3,5-Tetrachlorobenzene and 1,2,4,5-Tetrachlorobenzene coelute and cannot be quantified separately.

Resubmitted
MAR 21 1990 CEK

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

40227

Lab Name:VERSAR Contract:_____

Lab Code:VERSAR Case No.:420.1 SAS No.: _____ SDG No.: 2

Matrix: (soil/water)SOIL (g/ml)G Lab Sample ID: __88789

Sample wt/vol: 30.32 Lab File ID: __Z3366

Level:(low/med) LOW Date Received: ___11/22/89

% Moisture: not dec. 20.2 (12.8 3/30/90 CEK) dec._____ Date Extracted: 12/05/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 12/30/89

GPC Cleanup: (Y/N) N pH:_____ Dilution Factor: _ 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	
98-95-3	Nitrobenzene	380	U
120-82-1	1,2,4-Trichlorobenzene	380	U
87-61-6	1,2,3-Trichlorobenzene	380	U
121-73-3	1-Chloro-3-Nitrobenzene	380	U
634-66-2	1,2,3,4-Tetrachlorobenzene	380	U
95-94-3	1,2,4,5-Tetrachlorobenzene	380	U
----------	Pentachlorobenzene	380	U
118-74-1	Hexachlorbenzene	380	U

1) 1,2,3-Trichlorobenzene and 1,3,5-Trichlorobenzene coelute and cannot be quantified separately.

2) 1,2,3,5-Tetrachlorobenzene and 1,2,4,5-Tetrachlorobenzene coelute and cannot be quantified separately.

Resubmitted MAR 21 1990 CEK

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
42185

Lab Name:VERSAR Contract:_____

Lab Code:VERSAR Case No.:420.1.0 SAS No.: _____ SDG No.: 3

Matrix: (soil/water)SOIL Lab Sample ID: __89907

Sample wt/vol: 1.00 (g/ml)G Lab File ID: __Z3425

Level:(low/med) MED Date Received: ___11/30/89

% Moisture: not dec. 63.2 dec._____ Date Extracted: 12/05/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 01/04/90

GPC Cleanup: (Y/N)N pH:6.71 Dilution Factor: _ 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	
98-95-3	Nitrobenzene	54000	U
120-82-1	1,2,4-Trichlorobenzene		E
87-61-6	1,2,3-Trichlorobenzene		E
121-73-3	1-Chloro-3-Nitrobenzene	54000	U
634-66-2	1,2,3,4-Tetrachlorobenzene		E
95-94-3	1,2,4,5-Tetrachlorobenzene		E
	Pentachlorobenzene	270000	
118-74-1	Hexachlorobenzene	54000	U

1) 1,2,3-Trichlorobenzene and 1,3,5-Trichlorobenzene coelute and and cannot be quantified separately.

2) 1,2,3,5-Tetrachlorobenzene and 1,2,4,5-Tetrachlorobenzene coelute and cannot be quantified separately.

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

42185DL

Lab Name:VERSAR Contract:_____

Lab Code:VERSAR Case No.:420.1.0 SAS No.: _____ SDG No.: 3

Matrix: (soil/water)SOIL Lab Sample ID: __89907DL

Sample wt/vol: 1.00 (g/ml)G Lab File ID: __Z3432

Level:(low/med) MED Date Received: ___11/30/89

% Moisture: not dec. 63.2 dec._____ Date Extracted: 12/05/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 01/04/90

GPC Cleanup: (Y/N)N pH:6.71 Dilution Factor: _ 5

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	
98-95-3	Nitrobenzene	270000	U
120-82-1	1,2,4-Trichlorobenzene	1900000	D
87-61-6	1,2,3-Trichlorobenzene	650000	D
121-73-3	1-Chloro-3-Nitrobenzene	270000	U
634-66-2	1,2,3,4-Tetrachlorobenzene	1100000	D
95-94-3	1,2,4,5-Tetrachlorobenzene	1900000	D
----------	Pentachlorobenzene	270000	U
118-74-1	Hexachlorobenzene	270000	U

1) 1,2,3-Trichlorobenzene and 1,3,5-Trichlorobenzene coelute and and cannot be quantified separately.

2) 1,2,3,5-Tetrachlorobenzene and 1,2,4,5-Tetrachlorobenzene coelute and cannot be quantified separately.

Resubmitted MAR 21 1990 CEL

AR301328

FORM I SV-1

R100051

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

45807

Lab Name:VERSAR Contract:_____

Lab Code:VERSAR Case No.:420.1.0 SAS No.: _____ SDG No.: 3

Matrix: (soil/water)SOIL Lab Sample ID: 89910

Sample wt/vol: 30.03 (g/ml)G Lab File ID: Z3449

Level:(low/med) LOW Date Received: 11/30/89

% Moisture: not dec. 62.7 dec._____ Date Extracted: 12/09/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 01/05/90

GPC Cleanup: (Y/N)Y pH:7.87 Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	
98-95-3	Nitrobenzene	1800	U
120-82-1	1,2,4-Trichlorobenzene	1800	U
87-61-6	1,2,3-Trichlorobenzene	1800	U
121-73-3	1-Chloro-3-Nitrobenzene	1800	U
634-66-2	1,2,3,4-Tetrachlorobenzene	1800	U
95-94-3	1,2,4,5-Tetrachlorobenzene	1800	U
	Pentachlorobenzene	1800	U
118-74-1	Hexachlorobenzene	1800	U

1) 1,2,3-Trichlorobenzene and 1,3,5-Trichlorobenzene coelute and and cannot be quantified separately.

2) 1,2,3,5-Tetrachlorobenzene and 1,2,4,5-Tetrachlorobenzene coelute and cannot be quantified separately.

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

45808

Lab Name:VERSAR Contract:_____

Lab Code:VERSAR Case No.:420.1.0 SAS No.: _____ SDG No.: 3

Matrix: (soil/water)SOIL Lab Sample ID: __89911

Sample wt/vol: 30.48 (g/ml)G Lab File ID: __Z3450

Level:(low/med) LOW Date Received: ___11/30/89

% Moisture: not dec. 51.2 dec._____ Date Extracted: 12/09/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 01/05/90

GPC Cleanup: (Y/N)Y pH:7.69 Dilution Factor: _ 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	
98-95-3	Nitrobenzene	1300	U
120-82-1	1,2,4-Trichlorobenzene	1400	
87-61-6	1,2,3-Trichlorobenzene	670	J
121-73-3	1-Chloro-3-Nitrobenzene	1300	U
634-66-2	1,2,3,4-Tetrachlorobenzene	510	J
95-94-3	1,2,4,5-Tetrachlorobenzene	1300	U
	Pentachlorobenzene	1300	U
118-74-1	Hexachlorobenzene	1300	U

1) 1,2,3-Trichlorobenzene and 1,3,5-Trichlorobenzene coelute and and cannot be quantified separately.

2) 1,2,3,5-Tetrachlorobenzene and 1,2,4,5-Tetrachlorobenzene coelute and cannot be quantified separately.

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

46997

Lab Name:VERSAR Contract:_____

Lab Code:VERSAR Case No.:420.1.0 SAS No.: _____ SDG No.: 3

Matrix: (soil/water)SOIL Lab Sample ID: __89908

Sample wt/vol: 30.32 (g/ml)G Lab File ID: __Z3445

Level:(low/med) LOW Date Received: ___11/30/89

% Moisture: not dec. 54.3 dec._____ Date Extracted: 12/09/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 01/05/90

GPC Cleanup: (Y/N)Y pH:7.81 Dilution Factor: _ 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	
98-95-3	Nitrobenzene	1400	U
120-82-1	1,2,4-Trichlorobenzene		ES
87-61-6	1,2,3-Trichlorobenzene	11000	
121-73-3	1-Chloro-3-Nitrobenzene	1400	U
634-66-2	1,2,3,4-Tetrachlorobenzene	5000	
95-94-3	1,2,4,5-Tetrachlorobenzene	1200	J
	Pentachlorobenzene	640	J
118-74-1	Hexachlorobenzene	1400	U

1) 1,2,3-Trichlorobenzene and 1,3,5-Trichlorobenzene coelute and and cannot be quantified separately.

2) 1,2,3,5-Tetrachlorobenzene and 1,2,4,5-Tetrachlorobenzene coelute and cannot be quantified separately.

AR301331

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
46997DL

Lab Name:VERSAR Contract:_____

Lab Code:VERSAR Case No.:420.1.0 SAS No.: _____ SDG No.: 3

Matrix: (soil/water)SOIL Lab Sample ID: __89908DL

Sample wt/vol: 30.32 (g/ml)G Lab File ID: __Z3451

Level:(low/med) LOW Date Received: ___11/30/89

% Moisture: not dec. 54.3 dec._____ Date Extracted: 12/03/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 01/05/90

GPC Cleanup: (Y/N)Y pH:7.81 Dilution Factor: _ 3

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	
98-95-3	Nitrobenzene	4300	U
120-82-1	1,2,4-Trichlorobenzene	26000	D
87-61-6	1,2,3-Trichlorobenzene	9500	D
121-73-3	1-Chloro-3-Nitrobenzene	4300	U
634-66-2	1,2,3,4-Tetrachlorobenzene	5200	D
95-94-3	1,2,4,5-Tetrachlorobenzene	4300	U
----------	Pentachlorobenzene	4300	U
118-74-1	Hexachlorobenzene	4300	U

1) 1,2,3-Trichlorobenzene and 1,3,5-Trichlorobenzene coelute and and cannot be quantified separately.

2) 1,2,3,5-Tetrachlorobenzene and 1,2,4,5-Tetrachlorobenzene coelute and cannot be quantified separately.

Resubmitted MAR 21 1990 CK

AR301332

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

46998

Lab Name:VERSAR Contract:_____

Lab Code:VERSAR Case No.:420.1.0 SAS No.: _____ SDG No.: 3

Matrix: (soil/water)SOIL Lab Sample ID: __89909

Sample wt/vol: 30.01 (g/ml)G Lab File ID: __Z3448

Level:(low/med) LOW Date Received: ___11/30/89

% Moisture: not dec. 55.5 dec._____ Date Extracted: 12/09/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 01/05/90

GPC Cleanup: (Y/N)Y pH:8.11 Dilution Factor: _ 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	
98-95-3	Nitrobenzene	1500	U
120-82-1	1,2,4-Trichlorobenzene	1500	U
87-61-6	1,2,3-Trichlorobenzene	1500	U
121-73-3	1-Chloro-3-Nitrobenzene	1500	U
634-66-2	1,2,3,4-Tetrachlorobenzene	1500	U
95-94-3	1,2,4,5-Tetrachlorobenzene	1500	U
	Pentachlorobenzene	1500	U
118-74-1	Hexachlorobenzene	1500	U

1) 1,2,3-Trichlorobenzene and 1,3,5-Trichlorobenzene coelute and and cannot be quantified separately.

2) 1,2,3,5-Tetrachlorobenzene and 1,2,4,5-Tetrachlorobenzene coelute and cannot be quantified separately.

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

45794

Lab Name:VERSAR Contract:_____

Lab Code:VERSAR Case No.:420.1.0 SAS No.: _____ SDG No.: 4

Matrix: (soil/water)SOIL Lab Sample ID: __91452

Sample wt/vol: 30.03 (g/ml)G Lab File ID: __Z3400

Level:(low/med) LOW Date Received: ___12/06/89

% Moisture: not dec. 11.6 dec._____ Date Extracted: 12/16/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 01/03/90

GPC Cleanup: (Y/N)N pH:7.69 Dilution Factor: _ 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	
98-95-3	Nitrobenzene	380	U
120-82-1	1,2,4-Trichlorobenzene	820	
87-61-6	1,2,3-Trichlorobenzene	510	
121-73-3	1-Chloro-3-Nitrobenzene	380	U
634-66-2	1,2,3,4-Tetrachlorobenzene	430	X
95-94-3	1,2,4,5-Tetrachlorobenzene	310	J
----------	Pentachlorobenzene	380	U
118-74-1	Hexachlorobenzene	380	U

1) 1,2,3-Trichlorobenzene and 1,3,5-Trichlorobenzene coelute and and cannot be quantified separately.

2) 1,2,3,5-Tetrachlorobenzene and 1,2,4,5-Tetrachlorobenzene coelute and cannot be quantified separately.

AR301334

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

45795

Lab Name: VERSAR Contract: _____

Lab Code: VERSAR Case No.: 420.1.0 SAS No.: _____ SDG No.: 5

Matrix: (soil/water) SOIL Lab Sample ID: 92016

Sample wt/vol: 30.23 (g/ml) G Lab File ID: Z3405

Level: (low/med) LOW Date Received: 12/08/89

% Moisture: not dec. 10.5 dec. _____ Date Extracted: 12/16/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 01/03/90

GPC Cleanup: (Y/N) N pH: 7.51 Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	
98-95-3	Nitrobenzene	370	U
120-82-1	1,2,4-Trichlorobenzene	370	U
87-61-6	1,2,3-Trichlorobenzene	370	U
121-73-3	1-Chloro-3-Nitrobenzene	370	U
634-66-2	1,2,3,4-Tetrachlorobenzene	370	U
95-94-3	1,2,4,5-Tetrachlorobenzene	370	U
	Pentachlorobenzene	370	U
118-74-1	Hexachlorobenzene	370	U

1) 1,2,3-Trichlorobenzene and 1,3,5-Trichlorobenzene coelute and and cannot be quantified separately.

2) 1,2,3,5-Tetrachlorobenzene and 1,2,4,5-Tetrachlorobenzene coelute and cannot be quantified separately.

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

45796

Lab Name:VERSAR Contract:_____

Lab Code:VERSAR Case No.:420.1.0 SAS No.: _____ SDG No.: 5

Matrix: (soil/water)SOIL Lab Sample ID: __92017

Sample wt/vol: 30.11 (g/ml)G Lab File ID: __Z3401

Level:(low/med) LOW Date Received: ___12/08/89

% Moisture: not dec. 9.6 dec._____ Date Extracted: 12/16/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 01/03/90

GPC Cleanup: (Y/N)N pH:7.51 Dilution Factor: _ 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	
98-95-3	Nitrobenzene	370	U
120-82-1	1,2,4-Trichlorobenzene	2200	
87-61-6	1,2,3-Trichlorobenzene	190	J
121-73-3	1-Chloro-3-Nitrobenzene	370	U
634-66-2	1,2,3,4-Tetrachlorobenzene	850	
95-94-3	1,2,4,5-Tetrachlorobenzene	1200	
----------	Pentachlorobenzene	360	J
118-74-1	Hexachlorobenzene	330	J

1) 1,2,3-Trichlorobenzene and 1,3,5-Trichlorobenzene coelute and and cannot be quantified separately.

2) 1,2,3,5-Tetrachlorobenzene and 1,2,4,5-Tetrachlorobenzene coelute and cannot be quantified separately.

1R

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

45797

Lab Name:VERSAR Contract:_____

Lab Code:VERSAR Case No.:420.1.0 SAS No.: _____ SDG No.: 5

Matrix: (soil/water)SOIL Lab Sample ID: __92018

Sample wt/vol: 1.07 (g/ml)G Lab File ID: __Z3413

Level:(low/med) MED Date Received: ___12/08/89

% Moisture: not dec. 8.8 dec._____ Date Extracted: 12/16/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 01/30/90

GPC Cleanup: (Y/N)N pH:6.11 Dilution Factor: _ 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	
98-95-3	Nitrobenzene	21000	U
120-82-1	1,2,4-Trichlorobenzene	12000	J
87-61-6	1,2,3-Trichlorobenzene	21000	U
121-73-3	1-Chloro-3-Nitrobenzene	21000	U
634-66-2	1,2,3,4-Tetrachlorobenzene	21000	U
95-94-3	1,2,4,5-Tetrachlorobenzene	21000	U
	Pentachlorobenzene	21000	U
118-74-1	Hexachlorobenzene	21000	U

1) 1,2,3-Trichlorobenzene and 1,3,5-Trichlorobenzene coelute and and cannot be quantified separately.

2) 1,2,3,5-Tetrachlorobenzene and 1,2,4,5-Tetrachlorobenzene coelute and cannot be quantified separately.

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

45798

Lab Name:VERSAR Contract:_____

Lab Code:VERSAR Case No.:420.1.0 SAS No.: _____ SDG No.: 5

Matrix: (soil/water)SOIL Lab Sample ID: __92019

Sample wt/vol: 30.17 (g/ml)G Lab File ID: __Z3402

Level:(low/med) LOW Date Received: ___12/08/89

% Moisture: not dec. 11.4 dec._____ Date Extracted: 12/16/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 01/03/90

GPC Cleanup: (Y/N)N pH:4.10 Dilution Factor: _ 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)_ug/kg	
98-95-3	Nitrobenzene	370	U
120-82-1	1,2,4-Trichlorobenzene	370	U
87-61-6	1,2,3-Trichlorobenzene	370	U
121-73-3	1-Chloro-3-Nitrobenzene	370	U
634-66-2	1,2,3,4-Tetrachlorobenzene	620	
95-94-3	1,2,4,5-Tetrachlorobenzene	340	J
	Pentachlorobenzene		E
118-74-1	Hexachlorobenzene	310	J

1) 1,2,3-Trichlorobenzene and 1,3,5-Trichlorobenzene coelute and and cannot be quantified separately.

2) 1,2,3,5-Tetrachlorobenzene and 1,2,4,5-Tetrachlorobenzene coelute and cannot be quantified separately.

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

45798DL

Lab Name:VERSAR Contract:_____

Lab Code:VERSAR Case No.:420.1.0 SAS No.: _____ SDG No.: 5

Matrix: (soil/water)SOIL Lab Sample ID: __92019DL

Sample wt/vol: 30.17 (g/ml)G Lab File ID: __Z3410

Level:(low/med) LOW Date Received: ___12/08/89

% Moisture: not dec. 11.4 dec._____ Date Extracted: 12/16/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 01/03/90

GPC Cleanup: (Y/N)N pH:4.10 Dilution Factor: _ 2

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	
98-95-3	Nitrobenzene	750	U
120-82-1	1,2,4-Trichlorobenzene	750	U
87-61-6	1,2,3-Trichlorobenzene	750	U
121-73-3	1-Chloro-3-Nitrobenzene	750	U
634-66-2	1,2,3,4-Tetrachlorobenzene	750	U
95-94-3	1,2,4,5-Tetrachlorobenzene	750	U
	Pentachlorobenzene	6700	D
118-74-1	Hexachlorobenzene	750	U

1) 1,2,3-Trichlorobenzene and 1,3,5-Trichlorobenzene coelute and and cannot be quantified separately.

2) 1,2,3,5-Tetrachlorobenzene and 1,2,4,5-Tetrachlorobenzene coelute and cannot be quantified separately.

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

45799

Name:VERSAR Contract:_____

Lab Code:VERSAR Case No.:420.1.0 SAS No.: _____ SDG No.: 6

Matrix: (soil/water) SOIL Lab Sample ID: 93044

Sample wt/vol: 30.44 (g/ml) G Lab File ID: Z3422

Level: (low/med) LOW Date Received: 12/15/89

% Moisture: not dec. 17.8 dec._____ Date Extracted: 12/22/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 01/04/90

GPC Cleanup: (Y/N) N pH: 6.88 Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	
98-95-3	Nitrobenzene	400	U
120-82-1	1,2,4-Trichlorobenzene	120	X
87-61-6	1,2,3-Trichlorobenzene	3900	
121-73-3	1-Chloro-3-Nitrobenzene	400	U
634-66-2	1,2,3,4-Tetrachlorobenzene		E
95-94-3	1,2,4,5-Tetrachlorobenzene	3500	
----------	Pentachlorobenzene		E
118-74-1	Hexachlorobenzene	210	X

1) 1,2,3-Trichlorobenzene and 1,3,5-Trichlorobenzene coelute and and cannot be quantified separately.

2) 1,2,3,5-Tetrachlorobenzene and 1,2,4,5-Tetrachlorobenzene coelute and cannot be quantified separately.

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

45799DL

Lab Name:VERSAR Contract:_____

Lab Code:VERSAR Case No.:420.1.0 SAS No.: _____ SDG No.: 6

Matrix: (soil/water)SOIL Lab Sample ID: __93044DL

Sample wt/vol: 30.44 (g/ml)G Lab File ID: __Z3433

Level:(low/med) LOW Date Received: ___12/15/89

% Moisture: not dec. 17.8 dec._____ Date Extracted: 12/22/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 01/04/90

GPC Cleanup: (Y/N)N pH:6.88 Dilution Factor: _ 3

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	
98-95-3	Nitrobenzene	1200	U
120-82-1	1,2,4-Trichlorobenzene	1200	U
87-61-6	1,2,3-Trichlorobenzene	2500	D
121-73-3	1-Chloro-3-Nitrobenzene	1200	U
634-66-2	1,2,3,4-Tetrachlorobenzene	5800	D
95-94-3	1,2,4,5-Tetrachlorobenzene	3500	D
----------	Pentachlorobenzene	8100	D
118-74-1	Hexachlorobenzene	1200	U

1) 1,2,3-Trichlorobenzene and 1,3,5-Trichlorobenzene coelute and and cannot be quantified separately.

2) 1,2,3,5-Tetrachlorobenzene and 1,2,4,5-Tetrachlorobenzene coelute and cannot be quantified separately.

Resubmitted
MAR 21 1990 CEW

AR301341

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

45800

o Name:VERSAR Contract:_____

Lab Code:VERSAR Case No.:420.1.0 SAS No.: _____ SDG No.: 6

Matrix: (soil/water)SOIL Lab Sample ID: __93045

Sample wt/vol: 30.68 (g/ml)G Lab File ID: __Z3423

Level:(low/med) LOW Date Received: ___12/15/89

% Moisture: not dec. 28.2 dec._____ Date Extracted: 12/22/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 01/04/90

GPC Cleanup: (Y/N)N pH:7.01 Dilution Factor: _ 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)_ug/Kg	
98-95-3	Nitrobenzene	450	U
120-82-1	1,2,4-Trichlorobenzene		E
87-61-6	1,2,3-Trichlorobenzene	1800	
121-73-3	1-Chloro-3-Nitrobenzene	450	U
634-66-2	1,2,3,4-Tetrachlorobenzene		E
95-94-3	1,2,4,5-Tetrachlorobenzene	8500	
	Pentachlorobenzene		E
118-74-1	Hexachlorobenzene	1200	

1) 1,2,3-Trichlorobenzene and 1,3,5-Trichlorobenzene coelute and and cannot be quantified separately.

2) 1,2,3,5-Tetrachlorobenzene and 1,2,4,5-Tetrachlorobenzene coelute and cannot be quantified separately.

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

45800DL

Lab Name:VERSAR Contract:_____

Lab Code:VERSAR Case No.:420.1.0 SAS No.: _____ SDG No.: 6

Matrix: (soil/water)SOIL Lab Sample ID: __93045DL

Sample wt/vol: 30.68 (g/ml)G Lab File ID: __Z3434

Level:(low/med) LOW Date Received: ___12/15/89

% Moisture: not dec. 28.2 dec._____ Date Extracted: 12/22/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 01/04/90

GPC Cleanup: (Y/N)N pH:7.01 Dilution Factor: _ 4

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	
98-95-3	Nitrobenzene	1800	U
120-82-1	1,2,4-Trichlorobenzene	5200	D
87-61-6	1,2,3-Trichlorobenzene	1600	D
121-73-3	1-Chloro-3-Nitrobenzene	1800	U
634-66-2	1,2,3,4-Tetrachlorobenzene	8500	D
95-94-3	1,2,4,5-Tetrachlorobenzene	8700	D
----------	Pentachlorobenzene	10000	D
118-74-1	Hexachlorobenzene	1300	D

1) 1,2,3-Trichlorobenzene and 1,3,5-Trichlorobenzene coelute and and cannot be quantified separately.

2) 1,2,3,5-Tetrachlorobenzene and 1,2,4,5-Tetrachlorobenzene coelute and cannot be quantified separately.

Resubmitted MAR 21 1990 CEX

AR301343

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

45801

Name:VERSAR Contract:_____

Lab Code:VERSAR Case No.:420.1.0 SAS No.: _____ SDG No.: 6

Matrix: (soil/water)SOIL Lab Sample ID: __93046

Sample wt/vol: 1.12 (g/ml)G Lab File ID: __Z3417

Level:(low/med) MED Date Received: ___12/15/89

% Moisture: not dec. 25.4 dec._____ Date Extracted: 12/21/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 01/03/90

GPC Cleanup: (Y/N)N pH:6.96 Dilution Factor: _ 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	
98-95-3	Nitrobenzene	24000	U
120-82-1	1,2,4-Trichlorobenzene		E
87-61-6	1,2,3-Trichlorobenzene		E
121-73-3	1-Chloro-3-Nitrobenzene	24000	U
634-66-2	1,2,3,4-Tetrachlorobenzene		E
95-94-3	1,2,4,5-Tetrachlorobenzene	370000	
----------	Pentachlorobenzene	24000	
118-74-1	Hexachlorobenzene	24000	U

1) 1,2,3-Trichlorobenzene and 1,3,5-Trichlorobenzene coelute and and cannot be quantified separately.

2) 1,2,3,5-Tetrachlorobenzene and 1,2,4,5-Tetrachlorobenzene coelute and cannot be quantified separately.

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

45801DL

Lab Name:VERSAR Contract:_____

Lab Code:VERSAR Case No.:420.1.0 SAS No.: _____ SDG No.: 6

Matrix: (soil/water)SOIL Lab Sample ID: __93046DL

Sample wt/vol: 1.12 (g/ml)G Lab File ID: __Z3435

Level:(low/med) MED Date Received: ___12/15/89

% Moisture: not dec. 25.4 dec._____ Date Extracted: 12/21/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 01/04/90

GPC Cleanup: (Y/N)N pH:6.96 Dilution Factor: _ 20

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	
98-95-3	Nitrobenzene	480000	U
120-82-1	1,2,4-Trichlorobenzene	3800000	D
87-61-6	1,2,3-Trichlorobenzene	500000	D
121-73-3	1-Chloro-3-Nitrobenzene	480000	U
634-66-2	1,2,3,4-Tetrachlorobenzene	230000	D
95-94-3	1,2,4,5-Tetrachlorobenzene	260000	D
	Pentachlorobenzene	480000	U
118-74-1	Hexachlorobenzene	480000	U

1) 1,2,3-Trichlorobenzene and 1,3,5-Trichlorobenzene coelute and and cannot be quantified separately.

2) 1,2,3,5-Tetrachlorobenzene and 1,2,4,5-Tetrachlorobenzene coelute and cannot be quantified separately.

Resubmitted
MAR 21 1990 CEK

AR301345

FORM I SV-1

R100124

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

45802

Lab Name:VERSAR Contract:_____

Lab Code:VERSAR Case No.:420.1.0 SAS No.: _____ SDG No.: 6

Matrix: (soil/water)SOIL Lab Sample ID: __93047

Sample wt/vol: 1.12 (g/ml)G Lab File ID: __Z3418

Level:(low/med) MED Date Received: ___12/15/89

% Moisture: not dec. 7.8 dec._____ Date Extracted: 12/21/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 01/03/90

GPC Cleanup: (Y/N)N pH:7.02 Dilution Factor: _ 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	
98-95-3	Nitrobenzene	19000	U
120-82-1	1,2,4-Trichlorobenzene		E
87-61-6	1,2,3-Trichlorobenzene		E
121-73-3	1-Chloro-3-Nitrobenzene	19000	U
634-66-2	1,2,3,4-Tetrachlorobenzene		E
95-94-3	1,2,4,5-Tetrachlorobenzene	86000	
----------	Pentachlorobenzene	61000	
118-74-1	Hexachlorobenzene	19000	U

1) 1,2,3-Trichlorobenzene and 1,3,5-Trichlorobenzene coelute and and cannot be quantified separately.

2) 1,2,3,5-Tetrachlorobenzene and 1,2,4,5-Tetrachlorobenzene coelute and cannot be quantified separately.

100144

1R

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

45802DL

. o Name:VERSAR Contract:_____

Lab Code:VERSAR Case No.:420.1.0 SAS No.: _____ SDG No.: 6

Matrix: (soil/water)SOIL Lab Sample ID: __93047DL

Sample wt/vol: 1.12 (g/ml)G Lab File ID: __Z3436

Level:(low/med) MED Date Received: ___12/15/89

% Moisture: not dec. 7.8 dec._____ Date Extracted: 12/21/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 01/04/90

GPC Cleanup: (Y/N)N pH:7.02 Dilution Factor: _ 7

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	
98-95-3	Nitrobenzene	130000	U
120-82-1	1,2,4-Trichlorobenzene	830000	D
87-61-6	1,2,3-Trichlorobenzene	190000	D
121-73-3	1-Chloro-3-Nitrobenzene	130000	U
634-66-2	1,2,3,4-Tetrachlorobenzene	410000	D
95-94-3	1,2,4,5-Tetrachlorobenzene	85000	DJ
----------	Pentachlorobenzene	56000	DJ
118-74-1	Hexachlorobenzene	130000	U

1) 1,2,3-Trichlorobenzene and 1,3,5-Trichlorobenzene coelute and and cannot be quantified separately.

2) 1,2,3,5-Tetrachlorobenzene and 1,2,4,5-Tetrachlorobenzene coelute and cannot be quantified separately.

Resubmitted MAR 21 1990 CEK

AR301347

FORM I SV-1

R100167

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

45803

Lab Name:VERSAR Contract:

Lab Code:VERSAR Case No.:420.1.0 SAS No.: SDG No.: 6

Matrix: (soil/water)SOIL Lab Sample ID: 93048

Sample wt/vol: 1.15 (g/ml)G Lab File ID: Z3419

Level:(low/med) MED Date Received: 12/15/89

% Moisture: not dec. 35.7 dec. Date Extracted: 12/21/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 01/04/90

GPC Cleanup: (Y/N)N pH:7.12 Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	
98-95-3	Nitrobenzene	27000	U
120-82-1	1,2,4-Trichlorobenzene	270000	
87-61-6	1,2,3-Trichlorobenzene	130000	
121-73-3	1-Chloro-3-Nitrobenzene	27000	U
634-66-2	1,2,3,4-Tetrachlorobenzene	180000	
95-94-3	1,2,4,5-Tetrachlorobenzene	110000	
	Pentachlorobenzene	25000	J
118-74-1	Hexachlorobenzene	27000	U

1) 1,2,3-Trichlorobenzene and 1,3,5-Trichlorobenzene coelute and and cannot be quantified separately.

2) 1,2,3,5-Tetrachlorobenzene and 1,2,4,5-Tetrachlorobenzene coelute and cannot be quantified separately.

1R

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

45804

o Name:VERSAR Contract:_____

Lab Code:VERSAR Case No.:420.1.0 SAS No.: _____ SDG No.: 6

Matrix: (soil/water)SOIL Lab Sample ID: __93049

Sample wt/vol: 1.22 (g/ml)G Lab File ID: __Z3420

Level:(low/med) MED Date Received: ___12/15/89

% Moisture: not dec. 46 dec._____ Date Extracted: 12/21/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 01/04/90

GPC Cleanup: (Y/N)N pH:7.18 Dilution Factor: _ 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	
98-95-3	Nitrobenzene	30000	U
120-82-1	1,2,4-Trichlorobenzene		E
87-61-6	1,2,3-Trichlorobenzene	140000	
121-73-3	1-Chloro-3-Nitrobenzene	30000	U
634-66-2	1,2,3,4-Tetrachlorobenzene	290000	
95-94-3	1,2,4,5-Tetrachlorobenzene	150000	
	Pentachlorobenzene	40000	
118-74-1	Hexachlorobenzene	30000	U

1) 1,2,3-Trichlorobenzene and 1,3,5-Trichlorobenzene coelute and and cannot be quantified separately.

2) 1,2,3,5-Tetrachlorobenzene and 1,2,4,5-Tetrachlorobenzene coelute and cannot be quantified separately.

1R

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

45804DL

Lab Name:VERSAR Contract:_____

Lab Code:VERSAR Case No.:420.1.0 SAS No.: _____ SDG No.: 6

Matrix: (soil/water)SOIL Lab Sample ID: __93049DL

Sample wt/vol: 1.22 (g/ml)G Lab File ID: __Z3437

Level:(low/med) MED Date Received: ___12/15/89

% Moisture: not dec. 46 dec._____ Date Extracted: 12/21/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 01/04/90

GPC Cleanup: (Y/N)N pH:7.18 Dilution Factor: _ 2

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)_ug/Kg	
98-95-3	Nitrobenzene	61000	U
120-82-1	1,2,4-Trichlorobenzene	340000	D
87-61-6	1,2,3-Trichlorobenzene	160000	D
121-73-3	1-Chloro-3-Nitrobenzene	61000	U
634-66-2	1,2,3,4-Tetrachlorobenzene	260000	D
95-94-3	1,2,4,5-Tetrachlorobenzene	140000	D
	Pentachlorobenzene	34000	DJ
118-74-1	Hexachlorobenzene	61000	U

1) 1,2,3-Trichlorobenzene and 1,3,5-Trichlorobenzene coelute and and cannot be quantified separately.

2) 1,2,3,5-Tetrachlorobenzene and 1,2,4,5-Tetrachlorobenzene coelute and cannot be quantified separately.

Resubmitted MAR 21 1990 CEN

AR301350

FORM I SV-1

R100231

APPENDIX D

Support Documentation

CALIBRATION CHECK - SEMIVOLATILE HSL COMPOUNDS

CASE NO. _____ CONTRACT LAB: VERSAR

CONTRACT NO. _____ INSTRUMENT IDENTIFIER: Z

CALIBRATION DATE: 12/28/89

STANDARD FILE: Z3355

DATE: 12/29/89 TIME: 21:46

MINIMUM RF FOR SPCC IS .0500

MAXIMUM % D FOR CCC IS 25%

COMPOUND	MEAN RF(I)	RF(O)	% D
C410 NITROBENZENE	0.430	0.423	~~1.462~~ 1.64
C445 1,2,4-TRICHLOROBENZENE	0.450	0.440	~~2.147~~ 2.25
C630 HEXACHLOROBENZENE	0.315	0.281	~~10.618~~ 11.41
C--- 1-CHLORO-3-NITROBENZENE	0.284	0.409	~~43.705~~ 36.08
C--- 1235/1245 TETRACHLOROBE	0.738	0.660	~~10.603~~ 11.16
C--- 1234-TETRACHLOROBENZENE	0.695	0.648	~~6.803~~ 6.99
C--- PENTACHLOROBENZENE	0.760	0.700	~~7.886~~ 8.22

CEL 3/30/90

Associated Samples:

SBLK64
40225
40227
42188MSD
42184
46996
42187
45806
SBLK49
42188
42188MS

CALIBRATION CHECK - SEMIVOLATILE HSL COMPOUNDS

CASE NO. _____ CONTRACT LAB: VERSAR

CONTRACT NO. _____ INSTRUMENT IDENTIFIER: Z

CALIBRATION DATE: 12/28/89

STANDARD FILE: Z3370

DATE: 12/30/89 TIME: 14:27

MINIMUM RF FOR SPCC IS .0500

MAXIMUM % D FOR CCC IS 25%

COMPOUND	MEAN RF(I)	RF(O)	% D
C410 NITROBENZENE	0.430	0.347	~~19.274~~ 21.4
C445 1,2,4-TRICHLOROBENZENE	0.450	0.380	~~15.514~~ 16.9
C--- 1-CHLORO-3-NITROBENZENE	0.284	0.277	~~2.497~~ 2.5
C--- 1235/1245 TETRACHLOROBE	0.738	0.610	~~17.353~~ 19.0
C--- 1234-TETRACHLOROBENZENE	0.695	0.585	~~15.738~~ 17.2
C--- PENTACHLOROBENZENE	0.760	0.573	~~24.631~~ 28.1
C630 HEXACHLOROBENZENE	0.315	0.232	~~26.147~~ 30.3

CEW 3/30/90

Not Ongoing Calibration Criteria

12-30-89

Associated Samples: SBLK34

AR301353

CALIBRATION CHECK - SEMIVOLATILE HSL COMPOUNDS

CASE NO. _____ CONTRACT LAB: VERSAR

CONTRACT NO. _____ INSTRUMENT IDENTIFIER: Z

CALIBRATION DATE: 12/28/89

STANDARD FILE: Z3391

DATE: 1/2/90 TIME: 15:50

MINIMUM RF FOR SPCC IS .0500

MAXIMUM % D FOR CCC IS 25%

COMPOUND	MEAN RF(I)	RF(O)	% D
C410 NITROBENZENE	0.430	0.425	~~1.046~~ 1.2
C445 1,2,4-TRICHLOROBENZENE	0.450	0.429	~~4.478~~ 4.8
C--- 1-CHLORO-3-NITROBENZENE	0.284	0.363	~~-27.747~~ 24.4
C--- 1235/1245 TETRACHLOROBE	0.738	0.664	~~10.056~~ 10.6
C--- 1234-TETRACHLOROBENZENE	0.695	0.660	~~4.990~~ 5.2
C--- PENTACHLOROBENZENE	0.760	0.633	~~16.810~~ 18.2
C630 HEXACHLOROBENZENE	0.315	0.208	~~33.928~~ 40.9

Associated Samples:

40226
40226MS
40226MSD
40226MSDR1

45809
42186DL
42186
SBLK56
45794
45796
45798

CALIBRATION CHECK - SEMIVOLATILE HSL COMPOUNDS

CASE NO. _____ CONTRACT LAB: VERSAR

CONTRACT NO. _____ INSTRUMENT IDENTIFIER: Z

CALIBRATION DATE: 12/28/89

STANDARD FILE: Z3404

DATE: 1/3/89 TIME: 8:21

MINIMUM RF FOR SPCC IS .0500

MAXIMUM % D FOR CCC IS 25%

COMPOUND	MEAN RF(I)	RF(O)	% D	
C410 NITROBENZENE	0.430	0.466	~~-8.417~~	8.0
C445 1,2,4-TRICHLOROBENZENE	0.450	0.391	~~-12.949~~	14.0
C--- 1-CHLORO-3-NITROBENZENE	0.284	0.356	~~-25.132~~	22.5
C--- 1235/1245 TETRACHLOROBE	0.738	0.765	-3.670	3.6
C--- 1234-TETRACHLOROBENZENE	0.695	0.750	~~-7.893~~	7.6
C--- PENTACHLOROBENZENE	0.760	0.743	2.353	2.3
C630 HEXACHLOROBENZENE	0.315	0.211	~~33.043~~	39.5

CEL 3/30/90

Continuing Calibration Okay

J. L. Kal. 1/3/90

Associated samples:

40223
40223MS
40223MSD
SBLK71
40223DL

AR301355

CALIBRATION CHECK - SEMIVOLATILE HSL COMPOUNDS

CASE NO. _____ CONTRACT LAB: VERSAR

CONTRACT NO. _____ INSTRUMENT IDENTIFIER: Z

CALIBRATION DATE: 12/28/89

STANDARD FILE: Z3431

DATE: 1/4/90 TIME: 11:29

MINIMUM RF FOR SPCC IS .0500

MAXIMUM % D FOR CCC IS 25%

COMPOUND	MEAN RF(I)	RF(O)	% D	
C410 NITROBENZENE	0.430	0.420	~~2.174~~	2.4
C445 1,2,4-TRICHLOROBENZENE	0.450	0.410	~~8.815~~	9.3
C--- 1-CHLORO-3-NITROBENZENE	0.284	0.413	~~-45.160~~	37.0
C--- 1235/1245 TETRACHLOROBE	0.738	0.758	-2.706	2.7
C--- 1234-TETRACHLOROBENZENE	0.695	0.758	~~-9.029~~	8.7
C--- PENTACHLOROBENZENE	0.760	0.748	1.579	1.6
C630 HEXACHLOROBENZENE	0.315	0.260	~~17.501~~	19.1

CEK 3/30/90

Okay for Continuing Calibration 1/4/90

associated sample: 42185DL

AR301356

CALIBRATION CHECK SEMIVOLATILE ASE COMPOUNDS

CASE NO. _____ CONTRACT LAB: VERSAR

CONTRACT NO. _____ INSTRUMENT IDENTIFIER: Z

CALIBRATION DATE: 12/28/89

STANDARD FILE: Z3443

DATE: 1/4/90 TIME: 23:27

MINIMUM RF FOR SPCC IS .0500

MAXIMUM % D FOR CCC IS 25%

COMPOUND	MEAN RF(I)	RF(D)	% D
C410 NITROBENZENE	0.430	0.442	~~-2.926~~ 2.8
C445 1,2,4-TRICHLOROBENZENE	0.450	0.410	~~-8.875~~ 9.3
C--- 1-CHLORO-3-NITROBENZENE	0.284	0.371	~~-30.660~~ 26.6
C--- 1235/1245 TETRACHLOROBE	0.738	0.750	-1.629 1.6
C--- 1234-TETRACHLOROBENZENE	0.695	0.739	~~-6.296~~ 6.1
C--- PENTACHLOROBENZENE	0.760	0.718	~~5.610~~ 5.7
C630 HEXACHLOROBENZENE	0.315	0.255	~~18.937~~ 21.1

CEW 3/30/90

Associated Samples:

SBLK97
46997
46997MS
46997MSD
46998
45807
45808
46997DL

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

46997MS

Lab Name:VERSAR Contract:_____

Lab Code:VERSAR Case No.:420.1.0 SAS No.: _____ SDG No.: 3

Matrix: (soil/water)SOIL Lab Sample ID: __89908MS

Sample wt/vol: 30.04 (g/ml)G Lab File ID: __Z3446

Level:(low/med) LOW Date Received: ___11/30/89

% Moisture: not dec. 54.3 dec._____ Date Extracted: 12/09/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 01/05/90

GPC Cleanup: (Y/N)Y pH:7.81 Dilution Factor: _ 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	
98-95-3	Nitrobenzene	1500	U
120-82-1	1,2,4-Trichlorobenzene		Y
87-61-6	1,2,3-Trichlorobenzene	11000	
121-73-3	1-Chloro-3-Nitrobenzene	1500	U
634-66-2	1,2,3,4-Tetrachlorobenzene	6300	
95-94-3	1,2,4,5-Tetrachlorobenzene	2600	
	Pentachlorobenzene	930	
118-74-1	Hexachlorobenzene	1500	U

1) 1,2,3-Trichlorobenzene and 1,3,5-Trichlorobenzene coelute and and cannot be quantified separately.

2) 1,2,3,5-Tetrachlorobenzene and 1,2,4,5-Tetrachlorobenzene coelute and cannot be quantified separately.

1R

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

46997MSD

LAB Name:VERSAR Contract:_____

Lab Code:VERSAR Case No.:420.1.0 SAS No.: _____ SDG No.: 3

Matrix: (soil/water)SOIL Lab Sample ID: __89908MSD

Sample wt/vol: 30.77 (g/ml)G Lab File ID: __Z3447

Level:(low/med) LOW Date Received: ___11/30/89

% Moisture: not dec. 54.3 dec._____ Date Extracted: 12/09/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 01/05/90

GPC Cleanup: (Y/N)Y pH:7.81 Dilution Factor: _ 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	
98-95-3	Nitrobenzene	1400	U
120-82-1	1,2,4-Trichlorobenzene		Y
87-61-6	1,2,3-Trichlorobenzene	11000	
121-73-3	1-Chloro-3-Nitrobenzene	1400	U
634-66-2	1,2,3,4-Tetrachlorobenzene	7000	
95-94-3	1,2,4,5-Tetrachlorobenzene	1800	
----------	Pentachlorobenzene	1200	J
118-74-1	Hexachlorobenzene	1400	U

1) 1,2,3-Trichlorobenzene and 1,3,5-Trichlorobenzene coelute and and cannot be quantified separately.

2) 1,2,3,5-Tetrachlorobenzene and 1,2,4,5-Tetrachlorobenzene coelute and cannot be quantified separately.

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

40226MS

Lab Name:VERSAR Contract:_____

Lab Code:VERSAR Case No.:420.1 SAS No.: _____ SDG No.: 2

Matrix: (soil/water)SOIL (g/ml)G Lab Sample ID: __88788MS

Sample wt/vol: 30.01 Lab File ID: __Z3394

Level:(low/med) LOW Date Received: ___11/22/89

% Moisture: not dec. 20.2 dec._____ Date Extracted: 12/05/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 01/02/90

GPC Cleanup: (Y/N) N pH:_____ Dilution Factor: _ 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)_ug/Kg	
98-95-3	Nitrobenzene	420	U
120-82-1	1,2,4-Trichlorobenzene	420	U
87-61-6	1,2,3-Trichlorobenzene	420	U
121-73-3	1-Chloro-3-Nitrobenzene	420	U
634-66-2	1,2,3,4-Tetrachlorobenzene	420	U
95-94-3	1,2,4,5-Tetrachlorobenzene	420	U
	Pentachlorobenzene	420	U
118-74-1	Hexachlorbenzene	420	U

1) 1,2,3-Trichlorobenzene and 1,3,5-Trichlorobenzene coelute and cannot be quantified separately.

2) 1,2,3,5-Tetrachlorobenzene and 1,2,4,5-Tetrachlorobenzene coelute and cannot be quantified separately.

Resubmitted MAR 21 1990 CEK

AR301360

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

40226MSD

Lab Name:VERSAR Contract:_____

Lab Code:VERSAR Case No.:420.1 SAS No.: _____ SDG No.: 2

Matrix: (soil/water)SOIL (g/ml)G Lab Sample ID: __88788MSD

Sample wt/vol: 29.93 Lab File ID: __Z3395

Level:(low/med) LOW Date Received: ___11/22/89

% Moisture: not dec. 20.2 dec._____ Date Extracted: 12/05/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 01/02/90

GPC Cleanup: (Y/N) N pH:_____ Dilution Factor: _ 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)_ug/Kg	
98-95-3	Nitrobenzene	420	U
120-82-1	1,2,4-Trichlorobenzene	420	U
87-61-6	1,2,3-Trichlorobenzene	420	U
121-73-3	1-Chloro-3-Nitrobenzene	420	U
634-66-2	1,2,3,4-Tetrachlorobenzene	420	U
95-94-3	1,2,4,5-Tetrachlorobenzene	420	U
----------	Pentachlorobenzene	420	U
118-74-1	Hexachlorbenzene	420	U

1) 1,2,3-Trichlorobenzene and 1,3,5-Trichlorobenzene coelute and cannot be quantified separately.

2) 1,2,3,5-Tetrachlorobenzene and 1,2,4,5-Tetrachlorobenzene coelute and cannot be quantified separately.

Resubmitted
MAR 21 1990 CAR

AR301361

FORM I SV-1

R 100146

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

40223MS

Lab Name:VERSAR Contract:_____

Lab Code:VERSAR Case No.:420.1 SAS No.: _____ SDG No.: 1

Matrix: (soil/water)SOIL (g/ml)G Lab Sample ID: __88089MS

Sample wt/vol: 1.15 Lab File ID: __Z3407

Level:(low/med) MED Date Received: ___11/20/89

% Moisture: not dec. 30.6 dec._____ Date Extracted: 11/29/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 01/03/90

GPC Cleanup: (Y/N) N pH:_____ Dilution Factor: _ 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	
98-95-3	Nitrobenzene	25000	U
120-82-1	1,2,4-Trichlorobenzene		Y
87-61-6	1,2,3-Trichlorobenzene	25000	U
121-73-3	1-Chloro-3-Nitrobenzene	25000	U
634-66-2	1,2,3,4-Tetrachlorobenzene	250000	
95-94-3	1,2,4,5-Tetrachlorobenzene	58000	
----------	Pentachlorobenzene	41000	
118-74-1	Hexachlorbenzene	25000	U

1) 1,2,3-Trichlorobenzene and 1,3,5-Trichlorobenzene coelute and cannot be quantified separately.

2) 1,2,3,5-Tetrachlorobenzene and 1,2,4,5-Tetrachlorobenzene coelute and cannot be quantified separately.

AR301362

Resubmitted MAR 21 1990 CEK

FORM I SV-1

R100125

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

40223MSD

Lab Name:VERSAR Contract:_____

Lab Code:VERSAR Case No.:420.1 SAS No.: _____ SDG No.: 1

Matrix: (soil/water)SOIL (g/ml)G Lab Sample ID: __88089MSD

Sample wt/vol: 1.15 Lab File ID: __Z3408

Level:(low/med) MED Date Received: ___11/20/89

% Moisture: not dec. 30.6 dec._____ Date Extracted: 11/29/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 01/03/90

GPC Cleanup: (Y/N) N pH:_____ Dilution Factor: _ 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)_ug/Kg	
98-95-3	Nitrobenzene	27000	U
120-82-1	1,2,4-Trichlorobenzene		Y
87-61-6	1,2,3-Trichlorobenzene	27000	U
121-73-3	1-Chloro-3-Nitrobenzene	27000	U
634-66-2	1,2,3,4-Tetrachlorobenzene	360000	
95-94-3	1,2,4,5-Tetrachlorobenzene	74000	
	Pentachlorobenzene	55000	
118-74-1	Hexachlorbenzene	27000	U

1) 1,2,3-Trichlorobenzene and 1,3,5-Trichlorobenzene coelute and cannot be quantified separately.

2) 1,2,3,5-Tetrachlorobenzene and 1,2,4,5-Tetrachlorobenzene coelute and cannot be quantified separately.

Resubmitted MAR 21 1990 CEV

AR301363

D100139

Versar INC.

CHAIN OF CUSTODY RECORD

PROJECT NO.	PROJECT NAME	INDUSTRIAL HYGIENE SAMPLE
5303.500.03	SCD	Y / N

SAMPLERS: (Signature) David Spencer (Printed) DAVID SPENCER

FIELD SAMPLE NUMBER	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	Chlor. Benzenes								REMARKS
40225	11/20/89	1340		X	SD-2	1	1								CASE # R3-2 ~~FMONO 12/1/89~~
40226	11/20/89	1540		X	SD-3	1	1								~~DO MS/MSD~~ 11/20/89
40227	11/21/89	1205		X	SD-4	1	1								

PARAMETERS

AR301364

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
David S[illegible]	11/21/89 1700				
(Printed) DAVID S[illegible]CER		(Printed)	(Printed)		(Printed)

Relinquished (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks
(Printed)		(Printed)	11/22/89 915 AM	Shipped via Federal Express Air Bill No. 4575149504

Distribution: Original Plus One Accompanies Shipment (white and yellow); Copy to Coordinator Field Files (pink).

Versar INC.

CHAIN OF CUSTODY RECORD

PROJECT NO.	PROJECT NAME	INDUSTRIAL HYGIENE SAMPLE
C03041 5303.500	SCD	Y / N

SAMPLERS: (Signature) Russell J. Meier, L. Woodings

(Printed) RUSSELL J. MEIER, L. Woodings

PARAMETERS: TRIHALOMETHANES BY GC TO HIGH CHROMATOGRAPHY; METAL CONTENT BY ICP; NITROBENZENE

LOW SEDIMENTS + SURFACE WATER + SOILS

FIELD SAMPLE NUMBER	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	TRIHALOMETHANES BY GC TO HIGH CHROMATOGRAPHY	METAL CONTENT BY ICP	NITROBENZENE	REMARKS (ITR # / OTR #)
40223	11/17/89	9:40	X		SP-1 Do Q.C.	1	X	X		MCCE 72 / C2415

CASE # R3-2

FR301365

Relinquished (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
L. Woodings	11-17-89 1800				
(Printed) L. Woodings		(Printed)	(Printed)		(Printed)

Relinquished (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks
(Printed)		(Printed)	11/18/89 0900	SHIPPED VIA FEDERAL EXPRESS AIRBILL # 4981278212

SHIPPED TO: VERSAR INC. 6850 VERSAR CENTER SPRINGFIELD, VA 22151 (703) 750-3000 ATTN: BEV HUTCHINGS + TROY NESKY

CASE # F13-2

Distribution: Original Plus One Accompanies Shipment (white and yellow); Copy to Coordinator Field Files (pink).

NCS INC.

CHAIN OF CUSTODY RECORD

PROJECT NUMBER: ~~Q03041~~ 5303.800.03

PROJECT NAME: SCD

PARAMETERS

INDUSTRIAL HYGIENE SAMPLE: Y / N

SAMPLERS: (Signature) [signature]

(Printed) DAVID SPENCER

FIELD SAMPLE NUMBER	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	Organics + Derivatives									REMARKS
																CASE # R3-2
42188	11/27/89	1505		X	SWT-9 Do ms/msD	4	4									Do ms/msD
~~BB~~ 46996	11/27/89	1715		X	BB-10	2	2									FIELD BLANK
42184	11/27/89	1653		X	BB-5	2	2									EQ. BLANK
45806	11/27/89	1505		X	SWD-18	2	2									
46997	11/28/89	1155		X	SR-11	1	1									Do ms/msD
46998	11/28/89	1310		X	SR-12	1	1									
45807	11/27/89	1550		X	SR-13	1	1									
45808	11/28/89	1155		X	SR-14	1	1									
42187	11/27/89	1445		X	SWR-8	2	2									
42185	11/27/89	1250	X		SB-6	1	1									

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
[signature]	11/27/89 1930				
(Printed) DAVID SPENCER		(Printed)	(Printed)		(Printed)

Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks
				SHIPPED VIA Federal Express AIR Bill NO. 4575149456
(Printed)		(Printed)		

Distribution: Original One Accompanies Shipment (white and yellow); Copy to Coordinator Field Files (pink).

no signature for receipt

AR301366

2D
SOIL SEMIVOLATILE SURROGATE RECOVERY

Lab Name:VERSAR Contract:_____

Lab Code:VERSAR Case No.:420.1.0 SAS No.: _____ SDG No.: 3

Level:(low/med)_____LOW

	EPA SAMPLE NO.	S1 (NBZ)#	S2 (FBP)#	S3 (TPH)#	S4 (PHL)#	S5 (2FP)#	S6 (TBP)#	OTHER	TOT OUT
01	45807	40	46	51					
02	45808	4 *	6 *	6 *					
03	46997	68	71	87					
04	46997DL	59	67	79					
05	46998	65	70	75					
06	SBLK97	73	76	79					
07	46997MS	67	72	72					
08	46997MSD	68	71	76					
09									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									

		QC LIMITS
S1 (NBZ)	= Nitrobenzene-d5	(23-120)
S2 (FBP)	= 2-Fluorobiphenyl	(30-115)
S3 (TPH)	= Terphenyl-d14	(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

FORM II SV-2

AR301367

100008

VERSAR INC. Total [illegible]

Project :ECI Case :[illegible] Aeration :1

Date :[illegible] Analyst :[illegible]

Versar Sample#	Field Sample#	Tray Weight	Tray + Wet Sample	Wet Sample	Tray + Dry Sample	Dry Sample	Moisture	Dry Weight Factor
88089	40223	0.99g	10.12g	9.13g	7.53g	6.54g	28.6%	1.44
88787	40225	0.99g	9.03g	8.04g	7.63g	6.64g	17.4%	1.21
88788	40226	0.99g	6.97g	5.98g	5.76g	4.77g	20.2%	1.25
88789	40227	0.98g	11.81g	10.83g	10.41g	9.44g	22.8%	1.15

AR301368

100176

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
CENTRAL REGIONAL LABORATORY
839 BESTGATE ROAD
ANNAPOLIS, MARYLAND 21401
(301) 266-9180

DATE : March 14, 1990

SUBJECT: Organic Data Validation for the Standard Chlorine Site
Case 13230

FROM : Theresa A. Simpson
Region III ESAT DPO (3ES23)

TO : Bob Guarni
Regional Project Manager (3HW25)

THRU : Patricia J. Krantz, Chief
Quality Assurance Branch (3ES23)

Attached is the organic data review for the Standard Chlorine Site (Case 13230) completed by the Region III Environmental Services Assistance Team (ESAT) contractor under the direction of Region III ESD.

If you have any questions regarding this review, please call me.

Attachment

cc: Dave Basko VERSAR
Elaine Spiewak (3HW14) (w/o attachments)

TID File: 03900116 Task 1230

WESTON
MANAGERS DESIGNERS CONSULTANTS
2568A RIVA ROAD
SUITE 300
ANNAPOLIS, MD 21401
PHONE: 301-266-9887

DATE: March 13, 1990

SUBJECT: ORGANIC DATA VALIDATION, RAS 13230
SITE: STANDARD CHLORINE

FROM: MAHBOOBEH MECANIC MM
SR. INOR. DATA REVIEWER

DOUGLAS MCINNES DJM
SR. ORGANIC DATA REVIEWER

TO: THERESA A. SIMPSON
ESAT DEPUTY PROJECT OFFICER

THRU: RICHARD D. DRESSER
ESAT TEAM MANAGER

OVERVIEW

Case 13230 consisted of seven (7) water and five (5) soil samples for full organic analyses. Included in this case were two (2) trip blanks which were analyzed for volatiles only, one (1) equipment blank and one (1) field blank. The samples were analyzed as a Contract Laboratory Program (CLP) Routine Analytical Service (RAS).

SUMMARY

All samples were successfully analyzed for all target compounds with the exception of 2-butanone from the volatile analyses. All other instrument and method sensitivities were according to the Contract Laboratory Program (CLP) Routine Analytical Services (RAS) protocol.

MAJOR PROBLEM

- The response factors (RF) for 2-butanone in the water and soil samples were less than 0.05 in the initial and/or continuing calibrations. The quantitation limits for 2-butanone are qualified "R" in the affected samples. (See Table 1 of Appendix F).

MINOR PROBLEMS

- Several compounds failed precision criteria for the initial and/or continuing calibrations. Therefore, positive results are qualified "J" and quantitation limits are qualified "UJ" in the affected samples (See Table I of Appendix F).

- The volatile analyses of all soil samples were performed ten (10) to eleven (11) days from the date of sample collection. Although no technical holding time has been established for soil samples, the technical holding time for volatile aromatics in water samples of seven (7) days has been exceeded by three (3) to four (4) days. The quantitation limits and positive results for aromatic volatiles are qualified "UL" and "L" respectively, excluding results which have been qualified "J" which supercedes the "L" qualifier.

- The semivolatile extractions of all soil samples were performed eight (8) to nine (9) days from the date of sample collection. Although no technical extraction holding time has been established for soil samples, the extraction holding time of seven (7) days for water samples has been exceeded by one (1) to two (2) days. The quantitation limits and positive results are qualified "UJ" and "J" respectively, excluding results which have been qualified "B" due to blank contamination.

NOTES:

- Sample CZ420 was run as medium level soil for full organic analysis. The dilution factors given on the data summary forms have been changed to reflect this action. As a result, the dilution factors on the data summary forms do not match those given on Forms I's by the laboratory.

- The maximum concentrations of all compounds found in the method and field blanks are listed below. Medium level blank concentrations are converted to low level for comparison. All samples with concentrations of common laboratory contaminants less than ten times (10X), and concentrations of non-common laboratory contaminants less than five times (5X) the blank level are qualified "B" on the data summary forms. (See Appendix F).

Compound	Concentration (ug/L)	Concentration (ug/Kg)
Acetone *	9 J	
1,1,2,2-Tetrachloroethane		0.51 J
Chlorobenzene		0.57 J
Bis(2-ethylhexyl)phthalate *	4 J	

* Common laboratory contaminant

- The volatile analysis of sample CZ420 was performed at two (2) different dilutions to correct for one (1) compound which exceeded the linear calibration range. The reported results for this sample on the data summary forms are from both analyses.

- The volatile analysis of sample CZ428 and the pesticide/PCB analysis of sample CZ419 have elevated CRQL's due to the reduced sample size used by the laboratory.

- Samples CZ425, CZ426 and CZ420 were used for the soil MS/MSD analyses. The results for precision estimates for non-spiked compounds found in the sample and MS/MSD analyses are as follows:

Sample and MS/MSD Non-Spiked Compounds

	Concentration (ug/Kg)			
Compound	CZ425	CZ425MS	CZ425MSD	%RSD
Methylene chloride		7 J	7 J	0+
2-butanone	16 J	ND	ND	IN
Chlorobenzene	180 J	ND	ND	IN

Sample and MS/MSD Non-Spiked Compounds

	Concentration (ug/Kg)			
Compound	CZ420	CZ420MS	CZ420MSD	%RSD
1,3-Dichlorobenzene	94000 J	97000 J	110000 J	8.5
1,2-Dichlorobenzene	170000 J	190000 J	230000 J	16

Sample and MS/MSD Non-Spiked Compounds

	Concentration (ug/Kg)			
Compound	CZ426	CZ426MS	CZ426MSD	%RSD
Bis(2-chloroethoxy)-methane	ND	ND	210 J	IN
Fluoranthene	130 J	110 J	110 J	9.9

%RSD = Percent Relative Standard Deviation
+ = Value is Relative Percent Difference
ND = Not Detected
IN = Indeterminate

- The reported Tentatively Identified Compounds (TIC's) of Appendix D have been reviewed and corrected during data validation. Compounds identified as blank contaminants or suspected aldol condensation products have been crossed off the TIC Form I's.

All data for Case 13230 were reviewed in accordance with the Functional Guidelines for Evaluating Organic Analyses with Modifications for Use within Region III. The text of this report addresses only those problems affecting usability.

ATTACHMENTS

1) Appendix A - Glossary of Data Qualifiers
2) Appendix B - Data Summary. These include:
   (a) All positive results for target compounds with qualifier codes where applicable.
   (b) All unusable detection limits (qualified "R").
3) Appendix C - Results as Reported by the Laboratory for All Target Compounds
4) Appendix D - Reviewed and Corrected Tentatively Identified Compounds
5) Appendix E - DPO Report for Contractual Compliance
6) Appendix F - Support Documentation

MM003A02.STA

WESTON

Appendix A

Glossary of Data Qualifiers

WESTON

GLOSSARY OF DATA QUALIFIER CODES (ORGANIC)

CODES RELATING TO IDENTIFICATION
(confidence concerning presence or absence of compounds)

U = Not detected. The associated number indicates approximate sample concentration necessary to be detected.

NO CODE = Confirmed identification.

B = Not detected substantially above the level reported in laboratory or field blanks.

R = Unreliable result. Analyte may or may not be present in the sample. Supporting data necessary to confirm result.

N = Tenative identification. Consider present. Special methods may be needed to confirm its presence or absence in future sampling efforts.

CODES RELATED TO QUANTITATION
(can be used for both positive results and sample quantitation limits):

J = Analyte present. Reported value may not be accurate or precise.

K = Analyte present. Reported value may be biased high. Actual value is expected to be lower.

L = Analyte present. Reported value may be biased low. Actual value is expected to be higher.

UJ = Not detected, quantitation limit may be inaccurate or imprecise.

UL = Not detected, quantitation limit is probably higher.

OTHER CODES

Q = No analytical result.

WESTON

Appendix B

Data Summary Forms

DATA SUMMARY FORM: VOLATILES 1

Site Name: Standard Chlorine

Case #: 13230 Sampling Date(s): 11/27-29/87

WATER SAMPLES
(ug/L)

To calculate sample quantitation limit:
(CRQL * Dilution Factor)

	Sample No.	CZ405		CZ406		CZ419		CZ422		CZ423		CZ424		CZ432					
	Dilution Factor	1.0		1.0		1.0		5.0		1.0		1.0		1.0					
	Location	TB-19 Trip Blank		TB-20 Trip Blank		BB-5 EQ Blank		SWR-8		SWT-9		BB-10 Field Blank		SWO-18					
CRQL	COMPOUND																		
10	Chloromethane																		
10	Bromomethane																		
10	*Vinyl Chloride																		
10	Chloroethane																		
5	*Methylene Chloride		UJ				UJ				UJ		UJ		UJ				
10	Acetone		UJ		UJ		UJ		UJ	4	B		UJ		UJ				
5	Carbon Disulfide																		
5	*1,1-Dichloroethene																		
5	1,1-Dichloroethane																		
5	*Total-1,2-Dichloroethene																		
5	Chloroform																		
5	*1,2-Dichloroethane																		
10	*2-Butanone		R		R		R		R		R		R		R				
5	*1,1,1-Trichloroethane																		
5	*Carbon Tetrachloride																		
10	Vinyl Acetate				UJ				UJ										
5	Bromodichloromethane																		

CRQL = Contract Required Detection Limit *Action Level Exists SEE NARRATIVE FOR CODE DEFINITIONS

revised 12/88

AR301377

AR301378

DATA SUMMARY FORM: VOLATILES 2

Site Name: Standard chlorine

Case #: 13230 Sampling Date(s): 11/27-29/87

WATER SAMPLES
(ug/L)

To calculate sample quantitation limit:
(CRQL * Dilution Factor)

	Sample No.	CZ405	CZ406	CZ419	CZ422	CZ423	CZ424	CZ432		
	Dilution Factor	1.0	1.0	1.0	5.0	1.0	1.0	1.0		
	Location	TB-19 Trip Blank	TB-20 Trip Blank	BB-5 EQ-Blank	SWR-8	SWT-9	BB-10 Field Blank	SWO-18		
CRQL	COMPOUND									
5	*1,2-Dichloropropane									
5	Cis-1,3-Dichloropropene									
5	Trichloroethene									
5	Dibromochloromethane									
5	1,1,2-Trichloroethane									
5	*Benzene				70					
5	Trans-1,3-Dichloropropene									
5	Bromoform									
10	4-Methyl-2-pentanone									
10	2-Hexanone									
5	*Tetrachloroethene									
5	1,1,2,2-Tetrachloroethane									
5	*Toluene									
5	*Chlorobenzene				250					
5	*Ethylbenzene									
5	*Styrene									
5	*Total Xylenes									

CRQL = Co[illegible]t Required Detection Limit *Action Level Exists SEE NARRATIVE FOR CODE DEFINITIONS

revised 12/88

DATA SUMMARY FORM: VOLATILES 1

Site Name: Standard Chlorine

SOIL SAMPLES (ug/Kg)

Case #: 13230 Sampling Date(s): 11/27-29/89

To calculate sample quantitation limit: (CRQL * Dilution Factor) / ((100 - % moisture)/100)

AR301379

	Sample No.	CZ420		CZ425		CZ426		CZ427		CZ428	
	Dilution Factor	250/625 *		1.0		1.0		1.0		5.0 +	
	% Moisture	60		51		55		64		53	
	Location	SB-6		SR-11		SR-12		SR-13		SR-14	
CRQL	COMPOUND										
10	Chloromethane		UJ								
10	Bromomethane				UJ		UJ		UJ		UJ
10	Vinyl Chloride										
10	Chloroethane										
5	Methylene Chloride		UJ		UJ		UJ		UJ		UJ
10	Acetone		UJ	56	B	37	B		UJ	88	B
5	Carbon Disulfide										
5	1,1-Dichloroethene										
5	1,1-Dichloroethane										
5	Total-1,2-Dichloroethene										
5	Chloroform										
5	1,2-Dichloroethane										
10	2-Butanone		R	16	J						
5	1,1,1-Trichloroethane										
5	Carbon Tetrachloride										
10	Vinyl Acet[illegible]		UJ								
5	Bromodic[illegible]ethane										

CRDL = C[illegible]act Required Detection Limit

SEE NARRATIVE FOR CODE DEFINITIONS

* 4.0g of s[illegible]le by Medium level Protocol was diluted 2X, effective 250X dilution

. in re-anal[illegible] sample was diluted 5X, effective 625X dilution

\+ only 1.0[illegible] of sample was analyzed, effective 5X dilution

revised 12/88

DATA SUMMARY FORM: V O L A T I L E S 2

Site Name: Standard chlorine

Case #: 13230 Sampling Date(s): 11/27-29/87

SOIL SAMPLES (ug/Kg)

To calculate sample quantitation limit: (CRQL * Dilution Factor) / ((100 - % moisture)/100)

	Sample No.	CZ420		CZ425		CZ426		CZ427		CZ428									
	Dilution Factor	250/625*		1.0		1.0		1.0		5.0 +									
	% Moisture	60		51		55		64		53									
	Location	SB-6		SR-11		SR-12		SR-13		SR-14									
IOL	COMPOUND																		
5	1,2-Dichloropropane																		
5	Cis-1,3-Dichloropropene																		
5	Trichloroethene																		
5	Dibromochloromethane																		
5	1,1,2-Trichloroethane																		
5	Benzene	440	J		UL		UL		UL		UL								
5	Trans-1,3-Dichloropropene																		
5	Bromoform		UJ																
10	4-Methyl-2-pentanone																		
10	2-Hexanone																		
5	Tetrachloroethene																		
5	1,1,2,2-Tetrachloroethane																		
5	Toluene		UL		UL		UL		UL		UL								
5	Chlorobenzene	190000	L	180	L	6	J	9	J	920	L								
5	Ethylbenzene		UL		UL		UL		UL		UL								
5	Styrene		↓		↓		↓		↓		↓								
5	Total Xylenes																		

CRQL = Contra lequired Quantitation Limit

SEE NARRATIVE FOR CODE DEFINITIONS

revised 12/00

DATA SUMMARY FORM: B N A S 1

Site Name: Standard Chlorine

Case #: 13230 Sampling Date(s): 11/27-29/89

WATER SAMPLES
(ug/L)

To calculate sample quantitation limit:
(CRQL * Dilution Factor)

	Sample No.	CZ419		CZ422		CZ423		CZ424		CZ432									
	Dilution Factor	1.0		2.0		1.0		1.0		1.0									
	Location	BB-5 EQ Blank		SWR-8		SWT-9		BB-10 Field Blank		SWO-11									
RQL	COMPOUND																		
10	Phenol																		
10	bis(2-Chloroethyl)ether									3	J								
10	2-Chlorophenol																		
10	*1,3-Dichlorobenzene			35															
10	*1,4-Dichlorobenzene			330															
10	Benzyl Alcohol																		
10	1,2-Dichlorobenzene			90															
10	2-Methylphenol																		
10	bis(2-Chloroisopropyl)ether																		
10	4-Methylphenol																		
10	N-Nitroso-di-n propylamine																		
10	Hexachloroethane																		
10	Nitrobenzene																		
10	Isophorone		UJ		UJ		UJ		UJ		UJ								
10	2-Nitrophenol																		
10	2,4-Dimethylphenol																		
50	Benzoic Acid		UJ		UJ		UJ		UJ		UJ								
10	bis(2-Chloroethoxy)methane																		
10	2,4-Dichlorophenol																		
10	1,2,4-Trichlo[illegible]zene			160															
10	Naphthalen[illegible]																		
10	4-Chloroani[illegible]																		

CRQL = Co[illegible]t Required Detection Limit

*Action Level Exists

SEE NARRATIVE FOR CODE DEFINITIONS

revised 12/88

B30-381

AR301882

DATA SUMMARY FORM: B N A S 2

WATER SAMPLES
(ug/L)

Site Name: Standard Chlorine

Case #: 13230 Sampling Date(s): 11/27-29/89

To calculate sample quantitation limit:
(CRQL * Dilution Factor)

	Sample No.	CZ419		CZ422		CZ423		CZ424		CZ432									
	Dilution Factor	1.0		2.0		1.0		1.0		1.0									
	Location	BB-5 EQ-Blank		SWR-8		SWT-9		BB-10 Field Blank		SWQ-18									
CRQL	COMPOUND																		
10	Hexachlorobutadiene																		
10	4-Chloro-3-methylphenol																		
10	2-Methylnaphthalene																		
10	Hexachlorocyclopentadiene																		
10	2,4,6-Trichlorophenol																		
50	2,4,5-Trichlorophenol																		
10	2-Chloronaphthalene																		
50	2-Nitroaniline																		
10	Dimethylphthalate																		
10	Acenaphthylene																		
10	2,6-Dinitrotoluene																		
50	3-Nitroaniline		UJ		UJ		UJ		UJ		UJ								
10	Acenaphthene																		
50	2,4-Dinitrophenol																		
50	4-Nitrophenol																		
10	Dibenzofuran																		
10	2,4-Dinitrotoluene																		
10	Diethylphthala[illegible]																		
10	4-Chlorophen[illegible]ylether																		
10	Fluorene																		
50	4-Nitroaniline																		
50	4,6-Dinitro-2-m[illegible]henol																		

CRDL = Cont[illegible] Required Detection Limit

*Action Level Exists

SEE NARRATIVE FOR CODE DEFINITIONS

revised 12/88

DATA SUMMARY FORM: B N A S 3

Site Name: Standard chlorine

WATER SAMPLES
(ug/L)

Case #: 13230 Sampling Date(s): 11/27-29/89

To calculate sample quantitation limit:
(CRQL * Dilution Factor)

AR301383

CRDL	COMPOUND	CZ419		CZ422		CZ423		CZ424		CZ432									
	Dilution Factor	1.0		2.0		1.0		1.0		1.0									
	Location	BB-5 EQ Blank		SWR-8		SWT-9		BB-10 Field Blank		SWO-19									
10	N-Nitrosodiphenylamine																		
10	4-Bromophenyl-phenylether																		
10	*Hexachlorobenzene																		
50	*Pentachlorophenol																		
10	Phenanthrene																		
10	Anthracene																		
10	Di-n-butylphthalate																		
10	Fluoranthene																		
10	Pyrene																		
10	Butylbenzylphthalate																		
20	3,3-Dichlorobenzidine																		
10	Benzo(a)anthracene																		
10	Chrysene																		
10	bis(2-Ethylhexyl)phthalate	6	B	4	B	4	B	5	B	7	B								
10	Di-n-octylphthalate																		
10	Benzo(b)fluoranthene																		
10	Benzo(k)fluoranthene																		
10	Benzo(a)p[illegible]																		
10	Indeno(1,[illegible]yrene																		
10	Dibenz(a,[illegible]acene																		
10	Benzo(g,[illegible]lene																		

CRDL = C[illegible]act Required Detection Limit

*Action Level Exists

SEE NARRATIVE FOR CODE DEFINITIONS

revised 12/88

AR301384

DATA SUMMARY FORM: B N A S 1

Site Name: Standard Chlorine

SOIL SAMPLES (ug/Kg)

Case #: 13230 Sampling Date(s): 11/27-29/89

To calculate sample quantitation limit: (CRQL * Dilution Factor) / ((100 - % moisture)/100)

	Sample No.	CZ420		CZ425		CZ426		CZ427		CZ428	
	Dilution Factor	600*		10		2.0		2.0		20	
	% Moisture	60		51		55		64		53	
	Location	SB-6		SR-11		SR-12		SR-13		SR-14	
CRQL	COMPOUND										
330	Phenol		UJ		UJ		UJ		UJ		UJ
330	bis(2-Chloroethyl)ether		UJ		UJ		UJ		UJ		UJ
330	2-Chlorophenol		UJ		UJ		UJ		UJ		UJ
330	1,3-Dichlorobenzene	94000	J	9100	J		UJ	530	J	14000	J
330	1,4-Dichlorobenzene	3600000	J	62000	J	190	J	4100	J	160000	J
330	Benzyl Alcohol		UJ		UJ		UJ		UJ		UJ
330	1,2-Dichlorobenzene	170000	J	2200	J			170	J	4800	J
330	2-Methylphenol		UJ		UJ				UJ		UJ
330	bis(2-Chloroisopropyl)ether										
330	4-Methylphenol										
330	N-Nitroso-di-n-propylamine										
330	Hexachloroethane										
330	Nitrobenzene										
330	Isophorone										
330	2-Nitropher										
330	2,4-Dimeth nol										
1600	Benzoic A										
330	bis(2-Chlo oxy)methane										
330	2,4-Dichlo nol										
330	1,2,4-Tricl enzene	2300000	J	37000	J			1100	J	83000	J
330	Naphthal		UJ		UJ				UJ		UJ
330	4-Chloro		UJ		UJ				UJ		UJ

CRQL = Contract Required Quantitation Limit

SEE NARRATIVE FOR CODE DEFINITIONS

* Sample was analyzed by Medium level protocol and was diluted 10 x, effective 600x dilution

revised 12/88

DATA SUMMARY FORM: B N A S 2

Site Name: Standard chlorine

SOIL SAMPLES (ug/Kg)

Case #: 13230 Sampling Date(s): 11/27-29/89

To calculate sample quantitation limit: (CRQL * Dilution Factor) / ((100 - % moisture)/100)

AR301385

CRQL	COMPOUND	CZ420		CZ425		CZ426		CZ427		CZ428	
	Sample No.	CZ420		CZ425		CZ426		CZ427		CZ428	
	Dilution Factor	600 *		10		2.0		2.0		20	
	% Moisture	60		51		55		64		53	
	Location	SB-6		SR-11		SR-12		SR-13		SR-14	
330	Hexachlorobutadiene		UJ		UJ		UJ		UJ		UJ
330	4-Chloro-3-methylphenol		UJ								
330	2-Methylnaphthalene		UJ								
330	Hexachlorocyclopentadiene		UJ								
330	2,4,6-Trichlorophenol										
1600	2,4,5-Trichlorophenol										
330	2-Chloronaphthalene										
1600	2-Nitroaniline										
330	Dimethylphthalate										
330	Acenaphthylene										
330	2,6-Dinitrotoluene										
1600	3-Nitroaniline		UJ								
330	Acenaphthene		UJ								
1600	2,4-Dinitrophenol		UJ								
1600	4-Nitrophenol		UJ								
330	Dibenzofuran		UJ								
330	2,4-Dinitrotoluene		UJ								
330	Diethylphthalate		UJ								
330	4-Chlorophenyl-phenylether		UJ								
330	Fluorene		UJ								
1600	4-Nitroaniline		UJ								
1600	4,6-Dinitro-2-methylphenol		UJ								

CRQL = Contract Required Quantitation Limit

SEE NARRATIVE FOR CODE DEFINITIONS

* Sample was analyzed by medium level protocol and was diluted 10x, effective 600x dilution

revised 12/88

AR301386

DATA SUMMARY FORM: B N A S 3

Site Name: Standard Chlorine

SOIL SAMPLES (ug/Kg)

Case #: 13230 Sampling Date(s): 11/27-29/89

To calculate sample quantitation limit: (CRQL * Dilution Factor) / ((100 - % moisture)/100)

	Sample No.	CZ420		CZ425		CZ426		CZ427		CZ428	
	Dilution Factor	600*		10		20		20		20	
	% Moisture	60		51		55		64		53	
	Location	SB-6		SR-11		SR-12		SR-13		SR-14	
CRQL	COMPOUND										
330	N-Nitrosodiphenylamine		UJ		UJ		UJ		UJ		UJ
330	4-Bromophenyl phenylether										
330	Hexachlorobenzene										
1600	Pentachlorophenol										
330	Phenanthrene										
330	Anthracene										
330	Di-n-butylphthalate										
330	Fluoranthene					130	J	130	J		
330	Pyrene					140	J	150	J		
330	Butylbenzylphthalate						UJ		UJ		
660	3,3-Dichlorobenzidine								UJ		
330	Benzo(a)anthracene										
330	Chrysene										
330	bis(2-Ethylhexyl)phthalate					210	B	730	B		
330	Di-n-oct[illegible]alate						UJ		UJ		
330	Benzo(b[illegible]anthene										
330	Benzo(k[illegible]anthene										
330	Benzo(a[illegible]e										
330	Indeno(1[illegible]d)pyrene										
330	Dibenz(a[illegible]hracene										
330	Benzo(g[illegible]ylene										

CRQL = C[illegible]ct Required Quantitation Limit

SEE NARRATIVE FOR CODE DEFINITIONS

* Sam[illegible] was analyzed by Medium level Protocol and was diluted 10X, effective 600 x dilution

revised 12/88

DATA SUMMARY FORM: PESTICIDES AND PCBS

Site Name: Standard Chlorine

Case #: 13230 Sampling Date(s): 11/27-29/89

WATER SAMPLES
(ug/L)

To calculate sample quantitation limit:
(CRQL * Dilution Factor)

SR301387

CRQL	COMPOUND	CZ419	CZ422	CZ423	CZ424	CZ432				
	Dilution Factor	1.1 *	1.0	1.0	1.0	1.0				
	Location	BB-5 EQ-Blank	SWR-8	SWT-9	BB-10 Field Blank	SWO-18				
0.05	alpha-BHC									
0.05	beta-BHC									
0.05	delta-BHC									
0.05	*Gamma-BHC (Lindane)									
0.05	*Heptachlor									
0.05	Aldrin									
0.05	Heptachlor Epoxide									
0.05	Endosulfan I									
0.10	Dieldrin									
0.10	4,4'-DDE									
0.10	*Endrin									
0.10	Endosulfan II									
0.10	4,4'-DDD									
0.10	Endosulfan Sulfate									
0.10	4,4'-DDT									
0.5	*Methoxychlor									
0.10	Endrin ketone									
0.5	*Alpha-Chlordane									
0.5	*Gamma-Chlordane									
1.0	*Toxaphene									
0.5	*Aroclor-1016									
0.5	*Aroclor-1221									
0.5	*Aroclor-1232									
0.5	*Aroclor-1242									
0.5	*Aroclor-1248									
1.0	*Aroclor-1254									
1.0	*Aroclor-1260									

CRDL = Contract Required Detection Limit *Action Level Exists SEE NARRATIVE FOR CODE DEFINITIONS

* 900 ml of sample was extracted, effective dilution factor of 1.1 X

revised 12/88

ARCO P388

DATA SUMMARY FORM: PESTICIDES AND PCBS

Site Name: Standard chlorine

Case #: 13230 Sampling Date(s): 11/27-29/89

SOIL SAMPLES (ug/Kg)

To calculate sample quantitation limit: (CRQL * Dilution Factor) / ((100 - % moisture)/100)

	Sample No.	CZ420	CZ425	CZ426	CZ427	CZ428				
	Dilution Factor	15 *	2.0 +	2.0 +	2.0 +	2.0 +				
	% Moisture	60	52	55	64	53				
	Location	SB-6	SR-11	SR-12	SR-13	SR-14				
CRQL	COMPOUND	11/29	11/29	11/29	11/29	11/29				
8	alpha-BHC									
8	beta-BHC									
8	delta-BHC									
8	Gamma-BHC (Lindane)									
8	Heptachlor									
8	Aldrin									
8	Heptachlor Epoxide									
8	Endosulfan I									
16	Dieldrin									
16	4,4'-DDE									
16	Endrin									
16	Endosulfan II									
16	4,4'-DDD									
16	Endosulfan Sulfate									
16	4,4'-DDT									
80	Methoxychlor									
16	Endrin ketone									
80	Alpha-Chlordane									
80	Gamma-Chlordane									
160	Toxaphene									
80	Aroclor-1016									
80	Aroclor-1221									
80	Aroclor-1232									
80	Aroclor-1242									
80	Aroclor-1248									
160	Aroclor-1254									
160	Aroclor-1260									

CRQL = Contract Required Quantitation Limit

SEE NARRATIVE FOR CODE DEFINITIONS

* sample was analyzed by Medium Level Protocol, effective 15x dilution

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WESTON SM

Appendix C

Results as Reported by the Laboratory
for all Target Compounds

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CZ405

Lab Name: ESE Contract: 68-W8-0008

Lab Code: ESE Case No.: 13230 SAS No.: SDG No.: CZ405

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

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: S5360

Level: (low/med) LOW Date Received: 11/29/89

% Moisture: not dec. 100. Date Analyzed: 11/30/89

Column: (pack/cap) PACK Dilution Factor: 1.00

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	Xylene (total)	5.	U

FORM I VOA

AR301390

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CZ406

Lab Name: ESE Contract: 68-W8-0008

Lab Code: ESE Case No.: 13230 SAS No.: SDG No.: CZ405

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

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 85374

Level: (low/med) LOW Date Received: 11/30/89

% Moisture: not dec. 100. Date Analyzed: 12/ 4/89

Column: (pack/cap) PACK Dilution Factor: 1.00

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		
1330-20-7	Xylene (total)		

FORM I VOA 00035 Rev.

AR301391

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CZ~~405~~ 419

Lab Name: ESE Contract: 68-W8-0008

Lab Code: ESE Case No.: 13230 SAS No.: SDG No.: CZ405

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

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 85363

Level: (low/med) LOW Date Received: 11/30/89

% Moisture: not dec. 100. Date Analyzed: 11/30/89

Column: (pack/cap) PACK Dilution Factor: 1.00

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		
1330-20-7	Xylene (total)		

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CZ419

Lab Name: ESE Contract: 68-W8-0008

Lab Code: ESE Case No.: 13230 SAS No.: SDG No.: CZ405

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

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: 22202

Level: (low/med) LOW Date Received: 11/29/89

% Moisture: not dec. 100. dec.____ Date Extracted: 12/ 4/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 12/27/89

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1.00

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
108-60-1	bis(2-Chloroisopropyl)ether	10.	U
106-44-5	4-Methylphenol	10.	U
621-64-7	N-Nitroso-di-n-propylamine	10.	U
67-72-1	Hexachloroethane	10.	U
98-95-3	Nitrobenzene	10.	U
78-59-1	Isophorone	10.	U
88-75-5	2-Nitrophenol	10.	U
105-67-9	2,4-Dimethylphenol	10.	U
65-85-0	Benzoic acid	50.	U
111-91-1	bis(2-Chloroethoxy)methane	10.	U
120-83-2	2,4-Dichlorophenol	10.	U
120-82-1	1,2,4-Trichlorobenzene	10.	U
91-20-3	Naphthalene	10.	U
106-47-8	4-Chloroaniline	10.	U
87-68-3	Hexachlorobutadiene	10.	U
59-50-7	4-Chloro-3-methylphenol	10.	U
91-57-6	2-Methylnaphthalene	10.	U
77-47-4	Hexachlorocyclopentadiene	10.	U
88-06-2	2,4,6-Trichlorophenol	10.	U
95-95-4	2,4,5-Trichlorophenol	50	
91-58-7	2-Chloronaphthalene	10.	U
88-74-4	2-Nitroaniline	50.	U
131-11-3	Dimethylphthalate	10.	U
208-96-8	Acenaphthylene	10.	U
606-20-2	2,6-Dinitrotoluene	10.	U

AR301393

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CZ419

Lab Name: ESE Contract: 68-W8-0008

Lab Code: ESE Case No.: 13230 SAS No.: SDG No.: CZ405

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

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: 22202

Level: (low/med) LOW Date Received: 11/29/89

% Moisture: not dec. 100. dec.____ Date Extracted: 12/ 4/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 12/27/89

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1.00

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	6.	BJ
117-84-0	Di-n-octylphthalate	10.	U
205-99-2	Benzo(b)fluoranthene	10.	U
207-08-9	Benzo(k)fluoranthene	10.	U
50-32-8	Benzo(a)pyrene		
193-39-5	Indeno(1,2,3-cd)pyrene		
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

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

CZ419

Lab Name: ESE Contract: 68-W8-0008

Lab Code: ESE Case No.: 13230 SAS No.: SDG No.: CZ405

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

Sample wt/vol: 900. (g/mL)ML Lab File ID: ACZWS15

Level: (low/med) LOW Date Received: 11/29/89

% Moisture: not dec.100. dec. 0. Date Extracted: 12/ 4/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 12/26/89

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	Alpha-BHC	.056	U
319-85-7	Beta-BHC	.056	U
319-86-8	Delta-BHC	.056	U
58-89-9	Gamma-BHC	.056	U
76-44-8	Heptachlor	.056	U
309-00-2	Aldrin	.056	U
1024-57-3	Heptachlor Epoxide	.056	U
959-98-8	Endosulfan I	.056	U
60-57-1	Dieldrin	.11	U
72-55-9	4,4'-DDE	.11	U
72-20-8	Endrin	.11	U
33213-65-9	Endosulfan II	.11	U
72-54-8	4,4'-DDD	.11	U
1031-07-8	Endosulfan Sulfate	.11	U
50-29-3	4,4'-DDT	.11	U
72-43-5	Methoxychlor	.56	U
53494-70-5	Endrin Ketone	.11	U
5103-71-9	Alpha Chlordane	.56	U
5103-74-2	Gamma Chlordane	.56	U
8001-35-2	Toxaphene	1.1	U
12674-11-2	Aroclor-1016	.56	U
11104-28-2	Aroclor-1221	.56	U
11141-16-5	Aroclor-1232	.56	U
53469-21-9	Aroclor-1242	.56	U
12672-29-6	Aroclor-1248	.56	U
11097-69-1	Aroclor-1254	1.1	U
11096-82-5	Aroclor-1260	1.1	U

FORM I PEST

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CZ420

Contract: 68-W8-0008

Lab Name: ESE

Lab Code: ESE Case No.: 13230 SAS No.: SDG No.: CZ405

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

Sample wt/vol: 4.000 (g/mL) G Lab File ID: 85400

Level: (low/med) MED Date Received: 11/30/89

% Moisture: not dec. 60. Date Analyzed: 12/ 9/89 DFR

Dilution Factor: ~~100.00~~ 2.00 1/25

Column: (pack/cap) PACK

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	6300.	U
74-83-9	Bromomethane	6300.	U
75-01-4	Vinyl Chloride	6300.	U
75-00-3	Chloroethane	6300.	U
75-09-2	Methylene Chloride	3100.	U
67-64-1	Acetone	6300.	U
75-15-0	Carbon Disulfide	3100.	U
75-35-4	1,1-Dichloroethene	3100.	U
75-34-3	1,1-Dichloroethane	3100.	U
540-59-0	1,2-Dichloroethene (total)	3100.	U
67-66-3	Chloroform	3100.	U
107-06-2	1,2-Dichloroethane	3100.	U
78-93-3	2-Butanone	6300.	U
71-55-6	1,1,1-Trichloroethane	3100.	U
56-23-5	Carbon Tetrachloride	3100.	U
108-05-4	Vinyl Acetate	6300.	U
75-27-4	Bromodichloromethane	3100.	U
78-87-5	1,2-Dichloropropane	3100.	U
10061-01-5	cis-1,3-Dichloropropene	3100.	U
79-01-6	Trichloroethene	3100.	U
124-48-1	Dibromochloromethane	3100.	U
79-00-5	1,1,2-Trichloroethane	3100.	U
71-43-2	Benzene	440.	J
10061-02-6	trans-1,3-Dichloropropene	3100.	U
75-25-2	Bromoform	3100.	U
108-10-1	4-Methyl-2-Pentanone	6300.	U
591-78-6	2-Hexanone	6300.	U
127-18-4	Tetrachloroethene	3100.	U
79-34-5	1,1,2,2-Tetrachloroethane	3100.	U
108-88-3	Toluene	3100.	U
108-90-7	Chlorobenzene	220000.	E
100-41-4	Ethylbenzene	3100.	U
100-42-5	Styrene	3100.	U
1330-20-7	Xylene (total)	[illegible]	U

FORM I VOA

1/87 Re

AR301396

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CZ420 DL

Lab Name: ESE Contract: 68-W8-0006

Lab Code: ESE Case No.: 13230 SAS No.: SDG No.: CZ405

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

Sample wt/vol: 4.000 (g/mL) G Lab File ID: 85411

Level: (low/med) MED Date Received: 11/30/89

% Moisture: not dec. 60. Date Analyzed: 12/10/89

Column: (pack/cap) PACK Dilution Factor: ~~250.00~~ 5.00 1/25

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	16000.	U
74-83-9	Bromomethane	16000.	U
75-01-4	Vinyl Chloride	16000.	U
75-00-3	Chloroethane	16000.	U
75-09-2	Methylene Chloride	7800.	U
67-64-1	Acetone	16000.	U
75-15-0	Carbon Disulfide	7800.	U
75-35-4	1,1-Dichloroethene	7800.	U
75-34-3	1,1-Dichloroethane	7800.	U
540-59-0	1,2-Dichloroethene (total)	7800.	U
67-66-3	Chloroform	7800.	U
107-06-2	1,2-Dichloroethane	7800.	U
78-93-3	2-Butanone	16000.	U
71-55-6	1,1,1-Trichloroethane	7800.	U
56-23-5	Carbon Tetrachloride	7800.	U
108-05-4	Vinyl Acetate	16000.	U
75-27-4	Bromodichloromethane	7800.	U
78-87-5	1,2-Dichloropropane	7800.	U
10061-01-5	cis-1,3-Dichloropropene	7800.	U
79-01-6	Trichloroethene	7800.	U
124-48-1	Dibromochloromethane	7800.	U
79-00-5	1,1,2-Trichloroethane	7800.	U
71-43-2	Benzene	320.	J D
10061-02-6	trans-1,3-Dichloropropene	7800.	U
75-25-2	Bromoform	7800.	U
108-10-1	4-Methyl-2-Pentanone	16000.	U
591-78-6	2-Hexanone	16000.	U
127-18-4	Tetrachloroethene	7800.	U
79-34-5	1,1,2,2-Tetrachloroethane	7800.	U
108-88-3	Toluene	7800.	U
108-90-7	Chlorobenzene	130000.	B D
100-41-4	Ethylbenzene	7800.	U
100-42-5	Styrene	7800.	U
1330-20-7	Xylene (total)	7800.	U

FORM I VOA 1/87 Re

AR301397

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CZ420

Lab Name: ESE Contract: 68-W8-0008

Lab Code: ESE Case No.: 13230 SAS No.: SDG No.: CZ405

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

Sample wt/vol: 1.000 (g/mL) G Lab File ID: 22225

Level: (low/med) MED Date Received: 11/30/89

% Moisture: not dec. 60. dec._____ Date Extracted: 12/ 8/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 12/28/89

GPC Cleanup: (Y/N) N pH: 6.2 Dilution Factor: 10.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	500000.	U
111-44-4	bis(2-Chloroethyl)ether	500000.	U
95-57-8	2-Chlorophenol	500000.	U
541-73-1	1,3-Dichlorobenzene	94000.	J
106-46-7	1,4-Dichlorobenzene	3600000.	
100-51-6	Benzyl alcohol	500000.	U
95-50-1	1,2-Dichlorobenzene	170000.	J
95-48-7	2-Methylphenol	500000.	U
108-60-1	bis(2-Chloroisopropyl)ether	500000.	U
106-44-5	4-Methylphenol	500000.	U
621-64-7	N-Nitroso-di-n-propylamine	500000.	U
67-72-1	Hexachloroethane	500000.	U
98-95-3	Nitrobenzene	500000.	U
78-59-1	Isophorone	500000.	U
88-75-5	2-Nitrophenol	500000.	U
105-67-9	2,4-Dimethylphenol	500000.	U
65-85-0	Benzoic acid	2400000.	U
111-91-1	bis(2-Chloroethoxy)methane	500000.	U
120-83-2	2,4-Dichlorophenol	500000.	U
120-82-1	1,2,4-Trichlorobenzene	2300000.	
91-20-3	Naphthalene	500000.	U
106-47-8	4-Chloroaniline	500000.	U
87-68-3	Hexachlorobutadiene	500000.	U
59-50-7	4-Chloro-3-methylphenol	500000.	U
91-57-6	2-Methylnaphthalene	500000.	U
77-47-4	Hexachlorocyclopentadiene	500000.	U
88-06-2	2,4,6-Trichlorophenol	500000.	U
95-95-4	2,4,5-Trichlorophenol	2400000.	U
91-58-7	2-Chloronaphthalene	500000.	U
88-74-4	2-Nitroaniline	2400000.	U
131-11-3	Dimethylphthalate	[illegible]	
208-96-8	Acenaphthylene	[illegible]	U
606-20-2	2,6-Dinitrotoluene	500000.	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CZ420

Lab Name: ESE Contract: 68-W8-0008

Lab Code: ESE Case No.: 13230 SAS No.: SDG No.: CZ405

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

Sample wt/vol: 1.000 (g/mL) G Lab File ID: 22225

Level: (low/med) MED Date Received: 11/30/89

% Moisture: not dec. 50. dec.____ Date Extracted: 12/ 8/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 12/28/89

GPC Cleanup: (Y/N) N pH: 6.2 Dilution Factor: 10.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	2400000.	U
83-32-9	Acenaphthene	500000.	U
51-28-5	2,4-Dinitrophenol	2400000.	U
100-02-7	4-Nitrophenol	2400000.	U
132-64-9	Dibenzofuran	500000.	U
121-14-2	2,4-Dinitrotoluene	500000.	U
84-66-2	Diethylphthalate	500000.	U
7005-72-3	4-Chlorophenyl-phenylether	500000.	U
86-73-7	Fluorene	500000.	U
100-01-6	4-Nitroaniline	2400000.	U
534-52-1	4,6-Dinitro-2-methylphenol	2400000.	U
86-30-6	N-Nitrosodiphenylamine (1)	500000.	U
101-55-3	4-Bromophenyl-phenylether	500000.	U
118-74-1	Hexachlorobenzene	500000.	U
87-86-5	Pentachlorophenol	2400000.	U
85-01-8	Phenanthrene	500000.	U
120-12-7	Anthracene	500000.	U
84-74-2	Di-n-butylphthalate	500000.	U
206-44-0	Fluoranthene	500000.	U
129-00-0	Pyrene	500000.	U
85-68-7	Butylbenzylphthalate	500000.	U
91-94-1	3,3'-Dichlorobenzidine	1000000.	U
56-55-3	Benzo(a)anthracene	500000.	U
218-01-9	Chrysene	500000.	U
117-81-7	bis(2-Ethylhexyl)phthalate	500000.	U
117-84-0	Di-n-octylphthalate	500000.	U
205-99-2	Benzo(b)fluoranthene	500000.	U
207-08-9	Benzo(k)fluoranthene	500000.	U
50-32-8	Benzo(a)pyrene	500000.	U
193-39-5	Indeno(1,2,3-cd)pyrene	500000.	U
53-70-3	Dibenzo(a,h)anthracene	[illegible]	U
191-24-2	Benzo(g,h,i)perylene		

(1) - Cannot be separated from diphenylamine

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CZ420

Contract: 68-W8-0008

Lab Name: ESE

Lab Code: ESE Case No.: 13230 SAS No.: SDG No.: CZ405

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

Sample wt/vol: 1. (g/mL) G Lab File ID: ACZWS33

Level: (low/med) MED Date Received: 11/30/89

% Moisture: not dec. 60. dec. 0. Date Extracted: 12/ 8/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 12/27/89

GPC Cleanup: (Y/N) N pH: 6.2 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	Alpha-BHC	280.	U
319-85-7	Beta-BHC	280.	U
319-86-8	Delta-BHC	280.	U
58-89-9	Gamma-BHC	280.	U
76-44-8	Heptachlor	280.	U
309-00-2	Aldrin	280.	U
1024-57-3	Heptachlor Epoxide	280.	U
959-98-8	Endosulfan I	560.	U
60-57-1	Dieldrin	560.	U
72-55-9	4,4'-DDE	560.	U
72-20-8	Endrin	560.	U
33213-65-9	Endosulfan II	560.	U
72-54-8	4,4'-DDD	560.	U
1031-07-8	Endosulfan Sulfate	560.	U
50-29-3	4,4'-DDT	2800.	U
72-43-5	Methoxychlor	560.	U
53494-70-5	Endrin Ketone	2800.	U
5103-71-9	Alpha Chlordane	2800.	U
5103-74-2	Gamma Chlordane	5600.	U
8001-35-2	Toxaphene	2800.	U
12674-11-2	Aroclor-1016	2800.	U
11104-28-2	Aroclor-1221	2800.	U
11141-16-5	Aroclor-1232	2800.	U
53469-21-9	Aroclor-1242	2800.	U
12672-29-6	Aroclor-1248	5600.	U
11097-69-1	Aroclor-1254	5600.	U
11096-82-5	Aroclor-1260		

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CZ422

Lab Name: ESE Contract: 68-W8-0008

Lab Code: ESE Case No.: 13230 SAS No.: SDG No.: CZ40E

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

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 85372

Level: (low/med) LOW Date Received: 11/30/89

% Moisture: not dec. 100. Date Analyzed: 12/ 4/89

Column: (pack/cap) PACK Dilution Factor: 5.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	50.	U
74-83-9	Bromomethane	50.	U
75-01-4	Vinyl Chloride	50.	U
75-00-3	Chloroethane	50.	U
75-09-2	Methylene Chloride	25.	U
67-64-1	Acetone	50.	U
75-15-0	Carbon Disulfide	25.	U
75-35-4	1,1-Dichloroethene	25.	U
75-34-3	1,1-Dichloroethane	25.	U
540-59-0	1,2-Dichloroethene (total)	25.	U
67-66-3	Chloroform	25.	U
107-06-2	1,2-Dichloroethane	25.	U
78-93-3	2-Butanone	50.	U
71-55-6	1,1,1-Trichloroethane	25.	U
56-23-5	Carbon Tetrachloride	25.	U
108-05-4	Vinyl Acetate	50.	U
75-27-4	Bromodichloromethane	25.	U
78-87-5	1,2-Dichloropropane	25.	U
10061-01-5	cis-1,3-Dichloropropene	25.	U
79-01-6	Trichloroethene	25.	U
124-48-1	Dibromochloromethane	25.	U
79-00-5	1,1,2-Trichloroethane	25.	U
71-43-2	Benzene	70.	
10061-02-6	trans-1,3-Dichloropropene	25.	U
75-25-2	Bromoform	25.	U
108-10-1	4-Methyl-2-Pentanone	50.	U
591-78-6	2-Hexanone	50.	U
127-18-4	Tetrachloroethene	25.	U
79-34-5	1,1,2,2-Tetrachloroethane	25.	U
108-88-3	Toluene	25.	U
108-90-7	Chlorobenzene	250.	
100-41-4	Ethylbenzene	25.	U
100-42-5	Styrene	25.	U
1330-20-7	Xylene (total)	25.	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CZ422

Lab Name: ESE Contract: 68-W8-0008

Lab Code: ESE Case No.: 13230 SAS No.: SDG No.: CZ405

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

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: 22208

Level: (low/med) LOW Date Received: 11/30/89

% Moisture: not dec. 100. dec._____ Date Extracted: 12/ 4/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 12/27/89

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 2.00

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	35.	
106-46-7	1,4-Dichlorobenzene	330.	
100-51-6	Benzyl alcohol	20.	U
95-50-1	1,2-Dichlorobenzene	90.	
95-48-7	2-Methylphenol	20.	U
108-60-1	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	160.	
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		
131-11-3	Dimethylphthalate	20.	U
208-96-8	Acenaphthylene	20.	U
606-20-2	2,6-Dinitrotoluene	20.	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CZ422

Lab Name: ESE Contract: 68-W8-0008

Lab Code: ESE Case No.: 13230 SAS No.: SDG No.: CZ405

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

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: 22208

Level: (low/med) LOW Date Received: 11/30/89

% Moisture: not dec. 100. dec.____ Date Extracted: 12/ 4/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 12/27/89

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 2.00

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	20.	U
120-12-7	Anthracene	20.	U
84-74-2	Di-n-butylphthalate	20.	U
206-44-0	Fluoranthene	20.	U
129-00-0	Pyrene	20.	U
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	20.	U
117-81-7	bis(2-Ethylhexyl)phthalate	4.	BJ
117-84-0	Di-n-octylphthalate	20.	U
205-99-2	Benzo(b)fluoranthene	20.	U
207-08-9	Benzo(k)fluoranthene	20.	U
50-32-8	Benzo(a)pyrene	20.	U
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

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CZ422

Lab Name: ESE Contract: 68-W8-0008

Lab Code: ESE Case No.: 13230 SAS No.: SDG No.: CZ405

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

Sample wt/vol: 1000. (g/mL)ML Lab File ID: ACZWS17

Level: (low/med) LOW Date Received: 11/30/89

% Moisture: not dec.100. dec. 0. Date Extracted: 12/ 4/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 12/27/89

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	Alpha-BHC	.050	U
319-85-7	Beta-BHC	.050	U
319-86-8	Delta-BHC	.050	U
58-89-9	Gamma-BHC	.050	U
76-44-8	Heptachlor	.050	U
309-00-2	Aldrin	.050	U
1024-57-3	Heptachlor Epoxide	.050	U
959-98-8	Endosulfan I	.050	U
60-57-1	Dieldrin	.100	U
72-55-9	4,4'-DDE	.100	U
72-20-8	Endrin	.100	U
33213-65-9	Endosulfan II	.100	U
72-54-8	4,4'-DDD	.100	U
1031-07-8	Endosulfan Sulfate	.100	U
50-29-3	4,4'-DDT	.100	U
72-43-5	Methoxychlor	.50	U
53494-70-5	Endrin Ketone	.100	U
5103-71-9	Alpha Chlordane	.50	U
5103-74-2	Gamma Chlordane	.50	U
8001-35-2	Toxaphene	1.0	U
12674-11-2	Aroclor-1016	.50	U
11104-28-2	Aroclor-1221	.50	U
11141-16-5	Aroclor-1232	.50	U
53469-21-9	Aroclor-1242	.50	U
12672-29-6	Aroclor-1248	.50	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CZ423

Lab Name: ESE Contract: 68-W8-0008

Lab Code: ESE Case No.: 13230 SAS No.: SDG No.: CZ405

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

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 85359

Level: (low/med) LOW Date Received: 11/29/89

% Moisture: not dec. 100. Date Analyzed: 11/30/89

Column: (pack/cap) PACK Dilution Factor: 1.00

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	4.	BJ
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	Xylene (total)	5.	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CZ423

Lab Name: ESE Contract: 68-W8-0008

Lab Code: ESE Case No.: 13230 SAS No.: SDG No.: CZ405

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

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: 22203

Level: (low/med) LOW Date Received: 11/29/89

% Moisture: not dec. 100. dec._____ Date Extracted: 12/ 4/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 12/27/89

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1.00

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
108-60-1	bis(2-Chloroisopropyl)ether	10.	U
106-44-5	4-Methylphenol	10.	U
621-64-7	N-Nitroso-di-n-propylamine	10.	U
67-72-1	Hexachloroethane	10.	U
98-95-3	Nitrobenzene	10.	U
78-59-1	Isophorone	10.	U
88-75-5	2-Nitrophenol	10.	U
105-67-9	2,4-Dimethylphenol	10.	U
65-85-0	Benzoic acid	50.	U
111-91-1	bis(2-Chloroethoxy)methane	10.	U
120-83-2	2,4-Dichlorophenol	10.	U
120-82-1	1,2,4-Trichlorobenzene	10.	U
91-20-3	Naphthalene	10.	U
106-47-8	4-Chloroaniline	10.	U
87-68-3	Hexachlorobutadiene	10.	U
59-50-7	4-Chloro-3-methylphenol	10.	U
91-57-6	2-Methylnaphthalene	10.	U
77-47-4	Hexachlorocyclopentadiene	10.	U
88-06-2	2,4,6-Trichlorophenol	10.	U
95-95-4	2,4,5-Trichlorophenol	50.	U
91-58-7	2-Chloronaphthalene	10.	U
88-74-4	2-Nitroaniline		
131-11-3	Dimethylphthalate	10.	U
208-96-8	Acenaphthylene	10.	U
606-20-2	2,6-Dinitrotoluene	10.	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CZ423

Lab Name: ESE Contract: 68-W8-0008

Lab Code: ESE Case No.: 13230 SAS No.: SDG No.: CZ405

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

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: 22203

Level: (low/med) LOW Date Received: 11/29/89

% Moisture: not dec. 100. dec.____ Date Extracted: 12/ 4/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 12/27/89

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1.00

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.	BJ
117-84-0	Di-n-octylphthalate	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	
191-24-2	Benzo(g,h,i)perylene	10.	

(1) - Cannot be separated from diphenylamine

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CZ423

Lab Name: ESE Contract: 68-W8-0008

Lab Code: ESE Case No.: 13230 SAS No.: SDG No.: CZ405

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

Sample wt/vol: 1000. (g/mL)ML Lab File ID: ACZWS18

Level: (low/med) LOW Date Received: 11/29/89

% Moisture: not dec.100. dec. 0. Date Extracted: 12/ 4/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 12/27/89

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	Alpha-BHC	.050	U
319-85-7	Beta-BHC	.050	U
319-86-8	Delta-BHC	.050	U
58-89-9	Gamma-BHC	.050	U
76-44-8	Heptachlor	.050	U
309-00-2	Aldrin	.050	U
1024-57-3	Heptachlor Epoxide	.050	U
959-98-8	Endosulfan I	.050	U
60-57-1	Dieldrin	.100	U
72-55-9	4,4'-DDE	.100	U
72-20-8	Endrin	.100	U
33213-65-9	Endosulfan II	.100	U
72-54-8	4,4'-DDD	.100	U
1031-07-8	Endosulfan Sulfate	.100	U
50-29-3	4,4'-DDT	.100	U
72-43-5	Methoxychlor	.50	U
53494-70-5	Endrin Ketone	.100	U
5103-71-9	Alpha Chlordane	.50	U
5103-74-2	Gamma Chlordane	.50	U
8001-35-2	Toxaphene	1.0	U
12674-11-2	Aroclor-1016	.50	U
11104-28-2	Aroclor-1221	.50	U
11141-16-5	Aroclor-1232	.50	U
53469-21-9	Aroclor-1242	.50	U
12672-29-6	Aroclor-1248	.50	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CZ424

Lab Name: ESE Contract: 68-W8-0008

Lab Code: ESE Case No.: 13230 SAS No.: SDG No.: CZ405

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

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 85367

Level: (low/med) LOW Date Received: 11/29/89

% Moisture: not dec. 100. Date Analyzed: 11/30/89

Column: (pack/cap) PACK Dilution Factor: 1.00

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		
1330-20-7	Xylene (total)		

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CZ424

Lab Name: ESE Contract: 68-W8-0008

Lab Code: ESE Case No.: 13230 SAS No.: SDG No.: CZ405

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

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: 22206

Level: (low/med) LOW Date Received: 11/29/89

% Moisture: not dec. 100. dec._____ Date Extracted: 12/ 4/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 12/27/89

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1.00

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
108-60-1	bis(2-Chloroisopropyl)ether	10.	U
106-44-5	4-Methylphenol	10.	U
621-64-7	N-Nitroso-di-n-propylamine	10.	U
67-72-1	Hexachloroethane	10.	U
98-95-3	Nitrobenzene	10.	U
78-59-1	Isophorone	10.	U
88-75-5	2-Nitrophenol	10.	U
105-67-9	2,4-Dimethylphenol	10.	U
65-85-0	Benzoic acid	50.	U
111-91-1	bis(2-Chloroethoxy)methane	10.	U
120-83-2	2,4-Dichlorophenol	10.	U
120-82-1	1,2,4-Trichlorobenzene	10.	U
91-20-3	Naphthalene	10.	U
106-47-8	4-Chloroaniline	10.	U
87-68-3	Hexachlorobutadiene	10.	U
59-50-7	4-Chloro-3-methylphenol	10.	U
91-57-6	2-Methylnaphthalene	10.	U
77-47-4	Hexachlorocyclopentadiene	10.	U
88-06-2	2,4,6-Trichlorophenol	10.	
95-95-4	2,4,5-Trichlorophenol	50.	
91-58-7	2-Chloronaphthalene	10.	U
88-74-4	2-Nitroaniline	50.	U
131-11-3	Dimethylphthalate	10.	U
208-96-8	Acenaphthylene	10.	U
606-20-2	2,6-Dinitrotoluene	10.	U

AR301410

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CZ424

Lab Name: ESE Contract: 68-W8-0008

Lab Code: ESE Case No.: 13230 SAS No.: SDG No.: CZ405

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

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: 22206

Level: (low/med) LOW Date Received: 11/29/89

% Moisture: not dec. 100. dec.____ Date Extracted: 12/ 4/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 12/27/89

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1.00

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	5.	BJ
117-84-0	Di-n-octylphthalate	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		
53-70-3	Dibenzo(a,h)anthracene		
191-24-2	Benzo(g,h,i)perylene	10.	U

(1) - Cannot be separated from diphenylamine

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CZ424

Lab Name: ESE Contract: 68-W8-0008

Lab Code: ESE Case No.: 13230 SAS No.: SDG No.: CZ405

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

Sample wt/vol: 1000. (g/mL)ML Lab File ID: ACZWS16

Level: (low/med) LOW Date Received: 11/29/89

% Moisture: not dec.100. dec. 0. Date Extracted: 12/ 4/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 12/26/89

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	Alpha-BHC	.050	U
319-85-7	Beta-BHC	.050	U
319-86-8	Delta-BHC	.050	U
58-89-9	Gamma-BHC	.050	U
76-44-8	Heptachlor	.050	U
309-00-2	Aldrin	.050	U
1024-57-3	Heptachlor Epoxide	.050	U
959-98-8	Endosulfan I	.050	U
60-57-1	Dieldrin	.100	U
72-55-9	4,4'-DDE	.100	U
72-20-8	Endrin	.100	U
33213-65-9	Endosulfan II	.100	U
72-54-8	4,4'-DDD	.100	U
1031-07-8	Endosulfan Sulfate	.100	U
50-29-3	4,4'-DDT	.100	U
72-43-5	Methoxychlor	.50	U
53494-70-5	Endrin Ketone	.100	U
5103-71-9	Alpha Chlordane	.50	U
5103-74-2	Gamma Chlordane	.50	U
8001-35-2	Toxaphene	1.0	U
12674-11-2	Aroclor-1016	.50	U
11104-28-2	Aroclor-1221	.50	U
11141-16-5	Aroclor-1232	.50	U
53469-21-9	Aroclor-1242	.50	U
12672-29-6	Aroclor-1248	.50	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CZ42S

Lab Name: ESE Contract: 68-W8-0008

Lab Code: ESE Case No.: 13230 SAS No.: SDG No.: CZ405

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

Sample wt/vol: 5.000 (g/mL) G Lab File ID: 85394

Level: (low/med) LOW Date Received: 11/29/89

% Moisture: not dec. 51. Date Analyzed: 12/ 8/89

Column: (pack/cap) PACK Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	21.	U
74-83-9	Bromomethane	21.	U
75-01-4	Vinyl Chloride	21.	U
75-00-3	Chloroethane	21.	U
75-09-2	Methylene Chloride	10.	U
67-64-1	Acetone	56.	B
75-15-0	Carbon Disulfide	10.	U
75-35-4	1,1-Dichloroethene	10.	U
75-34-3	1,1-Dichloroethane	10.	U
540-59-0	1,2-Dichloroethene (total)	10.	U
67-66-3	Chloroform	10.	U
107-06-2	1,2-Dichloroethane	10.	U
78-93-3	2-Butanone	16.	J
71-55-6	1,1,1-Trichloroethane	10.	U
56-23-5	Carbon Tetrachloride	10.	U
108-05-4	Vinyl Acetate	21.	U
75-27-4	Bromodichloromethane	10.	U
78-87-5	1,2-Dichloropropane	10.	U
10061-01-5	cis-1,3-Dichloropropene	10.	U
79-01-6	Trichloroethene	10.	U
124-48-1	Dibromochloromethane	10.	U
79-00-5	1,1,2-Trichloroethane	10.	U
71-43-2	Benzene	10.	U
10061-02-6	trans-1,3-Dichloropropene	10.	U
75-25-2	Bromoform	10.	U
108-10-1	4-Methyl-2-Pentanone	21.	U
591-78-6	2-Hexanone	21.	U
127-18-4	Tetrachloroethene	10.	U
79-34-5	1,1,2,2-Tetrachloroethane	10.	U
108-88-3	Toluene	10.	U
108-90-7	Chlorobenzene	180.	
100-41-4	Ethylbenzene	10.	U
100-42-5	Styrene	10.	U
1330-20-7	Xylene (total)	10.	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CZ425

Lab Name: ESE Contract: 68-W8-0008

Lab Code: ESE Case No.: 13230 SAS No.: SDG No.: CZ405

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

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 22222

Level: (low/med) LOW Date Received: 11/29/89

% Moisture: not dec. 51. dec._____ Date Extracted: 12/ 6/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 12/28/89

GPC Cleanup: (Y/N) N pH: 6.5 Dilution Factor: 10.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	6900.	U
111-44-4	bis(2-Chloroethyl)ether	6900.	U
95-57-8	2-Chlorophenol	6900.	U
541-73-1	1,3-Dichlorobenzene	9100.	
106-46-7	1,4-Dichlorobenzene	62000.	
100-51-6	Benzyl alcohol	6900.	U
95-50-1	1,2-Dichlorobenzene	2200.	J
95-48-7	2-Methylphenol	6900.	U
108-60-1	bis(2-Chloroisopropyl)ether	6900.	U
106-44-5	4-Methylphenol	6900.	U
621-64-7	N-Nitroso-di-n-propylamine	6900.	U
67-72-1	Hexachloroethane	6900.	U
98-95-3	Nitrobenzene	6900.	U
78-59-1	Isophorone	6900.	U
88-75-5	2-Nitrophenol	6900.	U
105-67-9	2,4-Dimethylphenol	6900.	U
65-85-0	Benzoic acid	34000.	U
111-91-1	bis(2-Chloroethoxy)methane	69[illegible]0.	U
120-83-2	2,4-Dichlorophenol	6900.	U
120-82-1	1,2,4-Trichlorobenzene	37000.	
91-20-3	Naphthalene	6900.	U
106-47-8	4-Chloroaniline	6900.	U
87-68-3	Hexachlorobutadiene	6900.	U
59-50-7	4-Chloro-3-methylphenol	6900.	U
91-57-6	2-Methylnaphthalene	6900.	U
77-47-4	Hexachlorocyclopentadiene	6900.	U
88-06-2	2,4,6-Trichlorophenol	6900.	U
95-95-4	2,4,5-Trichlorophenol	34000.	U
91-58-7	2-Chloronaphthalene	6900.	U
88-74-4	2-Nitroaniline	[illegible]	U
131-11-3	Dimethylphthalate		
208-96-8	Acenaphthylene	6900.	U
606-20-2	2,6-Dinitrotoluene	6900.	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CZ425

Lab Name: ESE Contract: 68-W8-0008

Lab Code: ESE Case No.: 13230 SAS No.: SDG No.: CZ405

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

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 22222

Level: (low/med) LOW Date Received: 11/29/89

% Moisture: not dec. 51. dec.____ Date Extracted: 12/ 6/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 12/28/89

GPC Cleanup: (Y/N) N pH: 6.5 Dilution Factor: 10.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	34000.	U
83-32-9	Acenaphthene	6900.	U
51-28-5	2,4-Dinitrophenol	34000.	U
100-02-7	4-Nitrophenol	34000.	U
132-64-9	Dibenzofuran	6900.	U
121-14-2	2,4-Dinitrotoluene	6900.	U
84-66-2	Diethylphthalate	6900.	U
7005-72-3	4-Chlorophenyl-phenylether	6900.	U
86-73-7	Fluorene	6900.	U
100-01-6	4-Nitroaniline	34000.	U
534-52-1	4,6-Dinitro-2-methylphenol	34000.	U
86-30-6	N-Nitrosodiphenylamine (1)	6900.	U
101-55-3	4-Bromophenyl-phenylether	6900.	U
118-74-1	Hexachlorobenzene	6900.	U
87-86-5	Pentachlorophenol	34000.	U
85-01-8	Phenanthrene	6900.	U
120-12-7	Anthracene	6900.	U
84-74-2	Di-n-butylphthalate	6900.	U
206-44-0	Fluoranthene	6900.	U
129-00-0	Pyrene	6900.	U
85-68-7	Butylbenzylphthalate	6900.	U
91-94-1	3,3'-Dichlorobenzidine	14000.	U
56-55-3	Benzo(a)anthracene	6900.	U
218-01-9	Chrysene	6900.	U
117-81-7	bis(2-Ethylhexyl)phthalate	6900.	U
117-84-0	Di-n-octylphthalate	6900.	U
205-99-2	Benzo(b)fluoranthene	6900.	U
207-08-9	Benzo(k)fluoranthene	6900.	U
50-32-8	Benzo(a)pyrene	6900.	U
193-39-5	Indeno(1,2,3-cd)pyrene	6900.	U
53-70-3	Dibenzo(a,h)anthracene		U
191-24-2	Benzo(g,h,i)perylene		

(1) - Cannot be separated from diphenylamine

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CZ425

Lab Name: ESE Contract: 68-W8-0008

Lab Code: ESE Case No.: 13230 SAS No.: SDG No.: CZ405

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

Sample wt/vol: 30. (g/mL) G Lab File ID: ACZWS24

Level: (low/med) LOW Date Received: 11/29/89

% Moisture: not dec. 52. dec. 0. Date Extracted: 12/ 6/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 12/27/89

GPC Cleanup: (Y/N) Y pH: 6.5 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	Alpha-BHC	33.	U
319-85-7	Beta-BHC	33.	U
319-86-8	Delta-BHC	33.	U
58-89-9	Gamma-BHC	33.	U
76-44-8	Heptachlor	33.	U
309-00-2	Aldrin	33.	U
1024-57-3	Heptachlor Epoxide	33.	U
959-98-8	Endosulfan I	33.	U
60-57-1	Dieldrin	66.	U
72-55-9	4,4'-DDE	66.	U
72-20-8	Endrin	66.	U
33213-65-9	Endosulfan II	66.	U
72-54-8	4,4'-DDD	66.	U
1031-07-8	Endosulfan Sulfate	66.	U
50-29-3	4,4'-DDT	66.	U
72-43-5	Methoxychlor	330.	U
53494-70-5	Endrin Ketone	66.	U
5103-71-9	Alpha Chlordane	330.	U
5103-74-2	Gamma Chlordane	330.	U
8001-35-2	Toxaphene	660.	U
12674-11-2	Aroclor-1016	330.	U
11104-28-2	Aroclor-1221	330.	U
11141-16-5	Aroclor-1232	330.	U
53469-21-9	Aroclor-1242	330.	U
12672-29-6	Aroclor-1248	330.	U
11097-69-1	Aroclor-1254	660.	U
11096-82-5	Aroclor-1260	660.	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CZ426

Lab Name: ESE Contract: 68-W8-0008

Lab Code: ESE Case No.: 13230 SAS No.: SDG No.: CZ405

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

Sample wt/vol: 5.000 (g/mL) G Lab File ID: 85389

Level: (low/med) LOW Date Received: 11/29/89

% Moisture: not dec. 55. Date Analyzed: 12/ 8/89

Column: (pack/cap) PACK Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	22.	U
74-83-9	Bromomethane	22.	U
75-01-4	Vinyl Chloride	22.	U
75-00-3	Chloroethane	22.	U
75-09-2	Methylene Chloride	11.	U
67-64-1	Acetone	37.	B
75-15-0	Carbon Disulfide	11.	U
75-35-4	1,1-Dichloroethene	11.	U
75-34-3	1,1-Dichloroethane	11.	U
540-59-0	1,2-Dichloroethene (total)	11.	U
67-66-3	Chloroform	11.	U
107-06-2	1,2-Dichloroethane	11.	U
78-93-3	2-Butanone	22.	U
71-55-6	1,1,1-Trichloroethane	11.	U
56-23-5	Carbon Tetrachloride	11.	U
108-05-4	Vinyl Acetate	22.	U
75-27-4	Bromodichloromethane	11.	U
78-87-5	1,2-Dichloropropane	11.	U
10061-01-5	cis-1,3-Dichloropropene	11.	U
79-01-6	Trichloroethene	11.	U
124-48-1	Dibromochloromethane	11.	U
79-00-5	1,1,2-Trichloroethane	11.	U
71-43-2	Benzene	11.	U
10061-02-6	trans-1,3-Dichloropropene	11.	U
75-25-2	Bromoform	11.	U
108-10-1	4-Methyl-2-Pentanone	22.	U
591-78-6	2-Hexanone	22.	U
127-18-4	Tetrachloroethene	11.	U
79-34-5	1,1,2,2-Tetrachloroethane	11.	U
108-88-3	Toluene	11.	U
108-90-7	Chlorobenzene	6.	J
100-41-4	Ethylbenzene	11.	U
100-42-5	Styrene	11.	U
1330-20-7	Xylene (total)		

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CZ426

Lab Name: ESE Contract: 68-W8-0008

Lab Code: ESE Case No.: 13230 SAS No.: SDG No.: CZ405

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

Sample wt/vol: 30.0 (g/ml) G Lab File ID: 22210

Level: (low/med) LOW Date Received: 11/29/89

% Moisture: not dec. 55. dec.____ Date Extracted: 12/ 8/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 12/27/89

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 2.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	1500.	U
111-44-4	bis(2-Chloroethyl)ether	1500.	U
95-57-8	2-Chlorophenol	1500.	U
541-73-1	1,3-Dichlorobenzene	1500.	U
106-46-7	1,4-Dichlorobenzene	190.	J
100-51-6	Benzyl alcohol	1500.	U
95-50-1	1,2-Dichlorobenzene	1500.	U
95-48-7	2-Methylphenol	1500.	U
108-60-1	bis(2-Chloroisopropyl)ether	1500.	U
106-44-5	4-Methylphenol	1500.	U
621-64-7	N-Nitroso-di-n-propylamine	1500.	U
67-72-1	Hexachloroethane	1500.	U
98-95-3	Nitrobenzene	1500.	U
78-59-1	Isophorone	1500.	U
88-75-5	2-Nitrophenol	1500.	U
105-67-9	2,4-Dimethylphenol	1500.	U
65-85-0	Benzoic acid	7000.	U
111-91-1	bis(2-Chloroethoxy)methane	1500.	U
120-83-2	2,4-Dichlorophenol	1500.	U
120-82-1	1,2,4-Trichlorobenzene	1500.	U
91-20-3	Naphthalene	1500.	U
106-47-8	4-Chloroaniline	1500.	U
87-68-3	Hexachlorobutadiene	1500.	U
59-50-7	4-Chloro-3-methylphenol	1500.	U
91-57-6	2-Methylnaphthalene	1500.	U
77-47-4	Hexachlorocyclopentadiene	1500.	U
88-06-2	2,4,6-Trichlorophenol	1500.	U
95-95-4	2,4,5-Trichlorophenol	7000.	U
91-58-7	2-Chloronaphthalene		
88-74-4	2-Nitroaniline		
131-11-3	Dimethylphthalate	1500.	U
208-96-8	Acenaphthylene	1500.	U
606-20-2	2,6-Dinitrotoluene	1500.	U

AR301418

AA 273

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CZ426

Lab Name: ESE Contract: 68-W8-0008

Lab Code: ESE Case No.: 13230 SAS No.: SDG No.: CZ405

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

Sample wt/vol: 30.0 (g/ml) G Lab File ID: 22210

Level: (low/med) LOW Date Received: 11/29/89

% Moisture: not dec. 55% dec._____ Date Extracted: 12/ 6/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 12/27/89

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 2.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	7000.	U
83-32-9	Acenaphthene	1500.	U
51-28-5	2,4-Dinitrophenol	7000.	U
100-02-7	4-Nitrophenol	7000.	U
132-64-9	Dibenzofuran	1500.	U
121-14-2	2,4-Dinitrotoluene	1500.	U
84-66-2	Diethylphthalate	1500.	U
7005-72-3	4-Chlorophenyl-phenylether	1500.	U
86-73-7	Fluorene	1500.	U
100-01-6	4-Nitroaniline	7000.	U
534-52-1	4,6-Dinitro-2-methylphenol	7000.	U
86-30-6	N-Nitrosodiphenylamine (1)	1500.	U
101-55-3	4-Bromophenyl-phenylether	1500.	U
118-74-1	Hexachlorobenzene	1500.	U
87-86-5	Pentachlorophenol	7000.	U
85-01-8	Phenanthrene	1500.	U
120-12-7	Anthracene	1500.	U
84-74-2	Di-n-butylphthalate	1500.	U
206-44-0	Fluoranthene	130.	J
129-00-0	Pyrene	140.	J
85-68-7	Butylbenzylphthalate	1500.	U
91-94-1	3,3'-Dichlorobenzidine	3000.	U
56-55-3	Benzo(a)anthracene	1500.	U
218-01-9	Chrysene	1500.	U
117-81-7	bis(2-Ethylhexyl)phthalate	210.	BJ
117-84-0	Di-n-octylphthalate	1500.	U
205-99-2	Benzo(b)fluoranthene	1500.	U
207-08-9	Benzo(k)fluoranthene	1500.	U
50-32-8	Benzo(a)pyrene	1500.	U
193-39-5	Indeno(1,2,3-cd)pyrene	1500.	U
53-70-3	Dibenzo(a,h)anthracene	[illegible]	
191-24-2	Benzo(g,h,i)perylene	[illegible]	

(1) - Cannot be separated from diphenylamine

AR301419

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CZ426

Lab Name: ESE Contract: 68-W8-0008

Lab Code: ESE Case No.: 13230 SAS No.: SDG No.: CZ405

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

Sample wt/vol: 30. (g/mL) G Lab File ID: ACZWS26

Level: (low/med) LOW Date Received: 11/29/89

% Moisture: not dec. 55. dec. 0. Date Extracted: 12/ 6/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 12/27/89

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	Alpha-BHC	36.	U
319-85-7	Beta-BHC	36.	U
319-86-8	Delta-BHC	36.	U
58-89-9	Gamma-BHC	36.	U
76-44-8	Heptachlor	36.	U
309-00-2	Aldrin	36.	U
1024-57-3	Heptachlor Epoxide	36.	U
959-98-8	Endosulfan I	36.	U
60-57-1	Dieldrin	72.	U
72-55-9	4,4'-DDE	72.	U
72-20-8	Endrin	72.	U
33213-65-9	Endosulfan II	72.	U
72-54-8	4,4'-DDD	72.	U
1031-07-8	Endosulfan Sulfate	72.	U
50-29-3	4,4'-DDT	72.	U
72-43-5	Methoxychlor	360.	U
53494-70-5	Endrin Ketone	72.	U
5103-71-9	Alpha Chlordane	360.	U
5103-74-2	Gamma Chlordane	360.	U
8001-35-2	Toxaphene	720.	U
12674-11-2	Aroclor-1016	360.	U
11104-28-2	Aroclor-1221	360.	U
11141-16-5	Aroclor-1232	360.	U
53469-21-9	Aroclor-1242	360.	U
12672-29-6	Aroclor-1248	360.	U
11097-69-1	Aroclor-1254	720.	U
11096-82-5	Aroclor-1260	720.	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CZ427

Lab Name: ESE Contract: 68-W8-0008

Lab Code: ESE Case No.: 13230 SAS No.: SDG No.: CZ405

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

Sample wt/vol: 5.000 (g/mL) G Lab File ID: 85390

Level: (low/med) LOW Date Received: 11/29/89

% Moisture: not dec. 64. Date Analyzed: 12/ 8/89

Column: (pack/cap) PACK Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	27.	U
74-83-9	Bromomethane	27.	U
75-01-4	Vinyl Chloride	27.	U
75-00-3	Chloroethane	27.	U
75-09-2	Methylene Chloride	14.	U
67-64-1	Acetone	27.	U
75-15-0	Carbon Disulfide	14.	U
75-35-4	1,1-Dichloroethene	14.	U
75-34-3	1,1-Dichloroethane	14.	U
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	27.	U
71-55-6	1,1,1-Trichloroethane	14.	U
56-23-5	Carbon Tetrachloride	14.	U
108-05-4	Vinyl Acetate	27.	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	14.	U
10061-02-6	trans-1,3-Dichloropropene	14.	U
75-25-2	Bromoform	14.	U
108-10-1	4-Methyl-2-Pentanone	27.	U
591-78-6	2-Hexanone	27.	U
127-18-4	Tetrachloroethene	14.	U
79-34-5	1,1,2,2-Tetrachloroethane	14.	U
108-88-3	Toluene	14.	U
108-90-7	Chlorobenzene	9.	J
100-41-4	Ethylbenzene	14.	U
100-42-5	Styrene	14.	U
1330-20-7	Xylene (total)	14.	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CZ427

Lab Name: ESE Contract: 68-W8-0008

Lab Code: ESE Case No.: 13230 SAS No.: SDG No.: CZ405

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

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 22221

Level: (low/med) LOW Date Received: 11/29/89

% Moisture: not dec. 64. dec.____ Date Extracted: 12/ 6/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 12/28/89

GPC Cleanup: (Y/N) N pH: 7.3 Dilution Factor: 2.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	1800.	U
111-44-4	bis(2-Chloroethyl)ether	1800.	U
95-57-8	2-Chlorophenol	1800.	U
541-73-1	1,3-Dichlorobenzene	530.	J
106-46-7	1,4-Dichlorobenzene	4100.	
100-51-6	Benzyl alcohol	1800.	U
95-50-1	1,2-Dichlorobenzene	170.	J
95-48-7	2-Methylphenol	1800.	U
108-60-1	bis(2-Chloroisopropyl)ether	1800.	U
106-44-5	4-Methylphenol	1800.	U
621-64-7	N-Nitroso-di-n-propylamine	1800.	U
67-72-1	Hexachloroethane	1800.	U
98-95-3	Nitrobenzene	1800.	U
78-59-1	Isophorone	1800.	U
88-75-5	2-Nitrophenol	1800.	U
105-67-9	2,4-Dimethylphenol	1800.	U
65-85-0	Benzoic acid	8800.	U
111-91-1	bis(2-Chloroethoxy)methane	1800.	U
120-83-2	2,4-Dichlorophenol	1800.	U
120-82-1	1,2,4-Trichlorobenzene	1100.	J
91-20-3	Naphthalene	1800.	U
106-47-8	4-Chloroaniline	1800.	U
87-68-3	Hexachlorobutadiene	1800.	U
59-50-7	4-Chloro-3-methylphenol	1800.	U
91-57-6	2-Methylnaphthalene	1800.	U
77-47-4	Hexachlorocyclopentadiene	1800.	U
88-06-2	2,4,6-Trichlorophenol	1800.	U
95-95-4	2,4,5-Trichlorophenol	8800.	U
91-58-7	2-Chloronaphthalene	1800.	U
88-74-4	2-Nitroaniline	8800.	U
131-11-3	Dimethylphthalate		
208-96-8	Acenaphthylene	1800.	U
606-20-2	2,6-Dinitrotoluene	1800.	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CZ427

Lab Name: ESE Contract: 68-W8-0008

Lab Code: ESE Case No.: 13230 SAS No.: SDG No.: CZ405

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

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 22221

Level: (low/med) LOW Date Received: 11/29/89

% Moisture: not dec. 84. dec.____ Date Extracted: 12/ 6/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 12/28/89

GPC Cleanup: (Y/N) N pH: 7.3 Dilution Factor: 2.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	8800.	U
83-32-9	Acenaphthene	1800.	U
51-28-5	2,4-Dinitrophenol	8800.	U
100-02-7	4-Nitrophenol	8800.	U
132-64-9	Dibenzofuran	1800.	U
121-14-2	2,4-Dinitrotoluene	1800.	U
84-66-2	Diethylphthalate	1800.	U
7005-72-3	4-Chlorophenyl-phenylether	1800.	U
86-73-7	Fluorene	1800.	U
100-01-6	4-Nitroaniline	8800.	U
534-52-1	4,6-Dinitro-2-methylphenol	8800.	U
86-30-6	N-Nitrosodiphenylamine (1)	1800.	U
101-55-3	4-Bromophenyl-phenylether	1800.	U
118-74-1	Hexachlorobenzene	1800.	U
87-86-5	Pentachlorophenol	8800.	U
85-01-8	Phenanthrene	1800.	U
120-12-7	Anthracene	1800.	U
84-74-2	Di-n-butylphthalate	1800.	U
206-44-0	Fluoranthene	130.	J
129-00-0	Pyrene	150.	J
85-68-7	Butylbenzylphthalate	1800.	U
91-94-1	3,3'-Dichlorobenzidine	3700.	U
56-55-3	Benzo(a)anthracene	1800.	U
218-01-9	Chrysene	1800.	U
117-81-7	bis(2-Ethylhexyl)phthalate	730.	BJ
117-84-0	Di-n-octylphthalate	1800.	U
205-99-2	Benzo(b)fluoranthene	1800.	U
207-08-9	Benzo(k)fluoranthene	1800.	U
50-32-8	Benzo(a)pyrene	1800.	U
193-39-5	Indeno(1,2,3-cd)pyrene	[illegible]	U
53-70-3	Dibenzo(a,h)anthracene		
191-24-2	Benzo(g,h,i)perylene	1800.	U

(1) - Cannot be separated from diphenylamine

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CZ427

Lab Name: ESE Contract: 68-W8-0008

Lab Code: ESE Case No.: 13230 SAS No.: SDG No.: CZ405

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

Sample wt/vol: 30. (g/mL) G Lab File ID: ACZWS29

Level: (low/med) LOW Date Received: 11/29/89

% Moisture: not dec. 64. dec. 0. Date Extracted: 12/ 6/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 12/27/89

GPC Cleanup: (Y/N) Y pH: 7.3 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	Alpha-BHC	44.	U
319-85-7	Beta-BHC	44.	U
319-86-8	Delta-BHC	44.	U
58-89-9	Gamma-BHC	44.	U
76-44-8	Heptachlor	44.	U
309-00-2	Aldrin	44.	U
1024-57-3	Heptachlor Epoxide	44.	U
959-98-8	Endosulfan I	44.	U
60-57-1	Dieldrin	88.	U
72-55-9	4,4'-DDE	88.	U
72-20-8	Endrin	88.	U
33213-65-9	Endosulfan II	88.	U
72-54-8	4,4'-DDD	88.	U
1031-07-8	Endosulfan Sulfate	88.	U
50-29-3	4,4'-DDT	88.	U
72-43-5	Methoxychlor	440.	U
53494-70-5	Endrin Ketone	88.	U
5103-71-9	Alpha Chlordane	440.	U
5103-74-2	Gamma Chlordane	440.	U
8001-35-2	Toxaphene	880.	U
12674-11-2	Aroclor-1016	440.	U
11104-28-2	Aroclor-1221	440.	U
11141-16-5	Aroclor-1232	440.	U
53469-21-9	Aroclor-1242	440.	U
12672-29-6	Aroclor-1248	440.	U
11097-69-1	Aroclor-1254	880.	U
11096-82-5	Aroclor-1260	880.	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CZ428

Lab Name: ESE Contract: 68-W8-0008

Lab Code: ESE Case No.: 13230 SAS No.: SDG No.: CZ405

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

Sample wt/vol: 1.000 (g/mL) G Lab File ID: 85395

Level: (low/med) LOW Date Received: 11/29/89

% Moisture: not det. 53. Date Analyzed: 12/ 8/89

Column: (pack/cap) PACK Dilution Factor: ~~5.00~~ 1.00 MS 3/7

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	110.	U
74-83-9	Bromomethane	110.	U
75-01-4	Vinyl Chloride	110.	U
75-00-3	Chloroethane	110.	U
75-09-2	Methylene Chloride	53.	U
67-64-1	Acetone	88.	BJ
75-15-0	Carbon Disulfide	53.	U
75-35-4	1,1-Dichloroethene	53.	U
75-34-3	1,1-Dichloroethane	53.	U
540-59-0	1,2-Dichloroethene (total)	53.	U
67-66-3	Chloroform	53.	U
107-06-2	1,2-Dichloroethane	53.	U
78-93-3	2-Butanone	110.	U
71-55-6	1,1,1-Trichloroethane	53.	U
56-23-5	Carbon Tetrachloride	53.	U
108-05-4	Vinyl Acetate	110.	U
75-27-4	Bromodichloromethane	53.	U
78-87-5	1,2-Dichloropropane	53.	U
10061-01-5	cis-1,3-Dichloropropene	53.	U
79-01-6	Trichloroethene	53.	U
124-48-1	Dibromochloromethane	53.	U
79-00-5	1,1,2-Trichloroethane	53.	U
71-43-2	Benzene	53.	U
10061-02-6	trans-1,3-Dichloropropene	53.	U
75-25-2	Bromoform	53.	U
108-10-1	4-Methyl-2-Pentanone	110.	U
591-78-6	2-Hexanone	110.	U
127-18-4	Tetrachloroethene	53.	U
79-34-5	1,1,2,2-Tetrachloroethane	53.	U
108-88-3	Toluene	53.	U
108-90-7	Chlorobenzene	920.	
100-41-4	Ethylbenzene	53.	U
100-42-5	Styrene		J
1330-20-7	Xylene (total)		J

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CZ428

Lab Name: ESE Contract: 68-W8-0008

Lab Code: ESE Case No.: 13230 SAS No.: SDG No.: CZ405

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

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 22223

Level: (low/med) LOW Date Received: 11/29/89

% Moisture: not dec. 53. dec._____ Date Extracted: 12/ 6/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 12/28/89

GPC Cleanup: (Y/N) N pH: 7.3 Dilution Factor: 20.00

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.	
106-46-7	1,4-Dichlorobenzene	160000.	
100-51-6	Benzyl alcohol	14000.	U
95-50-1	1,2-Dichlorobenzene	4800.	J
95-48-7	2-Methylphenol	14000.	U
108-60-1	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	71000.	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	63000.	
91-20-3	Naphthalene	14000.	U
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	71000.	U
91-58-7	2-Chloronaphthalene	1	
88-74-4	2-Nitroaniline	7	
131-11-3	Dimethylphthalate	14000.	U
208-96-8	Acenaphthylene	14000.	U
606-20-2	2,6-Dinitrotoluene	14000.	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CZ428

Lab Name: ESE Contract: 68-W8-0008

Lab Code: ESE Case No.: 13230 SAS No.: SDG No.: CZ405

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

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 22223

Level: (low/med) LOW Date Received: 11/29/89

% Moisture: not dec. 53. dec.____ Date Extracted: 12/ 6/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 12/28/89

GPC Cleanup: (Y/N) N pH: 7.3 Dilution Factor: 20.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q.
99-09-2	3-Nitroaniline	71000.	U
83-32-9	Acenaphthene	14000.	U
51-28-5	2,4-Dinitrophenol	71000.	U
100-02-7	4-Nitrophenol	71000.	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	14000.	U
100-01-6	4-Nitroaniline	71000.	U
534-52-1	4,6-Dinitro-2-methylphenol	71000.	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	71000.	U
85-01-8	Phenanthrene	14000.	U
120-12-7	Anthracene	14000.	U
84-74-2	Di-n-butylphthalate	14000.	U
206-44-0	Fluoranthene	14000.	U
129-00-0	Pyrene	14000.	U
85-68-7	Butylbenzylphthalate	14000.	U
91-94-1	3,3'-Dichlorobenzidine	28000.	U
56-55-3	Benzo(a)anthracene	14000.	U
218-01-9	Chrysene	14000.	U
117-81-7	bis(2-Ethylhexyl)phthalate	14000.	U
117-84-0	Di-n-octylphthalate	14000.	U
205-99-2	Benzo(b)fluoranthene	14000.	U
207-08-9	Benzo(k)fluoranthene	14000.	U
50-32-8	Benzo(a)pyrene	14000.	U
193-39-5	Indeno(1,2,3-cd)pyrene	14000.	U
53-70-3	Dibenzo(a,h)anthracene		
191-24-2	Benzo(g,h,i)perylene	14000.	U

(1) - Cannot be separated from diphenylamine

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CZ428

Lab Name: ESE Contract: 68-W8-0008

Lab Code: ESE Case No.: 13230 SAS No.: SDG No.: CZ405

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

Sample wt/vol: 30. (g/mL) G Lab File ID: ACZWS30

Level: (low/med) LOW Date Received: 11/29/89

% Moisture: not dec. 53. dec. 0. Date Extracted: 12/ 6/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 12/27/89

GPC Cleanup: (Y/N) Y pH: 7.3 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	Alpha-BHC	34.	U
319-85-7	Beta-BHC	34.	U
319-86-8	Delta-BHC	34.	U
58-89-9	Gamma-BHC	34.	U
76-44-8	Heptachlor	34.	U
309-00-2	Aldrin	34.	U
1024-57-3	Heptachlor Epoxide	34.	U
959-98-8	Endosulfan I	34.	U
60-57-1	Dieldrin	68.	U
72-55-9	4,4'-DDE	68.	U
72-20-8	Endrin	68.	U
33213-65-9	Endosulfan II	68.	U
72-54-8	4,4'-DDD	68.	U
1031-07-8	Endosulfan Sulfate	68.	U
50-29-3	4,4'-DDT	68.	U
72-43-5	Methoxychlor	340.	U
53494-70-5	Endrin Ketone	68.	U
5103-71-9	Alpha Chlordane	340.	U
5103-74-2	Gamma Chlordane	340.	U
8001-35-2	Toxaphene	680.	U
12674-11-2	Aroclor-1016	340.	U
11104-28-2	Aroclor-1221	340.	U
11141-16-5	Aroclor-1232	340.	U
53469-21-9	Aroclor-1242	340.	U
12672-29-6	Aroclor-1248	340.	U
11097-69-1	Aroclor-1254	680.	U
11096-82-5	Aroclor-1260	680.	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CZ432

Lab Name: ESE Contract: 68-W8-0008

Lab Code: ESE Case No.: 13230 SAS No.: SDG No.: CZ405

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

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 85368

Level: (low/med) LOW Date Received: 11/29/89

% Moisture: not dec. 100. Date Analyzed: 11/30/89

Column: (pack/cap) PACK Dilution Factor: 1.00

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	Xylene (total)	5.	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CZ432

Lab Name: ESE Contract: 68-W8-0008

Lab Code: ESE Case No.: 13230 SAS No.: SDG No.: CZ405

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

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: 22207

Level: (low/med) LOW Date Received: 11/29/89

% Moisture: not dec. 100. dec._____ Date Extracted: 12/ 4/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 12/27/89

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1.00

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

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CZ432

Lab Name: ESE Contract: 68-W8-0008

Lab Code: ESE Case No.: 13230 SAS No.: SDG No.: CZ405

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

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: 22207

Level: (low/med) LOW Date Received: 11/29/89

% Moisture: not dec. 100. dec._____ Date Extracted: 12/ 4/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 12/27/89

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1.00

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	7.	BJ
117-84-0	Di-n-octylphthalate	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	

(1) - Cannot be separated from diphenylamine

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1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CZ432

Lab Name: ESE Contract: 68-W8-0008

Lab Code: ESE Case No.: 13230 SAS No.: SDG No.: CZ405

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

Sample wt/vol: 1000. (g/mL)ML Lab File ID: ACZWS22

Level: (low/med) LOW Date Received: 11/29/89

% Moisture: not dec.100. dec. 0. Date Extracted: 12/ 4/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 12/27/89

GPC Cleanup: (Y/N) N. pH: 7.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	Alpha-BHC	.050	U
319-85-7	Beta-BHC	.050	U
319-86-8	Delta-BHC	.050	U
58-89-9	Gamma-BHC	.050	U
76-44-8	Heptachlor	.050	U
309-00-2	Aldrin	.050	U
1024-57-3	Heptachlor Epoxide	.050	U
959-98-8	Endosulfan I	.050	U
60-57-1	Dieldrin	.100	U
72-55-9	4,4'-DDE	.100	U
72-20-8	Endrin	.100	U
33213-65-9	Endosulfan II	.100	U
72-54-8	4,4'-DDD	.100	U
1031-07-8	Endosulfan Sulfate	.100	U
50-29-3	4,4'-DDT	.100	U
72-43-5	Methoxychlor	.50	U
53494-70-5	Endrin Ketone	.100	U
5103-71-9	Alpha Chlordane	.50	U
5103-74-2	Gamma Chlordane	.50	U
8001-35-2	Toxaphene	1.0	U
12674-11-2	Aroclor-1016	.50	U
11104-28-2	Aroclor-1221	.50	U
11141-16-5	Aroclor-1232	.50	U
53469-21-9	Aroclor-1242	.50	U
12672-29-6	Aroclor-1248	.50	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

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Appendix D

Reviewed and Corrected Tentatively Identified Compounds

Appendix D

Reviewed and Corrected Tentatively Identified Compounds

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

CZ405

Lab Name: ESE Contract: 68-W8-0008

Lab Code: ESE Case No.: 13230 SAS No.: SDG No.: CZ405

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

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 85360

Level: (low/med) LOW Date Received: 11/29/89

% Moisture: not dec. 100. Date Analyzed: 11/30/89

Column: (pack/cap) PACK Dilution Factor: 1.00

Number TICs found: 0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

CZ406

Lab Name: ESE Contract: 68-W8-0009

Lab Code: ESE Case No.: 13230 SAS No.: SDG No.: CZ405

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

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 85374

Level: (low/med) LOW Date Received: 11/30/89

% Moisture: not dec. 100. Date Analyzed: 12/ 4/89

Column: (pack/cap) PACK Dilution Factor: 1.00

Number TICs found: 0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

419 DFR
CZ~~405~~ 1/3/90

Lab Name: ESE Contract: 68-W8-0008

Lab Code: ESE Case No.: 13230 SAS No.: SDG No.: CZ405

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

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 85363

Level: (low/med) LOW Date Received: 11/30/89

% Moisture: not dec. 100. Date Analyzed: 11/30/89

Column: (pack/cap) PACK Dilution Factor: 1.00

Number TICs found: 0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

CZ419

Lab Name: ESE Contract: 68-W8-0008

Lab Code: ESE Case No.: 13230 SAS No.: SDG No.: CZ405

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

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: 22202

Level: (low/med) LOW Date Received: 11/29/89

% Moisture: not dec. 100. dec._____ Date Extracted: 12/ 4/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 12/27/89

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1.00

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

CZ420

Lab Name: ESE Contract: 68-W8-0008

Lab Code: ESE Case No.: 13230 SAS No.: SDG No.: CZ405

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

Sample wt/vol: 4.000 (g/mL) G Lab File ID: S5400

Level: (low/med) MED Date Received: 11/30/89

% Moisture: not dec. 60. Date Analyzed: 12/ 9/89

Column: (pack/cap) PACK Dilution Factor: ~~100.00~~ 2.00 DFR 1/25/

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPL

CZ420

Lab Name: ESE Contract: 68-W8-0008

Lab Code: ESE Case No.: 13230 SAS No.: SDG No.: CZ405

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

Sample wt/vol: 4.000 (g/mL) G Lab File ID: 85411

Level: (low/med) MED Date Received: 11/30/89

% Moisture: not dec. 50. Date Analyzed: 12/10/89

Column: (pack/cap) PACK Dilution Factor: 5.0 ~~250~~

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

CZ420

Lab Name: ESE Contract: 68-W8-0008

Lab Code: ESE Case No.: 13230 SAS No.: SDG No.: CZ405

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

Sample wt/vol: 1.000 (g/mL) G Lab File ID: 22225

Level: (low/med) MED Date Received: 11/30/89

% Moisture: not dec. 50. dec._____ Date Extracted: 12/ 8/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 12/28/89

GPC Cleanup: (Y/N) N pH: 6.2 Dilution Factor: 10.00

Number TICs found: 2 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	87-61-6	Benzene, 1,2,3-trichloro-	9.44	500000.	J
2.	634-66-2	Benzene, 1,2,3,4-tetrachloro	11.21	800000.	J
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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

CZ422

Lab Name: ESE Contract: 68-W8-0008

Lab Code: ESE Case No.: 13230 SAS No.: SDG No.: CZ405

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

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 85372

Level: (low/med) LOW Date Received: 11/30/89

% Moisture: not dec. 100. Date Analyzed: 12/ 4/89

Column: (pack/cap) PACK Dilution Factor: 5.00

Number TICs found: 1

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	106-46-7	Benzene, 1,4-dichloro-	33.58	200.	J
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

CZ422

Lab Name: ESE Contract: 68-W8-0008

Lab Code: ESE Case No.: 13230 SAS No.: SDG No.: CZ405

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

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: 22208

Level: (low/med) LOW Date Received: 11/30/89

% Moisture: not dec. 100. dec._____ Date Extracted: 12/ 4/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 12/27/89

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 2.00

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 87-61-6	Benzene, 1,2,3-trichloro-	9.39	10.	J
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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

CZ423

Lab Name: ESE Contract: 68-W8-0008

Lab Code: ESE Case No.: 13230 SAS No.: SDG No.: CZ405

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

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 85359

Level: (low/med) LOW Date Received: 11/29/89

% Moisture: not dec. 100. Date Analyzed: 11/30/89

Column: (pack/cap) PACK Dilution Factor: 1.00

Number TICs found: 0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

CZ423

b[illegible]me: ESE Contract: 68-W8-0008

.b Code: ESE Case No.: 13230 SAS No.: SDG No.: CZ405

.trix: (soil/water) WATER Lab Sample ID:

.mple wt/vol: 1000.0 (g/mL) ML Lab File ID: 22203

:vel: (low/med) LOW Date Received: 11/29/89

Moisture: not dec. 100. dec._____ Date Extracted: 12/ 4/89

:traction: (SepF/Cont/Sonc) SEPF Date Analyzed: 12/27/89

PC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1.00

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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3.				
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[illegible]				
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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

CZ424

Lab Name: ESE Contract: 68-W8-0008

Lab Code: ESE Case No.: 13230 SAS No.: SDG No.: CZ405

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

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 85367

Level: (low/med) LOW Date Received: 11/29/89

% Moisture: not dec. 100. Date Analyzed: 11/30/89

Column: (pack/cap) PACK Dilution Factor: 1.00

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

CZ424

Name: ESE Contract: 68-W8-0008

Code: ESE Case No.: 13230 SAS No.: SDG No.: CZ405

rix: (soil/water) WATER Lab Sample ID:

ple wt/vol: 1000.0 (g/mL) ML Lab File ID: 22206

el: (low/med) LOW Date Received: 11/29/89

oisture: not dec. 100. dec._____ Date Extracted: 12/ 4/89

raction: (SepF/Cont/Sonc) SEPF Date Analyzed: 12/27/89

Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1.00

nber TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

CZ425

Lab Name: ESE Contract: 68-W8-0008

Lab Code: ESE Case No.: 13230 SAS No.: SDG No.: CZ405

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

Sample wt/vol: 5.000 (g/mL) G Lab File ID: 85394

Level: (low/med) LOW Date Received: 11/29/89

% Moisture: not dec. 51. Date Analyzed: 12/ 8/89

Column: (pack/cap) PACK Dilution Factor: 1.00

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

CZ425

Lab Name: ESE Contract: 68-W8-0008

Lab Code: ESE Case No.: 13230 SAS No.: SDG No.: CZ405

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

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 22222

Level: (low/med) LOW Date Received: 11/29/89

% Moisture: not dec. 51. dec._____ Date Extracted: 12/ 6/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 12/28/89

GPC Cleanup: (Y/N) N pH: 6.5 Dilution Factor: 10.00

Number TICs found: 8

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	87-61-6	Benzene, 1,2,3-trichloro-	9.43	10000.	J
2.	634-66-2	Benzene, 1,2,3,4-tetrachloro	11.20	2000.	J
3.	95-94-3	Benzene, 1,2,4,5-tetrachloro	11.87	4000.	J
4.	10544-50-0	Sulfur, mol. (S8)	19.10	20000.	J
5.	- -	UNKNOWN	24.93	6000.	J
6.	- -	UNKNOWN HYDROCARBON	26.36	4000.	J
7.	- -	UNKNOWN HYDROCARBON	27.68	3000.	J
8.	- -	UNKNOWN	29.61	4000.	J
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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

CZ426

Lab Name: ESE Contract: 68-W8-0008

Lab Code: ESE Case No.: 13230 SAS No.: SDG No.: CZ405

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

Sample wt/vol: 5.000 (g/mL) G Lab File ID: 85389

Level: (low/med) LOW Date Received: 11/29/89

% Moisture: not dec. 55. Date Analyzed: 12/ 8/89

Column: (pack/cap) PACK Dilution Factor: 1.00

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

CZ426

Name: ESE Contract: 68-W8-0008

Lab Code: ESE Case No.: 13230 SAS No.: SDG No.: CZ405

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

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 22210

Level: (low/med) LOW Date Received: 11/29/89

% Moisture: not dec. 55. dec.____ Date Extracted: 12/ 6/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 12/27/89

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 2.00

Number TICs found: 18 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q	
1.	- -	~~UNKNOWN Methyl Ketone~~	~~3.29~~	~~700.~~	~~BJ~~	~~A~~
2.	- -	~~UNKNOWN Methyl Ketone~~	~~4.31~~	~~2000.~~	~~J~~	~~A~~
3.	- -	~~UNKNOWN Methyl Ketone~~	~~5.51~~	~~1000.~~	~~J~~	~~A~~
4.	- -	~~UNKNOWN Methyl Ketone~~	~~6.61~~	~~500.~~	~~J~~	~~A~~
5.	- -	UNKNOWN	13.21	300.	J	
6.	504-96-1	Neophytadiene	17.45	1000.	J	
7.	- -	UNKNOWN Neophytadiene isomer	17.70	300.	J	
8.	- -	UNKNOWN Neophytadiene isomer	17.88	600.	J	
9.	2091-29-4	9-Hexadecenoic acid	18.69	300.	J	
10.	10544-50-0	Sulfur, mol. (S8)	19.14	90000.	J	
11.	638-67-5	Tricosane	21.76	400.	J	
12.	- -	UNKNOWN	23.31	800.	J	
13.	- -	UNKNOWN HYDROCARBON	23.38	600.	J	
14.	- -	UNKNOWN HYDROCARBON	24.89	3000.	J	
15.	4500-01-0	9-Octadecenoic acid (Z)-, 2-	25.60	700.	J	
16.	- -	UNKNOWN HYDROCARBON	26.30	2000.	J	
17.	- -	UNKNOWN HYDROCARBON	27.61	1000.	J	
18.	- -	UNKNOWN	28.62	900.	J	
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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

CZ427

Lab Name: ESE Contract: 68-W8-0008

Lab Code: ESE Case No.: 13230 SAS No.: SDG No.: CZ405

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

Sample wt/vol: 5.000 (g/mL) G Lab File ID: 85330

Level: (low/med) LOW Date Received: 11/29/89

% Moisture: not dec. 64. Date Analyzed: 12/ 8/89

Column: (pack/cap) PACK Dilution Factor: 1.00

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

CZ427

Lab Name: ESE Contract: 68-W8-0008

Lab Code: ESE Case No.: 13230 SAS No.: SDG No.: CZ405

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

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 22221

Level: (low/med) LOW Date Received: 11/29/89

% Moisture: not dec. 64. dec._____ Date Extracted: 12/ 6/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 12/28/89

GPC Cleanup: (Y/N) N pH: 7.3 Dilution Factor: 2.00

Number TICs found: 18

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	- -	~~UNKNOWN Methyl Ketone~~	~~4.41~~	~~3000.~~	~~J A~~
2.	- -	~~UNKNOWN Methyl Ketone~~	~~6.76~~	~~700.~~	~~J A~~
3.	629-78-7	Heptadecane	16.16	800.	J
4.	504-96-1	Neophytadiene	17.65	2000.	J
5.	- -	UNKNOWN Neophytadiene isomer	17.90	1000.	J
6.	- -	UNKNOWN Neophytadiene isomer	18.08	1000.	J
7.	2091-29-4	9-Hexadecenoic acid	18.71	2000.	J
8.	57-10-3	Hexadecanoic acid	18.91	1000.	J
9.	10544-50-0	Sulfur, mol. (S8)	19.22	2000.	J
10.	638-67-5	Tricosane	21.96	1000.	J
11.	- -	UNKNOWN	23.51	2000.	J
12.	- -	UNKNOWN	25.06	2000.	J
13.	593-49-7	Heptacosane	25.09	2000.	J
14.	- -	UNKNOWN HYDROCARBON	26.50	5000.	J
15.	- -	UNKNOWN	27.83	4000.	J
16.	- -	UNKNOWN	29.14	2000.	J
17.	- -	UNKNOWN	29.30	2000.	J
18.	- -	UNKNOWN	29.73	3000.	J
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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

CZ428

Lab Name: ESE Contract: 68-W8-0008

Lab Code: ESE Case No.: 13230 SAS No.: SDG No.: CZ405

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

Sample wt/vol: 1.000 (g/mL) G Lab File ID: 85395

Level: (low/med) LOW Date Received: 11/29/89

% Moisture: not dec. 53. Date Analyzed: 12/ 8/89

Column: (pack/cap) PACK Dilution Factor: ~~5.00~~ 1.00 MJ 3/7

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

CZ428

Lab Name: ESE Contract: 68-W8-0008

Lab Code: ESE Case No.: 13230 SAS No.: SDG No.: CZ405

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

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 22223

Level: (low/med) LOW Date Received: 11/29/89

% Moisture: not dec. 53. dec._____ Date Extracted: 12/ 6/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 12/28/89

GPC Cleanup: (Y/N) N pH: 7.3 Dilution Factor: 20.00

Number TICs found: 3 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	87-61-6	Benzene, 1,2,3-trichloro-	9.45	30000.	J
2.	95-94-3	Benzene, 1,2,4,5-tetrachloro	11.88	10000.	J
3.	10544-50-0	Sulfur, mol. (S8)	19.10	10000.	J
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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

CZ432

Lab Name: ESE Contract: 68-W8-0008

Lab Code: ESE Case No.: 13230 SAS No.: SDG No.: CZ405

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

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 85368

Level: (low/med) LOW Date Received: 11/29/89

% Moisture: not dec. 100. Date Analyzed: 11/30/89

Column: (pack/cap) PACK Dilution Factor: 1.00

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

CZ432

Lab Name: ESE Contract: 68-W8-0008

Lab Code: ESE Case No.: 13230 SAS No.: SDG No.: CZ405

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

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: 22207

Level: (low/med) LOW Date Received: 11/29/89

% Moisture: not dec. 100. dec._____ Date Extracted: 12/ 4/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 12/27/89

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1.00

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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