

CHRISTINE O. GREGOIRE  
Director



90-e56

WA-28-1020 GW

STATE OF WASHINGTON  
DEPARTMENT OF ECOLOGY

7171 Cleanwater Lane, Building 8, LH-14 • Olympia, Washington 98504

October 22, 1990

TO: Mike Wilson

FROM: Pam Marti *Pm*

SUBJECT: Toftdahl Drum Site Routine Monitoring Round Two (April, 1990)

### SUMMARY

The Toxics Investigations/Ground Water Monitoring Section collected samples from domestic supply wells located in the area surrounding the former Toftdahl Drum Site on April 11, 1990. Sample analyses showed low concentrations of copper, zinc and mercury in domestic wells. Metals concentrations did not exceed draft EPA drinking water standards.

### OBJECTIVES

The Toxics Investigations/Ground Water Monitoring Section was requested by the Toxics Cleanup Program (TCP) to monitor ground water at the Toftdahl Drum Site on a bi-annual basis. Monitoring objectives are as follows:

1. Provide routine ground water monitoring data as required by the federally mandated Record of Decision (ROD);
2. Provide TCP with data to possibly explain past sporadic detection of polyaromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), volatile organic compounds (VOCs), and semi-volatile organic compounds (BNAs); and
3. Determine future sampling needs.

### SITE BACKGROUND

In the early 1970s, drums containing unknown quantities and types of waste were cleaned for resale on the Toftdahl property. The drums allegedly contained industrial wastes from a plywood manufacturing facility. It is estimated that between 100 and 200 drums were cleaned on site. Approximately 50 drums contained residual wastes and could not be sold.

Mike Wilson  
October 22, 1990  
Page Two

these drums were buried on site (see Figure 1). In 1985, the buried drums and wastes were removed. A Remedial Investigation conducted after drum removal concluded that no evidence of significant soil or ground water contamination existed. Low concentrations of PAHs, PCBs, VOCs, and BNAs were detected sporadically in nearby domestic water supply wells. The ROD prepared for the Toftdahl site requires ground water monitoring on a semi-annual basis for five years and annually for ten years. In 1989, the site was delisted from the National Priorities List.

## METHODS

### Ground Water Sampling

Figure 1 shows locations of domestic wells sampled and the direction of ground water flow. Prior to sample collection, domestic wells were purged by allowing taps to run until stable pH, temperature, and specific conductance values were obtained. Samples were then collected from the tap nearest the well. Wells were sampled from up-gradient to down-gradient. All wells were sampled for VOCs, BNAs, PCBs, pesticides, cyanide, and total priority pollutant metals. Metals samples were preserved with 1 mL of concentrated nitric acid to a pH  $\leq 2$ .

### Quality Assurance Samples

A duplicate sample and transport blank were submitted. Matrix spikes, matrix spike duplicates, and method blanks were analyzed for all parameters.

## SAMPLE ANALYTICAL RESULTS

Sample analytical results are presented in Appendix A. Data are stored in the ENVIS database. Table 1 is a summary of contaminants found during Sampling Round Two conducted on April 11, 1990. Copper, zinc, and mercury were present in both the up and down-gradient wells at concentrations well below EPA draft drinking water standards. Matrix spikes, matrix spike duplicates, and method blanks were within contract laboratory program limits. Duplicate samples from the Kyle domestic well (labeled Smith) showed similar analytical results. Table 2 is a summary of contaminants found throughout the three sample rounds that have been conducted to date.

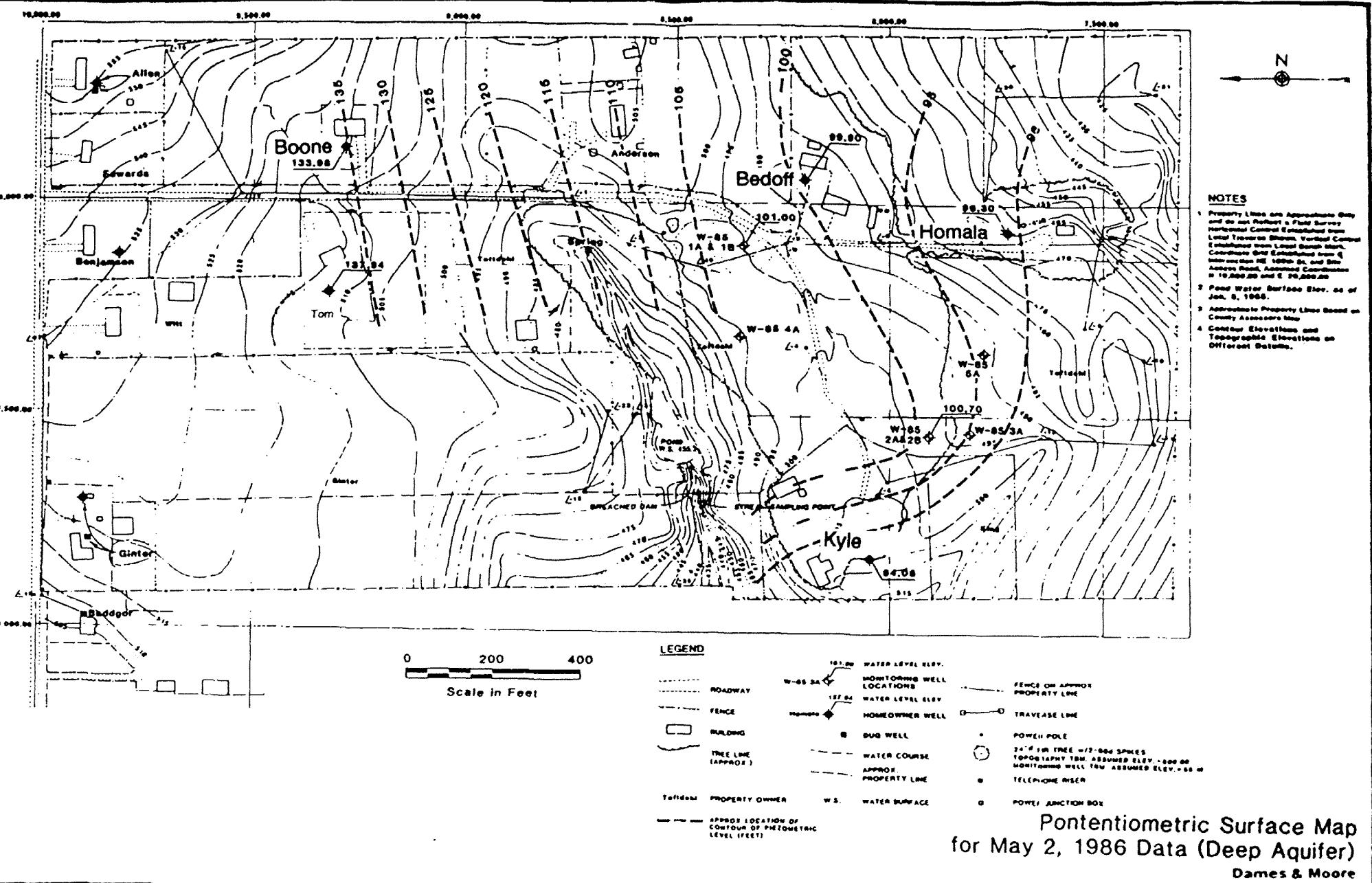


Figure 1: Site Map

Mike Wilson  
 October 22, 1990  
 Page Three

Table 1: Summary of Sampling Results from April 1990.

Location	pH	Temperature (degree C)	Specific Conduct. ( $\mu$ mhos/cm)	Copper* mg/L	Zinc* mg/L	Mercury ug/L
Boone	6.91	11.2	110	0.08	0.16	0.05 J
Bedoff	7.08	11.1	120	0.04	ND	0.08 J
Kyle Smith (duplicate)	6.99 ---	10.7 ---	88 ---	0.05 0.05	ND ND	0.04 J ND
Homala	6.73	10.2	92	ND	0.08	0.04 J
Transport				ND	ND	ND
Detection Limits				0.002	0.005	0.02
Draft Drinking Water Standards				1.0	5.0	2.0

ND: Not Detected at Limits Shown

J: Estimated Value

\* Copper and Zinc Draft Drinking Water Standards are considered Secondary Chemical Contaminants.

#### DISCUSSION AND CONCLUSIONS

Volatile and semi-volatile compounds, pesticides, and polychlorinated biphenyls analyses showed no detectable levels of contaminants in ground water samples (See Appendix A). Cyanide was detected in the sample from the Kyle well. This sample was analyzed several times, with the results ranging from below detection limit to 0.012J mg/L. To be conservative the value was reported as 0.012J mg/L. Cyanide was not detected in either the

Table 2: Summary of Sampling Results from September 1988 to April 1990

<u>Location</u>	September 12, 1988			October 17, 1989			April 11, 1990		
	Copper* (mg/L)	Zinc* (mg/L)	Mercury (ug/L)	Copper* (mg/L)	Zinc* (mg/L)	Mercury (ug/L)	Copper* (mg/L)	Zinc* (mg/L)	Mercury (ug/L)
Boone	0.08	0.39	ND	0.05	0.29	ND	0.08	0.16	0.05J
Bedoff	0.12	ND	ND	0.05	ND	ND	0.04	ND	0.08J
Kyle Smith (duplicate)	0.04	0.05	ND	0.03	0.02	0.10B	0.05	ND	0.04J
Homala	----	----	----	ND	0.02	0.16B	ND	0.08	0.04J
Tom East (duplicate)	0.03	0.03	0.1	0.01	0.01	0.01	----	----	----
----	----	----	----	ND	0.02	ND	----	----	----
Ginter	----	----	----	ND	ND	ND	----	----	----
Detection Limits	0.002	0.004	0.08	0.01	0.01	0.06	0.002	0.005	0.02
Draft Drinking Water Standards	1.0	5.0	2.0	1.0	5.0	2.0	1.0	5.0	2.0

ND: Not Detected at Limits Shown

J: Estimated Value

B: Concentration Detected Less than that Detected in the Transport Blank

\* Copper and Zinc Draft Drinking Water Standards are considered Secondary Chemical Contaminants.

Mike Wilson  
October 22, 1990  
Page Four

duplicate sample or any of the blanks. Cyanide has not appeared in any other sample throughout this investigation. The EPA Draft Drinking Water Standards is 0.005 ug/L for cyanide. Priority pollutant metals analyses showed detectable concentrations of copper, zinc and mercury. All analyses were well below EPA draft drinking water standards.

#### RECOMMENDATIONS

1. Sample the Kyle well for cyanide in Round III.
2. To determine if sampling should continue on an annual rather than semi-annual basis, an additional round of sampling should be conducted for priority pollutants and priority pollutant metals.
3. Down-gradient wells, Bedoff, Homala, and Kyle, and up-gradient well Boone should continue to be sampled for priority pollutants and priority pollutant metals annually.

PM:krc

cc: Bill Yake

## Appendix A

STATE OF WASHINGTON DEPARTMENT OF ECOLOGY  
MANCHESTER ENVIRONMENTAL LABORATORY  
P.O. Box 307, Manchester WA 98353

DATA REVIEW  
June 29, 1990

Project: Tofdahl Drumsite

Samples: 158040 158041 158042 158043 158044 158045

Laboratory: Laucks Testing Laboratory

By: Greg Perez *GP*  
Through: Stuart Magooch *SM*

CASE SUMMARY

Specific methods used and problems incurred during the analysis of these samples are detailed in the case narrative and will not be addressed here. Specific problems with QC will be noted and referenced to the case narrative. A notation by lab staff on the sample request form indicates the volatile samples were not preserved. This will not affect the quality of the data.

QUALIFIER DEFINITIONS

J - The reported number is an estimated value.

**VOA FRACTION****Matrix:** Water**Holding times**

Sample	Date Collect	Date Man Lab Recd	Date Cntr Lab Recd	Date Anlz	#Days from Collect
158040	4/11	4/12	4/12	4/16	5 of 7
158041	4/11	4/12	4/12	4/16	5 of 7
158042	4/11	4/12	4/12	4/16	5 of 7
158043	4/11	4/12	4/12	4/16	5 of 7
158044	4/11	4/12	4/12	4/16	5 of 7
158045	4/11	4/12	4/12	4/16	5 of 7

These samples have been analyzed within the recommended holding times. Recommended holding time for unpreserved samples is seven days.

**Surrogates:**

Surrogate recoveries for these samples, the matrix spikes and the method blank are within the QC recovery limits.

**Matrix Spike and Matrix Spike Duplicate (MS/MSD):**

Matrix spike and spike duplicate recoveries and precision data are acceptable and within limits.

**Sample Data:**

This data is acceptable for use.

**BNA FRACTION****Matrix:** Water**Holding times**

Sample	Date Collect	Date Man Recd	Date Cntr Recd	Date Extd	Date Anlz	#Days from Collect
158040	4/11	4/12	4/12	4/13	4/19	2 of 7
158041	4/11	4/12	4/12	4/13	4/19	2 of 7
158042	4/11	4/12	4/12	4/13	4/19	2 of 7
158043	4/11	4/12	4/12	4/13	4/19	2 of 7
158044	4/11	4/12	4/12	4/13	4/19	2 of 7
158045	4/11	4/12	4/12	4/13	4/19	2 of 7

These samples have been extracted and analyzed within the recommended holding times.

**Surrogates:**

Surrogate recoveries for these samples, the matrix spikes and the method blank are within the QC recovery limits.

**Matrix Spike and Matrix Spike Duplicate (MS/MSD):**

Matrix spike and spike duplicate recoveries and precision data are acceptable and within limits.

**Sample Data:**

This data is acceptable for use.

**PESTICIDE/PCB FRACTION****Holding times**

Sample	Date	Date	Cntr Lab Rec'd	Date Extd	Date Anlz	#Days from Collect
	Sample Collect	Man Lab Rec'd				
158040	4/11	4/12	4/12	4/13	4/24	2 of 7
158041	4/11	4/12	4/12	4/13	4/24	2 of 7
158042	4/11	4/12	4/12	4/13	4/24	2 of 7
158043	4/11	4/12	4/12	4/13	4/24	2 of 7
158044	4/11	4/12	4/12	4/13	4/24	2 of 7
158045	4/11	4/12	4/12	4/13	4/24	2 of 7

These samples have been extracted and analyzed within the recommended holding times.

**Surrogates:**

Surrogate recoveries for these samples and the method blank are within recovery limits.

**Matrix Spike and Matrix Spike Duplicate (MS/MSD):**

Matrix spike and spike duplicate recoveries and precision data are acceptable and within limits.

**Sample Data:**

This data is acceptable for use without the need for additional qualifiers.

LAUCKS TESTING LABORATORIES  
940 S. Harney  
Seattle, WA 98108

TO: Washington Department of Ecology

Project Name: Toftdahl

Laboratory No.: 9004186

Date of this report: May 08, 1990

**GENERAL REMARKS ON ORGANIC ANALYSES:**

The following samples were analyzed under the above lab number:

Client <u>Sample</u> <u>I.D.</u>	LTL <u>Sample</u> <u>Number</u>	Analysis <u>Request</u>
158040	9004186-1	VOA/ABN/PEST/PCB
158041	9004186-2	VOA/ABN/PEST/PCB
158042	9004186-3	VOA/ABN/PEST/PCB
158043	9004186-4	VOA/ABN/PEST/PCB
158044	9004186-5	VOA/ABN/PEST/PCB
158045	9004186-6	VOA/ABN/PEST/PCB

GC/MS Fractions:

Compounds may be called out as hits on the computerized printout. However, if they are not reported on the OADS (sample results) form, the mass spectral data have been manually searched and the compounds have been eliminated as hits based on this search.

ABN Fraction:

The data system which is used to perform the searches for ABN Tentatively Identified Compounds (TICs) is set with a threshold of 5% fit for TICs. In some cases less than three compounds in the NBS library pass this threshold setting. When this occurs there will not be spectra and fits for the associated unknown compound. This will be called out on the first page of the data system report and will be reflected in the spectra which are drawn; i.e., there will be less than three best-fit spectra. This generally has one of two meanings. First, that there are no compounds passing the fit

**LAUCKS TESTING LABORATORIES**  
**940 S. Harvey**  
**Seattle, WA 98108**

criteria; or, second, that one or more compounds pass the fit criteria. It is our opinion that the threshold setting for fit is set low enough that all reasonable and possible hits will be reported (up to a maximum of three).

Two optional ABN surrogates are used for recovery purposes, recoveries for one of which (2-Bromophenol) are listed under "Other" on Form II. The second optional surrogate is d10-Azobenzene. The recoveries for samples in this set are as listed:

Sample	% Recovery
SBLKII1	87
158040	78
158041	90
158042	85
158043	86
158044	76
158044MS	78
158044MSD	84
158045	76

Volatile Fraction:

All volatile analyses were performed using a DB-624 megabore capillary. The elution order and retention times differ from those stated for packed column analysis in the U.S.E.P.A.'s Statement of Work for organic CLP analyses. Listed below are the correct elution order and the internal standard with which each compound is associated.

Bromochloromethane (IS)	1,4-Difluorobenzene (IS)	d5-Chlorobenzene (IS)
Chloromethane	Benzene	4-Methyl-2-Pentanone
Vinyl Chloride	Trichloroethylene	Toluene
Bromomethane	1,2-Dichloropropane	d8-Toluene (SURR)
Chloroethane	Bromodichloromethane	Trans-1,3-Dichloropropene
1,1-Dichloroethylene	Cis-1,3-Dichloropropene	1,1,2-Trichloroethane
Acetone		Tetrachloroethylene
Carbon Disulfide		2-Hexanone
Methylene Chloride		Dibromochloromethane
Trans-1,2-Dichloroethylene		Chlorobenzene
1,1-Dichloroethane		Ethylbenzene
Vinyl Acetate		Styrene
Cis-1,2-Dichloroethylene		M,P-Xylene

LAUCKS TESTING LABORATORIES  
940 S. Harvey  
Seattle, WA 98108

2-Butanone	O-xylene
Chloroform	Bromoform
1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane
Carbon Tetrachloride	Bromofluorobenzene(SURR)
1,2-Dichloroethane	
d4-1,2-Dichloroethane(SURR)	

The analytes listed above were assigned to their respective internal standards on the basis of relative retention time (RRT). For all compounds except cis-1,3-dichloropropene, the RRTs fall between 0.8 and 1.2. Cis-1,2-dichloropropene was the only compound to fall outside of this range, and was assigned to the internal standard closest to its retention time.

Separation of cis- and trans- dichloroethylene isomers is achievable on a DB-624 megabore capillary column. These compounds have been found to coelute on the packed column specified in the U.S.E.P.A.'s Statement of Work. When these isomers are found in a sample, they will be reported as total-1,2-dichloroethylene.

A holding blank was analyzed in the same QC period with the samples from this set. The raw data were not submitted with the case. It will be held on file at Laucks should future review be necessary.

Pesticide/PCB Fraction:

The compound isodrin was added as a second, optional surrogate in the pesticide/PCB analyses. Recovery values are reported on the appropriate FORM II - PEST.

**SPECIFIC REMARKS ON ORGANIC ANALYSES:**

VOA Fraction:

No comments.

ABN Fraction:

No comments.

Pesticide/PCB Fraction:

No comments.

Sample Preparation:

**LAUCKS TESTING LABORATORIES**  
**940 S. Marney**  
**Seattle, WA 98108**

The following observations were made during extraction of the samples:

<u>Sample ID</u>	<u>Lab ID</u>	<u>Color</u>	<u>Odor</u>	<u>Notes</u>
158040	9004186-1	Clear	None	
158041	9004186-2	Clear	None	Sample contained a few very small floaters that looked like brown paper
158042	9004186-3	Clear	None	
158043	9004186-4	Clear	None	
158044	9004186-5	Clear	None	
158045	9004186-6	Clear	None	

2A  
WATER VOLATILE SURROGATE RECOVERY

Lab Name: Laucks Testing Labs Contract: \_\_\_\_\_

Lab Code: LAUCKS Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDO No.: 15804

	DOE SAMPLE NO.	S1 (TCL) #	S2 (BFB) #	S3 (DCE) #	OTHER	TOL   QUT
01	VBLKU1	106	103	95	-----	0
02	158040	103	100	96	-----	0
03	158041	105	101	96	-----	0
04	158042	106	101	97	-----	0
05	158043	107	100	96	-----	0
06	158044	105	102	97	-----	0
07	158045	108	103	95	-----	0
08	158041MS	100	94	93	-----	0
09	158041MSD	99	94	92	-----	0
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						

QC LIMITS

S1 (TOL) = Toluene-d8 (88-110)

S2 (BFB) = Bromofluorobenzene (86-115)

S3 (DCE) = 1,2-Dichloroethane-d4 (76-114)

# Column to be used to flag recovery values

\* Values outside of contract required QC limits

D Surrogates diluted out

CA  
WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Laucks Testing Labs Contract: \_\_\_\_\_

Lab Code: LAUCKS Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 15804

Matrix Spike - DOE Sample No.: 158041

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMITS REC.
1,1-Dichloroethene	50.000	0.000	39.400	79	- 61-145
Trichloroethene	50.000	0.000	52.700	105	- 71-120
Benzene	50.000	0.000	48.900	98	- 76-127
Toluene	50.000	0.000	52.300	106	- 76-125
Chlorobenzene	50.000	0.000	51.100	102	- 75-130

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD   REC.
1,1-Dichloroethene	50.000	40.500	81	3	- 14 61-145
Trichloroethene	50.000	54.000	108	2	- 14 71-120
Benzene	50.000	49.600	99	1	- 11 76-127
Toluene	50.000	53.600	107	2	- 13 76-125
Chlorobenzene	50.000	51.900	104	2	- 13 75-130

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

RPD:0 out of 5 outside limits  
 Spike Recovery:0 out of 10 outside limits

Comments: \_\_\_\_\_  
\_\_\_\_\_

4A  
VOLATILE METHOD-BLANK SUMMARY

Lab Name: Laucks Testing Labs Contract: \_\_\_\_\_  
 Lab Code: LAUCKS Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 15804  
 Lab File ID: 80418MVOWJ1 Lab Sample ID: 80418MVOWJ1  
 Date Analyzed: 04/18/90 Time Analyzed: 11:18  
 Matrix: (soil/water) WATER Level: (low/med) LOW  
 Instrument ID: 1020J

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

DOE	LAO	LAO	TIME
SAMPLE NO.	SAMPLE ID	FILE ID	ANALYZED
01 158040	04186-01A	04186V01	11:55
02 158041	04186-02A	04186V02	12:30
03 158042	04186-03A	04186V03	14:28
04 158043	04186-04A	04186V04	15:05
05 158044	04186-05A	04186V05	15:44
06 158045	04186-06A	04186V06	16:39
07 158041MS	04186-02AMS	04186V02MS	18:11
08 158041MSD	04186-02AMSD	04186V02MSD	19:38
09			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			

COMMENTS: \_\_\_\_\_

## VOLATILE ORGANIC ANALYSIS DATA SHEET

SOG SAMPLE NO.

158040

Lab Name: Laucks Testing Labs

Contract: Transport

Lab Code: LAUCKS

Case No. \_\_\_\_\_

SAS No. \_\_\_\_\_

SOG No.: 15804

Matrix: (solid/water)WATER

Lab Sample ID: 84135 C1A

Sample size/ml: 5.0 (ml/m<sup>3</sup>)ML

Lab Title ID: 84135VO

Level: (low/med) LOW

Date Received: 04/12/90

% Moisture: Not detected

Date Analyzed: 04/16/90

Column: (pack/cap) CAP

Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS. (ug/L or ug/Kg)UG/L	C
---------	----------	---	---

64-07-0	Chloromethane	1 U	
74-83-6	Bromomethane	1 U	
75-01-4	Vinyl Chloride	1 U	
75-00-0	Chloroethane	0 U	
75-09-2	Methylene Chloride	1 U	
67-64-1	Acetone	7 -----	
75-15-0	Carbon Disulfide	1 U	
75-35-4	1,1-Dichloroethene	1 U	
75-34-0	1,1-Dichloroethane	1 U	
540-59-0	1,2-Dichloroethene (total)	1 U	
57-66-3	Chloroform	1 U	
107-06-2	1,2-Dichloroethane	1 U	
78-93-3	2-Butanone	3 U	
71-55-5	1,1,1-Trichloroethane	1 U	
56-23-5	Carbon Tetrachloride	1 U	
108-05-4	Vinyl Acetate	1 U	
75-27-4	Bromodichloromethane	1 U	
78-87-5	1,2-Dichloropropane	1 U	
10061-01-5	cis-1,3-Dichloropropene	3 U	
79-01-6	Trichloroethene	1 U	
124-48-1	Dibromochloromethane	3 U	
79-00-5	1,1,2-Trichloroethane	1 U	
71-43-2	Benzene	1 U	
10061-02-6	Trans-1,3-Dichloropropene	3 U	
75-25-2	Bromoform	1 U	
108-10-1	4-Methyl-2-Pentanone	3 U	
591-78-6	2-Hexanone	3 U	
127-18-4	Tetrachloroethene	1 U	
79-34-5	1,1,2,2-Tetrachloroethane	3 U	
108-88-3	Toluene	1 U	
108-90-7	Chlorobenzene	3 U	
100-41-4	Ethylbenzene	1 U	
100-42-5	Styrene	1 U	
1330-20-7	Xylene (total)	1 U	

15  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

DOC SAMPLE NO.

158040

*Transport*

Lab Name. Laucks Testing Labs Contract: \_\_\_\_\_

Lab Code. LAUCKS Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SOD No.: 15804

Matrix: (soil/water)WATER Lab Sample ID: 04186 01A

Sample wt/vol. 5.0 (g/ml)ML Lab File ID. 04186V01

Level. (low/med) LOW Date Received. 04/12/90

% Moisture. not dec. Date Analyzed: 04/15/90

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

CONCENTRATION UNITS:

Number TICs found. 0 (ug/L or ug/Kg)UG/L

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

## VOLATILE ORGANICS ANALYSIS DATA SHEET

SOG SAMPLE NO.

Lab Name. Laucks Testing Labs

Contract: \_\_\_\_\_

158041

Boone

Lab Code. LAUCKS

Case No. \_\_\_\_\_

SAS No. \_\_\_\_\_

SOG No.: 15804

Matrix: (soil/water)WATER

Lab Sample ID: 04186-02A

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

Lab File ID. 04186V02

Level. (low/med) LOW

Date Received. 04/12/90

% Moisture. not dec. \_\_

Date Analyzed. 04/16/90

Column. (pack/cap) CAP

Dilution Factor: 1

## CONCENTRATION UNITS:

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

74-87-3	Chloromethane	1 U
74-83-9	Bromomethane	1 U
75-01-4	Vinyl Chloride	1 U
75-00-3	Chloroethane	3 U
75-09-2	Methylene Chloride	1 U
67-64-1	Acetone	5 U
75-15-0	Carbon Disulfide	1 U
75-35-4	1,1-Dichloroethene	1 U
75-34-3	1,1-Dichloroethane	1 U
540-59-0	1,2-Dichloroethene (total)	1 U
67-66-3	Chloroform	1 U
107-06-2	1,2-Dichloroethane	1 U
78-93-3	2-Butanone	3 U
71-55-8	1,1,1-Trichloroethane	1 U
56-23-5	Carbon Tetrachloride	1 U
108-05-4	Vinyl Acetate	1 U
75-27-4	Bromodichloromethane	1 U
78-87-5	1,2-Dichloropropane	1 U
10061-01-5	cis-1,3-Dichloropropene	3 U
79-01-6	Trichloroethene	1 U
124-48-1	Dibromochloromethane	3 U
79-00-5	1,1,2-Trichloroethane	1 U
71-43-2	Benzene	1 U
10061-02-6	Trans-1,3-Dichloropropene	3 U
75-25-2	Bromoform	1 U
108-10-1	4-Methyl-2-Pentanone	3 U
591-78-6	2-Hexanone	3 U
127-18-4	Tetrachloroethene	1 U
79-34-5	1,1,2,2-Tetrachloroethane	3 U
108-88-3	Toluene	1 U
108-90-7	Chlorobenzene	3 U
100-41-4	Ethylbenzene	1 U
100-42-5	Styrene	1 U
1330-20-7	Xylene (total)	1 U

18  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

DOE SAMPLE NO.

158041

Boone

Lab Name. Laucks Testing Labs Contract: \_\_\_\_\_

Lab Code. LAUCKS Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SOG No.: 15804

Matrix. (soil/water)WATER Lab Sample ID: 04106-02A

Sample wt/vol. 5.0 (g/ml)ML Lab File ID. 04106V02

Level. (low/med) LOW Date Received: 04/12/90

% Moisture. not dec. Date Analyzed: 04/16/90

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

Number TICs found. 0

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

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

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

DOE SAMPLE NO.

Lab Name. Laucks Testing Labs Contract: \_\_\_\_\_ | 158042 | Hanover |

Lab Code. LAUCKS Case No. \_\_\_\_\_ SAS No. \_\_\_\_\_ SDG No.: 15804

Matrix. (soil/water)WATER Lab Sample ID: 04186-03A

Sample wt/vol: 5.0 (g/ml)ML Lab File ID. 04186V00

Level. (low/med) LOW Date Received: 04/12/90

% Moisture. not dec. Date Analyzed: 04/16/90

Column. (pack/cap) CAP Dilution Factor: 1

CONCENTRATION UNITS:

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

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

15  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

DOE SAMPLE NO.

158042

Lab Name: Laucks Testing Labs Contract: \_\_\_\_\_ Homepa

Lab Code: LAUCKS Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 15804

Matrix: (soil/water)WATER Lab Sample ID: 04186-03A

Sample wt/vol: 5.0 (g/ml)ML Lab File ID: 04186V00

Level: (low/med) LOW Date Received: 04/12/90

% Moisture: not dec. Date Analyzed: 04/16/90

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

CONCENTRATION UNITS:

Number TICs found: 0

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

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

IA  
VOLATILE ORGANICS ANALYSIS DATA SHEET

DOE SAMPLE NO.

158043

~~BEDORE~~

Lab Name: Laucks Testing Labs Contract: \_\_\_\_\_  
 Lab Code: LAUCKS Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 15804  
 Matrix: (soil/water)WATER Lab Sample ID: 04186-04A  
 Sample wt/vol. 5.0 (g/ml)ML Lab File ID: 04186V04  
 Level. (low/med) LOW Date Received: 04/12/90  
 % Moisture. not dec. \_\_\_\_\_ Date Analyzed: 04/16/90  
 Column. (pack/cap) CAP Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS. (ug/L or ug/Kg)UG/L		Q
		1	U	
74-87-3	-Chloromethane			
74-83-9	-Bromomethane			
75-01-4	-Vinyl Chloride			
75-00-3	-Chloroethane	3	U	
75-09-2	-Methylene Chloride	1	U	
67-64-1	-Acetone	2	J	
75-15-0	-Carbon Disulfide	1	U	
75-35-4	-1,1-Dichloroethene	1	U	
75-34-3	-1,1-Dichloroethane	1	U	
540-59-0	-1,2-Dichloroethene (total)	1	U	
67-86-3	-Chloroform	1	U	
107-06-2	-1,2-Dichloroethane	1	U	
78-93-3	-2-Butanone	3	U	
71-55-6	-1,1,1-Trichloroethane	1	U	
56-23-5	-Carbon Tetrachloride	1	U	
108-05-4	-Vinyl Acetate	1	U	
75-27-4	-Bromodichloromethane	1	U	
78-87-5	-1,2-Dichloropropane	1	U	
10061-01-5	-cis-1,3-Dichloropropene	3	U	
79-01-6	-Trichloroethene	1	U	
124-48-1	-Dibromochloromethane	3	U	
79-00-5	-1,1,2-Trichloroethane	1	U	
71-43-2	-Benzene	1	U	
10061-02-6	-Trans-1,3-Dichloropropene	3	U	
75-25-2	-Bromoform	1	U	
108-10-1	-4-Methyl-2-Pentanone	3	U	
591-78-6	-2-Hexanone	3	U	
127-18-4	-Tetrachloroethene	1	U	
79-34-5	-1,1,2,2-Tetrachloroethane	3	U	
108-88-3	-Toluene	1	U	
108-90-7	-Chlorobenzene	3	U	
100-41-4	-Ethylbenzene	1	U	
100-42-5	-Styrene	1	U	
1330-20-7	-Xylene (total)	1	U	

1E  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

DOE SAMPLE NO.

Lab Name:	Laucks Testing Labs	Contract:	158043
Lab Code:	LAUCKS	Case No.:	SAS No.: 15804
Matrix: (soil/water)WATER		Lab Sample ID: 04186-04A	
Sample wt/vol.	5.0 (g/ml)ML	Lab File ID:	04186V04
Level:	(low/med) LOW	Date Received:	04/12/90
% Moisture:	not dec.	Date Analyzed:	04/18/90
Column:	(pack/cap) CAP	Dilution Factor:	1.0

Number TICs found: 0

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

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

IA  
VOLATILE ORGANICS ANALYSIS DATA SHEET

SDC SAMPLE NO.

150044

Lab Name. Laucks Testing Labs Contract: \_\_\_\_\_ | SMITH \_\_\_\_\_ |

Lab Code. LAUCKS Case No. \_\_\_\_\_ SAS No. \_\_\_\_\_ SDC No. 15004

Matrix: (soil)/water)WATER Lab Sample ID: 04106-05A

Sample wt/vol: 5.0 (g/ml)ML Lab File ID. 04106V05

Level. (low/med) LOW Date Received. 04/10/90

% Moisture. not dec. Date Analyzed. 04/16/90

Column. (pack/cap) CAP Dilution Factor. 1

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

VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: Laucks Testing Labs Contract: \_\_\_\_\_ DOE SAMPLE NO. \_\_\_\_\_  
 Lab Code: LAUCKS Case No.: \_\_\_\_\_ SAC No.: \_\_\_\_\_ SDC No.: 15804  
 Matrix: (soil/water)WATER Lab Sample ID: 04186-05A  
 Sample wt/vol: 5.0 (g/ml)ML Lab File ID: 04186V05  
 Level: (low/med) LOW Date Received: 04/12/90  
 % Moisture, not dec.: \_\_\_\_\_ Date Analyzed: 04/16/90  
 Column: (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 0

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

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

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

DOE SAMPLE NO.

158045

KYLE

Lab Name: Laucks Testing Labs

Contract: \_\_\_\_\_

Lab Code: LAUCKS

Case No.: \_\_\_\_\_

SAS No. \_\_\_\_\_

ODG No.: 15804

Matrix: (soil/water)WATER

Lab Sample ID: 04186-06A

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

Lab File ID: 04186V06

Level: (low/med) LOW

Date Received: 04/12/90

% Moisture: not dec. \_\_

Date Analyzed: 04/16/90

Column: (pack/cap) CAP

Dilution Factor: 1

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

74-87-3	Chloromethane	1 U
74-83-9	Bromomethane	1 U
75-01-4	Vinyl Chloride	1 U
75-00-3	Chloroethane	3 U
75-09-2	Methylene Chloride	1 U
57-84-1	Acetone	5 U
75-15-0	Carbon Disulfide	1 U
75-35-4	1,1-Dichloroethene	1 U
75-34-3	1,1-Dichloroethane	1 U
540-59-0	1,2-Dichloroethene (total)	1 U
67-66-3	Chloroform	1 U
107-06-2	1,2-Dichloroethane	1 U
78-93-3	2-Butanone	3 U
71-55-8	1,1,1-Trichloroethane	1 U
56-23-5	Carbon Tetrachloride	1 U
108-05-4	Vinyl Acetate	1 U
75-27-4	Bromodichloromethane	1 U
78-87-5	1,2-Dichloroproppane	1 U
10061-01-5	cis-1,3-Dichloropropene	3 U
79-01-6	Trichloroethene	1 U
124-48-1	Dibromochloromethane	3 U
79-00-5	1,1,2-Trichloroethane	1 U
71-43-2	Benzene	1 U
10061-02-6	Trans-1,3-Dichloropropene	3 U
75-25-2	Bromoform	1 U
108-10-1	4-Methyl-2-Pentanone	3 U
591-78-6	2-Hexanone	3 U
127-18-4	Tetrachloroethene	1 U
79-34-5	1,1,2,2-Tetrachloroethane	3 U
108-88-3	Toluene	1 U
108-90-7	Chlorobenzene	3 U
100-41-4	Ethylbenzene	1 U
100-42-5	Styrene	1 U
1330-20-7	Xylene (total)	1 U

1E  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

DOE SAMPLE NO.

Lab Name: Laucks Testing Labs Contract: \_\_\_\_\_

158045

KYLR

Lab Code: LAUCKS Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 15804

Matrix: (soil/water)WATER Lab Sample ID: 04186-C6A

Sample wt/vol: 5.0 (g/ml)ML Lab File ID: 04186V06

Level: (low/med) LOW Date Received: 04/12/90

% Moisture: not dec. Date Analyzed: 04/16/90

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

CONCENTRATION UNITS:

Number TICs found: 0

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

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

IA  
VOLATILE ORGANICS ANALYSIS DATA SHEET

DOC SAMPLE NO.

**VBLKJ1**

Lab Name: Laucks Testing Labs Contract: \_\_\_\_\_

Lab Code: LAUCKS Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 15804

Matrix: (soil/water)WATER Lab Sample ID: 80416MVOWJ1

Sample wt/vol: 5.0 (g/ml)ML Lab File ID: 80416MVOWJ1

Level: (low/med) LOW Date Received: 04/12/90

% Moisture: not dec. Date Analyzed: 04/16/90

Column: (back/cap) CAP Dilution Factor: 1

CONCENTRATION UNITS:

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

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

1E  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

DOE SAMPLE NO.

VBLKJ1

Lab Name:	Laucks Testing Labs	Contract:	-----
Lab Code:	LAUCKS	Case No.:	SAS No.: ----- SDG No.: 15004
Matrix:	(soil/water)WATER	Lab Sample ID:	B0416MVOWJ1
Sample wt/vol:	5.0 (g/ml)ML	Lab File ID:	B0416MVOWJ1
Level:	(low/med) LOW	Date Received:	04/12/90
% Moisture, not dec.:	__	Date Analyzed:	04/16/90
Column:	(pack/cap) CAP	Dilution Factor:	1.0

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

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

IA  
VOLATILE ORGANICS ANALYSIS DATA SHEET

COG SAMPLE NO.

158041MS

Lab Name: Laucks Testing Labs Contract: \_\_\_\_\_  
 Lab Code: LAUCKS Case No.: \_\_\_\_\_ COG No.: 15804  
 Matrix: (soil/water)WATER Lab Sample ID: 04186-02AMS  
 Sample wt/vol: 5.0 (g/ml)ML Lab File ID: 04186VO2MS  
 Level: (low/med) LOW Date Received: 04/12/90  
 % Moisture: not dec. Date Analyzed: 04/16/90  
 Column: (pack/cap) CAP Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS. (ug/L or ug/Kg)UG/L	Q
74-87-3	Chloromethane	1 U	
74-83-9	Bromomethane	1 U	
75-01-4	Vinyl Chloride	1 U	
75-00-3	Chloroethane	3 U	
75-09-2	Methylene Chloride	1 U	
.67-54-1	Acetone	5 U	
75-15-0	Carbon Disulfide	1 U	
75-35-4	1,1-Dichloroethene	1 U	
75-34-3	1,1-Dichloroethane	1 U	
540-59-0	1,2-Dichloroethene (total)	1 U	
67-66-3	Chloroform	1 U	
107-06-2	1,2-Dichloroethane	1 U	
78-93-3	2-Butanone	3 U	
71-55-6	1,1,1-Trichloroethane	1 U	
56-23-5	Carbon Tetrachloride	1 U	
108-05-4	Vinyl Acetate	1 U	
75-27-4	Bromodichloromethane	1 U	
78-87-5	1,2-Dichloropropane	1 U	
10061-01-5	cis-1,3-Dichloropropene	3 U	
79-01-6	Trichloroethene	1 U	
124-48-1	Dibromochloromethane	3 U	
79-00-5	1,1,2-Trichloroethane	1 U	
71-43-2	Benzene	1 U	
10061-02-6	Trans-1,3-Dichloropropene	3 U	
75-25-2	Bromoform	1 U	
108-10-1	4-Methyl-2-Pentanone	3 U	
591-78-6	2-Hexanone	3 U	
127-18-4	Tetrachloroethene	1 U	
79-34-5	1,1,2,2-Tetrachloroethane	3 U	
108-88-3	Toluene	1 U	
108-90-7	Chlorobenzene	3 U	
100-41-4	Ethylbenzene	1 U	
100-42-5	Styrene	1 U	
1330-20-7	Xylene (total)	1 U	

## VOLATILE ORGANICS ANALYSIS DATA SHEET

DOC SAMPLE NO.

158041MSD

Lab Name: Laucks Testing Labs

Contract. \_\_\_\_\_

Lab Code: LAUCKS

Case No. \_\_\_\_\_

SAC No. \_\_\_\_\_

SGG No.: 15804

Matrix: (soil/water)WATER

Lab Sample ID: 04186-02AMSD

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

Lab File ID: 04186V02MSD

Level: (low/med) LOW

Date Received: 04/12/90

% Moisture: not dec. \_\_

Date Analyzed: 04/16/90

Column: (pack/cap) CAP

Dilution Factor: 1

## CONCENTRATION UNITS:

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

74-87-3	Chloromethane	1 U
74-83-9	Bromomethane	1 U
75-01-4	Vinyl Chloride	1 U
75-00-3	Chloroethane	3 U
75-09-2	Methylene Chloride	1 U
67-64-1	Acetone	4 S
75-15-0	Carbon Disulfide	1 U
75-35-4	1,1-Dichloroethene	1 U
75-34-3	1,1-Dichloroethane	1 U
540-59-0	1,2-Dichloroethene (total)	1 U
57-66-3	Chloroform	1 U
107-06-2	1,2-Dichloroethane	1 U
78-93-3	2-Butanone	3 U
71-55-6	1,1,1-Trichloroethane	1 U
56-23-5	Carbon Tetrachloride	1 U
108-05-4	Vinyl Acetate	1 U
75-27-4	Bromodichloromethane	1 U
78-87-5	1,2-Dichloropropane	1 U
10061-01-5	cis-1,3-Dichloropropene	3 U
79-01-6	Trichloroethene	1 U
124-48-1	Dibromochloromethane	3 U
79-00-5	1,1,2-Trichloroethane	1 U
71-43-2	Benzene	1 U
10061-02-6	Trans-1,3-Dichloropropene	3 U
75-25-2	Bromoform	1 U
108-10-1	4-Methyl-2-Pentanone	3 U
591-78-6	2-Hexanone	3 U
127-18-4	Tetrachloroethene	1 U
79-34-5	1,1,2,2-Tetrachloroethane	3 U
108-88-3	Toluene	1 U
108-90-7	Chlorobenzene	3 U
100-41-4	Ethylbenzene	1 U
100-42-5	Styrene	1 U
1330-20-7	Xylene (total)	1 U

## WATER SEMIVOLATILE SURROGATE RECOVERY

Lab Name: Laucks Testing Labs Contract: \_\_\_\_\_

Lab Code: LAUCKS Case No.: 41B6 SAG No.: \_\_\_\_\_ SDS No.: \_\_\_\_\_

	S1	S2	S3	S4	S5	S6	OTHER	TOT	OUT
SAMPLE NO.	(NBZ) #	(FBP) #	(TPH) #	(PHL) #	(2FP) #	(TBP) #			
01 SBLKH1	166	166	181	138	151	177	163	10	
02 158041	173	170	188	138	155	182	170	10	
03 158042	164	169	184	137	149	185	166	10	
04 158043	165	171	179	133	144	176	160	0	
05 158044	164	163	179	138	150	174	166	10	
06 158044MS	168	164	194	143	153	176	165	10	
07 158044MSD	162	166	191	145	154	179	163	10	
08 158045	163	161	184	134	148	174	162	10	
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	(35-114)
S2 (FBP) = 2-Fluorobiphenyl	(43-116)
S3 (TPH) = Terphenyl-d14	(33-141)
S4 (PHL) = Phenol-d5	(10-94)
S5 (2FP) = 2-Fluorophenol	(21-100)
S6 (TBP) = 2,4,6-Tribromophenol	(10-123)

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

QC  
WATER SEMIVOLATILE SURROGATE RECOVERY

Lab Name: Laucks Testing Labs Contract: \_\_\_\_\_

Lab Code: LAUCKS Case No.: 4186 SAS No.: \_\_\_\_\_ SDG No.: \_\_\_\_\_

	S1	S2	S3	S4	S5	S6	OTHER	TOT
SAMPLE NO.	(NBZ)	(FBP)	(TPH)	(PHL)	(2FP)	(TBP)	(OUT)	
01	158040	166	167	192	134	145	179	164
02								
03								
04								
05								
06								
07								
08								
09								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								

QC LIMITS

S1 (NBZ) = Nitrobenzene-d5	(35-114)
S2 (FBP) = 2-Fluorobiphenyl	(43-116)
S3 (TPH) = Terphenyl-d14	(33-141)
S4 (PHL) = Phenol-d5	(10-94)
S5 (2FP) = 2-Fluorophenol	(21-100)
S6 (TBP) = 2,4,6-Tribromophenol	(10-123)

# Column to be used to flag recovery values

\* Values outside of contract required QC limits

D Surrogates diluted out

- 3C  
MATERIAL SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Laucks Testing Labs Contract: \_\_\_\_\_

Lab Code: LAUCKS Case No.: 4186 SAE No.: \_\_\_\_\_ SDG No.: \_\_\_\_\_

Matrix Spike - Sample No.: 158044

COMPOUND	SPIKE	SAMPLE	MS	MS	%	QC
	ADDED (ug/L)	CONCENTRATION (ug/L)	CONCENTRATION (ug/L)	REC #	RFD #	LIMITS
Phenol	1267	10	1108	141	-	112- 89
2-Chlorophenol	1267	10	1169	163	-	127-123
1,4-Dichlorobenzene	1133	10	1190	167	-	136- 97
N-Nitroso-di-n-prop. (1)	1133	10	1103	177	-	141-116
1,2,4-Trichlorobenzene	1133	10	1195	171	-	139- 98
4-Chloro-3-methylphenol	1267	10	1196	174	-	123- 77
Acenaphthene	1133	10	1189	167	-	146-118
4-Nitrophenol	1267	10	1120	145	-	110- 80
2,4-Dinitrotoluene	1133	10	1100	175	-	124- 96
Pentachlorophenol	1267	10	1167	163	-	119-103
Pyrene	1133	10	1104	178	-	126-127

COMPOUND	SPIKE	MSD	MSD	%	%	QC LIMITS
	ADDED (ug/L)	CONCENTRATION (ug/L)	REC #	RFD #	RPD #	REC.
Phenol	1267	1110	141	-11	-	112- 89
2-Chlorophenol	1267	1166	162	-12	-	127-123
1,4-Dichlorobenzene	1133	187	165	-13	-	136- 97
N-Nitroso-di-n-prop. (1)	1133	1111	183	-18	-	141-116
1,2,4-Trichlorobenzene	1133	190	167	-16	-	139- 98
4-Chloro-3-methylphenol	1267	1179	167	-19	-	123- 97
Acenaphthene	1133	194	171	-15	-	146-118
4-Nitrophenol	1267	1132	150	-10	-	110- 80
2,4-Dinitrotoluene	1133	1102	177	-13	-	124- 96
Pentachlorophenol	1267	1173	165	-13	-	119-103
Pyrene	1133	1106	180	-12	-	126-127

(1) N-Nitroso-di-n-propylamine

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

RPD:0 out of 11 outside limits

Spike Recovery:0 out of 22 outside limits

Comments: \_\_\_\_\_

4B  
SEMITVOLATILE METHOD BLANK SUMMARY

Lab Name: Laucks Testing Labs      Contracts: \_\_\_\_\_  
 Lab Code: LAUCKS      Case No.: 4186      SAG No.: \_\_\_\_\_ SDB No.: \_\_\_\_\_  
 Lab File ID: DHD190::D3      Lab Sample ID: B6415MPFWLZ  
 Date Extracted: 04/13/90      Extraction: (SepF/Cont/Cont) SEPF  
 Date Analyzed: 04/19/90      Time Analyzed: 14:31  
 Matrix: (soil/water) WATER      Level: (low/med) LOW  
 Instrument ID: 5970H

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

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01158041	104186-02A	DHD192::D3	104/19/90
02158042	104186-03A	DHD193::D3	104/19/90
03158043	104186-04A	DHD194::D3	104/19/90
04158044	104186-05A	DHD195::D3	104/19/90
05158044MS	104186-05AMS	DHD196::D3	104/19/90
06158044MSD	104186-05AMSD	DHD197::D3	104/19/90
07158045	104186-06A	DHD198::D3	104/19/90
08158040	104186-01A	DHD200::D3	104/20/90
09			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			

COMMENTS: \_\_\_\_\_  
 \_\_\_\_\_

## DECOMINATE ORGANICS ANALYSIS DATA SHEET

1158040

Lab Name: Laucks Testing Labs Contract: TRANSPORT

Lab Code: LAUCKS Case No.: 4186 SAS No.: SDG No.:

Matrix: (soil/water)WATER Lab Sample ID: 04186-01A

Sample wt/vol: 1000. (g/ml)ML Lab File ID: DHD2001.DT

Level: (low/med) LOW Date Received: 04/12/96

% Methylated: not det. dec. Date Extracted: 04/13/96

Extraction: (SepP/Cont/Sonic) SEPF Date Analyzed: 04/20/96

GPC Clean-up: (Y/N)N pH:9.0 Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	ug/L
108-93-2	Phenol	2IU	
111-44-1	bis (2-Chloroethyl)ether	2IU	
75-57-0	2-Chlorophenol	2IU	
541-73-1	1,3-Dichlorobenzene	2IU	
108-46-7	1,4-Dichlorobenzene	2IU	
100-51-6	Benzyl alcohol	2IU	
95-50-1	1,2-Dichlorobenzene	2IU	
95-48-7	2-Methylphenol	2IU	
108-60-1	bis (2-Chloroisopropyl)ether	2IU	
104-44-3	4-Methylphenol	2IU	
621-64-7	N-Nitroso-di-n-propylamine	2IU	
57-72-1	Hexachloroethane	4IU	
98-95-3	Nitrobenzene	2IU	
78-59-1	Isophorone	2IU	
88-75-5	2-Nitrophenol	4IU	
105-67-9	2,4-Dimethylphenol	2IU	
65-85-0	Benzoic acid	50IU	
111-91-1	bis (2-Chloroethoxy)methane	2IU	
120-83-2	2,4-Dichlorophenol	4IU	
120-82-1	1,2,4-Trichlorobenzene	2IU	
91-20-3	Naphthalene	4IU	
106-47-9	4-Chloroaniline	2IU	
87-68-3	Hexachlorobutadiene	2IU	
59-50-7	4-Chloro-3-methylphenol	4IU	
91-57-6	2-Methylnaphthalene	2IU	
77-47-4	Hexachlorocyclopentadiene	4IU	
88-06-2	2,4,6-Trichlorophenol	4IU	
95-95-4	2,4,5-Trichlorophenol	4IU	
91-58-7	2-Choronaphthalene	2IU	
88-74-4	2-Nitroaniline	4IU	
131-11-3	Dimethylphthalate	2IU	
208-96-8	Acenaphthylene	2IU	
606-20-2	2,6-Dinitrotoluene	4IU	

1C  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

Lab Name: Laucks Testing Labs

Contract #: \_\_\_\_\_

156940

TRANSPORT

Lab Code: LAUCKS Case No.: 4186

SAS No.: \_\_\_\_\_

SDG No.: \_\_\_\_\_

Matrix: (soil/water) WATER

Lab Sample ID: 04186-01A

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

Lab File ID: 10D209125

Level: (low/med) LOW

Date Received: 04/12/90

X Mass spect: not done dec. \_\_\_\_\_

Date Extracted: 04/13/90

Extraction: (Sep/F/Cont/Sono) SEP

Date Analyzed: 04/20/90

GPC Clean-up: (Y/N) N pH: 0.0

Dilution Factor: 1

## CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg)/UD/L	Q
129-07-0	3-Nitroaniline	10IU	1
82-32-9	Acenaphthene	2IU	1
51-26-5	2,4-Dinitrophenol	20IU	1
100-02-7	4-Nitrophenol	20IU	1
122-64-9	Dibenzofuran	2IU	1
121-14-2	2,4-Dinitrotoluene	4IU	1
84-66-2	Diethylphthalate	2IU	1
7005-72-3	4-Chlorophenyl-phenylether	2IU	1
86-73-7	Fluorene	2IU	1
100-01-6	4-Nitroaniline	4IU	1
534-52-1	4,6-Dinitro-2-methylphenol	20IU	1
86-30-6	N-Nitrosodiphenylamine	2IU	1
101-55-3	4-Bromophenyl-phenylether	4IU	1
112-74-1	Hexachlorobenzene	4IU	1
67-86-5	Pentachlorophenol	20IU	1
25-01-8	Phenanthrene	2IU	1
120-12-7	Anthracene	2IU	1
84-74-2	Di-n-butylphthalate	2IU	1
206-44-0	Fluoranthene	2IU	1
129-00-0	Fyrene	2IU	1
85-68-7	Butylbenzylphthalate	2IU	1
91-94-1	3,3'-Dichlorobenzidine	20IU	1
56-55-3	Benz(a)anthracene	2IU	1
218-01-9	Chrysene	2IU	1
117-81-7	bis(2-Ethylhexyl)phthalate	11J	1
117-84-0	Di-n-octylphthalate	2IU	1
205-99-2	Benzo(b)fluoranthene	4IU	1
207-08-9	Benzo(k)fluoranthene	4IU	1
50-32-8	Benzo(a)pyrene	4IU	1
193-39-5	Indeno(1,2,3-cd)pyrene	4IU	1
53-70-3	Dibenzo(a,h)anthracene	4IU	1
191-24-2	Benzo(g,h,i)perylene	4IU	1

(1) - Cannot be separated from diphenylamine

**SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS**

Lab Name: Laucks Testing Labs Contract: \_\_\_\_\_  
 Lab Code: LAUCKS Case No.: 4186 SAS No.: \_\_\_\_\_ SDG No.: \_\_\_\_\_  
 Matrix: (soil/water)WATER Lab Sample ID: 04186-01A  
 Sample wt/vol: 1000.(g/ml)ML Lab File ID: SHD200:1B3  
 Level: (low/med) LOW Date Received: 04/12/90  
 % Moisture: not dec. dec. \_\_\_\_\_ Date Extracted: 04/13/90  
 Extraction: (SepP/Cont/Sonic) SEP P Date Analyzed: 04/20/90  
 CPC Cleanup: (Y/N) N pH: 0.0 Dilution Factor: 1.0

## CONCENTRATION UNITS:

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

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

1E  
SEMI-VOLATILE ORGANICS ANALYTIC DATA SHEET

SAMPLE NO.

Lab Name: Laucks Testing Labs Contract: \_\_\_\_\_ 158041  
 Lab Code: LAUCKS Case No.: 4186 SAS No.: \_\_\_\_\_ SDG No.: \_\_\_\_\_ Boone  
 Matrix: (soil/water)WATER Lab Sample ID: 04186-02A  
 Sample wt/vol: 1000. (g/ml) ML Lab File ID: XHD192::D3  
 Level: (low/med) LOW Date Received: 04/12/90  
 % Moisture: not dec. dec. Date Extracted: 04/13/90  
 Extraction: (SepF/Cont/Sonic) SEPFF Date Analyzed: 04/19/90  
 GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1

## CONCENTRATION UNITS:

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

PC  
SEMIVOLATILE ORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

158041

Brooke

Lab Name: Laucks Testing Labs Contract: \_\_\_\_\_  
 Lab Code: LAUCKS Case No.: 4136 SAS No.: \_\_\_\_\_ SBD No.: \_\_\_\_\_  
 Matrix: (soil/water)WATER Lab Sample ID: 04186-02A  
 Sample wt/vol: 1000. (g/ml)ML Lab File ID: NHD192:::D3  
 Level: (low/med) LOW Date Received: 04/12/90  
 % Moisture: not determined Date Extracted: 04/13/90  
 Extraction: (SepF/Cent/Sona) SEP Date Analyzed: 04/19/90  
 GPC Cleanup: (Y/N)N pH: 0.0 Dilution Factor: 1

## CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg)UG/L	Q
99-09-2	3-Nitroaniline	10IU	I
85-52-5	Acenaphthene	2IU	I
51-28-5	2,4-Dinitrophenol	20IU	I
100-02-7	4-Nitrophenol	20IU	I
152-64-9	Dibenzofuran	2IU	I
121-14-2	2,4-Dinitrotoluene	4IU	I
84-66-2	Diethylphthalate	2IU	I
7005-72-3	4-Chlorophenyl-phenylether	2IU	I
86-73-7	Fluorene	2IU	I
100-01-6	4-Nitroaniline	4IU	I
534-52-1	4,6-Dinitro-2-methylphenol	20IU	I
86-30-6	N-Nitrosodiphenylamine	2IU	I
101-53-3	4-Bromophenyl-phenylether	4IU	I
118-74-1	Hexachlorobenzene	4IU	I
87-86-5	Pentachlorophenol	20IU	I
85-01-8	Phenanthrene	2IU	I
120-12-7	Anthracene	2IU	I
84-74-2	Di-n-butylphthalate	2IU	I
206-44-0	Fluoranthene	2IU	I
129-00-0	Pyrene	2IU	I
85-68-7	Butylbenzylphthalate	2IU	I
91-94-1	3,3'-Dichlorobenzidine	20IU	I
56-55-3	Benzo(a)anthracene	2IU	I
218-01-9	Chrysene	2IU	I
117-81-7	bis(2-Ethylhexyl)phthalate	1IJ	I
117-84-0	Di-n-octylphthalate	2IU	I
205-99-2	Benzo(b)fluoranthene	4IU	I
207-08-9	Benzo(k)fluoranthene	4IU	I
50-32-8	Benzo(a)pyrene	4IU	I
193-39-5	Indeno(1,2,3-cd)pyrene	4IU	I
53-70-3	Dibenzo(a,h)anthracene	4IU	I
191-24-2	Benzo(g,h,i)perylene	4IU	I

(1) - Cannot be separated from diphenylamine

**SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET**  
**TENTATIVELY IDENTIFIED COMPOUNDS**

Lab Name:	Laucks Testing Labs	Contract:	158041
Lab Code:	LAUCKS	Case No.:	Boone
Matrix:	(soil/water)WATER	Lab Sample ID: 04186-028	
Sample wt/vol:	1000. (g/ml) ML	Lab File ID: XHD1921:028	
Level:	(low/med) LOW	Date Received: 04/12/90	
% Moisture: not det. __	det. __	Date Extracted: 04/13/90	
Extraction: (Sep/F/Cont/Sonic)	SEPF	Date Analyzed: 04/19/90	
EPC Cleanup: (Y/N)	pH: 0.0	Dilution Factor: 1.0	

## CONCENTRATION UNITS:

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

Number TICs found: 0

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

1B  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE no.

Lab Name: Laucks Testing Labs Contract: 1158042 HOMPA

Lab Code: LAUCKS Case No.: 4186 SAG No.: SDG No.: \_\_\_\_\_

Matrix: (soil/water)WATER Lab Sample ID: 04186-02A

Sample wt/vol: 1000. (g/ml) ML Lab File ID: NHD195:123

Level: (low/med) LOW Date Received: 04/12/90

% Moisture: not dec. dec. \_\_\_\_\_ Date Extracted: 04/13/90

Extraction: (SepF/Cent/Sonic) SEP/F Date Analyzed: 04/17/90

GPC Cleanup: (Y/N) N pH: 9.0 Dilution Factor: 1

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

LC  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

15B042

Homopolymer

Lab Name: Laucks Testing Labs Contract: \_\_\_\_\_  
 Lab Code: LAUCKS Case No.: 4186 SAS No.: \_\_\_\_\_ SDG No.: \_\_\_\_\_  
 Matrix: (soil/water)WATER Lab Sample ID: 04186-03A  
 Sample wt/vol: 1000. (g/ml) ML Lab File ID: PWD193:01T  
 Level: (low/med) LOW Date Received: 04/12/90  
 % Moisture: not det. \_\_\_\_\_ Date Extracted: 04/12/90  
 Extractions: (Sep/F/Cent/Sonic) SEP Date Analyzed: 04/19/90  
 OPC Cleanup: (Y/N) N pH: 9.0 Dilution Factor: 1

## CONCENTRATION UNITS:

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

CAS NO.	COMPOUND		
99-09-2	2-Nitroaniline	10IU	
85-32-9	Acenaphthene	2IU	
51-28-5	2,4-Dinitrophenol	20IU	
100-02-7	4-Nitrophenol	20IU	
132-64-9	Dibenzofuran	2IU	
121-14-2	2,4-Dinitrotoluene	4IU	
84-66-2	Diethylphthalate	2IU	
7005-72-3	4-Chlorophenyl-phenylether	2IU	
86-73-7	Fluorene	2IU	
100-01-6	4-Nitroaniline	4IU	
534-52-1	4,6-Dinitro-2-methylphenol	20IU	
86-30-6	N-Nitrosodiphenylamine	2IU	
101-55-3	4-Bromophenyl-phenylether	4IU	
118-74-1	Hexachlorobenzene	4IU	
87-86-5	Pentachlorophenol	20IU	
85-01-8	Phenanthrene	2IU	
120-12-7	Anthracene	2IU	
84-74-2	Di-n-butylphthalate	2IU	
206-44-0	Fluoranthene	2IU	
129-00-0	Pyrene	2IU	
85-68-7	Butylbenzylphthalate	2IU	
91-94-1	3,3'-Dichlorobenzidine	20IU	
56-55-3	Benzo(a)anthracene	2IU	
218-01-9	Chrysene	2IU	
117-81-7	bis(2-Ethylhexyl)phthalate	11J	
117-84-0	Di-n-octylphthalate	2IU	
205-99-2	Benzo(b)fluoranthene	4IU	
207-08-9	Benzo(k)fluoranthene	4IU	
50-32-8	Benzo(a)pyrene	4IU	
193-39-5	Indeno(1,2,3-cd)pyrene	4IU	
53-70-3	Dibenzo(a,h)anthracene	4IU	
191-24-2	Benzo(g,h,i)perylene	4IU	

(1) - Cannot be separated from diphenylamine

**SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET**  
**TENTATIVELY IDENTIFIED COMPOUNDS**

Lab Name:	Laucks Testing Labs	Contract:	158042
Lab Code:	LAUCKS Case No.: 4186	SAS No.:	SDS No.:
Matrix:	(soil/water) WATER	Lab Sample ID: 04186-03A	
Sample wt/vol:	1000. (g/ml) ML	Lab File ID: 04186-03	
Level:	(low/med) LOW	Date Received: 04/12/90	
% Moisture: not dec.	dec.	Date Extracted: 04/13/90	
Extraction:	(Sep/F/Cont/Sconc) SEPF	Date Analyzed: 04/19/90	
GPC Cleanup:	(Y/N) N	pH: 0.0	Dilution Factor: 1.0

## CONCENTRATION UNITS:

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

Number TICs found: 0

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

## DEMONSTRABLE DRUG/WATER ANALYSIS DATA SHEET

Lab Name: Laucks Testing Labs Contract #: BBDOFF

Lab Code: LUCKS Case No.: 4186 SAB No.: \_\_\_\_\_ SDS No.: \_\_\_\_\_

Matrix: (soil/water)WATER Lab Sample ID: 04186-04A

Sample wt/vol: 1000.0g/ml/NL Lab File ID: SHD1741103

Level: (low/med) LOW Date Received: 04/12/90

% Moisture: not dec. dec. Date Extracted: 04/13/90

Extraction: (SepP/Cent/Sonic) SEP Date Analyzed: 04/19/90

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1

## CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	210	1
111-44-4	bis (2-Chloroethyl)ether	210	1
95-57-6	2-Chlorophenol	210	1
541-73-1	1,3-Dichlorobenzene	210	1
106-46-7	1,4-Dichlorobenzene	210	1
100-51-6	Benzyl alcohol	210	1
95-50-1	1,2-Dichlorobenzene	210	1
95-48-7	2-Methylphenol	210	1
108-60-1	bis (2-Chloroisopropyl)ether	210	1
106-44-5	4-Methylphenol	210	1
621-64-7	N-Nitroso-di-n-propylamine	210	1
67-72-1	Hexachloroethane	410	1
98-95-3	Nitrobenzene	210	1
78-59-1	Isophorone	210	1
88-75-5	2-Nitrophenol	410	1
105-67-9	2,4-Dimethylphenol	210	1
65-85-0	Benzoic acid	5010	1
111-91-1	bis (2-Chloroethoxy) methane	210	1
120-83-2	2,4-Dichlorophenol	410	1
120-82-1	1,2,4-Trichlorobenzene	210	1
91-20-3	Naphthalene	410	1
106-47-8	4-Chloroaniline	210	1
87-68-3	Hexachlorobutadiene	210	1
59-50-7	4-Chloro-3-methylphenol	410	1
91-57-6	2-Methylnaphthalene	210	1
77-47-4	Hexachlorocyclopentadiene	410	1
88-06-2	2,4,6-Trichlorophenol	410	1
95-95-4	2,4,5-Trichlorophenol	410	1
91-58-7	2-Chloronaphthalene	210	1
88-74-4	2-Nitroaniline	410	1
131-11-3	Dimethylphthalate	210	1
208-96-8	Acenaphthylene	210	1
606-20-2	2,6-Dinitrotoluene	410	1

10  
ENVIRONMENTAL CONTAMINANT ANALYSIS DATA SHEET

SAMPLE NO.

1138045

(Pesticide)

Lab Name: Laucks Testing Lab Contract: \_\_\_\_\_

Lab Code: LAUCKS Case No.: 6185 CAS No.: \_\_\_\_\_ SDG No.: \_\_\_\_\_

Matrix: (soil/water)WATER Lab Sample ID: 04185-648

Sample wt/vol: 1000.0g/ml/L Lab File ID: DHD19414ED

Level: (low/med) LOW Date Received: 04/12/90

% Moisture: not dec. dec. Date Extracted: 04/12/90

Extraction: (Sep/F/Conc/Sonic) SEP/F Date Analyzed: 04/19/90

EPC Cleanup: (Y/N) N pH: 0.0 Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
99-09-1	3-Nitroaniline	10IU	
63-32-9	Acenaphthene	2IU	
51-29-5	2,4-Dinitrophenol	20IU	
100-02-7	4-Nitrophenol	20IU	
132-64-9	Dibenzofuran	2IU	
121-14-2	2,4-Dinitrotoluene	4IU	
84-66-2	Diethylphthalate	2IU	
7005-72-3	4-Chlorophenyl-phenylether	2IU	
86-73-7	Fluorene	2IU	
100-01-6	4-Nitroaniline	4IU	
534-52-1	4,6-Dinitro-2-methylphenol	20IU	
86-30-6	N-Nitrosodiphenylamine	2IU	
101-55-3	4-Bromophenyl-phenylether	4IU	
116-74-1	Hexachlorobenzene	4IU	
87-86-5	Pentachlorophenol	20IU	
85-01-8	Phenanthrene	2IU	
120-12-7	Anthracene	2IU	
84-74-2	Di-n-butylphthalate	2IU	
206-44-0	Fluoranthene	2IU	
129-00-0	Pyrene	2IU	
85-68-7	Butylbenzylphthalate	2IU	
91-94-1	3,3'-Dichlorobenzidine	20IU	
56-55-3	Benzo(a)anthracene	2IU	
218-01-9	Chrysene	2IU	
117-81-7	bis(2-Ethylhexyl)phthalate	2IU	
117-84-0	Di-n-octylphthalate	2IU	
205-99-2	Benzo(b)fluoranthene	4IU	
207-08-9	Benzo(k)fluoranthene	4IU	
50-32-8	Benzo(a)pyrene	4IU	
193-39-5	Indeno(1,2,3-cd)pyrene	4IU	
53-70-3	Dibenzo(a,h)anthracene	4IU	
191-24-2	Benzo(g,h,i)perylene	4IU	

(1) - Cannot be separated from diphenylamine

17  
SEMI-EVOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

ANALYST: J. A.

Lab Name: LAUCKS TESTING LABS Contract #: \_\_\_\_\_  
 Lab Code: LAUCKS Case No.: 4186 SAB No.: \_\_\_\_\_ SDG No.: \_\_\_\_\_  
 Matrix: (soil/water)WATER Lab Sample ID: 04186-04A  
 Sample wt/vol: 1000.0 g/ml/wt Lab File ID: DRD174.00  
 Level: (low/med) LOW Date Received: 04/12/70  
 % Moisture not declared: 0.00% Date Extracted: 04/13/70  
 Extraction: (SopP/Cont/Bond) SopP Date Analyzed: 04/19/70  
 GPC Cleanup: (Y/N) N Dilution Factor: 1.0

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

Number TIC's found: 0

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

## SEPARATE SOURCE ANALYSIS DATA SHEET

Lab Name: Lucks Testing Labs

Contract #: \_\_\_\_\_

115804-

L SMITH

Lab Order: LUCKS Case No.: 1196

SAC No.: \_\_\_\_\_

SDG No.: \_\_\_\_\_

Matrix: Soil/Water

Lab Sample ID: 04136-PGA

Sample Volume: 1000.0 ml / ml

Lab File ID: MD1931.00

Level: (Low/Med) LOW

Date Received: 04/12/90

% Moisture: not done. % dec. %

Date Extracted: 04/12/90

Extraction: (SopF/Cont/Sorb) SopF

Date Analyzed: 04/18/90

HPLC Cleanup: CY/NR pH: 0.0

Dilution Factor: 1

## CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) ug/L	Q
102-75-2	Phenol	210	1
111-41-1	bis (2-Chloroethyl)ether	210	1
75-57-8	2-Chlorophenol	210	1
541-73-1	1,3-Dichlorobenzene	210	1
106-46-7	1,4-Dichlorobenzene	210	1
100-51-6	Benzyl alcohol	210	1
95-50-1	1,2-Dichlorobenzene	210	1
95-48-7	2-Methylphenol	210	1
108-60-1	bis (2-Chloroisopropyl)ether	210	1
106-44-5	4-Methylphenol	210	1
621-64-7	N-Nitroso-di-n-propylamine	210	1
67-72-1	Hexachloroethane	410	1
98-95-3	Nitrobenzene	210	1
78-59-1	Isophorone	210	1
88-75-5	2-Nitrophenol	410	1
105-67-9	2,4-Dimethylphenol	210	1
65-85-0	Benzoic acid	50/10	1
111-91-1	bis (2-Chloroethoxy)methane	210	1
120-83-2	2,4-Dichlorophenol	410	1
120-82-1	1,2,4-Trichlorobenzene	210	1
91-20-3	Naphthalene	410	1
106-47-8	4-Chloroaniline	210	1
87-68-3	Hexachlorobutadiene	210	1
59-50-7	4-Chloro-3-methylphenol	410	1
91-57-6	2-Methylnaphthalene	210	1
77-47-4	Hexachlorocyclopentadiene	410	1
88-06-2	2,4,6-Trichlorophenol	410	1
95-95-4	2,4,5-Trichlorophenol	410	1
91-58-7	2-Chloronaphthalene	210	1
88-74-4	2-Nitroaniline	410	1
131-11-3	Dimethylphthalate	210	1
208-96-8	Acenaphthylene	210	1
606-20-2	2,6-Dinitrotoluene	410	1

1C  
CONFIDENTIAL GC/MS ANALYSIS DATA SHEET

SAMPLE NO.

1158044

SMITH

Lab Name: Lauchs Testing Labs Contract #: \_\_\_\_\_

Lab Code: LAUCHS Case No.: 4166 SAG No.: \_\_\_\_\_ SDG No.: \_\_\_\_\_

Matrix: (solid/water)WATER Lab Sample ID: 04186-056

Sample wt. (g) 1000. (g/ml) ML Lab File ID: JHD1951.BD

Level: (low/med) LOW Date Received: 04/12/90

% Moisture: not dec. dec. Date Extracted: 04/13/90

Extraction: (SepF/Cent/Sonic) SEPF Date Analyzed: 04/17/90

GC Cleanup: (Y/N) N pH: 0.0 Dilution Factor: 1

## CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg)UG/L	Q
59-19-2	3-Nitroaniline	10IU	
85-52-9	Acenaphthene	2IU	
31-23-5	2,4-Dinitrophenol	20IU	
100-02-7	4-Nitrophenol	20IU	
132-64-2	Dibenzofuran	2IU	
121-14-2	2,4-Dinitrotoluene	4IU	
84-66-2	Diethylphthalate	2IU	
7005-72-3	4-Chlorophenyl-phenylether	2IU	
36-73-7	Fluorene	2IU	
100-01-6	4-Nitroaniline	4IU	
534-52-1	4,6-Dinitro-2-methylphenol	20IU	
86-30-6	N-Nitrosodiphenylamine	2IU	
101-58-5	4-Bromophenyl-phenylether	4IU	
118-74-1	Hexachlorobenzene	4IU	
87-86-5	Pentachlorophenol	20IU	
85-01-8	Phenanthrene	2IU	
120-12-7	Anthracene	2IU	
84-74-2	Di-n-butylphthalate	2IU	
206-44-0	Fluoranthene	2IU	
129-00-0	Pyrene	2IU	
85-68-7	Butylbenzylphthalate	2IU	
91-94-1	3,3'-Dichlorobenzidine	20IU	
56-55-3	Benzo(a)anthracene	2IU	
218-01-9	Chrysene	2IU	
117-81-7	bis(2-Ethylhexyl)phthalate	2IU	
117-84-0	Di-n-octylphthalate	2IU	
205-99-2	Benzo(b)fluoranthene	4IU	
207-08-9	Benzo(k)fluoranthene	4IU	
50-32-8	Benzo(a)pyrene	4IU	
193-39-5	Indeno(1,2,3-cd)pyrene	4IU	
53-70-3	Dibenzo(a,h)anthracene	4IU	
191-24-2	Benzo(g,h,i)perylene	4IU	

(1) - Cannot be separated from diphenylamine

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

EPA-600-R-93-002

Lab Name: Laucks Testing Labs Contract #: \_\_\_\_\_ Lab Sample ID: 04186-00A  
Lab Code: LAUCKS Case No.: 4186 SDS No.: \_\_\_\_\_  
1158044  
SMITH

Matrix: (soil/water)WATER Lab Sample ID: 04186-00A

Sample wt/vol: 1000. (g/ml)ML Lab File ID: JHC1754.DAT

Level: (low/med) LCW Date Received: 04/12/96

% Polychem not detected dec. Date Extracted: 04/15/96

Extraction: (SepP/Cont/Genc) SEP P Date Analyzed: 04/17/96

CPC Clean-up: (Y/N)N pH: 0.0 Dilution Factor: 1.0

CONCENTRATION UNITS:

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

Number TICs Found: 0

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

1B  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

Lab Name: Laucks Testing Labs

Contract: \_\_\_\_\_

158045

KALE

Lab Code: LAUCKS Case No.: 41B6

SAS No.: \_\_\_\_\_

SDG No.: \_\_\_\_\_

Matrix: (soil/water)WATER

Lab Sample ID: 041B6-06A

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

Lab File ID: DHD198::D3

Level: (low/med) LOW

Date Received: 04/12/90

% Moisture: not dec. dec. \_\_

Date Extracted: 04/13/90

Extraction: (SepF/Cont/Sonic) SEP

Date Analyzed: 04/19/90

GPC Cleanup: (Y/N) N pH: 0.0

Dilution Factor: 1

## CONCENTRATION UNITS:

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

## SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

1458045

Lab Name: Laucks Testing Labs Contract #: KYLE

Lab Code: LAUCKS Case No.: 4186 SAS No.: SDB No.: \_\_\_\_\_

Matrix: (soil/water)WATER Lab Sample ID: 04186-06A

Sample wt/vol: 1000. (g/ml)ML Lab File ID: DHD198:1.D3

Level: (low/med) LOW Date Received: 04/12/90

% Moisture: not dec. dec. Date Extracted: 04/13/90

Extraction: (Sep/F/Cont/Sonic) SERF Date Analyzed: 04/19/90

GPC Cleanup: (Y/N) N pH: 0.0 Dilution Factor: 1

## CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) ug/L	Q
99-09-2	3-Nitroaniline	10IU	1
82-32-9	Acenaphthene	2IU	1
51-28-5	2,4-Dinitrophenol	20IU	1
100-02-7	4-Nitrophenol	20IU	1
132-64-9	Dibenzofuran	2IU	1
121-14-2	2,4-Dinitrotoluene	4IU	1
84-66-2	Diethylphthalate	2IU	1
7005-72-3	4-Chlorophenyl-phenylether	2IU	1
86-73-7	Fluorene	2IU	1
100-01-6	4-Nitroaniline	4IU	1
534-52-1	4,6-Dinitro-2-methylphenol	20IU	1
36-30-6	N-Nitrosodiphenylamine	2IU	1
101-55-3	4-Bromophenyl-phenylether	4IU	1
118-74-1	Hexachlorobenzene	4IU	1
87-86-5	Pentachlorophenol	20IU	1
85-01-8	Phenanthrene	2IU	1
120-12-7	Anthracene	2IU	1
84-74-2	Di-n-butylphthalate	2IU	1
206-44-0	Fluoranthene	2IU	1
129-00-0	Pyrene	2IU	1
85-68-7	Butylbenzylphthalate	2IU	1
91-94-1	3,3'-Dichlorobenzidine	20IU	1
56-55-3	Benzo(a)anthracene	2IU	1
218-01-9	Chrysene	2IU	1
117-81-7	bis(2-Ethylhexyl)phthalate	2IU	1
117-84-0	Di-n-octylphthalate	2IU	1
205-99-2	Benzo(b)fluoranthene	4IU	1
207-08-9	Benzo(k)fluoranthene	4IU	1
50-32-8	Benzo(a)pyrene	4IU	1
193-39-5	Indeno(1,2,3-cd)pyrene	4IU	1
53-70-3	Dibenzo(a,h)anthracene	4IU	1
191-24-2	Benzo(g,h,i)perylene	4IU	1

(1) - Cannot be separated from diphenylamine

1F

SAMPLE NO.

SEMICVOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: Laucks Testing Labs Contract: \_\_\_\_\_ | \_\_\_\_\_ | \_\_\_\_\_ | \_\_\_\_\_ |

Lab Code: LAUCKS Case No.: 4186 SAS No.: \_\_\_\_\_ SDG No.: \_\_\_\_\_

Matrix: (soil/water)WATER Lab Sample ID: 04186-06A

Sample wt/vol: 1000. (g/ml) ML Lab File ID: DHD198::DB

Level: (low/med) LOW Date Received: 04/12/90

% Moisture: not dec. dec. \_\_\_\_\_ Date Extracted: 04/13/90

Extraction: (Sep/F/Cent/Sonic) SEPF Date Analyzed: 04/19/90

GPC Cleanup: (Y/N) N pH: 0.0 Dilution Factor: 1.0

## CONCENTRATION UNITS:

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

Number TICs found: 0

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

1B  
DOMINICAN REPUBLIC  
ENVIRONMENTAL MONITORING DATA SHEET

SAMPLE #

Lab Name: Laucks Testing Labs Contract #: 16BLRHM  
 Lab Code: LAUCKS Case No.: 4186 SAS No.: SGS No.:  
 Matrix: (soil/water)WATER Lab Sample ID: BD4186P001  
 Sample wt/vol: 1000. (g/ml)ML Lab File ID: BD4186P001  
 Level: (low/med) LOW Date Received: 04/12/90  
 % Moisture: not dec. dec. Date Extracted: 04/10/90  
 Extraction: (Sep/F/Cont/Sono) SF Date Analyzed: 04/19/90  
 GPC Cleanup: (Y/N)N pH: 0.0 Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	ug/L
108-95-2	Phenol	210	
111-44-4	bis (2-Chloroethyl)ether	210	
75-57-8	2-Chlorophenol	210	
541-73-1	1,3-Dichlorobenzene	210	
106-46-7	1,4-Dichlorobenzene	210	
100-51-8	Benzyl alcohol	210	
95-50-1	1,2-Dichlorobenzene	210	
95-48-7	2-Methylphenol	210	
108-60-1	bis (2-Chloroisopropyl)ether	210	
106-44-5	4-Methylphenol	210	
621-64-7	N-Nitroso-di-n-propylamine	210	
67-72-1	Hexachloroethane	210	
98-95-3	Nitrobenzene	210	
78-59-1	Isophorone	210	
88-75-5	2-Nitrophenol	410	
105-67-9	2,4-Dimethylphenol	210	
65-85-0	Benzoic acid	5010	
111-91-1	bis (2-Chloroethoxy)methane	210	
120-83-2	2,4-Dichlorophenol	410	
120-82-1	1,2,4-Trichlorobenzene	210	
91-20-3	Naphthalene	410	
106-47-8	4-Chloroaniline	210	
87-68-3	Hexachlorobutadiene	210	
59-50-7	4-Chloro-3-methylphenol	410	
91-57-6	2-Methylnaphthalene	210	
77-47-4	Hexachlorocyclopentadiene	410	
88-06-2	2,4,6-Trichlorophenol	410	
95-95-4	2,4,5-Trichlorophenol	410	
91-58-7	2-Chloronaphthalene	210	
88-74-4	2-Nitroaniline	410	
131-11-3	Dimethylphthalate	210	
208-96-8	Acenaphthylene	210	
606-20-2	2,6-Dinitrotoluene	410	

1C  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

SBLKH1

Lab Name: Laucks Testing Labs Contract: \_\_\_\_\_  
Lab Code: LAUCKS Case No.: 4186 SAS No.: \_\_\_\_\_ SDG No.: \_\_\_\_\_  
Matrix: (soil/water)WATER Lab Sample ID: 8041 IMPURIE  
Sample wt./vol: 1000. (g/ml)ML Lab File ID: M-D170: 00  
Level: (low/med) LOW Date Received: 04/12/70  
% Metabolism: not dec. dec. Date Extracted: 04/17/70  
Extraction: (Sep/F/Cent/Sonic) SFPP Date Analyzed: 04/19/70  
HPLC Cleanup: (Y/N)N pH: 0.0 Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	ug/L
39-09-2	3-Nitroaniline		10IU
35-32-9	Acenaphthene		2IU
51-28-5	2, 4-Dinitrophenol		20IU
100-02-7	4-Nitrophenol		20IU
132-64-9	Dibenzofuran		2IU
121-14-2	2, 4-Dinitrotoluene		4IU
84-66-2	Diethylphthalate		2IU
7005-72-3	4-Chlorophenyl-phenylether		2IU
86-73-7	Fluorene		2IU
100-01-6	4-Nitroaniline		4IU
534-52-1	4, 6-Dinitro-2-methylphenol		20IU
96-30-6	N-Nitrosodiphenylamine		2IU
101-55-3	4-Bromophenyl-phenylether		4IU
118-74-1	Hexachlorobenzene		4IU
87-86-5	Pentachlorophenol		20IU
85-01-8	Phenanthrene		2IU
120-12-7	Anthracene		2IU
84-74-2	Di-n-butylphthalate		2IU
206-44-0	Fluoranthene		2IU
129-00-0	Pyrene		2IU
35-68-7	Butylbenzylphthalate		2IU
91-94-1	3, 3'-Dichlorobenzidine		20IU
56-55-3	Benzo(a)anthracene		2IU
218-01-9	Chrysene		2IU
117-81-7	bis(2-Ethylhexyl)phthalate		2IU
117-84-0	Di-n-octylphthalate		2IU
205-99-2	Benzo(b)fluoranthene		4IU
207-08-9	Benzo(k)fluoranthene		4IU
50-32-8	Benzo(a)pyrene		4IU
193-39-5	Indeno(1,2,3-cd)pyrene		4IU
53-70-3	Dibenzo(a,h)anthracene		4IU
191-24-2	Benzo(g,h,i)perylene		4IU

(1) - Cannot be separated from diphenylamine

IP  
SEMIVOLATILE ORGANICS ANALYSED ON A TENTATIVE  
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.

SBLKH1

Lab Name: Laucks Testing Labs Contract #: \_\_\_\_\_

Lab Codes: LAUCKS Case No.: #186 SAG No.: \_\_\_\_\_ SOD No.: \_\_\_\_\_

Matrix: (soil/water) WATER Lab Sample ID: S0413MPWLE

Sample wt/vol.: 1000. (g/ml) ML Lab File ID: AF190425

Level: (low/med) LOW Date Received: 04/12/96

Manufacturer not dec. dev. Date Extracted: 04/13/96

Extractions (Sep/F/Cont/Sonic) SEPF Date Analyzed: 04/19/96

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.0

CONCENTRATION UNITS:

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

Number TICs found: 0

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

1B  
SEMI-VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

15804-MS

Lab Name: Laucks Testing Labs Contract No. \_\_\_\_\_

Lab Code: LAUCKS Case No.: 4186 SAG No. \_\_\_\_\_ SDG No. \_\_\_\_\_

Matrix: (soil/water)WATER Lab Sample ID: 04186-05AMS

Sample wt/vol: 750.0 (g/ml) ML Lab File ID: 15804-MS

Level: (low/med) LOW Date Received: 04/12/90

% Moisture: not det. Job No. \_\_\_\_\_ Date Extracted: 04/13/90

Extraction: (Sep/F/Cont/Sonic) SEP Date Analyzed: 04/19/90

GPC Cleanup: (Y/N) N pH: 0.0 Dilution Factor: 1

## CONCENTRATION UNITS:

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

## SEMI-VOLATILE ORGANICS ANALYSIS DATA SHEET

158044MS

Lab Name: Laucks Testing Labs Contract: \_\_\_\_\_  
 Lab Code: LAUCKS Case No.: 4186 SAG No.: \_\_\_\_\_ SDG No.: \_\_\_\_\_  
 Matrix: (soil/water)WATER Lab Sample ID: 04186-05AMS  
 Sample wt/vol: 750.0(g/ml)ML Lab File ID: DHE156403  
 Level: (low/med) LOW Date Received: 04/12/90  
 % Moisture: not dec. dec. Date Extracted: 04/13/90  
 Extractions: (Sep/F/Cont/Sonic) SEPF Date Analyzed: 04/17/90  
 CPC Cleanup: (Y/N) N pH: 9.0 Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)UG/L	Q
59-67-2	3-Nitroaniline	1510	
35-32-9	Acenaphthene	310	
21-25-5	2,4-Dinitrophenol	2710	
100-02-7	4-Nitrophenol	2710	
132-64-9	Dibenzofuran	310	
121-14-2	2,4-Dinitrotoluene	510	
34-66-2	Diethylphthalate	310	
7005-72-3	4-Chlorophenyl-phenylether	310	
86-73-7	Fluorene	310	
100-01-6	4-Nitroaniline	510	
534-52-1	4,6-Dinitro-2-methylphenol	2710	
86-30-6	N-Nitrosodiphenylamine	310	
101-55-3	4-Bromophenyl-phenylether	510	
118-74-1	Hexachlorobenzene	510	
87-86-5	Pentachlorophenol	2710	
85-01-8	Phenanthrene	310	
120-12-7	Anthracene	310	
84-74-2	Di-n-butylphthalate	310	
206-44-0	Fluoranthene	310	
129-00-0	Pyrene	310	
85-68-7	Butylbenzylphthalate	310	
91-94-1	3,3'-Dichlorobenzidine	2710	
56-55-3	Benzo(a)anthracene	310	
218-01-9	Chrysene	310	
117-81-7	bis(2-Ethylhexyl)phthalate	210	
117-84-0	Di-n-octylphthalate	310	
205-99-2	Benzo(b)fluoranthene	510	
207-08-9	Benzo(k)fluoranthene	510	
50-32-8	Benzo(a)pyrene	510	
193-39-5	Indeno(1,2,3-cd)pyrene	510	
53-70-3	Dibenzo(a,h)anthracene	510	
191-24-2	Benzo(g,h,i)perylene	510	

(1) - Cannot be separated from diphenylamine

## DETERMINATE ORGANICS ANALYTICAL DATA SHEET

158044MSD

Lab Name: Laucks Testing Labs Contract #: \_\_\_\_\_  
 Lab Code: LAUCKS Case No.: 4186 SAG No.: \_\_\_\_\_ SDS No.: \_\_\_\_\_  
 Matrix: (soil/water) WATER Lab Sample ID: 04186-08AMSD  
 Sample wt/vol: 750.0 (g/ml) ML Lab File ID: DRD1971:00  
 Level: (low/med) LOW Date Received: 04/12/90  
 % Moisture: Not done Date Extracted: 04/13/90  
 Extraction: (SopF/Cont/Sens) SEPF Date Analyzed: 04/19/90  
 SPC Cleanup: (Y/N) N pH: 0.0 Dilution Factor: 1

## CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	310	1
111-44-4	bis (2-Chloroethyl) ether	310	1
75-57-9	2-Chlorophenol	310	1
541-70-1	1,3-Dichlorobenzene	310	1
106-46-7	1,4-Dichlorobenzene	310	1
100-51-6	Benzyl alcohol	310	1
95-50-1	1,2-Dichlorobenzene	310	1
95-42-7	2-Methylphenol	310	1
108-60-1	bis (2-Chloroisopropyl) ether	310	1
106-44-5	4-Methylphenol	310	1
621-64-7	N-Nitroso-di-n-propylamine	310	1
67-72-1	Hexachloroethane	510	1
98-95-3	Nitrobenzene	310	1
78-59-1	Isophorone	310	1
38-75-5	2-Nitrophenol	310	1
105-67-9	2,4-Dimethylphenol	310	1
65-85-0	Benzoic acid	6710	1
111-91-1	bis (2-Chloroethoxy)methane	310	1
120-83-2	2,4-Dichlorophenol	510	1
120-82-1	1,2,4-Trichlorobenzene	310	1
91-20-3	Naphthalene	510	1
106-47-8	4-Chloroaniline	310	1
87-68-3	Hexachlorobutadiene	310	1
59-50-7	4-Chloro-3-methylphenol	510	1
91-57-6	2-Methylnaphthalene	310	1
77-47-4	Hexachlorocyclopentadiene	510	1
88-06-2	2,4,6-Trichlorophenol	510	1
95-95-4	2,4,5-Trichlorophenol	510	1
91-58-7	2-Chloronaphthalene	310	1
88-74-4	2-Nitroaniline	310	1
131-11-3	Dimethylphthalate	310	1
208-96-8	Acenaphthylene	310	1
606-20-2	2,6-Dinitrotoluene	510	1

## SEMIVOLATILE ORGANIC ANALYSIS DATA SHEET

156044MSD

Lab Name: Laucks Testing Lab Contract: \_\_\_\_\_

Lab Code: LAUCKS Case No.: 4186 SGS No.: \_\_\_\_\_ SGS No.: \_\_\_\_\_

Matrix: (soil/water)WATER Lab Sample ID: 04186-05AMSD

Sample wt/vol: 750.0 (g/ml)ML Lab File ID: SHD197::DS

Levels: (low/med) LOW Date Received: 04/12/90

K Measured: not dec. dec. Date Extracted: 04/13/90

Extraction: (SepF/Cont/Sono) SEPFF Date Analyzed: 04/19/90

SFC Cleanup: (Y/N) N pH: 0.0 Dilution Factor: 1

SAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	UG/L
99-09-2	3-Nitroaniline	3IU	
33-32-9	Acenaphthene	3IU	
S1-28-S	2,4-Dinitrophenol	27IU	
100-02-7	4-Nitrophenol	27IU	
132-64-9	Dibenzofuran	3IU	
121-14-2	2,4-Dinitrotoluene	3IU	
84-66-2	Diethylphthalate	3IU	
7005-72-3	4-Chlorophenyl-phenylether	3IU	
86-73-7	Fluorene	3IU	
100-01-6	4-Nitroaniline	3IU	
534-52-1	4,6-Dinitro-2-methylphenol	27IU	
96-30-6	N-Nitrosodiphenylamine	3IU	
101-53-3	4-Bromophenyl-phenylether	3IU	
118-74-1	Hexachlorobenzene	3IU	
87-86-5	Pentachlorophenol	27IU	
85-01-8	Phenanthrene	3IU	
120-12-7	Anthracene	3IU	
24-74-2	Di-n-butylphthalate	3IU	
206-44-0	Fluoranthene	3IU	
129-00-0	Fyrene	3IU	
85-68-7	Butylbenzylphthalate	3IU	
91-94-1	3,3'-Dichlorobenzidine	27IU	
56-55-3	Benzo(a)anthracene	3IU	
218-01-9	Chrysene	3IU	
117-81-7	bis(2-Ethylhexyl)phthalate	3IU	
117-84-0	Di-n-octylphthalate	3IU	
205-99-2	Benzo(b)fluoranthene	3IU	
207-08-9	Benzo(k)fluoranthene	3IU	
50-32-8	Benzo(a)pyrene	3IU	
193-39-5	Indeno(1,2,3-cd)pyrene	3IU	
53-70-3	Dibenzo(a,h)anthracene	3IU	
191-24-2	Benzo(g,h,i)perylene	3IU	

(1) - Cannot be separated from diphenylamine

2E  
WATER PESTICIDE SURROGATE RECOVERY

Lab Name: Laucks Testing Labs Contract: N/A

Lab Code: LAUCKS Lab No.: 4186 SAS No.: N/A SDG No.: N/A

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
EPA-L76	S1	OTHER																											
1	SAMPLE NO.	(DBC) #	*																										
01	PBLKD2	181	175																										
02	4186-1A	185	182																										
03	4186-2A	186	186																										
04	4186-3A	184	184																										
05	4186-6A	188	186																										
06	4186-6AMS	185	187																										
07	4186-6AMSD	183	181																										
08	4186-4A	193	191																										
09	4186-5A	189	184																										
10																													
11																													
12																													
13																													
14																													
15																													
16																													
17																													
18																													
19																													
20																													
21																													
22																													
23																													
24																													
25																													
26																													
27																													
28																													
29																													
30																													

ADVISORY  
QC LIMITS  
(24-154)

S1 (DBC) = Dibutylchlorendate

# Column to be used to flag recovery values

\* Values outside of contract required QC limits

D Surrogates diluted out

@ Isodrin (Secondary Surrogate)

## WATER PESTICIDE MATRIX SPIKE, MATRIX SPIKE DUPLICATE RECOVERY

Name: LAUCKS TESTING LABS Contract: N/A  
 Lab Code: LAUCKS Lab No.: 4186 SAS No.: N/A SDG No.: N/A

Matrix Spike - ~~EPA~~ Sample No.: 4186-6A

LTC

SM

COMPOUND	SPIKE	SAMPLE	MS	MS	QC
	ADDED (ug/L)	CONCENTRATION (ug/L)	CONCENTRATION (ug/L)	% REC #	LIMITS REC.
gamma-BHC (Lindane)	10.200	10.000	10.153	77	156-123
Heptachlor	10.200	10.000	10.147	74	140-131
Aldrin	10.200	10.000	10.164	82	140-120
Dieldrin	10.500	10.000	10.529	106	152-126
Endrin	10.500	10.000	10.474	95	156-121
4,4' DDT	10.500	10.000	10.489	98	138-127

COMPOUND	SPIKE	MSD	MSD	%	%	QC	LIMITS
	ADDED (ug/L)	CONCENTRATION (ug/L)	REC #	RFD #	RFD	REC.	
gamma-BHC (Lindane)	10.200	10.152	76	1	15	156-123	
Heptachlor	10.200	10.142	71	3	20	140-131	
Aldrin	10.200	10.158	79	4	22	140-120	
Dieldrin	10.500	10.524	105	1	18	152-126	
Endrin	10.500	10.460	92	3	21	156-121	
4,4' DDT	10.500	10.563	113	14	27	138-127	

\* Column to be used to flag recovery and RFD values with an asterisk

\* Values outside of QC limits

RFD: 0 out of 6 outside limits

Spike Recovery: 0 out of 12 outside limits

Comments: \_\_\_\_\_

4C  
PESTICIDE METHOD BLANK SUMMARY

Lab Name: LAUCKS TESTING LABS

Contract: N/A

Lab Code: LAUCKS

Lab No.: 4186

SAS No.: N/A

SDG No.: N/A

Lab Sample ID: B0413GPXWLW

Lab File ID:

Matrix: (soil/water) WATER

Level: (low/med) LOW

Date Extracted: 04/13/90

Extraction: (SopF/Cont/Sond) SopF

Date Analyzed (1): 04/23/90

Date Analyzed (2): 04/23/90

Time Analyzed (1): 20:25

Time Analyzed (2): 20:25

Instrument ID (1): A

Instrument ID (2): A

GC Column ID (1): DB1701

GC Column ID (2): DB-17

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

EPA LTL		LAB	DATE ANALYZED 1	DATE ANALYZED 2
	SAMPLE NO.	SAMPLE ID		
01	4186-1A	4186-1A	104/24/90	104/24/90
02	4186-2A	4186-2A	104/24/90	104/24/90
03	4186-3A	4186-3A	104/24/90	104/24/90
04	4186-6A	4186-6A	104/24/90	104/24/90
05	4186-6AMS	4186-6AMS	104/24/90	104/24/90
06	4186-6AMSD	4186-6AMSD	104/24/90	104/24/90
07	4186-4A	4186-4A	104/24/90	104/24/90
08	4186-5A	4186-5A	104/24/90	104/24/90
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				

COMMENTS: \_\_\_\_\_

1D  
PESTICIDE ORGANICS ANALYSIS DATA SHEET

X, 676 EPA SAMPLE NO.

Lab Name: Laucks Testing Labs Contract: N/A

4186-1A

Transport

Lab Code: LAUCKS Lab No.: 4186 SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) WATER Lab Sample ID: 4186-1A

Sample wt/vol: 100.0 (g/mL) ML Lab File ID: F042320F.PRN

Level: (low/med) LOW Date Received: 04/12/90

% Moisture: not dec. Date Extracted: 04/13/90

Extraction: (sepF/Cont/Sonic) SEPFF Date Analyzed: 04/24/90

GPC Cleanup: (Y/N) N pH: 6.6 Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-94-6	alpha-BHC	0.0501U	
319-85-7	beta-BHC	0.0501U	
319-86-8	delta-BHC	0.0501U	
58-89-9	gamma-BHC (Lindane)	0.0501U	
76-44-8	Heptachlor	0.0501U	
309-00-2	Aldrin	0.0501U	
1024-57-3	Heptachlor epoxide	0.0501U	
959-98-8	Endosulfan I	0.0501U	
60-57-1	Dieldrin	0.101U	
72-55-9	4,4'-DDE	0.101U	
72-20-8	Endrin	0.101U	
33213-65-9	Endosulfan II	0.101U	
72-54-8	4,4'-DDD	0.101U	
1031-07-8	Endosulfan sulfate	0.101U	
50-29-3	4,4'-DDT	0.101U	
72-43-5	Methoxychlor	0.501U	
53494-70-5	Endrin ketone	0.101U	
5103-71-9	alpha-Chlordane	0.501U	
5103-74-2	gamma-Chlordane	0.501U	
8001-35-2	Toxaphene	1.01U	
12674-11-2	Aroclor-1016	0.501U	
11104-28-2	Aroclor-1221	0.501U	
11141-16-5	Aroclor-1232	0.501U	
53469-21-9	Aroclor-1242	0.501U	
12672-29-6	Aroclor-1248	0.501U	
11097-69-1	Aroclor-1254	1.01U	
11096-82-5	Aroclor-1260	1.01U	

1B  
PESTICIDE ORGANICS ANALYSIS DATA SHEET47L  
EPA SAMPLE NO.

Lab Name: Laucks Testing Labs Contract:N/A

Lab Code: LAUCKS Lab No.:4186 SAS No.:N/A SDG No.:N/A

Matrix: (soil/water)WATER Lab Sample ID: 4186-2A

Sample wt/vol: 100.0 (g/mL)ML Lab File ID: F042327F.PRN

Level: (low/med) LOW Date Received: 04/12/90

Moisture: not dec. Date Extracted: 04/13/90

Extraction: (sepF/Cont/Sonic) SEPFF Date Analyzed: 04/24/90

HPLC Cleanup: (Y/N)N pH:7.6 Dilution Factor: 1

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

1D  
PESTICIDE ORGANICS ANALYSIS DATA SHEETLTL <sup>xx</sup>  
EPA SAMPLE NO.

Lab Name: Laucks Testing Labs Contract:N/A

4186-3A

Hanover

Lab Code: LAUCKS Lab No.:4186 SAS No.:N/A SDG No.:N/A

Matrix: (soil/water)WATER Lab Sample ID: 4186-3A

Sample wt/vol: 100.0 (g/mL)ML Lab File ID: F042328F.FRN

Level: (low/med) LOW Date Received: 04/12/90

% Moisture: not dec. Date Extracted: 04/13/90

Extraction: (sepF/Cont/Sonic) SEPF Date Analyzed: 04/24/90

GPC Cleanup: (Y/N)N pH:7.5 Dilution Factor: 1

## CONCENTRATION UNITS:

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

319-84-6-----alpha-BHC	0.050IU
319-85-7-----beta-BHC	0.050IU
319-86-8-----delta-BHC	0.050IU
58-89-9-----gamma-BHC (Lindane)	0.050IU
76-44-8-----Heptachlor	0.050IU
309-00-2-----Aldrin	0.050IU
1024-57-3-----Heptachlor epoxide	0.050IU
959-98-8-----Endosulfan I	0.050IU
60-57-1-----Dieldrin	0.10IU
72-55-9-----4,4'-DDE	0.10IU
72-20-8-----Endrin	0.10IU
33213-65-9-----Endosulfan II	0.10IU
72-54-8-----4,4'-DDD	0.10IU
1031-07-8-----Endosulfan sulfate	0.10IU
50-29-3-----4,4'-DDT	0.10IU
72-43-5-----Methoxychlor	0.50IU
53494-70-5-----Endrin ketone	0.10IU
5103-71-9-----alpha-Chlordane	0.50IU
5103-74-2-----gamma-Chlordane	0.50IU
8001-35-2-----Toxaphene	1.0IU
12674-11-2-----Aroclor-1016	0.50IU
11104-28-2-----Aroclor-1221	0.50IU
11141-16-5-----Aroclor-1232	0.50IU
53469-21-9-----Aroclor-1242	0.50IU
12672-29-6-----Aroclor-1248	0.50IU
11097-69-1-----Aroclor-1254	1.0IU
11096-82-5-----Aroclor-1260	1.0IU

1D  
FESTICIDE ORGANICS ANALYSIS DATA SHEET47  
EPA SAMPLE NO.

Lab Name: Laucks Testing Labs Contract: N/A

14186-4A

BEDOFF

Lab Code: LAUCKS Lab No.: 4186 SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) WATER Lab Sample ID: 4186-4A

Sample wt/vol: 100.0 (g/mL) ML Lab File ID: F042334F.FRN

Level: (low/med) LOW Date Received: 04/12/90

% Moisture: not dec. Date Extracted: 04/13/90

Extraction: (sepF/Cont/Sonic) SEPF Date Analyzed: 04/24/90

GPC Cleanup: (Y/N) N pH: 7.7 Dilution Factor: 1

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

319-84-6-----alpha-BHC	0.050IU		
319-85-7-----beta-BHC	0.050IU		
319-86-8-----delta-BHC	0.050IU		
58-89-9-----gamma-BHC (Lindane)	0.050IU		
76-44-8-----Heptachlor	0.050IU		
309-00-2-----Aldrin	0.050IU		
1024-57-3-----Heptachlor epoxide	0.050IU		
959-98-8-----Endosulfan I	0.050IU		
60-57-1-----Dieldrin	0.10IU		
72-55-9-----4,4'-DDE	0.10IU		
72-20-8-----Endrin	0.10IU		
33213-65-9-----Endosulfan II	0.10IU		
72-54-8-----4,4'-DDD	0.10IU		
1031-07-8-----Endosulfan sulfate	0.10IU		
50-29-3-----4,4'-DDT	0.10IU		
72-43-5-----Methoxychlor	0.50IU		
53494-70-5-----Endrin ketone	0.10IU		
5103-71-9-----alpha-Chlordane	0.50IU		
5103-74-2-----gamma-Chlordane	0.50IU		
8001-35-2-----Toxaphene	1.0IU		
12674-11-2-----Aroclor-1016	0.50IU		
11104-28-2-----Aroclor-1221	0.50IU		
11141-16-5-----Aroclor-1232	0.50IU		
53469-21-9-----Aroclor-1242	0.50IU		
12672-29-6-----Aroclor-1248	0.50IU		
11097-69-1-----Aroclor-1254	1.0IU		
11096-82-5-----Aroclor-1260	1.0IU		

## PESTICIDE ORGANICS ANALYSIS DATA SHEET

Lab Name: Laucks Testing Labs Contract:N/A : SMITH

Lab Code: LAUCKS Lab No.: 4186 SAS No.: N/A SDG No.: N/A

Matrix: (soil/water)WATER Lab Sample ID: 4186-5A

Sample wt/vol: 100.0 (g/mL)ML Lab File ID: F042335F.PRN

Level: (low/med) LOW Date Received: 04/12/90

% Moisture: not dec. Date Extracted: 04/13/90

Extraction: (sepF/Cont/Sonic) SERF Date Analyzed: 04/24/90

GPC Cleanup: (Y/N)N pH: 7.5 Dilution Factor: 1

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

319-84-6-----alpha-BHC		0.0501U	
319-65-7-----beta-BHC		0.0501U	
319-86-8-----delta-BHC		0.0501U	
58-89-9-----gamma-BHC (Lindane)		0.0501U	
76-44-8-----Heptachlor		0.0501U	
309-00-2-----Aldrin		0.0501U	
1024-57-3-----Heptachlor epoxide		0.0501U	
959-98-8-----Endosulfan I		0.0501U	
60-57-1-----Dieldrin		0.101U	
72-55-9-----4,4'-DDE		0.101U	
72-20-8-----Endrin		0.101U	
33213-65-9-----Endosulfan II		0.101U	
72-54-8-----4,4'-DDD		0.101U	
1031-07-8-----Endosulfan sulfate		0.101U	
50-29-3-----4,4'-DDT		0.101U	
72-43-5-----Methoxychlor		0.501U	
53494-70-5-----Endrin ketone		0.101U	
5103-71-9-----alpha-Chlordane		0.501U	
5103-74-2-----gamma-Chlordane		0.501U	
8001-35-2-----Toxaphene		1.01U	
12674-11-2-----Aroclor-1016		0.501U	
11104-28-2-----Aroclor-1221		0.501U	
11141-16-5-----Aroclor-1232		0.501U	
53469-21-9-----Aroclor-1242		0.501U	
12672-29-6-----Aroclor-1248		0.501U	
11097-69-1-----Aroclor-1254		1.01U	
11096-82-5-----Aroclor-1260		1.01U	

1D  
PESTICIDE ORGANICS ANALYSIS DATA SHEETLTL ON  
EEA SAMPLE NO.

Lab Name: Laucks Testing Labs Contract:N/A

4186-6A

KYLE

Lab Code: LAUCKS Lab No.:4186 SAS No.:N/A SDG No.:N/A

Matrix: (soil/water)WATER Lab Sample ID: 4186-6A

Sample wt/vol: 100.0 (g/mL)ML Lab File ID: F042329F.PRN

Level: (low/med) LOW Date Received: 04/12/90

% Moisture: not dec. Date Extracted: 04/13/90

Extraction: (sepF/Cont/Sonic) SEPF Date Analyzed: 04/24/90

GPC Cleanup: (Y/N)N pH:7.6 Dilution Factor: 1

## CONCENTRATION UNITS:

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

319-84-6-----alpha-BHC	0.0501U
319-85-7-----beta-BHC	0.0501U
319-86-8-----delta-BHC	0.0501U
58-89-9-----gamma-BHC (Lindane)	0.0501U
76-44-8-----Heptachlor	0.0501U
309-00-2-----Aldrin	0.0501U
1024-57-3-----Heptachlor epoxide	0.0501U
959-98-8-----Endosulfan I	0.0501U
60-57-1-----Dieldrin	0.101U
72-55-9-----4,4'-DDE	0.101U
72-20-8-----Endrin	0.101U
33213-65-9-----Endosulfan II	0.101U
72-54-8-----4,4'-DDD	0.101U
1031-07-8-----Endosulfan sulfate	0.101U
50-29-3-----4,4'-DDT	0.101U
72-43-5-----Methoxychlor	0.501U
53494-70-5-----Endrin ketone	0.101U
5103-71-9-----alpha-Chlordane	0.501U
5103-74-2-----gamma-Chlordane	0.501U
8001-35-2-----Toxaphene	1.01U
12674-11-2-----Aroclor-1016	0.501U
11104-28-2-----Aroclor-1221	0.501U
11141-16-5-----Aroclor-1232	0.501U
53469-21-9-----Aroclor-1242	0.501U
12672-29-6-----Aroclor-1248	0.501U
11097-69-1-----Aroclor-1254	1.01U
11096-82-5-----Aroclor-1260	1.01U

1D  
PESTICIDE ORGANICS ANALYSIS DATA SHEETCZ 3  
EPA SAMPLE NO.

Lab Name: Laucks Testing Labs Contract:N/A

FBLKDE

Lab Code: LAUCKS Lab No.:4186 SAS No.:N/A SDG No.:N/A

Matrix: (soil/water)WATER Lab Sample ID: B0413GPXWLW

Sample wt/vol: 100.0 (g/mL)ML Lab File ID: F042314F.FRN

Level: (low/med) LOW Date Received: 04/12/90

% Moisture: not dec. Date Extracted: 04/13/90

Extraction: (sepF/Cont/Sonic) SEPF Date Analyzed: 04/23/90

GPC Cleanup: (Y/N)N pH:7.0 Dilution Factor: 1

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

319-84-6-----alpha-BHC	0.0501U
319-85-7-----beta-BHC	0.0501U
319-86-8-----delta-BHC	0.0501U
58-89-9-----gamma-BHC (Lindane)	0.0501U
76-44-8-----Heptachlor	0.0501U
309-00-2-----Aldrin	0.0501U
1024-57-3-----Heptachlor epoxide	0.0501U
959-98-8-----Endosulfan I	0.0501U
60-57-1-----Dieldrin	0.101U
72-55-9-----4,4'-DDE	0.101U
72-20-8-----Endrin	0.101U
33213-65-9-----Endosulfan II	0.101U
72-54-8-----4,4'-DDD	0.101U
1031-07-8-----Endosulfan sulfate	0.101U
50-29-3-----4,4'-DDT	0.101U
72-43-5-----Methoxychlor	0.501U
53494-70-5-----Endrin ketone	0.101U
5103-71-9-----alpha-Chlordane	0.501U
5103-74-2-----gamma-Chlordane	0.501U
8001-35-2-----Toxaphene	1.01U
12674-11-2-----Aroclor-1016	0.501U
11104-28-2-----Aroclor-1221	0.501U
11141-16-5-----Aroclor-1232	0.501U
53469-21-9-----Aroclor-1242	0.501U
12672-29-6-----Aroclor-1248	0.501U
11097-69-1-----Aroclor-1254	1.01U
11096-82-5-----Aroclor-1260	1.01U

1D  
PESTICIDE ORGANICS ANALYSIS DATA SHEETCTL 54  
EPA SAMPLE NO.

Lab Name: Laucks Testing Labs Contract:N/A

4186-6AMS

Lab Code: LAUCKS Lab No.:4186 SAS No.:N/A SDG No.:N/A

Matrix: (soil/water)WATER Lab Sample ID: 4186-6AMS

Sample wt/vol: 100.0 (g/mL)ML Lab File ID: F042330F.FRN

Level: (low/med) LOW Date Received: 04/12/90

% Moisture: not dec. Date Extracted: 04/13/90

Extraction: (sepF/Cont/Sonic) SEPF Date Analyzed: 04/24/90

GPC Cleanup: (Y/N)N pH:7.6 Dilution Factor: 1

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

1D  
PESTICIDE ORGANICS ANALYSIS DATA SHEETLTC *m*  
EPA SAMPLE NO.

Lab Name: Laucks Testing Labs Contract:N/A

Lab Code: LAUCKS Lab No.: 4186 SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) WATER Lab Sample ID: 4186-6AMSD

Sample wt/vol: 100.0 (g/mL) ML Lab File ID: F042331F.PRN

Level: (low/med) LOW Date Received: 04/12/90

% Moisture: not dec. Date Extracted: 04/13/90

Extraction: (sepF/Cont/Sonic) SEPF Date Analyzed: 04/24/90

GPC Cleanup: (Y/N) N pH: 7.6 Dilution Factor: 1

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

27-APR-90

Washington State Department of Ecology  
\*\*\* Lab Analysis Report \*\*\*

Page 1

transaction #: 04271121 Seq #: 01 (10) Gen Inorg/Phys-Specified  
 Project: (DOE-008L) TOFTDAHL DRUM SITE (WE) Ecology, Manchester Lab  
 m: ( 720 S) Cyanide Total mg/l D3P01 LZC

QA Code: ( ) Normal Data  
 Instrument: (TECH-2 ) Technicon (AAII) General  
 Method: (EP1-335.3 ) Cyanide, (Total), Colorimetric, Automated  
 Chemist: (CGT) Tupas, Cyma DOE Hours Worked:  
 Lab Prep: ( ) Unspecified  
 Matrix: (10) Water-Total Date Preprd:  
 Units: (10) mg/l Date Anlyzd: 900425

Line	Sample #	Result	Sample Location/Description	#Days to Anl
1	90 158041	0.002U	BOONE	900411 ( 14 )
2	90 158042	0.002U	HOMALA	900411 ( 14 )
3	90 158043	0.002U	BDOFF	900411 ( 14 )
4	90 158044	0.002U	SMITH	900411 ( 14 )
5	90 158045	0.012	KYLE	900411 ( 14 )

Record Type: TRNIN2 Date Verified: 4.30-90 By: D. Deonno  
 Transaction Status: Edited Transaction...First Printing...Unverified.  
 Processed: 27-APR-90 11:27:11 Status: E Batch: (In CUR DB)

1-JUN-  
15:37:40

Washington State Department  
of Ecology  
Sample/Project Analysis

e 1

Project: DOE-008L TOFTDAHL DRUM SITE

f Ecology  
sults

Officer: LZC

Account: D3P01

Laboratory: Ecology, Manchester

Sample No: 90 158040

Description: TRANSPOR

Source: Drinking Water (At tap)

Begin Date: 90/04/11 :

All test  
Contract

Metals - PP	Water-Total	Result	Units
Arsenic As-Total	1.5U	ug/l	
Cadmium Cd-Total	0.10U	ug/l	
Lead Pb-Total	1.0U	ug/l	
Thallium Tl-Total	2.5U	ug/l	
Antimony Sb-Total	1.0U	ug/l	
Selenium Se-Total	1.0U	ug/l	
Mercury Hg-Total	0.02U	ug/l	

Metals - PP	Water-Total	Result	Units
Matrix Spike #1			
Mercury Hg-Total	109	% Recov	

Metals - PP	Water-Total	Result	Units
Matrix Spike #2			
Mercury Hg-Total	115	% Recov	

Metals - ICP Scan	Water-Total	Result	Units
Beryllium Be-Total	1.0U	ug/l	
Chromium Cr-Total	4.0U	ug/l	
Copper Cu-Total	2.0U	ug/l	
Nickel Ni-Total	20U	ug/l	
Silver Ag-Total	2.0U	ug/l	
Zinc Zn-Total	5.0U	ug/l	

Contract Lab Program	Water-Total	Result	Units
B/N/Acid GC/MS	REQ	CLP	
VOA GC/MS	REQ	CLP	
P/PCBs GC	REQ	CLP	

(Sample Complete)

1-JUN-9  
15:37:40

Washington State Department of Ecology  
Sample/Project Analysis Results

2

Project: DOE-008L TOFTDAHL DRUM SITE

Officer: LZC

Account: D3P01

Laboratory: Ecology, Manchester

Sample No: 90 158041

Description: BOONE

Source: Drinking Water (At tap)

Begin Date: 90/04/11 :

Gen Inorg/Phys-Speci		Water-Total	
		Result	Units
Cyanide	Total	0.002U	mg/l

Metals - PP		Water-Total	
		Result	Units
Arsenic	As-Total	1.5U	ug/l
Cadmium	Cd-Total	0.13BJ*	ug/l
Lead	Pb-Total	1.0JB*	ug/l
Thallium	Tl-Total	2.5U	ug/l
Antimony	Sb-Total	1.0U	ug/l
Selenium	Se-Total	1.0U	ug/l
Mercury	Hg-Total	0.048J*	ug/l

Metals - ICP Scan		Water-Total	
		Result	Units
Beryllium	Be-Total	1.0U	ug/l
Chromium	Cr-Total	4.0U	ug/l
Copper	Cu-Total	77.6 *	ug/l
Nickel	Ni-Total	20U	ug/l
Silver	Ag-Total	2.0U	ug/l
Zinc	Zn-Total	160 *	ug/l

Contract Lab Program		Water-Total	
		Result	Units
B/N/Acid	GC/MS	REQ	CLP
VOA	GC/MS	REQ	CLP
P/PCBs	GC	REQ	CLP

(Sample Complete)

1-JUN-9  
15:37:40

Washington State Department of Ecology  
Sample/Project Analysis Results

. 3 3

Project: DOE-008L TOFTDAHL DRUM SITE

Officer: LZC

Account: D3P01

Laboratory: Ecology, Manchester

Sample No: 90 158042

Description: HOMALA

Source: Drinking Water (At tap)

Begin Date: 90/04/11 :

Gen Inorg/Phys-Speci		Water	Total	
		Result	Units	
Cyanide	Total	0.002U	mg/l	

Metals - PP		Water	Total	
		Result	Units	
Arsenic	As-Total	1.5U	ug/l	
Cadmium	Cd-Total	0.22BJ*	ug/l	
Lead	Pb-Total	1.5JB*	ug/l	
Thallium	Tl-Total	2.5U	ug/l	
Antimony	Sb-Total	1.0U	ug/l	
Selenium	Se-Total	1.0U	ug/l	
Mercury	Hg-Total	0.037J*	ug/l	

Metals - ICP Scan		Water	Total	
		Result	Units	
Beryllium	Be-Total	1.0U	ug/l	
Chromium	Cr-Total	4.0U	ug/l	
Copper	Cu-Total	3.3J*	ug/l	
Nickel	Ni-Total	20U	ug/l	
Silver	Ag-Total	3.0U	ug/l	
Zinc	Zn-Total	80.3 *	ug/l	

Contract Lab Program		Water	Total	
		Result	Units	
B/N/Acid	GC/MS	REQ	CLP	
VOA	GC/MS	REQ	CLP	
P/PCBs	GC	REQ	CLP	

(Sample Complete)

1-JUN-9.  
15:37:40

Washington State Department of Ecology  
Sample/Project Analysis Results

. . 3 4

Project: DOE-008L TOFTDAHL DRUM SITE

Officer: LZC

Account: D3P01

Laboratory: Ecology, Manchester

Sample No: 90 158043

Description: BDOFF

Source: Drinking Water (At tap)

Begin Date: 90/04/11 :

Gen Inorg/Phys-Speci	Water-Total	Metals - ICP Scan	Water-Total
	Result Units	*** Continued ***	Result Units
Cyanide Total	0.002U mg/l	Zinc Zn-Total	5.0U ug/l

Metals - PP	Water-Total	Metals - ICP Scan	Water-Total
	Result Units	Matrix Spike #1	Result Units
Arsenic As-Total	1.5U ug/l	Beryllium Be-Total	119 % Recov
Cadmium Cd-Total	0.10U ug/l	Chromium Cr-Total	105 % Recov
Lead Pb-Total	1.0U ug/l	Copper Cu-Total	106 % Recov
Thallium Tl-Total	2.5U ug/l	Nickel Ni-Total	120 % Recov
Antimony Sb-Total	1.0U ug/l	Silver Ag-Total	96 % Recov
Selenium Se-Total	1.0U ug/l	Zinc Zn-Total	81 % Recov
Mercury Hg-Total	0.079J* ug/l		

Metals - PP	Water-Total	Metals - ICP Scan	Water-Total
Matrix Spike #1	Result Units	Matrix Spike #2	Result Units
Arsenic As-Total	97 % Recov	Beryllium Be-Total	118 % Recov
Cadmium Cd-Total	101 % Recov	Chromium Cr-Total	104 % Recov
Lead Pb-Total	102 % Recov	Copper Cu-Total	107 % Recov
Thallium Tl-Total	105 % Recov	Nickel Ni-Total	109 % Recov
Antimony Sb-Total	116 % Recov	Silver Ag-Total	99 % Recov
Selenium Se-Total	103 % Recov	Zinc Zn-Total	79 % Recov

Metals - PP	Water-Total	Contract Lab Program	Water-Total
Matrix Spike #1	Result Units		Result Units
Arsenic As-Total	103 % Recov	B/N/Acid GC/MS	REQ CLP
Cadmium Cd-Total	105 % Recov	VOA GC/MS	REQ CLP
Lead Pb-Total	108 % Recov	P/PCBs GC	REQ CLP
Thallium Tl-Total	102 % Recov		
Antimony Sb-Total	120 % Recov		
Selenium Se-Total	100 % Recov		

Metals - ICP Scan	Water-Total
	Result Units
Beryllium Be-Total	1.0U ug/l
Chromium Cr-Total	4.0U ug/l
Copper Cu-Total	37.6 * ug/l
Nickel Ni-Total	20U ug/l
Silver Ag-Total	2.0U ug/l

(Sample Complete)

1-JUN-9  
15:37:40

Washington State Department of Ecology  
Sample/Project Analysis Results

4 9 5

Project: DOE-008L TOFTDAHL DRUM SITE

Officer: LZC

Account: D3P01

Laboratory: Ecology, Manchester

Sample No: 90 158044

Description: SMITH

Source: Drinking Water (At tap)

Begin Date: 90/04/11 :

Gen Inorg/Phys-Speci		Water-Total	
		Result	Units
Cyanide	Total	0.002U	mg/l

Metals - PP		Water-Total	
		Result	Units
Arsenic	As-Total	1.5U	ug/l
Cadmium	Cd-Total	0.10U	ug/l
Lead	Pb-Total	1.0U	ug/l
Thallium	Tl-Total	2.5U	ug/l
Antimony	Sb-Total	1.0U	ug/l
Selenium	Se-Total	1.0U	ug/l
Mercury	Hg-Total	0.02U	ug/l

Metals - ICP Scan		Water-Total	
		Result	Units
Beryllium	Be-Total	1.0U	ug/l
Chromium	Cr-Total	4.0U	ug/l
Copper	Cu-Total	46.1 *	ug/l
Nickel	Ni-Total	20U	ug/l
Silver	Ag-Total	2.0U	ug/l
Zinc	Zn-Total	22JB*	ug/l

Contract Lab Program		Water-Total	
		Result	Units
B/N/Acid	GC/MS	REQ	CLP
VOA	GC/MS	REQ	CLP
P/PCBs	GC	REQ	CLP

( Sample Complete )

1-JUN-9  
15:37:40

Washington State Department of Ecology  
Sample/Project Analysis Results

6

Project: DOE-008L TOFTDAHL DRUM SITE

Laboratory: Ecology, Manchester

Sample No: 90 158045

Description: KYLE

Officer: LZC

Account: D3P01

Source: Drinking Water (At tap)

Begin Date: 90/04/11 :

		Water-Total	
		Result	Units
Cyanide Total		0.012 *	mg/l

		Water-Total	
		Result	Units
Arsenic	As-Total	1.50	ug/l
Cadmium	Cd-Total	0.100	ug/l
Lead	Pb-Total	1.00	ug/l
Thallium	Tl-Total	2.50	ug/l
Antimony	Sb-Total	1.00	ug/l
Selenium	Se-Total	1.00	ug/l
Mercury	Hg-Total	0.035J*	ug/l

		Water-Total	
		Result	Units
Beryllium	Be-Total	1.00	ug/l
Chromium	Cr-Total	4.00	ug/l
Copper	Cu-Total	46.1 *	ug/l
Nickel	Ni-Total	200	ug/l
Silver	Ag-Total	2.00	ug/l
Zinc	Zn-Total	31B*	ug/l

		Water-Total	
		Result	Units
B/N/Acid	GC/MS	REQ	CLP
VOA	GC/MS	REQ	CLP
P/PCBs	GC	REQ	CLP

(Sample Complete)

1-JUN-  
15:37:40

Washington State Department of Ecology  
Sample/Project Analysis Results

,e 7

Project: DOE-008L TOFTDAHL DRUM SITE

Officer: LZC

Account: D3P01

Blank ID: PB 16.82

Metals - PP	Water-Total	
Blank #1	Result	Units
Arsenic As-Total	1.5U	ug/l
Cadmium Cd-Total	0.14J*	ug/l
Lead Pb-Total	1.5J*	ug/l
Thallium Tl-Total	2.5U	ug/l
Antimony Sb-Total	1.0U	ug/l
Selenium Se-Total	1.0U	ug/l

Metals - ICP Scan	Water-Total	
Blank #1	Result	Units
Beryllium Be-Total	1.0U	ug/l
Chromium Cr-Total	5.0JB*	ug/l
Copper Cu-Total	2.0U	ug/l
Nickel Ni-Total	20U	ug/l
Silver Ag-Total	2.0U	ug/l
Zinc Zn-Total	5.0U	ug/l

(Sample Complete)

1-JUN-90  
15:37:40

Washington State Department of Ecology  
Sample/Project Analysis Results

Page 8

Project: DOE-008L TOFTDAHL DRUM SITE

Officer: LZC

Account: D3P01

Blank ID: PB 16.83

Metals - PP		Water-Total	
	Blank #2	Result	Units
Arsenic	As-Total	1.5U	ug/l
Cadmium	Cd-Total	0.10U	ug/l
Lead	Pb-Total	1.2J*	ug/l
Thallium	Tl-Total	2.5U	ug/l
Antimony	Sb-Total	1.0U	ug/l
Selenium	Se-Total	1.0U	ug/l

Metals - ICP Scan		Water-Total	
	Blank #2	Result	Units
Beryllium	Be-Total	1.0U	ug/l
Chromium	Cr-Total	4.0U	ug/l
Copper	Cu-Total	2.0U	ug/l
Nickel	Ni-Total	20U	ug/l
Silver	Ag-Total	2.0U	ug/l
Zinc	Zn-Total	5.6JB*	ug/l

(Sample Complete)