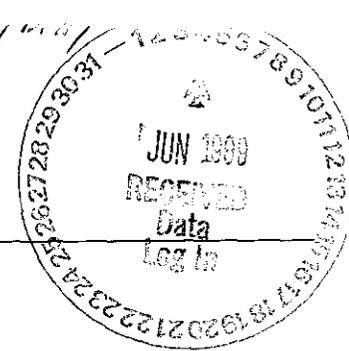


H0398-1418



a division of Recra Environmental, Inc.  
Virtual Laboratories Everywhere

0051541



**Recra LabNet Philadelphia  
Analytical Report**

**Client:** TNU-HANFORD B99-041  
**RFW#:** 9905L891, 896  
**SDG/SAF#:** H0398/B99-041

**W.O.#:** 01667-600-001-9999-00  
**Date Received:** 05-06-99

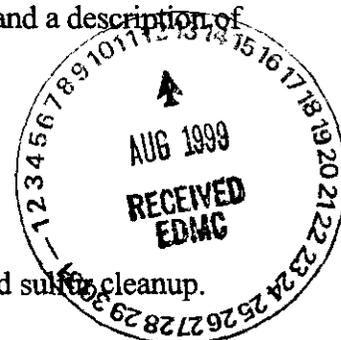
**PCB**

The set of samples consisted of eight (8) soil samples collected on 04-29,30-99.

The samples and their associated QC samples were extracted on 05-12-99 and analyzed based on SW846, 3rd Edition on 05-15-99. The extraction procedure was based on method 3540 and the extracts were analyzed based on method 8082 for Aroclors only.

The following is a summary of the QC results accompanying the sample results and a description of any problems encountered during their analyses:

1. All cooler temperatures have been recorded on the chain-of-custodies.
2. All required holding times for extraction and analysis have been met.
3. The samples and their associated QC samples received a sulfuric acid and sulfuric cleanup.
4. The method blank was below the reporting limits for all target compounds.
5. All surrogate recoveries were within acceptance criteria.
6. The blank spike recovery was within acceptance criteria.
7. All matrix spike recoveries were within acceptance criteria.
8. All initial calibrations associated with this data set were within acceptance criteria.
9. All continuing calibration standards analyzed prior to sample extracts were within acceptance criteria.



*J. Michael Taylor*

J. Michael Taylor  
Vice President  
Philadelphia Analytical Laboratory

05-25-99  
Date

pefr:\group\data\pest\05L-891.pcb

The results presented in this report relate only to the analytical testing and conditions of the samples at receipt and during storage. All pages of this report are integral parts of the analytical data. Therefore, this report should only be reproduced in its entirety of 12 pages.

11 5/24/99

001

**GLOSSARY OF PESTICIDE/PCB DATA**

**DATA QUALIFIERS**

- U** = Indicates that the compound was analyzed for but not detected. The minimum detection limit for the sample (not the method detection limit) is reported with the U (e.g., 10U).
- J** = Indicates an estimated value. This flag is used in cases where a target analyte is detected at a level less than the lower quantification level. If the limit of quantification is 10 ug/L and a concentration of 3 ug/L is calculated, it is reported as 3J.
- B** = This flag is used when the analyte is found in the associated blank as well as in the sample. It indicates possible/probable blank contamination.
- E** = Indicates that the compound was detected beyond the calibration range and was subsequently analyzed at a dilution.
- I** = Interference.

**ABBREVIATIONS**

- BS** = Indicates blank spike in which reagent grade water is spiked with the CLP matrix spiking solutions and carried through all the steps in the method. Spike recoveries are reported.
- BSD** = Indicates blank spike duplicate.
- MS** = Indicates matrix spike.
- MSD** = Indicates matrix spike duplicate.
- DL** = Indicates that recoveries were not obtained because the extract had to be diluted for analysis.
- NA** = Not Applicable.
- DF** = Dilution Factor.
- NR** = Not Required.
- SP** = Indicates Spiked Compound.



**GLOSSARY OF PESTICIDE/PCB DATA**

- P** = This flag is used for a pesticide/Aroclor target analyte when there is greater than 25% difference for detected concentrations between the two GC columns (see Form X). The lower of the two values is reported on Form I and flagged with a "P".
- D** = This flag identifies all compounds identified in an analysis at a secondary dilution factor.
- C** = This flag applies to a compound that has been confirmed by GC/MS.



Recre LabNet - Lionville Laboratory

PCBs by GC

Report Date: 05/17/99 13:15

RFW Batch Number: 9905L891

Client: TNU-HANFORD B99-041

Work Order: 10985001001 Page: 1

004

Sample Information	Cust ID:	B0VCW4	B0VCW4	B0VCW4	B0VCW5	B0VCW6	B0VCW7
	RFW#:	001	001 MS	001 MSD	002	003	004
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	D.F.:	1.00	1.00	1.00	1.00	1.00	1.00
	Units:	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
Surrogate:	Tetrachloro-m-xylene	82 %	105 %	105 %	88 %	92 %	98 %
	Decachlorobiphenyl	83 %	98 %	103 %	85 %	93 %	97 %
=====fl=====fl=====fl=====fl=====fl=====fl=====fl=====							
Aroclor-1016		34 U	34 U	41 U	34 U	34 U	34 U
Aroclor-1221		68 U	68 U	81 U	68 U	68 U	67 U
Aroclor-1232		34 U	34 U	41 U	34 U	34 U	34 U
Aroclor-1242		34 U	34 U	41 U	34 U	34 U	34 U
Aroclor-1248		34 U	34 U	41 U	34 U	34 U	34 U
Aroclor-1254		34 U	86 %	84 %	34 U	34 U	34 U
Aroclor-1260		34 U	34 U	41 U	34 U	34 U	34 U

Sample Information	Cust ID:	PBLKKE	PBLKKE BS
	RFW#:	99LE0582-MB1	99LE0582-MB1
	Matrix:	SOIL	SOIL
	D.F.:	1.00	1.00
	Units:	UG/KG	UG/KG
Surrogate:	Tetrachloro-m-xylene	95 %	98 %
	Decachlorobiphenyl	95 %	91 %
=====fl=====fl=====fl=====fl=====fl=====fl=====fl=====			
Aroclor-1016		33 U	33 U
Aroclor-1221		67 U	67 U
Aroclor-1232		33 U	33 U
Aroclor-1242		33 U	33 U
Aroclor-1248		33 U	33 U
Aroclor-1254		33 U	83 %
Aroclor-1260		33 U	33 U

*05/18/99*

U= Analyzed, not detected. J= Present below detection limit. B= Present in blank. NR= Not reported. NS= Not spiked. % = Percent recovery. D= Diluted out. I= Interference. NA= Not Applicable. \*= Outside of EPA CLP QC

Recre LabNet - Lionville Laboratory

PCBs by GC

Report Date: 05/17/99 13:39

RFW Batch Number: 9905L896

Client: TNU-HANFORD B99-041

Work Order: 10985001001 Page: 1

100

Sample Information	Cust ID:	B0VCW8	B0VCW8	B0VCW8	B0VCW9	B0VCX0	B0VCX1
	RFW#:	001	001 MS	001 MSD	002	003	004
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	D.F.:	1.00	1.00	1.00	1.00	1.00	1.00
	Units:	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
Surrogate:	Tetrachloro-m-xylene	90 %	98 %	88 %	90 %	80 %	85 %
	Decachlorobiphenyl	97 %	98 %	83 %	92 %	87 %	90 %
		-----fl-----	-----fl-----	-----fl-----	-----fl-----	-----fl-----	-----fl-----
Aroclor-1016		34 U	34 U	34 U	35 U	34 U	34 U
Aroclor-1221		68 U	68 U	68 U	69 U	69 U	69 U
Aroclor-1232		34 U	34 U	34 U	35 U	34 U	34 U
Aroclor-1242		34 U	34 U	34 U	35 U	34 U	34 U
Aroclor-1248		34 U	34 U	34 U	35 U	34 U	34 U
Aroclor-1254		34 U	85 %	82 %	35 U	34 U	34 U
Aroclor-1260		34 U	34 U	34 U	35 U	34 U	34 U

Sample Information	Cust ID:	PBLKKE	PBLKKE BS
	RFW#:	99LE0582-MB1	99LE0582-MB1
	Matrix:	SOIL	SOIL
	D.F.:	1.00	1.00
	Units:	UG/KG	UG/KG
Surrogate:	Tetrachloro-m-xylene	95 %	98 %
	Decachlorobiphenyl	95 %	91 %
		-----fl-----	-----fl-----
Aroclor-1016		33 U	33 U
Aroclor-1221		67 U	67 U
Aroclor-1232		33 U	33 U
Aroclor-1242		33 U	33 U
Aroclor-1248		33 U	33 U
Aroclor-1254		33 U	83 %
Aroclor-1260		33 U	33 U

*Handwritten signature*

U= Analyzed, not detected. J= Present below detection limit. B= Present in blank. NR= Not reported. NS= Not spiked. % = Percent recovery. D= Diluted out. I= Interference. NA= Not Applicable. \*= Outside of EPA CLP QC

Recra LabNet - Lionville Laboratory  
PCB ANALYTICAL DATA PACKAGE FOR  
TNU-HANFORD B99-041

DATE RECEIVED: 05/06/99

RFW LOT # :9905L891

CLIENT ID	RFW #	MTX	PREP #	COLLECTION	EXTR/PREP	ANALYSIS
B0VCW4	001	S	99LE0582	04/29/99	05/12/99	05/15/99
B0VCW4	001 MS	S	99LE0582	04/29/99	05/12/99	05/15/99
B0VCW4	001 MSD	S	99LE0582	04/29/99	05/12/99	05/15/99
B0VCW5	002	S	99LE0582	04/29/99	05/12/99	05/15/99
B0VCW6	003	S	99LE0582	04/29/99	05/12/99	05/15/99
B0VCW7	004	S	99LE0582	04/29/99	05/12/99	05/15/99

LAB QC:

PBLKKE	MB1	S	99LE0582	N/A	05/12/99	05/15/99
PBLKKE	MB1 BS	S	99LE0582	N/A	05/12/99	05/15/99

*Acc 5/18/99*

Recra LabNet - Lionville Laboratory  
PCB ANALYTICAL DATA PACKAGE FOR  
TNU-HANFORD B99-041

DATE RECEIVED: 05/06/99

RFW LOT # :9905L896

CLIENT ID	RFW #	MTX	PREP #	COLLECTION	EXTR/PREP	ANALYSIS
BOVCW8	001	S	99LE0582	04/30/99	05/12/99	05/15/99
BOVCW8	001 MS	S	99LE0582	04/30/99	05/12/99	05/15/99
BOVCW8	001 MSD	S	99LE0582	04/30/99	05/12/99	05/15/99
BOVCW9	002	S	99LE0582	04/30/99	05/12/99	05/15/99
BOVCX0	003	S	99LE0582	04/30/99	05/12/99	05/15/99
BOVCX1	004	S	99LE0582	04/30/99	05/12/99	05/15/99

LAB QC:

PBLKKE	MB1	S	99LE0582	N/A	05/12/99	05/15/99
PBLKKE	MB1 BS	S	99LE0582	N/A	05/12/99	05/15/99

*Quarantine*



Bechtel Hanford Inc.

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

B99-041-021

Page 1 of 1

Collector  
Mike Stankovich

Company Contact  
Mike Stankovich

Telephone No.  
(509) 531-7620

Project Coordinator  
TRENT, SJ

Price Code

Date Transferred

Project Designation  
100 H Area - Quick Turn

Sampling Location  
100-H-5

SAF No.  
B99-041

21 Days

Ice Chest No. SML-443

Field Logbook No.  
EL-1500

Method of Shipment  
Fed Ex

6.3

Shipped To  
MARRISSET  
RN 514199 RZRA Labnet

Offsite Property No.  
RN 514199

A990129

Bill of Lading/Air Bill No.  
RN 514199

423579525500 RN 514199

COA R1HX 1200D

423579525500

POSSIBLE SAMPLE HAZARDS/REMARKS

Radioactive

Special Handling and/or Storage

001

SAMPLE ANALYSIS

Sample No.	Matrix *	Sample Date	Sample Time	Preservation	Cool AC	Type of Container	No. of Container(s)	Volume	PCNs - 2002
BOVCW4	Soil	4-29-97	0825			KG	1	60ml	
BOVCW5	Soil	4-29-97	0840						
BOVCW6	Soil	4-29-97	0905						
BOVCW7	Soil	4-29-97	1240						

CHAIN OF POSSESSION

Signer/Print Names

SPECIAL INSTRUCTIONS

COC - R1HX 2000

Matrix \*

- Soil
- Water
- Vapor
- Other Solid
- Clear Liquid

M. Stankovich unavailable to reinspect samples.

Relinquished By	Date/Time	Received By	Date/Time
Mike Stankovich	4/29/97	1B	4/29/97
RF 1B	5/14/99	John Nelson	5/14/99
John Nelson	5/14/99	Fred Ex	5/14/99

Relinquished By	Date/Time	Received By	Date/Time
John Nelson	5/14/99	Fred Ex	5/14/99

LABORATORY SECTION	Received By	Title	Disposal Method	Date/Time
FINAL SAMPLE DISPOSITION	John Nelson	5/14/99	0930	



Collector Mike Stankovich	Company Contact Mike Stankovich	Telephone No. (509) 531-7620	Project Coordinator Trent, SJ	Price Code	Data Turnaround 21 Days
Project Designation 100 H Area - Quick Turn	Sampling Location 100-H-5	Field Logbook No. EL-1500	SAF No. B99-041		
Ice Chest No. # 009	Offsite Property No. RJR 5/5/99 A990131	Method of Shipment Federal Express			
Shipped To REZRA LabNet		Bill of Lading/Air Bill No. RJR 5/5/99 4235PF525603			
		COA R11HX12000			

POSSIBLE SAMPLE HAZARDS/REMARKS Radioactive	Preservation	Cool #C											
	Type of Container	uG											
	No. of Container(s)	1											
	Special Handling and/or Storage	Volume 60mL											
SAMPLE ANALYSIS		PCBs - 9082											

Sample No.	Matrix *	Sample Date	Sample Time										
BOVCW8	Soil	4-30-99	0805	✓									BOV857
BOVCW9	Soil	4-30-99	0845	✓									BOV871
BOVCX0	Soil	4-30-99	1020	✓									BOV877
BOVCX1	Soil	4-30-99	1035	✓									BOV875

CHAIN OF POSSESSION	Sign/Print Names		SPECIAL INSTRUCTIONS COC - R11HX1 2000				Matrix * Soil Water Vapor Other Solid Other Liquid
	Relinquished By Stankovich	Date/Time 4-30-99 1735	Received By #1B	Date/Time	M. Stankovich unavailable to relinquish samples.		
	Relinquished By #1B	Date/Time 5/5/99 1050	Received By R. Nielsen	Date/Time 5/5/99 1030	9905L896		
	Relinquished By R. Nielsen	Date/Time 5/5/99 1130	Received By Fed Ex	Date/Time	temp. 38°		
Relinquished By Fed Ex	Date/Time 5/6/99 14:30	Received By D. Sprunt	Date/Time 5/6/99 14:30	113 = 3°C			
LABORATORY SECTION	Received By	Title	Date/Time				
FINAL SAMPLE DISPOSITION	Disposal Method	Disposed By				Date/Time	