

0054392

H1185

Recra LabNet - Lionville Laboratory  
PCB ANALYTICAL DATA PACKAGE FOR  
TNUHANFORD B99-042 H1185

DATE RECEIVED: 12/13/00

RFW LOT # :0012L561

CLIENT ID	RFW #	MTX	PREP #	COLLECTION	EXTR/PREP	ANALYSIS
B112V2	001	S	00LE1644	12/11/00	12/13/00	12/14/00
B112V2	001 MS	S	00LE1644	12/11/00	12/13/00	12/14/00
B112V2	001 MSD	S	00LE1644	12/11/00	12/13/00	12/13/00
B112V3	002	S	00LE1644	12/11/00	12/13/00	12/13/00
B112V4	003	S	00LE1644	12/11/00	12/13/00	12/13/00
B112V5	004	S	00LE1644	12/11/00	12/13/00	12/13/00
B112V6	005	S	00LE1644	12/11/00	12/13/00	12/14/00
B112V7	006	S	00LE1644	12/11/00	12/13/00	12/14/00

LAB QC:

PBLKKG	MB1	S	00LE1644	N/A	12/13/00	12/13/00
PBLKKG	MB1 BS	S	00LE1644	N/A	12/13/00	12/14/00

12/20/00

RECEIVED  
JAN 22 2001



EDMC

**Recra LabNet Philadelphia  
Analytical Report**

**Client:** TNU HANFORD B99-042  
**RFW#:** 0012L561  
**SDG/SAF#:** H1185/B99-042

**W.O.#:** 10985-001-001-9999-00  
**Date Received:** 12-13-00

**PCB**

The set of samples consisted of six (6) soil samples collected on 12-11-00.

The samples and their associated QC samples were extracted on 12-13-00 and analyzed according to Recra OPs based on SW846, 3rd Edition procedures on 12-13,14-00. The extraction procedure was based on method 3550 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. The cooler temperature has been recorded on the chain-of-custody.
2. All required holding times for extraction and analysis have been met.
3. The samples and their associated QC samples received a sulfuric acid cleanup.
4. The method blank was below the reporting limits for all target compounds.
5. All obtainable surrogate recoveries were within acceptance criteria.
6. The blank spike recovery was within acceptance criteria.
7. Matrix spike recoveries were unobtainable due to the dilution required for analysis.
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.
10. Patterns for Aroclors 1254 and 1260 were identified in these samples. The reported Aroclor(s) was/were chosen based on the best pattern match and fit. Quantitation was performed using congeners common to both Aroclors to give the best overall total PCB concentration.



11. I certify that this sample data package is in compliance with SOW requirements, both technically and for completeness, other than the conditions detailed above. Release of the data contained in this hard-copy data package has been authorized by the laboratory Manager or a designee, as verified by the following signature.

*Copy*   
J. Michael Taylor  
VP, Laboratory General Manager  
Lionville Laboratory

12-20-00  
Date

pefr:\group\data\pest\10L-853.pcb



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.



Recra LabNet - Lionville Laboratory

PCBs by GC

Report Date: 12/19/00 12:53

RFW Batch Number: 0012L561

Client: TNUHANFORD B99-042 H1185 Work Order: 10985001001 Page: 1

06

Cust ID:		B112V2	B112V2	B112V2	B112V3	B112V4	B112V5
Sample Information	RFW#:	001	001 MS	001 MSD	002	003	004
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	D.F.:	10.0	10.0	10.0	1.00	1.00	1.00
	Units:	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
Surrogate:	Tetrachloro-m-xylene	90 %	85 %	78 %	95 %	95 %	95 %
	Decachlorobiphenyl	59 %	54 %	49 %	98 %	98 %	100 %
=====fl=====fl=====fl=====fl=====fl=====fl=====fl=====							
Aroclor-1016		360 U	360 U	360 U	35 U	34 U	36 U
Aroclor-1221		720 U	720 U	720 U	69 U	68 U	71 U
Aroclor-1232		360 U	360 U	360 U	35 U	34 U	36 U
Aroclor-1242		360 U	360 U	360 U	35 U	34 U	36 U
Aroclor-1248		360 U	360 U	360 U	35 U	34 U	36 U
Aroclor-1254		360 U	D %	D %	35 U	34 U	36 U
Aroclor-1260		690	630	620	35 U	34 U	36 U

Cust ID:		B112V6	B112V7	PBLKKG	PBLKKG BS
Sample Information	RFW#:	005	006	00LE1644-MB1	00LE1644-MB1
	Matrix:	SOIL	SOIL	SOIL	SOIL
	D.F.:	10.0	2.00	1.00	1.00
	Units:	UG/KG	UG/KG	UG/KG	UG/KG
Surrogate:	Tetrachloro-m-xylene	85 %	85 %	102 %	98 %
	Decachlorobiphenyl	57 %	94 %	101 %	97 %
=====fl=====fl=====fl=====fl=====fl=====fl=====fl=====					
Aroclor-1016		350 U	75 U	33 U	33 U
Aroclor-1221		710 U	150 U	67 U	67 U
Aroclor-1232		350 U	75 U	33 U	33 U
Aroclor-1242		350 U	75 U	33 U	33 U
Aroclor-1248		350 U	75 U	33 U	33 U
Aroclor-1254		350 U	75 U	33 U	97 %
Aroclor-1260		1600	290	33 U	33 U

*U 12-19-00*

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



Bechtel Hanford Inc.		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST				B99-042-099		Page 1 of 2		
Collector Renee Nielson		Company Contact Mike Stankovich		Telephone No. 531-76201		Project Coordinator TRENT, SJ		Price Code - <del>8L</del> <sup>RT</sup> <del>12-11-00</del>		
Project Designation 100 H Area - Full Protocol		Sampling Location 100-H-24		SAF No. B99-042		Air Quality <input type="checkbox"/>		Data Turnaround <del>21 Days</del> 24 Hours		
Ice Chest No. <u>IAZ</u> (1 of 1)		Field Logbook No. EL1500-3		COA R10H242600		Method of Shipment Federal Express <u>0</u>				
Shipped To <u>TMA/RECRA</u>		Offsite Property No. <u>HMOR# 000822</u>				Bill of Lading/Air Bill No. <u>N/A</u>				
<b>POSSIBLE SAMPLE HAZARDS/REMARKS</b> PCB's Samples did not originate in radiological controlled area. No total activity associated with sample/samples. <u>RT 12-11-00</u> From Suspect area. Special Handling and/or Storage PCB's <u>No PPM expected</u>					Preservation	Cool 4C				
					Type of Container	aG				
					No. of Container(s)	1				
					Volume	250mL				
						PCBs - 8082				
<b>SAMPLE ANALYSIS</b>										
Sample No.	Matrix *	Sample Date	Sample Time							
B112V2	SOIL	12-11-00	0940	X					B7-8	
B112V3	SOIL	12-11-00	0910	X					B7-11	
B112V4	SOIL	12-11-00	0917	X					B8-3	
B112V5	SOIL	12-11-00	0924	X					B8-4	
B112V6	SOIL	12-11-00	0935	X					B8-8	
<b>CHAIN OF POSSESSION</b>					<b>SPECIAL INSTRUCTIONS</b>					
Relinquished By		Date/Time		Received By		Date/Time		Samples did not originate from a radiological area.		<b>Matrix *</b> S=Soil SE=Soil/Stone SO=Soil S=Sludge W=Water O=Oil A=Air DS=Drum Solids DL=Drum Liquids T=Tissue WI=Wipe L=Liquid V=Vegetation X=Other
R. Nielson		12-11-00 1000		R. Fallon		12-11-00 1000				
R. Fallon		12-11-00 1050		R. Thoren		12-11-00 1050				
R. Thoren		12-11-00 0500		Stored in Ref JB 3728		12-11-00 1050				
R. Thoren		12-11-00 0800		R. Thoren		12-12-00 0800				
R. Thoren		12-12-00 0800		F. Eden						
F. Eden		12-13-00 1000		T. Keppel		12-13-00 1000				
<b>LABORATORY SECTION</b>	Received By		Date/Time		Title					
<b>FINAL SAMPLE DISPOSITION</b>	Disposal Method				Disposed By				Date/Time	

Bechtel Hanford Inc.		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			B99-042-099	Page 2 of 2
Collector Renee Nielson	Company Contact Mike Stankovich	Telephone No. 531-76201	Project Coordinator TRENT, SJ		Price Code <b>8LPT</b> 12-11-00	Data Turnaround <b>21 Days</b> <b>24 HOURS</b>
Project Designation 100 H Area - Full Protocol	Sampling Location 100-H-24	SAF No. B99-042	Air Quality <input type="checkbox"/>			
Ice Chest No. <b>IAZ</b>	Field Logbook No. EL1500-3	COA R10H242600	Method of Shipment Federal Express		<b>00</b>	
Shipped To TMA/RECRA	Offsite Property No. <b>HMSR# 000822</b>	Bill of Lading/Air Bill No. <b>NA</b>				
<b>POSSIBLE SAMPLE HAZARDS/REMARKS</b> PCB's <b>From Suspect Area.</b> Samples did not originate in radiological controlled area. No total activity associated with sample/samples. <b>RT 12/00</b> Special Handling and/or Storage PCB's <b>NO PPM EXPECTED</b>			Preservation Cool 4C			
			Type of Container aG			
			No. of Container(s) 1			
			Volume 250mL			
			PCBs - 8082			
<b>SAMPLE ANALYSIS</b>						
Sample No.	Matrix *	Sample Date	Sample Time			
B112V7	SOIL	12-11-00	0930	X		88-13
<b>CHAIN OF POSSESSION</b>				<b>SPECIAL INSTRUCTIONS</b>		<b>Matrix *</b>
Relinquished By <b>R. Nielson</b>	Date/Time 12-11-00 1000	Received By <b>R. Thoren</b>	Date/Time 12-11-00 1000	<b>Samples did not originate from a radiological area.</b>		S-Soil SS-Soil/m SO-Solid S-Sludge W-Water O-Other A-Air DS-Dry Solid DL-Dry Liquid T-Tissue WI-Wipe L-Liquid V-Vegetation X-Other
Relinquished By <b>R. Thoren</b>	Date/Time 12-11-00 1050	Received By <b>R. Thoren</b>	Date/Time 12-11-00 1050			
Relinquished By <b>R. Thoren</b>	Date/Time 12-11-00 1050	Received By <b>RT 11/00</b>	Date/Time 12-11-00 1050			
Relinquished By <b>RT 11/00</b>	Date/Time 12-11-00 1200	Received By <b>RT 11/00</b>	Date/Time 12-11-00 1200			
Relinquished By <b>RT 11/00</b>	Date/Time 12-11-00 0800	Received By <b>R. Thoren</b>	Date/Time 12-11-00 0800			
Relinquished By <b>RT 11/00</b>	Date/Time 12-11-00 0800	Received By <b>R. Thoren</b>	Date/Time 12-11-00 0800			
Relinquished By <b>Fed Ex</b>	Date/Time 12-13-00 1000	Received By <b>Thoren</b>	Date/Time 12-13-00 1000			
<b>LABORATORY SECTION</b>	Received By	Title		Date/Time		
<b>FINAL SAMPLE DISPOSITION</b>	Disposal Method	Disposed By		Date/Time		

Figure 1. Sample Check-in List

Date/Time Received: 12-13-00 / 1000

SDG#: 0012561

Work Order Number: —

SAF# 399-042

Shipping Container ID: Bucket

Chain of Custody # 399-042-099

- 1. Custody Seals on shipping container intact? Yes  No
- 2. Custody Seals dated and signed? Yes  No
- 3. Chain-of-Custody record present? Yes  No
- 4. Cooler temperature 3.5°C
- 5. Vermiculite/packing materials is Wet  Dry
- 6. Number of samples in shipping container: 10
- 7. Sample holding times exceeded? Yes  No

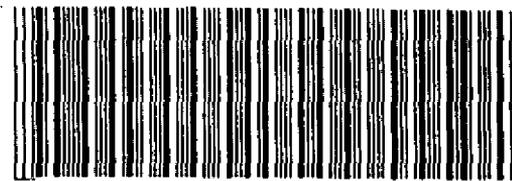
8. Samples have: <input checked="" type="checkbox"/> tape <input type="checkbox"/> custody seals	<input type="checkbox"/> hazard labels <input checked="" type="checkbox"/> appropriate sample labels
9. Samples are: <input checked="" type="checkbox"/> in good condition <input type="checkbox"/> broken	<input type="checkbox"/> leaking <input type="checkbox"/> have air bubbles

10. Were any anomalies identified in sample receipt? Yes  No

11. Description of anomalies (include sample numbers): N/A

Sample Custodian/Laboratory: Theppel Becca Date: 12-13-00

Telephoned to: \_\_\_\_\_ On \_\_\_\_\_ By \_\_\_\_\_



811511013835

Questions? Call 1-800-Go-FedEx® (800-463-3339) or Visit our Web site at www.fedex.com

From **12-12-00** Sender's FedEx Account Number [Redacted] 7627  
 Sender's name **G.O. BONESS** Phone (509) 874-  
**DURATEK FEDERAL SERVICES, INC. FOR U.S. DOE**  
 Company  
 Address **2355 SYMONS DRIVE MS 11-14** Dept./Floor/Suite/Room  
 City **RICHLAND** State **WA** ZIP **99352**

Your Internal Billing Reference **R116H72600**  
 To Recipient's name **ORLETTE JOHNSON** Phone **(610) 280-3012**  
 Company **RECRA LAB NET**  
 Address **208 WELSH POOL ROAD** Dept./Floor/Suite/Room  
 City **LIONVILLE** State **PA** ZIP **19341-1333**

For HOLD at FedEx Location check here  
 Hold Weekday  Hold Saturday  
 For WEEKEND Delivery check here  
 Saturday Delivery  Sunday Delivery

**Express Package Service Packages up to 150 lbs.**  
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 FedEx 2Day  FedEx Express Saver

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**5 Packaging**  
 Other Packaging  
 Dangerous Goods cannot be shipped in FedEx packaging

**6 Special Handling**  
 Dangerous Goods as per attached Shipper's Declaration  Cargo Aircraft Only

**7 Payment**  
 Bill to:  Sender  Recipient  Third Party  Credit Card  Cash Check



Total Packages **1** Total Weight **22** Total Declared Value **s NVD** Total Charges **.00**

Signature Release Unavailable  
 PART #154827 - Rev. Date 11/98 ©1994-98 FedEx - PRINTED IN U.S.A.

FedEx Tracking Number **811511013835** Form I.D. No. **0204**

Two completed and signed copies of this Declaration must be handed to the operator.

**TRANSPORT DETAILS**  
 This shipment is within the limitations prescribed for: (delete non-applicable)  
 PASSENGER AND CARGO AIRCRAFT  
 Airport of Departure: **PASCO, WA**  
 Airport of Destination:

**WARNING**  
 Failure to comply in all respects with the applicable Dangerous Goods Regulations may be in breach of the applicable law, subject to legal penalties. This Declaration must not, in any circumstances, be completed and/or signed by a consolidator, a forwarder or an IATA cargo agent.

Shipment type: (delete non-applicable)  
**NON-RADIOACTIVE** ~~EXCEPTED~~

NATURE AND QUANTITY OF DANGEROUS GOODS					Quantity and Type of Packaging	Packing Instr.	Authorization
Dangerous Goods Identification							
Proper Shipping Name	Class or Division	UN or I.D. No.	Packing Group	Sub-			
POLYCHLORINATED BIPHENYLS, SOLID	9	UN2315	II		1 METAL CAN x 3 Kg	911	PACKAGED PER FX-06

Additional Handling Information **EMERGENCY RESPONSE GUIDE #171 ATTACHED** Prepared for AIR TRANSPORT according to: (Customer MUST check one)  
 49 CFR  ICAO / IATA

I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name and are classified, packaged, marked, and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.  
 Name/Title of Signatory: **G.O. BONESS/TRAFFIC SPEC.**  
 Place and Date: **RICHLAND, WA 12-12-00**  
 Signature (see warning above): [Signature]

ACCEPTABLE FOR PASSENGER AIRCRAFT, THIS SHIPMENT CONTAINS RADIOACTIVE MATERIAL INTENDED FOR USE IN, OR INCIDENT TO, RESEARCH, MEDICAL DIAGNOSIS, OR TREATMENT.