

0054386

H 1126

Recra LabNet - Lionville Laboratory
PCB ANALYTICAL DATA PACKAGE FOR
TNUHANFORD B00-029 H1126

DATE RECEIVED: 11/07/00

RFW LOT # :0011L170

CLIENT ID	RFW #	MTX	PREP #	COLLECTION	EXTR/PREP	ANALYSIS
B10NV4	001	S	00LE1453	11/03/00	11/08/00	11/21/00
B10NV4	001 MS	S	00LE1453	11/03/00	11/08/00	11/21/00
B10NV4	001 MSD	S	00LE1453	11/03/00	11/08/00	11/21/00

LAB QC:

PBLK GK	MB1	S	00LE1453	N/A	11/08/00	11/21/00
PBLK GK	MB1 BS	S	00LE1453	N/A	11/08/00	11/21/00

*96
12-07-00*



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EDMC



**Recra LabNet Philadelphia
Analytical Report**

Client: TNU HANFORD B00-029
RFW#: 0011L170
SDG/SAF#: H1126/B00-029

W.O.#: 10985-001-001-9999-00
Date Received: 11-07-00

PCB

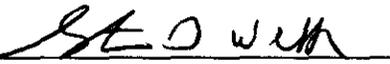
One (1) soil sample was collected on 11-03-00.

The sample and its associated QC samples were extracted on 11-08-00 and analyzed according to Recra OPs based on SW846, 3rd Edition procedures on 11-21-00. 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. 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 sample and its associated QC samples received a sulfuric acid cleanup.
4. The method blank was below the reporting limits for all target compounds.
5. All surrogate recoveries were outside the acceptance criteria. The surrogates showed a slight high bias (125-135%) and no target compounds were reported, so there is no impact on the data. A copy of the SDR has been enclosed.
6. All blank spike recoveries were 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.

10. 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.

by 
J. Michael Taylor
Vice President
Philadelphia Analytical Laboratory

12-11-0
Date

pefr:\group\data\pest\11L-170.pcb



RECRA

Sample Discrepancy Report (SDR)

SDR #: 606L299

Initiator: M. Kibel Batch: 0011170 Parameter: OPLB
Date: 11/27/00 Samples: 511 Matrix: Soil
Client: TNV Method: SW846/MCAVWW/CLP/ Prep Batch: 00LE1453

1. Reason for SDR

- a. COC Discrepancy Tech Profile Error Client Request Sampler Error on C-O-C
Transcription Error Wrong Test Code Other
b. General Discrepancy Missing Sample/Extract Container Broken Wrong Sample Pulled Label ID's Illegible
Hold Time Exceeded Insufficient Sample Preservation Wrong Received Past Hold
Improper Bottle Type Not Amenable to Analysis

Note: Verified by [Log-In] or [Prep Group] (circle)...signature/date:

c. QC Problem (Include all relevant specific results; attach data if necessary)
high surrogates in all samples (001, MJ, MSD, blank, and BS). Samples clean of targets
* see attached for details

2. Known or Probable Causes(s) (To be used for trend analysis)

- Lack of Organization Other (Please explain):
Lack of Training
Lack of Discipline
Lack of Resources
Lack of Time
Lack of Management Support

3. Discussion and Proposed Action

Other Description:

- Re-log
Entire Batch
Following Samples:
Re-leach
Re-extract
Re-digest
Revise EDD
Change Test Code to
Place On/Take Off Hold (circle)

Handwritten signature and date: 11/21/00

4. Project Manager Instructions...signature/date:

- Concur with Proposed Action
Disagree with Proposed Action; See Instruction
Include in Case Narrative
Client Contacted:
Date/Person
Add
Cancel

5. Final Action...signature/date:

- Verified re-[log][leach][extract][digest][analysis] (circle)
Included in Case Narrative
Hard Copy COC Revised
Electronic COC Revised
EDD Corrections Completed

Other Explanation:

When Final Action has been recorded, forward original to QA for distribution and filing.

Route/Distribution of SDR

- Initiator
Lab Manager: M. Taylor
Project Mgr: Stone/Carey/Johnson
Section Mgr: Wesson/Daniels
QA (file): Schrenkel
Data Management: Feldman
Sample Prep: Bickel/Kauffman

Route Distribution of Completed SDR

- Metals: Doughty
Inorganic: Perrone
GC/LC: Pastor
MS: Layman/Rycklak
Log-in: Keppel
Admin: Soos
Other:

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: 12/07/00 10:45

RFW Batch Number: 0011L170

Client: TNUHANFORD B00-029 H1126 Work Order: 10985001001 Page: 1

07

Sample Information	Cust ID:	B10NV4	B10NV4	B10NV4	PBLK GK	PBLK GK BS
	RFW#:	001	001 MS	001 MSD	00LE1453-MB1	00LE1453-MB1
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL
	D.F.:	1.00	1.00	1.00	1.00	1.00
	Units:	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
Surrogate:	Tetrachloro-m-xylene	130 * %	130 * %	132 * %	132 * %	125 * %
	Decachlorobiphenyl	128 * %	129 * %	129 * %	137 * %	138 * %
		-----fl-----	-----fl-----	-----fl-----	-----fl-----	-----fl-----
Aroclor-1016		37 U	37 U	37 U	33 U	33 U
Aroclor-1221		74 U	74 U	74 U	67 U	67 U
Aroclor-1232		37 U	37 U	37 U	33 U	33 U
Aroclor-1242		37 U	37 U	37 U	33 U	33 U
Aroclor-1248		37 U	37 U	37 U	33 U	33 U
Aroclor-1254		37 U	105 %	100 %	33 U	107 %
Aroclor-1260		37 U	37 U	37 U	33 U	33 U

al
to
12/07-01

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				B00-029-053		Page 1 of 8	
Collector Renee Nielson		Company Contact Mike Stankovich		Telephone No. 531-7620		Project Coordinator TRENT, SJ		Price Code NA Data Turnaround 14 days	
Project Designation 100 F Area - Quick Turn		Sampling Location 116-F-14		SAF No. B00-029		Air Quality []		14 days	
Ice Chest No. ERC-99-005 L10H		Field Logbook No. EL-1535		COA R16F142600		Method of Shipment Federal Express			
Shipped To TMA/RECRA		Offsite Property No. RSR # 106591		Bill of Lading/Air Bill No. NA					
POSSIBLE SAMPLE HAZARDS/REMARKS LTD. QTY shipment				Preservation		Cool 4C			
Special Handling and/or Storage				Type of Container		Cool 4C			
				No. of Container(s)					
				Volume					
SAMPLE ANALYSIS				PCBs - 8082		Semi-VOA - 8270A (TCL)			
Sample No.		Matrix *	Sample Date	Sample Time					TIC TO
B10NV4		SOIL	11/3/00	1115	X	X			B10119
CHAIN OF POSSESSION				Sign/Print Names		SPECIAL INSTRUCTIONS			
Relinquished By R. Nielson		Date/Time 11/3/00		Received By R. Thoren		Date/Time 11/3/00		Matrix *	
Relinquished By R. Thoren		Date/Time 11/06/00		Received By R. Thoren		Date/Time 0700		S-Soil	
Relinquished By R. Thoren		Date/Time 11/06/00		Received By FEDEX		Date/Time 11/06/00		SS-Sediment	
Relinquished By FEDEX		Date/Time 11-7-00 0930		Received By Thoren		Date/Time 11-7-00 0930		S-Slag	
Relinquished By		Date/Time		Received By		Date/Time		W-Water	
Relinquished By		Date/Time		Received By		Date/Time		O-Oil	
Relinquished By		Date/Time		Received By		Date/Time		A-Air	
Relinquished By		Date/Time		Received By		Date/Time		DS-Drum Solid	
Relinquished By		Date/Time		Received By		Date/Time		DL-Drum Liquid	
Relinquished By		Date/Time		Received By		Date/Time		T-Tissue	
Relinquished By		Date/Time		Received By		Date/Time		W1-Wipe	
Relinquished By		Date/Time		Received By		Date/Time		L-Liquid	
Relinquished By		Date/Time		Received By		Date/Time		V-Vegetation	
Relinquished By		Date/Time		Received By		Date/Time		X-Other	
LABORATORY SECTION		Received By		Title		Date/Time			
FINAL SAMPLE DISPOSITION		Disposal Method		Disposed By		Date/Time			

RT 11/06/00

Samples stored in Ref. # 1A at the 3728 Shipping Facility on 11/3/00. Collector not available to relinquish samples on 11/6/00 for shipment. RT 11/06/00

Recra LabNet - Lionville Laboratory
 BNA ANALYTICAL DATA PACKAGE FOR
 TNUHANFORD B00-029 H1126

DATE RECEIVED: 11/07/00

RFW LOT # :0011L170

CLIENT ID	RFW #	MTX	PREP #	COLLECTION	EXTR/PREP	ANALYSIS
B10NV4	001	S	00LE1450	11/03/00	11/08/00	11/21/00
B10NV4	001 MS	S	00LE1450	11/03/00	11/08/00	11/21/00
B10NV4	001 MSD	S	00LE1450	11/03/00	11/08/00	11/21/00

LAB QC:

SBLKGF	MB1	S	00LE1450	N/A	11/08/00	11/21/00
SBLKGF	MB1 BS	S	00LE1450	N/A	11/08/00	11/21/00



Client: TNU-HANFORD B00-029
RFW #: 0011L170
SDG/SAF #: H1126/B00-029

W.O. #: 10985-001-001-9999-00
Date Received: 11-07-00

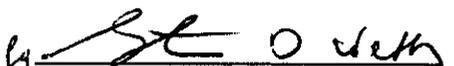
SEMIVOLATILE

One (1) soil sample was collected on 11-03-00.

The sample and its associated QC samples were extracted on 11-08-00 and analyzed according to criteria set forth in Recra OPs based on SW 846 Method 8270C for TCL target compounds on 11-21-00.

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 upon receipt has been recorded on the chain-of-custody.
2. The sample was extracted and analyzed within required holding times.
3. Two (2) of thirty (30) surrogate recoveries were outside EPA QC limits. However, EPA CLP surrogate recovery criteria were met (i.e., no more than one outlier per fraction {acid and base neutral} and no recoveries less than 10%).
4. One (1) of eleven (12) blank spike recoveries was outside EPA QC limits.
5. Four (4) of twenty-two (22) matrix spike recoveries were outside EPA QC limits
6. The method blank contained the common laboratory contaminants Bis(2-Ethylhexyl)phthalate at a level less than 2x the CRQL.
7. Manual integrations are performed according to OP L-QA-125 to produce quality data with the utmost integrity. All manual integrations are required to be technically valid and properly documented. Appropriate technical flags are defined in Section III ("Technical Flags For Manual Integration"); hard copies of the integrations have been included with the quantitation data.
8. "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."


J. Michael Taylor
VP, Laboratory General Manager
Lionville Laboratory

pef\group\data\bna\tnu-hanford-11-170.doc

12-13-00
Date



GLOSSARY OF BNA DATA

ABBREVIATIONS

- BS** = Indicates blank spike in which reagent grade water is spiked with the CLP matrix spike 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** = Suffix added to sample number to indicate that results are from a diluted analysis.
- NA** = Not Applicable.
- DF** = Dilution Factor.
- NR** = Not Required.
- SP, Z** = Indicates Spiked Compound.



GLOSSARY OF BNA DATA

DATA QUALIFIERS

- U** = Compound was analyzed for but not detected. The associated numerical value is the estimated sample quantitation limit which is included and corrected for dilution and percent moisture.
- J** = Indicates an estimated value. This flag is used under the following circumstances: 1) when estimating a concentration for tentatively identified compounds (TICs) where a 1:1 response is assumed; or 2) when the mass spectral data indicate the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero. For example, if the limit of detection 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. This flag is also used for a TIC as well as for a positively identified TCL compound.
- E** = Indicates that the compound was detected beyond the calibration range and was subsequently analyzed at a dilution.
- D** = Identifies all compounds identified in an analysis at a secondary dilution factor.
- I** = Interference.
- NQ** = Result qualitatively confirmed but not able to quantify.
- A** = Indicates that a TIC is a suspected aldol-condensation product.
- N** = Indicates presumptive evidence of a compound. This flag is only used for tentatively identified compounds (TICs), where the identification is based on a mass spectral library search. It is applied to all TIC results. For generic characterization of a TIC, such as chlorinated hydrocarbon, the N code is not used.
- X** = This flag is used for a TIC compound which is quantified relative to a response factor generated from a daily calibration standard (rather than quantified relative to the closest internal standard).
- Y** = Additional qualifiers used as required are explained in the case narrative.



TECHNICAL FLAGS FOR MANUAL INTEGRATION

Manual quan modifications or integrations are performed routinely to improve the data quality for a variety of technical reasons. Documentation of these modifications should be clear and concise. The following "flags" are used to indicate the technical reasons for quan modifications:

- MP** - **Missed Peak:** manually added peak not found by automatic quan program.
- PA** - **Peak Assignment:** quan report was changed to reflect correct peak assignment.
- RI** - **Routine Integration:** routine integrations are performed for some analytes that are consistently integrated improperly by the automatic integration programs. Examples are the dichlorobenzene isomers on the VOA packed column and benzo(b)fluoranthene/benzo(k)fluoranthene which are poorly resolved on the BNA column.
- SP** - **Split Peak:** the automatic integration improperly split the peak; a manual integration was performed to get the correct area.
- CB** - **Coelution/Background:** peak was manually integrated to eliminate contribution from coeluting compounds, background signal, or other interference.
- PI** - **Proper Integration:** a peak with poor or inconsistent integration (e.g., excessive tail) was properly integrated manually.

	Cust ID:	B10NV4	B10NV4	B10NV4	SBLKGF	SBLKGF BS
	RFW#:	001	001 MS	001 MSD	00LE1450-MB1	00LE1450-MB1
2-Chloronaphthalene		370 U	370 U	370 U	330 U	330 U
2-Nitroaniline		920 U	930 U	920 U	830 U	830 U
Dimethylphthalate		370 U	370 U	370 U	330 U	330 U
Acenaphthylene		370 U	370 U	370 U	330 U	330 U
2,6-Dinitrotoluene		370 U	370 U	370 U	330 U	330 U
3-Nitroaniline		920 U	930 U	920 U	830 U	830 U
Acenaphthene		370 U	87 %	91 %	330 U	84 %
2,4-Dinitrophenol		920 U	930 U	920 U	830 U	830 U
4-Nitrophenol		920 U	30 %	78 %	830 U	64 %
Dibenzofuran		370 U	370 U	370 U	330 U	330 U
2,4-Dinitrotoluene		370 U	92 * %	103 * %	330 U	90 * %
Diethylphthalate		370 U	370 U	370 U	330 U	330 U
4-Chlorophenyl-phenylether		370 U	370 U	370 U	330 U	330 U
Fluorene		370 U	370 U	370 U	330 U	330 U
4-Nitroaniline		920 U	930 U	920 U	830 U	830 U
4,6-Dinitro-2-methylphenol		920 U	930 U	920 U	830 U	830 U
N-Nitrosodiphenylamine (1)		370 U	370 U	370 U	330 U	330 U
4-Bromophenyl-phenylether		370 U	370 U	370 U	330 U	330 U
Hexachlorobenzene		370 U	370 U	370 U	330 U	330 U
Pentachlorophenol		920 U	1 * %	8 * %	830 U	21 %
Phenanthrene		370 U	370 U	370 U	330 U	330 U
Anthracene		370 U	370 U	370 U	330 U	330 U
Carbazole		370 U	370 U	370 U	330 U	330 U
Di-n-butylphthalate		370 U	370 U	370 U	330 U	330 U
Fluoranthene		370 U	370 U	370 U	330 U	330 U
Pyrene		370 U	101 %	110 %	330 U	104 %
Butylbenzylphthalate		370 U	370 U	370 U	330 U	330 U
3,3'-Dichlorobenzidine		370 U	370 U	370 U	330 U	330 U
Benzo(a)anthracene		370 U	370 U	370 U	330 U	330 U
Chrysene		370 U	370 U	370 U	330 U	330 U
bis(2-Ethylhexyl)phthalate		530 B	2600 B	270 JB	530	220 JB
Di-n-octyl phthalate		370 U	370 U	370 U	330 U	330 U
Benzo(b)fluoranthene		370 U	370 U	370 U	330 U	330 U
Benzo(k)fluoranthene		370 U	370 U	370 U	330 U	330 U
Benzo(a)pyrene		370 U	370 U	370 U	330 U	330 U
Indeno(1,2,3-cd)pyrene		370 U	370 U	370 U	330 U	330 U
Dibenz(a,h)anthracene		370 U	370 U	370 U	330 U	330 U
Benzo(g,h,i)perylene		370 U	370 U	370 U	330 U	330 U

(1) - Cannot be separated from Diphenylamine. *= Outside of EPA CLP QC limits.

2D
SOIL SEMIVOLATILE SURROGATE RECOVERY

Lab Name: Recra.LabNet

Contract: 0985-01-01

Case No.: TNUHANFORD B00-029 H1126

RFW Lot No.: 0011L170

	CLIENT SAMPLE NO.	S1 (NBZ)#	S2 (FBP)#	S3 (TPH)#	S4 (PHL)#	S5 (2FP)#	S6 (TBP)#	OTHER	TOT OUT
01	B10NV4	75	84	106	73	74	15 *		1
02	B10NV4MS	85	94	108	76	79	54		0
03	B10NV4MSD	90	97	123	84	82	97		0
04	SBLKGFLE1450-MB1	89	96	120	90	89	14 *		1
05	SBLKGFLE1450-MB1 BS	83	84	111	78	82	87		0

		QC LIMITS
S1 (NBZ)	= Nitrobenzene-d5	(23-120)
S2 (FBP)	= 2-Fluorobiphenyl	(30-115)
S3 (TPH)	= Terphenyl-d14	(18-137)
S4 (PHL)	= Phenol-d5	(24-113)
S5 (2FP)	= 2-Fluorophenol	(25-121)
S6 (TBP)	= 2,4,6-Tribromophenol	(19-122)

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

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

B10NV4

Lab Name: Recra.LabNet Work Order: 10985001001

Client: TNUHANFORD B00-029 H1126

Matrix: (soil/water) SOIL

Lab Sample ID: 0011L170-001

Sample wt/vol: 30.5 (g/mL) G

Lab File ID: A112113

Level: (low/med) LOW

Date Received: 11/07/00

% Moisture: 10 decanted: (Y/N) ___

Date Extracted: 11/08/00

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 11/21/00

Injection Volume: 2.0 (uL)

Dilution Factor: 1.00

GPC Cleanup: (Y/N) N

pH: _____

CONCENTRATION UNITS:

Number TICs found: 5

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	8.06	400	J
2.	UNKNOWN	20.12	1000	JB
3.	UNKNOWN	20.95	200	J
4.	UNKNOWN	26.60	100	JB
5.	ALKANE	27.10	90	J

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

SBLKGF

Lab Name: Recra.LabNet Work Order: 10985001001

Client: TNUHANFORD B00-029 H1126

Matrix: (soil/water) SOIL

Lab Sample ID: 00LE1450-MB1

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: A112108

Level: (low/med) LOW

Date Received: 11/08/00

% Moisture: _____ decanted: (Y/N) _____

Date Extracted: 11/08/00

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 11/21/00

Injection Volume: 2.0 (uL)

Dilution Factor: 1.00

GPC Cleanup: (Y/N) N

pH: _____

CONCENTRATION UNITS:

Number TICs found: 5

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	20.12	900	J
2.	UNKNOWN	23.01	100	J
3.	UNKNOWN	23.05	200	J
4.	UNKNOWN	23.36	400	J
5.	UNKNOWN	26.59	100	J

Bechtel Hanford Inc.		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST				B00-029-053	Page 1 of 1	
Collector Renee Nielson		Company Contact Mike Stankovich		Telephone No. 531-7620		Project Coordinator TRENT, SJ	Price Code NA	Data Turnaround
Project Designation 100 F Area - Quick Turn		Sampling Location 116-F-14		SAF No. B00-029		Air Quality []	14 days	
Ice Chest No. ERC-99-005 Loh		Field Logbook No. EL-1535		COA R16F142600		Method of Shipment Federal Express		12
Shipped To TMA/RECRA		Offsite Property No. RSR # 106591		Bill of Lading/Air Bill No. NA				
POSSIBLE SAMPLE HAZARDS/REMARKS LTD. QTY shipment		Preservation	Cool 4C	Cool 4C				
Special Handling and/or Storage		Type of Container	aG	aG				
		No. of Container(s)	1	1				
		Volume	60mL	120mL				
SAMPLE ANALYSIS		PCBs - 802	Semi-VOA - 8270A (TCL)					
Sample No.	Matrix *	Sample Date	Sample Time					TIC TO
B10NV4	SOIL	11/3/00	1115	X	X			B10119
CHAIN OF POSSESSION		Sign/Print Names		SPECIAL INSTRUCTIONS				Matrix *
Relinquished By R. Nielson	Date/Time 11/3/00	Received By R. Thoren	Date/Time 11/3/00	<p>Samples stored in Ref. # 1A at the 3728 Shipping Facility on 11/3/00. Collector not available to relinquish samples on 11/16/00 for shipment.</p> <p>PT 11/16/00</p>				5 - Soil
Relinquished By Removed from Ref # 1A 3728	Date/Time 11/06/00	Received By R. Thoren	Date/Time 11/06/00					5 - Sediment
Relinquished By R. Thoren	Date/Time 11/06/00	Received By FEDEX	Date/Time					S - Sludge
Relinquished By FEDEX	Date/Time 11/7/00	Received By TKappal	Date/Time 11/7/00					W - Water
Relinquished By	Date/Time	Received By	Date/Time					O - Oil
Relinquished By	Date/Time	Received By	Date/Time	A - Ash	DS - Dross Solids	DL - Dross Liquids	T - Tissue	W - Wipe
Relinquished By	Date/Time	Received By	Date/Time	L - Liquid	V - Vegetation	X - Other		
LABORATORY SECTION	Received By	Title	Date/Time					
FINAL SAMPLE DISPOSITION	Disposal Method	Disposed By	Date/Time					

Figure 1. Sample Check-in List

Date/Time Received: 11-7-00 / 0930

SDG#: 0011170

Work Order Number: -

SAF# B00-029

Shipping Container ID: -

Chain of Custody # B00-029-053

- 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 2.0°C
- 5. Vermiculite/packing materials is Wet Dry
- 6. Number of samples in shipping container: 2
- 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: T. Beppel / Becca Date: 11-7-00

Telephoned to: _____ On _____ By _____

FedEx USA Airbill

822771885536

Form 18 0215

SNA32

RECIPIENT: PEEL HERE

1 From This portion can be removed for Recipient's records
 Date **11-6-00** FedEx Tracking Number **822771885536**
 Sender's Name **G.O. BOWESS** Phone **509 376-7627**
 Company **WASTE MANAGEMENT TECHNICAL SERVICES/U.S. DOE**
 Address **2355 STEVENS DR MS G1-14 (EMERGENCY CONTACT) 1-888-766-0771**
 City **RICHLAND** State **WA** ZIP **99352**

2 Your Internal Billing Reference **R16F142600 RADIOACTIVE MATERIAL, EXCEPTED PACKAGE-LIMITED QUANTITY OF MATERIAL**
RMBN-4260 EMERGENCY RESPONSE GUIDE #161 ATTACHED

3 To Recipient's Name **ORLETTE JOHNSON** Phone **610 280-3012**
 Company **RECRA LAB NET**
 Address **208 WELSH POOL ROAD**
 City **LIONVILLE** State **PA** ZIP **19341-1333**

4a Express Package Service Packages up to 150 lbs.
 FedEx Priority Overnight Next business morning
 FedEx Standard Overnight Next business afternoon
 FedEx First Overnight Earliest next business morning delivery to select locations
 FedEx 2Day* Second business day
 FedEx Express Saver* Third business day
 4b Express Freight Service Packages over 150 lbs.
 FedEx 1Day Freight* Next business day
 FedEx 2Day Freight Second business day
 FedEx 3Day Freight Third business day

5 Packaging
 FedEx Envelope/Letter*
 FedEx Pak*
 Other Pkg. Includes FedEx Box, FedEx Tube, and Custom Pkg.

6 Special Handling
 SATURDAY Delivery Available for FedEx Priority Overnight and FedEx 2Day to select ZIP codes
 SUNDAY Delivery Available for FedEx Priority Overnight to select ZIP codes
 HOLD Weekday at FedEx Location Not available with FedEx First Overnight
 HOLD Saturday at FedEx Location Available for FedEx Priority Overnight and FedEx 2Day to select locations
 Does this shipment contain dangerous goods?
 No Yes As per attached Shipper's Declaration Yes Shipper's Declaration not required
 Dry Ice Dry Ice 5, 101 185
 Cargo Aircraft Only

7 Payment Method
 Sender Account (See Shipper's Declaration) Recipient Third Party Credit Card Cash/Check
 Total Packages **1** Total Weight **22** Total Charges
 *Our liability is limited to \$100 unless you declare a higher value. See the FedEx Service Guide for details.

8 Release Signature See to authorize delivery without obtaining signature
 By signing you authorize us to deliver this shipment without obtaining a signature and agree to indemnify and hold us harmless from any resulting claims
 Questions? Call 1-800-Go-FedEx (608 463 3339)
 Visit our Web site at www.fedex.com
 For Dom. Mail: 1-800-424-6463 For Int'l: 1-800-424-6463



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