H0510-7mA/RECRA

RECRA ENVIRONMENTAL INC.

Chemical and Environmental Measurement Information

Recra LabNet Philadelphia
Analytical Report
****REVISION****

Client : TNU-HANFORD B99-078
RFW# : 9909L951
SDG/SAF #: H0510/B99-078

W.O. #: 10985-001-001-9999-00
Date Received: 09-01-99

RECEIVED APR 11 2000 EDMC

SEMIVOLATILE

This narrative was corrected to add the TIC search for Tributylphosphate.

Seven (7) soil samples were collected on 08-30-99.

The samples and their associated QC samples were extracted on 09-08-99 and analyzed according to criteria set forth in Recra OPs based on SW 846 Method 8270B for TCL Semivolatile target compounds on 09-24,25-99.

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 temperatures upon receipt have been recorded on the chain-of-custody.
2. The required holding times for extraction and analysis were met.
3. Non-target compounds were detected in the samples.
4. These samples were spectrally searched for Butylated Hydroxytoluene and Tributylphosphate; however, they were not identified in the samples.
5. All surrogate recoveries were within EPA QC limits.
6. All matrix spike recoveries were within EPA QC limits.
7. All blank spike recoveries were within EPA QC limits.

by J. Michael Taylor
Vice President
Philadelphia Analytical Laboratory

01-27-00
Date

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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 18 pages.

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208 Welsh Pool Road • Lionville, PA 19341-1333 • (610) 280-3000 • Fax (610) 280-3041

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.

mmz\10-94\gloss.bna

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.

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Recra LabNet - Lionville Laboratory

Semivolatiles by GC/MS, HSL List

Report Date: 09/30/99 16:08

RFW Batch Number: **9909L951** Client: **TNU-HANFORD B99-078** Work Order: 10985001001 Page: 1a

	Cust ID:	B0W6B2		B0W6B2		B0W6B2		B0W6B3		B0W6B4		B0W6B5	
Sample Information	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 Recovery	Nitrobenzene-d5	86	%	75	%	77	%	75	%	77	%	85	%
	2-Fluorobiphenyl	83	%	74	%	79	%	74	%	78	%	86	%
	Terphenyl-d14	90	%	78	%	79	%	78	%	78	%	91	%
	Phenol-d5	77	%	64	%	67	%	64	%	66	%	74	%
	2-Fluorophenol	75	%	65	%	67	%	63	%	65	%	72	%
	2,4,6-Tribromophenol	69	%	65	%	62	%	54	%	54	%	56	%
			fl		fl		fl		fl		fl		fl
Phenol		360	U	65	%	64	%	340	U	350	U	340	U
bis(2-Chloroethyl)ether		360	U	360	U	360	U	340	U	350	U	340	U
2-Chlorophenol		360	U	67	%	66	%	340	U	350	U	340	U
1,3-Dichlorobenzene		360	U	360	U	360	U	340	U	350	U	340	U
1,4-Dichlorobenzene		360	U	74	%	74	%	340	U	350	U	340	U
1,2-Dichlorobenzene		360	U	360	U	360	U	340	U	350	U	340	U
2-Methylphenol*		360	U	360	U	360	U	340	U	350	U	340	U
2,2'-oxybis(1-Chloropropane)		360	U	360	U	360	U	340	U	350	U	340	U
4-Methylphenol		360	U	360	U	360	U	340	U	350	U	340	U
N-Nitroso-di-n-propylamine		360	U	84	%	85	%	340	U	350	U	340	U
Hexachloroethane		360	U	360	U	360	U	340	U	350	U	340	U
Nitrobenzene		360	U	360	U	360	U	340	U	350	U	340	U
Isophorone		360	U	360	U	360	U	340	U	350	U	340	U
2-Nitrophenol		360	U	360	U	360	U	340	U	350	U	340	U
2,4-Dimethylphenol		360	U	360	U	360	U	340	U	350	U	340	U
bis(2-Chloroethoxy)methane		360	U	360	U	360	U	340	U	350	U	340	U
2,4-Dichlorophenol		360	U	360	U	360	U	340	U	350	U	340	U
1,2,4-Trichlorobenzene		360	U	76	%	77	%	340	U	350	U	340	U
Naphthalene		360	U	360	U	360	U	340	U	350	U	340	U
4-Chloroaniline		360	U	360	U	360	U	340	U	350	U	340	U
Hexachlorobutadiene		360	U	360	U	360	U	340	U	350	U	340	U
4-Chloro-3-methylphenol		360	U	64	%	60	%	340	U	350	U	340	U
2-Methylnaphthalene		360	U	360	U	360	U	340	U	350	U	340	U
Hexachlorocyclopentadiene		360	U	360	U	360	U	340	U	350	U	340	U
2,4,6-Trichlorophenol		360	U	360	U	360	U	340	U	350	U	340	U
2,4,5-Trichlorophenol		900	U	900	U	900	U	860	U	860	U	860	U

*= Outside of EPA CLP QC limits.

RFW Batch Number: 9909L951 Client: TNU-HANFORD B99-078 Work Order: 10985001001 Page: 1b

Cust ID:	B0W6B2		B0W6B2		B0W6B2		B0W6B3		B0W6B4		B0W6B5	
RFW#:	001		001 MS		001 MSD		002		003		004	
2-Chloronaphthalene	360	U	360	U	360	U	340	U	350	U	340	U
2-Nitroaniline	900	U	900	U	900	U	860	U	860	U	860	U
Dimethylphthalate	360	U	360	U	360	U	340	U	350	U	340	U
Acenaphthylene	360	U	360	U	360	U	340	U	350	U	340	U
2,6-Dinitrotoluene	360	U	360	U	360	U	340	U	350	U	340	U
3-Nitroaniline	900	U	900	U	900	U	860	U	860	U	860	U
Acenaphthene	360	U	80	%	80	%	340	U	350	U	340	U
2,4-Dinitrophenol	900	U	900	U	900	U	860	U	860	U	860	U
4-Nitrophenol	900	U	53	%	45	%	860	U	860	U	860	U
Dibenzofuran	360	U	360	U	360	U	340	U	350	U	340	U
2,4-Dinitrotoluene	360	U	77	%	74	%	340	U	350	U	340	U
Diethylphthalate	360	U	360	U	360	U	340	U	350	U	340	U
4-Chlorophenyl-phenylether	360	U	360	U	360	U	340	U	350	U	340	U
Fluorene	360	U	360	U	360	U	340	U	350	U	340	U
4-Nitroaniline	900	U	900	U	900	U	860	U	860	U	860	U
4,6-Dinitro-2-methylphenol	900	U	900	U	900	U	860	U	860	U	860	U
N-Nitrosodiphenylamine (1)	360	U	360	U	360	U	340	U	350	U	340	U
4-Bromophenyl-phenylether	360	U	360	U	360	U	340	U	350	U	340	U
Hexachlorobenzene	360	U	360	U	360	U	340	U	350	U	340	U
Pentachlorophenol	900	U	63	%	58	%	860	U	860	U	860	U
Phenanthrene	360	U	360	U	360	U	340	U	350	U	340	U
Anthracene	360	U	360	U	360	U	340	U	350	U	340	U
Carbazole	360	U	360	U	360	U	340	U	350	U	340	U
Di-n-butylphthalate	360	U	20	J	360	U	340	U	21	J	340	U
Fluoranthene	360	U	360	U	360	U	340	U	350	U	340	U
Pyrene	360	U	81	%	82	%	340	U	350	U	340	U
Butylbenzylphthalate	360	U	360	U	360	U	340	U	350	U	340	U
3,3'-Dichlorobenzidine	360	U	360	U	360	U	340	U	350	U	340	U
Benzo(a)anthracene	360	U	360	U	360	U	340	U	350	U	340	U
Chrysene	360	U	360	U	360	U	340	U	350	U	340	U
bis(2-Ethylhexyl)phthalate	360	U	26	J	360	U	340	U	350	U	340	U
Di-n-octyl phthalate	360	U	360	U	360	U	340	U	350	U	340	U
Benzo(b)fluoranthene	360	U	360	U	360	U	340	U	350	U	340	U
Benzo(k)fluoranthene	360	U	360	U	360	U	340	U	350	U	340	U
Benzo(a)pyrene	360	U	360	U	360	U	340	U	350	U	340	U
Indeno(1,2,3-cd)pyrene	360	U	360	U	360	U	340	U	350	U	340	U
Dibenz(a,h)anthracene	360	U	360	U	360	U	340	U	350	U	340	U
Benzo(g,h,i)perylene	360	U	360	U	360	U	340	U	350	U	340	U

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

Recra LabNet - Lionville Laboratory

Semivolatiles by GC/MS, HSL List

Report Date: 09/30/99 16:08

RFW Batch Number: **9909L951** Client: **TNU-HANFORD B99-078** Work Order: 10985001001 Page: 2a

	Cust ID:	B0W6B6		B0W6B7		B0W6B8		SBLKCM		SBLKCM BS	
Sample Information	RFW#:	005		006		007		99LE1098-MB1		99LE1098-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 Recovery	Nitrobenzene-d5	81	%	75	%	83	%	89	%	86	%
	2-Fluorobiphenyl	77	%	74	%	80	%	89	%	84	%
	Terphenyl-d14	81	%	75	%	88	%	90	%	86	%
	Phenol-d5	68	%	65	%	70	%	75	%	74	%
	2-Fluorophenol	68	%	64	%	67	%	75	%	72	%
	2,4,6-Tribromophenol	56	%	50	%	51	%	64	%	71	%
Phenol		350	U	360	U	350	U	330	U	69	%
bis(2-Chloroethyl)ether		350	U	360	U	350	U	330	U	330	U
2-Chlorophenol		350	U	360	U	350	U	330	U	71	%
1,3-Dichlorobenzene		350	U	360	U	350	U	330	U	330	U
1,4-Dichlorobenzene		350	U	360	U	350	U	330	U	81	%
1,2-Dichlorobenzene		350	U	360	U	350	U	330	U	330	U
2-Methylphenol		350	U	360	U	350	U	330	U	330	U
2,2'-oxybis(1-Chloropropane)		350	U	360	U	350	U	330	U	330	U
4-Methylphenol		350	U	360	U	350	U	330	U	330	U
N-Nitroso-di-n-propylamine		350	U	360	U	350	U	330	U	90	%
Hexachloroethane		350	U	360	U	350	U	330	U	330	U
Nitrobenzene		350	U	360	U	350	U	330	U	330	U
Isophorone		350	U	360	U	350	U	330	U	330	U
2-Nitrophenol		350	U	360	U	350	U	330	U	330	U
2,4-Dimethylphenol		350	U	360	U	350	U	330	U	330	U
bis(2-Chloroethoxy)methane		350	U	360	U	350	U	330	U	330	U
2,4-Dichlorophenol		350	U	360	U	350	U	330	U	330	U
1,2,4-Trichlorobenzene		350	U	360	U	350	U	330	U	83	%
Naphthalene		350	U	360	U	350	U	330	U	330	U
4-Chloroaniline		350	U	360	U	350	U	330	U	330	U
Hexachlorobutadiene		350	U	360	U	350	U	330	U	330	U
4-Chloro-3-methylphenol		350	U	360	U	350	U	330	U	67	%
2-Methylnaphthalene		350	U	360	U	350	U	330	U	330	U
Hexachlorocyclopentadiene		350	U	360	U	350	U	330	U	330	U
2,4,6-Trichlorophenol		350	U	360	U	350	U	330	U	330	U
2,4,5-Trichlorophenol		880	U	900	U	860	U	840	U	840	U

*= Outside of EPA CLP QC limits.

Cust ID:	B0W6B6		B0W6B7		B0W6B8		SBLKCM		SBLKCM BS	
RFW#:	005		006		007		99LE1098-MB1		99LE1098-MB1	
2-Chloronaphthalene	350	U	360	U	350	U	330	U	330	U
2-Nitroaniline	880	U	900	U	860	U	840	U	840	U
Dimethylphthalate	350	U	360	U	350	U	330	U	330	U
Acenaphthylene	350	U	360	U	350	U	330	U	330	U
2,6-Dinitrotoluene	350	U	360	U	350	U	330	U	330	U
3-Nitroaniline	880	U	900	U	860	U	840	U	840	U
Acenaphthene	350	U	360	U	350	U	330	U	84	%
2,4-Dinitrophenol	880	U	900	U	860	U	840	U	840	U
4-Nitrophenol	880	U	900	U	860	U	840	U	55	%
Dibenzofuran	350	U	360	U	350	U	330	U	330	U
2,4-Dinitrotoluene	350	U	360	U	350	U	330	U	81	%
Diethylphthalate	350	U	360	U	350	U	330	U	330	U
4-Chlorophenyl-phenylether	350	U	360	U	350	U	330	U	330	U
Fluorene	350	U	360	U	350	U	330	U	330	U
4-Nitroaniline	880	U	900	U	860	U	840	U	840	U
4,6-Dinitro-2-methylphenol	880	U	900	U	860	U	840	U	840	U
N-Nitrosodiphenylamine (1)	350	U	360	U	350	U	330	U	330	U
4-Bromophenyl-phenylether	350	U	360	U	350	U	330	U	330	U
Hexachlorobenzene	350	U	360	U	350	U	330	U	330	U
Pentachlorophenol	880	U	900	U	860	U	840	U	69	%
Phenanthrene	350	U	360	U	350	U	330	U	330	U
Anthracene	350	U	360	U	350	U	330	U	330	U
Carbazole	350	U	360	U	350	U	330	U	330	U
Di-n-butylphthalate	22	J	360	U	350	U	330	U	330	U
Fluoranthene	350	U	360	U	350	U	330	U	330	U
Pyrene	350	U	360	U	350	U	330	U	83	%
Butylbenzylphthalate	350	U	360	U	350	U	330	U	330	U
3,3'-Dichlorobenzidine	350	U	360	U	350	U	330	U	330	U
Benzo(a)anthracene	350	U	360	U	350	U	330	U	330	U
Chrysene	350	U	360	U	350	U	330	U	330	U
bis(2-Ethylhexyl)phthalate	350	U	360	U	350	U	330	U	330	U
Di-n-octyl phthalate	350	U	360	U	350	U	330	U	330	U
Benzo(b)fluoranthene	350	U	360	U	350	U	330	U	330	U
Benzo(k)fluoranthene	350	U	360	U	350	U	330	U	330	U
Benzo(a)pyrene	350	U	360	U	350	U	330	U	330	U
Indeno(1,2,3-cd)pyrene	350	U	360	U	350	U	330	U	330	U
Dibenz(a,h)anthracene	350	U	360	U	350	U	330	U	330	U
Benzo(g,h,i)perylene	350	U	360	U	350	U	330	U	330	U

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

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

B0W6B2

Lab Name: Recra.LabNet Work Order: 10985001001

Client: TNU-HANFORD B99-078

Matrix: (soil/water) SOIL Lab Sample ID: 9909L951-001

Sample wt/vol: 30.0 (g/mL) G Lab File ID: D092415

Level: (low/med) LOW Date Received: 09/01/99

% Moisture: 7 decanted: (Y/N) Date Extracted: 09/08/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 09/24/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH:

Number TICs found: 20 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	ALDOL CONDENSATE	10.01	70	JA
2.	ADIPATE	23.38	200	J
3.	ADIPATE	23.42	1000	J
4.	ADIPATE	23.46	2000	J
5.	ADIPATE	23.82	4000	J
6.	ADIPATE	24.00	70	J
7.	ADIPATE	24.18	3000	J
8.	ADIPATE	24.42	100	J
9.	ADIPATE	24.47	500	J
10.	ADIPATE	24.59	200	J
11.	ADIPATE	24.64	600	J
12.	ADIPATE	24.73	800	J
13.	ADIPATE	24.78	2000	J
14.	ADIPATE	24.89	400	J
15.	ADIPATE	25.06	600	J
16.	ADIPATE	25.22	2000	J
17.	ADIPATE	25.30	2000	J
18.	ADIPATE	25.78	1000	J
19.	ADIPATE	26.07	90	J
20.	ADIPATE	26.49	90	J

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

B0W6B3

Lab Name: Recra.LabNet Work Order: 10985001001

Client: TNU-HANFORD B99-078

Matrix: (soil/water) SOIL Lab Sample ID: 9909L951-002

Sample wt/vol: 30.0 (g/mL) G Lab File ID: D092508

Level: (low/med) LOW Date Received: 09/01/99

% Moisture: 3 decanted: (Y/N) __ Date Extracted: 09/08/99

Concentrated Extract Volume: 1000(uL) Date Analyzed: 09/25/99

Injection Volume: 2.0(uL) Dilution Factor: 1.00

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

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	25.33	300	J

FORM 1 SV-TIC RFW (v3.3)

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

B0W6B4

Lab Name: Recra.LabNet Work Order: 10985001001

Client: TNU-HANFORD B99-078

Matrix: (soil/water) SOIL Lab Sample ID: 9909L951-003

Sample wt/vol: 30.0 (g/mL) G Lab File ID: D092509

Level: (low/med) LOW Date Received: 09/01/99

% Moisture: 4 decanted: (Y/N) __ Date Extracted: 09/08/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 09/25/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.00

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

Number TICs found: 2 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	ALKANE	23.13	80	J
2.	UNKNOWN	25.32	300	J

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

B0W6B5

Lab Name: Recra.LabNet Work Order: 10985001001

Client: TNU-HANFORD B99-078

Matrix: (soil/water) SOIL Lab Sample ID: 9909L951-004

Sample wt/vol: 30.0 (g/mL) G Lab File ID: D092510

Level: (low/med) LOW Date Received: 09/01/99

% Moisture: 3 decanted: (Y/N) __ Date Extracted: 09/08/99

Concentrated Extract Volume: 1000(uL) Date Analyzed: 09/25/99

Injection Volume: 2.0(uL) Dilution Factor: 1.00

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

Number TICs found: 3

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	ALDOL CONDENSATE	9.23	70	JA
2.	ALKANE	23.13	90	J
3.	UNKNOWN	25.35	70	J

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

B0W6B6

Lab Name: Recra.LabNet Work Order: 10985001001

Client: TNU-HANFORD B99-078

Matrix: (soil/water) SOIL Lab Sample ID: 9909L951-005

Sample wt/vol: 30.0 (g/mL) G Lab File ID: D092511

Level: (low/med) LOW Date Received: 09/01/99

% Moisture: 6 decanted: (Y/N) __ Date Extracted: 09/08/99

Concentrated Extract Volume: 1000(uL) Date Analyzed: 09/25/99

Injection Volume: 2.0(uL) Dilution Factor: 1.00

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

Number TICs found: 2

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	ALKANE	23.13	100	J
2.	UNKNOWN	25.34	90	J

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

B0W6B7

Lab Name: Recra.LabNet Work Order: 10985001001

Client: TNU-HANFORD B99-078

Matrix: (soil/water) SOIL Lab Sample ID: 9909L951-006

Sample wt/vol: 30.0 (g/mL) G Lab File ID: D092512

Level: (low/med) LOW Date Received: 09/01/99

% Moisture: 7 decanted: (Y/N) __ Date Extracted: 09/08/99

Concentrated Extract Volume: 1000(uL) Date Analyzed: 09/25/99

Injection Volume: 2.0(uL) Dilution Factor: 1.00

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

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

B0W6B8

Lab Name: Recra.LabNet Work Order: 10985001001

Client: TNU-HANFORD B99-078

Matrix: (soil/water) SOIL Lab Sample ID: 9909L951-007

Sample wt/vol: 30.0 (g/mL) G Lab File ID: D092513

Level: (low/med) LOW Date Received: 09/01/99

% Moisture: 4 decanted: (Y/N) __ Date Extracted: 09/08/99

Concentrated Extract Volume: 1000(uL) Date Analyzed: 09/25/99

Injection Volume: 2.0(uL) Dilution Factor: 1.00

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

Number TICs found: 2

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	ALDOL CONDENSATE	9.23	100	J
2.	UNKNOWN	25.33	100	J

Recra LabNet - Lionville Laboratory
BNA ANALYTICAL DATA PACKAGE FOR
TNU-HANFORD B99-078

DATE RECEIVED: 09/01/99 RFW LOT # :9909L951

CLIENT ID	RFW #	MTX	PREP #	COLLECTION	EXTR/PREP	ANALYSIS
B0W6B2	001	S	99LE1098	08/30/99	09/08/99	09/24/99
B0W6B2	001 MS	S	99LE1098	08/30/99	09/08/99	09/25/99
B0W6B2	001 MSD	S	99LE1098	08/30/99	09/08/99	09/25/99
B0W6B3	002	S	99LE1098	08/30/99	09/08/99	09/25/99
B0W6B4	003	S	99LE1098	08/30/99	09/08/99	09/25/99
B0W6B5	004	S	99LE1098	08/30/99	09/08/99	09/25/99
B0W6B6	005	S	99LE1098	08/30/99	09/08/99	09/25/99
B0W6B7	006	S	99LE1098	08/30/99	09/08/99	09/25/99
B0W6B8	007	S	99LE1098	08/30/99	09/08/99	09/25/99

LAB QC:

SBLKCM	MB1	S	99LE1098	N/A	09/08/99	09/24/99
SBLKCM	MB1 BS	S	99LE1098	N/A	09/08/99	09/24/99

RECRA LabNet Use Only
99091951

Custody Transfer Record/Lab Work Request

Page 1 of 1

RECRA LabNet

ALL FIELD PERSONNEL: COMPLETE ONLY SHADED AREAS (8) perrone wet lab

Client: TNU-Hanford B99-078
Est. Final Proj. Sampling Date:
Project #: 10985-001-001-9999-00
Project Contact/Phone #:
RECRA Project Manager: OJ
QC: spec Del: std TAT: 30 day
Date Rec'd: 9/1/99 Date Due: 10/1/99
Account #:

Refrigerator #		1	6					6		6	6				
#/Type Container	Liquid														
	Solid	1g	1g					1g		1g	1g				
Volume	Liquid														
	Solid	250	500					500		250	UT				
Preservatives															
ANALYSES REQUESTED →	ORGANIC: VOA	BNA	Pest/PCB	Herb				INORG: Metal	CN						

RECRA LabNet Use Only

MATRIX CODES:	Lab ID	Client ID/Description	Matrix QC Chosen (✓) MS	MSD	Matrix	Date Collected	Time Collected	02 24H OGCSC	02 25H ODRO	GRO	Met①	IPH	Anig①
S - Soil, SE - Sediment, SO - Solid, SL - Sludge, W - Water, O - Oil, A - Air, DS - Drum Solids, DL - Drum Liquids, L - EP/TCLP Leachate, WI - Wipe, X - Other, F - Fish	001	BOW6B32			S	8/30/99	0745	✓	✓	✓	✓	✓	✓
	002	3					0800						
	003	4					0812						
	004	5					0831						
	005	6					0848						
	006	7					0904						
	007	8					0925						

Met① = As, Ba, Be, Cd, Cr, Cu, Pb, Ni, Se, Ag, V, Zn, Hg, ICRG

Special Instructions:

Run matrix QC
Sref# B99-078

COMPOSITE WASTE

9/8/99 - 1N3N2 added to Inorg① list.

OGRSC = 1-propanol + ethanol

DATE/REVISIONS:

1. Sample #001 (1000ml ag) was
2. received broken.
3. Run analyses from other
4. jars.
5. Anig① = ICCL, ICFL, ICNO2, ICNO3, ICPO4,
6. ICSO4, ISFD, INH3N, ICNTU, IN3N2

RECRA LabNet Use Only

Samples were: 1) Shipped ✓ or Hand Delivered ___
Airbill #* ___
2) Ambient or Chilled
3) Received in Good Condition Y or N
4) Labels Indicate Properly Preserved Y or N
5) Received Within Holding Times Y or N

COC Tape was: 1) Present on Outer Package Y or N
2) Unbroken on Outer Package Y or N
3) Present on Sample Y or N
4) Unbroken on Sample Y or N
COC Record Present Upon Sample Rec'd Y or N
Cooler Temp. 5.5 °C

Discrepancies Between Samples Labels and COC Record? Y or N
NOTES:
*4235795288 63-4.3' 4235795288 52

Relinquished by	Received by	Date	Time
Fed Ex	D. Smith	9/1/99	0930

Relinquished by	Received by	Date	Time
Original			
	Rewritten		

9909L951

Bechtel Hanford Inc.	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	B99-078-89	Page 1 of 1

Collector: Bowers/Porter/Nielson	Company Contact: Chris Cearlock	Telephone No.: 372-9574	Project Coordinator: TRENT, SJ
Price Code: 8N	Data Turnaround: 45 Days		
Project Designation: 200 Area Source characterization - 200-CW-1 OU	Sampling Location: GP-5 <15' bgs	SAF No.: B99-078	
Ice Chest No.: ERC96-066 / ERC96-063	Field Logbook No.: EL-1511	Method of Shipment: Federal Express	
Shipped To: TMA/RECRA 8-30-99	Offsite Property No.: A990236	Bill of Lading/Air Bill No.: 4235 7952 8852 (682-684), 8863 (685-688)	
		COA: B20CW1 67/C	

POSSIBLE SAMPLE HAZARDS/REMARKS											
	Preservation	None	Cool 4C	None	Cool 4C	None	Cool 4C	None			
	Type of Container	aG	aG	aG	aG	aG	aG	aG			
Special Handling and/or Storage	No. of Container(s)	1	1	1	1	1	1	1			
	Volume	60mL	250mL	250mL	500mL	500mL	1000mL	1000mL			
SAMPLE ANALYSIS		Isotopic Uranium	VOA - 8260A (TCL), VOA - 8260A (Add-On) (1-Propanol, Ethanol)	pH (Soil) - 9045	Semi-VOA - 8270A (TCL), TPH-Diesel Range - WTPH-D, PCBs - 8082	See item (1) in Special Instructions	See item (2) in Special Instructions	See item (3) in Special Instructions			

	Sample No.	Matrix *	Sample Date	Sample Time									
001	B0W6B2	Soil	8-30-99	0745		X	X	X	X	X		3-4'	
002	BOW6B3	Soil	8-30-99	0800		X	X	X	X	X		5.5-6.5'	
003	BOW6B4	Soil	8-30-99	0812		X	X	X	X	X		8'-9'	
004	BOW6B5	Soil	8-30-99	0831		X	X	X	X	X		10.5'-11.5'	
005	BOW6B6	Soil	8-30-99	0848		X	X	X	X	X		14'	15'

CHAIN OF POSSESSION	Sign/Print Names		
Relinquished By: Doug Bowers	Date/Time: 8-30-99/1130	Received By: Ref 1B	Date/Time: 8-30-99/1130
Relinquished By: Ref 1B	Date/Time: 8-30-99 1530	Received By: C Fuller	Date/Time: 8/30/99 1530
Relinquished By: C Fuller	Date/Time: 8/31/99 1300	Received By: FEDEX	Date/Time: 8/31/99 1300
Relinquished By: Fed Ex	Date/Time: 9-1-99/0930	Received By: D Smith	Date/Time: 9-1-99/0930

SPECIAL INSTRUCTIONS

See chain of custody comments on SAF B99-078.

COLLECTOR UNAVAILABLE TO SIGN

(1) ICP Metals - 6010A (Supertrace) (Arsenic, Barium, Beryllium, Cadmium, Chromium, Copper, Lead, Nickel, Selenium, Silver, Vanadium, Zinc); Mercury - 7471 - (CV); Chromium Hex - 7196

(2) NO2/NO3 - 353.1; IC Anions - 300.0 (Chloride, Fluoride, Nitrate, Nitrite, Phosphate, Sulfate); Sulfides - 9030; Ammonia - 350.3; Total Cyanide - 9010

(3) Gamma Spectroscopy (Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155); Gamma Spec - Add-on (Americium-241); Strontium-89,90 -- Total Sr; Total Uranium (Uranium); Isotopic Plutonium; Isotopic Thorium (Thorium-232); Americium-241

use Box 528 to ship

Matrix *: Soil, Water, Vapor, Other Solid, Other Liquid

LABORATORY SECTION	Received By	Title	Date/Time
FINAL SAMPLE DISPOSITION	Disposal Method	Disposed By	Date/Time

4235 7952 8863 -4.3°

4235 7952 8852 -5.5°