H0499 TMA/RECRA

RECRA ENVIRONMENTAL INC.

0052705

Chemical and Environmental Measurement Information

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

Client : TNU-HANFORD B99-078
RFW# : 9908L850
SDG/SAF #: H0499/B99-078

W.O. #: 10985-001-001-9999-00
Date Received: 08-24-99

RECEIVED MAR 2 2 2000 EDMC

SEMIVOLATILE

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

Seven (7) soil samples were collected on 08-19-99.

The samples and their associated QC samples were extracted on 08-31-99 and analyzed according to criteria set forth in Recra OPs based on SW 846 Method 8270B for TCL Semivolatile target compounds on 09-03,18,20-99.

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. All surrogate recoveries were within EPA QC limits.
5. All matrix spike recoveries were within EPA QC limits.
6. All blank spike recoveries were within EPA QC limits.
7. A spectral search was conducted for the compound Butylated Hydroxytoluene and Tributylphosphate; these compounds were not identified in the samples.

FEB 2000

for J. Michael Taylor
Vice President
Philadelphia Analytical Laboratory

01-22-00
Date

som\group\data\bma\tnu08850.doc

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 17 pages.

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: 09/28/99 15:14

RFW Batch Number: **9908L850** Client: **TNU-HANFORD B99-078** Work Order: 10985001001 Page: 1a

	Cust ID:	B0W5P4		B0W5P2		B0W5M4		B0W5P3		B0W5M5		B0W5P7	
Sample Information	RFW#:	001		002		003		004		005		006	
	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	76	%	84	%	81	%	85	%	78	%	81	%
	2-Fluorobiphenyl	74	%	75	%	74	%	76	%	72	%	72	%
	Terphenyl-d14	79	%	83	%	80	%	82	%	81	%	78	%
	Phenol-d5	66	%	66	%	62	%	68	%	62	%	66	%
	2-Fluorophenol	61	%	60	%	59	%	64	%	58	%	61	%
	2,4,6-Tribromophenol	63	%	65	%	63	%	77	%	64	%	59	%
			fl		fl		fl		fl		fl		fl
Phenol		350	U	350	U	360	U	350	U	350	U	330	U
bis(2-Chloroethyl)ether		350	U	350	U	360	U	350	U	350	U	330	U
2-Chlorophenol		350	U	350	U	360	U	350	U	350	U	330	U
1,3-Dichlorobenzene		350	U	350	U	360	U	350	U	350	U	330	U
1,4-Dichlorobenzene		350	U	350	U	360	U	350	U	350	U	330	U
1,2-Dichlorobenzene		350	U	350	U	360	U	350	U	350	U	330	U
2-Methylphenol		350	U	350	U	360	U	350	U	350	U	330	U
2,2'-oxybis(1-Chloropropane)		350	U	350	U	360	U	350	U	350	U	330	U
4-Methylphenol		350	U	350	U	360	U	350	U	350	U	330	U
N-Nitroso-di-n-propylamine		350	U	350	U	360	U	350	U	350	U	330	U
Hexachloroethane		350	U	350	U	360	U	350	U	350	U	330	U
Nitrobenzene		350	U	350	U	360	U	350	U	350	U	330	U
Isophorone		350	U	350	U	360	U	350	U	350	U	330	U
2-Nitrophenol		350	U	350	U	360	U	350	U	350	U	330	U
2,4-Dimethylphenol		350	U	350	U	360	U	350	U	350	U	330	U
bis(2-Chloroethoxy)methane		350	U	350	U	360	U	350	U	350	U	330	U
2,4-Dichlorophenol		350	U	350	U	360	U	350	U	350	U	330	U
1,2,4-Trichlorobenzene		350	U	350	U	360	U	350	U	350	U	330	U
Naphthalene		350	U	350	U	360	U	350	U	350	U	330	U
4-Chloroaniline		350	U	350	U	360	U	350	U	350	U	330	U
Hexachlorobutadiene		350	U	350	U	360	U	350	U	350	U	330	U
4-Chloro-3-methylphenol		350	U	350	U	360	U	350	U	350	U	330	U
2-Methylnaphthalene		350	U	350	U	360	U	350	U	350	U	330	U
Hexachlorocyclopentadiene		350	U	350	U	360	U	350	U	350	U	330	U
2,4,6-Trichlorophenol		350	U	350	U	360	U	350	U	350	U	330	U
2,4,5-Trichlorophenol		870	U	880	U	900	U	880	U	880	U	840	U

*= Outside of EPA CLP QC limits.

RFW Batch Number: 9908L850 Client: TNU-HANFORD B99-078 Work Order: 10985001001 Page: 1b

Cust ID:	B0W5P4		B0W5P2		B0W5M4		B0W5P3		B0W5M5		B0W5P7	
RFW#:	001		002		003		004		005		006	
2-Chloronaphthalene	350	U	350	U	360	U	350	U	350	U	330	U
2-Nitroaniline	870	U	880	U	900	U	880	U	880	U	840	U
Dimethylphthalate	350	U	350	U	360	U	350	U	350	U	330	U
Acenaphthylene	350	U	350	U	360	U	350	U	350	U	330	U
2,6-Dinitrotoluene	350	U	350	U	360	U	350	U	350	U	330	U
3-Nitroaniline	870	U	880	U	900	U	880	U	880	U	840	U
Acenaphthene	350	U	350	U	360	U	350	U	350	U	330	U
2,4-Dinitrophenol	870	U	880	U	900	U	880	U	880	U	840	U
4-Nitrophenol	870	U	880	U	900	U	880	U	880	U	840	U
Dibenzofuran	350	U	350	U	360	U	350	U	350	U	330	U
2,4-Dinitrotoluene	350	U	350	U	360	U	350	U	350	U	330	U
Diethylphthalate	350	U	350	U	360	U	350	U	350	U	330	U
4-Chlorophenyl-phenylether	350	U	350	U	360	U	350	U	350	U	330	U
Fluorene	350	U	350	U	360	U	350	U	350	U	330	U
4-Nitroaniline	870	U	880	U	900	U	880	U	880	U	840	U
4,6-Dinitro-2-methylphenol	870	U	880	U	900	U	880	U	880	U	840	U
N-Nitrosodiphenylamine (1)	350	U	350	U	360	U	350	U	350	U	330	U
4-Bromophenyl-phenylether	350	U	350	U	360	U	350	U	350	U	330	U
Hexachlorobenzene	350	U	350	U	360	U	350	U	350	U	330	U
Pentachlorophenol	870	U	880	U	900	U	880	U	880	U	840	U
Phenanthrene	350	U	350	U	360	U	350	U	350	U	330	U
Anthracene	350	U	350	U	360	U	350	U	350	U	330	U
Carbazole	350	U	350	U	360	U	350	U	350	U	330	U
Di-n-butylphthalate	350	U	350	U	360	U	350	U	350	U	330	U
Fluoranthene	350	U	350	U	360	U	350	U	350	U	330	U
Pyrene	350	U	350	U	360	U	350	U	350	U	330	U
Butylbenzylphthalate	350	U	350	U	360	U	350	U	350	U	330	U
3,3'-Dichlorobenzidine	350	U	350	U	360	U	350	U	350	U	330	U
Benzo(a)anthracene	350	U	350	U	360	U	350	U	350	U	330	U
Chrysene	350	U	350	U	360	U	350	U	350	U	330	U
bis(2-Ethylhexyl)phthalate	350	U	350	U	360	U	350	U	350	U	330	U
Di-n-octyl phthalate	350	U	350	U	360	U	350	U	350	U	330	U
Benzo(b)fluoranthene	350	U	350	U	360	U	350	U	350	U	330	U
Benzo(k)fluoranthene	350	U	350	U	360	U	350	U	350	U	330	U
Benzo(a)pyrene	350	U	350	U	360	U	350	U	350	U	330	U
Indeno(1,2,3-cd)pyrene	350	U	350	U	360	U	350	U	350	U	330	U
Dibenz(a,h)anthracene	350	U	350	U	360	U	350	U	350	U	330	U
Benzo(g,h,i)perylene	350	U	350	U	360	U	350	U	350	U	330	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: 09/28/99 15:14

RFW Batch Number: **9908L850** Client: **TNU-HANFORD B99-078** Work Order: 10985001001 Page: 2a

	Cust ID:	B0W681		B0W681		B0W681		SBLKBY		SBLKBY BS	
Sample Information	RFW#:	007		007 MS		007 MSD		99LE1063-MB1		99LE1063-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	73	%	81	%	87	%	76	%	71	%
	2-Fluorobiphenyl	68	%	70	%	69	%	72	%	66	%
	Terphenyl-d14	71	%	75	%	74	%	69	%	60	%
	Phenol-d5	61	%	62	%	59	%	72	%	70	%
	2-Fluorophenol	57	%	64	%	61	%	69	%	69	%
	2,4,6-Tribromophenol	65	%	72	%	64	%	58	%	58	%
Phenol		400	U	58	%	52	%	330	U	64	%
bis(2-Chloroethyl)ether		400	U	400	U	400	U	330	U	330	U
2-Chlorophenol		400	U	63	%	61	%	330	U	65	%
1,3-Dichlorobenzene		400	U	400	U	400	U	330	U	330	U
1,4-Dichlorobenzene		400	U	75	%	74	%	330	U	74	%
1,2-Dichlorobenzene		400	U	400	U	400	U	330	U	330	U
2-Methylphenol		400	U	400	U	400	U	330	U	330	U
2,2'-oxybis(1-Chloropropane)		400	U	400	U	400	U	330	U	330	U
4-Methylphenol		400	U	400	U	400	U	330	U	330	U
N-Nitroso-di-n-propylamine		400	U	102	%	102	%	330	U	80	%
Hexachloroethane		400	U	400	U	400	U	330	U	330	U
Nitrobenzene		400	U	400	U	400	U	330	U	330	U
Isophorone		400	U	400	U	400	U	330	U	330	U
2-Nitrophenol		400	U	400	U	400	U	330	U	330	U
2,4-Dimethylphenol		400	U	400	U	400	U	330	U	330	U
bis(2-Chloroethoxy)methane		400	U	400	U	400	U	330	U	330	U
2,4-Dichlorophenol		400	U	400	U	400	U	330	U	330	U
1,2,4-Trichlorobenzene		400	U	77	%	81	%	330	U	75	%
Naphthalene		400	U	400	U	400	U	330	U	330	U
4-Chloroaniline		400	U	400	U	400	U	330	U	330	U
Hexachlorobutadiene		400	U	400	U	400	U	330	U	330	U
4-Chloro-3-methylphenol		400	U	68	%	64	%	330	U	64	%
2-Methylnaphthalene		400	U	400	U	400	U	330	U	330	U
Hexachlorocyclopentadiene		400	U	400	U	400	U	330	U	330	U
2,4,6-Trichlorophenol		400	U	400	U	400	U	330	U	330	U
2,4,5-Trichlorophenol		1000	U	1000	U	1000	U	840	U	840	U

*= Outside of EPA CLP QC limits.

Cust ID:	B0W681		B0W681		B0W681		SBLKBY		SBLKBY BS	
RFW#:	007		007 MS		007 MSD		99LE1063-MB1		99LE1063-MB1	
2-Chloronaphthalene	400	U	400	U	400	U	330	U	330	U
2-Nitroaniline	1000	U	1000	U	1000	U	840	U	840	U
Dimethylphthalate	400	U	400	U	400	U	330	U	330	U
Acenaphthylene	400	U	400	U	400	U	330	U	330	U
2,6-Dinitrotoluene	400	U	400	U	400	U	330	U	330	U
3-Nitroaniline	1000	U	1000	U	1000	U	840	U	840	U
Acenaphthene	400	U	75	%	73	%	330	U	63	%
2,4-Dinitrophenol	1000	U	1000	U	1000	U	840	U	840	U
4-Nitrophenol	1000	U	54	%	53	%	840	U	45	%
Dibenzofuran	400	U	400	U	400	U	330	U	330	U
2,4-Dinitrotoluene	400	U	79	%	76	%	330	U	64	%
Diethylphthalate	400	U	400	U	400	U	330	U	330	U
4-Chlorophenyl-phenylether	400	U	400	U	400	U	330	U	330	U
Fluorene	400	U	400	U	400	U	330	U	330	U
4-Nitroaniline	1000	U	1000	U	1000	U	840	U	840	U
4,6-Dinitro-2-methylphenol	1000	U	1000	U	1000	U	840	U	840	U
N-Nitrosodiphenylamine (1)	400	U	400	U	400	U	330	U	330	U
4-Bromophenyl-phenylether	400	U	400	U	400	U	330	U	330	U
Hexachlorobenzene	400	U	400	U	400	U	330	U	330	U
Pentachlorophenol	1000	U	71	%	78	%	840	U	61	%
Phenanthrene	400	U	400	U	400	U	330	U	330	U
Anthracene	400	U	400	U	400	U	330	U	330	U
Carbazole	400	U	400	U	400	U	330	U	330	U
Di-n-butylphthalate	400	U	400	U	400	U	330	U	330	U
Fluoranthene	400	U	400	U	400	U	330	U	330	U
Pyrene	400	U	79	%	76	%	330	U	63	%
Butylbenzylphthalate	400	U	400	U	400	U	330	U	330	U
3,3'-Dichlorobenzidine	400	U	400	U	400	U	330	U	330	U
Benzo(a)anthracene	400	U	400	U	400	U	330	U	330	U
Chrysene	400	U	400	U	400	U	330	U	330	U
bis(2-Ethylhexyl)phthalate	100	J	400	U	400	U	330	U	330	U
Di-n-octyl phthalate	400	U	400	U	400	U	330	U	330	U
Benzo(b)fluoranthene	400	U	400	U	400	U	330	U	330	U
Benzo(k)fluoranthene	400	U	400	U	400	U	330	U	330	U
Benzo(a)pyrene	400	U	400	U	400	U	330	U	330	U
Indeno(1,2,3-cd)pyrene	400	U	400	U	400	U	330	U	330	U
Dibenz(a,h)anthracene	400	U	400	U	400	U	330	U	330	U
Benzo(g,h,i)perylene	400	U	400	U	400	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.

B0W5P4

Lab Name: Recra.LabNet Work Order: 10985001001

Client: TNU-HANFORD B99-078

Matrix: (soil/water) SOIL Lab Sample ID: 9908L850-001

Sample wt/vol: 30.1 (g/mL) G Lab File ID: A091714

Level: (low/med) LOW Date Received: 08/24/99

% Moisture: 5 decanted: (Y/N) __ Date Extracted: 08/31/99

Concentrated Extract Volume: 1000(uL) Date Analyzed: 09/18/99

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.	ALDOL CONDENSATE	8.34	70	JA

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

B0W5P2

Lab Name: Recra.LabNet Work Order: 10985001001

Client: TNU-HANFORD B99-078

Matrix: (soil/water) SOIL Lab Sample ID: 9908L850-002

Sample wt/vol: 30.0 (g/mL) G Lab File ID: A091715

Level: (low/med) LOW Date Received: 08/24/99

% Moisture: 5 decanted: (Y/N) __ Date Extracted: 08/31/99

Concentrated Extract Volume: 1000(uL) Date Analyzed: 09/18/99

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	8.35	90	JA
2.	UNKNOWN	24.36	90	JB

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

B0W5M4

Lab Name: Recra.LabNet Work Order: 10985001001

Client: TNU-HANFORD B99-078

Matrix: (soil/water) SOIL Lab Sample ID: 9908L850-003

Sample wt/vol: 30.1 (g/mL) G Lab File ID: A091716

Level: (low/med) LOW Date Received: 08/24/99

% Moisture: 8 decanted: (Y/N) __ Date Extracted: 08/31/99

Concentrated Extract Volume: 1000(uL) Date Analyzed: 09/18/99

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	8.34	100	JA
2.	UNKNOWN	24.36	100	JB

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

B0W5P3

Lab Name: Recra.LabNet Work Order: 10985001001

Client: TNU-HANFORD B99-078

Matrix: (soil/water) SOIL Lab Sample ID: 9908L850-004

Sample wt/vol: 30.1 (g/mL) G Lab File ID: A092011

Level: (low/med) LOW Date Received: 08/24/99

% Moisture: 5 decanted: (Y/N) __ Date Extracted: 08/31/99

Concentrated Extract Volume: 1000(uL) Date Analyzed: 09/20/99

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.	ALDOL CONDENSATE	8.34	100	JA

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

B0W5M5

Lab Name: Recra.LabNet Work Order: 10985001001

Client: TNU-HANFORD B99-078

Matrix: (soil/water) SOIL Lab Sample ID: 9908L850-005

Sample wt/vol: 30.0 (g/mL) G Lab File ID: A092012

Level: (low/med) LOW Date Received: 08/24/99

% Moisture: 5 decanted: (Y/N) __ Date Extracted: 08/31/99

Concentrated Extract Volume: 1000(uL) Date Analyzed: 09/20/99

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.

B0W5P7

Lab Name: Recra.LabNet Work Order: 10985001001

Client: TNU-HANFORD B99-078

Matrix: (soil/water) SOIL Lab Sample ID: 9908L850-006

Sample wt/vol: 30.0 (g/mL) G Lab File ID: A092013

Level: (low/med) LOW Date Received: 08/24/99

% Moisture: 0 decanted: (Y/N) __ Date Extracted: 08/31/99

Concentrated Extract Volume: 1000(uL) Date Analyzed: 09/20/99

Injection Volume: 2.0(uL) Dilution Factor: 1.00

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

Number TICs found: 4

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	ALDOL CONDENSATE	8.34	200	JA
2.	ALDOL CONDENSATE	9.13	100	JA
3.	UNKNOWN	10.04	100	J
4.	UNKNOWN	24.38	100	JB

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

B0W681

Lab Name: Recra LabNet Work Order: 10985001001

Client: TNU-HANFORD B99-078

Matrix: (soil/water) SOIL Lab Sample ID: 9908L850-007

Sample wt/vol: 30.0 (g/mL) G Lab File ID: A092014

Level: (low/med) LOW Date Received: 08/24/99

% Moisture: 16 decanted: (Y/N)__ Date Extracted: 08/31/99

Concentrated Extract Volume: 1000(uL) Date Analyzed: 09/20/99

Injection Volume: 2.0(uL) Dilution Factor: 1.00

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

Number TICs found: 4 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	ALDOL CONDENSATE	8.35	200	JA
2.	ALDOL CONDENSATE	9.13	100	JA
3.	ORGANIC ACID	21.13	100	J
4.	UNKNOWN	24.36	200	JB

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

SBLKBY

Lab Name: Recra.LabNet Work Order: 10985001001

Client: TNU-HANFORD B99-078

Matrix: (soil/water) SOIL Lab Sample ID: 99LE1063-MB1

Sample wt/vol: 30.0 (g/mL) G Lab File ID: A090314

Level: (low/med) LOW Date Received: 08/31/99

% Moisture: _____ decanted: (Y/N)__ Date Extracted: 08/31/99

Concentrated Extract Volume: 1000(uL) Date Analyzed: 09/03/99

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	22.45	200	J

FORM 1 SV-TIC 3/90

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

DATE RECEIVED: 08/24/99 RFW LOT # :9908L850

CLIENT ID	RFW #	MTX	PREP #	COLLECTION	EXTR/PREP	ANALYSIS
B0W5P4	001	S	99LE1063	08/19/99	08/31/99	09/18/99
B0W5P2	002	S	99LE1063	08/19/99	08/31/99	09/18/99
B0W5M4	003	S	99LE1063	08/19/99	08/31/99	09/18/99
B0W5P3	004	S	99LE1063	08/19/99	08/31/99	09/20/99
B0W5M5	005	S	99LE1063	08/19/99	08/31/99	09/20/99
B0W5P7	006	S	99LE1063	08/19/99	08/31/99	09/20/99
B0W681	007	S	99LE1063	08/19/99	08/31/99	09/20/99
B0W681	007 MS	S	99LE1063	08/19/99	08/31/99	09/20/99
B0W681	007 MSD	S	99LE1063	08/19/99	08/31/99	09/20/99

LAB QC:

SBLKBY	MB1	S	99LE1063	N/A	08/31/99	09/03/99
SBLKBY	MB1 BS	S	99LE1063	N/A	08/31/99	09/03/99

RECRA LabNet Use Only: 99081850

Custody Transfer Record/Lab Work Request

Page 1 of 1

RECRA LabNet

ALL FIELD PERSONNEL: COMPLETE ONLY SHADED AREAS

Client: TWU-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: 8/24/99 Date Due: 9/23/99
Account #:

Refrigerator #		1	6						6		6	6				
#/Type Container	Liquid															
	Solid	1g	1g	1					1g		1g	1g				
Volume	Liquid															
	Solid	250	500	1					500		250	1000				
Preservatives																
ANALYSES REQUESTED →	ORGANIC: VOA								INORG: Metal							
	ORGANIC: BNA								INORG: CN							
	ORGANIC: Pest/PCB															
	ORGANIC: Herb															
	RECRA LabNet Use Only	0024H	0025H	0026B		0026C	0040		9MetQ		1PH	8AgQ				

MATRIX CODES:
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

Lab ID	Client ID/Description	Matrix QC Chosen (✓) MS	MSD	Matrix	Date Collected	Time Collected	0024H	0025H	0026B		0026C	0040		9MetQ		1PH	8AgQ				
001	BOW 5P4			S	8/19/99	1145	X	X	X		X	X		X		X	X				
2	5P2					1105															
3	5M4					1025															
4	5P3					1121															
5	5M5					1050															
6	5P7					0900															
7	681					0900															

Run matrix QC

Special Instructions:
saf # B99-078

COMPOSITE WASTE

DATE/REVISIONS:
Met(1) = As, Ba, Be, Cd, Cr, Cu, Pb, Ni, Se,
2. Ag, V, Zn, Hg, ICR6
AnaQ(1) 3 = IN3N2, ICCL, ICFL, ICNO2, ICNO3,
4. ICPO4, ICSO4, ISFD, INH3N, ICNTO
* 5. 4235795286 02-3.7°C
6. 4235795285 98-4.2°C

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't Y or N
Cooler Temp. 5.1 °C

Relinquished by	Received by	Date	Time
FedEx	Janson	8/24/99	0930

Relinquished by	Received by	Date	Time
	ORIGINAL		
	REWRITTEN		

Discrepancies Between Samples Labels and COC Record? Y or N
NOTES:
*4019645195