



0053032

Chemical and Environmental Measurement Information
Recra LabNet Philadelphia
Analytical Report

Client: TNU-HANFORD B00-039
RFW #: 0003L651
SDG/SAF #: H0775/B00-039

W.O. #: 10985-001-001-9999-00
Date Received: 03-07-2000

RECEIVED
APR 25 2000

GC/MS VOLATILE

EDMC

One (1) spent 'in-line' filter was collected on 03-01-2000. The sample was logged as solid to accommodate LIMS.

The sample and its associated QC samples were analyzed according to criteria set forth in Recra OPs based on SW 846 Method 8260A for the client specified Volatile target compound Carbon Tetrachloride on 03-15-2000.

The following is a summary of the QC results accompanying these 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 required holding time for the analysis was met.
3. The sample was prepared by eluting 10mL Methanol through the filter and analyzing an aliquot of the collected (eluted) methanol. The results were reported in total ng per filter.
4. All surrogate recoveries were within EPA QC limits.

All matrix and blank spike recoveries were within EPA QC limits. (The data were reported on the Form3s).

The surrogates and spikes were added to the extract prior to purging.



J. Michael Taylor
J. Michael Taylor

Vice President
Philadelphia Analytical Laboratory

03-30-00
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 9 pages.

GLOSSARY OF VOA 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.
- 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.



GLOSSARY OF VOA 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.



Recra LabNet - Lionville Laboratory

Volatiles By GC/MS, Special List

Report Date: 03/23/00 18:36

04

RFW Batch Number: 0003L651

Client: TNU-HANFORD B00-039

Work Order: 10985001001 Page: 1a

	Cust ID:	B0XP61	B0XP61	B0XP61	VBLKSB	VBLKSB BS
Sample Information	RFW#:	001	001 MS	001 MSD	00LVH112-MB1	00LVH112-MB1
	Matrix:	FILTER	FILTER	FILTER	FILTER	FILTER
	D.F.:	1.00	1.00	1.00	1.00	1.00
	Units:	total ng	total ng	total ng	total ng	total ng
<hr/>						
1,2-Dichloroethane-d4		101 %	99 %	97 %	96 %	100 %
Surrogate Toluene-d8		108 %	102 %	102 %	100 %	100 %
Recovery Bromofluorobenzene		106 %	102 %	101 %	100 %	100 %
<hr/>						
Carbon Tetrachloride		6000 U	6000 U	6000 U	3800 U	3800 U

*= Outside of EPA CLP QC limits.

SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Recra.LabNetContract: 0985-01-01Case No.: TNU-HANFORD B00-039RFW Lot No.: 0003L651-001MATRIX Spike - Sample No.: B0XP61Level: (low/med) LOW

COMPOUND	SPIKE ADDED ug/Kg	SAMPLE CONCENTRATION ug/Kg	MS CONCENTRATION ug/Kg	MS % REC #	QC LIMITS REC
1,1-Dichloroethene	60000	0	55900	93	59 -172
Trichloroethene	60000	0	57000	95	62 -137
Benzene	60000	0	61200	102	66 -142
Toluene	60000	0	60600	101	59 -139
Chlorobenzene	60000	0	60500	101	60 -133

COMPOUND	SPIKE ADDED ug/Kg	MSD CONCENTRATION ug/Kg	MSD % REC #	% RPD #	QC LIMITS RPD REC
1,1-Dichloroethene	60000	58500	98	5	22 59 -172
Trichloroethene	60000	59400	99	4	24 62 -137
Benzene	60000	63800	106	3	21 66 -142
Toluene	60000	63000	105	3	21 59 -139
Chlorobenzene	60000	63000	105	3	21 60 -133

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 5 outside limitsSpike Recovery: 0 out of 10 outside limits

COMMENTS:

3B
AIR VOLATILE MATRIX SPIKE RECOVERY

Lab Name: Recra.LabNet

Contract: 0985-01-01

Case No.: TNU-HANFORD B00-039

RFW Lot No.: 0003L651

MATRIX Spike - Sample No.: VBLKSBLVH112-MB1

Level: (low/med) LOW

COMPOUND	SPIKE	SAMPLE	MS	MS	QC
	ADDED	CONCENTRATION	CONCENTRATION	%	LIMITS
	ug/Kg	ug/Kg	ug/Kg	REC #	REC
1,1-Dichloroethene	37500	0	35400	94	59 -172
Trichloroethene	37500	0	37200	99	62 -137
Benzene	37500	0	40300	107	66 -142
Toluene	37500	0	39900	106	59 -139
Chlorobenzene	37500	0	39900	106	60 -133

Column to be used to flag recovery value with an asterisk

* Values outside of QC limits

Spike Recovery: 0 out of 5 outside limits

COMMENTS:

Recra LabNet - Lionville Laboratory
VOA ANALYTICAL DATA PACKAGE FOR
TNU-HANFORD B00-039

DATE RECEIVED: 03/07/00

RFW LOT # :0003L651

CLIENT ID	RFW #	MTX	PREP #	COLLECTION	EXTR/PREP	ANALYSIS
BOXP61	001	SO	00LVH112	03/01/00	N/A	03/15/00
BOXP61	001 MS	SO	00LVH112	03/01/00	N/A	03/15/00
BOXP61	001 MSD	SO	00LVH112	03/01/00	N/A	03/15/00

LAB QC:

VBLKSB	MB1	SO	00LVH112	N/A	N/A	03/15/00
VBLKSB	MB1 BS	SO	00LVH112	N/A	N/A	03/15/00



0003LL651

FIELD PERSONNEL: COMPLETE ONLY SHADED AREAS

Client Tnu-Hanford 800-039
 Est. Final Proj. Sampling Date _____
 Project # 10985-001-001-9999-00
 Project Contact/Phone # _____
 RECRA Project Manager aj
 QC Spec Del Std TAT 7day

Refrigerator # 1
 #/Type Container Liquid _____ Solid 1C.
 Volume Liquid _____ Solid Cap.
 Preservatives _____
 ANALYSES REQUESTED →

Date Rec'd 3-7-00 Date Due 3-14-00
 Account # _____

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 OC Chosen (✓)		Matrix	Date Collected	Time Collected	RECRA LabNet Use Only													
			MS	MSD				ORGANIC					INORG								
								VOA	BNA	Pest/PCB	Herb	Metal	CN								
		<u>001 BoxPE1</u>	✓	✓	<u>SO</u>	<u>3-1-00</u>	<u>1300</u>	<u>0624X</u>													

Special Instructions: Saf # 800-039

- DATE/REVISIONS:
- 0624X 1. Analyze for CCl4 only
 - _____
 - _____
 - _____
 - _____
 - _____

COMPOSITE WASTE

RECRA LabNet Use Only

Samples were:
 1) Shipped or Hand Delivered _____
 Airbill # See below
 2) Ambient or Chilled
 3) Received in Good Condition or N
 4) Labels Indicate Properly Preserved or N
 5) Received Within Holding Times 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 or N
 Cooler Temp. 6.1 °C

Relinquished by	Received by	Date	Time
<u>Fred Ec</u>	<u>T Koppel</u>	<u>3-7-00</u>	<u>0915</u>

Relinquished by	Received by	Date	Time
	ORIGINAL REWRITTEN		

Discrepancies Between Samples Labels and COC Record? Y or N
 NOTES:
423579534251

Bechtel Hanford Inc.		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST				B00-039-5	Page 1 of 1													
Collector Fahlberg	Company Contact Jane Borghese	Telephone No. 372-9442	Project Coordinator TRENT, SJ		Price Code 9B	Data Turnaround 7 Days														
Project Designation Analysis of Milipore Filters at 299-W15-31A		Sampling Location 200-ZP-1		SAF No. B00-039	Air Quality <input type="checkbox"/>															
Ice Chest No. ERC 99-057	Field Logbook No. EL 1424	COA HGWMRA4114		Method of Shipment Federal Express																
Shipped To TMA/RECRA RECRA		Offsite Property No. A000133		Bill of Lading/Air Bill No. 42357953 H 251																
POSSIBLE SAMPLE HAZARDS/REMARKS Special Handling and/or Storage				Preservation	Cool 4C															
				Type of Container	Zip Loc Bag															
				No. of Container(s)	1															
				Volume	250mL															
SAMPLE ANALYSIS				VOA - 8260A (TCL) (Carbon tetrachloride) See note #1																
Sample No.	Matrix *	Sample Date	Sample Time																	
B0XP61	Other Solid	3.1.00	1300	X																
CHAIN OF POSSESSION				Sign/Print Names				SPECIAL INSTRUCTIONS Close SDG upon receipt of samples #1) Analyze for CCl4 only #2) Sample originated in a non-radi area no activity report required <div style="text-align: right; font-size: 2em;">3728</div>					Matrix *							
Relinquished By R. Fere	Date/Time 1430	Received By R. Thoren	Date/Time 3.1.00			S=Soil SE=Sediment SO=Solid S=Sludge W=Water O=Oil A=Air DS=Drum Solids DL=Drum Liquids T=Tissue WI=Wipe L=Liquid V=Vegetation X=Other														
Relinquished By R. Thoren	Date/Time 3.6.00	Received By FED EX	Date/Time 0915																	
Relinquished By FedEx	Date/Time 3.7.00	Received By Thoppel	Date/Time 0915																	
Relinquished By	Date/Time	Received By	Date/Time																	
Relinquished By	Date/Time	Received By	Date/Time																	
Relinquished By	Date/Time	Received By	Date/Time																	
LABORATORY SECTION		Received By	Title		Date/Time															
FINAL SAMPLE DISPOSITION		Disposal Method	Disposed By		Date/Time															