



**RECRA  
ENVIRONMENTAL  
INC.**

Recra LabNet Philadelphia

0054099



**Analytical Report**  
Chemical and Environmental Measurement Information

**Client:** TNU HANFORD B00-058  
**RFW #:** 0009L625  
**SDG/SAF#:** H1035/B00-058

**W.O. #:** 10985-001-0099-00  
**Date Received:** 09-15-00

**GC SCAN**

The set of samples consisted of four (4) water samples collected on 09-13-00.

The samples and their associated QC samples were prepared on 09-15-00 and analyzed by methodology based on EPA Method 8015B for Methanol on 09-18-00.

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 samples were packaged and stored as specified in the method procedure. The temperature upon receipt has been recorded on the chain-of-custody.
2. The sample preparation and analysis holding times were met.
3. All initial calibrations associated with this data set were within acceptance criteria.
4. All continuing calibration standards analyzed prior to the sample extracts were within acceptance criteria.
5. Recra does not use surrogate spikes for this analysis. The method does not provide specific guidance regarding the use of surrogates and performance criteria. Method performance is monitored through the use of blank spikes and matrix spikes.
6. The blank spike recovery was 182% (outside of advisory control limits of 50%-150%), and may have been double spiked. A copy of the Sample Discrepancy Report (SDR) has been enclosed.
7. The matrix spike recoveries were within the advisory control limits of 50%-150%.
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. The laboratory Manager or a designee, as verified by the following signature, has authorized release of the data contained in this hard-copy data package.



**EDMC**

By J. Michael Taylor  
J. Michael Taylor  
Vice President  
Philadelphia Analytical Laboratory

09-29-00  
Date

r:\group\hplc-gcsc\name\gcvoa-scan\2000\09-625a1.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 7 pages.

RECRA

Sample Discrepancy Report (SDR)

SDR #: 00LC 1549

Initiator: Whissinger Batch: 0009C62C, 625 Parameter: 06CSC
Date: 9/25/03 Samples: BS Matrix: W
Client: Inn Hanford Method: SW846/MCAWWW/CLP/ Prep Batch: 00LLC175

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)
BS - high recovery of 182% for Methanol.
- Matrix QC for samples OK; no hits in samples.

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

- Lack of Organization Other (Please explain):
Lack of Training
Lack of Discipline - Possible double-spike
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)

narrate

Signature (John - 9/25/03)

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:

Signature (John - 9/25/03)

Other Explanation:

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

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

Route/Distribution of SDR

Route

Distribution of Completed SDR

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

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

## GLOSSARY OF OGCSC 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.



Recra LabNet - Lionville Laboratory  
 GCSC ANALYTICAL DATA PACKAGE FOR  
 TNU-HANFORD B00-058

RFW LOT # :0009L625

CLIENT ID	RFW #	MTX	PREP #	COLLECTN DATE	REC	EXT/PREP	ANALYSIS
B10797	001	W	00LLC175	09/13/00	09/15/00	09/15/00	09/18/00
B10798	002	W	00LLC175	09/13/00	09/15/00	09/15/00	09/18/00
B10799	003	W	00LLC175	09/13/00	09/15/00	09/15/00	09/18/00
B107B0	004	W	00LLC175	09/13/00	09/15/00	09/15/00	09/18/00
B107B0	004 MS	W	00LLC175	09/13/00	09/15/00	09/15/00	09/18/00
B107B0	004 MSD	W	00LLC175	09/13/00	09/15/00	09/15/00	09/18/00
LAB QC:							
BLK	MB1	W	00LLC175	N/A	N/A	09/15/00	09/18/00
BLK	MB1 BS	W	00LLC175	N/A	N/A	09/15/00	09/18/00

*9/15/00*  
*09-260*



Bechtel Hanford Inc.		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST				B00-058-02		Page 1 of 1		
Collector Shea/Thomas		Company Contact Laurenz, J		Telephone No. 372-9351		Project Coordinator TRENT, SJ		Price Code 7N Data Turnaround 45 Days <b>H</b>		
Project Designation 100-NR-2 Methanol Analysis		Sampling Location 100N		SAF No. B00-058		Air Quality <input type="checkbox"/>				
Ice Chest No. <b>SM1552 (20R)</b>		Field Logbook No. EL-1518		COA H10NR23E00		Method of Shipment Fed-ex				
Shipped To <b>TMA/RECRA</b>		Offsite Property No. <b>A000309</b>		Bill of Lading/Air Bill No. <b>42357953-9003</b>						
POSSIBLE SAMPLE HAZARDS/REMARKS				Preservation		Cool 4C				
				Type of Container		aGs*				
				No. of Container(s)		3				
				Volume		40mL				
Special Handling and/or Storage				Alcohol, Glycols, & Ketones - 8015M (Methanol)						
SAMPLE ANALYSIS										
Sample No.		Matrix *	Sample Date	Sample Time						
B10797		WATER	9-13-00	8:31	✓					
B10798		WATER	9-13-00	8:43	✓					
B10799		WATER	9-13-00	8:43	✓					
B10780		WATER	9-13-00	8:57	✓					
CHAIN OF POSSESSION				SPECIAL INSTRUCTIONS		Matrix *				
Relinquished By <b>Mug/Lombardi</b>		Date/Time <b>9/13/00 12:05</b>		Received By <b>R. Thoren</b>		Date/Time <b>9/13/00 12:15</b>		**A detection of 1 ppm or less is requested. <b>samples collected from an area &lt; 2000 ft<sup>2</sup>/g</b>		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 <b>R. Thoren</b>		Date/Time <b>9-13-00 12:30</b>		Received By <b>STORE</b>		Date/Time <b>9-13-00 12:30</b>				
Relinquished By <b>R. Thoren</b>		Date/Time <b>9-13-00 08:00</b>		Received By <b>R. Thoren</b>		Date/Time <b>9-13-00 08:00</b>				
Relinquished By <b>R. Thoren</b>		Date/Time <b>9-14-00 08:00</b>		Received By <b>FED EX</b>		Date/Time <b>9-14-00 08:00</b>				
Relinquished By <b>FED EX</b>		Date/Time <b>9-15-00 09:30</b>		Received By <b>TKoppel</b>		Date/Time <b>9-15-00 09:30</b>				
Relinquished By		Date/Time		Received By		Date/Time				
LABORATORY SECTION		Received By		Title		Date/Time				
FINAL SAMPLE DISPOSITION		Disposal Method		Disposed By		Date/Time				