

0078362

SAF-RC-052
Remaining Sites Confirmation Sampling -
Water
FINAL DATA PACKAGE

COMPLETE COPY OF DATA PACKAGE TO:

Kathy Wendt

H4-21

KW 7/1/08

INITIAL/DATE

COMMENTS:

SDG K1251

SAF-RC-052

Rad only

Chem only

Rad & Chem

Complete

Partial

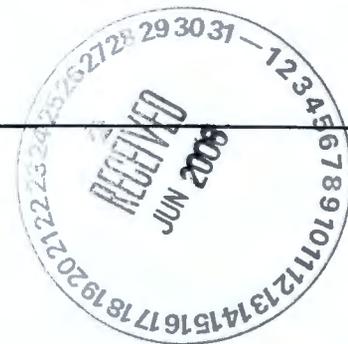
Waste Site: 100-H-28:5

RECEIVED
JUL 07 2008

EDMC



1 July 2008



Joan Kessner
WC-Hanford
2620 Fermi Avenue
MSIN H9-03
Richland, WA 99354

Subject: Analytical Data Package

Dear Ms. Kessner:

Enclosed are the hard copy analytical reports for the batch number/fraction indicated (marked X) in the following table:

LvLI Batch #	0806L250
SDG #	K1251
SAF #	RC-052
Date Received	6/5/08
# Samples	1
Matrix	WATER
Volatiles	X
Semivolatiles	
Pest/PCB	
Glycols	
DRO/KRO/GRO	
GC Alcohols	
Herbicides	
Metals	
Inorganics	

The electronic data deliverable (EDD) will be emailed shortly. If you have any questions, please don't hesitate to contact me at (610) 280-3012.

Sincerely,
Lionville Laboratory Incorporated

Orlette S. Johnson
Project Manager

r:\group\pm\orlette\tnu-hanford\data\b_ltrs.doc



Lionville Laboratory, Inc.
VOA ANALYTICAL DATA PACKAGE FOR
TNUHANFORD RC-052 K1251

DATE RECEIVED: 06/05/08

LVL LOT # :0806L250

CLIENT ID	LVL #	MTX	PREP #	COLLECTION	EXTR/PREP	ANALYSIS
J16WB7	001	W	08LVG098	06/03/08	N/A	06/06/08
J16WB7	001 MS	W	08LVG098	06/03/08	N/A	06/06/08
J16WB7	001 MSD	W	08LVG098	06/03/08	N/A	06/06/08

LAB QC:

VBLKKB	MB1	W	08LVG098	N/A	N/A	06/06/08
VBLKKB	MB1 BS	W	08LVG098	N/A	N/A	06/06/08



Case Narrative

Client: TNU-HANFORD RC-042
LVL #: 0806L250
SDG/SAF #

W.O. #: 11343-606-001-9999-00
Date Received: 06-05-2008

GC/MS VOLATILE

One (1) water sample was collected on 06-03-2008.

The sample and its associated QC samples were analyzed according to criteria set forth in Lionville Laboratory SOPs based on SW 846 Method 8260B for TCL volatile target compounds on 06-06-2008.

The following is a summary of QC results accompanying the sample results. Lionville Laboratory Inc (LvLI) certifies that all test results meet the requirements of NELAC except as noted below:

1. Samples were analyzed within required holding time.
2. Non-target compounds were detected in the the method blank 08LVG098-MB1.
3. All surrogate recoveries were within acceptance criteria.
4. All matrix spike recoveries were within acceptance criteria.
5. All blank spike recoveries were within acceptance criteria.
6. The method blank was below the reporting limit for all target compounds
7. All internal standard area and retention time criteria were met.

r:\group\data\2008\voa\tnu\0806-250kw1.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 **13** pages.



8. Manual integrations are performed according to SOP QA-125 to produce quality data with utmost integrity. All manual integrations are required to be technically valid and properly documented. Appropriate technical flags are defined in the Glossary ("Technical Flags For Manual Integration").
9. LvLI is NELAP accredited by the State of Pennsylvania. For a complete listing of accrediting authorities and the corresponding analytes/methods, please contact your Project Manager.
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."

Iain Daniels
by Iain Daniels
Iain Daniels
Laboratory Manager
Lionville Laboratory Incorporated

6/17/08
Date

GLOSSARY

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

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.

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 resolve 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 - **Co-elution/ Background:** Peak was manually integrated to eliminate contribution from co-eluting compounds, background signal, or other interference.
- PI - **Proper Integration:** A peak with poor or inconsistent integration (i.e., excessive tail) was properly integrated manually.

Sample Information	Cust ID:	J16WB7	J16WB7	J16WB7	VBLKBK	VBLKBK BS
	RFW#:	001	001 MS	001 MSD	08LVG098-MB1	08LVG098-MB1
	Matrix:	WATER	WATER	WATER	WATER	WATER
	D.F.:	1.00	1.00	1.00	1.00	1.00
	Units:	ug/L	ug/L	ug/L	ug/L	ug/L
Surrogate	Toluene-d8	101 %	106 %	105 %	104 %	108 %
Recovery	Bromofluorobenzene	104 %	111 %	106 %	112 %	113 %
	1,2-Dichloroethane-d4	93 %	95 %	91 %	97 %	98 %
-----fl-----fl-----fl-----fl-----fl-----fl-----fl-----						
Chloromethane		10 U	81 %	71 %	10 U	100 %
Bromomethane		10 U	65 %	59 %	10 U	68 %
Vinyl Chloride		10 U	80 %	80 %	10 U	100 %
Chloroethane		10 U	70 %	59 %	10 U	70 %
Methylene Chloride		2 J	92 %	87 %	5 U	100 %
Acetone		10 U	103 %	87 %	10 U	100 %
Carbon Disulfide		5 U	116 %	109 %	5 U	126 %
1,1-Dichloroethene		5 U	108 %	100 %	5 U	113 %
1,1-Dichloroethane		5 U	100 %	93 %	5 U	101 %
1,2-Dichloroethene (total)		5 U	99 %	96 %	5 U	103 %
Chloroform		5 U	97 %	94 %	5 U	100 %
1,2-Dichloroethane		5 U	97 %	89 %	5 U	95 %
2-Butanone		3 J	100 %	84 %	10 U	66 %
1,1,1-Trichloroethane		5 U	92 %	91 %	5 U	95 %
Carbon Tetrachloride		5 U	93 %	90 %	5 U	95 %
Bromodichloromethane		5 U	98 %	94 %	5 U	97 %
1,2-Dichloropropane		5 U	101 %	96 %	5 U	103 %
cis-1,3-Dichloropropene		5 U	103 %	97 %	5 U	107 %
Trichloroethene		5 U	103 %	102 %	5 U	103 %
Dibromochloromethane		5 U	104 %	101 %	5 U	103 %
1,1,2-Trichloroethane		5 U	105 %	98 %	5 U	100 %
Benzene		5 U	97 %	91 %	5 U	98 %
Trans-1,3-Dichloropropene		5 U	102 %	96 %	5 U	103 %
Bromoform		5 U	109 %	106 %	5 U	108 %
4-Methyl-2-pentanone		10 U	108 %	93 %	10 U	100 %
2-Hexanone		10 U	104 %	89 %	10 U	94 %
Tetrachloroethene		5 U	101 %	103 %	5 U	100 %
1,1,2,2-Tetrachloroethane		5 U	106 %	94 %	5 U	107 %
Toluene		5 U	106 %	104 %	5 U	105 %

*= Outside of EPA CLP QC limits.

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Cust ID:	J16WB7	J16WB7	J16WB7	VBLKBK	VBLKBK BS
RFW#:	001	001 MS	001 MSD	08LVG098-MB1	08LVG098-MB1

Chlorobenzene	5 U	99 %	98 %	5 U	98 %
Ethylbenzene	5 U	107 %	105 %	5 U	106 %
Styrene	5 U	107 %	107 %	5 U	108 %
Xylenes (total)	5 U	105 %	103 %	5 U	106 %
cis-1,2-dichloroethene	5 U	99 %	97 %	5 U	103 %
trans-1,2-dichloroethene	5 U	100 %	95 %	5 U	104 %

*= Outside of EPA CLP QC limits.

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1E
VOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

J16WB7

Lab Name: Lionville Labs, Inc. Contract: 11343606001

Lab Code: Lionvi Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: 0806L250-001

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: q060606

Level: (low/med) LOW Date Received: 06/05/08

% Moisture: not dec. _____ Date Analyzed: 06/06/08

Column: (pack/cap) CAP Dilution Factor: 1.00

Number TICs found: 0 CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

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

1E
VOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLKBK

Lab Name: Lionville Labs, Inc. Contract: 11343606001

Lab Code: Lionvi Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: 08LVG098-MB1

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: 0060604

Level: (low/med) LOW Date Received: 06/06/08

% Moisture: not dec. _____ Date Analyzed: 06/06/08

Column: (pack/cap) CAP Dilution Factor: 1.00

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	ALKANE	24.918	6	J

Director: Matt Perrott, Telephone No. 372-9088, Project Coordinator: KESSNER, JH, Price Code: 7C, Data Turnaround: 15 Days

Project Designation: Remaining Sites Confirmation Sampling - Water, Sampling Location: 100-H-28:5, SAF No. RC-052

Chest No. AFS-04-122, Field Logbook No. EL-1601-2, COA: cooh28a000, Method of Shipment: Fed Ex

Shipped To: BERLINE SERVICES / LIONVILLE, Offsite Property No. A080299, Bill of Lading/Air Bill No. Sec oSPC

Special Handling and/or Storage	Preservation	HCl or H2SO4 to pH < 2 Cool
	Type of Container	aGn*
	No. of Container(s)	3
	Volume	40mL

SAMPLE ANALYSIS	VOA - 8260A (TCL)																			
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Sample No.	Matrix *	Sample Date	Sample Time																	
WB7	WATER	6/3/08	1005 1815	X																

CHAIN OF POSSESSION		Sign/Print Names	
Acquired By/Removed From	Date/Time	Received By/Stored In	Date/Time
WILL HUDSON	6/3/08 1615	1060 #2A	6/3/08 1615
Acquired By/Removed From	Date/Time	Received By/Stored In	Date/Time
600 2A	6-4-08 0800	JR DeBaigne	6-4-08 0900
Acquired By/Removed From	Date/Time	Received By/Stored In	Date/Time
DeBaigne	6-4-08 0900	Fed Ex	
Acquired By/Removed From	Date/Time	Received By/Stored In	Date/Time
251 Ex	6/5/08 1005	1060 #2A	6-5-08 1005
Acquired By/Removed From	Date/Time	Received By/Stored In	Date/Time

SPECIAL INSTRUCTIONS	Matrix *
Sampler unavailable to remove samples from controlled storage. Shipper removed samples from storage location taking custody of samples for shipment to lab.	E=Soil
	SE=Soil/soil
	SO=Soil
	SI=Sludge
	W=Water
	O=Oil
	A=Air
	DS=Drum Solids
	DL=Drum Liquids
	T=Time
	WI=Wipe
	L=Liquid
	V=Vegetation
	X=Other

LABORATORY SECTION Received By: _____ Title: _____ Date/Time: _____

FINAL SAMPLE DISPOSITION Disposal Method: _____ Disposed By: _____ Date/Time: _____

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Lionville Laboratory Incorporated
SAMPLE RECEIPT CHECKLIST (SRC)

CLIENT: TNU HANFORD
 Project (SAF) SOW/Release #: RC-052

Date: 6/5/08

LvLI Batch #: 0806L250

Sample Custodian: Pat Newberry

NOTE: EXPLAIN ALL DISCREPANCIES

1. Samples Hand Delivered or Shipped?	Carrier <u>Fed Ex</u>	Airbill # <u>7989 5488 4122</u>
2. Custody Seals on coolers or shipping containers intact, signed & dated?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> No Seals
3. Outside of coolers or shipping containers are free from damage?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Comments:
4. All expected paperwork received (coc & other client specific information) sealed in plastic bag and easily accessible?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
5. Samples received cooled or ambient?	Temp <u>3.5</u> °C	Cooler # <u>AFS-04122</u>
How was the temperature taken?	<input checked="" type="checkbox"/> IR <input type="checkbox"/> Temp. Blank	<input type="checkbox"/> Other (Specify):
Is the Temp. Criteria met for these samples? (Hg in soils @ 4°C)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
6. Custody seals on sample containers intact, signed and dated?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> No Seals
7. COC (Client & LvLI) signed & dated?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
8. Sample containers are intact?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
9. All samples on COC received?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
All samples received on COC?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
10. All sample label information matches COC?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
11. Samples properly preserved? (If #5 is no, then this is no.)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
12. Samples received within hold times?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Short holds taken to wet lab?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A
13. <u>VOA</u> , TOC, TOX free of headspace?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> N/A
14. QC stickers placed on bottles designated by client?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> N/A
15. Shipment meets LvLI Sample Acceptance Policy? (Identify all bottles that do not meet the policy, which is on the reverse of this page.)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
16. Project Manager contacted concerning any discrepancies?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A
Person Contacted _____	Date _____	

