0077273

SAF-RC-012
100-N Ancillary Facilities & 190-DR Waste Characterization - Other Liquid
FINAL DATA PACKAGE

COMPLETE COPY OF DATA PACKAGE TO:

Amy Hood	X0-18	KW 5/15/08 INITIAL/DATE
Tom Edmundson	X0-18	KW 5/15/08 INITIAL/DATE

RECEIVED
MAY 21 2008
EDMC

COMMENTS:

SDG K1204 SAF-RC-012

Rad only X Chem only Rad & Chem

X Complete Partial

Waste Site: 1330-N Waste Pad 2nd Event

LIONVILLE LABORATORY INC.

13 May 2008

RECEIVED MAY 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 #	0804L964
SDG #	K1204
SAF #	RC-012
Date Received	4/22/08
# Samples	3
Matrix	OIL
Volatiles	
Semivolatiles	
Pest/PCB	X
Glycols	
DRO/KRO/GRO	
GC Alcohols	
Herbicides	
Metals	
Inorganics	X

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

208 Welsh Pool Road • Exton, PA 19341- 1313 • (610) 280-3000 • Fax (610) 280-3041

Lionville Laboratory, Inc.
INORGANIC ANALYTICAL DATA PACKAGE FOR
TNUHANFORD RC-012 K1204

RECEIVED
MAY 2008

DATE RECEIVED: 04/22/08 LVL LOT # :0804L964

CLIENT ID /ANALYSIS	LVL #	MTX	PREP #	COLLECTION	EXTR/PREP	ANALYSIS
J16HX8						
TOTAL HALIDES	002	OI	08LE006	04/17/08	04/25/08	04/25/08
J16HX9						
TOTAL HALIDES	003	OI	08LE006	04/17/08	04/25/08	04/25/08
TOTAL HALIDES	003 MS	OI	08LE006	04/17/08	04/25/08	04/25/08
TOTAL HALIDES	003 MSD	OI	08LE006	04/17/08	04/25/08	04/25/08
AB QC:						
TOTAL HALIDES	MB1	W	08LE006	N/A	04/25/08	04/25/08
TOTAL HALIDES	MB1 BS	W	08LE006	N/A	04/25/08	04/25/08

LIONVILLE LABORATORY INC.

Analytical Report

Client: TNU-HANFORD RC-012 K1204
LVL#: 0804L964

W.O.#: 11343-606-001-9999-00
Date Received: 04-22-08

INORGANIC NARRATIVE

1. This narrative covers the analysis of 2 oil samples.

2. The samples were prepared and analyzed in accordance with the method checked on the attached glossary.

   LvLI is NELAP accredited by the State of Pennsylvania. For a complete list of accrediting authorities and the corresponding analytes/methods, please contact your Project Manager. LvLI certifies that all test results meet the requirements of NELAC with any exception noted in the following statements.

3. Sample holding times as required by the method and/or contract were met.

4. The results presented in this report are derived from samples that met LvLI's sample acceptance policy.

5. The method blank was within the method criteria.

6. The Laboratory Control Sample (LCS) was within the laboratory control limits.

7. The matrix spike recoveries were within the 75-125% control limits. The matrix spike duplicate was within the 20% Relative Percent Difference (RPD) control limit.

8. Results for Total Halides are reported on a wet weight basis.

9. 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 package has been authorized by the Laboratory Manager or a designee, as verified by the following signature.

Iain Daniels
Laboratory Manager
Lionville Laboratory Incorporated

5/13/08
Date

njp\i04-964

The results presented in this report relate to the analytical testing and conditions of the samples upon 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 11 pages.

Lionville Laboratory Incorporated

WET CHEMISTRY

METHODS GLOSSARY FOR SOIL/SOLIDS* SAMPLE ANALYSIS

	ASTM	SW846	OTHER
% Ash	__ D2216-80		
% Moisture	__ D2216-80		__ ILMO4.0 (e)
% Solids	__ D2216-80		__ ILMO4.0 (e)
% Volatile Solids	__ D2216-80		
ASTM Extraction in Water	__ D3987-81/85		
BTU	__ D240-87		
CEC		__ 9081	__ c
Chromium VI		__ 3060A/7196A	
Corrosivity ___ by coupon ___ by pH		__ 1110(mod) __ 9045C	
Cyanide, Total		__ 9010B	__ ILMO4.0 (e)
Cyanide, Reactive		__ Section 7.3/9014	
Halides, Extractable Organic		__ 9020B	__ EPA 600/4/84-008
Halides, Total		✓ ~~9020B~~ 9023 mb 5-12-08	__ EPA 600/4/84-008
EP Toxicity		__ 1310A	
Flash Point		__ 1010	
Ignitability		__ 1010	
Oil & Grease		__ 9071A	
Carbon, Total Organic		__ 9060	__ Lloyd Kahn (mod)
Oxygen Bomb Prep for Anions	__ D240-87(mod)	__ 5050	
Petroleum Hydrocarbons, Total Recoverable		__ 9071	__ EPA 418.1
pH, Soil		__ 9045C	
Sulfide, Reactive		__ Section 7.3/9030B	
Sulfide		__ 9030B(mod)	
Specific Gravity	__ D1429-76C/	__ D5057-90	
Sulfur, Total		__ 9056	
Synthetic Preparation Leach		__ 1312	
Paint Filter		__ 9095A	
Other:	**Method:**		
Other:	**Method**		

* Oil samples

L-WI-034/B-01/01

000000003

METHOD REFERENCES AND DATA QUALIFIERS

DATA QUALIFIERS

U = Indicates that the parameter was not detected at or above the reported limit. The associated numerical value is the sample detection limit.

* = Indicates that the original sample result is greater than 4x the spike amount added.

ABBREVIATIONS

MB = Method or Preparation Blank.
MS = Matrix Spike.
MSD = Matrix Spike Duplicate.
REP = Sample Replicate
LC = Laboratory Control Sample.
NC = Not calculated.

A suffix of -R, -S, or -T following these codes indicate a replicate, spike or sample duplicate analysis respectively.

ANALYTICAL WET CHEMISTRY METHODS

1. ASTM Standard Methods.

2. USEPA Methods for Chemical Analysis of Water and Wastes (USEPA 600/4-79-020).

3. Test Methods for Evaluating Solid Waste (USEPA SW-846).

a. Standard Methods for the Examination of Water and Waste, 16 ed, (1983).

b. Standard Methods for the Examination of Water and Waste, 17 ed, (1989)/18ed (1992).

c. Method of Soil Analysis, Part 1, Physical and Mineralogical Methods, 2nd ed, (1986).

d. Method of Soil Analysis, Part 2, Chemical and Microbiological Properties, Am. Soc. Agron., Madison, WI (1965).

e. USEPA Contract Laboratory Program, Statement of Work for Inorganic Analysis.

f. Code of Federal Regulations.

Lionville Laboratory, Inc.

INORGANICS DATA SUMMARY REPORT 05/12/08

CLIENT: TNUHANFORD RC-012 K1204

LVL LOT #: 0804L964

WORK ORDER: 11343-606-001-9999-00

SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT	DILUTION FACTOR
-002	J16HX8	Total Halides	1260	MG/KG	24.1	1.0
-003	J16HX9	Total Halides	122	MG/KG	47.9	1.0

Lionville Laboratory, Inc.

INORGANICS METHOD BLANK DATA SUMMARY PAGE 05/12/08

CLIENT: TNUHANFORD RC-012 K1204 LVL LOT #: 0804L964

WORK ORDER: 11343-606-001-9999-00

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT	DILUTION FACTOR
BLANK1	08LE006-MB1	Total Halides	8.0	u	MG/KG	8.0	1.0

Lionville Laboratory, Inc.

INORGANICS ACCURACY REPORT 05/12/08

CLIENT: TNUHANFORD RC-012 K1204 LVL LOT #: 0804L964

WORK ORDER: 11343-606-001-9999-00

SAMPLE	SITE ID	ANALYTE	SPIKED SAMPLE	INITIAL RESULT	SPIKED AMOUNT	%RECOV.	DILUTION FACTOR(SPK)
-003	J16HX9	Total Halides	2950	122	2880	98.2	1.0
		Total Halides	2790	122	2770	96.2	1.0
BLANK1	08LE006-MB1	Total Halides	488	8.0 u	500	97.7	1.0

Lionville Laboratory, Inc.

INORGANICS DUPLICATE SPIKE REPORT 05/12/08

CLIENT: TNUHANFORD RC-012 K1204

LVL LOT #: 0804L964

WORK ORDER: 11343-606-001-9999-00

SAMPLE	SITE ID	ANALYTE	SPIKE#1 %RECOV	SPIKE#2 %RECOV	%DIFF
-003	J16HX9	Total Halides	98.2	96.2	2.1

Lionville Laboratory Use Only

7804L964

Custody Transfer Record/Lab Work Request

Page 1 of 1

FIELD PERSONNEL: COMPLETE ONLY SHADED AREAS

Client: TNU HANFORD SAF# RC-012

Est. Final Proj. Sampling Date:

Project#: 11343-606-001-9EEE-00

Project Contact/Phone#:

Lionville Laboratory Project Manager: O. JOHNSON

PC: SW846 Del: STD TAT: 7Day

Date Rec'd: 4-22-08 Date Due: 4-29-08

Refrigerator #				A 3												
#/Type Container	Liquid			16												
	Solid															
Volume				250												
Preservatives																
ANALYSES REQUESTED		ORGANIC							INORG							
		VOA	BNA	Pest/PCB	Herb	TPH			Metal	CN						
				OPCB		IOCT										

MATRIX CODES: S- Soil, SE- Sediment, SO- Solid, SL- Sludge, W- Water, O- Oil, A- Air, DS- Drum Solids, DL- Drum Liquids, EP/TCLP Leachate, WI- Wipe, O- Other, F- Fish

Lab ID	Client ID/Description	Matrix QC Chosen (✓) MS	MSD	Matrix	Date Collected	Time Collected	OPCB	IOCT
				W 4-24-08				
001	J16HX7			OIL X	4/17/08	1350	X	X
002	J16HX8			OIL	4/17/08	1500	X	X
003	J16HX9				4/17/08	1525	X	X

Special Instructions: #001 X=ODOR OF Fuel #002, #003 OIL

Special Instructions:
4-24-08 1. matrix changed to Oil per M. Ford
2.
3.
4.
5.
6.

Relinquished by	Received by	Date	Time
		4/22/08	0945

Relinquished by	Received by	Date	Time

Relinquished by	Received by	Date	Time
ORIGINAL			

COMPOSITE WASTE

000000009

Washington Closure Hanford

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

RC-012-018 | Page 1 of 2

Collector: Edmundson/Isom/Perry	Company Contact: Tom Edmundson	Telephone No.: 376-4058	Project Coordinator: KESSNER, JH
Price Code: 7J	Data Turnaround: ~~15~~ Days 7day TRE 4/17		
Project Designation: 100-N Ancillary Facilities & 190-DR Waste Characterization	Sampling Location: 1330-N Waste Pad 2nd Event		SAF No.: RC-012
Ice Chest No.: ERC-96-511	Field Logbook No.: EL-1516-12	COA: RD4MXX2F00	Method of Shipment: Fed Ex
Shipped To: EBERLINE SERVICES / LIONVILLE	Offsite Property No.: A080238		Bill of Lading/Air Bill No.: See OSPC

POSSIBLE SAMPLE HAZARDS/REMARKS
non-rad

Special Handling and/or Storage
Cool to 4c

Preservation	Cool 4C	Cool 4C	None	None	None	Cool 4C					
Type of Container	aG	aGs*	G/P	G/P	G/P	Gs*					
No. of Container(s)	1	0	1	1	1	1					
Volume	~~1000mL~~ 250ml → TRE 4-17-08	~~200mL~~	500mL	500mL	1000mL	60mL					
SAMPLE ANALYSIS	PCBs - 8082	TOX - 9020	Gross Alpha	Gross Beta	See item (1) in Special Instructions	Alcohols, Glycols, & Ketones - 8015 (Ethylene glycol)					
				TRE 4-17-08							

Sample No.	Matrix *	Sample Date	Sample Time										
~~16HX6~~	~~OTHER LIQUID~~	~~4-17-08~~	~~1330~~	~~✓~~	~~✓~~								
16HX7	OTHER LIQUID	4-17-08	1350	✓	✓								
16HX8	OTHER LIQUID	4-17-08	1500	✓	✓								
16HX9	OTHER LIQUID	4-17-08	1525	✓	✓								
~~16HY0~~ MS 4/21/08	OTHER LIQUID	~~4-17-08~~	~~1545~~ TRE 4-17-08										

CHAIN OF POSSESSION

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
R Edmundson	4-17-08 1830	1060 Bottle #2C	4-17-08 1830
060/2C	4/21/08 0945	MZL MSHankouch	4/21/08 0945
MZL MSHankouch	4/21/08 1500		FedEx
Fed Ex	4/22/08 0945		4/22/08 0945

SPECIAL INSTRUCTIONS

(1) Gamma Spectroscopy (TCL List) (Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155)

Sampler unavailable to remove samples from controlled storage. Shipper removed samples from storage location taking custody of samples for shipment to lab.

Matrix *
S=Soil
SE=Sediment
SO=Solid
SI=Sludge
W = Water
O=Oil
A=Air
DS=Drum Solids
DL=Drum Liquids
T=Tissue
WI=Wipe
L=Liquid
V=Vegetation
X=Other

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

FCH-EE-011

000000010

Lionville Laboratory Incorporated

SAMPLE RECEIPT CHECKLIST (SRC)

CLIENT: TNU HANFORD

Project/SAF/SOW/Release #: RC-012

Date: 4/22/08

LvLI Batch #: 0804L964

Sample Custodian: [signature]

NOTE: EXPLAIN ALL DISCREPANCIES

1. Samples Hand Delivered or Shipped?	Carrier Fed Ex		Airbill # 799840726890
2. Custody Seals on coolers or shipping containers intact, signed & dated?	☑ Yes	☐ No	☐ No Seals
3. Outside of coolers or shipping containers are free from damage?	☑ Yes	☐ No	*Comments:*
4. All expected paperwork received (coc & other client specific information) sealed in plactic bag and easily accessible?	☑ Yes	☐ No	
5. Samples received cooled or ambient?	Temp 3-8	°C	Cooler # ERC96-511
How was the temperature taken?	☑ IR	☐ Temp. Blank	☐ Other (Specify):
Is the Temp. Criteria met for these samples? (Hg in soils @ 4°C)	☑ Yes	☐ No	
6. Custody seals on sample containers intact, signed and dated?	☑ Yes	☐ No	☐ No Seals
7. COC (Client & LvLI) signed & dated?	☑ Yes	☐ No	
8. Sample containers are intact?	☑ Yes	☐ No	
9. All samples on COC received?	☑ Yes	☐ No	
All samples received on COC?	☑ Yes	☐ No	
10. All sample label information matches COC?	☑ Yes	☐ No	
11. Samples properly preserved? (If #5 is no, then this is no.)	☑ Yes	☐ No	
12. Samples received within hold times?	☑ Yes	☐ No	
Short holds taken to wet lab?	☐ Yes	☐ No	☑ N/A
13. VOA, TOC, TOX free of headspace?	☐ Yes	☐ No	☑ N/A
14. QC stickers placed on bottles designated by client?	☐ Yes	☐ No	☑ 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.)	☑ Yes	☐ No	
16. Project Manager contacted concerning any discrepancies?	☐ Yes	☐ No	☑ N/A

Person Contacted _____ Date _____

LVLI LIONVILLE LABORATORY INC.

Lionville Laboratory, Inc.
PCB ANALYTICAL DATA PACKAGE FOR
TNU-HANFORD RC-012 K1204

RECEIVED MAY 2008

DATE RECEIVED: 04/22/08 LVL LOT # :08041964

CLIENT ID	LVL #	MTX	PREP #	COLLECTION	EXTR/PREP	ANALYSIS
J16HX7	001	OI	08LE0196	04/17/08	04/24/08	04/25/08
J16HX7	001 MS	OI	08LE0196	04/17/08	04/24/08	04/25/08
J16HX7	001 MSD	OI	08LE0196	04/17/08	04/24/08	04/25/08
J16HX8	002	OI	08LE0196	04/17/08	04/24/08	04/25/08
J16HX9	003	OI	08LE0196	04/17/08	04/24/08	04/25/08

LAB QC:

PBLKPK	MB1	S	08LE0196	N/A	04/24/08	04/24/08
PBLKPK	MB1 BS	S	08LE0196	N/A	04/24/08	04/24/08

LIONVILLE LABORATORY INC.

Case Narrative

Client: TNU-HANFORD RC-012
LVL #: 0804L964
SDG/SAF # K12041/RC-012

W.O. #: 11343-606-001-9999-00
Date Received: 04-22-2008

PCB

Three (3) oil samples were collected on 04-17-2008.

The samples and their associated QC samples were extracted on 04-24-2008 and analyzed according to Lionville Laboratory SOPs based on SW846, 3rd Edition procedure on 04-24,25-2008. The extraction procedure was based on method 3580A (waste dilution – 1g into 10 mLs Hexane) and the extracts were analyzed based on method 8082.

All soil samples are reported on a dry weight basis unless requested by the client, required by the method, or noted otherwise. The following is a summary of the 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 extracted and analyzed within required holding time
2. The samples and their associated QC samples received Copper-Sulfur and Sulfuric Acid cleanups according to Lionville Laboratory SOPs based on SW846 methods 3660A and 3665A respectively.
3. The method blank was below the reporting limits for all target compounds.
4. One (1) of fourteen (14) surrogate recoveries was outside acceptance criteria. However, the surrogate recovery acceptance criteria were met (i.e. no more than one outlier per sample).
5. All blank spike recoveries were within acceptance criteria.
6. All matrix spike recoveries were within acceptance criteria.
7. The initial calibrations associated with this data set were within acceptance criteria.

k:\group\data\pest\tnu\0804-964ko2.pcb.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 9 pages.

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LIONVILLE LABORATORY INC.

8. The continuing calibration standards analyzed prior to sample extracts were within acceptance criteria.

9. The results for oil samples were reported on an 'as-received basis' as required by the project.

10. 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.

11. 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
Laboratory Manager
Lionville Laboratory Incorporated

5/6/08
Date

208 Welsh Pool Road • Exton, PA 19341- 1313 • (610) 280-3000 • Fax (610) 280-3041

GLOSSARY OF 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.
. I	=	Indicates an interference on one analytical column only. Result is reported from remaining analytical column.

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.
NS	=	Not Spiked.
SP	=	Indicates Spiked Compound.
P	=	This flag is used for an PESTICIDE/PCB target analyte when there is greater than 25% difference for detected concentrations between the two GC columns (see Form X). The lower of the two values is reported on Form I and flagged with a "P".
D	=	This flag identifies all compounds identified in an analysis at a secondary dilution factor.
C	=	This flag applies to a compound that has been confirmed by GC/MS.
NPM	=	No pattern match for multi-component target analytes.

Lionville Laboratory, Inc.

PCBs by GC

Report Date: 04/25/08 13:32

RFW Batch Number: **0804L964** Client: **TNU-HANFORD RC-012** Work Order: 11343606001 Page: 1

	Cust ID:	J16HX7	J16HX7	J16HX7	J16HX8	J16HX9	PBLKPK
Sample Information	RFW#:	001	001 MS	001 MSD	002	003	08LE0196-MB1
	Matrix:	OIL	OIL	OIL	OIL	OIL	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:	Tetrachloro-m-xylene	75 %	76 %	78 %	66 %	70 %	101 %
	Decachlorobiphenyl	70 %	72 %	79 %	48 %	34 * %	101 %
Aroclor-1016		400 U	71 %	74 %	400 U	400 U	400 U
Aroclor-1221		400 U	400 U	400 U	400 U	400 U	400 U
Aroclor-1232		400 U	400 U	400 U	400 U	400 U	400 U
Aroclor-1242		400 U	400 U	400 U	400 U	400 U	400 U
Aroclor-1248		400 U	400 U	400 U	400 U	400 U	400 U
Aroclor-1254		400 U	400 U	400 U	400 U	400 U	400 U
Aroclor-1260		400 U	69 %	78 %	400 U	400 U	400 U

	Cust ID:	PBLKPK BS
Sample Information	RFW#:	08LE0196-MB1
	Matrix:	SOIL
	D.F.:	1.00
	Units:	UG/KG
Surrogate:	Tetrachloro-m-xylene	101 %
	Decachlorobiphenyl	100 %
Aroclor-1016		113 %
Aroclor-1221		400 U
Aroclor-1232		400 U
Aroclor-1242		400 U
Aroclor-1248		400 U
Aroclor-1254		400 U
Aroclor-1260		113 %

U= Analyzed, not detected. J= Present below detection limit. B= Present in blank. NR= Not reported. NS= Not spiked. %= Percent recovery. D= Diluted out. I= Interference. NA= Not Applicable. *= Outside of EPA CLP QC

000000005

Lionville Laboratory, Inc.

SAMPLE EXTRACTION RECORD

Sheet no.: 1

Extract. Date: 04/24/08 Extraction Batch No: 08LE0196 Analyst: MF Method: **** WO 3580

Test: OPCB Cleanup Date: 04/24/08 Analyst: MF Client: TNU-HANFORD RC-012

LIMS Report Date: 04/24/08 Solvent: HEXANE Adsorbent: H2SO4

Sample No:	Client Name / Client ID	pH	Initial WT/VOL	Surr. Mult.	Spike Mult.	Final VOL	Final VOL	Split Mult.	GPC Y/N	% Solids	C/D FACTOR
0804L964-	TNU-HANFORD RC-012										
001	J16HX7		1.0	10.0		10		1.0	N	0.00	10000
001 -S	J16HX7		1.0	10.0	1.0	10		1.0	N	0.00	10000
001 -T	J16HX7		1.0	10.0	1.0	10		1.0	N	0.00	10000
002	J16HX8		1.0	10.0		10		1.0	N	0.00	10000
003	J16HX9		1.0	10.0		10		1.0	N	0.00	10000
08LE0196-MB1	PBLKPK		1.0	10.0		10		1.0	N	100.00	10000
08LE0196-MB1 -S	PBLKPK		1.0	10.0	1.0	10		1.0	N	100.00	10000

Comments: SMPL 003 REC BOTH SIL AND ACID CLEAN
Surrogate: 250 UYL OLM PSURR 89916405
Spike: 250 UL AR1660 89916602

Extracts Transferred	Relinquished By	Date Time	Received By	Date Time	Reason for Transfer
all	[illegible]	4/24/08 1400	SZ	4/24/08 14:10	GC

000000006

Lionville Laboratory Use Only

0804L964

Custody Transfer Record/Lab Work Request

LVLI Lionville Laboratory Inc

FIELD PERSONNEL: COMPLETE ONLY SHADED AREAS

000000007

Client: TNU HANFORD SAF# RC-012

Est. Final Proj. Sampling Date:

Project#: 11343-606-001-9999-00

Project Contact/Phone#:

Lionville Laboratory Project Manager: O. JOHNSON

QC: SW846 Del: STD TAT: 7Day

Date Rec'd: 4-22-08 Date Due: 4-29-08

Refrigerator #				A 3											
#/Type Container	Liquid / Solid			16											
Volume				250											
Preservatives															
ANALYSES REQUESTED →		VOA	BNA	Pest/PCB	Herb	TPH			Metal	CN					
		ORGANIC							INORG						
		Lionville Laboratory Use Only													
				OPCB		IOCT									

MATRIX (CODES): SL- Soil; SE- Sediment; SO- Solid; SL- Sludge; W- Water; O- Oil; A- Air; DS- Drum Solids; DL- Drum Liquids; E- EP/TCLP Leachate; WI- Wipe; O- Other; F- Fish

Lab ID	Client ID/Description	Matrix QC Chosen (✓) MS	MSD	Matrix	Date Collected	Time Collected	OPCB	IOCT
				we 4-24-08				
001	J16HX7			OIL X	4-17-08	1350	X	X
002	J16HX8			oil	4-17-08	1500	X	X
003	J16HX9			L	4-17-08	1525	X	X

Special Instructions: #001 X=ODOR OF Fuel #002, #003 OIL

Special Instructions:
4-24-08 1. matrix changed to Oil per M. Ford
2.
3.
4.
5.
6.

Relinquished by	Received by	Date	Time
[signature]	[signature]	4/22/08	0845

Relinquished by	Received by	Date	Time

Relinquished by	Received by	Date	Time
ORIGINAL DOWNITTEN		COMPOSITE WASTE	

Washington Closure Hanford

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

RC-012-018 | Page 1 of 2

Collector: Edmundson/Isom/Perry	Company Contact: Tom Edmundson	Telephone No.: 376-4058	Project Coordinator: KESSNER, JH
Price Code: 7J	Data Turnaround: ~~15~~ Days 7 days TRE 4-17-08 J		
Project Designation: 100-N Ancillary Facilities & 190-DR Waste Characterization	Sampling Location: 1330-N Waste Pad 2nd Event		SAF No.: RC-012
Ice Chest No.: ERC-96-511	Field Logbook No.: EL-1516-12	COA: RD4MXX2F00	Method of Shipment: Fed Ex
Shipped To: EBERLINE SERVICES / LIONVILLE	Offsite Property No.: A080238		Bill of Lading/Air Bill No.: See OSPC

POSSIBLE SAMPLE HAZARDS/REMARKS: non-rad

Special Handling and/or Storage: Cool to 4c

Preservation	Cool 4C	Cool 4C	None	None	None	Cool 4C				
Type of Container	aG	aGs*	G/P	G/P	G/P	Gs*				
No. of Container(s)	1	10	1	1	1	1				
Volume	~~1000mL~~ 250mL → TRE 4-17-08	~~200mL~~	500mL	500mL	1000mL	60mL				
SAMPLE ANALYSIS	PCBs - 8082	TOX - 9020	Gross Alpha	Gross Beta TRE 4-17-08	See item (1) in Special Instructions	Alcohols, Glycols, & Ketones - 8015 (Ethylene glycol)				

Sample No.	Matrix *	Sample Date	Sample Time									
~~6HX6~~	~~OTHER LIQUID~~	~~4-17-08~~	~~1330~~	~~✓~~	~~✓~~							
6HX7	OTHER LIQUID	4-17-08	1350	✓	✓							
6HX8	OTHER LIQUID	4-17-08	1500	✓	✓							
6HX9	OTHER LIQUID	4-17-08	1525	✓	✓							
6HY0 MS 4/21/08	OTHER LIQUID	~~4-17-08~~	~~1545~~ TRE 4-17-08									

CHAIN OF POSSESSION

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
TR Edmundson	4-17-08 1830	1060 Battelle #2C	4-17-08 1830
1060/2C	4/21/08 0945	MZL MStankovich	4/21/08 0945
MZL MStankovich	4/21/08 1500		FedEx
FedEx	4/22/08 0945	4/22/08	0945

SPECIAL INSTRUCTIONS

(1) Gamma Spectroscopy (TCL List) (Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155)

Sampler unavailable to remove samples from controlled storage. Shipper removed samples from storage location taking custody of samples for shipment to lab.

Matrix *

S=Soil
SE=Sediment
SO=Solid
St=Sludge
W = Water
O=Oil
A=Air
DS=Drum Solids
DL=Drum Liquids
T=Tissue
Wi=Wipe
L=Liquid
V=Vegetation
X=Other

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

CH-EE-011

Lionville Laboratory Incorporated

SAMPLE RECEIPT CHECKLIST (SRC)

CLIENT: TNU HANFORD

Date: 4/22/08

Project/SAF/SOW/Release #: RC-012

LvLI Batch #: 0804L964

Sample Custodian: [signature]

NOTE: EXPLAIN ALL DISCREPANCIES

1. Samples Hand Delivered or Shipped?	Carrier Fed Ex		Airbill # 799840726890
2. Custody Seals on coolers or shipping containers intact, signed & dated?	☑ Yes	☐ No	☐ No Seals
3. Outside of coolers or shipping containers are free from damage?	☑ Yes	☐ No	*Comments:*
4. All expected paperwork received (coc & other client specific information) sealed in plactic bag and easily accessible?	☑ Yes	☐ No	
5. Samples received cooled or ambient?	Temp 3-8	°C	Cooler # ERC-96-511
How was the temperature taken?	☑ IR	☐ Temp. Blank	☐ Other (Specify):
Is the Temp. Criteria met for these samples? (Hg in soils @ 4°C)	☑ Yes	☐ No	
6. Custody seals on sample containers intact, signed and dated?	☑ Yes	☐ No	☐ No Seals
7. COC (Client & LvLI) signed & dated?	☑ Yes	☐ No	
8. Sample containers are intact?	☑ Yes	☐ No	
9. All samples on COC received?	☑ Yes	☐ No	
All samples received on COC?	☑ Yes	☐ No	
10. All sample label information matches COC?	☑ Yes	☐ No	
11. Samples properly preserved? (If #5 is no, then this is no.)	☑ Yes	☐ No	
12. Samples received within hold times?	☑ Yes	☐ No	
Short holds taken to wet lab?	☐ Yes	☐ No	☑ N/A
13. VOA, TOC, TOX free of headspace?	☐ Yes	☐ No	☑ N/A
14. QC stickers placed on bottles designated by client?	☐ Yes	☐ No	☑ 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.)	☑ Yes	☐ No	
16. Project Manager contacted concerning any discrepancies?	☐ Yes	☐ No	☑ N/A

Person Contacted _____ Date _____

LvLI LIONVILLE LABORATORY INC.