H1510 0056944

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LIONVILLE LABORATORY INC.

Analytical Report

Client: TNU-HANFORD B01-103
LVL#: 0109L896
SDG/SAF#: H1510/B01-103

W.O.#: 11343-606-001-9999-00
Date Received: 09-21-01

Revision

METALS CASE NARRATIVE

This report has been revised to include the addition of Arsenic.

1. This narrative covers the analyses of 2 solid samples and 2 TCLP leachate samples.

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

3. All analyses were performed within the required holding times.

4. The cooler temperature has been recorded on the Chain of Custody.

5. All Initial and Continuing Calibration Verifications (ICV/CCVs) were within the 90-110% control limits.

6. All Initial and Continuing Calibration Blanks (ICB/CCBs) were within control limits (less than the PQL).

7. All preparation/method blanks (MB) were within method criteria {less than the Practical Quantitation Limit (3X the IDL), MB value less than 5% of the RCRA limit, or samples greater than 20X MB value}. Refer to the Inorganics Method Blank Data Summary.

8. All ICP Interference Check Standards were within control limits.

9. All laboratory control samples (LCS) were within the 80-120% control limits. Refer to the Inorganics Laboratory Control Standards Report.

10. The matrix spike (MS) recoveries for 2 analytes were outside the 75-125% control limits. Refer to the Inorganics Accuracy Report.

11. For analytes where the ICP MS is out-of-control, a post-digestion MS (PDS) and serial dilution are performed. A serial dilution is performed for Mercury. A PDS was prepared at meaningful concentration level for the following analytes:

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 18 pages.

208 Welsh Pool Road • Lionville, PA 19341-1333 • (610) 280-3000 • Fax (610) 280-3041

Sample ID	Element	PDS Concentration (ppb)	PDS % Recovery
B12XJ7	Aluminum	25,000	93.2
	Iron	25,000	72.4

12. The duplicate analyses for 3 analytes were outside the 20% Relative Percent Difference (RPD) control limits. Refer to the Inorganics Precision Report.

13. The TCLP extract from sample B12XJ7 was selected for the matrix spike (MS) for this analytical batch. All MS recoveries were greater than 50% as per method criteria.

14. For the purposes of this report, the data has been reported to the Instrument Detection Limit (IDL). Values between the IDL and the Practical Quantitation Limit (PQL) are acquired in a region of less-certain quantification.

15. 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
Deputy Laboratory Manager
Lionville Laboratory Incorporated

11-28-01
Date

gmb/m09-896r

LVLI
LIONVILLE LABORATORY INC.

Lionville Laboratory Sample Discrepancy Report (SDR)

SDR #: 01PM096

Initiator: O Johnson
Batch: 0109 ~~L916~~ 896 osj 11/26/01
Parameter: metals
Date: 11/16/01
Samples: all
Matrix: Sil
Client: TNu Hanford H7510
Method: SW846/MCAWW/CLP/
Prep Batch:

1. Reason for SDR

a. COC Discrepancy
__ Tech Profile Error
__ Transcription Error
✓ Client Request
__ Wrong Test Code
__ Sampler Error on C-O-C
__ Other _____

b. General Discrepancy
__ Missing Sample/Extract*
__ Hold Time Exceeded
__ Improper Bottle Type
__ Container Broken
__ Insufficient Sample*
__ Not Amenable to Analysis
__ Wrong Sample Pulled
__ Preservation Wrong
__ Label ID's Illegible
__ Received Past Hold

Note*: Verified by [Log-In] or [Prep Group] (circle)...signature/date: _____

c. Problem (Include all relevant specific results; attach data if necessary)

2. Known or Probable Causes(s)

3. Discussion and Proposed Action
__ Re-log
__ Entire Batch
__ Following Samples: _____
__ Re-leach
__ Re-extract
__ Re-digest
__ Revise EDD
__ Change Test Code to _____
__ Place On/Take Off Hold (circle)

Other Description:
add arsenic, TCLP to batch

4. Project Manager Instructions...signature/date: [signature] 11/16/01
__ 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] 11/26/01
✓ Verified re-[log][leach][extract][digest][analysis] (circle)
✓ Included in Case Narrative [initials] 11/28/01
✓ Hard Copy COC Revised
✓ Electronic COC Revised
__ EDD Corrections Completed

Other Explanation:

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

Route	Distribution of Completed SDR	Route	Distribution of Completed SDR
__	X Initiator	2	__ Metals: Beegle
__	X Lab General Manager: M. Taylor	__	__ Inorganic: Perrone
__	X Project Mgr: Stone/Johnson/Haslett	__	__ GC/LC: Kiger
__	X Technical Mgr: Wesson/Daniels	__	__ MS: Rychlak/Layman
__	X QA (file): Alberts	1	✓ Log-in: ~~Keppel~~ Melnick
__	__ Data Management: Feldman	__	__ Admin: Soos
__	__ Sample Prep: Beegle/Kiger	__	__ Other: _____

QA-105-A-0801

METALS METHOD GLOSSARY

The following methods are used as reference for the digestion and analysis of samples contained within this Lot#: 01091896

Leaching Procedure: __1310 ✓ __1311 __1312 __Other:_____

CLP Metals __ Digestion and __ Analysis Methods: __ILM03.0 __ILM04.0

Metals Digestion Methods: __3005A ✓ 3010A __3015 __3020A ✓ 3050B __3051 __200.7 __SS17
__Other: _____

Metals Analysis Methods

	SW846		EPA		STD MTD	EPA OSWR	USATHAMA
Aluminum	✓ 6010B		__200.7				__99
Antimony	✓ 6010B	__7041 [5]	__200.7	__204.2			__99
Arsenic	✓ 6010B	__7060A [5]	__200.7	__206.2	__3113B		__99
Barium	✓ 6010B		__200.7				__99
Beryllium	✓ 6010B		__200.7				__99
Bismuth	✓ 6010B [1]		__200.7 [1]			__1620	__99
Boron	__6010B		__200.7				__99
Cadmium	✓ 6010B	__7131A [5]	__200.7	__213.2			__99
Calcium	__6010B		__200.7				__99
Chromium	✓ 6010B	__7191 [5]	__200.7	__218.2			__SS17
Cobalt	__6010B		__200.7				__99
Copper	✓ 6010B	__7211 [5]	__200.7	__220.2			__99
Iron	✓ 6010B		__200.7				__99
Lead	✓ 6010B	__7421 [5]	__200.7	__239.2	__3113B		__99
Lithium	__6010B	__7430 [4]	__200.7			__1620	__99
Magnesium	✓ 6010B		__200.7				__99
Manganese	✓ 6010B		__200.7				__99
Mercury	✓ 7470A [3]	__7471A [3]	__245.1 [2]	__245.5 [2]			__99
Molybdenum	✓ 6010B		__200.7				__99
Nickel	✓ 6010B		__200.7				__99
Potassium	✓ 6010B	__7610 [4]	__200.7	__258.1 [4]			__99
Rare Earths	__6010B [1]		__200.7 [1]			__1620	__99
Selenium	✓ 6010B	__7740 [5]	__200.7	__270.2	__3113B		__99
Silicon	__6010B [1]		__200.7			__1620	__99
Silica	__6010B		__200.7			__1620	__99
Silver	✓ 6010B	__7761 [5]	__200.7	__272.2			__99
Sodium	✓ 6010B	__7770 [4]	__200.7	__273.1 [4]			__99
Strontium	__6010B		__200.7				__99
Thallium	__6010B	__7841 [5]	__200.7	__279.2 __200.9			__99
Tin	✓ 6010B		__200.7				__99
Titanium	__6010B		__200.7				__99
Uranium	__6010B [1]		__200.7 [1]			__1620	__99
Vanadium	✓ 6010B		__200.7				__99
Zinc	✓ 6010B		__200.7				__99
Zirconium	__6010B [1]		__200.7 [1]			__1620	__99

Other: Method: _____

L-WI-033/M-03/01

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.

B = Indicates that the parameter was between the Instrument Detection Limit (IDL) and the Contract Required Detection Limit (CRDL)

Q QUALIFIERS

E = The reported value is estimated because of the presence of interference.

M = Duplicate injection precision not met.

N = Spiked sample recovery not within control limits.

S = The reported value was determined by the Method of Standard Additions (MSA).

W = Post Digestion spike for Furnace AA analysis is out of control limits (85 -115 %), while sample absorbance is less than 50% of spike absorbance.

* = Duplicate analysis not within control limits.

+ = Correlation coefficient for the MSA is less than 0.995.

ABBREVIATIONS

PB = Method or Preparation Blank.
S = Matrix Spike.
T = Matrix Spike Duplicate.
R or D = Sample Replicate

ANALYTICAL METAL METHODS

1. Not included in the method element list.
2. Modified Hg: Hg1 and Hg2 require less total volume of digestate due to the autosampler analysis. Sample volumes and reagents for mercury determinations in water and soil have been proportionately scaled down to adapt to this semi-automated technique. The sample volume used for water analysis is 33 mL. For soils, 0.1 grams of sample is taken to a final volume of 50 mL (including all reagents).
3. Modified Hg: Hg1 and Hg2 require less total volume of digestate due to the autosampler analysis. Sample volumes and reagents for mercury determinations in water and soil have been proportionately scaled down to adapt to this semi-automated technique. The sample volume used for water analysis is 33 mL. For soils, three 0.1 gram of sample is taken to a final volume of 50 mL (including all reagents).
4. Flame AA.
5. Graphite Furnace AA.

Lionville Laboratory, Inc.

INORGANICS DATA SUMMARY REPORT 11/28/01

CLIENT: TNUHANFORD B01-103 M1510 LVL LOT #: 0109L896

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

SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT	DILUTION FACTOR
-001	B12XJ7	Aluminum, Total	8100	MG/KG	4.2	1.0
		Bismuth, Total	5.8	MG/KG	4.4	1.0
		Copper, Total	11.7	MG/KG	0.75	1.0
		Iron, Total	25100	MG/KG	0.70	1.0
		Potassium, Total	1280	MG/KG	64.7	1.0
		Magnesium, Total	5640	MG/KG	4.5	1.0
		Manganese, Total	397	MG/KG	0.26	1.0
		Molybdenum, Total	0.94 u	MG/KG	0.94	1.0
		Sodium, Total	383	MG/KG	13.5	1.0
		Tin, Total	4.6	MG/KG	1.3	1.0
-002	B12XJ8	Aluminum, Total	7280	MG/KG	5.6	1.0
		Bismuth, Total	5.8 u	MG/KG	5.8	1.0
		Copper, Total	13.6	MG/KG	0.99	1.0
		Iron, Total	19900	MG/KG	0.93	1.0
		Potassium, Total	880	MG/KG	86.1	1.0
		Magnesium, Total	3560	MG/KG	5.9	1.0
		Manganese, Total	497	MG/KG	0.35	1.0
		Molybdenum, Total	5.1	MG/KG	1.3	1.0
		Sodium, Total	664	MG/KG	18.0	1.0
		Tin, Total	4.3	MG/KG	1.7	1.0

Lionville Laboratory, Inc.

INORGANICS DATA SUMMARY REPORT 11/28/01

CLIENT: TNUHANFORD B01-103 H1510 LVL LOT #: 0109L896

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

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT	DILUTION FACTOR
-003	B12XJ7	Silver, TCLP Leachate	9.6	u	UG/L	9.6	1.0
		Arsenic, TCLP Leachate	52.1	u	UG/L	52.1	1.0
		Barium, TCLP Leachate	537		UG/L	5.5	1.0
		Beryllium,TCLP Leachate	0.40	u	UG/L	0.40	1.0
		Cadmium, TCLP Leachate	6.3	u	UG/L	6.3	1.0
		Chromium, TCLP Leachate	4.8	u	UG/L	4.8	1.0
		Mercury, TCLP Leachate	0.10	u	UG/L	0.10	1.0
		Nickel, TCLP Leachate	11.3	u	UG/L	11.3	1.0
		Lead, TCLP Leachate	22.7	u	UG/L	22.7	1.0
		Antimony, TCLP Leachate	45.4	u	UG/L	45.4	1.0
		Selenium, TCLP Leachate	62.1	u	UG/L	62.1	1.0
		Vanadium, TCLP Leachate	8.9	u	UG/L	8.9	1.0
		Zinc, TCLP Leachate	9.7		UG/L	2.8	1.0
-004	B12XJ8	Silver, TCLP Leachate	9.6	u	UG/L	9.6	1.0
		Arsenic, TCLP Leachate	52.1	u	UG/L	52.1	1.0
		Barium, TCLP Leachate	729		UG/L	5.5	1.0
		Beryllium,TCLP Leachate	0.79		UG/L	0.40	1.0
		Cadmium, TCLP Leachate	6.3	u	UG/L	6.3	1.0
		Chromium, TCLP Leachate	94.6		UG/L	4.8	1.0
		Mercury, TCLP Leachate	0.10	u	UG/L	0.10	1.0
		Nickel, TCLP Leachate	39.9		UG/L	11.3	1.0
		Lead, TCLP Leachate	33.8		UG/L	22.7	1.0
		Antimony, TCLP Leachate	45.4	u	UG/L	45.4	1.0
		Selenium, TCLP Leachate	62.1	u	UG/L	62.1	1.0
		Vanadium, TCLP Leachate	8.9	u	UG/L	8.9	1.0
		Zinc, TCLP Leachate	21.0		UG/L	2.8	1.0

Lionville Laboratory, Inc.

INORGANICS METHOD BLANK DATA SUMMARY PAGE 11/28/01

CLIENT: TNUHANFORD B01-103 M1510 LVL LOT #: 0109L896

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

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT	DILUTION FACTOR
BLANK1	01L0686-MB1	Aluminum, Total	4.5	u	MG/KG	4.5	1.0
		Bismuth, Total	4.7	u	MG/KG	4.7	1.0
		Copper, Total	0.80	u	MG/KG	0.80	1.0
		Iron, Total	2.7		MG/KG	0.75	1.0
		Potassium, Total	69.3	u	MG/KG	69.3	1.0
		Magnesium, Total	4.8	u	MG/KG	4.8	1.0
		Manganese, Total	0.28	u	MG/KG	0.28	1.0
		Molybdenum, Total	1.0	u	MG/KG	1.0	1.0
		Sodium, Total	14.5	u	MG/KG	14.5	1.0
		Tin, Total	1.4	u	MG/KG	1.4	1.0
BLANK1	01L0639-MB1	Silver, TCLP Leachate	9.6	u	UG/L	9.6	1.0
		Arsenic, TCLP Leachate	52.1	u	UG/L	52.1	1.0
		Barium, TCLP Leachate	5.5	u	UG/L	5.5	1.0
		Beryllium,TCLP Leachate	0.40	u	UG/L	0.40	1.0
		Cadmium, TCLP Leachate	6.3	u	UG/L	6.3	1.0
		Chromium, TCLP Leachate	4.8	u	UG/L	4.8	1.0
		Nickel, TCLP Leachate	11.3	u	UG/L	11.3	1.0
		Lead, TCLP Leachate	22.7	u	UG/L	22.7	1.0
		Antimony, TCLP Leachate	45.4	u	UG/L	45.4	1.0
		Selenium, TCLP Leachate	62.1	u	UG/L	62.1	1.0
		Vanadium, TCLP Leachate	8.9	u	UG/L	8.9	1.0
		Zinc, TCLP Leachate	5.7		UG/L	2.8	1.0
BLANK1	01C0302-MB1	Mercury, Total	0.10	u	UG/L	0.10	1.0
BLANK2	01C0302-MB2	Mercury, TCLP Leachate	0.21		UG/L	0.10	1.0

Lionville Laboratory, Inc.

INORGANICS ACCURACY REPORT 11/28/01

CLIENT: TMUHANFORD B01-103 H1510 LVL LOT #: 0109L896

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

SAMPLE	SITE ID	ANALYTE	SPIKED SAMPLE	INITIAL RESULT	SPIKED AMOUNT	%RECOV	DILUTION FACTOR(SPK)
-001	B12XJ7	Aluminum, Total	8790	8100	187	369.1*	1.0
		Bismuth, Total	453	5.8	467	95.8	1.0
		Copper, Total	35.6	11.7	23.4	102.1	1.0
		Iron, Total	25000	25100	93.4	-76. *	1.0
		Potassium, Total	3520	1280	2340	95.9	1.0
		Magnesium, Total	7960	5640	2340	99.4	1.0
		Manganese, Total	441	397	46.7	94.0*	1.0
		Molybdenum, Total	87.7	0.94u	93.4	93.9	1.0
		Sodium, Total	2610	383	2340	95.2	1.0
		Tin, Total	96.3	4.6	93.4	98.2	1.0
-003	B12XJ7	Silver, TCLP Leachate	3270	9.6 u	5000	65.4	1.0
		Arsenic, TCLP Leachate	4490	52.1 u	5000	89.9	1.0
		Barium, TCLP Leachate	95400	537	100000	94.8	1.0
		Beryllium, TCLP Leacha	828	0.40u	1000	82.8	1.0
		Cadmium, TCLP Leachate	676	6.3 u	1000	67.6	1.0
		Chromium, TCLP Leachat	4360	4.8 u	5000	87.2	1.0
		Mercury, TCLP Leachate	178	0.10u	200	89.1	50.0
		Nickel, TCLP Leachate	886	11.3 u	1000	88.6	1.0
		Lead, TCLP Leachate	4550	22.7 u	5000	91.0	1.0
		Antimony, TCLP Leachat	941	46.4 u	1000	94.1	1.0
		Selenium, TCLP Leachat	947	62.1 u	1000	94.7	1.0
		Vanadium, TCLP Leachat	884	8.9 u	1000	88.4	1.0
		Zinc, TCLP Leachate	896	9.7	1000	88.7	1.0

Lionville Laboratory, Inc.

INORGANICS PRECISION REPORT 11/28/01

CLIENT: TNUHANFORD B01-103 M1510 LVL LOT #: 0109L096

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

SAMPLE	SITE ID	ANALYTE	INITIAL RESULT	REPLICATE	RPD	DILUTION FACTOR(REP)
-001REP	B12XJ7	Aluminum, Total	8100	8390	3.5	1.0
		Bismuth, Total	5.8	4.4 u	NC 200	1.0
		Copper, Total	12.7	13.1	11.3	1.0
		Iron, Total	25100	25900	3.2	1.0
		Potassium, Total	1280	1310	1.8	1.0
		Magnesium, Total	5640	5870	4.0	1.0
		Manganese, Total	397	421	5.8	1.0
		Molybdenum, Total	0.94u	0.94u	NC	1.0
		Sodium, Total	383	391	2.0	1.0
		Tin, Total	4.6	3.7	21.7	1.0
-003REP	B12XJ7	Mercury, TCLP Leachate	0.10u	0.10u	NC	1.0

yp 11/28/01

Lionville Laboratory, Inc.

INORGANICS PRECISION REPORT 11/28/01

CLIENT: TNUHANFORD B01-103 H1510 LVL LOT #: 0109L896

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

SAMPLE	SITE ID	ANALYTE	INITIAL RESULT	REPLICATE	RPD	DILUTION FACTOR(REP)
-004REP	B12XJ8	Silver, TCLP Leachate	9.6 u	9.6 u	NC	1.0
		Arsenic, TCLP Leachate	52.1 u	52.1 u	NC	1.0
		Barium, TCLP Leachate	729	737	1.1	1.0
		Beryllium TCLP Leachate	0.79	0.79	0.00	1.0
		Cadmium, TCLP Leachate	6.3 u	6.3 u	NC	1.0
		Chromium, TCLP Leachate	94.6	91.0	3.9	1.0
		Nickel, Leachate	39.9	44.5	10.9	1.0
		Lead, TCLP Leachate	33.8	22.7 u	NC	1.0
		Antimony, Leachate	45.4 u	45.4 u	NC	1.0
		Selenium, TCLP Leachate	62.1 u	62.1 u	NC	1.0
		Vanadium, TCLP Leachate	8.9 u	8.9 u	NC	1.0
		Zinc, Leachate	21.0	22.6	7.3	1.0

11/28/01

Lionville Laboratory, Inc.

INORGANICS LABORATORY CONTROL STANDARDS REPORT 11/28/01

CLIENT: TNUHANFORD B01-103 H1510 LVL LOT #: 0109L896

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

SAMPLE	SITE ID	ANALYTE	SPIKED SAMPLE	SPIKED AMOUNT	UNITS	%RECOV
LCS1	01L0686-LC1	Aluminum, LCS	486	500	MG/KG	97.2
		Bismuth, LCS	467	500	MG/KG	93.3
		Copper, LCS	119	125	MG/KG	95.0
		Iron, LCS	489	500	MG/KG	97.9
		Potassium, LCS	2370	2500	MG/KG	94.9
		Magnesium, LCS	2400	2500	MG/KG	96.0
		Manganese, LCS	73.7	75.0	MG/KG	98.3
		Molybdenum, LCS	487	500	MG/KG	97.3
		Sodium, LCS	2360	2500	MG/KG	94.2
		Tin, LCS	473	500	MG/KG	94.7
LCS1	01L0639-LC1	Silver, LCS	451	500	UG/L	90.1
		Arsenic, LCS	9770	10000	UG/L	97.7
		Barium, LCS	5030	5000	UG/L	100.5
		Beryllium, LCS	246	250	UG/L	98.2
		Cadmium, LCS	243	250	UG/L	97.2
		Chromium, LCS	500	500	UG/L	99.9
		Nickel, LCS	2030	2000	UG/L	101.7
		Lead, LCS	2480	2500	UG/L	99.4
		Antimony, LCS	2950	3000	UG/L	98.3
		Selenium, LCS	9730	10000	UG/L	97.3
		Vanadium, LCS	2430	2500	UG/L	97.1
		Zinc, LCS	978	1000	UG/L	97.8
LCS1	01C0302-LC1	Mercury, LCS	5.1	5.0	UG/L	102.0

(8) 10H MACO LYM... NOT metals
BNA From Nicki DIG

Lionville Laboratory Use Only
01091896

Custody Transfer Record/Lab Work Request

Page 1 of 1

FIELD PERSONNEL: COMPLETE ONLY SHADED AREAS

LVLI

Client: TNU-Hanford B01-103
Est. Final Proj. Sampling Date:
Project #: 11343-606-001-9999-00
Project Contact/Phone #:
Lionville Laboratory Project Manager: OJ
QC: SPEC Del: STD TAT: 30

Date Rec'd: 9.21.01 Date Due: 10-21-01

		A	B	C				D	E		F	G	H			
Refrigerator #																
#/Type Container	Liquid															
	Solid	1Ag	1Ag	1Ag				1Ag	1AgP		1P	1Ag	1P			
Volume	Liquid															
	Solid	120	500	250				120	500		500	60	500			
Preservatives		—	—	—				—	—		—	—	—			
ANALYSES REQUESTED		ORGANIC: TCL VOA	BNA (5)	Pest/PCB	Herb			(4) Alcohols Glycols Ketones	INORG: Metal (1)	CN	Metals (2)	Hex Chrome	IC-(3) Anions			
Lionville Laboratory Use Only		0624H	0625X	0PCB				0DRO 0GRO	ME1	ME2	TCLP Ag Se	ZCrO	INORG ①			
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										
001	B12XJ7			S	9/19/01	1350	X	X	X				X	X	X	X	X	X
002	B12XJ8			⊥	⊥	1410	X	X	X				X	X	X	X	X	X
003	tclp of 001			L	*										X			
004	tclp of 002			⊥	⊥										X			

Special Instructions:

DATE/REVISIONS:

ME1	1.	Al, Cu, Fe, Mg, Mn, K, Na, Bi, Mo, Sn
Inorg 1	2.	ICNO3 ICNO2, INH3 N, IC N TO, IPH, ISFD
ME2	3.	Ba, Cd, Cr, Pb, Se, Ag, Al Sb, Be, Ni, V, Zn,
9-24-01	4.	Hg Add tclp for ME2
*	5.	see lab chron
11-26-01	6.	Add As to tclp Met ②

Relinquished by	Received by	Date	Time
Lee Fox	D. Smith	9/21/01	09:10

Relinquished by	Received by	Date	Time
COMPOSITE WASTE	ORIGINAL REWRITTEN		

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

4235 7954 7446

Lionville Laboratory Use Only

Samples were:
1) Shipped ✓ or Hand Delivered ___
Airbill # ___
Dec Ice Pack
2) Ambient or Chilled
3) Received in Good Condition (Y) or N
4) Samples Properly Preserved (Y) or N
5) Received Within Holding Times (Y) or N

Tamper Resistant Seal 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. 4.3 °C