0077914

SAF-RC-074
100-D/DR Burial Grounds & Remaining Sites – Soil Quick Turn
FINAL DATA PACKAGE

COMPLETE COPY OF DATA PACKAGE TO:

Kathy Wendt H4-21 KW 6/9/08
INITIAL/DATE

COMMENTS:

SDG K1171 SAF RC-074

Rad only X Chem only Rad & Chem

X Complete Partial

Waste Sites: 100-D-30 stained soil in pit to SW

RECEIVED
JUN 12 2008
EDMC

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 #	0803L837
SDG #	K1171
SAF #	RC-074
Date Received	3/28/08
# Samples	3
Matrix	SOIL
Volatiles	
Semivolatiles	
Pest/PCB	
Glycols	
DRO/KRO/GRO	
GC Alcohols	
Herbicides	
Metals	X
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-074 K1171

RECEIVED MAY 2008

DATE RECEIVED: 03/28/08 LVL LOT # :08031937

CLIENT ID /ANALYSIS	LVL #	MTX	PREP #	COLLECTION	EXTR/PREP	ANALYSIS
J16J17						
SILVER, TOTAL	001	S	08L0155	03/26/08	04/17/08	04/18/08
ALUMINUM, TOTAL	001	S	08L0155	03/26/08	04/17/08	04/18/08
ARSENIC, TOTAL	001	S	08L0155	03/26/08	04/17/08	04/18/08
BORON, TOTAL	001	S	08L0155	03/26/08	04/17/08	04/18/08
BARIUM, TOTAL	001	S	08L0155	03/26/08	04/17/08	04/18/08
BERYLLIUM, TOTAL	001	S	08L0155	03/26/08	04/17/08	04/18/08
BISMUTH, TOTAL	001	S	08L0155	03/26/08	04/17/08	04/18/08
CALCIUM, TOTAL	001	S	08L0155	03/26/08	04/17/08	04/18/08
CADMIUM, TOTAL	001	S	08L0155	03/26/08	04/17/08	04/18/08
COBALT, TOTAL	001	S	08L0155	03/26/08	04/17/08	04/18/08
CHROMIUM, TOTAL	001	S	08L0155	03/26/08	04/17/08	04/18/08
COPPER, TOTAL	001	S	08L0155	03/26/08	04/17/08	04/18/08
IRON, TOTAL	001	S	08L0155	03/26/08	04/17/08	04/18/08
MERCURY, TOTAL	001	S	08C0058	03/26/08	04/07/08	04/08/08
MERCURY, TOTAL	001 REP	S	08C0058	03/26/08	04/07/08	04/08/08
MERCURY, TOTAL	001 MS	S	08C0058	03/26/08	04/07/08	04/08/08
POTASSIUM, TOTAL	001	S	08L0155	03/26/08	04/17/08	04/18/08
LITHIUM, TOTAL	001	S	08L0155	03/26/08	04/17/08	04/18/08
MAGNESIUM, TOTAL	001	S	08L0155	03/26/08	04/17/08	04/18/08
MANGANESE, TOTAL	001	S	08L0155	03/26/08	04/17/08	04/18/08
MOLYBDENUM, TOTAL	001	S	08L0155	03/26/08	04/17/08	04/18/08
SODIUM, TOTAL	001	S	08L0155	03/26/08	04/17/08	04/18/08
NICKEL, TOTAL	001	S	08L0155	03/26/08	04/17/08	04/18/08
PHOSPHORUS, TOTAL	001	S	08L0155	03/26/08	04/17/08	04/21/08
LEAD, TOTAL	001	S	08L0155	03/26/08	04/17/08	04/18/08
ANTIMONY, TOTAL	001	S	08L0155	03/26/08	04/17/08	04/18/08
SELENIUM, TOTAL	001	S	08L0155	03/26/08	04/17/08	04/18/08
SILICON, TOTAL	001	S	08L0155	03/26/08	04/17/08	04/18/08
TIN, TOTAL	001	S	08L0155	03/26/08	04/17/08	04/18/08
STRONTIUM, TOTAL	001	S	08L0155	03/26/08	04/17/08	04/18/08
THALLIUM, TOTAL	001	S	08L0155	03/26/08	04/17/08	04/18/08
URANIUM, TOTAL	001	S	08L0155	03/26/08	04/17/08	04/18/08
VANADIUM, TOTAL	001	S	08L0155	03/26/08	04/17/08	04/18/08
ZINC, TOTAL	001	S	08L0155	03/26/08	04/17/08	04/18/08
J16J18						
SILVER, TOTAL	002	S	08L0155	03/26/08	04/17/08	04/18/08

Lionville Laboratory, Inc.
INORGANIC ANALYTICAL DATA PACKAGE FOR
TNUHANFORD RC-074 K1171

DATE RECEIVED: 03/28/08 LVL LOT # :0803L837

CLIENT ID /ANALYSIS	LVL #	MTX	PREP #	COLLECTION	EXTR/PREP	ANALYSIS
SILVER, TOTAL	002 REP	S	08L0155	03/26/08	04/17/08	04/18/08
SILVER, TOTAL	002 MS	S	08L0155	03/26/08	04/17/08	04/18/08
ALUMINUM, TOTAL	002	S	08L0155	03/26/08	04/17/08	04/18/08
ALUMINUM, TOTAL	002 REP	S	08L0155	03/26/08	04/17/08	04/18/08
ALUMINUM, TOTAL	002 MS	S	08L0155	03/26/08	04/17/08	04/18/08
ARSENIC, TOTAL	002	S	08L0155	03/26/08	04/17/08	04/18/08
ARSENIC, TOTAL	002 REP	S	08L0155	03/26/08	04/17/08	04/18/08
ARSENIC, TOTAL	002 MS	S	08L0155	03/26/08	04/17/08	04/18/08
BORON, TOTAL	002	S	08L0155	03/26/08	04/17/08	04/18/08
BORON, TOTAL	002 REP	S	08L0155	03/26/08	04/17/08	04/18/08
BORON, TOTAL	002 MS	S	08L0155	03/26/08	04/17/08	04/18/08
BARIUM, TOTAL	002	S	08L0155	03/26/08	04/17/08	04/18/08
BARIUM, TOTAL	002 REP	S	08L0155	03/26/08	04/17/08	04/18/08
BARIUM, TOTAL	002 MS	S	08L0155	03/26/08	04/17/08	04/18/08
BERYLLIUM, TOTAL	002	S	08L0155	03/26/08	04/17/08	04/18/08
BERYLLIUM, TOTAL	002 REP	S	08L0155	03/26/08	04/17/08	04/18/08
BERYLLIUM, TOTAL	002 MS	S	08L0155	03/26/08	04/17/08	04/18/08
BISMUTH, TOTAL	002	S	08L0155	03/26/08	04/17/08	04/18/08
BISMUTH, TOTAL REP	002 REP	S	08L0155	03/26/08	04/17/08	04/18/08
BISMUTH, TOTAL SPIKE	002 MS	S	08L0155	03/26/08	04/17/08	04/18/08
CALCIUM, TOTAL	002	S	08L0155	03/26/08	04/17/08	04/18/08
CALCIUM, TOTAL	002 REP	S	08L0155	03/26/08	04/17/08	04/18/08
CALCIUM, TOTAL	002 MS	S	08L0155	03/26/08	04/17/08	04/18/08
CADMIUM, TOTAL	002	S	08L0155	03/26/08	04/17/08	04/18/08
CADMIUM, TOTAL	002 REP	S	08L0155	03/26/08	04/17/08	04/18/08
CADMIUM, TOTAL	002 MS	S	08L0155	03/26/08	04/17/08	04/18/08
COBALT, TOTAL	002	S	08L0155	03/26/08	04/17/08	04/18/08
COBALT, TOTAL	002 REP	S	08L0155	03/26/08	04/17/08	04/18/08
COBALT, TOTAL	002 MS	S	08L0155	03/26/08	04/17/08	04/18/08
CHROMIUM, TOTAL	002	S	08L0155	03/26/08	04/17/08	04/18/08
CHROMIUM, TOTAL	002 REP	S	08L0155	03/26/08	04/17/08	04/18/08
CHROMIUM, TOTAL	002 MS	S	08L0155	03/26/08	04/17/08	04/18/08
COPPER, TOTAL	002	S	08L0155	03/26/08	04/17/08	04/18/08
COPPER, TOTAL	002 REP	S	08L0155	03/26/08	04/17/08	04/18/08
COPPER, TOTAL	002 MS	S	08L0155	03/26/08	04/17/08	04/18/08
IRON, TOTAL	002	S	08L0155	03/26/08	04/17/08	04/18/08
IRON, TOTAL	002 REP	S	08L0155	03/26/08	04/17/08	04/18/08
IRON, TOTAL	002 MS	S	08L0155	03/26/08	04/17/08	04/18/08

Lionville Laboratory, Inc.
INORGANIC ANALYTICAL DATA PACKAGE FOR
TNUHANFORD RC-074 K1171

DATE RECEIVED: 03/28/08 LVL LOT # :0803L837

CLIENT ID /ANALYSIS	LVL #	MTX	PREP #	COLLECTION	EXTR/PREP	ANALYSIS
MERCURY, TOTAL	002	S	08C0054	03/26/08	03/31/08	04/01/08
POTASSIUM, TOTAL	002	S	08L0155	03/26/08	04/17/08	04/18/08
POTASSIUM, TOTAL	002 REP	S	08L0155	03/26/08	04/17/08	04/18/08
POTASSIUM, TOTAL	002 MS	S	08L0155	03/26/08	04/17/08	04/18/08
LITHIUM, TOTAL	002	S	08L0155	03/26/08	04/17/08	04/18/08
LITHIUM, TOTAL	002 REP	S	08L0155	03/26/08	04/17/08	04/18/08
LITHIUM, TOTAL	002 MS	S	08L0155	03/26/08	04/17/08	04/18/08
MAGNESIUM, TOTAL	002	S	08L0155	03/26/08	04/17/08	04/18/08
MAGNESIUM, TOTAL	002 REP	S	08L0155	03/26/08	04/17/08	04/18/08
MAGNESIUM, TOTAL	002 MS	S	08L0155	03/26/08	04/17/08	04/18/08
MANGANESE, TOTAL	002	S	08L0155	03/26/08	04/17/08	04/18/08
MANGANESE, TOTAL	002 REP	S	08L0155	03/26/08	04/17/08	04/18/08
MANGANESE, TOTAL	002 MS	S	08L0155	03/26/08	04/17/08	04/18/08
MOLYBDENUM, TOTAL	002	S	08L0155	03/26/08	04/17/08	04/18/08
MOLYBDENUM, TOTAL	002 REP	S	08L0155	03/26/08	04/17/08	04/18/08
MOLYBDENUM, TOTAL	002 MS	S	08L0155	03/26/08	04/17/08	04/18/08
SODIUM, TOTAL	002	S	08L0155	03/26/08	04/17/08	04/18/08
SODIUM, TOTAL	002 REP	S	08L0155	03/26/08	04/17/08	04/18/08
SODIUM, TOTAL	002 MS	S	08L0155	03/26/08	04/17/08	04/18/08
NICKEL, TOTAL	002	S	08L0155	03/26/08	04/17/08	04/18/08
NICKEL, TOTAL	002 REP	S	08L0155	03/26/08	04/17/08	04/18/08
NICKEL, TOTAL	002 MS	S	08L0155	03/26/08	04/17/08	04/18/08
PHOSPHORUS, TOTAL	002	S	08L0155	03/26/08	04/17/08	04/21/08
PHOSPHORUS, TOTAL	002 REP	S	08L0155	03/26/08	04/17/08	04/21/08
PHOSPHORUS, TOTAL	002 MS	S	08L0155	03/26/08	04/17/08	04/21/08
LEAD, TOTAL	002	S	08L0155	03/26/08	04/17/08	04/18/08
LEAD, TOTAL	002 REP	S	08L0155	03/26/08	04/17/08	04/18/08
LEAD, TOTAL	002 MS	S	08L0155	03/26/08	04/17/08	04/18/08
ANTIMONY, TOTAL	002	S	08L0155	03/26/08	04/17/08	04/18/08
ANTIMONY, TOTAL	002 REP	S	08L0155	03/26/08	04/17/08	04/18/08
ANTIMONY, TOTAL	002 MS	S	08L0155	03/26/08	04/17/08	04/18/08
SELENIUM, TOTAL	002	S	08L0155	03/26/08	04/17/08	04/18/08
SELENIUM, TOTAL	002 REP	S	08L0155	03/26/08	04/17/08	04/18/08
SELENIUM, TOTAL	002 MS	S	08L0155	03/26/08	04/17/08	04/18/08
SILICON, TOTAL	002	S	08L0155	03/26/08	04/17/08	04/18/08
SILICON, TOTAL	002 REP	S	08L0155	03/26/08	04/17/08	04/18/08
SILICON, TOTAL	002 MS	S	08L0155	03/26/08	04/17/08	04/18/08
TIN, TOTAL	002	S	08L0155	03/26/08	04/17/08	04/18/08

Lionville Laboratory, Inc.
INORGANIC ANALYTICAL DATA PACKAGE FOR
TNUHANFORD RC-074 K1171

DATE RECEIVED: 03/28/08 LVL LOT # :0803L837

CLIENT ID /ANALYSIS	LVL #	MTX	PREP #	COLLECTION	EXTR/PREP	ANALYSIS
TIN, TOTAL	002 REP	S	08L0155	03/26/08	04/17/08	04/18/08
TIN, TOTAL	002 MS	S	08L0155	03/26/08	04/17/08	04/18/08
STRONTIUM, TOTAL	002	S	08L0155	03/26/08	04/17/08	04/18/08
STRONTIUM, TOTAL	002 REP	S	08L0155	03/26/08	04/17/08	04/18/08
STRONTIUM, TOTAL	002 MS	S	08L0155	03/26/08	04/17/08	04/18/08
THALLIUM, TOTAL	002	S	08L0155	03/26/08	04/17/08	04/18/08
THALLIUM, TOTAL	002 REP	S	08L0155	03/26/08	04/17/08	04/18/08
THALLIUM, TOTAL	002 MS	S	08L0155	03/26/08	04/17/08	04/18/08
URANIUM, TOTAL	002	S	08L0155	03/26/08	04/17/08	04/18/08
URANIUM, TOTAL	002 REP	S	08L0155	03/26/08	04/17/08	04/18/08
URANIUM, TOTAL	002 MS	S	08L0155	03/26/08	04/17/08	04/18/08
VANADIUM, TOTAL	002	S	08L0155	03/26/08	04/17/08	04/18/08
VANADIUM, TOTAL	002 REP	S	08L0155	03/26/08	04/17/08	04/18/08
VANADIUM, TOTAL	002 MS	S	08L0155	03/26/08	04/17/08	04/18/08
ZINC, TOTAL	002	S	08L0155	03/26/08	04/17/08	04/18/08
ZINC, TOTAL	002 REP	S	08L0155	03/26/08	04/17/08	04/18/08
ZINC, TOTAL	002 MS	S	08L0155	03/26/08	04/17/08	04/18/08
J16J19						
SILVER, TOTAL	003	S	08L0155	03/26/08	04/17/08	04/18/08
ALUMINUM, TOTAL	003	S	08L0155	03/26/08	04/17/08	04/18/08
ARSENIC, TOTAL	003	S	08L0155	03/26/08	04/17/08	04/18/08
BORON, TOTAL	003	S	08L0155	03/26/08	04/17/08	04/18/08
BARIUM, TOTAL	003	S	08L0155	03/26/08	04/17/08	04/18/08
BERYLLIUM, TOTAL	003	S	08L0155	03/26/08	04/17/08	04/18/08
BISMUTH, TOTAL	003	S	08L0155	03/26/08	04/17/08	04/18/08
CALCIUM, TOTAL	003	S	08L0155	03/26/08	04/17/08	04/18/08
CADMIUM, TOTAL	003	S	08L0155	03/26/08	04/17/08	04/18/08
COBALT, TOTAL	003	S	08L0155	03/26/08	04/17/08	04/18/08
CHROMIUM, TOTAL	003	S	08L0155	03/26/08	04/17/08	04/18/08
COPPER, TOTAL	003	S	08L0155	03/26/08	04/17/08	04/18/08
IRON, TOTAL	003	S	08L0155	03/26/08	04/17/08	04/18/08
MERCURY, TOTAL	003	S	08C0054	03/26/08	03/31/08	04/01/08
POTASSIUM, TOTAL	003	S	08L0155	03/26/08	04/17/08	04/18/08
LITHIUM, TOTAL	003	S	08L0155	03/26/08	04/17/08	04/18/08
MAGNESIUM, TOTAL	003	S	08L0155	03/26/08	04/17/08	04/18/08
MANGANESE, TOTAL	003	S	08L0155	03/26/08	04/17/08	04/18/08

Lionville Laboratory, Inc.
INORGANIC ANALYTICAL DATA PACKAGE FOR
TNUHANFORD RC-074 K1171

DATE RECEIVED: 03/28/08 LVL LOT # :0803L837

CLIENT ID /ANALYSIS	LVL #	MTX	PREP #	COLLECTION	EXTR/PREP	ANALYSIS
MOLYBDENUM, TOTAL	003	S	08L0155	03/26/08	04/17/08	04/18/08
SODIUM, TOTAL	003	S	08L0155	03/26/08	04/17/08	04/18/08
NICKEL, TOTAL	003	S	08L0155	03/26/08	04/17/08	04/18/08
PHOSPHORUS, TOTAL	003	S	08L0155	03/26/08	04/17/08	04/21/08
LEAD, TOTAL	003	S	08L0155	03/26/08	04/17/08	04/18/08
ANTIMONY, TOTAL	003	S	08L0155	03/26/08	04/17/08	04/18/08
SELENIUM, TOTAL	003	S	08L0155	03/26/08	04/17/08	04/18/08
SILICON, TOTAL	003	S	08L0155	03/26/08	04/17/08	04/18/08
TIN, TOTAL	003	S	08L0155	03/26/08	04/17/08	04/18/08
STRONTIUM, TOTAL	003	S	08L0155	03/26/08	04/17/08	04/18/08
THALLIUM, TOTAL	003	S	08L0155	03/26/08	04/17/08	04/18/08
URANIUM, TOTAL	003	S	08L0155	03/26/08	04/17/08	04/18/08
VANADIUM, TOTAL	003	S	08L0155	03/26/08	04/17/08	04/18/08
ZINC, TOTAL	003	S	08L0155	03/26/08	04/17/08	04/18/08

LAB QC:

SILVER LABORATORY	LC1 BS	S	08L0155	N/A	04/17/08	04/18/08
SILVER, TOTAL	MB1	S	08L0155	N/A	04/17/08	04/18/08
ALUMINUM LABORTORY	LC1 BS	S	08L0155	N/A	04/17/08	04/18/08
ALUMINUM, TOTAL	MB1	S	08L0155	N/A	04/17/08	04/18/08
ARSENIC LABORATORY	LC1 BS	S	08L0155	N/A	04/17/08	04/18/08
ARSENIC, TOTAL	MB1	S	08L0155	N/A	04/17/08	04/18/08
BORON LABORATORY	LC1 BS	S	08L0155	N/A	04/17/08	04/18/08
BORON, TOTAL	MB1	S	08L0155	N/A	04/17/08	04/18/08
BARIUM LABORATORY	LC1 BS	S	08L0155	N/A	04/17/08	04/18/08
BARIUM, TOTAL	MB1	S	08L0155	N/A	04/17/08	04/18/08
BERYLLIUM LABORATORY	LC1 BS	S	08L0155	N/A	04/17/08	04/18/08
BERYLLIUM, TOTAL	MB1	S	08L0155	N/A	04/17/08	04/18/08
BISMUTH, LCS	LC1 BS	S	08L0155	N/A	04/17/08	04/18/08
BISMUTH, TOTAL	MB1	S	08L0155	N/A	04/17/08	04/18/08
CALCIUM LABORATORY	LC1 BS	S	08L0155	N/A	04/17/08	04/18/08
CALCIUM, TOTAL	MB1	S	08L0155	N/A	04/17/08	04/18/08
CADMIUM LABORATORY	LC1 BS	S	08L0155	N/A	04/17/08	04/18/08
CADMIUM, TOTAL	MB1	S	08L0155	N/A	04/17/08	04/18/08
COBALT LABORATORY	LC1 BS	S	08L0155	N/A	04/17/08	04/18/08
COBALT, TOTAL	MB1	S	08L0155	N/A	04/17/08	04/18/08
CHROMIUM LABORATORY	LC1 BS	S	08L0155	N/A	04/17/08	04/18/08

Lionville Laboratory, Inc.
INORGANIC ANALYTICAL DATA PACKAGE FOR
TNUHANFORD RC-074 K1171

DATE RECEIVED: 03/28/08 LVL LOT # :0803L837

CLIENT ID /ANALYSIS	LVL #	MTX	PREP #	COLLECTION	EXTR/PREP	ANALYSIS
CHROMIUM, TOTAL	MB1	S	08L0155	N/A	04/17/08	04/18/08
COPPER LABORATORY	LC1 BS	S	08L0155	N/A	04/17/08	04/18/08
COPPER, TOTAL	MB1	S	08L0155	N/A	04/17/08	04/18/08
IRON LABORATORY	LC1 BS	S	08L0155	N/A	04/17/08	04/18/08
IRON, TOTAL	MB1	S	08L0155	N/A	04/17/08	04/18/08
MERCURY LABORATORY	LC1 BS	S	08C0058	N/A	04/07/08	04/08/08
MERCURY, TOTAL	MB1	S	08C0058	N/A	04/07/08	04/08/08
POTASSIUM LABORATORY	LC1 BS	S	08L0155	N/A	04/17/08	04/18/08
POTASSIUM, TOTAL	MB1	S	08L0155	N/A	04/17/08	04/18/08
LITHIUM LABORATORY	LC1 BS	S	08L0155	N/A	04/17/08	04/18/08
LITHIUM, TOTAL	MB1	S	08L0155	N/A	04/17/08	04/18/08
MAGNESIUM LABORATORY	LC1 BS	S	08L0155	N/A	04/17/08	04/18/08
MAGNESIUM, TOTAL	MB1	S	08L0155	N/A	04/17/08	04/18/08
MANGANESE LABORATORY	LC1 BS	S	08L0155	N/A	04/17/08	04/18/08
MANGANESE, TOTAL	MB1	S	08L0155	N/A	04/17/08	04/18/08
MOLYBDENUM LABORATOR	LC1 BS	S	08L0155	N/A	04/17/08	04/18/08
MOLYBDENUM, TOTAL	MB1	S	08L0155	N/A	04/17/08	04/18/08
SODIUM LABORATORY	LC1 BS	S	08L0155	N/A	04/17/08	04/18/08
SODIUM, TOTAL	MB1	S	08L0155	N/A	04/17/08	04/18/08
NICKEL LABORATORY	LC1 BS	S	08L0155	N/A	04/17/08	04/18/08
NICKEL, TOTAL	MB1	S	08L0155	N/A	04/17/08	04/18/08
PHOSPHORUS LCS	LC1 BS	S	08L0155	N/A	04/17/08	04/21/08
PHOSPHORUS, TOTAL	MB1	S	08L0155	N/A	04/17/08	04/21/08
LEAD LABORATORY	LC1 BS	S	08L0155	N/A	04/17/08	04/18/08
LEAD, TOTAL	MB1	S	08L0155	N/A	04/17/08	04/18/08
ANTIMONY LABORATORY	LC1 BS	S	08L0155	N/A	04/17/08	04/18/08
ANTIMONY, TOTAL	MB1	S	08L0155	N/A	04/17/08	04/18/08
SELENIUM LABORATORY	LC1 BS	S	08L0155	N/A	04/17/08	04/18/08
SELENIUM, TOTAL	MB1	S	08L0155	N/A	04/17/08	04/18/08
SILICON LABORATORY	LC1 BS	S	08L0155	N/A	04/17/08	04/18/08
SILICON, TOTAL	MB1	S	08L0155	N/A	04/17/08	04/18/08
TIN LABORATORY	LC1 BS	S	08L0155	N/A	04/17/08	04/18/08
TIN, TOTAL	MB1	S	08L0155	N/A	04/17/08	04/18/08
STRONTIUM LCS STANDA	LC1 BS	S	08L0155	N/A	04/17/08	04/18/08
STRONTIUM, TOTAL	MB1	S	08L0155	N/A	04/17/08	04/18/08
THALLIUM LABORATORY	LC1 BS	S	08L0155	N/A	04/17/08	04/18/08
THALLIUM, TOTAL	MB1	S	08L0155	N/A	04/17/08	04/18/08
URANIUM LABORATORY	LC1 BS	S	08L0155	N/A	04/17/08	04/18/08

Lionville Laboratory, Inc.
INORGANIC ANALYTICAL DATA PACKAGE FOR
TNUHANFORD RC-074 K1171

DATE RECEIVED: 03/28/08 LVL LOT # :0803L837

CLIENT ID /ANALYSIS	LVL #	MTX	PREP #	COLLECTION	EXTR/PREP	ANALYSIS
URANIUM, TOTAL	MB1	S	08L0155	N/A	04/17/08	04/18/08
VANADIUM LABORATORY	LC1 BS	S	08L0155	N/A	04/17/08	04/18/08
VANADIUM, TOTAL	MB1	S	08L0155	N/A	04/17/08	04/18/08
ZINC LABORATORY	LC1 BS	S	08L0155	N/A	04/17/08	04/18/08
ZINC, TOTAL	MB1	S	08L0155	N/A	04/17/08	04/18/08
MERCURY LABORATORY	LC1 BS	S	08C0054	N/A	03/31/08	04/01/08
MERCURY, TOTAL	MB1	S	08C0054	N/A	03/31/08	04/01/08

LIONVILLE LABORATORY INC.

Analytical Report

Client: TNU-HANFORD RC-074
LVL#: 0803L837
SDG/SAF#: K1171/RC-074

W.O.#: 11343-606-001-9999-00
Date Received: 03-28-08

METALS CASE NARRATIVE

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

All soil samples are reported on a dry weight basis unless requested by the client, required by the method, or noted otherwise.

1. This narrative covers the analyses of 3 soil samples.

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

   All samples were reported with a 3-fold dilution for all ICP analytes due to sample matrix.

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

4. All Initial and Continuing Calibration Verifications (ICV/CCVs) were within the 90-110% control limits (80-120% for Mercury).

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

6. All preparation/method blanks (MB) were within method criteria {less than the Limit of Quantitation (3-10X the LOD), or samples greater than 20X MB value}. Refer to the Inorganics Method Blank Data Summary.

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

8. All laboratory control samples (LCS) were within the 80-120% control with the exception of Silicon at 19.9%. Refer to the Inorganics Laboratory Control Standards Report. Associated sample results may be biased low.

9. The matrix spike (MS) recoveries for 4 analytes were outside the 75-125% control limits.

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 28 pages.

Refer to the Inorganics Accuracy Report.

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

Sample ID	Element	PDS Concentration (ppb)	PDS % Recovery
J16J18	Aluminum	66,000	97.8
	Antimony	300	100.2
	Chromium	300	94.4
	Iron	66,000	102.8

11. The duplicate analyses for all analytes were within the 20% Relative Percent Difference (RPD) control limits. Refer to the Inorganics Precision Report.

12. For the purposes of this report, the data has been reported to the Limit of Detection (LOD). Values between the LOD and the Limit of Quantitation (LOQ) are acquired in a region of less-certain quantification.

13. 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.

14. 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

4/24/08
Date

alm/m03-837

METALS METHOD GLOSSARY

The following methods are used as reference for the digestion and analysis of samples contained within t

Lot#: 0803 L837

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: Phosphorous

Method: _____

L-WI-033/M-03/01

000000010

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
LCS = Laboratory Control Sample.
NC = Not calculated.

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, approximately 0.3 grams of sample is taken to a final volume of 50 mL (including all reagents).

3. Flame AA.

4. Graphite Furnace AA.

L-WI-033/N-04/98

Lionville Laboratory, Inc.

INORGANICS DATA SUMMARY REPORT 04/23/08

CLIENT: TNUHANFORD RC-074 K1171

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

LVL LOT #: 0803L837

SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT	DILUTION FACTOR
-001	J16J17	Silver, Total	0.27 u	MG/KG	0.27	3.0
		Aluminum, Total	2410	MG/KG	10.9	3.0
		Arsenic, Total	1.8	MG/KG	1.4	3.0
		Boron, Total	1.4 u	MG/KG	1.4	3.0
		Barium, Total	60.3	MG/KG	0.27	3.0
		Beryllium, Total	0.59	MG/KG	0.14	3.0
		Bismuth, Total	1.6 u	MG/KG	1.6	3.0
		Calcium, Total	3720	MG/KG	10.9	3.0
		Cadmium, Total	0.14 u	MG/KG	0.14	3.0
		Cobalt, Total	5.6	MG/KG	0.55	3.0
		Chromium, Total	266	MG/KG	0.55	3.0
		Copper, Total	10.2	MG/KG	0.55	3.0
		Iron, Total	25300	MG/KG	12.3	3.0
		Mercury, Total	0.17	MG/KG	0.01	1.0
		Potassium, Total	395	MG/KG	10.9	3.0
		Lithium, Total	1.8	MG/KG	0.11	3.0
		Magnesium, Total	2330	MG/KG	6.8	3.0
		Manganese, Total	182	MG/KG	0.11	3.0
		Molybdenum, Total	0.82 u	MG/KG	0.82	3.0
		Sodium, Total	313	MG/KG	5.5	3.0
		Nickel, Total	4.1	MG/KG	0.55	3.0
		Phosphorus, Total	952	MG/KG	13.6	3.0
		Lead, Total	2.4	MG/KG	0.82	3.0
		Antimony, Total	0.82 u	MG/KG	0.82	3.0
		Selenium, Total	1.6 u	MG/KG	1.6	3.0
		Silicon, Total	275	MG/KG	10.9	3.0
		Tin, Total	1.6 u	MG/KG	1.6	3.0
		Strontium, Total	18.2	MG/KG	0.08	3.0
		Thallium, Total	1.6 u	MG/KG	1.6	3.0
		Uranium, Total	5.5 u	MG/KG	5.5	3.0
		Vanadium, Total	77.8	MG/KG	0.38	3.0
		Zinc, Total	37.6	MG/KG	1.6	3.0

Lionville Laboratory, Inc.

INORGANICS DATA SUMMARY REPORT 04/23/08

CLIENT: TNUHANFORD RC-074 K1171 LVL LOT #: 0803L837

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

SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT	DILUTION FACTOR
-002	J16J18	Silver, Total	0.27 u	MG/KG	0.27	3.0
		Aluminum, Total	2970	MG/KG	10.8	3.0
		Arsenic, Total	1.6	MG/KG	1.3	3.0
		Boron, Total	1.3 u	MG/KG	1.3	3.0
		Barium, Total	50.5	MG/KG	0.27	3.0
		Beryllium, Total	0.51	MG/KG	0.13	3.0
		Bismuth, Total	1.6 u	MG/KG	1.6	3.0
		Calcium, Total	3720	MG/KG	10.8	3.0
		Cadmium, Total	0.15	MG/KG	0.13	3.0
		Cobalt, Total	7.1	MG/KG	0.54	3.0
		Chromium, Total	187	MG/KG	0.54	3.0
		Copper, Total	15.1	MG/KG	0.54	3.0
		Iron, Total	26000	MG/KG	12.1	3.0
		Mercury, Total	0.04	MG/KG	0.01	1.0
		Potassium, Total	389	MG/KG	10.8	3.0
		Lithium, Total	2.2	MG/KG	0.11	3.0
		Magnesium, Total	3500	MG/KG	6.7	3.0
		Manganese, Total	224	MG/KG	0.11	3.0
		Molybdenum, Total	0.81 u	MG/KG	0.81	3.0
		Sodium, Total	144	MG/KG	5.4	3.0
		Nickel, Total	6.2	MG/KG	0.54	3.0
		Phosphorus, Total	1440	MG/KG	13.4	3.0
		Lead, Total	1.8	MG/KG	0.81	3.0
		Antimony, Total	0.81 u	MG/KG	0.81	3.0
		Selenium, Total	1.6 u	MG/KG	1.6	3.0
		Silicon, Total	252	MG/KG	10.8	3.0
		Tin, Total	1.6 u	MG/KG	1.6	3.0
		Strontium, Total	17.8	MG/KG	0.08	3.0
		Thallium, Total	1.6 u	MG/KG	1.6	3.0
		Uranium, Total	5.4 u	MG/KG	5.4	3.0
		Vanadium, Total	68.4	MG/KG	0.38	3.0
		Zinc, Total	39.3	MG/KG	1.6	3.0

Lionville Laboratory, Inc.

INORGANICS DATA SUMMARY REPORT 04/23/08

CLIENT: TNUHANFORD.RC-074 K1171 LVL LOT #: 0803L837

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

SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT	DILUTION FACTOR
-003	J16J19	Silver, Total	0.27 u	MG/KG	0.27	3.0
		Aluminum, Total	2610	MG/KG	10.7	3.0
		Arsenic, Total	1.6	MG/KG	1.3	3.0
		Boron, Total	1.3 u	MG/KG	1.3	3.0
		Barium, Total	61.2	MG/KG	0.27	3.0
		Beryllium, Total	0.50	MG/KG	0.13	3.0
		Bismuth, Total	1.6 u	MG/KG	1.6	3.0
		Calcium, Total	2530	MG/KG	10.7	3.0
		Cadmium, Total	0.13 u	MG/KG	0.13	3.0
		Cobalt, Total	5.5	MG/KG	0.53	3.0
		Chromium, Total	198	MG/KG	0.53	3.0
		Copper, Total	10.3	MG/KG	0.53	3.0
		Iron, Total	25800	MG/KG	12.0	3.0
		Mercury, Total	0.13	MG/KG	0.01	1.0
		Potassium, Total	631	MG/KG	10.7	3.0
		Lithium, Total	2.0	MG/KG	0.11	3.0
		Magnesium, Total	2840	MG/KG	6.7	3.0
		Manganese, Total	182	MG/KG	0.11	3.0
		Molybdenum, Total	0.80 u	MG/KG	0.80	3.0
		Sodium, Total	290	MG/KG	5.3	3.0
		Nickel, Total	6.5	MG/KG	0.53	3.0
		Phosphorus, Total	792	MG/KG	13.3	3.0
		Lead, Total	2.2	MG/KG	0.80	3.0
		Antimony, Total	0.80 u	MG/KG	0.80	3.0
		Selenium, Total	1.6 u	MG/KG	1.6	3.0
		Silicon, Total	281	MG/KG	10.7	3.0
		Tin, Total	1.6 u	MG/KG	1.6	3.0
		Strontium, Total	24.9	MG/KG	0.08	3.0
		Thallium, Total	1.6 u	MG/KG	1.6	3.0
		Uranium, Total	5.3 u	MG/KG	5.3	3.0
		Vanadium, Total	69.3	MG/KG	0.37	3.0
		Zinc, Total	35.7	MG/KG	1.6	3.0

Lionville Laboratory, Inc.

INORGANICS METHOD BLANK DATA SUMMARY PAGE 04/23/08

CLIENT: TNUHANFORD RC-074 K1171 LVL LOT #: 0803L837

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

SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT	DILUTION FACTOR
BLANK1	08L0155-MB1	Silver, Total	0.10 u	MG/KG	0.10	1.0
		Aluminum, Total	4.0 u	MG/KG	4.0	1.0
		Arsenic, Total	0.50 u	MG/KG	0.50	1.0
		Boron, Total	0.50 u	MG/KG	0.50	1.0
		Barium, Total	0.10 u	MG/KG	0.10	1.0
		Beryllium, Total	0.05 u	MG/KG	0.05	1.0
		Bismuth, Total	0.60 u	MG/KG	0.60	1.0
		Calcium, Total	5.5	MG/KG	4.0	1.0
		Cadmium, Total	0.05 u	MG/KG	0.05	1.0
		Cobalt, Total	0.20 u	MG/KG	0.20	1.0
		Chromium, Total	0.20 u	MG/KG	0.20	1.0
		Copper, Total	0.20 u	MG/KG	0.20	1.0
		Iron, Total	4.5 u	MG/KG	4.5	1.0
		Potassium, Total	4.0 u	MG/KG	4.0	1.0
		Lithium, Total	0.04 u	MG/KG	0.04	1.0
		Magnesium, Total	2.5 u	MG/KG	2.5	1.0
		Manganese, Total	0.04 u	MG/KG	0.04	1.0
		Molybdenum, Total	0.30 u	MG/KG	0.30	1.0
		Sodium, Total	13.3	MG/KG	2.0	1.0
		Nickel, Total	0.20 u	MG/KG	0.20	1.0
		Phosphorus, Total	5.0 u	MG/KG	5.0	1.0
		Lead, Total	0.30 u	MG/KG	0.30	1.0
		Antimony, Total	0.30 u	MG/KG	0.30	1.0
		Selenium, Total	0.60 u	MG/KG	0.60	1.0
		Silicon, Total	4.0 u	MG/KG	4.0	1.0
		Tin, Total	0.60 u	MG/KG	0.60	1.0
		Strontium, Total	0.05	MG/KG	0.03	1.0
		Thallium, Total	0.60 u	MG/KG	0.60	1.0
		Uranium, Total	2.0 u	MG/KG	2.0	1.0
		Vanadium, Total	0.14 u	MG/KG	0.14	1.0
		Zinc, Total	0.60 u	MG/KG	0.60	1.0
BLANK1	08C0058-MB1	Mercury, Total	0.01 u	MG/KG	0.01	1.0
BLANK1	08C0054-MB1	Mercury, Total	0.01 u	MG/KG	0.01	1.0

Lionville Laboratory, Inc.

INORGANICS ACCURACY REPORT 04/23/08

CLIENT: TNUHANFORD RC-074 K1171 LVL LOT #: 0803L837

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

SAMPLE	SITE ID	ANALYTE	SPIKED SAMPLE	INITIAL RESULT	SPIKED AMOUNT	%RECOV	DILUTION FACTOR(SPK)
-001	J16J17	Mercury, Total	0.33	0.17	0.17	92.3	1.0

Lionville Laboratory, Inc.

INORGANICS ACCURACY REPORT 04/23/08

CLIENT: TNUHANFORD RC-074 K1171 LVL LOT #: 0803L837

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

SAMPLE	SITE ID	ANALYTE	SPIKED SAMPLE	INITIAL RESULT	SPIKED AMOUNT	%RECOV	DILUTION FACTOR(SPK)
-002	J16J18	Silver, Total	3.9	0.27u	4.4	88.6	3.0
		Aluminum, Total	3930	2970	178	543.2*	3.0
		Arsenic, Total	159	1.6	178	88.5	3.0
		Boron, Total	80.5	1.3 u	88.8	90.7	3.0
		Barium, Total	214	50.5	178	91.9	3.0
		Beryllium, Total	4.6	0.51	4.4	92.9	3.0
		Bismuth, Total	410	1.6 u	444	92.3	3.0
		Calcium, Total	6420	3720	2220	121.7	3.0
		Cadmium, Total	4.2	0.15	4.4	92.1	3.0
		Cobalt, Total	48.1	7.1	44.4	92.3	3.0
		Chromium, Total	219	187	17.8	182.6*	3.0
		Copper, Total	36.7	15.1	22.2	97.3	3.0
		Iron, Total	27800	26000	88.8	2041 *	3.0
		Potassium, Total	2400	389	2220	90.6	3.0
		Lithium, Total	86.9	2.2	88.8	95.4	3.0
		Magnesium, Total	5630	3500	2220	96.2	3.0
		Manganese, Total	272	224	44.4	107.9*	3.0
		Molybdenum, Total	78.1	0.81u	88.8	88.0	3.0
		Sodium, Total	2150	144	2220	90.3	3.0
		Nickel, Total	47.7	6.2	44.4	93.5	3.0
		Phosphorus, Total	1980	1440	444	121.8	3.0
		Lead, Total	41.6	1.8	44.4	89.6	3.0
		Antimony, Total	24.2	0.81u	44.4	54.5	3.0
		Selenium, Total	138	1.6 u	178	77.6	3.0
		Silicon, Total	354	252	88.8	114.6	3.0
		Tin, Total	81.1	1.6 u	88.8	91.3	3.0
		Strontium, Total	106	17.8	88.8	99.1	3.0
		Thallium, Total	161	1.6 u	178	90.4	3.0
		Uranium, Total	412	5.4 u	444	92.9	3.0
		Vanadium, Total	116	68.4	44.4	107.7	3.0
		Zinc, Total	83.5	39.3	44.4	99.5	3.0

Lionville Laboratory, Inc.

INORGANICS PRECISION REPORT 04/23/08

CLIENT: TNUHANFORD RC-074 K1171 LVL LOT #: 0803L837

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

SAMPLE	SITE ID	ANALYTE	INITIAL RESULT	REPLICATE	RPD	DILUTION FACTOR(REP)
-001REP	J16J17	Mercury, Total	0.17	0.17	2.4	1.0

Lionville Laboratory, Inc.

INORGANICS PRECISION REPORT 04/23/08

CLIENT: TNUHANFORD RC-074 K1171 LVL LOT #: 0803L837

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

SAMPLE	SITE ID	ANALYTE	INITIAL RESULT	REPLICATE	RPD	DILUTION FACTOR(REP)
-002REP	J16J18	Silver, Total	0.27u	0.27u	NC	3.0
		Aluminum, Total	2970	3070	3.3	3.0
		Arsenic, Total	1.6	1.4 u	NC	3.0
		Boron, Total	1.3 u	1.4 u	NC	3.0
		Barium, Total	50.5	57.6	13.1	3.0
		Beryllium, Total	0.51	0.49	3.4	3.0
		Bismuth, Total	1.6 u	1.6 u	NC	3.0
		Calcium, Total	3720	3900	4.7	3.0
		Cadmium, Total	0.15	0.15	0.94	3.0
		Cobalt, Total	7.1	6.9	2.9	3.0
		Chromium, Total	187	197	5.4	3.0
		Copper, Total	15.1	15.1	0.00	3.0
		Iron, Total	26000	26400	1.4	3.0
		Potassium, Total	389	418	7.3	3.0
		Lithium, Total	2.2	2.2	0.00	3.0
		Magnesium, Total	3500	3570	2.1	3.0
		Manganese, Total	224	228	1.9	3.0
		Molybdenum, Total	0.81u	0.81u	NC	3.0
		Sodium, Total	144	144	0.28	3.0
		Nickel, Total	6.2	6.6	6.3	3.0
		Phosphorus, Total	1440	1530	6.2	3.0
		Lead, Total	1.8	1.8	0.00	3.0
		Antimony, Total	0.81u	0.81u	NC	3.0
		Selenium, Total	1.6 u	1.6 u	NC	3.0
		Silicon, Total	252	249	1.4	3.0
		Tin, Total	1.6 u	1.6 u	NC	3.0
		Strontium, Total	17.8	18.1	1.7	3.0
		Thallium, Total	1.6 u	1.6 u	NC	3.0
		Uranium, Total	5.4 u	5.4 u	NC	3.0
		Vanadium, Total	68.4	66.4	3.0	3.0
		Zinc, Total	39.3	39.9	1.5	3.0

Lionville Laboratory, Inc.

INORGANICS LABORATORY CONTROL STANDARDS REPORT 04/23/08

CLIENT: TNUHANFORD RC-074 K1171 LVL LOT #: 0803L837

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

SAMPLE	SITE ID	ANALYTE	SPIKED SAMPLE	SPIKED AMOUNT	UNITS	%RECOV
LCS1	08L0155-LC1	Silver, LCS	45.9	50.0	MG/KG	91.8
		Aluminum, LCS	456	500	MG/KG	91.2
		Arsenic, LCS	860	1000	MG/KG	86.0
		Boron, LCS	445	500	MG/KG	89.0
		Barium, LCS	456	500	MG/KG	91.3
		Beryllium, LCS	22.9	25.0	MG/KG	91.6
		Bismuth, LCS	449	500	MG/KG	89.7
		Calcium, LCS	2350	2500	MG/KG	94.0
		Cadmium, LCS	22.7	25.0	MG/KG	90.8
		Cobalt, LCS	231	250	MG/KG	92.3
		Chromium, LCS	45.8	50.0	MG/KG	91.6
		Copper, LCS	114	125	MG/KG	91.3
		Iron, LCS	469	500	MG/KG	93.8
		Potassium, LCS	2130	2500	MG/KG	85.1
		Lithium, LCS	486	500	MG/KG	97.3
		Magnesium, LCS	2320	2500	MG/KG	92.9
		Manganese, LCS	68.5	75.0	MG/KG	91.3
		Molybdenum, LCS	445	500	MG/KG	89.0
		Sodium, LCS	2200	2500	MG/KG	88.1
		Nickel, LCS	183	200	MG/KG	91.4
		Phosphorus, LCS	446	500	MG/KG	89.1
		Lead, LCS	225	250	MG/KG	90.1
		Antimony, LCS	261	300	MG/KG	87.0
		Selenium, LCS	836	1000	MG/KG	83.6
		Silicon, LCS	99.3	500	MG/KG	19.9
		Tin, LCS	460	500	MG/KG	92.0
		Strontium, LCS	461	500	MG/KG	92.3
		Thallium, LCS	905	1000	MG/KG	90.5
		Uranium, LCS	439	500	MG/KG	87.8
		Vanadium, LCS	228	250	MG/KG	91.0
		Zinc, LCS	89.9	100	MG/KG	89.9
LCS1	08C0058-LC1	Mercury, LCS	5.0	4.7	MG/KG	106.1
LCS1	08C0054-LC1	Mercury, LCS	4.8	4.7	MG/KG	102.0

Lionville Laboratory Incorporated Logbook #: 440

SAMPLE DIGESTION RECORD

SOP: L-SPI-3020 Rev. 00

Digestion Batch #: 08L0155
Date/Time Initiated: 4/17/08 1345
Date/Time Completed: 4/17/08 2030
Analyst(s): MW
Matrix: (Soil) Water Other: _____
Instr. Type: AA (ICP)
Parameters: HSL+B-, Mg, Si (No Tl) (872.913)
HSL+Bi, B-, Li, Mo, P-, Si, Sr, Sn, U- (857)
(Digested) / Undigested (circle one)
Balance #: B20
Balance Cal Verif: (Y) NA
Hot Plate Temp: 91°

Method: SW (circle)
3005A
3010A
3015
3020A
7060A (As/Se)
7760A (Ag)
(3050B)
3051

DW 200.7 (1994)
200.9
3113B
MCAWW 200.7 (1982)
200 (AA)
206.2 (As/Se)
SM 3030C (NC)
CLP ILMO3.0
ILMO4.0
Other _____

TW

COC Batch #	Spike Vol(s) (mL)	Initial Wt/Vol (g/mL)	Final Vol (mL)	pH <2	Type: To/So/TC	Texture	Color/Appearance	Artifact	Turb
0803L837-001		1.23gm	100ml	<2	TO	coarse	black, green, yellow	granula	
002		1.13gm						sandy/rocks	
002R		1.12gm							
002S *	1.0ml	1.14gm							
003		1.17gm						granules	
0804L872-001		1.00gm					white powder, black lumps		
001R		1.04gm							
001S *	1.0ml	1.01gm							
0804L913-001		1.13gm					dark brown	rocks	
001R		1.20gm							
001S *	1.0ml	1.18gm							
08L0155-MB1		1.0gm					boiling chips		
LC1 *	1.0ml	1.0gm							

Spiking IDs:
MS #: 8100-04-01
07
03
6072-78-07
LCS #: 08
09
10
11

Reagent IDs:
HNO_3 E46025
HCL E45047
H_2O_2 E44A06
1:1 HNO_3 9789-077-04
1:1 HCL

File ID#: IC01580I
IC01580Z
LIMS Transfer: (Y) N
Data Review By/Date: Updated

* add 0.5ml 6072-078-01 (U-)
0.5ml 6072-076-07 (P-)
0.5ml 6072-076-06 (Bi)

Lionville Laboratory Incorporated

MERCURY PREPARATION

Logbook # 422

Analyst: TLB
Date 3/31/08
Start Time/Temp: 1610 | 92°
End Time/Temp: 1640 | 96°

Instrument ID HG3.1/3.2
Balance #: B29 /NA
Pipette Calibration (Daily) Y ✓

Prep Batch: 08C0054
Worksheet: HG040101/02
SOP No. ME-HgCVAA, Rev. 02

pH < 2 for Liquids? __ Yes NA No (If no: designate affected samples in Comments column, and initiate an SDR)

NOTE: The Inital/Final Volume for water samples = 33mL, unless otherwise noted.
The Final volume for soil samples = 50mL, unless otherwise noted.

LvLI Batch #	Container Number	Spike Volume (mL)	Spike Conc. (µg/L)	Initial Wt. or Volume (g or mL)	Final Sample Volume (mL)	Comments, % Solids, etc.
Blank	2V			10mL	50mL	
0.2 µg/L	857	0.100				
1.0	55	0.500				
2.0	92	1.000				
5.0	31	2.500				
10.0	194	5.000				
ICV	LV	0.125	2.5			
CCV	154	0.250	5.0			
ICB/CCB	C4D					9.50L
MB1	X5			0.30		PBS154 100.0
LC1	28	*	*	0.30		LCSS154
0803L836-001	GTR			0.34		79.0
001R	B32			0.32		
001S	AB	0.500	1.0	0.34		
0803L798-001	SPRT			0.34		98.3
002	NB			0.40		97.13
003	L15			0.33		97.5
004	PA			0.40		97.5
0803L761-003	X3			0.32		100.0
009	40			0.33		
009S	P3	0.050	10.0	0.33		
009T	B2	0.050	10.0	0.32		
011	A901			0.31		
013	55			0.32		
015	AN			0.31		
017	C9			0.32		
0803816-001	JC			0.326		95.9

Standard:	ID	Prep Date/Time
ICAL/MS	R16072-75-07A	3/31/08 1030
ICV/CCV/LCS	US6072-75-08B	

Reviewed By/Date: [signature] 4/4/08

see book # 9368 for std traceability information

Soil LCS =US Metals in soil No.3; True Value = 4.70 mg/Kg
Catalogue #1RM-021, Lot # E021

Water Matrix Spiking Solution Concentration = 0.1 µg/ml
Water LCS Spiking Concentration: 1.0 µg/ml

Lionville Laboratory Incorporated

MERCURY PREPARATION

Logbook # 422

Analyst: TRB
Date 3/31/08
Start Time/Temp: see page 050
End Time/Temp:

Instrument ID HG31/32
Balance #: B29 ✓ /NA
Pipette Calibration (Daily) Y ✓

Prep Batch: 080054
Worksheet: HG040101/02
SOP No. ME-HgCVAA, Rev. 02

pH < 2 for Liquids? __ Yes NA No (If no: designate affected samples in Comments column, and initiate an SDR)

NOTE: The Inital/Final Volume for water samples = 33mL, unless otherwise noted.
The Final volume for soil samples = 50mL, unless otherwise noted.

LvLI Batch #	Container Number	Spike Volume (mL)	Spike Conc. (µg/L)	Initial Wt. or Volume (g or mL)	Final Sample Volume (mL)	Comments, % Solids, etc.
0803L816-002	CGR			0.32	50mL	97.45
004	2I			0.33		98.54
0803L837-001	222			0.32		89.42
001R	CT			0.37		⊥
001S	1C	0.500	1.0	0.33		
002	K17			0.30		98.77
003	S			0.31	⊥	96.32

TRB 3/31/08

Standard:	ID	Prep Date/Time
CAL/MS		
CV/CCV/LCS	See page 050	

Reviewed By/Date: [illegible] 4/4/08

see book # 9368 for std traceability information

Soil LCS =US Metals in soil No.3; True Value = 4.70 mg/Kg
Catalogue #1RM-021, Lot # E021

Water Matrix Spiking Solution Concentration = 0.1 µg/ml
Water LCS Spiking Concentration: 1.0 µg/ml

ME-HgCVAA-Prep1007

Page #:

Lionville Laboratory Incorporated

MERCURY PREPARATION

Logbook # 422

Analyst: TEN
Date 4/7/08
Start Time/Temp: 1535 | 93°
End Time/Temp: 1605 | 92°

Instrument ID HG-3.1
Balance #: B29 ✓ /NA
Pipette Calibration (Daily) Y ✓

Prep Batch: 08C0258
Worksheet: HG040801
SOP No. ME-HgCVAA, Rev. 02

pH < 2 for Liquids? __ Yes NA No (If no: designate affected samples in Comments column, and initiate an SDR)

NOTE: The Inital/Final Volume for water samples = 33mL, unless otherwise noted.
The Final volume for soil samples = 50mL, unless otherwise noted.

LvLI Batch #	Container Number	Spike Volume (mL)	Spike Conc. (µg/L)	Initial Wt. or Volume (g or mL)	Final Sample Volume (mL)	Comments, % Solids, etc.
Blank	8T			10mL	50mL	
0.2 µg/L	CB	0.100				
1.0	11A	0.500				
2.0	5T	1.000				
5.0	2B	2.500				
10.0	3H	5.000				
ICV	H	0.125	2.5			
CCV	PT	0.250	5.0			
ICB/CCB	1435					90.00L
MB1	997			0.30		PBS158 100.00
LC1	401	*	*	0.30		LSS158
0803L810-011	OLN			0.38		100.00
0803L837-001	871			0.33		89.42
001R	711			0.39		
001S	55	0.500	1.0	0.33		
0803L841-001	503			0.32		100.00
001R	AB			0.30		
001S	1721	0.500	1.0	0.32		
002	WO			0.32		
003	8H			0.35		
004	JC			0.32		
005	HW			0.35		
006	LIS			0.34		
007	S			0.33		
008	114			0.32		
0804L860-001	RU			0.34		100.00
001R	CX			0.32		

Standard:	ID	Prep Date/Time
CAL/MS	RI 6072-75-07B	4/7/08 1120
CV/CCV/LCS	US 6072-75-08A	

Reviewed By/Date: [signature] 4/16/08

see book # 9368 for std traceability information

Soil LCS =US Metals in soil No.3; True Value = 4.70 mg/Kg *
Catalogue #1RM-021, Lot # E021

Water Matrix Spiking Solution Concentration = 0.1 µg/ml
Water LCS Spiking Concentration: 1.0 µg/ml

Lionville Laboratory
Incorporated

MERCURY PREPARATION

Logbook # 422

Analyst: TEB
Date 4/7/08
Start Time/Temp:
End Time/Temp: see page 58

Instrument ID HG-3.1
Balance #: B29 ✓ /NA
Pipette Calibration (Daily) Y ✓

Prep Batch: 0802058
Worksheet: HG-040801
SOP No. ME-HgCVAA, Rev. 02

pH < 2 for Liquids? __ Yes NA No (If no: designate affected samples in Comments column, and initiate an SDR)

NOTE: The Inital/Final Volume for water samples = 33mL, unless otherwise noted.
The Final volume for soil samples = 50mL, unless otherwise noted.

LvLI Batch #	Container Number	Spike Volume (mL)	Spike Conc. (µg/L)	Initial Wt. or Volume (g or mL)	Final Sample Volume (mL)	Comments, % Solids, etc.
08046860-0015	J1	0.500	1.0	0.34	50mL	R 100.00
002	27			0.32	↓	↓ ↓

TEB 4/7/08

Standard:	ID	Prep Date/Time
CAL/MS		
CV/CCV/LCS	See page 058	

Reviewed By/Date: [signature] 4/16/08

see book # 9368 for std traceability information

LCS =US Metals in soil No.3; True Value = 4.70 mg/Kg
Catalogue #1RM-021, Lot # E021

Water Matrix Spiking Solution Concentration = 0.1 µg/ml
Water LCS Spiking Concentration: 1.0 µg/ml

ME-HgCVAA-Prep1007

Page #:

Lionville Laboratory Use Only

08036837

Custody Transfer Record/Lab Work Request

Page 1 of 1

FIELD PERSONNEL: COMPLETE ONLY SHADED AREAS

LVLI

Client: TNU HANFORD SAFE RC-074

Est. Final Proj. Sampling Date:

Project#: 11343-606-001-9999

Project Contact/Phone#:

Lionville Laboratory Project Manager: O. JOHNSON

QC: SW846 Del: STD TAT: 15

Date Rec'd: 3-28-08 Date Due: 4-12-08

		A	B	C
Refrigerator #		3	3	3
#/Type Container	Liquid / Solid	1G	1G	1G
Volume		60	60	60
Preservatives		—	—	—

ANALYSES REQUESTED →

Lab ID	Client ID/Description	Matrix QC Chosen (✓) MS	MSD	Matrix	Date Collected	Time Collected	ORGANIC VOA	BNA	Pest/PCB	Herb	INORG Metal	CN	PH		
001	J16J17			Soil	3/26/08	1012					MEI *See Below		IPH ICB2 ICV IFP	ICP	
002	18					1028									
003	19					1110									

Lionville Laboratory Use Only

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

Special Instructions:
MEI = RCRA + AL, B, BERA, CO, CU, FE, (TAUICP) K, Mg, Mn, Mo, Na, Ni, SB, SI, V, Zn

Special Instructions:
1.
2.
3.
4.
5.
6.

Relinquished by	Received by	Date	Time
[signature]	[signature]	3/27/08	0955

Relinquished by	Received by	Date	Time
	See SRC		

Relinquished by	Received by	Date	Time
COMPOSITE WASTE	REWRITTEN		

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-074-065	Page 1 of 1

Collector: D.W. Shea/Sub-contractor Dawn Everhart	Company Contact: D.W.Shea	Telephone No.: 521-6014	Project Coordinator: KESSNER, JH
Price Code: 8K	Data Turnaround: 15 days		
Project Designation: 100-D/DR Burial Grounds & Remaining Sites - Soil Quick Tu	Sampling Location: 100-D-30, stained soil in pit to SW		SAF No.: RC-074
Ice Chest No.: ERC-02-404 & ERC-02-406	Field Logbook No.: EL-1607-3	COA: R00D302600	Method of Shipment: Fed Ex
Shipped To: EBERLINE SERVICES/LIONVILLE	Offsite Property No.: ~~See OPSC~~ DAS 3/27/08 A080207		Bill of Lading/Air Bill No.: SEE OSPC

POSSIBLE SAMPLE HAZARDS/REMARKS

Chromate

Special Handling and/or Storage

Cool 4°C

Preservation	None	Cool 4C	Cool 4C								
Type of Container	G/P	G/P	G/P								
No. of Container(s)	1	1	1								
Volume	60mL	60mL	60mL								
SAMPLE ANALYSIS	See item (1) in Special Instructions.	Chromium Hex - 7196.	IC Anions - 300.0; pH (Soil) - 9045								
Sample No. / Matrix * / Sample Date / Sample Time											
J16J17 / SOIL / 3/26/08 / 1012	✓	✓	✓								
J16J18 / SOIL / ↓ / 1028	✓	✓	✓								
J16J19 / SOIL / ↓ / 1110	✓	✓	✓								
~~J16J20 / SOIL~~											
~~J16J21 / SOIL~~											

CHAIN OF POSSESSION — Sign/Print Names

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
failed to get sample signature	3/26/08 1611	DWShea DWSH EA	3/26/08 1611
DWShea DWShea	3/26/08 1908	Fridge 3A	3/26/08 1908
1060 BATELLE 3A	3/27/08 1130	PAUL S. JOHN	3/27/08 1130
DAVID ST JOHN	3/27/08 1130	FED EX	
Fed Ex	3/28/08 0955	[illegible]	3/28/08 0955

SPECIAL INSTRUCTIONS

(1) ICP Metals - 6010 (Full List) {Aluminum, Antimony, Arsenic, Barium, Beryllium, Bismuth, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Molybdenum, Nickel, Phosphorus, Potassium, Selenium, Silicon, Silver, Sodium, Strontium, Thallium, Tin, Uranium, Vanadium, Zinc} and Hg via CVAA
DWShea 3/26/08

Matrix *
S Soil
Sd Sediment
SO Solid
Sl Sludge
W Water
O Oil
A Air
DS Drum Solids
DL Drum Liquids
I 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

WCH-EE-011

0000000027

Lionville Laboratory Incorporated

SAMPLE RECEIPT CHECKLIST (SRC)

CLIENT: TNU HANFORD

Project/QAP/SOW/Release #: RC-074

Date: 3-28-08

LvLI Batch #: 08031837

Sample Custodian: [illegible]

NOTE: EXPLAIN ALL DISCREPANCIES

1. Samples Hand Delivered or Shipped?	Carrier FED EX		Airbill # 7989 0636 8613
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 3.1	°C	Cooler # ERC-02-406
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.
INORGANIC ANALYTICAL DATA PACKAGE FOR
TNUHANFORD RC-074 K1171

RECEIVED MAY 2008

DATE RECEIVED: 03/28/08 LVL LOT # :0803L837

CLIENT ID /ANALYSIS	LVL #	MTX	PREP #	COLLECTION	EXTR/PREP	ANALYSIS
J16J17						
% SOLIDS	001	S	08L%S028	03/26/08	03/28/08	03/31/08
% SOLIDS	001 REP	S	08L%S028	03/26/08	03/28/08	03/31/08
BROMIDE BY IC	001	S	08LICS25	03/26/08	04/03/08	04/04/08
CHLORIDE BY IC	001	S	08LICS25	03/26/08	04/03/08	04/04/08
FLUORIDE BY IC	001	S	08LICS25	03/26/08	04/03/08	04/04/08
NITRITE BY IC	001	S	08LICS25	03/26/08	04/03/08	04/04/08
NITRATE BY IC	001	S	08LICS25	03/26/08	04/03/08	04/04/08
PHOSPHATE BY IC	001	S	08LICS25	03/26/08	04/03/08	04/04/08
CHROMIUM VI	001	S	08LVI033	03/26/08	04/10/08	04/10/08
SULFATE BY IC	001	S	08LICS25	03/26/08	04/03/08	04/04/08
PH	001	S	08LPH016	03/26/08	04/01/08	04/01/08
J16J18						
% SOLIDS	002	S	08L%S028	03/26/08	03/28/08	03/31/08
BROMIDE BY IC	002	S	08LICS25	03/26/08	04/03/08	04/04/08
CHLORIDE BY IC	002	S	08LICS25	03/26/08	04/03/08	04/04/08
FLUORIDE BY IC	002	S	08LICS25	03/26/08	04/03/08	04/04/08
NITRITE BY IC	002	S	08LICS25	03/26/08	04/03/08	04/04/08
NITRATE BY IC	002	S	08LICS25	03/26/08	04/03/08	04/04/08
PHOSPHATE BY IC	002	S	08LICS25	03/26/08	04/03/08	04/04/08
CHROMIUM VI	002	S	08LVI033	03/26/08	04/10/08	04/10/08
SULFATE BY IC	002	S	08LICS25	03/26/08	04/03/08	04/04/08
PH	002	S	08LPH016	03/26/08	04/01/08	04/01/08
PH	002 REP	S	08LPH016	03/26/08	04/01/08	04/01/08
J16J19						
% SOLIDS	003	S	08L%S028	03/26/08	03/28/08	03/31/08
BROMIDE BY IC	003	S	08LICS25	03/26/08	04/03/08	04/04/08
BROMIDE BY IC	003 REP	S	08LICS25	03/26/08	04/03/08	04/04/08
BROMIDE BY IC	003 MS	S	08LICS25	03/26/08	04/03/08	04/04/08
CHLORIDE BY IC	003	S	08LICS25	03/26/08	04/03/08	04/04/08
CHLORIDE BY IC	003 REP	S	08LICS25	03/26/08	04/03/08	04/04/08
CHLORIDE BY IC	003 MS	S	08LICS25	03/26/08	04/03/08	04/04/08

Lionville Laboratory, Inc.
INORGANIC ANALYTICAL DATA PACKAGE FOR
TNUHANFORD RC-074 K1171

DATE RECEIVED: 03/28/08 LVL LOT # :0803L837

CLIENT ID /ANALYSIS	LVL #	MTX	PREP #	COLLECTION	EXTR/PREP	ANALYSIS
FLUORIDE BY IC	003	S	08LICS25	03/26/08	04/03/08	04/04/08
FLUORIDE BY IC	003 REP	S	08LICS25	03/26/08	04/03/08	04/04/08
FLUORIDE BY IC	003 MS	S	08LICS25	03/26/08	04/03/08	04/04/08
NITRITE BY IC	003	S	08LICS25	03/26/08	04/03/08	04/04/08
NITRITE BY IC	003 REP	S	08LICS25	03/26/08	04/03/08	04/04/08
NITRITE BY IC	003 MS	S	08LICS25	03/26/08	04/03/08	04/04/08
NITRATE BY IC	003	S	08LICS25	03/26/08	04/03/08	04/04/08
NITRATE BY IC	003 REP	S	08LICS25	03/26/08	04/03/08	04/04/08
NITRATE BY IC	003 MS	S	08LICS25	03/26/08	04/03/08	04/04/08
PHOSPHATE BY IC	003	S	08LICS25	03/26/08	04/03/08	04/04/08
PHOSPHATE BY IC	003 REP	S	08LICS25	03/26/08	04/03/08	04/04/08
PHOSPHATE BY IC	003 MS	S	08LICS25	03/26/08	04/03/08	04/04/08
CHROMIUM VI	003	S	08LVI033	03/26/08	04/10/08	04/10/08
CHROMIUM VI	003 REP	S	08LVI033	03/26/08	04/10/08	04/10/08
CHROMIUM VI	003 MS	S	08LVI033	03/26/08	04/10/08	04/10/08
CHROMIUM VI	003 MSD	S	08LVI033	03/26/08	04/10/08	04/10/08
SULFATE BY IC	003	S	08LICS25	03/26/08	04/03/08	04/04/08
SULFATE BY IC	003 REP	S	08LICS25	03/26/08	04/03/08	04/04/08
SULFATE BY IC	003 MS	S	08LICS25	03/26/08	04/03/08	04/04/08
PH	003	S	08LPH016	03/26/08	04/01/08	04/01/08

LAB QC:

BROMIDE BY IC	MB1	S	08LICS25	N/A	04/03/08	04/03/08
BROMIDE BY IC	MB1 BS	S	08LICS25	N/A	04/03/08	04/03/08
CHLORIDE BY IC	MB1	S	08LICS25	N/A	04/03/08	04/03/08
CHLORIDE BY IC	MB1 BS	S	08LICS25	N/A	04/03/08	04/03/08
FLUORIDE BY IC	MB1	S	08LICS25	N/A	04/03/08	04/03/08
FLUORIDE BY IC	MB1 BS	S	08LICS25	N/A	04/03/08	04/03/08
NITRITE BY IC	MB1	S	08LICS25	N/A	04/03/08	04/03/08
NITRITE BY IC	MB1 BS	S	08LICS25	N/A	04/03/08	04/03/08
NITRATE BY IC	MB1	S	08LICS25	N/A	04/03/08	04/03/08
NITRATE BY IC	MB1 BS	S	08LICS25	N/A	04/03/08	04/03/08
PHOSPHATE BY IC	MB1	S	08LICS25	N/A	04/03/08	04/03/08
PHOSPHATE BY IC	MB1 BS	S	08LICS25	N/A	04/03/08	04/03/08
CHROMIUM VI	MB1	S	08LVI033	N/A	04/10/08	04/10/08
CHROMIUM VI	MB1 BS	S	08LVI033	N/A	04/10/08	04/10/08
CHROMIUM VI	MB1 BSD	S	08LVI033	N/A	04/10/08	04/10/08

Lionville Laboratory, Inc.
INORGANIC ANALYTICAL DATA PACKAGE FOR
TNUHANFORD RC-074 K1171

DATE RECEIVED: 03/28/08 LVL LOT # :0803L837

CLIENT ID /ANALYSIS	LVL #	MTX	PREP #	COLLECTION	EXTR/PREP	ANALYSIS
SULFATE BY IC	MB1	S	08LICS25	N/A	04/03/08	04/03/08
SULFATE BY IC	MB1 BS	S	08LICS25	N/A	04/03/08	04/03/08

LIONVILLE LABORATORY INC.

Analytical Report

Client: TNU-HANFORD RC-074 K1171
LVL#: 0803L837

W.O.#: 11343-606-001-9999-00
Date Received: 03-28-08

INORGANIC NARRATIVE

1. This narrative covers the analyses of 3 soil samples.

2. The samples were prepared and analyzed in accordance with the methods indicated 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 blanks were within the method criteria.

6. The Laboratory Control Samples (LCS) were within the laboratory control limits.

7. The matrix spike recoveries were within the 75-125% control limits with the exception of Soluble Chromium VI that was above the control limits that may be attributed to low spike level and high background concentration of the target analyte.

8. The replicate analyses were within the 20% Relative Percent Difference (RPD) control limit.

9. Results for soil samples are reported on a dry weight basis.

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

Iain Daniels
Laboratory Manager
Lionville Laboratory Incorporated

4/14/08
Date

njp\03-837

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 13 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	__ 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		✓ 9045~~C~~D	
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: Bromide, Chloride, Fluoride, **Method:** EPA 300.0

Other: Nitrite, Nitrate, Phosphate, Sulfate **Method**

L-WI-034/B-01/01

Lionville Laboratory Incorporated

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 04/14/08

CLIENT: TNUHANFORD RC-074 K1171 LVL LOT #: 0803L837
WORK ORDER: 11343-606-001-9999-00

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT	DILUTION FACTOR
-001	J16J17	% Solids	89.4		%	0.01	1.0
		Bromide by IC	3.0	u	MG/KG	3.0	1.0
		Chloride by IC	3.0	u	MG/KG	3.0	1.0
		Fluoride by IC	3.0	u	MG/KG	3.0	1.0
		Nitrite by IC	2.97	u	MG/KG	2.97	1.0
		Nitrate by IC	7.06		MG/KG	2.97	1.0
		Phosphate by IC	3.0	u	MG/KG	3.0	1.0
		Chromium VI	286		MG/KG	11.2	50.0
		Sulfate by IC	4590		MG/KG	148	50.0
		pH	6.9		SOIL PH	0.01	1.0
-002	J16J18	% Solids	98.8		%	0.01	1.0
		Bromide by IC	2.5	u	MG/KG	2.5	1.0
		Chloride by IC	2.5	u	MG/KG	2.5	1.0
		Fluoride by IC	2.5	u	MG/KG	2.5	1.0
		Nitrite by IC	2.46	u	MG/KG	2.46	1.0
		Nitrate by IC	2.46	u	MG/KG	2.46	1.0
		Phosphate by IC	2.5	u	MG/KG	2.5	1.0
		Chromium VI	243		MG/KG	10.1	50.0
		Sulfate by IC	79.6		MG/KG	2.5	1.0
		pH	6.3		SOIL PH	0.01	1.0
-003	J16J19	% Solids	96.3		%	0.01	1.0
		Bromide by IC	2.6	u	MG/KG	2.6	1.0
		Chloride by IC	2.6	u	MG/KG	2.6	1.0
		Fluoride by IC	4.0		MG/KG	2.6	1.0
		Nitrite by IC	2.61	u	MG/KG	2.61	1.0
		Nitrate by IC	2.61	u	MG/KG	2.61	1.0
		Phosphate by IC	2.6	u	MG/KG	2.6	1.0
		Chromium VI	83.9		MG/KG	5.2	25.0
		Sulfate by IC	19.0		MG/KG	2.6	1.0
		pH	6.2		SOIL PH	0.01	1.0

Lionville Laboratory, Inc.

INORGANICS METHOD BLANK DATA SUMMARY PAGE 04/14/08

CLIENT: TNUHANFORD RC-074 K1171
WORK ORDER: 11343-606-001-9999-00

LVL LOT #: 0803L837

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT	DILUTION FACTOR
BLANK10	08LICS25-MB1	Bromide by IC	2.3	u	MG/KG	2.3	1.0
		Chloride by IC	2.3	u	MG/KG	2.3	1.0
		Fluoride by IC	2.3	u	MG/KG	2.3	1.0
		Nitrite by IC	2.34	u	MG/KG	2.34	1.0
		Nitrate by IC	2.34	u	MG/KG	2.34	1.0
		Phosphate by IC	2.3	u	MG/KG	2.3	1.0
		Sulfate by IC	2.3	u	MG/KG	2.3	1.0
BLANK10	08LVI033-MB1	Chromium VI	0.20	u	MG/KG	0.20	1.0

Lionville Laboratory, Inc.

INORGANICS ACCURACY REPORT 04/14/08

CLIENT: TNUHANFORD RC-074 K1171 LVL LOT #: 0803L837

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

SAMPLE	SITE ID	ANALYTE	SPIKED SAMPLE	INITIAL RESULT	SPIKED AMOUNT	%RECOV	DILUTION FACTOR(SPK)
-003	J16J19	Bromide by IC	54.6	0.0	55.0	99.3	1.0
		Chloride by IC	53.7	0.0	55.0	97.7	1.0
		Fluoride by IC	59.5	4.0	55.0	100.9	1.0
		Nitrite by IC	55.1	2.61u	55.0	100.1	1.0
		Nitrate by IC	55.4	2.61u	55.0	100.8	1.0
		Phosphate by IC	57.4	2.6 u	55.0	104.4	1.0
		Soluble Chromium VI	94.2	83.9	4.2	247.3*	25.0
		Insoluble Chromium VI	1130	83.9	1080	97.5	100
		Sulfate by IC	78.8	19.0	55.0	108.8	1.0
BLANK10	08LICS25-MB1	Bromide by IC	61.2	2.3 u	66.4	92.3	1.0
		Chloride by IC	63.7	2.3 u	66.4	96.0	1.0
		Fluoride by IC	62.5	2.3 u	66.4	94.3	1.0
		Nitrite by IC	62.5	2.34u	66.4	94.2	1.0
		Nitrate by IC	61.9	2.34u	66.4	93.3	1.0
		Phosphate by IC	60.9	2.3 u	66.4	91.8	1.0
		Sulfate by IC	62.6	2.3 u	66.4	94.3	1.0
BLANK10	08LVI033-MB1	Soluble Chromium VI	4.0	0.20u	4.0	100.3	1.0
		Insoluble Chromium VI	1170	0.20u	1170	100.6	100

Lionville Laboratory, Inc.

INORGANICS PRECISION REPORT 04/14/08

CLIENT: TNUHANFORD RC-074 K1171 LVL LOT #: 0803L837

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

SAMPLE	SITE ID	ANALYTE	INITIAL RESULT	REPLICATE	RPD	DILUTION FACTOR(REP)
-001REP	J16J17	% Solids	89.4	86.5	3.3	1.0
-002REP	J16J18	pH	6.3	6.4	0.3	1.0
-003REP	J16J19	Bromide by IC	2.6 u	2.7 u	NC	1.0
		Chloride by IC	2.6 u	2.7 u	NC	1.0
		Fluoride by IC	4.0	4.7	16.2	1.0
		Nitrite by IC	2.61u	2.69u	NC	1.0
		Nitrate by IC	2.61u	2.69u	NC	1.0
		Phosphate by IC	2.6 u	2.7 u	NC	1.0
		Chromium VI	83.9	92.2	9.4	25.0
		Sulfate by IC	19.0	22.0	14.6	1.0

Lionville Laboratory Use Only

08036837

Custody Transfer Record/Lab Work Request

Page 1 of 1

FIELD PERSONNEL: COMPLETE ONLY SHADED AREAS

LVLI Lionville Laboratory, Inc.

Client: TNU HANFORD SAF# RC-074

Est. Final Proj. Sampling Date:

Project#: 11343-606-001-9999

Project Contact/Phone#:

Lionville Laboratory Project Manager: O. JOHNSON

QC: SW846 Del: STD TAT: 15

Date Rec'd: 3-28-08 Date Due: 4-12-08

	A		B		C
Refrigerator #	3		3		3
#/Type Container (Liquid / Solid)	1G		1G		1G
Volume	60		60		60
Preservatives	—		—		—

ANALYSES REQUESTED →

ORGANIC				INORG			
VOA	BNA	Pest/PCB	Herb	Metal	CN	PH	

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	Lionville Laboratory Use Only												
														MEI *See Below		TPH ICBR ICL ICPL	ICNO2, ICNO3 ICSW4, ICRL	ICRL	
001	J16J17			Soil	3/26/08	1012								X		X		X	
002	18			↓	↓	1028								X		X		X	
003	19			↓	↓	1110								X		X		X	

Special Instructions:

MEI = RCRA + AL, B, BE, CA, CO, CU, FE, K, MG, MN, MO, NA, NI, SB, SI, V, ZN (TNUICP)

Special Instructions:

1.
2.
3.
4.
5.
6.

Relinquished by	Received by	Date	Time
[illegible]	[illegible]	3/28/08	0955

Relinquished by	Received by	Date	Time
	See SRG		

Relinquished by	Received by	Date	Time
COMPOSITE WASTE	REWRITTEN		

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-074-065	Page 1 of 1

Collector: D.W. Shea/Sub-contractor Dawn Everhart	Company Contact: D.W.Shea	Telephone No.: 521-6014	Project Coordinator: KESSNER, JH
Price Code: 8K	Data Turnaround: 15 days		
Project Designation: 100-D/DR Burial Grounds & Remaining Sites - Soil Quick Tu	Sampling Location: 100-D-30, stained soil in pit to SW		SAF No.: RC-074
Ice Chest No.: ERC-02-404 & ERC-02-406	Field Logbook No.: EL-1607-3	COA: R00D302600	Method of Shipment: Fed Ex
Shipped To: EBERLINE SERVICES / LIONVILLE	Offsite Property No.: ~~See OPSC~~ DAS 3/27/08 A080207		Bill of Lading/Air Bill No.: SEE OSPC

000000012

POSSIBLE SAMPLE HAZARDS/REMARKS

Chromate

Special Handling and/or Storage

Cool 4°C

Preservation	None	Cool 4C	Cool 4C								
Type of Container	G/P	G/P	G/P								
No. of Container(s)	1	1	1								
Volume	60ml.	60ml.	60ml.								
SAMPLE ANALYSIS	See item (1) in Special Instructions.	Chromium Hex - 7196.	IC Anions - 300.0; pH (Soil) - 9045								
Sample No. / Matrix * / Sample Date / Sample Time											
J16J17 / SOIL / 3/26/08 / 1012	✓	✓	✓								
J16J18 / SOIL / ↓ / 1028	✓	✓	✓								
J16J19 / SOIL / ↓ / 1110	✓	✓	✓								
~~J16J20 / SOIL~~											
~~J16J21 / SOIL~~											

CHAIN OF POSSESSION — Sign/Print Names

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
failed to set sample signature	3/26/08 1611	DWShea DWSHEA	3/26/08 1611
DWShea DWShea	3/26/08 1908	Fridge 3A	3/26/08 1908
1060 BATELLE 3A	3/27/08 1130	DAVID ST JOHN	3/27/08 1130
DAVID ST JOHN	3/27/08 1130	FED EX	
Fed Ex	3/28/08 0955	[illegible]	3/28/08 0955

SPECIAL INSTRUCTIONS

(1) ICP Metals - 6010 (Full List) {Aluminum, Antimony, Arsenic, Barium, Beryllium, Bismuth, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Molybdenum, Nickel, Phosphorus, Potassium, Selenium, Silicon, Silver, Sodium, Strontium, Thallium, Tin, Uranium, Vanadium, Zinc} and Hg via CVAA DWShea 3/26/08

Matrix *

S Soil
SE Sediment
SO Solid
SL 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

WCH-EE-011

Lionville Laboratory Incorporated

SAMPLE RECEIPT CHECKLIST (SRC)

CLIENT: TNU HANFORD

Project/QAP/SOW/Release #: RC-074

Date: 3-28-08

LvLI Batch #: 08031837

Sample Custodian: [illegible]

NOTE: EXPLAIN ALL DISCREPANCIES

1. Samples Hand Delivered or Shipped?	Carrier FED EX		Airbill # 7989 0636 8613
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 3.1	°C	Cooler # ERC-02-406
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.

RECEIVED JUN 2008

2 June 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 #	0804L017
SDG #	K1171
SAF #	RC-074
Date Received	4/29/08
# Samples	3
Matrix	SOIL
Volatiles	
Semivolatiles	
Pest/PCB	
Glycols	
DRO/KRO/GRO	
GC Organics	
Herbicides	
Metals	X
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

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

RECEIVED
JUN 2008

Lionville Laboratory, Inc.
INORGANIC ANALYTICAL DATA PACKAGE FOR
TNU-HANFORD RC-074 K1171

DATE RECEIVED: 03/28/08 LVL LOT # :0804L017

CLIENT ID /ANALYSIS	LVL #	MTX	PREP #	COLLECTION	EXTR/PREP	ANALYSIS
J16J17						
TCLP	001	S	08LTO040	03/26/08	05/06/08	05/07/08
J16J18						
TCLP	002	S	08LTO040	03/26/08	05/06/08	05/07/08
J16J19						
TCLP	003	S	08LTO040	03/26/08	05/06/08	05/07/08
J16J17						
SILVER, TCLP LEACHAT	004	W	08L0190	05/07/08	05/09/08	05/12/08
SILVER, TCLP LEACHAT	004 REP	W	08L0190	05/07/08	05/09/08	05/12/08
SILVER, TCLP LEACHAT	004 MS	W	08L0190	05/07/08	05/09/08	05/12/08
ARSENIC, TCLP LEACHA	004	W	08L0190	05/07/08	05/09/08	05/12/08
ARSENIC, TCLP LEACHA	004 REP	W	08L0190	05/07/08	05/09/08	05/12/08
ARSENIC, TCLP LEACHA	004 MS	W	08L0190	05/07/08	05/09/08	05/12/08
BARIUM, TCLP LEACHAT	004	W	08L0190	05/07/08	05/09/08	05/12/08
BARIUM, TCLP LEACHAT	004 REP	W	08L0190	05/07/08	05/09/08	05/12/08
BARIUM, TCLP LEACHAT	004 MS	W	08L0190	05/07/08	05/09/08	05/12/08
CADMIUM, TCLP LEACHA	004	W	08L0190	05/07/08	05/09/08	05/12/08
CADMIUM, TCLP LEACHA	004 REP	W	08L0190	05/07/08	05/09/08	05/12/08
CADMIUM, TCLP LEACHA	004 MS	W	08L0190	05/07/08	05/09/08	05/12/08
CHROMIUM, TCLP LEACH	004	W	08L0190	05/07/08	05/09/08	05/12/08
CHROMIUM, TCLP LEACH	004 REP	W	08L0190	05/07/08	05/09/08	05/12/08
CHROMIUM, TCLP LEACH	004 MS	W	08L0190	05/07/08	05/09/08	05/12/08
MERCURY, TCLP LEACHA	004	W	08C0081	05/07/08	05/08/08	05/09/08
MERCURY, TCLP LEACHA	004 REP	W	08C0081	05/07/08	05/08/08	05/09/08
MERCURY, TCLP LEACHA	004 MS	W	08C0081	05/07/08	05/08/08	05/09/08
LEAD, TCLP LEACHATE	004	W	08L0190	05/07/08	05/09/08	05/12/08
LEAD, TCLP LEACHATE	004 REP	W	08L0190	05/07/08	05/09/08	05/12/08
LEAD, TCLP LEACHATE	004 MS	W	08L0190	05/07/08	05/09/08	05/12/08
SELENIUM, TCLP LEACH	004	W	08L0190	05/07/08	05/09/08	05/12/08
SELENIUM, TCLP LEACH	004 REP	W	08L0190	05/07/08	05/09/08	05/12/08

Lionville Laboratory, Inc.
INORGANIC ANALYTICAL DATA PACKAGE FOR
TNU-HANFORD RC-074 K1171

DATE RECEIVED: 03/28/08 LVL LOT # :0804L017

CLIENT ID /ANALYSIS	LVL #	MTX	PREP #	COLLECTION	EXTR/PREP	ANALYSIS
SELENIUM, TCLP LEACH	004 MS	W	08L0190	05/07/08	05/09/08	05/12/08
J16J18						
SILVER, TCLP LEACHAT	005	W	08L0190	05/07/08	05/09/08	05/12/08
ARSENIC, TCLP LEACHA	005	W	08L0190	05/07/08	05/09/08	05/12/08
BARIUM, TCLP LEACHAT	005	W	08L0190	05/07/08	05/09/08	05/12/08
CADMIUM, TCLP LEACHA	005	W	08L0190	05/07/08	05/09/08	05/12/08
CHROMIUM, TCLP LEACH	005	W	08L0190	05/07/08	05/09/08	05/12/08
MERCURY, TCLP LEACHA	005	W	08C0081	05/07/08	05/08/08	05/09/08
LEAD, TCLP LEACHATE	005	W	08L0190	05/07/08	05/09/08	05/12/08
SELENIUM, TCLP LEACH	005	W	08L0190	05/07/08	05/09/08	05/12/08
J16J19						
SILVER, TCLP LEACHAT	006	W	08L0190	05/07/08	05/09/08	05/12/08
ARSENIC, TCLP LEACHA	006	W	08L0190	05/07/08	05/09/08	05/12/08
BARIUM, TCLP LEACHAT	006	W	08L0190	05/07/08	05/09/08	05/12/08
CADMIUM, TCLP LEACHA	006	W	08L0190	05/07/08	05/09/08	05/12/08
CHROMIUM, TCLP LEACH	006	W	08L0190	05/07/08	05/09/08	05/12/08
MERCURY, TCLP LEACHA	006	W	08C0081	05/07/08	05/08/08	05/09/08
LEAD, TCLP LEACHATE	006	W	08L0190	05/07/08	05/09/08	05/12/08
SELENIUM, TCLP LEACH	006	W	08L0190	05/07/08	05/09/08	05/12/08

LAB QC:

SILVER LABORATORY	LC1 BS	W	08L0190	N/A	05/09/08	05/12/08
SILVER, TCLP LEACHAT	MB1	W	08L0190	N/A	05/09/08	05/12/08
ARSENIC LABORATORY	LC1 BS	W	08L0190	N/A	05/09/08	05/12/08
ARSENIC, TCLP LEACHA	MB1	W	08L0190	N/A	05/09/08	05/12/08
BARIUM LABORATORY	LC1 BS	W	08L0190	N/A	05/09/08	05/12/08
BARIUM, TCLP LEACHAT	MB1	W	08L0190	N/A	05/09/08	05/12/08
CADMIUM LABORATORY	LC1 BS	W	08L0190	N/A	05/09/08	05/12/08
CADMIUM, TCLP LEACHA	MB1	W	08L0190	N/A	05/09/08	05/12/08
CHROMIUM LABORATORY	LC1 BS	W	08L0190	N/A	05/09/08	05/12/08
CHROMIUM, TCLP LEACH	MB1	W	08L0190	N/A	05/09/08	05/12/08
MERCURY LABORATORY	LC1 BS	W	08C0081	N/A	05/08/08	05/09/08
MERCURY, TOTAL	MB1	W	08C0081	N/A	05/08/08	05/09/08

Lionville Laboratory, Inc.
INORGANIC ANALYTICAL DATA PACKAGE FOR
TNU-HANFORD RC-074 K1171

DATE RECEIVED: 03/28/08 LVL LOT # :0804L017

CLIENT ID /ANALYSIS	LVL #	MTX	PREP #	COLLECTION	EXTR/PREP	ANALYSIS
LEAD LABORATORY	LC1 BS	W	08L0190	N/A	05/09/08	05/12/08
LEAD, TCLP LEACHATE	MB1	W	08L0190	N/A	05/09/08	05/12/08
SELENIUM LABORATORY	LC1 BS	W	08L0190	N/A	05/09/08	05/12/08
SELENIUM, TCLP LEACH	MB1	W	08L0190	N/A	05/09/08	05/12/08

LIONVILLE LABORATORY INC.

Analytical Report

Client: TNU-HANFORD RC-074
LVL#: 0804L017
SDG/SAF#: K1171/RC-074

W.O.#: 11343-606-001-9999-00
Date Received: 03-28-08

METALS CASE NARRATIVE

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

1. This narrative covers the analyses of 3 TCLP leachates. The samples were relogged from LvLI batch# 0803L837.

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

3. All analyses for ICP metals were performed within the required holding times. The TCLP procedure for Mercury was performed outside the required holding time. The analyses of all leachates were performed within the required holding times.

4. All Initial and Continuing Calibration Verifications (ICV/CCVs) were within the 90-110% control limits (80-120% for Mercury) with the exception of Lead CCV3 (112.5%) and CCV4 (113.9%) in file PS0512A. All samples were rerun in file PS0512B for Lead.

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

6. All preparation/method blanks (MB) were within method criteria {less than the Limit of Quantitation (3-10X the LOD), MB value less than 5% of the RCRA limit, or samples greater than 20X MB value}. Refer to the Inorganics Method Blank Data Summary.

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

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

9. All duplicate analyses were within the 20% Relative Percent Difference (RPD) control limits. Refer to the Inorganics Precision Report.

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 17 pages.

LIONVILLE LABORATORY INC.

10. The TCLP extract from sample J16J17 was selected for the matrix spike (MS) for this analytical batch.

11. The matrix spike for Silver was below 50% recovery (38.0 %). The recovery in the TCLP Leachate was below 80-120% of the action level so standard addition was not required per Federal Register, Vol.57, No.227, Nov. 24, 1992, page 55117.

12. For the purposes of this report, the data has been reported to the Limit of Detection (LOD). Values between the LOD and the Limit of Quantitation (LOQ) are acquired in a region of less-certain quantification.

13 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.

14 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.

Judy Stum

Iain Daniels
Laboratory Manager
Lionville Laboratory Incorporated

5/15/08
Date

alm/m04-017

METALS METHOD GLOSSARY

The following methods are used as reference for the digestion and analysis of samples contained within t

Lot#: 08040017

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:_____

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
LCS = Laboratory Control Sample.
NC = Not calculated.

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, approximately 0.3 grams of sample is taken to a final volume of 50 mL (including all reagents).

3. Flame AA.

4. Graphite Furnace AA.

L-WI-033/N-04/98

Lionville Laboratory, Inc.

INORGANICS DATA SUMMARY REPORT 05/13/08

CLIENT: TNU-HANFORD RC-074 K1171 LVL LOT #: 0804L017

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

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT	DILUTION FACTOR
-004	J16J17	Silver, TCLP Leachate	4.5	u	UG/L	4.5	1.0
		Arsenic, TCLP Leachate	31.7	u	UG/L	31.7	1.0
		Barium, TCLP Leachate	55.4		UG/L	3.1	1.0
		Cadmium, TCLP Leachate	5.6	u	UG/L	5.6	1.0
		Chromium, TCLP Leachate	88.9		UG/L	4.6	1.0
		Mercury, TCLP Leachate	0.10	u	UG/L	0.10	1.0
		Lead, TCLP Leachate	34.8	u	UG/L	34.8	1.0
		Selenium, TCLP Leachate	41.3	u	UG/L	41.3	1.0
-005	J16J18	Silver, TCLP Leachate	4.5	u	UG/L	4.5	1.0
		Arsenic, TCLP Leachate	31.7	u	UG/L	31.7	1.0
		Barium, TCLP Leachate	68.9		UG/L	3.1	1.0
		Cadmium, TCLP Leachate	5.6	u	UG/L	5.6	1.0
		Chromium, TCLP Leachate	171		UG/L	4.6	1.0
		Mercury, TCLP Leachate	0.10	u	UG/L	0.10	1.0
		Lead, TCLP Leachate	34.8	u	UG/L	34.8	1.0
		Selenium, TCLP Leachate	41.3	u	UG/L	41.3	1.0

Lionville Laboratory, Inc.

INORGANICS DATA SUMMARY REPORT 05/13/08

CLIENT: TNU-HANFORD RC-074 K1171 LVL LOT #: 0804L017

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

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT	DILUTION FACTOR
-006	J16J19	Silver, TCLP Leachate	4.5	u	UG/L	4.5	1.0
		Arsenic, TCLP Leachate	33.4		UG/L	31.7	1.0
		Barium, TCLP Leachate	36.2		UG/L	3.1	1.0
		Cadmium, TCLP Leachate	5.6	u	UG/L	5.6	1.0
		Chromium, TCLP Leachate	63.5		UG/L	4.6	1.0
		Mercury, TCLP Leachate	0.10	u	UG/L	0.10	1.0
		Lead, TCLP Leachate	34.8	u	UG/L	34.8	1.0
		Selenium, TCLP Leachate	41.3	u	UG/L	41.3	1.0

Lionville Laboratory, Inc.

INORGANICS METHOD BLANK DATA SUMMARY PAGE 05/13/08

CLIENT: TNU-HANFORD RC-074 K1171 LVL LOT #: 0804L017

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

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT	DILUTION FACTOR
BLANK1	08L0190-MB1	Silver, TCLP Leachate	4.5	u	UG/L	4.5	1.0
		Arsenic, TCLP Leachate	31.7	u	UG/L	31.7	1.0
		Barium, TCLP Leachate	3.1	u	UG/L	3.1	1.0
		Cadmium, TCLP Leachate	5.6	u	UG/L	5.6	1.0
		Chromium, TCLP Leachate	4.6	u	UG/L	4.6	1.0
		Lead, TCLP Leachate	34.8	u	UG/L	34.8	1.0
		Selenium, TCLP Leachate	41.3	u	UG/L	41.3	1.0
BLANK1	08C0081-MB1	Mercury, Total	0.10	u	UG/L	0.10	1.0

Lionville Laboratory, Inc.

INORGANICS ACCURACY REPORT 05/13/08

CLIENT: TNU-HANFORD RC-074 K1171 LVL LOT #: 0804L017

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

SAMPLE	SITE ID	ANALYTE	SPIKED SAMPLE	INITIAL RESULT	SPIKED AMOUNT	%RECOV	DILUTION FACTOR(SPK)
-004	J16J17	Silver, TCLP Leachate	1900	4.5 u	5000	38.0	1.0
		Arsenic, TCLP Leachate	4950	31.7 u	5000	99.0	1.0
		Barium, TCLP Leachate	101000	55.4	100000	101.4	6.0
		Cadmium, TCLP Leachate	928	5.6 u	1000	92.8	1.0
		Chromium, TCLP Leachat	4680	88.9	5000	91.8	1.0
		Mercury, TCLP Leachate	214	0.10u	200	106.8	50.0
		Lead, TCLP Leachate	4630	34.8 u	5000	92.6	1.0
		Selenium, TCLP Leachat	996	41.3 u	1000	99.6	1.0

Lionville Laboratory, Inc.

INORGANICS PRECISION REPORT 05/13/08

CLIENT: TNU-HANFORD RC-074 K1171 LVL LOT #: 0804L017

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

SAMPLE	SITE ID	ANALYTE	INITIAL RESULT	REPLICATE	RPD	DILUTION FACTOR(REP)
-004REP	J16J17	Silver, TCLP Leachate	4.5 u	5.9	NC	1.0
		Arsenic, TCLP Leachate	31.7 u	31.7 u	NC	1.0
		Barium, TCLP Leachate	55.4	51.1	8.1	1.0
		Cadmium, TCLP Leachate	5.6 u	5.6 u	NC	1.0
		Chromium, TCLP Leachate	88.9	89.6	0.78	1.0
		Mercury, TCLP Leachate	0.10u	0.10u	NC	1.0
		Lead, TCLP Leachate	34.8 u	34.8 u	NC	1.0
		Selenium, TCLP Leachate	41.3 u	41.3 u	NC	1.0

Lionville Laboratory, Inc.

INORGANICS LABORATORY CONTROL STANDARDS REPORT 05/13/08

CLIENT: TNU-HANFORD RC-074 K1171 LVL LOT #: 0804L017

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

SAMPLE	SITE ID	ANALYTE	SPIKED SAMPLE	SPIKED AMOUNT	UNITS	%RECOV
LCS1	08L0190-LC1	Silver, LCS	477	500	UG/L	95.3
		Arsenic, LCS	9740	10000	UG/L	97.4
		Barium, LCS	5110	5000	UG/L	102.2
		Cadmium, LCS	241	250	UG/L	96.2
		Chromium, LCS	490	500	UG/L	98.1
		Lead, LCS	2420	2500	UG/L	96.9
		Selenium, LCS	9730	10000	UG/L	97.3
LCS1	08C0081-LC1	Mercury, LCS	5.4	5.0	UG/L	108.1

SAMPLE DIGESTION RECORD

SOP: L-SPI-3020 Rev. 00

Digestion Batch #: 08L0190
Date/Time Initiated: 5/9/08 1500
Date/Time Completed: 5/9/08 1830
Analyst(s): MW
Matrix: Soil Water Other: TCLP
Instr. Type: AA (ICP)
Parameters: RCRA

(Digested) / Undigested (circle one)
Balance #: N/A
Balance Cal Verif: Y (NA)
Hot Plate Temp: 92°

Method: SW (circle)
3005A
(3010A)
3015
3020A
7060A (As/Se)
7760A (Ag)
3050B
3051
CLP ILMO3.0
ILMO4.0

DW 200.7 (1994)
200.9
3113B
MCAWW 200.7 (1982)
200 (AA)
206.2 (As/Se)
SM 3030C (NC)
Other

TMP Stock

COC Batch #	Spike Vol(s) (mL)	Initial Wt/Vol (g/mL)	Final Vol (mL)	pH <2	Type: To/So/TC	Texture	Color/Appearance	Artifact	Turb
0804L014-002		100ml	100ml	<2	TC	N/A	clear/colorless	RAM	
002R		↓	↓	↓	↓	↓	↓	↓	
002S	1.0ml	50ml	50ml	↓	↓	↓	↓	↓	
0804L017-004		100ml	100ml	↓	↓	↓	↓	↓	
004R		↓	↓	↓	↓	↓	↓	↓	
004S	1.0ml	↓	↓	↓	↓	↓	↓	↓	
005		↓	↓	↓	↓	↓	↓	↓	
006		↓	↓	↓	↓	↓	↓	↓	
0804L024-003		↓	↓	↓	↓	↓	↓	↓	
004		↓	↓	↓	↓	↓	↓	↓	
004R		↓	↓	↓	↓	↓	↓	↓	
004S	1.0ml	↓	↓	↓	↓	↓	↓	↓	
0804L003-003		↓	↓	↓	↓	↓	↓	↓	
003S	1.0ml	50ml	50ml	↓	↓	↓	↓	↓	
08L0190-MB1		100ml	100ml	↓	↓	↓	↓	↓	
LC1	1.0ml	↓	↓	↓	↓	↓	↓	↓	

MW 5/9/08

Spiking IDs:
MS #: 6072-73-05
6072-078-06

LCS #: 6072-78-08
-09
10
11

Reagent IDs:
HNO_3 E46025
HCL
H_2O_2
1:1 HNO_3
1:1 HCL 6072-069-03

File ID#: IC019001
LIMS Transfer: (Y) N updated
Data Review By/Date:
PMP, 05/09/08

nville Laboratory
orporated

MERCURY PREPARATION

Logbook # 422

alyst: Ter
e 5/9/08
rt Time/Temp: 1300 | 97°
d Time/Temp: 1500 | 93°

Instrument ID HG3.1
Balance #: (NA)
Pipette Calibration (Daily) Y ✓

Prep Batch: 08C0081
Worksheet: HG050901
SOP No. ME-HgCVAA, Rev. 02

pH < 2 for Liquids? ✓ Yes __ No (If no: designate affected samples in Comments column, and initiate an SDR)

NOTE: The Inital/Final Volume for water samples = 33mL, unless otherwise noted.
The Final volume for soil samples = 50mL, unless otherwise noted.

LvLI Batch #	Container Number	Spike Volume (mL)	Spike Conc. (µg/L)	Initial Wt. or Volume (g or mL)	Final Sample Volume (mL)	Comments, % Solids, etc.
Blank	CM			33mL	33mL	
0.2 µg/L	CB2	0.0667				
1.0	B14	0.334				
2.0	AB	0.667				
5.0	PC	1.667				
10.0	PA	3.334				
ICV	HR	0.0834	2.5			
CCV	NR	0.167	5.0			
ICB/CCB	L15					
MB1	27					PBW181
LC1	503	0.167	5.0			LCSW181
0804L008-008	2B					
008S	76	0.667	200			
008T	B32	0.667	200			
009	R2					
010	500					
0804L009-005	~~N60~~ WK TEST SILTY					
005S	X5	0.667	200			
005T	92	0.667	200			
006	~~OK~~ N60 TEST SILTY					
0804L017-004	SPRT					
004R	ET					
004S	HH	0.667	200			
005	154					
006	G12					
0804L024-003	71L					
004	BB					

Standard:	ID	Prep Date/Time
CAL/MS	B1 6072-78-14B	5/9/08 1210
CV/CCV/LCS	US 6072-78-15A	

Reviewed By/Date: [signature] 5/12/08

see book # 8368 for std traceability information

Soil LCS =US Metals in soil No.3; True Value = 4.70 mg/Kg
Catalogue #1RM-021, Lot # E021

Water Matrix Spiking Solution Concentration = 0.1 µg/ml
Water LCS Spiking Concentration: 1.0 µg/ml

ME-HgCVAA-Prep1007

Page #:

ville Laboratory
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MERCURY PREPARATION

Logbook # 422

t: TEB
5/9/08
ime/Temp:
me/Temp: see page 097

Instrument ID HG3.1
Balance #: NA
Pipette Calibration (Daily): Y ✓

Prep Batch: 08C0031
Worksheet: HG050901
SOP No. ME-HgCVAA, Rev. 02

pH < 2 for Liquids? ✓ Yes __ No (If no: designate affected samples in Comments column, and initiate an SDR)

NOTE: The Inital/Final Volume for water samples = 33mL, unless otherwise noted.
The Final volume for soil samples = 50mL, unless otherwise noted.

LvLI Batch #	Container Number	Spike Volume (mL)	Spike Conc. (µg/L)	Initial Wt. or Volume (g or mL)	Final Sample Volume (mL)	Comments, % Solids, etc.
08041024-004R	A1R			33mL	33mL	
004S	M1	0.667	200			
08041014-002	RU					
002R	P18					
002S	114	0.667	200			
08041003-003	857					
003S	W0	0.667	200			
08LTD040-LB1	297					
~~08041089 TEB 5/9/08~~						

TEB 5/9/08

rd:	ID	Prep Date/Time
IS		
CV/LCS	see page 097	

Reviewed By/Date: 5/12/08

see book # 9368 for std traceability information

S.=US Metals in soil No.3; True Value = 4.70 mg/Kg
ue #1RM-021, Lot # E021

Water Matrix Spiking Solution Concentration = 0.1 µg/ml
Water LCS Spiking Concentration: 1.0 µg/ml

CVAA-Prep1007

Page #:

onville Laboratory Use Only
S804L017

Custody Transfer Record/Lab Work Request

Page 1 of 1

FIELD PERSONNEL: COMPLETE ONLY SHADED AREAS

VLI

A

000000017

ent TNU Hanford RC-074 K1171

. Final Proj. Sampling Date

ject# 11343-606-001-9999-00

ject Contact/Phone#

nville Laboratory Project Manager Odette Johnson

SW846 Del STD TAT 7 Days

te Rec'd 3-28-08 Date Due 5-6-08

Refrigerator #											3							
#/Type Container	Liquid																	
	Solid										191		LEACHATE					
Volume	Solid										125							
Preservatives											1							
ANALYSES REQUESTED →		ORGANIC									INORG							
		VOA	BNA	Pest/PCB	Herb						TCLP Metal	CN						

TRIX DES:	Lab ID	Client ID/Description	Matrix QC Chosen (✓) MS	MSD	Matrix	Date Collected	Time Collected	Lionville Laboratory Use Only												
															TTCLP		RCRA			
Soil	001	J16J17			S	3-26-08	1012								X					
Sediment	002	J16J18			↓	↓	1028								X					
Solid	003	J16J19			↓	↓	1110								X					
Sludge	004	17 TCLP of 001			L	*											X			
Water	005	18 ↓ 002			↓	↓											X			
Oil	006	19 ↓ 003			↓	↓											X			
Air																				
Drum Solids																				
Drum Liquids																				
EP/TCLP Leachate																				
Wipe																				
Other																				
Fish																				

ecial Instructions:

Special Instructions:

1. Relog. of 08031L837
2.
3.
4.
5.
6.

* See ABCHRON

Relinquished by	Received by	Date	Time
F.	[signature]	4-29-08	12:20

Relinquished by	Received by	Date	Time

Relinquished by	Received by	Date	Time
ORIGINAL		COMPOSITE	
REWRITTEN		WASTE"	