0070147

SAF-RC-047
100 & 300 Area Component of the RCBRA Sediment and Tissues FINAL DATA PACKAGE

COMPLETE COPY OF DATA PACKAGE TO:

Jill Thomson	H0-23	NB 6/29/06 INITIAL/DATE
Jeanette Duncan	H9-02	NB 6/29/06 INITIAL/DATE

COMMENTS:

SDG K0331 **SAF-RC-047**

Rad only Chem only X Rad & Chem

X Complete Partial

Waste Site: Invertebrates

RECEIVED
JUL 11 2006
EDMC

LIONVILLE LABORATORY INC.

25 June 2006

Joan Kessner
WC-Hanford
3190 Washington Way
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 #	0604L876
SDG #	K0331
SAF #	RC-047
Date Received	4/27/06
# Samples	18
Mat\rix	OTHER SOLID
Volatiles	
Semivolatiles	
Pest/PCB	X
PAH	
DRO/KRO/GRO	
GC Alcohols	
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

Lionville Laboratory, Inc.
PEST/PCB ANALYTICAL DATA PACKAGE FOR
TNUHANFORD RC-047 K0331

DATE RECEIVED: 04/27/06 LVL LOT # :0604L876

CLIENT ID	LVL #	MTX	PREP #	COLLECTION	EXTR/PREP	ANALYSIS
J11KR0	001	SO	06LE0395	04/17/06	05/17/06	05/19/06
J11KR6	002	SO	06LE0395	04/17/06	05/17/06	06/06/06
J11KP9	003	SO	06LE0395	04/17/06	05/17/06	06/06/06
J11KR7	004	SO	06LE0395	04/17/06	05/17/06	06/06/06
J11XX8	005	SO	06LE0395	04/25/06	05/17/06	06/07/06
J11KR8	007	SO	06LE0395	04/17/06	05/17/06	06/07/06
J11XX9	008	SO	06LE0395	04/25/06	05/17/06	06/07/06
J11KR5	009	SO	06LE0395	04/25/06	05/17/06	06/07/06
J11KR1	010	SO	06LE0395	04/25/06	05/17/06	06/15/06
J11KR1	010 MS	SO	06LE0395	04/25/06	05/17/06	06/15/06
J11KR1	010 MSD	SO	06LE0395	04/25/06	05/17/06	06/15/06
J11KR3	012	SO	06LE0395	04/25/06	05/17/06	06/15/06
J11KR4	013	SO	06LE0395	04/25/06	05/17/06	06/15/06

LAB QC:

PBLKHK	MB1	S	06LE0395	N/A	05/17/06	06/06/06
PBLKHK	MB1 BS	S	06LE0395	N/A	05/17/06	06/06/06

LIONVILLE LABORATORY INC.

Case Narrative

Client: TNU-HANFORD RC-047
LVL #: 0604L876
SDG/SAF # K0331/RC-047

W.O. #: 11343-606-001-9999-00
Date Received: 04-27-2006

CHLORINATED PESTICIDES

Eleven (11) solid samples were collected on 04-17,25-2006.

The samples and their associated QC samples were extracted on 05-17-2006 and analyzed according to Lionville Laboratory SOPs based on SW846, 3rd Edition procedures on 05-19-2006 and 06-06,07,15-2006. The extraction procedure was based on method 3540C and the extracts were analyzed based on method 8081A.

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

1. The sample was stored in a refrigerator (ID# R003) that malfunctioned and failed to maintain the required sample storing temperature (4°C +/- 2°C) on 05-10-2006. A copy of the Sample Discrepancy Report (SDR) has been enclosed.

2. Samples were extracted outside the required holding time. A copy of the Sample Discrepancy Report (SDR) has been enclosed.

3. All samples results were reported on a wet-weight basis.

4. The samples and their associated QC samples received a Copper-Sulfur cleanup according to Lionville Laboratory SOPs based on SW846 method 3660A.

5. The method blank was below the reporting limits for all target compounds.

6. Four (4) of thirty (30) surrogate recoveries were outside acceptance criteria. A copy of the Sample Discrepancy Report (SDR) has been enclosed.

7. All blank spike recoveries were within acceptance criteria.

8. Three (3) of forty (40) matrix spike recoveries were outside acceptance criteria. A copy of the Sample Discrepancy Report (SDR) has been enclosed.

9. All samples required a 4-fold dilution due to the nature of the sample matrix. The reporting limits were adjusted to reflect the necessary dilution.

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 2 8 pages.

LIONVILLE LABORATORY INC.

10. The initial calibrations associated with this data set were within acceptance criteria.

11. The continuing calibration standards analyzed prior to sample extracts were within acceptance criteria with the exception of CCV analyzed on 06-06-2006 at 07:13 P.M on the RTX-CLP column. A copy of the Sample Discrepancy Report (SDR) has been enclosed.

12. LvLI is NELAP accredited by the state of Pennsylvania and holds over 20 additional state accreditations. For a complete listing of accrediting authorities and the corresponding analytes/methods, please contact your Project Manager.

13. 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

4/23/06
Date

som\r:\group\data\pest\tmu hanford\0604-876.pst

Lionville Laboratory Sample Discrepancy Report (SDR)

SDR #: 06PM002

Initiator: Orlette Johnson
Date: 6/21/06
Client: TNU Hanford

Batch: 06GL876
Samples: ALL
Method: SW846/MCAWW/CLP/

Parameter: Pesticides
Matrix: Other Solid
Prep Batch: 06LE0325

1. Reason for SDR

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

b. General Discrepancy

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

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

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

Sample(s) was/were extracted 7 days beyond the hold time

7 8 and 16

2. Known or Probable Causes(s) due to a temporary glassware shortage created by a malfunctioning drying kiln i.e, much of our glassware was lost when one of the kilns overheated. We made every effort to replace glassware as soon as possible but our needs exceeded on-the-shelf vendor stocks of certain critical items. This problem was exacerbated by an unusually high number of samples received during this period of time for organics extraction.

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:

We have replenished glassware stocks to higher levels than those in-house before the kiln malfunction. We have also replaced the kiln.

4. Project Manager Instructions...signature/date: 6/21/06

__ Concur with Proposed Action
__ Disagree with Proposed Action; See Instruction
X Include in Case Narrative
X Client Contacted
Date/Person _____
__ Add
__ Cancel

5. Final Action...signature/date: 6/23/06 Other Explanation:

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

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	__	__ Metals: Welsh
__	X Lab General Manager: I. Daniels	__	__ Inorganic: Perrone
__	X Project Mgr: Stone/Johnson	__	__ GC/LC: Kiger
__	X Data Management: Stilwell	__	__ MS: Schneider/Carden
__	__ Sample Prep: Kiger	__	__ Log-in: Perry
		__	__ Admin: _____
		__	__ Other: _____

Lionville Laboratory Sample Discrepancy Report (SDR)

SDR #: 06Gc186

Initiator: KBW
Date: 6/8/06
Client: TW

Batch: 0604L876
Samples: 0105, 0101, 012, 013
Method: SW846/MCAWW/CLP/

Parameter: AKST
Matrix: SOLID
Prep Batch: 06L6-0396

1. Reason for SDR

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

b. General Discrepancy

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

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

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

KBW 6/20/06

(1) Surrogate recoveries high in samples ~~0105, 0101,~~ 012 and 013.
(2) Spike recoveries out in samples 0105 and 0101.
(3) CCV analyzed 6/6/06 7:13:42pm high on RTX-CLP column.

2. Known or Probable Causes(s)

4 CW analyzed. 5/29/06 18:22 & 5/30 2:46 elevated.

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:

(1) Narrate - minimal impact to sample data
(2) Narrate - all BS recoveries w/in acceptance criteria
3 & 4 Quantitation taken from RTX-CLP 2 column which is diff in ±15%. Acceptance criteria. Elevated response on RTX-CLP column does not impact ability to confirm affected target compounds

6/23/06

4. Project Manager Instructions...signature/date: _____ 6/23/06

__ 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: _____

Other Explanation:

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

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

Route	Distribution of Completed SDR	Route	Distribution of Completed SDR
__	X Initiator	__	__ Metals: Beegle
__	X Lab General Manager: M. Taylor	__	__ Inorganic: Perrone
__	X Project Mgr: Stone/Johnson	__	__ GC/LC: Kiger
__	__ Data Management: Stilwell	__	__ MS: Rychlak/Daley
__	__ Sample Prep: Beegle/Kiger	__	__ Log-in: Perry
		__	__ Admin: _____
		__	__ Other: _____

QA-105-A-0805

Laboratory Sample Discrepancy Report (SDR)

SDR #: 06PM001

Initiator: Orlette Johnson
Date: 5/17/06
Client: TN Hanford

Batch: 06E04L876
Samples: -001 to -005; -007 to 010
Method: SW846/MCAWW/CLP/ -012, -013

Parameter: Pests
Matrix: Solid
Prep Batch:

1. Reason for SDR

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

b. General Discrepancy

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

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

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

On 5/10/06 sample storage refrigerator ID# R003 malfunctioned and was not holding the required sample storage temperature of 4°C +/- 2°C

2. Known or Probable Causes(s)

Broken motor

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:
At the time of malfunction R003 was used for storage of samples received for extractable organics, metals and wet chemistry (except TOC) analyses. All samples were removed from R003 to another refrigerator on 5/10/06. R003 was tagged out on 5/10/06, repaired on 5/12/06, and we have certified that R003 is maintaining the required sample storage temperature.

4. Project Manager Instructions...signature/date: Orlette Johnson 5/17/06

__ Concur with Proposed Action
__ Disagree with Proposed Action; See Instruction
✓ Include in Case Narrative
✓ Client Contacted
Date/Person Jan Kessner 5/16/06
__ Add
__ Cancel

5. Final Action...signature/date: 5/22/06

Other Explanation:

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

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

Route	Distribution of Completed SDR	Route	Distribution of Completed SDR
__	X Initiator	__	__ Metals: Welsh
__	X Lab Manager: I. Daniels	__	__ Inorganic: Perrone
__	X Project Mgr: Stone/Johnson	✓	__ GC/LC: Kiger
__	__ Data Management: Stilwell	__	__ MS: Schneider/Daley
__	__ Sample Prep: Beegle/Kiger	__	__ Log-in: Perry
		__	__ Admin:
		__	__ Other:

QA-105-A-0805

GLOSSARY OF DATA

DATA QUALIFIERS

U	=	Indicates that the compound was analyzed for but not detected. The minimum detection limit for the sample (not the method detection limit) is reported with the U (e.g., 10U).
J	=	Indicates an estimated value. This flag is used in cases where a target analyte is detected at a level less than the lower quantification level. If the limit of quantification is 10 ug/L and a concentration of 3 ug/L is calculated, it is reported as 3J.
B	=	This flag is used when the analyte is found in the associated blank as well as in the sample. It indicates possible/probable blank contamination.
E	=	Indicates that the compound was detected beyond the calibration range and was subsequently analyzed at a dilution.
I	=	Interference.
.I	=	Indicates an interference on one analytical column only. Result is reported from remaining analytical column.

ABBREVIATIONS

BS	=	Indicates blank spike in which reagent grade water is spiked with the CLP matrix spiking solutions and carried through all the steps in the method. Spike recoveries are reported.
BSD	=	Indicates blank spike duplicate.
MS	=	Indicates matrix spike.
MSD	=	Indicates matrix spike duplicate.
DL	=	Indicates that recoveries were not obtained because the extract had to be diluted for analysis.
NA	=	Not Applicable.
DF	=	Dilution Factor.
NR	=	Not Required.
NS	=	Not Spiked.
SP	=	Indicates Spiked Compound.
P	=	This flag is used for an PESTICIDE/PCB target analyte when there is greater than 25% difference for detected concentrations between the two GC columns (see Form X). The lower of the two values is reported on Form I and flagged with a "P".
D	=	This flag identifies all compounds identified in an analysis at a secondary dilution factor.
C	=	This flag applies to a compound that has been confirmed by GC/MS.
NPM	=	No pattern match for multi-component target analytes.

Lionville Laboratory, Inc.

Pesticide/PCBs by GC, CLP List

Report Date: 06/23/06 12:47

RFW Batch Number: 0604L876 Client: TNUHANFORD RC-047 K0331 Work Order: 11343606001 Page: 1

000000007

	Cust ID:	J11KR0	J11KR6	J11KP9	J11KR7	J11XX8	J11KR8
Sample Information	RFW#:	001	002	003	004	005	007
	Matrix:	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID
	D.F.:	4.00	4.00	4.00	4.00	4.00	4.00
	Units:	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
Surrogate:	Tetrachloro-m-xylene	100 %	90 %	99 %	94 %	86 %	44 %
	Decachlorobiphenyl	110 %	117 %	114 %	115 %	100 %	53 %
		fl	fl	fl	fl	fl	fl
Alpha-BHC		30 U	27 U	29 U	30 U	38 U	22 U
gamma-BHC (Lindane)		30 U	27 U	29 U	30 U	38 U	22 U
Beta-BHC		30 U	27 U	29 U	30 U	38 U	22 U
Heptachlor		30 U	27 U	29 U	30 U	38 U	22 U
Delta-BHC		30 U	27 U	29 U	30 U	38 U	22 U
Aldrin		30 U	27 U	10 J	30 U	38 U	22 U
Heptachlor epoxide		30 U	27 U	29 U	30 U	38 U	22 U
gamma-Chlordane		30 U	27 U	29 U	30 U	38 U	22 U
Endosulfan I		100	27 U	29 U	30 U	38 U	22 U
alpha-Chlordane		30 U	27 U	29 U	30 U	38 U	22 U
4,4'-DDE		30 U	27 U	29 U	30 U	38 U	22 U
Dieldrin		30 U	27 U	29 U	30 U	38 U	22 U
Endrin		30 U	27 U	29 U	30 U	38 U	22 U
4,4'-DDD		30 U	27 U	29 U	30 U	38 U	22 U
Endosulfan II		30 U	27 U	29 U	30 U	38 U	22 U
4,4'-DDT		30 U	120	180	84	140	94
Endrin aldehyde		30 U	27 U	29 U	30 U	38 U	22 U
Endosulfan sulfate		30 U	27 U	29 U	30 U	38 U	22 U
Methoxychlor		30 U	100	86	30 U	38 U	22 U
Endrin ketone		30 U	27 U	29 U	30 U	38 U	22 U
Toxaphene		300 U	270 U	290 U	300 U	380 U	220 U

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

6/23/6

Lionville Laboratory, Inc.

Pesticide/PCBs by GC, CLP List

Report Date: 06/19/06 20:37

RFW Batch Number: 0604L876 Client: TNUHANFORD RC-047 K0331 Work Order: 11343606001 Page: 2

000000008

	Cust ID:	J11XX9	J11KR5	J11KR1	J11KR1	J11KR1	J11KR3
Sample Information	RFW#:	008	009	010	010 MS	010 MSD	012
	Matrix:	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID
	D.F.:	4.00	4.00	4.00	4.00	4.00	4.00
	Units:	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
Surrogate:	Tetrachloro-m-xylene	83 %	86 %	90 %	87 %	88 %	146 * %
	Decachlorobiphenyl	100 %	95 %	92 %	95 %	96 %	144 * %
		fl	fl	fl	fl	fl	fl
Alpha-BHC		23 U	28 U	29 U	69 %	77 %	29 U
gamma-BHC (Lindane)		23 U	28 U	29 U	80 %	89 %	29 U
Beta-BHC		23 U	28 U	21 J	86 %	88 %	29 U
Heptachlor		23 U	28 U	29 U	75 %	75 %	29 U
Delta-BHC		23 U	28 U	29 U	65 %	70 %	29 U
Aldrin		23 U	28 U	29 U	72 %	69 %	29 U
Heptachlor epoxide		23 U	28 U	36	67 %	60 %	29 U
gamma-Chlordane		23 U	28 U	29 U	61 %	54 * %	29 U
Endosulfan I		23 U	26 J	29 U	78 %	80 %	59
alpha-Chlordane		23 U	28 U	29 U	72 %	75 %	29 U
4,4'-DDE		23 U	18 J	29 U	78 %	82 %	29 U
Dieldrin		23 U	28 U	29 U	75 %	73 %	29 U
Endrin		23 U	28 U	29 U	95 %	87 %	29 U
4,4'-DDD		23 U	74	29 U	85 %	83 %	29 U
Endosulfan II		23 U	28 U	29 U	77 %	79 %	29 U
4,4'-DDT		98	28 U	29 U	73 %	69 %	19 J
Endrin aldehyde		23 U	28 U	20 J	18 * %	22 * %	29 U
Endosulfan sulfate		23 U	1400	29 U	80 %	82 %	29 U
Methoxychlor		34	180	29 U	108 %	101 %	110
Endrin ketone		23 U	28 U	29 U	81 %	82 %	29 U
Toxaphene		230 U	280 U	290 U	290 U	290 U	290 U

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

6/20/06

Lionville Laboratory, Inc.

Pesticide/PCBs by GC, CLP List

Report Date: 06/19/06 20:37

RFW Batch Number: **0604L876** Client: **TNUHANFORD RC-047 K0331** Work Order: 11343606001 Page: 3

	Cust ID:	J11KR4	PBLKHK	PBLKHK BS
Sample Information	RFW#:	013	06LE0395-MB1	06LE0395-MB1
	Matrix:	SOLID	SOIL	SOIL
	D.F.:	4.00	1.00	1.00
	Units:	UG/KG	UG/KG	UG/KG
Surrogate: Tetrachloro-m-xylene		156 * %	86 %	92 %
Decachlorobiphenyl		144 * %	94 %	102 %
Alpha-BHC		27 U	0.33 U	104 %
gamma-BHC (Lindane)		27 U	0.33 U	99 %
Beta-BHC		120	0.33 U	109 %
Heptachlor		27 U	0.33 U	112 %
Delta-BHC		27 U	0.33 U	95 %
Aldrin		27 U	0.33 U	102 %
Heptachlor epoxide		27 U	0.33 U	109 %
gamma-Chlordane		27 U	0.33 U	104 %
Endosulfan I		21 J	0.33 U	112 %
alpha-Chlordane		27 U	0.33 U	105 %
4,4'-DDE		27 U	0.33 U	109 %
Dieldrin		27 U	0.33 U	116 %
Endrin		27 U	0.33 U	121 %
4,4'-DDD		39	0.33 U	109 %
Endosulfan II		27 U	0.33 U	107 %
4,4'-DDT		27 U	0.33 U	128 %
Endrin aldehyde		27 U	0.33 U	105 %
Endosulfan sulfate		27 U	0.33 U	107 %
Methoxychlor		27 U	0.33 U	152 %
Endrin ketone		27 U	0.33 U	111 %
Toxaphene		270 U	3.3 U	3.3 U

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

000000009

Lionville Laboratory Use Only

0604L87L

Custody Transfer Record/Lab Work Request

Page 1 of 2

See SRC

FIELD PERSONNEL: COMPLETE ONLY SHADED AREAS

Client: TNU Hanford RC-047

Est. Final Proj. Sampling Date:

Project #: 11343-0000-001-9999-00

Project Contact/Phone #:

Lionville Laboratory Project Manager: Charlotte Johnson

QC: Spec Del: Std TAT: 30 Days

Date Rec'd: 4-27-06 Date Due: 5/27/06

		A							B					
Refrigerator #		3							3					
#/Type Container	Liquid													
	Solid	1pl							1pl					
Volume	Liquid													
	Solid	50gr (125)							15gr (125)					
Preservatives		—							—					
ANALYSES REQUESTED →		ORGANIC						INORG						
		VOA	BNA	Pest/PCB	Herb			Metal + Hg	CN	Metals + Hg				
		Lionville Laboratory Use Only												
				0608H				METALS(1)		METALS(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	0608H	METALS(1)	METALS(1)
001	J11KR0			SO	4-17-06	0949	X	X	
002	J11KR6					0924	X	X	
003	J11KP9					1012	X	X	
004	J11KR7					1030	X		X
005	J11XX8				4-25-06	1232	X		X
006	J11KT1				4-17-06	1022			X
007	J11KR8					1024	X		X
008	J11XX9				4-25-06	1240	X		X
009	J11KR5					1150	X	X	
010	J11KR1					1131	X	X	

Special Instructions:

METALS(1) = HSL + Bi, B, Li, Mo, P, Si, Sr, Sn, U.

RUN MATRIX QC.

DATE/REVISIONS:

1. Matrix = Insects.
2.
3. 0608X;
4.
5.
6.

Relinquished by	Received by	Date	Time
[illegible]	[illegible]	4-27-06	0940

Relinquished by	Received by	Date	Time

Relinquished by	Received by	Date	Time
"COMPOSITE WASTE"			

ORIGINAL REWRITTEN

0000000010

Lionville Laboratory Use Only

06041876

Custody Transfer Record/Lab Work Request

VLI

FIELD PERSONNEL: COMPLETE ONLY SHADED AREAS

Client TNU Hanford RC-047

Est. Final Proj. Sampling Date

Project #

Project Contact/Phone # Pete Pg

Lionville Laboratory Project Manager Dilletta Johnson

QC ____ Del ____ TAT ____

Date Rec'd 4-27-06 Date Due

		A	B
Refrigerator #		3	3
#/Type Container	Liquid		
	Solid	1pl	1pl
Volume	Liquid		
	Solid	50gr (125)	15gr (125)
Preservatives		—	—

ANALYSES REQUESTED →

	ORGANIC							INORG		
	VOA	BNA	Pest/PCB	Herb				Metal	CN	Metals + Hg
Lionville Laboratory Use Only			CL-CBH					METALS(1)		METALS(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	CL-CBH	METALS(1)	METALS(1)
011	J11KT3			SO	4-25-06	1140			X
012	J11KR3					1127	X	X	
013	J11KR4					1120	X	X	
014	J11L34					1040			X
015	J11KT5					1210			X
016	J11L32					1045			X
017	J11955					1110			X
018	J11KT2				4-26-06	0724			X

Special Instructions:

METALS(1) - HSL + Bi, B, Li, Mo, P, Si, Sr, Sn, U

DATE/REVISIONS:

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

Relinquished by	Received by	Date	Time
FedEx	J Smith	4-27-06	0946

Relinquished by	Received by	Date	Time

Relinquished by	Received by	Date	Time

00000011

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-047-301	Page 1 of 1

Collector: TILLER, B. TR KLINCKMAN	Company Contact: JOAN KESSNER	Telephone No.: 375-4688	Project Coordinator: KESSNER, JH	Price Code: 9N	Data Turnaround: 45 Days
Project Designation: 100 & 300 Area Component of the RCBRA Sediment and Ti	Sampling Location: BORROW PIT 18 INVERTEBRATES		SAF No.: RC-047	Air Quality ☐	
Ice Chest No.: AFS-04-052	Field Logbook No.: EL-1595	COA: BESRAS6520	Method of Shipment: FED EX		
Shipped To: EBERLINE SERVICES LIONVILLE	Offsite Property No.: A060 378		Bill of Lading/Air Bill No.: SEE OSPC		

POSSIBLE SAMPLE HAZARDS/REMARKS

POTENTIAL RADIOACTIVE <DOT LIMITS

Special Handling and/or Storage

COOL 4C "MATRIX COMPOSED OF INSECTS"

Preservation	Cool 4C	Cool 4C										
Type of Container	P	aG										
No. of Container(s)	X0	1										
Volume	15g	50g										
SAMPLE ANALYSIS	See item (1) in Special Instructions.	Pesticides - 8081										

Sample No.	Matrix *	Sample Date	Sample Time										
J11KR0	OTHER SOLID	APR 17 2006	09:44	X	X								

CHAIN OF POSSESSION — **Sign/Print Names**

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
TR KLINCKMAN	APR 17 2006 1014	EAS LOCKED STORAGE	APR 17 2006 1014
EAS LOCKED STORAGE	04-26-06 0930	TR Klinckman	4-26-06 0930
TR Klinckman	4-26-06 1500	Fed Ex	
Fed Ex	4-27-06 0940	D. Smith	4-27-06 0940

SPECIAL INSTRUCTIONS

Perform pesticides and ICP metals in this order as sample is available.

(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]; Mercury - 7471 - (CV)

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
Ve=Vegetation
X=Other

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

BHI-EE-011 (08/29/2005)

000000012

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-047-307	Page 1 of 1

Collector: TILLER, B. TR KLINCKMAN	Company Contact: JOAN KESSNER	Telephone No.: 375-4688	Project Coordinator: KESSNER, JH
Price Code: 9N	Data Turnaround: 45 Days	Air Quality ☐	
Project Designation: 100 & 300 Area Component of the RCBRA Sediment and Ti	Sampling Location: 600-181 INVERTEBRATES		SAF No.: RC-047
Ice Chest No.: AFS-04-052	Field Logbook No.: EL-1595	COA: BESRAS6520	Method of Shipment: FED EX
Shipped To: EBERLINE SERVICES / LIONVILLE	Offsite Property No.: A060378		Bill of Lading/Air Bill No.: SEE OSPC

POSSIBLE SAMPLE HAZARDS/REMARKS

POTENTIAL RADIOACTIVE <DOT LIMITS

Special Handling and/or Storage

COOL 4C "MATRIX COMPOSED OF INSECTS"

Preservation	Cool 4C	Cool 4C										
Type of Container	P	aG										
No. of Container(s)	10	1										
Volume	15g	50g										
SAMPLE ANALYSIS	See item (1) in Special Instructions.	Pesticides - 8081										

Sample No.	Matrix *	Sample Date	Sample Time										
J11KR6	OTHER SOLID	APR 17 2006	0924	X	X								

CHAIN OF POSSESSION	Date/Time	Sign/Print Names: Received By/Stored In	Date/Time
Relinquished By/Removed From: TR KLINCKMAN	APR 17 2006 0943	EAS LOCKED STORAGE	APR 17 2006 0943
EAS LOCKED STORAGE	04-26-06 0930	TR Klinckman	4-26-06 0930
TR Klinckman WCH	4-26-06 1500	Fed Ex	
Fed Ex	4-27-06 0940	[illegible]	4-27-06 0940
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time

SPECIAL INSTRUCTIONS

Perform pesticides and ICP metals in this order as sample is available.

(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}; Mercury - 7471 - (CV)

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
Ve=Vegetation
X=Other

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

BHI-EE-011 (08/29/2005)

0000000013

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-047-300	Page 1 of 1

Collector TILLER, B. IH KLINCKMAN	Company Contact JOAN KESSNER	Telephone No. 375-4688	Project Coordinator KESSNER, JH
Price Code 9N	Data Turnaround 45 Days	Air Quality ☐	
Project Designation 100 & 300 Area Component of the RCBRA Sediment and Ti	Sampling Location BORROW PIT 14 INVERTEBRATES	SAF No. RC-047	
Ice Chest No. AFS-04-05 2	Field Logbook No. EL-1595	COA BESRAS6520	Method of Shipment FED EX
Shipped To EBERLINE SERVICES (LIONVILLE)	Offsite Property No. A060378	Bill of Lading/Air Bill No. SEE OSPC	

POSSIBLE SAMPLE HAZARDS/REMARKS

POTENTIAL RADIOACTIVE <DOT LIMITS

Special Handling and/or Storage

COOL 4C "MATRIX COMPOSED OF INSECTS"

Preservation	Cool 4C	Cool 4C									
Type of Container	G/P	aG									
No. of Container(s)	10	1									
Volume	15g	50g									
SAMPLE ANALYSIS	ICP Metals - 6010 (Full List); Mercury - 7471 - (CV)	Pesticides - 8081									

Sample No.	Matrix *	Sample Date	Sample Time										
J11KP9	OTHER SOLID	APR 17 2006	1012	X	X								

CHAIN OF POSSESSION	Sign/Print Names		
Relinquished By/Removed From IH KLINCKMAN	Date/Time APR 17 2006 1012	Received By/Stored In EAS LOCKED STORAGE	Date/Time APR 17 2006 1012
Relinquished By/Removed From EAS LOCKED STORAGE	Date/Time 04-26-06 0930	Received By/Stored In IH Klinckman	Date/Time 4-26-06 0930
Relinquished By/Removed From IH Klinckman	Date/Time 4-26-06 1500	Received By/Stored In Fed Ex	Date/Time
Relinquished By/Removed From Fed Ex	Date/Time 4-27-06 0940	Received By/Stored In D Smith	Date/Time 4-27-06 0940
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time

SPECIAL INSTRUCTIONS

Perform pesticides and ICP metals in this order as sample is available.

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

BHI-EE-011 (08/29/2005)

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-047-308	Page 1 of 1

Collector: TILLER, B. TR KLINCKMAN	Company Contact: JOAN KESSNER	Telephone No.: 375-4688	Project Coordinator: KESSNER, JH
Price Code: 9N	Data Turnaround: 45 Days	Air Quality ☐	
Project Designation: 100 & 300 Area Component of the RCBRA Sediment and Ti	Sampling Location: 628-1 INVERTEBRATES		SAF No.: RC-047
Ice Chest No.: AFS-04-052	Field Logbook No.: EL-1595	COA: BESRAS6520	Method of Shipment: FED EX
Shipped To: EBERLINE SERVICES / LIONVILLE	Offsite Property No.: A060378		Bill of Lading/Air Bill No.: SEE OSPC

POSSIBLE SAMPLE HAZARDS/REMARKS

POTENTIAL RADIOACTIVE <DOT LIMITS

Special Handling and/or Storage

COOL 4C "MATRIX COMPOSED OF INSECTS"

Preservation	Cool 4C	Cool 4C	Cool 4C								
Type of Container	P	aG	G/P								
No. of Container(s)	1	1	1								
Volume	15g	50g	15g								
SAMPLE ANALYSIS	See item (1) in Special Instructions.	Pesticides - 8081	ICP Metals - 6010 (Full List); Mercury - 7471 - (CV)								

Sample No.	Matrix *	Sample Date	Sample Time										
J11KR7	OTHER SOLID	04-17-06	10:30	X	X								
J11XX8	OTHER SOLID	~~04-17-06~~	~~10:30~~	X	X								
		04-25-06	12:32										
		04-25	CK ICG										

CHAIN OF POSSESSION	Sign/Print Names	Date/Time	Received By/Stored In	Date/Time
Relinquished By/Removed From	TR KLINCKMAN	04-17-06 10:40	EAS LOCKED STORAGE	04-17-06 10:40
Relinquished By/Removed From	EAS LOCKED STORAGE	04-25-06 12:20	TR KLINCKMAN	04-25-06 12:20
Relinquished By/Removed From	TR KLINCKMAN	04-25-06 12:40	EAS LOCKED STORAGE	04-25-06 12:40
Relinquished By/Removed From	EAS LOCKED STORAGE	04-26-06 0930	[illegible]	4-26-06 0930
Relinquished By/Removed From	WCH [illegible]	4-26-06 1500	Fed Ex	
Relinquished By/Removed From	[illegible]	4-27-06 0940	[illegible]	4-27-06 0940

SPECIAL INSTRUCTIONS

Perform pesticides and ICP metals in this order as sample is available.

(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}; Mercury - 7471 - (CV)

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

BHI-EE-011 (08/29/2005)

0000000015

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-047-312	Page 1 of 1

Collector: TILLER, B. TR KLINCKMAN	Company Contact: JOAN KESSNER	Telephone No.: 375-4688	Project Coordinator: KESSNER, JH
Price Code: 9N	Data Turnaround: 45 Days	Air Quality ☐	
Project Designation: 100 & 300 Area Component of the RCBRA Sediment and Ti	Sampling Location: 116-F-1 INVERTEBRATES		SAF No.: RC-047
Ice Chest No.: AFS-04-052	Field Logbook No.: EL-1595	COA: BESRAS6520	Method of Shipment: FED EX
Shipped To: EBERLINE SERVICES (LIONVILLE)	Offsite Property No.: A060378		Bill of Lading/Air Bill No.: SEE OSPC

POSSIBLE SAMPLE HAZARDS/REMARKS

POTENTIAL RADIOACTIVE <DOT LIMITS

Special Handling and/or Storage

COOL 4C "MATRIX COMPOSED OF INSECTS"

Preservation	Cool 4C
Type of Container	P
No. of Container(s)	1
Volume	15g
SAMPLE ANALYSIS	See item (1) in Special Instructions.

Sample No.	Matrix *	Sample Date	Sample Time	
J11KT1	OTHER SOLID	APR 17 2006	1022	X

CHAIN OF POSSESSION	Date/Time	Sign/Print Names: Received By/Stored In	Date/Time
Relinquished By/Removed From: TR KLINCKMAN	APR 17 2006 1024	EAS LOCKED STORAGE	APR 17 2006 1024
Relinquished By/Removed From: EAS LOCKED STORAGE	0930 4-26-06	TR Klinckman	4-26-06 0930
Relinquished By/Removed From: TR Klinckman	4-26-06 1500	Fed Ex	
Relinquished By/Removed From: Fed Ex	4-27-06 0940	N Mills	4-27-06 0940
Relinquished By/Removed From		Received By/Stored In	
Relinquished By/Removed From		Received By/Stored In	

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]; Mercury - 7471 - (CV)

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

BHI-EE-011 (08/29/2005)

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-047-309	Page 1 of 1

Collector: TILLER, B. TR KLINCKMAN	Company Contact: JOAN KESSNER	Telephone No.: 375-4688	Project Coordinator: KESSNER, JH
Price Code: 9N	Data Turnaround: 45 Days	Air Quality ☐	
Project Designation: 100 & 300 Area Component of the RCBRA Sediment and Ti	Sampling Location: 600-171 INVERTEBRATES		SAF No.: RC-047
Ice Chest No.: AFS-04-052	Field Logbook No.: EL-1595	COA: BESRAS6520	Method of Shipment: FED EX
Shipped To: EBERLINE SERVICES LIONVILLE	Offsite Property No.: A060378		Bill of Lading/Air Bill No.: SEE OSPC

POSSIBLE SAMPLE HAZARDS/REMARKS

POTENTIAL RADIOACTIVE <DOT LIMITS

Special Handling and/or Storage

COOL 4C "MATRIX COMPOSED OF INSECTS"

Preservation	Cool 4C	Cool 4C	Cool 4C								
Type of Container	P	aG	G/P								
No. of Container(s)	1	1	1								
Volume	15g	50g	15g								
SAMPLE ANALYSIS	See item (1) in Special Instructions.	Pesticides - 8081	ICP Metals - 6010 (Full List); Mercury - 7471 - (CV)								

Sample No.	Matrix *	Sample Date	Sample Time										
J11KR8	OTHER SOLID	04-17-06	10:24	X	X								
J11XX9	OTHER SOLID	04-17-06	~~10:24~~	X	X								
		ICG 04-26-06	~~10:27~~										
			12:40	ICG	04-25-06								

CHAIN OF POSSESSION	Date/Time	Sign/Print Names	Date/Time
Relinquished By/Removed From: TR KLINCKMAN	04-17-06 10:30	Received By/Stored In: EAS LOCKED STORAGE	04-17-06 10:30
Relinquished By/Removed From: EAS LOCKED STORAGE	04-25-06 12:30	Received By/Stored In: TR KLINCKMAN	04-25-06 12:30
Relinquished By/Removed From: TR KLINCKMAN	04-25-06 12:45	Received By/Stored In: EAS LOCKED STORAGE	04-25-06 12:45
Relinquished By/Removed From: EAS LOCKED STORAGE	04-26-06 0930	Received By/Stored In: JK Edmondson	4-26-06 0930
Relinquished By/Removed From: JK Edmondson	4-26-06 1500	Received By/Stored In: Fed Ex	
Relinquished By/Removed From:	4-27-06 0940	Received By/Stored In: D Smith	4-27-06 0940

SPECIAL INSTRUCTIONS

Perform pesticides and ICP metals in this order as sample is available.

(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); Mercury - 7471 - (CV)

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

BHI-EE-011 (08/29/2005)

0000000017

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-047-306	Page 1 of 1

Collector: TILLER, B. TR KLINCKMAN	Company Contact: JOAN KESSNER	Telephone No.: 375-4688	Project Coordinator: KESSNER, JH
Price Code: 9N	Data Turnaround: 45 Days	Air Quality ☐	
Project Designation: 100 & 300 Area Component of the RCBRA Sediment and Ti	Sampling Location: 600-208 INVERTEBRATES		SAF No.: RC-047
Ice Chest No.: AFS-04-052	Field Logbook No.: EL-1595	COA: BESRAS6520	Method of Shipment: FED EX
Shipped To: EBERLINE SERVICES, LIONVILLE	Offsite Property No.: A060378		Bill of Lading/Air Bill No.: SEE OSPC

POSSIBLE SAMPLE HAZARDS/REMARKS

POTENTIAL RADIOACTIVE <DOT LIMITS

Special Handling and/or Storage

COOL 4C "MATRIX COMPOSED OF INSECTS"

Preservation	Cool 4C	Cool 4C										
Type of Container	P	sG										
No. of Container(s)	1	1										
Volume	15g	50g										
SAMPLE ANALYSIS	See item (1) in Special Instructions.	Pesticides - 8081										
ICG 04-25-06												
Sample No.	Matrix *	Sample Date	Sample Time									
J11KR5	OTHER SOLID	APR 17 2006	11:50	X	X							
		25										

CHAIN OF POSSESSION 04-25-06 **Sign/Print Names** 04-25-06

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
TR KLINCKMAN	APR 17 2006 11:55	EAS LOCKED STORAGE	APR 17 2006 11:55
EAS LOCKED STORAGE	25 04-26-06 0930		25 04-26-06 0930
WCH	4-26-06 1500	Fed Ex	
	4-27-06 0940		4-27-06 0940

SPECIAL INSTRUCTIONS

Perform pesticides and ICP metals in this order as sample is available.

(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}; Mercury - 7471 - (CV)

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

BHI-EE-011 (08/29/2005)

00000018

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-047-302	Page 1 of 1

Collector TILLER, B. TR KLINGAMAN	Company Contact JOAN KESSNER	Telephone No. 375-4688	Project Coordinator KESSNER, JH
Price Code 9N	Data Turnaround 45 Days	Air Quality ☐	
Project Designation 100 & 300 Area Component of the RCBRA Sediment and Ti	Sampling Location 600-23 INVERTEBRATES	SAF No. RC-047	
Ice Chest No. AFS-04-052	Field Logbook No. EL-1595	COA BESRAS6520	Method of Shipment FED EX
Shipped To EBERLINE SERVICES LIONVILLE	Offsite Property No. A060378	Bill of Lading/Air Bill No. SEE OSPC	

POSSIBLE SAMPLE HAZARDS/REMARKS

POTENTIAL RADIOACTIVE <DOT LIMITS

Special Handling and/or Storage

COOL 4C "MATRIX COMPOSED OF INSECTS"

Preservation	Cool 4C	Cool 4C										
Type of Container	P	aG										
No. of Container(s)	10	1										
Volume	15g	50g										
SAMPLE ANALYSIS	See Item (1) in Special Instructions.	Pesticides - 8081										

Sample No.	Matrix *	Sample Date	Sample Time									
J11KR1	OTHER SOLID	APR 17 2006	11:31	X	X							
	KG	25										
	04-25-06											

CHAIN OF POSSESSION 04-25-06 **Sign/Print Names** 04-25-06

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
TR KLINGAMAN	APR 17 2006 11:35	EAS LOCKED STORAGE	APR 17 2006 11:35
25 EAS LOCKED STORAGE	04-26-06 0930	TR Klingaman ICG-25	04-26-06 0930
TR Klingaman WCH	4-26-06 1500	Fed Ex	
Fed Ex	4.27.06 0940	[illegible]	4.27.06 0940

SPECIAL INSTRUCTIONS

Perform pesticides and ICP metals in this order as sample is available.

(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]; Mercury - 7471 - (CV)

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

BHI-EE-011 (08/29/2005)

000000019

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-047-314	Page 1 of 1

Collector: TILLER, B. TR KLINCKMAN	Company Contact: JOAN KESSNER	Telephone No.: 375-4688	Project Coordinator: KESSNER, JH	Price Code: 9N	Data Turnaround: 45 Days
Project Designation: 100 & 300 Area Component of the RCBRA Sediment and Ti	Sampling Location: 300-49 INVERTEBRATES		SAF No.: RC-047	Air Quality ☐	
Ice Chest No.: AFS-04-052	Field Logbook No.: EL-1595	COA: BESRAS6520	Method of Shipment: FED EX		
Shipped To: EBERLINE SERVICES LIONVILLE	Offsite Property No.: A060378		Bill of Lading/Air Bill No.: SEE OSPC		

POSSIBLE SAMPLE HAZARDS/REMARKS

POTENTIAL RADIOACTIVE <DOT LIMITS

Special Handling and/or Storage

COOL 4C "MATRIX COMPOSED OF INSECTS"

Preservation	COOL 4C ~~None~~ 4/0 32366	Cool 4C									
Type of Container	G/P	P									
No. of Container(s)	1	1									
Volume	10g	15g									
SAMPLE ANALYSIS	See item (1) in Special Instructions.	See item (2) in Special Instructions.									

Sample No.	Matrix *	Sample Date	Sample Time										
J11KT3	OTHER SOLID	04-25-06	11:40		X								

CHAIN OF POSSESSION — Sign/Print Names

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
TR KLINCKMAN	04-25-06 11:42	EAS LOCKED STORAGE	04-25-06 11:42
EAS LOCKED STORAGE	04-26-06 0930	FR Blanchard	4-26-06 0930
FR Blanchard	4-26-06 1500	Fed Ex	
Fed Ex	4-27-06 0940	D. Smith	4-27-06 0940

SPECIAL INSTRUCTIONS

(1) ~~Strontium-89,90 Total Sr; Isotopic Thorium | Thorium-232~~; Isotopic Uranium | Uranium-233/234, Uranium-235, Uranium-238 |; ~~Isotopic Plutonium~~ 4/0 32366

(2) 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); Mercury - 7471 - (CV)

Matrix *
S=Soil
SE=Sediment
SD=Solid
Sl=Sludge
W = Water
O=Oil
A=Air
DS=Drum Solids
DL=Drum Liquids
T=Tissue
Wi=Wipe
L=Liquid
Vs=Vegetation
X=Other

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

BHI-EE-011 (08/29/2005)

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-047-304	Page 1 of 1

Collector: TILLER, B. TR KLINCKMAN	Company Contact: JOAN KESSNER	Telephone No.: 375-4688	Project Coordinator: KESSNER, JH
Price Code: 9N	Data Turnaround: 45 Days	Air Quality ☐	
Project Designation: 100 & 300 Area Component of the RCBRA Sediment and Ti	Sampling Location: 600-139 INVERTEBRATES	SAF No.: RC-047	
Ice Chest No.: AFS-04-052	Field Logbook No.: EL-1595	COA: BESRAS6520	Method of Shipment: FED EX
Shipped To: EBERLINE SERVICES / JONVILLE	Offsite Property No.: A060378	Bill of Lading/Air Bill No.: SEE OSPC	

POSSIBLE SAMPLE HAZARDS/REMARKS

POTENTIAL RADIOACTIVE <DOT LIMITS

Special Handling and/or Storage

COOL 4C "MATRIX COMPOSED OF INSECTS"

Preservation	Cool 4C	Cool 4C										
Type of Container	P	aG										
No. of Container(s)	10	1										
Volume	15g	50g										
SAMPLE ANALYSIS	See item (1) in Special Instructions.	Pesticides - 8081										

04-25-06

Sample No.	Matrix *	Sample Date	Sample Time										
J11KR3	OTHER SOLID	25 APR 2006	11:27	X	X								
	100												

CHAIN OF POSSESSION 04-25-06 **Sign/Print Names** 04-25-06

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
TR KLINCKMAN 100	APR 17 2006 11:30	EAS LOCKED STORAGE 100	APR 17 2006 11:30
EAS LOCKED STORAGE	25 04-26-06 1930	TR Klinckman	25 4-26-06 0930
TR Klinckman	4-26-06 1500	Fed Ex	
Fed Ex	4-27-06 0940	[illegible]	4-27-06 0940
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time

SPECIAL INSTRUCTIONS

Perform pesticides and ICP metals in this order as sample is available.

(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]; Mercury - 7471 - (CV)

Matrix *
SaSoil
SEaSediment
SOaSolid
SlaSludge
WaWater
OaOil
AaAir
DSaDrum Solids
DLaDrum Liquids
TaTissue
WIaWipe
LaLiquid
VaVegetation
XaOther

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

BHI-EE-011 (08/29/2005)

000000021

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-047-305	Page 1 of 1

Collector: TILLER, B. TR KLINCKMAN	Company Contact: JOAN KESSNER	Telephone No.: 375-4688	Project Coordinator: KESSNER, JH
Price Code: 9N	Data Turnaround: 45 Days	Air Quality ☐	
Project Designation: 100 & 300 Area Component of the RCBRA Sediment and Ti	Sampling Location: 600-204 INVERTEBRATES	SAF No.: RC-047	
Ice Chest No.: AFS-04-062	Field Logbook No.: EL-1595	COA: BESRAS6520	Method of Shipment: FED EX
Shipped To: EBERLINE SERVICES/LIONVILLE	Offsite Property No.: A060378	Bill of Lading/Air Bill No.: SEE OSPC	

POSSIBLE SAMPLE HAZARDS/REMARKS

POTENTIAL RADIOACTIVE <DOT LIMITS

Special Handling and/or Storage

COOL 4C "MATRIX COMPOSED OF INSECTS"

Preservation	Cool 4C	Cool 4C									
Type of Container	P	aG									
No. of Container(s)	1	1									
Volume	15g	50g									
SAMPLE ANALYSIS	See item (1) in Special Instructions. 04-25-06 ICG	Pesticides - 8081									

04-25-06 ICG

Sample No.	Matrix *	Sample Date	Sample Time										
J11KR4	OTHER SOLID	APR 25 2006	11:20	X	X	X							

CHAIN OF POSSESSION 04-25-06 **Sign/Print Names** 04-25-06

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
TR KLINCKMAN	APR 25 2006 11:25 ICG	EAS LOCKED STORAGE	APR 25 2006 11:25 ICG
EAS LOCKED STORAGE	04-26-06 0930	[illegible]	04-26-06 0930
[illegible]	4-26-06 1500	Fed Ex	
[illegible]	4.27.06 0940	[illegible]	4.27.06 0940

SPECIAL INSTRUCTIONS

perform pesticides and ICP metals in this order as sample is available.

(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]; Mercury - 7471 - (CV)

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

BHI-EE-011 (08/29/2005)

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-047-341	Page 1 of 1

Collector: TILLER, B. TR KLINCKMAN	Company Contact: JOAN KESSNER	Telephone No.: 375-4688	Project Coordinator: KESSNER, JH
Price Code: 9N	Data Turnaround: 45 Days	Air Quality ☐	
Project Designation: 100 & 300 Area Component of the RCBRA Sediment and Ti	Sampling Location: JA JONES 1 INVERTEBRATES	SAF No.: RC-047	
Ice Chest No.: AFS-04-052	Field Logbook No.: EL-1595	COA: BESRAS6520	Method of Shipment: FED EX
Shipped To: EBERLINE SERVICES / JONVILLE	Offsite Property No.: A060 378	Bill of Lading/Air Bill No.: SEE OSPC	

POSSIBLE SAMPLE HAZARDS/REMARKS

POTENTIAL RADIOACTIVE <DOT LIMITS

Special Handling and/or Storage

COOL 4C "MATRIX COMPOSED OF INSECTS"

Preservation	Cool 4C										
Type of Container	G/P										
No. of Container(s)	1										
Volume	15g										
SAMPLE ANALYSIS	See item (1) in Special Instructions.										

04-25-06

Sample No.	Matrix *	Sample Date	Sample Time										
J11L34	OTHER SOLID	APR 17 2006	~~09:14~~	X									
	ICG	25	10:40										

CHAIN OF POSSESSION 04-25-06 10:45 Sign/Print Names 04-25-06 10:45

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
TR KLINCKMAN	APR 17 2006 ICG ~~09:17~~	ICG EAS LOCKED STORAGE	APR 17 2006 ~~09:17~~
EAS LOCKED STORAGE	04-26-06 0930	TR Klinckman	4-26-06 0930
WCH TR Klinckman	4-26-06 1500	Fed Ex	
Fed Ex	4-27-06/0940		4-27-06/0940

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}; Mercury - 7471 - (CV)

Matrix *
S=Soil
SE=Sediment
SO=Solid
Sl=Sludge
W = Water
O=Oil
A=Air
DS=Drum Solids
DL=Drum Liquids
Ti=Tissue
Wi=Wipe
L=Liquid
Ve=Vegetation
X=Other

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

BHI-EE-011 (08/29/2005)

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-047-316	Page 1 of 1

Collector: TILLER, B. 1rt KLINCKMAN	Company Contact: JOAN KESSNER	Telephone No.: 375-4688	Project Coordinator: KESSNER, JH
Price Code: 9N	Data Turnaround: 45 Days	Air Quality ☐	
Project Designation: 100 & 300 Area Component of the RCBRA Sediment and Ti	Sampling Location: BORROW PIT 9 INVERTEBRATES		SAF No.: RC-047
Ice Chest No.: AFS-04-052	Field Logbook No.: EL-1595	COA: BESRAS6520	Method of Shipment: FED EX
Shipped To: EBERLINE SERVICES/LIONVILLE	Offsite Property No.: A060378		Bill of Lading/Air Bill No.: SEE OSPC

000000024

POSSIBLE SAMPLE HAZARDS/REMARKS

POTENTIAL RADIOACTIVE <DOT LIMITS

Special Handling and/or Storage

COOL 4C "MATRIX COMPOSED OF INSECTS"

Preservation	Cool 4C											
Type of Container	P											
No. of Container(s)	1											
Volume	15g											
SAMPLE ANALYSIS	See item (1) in Special Instructions.											
ICG 04-25-06												

Sample No.	Matrix *	Sample Date	Sample Time										
J11KT5	OTHER SOLID	APR 25 2006	12:10	X									

CHAIN OF POSSESSION 04-25-06 **Sign/Print Names**

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
TR KLINCKMAN	APR 25 2006 12:15	EAS LOCKED STORAGE	APR 25 2006 12:15
EAS LOCKED STORAGE	04-26-06 0930	ICG / TR Edmundson	4-26-06 0930
TR Edmundson / WCH	4-26-06 1500	Fed Ex	
Fed Ex	4-27-06 0940	[signature]	4-27-06 0940

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]; Mercury - 7471 - (CV)

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
Liquid
V=Vegetation
X=Other

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

BHI-EE-011 (08/29/2005)

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-047-339	Page 1 of 1

Collector: TILLER, B. TR KLINCKMAN	Company Contact: JOAN KESSNER	Telephone No.: 375-4688	Project Coordinator: KESSNER, JH
Price Code: 9N	Data Turnaround: 45 Days	Air Quality ☐	
Project Designation: 100 & 300 Area Component of the RCBRA Sediment and Ti	Sampling Location: 100-F-2 INVERTEBRATES	SAF No.: RC-047	
Ice Chest No.: AFS-04-052	Field Logbook No.: EL-1595	COA: BESRAS6520	Method of Shipment: FED EX
Shipped To: EBERLINE SERVICES (LIONVILLE)	Offsite Property No.: A060378		Bill of Lading/Air Bill No.: SEE OSPC

POSSIBLE SAMPLE HAZARDS/REMARKS

POTENTIAL RADIOACTIVE <DOT LIMITS

Special Handling and/or Storage

COOL 4C "MATRIX COMPOSED OF INSECTS"

Preservation	Cool 4C	
Type of Container	G/P	
No. of Container(s)	1	
Volume	15g	

SAMPLE ANALYSIS

04-25-06

See item (1) in Special Instructions.

Sample No.	Matrix *	Sample Date	Sample Time	
J11L32	OTHER SOLID	APR 25 2006	~~09:19~~	X
	ICG	25	10:45	

CHAIN OF POSSESSION 04-25-06 10:50 **Sign/Print Names** 04-25-06 10:50

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
ICG TR KLINCKMAN	APR 25 2006 ~~09:22~~	EAS LOCKED STORAGE	APR 25 2006
EAS LOCKED STORAGE	04-26-06 0930	ICG TR Ellenbecker	4-26-06 0930
TR Ellenbecker 4-26-06	1530	Fed Ex	
Fed Ex	4-27-06 0940	D J Mulh	4-27-06 0940

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]; Mercury - 7471 - (CV)

Matrix *

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

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

BHI-EE-011 (08/29/2005)

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-047-246	Page 1 of 1

Collector: TILLER, B. TR KLINCKMAN	Company Contact: JOAN KESSNER	Telephone No.: 375-4688	Project Coordinator: KESSNER, JH
Price Code: 9N	Data Turnaround: 45 Days	Air Quality ☐	
Project Designation: 100 & 300 Area Component of the RCBRA Sediment and Ti	Sampling Location: 300-A RIPARIAN #6 INVERTEBRATES		SAF No.: RC-047
Ice Chest No.: AFS-04-052	Field Logbook No.: EL-1595	COA: BESRAS6520	Method of Shipment: FED EX
Shipped To: EBERLINE SERVICES (LIONVILLE)	Offsite Property No.: A060378		Bill of Lading/Air Bill No.: SEE OSPC

POSSIBLE SAMPLE HAZARDS/REMARKS

POTENTIAL RADIOACTIVE <DOT LIMITS

Special Handling and/or Storage

COOL 4C

Preservation	None	Cool 4C										
Type of Container	G/P	P										
No. of Container(s)	1	1										
Volume	10g	15g										
SAMPLE ANALYSIS	See item (1) in Special Instructions	ICP Metals - 6010 (Full List); Mercury - 7471 - (CV)										

Sample No.	Matrix *	Sample Date	Sample Time									
J11955	OTHER SOLID	4-25-06	11:10		X							

CHAIN OF POSSESSION	Date/Time	Sign/Print Names: Received By/Stored In	Date/Time
Relinquished By/Removed From: TR KLINCKMAN	11:15 APR 25 2006	EAS LOCKED STORAGE	11:15 APR 25 2006
Relinquished By/Removed From: EAS LOCKED STORAGE	0930 4-26-06	Received By/Stored In: TR Elmendorf	4-26-06 0930
Relinquished By/Removed From: TR Elmendorf	4-26-06 1500	Received By/Stored In: Fed Ex	
Relinquished By/Removed From: Fed Ex	4-27-06/0940	Received By/Stored In: D J Smith	4-27-06/0940
Relinquished By/Removed From		Received By/Stored In	
Relinquished By/Removed From		Received By/Stored In	

SPECIAL INSTRUCTIONS

(1) Strontium-89,90 -- Total Sr; Isotopic Thorium (Thorium-232); Isotopic Uranium (Uranium-233/234, Uranium-235, Uranium-238); Isotopic Plutonium

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

BHI-EE-011 (08/29/2005)

0000000026

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-047-313	Page 1 of 1

Collector TILLER, B. TR KLINCKMAN	Company Contact JOAN KESSNER	Telephone No. 375-4688	Project Coordinator KESSNER, JH
Price Code 9N	Data Turnaround 45 Days	Air Quality ☐	
Project Designation 100 & 300 Area Component of the RCBRA Sediment and Ti	Sampling Location 300-44/618-4 INVERTEBRATES		SAF No. RC-047
Ice Chest No. AFS-04-052	Field Logbook No. EL-1595	COA BESRAS6520	Method of Shipment FED EX
Shipped To EBERLINE SERVICES / LIONVILLE	Offsite Property No. A060378		Bill of Lading/Air Bill No. SEE OSPC

000000027

POSSIBLE SAMPLE HAZARDS/REMARKS

POTENTIAL RADIOACTIVE <DOT LIMITS

Special Handling and/or Storage

COOL 4C "MATRIX COMPOSED OF INSECTS"

Preservation	None	Cool 4C										
Type of Container	G/P	P										
No. of Container(s)	1	1										
Volume	10g	15g										
SAMPLE ANALYSIS	See item (1) in Special Instructions.	See item (2) in Special Instructions.										
Sample No.	Matrix *	Sample Date	Sample Time									
J11KT2	OTHER SOLID	APR 26 2006	0724		X							

CHAIN OF POSSESSION	Date/Time	Sign/Print Names	Date/Time
Relinquished By/Removed From TR KLINCKMAN	0735 APR 26 2006	Received By/Stored In EAS LOCKED STORAGE	0735 APR 26 2006
Relinquished By/Removed From EAS LOCKED STORAGE	04-26-06 0930	Received By/Stored In TR Ellenbecker	4-26-06 0930
Relinquished By/Removed From TR Ellenbecker	4-26-06 1500	Received By/Stored In Fed Ex	
Relinquished By/Removed From Fed Ex	4-27-06 0940	Received By/Stored In	4-27-06 0940
Relinquished By/Removed From		Received By/Stored In	
Relinquished By/Removed From		Received By/Stored In	

SPECIAL INSTRUCTIONS

(1) Strontium-89,90 -- Total Sr; Isotopic Thorium (Thorium-232); Isotopic Uranium (Uranium-233/234, Uranium-235, Uranium-238); Isotopic Plutonium
(2) 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); Mercury - 7471 - (CV)

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

BHI-EE-011 (08/29/2005)

Lionville Laboratory Incorporated

SAMPLE RECEIPT CHECKLIST (SRC)

CLIENT: TNU Hanford **Date:** 4-27-06

Purchase Order / Project# / SAF# / SOW# / Release #: RC-047

LvLI Batch # : 06041876 **Sample Custodian:** D. Smith

NOTE: EXPLAIN ALL DISCREPANCIES

1.	Samples Hand Delivered or Shipped	Carrier Fed Ex		Airbill# AFS-04-052	
2.	Custody seals on coolers or shipping container intact, signed and dated?	☑ Yes	☐ No	☐ No Seals	Comments
3.	Outside of coolers or shipping containers are free from damage?	☑ Yes	☐ No		
4.	All expected paperwork received (coc and other client specific information) sealed in plastic bag and easily accessible?	☑ Yes	☐ No		
5.	Samples received cooled or ambient? IR	Temp 1.3 °C		Cooler # AFS-04-052	
6.	Custody seals on sample containers intact, signed and dated?	☑ Yes	☐ No	☐ No Seals	
7.	coc signed and dated?	☑ Yes	☐ No		
8.	Sample containers are intact?	☑ Yes	☐ No		
9.	All samples on coc received? All samples received on coc?	☑ Yes	☐ No		
10.	All sample label information matches coc?	☑ Yes	☐ No		
11.	Samples properly preserved?	☑ Yes	☐ No		
12.	Samples received within hold times? Short holds taken to wet lab?	☑ Yes	☐ No		
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 not within policy. See reverse side for policy)	☑ Yes	☐ No		
16.	Project Manager contacted concerning discrepancies? name/date (or samples outside criteria)	☐ Yes	☐ No	☑ No Discrepancies	

SR-002-B

LVLI LIONVILLE LABORATORY, INC.

Lionville Laboratory, Inc.
INORGANIC ANALYTICAL DATA PACKAGE FOR
TNUHANFORD RC-047 K0331

DATE RECEIVED: 04/27/06 LVL LOT # :0604L876

CLIENT ID /ANALYSIS	LVL #	MTX	PREP #	COLLECTION	EXTR/PREP	ANALYSIS
J11KR0						
SILVER, TOTAL	001	SO	06L0322	04/17/06	05/25/06	05/25/06
SILVER, TOTAL	001 REP	SO	06L0322	04/17/06	05/25/06	05/25/06
ALUMINUM, TOTAL	001	SO	06L0322	04/17/06	05/25/06	05/25/06
ALUMINUM, TOTAL	001 REP	SO	06L0322	04/17/06	05/25/06	05/25/06
ARSENIC, TOTAL	001	SO	06L0322	04/17/06	05/25/06	05/25/06
ARSENIC, TOTAL	001 REP	SO	06L0322	04/17/06	05/25/06	05/25/06
BORON, TOTAL	001	SO	06L0322	04/17/06	05/25/06	05/25/06
BORON, TOTAL	001 REP	SO	06L0322	04/17/06	05/25/06	05/25/06
BARIUM, TOTAL	001	SO	06L0322	04/17/06	05/25/06	05/25/06
BARIUM, TOTAL	001 REP	SO	06L0322	04/17/06	05/25/06	05/25/06
BERYLLIUM, TOTAL	001	SO	06L0322	04/17/06	05/25/06	05/25/06
BERYLLIUM, TOTAL	001 REP	SO	06L0322	04/17/06	05/25/06	05/25/06
BISMUTH, TOTAL	001	SO	06L0322	04/17/06	05/25/06	05/25/06
BISMUTH, TOTAL REP	001 REP	SO	06L0322	04/17/06	05/25/06	05/25/06
CALCIUM, TOTAL	001	SO	06L0322	04/17/06	05/25/06	05/25/06
CALCIUM, TOTAL	001 REP	SO	06L0322	04/17/06	05/25/06	05/25/06
CADMIUM, TOTAL	001	SO	06L0322	04/17/06	05/25/06	05/25/06
CADMIUM, TOTAL	001 REP	SO	06L0322	04/17/06	05/25/06	05/25/06
COBALT, TOTAL	001	SO	06L0322	04/17/06	05/25/06	05/25/06
COBALT, TOTAL	001 REP	SO	06L0322	04/17/06	05/25/06	05/25/06
CHROMIUM, TOTAL	001	SO	06L0322	04/17/06	05/25/06	05/25/06
CHROMIUM, TOTAL	001 REP	SO	06L0322	04/17/06	05/25/06	05/25/06
COPPER, TOTAL	001	SO	06L0322	04/17/06	05/25/06	05/25/06
COPPER, TOTAL	001 REP	SO	06L0322	04/17/06	05/25/06	05/25/06
IRON, TOTAL	001	SO	06L0322	04/17/06	05/25/06	05/25/06
IRON, TOTAL	001 REP	SO	06L0322	04/17/06	05/25/06	05/25/06
MERCURY, TOTAL	001	SO	06C0085	04/17/06	05/03/06	05/04/06
POTASSIUM, TOTAL	001	SO	06L0322	04/17/06	05/25/06	05/25/06
POTASSIUM, TOTAL	001 REP	SO	06L0322	04/17/06	05/25/06	05/25/06
LITHIUM, TOTAL	001	SO	06L0322	04/17/06	05/25/06	05/25/06
LITHIUM, TOTAL	001 REP	SO	06L0322	04/17/06	05/25/06	05/25/06
MAGNESIUM, TOTAL	001	SO	06L0322	04/17/06	05/25/06	05/25/06
MAGNESIUM, TOTAL	001 REP	SO	06L0322	04/17/06	05/25/06	05/25/06
MANGANESE, TOTAL	001	SO	06L0322	04/17/06	05/25/06	05/25/06
MANGANESE, TOTAL	001 REP	SO	06L0322	04/17/06	05/25/06	05/25/06

Lionville Laboratory, Inc.
INORGANIC ANALYTICAL DATA PACKAGE FOR
TNUHANFORD RC-047 K0331

DATE RECEIVED: 04/27/06 LVL LOT # :0604L876

CLIENT ID /ANALYSIS	LVL #	MTX	PREP #	COLLECTION	EXTR/PREP	ANALYSIS
MOLYBDENUM, TOTAL	001	SO	06L0322	04/17/06	05/25/06	05/25/06
MOLYBDENUM, TOTAL	001 REP	SO	06L0322	04/17/06	05/25/06	05/25/06
SODIUM, TOTAL	001	SO	06L0322	04/17/06	05/25/06	05/25/06
SODIUM, TOTAL	001 REP	SO	06L0322	04/17/06	05/25/06	05/25/06
NICKEL, TOTAL	001	SO	06L0322	04/17/06	05/25/06	05/25/06
NICKEL, TOTAL	001 REP	SO	06L0322	04/17/06	05/25/06	05/25/06
PHOSPHORUS, TOTAL	001	SO	06L0322	04/17/06	05/25/06	05/25/06
PHOSPHORUS, TOTAL	001 REP	SO	06L0322	04/17/06	05/25/06	05/25/06
LEAD, TOTAL	001	SO	06L0322	04/17/06	05/25/06	05/25/06
LEAD, TOTAL	001 REP	SO	06L0322	04/17/06	05/25/06	05/25/06
ANTIMONY, TOTAL	001	SO	06L0322	04/17/06	05/25/06	05/25/06
ANTIMONY, TOTAL	001 REP	SO	06L0322	04/17/06	05/25/06	05/25/06
SELENIUM, TOTAL	001	SO	06L0322	04/17/06	05/25/06	05/25/06
SELENIUM, TOTAL	001 REP	SO	06L0322	04/17/06	05/25/06	05/25/06
SILICON, TOTAL	001	SO	06L0322	04/17/06	05/25/06	05/25/06
SILICON, TOTAL	001 REP	SO	06L0322	04/17/06	05/25/06	05/25/06
TIN, TOTAL	001	SO	06L0322	04/17/06	05/25/06	05/25/06
TIN, TOTAL	001 REP	SO	06L0322	04/17/06	05/25/06	05/25/06
STRONTIUM, TOTAL	001	SO	06L0322	04/17/06	05/25/06	05/25/06
STRONTIUM, TOTAL	001 REP	SO	06L0322	04/17/06	05/25/06	05/25/06
THALLIUM, TOTAL	001	SO	06L0322	04/17/06	05/25/06	05/25/06
THALLIUM, TOTAL	001 REP	SO	06L0322	04/17/06	05/25/06	05/25/06
URANIUM, TOTAL	001	SO	06L0322	04/17/06	05/25/06	05/25/06
URANIUM, TOTAL	001 REP	SO	06L0322	04/17/06	05/25/06	05/25/06
VANADIUM, TOTAL	001	SO	06L0322	04/17/06	05/25/06	05/25/06
VANADIUM, TOTAL	001 REP	SO	06L0322	04/17/06	05/25/06	05/25/06
ZINC, TOTAL	001	SO	06L0322	04/17/06	05/25/06	05/25/06
ZINC, TOTAL	001 REP	SO	06L0322	04/17/06	05/25/06	05/25/06
J11KR6						
SILVER, TOTAL	002	SO	06L0322	04/17/06	05/25/06	05/25/06
SILVER, TOTAL	002 MS	SO	06L0322	04/17/06	05/25/06	05/25/06
ALUMINUM, TOTAL	002	SO	06L0322	04/17/06	05/25/06	05/25/06
ALUMINUM, TOTAL	002 MS	SO	06L0322	04/17/06	05/25/06	05/25/06
ARSENIC, TOTAL	002	SO	06L0322	04/17/06	05/25/06	05/25/06
ARSENIC, TOTAL	002 MS	SO	06L0322	04/17/06	05/25/06	05/25/06
BORON, TOTAL	002	SO	06L0322	04/17/06	05/25/06	05/25/06

Lionville Laboratory, Inc.
INORGANIC ANALYTICAL DATA PACKAGE FOR
TNUHANFORD RC-047 K0331

DATE RECEIVED: 04/27/06 LVL LOT # :0604L876

CLIENT ID /ANALYSIS	LVL #	MTX	PREP #	COLLECTION	EXTR/PREP	ANALYSIS
BORON, TOTAL	002 MS	SO	06L0322	04/17/06	05/25/06	05/25/06
BARIUM, TOTAL	002	SO	06L0322	04/17/06	05/25/06	05/25/06
BARIUM, TOTAL	002 MS	SO	06L0322	04/17/06	05/25/06	05/25/06
BERYLLIUM, TOTAL	002	SO	06L0322	04/17/06	05/25/06	05/25/06
BERYLLIUM, TOTAL	002 MS	SO	06L0322	04/17/06	05/25/06	05/25/06
BISMUTH, TOTAL	002	SO	06L0322	04/17/06	05/25/06	05/25/06
BISMUTH, TOTAL SPIKE	002 MS	SO	06L0322	04/17/06	05/25/06	05/25/06
CALCIUM, TOTAL	002	SO	06L0322	04/17/06	05/25/06	05/25/06
CALCIUM, TOTAL	002 MS	SO	06L0322	04/17/06	05/25/06	05/25/06
CADMIUM, TOTAL	002	SO	06L0322	04/17/06	05/25/06	05/25/06
CADMIUM, TOTAL	002 MS	SO	06L0322	04/17/06	05/25/06	05/25/06
COBALT, TOTAL	002	SO	06L0322	04/17/06	05/25/06	05/25/06
COBALT, TOTAL	002 MS	SO	06L0322	04/17/06	05/25/06	05/25/06
CHROMIUM, TOTAL	002	SO	06L0322	04/17/06	05/25/06	05/25/06
CHROMIUM, TOTAL	002 MS	SO	06L0322	04/17/06	05/25/06	05/25/06
COPPER, TOTAL	002	SO	06L0322	04/17/06	05/25/06	05/25/06
COPPER, TOTAL	002 MS	SO	06L0322	04/17/06	05/25/06	05/25/06
IRON, TOTAL	002	SO	06L0322	04/17/06	05/25/06	05/25/06
IRON, TOTAL	002 MS	SO	06L0322	04/17/06	05/25/06	05/25/06
MERCURY, TOTAL	002	SO	06C0085	04/17/06	05/03/06	05/04/06
POTASSIUM, TOTAL	002	SO	06L0322	04/17/06	05/25/06	05/25/06
POTASSIUM, TOTAL	002 MS	SO	06L0322	04/17/06	05/25/06	05/25/06
LITHIUM, TOTAL	002	SO	06L0322	04/17/06	05/25/06	05/25/06
LITHIUM, TOTAL	002 MS	SO	06L0322	04/17/06	05/25/06	05/25/06
MAGNESIUM, TOTAL	002	SO	06L0322	04/17/06	05/25/06	05/25/06
MAGNESIUM, TOTAL	002 MS	SO	06L0322	04/17/06	05/25/06	05/25/06
MANGANESE, TOTAL	002	SO	06L0322	04/17/06	05/25/06	05/25/06
MANGANESE, TOTAL	002 MS	SO	06L0322	04/17/06	05/25/06	05/25/06
MOLYBDENUM, TOTAL	002	SO	06L0322	04/17/06	05/25/06	05/25/06
MOLYBDENUM, TOTAL	002 MS	SO	06L0322	04/17/06	05/25/06	05/25/06
SODIUM, TOTAL	002	SO	06L0322	04/17/06	05/25/06	05/25/06
SODIUM, TOTAL	002 MS	SO	06L0322	04/17/06	05/25/06	05/25/06
NICKEL, TOTAL	002	SO	06L0322	04/17/06	05/25/06	05/25/06
NICKEL, TOTAL	002 MS	SO	06L0322	04/17/06	05/25/06	05/25/06
PHOSPHORUS, TOTAL	002	SO	06L0322	04/17/06	05/25/06	05/25/06
PHOSPHORUS, TOTAL	002 MS	SO	06L0322	04/17/06	05/25/06	05/25/06
LEAD, TOTAL	002	SO	06L0322	04/17/06	05/25/06	05/25/06
LEAD, TOTAL	002 MS	SO	06L0322	04/17/06	05/25/06	05/25/06

Lionville Laboratory, Inc.
INORGANIC ANALYTICAL DATA PACKAGE FOR
TNUHANFORD RC-047 K0331

DATE RECEIVED: 04/27/06 LVL LOT # :0604L876

CLIENT ID /ANALYSIS	LVL #	MTX	PREP #	COLLECTION	EXTR/PREP	ANALYSIS
ANTIMONY, TOTAL	002	SO	06L0322	04/17/06	05/25/06	05/25/06
ANTIMONY, TOTAL	002 MS	SO	06L0322	04/17/06	05/25/06	05/25/06
SELENIUM, TOTAL	002	SO	06L0322	04/17/06	05/25/06	05/25/06
SELENIUM, TOTAL	002 MS	SO	06L0322	04/17/06	05/25/06	05/25/06
SILICON, TOTAL	002	SO	06L0322	04/17/06	05/25/06	05/25/06
SILICON, TOTAL	002 MS	SO	06L0322	04/17/06	05/25/06	05/25/06
TIN, TOTAL	002	SO	06L0322	04/17/06	05/25/06	05/25/06
TIN, TOTAL	002 MS	SO	06L0322	04/17/06	05/25/06	05/25/06
STRONTIUM, TOTAL	002	SO	06L0322	04/17/06	05/25/06	05/25/06
STRONTIUM, TOTAL	002 MS	SO	06L0322	04/17/06	05/25/06	05/25/06
THALLIUM, TOTAL	002	SO	06L0322	04/17/06	05/25/06	05/25/06
THALLIUM, TOTAL	002 MS	SO	06L0322	04/17/06	05/25/06	05/25/06
URANIUM, TOTAL	002	SO	06L0322	04/17/06	05/25/06	05/25/06
URANIUM, TOTAL	002 MS	SO	06L0322	04/17/06	05/25/06	05/25/06
VANADIUM, TOTAL	002	SO	06L0322	04/17/06	05/25/06	05/25/06
VANADIUM, TOTAL	002 MS	SO	06L0322	04/17/06	05/25/06	05/25/06
ZINC, TOTAL	002	SO	06L0322	04/17/06	05/25/06	05/25/06
ZINC, TOTAL	002 MS	SO	06L0322	04/17/06	05/25/06	05/25/06
J11KP9						
SILVER, TOTAL	003	SO	06L0322	04/17/06	05/25/06	05/25/06
ALUMINUM, TOTAL	003	SO	06L0322	04/17/06	05/25/06	05/25/06
ARSENIC, TOTAL	003	SO	06L0322	04/17/06	05/25/06	05/25/06
BORON, TOTAL	003	SO	06L0322	04/17/06	05/25/06	05/25/06
BARIUM, TOTAL	003	SO	06L0322	04/17/06	05/25/06	05/25/06
BERYLLIUM, TOTAL	003	SO	06L0322	04/17/06	05/25/06	05/25/06
BISMUTH, TOTAL	003	SO	06L0322	04/17/06	05/25/06	05/25/06
CALCIUM, TOTAL	003	SO	06L0322	04/17/06	05/25/06	05/25/06
CADMIUM, TOTAL	003	SO	06L0322	04/17/06	05/25/06	05/25/06
COBALT, TOTAL	003	SO	06L0322	04/17/06	05/25/06	05/25/06
CHROMIUM, TOTAL	003	SO	06L0322	04/17/06	05/25/06	05/25/06
COPPER, TOTAL	003	SO	06L0322	04/17/06	05/25/06	05/25/06
IRON, TOTAL	003	SO	06L0322	04/17/06	05/25/06	05/25/06
MERCURY, TOTAL	003	SO	06C0085	04/17/06	05/03/06	05/04/06
MERCURY, TOTAL	003 REP	SO	06C0085	04/17/06	05/03/06	05/04/06
MERCURY, TOTAL	003 MS	SO	06C0085	04/17/06	05/03/06	05/04/06
POTASSIUM, TOTAL	003	SO	06L0322	04/17/06	05/25/06	05/25/06

Lionville Laboratory, Inc.
INORGANIC ANALYTICAL DATA PACKAGE FOR
TNUHANFORD RC-047 K0331

DATE RECEIVED: 04/27/06 LVL LOT # :0604L876

CLIENT ID /ANALYSIS	LVL #	MTX	PREP #	COLLECTION	EXTR/PREP	ANALYSIS
LITHIUM, TOTAL	003	SO	06L0322	04/17/06	05/25/06	05/25/06
MAGNESIUM, TOTAL	003	SO	06L0322	04/17/06	05/25/06	05/25/06
MANGANESE, TOTAL	003	SO	06L0322	04/17/06	05/25/06	05/25/06
MOLYBDENUM, TOTAL	003	SO	06L0322	04/17/06	05/25/06	05/25/06
SODIUM, TOTAL	003	SO	06L0322	04/17/06	05/25/06	05/25/06
NICKEL, TOTAL	003	SO	06L0322	04/17/06	05/25/06	05/25/06
PHOSPHORUS, TOTAL	003	SO	06L0322	04/17/06	05/25/06	05/25/06
LEAD, TOTAL	003	SO	06L0322	04/17/06	05/25/06	05/25/06
ANTIMONY, TOTAL	003	SO	06L0322	04/17/06	05/25/06	05/25/06
SELENIUM, TOTAL	003	SO	06L0322	04/17/06	05/25/06	05/25/06
SILICON, TOTAL	003	SO	06L0322	04/17/06	05/25/06	05/25/06
TIN, TOTAL	003	SO	06L0322	04/17/06	05/25/06	05/25/06
STRONTIUM, TOTAL	003	SO	06L0322	04/17/06	05/25/06	05/25/06
THALLIUM, TOTAL	003	SO	06L0322	04/17/06	05/25/06	05/25/06
URANIUM, TOTAL	003	SO	06L0322	04/17/06	05/25/06	05/25/06
VANADIUM, TOTAL	003	SO	06L0322	04/17/06	05/25/06	05/25/06
ZINC, TOTAL	003	SO	06L0322	04/17/06	05/25/06	05/25/06
J11KR7						
SILVER, TOTAL	004	SO	06L0322	04/17/06	05/25/06	05/25/06
ALUMINUM, TOTAL	004	SO	06L0322	04/17/06	05/25/06	05/25/06
ARSENIC, TOTAL	004	SO	06L0322	04/17/06	05/25/06	05/25/06
BORON, TOTAL	004	SO	06L0322	04/17/06	05/25/06	05/25/06
BARIUM, TOTAL	004	SO	06L0322	04/17/06	05/25/06	05/25/06
BERYLLIUM, TOTAL	004	SO	06L0322	04/17/06	05/25/06	05/25/06
BISMUTH, TOTAL	004	SO	06L0322	04/17/06	05/25/06	05/25/06
CALCIUM, TOTAL	004	SO	06L0322	04/17/06	05/25/06	05/25/06
CADMIUM, TOTAL	004	SO	06L0322	04/17/06	05/25/06	05/25/06
COBALT, TOTAL	004	SO	06L0322	04/17/06	05/25/06	05/25/06
CHROMIUM, TOTAL	004	SO	06L0322	04/17/06	05/25/06	05/25/06
COPPER, TOTAL	004	SO	06L0322	04/17/06	05/25/06	05/25/06
IRON, TOTAL	004	SO	06L0322	04/17/06	05/25/06	05/25/06
MERCURY, TOTAL	004	SO	06C0085	04/17/06	05/03/06	05/04/06
POTASSIUM, TOTAL	004	SO	06L0322	04/17/06	05/25/06	05/25/06
LITHIUM, TOTAL	004	SO	06L0322	04/17/06	05/25/06	05/25/06
MAGNESIUM, TOTAL	004	SO	06L0322	04/17/06	05/25/06	05/25/06
MANGANESE, TOTAL	004	SO	06L0322	04/17/06	05/25/06	05/25/06

Lionville Laboratory, Inc.
INORGANIC ANALYTICAL DATA PACKAGE FOR
TNUHANFORD RC-047 K0331

DATE RECEIVED: 04/27/06 LVL LOT # :0604L876

CLIENT ID /ANALYSIS	LVL #	MTX	PREP #	COLLECTION	EXTR/PREP	ANALYSIS
MOLYBDENUM, TOTAL	004	SO	06L0322	04/17/06	05/25/06	05/25/06
SODIUM, TOTAL	004	SO	06L0322	04/17/06	05/25/06	05/25/06
NICKEL, TOTAL	004	SO	06L0322	04/17/06	05/25/06	05/25/06
PHOSPHORUS, TOTAL	004	SO	06L0322	04/17/06	05/25/06	05/25/06
LEAD, TOTAL	004	SO	06L0322	04/17/06	05/25/06	05/25/06
ANTIMONY, TOTAL	004	SO	06L0322	04/17/06	05/25/06	05/25/06
SELENIUM, TOTAL	004	SO	06L0322	04/17/06	05/25/06	05/25/06
SILICON, TOTAL	004	SO	06L0322	04/17/06	05/25/06	05/25/06
TIN, TOTAL	004	SO	06L0322	04/17/06	05/25/06	05/25/06
STRONTIUM, TOTAL	004	SO	06L0322	04/17/06	05/25/06	05/25/06
THALLIUM, TOTAL	004	SO	06L0322	04/17/06	05/25/06	05/25/06
URANIUM, TOTAL	004	SO	06L0322	04/17/06	05/25/06	05/25/06
VANADIUM, TOTAL	004	SO	06L0322	04/17/06	05/25/06	05/25/06
ZINC, TOTAL	004	SO	06L0322	04/17/06	05/25/06	05/25/06
J11XX8						
SILVER, TOTAL	005	SO	06L0322	04/25/06	05/25/06	05/25/06
ALUMINUM, TOTAL	005	SO	06L0322	04/25/06	05/25/06	05/25/06
ARSENIC, TOTAL	005	SO	06L0322	04/25/06	05/25/06	05/25/06
BORON, TOTAL	005	SO	06L0322	04/25/06	05/25/06	05/25/06
BARIUM, TOTAL	005	SO	06L0322	04/25/06	05/25/06	05/25/06
BERYLLIUM, TOTAL	005	SO	06L0322	04/25/06	05/25/06	05/25/06
BISMUTH, TOTAL	005	SO	06L0322	04/25/06	05/25/06	05/25/06
CALCIUM, TOTAL	005	SO	06L0322	04/25/06	05/25/06	05/25/06
CADMIUM, TOTAL	005	SO	06L0322	04/25/06	05/25/06	05/25/06
COBALT, TOTAL	005	SO	06L0322	04/25/06	05/25/06	05/25/06
CHROMIUM, TOTAL	005	SO	06L0322	04/25/06	05/25/06	05/25/06
COPPER, TOTAL	005	SO	06L0322	04/25/06	05/25/06	05/25/06
IRON, TOTAL	005	SO	06L0322	04/25/06	05/25/06	05/25/06
MERCURY, TOTAL	005	SO	06C0085	04/25/06	05/03/06	05/04/06
POTASSIUM, TOTAL	005	SO	06L0322	04/25/06	05/25/06	05/25/06
LITHIUM, TOTAL	005	SO	06L0322	04/25/06	05/25/06	05/25/06
MAGNESIUM, TOTAL	005	SO	06L0322	04/25/06	05/25/06	05/25/06
MANGANESE, TOTAL	005	SO	06L0322	04/25/06	05/25/06	05/25/06
MOLYBDENUM, TOTAL	005	SO	06L0322	04/25/06	05/25/06	05/25/06
SODIUM, TOTAL	005	SO	06L0322	04/25/06	05/25/06	05/25/06
NICKEL, TOTAL	005	SO	06L0322	04/25/06	05/25/06	05/25/06

Lionville Laboratory, Inc.
INORGANIC ANALYTICAL DATA PACKAGE FOR
TNUHANFORD RC-047 K0331

DATE RECEIVED: 04/27/06 LVL LOT # :0604L876

CLIENT ID /ANALYSIS	LVL #	MTX	PREP #	COLLECTION	EXTR/PREP	ANALYSIS
PHOSPHORUS, TOTAL	005	SO	06L0322	04/25/06	05/25/06	05/25/06
LEAD, TOTAL	005	SO	06L0322	04/25/06	05/25/06	05/25/06
ANTIMONY, TOTAL	005	SO	06L0322	04/25/06	05/25/06	05/25/06
SELENIUM, TOTAL	005	SO	06L0322	04/25/06	05/25/06	05/25/06
SILICON, TOTAL	005	SO	06L0322	04/25/06	05/25/06	05/25/06
TIN, TOTAL	005	SO	06L0322	04/25/06	05/25/06	05/25/06
STRONTIUM, TOTAL	005	SO	06L0322	04/25/06	05/25/06	05/25/06
THALLIUM, TOTAL	005	SO	06L0322	04/25/06	05/25/06	05/25/06
URANIUM, TOTAL	005	SO	06L0322	04/25/06	05/25/06	05/25/06
VANADIUM, TOTAL	005	SO	06L0322	04/25/06	05/25/06	05/25/06
ZINC, TOTAL	005	SO	06L0322	04/25/06	05/25/06	05/25/06
J11KT1						
SILVER, TOTAL	006	SO	06L0322	04/17/06	05/25/06	05/25/06
ALUMINUM, TOTAL	006	SO	06L0322	04/17/06	05/25/06	05/25/06
ARSENIC, TOTAL	006	SO	06L0322	04/17/06	05/25/06	05/25/06
BORON, TOTAL	006	SO	06L0322	04/17/06	05/25/06	05/25/06
BARIUM, TOTAL	006	SO	06L0322	04/17/06	05/25/06	05/25/06
BERYLLIUM, TOTAL	006	SO	06L0322	04/17/06	05/25/06	05/25/06
BISMUTH, TOTAL	006	SO	06L0322	04/17/06	05/25/06	05/25/06
CALCIUM, TOTAL	006	SO	06L0322	04/17/06	05/25/06	05/25/06
CADMIUM, TOTAL	006	SO	06L0322	04/17/06	05/25/06	05/25/06
COBALT, TOTAL	006	SO	06L0322	04/17/06	05/25/06	05/25/06
CHROMIUM, TOTAL	006	SO	06L0322	04/17/06	05/25/06	05/25/06
COPPER, TOTAL	006	SO	06L0322	04/17/06	05/25/06	05/25/06
IRON, TOTAL	006	SO	06L0322	04/17/06	05/25/06	05/25/06
MERCURY, TOTAL	006	SO	06C0085	04/17/06	05/03/06	05/04/06
POTASSIUM, TOTAL	006	SO	06L0322	04/17/06	05/25/06	05/25/06
LITHIUM, TOTAL	006	SO	06L0322	04/17/06	05/25/06	05/25/06
MAGNESIUM, TOTAL	006	SO	06L0322	04/17/06	05/25/06	05/25/06
MANGANESE, TOTAL	006	SO	06L0322	04/17/06	05/25/06	05/25/06
MOLYBDENUM, TOTAL	006	SO	06L0322	04/17/06	05/25/06	05/25/06
SODIUM, TOTAL	006	SO	06L0322	04/17/06	05/25/06	05/25/06
NICKEL, TOTAL	006	SO	06L0322	04/17/06	05/25/06	05/25/06
PHOSPHORUS, TOTAL	006	SO	06L0322	04/17/06	05/25/06	05/25/06
LEAD, TOTAL	006	SO	06L0322	04/17/06	05/25/06	05/25/06
ANTIMONY, TOTAL	006	SO	06L0322	04/17/06	05/25/06	05/25/06

Lionville Laboratory, Inc.
INORGANIC ANALYTICAL DATA PACKAGE FOR
TNUHANFORD RC-047 K0331

DATE RECEIVED: 04/27/06 LVL LOT # :0604L876

CLIENT ID /ANALYSIS	LVL #	MTX	PREP #	COLLECTION	EXTR/PREP	ANALYSIS
SELENIUM, TOTAL	006	SO	06L0322	04/17/06	05/25/06	05/25/06
SILICON, TOTAL	006	SO	06L0322	04/17/06	05/25/06	05/25/06
TIN, TOTAL	006	SO	06L0322	04/17/06	05/25/06	05/25/06
STRONTIUM, TOTAL	006	SO	06L0322	04/17/06	05/25/06	05/25/06
THALLIUM, TOTAL	006	SO	06L0322	04/17/06	05/25/06	05/25/06
URANIUM, TOTAL	006	SO	06L0322	04/17/06	05/25/06	05/25/06
VANADIUM, TOTAL	006	SO	06L0322	04/17/06	05/25/06	05/25/06
ZINC, TOTAL	006	SO	06L0322	04/17/06	05/25/06	05/25/06
J11KR8						
SILVER, TOTAL	007	SO	06L0322	04/17/06	05/25/06	05/25/06
ALUMINUM, TOTAL	007	SO	06L0322	04/17/06	05/25/06	05/25/06
ARSENIC, TOTAL	007	SO	06L0322	04/17/06	05/25/06	05/25/06
BORON, TOTAL	007	SO	06L0322	04/17/06	05/25/06	05/25/06
BARIUM, TOTAL	007	SO	06L0322	04/17/06	05/25/06	05/25/06
BERYLLIUM, TOTAL	007	SO	06L0322	04/17/06	05/25/06	05/25/06
BISMUTH, TOTAL	007	SO	06L0322	04/17/06	05/25/06	05/25/06
CALCIUM, TOTAL	007	SO	06L0322	04/17/06	05/25/06	05/25/06
CADMIUM, TOTAL	007	SO	06L0322	04/17/06	05/25/06	05/25/06
COBALT, TOTAL	007	SO	06L0322	04/17/06	05/25/06	05/25/06
CHROMIUM, TOTAL	007	SO	06L0322	04/17/06	05/25/06	05/25/06
COPPER, TOTAL	007	SO	06L0322	04/17/06	05/25/06	05/25/06
IRON, TOTAL	007	SO	06L0322	04/17/06	05/25/06	05/25/06
MERCURY, TOTAL	007	SO	06C0085	04/17/06	05/03/06	05/04/06
POTASSIUM, TOTAL	007	SO	06L0322	04/17/06	05/25/06	05/25/06
LITHIUM, TOTAL	007	SO	06L0322	04/17/06	05/25/06	05/25/06
MAGNESIUM, TOTAL	007	SO	06L0322	04/17/06	05/25/06	05/25/06
MANGANESE, TOTAL	007	SO	06L0322	04/17/06	05/25/06	05/25/06
MOLYBDENUM, TOTAL	007	SO	06L0322	04/17/06	05/25/06	05/25/06
SODIUM, TOTAL	007	SO	06L0322	04/17/06	05/25/06	05/25/06
NICKEL, TOTAL	007	SO	06L0322	04/17/06	05/25/06	05/25/06
PHOSPHORUS, TOTAL	007	SO	06L0322	04/17/06	05/25/06	05/25/06
LEAD, TOTAL	007	SO	06L0322	04/17/06	05/25/06	05/25/06
ANTIMONY, TOTAL	007	SO	06L0322	04/17/06	05/25/06	05/25/06
SELENIUM, TOTAL	007	SO	06L0322	04/17/06	05/25/06	05/25/06
SILICON, TOTAL	007	SO	06L0322	04/17/06	05/25/06	05/25/06
TIN, TOTAL	007	SO	06L0322	04/17/06	05/25/06	05/25/06

Lionville Laboratory, Inc.
INORGANIC ANALYTICAL DATA PACKAGE FOR
TNUHANFORD RC-047 K0331

DATE RECEIVED: 04/27/06 LVL LOT # :0604L876

CLIENT ID /ANALYSIS	LVL #	MTX	PREP #	COLLECTION	EXTR/PREP	ANALYSIS
STRONTIUM, TOTAL	007	SO	06L0322	04/17/06	05/25/06	05/25/06
THALLIUM, TOTAL	007	SO	06L0322	04/17/06	05/25/06	05/25/06
URANIUM, TOTAL	007	SO	06L0322	04/17/06	05/25/06	05/25/06
VANADIUM, TOTAL	007	SO	06L0322	04/17/06	05/25/06	05/25/06
ZINC, TOTAL	007	SO	06L0322	04/17/06	05/25/06	05/25/06
J11XX9						
SILVER, TOTAL	008	SO	06L0322	04/25/06	05/25/06	05/25/06
ALUMINUM, TOTAL	008	SO	06L0322	04/25/06	05/25/06	05/25/06
ARSENIC, TOTAL	008	SO	06L0322	04/25/06	05/25/06	05/25/06
BORON, TOTAL	008	SO	06L0322	04/25/06	05/25/06	05/25/06
BARIUM, TOTAL	008	SO	06L0322	04/25/06	05/25/06	05/25/06
BERYLLIUM, TOTAL	008	SO	06L0322	04/25/06	05/25/06	05/25/06
BISMUTH, TOTAL	008	SO	06L0322	04/25/06	05/25/06	05/25/06
CALCIUM, TOTAL	008	SO	06L0322	04/25/06	05/25/06	05/25/06
CADMIUM, TOTAL	008	SO	06L0322	04/25/06	05/25/06	05/25/06
COBALT, TOTAL	008	SO	06L0322	04/25/06	05/25/06	05/25/06
CHROMIUM, TOTAL	008	SO	06L0322	04/25/06	05/25/06	05/25/06
COPPER, TOTAL	008	SO	06L0322	04/25/06	05/25/06	05/25/06
IRON, TOTAL	008	SO	06L0322	04/25/06	05/25/06	05/25/06
MERCURY, TOTAL	008	SO	06C0085	04/25/06	05/03/06	05/04/06
POTASSIUM, TOTAL	008	SO	06L0322	04/25/06	05/25/06	05/25/06
LITHIUM, TOTAL	008	SO	06L0322	04/25/06	05/25/06	05/25/06
MAGNESIUM, TOTAL	008	SO	06L0322	04/25/06	05/25/06	05/25/06
MANGANESE, TOTAL	008	SO	06L0322	04/25/06	05/25/06	05/25/06
MOLYBDENUM, TOTAL	008	SO	06L0322	04/25/06	05/25/06	05/25/06
SODIUM, TOTAL	008	SO	06L0322	04/25/06	05/25/06	05/25/06
NICKEL, TOTAL	008	SO	06L0322	04/25/06	05/25/06	05/25/06
PHOSPHORUS, TOTAL	008	SO	06L0322	04/25/06	05/25/06	05/25/06
LEAD, TOTAL	008	SO	06L0322	04/25/06	05/25/06	05/25/06
ANTIMONY, TOTAL	008	SO	06L0322	04/25/06	05/25/06	05/25/06
SELENIUM, TOTAL	008	SO	06L0322	04/25/06	05/25/06	05/25/06
SILICON, TOTAL	008	SO	06L0322	04/25/06	05/25/06	05/25/06
TIN, TOTAL	008	SO	06L0322	04/25/06	05/25/06	05/25/06
STRONTIUM, TOTAL	008	SO	06L0322	04/25/06	05/25/06	05/25/06
THALLIUM, TOTAL	008	SO	06L0322	04/25/06	05/25/06	05/25/06
URANIUM, TOTAL	008	SO	06L0322	04/25/06	05/25/06	05/25/06

Lionville Laboratory, Inc.
INORGANIC ANALYTICAL DATA PACKAGE FOR
TNUHANFORD RC-047 K0331

DATE RECEIVED: 04/27/06 LVL LOT # :0604L876

CLIENT ID /ANALYSIS	LVL #	MTX	PREP #	COLLECTION	EXTR/PREP	ANALYSIS
VANADIUM, TOTAL	008	SO	06L0322	04/25/06	05/25/06	05/25/06
ZINC, TOTAL	008	SO	06L0322	04/25/06	05/25/06	05/25/06
J11KR5						
SILVER, TOTAL	009	SO	06L0322	04/25/06	05/25/06	05/25/06
ALUMINUM, TOTAL	009	SO	06L0322	04/25/06	05/25/06	05/25/06
ARSENIC, TOTAL	009	SO	06L0322	04/25/06	05/25/06	05/25/06
BORON, TOTAL	009	SO	06L0322	04/25/06	05/25/06	05/25/06
BARIUM, TOTAL	009	SO	06L0322	04/25/06	05/25/06	05/25/06
BERYLLIUM, TOTAL	009	SO	06L0322	04/25/06	05/25/06	05/25/06
BISMUTH, TOTAL	009	SO	06L0322	04/25/06	05/25/06	05/25/06
CALCIUM, TOTAL	009	SO	06L0322	04/25/06	05/25/06	05/25/06
CADMIUM, TOTAL	009	SO	06L0322	04/25/06	05/25/06	05/25/06
COBALT, TOTAL	009	SO	06L0322	04/25/06	05/25/06	05/25/06
CHROMIUM, TOTAL	009	SO	06L0322	04/25/06	05/25/06	05/25/06
COPPER, TOTAL	009	SO	06L0322	04/25/06	05/25/06	05/25/06
IRON, TOTAL	009	SO	06L0322	04/25/06	05/25/06	05/25/06
MERCURY, TOTAL	009	SO	06C0085	04/25/06	05/03/06	05/04/06
POTASSIUM, TOTAL	009	SO	06L0322	04/25/06	05/25/06	05/25/06
LITHIUM, TOTAL	009	SO	06L0322	04/25/06	05/25/06	05/25/06
MAGNESIUM, TOTAL	009	SO	06L0322	04/25/06	05/25/06	05/25/06
MANGANESE, TOTAL	009	SO	06L0322	04/25/06	05/25/06	05/25/06
MOLYBDENUM, TOTAL	009	SO	06L0322	04/25/06	05/25/06	05/25/06
SODIUM, TOTAL	009	SO	06L0322	04/25/06	05/25/06	05/25/06
NICKEL, TOTAL	009	SO	06L0322	04/25/06	05/25/06	05/25/06
PHOSPHORUS, TOTAL	009	SO	06L0322	04/25/06	05/25/06	05/25/06
LEAD, TOTAL	009	SO	06L0322	04/25/06	05/25/06	05/25/06
ANTIMONY, TOTAL	009	SO	06L0322	04/25/06	05/25/06	05/25/06
SELENIUM, TOTAL	009	SO	06L0322	04/25/06	05/25/06	05/25/06
SILICON, TOTAL	009	SO	06L0322	04/25/06	05/25/06	05/25/06
TIN, TOTAL	009	SO	06L0322	04/25/06	05/25/06	05/25/06
STRONTIUM, TOTAL	009	SO	06L0322	04/25/06	05/25/06	05/25/06
THALLIUM, TOTAL	009	SO	06L0322	04/25/06	05/25/06	05/25/06
URANIUM, TOTAL	009	SO	06L0322	04/25/06	05/25/06	05/25/06
VANADIUM, TOTAL	009	SO	06L0322	04/25/06	05/25/06	05/25/06
ZINC, TOTAL	009	SO	06L0322	04/25/06	05/25/06	05/25/06
J11KR1						
SILVER, TOTAL	010	SO	06L0322	04/25/06	05/25/06	05/25/06

Lionville Laboratory, Inc.
INORGANIC ANALYTICAL DATA PACKAGE FOR
TNUHANFORD RC-047 K0331

DATE RECEIVED: 04/27/06 LVL LOT # :0604L876

CLIENT ID /ANALYSIS	LVL #	MTX	PREP #	COLLECTION	EXTR/PREP	ANALYSIS
ALUMINUM, TOTAL	010	SO	06L0322	04/25/06	05/25/06	05/25/06
ARSENIC, TOTAL	010	SO	06L0322	04/25/06	05/25/06	05/25/06
BORON, TOTAL	010	SO	06L0322	04/25/06	05/25/06	05/25/06
BARIUM, TOTAL	010	SO	06L0322	04/25/06	05/25/06	05/25/06
BERYLLIUM, TOTAL	010	SO	06L0322	04/25/06	05/25/06	05/25/06
BISMUTH, TOTAL	010	SO	06L0322	04/25/06	05/25/06	05/25/06
CALCIUM, TOTAL	010	SO	06L0322	04/25/06	05/25/06	05/25/06
CADMIUM, TOTAL	010	SO	06L0322	04/25/06	05/25/06	05/25/06
COBALT, TOTAL	010	SO	06L0322	04/25/06	05/25/06	05/25/06
CHROMIUM, TOTAL	010	SO	06L0322	04/25/06	05/25/06	05/25/06
COPPER, TOTAL	010	SO	06L0322	04/25/06	05/25/06	05/25/06
IRON, TOTAL	010	SO	06L0322	04/25/06	05/25/06	05/25/06
MERCURY, TOTAL	010	SO	06C0085	04/25/06	05/03/06	05/04/06
POTASSIUM, TOTAL	010	SO	06L0322	04/25/06	05/25/06	05/25/06
LITHIUM, TOTAL	010	SO	06L0322	04/25/06	05/25/06	05/25/06
MAGNESIUM, TOTAL	010	SO	06L0322	04/25/06	05/25/06	05/25/06
MANGANESE, TOTAL	010	SO	06L0322	04/25/06	05/25/06	05/25/06
MOLYBDENUM, TOTAL	010	SO	06L0322	04/25/06	05/25/06	05/25/06
SODIUM, TOTAL	010	SO	06L0322	04/25/06	05/25/06	05/25/06
NICKEL, TOTAL	010	SO	06L0322	04/25/06	05/25/06	05/25/06
PHOSPHORUS, TOTAL	010	SO	06L0322	04/25/06	05/25/06	05/25/06
LEAD, TOTAL	010	SO	06L0322	04/25/06	05/25/06	05/25/06
ANTIMONY, TOTAL	010	SO	06L0322	04/25/06	05/25/06	05/25/06
SELENIUM, TOTAL	010	SO	06L0322	04/25/06	05/25/06	05/25/06
SILICON, TOTAL	010	SO	06L0322	04/25/06	05/25/06	05/25/06
TIN, TOTAL	010	SO	06L0322	04/25/06	05/25/06	05/25/06
STRONTIUM, TOTAL	010	SO	06L0322	04/25/06	05/25/06	05/25/06
THALLIUM, TOTAL	010	SO	06L0322	04/25/06	05/25/06	05/25/06
URANIUM, TOTAL	010	SO	06L0322	04/25/06	05/25/06	05/25/06
VANADIUM, TOTAL	010	SO	06L0322	04/25/06	05/25/06	05/25/06
ZINC, TOTAL	010	SO	06L0322	04/25/06	05/25/06	05/25/06
J11KT3						
SILVER, TOTAL	011	SO	06L0322	04/25/06	05/25/06	05/25/06
ALUMINUM, TOTAL	011	SO	06L0322	04/25/06	05/25/06	05/25/06
ARSENIC, TOTAL	011	SO	06L0322	04/25/06	05/25/06	05/25/06
BORON, TOTAL	011	SO	06L0322	04/25/06	05/25/06	05/25/06

Lionville Laboratory, Inc.
INORGANIC ANALYTICAL DATA PACKAGE FOR
TNUHANFORD RC-047 K0331

DATE RECEIVED: 04/27/06 LVL LOT # :0604L876

CLIENT ID /ANALYSIS	LVL #	MTX	PREP #	COLLECTION	EXTR/PREP	ANALYSIS
BARIUM, TOTAL	011	SO	06L0322	04/25/06	05/25/06	05/25/06
BERYLLIUM, TOTAL	011	SO	06L0322	04/25/06	05/25/06	05/25/06
BISMUTH, TOTAL	011	SO	06L0322	04/25/06	05/25/06	05/25/06
CALCIUM, TOTAL	011	SO	06L0322	04/25/06	05/25/06	05/25/06
CADMIUM, TOTAL	011	SO	06L0322	04/25/06	05/25/06	05/25/06
COBALT, TOTAL	011	SO	06L0322	04/25/06	05/25/06	05/25/06
CHROMIUM, TOTAL	011	SO	06L0322	04/25/06	05/25/06	05/25/06
COPPER, TOTAL	011	SO	06L0322	04/25/06	05/25/06	05/25/06
IRON, TOTAL	011	SO	06L0322	04/25/06	05/25/06	05/25/06
MERCURY, TOTAL	011	SO	06C0085	04/25/06	05/03/06	05/04/06
POTASSIUM, TOTAL	011	SO	06L0322	04/25/06	05/25/06	05/25/06
LITHIUM, TOTAL	011	SO	06L0322	04/25/06	05/25/06	05/25/06
MAGNESIUM, TOTAL	011	SO	06L0322	04/25/06	05/25/06	05/25/06
MANGANESE, TOTAL	011	SO	06L0322	04/25/06	05/25/06	05/25/06
MOLYBDENUM, TOTAL	011	SO	06L0322	04/25/06	05/25/06	05/25/06
SODIUM, TOTAL	011	SO	06L0322	04/25/06	05/25/06	05/25/06
NICKEL, TOTAL	011	SO	06L0322	04/25/06	05/25/06	05/25/06
PHOSPHORUS, TOTAL	011	SO	06L0322	04/25/06	05/25/06	05/25/06
LEAD, TOTAL	011	SO	06L0322	04/25/06	05/25/06	05/25/06
ANTIMONY, TOTAL	011	SO	06L0322	04/25/06	05/25/06	05/25/06
SELENIUM, TOTAL	011	SO	06L0322	04/25/06	05/25/06	05/25/06
SILICON, TOTAL	011	SO	06L0322	04/25/06	05/25/06	05/25/06
TIN, TOTAL	011	SO	06L0322	04/25/06	05/25/06	05/25/06
STRONTIUM, TOTAL	011	SO	06L0322	04/25/06	05/25/06	05/25/06
THALLIUM, TOTAL	011	SO	06L0322	04/25/06	05/25/06	05/25/06
URANIUM, TOTAL	011	SO	06L0322	04/25/06	05/25/06	05/25/06
VANADIUM, TOTAL	011	SO	06L0322	04/25/06	05/25/06	05/25/06
ZINC, TOTAL	011	SO	06L0322	04/25/06	05/25/06	05/25/06
J11KR3						
SILVER, TOTAL	012	SO	06L0322	04/25/06	05/25/06	05/25/06
ALUMINUM, TOTAL	012	SO	06L0322	04/25/06	05/25/06	05/25/06
ARSENIC, TOTAL	012	SO	06L0322	04/25/06	05/25/06	05/25/06
BORON, TOTAL	012	SO	06L0322	04/25/06	05/25/06	05/25/06
BARIUM, TOTAL	012	SO	06L0322	04/25/06	05/25/06	05/25/06
BERYLLIUM, TOTAL	012	SO	06L0322	04/25/06	05/25/06	05/25/06
BISMUTH, TOTAL	012	SO	06L0322	04/25/06	05/25/06	05/25/06

Lionville Laboratory, Inc.
INORGANIC ANALYTICAL DATA PACKAGE FOR
TNUHANFORD RC-047 K0331

DATE RECEIVED: 04/27/06 LVL LOT # :0604L876

CLIENT ID /ANALYSIS	LVL #	MTX	PREP #	COLLECTION	EXTR/PREP	ANALYSIS
CALCIUM, TOTAL	012	SO	06L0322	04/25/06	05/25/06	05/25/06
CADMIUM, TOTAL	012	SO	06L0322	04/25/06	05/25/06	05/25/06
COBALT, TOTAL	012	SO	06L0322	04/25/06	05/25/06	05/25/06
CHROMIUM, TOTAL	012	SO	06L0322	04/25/06	05/25/06	05/25/06
COPPER, TOTAL	012	SO	06L0322	04/25/06	05/25/06	05/25/06
IRON, TOTAL	012	SO	06L0322	04/25/06	05/25/06	05/25/06
MERCURY, TOTAL	012	SO	06C0085	04/25/06	05/03/06	05/04/06
POTASSIUM, TOTAL	012	SO	06L0322	04/25/06	05/25/06	05/25/06
LITHIUM, TOTAL	012	SO	06L0322	04/25/06	05/25/06	05/25/06
MAGNESIUM, TOTAL	012	SO	06L0322	04/25/06	05/25/06	05/25/06
MANGANESE, TOTAL	012	SO	06L0322	04/25/06	05/25/06	05/25/06
MOLYBDENUM, TOTAL	012	SO	06L0322	04/25/06	05/25/06	05/25/06
SODIUM, TOTAL	012	SO	06L0322	04/25/06	05/25/06	05/25/06
NICKEL, TOTAL	012	SO	06L0322	04/25/06	05/25/06	05/25/06
PHOSPHORUS, TOTAL	012	SO	06L0322	04/25/06	05/25/06	05/25/06
LEAD, TOTAL	012	SO	06L0322	04/25/06	05/25/06	05/25/06
ANTIMONY, TOTAL	012	SO	06L0322	04/25/06	05/25/06	05/25/06
SELENIUM, TOTAL	012	SO	06L0322	04/25/06	05/25/06	05/25/06
SILICON, TOTAL	012	SO	06L0322	04/25/06	05/25/06	05/25/06
TIN, TOTAL	012	SO	06L0322	04/25/06	05/25/06	05/25/06
STRONTIUM, TOTAL	012	SO	06L0322	04/25/06	05/25/06	05/25/06
THALLIUM, TOTAL	012	SO	06L0322	04/25/06	05/25/06	05/25/06
URANIUM, TOTAL	012	SO	06L0322	04/25/06	05/25/06	05/25/06
VANADIUM, TOTAL	012	SO	06L0322	04/25/06	05/25/06	05/25/06
ZINC, TOTAL	012	SO	06L0322	04/25/06	05/25/06	05/25/06
J11KR4						
SILVER, TOTAL	013	SO	06L0322	04/25/06	05/25/06	05/25/06
ALUMINUM, TOTAL	013	SO	06L0322	04/25/06	05/25/06	05/25/06
ARSENIC, TOTAL	013	SO	06L0322	04/25/06	05/25/06	05/25/06
BORON, TOTAL	013	SO	06L0322	04/25/06	05/25/06	05/25/06
BARIUM, TOTAL	013	SO	06L0322	04/25/06	05/25/06	05/25/06
BERYLLIUM, TOTAL	013	SO	06L0322	04/25/06	05/25/06	05/25/06
BISMUTH, TOTAL	013	SO	06L0322	04/25/06	05/25/06	05/25/06
CALCIUM, TOTAL	013	SO	06L0322	04/25/06	05/25/06	05/25/06
CADMIUM, TOTAL	013	SO	06L0322	04/25/06	05/25/06	05/25/06
COBALT, TOTAL	013	SO	06L0322	04/25/06	05/25/06	05/25/06

Lionville Laboratory, Inc.
INORGANIC ANALYTICAL DATA PACKAGE FOR
TNUHANFORD RC-047 K0331

DATE RECEIVED: 04/27/06 LVL LOT # :0604L876

CLIENT ID /ANALYSIS	LVL #	MTX	PREP #	COLLECTION	EXTR/PREP	ANALYSIS
CHROMIUM, TOTAL	013	SO	06L0322	04/25/06	05/25/06	05/25/06
COPPER, TOTAL	013	SO	06L0322	04/25/06	05/25/06	05/25/06
IRON, TOTAL	013	SO	06L0322	04/25/06	05/25/06	05/25/06
MERCURY, TOTAL	013	SO	06C0085	04/25/06	05/03/06	05/04/06
POTASSIUM, TOTAL	013	SO	06L0322	04/25/06	05/25/06	05/25/06
LITHIUM, TOTAL	013	SO	06L0322	04/25/06	05/25/06	05/25/06
MAGNESIUM, TOTAL	013	SO	06L0322	04/25/06	05/25/06	05/25/06
MANGANESE, TOTAL	013	SO	06L0322	04/25/06	05/25/06	05/25/06
MOLYBDENUM, TOTAL	013	SO	06L0322	04/25/06	05/25/06	05/25/06
SODIUM, TOTAL	013	SO	06L0322	04/25/06	05/25/06	05/25/06
NICKEL, TOTAL	013	SO	06L0322	04/25/06	05/25/06	05/25/06
PHOSPHORUS, TOTAL	013	SO	06L0322	04/25/06	05/25/06	05/25/06
LEAD, TOTAL	013	SO	06L0322	04/25/06	05/25/06	05/25/06
ANTIMONY, TOTAL	013	SO	06L0322	04/25/06	05/25/06	05/25/06
SELENIUM, TOTAL	013	SO	06L0322	04/25/06	05/25/06	05/25/06
SILICON, TOTAL	013	SO	06L0322	04/25/06	05/25/06	05/25/06
TIN, TOTAL	013	SO	06L0322	04/25/06	05/25/06	05/25/06
STRONTIUM, TOTAL	013	SO	06L0322	04/25/06	05/25/06	05/25/06
THALLIUM, TOTAL	013	SO	06L0322	04/25/06	05/25/06	05/25/06
URANIUM, TOTAL	013	SO	06L0322	04/25/06	05/25/06	05/25/06
VANADIUM, TOTAL	013	SO	06L0322	04/25/06	05/25/06	05/25/06
ZINC, TOTAL	013	SO	06L0322	04/25/06	05/25/06	05/25/06
J11L34						
SILVER, TOTAL	014	SO	06L0322	04/25/06	05/25/06	05/25/06
ALUMINUM, TOTAL	014	SO	06L0322	04/25/06	05/25/06	05/25/06
ARSENIC, TOTAL	014	SO	06L0322	04/25/06	05/25/06	05/25/06
BORON, TOTAL	014	SO	06L0322	04/25/06	05/25/06	05/25/06
BARIUM, TOTAL	014	SO	06L0322	04/25/06	05/25/06	05/25/06
BERYLLIUM, TOTAL	014	SO	06L0322	04/25/06	05/25/06	05/25/06
BISMUTH, TOTAL	014	SO	06L0322	04/25/06	05/25/06	05/25/06
CALCIUM, TOTAL	014	SO	06L0322	04/25/06	05/25/06	05/25/06
CADMIUM, TOTAL	014	SO	06L0322	04/25/06	05/25/06	05/25/06
COBALT, TOTAL	014	SO	06L0322	04/25/06	05/25/06	05/25/06
CHROMIUM, TOTAL	014	SO	06L0322	04/25/06	05/25/06	05/25/06
COPPER, TOTAL	014	SO	06L0322	04/25/06	05/25/06	05/25/06
IRON, TOTAL	014	SO	06L0322	04/25/06	05/25/06	05/25/06

Lionville Laboratory, Inc.
INORGANIC ANALYTICAL DATA PACKAGE FOR
TNUHANFORD RC-047 K0331

DATE RECEIVED: 04/27/06 LVL LOT # :0604L876

CLIENT ID /ANALYSIS	LVL #	MTX	PREP #	COLLECTION	EXTR/PREP	ANALYSIS
MERCURY, TOTAL	014	SO	06C0085	04/25/06	05/03/06	05/04/06
POTASSIUM, TOTAL	014	SO	06L0322	04/25/06	05/25/06	05/25/06
LITHIUM, TOTAL	014	SO	06L0322	04/25/06	05/25/06	05/25/06
MAGNESIUM, TOTAL	014	SO	06L0322	04/25/06	05/25/06	05/25/06
MANGANESE, TOTAL	014	SO	06L0322	04/25/06	05/25/06	05/25/06
MOLYBDENUM, TOTAL	014	SO	06L0322	04/25/06	05/25/06	05/25/06
SODIUM, TOTAL	014	SO	06L0322	04/25/06	05/25/06	05/25/06
NICKEL, TOTAL	014	SO	06L0322	04/25/06	05/25/06	05/25/06
PHOSPHORUS, TOTAL	014	SO	06L0322	04/25/06	05/25/06	05/25/06
LEAD, TOTAL	014	SO	06L0322	04/25/06	05/25/06	05/25/06
ANTIMONY, TOTAL	014	SO	06L0322	04/25/06	05/25/06	05/25/06
SELENIUM, TOTAL	014	SO	06L0322	04/25/06	05/25/06	05/25/06
SILICON, TOTAL	014	SO	06L0322	04/25/06	05/25/06	05/25/06
TIN, TOTAL	014	SO	06L0322	04/25/06	05/25/06	05/25/06
STRONTIUM, TOTAL	014	SO	06L0322	04/25/06	05/25/06	05/25/06
THALLIUM, TOTAL	014	SO	06L0322	04/25/06	05/25/06	05/25/06
URANIUM, TOTAL	014	SO	06L0322	04/25/06	05/25/06	05/25/06
VANADIUM, TOTAL	014	SO	06L0322	04/25/06	05/25/06	05/25/06
ZINC, TOTAL	014	SO	06L0322	04/25/06	05/25/06	05/25/06
J11KT5						
SILVER, TOTAL	015	SO	06L0322	04/25/06	05/25/06	05/25/06
ALUMINUM, TOTAL	015	SO	06L0322	04/25/06	05/25/06	05/25/06
ARSENIC, TOTAL	015	SO	06L0322	04/25/06	05/25/06	05/25/06
BORON, TOTAL	015	SO	06L0322	04/25/06	05/25/06	05/25/06
BARIUM, TOTAL	015	SO	06L0322	04/25/06	05/25/06	05/25/06
BERYLLIUM, TOTAL	015	SO	06L0322	04/25/06	05/25/06	05/25/06
BISMUTH, TOTAL	015	SO	06L0322	04/25/06	05/25/06	05/25/06
CALCIUM, TOTAL	015	SO	06L0322	04/25/06	05/25/06	05/25/06
CADMIUM, TOTAL	015	SO	06L0322	04/25/06	05/25/06	05/25/06
COBALT, TOTAL	015	SO	06L0322	04/25/06	05/25/06	05/25/06
CHROMIUM, TOTAL	015	SO	06L0322	04/25/06	05/25/06	05/25/06
COPPER, TOTAL	015	SO	06L0322	04/25/06	05/25/06	05/25/06
IRON, TOTAL	015	SO	06L0322	04/25/06	05/25/06	05/25/06
MERCURY, TOTAL	015	SO	06C0085	04/25/06	05/03/06	05/04/06
POTASSIUM, TOTAL	015	SO	06L0322	04/25/06	05/25/06	05/25/06
LITHIUM, TOTAL	015	SO	06L0322	04/25/06	05/25/06	05/25/06

Lionville Laboratory, Inc.
INORGANIC ANALYTICAL DATA PACKAGE FOR
TNUHANFORD RC-047 K0331

DATE RECEIVED: 04/27/06 LVL LOT # :0604L876

CLIENT ID /ANALYSIS	LVL #	MTX	PREP #	COLLECTION	EXTR/PREP	ANALYSIS
MAGNESIUM, TOTAL	015	SO	06L0322	04/25/06	05/25/06	05/25/06
MANGANESE, TOTAL	015	SO	06L0322	04/25/06	05/25/06	05/25/06
MOLYBDENUM, TOTAL	015	SO	06L0322	04/25/06	05/25/06	05/25/06
SODIUM, TOTAL	015	SO	06L0322	04/25/06	05/25/06	05/25/06
NICKEL, TOTAL	015	SO	06L0322	04/25/06	05/25/06	05/25/06
PHOSPHORUS, TOTAL	015	SO	06L0322	04/25/06	05/25/06	05/25/06
LEAD, TOTAL	015	SO	06L0322	04/25/06	05/25/06	05/25/06
ANTIMONY, TOTAL	015	SO	06L0322	04/25/06	05/25/06	05/25/06
SELENIUM, TOTAL	015	SO	06L0322	04/25/06	05/25/06	05/25/06
SILICON, TOTAL	015	SO	06L0322	04/25/06	05/25/06	05/25/06
TIN, TOTAL	015	SO	06L0322	04/25/06	05/25/06	05/25/06
STRONTIUM, TOTAL	015	SO	06L0322	04/25/06	05/25/06	05/25/06
THALLIUM, TOTAL	015	SO	06L0322	04/25/06	05/25/06	05/25/06
URANIUM, TOTAL	015	SO	06L0322	04/25/06	05/25/06	05/25/06
VANADIUM, TOTAL	015	SO	06L0322	04/25/06	05/25/06	05/25/06
ZINC, TOTAL	015	SO	06L0322	04/25/06	05/25/06	05/25/06
J11L32						
SILVER, TOTAL	016	SO	06L0322	04/25/06	05/25/06	05/25/06
ALUMINUM, TOTAL	016	SO	06L0322	04/25/06	05/25/06	05/25/06
ARSENIC, TOTAL	016	SO	06L0322	04/25/06	05/25/06	05/25/06
BORON, TOTAL	016	SO	06L0322	04/25/06	05/25/06	05/25/06
BARIUM, TOTAL	016	SO	06L0322	04/25/06	05/25/06	05/25/06
BERYLLIUM, TOTAL	016	SO	06L0322	04/25/06	05/25/06	05/25/06
BISMUTH, TOTAL	016	SO	06L0322	04/25/06	05/25/06	05/25/06
CALCIUM, TOTAL	016	SO	06L0322	04/25/06	05/25/06	05/25/06
CADMIUM, TOTAL	016	SO	06L0322	04/25/06	05/25/06	05/25/06
COBALT, TOTAL	016	SO	06L0322	04/25/06	05/25/06	05/25/06
CHROMIUM, TOTAL	016	SO	06L0322	04/25/06	05/25/06	05/25/06
COPPER, TOTAL	016	SO	06L0322	04/25/06	05/25/06	05/25/06
IRON, TOTAL	016	SO	06L0322	04/25/06	05/25/06	05/25/06
MERCURY, TOTAL	016	SO	06C0085	04/25/06	05/03/06	05/04/06
POTASSIUM, TOTAL	016	SO	06L0322	04/25/06	05/25/06	05/25/06
LITHIUM, TOTAL	016	SO	06L0322	04/25/06	05/25/06	05/25/06
MAGNESIUM, TOTAL	016	SO	06L0322	04/25/06	05/25/06	05/25/06
MANGANESE, TOTAL	016	SO	06L0322	04/25/06	05/25/06	05/25/06
MOLYBDENUM, TOTAL	016	SO	06L0322	04/25/06	05/25/06	05/25/06

Lionville Laboratory, Inc.
INORGANIC ANALYTICAL DATA PACKAGE FOR
TNUHANFORD RC-047 K0331

DATE RECEIVED: 04/27/06 LVL LOT # :0604L876

CLIENT ID /ANALYSIS	LVL #	MTX	PREP #	COLLECTION	EXTR/PREP	ANALYSIS
SODIUM, TOTAL	016	SO	06L0322	04/25/06	05/25/06	05/25/06
NICKEL, TOTAL	016	SO	06L0322	04/25/06	05/25/06	05/25/06
PHOSPHORUS, TOTAL	016	SO	06L0322	04/25/06	05/25/06	05/25/06
LEAD, TOTAL	016	SO	06L0322	04/25/06	05/25/06	05/25/06
ANTIMONY, TOTAL	016	SO	06L0322	04/25/06	05/25/06	05/25/06
SELENIUM, TOTAL	016	SO	06L0322	04/25/06	05/25/06	05/25/06
SILICON, TOTAL	016	SO	06L0322	04/25/06	05/25/06	05/25/06
TIN, TOTAL	016	SO	06L0322	04/25/06	05/25/06	05/25/06
STRONTIUM, TOTAL	016	SO	06L0322	04/25/06	05/25/06	05/25/06
THALLIUM, TOTAL	016	SO	06L0322	04/25/06	05/25/06	05/25/06
URANIUM, TOTAL	016	SO	06L0322	04/25/06	05/25/06	05/25/06
VANADIUM, TOTAL	016	SO	06L0322	04/25/06	05/25/06	05/25/06
ZINC, TOTAL	016	SO	06L0322	04/25/06	05/25/06	05/25/06
J11955						
SILVER, TOTAL	017	SO	06L0322	04/25/06	05/25/06	05/25/06
ALUMINUM, TOTAL	017	SO	06L0322	04/25/06	05/25/06	05/25/06
ARSENIC, TOTAL	017	SO	06L0322	04/25/06	05/25/06	05/25/06
BORON, TOTAL	017	SO	06L0322	04/25/06	05/25/06	05/25/06
BARIUM, TOTAL	017	SO	06L0322	04/25/06	05/25/06	05/25/06
BERYLLIUM, TOTAL	017	SO	06L0322	04/25/06	05/25/06	05/25/06
BISMUTH, TOTAL	017	SO	06L0322	04/25/06	05/25/06	05/25/06
CALCIUM, TOTAL	017	SO	06L0322	04/25/06	05/25/06	05/25/06
CADMIUM, TOTAL	017	SO	06L0322	04/25/06	05/25/06	05/25/06
COBALT, TOTAL	017	SO	06L0322	04/25/06	05/25/06	05/25/06
CHROMIUM, TOTAL	017	SO	06L0322	04/25/06	05/25/06	05/25/06
COPPER, TOTAL	017	SO	06L0322	04/25/06	05/25/06	05/25/06
IRON, TOTAL	017	SO	06L0322	04/25/06	05/25/06	05/25/06
MERCURY, TOTAL	017	SO	06C0085	04/25/06	05/03/06	05/04/06
POTASSIUM, TOTAL	017	SO	06L0322	04/25/06	05/25/06	05/25/06
LITHIUM, TOTAL	017	SO	06L0322	04/25/06	05/25/06	05/25/06
MAGNESIUM, TOTAL	017	SO	06L0322	04/25/06	05/25/06	05/25/06
MANGANESE, TOTAL	017	SO	06L0322	04/25/06	05/25/06	05/25/06
MOLYBDENUM, TOTAL	017	SO	06L0322	04/25/06	05/25/06	05/25/06
SODIUM, TOTAL	017	SO	06L0322	04/25/06	05/25/06	05/25/06
NICKEL, TOTAL	017	SO	06L0322	04/25/06	05/25/06	05/25/06
PHOSPHORUS, TOTAL	017	SO	06L0322	04/25/06	05/25/06	05/25/06

Lionville Laboratory, Inc.
INORGANIC ANALYTICAL DATA PACKAGE FOR
TNUHANFORD RC-047 K0331

DATE RECEIVED: 04/27/06 LVL LOT # :0604L876

CLIENT ID /ANALYSIS	LVL #	MTX	PREP #	COLLECTION	EXTR/PREP	ANALYSIS
LEAD, TOTAL	017	SO	06L0322	04/25/06	05/25/06	05/25/06
ANTIMONY, TOTAL	017	SO	06L0322	04/25/06	05/25/06	05/25/06
SELENIUM, TOTAL	017	SO	06L0322	04/25/06	05/25/06	05/25/06
SILICON, TOTAL	017	SO	06L0322	04/25/06	05/25/06	05/25/06
TIN, TOTAL	017	SO	06L0322	04/25/06	05/25/06	05/25/06
STRONTIUM, TOTAL	017	SO	06L0322	04/25/06	05/25/06	05/25/06
THALLIUM, TOTAL	017	SO	06L0322	04/25/06	05/25/06	05/25/06
URANIUM, TOTAL	017	SO	06L0322	04/25/06	05/25/06	05/25/06
VANADIUM, TOTAL	017	SO	06L0322	04/25/06	05/25/06	05/25/06
ZINC, TOTAL	017	SO	06L0322	04/25/06	05/25/06	05/25/06
J11KT2						
SILVER, TOTAL	018	SO	06L0322	04/26/06	05/25/06	05/25/06
ALUMINUM, TOTAL	018	SO	06L0322	04/26/06	05/25/06	05/25/06
ARSENIC, TOTAL	018	SO	06L0322	04/26/06	05/25/06	05/25/06
BORON, TOTAL	018	SO	06L0322	04/26/06	05/25/06	05/25/06
BARIUM, TOTAL	018	SO	06L0322	04/26/06	05/25/06	05/25/06
BERYLLIUM, TOTAL	018	SO	06L0322	04/26/06	05/25/06	05/25/06
BISMUTH, TOTAL	018	SO	06L0322	04/26/06	05/25/06	05/25/06
CALCIUM, TOTAL	018	SO	06L0322	04/26/06	05/25/06	05/25/06
CADMIUM, TOTAL	018	SO	06L0322	04/26/06	05/25/06	05/25/06
COBALT, TOTAL	018	SO	06L0322	04/26/06	05/25/06	05/25/06
CHROMIUM, TOTAL	018	SO	06L0322	04/26/06	05/25/06	05/25/06
COPPER, TOTAL	018	SO	06L0322	04/26/06	05/25/06	05/25/06
IRON, TOTAL	018	SO	06L0322	04/26/06	05/25/06	05/25/06
MERCURY, TOTAL	018	SO	06C0085	04/26/06	05/03/06	05/04/06
POTASSIUM, TOTAL	018	SO	06L0322	04/26/06	05/25/06	05/25/06
LITHIUM, TOTAL	018	SO	06L0322	04/26/06	05/25/06	05/25/06
MAGNESIUM, TOTAL	018	SO	06L0322	04/26/06	05/25/06	05/25/06
MANGANESE, TOTAL	018	SO	06L0322	04/26/06	05/25/06	05/25/06
MOLYBDENUM, TOTAL	018	SO	06L0322	04/26/06	05/25/06	05/25/06
SODIUM, TOTAL	018	SO	06L0322	04/26/06	05/25/06	05/25/06
NICKEL, TOTAL	018	SO	06L0322	04/26/06	05/25/06	05/25/06
PHOSPHORUS, TOTAL	018	SO	06L0322	04/26/06	05/25/06	05/25/06
LEAD, TOTAL	018	SO	06L0322	04/26/06	05/25/06	05/25/06
ANTIMONY, TOTAL	018	SO	06L0322	04/26/06	05/25/06	05/25/06
SELENIUM, TOTAL	018	SO	06L0322	04/26/06	05/25/06	05/25/06

Lionville Laboratory, Inc.
INORGANIC ANALYTICAL DATA PACKAGE FOR
TNUHANFORD RC-047 K0331

DATE RECEIVED: 04/27/06 LVL LOT # :0604L876

CLIENT ID /ANALYSIS	LVL #	MTX	PREP #	COLLECTION	EXTR/PREP	ANALYSIS
SILICON, TOTAL	018	SO	06L0322	04/26/06	05/25/06	05/25/06
TIN, TOTAL	018	SO	06L0322	04/26/06	05/25/06	05/25/06
STRONTIUM, TOTAL	018	SO	06L0322	04/26/06	05/25/06	05/25/06
THALLIUM, TOTAL	018	SO	06L0322	04/26/06	05/25/06	05/25/06
URANIUM, TOTAL	018	SO	06L0322	04/26/06	05/25/06	05/25/06
VANADIUM, TOTAL	018	SO	06L0322	04/26/06	05/25/06	05/25/06
ZINC, TOTAL	018	SO	06L0322	04/26/06	05/25/06	05/25/06

LAB QC:

SILVER LABORATORY	LC1 BS	S	06L0322	N/A	05/25/06	05/25/06
SILVER, TOTAL	MB1	S	06L0322	N/A	05/25/06	05/25/06
ALUMINUM LABORTORY	LC1 BS	S	06L0322	N/A	05/25/06	05/25/06
ALUMINUM, TOTAL	MB1	S	06L0322	N/A	05/25/06	05/25/06
ARSENIC LABORATORY	LC1 BS	S	06L0322	N/A	05/25/06	05/25/06
ARSENIC, TOTAL	MB1	S	06L0322	N/A	05/25/06	05/25/06
BORON LABORATORY	LC1 BS	S	06L0322	N/A	05/25/06	05/25/06
BORON, TOTAL	MB1	S	06L0322	N/A	05/25/06	05/25/06
BARIUM LABORATORY	LC1 BS	S	06L0322	N/A	05/25/06	05/25/06
BARIUM, TOTAL	MB1	S	06L0322	N/A	05/25/06	05/25/06
BERYLLIUM LABORATORY	LC1 BS	S	06L0322	N/A	05/25/06	05/25/06
BERYLLIUM, TOTAL	MB1	S	06L0322	N/A	05/25/06	05/25/06
BISMUTH, LCS	LC1 BS	S	06L0322	N/A	05/25/06	05/25/06
BISMUTH, TOTAL	MB1	S	06L0322	N/A	05/25/06	05/25/06
CALCIUM LABORATORY	LC1 BS	S	06L0322	N/A	05/25/06	05/25/06
CALCIUM, TOTAL	MB1	S	06L0322	N/A	05/25/06	05/25/06
CADMIUM LABORATORY	LC1 BS	S	06L0322	N/A	05/25/06	05/25/06
CADMIUM, TOTAL	MB1	S	06L0322	N/A	05/25/06	05/25/06
COBALT LABORATORY	LC1 BS	S	06L0322	N/A	05/25/06	05/25/06
COBALT, TOTAL	MB1	S	06L0322	N/A	05/25/06	05/25/06
CHROMIUM LABORATORY	LC1 BS	S	06L0322	N/A	05/25/06	05/25/06
CHROMIUM, TOTAL	MB1	S	06L0322	N/A	05/25/06	05/25/06
COPPER LABORATORY	LC1 BS	S	06L0322	N/A	05/25/06	05/25/06
COPPER, TOTAL	MB1	S	06L0322	N/A	05/25/06	05/25/06
IRON LABORATORY	LC1 BS	S	06L0322	N/A	05/25/06	05/25/06
IRON, TOTAL	MB1	S	06L0322	N/A	05/25/06	05/25/06
MERCURY LABORATORY	LC1 BS	S	06C0085	N/A	05/03/06	05/04/06
MERCURY, TOTAL	MB1	S	06C0085	N/A	05/03/06	05/04/06

Lionville Laboratory, Inc.
INORGANIC ANALYTICAL DATA PACKAGE FOR
TNUHANFORD RC-047 K0331

DATE RECEIVED: 04/27/06 LVL LOT # :0604L876

CLIENT ID /ANALYSIS	LVL #	MTX	PREP #	COLLECTION	EXTR/PREP	ANALYSIS
POTASSIUM LABORATORY	LC1 BS	S	06L0322	N/A	05/25/06	05/25/06
POTASSIUM, TOTAL	MB1	S	06L0322	N/A	05/25/06	05/25/06
LITHIUM LABORATORY	LC1 BS	S	06L0322	N/A	05/25/06	05/25/06
LITHIUM, TOTAL	MB1	S	06L0322	N/A	05/25/06	05/25/06
MAGNESIUM LABORATORY	LC1 BS	S	06L0322	N/A	05/25/06	05/25/06
MAGNESIUM, TOTAL	MB1	S	06L0322	N/A	05/25/06	05/25/06
MANGANESE LABORATORY	LC1 BS	S	06L0322	N/A	05/25/06	05/25/06
MANGANESE, TOTAL	MB1	S	06L0322	N/A	05/25/06	05/25/06
MOLYBDENUM LABORATOR	LC1 BS	S	06L0322	N/A	05/25/06	05/25/06
MOLYBDENUM, TOTAL	MB1	S	06L0322	N/A	05/25/06	05/25/06
SODIUM LABORATORY	LC1 BS	S	06L0322	N/A	05/25/06	05/25/06
SODIUM, TOTAL	MB1	S	06L0322	N/A	05/25/06	05/25/06
NICKEL LABORATORY	LC1 BS	S	06L0322	N/A	05/25/06	05/25/06
NICKEL, TOTAL	MB1	S	06L0322	N/A	05/25/06	05/25/06
PHOSPHORUS LCS	LC1 BS	S	06L0322	N/A	05/25/06	05/25/06
PHOSPHORUS, TOTAL	MB1	S	06L0322	N/A	05/25/06	05/25/06
LEAD LABORATORY	LC1 BS	S	06L0322	N/A	05/25/06	05/25/06
LEAD, TOTAL	MB1	S	06L0322	N/A	05/25/06	05/25/06
ANTIMONY LABORATORY	LC1 BS	S	06L0322	N/A	05/25/06	05/25/06
ANTIMONY, TOTAL	MB1	S	06L0322	N/A	05/25/06	05/25/06
SELENIUM LABORATORY	LC1 BS	S	06L0322	N/A	05/25/06	05/25/06
SELENIUM, TOTAL	MB1	S	06L0322	N/A	05/25/06	05/25/06
SILICON LABORATORY	LC1 BS	S	06L0322	N/A	05/25/06	05/25/06
SILICON, TOTAL	MB1	S	06L0322	N/A	05/25/06	05/25/06
TIN LABORATORY	LC1 BS	S	06L0322	N/A	05/25/06	05/25/06
TIN, TOTAL	MB1	S	06L0322	N/A	05/25/06	05/25/06
STRONTIUM LCS STANDA	LC1 BS	S	06L0322	N/A	05/25/06	05/25/06
STRONTIUM, TOTAL	MB1	S	06L0322	N/A	05/25/06	05/25/06
THALLIUM LABORATORY	LC1 BS	S	06L0322	N/A	05/25/06	05/25/06
THALLIUM, TOTAL	MB1	S	06L0322	N/A	05/25/06	05/25/06
URANIUM LABORATORY	LC1 BS	S	06L0322	N/A	05/25/06	05/25/06
URANIUM, TOTAL	MB1	S	06L0322	N/A	05/25/06	05/25/06
VANADIUM LABORATORY	LC1 BS	S	06L0322	N/A	05/25/06	05/25/06
VANADIUM, TOTAL	MB1	S	06L0322	N/A	05/25/06	05/25/06
ZINC LABORATORY	LC1 BS	S	06L0322	N/A	05/25/06	05/25/06
ZINC, TOTAL	MB1	S	06L0322	N/A	05/25/06	05/25/06

LIONVILLE LABORATORY INC.

Analytical Report

Client: TNU-HANFORD RC-047
LVL#: 0604L876
SDG/SAF#: K0331/RC-047

W.O.#: 11343-606-001-9999-00
Date Received: 04-27-06

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 18 solid samples.

2. The samples were prepared and analyzed in accordance with methods checked on the attached glossary. The samples are reported on a wet weight, 'as received' basis.

   All samples were rerun for Aluminum, along with the Phosphorous analysis, 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 PQL).

6. All preparation/method blanks (MB) were within method criteria {less than the Practical Quantitation Limit (3X the IDL), 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 with the exception of Silicon at 77.6%. Refer to the Inorganics Laboratory Control Standards Report. Associated sample results may be biased low.

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 67 pages.

9. The matrix spike (MS) recoveries for 3 analytes were outside the 75-125% control limits. 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
J11KR6	Iron	2,000	98.7
	Phosphorous	5,000	81.6
	Silicon	100	87.6

11. The duplicate analyses for 3 analytes were outside 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 Instrument Detection Limit (IDL). Values between the IDL and the Practical Quantitation Limit (PQL) are acquired in a region of less-certain quantification.

13. LvLI is NELAP accredited by the state of Pennsylvania and holds over 20 additional state accreditations. 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

6/8/06
Date

jjw/m04-876

LvLI
LIONVILLE LABORATORY INC.

METALS METHOD GLOSSARY

The following methods are used as reference for the digestion and analysis of samples contained within
Lot#: 0604L876

Leaching Procedure: __1310 __1311 __1312 __Other:_____

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

Metals Digestion Methods: __3005A __3010A __3015 __3020A X3050B __3051 __200.7 __SS17
__Other: _____

Metals Analysis Methods

	SW846		EPA		STD MTD	EPA OSWR	USATHAMA
Aluminum	X6010B		__200.7				__99
Antimony	X6010B	__7041 [5]	__200.7	__204.2			__99
Arsenic	X6010B	__7060A [5]	__200.7	__206.2	__3113B		__99
Barium	X6010B		__200.7				__99
Beryllium	X6010B		__200.7				__99
Bismuth	X6010B [1]		__200.7 [1]			__1620	__99
Boron	X6010B		__200.7				__99
Cadmium	X6010B	__7131A [5]	__200.7	__213.2			__99
Calcium	X6010B		__200.7				__99
Chromium	X6010B	__7191 [5]	__200.7	__218.2			__SS17
Cobalt	X6010B		__200.7				__99
Copper	X6010B	__7211 [5]	__200.7	__220.2			__99
Iron	X6010B		__200.7				__99
Lead	X6010B	__7421 [5]	__200.7	__239.2	__3113B		__99
Lithium	X6010B	__7430 [4]	__200.7			__1620	__99
Magnesium	X6010B		__200.7				__99
Manganese	X6010B		__200.7				__99
Mercury	__7470A [3]	X7471A [3]	__245.1 [2]	__245.5 [2]			__99
Molybdenum	X6010B		__200.7				__99
Nickel	X6010B		__200.7				__99
Potassium	X6010B	__7610 [4]	__200.7	__258.1 [4]			__99
Rare Earths	__6010B [1]		__200.7 [1]			__1620	__99
Selenium	X6010B	__7740 [5]	__200.7	__270.2	__3113B		__99
Silicon	X6010B [1]		__200.7			__1620	__99
Silica	__6010B		__200.7			__1620	__99
Silver	X6010B	__7761 [5]	__200.7	__272.2			__99
Sodium	X6010B	__7770 [4]	__200.7	__273.1 [4]			__99
Strontium	X6010B		__200.7				__99
Thallium	X6010B	__7841 [5]	__200.7	__279.2__200.9			__99
Tin	X6010B		__200.7				__99
Titanium	__6010B		__200.7				__99
Uranium	X6010B [1]		__200.7 [1]			__1620	__99
Vanadium	X6010B		__200.7				__99
Zinc	X6010B		__200.7				__99
Zirconium	__6010B [1]		__200.7 [1]			__1620	__99

Other: Phosphorous Method: 6010B

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 06/08/06

CLIENT: TNUHANFORD RC-047 K0331 LVL LOT #: 0604L076

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

SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT	DILUTION FACTOR
-001	J11KR0	Silver, Total	0.07 u	MG/KG	0.07	1.0
		Aluminum, Total	34.4	MG/KG	2.3	1.0
		Arsenic, Total	1.2	MG/KG	0.59	1.0
		Boron, Total	5.0	MG/KG	0.23	1.0
		Barium, Total	2.5	MG/KG	0.02	1.0
		Beryllium, Total	0.02 u	MG/KG	0.02	1.0
		Bismuth, Total	0.50 u	MG/KG	0.50	1.0
		Calcium, Total	343	MG/KG	1.6	1.0
		Cadmium, Total	0.07 u	MG/KG	0.07	1.0
		Cobalt, Total	0.14	MG/KG	0.14	1.0
		Chromium, Total	0.44	MG/KG	0.13	1.0
		Copper, Total	6.4	MG/KG	0.12	1.0
		Iron, Total	112	MG/KG	3.4	1.0
		Mercury, Total	0.02 u	MG/KG	0.02	1.0
		Potassium, Total	2410	MG/KG	2.2	1.0
		Lithium, Total	0.07	MG/KG	0.03	1.0
		Magnesium, Total	714	MG/KG	0.94	1.0
		Manganese, Total	6.8	MG/KG	0.03	1.0
		Molybdenum, Total	0.28 u	MG/KG	0.28	1.0
		Sodium, Total	417	MG/KG	0.74	1.0
		Nickel, Total	0.37	MG/KG	0.23	1.0
		Phosphorus, Total	2370	MG/KG	0.87	1.0
		Lead, Total	0.30 u	MG/KG	0.30	1.0
		Antimony, Total	0.44	MG/KG	0.43	1.0
		Selenium, Total	0.46 u	MG/KG	0.46	1.0
		Silicon, Total	61.0	MG/KG	2.2	1.0
		Tin, Total	1.1	MG/KG	1.0	1.0
		Strontium, Total	6.0	MG/KG	0.01	1.0
		Thallium, Total	0.68 u	MG/KG	0.68	1.0
		Uranium, Total	2.2	MG/KG	0.85	1.0
		Vanadium, Total	0.31	MG/KG	0.09	1.0
		Zinc, Total	32.3	MG/KG	0.16	1.0

Lionville Laboratory, Inc.

INORGANICS DATA SUMMARY REPORT 06/08/06

CLIENT: TNUHANFORD RC-047 K0331 LVL LOT #: 0604L876

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

SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT	DILUTION FACTOR
-002	J11KR6	Silver, Total	0.07 u	MG/KG	0.07	1.0
		Aluminum, Total	24.9	MG/KG	2.3	1.0
		Arsenic, Total	1.1	MG/KG	0.60	1.0
		Boron, Total	3.0	MG/KG	0.24	1.0
		Barium, Total	1.7	MG/KG	0.02	1.0
		Beryllium, Total	0.02 u	MG/KG	0.02	1.0
		Bismuth, Total	0.50 u	MG/KG	0.50	1.0
		Calcium, Total	306	MG/KG	1.6	1.0
		Cadmium, Total	0.07 u	MG/KG	0.07	1.0
		Cobalt, Total	0.18	MG/KG	0.14	1.0
		Chromium, Total	1.9	MG/KG	0.13	1.0
		Copper, Total	5.6	MG/KG	0.12	1.0
		Iron, Total	83.7	MG/KG	3.4	1.0
		Mercury, Total	0.02 u	MG/KG	0.02	1.0
		Potassium, Total	2550	MG/KG	2.2	1.0
		Lithium, Total	0.05	MG/KG	0.03	1.0
		Magnesium, Total	798	MG/KG	0.95	1.0
		Manganese, Total	5.3	MG/KG	0.03	1.0
		Molybdenum, Total	0.35	MG/KG	0.28	1.0
		Sodium, Total	438	MG/KG	0.74	1.0
		Nickel, Total	0.99	MG/KG	0.24	1.0
		Phosphorus, Total	2600	MG/KG	0.88	1.0
		Lead, Total	0.37	MG/KG	0.30	1.0
		Antimony, Total	0.43 u	MG/KG	0.43	1.0
		Selenium, Total	0.52	MG/KG	0.46	1.0
		Silicon, Total	51.6	MG/KG	2.2	1.0
		Tin, Total	1.0 u	MG/KG	1.0	1.0
		Strontium, Total	3.3	MG/KG	0.01	1.0
		Thallium, Total	0.69 u	MG/KG	0.69	1.0
		Uranium, Total	1.9	MG/KG	0.86	1.0
		Vanadium, Total	0.24	MG/KG	0.09	1.0
		Zinc, Total	34.9	MG/KG	0.16	1.0

Lionville Laboratory, Inc.

INORGANICS DATA SUMMARY REPORT 06/08/06

CLIENT: TNUHANFORD RC-047 K0331 LVL LOT #: 0604L876

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

SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT	DILUTION FACTOR
-003	J11KP9	Silver, Total	0.07 u	MG/KG	0.07	1.0
		Aluminum, Total	49.7	MG/KG	2.3	1.0
		Arsenic, Total	1.1	MG/KG	0.59	1.0
		Boron, Total	4.6	MG/KG	0.23	1.0
		Barium, Total	3.0	MG/KG	0.02	1.0
		Beryllium, Total	0.02 u	MG/KG	0.02	1.0
		Bismuth, Total	0.50 u	MG/KG	0.50	1.0
		Calcium, Total	376	MG/KG	1.6	1.0
		Cadmium, Total	0.07 u	MG/KG	0.07	1.0
		Cobalt, Total	0.24	MG/KG	0.14	1.0
		Chromium, Total	0.41	MG/KG	0.13	1.0
		Copper, Total	13.4	MG/KG	0.12	1.0
		Iron, Total	170	MG/KG	3.4	1.0
		Mercury, Total	0.02 u	MG/KG	0.02	1.0
		Potassium, Total	2620	MG/KG	2.2	1.0
		Lithium, Total	0.09	MG/KG	0.03	1.0
		Magnesium, Total	888	MG/KG	0.94	1.0
		Manganese, Total	7.5	MG/KG	0.03	1.0
		Molybdenum, Total	0.28 u	MG/KG	0.28	1.0
		Sodium, Total	479	MG/KG	0.74	1.0
		Nickel, Total	0.29	MG/KG	0.23	1.0
		Phosphorus, Total	2610	MG/KG	0.87	1.0
		Lead, Total	0.38	MG/KG	0.30	1.0
		Antimony, Total	0.56	MG/KG	0.43	1.0
		Selenium, Total	0.46 u	MG/KG	0.46	1.0
		Silicon, Total	71.8	MG/KG	2.2	1.0
		Tin, Total	1.7	MG/KG	1.0	1.0
		Strontium, Total	4.5	MG/KG	0.01	1.0
		Thallium, Total	0.68 u	MG/KG	0.68	1.0
		Uranium, Total	1.7	MG/KG	0.85	1.0
		Vanadium, Total	0.40	MG/KG	0.09	1.0
		Zinc, Total	35.7	MG/KG	0.16	1.0

Lionville Laboratory, Inc.

INORGANICS DATA SUMMARY REPORT 06/08/06

CLIENT: TNUHANFORD RC-047 K0331 LVL LOT #: 0604L876

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

SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT	DILUTION FACTOR
-004	J11KR7	Silver, Total	0.08 u	MG/KG	0.08	1.0
		Aluminum, Total	28.1	MG/KG	2.8	1.0
		Arsenic, Total	1.5	MG/KG	0.73	1.0
		Boron, Total	3.9	MG/KG	0.29	1.0
		Barium, Total	1.9	MG/KG	0.02	1.0
		Beryllium, Total	0.02 u	MG/KG	0.02	1.0
		Bismuth, Total	0.61 u	MG/KG	0.61	1.0
		Calcium, Total	330	MG/KG	2.0	1.0
		Cadmium, Total	0.08 u	MG/KG	0.08	1.0
		Cobalt, Total	0.17 u	MG/KG	0.17	1.0
		Chromium, Total	0.34	MG/KG	0.15	1.0
		Copper, Total	6.2	MG/KG	0.14	1.0
		Iron, Total	127	MG/KG	4.2	1.0
		Mercury, Total	0.02 u	MG/KG	0.02	1.0
		Potassium, Total	2510	MG/KG	2.7	1.0
		Lithium, Total	0.05	MG/KG	0.04	1.0
		Magnesium, Total	601	MG/KG	1.2	1.0
		Manganese, Total	6.9	MG/KG	0.04	1.0
		Molybdenum, Total	0.40	MG/KG	0.35	1.0
		Sodium, Total	464	MG/KG	0.90	1.0
		Nickel, Total	0.33	MG/KG	0.29	1.0
		Phosphorus, Total	2180	MG/KG	1.1	1.0
		Lead, Total	0.37 u	MG/KG	0.37	1.0
		Antimony, Total	0.69	MG/KG	0.52	1.0
		Selenium, Total	0.56 u	MG/KG	0.56	1.0
		Silicon, Total	56.9	MG/KG	2.7	1.0
		Tin, Total	1.3 u	MG/KG	1.3	1.0
		Strontium, Total	4.2	MG/KG	0.01	1.0
		Thallium, Total	0.83 u	MG/KG	0.83	1.0
		Uranium, Total	2.0	MG/KG	1.0	1.0
		Vanadium, Total	0.31	MG/KG	0.11	1.0
		Zinc, Total	36.9	MG/KG	0.19	1.0

Lionville Laboratory, Inc.

INORGANICS DATA SUMMARY REPORT 06/08/06

CLIENT: TNUHANFORD RC-047 K0331 LVL LOT #: 0604L876

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

SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT	DILUTION FACTOR
-005	J11XX8	Silver, Total	0.07 u	MG/KG	0.07	1.0
		Aluminum, Total	34.4	MG/KG	2.5	1.0
		Arsenic, Total	1.1	MG/KG	0.65	1.0
		Boron, Total	3.8	MG/KG	0.26	1.0
		Barium, Total	2.1	MG/KG	0.02	1.0
		Beryllium, Total	0.02 u	MG/KG	0.02	1.0
		Bismuth, Total	0.54 u	MG/KG	0.54	1.0
		Calcium, Total	424	MG/KG	1.7	1.0
		Cadmium, Total	0.07 u	MG/KG	0.07	1.0
		Cobalt, Total	0.17	MG/KG	0.15	1.0
		Chromium, Total	0.26	MG/KG	0.14	1.0
		Copper, Total	6.8	MG/KG	0.13	1.0
		Iron, Total	158	MG/KG	3.7	1.0
		Mercury, Total	0.01 u	MG/KG	0.01	1.0
		Potassium, Total	2490	MG/KG	2.4	1.0
		Lithium, Total	0.07	MG/KG	0.03	1.0
		Magnesium, Total	686	MG/KG	1.0	1.0
		Manganese, Total	7.2	MG/KG	0.03	1.0
		Molybdenum, Total	0.35	MG/KG	0.31	1.0
		Sodium, Total	453	MG/KG	0.81	1.0
		Nickel, Total	0.26 u	MG/KG	0.26	1.0
		Phosphorus, Total	2230	MG/KG	0.96	1.0
		Lead, Total	0.33 u	MG/KG	0.33	1.0
		Antimony, Total	0.55	MG/KG	0.47	1.0
		Selenium, Total	0.50 u	MG/KG	0.50	1.0
		Silicon, Total	66.8	MG/KG	2.4	1.0
		Tin, Total	1.2	MG/KG	1.1	1.0
		Strontium, Total	4.2	MG/KG	0.01	1.0
		Thallium, Total	0.74 u	MG/KG	0.74	1.0
		Uranium, Total	1.9	MG/KG	0.94	1.0
		Vanadium, Total	0.48	MG/KG	0.1	1.0
		Zinc, Total	33.7	MG/KG	0.17	1.0

Lionville Laboratory, Inc.

INORGANICS DATA SUMMARY REPORT 06/08/06

CLIENT: TNUHANFORD RC-047 K0331 LVL LOT #: 0604L876

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

SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT	DILUTION FACTOR
-006	J11KT1	Silver, Total	0.07 u	MG/KG	0.07	1.0
		Aluminum, Total	27.3	MG/KG	2.2	1.0
		Arsenic, Total	2.9	MG/KG	0.58	1.0
		Boron, Total	5.5	MG/KG	0.23	1.0
		Barium, Total	2.1	MG/KG	0.02	1.0
		Beryllium, Total	0.02 u	MG/KG	0.02	1.0
		Bismuth, Total	0.49 u	MG/KG	0.49	1.0
		Calcium, Total	533	MG/KG	1.6	1.0
		Cadmium, Total	0.07 u	MG/KG	0.07	1.0
		Cobalt, Total	0.16	MG/KG	0.13	1.0
		Chromium, Total	0.17	MG/KG	0.12	1.0
		Copper, Total	6.8	MG/KG	0.11	1.0
		Iron, Total	77.7	MG/KG	3.3	1.0
		Mercury, Total	0.02 u	MG/KG	0.02	1.0
		Potassium, Total	2450	MG/KG	2.2	1.0
		Lithium, Total	0.07	MG/KG	0.03	1.0
		Magnesium, Total	845	MG/KG	0.92	1.0
		Manganese, Total	6.4	MG/KG	0.03	1.0
		Molybdenum, Total	0.49	MG/KG	0.28	1.0
		Sodium, Total	495	MG/KG	0.72	1.0
		Nickel, Total	0.23 u	MG/KG	0.23	1.0
		Phosphorus, Total	2530	MG/KG	0.86	1.0
		Lead, Total	1.1	MG/KG	0.30	1.0
		Antimony, Total	0.42 u	MG/KG	0.42	1.0
		Selenium, Total	0.53	MG/KG	0.45	1.0
		Silicon, Total	54.5	MG/KG	2.2	1.0
		Tin, Total	1.0 u	MG/KG	1.0	1.0
		Strontium, Total	8.3	MG/KG	0.01	1.0
		Thallium, Total	0.67 u	MG/KG	0.67	1.0
		Uranium, Total	1.8	MG/KG	0.84	1.0
		Vanadium, Total	0.21	MG/KG	0.09	1.0
		Zinc, Total	34.9	MG/KG	0.15	1.0

Lionville Laboratory, Inc.

INORGANICS DATA SUMMARY REPORT 06/08/06

CLIENT: TNUHANFORD RC-047 K0331 LVL LOT #: 0604L876

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

SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT	DILUTION FACTOR
-007	J11KR8	Silver, Total	0.07 u	MG/KG	0.07	1.0
		Aluminum, Total	17.3	MG/KG	2.2	1.0
		Arsenic, Total	2.2	MG/KG	0.58	1.0
		Boron, Total	3.8	MG/KG	0.23	1.0
		Barium, Total	1.9	MG/KG	0.02	1.0
		Beryllium, Total	0.02 u	MG/KG	0.02	1.0
		Bismuth, Total	0.49 u	MG/KG	0.49	1.0
		Calcium, Total	319	MG/KG	1.6	1.0
		Cadmium, Total	0.07 u	MG/KG	0.07	1.0
		Cobalt, Total	0.14	MG/KG	0.13	1.0
		Chromium, Total	0.70	MG/KG	0.12	1.0
		Copper, Total	13.2	MG/KG	0.11	1.0
		Iron, Total	71.4	MG/KG	3.3	1.0
		Mercury, Total	0.02 u	MG/KG	0.02	1.0
		Potassium, Total	2760	MG/KG	2.2	1.0
		Lithium, Total	0.05	MG/KG	0.03	1.0
		Magnesium, Total	754	MG/KG	0.92	1.0
		Manganese, Total	5.6	MG/KG	0.03	1.0
		Molybdenum, Total	0.55	MG/KG	0.28	1.0
		Sodium, Total	432	MG/KG	0.72	1.0
		Nickel, Total	0.38	MG/KG	0.23	1.0
		Phosphorus, Total	2670	MG/KG	0.86	1.0
		Lead, Total	0.30 u	MG/KG	0.30	1.0
		Antimony, Total	0.54	MG/KG	0.42	1.0
		Selenium, Total	0.67	MG/KG	0.45	1.0
		Silicon, Total	39.5	MG/KG	2.2	1.0
		Tin, Total	1.8	MG/KG	1.0	1.0
		Strontium, Total	3.7	MG/KG	0.01	1.0
		Thallium, Total	0.67 u	MG/KG	0.67	1.0
		Uranium, Total	1.3	MG/KG	0.84	1.0
		Vanadium, Total	0.17	MG/KG	0.09	1.0
		Zinc, Total	41.4	MG/KG	0.15	1.0

Lionville Laboratory, Inc.

INORGANICS DATA SUMMARY REPORT 06/08/06

CLIENT: TNUHANFORD RC-047 K0331 LVL LOT #: 0604L076

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

SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT	DILUTION FACTOR
-008	J11XX9	Silver, Total	0.07 u	MG/KG	0.07	1.0
		Aluminum, Total	19.0	MG/KG	2.4	1.0
		Arsenic, Total	1.5	MG/KG	0.63	1.0
		Boron, Total	4.6	MG/KG	0.25	1.0
		Barium, Total	2.1	MG/KG	0.02	1.0
		Beryllium, Total	0.02 u	MG/KG	0.02	1.0
		Bismuth, Total	0.53 u	MG/KG	0.53	1.0
		Calcium, Total	318	MG/KG	1.7	1.0
		Cadmium, Total	0.07 u	MG/KG	0.07	1.0
		Cobalt, Total	0.14 u	MG/KG	0.14	1.0
		Chromium, Total	0.64	MG/KG	0.13	1.0
		Copper, Total	18.6	MG/KG	0.12	1.0
		Iron, Total	59.8	MG/KG	3.6	1.0
		Mercury, Total	0.02 u	MG/KG	0.02	1.0
		Potassium, Total	2490	MG/KG	2.3	1.0
		Lithium, Total	0.06	MG/KG	0.03	1.0
		Magnesium, Total	764	MG/KG	1.0	1.0
		Manganese, Total	5.5	MG/KG	0.03	1.0
		Molybdenum, Total	0.52	MG/KG	0.30	1.0
		Sodium, Total	477	MG/KG	0.78	1.0
		Nickel, Total	0.40	MG/KG	0.25	1.0
		Phosphorus, Total	2470	MG/KG	0.93	1.0
		Lead, Total	0.32 u	MG/KG	0.32	1.0
		Antimony, Total	0.50	MG/KG	0.45	1.0
		Selenium, Total	0.48 u	MG/KG	0.48	1.0
		Silicon, Total	44.5	MG/KG	2.3	1.0
		Tin, Total	2.2	MG/KG	1.1	1.0
		Strontium, Total	4.6	MG/KG	0.01	1.0
		Thallium, Total	0.72 u	MG/KG	0.72	1.0
		Uranium, Total	2.1	MG/KG	0.91	1.0
		Vanadium, Total	0.19	MG/KG	0.09	1.0
		Zinc, Total	39.3	MG/KG	0.16	1.0

Lionville Laboratory, Inc.

INORGANICS DATA SUMMARY REPORT 06/08/06

CLIENT: TNUHANFORD RC-047 K0331 LVL LOT #: 0604L876

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

SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT	DILUTION FACTOR
-009	J11KR5	Silver, Total	0.07 u	MG/KG	0.07	1.0
		Aluminum, Total	33.6	MG/KG	2.3	1.0
		Arsenic, Total	2.1	MG/KG	0.59	1.0
		Boron, Total	2.8	MG/KG	0.23	1.0
		Barium, Total	1.2	MG/KG	0.02	1.0
		Beryllium, Total	0.02 u	MG/KG	0.02	1.0
		Bismuth, Total	0.49 u	MG/KG	0.49	1.0
		Calcium, Total	485	MG/KG	1.6	1.0
		Cadmium, Total	0.07 u	MG/KG	0.07	1.0
		Cobalt, Total	0.14	MG/KG	0.13	1.0
		Chromium, Total	0.48	MG/KG	0.12	1.0
		Copper, Total	7.0	MG/KG	0.12	1.0
		Iron, Total	104	MG/KG	3.4	1.0
		Mercury, Total	0.02 u	MG/KG	0.02	1.0
		Potassium, Total	2270	MG/KG	2.2	1.0
		Lithium, Total	0.06	MG/KG	0.03	1.0
		Magnesium, Total	608	MG/KG	0.93	1.0
		Manganese, Total	6.6	MG/KG	0.03	1.0
		Molybdenum, Total	0.34	MG/KG	0.28	1.0
		Sodium, Total	460	MG/KG	0.73	1.0
		Nickel, Total	0.64	MG/KG	0.23	1.0
		Phosphorus, Total	2090	MG/KG	0.86	1.0
		Lead, Total	0.89	MG/KG	0.30	1.0
		Antimony, Total	0.44	MG/KG	0.42	1.0
		Selenium, Total	0.46	MG/KG	0.45	1.0
		Silicon, Total	55.2	MG/KG	2.2	1.0
		Tin, Total	1.1	MG/KG	1.0	1.0
		Strontium, Total	3.3	MG/KG	0.01	1.0
		Thallium, Total	0.67 u	MG/KG	0.67	1.0
		Uranium, Total	1.7	MG/KG	0.85	1.0
		Vanadium, Total	0.22	MG/KG	0.09	1.0
		Zinc, Total	34.4	MG/KG	0.15	1.0

Lionville Laboratory, Inc.

INORGANICS DATA SUMMARY REPORT 06/08/06

CLIENT: TNUHANFORD RC-047 K0331 LVL LOT #: 0604L876

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

SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT	DILUTION FACTOR
-010	J11KR1	Silver, Total	0.08 u	MG/KG	0.08	1.0
		Aluminum, Total	22.9	MG/KG	2.8	1.0
		Arsenic, Total	0.81	MG/KG	0.74	1.0
		Boron, Total	3.3	MG/KG	0.29	1.0
		Barium, Total	2.8	MG/KG	0.02	1.0
		Beryllium, Total	0.02 u	MG/KG	0.02	1.0
		Bismuth, Total	0.61 u	MG/KG	0.61	1.0
		Calcium, Total	373	MG/KG	2.0	1.0
		Cadmium, Total	0.08 u	MG/KG	0.08	1.0
		Cobalt, Total	0.17	MG/KG	0.17	1.0
		Chromium, Total	0.30	MG/KG	0.16	1.0
		Copper, Total	10.3	MG/KG	0.14	1.0
		Iron, Total	66.4	MG/KG	4.2	1.0
		Mercury, Total	0.01 u	MG/KG	0.01	1.0
		Potassium, Total	2520	MG/KG	2.7	1.0
		Lithium, Total	0.06	MG/KG	0.04	1.0
		Magnesium, Total	659	MG/KG	1.2	1.0
		Manganese, Total	6.9	MG/KG	0.04	1.0
		Molybdenum, Total	0.42	MG/KG	0.35	1.0
		Sodium, Total	731	MG/KG	0.92	1.0
		Nickel, Total	0.36	MG/KG	0.29	1.0
		Phosphorus, Total	2420	MG/KG	1.1	1.0
		Lead, Total	0.55	MG/KG	0.37	1.0
		Antimony, Total	0.53 u	MG/KG	0.53	1.0
		Selenium, Total	0.57 u	MG/KG	0.57	1.0
		Silicon, Total	37.2	MG/KG	2.7	1.0
		Tin, Total	1.4	MG/KG	1.3	1.0
		Strontium, Total	3.9	MG/KG	0.01	1.0
		Thallium, Total	0.84 u	MG/KG	0.84	1.0
		Uranium, Total	2.7	MG/KG	1.1	1.0
		Vanadium, Total	0.20	MG/KG	0.11	1.0
		Zinc, Total	58.7	MG/KG	0.19	1.0

Lionville Laboratory, Inc.

INORGANICS DATA SUMMARY REPORT 06/08/06

CLIENT: TNUHANFORD RC-047 K0331 LVL LOT #: 0604L876

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

SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT	DILUTION FACTOR
-011	J11KT3	Silver, Total	0.07 u	MG/KG	0.07	1.0
		Aluminum, Total	14.5	MG/KG	2.3	1.0
		Arsenic, Total	1.1	MG/KG	0.59	1.0
		Boron, Total	4.7	MG/KG	0.23	1.0
		Barium, Total	2.2	MG/KG	0.02	1.0
		Beryllium, Total	0.02 u	MG/KG	0.02	1.0
		Bismuth, Total	0.49 u	MG/KG	0.49	1.0
		Calcium, Total	356	MG/KG	1.6	1.0
		Cadmium, Total	0.07 u	MG/KG	0.07	1.0
		Cobalt, Total	0.14	MG/KG	0.13	1.0
		Chromium, Total	0.32	MG/KG	0.12	1.0
		Copper, Total	8.0	MG/KG	0.12	1.0
		Iron, Total	51.9	MG/KG	3.4	1.0
		Mercury, Total	0.02 u	MG/KG	0.02	1.0
		Potassium, Total	2510	MG/KG	2.2	1.0
		Lithium, Total	0.05	MG/KG	0.03	1.0
		Magnesium, Total	662	MG/KG	0.93	1.0
		Manganese, Total	4.5	MG/KG	0.03	1.0
		Molybdenum, Total	0.30	MG/KG	0.28	1.0
		Sodium, Total	466	MG/KG	0.73	1.0
		Nickel, Total	0.52	MG/KG	0.23	1.0
		Phosphorus, Total	2370	MG/KG	0.86	1.0
		Lead, Total	0.30 u	MG/KG	0.30	1.0
		Antimony, Total	0.42 u	MG/KG	0.42	1.0
		Selenium, Total	0.45 u	MG/KG	0.45	1.0
		Silicon, Total	31.8	MG/KG	2.2	1.0
		Tin, Total	1.2	MG/KG	1.0	1.0
		Strontium, Total	5.2	MG/KG	0.01	1.0
		Thallium, Total	0.67 u	MG/KG	0.67	1.0
		Uranium, Total	0.85 u	MG/KG	0.85	1.0
		Vanadium, Total	0.16	MG/KG	0.09	1.0
		Zinc, Total	39.5	MG/KG	0.15	1.0

Lionville Laboratory, Inc.

INORGANICS DATA SUMMARY REPORT 06/08/06

CLIENT: TNUHANFORD RC-047 K0331 LVL LOT #: 0604L876

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

SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT	DILUTION FACTOR
-012	J11KR3	Silver, Total	0.07 u	MG/KG	0.07	1.0
		Aluminum, Total	18.9	MG/KG	2.3	1.0
		Arsenic, Total	1.3	MG/KG	0.59	1.0
		Boron, Total	2.5	MG/KG	0.23	1.0
		Barium, Total	1.3	MG/KG	0.02	1.0
		Beryllium, Total	0.02 u	MG/KG	0.02	1.0
		Bismuth, Total	0.49 u	MG/KG	0.49	1.0
		Calcium, Total	335	MG/KG	1.6	1.0
		Cadmium, Total	0.57	MG/KG	0.07	1.0
		Cobalt, Total	0.16	MG/KG	0.13	1.0
		Chromium, Total	0.28	MG/KG	0.12	1.0
		Copper, Total	18.3	MG/KG	0.12	1.0
		Iron, Total	57.5	MG/KG	3.4	1.0
		Mercury, Total	0.01 u	MG/KG	0.01	1.0
		Potassium, Total	2540	MG/KG	2.2	1.0
		Lithium, Total	0.04	MG/KG	0.03	1.0
		Magnesium, Total	540	MG/KG	0.93	1.0
		Manganese, Total	6.0	MG/KG	0.03	1.0
		Molybdenum, Total	0.36	MG/KG	0.28	1.0
		Sodium, Total	820	MG/KG	0.73	1.0
		Nickel, Total	0.46	MG/KG	0.23	1.0
		Phosphorus, Total	2490	MG/KG	0.86	1.0
		Lead, Total	0.44	MG/KG	0.30	1.0
		Antimony, Total	0.42 u	MG/KG	0.42	1.0
		Selenium, Total	0.45 u	MG/KG	0.45	1.0
		Silicon, Total	38.0	MG/KG	2.2	1.0
		Tin, Total	1.4	MG/KG	1.0	1.0
		Strontium, Total	2.7	MG/KG	0.01	1.0
		Thallium, Total	0.67 u	MG/KG	0.67	1.0
		Uranium, Total	2.5	MG/KG	0.85	1.0
		Vanadium, Total	0.16	MG/KG	0.09	1.0
		Zinc, Total	60.3	MG/KG	0.15	1.0

Lionville Laboratory, Inc.

INORGANICS DATA SUMMARY REPORT 06/08/06

CLIENT: TNUHANFORD RC-047 K0331 LVL LOT #: 0604L876

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

SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT	DILUTION FACTOR
-013	J11KR4	Silver, Total	0.07 u	MG/KG	0.07	1.0
		Aluminum, Total	17.4	MG/KG	2.2	1.0
		Arsenic, Total	1.2	MG/KG	0.58	1.0
		Boron, Total	3.6	MG/KG	0.23	1.0
		Barium, Total	2.7	MG/KG	0.02	1.0
		Beryllium, Total	0.02 u	MG/KG	0.02	1.0
		Bismuth, Total	0.49 u	MG/KG	0.49	1.0
		Calcium, Total	308	MG/KG	1.6	1.0
		Cadmium, Total	0.07 u	MG/KG	0.07	1.0
		Cobalt, Total	0.17	MG/KG	0.13	1.0
		Chromium, Total	0.22	MG/KG	0.12	1.0
		Copper, Total	8.0	MG/KG	0.11	1.0
		Iron, Total	58.5	MG/KG	3.3	1.0
		Mercury, Total	0.01 u	MG/KG	0.01	1.0
		Potassium, Total	2620	MG/KG	2.2	1.0
		Lithium, Total	0.06	MG/KG	0.03	1.0
		Magnesium, Total	722	MG/KG	0.92	1.0
		Manganese, Total	5.9	MG/KG	0.03	1.0
		Molybdenum, Total	0.44	MG/KG	0.28	1.0
		Sodium, Total	469	MG/KG	0.72	1.0
		Nickel, Total	0.52	MG/KG	0.23	1.0
		Phosphorus, Total	2480	MG/KG	0.86	1.0
		Lead, Total	2.2	MG/KG	0.30	1.0
		Antimony, Total	0.42 u	MG/KG	0.42	1.0
		Selenium, Total	0.45 u	MG/KG	0.45	1.0
		Silicon, Total	41.0	MG/KG	2.2	1.0
		Tin, Total	1.2	MG/KG	1.0	1.0
		Strontium, Total	4.0	MG/KG	0.01	1.0
		Thallium, Total	0.67 u	MG/KG	0.67	1.0
		Uranium, Total	0.92	MG/KG	0.84	1.0
		Vanadium, Total	0.17	MG/KG	0.09	1.0
		Zinc, Total	35.5	MG/KG	0.15	1.0

Lionville Laboratory, Inc.

INORGANICS DATA SUMMARY REPORT 06/08/06

CLIENT: TNUHANFORD RC-047 K0331 LVL LOT #: 0604L876

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

SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT	DILUTION FACTOR
-014	J11L34	Silver, Total	0.07 u	MG/KG	0.07	1.0
		Aluminum, Total	15.2	MG/KG	2.3	1.0
		Arsenic, Total	0.72	MG/KG	0.59	1.0
		Boron, Total	4.7	MG/KG	0.23	1.0
		Barium, Total	2.6	MG/KG	0.02	1.0
		Beryllium, Total	0.02 u	MG/KG	0.02	1.0
		Bismuth, Total	0.50 u	MG/KG	0.50	1.0
		Calcium, Total	439	MG/KG	1.6	1.0
		Cadmium, Total	0.07 u	MG/KG	0.07	1.0
		Cobalt, Total	0.14 u	MG/KG	0.14	1.0
		Chromium, Total	0.15	MG/KG	0.13	1.0
		Copper, Total	5.3	MG/KG	0.12	1.0
		Iron, Total	67.8	MG/KG	3.4	1.0
		Mercury, Total	0.02 u	MG/KG	0.02	1.0
		Potassium, Total	2620	MG/KG	2.2	1.0
		Lithium, Total	0.04	MG/KG	0.03	1.0
		Magnesium, Total	826	MG/KG	0.94	1.0
		Manganese, Total	7.1	MG/KG	0.03	1.0
		Molybdenum, Total	0.40	MG/KG	0.28	1.0
		Sodium, Total	427	MG/KG	0.74	1.0
		Nickel, Total	0.29	MG/KG	0.23	1.0
		Phosphorus, Total	2540	MG/KG	0.87	1.0
		Lead, Total	0.30 u	MG/KG	0.30	1.0
		Antimony, Total	0.43 u	MG/KG	0.43	1.0
		Selenium, Total	0.46 u	MG/KG	0.46	1.0
		Silicon, Total	36.8	MG/KG	2.2	1.0
		Tin, Total	1.0 u	MG/KG	1.0	1.0
		Strontium, Total	4.8	MG/KG	0.01	1.0
		Thallium, Total	0.68 u	MG/KG	0.68	1.0
		Uranium, Total	1.1	MG/KG	0.85	1.0
		Vanadium, Total	0.16	MG/KG	0.09	1.0
		Zinc, Total	42.0	MG/KG	0.16	1.0

Lionville Laboratory, Inc.

INORGANICS DATA SUMMARY REPORT 06/08/06

CLIENT: TNUHANFORD RC-047 K0331 LVL LOT #: 0604L876

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

SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT	DILUTION FACTOR
-015	J11KT5	Silver, Total	0.08 u	MG/KG	0.08	1.0
		Aluminum, Total	12.4	MG/KG	2.6	1.0
		Arsenic, Total	0.88	MG/KG	0.67	1.0
		Boron, Total	3.6	MG/KG	0.26	1.0
		Barium, Total	3.0	MG/KG	0.02	1.0
		Beryllium, Total	0.02 u	MG/KG	0.02	1.0
		Bismuth, Total	0.56 u	MG/KG	0.56	1.0
		Calcium, Total	539	MG/KG	1.8	1.0
		Cadmium, Total	0.08 u	MG/KG	0.08	1.0
		Cobalt, Total	0.15 u	MG/KG	0.15	1.0
		Chromium, Total	0.14 u	MG/KG	0.14	1.0
		Copper, Total	3.9	MG/KG	0.13	1.0
		Iron, Total	43.3	MG/KG	3.8	1.0
		Mercury, Total	0.02 u	MG/KG	0.02	1.0
		Potassium, Total	2220	MG/KG	2.5	1.0
		Lithium, Total	0.05	MG/KG	0.03	1.0
		Magnesium, Total	858	MG/KG	1.1	1.0
		Manganese, Total	7.0	MG/KG	0.03	1.0
		Molybdenum, Total	0.48	MG/KG	0.32	1.0
		Sodium, Total	508	MG/KG	0.84	1.0
		Nickel, Total	0.26 u	MG/KG	0.26	1.0
		Phosphorus, Total	2290	MG/KG	0.99	1.0
		Lead, Total	0.34 u	MG/KG	0.34	1.0
		Antimony, Total	0.48 u	MG/KG	0.48	1.0
		Selenium, Total	0.52 u	MG/KG	0.52	1.0
		Silicon, Total	57.3	MG/KG	2.5	1.0
		Tin, Total	1.2 u	MG/KG	1.2	1.0
		Strontium, Total	4.5	MG/KG	0.01	1.0
		Thallium, Total	0.77 u	MG/KG	0.77	1.0
		Uranium, Total	0.97 u	MG/KG	0.97	1.0
		Vanadium, Total	0.14	MG/KG	0.1	1.0
		Zinc, Total	33.1	MG/KG	0.18	1.0

Lionville Laboratory, Inc.

INORGANICS DATA SUMMARY REPORT 06/08/06

CLIENT: TNUHANFORD RC-047 K0331 LVL LOT #: 0604L876

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

SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT	DILUTION FACTOR
-016	J11L32	Silver, Total	0.07 u	MG/KG	0.07	1.0
		Aluminum, Total	15.5	MG/KG	2.2	1.0
		Arsenic, Total	1.7	MG/KG	0.57	1.0
		Boron, Total	3.1	MG/KG	0.22	1.0
		Barium, Total	1.1	MG/KG	0.02	1.0
		Beryllium, Total	0.02 u	MG/KG	0.02	1.0
		Bismuth, Total	0.48 u	MG/KG	0.48	1.0
		Calcium, Total	537	MG/KG	1.5	1.0
		Cadmium, Total	0.07 u	MG/KG	0.07	1.0
		Cobalt, Total	0.13 u	MG/KG	0.13	1.0
		Chromium, Total	0.12 u	MG/KG	0.12	1.0
		Copper, Total	6.0	MG/KG	0.11	1.0
		Iron, Total	40.4	MG/KG	3.3	1.0
		Mercury, Total	0.02 u	MG/KG	0.02	1.0
		Potassium, Total	2430	MG/KG	2.1	1.0
		Lithium, Total	0.04	MG/KG	0.03	1.0
		Magnesium, Total	568	MG/KG	0.91	1.0
		Manganese, Total	5.4	MG/KG	0.03	1.0
		Molybdenum, Total	0.46	MG/KG	0.27	1.0
		Sodium, Total	440	MG/KG	0.71	1.0
		Nickel, Total	0.22 u	MG/KG	0.22	1.0
		Phosphorus, Total	2270	MG/KG	0.84	1.0
		Lead, Total	0.29 u	MG/KG	0.29	1.0
		Antimony, Total	0.45	MG/KG	0.41	1.0
		Selenium, Total	0.44 u	MG/KG	0.44	1.0
		Silicon, Total	42.4	MG/KG	2.1	1.0
		Tin, Total	1.0 u	MG/KG	1.0	1.0
		Strontium, Total	4.6	MG/KG	0.009	1.0
		Thallium, Total	0.65 u	MG/KG	0.65	1.0
		Uranium, Total	1.6	MG/KG	0.82	1.0
		Vanadium, Total	0.10	MG/KG	0.08	1.0
		Zinc, Total	35.6	MG/KG	0.15	1.0

Lionville Laboratory, Inc.

INORGANICS DATA SUMMARY REPORT 06/08/06

CLIENT: TNUHANFORD RC-047 K0331 LVL LOT #: 0604L876

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

SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT	DILUTION FACTOR
-017	J11955	Silver, Total	0.07 u	MG/KG	0.07	1.0
		Aluminum, Total	16.0	MG/KG	2.3	1.0
		Arsenic, Total	1.4	MG/KG	0.59	1.0
		Boron, Total	3.5	MG/KG	0.23	1.0
		Barium, Total	1.4	MG/KG	0.02	1.0
		Beryllium, Total	0.02 u	MG/KG	0.02	1.0
		Bismuth, Total	0.49 u	MG/KG	0.49	1.0
		Calcium, Total	385	MG/KG	1.6	1.0
		Cadmium, Total	0.07 u	MG/KG	0.07	1.0
		Cobalt, Total	0.13 u	MG/KG	0.13	1.0
		Chromium, Total	0.30	MG/KG	0.12	1.0
		Copper, Total	7.7	MG/KG	0.12	1.0
		Iron, Total	51.0	MG/KG	3.4	1.0
		Mercury, Total	0.02 u	MG/KG	0.02	1.0
		Potassium, Total	2470	MG/KG	2.2	1.0
		Lithium, Total	0.04	MG/KG	0.03	1.0
		Magnesium, Total	804	MG/KG	0.93	1.0
		Manganese, Total	5.3	MG/KG	0.03	1.0
		Molybdenum, Total	0.45	MG/KG	0.28	1.0
		Sodium, Total	494	MG/KG	0.73	1.0
		Nickel, Total	0.60	MG/KG	0.23	1.0
		Phosphorus, Total	2550	MG/KG	0.86	1.0
		Lead, Total	0.30 u	MG/KG	0.30	1.0
		Antimony, Total	0.42 u	MG/KG	0.42	1.0
		Selenium, Total	0.45 u	MG/KG	0.45	1.0
		Silicon, Total	37.4	MG/KG	2.2	1.0
		Tin, Total	1.2	MG/KG	1.0	1.0
		Strontium, Total	3.8	MG/KG	0.01	1.0
		Thallium, Total	0.67 u	MG/KG	0.67	1.0
		Uranium, Total	1.9	MG/KG	0.85	1.0
		Vanadium, Total	0.12	MG/KG	0.09	1.0
		Zinc, Total	38.5	MG/KG	0.15	1.0

Lionville Laboratory, Inc.

INORGANICS DATA SUMMARY REPORT 06/08/06

CLIENT: TNUHANFORD RC-047 K0331 LVL LOT #: 0604L876

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

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT	DILUTION FACTOR
-018	J11KT2	Silver, Total	0.50	u	MG/KG	0.50	1.0
		Aluminum, Total	53.8		MG/KG	16.9	1.0
		Arsenic, Total	4.4	u	MG/KG	4.4	1.0
		Boron, Total	7.0		MG/KG	1.7	1.0
		Barium, Total	4.1		MG/KG	0.14	1.0
		Beryllium, Total	0.14	u	MG/KG	0.14	1.0
		Bismuth, Total	3.6	u	MG/KG	3.6	1.0
		Calcium, Total	1100		MG/KG	11.7	1.0
		Cadmium, Total	0.50	u	MG/KG	0.50	1.0
		Cobalt, Total	1.0	u	MG/KG	1.0	1.0
		Chromium, Total	0.93	u	MG/KG	0.93	1.0
		Copper, Total	15.6		MG/KG	0.86	1.0
		Iron, Total	156		MG/KG	24.9	1.0
		Mercury, Total	0.03	u	MG/KG	0.03	1.0
		Potassium, Total	3440		MG/KG	16.2	1.0
		Lithium, Total	0.24		MG/KG	0.21	1.0
		Magnesium, Total	952		MG/KG	6.9	1.0
		Manganese, Total	12.5		MG/KG	0.21	1.0
		Molybdenum, Total	2.1	u	MG/KG	2.1	1.0
		Sodium, Total	570		MG/KG	5.4	1.0
		Nickel, Total	1.7	u	MG/KG	1.7	1.0
		Phosphorus, Total	2970		MG/KG	6.4	1.0
		Lead, Total	2.2	u	MG/KG	2.2	1.0
		Antimony, Total	3.1	u	MG/KG	3.1	1.0
		Selenium, Total	3.4	u	MG/KG	3.4	1.0
		Silicon, Total	67.4		MG/KG	16.2	1.0
		Tin, Total	7.6	u	MG/KG	7.6	1.0
		Strontium, Total	7.2		MG/KG	0.07	1.0
		Thallium, Total	5.0	u	MG/KG	5.0	1.0
		Uranium, Total	10.8		MG/KG	6.3	1.0
		Vanadium, Total	0.74		MG/KG	0.64	1.0
		Zinc, Total	61.1		MG/KG	1.1	1.0

Lionville Laboratory, Inc.

INORGANICS METHOD BLANK DATA SUMMARY PAGE 06/08/06

CLIENT: TNUHANFORD RC-047 K0331 LVL LOT #: 0604L876

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

SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT	DILUTION FACTOR
BLANK1	06L0322-MB1	Silver, Total	0.07 u	MG/KG	0.07	1.0
		Aluminum, Total	2.4 u	MG/KG	2.4	1.0
		Arsenic, Total	0.61 u	MG/KG	0.61	1.0
		Boron, Total	0.46	MG/KG	0.24	1.0
		Barium, Total	0.02	MG/KG	0.02	1.0
		Beryllium, Total	0.02 u	MG/KG	0.02	1.0
		Bismuth, Total	0.51 u	MG/KG	0.51	1.0
		Calcium, Total	3.1	MG/KG	1.6	1.0
		Cadmium, Total	0.07 u	MG/KG	0.07	1.0
		Cobalt, Total	0.14 u	MG/KG	0.14	1.0
		Chromium, Total	0.13 u	MG/KG	0.13	1.0
		Copper, Total	0.12 u	MG/KG	0.12	1.0
		Iron, Total	3.9	MG/KG	3.5	1.0
		Potassium, Total	2.3 u	MG/KG	2.3	1.0
		Lithium, Total	0.05	MG/KG	0.03	1.0
		Magnesium, Total	0.97 u	MG/KG	0.97	1.0
		Manganese, Total	0.03 u	MG/KG	0.03	1.0
		Molybdenum, Total	0.29 u	MG/KG	0.29	1.0
		Sodium, Total	0.76 u	MG/KG	0.76	1.0
		Nickel, Total	0.24 u	MG/KG	0.24	1.0
		Phosphorus, Total	0.90 u	MG/KG	0.90	1.0
		Lead, Total	0.31 u	MG/KG	0.31	1.0
		Antimony, Total	0.44 u	MG/KG	0.44	1.0
		Selenium, Total	0.47 u	MG/KG	0.47	1.0
		Silicon, Total	2.3 u	MG/KG	2.3	1.0
		Tin, Total	1.3	MG/KG	1.1	1.0
		Strontium, Total	0.01	MG/KG	0.01	1.0
		Thallium, Total	0.70 u	MG/KG	0.70	1.0
		Uranium, Total	0.88 u	MG/KG	0.88	1.0
		Vanadium, Total	0.09 u	MG/KG	0.09	1.0
		Zinc, Total	0.35	MG/KG	0.16	1.0
BLANK1	06C0085-MB1	Mercury, Total	0.02 u	MG/KG	0.02	1.0

Lionville Laboratory, Inc.

INORGANICS ACCURACY REPORT 06/08/06

CLIENT: TNUHANFORD RC-047 K0331

LVL LOT #: 0604L876

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

SAMPLE	SITE ID	ANALYTE	SPIKED SAMPLE	INITIAL RESULT	SPIKED AMOUNT	%RECOV	DILUTION FACTOR(SPK)
-002	J11KR6	Silver, Total	4.4	0.07u	4.9	89.8	1.0
		Aluminum, Total	222	24.9	196	100.5	1.0
		Arsenic, Total	175	1.1	196	88.8	1.0
		Boron, Total	92.6	3.0	98.0	91.4	1.0
		Barium, Total	183	1.7	196	92.5	1.0
		Beryllium, Total	4.6	0.02u	4.9	93.9	1.0
		Bismuth, Total	449	0.50u	490	91.6	1.0
		Calcium, Total	2650	306	2450	95.6	1.0
		Cadmium, Total	4.5	0.07u	4.9	91.8	1.0
		Cobalt, Total	45.3	0.18	49.0	92.1	1.0
		Chromium, Total	18.7	1.9	19.6	85.7	1.0
		Copper, Total	29.3	5.6	24.5	96.7	1.0
		Iron, Total	287	83.7	98.0	207.2	1.0
		Potassium, Total	5000	2550	2450	99.9	1.0
		Lithium, Total	98.1	0.05	98.0	100.0	1.0
		Magnesium, Total	3010	798	2450	90.4	1.0
		Manganese, Total	53.8	5.3	49.0	99.0	1.0
		Molybdenum, Total	89.9	0.35	98.0	91.4	1.0
		Sodium, Total	2620	438	2450	89.1	1.0
		Nickel, Total	45.8	0.99	49.0	91.4	1.0
		Phosphorus, Total	2900	2600	490	62.0*	1.0
		Lead, Total	45.0	0.37	49.0	91.1	1.0
		Antimony, Total	43.5	0.43u	49.0	88.8	1.0
		Selenium, Total	173	0.52	196	87.9	1.0
		Silicon, Total	207	51.6	98.0	158.6	1.0
		Tin, Total	85.5	1.0 u	98.0	87.2	1.0
		Strontium, Total	94.7	3.3	98.0	93.3	1.0
		Thallium, Total	178	0.69u	196	90.8	1.0
		Uranium, Total	212	1.9	~~490~~	~~43.0~~ 85.9	1.0
		Vanadium, Total	45.8	0.24	49.0	93.0	1.0
		Zinc, Total	80.7	34.9	49.0	93.5	1.0

corrected entry pw 6/8/06

Lionville Laboratory, Inc.

INORGANICS ACCURACY REPORT 06/08/06

CLIENT: TNUHANFORD RC-047 K0331 LVL LOT #: 0604L876

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

SAMPLE	SITE ID	ANALYTE	SPIKED SAMPLE	INITIAL RESULT	SPIKED AMOUNT	%RECOV	DILUTION FACTOR(SPK)
-003	J11KP9	Mercury, Total	0.15	0.02u	0.15	99.3	1.0

Lionville Laboratory, Inc.

INORGANICS PRECISION REPORT 06/08/06

CLIENT: TNUHANFORD RC-047 K0331 LVL LOT #: 0604L876

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

SAMPLE	SITE ID	ANALYTE	INITIAL RESULT	REPLICATE	RPD	DILUTION FACTOR (REP)
-001REP	J11KR0	Silver, Total	0.07u	0.07u	NC	1.0
		Aluminum, Total	34.4	29.6	15.0	1.0
		Arsenic, Total	1.2	1.3	8.0	1.0
		Boron, Total	5.0	4.9	2.0	1.0
		Barium, Total	2.5	2.3	8.3	1.0
		Beryllium, Total	0.02u	0.02u	NC	1.0
		Bismuth, Total	0.50u	0.50u	NC	1.0
		Calcium, Total	343	418	19.9	1.0
		Cadmium, Total	0.07u	0.07u	NC	1.0
		Cobalt, Total	0.14	0.17	19.9	1.0
		Chromium, Total	0.44	0.55	23.0	1.0
		Copper, Total	6.4	7.0	9.0	1.0
		Iron, Total	112	103	7.7	1.0
		Potassium, Total	2410	2280	5.5	1.0
		Lithium, Total	0.07	0.06	17.1	1.0
		Magnesium, Total	714	758	6.0	1.0
		Manganese, Total	6.8	7.5	9.8	1.0
		Molybdenum, Total	0.28u	0.28u	NC	1.0
		Sodium, Total	417	374	11.0	1.0
		Nickel, Total	0.37	0.44	16.9	1.0
		Phosphorus, Total	2370	2310	2.8	1.0
		Lead, Total	0.30u	0.30u	NC	1.0
		Antimony, Total	0.44	0.53	17.7	1.0
		Selenium, Total	0.46u	0.46u	NC	1.0
		Silicon, Total	61.0	55.1	10.2	1.0
		Tin, Total	1.1	1.0 u	~~NC~~ 200	1.0
		Strontium, Total	6.0	5.7	5.1 corrected	1.0
		Thallium, Total	0.68u	0.68u	NC entry PW	1.0
		Uranium, Total	2.2	2.4	8.7 6/8/06	1.0
		Vanadium, Total	0.31	0.25	21.5	1.0
		Zinc, Total	32.3	37.5	14.9	1.0

Lionville Laboratory, Inc.

INORGANICS PRECISION REPORT 06/08/06

CLIENT: TNUHANFORD RC-047 K0331 LVL LOT #: 0604L876

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

SAMPLE	SITE ID	ANALYTE	INITIAL RESULT	REPLICATE	RPD	DILUTION FACTOR(REP)
-003REP	J11KP9	Mercury, Total	0.02u	0.01u	NC	1.0

Lionville Laboratory, Inc.

INORGANICS LABORATORY CONTROL STANDARDS REPORT 06/08/06

CLIENT: TNUHANFORD RC-047 K0331 LVL LOT #: 0604L876

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

SAMPLE	SITE ID	ANALYTE	SPIKED SAMPLE	SPIKED AMOUNT	UNITS	%RECOV
LCS1	06L0322-LC1	Silver, LCS	48.6	50.0	MG/KG	97.2
		Aluminum, LCS	444	500	MG/KG	88.8
		Arsenic, LCS	951	1000	MG/KG	95.1
		Boron, LCS	482	500	MG/KG	96.5
		Barium, LCS	488	500	MG/KG	97.5
		Beryllium, LCS	24.7	25.0	MG/KG	98.8
		Bismuth, LCS	481	500	MG/KG	96.3
		Calcium, LCS	2520	2500	MG/KG	100.6
		Cadmium, LCS	24.9	25.0	MG/KG	99.6
		Cobalt, LCS	248	250	MG/KG	99.2
		Chromium, LCS	49.9	50.0	MG/KG	99.8
		Copper, LCS	123	125	MG/KG	98.3
		Iron, LCS	504	500	MG/KG	100.9
		Potassium, LCS	2230	2500	MG/KG	89.3
		Lithium, LCS	507	500	MG/KG	101.4
		Magnesium, LCS	2450	2500	MG/KG	98.1
		Manganese, LCS	75.7	75.0	MG/KG	100.9
		Molybdenum, LCS	506	500	MG/KG	101.1
		Sodium, LCS	2290	2500	MG/KG	91.4
		Nickel, LCS	200	200	MG/KG	100
		Phosphorus, LCS	474	500	MG/KG	94.7
		Lead, LCS	248	250	MG/KG	99.1
		Antimony, LCS	290	300	MG/KG	96.5
		Selenium, LCS	923	1000	MG/KG	92.3
		Silicon, LCS	388	500	MG/KG	77.6
		Tin, LCS	505	500	MG/KG	101.0
		Strontium, LCS	495	500	MG/KG	99.0
		Thallium, LCS	988	1000	MG/KG	98.8
		Uranium, LCS	228	250 ~~900~~ *	MG/KG	* ~~45.6~~ 91.3
		Vanadium, LCS	246	250	MG/KG	98.6
		Zinc, LCS	96.9	100	MG/KG	96.9
LCS1	06C0085-LC1	Mercury, LCS	6.8	6.2	MG/KG	109.3

* corrected entries PW 6/8/06

Lionville Laboratory Use Only

06041876

Custody Transfer Record/Lab Work Request

LVLI

FIELD PERSONNEL: COMPLETE ONLY SHADED AREAS

See SRC

Client: TNU Hanford RC-047

Est. Final Proj. Sampling Date:

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

Project Contact/Phone #:

Lionville Laboratory Project Manager: Arlette Johnson

QC: Spec Del: Std TAT: 30 Days

Date Rec'd: 4-27-06 Date Due: 5/27/06

		A							B					
Refrigerator #		3							3					
#/Type Container	Liquid													
	Solid	1pl							1pl					
Volume	Liquid													
	Solid	50gr (125)							15gr (125)					
Preservatives		—							—					
ANALYSES REQUESTED →		ORGANIC						INORG						
		VOA	BNA	Pest/PCB	Herb			Metal + Hg	CN	Metals + Hg				
		Lionville Laboratory Use Only												
				CLOSEH				METALS(1)		METALS(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	J11KR0			SO	4-17-06	0949			X				X						
002	J11KR6					0924			X				X						
003	J11KP9					1012			X				X						
004	J11KR7					1030			X						X				
005	J11XX8				4-25-06	1232			X						X				
006	J11KT1				4-17-06	1022									X				
007	J11KR8					1024			X						X				
008	J11XX9				4-25-06	1240			X						X				
009	J11KR5					1150			X				X						
010	J11KR1					1131			X				X						

Special Instructions:

METALS(1) = HSL + Bi, B, Li, Mo, P, Si, Sr, Sn, U

DATE/REVISIONS:

1. Matrix = Solids.
2.
3.
4.
5.
6.

Run MATRIX QC.

Relinquished by	Received by	Date	Time
Fed Ex	J. Smith	4-27-06	0940

Relinquished by	Received by	Date	Time

Relinquished by	Received by	Date	Time
"COMPOSITE WASTE"	ORIGINAL REWRITTEN		

000000049

Lionville Laboratory Use Only

0604L876

Custody Transfer Record/Lab Work Request

LVLI

FIELD PERSONNEL: COMPLETE ONLY SHADED AREAS

Client TNU Hanford RC-047

Est. Final Proj. Sampling Date

Project #

Project Contact/Phone # per pg 1

Lionville Laboratory Project Manager Dilette Johnson

QC Del TAT

Date Rec'd 4-27-06 Date Due

		A	B
Refrigerator #		3	3
#/Type Container	Liquid		
	Solid	1pl	1pl
Volume	Liquid		
	Solid	50g (125)	15g (125)
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	Metals + Hg
									CL-OBH					METALS(1)		METALS(1)
011	J11KT3			SO	4-25-06	1140										X
012	J11KR3					1127			X					X		
013	J11KR4					1120			X					X		
014	J11L34					1040										X
015	J11KT5					1210										X
016	J11L32					1045										X
017	J11955					1110										X
018	J11KT2				4-26-06	0724										X

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:

METALS(1) - HSL+Bi, B, Li, Mo, P, Si, Sr, Sn, U

DATE/REVISIONS:

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

Relinquished by	Received by	Date	Time
FedEx	D. Smith	4-27-06	0946

Relinquished by	Received by	Date	Time

Relinquished by	Received by	Date	Time

0500000050

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-047-301	Page 1 of 1

Collector: TILLER, B. TR KLINCKMAN	Company Contact: JOAN KESSNER	Telephone No.: 375-4688	Project Coordinator: KESSNER, JH
Price Code: 9N	Data Turnaround: 45 Days	Air Quality ☐	
Project Designation: 100 & 300 Area Component of the RCBRA Sediment and Ti	Sampling Location: BORROW PIT 18 INVERTEBRATES	SAF No.: RC-047	
Ice Chest No.: AFS-04-052	Field Logbook No.: EL-1595	COA: BESRAS6520	Method of Shipment: FED EX
Shipped To: EBERLINE SERVICES LIONVILLE	Offsite Property No.: A060 378	Bill of Lading/Air Bill No.: SEE OSPC	

POSSIBLE SAMPLE HAZARDS/REMARKS

POTENTIAL RADIOACTIVE <DOT LIMITS

Special Handling and/or Storage

COOL 4C "MATRIX COMPOSED OF INSECTS"

Preservation	Cool 4C	Cool 4C									
Type of Container	P	aG									
No. of Container(s)	10	1									
Volume	15g	50g									
SAMPLE ANALYSIS	See item (1) in Special Instructions.	Pesticides - 8081									
Sample No. / Matrix * / Sample Date / Sample Time											
J11KR0 / OTHER SOLID / APR 17 2006 / 09:44	X	X									

CHAIN OF POSSESSION	Date/Time	Sign/Print Names: Received By/Stored In	Date/Time
Relinquished By/Removed From: TR KLINCKMAN	APR 17 2006 1014	Received By/Stored In: EAS LOCKED STORAGE	APR 17 2006 1014
Relinquished By/Removed From: EAS LOCKED STORAGE	04-26-06 0930	Received By/Stored In: TR Klinckman	4-26-06 0930
Relinquished By/Removed From: TR Klinckman	4-26-06 1500	Received By/Stored In: Fed Ex	
Relinquished By/Removed From: Fed Ex	4-27-06 0940	Received By/Stored In: D. Smith	4-27-06 0940
Relinquished By/Removed From		Received By/Stored In	
Relinquished By/Removed From		Received By/Stored In	

SPECIAL INSTRUCTIONS

Perform pesticides and ICP metals in this order as sample is available.

(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]; Mercury - 7471 - (CV)

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

BHI-EE-011 (08/29/2005)

150000051

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-047-307	Page 1 of 1

Collector: TILLER, B. TR KLINCKMAN	Company Contact: JOAN KESSNER	Telephone No.: 375-4688	Project Coordinator: KESSNER, JH
Price Code: 9N	Data Turnaround: 45 Days	Air Quality ☐	
Project Designation: 100 & 300 Area Component of the RCBRA Sediment and Ti	Sampling Location: 600-181 INVERTEBRATES		SAF No.: RC-047
Ice Chest No.: AFS-04-052	Field Logbook No.: EL-1595	COA: BESRAS6520	Method of Shipment: FED EX
Shipped To: EBERLINE SERVICES LIONVILLE	Offsite Property No.: A060378		Bill of Lading/Air Bill No.: SEE OSPC

POSSIBLE SAMPLE HAZARDS/REMARKS

POTENTIAL RADIOACTIVE <DOT LIMITS

Special Handling and/or Storage

COOL 4C "MATRIX COMPOSED OF INSECTS"

Preservation	Cool 4C	Cool 4C										
Type of Container	P	aG										
No. of Container(s)	10	1										
Volume	15g	50g										
SAMPLE ANALYSIS	See item (1) in Special Instructions.	Pesticides - 8081										
Sample No.	Matrix *	Sample Date	Sample Time									
J11KR6	OTHER SOLID	APR 17 2006	0924	X	X							

CHAIN OF POSSESSION	Sign/Print Names		
Relinquished By/Removed From: TR KLINCKMAN	Date/Time: APR 17 2006 09 43	Received By/Stored In: EAS LOCKED STORAGE	Date/Time: APR 17 2006 09 43
Relinquished By/Removed From: EAS LOCKED STORAGE	Date/Time: 04-26-06 0930	Received By/Stored In: FR Edmundson	Date/Time: 4-26-06 0930
Relinquished By/Removed From: FR Edmundson WCH	Date/Time: 4-26-06 1500	Received By/Stored In: Fed Ex	Date/Time:
Relinquished By/Removed From: Fed Ex	Date/Time: 4-27-06 0940	Received By/Stored In: [illegible]	Date/Time: 4-27-06 0940
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time

SPECIAL INSTRUCTIONS

Perform pesticides and ICP metals in this order as sample is available.

(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}; Mercury - 7471 - (CV)

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
Ve=Vegetation
X=Other

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

BHI-EE-011 (08/29/2005)

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-047-300	Page 1 of 1

Collector TILLER, B. JR KLINCKMAN	Company Contact JOAN KESSNER	Telephone No. 375-4688	Project Coordinator KESSNER, JH
Price Code 9N	Data Turnaround 45 Days	Air Quality ☐	
Project Designation 100 & 300 Area Component of the RCBRA Sediment and Ti	Sampling Location BORROW PIT 14 INVERTEBRATES	SAF No. RC-047	
Ice Chest No. AFS-04-052	Field Logbook No. EL-1595	COA BESRAS6520	Method of Shipment FED EX
Shipped To EBERLINE SERVICES, LIONVILLE	Offsite Property No. A060378	Bill of Ladine/Air Bill No. SEE OSPC	

POSSIBLE SAMPLE HAZARDS/REMARKS

POTENTIAL RADIOACTIVE <DOT LIMITS

Special Handling and/or Storage

COOL 4C "MATRIX COMPOSED OF INSECTS"

Preservation	Cool 4C	Cool 4C										
Type of Container	G/P	aG										
No. of Container(s)	10	1										
Volume	15g	50g										
SAMPLE ANALYSIS	ICP Metals - 6010 (Full List); Mercury - 7471 - (CV)	Pesticides - 8081										
Sample No.	Matrix *	Sample Date	Sample Time									
J11KP9	OTHER SOLID	APR 17 2006	1012	X	X							

CHAIN OF POSSESSION	Sign/Print Names		
Relinquished By/Removed From: JR KLINCKMAN	Date/Time: APR 17 2006 1020	Received By/Stored In: EAS LOCKED STORAGE	Date/Time: APR 17 2006 1020
Relinquished By/Removed From: EAS LOCKED STORAGE	Date/Time: 04-26-06 0930	Received By/Stored In: JR Klinckman 4-26-06	Date/Time: 0930
Relinquished By/Removed From: JR Klinckman WCH 4-26-06 1500	Date/Time:	Received By/Stored In: Fed Ex	Date/Time:
Relinquished By/Removed From: Fed Ex 4-27-06 0940	Date/Time:	Received By/Stored In: D Smith 4-27-06 0940	Date/Time:
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time

SPECIAL INSTRUCTIONS

Perform pesticides and ICP metals in this order as sample is available.

Matrix *

SaSoil
SE=Sediment
SO=Solid
Sl=Sludge
W = Water
O=Oil
A=Air
DS=Drum Solids
DL=Drum Liquids
T=Tissue
Wi=Wipe
L=Liquid
Ve=Vegetation
Xo=Other

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

BHI-EE-011 (08/29/2005)

000000053

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-047-308	Page 1 of 1

Collector: TILLER, B. TR KLINCKMAN	Company Contact: JOAN KESSNER	Telephone No.: 375-4688	Project Coordinator: KESSNER, JH
Price Code: 9N	Data Turnaround: 45 Days	Air Quality ☐	
Project Designation: 100 & 300 Area Component of the RCBRA Sediment and Ti	Sampling Location: 628-1 INVERTEBRATES	SAF No.: RC-047	
Ice Chest No.: AFS-04-052	Field Logbook No.: EL-1595	COA: BESRAS6520	Method of Shipment: FED EX
Shipped To: EBERLINE SERVICES / LIONVILLE	Offsite Property No.: A060378	Bill of Lading/Air Bill No.: SEE OSPC	

POSSIBLE SAMPLE HAZARDS/REMARKS

POTENTIAL RADIOACTIVE <DOT LIMITS

Special Handling and/or Storage

COOL 4C "MATRIX COMPOSED OF INSECTS"

Preservation	Cool 4C	Cool 4C	Cool 4C
Type of Container	P	aG	G/P
No. of Container(s)	1	1	1
Volume	15g	50g	15g

SAMPLE ANALYSIS

Sample No.	Matrix *	Sample Date	Sample Time	See item (1) in Special Instructions.	Pesticides - 8081	ICP Metals - 6010 (Full List); Mercury - 7471 - (CV)
J11KR7	OTHER SOLID	04-17-06	10:30	X	X	
J11XX8	OTHER SOLID	~~04-17-06~~	~~10:30~~	X	X	
		04-25-06	12:32			
		04-25-06	1100			

CHAIN OF POSSESSION — Sign/Print Names

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
TR KLINCKMAN	04-17-06 10:40	EAS LOCKED STORAGE	04-17-06 10:40
EAS LOCKED STORAGE	04-25-06 12:20	TR KLINCKMAN	04-25-06 12:20
TR KLINCKMAN	04-25-06 12:40	EAS LOCKED STORAGE	04-25-06 12:40
EAS LOCKED STORAGE	04-26-06 0930	TR Klinckman	4-26-06 0930
TR Klinckman	4-26-06 1500	Fed Ex	
Fed Ex	4-27-06 0940		4-27-06 0940

SPECIAL INSTRUCTIONS

Perform pesticides and ICP metals in this order as sample is available.

(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 }; Mercury - 7471 - (CV)

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

BHI-EE-011 (08/29/2005)

000000054

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-047-312	Page 1 of 1

Collector TILLER, B. TR KLINCKMAN	**Company Contact** JOAN KESSNER **Telephone No.** 375-4688	**Project Coordinator** KESSNER, JH	**Price Code** 9N **Data Turnaround** 45 Days
Project Designation 100 & 300 Area Component of the RCBRA Sediment and Ti	**Sampling Location** 116-F-1 INVERTEBRATES	**SAF No.** RC-047	**Air Quality** ☐
Ice Chest No. AFS-04-052	**Field Logbook No.** EL-1595 / **COA** BESRAS6520	**Method of Shipment** FED EX	
Shipped To EBERLINE SERVICES (LIONVILLE)	**Offsite Property No.** A060378	**Bill of Lading/Air Bill No.** SEE OSPC	

POSSIBLE SAMPLE HAZARDS/REMARKS

POTENTIAL RADIOACTIVE <DOT LIMITS

Special Handling and/or Storage

COOL 4C "MATRIX COMPOSED OF INSECTS"

Preservation	Cool 4C
Type of Container	P
No. of Container(s)	1
Volume	15g

SAMPLE ANALYSIS — See item (1) in Special Instructions.

Sample No.	Matrix *	Sample Date	Sample Time	
J11KT1	OTHER SOLID	APR 17 2006	1022	X

CHAIN OF POSSESSION — **Sign/Print Names**

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
TR KLINCKMAN	APR 17 2006 1022	EAS LOCKED STORAGE	APR 17 2006 1024
EAS LOCKED STORAGE	0930	[illegible]	0930
[illegible]	1500	Fed Ex	
Fed Ex	4-27-06 0940	[illegible]	4-27-06 0940

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]; Mercury - 7471 - (CV)

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

BHI-EE-011 (08/29/2005)

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-047-309	Page 1 of 1

Collector: TILLER, B. TR KLINCKMAN	Company Contact: JOAN KESSNER	Telephone No.: 375-4688	Project Coordinator: KESSNER, JH
Price Code: 9N	Data Turnaround: 45 Days	Air Quality ☐	
Project Designation: 100 & 300 Area Component of the RCBRA Sediment and Ti	Sampling Location: 600-171 INVERTEBRATES	SAF No.: RC-047	
Ice Chest No.: AFS-04-052	Field Logbook No.: EL-1595	COA: BESRAS6520	Method of Shipment: FED EX
Shipped To: EBERLINE SERVICES, LIONVILLE	Offsite Property No.: A060378	Bill of Lading/Air Bill No.: SEE OSPC	

POSSIBLE SAMPLE HAZARDS/REMARKS

POTENTIAL RADIOACTIVE <DOT LIMITS

Special Handling and/or Storage

COOL 4C "MATRIX COMPOSED OF INSECTS"

Preservation	Cool 4C	Cool 4C	Cool 4C								
Type of Container	P	aG	G/P								
No. of Container(s)	1	1	1								
Volume	15g	50g	15g								
SAMPLE ANALYSIS	See item (1) in Special Instructions.	Pesticides - 8081	ICP Metals - 6010 (Full List); Mercury - 7471 - (CV)								
Sample No. / Matrix * / Sample Date / Sample Time											
J11KR8 / OTHER SOLID / 04-17-06 / 10:24	X	X									
J11XX9 / OTHER SOLID / 04-17-06 / ~~10:24~~	X	X									
ICG 04-26-06 / ~~10:27~~											
12:40	ICG	04-25-06									

CHAIN OF POSSESSION	Sign/Print Names	Date/Time	Received By/Stored In	Date/Time
Relinquished By/Removed From: TR KLINCKMAN		04-17-06 10:30	EAS LOCKED STORAGE	04-17-06 10:30
Relinquished By/Removed From: EAS LOCKED STORAGE		04-25-06 12:30	TR KLINCKMAN	04-25-06 12:30
Relinquished By/Removed From: TR KLINCKMAN		04-25-06 12:45	EAS LOCKED STORAGE	04-25-06 12:45
Relinquished By/Removed From: EAS LOCKED STORAGE		04-26-06 0930	Received By/Stored In: JR Edmundson	4-26-06 0930
Relinquished By/Removed From: WCH JR Edmundson		4-26-06 1500	Received By/Stored In: Fed Ex	
Relinquished By/Removed From:		4-27-06 0940	Received By/Stored In: D Smith	4-27-06 0940

SPECIAL INSTRUCTIONS

Perform pesticides and ICP metals in this order as sample is available.

(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}; Mercury - 7471 - (CV)

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

BHI-EE-011 (08/29/2005)

65000000

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-047-306	Page 1 of 1

Collector: TILLER, B. TR KLINCKMAN	Company Contact: JOAN KESSNER	Telephone No.: 375-4688	Project Coordinator: KESSNER, JH
Price Code: 9N	Data Turnaround: 45 Days	Air Quality ☐	
Project Designation: 100 & 300 Area Component of the RCBRA Sediment and Ti	Sampling Location: 600-208 INVERTEBRATES	SAF No.: RC-047	
Ice Chest No.: AFS-04-052	Field Logbook No.: EL-1595	COA: BESRAS6520	Method of Shipment: FED EX
Shipped To: EBERLINE SERVICES LIONVILLE	Offsite Property No.: A060378	Bill of Lading/Air Bill No.: SEE OSPC	

POSSIBLE SAMPLE HAZARDS/REMARKS

POTENTIAL RADIOACTIVE <DOT LIMITS

Special Handling and/or Storage

COOL 4C "MATRIX COMPOSED OF INSECTS"

Preservation	Cool 4C	Cool 4C									
Type of Container	P	aG									
No. of Container(s)	1	1									
Volume	15g	50g									
SAMPLE ANALYSIS	See item (1) in Special Instructions.	Pesticides - 8081									
ICG 04-25-06											
Sample No.	Matrix *	Sample Date	Sample Time								
J11KR5	OTHER SOLID	APR 17 2006	11:50	X	X						
		25									

CHAIN OF POSSESSION 04-25-06	Sign/Print Names 04-25-06
Relinquished By/Removed From: TR KLINCKMAN Date/Time: APR 17 2006 11:55	Received By/Stored In: EAS LOCKED STORAGE Date/Time: APR 17 2006 11:55
Relinquished By/Removed From: EAS LOCKED STORAGE Date/Time: 04-26-06 0930	Received By/Stored In: 4-26-06 0930
Relinquished By/Removed From: WCH Date/Time: 4-26-06 1500	Received By/Stored In: Fed Ex Date/Time:
Relinquished By/Removed From: 4-27-06 0940	Received By/Stored In: 4-27-06 0940
Relinquished By/Removed From: Date/Time:	Received By/Stored In: Date/Time:
Relinquished By/Removed From: Date/Time:	Received By/Stored In: Date/Time:

SPECIAL INSTRUCTIONS

Perform pesticides and ICP metals in this order as sample is available.

(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]; Mercury - 7471 - (CV)

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

BHI-EE-011 (08/29/2005)

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-047-302	Page 1 of 1

Collector TILLER, B. TR KLINGAMAN	Company Contact JOAN KESSNER	Telephone No. 375-4688	Project Coordinator KESSNER, JH	Price Code 9N	Data Turnaround 45 Days
Project Designation 100 & 300 Area Component of the RCBRA Sediment and Ti	Sampling Location 600-23 INVERTEBRATES		SAF No. RC-047	Air Quality ☐	
Ice Chest No. AFS-04-052	Field Logbook No. EL-1595	COA BESRAS6520	Method of Shipment FED EX		
Shipped To EBERLINE SERVICES LIONVILLE	Offsite Property No. A060378		Bill of Lading/Air Bill No. SEE OSPC		

POSSIBLE SAMPLE HAZARDS/REMARKS

POTENTIAL RADIOACTIVE <DOT LIMITS

Special Handling and/or Storage

COOL 4C "MATRIX COMPOSED OF INSECTS"

Preservation	Cool 4C	Cool 4C									
Type of Container	P	aG									
No. of Container(s)	X0	1									
Volume	15g	50g									
SAMPLE ANALYSIS	See item (1) in Special Instructions.	Pesticides - 8081									

Sample No.	Matrix *	Sample Date	Sample Time										
J11KR1	OTHER SOLID	APR 17 2006	11:31	X	X								
	ICG	25											
	04-25-06												

CHAIN OF POSSESSION 04-25-06 **Sign/Print Names** 04-25-06

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
TR KLINGAMAN	APR 17 2006 11:35	EAS LOCKED STORAGE	APR 17 2006 11:35
EAS LOCKED STORAGE	25 04-26-06 0530	ICG-25	04-26-06 0930
ICG	4-26-06 1500	Fed Ex	
Fed Ex	4-27-06 0940		4-27-06 0940

SPECIAL INSTRUCTIONS

Perform pesticides and ICP metals in this order as sample is available.

(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]; Mercury - 7471 - (CV)

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

BHI-EE-011 (08/29/2005)

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-047-314	Page 1 of 1
Collector: TILLER, B. TR KLINCKMAN	Company Contact: JOAN KESSNER; Telephone No.: 375-4688	Project Coordinator: KESSNER, JH	Price Code: 9N; Data Turnaround: 45 Days
Project Designation: 100 & 300 Area Component of the RCBRA Sediment and Ti	Sampling Location: 300-49 INVERTEBRATES	SAF No.: RC-047	Air Quality ☐
Ice Chest No.: AFS-04-052	Field Logbook No.: EL-1595; COA: BESRAS6520	Method of Shipment: FED EX	
Shipped To: EBERLINE SERVICES (LIONVILLE)	Offsite Property No.: A060378	Bill of Lading/Air Bill No.: SEE OSPC	

POSSIBLE SAMPLE HAZARDS/REMARKS

POTENTIAL RADIOACTIVE <DOT LIMITS

Special Handling and/or Storage

COOL 4C "MATRIX COMPOSED OF INSECTS"

Preservation	COOL 4C ~~None~~	Cool 4C									
Type of Container	G/P	P									
No. of Container(s)	1	1									
Volume	10g	15g									
SAMPLE ANALYSIS	See item (1) in Special Instructions.	See item (2) in Special Instructions.									

Sample No.	Matrix *	Sample Date	Sample Time									
J11KT3	OTHER SOLID	04-25-06	11:40		X							

CHAIN OF POSSESSION — Sign/Print Names

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
TR KLINCKMAN	04-25-06 11:42	EAS LOCKED STORAGE	04-25-06 11:42
EAS LOCKED STORAGE	04-26-06 0930	[illegible] Edson / TR Klinckman	4-26-06 0930
TR Klinckman / WCH	4-26-06 1500	Fed Ex	
Fed Ex	4-27-06 0940	D. Smith	4-27-06 0940

SPECIAL INSTRUCTIONS

(1) ~~Strontium-89,90 - Total Sr; Isotopic Thorium (Thorium-232)~~; Isotopic Uranium (Uranium-233/234, Uranium-235, Uranium-238); ~~Isotopic Plutonium~~ 8/8 3236

(2) 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); Mercury - 7471 - (CV)

Matrix *

SoSoil
SE=Sediment
SOs=Solid
Sl=Sludge
W = Water
O=Oil
A=Air
DS=Drum Solids
DL=Drum Liquids
T=Tissue
Wi=Wipe
Li=Liquid
V=Vegetation
X=Other

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

BHI-EE-011 (08/29/2005)

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-047-304	Page 1 of 1

Collector: TILLER, B. TR KLINCKMAN	Company Contact: JOAN KESSNER	Telephone No.: 375-4688	Project Coordinator: KESSNER, JH
Price Code: 9N	Data Turnaround: 45 Days	Air Quality ☐	
Project Designation: 100 & 300 Area Component of the RCBRA Sediment and Ti	Sampling Location: 600-139 INVERTEBRATES		SAF No.: RC-047
Ice Chest No.: AFS-04-052	Field Logbook No.: EL-1595	COA: BESRAS6520	Method of Shipment: FED EX
Shipped To: EBERLINE SERVICES / LIONVILLE	Offsite Property No.: A060378		Bill of Lading/Air Bill No.: SEE OSPC

POSSIBLE SAMPLE HAZARDS/REMARKS

POTENTIAL RADIOACTIVE <DOT LIMITS

Special Handling and/or Storage

COOL 4C "MATRIX COMPOSED OF INSECTS"

Preservation	Cool 4C	Cool 4C									
Type of Container	P	aG									
No. of Container(s)	10	1									
Volume	15g	50g									
SAMPLE ANALYSIS	See item (1) in Special Instructions.	Pesticides - 8081									

04-25-06

Sample No.	Matrix *	Sample Date	Sample Time										
J11KR3	OTHER SOLID	APR 25 2006	11:29	X	X								
	ICG												

CHAIN OF POSSESSION 04-25-06 Sign/Print Names 04-25-06

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
TR KLINCKMAN ICG	APR 17 2006 11:30	EAS LOCKED STORAGE	APR 17 2006 11:30
EAS LOCKED STORAGE 25	04-26-06 0930	ICG 25	04-26-06 0930
ICG	4-26-06 1500	Fed Ex	
Fed Ex	4-27-06 0940		4-27-06 0940

SPECIAL INSTRUCTIONS

Perform pesticides and ICP metals in this order as sample is available.

(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]; Mercury - 7471 - (CV)

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
K=Other

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

3HI-EE-011 (08/29/2005)

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-047-305	Page 1 of 1

Collector: TILLER, B. TR KLINCKMAN	Company Contact: JOAN KESSNER	Telephone No.: 375-4688	Project Coordinator: KESSNER, JH
Price Code: 9N	Data Turnaround: 45 Days	Air Quality ☐	
Project Designation: 100 & 300 Area Component of the RCBRA Sediment and Ti	Sampling Location: 600-204 INVERTEBRATES	SAF No.: RC-047	
Ice Chest No.: AFS-04-052	Field Logbook No.: EL-1595	COA: BBSRAS6520	Method of Shipment: FED EX
Shipped To: EBERLINE SERVICES / LIONVILLE	Offsite Property No.: A060378	Bill of Lading/Air Bill No.: SEE OSPC	

POSSIBLE SAMPLE HAZARDS/REMARKS

POTENTIAL RADIOACTIVE <DOT LIMITS

Special Handling and/or Storage

COOL 4C "MATRIX COMPOSED OF INSECTS"

Preservation	Cool 4C	Cool 4C									
Type of Container	P	aG									
No. of Container(s)	10	1									
Volume	15g	50g									
SAMPLE ANALYSIS	See item (1) in Special Instructions. 04-25-06 ICG	Pesticides - 8081									
04-25-06 ICG											

Sample No.	Matrix *	Sample Date	Sample Time									
J11KR4	OTHER SOLID	APR 11 2006 25	11:20	X	X	X						

CHAIN OF POSSESSION	Date/Time	Sign/Print Names	Date/Time
Relinquished By/Removed From: TR KLINCKMAN	APR 11 2006 11:25 ICG	Received By/Stored In: EAS LOCKED STORAGE	APR 11 2006 11:25
Relinquished By/Removed From: EAS LOCKED STORAGE	25 0930 04-26-06	Received By/Stored In: 25	25 ICG 4-26-06 0930
Relinquished By/Removed From: WCH TR Klinckman / Ed Eberline	4-26-06 1500	Received By/Stored In: Fed Ex	
Relinquished By/Removed From: Fed Ex	4-27-06 0940	Received By/Stored In:	4-27-06 0940
Relinquished By/Removed From		Received By/Stored In	
Relinquished By/Removed From		Received By/Stored In	

SPECIAL INSTRUCTIONS

perform pesticides and ICP metals in this order as sample is available.

(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]; Mercury - 7471 - (CV)

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
Ve=Vegetation
X=Other

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

BHI-EE-011 (08/29/2005)

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-047-341	Page 1 of 1

Collector TILLER, B. TR KLINCKMAN	Company Contact JOAN KESSNER	Telephone No. 375-4688	Project Coordinator KESSNER, JH	Price Code 9N	Data Turnaround 45 Days
Project Designation 100 & 300 Area Component of the RCBRA Sediment and Ti	Sampling Location JA JONES 1 INVERTEBRATES		SAF No. RC-047	Air Quality ☐	
Ice Chest No. AFS-04-052	Field Logbook No. EL-1595	COA BESRAS6520	Method of Shipment FED EX		
Shipped To EBERLINE SERVICES / JONVILLE	Offsite Property No. A060 378		Bill of Lading/Air Bill No. SEE OSPC		

POSSIBLE SAMPLE HAZARDS/REMARKS

POTENTIAL RADIOACTIVE <DOT LIMITS

Special Handling and/or Storage

COOL 4C "MATRIX COMPOSED OF INSECTS"

Preservation	Cool 4C										
Type of Container	G/P										
No. of Container(s)	1										
Volume	15g										
SAMPLE ANALYSIS 04-25-06	See item (1) in Special Instructions.										
Sample No.	Matrix *	Sample Date	Sample Time								
J11L34	OTHER SOLID	APR 21 2006	~~09:14~~	X							
	ICG	25	10:40								

CHAIN OF POSSESSION 04-25-06 10:45 **Sign/Print Names** 04-25-06 10:45

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
TR KLINCKMAN	APR 25 2006 ICG ~~0919~~	ICG	APR 25 2006 ~~0919~~
EAS LOCKED STORAGE	04-26-06 0930	EAS LOCKED STORAGE	4-26-06 0930
WCH	4-26-06 1500	Fed Ex	
Fed Ex	4-27-06/0940	mlh	4-27-06/0940

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]; Mercury - 7471 - (CV)

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
LI=Liquid
V=Vegetation
X=Other

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

BHI-EE-011 (08/29/2005)

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-047-316	Page 1 of 1

Collector: TILLER, B. TR KLINCKMAN	Company Contact: JOAN KESSNER	Telephone No.: 375-4688	Project Coordinator: KESSNER, JH
Price Code: 9N	Data Turnaround: 45 Days	Air Quality ☐	
Project Designation: 100 & 300 Area Component of the RCBRA Sediment and Ti	Sampling Location: BORROW PIT 9 INVERTEBRATES	SAF No.: RC-047	
Ice Chest No.: AFS-04-052	Field Logbook No.: EL-1595	COA: BESRAS6520	Method of Shipment: FED EX
Shipped To: EBERLINE SERVICES LIONVILLE	Offsite Property No.: A060378	Bill of Lading/Air Bill No.: SEE OSPC	

POSSIBLE SAMPLE HAZARDS/REMARKS

POTENTIAL RADIOACTIVE <DOT LIMITS

Special Handling and/or Storage

COOL 4C "MATRIX COMPOSED OF INSECTS"

Preservation	Cool 4C										
Type of Container	P										
No. of Container(s)	1										
Volume	15g										

SAMPLE ANALYSIS

ICG 04-25-06

Sample No.	Matrix *	Sample Date	Sample Time	See item (1) in Special Instructions								
J11KT5	OTHER SOLID	APR 25 2006	12:10	X								

CHAIN OF POSSESSION 04-25-06 **Sign/Print Names**

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
TR KLINCKMAN	2512:15 APR 25 2006	EAS LOCKED STORAGE	12:15 APR 25 2006
EAS LOCKED STORAGE	0930 04-26-06	[illegible]	0930
[illegible]	1500	Fed Ex	
Fed Ex	4-27-06 0940	[illegible]	4-27-06 0940

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); Mercury - 7471 - (CV)

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

BHI-EE-011 (08/29/2005)

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-047-339	Page 1 of 1

Collector: TILLER, B. TR KLINCKMAN	Company Contact: JOAN KESSNER	Telephone No.: 375-4688	Project Coordinator: KESSNER, JH
Price Code: 9N	Data Turnaround: 45 Days	Air Quality ☐	
Project Designation: 100 & 300 Area Component of the RCBRA Sediment and Ti	Sampling Location: 100-F-2 INVERTEBRATES	SAF No.: RC-047	
Ice Chest No.: AES-04-052	Field Logbook No.: EL-1595	COA: BESRAS6520	Method of Shipment: FED EX
Shipped To: EBERLINE SERVICES (LIONVILLE)	Offsite Property No.: A060378	Bill of Lading/Air Bill No.: SEE OSPC	

POSSIBLE SAMPLE HAZARDS/REMARKS

POTENTIAL RADIOACTIVE <DOT LIMITS

Special Handling and/or Storage

COOL 4C "MATRIX COMPOSED OF INSECTS"

Preservation	Cool 4C											
Type of Container	G/P											
No. of Container(s)	1											
Volume	15g											
SAMPLE ANALYSIS	See item (1) in Special Instructions											
04-25-06												

Sample No.	Matrix *	Sample Date	Sample Time										
J11L32	OTHER SOLID	APR 25 2006	09:19	X									
	ICG	25	10:45										

CHAIN OF POSSESSION 04-25-06 10:50 **Sign/Print Names** 04-25-06 10:50

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
ICG TR KLINCKMAN	APR 25 2006 09:22	EAS LOCKED STORAGE	APR 25 2006 09:22
EAS LOCKED STORAGE	04-26-06 0930	ICG SR Edmundson	4-26-06 0930
SR Edmundson	4-26-06 1530	Fed Ex	
Fed Ex	4-27-06 0940	D Smith	4-27-06 0940

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]; Mercury - 7471 - (CV)

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

3HI-EE-011 (08/29/2005)

00000000064

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-047-246	Page 1 of 1

Collector TILLER, B. TR KLINCKMAN	Company Contact JOAN KESSNER	Telephone No. 375-4688	Project Coordinator KESSNER, JH
Price Code 9N	Data Turnaround 45 Days	Air Quality ☐	
Project Designation 100 & 300 Area Component of the RCBRA Sediment and Ti	Sampling Location 300-A RIPARIAN #6 INVERTEBRATES	SAF No. RC-047	
Ice Chest No. AFS-04-052	Field Logbook No. EL-1595	COA BESRAS6520	Method of Shipment FED EX
Shipped To EBERLINE SERVICES LIONVILLE	Offsite Property No. A060378	Bill of Lading/Air Bill No. SEE OSPC	

00000095

POSSIBLE SAMPLE HAZARDS/REMARKS

POTENTIAL RADIOACTIVE <DOT LIMITS

Special Handling and/or Storage

COOL 4C

Preservation	None	Cool 4C									
Type of Container	G/P	P									
No. of Container(s)	1	1									
Volume	10g	15g									
SAMPLE ANALYSIS	See item (1) in Special Instructions.	ICP Metals - 6010 (Full List); Mercury - 7471 - (CV)									
Sample No. / Matrix * / Sample Date / Sample Time											
J11955 / OTHER SOLID / 4-25-06 / 11:10		X									

CHAIN OF POSSESSION	Date/Time	Sign/Print Names	Date/Time
Relinquished By/Removed From TR KLINCKMAN	11:15 APR 25 2006	Received By/Stored In EAS LOCKED STORAGE	11:15 APR 25 2006
Relinquished By/Removed From EAS LOCKED STORAGE	4-26-06 0930	Received By/Stored In TR Edmundson	4-26-06 0930
Relinquished By/Removed From TR Edmundson	4-26-06 1500	Received By/Stored In Fed Ex	
Relinquished By/Removed From Fed Ex	4-27-06/0940	Received By/Stored In D V Smith	4-27-06/0940
Relinquished By/Removed From		Received By/Stored In	
Relinquished By/Removed From		Received By/Stored In	

SPECIAL INSTRUCTIONS

(1) Strontium-89,90 -- Total Sr; Isotopic Thorium (Thorium-232); Isotopic Uranium (Uranium-233/234, Uranium-235, Uranium-238); Isotopic Plutonium

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

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

3HI-EE-011 (08/29/2005)

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-047-313	Page 1 of 1

Collector TILLER, B. TR KLINCKMAN	Company Contact JOAN KESSNER	Telephone No. 375-4688	Project Coordinator KESSNER, JH
Price Code 9N	Data Turnaround 45 Days	Air Quality ☐	
Project Designation 100 & 300 Area Component of the RCBRA Sediment and Ti	Sampling Location 300-44/618-4 INVERTEBRATES	SAF No. RC-047	
Ice Chest No. AFS-04-052	Field Logbook No. EL-1595	COA BESRAS6520	Method of Shipment FED EX
Shipped To EBERLINE SERVICES LIONVILLE	Offsite Property No. A060378	Bill of Lading/Air Bill No. SEE OSPC	

POSSIBLE SAMPLE HAZARDS/REMARKS

POTENTIAL RADIOACTIVE <DOT LIMITS

Special Handling and/or Storage

COOL 4C "MATRIX COMPOSED OF INSECTS"

Preservation	None	Cool 4C									
Type of Container	G/P	P									
No. of Container(s)	1	1									
Volume	10g	15g									
SAMPLE ANALYSIS	See item (1) in Special Instructions	See item (2) in Special Instructions									

Sample No.	Matrix *	Sample Date	Sample Time								
J11KT2	OTHER SOLID	APR 26 2006	0724		X						

CHAIN OF POSSESSION	Date/Time	Sign/Print Names	Date/Time
Relinquished By/Removed From TR KLINCKMAN	0735 APR 26 2006	Received By/Stored In EAS LOCKED STORAGE	0735 APR 26 2006
Relinquished By/Removed From EAS LOCKED STORAGE	04-26-06 0930	Received By/Stored In TR Edmundson	4-26-06 0930
Relinquished By/Removed From TR Edmundson	4-26-06 1500	Received By/Stored In Fed Ex	
Relinquished By/Removed From Fed Ex	4-27-06 0940	Received By/Stored In D Smith	4-27-06 0940
Relinquished By/Removed From		Received By/Stored In	
Relinquished By/Removed From		Received By/Stored In	

SPECIAL INSTRUCTIONS

(1) Strontium-89,90 -- Total Sr; Isotopic Thorium (Thorium-232); Isotopic Uranium (Uranium-233/234, Uranium-235, Uranium-238); Isotopic Plutonium

(2) 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); Mercury - 7471 - (CV)

Matrix *

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

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

BHI-EE-011 (08/29/2005)

000000066

Lionville Laboratory Incorporated

SAMPLE RECEIPT CHECKLIST (SRC)

CLIENT: TNU Hanford **Date:** 4-27-06

Purchase Order / Project# / SAF# / SOW# / Release #: RC-047

LvLI Batch # : 06041876 **Sample Custodian:** D Smith

NOTE: EXPLAIN ALL DISCREPANCIES

1.	Samples Hand Delivered or Shipped	Carrier Fed Ex		Airbill# AFS-04-052	
2.	Custody seals on coolers or shipping container intact, signed and dated?	☑ Yes	☐ No	☐ No Seals	Comments
3.	Outside of coolers or shipping containers are free from damage?	☑ Yes	☐ No		
4.	All expected paperwork received (coc and other client specific information) sealed in plastic bag and easily accessible?	☑ Yes	☐ No		
5.	Samples received cooled or ambient? IR.	Temp 1.3 °C		Cooler # AFS-04-052	
6.	Custody seals on sample containers intact, signed and dated?	☑ Yes	☐ No	☐ No Seals	
7.	coc signed and dated?	☑ Yes	☐ No		
8.	Sample containers are intact?	☑ Yes	☐ No		
9.	All samples on coc received? All samples received on coc?	☑ Yes	☐ No		
10.	All sample label information matches coc?	☑ Yes	☐ No		
11.	Samples properly preserved?	☑ Yes	☐ No		
12.	Samples received within hold times? Short holds taken to wet lab?	☑ Yes	☐ No		
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 not within policy. See reverse side for policy)	☑ Yes	☐ No		
16.	Project Manager contacted concerning discrepancies? name/date (or samples outside criteria)	☐ Yes	☐ No	☑ No Discrepancies	

SR-002-B

LVLI Lionville Laboratory Inc.

EBERLINE
SERVICES

RECEIVED
JUN 2006

June 2, 2006

Ms. Joan Kessner
Bechtel Hanford Inc.
3190 George Washington Way
MSIN H9-02
Richland, WA 99352

Reference: **P.O. #630**
Eberline Services R6-04-201-7430, SDG K0331

Dear Ms. Kessner:

Enclosed is the data report for three solid (other solid) samples designated under SAF No. RC-047 received at Eberline Services on April 27, 2006. The samples were analyzed according to the accompanying chain-of-custody documents.

Please call if you have any questions concerning this report.

Sincerely,

Melissa Mannion

Melissa C. Mannion
Senior Program Manager

MCM/njv

Enclosure: Data Package

Analytical Services
2030 Wright Avenue
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1.0 GENERAL

Washington Closure Hanford (WCH) Sample Delivery Group K0331 was composed of three solid (other solid) samples designated under SAF No. RC-047 with a Project Designation of: 100 & 300 Area Component of the RCBRA Sediment and Ti.

The samples were received as stated on the Chain-of-Custody documents. Any discrepancies are noted on the Eberline Services Sample Receipt Checklist. The results were transmitted to WCH via e-mail on May 31, 2006.

2.0 ANALYSIS NOTES

2.1 Isotopic Uranium Analysis

No problems were encountered during the course of the analyses.

Case Narrative Certification Statement

"I certify that this data package is in compliance with the SOW, both technically and for completeness, for other than the conditions detailed above. Release of the data obtained in this hard copy data package has been authorized by the Laboratory Manager or a designee, as verified by the following signature."

Melissa Mannion

Melissa C. Mannion
Senior Program Manager

6/02/06

Date

E B E R L I N E S E R V I C E S / R I C H M O N D
SAMPLE DELIVERY GROUP K0331

SDG	7430
Contact	Melissa C. Mannion

Client	Hanford
Contract	No. 630
Case no	SDG_K0331

S U M M A R Y D A T A S E C T I O N

T A B L E O F C O N T E N T S

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Prepared by

Reviewed by

Lab id	EBRLNE
Protocol	Hanford
Version	Ver 1.0
Form	DVD-TOC
Version	3.06
Report date	05/31/06

SDG 7430
Contact Melissa C. Mannion

REPORT GUIDE

Client Hanford
Contract No. 630
Case no SDG K0331

ABOUT THE DATA SUMMARY SECTION

The Data Summary Section of a Data Package has all data, in several useful orders, necessary for first level, routine review of the data package for a Sample Delivery Group (SDG). This section follows the Data Package Narrative, which has an overview of the data package and a discussion of special problems. It is followed by the Raw Data Section, which has full details.

The Data Summary Section has several groups of reports:

SAMPLE SUMMARIES

The Sample and QC Summary Reports show all samples, including QC samples, reported in one SDG. These reports cross-reference client and lab sample identifiers.

PREPARATION BATCH SUMMARY

The Preparation Batch Summary Report shows all preparation batches (lab groupings reflecting how work was organized) relevant to the reported SDG with information necessary to check the completeness and consistency of the SDG.

WORK SUMMARY

The Work Summary Report shows all samples and work done on them relevant to the reported SDG.

METHOD BLANKS

The Method Blank Reports, one for each Method Blank relevant to the SDG, show all results and primary supporting information for the blanks.

LAB CONTROL SAMPLES

The Lab Control Sample Reports, one for each Lab Control Sample relevant to the SDG, show all results, recoveries and primary supporting information for these QC samples.

Lab id EBRLNE
Protocol Hanford
Version Ver 1.0
Form DVD-RG
Version 3.06
Report date 05/31/06

SDG 7430
Contact Melissa C. Mannion

Client Hanford
Contract No. 630
Case no SDG K0331

ABOUT THE DATA SUMMARY SECTION

DUPLICATES

The Duplicate Reports, one for each Duplicate and Original sample pair relevant to the SDG, show all results, differences and primary supporting information for these QC samples.

MATRIX SPIKES

The Matrix Spike Reports, one for each Spiked and Original sample pair relevant to the SDG, show all results, recoveries and primary supporting information for these QC samples.

DATA SHEETS

The Data Sheet Reports, one for each client sample in the SDG, show all results and primary supporting information for these samples.

METHOD SUMMARIES

The Method Summary Reports, one for each test used in the SDG, show all results, QC and method performance data for one analyte on one or two pages. (A test is a short code for the method used to do certain work to the client's specification.)

REPORT GUIDES

The Report Guides, one for each of the above groups of reports, have documentation on how to read the associated reports.

Lab id EBRLNE
Protocol Hanford
Version Ver 1.0
Form DVD-RG
Version 3.06
Report date 05/31/06

EBERLINE SERVICES/RICHMOND

SAMPLE DELIVERY GROUP K0331

SAMPLE SUMMARY

SDG 7430
Contact Melissa C. Mannion

Client Hanford
Contract No. 630
Case no SDG K0331

CLIENT SAMPLE ID	LOCATION	MATRIX	LEVEL	LAB SAMPLE ID	SAF NO	CHAIN OF CUSTODY	COLLECTED
J11955	300-A RIP#6INVERTEBRATES	SOLID		R604201-03	RC-047	RC-047-246	04/25/06 11:10
J11KT2	300-44/618-4 INVERTIBRTS	SOLID		R604201-01	RC-047	RC-047-313	04/26/06 07:24
J11KT3	300-49 INVERTEBRATES	SOLID		R604201-02	RC-047	RC-047-314	04/25/06 11:40
Method Blank		SOLID		R604201-05	RC-047		
Lab Control Sample		SOLID		R604201-04	RC-047		
Duplicate (R604201-02)	300-49 INVERTEBRATES	SOLID		R604201-06	RC-047		04/25/06 11:40

Lab id EBRLNE
Protocol Hanford
Version Ver 1.0
Form DVD-CS
Version 3.06
Report date 05/31/06

EBERLINE SERVICES/RICHMOND

SDG 7430
Contact Melissa C. Mannion

SAMPLE DELIVERY GROUP K0331

QC SUMMARY

Client Hanford
Contract No. 630
Case no SDG K0331

QC BATCH	CHAIN OF CUSTODY	CLIENT SAMPLE ID	MATRIX	% SOLIDS	SAMPLE AMOUNT	BASIS AMOUNT	DAYS SINCE RECEIVED	DAYS SINCE COLL	LAB SAMPLE ID	DEPARTMENT SAMPLE ID
7430	RC-047-246	J11955	SOLID	100.0	3.93 g		04/27/06	2	R604201-03	7430-003
	RC-047-313	J11KT2	SOLID	100.0	2.44 g		04/27/06	1	R604201-01	7430-001
	RC-047-314	J11KT3	SOLID	100.0	2.18 g		04/27/06	2	R604201-02	7430-002
		Method Blank	SOLID						R604201-05	7430-005
		Lab Control Sample	SOLID						R604201-04	7430-004
		Duplicate (R604201-02)	SOLID	100.0	2.18 g		04/27/06	2	R604201-06	7430-006

Lab id EBRLNE
Protocol Hanford
Version Ver 1.0
Form DVD-QS
Version 3.06
Report date 05/31/06

EBERLINE SERVICES/RICHMOND

SAMPLE DELIVERY GROUP K0331

SDG 7430
Contact Melissa C. Mannion

PREP BATCH SUMMARY

Client Hanford
Contract No. 630
Case no SDG K0331

TEST	MATRIX	METHOD	PREPARATION BATCH	ERROR 2σ %	PLANCHETS ANALYZED CLIENT	MORE	RE	BLANK	LCS	DUP/ORIG	MS/ORIG	QUALIFIERS
Alpha Spectroscopy												
U	SOLID	Uranium, Isotopic in Solids	7181-099	5.0	3			1	1	1/1		

Duplicates and Matrix Spikes are those with original (Client) sample in this Sample Delivery Group.
Blank and LCS planchets are those in the same preparation batch as some Client, Duplicate or Spike sample.

Lab id EBRLNE
Protocol Hanford
Version Ver 1.0
Form DVD-PBS
Version 3.06
Report date 05/31/06

EBERLINE SERVICES/RICHMOND

SAMPLE DELIVERY GROUP K0331

SDG 7430
Contact Melissa C. Mannion

WORK SUMMARY

Client Hanford
Contract No. 630
Case no SDG K0331

CLIENT SAMPLE ID / LOCATION / CUSTODY	SAF No	MATRIX	LAB SAMPLE ID / COLLECTED / RECEIVED	PLANCHET	TEST	SUF-FIX	ANALYZED	REVIEWED	BY	METHOD
J11955			R604201-03	7430-003	U		05/23/06	05/24/06	MWT	Uranium, Isotopic in Solids
300-A RIP#6INVERTEBRATES		SOLID	04/25/06							
RC-047-246	RC-047		04/27/06							
J11KT2			R604201-01	7430-001	U		05/23/06	05/24/06	MWT	Uranium, Isotopic in Solids
300-44/618-4 INVERTIBRTS		SOLID	04/26/06							
RC-047-313	RC-047		04/27/06							
J11KT3			R604201-02	7430-002	U		05/23/06	05/24/06	MWT	Uranium, Isotopic in Solids
300-49 INVERTEBRATES		SOLID	04/25/06							
RC-047-314	RC-047		04/27/06							
Method Blank			R604201-05	7430-005	U		05/23/06	05/24/06	MWT	Uranium, Isotopic in Solids
		SOLID								
	RC-047									
Lab Control Sample			R604201-04	7430-004	U		05/23/06	05/24/06	MWT	Uranium, Isotopic in Solids
		SOLID								
	RC-047									
Duplicate (R604201-02)			R604201-06	7430-006	U		05/23/06	05/24/06	MWT	Uranium, Isotopic in Solids
300-49 INVERTEBRATES		SOLID	04/25/06							
	RC-047		04/27/06							

COUNTS OF TESTS BY SAMPLE TYPE

TEST	SAF No	METHOD	REFERENCE	CLIENT	MORE	RE	BLANK	LCS	DUP	SPIKE	TOTAL
U	RC-047	Uranium, Isotopic in Solids	UISO_PLATE_AEA	3			1	1	1		6
TOTALS				3			1	1	1		6

Lab id EBRLNE
Protocol Hanford
Version Ver 1.0
Form DVD-CWS
Version 3.06
Report date 05/31/06

EBERLINE SERVICES/RICHMOND

SAMPLE DELIVERY GROUP K0331

R604201-05 **Method Blank**

METHOD BLANK

SDG	7430	Client/Case no	Hanford SDG K0331
Contact	Melissa C. Mannion	Contract	No. 630
Lab sample id	R604201-05	Client sample id	Method Blank
Dept sample id	7430-005	Material/Matrix	SOLID
		SAF No	RC-047

ANALYTE	CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI-FIERS	TEST
Uranium 233/234	U-233/234	0	0.076	0.29	1.0	U	U
Uranium 235	15117-96-1	0	0.092	0.35	1.0	U	U
Uranium 238	U-238	0	0.076	0.29	1.0	U	U

100&300Area Compnt RCBRA Sediment&Ti

QC-BLANK 56948

Lab id	EBRLNE
Protocol	Hanford
Version	Ver 1.0
Form	DVD-DS
Version	3.06
Report date	05/31/06

EBERLINE SERVICES/RICHMOND

SAMPLE DELIVERY GROUP K0331

R604201-04

Lab Control Sample

LAB CONTROL SAMPLE

SDG 7430

Contact Melissa C. Mannion

Client/Case no Hanford SDG K0331

Contract No. 630

Lab sample id R604201-04

Dept sample id 7430-004

Client sample id Lab Control Sample

Material/Matrix SOLID

SAF No RC-047

ANALYTE	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI-FIERS	TEST	ADDED pCi/g	2σ ERR pCi/g	REC %	3σ LMTS (TOTAL)	PROTOCOL LIMITS
Uranium 233/234	16.9	2.0	0.94	1.0		U	18.6	0.74	91	82-118	80-120
Uranium 235	14.5	1.8	0.24	1.0		U	15.1	0.60	96	80-120	80-120
Uranium 238	18.0	2.1	0.90	1.0		U	20.2	0.81	89	82-118	80-120

100&300Area Compnt RCBRA Sediment&Ti

QC-LCS 56947

Lab id EBRLNE

Protocol Hanford

Version Ver 1.0

Form DVD-LCS

Version 3.06

Report date 05/31/06

EBERLINE SERVICES/RICHMOND

SAMPLE DELIVERY GROUP K0331

R604201-06

J11KT3

DUPLICATE

SDG	7430			Client/Case no	Hanford SDG K0331
Contact	Melissa C. Mannion			Contract	No. 630
	DUPLICATE		ORIGINAL		
Lab sample id	R604201-06	Lab sample id	R604201-02	Client sample id	J11KT3
Dept sample id	7430-006	Dept sample id	7430-002	Location/Matrix	300-49 INVERTEBRATES SOLID
		Received	04/27/06	Collected/Weight	04/25/06 11:40 2.18 g
% solids	100.0	% solids	100.0	Custody/SAF No	RC-047-314 RC-047

ANALYTE	DUPLICATE pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI-FIERS	TEST	ORIGINAL pCi/g	2σ ERR (COUNT)	MDA pCi/g	QUALI-FIERS	RPD %	3σ TOT	DER σ
Uranium 233/234	0	0.069	0.26	1.0	U	U	0.072	0.073	0.28	U	-		1.4
Uranium 235	0	0.084	0.32	1.0	U	U	0	0.088	0.34	U	-		0
Uranium 238	0	0.069	0.26	1.0	U	U	0	0.072	0.28	U	-		0

100&300Area Compnt RCBRA Sediment&Ti

QC-DUP#2 56949

Lab id	EBRLNE
Protocol	Hanford
Version	Ver 1.0
Form	DVD-DUP
Version	3.06
Report date	05/31/06

EBERLINE SERVICES/RICHMOND

SAMPLE DELIVERY GROUP K0331

R604201-03 **J11955**

DATA SHEET

SDG	7430	Client/Case no	Hanford SDG K0331
Contact	Melissa C. Mannion	Contract	No. 630
Lab sample id	R604201-03	Client sample id	J11955
Dept sample id	7430-003	Location/Matrix	300-A RIP#6INVERTEBRATES SOLID
Received	04/27/06	Collected/Weight	04/25/06 11:10 3.93 g
% solids	100.0	Custody/SAF No	RC-047-246 RC-047

ANALYTE	CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI-FIERS	TEST
Uranium 233/234	U-233/234	0	0.061	0.23	1.0	U	U
Uranium 235	15117-96-1	0	0.074	0.28	1.0	U	U
Uranium 238	U-238	0	0.061	0.23	1.0	U	U

100&300Area Compnt RCBRA Sediment&Ti

Lab id	EBRLNE
Protocol	Hanford
Version	Ver 1.0
Form	DVD-DS
Version	3.06
Report date	05/31/06

EBERLINE SERVICES/RICHMOND

SAMPLE DELIVERY GROUP K0331

R604201-01 **J11KT2**

DATA SHEET

SDG	7430	Client/Case no	Hanford	SDG K0331	
Contact	Melissa C. Mannion	Contract	No. 630		
Lab sample id	R604201-01	Client sample id	J11KT2		
Dept sample id	7430-001	Location/Matrix	300-44/618-4 INVERTIBRTS	SOLID	
Received	04/27/06	Collected/Weight	04/26/06 07:24	2.44 g	
% solids	100.0	Custody/SAF No	RC-047-313	RC-047	

ANALYTE	CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI-FIERS	TEST
Uranium 233/234	U-233/234	0.030	0.059	0.23	1.0	U	U
Uranium 235	15117-96-1	0	0.072	0.27	1.0	U	U
Uranium 238	U-238	0	0.059	0.23	1.0	U	U

100&300Area Compnt RCBRA Sediment&Ti

Lab id	EBRLNE
Protocol	Hanford
Version	Ver 1.0
Form	DVD-DS
Version	3.06
Report date	05/31/06

EBERLINE SERVICES/RICHMOND

SAMPLE DELIVERY GROUP K0331

R604201-02 **J11KT3**

DATA SHEET

SDG	7430	Client/Case no	Hanford	SDG K0331	
Contact	Melissa C. Mannion	Contract	No. 630		
Lab sample id	R604201-02	Client sample id	J11KT3		
Dept sample id	7430-002	Location/Matrix	300-49 INVERTEBRATES	SOLID	
Received	04/27/06	Collected/Weight	04/25/06 11:40	2.18 g	
% solids	100.0	Custody/SAF No	RC-047-314	RC-047	

ANALYTE	CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI-FIERS	TEST
Uranium 233/234	U-233/234	0.072	0.073	0.28	1.0	U	U
Uranium 235	15117-96-1	0	0.088	0.34	1.0	U	U
Uranium 238	U-238	0	0.072	0.28	1.0	U	U

100&300Area Compnt RCBRA Sediment&Ti

Lab id	EBRLNE
Protocol	Hanford
Version	Ver 1.0
Form	DVD-DS
Version	3.06
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EBERLINE SERVICES/RICHMOND

SAMPLE DELIVERY GROUP K0331

Test U Matrix SOLID
SDG 7430
Contact Melissa C. Mannion

METHOD SUMMARY

URANIUM, ISOTOPIC IN SOLIDS

ALPHA SPECTROSCOPY

Client Hanford
Contract No. 630
Contract SDG K0331

RESULTS

CLIENT SAMPLE ID	LAB SAMPLE ID	RAW TEST	SUF-FIX	PLANCHET	1: Uranium 233/234		2: Uranium 235		3: Uranium 238		RESULT RATIOS (%) 1+3	2σ	2+3	2σ
Preparation batch 7181-099														
J11955	R604201-03			7430-003	U		U		U					
J11KT2	R604201-01			7430-001	U		U		U					
J11KT3	R604201-02			7430-002	U		U		U					
Method Blank	R604201-05			7430-005	U		U		U					
Lab Control Sample	R604201-04			7430-004	ok		ok		ok					
Duplicate (R604201-02)	R604201-06			7430-006	-	U	-	U	-	U				
Nominal values and limits from method				RDLs (pCi/g)	1.0		1.0		1.0		100		4	
100&300Area Compnt RCBRA Sediment&Ti											Averages			

METHOD PERFORMANCE

CLIENT SAMPLE ID	LAB SAMPLE ID	RAW TEST	SUF-FIX	MAX MDA pCi/g	ALIQ g	PREP FAC	DILU-TION	YIELD %	EFF %	COUNT min	FWHM keV	DRIFT KeV	DAYS HELD	PREPARED	ANAL-YZED	DETECTOR
Preparation batch 7181-099	2σ prep error 5.0 %			Reference Lab Notebook 7181 pg. 99												
J11955	R604201-03			0.28	0.500			81		105			28	05/22/06	05/23	SS-033
J11KT2	R604201-01			0.27	0.500			85		105			27	05/22/06	05/23	SS-031
J11KT3	R604201-02			0.34	0.500			68		105			28	05/22/06	05/23	SS-032
Method Blank	R604201-05			0.35	0.500			58		105				05/22/06	05/23	SS-035
Lab Control Sample	R604201-04			0.94	0.500			98		106				05/22/06	05/23	SS-034
Duplicate (R604201-02)	R604201-06			0.32	0.500			61		106			28	05/22/06	05/23	SS-036
Nominal values and limits from method				1.0	0.500			20-105		100	100		180			

PROCEDURES	REFERENCE	UISO_PLATE_AEA
	CP-073	Soil Leaching, 10 - 200 g Aliquot, rev 3
	CP-921	Uranium in Water and Dissolved Samples by Extraction Chromatography, rev 1
	CP-008	Heavy Element Electroplating, rev 9

AVERAGES ± 2 SD FOR 6 SAMPLES
MDA 0.42 ± 0.52
YIELD 75 ± 31

Lab id EBRLNE
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Version 3.06
Report date 05/31/06

EBERLINE SERVICES/RICHMOND

SAMPLE DELIVERY GROUP K0331

SDG	7430
Contact	Melissa C. Mannion

REPORT GUIDE

Client	Hanford
Contract	No. 630
Case no	SDG K0331

SAMPLE SUMMARY

The Sample and QC Summary Reports show all samples, including QC samples, reported in one Sample Delivery Group (SDG).

The Sample Summary Report fully identifies client samples and gives the corresponding lab sample identification. The QC Summary Report shows at the sample level how the lab organized the samples into batches and generated QC samples. The Preparation Batch and Method Summary Reports show this at the analysis level.

The following notes apply to these reports:

* LAB SAMPLE ID is the lab's primary identification for a sample.

* DEPARTMENT SAMPLE ID is an alternate lab id, for example one assigned by a radiochemistry department in a lab.

* CLIENT SAMPLE ID is the client's primary identification for a sample. It includes any sample preparation done by the client that is necessary to identify the sample.

* QC BATCH is a lab assigned code that groups samples to be processed and QCed together. These samples should have similar matrices.

  QC BATCH is not necessarily the same as SDG, which reflects samples received and reported together.

* All Lab Control Samples, Method Blanks, Duplicates and Matrix Spikes are shown that QC any of the samples. Due to possible reanalyses, not all results for all these QC samples may be relevant to the SDG. The Lab Control Sample, Method Blank, Duplicate, Matrix Spike and Method Summary Reports detail these relationships.

Lab id	EBRLNE
Protocol	Hanford
Version	Ver 1.0
Form	DVD-RG
Version	3.06
Report date	05/31/06

SDG 7430
Contact Melissa C. Mannion

REPORT GUIDE

Client Hanford
Contract No. 630
Case no SDG K0331

PREPARATION BATCH SUMMARY

The Preparation Batch Summary Report shows all preparation batches in one Sample Delivery Group (SDG) with information necessary to check the completeness and consistency of the SDG.

The following notes apply to this report:

* The preparation batches are shown in the same order as the Method Summary Reports are printed.

* Only analyses of planchets relevant to the SDG are included.

* Each preparation batch should have at least one Method Blank and LCS in it to validate client sample results.

* The QUALIFIERS shown are all qualifiers other than U, J, B, L and H that occur on any analysis in the preparation batch. The Method Summary Report has these qualifiers on a per sample basis.

  These qualifiers should be reviewed as follows:

  X Some data has been manually entered or modified. Transcription errors are possible.

  P One or more results are 'preliminary'. The data is not ready for final reporting.

  2 There were two or more results for one analyte on one planchet imported at one time. The results in DVD may not be the same as on the raw data sheets.

  Other lab defined qualifiers may occur. In general, these should be addressed in the SDG narrative.

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Protocol Hanford
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SDG 7430
Contact Melissa C. Mannion

REPORT GUIDE

Client Hanford
Contract No. 630
Case no SDG K0331

WORK SUMMARY

The Work Summary Report shows all samples, including QC samples, and all relevant analyses in one Sample Delivery Group (SDG). This report is often useful as supporting documentation for an invoice.

The following notes apply to this report:

* TEST is a code for the method used to measure associated analytes. Results and related information for each analyte are on the Data Sheet Report. In special cases, a test code used in the summary data section is not the same as in associated raw data. In this case, both codes are shown on the Work Summary.

* SUFFIX is the lab's code to distinguish multiple analyses (recounts, reworks, reanalyses) of a fraction of the sample. The suffix indicates which result is being reported. An empty suffix normally identifies the first attempt to analyze the sample.

* The LAB SAMPLE ID, TEST and SUFFIX uniquely identify all supporting data for a result. The Method Summary Report for each TEST has method performance data, such as yield, for each lab sample id and suffix and procedures used in the method.

* PLANCHET is an alternate lab identifier for work done for one test. It, combined with the TEST and SUFFIX, may be the best link to raw data.

* For QC samples, only analyses that directly QC some regular sample are shown. The Lab Control Sample, Method Blank, Duplicate, Matrix Spike and Method Summary Reports detail these relationships.

* The SAS (Special Analytical Services) Number is a client or lab assigned code that reflects special processing for samples, such as rapid turn around. Counts of tests done are lists by SAS number since it is likely to affect prices.

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SDG 7430
Contact Melissa C. Mannion

REPORT GUIDE

Client Hanford
Contract No. 630
Case no SDG K0331

DATA SHEET

The Data Sheet Report shows all results and primary supporting information for one client sample or Method Blank. This report corresponds to both the CLP Inorganics and Organics Data Sheet.

The following notes apply to this report:

* TEST is a code for the method used to measure an analyte. If the TEST is empty, no data is available; the analyte was not analyzed for.

* The LAB SAMPLE ID and TEST uniquely identify work within the Summary Data Section of a Data Package. The Work Summary and Method Summary Reports further identify raw data that underlies this work.

  The Method Summary Report for each TEST has method performance data, such as yield, for each Lab Sample ID and a list of procedures used in the method.

* ERRORs can be labeled TOTAL or COUNT. TOTAL implies a preparation (non-counting method) error has been added, as square root of sum of squares, to the counting error denoted by COUNT. The preparation errors, which may vary by preparation batch, are shown on the Method Summary Report.

* A RESULT can be 'N.R.' (Not Reported). This means the lab did this work but chooses not to report it now, possibly because it was reported at another time.

* When reporting a Method Blank, a RESULT can be 'N.A.' (Not Applicable). This means there is no reported client sample work in the same preparation batch as the Blank's result. This is likely to occur when the Method Blank is associated with reanalyses of selected work for a few samples in the SDG.

The following qualifiers are defined by the DVD system:

U The RESULT is less than the MDA (Minimum Detectable Activity).

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DATA SHEET

If the MDA is blank, the ERROR is used as the limit.

J The RESULT is less than the RDL (Required Detection Limit) and no U qualifier is assigned.

B A Method Blank associated with this sample had a result without a U flag and, after correcting for possibly different aliquots, that result is greater than or equal to the MDA for this sample.

Normally, B is not assigned if U is. When method blank subtraction is shown on this report, B flags are assigned based on the unsubtracted values while U's are assigned based on the subtracted ones. Both flags can be assigned in this case.

For each sample result, all Method Blank results in the same preparation batch are compared. The Method Summary Report documents this and other QC relationships.

L Some Lab Control Sample that QC's this sample had a low recovery. The lab can disable assignment of this qualifier.

H Similar to 'L' except the recovery was high.

P The RESULT is 'preliminary'.

X Some data necessary to compute the RESULT, ERROR or MDA was manually entered or modified.

2 There were two or more results available for this analyte. The reported result may not be the same as in the raw data.

Other qualifiers are lab defined. Definitions should be in the SDG narrative.

The following values are underlined to indicate possible problems:

* An MDA is underlined if it is bigger than its RDL.

SDG 7430	Client Hanford
Contact Melissa C. Mannion	Contract No. 630
	Case no SDG K0331

GUIDE, cont.

DATA SHEET

* An ERROR is underlined if the 1.645 sigma counting error is bigger than both the MDA and the RESULT, implying that the MDA may not be a good estimate of the 'real' minimum detectable activity.

* A negative RESULT is underlined if it is less than the negative of its 2 sigma counting ERROR.

* When reporting a Method Blank, a RESULT is underlined if greater than its MDA. If the MDA is blank, the 2 sigma counting error is used in the comparison.

Lab id	EBRLNE
Protocol	Hanford
Version	Ver 1.0
Form	DVD-RG
Version	3.06
Report date	05/31/06

SDG 7430
Contact Melissa C. Mannion

REPORT GUIDE

Client Hanford
Contract No. 630
Case no SDG_K0331

LAB CONTROL SAMPLE

The Lab Control Sample Report shows all results, recoveries and primary supporting information for one Lab Control Sample.

The following notes apply to this report:

* All fields in common with the Data Sheet Report have similar usage. Refer to its Report Guide for details.

* An amount ADDED is the lab's value for the actual amount spiked into this sample with its ERROR an estimate of the error of this amount.

  An amount added is underlined if its ratio to the corresponding RDL is outside protocol specified limits.

* REC (Recovery) is RESULT divided by ADDED expressed as a percent.

* The first, computed limits for the recovery reflect:

  1. The error of RESULT, including that introduced by rounding the result prior to printing.

     If the limits are labeled (TOTAL), they include preparation error in the result. If labeled (COUNT), they do not.

  2. The error of ADDED.

  3. A lab specified, per analyte bias. The bias changes the center of the computed limits.

* The second limits are protocol defined upper and lower QC limits for the recovery.

* The recovery is underlined if it is outside either of these ranges.

Lab id EBRLNE
Protocol Hanford
Version Ver 1.0
Form DVD-RG
Version 3.06
Report date 05/31/06

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Contact Melissa C. Mannion

REPORT GUIDE

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Contract No. 630
Case no SDG_K0331

DUPLICATE

The Duplicate Report shows all results, differences and primary supporting information for one Duplicate and associated Original sample.

The following notes apply to this report:

* All fields in common with the Data Sheet Report have similar usage. This applies both to the Duplicate and Original sample data. Refer to the Data Sheet Report Guide for details.

  If the Duplicate has data for a TEST and the lab did not do this test to the Original, the Original's RESULTs are underlined.

* The RPD (Relative Percent Difference) is the absolute value of the difference of the RESULTs divided by their average expressed as a percent.

  If both RESULTs are less than their MDAs, no RPD is computed and a '-' is printed.

  For an analyte, if the lab did work for both samples but has data for only one, the MDA from the sample with data is used as the other's result in the RPD.

* The first, computed limit is the sum, as square root of sum of squares, of the errors of the results divided by the average result as a percent, hence the relative error of the difference rather than the error of the relative difference. The errors include those introduced by rounding the RESULTs prior to printing.

  If this limit is labeled TOT, it includes the preparation error in the RESULTs. If labeled CNT, it does not.

  This value reported for this limit is at most 999.

* The second limit for the RPD is the larger of:

  1. A fixed percentage specified in the protocol.

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Protocol Hanford
Version Ver 1.0
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DUPLICATE

2. A protocol factor (typically 2) times the average MDA as a percent of the average result. This limit applies when the results are close to the MDAs.

* The RPD is underlined if it is greater than either limit.

* If specified by the lab, the second limit column is replaced by the Difference Error Ratio (DER), which is the absolute value of the difference of the results divided by the quadratic sum of their one sigma errors, the same errors as used in the first limit.

  Except for differences due to rounding, the DER is the same as the RPD divided by the first RPD limit with the limit scaled to 1 sigma.

* The DER is underlined if it is greater than the sigma factor, typically 2 or 3, shown in the header for the first RPD limit.

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REPORT GUIDE

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Case no SDG K0331

MATRIX SPIKE

The Matrix Spike Report shows all results, recoveries and primary supporting information for one Matrix Spike and associated Original sample.

The following notes apply to this report:

* All fields in common with the Data Sheet Report have similar usage. This applies both to the Spiked and Original sample data. Refer to the Data Sheet Report Guide for details.

  If the Spike has data for a TEST and the lab did not do this test to the Original, the Original's RESULTs are underlined.

* An amount ADDED is the lab's value for the actual amount spiked into the Spike sample with its ERROR an estimate of the error of this amount.

  An amount is underlined if its ratio to the corresponding RDL is outside protocol specified limits.

* REC (Recovery) is the Spike RESULT minus the Original RESULT divided by ADDED expressed as a percent.

* The first, computed limits for the recovery reflect:

  1. The errors of the two RESULTs, including those introduced by rounding them prior to printing.

     If the limits are labeled (TOTAL), they include preparation error in the result. If labeled (COUNT), they do not.

  2. The error of ADDED.

  3. A lab specified, per analyte bias. The bias changes the center of the computed limits.

* The second limits are protocol defined upper and lower QC limits

Lab id EBRLNE
Protocol Hanford
Version Ver 1.0
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GUIDE, cont.

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Contract No. 630
Case no SDG K0331

MATRIX SPIKE

for the recovery.

These limits are left blank if the Original RESULT is more than a protocol defined factor (typically 4) times ADDED. This is a way of accounting for that when the spike is small compared to the amount in the original sample, the recovery is unreliable.

* The recovery is underlined (out of spec) if it is outside either of these ranges.

Lab id EBRLNE
Protocol Hanford
Version Ver 1.0
Form DVD-RG
Version 3.06
Report date 05/31/06

SDG 7430
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REPORT GUIDE

Client Hanford
Contract No. 630
Case no SDG K0331

METHOD SUMMARY

The Method Summary Report has two tables. One shows up to five results measured using one method. The other has performance data for the method. There is one report for each TEST, as used on the Data Sheet Report.

The following notes apply to this report:

* Each table is subdivided into sections, one for each preparation batch. A preparation batch is a group of aliquots prepared at roughly the same time in one work area of the lab using the same method.

  There should be Lab Control Sample and Method Blank results in each preparation batch since this close correspondence makes the QC meaningful. Depending on lab policy, Duplicates need not occur in each batch since they QC sample dependencies such as matrix effects.

* The RAW TEST column shows the test code used in the raw data to identify a particular analysis if it is different than the test code in the header of the report. This occurs in special cases due to method specific details about how the lab labels work.

  The Lab Sample or Planchet ID combined with the (Raw) Test Code and Suffix uniquely identify the raw data for each analysis.

* If a result is less than both its MDA and RDL, it is replaced by just 'U' on this report. If it is greater than or equal to the RDL but less than the MDA, the result is shown with a 'U' flag.

  The J and X flags are as on the data sheet.

* Non-U results for Method Blanks are underlined to indicate possible contamination of other samples in the preparation batch. The Method Blank Report has supporting data.

* Lab Control Sample and Matrix Spike results are shown as: ok, No data, LOW or HIGH, with the last two underlined. 'No data'

Lab id EBRLNE
Protocol Hanford
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Report date 05/31/06

METHOD SUMMARY

means no amount ADDED was specified. 'LOW' and 'HIGH' correspond to when the recovery is underlined on the Lab Control Sample or Matrix Spike Report. See these reports for supporting data.

* Duplicate sample results are shown as: ok, No data, or OUT, with the last two underlined. 'No data' means there was no original sample data found for this duplicate. 'OUT' corresponds to when the RPD is underlined on the Duplicate Report. See this report for supporting data.

* If the MDA column is labeled 'MAX MDA', there was more than one result measured by the reported method and the MDA shown is the largest MDA. If not all these results have the same RDL, the MAX MDA reflects only those results with RDL equal to the smallest one.

  MDAs are underlined if greater than the printed RDL.

* Aliquots are underlined if less than the nominal value specified for the method.

* Prepareation factors are underlined if greater than the nominal value specified for the method.

* Dilution factors are underlined if greater than the nominal value specified for the method.

* Residues are underlined if outside the range specified for the method. Residues are not printed if yields are.

* Yields, which may be gravimetric, radiometric or some type of recovery depending on the method, are underlined if outside the range specified for the method.

* Efficiencies are underlined if outside the range specified for the method. Efficiencies are detector and geometry dependent so this test is only approximate.

METHOD SUMMARY

* Count times are underlined if less than the nominal value specified for the method.

* Resolutions (as FWHM; Full Width at Half Max) are underlined if greater than the method specified limit.

* Tracer drifts are underlined if their absolute values are greater than the method specified limit. Tracer drifts are not printed if percent moistures are.

* Days Held are underlined if greater than the holding time specified in the protocol.

* Analysis dates are underlined if before their planchet's preparation date or, if a limit is specified, too far after it.

For some methods, ratios as percentages and error estimates for them are computed for pairs of results. A ratio column header like '1÷3' means the ratio of the first result column and the third result column.

Ratios are not computed for Lab Control Sample, Method Blank or Matrix Spike results since their matrices are not necessarily similar to client samples'.

The error estimate for a ratio of results from one planchet reflects only counting errors since other errors should be correlated. For a ratio involving different planchets, if QC limits are computed based on total errors, the error for the ratio allows for the preparation errors for the planchets.

The ratio is underlined (out of spec) if the absolute value of its difference from the nominal value is greater than its error estimate. If no nominal value is specified, this test is not done.

For Gross Alpha or Gross Beta results, there may be a column showing the sum of other Alpha or Beta emitters. This sum includes all relevant

METHOD SUMMARY

results in the DVD database, whether reported or not. Results in the sum are weighted by a particles/decay value specified by the lab for each relevant analyte. Results less than their MDA are not included. No sums are computed for Lab Control, Method Blank or Matrix Spike samples since their various planchets may not be physically related.

If a ratio of total isotopic to Gross Alpha or Beta is shown, the error for the ratio reflects both the error in the Gross result and the sum, as square root of sum of squares, of the errors in the isotopic results.

For total elemental uranium or thorium results, there may be a column showing the total weight computed from associated isotopic results. Ignoring results less than their MDAs, this is a weighted sum of the isotopic results. The weights depend on the molecular weight and half-life of each isotope so as to convert activities (decays) to weight (atoms).

If a ratio of total computed to measured elemental uranium or thorium is shown, the error for the ratio reflects the errors in all the measurements.

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-047-313	Page 1 of 1

Collector: TILLER, B. TR KLINCKMAN	Company Contact: JOAN KESSNER	Telephone No.: 375-4688	Project Coordinator: KESSNER, JH
Price Code: 9N	Data Turnaround: 45 Days	Air Quality: [ ]	
Project Designation: 100 & 300 Area Component of the RCBRA Sediment and Ti	Sampling Location: 300-44/618-4 INVERTEBRATES K0331 (7430)	SAF No.: RC-047	
Ice Chest No.: ERC-03-106	Field Logbook No.: EL-1595	COA: BESRAS6520	Method of Shipment: FED EX
Shipped To: EBERLINE SERVICES / LIONVILLE	Offsite Property No.: A060408	Bill of Lading/Air Bill No.: SEE OSPC	

POSSIBLE SAMPLE HAZARDS/REMARKS

POTENTIAL RADIOACTIVE <DOT LIMITS

Special Handling and/or Storage

COOL 4C "MATRIX COMPOSED OF INSECTS"

Preservation	COOL 4C ~~None~~ JH 3-26-06	Cool 4C									
Type of Container	G/P	P									
No. of Container(s)	1	1									
Volume	10g	15g									
SAMPLE ANALYSIS	See item (1) in Special Instructions.	See item (2) in Special Instructions.									

Sample No.	Matrix *	Sample Date	Sample Time									
J11KT2	OTHER SOLID	APR 26 2006	0720	X								

CHAIN OF POSSESSION — Sign/Print Names

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
TR KLINCKMAN	APR 26 2006 0730	EAS LOCKED STORAGE	APR 26 2006 0730
EAS LOCKED STORAGE	04-26-06 0930	T.R. Shandon	4-26-06 0930
T.R. Shandon WCH T.R. Shandon	4-26-06 1500	Fed Ex	
FED EX			04/27/06 9:15

SPECIAL INSTRUCTIONS

~~(1) Strontium 89,90 - Total Sr; Isotopic Thorium [Thorium-232]~~; Isotopic Uranium [Uranium-233/234, Uranium-235, Uranium-238]; ~~Isotopic Plutonium~~ JH 5-3-06

(2) 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]; Mercury - 7471 - (CV)

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

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

BHI-EE-011 (08/29/2005)

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-047-314	Page 1 of 1

Collector: TILLER, B. TR KLINCKMAN	Company Contact: JOAN KESSNER	Telephone No.: 375-4688	Project Coordinator: KESSNER, JH	Price Code: 9N	Data Turnaround: 45 Days
Project Designation: 100 & 300 Area Component of the RCBRA Sediment and Ti	Sampling Location: 300-49 INVERTEBRATES K0331 (7430)		SAF No.: RC-047	Air Quality ☐	
Ice Chest No.: ERC-03-106	Field Logbook No.: EL-1595	COA: BESRAS6520	Method of Shipment: FED EX		
Shipped To: EBERLINE SERVICES LIONVILLE	Offsite Property No.: A060408		Bill of Lading/Air Bill No.: SEE OSPC		

POSSIBLE SAMPLE HAZARDS/REMARKS

POTENTIAL RADIOACTIVE <DOT LIMITS

Special Handling and/or Storage

COOL 4C "MATRIX COMPOSED OF INSECTS"

Preservation	COOL 4C ~~None~~ JD 3236	Cool 4C									
Type of Container	G/P	P									
No. of Container(s)	1	1									
Volume	10g	15g									
SAMPLE ANALYSIS	See item (1) in Special Instructions.	See item (2) in Special Instructions.									

Sample No.	Matrix *	Sample Date	Sample Time									
J11KT3	OTHER SOLID	04-25-06	11:40	X								

25 06

CHAIN OF POSSESSION	Sign/Print Names	SPECIAL INSTRUCTIONS	Matrix *
Relinquished By/Removed From: TR KLINCKMAN Date/Time: 04-25-06 11:42	Received By/Stored In: EAS LOCKED STORAGE Date/Time: 04-25-06 11:42	(1) ~~Strontium 89,90 - Total Sr; Isotopic Thorium (Thorium-232);~~ Isotopic Uranium (Uranium-233/234, Uranium-235, Uranium-238); ~~Isotopic Plutonium~~ JD 3236	S=Soil
Relinquished By/Removed From: TR KLINCKMAN EAS LOCKED STORAGE Date/Time: 04-26-06 0930	Received By/Stored In: T.R. Klinckman Date/Time: 4-26-06 0930	(2) 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); Mercury - 7471 - (CV)	SE=Sediment
Relinquished By/Removed From: EAS LOCKED STORAGE Date/Time: 04-26-06	Received By/Stored In: Date/Time:		SO=Solid
Relinquished By/Removed From: WCH T.R. Klinckman 4-26-06 1500 Date/Time:	Received By/Stored In: Fed Ex Date/Time:		SL=Sludge
Relinquished By/Removed From: FED EX Date/Time:	Received By/Stored In: 04/27/06 9:15 Date/Time:		W = Water
Relinquished By/Removed From: Date/Time:	Received By/Stored In: Date/Time:		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

BHI-EE-011 (08/29/2005)

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-047-246	Page 1 of 1

Collector: TILLER, B. TR KLINCKMAN	Company Contact: JOAN KESSNER	Telephone No.: 375-4688	Project Coordinator: KESSNER, JH
Price Code: 9N	Data Turnaround: 45 Days	Air Quality ☐	
Project Designation: 100 & 300 Area Component of the RCBRA Sediment and Ti	Sampling Location: 300-A RIPARIAN #6 INVERTEBRATES K0331 (7430)	SAF No.: RC-047	
Ice Chest No.: ERC-03-106	Field Logbook No.: EL-1595	COA: BESRAS6520	Method of Shipment: FED EX
Shipped To: EBERLINE SERVICES LIONVILLE	Offsite Property No.: A060 408	Bill of Lading/Air Bill No.: SEE OSPC	

POSSIBLE SAMPLE HAZARDS/REMARKS

POTENTIAL RADIOACTIVE <DOT LIMITS

Special Handling and/or Storage

COOL 4C

Preservation	COOL 4C ~~None~~ DJ 4/26/06	Cool 4C									
Type of Container	G/P	P									
No. of Container(s)	1	1									
Volume	10g	15g									
SAMPLE ANALYSIS	See item (1) in Special Instructions.	ICP Metals - 6010 (Full List), Mercury - 7471 - (CV)									

Sample No.	Matrix *	Sample Date	Sample Time										
					ICG 04-25-06								
J11955	OTHER SOLID	04-25-06	11:10	X	X								

CHAIN OF POSSESSION — **Sign/Print Names**

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
TR KLINCKMAN	04-25-06 / 11:15	EAS LOCKED STORAGE	04-25-06 / 11:15
EAS LOCKED STORAGE	04-26-06 0930	TR Klinckman	4-26-06 0930
TR Klinckman WCH	4-26-06 1500	Fed Ex	
FED EX		MFW	04/27/06 9:15

SPECIAL INSTRUCTIONS

~~(1) Strontium-89,90 - Total Sr; Isotopic Thorium (Thorium-232)~~; Isotopic Uranium [Uranium-233/234, Uranium-235, Uranium-238]; ~~Isotopic Plutonium~~ DJ 4/26/06

Matrix *

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

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

BHI-EE-011 (08/29/2005)

EBERLINE SERVICES

RICHMOND, CA LABORATORY

SAMPLE RECEIPT CHECKLIST

Client: W.C. HANFORD City MCHLAND State WA

Date/Time received 04/27/06 9:15 CoC No. RC-047-313, 314, 246

Container I.D. No. ERC-03-106 Requested TAT (Days) 45 P.O. Received Yes [ ] No [ ]

INSPECTION

1. Custody seals on shipping container intact? Yes [X] No [ ] N/A [ ]
2. Custody seals on shipping container dated & signed? Yes [X] No [ ] N/A [ ]
3. Custody seals on sample containers intact? Yes [X] No [ ] N/A [ ]
4. Custody seals on sample containers dated & signed? Yes [X] No [ ] N/A [ ]
5. Packing material is: Wet [ ] Dry [X]
6. Number of samples in shipping container: 3 Sample Matrix X INSECTS
7. Number of containers per sample: 1 (Or see CoC _____)
8. Samples are in correct container Yes [X] No [ ]
9. Paperwork agrees with samples? Yes [X] No [ ]
10. Samples have: Tape [ ] Hazard labels [ ] Rad labels [ ] Appropriate sample labels [X]
11. Samples are: In good condition [X] Leaking [ ] Broken Container [ ] Missing [ ]
12. Samples are: Preserved [ ] Not preserved [ ] pH _____ Preservative _____
13. Describe any anomalies:
14. Was P.M. notified of any anomalies? Yes [ ] No [ ] Date _____
15. Inspected by MCW Date: 04/27/06 Time: 12:30

Customer Sample No.	cpm	mR/hr	Wipe	Customer Sample No.	cpm	mR/hr	wipe

Ion Chamber Ser. No. _____ Calibration date _____
Alpha Meter Ser. No. _____ Calibration date _____
Beta/Gamma Meter Ser. No. _____ Calibration date _____