JANUARY 31, 2013

LIONVILLE LABORATORY
A division of Eberline Analytical Corporation

264 Welsh Pool Road
Exton, Pennsylvania 19341
Phone (610) 280-3000
Fax (610) 280-3041

7 December 2012

Mr. Scot Fitzgerald
CH2M Hill Plateau Remediation Company
P.O. Box 1600
Mail Stop - B6-06
Richland, WA 99352

Subject: Contract No. 630 - Analytical Data Package

Dear Mr. Fitzgerald:

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

LvL Batch #	1211032
SDG #	L0051
SAF #	I13-007
Date Received	11/08/2012
# Samples	1
Matrix	Water
Volatiles	
Semivolatiles	
Pesticide	X
DRO/GRO/KRO	
PAH	X
Acrylamide	
Metals	
Inorganics	

The electronic data deliverable (EDD) has been uploaded to EDDPro. If you have any questions, please don't hesitate to contact me at (610) 280-3012.

Sincerely,

Lionville Laboratory
(A Division of Eberline Analytical Corporation)

Orlette S. Johnson
Project Manager

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 27 pages.

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JANUARY 31, 2013

CHAIN OF CUSTODY

Lionville Laboratory Use Only

1211032

Custody Transfer Record/Lab Work Request

Page 1 of 1

FIELD PERSONNEL: COMPLETE ONLY SHADED AREAS

Lionville Laboratory
A Division of Eberline Analytical Corporation

Client CHPRC SAF# I13-007 L0051

Est. Final Proj. Sampling Date

Project#

Project Contact/Phone#

Lionville Laboratory Project Manager A Johnson

QC SW Del Std TAT 30

Date Rec'd 11/8/12 Date Due 12/8/12

Refrigerator #																					
#/Type Container	Liquid																				
	Solid																				
Volume	Liquid																				
	Solid																				
Preservatives																					
ANALYSES REQUESTED →																					

ABC-F

Refrigerator #									2	2											
#/Type Container	Liquid								2AG	4AG											
	Solid																				
Volume	Liquid								L	L											
	Solid																				
Preservatives									—	—											
ANALYSES REQUESTED →									ORGANIC							INORG					
									VOA	~~BNA~~ PAH	Pest/ ~~PCB~~	Herb				Metal	CN				
									Lionville Laboratory Use Only												
										PAH 8310	Pest 8081										
Lab ID	Client ID/Description	Matrix QC Chosen (✓) MS	MSD	Matrix	Date Collected	Time Collected															
01	B2MXL5	✓	✓	W	11-7-12	1021				X	X										

MATRIX CODES:
W Water
WW Waste Water
GW Groundwater
WST Waste
WI Wipe
SO Solid
S Soil
SL Sludge
SE Sediment
PC Paint Chips
O Oil
NAL Non-Aqueous Liquid
L Leachate
A Air
T Tissue
F Fish

Special Instructions:

Special Instructions:
1. pest = total chlordane + regular list (no alpha/gamma chlordane)
2.
3.
4.
5.
6.

Relinquished by	Received by	Date	Time
[signature]	[signature]	11/8/12	1520

Relinquished by	Received by	Date	Time

Relinquished by	Received by	Date	Time

JANUARY 31, 2013

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # I13-007-004
		Page 1 of 1

Collector	Robert Crow	Contact/Requester	Karen Waters-Husted	Telephone No.	376-4650
SAF No.	I13-007	Sampling Origin	Hanford Site	Purchase Order/Charge Code	300071ES20
Project Title	100NR2, DECEMBER 2012	Logbook No.	HNF-N-506 36 134	Ice Chest No.	GWS-293 — 53 lbs
Shipped To (Lab)	Lionville Laboratory Incorporated	Method of Shipment	Commercial Carrier	Bill of Lading/Air Bill No.	7940-2501-4404
Protocol	CERCLA	Priority: 30 Days	PRIORITY	Offsite Property No.	

POSSIBLE SAMPLE HAZARDS/REMARKS

** ** Contains Radioactive Material at concentations that are not regulated for transportation per 49 CRF but are not releasable per DOE Order 5400 5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐

100 Area Generator Knowledge Information Form applies.
The CACN for all analytical work at WSCF is 401647.
FY12 and FY13 samples cannot be in the same SD

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B2MXL5	N	W	11-7-12	1021	4x1-L aG	8081_PEST_GC: List-1 (19)	7/40 Days	Cool~4C
B2MXL5	N	W	↓	↓	2x1-L aG	8310_SVOA_HPLC	7/40 Days	Cool~4C
B2MXL5	N	W	11-7-12	1021	1x20-mL P	Activity Scan	6 Months	None

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Robert Crow	R Crow		NOV 07 2012 1105	ARMcFutyre	ARMcFutyre		NOV 07 2012 1105
ARMcFutyre	ARMcFutyre		11-7-12 1400	FED EX	FED EX		11-7-12
Fed Ex			11-8-12 1520	VICTOR HERNANDEZ			11-8-12 1520

Matrix *

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

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

PRINTED O 10/24/2012

A-6004-842 (REV 2)

JANUARY 31, 2012

000000004

JANUARY 31, 2013

Lionville Laboratory

SAMPLE RECEIPT CHECKLIST (SRC)

CLIENT: CHPRC
Project/SAF/SOW/Release #: I13-007

Date: 11/8/12

LvL Batch #: 1211032

Sample Custodian: [illegible]

NOTE: EXPLAIN ALL DISCREPANCIES

1. Samples Hand Delivered or Shipped?	Carrier FedEx		Airbill # 7940250144 04
2. Custody Seals on coolers or shipping containers intact, signed & dated?	☑ Yes	☐ No	☐ No Seals
3. Outside of coolers or shipping containers are free from damage?	☑ Yes	☐ No	*Comments:*
4. All expected paperwork received (coc & other client specific information) sealed in plactic bag and easily accessible?	☑ Yes	☐ No	
5. Samples received cooled or ambient?	Temp 2.5° °C		Cooler # GWS-293
How was the temperature taken?	☑ IR	☐ Temp. Blank	☐ Other (Specify):
Is the Temp. Criteria met for these samples? (Hg in soils @ 4°C)	☑ Yes	☐ No	
6. Custody seals on sample containers intact, signed and dated?	☑ Yes	☐ No	☐ No Seals
7. COC (Client & LvL) signed & dated?	☑ Yes	☐ No	
8. Sample containers are intact?	☑ Yes	☐ No	
9. All samples on COC received?	☑ Yes	☐ No	
All samples received on COC?	☑ Yes	☐ No	
10. All sample label information matches COC?	☑ Yes	☐ No	
11. Samples properly preserved? (If #5 is no, then this is no.)	☑ Yes	☐ No	
12. Samples received within hold times?	☑ Yes	☐ No	
Short holds taken to wet lab?	☐ Yes	☐ No	☑ N/A
13. VOA, TOC, TOX free of headspace?	☐ Yes	☐ No	☑ N/A
14. QC stickers placed on bottles designated by client?	☑ Yes	☐ No	☐ N/A
15. Shipment meets LvL Sample Acceptance Policy? (Identify all bottles that do not meet the policy, which is on the reverse of this page.)	☑ Yes	☐ No	
16. Project Manager contacted concerning any discrepancies?	☐ Yes	☐ No	☑ N/A
Person Contacted _____		Date _____	

SR-002-B-0412.doc

PESTICIDES

JANUARY 31, 2013

264 Welsh Pool Road
Exton, PA 19341
Phone: 610-280-3000
Fax: 610-280-3041

CHPRC Hanford	Project: I13-007	
PO Box 1600, Mail Stop - R3-60	Project Number: L0051	**Reported:**
Richland WA, 99352	Project Manager: Scot Fitzgerald	12/07/2012 13:34

Analytical Report for Organochlorine Pesticides by SW846 8081A

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
B2MXL5	1211032-01	Water	11/07/2012 10:21	11/08/2012 15:20

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LIONVILLE LABORATORY
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Case Narrative

Client: CHPRC I13-007 L0051
LVL #: 1211032

W.O. #: 60049-001-001-0001-00
Date Received: 11-08-2012

CHLORINATED PESTICIDES

One (1) water sample was collected on 11-07-2012.

The sample and associated QC samples were extracted 11-14-2012 and analyzed 11-26-2012 and 11/27/2012 according to criteria set forth in Lionville Laboratory SOPs. The extraction procedure was based on SW846 Method 3520C, and the analysis procedure was based on SW846 Method 8081A for client specified target compounds. All samples received Copper-Sulfur cleanup based on SW846 method 3660A.

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

1. The results presented in this report are derived from a sample that met LvL's sample acceptance policy.

2. All required holding times for extraction and analysis have been met.

3. All obtainable surrogate recoveries were within acceptance criteria.

4. The method blank was below the reporting limit for all target compounds.

5. All blank spike recoveries were within acceptance criteria.

6. All matrix spike recoveries were within acceptance criteria.

7. The matrix spike duplicate analysis was outside the RPD control limit for Endrin.

8. All initial calibrations associated with this data set were within acceptance criteria.

9. All continuing calibration standards analyzed prior to sample extracts were within acceptance criteria.

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10. I certify that this sample data package is in compliance with SOW requirements, both technically and for completeness, other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the laboratory manager or a designee, as verified by the following signature.

Iain Daniels
LvL Laboratory Manager

12/6/12
Date

JANUARY 31, 2013

LIONVILLE LABORATORY INC.

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.
P	=	This flag is used for a dual column analysis (i.e. pesticides/PCB/herbicides) when there is greater than 40% difference for detected concentrations between the two GC columns; the lower of the two values is reported on Form 1 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.

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.
NPM	=	No pattern match for multi-component target analytes.

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CHPRC Hanford	Project: I13-007	
PO Box 1600, Mail Stop - R3-60	Project Number: L0051	**Reported:**
Richland WA, 99352	Project Manager: Scot Fitzgerald	12/07/2012 13:34

B2MXL5
1211032-01 (Water)

Analyte	Result and Qualifier		Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Lionville Laboratory									
Organochlorine Pesticides by SW846 8081A									
alpha-BHC	0.0500	U	0.0500	ug/L	1	L211114	11/14/2012	11/27/2012	8081A
gamma-BHC	0.0500	U	0.0500	ug/L	1	L211114	11/14/2012	11/27/2012	8081A
beta-BHC	0.0500	U	0.0500	ug/L	1	L211114	11/14/2012	11/27/2012	8081A
delta-BHC	0.0500	U	0.0500	ug/L	1	L211114	11/14/2012	11/27/2012	8081A
Heptachlor	0.0500	U	0.0500	ug/L	1	L211114	11/14/2012	11/27/2012	8081A
Aldrin	0.0500	U	0.0500	ug/L	1	L211114	11/14/2012	11/27/2012	8081A
Heptachlor epoxide	0.0500	U	0.0500	ug/L	1	L211114	11/14/2012	11/27/2012	8081A
Endosulfan I	0.0500	U	0.0500	ug/L	1	L211114	11/14/2012	11/27/2012	8081A
4,4'-DDE	0.0500	U	0.0500	ug/L	1	L211114	11/14/2012	11/27/2012	8081A
Dieldrin	0.0500	U	0.0500	ug/L	1	L211114	11/14/2012	11/27/2012	8081A
Endrin	0.0500	U	0.0500	ug/L	1	L211114	11/14/2012	11/27/2012	8081A
4,4'-DDD	0.0500	U	0.0500	ug/L	1	L211114	11/14/2012	11/27/2012	8081A
Endosulfan II	0.0500	U	0.0500	ug/L	1	L211114	11/14/2012	11/27/2012	8081A
Endrin aldehyde	0.0500	U	0.0500	ug/L	1	L211114	11/14/2012	11/27/2012	8081A
Endosulfan sulfate	0.0500	U	0.0500	ug/L	1	L211114	11/14/2012	11/27/2012	8081A
Methoxychlor	0.0500	U	0.0500	ug/L	1	L211114	11/14/2012	11/27/2012	8081A
Endrin ketone	0.0500	U	0.0500	ug/L	1	L211114	11/14/2012	11/27/2012	8081A
Toxaphene	0.500	U	0.500	ug/L	1	L211114	11/14/2012	11/27/2012	8081A
Chlordane	0.100	U	0.100	ug/L	1	L211114	11/14/2012	11/27/2012	8081A
4,4'-DDT	0.0500	U	0.0500	ug/L	1	L211114	11/14/2012	11/27/2012	8081A
Surrogate: Tetrachloro-meta-xylene	*82.0 %*		*22-125*			*L211114*	*11/14/2012*	*11/27/2012*	*8081A*
Surrogate: Decachlorobiphenyl	*68.3 %*		*20-135*			*L211114*	*11/14/2012*	*11/27/2012*	*8081A*

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CHPRC Hanford	Project: I13-007	
PO Box 1600, Mail Stop - R3-60	Project Number: L0051	**Reported:**
Richland WA, 99352	Project Manager: Scot Fitzgerald	12/07/2012 13:34

Organochlorine Pesticides by SW846 8081A - Quality Control

Lionville Laboratory

Analyte	Result and Qualifiers		Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch L211114 - SW 3520C										
Blank (L211114-BLK1)				Prepared: 11/14/2012 Analyzed: 11/26/2012						
alpha-BHC	0.0500	U	0.0500	ug/L						
gamma-BHC	0.0500	U	0.0500	ug/L						
beta-BHC	0.0500	U	0.0500	ug/L						
delta-BHC	0.0500	U	0.0500	ug/L						
Heptachlor	0.0500	U	0.0500	ug/L						
Aldrin	0.0500	U	0.0500	ug/L						
Heptachlor epoxide	0.0500	U	0.0500	ug/L						
Endosulfan I	0.0500	U	0.0500	ug/L						
4,4'-DDE	0.0500	U	0.0500	ug/L						
Dieldrin	0.0500	U	0.0500	ug/L						
Endrin	0.0500	U	0.0500	ug/L						
4,4'-DDD	0.0500	U	0.0500	ug/L						
Endosulfan II	0.0500	U	0.0500	ug/L						
Endrin aldehyde	0.0500	U	0.0500	ug/L						
Endosulfan sulfate	0.0500	U	0.0500	ug/L						
Methoxychlor	0.0500	U	0.0500	ug/L						
Endrin ketone	0.0500	U	0.0500	ug/L						
Toxaphene	0.500	U	0.500	ug/L						
Chlordane	0.100	U	0.100	ug/L						
4,4'-DDT	0.0500	U	0.0500	ug/L						
Surrogate: Tetrachloro-meta-xylene	*0.744*			*ug/L*	*1.0001*		*74.4*	*22-125*		
Surrogate: Decachlorobiphenyl	*0.762*			*ug/L*	*1.0000*		*76.2*	*20-135*		
LCS (L211114-BS1)				Prepared: 11/14/2012 Analyzed: 11/26/2012						
alpha-BHC	0.940		0.0500	ug/L	1.0000		94.0	64-143		
gamma-BHC	0.923		0.0500	ug/L	1.0000		92.3	71-142		
beta-BHC	0.880		0.0500	ug/L	1.0000		88.0	73-133		
delta-BHC	0.962		0.0500	ug/L	1.0000		96.2	59-135		
Heptachlor	0.850		0.0500	ug/L	1.0000		85.0	70-131		
Aldrin	0.874		0.0500	ug/L	1.0000		87.4	54-139		
Heptachlor epoxide	0.895		0.0500	ug/L	1.0000		89.5	74-132		
Endosulfan I	0.894		0.0500	ug/L	1.0000		89.4	77-136		
4,4'-DDE	0.957		0.0500	ug/L	1.0000		95.7	80-139		
Dieldrin	0.917		0.0500	ug/L	1.0000		91.7	80-134		
Endrin	0.913		0.0500	ug/L	1.0000		91.3	68-147		
4,4'-DDD	0.981		0.0500	ug/L	1.0000		98.1	80-141		
Endosulfan II	0.908		0.0500	ug/L	1.0000		90.8	79-133		

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Richland WA, 99352	Project Manager: Scot Fitzgerald	12/07/2012 13:34

Organochlorine Pesticides by SW846 8081A - Quality Control

Lionville Laboratory

Analyte	Result and Qualifiers	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch L211114 - SW 3520C									
LCS (L211114-BS1)			Prepared: 11/14/2012 Analyzed: 11/26/2012						
Endrin aldehyde	0.802	0.0500	ug/L	1.0000		80.2	74-131		
Endosulfan sulfate	0.908	0.0500	ug/L	1.0000		90.8	73-129		
Methoxychlor	0.887	0.0500	ug/L	1.0000		88.7	69-136		
Endrin ketone	0.920	0.0500	ug/L	1.0000		92.0	81-137		
4,4'-DDT	0.937	0.0500	ug/L	1.0000		93.7	68-145		
Surrogate: Tetrachloro-meta-xylene	*0.762*		*ug/L*	*1.0001*		*76.2*	*22-125*		
Surrogate: Decachlorobiphenyl	*0.465*		*ug/L*	*1.0000*		*46.5*	*20-135*		
LCS Dup (L211114-BSD1)			Prepared: 11/14/2012 Analyzed: 11/27/2012						
alpha-BHC	0.890	0.0500	ug/L	1.0000		89.0	64-143	5.46	20
gamma-BHC	0.876	0.0500	ug/L	1.0000		87.6	71-142	5.23	20
beta-BHC	0.832	0.0500	ug/L	1.0000		83.2	73-133	5.61	20
delta-BHC	0.922	0.0500	ug/L	1.0000		92.2	59-135	4.25	20
Heptachlor	0.816	0.0500	ug/L	1.0000		81.6	70-131	4.08	20
Aldrin	0.832	0.0500	ug/L	1.0000		83.2	54-139	4.92	20
Heptachlor epoxide	0.854	0.0500	ug/L	1.0000		85.4	74-132	4.69	20
Endosulfan I	0.853	0.0500	ug/L	1.0000		85.3	77-136	4.69	20
4,4'-DDE	0.907	0.0500	ug/L	1.0000		90.7	80-139	5.36	20
Dieldrin	0.862	0.0500	ug/L	1.0000		86.2	80-134	6.18	20
Endrin	0.848	0.0500	ug/L	1.0000		84.8	68-147	7.38	20
4,4'-DDD	0.916	0.0500	ug/L	1.0000		91.6	80-141	6.85	20
Endosulfan II	0.860	0.0500	ug/L	1.0000		86.0	79-133	5.43	20
Endrin aldehyde	0.781	0.0500	ug/L	1.0000		78.1	74-131	2.65	20
Endosulfan sulfate	0.862	0.0500	ug/L	1.0000		86.2	73-129	5.20	20
Methoxychlor	0.835	0.0500	ug/L	1.0000		83.5	69-136	6.04	20
Endrin ketone	0.889	0.0500	ug/L	1.0000		88.9	81-137	3.43	20
4,4'-DDT	0.885	0.0500	ug/L	1.0000		88.5	68-145	5.71	20
Surrogate: Tetrachloro-meta-xylene	*0.705*		*ug/L*	*1.0001*		*70.5*	*22-125*		
Surrogate: Decachlorobiphenyl	*0.716*		*ug/L*	*1.0000*		*71.6*	*20-135*		

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PO Box 1600, Mail Stop - R3-60	Project Number: L0051	**Reported:**
Richland WA, 99352	Project Manager: Scot Fitzgerald	12/07/2012 13:34

Organochlorine Pesticides by SW846 8081A - Quality Control

Lionville Laboratory

Analyte	Result and Qualifiers	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch L211114 - SW 3520C									
Matrix Spike (L211114-MS1)		**Source: 1211032-01**	Prepared: 11/14/2012 Analyzed: 11/27/2012						
alpha-BHC	1.04	0.0500	ug/L	1.0000	0.0500 U	104	64-143		
gamma-BHC	1.02	0.0500	ug/L	1.0000	0.0500 U	102	71-142		
beta-BHC	0.971	0.0500	ug/L	1.0000	0.0500 U	97.1	73-133		
delta-BHC	1.05	0.0500	ug/L	1.0000	0.0500 U	105	59-135		
Heptachlor	0.948	0.0500	ug/L	1.0000	0.0500 U	94.8	70-131		
Aldrin	0.975	0.0500	ug/L	1.0000	0.0500 U	97.5	54-139		
Heptachlor epoxide	0.991	0.0500	ug/L	1.0000	0.0500 U	99.1	74-132		
Endosulfan I	0.976	0.0500	ug/L	1.0000	0.0500 U	97.6	77-136		
4,4'-DDE	1.05	0.0500	ug/L	1.0000	0.0500 U	105	80-139		
Dieldrin	1.03	0.0500	ug/L	1.0000	0.0500 U	103	80-134		
Endrin	1.04	0.0500	ug/L	1.0000	0.0500 U	104	68-147		
4,4'-DDD	1.10	0.0500	ug/L	1.0000	0.0500 U	110	80-141		
Endosulfan II	0.982	0.0500	ug/L	1.0000	0.0500 U	98.2	79-133		
Endrin aldehyde	0.980	0.0500	ug/L	1.0000	0.0500 U	98.0	74-131		
Endosulfan sulfate	1.01	0.0500	ug/L	1.0000	0.0500 U	101	73-129		
Methoxychlor	0.984	0.0500	ug/L	1.0000	0.0500 U	98.4	69-136		
Endrin ketone	1.02	0.0500	ug/L	1.0000	0.0500 U	102	81-137		
4,4'-DDT	1.05	0.0500	ug/L	1.0000	0.0500 U	105	68-145		
Surrogate: Tetrachloro-meta-xylene	*0.827*		*ug/L*	*1.0001*		*82.7*	*22-125*		
Surrogate: Decachlorobiphenyl	*0.800*		*ug/L*	*1.0000*		*80.0*	*20-135*		
Matrix Spike Dup (L211114-MSD1)		**Source: 1211032-01**	Prepared: 11/14/2012 Analyzed: 11/27/2012						
alpha-BHC	0.947	0.0500	ug/L	1.0000	0.0500 U	94.7	64-143	9.65	20
gamma-BHC	0.933	0.0500	ug/L	1.0000	0.0500 U	93.3	71-142	8.91	20
beta-BHC	0.891	0.0500	ug/L	1.0000	0.0500 U	89.1	73-133	8.59	20
delta-BHC	0.960	0.0500	ug/L	1.0000	0.0500 U	96.0	59-135	8.96	20
Heptachlor	0.865	0.0500	ug/L	1.0000	0.0500 U	86.5	70-131	9.16	20
Aldrin	0.899	0.0500	ug/L	1.0000	0.0500 U	89.9	54-139	8.11	20
Heptachlor epoxide	0.914	0.0500	ug/L	1.0000	0.0500 U	91.4	74-132	8.08	20
Endosulfan I	0.895	0.0500	ug/L	1.0000	0.0500 U	89.5	77-136	8.66	20
4,4'-DDE	0.964	0.0500	ug/L	1.0000	0.0500 U	96.4	80-139	8.25	20
Dieldrin	0.953	0.0500	ug/L	1.0000	0.0500 U	95.3	80-134	7.77	20
Endrin	0.840	0.0500	ug/L	1.0000	0.0500 U	84.0	68-147	21.3*	20
4,4'-DDD	1.01	0.0500	ug/L	1.0000	0.0500 U	101	80-141	8.51	20
Endosulfan II	0.907	0.0500	ug/L	1.0000	0.0500 U	90.7	79-133	7.94	20
Endrin aldehyde	0.927	0.0500	ug/L	1.0000	0.0500 U	92.7	74-131	5.56	20
Endosulfan sulfate	0.937	0.0500	ug/L	1.0000	0.0500 U	93.7	73-129	7.89	20

JANUARY 31, 2013

264 Welsh Pool Road
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CHPRC Hanford	Project: I13-007	
PO Box 1600, Mail Stop - R3-60	Project Number: L0051	**Reported:**
Richland WA, 99352	Project Manager: Scot Fitzgerald	12/07/2012 13:34

Organochlorine Pesticides by SW846 8081A - Quality Control

Lionville Laboratory

Analyte	Result and Qualifiers	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch L211114 - SW 3520C									
Matrix Spike Dup (L211114-MSD1)		**Source: 1211032-01**	Prepared: 11/14/2012 Analyzed: 11/27/2012						
Methoxychlor	0.918	0.0500	ug/L	1.0000	0.0500 U	91.8	69-136	6.94	20
Endrin ketone	0.999	0.0500	ug/L	1.0000	0.0500 U	99.9	81-137	1.88	20
4,4'-DDT	0.970	0.0500	ug/L	1.0000	0.0500 U	97.0	68-145	7.92	20
Surrogate: Tetrachloro-meta-xylene	*0.758*		*ug/L*	*1.0001*		*75.8*	*22-125*		
Surrogate: Decachlorobiphenyl	*0.752*		*ug/L*	*1.0000*		*75.2*	*20-135*		

PREPARATION BENCH SHEET

L211114

Lionville Laboratory

Printed: 11/15/2012 12:30:36PM

00000016

Matrix: Water **Prepared using: GC - SW 3520C** **Surrogate used: 1201397**

Lab Number	Analysis	Prepared	Initial (mL)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surrogate	Client	Extraction Comments
1211032-01	8081A TCL Pesticides	11/14/2012 13:17	1000	10				250	CHPRC Hanford	regulars + total chlordane (no alpha/gamma chlordane)
1211032-01	8082 PCBs	11/14/2012 13:17	1000	10				250	CHPRC Hanford	Added for BatchQC in: L211114
1211044-04	8081A TCL Pesticides	11/14/2012 13:17	1000	10				250	URS/CH2M Oak Ridge (UCOR)	
1211044-04	8082 PCBs	11/14/2012 13:17	1000	10				250	URS/CH2M Oak Ridge (UCOR)	
1211044-10	8081A TCL Pesticides	11/14/2012 13:17	1000	10				250	URS/CH2M Oak Ridge (UCOR)	
1211044-10	8082 PCBs	11/14/2012 13:17	1000	10				250	URS/CH2M Oak Ridge (UCOR)	
1211044-16	8081A TCL Pesticides	11/14/2012 13:17	1000	10				250	URS/CH2M Oak Ridge (UCOR)	
1211044-16	8082 PCBs	11/14/2012 13:17	1000	10				250	URS/CH2M Oak Ridge (UCOR)	
1211044-22	8081A TCL Pesticides	11/14/2012 13:17	1000	10				250	URS/CH2M Oak Ridge (UCOR)	
1211044-22	8082 PCBs	11/14/2012 13:17	1000	10				250	URS/CH2M Oak Ridge (UCOR)	
L211114-BLK1	QC	11/14/2012 13:17	1000	10				250		PEST
L211114-BLK2	QC	11/14/2012 13:17	1000	10				250		PCB
L211114-BS1	QC	11/14/2012 13:17	1000	10	1201358		250	250		PEST
L211114-BS2	QC	11/14/2012 13:17	1000	10	1200902		250	250		PCB
L211114-BSD1	QC	11/14/2012 13:17	1000	10	1201358		250	250		PEST
L211114-BSD2	QC	11/14/2012 13:17	1000	10	1200902		250	250		PCB
L211114-MS1	QC	11/14/2012 13:17	1000	10	1201358	1211032-01	250	250		PEST
L211114-MSD1	QC	11/14/2012 13:17	1000	10	1201358	1211032-01	250	250		PEST

S cleaned SZ 11.15.12
Cu lot # 810X036

11/15/12 1230
Extracts Relinquished By Date

S Zak 11.15.12 13:00
Extracts Received By Date

JANUARY 31, 2013

PAHs

JANUARY 31, 2013

264 Welsh Pool Road
Exton, PA 19341
Phone: 610-280-3000
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CHPRC Hanford	Project: I13-007	
PO Box 1600, Mail Stop - R3-60	Project Number: L0051	**Reported:**
Richland WA, 99352	Project Manager: Scot Fitzgerald	12/07/2012 13:34

Analytical Report for Polynuclear Aromatic Compounds by SW846 8310

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
B2MXL5	1211032-01	Water	11/07/2012 10:21	11/08/2012 15:20

JANUARY 31, 2013

LIONVILLE LABORATORY
A division of Eberline Analytical Corporation

264 Welsh Pool Road
Exton, Pennsylvania 19341
Phone (610) 280-3000
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Case Narrative

Client: CHPRC Hanford I13-007 L0051
LVL #: 1211032

W.O. #: 60049-001-001-0001-00
Date Received: 11-08-2012

POLYNUCLEAR AROMATIC HYDROCARBONS (PAH)

One (1) water sample was collected on 11-07-2012.

The sample and associated QC samples were extracted 11-14-2012 and analyzed 11-28-2012 according to criteria set forth in Lionville Laboratory SOPs. The extraction procedure was based on SW846 Method 3520C and the analysis procedure was based on SW846 Method 8310.

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

1. The results presented in this report are derived from samples that met LvL's sample acceptance policy.
2. All required holding times for extraction and analysis have been met.
3. All obtainable surrogate recoveries were within acceptance criteria.
4. The method blank was below the reporting limits for all target compounds.
5. All blank spike recoveries were within acceptance criteria.
6. All matrix spike recoveries were within acceptance criteria.
7. The initial calibrations associated with this data set were within acceptance criteria.
8. All continuing calibration standards analyzed prior to sample extracts were within acceptance criteria.
9. I certify that this sample data package is in compliance with SOW requirements, both technically and for completeness, other than the conditions detailed above. Release of the data contained in this hard-copy data package has been authorized by the laboratory manager or a designee as verified by the following signature.

Iain Daniels
LvL Laboratory Manager

12/7/12
Date

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 pages.

JANUARY 31, 2013

LIONVILLE LABORATORY INC.

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.
P	=	This flag is used for a dual column analysis (i.e. pesticides/PCB/herbicides) when there is greater than 40% difference for detected concentrations between the two GC columns; the lower of the two values is reported on Form 1 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.

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.
NPM	=	No pattern match for multi-component target analytes.

JANUARY 31, 2013

264 Welsh Pool Road
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Phone: 610-280-3000
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CHPRC Hanford	Project: I13-007	
PO Box 1600, Mail Stop - R3-60	Project Number: L0051	**Reported:**
Richland WA, 99352	Project Manager: Scot Fitzgerald	12/07/2012 13:34

B2MXL5
1211032-01 (Water)

Analyte	Result and Qualifier		Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Lionville Laboratory									
Polynuclear Aromatic Compounds by SW846 8310									
Naphthalene	0.100	U	0.100	ug/L	1	L211113	11/14/2012	11/28/2012	8310
Acenaphthylene	0.100	U	0.100	ug/L	1	L211113	11/14/2012	11/28/2012	8310
Acenaphthene	0.100	U	0.100	ug/L	1	L211113	11/14/2012	11/28/2012	8310
Fluorene	**0.0290**	J	0.100	ug/L	1	L211113	11/14/2012	11/28/2012	8310
Phenanthrene	0.100	U	0.100	ug/L	1	L211113	11/14/2012	11/28/2012	8310
Anthracene	0.100	U	0.100	ug/L	1	L211113	11/14/2012	11/28/2012	8310
Fluoranthene	0.100	U	0.100	ug/L	1	L211113	11/14/2012	11/28/2012	8310
Indeno[1,2,3-cd]pyrene	0.100	U	0.100	ug/L	1	L211113	11/14/2012	11/28/2012	8310
Pyrene	0.100	U	0.100	ug/L	1	L211113	11/14/2012	11/28/2012	8310
Benz[a]anthracene	0.100	U	0.100	ug/L	1	L211113	11/14/2012	11/28/2012	8310
Chrysene	0.100	U	0.100	ug/L	1	L211113	11/14/2012	11/28/2012	8310
Benzo[b] fluoranthene	0.100	U	0.100	ug/L	1	L211113	11/14/2012	11/28/2012	8310
Benzo[k] fluoranthene	0.100	U	0.100	ug/L	1	L211113	11/14/2012	11/28/2012	8310
Benzo[a] pyrene	0.100	U	0.100	ug/L	1	L211113	11/14/2012	11/28/2012	8310
Dibenz[a,h]anthracene	0.100	U	0.100	ug/L	1	L211113	11/14/2012	11/28/2012	8310
Benzo[g,h,i] perylene	0.100	U	0.100	ug/L	1	L211113	11/14/2012	11/28/2012	8310
Surrogate: Triphenylene	*88 %*		*68-129*			*L211113*	*11/14/2012*	*11/28/2012*	*8310*

JANUARY 31, 2013

264 Welsh Pool Road
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Phone: 610-280-3000
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CHPRC Hanford	Project: I13-007	
PO Box 1600, Mail Stop - R3-60	Project Number: L0051	**Reported:**
Richland WA, 99352	Project Manager: Scot Fitzgerald	12/07/2012 13:34

Polynuclear Aromatic Compounds by SW846 8310 - Quality Control

Lionville Laboratory

Analyte	Result and Qualifiers		Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch L211113 - SW 3520C										
Blank (L211113-BLK1)				Prepared: 11/14/2012 Analyzed: 11/28/2012						
Naphthalene	0.100	U	0.100	ug/L						
Acenaphthylene	0.100	U	0.100	ug/L						
Acenaphthene	0.100	U	0.100	ug/L						
Fluorene	0.100	U	0.100	ug/L						
Phenanthrene	0.100	U	0.100	ug/L						
Anthracene	0.100	U	0.100	ug/L						
Fluoranthene	0.100	U	0.100	ug/L						
Indeno[1,2,3-cd]pyrene	0.100	U	0.100	ug/L						
Pyrene	0.100	U	0.100	ug/L						
Benz[a]anthracene	0.100	U	0.100	ug/L						
Chrysene	0.0335	J	0.100	ug/L						
Benzo[b] fluoranthene	0.0260	J	0.100	ug/L						
Benzo[k] fluoranthene	0.100	U	0.100	ug/L						
Benzo[a] pyrene	0.100	U	0.100	ug/L						
Dibenz[a,h]anthracene	0.100	U	0.100	ug/L						
Benzo[g,h,i] perylene	0.100	U	0.100	ug/L						
Surrogate: Triphenylene	*4.74*			*ug/L*	*5.0000*		*95*	*68-129*		
LCS (L211113-BS1)				Prepared: 11/14/2012 Analyzed: 11/28/2012						
Naphthalene	3.60		0.100	ug/L	5.0000		72	0-127		
Acenaphthylene	3.86		0.100	ug/L	5.0000		77	50-140		
Acenaphthene	3.92		0.100	ug/L	5.0000		78	17-139		
Fluorene	4.13		0.100	ug/L	5.0000		83	28-145		
Phenanthrene	4.12		0.100	ug/L	5.0000		82	30-152		
Anthracene	4.07		0.100	ug/L	5.0000		81	19-171		
Fluoranthene	4.26		0.100	ug/L	5.0000		85	34-159		
Indeno[1,2,3-cd]pyrene	4.40		0.100	ug/L	5.0000		88	31-156		
Pyrene	4.18		0.100	ug/L	5.0000		84	33-152		
Benz[a]anthracene	4.76		0.100	ug/L	5.0000		95	32-157		
Chrysene	4.24		0.100	ug/L	5.0000		85	31-159		
Benzo[b] fluoranthene	4.55		0.100	ug/L	5.0000		91	33-164		
Benzo[k] fluoranthene	4.53		0.100	ug/L	5.0000		91	28-161		
Benzo[a] pyrene	4.47		0.100	ug/L	5.0000		89	29-149		
Dibenz[a,h]anthracene	4.61		0.100	ug/L	5.0000		92	27-153		
Benzo[g,h,i] perylene	4.64		0.100	ug/L	5.0000		93	32-157		
Surrogate: Triphenylene	*4.52*			*ug/L*	*5.0000*		*90*	*68-129*		

JANUARY 31, 2013

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CHPRC Hanford	Project: I13-007	
PO Box 1600, Mail Stop - R3-60	Project Number: L0051	**Reported:**
Richland WA, 99352	Project Manager: Scot Fitzgerald	12/07/2012 13:34

Polynuclear Aromatic Compounds by SW846 8310 - Quality Control

Lionville Laboratory

Analyte	Result and Qualifiers	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch L211113 - SW 3520C									
Matrix Spike (L211113-MS1)		**Source: 1211032-01**	Prepared: 11/14/2012 Analyzed: 11/28/2012						
Naphthalene	3.77	0.100	ug/L	5.0000	0.100 U	75	0-127		
Acenaphthylene	4.26	0.100	ug/L	5.0000	0.100 U	85	50-140		
Acenaphthene	4.41	0.100	ug/L	5.0000	0.100 U	88	17-139		
Fluorene	4.42	0.100	ug/L	5.0000	0.0290	88	28-145		
Phenanthrene	4.34	0.100	ug/L	5.0000	0.100 U	87	30-152		
Anthracene	4.35	0.100	ug/L	5.0000	0.100 U	87	19-171		
Fluoranthene	4.49	0.100	ug/L	5.0000	0.100 U	90	34-159		
Indeno[1,2,3-cd]pyrene	4.44	0.100	ug/L	5.0000	0.100 U	89	31-156		
Pyrene	4.29	0.100	ug/L	5.0000	0.100 U	86	33-152		
Benz[a]anthracene	4.86	0.100	ug/L	5.0000	0.100 U	97	32-157		
Chrysene	4.27	0.100	ug/L	5.0000	0.100 U	85	31-159		
Benzo[b] fluoranthene	4.64	0.100	ug/L	5.0000	0.100 U	93	33-164		
Benzo[k] fluoranthene	4.60	0.100	ug/L	5.0000	0.100 U	92	28-161		
Benzo[a] pyrene	4.59	0.100	ug/L	5.0000	0.100 U	92	29-149		
Dibenz[a,h]anthracene	4.68	0.100	ug/L	5.0000	0.100 U	94	27-153		
Benzo[g,h,i] perylene	4.74	0.100	ug/L	5.0000	0.100 U	95	32-157		
Surrogate: Triphenylene	*4.50*		*ug/L*	*5.0000*		*90*	*68-129*		
Matrix Spike Dup (L211113-MSD1)		**Source: 1211032-01**	Prepared: 11/14/2012 Analyzed: 11/28/2012						
Naphthalene	3.64	0.100	ug/L	5.0000	0.100 U	73	0-127	3	30
Acenaphthylene	3.89	0.100	ug/L	5.0000	0.100 U	78	50-140	9	30
Acenaphthene	3.82	0.100	ug/L	5.0000	0.100 U	76	17-139	14	30
Fluorene	4.20	0.100	ug/L	5.0000	0.0290	83	28-145	5	30
Phenanthrene	4.25	0.100	ug/L	5.0000	0.100 U	85	30-152	2	30
Anthracene	4.21	0.100	ug/L	5.0000	0.100 U	84	19-171	3	30
Fluoranthene	4.37	0.100	ug/L	5.0000	0.100 U	87	34-159	3	30
Indeno[1,2,3-cd]pyrene	4.38	0.100	ug/L	5.0000	0.100 U	88	31-156	1	30
Pyrene	4.23	0.100	ug/L	5.0000	0.100 U	85	33-152	1	30
Benz[a]anthracene	4.79	0.100	ug/L	5.0000	0.100 U	96	32-157	2	30
Chrysene	4.21	0.100	ug/L	5.0000	0.100 U	84	31-159	2	30
Benzo[b] fluoranthene	4.55	0.100	ug/L	5.0000	0.100 U	91	33-164	2	30
Benzo[k] fluoranthene	4.52	0.100	ug/L	5.0000	0.100 U	90	28-161	2	30
Benzo[a] pyrene	4.43	0.100	ug/L	5.0000	0.100 U	89	29-149	4	30
Dibenz[a,h]anthracene	4.57	0.100	ug/L	5.0000	0.100 U	91	27-153	2	30
Benzo[g,h,i] perylene	4.62	0.100	ug/L	5.0000	0.100 U	92	32-157	3	30
Surrogate: Triphenylene	*4.32*		*ug/L*	*5.0000*		*86*	*68-129*		

PREPARATION BENCH SHEET

L211113

Lionville Laboratory

Printed: 11/15/2012 12:37:41PM

00000024

Matrix: Water **Prepared using: GC - SW 3520C** **Surrogate used: 1200612**

Lab Number	Analysis	Prepared	Initial (mL)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surrogate	Client	Extraction Comments
1211032-01	8310 PAH	11/14/2012 13:09	1000	5				50	CHPRC Hanford	
L211113-BLK1	QC	11/14/2012 13:09	1000	5				50		
L211113-BS1	QC	11/14/2012 13:09	1000	5	1200963		50	50		
L211113-MS1	QC	11/14/2012 13:09	1000	5	1200963	1211032-01	50	50		
L211113-MSD1	QC	11/14/2012 13:09	1000	5	1200963	1211032-01	50	50		

JANUARY 31, 2013

S. A 11/15/12 1237
Extracts Relinquished By Date

LC 11-15-12
Extracts Received By Date

Lionville Laboratory Use Only
1211032

Custody Transfer Record/Lab Work Request

Page 1 of 1

FIELD PERSONNEL: COMPLETE ONLY SHADED AREAS

Lionville Laboratory
A Division of Eberline Analytical Corporation

Client CHPRC SAF# I13-007 L0051

Est. Final Proj. Sampling Date

Project#

Project Contact/Phone#

Lionville Laboratory Project Manager A Johnson

QC SW Del Std TAT 30

Date Rec'd 11/8/12 Date Due 12/8/12

		A	B	C-F
Refrigerator #			2	2
#/Type Container	Liquid		2AG	4AG
	Solid			
Volume	Liquid		L	L
	Solid			
Preservatives			—	—

ANALYSES REQUESTED → ORGANIC: VOA, ~~BNA~~ PAH, Pest/~~PCB~~, Herb; INORG: Metal, CN

Lionville Laboratory Use Only

MATRIX CODES:
W Water
WW Waste Water
GW Groundwater
WST Waste
WI Wipe
SO Solid
S Soil
SL Sludge
SE Sediment
PC Paint Chips
O Oil
NAL Non-Aqueous Liquid
L Leachate
A Air
T Tissue
F Fish

Lab ID	Client ID/Description	Matrix QC Chosen (✓) MS	MSD	Matrix	Date Collected	Time Collected	PAH 8310	Pest 8081
01	B2MXL5	✓	✓	W	11-7-12	1021	X	X

Special Instructions:

Special Instructions:
1. pest = total chlordane + regular list (no alpha/gamma chlordane)
2.
3.
4.
5.
6.

Relinquished by	Received by	Date	Time
[signature]	[signature]	11/8/12	1520

Relinquished by	Received by	Date	Time

Relinquished by	Received by	Date	Time

JANUARY 31, 2013

0000000025

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # I13-007-004
		Page 1 of 1

Collector	Robert Crow	Contact/Requester	Karen Waters-Husted	Telephone No.	376-4650
SAF No.	I13-007	Sampling Origin	Hanford Site	Purchase Order/Charge Code	300071ES20
Project Title	100NR2, DECEMBER 2012	Logbook No.	HNF-N-506 36 134	Ice Chest No.	605-293 — 53 lbs
Shipped To (Lab)	Lionville Laboratory Incorporated	Method of Shipment	Commercial Carrier	Bill of Lading/Air Bill No.	7940-2501-4404
Protocol	CERCLA	Priority:	30 Days PRIORITY	Offsite Property No.	

POSSIBLE SAMPLE HAZARDS/REMARKS

** ** Contains Radioactive Material at concentations that are not regulated for transportation per 49 CRF but are not releasable per DOE Order 5400 5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time**

100 Area Generator Knowledge Information Form applies.
The CACN for all analytical work at WSCF is 401647.
FY12 and FY13 samples cannot be in the same SD

Total Activity Exemption: Yes ☑ No ☐

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B2MXL5	N	W	11-7-12	1021	4x1-L aG	8081_PEST_GC: List-1 (19)	7/40 Days	Cool~4C
B2MXL5	N	W	↓	↓	2x1-L aG	8310_SVOA_HPLC	7/40 Days	Cool~4C
B2MXL5	N	W	11-7-12	1021	1x20-mL P	Activity Scan	6 Months	None

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Robert Crow	R Crow		NOV 07 2012 1105	ARMcFutze			NOV 07 2012 1105
ARMcFutze			11-7-12 1400	FED EX			11-7-12
Fed Ex			11-8-12 1520	VICTOR HERNANDEZ			11-8-12 1520

Matrix *

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

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

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A-6004-842 (REV 2)

JANUARY 31, 2013

000000026

JANUARY 31, 2013

Lionville Laboratory

SAMPLE RECEIPT CHECKLIST (SRC)

CLIENT: CHPRC
Project/SAF/SOW/Release #: I13-007

Date: 11/8/12

LvL Batch #: 1211032

Sample Custodian: [illegible]

NOTE: EXPLAIN ALL DISCREPANCIES

1. Samples Hand Delivered or Shipped?	Carrier FedEx		Airbill # 794025014404
2. Custody Seals on coolers or shipping containers intact, signed & dated?	☑ Yes	☐ No	☐ No Seals
3. Outside of coolers or shipping containers are free from damage?	☑ Yes	☐ No	*Comments:*
4. All expected paperwork received (coc & other client specific information) sealed in plactic bag and easily accessible?	☑ Yes	☐ No	
5. Samples received cooled or ambient?	Temp 2.5° °C		Cooler # GWS-293
How was the temperature taken?	☑ IR	☐ Temp. Blank	☐ Other (Specify):
Is the Temp. Criteria met for these samples? (Hg in soils @ 4°C)	☑ Yes	☐ No	
6. Custody seals on sample containers intact, signed and dated?	☑ Yes	☐ No	☐ No Seals
7. COC (Client & LvL) signed & dated?	☑ Yes	☐ No	
8. Sample containers are intact?	☑ Yes	☐ No	
9. All samples on COC received?	☑ Yes	☐ No	
All samples received on COC?	☑ Yes	☐ No	
10. All sample label information matches COC?	☑ Yes	☐ No	
11. Samples properly preserved? (If #5 is no, then this is no.)	☑ Yes	☐ No	
12. Samples received within hold times?	☑ Yes	☐ No	
Short holds taken to wet lab?	☐ Yes	☐ No	☑ N/A
13. VOA, TOC, TOX free of headspace?	☐ Yes	☐ No	☑ N/A
14. QC stickers placed on bottles designated by client?	☑ Yes	☐ No	☐ N/A
15. Shipment meets LvL Sample Acceptance Policy? (Identify all bottles that do not meet the policy, which is on the reverse of this page.)	☑ Yes	☐ No	
16. Project Manager contacted concerning any discrepancies?	☐ Yes	☐ No	☑ N/A
Person Contacted_____		Date _____	

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