EBERLINE SERVICES

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December 10, 2012

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

Reference: **P.O. #33677**
Eberline Analytical S2-11-027-7040, SDG H4763

Dear Mr. Fitzgerald:

Enclosed is a data report for four water samples designated under SAF No. I13-002 received at Eberline Analytical on November 7, 2012 and subsequently analyzed according to the accompanying chain-of-custody documents.

Please call if you have any questions concerning this report.

Sincerely,

Joseph Verville
Client Services Manager

NJV/

Enclosure: Case Narrative

1.0 GENERAL

CH2M Hill Plateau Remediation Company (CHPRC) Sample Delivery Group H4763 was composed of four water samples designated under SAF No. I13-002 with a Project Designation of: 100KR4(1), November 2012.

The samples were received as stated on the Chain-of-Custody documents. Any discrepancies are noted on the Eberline Analytical Sample Receipt Checklist.

2.0 ANALYSIS NOTES

2.1 Carbon-14 Analysis

No problems were encountered during the course of the analyses. The carbon-14 QC MS analysis data sheet denotes an "X" qualifier, which indicates that some data was manually entered and may need to be double checked; in this case the "added amount" was manually entered, and subsequently double checked.

3.0 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."

12/10/12

Joseph Verville
Client Services Manager

Date

E B E R L I N E A N A L Y T I C A L - R I C H M O N D
SAMPLE DELIVERY GROUP H4763

SDG	7040
Contact	Joseph Verville

Client	Hanford
Contract	No. 33677
Case no	SDG_H4763

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	CHPRC
Version	Ver 1.0
Form	DVD-TOC
Version	3.06
Report date	12/10/12

EBERLINE ANALYTICAL-RICHMOND

SAMPLE DELIVERY GROUP H4763

SDG 7040
Contact Joseph Verville

REPORT GUIDE

Client Hanford
Contract No. 33677
Case no SDG H4763

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 CHPRC
Version Ver 1.0
Form DVD-RG
Version 3.06
Report date 12/10/12

SDG 7040
Contact Joseph Verville

GUIDE, cont.

Client Hanford
Contract No. 33677
Case no SDG H4763

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.

EBERLINE ANALYTICAL-RICHMOND

SAMPLE DELIVERY GROUP H4763

SDG 7040
Contact Joseph Verville

LAB SAMPLE SUMMARY

Client Hanford
Contract No. 33677
Case no SDG H4763

LAB SAMPLE ID	CLIENT SAMPLE ID	LOCATION	MATRIX	LEVEL	SAF NO	CHAIN OF CUSTODY	COLLECTED
S211027-01	B2MPJ1	Hanford Site	WATER		I13-002	I13-002-001	11/05/12 13:10
S211027-02	B2MPJ2	Hanford Site	WATER		I13-002	I13-002-002	11/05/12 13:10
S211027-03	B2MPK1	Hanford Site	WATER		I13-002	I13-002-003	11/05/12 14:21
S211027-04	B2MRJ4	Hanford Site	WATER		I13-002	I13-002-003	11/05/12 15:05
S211027-05	Lab Control Sample		WATER		I13-002		
S211027-06	Method Blank		WATER		I13-002		
S211027-07	Duplicate (S211027-01)	Hanford Site	WATER		I13-002		11/05/12 13:10
S211027-08	Spike (S211027-02)	Hanford Site	WATER		I13-002		11/05/12 13:10

Lab id EBRLNE
Protocol CHPRC
Version Ver 1.0
Form DVD-LS
Version 3.06
Report date 12/10/12

EBERLINE ANALYTICAL-RICHMOND

SAMPLE DELIVERY GROUP H4763

QC SUMMARY

SDG 7040
Contact Joseph Verville

Client Hanford
Contract No. 33677
Case no SDG H4763

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
7040	I13-002-001	B2MPJ1	WATER		125 mL		11/07/12	2	S211027-01	7040-001
	I13-002-002	B2MPJ2	WATER		125 mL		11/07/12	2	S211027-02	7040-002
	I13-002-003	B2MPK1	WATER		125 mL		11/07/12	2	S211027-03	7040-003
		B2MRJ4	WATER		125 mL		11/07/12	2	S211027-04	7040-004
		Method Blank	WATER						S211027-06	7040-006
		Lab Control Sample	WATER						S211027-05	7040-005
		Duplicate (S211027-01)	WATER		125 mL		11/07/12	2	S211027-07	7040-007
		Spike (S211027-02)	WATER		125 mL		11/07/12	2	S211027-08	7040-008

Lab id EBRLNE
Protocol CHPRC
Version Ver 1.0
Form DVD-QS
Version 3.06
Report date 12/10/12

EBERLINE ANALYTICAL-RICHMOND

SAMPLE DELIVERY GROUP H4763

SDG 7040
Contact Joseph Verville

PREP BATCH SUMMARY

Client Hanford
Contract No. 33677
Case no SDG H4763

TEST	MATRIX	METHOD	PREPARATION BATCH	ERROR 2σ %	PLANCHETS ANALYZED CLIENT	MORE	RE	BLANK	LCS	DUP/ORIG	MS/ORIG	QUALIFIERS
Liquid Scintillation Counting												
C	WATER	Carbon 14 in Water	7733-187	10.0	4			1	1	1/1	1/1	X

Blank, LCS, Duplicate and Spike planchets are those in the same preparation batch as some Client sample.

Lab id EBRLNE
Protocol CHPRC
Version Ver 1.0
Form DVD-PBS
Version 3.06
Report date 12/10/12

EBERLINE ANALYTICAL-RICHMOND

SAMPLE DELIVERY GROUP H4763

SDG 7040
Contact Joseph Verville

LAB WORK SUMMARY

Client Hanford
Contract No. 33677
Case no SDG H4763

LAB SAMPLE COLLECTED RECEIVED	CLIENT SAMPLE ID LOCATION CUSTODY	SAF No	MATRIX	PLANCHET	TEST	SUF-FIX	ANALYZED	REVIEWED	BY	METHOD
S211027-01 11/05/12 11/07/12	B2MPJ1 Hanford Site I13-002-001	I13-002	WATER	7040-001	C		12/04/12	12/06/12	BW	Carbon 14 in Water
S211027-02 11/05/12 11/07/12	B2MPJ2 Hanford Site I13-002-002	I13-002	WATER	7040-002	C		12/04/12	12/06/12	BW	Carbon 14 in Water
S211027-03 11/05/12 11/07/12	B2MPK1 Hanford Site I13-002-003	I13-002	WATER	7040-003	C		12/04/12	12/06/12	BW	Carbon 14 in Water
S211027-04 11/05/12 11/07/12	B2MRJ4 Hanford Site I13-002-003	I13-002	WATER	7040-004	C		12/04/12	12/06/12	BW	Carbon 14 in Water
S211027-05	Lab Control Sample	I13-002	WATER	7040-005	C		12/04/12	12/06/12	BW	Carbon 14 in Water
S211027-06	Method Blank	I13-002	WATER	7040-006	C		12/05/12	12/06/12	BW	Carbon 14 in Water
S211027-07 11/05/12 11/07/12	Duplicate (S211027-01) Hanford Site	I13-002	WATER	7040-007	C		12/04/12	12/06/12	BW	Carbon 14 in Water
S211027-08 11/05/12 11/07/12	Spike (S211027-02) Hanford Site	I13-002	WATER	7040-008	C		12/04/12	12/06/12	BW	Carbon 14 in Water

Lab id EBRLNE
Protocol CHPRC
Version Ver 1.0
Form DVD-LWS
Version 3.06
Report date 12/10/12

EBERLINE ANALYTICAL-RICHMOND

SAMPLE DELIVERY GROUP H4763

SDG 7040
Contact Joseph Verville

WORK SUMMARY, cont.

Client Hanford
Contract No. 33677
Case no SDG H4763

COUNTS OF TESTS BY SAMPLE TYPE

TEST	SAF No	METHOD	REFERENCE	CLIENT	MORE	RE	BLANK	LCS	DUP	SPIKE	TOTAL
C	I13-002	Carbon 14 in Water	C14_CHEM_LSC	4			1	1	1	1	8
TOTALS				4			1	1	1	1	8

Lab id EBRLNE
Protocol CHPRC
Version Ver 1.0
Form DVD-LWS
Version 3.06
Report date 12/10/12

EBERLINE ANALYTICAL-RICHMOND

SAMPLE DELIVERY GROUP H4763

7040-006 Method Blank

METHOD BLANK

SDG	7040	Client/Case no	Hanford	SDG H4763
Contact	Joseph Verville	Contract	No. 33677	
Lab sample id	S211027-06	Client sample id	Method Blank	
Dept sample id	7040-006	Material/Matrix		WATER
		SAF No	I13-002	

ANALYTE	CAS NO	RESULT pCi/L	2σ ERR (COUNT)	MDA pCi/L	RDL pCi/L	QUALI-FIERS	TEST
Carbon 14	14762-75-5	0.428	30	51.3	200	U	C

QC-BLANK #82916

Lab id	EBRLNE
Protocol	CHPRC
Version	Ver 1.0
Form	DVD-DS
Version	3.06
Report date	12/10/12

EBERLINE ANALYTICAL-RICHMOND

SAMPLE DELIVERY GROUP H4763

7040-005

Lab Control Sample

LAB CONTROL SAMPLE

SDG 7040
Contact Joseph Verville

Client/Case no Hanford SDG H4763
Contract No. 33677

Lab sample id S211027-05
Dept sample id 7040-005

Client sample id Lab Control Sample
Material/Matrix WATER
SAF No I13-002

ANALYTE	RESULT pCi/L	2σ ERR (COUNT)	MDA pCi/L	RDL pCi/L	QUALI-FIERS	TEST	ADDED pCi/L	2σ ERR pCi/L	REC %	3σ LMTS (TOTAL)	PROTOCOL LIMITS
Carbon 14	7650	120	47.5	200		C	7970	320	96	84-116	80-120

QC-LCS #82915

Lab id EBRLNE
Protocol CHPRC
Version Ver 1.0
Form DVD-LCS
Version 3.06
Report date 12/10/12

EBERLINE ANALYTICAL-RICHMOND

SAMPLE DELIVERY GROUP H4763

7040-007 B2MPJ1

DUPLICATE

SDG	7040			Client/Case no	Hanford SDG H4763
Contact	Joseph Verville			Contract	No. 33677
	DUPLICATE		ORIGINAL		
Lab sample id	S211027-07	Lab sample id	S211027-01	Client sample id	B2MPJ1
Dept sample id	7040-007	Dept sample id	7040-001	Location/Matrix	Hanford Site WATER
		Received	11/07/12	Collected/Volume	11/05/12 13:10 125 mL
				Custody/SAF No	I13-002-001 I13-002

ANALYTE	DUPLICATE pCi/L	2σ ERR (COUNT)	MDA pCi/L	RDL pCi/L	QUALI-FIERS	TEST	ORIGINAL pCi/L	2σ ERR (COUNT)	MDA pCi/L	QUALI-FIERS	RPD %	3σ TOT	DER σ
Carbon 14	8840	120	48.2	200		C	9230	130	50.0		4	21	0.6

QC-DUP#1 82917

100KR4(1) November 2012

Lab id	EBRLNE
Protocol	CHPRC
Version	Ver 1.0
Form	DVD-DUP
Version	3.06
Report date	12/10/12

EBERLINE ANALYTICAL-RICHMOND

SAMPLE DELIVERY GROUP H4763

7040-008 B2MPJ2

MATRIX SPIKE

SDG	7040			Client/Case no	Hanford SDG H4763
Contact	Joseph Verville			Contract	No. 33677
	MATRIX SPIKE		ORIGINAL		
Lab sample id	S211027-08	Lab sample id	S211027-02	Client sample id	B2MPJ2
Dept sample id	7040-008	Dept sample id	7040-002	Location/Matrix	Hanford Site WATER
		Received	11/07/12	Collected/Volume	11/05/12 13:10 125 mL
				Custody/SAF No	I13-002-002 I13-002

ANALYTE	SPIKE pCi/L	2σ ERR (COUNT)	MDA pCi/L	RDL pCi/L	QUALI-FIERS	TEST	ADDED pCi/L	2σ ERR pCi/L	ORIGINAL pCi/L	2σ ERR (COUNT)	REC %	3σ LMTS (TOTAL)	PROTOCOL LIMITS
Carbon 14	22900	240	72.7	200	X	C	14300	570	8930	130	98	73-127	80-120

QC-MS#2 82918

100KR4(1) November 2012

Lab id	EBRLNE
Protocol	CHPRC
Version	Ver 1.0
Form	DVD-MS
Version	3.06
Report date	12/10/12

EBERLINE ANALYTICAL-RICHMOND

SAMPLE DELIVERY GROUP H4763

7040-001 B2MPJ1

DATA SHEET

SDG	7040	Client/Case no	Hanford	SDG H4763	
Contact	Joseph Verville	Contract	No. 33677		
Lab sample id	S211027-01	Client sample id	B2MPJ1		
Dept sample id	7040-001	Location/Matrix	Hanford Site	WATER	
Received	11/07/12	Collected/Volume	11/05/12 13:10	125 mL	
		Custody/SAF No	I13-002-001	I13-002	

ANALYTE	CAS NO	RESULT pCi/L	2σ ERR (COUNT)	MDA pCi/L	RDL pCi/L	QUALI-FIERS	TEST
Carbon 14	14762-75-5	9230	130	50.0	200		C

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DATA SHEETS
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SUMMARY DATA SECTION
Page 12

Lab id	EBRLNE
Protocol	CHPRC
Version	Ver 1.0
Form	DVD-DS
Version	3.06
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EBERLINE ANALYTICAL-RICHMOND

SAMPLE DELIVERY GROUP H4763

7040-002 B2MPJ2

DATA SHEET

SDG	7040	Client/Case no	Hanford	SDG H4763	
Contact	Joseph Verville	Contract	No. 33677		
Lab sample id	S211027-02	Client sample id	B2MPJ2		
Dept sample id	7040-002	Location/Matrix	Hanford Site	WATER	
Received	11/07/12	Collected/Volume	11/05/12 13:10	125 mL	
		Custody/SAF No	I13-002-002	I13-002	

ANALYTE	CAS NO	RESULT pCi/L	2σ ERR (COUNT)	MDA pCi/L	RDL pCi/L	QUALI-FIERS	TEST
Carbon 14	14762-75-5	8930	130	49.2	200		C

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DATA SHEETS
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Lab id	EBRLNE
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EBERLINE ANALYTICAL-RICHMOND

SAMPLE DELIVERY GROUP H4763

7040-003 B2MPK1

DATA SHEET

SDG	7040	Client/Case no	Hanford	SDG H4763	
Contact	Joseph Verville	Contract	No. 33677		
Lab sample id	S211027-03	Client sample id	B2MPK1		
Dept sample id	7040-003	Location/Matrix	Hanford Site	WATER	
Received	11/07/12	Collected/Volume	11/05/12 14:21	125 mL	
		Custody/SAF No	I13-002-003	I13-002	

ANALYTE	CAS NO	RESULT pCi/L	2σ ERR (COUNT)	MDA pCi/L	RDL pCi/L	QUALI-FIERS	TEST
Carbon 14	14762-75-5	725	45	48.4	200		C

100KR4(1) November 2012

Lab id	EBRLNE
Protocol	CHPRC
Version	Ver 1.0
Form	DVD-DS
Version	3.06
Report date	12/10/12

EBERLINE ANALYTICAL-RICHMOND

SAMPLE DELIVERY GROUP H4763

7040-004 B2MRJ4

DATA SHEET

SDG	7040	Client/Case no	Hanford	SDG H4763
Contact	Joseph Verville	Contract	No. 33677	
Lab sample id	S211027-04	Client sample id	B2MRJ4	
Dept sample id	7040-004	Location/Matrix	Hanford Site	WATER
Received	11/07/12	Collected/Volume	11/05/12 15:05	125 mL
		Custody/SAF No	I13-002-003	I13-002

ANALYTE	CAS NO	RESULT pCi/L	2σ ERR (COUNT)	MDA pCi/L	RDL pCi/L	QUALI-FIERS	TEST
Carbon 14	14762-75-5	230	36	50.3	200		C

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DATA SHEETS
Page 4
SUMMARY DATA SECTION
Page 15

Lab id	EBRLNE
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EBERLINE ANALYTICAL-RICHMOND

SAMPLE DELIVERY GROUP H4763

Test C Matrix WATER
SDG 7040
Contact Joseph Verville

LAB METHOD SUMMARY

CARBON 14 IN WATER

LIQUID SCINTILLATION COUNTING

Client Hanford
Contract No. 33677
Contract SDG H4763

RESULTS

LAB SAMPLE ID	RAW TEST	SUF-FIX	PLANCHET	CLIENT SAMPLE ID	Carbon 14	
Preparation batch 7733-187						
S211027-01			7040-001	B2MPJ1	9230	
S211027-02			7040-002	B2MPJ2	8930	
S211027-03			7040-003	B2MPK1	725	
S211027-04			7040-004	B2MRJ4	230	
S211027-05			7040-005	Lab Control Sample	ok	
S211027-06			7040-006	Method Blank	U	
S211027-07			7040-007	Duplicate (S211027-01)	ok	
S211027-08			7040-008	Spike (S211027-02)	ok	X
Nominal values and limits from method				RDLs (pCi/L)	200	

METHOD PERFORMANCE

LAB SAMPLE ID	RAW TEST	SUF-FIX	CLIENT SAMPLE ID	MDA pCi/L	ALIQ L	PREP FAC	DILU-TION	YIELD %	EFF %	COUNT min	FWHM keV	DRIFT KeV	DAYS HELD	PREPARED	ANAL-YZED	DETECTOR
Preparation batch 7733-187			2σ prep error 10.0 %	Reference Lab Notebook 7733-187												
S211027-01			B2MPJ1	50.0	0.0300			100		50			29	12/04/12	12/04	LSC-004
S211027-02			B2MPJ2	49.2	0.0300			100		50			29	12/04/12	12/04	LSC-004
S211027-03			B2MPK1	48.4	0.0300			100		50			29	12/04/12	12/04	LSC-004
S211027-04			B2MRJ4	50.3	0.0300			100		50			29	12/04/12	12/04	LSC-004
S211027-05			Lab Control Sample	47.5	0.0300			100		50				12/04/12	12/04	LSC-004
S211027-06			Method Blank	51.3	0.0300			100		50				12/04/12	12/05	LSC-004
S211027-07			Duplicate (S211027-01)	48.2	0.0300			100		50			29	12/04/12	12/04	LSC-004
S211027-08			Spike (S211027-02)	72.7	0.0200			100		50			29	12/04/12	12/04	LSC-004
Nominal values and limits from method				200	0.0300					50			180			

PROCEDURES REFERENCE C14_CHEM_LSC
CP-241 Carbon-14 in Aqueous Samples, rev 8

AVERAGES ± 2 SD MDA 52.2 ± 16.8
FOR 8 SAMPLES YIELD 100 ± 0

Lab id EBRLNE
Protocol CHPRC
Version Ver 1.0
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EBERLINE ANALYTICAL-RICHMOND

SAMPLE DELIVERY GROUP H4763

SDG 7040
Contact Joseph Verville

REPORT GUIDE

Client Hanford
Contract No. 33677
Case no SDG H4763

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.

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Protocol CHPRC
Version Ver 1.0
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EBERLINE ANALYTICAL-RICHMOND

SAMPLE DELIVERY GROUP H4763

SDG	7040
Contact	Joseph Verville

REPORT GUIDE

Client	Hanford
Contract	No. 33677
Case no	SDG_H4763

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.

Lab id	EBRLNE
Protocol	CHPRC
Version	Ver 1.0
Form	DVD-RG
Version	3.06
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EBERLINE ANALYTICAL - RICHMOND

SAMPLE DELIVERY GROUP H4763

SDG	7040
Contact	Joseph Verville

REPORT GUIDE

Client	Hanford
Contract	No. 33677
Case no	SDG H4763

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.

Lab id	EBRLNE
Protocol	CHPRC
Version	Ver 1.0
Form	DVD-RG
Version	3.06
Report date	12/10/12

EBERLINE ANALYTICAL-RICHMOND

SAMPLE DELIVERY GROUP H4763

SDG 7040
Contact Joseph Verville

REPORT GUIDE

Client Hanford
Contract No. 33677
Case no SDG_H4763

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).

Lab id EBRLNE
Protocol CHPRC
Version Ver 1.0
Form DVD-RG
Version 3.06
Report date 12/10/12

SDG 7040
Contact Joseph Verville

GUIDE, cont.

Client Hanford
Contract No. 33677
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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.

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Protocol CHPRC
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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.

EBERLINE ANALYTICAL-RICHMOND

SAMPLE DELIVERY GROUP H4763

SDG	7040
Contact	Joseph Verville

REPORT GUIDE

Client	Hanford
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Case no	SDG_H4763

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.

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Protocol	CHPRC
Version	Ver 1.0
Form	DVD-RG
Version	3.06
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SAMPLE DELIVERY GROUP H4763

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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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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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SAMPLE DELIVERY GROUP H4763

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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

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Protocol	CHPRC
Version	Ver 1.0
Form	DVD-RG
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Client Hanford
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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.

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SAMPLE DELIVERY GROUP H4763

SDG	7040
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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'

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Protocol	CHPRC
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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.

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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

Lab id EBRLNE
Protocol CHPRC
Version Ver 1.0
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Version 3.06
Report date 12/10/12

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.

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CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST H4763 (7040)	C.O.C. # I13-002-001 Page 1 of 1

Collector	B.E. Briggs CHPRC	Contact/Requester	Karen Waters-Husted	Telephone No.	376-4650
SAF No.	I13-002	Sampling Origin	Hanford Site	Purchase Order/Charge Code	300071ES20
Project Title	100KR4(1) NOVEMBER 2012	Logbook No.	HNF-N-506 51 /42	Ice Chest No.	GWS-249
Shipped To (Lab)	Eberline Services	Method of Shipment	Commercial Carrier	Bill of Lading/Air Bill No.	794011069172
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 SDG.

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B2MPJ1	N	W	NOV 05 2012	1310	1x20-mL P	Activity Scan	6 Months	None
B2MPJ1	N	W	↓	↓	1x125-mL G/P	C14_CHEM_LSC: Carbon-14(1)	6 Months	None

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
B.E. Briggs CHPRC	BeBriggs		NOV 05 2012 1530	SSU#1			NOV 05 2012 1530
SSU#1			NOV 06 2012 0900	MA White CHPRC	MaWhite		NOV 06 2012 0900
MA White CHPRC	MaWhite		NOV 06 2012 1400	FEDEX			
FEDEX				MF-NATAWARAN	[signature]		11/07/12 0920

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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CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST H4763 (7040)	C.O.C. # I13-002-002 Page 1 of 1

Collector	B.E. Briggs CHPRC	Contact/Requester	Karen Waters-Husted	Telephone No.	376-4650
SAF No.	I13-002	Sampling Origin	Hanford Site	Purchase Order/Charge Code	300071ES20
Project Title	100KR4(1) NOVEMBER 2012	Logbook No.	HNF-N-506 51 / 42	Ice Chest No.	GWS-249
Shipped To (Lab)	Eberline Services	Method of Shipment	Commercial Carrier	Bill of Lading/Air Bill No.	7940 1106 9172
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 SDG.

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B2MPJ2	N	W	NOV 05 2012	1310	1x20-mL P	Activity Scan	6 Months	None
B2MPJ2	N	W	↓	↓	1x125-mL G/P	C14_CHEM_LSC: Carbon-14(1)	6 Months	None

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
B.E. Briggs CHPRC	B.E. Briggs		NOV 05 2012 1530	SSU#1			NOV 05 2012 1530
SSU-1			NOV 06 2012 0900	MA White CHPRC	MA White		NOV 06 2012 0900
MA White CHPRC	MA White		NOV 06 2012 1400	FEDEX			
	FED EX			MF-MATAWAMAN	[signature]		11/07/12 0920

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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CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST H4763 (7040)	C.O.C. # I13-002-003 Page 1 of 1

Collector	B.E. Briggs CHPRC	Contact/Requester	Karen Waters-Husted	Telephone No.	376-4650
SAF No.	I13-002	Sampling Origin	Hanford Site	Purchase Order/Charge Code	300071ES20
Project Title	100KR4(1) NOVEMBER 2012	Logbook No.	HNF-N-506 31/43	Ice Chest No.	GWS-249
Shipped To (Lab)	Eberline Services	Method of Shipment	Commercial Carrier	Bill of Lading/Air Bill No.	7940 1106 9172
Protocol	CERCLA	Priority:	30 Days **PRIORITY**	Offsite Property No.	7

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 SDG.

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B2MPK1	N	W	NOV 05 2012	1421	1x20-mL P	Activity Scan	6 Months	None
B2MPK1	N	W	↓	↓	1x125-mL G/P	C14_CHEM_LSC: Carbon-14(1)	6 Months	None

DECEMBER 10, 2012

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
B.E. Briggs CHPRC	BE Briggs		NOV 05 2012 1530	SSU#1			NOV 05 2012 1530
SSU#1			NOV 06 2012 0900	MA White CHPRC	MA White		NOV 06 2012 0900
MA White CHPRC	MA White		NOV 06 2012 11-6-12 ~~0~~ 1400	FEDEX			
	FED EX			M. MATANARAN	Fedex		11/07/12 0920

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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CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST H4763 (7040)	C.O.C. # I13-002-039 Page 1 of 1

Collector	F. M. Hall	Contact/Requester	Karen Waters-Husted	Telephone No.	376-4650
SAF No.	I13-002	Sampling Origin	Hanford Site	Purchase Order/Charge Code	300071ES20
Project Title	100KR4(1) NOVEMBER 2012	Logbook No.	HNF-N-506 491 71-72	Ice Chest No.	GWS-249
Shipped To (Lab)	Eberline Services	Method of Shipment	Commercial Carrier	Bill of Lading/Air Bill No.	7940 1106 9172
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 SDG.

Total Activity Exemption: Yes ☑ No ☐

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B2MRJ4	N	W	11-5-12	1505	1x20-mL P	Activity Scan	6 Months	None
B2MRJ4	N	W	↓	↓	1x125-mL G/P	C14_CHEM_LSC: Carbon-14(1)	6 Months	None

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
	F. M. Hall	[signature]	NOV 0 5 2012 1551		SSU #1		NOV 0 5 2012 1551
	SSU #1		NOV 0 6 2012 0900		MA White CHPRC	[signature]	NOV 0 6 2012 0900
	MA White CHPRC	[signature]	NOV 0 6 2012 1400		FEDEX		
	FED EX				[illegible]	[signature]	11/07/12 0920

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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EBERLINE SERVICES

RICHMOND, CA LABORATORY

SAMPLE RECEIPT CHECKLIST

Client: CHPRC City RICHLAND State WA

Date/Time received 11/07/12 0920 CoC No. I13-002-001, 002, 003, 039

Container I.D. No. GWS-249 Requested TAT (Days) 30 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: 4 Sample Matrix W
7. Number of containers per sample: 2 (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 [X] pH N/A Preservative _____
13. Describe any anomalies:
14. Was P.M. notified of any anomalies? Yes [ ] No [ ] Date _____
15. Inspected by [signature] Date: 11/07/12 Time: 1115

Customer Sample No.	Beta/Gamma cpm	Ion Chamber mR/hr	Wipe	Customer Sample No.	Beta/Gamma cpm	Ion Chamber mR/hr	wipe
All Samples	<80						

Ion Chamber Ser. No. _____ Calibration date _____

Alpha Meter Ser. No. _____ Calibration date _____

Beta/Gamma Meter Ser. No. 100482 Calibration date 06 DEC 11

Form SCP-02, 07-30-07

"over 55 years of quality nuclear services"