

0077132



EBERLINE
SERVICES

October 30, 2007

Mr. Steve Trent
Fluor Hanford Inc.
1200 Jadwin Avenue
Richland, WA 99352

Reference: **P.O. #630**
Eberline Services R7-09-076-7688, SDG H3574

Dear Mr. Trent:

Enclosed is the data report for two water samples designated under SAF No. F07-052 received at Eberline Services on September 13, 2007. The samples were analyzed according to the accompanying chain-of-custody documents.

Please call if you have any questions concerning this report.

Sincerely,

Melissa C. Mannion
Senior Program Manager

MCM/njv

Enclosure: Data Package

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1.0 GENERAL

Fluor Hanford Inc. (FH) Sample Delivery Group H3574 was composed of two water samples designated under SAF No. F07-052 with a Project Designation of: 200-ZP-1 Laundry Facility Sampling on C5572, C5573, & C5574-GW.

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

2.0 ANALYSIS NOTES

2.1 Tritium Analysis

No problems were encountered during the course of the analyses.

2.2 Iodine-129 Analysis

No problems were encountered during the course of the analyses.

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."

Melissa C. Mannion
Senior Program Manager

Date

EBRLINE SERVICES / RICHMOND
SAMPLE DELIVERY GROUP H3574

SDG 7688
Contact Melissa C. Mannion

Client Hanford
Contract No. 630
Case no SDG_H3574

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

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M. Mannion
Prepared by

M. Mannion
Reviewed by

Lab id EBRLINE
Protocol Hanford
Version Ver 1.0
Form DVD-TOC
Version 3.06
Report date 10/30/07

00000001

EBERLINE SERVICES / RICHMOND

SAMPLE DELIVERY GROUP H3574

SDG 7688
Contact Melissa C. Mannion

REPORT GUIDE

Client Hanford
Contract No. 630
Case no SDG H3574

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.

REPORT GUIDES

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SUMMARY DATA SECTION

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Lab id EBRLNE
Protocol Hanford
Version Ver 1.0
Form DVD-RG
Version 3.06
Report date 10/30/07

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EBERLINE SERVICES / RICHMOND

SAMPLE DELIVERY GROUP H3574

SDG 7688
Contact Melissa C. Mannion

GUIDE, cont.

Client Hanford
Contract No. 630
Case no SDG_H3574

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.

REPORT GUIDES

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SUMMARY DATA SECTION

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Protocol Hanford
Version Ver 1.0
Form DVD-RG
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EBERLINE SERVICES/RICHMOND

SAMPLE DELIVERY GROUP H3574

SDG 7688
 Contact Melissa C. Mannion

LAB SAMPLE SUMMARY

Client Hanford
 Contract No. 630
 Case no SDG H3574

LAB SAMPLE ID	CLIENT SAMPLE ID	LOCATION	MATRIX	LEVEL	SAF NO	CHAIN OF CUSTODY	COLLECTED
R709076-01	B1P108	C5574, I-4	WATER		F07-052	F07-052-152	09/06/07 11:00
R709076-02	B1PK67	C5574, I-MUD	WATER		F07-052	F07-052-204	08/31/07 11:40
R709076-03	Lab Control Sample		WATER		F07-052		
R709076-04	Method Blank		WATER		F07-052		
R709076-05	Duplicate (R709076-01)	C5574, I-4	WATER		F07-052		09/06/07 11:00
R709076-06	Spike (R709076-01)	C5574, I-4	WATER		F07-052		09/06/07 11:00

Lab id EBRLNE
 Protocol Hanford
 Version Ver 1.0
 Form DVD-LS
 Version 3.06
 Report date 10/30/07

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EBERLINE SERVICES/RICHMOND

SAMPLE DELIVERY GROUP H3574

SDG 7688
 Contact Melissa C. Mannion

QC SUMMARY

Client Hanford
 Contract No. 630
 Case no SDG H3574

QC BATCH	CHAIN OF CUSTODY	CLIENT SAMPLE ID	MATRIX	% SOLIDS	SAMPLE AMOUNT	BASIS AMOUNT	DAYS SINCE RECEIVED	LAB COLL	LAB SAMPLE ID	DEPARTMENT SAMPLE ID
7688	F07-052-152	B1P108	WATER		4.0 L		09/13/07 7	R709076-01		7688-001
	F07-052-204	B1PK67	WATER		4.0 L		09/13/07 13	R709076-02		7688-002
		Method Blank	WATER					R709076-04		7688-004
		Lab Control Sample	WATER					R709076-03		7688-003
		Duplicate (R709076-01)	WATER		4.0 L		09/13/07 7	R709076-05		7688-005
		Spike (R709076-01)	WATER		4.0 L		09/13/07 7	R709076-06		7688-006

QC SUMMARY

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SUMMARY DATA SECTION

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Lab id EBERLINE
 Protocol Hanford
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 Form DVD-QS
 Version 3.06
 Report date 10/30/07

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EBERLINE SERVICES/RICHMOND

SAMPLE DELIVERY GROUP H3574

SDG 7688
 Contact Melissa C. Mannion

PREP BATCH SUMMARY

Client Hanford
 Contract No. 630
 Case no SDG H3574

TEST	MATRIX	METHOD	PREPARATION ERROR		PLANCHETS ANALYZED					QUALI-	
			BATCH	2σ %	CLIENT	MORE	RE	BLANK	LCS		DUP/ORIG
Gamma Spectroscopy											
I	WATER	Iodine 129 in Water	6130-013	5.0	2			1	1	1/1	
Liquid Scintillation Counting											
H	WATER	Tritium in Water	6130-013	10.0	2			1	1	1/1	1/1 X

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.

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EBERLINE SERVICES/RICHMOND

SAMPLE DELIVERY GROUP H3574

SDG 7688
Contact Melissa C. Mannion

LAB WORK SUMMARY

Client Hanford
Contract No. 630
Case no SDG H3574

LAB SAMPLE	CLIENT SAMPLE ID	COLLECTED	LOCATION	MATRIX	PLANCHET	TEST	SUF-	ANALYZED	REVIEWED	BY	METHOD
RECEIVED	CUSTODY	SAF No					FIX				
R709076-01	B1P108				7688-001	H		10/24/07	10/26/07	BW	Tritium in Water
09/06/07	C5574, I-4			WATER	7688-001	I		10/19/07	10/26/07	BW	Iodine 129 in Water
09/13/07	F07-052-152	F07-052									
R709076-02	B1PK67				7688-002	H		10/24/07	10/26/07	BW	Tritium in Water
08/31/07	C5574, I-MUD			WATER	7688-002	I		10/19/07	10/26/07	BW	Iodine 129 in Water
09/13/07	F07-052-204	F07-052									
R709076-03	Lab Control Sample				7688-003	H		10/24/07	10/26/07	BW	Tritium in Water
				WATER	7688-003	I		10/19/07	10/26/07	BW	Iodine 129 in Water
		F07-052									
R709076-04	Method Blank				7688-004	H		10/24/07	10/26/07	BW	Tritium in Water
				WATER	7688-004	I		10/22/07	10/26/07	BW	Iodine 129 in Water
		F07-052									
R709076-05	Duplicate (R709076-01)				7688-005	H		10/24/07	10/26/07	BW	Tritium in Water
09/06/07	C5574, I-4			WATER	7688-005	I		10/22/07	10/26/07	BW	Iodine 129 in Water
09/13/07		F07-052									
R709076-06	Spike (R709076-01)				7688-006	H		10/24/07	10/26/07	BW	Tritium in Water
09/06/07	C5574, I-4			WATER							
09/13/07		F07-052									

COUNTS OF TESTS BY SAMPLE TYPE

TEST	SAF No	METHOD	REFERENCE	CLIENT	MORE	RE	BLANK	LCS	DUP	SPIKE	TOTAL
H	F07-052	Tritium in Water	906.0_B3_LSC	2			1	1	1	1	6
I	F07-052	Iodine 129 in Water	I129_SEP_LEPS_GS	2			1	1	1		5
TOTALS				4			2	2	2	1	11

WORK SUMMARY

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EBERLINE SERVICES / RICHMOND
SAMPLE DELIVERY GROUP H3574

7688-004

Method Blank

METHOD BLANK

SDG <u>7688</u>	Client/Case no <u>Hanford</u>	<u>SDG H3574</u>
Contact <u>Melissa C. Mannion</u>	Contract No. <u>630</u>	
Lab sample id <u>R709076-04</u>	Client sample id <u>Method Blank</u>	
Dept sample id <u>7688-004</u>	Material/Matrix <u>WATER</u>	
	SAF No <u>F07-052</u>	

ANALYTE	CAS NO	RESULT pCi/L	2σ ERR (COUNT)	MDA pCi/L	RDL pCi/L	QUALI- FIERS	TEST
Tritium	10028-17-8	376	970	<u>1630</u>	400	U	H
Iodine 129	15046-84-1	-0.685	1.2	2.65	5.00	U	I

200ZP1 LaundFacSampC5572, C5573, C5574

QC-BLANK #62889

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

SAMPLE DELIVERY GROUP H3574

7688-003

Lab Control Sample

LAB CONTROL SAMPLE

SDG <u>7688</u>	Client/Case no <u>Hanford</u>	SDG <u>H3574</u>
Contact <u>Melissa C. Mannion</u>	Contract No. <u>530</u>	
Lab sample id <u>R709076-03</u>	Client sample id <u>Lab Control Sample</u>	
Dept sample id <u>7688-003</u>	Material/Matrix <u>WATER</u>	
	SAF No <u>F07-052</u>	

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 LMIS (TOTAL)	PROTOCOL LIMITS
Tritium	19200	1400	<u>1640</u>	400	H	20300	810	95	81-119	80-120
Iodine 129	261	2.6	3.19	5.00	I	232	9.3	<u>112</u>	90-110	80-120

200ZP1 LaundFacSampC5572, C5573, C5574

QC-LCS #62888

Lab id <u>EBRLINE</u>
Protocol <u>Hanford</u>
Version <u>Ver 1.0</u>
Form <u>DVD-LCS</u>
Version <u>3.05</u>
Report date <u>10/30/07</u>

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EBERLINE SERVICES/RICHMOND

SAMPLE DELIVERY GROUP H3574

7688-005

B1P108

DUPLICATE

SDG <u>7688</u>	Client/Case no <u>Hanford</u>	<u>SDG H3574</u>
Contact <u>Melissa C. Mannion</u>	Contract No. <u>630</u>	
DUPLICATE	ORIGINAL	
Lab sample id <u>R709076-05</u>	Lab sample id <u>R709076-01</u>	Client sample id <u>B1P108</u>
Dept sample id <u>7688-005</u>	Dept sample id <u>7688-001</u>	Location/Matrix <u>C5574, I-4</u> <u>WATER</u>
	Received <u>09/13/07</u>	Collected/Volume <u>09/06/07 11:00</u> <u>4.0 L</u>
		Custody/SAF No <u>F07-052-152</u> <u>F07-052</u>

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
Tritium	59.2	99	164	400	U	H	113	100	165	U	-		0.8
Iodine 129	-0.914	1.4	3.20	5.00	U	I	-0.822	1.3	3.00	U	-		0.1

200ZP1 LaundFacSampC5572, C5573, C5574

QC-DUP#1 62890

DUPLICATES

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Lab id <u>EBRLNE</u>
Protocol <u>Hanford</u>
Version Ver <u>1.0</u>
Form <u>DVD-DOP</u>
Version <u>3.06</u>
Report date <u>10/30/07</u>

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EBERLINE SERVICES/RICHMOND

SAMPLE DELIVERY GROUP H3574

7688-006

BLP108

MATRIX SPIKE

SDG <u>7688</u>	Client/Case no <u>Hanford</u>	<u>SDG H3574</u>
Contact <u>Melissa C. Mannion</u>	Contract No. <u>630</u>	
MATRIX SPIKE	ORIGINAL	
Lab sample id <u>R709076-06</u>	Lab sample id <u>R709076-01</u>	Client sample id <u>BLP108</u>
Dept sample id <u>7688-006</u>	Dept sample id <u>7688-001</u>	Location/Matrix <u>C5574, I-4</u> <u>WATER</u>
	Received <u>09/13/07</u>	Collected/Volume <u>09/06/07 11:00</u> <u>4.0 L</u>
		Custody/SAF No <u>F07-052-152</u> <u>F07-052</u>

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 % (TOTAL)	IMTS LIMITS	PROTOCOL LIMITS
Tritium	26400	400	164	400	X H	27300	1100	113	100	96	84-116	60-140

200ZP1 LaundFacSampC5572,C5573,C5574

QC-MS#1 62891

MATRIX SPIKES

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EBERLINE SERVICES / RICHMOND
SAMPLE DELIVERY GROUP H3574

7688-001

B1P108

DATA SHEET

SDG <u>7688</u>	Client/Case no <u>Hanford</u>	SDG <u>H3574</u>
Contact <u>Melissa C. Mannion</u>	Contract No. <u>630</u>	
Lab sample id <u>R709076-01</u>	Client sample id <u>B1P108</u>	
Dept sample id <u>7688-001</u>	Location/Matrix <u>C5574, I-4</u>	<u>WATER</u>
Received <u>09/13/07</u>	Collected/Volume <u>09/06/07 11:00</u>	<u>4.0 L</u>
	Custody/SAF No <u>F07-052-152</u>	<u>F07-052</u>

ANALYTE	CAS NO	RESULT pCi/L	2σ ERR (COUNT)	MDA pCi/L	RDL pCi/L	QUALI- FIERS	TEST
Tritium	10028-17-8	113	100	165	400	U	H
Iodine 129	15046-84-1	-0.822	1.3	3.00	5.00	U	I

200ZP1 LaundFacSampC5572, C5573, C5574

Lab id <u>EBRLNE</u>
Protocol <u>Hanford</u>
Version <u>Ver 1.0</u>
Form <u>DVD-DS</u>
Version <u>3.06</u>
Report date <u>10/30/07</u>

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EBERLINE SERVICES / RICHMOND
SAMPLE DELIVERY GROUP H3574

7688-002

B1PK67

DATA SHEET

SDG <u>7688</u>	Client/Case no <u>Hanford</u>	SDG <u>H3574</u>
Contact <u>Melissa C. Mannion</u>	Contract <u>No. 630</u>	
Lab sample id <u>R709076-02</u>	Client sample id <u>B1PK67</u>	
Dept sample id <u>7688-002</u>	Location/Matrix <u>C5574, I-MUD</u>	<u>WATER</u>
Received <u>09/13/07</u>	Collected/Volume <u>08/31/07 11:40</u>	<u>4.0 L</u>
	Custody/SAF No <u>F07-052-204</u>	<u>F07-052</u>

ANALYTE	CAS NO	RESULT pCi/L	2σ ERR (COUNT)	MDA pCi/L	RDL pCi/L	QUALI- FIERS	TEST
Tritium	10028-17-8	83.4	100	165	400	U	H
Iodine 129	15046-84-1	<u>-1.01</u>	0.87	1.99	5.00	U	I

200ZP1 LaundFacSampC5572, C5573, C5574

Lab id <u>EBRLNE</u>
Protocol <u>Hanford</u>
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EBERLINE SERVICES/RICHMOND

SAMPLE DELIVERY GROUP H3574

Test I Matrix WATER
 SDG 7688
 Contact Melissa C. Mannion

LAB METHOD SUMMARY

IODINE 129 IN WATER
 GAMMA SPECTROSCOPY

Client Hanford
 Contract No. 630
 Contract SDG H3574

RESULTS

LAB	RAW	SUF-		
SAMPLE ID	TEST FIX	PLANCHET	CLIENT SAMPLE ID	Iodine 129
Preparation batch 6130-013				
R709076-01		7688-001	B1P108	U
R709076-02		7688-002	B1PK67	U
R709076-03		7688-003	Lab Control Sample	<u>HIGH</u>
R709076-04		7688-004	Method Blank	U
R709076-05		7688-005	Duplicate (R709076-01)	- U

Nominal values and limits from method RDLs (pCi/L) 5.00
 200ZP1 LaundFacSampC5572,C5573,C5574

METHOD PERFORMANCE

LAB	RAW	SUF-	MDA	ALIQ	PREP	DILU-	YIELD	EFF	COUNT	FWHM	DRIFT	DAYS	ANAL-		
SAMPLE ID	TEST FIX	CLIENT SAMPLE ID	pCi/L	L	FAC	TION	%	%	min	keV	KeV	HELD	PREPARED	YZED	DETECTOR
Preparation batch 6130-013			2σ prep error 5.0 %		Reference Lab Notebook #6130		pg. 13								
R709076-01		B1P108	3.00	0.500			76		605			43	10/18/07	10/19	XSPEC-002
R709076-02		B1PK67	1.99	0.500			79		1011			49	10/18/07	10/19	XSPEC-004
R709076-03		Lab Control Sample	3.19	0.500			84		1010				10/18/07	10/19	XSPEC-002
R709076-04		Method Blank	2.65	0.500			84		563				10/18/07	10/22	XSPEC-004
R709076-05		Duplicate (R709076-01)	3.20	0.500			77		564			46	10/18/07	10/22	XSPEC-002
Nominal values and limits from method			5.00	0.500			20-105		300	100		180			

PROCEDURES REFERENCE I129_SEP_LEPS_GS
 SPP-062 Sample Aliquoting, rev 0
 CP-530 Iodine-129 Purification, rev 1

AVERAGES ± 2 SD MDA 2.81 ± 1.02
 FOR 5 SAMPLES YIELD 80 ± 8

METHOD SUMMARIES

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EBERLINE SERVICES/RICHMOND

SAMPLE DELIVERY GROUP H3574

Test H Matrix WATER
 SDG 7688
 Contact Melissa C. Mannion

Client Hanford
 Contract No. 630
 Contract SDG H3574

LAB METHOD SUMMARY

TRITIUM IN WATER

LIQUID SCINTILLATION COUNTING

RESULTS

LAB	RAW	SUF-			
SAMPLE ID	TEST FIX	PLANCHET	CLIENT SAMPLE ID	Tritium	
Preparation batch 6130-013					
R709076-01		7688-001	B1P108	U	
R709076-02		7688-002	B1PK67	U	
R709076-03		7688-003	Lab Control Sample	ok	
R709076-04		7688-004	Method Blank	U	
R709076-05		7688-005	Duplicate (R709076-01)	-	U
R709076-06		7688-006	Spike (R709076-01)	ok	X

Nominal values and limits from method RDLs (pCi/L) 400
 200ZP1 LaundFacSampC5572, C5573, C5574

METHOD PERFORMANCE

LAB	RAW	SUF-	MDA	ALIQ	PREP	DILU-	YIELD	EFF	COUNT	FWHM	DRIFT	DAYS	ANAL-
SAMPLE ID	TEST FIX	CLIENT SAMPLE ID	pCi/L	L	FAC	TION	%	%	min	keV	KeV	HELD PREPARED	YZED DETECTOR
Preparation batch 6130-013 2σ prep error 10.0 % Reference Lab Notebook #6130 pg. 13													
R709076-01		B1P108	165	0.0100			100		150		48	10/23/07	10/24 LSC-004
R709076-02		B1PK67	165	0.0100			100		150		54	10/23/07	10/24 LSC-004
R709076-03		Lab Control Sample	<u>1640</u>	0.0100			10		150			10/23/07	10/24 LSC-004
R709076-04		Method Blank	<u>1630</u>	0.0100			10		150			10/23/07	10/24 LSC-004
R709076-05		Duplicate (R709076-01)	164	0.0100			100		150		48	10/23/07	10/24 LSC-004
R709076-06		Spike (R709076-01)	164	0.0300			33		150		48	10/23/07	10/24 LSC-004

Nominal values and limits from method 400 0.0100 25 180

PROCEDURES REFERENCE 906.0_H3_LSC
 CP-210 Tritium in Water Samples by Distillation, rev 8

AVERAGES ± 2 SD MDA 655 ± 1520
 FOR 6 SAMPLES YIELD 59 ± 92

METHOD SUMMARIES

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 Form DVD-LMS
 Version 3.06
 Report date 10/30/07

00000015

EBERLINE SERVICES / RICHMOND

SAMPLE DELIVERY GROUP H3574

SDG 7688
Contact Melissa C. Mannion

REPORT GUIDE

Client Hanford
Contract No. 630
Case no SDG H3574

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 10/30/07

00000016

EBERLINE SERVICES / RICHMOND

SAMPLE DELIVERY GROUP H3574

SDG 7688
Contact Melissa C. Mannion

REPORT GUIDE

Client Hanford
Contract No. 630
Case no SDG H3574

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.

REPORT GUIDES

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SUMMARY DATA SECTION

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Lab id EBRLNE
Protocol Hanford
Version Ver 1.0
Form DVD-RG
Version 3.06
Report date 10/30/07

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EBERLINE SERVICES / RICHMOND

SAMPLE DELIVERY GROUP H3574

SDG 7688

Contact Melissa C. Mannion

REPORT GUIDE

Client Hanford

Contract No. 630

Case no SDG H3574

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.

REPORT GUIDES

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SUMMARY DATA SECTION

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Lab id EBRLNE

Protocol Hanford

Version Ver 1.0

Form DVD-RG

Version 3.06

Report date 10/30/07

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EBERLINE SERVICES / RICHMOND

SAMPLE DELIVERY GROUP H3574

SDG 7688
 Contact Melissa C. Mannion

REPORT GUIDE

Client Hanford
 Contract No. 630
 Case no SDG H3574

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 EBRINE
 Protocol Hanford
 Version Ver 1.0
 Form DVD-RG
 Version 3.06
 Report date 10/30/07

00000019

EBERLINE SERVICES / RICHMOND

SAMPLE DELIVERY GROUP H3574

SDG 7688
 Contact Melissa C. Mannion

GUIDE, cont.

Client Hanford
 Contract No. 630
 Case no SDG H3574

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.

Lab id EBRLNE
 Protocol Hanford
 Version Ver 1.0
 Form DVD-RG
 Version 3.05
 Report date 10/30/07

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SAMPLE DELIVERY GROUP H3574

SDG 7688

Contact Melissa C. Mannion

Client Hanford

Contract No. 630

Case no SDG H3574

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.

REPORT GUIDES

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SUMMARY DATA SECTION

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Lab id EBRLNE

Protocol Hanford

Version Ver 1.0

Form DVD-RG

Version 3.06

Report date 10/30/07

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SAMPLE DELIVERY GROUP H3574

REPORT GUIDE

SDG 7688

Contact Melissa C. Mannion

Client Hanford

Contract No. 630

Case no SDG_H3574

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.

REPORT GUIDES

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SUMMARY DATA SECTION

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Protocol Hanford

Version Ver 1.0

Form DVD-RG

Version 3.06

Report date 10/30/07

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SAMPLE DELIVERY GROUP H3574

SDG 7688
 Contact Melissa C. Mannion

REPORT GUIDE

Client Hanford
 Contract No. 630
 Case no SDG H3574

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.

Lab id EBRINE
 Protocol Hanford
 Version Ver 1.0
 Form DVD-RG
 Version 3.06
 Report date 10/30/07

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SDG 7688

Contact Melissa C. Mannion

Client Hanford

Contract No. 630

Case no SDG H3574

GUIDE, cont.

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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SUMMARY DATA SECTION

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Lab id EBRLNE

Protocol Hanford

Version Ver 1.0

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Version 3.06

Report date 10/30/07

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SAMPLE DELIVERY GROUP H3574

SDG 7688
 Contact Melissa C. Mannion

REPORT GUIDE

Client Hanford
 Contract No. 630
 Case no SDG H3574

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

REPORT GUIDES

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SUMMARY DATA SECTION

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Lab id EBRLNE
 Protocol Hanford
 Version Ver 1.0
 Form DVD-RG
 Version 3.06
 Report date 10/30/07

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SAMPLE DELIVERY GROUP H3574

SDG 7688

Contact Melissa C. Mannion

Client Hanford

Contract No. 630

Case no SDG H3574

GUIDE, cont.

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.

REPORT GUIDES

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SUMMARY DATA SECTION

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Lab id EBRLINE

Protocol Hanford

Version Ver 1.0

Form DVD-RG

Version 3.06

Report date 10/30/07

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SAMPLE DELIVERY GROUP H3574

SDG 7688
Contact Melissa C. Mannion

REPORT GUIDE

Client Hanford
Contract No. 630
Case no SDG H3574

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
Version Ver 1.0
Form DVD-RG
Version 3.06
Report date 10/30/07

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EBERLINE SERVICES / RICHMOND

SAMPLE DELIVERY GROUP H3574

SDG 7688
 Contact Melissa C. Mannion

GUIDE, cont.

Client Hanford
 Contract No. 630
 Case no SDG H3574

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.

* Preparation 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.

Lab id EBRLNE
 Protocol Hanford
 Version Ver 1.0
 Form DVD-RG
 Version 3.06
 Report date 10/30/07

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SAMPLE DELIVERY GROUP H3574

SDG 7688
 Contact Melissa C. Mannion

GUIDE, cont.

Client Hanford
 Contract No. 630
 Case no SDG H3574

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 Hanford
 Version Ver 1.0
 Form DVD-RG
 Version 3.06
 Report date 10/30/07

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SAMPLE DELIVERY GROUP H3574

SDG 7688
Contact Melissa C. Mannion

GUIDE, cont.

Client Hanford
Contract No. 630
Case no SDG H3574

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.

REPORT GUIDES

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SUMMARY DATA SECTION

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Lab id EBRLNE
Protocol Hanford
Version Ver 1.0
Form DVD-RG
Version 3.06
Report date 10/30/07

00000030

COLLECTOR

Pope, Pfister, Moekler

SAMPLING LOCATION

C5574, I-4 390

ICE CHEST NO.

61ND-07-010

SHIPPED TO

Eberline Services

MATRIX*

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

POSSIBLE SAMPLE HAZARDS/ REMARKS

Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE

Rad to BIPOV5

COMPANY CONTACT

Trent, SJ

TELEPHONE NO.

373-5869

PROJECT COORDINATOR

TRENT, SJ

PROJECT DESIGNATION

200-ZP-1 Laundry Facility Sampling on C5572, C5573, & C5574 - GW

H3574 (7688)

FIELD LOGBOOK NO.

COA

122597ES10

METHOD OF SHIPMENT

FEDERAL EXPRESS

BILL OF LADING/AIR BILL NO.

See PTR

20233

OFFSITE PROPERTY NO.

See PTR

20233

PRESERVATION

None None

TYPE OF CONTAINER

G/P P

NO. OF CONTAINER(S)

4 1

VOLUME

1000mL 125mL

SAMPLE ANALYSIS

Iodine-129; TRITIUM - MIDDLELEVEL

PRICE CODE 7N

AIR QUALITY

DATA TURNAROUND

45 Days / 45 Days

Table with columns: SAMPLE NO., MATRIX*, SAMPLE DATE, SAMPLE TIME. Row 1: B1P108, WATER, 9-6-07, 1100

CHAIN OF POSSESSION

SIGN/ PRINT NAMES

SPECIAL INSTRUCTIONS

Table with columns: RELINQUISHED BY/REMOVED FROM, DATE/TIME, RECEIVED BY/STORED IN, DATE/TIME. Includes handwritten signatures and dates like M.A. Baechler, 9-6-07, 9-13-07.

LABORATORY SECTION

RECEIVED BY

TITLE

DATE/TIME

FINAL SAMPLE DISPOSITION

DISPOSAL METHOD

DISPOSED BY

DATE/TIME

00000031

Fluor Hanford Inc.

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F07-052-204

PAGE 1 OF 1

COLLECTOR

Pope, Pfister, Mokler

COMPANY CONTACT

Trent, SJ

TELEPHONE NO.

373-5869

PROJECT COORDINATOR

TRENT, SJ

SAMPLING LOCATION

C5574, I-MUD TO I-MUD 8-31-07

PROJECT DESIGNATION

200-ZP-1 Laundry Facility Sampling on C5572, C5573, & C5574 - GW

H3574 (7688)

SAF NO.

F07-052

PRICE CODE

7N

DATA TURNAROUND

45 Days / 45 Days

ICE CHEST NO.

GW0-07-010

FIELD LOGBOOK NO.

COA 122597E510

METHOD OF SHIPMENT

FEDERAL EXPRESS

SHIPPED TO

Eberline Services

OFFSITE PROPERTY NO.

See PTR 20233

BILL OF LADING/AIR BILL NO.

See PTR 20233

- MATRIX*
- A=Air
 - DL=Drum
 - Liquids
 - DS=Drum
 - Solids
 - L=Liquid
 - O=Oil
 - S=Soil
 - SE=Sediment
 - T=Tissue
 - V=Vegetation
 - W=Water
 - WI=Wipe
 - X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS

Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE

Rad to BIPK68

PRESERVATION	None	None								
TYPE OF CONTAINER	GP	P								
NO. OF CONTAINER(S)	4	1								
VOLUME	1000ml	125ml								
SAMPLE ANALYSIS	Iodine-129;	TRITIUM - MIDDLELEVEL;								

SAMPLE NO.	MATRIX*
B1PK67	WATER

SAMPLE DATE	SAMPLE TIME									
8-31-07	11:40									
	LOTA	023761	025886							

CHAIN OF POSSESSION

SIGN/ PRINT NAMES

SPECIAL INSTRUCTIONS

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
MO-745 Ref # 1207	8-31-07/1330	M. A. Baechler	8-31-07/1330
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
M. A. Baechler	SEP 12 2007 0930	M. A. Baechler	SEP 12 2007 0930
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FED	6X	M. A. Baechler	09/13/07 09:30
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

00000032



RICHMOND, CA LABORATORY
SAMPLE RECEIPT CHECKLIST

JK 9/13/07

Client: F. HANFORD City RICHLAND State WA
 Date/Time received 09/13/07 09:30 CoC No. FO7-052-152,204
 Container I.D. No. GWO-07-010 Requested TAT (Days) 45 P.O. Received Yes [] No []

INSPECTION

1. Custody seals on shipping container intact? Yes [] No [] N/A []
2. Custody seals on shipping container dated & signed? Yes [] No [] N/A []
3. Custody seals on sample containers intact? Yes [] No [] N/A []
4. Custody seals on sample containers dated & signed? Yes [] No [] N/A []
5. Packing material is: Wet [] Dry []
6. Number of samples in shipping container: 2 Sample Matrix W
7. Number of containers per sample: 5 (Or see CoC _____)
8. Samples are in correct container Yes [] No []
9. Paperwork agrees with samples? Yes [] No []
10. Samples have: Tape [] Hazard labels [] Rad labels [] Appropriate sample labels []
11. Samples are: In good condition [] 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 *[Signature]* Date: 09/13/07 Time: 10:30

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 _____