



July 9, 2007

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

Reference: **P.O. #630**  
**Eberline Services R7-05-173-7645, SDG H3525**

Dear Mr. Trent:

Enclosed is the data report for four water samples designated under SAF No. F07-024, received at Eberline Services on May 30, 2007. The samples were analyzed according to the accompanying chain-of-custody documents.

Please call if you have any questions concerning this report.

Sincerely,

For 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 H3525 was composed of four water samples designated under SAF No. F07-024 with a Project Designation of: 100-KW Treatment System-Quarterly Sampling.

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 Carbon-14 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

EBERLINE SERVICES / RICHMOND  
SAMPLE DELIVERY GROUP H3525

SDG 7645  
Contact Melissa C. Mannion

Client Hanford  
Contract No. 630  
Case no SDG\_H3525

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 *Melissa Mannion*

Reviewed by \_\_\_\_\_

Lab id EBRLNE  
Protocol Hanford  
Version Ver 1.0  
Form DVD-TOC  
Version 3.06  
Report date 07/03/07

0000002

EBERLINE SERVICES / RICHMOND

SAMPLE DELIVERY GROUP H3525

SDG 7645  
Contact Melissa C. Mannion

REPORT GUIDE

Client Hanford  
Contract No. 630  
Case no SDG H3525

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

Page 1

SUMMARY DATA SECTION

Page 1

Lab id EBERLINE  
Protocol Hanford  
Version Ver 1.0  
Form DVD-RG  
Version 3.06  
Report date 07/03/07

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EBERLINE SERVICES / RICHMOND

SAMPLE DELIVERY GROUP H3525

SDG 7645  
Contact Melissa C. Mannion

GUIDE, cont.

Client Hanford  
Contract No. 630  
Case no SDG H3525

ABOUT THE DATA SUMMARY SECTION

DUPLICATES

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

MATRIX SPIKES

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

DATA SHEETS

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

METHOD SUMMARIES

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

REPORT GUIDES

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

Lab id EBRLNE  
Protocol Hanford  
Version Ver 1.0  
Form DVD-RG  
Version 3.06  
Report date 07/03/07

**EBERLINE SERVICES/RICHMOND**

SAMPLE DELIVERY GROUP H3525

SDG 7645  
 Contact Melissa C. Mannon

**LAB SAMPLE SUMMARY**

Client Hanford  
 Contract No. 630  
 Case no SDG H3525

LAB SAMPLE ID	CLIENT SAMPLE ID	LOCATION	MATRIX	LEVEL	SAF NO	CHAIN OF CUSTODY	COLLECTED
R705173-01	B1NJP3	100 KW and Treat	WATER		F07-024	F07-024-002	05/24/07 08:00
R705173-02	B1NJP4	100 KW and Treat	WATER		F07-024	F07-024-002	05/24/07 08:18
R705173-03	B1NJP8	100 KW and Treat	WATER		F07-024	F07-024-002	05/24/07 08:30
R705173-04	B1NJP9	100 KW and Treat	WATER		F07-024	F07-024-002	05/24/07 08:37
R705173-05	Lab Control Sample		WATER		F07-024		
R705173-06	Method Blank		WATER		F07-024		
R705173-07	Duplicate (R705173-01)	100 KW and Treat	WATER		F07-024		05/24/07 08:00
R705173-08	Spike (R705173-02)	100 KW and Treat	WATER		F07-024		05/24/07 08:18

Lab id EBRLINE  
 Protocol Hanford  
 Version Ver 1.0  
 Form DVD-1S  
 Version 3.06  
 Report date 07/03/07

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EBERLINE SERVICES/RICHMOND

SAMPLE DELIVERY GROUP H3525

SDG 7645  
 Contact Melissa C. Mannion

QC SUMMARY

Client Hanford  
 Contract No. 630  
 Case no SDG H3525

QC BATCH	CHAIN OF CUSTODY	CLIENT SAMPLE ID	MATRIX	% SOLIDS	SAMPLE AMOUNT	BASIS AMOUNT	DAYS SINCE RECEIVED	LAB COLL SAMPLE ID	DEPARTMENT SAMPLE ID
7645	F07-024-002	BLNJP3	WATER		0.125 L		05/30/07 6	R705173-01	7645-001
		BLNJP4	WATER		0.125 L		05/30/07 6	R705173-02	7645-002
		BLNJP8	WATER		0.125 L		05/30/07 6	R705173-03	7645-003
		BLNJP9	WATER		0.125 L		05/30/07 6	R705173-04	7645-004
		Method Blank	WATER					R705173-06	7645-006
		Lab Control Sample	WATER					R705173-05	7645-005
		Duplicate (R705173-01)	WATER		0.125 L		05/30/07 6	R705173-07	7645-007
		Spike (R705173-02)	WATER		0.125 L		05/30/07 6	R705173-08	7645-008

QC SUMMARY

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SUMMARY DATA SECTION

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Lab id EBRLNE  
 Protocol Hanford  
 Version Ver 1.0  
 Form DVD-QS  
 Version 3.06  
 Report date 07/03/07

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EBERLINE SERVICES/RICHMOND

SAMPLE DELIVERY GROUP H3525

SDG 7645  
 Contact Melissa C. Mannion

PREP BATCH SUMMARY

Client Hanford  
 Contract No. 630  
 Case no SDG H3525

TEST	MATRIX	METHOD	PREPARATION ERROR		PLANCHETS ANALYZED				QUALI-			
			BATCH	2σ %	CLIENT	MORE	RE	BLANK	LCS	DUP/ORIG	MS/ORIG	FIERS
Liquid Scintillation Counting												
C	WATER	Carbon 14 in Water	6116-011	10.0	4			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.

Lab id EBRLNE  
 Protocol Hanford  
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 Form DVD-PES  
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 Report date 07/03/07

3000001

**EBERLINE SERVICES/RICHMOND**

SAMPLE DELIVERY GROUP H3525

SDG 7645  
Contact Melissa C. Mannion

**LAB WORK SUMMARY**

Client Hanford  
Contract No. 630  
Case no SDG H3525

LAB SAMPLE	CLIENT SAMPLE ID									
COLLECTED	LOCATION	MATRIX		SUP-						
RECEIVED	CUSTODY	SAP No	PLANCHET	TEST	FIX	ANALYZED	REVIEWED	BY	METHOD	
R705173-01	B1NJP3		7645-001	C		06/27/07	07/02/07	BW	Carbon 14 in Water	
05/24/07	100 KW and Treat	WATER								
05/30/07	F07-024-002	F07-024								
R705173-02	B1NJP4		7645-002	C		06/27/07	07/02/07	BW	Carbon 14 in Water	
05/24/07	100 KW and Treat	WATER								
05/30/07	F07-024-002	F07-024								
R705173-03	B1NJP8		7645-003	C		06/27/07	07/02/07	BW	Carbon 14 in Water	
05/24/07	100 KW and Treat	WATER								
05/30/07	F07-024-002	F07-024								
R705173-04	B1NJP9		7645-004	C		06/27/07	07/02/07	BW	Carbon 14 in Water	
05/24/07	100 KW and Treat	WATER								
05/30/07	F07-024-002	F07-024								
R705173-05	Lab Control Sample		7645-005	C		06/27/07	07/02/07	BW	Carbon 14 in Water	
		WATER								
		F07-024								
R705173-06	Method Blank		7645-006	C		06/27/07	07/02/07	BW	Carbon 14 in Water	
		WATER								
		F07-024								
R705173-07	Duplicate (R705173-01)		7645-007	C		06/27/07	07/02/07	BW	Carbon 14 in Water	
05/24/07	100 KW and Treat	WATER								
05/30/07		F07-024								
R705173-08	Spike (R705173-02)		7645-008	C		06/27/07	07/02/07	BW	Carbon 14 in Water	
05/24/07	100 KW and Treat	WATER								
05/30/07		F07-024								

WORK SUMMARY

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SUMMARY DATA SECTION

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Lab id EBRLNE  
Protocol Hanford  
Version Ver 1.0  
Form DVD-LWS  
Version 3.06  
Report date 07/03/07

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EBERLINE SERVICES/RICHMOND

SAMPLE DELIVERY GROUP H3525

SDG 7645  
 Contact Melissa C. Mannion

WORK SUMMARY, cont.

Client Hanford  
 Contract No. 630  
 Case no SDG H3525

COUNTS OF TESTS BY SAMPLE TYPE											
TEST	SAP No	METHOD	REFERENCE	CLIENT	MORE	RE	BLANK	LCS	DUP	SPIKE	TOTAL
C	P07-024	Carbon 14 in Water	C14_CHEM_LSC	4			1	1	1	1	8
TOTALS				4			1	1	1	1	8

Lab id EBRLINE  
 Protocol Hanford  
 Version Ver 1.0  
 Form DVD-LWS  
 Version 3.06  
 Report date 07/03/07

3000003

EBERLINE SERVICES / RICHMOND  
 SAMPLE DELIVERY GROUP H3525

7645-006

Method Blank

METHOD BLANK

SDG <u>7645</u>	Client/Case no <u>Hanford</u>	SDG <u>H3525</u>
Contact <u>Melissa C. Mannion</u>	Contract No. <u>630</u>	
Lab sample id <u>R705173-06</u>	Client sample id <u>Method Blank</u>	
Dept sample id <u>7645-006</u>	Material/Matrix <u>WATER</u>	
	SAF No <u>F07-024</u>	

ANALYTE	CAS NO	RESULT pCi/L	2σ ERR (COUNT)	MDA pCi/L	RDL pCi/L	QUALI- FIERS	TEST
Carbon 14	14762-75-5	9.49	35	59.1	200	U	C

100-KW Treatment System-QrtlySamplng

QC-BLANK #61689

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>07/03/07</u>

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SAMPLE DELIVERY GROUP H3525

7645-005

Lab Control Sample

LAB CONTROL SAMPLE

SDG <u>7645</u>	Client/Case no <u>Hanford</u>	SDG <u>H3525</u>
Contact <u>Melissa C. Mannion</u>	Contract No. <u>630</u>	
Lab sample id <u>R705173-05</u>	Client sample id <u>Lab Control Sample</u>	
Dept sample id <u>7645-005</u>	Material/Matrix <u>WATER</u>	
	SAF No <u>F07-024</u>	

ANALYTE	RESULT pCi/L	2σ ERR (COUNT)	MDA pCi/L	RDL pCi/L	QUALI- FLERS TEST	ADDED pCi/L	2σ ERR pCi/L	REC %	3σ LIMITS (TOTAL)	PROTOCOL LIMITS
Carbon 14	7450	260	127	200	C	7970	320	93	84-116	80-120

100-KW Treatment System-QtlySampling

QC-LCS #61688
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Lab id <u>EBRINE</u>
Protocol <u>Hanford</u>
Version <u>Ver 1.0</u>
Form <u>DVD-LCS</u>
Version <u>3.06</u>
Report date <u>07/03/07</u>

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**EBERLINE SERVICES/RICHMOND**

SAMPLE DELIVERY GROUP H3525

7645-007

B1NJP3

**DUPLICATE**

SDG <u>7645</u> Contact <u>Melissa C. Mannion</u> DUPLICATE Lab sample id <u>R705173-07</u> Dept sample id <u>7645-007</u>	ORIGINAL Lab sample id <u>R705173-01</u> Dept sample id <u>7645-001</u> Received <u>05/30/07</u>	Client/Case no <u>Hanford</u> SDG <u>H3525</u> Contract No. <u>630</u> Client sample id <u>B1NJP3</u> Location/Matrix <u>100 KW and Treat</u> <u>WATER</u> Collected/Volume <u>05/24/07 08:00</u> <u>0.125 L</u> Custody/SAF No <u>F07-024-002</u> <u>F07-024</u>
--	---	--

ANALYTE	DUPLICATE		MDA pCi/L	RDL pCi/L	QUALI- FIERS	TEST	ORIGINAL		MDA pCi/L	QUALI- FIERS	RPD %	3σ TOT	DER σ
	pCi/L	2σ ERR (COUNT)					pCi/L	2σ ERR (COUNT)					
Carbon 14	333	43	59.6	200		C	356	43	58.5		7	34	0.6

100-KW Treatment System-QtlySampling

QC-DUP#1 61690

DUPLICATES

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SUMMARY DATA SECTION

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Lab id <u>EBRLNE</u>
Protocol <u>Hanford</u>
Version <u>Ver 1.0</u>
Form <u>DVD-DUP</u>
Version <u>3.06</u>
Report date <u>07/03/07</u>

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EBERLINE SERVICES/RICHMOND

SAMPLE DELIVERY GROUP H3525

7645-008

B1NJPA

MATRIX SPIKE

SDG <u>7645</u>	Client/Case no <u>Hanford</u>	<u>SDG H3525</u>
Contact <u>Melissa C. Mannion</u>	Contract No. <u>630</u>	
<b>MATRIX SPIKE</b>	<b>ORIGINAL</b>	
Lab sample id <u>R705173-08</u>	Lab sample id <u>R705173-02</u>	Client sample id <u>B1NJPA</u>
Dept sample id <u>7645-008</u>	Dept sample id <u>7645-002</u>	Location/Matrix <u>100 KW and Treat</u> <u>WATER</u>
	Received <u>05/30/07</u>	Collected/Volume <u>05/24/07 08:18</u> <u>0.125 L</u>
		Custody/SAF No <u>F07-024-002</u> <u>F07-024</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)	IMS (TOTAL)	PROTOCOL LIMITS
Carbon 14	23400	800	<u>282</u>	200	X C	23900	960	584	48	95	83-117	60-140

100-KW Treatment System-QrtlySampling

QC-MS#2 61691

Lab id <u>EBRLINE</u>
Protocol <u>Hanford</u>
Version <u>Ver 1.0</u>
Form <u>DVD-MS</u>
Version <u>3.06</u>
Report date <u>07/03/07</u>

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EBERLINE SERVICES / RICHMOND  
SAMPLE DELIVERY GROUP H3525

7645-001

B1NJ3

DATA SHEET

SDG <u>7645</u>	Client/Case no <u>Hanford</u>	SDG <u>H3525</u>
Contact <u>Melissa C. Mannion</u>	Contract No. <u>630</u>	
Lab sample id <u>R705173-01</u>	Client sample id <u>B1NJ3</u>	
Dept sample id <u>7645-001</u>	Location/Matrix <u>100 KW and Treat</u>	<u>WATER</u>
Received <u>05/30/07</u>	Collected/Volume <u>05/24/07 08:00</u>	<u>0.125 L</u>
	Custody/SAF No <u>F07-024-002</u>	<u>F07-024</u>

ANALYTE	CAS NO	RESULT pCi/L	2σ ERR (COUNT)	MDA pCi/L	RDL pCi/L	QUALI- FIERS	TEST
Carbon 14	14762-75-5	356	43	58.5	200		C

100-KW Treatment System-OrtlySamplng

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>07/03/07</u>

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EBERLINE SERVICES / RICHMOND  
SAMPLE DELIVERY GROUP H3525

7645-002

B1NJ4

DATA SHEET

SDG <u>7645</u>	Client/Case no <u>Hanford</u>	<u>SDG H3525</u>
Contact <u>Melissa C. Mannion</u>	Contract <u>No. 630</u>	
Lab sample id <u>R705173-02</u>	Client sample id <u>B1NJ4</u>	
Dept sample id <u>7645-002</u>	Location/Matrix <u>100 KW and Treat</u>	<u>WATER</u>
Received <u>05/30/07</u>	Collected/Volume <u>05/24/07 08:18</u>	<u>0.125 L</u>
	Custody/SAF No <u>F07-024-002</u>	<u>F07-024</u>

ANALYTE	CAS NO	RESULT pCi/L	2σ ERR (COUNT)	MDA pCi/L	RDL pCi/L	QUALI- FIERS	TEST
Carbon 14	14762-75-5	584	48	58.9	200		C

100-KW Treatment System-QrtlySampling

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>07/03/07</u>

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EBERLINE SERVICES / RICHMOND  
 SAMPLE DELIVERY GROUP H3525

7645-003

B1NJPS

DATA SHEET

SDG <u>7645</u>	Client/Case no <u>Hanford</u>	SDG <u>H3525</u>
Contact <u>Melissa C. Mannion</u>	Contract <u>No. 630</u>	
Lab sample id <u>R705173-03</u>	Client sample id <u>B1NJPS</u>	
Dept sample id <u>7645-003</u>	Location/Matrix <u>100 KW and Treat</u>	<u>WATER</u>
Received <u>05/30/07</u>	Collected/Volume <u>05/24/07 08:30</u>	<u>0.125 L</u>
	Custody/SAF No <u>F07-024-002</u>	<u>F07-024</u>

ANALYTE	CAS NO	RESULT pCi/L	2σ ERR (COUNT)	MDA pCi/L	RDL pCi/L	QUALI- FIERS	TEST
Carbon 14	14762-75-5	253	41	58.1	200		C

100-KW Treatment System-OrtlySamplng

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>07/03/07</u>

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EBERLINE SERVICES / RICHMOND  
SAMPLE DELIVERY GROUP H3525

7645-004

B1NJ9

DATA SHEET

SDG <u>7645</u>	Client/Case no <u>Hanford</u>	SDG <u>H3525</u>
Contact <u>Melissa C. Mannion</u>	Contract No. <u>630</u>	
Lab sample id <u>R705173-04</u>	Client sample id <u>B1NJ9</u>	
Dept sample id <u>7645-004</u>	Location/Matrix <u>100 KW and Treat</u>	<u>WATER</u>
Received <u>05/30/07</u>	Collected/Volume <u>05/24/07 08:37 0.125 L</u>	
	Custody/SAF No <u>F07-024-002</u>	<u>F07-024</u>

ANALYTE	CAS NO	RESULT pCi/L	2σ ERR (COUNT)	MDA pCi/L	RDL pCi/L	QUALI- FIERS	TEST
Carbon 14	14762-75-5	1090	56	57.5	200		C

100-KW Treatment System-OrtlySamplng

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>07/03/07</u>

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**EBERLINE SERVICES/RICHMOND**

SAMPLE DELIVERY GROUP H3525

Test C Matrix WATER  
 SDG 7645  
 Contact Melissa C. Mannion

**LAB METHOD SUMMARY**

CARBON 14 IN WATER  
 LIQUID SCINTILLATION COUNTING

Client Hanford  
 Contract No. 630  
 Contract SDG H3525

**RESULTS**

LAB RAW SUF-  
 SAMPLE ID TEST FIX PLANCHET CLIENT SAMPLE ID Carbon 14

Preparation batch 6116-011

R705173-01	7645-001	B1NJP3	356
R705173-02	7645-002	B1NJP4	584
R705173-03	7645-003	B1NJP8	253
R705173-04	7645-004	B1NJP9	1090
R705173-05	7645-005	Lab Control Sample	ok
R705173-06	7645-006	Method Blank	U
R705173-07	7645-007	Duplicate (R705173-01)	ok
R705173-08	7645-008	Spike (R705173-02)	ok X

Nominal values and limits from method RDLs (pCi/L) 200  
 100-KW Treatment System-QtlySampling

**METHOD PERFORMANCE**

LAB RAW SUF- MDA ALIQ PREP DILD- 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 6116-011 2σ prep error 10.0 % Reference Lab Notebook #6115, pg. 11

R705173-01	B1NJP3	58.5	0.0300	100	50	34	06/21/07	06/27	LSC-004
R705173-02	B1NJP4	58.9	0.0300	100	50	34	06/21/07	06/27	LSC-004
R705173-03	B1NJP8	58.1	0.0300	100	50	34	06/21/07	06/27	LSC-004
R705173-04	B1NJP9	57.5	0.0300	100	50	34	06/21/07	06/27	LSC-004
R705173-05	Lab Control Sample	127	0.0300	100	<u>11</u>		06/21/07	06/27	LSC-004
R705173-06	Method Blank	59.1	0.0300	100	50		06/21/07	06/27	LSC-004
R705173-07	Duplicate (R705173-01)	59.6	0.0300	100	50	34	06/21/07	06/27	LSC-004
R705173-08	Spike (R705173-02)	<u>282</u>	<u>0.0200</u>	100	<u>5</u>	34	06/21/07	06/27	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 6

AVERAGES ± 2 SD MDA 95.1 ± 158  
 FOR 8 SAMPLES YIELD 100 ± 0

METHOD SUMMARIES

Page 1

SUMMARY DATA SECTION

Page 16

Lab id EBERLINE  
 Protocol Hanford  
 Version Ver 1.0  
 Form DVD-LMS  
 Version 3.06  
 Report date 07/03/07

0000018

EBERLINE SERVICES / RICHMOND

SAMPLE DELIVERY GROUP H3525

SDG 7645  
Contact Melissa C. Mannion

REPORT GUIDE

Client Hanford  
Contract No. 630  
Case no SDG H3525

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 07/03/07

000019

EBERLINE SERVICES / RICHMOND

SAMPLE DELIVERY GROUP H3525

SDG 7645

Contact Melissa C. Mannion

REPORT GUIDE

Client Hanford

Contract No. 630

Case no SDG H3525

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

Page 2

SUMMARY DATA SECTION

Page 18

Lab id EBRLNE

Protocol Hanford

Version Ver 1.0

Form DVD-RG

Version 3.06

Report date 07/03/07

000020

EBERLINE SERVICES / RICHMOND

SAMPLE DELIVERY GROUP H3525

SDG 7645

Contact Melissa C. Mannion

REPORT GUIDE

Client Hanford

Contract No. 630

Case no SDG H3525

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 07/03/07

0000021

EBERLINE SERVICES / RICHMOND

SAMPLE DELIVERY GROUP H3525

SDG 7645  
 Contact Melissa C. Mannion

REPORT GUIDE

Client Hanford  
 Contract No. 630  
 Case no SDG H3525

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 07/03/07

000022

EBERLINE SERVICES / RICHMOND

SAMPLE DELIVERY GROUP H3525

SDG 7645  
 Contact Melissa C. Mannion

GUIDE, cont.

Client Hanford  
 Contract No. 630  
 Case no SDG H3525

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 EBRINE  
 Protocol Hanford  
 Version Ver 1.0  
 Form DVD-RG  
 Version 3.06  
 Report date 07/03/07

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SAMPLE DELIVERY GROUP H3525

SDG 7645  
Contact Melissa C. Mannion

GUIDE, cont.

Client Hanford  
Contract No. 630  
Case no SDG H3525

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 EBRINE  
Protocol Hanford  
Version Ver 1.0  
Form DVD-RG  
Version 3.06  
Report date 07/03/07

0000024

EBERLINE SERVICES / RICHMOND

SAMPLE DELIVERY GROUP H3525

SDG 7645  
Contact Melissa C. Mannion

REPORT GUIDE

Client Hanford  
Contract No. 630  
Case no SDG H3525

LAB CONTROL SAMPLE

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

The following notes apply to this report:

- \* All fields in common with the Data Sheet Report have similar usage. Refer to its Report Guide for details.
- \* An amount ADDED is the lab's value for the actual amount spiked into this sample with its ERROR an estimate of the error of this amount.

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

- \* REC (Recovery) is RESULT divided by ADDED expressed as a percent.
- \* The first, computed limits for the recovery reflect:
  1. The error of RESULT, including that introduced by rounding the result prior to printing.  
  
If the limits are labeled (TOTAL), they include preparation error in the result. If labeled (COUNT), they do not.
  2. The error of ADDED.
  3. A lab specified, per analyte bias. The bias changes the center of the computed limits.
- \* The second limits are protocol defined upper and lower QC limits for the recovery.
- \* The recovery is underlined if it is outside either of these ranges.

Lab id EBRLNE  
Protocol Hanford  
Version Ver 1.0  
Form DVD-RG  
Version 3.06  
Report date 07/03/07

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SAMPLE DELIVERY GROUP H3525

SDG 7645  
 Contact Melissa C. Mannion

REPORT GUIDE

Client Hanford  
 Contract No. 630  
 Case no SDG H3525

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 07/03/07

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EBERLINE SERVICES / RICHMOND

SAMPLE DELIVERY GROUP H3525

SDG 7645  
Contact Melissa C. Mannion

GUIDE, cont.

Client Hanford  
Contract No. 630  
Case no SDG\_H3525

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.

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 07/03/07

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SAMPLE DELIVERY GROUP H3525

SDG 7645  
Contact Melissa C. Mannion

REPORT GUIDE

Client Hanford  
Contract No. 630  
Case no SDG H3525

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 07/03/07

000028

EBERLINE SERVICES / RICHMOND

SAMPLE DELIVERY GROUP H3525

SDG 7645

Contact Melissa C. Mannion

Client Hanford

Contract No. 630

Case no SDG H3525

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 EBRLNE

Protocol Hanford

Version Ver 1.0

Form DVD-RG

Version 3.06

Report date 07/03/07

0000028

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SAMPLE DELIVERY GROUP H3525

SDG 7645  
Contact Melissa C. Mannion

REPORT GUIDE

Client Hanford  
Contract No. 630  
Case no SDG H3525

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'

REPORT GUIDES

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SUMMARY DATA SECTION

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Lab id EBRINE  
Protocol Hanford  
Version Ver 1.0  
Form DVD-RG  
Version 3.06  
Report date 07/03/07

0000000

EBERLINE SERVICES / RICHMOND

SAMPLE DELIVERY GROUP H3525

SDG 7645  
 Contact Melissa C. Mannion

GUIDE, cont.

Client Hanford  
 Contract No. 630  
 Case no SDG\_H3525

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 07/03/07

000001

EBERLINE SERVICES / RICHMOND

SAMPLE DELIVERY GROUP H3525

SDG 7645  
Contact Melissa C. Mannion

GUIDE, cont.

Client Hanford  
Contract No. 630  
Case no SDG H3525

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

EBERLINE SERVICES / RICHMOND

SAMPLE DELIVERY GROUP H3525

SDG 7645  
Contact Melissa C. Mannion

GUIDE, cont.

Client Hanford  
Contract No. 630  
Case no SDG\_H3525

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 EBRINE  
Protocol Hanford  
Version Ver 1.0  
Form DVD-RG  
Version 3.06  
Report date 07/03/07

000003

COLLECTOR

Pope/Pfister/Mokler/Hughes/Connolly/Parchen

COMPANY CONTACT

HEDQUIST, KA

TELEPHONE NO.

372-1436

PROJECT COORDINATOR

TRENT, SJ

SAMPLING LOCATION

100 KW and Treat

PROJECT DESIGNATION

100-KW Treatment System - Quarterly Sampling

H3525  
COA (76%)

PRICE CODE

7N

DATA TURNAROUND

45 Days / 45 Days

ICE CHEST NO.

GRP-07-001

FIELD LOGBOOK NO.

HNF-N-576-2

122553E520

AIR QUALITY

METHOD OF SHIPMENT

FedEx

BILL OF LADING/AIR BILL NO.

See PTR 19647

SHIPPED TO

Eberline Services

OFFSITE PROPERTY NO.

See PTR 19647

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)

Rad Fu Bin JRO  
Bin JP3

SPECIAL HANDLING AND/OR STORAGE

Rad Fu Bin JP4 to  
BIN JRI

PRESERVATION

None

TYPE OF CONTAINER

P

NO. OF CONTAINER(S)

1

VOLUME

125ml

SAMPLE ANALYSIS

Carbon-14

SAMPLE NO.

MATRIX\*

SAMPLE DATE : SAMPLE TIME

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B1NJP3	WATER	5-24-07	0800 X
B1NJP4	WATER	5-24-07	0818 X
B1NJP5	WATER		
B4NJP6	WATER		
B1NJP7	WATER		

ASL  
5-24-07

CHAIN OF POSSESSION

SIGN/ PRINT NAMES

SPECIAL INSTRUCTIONS

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
J. Palle / ASL	5-24-07 1340	MU-745 REF. # 15-2407	1340
L. J. Farrell / MO-745 REF. #	5/29/07 10:55am	L. J. Farrell / Fed Ex	10:55am
L. J. Farrell / Fed Ex	5/29/07 10:55am	M. Fur 05/30/07	9:30
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
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

000004

COLLECTOR

Pope/Pfister/Mokler/Hughes/Connolly/Parchen

COMPANY CONTACT

HEDQUIST, KA

TELEPHONE NO.

372-1436

PROJECT COORDINATOR

TRENT, SJ

PRICE CODE

7N

DATA TURNAROUND

45 Days / 45 Days

SAMPLING LOCATION

100 KW and Treat

PROJECT DESIGNATION

100-KW Treatment System - Quarterly Sampling

H3525

SAF NO.

F07-024

AIR QUALITY

ICE CHEST NO.

GRP-07-001

FIELD LOGBOOK NO.

HNF-N-576-2

COA

(7643)

METHOD OF SHIPMENT

Fed Ex

BILL OF LADING/AIR BILL NO.

See PTR 19647

SHIPPED TO

Eberline Services

MATRIX\*

A=Air  
DL=Drum  
L=Liquid  
DS=Drum  
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)

PRESERVATION

None

TYPE OF CONTAINER

IP

NO. OF CONTAINER(S)

1

VOLUME

125ml

SAMPLE ANALYSIS

Carbon-14

SPECIAL HANDLING AND/OR STORAGE

SAMPLE NO.

MATRIX\*

SAMPLE DATE

SAMPLE TIME

B1NJP8

WATER

5-24-07

0830

X

Rad to BINJKS

B1NJP9

WATER

5-24-07

0837

X

Rad to BINJRL

CHAIN OF POSSESSION

SIGN/ PRINT NAMES

SPECIAL INSTRUCTIONS

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

J. Pope / 5-24-07

1340

MNO-745 / RES.#1 5-24-07

1340

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

MO-745 / Res #1

5/29/07 10:55am

L.S. Furrell / Hoqzmeil

5/29/07 10:55 am

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

L.S. Furrell / Hoqzmeil

5/29/07 10:55am

FedEx

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

Fed Ex

MNO

05/30/07

9:30

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

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