



EBERLINE
SERVICES

0059102

December 4, 2002

Ms. Joan Kessner
Bechtel Hanford Inc.
3350 George Washington Way
Richland, WA 99352
MSIN: H0-25



Reference: **P.O. #630**
Eberline Services R2-11-028-7725, SDG H1956

Dear Ms. Kessner:

Enclosed is the data report for twenty-seven solid samples designated under SAF No. BQ2-029 received at Eberline Services on November 8, 2002. The samples were analyzed according to the accompanying chain-of-custody documents.

Q NC 12/19/02

Please call if you have any questions concerning this report.

Sincerely,

Melissa C. Mannion

Melissa C. Mannion
Program Manager

RECEIVED
APR 28 2003
EDMC

MCM

Enclosure: Data Package

Analytical Services
2030 Wright Avenue
P.O. Box 4040
Richmond, California 94804-0040
(510) 235-2633 Fax (510) 235-0438
Toll Free (800) 841-5487
www.eberlineservices.com

1.0 GENERAL

Bechtel Hanford Inc. (BHI) Sample Delivery Group H1956 was composed of twenty-seven solid (soil) samples designated under SAF No. B02-029 with a Project Designation of: 100 F Area – Quick Turn.

The samples were received as stated on the Chain-of-Custody documents. Any discrepancies are noted on the Eberline Services Sample Receipt Checklist. The results were transmitted to BHI via e-Fax on November 15, 2002. The electronic data deliverable (EDD) was transmitted to BHI via e-Mail on November 15, 2002.

2.0 ANALYSIS NOTES

2.1 Gamma Screen Analyses

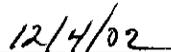
No problems were encountered during the course of the analyses.

Case Narrative Certification Statement

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



Melissa C. Mannion
Program Manager



Date

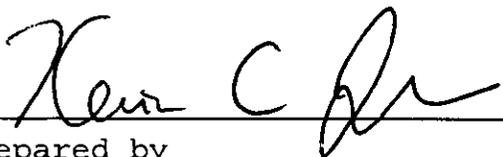
EBRLINE SERVICES / RICHMOND
SAMPLE DELIVERY GROUP H1956

SDG 7725
Contact Melissa C. Mannion

Client Hanford
Contract No. 630
Case no SDG_H1956

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

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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 11/15/02

EBERLINE SERVICES / RICHMOND

SAMPLE DELIVERY GROUP H1956

SDG 7725
Contact Melissa C. Mannion

REPORT GUIDE

Client Hanford
Contract No. 630
Case no SDG_H1956

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

Page 1

Lab id EBRLNE
Protocol Hanford
Version Ver 1.0
Form DVD-RG
Version 3.06
Report date 11/15/02

EBERLINE SERVICES / RICHMOND

SAMPLE DELIVERY GROUP H1956

SDG 7725
Contact Melissa C. Mannion

GUIDE , c o n t .

Client Hanford
Contract No. 630
Case no SDG H1956

ABOUT THE DATA SUMMARY SECTION

DUPLICATES

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

MATRIX SPIKES

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

DATA SHEETS

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

METHOD SUMMARIES

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

REPORT GUIDES

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

EBERLINE SERVICES/RICHMOND

SAMPLE DELIVERY GROUP H1956

LAB SAMPLE SUMMARY

SDG 7725
Contact Melissa C. Mannion

Client Hanford
Contract No. 630
Case no SDG H1956

LAB SAMPLE ID	CLIENT SAMPLE ID	LOCATION	MATRIX	LEVEL	SAF NO	CHAIN OF CUSTODY	COLLECTED
R211028-01	J00866	116-F-6	SOLID		B00-029	B00-029-240	11/06/02 10:00
R211028-02	J00867	116-F-6	SOLID		B00-029	B00-029-240	11/06/02 10:02
R211028-03	J00868	116-F-6	SOLID		B00-029	B00-029-240	11/06/02 10:04
R211028-04	J00869	116-F-6	SOLID		B00-029	B00-029-240	11/06/02 10:06
R211028-05	J00870	116-F-6	SOLID		B00-029	B00-029-240	11/06/02 10:08
R211028-06	J00871	116-F-6	SOLID		B00-029	B00-029-240	11/06/02 10:10
R211028-07	J00872	116-F-6	SOLID		B00-029	B00-029-240	11/06/02 10:13
R211028-08	J00873	116-F-6	SOLID		B00-029	B00-029-240	11/06/02 10:15
R211028-09	J00874	116-F-6	SOLID		B00-029	B00-029-240	11/06/02 10:17
R211028-10	J00875	116-F-6	SOLID		B00-029	B00-029-240	11/06/02 10:19
R211028-11	J00876	116-F-6	SOLID		B00-029	B00-029-240	11/06/02 10:21
R211028-12	J00877	116-F-6	SOLID		B00-029	B00-029-240	11/06/02 10:23
R211028-13	J00878	116-F-6	SOLID		B00-029	B00-029-240	11/06/02 10:26
R211028-14	J00879	116-F-6	SOLID		B00-029	B00-029-240	11/06/02 10:28
R211028-15	J00880	116-F-6	SOLID		B00-029	B00-029-240	11/06/02 10:30
R211028-16	J00881	116-F-6	SOLID		B00-029	B00-029-240	11/06/02 10:32
R211028-17	J00882	116-F-6	SOLID		B00-029	B00-029-240	11/06/02 10:34
R211028-18	J00883	116-F-6	SOLID		B00-029	B00-029-240	11/06/02 10:36
R211028-19	J00884	116-F-6	SOLID		B00-029	B00-029-240	11/06/02 10:39
R211028-20	J00885	116-F-6	SOLID		B00-029	B00-029-240	11/06/02 10:41
R211028-21	J00886	116-F-6	SOLID		B00-029	B00-029-240	11/06/02 10:43
R211028-22	J00887	116-F-6	SOLID		B00-029	B00-029-240	11/06/02 10:45
R211028-23	J00888	116-F-6	SOLID		B00-029	B00-029-240	11/06/02 10:47
R211028-24	J00889	116-F-6	SOLID		B00-029	B00-029-240	11/06/02 10:49
R211028-25	J00153	116-F-6	SOLID		B00-029	B00-029-227	11/06/02 09:30
R211028-26	J00154	116-F-6	SOLID		B00-029	B00-029-227	11/06/02 09:40
R211028-27	J00155	116-F-6	SOLID		B00-029	B00-029-227	11/06/02 09:50
R211028-28	Method Blank		SOLID		B00-029		

LAB SUMMARY

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SUMMARY DATA SECTION

Page 3

Lab id EBRLNE
Protocol Hanford
Version Ver 1.0
Form DVD-LS
Version 3.06
Report date 11/15/02

EBERLINE SERVICES/RICHMOND
 SAMPLE DELIVERY GROUP H1956

QC SUMMARY

SDG 7725
 Contact Melissa C. Mannion

Client Hanford
 Contract No. 630
 Case no SDG H1956

QC BATCH	CHAIN OF CUSTODY	CLIENT SAMPLE ID	MATRIX	% SOLIDS	SAMPLE AMOUNT	BASIS AMOUNT	DAYS SINCE RECEIVED	LAB COLL SAMPLE ID	DEPARTMENT SAMPLE ID
7725	B00-029-227	J00153	SOLID	100.0	608.4 g		11/08/02 2	R211028-25	7725-025
		J00154	SOLID	100.0	687.9 g		11/08/02 2	R211028-26	7725-026
		J00155	SOLID	100.0	661.8 g		11/08/02 2	R211028-27	7725-027
	B00-029-240	J00866	SOLID	100.0	761.8 g		11/08/02 2	R211028-01	7725-001
		J00867	SOLID	100.0	788.7 g		11/08/02 2	R211028-02	7725-002
		J00868	SOLID	100.0	706.6 g		11/08/02 2	R211028-03	7725-003
		J00869	SOLID	100.0	813.8 g		11/08/02 2	R211028-04	7725-004
		J00870	SOLID	100.0	849.9 g		11/08/02 2	R211028-05	7725-005
		J00871	SOLID	100.0	793.9 g		11/08/02 2	R211028-06	7725-006
		J00872	SOLID	100.0	803.3 g		11/08/02 2	R211028-07	7725-007
		J00873	SOLID	100.0	912.3 g		11/08/02 2	R211028-08	7725-008
		J00874	SOLID	100.0	846.4 g		11/08/02 2	R211028-09	7725-009
		J00875	SOLID	100.0	864.6 g		11/08/02 2	R211028-10	7725-010
		J00876	SOLID	100.0	896.3 g		11/08/02 2	R211028-11	7725-011
		J00877	SOLID	100.0	772.6 g		11/08/02 2	R211028-12	7725-012
		J00878	SOLID	100.0	763.9 g		11/08/02 2	R211028-13	7725-013
		J00879	SOLID	100.0	797.8 g		11/08/02 2	R211028-14	7725-014
		J00880	SOLID	100.0	754.2 g		11/08/02 2	R211028-15	7725-015
		J00881	SOLID	100.0	680.1 g		11/08/02 2	R211028-16	7725-016
		J00882	SOLID	100.0	759.0 g		11/08/02 2	R211028-17	7725-017
		J00883	SOLID	100.0	908.1 g		11/08/02 2	R211028-18	7725-018
		J00884	SOLID	100.0	749.4 g		11/08/02 2	R211028-19	7725-019
		J00885	SOLID	100.0	856.5 g		11/08/02 2	R211028-20	7725-020
		J00886	SOLID	100.0	836.8 g		11/08/02 2	R211028-21	7725-021
		J00887	SOLID	100.0	843.2 g		11/08/02 2	R211028-22	7725-022
		J00888	SOLID	100.0	829.9 g		11/08/02 2	R211028-23	7725-023
		J00889	SOLID	100.0	947.7 g		11/08/02 2	R211028-24	7725-024
		Method Blank	SOLID					R211028-28	7725-028

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SAMPLE DELIVERY GROUP H1956

SDG 7725
 Contact Melissa C. Mannion

PREP BATCH SUMMARY

Client Hanford
 Contract No. 630
 Case no SDG H1956

TEST	MATRIX	METHOD	PREPARATION ERROR		PLANCHETS ANALYZED				QUALI-	
			BATCH	2σ %	CLIENT	MORE	RE BLANK	LCS		DUP/ORIG MS/ORIG
Gamma Spectroscopy										
GAM	SOLID	Gamma Scan	7032-079	15.0	27				1	

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

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SAMPLE DELIVERY GROUP H1956

LAB WORK SUMMARY

SDG 7725
 Contact Melissa C. Mannion

Client Hanford
 Contract No. 630
 Case no SDG H1956

LAB SAMPLE	CLIENT SAMPLE ID				SUF-					
COLLECTED	LOCATION	MATRIX			FIX	ANALYZED	REVIEWED	BY	METHOD	
RECEIVED	CUSTODY	SAF No	PLANCHET	TEST						
R211028-01	J00866		7725-001	GAM		11/14/02	11/15/02	NJV	Gamma Scan	
11/06/02	116-F-6	SOLID								
11/08/02	B00-029-240	B00-029								
R211028-02	J00867		7725-002	GAM		11/14/02	11/15/02	NJV	Gamma Scan	
11/06/02	116-F-6	SOLID								
11/08/02	B00-029-240	B00-029								
R211028-03	J00868		7725-003	GAM		11/14/02	11/15/02	NJV	Gamma Scan	
11/06/02	116-F-6	SOLID								
11/08/02	B00-029-240	B00-029								
R211028-04	J00869		7725-004	GAM		11/14/02	11/15/02	NJV	Gamma Scan	
11/06/02	116-F-6	SOLID								
11/08/02	B00-029-240	B00-029								
R211028-05	J00870		7725-005	GAM		11/14/02	11/15/02	NJV	Gamma Scan	
11/06/02	116-F-6	SOLID								
11/08/02	B00-029-240	B00-029								
R211028-06	J00871		7725-006	GAM		11/14/02	11/15/02	NJV	Gamma Scan	
11/06/02	116-F-6	SOLID								
11/08/02	B00-029-240	B00-029								
R211028-07	J00872		7725-007	GAM		11/14/02	11/15/02	NJV	Gamma Scan	
11/06/02	116-F-6	SOLID								
11/08/02	B00-029-240	B00-029								
R211028-08	J00873		7725-008	GAM		11/14/02	11/15/02	NJV	Gamma Scan	
11/06/02	116-F-6	SOLID								
11/08/02	B00-029-240	B00-029								
R211028-09	J00874		7725-009	GAM		11/14/02	11/15/02	NJV	Gamma Scan	
11/06/02	116-F-6	SOLID								
11/08/02	B00-029-240	B00-029								
R211028-10	J00875		7725-010	GAM		11/14/02	11/15/02	NJV	Gamma Scan	
11/06/02	116-F-6	SOLID								
11/08/02	B00-029-240	B00-029								

WORK SUMMARY

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EBERLINE SERVICES/RICHMOND

SAMPLE DELIVERY GROUP H1956

WORK SUMMARY, cont.

SDG 7725
 Contact Melissa C. Mannion

Client Hanford
 Contract No. 630
 Case no SDG H1956

LAB SAMPLE	CLIENT SAMPLE ID									
COLLECTED	LOCATION	MATRIX		SUF-						
RECEIVED	CUSTODY	SAF No	PLANCHET	TEST	FIX	ANALYZED	REVIEWED	BY	METHOD	
R211028-11	J00876		7725-011	GAM		11/14/02	11/15/02	NJV	Gamma Scan	
11/06/02	116-F-6	SOLID								
11/08/02	B00-029-240	B00-029								
R211028-12	J00877		7725-012	GAM		11/14/02	11/15/02	NJV	Gamma Scan	
11/06/02	116-F-6	SOLID								
11/08/02	B00-029-240	B00-029								
R211028-13	J00878		7725-013	GAM		11/14/02	11/15/02	NJV	Gamma Scan	
11/06/02	116-F-6	SOLID								
11/08/02	B00-029-240	B00-029								
R211028-14	J00879		7725-014	GAM		11/14/02	11/15/02	NJV	Gamma Scan	
11/06/02	116-F-6	SOLID								
11/08/02	B00-029-240	B00-029								
R211028-15	J00880		7725-015	GAM		11/14/02	11/15/02	NJV	Gamma Scan	
11/06/02	116-F-6	SOLID								
11/08/02	B00-029-240	B00-029								
R211028-16	J00881		7725-016	GAM		11/14/02	11/15/02	NJV	Gamma Scan	
11/06/02	116-F-6	SOLID								
11/08/02	B00-029-240	B00-029								
R211028-17	J00882		7725-017	GAM		11/14/02	11/15/02	NJV	Gamma Scan	
11/06/02	116-F-6	SOLID								
11/08/02	B00-029-240	B00-029								
R211028-18	J00883		7725-018	GAM		11/14/02	11/15/02	NJV	Gamma Scan	
11/06/02	116-F-6	SOLID								
11/08/02	B00-029-240	B00-029								
R211028-19	J00884		7725-019	GAM		11/14/02	11/15/02	NJV	Gamma Scan	
11/06/02	116-F-6	SOLID								
11/08/02	B00-029-240	B00-029								
R211028-20	J00885		7725-020	GAM		11/14/02	11/15/02	NJV	Gamma Scan	
11/06/02	116-F-6	SOLID								
11/08/02	B00-029-240	B00-029								

WORK SUMMARY

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EBERLINE SERVICES/RICHMOND

SAMPLE DELIVERY GROUP H1956

WORK SUMMARY, cont.

SDG 7725
 Contact Melissa C. Mannion

Client Hanford
 Contract No. 630
 Case no SDG H1956

LAB SAMPLE COLLECTED RECEIVED	CLIENT SAMPLE ID LOCATION CUSTODY	MATRIX SAF No	PLANCHET	TEST	SUF- FIX	ANALYZED	REVIEWED	BY	METHOD
R211028-21 11/06/02 11/08/02	J00886 116-F-6 B00-029-240	 SOLID B00-029	7725-021	GAM		11/14/02	11/15/02	NJV	Gamma Scan
R211028-22 11/06/02 11/08/02	J00887 116-F-6 B00-029-240	 SOLID B00-029	7725-022	GAM		11/14/02	11/15/02	NJV	Gamma Scan
R211028-23 11/06/02 11/08/02	J00888 116-F-6 B00-029-240	 SOLID B00-029	7725-023	GAM		11/14/02	11/15/02	NJV	Gamma Scan
R211028-24 11/06/02 11/08/02	J00889 116-F-6 B00-029-240	 SOLID B00-029	7725-024	GAM		11/14/02	11/15/02	NJV	Gamma Scan
R211028-25 11/06/02 11/08/02	J00153 116-F-6 B00-029-227	 SOLID B00-029	7725-025	GAM		11/14/02	11/15/02	NJV	Gamma Scan
R211028-26 11/06/02 11/08/02	J00154 116-F-6 B00-029-227	 SOLID B00-029	7725-026	GAM		11/15/02	11/15/02	NJV	Gamma Scan
R211028-27 11/06/02 11/08/02	J00155 116-F-6 B00-029-227	 SOLID B00-029	7725-027	GAM		11/15/02	11/15/02	NJV	Gamma Scan
R211028-28	Method Blank	 SOLID B00-029	7725-028	GAM		11/15/02	11/15/02	NJV	Gamma Scan

WORK SUMMARY

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EBERLINE SERVICES/RICHMOND

SAMPLE DELIVERY GROUP H1956

SDG 7725
 Contact Melissa C. Mannion

WORK SUMMARY, cont.

Client Hanford
 Contract No. 630
 Case no SDG H1956

COUNTS OF TESTS BY SAMPLE TYPE										
TEST	SAF No	METHOD	REFERENCE	CLIENT	MORE	RE	BLANK	LCS	DUP SPIKE	TOTAL
GAM	B00-029	Gamma Scan	GAMMA_GS		27		1			28
TOTALS					27		1			28

WORK SUMMARY

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EBERLINE SERVICES / RICHMOND
SAMPLE DELIVERY GROUP H1956

7725-028

Method Blank

METHOD BLANK

SDG <u>7725</u>	Client/Case no <u>Hanford</u>	<u>SDG H1956</u>
Contact <u>Melissa C. Mannion</u>	Contract No. <u>630</u>	
Lab sample id <u>R211028-28</u>	Client sample id <u>Method Blank</u>	
Dept sample id <u>7725-028</u>	Material/Matrix <u>SOLID</u>	
	SAF No <u>B00-029</u>	

ANALYTE	CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI- FIERS	TEST
Cobalt 60	10198-40-0	U		<u>0.064</u>	0.050	U	GAM
Cesium 137	10045-97-3	U		<u>0.043</u>	0.10	U	GAM
Europium 152	14683-23-9	U		<u>0.13</u>	0.10	U	GAM
Europium 154	15585-10-1	U		<u>0.18</u>	0.10	U	GAM
Europium 155	14391-16-3	U		<u>0.13</u>	0.10	U	GAM
Americium 241	14596-10-2	U		<u>0.17</u>		U	GAM

100 F Area - Quick Turn

QC-BLANK 43124

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>11/15/02</u>

EBERLINE SERVICES / RICHMOND
SAMPLE DELIVERY GROUP H1956

7725-001

J00866

DATA SHEET

SDG <u>7725</u>	Client/Case no <u>Hanford</u>	SDG <u>H1956</u>
Contact <u>Melissa C. Mannion</u>	Contract No. <u>630</u>	
Lab sample id <u>R211028-01</u>	Client sample id <u>J00866</u>	
Dept sample id <u>7725-001</u>	Location/Matrix <u>116-F-6</u>	<u>SOLID</u>
Received <u>11/08/02</u>	Collected/Weight <u>11/06/02 10:00</u>	<u>761.8 g</u>
% solids <u>100.0</u>	Custody/SAF No <u>B00-029-240</u>	<u>B00-029</u>

ANALYTE	CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI- FIERS	TEST
Cobalt 60	10198-40-0	U		<u>0.057</u>	0.050	U	GAM
Cesium 137	10045-97-3	U		<u>0.054</u>	0.10	U	GAM
Europium 152	14683-23-9	U		<u>0.11</u>	0.10	U	GAM
Europium 154	15585-10-1	U		<u>0.20</u>	0.10	U	GAM
Europium 155	14391-16-3	U		<u>0.13</u>	0.10	U	GAM
Americium 241	14596-10-2	U		<u>0.062</u>		U	GAM

100 F Area - Quick Turn

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>11/15/02</u>

EBERLINE SERVICES / RICHMOND

SAMPLE DELIVERY GROUP H1956

7725-002

J00867

DATA SHEET

SDG <u>7725</u>	Client/Case no <u>Hanford</u>	SDG <u>H1956</u>
Contact <u>Melissa C. Mannion</u>	Contract <u>No. 630</u>	
Lab sample id <u>R211028-02</u>	Client sample id <u>J00867</u>	
Dept sample id <u>7725-002</u>	Location/Matrix <u>116-F-6</u>	<u>SOLID</u>
Received <u>11/08/02</u>	Collected/Weight <u>11/06/02 10:02</u>	<u>788.7 g</u>
% solids <u>100.0</u>	Custody/SAF No <u>B00-029-240</u>	<u>B00-029</u>

ANALYTE	CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI- FIERS	TEST
Cobalt 60	10198-40-0	U		0.034	0.050	U	GAM
Cesium 137	10045-97-3	U		0.053	0.10	U	GAM
Europium 152	14683-23-9	U		<u>0.12</u>	0.10	U	GAM
Europium 154	15585-10-1	U		<u>0.12</u>	0.10	U	GAM
Europium 155	14391-16-3	U		0.071	0.10	U	GAM
Americium 241	14596-10-2	U		0.046		U	GAM

100 F Area - Quick Turn

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>11/15/02</u>

EBERLINE SERVICES / RICHMOND
SAMPLE DELIVERY GROUP H1956

7725-003

J00868

DATA SHEET

SDG <u>7725</u>	Client/Case no <u>Hanford</u>	<u>SDG H1956</u>
Contact <u>Melissa C. Mannion</u>	Contract No. <u>630</u>	
Lab sample id <u>R211028-03</u>	Client sample id <u>J00868</u>	
Dept sample id <u>7725-003</u>	Location/Matrix <u>116-F-6</u>	<u>SOLID</u>
Received <u>11/08/02</u>	Collected/Weight <u>11/06/02 10:04</u>	<u>706.6 g</u>
% solids <u>100.0</u>	Custody/SAF No <u>B00-029-240</u>	<u>B00-029</u>

ANALYTE	CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI- FIERS	TEST
Cobalt 60	10198-40-0	U		<u>0.058</u>	0.050	U	GAM
Cesium 137	10045-97-3	U		<u>0.052</u>	0.10	U	GAM
Europium 152	14683-23-9	U		<u>0.12</u>	0.10	U	GAM
Europium 154	15585-10-1	U		<u>0.19</u>	0.10	U	GAM
Europium 155	14391-16-3	U		<u>0.13</u>	0.10	U	GAM
Americium 241	14596-10-2	U		<u>0.18</u>		U	GAM

100 F Area - Quick Turn

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>11/15/02</u>

EBERLINE SERVICES / RICHMOND
SAMPLE DELIVERY GROUP H1956

7725-004

J00869

DATA SHEET

SDG <u>7725</u>	Client/Case no <u>Hanford</u>	<u>SDG H1956</u>
Contact <u>Melissa C. Mannion</u>	Contract No. <u>630</u>	
Lab sample id <u>R211028-04</u>	Client sample id <u>J00869</u>	
Dept sample id <u>7725-004</u>	Location/Matrix <u>116-F-6</u>	<u>SOLID</u>
Received <u>11/08/02</u>	Collected/Weight <u>11/06/02 10:06</u>	<u>813.8 g</u>
% solids <u>100.0</u>	Custody/SAF No <u>B00-029-240</u>	<u>B00-029</u>

ANALYTE	CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI- FIERS	TEST
Cobalt 60	10198-40-0	U		0.035	0.050	U	GAM
Cesium 137	10045-97-3	0.085	0.031	0.033	0.10	J	GAM
Europium 152	14683-23-9	U		0.077	0.10	U	GAM
Europium 154	15585-10-1	U		<u>0.13</u>	0.10	U	GAM
Europium 155	14391-16-3	U		0.092	0.10	U	GAM
Americium 241	14596-10-2	U		0.12		U	GAM

100 F Area - Quick Turn

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>11/15/02</u>

EBERLINE SERVICES / RICHMOND
SAMPLE DELIVERY GROUP H1956

7725-005

J00870

DATA SHEET

SDG <u>7725</u>	Client/Case no <u>Hanford</u>	SDG <u>H1956</u>
Contact <u>Melissa C. Mannion</u>	Contract <u>No. 630</u>	
Lab sample id <u>R211028-05</u>	Client sample id <u>J00870</u>	
Dept sample id <u>7725-005</u>	Location/Matrix <u>116-F-6</u>	<u>SOLID</u>
Received <u>11/08/02</u>	Collected/Weight <u>11/06/02 10:08</u>	<u>849.9 g</u>
% solids <u>100.0</u>	Custody/SAF No <u>B00-029-240</u>	<u>B00-029</u>

ANALYTE	CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI- FIERS	TEST
Cobalt 60	10198-40-0	U		0.040	0.050	U	GAM
Cesium 137	10045-97-3	U		0.041	0.10	U	GAM
Europium 152	14683-23-9	U		0.093	0.10	U	GAM
Europium 154	15585-10-1	U		<u>0.14</u>	0.10	U	GAM
Europium 155	14391-16-3	U		<u>0.12</u>	0.10	U	GAM
Americium 241	14596-10-2	U		0.25		U	GAM

100 F Area - Quick Turn

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>11/15/02</u>

EBERLINE SERVICES / RICHMOND
SAMPLE DELIVERY GROUP H1956

7725-006

J00871

DATA SHEET

SDG <u>7725</u>	Client/Case no <u>Hanford</u>	<u>SDG H1956</u>
Contact <u>Melissa C. Mannion</u>	Contract <u>No. 630</u>	
Lab sample id <u>R211028-06</u>	Client sample id <u>J00871</u>	
Dept sample id <u>7725-006</u>	Location/Matrix <u>116-F-6</u>	<u>SOLID</u>
Received <u>11/08/02</u>	Collected/Weight <u>11/06/02 10:10</u>	<u>793.9 g</u>
% solids <u>100.0</u>	Custody/SAF No <u>B00-029-240</u>	<u>B00-029</u>

ANALYTE	CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI- FIERS	TEST
Cobalt 60	10198-40-0	U		<u>0.089</u>	0.050	U	GAM
Cesium 137	10045-97-3	U		<u>0.085</u>	0.10	U	GAM
Europium 152	14683-23-9	U		<u>0.20</u>	0.10	U	GAM
Europium 154	15585-10-1	U		<u>0.23</u>	0.10	U	GAM
Europium 155	14391-16-3	U		<u>0.19</u>	0.10	U	GAM
Americium 241	14596-10-2	U		<u>0.27</u>		U	GAM

100 F Area - Quick Turn

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>11/15/02</u>

EBERLINE SERVICES / RICHMOND
SAMPLE DELIVERY GROUP H1956

7725-007

J00872

DATA SHEET

SDG <u>7725</u>	Client/Case no <u>Hanford</u>	SDG <u>H1956</u>
Contact <u>Melissa C. Mannion</u>	Contract No. <u>630</u>	
Lab sample id <u>R211028-07</u>	Client sample id <u>J00872</u>	
Dept sample id <u>7725-007</u>	Location/Matrix <u>116-F-6</u>	<u>SOLID</u>
Received <u>11/08/02</u>	Collected/Weight <u>11/06/02 10:13</u>	<u>803.3 g</u>
% solids <u>100.0</u>	Custody/SAF No <u>B00-029-240</u>	<u>B00-029</u>

ANALYTE	CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI- FIERS	TEST
Cobalt 60	10198-40-0	U		0.045	0.050	U	GAM
Cesium 137	10045-97-3	U		0.050	0.10	U	GAM
Europium 152	14683-23-9	U		<u>0.11</u>	0.10	U	GAM
Europium 154	15585-10-1	U		<u>0.16</u>	0.10	U	GAM
Europium 155	14391-16-3	U		0.097	0.10	U	GAM
Americium 241	14596-10-2	U		0.061		U	GAM

100 F Area - Quick Turn

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>11/15/02</u>

EBERLINE SERVICES / RICHMOND

SAMPLE DELIVERY GROUP H1956

7725-008

J00873

DATA SHEET

SDG <u>7725</u>	Client/Case no <u>Hanford</u>	<u>SDG H1956</u>
Contact <u>Melissa C. Mannion</u>	Contract No. <u>630</u>	
Lab sample id <u>R211028-08</u>	Client sample id <u>J00873</u>	
Dept sample id <u>7725-008</u>	Location/Matrix <u>116-F-6</u>	<u>SOLID</u>
Received <u>11/08/02</u>	Collected/Weight <u>11/06/02 10:15</u>	<u>912.3 g</u>
% solids <u>100.0</u>	Custody/SAF No <u>B00-029-240</u>	<u>B00-029</u>

ANALYTE	CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI- FIERS	TEST
Cobalt 60	10198-40-0	U		<u>0.051</u>	0.050	U	GAM
Cesium 137	10045-97-3	0.101	0.035	0.041	0.10		GAM
Europium 152	14683-23-9	U		<u>0.11</u>	0.10	U	GAM
Europium 154	15585-10-1	U		<u>0.16</u>	0.10	U	GAM
Europium 155	14391-16-3	U		<u>0.12</u>	0.10	U	GAM
Americium 241	14596-10-2	U		0.16		U	GAM

100 F Area - Quick Turn

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>11/15/02</u>

EBERLINE SERVICES / RICHMOND
SAMPLE DELIVERY GROUP H1956

7725-009

J00874

DATA SHEET

SDG <u>7725</u>	Client/Case no <u>Hanford</u>	SDG <u>H1956</u>
Contact <u>Melissa C. Mannion</u>	Contract No. <u>630</u>	
Lab sample id <u>R211028-09</u>	Client sample id <u>J00874</u>	
Dept sample id <u>7725-009</u>	Location/Matrix <u>116-F-6</u>	<u>SOLID</u>
Received <u>11/08/02</u>	Collected/Weight <u>11/06/02 10:17</u>	<u>846.4 g</u>
% solids <u>100.0</u>	Custody/SAF No <u>B00-029-240</u>	<u>B00-029</u>

ANALYTE	CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI- FIERS	TEST
Cobalt 60	10198-40-0	U		<u>0.052</u>	0.050	U	GAM
Cesium 137	10045-97-3	0.127	0.052	0.059	0.10		GAM
Europium 152	14683-23-9	U		<u>0.15</u>	0.10	U	GAM
Europium 154	15585-10-1	U		<u>0.19</u>	0.10	U	GAM
Europium 155	14391-16-3	U		<u>0.18</u>	0.10	U	GAM
Americium 241	14596-10-2	U		0.41		U	GAM

100 F Area - Quick Turn

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>11/15/02</u>

EBERLINE SERVICES / RICHMOND
SAMPLE DELIVERY GROUP H1956

7725-010

J00875

DATA SHEET

SDG <u>7725</u>	Client/Case no <u>Hanford</u>	SDG <u>H1956</u>
Contact <u>Melissa C. Mannion</u>	Contract No. <u>630</u>	
Lab sample id <u>R211028-10</u>	Client sample id <u>J00875</u>	
Dept sample id <u>7725-010</u>	Location/Matrix <u>116-F-6</u>	<u>SOLID</u>
Received <u>11/08/02</u>	Collected/Weight <u>11/06/02 10:19</u>	<u>864.6 g</u>
% solids <u>100.0</u>	Custody/SAF No <u>B00-029-240</u>	<u>B00-029</u>

ANALYTE	CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI- FIERS	TEST
Cobalt 60	10198-40-0	U		<u>0.054</u>	0.050	U	GAM
Cesium 137	10045-97-3	0.179	0.059	0.054	0.10		GAM
Europium 152	14683-23-9	U		<u>0.15</u>	0.10	U	GAM
Europium 154	15585-10-1	U		<u>0.20</u>	0.10	U	GAM
Europium 155	14391-16-3	U		<u>0.15</u>	0.10	U	GAM
Americium 241	14596-10-2	U		0.18		U	GAM

100 F Area - Quick Turn

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>11/15/02</u>

EBERLINE SERVICES / RICHMOND
SAMPLE DELIVERY GROUP H1956

7725-011

J00876

DATA SHEET

SDG <u>7725</u>	Client/Case no <u>Hanford</u>	<u>SDG H1956</u>
Contact <u>Melissa C. Mannion</u>	Contract No. <u>630</u>	
Lab sample id <u>R211028-11</u>	Client sample id <u>J00876</u>	
Dept sample id <u>7725-011</u>	Location/Matrix <u>116-F-6</u>	<u>SOLID</u>
Received <u>11/08/02</u>	Collected/Weight <u>11/06/02 10:21</u>	<u>896.3 g</u>
% solids <u>100.0</u>	Custody/SAF No <u>B00-029-240</u>	<u>B00-029</u>

ANALYTE	CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI- FIERS	TEST
Cobalt 60	10198-40-0	U		<u>0.067</u>	0.050	U	GAM
Cesium 137	10045-97-3	0.174	0.060	0.067	0.10		GAM
Europium 152	14683-23-9	0.191	0.081	<u>0.11</u>	0.10		GAM
Europium 154	15585-10-1	U		<u>0.20</u>	0.10	U	GAM
Europium 155	14391-16-3	U		<u>0.19</u>	0.10	U	GAM
Americium 241	14596-10-2	U		0.40		U	GAM

100 F Area - Quick Turn

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>11/15/02</u>

EBERLINE SERVICES / RICHMOND
SAMPLE DELIVERY GROUP H1956

7725-012

J00877

DATA SHEET

SDG <u>7725</u>	Client/Case no <u>Hanford</u>	SDG <u>H1956</u>
Contact <u>Melissa C. Mannion</u>	Contract No. <u>630</u>	
Lab sample id <u>R211028-12</u>	Client sample id <u>J00877</u>	
Dept sample id <u>7725-012</u>	Location/Matrix <u>116-F-6</u>	<u>SOLID</u>
Received <u>11/08/02</u>	Collected/Weight <u>11/06/02 10:23</u>	<u>772.6 g</u>
% solids <u>100.0</u>	Custody/SAF No <u>B00-029-240</u>	<u>B00-029</u>

ANALYTE	CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI- FIERS	TEST
Cobalt 60	10198-40-0	U		<u>0.058</u>	0.050	U	GAM
Cesium 137	10045-97-3	0.482	0.071	0.066	0.10		GAM
Europium 152	14683-23-9	0.276	0.090	<u>0.12</u>	0.10		GAM
Europium 154	15585-10-1	U		<u>0.18</u>	0.10	U	GAM
Europium 155	14391-16-3	U		<u>0.11</u>	0.10	U	GAM
Americium 241	14596-10-2	U		0.069		U	GAM

100 F Area - Quick Turn

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>11/15/02</u>

EBERLINE SERVICES / RICHMOND
SAMPLE DELIVERY GROUP H1956

7725-013

J00878

DATA SHEET

SDG <u>7725</u>	Client/Case no <u>Hanford</u>	SDG <u>H1956</u>
Contact <u>Melissa C. Mannion</u>	Contract No. <u>630</u>	
Lab sample id <u>R211028-13</u>	Client sample id <u>J00878</u>	
Dept sample id <u>7725-013</u>	Location/Matrix <u>116-F-6</u>	<u>SOLID</u>
Received <u>11/08/02</u>	Collected/Weight <u>11/06/02 10:26</u>	<u>763.9 g</u>
% solids <u>100.0</u>	Custody/SAF No <u>B00-029-240</u>	<u>B00-029</u>

ANALYTE	CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI- FIERS	TEST
Cobalt 60	10198-40-0	U		<u>0.095</u>	0.050	U	GAM
Cesium 137	10045-97-3	0.082	0.058	0.082	0.10	J	GAM
Europium 152	14683-23-9	U		<u>0.22</u>	0.10	U	GAM
Europium 154	15585-10-1	U		<u>0.30</u>	0.10	U	GAM
Europium 155	14391-16-3	U		<u>0.20</u>	0.10	U	GAM
Americium 241	14596-10-2	U		0.29		U	GAM

100 F Area - Quick Turn

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>11/15/02</u>

DATA SHEETS

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SUMMARY DATA SECTION

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EBERLINE SERVICES / RICHMOND
SAMPLE DELIVERY GROUP H1956

7725-014

J00879

D A T A S H E E T

SDG <u>7725</u>	Client/Case no <u>Hanford</u>	SDG <u>H1956</u>
Contact <u>Melissa C. Mannion</u>	Contract <u>No. 630</u>	
Lab sample id <u>R211028-14</u>	Client sample id <u>J00879</u>	
Dept sample id <u>7725-014</u>	Location/Matrix <u>116-F-6</u>	<u>SOLID</u>
Received <u>11/08/02</u>	Collected/Weight <u>11/06/02 10:28</u>	<u>797.8 g</u>
% solids <u>100.0</u>	Custody/SAF No <u>B00-029-240</u>	<u>B00-029</u>

ANALYTE	CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI- FIERS	TEST
Cobalt 60	10198-40-0	U		0.050	0.050	U	GAM
Cesium 137	10045-97-3	U		0.071	0.10	U	GAM
Europium 152	14683-23-9	U		<u>0.21</u>	0.10	U	GAM
Europium 154	15585-10-1	U		<u>0.18</u>	0.10	U	GAM
Europium 155	14391-16-3	U		<u>0.14</u>	0.10	U	GAM
Americium 241	14596-10-2	U		0.18		U	GAM

100 F Area - Quick Turn

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>11/15/02</u>

EBERLINE SERVICES / RICHMOND
SAMPLE DELIVERY GROUP H1956

7725-015

J00880

DATA SHEET

SDG <u>7725</u>	Client/Case no <u>Hanford</u>	SDG <u>H1956</u>
Contact <u>Melissa C. Mannion</u>	Contract No. <u>630</u>	
Lab sample id <u>R211028-15</u>	Client sample id <u>J00880</u>	
Dept sample id <u>7725-015</u>	Location/Matrix <u>116-F-6</u>	<u>SOLID</u>
Received <u>11/08/02</u>	Collected/Weight <u>11/06/02 10:30</u>	<u>754.2 g</u>
% solids <u>100.0</u>	Custody/SAF No <u>B00-029-240</u>	<u>B00-029</u>

ANALYTE	CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI- FIERS	TEST
Cobalt 60	10198-40-0	U		<u>0.058</u>	0.050	U	GAM
Cesium 137	10045-97-3	0.161	0.050	0.054	0.10		GAM
Europium 152	14683-23-9	0.133	0.071	<u>0.11</u>	0.10		GAM
Europium 154	15585-10-1	U		<u>0.21</u>	0.10	U	GAM
Europium 155	14391-16-3	U		<u>0.17</u>	0.10	U	GAM
Americium 241	14596-10-2	U		0.39		U	GAM

100 F Area - Quick Turn

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>11/15/02</u>

EBERLINE SERVICES / RICHMOND
SAMPLE DELIVERY GROUP H1956

7725-016

J00881

D A T A S H E E T

SDG <u>7725</u>	Client/Case no <u>Hanford</u>	<u>SDG H1956</u>
Contact <u>Melissa C. Mannion</u>	Contract No. <u>630</u>	
Lab sample id <u>R211028-16</u>	Client sample id <u>J00881</u>	
Dept sample id <u>7725-016</u>	Location/Matrix <u>116-F-6</u>	<u>SOLID</u>
Received <u>11/08/02</u>	Collected/Weight <u>11/06/02 10:32</u>	<u>680.1 g</u>
% solids <u>100.0</u>	Custody/SAF No <u>B00-029-240</u>	<u>B00-029</u>

ANALYTE	CAS NO	RESULT pCi/g	2 σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI- FIERS	TEST
Cobalt 60	10198-40-0	U		<u>0.089</u>	0.050	U	GAM
Cesium 137	10045-97-3	0.179	0.075	0.087	0.10		GAM
Europium 152	14683-23-9	U		<u>0.21</u>	0.10	U	GAM
Europium 154	15585-10-1	U		<u>0.30</u>	0.10	U	GAM
Europium 155	14391-16-3	U		<u>0.19</u>	0.10	U	GAM
Americium 241	14596-10-2	U		0.27		U	GAM

100 F Area - Quick Turn

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>11/15/02</u>

EBERLINE SERVICES / RICHMOND
SAMPLE DELIVERY GROUP H1956

7725-017

J00882

D A T A S H E E T

SDG <u>7725</u>	Client/Case no <u>Hanford</u>	SDG <u>H1956</u>
Contact <u>Melissa C. Mannion</u>	Contract No. <u>630</u>	
Lab sample id <u>R211028-17</u>	Client sample id <u>J00882</u>	
Dept sample id <u>7725-017</u>	Location/Matrix <u>116-F-6</u>	<u>SOLID</u>
Received <u>11/08/02</u>	Collected/Weight <u>11/06/02 10:34</u>	<u>759.0 g</u>
% solids <u>100.0</u>	Custody/SAF No <u>B00-029-240</u>	<u>B00-029</u>

ANALYTE	CAS NO	RESULT pCi/g	2 σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI- FIERS	TEST
Cobalt 60	10198-40-0	U		0.047	0.050	U	GAM
Cesium 137	10045-97-3	0.132	0.043	0.049	0.10		GAM
Europium 152	14683-23-9	U		<u>0.17</u>	0.10	U	GAM
Europium 154	15585-10-1	U		<u>0.15</u>	0.10	U	GAM
Europium 155	14391-16-3	U		0.095	0.10	U	GAM
Americium 241	14596-10-2	U		0.058		U	GAM

100 F Area - Quick Turn

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>11/15/02</u>

EBERLINE SERVICES / RICHMOND
SAMPLE DELIVERY GROUP H1956

7725-018

J00883

DATA SHEET

SDG <u>7725</u>	Client/Case no <u>Hanford</u>	<u>SDG H1956</u>
Contact <u>Melissa C. Mannion</u>	Contract No. <u>630</u>	
Lab sample id <u>R211028-18</u>	Client sample id <u>J00883</u>	
Dept sample id <u>7725-018</u>	Location/Matrix <u>116-F-6</u>	<u>SOLID</u>
Received <u>11/08/02</u>	Collected/Weight <u>11/06/02 10:36</u>	<u>908.1 g</u>
% solids <u>100.0</u>	Custody/SAF No <u>B00-029-240</u>	<u>B00-029</u>

ANALYTE	CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI- FIERS	TEST
Cobalt 60	10198-40-0	U		<u>0.084</u>	0.050	U	GAM
Cesium 137	10045-97-3	0.121	0.087	0.10	0.10		GAM
Europium 152	14683-23-9	U		<u>0.23</u>	0.10	U	GAM
Europium 154	15585-10-1	U		<u>0.26</u>	0.10	U	GAM
Europium 155	14391-16-3	U		<u>0.21</u>	0.10	U	GAM
Americium 241	14596-10-2	U		0.29		U	GAM

100 F Area - Quick Turn

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>11/15/02</u>

EBERLINE SERVICES / RICHMOND
SAMPLE DELIVERY GROUP H1956

7725-019

J00884

D A T A S H E E T

SDG <u>7725</u>	Client/Case no <u>Hanford</u>	<u>SDG H1956</u>
Contact <u>Melissa C. Mannion</u>	Contract <u>No. 630</u>	
Lab sample id <u>R211028-19</u>	Client sample id <u>J00884</u>	
Dept sample id <u>7725-019</u>	Location/Matrix <u>116-F-6</u>	<u>SOLID</u>
Received <u>11/08/02</u>	Collected/Weight <u>11/06/02 10:39</u>	<u>749.4 g</u>
% solids <u>100.0</u>	Custody/SAF No <u>B00-029-240</u>	<u>B00-029</u>

ANALYTE	CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI- FIERS	TEST
Cobalt 60	10198-40-0	U		<u>0.070</u>	0.050	U	GAM
Cesium 137	10045-97-3	0.360	0.073	0.065	0.10		GAM
Europium 152	14683-23-9	U		<u>0.20</u>	0.10	U	GAM
Europium 154	15585-10-1	U		<u>0.24</u>	0.10	U	GAM
Europium 155	14391-16-3	U		<u>0.17</u>	0.10	U	GAM
Americium 241	14596-10-2	U		0.22		U	GAM

100 F Area - Quick Turn

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>11/15/02</u>

EBERLINE SERVICES / RICHMOND
SAMPLE DELIVERY GROUP H1956

7725-020

J00885

DATA SHEET

SDG <u>7725</u>	Client/Case no <u>Hanford</u>	<u>SDG H1956</u>
Contact <u>Melissa C. Mannion</u>	Contract No. <u>630</u>	
Lab sample id <u>R211028-20</u>	Client sample id <u>J00885</u>	
Dept sample id <u>7725-020</u>	Location/Matrix <u>116-F-6</u>	<u>SOLID</u>
Received <u>11/08/02</u>	Collected/Weight <u>11/06/02 10:41</u>	<u>856.5 g</u>
% solids <u>100.0</u>	Custody/SAF No <u>B00-029-240</u>	<u>B00-029</u>

ANALYTE	CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI- FIERS	TEST
Cobalt 60	10198-40-0	U		<u>0.073</u>	0.050	U	GAM
Cesium 137	10045-97-3	0.192	0.067	0.065	0.10		GAM
Europium 152	14683-23-9	U		<u>0.16</u>	0.10	U	GAM
Europium 154	15585-10-1	U		<u>0.26</u>	0.10	U	GAM
Europium 155	14391-16-3	U		<u>0.22</u>	0.10	U	GAM
Americium 241	14596-10-2	U		0.47		U	GAM

100 F Area - Quick Turn

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>11/15/02</u>

EBERLINE SERVICES / RICHMOND
SAMPLE DELIVERY GROUP H1956

7725-021

J00886

DATA SHEET

SDG <u>7725</u>	Client/Case no <u>Hanford</u>	SDG <u>H1956</u>
Contact <u>Melissa C. Mannion</u>	Contract No. <u>630</u>	
Lab sample id <u>R211028-21</u>	Client sample id <u>J00886</u>	
Dept sample id <u>7725-021</u>	Location/Matrix <u>116-F-6</u>	<u>SOLID</u>
Received <u>11/08/02</u>	Collected/Weight <u>11/06/02 10:43</u>	<u>836.8 g</u>
% solids <u>100.0</u>	Custody/SAF No <u>B00-029-240</u>	<u>B00-029</u>

ANALYTE	CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI- FIERS	TEST
Cobalt 60	10198-40-0	U		<u>0.054</u>	0.050	U	GAM
Cesium 137	10045-97-3	U		<u>0.058</u>	0.10	U	GAM
Europium 152	14683-23-9	U		<u>0.13</u>	0.10	U	GAM
Europium 154	15585-10-1	U		<u>0.16</u>	0.10	U	GAM
Europium 155	14391-16-3	U		<u>0.11</u>	0.10	U	GAM
Americium 241	14596-10-2	U		<u>0.075</u>		U	GAM

100 F Area - Quick Turn

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>11/15/02</u>

DATA SHEETS

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SUMMARY DATA SECTION

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EBERLINE SERVICES / RICHMOND
SAMPLE DELIVERY GROUP H1956

7725-022

J00887

DATA SHEET

SDG <u>7725</u>	Client/Case no <u>Hanford</u>	SDG <u>H1956</u>
Contact <u>Melissa C. Mannion</u>	Contract No. <u>630</u>	
Lab sample id <u>R211028-22</u>	Client sample id <u>J00887</u>	
Dept sample id <u>7725-022</u>	Location/Matrix <u>116-F-6</u>	<u>SOLID</u>
Received <u>11/08/02</u>	Collected/Weight <u>11/06/02 10:45</u>	<u>843.2 g</u>
% solids <u>100.0</u>	Custody/SAF No <u>B00-029-240</u>	<u>B00-029</u>

ANALYTE	CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI- FIERS	TEST
Cobalt 60	10198-40-0	U		0.048	0.050	U	GAM
Cesium 137	10045-97-3	0.448	0.064	0.055	0.10		GAM
Europium 152	14683-23-9	0.282	0.078	<u>0.11</u>	0.10		GAM
Europium 154	15585-10-1	U		<u>0.16</u>	0.10	U	GAM
Europium 155	14391-16-3	U		<u>0.11</u>	0.10	U	GAM
Americium 241	14596-10-2	U		0.070		U	GAM

100 F Area - Quick Turn

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>11/15/02</u>

EBERLINE SERVICES / RICHMOND
SAMPLE DELIVERY GROUP H1956

7725-023

J00888

D A T A S H E E T

SDG <u>7725</u>	Client/Case no <u>Hanford</u>	SDG <u>H1956</u>
Contact <u>Melissa C. Mannion</u>	Contract No. <u>630</u>	
Lab sample id <u>R211028-23</u>	Client sample id <u>J00888</u>	
Dept sample id <u>7725-023</u>	Location/Matrix <u>116-F-6</u>	<u>SOLID</u>
Received <u>11/08/02</u>	Collected/Weight <u>11/06/02 10:47</u>	<u>829.9 g</u>
* solids <u>100.0</u>	Custody/SAF No <u>B00-029-240</u>	<u>B00-029</u>

ANALYTE	CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI- FIERS	TEST
Cobalt 60	10198-40-0	U		<u>0.11</u>	0.050	U	GAM
Cesium 137	10045-97-3	2.41	0.19	<u>0.14</u>	0.10		GAM
Europium 152	14683-23-9	1.02	0.26	<u>0.33</u>	0.10		GAM
Europium 154	15585-10-1	U		<u>0.39</u>	0.10	U	GAM
Europium 155	14391-16-3	U		<u>0.26</u>	0.10	U	GAM
Americium 241	14596-10-2	U		<u>0.34</u>		U	GAM

100 F Area - Quick Turn

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>11/15/02</u>

EBERLINE SERVICES / RICHMOND
SAMPLE DELIVERY GROUP H1956

7725-024

J00889

DATA SHEET

SDG <u>7725</u>	Client/Case no <u>Hanford</u>	SDG <u>H1956</u>
Contact <u>Melissa C. Mannion</u>	Contract No. <u>630</u>	
Lab sample id <u>R211028-24</u>	Client sample id <u>J00889</u>	
Dept sample id <u>7725-024</u>	Location/Matrix <u>116-F-6</u>	<u>SOLID</u>
Received <u>11/08/02</u>	Collected/Weight <u>11/06/02 10:49</u>	<u>947.7 g</u>
% solids <u>100.0</u>	Custody/SAF No <u>B00-029-240</u>	<u>B00-029</u>

ANALYTE	CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI- FIERS	TEST
Cobalt 60	10198-40-0	U		0.047	0.050	U	GAM
Cesium 137	10045-97-3	U		0.055	0.10	U	GAM
Europium 152	14683-23-9	U		<u>0.13</u>	0.10	U	GAM
Europium 154	15585-10-1	U		<u>0.18</u>	0.10	U	GAM
Europium 155	14391-16-3	U		<u>0.14</u>	0.10	U	GAM
Americium 241	14596-10-2	U		0.18		U	GAM

100 F Area - Quick Turn

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>11/15/02</u>

EBERLINE SERVICES / RICHMOND
SAMPLE DELIVERY GROUP H1956

7725-025

J00153

DATA SHEET

SDG <u>7725</u>	Client/Case no <u>Hanford</u>	SDG <u>H1956</u>
Contact <u>Melissa C. Mannion</u>	Contract No. <u>630</u>	
Lab sample id <u>R211028-25</u>	Client sample id <u>J00153</u>	
Dept sample id <u>7725-025</u>	Location/Matrix <u>116-F-6</u>	<u>SOLID</u>
Received <u>11/08/02</u>	Collected/Weight <u>11/06/02 09:30</u>	<u>608.4 g</u>
% solids <u>100.0</u>	Custody/SAF No <u>B00-029-227</u>	<u>B00-029</u>

ANALYTE	CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI- FIERS	TEST
Cobalt 60	10198-40-0	U		<u>0.091</u>	0.050	U	GAM
Cesium 137	10045-97-3	0.198	0.084	0.081	0.10		GAM
Europium 152	14683-23-9	U		<u>0.19</u>	0.10	U	GAM
Europium 154	15585-10-1	U		<u>0.27</u>	0.10	U	GAM
Europium 155	14391-16-3	U		<u>0.24</u>	0.10	U	GAM
Americium 241	14596-10-2	U		0.53		U	GAM

100 F Area - Quick Turn

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>11/15/02</u>

EBERLINE SERVICES / RICHMOND
 SAMPLE DELIVERY GROUP H1956

7725-026

J00154

DATA SHEET

SDG <u>7725</u>	Client/Case no <u>Hanford</u>	SDG <u>H1956</u>
Contact <u>Melissa C. Mannion</u>	Contract No. <u>630</u>	
Lab sample id <u>R211028-26</u>	Client sample id <u>J00154</u>	
Dept sample id <u>7725-026</u>	Location/Matrix <u>116-F-6</u>	<u>SOLID</u>
Received <u>11/08/02</u>	Collected/Weight <u>11/06/02 09:40</u>	<u>687.9 g</u>
% solids <u>100.0</u>	Custody/SAF No <u>B00-029-227</u>	<u>B00-029</u>

ANALYTE	CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI- FIERS	TEST
Cobalt 60	10198-40-0	U		<u>0.11</u>	0.050	U	GAM
Cesium 137	10045-97-3	U		0.10	0.10	U	GAM
Europium 152	14683-23-9	U		<u>0.20</u>	0.10	U	GAM
Europium 154	15585-10-1	U		<u>0.38</u>	0.10	U	GAM
Europium 155	14391-16-3	U		<u>0.16</u>	0.10	U	GAM
Americium 241	14596-10-2	U		0.12		U	GAM

100 F Area - Quick Turn

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>11/15/02</u>

EBERLINE SERVICES / RICHMOND
SAMPLE DELIVERY GROUP H1956

7725-027

J00155

DATA SHEET

SDG <u>7725</u>	Client/Case no <u>Hanford</u>	SDG <u>H1956</u>
Contact <u>Melissa C. Mannion</u>	Contract No. <u>630</u>	
Lab sample id <u>R211028-27</u>	Client sample id <u>J00155</u>	
Dept sample id <u>7725-027</u>	Location/Matrix <u>116-F-6</u>	<u>SOLID</u>
Received <u>11/08/02</u>	Collected/Weight <u>11/06/02 09:50</u>	<u>661.8 g</u>
% solids <u>100.0</u>	Custody/SAF No <u>B00-029-227</u>	<u>B00-029</u>

ANALYTE	CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI- FIERS	TEST
Cobalt 60	10198-40-0	U		<u>0.066</u>	0.050	U	GAM
Cesium 137	10045-97-3	0.086	0.052	0.066	0.10	J	GAM
Europium 152	14683-23-9	U		<u>0.16</u>	0.10	U	GAM
Europium 154	15585-10-1	U		<u>0.23</u>	0.10	U	GAM
Europium 155	14391-16-3	U		<u>0.14</u>	0.10	U	GAM
Americium 241	14596-10-2	U		0.081		U	GAM

100 F Area - Quick Turn

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>11/15/02</u>

EBERLINE SERVICES/RICHMOND

SAMPLE DELIVERY GROUP H1956

LAB METHOD SUMMARY

GAMMA SCAN

GAMMA SPECTROSCOPY

Test GAM Matrix SOLID
 SDG 7725
 Contact Melissa C. Mannion

Client Hanford
 Contract No. 630
 Contract SDG H1956

RESULTS

LAB	RAW	SUF-			
SAMPLE ID	TEST FIX	PLANCHET	CLIENT SAMPLE ID	Cobalt 60	Cesium 137
Preparation batch 7032-079					
R211028-01		7725-001	J00866	U	U
R211028-02		7725-002	J00867	U	U
R211028-03		7725-003	J00868	U	U
R211028-04		7725-004	J00869	U	0.085 J
R211028-05		7725-005	J00870	U	U
R211028-06		7725-006	J00871	U	U
R211028-07		7725-007	J00872	U	U
R211028-08		7725-008	J00873	U	0.101
R211028-09		7725-009	J00874	U	0.127
R211028-10		7725-010	J00875	U	0.179
R211028-11		7725-011	J00876	U	0.174
R211028-12		7725-012	J00877	U	0.482
R211028-13		7725-013	J00878	U	0.082 J
R211028-14		7725-014	J00879	U	U
R211028-15		7725-015	J00880	U	0.161
R211028-16		7725-016	J00881	U	0.179
R211028-17		7725-017	J00882	U	0.132
R211028-18		7725-018	J00883	U	0.121
R211028-19		7725-019	J00884	U	0.360
R211028-20		7725-020	J00885	U	0.192
R211028-21		7725-021	J00886	U	U
R211028-22		7725-022	J00887	U	0.448
R211028-23		7725-023	J00888	U	2.41
R211028-24		7725-024	J00889	U	U
R211028-25		7725-025	J00153	U	0.198
R211028-26		7725-026	J00154	U	U
R211028-27		7725-027	J00155	U	0.086 J
R211028-28		7725-028	BLK (QC ID=43124)	U	U

Nominal values and limits from method RDLs (pCi/g) 0.050 0.10
 100 F Area - Quick Turn

METHOD SUMMARIES

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EBERLINE SERVICES/RICHMOND

SAMPLE DELIVERY GROUP H1956

LAB METHOD SUMMARY

GAMMA SCAN

GAMMA SPECTROSCOPY

Test GAM Matrix SOLID
 SDG 7725
 Contact Melissa C. Mannion

Client Hanford
 Contract No. 630
 Contract SDG H1956

METHOD PERFORMANCE

LAB	RAW	SUF-	MDA	ALIQ	PREP	DILU-	YIELD	EFF	COUNT	FWHM	DRIFT	DAYS	ANAL-				
SAMPLE ID	TEST	FIX	CLIENT	SAMPLE ID	pCi/g	g	FAC	TION	%	%	min	keV	KeV	HELD	PREPARED	YZED	DETECTOR
Preparation batch 7032-079 2σ prep error 15.0 % Reference Lab Notebook 7024 pg. 079																	
R211028-01			J00866		0.057	762							87	8	11/14/02	11/14	02,01,00
R211028-02			J00867		0.034	789							87	8	11/14/02	11/14	MB,07,00
R211028-03			J00868		0.058	707							87	8	11/14/02	11/14	02,03,00
R211028-04			J00869		0.035	814							87	8	11/14/02	11/14	02,04,00
R211028-05			J00870		0.040	850							87	8	11/14/02	11/14	MB,05,00
R211028-06			J00871		0.089	794							43	8	11/14/02	11/14	02,03,00
R211028-07			J00872		0.045	803							44	8	11/14/02	11/14	MB,07,00
R211028-08			J00873		0.051	912							43	8	11/14/02	11/14	02,04,00
R211028-09			J00874		0.052	846							43	8	11/14/02	11/14	MB,05,00
R211028-10			J00875		0.054	865							39	8	11/14/02	11/14	02,04,00
R211028-11			J00876		0.067	896							39	8	11/14/02	11/14	MB,05,00
R211028-12			J00877		0.058	773							39	8	11/14/02	11/14	MB,07,00
R211028-13			J00878		0.095	764							39	8	11/14/02	11/14	02,03,00
R211028-14			J00879		0.050	798							52	8	11/14/02	11/14	02,04,00
R211028-15			J00880		0.058	754							53	8	11/14/02	11/14	MB,05,00
R211028-16			J00881		0.089	680							52	8	11/14/02	11/14	02,03,00
R211028-17			J00882		0.047	759							53	8	11/14/02	11/14	MB,07,00
R211028-18			J00883		0.084	908							32	8	11/14/02	11/14	02,03,00
R211028-19			J00884		0.070	749							32	8	11/14/02	11/14	02,04,00
R211028-20			J00885		0.073	856							32	8	11/14/02	11/14	MB,05,00
R211028-21			J00886		0.054	837							32	8	11/14/02	11/14	MB,07,00
R211028-22			J00887		0.048	843							35	8	11/14/02	11/14	MB,07,00
R211028-23			J00888		0.11	830							35	8	11/14/02	11/14	02,03,00
R211028-24			J00889		0.047	948							35	8	11/14/02	11/14	02,04,00
R211028-25			J00153		0.091	608							35	8	11/14/02	11/14	MB,05,00
R211028-26			J00154		0.11	688							31	9	11/14/02	11/15	02,01,00
R211028-27			J00155		0.066	662							31	9	11/14/02	11/15	MB,07,00
R211028-28			BLK (QC ID=43124)		0.064	608							31		11/14/02	11/15	01,03,00
Nominal values and limits from method					0.050	608				100			180				

PROCEDURES REFERENCE GAMMA_GS
 CP-100 Ge(Li) Preparation for Commercial Samples, rev 5

AVERAGES ± 2 SD MDA 0.064 ± 0.042
 FOR 28 SAMPLES YIELD _____ ± _____

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EBERLINE SERVICES / RICHMOND

SAMPLE DELIVERY GROUP H1956

SDG 7725
Contact Melissa C. Mannion

REPORT GUIDE

Client Hanford
Contract No. 630
Case no SDG H1956

SAMPLE SUMMARY

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

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

The following notes apply to these reports:

- * LAB SAMPLE ID is the lab's primary identification for a sample.
- * DEPARTMENT SAMPLE ID is an alternate lab id, for example one assigned by a radiochemistry department in a lab.
- * CLIENT SAMPLE ID is the client's primary identification for a sample. It includes any sample preparation done by the client that is necessary to identify the sample.
- * QC BATCH is a lab assigned code that groups samples to be processed and QCed together. These samples should have similar matrices.

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

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

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PREPARATION BATCH SUMMARY

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

The following notes apply to this report:

- * The preparation batches are shown in the same order as the Method Summary Reports are printed.
- * Only analyses of planchets relevant to the SDG are included.
- * Each preparation batch should have at least one Method Blank and LCS in it to validate client sample results.
- * The QUALIFIERS shown are all qualifiers other than U, J, B, L and H that occur on any analysis in the preparation batch. The Method Summary Report has these qualifiers on a per sample basis.

These qualifiers should be reviewed as follows:

- X Some data has been manually entered or modified. Transcription errors are possible.
- P One or more results are 'preliminary'. The data is not ready for final reporting.
- 2 There were two or more results for one analyte on one planchet imported at one time. The results in DVD may not be the same as on the raw data sheets.

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

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WORK SUMMARY

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

The following notes apply to this report:

- * TEST is a code for the method used to measure associated analytes. Results and related information for each analyte are on the Data Sheet Report. In special cases, a test code used in the summary data section is not the same as in associated raw data. In this case, both codes are shown on the Work Summary.
- * SUFFIX is the lab's code to distinguish multiple analyses (recounts, reworks, reanalyses) of a fraction of the sample. The suffix indicates which result is being reported. An empty suffix normally identifies the first attempt to analyze the sample.
- * The LAB SAMPLE ID, TEST and SUFFIX uniquely identify all supporting data for a result. The Method Summary Report for each TEST has method performance data, such as yield, for each lab sample id and suffix and procedures used in the method.
- * PLANCHET is an alternate lab identifier for work done for one test. It, combined with the TEST and SUFFIX, may be the best link to raw data.
- * For QC samples, only analyses that directly QC some regular sample are shown. The Lab Control Sample, Method Blank, Duplicate, Matrix Spike and Method Summary Reports detail these relationships.
- * The SAS (Special Analytical Services) Number is a client or lab assigned code that reflects special processing for samples, such as rapid turn around. Counts of tests done are lists by SAS number since it is likely to affect prices.

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DATA SHEET

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

The following notes apply to this report:

- * TEST is a code for the method used to measure an analyte. If the TEST is empty, no data is available; the analyte was not analyzed for.
- * The LAB SAMPLE ID and TEST uniquely identify work within the Summary Data Section of a Data Package. The Work Summary and Method Summary Reports further identify raw data that underlies this work.

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

- * ERRORS can be labeled TOTAL or COUNT. TOTAL implies a preparation (non-counting method) error has been added, as square root of sum of squares, to the counting error denoted by COUNT. The preparation errors, which may vary by preparation batch, are shown on the Method Summary Report.
- * A RESULT can be 'N.R.' (Not Reported). This means the lab did this work but chooses not to report it now, possibly because it was reported at another time.
- * When reporting a Method Blank, a RESULT can be 'N.A.' (Not Applicable). This means there is no reported client sample work in the same preparation batch as the Blank's result. This is likely to occur when the Method Blank is associated with reanalyses of selected work for a few samples in the SDG.

The following qualifiers are defined by the DVD system:

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

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

- J The RESULT is less than the RDL (Required Detection Limit) and no U qualifier is assigned.
 - B A Method Blank associated with this sample had a result without a U flag and, after correcting for possibly different aliquots, that result is greater than or equal to the MDA for this sample.
- Normally, B is not assigned if U is. When method blank subtraction is shown on this report, B flags are assigned based on the unsubtracted values while U's are assigned based on the subtracted ones. Both flags can be assigned in this case.
- For each sample result, all Method Blank results in the same preparation batch are compared. The Method Summary Report documents this and other QC relationships.
- L Some Lab Control Sample that QC's this sample had a low recovery. The lab can disable assignment of this qualifier.
 - H Similar to 'L' except the recovery was high.
 - P The RESULT is 'preliminary'.
 - X Some data necessary to compute the RESULT, ERROR or MDA was manually entered or modified.
 - 2 There were two or more results available for this analyte. The reported result may not be the same as in the raw data.

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

The following values are underlined to indicate possible problems:

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

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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.

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LAB CONTROL SAMPLE

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

The following notes apply to this report:

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

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

- * REC (Recovery) is RESULT divided by ADDED expressed as a percent.
- * The first, computed limits for the recovery reflect:
 1. The error of RESULT, including that introduced by rounding the result prior to printing.

If the limits are labeled (TOTAL), they include preparation error in the result. If labeled (COUNT), they do not.
 2. The error of ADDED.
 3. A lab specified, per analyte bias. The bias changes the center of the computed limits.
- * The second limits are protocol defined upper and lower QC limits for the recovery.
- * The recovery is underlined if it is outside either of these ranges.

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DUPLICATE

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

The following notes apply to this report:

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

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

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

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

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

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

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

This value reported for this limit is at most 999.

- * The second limit for the RPD is the larger of:
 1. A fixed percentage specified in the protocol.

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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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M A T R I X S P I K E

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

The following notes apply to this report:

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

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

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

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

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

- * The first, computed limits for the recovery reflect:

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

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

2. The error of ADDED.

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

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

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MATRIX SPIKE

for the recovery.

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

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

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METHOD SUMMARY

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

The following notes apply to this report:

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

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

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

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

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

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

- * Non-U results for Method Blanks are underlined to indicate possible contamination of other samples in the preparation batch. The Method Blank Report has supporting data.
- * Lab Control Sample and Matrix Spike results are shown as: ok, No data, LOW or HIGH, with the last two underlined. 'No data'

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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.

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- * 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

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

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

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

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

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Bechtel Hanford Inc.		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST				B00-029-240	Page 1 of 2
Collector MT Stankovich	Company Contact Mike Stankovich	Telephone No. 531-7620	Project Coordinator TRENT, SJ	Price Code 2D	Date Turnaround		
Project Designation 100 F Area - Quick Turn	Sampling Location 116-F-6	H1956 (7725)	SAF No. B00-029	Air Quality <input type="checkbox"/>	7-day		
Ice Chest No. ERC-01-027 + ERC-01-030	Field Logbook No. El-153547	WD 11-6-02	COA R116F6 2000	Method of Shipment FedEx			
Shipped To TMA/REGA- 11/7/02 DAS	Offsite Property No. AD30035		Bill of Lading/Air Bill No. 1012 7921 3004 7633				
POSSIBLE SAMPLE HAZARDS/REMARKS Radioactive < 2000 pCi/gm Special Handling and/or Storage		Preservation None	Type of Container Marinelli	No. of Container(s) 1	Volume 500mL		
SAMPLE ANALYSIS		See item (1) in Special Instructions.					
Sample No.	Matrix *	Sample Date	Sample Time				
J00866	SOIL	11-6-02	1000	✓			
J00867	SOIL	11-6-02	1002	✓			
J00868	SOIL	11-6-02	1004	✓			
J00869	SOIL	11-6-02	1006	✓			
J00870	SOIL	11-6-02	1008	✓			
CHAIN OF POSSESSION		Sign/Print Names		SPECIAL INSTRUCTIONS			Matrix *
Relinquished By/Removed From MTR → M Stankovich	Date/Time 11-6-02 1510	Received By/Stored In SIS/3728	Date/Time 11-6-02 1510	(1) Gamma Spectroscopy - Screen (Americium-241, Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155)			B=Soil SB=Soil/Sediment SO=Soil S=Sludge W=Water O=Oil A=Air DS=Dry Solid DL=Dry Liquid T=Tree WR=Wipe L=Liquid V=Vegetation O=Other
Relinquished By/Removed From 3728 Ref. 3B	Date/Time 11/7/02 1200	Received By/Stored In David S. John	Date/Time 11/7/02 1200				
Relinquished By/Removed From David S. John	Date/Time 11/7/02 1200	Received By/Stored In FED EX	Date/Time				
Relinquished By/Removed From FED EX	Date/Time 11/8/02 9:30	Received By/Stored In David S. John	Date/Time 11/8/02 9:30 AM				
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time				
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time	M. Stankovich not available to relinquish for shipment to lab on 11/7/02 @ 1200 DAS 11/7/02			
LABORATORY SECTION	Received By	Title		Date/Time			
FINAL SAMPLE DISPOSITION	Disposal Method	Disposed By		Date/Time			

Bechtel Hanford Inc.		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST				B00-029-240	Page 2 of 2	
Collector MT Stankovich		Company Contact Mike Stankovich		Telephone No. 531-7620	Project Coordinator TRENT, SJ	Price Code 2D	Data Turnaround	
Project Designation 100 F Area - Quick Turn		Sampling Location 116-F-6		H1956 (7725)	SAF No. B00-029	Air Quality <input type="checkbox"/>	7. day	
Ice Chest No. ERC-01-027 and ERC-01-030		Field Logbook No. EI-13357	MO 11-6-02	CPA R116 F6 2000	Method of Shipment FedEx			
Shipped To TMA/RECA 11/7/02 DAS		Offsite Property No. A030035		Bill of Lading/Air Bill No. 10F2 7921 3004 7633 Z0F2 7921 3004 7666				
POSSIBLE SAMPLE HAZARDS/REMARKS Radioactive 22,000 pCi/gm Special Handling and/or Storage				Preservation	None			
				Type of Container	Marinelli			
				No. of Container(s)	1			
				Volume	500mL			
SAMPLE ANALYSIS				See item (1) in Special Instructions.				
Sample No.	Matrix *	Sample Date	Sample Time					
J00871	SOIL	11-6-02	1010	-				
J00872	SOIL	11-6-02	1013	-				
J00873	SOIL	11-6-02	1015	✓				
J00874	SOIL	11-6-02	1017	✓				
J00875	SOIL	11-6-02	1019	✓				
CHAIN OF POSSESSION				SPECIAL INSTRUCTIONS			Matrix *	
Relinquished By/Removed From <i>Mike Stankovich</i>		Date/Time 11-6-02	Received By/Stored In 313/3128	Date/Time 11-6-02 1510	(1) Gamma Spectroscopy - Screen (Americium-241, Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155) Mr. Stankovich not available to relinquish for shipment to lab on 11/7/02 @ 1200 DAS 11/7/02			S=Soil SS=Substrate SO=Soil SL=Sludge W=Water O=Oil A=Air DS=Dry Solid DL=Dry Liquid T=Trace W=Wipe L=Liquid V=Vegetation X=Other
Relinquished By/Removed From 3128 Ref 3B		Date/Time 11/7/02 1200	Received By/Stored In David Stankovich	Date/Time 11/7/02				
Relinquished By/Removed From David Stankovich		Date/Time 11/7/02	Received By/Stored In FED EX	Date/Time				
Relinquished By/Removed From FED EX		Date/Time 11/7/02 9:30	Received By/Stored In Fred Davis	Date/Time 11/7/02 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	Disposed Method	Disposed By			Date/Time			

Bechtel Hanford Inc.		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST				B00-029-240	Page 3 of 5	
Collector MT Stankovich	Company Contact Mike Stankovich	Telephone No. 531-7620	Project Coordinator TRENT, SJ		Price Code 2D	Data Turnaround		
Project Destination 100 F Area - Quick Turn	Sampling Location 116-F-6	H1956 (7725)		SAF No. B00-029	Air Quality <input type="checkbox"/>	7-Sep		
Ice Chest No. ERC-01-027 / ERC-01-030	Field Logbook No. EI-1535-67	MO 11-6-02	COA R116F6 2000	Method of Shipment FedEx				
Shipped To TMA/REGRA 11/7/02 DAS	Offsite Property No. A030035	Bill of Lading/Air Bill No. 10F2 7921 3004 7633 20F2 7921 3004 7666						
POSSIBLE SAMPLE HAZARDS/REMARKS Radioactive L 2,000 pCi/gm Special Handling and/or Storage			Preservation None					
			Type of Container Marinelli					
			No. of Container(s) 1					
			Volume 500mL					
SAMPLE ANALYSIS				See item (1) in Special Instructions.				
Sample No.	Matrix *	Sample Date	Sample Time					
J00676	SOIL	11-6-02	1021	✓				
J00677	SOIL	11-6-02	1023	✓				
J00678	SOIL	11-6-02	1026	✓				
J00679	SOIL	11-6-02	1028	✓				
J00680	SOIL	11-6-02	1030	✓				
CHAIN OF POSSESSION			Sign/Print Names		SPECIAL INSTRUCTIONS			Matrix *
Relinquished By/Removed From <i>M. Stankovich</i>	Date/Time 11-6-02 1510	Received By/Stored In <i>S. S. S. S.</i>	Date/Time 11-6-02 1510	(1) Gamma Spectroscopy - Screen (Americium-241, Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155)				S=Soil SS=Sediment SO=Soil SL=Sediment W=Water O=Oil A=Air DS=Drum Spills DL=Drum Leaks T=Flame WL=Wipe L=Liquid V=Vegetation X=Other
Relinquished By/Removed From <i>372B Ref 3B</i>	Date/Time 11/7/02 1200	Received By/Stored In <i>John Stankovich</i>	Date/Time 11/7/02 1200	M. Stankovich not available to relinquish for shipment to lab on 11/7/02 1200 DAS 11/7/02				
Relinquished By/Removed From <i>D. Stankovich</i>	Date/Time 11/7/02 1200	Received By/Stored In <i>FED EX</i>	Date/Time					
Relinquished By/Removed From <i>FED EX</i>	Date/Time 11/8/02 9:30	Received By/Stored In <i>John Stankovich</i>	Date/Time 11/8/02 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				

Bechtel Hanford Inc.		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST				B00-029-240	Page 4 of 2
Collector MT Stankovich	Company Contact Mike Stankovich	Telephone No. 531-7620	Project Coordinator TRENT, SJ		Price Code 20	Data Turnaround	
Project Designation 100 F Area - Quick Turn	Sampling Location 116-F-6	H1956 (7725)		SAF No. B00-029	Air Quality <input type="checkbox"/>	7-day	
Ice Chest No. ERC-01-027, ERC-01-030	Field Logbook No. El-15354 7	NO 11-6-02	COA R116FL2000	Method of Shipment FedEx			
Shipped To TMA/RECRA 11/7/02 DAS	Offsite Property No. A030035	Bill of Lading/Air Bill No. 10FZ 7921 3004 7633 20FZ 7921 3004 7633					
POSSIBLE SAMPLE HAZARDS/REMARKS Radioactive $< 2.000 \mu\text{Ci/gm}$ Special Handling and/or Storage							
				Preservation	None		
				Type of Container	Marinelli		
				No. of Container(s)	1		
				Volume	500mL		
				See item (1) in Special Instructions.			
SAMPLE ANALYSIS							
Sample No.	Matrix *	Sample Date	Sample Time				
J00881	SOIL	11-6-02	1032	✓			
J00882	SOIL	11-6-02	1034	✓			
J00883	SOIL	11-6-02	1036	✓			
J00884	SOIL	11-6-02	1039	✓			
J00885	SOIL	11-6-02	1041	✓			
CHAIN OF POSSESSION				SPECIAL INSTRUCTIONS			
Relinquished By/Removed From Mike Stankovich 11-6-02		Date/Time 1510		Received By/Stored In 315 / 3728		Date/Time 11-6-02 1510	
Relinquished By/Removed From 3728 Ref 3B		Date/Time 11/7/02 1200		Received By/Stored In David Stankovich		Date/Time 11/7/02 1200	
Relinquished By/Removed From David Stankovich		Date/Time 11/7/02		Received By/Stored In FED EX		Date/Time	
Relinquished By/Removed From FED EX		Date/Time 11/8/02 9:30		Received By/Stored In David Stankovich		Date/Time 11/8/02 9:30 AM	
Relinquished By/Removed From		Date/Time		Received By/Stored In		Date/Time	
Relinquished By/Removed From		Date/Time		Received By/Stored In		Date/Time	
				(1) Gamma Spectroscopy - Screen (Americium-241, Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155) M. Stankovich not available to relinquish for shipment to lab on 11/7/02 @ 1200 DAS 11/7/02			
LABORATORY SECTION		Received By		Title		Date/Time	
FINAL SAMPLE DISPOSITION		Disposal Method		Disposed By		Date/Time	

Bechtel Hanford Inc.		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			B00-029-240	Page 1 of 1
Collector MT Stankovich	Company Contact Mike Stankovich	Telephone No. 531-7620	Project Coordinator TRENT, SJ		Price Code 20	Data Turnaround
Project Designation 100 F Area - Quick Turn		Sampling Location 116-F-6	H1956 (7725)		SAF No. B00-029	Air Quality <input type="checkbox"/> 7 Day
Ice Chest No. ERL-01-027 ERL-01-030	Field Logbook No. EI-1535-9 7	NO 11-6-02	COA R116F6 2000		Method of Shipment FedEx	
Shipped To TMA/RECR 11/7/02 OAS		Offsite Property No. A030035	Bill of Lading/Air Bill No. 1 OF 2 7921 3004 7633 2 OF 2 7921 3004 7666			

POSSIBLE SAMPLE HAZARDS/REMARKS Radioactive $< 2,000 \text{ pCi/gm}$ Special Handling and/or Storage	Preservation	None								
	Type of Container	Marinelli								
	No. of Container(s)	1								
	Volume	500mL								

SAMPLE ANALYSIS				See item (1) in Special Instructions.															
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Sample No.	Matrix *	Sample Date	Sample Time																
J00886	SOIL	11-6-02	1043	✓															
J00887	SOIL	11-6-02	1045	✓															
J00888	SOIL	11-6-02	1047	✓															
J00889	SOIL	11-6-02	1049	✓															

CHAIN OF POSSESSION				SPECIAL INSTRUCTIONS				Matrix *			
Relinquished By/Removed From M. Stankovich 11-6-02	Date/Time 1510	Received By/Stored In 3A/3725	Date/Time 11-6-02 1510	(1) Gamma Spectroscopy - Screen (Americium-241, Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155) M. Stankovich not available to relinquish for shipment to lab on 11/7/02 @ 1200 OAS 11/7/02				3=Soil SB=Bottom SO=Solid S=Sludge W=Water O=Oil A=Air DB=Drum Solids DL=Drum Liquids T=Trash W=Wipe L=Liquid V=Vegetation ?=Other			
Relinquished By/Removed From David Stankovich	Date/Time 11/7/02 1200	Received By/Stored In David Stankovich	Date/Time 11/7/02 1200								
Relinquished By/Removed From David Stankovich	Date/Time 11/7/02 1200	Received By/Stored In FED EX	Date/Time								
Relinquished By/Removed From FED EX	Date/Time 11/7/02 9:30	Received By/Stored In Fed Ex	Date/Time 11/7/02 9:30 AM								
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time								

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

Bechtel Hanford Inc.		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST				B00-029-227	Page 4 of 5
Collector MT Stankovich	Company Contact Mike Stankovich	Telephone No. 531-7620	Project Coordinator TRENT, SJ	Price Code 2D	Data Turnaround		
Project Designation 100 F Area - Quick Turn	Sampling Location 116-F-6	H1956 (7725)	SAF No. B00-029	Air Quality <input type="checkbox"/>	7-Samp		
Ice Chest No. ERC-01-027 / ERC-01-030	Field Logbook No. EI-1535-6	COA R116F62000	Method of Shipment FedEx				
Shipped To TMA/REGA 6/7/02 OAS	Offsite Property No. A030035		Bill of Lading/Air Bill No. 1DF2 7921 3004 7633				
POSSIBLE SAMPLE HAZARDS/REMARKS Radioactive L 2000 pCi/gm Special Handling and/or Storage		Preservation None	Type of Container Marinelli	No. of Container(s) 1	Volume 500mL		
SAMPLE ANALYSIS		See item (1) in Special Instructions.					
Sample No.	Matrix *	Sample Date	Sample Time				
J00150	SOIL	TF					
J00151	SOIL						
J00152	SOIL	11-6-02	0950	✓			
J00153	SOIL	11-6-02	0930	✓			
J00154	SOIL	11-6-02	0940	✓			
CHAIN OF POSSESSION		Sign/Print Names		SPECIAL INSTRUCTIONS			Matrix *
Relinquished By/Removed From <i>MT Stankovich</i>	Date/Time 11-6-02 1510	Received By/Stored In <i>SB/3728</i>	Date/Time 11-6-02 1510	(1) Gamma Spectroscopy - Screen (Americium-241, Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155)			S=Soil SE=Settlement SO=Solid SL=Sludge W=Water O=Oil A=Air DS=Drum Solids DL=Drum Liquids T=Traces W=Wipe L=Liquid V=Vegetation X=Other
Relinquished By/Removed From <i>3728 Ref 3B</i>	Date/Time 11/7/02 1200	Received By/Stored In <i>Dave St. John</i>	Date/Time 11/7/02 1200				
Relinquished By/Removed From <i>Dave St. John</i>	Date/Time 11/7/02 1200	Received By/Stored In <i>FED EX</i>	Date/Time				
Relinquished By/Removed From <i>FED EX</i>	Date/Time 11/8/02 9:30am	Received By/Stored In <i>David</i>	Date/Time 11/8/02 9:30am				
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
FINAL SAMPLE DISPOSITION				Disposal Method			Disposed By
							Date/Time

Richmond, CA Laboratory

SAMPLE RECEIPT CHECKLIST

SAMPLE RECEIPT

Client: Fluor Hanford Date/Time received 11/07/02 9:30 AM

CoC No. B00-029-240

Container I.D. No. ERC 01-027 Requested TAT (Days) 7 P.O. Received Yes [] No []

INSPECTION

- 1. Custody seals on shipping container intact? Yes [] No [] N/A [X]
2. Custody seals on shipping container dated & signed? Yes [] No [] N/A [X]
3. Custody seals on sample containers intact? Yes [X] No [] N/A []
4. Custody seals on sample containers dated & signed? Yes [X] No [] N/A []
5. Packing material is: Wet [] Dry [X]
6. Number of samples in shipping container: 27
7. Number of containers per sample: 1 (Or see CoC)
8. Paperwork agrees with samples? Yes [X] No []
9. Samples have: Tape [] Hazard labels [] Rad labels [] Appropriate sample labels [X]
10. Samples are: In good condition [X] Leaking [] Broken Container [] Missing []
11. Describe any anomalies:
13. Was P.M. notified of any anomalies? Yes [] No [] Date
14. Received by [Signature] Date: 11/07/02 Time: 9:30 AM

Table with 8 columns: Customer Sample No., cpm, mr/hr, wipe, Customer Sample No., cpm, mr/hr, wipe. Multiple rows for data entry.

Ion Chamber Ser. No. Calibration date
Alpha meter Ser. No. Calibration date
Survey Meter Ser. No. Calibration date