0078370

SAF-RC-087
618-7 Burial Ground - Soil
FINAL DATA PACKAGE

COMPLETE COPY OF DATA PACKAGE TO:

Rick Kerkow	L6-06	KW 7/2/08 Initials/Date
Kathy Wendt	H4-21	KW 7/2/08 Initials/Date

COMMENTS:

SDG J00174 SAF-RC-087

Rad only X Chem only Rad & Chem

X Complete Partial

WASTE SITE: 618-7 Burial Ground/Stockpiles

RECEIVED
JUL 07 2008
EDMC

Analytical Data Package Prepared For

Washington Closure Hanford

Analysis Provided By

TestAmerica Richland
2800 George Washington Way
Richland WA, 99354
(509)375-3131
Assigned Laboratory Code: TALR

RECEIVED
JUL 2008

SDG Number:J00174

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Certificate of Analysis

Washington Closure Hanford
2620 Fermi Avenue
Richland, WA 99354

July 2, 2008

Attention: Joan Kessner

SAF Number	:	RC-087
Date SDG Closed	:	June 17, 2008
Number of Samples	:	Twenty (20)
Sample Type	:	Soil
SDG Number	:	J00174
Data Deliverable	:	Quick Turn Metals / Summary

CASE NARRATIVE

I. Introduction

Between June 2, 2008 and June 17, 2008 twenty soils were received at TestAmerica for ICP metals analysis. Upon receipt, the samples were assigned the following laboratory ID numbers to correspond with the Washington Closure Hanford (WCH) specific ID;

WCH ID#	STLR ID#	MATRIX	DATE OF RECEIPT
J16VB8	KN7WA	SOIL	06/02/08
J16VB9	KN7X8	SOIL	060/2/08
J16VW3	KN70C	SOIL	06/02/08
J16VW7	KN9E1	SOIL	06/03/08
J16VW9	KN9FD	SOIL	06/03/08
J16VX1	KN9FH	SOIL	06/03/08
J16VX3	KN9FL	SOIL	06/03/08
J16VX5	KN9FR	SOIL	06/03/08
J16VX7	KN9F0	SOIL	06/03/08
J16VY5	KPDF9	SOIL	06/04/08
J16VY7	KPDGJ	SOIL	06/04/08
J16VY9	KPDGK	SOIL	06/04/08
J16W01	KPDGN	SOIL	06/04/08
J16W03	KPDGR	SOIL	06/04/08
J16VW5	KPDG0	SOIL	06/04/08
J16VX9	KPDG5	SOIL	06/04/08
J16VY1	KPDG7	SOIL	06/04/08
J16VY3	KPDG8	SOIL	06/04/08
J16W52	KP2LJ	SOIL	06/16/08
J16W13	KP3RT	SOIL	06/17/08

II. Sample Receipt

The samples were received in good condition and no anomalies were noted during check-in.

III. Analytical Results/Methodology

The analytical results for this report are presented by laboratory sample ID. Each set of data includes sample identification information, analytical results and the appropriate associated statistical errors. The requested analyses were:

ICP Metals
ICP Metals by method SW-846 6010A

IV. Quality Control

SDG J00174 includes a minimum of one Laboratory Control Samples (LCS) and one method (reagent) blank. A duplicate sample, matrix spike sample and a matrix spike duplicate sample will be analyzed per 20 samples or per month, whichever is more frequent. Any exceptions have been noted in the "Comments" section.

Blanks and LCS are reported in mg/L units, other QC and sample results are reported in the same units.

V. Comments

ICP Metals
ICP Metals by method SW-846 6010A
Five batches were analyzed in June 2008 for samples with the standard metal request list and add ons aluminum, beryllium, copper, iron, zinc and zirconium.

Batch 8154305:
The ICV and CCV recovered high in iron. Suspect iron contamination in the system due to high level iron samples. Except as noted, the LCS, batch blank, sample, sample duplicate, MS, MSD, ICB, and CCB results are within contractual limits.

Batch 8155338:
The LCS, ICV and CCV recovered high in iron. Suspect iron contamination in the system due to high level iron samples. Except as noted, batch blank, sample, sample duplicate, MS, MSD, ICB, and CCB results are within contractual limits.

Batch 8156397:
The ICV and CCV recovered high in iron. Suspect iron contamination in the system due to high level iron samples. Except as noted, the LCS, batch blank, sample, sample duplicate, MS, MSD, ICB, and CCB results are within contractual limits.

Washington Closure Hanford
July 2, 2008

Batch 8168543:
The ICV and CCV recovered high in iron. Suspect iron contamination in the system due to high level iron samples. Arsenic also recovered high for the ICV. Suspect contamination in the ICV. Except as noted, the LCS, batch blank, sample, sample duplicate, MS, MSD, ICB, and CCB results are within contractual limits.

Batch 8169246:
The LCS, ICV and CCV recovered high in iron. Suspect iron contamination in the system due to high level iron samples. Except as noted, batch blank, sample, sample duplicate, MS, MSD, ICB, and CCB results are within contractual limits.

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

Reviewed and approved:

Sandra Seger
Project Manager

TESTAMERICA

SDG Number: J00174
SAF Number: RC-087
Batch Number: 8154305

Sample Number	Client ID	Aliquant	Aluminum	Arsenic	Barium	Berylium	Cadmium	Copper	Chromium	Iron	Lead	Selenium	Silver	Zinc
		sa	mg/sa	mg/sa	mg/sa	mg/sa	mg/sa	mg/sa	mg/sa	mg/sa	mg/sa	mg/sa	mg/sa	mg/sa
J8F020000-305-B		1.000	-0.0064	-0.0042	0	0	0.0002	-0.0002	-0.0008	-0.0013	0.0033	0.00443	-0.0007	0.0039
J8F020000-305-C		1.000	0.9363	0.9453	0.9779	1.013	0.9308	0.9928	0.938	1.096	0.9473	0.79707	0.9184	0.9391
LCS Recovery %			93.630%	94.530%	97.790%	101.300%	93.080%	99.280%	93.800%	109.600%	94.730%	79.707%	91.840%	93.910%
		g	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
J8F020130-001	J16VB8	0.4971	5480.78857	<MDL	70.79059	0.170992	2.273184	8.569704	6.96037	18557.634	3.952927	<MDL	<MDL	34.56045
J8F020130-001-X	J16VB8-DUP	0.5058	5588.17715	<MDL	56.54409	0.197707	2.293397	10.2412	8.303677	18287.861	4.310004	<MDL	<MDL	36.4571
J8F020130-002	J16VB9	0.5088	5487.42138	1.117042	74.60692	0.196541	2.830189	20.04717	10.02358	21560.535	8.687107	<MDL	<MDL	65.67414
J8F020130-003	J16VW3	0.4998	6026.41056	1.149764	82.52301	0.35014	2.631052	36.93477	13.87555	20188.075	17.86715	<MDL	<MDL	123.0492
J8F020130-001-S	J16VB8-MS	0.5018	N/A	92.77601	153.3479	97.778	89.96612	106.8155	96.73177	N/A	94.21084	75.33878	86.05022	122.3595
% Recovery				92.776	82.557	97.607	87.693	98.246	89.771		90.258	75.339	86.050	87.799
J8F020130-001-D	J16VB8-MSD	0.5046	N/A	94.14388	152.5961	98.73167	90.8046	110.0872	96.99762	N/A	98.64249	77.46036	86.79152	125.545
% Recovery				94.144	81.806	98.561	88.531	101.517	90.037		94.690	77.460	86.792	90.985

TESTAMERICA

SDG Number: J00174
SAF Number: RC-087
Batch Number: 8155338

Sample Number	Client ID	Aliquant	Aluminum	Arsenic	Barium	Berylium	Cadmium	Copper	Chromium	Iron	Lead	Selenium	Silver	Zinc
		sa	mg/sa	mg/sa	mg/sa	mg/sa	mg/sa	mg/sa	mg/sa	mg/sa	mg/sa	mg/sa	mg/sa	mg/sa
J8F030000-338-B		1.000	0.0104	-0.0039	0.0001	0	0.0001	0.0005	0.0008	0.0589	0.003	0.00108	0	0.0166
J8F030000-338-C		1.000	1.022	0.9972	1.025	1.062	0.9683	1.045	0.9799	1.19	0.9893	0.8324	0.9565	0.9888
LCS Recovery %			102.200%	99.720%	102.500%	106.200%	96.830%	104.500%	97.990%	119.000%	98.930%	83.240%	95.650%	98.880%
		g	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
J8F030167-001	J16VW7	0.4981	5932.54367	<MDL	79.10058	0.180687	2.690223	21.50171	13.51134	21110.219	10.14856	<MDL	<MDL	70.80907
J8F030167-001-X	J16VW7-DUP	0.5066	5824.12159	<MDL	88.99526	0.197394	2.674694	17.50888	10.77773	20756.021	7.678642	<MDL	<MDL	66.27517
J8F030167-002	J16VW9	0.5057	5971.92011	<MDL	63.96085	0.187858	2.669567	13.59502	9.580779	21109.353	7.514337	<MDL	<MDL	51.91813
J8F030167-003	J16VX1	0.495	5223.23232	0.828283	60.32323	0.181818	2.535354	9.393939	6.242424	20060.606	3.767677	<MDL	<MDL	34.88889
J8F030167-004	J16VX3	0.4993	5270.37853	<MDL	68.94653	0.170238	2.663729	11.36591	5.828159	21129.581	4.155818	<MDL	<MDL	36.55117
J8F030167-005	J16VX5	0.5021	5130.4521	<MDL	54.22227	0.169289	2.429795	10.70504	8.145788	19378.61	3.634734	<MDL	<MDL	33.29018
J8F030167-006	J16VX7	0.5086	5899.52812	1.454974	58.89697	0.176956	2.310263	11.26622	8.739678	20703.893	3.67676	<MDL	<MDL	33.75934
J8F030167-001-S	J16VW7-MS	0.4944	N/A	100.0405	204.1869	104.5712	95.59061	132.585	106.9984	N/A	105.9871	80.96379	92.39482	157.6659
% Recovery				100.040	125.086	104.391	92.900	111.083	93.487		95.838	80.964	92.395	86.857
J8F030167-001-D	J16VW7-MSD	0.5009	N/A	98.76223	180.2755	103.5137	94.55979	124.0767	102.9148	N/A	101.8167	79.9471	91.06608	158.8141
% Recovery				98.762	101.175	103.333	91.870	102.575	89.403		91.668	79.947	91.066	88.005

TESTAMERICA

SDG Number: J00174
SAF Number: RC-087
Batch Number: 8156397

Sample Number	Client ID	Aliquant	Aluminum	Arsenic	Barium	Berylium	Cadmium	Copper	Chromium	Iron	Lead	Selenium	Silver	Zinc
		sa	mg/sa	mg/sa	mg/sa	mg/sa	mg/sa	mg/sa	mg/sa	mg/sa	mg/sa	mg/sa	mg/sa	mg/sa
J8F040000-397-B		1.000	0.0031	-0.0039	0.0002	0.0001	0.0003	-0.0001	0.0001	0.0484	0.0015	0.00814	0	0.0046
J8F040000-397-C		1.000	0 9292	0.9288	0.9627	0.9944	0.9178	0.978	0.9277	1.072	0.9309	0.79184	0.9032	0.9191
LCS Recovery %			92.920%	92.880%	96.270%	99.440%	91.780%	97.800%	92.770%	107.200%	93.090%	79.184%	90.320%	91.910%
		g	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
J8F040320-001	J16VY5	0.546	5559.52381	<MDL	61.55678	0.173993	2.454212	11.90476	5.567766	20375.458	4.331502	<MDL	<MDL	37.14286
J8F040320-001-X	J16VY5-DUP	0.537	5705.77281	0.8473	68.2216	0.176909	4.785847	12.58845	6.955307	20912.477	5.009311	<MDL	<MDL	36.79702
J8F040320-002	J16VY7	0.5196	4837.3749	<MDL	63.39492	0.163587	2.492302	11.24904	6.081601	21843.726	4.10893	<MDL	<MDL	34.17052
J8F040320-003	J16VY9	0.5206	5714.56012	0.777949	68.95889	0.182482	2.47791	10.41106	5.829812	20870.15	4.417979	<MDL	<MDL	34.52747
J8F040320-004	J16W01	0.5222	5846.419	<MDL	68.44121	0.181923	2.422444	10.32172	6.491766	21045.576	3.638453	<MDL	<MDL	33.89506
J8F040320-005	J16W03	0.5058	5269.86951	<MDL	82.04824	0.168051	2.204429	11.6548	6.722025	19157.77	4.655991	<MDL	<MDL	31.28707
J8F040320-006	J16VW5	0.5258	5210.15595	<MDL	64.43515	0.161658	2.472423	10.4127	5.876759	20502.092	3.432864	<MDL	<MDL	33.30164
J8F040320-007	J16VX9	0.5055	5303.65974	<MDL	65.99407	0.178042	2.532146	11.29575	6.686449	2027.6954	3.659743	<MDL	<MDL	34.95549
J8F040320-008	J16VY1	0.539	5509.27644	<MDL	59.29499	0.176252	2.402597	9.897959	6.623377	20862.709	3.627087	<MDL	<MDL	33.46939
J8F040320-009	J16VY3	0.5281	5581.32929	<MDL	67.60083	0.17989	2.490059	10.91649	6.854762	19929.938	3.673547	<MDL	<MDL	35.25847
J8F040320-001-S	J16VY5-MS	0.5253	N/A	87.74986	157.4338	91.66191	84.97049	105.0828	89.47268	N/A	89.19665	73.00876	81.38207	127.0702
% Recovery				87.750	95.877	91.488	82.516	93.178	83.905		84.865	73.009	81.382	89.927
J8F040320-001-D	J16VY5-MSD	0.5226	N/A	88.739	158.8213	92.58515	86.01225	105.8171	90.82472	N/A	89.45656	73.23574	82.1948	119.8814
% Recovery				88.739	97.265	92.411	83.558	93.912	85.257		85.125	73.236	82.195	82.739

TESTAMERICA

SDG Number: J00174
SAF Number: RC-087
Batch Number: 8168543

Sample Number	Client ID	Aliquant	Aluminum	Arsenic	Barium	Berylium	Cadmium	Copper	Chromium	Iron	Lead	Selenium	Silver	Zinc
		sa	mg/sa	mg/sa	mg/sa	mg/sa	mg/sa	mg/sa	mg/sa	mg/sa	mg/sa	mg/sa	mg/sa	mg/sa
J8F160000-543-B		1.000	-0.0104	-0.0029	0	0	-0.0002	-0.0009	-0.0072	-0.0014	0.0021	0.00101	-0.0001	0.0021
J8F160000-543-C		1.000	0.9448	0.992	0.9858	0.9979	0.9517	1.005	0.9754	1.134	0.9732	0.8067	0.9291	0.952
LCS Recovery %			94.480%	99.200%	98.580%	99.790%	95.170%	100.500%	97.540%	113.400%	97.320%	80.670%	92.910%	95.200%
		g	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
J8F160202-001	J16W52	0.4974	2433.65501	4.412947	23.62284	0.050261	0.8846	6.473663	526.2364	6077.6035	4.402895	<MDL	<MDL	11.58022
J8F160202-001-X	J16W52-DUP	0.5014	2486.03909	5.255285	35.09174	0.059832	0.907459	6.192661	560.8297	6589.5493	4.347826	<MDL	<MDL	12.11607
J8F160202-001-S	J16W52-MS	0.4989	N/A	96.47224	128.9838	95.78072	90.61936	104.9308	758.168	N/A	97.33414	73.38545	89.00581	103.1269
% Recovery				96.472	105.361	95.730	89.735	98.457	231.932		92.931	73.385	89.006	91.547
J8F160202-001-D	J16W52-MSD	0.5031	N/A	98.02226	141.6219	96.95886	91.69151	102.5641	771.8147	N/A	96.70046	74.41065	89.60445	109.521
% Recovery				98.022	117.999	96.909	90.807	96.090	245.578		92.298	74.411	89.604	97.941

SDG Number: J00174
SAF Number: RC-087
Batch Number: 8169246

Sample Number	Client ID	Aliquant	Aluminum	Arsenic	Barium	Berylium	Cadmium	Copper	Chromium	Iron	Lead	Selenium	Silver	Zinc
		sa	mg/sa	mg/sa	mg/sa	mg/sa	mg/sa	mg/sa	mg/sa	mg/sa	mg/sa	mg/sa	mg/sa	mg/sa
J8F170000-246-B		1.000	-0.0039	-0.002	0.0002	0	0.0001	0.0009	0.0004	0.2323	0.0036	0.00375	0.0006	0.024
J8F170000-246-C		1.000	0.9557	0.9522	0.9694	1.049	0.9304	0.9903	0.9333	1.635	0.9553	0.8154	0.9217	0.9458
LCS Recovery %			95.570%	95.220%	96.940%	104.900%	93.040%	99.030%	93.330%	163.500%	95.530%	81.540%	92.170%	94.580%
		g	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
J8F170197-001	J16W13	0.4995	5919.91992	<MDL	75.4955	0.18018	3.103103	22.94294	12.02202	24084.084	9.399399	<MDL	<MDL	70.7007
J8F170197-001-X	J16W13-DUP	0.4981	4435.85625	<MDL	63.9731	0.140534	2.579803	20.11644	9.897611	19805.26	6.354146	<MDL	<MDL	48.65489
J8F170197-001-S	J16W13-MS	0.4959	N/A	95.23089	174.4303	103.4483	92.77072	123.0087	104.6582	N/A	100.3529	79.65719	88.66707	153.2567
% Recovery				95.231	98.935	103.268	89.668	100.066	92.636		90.953	79.657	88.667	82.556
J8F170197-001-D	J16W13-MSD	0.5082	N/A	94.28375	167.3554	101.7316	91.06651	119.6379	100.2558	N/A	117.5718	79.06139	86.93428	146.891
% Recovery				94.284	91.860	101.551	87.963	96.695	88.234		108.172	79.061	86.934	76.190

TESTAMERICA

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-087-147	Page 1 of 1

Collector: B Lawrence, E. Harries	Company Contact: Joan Kessner	Telephone No.: 509-375-4688	Project Coordinator: KESSNER, JH
Price Code: 2B	Data Turnaround: 24 Hours		
Project Designation: 618-7 Burial Ground - Soil	Sampling Location: 618-7 Burial Ground/Stockpiles		SAF No.: RC-087
Ice Chest No.: ERC-97-079	Field Logbook No.: EL-1395-13	COA: RG61872600	Method of Shipment: GOVERNMENT VEHICLE
Shipped To: TestAmerica Incorporated, Richland	Offsite Property No.: NA		Bill of Lading/Air Bill No.: NA

POSSIBLE SAMPLE HAZARDS/REMARKS

Potential Radiological and Beryllium contamination

Special Handling and/or Storage

None

Preservation	None										
Type of Container	P										
No. of Container(s)	1										
Volume	60mL										
SAMPLE ANALYSIS	See item (1) in Special Instructions.							TIED TO			

Sample No.	Matrix *	Sample Date	Sample Time										
J16VB8 KN7WA	SOIL	5/29/08	0745	X						J16VR3		SEG	C-013
J16VB9 KN7X8	SOIL	5/29/08	0755	X						J16VR4		"	C-014
J16VW3 KN70C	SOIL	5/29/08	0805	X						J16VR5		"	C-015

CHAIN OF POSSESSION — **Sign/Print Names**

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
B Lawrence	0820 5-29-08	RJ Coffman / RJ Coffman	0820 5/29/08
RJ Coffman / RJ Coffman	0930 5/29/08	REFER # 1A, 1060 BLDG	0930 5/29/08
1060/1A 0900	JUN 0 2 2008	MLK MStankovich	0900 JUN 0 2 2008
MLK MStankovich	0945 JUN 0 2 2008	LJLANE TAL 6208	0945

SPECIAL INSTRUCTIONS

None

(1) Metals by ICP - 6010 - Quick Turn {Arsenic, Barium, Cadmium, Chromium, Lead, Selenium, Silver}; Metals by ICP - 6010 - Quick Turn (Add On) {Aluminum, Beryllium, Copper, Iron, Zinc, Zirconium}

J8F020130
J00174
DUE 6308

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

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

WCH-EE-011

Analysis Report for RCF19756

J16VR4 SAF:RC-087 FF2/ 618-7 Soil Sample

GAMMA SPECTRUM ANALYSIS

Sample Identification	: RCF19756
Sample Description	: J16VR4 SAF:RC-087 FF2/ 618-7 Soil Sample
Sample Type	: 80 gram pill box
Unit	:
Sample Point	
Sample Size	: 6.100E+01 grams
Facility	: Default
Sample Taken On	: 5/29/2008 7:55:00AM
Acquisition Started	: 5/29/2008 1:41:00PM
Procedure	: 80 gram pill box
Operator	: RCT
Detector Name	: PGTWHITE
Geometry	: 80 Gram Pill Box
Live Time	: 3600.0 seconds
Real Time	: 3600.7 seconds
Dead Time	: 0.02 %
Peak Locate Threshold	: 3.00
Peak Locate Range (in channels)	: 80 - 4096
Peak Area Range (in channels)	: 80 - 4096
Identification Energy Tolerance	: 1.300 keV
Energy Calibration Used Done On	: 1/31/2008
Efficiency Calibration Used Done On	: 2/5/2008
Efficiency Calibration Description	: 80g Pill box 2/5/2008
Sample Number	: 19567

B9
J16VR4

INTERFERENCE CORRECTED REPORT

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/grams)	Wt mean Activity Uncertainty	Comments
K-40		0.989	1.62E+01	4.58E+00	
PB-212		0.707	9.09E-01	1.87E-01	
RA-226d		0.402	3.81E-01	1.56E-01	
TH-232d		0.852	5.79E-01	1.68E-01	
U-235		0.551	1.12E-01	1.11E-01	
U-238d	@	0.998	4.15E+00	1.73E+00	

J16VR4 SAF:RC-087 FF2/ 618-7 Soil Sample

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity
d = identified by daughter product energy lines assumed to be in secular equilibrium
Errors quoted at 2.000 sigma

UNIDENTIFIED PEAKS

Peak Locate Performed on : 5/29/2008 2:41:06PM
Peak Locate From Channel : 80
Peak Locate To Channel : 4096

Peak No.	Energy (keV)	Peak Rate (CPS)	Peak Rate (%) Uncertainty

All peaks were identified.

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet
Errors quoted at 2.000 sigma

NP = No Peak
UK = Unknown

NUCLIDE MDA REPORT

Nuclide Library Used : \\GOZER\ApexRoot\Default\Library\RCF UNKNOWN.NLB

	Nuclide Name	Energy (keV)		Yield(%)	Activity (pCi/grams)	Nuclide MDA (pCi/grams)	Line MDA (pCi/grams)
+	K-40	1460.83	*	10.67	1.62E+01	2.82E+00	2.82E+00
	CO-60	1173.24		99.90	-1.35E-01	2.06E-01	2.06E-01
		1332.50		99.98	1.08E-01		2.53E-01
	NB-94	702.63		99.81	3.39E-02	1.82E-01	1.82E-01
		871.10		99.89	9.39E-02		1.99E-01
	AG-108m	433.94		90.50	9.28E-02	1.40E-01	1.40E-01
		614.28		89.80	2.78E-02		2.10E-01
		722.94		90.80	8.90E-02		2.03E-01
	CS-137	661.66		85.21	-1.55E-01	1.46E-01	1.46E-01
	EU-152	40.12		38.40	6.85E-02	2.58E-01	2.97E-01
		45.38		11.10	7.40E-02		9.21E-01
		121.78		28.40	7.63E-02		2.58E-01
		244.69		7.51	9.86E-01		1.37E+00
		344.29		26.60	-2.30E-01		4.07E-01
		411.12		2.23	4.48E-01		5.11E+00
		443.89		2.80	-2.34E+00		4.56E+00
		778.92		12.98	-1.57E+00		1.29E+00
		867.38		4.21	-1.70E+00		4.71E+00

J16VR4 SAF:RC-087 FF2/ 618-7 Soil Sample

	Nuclide Name	Energy (keV)		Yield(%)	Activity (pCi/grams)	Nuclide MDA (pCi/grams)	Line MDA (pCi/grams)
		964.11		14.50	1.81E+00		1.99E+00
		1085.89		9.94	-1.48E+00		2.48E+00
		1089.71		1.71	9.78E+00		1.51E+01
		1112.07		13.60	-8.93E-01		1.57E+00
		1212.93		1.40	2.67E+00		1.95E+01
		1299.16		1.63	-6.63E+00		1.37E+01
		1408.00		20.80	5.02E-01		1.06E+00
	EU-154	123.10		40.50	1.39E-01	1.84E-01	1.84E-01
		723.36		19.70	4.10E-01		9.36E-01
		873.23		11.45	1.69E-01		1.66E+00
		1004.78		17.90	-8.48E-01		1.10E+00
		1274.54		35.50	1.15E-01		6.55E-01
	EU-155	86.54		34.00	7.52E-02	2.80E-01	2.80E-01
		105.31		20.60	1.14E-01		3.63E-01
+	PB-212	74.81	*	10.50	9.34E-01	4.03E-01	7.25E-01
		77.11	*	17.70	8.96E-01		4.03E-01
		87.19		6.27	1.30E+00		1.57E+00
+	RA-226d	186.11	*	3.28	2.19E+00	2.63E-01	2.67E+00
		241.92		7.46	8.47E-01		2.10E+00
		295.09		19.20	4.60E-01		6.35E-01
		351.87	*	37.10	4.84E-01		2.63E-01
		609.31	*	46.10	3.01E-01		3.12E-01
		1120.27		15.00	-6.57E-02		1.69E+00
		1764.49		15.90	4.20E-01		1.47E+00
+	TH-232d	238.58	*	43.60	4.88E-01	3.02E-01	3.02E-01
		338.42	*	12.40	1.30E+00		7.27E-01
		583.02	*	30.87	5.83E-01		4.60E-01
		911.16	*	29.00	5.39E-01		5.33E-01
		968.97		17.40	1.16E+00		1.72E+00
+	U-235	143.79		10.50	4.93E-01	1.65E-01	8.03E-01
		163.38		4.70	1.29E+00		1.69E+00
		185.74	*	53.00	1.36E-01		1.65E-01
		205.33		4.70	-2.02E+00		1.78E+00
+	U-238d	63.29	*	3.80	4.15E+00	1.81E+00	2.58E+00
		92.56	*	5.41	2.40E+00		1.81E+00
	AM-241	59.54		35.70	4.78E-02	2.27E-01	2.27E-01
	CM-243	99.52		14.40	3.03E-01	3.23E-01	5.26E-01
		103.73		23.00	6.19E-02		3.23E-01
		116.93		8.32	-4.33E-01		8.42E-01
		228.19		10.56	-1.90E-01		8.73E-01
		277.60		14.00	3.72E-01		7.62E-01
	CM-245	99.52		21.10	2.07E-01	2.21E-01	3.59E-01
		103.73		33.60	4.24E-02		2.21E-01
		116.93		12.20	-2.96E-01		5.74E-01
		174.94		9.50	-2.78E-01		8.15E-01

J16VR4 SAF:RC-087 FF2/ 618-7 Soil Sample

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Reviewed and Approved: EDWARD S. WALLACE

MAY 29 2008 Edward S Wallace

(print/sign/date)

TESTAMERICA

15

Washington Closure Hanford

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

RC-087-137 | Page 1 of 1

Collector	B Lawrence, E. Harries
Company Contact	Joan Kessner
Telephone No.	509-375-4688
Project Coordinator	KESSNER, JH
Price Code	2A
Data Turnaround	24 Hours
Project Designation	618-7 Burial Ground - Soil
Sampling Location	618-7 Burial Ground/Stockpiles
SAF No.	RC-087
Ice Chest No.	AFS-97-079
Field Logbook No.	EL-1395-13
COA	RG61872600
Shipped To	Radiological Counting Facility
Offsite Property No.	NA
Method of Shipment	GOVERNMENT VEHICLE
Bill of Lading/Air Bill No.	NA

POSSIBLE SAMPLE HAZARDS/REMARKS

Potential Radiological and Beryllium contamination

Special Handling and/or Storage

None

SAMPLE ANALYSIS

Preservation	None												
Type of Container	Snap Vial												
No. of Container(s)	1												
Volume	80g												
	RCF GEA Shipping Screen												
Sample No.	Matrix *	Sample Date	Sample Time										
J16VR3	SOIL	5/29/08	0745	X		RCF #	grams						
J16VR4	SOIL	5/29/08	0755	X		19755	50						C-013
J16VR5	SOIL	5/29/08	0805	X		19756	61						C-014
						19757	71						C-015

CHAIN OF POSSESSION — **Sign/Print Names**

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
B Lawrence	5-29-08 0820	RT Coffman / RT Coffman	5/29/08 0820
RT Coffman / RT Coffman	5/29/08 0830	JR DeBruyne / JR DeBruyne	5-29-08 0830
JR DeBruyne / JR DeBruyne	5-29-08 1235	MA Stanaback / MA Stanaback	MAY 29 2008 1235
MA Stanaback / MA Stanaback	MAY 29 2008 1325	RCF / K.E. Jason / K.E. Jason	5-29-08 1325
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time

SPECIAL INSTRUCTIONS

None

COPY

Matrix *

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

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

WCH EE-011

RCF 19757

Analysis Report for RCF19757

J16VR5 SAF:RC-087 FF2/ 618-7 Soil Sample

GAMMA SPECTRUM ANALYSIS

Sample Identification	: RCF19757
Sample Description	: J16VR5 SAF:RC-087 FF2/ 618-7 Soil Sample
Sample Type	: 80 gram pill box
Unit	:
Sample Point	
Sample Size	: 7.100E+01 grams
Facility	: Default
Sample Taken On	: 5/29/2008 8:05:00AM
Acquisition Started	: 5/29/2008 1:41:07PM
Procedure	: 80 gram pill box
Operator	: RCT
Detector Name	: BEGE
Geometry	: 80 Gram Pill Box
Live Time	: 3600.0 seconds
Real Time	: 3600.2 seconds
Dead Time	: 0.01 %
Peak Locate Threshold	: 3.00
Peak Locate Range (in channels)	: 80 - 4096
Peak Area Range (in channels)	: 80 - 4096
Identification Energy Tolerance	: 1.300 keV
Energy Calibration Used Done On	: 3/27/2008
Efficiency Calibration Used Done On	: 4/1/2008
Efficiency Calibration Description	: 80g Pill box 4-1-2008
Sample Number	: 19569

W3
J16VR5

INTERFERENCE CORRECTED REPORT

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/grams)	Wt mean Activity Uncertainty	Comments
K-40		0.998	1.51E+01	3.02E+00	
PB-212		0.710	1.21E+00	1.65E-01	
RA-226d		0.415	5.92E-01	1.39E-01	
TH-232d		0.438	5.51E-01	1.71E-01	
U-235		0.547	8.03E-01	3.60E-01	
U-238d	@	0.999	1.03E+01	1.72E+00	

Analysis Report for RCF19757

J16VR5 SAF:RC-087 FF2/ 618-7 Soil Sample

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity
d = identified by daughter product energy lines assumed to be in secular equilibrium
Errors quoted at 2.000 sigma

UNIDENTIFIED PEAKS

Peak Locate Performed on : 5/29/2008 2:41:17PM
Peak Locate From Channel : 80
Peak Locate To Channel : 4096

Peak No.	Energy (keV)	Peak Rate (CPS)	Peak Rate (%) Uncertainty

All peaks were identified.

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet
Errors quoted at 2.000 sigma

NP = No Peak
UK = Unknown

NUCLIDE MDA REPORT

Nuclide Library Used : \\GOZER\ApexRoot\Default\Library\RCF UNKNOWN.NLB

	Nuclide Name	Energy (keV)		Yield(%)	Activity (pCi/grams)	Nuclide MDA (pCi/grams)	Line MDA (pCi/grams)
+	K-40	1460.83	*	10.67	1.51E+01	1.64E+00	1.64E+00
	CO-60	1173.24		99.90	1.33E-02	2.18E-01	2.18E-01
		1332.50		99.98	-6.96E-02		2.34E-01
	NB-94	702.63		99.81	-1.58E-02	1.61E-01	1.61E-01
		871.10		99.89	1.91E-02		1.72E-01
	AG-108m	433.94		90.50	-8.46E-02	9.66E-02	9.66E-02
		614.28		89.80	-2.63E-02		1.85E-01
		722.94		90.80	-1.45E-01		1.47E-01
	CS-137	661.66		85.21	1.03E-01	1.84E-01	1.84E-01
	EU-152	40.12		38.40	3.99E-02	1.22E-01	1.22E-01
		45.38		11.10	-1.48E-01		3.70E-01
		121.78		28.40	-5.64E-03		1.52E-01
		244.69		7.51	-9.53E-01		9.12E-01
		344.29		26.60	9.65E-02		3.34E-01
		411.12		2.23	-1.66E+00		4.23E+00
		443.89		2.80	-1.77E+00		3.23E+00
		778.92		12.98	-3.64E-01		1.15E+00
		867.38		4.21	6.61E-02		4.19E+00

J16VR5 SAF:RC-087 FF2/ 618-7 Soil Sample

	Nuclide Name	Energy (keV)		Yield(%)	Activity (pCi/grams)	Nuclide MDA (pCi/grams)	Line MDA (pCi/grams)
		964.11		14.50	1.15E-01		1.35E+00
		1085.89		9.94	0.00E+00		2.07E+00
		1089.71		1.71	-8.80E+00		1.04E+01
		1112.07		13.60	1.12E+00		1.44E+00
		1212.93		1.40	-5.61E+00		1.71E+01
		1299.16		1.63	4.51E+00		1.39E+01
		1408.00		20.80	3.72E-01		9.14E-01
	EU-154	123.10		40.50	-4.09E-02	1.18E-01	1.18E-01
		723.36		19.70	-8.21E-01		6.65E-01
		873.23		11.45	8.36E-01		1.53E+00
		1004.78		17.90	1.68E+00		1.41E+00
		1274.54		35.50	-5.39E-02		6.23E-01
	EU-155	86.54		34.00	-1.14E-01	1.77E-01	1.77E-01
		105.31		20.60	4.73E-02		2.15E-01
+	PB-212	74.81	*	10.50	1.28E+00	2.60E-01	4.19E-01
		77.11	*	17.70	1.17E+00		2.60E-01
		87.19		6.27	6.56E-01		9.44E-01
+	RA-226d	186.11	*	3.28	1.36E+01	1.70E-01	2.17E+00
		241.92		7.46	7.14E-01		1.25E+00
		295.09		19.20	8.80E-01		5.25E-01
		351.87	*	37.10	6.79E-01		1.70E-01
		609.31	*	46.10	5.14E-01		2.29E-01
		1120.27		15.00	-2.74E-01		1.29E+00
		1764.49		15.90	4.96E-01		2.02E+00
+	TH-232d	238.58	*	43.60	4.93E-01	2.79E-01	2.79E-01
		338.42		12.40	1.30E+00		8.75E-01
		583.02	*	30.87	6.14E-01		2.99E-01
		911.16		29.00	7.91E-01		8.04E-01
		968.97		17.40	1.05E+00		1.29E+00
+	U-235	143.79		10.50	1.12E+00	1.34E-01	7.18E-01
		163.38		4.70	1.73E+00		1.53E+00
		185.74	*	53.00	8.40E-01		1.34E-01
		205.33		4.70	-2.23E-01		1.46E+00
+	U-238d	63.29	*	3.80	1.03E+01	1.57E+00	1.72E+00
		92.56	*	5.41	9.26E+00		1.57E+00
	AM-241	59.54		35.70	3.78E-02	1.09E-01	1.09E-01
	CM-243	99.52		14.40	3.61E-01	1.93E-01	3.42E-01
		103.73		23.00	-4.83E-03		1.93E-01
		116.93		8.32	1.37E-01		5.44E-01
		228.19		10.56	-2.40E-01		6.18E-01
		277.60		14.00	-4.27E-02		5.51E-01
	CM-245	99.52		21.10	2.47E-01	1.32E-01	2.33E-01
		103.73		33.60	-3.31E-03		1.32E-01
		116.93		12.20	9.32E-02		3.71E-01
		174.94		9.50	-2.19E-01		5.92E-01

J16VR5 SAF:RC-087 FF2/ 618-7 Soil Sample

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Reviewed and Approved: **EDWARD S. WALLACE**

MAY 29 2008 Edward S Wallace
(print/sign/date)

'ESTAMERICA

20

Washington Closure Hanford

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

RC-087-137

Collector	B Lawrence, E. Harries
Project Designation	618-7 Burial Ground - Soil
Ice Chest No.	AFS-97-079
Shipped To	Radiological Counting Facility
Company Contact	Joan Kessner
Telephone No.	509-375-4688
Sampling Location	618-7 Burial Ground/Stockpiles
Field Logbook No.	EL-1395-13
COA	RG61872600
Offsite Property No.	NA
Project Coordinator	KESSNER, JH
SAF No.	RC-087
Price Code	2A
Data Turnaround	24 Hours
Method of Shipment	GOVERNMENT VEHICLE
Bill of Lading/Air Bill No.	NA

POSSIBLE SAMPLE HAZARDS/REMARKS

Potential Radiological and Beryllium contamination

Special Handling and/or Storage

None

SAMPLE ANALYSIS

Preservation				None										
Type of Container				Snap Vial										
No. of Container(s)				1										
Volume				80g										
				RCF GEA Shipping Screen										
Sample No.	Matrix *	Sample Date	Sample Time			RCF #	grams							
J16VR3	SOIL	5/29/08	0745	X		19755	50							C-013
J16VR4	SOIL	5/29/08	0755	X		19756	61							C-014
J16VR5	SOIL	5/29/08	0805	X		19757	71							C-015

CHAIN OF POSSESSION

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
B Lawrence	5-29-08 0820	RT Coffman / RT Coffman	5/29/08 0820
RT Coffman / RT Coffman	5/29/08 0830	JR DeBruigne / JR DeBruigne	5-29-08 0830
JR DeBruigne / JR DeBruigne	5-29-08 1235	MS Hardwick / MS Hardwick	1235 MAY 29 2008
MS Hardwick / MS Hardwick	1325 MAY 29 2008	RCF / K.E. Jackson / K.E. Jackson	5-29-08 1325

Sign/Print Names

SPECIAL INSTRUCTIONS

None

COPY

Matrix *

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

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

WCH-EE-011

RCF 19756

Analysis Report for RCF19755

J16VR3 SAF:RC-087 FF2/ 618-7 Soil Sample

GAMMA SPECTRUM ANALYSIS

Sample Identification	: RCF19755
Sample Description	: J16VR3 SAF:RC-087 FF2/ 618-7 Soil Sample
Sample Type	: 50 gram pill box
Unit	:
Sample Point	
Sample Size	: 5.000E+01 grams
Facility	: Default
Sample Taken On	: 5/29/2008 7:45:00AM
Acquisition Started	: 5/29/2008 1:40:51PM
Procedure	: 50 gram pill box
Operator	: RCT
Detector Name	: REGIE02
Geometry	: 50 ml Pill Box
Live Time	: 3600.0 seconds
Real Time	: 3662.6 seconds
Dead Time	: 1.71 %
Peak Locate Threshold	: 3.00
Peak Locate Range (in channels)	: 80 - 4096
Peak Area Range (in channels)	: 80 - 4096
Identification Energy Tolerance	: 1.300 keV
Energy Calibration Used Done On	: 1/10/2008
Efficiency Calibration Used Done On	: 1/11/2008
Efficiency Calibration Description	: 50g Pill Box 1-10-2008
Sample Number	: 19566

J16VR3 B8

INTERFERENCE CORRECTED REPORT

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/grams)	Wt mean Activity Uncertainty	Comments
K-40		0.975	1.81E+01	3.46E+00	
PB-212		0.710	8.00E-01	1.68E-01	
TH-232d		0.846	5.90E-01	1.66E-01	
U-235		0.547	2.66E-01	1.54E-01	
U-238d	@	0.999	1.80E+00	1.46E+00	

J16VR3 SAF:RC-087 FF2/ 618-7 Soil Sample

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity
d = identified by daughter product energy lines assumed to be in secular equilibrium
Errors quoted at 2.000 sigma

UNIDENTIFIED PEAKS

Peak Locate Performed on : 5/29/2008 2:41:57PM
Peak Locate From Channel : 80
Peak Locate To Channel : 4096

Peak No.	Energy (keV)		Peak Rate (CPS)	Peak Rate (%) Uncertainty
8	352.17	Pb-214	2.11E-02	19.14

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet
Errors quoted at 2.000 sigma

NP = No Peak
UK = Unknown

NUCLIDE MDA REPORT

Nuclide Library Used : \\GOZER\ApexRoot\Default\Library\RCF UNKNOWN.NLB

	Nuclide Name	Energy (keV)		Yield(%)	Activity (pCi/grams)	Nuclide MDA (pCi/grams)	Line MDA (pCi/grams)
+	K-40	1460.83	*	10.67	1.81E+01	3.12E+00	3.12E+00
	CO-60	1173.24		99.90	1.08E-02	2.81E-01	3.49E-01
		1332.50		99.98	2.02E-01		2.81E-01
	NB-94	702.63		99.81	9.17E-02	2.42E-01	2.52E-01
		871.10		99.89	2.90E-02		2.42E-01
	AG-108m	433.94		90.50	-8.09E-02	1.79E-01	1.79E-01
		614.28		89.80	-7.02E-02		3.06E-01
		722.94		90.80	2.90E-01		3.02E-01
	CS-137	661.66		85.21	1.47E-01	2.73E-01	2.73E-01
	EU-152	40.12		38.40	1.73E-01	3.38E-01	3.38E-01
		45.38		11.10	4.77E-01		1.05E+00
		121.78		28.40	1.17E-01		3.52E-01
		244.69		7.51	-1.42E+00		1.95E+00
		344.29		26.60	-6.21E-02		6.28E-01
		411.12		2.23	8.02E+00		9.00E+00
		443.89		2.80	1.50E+00		6.35E+00
		778.92		12.98	8.29E-01		1.98E+00
		867.38		4.21	2.38E+00		6.20E+00
		964.11		14.50	1.07E+00		2.26E+00

J16VR3 SAF:RC-087 FF2/ 618-7 Soil Sample

	Nuclide Name	Energy (keV)		Yield(%)	Activity (pCi/grams)	Nuclide MDA (pCi/grams)	Line MDA (pCi/grams)
		1085.89		9.94	-1.52E+00		3.09E+00
		1089.71		1.71	7.75E+00		1.95E+01
		1112.07		13.60	-1.40E+00		2.36E+00
		1212.93		1.40	-2.74E-02		2.32E+01
		1299.16		1.63	8.24E+00		2.12E+01
		1408.00		20.80	3.10E-01		1.03E+00
	EU-154	123.10		40.50	3.06E-02	2.48E-01	2.48E-01
		723.36		19.70	1.32E+00		1.38E+00
		873.23		11.45	-1.86E-01		2.03E+00
		1004.78		17.90	-3.93E-01		1.60E+00
		1274.54		35.50	9.17E-02		8.92E-01
	EU-155	86.54		34.00	2.25E-01	3.38E-01	3.38E-01
		105.31		20.60	-1.94E-01		4.54E-01
+	PB-212	74.81	*	10.50	6.30E-01	3.32E-01	6.45E-01
		77.11	*	17.70	8.91E-01		3.32E-01
		87.19		6.27	1.07E+00		1.85E+00
	RA-226d	186.11		3.28	1.67E+00	5.49E-01	4.49E+00
		241.92		7.46	-1.90E-01		2.66E+00
		295.09		19.20	-1.25E-01		9.20E-01
		351.87		37.10	3.91E-01		5.49E-01
		609.31		46.10	6.01E-01		5.91E-01
		1120.27		15.00	1.11E+00		2.30E+00
		1764.49		15.90	8.78E-02		1.93E+00
+	TH-232d	238.58	*	43.60	6.18E-01	3.09E-01	3.09E-01
		338.42	*	12.40	9.97E-01		1.08E+00
		583.02	*	30.87	4.06E-01		5.80E-01
		911.16	*	29.00	5.71E-01		7.04E-01
		968.97		17.40	1.33E+00		1.92E+00
+	U-235	143.79		10.50	-1.53E-01	2.42E-01	1.11E+00
		163.38		4.70	1.04E+00		2.52E+00
		185.74	*	53.00	2.66E-01		2.42E-01
		205.33		4.70	-8.89E-01		2.97E+00
+	U-238d	63.29	*	3.80	1.80E+00	1.75E+00	2.35E+00
		92.56	*	5.41	1.49E+00		1.75E+00
	AM-241	59.54		35.70	6.44E-02	2.98E-01	2.98E-01
	CM-243	99.52		14.40	-2.76E-01	4.09E-01	6.49E-01
		103.73		23.00	2.63E-03		4.09E-01
		116.93		8.32	-1.32E-01		1.18E+00
		228.19		10.56	7.99E-01		1.23E+00
		277.60		14.00	3.64E-01		1.14E+00
	CM-245	99.52		21.10	-1.88E-01	2.80E-01	4.43E-01
		103.73		33.60	1.80E-03		2.80E-01
		116.93		12.20	-9.03E-02		8.05E-01
		174.94		9.50	-7.48E-01		1.32E+00

J16VR3 SAF:RC-087 FF2/ 618-7 Soil Sample

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Reviewed and Approved: EDWARD S. WALLACE

MAY 29 2008 Edward S Wallace
(print/sign/date)

TESTAMERICA

25

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		RC-087-137	Page 1 of 1
Collector: B Lawrence, E. Harries	Company Contact: Joan Kessner	Telephone No.: 509-375-4688	Project Coordinator: KESSNER, JH	Price Code: 2A
Project Designation: 618-7 Burial Ground - Soil	Sampling Location: 618-7 Burial Ground/Stockpiles		SAF No.: RC-087	Data Turnaround: 24 Hours
Ice Chest No.: AFS-97-079	Field Logbook No.: EL-1395-13	COA: RG61872600	Method of Shipment: GOVERNMENT VEHICLE	
Shipped To: Radiological Counting Facility	Offsite Property No.: NA		Bill of Lading/Air Bill No.: NA	

POSSIBLE SAMPLE HAZARDS/REMARKS

Potential Radiological and Beryllium contamination

Special Handling and/or Storage

None

Preservation	None											
Type of Container	Snap Vial											
No. of Container(s)	1											
Volume	80g											
SAMPLE ANALYSIS	RCF GEA Shipping Screen											
Sample No.	Matrix *	Sample Date	Sample Time			RCF #	grams					
J16VR3	SOIL	5/29/08	0745	X		19755	50					C-013
J16VR4	SOIL	5/29/08	0755	X		19756	61					C-014
J16VR5	SOIL	5/29/08	0805	X		19757	71					C-015

CHAIN OF POSSESSION — **Sign/Print Names**

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
B Lawrence	5-29-08 0820	RT Coffman / RT Coffman	5/29/08 0820
RT Coffman / RT Coffman	5/29/08 0830	JR DeBruijne / JR DeBruijne	5-29-08 0830
JR DeBruijne / JR DeBruijne	5-29-08 1235	MJ Stanlowick / MJ Stanlowick	1235 MAY 29 2008
MJ Stanlowick / MJ Stanlowick	1325 MAY 29 2008	K Eliason / K Eliason	RCF 5-29-08 1325
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time

SPECIAL INSTRUCTIONS

None

COPY

Matrix *

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

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

WCH-EE-011

RCF 19755

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Sample Check-in List

Date/Time Received: 6 2 08 0945 GM Screen Result 0.2K

Client: WCH SDG #: J00174 NA[ ] SAF #: RC-087 NA [ ]

Work Order Number: J8F020130 Chain of Custody # RC-087-147

Shipping Container ID: _____ Air Bill # _____

1. Custody Seals on shipping container intact? NA [ ] Yes [✓] No [ ]
2. Custody Seals dated and signed? NA [ ] Yes [✓] No [ ]
3. Chain of Custody record present? NA [ ] Yes [✓] No [ ]
4. Cooler Temperature: _____ NA [✓] 5. Vermiculite/packing materials is NA [✓] Wet [ ] Dry [ ]
6. Number of samples in shipping container: 3
7. Sample holding times exceeded? NA [✓] Yes [ ] No [ ]
8. Samples have:
   - ____ Tape
   - ✓ Custody Seals
   - ____ Hazard Lables
   - ✓ Appropriate Sample Lables
9. Samples are:
   - ✓ In Good Condition
   - ____ Broken
   - ____ Leaking
   - ____ Have Air Bubbles
   - (Only for samples requiring no head space.)
10. Sample pH taken? SOIL NA [✓] pH<2 [ ] pH>2 [ ] pH>9 [ ] Amount HNO_3 Added _____
11. Sample Location, Sample Collector Listed? *
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [✓]
13. Description of anomalies (include sample numbers): _____

Sample Custodian: [signature] Date: 6 2 08

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person Contacted _____

[ ] No action necessary; process as is.

Project Manager _____ Date _____

TESTAMERICA

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-087-149	Page 1 of 1

Collector B Lawrence, E. Harries	**Company Contact** Joan Kessner	**Telephone No.** 509-375-4688	**Project Coordinator** KESSNER, JH
Price Code 2B	**Data Turnaround** 24 Hours		
Project Designation 618-7 Burial Ground - Soil	**Sampling Location** 618-7 Burial Ground/Stockpiles		**SAF No.** RC-087
Ice Chest No. WCH -07-01	**Field Logbook No.** EL-1395-13	**COA** RG61872600	**Method of Shipment** Gov't Vehicle
Shipped To TestAmerica Incorporated, Richland	**Offsite Property No.** NA		**Bill of Lading/Air Bill No.** NA

POSSIBLE SAMPLE HAZARDS/REMARKS

Potential Radiological and Beryllium contamination

Special Handling and/or Storage

None

Preservation	None										
Type of Container	aG										
No. of Container(s)	1										
Volume	60mL										
SAMPLE ANALYSIS	See item (1) in Special Instructions.							TIED TO			

Sample No.		Matrix *	Sample Date	Sample Time										
J16VW7	KN9E1	SOIL	6/2/08	0800	X						J16VR7			D-013
J16VW9	KN9FD	SOIL	6/2/08	0805	X						J16VR8			D-014
J16VX1	KN9FH	SOIL	6/2/08	0810	X						J16VR9			D-015

CHAIN OF POSSESSION	Date/Time	Sign/Print Names	Date/Time
Relinquished By/Removed From: B Lawrence	6-2-08 0920	Received By/Stored In: RT Coffman / RT Coffman	6/2/08 0920
Relinquished By/Removed From: RT Coffman / RT Coffman	6/2/08 0940	Received By/Stored In: Refer #1A, 1060 BLDG	6/2/08 0940
Relinquished By/Removed From: Refer 1A / 1060	6-3-08 0745	Received By/Stored In: JR DeRuiche JRD	6-3-08 0745
Relinquished By/Removed From: JR DeRuiche JRD	6-3-08 0950	Received By/Stored In: W LANE TAL	6308 0950
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time

SPECIAL INSTRUCTIONS

None

(1) Metals by ICP - 6010 - Quick Turn {Arsenic, Barium, Cadmium, Chromium, Lead, Selenium, Silver}; Metals by ICP - 6010 - Quick Turn (Add On) {Aluminum, Beryllium, Copper, Iron, Zinc, Zirconium}

J8F030167
J00174
DUE 6408

Sampler unavailable to remove samples from controlled storage. Shipper removed samples from storage location taking custody of samples for shipment to lab.

RTC MJS

Matrix *

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

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

WCH-EE-011

TESTAMERICA

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-087-150	Page 1 of 1

Collector B Lawrence, E. Harries	**Company Contact** Joan Kessner	**Telephone No.** 509-375-4688	**Project Coordinator** KESSNER, JH
Price Code 2B	**Data Turnaround** 24 Hours		
Project Designation 618-7 Burial Ground - Soil	**Sampling Location** 618-7 Burial Ground/Stockpiles		**SAF No.** RC-087
Ice Chest No. WCH-07-01	**Field Logbook No.** EL-1395-13	**COA** RG61872600	**Method of Shipment** Gov't Vehicle
Shipped To TestAmerica Incorporated, Richland	**Offsite Property No.** NA		**Bill of Lading/Air Bill No.** NA

POSSIBLE SAMPLE HAZARDS/REMARKS

Potential Radiological and Beryllium contamination

Special Handling and/or Storage

None

Preservation	None										
Type of Container	aG										
No. of Container(s)	1										
Volume	60mL										
SAMPLE ANALYSIS	See item (1) in Special Instructions.							TIED TO			
Sample No. / Matrix * / Sample Date / Sample Time											
J16VX3 KN9FL / SOIL / 6/2/08 / 0815	X							J16VT0			D-016
J16VX5 KN9FR / SOIL / 6/2/08 / 0820	X							J16VT1			E-016
J16VX7 KN9FO / SOIL / 6/2/08 / 0825	X							J16VT2			F-016

CHAIN OF POSSESSION	Sign/Print Names	Date/Time
Relinquished By/Removed From: B Lawrence	Received By/Stored In: RT Coffman / RT Coffman	6-2-08 0920
Relinquished By/Removed From: RT Coffman / RT Coffman	Received By/Stored In: Refer #1A, 1060 BLDG	6/2/08 0940
Relinquished By/Removed From: Refer 1A / 1060	Received By/Stored In: JR DeBuique JR DeBuique	6-3-08 0745
Relinquished By/Removed From: JR DeBuique JR DeBuique	Received By/Stored In: LJ LANE TAL	6-3-08 0950 6308
Relinquished By/Removed From:	Received By/Stored In:	Date/Time
Relinquished By/Removed From:	Received By/Stored In:	Date/Time

SPECIAL INSTRUCTIONS

None

(1) Metals by ICP - 6010 - Quick Turn {Arsenic, Barium, Cadmium, Chromium, Lead, Selenium, Silver}; Metals by ICP - 6010 - Quick Turn (Add On) {Aluminum, Beryllium, Copper, Iron, Zinc, Zirconium}

J8F030167
J00174
DUE 6408

Sampler unavailable to remove samples from controlled storage. Shipper removed samples from storage location taking custody of samples for shipment to lab.

RR NTS

Matrix *

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

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

WCH-EE-011

Radiological Counting Facility

Analysis Report for RCF19761

J16VR7 SAF:RC-087 FF2/618-7 Soil Sample

GAMMA SPECTRUM ANALYSIS

Sample Identification	: RCF19761
Sample Description	: J16VR7 SAF:RC-087 FF2/618-7 Soil Sample
Sample Type	: 50 gram pill box
Unit	:
Sample Point	
Sample Size	: 4.600E+01 grams
Facility	: Default
Sample Taken On	: 6/2/2008 8:00:00AM
Acquisition Started	: 6/2/2008 2:13:32PM
Procedure	: 50 gram pill box
Operator	: RCT
Detector Name	: REGIE02
Geometry	: 50 ml Pill Box
Live Time	: 3600.0 seconds
Real Time	: 3653.8 seconds
Dead Time	: 1.47 %
Peak Locate Threshold	: 3.00
Peak Locate Range (in channels)	: 80 - 4096
Peak Area Range (in channels)	: 80 - 4096
Identification Energy Tolerance	: 1.300 keV
Energy Calibration Used Done On	: 1/10/2008
Efficiency Calibration Used Done On	: 1/11/2008
Efficiency Calibration Description	: 50g Pill Box 1-10-2008
Sample Number	: 19622

J16VW7

INTERFERENCE CORRECTED REPORT

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/grams)	Wt mean Activity Uncertainty	Comments
K-40		0.984	1.48E+01	3.29E+00	
PB-212		0.710	9.82E-01	1.94E-01	
TH-232d		0.678	6.47E-01	1.85E-01	
U-235		0.795	8.44E-01	1.91E-01	
U-238d	@	1.000	1.02E+01	2.30E+00	

Analysis Report for RCF19761

J16VR7 SAF:RC-087 FF2/618-7 Soil Sample

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity
d = identified by daughter product energy lines assumed to be in secular equilibrium
Errors quoted at 2.000 sigma

UNIDENTIFIED PEAKS

Peak Locate Performed on : 6/2/2008 3:14:29PM
Peak Locate From Channel : 80
Peak Locate To Channel : 4096

Peak No.	Energy (keV)	Peak Rate (CPS)	Peak Rate (%) Uncertainty
8	352.19 Pb-214	1.11E-02	34.51

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet
Errors quoted at 2.000 sigma

NP = No Peak
UK = Unknown

NUCLIDE MDA REPORT

Nuclide Library Used : \\GOZER\ApexRoot\Default\Library\RCF UNKNOWN.NLB

	Nuclide Name	Energy (keV)		Yield(%)	Activity (pCi/grams)	Nuclide MDA (pCi/grams)	Line MDA (pCi/grams)
+	K-40	1460.83	*	10.67	1.48E+01	3.16E+00	3.16E+00
	CO-60	1173.24		99.90	7.24E-02	3.25E-01	3.59E-01
		1332.50		99.98	6.08E-02		3.25E-01
	NB-94	702.63		99.81	8.87E-03	2.66E-01	2.70E-01
		871.10		99.89	3.29E-02		2.66E-01
	AG-108m	433.94		90.50	-1.28E-02	2.19E-01	2.19E-01
		614.28		89.80	4.30E-01		3.37E-01
		722.94		90.80	2.58E-02		2.75E-01
	CS-137	661.66		85.21	1.11E-01	3.04E-01	3.04E-01
	EU-152	40.12		38.40	-1.36E-01	3.85E-01	3.85E-01
		45.38		11.10	-6.38E-01		1.19E+00
		121.78		28.40	9.26E-02		4.20E-01
		244.69		7.51	-1.63E+00		1.92E+00
		344.29		26.60	-2.02E-01		7.47E-01
		411.12		2.23	2.94E+00		8.99E+00
		443.89		2.80	-4.32E+00		6.99E+00
		778.92		12.98	6.99E-01		1.98E+00
		867.38		4.21	3.04E-01		6.66E+00
		964.11		14.50	1.85E+00		2.44E+00

Analysis Report for RCF19761

J16VR7 SAF:RC-087 FF2/618-7 Soil Sample

	Nuclide Name	Energy (keV)		Yield(%)	Activity (pCi/grams)	Nuclide MDA (pCi/grams)	Line MDA (pCi/grams)
		1085.89		9.94	-6.55E-02		2.54E+00
		1089.71		1.71	4.67E+00		1.63E+01
		1112.07		13.60	4.19E-02		2.57E+00
		1212.93		1.40	-5.41E+00		2.48E+01
		1299.16		1.63	-1.28E+01		1.83E+01
		1408.00		20.80	1.55E-01		1.55E+00
	EU-154	123.10		40.50	1.34E-01	2.95E-01	2.95E-01
		723.36		19.70	-2.19E-01		1.23E+00
		873.23		11.45	2.46E-01		2.30E+00
		1004.78		17.90	1.91E-01		1.89E+00
		1274.54		35.50	1.76E-01		9.55E-01
	EU-155	86.54		34.00	2.27E-01	4.24E-01	4.24E-01
		105.31		20.60	-2.32E-01		5.63E-01
+	PB-212	74.81	*	10.50	9.47E-01	3.99E-01	7.82E-01
		77.11	*	17.70	9.97E-01		3.99E-01
		87.19		6.27	1.47E+00		2.36E+00
	RA-226d	186.11		3.28	1.15E+01	6.20E-01	6.14E+00
		241.92		7.46	-5.19E-01		2.70E+00
		295.09		19.20	3.42E-01		9.82E-01
		351.87		37.10	7.80E-01		6.20E-01
		609.31		46.10	4.72E-01		6.49E-01
		1120.27		15.00	-1.63E-01		2.27E+00
		1764.49		15.90	1.29E+00		2.23E+00
+	TH-232d	238.58	*	43.60	8.34E-01	3.68E-01	3.68E-01
		338.42		12.40	4.53E-01		1.66E+00
		583.02	*	30.87	3.87E-01		4.73E-01
		911.16	*	29.00	6.26E-01		8.06E-01
		968.97		17.40	1.15E+00		2.06E+00
+	U-235	143.79	*	10.50	1.30E+00	2.75E-01	1.10E+00
		163.38		4.70	1.31E+00		3.04E+00
		185.74	*	53.00	8.08E-01		2.75E-01
		205.33		4.70	-8.68E-01		3.24E+00
+	U-238d	63.29	*	3.80	1.02E+01	2.21E+00	3.18E+00
		92.56	*	5.41	1.19E+01		2.21E+00
	AM-241	59.54		35.70	-1.36E-01	4.41E-01	4.41E-01
	CM-243	99.52		14.40	-6.00E-01	5.03E-01	8.33E-01
		103.73		23.00	-2.71E-01		5.03E-01
		116.93		8.32	5.37E-01		1.49E+00
		228.19		10.56	5.53E-01		1.45E+00
		277.60		14.00	-6.64E-01		1.19E+00
	CM-245	99.52		21.10	-4.09E-01	3.44E-01	5.69E-01
		103.73		33.60	-1.86E-01		3.44E-01
		116.93		12.20	3.66E-01		1.02E+00
		174.94		9.50	1.24E-01		1.53E+00

Analysis Report for RCF19761

J16VR7 SAF:RC-087 FF2/618-7 Soil Sample

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Reviewed and Approved: EDWARD S. WALLACE

JUN 02 2008 Edward S. Wallace

(print/sign/date)

TESTAMERICA

33

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-087-139	Page 1 of 1

Collector B Lawrence, E. Harries	Company Contact Joan Kessner	Telephone No. 509-375-4688	Project Coordinator KESSNER, JH
Project Designation 618-7 Burial Ground - Soil	Sampling Location 618-7 Burial Ground/Stockpiles		SAF No. RC-087
Ice Chest No.	Field Logbook No. EL-1395-13	COA RG61872600	Method of Shipment
Shipped To Radiological Counting Facility	Offsite Property No.		Bill of Lading/Air Bill No.

Price Code

Data Turnaround
24 Hours

POSSIBLE SAMPLE HAZARDS/REMARKS
Potential Radiological and Beryllium contamination

Special Handling and/or Storage
None

Preservation	None											
Type of Container	Snap Vial											
No. of Container(s)	1											
Volume	80g											
SAMPLE ANALYSIS	RCF GEA Shipping Screen											

Sample No.	Matrix *	Sample Date	Sample Time			RCF							
J16VR7	SOIL	6/2/08	0800	X		19761							D-013
J16VR8	SOIL	6/2/08	0805	X		19762							D-014
J16VR9	SOIL	6/2/08	0810	X		19763							D-015

CHAIN OF POSSESSION — **Sign/Print Names**

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
B Lawrence	0920 6-2-08	RT Goffman / RT Goffman	0920 6/2/08
RT Goffman / RT Goffman	0940 6/2/08	MSTankouch	0940 JUN 02 2008
MSTankouch	1000 JUN 02 2008	D. Miller / D. Miller	RCF 1000 6-2-08

SPECIAL INSTRUCTIONS
None

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

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

WCH-EE-011

RCF 19761

Radiological Counting Facility

Analysis Report for RCF19762

J16VR8 SAF:RC-087 FF2/618-7 Soil Sample

GAMMA SPECTRUM ANALYSIS

Sample Identification	: RCF19762
Sample Description	: J16VR8 SAF:RC-087 FF2/618-7 Soil Sample
Sample Type	: 80 gram pill box
Unit	:
Sample Point	
Sample Size	: 6.000E+01 grams
Facility	: Default
Sample Taken On	: 6/2/2008 8:05:00AM
Acquisition Started	: 6/2/2008 2:13:39PM
Procedure	: 80 gram pill box
Operator	: RCT
Detector Name	: PGTWHITE
Geometry	: 80 Gram Pill Box
Live Time	: 3600.0 seconds
Real Time	: 3600.7 seconds
Dead Time	: 0.02 %
Peak Locate Threshold	: 3.00
Peak Locate Range (in channels)	: 80 - 4096
Peak Area Range (in channels)	: 80 - 4096
Identification Energy Tolerance	: 1.300 keV
Energy Calibration Used Done On	: 1/31/2008
Efficiency Calibration Used Done On	: 2/5/2008
Efficiency Calibration Description	: 80g Pill box 2/5/2008
Sample Number	: 19623

J16VW9

INTERFERENCE CORRECTED REPORT

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/grams)	Wt mean Activity Uncertainty	Comments
K-40		0.999	1.47E+01	4.32E+00	
PB-212		0.707	8.12E-01	1.63E-01	
TH-232d		0.606	5.39E-01	1.76E-01	
U-235		0.551	1.29E-01	1.18E-01	
U-238d	@	0.999	2.54E+00	1.63E+00	

Analysis Report for RCF19762

J16VR8 SAF:RC-087 FF2/618-7 Soil Sample

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity
d = identified by daughter product energy lines assumed to be in secular equilibrium
Errors quoted at 2.000 sigma

UNIDENTIFIED PEAKS

Peak Locate Performed on : 6/2/2008 3:13:47PM
Peak Locate From Channel : 80
Peak Locate To Channel : 4096

Peak No.	Energy (keV)		Peak Rate (CPS)	Peak Rate (%) Uncertainty
7	295.10	Pb-214	7.34E-03	46.64
9	351.74	Pb-214	1.47E-02	24.79
11	812.03	No Peak	1.94E-03	65.61

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet
Errors quoted at 2.000 sigma

NP = No Peak
UK = Unknown

NUCLIDE MDA REPORT

Nuclide Library Used : \\GOZER\ApexRoot\Default\Library\RCF UNKNOWN.NLB

	Nuclide Name	Energy (keV)		Yield(%)	Activity (pCi/grams)	Nuclide MDA (pCi/grams)	Line MDA (pCi/grams)
+	K-40	1460.83	*	10.67	1.47E+01	2.99E+00	2.99E+00
	CO-60	1173.24		99.90	-7.24E-02	2.14E-01	2.38E-01
		1332.50		99.98	-1.70E-01		2.14E-01
	NB-94	702.63		99.81	-8.84E-02	1.66E-01	1.74E-01
		871.10		99.89	-5.39E-02		1.66E-01
	AG-108m	433.94		90.50	-7.33E-03	1.29E-01	1.29E-01
		614.28		89.80	1.00E-01		2.13E-01
		722.94		90.80	1.06E-01		2.10E-01
	CS-137	661.66		85.21	1.36E-01	1.97E-01	1.97E-01
	EU-152	40.12		38.40	1.92E-01	2.55E-01	2.86E-01
		45.38		11.10	6.30E-01		9.25E-01
		121.78		28.40	-2.73E-02		2.55E-01
		244.69		7.51	7.42E-01		1.36E+00
		344.29		26.60	6.34E-03		4.32E-01
		411.12		2.23	-6.19E-02		5.16E+00
		443.89		2.80	3.07E+00		4.58E+00
		778.92		12.98	2.63E-01		1.37E+00

Analysis Report for RCF19762

J16VR8 SAF:RC-087 FF2/618-7 Soil Sample

	Nuclide Name	Energy (keV)		Yield(%)	Activity (pCi/grams)	Nuclide MDA (pCi/grams)	Line MDA (pCi/grams)
		867.38		4.21	-3.68E+00		4.57E+00
		964.11		14.50	8.69E-01		1.82E+00
		1085.89		9.94	2.53E-02		2.50E+00
		1089.71		1.71	1.13E+00		1.50E+01
		1112.07		13.60	-1.01E+00		1.57E+00
		1212.93		1.40	3.40E-01		1.62E+01
		1299.16		1.63	8.63E+00		1.34E+01
		1408.00		20.80	-8.05E-01		9.47E-01
	EU-154	123.10		40.50	-5.66E-02	1.80E-01	1.80E-01
		723.36		19.70	4.90E-01		9.68E-01
		873.23		11.45	5.27E-01		1.50E+00
		1004.78		17.90	8.10E-01		1.40E+00
		1274.54		35.50	-1.80E-01		6.32E-01
	EU-155	86.54		34.00	-6.45E-02	2.85E-01	2.85E-01
		105.31		20.60	-6.59E-02		3.42E-01
+	PB-212	74.81	*	10.50	9.07E-01	4.07E-01	6.88E-01
		77.11	*	17.70	7.73E-01		4.07E-01
		87.19		6.27	1.53E+00		1.59E+00
	RA-226d	186.11		3.28	2.46E+00	3.97E-01	3.16E+00
		241.92		7.46	5.78E-01		1.96E+00
		295.09		19.20	3.38E-01		6.33E-01
		351.87		37.10	4.59E-01		3.97E-01
		609.31		46.10	2.73E-01		4.26E-01
		1120.27		15.00	1.04E+00		1.83E+00
		1764.49		15.90	1.72E+00		1.89E+00
+	TH-232d	238.58	*	43.60	4.35E-01	2.76E-01	2.76E-01
		338.42	*	12.40	9.01E-01		7.63E-01
		583.02	*	30.87	6.32E-01		4.46E-01
		911.16		29.00	8.07E-01		9.06E-01
		968.97		17.40	1.45E+00		1.53E+00
+	U-235	143.79		10.50	-4.98E-01	1.82E-01	6.89E-01
		163.38		4.70	4.45E-01		1.75E+00
		185.74	*	53.00	1.29E-01		1.82E-01
		205.33		4.70	-1.03E+00		1.84E+00
+	U-238d	63.29	*	3.80	2.54E+00	1.81E+00	2.57E+00
		92.56	*	5.41	2.22E+00		1.81E+00
	AM-241	59.54		35.70	2.26E-02	2.11E-01	2.11E-01
	CM-243	99.52		14.40	9.73E-02	3.15E-01	4.95E-01
		103.73		23.00	2.09E-01		3.15E-01
		116.93		8.32	-4.90E-01		9.10E-01
		228.19		10.56	1.93E-01		8.51E-01
		277.60		14.00	4.61E-01		7.22E-01
	CM-245	99.52		21.10	6.64E-02	2.16E-01	3.38E-01
		103.73		33.60	1.43E-01		2.16E-01
		116.93		12.20	-3.34E-01		6.20E-01
		174.94		9.50	1.25E-01		8.82E-01

Analysis Report for RCF19762

J16VR8 SAF:RC-087 FF2/618-7 Soil Sample

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Reviewed and Approved: EDWARD S. WALLACE

JUN 02 2008 Edward S Wallace

(print/sign/date)

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-087-139	Page 1 of 1

Collector B Lawrence, E. Harries	**Company Contact** Joan Kessner **Telephone No.** 509-375-4688	**Project Coordinator** KESSNER, JH	**Price Code** / **Data Turnaround** 24 Hours
Project Designation 618-7 Burial Ground - Soil	**Sampling Location** 618-7 Burial Ground/Stockpiles	**SAF No.** RC-087	
Ice Chest No.	**Field Logbook No.** EL-1395-13 / **COA** RG61872600	**Method of Shipment**	
Shipped To Radiological Counting Facility	**Offsite Property No.**	**Bill of Lading/Air Bill No.**	

POSSIBLE SAMPLE HAZARDS/REMARKS

Potential Radiological and Beryllium contamination

Special Handling and/or Storage

None

Preservation	None											
Type of Container	Snap Vial											
No. of Container(s)	1											
Volume	80g											
SAMPLE ANALYSIS	RCF GEA Shipping Screen											

Sample No.	Matrix *	Sample Date	Sample Time			RCF							
J16VR7	SOIL	6/2/08	0800	X		19761							D-013
J16VR8	SOIL	6/2/08	0805	X		19762							D-014
J16VR9	SOIL	6/2/08	0810	X		19763							D-015

CHAIN OF POSSESSION	Date/Time	Sign/Print Names: Received By/Stored In	Date/Time
Relinquished By/Removed From: B Lawrence	0920 6-2-08	Received By/Stored In: RT Griffman / RT Griffman	0920 6/2/08
Relinquished By/Removed From: RT Griffman / RT Griffman	0940 6/2/08	Received By/Stored In: M Stankovich	0940 JUN 02 2008
Relinquished By/Removed From: M Stankovich	1000 JUN 02 2008	Received By/Stored In: RCF D. Miller / D. Miller	1000 6-2-08
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

SPECIAL INSTRUCTIONS

None

Matrix *

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

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

WCH-EE-011

RCF 19762

Radiological Counting Facility

Analysis Report for RCF19763

J16VR9 SAF:RC-087 FF2/618-7 Soil Sample

GAMMA SPECTRUM ANALYSIS

Sample Identification	: RCF19763
Sample Description	: J16VR9 SAF:RC-087 FF2/618-7 Soil Sample
Sample Type	: 50 gram pill box
Unit	:
Sample Point	
Sample Size	: 4.700E+01 grams
Facility	: Default
Sample Taken On	: 6/2/2008 8:10:00AM
Acquisition Started	: 6/2/2008 2:13:48PM
Procedure	: 50 gram pill box
Operator	: RCT
Detector Name	: BEGE
Geometry	: 50 ml Pill Box
Live Time	: 3600.0 seconds
Real Time	: 3600.2 seconds
Dead Time	: 0.01 %
Peak Locate Threshold	: 3.00
Peak Locate Range (in channels)	: 80 - 4096
Peak Area Range (in channels)	: 80 - 4096
Identification Energy Tolerance	: 1.300 keV
Energy Calibration Used Done On	: 3/27/2008
Efficiency Calibration Used Done On	: 3/31/2008
Efficiency Calibration Description	: 50 ml Pill Box 3-31-2008
Sample Number	: 19624

J16VX1

INTERFERENCE CORRECTED REPORT

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/grams)	Wt mean Activity Uncertainty	Comments
K-40	0.998	1.63E+01	3.47E+00	
PB-212	0.707	1.01E+00	1.46E-01	
RA-226d	0.629	5.51E-01	1.61E-01	
TH-232d	0.455	6.40E-01	1.62E-01	

Analysis Report for RCF19763

J16VR9 SAF:RC-087 FF2/618-7 Soil Sample

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity
d = identified by daughter product energy lines assumed to be in secular equilibrium
Errors quoted at 2.000 sigma

UNIDENTIFIED PEAKS

Peak Locate Performed on : 6/2/2008 3:13:59PM
Peak Locate From Channel : 80
Peak Locate To Channel : 4096

Peak No.	Energy (keV)	Peak Rate (CPS)	Peak Rate (%) Uncertainty

All peaks were identified.

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet
Errors quoted at 2.000 sigma

NP = No Peak
UK = Unknown

NUCLIDE MDA REPORT

Nuclide Library Used : \\GOZER\ApexRoot\Default\Library\RCF UNKNOWN.NLB

	Nuclide Name	Energy (keV)		Yield(%)	Activity (pCi/grams)	Nuclide MDA (pCi/grams)	Line MDA (pCi/grams)
+	K-40	1460.83	*	10.67	1.63E+01	2.34E+00	2.34E+00
	CO-60	1173.24		99.90	1.68E-02	3.07E-01	3.27E-01
		1332.50		99.98	-2.47E-01		3.07E-01
	NB-94	702.63		99.81	1.54E-01	2.09E-01	2.10E-01
		871.10		99.89	8.39E-02		2.09E-01
	AG-108m	433.94		90.50	-6.22E-02	1.25E-01	1.25E-01
		614.28		89.80	3.86E-03		2.30E-01
		722.94		90.80	-6.80E-03		2.52E-01
	CS-137	661.66		85.21	1.32E-01	2.15E-01	2.15E-01
	EU-152	40.12		38.40	-4.30E-02	1.12E-01	1.12E-01
		45.38		11.10	-1.20E-01		2.92E-01
		121.78		28.40	-6.20E-02		1.44E-01
		244.69		7.51	-7.43E-01		1.06E+00
		344.29		26.60	-6.05E-02		3.55E-01
		411.12		2.23	-2.57E-02		5.44E+00
		443.89		2.80	-1.32E+00		3.83E+00
		778.92		12.98	4.70E-01		1.68E+00
		867.38		4.21	-7.16E+00		4.53E+00
		964.11		14.50	-1.21E+00		1.95E+00
		1085.89		9.94	-5.20E-01		3.13E+00

Analysis Report for RCF19763

J16VR9 SAF:RC-087 FF2/618-7 Soil Sample

	Nuclide Name	Energy (keV)		Yield(%)	Activity (pCi/grams)	Nuclide MDA (pCi/grams)	Line MDA (pCi/grams)
		1089.71		1.71	5.95E-01		1.76E+01
		1112.07		13.60	1.15E-01		2.17E+00
		1212.93		1.40	-5.24E+00		2.51E+01
		1299.16		1.63	-2.61E+00		1.94E+01
		1408.00		20.80	-1.12E+00		1.41E+00
	EU-154	123.10		40.50	4.73E-02	1.13E-01	1.13E-01
		723.36		19.70	-5.60E-01		1.15E+00
		873.23		11.45	4.27E-01		1.78E+00
		1004.78		17.90	2.23E-01		1.44E+00
		1274.54		35.50	-3.21E-01		8.50E-01
	EU-155	86.54		34.00	5.35E-02	1.75E-01	1.75E-01
		105.31		20.60	-1.36E-01		1.98E-01
+	PB-212	74.81	*	10.50	1.34E+00	2.30E-01	4.21E-01
		77.11	*	17.70	8.82E-01		2.30E-01
		87.19		6.27	1.08E+00		9.38E-01
+	RA-226d	186.11		3.28	-1.71E-03	3.41E-01	2.24E+00
		241.92		7.46	6.81E-01		1.32E+00
		295.09	*	19.20	6.15E-01		6.21E-01
		351.87	*	37.10	5.21E-01		3.41E-01
		609.31	*	46.10	5.59E-01		3.54E-01
		1120.27		15.00	-1.51E-01		1.98E+00
		1764.49		15.90	-2.96E-01		2.33E+00
+	TH-232d	238.58	*	43.60	5.55E-01	2.45E-01	2.45E-01
		338.42		12.40	8.45E-01		1.04E+00
		583.02	*	30.87	9.90E-01		4.41E-01
		911.16		29.00	5.08E-01		1.03E+00
		968.97		17.40	6.97E-01		1.74E+00
	U-235	143.79		10.50	-2.93E-01	1.48E-01	4.91E-01
		163.38		4.70	4.33E-01		1.29E+00
		185.74		53.00	8.81E-02		1.48E-01
		205.33		4.70	-5.22E-01		1.42E+00
	U-238d	63.29		3.80	4.72E-01	9.97E-01	1.13E+00
		92.56		5.41	4.66E-01		9.97E-01
	AM-241	59.54		35.70	9.48E-03	9.36E-02	9.36E-02
	CM-243	99.52		14.40	1.09E-01	1.97E-01	2.65E-01
		103.73		23.00	1.41E-01		1.97E-01
		116.93		8.32	-7.14E-02		4.93E-01
		228.19		10.56	1.10E-01		7.55E-01
		277.60		14.00	7.53E-02		7.07E-01
	CM-245	99.52		21.10	7.41E-02	1.35E-01	1.81E-01
		103.73		33.60	9.66E-02		1.35E-01
		116.93		12.20	-4.87E-02		3.36E-01
		174.94		9.50	4.60E-02		6.74E-01

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Analysis Report for RCF19763

J16VR9 SAF:RC-087 FF2/618-7 Soil Sample

Reviewed and Approved: EDWARD S. WALLACE

JUN 02 2008

(print/sign/date)

TESTAMERICA

43

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-087-139	Page 1 of 1

Collector B Lawrence, E. Harries	Company Contact Joan Kessner	Telephone No. 509-375-4688	Project Coordinator KESSNER, JH
Price Code	Data Turnaround 24 Hours		
Project Designation 618-7 Burial Ground - Soil	Sampling Location 618-7 Burial Ground/Stockpiles		SAF No. RC-087
Ice Chest No.	Field Logbook No. EL-1395-13	COA RG61872600	Method of Shipment
Shipped To Radiological Counting Facility	Offsite Property No.		Bill of Lading/Air Bill No.

POSSIBLE SAMPLE HAZARDS/REMARKS

Potential Radiological and Beryllium contamination

Special Handling and/or Storage

None

Preservation	None										
Type of Container	Snap Vial										
No. of Container(s)	1										
Volume	80g										
SAMPLE ANALYSIS	RCF GEA Shipping Screen										
Sample No. / Matrix * / Sample Date / Sample Time					RCF						
J16VR7 / SOIL / 6/2/08 / 0800	X				19761						D-013
J16VR8 / SOIL / 6/2/08 / 0805	X				19762						D-014
J16VR9 / SOIL / 6/2/08 / 0810	X				19763						D-015

CHAIN OF POSSESSION	Sign/Print Names	
Relinquished By/Removed From B Lawrence 6-2-08	Date/Time 0920	Received By/Stored In RT Coffman / RT Coffman 6/2/08
Relinquished By/Removed From RT Coffman / RT Coffman 6/2/08	Date/Time 0940	Received By/Stored In 0940 M Stankovich JUN 02 2008
Relinquished By/Removed From 1000 M Stankovich JUN 02 2008	Date/Time	Received By/Stored In RCF D. Miller 6-2-08
Relinquished By/Removed From	Date/Time	Received By/Stored In
Relinquished By/Removed From	Date/Time	Received By/Stored In
Relinquished By/Removed From	Date/Time	Received By/Stored In

Received By/Stored In	Date/Time 0920	Received By/Stored In 6/2/08	Date/Time
Received By/Stored In 0940	Date/Time JUN 02 2008	Received By/Stored In RCF	Date/Time 1000
Received By/Stored In D. Miller	Date/Time 6-2-08		

SPECIAL INSTRUCTIONS

None

Matrix *

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

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

WCH-EE-011

RCF 19763

Radiological Counting Facility

Analysis Report for RCF19758

J16VT0 SAF:RC-087 FF2/618-7 Soil Sample

GAMMA SPECTRUM ANALYSIS

Sample Identification	: RCF19758
Sample Description	: J16VT0 SAF:RC-087 FF2/618-7 Soil Sample
Sample Type	: 50 gram pill box
Unit	:
Sample Point	
Sample Size	: 5.300E+01 grams
Facility	: Default
Sample Taken On	: 6/2/2008 8:15:00AM
Acquisition Started	: 6/2/2008 12:26:03PM
Procedure	: 50 gram pill box
Operator	: RCT
Detector Name	: REGIE02
Geometry	: 50 ml Pill Box
Live Time	: 3600.0 seconds
Real Time	: 3652.5 seconds
Dead Time	: 1.44 %
Peak Locate Threshold	: 3.00
Peak Locate Range (in channels)	: 80 - 4096
Peak Area Range (in channels)	: 80 - 4096
Identification Energy Tolerance	: 1.300 keV
Energy Calibration Used Done On	: 1/10/2008
Efficiency Calibration Used Done On	: 1/11/2008
Efficiency Calibration Description	: 50g Pill Box 1-10-2008
Sample Number	: 19619

J16VX3

INTERFERENCE CORRECTED REPORT

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/grams)	Wt mean Activity Uncertainty	Comments
K-40		0.986	1.22E+01	2.89E+00	
PB-212		0.710	5.75E-01	1.47E-01	
RA-226d		0.612	4.70E-01	1.57E-01	
TH-232d		0.847	5.11E-01	1.40E-01	
U-238d	@	0.999	1.09E+00	1.07E+00	

Analysis Report for RCF19758

J16VT0 SAF:RC-087 FF2/618-7 Soil Sample

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity
d = identified by daughter product energy lines assumed to be in secular equilibrium
Errors quoted at 2.000 sigma

UNIDENTIFIED PEAKS

Peak Locate Performed on : 6/2/2008 1:26:58PM
Peak Locate From Channel : 80
Peak Locate To Channel : 4096

Peak No.	Energy (keV)	Peak Rate (CPS)	Peak Rate (%) Uncertainty
1	46.74 Pb-210	6.96E-03	49.37
6	143.42 U-235	7.83E-03	52.13

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet
Errors quoted at 2.000 sigma

NP = No Peak
UK = Unknown

NUCLIDE MDA REPORT

Nuclide Library Used : \\GOZER\ApexRoot\Default\Library\RCF UNKNOWN.NLB

	Nuclide Name	Energy (keV)		Yield(%)	Activity (pCi/grams)	Nuclide MDA (pCi/grams)	Line MDA (pCi/grams)
+	K-40	1460.83	*	10.67	1.22E+01	2.98E+00	2.98E+00
	CO-60	1173.24		99.90	-6.74E-02	2.15E-01	2.60E-01
		1332.50		99.98	1.70E-02		2.15E-01
	NB-94	702.63		99.81	-4.00E-02	2.11E-01	2.11E-01
		871.10		99.89	1.66E-02		2.34E-01
	AG-108m	433.94		90.50	2.54E-02	1.79E-01	1.79E-01
		614.28		89.80	-1.23E-01		2.94E-01
		722.94		90.80	1.53E-01		2.67E-01
	CS-137	661.66		85.21	1.16E-01	2.53E-01	2.53E-01
	EU-152	40.12		38.40	1.07E-01	3.02E-01	3.02E-01
		45.38		11.10	7.79E-01		9.71E-01
		121.78		28.40	-1.12E-01		3.18E-01
		244.69		7.51	-1.41E+00		1.77E+00
		344.29		26.60	-8.27E-01		6.21E-01
		411.12		2.23	-7.00E-01		7.26E+00
		443.89		2.80	-3.65E+00		5.99E+00
		778.92		12.98	-7.03E-01		1.52E+00
		867.38		4.21	3.41E+00		6.15E+00

Analysis Report for RCF19758

J16VT0 SAF:RC-087 FF2/618-7 Soil Sample

	Nuclide Name	Energy (keV)		Yield(%)	Activity (pCi/grams)	Nuclide MDA (pCi/grams)	Line MDA (pCi/grams)
		964.11		14.50	-4.34E-01		2.04E+00
		1085.89		9.94	-2.02E+00		2.16E+00
		1089.71		1.71	-5.17E+00		1.34E+01
		1112.07		13.60	-2.72E+00		1.99E+00
		1212.93		1.40	-1.26E+01		2.04E+01
		1299.16		1.63	5.61E+00		2.00E+01
		1408.00		20.80	9.95E-01		1.43E+00
	EU-154	123.10		40.50	-1.01E-01	2.25E-01	2.25E-01
		723.36		19.70	6.21E-01		1.23E+00
		873.23		11.45	-6.04E-01		1.94E+00
		1004.78		17.90	8.19E-01		1.51E+00
		1274.54		35.50	1.97E-01		6.70E-01
	EU-155	86.54		34.00	1.17E-01	3.14E-01	3.14E-01
		105.31		20.60	-2.19E-01		4.50E-01
+	PB-212	74.81	*	10.50	6.42E-01	3.29E-01	6.68E-01
		77.11	*	17.70	5.54E-01		3.29E-01
		87.19		6.27	4.45E-01		1.71E+00
+	RA-226d	186.11		3.28	3.10E+00	3.43E-01	3.79E+00
		241.92		7.46	2.48E-01		2.42E+00
		295.09	*	19.20	4.28E-01		5.36E-01
		351.87	*	37.10	5.18E-01		3.43E-01
		609.31	*	46.10	4.36E-01		4.07E-01
		1120.27		15.00	7.31E-01		2.06E+00
		1764.49		15.90	4.71E-01		1.93E+00
+	TH-232d	238.58	*	43.60	4.27E-01	2.73E-01	2.73E-01
		338.42	*	12.40	8.94E-01		6.87E-01
		583.02	*	30.87	5.20E-01		4.44E-01
		911.16	*	29.00	6.22E-01		5.56E-01
		968.97		17.40	1.76E+00		1.81E+00
	U-235	143.79		10.50	-5.40E-02	2.34E-01	1.01E+00
		163.38		4.70	-2.03E+00		2.31E+00
		185.74		53.00	1.92E-01		2.34E-01
		205.33		4.70	1.60E+00		2.78E+00
+	U-238d	63.29	*	3.80	1.09E+00	1.40E+00	1.73E+00
		92.56	*	5.41	1.02E+00		1.40E+00
	AM-241	59.54		35.70	1.31E-02	2.80E-01	2.80E-01
	CM-243	99.52		14.40	-2.75E-01	3.97E-01	6.30E-01
		103.73		23.00	-2.51E-01		3.97E-01
		116.93		8.32	-4.38E-01		1.08E+00
		228.19		10.56	7.28E-02		1.21E+00
		277.60		14.00	4.03E-01		1.01E+00
	CM-245	99.52		21.10	-1.87E-01	2.72E-01	4.30E-01
		103.73		33.60	-1.72E-01		2.72E-01
		116.93		12.20	-2.98E-01		7.38E-01
		174.94		9.50	-2.08E-01		1.19E+00

Analysis Report for RCF19758

J16VT0 SAF:RC-087 FF2/618-7 Soil Sample

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Reviewed and Approved: EDWARD S. WALLACE

JUN 02 2008 Edward S Wallace
(print/sign/date)

TESTAMERICA

48

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-087-140	Page 1 of 1

Collector B Lawrence, E. Harries	Company Contact Joan Kessner	Telephone No. 509-375-4688	Project Coordinator KESSNER, JH
Project Designation 618-7 Burial Ground - Soil	Sampling Location 618-7 Burial Ground/Stockpiles		SAF No. RC-087
Ice Chest No.	Field Logbook No. EL-1395-13	COA RG61872600	Method of Shipment
Shipped To Radiological Counting Facility	Offsite Property No.		Bill of Lading/Air Bill No.

Price Code

Data Turnaround
24 Hours

POSSIBLE SAMPLE HAZARDS/REMARKS

Potential Radiological and Beryllium contamination

Special Handling and/or Storage

None

Preservation	None											
Type of Container	Snap Vial											
No. of Container(s)	1											
Volume	80g											
SAMPLE ANALYSIS	RCF GEA Shipping Screen											

Sample No.	Matrix *	Sample Date	Sample Time			RCF							
J16VT0	SOIL	6/2/08	0815	X		19758							D-016
J16VT1	SOIL	6/2/08	0820	X		19759							E-016
J16VT2	SOIL	6/2/08	0825	X		19760							F-016

CHAIN OF POSSESSION — **Sign/Print Names**

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
B Lawrence	6.2.08 0920	RT Coffman/RT Coffman	0920 6/2/08
RT Coffman/RT Coffman	6/2/08 0940	MSTankovich	0940 JUN 02 2008
MSTankovich	JUN 02 2008 1000	D.Miller/DL Miller	RCF 1000 6-2-08

SPECIAL INSTRUCTIONS
None

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

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

WCH-EE-011

RCF19758

Analysis Report for RCF19759
J16VT1 SAF:RC-087 FF2/618-7 Soil Sample

GAMMA SPECTRUM ANALYSIS

Sample Identification	: RCF19759
Sample Description	: J16VT1 SAF:RC-087 FF2/618-7 Soil Sample
Sample Type	: 50 gram pill box
Unit	:
Sample Point	
Sample Size	: 4.800E+01 grams
Facility	: Default
Sample Taken On	: 6/2/2008 8:19:00AM
Acquisition Started	: 6/2/2008 12:26:10PM
Procedure	: 50 gram pill box
Operator	: RCT
Detector Name	: PGTWHITE
Geometry	: 50 ml Pill Box
Live Time	: 3600.0 seconds
Real Time	: 3600.7 seconds
Dead Time	: 0.02 %
Peak Locate Threshold	: 3.00
Peak Locate Range (in channels)	: 80 - 4096
Peak Area Range (in channels)	: 80 - 4096
Identification Energy Tolerance	: 1.300 keV
Energy Calibration Used Done On	: 1/31/2008
Efficiency Calibration Used Done On	: 2/4/2008
Efficiency Calibration Description	: 50ml Pill Box (1234-95-2) 2/4/2008
Sample Number	: 19620

J16VX5

INTERFERENCE CORRECTED REPORT

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/grams)	Wt mean Activity Uncertainty	Comments
K-40	1.000	1.74E+01	3.68E+00	
PB-212	0.709	8.97E-01	2.15E-01	
RA-226d	0.353	6.20E-01	2.48E-01	
TH-232d	0.421	8.46E-01	2.52E-01	

Analysis Report for RCF19759

J16VT1 SAF:RC-087 FF2/618-7 Soil Sample

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity
d = identified by daughter product energy lines assumed to be in secular equilibrium

Errors quoted at 2.000 sigma

UNIDENTIFIED PEAKS

Peak Locate Performed on : 6/2/2008 1:26:17PM
Peak Locate From Channel : 80
Peak Locate To Channel : 4096

Peak No.	Energy (keV)	Peak Rate (CPS)	Peak Rate (%) Uncertainty

All peaks were identified.

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet
NP = No Peak
UK = Unknown

Errors quoted at 2.000 sigma

NUCLIDE MDA REPORT

Nuclide Library Used : \\GOZER\ApexRoot\Default\Library\RCF UNKNOWN.NLB

	Nuclide Name	Energy (keV)		Yield(%)	Activity (pCi/grams)	Nuclide MDA (pCi/grams)	Line MDA (pCi/grams)
+	K-40	1460.83	*	10.67	1.74E+01	3.21E+00	3.21E+00
	CO-60	1173.24		99.90	4.15E-02	3.13E-01	3.13E-01
		1332.50		99.98	-1.89E-02		3.45E-01
	NB-94	702.63		99.81	1.39E-01	2.81E-01	2.98E-01
		871.10		99.89	-2.83E-01		2.81E-01
	AG-108m	433.94		90.50	6.60E-02	2.39E-01	2.39E-01
		614.28		89.80	-1.02E-01		3.19E-01
		722.94		90.80	-9.83E-02		3.45E-01
	CS-137	661.66		85.21	-2.15E-01	2.63E-01	2.63E-01
	EU-152	40.12		38.40	-4.76E-03	3.45E-01	3.45E-01
		45.38		11.10	4.75E-01		1.17E+00
		121.78		28.40	-8.92E-02		3.73E-01
		244.69		7.51	-1.37E-01		2.33E+00
		344.29		26.60	-1.89E-01		7.63E-01
		411.12		2.23	9.84E-01		8.23E+00
		443.89		2.80	3.45E+00		7.93E+00
		778.92		12.98	6.72E-02		2.06E+00
		867.38		4.21	-3.03E+00		7.28E+00
		964.11		14.50	2.40E-01		2.33E+00
		1085.89		9.94	2.43E+00		3.57E+00

Analysis Report for RCF19759

J16VT1 SAF:RC-087 FF2/618-7 Soil Sample

	Nuclide Name	Energy (keV)		Yield(%)	Activity (pCi/grams)	Nuclide MDA (pCi/grams)	Line MDA (pCi/grams)
		1089.71		1.71	-7.31E+00		1.94E+01
		1112.07		13.60	-2.14E+00		2.48E+00
		1212.93		1.40	-2.05E+01		2.77E+01
		1299.16		1.63	-1.35E+01		2.35E+01
		1408.00		20.80	-1.49E-01		1.67E+00
	EU-154	123.10		40.50	8.81E-02	2.70E-01	2.70E-01
		723.36		19.70	-4.54E-01		1.59E+00
		873.23		11.45	-2.91E-01		2.56E+00
		1004.78		17.90	4.77E-01		1.82E+00
		1274.54		35.50	1.95E-01		9.89E-01
	EU-155	86.54		34.00	1.03E-01	3.78E-01	3.78E-01
		105.31		20.60	-3.45E-01		4.77E-01
+	PB-212	74.81	*	10.50	1.01E+00	5.13E-01	9.61E-01
		77.11	*	17.70	8.52E-01		5.13E-01
		87.19		6.27	8.35E-01		2.09E+00
+	RA-226d	186.11		3.28	5.19E+00	4.62E-01	5.22E+00
		241.92		7.46	2.54E-01		3.43E+00
		295.09		19.20	1.06E+00		1.04E+00
		351.87	*	37.10	7.39E-01		4.62E-01
		609.31	*	46.10	4.47E-01		6.18E-01
		1120.27		15.00	8.44E-01		2.77E+00
		1764.49		15.90	1.48E+00		2.72E+00
+	TH-232d	238.58	*	43.60	7.83E-01	4.48E-01	4.48E-01
		338.42		12.40	-1.28E+00		1.62E+00
		583.02	*	30.87	9.80E-01		6.14E-01
		911.16		29.00	4.46E-02		1.44E+00
		968.97		17.40	7.06E-01		2.11E+00
	U-235	143.79		10.50	-1.15E-01	3.23E-01	1.09E+00
		163.38		4.70	-1.43E+00		2.66E+00
		185.74		53.00	3.21E-01		3.23E-01
		205.33		4.70	-2.76E-01		2.90E+00
	U-238d	63.29		3.80	2.74E+00	2.65E+00	3.05E+00
		92.56		5.41	5.38E+00		2.65E+00
	AM-241	59.54		35.70	-1.46E-02	2.78E-01	2.78E-01
	CM-243	99.52		14.40	-2.29E-01	4.25E-01	6.68E-01
		103.73		23.00	-1.14E-01		4.25E-01
		116.93		8.32	-1.53E-01		1.25E+00
		228.19		10.56	8.83E-01		1.52E+00
		277.60		14.00	6.49E-01		1.22E+00
	CM-245	99.52		21.10	-1.57E-01	2.91E-01	4.56E-01
		103.73		33.60	-7.77E-02		2.91E-01
		116.93		12.20	-1.05E-01		8.54E-01
		174.94		9.50	8.32E-01		1.39E+00

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Analysis Report for RCF19759

J16VT1 SAF:RC-087 FF2/618-7 Soil Sample

Reviewed and Approved: EDWARD S. WALLACE

JUN 02 2008 Edward S Wallace

(print/sign/date)

TESTAMERICA

53

Washington Closure Hanford

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

RC-087-140

Page 1 of 1

Collector: B Lawrence, E. Harries	Company Contact: Joan Kessner	Telephone No.: 509-375-4688	Project Coordinator: KESSNER, JH
Project Designation: 618-7 Burial Ground - Soil	Sampling Location: 618-7 Burial Ground/Stockpiles		SAF No.: RC-087
Ice Chest No.	Field Logbook No.: EL-1395-13	COA: RG61872600	Method of Shipment
Shipped To: Radiological Counting Facility	Offsite Property No.		Bill of Lading/Air Bill No.

Price Code

Data Turnaround: **24 Hours**

POSSIBLE SAMPLE HAZARDS/REMARKS

Potential Radiological and Beryllium contamination

Special Handling and/or Storage

None

Preservation	None												
Type of Container	Snap Vial												
No. of Container(s)	1												
Volume	80g												
SAMPLE ANALYSIS	RCF GEA Shipping Screen												
Sample No.	Matrix *	Sample Date	Sample Time			RCF							
J16VT0	SOIL	6/2/08	0815	X		19758							D-016
J16VT1	SOIL	6/2/08	0820	X		19759							E-016
J16VT2	SOIL	6/2/08	0825	X		19760							F-016

CHAIN OF POSSESSION — Sign/Print Names

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
B Lawrence	6-2-08 0920	RT Coffman/RT Coffman	6/2/08 0920
RT Coffman/RT Coffman	6/2/08 0940	MSTankovich	0940 JUN 02 2008
MSTankovich	JUN 02 2008 1000	D.Miller/DL	RCF 6-2-08 1000

SPECIAL INSTRUCTIONS

None

Matrix *

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

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

WCH-EE-011

RCF 19759

Analysis Report for RCF19760

J16VT2 SAF:RC-087 FF2/618-7 Soil Sample

GAMMA SPECTRUM ANALYSIS

Sample Identification	: RCF19760
Sample Description	: J16VT2 SAF:RC-087 FF2/618-7 Soil Sample
Sample Type	: 80 gram pill box
Unit	:
Sample Point	
Sample Size	: 6.200E+01 grams
Facility	: Default
Sample Taken On	: 6/2/2008 8:25:00AM
Acquisition Started	: 6/2/2008 12:26:18PM
Procedure	: 80 gram pill box
Operator	: RCT
Detector Name	: BEGE
Geometry	: 80 Gram Pill Box
Live Time	: 3600.0 seconds
Real Time	: 3600.2 seconds
Dead Time	: 0.01 %
Peak Locate Threshold	: 3.00
Peak Locate Range (in channels)	: 80 - 4096
Peak Area Range (in channels)	: 80 - 4096
Identification Energy Tolerance	: 1.300 keV
Energy Calibration Used Done On	: 3/27/2008
Efficiency Calibration Used Done On	: 4/1/2008
Efficiency Calibration Description	: 80g Pill box 4-1-2008
Sample Number	: 19621

J16VT7

INTERFERENCE CORRECTED REPORT

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/grams)	Wt mean Activity Uncertainty	Comments
K-40	1.000	1.03E+01	2.62E+00	
PB-212	0.710	7.03E-01	1.74E-01	
RA-226d	0.633	4.58E-01	1.29E-01	
TH-232d	0.439	5.13E-01	1.69E-01	

Analysis Report for RCF19760

J16VT2 SAF:RC-087 FF2/618-7 Soil Sample

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity
d = identified by daughter product energy lines assumed to be in secular equilibrium
Errors quoted at 2.000 sigma

UNIDENTIFIED PEAKS

Peak Locate Performed on : 6/2/2008 1:26:28PM
Peak Locate From Channel : 80
Peak Locate To Channel : 4096

Peak No.	Energy (keV)	Peak Rate (CPS)	Peak Rate (%) Uncertainty
6	510.67 Annihilation or Single Escape Peak	5.39E-03	57.46

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet
Errors quoted at 2.000 sigma

NP = No Peak
UK = Unknown

NUCLIDE MDA REPORT

Nuclide Library Used : \\GOZER\ApexRoot\Default\Library\RCF UNKNOWN.NLB

	Nuclide Name	Energy (keV)		Yield(%)	Activity (pCi/grams)	Nuclide MDA (pCi/grams)	Line MDA (pCi/grams)
+	K-40	1460.83	*	10.67	1.03E+01	1.88E+00	1.88E+00
	CO-60	1173.24		99.90	-1.40E-01	2.11E-01	2.29E-01
		1332.50		99.98	-4.08E-02		2.11E-01
	NB-94	702.63		99.81	4.54E-02	1.69E-01	1.69E-01
		871.10		99.89	5.45E-02		1.75E-01
	AG-108m	433.94		90.50	7.06E-03	1.01E-01	1.01E-01
		614.28		89.80	-4.23E-02		1.83E-01
		722.94		90.80	3.87E-02		1.73E-01
	CS-137	661.66		85.21	1.67E-02	1.78E-01	1.78E-01
	EU-152	40.12		38.40	-4.09E-02	1.24E-01	1.24E-01
		45.38		11.10	-1.96E-01		2.85E-01
		121.78		28.40	-5.62E-02		1.55E-01
		244.69		7.51	-1.23E+00		9.51E-01
		344.29		26.60	-1.76E-02		3.42E-01
		411.12		2.23	6.72E-01		4.49E+00
		443.89		2.80	-1.98E-01		3.35E+00
		778.92		12.98	-4.64E-01		9.83E-01
		867.38		4.21	-2.10E+00		4.29E+00
		964.11		14.50	1.06E+00		1.60E+00

Analysis Report for RCF19760

J16VT2 SAF:RC-087 FF2/618-7 Soil Sample

	Nuclide Name	Energy (keV)		Yield(%)	Activity (pCi/grams)	Nuclide MDA (pCi/grams)	Line MDA (pCi/grams)
		1085.89		9.94	6.94E-01		2.28E+00
		1089.71		1.71	-7.12E+00		1.36E+01
		1112.07		13.60	-7.97E-01		1.54E+00
		1212.93		1.40	-3.10E+00		1.89E+01
		1299.16		1.63	-3.67E-01		1.52E+01
		1408.00		20.80	-3.45E-01		1.13E+00
	EU-154	123.10		40.50	-4.20E-02	1.19E-01	1.19E-01
		723.36		19.70	3.84E-02		8.12E-01
		873.23		11.45	1.43E-01		1.50E+00
		1004.78		17.90	-4.23E-01		9.56E-01
		1274.54		35.50	1.20E-01		6.43E-01
	EU-155	86.54		34.00	1.10E-01	1.57E-01	1.57E-01
		105.31		20.60	2.33E-02		1.87E-01
+	PB-212	74.81	*	10.50	6.29E-01	2.15E-01	4.32E-01
		77.11	*	17.70	7.68E-01		2.15E-01
		87.19		6.27	5.52E-01		8.23E-01
+	RA-226d	186.11		3.28	1.66E+00	2.43E-01	2.29E+00
		241.92		7.46	1.26E+00		1.27E+00
		295.09	*	19.20	7.22E-01		4.20E-01
		351.87	*	37.10	5.66E-01		2.43E-01
		609.31	*	46.10	3.01E-01		2.63E-01
		1120.27		15.00	7.59E-01		1.71E+00
		1764.49		15.90	1.90E+00		2.37E+00
+	TH-232d	238.58	*	43.60	5.47E-01	2.09E-01	2.09E-01
		338.42		12.40	9.25E-01		8.89E-01
		583.02	*	30.87	4.67E-01		3.56E-01
		911.16		29.00	2.85E-01		7.57E-01
		968.97		17.40	4.09E-01		1.32E+00
	U-235	143.79		10.50	-1.88E-01	1.43E-01	5.21E-01
		163.38		4.70	1.23E-01		1.28E+00
		185.74		53.00	9.17E-02		1.43E-01
		205.33		4.70	-9.99E-02		1.34E+00
	U-238d	63.29		3.80	3.98E-01	9.18E-01	9.73E-01
		92.56		5.41	6.35E-01		9.18E-01
	AM-241	59.54		35.70	-9.65E-03	7.85E-02	7.85E-02
	CM-243	99.52		14.40	2.06E-01	1.64E-01	2.75E-01
		103.73		23.00	9.62E-02		1.64E-01
		116.93		8.32	-5.35E-02		5.41E-01
		228.19		10.56	-6.84E-04		6.63E-01
		277.60		14.00	5.00E-01		6.72E-01
	CM-245	99.52		21.10	1.41E-01	1.13E-01	1.88E-01
		103.73		33.60	6.59E-02		1.13E-01
		116.93		12.20	-3.65E-02		3.69E-01
		174.94		9.50	3.39E-02		6.35E-01

Analysis Report for RCF19760

J16VT2 SAF:RC-087 FF2/618-7 Soil Sample

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Reviewed and Approved: **EDWARD S. WALLACE**

JUN 02 2008 Edward S Wallace
(print/sign/date)

TESTAMERICA

58

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		RC-087-140	Page 1 of 1
Collector: B Lawrence, E. Harries	Company Contact: Joan Kessner	Telephone No.: 509-375-4688	Project Coordinator: KESSNER, JH	Price Code / Data Turnaround: 24 Hours
Project Designation: 618-7 Burial Ground - Soil	Sampling Location: 618-7 Burial Ground/Stockpiles		SAF No.: RC-087	
Ice Chest No.	Field Logbook No.: EL-1395-13	COA: RG61872600	Method of Shipment	
Shipped To: Radiological Counting Facility	Offsite Property No.		Bill of Lading/Air Bill No.	

POSSIBLE SAMPLE HAZARDS/REMARKS

Potential Radiological and Beryllium contamination

Special Handling and/or Storage

None

Preservation	None											
Type of Container	Snap Vial											
No. of Container(s)	1											
Volume	80g											
SAMPLE ANALYSIS	RCF GEA Shipping Screen											
Sample No. / Matrix * / Sample Date / Sample Time					RCF							
J16VT0 / SOIL / 6/2/08 / 0815	X				19758							
J16VT1 / SOIL / 6/2/08 / 0820	X				19759							D-016
J16VT2 / SOIL / 6/2/08 / 0825	X				19760							E-016
												F-016

CHAIN OF POSSESSION — Sign/Print Names

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
B Lawrence	6-2-08 0920	RT Coffman/RT Coffman	0920 6/2/08
RT Coffman/RT Coffman	6/2/08 0940	MSTankovich	0940 JUN 02 2008
MSTankovich	JUN 02 2008 1000	D.Miller/DL Miller (RCF)	1000 6-2-08
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

SPECIAL INSTRUCTIONS

None

Matrix *

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

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

WCH-EE-011

RCF 19760

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Sample Check-in List

Date/Time Received: 6 3 08 0950 GM Screen Result 0.2K

Client: WCH SDG #: J00174 NA[ ] SAF #: RC-087 NA [ ]

Work Order Number: J8F030167 Chain of Custody # RC-087-149,-150

Shipping Container ID: N/A Air Bill # N/A

1. Custody Seals on shipping container intact? NA [ ] Yes [✓] No [ ]
2. Custody Seals dated and signed? NA [ ] Yes [✓] No [ ]
3. Chain of Custody record present? NA [ ] Yes [✓] No [ ]
4. Cooler Temperature: _____ NA [✓] 5. Vermiculite/packing materials is NA [✓] Wet [ ] Dry [ ]
6. Number of samples in shipping container: 6
7. Sample holding times exceeded? NA [✓] Yes [ ] No [ ]
8. Samples have:
   - ____ Tape
   - ✓ Custody Seals
   - ____ Hazard Lables
   - ✓ Appropriate Sample Lables
9. Samples are:
   - ✓ In Good Condition
   - ____ Broken
   - ____ Leaking
   - ____ Have Air Bubbles (Only for samples requiring no head space.)
10. Sample pH taken? NA [✓] SOIL pH<2 [ ] pH>2 [ ] pH>9 [ ] Amount HNO_3 Added _____
11. Sample Location, Sample Collector Listed? *
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [✓]
13. Description of anomalies (include sample numbers): _____

Sample Custodian: [signature] Date: 6 3 08

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person Contacted _____

[ ] No action necessary; process as is.

Project Manager _____ Date _____

TESTAMERICA

60

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-087-151	Page 1 of 1

Collector B Lawrence, E. Harries	**Company Contact** Joan Kessner	**Telephone No.** 509-375-4688	**Project Coordinator** KESSNER, JH
Price Code 2B	**Data Turnaround** 24 Hours		
Project Designation 618-7 Burial Ground - Soil	**Sampling Location** 618-7 Burial Ground/Stockpiles		**SAF No.** RC-087
Ice Chest No. ERC-97-079	**Field Logbook No.** EL-1395-13	**COA** RG61872600	**Method of Shipment** GOVERNMENT VEHICLE
Shipped To TestAmerica Incorporated, Richland	**Offsite Property No.** NA		**Bill of Lading/Air Bill No.** NA

POSSIBLE SAMPLE HAZARDS/REMARKS

Potential Radiological and Beryllium contamination

Special Handling and/or Storage

None

Preservation	None											
Type of Container	aG											
No. of Container(s)	1											
Volume	60mL											
SAMPLE ANALYSIS	See item (1) in Special Instructions.											

Sample No.	Matrix *	Sample Date	Sample Time										
J16VY5 KPDF9	SOIL	6-3-08	1500	X									E-012
J16VY7 KPDGJ	SOIL	6-3-08	1505	X									E-013
J16VY9 KPDGK	SOIL	6-3-08	1510	X									E-014
J16W01 KPDGN	SOIL	6-3-08	1515	X									E-015
J16W03 KPDGR	SOIL	6-3-08	1520	X									E-015

CHAIN OF POSSESSION — **Sign/Print Names**

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
B Lawrence	1545 6-3-08	RB KERKW/RB Kerk	1545 6-3-08
RB KERKW/RB Kerk	1620 6-3-08	REF 1B (1060)	1620 6-3-08
1060/1225 1B	JUN 04 2008	1225 MJ mstankovich	JUN 04 2008
MJ mstankovich	JUN 04 2008 1405	LULANE TAL	1405 6408
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time

SPECIAL INSTRUCTIONS

None

(1) Metals by ICP - 6010 - Quick Turn (Arsenic, Barium, Cadmium, Chromium, Lead, Selenium, Silver); Metals by ICP - 6010 - Quick Turn (Add On) (Aluminum, Beryllium, Copper, Iron, Zinc, Zirconium)

J8F040320
J001784 RW 6/4/08
DUE 6508

Sampler unavailable to remove samples from controlled storage. Shipper removed samples from storage location taking custody of samples for shipment to lab.

Matrix *

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

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

WCH-EE-011

TESTAMERICA

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-087-148	Page 1 of 1

Collector B Lawrence, E. Harries	**Company Contact** Joan Kessner	**Telephone No.** 509-375-4688	**Project Coordinator** KESSNER, JH
Price Code 2B	**Data Turnaround** 24 Hours		
Project Designation 618-7 Burial Ground - Soil	**Sampling Location** 618-7 Burial Ground/Stockpiles		**SAF No.** RC-087
Ice Chest No. EAL-97-079	**Field Logbook No.** EL-1395-13	**COA** RG61872600	**Method of Shipment** GOVERNMENT VEHICLE
Shipped To TestAmerica Incorporated, Richland	**Offsite Property No.** NA		**Bill of Lading/Air Bill No.** NA

POSSIBLE SAMPLE HAZARDS/REMARKS

Potential Radiological and Beryllium contamination

Special Handling and/or Storage

None

Preservation	None										
Type of Container	aG										
No. of Container(s)	1										
Volume	60mL										
SAMPLE ANALYSIS	See item (1) in Special Instructions.							TIE TO			
Sample No. / Matrix * / Sample Date / Sample Time											
J16VW5 KPDG0 / SOIL / 6-3-08 / 0730	X							J16VR6			G-016
J16VX9 KPDG5 / SOIL / 6-3-08 / 0735	X							J16VT3			H-016
J16VY1 KPDG7 / SOIL / 6-3-08 / 0740	X							J16VT4			I-016
J16VY3 KPDG8 / SOIL / 6-3-08 / 0745	X							J16VT5			J-016

CHAIN OF POSSESSION	Sign/Print Names	Date/Time
Relinquished By/Removed From: E. Harries / E. Harries	Received By/Stored In: RB KERKOW / RB Kerkow	Date/Time: 6/3/08 0830 / 0830
Relinquished By/Removed From: RB KERKOW / RB Kerkow	Received By/Stored In: REF 1B	Date/Time: 1000 / 6-3-08
Relinquished By/Removed From: 1060/1B	Received By/Stored In: MSTANBOUCK	Date/Time: 1225 JUN 04 2008
Relinquished By/Removed From: MSTANBOUCK	Received By/Stored In: LJ LANE TAL	Date/Time: 1405 JUN 04 2008 / 1405 / 6408
Relinquished By/Removed From	Received By/Stored In	Date/Time
Relinquished By/Removed From	Received By/Stored In	Date/Time

SPECIAL INSTRUCTIONS

None

(1) Metals by ICP - 6010 - Quick Turn (Arsenic, Barium, Cadmium, Chromium, Lead, Selenium, Silver); Metals by ICP - 6010 - Quick Turn (Add On) (Aluminum, Beryllium, Copper, Iron, Zinc, Zirconium)

J8F040320
J00178
DUE 6508 RWU 4/08

Sampler unavailable to remove samples from controlled storage. Shipper removed samples from storage location taking custody of samples for shipment to lab.

Matrix *

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

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

WCH-EE-011

Radiological Counting Facility

Analysis Report for RCF19771

J16VT5 SAF:RC-087 FF2/618-7 Soil Sample

GAMMA SPECTRUM ANALYSIS

Sample Identification	: RCF19771
Sample Description	: J16VT5 SAF:RC-087 FF2/618-7 Soil Sample
Sample Type	: 80 gram pill box
Unit	:
Sample Point	
Sample Size	: 6.800E+01 grams
Facility	: Default
Sample Taken On	: 6/3/2008 7:45:00AM
Acquisition Started	: 6/3/2008 10:57:13AM
Procedure	: 80 gram pill box
Operator	: RCT
Detector Name	: REGIE02
Geometry	: 80 Gram Pill Box
Live Time	: 3600.0 seconds
Real Time	: 3634.2 seconds
Dead Time	: 0.94 %
Peak Locate Threshold	: 3.00
Peak Locate Range (in channels)	: 80 - 4096
Peak Area Range (in channels)	: 80 - 4096
Identification Energy Tolerance	: 1.300 keV
Energy Calibration Used Done On	: 1/10/2008
Efficiency Calibration Used Done On	: 1/11/2008
Efficiency Calibration Description	: 80g Pill Box 71385A-238 1/10/2008
Sample Number	: 19657

J16VY3

INTERFERENCE CORRECTED REPORT

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/grams)	Wt mean Activity Uncertainty	Comments
K-40	0.995	1.00E+01	2.32E+00	
PB-212	0.707	7.16E-01	1.43E-01	
RA-226d	0.620	3.60E-01	1.29E-01	
TH-232d	0.491	3.33E-01	1.61E-01	

Analysis Report for RCF19771

J16VT5 SAF:RC-087 FF2/618-7 Soil Sample

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity
d = identified by daughter product energy lines assumed to be in secular equilibrium
Errors quoted at 2.000 sigma

UNIDENTIFIED PEAKS

Peak Locate Performed on : 6/3/2008 11:57:56AM
Peak Locate From Channel : 80
Peak Locate To Channel : 4096

Peak No.	Energy (keV)	Peak Rate (CPS)	Peak Rate (%) Uncertainty

All peaks were identified.

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet
NP = No Peak
UK = Unknown
Errors quoted at 2.000 sigma

NUCLIDE MDA REPORT

Nuclide Library Used : \\GOZER\ApexRoot\Default\Library\RCF UNKNOWN.NLB

	Nuclide Name	Energy (keV)		Yield(%)	Activity (pCi/grams)	Nuclide MDA (pCi/grams)	Line MDA (pCi/grams)
+	K-40	1460.83	*	10.67	1.00E+01	2.27E+00	2.27E+00
	CO-60	1173.24		99.90	1.32E-01	1.75E-01	2.25E-01
		1332.50		99.98	1.97E-02		1.75E-01
	NB-94	702.63		99.81	-7.92E-02	1.54E-01	1.54E-01
		871.10		99.89	2.30E-02		1.90E-01
	AG-108m	433.94		90.50	-4.58E-02	1.31E-01	1.31E-01
		614.28		89.80	-4.22E-02		2.11E-01
		722.94		90.80	1.31E-01		1.91E-01
	CS-137	661.66		85.21	-1.90E-02	1.65E-01	1.65E-01
	EU-152	40.12		38.40	-7.73E-02	1.90E-01	1.90E-01
		45.38		11.10	1.69E-01		6.98E-01
		121.78		28.40	7.68E-02		2.58E-01
		244.69		7.51	-6.56E-01		1.43E+00
		344.29		26.60	-1.95E-01		4.31E-01
		411.12		2.23	-1.11E+00		5.32E+00
		443.89		2.80	-1.55E-01		4.28E+00
		778.92		12.98	6.20E-01		1.32E+00
		867.38		4.21	4.86E-01		4.69E+00
		964.11		14.50	-4.60E-01		1.65E+00
		1085.89		9.94	1.03E+00		2.21E+00

Analysis Report for RCF19771

J16VT5 SAF:RC-087 FF2/618-7 Soil Sample

	Nuclide Name	Energy (keV)		Yield(%)	Activity (pCi/grams)	Nuclide MDA (pCi/grams)	Line MDA (pCi/grams)
		1089.71		1.71	1.99E+00		1.27E+01
		1112.07		13.60	-2.23E+00		1.15E+00
		1212.93		1.40	-5.01E+00		1.56E+01
		1299.16		1.63	-4.77E+00		1.17E+01
		1408.00		20.80	1.75E-01		7.64E-01
	EU-154	123.10		40.50	-1.38E-02	1.78E-01	1.78E-01
		723.36		19.70	5.20E-01		8.75E-01
		873.23		11.45	6.30E-01		1.61E+00
		1004.78		17.90	4.36E-01		1.04E+00
		1274.54		35.50	1.34E-01		6.11E-01
	EU-155	86.54		34.00	2.24E-01	2.62E-01	2.62E-01
		105.31		20.60	-2.37E-01		3.55E-01
+	PB-212	74.81	*	10.50	5.47E-01	2.72E-01	5.14E-01
		77.11	*	17.70	8.07E-01		2.72E-01
		87.19		6.27	-7.76E-01		1.40E+00
+	RA-226d	186.11		3.28	2.68E-01	2.71E-01	2.98E+00
		241.92		7.46	-1.45E+00		1.84E+00
		295.09	*	19.20	3.22E-01		3.68E-01
		351.87	*	37.10	3.89E-01		2.71E-01
		609.31	*	46.10	3.58E-01		2.78E-01
		1120.27		15.00	6.42E-01		1.41E+00
		1764.49		15.90	7.10E-01		1.50E+00
+	TH-232d	238.58	*	43.60	3.43E-01	1.96E-01	1.96E-01
		338.42		12.40	4.23E-01		9.81E-01
		583.02		30.87	5.80E-01		5.73E-01
		911.16	*	29.00	2.56E-01		5.19E-01
		968.97	*	17.40	4.77E-01		8.31E-01
	U-235	143.79		10.50	9.08E-01	1.84E-01	7.72E-01
		163.38		4.70	1.48E-01		1.84E+00
		185.74		53.00	1.65E-02		1.84E-01
		205.33		4.70	4.01E-02		2.03E+00
	U-238d	63.29		3.80	6.30E-02	1.54E+00	2.12E+00
		92.56		5.41	-5.51E-01		1.54E+00
	AM-241	59.54		35.70	-5.11E-02	2.19E-01	2.19E-01
	CM-243	99.52		14.40	-1.83E-01	3.13E-01	5.12E-01
		103.73		23.00	-1.84E-01		3.13E-01
		116.93		8.32	-8.44E-01		8.54E-01
		228.19		10.56	-3.09E-01		8.84E-01
		277.60		14.00	-4.30E-02		7.24E-01
	CM-245	99.52		21.10	-1.25E-01	2.14E-01	3.49E-01
		103.73		33.60	-1.26E-01		2.14E-01
		116.93		12.20	-5.75E-01		5.83E-01
		174.94		9.50	-8.00E-02		8.96E-01

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Analysis Report for RCF19771

J16VT5 SAF:RC-087 FF2/618-7 Soil Sample

Reviewed and Approved: EDWARD S. WALLACE

JUN 03 2008 Edward S Wallace

(print/sign/date)

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-087-138	Page 1 of 1

Collector B Lawrence, E. Harries	**Company Contact** Joan Kessner	**Telephone No.** 509-375-4688	**Project Coordinator** KESSNER, JH	**Price Code** 2B	**Data Turnaround** 24 Hours
Project Designation 618-7 Burial Ground - Soil	**Sampling Location** 618-7 Burial Ground/Stockpiles		**SAF No.** RC-087		
Ice Chest No.	**Field Logbook No.** EL-1395-13	**COA** RG61872600	**Method of Shipment** GOVERNMENT VEHICLE		
Shipped To Radiological Counting Facility	**Offsite Property No.**		**Bill of Lading/Air Bill No.**		

POSSIBLE SAMPLE HAZARDS/REMARKS

Potential Radiological and Beryllium contamination

Special Handling and/or Storage

None

Preservation	None											
Type of Container	Snap Vial											
No. of Container(s)	1											
Volume	80g											
SAMPLE ANALYSIS	RCF GEA Shipping Screen											
Sample No. / Matrix * / Sample Date / Sample Time												
J16VR6 / SOIL / 6-3-08 / 0730	X		19768									G-016
J16VT3 / SOIL / 6-3-08 / 0735	X		19769									H-016
J16VT4 / SOIL / 6-3-08 / 0740	X		19770									I-016
J16VT5 / SOIL / 6-3-08 / 0745	X		19771									J-016

CHAIN OF POSSESSION	Sign/Print Names		
Relinquished By/Removed From	Date/Time 6/3/08 0830	Received By/Stored In	Date/Time 0830
E. Harries/E. Harries		RB Kerkow/RB Kerkow	6-3-08
Relinquished By/Removed From	Date/Time 0935	Received By/Stored In	Date/Time 0935
RB Kerkow/RB Kerkow	6-3-08	RCF D. Miller/D. Miller	6-3-08
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
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time

SPECIAL INSTRUCTIONS

None

COPY

Matrix *

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

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

WCH-EE-011

RCF 19771

99

TESTAMERICA

Radiological Counting Facility

Analysis Report for RCF19768

J16VR6 SAF:RC-087 FF2/618-7 Soil Sample

GAMMA SPECTRUM ANALYSIS

Sample Identification	: RCF19768
Sample Description	: J16VR6 SAF:RC-087 FF2/618-7 Soil Sample
Sample Type	: 80 gram pill box
Unit	:
Sample Point	
Sample Size	: 7.800E+01 grams
Facility	: Default
Sample Taken On	: 6/3/2008 7:30:00AM
Acquisition Started	: 6/3/2008 9:50:02AM
Procedure	: 80 gram pill box
Operator	: RCT
Detector Name	: REGIE02
Geometry	: 80 Gram Pill Box
Live Time	: 3600.0 seconds
Real Time	: 3649.9 seconds
Dead Time	: 1.37 %
Peak Locate Threshold	: 3.00
Peak Locate Range (in channels)	: 80 - 4096
Peak Area Range (in channels)	: 80 - 4096
Identification Energy Tolerance	: 1.300 keV
Energy Calibration Used Done On	: 1/10/2008
Efficiency Calibration Used Done On	: 1/11/2008
Efficiency Calibration Description	: 80g Pill Box 71385A-238 1/10/2008
Sample Number	: 19650

J16VW5

INTERFERENCE CORRECTED REPORT

	Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/grams)	Wt mean Activity Uncertainty	Comments
	K-40	0.999	1.33E+01	2.43E+00	
	PB-212	0.706	9.42E-01	1.53E-01	
	RA-226d	0.787	5.03E-01	1.39E-01	
	TH-232d	0.607	5.56E-01	1.76E-01	
X	U-235	0.546			

Analysis Report for RCF19768

J16VR6 SAF:RC-087 FF2/618-7 Soil Sample

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity
d = identified by daughter product energy lines assumed to be in secular equilibrium

Errors quoted at 2.000 sigma

UNIDENTIFIED PEAKS

Peak Locate Performed on : 6/3/2008 10:50:55AM
Peak Locate From Channel : 80
Peak Locate To Channel : 4096

Peak No.	Energy (keV)	Peak Rate (CPS)	Peak Rate (%) Uncertainty

All peaks were identified.

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet
NP = No Peak
UK = Unknown

Errors quoted at 2.000 sigma

NUCLIDE MDA REPORT

Nuclide Library Used : \\GOZER\ApexRoot\Default\Library\RCF UNKNOWN.NLB

	Nuclide Name	Energy (keV)		Yield(%)	Activity (pCi/grams)	Nuclide MDA (pCi/grams)	Line MDA (pCi/grams)
+	K-40	1460.83	*	10.67	1.33E+01	2.06E+00	2.06E+00
	CO-60	1173.24		99.90	-5.06E-02	1.62E-01	2.07E-01
		1332.50		99.98	-5.78E-02		1.62E-01
	NB-94	702.63		99.81	1.06E-02	1.52E-01	1.52E-01
		871.10		99.89	2.22E-02		1.81E-01
	AG-108m	433.94		90.50	-4.97E-02	1.24E-01	1.24E-01
		614.28		89.80	4.06E-02		2.24E-01
		722.94		90.80	4.21E-02		1.79E-01
	CS-137	661.66		85.21	2.46E-02	1.76E-01	1.76E-01
	EU-152	40.12		38.40	-5.50E-02	1.79E-01	1.79E-01
		45.38		11.10	3.21E-01		6.72E-01
		121.78		28.40	-3.54E-02		2.44E-01
		244.69		7.51	-8.38E-01		1.35E+00
		344.29		26.60	-1.36E-01		4.20E-01
		411.12		2.23	-1.76E-01		5.21E+00
		443.89		2.80	-1.16E+00		3.85E+00
		778.92		12.98	4.46E-01		1.16E+00
		867.38		4.21	4.08E+00		4.39E+00
		964.11		14.50	1.47E+00		1.49E+00
		1085.89		9.94	-1.68E+00		1.82E+00

Analysis Report for RCF19768

J16VR6 SAF:RC-087 FF2/618-7 Soil Sample

	Nuclide Name	Energy (keV)		Yield(%)	Activity (pCi/grams)	Nuclide MDA (pCi/grams)	Line MDA (pCi/grams)
		1089.71		1.71	6.65E+00		1.14E+01
		1112.07		13.60	-5.41E-01		1.53E+00
		1212.93		1.40	-1.28E+01		1.46E+01
		1299.16		1.63	3.07E+00		1.16E+01
		1408.00		20.80	3.30E-01		8.58E-01
	EU-154	123.10		40.50	-7.08E-02	1.73E-01	1.73E-01
		723.36		19.70	6.15E-01		8.56E-01
		873.23		11.45	-3.24E-01		1.56E+00
		1004.78		17.90	4.80E-02		1.05E+00
		1274.54		35.50	-9.48E-02		5.78E-01
	EU-155	86.54		34.00	1.09E-01	2.55E-01	2.55E-01
		105.31		20.60	5.49E-02		3.32E-01
+	PB-212	74.81	*	10.50	8.49E-01	2.64E-01	5.12E-01
		77.11	*	17.70	9.93E-01		2.64E-01
		87.19		6.27	-4.32E-01		1.39E+00
+	RA-226d	186.11	*	3.28	1.34E+00	2.28E-01	2.11E+00
		241.92		7.46	-7.34E-01		1.90E+00
		295.09	*	19.20	5.30E-01		7.65E-01
		351.87	*	37.10	4.68E-01		2.28E-01
		609.31	*	46.10	5.12E-01		2.64E-01
		1120.27	*	15.00	6.25E-01		9.48E-01
		1764.49		15.90	8.24E-01		1.49E+00
+	TH-232d	238.58	*	43.60	7.06E-01	2.40E-01	2.40E-01
		338.42	*	12.40	9.29E-01		6.23E-01
		583.02	*	30.87	4.37E-01		3.07E-01
		911.16		29.00	8.66E-01		7.66E-01
		968.97		17.40	4.32E-01		1.20E+00
	U-235	143.79		10.50	-2.70E-01	1.31E-01	7.19E-01
		163.38		4.70	1.04E-01		1.72E+00
		185.74	*	53.00	8.31E-02		1.31E-01
		205.33		4.70	1.56E+00		2.03E+00
	U-238d	63.29		3.80	2.30E-01	1.55E+00	2.12E+00
		92.56		5.41	-6.01E-01		1.55E+00
	AM-241	59.54		35.70	-6.87E-02	2.09E-01	2.09E-01
	CM-243	99.52		14.40	-5.66E-01	2.96E-01	4.81E-01
		103.73		23.00	-5.91E-02		2.96E-01
		116.93		8.32	-2.16E-01		8.17E-01
		228.19		10.56	-4.65E-01		8.08E-01
		277.60		14.00	-5.00E-01		6.89E-01
	CM-245	99.52		21.10	-3.86E-01	2.03E-01	3.29E-01
		103.73		33.60	-4.04E-02		2.03E-01
		116.93		12.20	-1.47E-01		5.57E-01
		174.94		9.50	-5.52E-01		8.45E-01

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Analysis Report for RCF19768

J16VR6 SAF:RC-087 FF2/618-7 Soil Sample

Reviewed and Approved: **EDWARD S. WALLACE**

JUN 03 2008 Edward S. Wallace

(print/sign/date)

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-087-138	Page 1 of 1

Collector B Lawrence, E. Harries	**Company Contact** Joan Kessner	**Telephone No.** 509-375-4688	**Project Coordinator** KESSNER, JH
Price Code 2B	**Data Turnaround** 24 Hours		
Project Designation 618-7 Burial Ground - Soil	**Sampling Location** 618-7 Burial Ground/Stockpiles		**SAF No.** RC-087
Ice Chest No.	**Field Logbook No.** EL-1395-13	**COA** RG61872600	**Method of Shipment** GOVERNMENT VEHICLE
Shipped To Radiological Counting Facility	**Offsite Property No.**		**Bill of Lading/Air Bill No.**

POSSIBLE SAMPLE HAZARDS/REMARKS

Potential Radiological and Beryllium contamination

Special Handling and/or Storage

None

Preservation	None											
Type of Container	Snap Vial											
No. of Container(s)	1											
Volume	80g											
SAMPLE ANALYSIS	RCF GEA Shipping Screen											
Sample No.	Matrix *	Sample Date	Sample Time									
J16VR6	SOIL	6-3-08	0730	X		19768						G-016
J16VT3	SOIL	6-3-08	0735	X		19769						H-016
J16VT4	SOIL	6-3-08	0740	X		19770						I-016
J16VT5	SOIL	6-3-08	0745	X		19771						J-016

CHAIN OF POSSESSION	Date/Time	Sign/Print Names: Received By/Stored In	Date/Time
Relinquished By/Removed From: E. Harries/E. Harries	6/3/08 0830	Received By/Stored In: RB Kerkin/RB Kerkin	0830 6-3-08
Relinquished By/Removed From: RB Kerkin/RB Kerkin	0935 6-3-08	Received By/Stored In: D. Miller/D. Miller RCF	0935 6-3-08
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
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time

SPECIAL INSTRUCTIONS

None

COPY

Matrix *

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

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

WCH-EE-011

RCF 19768

71

TESTAMERICA

Radiological Counting Facility

Analysis Report for RCF19769

J16VT3 SAF:RC-087 FF2/618-7 Soil Sample

GAMMA SPECTRUM ANALYSIS

Sample Identification	: RCF19769
Sample Description	: J16VT3 SAF:RC-087 FF2/618-7 Soil Sample
Sample Type	: 80 gram pill box
Unit	:
Sample Point	
Sample Size	: 6.900E+01 grams
Facility	: Default
Sample Taken On	: 6/3/2008 7:35:00AM
Acquisition Started	: 6/3/2008 9:50:11AM
Procedure	: 80 gram pill box
Operator	: RCT
Detector Name	: PGTWHITE
Geometry	: 80 Gram Pill Box
Live Time	: 3600.0 seconds
Real Time	: 3600.7 seconds
Dead Time	: 0.02 %
Peak Locate Threshold	: 3.00
Peak Locate Range (in channels)	: 80 - 4096
Peak Area Range (in channels)	: 80 - 4096
Identification Energy Tolerance	: 1.300 keV
Energy Calibration Used Done On	: 1/31/2008
Efficiency Calibration Used Done On	: 2/5/2008
Efficiency Calibration Description	: 80g Pill box 2/5/2008
Sample Number	: 19651

J16VX9

INTERFERENCE CORRECTED REPORT

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/grams)	Wt mean Activity Uncertainty	Comments
K-40	0.998	1.29E+01	3.71E+00	
PB-212	0.707	7.43E-01	1.43E-01	
TH-232d	0.430	3.18E-01	1.51E-01	
U-235	0.550	8.90E-02	9.58E-02	

Analysis Report for RCF19769

J16VT3 SAF:RC-087 FF2/618-7 Soil Sample

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity
d = identified by daughter product energy lines assumed to be in secular equilibrium
Errors quoted at 2.000 sigma

UNIDENTIFIED PEAKS

Peak Locate Performed on : 6/3/2008 10:50:16AM
Peak Locate From Channel : 80
Peak Locate To Channel : 4096

Peak No.	Energy (keV)		Peak Rate (CPS)	Peak Rate (%) Uncertainty
5	295.19	Pb-214	9.01E-03	39.79
6	351.87	Pb-214	1.59E-02	29.63

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet
Errors quoted at 2.000 sigma

NP = No Peak
UK = Unknown

NUCLIDE MDA REPORT

Nuclide Library Used : \\GOZER\ApexRoot\Default\Library\RCF UNKNOWN.NLB

	Nuclide Name	Energy (keV)		Yield(%)	Activity (pCi/grams)	Nuclide MDA (pCi/grams)	Line MDA (pCi/grams)
+	K-40	1460.83	*	10.67	1.29E+01	2.30E+00	2.30E+00
	CO-60	1173.24		99.90	7.32E-03	1.78E-01	2.24E-01
		1332.50		99.98	2.97E-02		1.78E-01
	NB-94	702.63		99.81	-1.25E-02	1.62E-01	1.66E-01
		871.10		99.89	-3.87E-02		1.62E-01
	AG-108m	433.94		90.50	7.44E-02	1.29E-01	1.29E-01
		614.28		89.80	-1.60E-01		1.75E-01
		722.94		90.80	1.00E-01		1.86E-01
	CS-137	661.66		85.21	3.70E-02	1.57E-01	1.57E-01
	EU-152	40.12		38.40	6.45E-02	2.06E-01	2.29E-01
		45.38		11.10	1.00E-01		7.89E-01
		121.78		28.40	-1.02E-01		2.06E-01
		244.69		7.51	1.77E-01		1.14E+00
		344.29		26.60	-7.36E-02		3.84E-01
		411.12		2.23	-1.08E-01		4.22E+00
		443.89		2.80	1.01E+00		4.17E+00
		778.92		12.98	6.81E-02		1.22E+00
		867.38		4.21	-2.72E+00		3.88E+00

Analysis Report for RCF19769

J16VT3 SAF:RC-087 FF2/618-7 Soil Sample

	Nuclide Name	Energy (keV)		Yield(%)	Activity (pCi/grams)	Nuclide MDA (pCi/grams)	Line MDA (pCi/grams)
		964.11		14.50	-9.71E-01		1.47E+00
		1085.89		9.94	-1.41E+00		1.83E+00
		1089.71		1.71	-2.16E+00		1.13E+01
		1112.07		13.60	-4.16E-03		1.41E+00
		1212.93		1.40	-6.27E+00		1.70E+01
		1299.16		1.63	-8.19E-01		1.02E+01
		1408.00		20.80	3.38E-01		9.34E-01
	EU-154	123.10		40.50	-3.12E-02	1.48E-01	1.48E-01
		723.36		19.70	4.61E-01		8.56E-01
		873.23		11.45	-1.30E+00		1.34E+00
		1004.78		17.90	4.21E-01		1.10E+00
		1274.54		35.50	2.91E-01		5.69E-01
	EU-155	86.54		34.00	1.31E-01	2.42E-01	2.42E-01
		105.31		20.60	2.85E-02		3.08E-01
+	PB-212	74.81	*	10.50	7.56E-01	2.96E-01	5.11E-01
		77.11	*	17.70	7.37E-01		2.96E-01
		87.19		6.27	1.03E+00		1.33E+00
	RA-226d	186.11		3.28	1.60E+00	3.75E-01	2.66E+00
		241.92		7.46	2.72E-01		1.63E+00
		295.09		19.20	3.87E-01		5.34E-01
		351.87		37.10	5.65E-01		3.75E-01
		609.31		46.10	5.49E-01		3.95E-01
		1120.27		15.00	5.61E-01		1.55E+00
		1764.49		15.90	6.81E-01		1.56E+00
+	TH-232d	238.58	*	43.60	2.40E-01	2.72E-01	2.72E-01
		338.42		12.40	7.09E-01		9.73E-01
		583.02	*	30.87	4.66E-01		3.64E-01
		911.16		29.00	8.18E-01		8.20E-01
		968.97		17.40	1.81E+00		1.37E+00
+	U-235	143.79		10.50	-1.70E-01	1.51E-01	6.32E-01
		163.38		4.70	-2.92E-01		1.30E+00
		185.74	*	53.00	8.90E-02		1.51E-01
		205.33		4.70	-1.48E+00		1.58E+00
	U-238d	63.29		3.80	1.92E+00	1.60E+00	2.00E+00
		92.56		5.41	2.27E+00		1.60E+00
	AM-241	59.54		35.70	-5.19E-03	1.77E-01	1.77E-01
	CM-243	99.52		14.40	-8.86E-04	2.69E-01	4.60E-01
		103.73		23.00	-1.26E-01		2.69E-01
		116.93		8.32	1.92E-01		7.60E-01
		228.19		10.56	-1.54E-01		8.00E-01
		277.60		14.00	8.24E-02		6.42E-01
	CM-245	99.52		21.10	-6.05E-04	1.84E-01	3.14E-01
		103.73		33.60	-8.60E-02		1.84E-01
		116.93		12.20	1.31E-01		5.18E-01
		174.94		9.50	2.00E-01		7.62E-01

Analysis Report for RCF19769

J16VT3 SAF:RC-087 FF2/618-7 Soil Sample

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Reviewed and Approved: **EDWARD S. WALLACE**

JUN 03 2008 (print/sign/date)

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-087-138	Page 1 of 1

Collector B Lawrence, E. Harries	**Company Contact** Joan Kessner	**Telephone No.** 509-375-4688	**Project Coordinator** KESSNER, JH
Price Code 2B	**Data Turnaround** 24 Hours		
Project Designation 618-7 Burial Ground - Soil	**Sampling Location** 618-7 Burial Ground/Stockpiles		**SAF No.** RC-087
Ice Chest No.	**Field Logbook No.** EL-1395-13	**COA** RG61872600	**Method of Shipment** GOVERNMENT VEHICLE
Shipped To Radiological Counting Facility	**Offsite Property No.**		**Bill of Lading/Air Bill No.**

POSSIBLE SAMPLE HAZARDS/REMARKS

Potential Radiological and Beryllium contamination

Special Handling and/or Storage

None

Preservation	None											
Type of Container	Snap Vial											
No. of Container(s)	1											
Volume	80g											
SAMPLE ANALYSIS	RCF GEA Shipping Screen											
Sample No. / Matrix * / Sample Date / Sample Time												
J16VR6 / SOIL / 6-3-08 / 0730	X		19768									G-016
J16VT3 / SOIL / 6-3-08 / 0735	X		19769									H-016
J16VT4 / SOIL / 6-3-08 / 0740	X		19770									I-016
J16VT5 / SOIL / 6-3-08 / 0745	X		19771									J-016

CHAIN OF POSSESSION	Date/Time	Sign/Print Names: Received By/Stored In	Date/Time
Relinquished By/Removed From: E. Harries/E. Harries	6/3/08 0830	Received By/Stored In: RB KERLIN/RB Kerlin	0830 6-3-08
Relinquished By/Removed From: RB KERLIN/RB Kerlin	0935 6-3-08	Received By/Stored In: RCF D. Miller/D. Miller	0935 6-3-08
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
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time

SPECIAL INSTRUCTIONS

None

COPY

Matrix *

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

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

WCH-EE-011

RCF 19769

76

TESTAMERICA

Radiological Counting Facility

Analysis Report for RCF19770

J16VT4 SAF:RC-087 FF2/618-7 Soil Sample

GAMMA SPECTRUM ANALYSIS

Sample Identification	: RCF19770
Sample Description	: J16VT4 SAF:RC-087 FF2/618-7 Soil Sample
Sample Type	: 80 gram pill box
Unit	:
Sample Point	
Sample Size	: 6.300E+01 grams
Facility	: Default
Sample Taken On	: 6/3/2008 7:40:00AM
Acquisition Started	: 6/3/2008 9:50:18AM
Procedure	: 80 gram pill box
Operator	: RCT
Detector Name	: BEGE
Geometry	: 80 Gram Pill Box
Live Time	: 3600.0 seconds
Real Time	: 3600.2 seconds
Dead Time	: 0.01 %
Peak Locate Threshold	: 3.00
Peak Locate Range (in channels)	: 80 - 4096
Peak Area Range (in channels)	: 80 - 4096
Identification Energy Tolerance	: 1.300 keV
Energy Calibration Used Done On	: 3/27/2008
Efficiency Calibration Used Done On	: 4/1/2008
Efficiency Calibration Description	: 80g Pill box 4-1-2008
Sample Number	: 19652

J16VY1

INTERFERENCE CORRECTED REPORT

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/grams)	Wt mean Activity Uncertainty	Comments
K-40	1.000	1.51E+01	3.07E+00	
PB-212	0.710	7.16E-01	1.36E-01	
RA-226d	0.357	4.61E-01	1.31E-01	
TH-232d	0.348	5.56E-01	1.75E-01	

Analysis Report for RCF19770

J16VT4 SAF:RC-087 FF2/618-7 Soil Sample

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity
d = identified by daughter product energy lines assumed to be in secular equilibrium
Errors quoted at 2.000 sigma

UNIDENTIFIED PEAKS

Peak Locate Performed on : 6/3/2008 10:50:32AM
Peak Locate From Channel : 80
Peak Locate To Channel : 4096

Peak No.	Energy (keV)	Peak Rate (CPS)	Peak Rate (%) Uncertainty

All peaks were identified.

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet
Errors quoted at 2.000 sigma

NP = No Peak
UK = Unknown

NUCLIDE MDA REPORT

Nuclide Library Used : \\GOZER\ApexRoot\Default\Library\RCF UNKNOWN.NLB

	Nuclide Name	Energy (keV)		Yield(%)	Activity (pCi/grams)	Nuclide MDA (pCi/grams)	Line MDA (pCi/grams)
+	K-40	1460.83	*	10.67	1.51E+01	1.11E+00	1.11E+00
	CO-60	1173.24		99.90	5.46E-03	2.16E-01	2.40E-01
		1332.50		99.98	-1.62E-01		2.16E-01
	NB-94	702.63		99.81	4.85E-02	1.55E-01	1.55E-01
		871.10		99.89	-2.23E-02		1.88E-01
	AG-108m	433.94		90.50	1.92E-03	1.07E-01	1.07E-01
		614.28		89.80	-9.85E-02		1.58E-01
		722.94		90.80	-2.68E-02		1.45E-01
	CS-137	661.66		85.21	4.72E-02	1.85E-01	1.85E-01
	EU-152	40.12		38.40	7.45E-02	1.21E-01	1.21E-01
		45.38		11.10	3.96E-02		3.41E-01
		121.78		28.40	-7.24E-02		1.29E-01
		244.69		7.51	-6.04E-01		9.09E-01
		344.29		26.60	-6.54E-02		2.87E-01
		411.12		2.23	-1.21E-01		4.52E+00
		443.89		2.80	1.11E-01		3.45E+00
		778.92		12.98	-9.13E-01		1.02E+00
		867.38		4.21	1.08E+00		4.58E+00
		964.11		14.50	-2.01E-01		1.14E+00
		1085.89		9.94	8.29E-02		2.11E+00

Analysis Report for RCF19770

J16VT4 SAF:RC-087 FF2/618-7 Soil Sample

	Nuclide Name	Energy (keV)		Yield(%)	Activity (pCi/grams)	Nuclide MDA (pCi/grams)	Line MDA (pCi/grams)
		1089.71		1.71	4.65E+00		1.26E+01
		1112.07		13.60	-1.69E-02		1.55E+00
		1212.93		1.40	-9.54E-02		1.75E+01
		1299.16		1.63	-9.45E+00		1.24E+01
		1408.00		20.80	5.20E-01		1.15E+00
	EU-154	123.10		40.50	-4.09E-02	1.01E-01	1.01E-01
		723.36		19.70	1.10E-01		6.95E-01
		873.23		11.45	7.46E-02		1.65E+00
		1004.78		17.90	4.51E-01		1.14E+00
		1274.54		35.50	2.98E-01		6.69E-01
	EU-155	86.54		34.00	2.96E-02	1.38E-01	1.38E-01
		105.31		20.60	1.42E-01		2.15E-01
+	PB-212	74.81	*	10.50	5.29E-01	2.17E-01	4.14E-01
		77.11	*	17.70	9.25E-01		2.17E-01
		87.19		6.27	1.55E-01		7.35E-01
+	RA-226d	186.11		3.28	9.26E-01	1.76E-01	2.05E+00
		241.92		7.46	2.21E-01		1.06E+00
		295.09		19.20	3.17E-01		5.31E-01
		351.87	*	37.10	5.42E-01		1.76E-01
		609.31	*	46.10	3.80E-01		2.43E-01
		1120.27		15.00	1.26E+00		1.74E+00
		1764.49		15.90	9.13E-01		2.15E+00
+	TH-232d	238.58	*	43.60	5.06E-01	2.03E-01	2.03E-01
		338.42		12.40	2.84E-01		8.51E-01
		583.02		30.87	3.57E-01		4.97E-01
		911.16	*	29.00	6.62E-01		3.42E-01
		968.97		17.40	8.27E-02		1.05E+00
	U-235	143.79		10.50	-1.67E-01	1.27E-01	4.86E-01
		163.38		4.70	3.80E-01		1.25E+00
		185.74		53.00	2.82E-03		1.27E-01
		205.33		4.70	1.08E+00		1.49E+00
	U-238d	63.29		3.80	3.95E-01	8.67E-01	8.67E-01
		92.56		5.41	5.30E-01		9.04E-01
	AM-241	59.54		35.70	-1.38E-02	8.19E-02	8.19E-02
	CM-243	99.52		14.40	1.04E-01	1.63E-01	2.63E-01
		103.73		23.00	-1.44E-01		1.63E-01
		116.93		8.32	5.52E-02		4.94E-01
		228.19		10.56	-1.32E-01		5.80E-01
		277.60		14.00	1.37E-01		6.16E-01
	CM-245	99.52		21.10	7.10E-02	1.12E-01	1.79E-01
		103.73		33.60	-9.83E-02		1.12E-01
		116.93		12.20	3.76E-02		3.37E-01
		174.94		9.50	-3.01E-01		5.57E-01

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Analysis Report for RCF19770

J16VT4 SAF:RC-087 FF2/618-7 Soil Sample

Reviewed and Approved: **EDWARD S. WALLACE**

JUN 03 2008 (print/sign/date)

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-087-138	Page 1 of 1

Collector B Lawrence, E. Harries	**Company Contact** Joan Kessner	**Telephone No.** 509-375-4688	**Project Coordinator** KESSNER, JH
Price Code 2B	**Data Turnaround** 24 Hours		
Project Designation 618-7 Burial Ground - Soil	**Sampling Location** 618-7 Burial Ground/Stockpiles		**SAF No.** RC-087
Ice Chest No.	**Field Logbook No.** EL-1395-13	**COA** RG61872600	**Method of Shipment** GOVERNMENT VEHICLE
Shipped To Radiological Counting Facility	**Offsite Property No.**		**Bill of Lading/Air Bill No.**

POSSIBLE SAMPLE HAZARDS/REMARKS

Potential Radiological and Beryllium contamination

Special Handling and/or Storage

None

Preservation	None											
Type of Container	Snap Vial											
No. of Container(s)	1											
Volume	80g											
SAMPLE ANALYSIS	RCF GEA Shipping Screen											
Sample No.	Matrix *	Sample Date	Sample Time									
J16VR6	SOIL	6-3-08	0730	X		19768						G-016
J16VT3	SOIL	6-3-08	0735	X		19769						H-016
J16VT4	SOIL	6-3-08	0740	X		19770						I-016
J16VT5	SOIL	6-3-08	0745	X		19771						J-016

CHAIN OF POSSESSION	Date/Time	Sign/Print Names	Date/Time
Relinquished By/Removed From E. Harries/E. Harries	6/3/08 0830	Received By/Stored In RB KERLIN / RB Kerlin	0830 6-3-08
Relinquished By/Removed From RB KERLIN / RB Kerlin	0935 6-3-08	Received By/Stored In RCF D. Miller / D. Miller	0935 6-3-08
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
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time

SPECIAL INSTRUCTIONS

None

COPY

Matrix *

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

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

WCH-EE-011

RCF 19770

81

TESTAMERICA

Radiological Counting Facility

Analysis Report for RCF19784

J16VT9 SAF:RC-087 FF2/618-2 Soil Sample

GAMMA SPECTRUM ANALYSIS

Sample Identification	: RCF19784
Sample Description	: J16VT9 SAF:RC-087 FF2/618-2 Soil Sample
Sample Type	: 50 gram pill box
Unit	:
Sample Point	
Sample Size	: 5.900E+01 grams
Facility	: Default
Sample Taken On	: 6/3/2008 3:15:00PM
Acquisition Started	: 6/4/2008 7:39:00AM
Procedure	: 50 gram pill box
Operator	: RCT
Detector Name	: PGTWHITE
Geometry	: 50 ml Pill Box
Live Time	: 3600.0 seconds
Real Time	: 3600.7 seconds
Dead Time	: 0.02 %
Peak Locate Threshold	: 3.00
Peak Locate Range (in channels)	: 80 - 4096
Peak Area Range (in channels)	: 80 - 4096
Identification Energy Tolerance	: 1.300 keV
Energy Calibration Used Done On	: 1/31/2008
Efficiency Calibration Used Done On	: 2/4/2008
Efficiency Calibration Description	: 50ml Pill Box (1234-95-2) 2/4/2008
Sample Number	: 19684

J16W01

INTERFERENCE CORRECTED REPORT

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/grams)	Wt mean Activity Uncertainty	Comments
K-40	0.996	1.89E+01	3.48E+00	
PB-212	0.709	8.40E-01	1.89E-01	
RA-226d	0.617	6.33E-01	2.08E-01	
TH-232d	0.848	7.10E-01	1.90E-01	

Analysis Report for RCF19784

J16VT9 SAF:RC-087 FF2/618-2 Soil Sample

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity
d = identified by daughter product energy lines assumed to be in secular equilibrium
Errors quoted at 2.000 sigma

UNIDENTIFIED PEAKS

Peak Locate Performed on : 6/4/2008 8:39:07AM
Peak Locate From Channel : 80
Peak Locate To Channel : 4096

Peak No.	Energy (keV)	Peak Rate (CPS)	Peak Rate (%) Uncertainty

All peaks were identified.

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet
NP = No Peak
UK = Unknown
Errors quoted at 2.000 sigma

NUCLIDE MDA REPORT

Nuclide Library Used : \\GOZER\ApexRoot\Default\Library\RCF UNKNOWN.NLB

	Nuclide Name	Energy (keV)		Yield(%)	Activity (pCi/grams)	Nuclide MDA (pCi/grams)	Line MDA (pCi/grams)
+	K-40	1460.83	*	10.67	1.89E+01	2.94E+00	2.94E+00
	CO-60	1173.24		99.90	-2.11E-01	3.03E-01	3.18E-01
		1332.50		99.98	3.80E-02		3.03E-01
	NB-94	702.63		99.81	2.62E-02	2.35E-01	2.53E-01
		871.10		99.89	-8.09E-02		2.35E-01
	AG-108m	433.94		90.50	6.86E-02	1.91E-01	1.91E-01
		614.28		89.80	-4.70E-02		2.79E-01
		722.94		90.80	4.38E-02		2.72E-01
	CS-137	661.66		85.21	2.29E-01	2.86E-01	2.86E-01
	EU-152	40.12		38.40	-6.28E-02	2.63E-01	2.63E-01
		45.38		11.10	1.29E+00		1.10E+00
		121.78		28.40	1.21E-01		2.94E-01
		244.69		7.51	7.81E-01		1.84E+00
		344.29		26.60	-3.45E-01		5.47E-01
		411.12		2.23	-2.25E+00		7.50E+00
		443.89		2.80	5.95E-01		5.84E+00
		778.92		12.98	-1.33E-01		1.76E+00
		867.38		4.21	-1.35E+00		6.06E+00
		964.11		14.50	-7.14E-02		2.33E+00
		1085.89		9.94	-1.09E+00		2.70E+00

Analysis Report for RCF19784

J16VT9 SAF:RC-087 FF2/618-2 Soil Sample

	Nuclide Name	Energy (keV)		Yield(%)	Activity (pCi/grams)	Nuclide MDA (pCi/grams)	Line MDA (pCi/grams)
		1089.71		1.71	-7.60E-02		1.55E+01
		1112.07		13.60	-1.38E+00		2.23E+00
		1212.93		1.40	6.38E+00		2.31E+01
		1299.16		1.63	8.54E+00		1.91E+01
		1408.00		20.80	2.63E-01		1.15E+00
	EU-154	123.10		40.50	9.93E-02	2.10E-01	2.10E-01
		723.36		19.70	2.02E-01		1.25E+00
		873.23		11.45	1.28E-01		1.97E+00
		1004.78		17.90	-2.21E-01		1.50E+00
		1274.54		35.50	4.26E-01		8.34E-01
	EU-155	86.54		34.00	1.15E-01	3.29E-01	3.29E-01
		105.31		20.60	2.96E-01		4.33E-01
+	PB-212	74.81	*	10.50	7.36E-01	4.39E-01	7.47E-01
		77.11	*	17.70	8.92E-01		4.39E-01
		87.19		6.27	1.86E+00		1.84E+00
+	RA-226d	186.11		3.28	3.32E+00	4.65E-01	4.15E+00
		241.92		7.46	6.04E-01		2.71E+00
		295.09	*	19.20	9.16E-01		7.39E-01
		351.87	*	37.10	6.69E-01		4.65E-01
		609.31	*	46.10	4.56E-01		5.32E-01
		1120.27		15.00	2.01E+00		2.23E+00
		1764.49		15.90	1.08E+00		2.49E+00
+	TH-232d	238.58	*	43.60	5.91E-01	3.62E-01	3.62E-01
		338.42	*	12.40	9.73E-01		1.01E+00
		583.02	*	30.87	6.30E-01		6.64E-01
		911.16	*	29.00	1.25E+00		7.22E-01
		968.97		17.40	7.34E-01		1.97E+00
	U-235	143.79		10.50	-1.86E-01	2.56E-01	1.01E+00
		163.38		4.70	-7.94E-02		2.26E+00
		185.74		53.00	2.05E-01		2.56E-01
		205.33		4.70	-1.49E+00		2.56E+00
	U-238d	63.29		3.80	9.54E-01	2.20E+00	2.48E+00
		92.56		5.41	4.00E+00		2.20E+00
	AM-241	59.54		35.70	-1.03E-01	2.12E-01	2.12E-01
	CM-243	99.52		14.40	5.63E-02	3.81E-01	6.07E-01
		103.73		23.00	-1.43E-01		3.81E-01
		116.93		8.32	-1.21E+00		9.21E-01
		228.19		10.56	-7.91E-01		1.19E+00
		277.60		14.00	-4.32E-01		8.69E-01
	CM-245	99.52		21.10	3.84E-02	2.61E-01	4.14E-01
		103.73		33.60	-9.77E-02		2.61E-01
		116.93		12.20	-8.26E-01		6.28E-01
		174.94		9.50	3.83E-01		1.21E+00

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Analysis Report for RCF19784

J16VT9 SAF:RC-087 FF2/618-2 Soil Sample

Reviewed and Approved: **EDWARD S. WALLACE**

JUN 04 2008 (print/sign/date) Edward S Wallace

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-087-141	Page 1 of 1

Collector B Lawrence, E. Harries	**Company Contact** Joan Kessner **Telephone No.** 509-375-4688	**Project Coordinator** KESSNER, JH	**Price Code** 2A **Data Turnaround** 24 Hours
Project Designation 618-7 Burial Ground - Soil	**Sampling Location** 618-7 Burial Ground/Stockpiles	**SAF No.** RC-087	
Ice Chest No.	**Field Logbook No.** EL-1395-13 **COA** RG61872600	**Method of Shipment** GOVERNMENT VEHICLE	
Shipped To Radiological Counting Facility	**Offsite Property No.** NA	**Bill of Lading/Air Bill No.** NA	

POSSIBLE SAMPLE HAZARDS/REMARKS

Potential Radiological and Beryllium contamination

Special Handling and/or Storage

None

Preservation	None											
Type of Container	Snap Vial											
No. of Container(s)	1											
Volume	80g											
SAMPLE ANALYSIS	RCF GEA Shipping Screen											
Sample No.	Matrix *	Sample Date	Sample Time			RCF						
J16VT6	SOIL	6-3-08	1500	X		19781						E-012
J16VT7	SOIL	6-3-08	1505	X		19782						E-013
J16VT8	SOIL	6-3-08	1510	X		19783						E-014
J16VT9	SOIL	6-3-08	1515	X		19784						E-015
J16VV0	SOIL	6-3-08	1520	X		19785						F-015

CHAIN OF POSSESSION	Date/Time	Sign/Print Names: Received By/Stored In	Date/Time
Relinquished By/Removed From: B Lawrence	1545 6-3-08	RB KERKOW/RB Kerkow	1545 6-3-08
Relinquished By/Removed From: RB KERKOW/RB Kerkow	1600 6-3-08	RCF D. Miller/ D Miller	1600 6-3-08
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
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time

SPECIAL INSTRUCTIONS

None

COPY

Matrix *

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

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

WCH-EE-011

RCF 19784

86

TESTAMERICA

Radiological Counting Facility

Analysis Report for RCF19783

J16VT8 SAF:RC-087 FF2/618-2 Soil Sample

GAMMA SPECTRUM ANALYSIS

Sample Identification	: RCF19783
Sample Description	: J16VT8 SAF:RC-087 FF2/618-2 Soil Sample
Sample Type	: 50 gram pill box
Unit	:
Sample Point	
Sample Size	: 5.900E+01 grams
Facility	: Default
Sample Taken On	: 6/3/2008 3:10:00PM
Acquisition Started	: 6/4/2008 7:38:51AM
Procedure	: 50 gram pill box
Operator	: RCT
Detector Name	: REGIE02
Geometry	: 50 ml Pill Box
Live Time	: 3600.0 seconds
Real Time	: 3657.5 seconds
Dead Time	: 1.57 %
Peak Locate Threshold	: 3.00
Peak Locate Range (in channels)	: 80 - 4096
Peak Area Range (in channels)	: 80 - 4096
Identification Energy Tolerance	: 1.300 keV
Energy Calibration Used Done On	: 1/10/2008
Efficiency Calibration Used Done On	: 1/11/2008
Efficiency Calibration Description	: 50g Pill Box 1-10-2008
Sample Number	: 19683

J16VY9

INTERFERENCE CORRECTED REPORT

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/grams)	Wt mean Activity Uncertainty	Comments
K-40	0.995	1.07E+01	2.44E+00	
PB-212	0.709	5.07E-01	1.26E-01	
RA-226d	0.614	4.07E-01	1.33E-01	
TH-232d	0.602	5.34E-01	1.56E-01	

Analysis Report for RCF19783

J16VT8 SAF:RC-087 FF2/618-2 Soil Sample

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity
d = identified by daughter product energy lines assumed to be in secular equilibrium
Errors quoted at 2.000 sigma

UNIDENTIFIED PEAKS

Peak Locate Performed on : 6/4/2008 8:39:51AM
Peak Locate From Channel : 80
Peak Locate To Channel : 4096

Peak No.	Energy (keV)	Peak Rate (CPS)	Peak Rate (%) Uncertainty

All peaks were identified.

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet
Errors quoted at 2.000 sigma

NP = No Peak
UK = Unknown

NUCLIDE MDA REPORT

Nuclide Library Used : \\GOZER\ApexRoot\Default\Library\RCF UNKNOWN.NLB

	Nuclide Name	Energy (keV)		Yield(%)	Activity (pCi/grams)	Nuclide MDA (pCi/grams)	Line MDA (pCi/grams)
+	K-40	1460.83	*	10.67	1.07E+01	2.30E+00	2.30E+00
	CO-60	1173.24		99.90	-1.43E-02	2.52E-01	2.52E-01
		1332.50		99.98	1.09E-01		2.80E-01
	NB-94	702.63		99.81	1.15E-01	2.12E-01	2.12E-01
		871.10		99.89	-2.61E-02		2.29E-01
	AG-108m	433.94		90.50	1.26E-02	1.67E-01	1.67E-01
		614.28		89.80	-2.62E-01		2.53E-01
		722.94		90.80	-1.38E-01		1.85E-01
	CS-137	661.66		85.21	-3.18E-02	2.18E-01	2.18E-01
	EU-152	40.12		38.40	-7.52E-02	2.57E-01	2.57E-01
		45.38		11.10	1.34E-01		8.09E-01
		121.78		28.40	-5.23E-03		3.15E-01
		244.69		7.51	-1.03E+00		1.58E+00
		344.29		26.60	-1.95E-01		5.37E-01
		411.12		2.23	-6.79E-01		6.71E+00
		443.89		2.80	2.31E+00		5.68E+00
		778.92		12.98	2.64E-01		1.49E+00
		867.38		4.21	2.65E+00		5.68E+00
		964.11		14.50	1.77E+00		1.93E+00
		1085.89		9.94	-7.52E-01		2.06E+00

Analysis Report for RCF19783

J16VT8 SAF:RC-087 FF2/618-2 Soil Sample

	Nuclide Name	Energy (keV)		Yield(%)	Activity (pCi/grams)	Nuclide MDA (pCi/grams)	Line MDA (pCi/grams)
		1089.71		1.71	-1.25E+01		1.23E+01
		1112.07		13.60	-3.59E+00		1.66E+00
		1212.93		1.40	8.81E+00		1.88E+01
		1299.16		1.63	8.53E-01		1.70E+01
		1408.00		20.80	-4.32E-01		8.75E-01
	EU-154	123.10		40.50	9.08E-03	2.22E-01	2.22E-01
		723.36		19.70	-2.21E-01		8.74E-01
		873.23		11.45	5.70E-01		2.02E+00
		1004.78		17.90	-1.07E+00		9.80E-01
		1274.54		35.50	-4.72E-01		5.87E-01
	EU-155	86.54		34.00	1.11E-01	2.86E-01	2.86E-01
		105.31		20.60	1.72E-01		4.00E-01
+	PB-212	74.81	*	10.50	8.21E-01	2.99E-01	5.46E-01
		77.11	*	17.70	4.29E-01		2.99E-01
		87.19		6.27	-6.94E-01		1.54E+00
+	RA-226d	186.11		3.28	1.35E+00	3.08E-01	3.30E+00
		241.92		7.46	-7.06E-02		2.21E+00
		295.09	*	19.20	3.35E-01		4.50E-01
		351.87	*	37.10	4.70E-01		3.08E-01
		609.31	*	46.10	3.85E-01		3.10E-01
		1120.27		15.00	1.55E-01		1.79E+00
		1764.49		15.90	1.26E+00		1.87E+00
+	TH-232d	238.58	*	43.60	5.20E-01	2.76E-01	2.76E-01
		338.42	*	12.40	1.06E+00		8.35E-01
		583.02	*	30.87	4.10E-01		4.88E-01
		911.16		29.00	9.64E-01		9.38E-01
		968.97		17.40	1.28E+00		1.52E+00
	U-235	143.79		10.50	9.08E-01	2.04E-01	9.87E-01
		163.38		4.70	-1.55E+00		2.01E+00
		185.74		53.00	8.37E-02		2.04E-01
		205.33		4.70	1.44E+00		2.43E+00
	U-238d	63.29		3.80	1.66E+00	1.71E+00	2.35E+00
		92.56		5.41	-3.00E-01		1.71E+00
	AM-241	59.54		35.70	-3.14E-02	2.45E-01	2.45E-01
	CM-243	99.52		14.40	-4.84E-01	3.43E-01	5.50E-01
		103.73		23.00	-2.26E-01		3.43E-01
		116.93		8.32	-3.06E-01		1.05E+00
		228.19		10.56	1.54E-01		1.04E+00
		277.60		14.00	7.96E-02		8.62E-01
	CM-245	99.52		21.10	-3.30E-01	2.35E-01	3.75E-01
		103.73		33.60	-1.55E-01		2.35E-01
		116.93		12.20	-2.09E-01		7.17E-01
		174.94		9.50	-3.40E-01		1.03E+00

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Analysis Report for RCF19783

J16VT8 SAF:RC-087 FF2/618-2 Soil Sample

Reviewed and Approved: EDWARD S. WALLACE

JUN 04 2008 (print/sign/date)

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-087-141	Page 1 of 1
Collector: B Lawrence, E. Harries	Company Contact: Joan Kessner; Telephone No.: 509-375-4688	Project Coordinator: KESSNER, JH	Price Code: 2A; Data Turnaround: 24 Hours
Project Designation: 618-7 Burial Ground - Soil	Sampling Location: 618-7 Burial Ground/Stockpiles	SAF No.: RC-087	
Ice Chest No.	Field Logbook No.: EL-1395-13; COA: RG61872600	Method of Shipment: GOVERNMENT VEHICLE	
Shipped To: Radiological Counting Facility	Offsite Property No.: NA	Bill of Lading/Air Bill No.: NA	

POSSIBLE SAMPLE HAZARDS/REMARKS

Potential Radiological and Beryllium contamination

Special Handling and/or Storage

None

Preservation	None											
Type of Container	Snap Vial											
No. of Container(s)	1											
Volume	80g											
SAMPLE ANALYSIS	RCF GEA Shipping Screen											
Sample No.	Matrix *	Sample Date	Sample Time			RCF						
J16VT6	SOIL	6-3-08	1500	X		19781						E-012
J16VT7	SOIL	6-3-08	1505	X		19782						E-013
J16VT8	SOIL	6-3-08	1510	X		19783						E-014
J16VT9	SOIL	6-3-08	1515	X		19784						E-015
J16VV0	SOIL	6-3-08	1520	X		19785						F-015

CHAIN OF POSSESSION — **Sign/Print Names**

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
B Lawrence	1545 6-3-08	RB KERKOW/RB Kerk	1545 6-3-08
RB KERKOW/RB Kerk	1600 6-3-08	RCF D. Miller/	1600 6-3-08

SPECIAL INSTRUCTIONS

None

COPY

Matrix *

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

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

WCH-EE-011

RCF 19782

91

TESTAMERICA

Radiological Counting Facility

Analysis Report for RCF19782

J16VT7 SAF:RC-087 FF2/618-2 Soil Sample

GAMMA SPECTRUM ANALYSIS

Sample Identification	: RCF19782
Sample Description	: J16VT7 SAF:RC-087 FF2/618-2 Soil Sample
Sample Type	: 80 gram pill box
Unit	:
Sample Point	
Sample Size	: 7.900E+01 grams
Facility	: Default
Sample Taken On	: 6/3/2008 3:05:00PM
Acquisition Started	: 6/4/2008 6:37:51AM
Procedure	: 80 gram pill box
Operator	: RCT
Detector Name	: BEGE
Geometry	: 80 Gram Pill Box
Live Time	: 3600.0 seconds
Real Time	: 3600.2 seconds
Dead Time	: 0.01 %
Peak Locate Threshold	: 3.00
Peak Locate Range (in channels)	: 80 - 4096
Peak Area Range (in channels)	: 80 - 4096
Identification Energy Tolerance	: 1.300 keV
Energy Calibration Used Done On	: 3/27/2008
Efficiency Calibration Used Done On	: 4/1/2008
Efficiency Calibration Description	: 80g Pill box 4-1-2008
Sample Number	: 19682

J16VY7

INTERFERENCE CORRECTED REPORT

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/grams)	Wt mean Activity Uncertainty	Comments
K-40	0.997	1.26E+01	2.56E+00	
PB-212	0.710	6.10E-01	1.09E-01	
TH-232d	0.612	4.14E-01	1.37E-01	

Analysis Report for RCF19782

J16VT7 SAF:RC-087 FF2/618-2 Soil Sample

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity
d = identified by daughter product energy lines assumed to be in secular equilibrium
Errors quoted at 2.000 sigma

UNIDENTIFIED PEAKS

Peak Locate Performed on : 6/4/2008 7:37:55AM
Peak Locate From Channel : 80
Peak Locate To Channel : 4096

Peak No.	Energy (keV)	Peak Rate (CPS)	Peak Rate (%) Uncertainty
4	295.30 Pb-214	1.36E-02	27.60
6	352.04 Pb-214	2.02E-02	17.81

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet
Errors quoted at 2.000 sigma

NP = No Peak
UK = Unknown

NUCLIDE MDA REPORT

Nuclide Library Used : \\GOZER\ApexRoot\Default\Library\RCF UNKNOWN.NLB

	Nuclide Name	Energy (keV)		Yield(%)	Activity (pCi/grams)	Nuclide MDA (pCi/grams)	Line MDA (pCi/grams)
+	K-40	1460.83	*	10.67	1.26E+01	1.26E+00	1.26E+00
	CO-60	1173.24		99.90	-1.08E-02	1.84E-01	1.84E-01
		1332.50		99.98	-1.88E-02		1.90E-01
	NB-94	702.63		99.81	9.23E-02	1.24E-01	1.24E-01
		871.10		99.89	0.00E+00		1.37E-01
	AG-108m	433.94		90.50	-8.73E-03	9.03E-02	9.03E-02
		614.28		89.80	-3.25E-02		1.54E-01
		722.94		90.80	-3.54E-02		1.34E-01
	CS-137	661.66		85.21	1.28E-02	1.16E-01	1.16E-01
	EU-152	40.12		38.40	1.69E-03	1.04E-01	1.04E-01
		45.38		11.10	-4.07E-02		2.57E-01
		121.78		28.40	-2.92E-02		1.14E-01
		244.69		7.51	-5.97E-01		6.95E-01
		344.29		26.60	1.15E-01		2.74E-01
		411.12		2.23	1.22E+00		3.77E+00
		443.89		2.80	1.98E+00		3.26E+00
		778.92		12.98	-4.61E-01		8.56E-01
		867.38		4.21	-4.24E+00		3.31E+00

Analysis Report for RCF19782

J16VT7 SAF:RC-087 FF2/618-2 Soil Sample

	Nuclide Name	Energy (keV)		Yield(%)	Activity (pCi/grams)	Nuclide MDA (pCi/grams)	Line MDA (pCi/grams)
		964.11		14.50	5.29E-01		1.16E+00
		1085.89		9.94	1.20E+00		1.64E+00
		1089.71		1.71	-5.70E+00		7.57E+00
		1112.07		13.60	3.27E-02		1.47E+00
		1212.93		1.40	-4.20E+00		1.40E+01
		1299.16		1.63	1.18E+00		1.33E+01
		1408.00		20.80	8.98E-02		9.19E-01
	EU-154	123.10		40.50	2.06E-02	9.09E-02	9.09E-02
		723.36		19.70	3.71E-02		6.18E-01
		873.23		11.45	7.07E-01		1.27E+00
		1004.78		17.90	2.39E-01		1.00E+00
		1274.54		35.50	-2.08E-01		5.86E-01
	EU-155	86.54		34.00	4.45E-02	1.26E-01	1.26E-01
		105.31		20.60	7.99E-02		1.65E-01
+	PB-212	74.81	*	10.50	6.15E-01	1.89E-01	3.66E-01
		77.11	*	17.70	6.07E-01		1.89E-01
		87.19		6.27	9.55E-01		7.00E-01
	RA-226d	186.11		3.28	1.22E+00	3.07E-01	2.02E+00
		241.92		7.46	4.15E-01		8.79E-01
		295.09		19.20	5.10E-01		4.78E-01
		351.87		37.10	4.62E-01		3.07E-01
		609.31		46.10	2.45E-01		3.39E-01
		1120.27		15.00	1.34E-01		1.32E+00
		1764.49		15.90	5.16E-01		1.76E+00
+	TH-232d	238.58	*	43.60	4.50E-01	2.02E-01	2.02E-01
		338.42	*	12.40	5.80E-01		5.51E-01
		583.02	*	30.87	3.07E-01		3.43E-01
		911.16		29.00	4.82E-01		6.62E-01
		968.97		17.40	-1.82E-01		1.09E+00
	U-235	143.79		10.50	1.92E-01	1.26E-01	4.57E-01
		163.38		4.70	-1.48E-01		1.06E+00
		185.74		53.00	1.13E-01		1.26E-01
		205.33		4.70	2.59E-02		1.00E+00
	U-238d	63.29		3.80	6.64E-01	8.07E-01	8.84E-01
		92.56		5.41	6.49E-01		8.07E-01
	AM-241	59.54		35.70	3.16E-03	7.13E-02	7.13E-02
	CM-243	99.52		14.40	-2.41E-02	1.45E-01	2.24E-01
		103.73		23.00	4.14E-02		1.45E-01
		116.93		8.32	-8.39E-02		4.34E-01
		228.19		10.56	2.61E-01		5.64E-01
		277.60		14.00	3.05E-01		5.45E-01
	CM-245	99.52		21.10	-1.64E-02	9.95E-02	1.53E-01
		103.73		33.60	2.83E-02		9.95E-02
		116.93		12.20	-5.72E-02		2.96E-01
		174.94		9.50	1.62E-01		5.39E-01

Analysis Report for RCF19782

J16VT7 SAF:RC-087 FF2/618-2 Soil Sample

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Reviewed and Approved: EDWARD S. WALLACE

JUN 04 2008

(print/sign/date)

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-087-141	Page 1 of 1

Collector B Lawrence, E. Harries	**Company Contact** Joan Kessner	**Telephone No.** 509-375-4688	**Project Coordinator** KESSNER, JH
Price Code 2A	**Data Turnaround** 24 Hours		
Project Designation 618-7 Burial Ground - Soil	**Sampling Location** 618-7 Burial Ground/Stockpiles		**SAF No.** RC-087
Ice Chest No.	**Field Logbook No.** EL-1395-13	**COA** RG61872600	**Method of Shipment** GOVERNMENT VEHICLE
Shipped To Radiological Counting Facility	**Offsite Property No.** NA		**Bill of Lading/Air Bill No.** NA

POSSIBLE SAMPLE HAZARDS/REMARKS

Potential Radiological and Beryllium contamination

Special Handling and/or Storage

None

Preservation	None											
Type of Container	Snap Vial											
No. of Container(s)	1											
Volume	80g											
SAMPLE ANALYSIS	RCF GEA Shipping Screen											
Sample No.	Matrix *	Sample Date	Sample Time			RCF						
J16VT6	SOIL	6-3-08	1500	X		19781						E-012
J16VT7	SOIL	6-3-08	1505	X		19782						E-013
J16VT8	SOIL	6-3-08	1510	X		19783						E-014
J16VT9	SOIL	6-3-08	1515	X		19784						E-015
J16VV0	SOIL	6-3-08	1520	X		19785						E-016

CHAIN OF POSSESSION — **Sign/Print Names**

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
B Lawrence	1545 6-3-08	RB Kerkow/RB Kerkow	1545 6-3-08
RB Kerkow/RB Kerkow	1600 6-3-08	RCF D. Miller/	1600 6-3-08

SPECIAL INSTRUCTIONS

None

COPY

Matrix *

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

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

WCH-EE-011

RCF 19782

96

TESTAMERICA

Radiological Counting Facility

Analysis Report for RCF19781

J16VT6 SAF:RC-087 FF2/618-2 Soil Sample

GAMMA SPECTRUM ANALYSIS

Sample Identification	: RCF19781
Sample Description	: J16VT6 SAF:RC-087 FF2/618-2 Soil Sample
Sample Type	: 80 gram pill box
Unit	:
Sample Point	
Sample Size	: 6.300E+01 grams
Facility	: Default
Sample Taken On	: 6/3/2008 3:00:00PM
Acquisition Started	: 6/4/2008 6:34:56AM
Procedure	: 80 gram pill box
Operator	: RCT
Detector Name	: PGTWHITE
Geometry	: 80 Gram Pill Box
Live Time	: 3600.0 seconds
Real Time	: 3600.7 seconds
Dead Time	: 0.02 %
Peak Locate Threshold	: 3.00
Peak Locate Range (in channels)	: 80 - 4096
Peak Area Range (in channels)	: 80 - 4096
Identification Energy Tolerance	: 1.300 keV
Energy Calibration Used Done On	: 1/31/2008
Efficiency Calibration Used Done On	: 2/5/2008
Efficiency Calibration Description	: 80g Pill box 2/5/2008
Sample Number	: 19681

J16VY5

INTERFERENCE CORRECTED REPORT

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/grams)	Wt mean Activity Uncertainty	Comments
K-40		0.997	1.00E+01	3.18E+00	
RA-226d		0.674	4.58E-01	1.56E-01	
TH-232d		0.432	3.86E-01	1.45E-01	
U-235		0.551	1.36E-01	1.28E-01	
U-238d	@	0.999	2.45E+00	1.51E+00	

Analysis Report for RCF19781

J16VT6 SAF:RC-087 FF2/618-2 Soil Sample

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity
d = identified by daughter product energy lines assumed to be in secular equilibrium
Errors quoted at 2.000 sigma

UNIDENTIFIED PEAKS

Peak Locate Performed on : 6/4/2008 7:35:01AM
Peak Locate From Channel : 80
Peak Locate To Channel : 4096

Peak No.	Energy (keV)	Peak Rate (CPS)	Peak Rate (%) Uncertainty
2	77.21 Pb-212	2.78E-02	28.07

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet
Errors quoted at 2.000 sigma

NP = No Peak
UK = Unknown

NUCLIDE MDA REPORT

Nuclide Library Used : \\GOZER\ApexRoot\Default\Library\RCF UNKNOWN.NLB

	Nuclide Name	Energy (keV)		Yield(%)	Activity (pCi/grams)	Nuclide MDA (pCi/grams)	Line MDA (pCi/grams)
+	K-40	1460.83	*	10.67	1.00E+01	2.43E+00	2.43E+00
	CO-60	1173.24		99.90	-1.35E-01	1.95E-01	2.65E-01
		1332.50		99.98	-1.33E-01		1.95E-01
	NB-94	702.63		99.81	4.51E-02	1.64E-01	1.64E-01
		871.10		99.89	-2.37E-02		1.91E-01
	AG-108m	433.94		90.50	-1.06E-02	1.24E-01	1.24E-01
		614.28		89.80	-6.24E-04		1.96E-01
		722.94		90.80	1.12E-01		2.00E-01
	CS-137	661.66		85.21	-8.28E-02	1.52E-01	1.52E-01
	EU-152	40.12		38.40	1.70E-01	2.37E-01	2.68E-01
		45.38		11.10	1.33E+00		9.38E-01
		121.78		28.40	-1.11E-01		2.37E-01
		244.69		7.51	-1.52E-01		1.31E+00
		344.29		26.60	2.80E-01		4.41E-01
		411.12		2.23	-1.16E+00		4.91E+00
		443.89		2.80	-2.94E+00		4.33E+00
		778.92		12.98	-3.64E-01		1.35E+00
		867.38		4.21	-2.46E+00		4.56E+00
		964.11		14.50	-2.30E-01		1.47E+00

Analysis Report for RCF19781

J16VT6 SAF:RC-087 FF2/618-2 Soil Sample

	Nuclide Name	Energy (keV)		Yield(%)	Activity (pCi/grams)	Nuclide MDA (pCi/grams)	Line MDA (pCi/grams)
		1085.89		9.94	9.88E-01		1.94E+00
		1089.71		1.71	5.66E+00		1.15E+01
		1112.07		13.60	-1.76E-02		1.65E+00
		1212.93		1.40	-9.16E+00		1.62E+01
		1299.16		1.63	-8.61E+00		1.14E+01
		1408.00		20.80	-3.04E-02		9.02E-01
	EU-154	123.10		40.50	7.79E-02	1.71E-01	1.71E-01
		723.36		19.70	5.16E-01		9.22E-01
		873.23		11.45	-3.87E-01		1.69E+00
		1004.78		17.90	9.44E-03		1.05E+00
		1274.54		35.50	-5.80E-02		6.13E-01
	EU-155	86.54		34.00	2.79E-01	2.67E-01	2.67E-01
		105.31		20.60	1.01E-01		3.47E-01
	PB-212	74.81		10.50	1.50E-01	6.40E-01	9.18E-01
		77.11		17.70	1.28E+00		6.40E-01
		87.19		6.27	6.24E-01		1.41E+00
+	RA-226d	186.11	*	3.28	2.66E+00	2.71E-01	3.07E+00
		241.92		7.46	7.33E-01		1.86E+00
		295.09	*	19.20	7.28E-01		4.59E-01
		351.87	*	37.10	4.61E-01		2.71E-01
		609.31	*	46.10	3.44E-01		3.87E-01
		1120.27		15.00	1.38E+00		1.87E+00
		1764.49		15.90	5.66E-01		1.22E+00
+	TH-232d	238.58	*	43.60	3.03E-01	2.27E-01	2.27E-01
		338.42		12.40	9.37E-01		1.02E+00
		583.02	*	30.87	5.58E-01		3.22E-01
		911.16		29.00	1.02E+00		8.63E-01
		968.97		17.40	3.19E-01		1.25E+00
+	U-235	143.79		10.50	2.98E-02	1.90E-01	7.12E-01
		163.38		4.70	1.03E+00		1.66E+00
		185.74	*	53.00	1.65E-01		1.90E-01
		205.33		4.70	-1.38E-01		1.86E+00
+	U-238d	63.29	*	3.80	2.45E+00	1.55E+00	2.35E+00
		92.56	*	5.41	2.11E+00		1.55E+00
	AM-241	59.54		35.70	-6.35E-02	1.93E-01	1.93E-01
	CM-243	99.52		14.40	3.64E-01	3.00E-01	4.90E-01
		103.73		23.00	-4.00E-02		3.00E-01
		116.93		8.32	-3.42E-02		8.12E-01
		228.19		10.56	-7.00E-01		8.07E-01
		277.60		14.00	2.97E-02		6.71E-01
	CM-245	99.52		21.10	2.48E-01	2.05E-01	3.35E-01
		103.73		33.60	-2.74E-02		2.05E-01
		116.93		12.20	-2.33E-02		5.54E-01
		174.94		9.50	-2.15E-01		7.73E-01

Analysis Report for RCF19781

J16VT6 SAF:RC-087 FF2/618-2 Soil Sample

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Reviewed and Approved: EDWARD S. WALLACE

JUN 04 2008 (print/sign/date)

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-087-141	Page 1 of 1

Collector B Lawrence, E. Harries	**Company Contact** Joan Kessner **Telephone No.** 509-375-4688	**Project Coordinator** KESSNER, JH	**Price Code** 2A **Data Turnaround** **24 Hours**
Project Designation 618-7 Burial Ground - Soil	**Sampling Location** 618-7 Burial Ground/Stockpiles	**SAF No.** RC-087	
Ice Chest No.	**Field Logbook No.** EL-1395-13 **COA** RG61872600	**Method of Shipment** GOVERNMENT VEHICLE	
Shipped To Radiological Counting Facility	**Offsite Property No.** NA	**Bill of Lading/Air Bill No.** NA	

POSSIBLE SAMPLE HAZARDS/REMARKS

Potential Radiological and Beryllium contamination

Special Handling and/or Storage

None

Preservation	None											
Type of Container	Snap Vial											
No. of Container(s)	1											
Volume	80g											
SAMPLE ANALYSIS	RCF GEA Shipping Screen											
Sample No.	Matrix *	Sample Date	Sample Time			RCF						
J16VT6	SOIL	6-3-08	1500	X		19781						E-012
J16VT7	SOIL	6-3-08	1505	X		19782						E-013
J16VT8	SOIL	6-3-08	1510	X		19783						E-014
J16VT9	SOIL	6-3-08	1515	X		19784						E-015
J16VV0	SOIL	6-3-08	1520	X		19785						F-015

CHAIN OF POSSESSION — **Sign/Print Names**

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
B Lawrence	1545 6-3-08	RB KERKOW/RB Kerkow	1545 6-3-08
RB KERKOW/RB Kerkow	1600 6-3-08	RCF D. Millen/ D Millen	1600 6-3-08

SPECIAL INSTRUCTIONS

None

COPY

Matrix *

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

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

WCH-EE-011

RCF 19781

101

TESTAMERICA

Radiological Counting Facility

Analysis Report for RCF19785

J16VV0 SAF:RC-087 FF2/618-2 Soil Sample

GAMMA SPECTRUM ANALYSIS

Sample Identification	: RCF19785
Sample Description	: J16VV0 SAF:RC-087 FF2/618-2 Soil Sample
Sample Type	: 50 gram pill box
Unit	:
Sample Point	
Sample Size	: 5.500E+01 grams
Facility	: Default
Sample Taken On	: 6/3/2008 3:20:00PM
Acquisition Started	: 6/4/2008 7:39:06AM
Procedure	: 50 gram pill box
Operator	: RCT
Detector Name	: BEGE
Geometry	: 50 ml Pill Box
Live Time	: 3600.0 seconds
Real Time	: 3600.2 seconds
Dead Time	: 0.01 %
Peak Locate Threshold	: 3.00
Peak Locate Range (in channels)	: 80 - 4096
Peak Area Range (in channels)	: 80 - 4096
Identification Energy Tolerance	: 1.300 keV
Energy Calibration Used Done On	: 3/27/2008
Efficiency Calibration Used Done On	: 3/31/2008
Efficiency Calibration Description	: 50 ml Pill Box 3-31-2008
Sample Number	: 19685

J16W03

INTERFERENCE CORRECTED REPORT

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/grams)	Wt mean Activity Uncertainty	Comments
K-40	0.992	1.31E+01	2.89E+00	
PB-212	0.707	7.09E-01	1.17E-01	
RA-226d	0.347	2.34E-01	1.24E-01	
TH-232d	0.457	4.70E-01	1.42E-01	

Analysis Report for RCF19785

J16VV0 SAF:RC-087 FF2/618-2 Soil Sample

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity
d = identified by daughter product energy lines assumed to be in secular equilibrium
Errors quoted at 2.000 sigma

UNIDENTIFIED PEAKS

Peak Locate Performed on : 6/4/2008 8:39:18AM
Peak Locate From Channel : 80
Peak Locate To Channel : 4096

Peak No.	Energy (keV)	Peak Rate (CPS)	Peak Rate (%) Uncertainty

All peaks were identified.

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet
Errors quoted at 2.000 sigma

NP = No Peak
UK = Unknown

NUCLIDE MDA REPORT

Nuclide Library Used : \\GOZER\ApexRoot\Default\Library\RCF UNKNOWN.NLB

	Nuclide Name	Energy (keV)		Yield(%)	Activity (pCi/grams)	Nuclide MDA (pCi/grams)	Line MDA (pCi/grams)
+	K-40	1460.83	*	10.67	1.31E+01	2.01E+00	2.01E+00
	CO-60	1173.24		99.90	8.13E-04	2.29E-01	2.29E-01
		1332.50		99.98	9.14E-02		2.37E-01
	NB-94	702.63		99.81	4.55E-02	1.59E-01	1.59E-01
		871.10		99.89	2.53E-02		2.00E-01
	AG-108m	433.94		90.50	2.12E-04	1.26E-01	1.26E-01
		614.28		89.80	1.34E-03		1.65E-01
		722.94		90.80	-3.00E-02		1.77E-01
	CS-137	661.66		85.21	4.63E-03	1.84E-01	1.84E-01
	EU-152	40.12		38.40	1.99E-02	9.30E-02	9.30E-02
		45.38		11.10	-6.89E-02		2.73E-01
		121.78		28.40	-4.81E-02		1.21E-01
		244.69		7.51	-9.16E-01		7.91E-01
		344.29		26.60	5.30E-03		2.50E-01
		411.12		2.23	-2.35E+00		4.65E+00
		443.89		2.80	-7.62E-01		3.59E+00
		778.92		12.98	-6.59E-01		1.14E+00
		867.38		4.21	-3.89E+00		3.99E+00
		964.11		14.50	-8.90E-01		1.80E+00
		1085.89		9.94	-4.36E-01		2.05E+00

Analysis Report for RCF19785

J16VV0 SAF:RC-087 FF2/618-2 Soil Sample

	Nuclide Name	Energy (keV)		Yield(%)	Activity (pCi/grams)	Nuclide MDA (pCi/grams)	Line MDA (pCi/grams)
		1089.71		1.71	7.97E+00		1.31E+01
		1112.07		13.60	-5.58E-01		1.48E+00
		1212.93		1.40	-3.16E+00		1.75E+01
		1299.16		1.63	-2.73E+00		1.24E+01
		1408.00		20.80	5.82E-01		1.42E+00
	EU-154	123.10		40.50	8.61E-03	8.94E-02	8.94E-02
		723.36		19.70	3.94E-01		8.81E-01
		873.23		11.45	8.07E-01		1.78E+00
		1004.78		17.90	2.67E-01		1.29E+00
		1274.54		35.50	1.96E-01		8.77E-01
	EU-155	86.54		34.00	5.91E-02	1.25E-01	1.25E-01
		105.31		20.60	6.58E-02		1.59E-01
+	PB-212	74.81	*	10.50	7.55E-01	2.02E-01	3.35E-01
		77.11	*	17.70	6.83E-01		2.02E-01
		87.19		6.27	-2.12E-02		6.66E-01
+	RA-226d	186.11		3.28	8.66E-01	2.47E-01	1.94E+00
		241.92		7.46	7.44E-01		1.16E+00
		295.09		19.20	4.91E-01		5.37E-01
		351.87	*	37.10	2.44E-01		2.47E-01
		609.31	*	46.10	2.20E-01		2.98E-01
		1120.27		15.00	5.58E-01		1.45E+00
		1764.49		15.90	4.66E-01		1.74E+00
+	TH-232d	238.58	*	43.60	4.16E-01	2.31E-01	2.31E-01
		338.42		12.40	3.96E-01		7.42E-01
		583.02	*	30.87	6.52E-01		3.95E-01
		911.16		29.00	2.78E-01		8.20E-01
		968.97		17.40	1.26E+00		1.55E+00
	U-235	143.79		10.50	2.14E-01	1.21E-01	4.35E-01
		163.38		4.70	1.80E-01		1.15E+00
		185.74		53.00	8.29E-02		1.21E-01
		205.33		4.70	5.58E-01		1.35E+00
	U-238d	63.29		3.80	5.02E-01	8.20E-01	9.57E-01
		92.56		5.41	-3.87E-01		8.20E-01
	AM-241	59.54		35.70	1.94E-02	7.77E-02	7.77E-02
	CM-243	99.52		14.40	-7.07E-02	1.37E-01	2.37E-01
		103.73		23.00	-1.06E-01		1.37E-01
		116.93		8.32	-2.80E-01		3.86E-01
		228.19		10.56	2.97E-02		6.34E-01
		277.60		14.00	3.53E-02		4.93E-01
	CM-245	99.52		21.10	-4.82E-02	9.38E-02	1.62E-01
		103.73		33.60	-7.22E-02		9.38E-02
		116.93		12.20	-1.91E-01		2.63E-01
		174.94		9.50	-2.68E-01		5.40E-01

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Analysis Report for RCF19785

J16VV0 SAF:RC-087 FF2/618-2 Soil Sample

Reviewed and Approved: EDWARD S. WALLACE

JUN 04 2008 (print/sign/date)

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		RC-087-141	Page 1 of 1
Collector B Lawrence, E. Harries	Company Contact Joan Kessner	Telephone No. 509-375-4688	Project Coordinator KESSNER, JH	Price Code 2A
Project Designation 618-7 Burial Ground - Soil	Sampling Location 618-7 Burial Ground/Stockpiles		SAF No. RC-087	Data Turnaround 24 Hours
Ice Chest No.	Field Logbook No. EL-1395-13	COA RG61872600	Method of Shipment GOVERNMENT VEHICLE	
Shipped To Radiological Counting Facility	Offsite Property No. NA		Bill of Lading/Air Bill No. NA	

POSSIBLE SAMPLE HAZARDS/REMARKS

Potential Radiological and Beryllium contamination

Special Handling and/or Storage

None

Preservation	None											
Type of Container	Snap Vial											
No. of Container(s)	1											
Volume	80g											
SAMPLE ANALYSIS	RCF GEA Shipping Screen											
Sample No. / Matrix * / Sample Date / Sample Time						RCF						
J16VT6 / SOIL / 6-3-08 / 1500	X					19781						
J16VT7 / SOIL / 6-3-08 / 1505	X					19782						E-012
J16VT8 / SOIL / 6-3-08 / 1510	X					19783						E-013
J16VT9 / SOIL / 6-3-08 / 1515	X					19784						E-014
J16VV0 / SOIL / 6-3-08 / 1520	X					19785						E-015
												F-015

CHAIN OF POSSESSION — **Sign/Print Names**

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
B Lawrence	1545 6-3-08	RB KERKOW/RB Kerk	1545 6-3-08
RB KERKOW/RB Kerk	1600 6-3-08	RCF D. Miller/	1600 6-3-08

SPECIAL INSTRUCTIONS

None

COPY

Matrix *

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

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

WCH-EE-011

RCF19785

106

TESTAMERICA

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Sample Check-in List

Date/Time Received: 6408 1405 GM Screen Result 0.2K

Client: WCH SDG #: J00178 4 NA[ ] SAF #: RC-087 NA [ ]

Work Order Number: J8F040320 Chain of Custody # RC-087-148,-151 Rev 6/4/08

Shipping Container ID: _____ Air Bill # _____

1. Custody Seals on shipping container intact? NA [ ] Yes [✓] No [ ]
2. Custody Seals dated and signed? NA [ ] Yes [✓] No [ ]
3. Chain of Custody record present? NA [ ] Yes [✓] No [ ]
4. Cooler Temperature: _____ NA [✓] 5. Vermiculite/packing materials is NA [✓] Wet [ ] Dry [ ]
6. Number of samples in shipping container: 9
7. Sample holding times exceeded? NA [✓] Yes [ ] No [ ]
8. Samples have:
   - ____ Tape
   - ✓ Custody Seals
   - ____ Hazard Lables
   - ✓ Appropriate Sample Lables
9. Samples are:
   - ✓ In Good Condition
   - ____ Broken
   - ____ Leaking
   - ____ Have Air Bubbles
   - (Only for samples requiring no head space.)
10. Sample pH taken? SOIL NA [✓] pH<2 [ ] pH>2 [ ] pH>9 [ ] Amount HNO_3 Added _____
11. Sample Location, Sample Collector Listed? *
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [✓]
13. Description of anomalies (include sample numbers): _____

Sample Custodian: _____ Date: 6408

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person Contacted _____

[ ] No action necessary; process as is.

Project Manager _____ Date _____

TESTAMERICA

108

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-087-172	Page 1 of 1

Collector B Lawrence, E. Harries	Company Contact Joan Kessner	Telephone No. 509-375-4688	Project Coordinator KESSNER, JH	Price Code	Data Turnaround **24 Hours**
Project Designation 618-7 Burial Ground - Soil	Sampling Location 618-7 Burial Ground/anomalous materials		SAF No. RC-087		
Ice Chest No.	Field Logbook No. EL-1395-13	COA RG61872600	Method of Shipment		
Shipped To TestAmerica Incorporated, Richland	Offsite Property No.		Bill of Lading/Air Bill No.		

POSSIBLE SAMPLE HAZARDS/REMARKS

Potential Radiological and Beryllium contamination

Special Handling and/or Storage

None

Preservation	None										
Type of Container	aG										
No. of Container(s)	1										
Volume	60mL										
SAMPLE ANALYSIS	See item (1) in Special Instructions.										

Sample No.	Matrix *	Sample Date	Sample Time										
J16W52 KP2LJ	SOIL	6-13-08	0830	X									

CHAIN OF POSSESSION — **Sign/Print Names**

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
E. Harries / E. Harries	1 13 08 1000	R. Fahlberg / R. Fahlberg	1000 6-13-08
R. Fahlberg / R. Fahlberg	1100 6-13-08	1-A 1060 Batt. Blvd. / 6-13-08	1100
1-A 1060	6-16-08 1500	JRDeBrigne / JRDeBrigne	1500 6-16-08
JRDeBrigne / JRDeBrigne	6-16-08 1540	[illegible] LANE TAL	61608 1540

SPECIAL INSTRUCTIONS

None

(1) Metals by ICP - 6010 - Quick Turn {Arsenic, Barium, Cadmium, Chromium, Lead, Selenium, Silver}; Metals by ICP - 6010 - Quick Turn (Add On) {Aluminum, Beryllium, Copper, Iron, Zinc, Zirconium}

J8F160202
J00174
DUE 61708

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

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

WCH-EE-011

Radiological Counting Facility

Analysis Report for RCF19877

J16W47 SAF:RC-087 FF2/618-7 BURIAL GROUND/ANOMALOUS MATERIAL

GAMMA SPECTRUM ANALYSIS

Sample Identification	: RCF19877
Sample Description	: J16W47 SAF:RC-087 FF2/618-7 BURIAL GROUND/ANOMALOUS MATERIAL
Sample Type	: 50 gram pill box
Unit	:
Sample Point	
Sample Size	: 5.400E+01 grams
Facility	: Default
Sample Taken On	: 6/13/2008 8:30:00AM
Acquisition Started	: 6/16/2008 12:15:50PM
Procedure	: 50 gram pill box
Operator	: RCT
Detector Name	: PGTWHITE
Geometry	: 50 ml Pill Box
Live Time	: 3600.0 seconds
Real Time	: 3600.6 seconds
Dead Time	: 0.02 %
Peak Locate Threshold	: 3.00
Peak Locate Range (in channels)	: 80 - 4096
Peak Area Range (in channels)	: 80 - 4096
Identification Energy Tolerance	: 1.300 keV
Energy Calibration Used Done On	: 1/31/2008
Efficiency Calibration Used Done On	: 2/4/2008
Efficiency Calibration Description	: 50ml Pill Box (1234-95-2) 2/4/2008
Sample Number	: 19956

INTERFERENCE CORRECTED REPORT

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/grams)	Wt mean Activity Uncertainty	Comments

Analysis Report for RCF19877

J16W47 SAF:RC-087 FF2/618-7 BURIAL GROUND/ANOMALOUS MATERIAL

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity
d = identified by daughter product energy lines assumed to be in secular equilibrium

Errors quoted at 2.000 sigma

No peak search results available for nuclide analysis.

NUCLIDE MDA REPORT

Nuclide Library Used : \\GOZER\ApexRoot\Default\Library\RCF UNKNOWN.NLB

Nuclide Name	Energy (keV)	Yield(%)	Activity (pCi/grams)	Nuclide MDA (pCi/grams)	Line MDA (pCi/grams)
K-40	1460.83	10.67	6.51E+00	5.07E+00	5.07E+00
CO-60	1173.24	99.90	-5.31E-02	2.67E-01	2.67E-01
	1332.50	99.98	4.78E-03		2.86E-01
NB-94	702.63	99.81	-1.43E-01	2.19E-01	2.19E-01
	871.10	99.89	1.55E-01		2.43E-01
AG-108m	433.94	90.50	-8.92E-02	1.84E-01	1.84E-01
	614.28	89.80	-2.37E-01		2.36E-01
	722.94	90.80	1.73E-03		2.65E-01
CS-137	661.66	85.21	-1.06E-02	2.43E-01	2.43E-01
EU-152	40.12	38.40	1.28E-01	2.74E-01	2.74E-01
	45.38	11.10	1.00E+00		9.11E-01
	121.78	28.40	-6.34E-02		2.75E-01
	244.69	7.51	6.38E-01		1.92E+00
	344.29	26.60	2.79E-02		5.90E-01
	411.12	2.23	-7.43E-02		6.67E+00
	443.89	2.80	6.23E-01		6.38E+00
	778.92	12.98	-6.37E-01		1.63E+00
	867.38	4.21	4.12E-01		5.66E+00
	964.11	14.50	-2.05E-01		1.97E+00
	1085.89	9.94	-8.79E-01		2.76E+00
	1089.71	1.71	1.31E+01		1.69E+01
	1112.07	13.60	-1.72E+00		1.55E+00
	1212.93	1.40	-2.19E+00		1.83E+01
	1299.16	1.63	7.80E+00		1.72E+01
	1408.00	20.80	-4.83E-02		1.45E+00
EU-154	123.10	40.50	5.73E-02	1.99E-01	1.99E-01
	723.36	19.70	7.99E-03		1.22E+00
	873.23	11.45	-5.32E-01		1.99E+00
	1004.78	17.90	-2.28E-01		1.35E+00
	1274.54	35.50	2.07E-01		9.43E-01
EU-155	86.54	34.00	1.17E-01	2.79E-01	2.79E-01
	105.31	20.60	-1.60E-01		3.82E-01
PB-212	74.81	10.50	2.60E-01	5.73E-01	8.67E-01
	77.11	17.70	4.73E-01		5.73E-01

Analysis Report for RCF19877

J16W47 SAF:RC-087 FF2/618-7 BURIAL GROUND/ANOMALOUS MATERIAL

Nuclide Name	Energy (keV)	Yield(%)	Activity (pCi/grams)	Nuclide MDA (pCi/grams)	Line MDA (pCi/grams)
	87.19	6.27	1.50E+00		1.49E+00
RA-226d	186.11	3.28	4.45E+00	4.85E-01	4.00E+00
	241.92	7.46	2.11E+00		2.24E+00
	295.09	19.20	1.52E-01		7.90E-01
	351.87	37.10	2.27E-01		4.85E-01
	609.31	46.10	1.31E-01		5.08E-01
	1120.27	15.00	7.66E-01		2.10E+00
	1764.49	15.90	9.95E-01		2.25E+00
TH-232d	238.58	43.60	2.76E-01	3.69E-01	3.69E-01
	338.42	12.40	5.93E-02		1.15E+00
	583.02	30.87	2.95E-01		7.47E-01
	911.16	29.00	2.30E-01		9.83E-01
	968.97	17.40	2.44E-01		1.54E+00
U-235	143.79	10.50	5.51E-02	2.47E-01	9.21E-01
	163.38	4.70	1.32E+00		2.35E+00
	185.74	53.00	2.75E-01		2.47E-01
	205.33	4.70	1.42E+00		2.61E+00
U-238d	63.29	3.80	1.40E+00	1.83E+00	2.19E+00
	92.56	5.41	1.54E+00		1.83E+00
AM-241	59.54	35.70	-7.27E-03	1.97E-01	1.97E-01
CM-243	99.52	14.40	3.59E-01	3.39E-01	5.86E-01
	103.73	23.00	6.98E-02		3.39E-01
	116.93	8.32	-4.87E-01		9.17E-01
	228.19	10.56	7.31E-01		1.18E+00
	277.60	14.00	-3.10E-01		1.04E+00
CM-245	99.52	21.10	2.45E-01	2.32E-01	4.00E-01
	103.73	33.60	4.77E-02		2.32E-01
	116.93	12.20	-3.32E-01		6.26E-01
	174.94	9.50	2.82E-01		1.16E+00

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Reviewed and Approved: EDWARD S. WALLACE

JUN 16 2008 (print/sign/date)

TESTAMERICA

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

Washington Closure Hanford	Company Contact: Joan Kessner	Telephone No.: 509-375-4688	Project Coordinator: KESSNER, JH
Price Code	Data Turnaround: **24 Hours**		
Collector: B Lawrence, E. Harries	Sampling Location: 618-7 Burial Ground/anomalous materials		SAF No.: RC-087
Project Designation: 618-7 Burial Ground - Soil	Field Logbook No.: EL-1395-13	COA: RG61872600	Method of Shipment
Ice Chest No.	Offsite Property No.		Bill of Lading/Air Bill No.

Shipped To: Radiological Counting Facility

POSSIBLE SAMPLE HAZARDS/REMARKS

Potential Radiological and Beryllium contamination

Special Handling and/or Storage

None

Preservation	None
Type of Container	Snap Vial
No. of Container(s)	1
Volume	80g

SAMPLE ANALYSIS

Sample No.	Matrix *	Sample Date	Sample Time	RCF GEA Shipping Screen	RCF
J16W47	SOIL	6-13-08	0830	X	A077

CHAIN OF POSSESSION

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
Eric Harries / E. Harries	6/13/08 1000	R. Fahlberg R. Fahlberg	6-13-08 1000
R. Fahlberg R. Fahlberg	6-13-08 1100	1-A 1060 Batt.	6-13-08 1100
1060 1A	6-16-08 0900	JR DeBruyn JRDB	6-16-08 0850
JR DeBruyn JRDB	6-16-08 0805	Mike Rode Mike Rode RCF	6-16-08 0805

Sign/Print Names

SPECIAL INSTRUCTIONS: None

COPY

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

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

RCF-19877

WCH-EE-011

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Sample Check-in List

Date/Time Received: 61608 1540 GM Screen Result 0.1K

Client: WCH SDG #: J00174 NA[ ] SAF #: RC-087 NA [ ]

Work Order Number: J8F160202 Chain of Custody # RC-087-172

Shipping Container ID: N/A Air Bill # N/A

1. Custody Seals on shipping container intact? NA [ ] Yes [✓] No [ ]
2. Custody Seals dated and signed? NA [ ] Yes [✓] No [ ]
3. Chain of Custody record present? NA [ ] Yes [✓] No [ ]
4. Cooler Temperature: _____ NA [✓] 5. Vermiculite/packing materials is NA [✓] Wet [ ] Dry [ ]
6. Number of samples in shipping container: 1
7. Sample holding times exceeded? NA [✓] Yes [ ] No [ ]
8. Samples have:
   - ____ Tape
   - ✓ Custody Seals
   - ____ Hazard Lables
   - ✓ Appropriate Sample Lables
9. Samples are:
   - ✓ In Good Condition
   - ____ Broken
   - ____ Leaking
   - ____ Have Air Bubbles
   - (Only for samples requiring no head space.)
10. Sample pH taken? NA [✓] SOIL pH<2 [ ] pH>2 [ ] pH>9 [ ] Amount HNO_3 Added _____
11. Sample Location, Sample Collector Listed? *
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [✓]
13. Description of anomalies (include sample numbers): _____

Sample Custodian: [signature] Date: 61608

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person Contacted _____

[ ] No action necessary; process as is.

Project Manager _____ Date _____

TESTAMERICA

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-087-154	Page 1 of 1

Collector B Lawrence, E. Harries	**Company Contact** Joan Kessner	**Telephone No.** 509-375-4688	**Project Coordinator** KESSNER, JH
Price Code 2B	**Data Turnaround** 24 Hours		
Project Designation 618-7 Burial Ground - Soil	**Sampling Location** 618-7 Burial Ground/Stockpiles		**SAF No.** RC-087
Ice Chest No. ERC-97-079	**Field Logbook No.** EL-1395-13	**COA** RG61872600	**Method of Shipment** GOVERNMENT VEHICLE
Shipped To TestAmerica Incorporated, Richland	**Offsite Property No.** NA		**Bill of Lading/Air Bill No.** NA

POSSIBLE SAMPLE HAZARDS/REMARKS

Potential Radiological and Beryllium contamination

Special Handling and/or Storage

None

Preservation	None										
Type of Container	aG										
No. of Container(s)	1										
Volume	60mL										
SAMPLE ANALYSIS	See item (1) in Special Instructions.										

Sample No.	Matrix *	Sample Date	Sample Time										
J16W13	SOIL	6-16-08	0740	X									
~~J16W14~~	~~SOIL~~												

11 RA 6/16/08

CHAIN OF POSSESSION		Sign/Print Names	
Relinquished By/Removed From: B Lawrence	Date/Time 0810 6-16-08	Received By/Stored In: RB Kerkow / RB Kerk	Date/Time 0810 6-16-08
Relinquished By/Removed From: RB Kerkow / RB Kerk	Date/Time 0840 6-16-08	Received By/Stored In: REF 1B (1060)	Date/Time 6-16-08 0840
Relinquished By/Removed From: 1060 1B	Date/Time 0945 JUN 17 2008	Received By/Stored In: MS Stankovich	Date/Time 0945 JUN 17 2008
Relinquished By/Removed From: MS Stankovich	Date/Time 1000 JUN 17 2008	Received By/Stored In: LJ LANE TAL	Date/Time 1000 61708
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time

SPECIAL INSTRUCTIONS

None

(1) Metals by ICP - 6010 - Quick Turn {Arsenic, Barium, Cadmium, Chromium, Lead, Selenium, Silver}; Metals by ICP - 6010 - Quick Turn (Add On) {Aluminum, Beryllium, Copper, Iron, Zinc, Zirconium}

J8F170197
J00174
DUE 61808
KP3RT

Matrix *

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

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

WCH-EE-011

Radiological Counting Facility

Analysis Report for RCF19879

J16WC3 SAF:RC-087 FF2/618-7 BURIAL GROUND

GAMMA SPECTRUM ANALYSIS

Sample Identification	: RCF19879
Sample Description	: J16WC3 SAF:RC-087 FF2/618-7 BURIAL GROUND
Sample Type	: 50 gram pill box
Unit	:
Sample Point	
Sample Size	: 5.900E+01 grams
Facility	: Default
Sample Taken On	: 6/16/2008 7:40:00AM
Acquisition Started	: 6/16/2008 2:10:47PM
Procedure	: 50 gram pill box
Operator	: RCT
Detector Name	: PGTWHITE
Geometry	: 50 ml Pill Box
Live Time	: 3600.0 seconds
Real Time	: 3600.7 seconds
Dead Time	: 0.02 %
Peak Locate Threshold	: 3.00
Peak Locate Range (in channels)	: 80 - 4096
Peak Area Range (in channels)	: 80 - 4096
Identification Energy Tolerance	: 1.300 keV
Energy Calibration Used Done On	: 1/31/2008
Efficiency Calibration Used Done On	: 2/4/2008
Efficiency Calibration Description	: 50ml Pill Box (1234-95-2) 2/4/2008
Sample Number	: 19963

INTERFERENCE CORRECTED REPORT

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/grams)	Wt mean Activity Uncertainty	Comments
K-40		0.999	8.79E+00	2.72E+00	
PB-212		0.709	1.55E+00	2.36E-01	
TH-232d		0.740	1.09E+00	2.26E-01	
U-235		0.540	8.32E-01	2.00E-01	
U-238d	@	1.000	1.02E+01	2.50E+00	

Analysis Report for RCF19879

J16WC3 SAF:RC-087 FF2/618-7 BURIAL GROUND

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity
d = identified by daughter product energy lines assumed to be in secular equilibrium
Errors quoted at 2.000 sigma

UNIDENTIFIED PEAKS

Peak Locate Performed on : 6/16/2008 3:10:57PM
Peak Locate From Channel : 80
Peak Locate To Channel : 4096

Peak No.	Energy (keV)	Peak Rate (CPS)	Peak Rate (%) Uncertainty

All peaks were identified.

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet
Errors quoted at 2.000 sigma

NP = No Peak
UK = Unknown

NUCLIDE MDA REPORT

Nuclide Library Used : \\GOZER\ApexRoot\Default\Library\RCF UNKNOWN.NLB

	Nuclide Name	Energy (keV)		Yield(%)	Activity (pCi/grams)	Nuclide MDA (pCi/grams)	Line MDA (pCi/grams)
+	K-40	1460.83	*	10.67	8.79E+00	3.23E+00	3.23E+00
	CO-60	1173.24		99.90	-4.57E-02	2.55E-01	2.93E-01
		1332.50		99.98	-1.36E-01		2.55E-01
	NB-94	702.63		99.81	-4.53E-02	2.16E-01	2.28E-01
		871.10		99.89	-1.67E-01		2.16E-01
	AG-108m	433.94		90.50	-5.44E-02	2.06E-01	2.06E-01
		614.28		89.80	-1.42E-01		2.77E-01
		722.94		90.80	1.34E-01		2.89E-01
	CS-137	661.66		85.21	1.46E-02	2.62E-01	2.62E-01
	EU-152	40.12		38.40	4.36E-02	3.29E-01	3.49E-01
		45.38		11.10	1.16E+00		1.09E+00
		121.78		28.40	7.11E-02		3.29E-01
		244.69		7.51	4.06E-01		1.96E+00
		344.29		26.60	-2.61E-02		6.39E-01
		411.12		2.23	6.00E-02		7.69E+00
		443.89		2.80	-3.73E-01		6.24E+00
		778.92		12.98	-4.32E-01		1.91E+00
		867.38		4.21	-3.57E+00		5.25E+00
		964.11		14.50	3.50E-01		2.40E+00
		1085.89		9.94	-1.38E+00		2.43E+00

Analysis Report for RCF19879

J16WC3 SAF:RC-087 FF2/618-7 BURIAL GROUND

	Nuclide Name	Energy (keV)		Yield(%)	Activity (pCi/grams)	Nuclide MDA (pCi/grams)	Line MDA (pCi/grams)
		1089.71		1.71	-2.94E+00		1.42E+01
		1112.07		13.60	-6.25E-01		2.11E+00
		1212.93		1.40	1.02E+01		2.37E+01
		1299.16		1.63	2.60E+00		1.72E+01
		1408.00		20.80	-1.26E-01		1.36E+00
	EU-154	123.10		40.50	-5.38E-02	2.27E-01	2.27E-01
		723.36		19.70	6.16E-01		1.33E+00
		873.23		11.45	-4.44E-01		1.94E+00
		1004.78		17.90	-7.78E-02		1.63E+00
		1274.54		35.50	3.26E-01		9.16E-01
	EU-155	86.54		34.00	2.24E-01	4.07E-01	4.07E-01
		105.31		20.60	-1.17E-01		4.74E-01
+	PB-212	74.81	*	10.50	1.63E+00	5.25E-01	9.40E-01
		77.11	*	17.70	1.52E+00		5.25E-01
		87.19		6.27	1.50E+00		2.23E+00
	RA-226d	186.11		3.28	1.41E+01	5.35E-01	6.01E+00
		241.92		7.46	1.06E+00		3.14E+00
		295.09		19.20	-1.36E-01		8.61E-01
		351.87		37.10	3.77E-01		5.35E-01
		609.31		46.10	4.54E-01		5.97E-01
		1120.27		15.00	-6.28E-01		2.16E+00
		1764.49		15.90	6.47E-01		2.21E+00
+	TH-232d	238.58	*	43.60	9.47E-01	4.32E-01	4.32E-01
		338.42	*	12.40	1.10E+00		1.36E+00
		583.02	*	30.87	1.20E+00		5.40E-01
		911.16		29.00	6.05E-01		1.24E+00
		968.97	*	17.40	1.67E+00		1.05E+00
+	U-235	143.79		10.50	5.92E-01	2.66E-01	1.09E+00
		163.38		4.70	1.33E+00		2.77E+00
		185.74	*	53.00	8.32E-01		2.66E-01
		205.33		4.70	-8.53E-01		2.93E+00
+	U-238d	63.29	*	3.80	1.02E+01	2.24E+00	3.52E+00
		92.56	*	5.41	9.69E+00		2.24E+00
	AM-241	59.54		35.70	-2.68E-02	2.68E-01	2.68E-01
	CM-243	99.52		14.40	7.28E-01	4.22E-01	7.46E-01
		103.73		23.00	-4.25E-02		4.22E-01
		116.93		8.32	-2.09E-01		1.19E+00
		228.19		10.56	-1.09E-01		1.26E+00
		277.60		14.00	1.23E-01		1.05E+00
	CM-245	99.52		21.10	4.97E-01	2.89E-01	5.09E-01
		103.73		33.60	-2.91E-02		2.89E-01
		116.93		12.20	-1.43E-01		8.11E-01
		174.94		9.50	1.08E-01		1.29E+00

+ = Nuclide identified during the nuclide identification
* = Energy line found in the spectrum
> = MDA value not calculated
@ = Half-life too short to be able to perform the decay correction

Analysis Report for RCF19879

J16WC3 SAF:RC-087 FF2/618-7 BURIAL GROUND

Reviewed and Approved: **EDWARD S. WALLACE**

JUN 16 2008 (print/sign/date)

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		RC-087-176	Page 1 of 1
Collector B Lawrence, E. Harries	Company Contact Joan Kessner	Telephone No. 509-375-4688	Project Coordinator KESSNER, JH	Price Code 2A
Project Designation 618-7 Burial Ground - Soil	Sampling Location 618-7 Burial Ground/Stockpiles		SAF No. RC-087	Data Turnaround 24 Hours
Ice Chest No.	Field Logbook No. EL-1395-13	COA RG61872600	Method of Shipment GOVERNMENT VEHICLE	
Shipped To Radiological Counting Facility	Offsite Property No. NA		Bill of Lading/Air Bill No. NA	

POSSIBLE SAMPLE HAZARDS/REMARKS

Potential Radiological and Beryllium contamination

Special Handling and/or Storage

None

Preservation	None											
Type of Container	Snap Vial											
No. of Container(s)	1											
Volume	80g											
SAMPLE ANALYSIS	RCF GFA Shipping Screen			RCF								
Sample No. / Matrix * / Sample Date / Sample Time												
J16WC3 / SOIL / 6-16-08 / 0740	X		19879									
~~J16WC4 / SOIL~~												

CHAIN OF POSSESSION — **Sign/Print Names**

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
[signature]	0810 6-16-08	RB KERKOW/RB Kerk	0810 6-16-08
RB KERKOW/RB Kerk	0830 6-16-08	[signature] RCF	0830 6-16-08

SPECIAL INSTRUCTIONS

None

RUSH

COPY

Matrix *

SeSoil
SEdSediment
SOSolid
SlSludge
W = Water
OiOil
AaAir
DSDrum Solids
DLDrum Liquids
TsTissue
WiWipe
LiLiquid
VeVegetation
XOther

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

WCH-EE-011

119

TESTAMERICA

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Sample Check-in List

Date/Time Received: 61708 1000 GM Screen Result 0.1K

Client: WCH SDG #: J00174 NA[ ] SAF #: RC-087 NA [ ]

Work Order Number: J8F170197 Chain of Custody # RC-087-154

Shipping Container ID: N/A Air Bill # N/A

1. Custody Seals on shipping container intact? NA [ ] Yes [✓] No [ ]
2. Custody Seals dated and signed? NA [ ] Yes [✓] No [ ]
3. Chain of Custody record present? NA [ ] Yes [✓] No [ ]
4. Cooler Temperature: _____ NA [✓] 5. Vermiculite/packing materials is NA [✓] Wet [ ] Dry [ ]
6. Number of samples in shipping container: 1
7. Sample holding times exceeded? NA [✓] Yes [ ] No [ ]
8. Samples have:
   - ____ Tape
   - ✓ Custody Seals
   - ____ Hazard Lables
   - ✓ Appropriate Sample Lables
9. Samples are:
   - ✓ In Good Condition
   - ____ Broken
   - ____ Leaking
   - ____ Have Air Bubbles
   - (Only for samples requiring no head space.)
10. Sample pH taken? NA [✓] SOIL pH<2 [ ] pH>2 [ ] pH>9 [ ] Amount HNO_3 Added _____
11. Sample Location, Sample Collector Listed? *
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [✓]
13. Description of anomalies (include sample numbers): _____

Sample Custodian: _____ Date: 61708

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person Contacted _____

[ ] No action necessary, process as is.

Project Manager _____ Date _____