TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
Tel: (314)298-8566

TestAmerica Job ID: 160-3235-2
Client Project/Site: RFP-CBA-022 (21 DAY TAT)

For:
Westinghouse Electric Company LLC
3300 State Road P
Festus, Missouri 63028

Attn: Martin Swanson

Authorized for release by:
9/3/2013 5:37:36 PM

Ivan Vania, Project Manager I
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Table of Contents

Job ID: 160-3235-2

Laboratory: TestAmerica St. Louis

Narrative

CASE NARRATIVE

Client: Westinghouse Electric Company LLC

Project: RFP-CBA-022 (21 DAY TAT)

Report Number: 160-3235-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica St. Louis attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results for Chemistry analyses are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header. All soil/sediment sample results for radiochemistry analyses are based upon sample as dried and disaggregated with the exception of tritium, carbon-14, and iodine-129 by gamma spectroscopy unless requested as wet weight by the client."

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 08/03/2013; the samples arrived in good condition, properly preserved and on ice. The temperatures of the 4 coolers at receipt time were 0.8º C, 2.2º C, 23.7º C and 25.1º C.

TECHNETIUM-99 (ICPMS)

Samples L100816BUB00 (160-3235-1), L100817BUB00 (160-3235-2), L100818BUB00 (160-3235-3), L100819BUB00 (160-3235-4), L100820BUB00 (160-3235-5), L100821BUB00 (160-3235-6), L100822BUB00 (160-3235-7), L100823BUB00 (160-3235-8), L100824BUB00 (160-3235-9), L100825BUB00 (160-3235-10), L100826BUB00 (160-3235-11), L100827BUB00 (160-3235-12) and L100828BUB00 (160-3235-13) were analyzed for Technetium-99 (ICPMS) in accordance with EPA SW-846 Method 6020A. The samples were prepared on 08/06/2013 and analyzed on 08/09/2013 and 08/12/2013.

No difficulties were encountered during the Tc-99 analysis. All quality control parameters were within the acceptance limits.

PERCENT SOLIDS

Samples L100816BUB00 (160-3235-1), L100817BUB00 (160-3235-2), L100818BUB00 (160-3235-3), L100819BUB00 (160-3235-4),

Job ID: 160-3235-2 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

L100820BUB00 (160-3235-5), L100821BUB00 (160-3235-6), L100822BUB00 (160-3235-7), L100823BUB00 (160-3235-8), L100824BUB00 (160-3235-9), L100825BUB00 (160-3235-10), L100826BUB00 (160-3235-11), L100827BUB00 (160-3235-12) and L100828BUB00 (160-3235-13) were analyzed for percent solids in accordance with EPA Method 160.3 MOD. The samples were analyzed on 08/05/2013.

No difficulties were encountered during the % solids analysis. All quality control parameters were within the acceptance limits.

CESIUM-137 & OTHER GAMMA EMITTERS (GS)

Samples L100816BUB00 (160-3235-1), L100817BUB00 (160-3235-2), L100818BUB00 (160-3235-3), L100819BUB00 (160-3235-4), L100820BUB00 (160-3235-5), L100821BUB00 (160-3235-6), L100822BUB00 (160-3235-7), L100823BUB00 (160-3235-8), L100824BUB00 (160-3235-9), L100825BUB00 (160-3235-10), L100826BUB00 (160-3235-11), L100827BUB00 (160-3235-12) and L100828BUB00 (160-3235-13) were analyzed for Cesium-137 & Other Gamma Emitters (GS) in accordance with DOE GA-01-R. The samples were leached on 08/06/2013, and prepared and analyzed on 08/08/2013.

Preparation Batch 65539:
Bismuth-214/Radium-226 analyzed by gamma spectroscopy was detected above the MDC but below the CRDL in the method blank. The data is reported. (160-3235-1 DU), (LCS 160-65539/2-A), (MB 160-65539/1-A), L100816BUB00 (160-3235-1), L100817BUB00 (160-3235-2), L100818BUB00 (160-3235-3), L100819BUB00 (160-3235-4), L100820BUB00 (160-3235-5), L100821BUB00 (160-3235-6), L100822BUB00 (160-3235-7), L100823BUB00 (160-3235-8), L100824BUB00 (160-3235-9), L100825BUB00 (160-3235-10), L100826BUB00 (160-3235-11), L100827BUB00 (160-3235-12), L100828BUB00 (160-3235-13)

No other difficulties were encountered during the Gamma spec analysis. All other quality control parameters were within the acceptance limits.

FORM HDP-PR-QA-006-1
CHAIN OF CUSTODY

Instructions: Each time the container is transferred to another organization, a person from each organization should sign the CoC. The Laboratory/End User must verify that the sample is correctly identified before the sample is released for use or analysis and send the completed CoC to HDP.

Chain of Cutody ID No. F-080213-01 **Page** 1/2

Project Name:
Westinghouse Electric Company

Contact Person:
Gerald Rood

Phone Number:
314-810-3382

Sampler Name
Scott Jenkins

Laboratory Name:
TA-MO

Laboratory Address:
13715 Rider Trail North

Phone No.
314-298-8566

Laboratory Contact Person:
Joe Walker

Phone No.
708-870-8453

Turn Around Time
Rush (7 days)

Sample ID	Date	Time	Matrix	Comp (C) or Grab (G)	Requested Analysis: Gamma Spec	Isotopic Uranium	Tc-99	Gamma Spec (21 day ingrow for Ra-226)						Total Containers	Remarks
L100816BUB00	8/1/2013	9:08	S	C	X		X	X						1	Biased-FSS Samples LSA1008
L100817BUB00	8/1/2013	9:18	S	C	X		X	X						1	
L100818BUB00	8/1/2013	9:28	S	C	X		X	X						1	
L100819BUB00	8/1/2013	9:38	S	C	X		X	X						1	
L100820BUB00	8/1/2013	9:48	S	C	X		X	X						1	
L100821BUB00	8/1/2013	9:58	S	C	X		X	X						1	
L100822BUB00	8/1/2013	10:08	S	C	X		X	X						1	
L100823BUB00	8/1/2013	10:18	S	C	X		X	X						1	
L100824BUB00	8/1/2013	10:28	S	C	X		X	X						1	
L100825BUB00	8/1/2013	10:38	S	C	X		X	X						1	
L100826BUB00	8/1/2013	10:48	S	C	X		X	X						1	
L100827BUB00	8/1/2013	10:58	S	C	X		X	X						1	Biased-FSS Samples LSA1008

Relinquished by:	Date/Time 8-3-13 1500	Received by:	Date/Time 8-3-13 15:00	Total 13	Cooler Temperature: 4 Degrees C
Company Name: WEC		Company Name: WEC		Cooler ID: 0803-01	Shipper and Number:
Received by:	Date/Time 8-7-13 1601	Relinquished by:	Date/Time	Comments: Please re-analyze samples after 21-day ingrowth period.	
Company Name: TA		Company Name:			
Relinquished by:	Date/Time	Received by:	Date/Time	Verified By:	
Company Name:		Company Name:			

3235-1
3235-2

FORM HDP-PR-QA-006-1
CHAIN OF CUSTODY

Instructions: Each time the container is transferred to another organization, a person from each organization should sign the CoC. The Laboratory/End User must verify that the sample is correctly identified before the sample is released for use or analysis and send the completed CoC to HDP.

Chain of Cutody ID No. F-080213-01 **Page** 2/2

Project Name:
Westinghouse Electric Company

Contact Person:
Gerald Rood

Phone Number:
314-810-3382

Sampler Name
Scott Jenkins

Sample ID	Date	Time	Matrix	Comp (C) or Grab (G)	Requested Analysis: Gamma Spec	Isotopic Uranium	Tc-99	Gamma Spec (21 day ingrow for Ra-226)						Total Containers	Remarks
L100828BUB00	8/1/2013	15:32	S	C	X		X	X						1	Biased-FSS Samples LBA 1008

Laboratory Name:
TA-MO

Laboratory Address:
13715 Rider Trail North

Phone No.
314-298-8566

Laboratory Contact Person:
Joe Walker

Phone No.
708-870-8453

Turn Around Time
Rush (7 days)

Relinquished by:	Date/Time	Received by:	Date/Time
Company Name: WEC	8-2-13 1500	Company Name: WEC	8.5.13 1300
Received by:	Date/Time	Relinquished by:	Date/Time
Company Name: TA	8-23-13 1600	Company Name:	
Relinquished by:	Date/Time	Received by:	Date/Time
Company Name:		Company Name:	

Total 13

Cooler ID: 0803-01

Cooler Temperature: 4 Degrees C

Shipper and Number:

Comments: Please re-analyze samples after 21-day ingrowth period.

Verified By:

Login Sample Receipt Checklist

Client: Westinghouse Electric Company LLC

Job Number: 160-3235-2

Login Number: 3235

List Source: TestAmerica St. Louis

List Number: 1

Creator: Vania, Ivan H

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	Where required
Cooler Temperature is acceptable.	True	See NCM
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Qualifiers

Rad

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Method Summary

Client: Westinghouse Electric Company LLC
Project/Site: RFP-CBA-022 (21 DAY TAT)

TestAmerica Job ID: 160-3235-2

Method	Method Description	Protocol	Laboratory
GA-01-R	Radium-226 & Other Gamma Emitters (GS)	DOE	TAL SL

Protocol References:

DOE = U.S. Department of Energy

Laboratory References:

TAL SL = TestAmerica St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Sample Summary

Client: Westinghouse Electric Company LLC
Project/Site: RFP-CBA-022 (21 DAY TAT)

TestAmerica Job ID: 160-3235-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
160-3235-1	L100816BUB00	Solid	08/01/13 09:08	08/03/13 16:01
160-3235-2	L100817BUB00	Solid	08/01/13 09:18	08/03/13 16:01
160-3235-3	L100818BUB00	Solid	08/01/13 09:28	08/03/13 16:01
160-3235-4	L100819BUB00	Solid	08/01/13 09:38	08/03/13 16:01
160-3235-5	L100820BUB00	Solid	08/01/13 09:48	08/03/13 16:01
160-3235-6	L100821BUB00	Solid	08/01/13 09:58	08/03/13 16:01
160-3235-7	L100822BUB00	Solid	08/01/13 10:08	08/03/13 16:01
160-3235-8	L100823BUB00	Solid	08/01/13 10:18	08/03/13 16:01
160-3235-9	L100824BUB00	Solid	08/01/13 10:28	08/03/13 16:01
160-3235-10	L100825BUB00	Solid	08/01/13 10:38	08/03/13 16:01
160-3235-11	L100826BUB00	Solid	08/01/13 10:48	08/03/13 16:01
160-3235-12	L100827BUB00	Solid	08/01/13 10:58	08/03/13 16:01
160-3235-13	L100828BUB00	Solid	08/01/13 15:32	08/03/13 16:01

Client Sample ID: L100816BUB00

Lab Sample ID: 160-3235-1

Date Collected: 08/01/13 09:08

Matrix: Solid

Date Received: 08/03/13 16:01

Method: GA-01-R - Radium-226 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Actinium 228	0.756		0.0923	0.120		0.0938	pCi/g	08/08/13 11:47	08/29/13 11:53	1
Bismuth 212	0.747		0.373	0.381		0.380	pCi/g	08/08/13 11:47	08/29/13 11:53	1
Bismuth 214	0.774		0.0837	0.116		0.0530	pCi/g	08/08/13 11:47	08/29/13 11:53	1
Lead 212	0.776		0.0579	0.116		0.0481	pCi/g	08/08/13 11:47	08/29/13 11:53	1
Lead 214	0.891		0.0708	0.117		0.0555	pCi/g	08/08/13 11:47	08/29/13 11:53	1
Potassium 40	13.7		0.900	1.67		0.258	pCi/g	08/08/13 11:47	08/29/13 11:53	1
Protactinium 231	0.644	U	0.287	0.296		1.01	pCi/g	08/08/13 11:47	08/29/13 11:53	1
Radium 226	0.774		0.0837	0.116	1.00	0.0530	pCi/g	08/08/13 11:47	08/29/13 11:53	1
Thorium 232	0.756		0.0923	0.120		0.0938	pCi/g	08/08/13 11:47	08/29/13 11:53	1
Thorium 234	2.50		0.682	0.730		0.792	pCi/g	08/08/13 11:47	08/29/13 11:53	1
Uranium 235	0.773		0.157	0.176		0.214	pCi/g	08/08/13 11:47	08/29/13 11:53	1
Americium 241	0.0194	U	0.0526	0.0526		0.0878	pCi/g	08/08/13 11:47	08/29/13 11:53	1
Protactinium 234m	5.83		2.23	2.30		3.77	pCi/g	08/08/13 11:47	08/29/13 11:53	1

Client Sample ID: L100817BUB00

Lab Sample ID: 160-3235-2

Date Collected: 08/01/13 09:18

Matrix: Solid

Date Received: 08/03/13 16:01

Method: GA-01-R - Radium-226 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Actinium 228	0.663		0.0890	0.112		0.0783	pCi/g	08/08/13 11:47	08/29/13 11:54	1
Bismuth 212	0.455		0.237	0.242		0.351	pCi/g	08/08/13 11:47	08/29/13 11:54	1
Bismuth 214	0.690		0.0734	0.103		0.0526	pCi/g	08/08/13 11:47	08/29/13 11:54	1
Lead 212	0.552		0.0519	0.0883		0.0569	pCi/g	08/08/13 11:47	08/29/13 11:54	1
Lead 214	0.775		0.0644	0.103		0.0571	pCi/g	08/08/13 11:47	08/29/13 11:54	1
Potassium 40	10.8		0.754	1.34		0.234	pCi/g	08/08/13 11:47	08/29/13 11:54	1
Protactinium 231	0.369	U	0.179	0.183		0.771	pCi/g	08/08/13 11:47	08/29/13 11:54	1
Radium 226	0.690		0.0734	0.103	1.00	0.0526	pCi/g	08/08/13 11:47	08/29/13 11:54	1
Thorium 232	0.663		0.0890	0.112		0.0783	pCi/g	08/08/13 11:47	08/29/13 11:54	1
Thorium 234	1.66		0.619	0.643		0.734	pCi/g	08/08/13 11:47	08/29/13 11:54	1
Uranium 235	0.407		0.125	0.132		0.168	pCi/g	08/08/13 11:47	08/29/13 11:54	1
Americium 241	-0.0138	U	0.0500	0.0500		0.0837	pCi/g	08/08/13 11:47	08/29/13 11:54	1
Protactinium 234m	3.51	U	2.33	2.35		3.59	pCi/g	08/08/13 11:47	08/29/13 11:54	1

Client Sample ID: L100818BUB00

Lab Sample ID: 160-3235-3

Date Collected: 08/01/13 09:28

Matrix: Solid

Date Received: 08/03/13 16:01

Method: GA-01-R - Radium-226 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Actinium 228	0.986		0.118	0.155		0.108	pCi/g	08/08/13 11:47	08/29/13 11:54	1
Bismuth 212	0.940		0.335	0.349		0.440	pCi/g	08/08/13 11:47	08/29/13 11:54	1
Bismuth 214	1.04		0.118	0.160		0.0792	pCi/g	08/08/13 11:47	08/29/13 11:54	1
Lead 212	1.02		0.0714	0.150		0.0572	pCi/g	08/08/13 11:47	08/29/13 11:54	1

Client Sample ID: L100818BUB00 — **Lab Sample ID: 160-3235-3**
Date Collected: 08/01/13 09:28 — **Matrix: Solid**
Date Received: 08/03/13 16:01

Method: GA-01-R - Radium-226 & Other Gamma Emitters (GS) (Continued)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Lead 214	1.14		0.105	0.158		0.0788	pCi/g	08/08/13 11:47	08/29/13 11:54	1
Potassium 40	16.7		1.12	2.04		0.138	pCi/g	08/08/13 11:47	08/29/13 11:54	1
Protactinium 231	0.512	U	0.308	0.313		1.07	pCi/g	08/08/13 11:47	08/29/13 11:54	1
Radium 226	1.04		0.118	0.160	1.00	0.0792	pCi/g	08/08/13 11:47	08/29/13 11:54	1
Thorium 232	0.986		0.118	0.155		0.108	pCi/g	08/08/13 11:47	08/29/13 11:54	1
Thorium 234	2.71		0.806	0.854		0.941	pCi/g	08/08/13 11:47	08/29/13 11:54	1
Uranium 235	0.510		0.157	0.165		0.203	pCi/g	08/08/13 11:47	08/29/13 11:54	1
Americium 241	-0.0324	U	0.0729	0.0730		0.0857	pCi/g	08/08/13 11:47	08/29/13 11:54	1
Protactinium 234m	1.94	U	3.23	3.23		5.43	pCi/g	08/08/13 11:47	08/29/13 11:54	1

Client Sample ID: L100819BUB00 — **Lab Sample ID: 160-3235-4**
Date Collected: 08/01/13 09:38 — **Matrix: Solid**
Date Received: 08/03/13 16:01

Method: GA-01-R - Radium-226 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Actinium 228	1.39		0.207	0.251		0.115	pCi/g	08/08/13 11:47	08/29/13 11:55	1
Bismuth 212	1.49		0.444	0.470		0.357	pCi/g	08/08/13 11:47	08/29/13 11:55	1
Bismuth 214	1.11		0.125	0.170		0.108	pCi/g	08/08/13 11:47	08/29/13 11:55	1
Lead 212	1.17		0.0904	0.176		0.0766	pCi/g	08/08/13 11:47	08/29/13 11:55	1
Lead 214	1.28		0.113	0.175		0.0993	pCi/g	08/08/13 11:47	08/29/13 11:55	1
Potassium 40	18.0		1.38	2.30		0.193	pCi/g	08/08/13 11:47	08/29/13 11:55	1
Protactinium 231	0.539	U	0.292	0.298		1.44	pCi/g	08/08/13 11:47	08/29/13 11:55	1
Radium 226	1.11		0.125	0.170	1.00	0.108	pCi/g	08/08/13 11:47	08/29/13 11:55	1
Thorium 232	1.39		0.207	0.251		0.115	pCi/g	08/08/13 11:47	08/29/13 11:55	1
Thorium 234	2.94		0.986	1.03		1.16	pCi/g	08/08/13 11:47	08/29/13 11:55	1
Uranium 235	0.388		0.206	0.210		0.326	pCi/g	08/08/13 11:47	08/29/13 11:55	1
Americium 241	0.0162	U	0.0808	0.0808		0.136	pCi/g	08/08/13 11:47	08/29/13 11:55	1
Protactinium 234m	1.42	U	4.52	4.52		7.83	pCi/g	08/08/13 11:47	08/29/13 11:55	1

Client Sample ID: L100820BUB00 — **Lab Sample ID: 160-3235-5**
Date Collected: 08/01/13 09:48 — **Matrix: Solid**
Date Received: 08/03/13 16:01

Method: GA-01-R - Radium-226 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Actinium 228	1.10		0.151	0.188		0.165	pCi/g	08/08/13 11:47	08/29/13 11:56	1
Bismuth 212	1.14		0.417	0.434		0.533	pCi/g	08/08/13 11:47	08/29/13 11:56	1
Bismuth 214	1.16		0.145	0.189		0.0930	pCi/g	08/08/13 11:47	08/29/13 11:56	1
Lead 212	1.05		0.0837	0.160		0.0694	pCi/g	08/08/13 11:47	08/29/13 11:56	1
Lead 214	1.27		0.111	0.172		0.0818	pCi/g	08/08/13 11:47	08/29/13 11:56	1
Potassium 40	17.2		1.35	2.22		0.318	pCi/g	08/08/13 11:47	08/29/13 11:56	1
Protactinium 231	0.278	U	0.569	0.569		0.962	pCi/g	08/08/13 11:47	08/29/13 11:56	1
Radium 226	1.16		0.145	0.189	1.00	0.0930	pCi/g	08/08/13 11:47	08/29/13 11:56	1

Client Sample ID: L100820BUB00 — **Lab Sample ID: 160-3235-5**
Date Collected: 08/01/13 09:48 — **Matrix: Solid**
Date Received: 08/03/13 16:01

Method: GA-01-R - Radium-226 & Other Gamma Emitters (GS) (Continued)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Thorium 232	1.10		0.151	0.188		0.165	pCi/g	08/08/13 11:47	08/29/13 11:56	1
Thorium 234	1.56		0.862	0.877		1.07	pCi/g	08/08/13 11:47	08/29/13 11:56	1
Uranium 235	0.247		0.153	0.155		0.182	pCi/g	08/08/13 11:47	08/29/13 11:56	1
Americium 241	0.0573	U	0.0616	0.0619		0.0879	pCi/g	08/08/13 11:47	08/29/13 11:56	1
Protactinium 234m	5.29	U	3.93	3.97		7.35	pCi/g	08/08/13 11:47	08/29/13 11:56	1

Client Sample ID: L100821BUB00 — **Lab Sample ID: 160-3235-6**
Date Collected: 08/01/13 09:58 — **Matrix: Solid**
Date Received: 08/03/13 16:01

Method: GA-01-R - Radium-226 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Actinium 228	1.12		0.119	0.165		0.128	pCi/g	08/08/13 11:47	08/29/13 22:27	1
Bismuth 212	1.27		0.335	0.360		0.288	pCi/g	08/08/13 11:47	08/29/13 22:27	1
Bismuth 214	0.964		0.0990	0.141		0.0652	pCi/g	08/08/13 11:47	08/29/13 22:27	1
Lead 212	0.942		0.0691	0.140		0.0601	pCi/g	08/08/13 11:47	08/29/13 22:27	1
Lead 214	1.17		0.0922	0.152		0.0773	pCi/g	08/08/13 11:47	08/29/13 22:27	1
Potassium 40	18.1		1.12	2.17		0.345	pCi/g	08/08/13 11:47	08/29/13 22:27	1
Protactinium 231	-0.454	U	0.637	0.639		1.06	pCi/g	08/08/13 11:47	08/29/13 22:27	1
Radium 226	0.964		0.0990	0.141	1.00	0.0652	pCi/g	08/08/13 11:47	08/29/13 22:27	1
Thorium 232	1.12		0.119	0.165		0.128	pCi/g	08/08/13 11:47	08/29/13 22:27	1
Thorium 234	1.45		0.704	0.720		0.892	pCi/g	08/08/13 11:47	08/29/13 22:27	1
Uranium 235	0.144	U	0.148	0.149		0.226	pCi/g	08/08/13 11:47	08/29/13 22:27	1
Americium 241	-0.00660	U	0.0607	0.0607		0.102	pCi/g	08/08/13 11:47	08/29/13 22:27	1
Protactinium 234m	1.16	U	2.75	2.75		5.09	pCi/g	08/08/13 11:47	08/29/13 22:27	1

Client Sample ID: L100822BUB00 — **Lab Sample ID: 160-3235-7**
Date Collected: 08/01/13 10:08 — **Matrix: Solid**
Date Received: 08/03/13 16:01

Method: GA-01-R - Radium-226 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Actinium 228	1.10		0.181	0.213		0.143	pCi/g	08/08/13 11:47	08/29/13 22:29	1
Bismuth 212	1.34		0.408	0.431		0.329	pCi/g	08/08/13 11:47	08/29/13 22:29	1
Bismuth 214	1.03		0.112	0.155		0.0914	pCi/g	08/08/13 11:47	08/29/13 22:29	1
Lead 212	0.946		0.0790	0.146		0.0729	pCi/g	08/08/13 11:47	08/29/13 22:29	1
Lead 214	1.07		0.101	0.150		0.0919	pCi/g	08/08/13 11:47	08/29/13 22:29	1
Potassium 40	15.2		1.24	1.99		0.411	pCi/g	08/08/13 11:47	08/29/13 22:29	1
Protactinium 231	1.11		0.456	0.472		0.862	pCi/g	08/08/13 11:47	08/29/13 22:29	1
Radium 226	1.03		0.112	0.155	1.00	0.0914	pCi/g	08/08/13 11:47	08/29/13 22:29	1
Thorium 232	1.10		0.181	0.213		0.143	pCi/g	08/08/13 11:47	08/29/13 22:29	1
Thorium 234	2.15		0.763	0.795		0.919	pCi/g	08/08/13 11:47	08/29/13 22:29	1
Uranium 235	0.193	U	0.135	0.137		0.216	pCi/g	08/08/13 11:47	08/29/13 22:29	1
Americium 241	-0.0145	U	0.0660	0.0660		0.111	pCi/g	08/08/13 11:47	08/29/13 22:29	1

Client Sample ID: L100822BUB00 — **Lab Sample ID: 160-3235-7**
Date Collected: 08/01/13 10:08 — **Matrix: Solid**
Date Received: 08/03/13 16:01

Method: GA-01-R - Radium-226 & Other Gamma Emitters (GS) (Continued)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Protactinium 234m	0.989	U	3.65	3.65		6.39	pCi/g	08/08/13 11:47	08/29/13 22:29	1

Client Sample ID: L100823BUB00 — **Lab Sample ID: 160-3235-8**
Date Collected: 08/01/13 10:18 — **Matrix: Solid**
Date Received: 08/03/13 16:01

Method: GA-01-R - Radium-226 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Actinium 228	**0.861**		0.179	0.199		0.164	pCi/g	08/08/13 11:47	08/29/13 23:18	1
Bismuth 212	**1.46**		0.464	0.488		0.371	pCi/g	08/08/13 11:47	08/29/13 23:18	1
Bismuth 214	**1.07**		0.128	0.170		0.0790	pCi/g	08/08/13 11:47	08/29/13 23:18	1
Lead 212	**1.05**		0.0831	0.160		0.0733	pCi/g	08/08/13 11:47	08/29/13 23:18	1
Lead 214	**1.20**		0.115	0.170		0.0982	pCi/g	08/08/13 11:47	08/29/13 23:18	1
Potassium 40	**19.1**		1.38	2.39		0.299	pCi/g	08/08/13 11:47	08/29/13 23:18	1
Protactinium 231	0.612	U	0.282	0.290		1.35	pCi/g	08/08/13 11:47	08/29/13 23:18	1
Radium 226	**1.07**		0.128	0.170	1.00	0.0790	pCi/g	08/08/13 11:47	08/29/13 23:18	1
Thorium 232	**0.861**		0.179	0.199		0.164	pCi/g	08/08/13 11:47	08/29/13 23:18	1
Thorium 234	**1.52**		0.731	0.748		0.943	pCi/g	08/08/13 11:47	08/29/13 23:18	1
Uranium 235	0.203	U	0.164	0.165		0.236	pCi/g	08/08/13 11:47	08/29/13 23:18	1
Americium 241	0.0183	U	0.0695	0.0695		0.117	pCi/g	08/08/13 11:47	08/29/13 23:18	1
Protactinium 234m	-1.42	U	4.62	4.62		7.98	pCi/g	08/08/13 11:47	08/29/13 23:18	1

Client Sample ID: L100824BUB00 — **Lab Sample ID: 160-3235-9**
Date Collected: 08/01/13 10:28 — **Matrix: Solid**
Date Received: 08/03/13 16:01

Method: GA-01-R - Radium-226 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Actinium 228	**1.12**		0.137	0.179		0.0946	pCi/g	08/08/13 11:47	08/29/13 23:17	1
Bismuth 212	**1.22**		0.396	0.416		0.344	pCi/g	08/08/13 11:47	08/29/13 23:17	1
Bismuth 214	**1.05**		0.110	0.155		0.0737	pCi/g	08/08/13 11:47	08/29/13 23:17	1
Lead 212	**1.09**		0.0736	0.159		0.0605	pCi/g	08/08/13 11:47	08/29/13 23:17	1
Lead 214	**1.11**		0.0868	0.145		0.0640	pCi/g	08/08/13 11:47	08/29/13 23:17	1
Potassium 40	**17.5**		1.10	2.10		0.344	pCi/g	08/08/13 11:47	08/29/13 23:17	1
Protactinium 231	0.450	U	0.252	0.257		1.14	pCi/g	08/08/13 11:47	08/29/13 23:17	1
Radium 226	**1.05**		0.110	0.155	1.00	0.0737	pCi/g	08/08/13 11:47	08/29/13 23:17	1
Thorium 232	**1.12**		0.137	0.179		0.0946	pCi/g	08/08/13 11:47	08/29/13 23:17	1
Thorium 234	**1.86**		0.770	0.794		0.943	pCi/g	08/08/13 11:47	08/29/13 23:17	1
Uranium 235	**0.409**		0.146	0.152		0.195	pCi/g	08/08/13 11:47	08/29/13 23:17	1
Americium 241	0.00707	U	0.0673	0.0673		0.113	pCi/g	08/08/13 11:47	08/29/13 23:17	1
Protactinium 234m	3.17	U	3.00	3.02		4.79	pCi/g	08/08/13 11:47	08/29/13 23:17	1

Client Sample ID: L100825BUB00 — **Lab Sample ID: 160-3235-10**
Date Collected: 08/01/13 10:38 — **Matrix: Solid**
Date Received: 08/03/13 16:01

Method: GA-01-R - Radium-226 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Actinium 228	1.00		0.131	0.166		0.0858	pCi/g	08/08/13 11:47	08/29/13 23:16	1
Bismuth 212	1.34		0.439	0.460		0.381	pCi/g	08/08/13 11:47	08/29/13 23:16	1
Bismuth 214	1.02		0.110	0.153		0.0746	pCi/g	08/08/13 11:47	08/29/13 23:16	1
Lead 212	0.864		0.0712	0.133		0.0780	pCi/g	08/08/13 11:47	08/29/13 23:16	1
Lead 214	1.08		0.101	0.151		0.0762	pCi/g	08/08/13 11:47	08/29/13 23:16	1
Potassium 40	19.8		1.10	2.30		0.278	pCi/g	08/08/13 11:47	08/29/13 23:16	1
Protactinium 231	0.345	U	0.218	0.221		1.12	pCi/g	08/08/13 11:47	08/29/13 23:16	1
Radium 226	1.02		0.110	0.153	1.00	0.0746	pCi/g	08/08/13 11:47	08/29/13 23:16	1
Thorium 232	1.00		0.131	0.166		0.0858	pCi/g	08/08/13 11:47	08/29/13 23:16	1
Thorium 234	1.45		0.701	0.717		0.882	pCi/g	08/08/13 11:47	08/29/13 23:16	1
Uranium 235	0.175	U	0.142	0.143		0.242	pCi/g	08/08/13 11:47	08/29/13 23:16	1
Americium 241	-0.0204	U	0.0619	0.0619		0.103	pCi/g	08/08/13 11:47	08/29/13 23:16	1
Protactinium 234m	-0.294	U	3.11	3.11		5.45	pCi/g	08/08/13 11:47	08/29/13 23:16	1

Client Sample ID: L100826BUB00 — **Lab Sample ID: 160-3235-11**
Date Collected: 08/01/13 10:48 — **Matrix: Solid**
Date Received: 08/03/13 16:01

Method: GA-01-R - Radium-226 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Actinium 228	1.15		0.155	0.195		0.0874	pCi/g	08/08/13 11:47	08/29/13 23:16	1
Bismuth 212	1.33		0.384	0.408		0.320	pCi/g	08/08/13 11:47	08/29/13 23:16	1
Bismuth 214	1.01		0.118	0.158		0.0822	pCi/g	08/08/13 11:47	08/29/13 23:16	1
Lead 212	1.03		0.0773	0.154		0.0639	pCi/g	08/08/13 11:47	08/29/13 23:16	1
Lead 214	1.18		0.103	0.160		0.0796	pCi/g	08/08/13 11:47	08/29/13 23:16	1
Potassium 40	19.4		1.33	2.39		0.324	pCi/g	08/08/13 11:47	08/29/13 23:16	1
Protactinium 231	0.250	U	0.260	0.261		1.19	pCi/g	08/08/13 11:47	08/29/13 23:16	1
Radium 226	1.01		0.118	0.158	1.00	0.0822	pCi/g	08/08/13 11:47	08/29/13 23:16	1
Thorium 232	1.15		0.155	0.195		0.0874	pCi/g	08/08/13 11:47	08/29/13 23:16	1
Thorium 234	1.22		0.676	0.688		0.900	pCi/g	08/08/13 11:47	08/29/13 23:16	1
Uranium 235	0.0895	U	0.158	0.159		0.247	pCi/g	08/08/13 11:47	08/29/13 23:16	1
Americium 241	-0.0127	U	0.194	0.194		0.105	pCi/g	08/08/13 11:47	08/29/13 23:16	1
Protactinium 234m	1.50	U	3.04	3.04		5.21	pCi/g	08/08/13 11:47	08/29/13 23:16	1

Client Sample ID: L100827BUB00 — **Lab Sample ID: 160-3235-12**
Date Collected: 08/01/13 10:58 — **Matrix: Solid**
Date Received: 08/03/13 16:01

Method: GA-01-R - Radium-226 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Actinium 228	1.02		0.137	0.172		0.0896	pCi/g	08/08/13 11:47	08/29/13 23:17	1
Bismuth 212	1.16		0.321	0.343		0.312	pCi/g	08/08/13 11:47	08/29/13 23:17	1
Bismuth 214	0.917		0.0946	0.134		0.0634	pCi/g	08/08/13 11:47	08/29/13 23:17	1
Lead 212	1.01		0.0676	0.147		0.0551	pCi/g	08/08/13 11:47	08/29/13 23:17	1

Client Sample ID: L100827BUB00 — **Lab Sample ID: 160-3235-12**
Date Collected: 08/01/13 10:58 — **Matrix: Solid**
Date Received: 08/03/13 16:01

Method: GA-01-R - Radium-226 & Other Gamma Emitters (GS) (Continued)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Lead 214	**1.10**		0.0892	0.145		0.0587	pCi/g	08/08/13 11:47	08/29/13 23:17	1
Potassium 40	**18.9**		1.10	2.23		0.298	pCi/g	08/08/13 11:47	08/29/13 23:17	1
Protactinium 231	0.485	U	0.213	0.220		0.988	pCi/g	08/08/13 11:47	08/29/13 23:17	1
Radium 226	**0.917**		0.0946	0.134	1.00	0.0634	pCi/g	08/08/13 11:47	08/29/13 23:17	1
Thorium 232	**1.02**		0.137	0.172		0.0896	pCi/g	08/08/13 11:47	08/29/13 23:17	1
Thorium 234	**0.927**		0.286	0.302		0.773	pCi/g	08/08/13 11:47	08/29/13 23:17	1
Uranium 235	0.0870	U	0.131	0.131		0.219	pCi/g	08/08/13 11:47	08/29/13 23:17	1
Americium 241	-0.0301	U	0.0545	0.0545		0.0905	pCi/g	08/08/13 11:47	08/29/13 23:17	1
Protactinium 234m	2.07	U	2.85	2.86		4.73	pCi/g	08/08/13 11:47	08/29/13 23:17	1

Client Sample ID: L100828BUB00 — **Lab Sample ID: 160-3235-13**
Date Collected: 08/01/13 15:32 — **Matrix: Solid**
Date Received: 08/03/13 16:01

Method: GA-01-R - Radium-226 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Actinium 228	**0.662**		0.108	0.128		0.127	pCi/g	08/08/13 11:47	08/29/13 23:55	1
Bismuth 212	0.387	U	0.331	0.334		0.523	pCi/g	08/08/13 11:47	08/29/13 23:55	1
Bismuth 214	**0.768**		0.101	0.128		0.0633	pCi/g	08/08/13 11:47	08/29/13 23:55	1
Lead 212	**0.550**		0.0590	0.0924		0.0578	pCi/g	08/08/13 11:47	08/29/13 23:55	1
Lead 214	**0.792**		0.0911	0.123		0.0690	pCi/g	08/08/13 11:47	08/29/13 23:55	1
Potassium 40	**9.35**		0.916	1.32		0.269	pCi/g	08/08/13 11:47	08/29/13 23:55	1
Protactinium 231	0.316	U	0.230	0.233		1.14	pCi/g	08/08/13 11:47	08/29/13 23:55	1
Radium 226	**0.768**		0.101	0.128	1.00	0.0633	pCi/g	08/08/13 11:47	08/29/13 23:55	1
Thorium 232	**0.662**		0.108	0.128		0.127	pCi/g	08/08/13 11:47	08/29/13 23:55	1
Thorium 234	**1.00**		0.517	0.528		0.689	pCi/g	08/08/13 11:47	08/29/13 23:55	1
Uranium 235	0.0654	U	0.131	0.131		0.221	pCi/g	08/08/13 11:47	08/29/13 23:55	1
Americium 241	0.00672	U	0.0453	0.0453		0.0769	pCi/g	08/08/13 11:47	08/29/13 23:55	1
Protactinium 234m	0.000	U	1.13	1.13		5.17	pCi/g	08/08/13 11:47	08/29/13 23:55	1

Client: Westinghouse Electric Company LLC
Project/Site: RFP-CBA-022 (21 DAY TAT)

TestAmerica Job ID: 160-3235-2

Method: GA-01-R - Radium-226 & Other Gamma Emitters (GS)

Lab Sample ID: MB 160-65539/1-A
Matrix: Solid
Analysis Batch: 69584

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 65539

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Actinium 228	0.0000	U	0.00642	0.00642		0.0236	pCi/g	08/08/13 11:47	08/29/13 22:27	1
Bismuth 212	0.01127	U	0.0949	0.0949		0.180	pCi/g	08/08/13 11:47	08/29/13 22:27	1
Bismuth 214	0.04139		0.0215	0.0220		0.0305	pCi/g	08/08/13 11:47	08/29/13 22:27	1
Lead 212	-0.006612	U	0.0363	0.0363		0.0262	pCi/g	08/08/13 11:47	08/29/13 22:27	1
Lead 214	0.02108	U	0.0191	0.0193		0.0327	pCi/g	08/08/13 11:47	08/29/13 22:27	1
Potassium 40	0.02211	U	0.104	0.104		0.228	pCi/g	08/08/13 11:47	08/29/13 22:27	1
Protactinium 231	0.02261	U	0.0879	0.0880		0.371	pCi/g	08/08/13 11:47	08/29/13 22:27	1
Radium 226	0.04139		0.0215	0.0220	1.00	0.0305	pCi/g	08/08/13 11:47	08/29/13 22:27	1
Thorium 232	0.0000	U	0.00642	0.00642		0.0236	pCi/g	08/08/13 11:47	08/29/13 22:27	1
Thorium 234	0.03733	U	0.139	0.139		0.264	pCi/g	08/08/13 11:47	08/29/13 22:27	1
Uranium 235	-0.003096	U	0.0101	0.0101		0.0553	pCi/g	08/08/13 11:47	08/29/13 22:27	1
Americium 241	0.001052	U	0.0106	0.0106		0.0193	pCi/g	08/08/13 11:47	08/29/13 22:27	1
Protactinium 234m	0.4596	U	1.22	1.22		2.18	pCi/g	08/08/13 11:47	08/29/13 22:27	1

Lab Sample ID: LCS 160-65539/2-A
Matrix: Solid
Analysis Batch: 70048

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 65539

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Americium 241			97.7	95.93		9.99		0.568	pCi/g	98	87 - 116		
Cesium 137			31.6	31.15		3.27		0.180	pCi/g	98	87 - 120		
Cobalt 60			24.8	24.20		2.45		0.118	pCi/g	98	87 - 115		

Lab Sample ID: 160-3235-1 DU
Matrix: Solid
Analysis Batch: 69584

Client Sample ID: L100816BUB00
Prep Type: Total/NA
Prep Batch: 65539

Analyte	Sample Result	Sample Qual		DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit			RER	RER Limit
Actinium 228	0.756			0.7731		0.125		0.0924	pCi/g			0.07	1
Bismuth 212	0.747			0.7684		0.320		0.323	pCi/g			0.03	1
Bismuth 214	0.774			0.7738		0.118		0.0617	pCi/g			0	1
Lead 212	0.776			0.6301		0.101		0.0676	pCi/g			0.67	1
Lead 214	0.891			0.8622		0.124		0.0634	pCi/g			0.12	1
Potassium 40	13.7			14.03		1.70		0.309	pCi/g			0.08	1
Protactinium 231	0.644	U		0.2824	U	0.208		0.901	pCi/g			0.72	1
Radium 226	0.774			0.7738		0.118	1.00	0.0617	pCi/g			0	1
Thorium 232	0.756			0.7731		0.125		0.0924	pCi/g			0.07	1
Thorium 234	2.50			2.460		0.748		0.802	pCi/g			0.03	1
Uranium 235	0.773			0.5762		0.144		0.185	pCi/g			0.62	1
Americium 241	0.0194	U		0.01505	U	0.0512		0.0858	pCi/g			0.04	1
Protactinium 234m	5.83			3.516	U	2.65		3.69	pCi/g			0.47	1

Client: Westinghouse Electric Company LLC
Project/Site: RFP-CBA-022 (21 DAY TAT)

TestAmerica Job ID: 160-3235-2

Rad

Leach Batch: 65001

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-3235-1	L100816BUB00	Total/NA	Solid	Dry and Grind	
160-3235-1 DU	L100816BUB00	Total/NA	Solid	Dry and Grind	
160-3235-2	L100817BUB00	Total/NA	Solid	Dry and Grind	
160-3235-3	L100818BUB00	Total/NA	Solid	Dry and Grind	
160-3235-4	L100819BUB00	Total/NA	Solid	Dry and Grind	
160-3235-5	L100820BUB00	Total/NA	Solid	Dry and Grind	
160-3235-6	L100821BUB00	Total/NA	Solid	Dry and Grind	
160-3235-7	L100822BUB00	Total/NA	Solid	Dry and Grind	
160-3235-8	L100823BUB00	Total/NA	Solid	Dry and Grind	
160-3235-9	L100824BUB00	Total/NA	Solid	Dry and Grind	
160-3235-10	L100825BUB00	Total/NA	Solid	Dry and Grind	
160-3235-11	L100826BUB00	Total/NA	Solid	Dry and Grind	
160-3235-12	L100827BUB00	Total/NA	Solid	Dry and Grind	
160-3235-13	L100828BUB00	Total/NA	Solid	Dry and Grind	

Prep Batch: 65539

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-3235-1	L100816BUB00	Total/NA	Solid	Fill_Geo-21	65001
160-3235-1 DU	L100816BUB00	Total/NA	Solid	Fill_Geo-21	65001
160-3235-2	L100817BUB00	Total/NA	Solid	Fill_Geo-21	65001
160-3235-3	L100818BUB00	Total/NA	Solid	Fill_Geo-21	65001
160-3235-4	L100819BUB00	Total/NA	Solid	Fill_Geo-21	65001
160-3235-5	L100820BUB00	Total/NA	Solid	Fill_Geo-21	65001
160-3235-6	L100821BUB00	Total/NA	Solid	Fill_Geo-21	65001
160-3235-7	L100822BUB00	Total/NA	Solid	Fill_Geo-21	65001
160-3235-8	L100823BUB00	Total/NA	Solid	Fill_Geo-21	65001
160-3235-9	L100824BUB00	Total/NA	Solid	Fill_Geo-21	65001
160-3235-10	L100825BUB00	Total/NA	Solid	Fill_Geo-21	65001
160-3235-11	L100826BUB00	Total/NA	Solid	Fill_Geo-21	65001
160-3235-12	L100827BUB00	Total/NA	Solid	Fill_Geo-21	65001
160-3235-13	L100828BUB00	Total/NA	Solid	Fill_Geo-21	65001
LCS 160-65539/2-A	Lab Control Sample	Total/NA	Solid	Fill_Geo-21	
MB 160-65539/1-A	Method Blank	Total/NA	Solid	Fill_Geo-21	