

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: 160-16001-1

Client Project/Site: HDP RFP-CBA-022 (7 DAY TAT)

For:

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

Attn: Mr. Martin Swanson



Authorized for release by:
2/17/2016 8:25:09 AM

Ivan Vania, Project Manager II
(314)298-8566
ivan.vania@testamericainc.com

LINKS

Review your project
results through

TotalAccess

Have a Question?



Visit us at:

www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

1

2

3

4

5

6

7

8

9

10

11

12

Table of Contents

Cover Page	1
Table of Contents	2
Case Narrative	3
Chain of Custody	5
Receipt Checklists	7
Definitions/Glossary	8
Method Summary	9
Sample Summary	10
Client Sample Results	11
QC Sample Results	17
QC Association Summary	19
Tracer Carrier Summary	21



Case Narrative

Client: Westinghouse Electric Company LLC
Project/Site: HDP RFP-CBA-022 (7 DAY TAT)

TestAmerica Job ID: 160-16001-1

Job ID: 160-16001-1

Laboratory: TestAmerica St. Louis

Narrative

CASE NARRATIVE

Client: Westinghouse Electric Company LLC

Project: HDP RFP-CBA-022 (7 DAY TAT)

Report Number: 160-16001-1

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. This deliverable provides results for Tc-99 analysis. Gamma spectroscopy results will be reported under a separate job number.

RECEIPT

The samples were received on 2/5/2016 11:11 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 18.7° C.

TECHNETIUM-99 (ICPMS)

Samples B030101PSS00 (160-16001-1), B030102PRQ00 (160-16001-2), B030102PRS00 (160-16001-3), B030104PSS00 (160-16001-4), B030105PRS00 (160-16001-5), B030107PSS00 (160-16001-6), B030108PRS00 (160-16001-7), B030110PSS00 (160-16001-8), B030111PRS00 (160-16001-9), B030113PSS00 (160-16001-10), B030114PRS00 (160-16001-11), B030116PSS00 (160-16001-12), B030117PRS00 (160-16001-13), B030118PES00 (160-16001-14), B030119PSQ00 (160-16001-15), B030119PSS00 (160-16001-16), B030120PRS00 (160-16001-17), B030122PSS00 (160-16001-18) and B030123PRS00 (160-16001-19) were analyzed for Technetium-99 (ICPMS) in accordance with EPA SW-846 Method 6020A. The samples were prepared on 02/08/2016 and analyzed on 02/16/2016.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Case Narrative

Client: Westinghouse Electric Company LLC
Project/Site: HDP RFP-CBA-022 (7 DAY TAT)

TestAmerica Job ID: 160-16001-1

Job ID: 160-16001-1 (Continued)

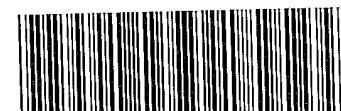
Laboratory: TestAmerica St. Louis (Continued)

PERCENT SOLIDS

Samples B030101PSS00 (160-16001-1), B030102PRQ00 (160-16001-2), B030102PRS00 (160-16001-3), B030104PSS00 (160-16001-4), B030105PRS00 (160-16001-5), B030107PSS00 (160-16001-6), B030108PRS00 (160-16001-7), B030110PSS00 (160-16001-8), B030111PRS00 (160-16001-9), B030113PSS00 (160-16001-10), B030114PRS00 (160-16001-11), B030116PSS00 (160-16001-12), B030117PRS00 (160-16001-13), B030118PES00 (160-16001-14), B030119PSQ00 (160-16001-15), B030119PSS00 (160-16001-16), B030120PRS00 (160-16001-17), B030122PSS00 (160-16001-18) and B030123PRS00 (160-16001-19) were analyzed for percent solids in accordance with EPA Method 160.3 MOD. The samples were analyzed on 02/10/2016.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Hematite Decommissioning Project				Procedure HDP-PR-QA-006, Chain of Custody															
				Revision: 3								Page 1 of 1							
				Westinghouse Non-Proprietary Class 3															
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 Custody ID No.		F-020416-02		Page		1/2		Requested Analysis								Laboratory Name:			
Project Name: Westinghouse Electric Company Contact Person: Clark Evers Phone Number: 314-810-3336 Sampler Name: Andrew Schooley								Comp (C) or Grab (G)	Gamma Spec	Isotopic Uranium	16-99	Gamma Spec (21 day ingrow for Ra-226)					Total Containers	TA-MO	
																		Laboratory Address: 13715 Rider Trail North	
																		Phone No. 314-298-8566	
																		Laboratory Contact Person: Ivan Vania	
																Phone No. 708-870-8453			
																Turn Around Time			
																Rush (7 days)			
																Remarks			
Sample ID	Date	Time	Matrix																
B030101PSS00	/	2/2/2016	15:00	S	G	X		X	X								1		
B030102PRQ00	/	2/2/2016	15:20	S	C	X		X	X								1		
B030102PRS00	/	2/2/2016	15:20	S	C	X		X	X								1		
B030104PSS00	/	2/3/2016	7:45	S	G	X		X	X								1		
B030105PRS00	/	2/3/2016	8:10	S	C	X		X	X								1		
B030107PSS00	/	2/2/2016	16:10	S	G	X		X	X								1		
B030108PRS00	/	2/2/2016	16:25	S	C	X		X	X								1		
B030110PSS00	/	2/2/2016	16:40	S	G	X		X	X								1		
B030111PRS00	/	2/2/2016	16:50	S	C	X		X	X								1		
B030113PSS00	/	2/3/2016	8:55	S	G	X		X	X								1		
B030114PRS00	/	2/3/2016	9:15	S	C	X		X	X								1		
B030116PSS00	/	2/3/2016	9:35	S	G	X		X	X								1		
Relinquished by: <i>C. Evers</i>				Date/Time: <i>2-5-16 0910</i>		Received by: <i>CLARK EVERS</i>				Date/Time: <i>2-5-16 0910</i>		Total: 19		Cooler Temperature: Ambient					
Company Name: <i>WEC</i>						Company Name: <i>CROSSROADS</i>						Cooler ID: 0204-		Shipper and Number:					
Received by:				Date/Time:		Relinquished by:				Date/Time:		Comments: Cooler #s 0204/01/02/03							
Company Name:						Company Name:													
Relinquished by: <i>R. Gault</i>				Date/Time: <i>2-5-16 1110</i>		Received by: <i>CLARK EVERS</i>				Date/Time: <i>2-5-16 1110</i>		Verified By: <i>Curtis Wilder</i>							
Company Name: <i>CROSSROADS</i>						Company Name: <i>WEC</i>													



160-16001 Chain of Custody

Hematite Decommissioning Project				Procedure HDP-PR-QA-006, Chain of Custody												Page 1 of 1																																																			
				Revision: 3																																																															
				Westinghouse Non-Proprietary Class 3																																																															
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 Custody ID No. F-020416-02 Page 2/2				Requested Analysis												Laboratory Name: TA-MO Laboratory Address: 13715 Rider Trail North Phone No. 314-298-8566 Laboratory Contact Person: Ivan Vania Phone No. 708-870-8453 Turn Around Time Rush (7 days) Remarks																																																			
Project Name: Westinghouse Electric Company Contact Person: Clark Evers Phone Number: 314-810-3336 Sampler Name Andrew Schooley				Total Containers	Comp (C) or Grab (G)	Gamma Spec	Isotopic Uranium	Tc-99	Gamma Spec (21 day ingrow for Ra-226)																																																										
<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th>Sample ID</th> <th>Date</th> <th>Time</th> <th>Matrix</th> </tr> <tr><td>B030117PRS00</td><td>/</td><td>2/3/2016</td><td>9:55</td></tr> <tr><td>B030118PES00</td><td>/</td><td>2/3/2016</td><td>10:00</td></tr> <tr><td>B030119PSQ00</td><td>/</td><td>2/3/2016</td><td>10:40</td></tr> <tr><td>B030119PSS00</td><td>/</td><td>2/3/2016</td><td>10:40</td></tr> <tr><td>B030120PRS00</td><td>/</td><td>2/3/2016</td><td>11:15</td></tr> <tr><td>B030122PSS00</td><td>/</td><td>2/3/2016</td><td>11:30</td></tr> <tr><td>B030123PRS00</td><td>/</td><td>2/3/2016</td><td>11:40</td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> </table>																Sample ID	Date		Time	Matrix	B030117PRS00	/	2/3/2016	9:55	B030118PES00	/	2/3/2016	10:00	B030119PSQ00	/	2/3/2016	10:40	B030119PSS00	/	2/3/2016	10:40	B030120PRS00	/	2/3/2016	11:15	B030122PSS00	/	2/3/2016	11:30	B030123PRS00	/	2/3/2016	11:40																			
Sample ID	Date	Time	Matrix																																																																
B030117PRS00	/	2/3/2016	9:55																																																																
B030118PES00	/	2/3/2016	10:00																																																																
B030119PSQ00	/	2/3/2016	10:40																																																																
B030119PSS00	/	2/3/2016	10:40																																																																
B030120PRS00	/	2/3/2016	11:15																																																																
B030122PSS00	/	2/3/2016	11:30																																																																
B030123PRS00	/	2/3/2016	11:40																																																																
Relinquished by: <i>[Signature]</i> Company Name: <i>WEC</i> Received by: <i>[Signature]</i> Company Name: <i>CROSS ROAD</i>				Date/Time 2-5-16 0910 Date/Time 2-5-16 0913		Total 19 Cooler ID: 0204-		Cooler Temperature: Ambient Shipper and Number: Comments: Cooler #s 0204/01/02/03																																																											
Relinquished by: <i>[Signature]</i> 3015 Company Name: <i>CROSS ROAD</i>				Date/Time 2-5-16 11:10 Date/Time 2-5-16 1110		Verified By: <i>Carlis Wilder</i>																																																													



Login Sample Receipt Checklist

Client: Westinghouse Electric Company LLC

Job Number: 160-16001-1

Login Number: 16001

List Number: 1

Creator: Daniels, Brian J

List Source: TestAmerica St. Louis

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ 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.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	False	Thermal preservation not required.
Cooler Temperature is acceptable.	True	
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 (excluding tests with immediate HTs)	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 $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Definitions/Glossary

Client: Westinghouse Electric Company LLC
Project/Site: HDP RFP-CBA-022 (7 DAY TAT)

TestAmerica Job ID: 160-16001-1

Qualifiers

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Rad

Qualifier	Qualifier Description
U	Result is less than the sample detection limit.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
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: HDP RFP-CBA-022 (7 DAY TAT)

TestAmerica Job ID: 160-16001-1

Method	Method Description	Protocol	Laboratory
6020A	Metals (ICP/MS), Tc-99	SW846	TAL SL
Moisture	Percent Moisture	EPA	TAL SL
6020A	Metals (ICP/MS), Tc-99 in Activity	SW846	TAL SL

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

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: HDP RFP-CBA-022 (7 DAY TAT)

TestAmerica Job ID: 160-16001-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
160-16001-1	B030101PSS00	Solid	02/02/16 15:00	02/05/16 11:11
160-16001-2	B030102PRQ00	Solid	02/02/16 15:20	02/05/16 11:11
160-16001-3	B030102PRS00	Solid	02/02/16 15:20	02/05/16 11:11
160-16001-4	B030104PSS00	Solid	02/03/16 07:45	02/05/16 11:11
160-16001-5	B030105PRS00	Solid	02/03/16 08:10	02/05/16 11:11
160-16001-6	B030107PSS00	Solid	02/02/16 16:10	02/05/16 11:11
160-16001-7	B030108PRS00	Solid	02/02/16 16:25	02/05/16 11:11
160-16001-8	B030110PSS00	Solid	02/02/16 16:40	02/05/16 11:11
160-16001-9	B030111PRS00	Solid	02/02/16 16:50	02/05/16 11:11
160-16001-10	B030113PSS00	Solid	02/03/16 08:55	02/05/16 11:11
160-16001-11	B030114PRS00	Solid	02/03/16 09:15	02/05/16 11:11
160-16001-12	B030116PSS00	Solid	02/03/16 09:35	02/05/16 11:11
160-16001-13	B030117PRS00	Solid	02/03/16 09:55	02/05/16 11:11
160-16001-14	B030118PES00	Solid	02/03/16 10:00	02/05/16 11:11
160-16001-15	B030119PSQ00	Solid	02/03/16 10:40	02/05/16 11:11
160-16001-16	B030119PSS00	Solid	02/03/16 10:40	02/05/16 11:11
160-16001-17	B030120PRS00	Solid	02/03/16 11:15	02/05/16 11:11
160-16001-18	B030122PSS00	Solid	02/03/16 11:30	02/05/16 11:11
160-16001-19	B030123PRS00	Solid	02/03/16 11:40	02/05/16 11:11

Client Sample Results

Client: Westinghouse Electric Company LLC
Project/Site: HDP RFP-CBA-022 (7 DAY TAT)

TestAmerica Job ID: 160-16001-1

Client Sample ID: B030101PSS00

Date Collected: 02/02/16 15:00

Date Received: 02/05/16 11:11

Lab Sample ID: 160-16001-1

Matrix: Solid

Percent Solids: 82.9

Method: 6020A - Metals (ICP/MS), Tc-99

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Technetium 99	ND		0.000064	0.000019	mg/Kg	☼	02/08/16 11:30	02/16/16 09:26	1

Method: 6020A - Metals (ICP/MS), Tc-99 in Activity

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Technetium 99	0.0799	U	0.0228	0.0240	1.29	0.220	pCi/g	02/08/16 11:30	02/16/16 09:26	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Re	94		30 - 110					02/08/16 11:30	02/16/16 09:26	1

Client Sample ID: B030102PRQ00

Date Collected: 02/02/16 15:20

Date Received: 02/05/16 11:11

Lab Sample ID: 160-16001-2

Matrix: Solid

Percent Solids: 82.9

Method: 6020A - Metals (ICP/MS), Tc-99

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Technetium 99	ND		0.000063	0.000019	mg/Kg	☼	02/08/16 11:30	02/16/16 09:38	1

Method: 6020A - Metals (ICP/MS), Tc-99 in Activity

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Technetium 99	0.0961	U	0.0402	0.0412	1.26	0.217	pCi/g	02/08/16 11:30	02/16/16 09:38	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Re	96		30 - 110					02/08/16 11:30	02/16/16 09:38	1

Client Sample ID: B030102PRS00

Date Collected: 02/02/16 15:20

Date Received: 02/05/16 11:11

Lab Sample ID: 160-16001-3

Matrix: Solid

Percent Solids: 80.7

Method: 6020A - Metals (ICP/MS), Tc-99

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Technetium 99	ND		0.000065	0.000019	mg/Kg	☼	02/08/16 11:30	02/16/16 09:42	1

Method: 6020A - Metals (ICP/MS), Tc-99 in Activity

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Technetium 99	0.0654	U	0.0303	0.0309	1.30	0.222	pCi/g	02/08/16 11:30	02/16/16 09:42	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Re	95		30 - 110					02/08/16 11:30	02/16/16 09:42	1

TestAmerica St. Louis

Client Sample Results

Client: Westinghouse Electric Company LLC
Project/Site: HDP RFP-CBA-022 (7 DAY TAT)

TestAmerica Job ID: 160-16001-1

Client Sample ID: B030104PSS00

Lab Sample ID: 160-16001-4

Date Collected: 02/03/16 07:45

Matrix: Solid

Date Received: 02/05/16 11:11

Percent Solids: 94.1

Method: 6020A - Metals (ICP/MS), Tc-99

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Technetium 99	ND		0.000056	0.000017	mg/Kg	☼	02/08/16 11:30	02/16/16 09:45	1

Method: 6020A - Metals (ICP/MS), Tc-99 in Activity

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Technetium 99	0.0624	U	0.0379	0.0384	1.13	0.193	pCi/g	02/08/16 11:30	02/16/16 09:45	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Re	94		30 - 110					02/08/16 11:30	02/16/16 09:45	1

Client Sample ID: B030105PRS00

Lab Sample ID: 160-16001-5

Date Collected: 02/03/16 08:10

Matrix: Solid

Date Received: 02/05/16 11:11

Percent Solids: 82.4

Method: 6020A - Metals (ICP/MS), Tc-99

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Technetium 99	ND		0.000065	0.000020	mg/Kg	☼	02/08/16 11:30	02/16/16 09:49	1

Method: 6020A - Metals (ICP/MS), Tc-99 in Activity

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Technetium 99	0.0902	U	0.0807	0.0811	1.30	0.223	pCi/g	02/08/16 11:30	02/16/16 09:49	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Re	94		30 - 110					02/08/16 11:30	02/16/16 09:49	1

Client Sample ID: B030107PSS00

Lab Sample ID: 160-16001-6

Date Collected: 02/02/16 16:10

Matrix: Solid

Date Received: 02/05/16 11:11

Percent Solids: 94.5

Method: 6020A - Metals (ICP/MS), Tc-99

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Technetium 99	ND		0.000054	0.000016	mg/Kg	☼	02/08/16 11:30	02/16/16 09:53	1

Method: 6020A - Metals (ICP/MS), Tc-99 in Activity

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Technetium 99	-0.00202	U	0.0301	0.0301	1.07	0.184	pCi/g	02/08/16 11:30	02/16/16 09:53	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Re	98		30 - 110					02/08/16 11:30	02/16/16 09:53	1

Client Sample ID: B030108PRS00

Lab Sample ID: 160-16001-7

Date Collected: 02/02/16 16:25

Matrix: Solid

Date Received: 02/05/16 11:11

Percent Solids: 80.7

Method: 6020A - Metals (ICP/MS), Tc-99

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Technetium 99	ND		0.000064	0.000019	mg/Kg	☼	02/08/16 11:30	02/16/16 10:09	1

TestAmerica St. Louis

Client Sample Results

Client: Westinghouse Electric Company LLC
Project/Site: HDP RFP-CBA-022 (7 DAY TAT)

TestAmerica Job ID: 160-16001-1

Method: 6020A - Metals (ICP/MS), Tc-99 in Activity

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Technetium 99	0.0675	U	0.0186	0.0196	1.28	0.220	pCi/g	02/08/16 11:30	02/16/16 10:09	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Re	96		30 - 110					02/08/16 11:30	02/16/16 10:09	1

Client Sample ID: B030110PSS00

Date Collected: 02/02/16 16:40

Date Received: 02/05/16 11:11

Lab Sample ID: 160-16001-8

Matrix: Solid

Percent Solids: 78.3

Method: 6020A - Metals (ICP/MS), Tc-99

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Technetium 99	ND		0.000066	0.000020	mg/Kg	☼	02/08/16 11:30	02/16/16 10:13	1

Method: 6020A - Metals (ICP/MS), Tc-99 in Activity

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Technetium 99	0.174	U	0.0178	0.0240	1.31	0.225	pCi/g	02/08/16 11:30	02/16/16 10:13	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Re	97		30 - 110					02/08/16 11:30	02/16/16 10:13	1

Client Sample ID: B030111PRS00

Date Collected: 02/02/16 16:50

Date Received: 02/05/16 11:11

Lab Sample ID: 160-16001-9

Matrix: Solid

Percent Solids: 80.3

Method: 6020A - Metals (ICP/MS), Tc-99

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Technetium 99	ND		0.000067	0.000020	mg/Kg	☼	02/08/16 18:40	02/16/16 10:16	1

Method: 6020A - Metals (ICP/MS), Tc-99 in Activity

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Technetium 99	0.0700	U	0.0114	0.0131	1.34	0.229	pCi/g	02/08/16 18:40	02/16/16 10:16	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Re	94		30 - 110					02/08/16 18:40	02/16/16 10:16	1

Client Sample ID: B030113PSS00

Date Collected: 02/03/16 08:55

Date Received: 02/05/16 11:11

Lab Sample ID: 160-16001-10

Matrix: Solid

Percent Solids: 91.7

Method: 6020A - Metals (ICP/MS), Tc-99

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Technetium 99	ND		0.000056	0.000017	mg/Kg	☼	02/08/16 18:40	02/16/16 10:20	1

Method: 6020A - Metals (ICP/MS), Tc-99 in Activity

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Technetium 99	0.0274	U	0.00201	0.00322	1.13	0.193	pCi/g	02/08/16 18:40	02/16/16 10:20	1

TestAmerica St. Louis

Client Sample Results

Client: Westinghouse Electric Company LLC
Project/Site: HDP RFP-CBA-022 (7 DAY TAT)

TestAmerica Job ID: 160-16001-1

Client Sample ID: B030113PSS00

Date Collected: 02/03/16 08:55

Date Received: 02/05/16 11:11

Lab Sample ID: 160-16001-10

Matrix: Solid

Percent Solids: 91.7

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Re	97		30 - 110	02/08/16 18:40	02/16/16 10:20	1

Client Sample ID: B030114PRS00

Date Collected: 02/03/16 09:15

Date Received: 02/05/16 11:11

Lab Sample ID: 160-16001-11

Matrix: Solid

Percent Solids: 81.0

Method: 6020A - Metals (ICP/MS), Tc-99

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Technetium 99	ND		0.000067	0.000020	mg/Kg	☼	02/08/16 18:40	02/16/16 10:24	1

Method: 6020A - Metals (ICP/MS), Tc-99 in Activity

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Technetium 99	0.0112	U	0.0126	0.0127	1.34	0.229	pCi/g	02/08/16 18:40	02/16/16 10:24	1
Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac				
Re	93		30 - 110	02/08/16 18:40	02/16/16 10:24	1				

Client Sample ID: B030116PSS00

Date Collected: 02/03/16 09:35

Date Received: 02/05/16 11:11

Lab Sample ID: 160-16001-12

Matrix: Solid

Percent Solids: 84.8

Method: 6020A - Metals (ICP/MS), Tc-99

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Technetium 99	0.000024	J	0.000062	0.000019	mg/Kg	☼	02/08/16 18:40	02/16/16 10:28	1

Method: 6020A - Metals (ICP/MS), Tc-99 in Activity

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Technetium 99	0.416		0.0611	0.0721	1.25	0.213	pCi/g	02/08/16 18:40	02/16/16 10:28	1
Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac				
Re	94		30 - 110	02/08/16 18:40	02/16/16 10:28	1				

Client Sample ID: B030117PRS00

Date Collected: 02/03/16 09:55

Date Received: 02/05/16 11:11

Lab Sample ID: 160-16001-13

Matrix: Solid

Percent Solids: 80.8

Method: 6020A - Metals (ICP/MS), Tc-99

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Technetium 99	ND		0.000066	0.000020	mg/Kg	☼	02/08/16 18:40	02/16/16 10:32	1

Method: 6020A - Metals (ICP/MS), Tc-99 in Activity

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Technetium 99	0.0214	U	0.0609	0.0609	1.33	0.227	pCi/g	02/08/16 18:40	02/16/16 10:32	1
Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac				
Re	94		30 - 110	02/08/16 18:40	02/16/16 10:32	1				

TestAmerica St. Louis

Client Sample Results

Client: Westinghouse Electric Company LLC
Project/Site: HDP RFP-CBA-022 (7 DAY TAT)

TestAmerica Job ID: 160-16001-1

Client Sample ID: B030118PES00

Lab Sample ID: 160-16001-14

Date Collected: 02/03/16 10:00

Matrix: Solid

Date Received: 02/05/16 11:11

Percent Solids: 80.6

Method: 6020A - Metals (ICP/MS), Tc-99

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Technetium 99	ND		0.000067	0.000020	mg/Kg	☼	02/08/16 18:40	02/16/16 10:36	1

Method: 6020A - Metals (ICP/MS), Tc-99 in Activity

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Technetium 99	0.0119	U	0.0191	0.0191	1.34	0.229	pCi/g	02/08/16 18:40	02/16/16 10:36	1

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Re	92		30 - 110	02/08/16 18:40	02/16/16 10:36	1

Client Sample ID: B030119PSQ00

Lab Sample ID: 160-16001-15

Date Collected: 02/03/16 10:40

Matrix: Solid

Date Received: 02/05/16 11:11

Percent Solids: 83.6

Method: 6020A - Metals (ICP/MS), Tc-99

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Technetium 99	ND		0.000065	0.000019	mg/Kg	☼	02/08/16 18:40	02/16/16 10:40	1

Method: 6020A - Metals (ICP/MS), Tc-99 in Activity

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Technetium 99	0.0237	U	0.0606	0.0606	1.29	0.221	pCi/g	02/08/16 18:40	02/16/16 10:40	1

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Re	93		30 - 110	02/08/16 18:40	02/16/16 10:40	1

Client Sample ID: B030119PSS00

Lab Sample ID: 160-16001-16

Date Collected: 02/03/16 10:40

Matrix: Solid

Date Received: 02/05/16 11:11

Percent Solids: 83.8

Method: 6020A - Metals (ICP/MS), Tc-99

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Technetium 99	ND		0.000065	0.000019	mg/Kg	☼	02/08/16 18:40	02/16/16 10:43	1

Method: 6020A - Metals (ICP/MS), Tc-99 in Activity

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Technetium 99	0.108	U	0.0573	0.0581	1.29	0.221	pCi/g	02/08/16 18:40	02/16/16 10:43	1

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Re	92		30 - 110	02/08/16 18:40	02/16/16 10:43	1

Client Sample ID: B030120PRS00

Lab Sample ID: 160-16001-17

Date Collected: 02/03/16 11:15

Matrix: Solid

Date Received: 02/05/16 11:11

Percent Solids: 79.3

Method: 6020A - Metals (ICP/MS), Tc-99

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Technetium 99	ND		0.000065	0.000020	mg/Kg	☼	02/08/16 18:40	02/16/16 10:59	1

TestAmerica St. Louis

Client Sample Results

Client: Westinghouse Electric Company LLC
Project/Site: HDP RFP-CBA-022 (7 DAY TAT)

TestAmerica Job ID: 160-16001-1

Method: 6020A - Metals (ICP/MS), Tc-99 in Activity

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Technetium 99	0.0746	U	0.0147	0.0162	1.31	0.224	pCi/g	02/08/16 18:40	02/16/16 10:59	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Re	96		30 - 110					02/08/16 18:40	02/16/16 10:59	1

Client Sample ID: B030122PSS00

Lab Sample ID: 160-16001-18

Date Collected: 02/03/16 11:30

Matrix: Solid

Date Received: 02/05/16 11:11

Percent Solids: 87.3

Method: 6020A - Metals (ICP/MS), Tc-99

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Technetium 99	ND		0.000061	0.000018	mg/Kg	☼	02/08/16 18:40	02/16/16 11:03	1

Method: 6020A - Metals (ICP/MS), Tc-99 in Activity

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Technetium 99	0.139	U	0.0180	0.0221	1.22	0.209	pCi/g	02/08/16 18:40	02/16/16 11:03	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Re	94		30 - 110					02/08/16 18:40	02/16/16 11:03	1

Client Sample ID: B030123PRS00

Lab Sample ID: 160-16001-19

Date Collected: 02/03/16 11:40

Matrix: Solid

Date Received: 02/05/16 11:11

Percent Solids: 80.7

Method: 6020A - Metals (ICP/MS), Tc-99

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Technetium 99	ND		0.000066	0.000020	mg/Kg	☼	02/08/16 18:40	02/16/16 11:07	1

Method: 6020A - Metals (ICP/MS), Tc-99 in Activity

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Technetium 99	0.0279	U	0.0461	0.0462	1.32	0.226	pCi/g	02/08/16 18:40	02/16/16 11:07	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Re	94		30 - 110					02/08/16 18:40	02/16/16 11:07	1

TestAmerica St. Louis

QC Sample Results

Client: Westinghouse Electric Company LLC
Project/Site: HDP RFP-CBA-022 (7 DAY TAT)

TestAmerica Job ID: 160-16001-1

Method: 6020A - Metals (ICP/MS), Tc-99

Lab Sample ID: MB 160-236282/1-A
Matrix: Solid
Analysis Batch: 236809

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 236282

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Technetium 99	ND		0.000050	0.000015	mg/Kg		02/08/16 11:30	02/16/16 09:18	1

Lab Sample ID: LCS 160-236282/2-A
Matrix: Solid
Analysis Batch: 236809

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 236282

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Technetium 99	0.00123	0.00118		mg/Kg		97	80 - 120

Lab Sample ID: 160-16001-1 MS
Matrix: Solid
Analysis Batch: 236809

Client Sample ID: B030101PSS00
Prep Type: Total/NA
Prep Batch: 236282

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Technetium 99	ND		0.00148	0.00140		mg/Kg	☼	95	75 - 125

Lab Sample ID: 160-16001-1 MSD
Matrix: Solid
Analysis Batch: 236809

Client Sample ID: B030101PSS00
Prep Type: Total/NA
Prep Batch: 236282

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Technetium 99	ND		0.00148	0.00142		mg/Kg	☼	96	75 - 125	1	30

Method: 6020A - Metals (ICP/MS), Tc-99 in Activity

Lab Sample ID: MB 160-236282/1-A
Matrix: Solid
Analysis Batch: 236810

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 236282

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Technetium 99	0.01878	U	0.00771	0.00790	1.01	0.172	pCi/g	02/08/16 11:30	02/16/16 09:18	1
Carrier	MB %Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Re	99		30 - 110					02/08/16 11:30	02/16/16 09:18	1

Lab Sample ID: LCS 160-236282/2-A
Matrix: Solid
Analysis Batch: 236810

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 236282

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Technetium 99	21.0	20.28		1.92	1.02	0.174	pCi/g	97	80 - 120
Carrier	LCS %Yield	LCS Qualifier	Limits						
Re	98		30 - 110						

TestAmerica St. Louis

QC Sample Results

Client: Westinghouse Electric Company LLC
Project/Site: HDP RFP-CBA-022 (7 DAY TAT)

TestAmerica Job ID: 160-16001-1

Method: 6020A - Metals (ICP/MS), Tc-99 in Activity (Continued)

Lab Sample ID: 160-16001-1 MS

Matrix: Solid

Analysis Batch: 236810

Client Sample ID: B030101PSS00

Prep Type: Total/NA

Prep Batch: 236282

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Technetium 99	0.0799	U	25.4	24.04		2.24	1.27	0.217	pCi/g	95	75 - 125		
Carrier	MS %Yield	MS Qualifier	Limits										
Re	95		30 - 110										

Lab Sample ID: 160-16001-1 MSD

Matrix: Solid

Analysis Batch: 236810

Client Sample ID: B030101PSS00

Prep Type: Total/NA

Prep Batch: 236282

Analyte	Sample Result	Sample Qual	Spike Added	MSD Result	MSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Technetium 99	0.0799	U	25.4	24.31		2.34	1.25	0.215	pCi/g	96	75 - 125	0.06	1
Carrier	MSD %Yield	MSD Qualifier	Limits										
Re	96		30 - 110										

QC Association Summary

Client: Westinghouse Electric Company LLC
Project/Site: HDP RFP-CBA-022 (7 DAY TAT)

TestAmerica Job ID: 160-16001-1

Metals

Prep Batch: 236282

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-16001-1	B030101PSS00	Total/NA	Solid	None	
160-16001-1 MS	B030101PSS00	Total/NA	Solid	None	
160-16001-1 MSD	B030101PSS00	Total/NA	Solid	None	
160-16001-2	B030102PRQ00	Total/NA	Solid	None	
160-16001-3	B030102PRS00	Total/NA	Solid	None	
160-16001-4	B030104PSS00	Total/NA	Solid	None	
160-16001-5	B030105PRS00	Total/NA	Solid	None	
160-16001-6	B030107PSS00	Total/NA	Solid	None	
160-16001-7	B030108PRS00	Total/NA	Solid	None	
160-16001-8	B030110PSS00	Total/NA	Solid	None	
160-16001-9	B030111PRS00	Total/NA	Solid	None	
160-16001-10	B030113PSS00	Total/NA	Solid	None	
160-16001-11	B030114PRS00	Total/NA	Solid	None	
160-16001-12	B030116PSS00	Total/NA	Solid	None	
160-16001-13	B030117PRS00	Total/NA	Solid	None	
160-16001-14	B030118PES00	Total/NA	Solid	None	
160-16001-15	B030119PSQ00	Total/NA	Solid	None	
160-16001-16	B030119PSS00	Total/NA	Solid	None	
160-16001-17	B030120PRS00	Total/NA	Solid	None	
160-16001-18	B030122PSS00	Total/NA	Solid	None	
160-16001-19	B030123PRS00	Total/NA	Solid	None	
LCS 160-236282/2-A	Lab Control Sample	Total/NA	Solid	None	
MB 160-236282/1-A	Method Blank	Total/NA	Solid	None	

Analysis Batch: 236809

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-16001-1	B030101PSS00	Total/NA	Solid	6020A	236282
160-16001-1 MS	B030101PSS00	Total/NA	Solid	6020A	236282
160-16001-1 MSD	B030101PSS00	Total/NA	Solid	6020A	236282
160-16001-2	B030102PRQ00	Total/NA	Solid	6020A	236282
160-16001-3	B030102PRS00	Total/NA	Solid	6020A	236282
160-16001-4	B030104PSS00	Total/NA	Solid	6020A	236282
160-16001-5	B030105PRS00	Total/NA	Solid	6020A	236282
160-16001-6	B030107PSS00	Total/NA	Solid	6020A	236282
160-16001-7	B030108PRS00	Total/NA	Solid	6020A	236282
160-16001-8	B030110PSS00	Total/NA	Solid	6020A	236282
160-16001-9	B030111PRS00	Total/NA	Solid	6020A	236282
160-16001-10	B030113PSS00	Total/NA	Solid	6020A	236282
160-16001-11	B030114PRS00	Total/NA	Solid	6020A	236282
160-16001-12	B030116PSS00	Total/NA	Solid	6020A	236282
160-16001-13	B030117PRS00	Total/NA	Solid	6020A	236282
160-16001-14	B030118PES00	Total/NA	Solid	6020A	236282
160-16001-15	B030119PSQ00	Total/NA	Solid	6020A	236282
160-16001-16	B030119PSS00	Total/NA	Solid	6020A	236282
160-16001-17	B030120PRS00	Total/NA	Solid	6020A	236282
160-16001-18	B030122PSS00	Total/NA	Solid	6020A	236282
160-16001-19	B030123PRS00	Total/NA	Solid	6020A	236282
LCS 160-236282/2-A	Lab Control Sample	Total/NA	Solid	6020A	236282
MB 160-236282/1-A	Method Blank	Total/NA	Solid	6020A	236282

TestAmerica St. Louis

QC Association Summary

Client: Westinghouse Electric Company LLC
Project/Site: HDP RFP-CBA-022 (7 DAY TAT)

TestAmerica Job ID: 160-16001-1

General Chemistry

Analysis Batch: 236317

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-16001-1	B030101PSS00	Total/NA	Solid	Moisture	
160-16001-2	B030102PRQ00	Total/NA	Solid	Moisture	
160-16001-3	B030102PRS00	Total/NA	Solid	Moisture	
160-16001-4	B030104PSS00	Total/NA	Solid	Moisture	
160-16001-5	B030105PRS00	Total/NA	Solid	Moisture	
160-16001-6	B030107PSS00	Total/NA	Solid	Moisture	
160-16001-7	B030108PRS00	Total/NA	Solid	Moisture	
160-16001-8	B030110PSS00	Total/NA	Solid	Moisture	
160-16001-9	B030111PRS00	Total/NA	Solid	Moisture	
160-16001-10	B030113PSS00	Total/NA	Solid	Moisture	
160-16001-11	B030114PRS00	Total/NA	Solid	Moisture	
160-16001-12	B030116PSS00	Total/NA	Solid	Moisture	
160-16001-13	B030117PRS00	Total/NA	Solid	Moisture	
160-16001-14	B030118PES00	Total/NA	Solid	Moisture	
160-16001-15	B030119PSQ00	Total/NA	Solid	Moisture	
160-16001-16	B030119PSS00	Total/NA	Solid	Moisture	
160-16001-17	B030120PRS00	Total/NA	Solid	Moisture	
160-16001-18	B030122PSS00	Total/NA	Solid	Moisture	
160-16001-19	B030123PRS00	Total/NA	Solid	Moisture	
160-16001-19 DU	B030123PRS00	Total/NA	Solid	Moisture	

Rad

Prep Batch: 236282

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-16001-1	B030101PSS00	Total/NA	Solid	None	
160-16001-1 MS	B030101PSS00	Total/NA	Solid	None	
160-16001-1 MSD	B030101PSS00	Total/NA	Solid	None	
160-16001-2	B030102PRQ00	Total/NA	Solid	None	
160-16001-3	B030102PRS00	Total/NA	Solid	None	
160-16001-4	B030104PSS00	Total/NA	Solid	None	
160-16001-5	B030105PRS00	Total/NA	Solid	None	
160-16001-6	B030107PSS00	Total/NA	Solid	None	
160-16001-7	B030108PRS00	Total/NA	Solid	None	
160-16001-8	B030110PSS00	Total/NA	Solid	None	
160-16001-9	B030111PRS00	Total/NA	Solid	None	
160-16001-10	B030113PSS00	Total/NA	Solid	None	
160-16001-11	B030114PRS00	Total/NA	Solid	None	
160-16001-12	B030116PSS00	Total/NA	Solid	None	
160-16001-13	B030117PRS00	Total/NA	Solid	None	
160-16001-14	B030118PES00	Total/NA	Solid	None	
160-16001-15	B030119PSQ00	Total/NA	Solid	None	
160-16001-16	B030119PSS00	Total/NA	Solid	None	
160-16001-17	B030120PRS00	Total/NA	Solid	None	
160-16001-18	B030122PSS00	Total/NA	Solid	None	
160-16001-19	B030123PRS00	Total/NA	Solid	None	
LCS 160-236282/2-A	Lab Control Sample	Total/NA	Solid	None	
MB 160-236282/1-A	Method Blank	Total/NA	Solid	None	

TestAmerica St. Louis

Tracer/Carrier Summary

Client: Westinghouse Electric Company LLC
Project/Site: HDP RFP-CBA-022 (7 DAY TAT)

TestAmerica Job ID: 160-16001-1

Method: 6020A - Metals (ICP/MS), Tc-99 in Activity

Matrix: Solid

Prep Type: Total/NA

Percent Yield (Acceptance Limits)

Lab Sample ID	Client Sample ID	Re (30-110)
160-16001-1	B030101PSS00	94
160-16001-1 MS	B030101PSS00	95
160-16001-1 MSD	B030101PSS00	96
160-16001-2	B030102PRQ00	96
160-16001-3	B030102PRS00	95
160-16001-4	B030104PSS00	94
160-16001-5	B030105PRS00	94
160-16001-6	B030107PSS00	98
160-16001-7	B030108PRS00	96
160-16001-8	B030110PSS00	97
160-16001-9	B030111PRS00	94
160-16001-10	B030113PSS00	97
160-16001-11	B030114PRS00	93
160-16001-12	B030116PSS00	94
160-16001-13	B030117PRS00	94
160-16001-14	B030118PES00	92
160-16001-15	B030119PSQ00	93
160-16001-16	B030119PSS00	92
160-16001-17	B030120PRS00	96
160-16001-18	B030122PSS00	94
160-16001-19	B030123PRS00	94
LCS 160-236282/2-A	Lab Control Sample	98
MB 160-236282/1-A	Method Blank	99

Tracer/Carrier Legend

Re = Re