

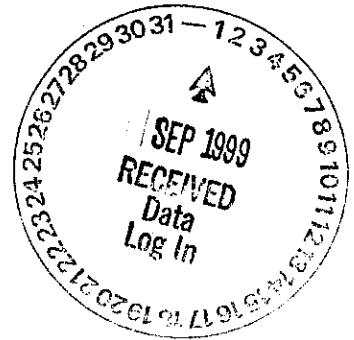
50017

0055773

# FAX COVER SHEET

Date: September 1, 1999

Page 1 of 5 Pages (Coversheet included)



<b>Fax Number To:</b> (509)372-9487	<b>Fax Number From:</b> 373-4884 (509)372-1878
<b>Name:</b> Steve Trent	<b>Name:</b> Ruth Esch
<b>Phone Number/Location:</b> (509)372-9651	<b>Phone Number/Location:</b> 373-4314
<b>Organization:</b> ERC	<b>Organization:</b> Waste Management Hanford WML Analytical Production

## Message

Steve,

Attached is the Interim Data Summary report for 233S SDG4. An email message has a brief narrative. An interim letter report will be issued as soon as the No-237 results are available.

Thanks  
Ruth Esch  
Project Coordinator  
222-S Laboratory

B99-024

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**PRIORITY**

**EDMC**

# INTERIM

Interim Data Summary Report  
233S SDG4

CORE NUMBER: n/a  
SEGMENT #: BOVKNS

SEGMENT PORTION: Digested Tech Smear

Sample#	RA#	Analyte	Unit	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err%
S99N000259		Strontium-89/90 High Level	uCi/Sample	110.2	1.43e-05	1.72e-03	n/a	n/a	n/a	n/a	3.78e-04	2.15E+01
S99N000259		Pu-239/240 by TRU-SPEC Resin	uCi/Sample	101.6	<1.870	1.330	n/a	n/a	n/a	n/a	1.25e-01	2.19E+00
S99N000259		Pu-238 by Ion Exchange	uCi/Sample	n/a	<1.870	5.44e-01	n/a	n/a	n/a	n/a	1.25e-01	2.99E+00
S99N000259		Cobalt-60 by GEA	uCi/Sample	108.6	<3.73e-06	<4.02e-06	n/a	n/a	n/a	n/a	4.02e-06	n/a
S99N000259		Antimony-125 by GEA	uCi/Sample	n/a	<9.44e-06	<1.02e-05	n/a	n/a	n/a	n/a	1.02e-05	n/a
S99N000259		Cesium-134 by GEA	uCi/Sample	n/a	<3.13e-06	<3.23e-06	n/a	n/a	n/a	n/a	3.23e-06	n/a
S99N000259		Cesium-137 by GEA	uCi/Sample	101.2	<8.33e-06	<1.01e-05	n/a	n/a	n/a	n/a	1.01e-05	n/a
S99N000259		Europium-152 by GEA	uCi/Sample	n/a	<7.27e-06	<7.37e-06	n/a	n/a	n/a	n/a	7.37e-06	n/a
S99N000259		Europium-154 by GEA	uCi/Sample	n/a	<1.29e-05	<1.18e-05	n/a	n/a	n/a	n/a	1.18e-05	n/a
S99N000259		Europium-155 by GEA	uCi/Sample	n/a	<8.30e-06	<8.16e-06	n/a	n/a	n/a	n/a	1.16e-05	n/a
S99N000259		Radium-226 by GEA	uCi/Sample	n/a	<6.29e-05	<6.15e-05	n/a	n/a	n/a	n/a	6.15e-05	n/a
S99N000259		Actinium-228 by GEA	uCi/Sample	n/a	<1.27e-05	<1.02e-05	n/a	n/a	n/a	n/a	1.02e-05	n/a
S99N000259		Americium-241 by GEA	uCi/Sample	n/a	<2.91e-05	5.32e-02	n/a	n/a	n/a	n/a	n/a	0.600
S99N000259		Am-241 by Extraction	uCi/Sample	111.2	<1.430	1.724	n/a	n/a	n/a	n/a	1.20e-01	2.44E+00
S99N000259		Cm-243/244 by Extraction	uCi/Sample	n/a	<1.430	1.20e-01	n/a	n/a	n/a	n/a	1.20e-01	1.00E+02
S99N000259		Alpha Env: Solid/Misc (Each)	uCi/Sample	90.00	<1.17e-02	2.640	n/a	n/a	n/a	n/a	1.84e-04	4.11E-01
S99N000259		Beta in Env. Samples (Each)	uCi/Sample	102.8	7.30e-02	2.13e-01	n/a	n/a	n/a	n/a	4.93e-04	1.11E+00

INTERIM  
PRIORITY

# INTERIM

Interim Data Summary Report  
233S SDG4

CORE NUMBER: n/a  
SEGMENT #: B0VKM7

SEGMENT PORTION: Digested Tech Smear

Sample#	R A#	Analyte	Unit	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err%
S99N000258		Strontium-89/90 High Level	uCi/Sample	100.4	<1.40e-04	2.50e-03	n/a	n/a	n/a	n/a	1.93e-04	1.06E+01
S99N000258		Pu-239/240 by TRU-SPEC Resin	uCi/Sample	101.6	<1.870	10.10	n/a	n/a	n/a	n/a	5.14e-01	1.67E+00
S99N000258		Pu-238 by Ion Exchange	uCi/Sample	n/a	<1.870	2.520	n/a	n/a	n/a	n/a	5.14e-01	2.11E+00
S99N000258		Cobalt-60 by GEA	uCi/Sample	110.2	<2.08e-05	<2.27e-05	n/a	n/a	n/a	n/a	2.27e-05	n/a
S99N000258		Antimony-125 by GEA	uCi/Sample	n/a	<5.24e-05	<6.66e-05	n/a	n/a	n/a	n/a	6.66e-05	n/a
S99N000258		Cesium-134 by GEA	uCi/Sample	n/a	<1.87e-05	<1.93e-05	n/a	n/a	n/a	n/a	1.93e-05	n/a
S99N000258		Cesium-137 by GEA	uCi/Sample	104.7	<3.20e-05	1.68e-04	n/a	n/a	n/a	n/a	n/a	3.02
S99N000258		Europium-152 by GEA	uCi/Sample	n/a	<3.71e-05	<7.18e-05	n/a	n/a	n/a	n/a	7.18e-05	n/a
S99N000258		Europium-154 by GEA	uCi/Sample	n/a	<6.25e-05	<1.94e-04	n/a	n/a	n/a	n/a	1.94e-04	n/a
S99N000258		Europium-155 by GEA	uCi/Sample	n/a	<4.89e-05	<1.99e-04	n/a	n/a	n/a	n/a	1.99e-04	n/a
S99N000258		Radium-226 by GEA	uCi/Sample	n/a	<3.48e-04	<4.65e-04	n/a	n/a	n/a	n/a	4.65e-04	n/a
S99N000258		Actinium-228 by GEA	uCi/Sample	n/a	<1.08e-04	<1.08e-04	n/a	n/a	n/a	n/a	1.08e-04	n/a
S99N000258		Americium-241 by GEA	uCi/Sample	n/a	<2.49e-04	7.00	n/a	n/a	n/a	n/a	n/a	0.0900
S99N000258		Am-241 by Extraction	uCi/Sample	111.2	<1.40e-04	7.00	n/a	n/a	n/a	n/a	4.86e-01	1.91E+00
S99N000258		Cm-243/244 by Extraction	uCi/Sample	n/a	<1.40e-04	2.86e-01	n/a	n/a	n/a	n/a	4.86e-01	1.00E+02
S99N000258		Alpha Env: Solid/Misc (Each)	uCi/Sample	84.40	<1.40e-03	17.10	n/a	n/a	n/a	n/a	2.00e-03	5.69E-01
S99N000258		Beta in Env. Samples (Each)	uCi/Sample	98.76	<8.20e-03	1.340	n/a	n/a	n/a	n/a	7.00e-03	1.58E+00

INTERIM  
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# INTERIM

Interim Data Summary Report  
233S SDG4

CORE NUMBER: n/a  
SEGMENT #: BOVK06

SEGMENT PORTION: Digested Tech Smear

Sample#	R A#	Analyte	Unit	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err%
S99W000257		Strontium-89/90 High Level	uCi/Sample	100.4	<1.40e-04	5.55e-03	n/a	n/a	n/a	n/a	2.10e-04	6.89E+00
S99W000257		Pu-239/240 by TRU-SPEC Resin	uCi/Sample	101.6	<1.870	9.28e-01	n/a	n/a	n/a	n/a	5.50e-02	2.13E+00
S99W000257		Pu-238 by Ion Exchange	uCi/Sample	n/a	<1.870	1.31e-01	n/a	n/a	n/a	n/a	5.50e-02	3.82E+00
S99W000257		Cobalt-60 by GEA	uCi/Sample	110.2	<2.08e-05	<2.26e-05	n/a	n/a	n/a	n/a	2.26e-05	n/a
S99W000257		Antimony-125 by GEA	uCi/Sample	n/a	<5.24e-05	<6.68e-05	n/a	n/a	n/a	n/a	6.68e-05	n/a
S99W000257		Cesium-134 by GEA	uCi/Sample	n/a	<1.87e-05	<1.97e-05	n/a	n/a	n/a	n/a	1.97e-05	n/a
S99W000257		Cesium-137 by GEA	uCi/Sample	104.7	<3.20e-05	2.14e-05	n/a	n/a	n/a	n/a	n/a	2.48
S99W000257		Europium-152 by GEA	uCi/Sample	n/a	<3.71e-05	<4.62e-05	n/a	n/a	n/a	n/a	4.62e-05	n/a
S99W000257		Europium-154 by GEA	uCi/Sample	n/a	<6.25e-05	<6.67e-05	n/a	n/a	n/a	n/a	6.67e-05	n/a
S99W000257		Europium-155 by GEA	uCi/Sample	n/a	<4.89e-05	<7.60e-05	n/a	n/a	n/a	n/a	7.60e-05	n/a
S99W000257		Radium-226 by GEA	uCi/Sample	n/a	<3.69e-04	<4.04e-04	n/a	n/a	n/a	n/a	4.04e-04	n/a
S99W000257		Actinium-228 by GEA	uCi/Sample	n/a	<1.10e-04	<1.10e-04	n/a	n/a	n/a	n/a	1.10e-04	n/a
S99W000257		Americium-241 by GEA	uCi/Sample	n/a	<2.49e-04	7.60e-01	n/a	n/a	n/a	n/a	n/a	0.310
S99W000257		Am-241 by Extraction	uCi/Sample	111.2	<1.870	7.55e-01	n/a	n/a	n/a	n/a	5.40e-02	2.14E+00
S99W000257		Cm-243/244 by Extraction	uCi/Sample	n/a	<1.870	3.6e-02	n/a	n/a	n/a	n/a	5.40e-02	1.00E+02
S99W000257		Alpha Env: Solid/Misc (Each)	uCi/Sample	84.40	<1.87e-03	1.460	n/a	n/a	n/a	n/a	2.00e-03	1.97E+00
S99W000257		Beta In Env. Samples (Each)	uCi/Sample	98.74	<8.20e-03	1.38e-01	n/a	n/a	n/a	n/a	7.00e-03	5.59E+00

INTERIM  
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# INTERIM

Interim Data Summary Report  
233S SDG4

CORE NUMBER: n/a  
SEGMENT #: BOVKNS

SEGMENT PORTION: Digested Tech Smear

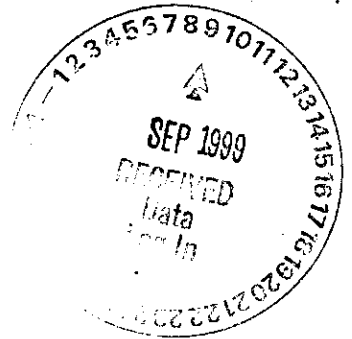
Sample#	R A#	Analyte	Unit	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err%
S99M000256		Strontium-89/90 High Level	uCi/Sample	110.2	1.43e-05	2.40e-03	n/a	n/a	n/a	n/a	3.86e-04	1.70E+01
S99M000256		Pu-239/240 by TRU-SPEC Resin	uCi/Sample	101.6	<1.870	25.70	n/a	n/a	n/a	n/a	2.970	2.92E+00
S99M000256		Pu-238 by Ion Exchange	uCi/Sample	n/a	<1.870	7.250	n/a	n/a	n/a	n/a	2.970	4.81E+00
S99M000256		Cobalt-60 by GEA	uCi/Sample	108.6	<3.73e-06	<3.50e-06	n/a	n/a	n/a	n/a	3.50e-06	n/a
S99M000256		Antimony-125 by GEA	uCi/Sample	n/a	<9.44e-06	<1.09e-05	n/a	n/a	n/a	n/a	1.09e-05	n/a
S99M000256		Cesium-134 by GEA	uCi/Sample	n/a	<3.13e-06	<3.04e-06	n/a	n/a	n/a	n/a	3.04e-06	n/a
S99M000256		Cesium-137 by GEA	uCi/Sample	101.2	<8.33e-06	<6.25e-06	n/a	n/a	n/a	n/a	6.25e-06	n/a
S99M000256		Europium-152 by GEA	uCi/Sample	n/a	<7.27e-06	<1.45e-05	n/a	n/a	n/a	n/a	1.45e-05	n/a
S99M000256		Europium-154 by GEA	uCi/Sample	n/a	<1.29e-05	1.22e-05	n/a	n/a	n/a	n/a	1.22e-05	n/a
S99M000256		Europium-155 by GEA	uCi/Sample	n/a	<8.30e-06	8.21e-06	n/a	n/a	n/a	n/a	4.21e-05	n/a
S99M000256		Radium-226 by GEA	uCi/Sample	n/a	<6.29e-05	6.06e-05	n/a	n/a	n/a	n/a	7.96e-05	n/a
S99M000256		Actinium-228 by GEA	uCi/Sample	n/a	<1.91e-05	1.89e-05	n/a	n/a	n/a	n/a	1.89e-05	n/a
S99M000256		Americium-241 by GEA	uCi/Sample	n/a	8.91e-05	8.51e-01	n/a	n/a	n/a	n/a	n/a	0.130
S99M000256		Am-241 by Extraction	uCi/Sample	111.2	<1.420	2.620	n/a	n/a	n/a	n/a	2.620	2.71E+00
S99M000256		Cm-243/244 by Extraction	uCi/Sample	n/a	<1.420	2.620	n/a	n/a	n/a	n/a	2.620	1.00E+02
S99M000256		Alpha Env: Solid/Misc (Each)	uCi/Sample	100.0	<2.00e-02	50.60	n/a	n/a	n/a	n/a	9.00e-02	2.07E+00
S99M000256		Beta in Env. Samples (Each)	uCi/Sample	108.7	<2.00e-01	4.850	n/a	n/a	n/a	n/a	3.51e-01	6.93E+00

INTERIM  
PRIORITY

# FAX COVER SHEET

Date: September 9, 1999

Page 1 of 5 Pages (Coversheet included)



<b>Fax Number To:</b> 372-9487	<b>Fax Number From:</b> (509)372-1878
<b>Name:</b> Steve Trent	<b>Name:</b> Ruth Esch
<b>Phone Number/Location:</b> 372-9651	<b>Phone Number/Location:</b> 373-4314
<b>Organization:</b> ERC	<b>Organization:</b> Waste Management Hanford 222-S Production Management

### Message

*50017*

<p>Steve.</p> <p>The Interim Results report for Np-237 and ICP/MS actinides for the four tech smear samples from 233-S SDG4 is attached.</p> <p>Ruth E</p>
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*B99-024*

## PRIORITY

# INTERIM

Interim Results  
Z33S SDG4

CORE NUMBER: n/a  
SEGMENT #: 00VKN5

SEGMENT PORTION: Digested Tech Smear

Sample#	R	AI	Analyte	Unit	Standard Z	Blank	Result	Duplicate	Average	RPD %	Spk Rec X	Det Limit	Count ErrX
S99H000256			Pu-239/240 by TRU-SPEC Resin	uCi/Sample	101.6	<1.870	25.70	n/a	n/a	n/a	n/a	2.970	2.92E+00
S99H000256			Pu-238 by Ion Exchange	uCi/Sample	n/a	<1.870	7.250	n/a	n/a	n/a	n/a	2.970	4.81E+00
S99H000256			Np237 by IIA Extraction	uCi/Sample	75.33	<2.17e-03	7.86e-03	n/a	n/a	n/a	n/a	3.00e-03	2.65E+01
S99H000256	D		Neptunium-237 by ICP/MS	ug/Sample	148.4	<4.06e-05	14.58	14.58	14.44	2.08	131.6	1.829	n/a
S99H000256	D		Plutonium-239 by ICP/MS	ug/Sample	166.0	<4.22e-05	4.58e+02	458.9	458.9	0.44	141.9	1.902	n/a
S99H000256	D		Plutonium-240 by ICP/MS	ug/Sample	n/a	<2.50e-05	55.64	55.70	55.57	0.54	n/a	1.126	n/a
S99H000256	D		Plutonium-242 by ICP/MS	ug/Sample	n/a	<1.91e-05	3.370	3.370	3.335	8.10	n/a	8.61e-01	n/a
S99H000256	D		Pu/Am-241 by ICP/MS	ug/Sample	210.5	<2.39e-05	14.20	14.20	14.20	0.00	185.7	1.080	n/a
S99H000256	D		Am 243/Cm 243 by ICP/MS	ug/Sample	n/a	<2.61e-05	1.176	1.176	n/a	n/a	n/a	1.176	n/a
S99H000256	D		Pu 244/Cm 244 by ICP/MS	ug/Sample	n/a	<1.05e-05	4.74e-01	4.74e-01	n/a	n/a	n/a	4.74e-01	n/a
S99H000256			Am-241 by Extraction	uCi/Sample	111.2	<1.420	21.60	n/a	n/a	n/a	n/a	2.620	2.71E+00

# INTERIM

PRIORITY

# INTERIM

Interim Results  
233S SDG4

CORE NUMBER: n/a  
SEGMENT #: BOVKM6

SEGMENT PORTION: Digested Tech Smear

Sample#	R	AF	Analyte	Unit	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err%
S99H000257			Pu-239/240 by TRU-SPEC Resin	uCi/Sample	101.6	<1.870	9.28e-01	n/a	n/a	n/a	n/a	5.50e-02	2.13E+00
S99H000257			Pu-238 by Ion Exchange	uCi/Sample	n/a	<1.870	1.31e-01	n/a	n/a	n/a	n/a	5.50e-02	3.82E+00
S99H000257			Np237 by TIA Extraction	uCi/Sample	75.33	<2.17e-03	<4.84e-03	n/a	n/a	n/a	n/a	7.00e-03	2.36E+02
S99H000257	D		Neptunium-237 by ICP/MS	ug/Sample	148.4	<4.06e-05	1.388	n/a	n/a	n/a	n/a	2.13e-01	n/a
S99H000257	D		Plutonium-239 by ICP/MS	ug/Sample	166.0	<4.22e-05	29.39	n/a	n/a	n/a	n/a	2.21e-01	n/a
S99H000257	D		Plutonium-240 by ICP/MS	ug/Sample	n/a	<2.50e-05	2.662	n/a	n/a	n/a	n/a	1.31e-01	n/a
S99H000257	D		Plutonium-242 by ICP/MS	ug/Sample	n/a	<1.91e-05	<1.00e-01	n/a	n/a	n/a	n/a	1.00e-01	n/a
S99H000257	D		Pu/Am-241 by ICP/MS	ug/Sample	210.5	<2.39e-05	7.39e-01	n/a	n/a	n/a	n/a	1.26e-01	n/a
S99H000257	D		Am 243/Cm 243 by ICP/MS	ug/Sample	n/a	<2.61e-05	1.37e-01	n/a	n/a	n/a	n/a	1.37e-01	n/a
S99H000257	D		Pu 244/Cm 244 by ICP/MS	ug/Sample	n/a	<1.05e-05	5.51e-01	n/a	n/a	n/a	n/a	5.50e-02	n/a
S99H000257			Am-241 by Extraction	uCi/Sample	111.2	<1.870	7.13e-01	n/a	n/a	n/a	n/a	5.40e-02	2.14E+00

# INTERIM

PRIORITY



# INTERIM

Interim Results  
233S SDG4

CORE NUMBER: n/a  
SEGMENT #: 80VKN7

SEGMENT PORTION: Digested Tech Smear

Sample#	R	AS	Analyte	Unit	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err%
S99H000258			Pu-239/240 by TRU-SPEC Resin	uCi/Sample	101.6	<1.870	10.70	n/a	n/a	n/a	n/a	5.14e-01	1.67E+00
S99H000258			Pu-238 by Ion Exchange	uCi/Sample	n/a	<1.870	2.520	n/a	n/a	n/a	n/a	5.14e-01	2.11E+00
S99H000258			Mn-237 by TTA Extraction	uCi/Sample	75.33	<2.17e-03	4.68e-03	n/a	n/a	n/a	n/a	7.00e-03	8.73E+01
S99H000258	D		Neptunium-237 by ICP/MS	ug/Sample	148.4	<4.06e-05	10.85	n/a	n/a	n/a	n/a	1.024	n/a
S99H000258	D		Plutonium-239 by ICP/MS	ug/Sample	166.0	<4.22e-05	2.52e+02	n/a	n/a	n/a	n/a	1.065	n/a
S99H000258	D		Plutonium-240 by ICP/MS	ug/Sample	n/a	<2.50e-05	32.92	n/a	n/a	n/a	n/a	6.30e-01	n/a
S99H000258	D		Plutonium-242 by ICP/MS	ug/Sample	n/a	<1.91e-05	12.00	n/a	n/a	n/a	n/a	4.82e-01	n/a
S99H000258	D		Pu/Am-241 by ICP/MS	ug/Sample	210.5	<2.39e-05	6.072	n/a	n/a	n/a	n/a	6.05e-01	n/a
S99H000258	D		Am 243/Cm 243 by ICP/MS	ug/Sample	n/a	<2.61e-05	6.58e-01	n/a	n/a	n/a	n/a	6.58e-01	n/a
S99H000258	D		Pu 244/Cm 244 by ICP/MS	ug/Sample	n/a	<1.05e-05	2.65e-01	n/a	n/a	n/a	n/a	2.65e-01	n/a
S99H000258			Am-241 by Extraction	uCi/Sample	111.2	<1.420	17.924	n/a	n/a	n/a	n/a	4.86e-01	1.91E+00

# INTERIM

PRIORITY

# INTERIM

Interim Results  
Z33S S0G4

CORE NUMBER: n/a  
SEGMENT #: B0VKMB

SEGMENT PORTION: Digested Tech Smear

Sample#	R	AD	Analyte	Unit	Standard X	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err%
S99M00259			Pu-239/240 by TRU-SPEC Resin	uCi/Sample	101.6	<1.870	1.330	n/a	n/a	n/a	n/a	1.25e-01	2.19E+00
S99M00259			Pu-238 by Ion Exchange	uCi/Sample	n/a	<1.870	5.44e-01	n/a	n/a	n/a	n/a	1.25e-01	2.99E+00
S99M00259			Np237 by TTA Extraction	uCi/Sample	75.33	<2.17e-03	<1.78e-03	n/a	n/a	n/a	n/a	3.00e-03	3.00E+02
S99M00259	D		Neptunium-237 by ICP/MS	ug/Sample	148.4	<4.06e-05	<4.10e-01	n/a	n/a	n/a	n/a	4.10e-01	n/a
S99M00259	D		Plutonium-239 by ICP/MS	ug/Sample	166.0	<4.22e-05	31.39	n/a	n/a	n/a	n/a	4.26e-01	n/a
S99M00259	D		Plutonium-240 by ICP/MS	ug/Sample	n/a	<2.50e-05	3.667	n/a	n/a	n/a	n/a	2.52e-01	n/a
S99M00259	D		Plutonium-242 by ICP/MS	ug/Sample	n/a	<1.91e-05	<1.93e-01	n/a	n/a	n/a	n/a	1.93e-01	n/a
S99M00259	D		Pu/Am-241 by ICP/MS	ug/Sample	210.5	<2.39e-05	8.43e-01	n/a	n/a	n/a	n/a	2.42e-01	n/a
S99M00259	D		Am 243/Cm 243 by ICP/MS	ug/Sample	n/a	<2.61e-05	2.63e-01	n/a	n/a	n/a	n/a	2.63e-01	n/a
S99M00259	D		Pu 244/Cm 244 by ICP/MS	ug/Sample	n/a	<1.05e-05	1.06e-01	n/a	n/a	n/a	n/a	1.06e-01	n/a
S99M00259			Am-241 by Extraction	uCi/Sample	111.2	<1.420	1.240	n/a	n/a	n/a	n/a	1.20e-01	2.44E+00

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