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To Distribution	From Characterization Plans and Reports		Page 1 of 2	
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			ECN NO.:	N/A
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M. J. Kupfer	H5-49	X		
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B. C. Simpson	R2-12		X	
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ENGINEERING DATA TRANSMITTAL

Page 1 of 1

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	1	Cog. Eng. R.D. Schreiber	<i>Ruth D. Schreiber</i>	5/5/95	R2-12						
	1	Cog. Mgr. J.G. Kristofzski	<i>J.G. Kristofzski</i>	5/5/95	TL-0U						
	1	QA T. L. Tung	<i>T. L. Tung</i>	5/5/95	S3-30						
		Safety									
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Document Number: WHC-SD-WM-DP-109, REV 0

Document Title: 45-Day Safety Screen Results for Tank 241-U-203,
Push Mode, Cores 79 and 80

Release Date: 5/5/95

**This document was reviewed following the
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May 5, 1995

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P.O. Box 1970 Richland, WA 99352

WHC-SD-WM-DP-109, REV. 0

ANALYTICAL SERVICES

45-DAY SAFETY SCREEN RESULTS FOR TANK 241-U-203, PUSH MODE, CORES 79 AND 80

DATE PRINTED:

MAY 4, 1995

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WHC-SD-WM-DP-109, REV. 0

NARRATIVE

45-DAY SAFETY SCREEN RESULTS FOR TANK 241-U-203,
PUSH MODE, CORES 79 AND 80

ANALYTICAL SUMMARY

Two one-segment core samples from tank 241-U-203 (U-203) were received by the 222-S Laboratories and underwent safety screening analysis, consisting of differential scanning calorimetry (DSC), thermogravimetric analysis (TGA), and total alpha activity. In addition to the safety screening requirements, inductively coupled plasma (ICP) spectrographic analysis for lithium was performed to determine the extent of hydrostatic head fluid contamination during the sampling event. No notification limits were exceeded for these analyses.

SCOPE

This document serves as the 45-day report deliverable for the tank U-203 push mode core samples collected on March 31, 1995 and April 3, 1995 (samples 95-059 and 95-061, respectively). Each sample was received, extruded, and analyzed by the 222-S Laboratories in accordance with the below referenced Tank Characterization Plan (TCP). Included in this report are the primary safety screening results obtained from the analyses and copies of all DSC and TGA raw data scans as requested per the TCP. Photographs of the push mode core samples were taken during extrusion and, although not included in this report, are available.

SAMPLE RECEIPT, EXTRUSION, AND SUBSAMPLING

Core 79, Sample 95-059

Sample 95-059 was collected from riser 2 of tank U-203 using the push mode core sampling system. It was received into the 222-S Laboratories on April 3, 1995 at 1415 hours and extruded on April 5, 1995. 44.96 grams of drainable liquid and 105.28 grams of solid material were collected. The drainable liquid was yellow, and the solids consisted of yellow crystals with black specks dispersed throughout the crystals. The drainable liquid was subsampled into jar #6766, and the solids were subsampled into jar #6693 and identified as lower half solids. All archiving requirements per the TCP were performed on the unfiltered liquid and solid subsamples, while all analysis of the drainable liquid was run after filtration.

Core 80, Sample 95-061

Sample 95-061 was collected from riser 6 of tank U-203 using the push mode core sampling system. It was received into the 222-S Laboratories on April 3, 1995 at 1405 hours and extruded on April 5, 1995. There was no drainable liquid obtained, but approximately six inches (221.64 grams) of solids were collected. The first three inches of solids extruded consisted of yellow crystals, and the last three inches of solids were yellow sludge. In accordance with the referenced TCP, the material from sample 95-061 was

divided into half-segments. The crystalline material was identified as the lower half solids and subsampled into jar #6696, and the sludge material was identified as the upper half solids and subsampled into jar #6697. All analyses and sample archives in the TCP were performed on these samples.

ANALYTICAL RESULTS

Analytical results are presented in Tables 1, 2 and 3, with the applicable notification limits shaded.

DSC (Energetics Content)

DSC analyses were performed under a nitrogen atmosphere using procedure LA-514-113, Rev. B-1. The results are given in Tables 1, 2 and 3. For all four samples (S95T000639, S95T000658, S95T000685, and S95T000689), no exotherms were detected. Since no exotherms were detected for all samples and duplicates, no dry weight basis results were calculated or reported. The Laboratory Management Control System (LMCS) control standard exhibited a recovery of 99.12 percent for the solid samples and 93.15 percent for the liquid sample, which were within the program's specified accuracy control limits of 90 to 110 percent recovery.

TGA (Moisture Content)

Weight percent water was performed under a nitrogen atmosphere using procedure LA-560-112, Rev. A-2 (for samples S95T000639, S95T000685, and S95T000689), and procedure LA-514-114, Rev. B-0 (for sample S95T000658). Results for the four samples and their duplicates ranged in value from 22.94 to 69.99 percent water by weight. Although there was a significant variation in the TGA results between core samples, the results within each core were relatively similar. The relative percent difference (RPD) values between the samples and their duplicates ranged from 0.19 to 8.31 and met the TCP specified precision requirement of 10%. Three LMCS control standards were run for these TGA analyses and exhibited recoveries ranging from 96.77 to 99.70 percent, which were within the program's specified accuracy control limits of 90 to 110 percent.

Total Alpha Activity

Analyses for total alpha activity were performed for the three solid samples (S95T000642, S95T000686, and S95T000690). Total alpha activity analysis was not required for the drainable liquid sample. Samples were prepared by fusion using procedure LA-549-141, Rev. C-2, and analyses were performed using procedure LA-508-101, Rev. D-2. A sample duplicate and spike were performed on all three samples. Results for the samples (except sample S95T000690) and duplicates were below their corresponding detection limits, so no RPD values were generated. Lower than normal spike recoveries caused all three samples to exceed the accuracy control limits of 90 to 110 percent recovery, with values of 70.3%, 59.2%, and 49.7%. This poor spike recovery was attributed to solids observed in the sample mount. Since the majority of the sample and

duplicate results were below the detection limits, no additional runs were performed.

ICP - Lithium

It is occasionally necessary to use hydrostatic head fluid (water with lithium bromide tracer) to aid in the collection of core samples. In order to determine if sample contamination by this fluid occurred during sampling, analyses for lithium by ICP were performed on samples S95T000642, S95T000662, S95T000686, and S95T000690. The solid samples were prepared by fusion digestion using procedure LA-549-141, Rev. C-2, and the drainable liquid sample was prepared by acid digestion using procedure LA-505-158, Rev. A-4. A sample duplicate and spike were performed on all four samples. Results for the samples and duplicates were below their corresponding detection limits, so no RPD values were generated. The spike recoveries for the samples ranged from 91.92 to 102.0 percent, which were within the accuracy control limits specified in the TCP.

REFERENCE WHC-SD-WM-TP-310, Revision 0, "Tank 241-U-203 Tank Characterization Plan, dated March 27, 1995.

WHC-SD-WM-DP-109, REV. 0

SAMPLE DATA SUMMARY

45 Day Safety Screen Results for U-203
U-203

CORE NUMBER: 79
SEGMENT #: 1

TABLE 1

SEGMENT PORTION: L Lower Half of Segment

Sample#	R	A#	Analyte	Unit	Action Limits		Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err%
					Lower	Upper									
S95T000639			% Water by TGA using Mettler	%	17.000	100.000	99.70	n/a	67.19	61.83	64.51	8.31	n/a	n/a	n/a
S95T000639			DSC Exotherm using Mettler	Joules/g	-999.000	481.000	99.12	n/a	0.00e+00	0	0.000	n/a	n/a	n/a	n/a
S95T000642	F		Lithium -ICP-Fusion	ug/g	-999.000	100.000	103.0	2.00e-03	< 49.2400	<49.1300	n/a	n/a	95.85	49.20	n/a
S95T000642	F		Alpha of Digested Solid	uCi/g	-999.000	41.000	97.64	<8.03e-04	< 1.51e-3	<1.47e-3	n/a	n/a	70.30	2.00e-03	207.7

=> Limit violated

=> Selected Limit

WHC-SD-WM-DP-109, REV. 0

45 Day Safety Screen Results for U-203
U-203

CORE NUMBER: 79
SEGMENT #: 1

TABLE 2

SEGMENT PORTION: Drainable Liquid

Sample#	R	A#	Analyte	Unit	Action Limits		Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err%
					Lower	Upper									
S95T000658			% Water by TGA on Perkin Elmer	%	17.000	100.000	96.77	n/a	69.86	69.99	69.92	0.19	n/a	n/a	n/a
S95T000658			DSC Exotherm using Mettler	Joules/g	-999.000	481.000	93.15	n/a	0.00e+00	0	0.000	n/a	n/a	n/a	n/a
S95T000662	B		Lithium -ICP-Acid Adjust	ug/mL	-999.000	100.000	103.6	2.00e-03	< 10.0000	<10.0000	n/a	n/a	102.0	10.00	n/a

=> Limit violated

=> Selected Limit

WHC-SD-WM-DP-109, REV.0

45 Day Safety Screen Results for U-203
U-203

CORE NUMBER: 80
SEGMENT #: 1

TABLE 3

SEGMENT PORTION: U Upper Half of Segment

Sample#	R	A#	Analyte	Unit	Action Limits		Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err%
					Lower	Upper									
S95T000685			% Water by TGA using Mettler	%	17.000	100.000	99.41	n/a	24.50	22.94	23.72	6.58	n/a	n/a	n/a
S95T000685			DSC Exotherm using Mettler	Joules/g	-999.000	481.000	99.12	n/a	0.00e+00	0	0.000	n/a	n/a	n/a	n/a
S95T000686	F		Lithium -ICP-Fusion	ug/g	-999.000	100.000	104.1	1.60e-02	< 35.9131	<38.7372	n/a	n/a	92.64	35.90	n/a
S95T000686	F		Alpha of Digested Solid	uCi/g	-999.000	41.000	97.64	<5.86e-04	< 1.21e-3	<1.31e-3	n/a	n/a	59.20	1.00e-03	136.9

L Lower Half of Segment: L Lower Half of Segment

Sample#	R	A#	Analyte	Unit	Action Limits		Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err%
					Lower	Upper									
S95T000689			% Water by TGA using Mettler	%	17.000	100.000	99.41	n/a	33.25	31.51	32.38	5.37	n/a	n/a	n/a
S95T000689			DSC Exotherm using Mettler	Joules/g	-999.000	481.000	99.12	n/a	0.00e+00	0	0.000	n/a	n/a	n/a	n/a
S95T000690	F		Lithium -ICP-Fusion	ug/g	-999.000	100.000	104.1	1.60e-02	< 40.2	<36.5564	n/a	n/a	91.92	40.20	n/a
S95T000690	F		Alpha of Digested Solid	uCi/g	-999.000	41.000	97.64	<5.86e-04	9.75e-04	<1.15e-3	n/a	n/a	49.70	1.00e-03	110.2

=> Limit violated
=> Selected Limit

WHC-SD-WM-DP-109, REV. 0

WHC-SD-WM-DP-109, REV. 0

UNDIGESTED ANALYSES RESULTS - DIRECT

LABCORE Data Entry Template for Worklist# 1013

Analyst: KRM Instrument: DSC01 Book # 12N14-A
Method: LA-514-113 Rev/Mod B-1

Worklist Comment: Please run U-203 DSC under N2. bdv

GROUP	PROJECT	S TYPE	SAMPLE#	R A	-----TEST-----	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD			DSC-01	SOLID	<u>28.45</u>	<u>28.2</u>	<u>N/A</u>	Joules/g
95000053	U-203	2 SAMPLE	S95T000685	0	DSC-01	SOLID	<u>N/A</u>	<u>Ø</u>		Joules/g
95000053	U-203	3 DUP	S95T000685	0	DSC-01	SOLID	<u>Ø</u>	<u>Ø</u>	<u>N/A</u>	Joules/g
95000053	U-203	4 SAMPLE	S95T000689	0	DSC-01	SOLID	<u>N/A</u>	<u>Ø</u>		Joules/g
95000053	U-203	5 DUP	S95T000689	0	DSC-01	SOLID	<u>Ø</u>	<u>Ø</u>	<u>N/A</u>	Joules/g

Final page for worklist # 1013

Analyst Signature 4-30-95
5-1-95

Verified by

Analyst Signature 5-1-95
5-1-95

Data Entry Comments:

S95T000685 produced three endotherms, one at 103.6°C with a delta H of 667.9 J/g second at 180.9°C with a delta H of 3.5 J/g and third at 284.0°C with a delta H of 706.1 J/g. S95T000689 produced three endotherms one at 119.6°C with a delta H of 960.6 J/g second at 179.1°C with a delta H of 3.8 J/g and third at 283.4°C with a delta H of 509.3 J/g

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DSC STD 12N14-A

6.340 mg

Rate: 10.0 °C/min

File: 00007.001

DSC METTLER 29-Apr-95

Ident: 0.0

222-S Laboratory

WHC-SD-WM-DP-109, REV.0

[Signature] 4-30-95

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S95T000685 N2

14.810 mg

File: 00009.001 DSC METTLER 29-Apr-95

Ident: 0.0 222-S Laboratory

Rate: 10.0 °C/min

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S95T000685 (DUP) N2

13.224 mg

Rate: 10.0 °C/min

File: 00011.001

DSC METTLER

29-Apr-95

Ident: 0.0

222-S Laboratory

100.

200.

300.

400.

°C

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S95T000689 N2

12.057 mg

File: 00013.001 DSC METTLER 30-Apr-95

Ident: 0.0 222-S Laboratory

Rate: 10.0 °C/min

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LABCORE Data Entry Template for Worklist# 1014

Analyst: RDM Instrument: DSC01 Book # 12N/4A

Method: LA-514-113 Rev/Mod 5/14/95 BX ~~B-1~~ B-1

Worklist Comment: Please run U-203 DSC under N2. bdv

GROUP	PROJECT	S TYPE	SAMPLE#	R A	-----TEST-----	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD			DSC-01	SOLID	<u>28.45</u>	<u>28.2</u>	<u>N/A</u>	Joules/g
95000051	U-203	2 SAMPLE	S95T000639	0	DSC-01	SOLID	<u>N/A</u>	<u>Ø</u>		Joules/g
95000051	U-203	3 DUP	S95T000639	0	DSC-01	SOLID	<u>Ø</u>	<u>Ø</u>	<u>N/A</u>	Joules/g

Final page for worklist # 1014

RDM 4/25/95
Analyst Signature Date

R. Jones 4-26-95
Analyst Signature Date

Verified by Blandina Valenzuela 4-26-95

Data Entry Comments: S95T000639 produced two endotherms one at 115.3°C
with a delta H of 1517.8 J/g and the second at 227.2°C with a
delta H of 15.8 J/g.

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number,
R = Replicate Number, A = Aliquot Code.

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DSC STD 12N14-A

6.654 mg

5/4/95

130V

File: 00041.001 DSC METTLER 25-Apr-95

Ident: 0.0 222-S Laboratory

Rate: 10.0 °C/min

exov

Blandina Valenzuela

120. 140. 150. 180. °C 4/27/95

BEST AVAILABLE COPY

S95T000639 N2

13.100 mg

File: 00043.001 DSC METTLER 25-Apr-95

Ident: 0.0 222-S Laboratory

Rate: 10.0 °C/min

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S95T000639 (DUP) N2

18.920 mg

File: 00044.001 DSC METTLER 25-Apr-95

Ident: 0.0 222-S Laboratory

Rate: 10.0 °C/min

exo

Integration

Delta H23401 mJ

1236.8 J/g

Peak

111.3°C

-85.3 mW

Integration

Delta H 732 mJ

38.7 J/g

Peak

273.1°C

-3.6 mW

LABCORE Data Entry Template for Worklist# 1032

Analyst: RDM Instrument: DSC01 Book # 12N4A

Method: LA-514-113 Rev/Mod B-01

Worklist Comment: Please run U-203 DSC under N2. bdv

GROUP	PROJECT	S TYPE	SAMPLE#	R A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD			DSC-01	LIQUID	28.45	26.5	N/A	Joules/g
95000051	U-203	2 SAMPLE	S95T000658	0	DSC-01	LIQUID	N/A	Ø		Joules/g
95000051	U-203	3 DUP	S95T000658	0	DSC-01	LIQUID	Ø	Ø	N/A	Joules/g

Final page for worklist # 1032

RDM 4/30/95
Analyst Signature Date

Dan H. Smith 5/1/95
Analyst Signature Date

Verified by Blandina Valenzuela 5/1/95

Data Entry Comments: S95T000658 produced two endotherms one at 113.3°C with a
delta H of 1592.1 J/g, and the second at 5/1/95 228.9°C with a delta H of
37.7 J/g.

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number,
R = Replicate Number, A = Aliquot Code.

SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT
COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 21 TO 23.

BEST AVAILABLE COPY

DSC STD 12N14-A
6.340 mg 5/4/95
BDV

Rate: 10.0 °C/min

File: 00004.001 DSC METTLER 29-Apr-95
Ident: 0.0 222-S Laboratory

Blandina Valenzuela 5/1/95 for RD Meyers

BEST AVAILABLE COPY

S95T000658 N2

14.625 mg

File: 00005.001 DSC METTLER 29-Apr-95

Ident: 0.0 222-S Laboratory

Rate: 10.0 °C/min

BEST AVAILABLE COPY

S95T000658 (DUP) N2

14.450 mg

Rate: 10.0 °C/min

File: 00006.001

DSC METTLER

29-Apr-95

Ident: 0.0

222-S Laboratory

LABCORE Data Entry Template for Worklist# 1038

Analyst: SMF Instrument: TGA⁰³₀₁ 5/5/95 BDV Book # 42N8-A

Method: LA-514-114 Rev/Mod B-0

Worklist Comment: Please run U-203 TGA under N2. bdv

GROUP	PROJECT	S TYPE	SAMPLE#	R A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD			TGA-03	LIQUID	<u>59.19</u>	<u>57.28</u>	<u>N/A</u>	%
95000051	U-203	2 SAMPLE	S95T000658	0	TGA-03	LIQUID	<u>N/A</u>	<u>69.86</u>		%
95000051	U-203	3 DUP	S95T000658	0	TGA-03	LIQUID	<u>69.86</u>	<u>69.99</u>	<u>N/A</u>	%

Final page for worklist # 1038

See attached for signatures
Analyst Signature _____ Date _____

Data entered + verified by
Blandina Valenzuela 5/2/95
Analyst Signature _____ Date _____

Data Entry Comments:

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

LABCORE Data Entry Template for Worklist# 1038

Analyst: SMF Instrument: TGA01 Book # 42N8-A

Method: LA-560-112 Rev/Mod LA-514-114/B0

Worklist Comment: Please run U-203 TGA under N2. bdv

GROUP	PROJECT	S TYPE	SAMPLE#	R A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD			TGA-01	LIQUID			N/A	%
95000051	U-203	2 SAMPLE	S95T000658	0	TGA-01	LIQUID	N/A			%
95000051	U-203	3 DUP	S95T000658	0	TGA-01	LIQUID			N/A	%

Final page for worklist # 1038

Susie M. Dulton 5/02/95
Analyst Signature Date 5/5/95
BDV

Analyst Signature Date

Data Entry Comments:

S95T000658 - Bright yellow liquid
The other instrument was used.

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

Curve 1: TGA

File info: TER050201 Tue May 2 09:16:09 1995

Sample Weight: 16.162 mg

42N8A Terliq

SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT
COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 26 TO 28.

WHC-SD-WM-DP-109, REV.0

N2
TEMP1: 35.0 C
TEMP2: 250.0 C
TIME1: 0.0 min
RATE1: 10.0 C/min

Temperature (°C)

SM Fulton
PERKIN-ELMER
7 Series Thermal Analysis System
Tue May 2 09:55:40 1995

Curve 1: TGA

File info: SAM050201 Tue May 2 11:24:59 1995

Sample Weight: 13.022 mg

S956T000658, 10C/min

22

WHC-SD-WM-DP-109, REV. 0

N2

TEMP1: 35.0 C TIME1: 0.0 min RATE1: 10.0 C/min
TEMP2: 500.0 C

SM Fulton
PERKIN-ELMER
7 Series Thermal Analysis System
Tue May 2 11:39:17 1995

Curve 1: TGA

File info: SAM050202 Tue May 2 12:31:29 1995

Sample Weight: 13.305 mg

S95T000658 (DUP), 10C/min

WHC-SD-WM-DP-109, REV.0

N2

TEMP1: 35.0 °C TIME1: 0.0 min RATE1: 10.0 °C/min
TEMP2: 500.0 °C

SM Fulton
PERKIN-ELMER
7 Series Thermal Analysis System
Tue May 2 12:58:36 1995

LABCORE Data Entry Template for Worklist# 1042

Analyst: KRM Instrument: TGA01 Book # 42N8A

Method: LA-560-112 Rev/Mod A-2

Worklist Comment: Please run U-203 TGA under N2. bdv

GROUP	PROJECT	S TYPE	SAMPLE#	R A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD			TGA-01	SOLID	<u>59.19</u>	<u>58.84</u>	<u>N/A</u>	%
95000053	U-203	2 SAMPLE	S95T000685	0	TGA-01	SOLID	<u>N/A</u>	<u>24.50</u>		%
95000053	U-203	3 DUP	S95T000685	0	TGA-01	SOLID	<u>24.50</u>	<u>22.94</u>	<u>N/A</u>	%
95000053	U-203	4 SAMPLE	S95T000689	0	TGA-01	SOLID	<u>N/A</u>	<u>33.25</u>		%
95000053	U-203	5 DUP	S95T000689	0	TGA-01	SOLID	<u>33.25</u>	<u>31.51</u>	<u>N/A</u>	%

Final page for worklist # 1042

4-30-95
Analyst Signature Date

5/1/95
Analyst Signature Date

Verified by Blandina Valenzuela 5/1/95

Data Entry Comments: S95T000685 produced a second weight loss step of 20.61% at
305.8°C. Sample S95T000689 produced a second weight loss step of 16.63%
at 301.0°C

Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number,
R = Replicate Number, A = Aliquot Code.

SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT
COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 30 TO 34.

TGA STD 42N8-A

27.242 mg

Rate: 10.0 °C/min

File: 00008.001

TG

METTLER

29-Apr-95

Ident: 0.0

222-S Laboratory

Step Analysis

Height-16.03 mg

-58.84 %

ResidC. 11.21 mg

41.16 %

Dpeak 104.2 °C

WHC-SD-WM-DP-109, REV. 0

[Handwritten Signature] 4-30-95

S95T000685 N2

15.837 mg

Rate: 10.0 °C/min

File: 00010.001

TG

METTLER

29-Apr-95

Ident: 0.0

222-S Laboratory

Step Analysis
Height -3.88 mg
-24.50 %
ResiC. 11.96 mg
75.50 %
Dpeak 51.0 °C

Step Analysis
Height -3.26 mg
-20.61 %
ResiC. 8.59 mg
54.23 %
Dpeak 305.0 °C

31

S95T000685 (DUP) N2

13.431 mg

Rate: 10.0 °C/min

File: 00012.001

TG

METTLER

29-Apr-95

Ident: 0.0

222-S Laboratory

Step Analysis

Height -3.08 mg

-22.94 %

ResiC. 10.35 mg

77.06 %

Dpeak 47.0 °C

Step Analysis

Height -2.40 mg

-17.88 %

ResiC. 7.45 mg

55.45 %

Dpeak 303.0 °C

32

S95T000689 (DUP) N2

16.061 mg

Rate: 10.0 °C/min

File: 00016.001

TG

METTLER

30-Apr-95

Ident: 0.0

222-S Laboratory

Step Analysis
Height -5.06 mg
-31.51 %
ResiC. 11.00 mg
68.49 %
Dpeak 59.0 °C

Step Analysis
Height -2.86 mg
-17.81 %
ResiC. 8.11 mg
50.47 %
Dpeak 297.0 °C

LABCORE Data Entry Template for Worklist# 1054

Analyst: RDM Instrument: TGA01 _____ Book # 42N8-A

Method: LA-560-112 Rev/Mod A-2

Worklist Comment: Please run U-203 TGA under N2. bdv

GROUP	PROJECT	S TYPE	SAMPLE#	R A	-----TEST-----	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD			TGA-01	SOLID	<u>59.19</u>	<u>59.01</u>	<u>N/A</u>	%
95000051	U-203	2 SAMPLE	S95T000639	0	TGA-01	SOLID	<u>N/A</u>	<u>67.19</u>		%
95000051	U-203	3 DUP	S95T000639	0	TGA-01	SOLID	<u>67.19</u>	<u>61.83</u>	<u>N/A</u>	%

Final page for worklist # 1054

RDM 5/2/95
Analyst Signature Date

[Signature] 5/2/95
Analyst Signature Date

Verified by Blandina Valenzuela 5-2-95

Data Entry Comments:

SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT
COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 36 TO 38.

TGA STD 42N8-A

13.952 mg

Rate: 10.0 °C/min

File: 00031.001

TG

METTLER

01-May-95

Ident: 0.0

222-S Laboratory

Step Analysis

Height -8.23 mg

-59.01 %

ResidC. 5.72 mg

40.99 %

Dpeak 81.0 °C

Blondina Valenzuela 5-2-95

S95T000639 (DUP) N2

9.307 mg

Rate: 10.0 °C/min

File: 00033.001

TG

METTLER

01-May-95

Ident: 0.0

222-S Laboratory

Step Analysis

Height -5.75 mg

-61.83 %

ResiC. 3.55 mg

38.17 %

Dpeak 67.0 °C