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	ECN NO.: N/A

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		ECN NO.: N/A		
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	1	Cog. Mgr. J.G. Kristofzski	<i>[Signature]</i>	6/13/95							
	1	QA W.A. Hendricksen	<i>[Signature]</i>	6/13/95							
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18. A.E. Young <i>[Signature]</i> Signature of EDT Originator Date <u>5-31-95</u>	19. _____ Authorized Representative Date for Receiving Organization	20. J.G. Kristofzski <i>[Signature]</i> Cognizant Manager Date <u>6/13/95</u>	21. DOE APPROVAL (if required) Ctrl. No. ☐ Approved ☐ Approved w/comments ☐ Disapproved w/comments
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Auger Samples 95-AUG-025 and 95-AUG-026

Release Date: 6/15/95

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SUPPORTING DOCUMENT

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R. M. Asaki for RDS
Signature

Organization/Charge Code 75310/MDR21

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ANALYTICAL SERVICES

45-DAY SAFETY SCREEN RESULTS FOR TANK 241-C-201, AUGER SAMPLES,
95-AUG-025 AND 95-AUG-026

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This report was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof.

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This Document consists of pages 1 through 33.

NARRATIVE

45-DAY SAFETY SCREEN RESULTS FOR TANK 241-C-201,
AUGER SAMPLES 95-AUG-025 AND 95-AUG-026

ANALYTICAL SUMMARY

Two auger samples from tank 241-C-201 (C-201) 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. Analytical results for the DSC analyses of both samples exceeded the notification limit of 481 J/g (dry weight basis). As well, the TGA analyses for both samples were less than the safety screening notification limit (notification is made if the sample is analyzed at less than 17 percent water). Notification of both of these occurrences was made on May 15, 1995, and secondary analysis of total organic carbon (TOC) was initiated¹. These TOC analysis results are also included in this report.

SCOPE

This document serves as the 45-day report deliverable for the tank C-201 auger samples collected on May 4, 1995 (95-AUG-025 and 95-AUG-026). Each sample was received, extruded, and analyzed by the 222-S Laboratories in accordance with the below referenced 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 directed by the TCP. Photographs of the auger samples were taken during extrusion and, although not included in this report, are available and will be included in the final data report.

SAMPLE RECEIPT, EXTRUSION, AND SUBSAMPLING

Auger 95-AUG-025

Auger sample 95-AUG-025 was collected from riser 7 East of tank C-201 using a 20 inch auger bit. It was received into the 222-S Laboratories on May 4, 1995 at 1145 hours and extruded on May 8, 1995. There was no drainable liquid, but 3.72 grams of solids were collected. The solids were brownish-grey in color with some yellow solids intermixed, looked very dry and crumbly, and fell off the auger onto the sample tray after the sleeve was removed. Due to the small amount of sample obtained, all material was subsampled into one jar (#6654) and was not divided into half-segments as directed in the TCP. Due to insufficient sample recovery, no material was archived from this auger sample. However, all primary analysis requirements per the TCP were able to be performed on this sample.

¹ Upon discussion with the Ferrocyanide and Organic Safety Program management, a decision was made to not run cyanide analyses as directed by the TCP. This decision was based on the programs' existing knowledge of the tank's fill history and the fact that the auger samples yielded very little sample. Discussions are currently ongoing to determine if RSST analysis is necessary.

Auger 95-AUG-026

Auger sample 95-AUG-026 was collected from riser 7 West of tank C-201 using a 20 inch auger bit. It was received into the 222-S Laboratories on May 4, 1995 at 1155 hours and extruded on May 8, 1995. There was no drainable liquid, but 12.09 grams of solids were collected. The solids were brownish-grey in color with some yellow solids intermixed, looked very dry and crumbly, and fell off the auger onto the sample tray after the sleeve was removed. As with the sample material from auger 95-AUG-025, the material from 95-AUG-026 was subsampled into one jar (#7167). All analyses and sample archives were performed from this jar.

ANALYTICAL RESULTS

Analytical results are presented in the sample data summary, 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. Using the average percent water by TGA for each sample, dry weight basis results were calculated from the wet weight basis results. Both the wet and dry results for the sample and duplicate are given in the sample data summary. For samples S95T000895 and S95T000898, exotherms on a dry weight basis ranging from 381 J/g to 685 J/g were detected beginning at approximately 120°C to 180°C. Sample precision values were 11.7 and 17.0 relative percent difference (RPD) for samples S95T000895 and S95T000898, respectively. Since neither sample met the TCP specified precision criterion of 10% RPD, additional runs were performed. The results for the remaining runs are also given in the sample data summary, and the raw data has been included in this report. The additional runs resulted in higher RPDs. The wide range of DSC results could be due to the small sample size used for the DSC (typically 15 to 35 milligrams) or due to insufficient homogenization. Six of the eight reported runs resulted in values greater than the notification limit of 481 J/g given in the TCP, and notification of this occurrence was made both verbally and in writing on May 15, 1995. Many of the scans show an endothermic region within the exotherm; this is attributed to sodium nitrate in the sample. The LMCS control standard exhibited a recovery of 107.9 percent, which was 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. Results for samples S95T000895 and S95T000898 and their duplicates ranged in value from 9.67 to 11.46 percent water by weight. The results for both samples and their duplicates were less than the notification limit of 17 weight percent water, and notification was made on May 15, 1995. The RPD values between the samples and their duplicates were 10.0 and 8.46 for samples S95T000895 and S95T000898, respectively. Due to a miscommunication between the laboratory chemist and the chemical technologist running the analysis, two additional runs for sample S95T000895 were performed even though the RPD value for the sample met the TCP specified precision requirement of 10%. The results for these additional runs are given in the sample data summary, and the raw data is included in this report. The Laboratory Measurement Control System (LMCS) control standard exhibited a recovery of 99.17 percent, which was within the program's specified accuracy control limits of 90 to 110 percent.

Total Alpha Activity

Analyses for total alpha activity were performed on samples S95T000897 and S95T000899. Samples were prepared by fusion using procedure LA-549-141, Rev. C-3, and analyses were performed using procedure LA-508-101, Rev. D-2. A sample duplicate and spike were performed on both samples. Sample S95T000897 had an RPD value of 0.84, which was within the TCP specified precision criterion of 10% RPD, but sample S95T000899 did not meet this precision criterion with its RPD value of 15.5%. As well, lower than normal spike recoveries caused both samples to exceed the accuracy control limits of 90 to 110 percent recovery, with values of 83.3% and 84.2%, respectively. This poor spike recovery was most likely due to solids observed in the sample mount. The results of the analyses are given in the sample data summary. Sample and duplicate alpha activities ranged from 11.9 to 22.9 $\mu\text{Ci/g}$, which were less than the notification limit of 41 $\mu\text{Ci/g}$ (notification is made if this limit is exceeded).

Total Organic Carbon Analysis

Since the DSC notification limit was exceeded for the tank C-201 auger samples, TOC secondary analyses were performed on samples S95T000895 and S95T000898 in accordance with the TCP. Procedure LA-342-100, Rev. A-0 (direct persulfate method) was used for the analyses. Sample and duplicate values ranged from 3.77 wt% to 4.57 wt% carbon for the two samples, and the results are given in the sample data summary. Both samples exceeded the TOC notification limit of 3 wt% carbon (30,000 $\mu\text{g C/g}$), and notification of this occurrence was given verbally and in writing on May 26, 1995. Neither sample met the TCP specified precision criterion of 10% RPD, but additional runs were not performed since the values were close to the criterion (11.0% and 10.8% RPD, respectively). The Laboratory Measurement Control System (LMCS) control standard exhibited a recovery of 98.67 percent, which was within the program's specified accuracy control limits of 90 to 110 percent.

REFERENCE Schreiber, R. D., 1995, WHC-SD-WM-TP-304, Revision 0, "*Tank 241-C-201 Tank Characterization Plan*", dated March 6, 1995.

Project Coordinator: Ruth Schreiber

WHC-SD-WM-DP-116, REV. 0

SAMPLE DATA SUMMARY

45 Day Safety Screen Report for Tank 241-C-201
C-201

CORE NUMBER: 95-AUG-26, 95-AUG-25
SEGMENT #: 95-AUG-25

SEGMENT PORTION: W Whole Segment

Sample#	R	A#	Analyte	Unit	Action Limits		Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err%
					Lower	Upper									
S95T000895			TOC by Persulfate/Coulometry	ug/g	-999.000	30000.000	98.67	39.80	3.77e+04	4.21e04	3.99e+04	11.0	88.90	80.00	n/a
S95T000895			% Water by TGA using Mettler	%	17.000	100.000	99.17	n/a	10.69	9.67	10.18	10.0	n/a	n/a	n/a
S95T000895			DSC Exotherm Dry Calculated	Joules/g Dry	-999.000	481.000	n/a	n/a	609.0	685	647.0	11.7	n/a	1.00e-04	n/a
S95T000895			DSC Exotherm using Mettler	Joules/g	-999.000	481.000	107.9	n/a	546.6	615.6	581.1	11.9	n/a	n/a	n/a
S95T000897	F		Alpha of Digested Solid	uCi/g	-999.000	41.000	93.49	<3.14e-02	11.90	1.20e+1	1.19e+01	0.84	83.30	7.10e-02	3.2

=> Limit violated
=> Selected Limit

Additional DSC and TGA Results.

Sample#	A#	Analyte	Unit	Action Limits		Standard	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err %
				Lower	Upper									
S95T000895		% Water by TGA using Mettler	%	17.000	100.000	99.0	n/a	6.38	12.42	9.4	64.3	n/a	n/a	n/a
S95T000895		DSC Exotherm Dry Calculated	Joules/g Dry	-999.000	481.000	n/a	n/a	802.3	495.3	648.8	47.3	n/a	n/a	n/a
S95T000895		DSC Exotherm using Mettler	Joules/g	-999.000	481.000	107.0	n/a	720.6	444.9	582.8	47.3	n/a	n/a	n/a

WHC-SD-WM-DP-116 REV.0

45 Day Safety Screen Report for Tank 241-C-201
C-201

CORE NUMBER: 95-AUG-26, 95-AUG-25
SEGMENT #: 95-AUG-26

SEGMENT PORTION: W Whole Segment

Sample#	R	A#	Analyte	Unit	Action Limits		Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err%
					Lower	Upper									
S95T000898			TOC by Persulfate/Coulometry	ug/g	-999.000	30000.000	98.67	39.80	4.57e+04	4.10e04	4.34e+04	10.8	n/a	80.00	n/a
S95T000898			% Water by TGA using Mettler	%	17.000	100.000	99.17	n/a	11.46	10.53	11.00	8.46	n/a	n/a	n/a
S95T000898			DSC Exotherm Dry Calculated	Joules/g Dry	-999.000	481.000	n/a	n/a	381.0	452	416.5	17.0	n/a	1.00e-04	n/a
S95T000898			DSC Exotherm using Mettler	Joules/g	-999.000	481.000	107.9	n/a	339.2	402.4	370.8	17.0	n/a	n/a	n/a
S95T000899	F		Alpha of Digested Solid	uCi/g	None	None	93.49	<3.14e-02	22.90	1.96e+1	2.12e+01	15.5	84.20	7.30e-02	2.4

=> Limit violated
=> Selected Limit

Additional DSC Results

Sample#	A#	Analyte	Unit	Action Limits		Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err %
				Lower	Upper									
S95000898		DSC Exotherm Dry Calculated	Joules/g Dry	-999.000	481.000	n/a	n/a	766.1	664.4	715.3	14.2	n/a	n/a	n/a
S95000898		DSC Exotherm using Mettler	Joules/g	-999.000	481.000	107.6	n/a	681.8	591.3	636.6	14.2	n/a	n/a	n/a

WHC-SD-MM-DP-116 REV.0

WHC-SD-WM-DP-116, REV. 0

SAMPLE ANALYSES RESULTS

LABCORE Data Entry Template for Worklist# 1376

Analyst: DCD Instrument: DSC0 1 Book # 12N14-A

Method: LA-514-113 Rev/Mod B-1

Worklist Comment: Please run C-201 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>30.7</u>	<u>N/A</u>	Joules/g
95000068	C-201	2 SAMPLE	S95T000895	0	DSC-01	SOLID	<u>N/A</u>	<u>546.6</u>		Joules/g
95000068	C-201	3 DUP	S95T000895	0	DSC-01	SOLID	<u>546.6</u>	<u>615.6</u>	<u>N/A</u>	Joules/g
95000068	C-201	4 SAMPLE	S95T000898	0	DSC-01	SOLID	<u>N/A</u>	<u>339.2</u>		Joules/g
95000068	C-201	5 DUP	S95T000898	0	DSC-01	SOLID	<u>339.2</u>	<u>402.4</u>	<u>N/A</u>	Joules/g

Final page for worklist # 1376

David C Dunham
Analyst Signature Date

Phyllis 5-23-95
Analyst Signature Date

Verified by Blandina Valenzuela 5/23/95

S95T000895 produced two endotherms one at 79.1°C with a delta H of 140.1 J/g and second at 405.3°C with a delta H of 10.3 J/g. Additional analysis were run and will be reported on an additional table.

S95T000898 produced two endotherms one at 83.0°C with a delta H of 200.6 J/g and second at 437.5°C with a delta H of 19.1 J/g. The values reported in LABCORE are the sum of two exotherms, the chemist was directed to report them as such. Additional analysis were performed on this sample and the results will be reported on an additional table.

Data Entry Comments:

Both samples were a creamy brown soil.

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SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT
COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 11 TO 20.

DSC STD 12N14-A File: 00087.001 DSC METTLER 13-May-95
6.580 mg Rate: 10.0 °C/min Ident: 0.0 222-S Laboratory

Blandina Valenzuela for DCD
5/23/95

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S95T000895 N2
 8.666 mg
 Rate: 10.0 °C/min
 File: 00089.001
 Ident: 0.0
 DSC METTLER
 222-S Laboratory
 13-May-95

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S95T000895 (DUP) N2

5.257 mg

Rate: 10.0 °C/min

File: 00091.001

Ident: 0.0

DSC METTLER

13-May-95

222-S Laboratory

exo

5. mW

Integration
Delta H 629 mJ
119.7 J/g
Peak 57.2°C
-2.9 mW

Integration
Delta H 3236 mJ
615.6 J/g
Peak 307.7°C
4.9 mW

Integration
Delta H 78 mJ
14.7 J/g
Peak 401.3°C
-0.9 mW

100.

200.

300.

400.

°C

BEST AVAILABLE COPY

S95T000898 N2
 11.699 mg
 Rate: 10.0 °C/min
 File: 00093.001
 Ident: 0.0
 DSC METTLER
 222-S Laboratory
 13-May-95

exo

5. mW

100. 200. 300. 400. °C

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S95T000898 (DUP) N2
 6.448 mg
 Rate: 10.0 °C/min
 File: 00095.001 DSC METTLER 13-May-95
 Ident: 0.0 222-S Laboratory

EXO

Integration
 Delta H 573 mJ
 88.8 J/g
 Peak 77.0 °C
 -2.7 mW

Integration
 Delta H 952 mJ
 147.6 J/g
 Peak 289.5 °C
 4.0 mW

Integration
 Delta H 1643 mJ
 254.8 J/g
 Peak 347.6 °C
 4.2 mW

LABCORE Data Entry Template for Worklist# 1459

Analyst: BDV Instrument: DSC0 2 Book # —

Method: LA-514-113 Rev/Mod —

Worklist Comment: Calculated dry DSC for C-201. bdv

GROUP	PROJECT	S TYPE	SAMPLE#	R A	-----TEST-----	MATRIX	ACTUAL	FOUND	DL	UNIT
95000068	C-201	1 SAMPLE	S95T000895	0	DSC-02	SOLID	<u>N/A</u>	<u>609</u>		Joules/g Dry
95000068	C-201	2 DUP	S95T000895	0	DSC-02	SOLID	<u>609</u>	<u>685</u>	<u>N/A</u>	Joules/g Dry
95000068	C-201	3 SAMPLE	S95T000898	0	DSC-02	SOLID	<u>N/A</u>	<u>381</u>		Joules/g Dry
95000068	C-201	4 DUP	S95T000898	0	DSC-02	SOLID	<u>381</u>	<u>452</u>	<u>N/A</u>	Joules/g Dry

Final page for worklist # 1459

Data entered and verified by

Blandina Valenzuela 5/30/95
Analyst Signature Date

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.

21 16

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ADDITIONAL DSC ANALYSES

FOR SAMPLES 95T000895 AND S95T000898

(These results could not be entered into Labcore)

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DSC STD 12N14-A
6.746 mg
Rate: 10.0 °C/min
File: 00104.001
Ident: 0.0
DSC METTLER
222-S Laboratory
15-May-95

Integration
Delta H 206 mJ
30.6 J/g
Peak 158.5°C
-14.6 mW

MW · g

Handwritten: 16 19
6/13/95

Handwritten: David Dunham 5-15-95

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S95T000895 N2
9.374 mg
Rate: 10.0 °C/min
File: 00105.001
Ident: 0.0
DSC METTLER
222-S Laboratory
15-May-95

exo

10
mW

Integration
Delta H 348 mJ
37.1 J/g
Peak 113.1°C
-1.0 mW

Integration
Delta H 46 mJ
4.9 J/g
Peak 409.2°C
-0.9 mW

Integration
Delta H 6755 mJ
720.6 J/g
Peak 349.9°C
9.6 mW

100.

200.

300.

400.

°C

20
17
11/13/95

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S95T000895 (DUP) N2 File: 00106.001 DSC METTLER 15-May-95
 10.449 mg Rate: 10.0 °C/min Ident: 0.0 222-S Laboratory

<OXe

Integration
 Delta H 943 mJ
 90.2 J/g
 Peak 79.0 °C
 -2.6 mW

Integration
 Delta H 329 mJ
 31.5 J/g
 Peak 407.1 °C
 -2.8 mW

Integration
 Delta H 4649 mJ
 444.9 J/g
 Peak 331.7 °C
 7.4 mW

5 mW

100. 200. 300. 400. °C

21

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S95T000898 N2
10.939 mg
Rate: 10.0 °C/min
File: 00107.001 DSC METTLER 15-May-95
Ident: 0.0 222-S Laboratory

22
6/13/95

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S95T000898 (DUP) N2
 10.015 mg
 Rate: 10.0 °C/min
 File: 00108.001
 Ident: 0.0
 DSC METTLER 15-May-95
 222-S Laboratory

OXO

Integration
 Delta H 3384 mJ
 337.9 J/g
 Peak 347.8°C
 7.6 mW

Integration
 Delta H 2538 mJ
 253.4 J/g
 Peak 287.6°C
 6.1 mW

Integration
 Delta H 911 mJ
 91.0 J/g
 Peak 75.9°C
 -4.2 mW

Handwritten signature

WHC-SD-WM-DP-116 REV. 0

LABCORE Data Entry Template for Worklist# 1372

Analyst: DCD Instrument: TGA0 1 Book # 42N8-A

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

Worklist Comment: Please run C-201 TGA under N2. bdv

GROUP	PROJECT	S TYPE	SAMPLE#	R A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD			TGA-01	SOLID	59.19	58.70	N/A	%
95000068	C-201	2 SAMPLE	S95T000895	0	TGA-01	SOLID	N/A	10.69		%
95000068	C-201	3 DUP	S95T000895	0	TGA-01	SOLID	10.69	9.67	N/A	%
95000068	C-201	4 SAMPLE	S95T000898	0	TGA-01	SOLID	N/A	11.46		%
95000068	C-201	5 DUP	S95T000898	0	TGA-01	SOLID	11.46	10.53	N/A	%

Final page for worklist # 1372

Daniel C. Dunham 5-15-95
Analyst Signature Date

[Signature] 5-23-95
Analyst Signature Date

Verified by Blandina Valenzuela 5/23/95

In all case the percent water was determined by averaging ^{5/22/95} ~~water~~ ^{FDN} at what temp the water loss was complete on the DSC and using that temp as T₂ for the TGA.

Data Entry Comments:

Both sample were a creamy brown soil

S95T000895 produced a second weight loss step of 16.91% at 399°C

S95T000898 produced a second weight loss step of 15.89% at 30°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.

22 24 21 MM 6/02/95

SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT
COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 25 TO 29.

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TGA STD 42N8-A

19.702 mg

Rate: 10.0 °C/min

File: 00088.001

TG

METTLER

13-May-95

Ident: 0.0

222-S Laboratory

Step Analysis

Height--11.56 mg

-58.70 %

ResidC. 8.14 mg

41.30 %

Dpeak 89.2°C

David Dunham 5-13-95

WHC-SD-MM-DP-116 REV.0

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S95T000895 N2

6.072 mg

Rate: 10.0 °C/min

File: 00090.001

Ident: 0.0

TG

METTLER

13-May-95

222-S Laboratory

Step Analysis
Height -0.65 mg
-10.69 %
ResiC. 5.42 mg
89.20 %

Step Analysis
Height -1.03 mg
-16.91 %
ResiC. 4.37 mg
71.92 %
Dpeak 399.0 °C

26

WHC-SD-MM-DP-116 REV.0

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S95T000895 (DUP) N2
 7.942 mg
 Rate: 10.0 °C/min
 File: 00092,001 TG METTLER 13-May-95
 Ident: 92.0 222-S Laboratory

Step Analysis
 Height -0.77 mg
 -9.67 %
 Resid. 7.16 mg
 90.21 %

Step Analysis
 Height -1.19 mg
 -15.00 %
 Resid. 5.97 mg
 75.21 %
 Dpeak 399.0 °C

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S95T000898 N2
 9.467 mg
 Rate: 10.0 °C/min
 File: 00094.001 TG METTLER 13-May-95
 Ident: 0.0 222-S Laboratory

Step Analysis
 Height -1.08 mg
 -11.46 %
 Resic. 8.37 mg
 88.40 %
 Dpeak 44.2 °C

Step Analysis
 Height -1.50 mg
 -15.89 %
 Resic. 6.85 mg
 72.40 %

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S95T000898 (DUP) N2
11.986 mg

Rate: 10.0 °C/min

File: 00096.001 TG METTLER 13-May-95
Ident: 0.0 222-S Laboratory

Step Analysis
Height -1.26 mg
-10.53 %
Resic. 10.70 mg
89.31 %

Step Analysis
Height -1.53 mg
-12.76 %
Resic. 9.16 mg
76.45 %

Step Analysis
Height -0.22 mg
-1.80 %
Resic. 8.94 mg
74.57 %

WHC-SD-WM-DP-116, REV. 0

ADDITIONAL TGA ANALYSES

FOR SAMPLE 95T000895

(These results could not be entered into Labcore)

SIGNATURE BELOW REPRESENTS CHEMICAL, TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 22 TO 24.

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BEST AVAILABLE COPY

File: 00075.001 TG METTLER 12-May-95
Ident: 0.0 222-S Laboratory

Rate: 10.0 °C/min

S95T000895 N2

18.436 mg

Step Analysis
Height -1.18 mg
-6.38 %
ResidC. 17.25 mg
93.58 %

Step Analysis
Height -2.56 mg
-13.91 %
ResidC. 14.69 mg
79.66 %
Dpeak 423.0 °C

23 6/13/95 32

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S95T000895 DUP N2
17.050 mg
Rate: 10.0 °C/min
File: 00076.001 TG METTLER 12-May-95
Ident: 0.0 222-S Laboratory

Step Analysis
Height -2.12 mg
-12.42 %
Resid: 14.92 mg
87.51 %

Step Analysis
Height -2.29 mg
-13.41 %
Resid: 12.60 mg
73.90 %