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ENGINEERING DATA TRANSMITTAL

Page 1 of 1

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2	1	Cog. Mgr. J.G. Kristofzski	[signature] for	8/18/95							
2	1	QA w.a. henricksen	W.A. Henricksen	8/18/95							
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This document was reviewed following the procedures described in WHC-CM-3-4 and is:

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WHC-SD-WM-DP-140, REV. 0

ANALYTICAL SERVICES

45-DAY SAFETY SCREEN RESULTS FOR TANK 241-B-106, PUSH MODE CORES 93 AND 95

Date Printed: AUGUST 17, 1995

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NARRATIVE

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45-DAY SAFETY SCREENING REPORT FOR TANK 241-B-106, PUSH MODE CORE SAMPLES 93 AND 94

ANALYTICAL SUMMARY

Two push-mode core samples, consisting of two segments each, were taken from tank 241-B-106 (B-106). The samples were received at the 222-S Laboratories and underwent safety screening analyses, consisting of differential scanning calorimetry (DSC), thermogravimetric analysis (TGA), and determination of total alpha activity. All of the analytical results were within the action limits stated in the Sampling and Analysis Plan (SAP) [Reference 1]. As required in the revised *Tank Safety Screening Data Quality Objective* (DQO) [Reference 2], a 90% confidence interval was calculated for the sample results. The precision requirements of the SAP were satisfied by comparing a one-sided 90% confidence interval of the mean for each sample to the action limit, rather than requiring a relative percent difference between sample and duplicate results of less than 10%. Results for all samples remained within the action limits when compared at a 90% confidence level. The statistical technique that was used is described in Attachment 1.

When compared to the decision rules in the DQO [2], none of the data indicate that the tank should be considered "unsafe." The tank can be considered "safe" once it has been determined that no flammability concern exists in the tank vapor space.

As lithium bromide was used as a tracer in the hydrostatic head fluid (HHF) used during drilling, the samples were tested for lithium by inductively coupled plasma spectroscopy (ICP) to determine whether the HHF had contaminated the samples. All results were below detection limits, and below the action limit stated in the SAP [1]. Sample S95T001277 will be rerun due to poor spike recovery.

SCOPE

This document serves as the 45-day report deliverable for the tank B-106 push mode core samples collected on July 17 and 18, 1995 (core samples 93 and 94). The 222-S Laboratories received, extruded, and analyzed each sample in accordance with the SAP referenced below. 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 in the SAP [1].

No additional testing to support safety screening analyses is required. Any additional analyses conducted by the 222-S Laboratories on the B-106 core samples will be included in a revision to this report.

SAMPLE RECEIPT, EXTRUSION, AND SUBSAMPLING

Core 93

Push mode core sample 93 was collected from riser 2 of tank B-106 on July 14, 1995. The core sample consisted of two segments and a field blank. The samples were received at the 222-S Laboratories on July 17 and extruded on July 18 and 19.

Field blank. Upon extrusion, the field blank was collected into two jars. A total of 241.3 g of clear, colorless liquid was recovered. A subsample was loaded out of the hot cell for analysis, and an archive sample was retained in the hot cell.

Segment 1 (sample number 95-0110). Approximately 11 inches of wet, brown, solids were extruded from segment 1. The sample did not retain its shape, but tended to sag and spread out on the tray. A total of 84.2 grams of light-brown drainable liquid was recovered. The solids were subsampled into half-segments. The lower half-segment solids weighed 166.0 grams. This portion of the sample appeared to be slightly lighter in color than the upper half-segment. The upper half-segment solids weighed 121.6 grams. Subsamples for laboratory analyses and archiving were created as called for in the tank SAP.

Segment 2 (sample number 95-0111). Approximately 19 inches were recovered from segment 2. No drainable liquid was observed nor collected. The lower 5.5 inches appeared to be a light-green, creamy, sludge. This portion (95.7 g) was subsampled as the lower half-segment. The upper 13.5 inches were a brown sludge similar in appearance to the first segment solids. This material (238.8 g) was subsampled as the upper half-segment. Subsamples were created for laboratory analyses and archiving as called for in the SAP.

Core 94

Push mode core sample 94 was collected from riser 7 of the tank on July 18, 1995. The core sample consisted of two segments. The samples were received at the laboratory on July 18 and extruded on July 20.

HHF blank. An HHF blank was shipped along with the samples, but was not loaded into the hot cell as it was not radioactively contaminated. A subsample from the HHF blank was taken for laboratory analyses.

Segment 1 (sample number 95-0112). Approximately 19 inches were recovered from segment 1. No drainable liquid was observed nor collected. The sample appeared to be a creamy, brown, sludge, which tended to sag and spread out on the tray. The lower 5 inches were a darker shade of brown than the upper 14 inches. The sample was broken into half-segments at the point of the color change. The lower half-segment solids weighed 87.8 grams, and the upper half-segment solids weighed 335.9 grams. Subsamples were created for laboratory analyses and archiving as called for in the SAP.

Segment 2 (sample number 95-0113). Approximately 16 inches of sample were extruded from segment 2. No drainable liquid was observed nor collected. The lower portion (4.5 inches) of the sample was a light-green color, while the upper portion (11.5 inches) was light brown. A total of 91.3 grams was subsampled as the lower half-segment, and 217.9 grams were subsampled as the upper half-segment. Subsamples were created for laboratory analyses and archiving in accordance with the SAP.

ANALYTICAL RESULTS

Thermogravimetric Analysis

One drainable liquid sample and eight half-segment solids samples were submitted for determination of moisture content by TGA in accordance with procedure LA-560-112, Rev. A-2 (the first weight-loss step on the TGA scans is interpreted as a loss of moisture from the sample). The samples were analyzed in duplicate. The results are presented in the summary tables, and the raw data scans are attached. All results were well above the action limit of 17 weight percent water (the lowest measured moisture content was 55.98%). As required in the revised safety screening DQO, the sample results were compared to the action limit at a 90% confidence level. These comparisons are presented in Table 1. A summary of the statistical technique is presented in Attachment 1. The lower 90% confidence level for all samples is well above the action limit of 17%.

Six standards were run with these samples. The percent recovery for each standard analyzed was within the 90-110% range specified in the SAP. The results are presented in the summary tables.

Differential Scanning Calorimetry

One drainable liquid sample and eight half-segment solids samples were submitted for determination of energetics by DSC in accordance with procedure LA-514-113, Rev. B-1. The samples were analyzed in duplicate. The results are presented in the summary tables, and the raw data scans are attached. Any exotherms on the scans would be visible as a rise from the baseline established at the beginning and ending of the scan. None of the samples exhibited exotherms. Therefore, the upper 90% confidence level values calculated for each sample (presented in Table 2) are all zero as well.

Seven standards were run with these samples. The percent recovery for each standard analyzed was within the 90-110% range specified in the SAP. The results are presented in the summary tables.

Alpha Total

Eight half-segment solids samples were submitted for total alpha analysis in accordance with procedure LA-508-101, Rev. D-2. The samples were fused as called for in procedure LA-549-141, Rev. D-0 prior to analysis. Two fusions were prepared for each sample (for duplicate results). Each fused dilution was analyzed twice; the results were averaged and reported as one value. The highest result returned was 0.0617 μCi/g, almost three orders of magnitude below the action limit of 41 μCi/g. The upper 90% confidence level for each sample has been calculated and is presented in Table 3. All of the adjusted results are far below the action limit.

Results for the four blanks run with these samples were below detection limits. Three of the four standards run with these samples exhibited recoveries within the 90-110% range specified in the SAP. The standard run with samples S95T001307 and S95T001311 exhibited a recovery of 87.10%. Since the results for these samples were very low (less-than-detectable for

S95T001311 and an average of 0.0615 μCi/g for S95T001307) and the standard recovery was within the method control limits (70.5% to 128.9%), reruns to improve standard recovery were deemed unnecessary. A spike was run with sample S95T001277. The spike recovery was acceptable (96.70%). These quality control results are presented in the summary tables.

Lithium (by ICP)

Lithium was analyzed by ICP as called for in procedure LA-505-151, Rev. D-2, or LA-505-161, Rev. A-1 (depending on which ICP analyzer was used). Solids subsamples were prepared by fusion as called for in procedure LA-549-141, Rev. D-0. All analyses were performed in duplicate. All results for all samples from the tank (one drainable liquid sample and eight fused solids samples) were below detection limits. The results on all samples from the tank were below the notification limit of 100 μg/g. All results are presented in the summary tables.

Results for the field blank submitted with core 93 averaged 0.0172 μg/g. This value is less than two times the detection limit, indicating very little contamination of lithium in the field blank. A hydrostatic head fluid blank was submitted with core 94. The results on this sample averaged 1930 μg/g. These results are presented in the summary tables.

All five standards run with these samples exhibited recoveries within the 90-110% range specified in the SAP. Five instrument blanks were also analyzed along with these samples. The highest concentration for a blank sample was 0.0415 μg/g. Spiked samples were analyzed along with all nine of the tank waste samples. Spike recoveries for seven of the samples were between 87% and 94%. The spike recovery for sample S95T001282 was 80.83%, which is still within the laboratories' internal quality control limits of 75-125%. The spike recovery for sample S95T001277 was 71.18%. This sample will be rerun, and the results will be provided in a subsequent report. All quality control results are presented in the summary tables.

REFERENCES

[1] J. M. Conner, *Tank 241-B-106 Push Mode Core Sampling and Analysis Plan*, WHC-SD-WM-TSAP-002, Rev. 0, Westinghouse Hanford Company, Richland, Washington, June 15, 1995.

[2] H. Babad, J. W. Hunt, and K. S. Redus, *Tank Safety Screening Data Quality Objective*, WHC-SD-WM-SP-004, Rev. 1, Westinghouse Hanford Company, Richland, Washington, April 27, 1995.

Table 1. 90% Lower Confidence Interval Limits for (TGA) Percent Water (Units are in %).

Sample Number and Description	$\hat{\mu}$	$\hat{\sigma}^2_{\hat{\mu}}$	LL
S95T001272 C93/S1 Dr.Liq.	67.23	0.009	66.93
S95T001278 C93/S1 UH	59.18	0.116	58.13
S95T001275 C93/S1 LH	63.06	0.212	61.64
S95T001284 C93/S2 UH	59.76	0.397	57.82
S95T001281 C93/S2 LH	56.59	0.372	54.71
S95T001302 C94/S1 UH	62.35	0.0001	62.32
S95T001298 C94/S1 LH	64.09	0.922	61.14
S95T001310 C94/S2 UH	61.38	0.005	61.16
S95T001306 C94/S2 LH	57.05	0.001	56.94

C = Core Number
S = Segment Number
UH = Upper Half
LH = Lower Half
Dr.Liq. = Drainable Liquid

Table 2. 90% Upper Confidence Interval Limits for DSC (Units are in Joules/g).

Sample Number and Description	$\hat{\mu}$	$\hat{\sigma}^2_{\hat{\mu}}$	UL
S95T001272 C93/S1 Dr.Liq.	0	0	0
S95T001278 C93/S1 UH	0	0	0
S95T001275 C93/S1 LH	0	0	0
S95T001284 C93/S2 UH	0	0	0
S95T001281 C93/S2 LH	0	0	0
S95T001302 C94/S1 UH	0	0	0
S95T001298 C94/S1 LH	0	0	0
S95T001310 C94/S2 UH	0	0	0
S95T001306 C94/S2 LH	0	0	0

C = Core Number
S = Segment Number
UH = Upper Half
LH = Lower Half
Dr.Liq. = Drainable Liquid

Table 3. 90% Upper Confidence Interval Limits for Total Alpha (Units are in μCi/g).

Sample Number and Description	$\hat{\mu}$	$\hat{\sigma}^2_{\hat{\mu}}$	UL
S95T001279* C93/S1 UH	0.07	0.000119	0.10
S95T001277* C93/S1 LH	0.04	0.000033	0.06
S95T001285* C93/S2 UH	0.06	0.000001	0.06
S95T001282 C93/S2 LH	0.05	0.0000006	0.06
S95T001303* C94/S1 UH	0.04	0.0000001	0.04
S95T001299* C94/S1 LH	0.04	0.00000006	0.04
S95T001311* C94/S2 UH	0.03	0.0000245	0.05
S95T001307 C94/S2 LH	0.06	0.00000004	0.06

C = Core Number
S = Segment Number
UH = Upper Half
LH = Lower Half
* indicates that less-than-detectable values were used for the calculation

ATTACHMENT 1

Discussion of 90% Confidence Limits

The 90% Confidence Interval lower limit (LL) on the mean for percent water (TGA) data is

$$\hat{\mu} - t_{(a-1)} * \sqrt{\hat{\sigma}^2_{\hat{\mu}}}$$

The 90% Confidence Interval upper limit (UL) on the mean for DSC and total alpha data is

$$\hat{\mu} + t_{(a-1)} * \sqrt{\hat{\sigma}^2_{\hat{\mu}}}$$

where $\hat{\mu}$ is the ordinary sample mean and $\hat{\sigma}^2_{\hat{\mu}}$ is the variance of the sample mean and $t_{(a-1)}$ is a quantile from Student's t distribution with a-1 degrees of freedom. In these equations a is the number of samples in each sub-segment, and $t_{(1)}$ is equal to 3.078 for a one-sided 90% confidence interval.

Note: $\hat{\sigma}^2_{\hat{\mu}} = \hat{\sigma}^2/n$

Table 1 of the report gives the lower limits (LL) to the 90% confidence interval on the percent water (TGA) for each sub-segment in B-106. If the lower limit is greater than 17%, then we reject the null hypothesis that the percent water is less than or equal to 17 percent.

Table 2 of the report gives the upper limit (UL) to the 90% confidence interval for DSC for each sub-segment in B-106. If the upper limit is less than 481 Joules/g, then we reject the null hypothesis that DSC is greater than or equal to 481 Joules/g.

Table 3 of the report gives the upper limit (UL) to the 90% confidence interval on the Total Alpha for each sub-segment in B-106. If the upper limit is less than 41 μCi/g, then we reject the null hypothesis that the Total Alpha is greater than or equal to 41 μCi/g.

SAMPLE DATA SUMMARY

INTERIM

45-Day Safety Screening Results
B-106

CORE NUMBER: 93, 94
SEGMENT #: Core 93 Seg 1

SEGMENT PORTION: U Upper Half of Segment

Sample#	R	A#	Analyte	Unit	Action Limits Lower	Action Limits Upper	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err%
S95T001278			% Water by TGA using Mettler	%	17.00	115.0	101.4	n/a	59.52	58.84	59.18	1.15	n/a	n/a	n/a
S95T001278			DSC Exotherm using Mettler	Joules/g	-9.9e+01	481.0	110.0	n/a	0.00e+00	0.00e+00	0.00e+00	n/a	n/a	n/a	n/a
S95T001279		F	Alpha of Digested Solid	uCi/g	-9.9e+01	41.01	105.0	<3.40e-02	< 8.19e-2	<6.00e-2	n/a	n/a	n/a	7.68e-02	162.5
S95T001279		F	Lithium -ICP-Fusion	ug/g	-9.9e+01	100.0	98.40	1.75e-02	< 47.3400	<46.6800	n/a	n/a	93.24	47.30	n/a

L Lower Half of Segment: L Lower Half of Segment

Sample#	R	A#	Analyte	Unit	Action Limits Lower	Action Limits Upper	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err%
S95T001275			% Water by TGA using Mettler	%	17.00	115.0	103.7	n/a	63.52	62.60	63.06	1.46	n/a	n/a	n/a
S95T001275			DSC Exotherm using Mettler	Joules/g	-9.9e+01	481.0	109.0	n/a	0.00e+00	0.00e+00	0.00e+00	n/a	n/a	n/a	n/a
S95T001277		F	Alpha of Digested Solid	uCi/g	-9.9e+01	41.01	105.0	<3.40e-02	< 3.40e-2	<4.55e-2	n/a	n/a	96.70	7.74e-02	99.9
S95T001277		F	Lithium -ICP-Fusion	ug/g	-9.9e+01	100.0	98.40	1.75e-02	< 47.6600	<47.4400	n/a	n/a	71.18	47.70	n/a

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INTERIM

INTERIM

45-Day Safety Screening Results
B-106

CORE NUMBER: 93, 94
SEGMENT #: Core 93 Seg 1

SEGMENT PORTION: Drainable Liquid

Sample#	R	A#	Analyte	Unit	Action Limits Lower	Action Limits Upper	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err%
S95T001272			% Water by TGA using Mettler	%	17.00	115.0	103.4	n/a	67.32	67.13	67.22	0.28	n/a	n/a	n/a
S95T001272			DSC Exotherm using Mettler	Joules/g	-9.9e+01	481.0	102.6	n/a	0.00e+00	0.00e+00	0.00e+00	n/a	n/a	n/a	n/a
S95T001272		D	Lithium-ICP-Acid Dil.	ug/mL	-9.9e+01	100.0	98.48	7.00e-04	< 4.0100	<4.0100	n/a	n/a	89.33	4.010	n/a

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INTERIM

12

INTERIM

45-Day Safety Screening Results
B-106

CORE NUMBER: 93, 94
SEGMENT #: Core 93 blank

SEGMENT PORTION: n/a

Sample#	R	A#	Analyte	Unit	Action Limits Lower	Action Limits Upper	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err%
S95T001269		D	Lithium-ICP-Acid Dil.	ug/mL	-9.9e+01	100.0	98.48	7.00e-04	1.73e-02	1.71e-02	1.72e-02	1.16	n/a	1.00e-02	n/a

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INTERIM

INTERIM

45-Day Safety Screening Results
B-106

CORE NUMBER: 93, 94
SEGMENT #: Core 93 Seg 2

SEGMENT PORTION: U Upper Half of Segment

Sample#	R	A#	Analyte	Unit	Action Limits Lower	Action Limits Upper	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err%
S95T001284			% Water by TGA using Mettler	%	17.00	115.0	101.2	n/a	59.13	60.39	59.76	2.11	n/a	n/a	n/a
S95T001284			DSC Exotherm using Mettler	Joules/g	-9.9e+01	481.0	95.61	n/a	0.00e+00	0.00e+00	0.00e+00	n/a	n/a	n/a	n/a
S95T001285		F	Alpha of Digested Solid	uCi/g	-9.9e+01	41.01	97.85	<3.08e-03	< 5.62E-2	<5.41e-2	n/a	n/a	n/a	6.68e-02	500
S95T001285		F	Lithium -ICP-Fusion	ug/g	-9.9e+01	100.0	100.5	4.15e-02	< 44.5000	<45.4880	n/a	n/a	93.53	44.50	n/a

L Lower Half of Segment: L Lower Half of Segment

Sample#	R	A#	Analyte	Unit	Action Limits Lower	Action Limits Upper	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err%
S95T001281			% Water by TGA using Mettler	%	17.00	115.0	101.2	n/a	55.98	57.20	56.59	2.16	n/a	n/a	n/a
S95T001281			DSC Exotherm using Mettler	Joules/g	-9.9e+01	481.0	95.61	n/a	0.00e+00	0.00e+00	0.00e+00	n/a	n/a	n/a	n/a
S95T001282		F	Alpha of Digested Solid	uCi/g	-9.9e+01	41.01	97.85	<3.08e-03	5.40e-02	5.25e-02	5.32e-02	2.82	n/a	7.01e-03	17
S95T001282		F	Lithium -ICP-Fusion	ug/g	-9.9e+01	100.0	100.5	4.15e-02	< 47.1520	<47.4650	n/a	n/a	80.83	47.20	n/a

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INTERIM

INTERIM

45-Day Safety Screening Results
B-106

CORE NUMBER: 93, 94
SEGMENT #: HHF blank

SEGMENT PORTION: Hydrostatic Head Fluid

Sample#	R	A#	Analyte	Unit	Action Limits Lower	Action Limits Upper	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err%
S95T001286		D	Lithium-ICP-Acid Dil.	ug/mL	-9.9e+01	100.0	98.48	7.00e-04	1.94e+03	1.93e+03	1.93e+03	0.28	n/a	1.010	n/a

=> Limit violated
=> Selected Limit

INTERIM

INTERIM

45-Day Safety Screening Results
B-106

CORE NUMBER: 93, 94
SEGMENT #: Core 94 Seg 1

SEGMENT PORTION: U Upper Half of Segment

Sample#	R	A#	Analyte	Unit	Action Limits Lower	Action Limits Upper	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err%
S95T001302			% Water by TGA using Mettler	%	17.00	115.0	100.3	n/a	62.36	62.34	62.35	0.03	n/a	n/a	n/a
S95T001302			DSC Exotherm using Mettler	Joules/g	-9.9e+01	481.0	98.77	n/a	0.00e+00	0.00e+00	0.00e+00	n/a	n/a	n/a	n/a
S95T001303		F	Alpha of Digested Solid	uCi/g	-9.9e+01	41.01	95.34	<3.61e-02	< 3.80e-2	<3.73e-2	n/a	n/a	n/a	8.51e-02	438.3
S95T001303		F	Lithium -ICP-Fusion	ug/g	-9.9e+01	100.0	99.87	8.80e-03	< 49.8700	<48.9910	n/a	n/a	88.82	49.90	n/a

L Lower Half of Segment: L Lower Half of Segment

Sample#	R	A#	Analyte	Unit	Action Limits Lower	Action Limits Upper	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err%
S95T001298			% Water by TGA using Mettler	%	17.00	115.0	103.3	n/a	65.05	63.13	64.09	3.00	n/a	n/a	n/a
S95T001298			DSC Exotherm using Mettler	Joules/g	-9.9e+01	481.0	98.77	n/a	0.00e+00	0.00e+00	0.00e+00	n/a	n/a	n/a	n/a
S95T001299		F	Alpha of Digested Solid	uCi/g	-9.9e+01	41.01	95.34	<3.61e-02	< 3.61e-2	<3.56e-2	n/a	n/a	n/a	8.08e-02	155
S95T001299		F	Lithium -ICP-Fusion	ug/g	-9.9e+01	100.0	99.87	8.80e-03	< 47.3660	<46.7460	n/a	n/a	89.81	47.40	n/a

=> Limit violated
=> Selected Limit

INTERIM

INTERIM

45-Day Safety Screening Results
B-106

CORE NUMBER: 93, 94
SEGMENT #: Core 94 Seg 2

SEGMENT PORTION: U Upper Half of Segment

Sample#	R	A#	Analyte	Unit	Action Limits Lower	Action Limits Upper	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err%
S95T001310			% Water by TGA using Mettler	%	17.00	115.0	103.7	n/a	61.31	61.45	61.38	0.23	n/a	n/a	n/a
S95T001310			DSC Exotherm using Mettler	Joules/g	-9.9e+01	481.0	95.96	n/a	0.00e+00	0.00e+00	0.00e+00	n/a	n/a	n/a	n/a
S95T001311		F	Alpha of Digested Solid	uCi/g	-9.9e+01	41.01	87.10	<2.74e-03	< 3.51e-2	<2.52e-2	n/a	n/a	n/a	5.84e-02	500.0
S95T001311		F	Lithium -ICP-Fusion	ug/g	-9.9e+01	100.0	98.47	-1.00e-04	< 44.0839	<43.8059	n/a	n/a	90.31	44.10	n/a

L Lower Half of Segment: L Lower Half of Segment

Sample#	R	A#	Analyte	Unit	Action Limits Lower	Action Limits Upper	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err%
S95T001306			% Water by TGA using Mettler	%	17.00	115.0	101.8	n/a	57.01	57.08	57.05	0.12	n/a	n/a	n/a
S95T001306			DSC Exotherm using Mettler	Joules/g	-9.9e+01	481.0	109.0	n/a	0.00e+00	0.00e+00	0.00e+00	n/a	n/a	n/a	n/a
S95T001307		F	Alpha of Digested Solid	uCi/g	-9.9e+01	41.01	87.10	<2.74e-03	6.17e-02	6.13e-02	6.15e-02	0.65	n/a	6.30e-03	15.1
S95T001307		F	Lithium -ICP-Fusion	ug/g	-9.9e+01	100.0	98.47	-1.00e-04	< 48.0584	<49.4854	n/a	n/a	89.44	48.10	n/a

=> Limit violated
=> Selected Limit

INTERIM

9513381.1906

INORGANIC ANALYSES

LABCORE Data Entry Template for Worklist# 1892

Analyst: JDS **Instrument:** DSC0 1 **Book #** 12N14A

Method: LA-514-113 Rev/Mod ~~B-0~~ B-1 8-17-95 BDV

Worklist Comment: Please run B-106 DSC under N2. bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	-------TEST------	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				DSC-01	SOLID	28.45	31.0	N/A	Joules/g
95000096	B-106	2	SAMPLE	S95T001275	0		DSC-01	SOLID	N/A	Ø		Joules/g
95000096	B-106	3	DUP	S95T001275	0		DSC-01	SOLID	Ø	Ø	N/A	Joules/g
		4	STD				DSC-01	SOLID	28.45	31.3	N/A	Joules/g
95000096	B-106	5	SAMPLE	S95T001278	0		DSC-01	SOLID	N/A	Ø		Joules/g
95000096	B-106	6	DUP	S95T001278	0		DSC-01	SOLID	Ø	Ø	N/A	Joules/g

Final page for worklist # 1892

See attached for signatures
Analyst Signature **Date** 7-31-95

Verified by Blandina Valenzuela BDV 8-2-95

[signature] 7-31-95
Analyst Signature **Date**

Data Entry Comments: S95T001275 produced two endothermic regions one at 116.3°C with a delta H of 1174.5 J/g and second at 295.0°C with a delta H of 28.9 J/g. S95T001278 produced two endothermic regions one at 113.3°C with a delta H of 1208.8 J/g and second at 296.8°C with a delta H of 25.1 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.

LABCORE Data Entry Template for Worklist# 1892

Analyst: jds **Instrument:** DSC0 **Book #** 12N 14A

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

Worklist Comment: Please run B-106 DSC under N2. bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	-------TEST------	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				DSC-01	SOLID			N/A	Joules/g
95000096	B-106	2	SAMPLE	S95T001275	0		DSC-01	SOLID	N/A			Joules/g
95000096	B-106	3	DUP	S95T001275	0		DSC-01	SOLID			N/A	Joules/g
95000096	B-106	4	SAMPLE	S95T001278	0		DSC-01	SOLID	N/A			Joules/g
95000096	B-106	5	DUP	S95T001278	0		DSC-01	SOLID			N/A	Joules/g

Final page for worklist # 1892

JAS 7.28.95

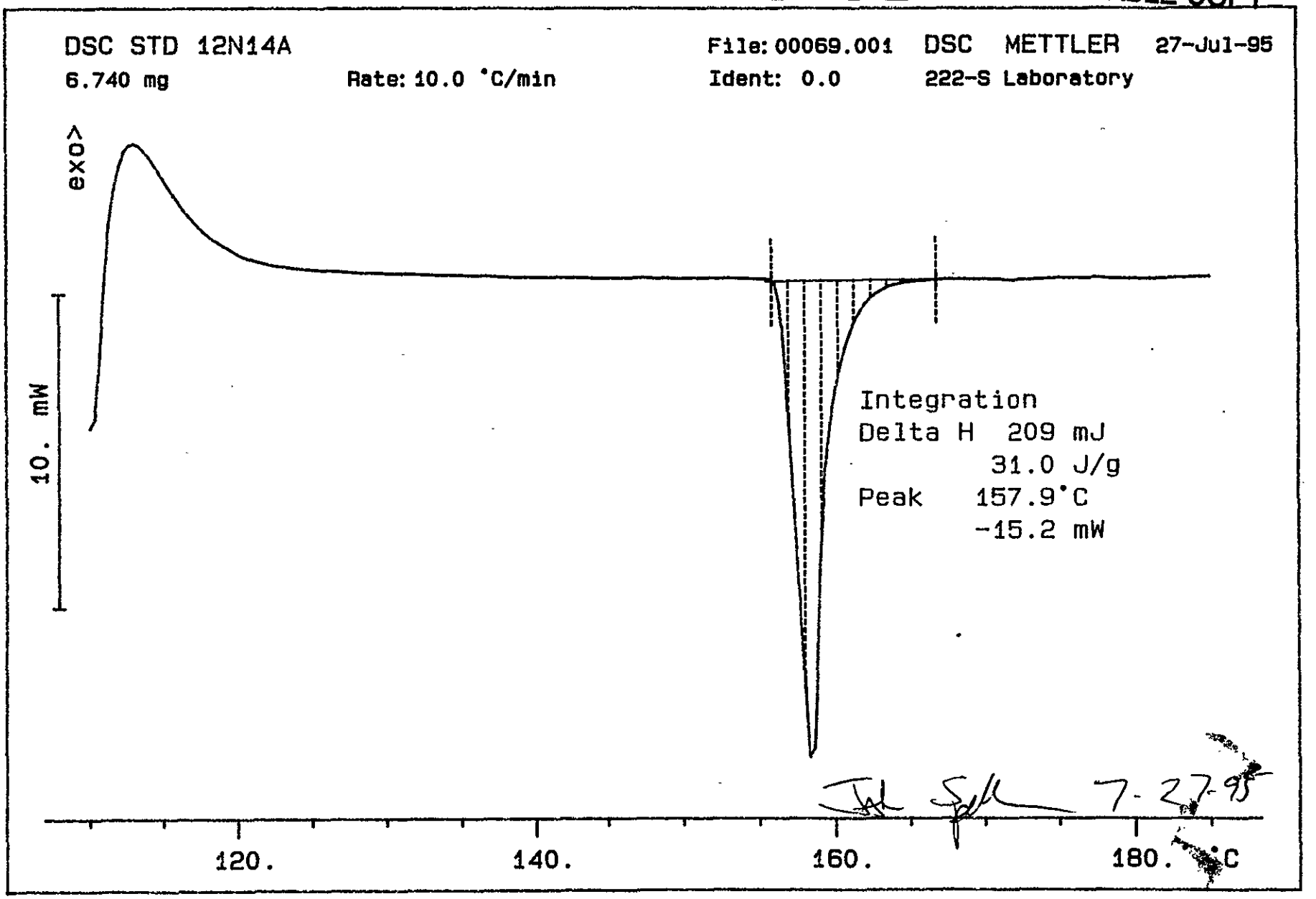
Analyst Signature **Date** **Analyst Signature** **Date**

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.

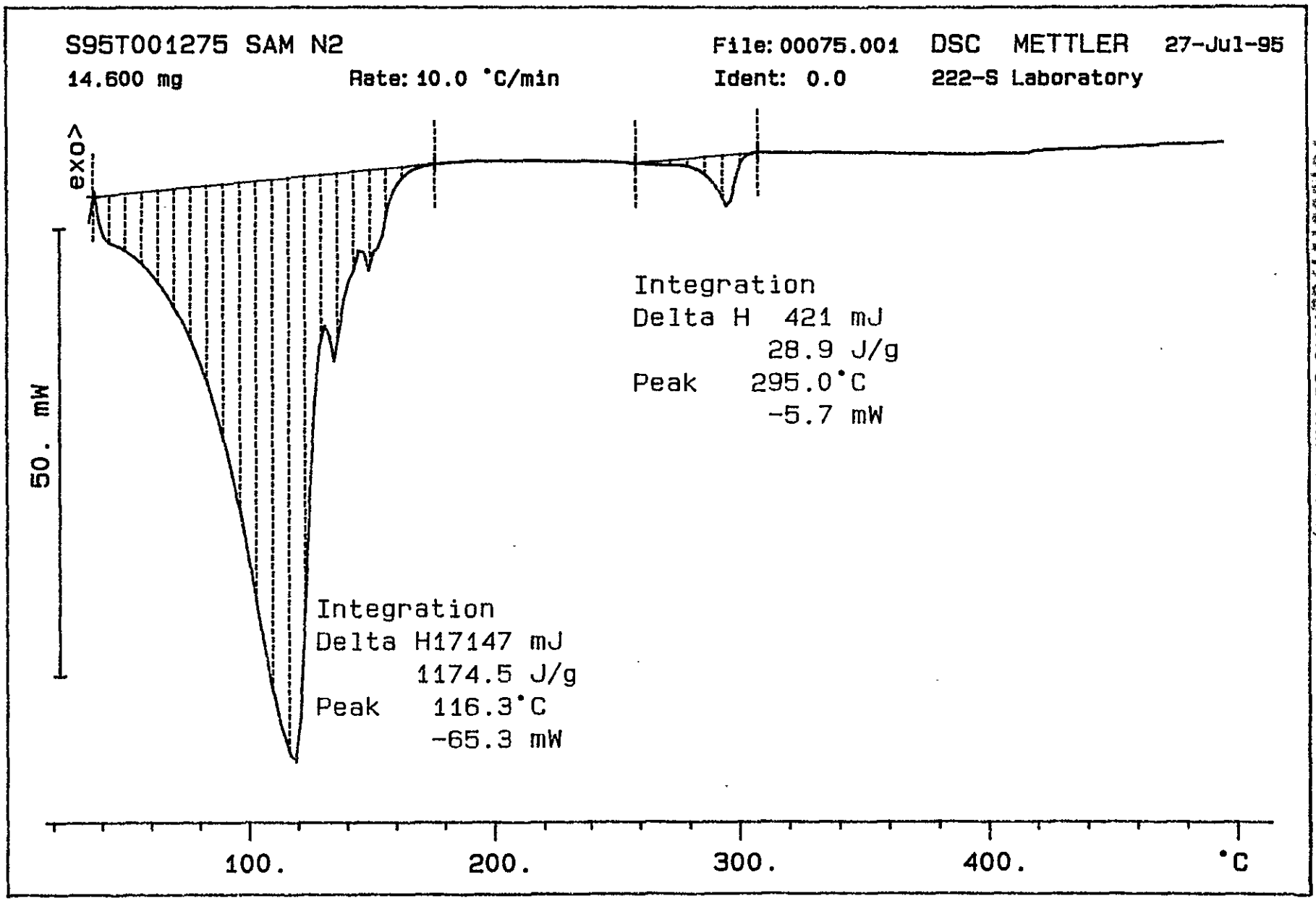
SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 21 TO 26.

BEST AVAILABLE COPY



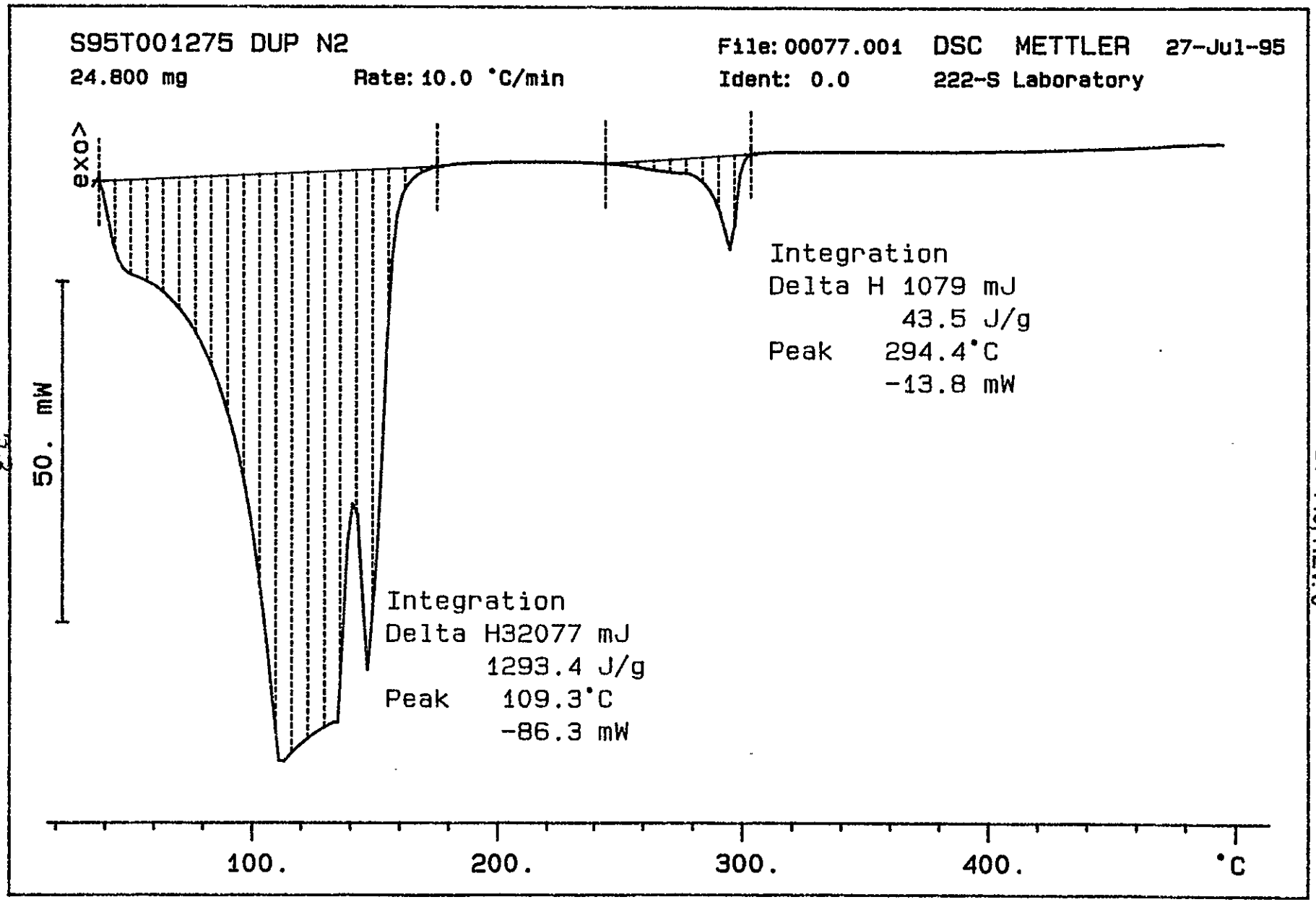
7-27-95

BEST AVAILABLE COPY



9513381.1908WHC-SD-WM-DP-140, REV. 0

BEST AVAILABLE COPY



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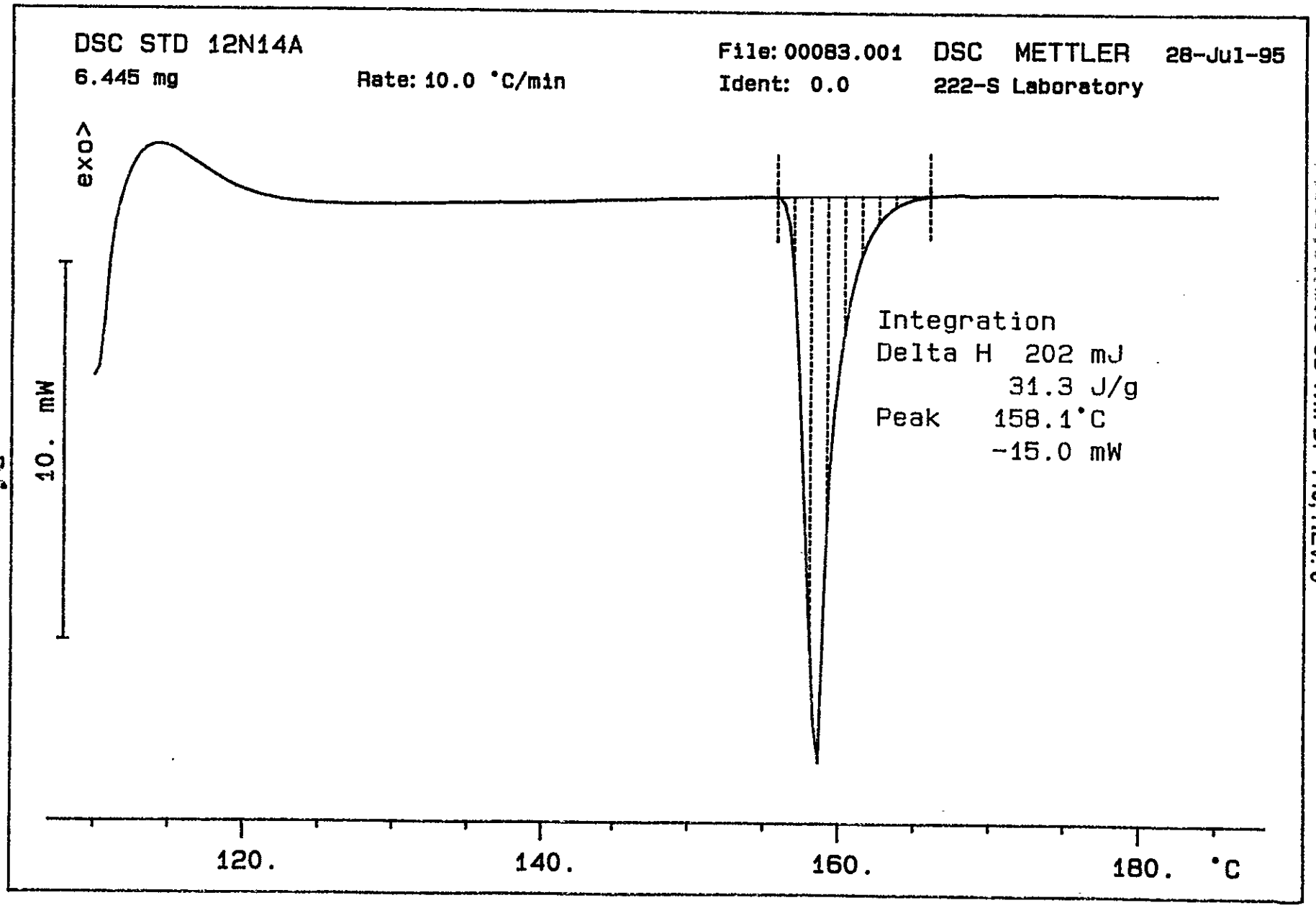
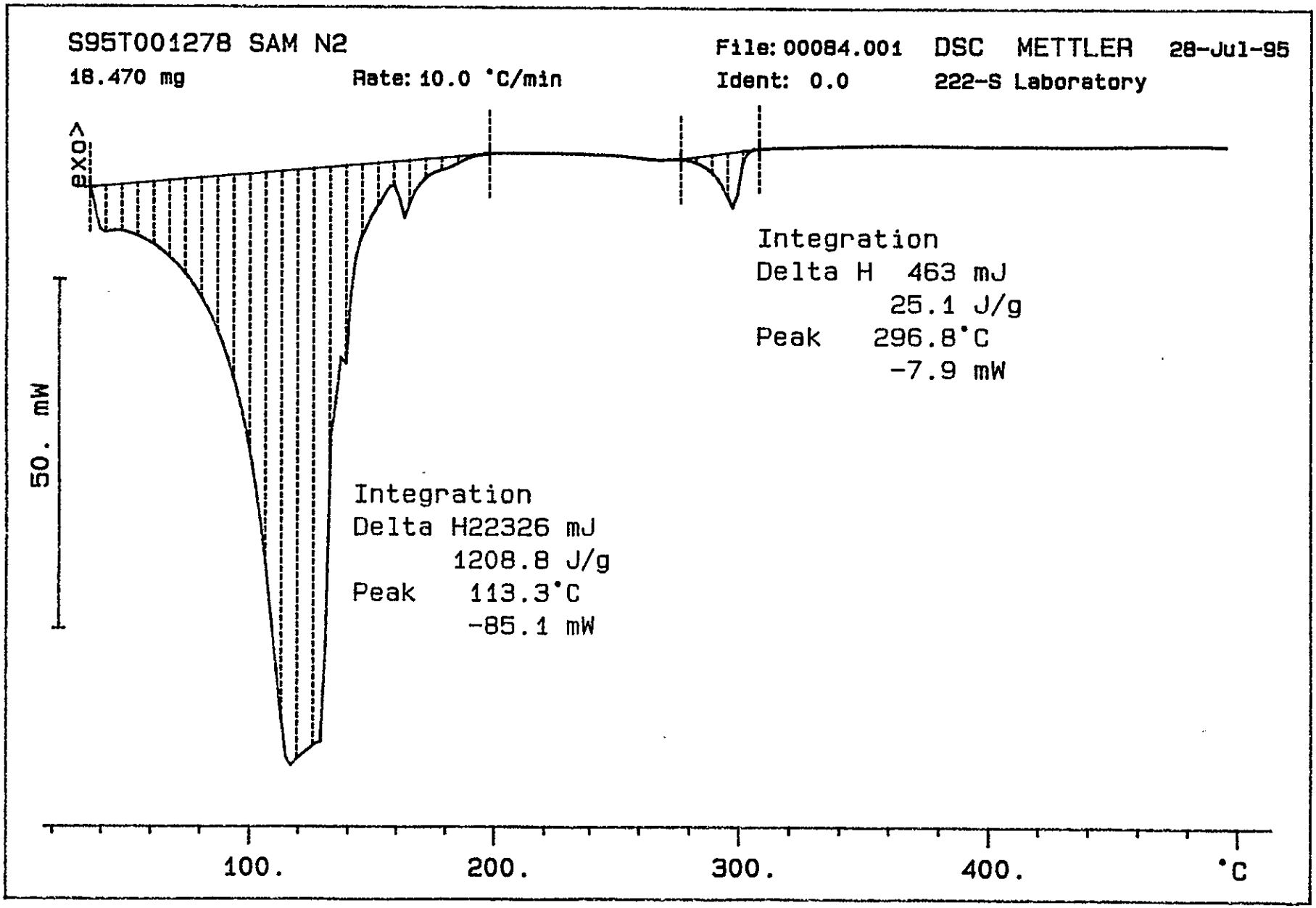


WHC-SD-WM-DP-140, REV. 0

BEST AVAILABLE COPY



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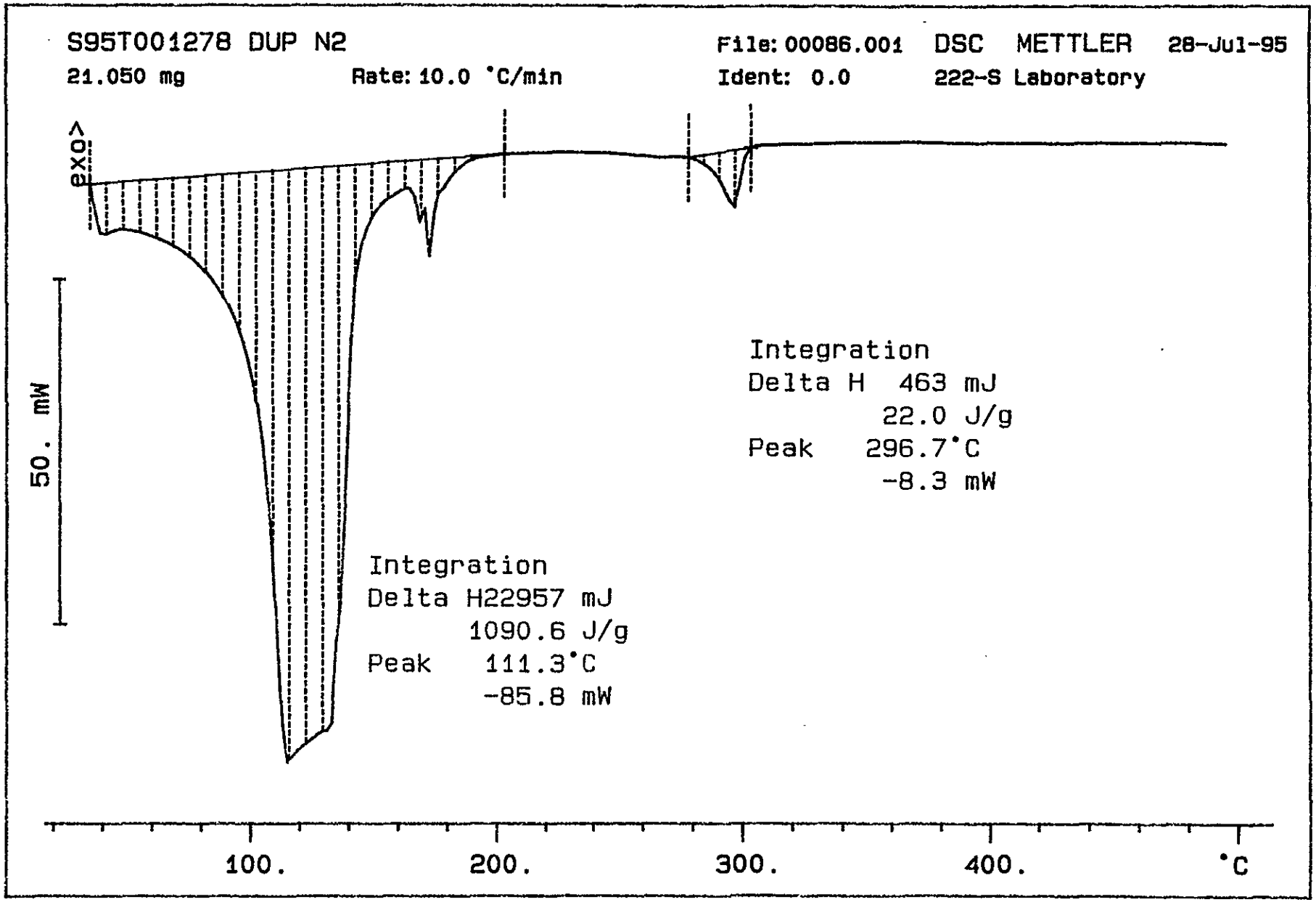


LABCORE Data Entry Template for Worklist# 1893

Analyst: JJS **Instrument:** DSC0 1 **Book #** 12N14

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

Worklist Comment: Please run B-106 DSCs under N2. bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	-------TEST------	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				DSC-01	SOLID	28.45	27.2	N/A	Joules/g
95000096	B-106	2	SAMPLE	S95T001281	0		DSC-01	SOLID	N/A	Ø		Joules/g
95000096	B-106	3	DUP	S95T001281	0		DSC-01	SOLID	Ø	Ø	N/A	Joules/g
95000096	B-106	4	SAMPLE	S95T001284	0		DSC-01	SOLID	N/A	Ø		Joules/g
95000096	B-106	5	DUP	S95T001284	0		DSC-01	SOLID	Ø	Ø	N/A	Joules/g

Final page for worklist # 1893

JJS 8-2-95
Analyst Signature **Date**

8-7-95
Analyst Signature **Date**

Verified by Blandina Valenzuela 8-8-95

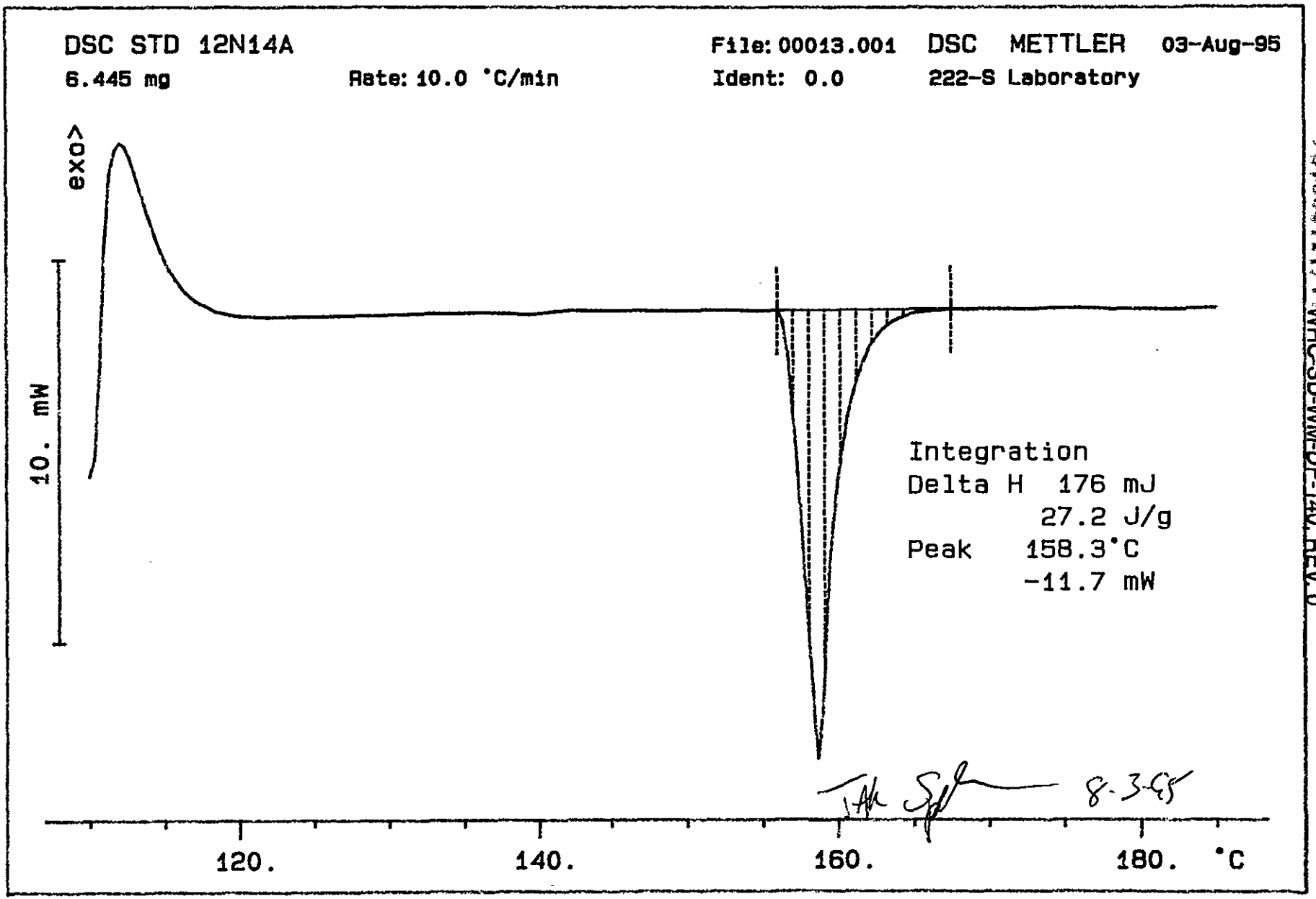
S95T001281 produced two endothermic regions, one at 109.3°C and a delta H of 841.5 J/g and the second at 290.5°C with a delta H of 27.9 J/g

Data Entry Comments: S95T001284 produced two endothermic regions, one at 107.3 °C with a delta H of 481.2 J/g and second at 294.3°C with a delta H of 23.4 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.

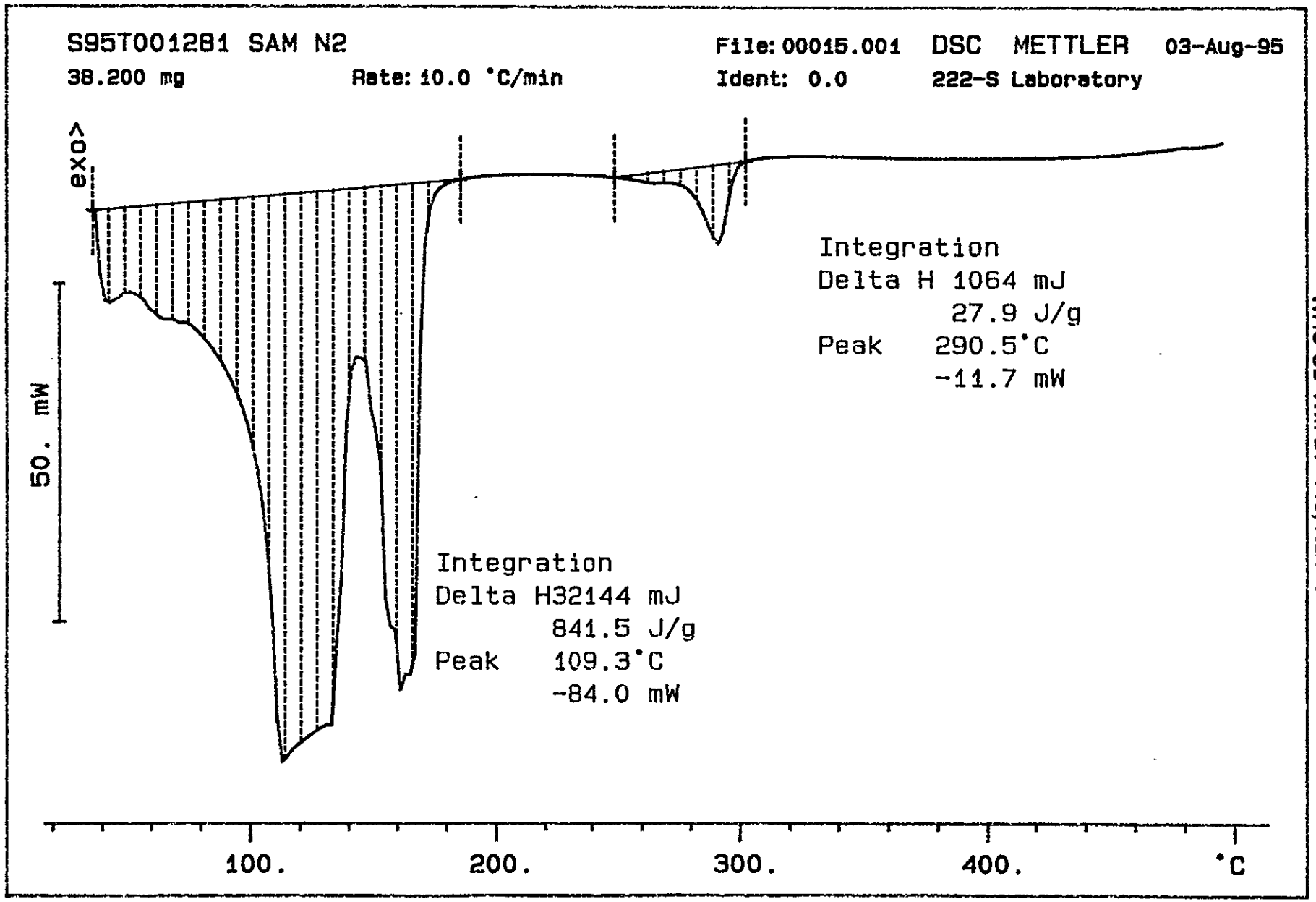
SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 28 TO 32.

BEST AVAILABLE COPY

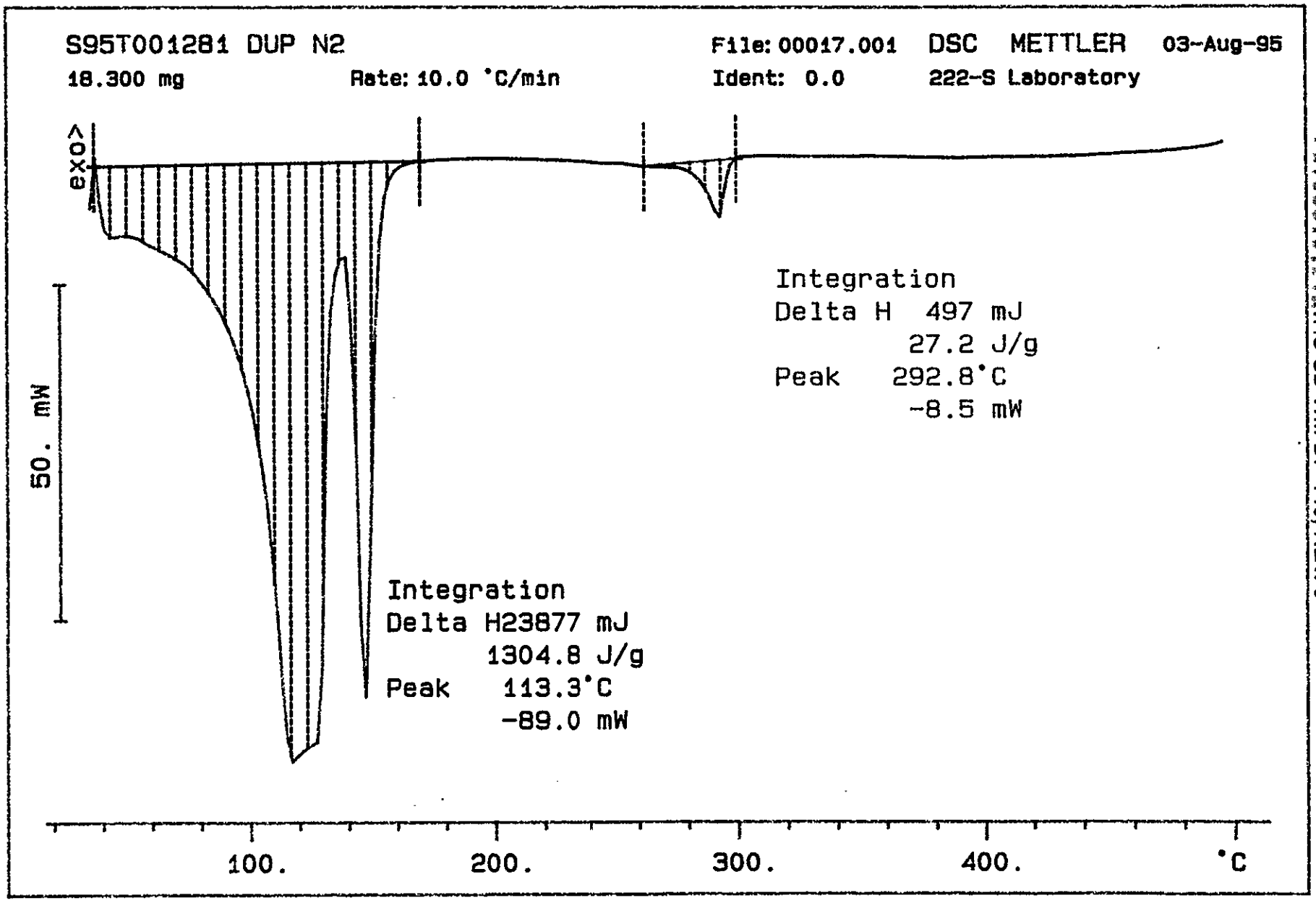


9513381.1911 WHC-SD-WM-DP-140 REV.0

BEST AVAILABLE COPY

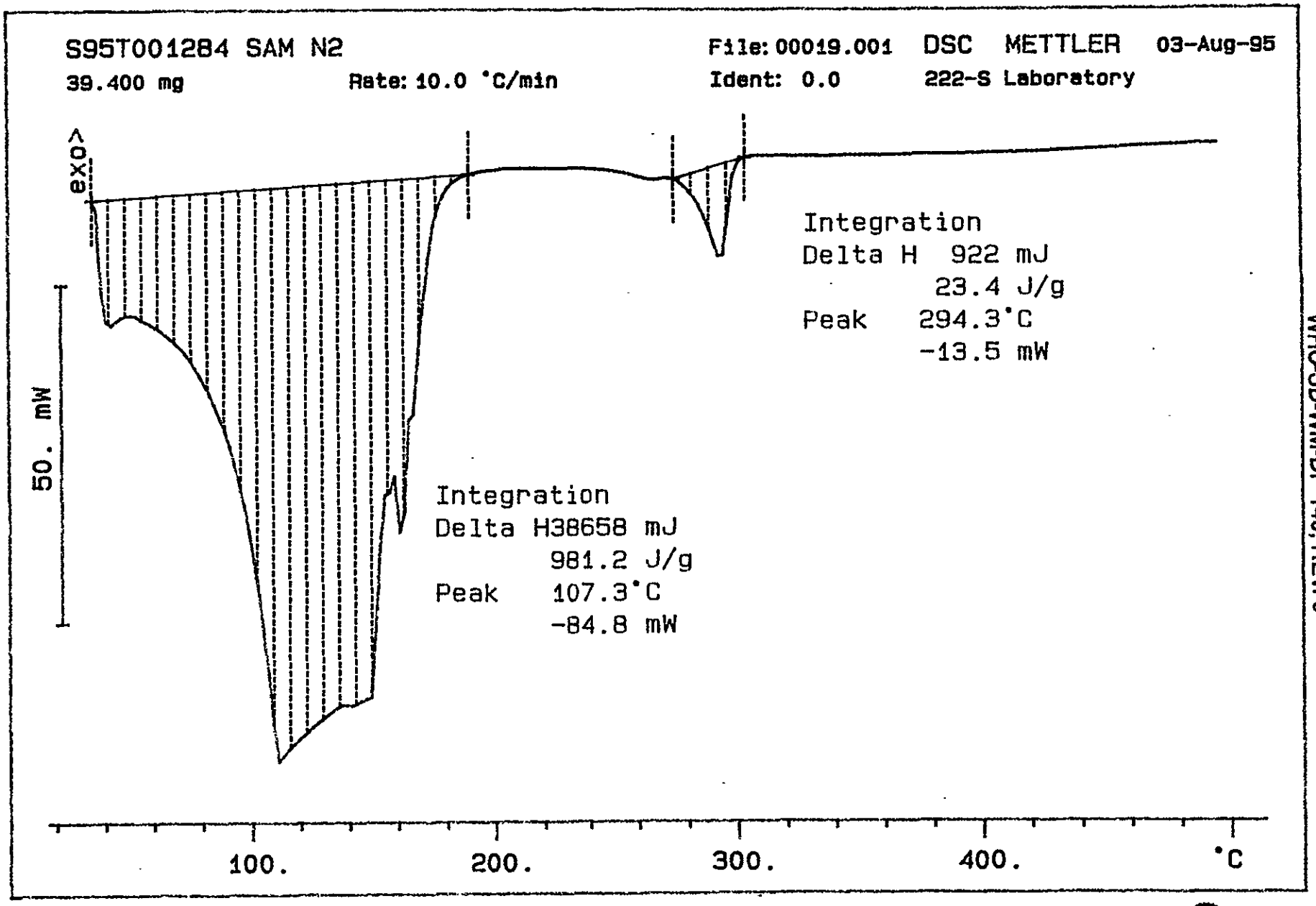


BEST AVAILABLE COPY

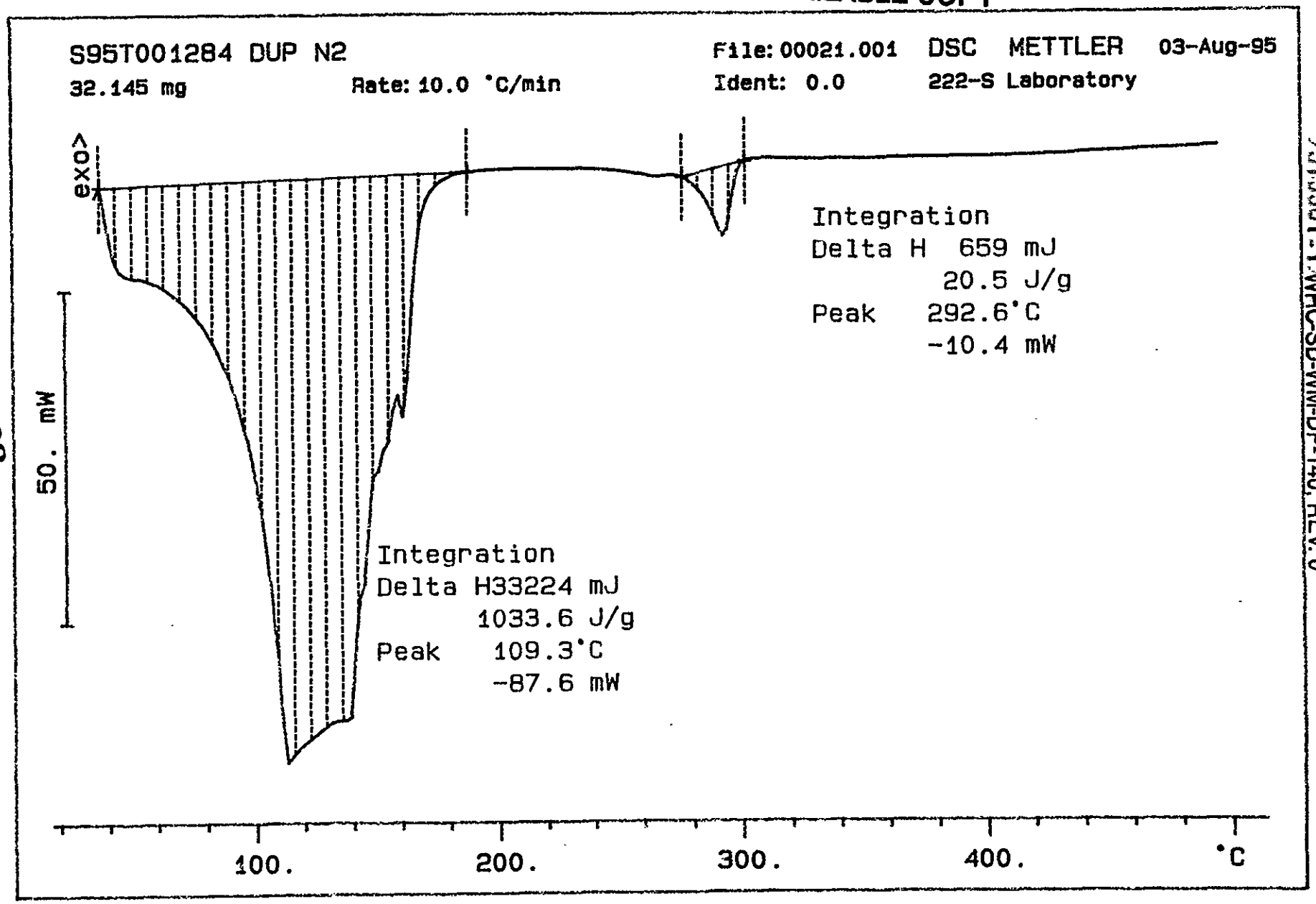


9513381.1912 WHC-SD-WM-DP-140, REV. 0

BEST AVAILABLE COPY



BEST AVAILABLE COPY



9513381.1913 WHC-SD-WM-DP-140, REV.0

LABCORE Data Entry Template for Worklist# 1894

Analyst: ADP **Instrument:** DSC0 1 **Book #** 12N14A

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

Worklist Comment: Please run B-106 DSCs under N2. bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	-------TEST------	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				DSC-01	SOLID	28.45	28.1	N/A	Joules/g
95000096	B-106	2	SAMPLE	S95T001298	0		DSC-01	SOLID	N/A	Ø		Joules/g
95000096	B-106	3	DUP	S95T001298	0		DSC-01	SOLID	Ø	Ø	N/A	Joules/g
95000096	B-106	4	SAMPLE	S95T001302	0		DSC-01	SOLID	N/A	Ø		Joules/g
95000096	B-106	5	DUP	S95T001302	0		DSC-01	SOLID	Ø	Ø	N/A	Joules/g

Final page for worklist # 1894

Anthony Puente 8-4-95
Analyst Signature **Date** ADP

Verified by Blandina Valenzuela 8-8-95

[signature] 8-8-95
Analyst Signature **Date**

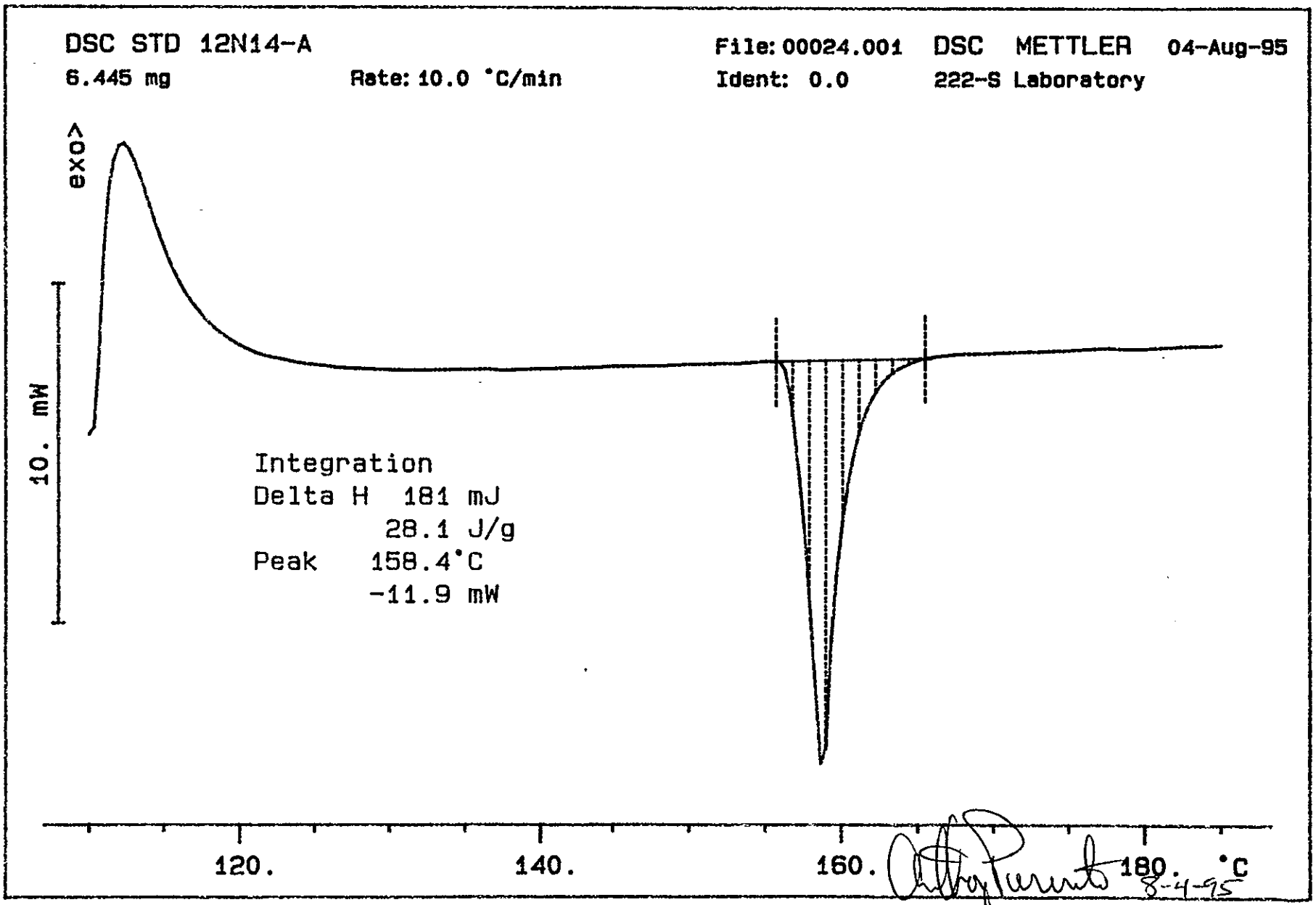
S95T001298 produced two endothermic regions one at 113.3°C with a delta H of 1068.9 J/g and the second at 294.7°C with a delta H of 21.1 J/g.

Data Entry Comments: S95T001302 produced two endothermic regions one at 99.3°C with a delta H of 499.5 J/g and the second at 295.5°C with a delta H of 24.2 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 34 TO 38.

BEST AVAILABLE COPY



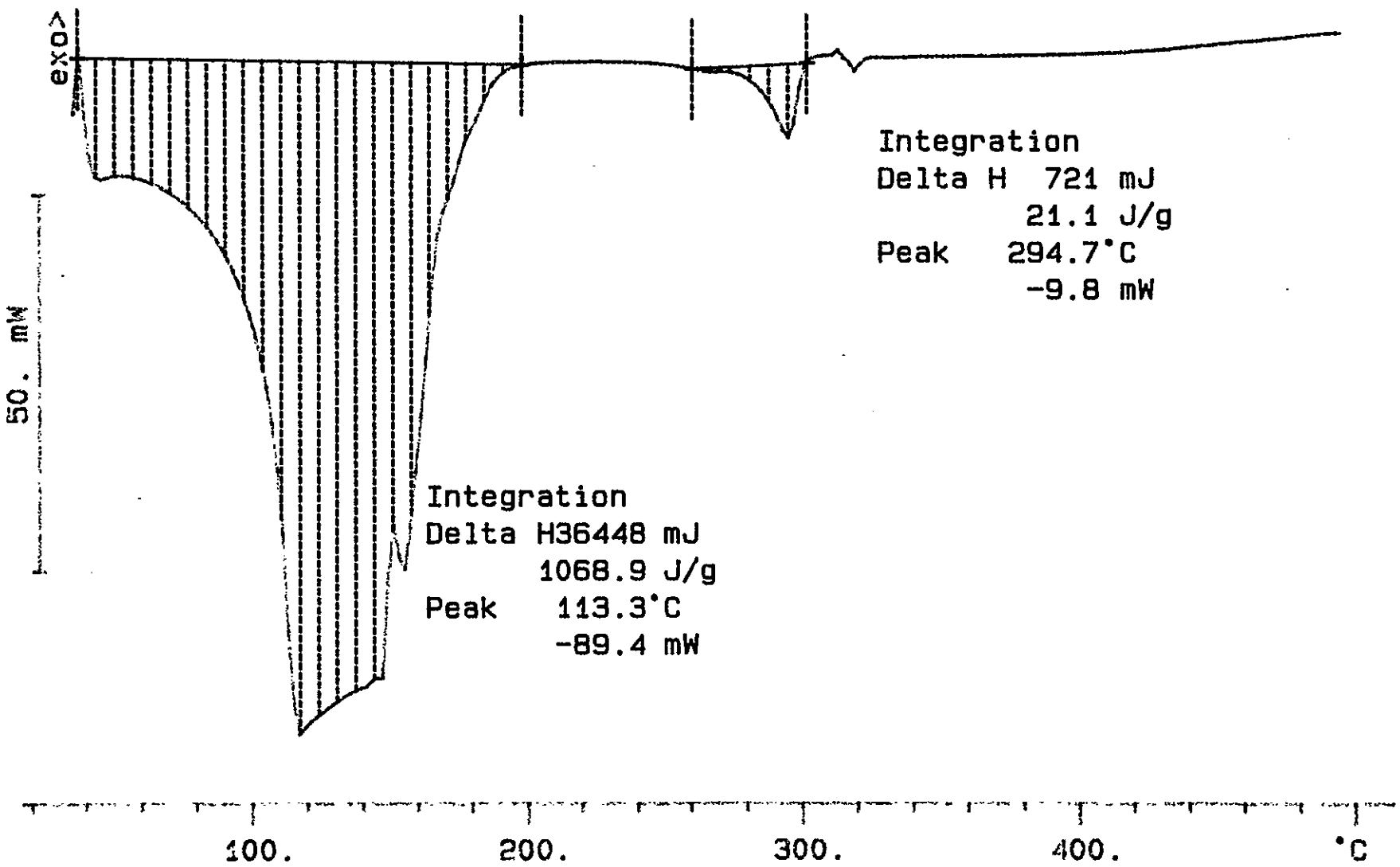
8-4-95

9513381.1 WHC-SD-WM-DP-140, REV. 0

BEST AVAILABLE COPY

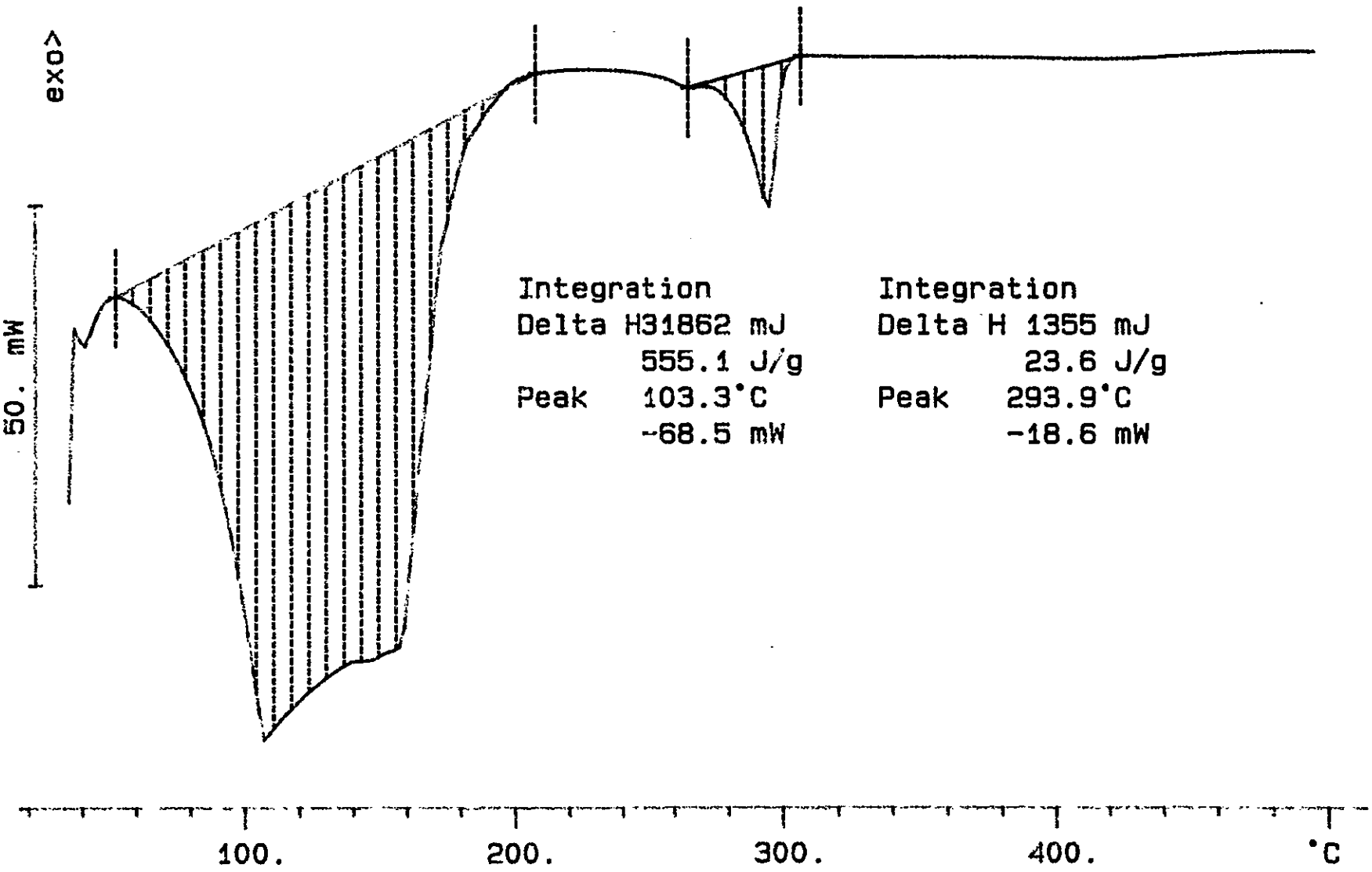
S95T001298 SAM N2 File: 00025.001 DSC METTLER 04-Aug-95

34.100 mg Rate: 10.0 °C/min Ident: 0.0 222-S Laboratory



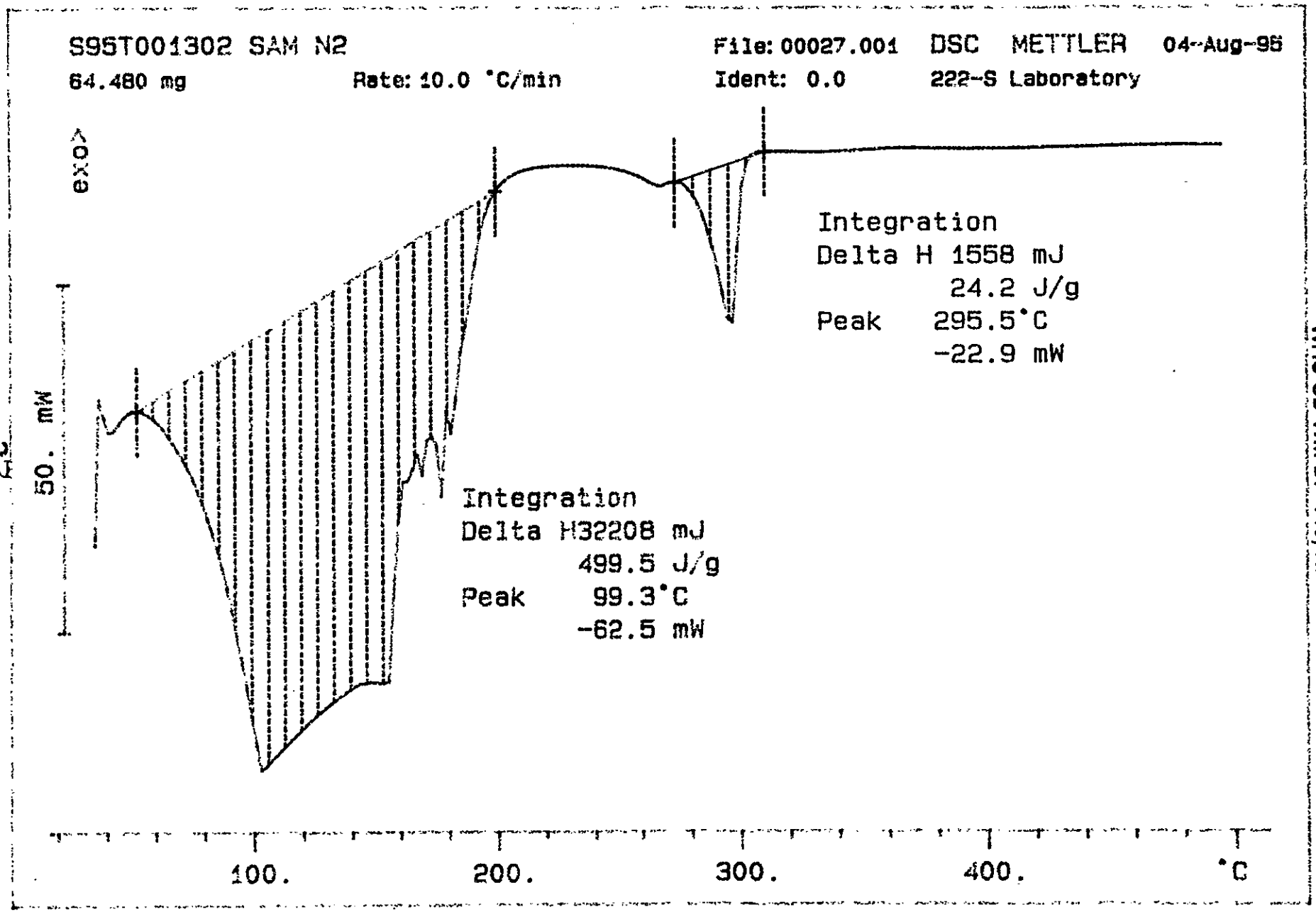
BEST AVAILABLE COPY

S95T001298 DUP N2
57.401 mg
Rate: 10.0 °C/min
File: 00026.001
Ident: 0.0
DSC METTLER 04-Aug-95
222-S Laboratory

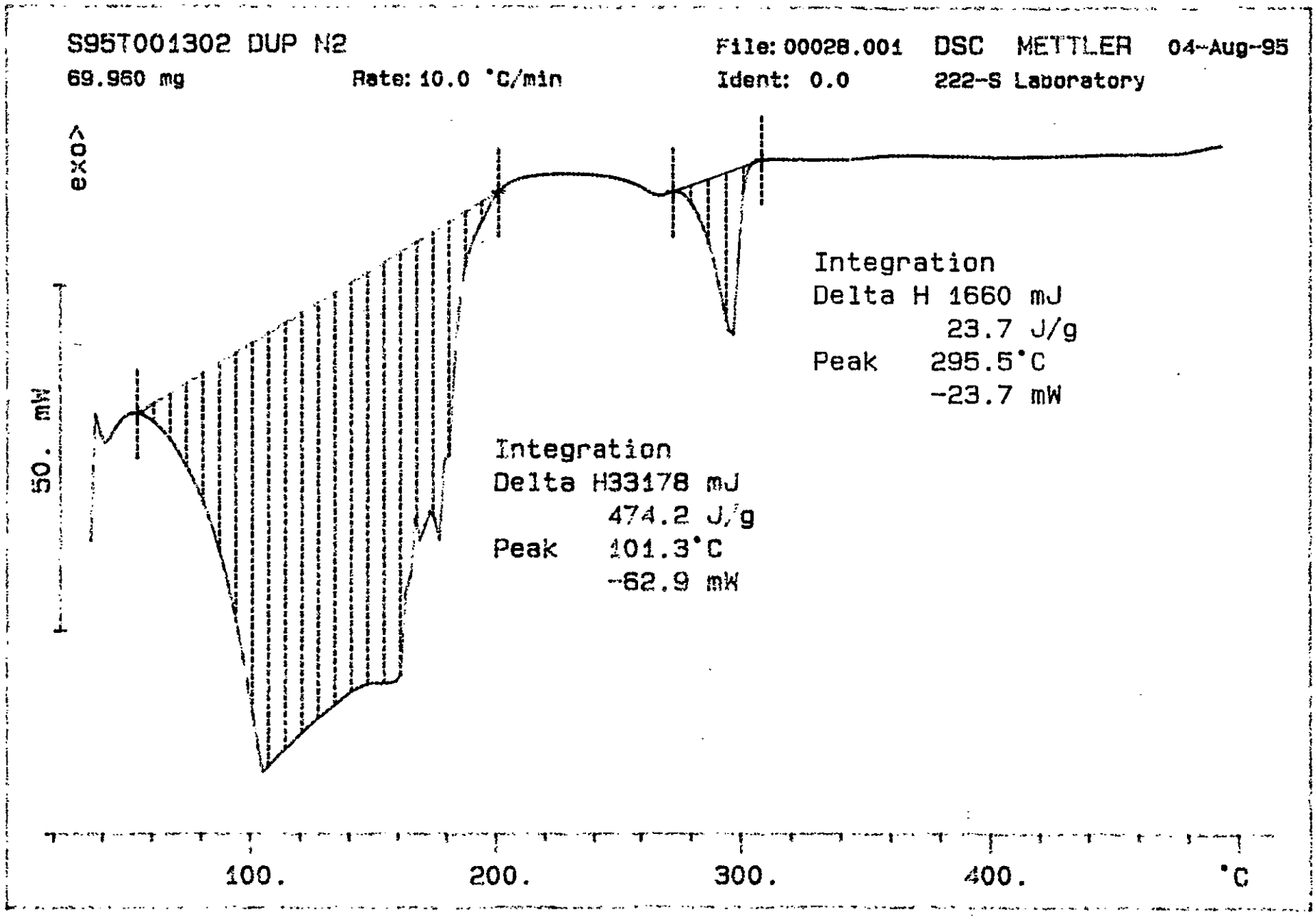


9513381.1915
WHC-SD-WM-DP-140, REV. 0

BEST AVAILABLE COPY



BEST AVAILABLE COPY



LABCORE Data Entry Template for Worklist# 1895

Analyst: JDS **Instrument:** DSC0 1 **Book #** 12N14-A

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

Worklist Comment: Please run B-106 DSCs under N2. bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	-------TEST------	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				DSC-01	SOLID	28.45	31.0	N/A	Joules/g
95000096	B-106	2	SAMPLE	S95T001306	0		DSC-01	SOLID	N/A	Ø		Joules/g
95000096	B-106	3	DUP	S95T001306	0		DSC-01	SOLID	Ø	Ø	N/A	Joules/g
		4	STD				DSC-01	SOLID	28.45	27.3	N/A	Joules/g
95000096	B-106	5	SAMPLE	S95T001310	0		DSC-01	SOLID	N/A	Ø		Joules/g
95000096	B-106	6	DUP	S95T001310	0		DSC-01	SOLID	Ø	Ø	N/A	Joules/g

Final page for worklist # 1895

See attached for signatures
Analyst Signature **Date** 8-1-95

Verified by Blandina Valenzuela 8-2-95

[signature] 8-2-95
Analyst Signature **Date**

S95T001306 produced two endothermic regions one at 109.3°C with a delta H of 994.7 J/g and the second at 294.4°C with a delta H of 213 J/g.

Data Entry Comments: S95T001310 produced two endothermic regions one at 109.3°C with a delta H of 1125.0 J/g and the second at 292.5°C with a delta H of 22.4 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.

worklistrpt Version 2.1 05/15/95
07/25/95 09:01

LABCORE Data Entry Template for Worklist# 1895

Analyst: JDS **Instrument:** DSC0 _____ **Book #** 12N/4A

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

Worklist Comment: Please run B-106 DSCs under N2. bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	-------TEST------	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				DSC-01	SOLID			N/A	Joules/g
95000096	B-106	2	SAMPLE	S95T001306	0		DSC-01	SOLID	N/A			Joules/g
95000096	B-106	3	DUP	S95T001306	0		DSC-01	SOLID			N/A	Joules/g
95000096	B-106	4	SAMPLE	S95T001310	0		DSC-01	SOLID	N/A			Joules/g
95000096	B-106	5	DUP	S95T001310	0		DSC-01	SOLID			N/A	Joules/g

Final page for worklist # 1895

8-1-95

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.

SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 41 TO 46.

BEST AVAILABLE COPY

DSC STD 12N14A

6.445 mg

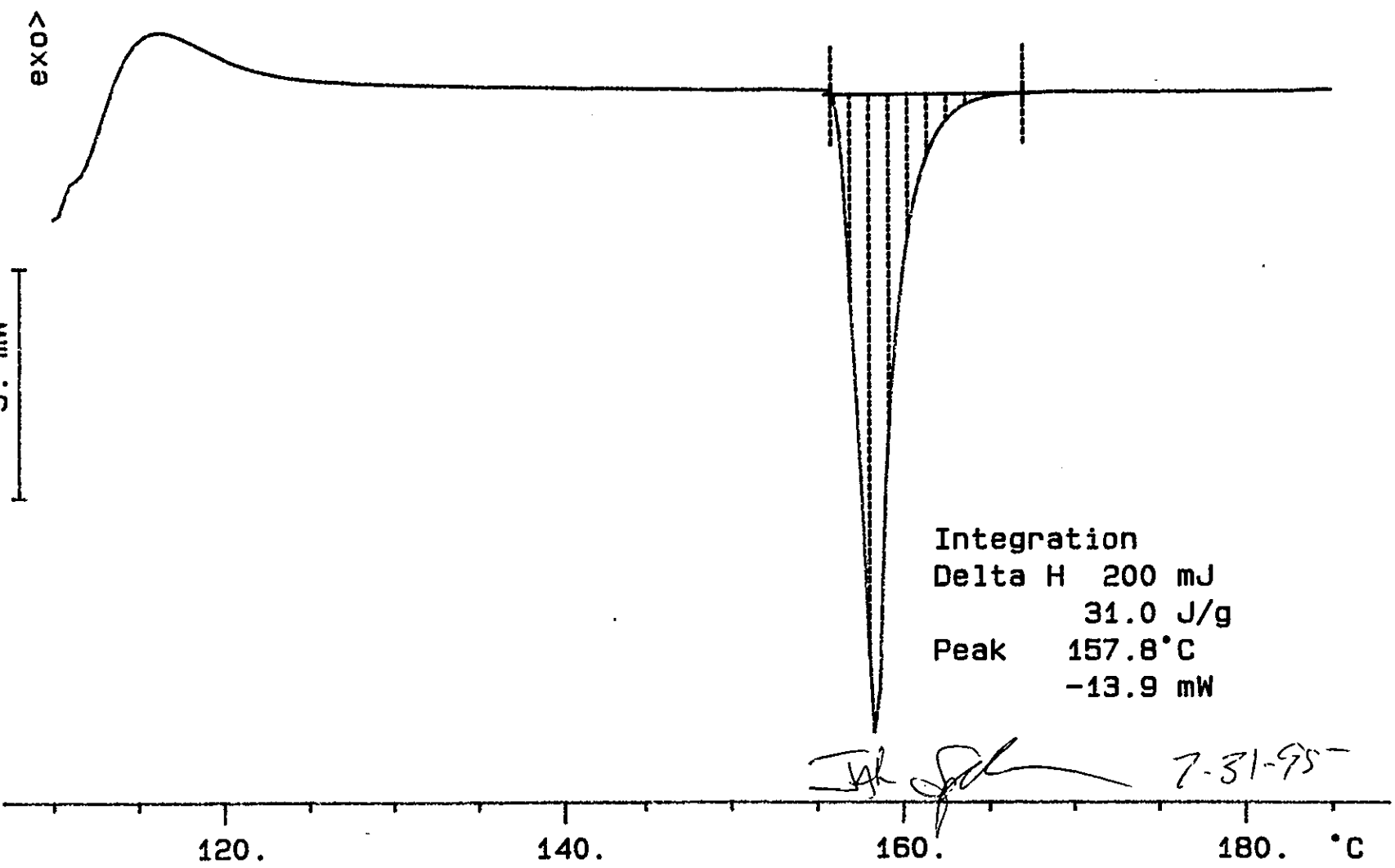
Rate: 10.0 °C/min

File: 00093.001

Ident: 0.0

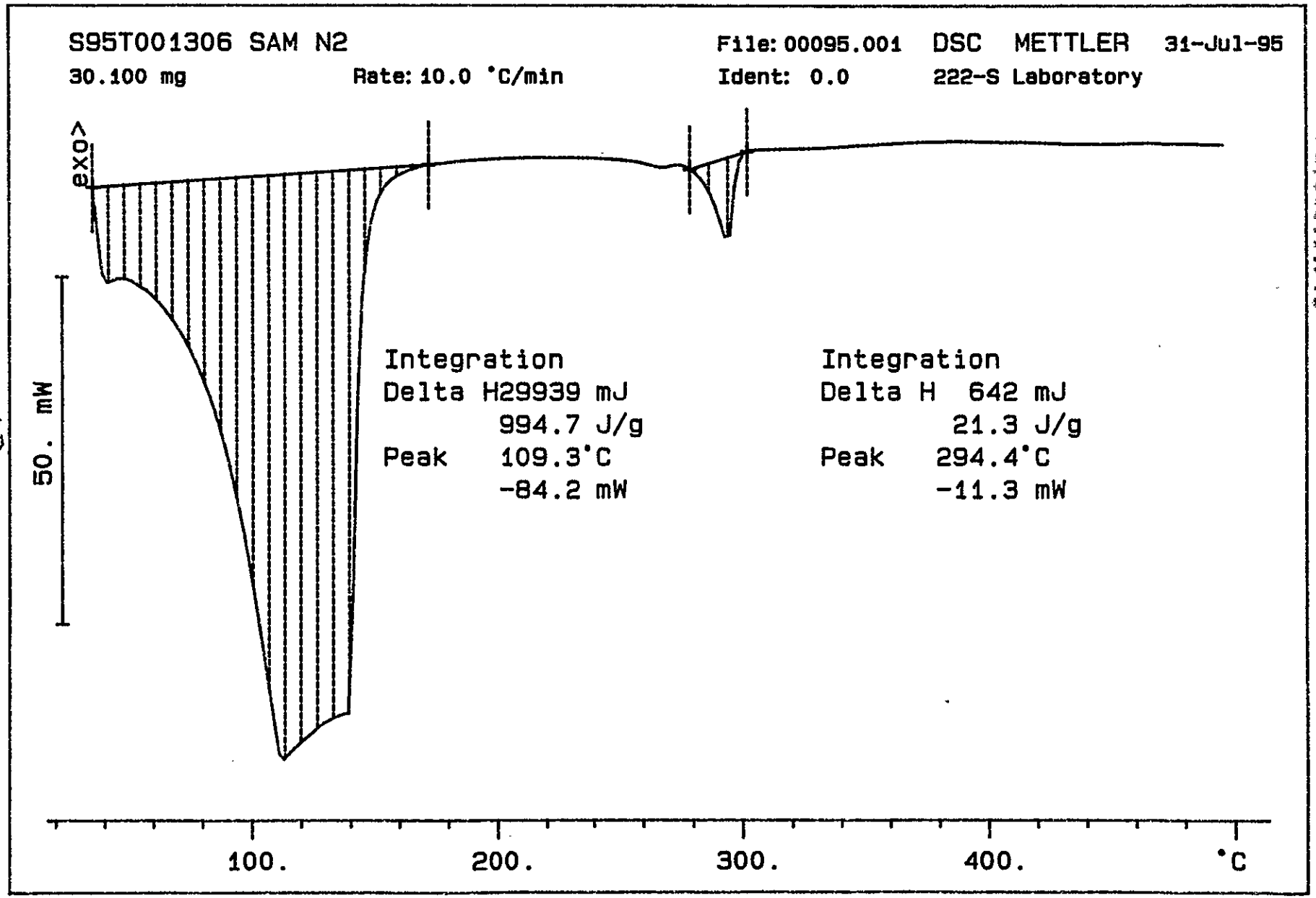
DSC METTLER 31-Jul-95

222-S Laboratory



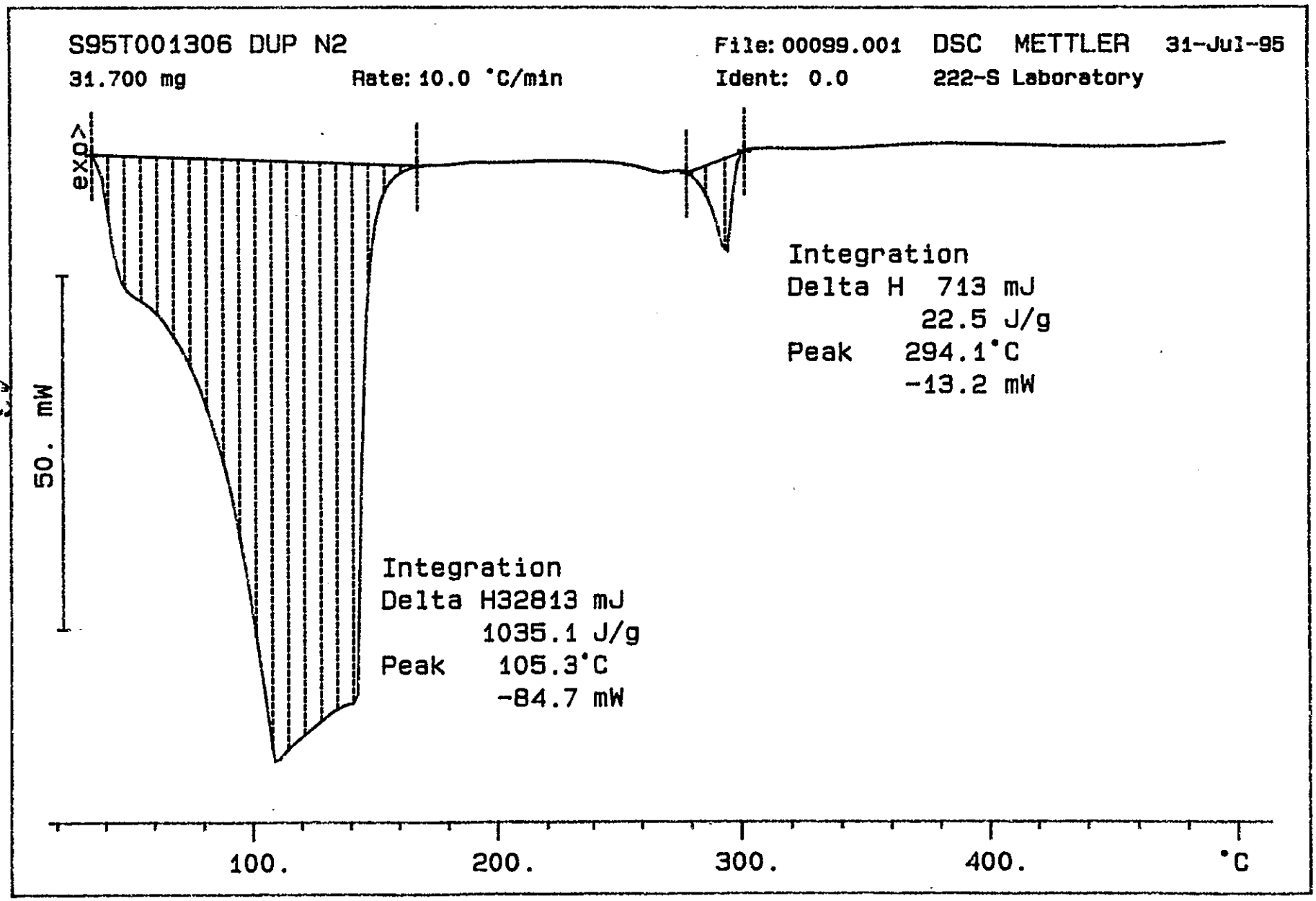
7-31-95

BEST AVAILABLE COPY



9513381.1918 WHC-SD-WM-DP-140, REV. 0

BEST AVAILABLE COPY



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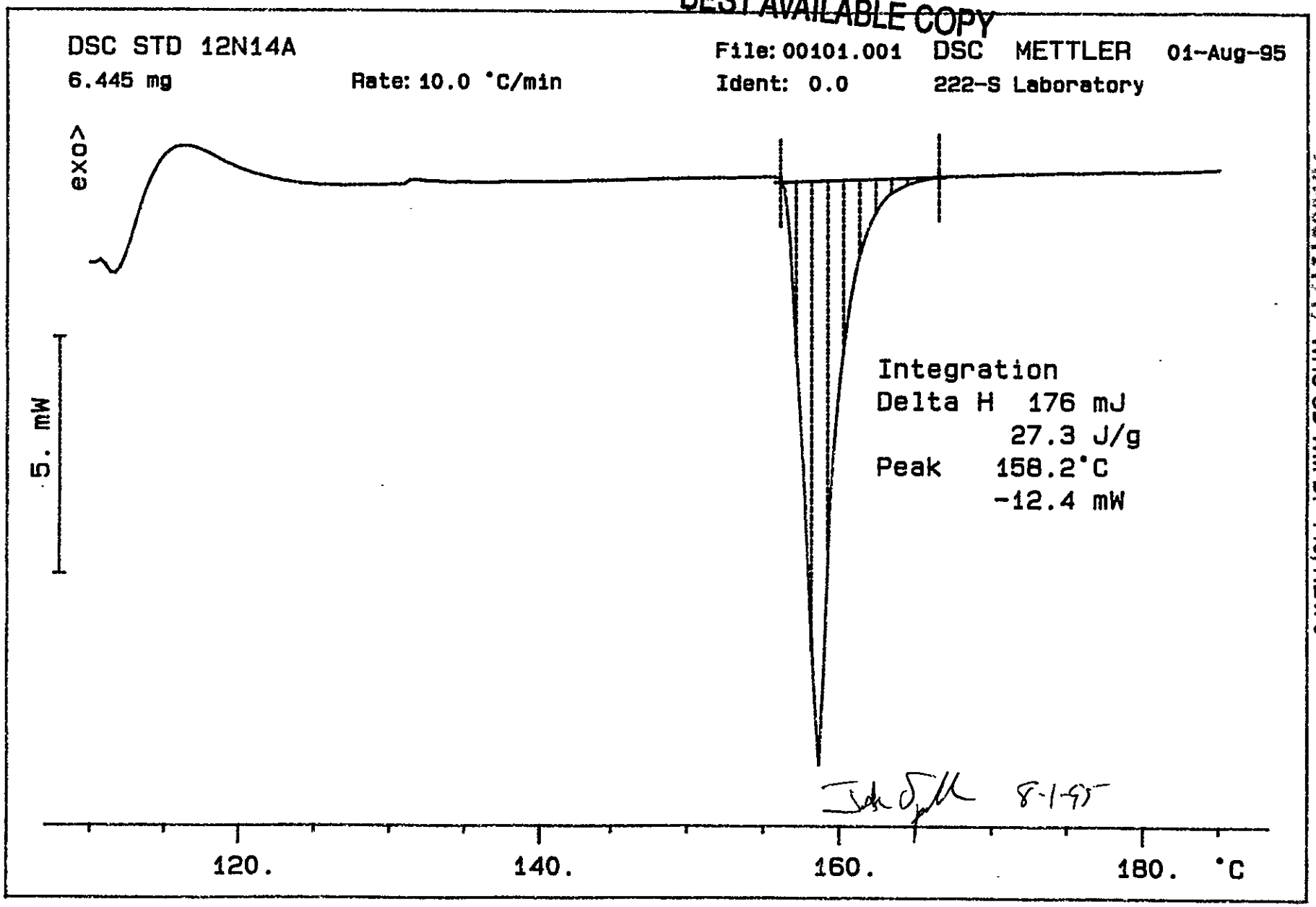
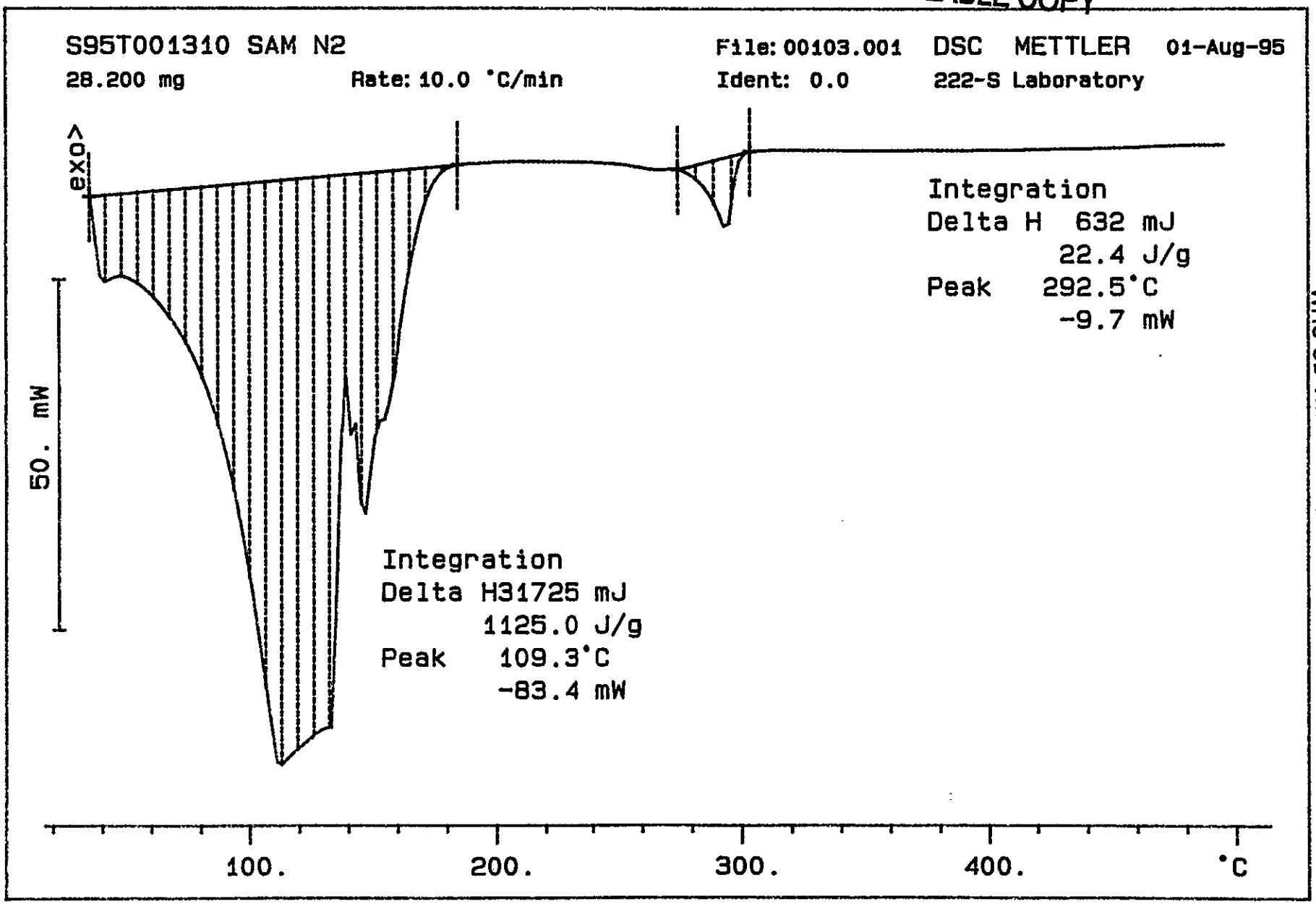
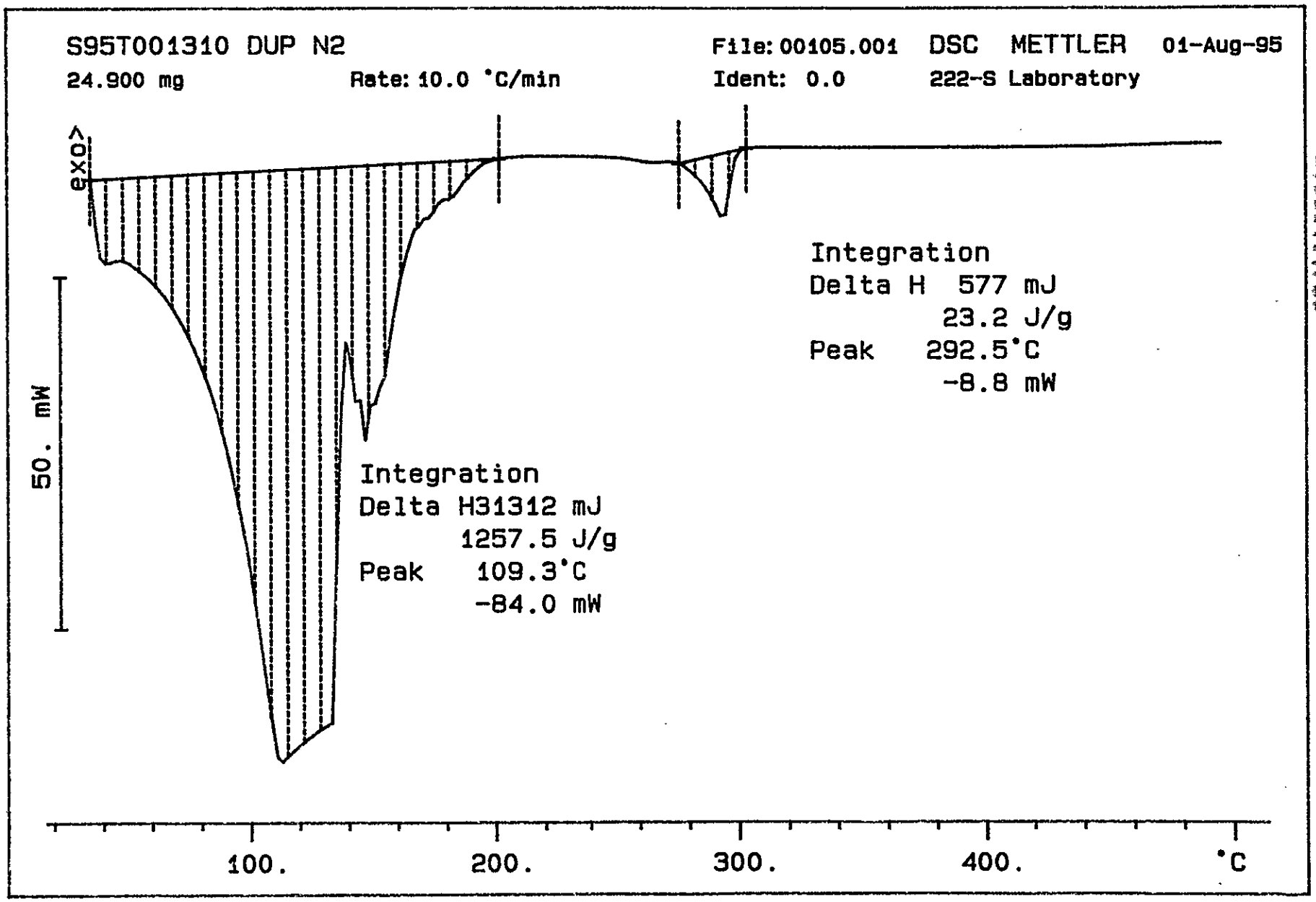


9513381.1919 WHC-SD-WM-DP-140, REV. 0

BEST AVAILABLE COPY



BEST AVAILABLE COPY



9513381.1WHC-SD-WM-DP-140, REV. 0

LABCORE Data Entry Template for Worklist# 1896

Analyst: [illegible] **Instrument:** DSC0 1 **Book #** 12N14A

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

Worklist Comment: Please run B-106 DSCs under N2. bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	-------TEST------	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				DSC-01	LIQUID	28.45	29.2	N/A	Joules/g
95000096	B-106	2	SAMPLE	S95T001272	0		DSC-01	LIQUID	N/A	Ø		Joules/g
95000096	B-106	3	DUP	S95T001272	0		DSC-01	LIQUID	Ø	Ø	N/A	Joules/g

Final page for worklist # 1896

[illegible] 7/27/95
Analyst Signature **Date**

[illegible] 7-29-95
Analyst Signature **Date**

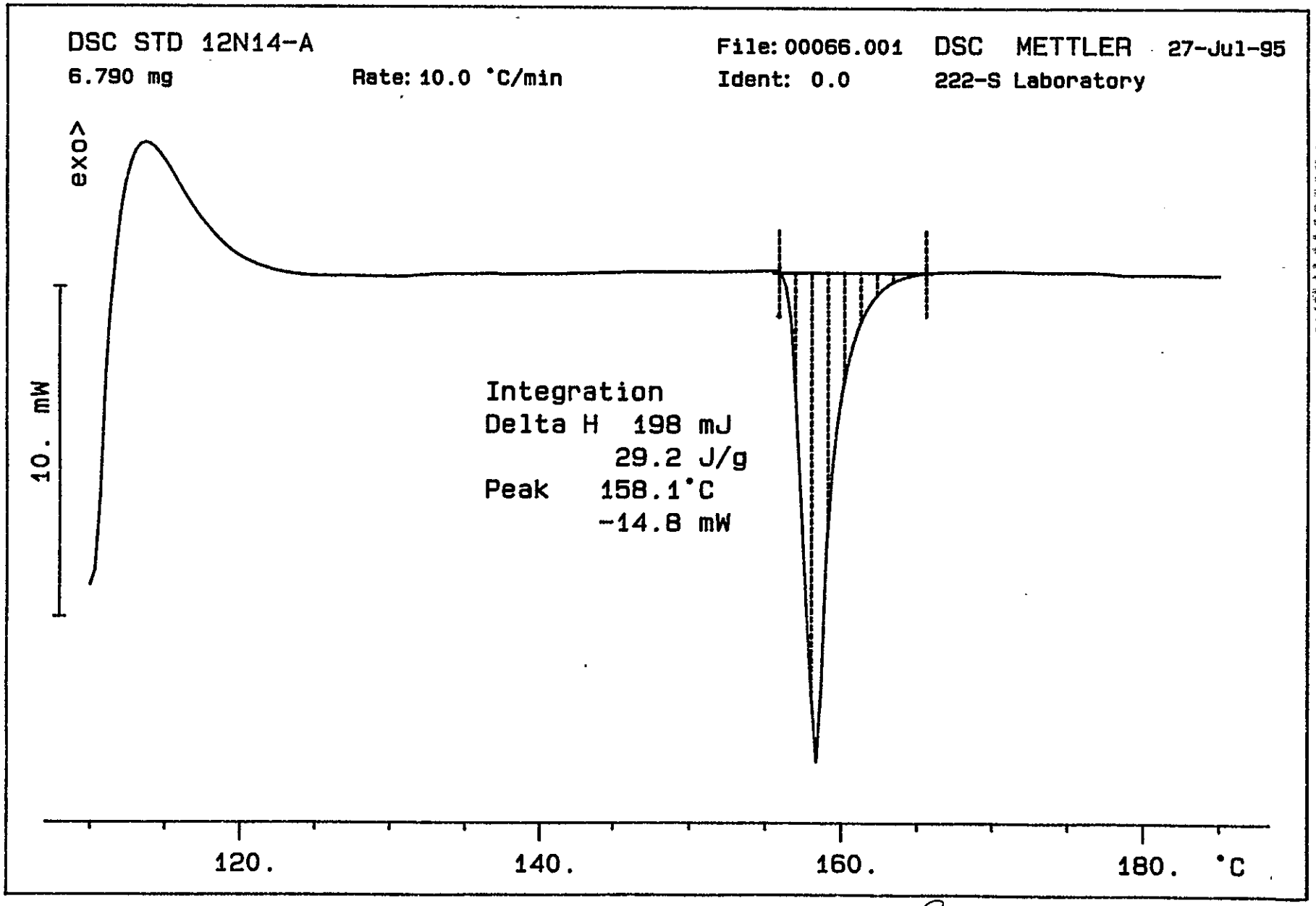
Verified by Blandina Valenzuela (8-2-95)

Data Entry Comments: The sample produced two endothermic regions, one at 108.5°C with a delta H of 1304.1 J/g and the second at 293.3°C with a delta H of 20.0 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 48 TO 50.

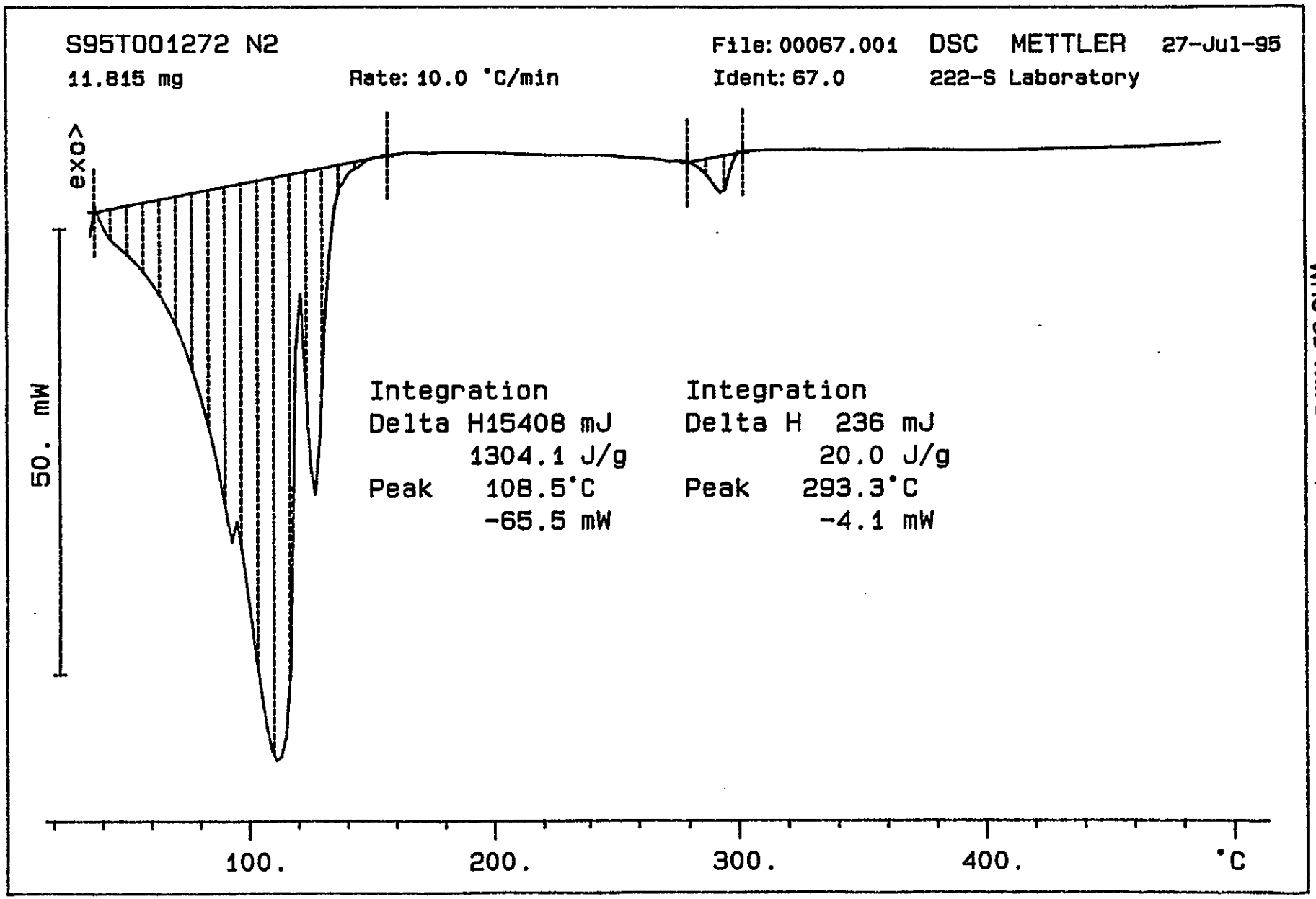
BEST AVAILABLE COPY



7/27/95

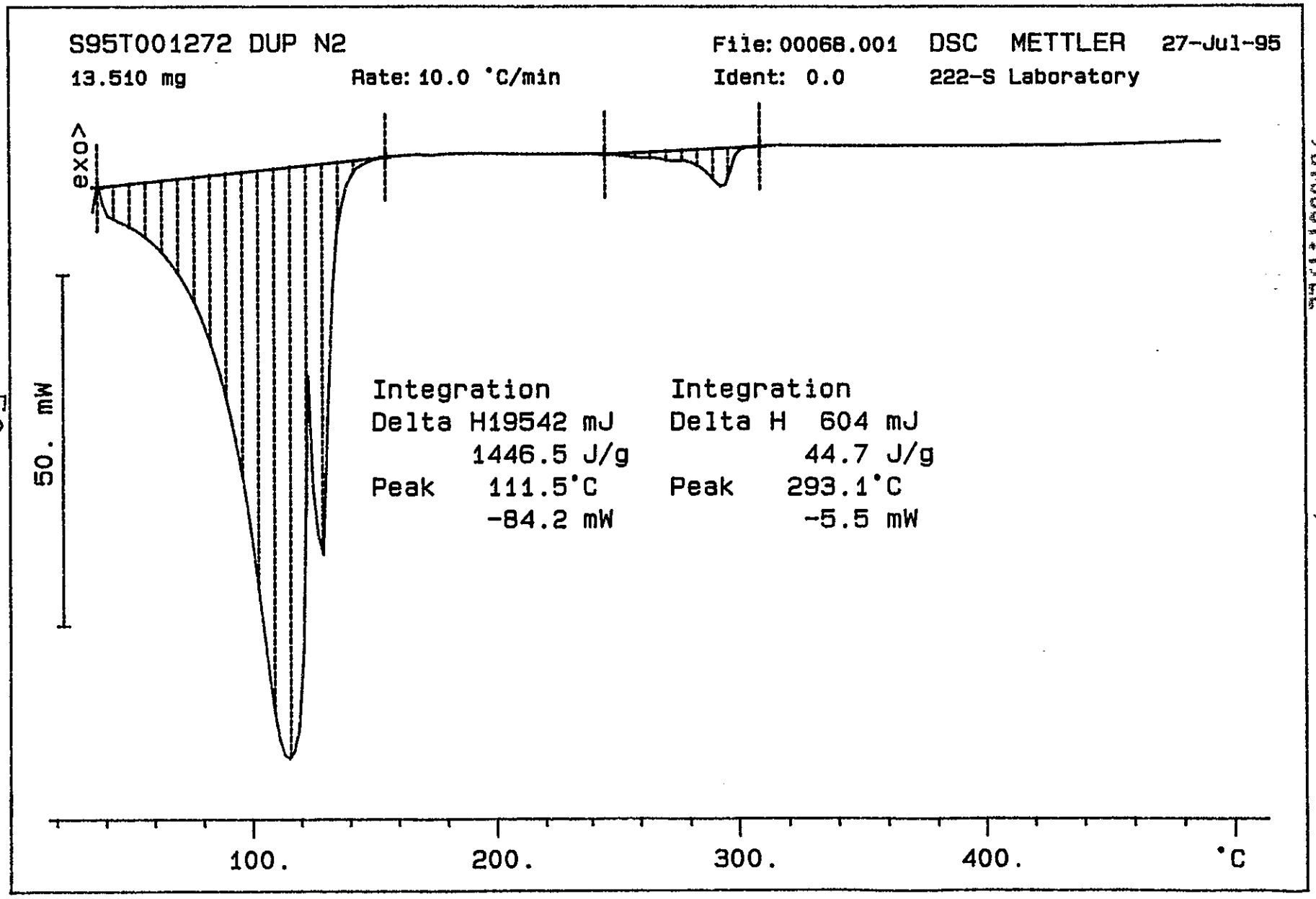
9513381.1980 WHC-SD-WM-DP-140, REV. 0

BEST AVAILABLE COPY



7/95

BEST AVAILABLE COPY



9513381.1927 WHC-SD-WM-DP-140, REV. 0

50

JC [illegible] 7/27/95

worklistrpt Version 2.1 05/15/95
07/31/95 11:03

LABCORE Data Entry Template for Worklist# 1897

Analyst: JDS **Instrument:** TGA0 1 **Book #** 65N8A

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

Worklist Comment: Please run B-106 TGAs under N2. bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	-------TEST------	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA-01	SOLID	59.74	61.94	N/A	%
95000096	B-106	2	SAMPLE	S95T001275	0		TGA-01	SOLID	N/A	~~62.60~~ 63.52 7-31-95 BDV		%
95000096	B-106	3	DUP	S95T001275	0		TGA-01	SOLID	63.52	62.60	N/A	%
		4	STD				TGA-01	SOLID	59.74	60.60	N/A	%
95000096	B-106	5	SAMPLE	S95T001278	0		TGA-01	SOLID	N/A	59.52		%
95000096	B-106	6	DUP	S95T001278	0		TGA-01	SOLID	59.52	58.84	N/A	%

Final page for worklist # 1897

See attached for signatures
Analyst Signature **Date** 7-31-95

Verified by Blandina Valenzuela BDV 8-2-95

[signature] 7-31-95
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# 1897

Analyst: Jds **Instrument:** TGA0 **Book #** 65N84

Method: LA-560-112 Rev/Mod A2

Worklist Comment: Please run B-106 TGAs under N2. bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	-------TEST------	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA-01	SOLID			N/A	%
95000096	B-106	2	SAMPLE	S95T001275	0		TGA-01	SOLID	N/A			%
95000096	B-106	3	DUP	S95T001275	0		TGA-01	SOLID			N/A	%
95000096	B-106	4	SAMPLE	S95T001278	0		TGA-01	SOLID	N/A			%
95000096	B-106	5	DUP	S95T001278	0		TGA-01	SOLID			N/A	%

Final page for worklist # 1897

Jds 7-28-95

Analyst Signature **Date**

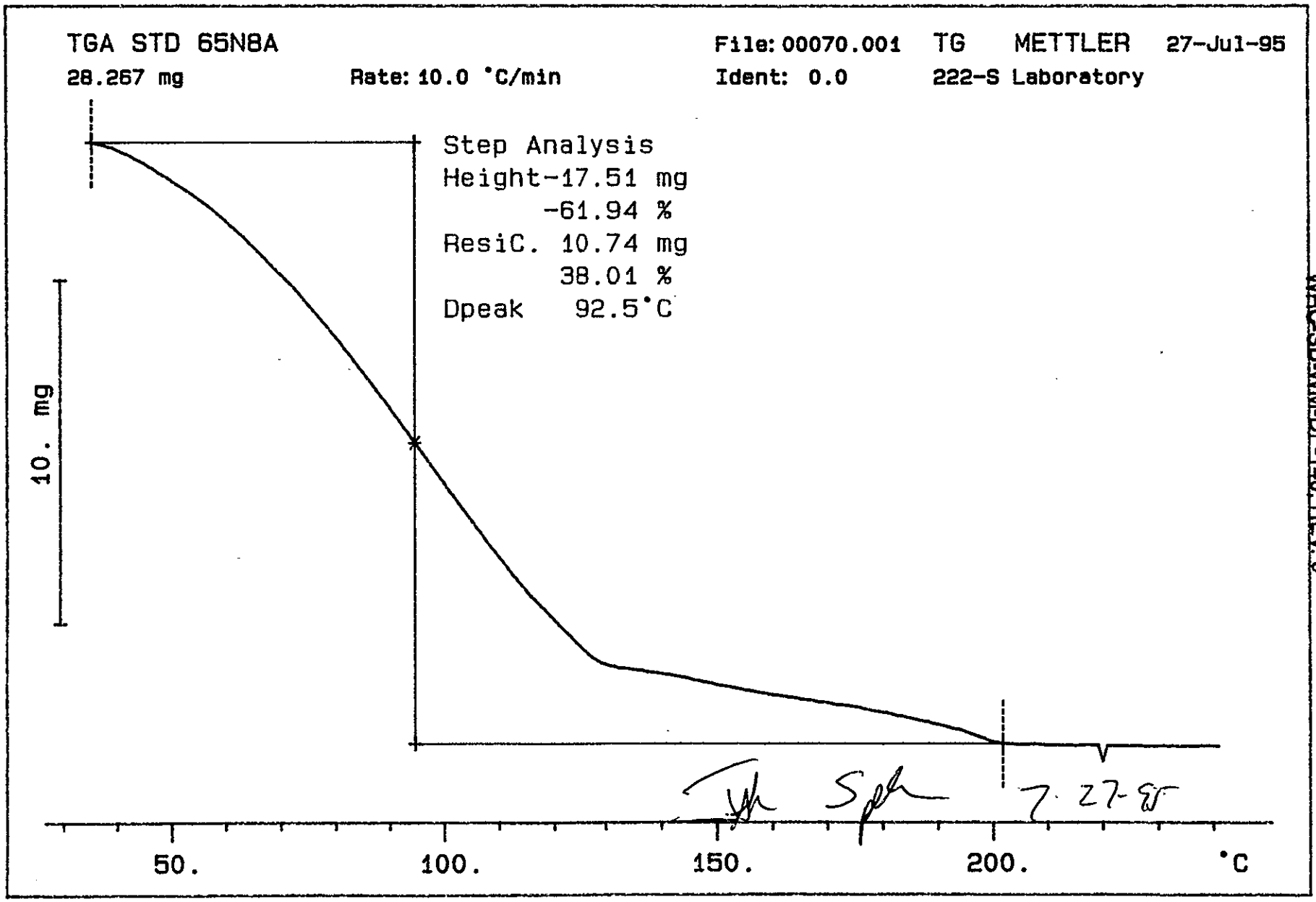
Analyst Signature **Date**

Data Entry Comments:

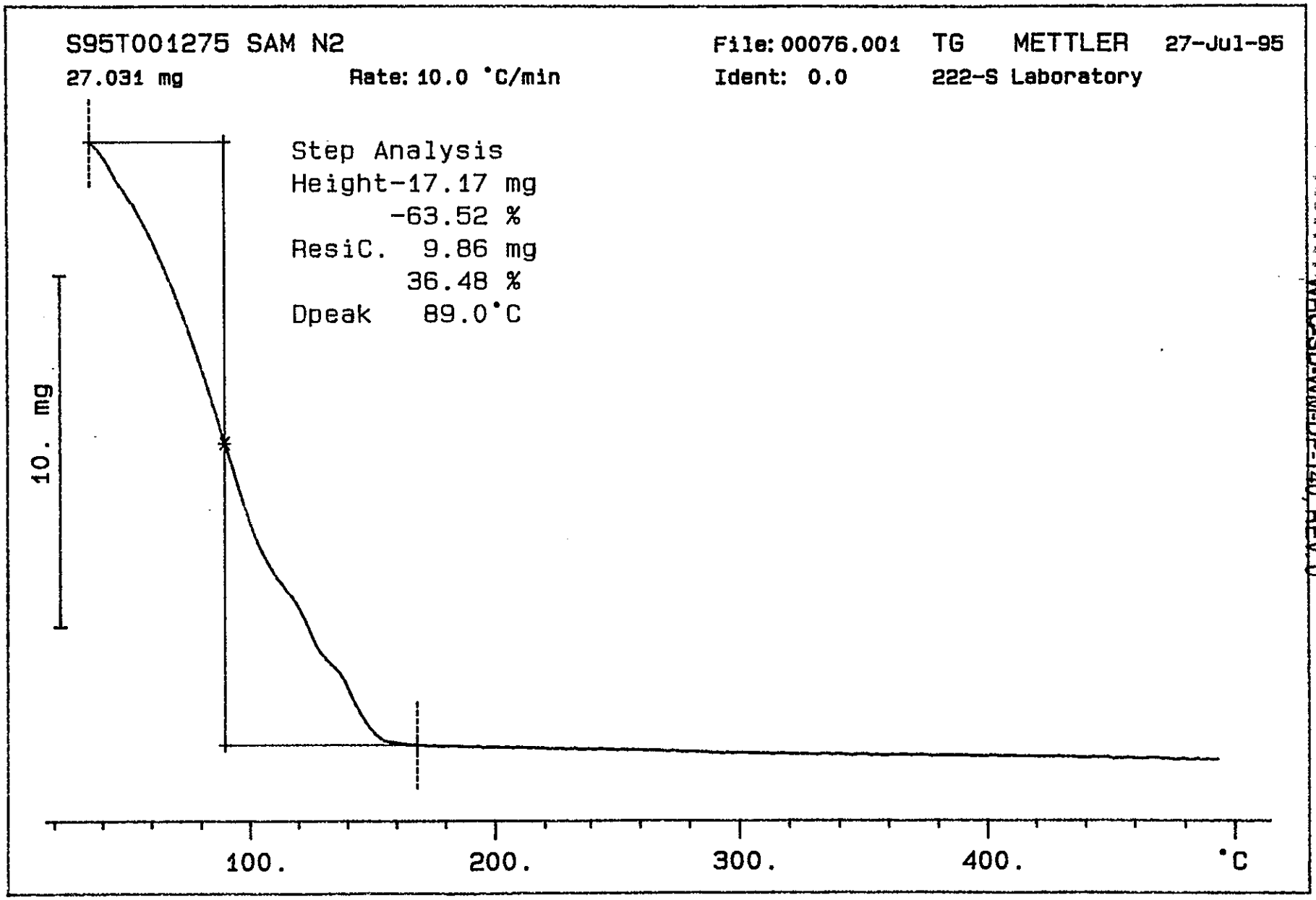
Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 53 TO 58.

BEST AVAILABLE COPY

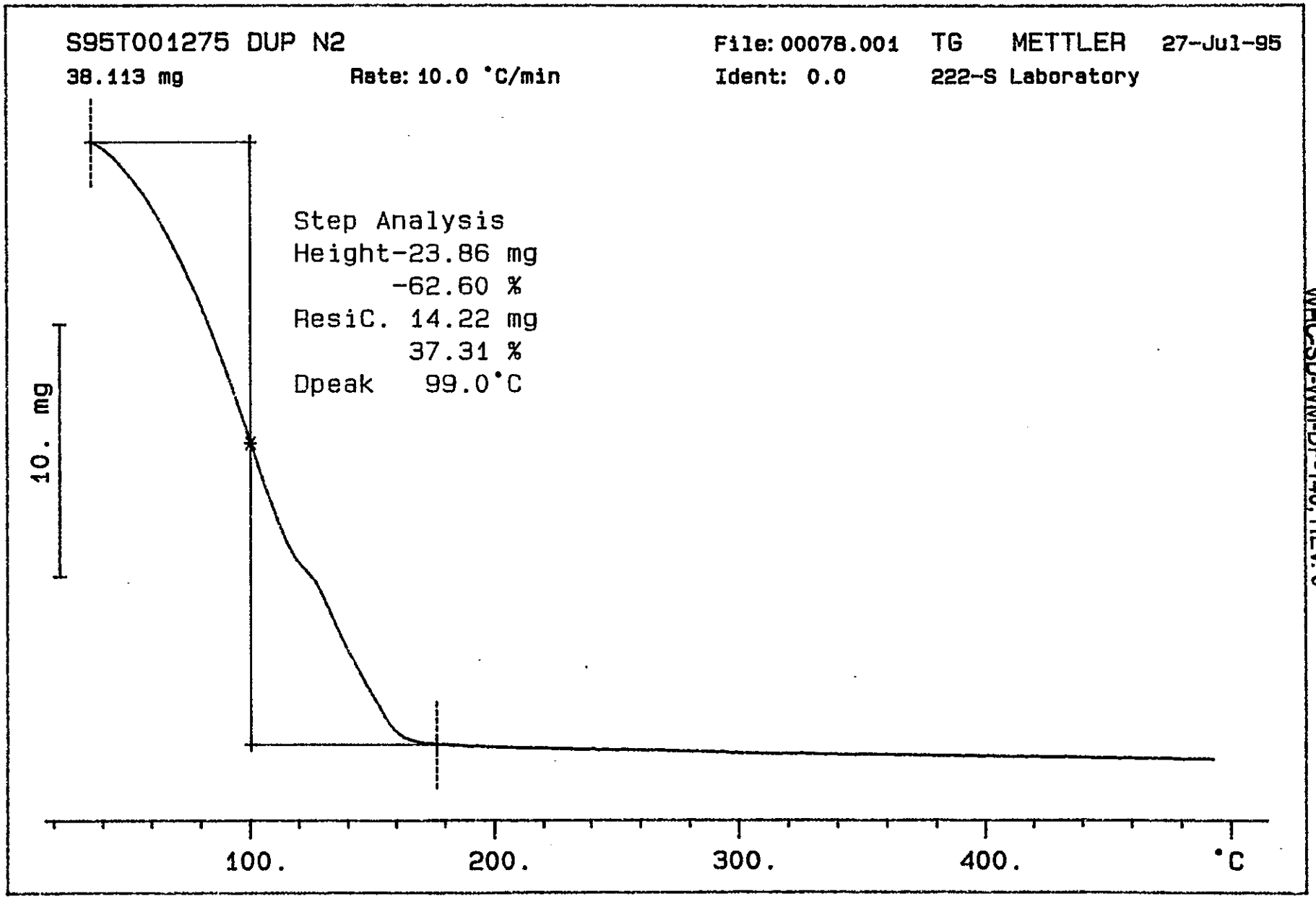


BEST AVAILABLE COPY

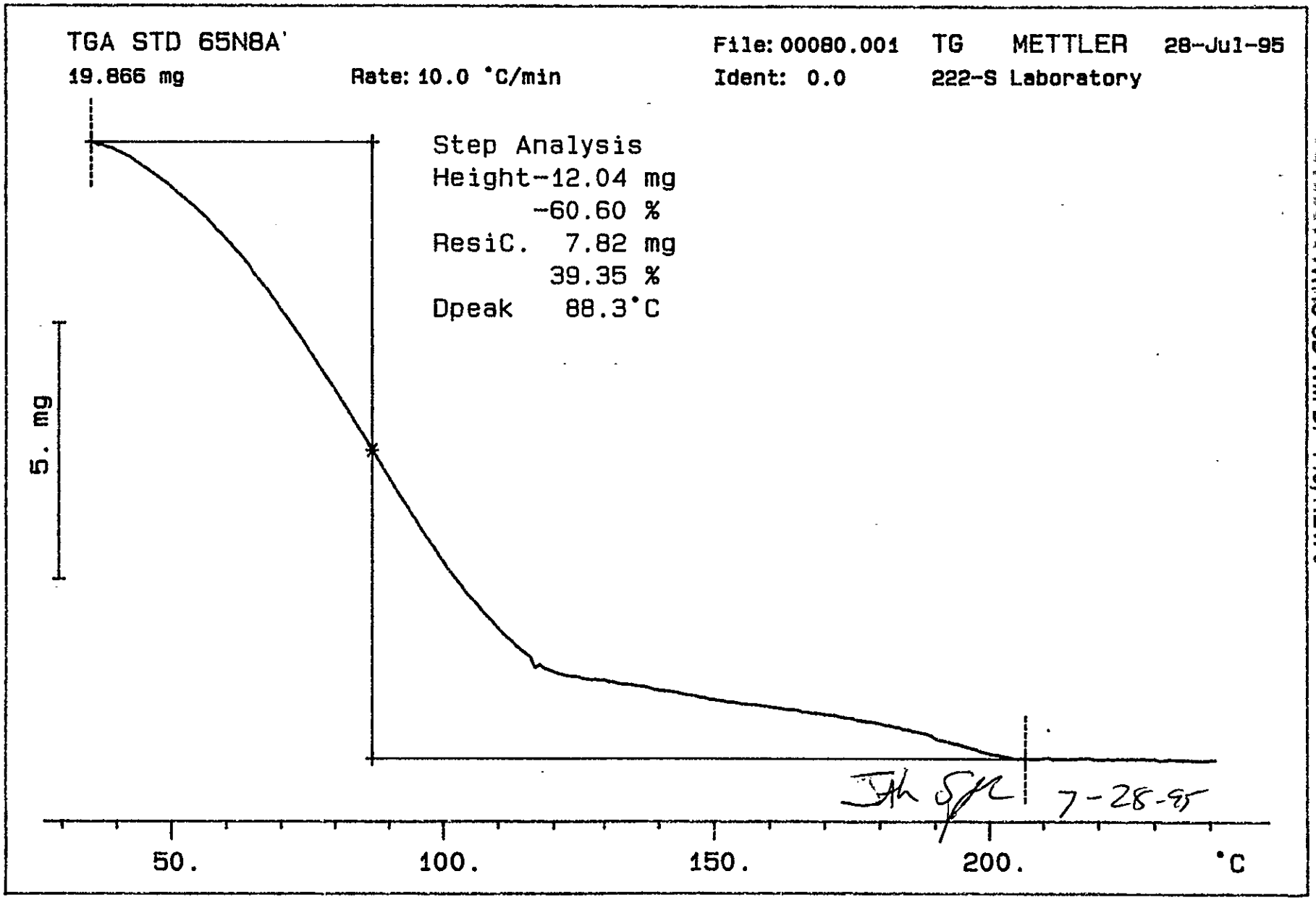


9513381.1034
WHC-SD-WM-DP-140, REV. 0

BEST AVAILABLE COPY

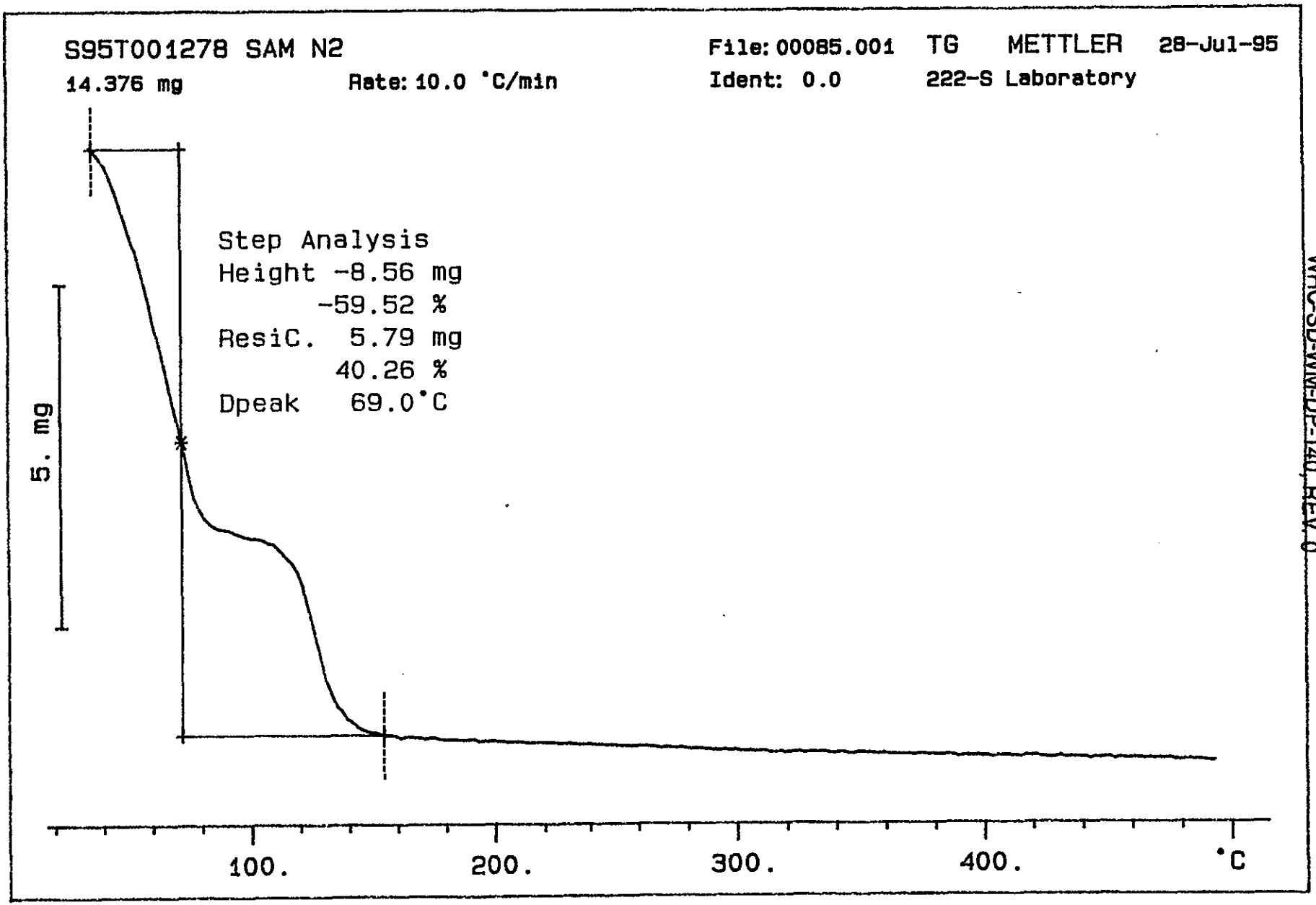


BEST AVAILABLE COPY

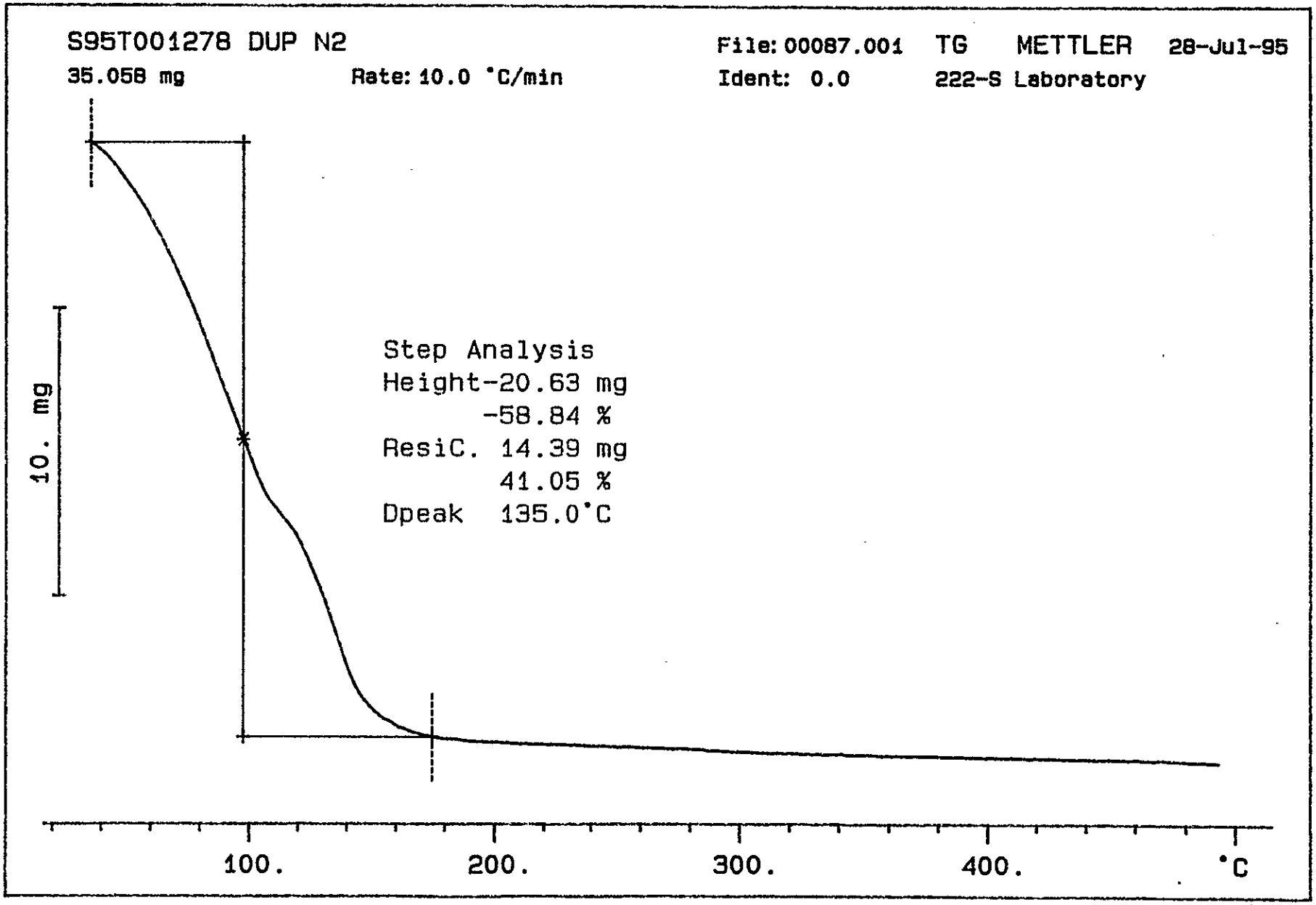


9513381.1026 HNF-SD-WM-DP-140, REV. 0

BEST AVAILABLE COPY



BEST AVAILABLE COPY



95T558 WHC-SD-WM-DP-140, REV. 0

LABCORE Data Entry Template for Worklist# 1898

Analyst: Sds **Instrument:** TGA0 1 **Book #** 65 N84

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

Worklist Comment: Please run B-106 TGAs under N2. bdv

GROUP	PROJECT	S TYPE	SAMPLE#	R	A	-------TEST------	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD				TGA-01	SOLID	59.74	60.44	N/A	%
95000096	B-106	2 SAMPLE	S95T001281	0		TGA-01	SOLID	N/A	55.98		%
95000096	B-106	3 DUP	S95T001281	0		TGA-01	SOLID	55.98	57.20	N/A	%
95000096	B-106	4 SAMPLE	S95T001284	0		TGA-01	SOLID	N/A	59.13		%
95000096	B-106	5 DUP	S95T001284	0		TGA-01	SOLID	59.13	60.39	N/A	%

Final page for worklist # 1898

JAK 8-3-95
Analyst Signature **Date**

8-7-95
Analyst Signature **Date**

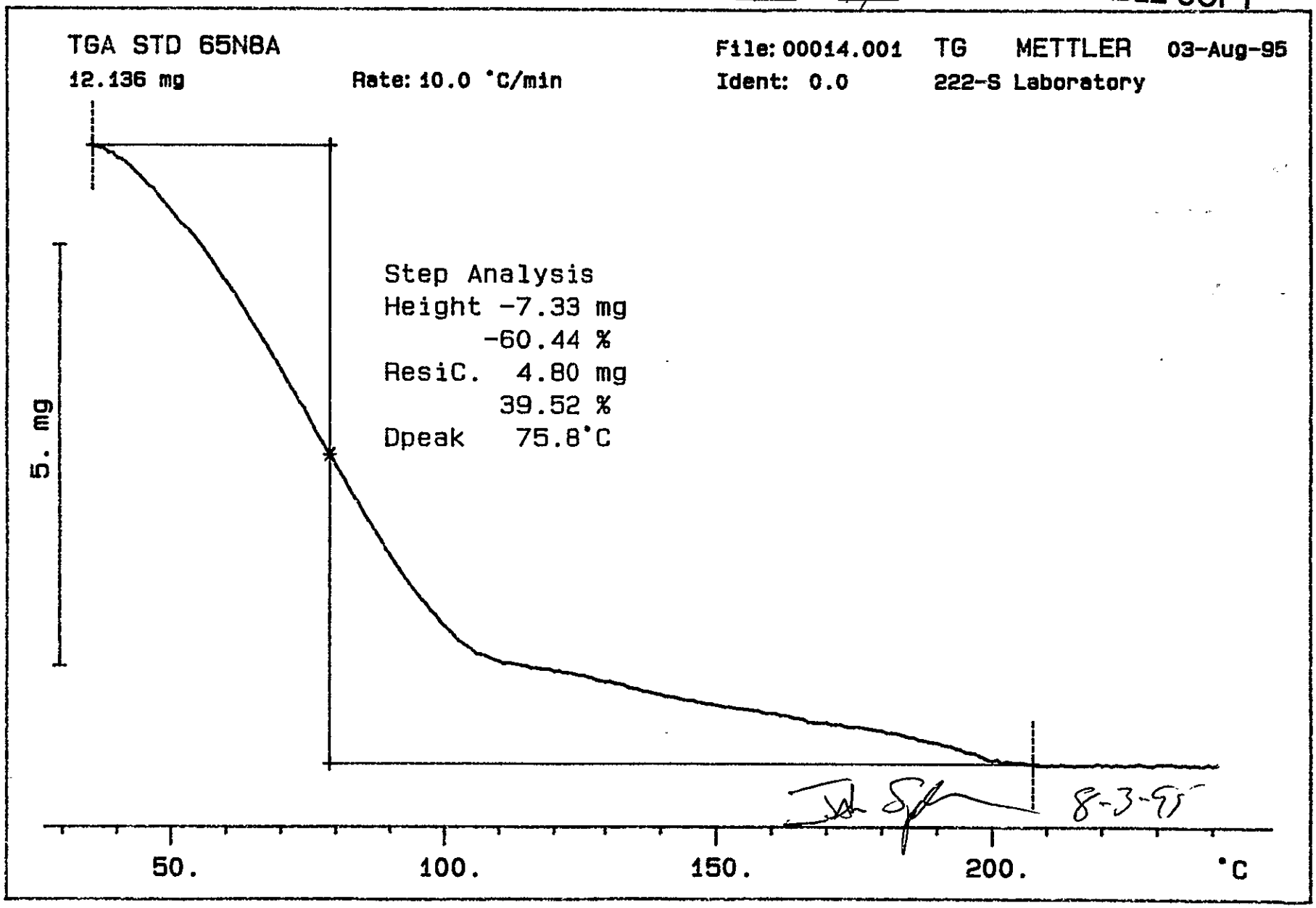
Verified by Blandina Valenzuela 8-8-95

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.

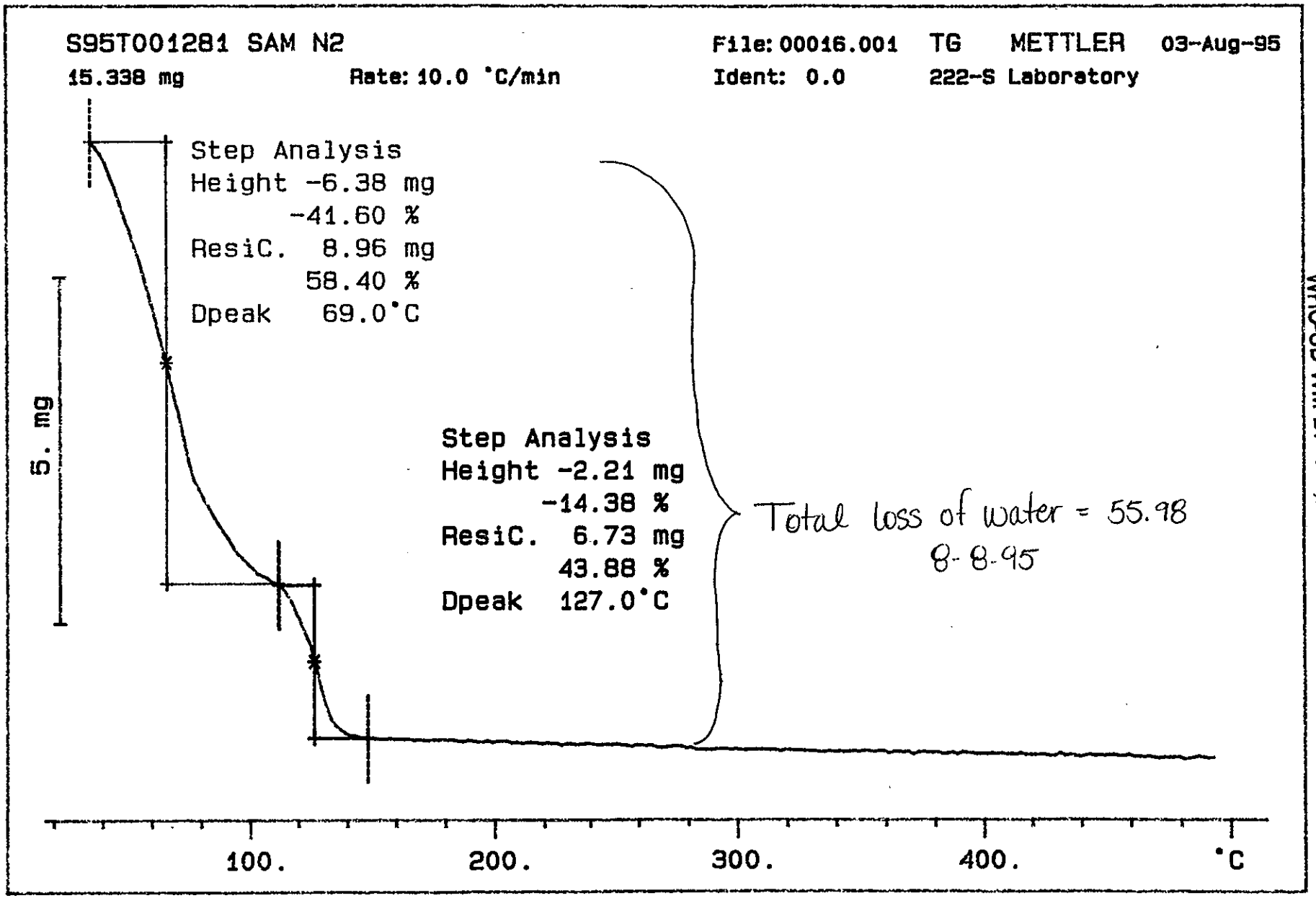
SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 60 TO 64.

BEST AVAILABLE COPY

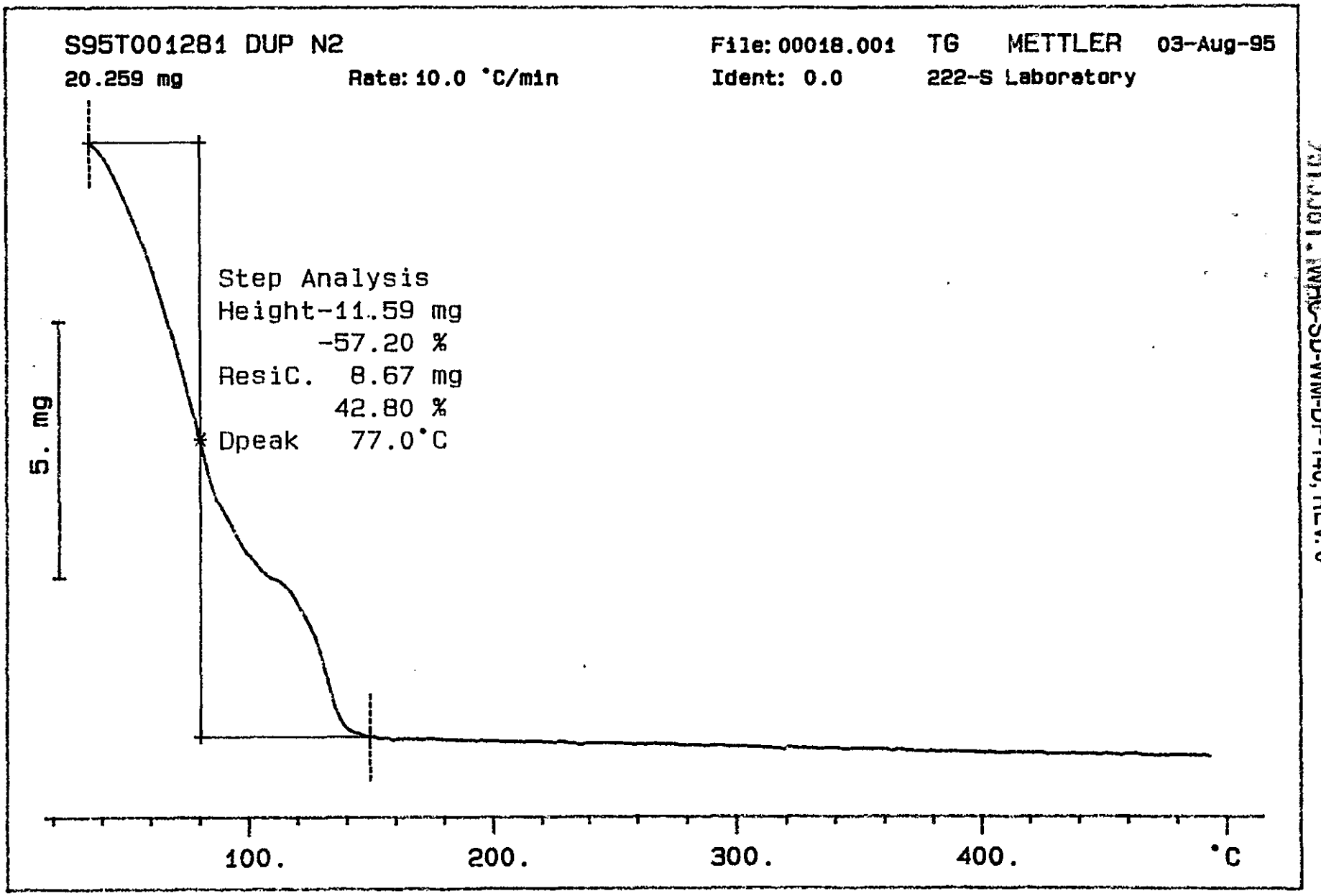


WHC-SD-WM-DP-140, REV. 0

BEST AVAILABLE COPY

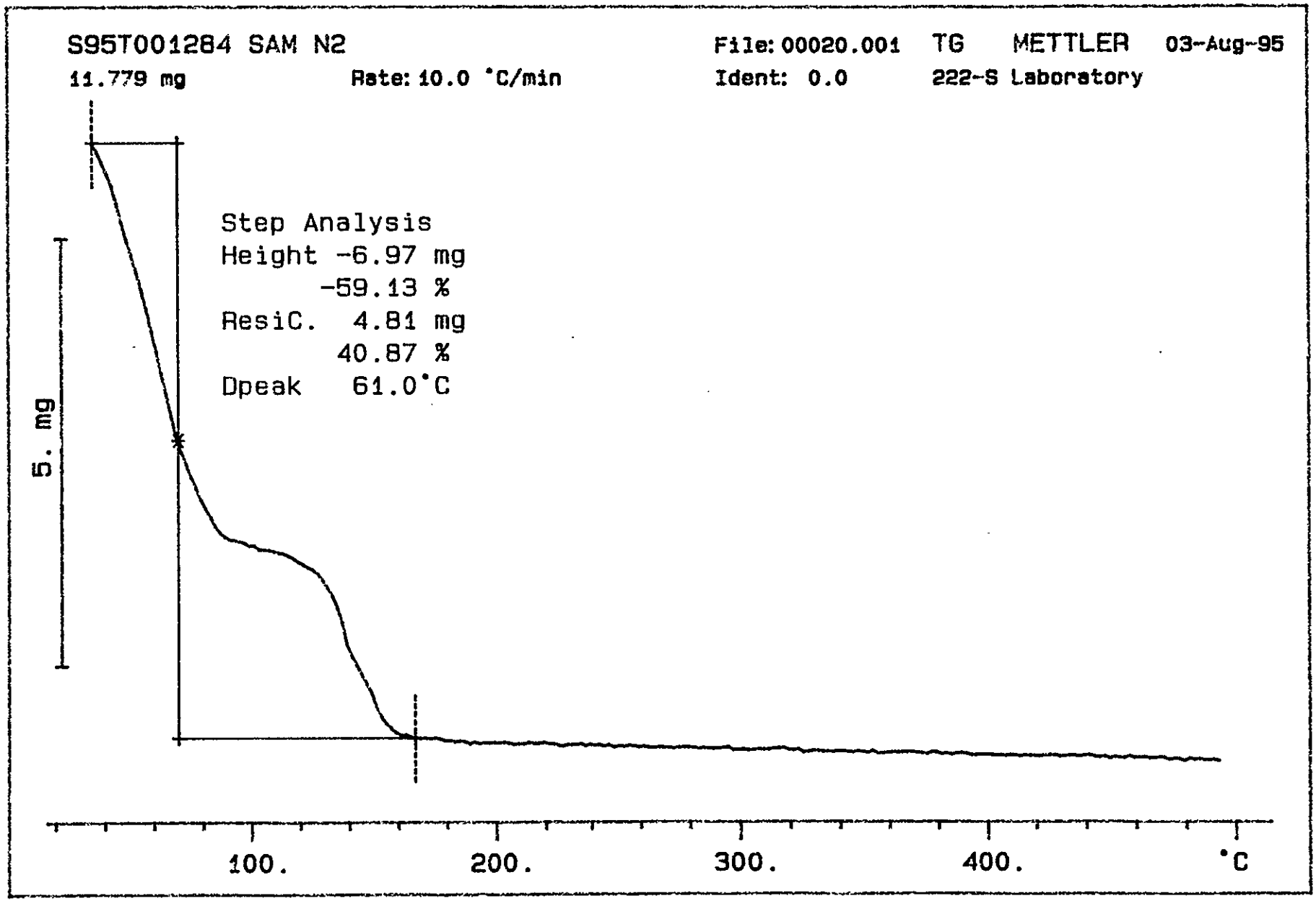


BEST AVAILABLE COPY

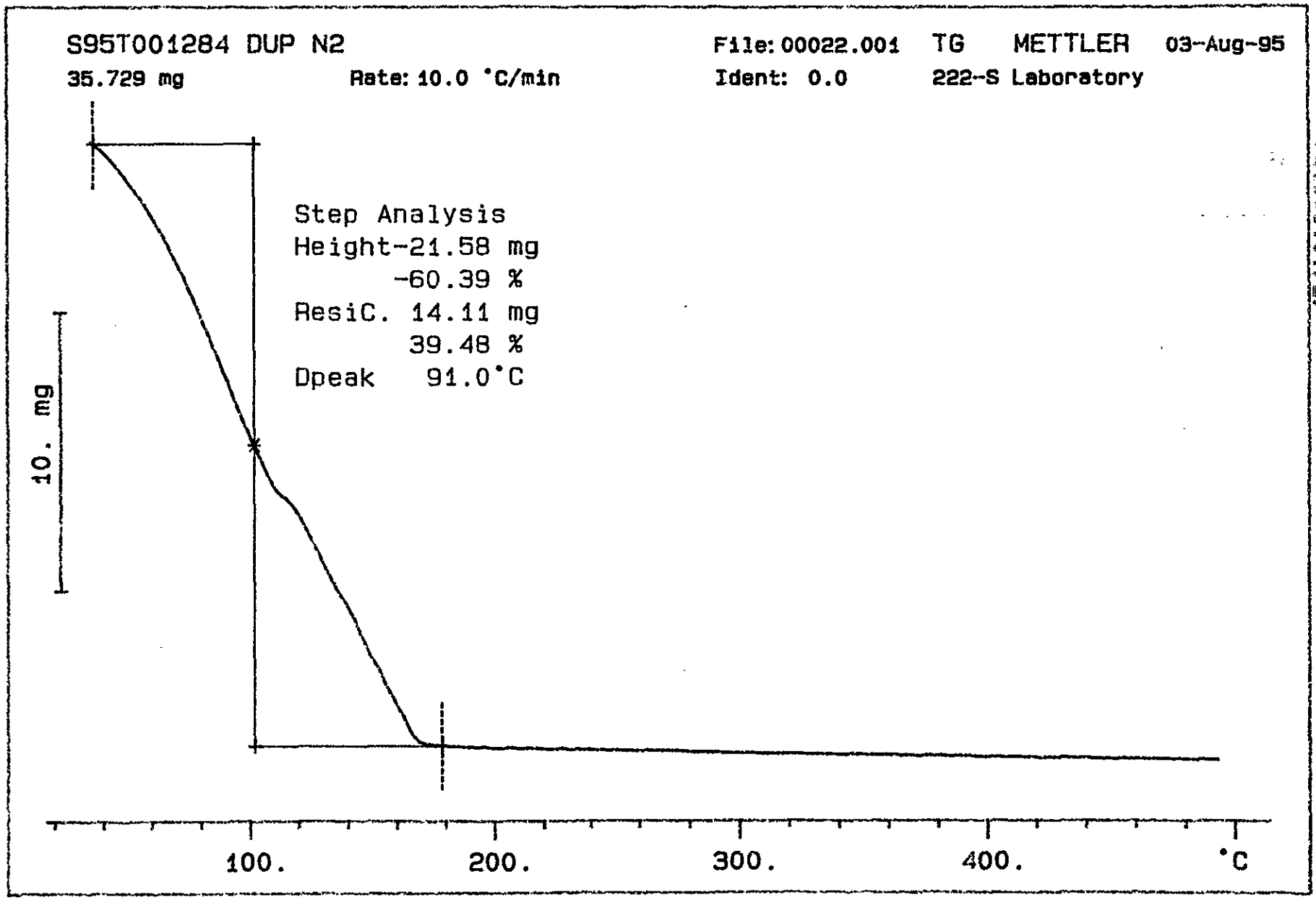


9513381.WHC-SD-WM-DP-140, REV. 0

BEST AVAILABLE COPY



BEST AVAILABLE COPY



9513381.1172
WHC-SD-WM-DP-140, REV. 0

LABCORE Data Entry Template for Worklist# 1899

Analyst: SMF **Instrument:** TGA0 1 **Book #** 65N8-A

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

Worklist Comment: Please run B-106 TGAs under N2. bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	-------TEST------	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA-01	SOLID	59.74	61.74	N/A	%
95000096	B-106	2	SAMPLE	S95T001298	0		TGA-01	SOLID	N/A	65.05		%
95000096	B-106	3	DUP	S95T001298	0		TGA-01	SOLID	65.05	63.13	N/A	%
		4	STD				TGA-01	SOLID	59.74	59.92	N/A	%
95000096	B-106	5	SAMPLE	S95T001302	0		TGA-01	SOLID	N/A	62.36		%
95000096	B-106	6	DUP	S95T001302	0		TGA-01	SOLID	62.36	62.34	N/A	%

Final page for worklist # 1899

See attached for signatures 8-8-95
Analyst Signature **Date**

[signature] 8-8-95
Analyst Signature **Date**

Verified by Blandina Valenzuela 8-9-95

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# 1899

Analyst: SMF **Instrument:** TGA0 1 **Book #** 865N8A

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

Worklist Comment: Please run B-106 TGAs under N2. bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA-01	SOLID			N/A	%
95000096	B-106	2	SAMPLE	S95T001298	0		TGA-01	SOLID	N/A			%
95000096	B-106	3	DUP	S95T001298	0		TGA-01	SOLID			N/A	%
95000096	B-106	4	SAMPLE	S95T001302	0		TGA-01	SOLID	N/A			%
95000096	B-106	5	DUP	S95T001302	0		TGA-01	SOLID			N/A	%

Final page for worklist # 1899

Susie M. Dutton 8-8-95

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.

SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 67 TO 72. BEST AVAILABLE COPY

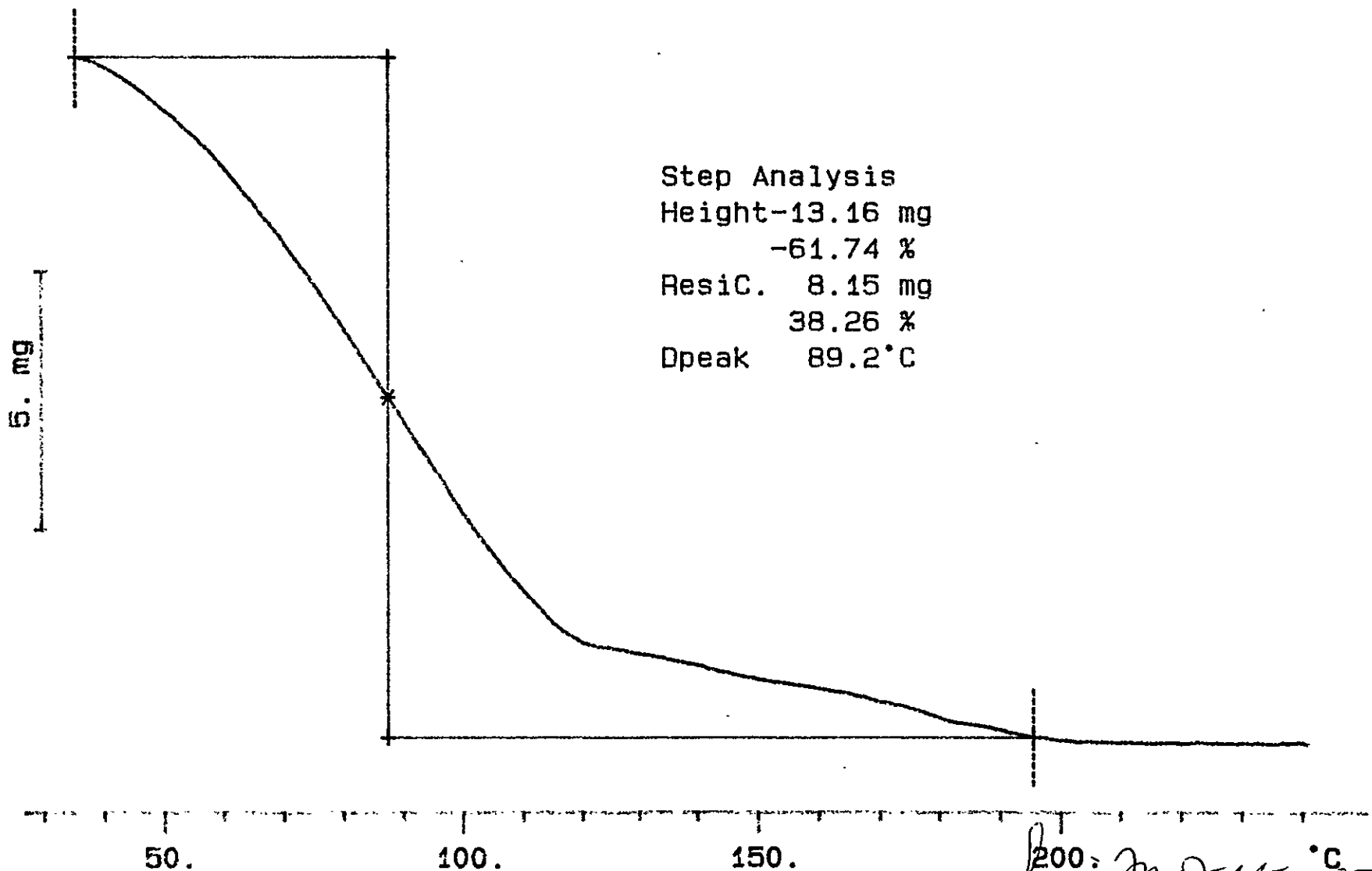
TGA STD 65N8A

21.315 mg

Rate: 10.0 °C/min

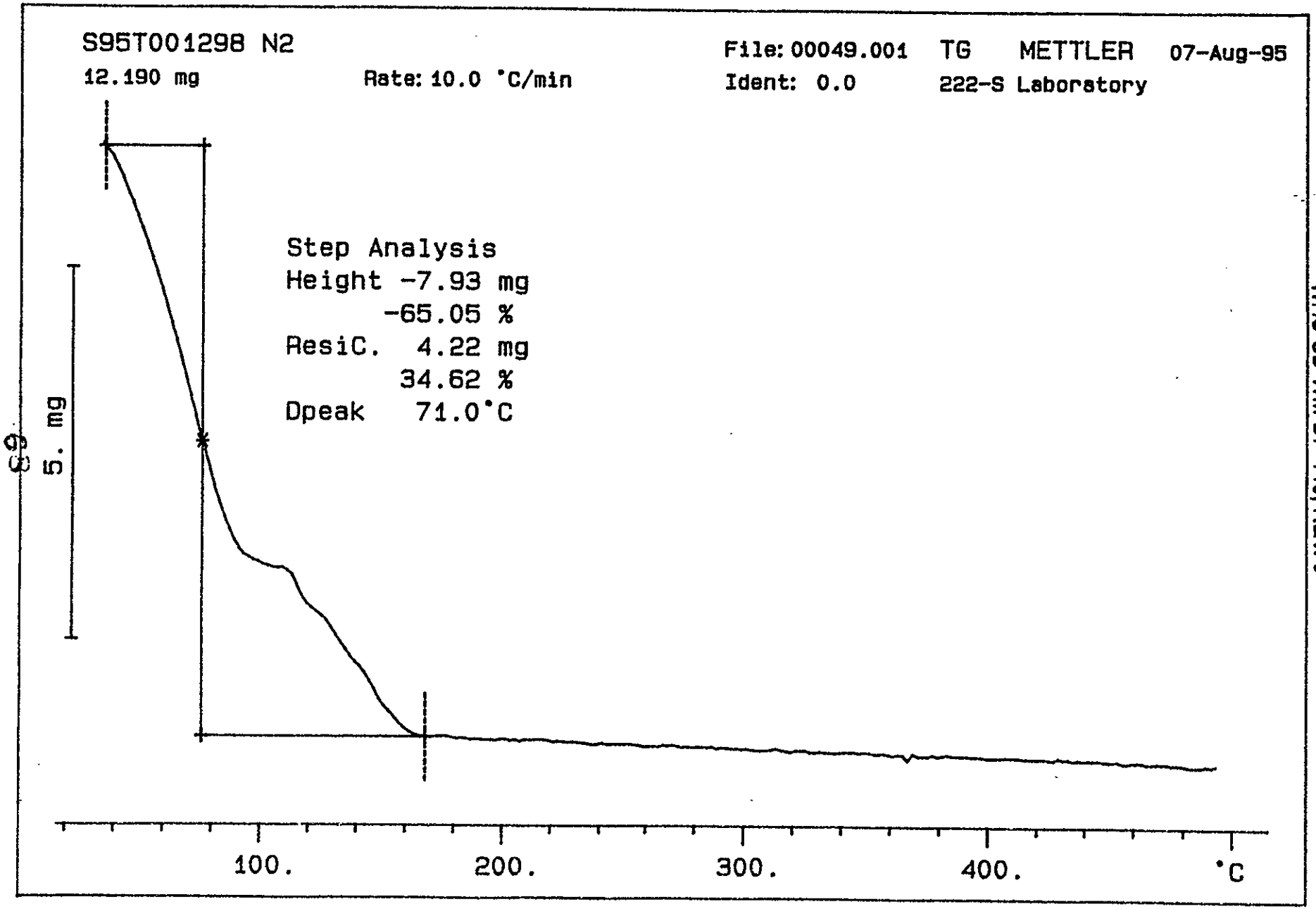
File: 00048.001 TG METTLER 07-Aug-95

Ident: 0.0 222-S Laboratory



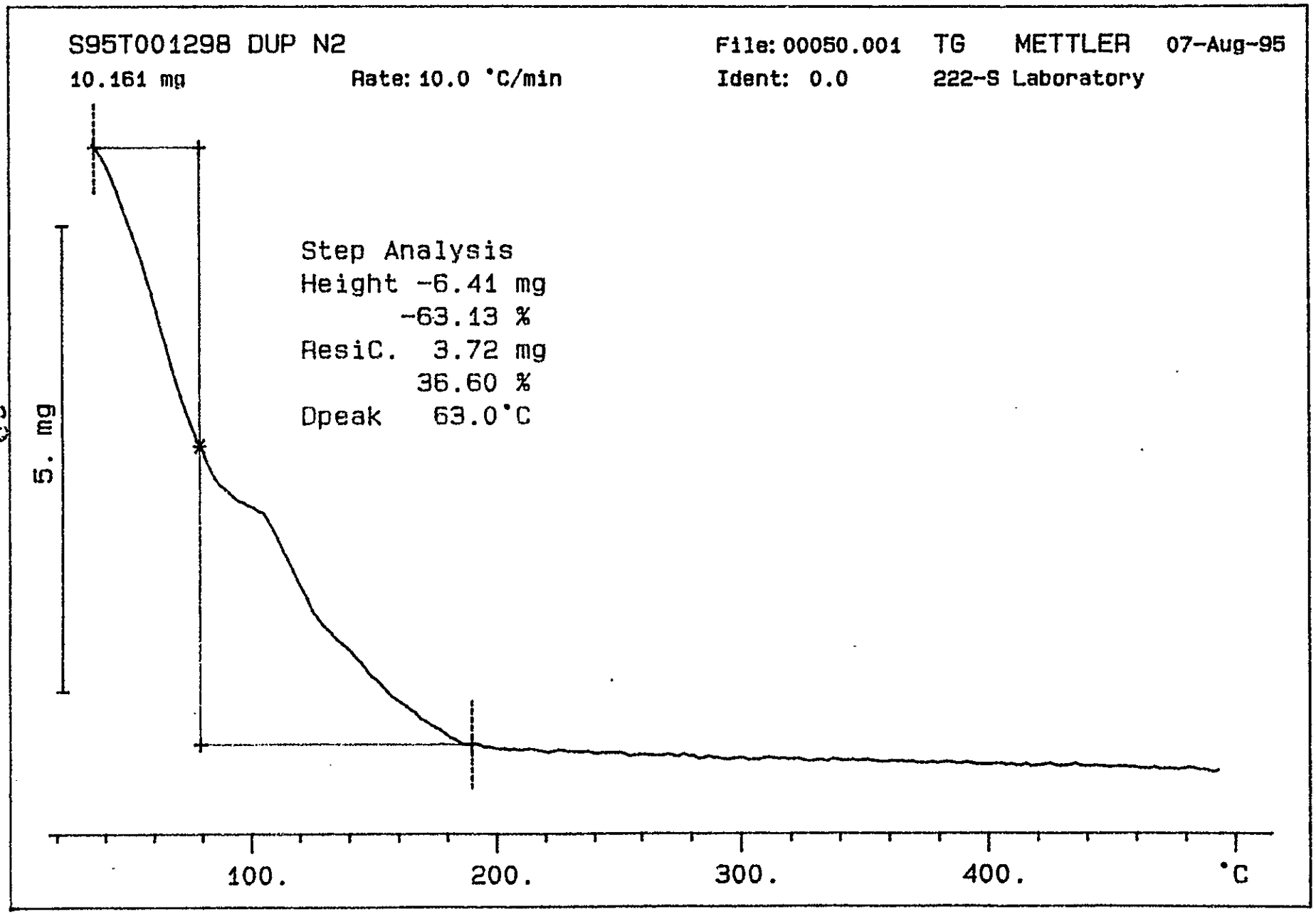
Susie M. Dalton 8-7-95

BEST AVAILABLE COPY



9513381.1831
WHC-SD-WM-DP-140, REV. 0

BEST AVAILABLE COPY



BEST AVAILABLE COPY

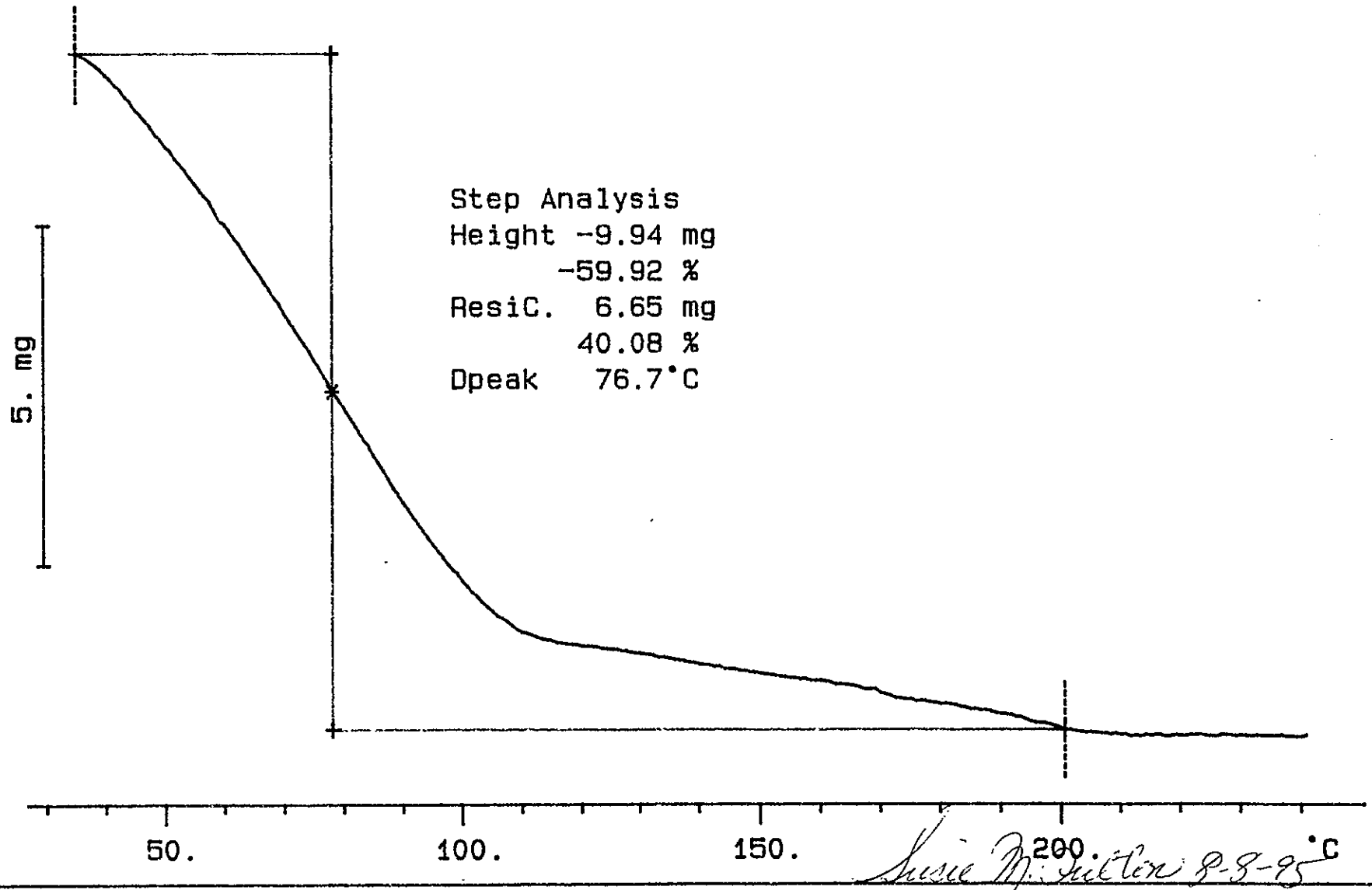
TGA STD 65N8A

16.597 mg

Rate: 10.0 °C/min

File: 00063.001 TG METTLER 08-Aug-95

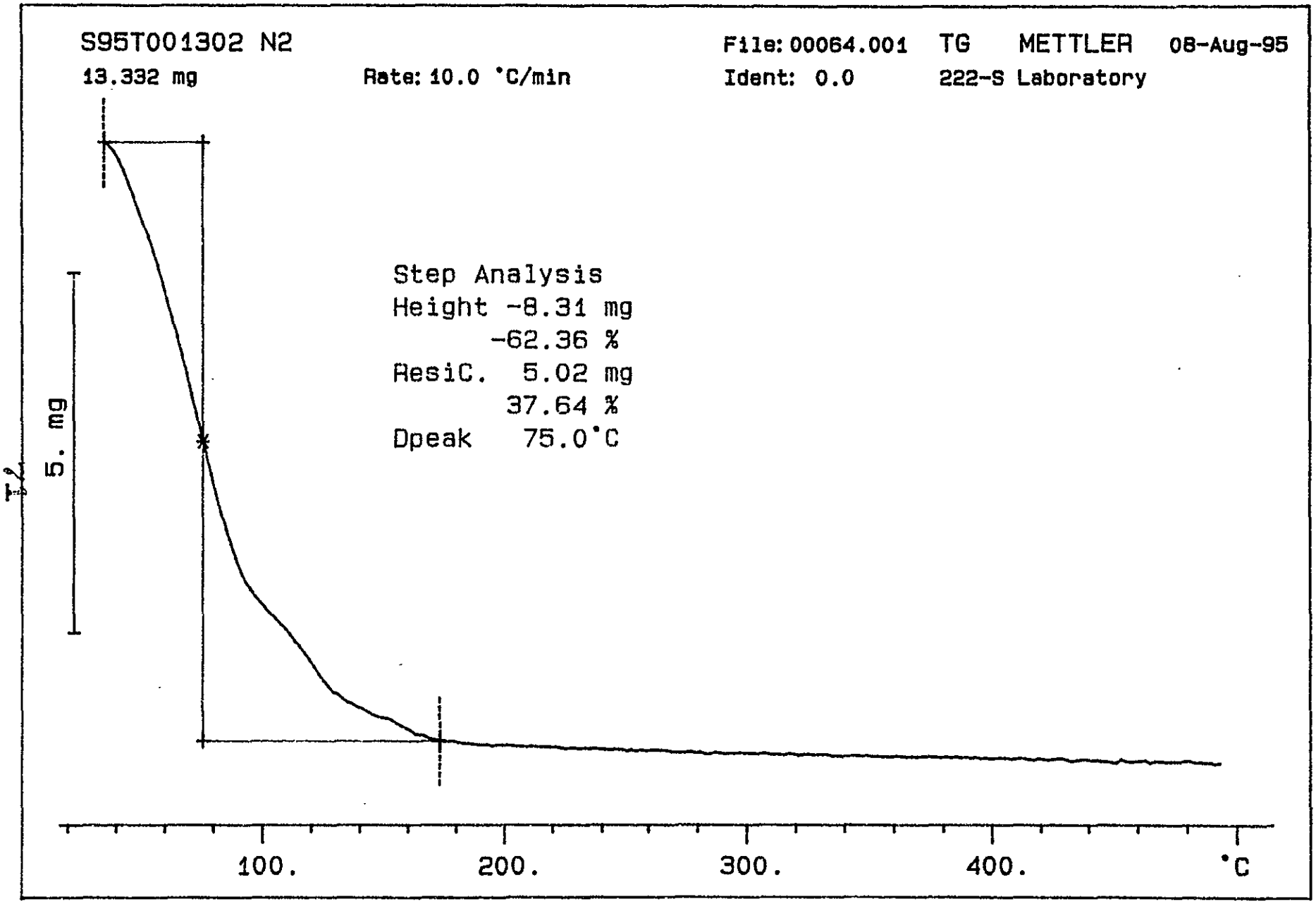
Ident: 0.0 222-S Laboratory



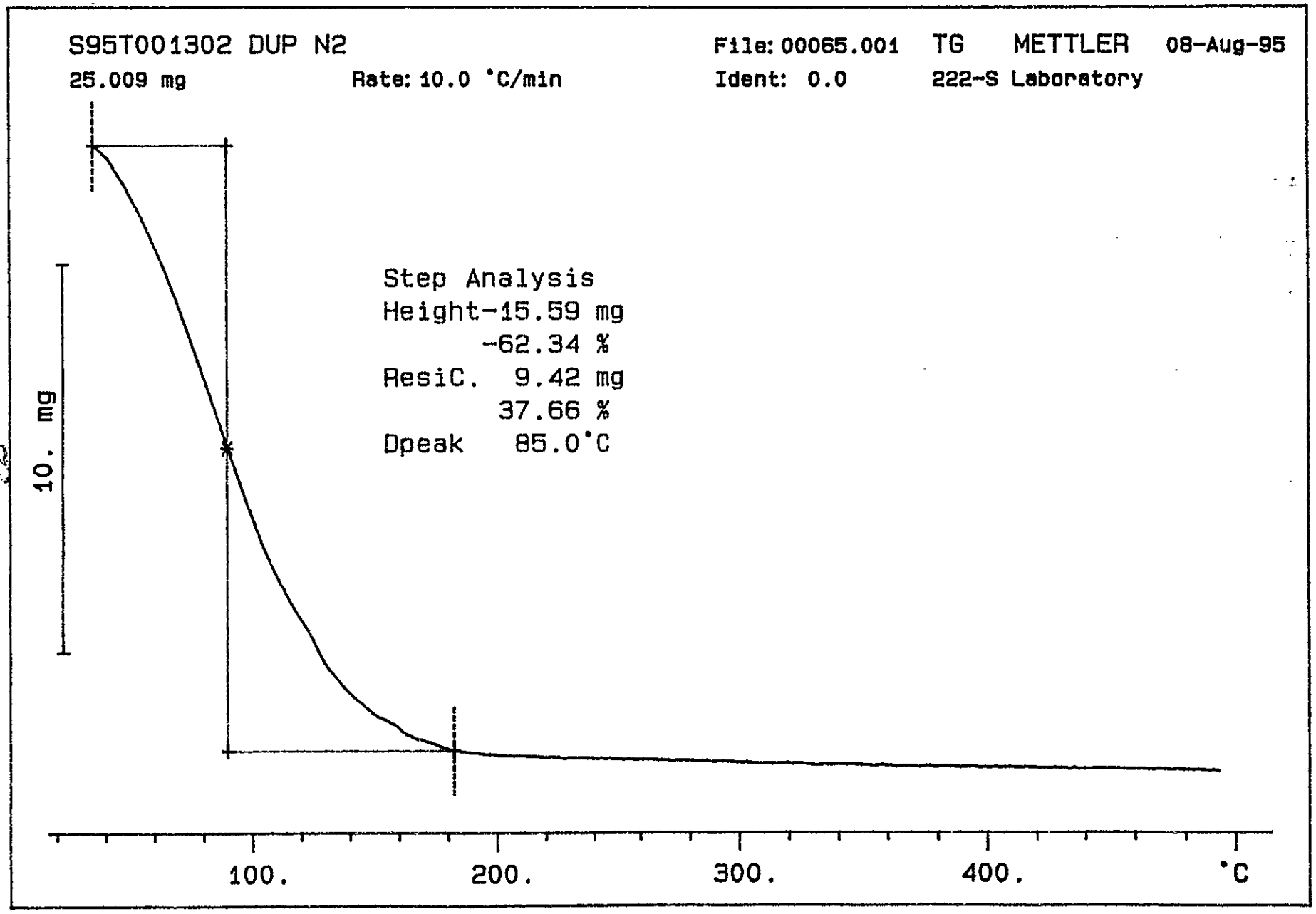
Susie M. Fritton 8-8-95

9513381.1932
WHC-SD-WM-DP-140, REV. 0

BEST AVAILABLE COPY



BEST AVAILABLE COPY



WHC-SD-WM-DP-140, REV. 0

LABCORE Data Entry Template for Worklist# 1900

Analyst: JDS **Instrument:** TGA0 1 **Book #** 65N8-A

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

Worklist Comment: Please run B-106 TGAs under N2. bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	-------TEST------	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA-01	SOLID	59.74	60.83	N/A	%
95000096	B-106	2	SAMPLE	S95T001306	0		TGA-01	SOLID	N/A	57.01		%
95000096	B-106	3	DUP	S95T001306	0		TGA-01	SOLID	57.01	57.08	N/A	%
		4	STD				TGA-01	SOLID	59.74	61.96	N/A	%
95000096	B-106	5	SAMPLE	S95T001310	0		TGA-01	SOLID	N/A	61.31		%
95000096	B-106	6	DUP	S95T001310	0		TGA-01	SOLID	61.31	61.45	N/A	%

Final page for worklist # 1900

See attached for signatures
Analyst Signature **Date** 8-1-95

Analyst Signature **Date** 8-2-95

Verified by Blandina Valenzuela 8-2-95

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# 1900

Analyst: JDS **Instrument:** TGA0 _____ **Book #** 65 N8A

Method: LA-560-112 Rev/Mod A2

Worklist Comment: Please run B-106 TGAs under N2. bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA-01	SOLID			N/A	%
95000096	B-106	2	SAMPLE	S95T001306	0		TGA-01	SOLID	N/A			%
95000096	B-106	3	DUP	S95T001306	0		TGA-01	SOLID			N/A	%
95000096	B-106	4	SAMPLE	S95T001310	0		TGA-01	SOLID	N/A			%
95000096	B-106	5	DUP	S95T001310	0		TGA-01	SOLID			N/A	%

Final page for worklist # 1900

8-1-95

Analyst Signature **Date**

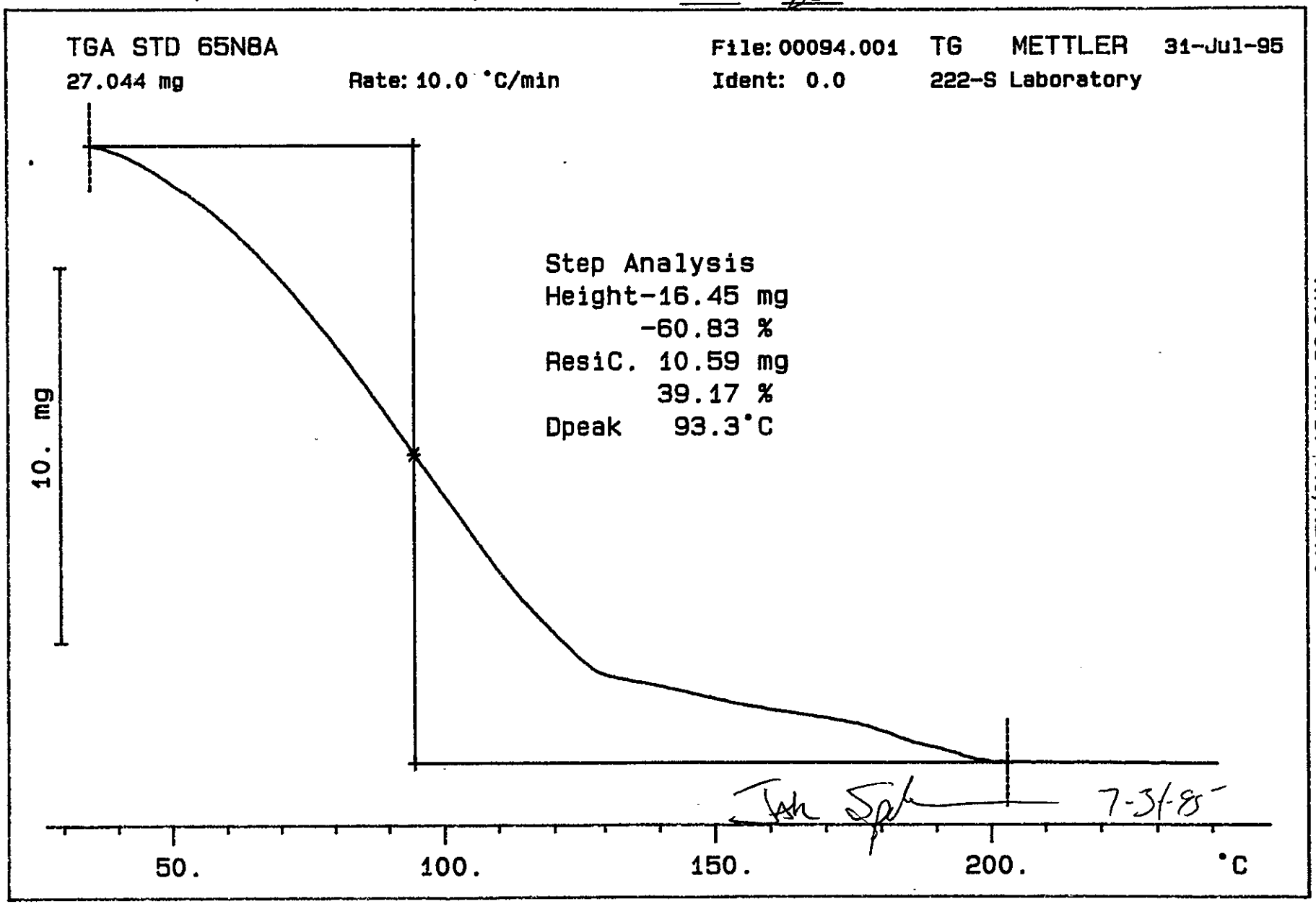
Analyst Signature **Date**

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.

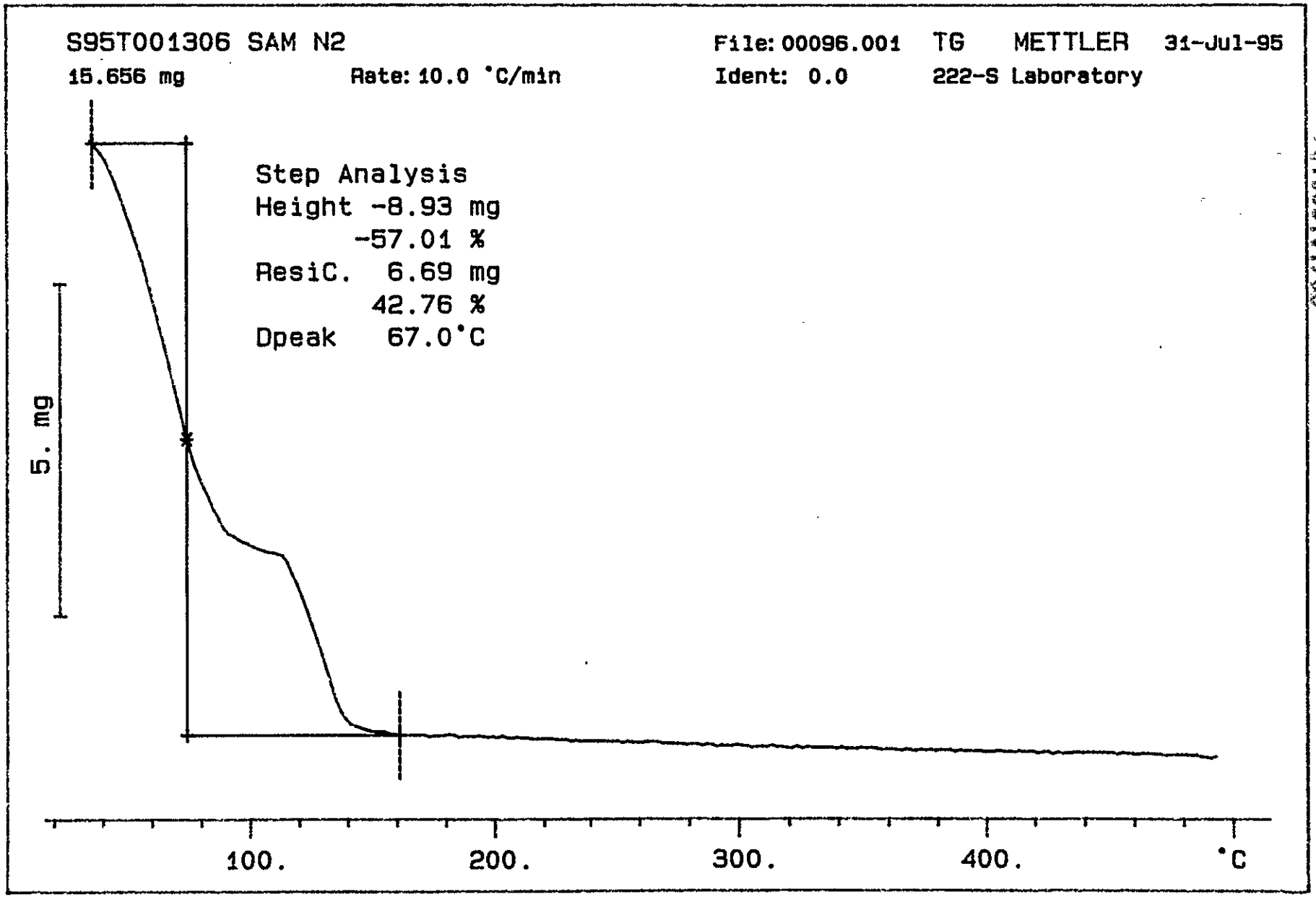
SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 75 TO 80.

BEST AVAILABLE COPY



7-31-95

BEST AVAILABLE COPY



95133B1.1933 WHC-SD-WM-DP-140, REV. 0

BEST AVAILABLE COPY

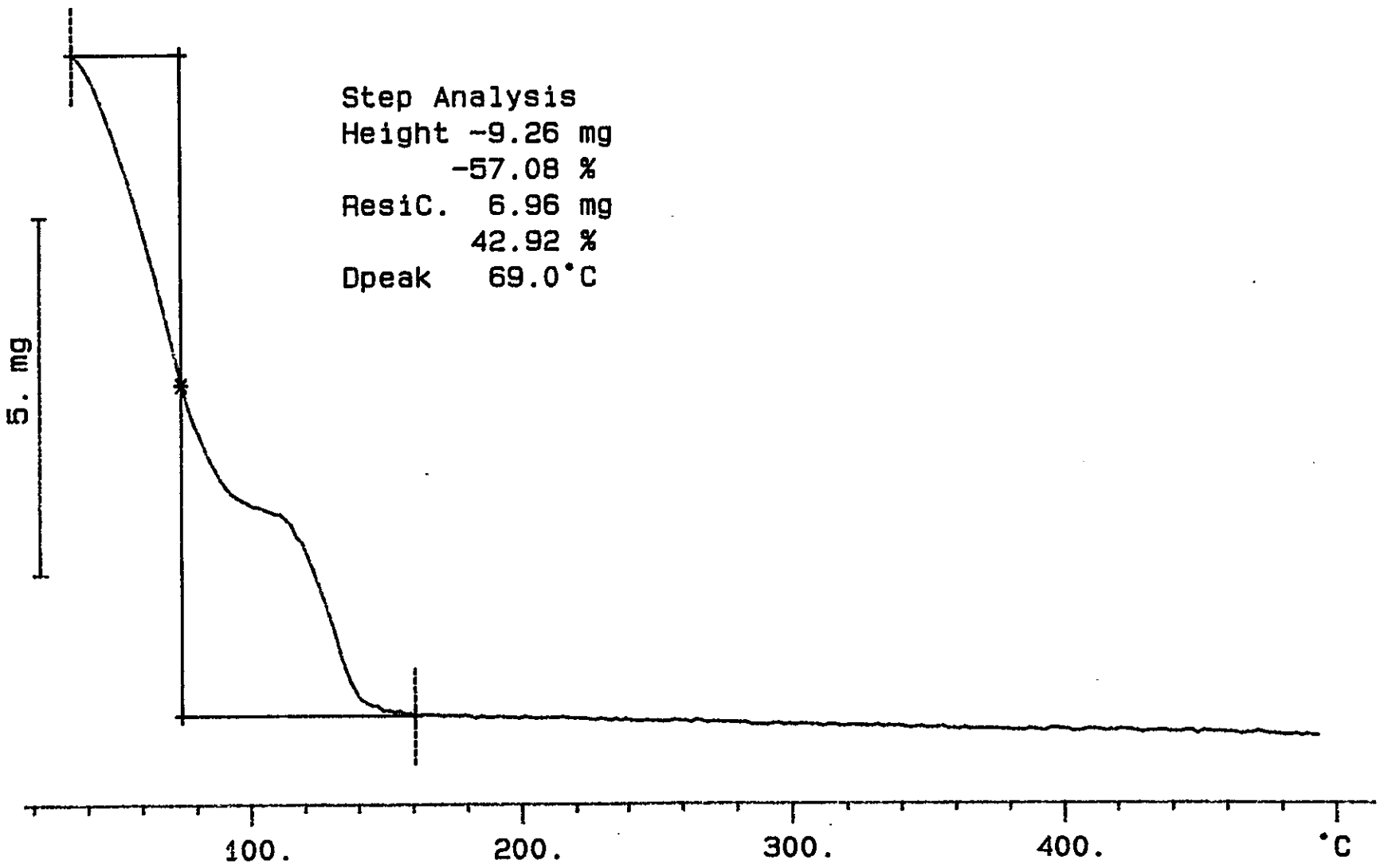
S95T001306DUP

16.215 mg

Rate: 10.0 °C/min

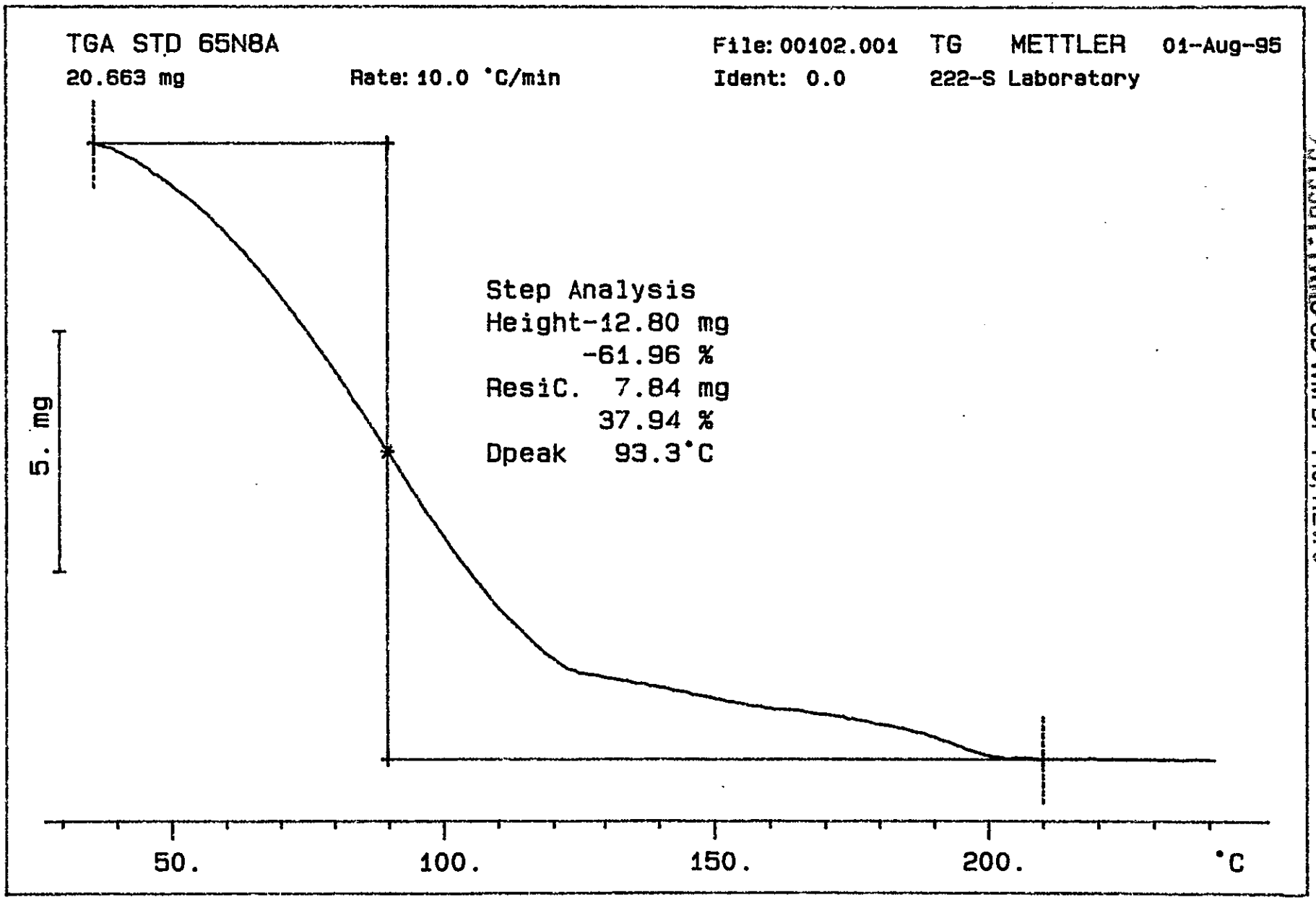
File: 00100.001 TG METTLER 31-Jul-95

Ident: 0.0 222-S Laboratory



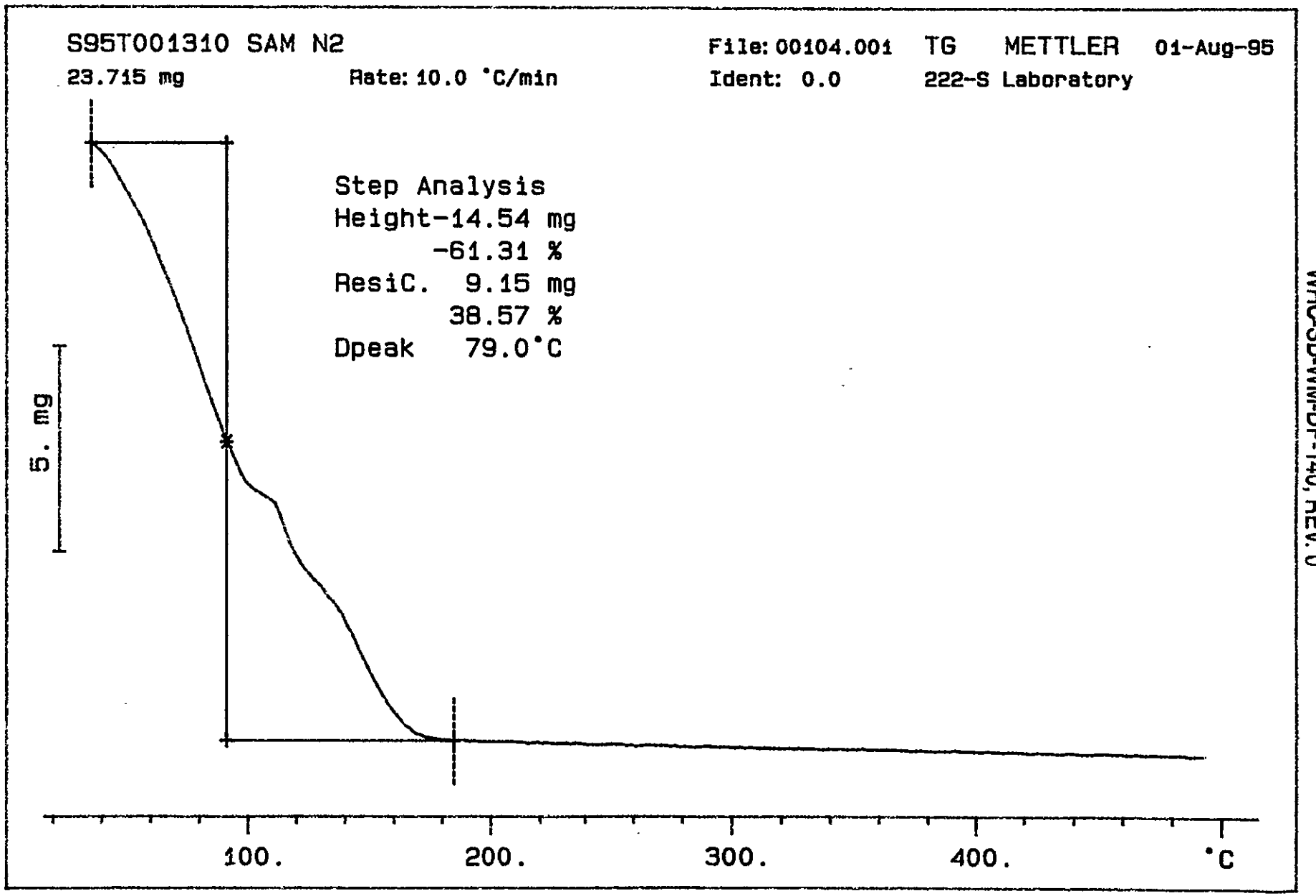
WHC-SD-WM-DP-140, REV. 0

BEST AVAILABLE COPY

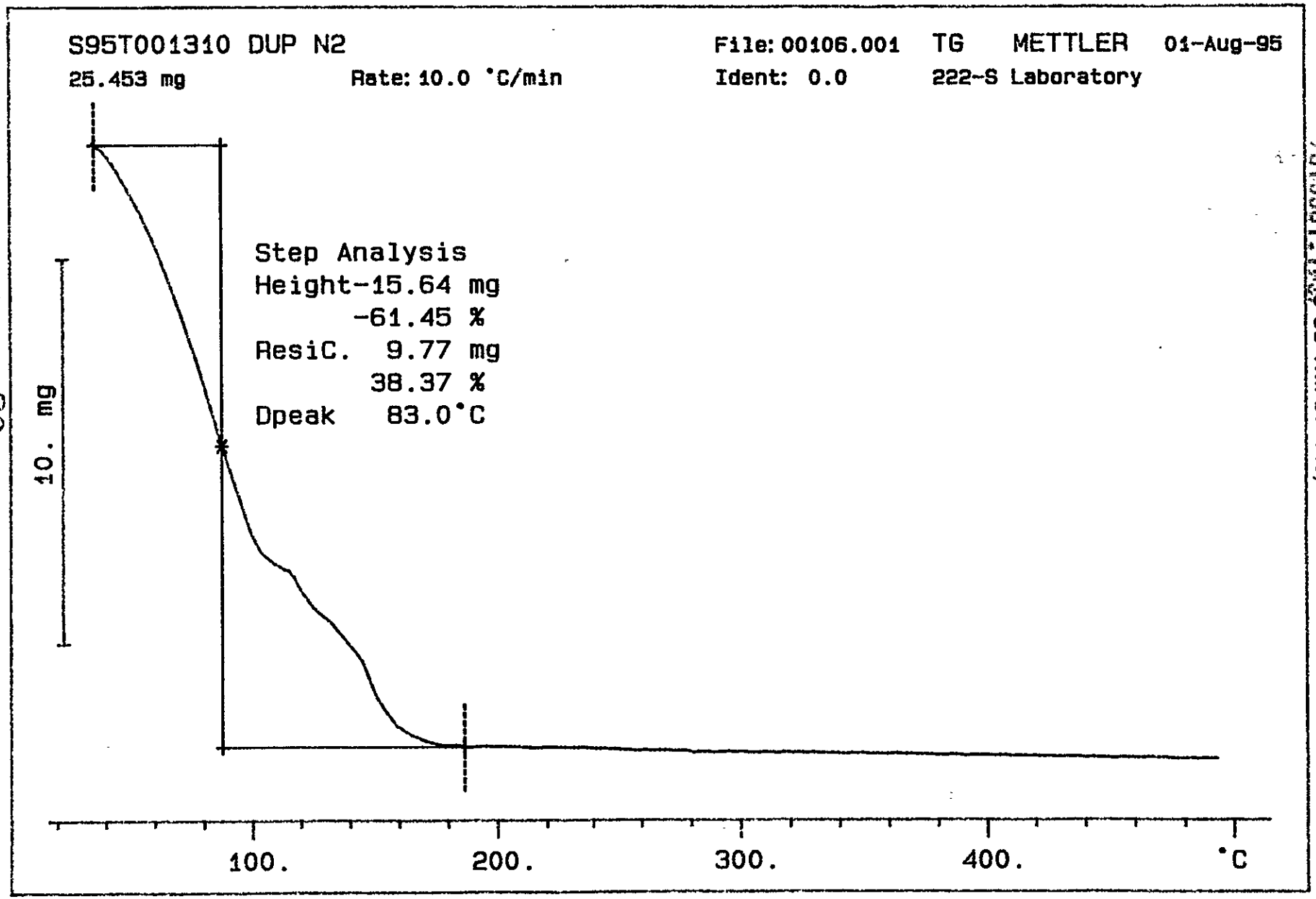


95133B1.1WHC-SD-WM-DP-140, REV. 0

BEST AVAILABLE COPY



BEST AVAILABLE COPY



9513381.WHC-SD-WM-DP-140, REV. 0

LABCORE Data Entry Template for Worklist# 1901

Analyst: Jds **Instrument:** TGA0 1 **Book #** 65N84

Method: LA-560-112 Rev/Mod A2

Worklist Comment: Please run B-106 TGAs under N2. bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	-------TEST------	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA-01	LIQUID	59.74	61.80	N/A	%
95000096	B-106	2	SAMPLE	S95T001272	0		TGA-01	LIQUID	N/A	67.32		%
95000096	B-106	3	DUP	S95T001272	0		TGA-01	LIQUID	67.32	67.13	N/A	%

Final page for worklist # 1901

[signature] 7-27-95
Analyst Signature **Date**

[signature] 7-27-95
Analyst Signature **Date**

Verified by Blandina D Valenzuela 7-28-95

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.

SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 82 TO 84.

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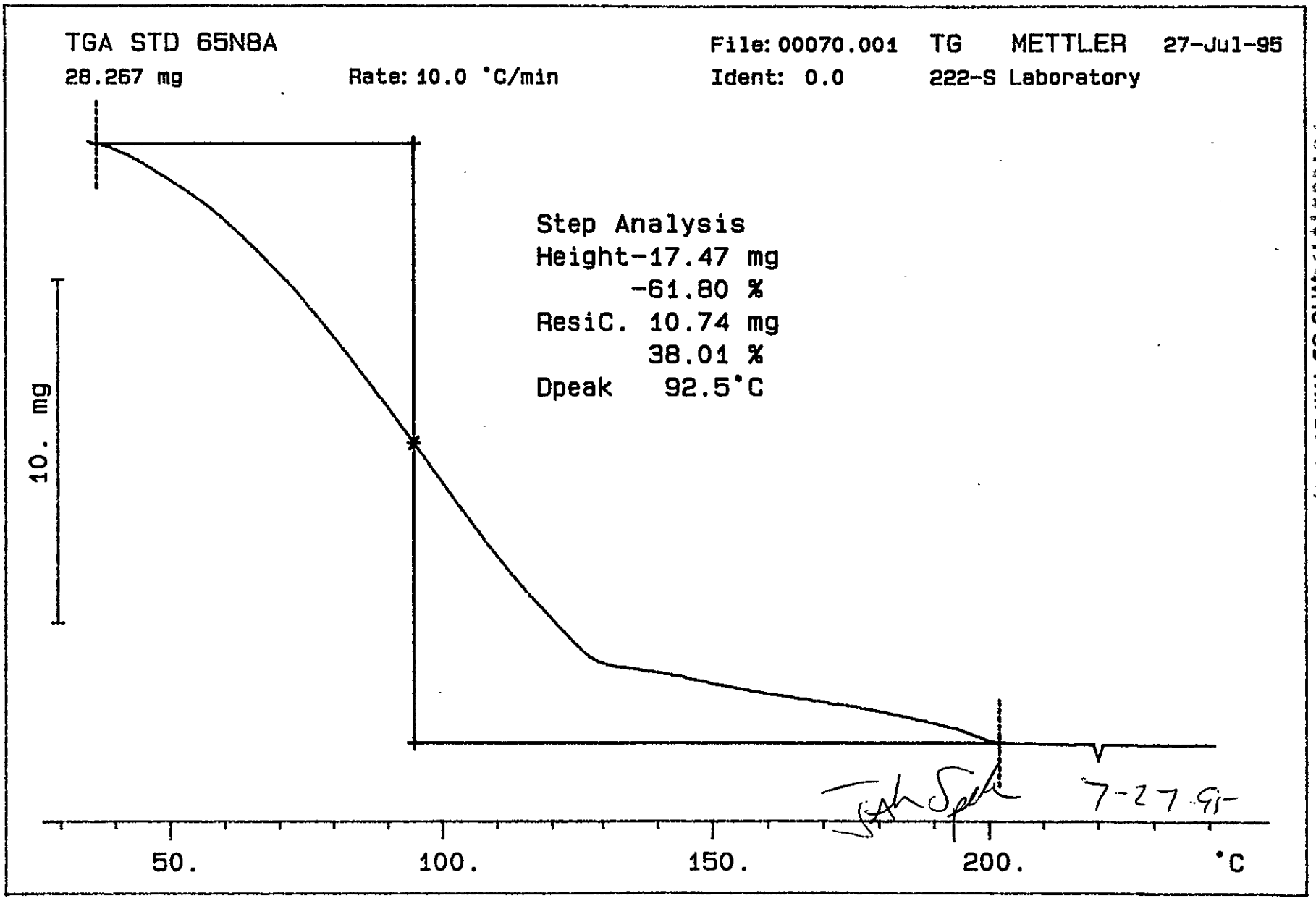

9513381.1970 WHC-SD-WM-DP-140, REV. 0

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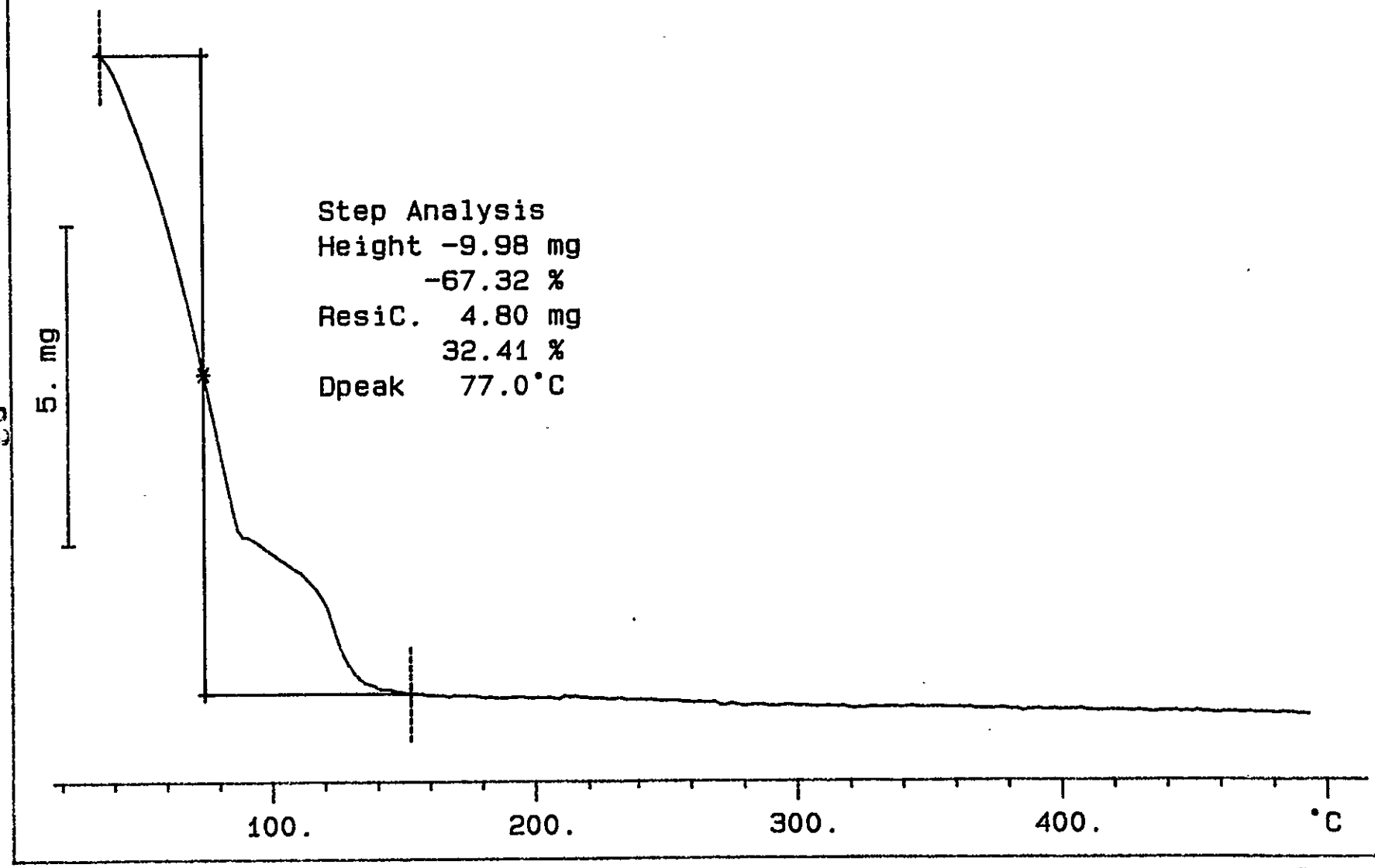
S95T001272 SAM N2

14.822 mg

Rate: 10.0 °C/min

File: 00072.001 TG METTLER 27-Jul-95

Ident: 0.0 222-S Laboratory



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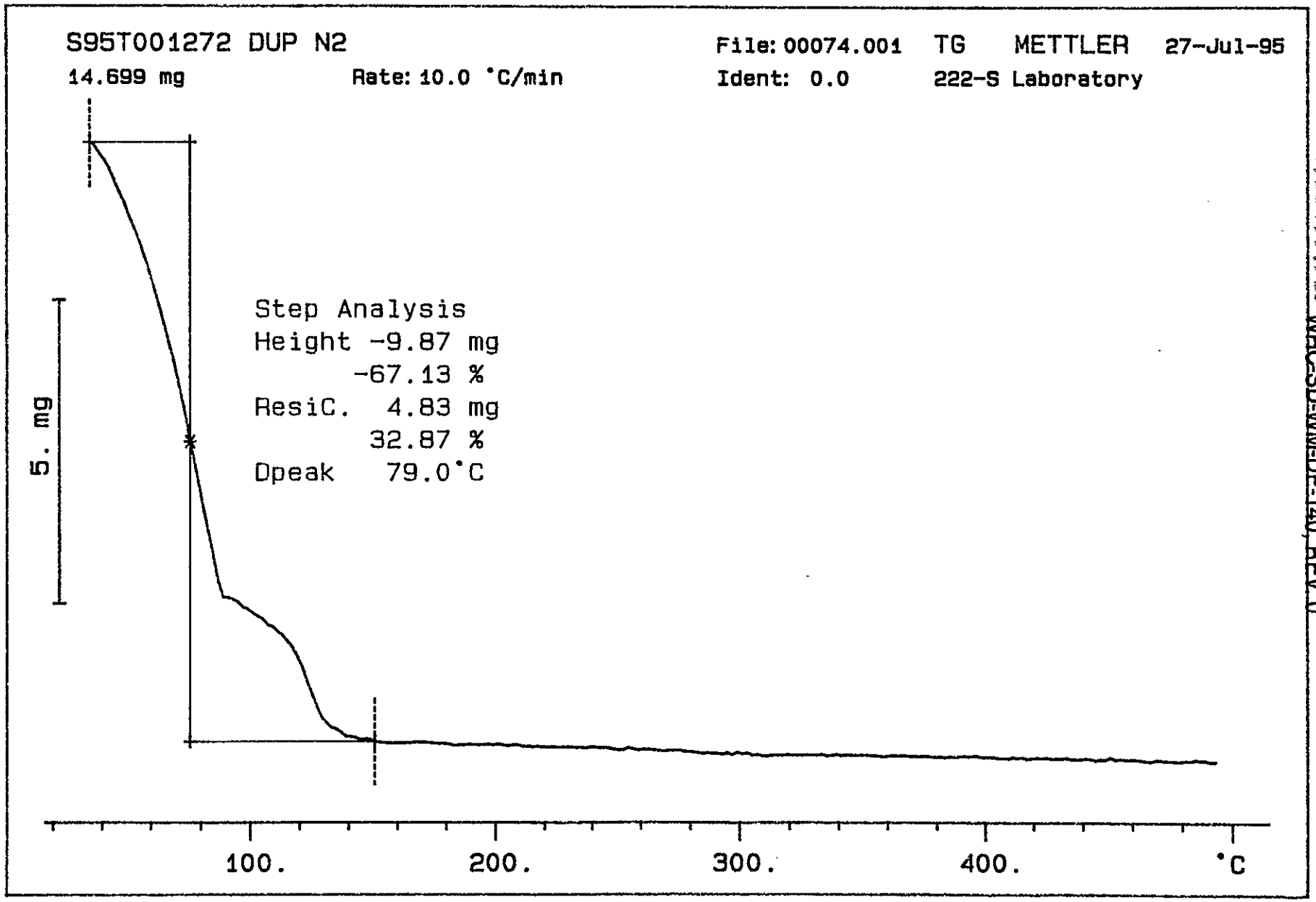

9513381.1939 WHC-SD-WM-DP-140, REV 0

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9513381.1940

DISTRIBUTION SHEET

To Distribution	From Characterization Plans, Coordination and Reports	Page 2 of 2
		Date: 08/18/95
Project Title/Work Order WHC-SD-WM-DP-140, Rev. 0, "45-Day Safety Screen Results for Tank 241-B-106, Push Mode, Cores 93 and 94"		EDT NO.: EDT-613109
		ECN NO.: N/A

Name	MSIN	Text With all Attach	EDT/ECN ONLY	
Washington State Department of Ecology Single-Shell Tank Unit Manager A. B. Stone	B5-18	X		
Environmental Protection Agency Single-Shell Tank Unit Manager D. R. Einan	B5-01	X		
U. S. Department of Energy Jim Poppiti 12800 Middlebrook Rd. Trevion II, EM-36 Germantown, MD 20874			X	
Los Alamos Technical Associates A. T. DiCenso 750 Swift Boulevard Suite # 4 Richland, WA 99352		X		

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DISTRIBUTION SHEET

To	From	Page 1 of 2
Distribution	Characterization Plans, Coordination and Reports	Date: 08/18/95
Project Title/Work Order WHC-SD-WM-DP-140, Rev. 0, "45-Day Safety Screen Results for Tank 241-B-106, Push Mode, Cores 93 and 94"		EDT NO.: EDT-613109 ECN NO.: N/A

Name	MSIN	Text With all Attach	EDT/ECN ONLY
Pacific Northwest Laboratory			
J. R. Gormsen	K7-28		X
S. J. Harris	K7-22	X	
K. L. Silvers	P7-27		X
U.S. Department of Energy, RL			
C. A. Babel	S7-54	X	
Westinghouse Hanford Company			
J. N. Appel	G3-21		X
H. Babad	S7-30	X	
R. J. Cash	S7-15	X	
J. M. Conner	R2-12	X	
G. D. Forehand	S7-31		X
C. E. Golberg	H5-49		X
V. W. Hall	H4-21		X
D. C. Hetzer	S6-31		X
Jensen	T6-07	X	
D. Johnson	S7-15	X	
N. W. Kirch	R2-11	X	
J. G. Kristofzski	T6-06	X	
M. J. Kupfer	H5-49	X	
E. J. Lipke	S7-14		X
N. G. McDuffie	S7-15	X	
J. E. Meacham	S7-15	X	
P. M. Morant	H4-25	X	
B. C. Simpson	R2-12		X
D. A. Turner	S7-15	X	
J. A. Voogd	R4-01		X
Central Files	A3-88	X1	
EDMC	H6-08	X	
LTIC	T6-03		X
TCRC	R2-12	X	
TFIC (Tank Farm Information Center)	R1-20		X

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