ENGINEERING DATA TRANSMITTAL

Page 1 of 1

1. EDT № 612152

2. To: (Receiving Organization) Distribution	3. From: (Originating Organization) Characterization Plans and Reports	4. Related EDT No.: N/A
5. Proj. Prog./Dept./Div.: Tank 241-U-202/Waste Management/CPR/Char. Eng.	6. Cog. Engr.: Jaiduk Jo	7. Purchase Order No.: N/A
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		14. Required Response Date: 05/05/95

15. DATA TRANSMITTED

(A) Item No.	(B) Document/Drawing No.	(C) Sheet No.	(D) Rev. No.	(E) Title or Description of Data Transmitted	(F) Approval Designator	(G) Reason for Transmittal	(H) Originator Disposition	(I) Receiver Disposition
1	WHC-SD-WM-DP-110	N/A	0	45-Day Safety Screen Results for Tank 241-U-202, Push Mode, Cores 75 and 78	Q	2	1	

16. KEY

Approval Designator (F)	Reason for Transmittal (G)	Disposition (H) & (I)
E, S, Q, D or N/A (see WHC-CM-3-5, Sec.12.7)	1. Approval 2. Release 3. Information 4. Review 5. Post Review 6. Dist. (Receipt Acknow. Required)	1. Approved 2. Approved w/comment 3. Disapproved w/comment 4. Reviewed no/comment 5. Reviewed w/comment 6. Receipt acknowledged

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2	1	Cog.Eng. J. Jo		5-5-95						
2	1	Cog. Mgr. J.G. Kristofzski		5/5/95						
2	1	QA W.A. Hendricksen		5/10/95						
		Safety								
		Env.								

MAY 1995 RECEIVED EDMC

18. A.E. Young — Signature of EDT Originator — Date 5-5-95

19. Authorized Representative for Receiving Organization — Date

20. J.G. Kristofzski — Cognizant Manager — Date 5/5/95

21. DOE APPROVAL (if required) Ctrl. No.
[] Approved
[] Approved w/comments
[] Disapproved w/comments

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RELEASE AUTHORIZATION

Document Number:	WHC-SD-WM-DP-110, REV 0
Document Title:	45-Day Safety Screen Results for Tank 241-U-202, Push Mode, Cores 75 and 78
Release Date:	5/10/95

This document was reviewed following the procedures described in WHC-CM-3-4 and is:

APPROVED FOR PUBLIC RELEASE

WHC Information Release Administration Specialist:

Kara M. Broz — May 10, 1995

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SUPPORTING DOCUMENT

1. Total Pages 169

2. Title	3. Number	4. Rev No.
45-Day Safety Screen Results for Tank 241-U-202, Push Mode, Cores 75 and 78	WHC-SD-WM-DP-110	0

5. Key Words	6. Author
45-Day Safety Screen Results, Safety Screen Results, Safety Screen, Tank 241-U-202, Tank U-202, U-202, Push Mode, Core 75, Core 78	Name: Jaiduk Jo Signature: Jaiduk Jo Organization/Charge Code 8E480/MDR21

7. Abstract

N/A

8. RELEASE STAMP

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BY WHC
DATE [illegible]

A-6400-073 (08/94) WEF124

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P.O. Box 1970 Richland, WA 99352

WHC-SD-WM-DP-110, REV. 0

ANALYTICAL SERVICES

45-DAY SAFETY SCREEN RESULTS FOR TANK 241-U-202, PUSH MODE, CORES 75 AND 78

DATED: MAY 5, 1995

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NARRATIVE

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Summary

Three two-segment core samples from tank U-202 were received at the 222-S Laboratories. Two core samples were analyzed and one core sample, first core from riser 6 (Sample 95-055 and Sample 95-056), was archived for future needs. These samples underwent safety screening analysis Differential Scanning Calorimetry (DSC), Thermogravimetric Analysis (TGA) and Alpha Total in accordance with reference (1) below. The test results indicate that no safety screening notification limits were exceeded.

Sample Receipt and Extrusion

Core 75, Segment 1, Sample 95-050 (Riser 2)

Sample 95-050 was collected from riser 2 of tank U-202 on 3/22/95, and received at the 222-S laboratory on 3/23/95. Extrusion took place on 4/3/95, with the total amount of solid material recovered being 119 grams and drainable liquid recovered being 155 grams. There was no liquid in the liner. The drainable liquid was yellow and the solid sample was light yellow with some black specks and large crystals. The first 3 inches of the solid sample retained the shape of the sampler. The final 2 inches "melted" on the extrusion tray. The solid material was damp and creamy. 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 settling the solids. Sub-samples were provided to the laboratory for analysis, and results appear in the summary table as sample numbers S95T000582, S95T000584 and S95T000585.

Core 75, Segment 2, Sample 95-051 (Riser 2)

Sample 95-051 was collected from riser 2 of tank U-202 on 3/22/95, and received at the 222-S laboratory on 3/23/95. Extrusion took place on 4/3/95, with the total amount of solid material recovered being 122 grams and drainable liquid recovered being 137 grams. There was nine grams of fluid in the liner. The drainable liquid was yellow and the solid sample was light yellow. The solid material was extruded near the last six inches of extrusion of which the final three inches of the solid material was a light yellow sludge material. All other solid material was crystalline. The solid sample was divided into crystalline half segment and sludge half segment. 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 settling the solids. The liner liquid was not analyzed due to insufficient amount of sample. Sub-samples were provided to the laboratory for analysis, and results appear in the summary table as sample numbers S95T000588, S95T000590, S95T000591, S95T000598, and S95T000599.

Core 78, Segment 1, Sample 95-057 (Riser 6)

Sample 95-057 was collected from riser 6 of tank U-202 on 3/29/95, and received at the 222-S laboratory on 3/30/95. Extrusion took place on 4/4/95, with the total amount of solid material recovered being 312 grams, drainable liquid recovered being 42 grams, and no liner fluid was found. The drainable liquid was yellow and the solid sample was light yellow. The first six inches of extrusion was light yellow soft sludge, followed by a 3 inch gap which contained drainable liquid, and the last six inches was yellow sludge. The sludge contained black specks on the surface, but no crystals were observed. The solid sample was divided into a upper half segment and a lower half segment. 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 settling the solids. Sub-samples were provided to the laboratory for analysis, and results appear in the summary table as sample numbers S95T000621, S95T000630, S95T000632, S95T000633, and S95T000634.

Core 78, Segment 2, Sample 95-058 (Riser 6)

Sample 95-058 was collected from riser 6 of tank U-202 on 3/29/95, and received at the 222-S laboratory on 3/30/95. Extrusion took place on 4/4/95, with the total amount of solid material recovered being 184 grams, drainable liquid recovered being 19 grams, and no liner fluid was found. The drainable liquid was yellow and the solid sample was light yellow. The last eight inches of extrusion was solid of which the first four inches were light yellow crystals and the last four inches were light yellow sludge. The solid sample was divided into a upper half segment and a lower half segment. 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 settling the solid. Sub-samples were provided to the laboratory for analysis, and results appear in the summary table as sample numbers S95T000636, S95T000643, S95T000644, S95T000646, and S95T000650.

Core 78, Field Blank

Field Blank was collected for tank U-202 and U-201 on 3/30/95, and received at the 222-S laboratory on 3/30/95. Extrusion took place on 4/4/95, with the total amount of liquid recovered being 286 grams. The Field Blank was provided to the laboratory for analysis and results appear in the summary table as sample number S95T000654.

Analytical Results

TGA (Moisture)

The weight percent water by Thermogravimetric Analysis was performed using procedure LA-560-112, Rev. A-2 with a nitrogen purge. All results were above the notification limit (notification is made if the sample is analyzed at less than 17 percent water), therefore no notifications were made. All samples met the precision and accuracy criteria stated in reference (1) with an exception of samples S95T000590, S95T000630, and S95T000643. TGA precision between the sample and duplicate for samples S95T000590, S95T000630, and S95T000643

exceeded the acceptance criteria, with Relative Percent Deviation (RPD) values of 12.0, 24.2, and 13.6, respectively. The sample result for S95T000590 was 43.64% water, the duplicate 38.71%. A third analysis was run with a result of 36.88%. This result does not appear on the table, but is included in the raw data. The sample result for S95T000630 was 24.11% water, the duplicate 18.90%. A third analysis was run with a result of 19.27%. This result does not appear on the table, but is included in the raw data.

The sample result for S95T000643 was 36.24% water, the duplicate 41.52%. A third analysis was run with a result of 34.81%. This result does not appear on the table, but is included in the raw data.

DSC

Differential thermal analyses were performed using procedure LA-514-113, Rev. B-1 and a Mettler Model 20 and LA-514-114, Rev. B-0 and a Perkin Elmer DSC-7 Differential Scanning Calorimetry under a nitrogen purge. All results were below the safety screen notification limit of 481 joules/g (dry), therefore no notifications were made. All samples met the precision and accuracy criteria stated in reference (1). No exotherms were observed in any of the samples.

Alpha Total

The Alpha Total analyses were performed using procedure LA-508-101, Rev. D-2. All alpha total results were below the notification limit. All samples (S95T000585, S95T000591, S95T000599, S95T000633, S95T000634, S95T000646, and S95T000650) exceeded the precision criteria. These samples demonstrated lower than normal spike recovery with values ranging from 50.8 to 89.6 percent recovery. Because sample alpha activities were approximately 3 orders of magnitude less than the action limit for total alpha, a rerun was not requested. The results appear in the summary table. The Tank Characterization Plan (TCP) accuracy criteria for the control standard was met in each case.

Reference: (1) WHC-SD-WM-TP-309, REV. 0, "Tank 241-U-202 Tank Characterization Plan," dated March 2, 1995, Westinghouse Hanford Company, Richland, WA 99352

SAMPLE DATA SUMMARY

05-may-1995 10:01:17
A-0002-1

45 Day Safety Screen Results for 241-U-202
U-202

CORE NUMBER: 75
SEGMENT #: 1

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%
S95T000585		F	Alpha of Digested Solid	uCi/g	-1.000	41.100	78.04	<6.35e-04	1.19e-03	1.07e-3	1.13e-03	10.6	64.40	1.00e-03	80.6

W Whole Segment: W Whole Segment

Sample#	R	A#	Analyte	Unit	Action Limits Lower	Action Limits Upper	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err%
S95T000584			% Water by TGA using Mettler	%	16.900	110.000	98.51	n/a	25.49	26.24	25.86	2.90	n/a	n/a	n/a
S95T000584			DSC Exotherm Dry Calculated	Joules/g Dry	-1.000	481.100	n/a	n/a	0.00e+00	0	0.000	n/a	n/a	n/a	n/a
S95T000584			DSC Exotherm using Mettler	Joules/g	-1.000	481.100	94.55	n/a	0.00e+00	0	0.000	n/a	n/a	n/a	n/a

Drainable Liquid: 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%
S95T000582			% Water by TGA using Mettler	%	None	None	99.17	n/a	72.60	73.24	72.92	0.88	n/a	n/a	n/a
S95T000582			DSC Exotherm Dry Calculated	Joules/g Dry	None	None	n/a	n/a	0.00e+00	0	0.000	n/a	n/a	n/a	n/a
S95T000582			DSC Exotherm using Mettler	Joules/g	None	None	91.74	n/a	0.00e+00	0	0.000	n/a	n/a	n/a	n/a

=> Limit violated
Selected Limit

WHC-SD-WM-DP-110, REV.

45 Day Safety Screen Results for 241-U-202
U-202

CORE NUMBER: 75
SEGMENT #: 2

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%
S95T000588			% Water by TGA using Mettler	%	None	None	99.17	n/a	73.29	72.23	72.76	1.46	n/a	n/a	n/a
S95T000588			DSC Exotherm Dry Calculated	Joules/g Dry	None	None	n/a	n/a	0.00e+00	0	0.000	n/a	n/a	n/a	n/a
S95T000588			DSC Exotherm using Mettler	Joules/g	None	None	91.74	n/a	0.00e+00	0	0.000	n/a	n/a	n/a	n/a

U Upper Half of Segment: 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%
S95T000598			% Water by TGA using Mettler	%	16.900	110.000	99.86	n/a	22.87	22.90	22.88	0.13	n/a	n/a	n/a
S95T000598			DSC Exotherm Dry Calculated	Joules/g Dry	-1.000	481.100	n/a	n/a	0.00e+00	0	0.000	n/a	n/a	n/a	n/a
S95T000598			DSC Exotherm using Mettler	Joules/g	-1.000	481.100	95.61	n/a	0.00e+00	0	0.000	n/a	n/a	n/a	n/a
S95T000599		F	Alpha of Digested Solid	uCi/g	-1.000	41.100	78.04	<6.35e-04	< 7.40e-4	<1.22e-3	n/a	n/a	53.80	2.00e-03	500.0

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%
S95T000590			% Water by TGA using Mettler	%	16.900	110.000	98.51	n/a	43.64	38.71	41.17	12.0	n/a	n/a	n/a
S95T000590			DSC Exotherm Dry Calculated	Joules/g Dry	-1.000	481.100	n/a	n/a	0.00e+00	0	0.000	n/a	n/a	n/a	n/a
S95T000590			DSC Exotherm using Mettler	Joules/g	-1.000	481.100	94.55	n/a	0.00e+00	0	0.000	n/a	n/a	n/a	n/a
S95T000591			Alpha of Digested Solid	uCi/g	1.000	41.100	82.43	<1.18e-03	< 1.18e-3	<1.20e-3	n/a	n/a	79.70	3.00e-03	129.6

=> Limit Violated
=> Selected Limit

45 Day Safety Screen Results for 241-U-202
U-202

CORE NUMBER: 78
SEGMENT #: 1

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%
S95T000621			% Water by TGA using Mettler	%	None	None	99.24	n/a	73.42	73.6	73.51	0.27	n/a	n/a	n/a
S95T000621			DSC Exotherm Dry Calculated	Joules/g Dry	None	None	n/a	n/a	0.00e+00	0	0.000	n/a	n/a	n/a	n/a
S95T000621			DSC Exotherm using Mettler	Joules/g	None	None	102.3	n/a	0.00e+00	0	0.000	n/a	n/a	n/a	n/a
S95T000630			% Water by TGA using Mettler	%	16.900	110.000	99.81	n/a	24.11	18.90	21.50	24.2	n/a	n/a	n/a
S95T000630			DSC Exotherm Dry Calculated	Joules/g Dry	-1.000	481.100	n/a	n/a	0.00e+00	0	0.000	n/a	n/a	n/a	n/a
S95T000630			DSC Exotherm using Mettler	Joules/g	-1.000	481.100	111.4	n/a	0.00e+00	0	0.000	n/a	n/a	n/a	n/a
S95T000632			% Water by TGA using Mettler	%	16.900	110.000	99.43	n/a	24.45	22.24	23.34	9.47	n/a	n/a	n/a
S95T000632			DSC Exotherm Dry Calculated	Joules/g Dry	-1.000	481.100	n/a	n/a	0.00e+00	0	0.000	n/a	n/a	n/a	n/a
S95T000632			DSC Exotherm using Mettler	Joules/g	-1.000	481.100	107.0	n/a	0.00e+00	0	0.000	n/a	n/a	n/a	n/a
S95T000633	F		Alpha of Digested Solid	uCi/g	-1.000	41.100	78.04	<6.90e-04	1.52e-03	<1.10e-3	n/a	n/a	53.20	2.00e-03	77.2
S95T000634	F		Alpha of Digested Solid	uCi/g	-1.000	41.100	78.04	<6.90e-04	1.25e-03	<1.37e-3	n/a	n/a	50.80	2.00e-03	88.6

=> Limit violated
-> Selected limit

45 Day Safety Screen Results for 241-U-202
U-202

CORE NUMBER: 78
SEGMENT #: 2

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%
S95T000636			% Water by TGA on Perkin Elmer	%	None	None	97.30	n/a	72.27	72.23	72.25	0.06	n/a	n/a	n/a
S95T000636			DSC Exotherm on Perkin Elmer	Joules/g	None	None	101.9	n/a	0.00e+00	0	0.000	n/a	n/a	n/a	n/a
S95T000636			DSC Exotherm Dry Calculated	Joules/g Dry	None	None	n/a	n/a	0.00e+00	0	0.000	n/a	n/a	n/a	n/a
S95T000643			% Water by TGA using Mettler	%	16.900	110.000	99.63	n/a	36.24	41.5	38.87	13.6	n/a	n/a	n/a
S95T000643			DSC Exotherm Dry Calculated	Joules/g Dry	-1.000	481.100	n/a	n/a	0.00e+00	0	0.000	n/a	n/a	n/a	n/a
S95T000643			DSC Exotherm using Mettler	Joules/g	-1.000	481.100	106.5	n/a	0.00e+00	0	0.000	n/a	n/a	n/a	n/a
S95T000644			% Water by TGA using Mettler	%	16.900	110.000	98.67	n/a	24.43	23.96	24.20	1.94	n/a	n/a	n/a
S95T000644			DSC Exotherm Dry Calculated	Joules/g Dry	-1.000	481.100	n/a	n/a	0.00e+00	0	0.000	n/a	n/a	n/a	n/a
S95T000644			DSC Exotherm using Mettler	Joules/g	-1.000	481.100	110.4	n/a	0.00e+00	0	0.000	n/a	n/a	n/a	n/a
S95T000646			Alpha of Digested Solid	uCi/g	-1.000	41.100	82.43	<1.18e-03	< 1.18e-3	<1.16e-3	n/a	n/a	81.50	3.00e-03	500.0
S95T000650		F	Alpha of Digested Solid	uCi/g	-1.000	41.100	84.46	<2.49e-03	< 5.32e-3	<4.71e-3	n/a	n/a	89.60	6.00e-03	375.3

=> Limit violated
Selected Limit

45 Day Safety Screen Results for 241-U-202
U-202

CORE NUMBER: 78
SEGMENT #: FB

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%
S95T000654			% Water by TGA on Perkin Elmer	%	None	None	97.30	n/a	99.66	99.52	99.59	0.14	n/a	n/a	n/a
S95T000654			DSC Exotherm on Perkin Elmer	Joules/g	None	None	101.9	n/a	0.00e+00	0	0.000	n/a	n/a	n/a	n/a
S95T000654			DSC Exotherm Dry Calculated	Joules/g Dry	None	None	n/a	n/a	0.00e+00	0	0.000	n/a	n/a	n/a	n/a

=> Limit violated
=> Selected Limit

WHC-SD-WM-DP-110, REV. 0

UNDIGESTED ANALYSES RESULTS - DIRECT

worklistrpt Version 2.0 02/21/95
04/07/95 12:19

LABCORE Data Entry Template for Worklist# 1019

Analyst: SMF **Instrument:** DSC01 **Book #** 12N14-17

Method: LA-514-113 Rev/Mod [illegible]

Worklist Comment: Please run U-202 DSC under N2 bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				DSC-01	SOLID	28.45	26.9	N/A	Joules/g
95000039	U-202	2	SAMPLE	S95T000584	0		DSC-01	SOLID	N/A	Ø		Joules/g
95000039	U-202	3	DUP	S95T000584	0		DSC-01	SOLID	Ø	Ø	N/A	Joules/g
95000039	U-202	4	SAMPLE	S95T000590	0		DSC-01	SOLID	N/A	Ø		Joules/g
95000039	U-202	5	DUP	S95T000590	0		DSC-01	SOLID	Ø	Ø	N/A	Joules/g

Final page for worklist # 1019

Susie M. Fulton 4/25/95
Analyst Signature **Date**

[illegible] 4-25-95
Analyst Signature **Date**

Verified by Blandina Valenzuela 4/25/95

Data Entry Comments:

[illegible] light [illegible] liquid w/ [illegible] [illegible]
[illegible]. Flattened Sandstone
S95T000590 - light, [illegible] yellow liquid w/ large, clear crystal (≈ 1/4")

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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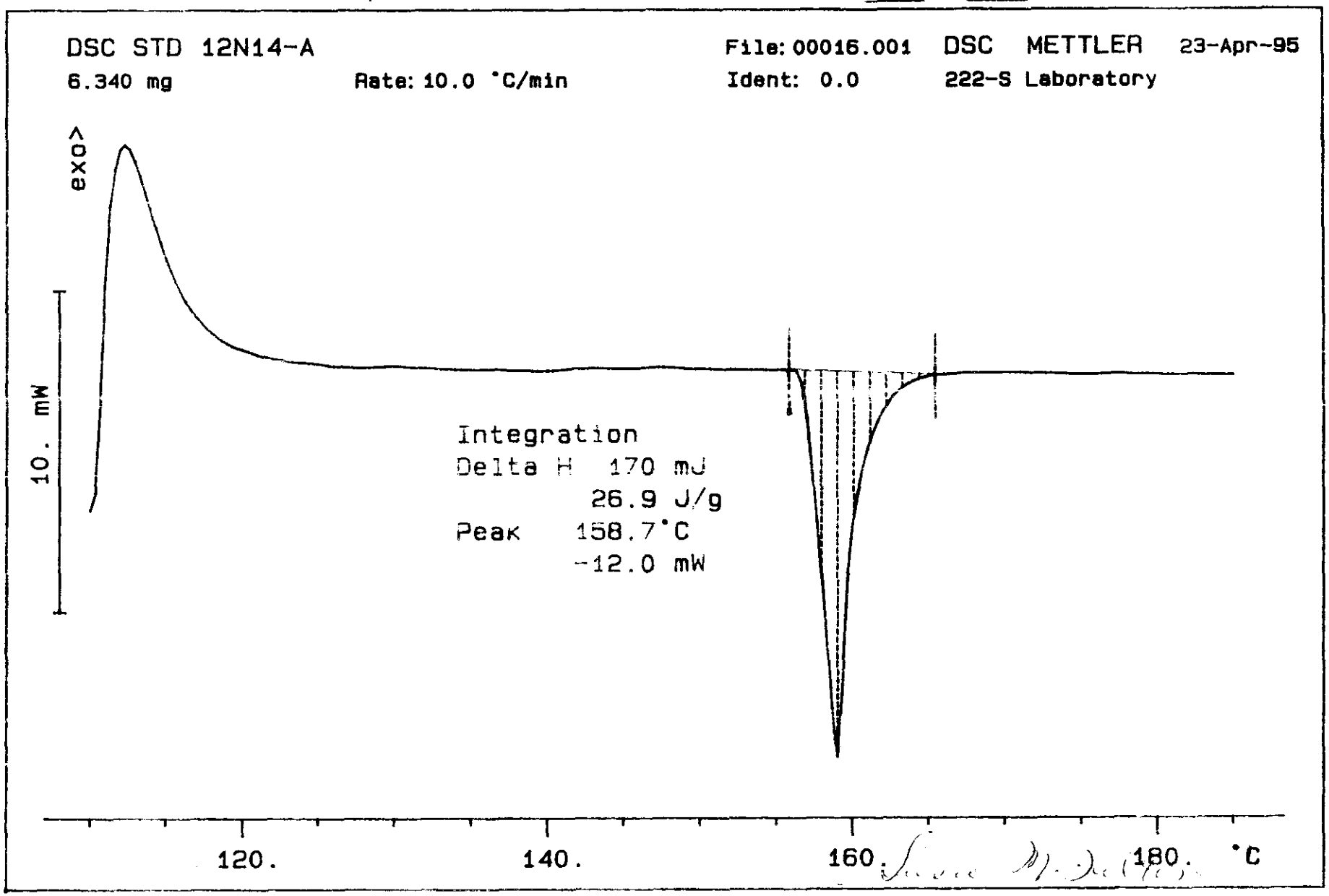
SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 13 TO 18.



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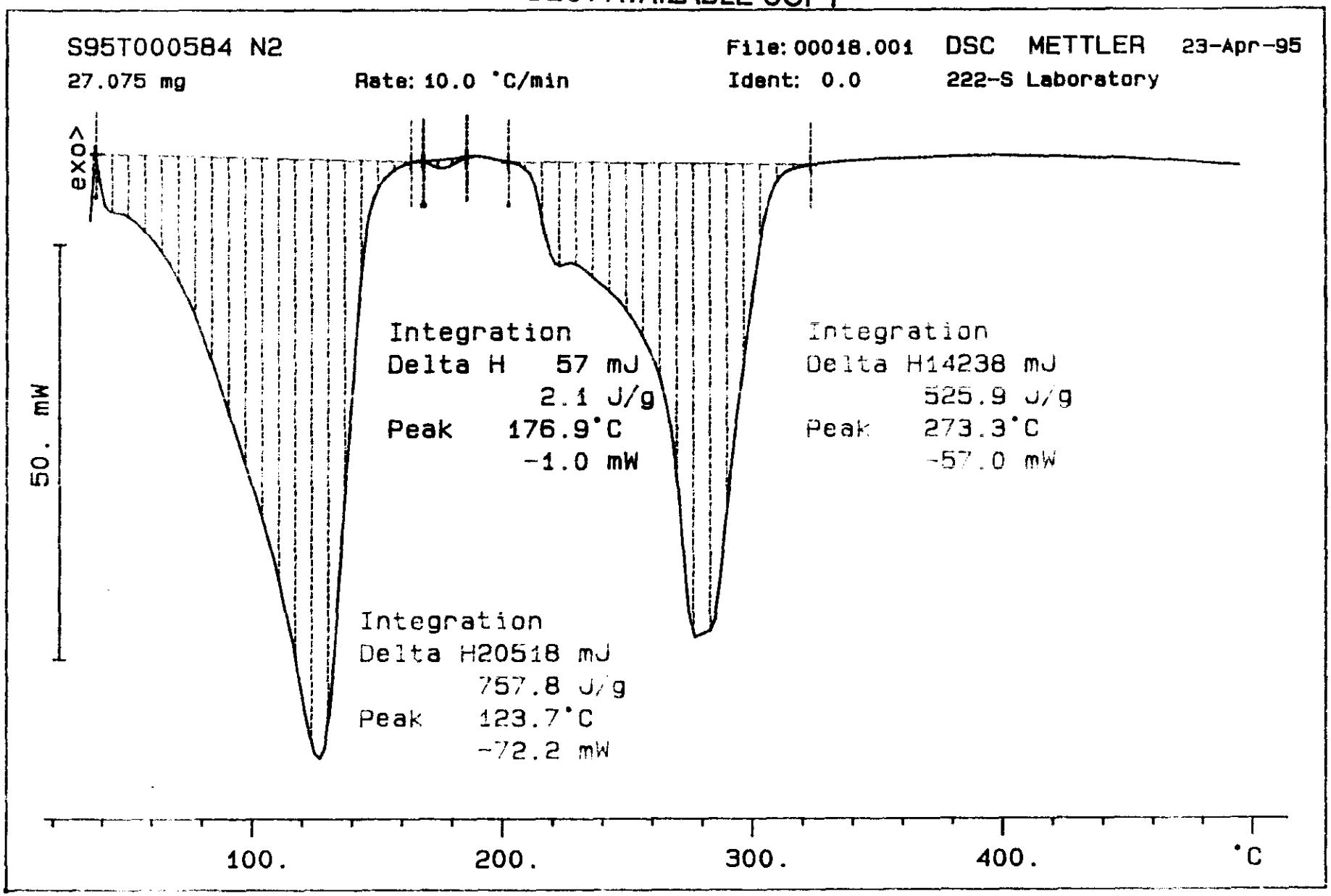

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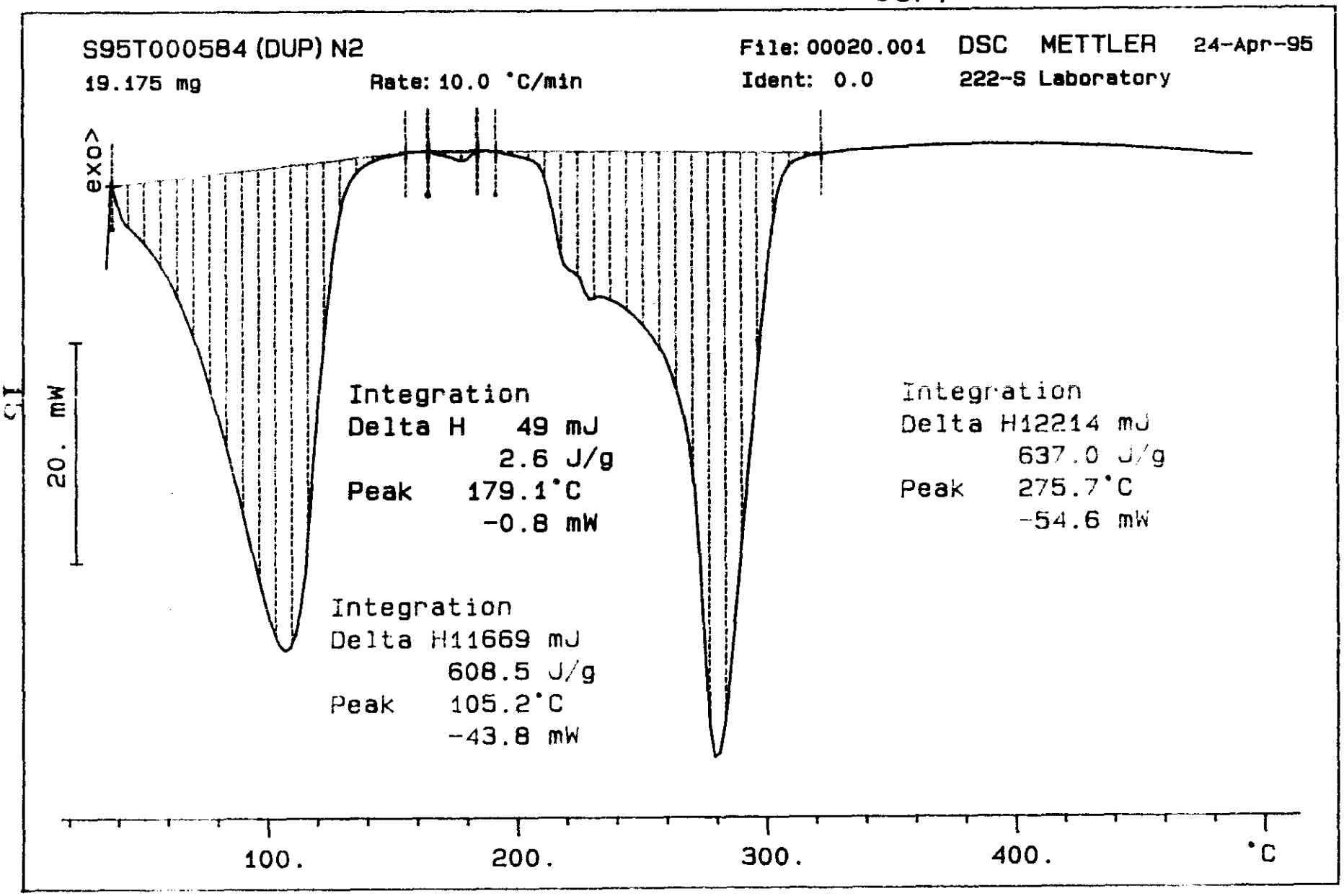

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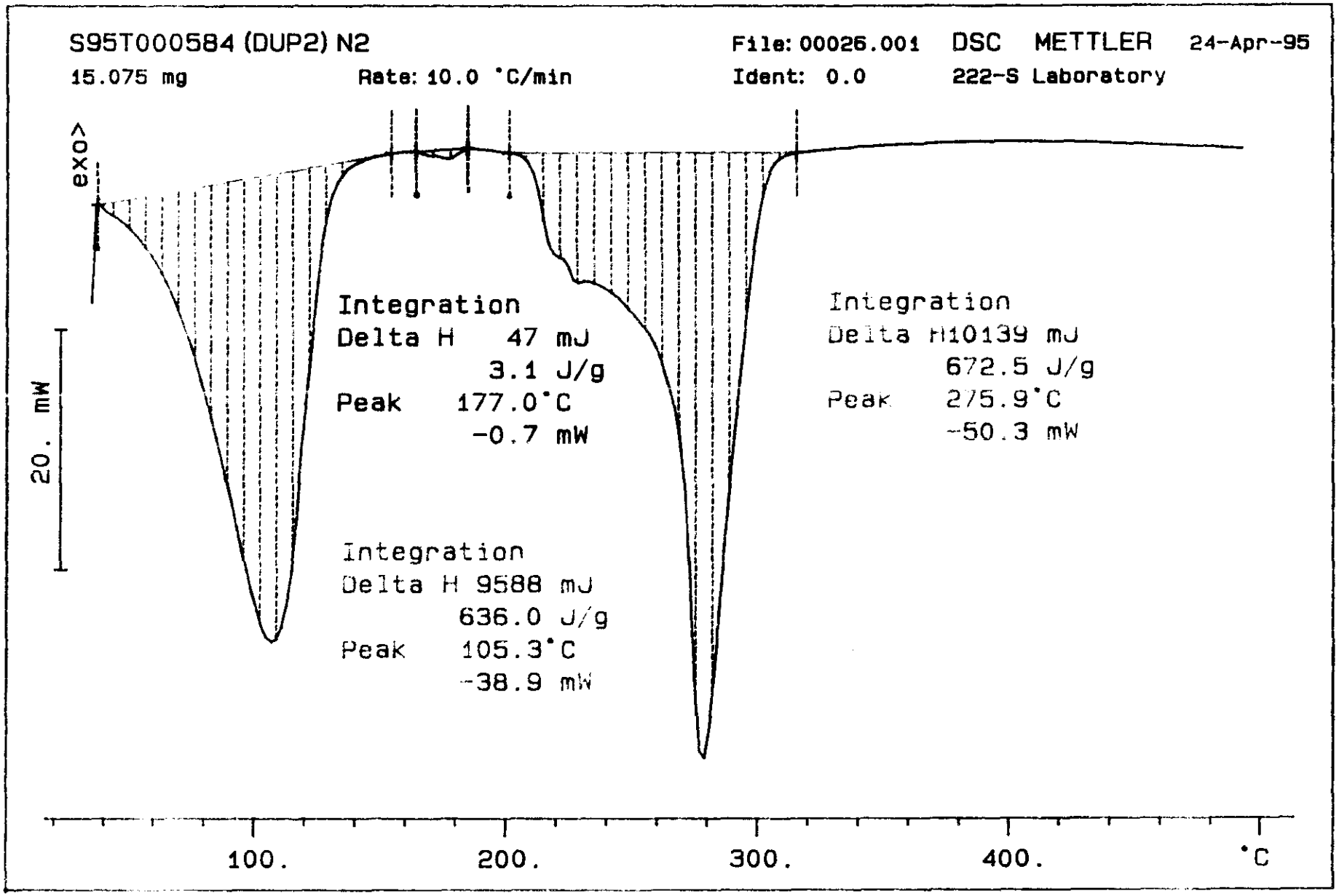

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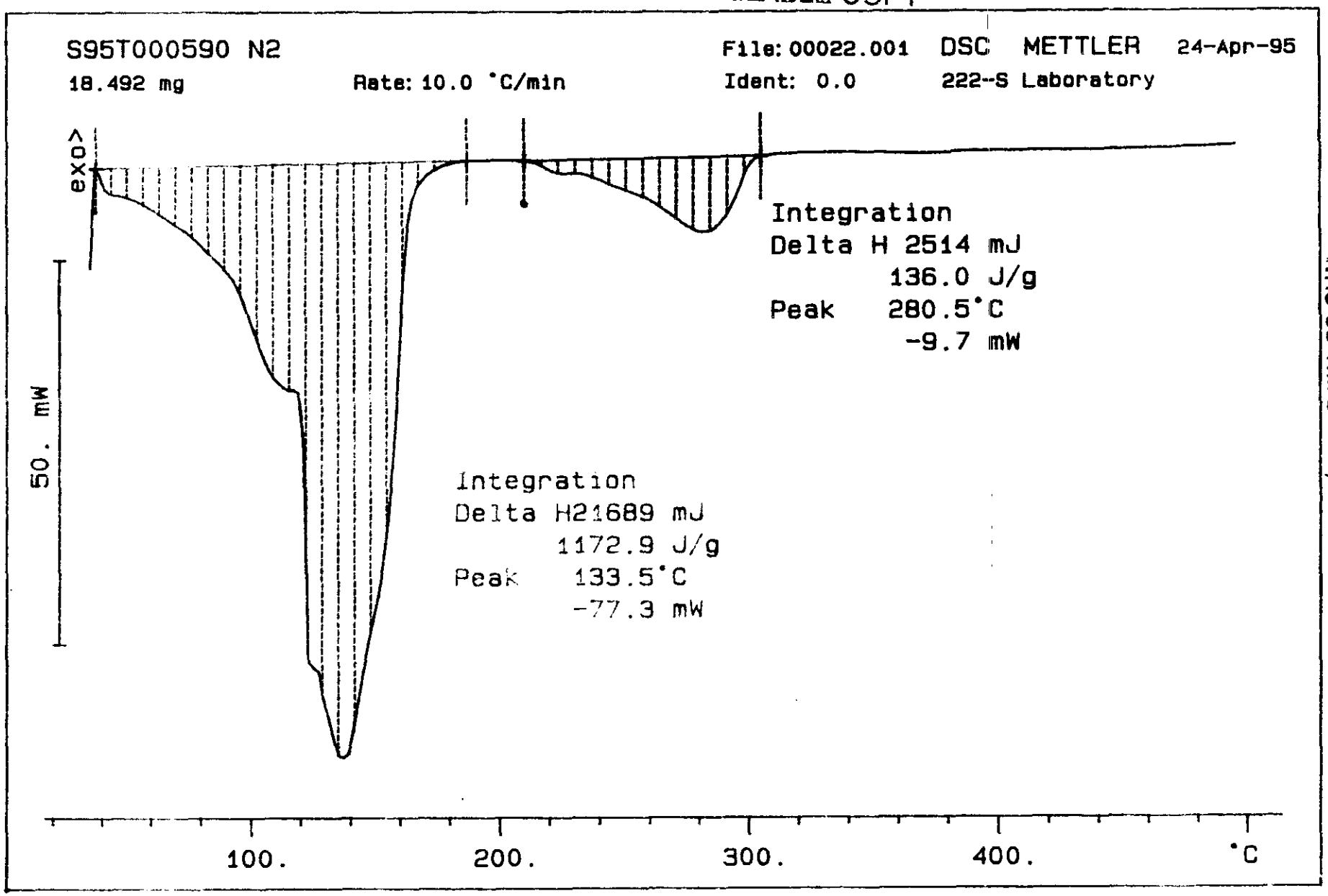

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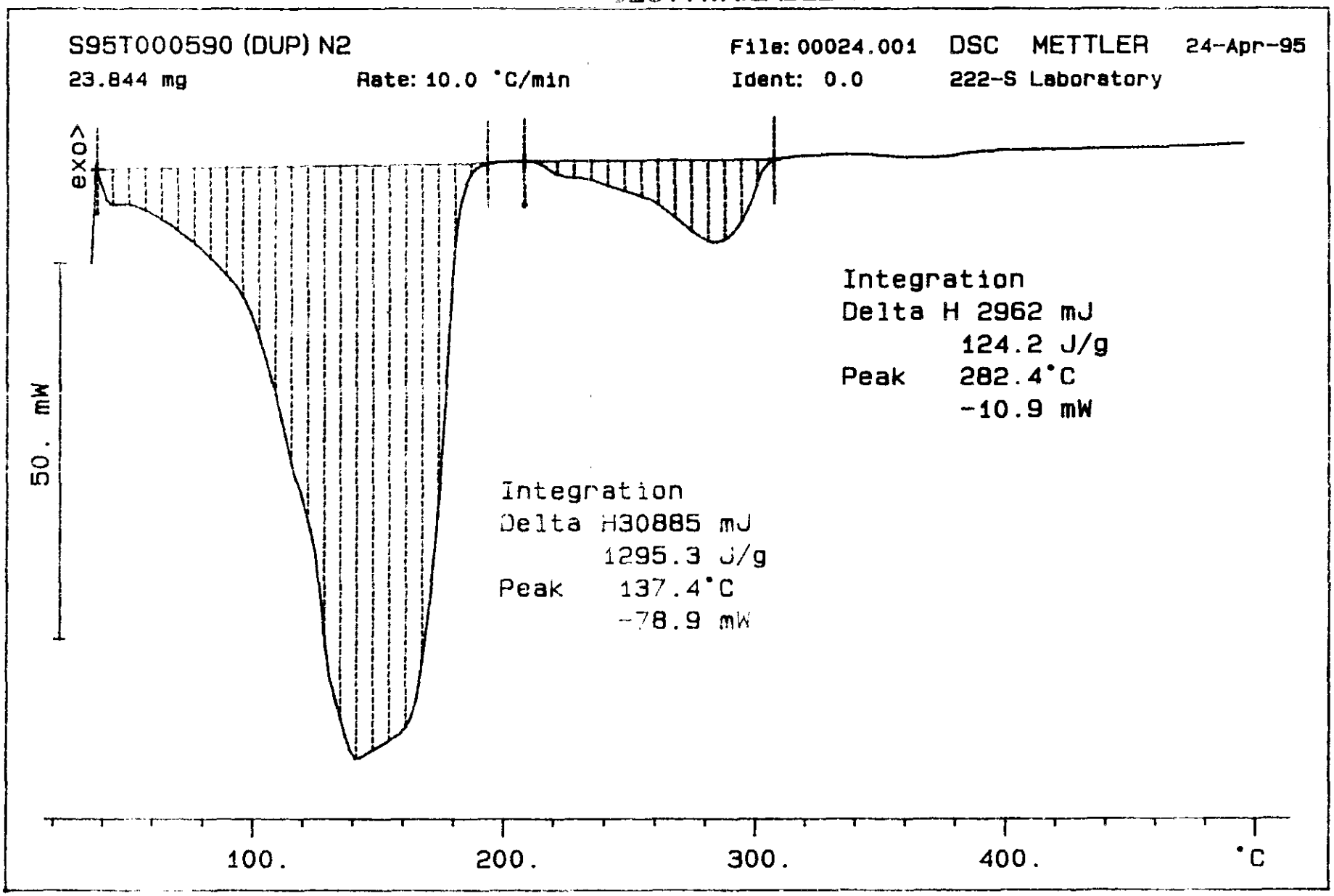


LABCORE Data Entry Template for Worklist# 1020

Analyst: RDM **Instrument:** DSC01 **Book #** 12N14A

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

Worklist Comment: Please run U-202 DSC 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
95000039	U-202	2	SAMPLE	S95T000598	0		DSC-01	SOLID	N/A	Ø		Joules/g
95000039	U-202	3	DUP	S95T000598	0		DSC-01	SOLID	Ø	Ø	N/A	Joules/g

Final page for worklist # 1020

RDMeyer 5/1/95
Analyst Signature **Date**

[signature] 5/1/95
Analyst Signature **Date**

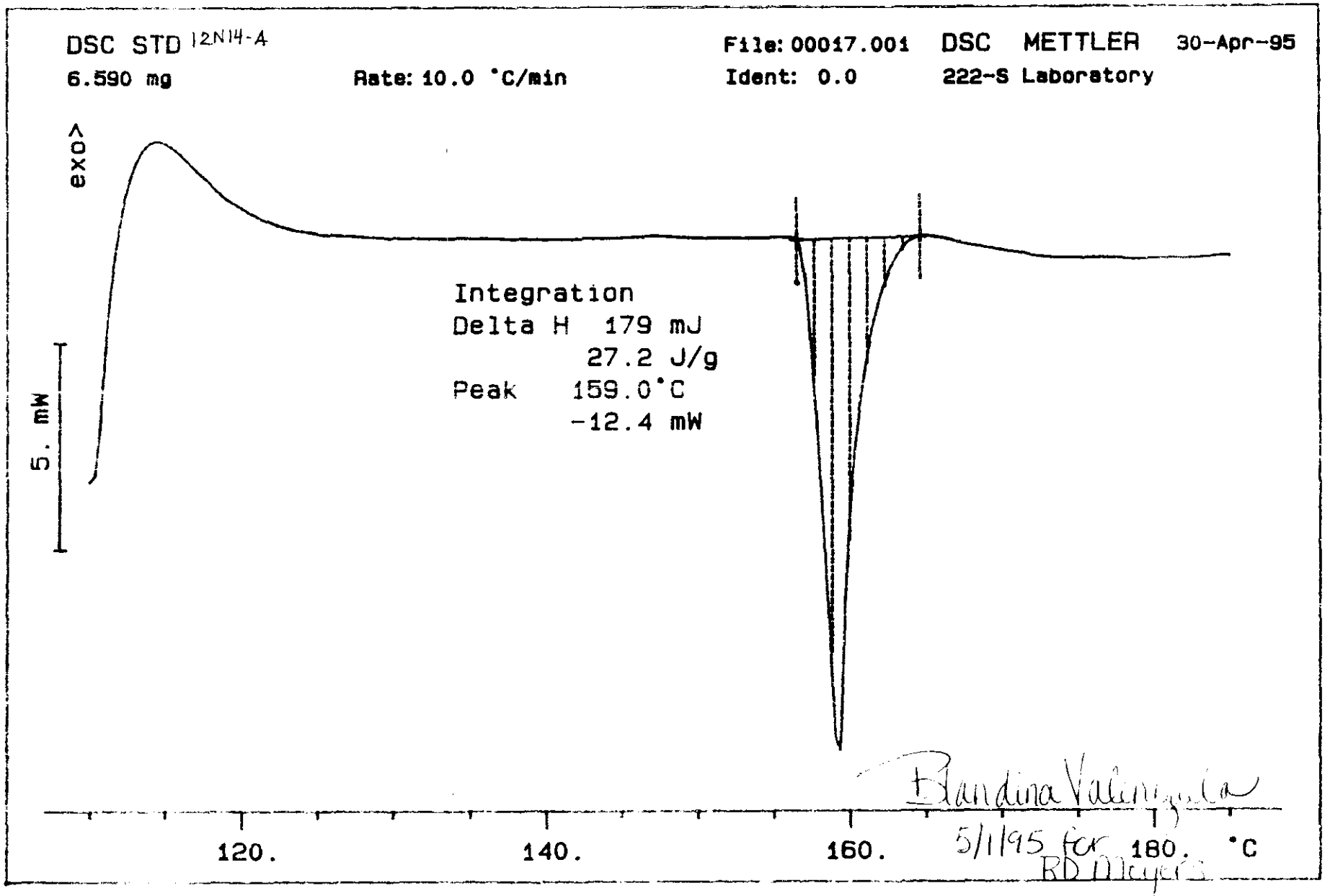
Verified by Blandina Valenzuela 5/1/95

Data Entry Comments: S15T000598 produced three endothermic one at 110.[illegible]°C with a delta H of 1118.5 J/g, second at 176.9°C with a delta H of 100.[illegible] J/g and the third at 273.4°C with a delta H of 44.6 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 22.

BEST AVAILABLE COPY



Blandina Valenzuela
5/1/95 for RD Meyers

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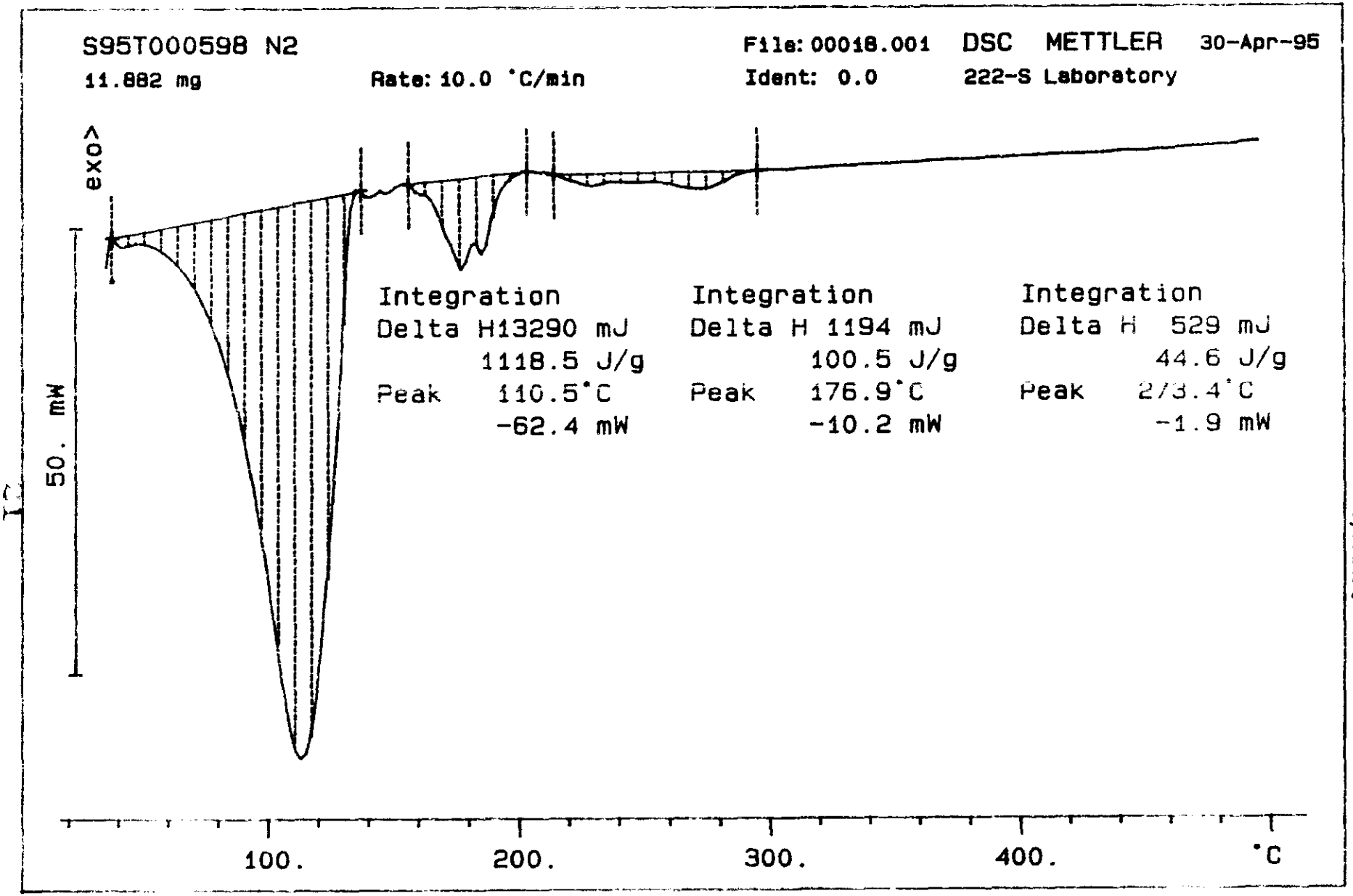

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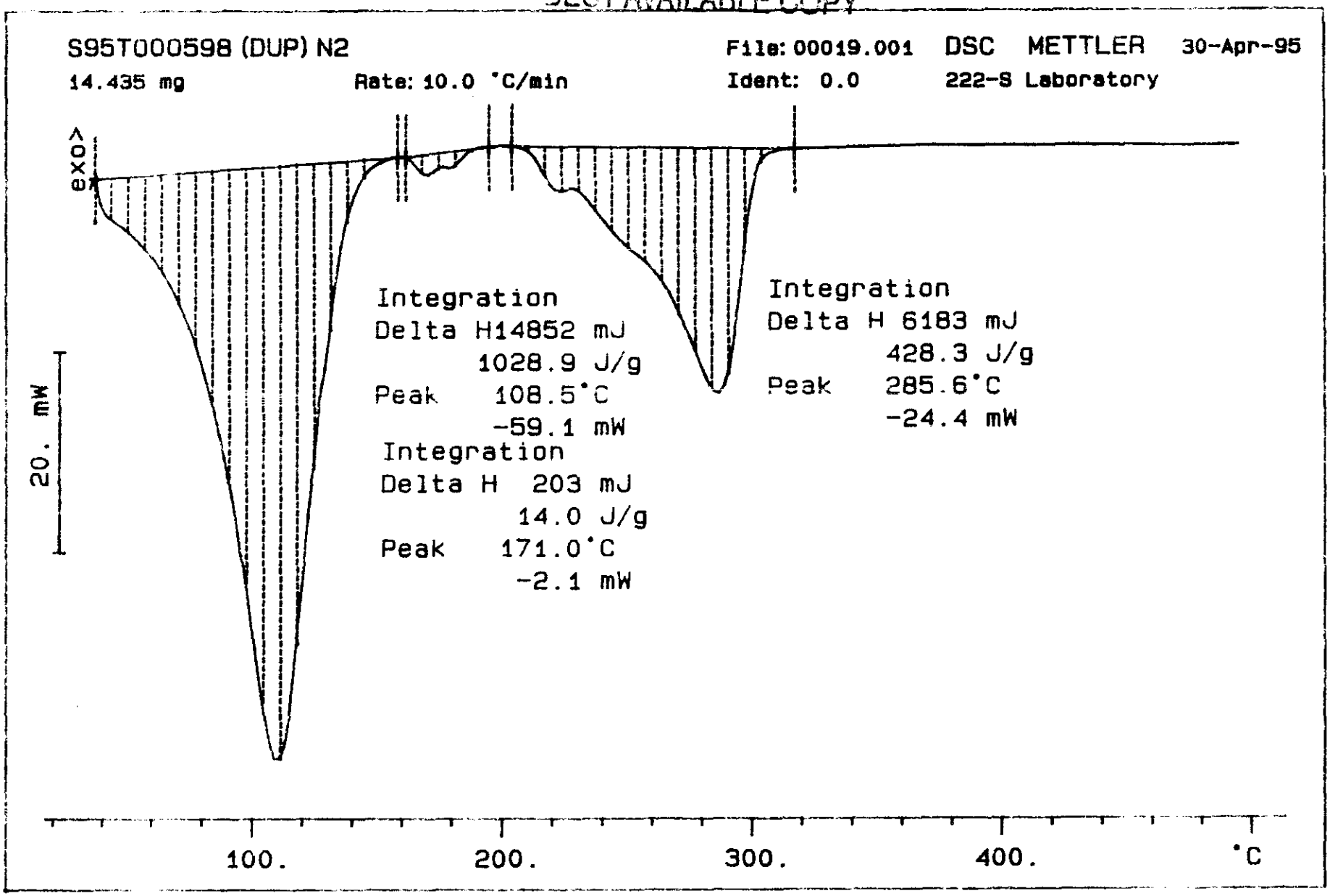


LABCORE Data Entry Template for Worklist# 1021

Analyst: ABP **Instrument:** DSC01 **Book #** 12N14-A

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

Worklist Comment: Please run U-202 DSC under N2. bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				DSC 01	SOLID	28.45	31.7	N/A	Joules/g
95000052	U-202	4	SAMPLE	S95T000630	0		DSC 01	SOLID	N/A	Ø		Joules/g
95000052	U-202	5	DUP	S95T000630	0		DSC 01	SOLID	Ø	Ø	N/A	Joules/g

Final page for worklist # 1021

Anthony Purnutor 5-2-95
Analyst Signature **Date**

[illegible] 5-3-95
Analyst Signature **Date**

Verified by Elandina Valenzuela 5-[illegible]-95

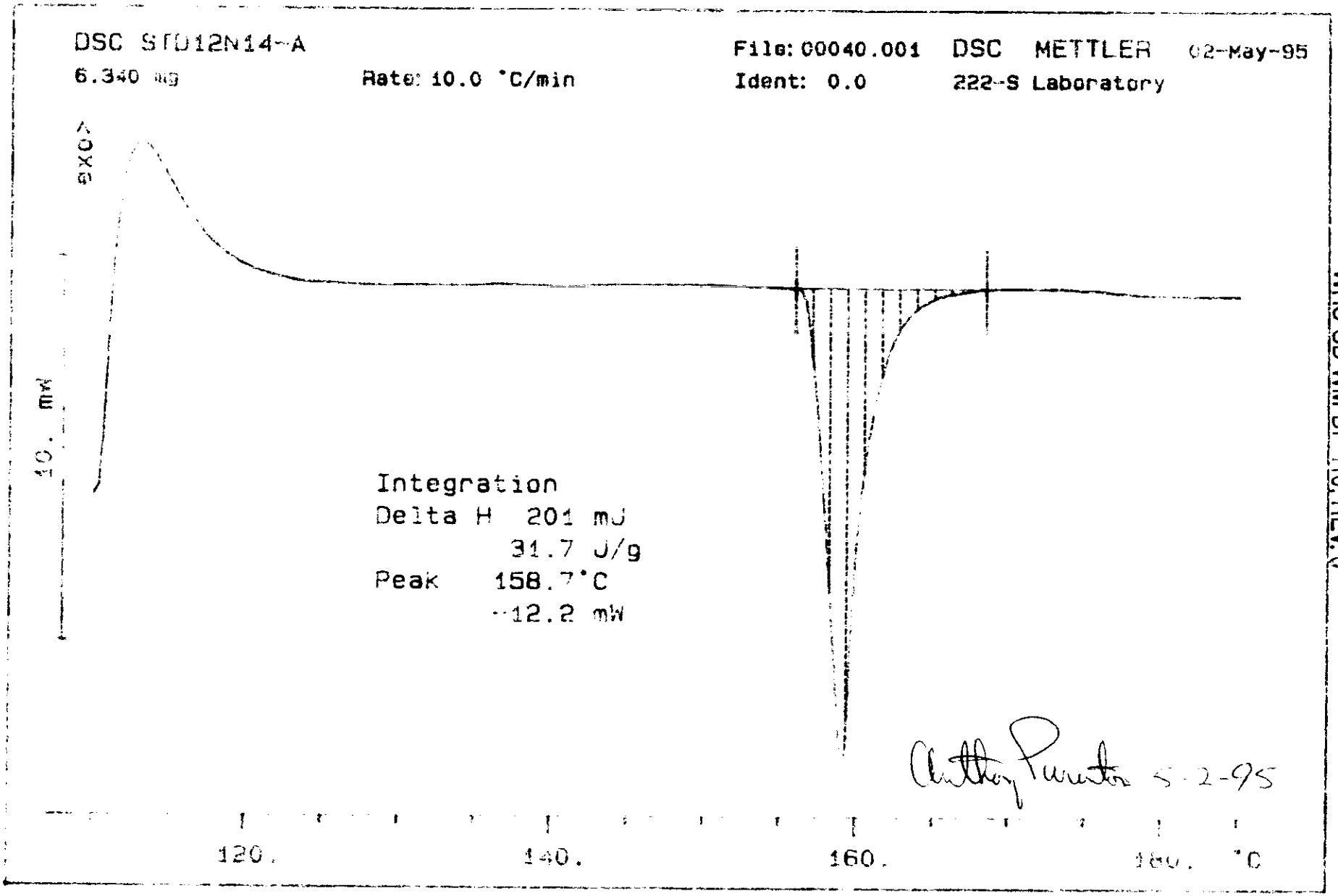
Data Entry Comments:

[illegible]

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.

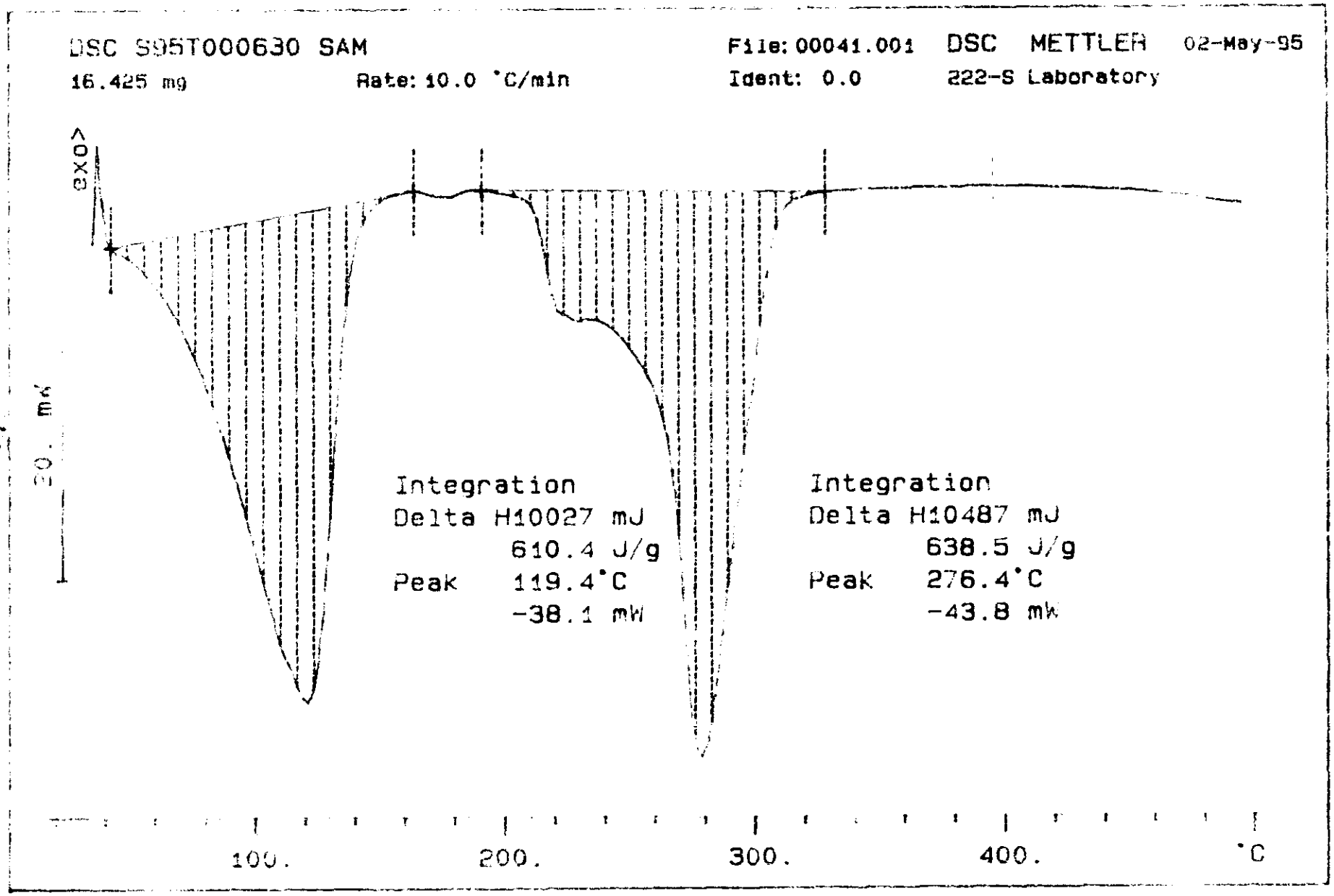
SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 24 TO 26.

BEST AVAILABLE COPY



Anthony Punter 5-2-95

BEST AVAILABLE COPY



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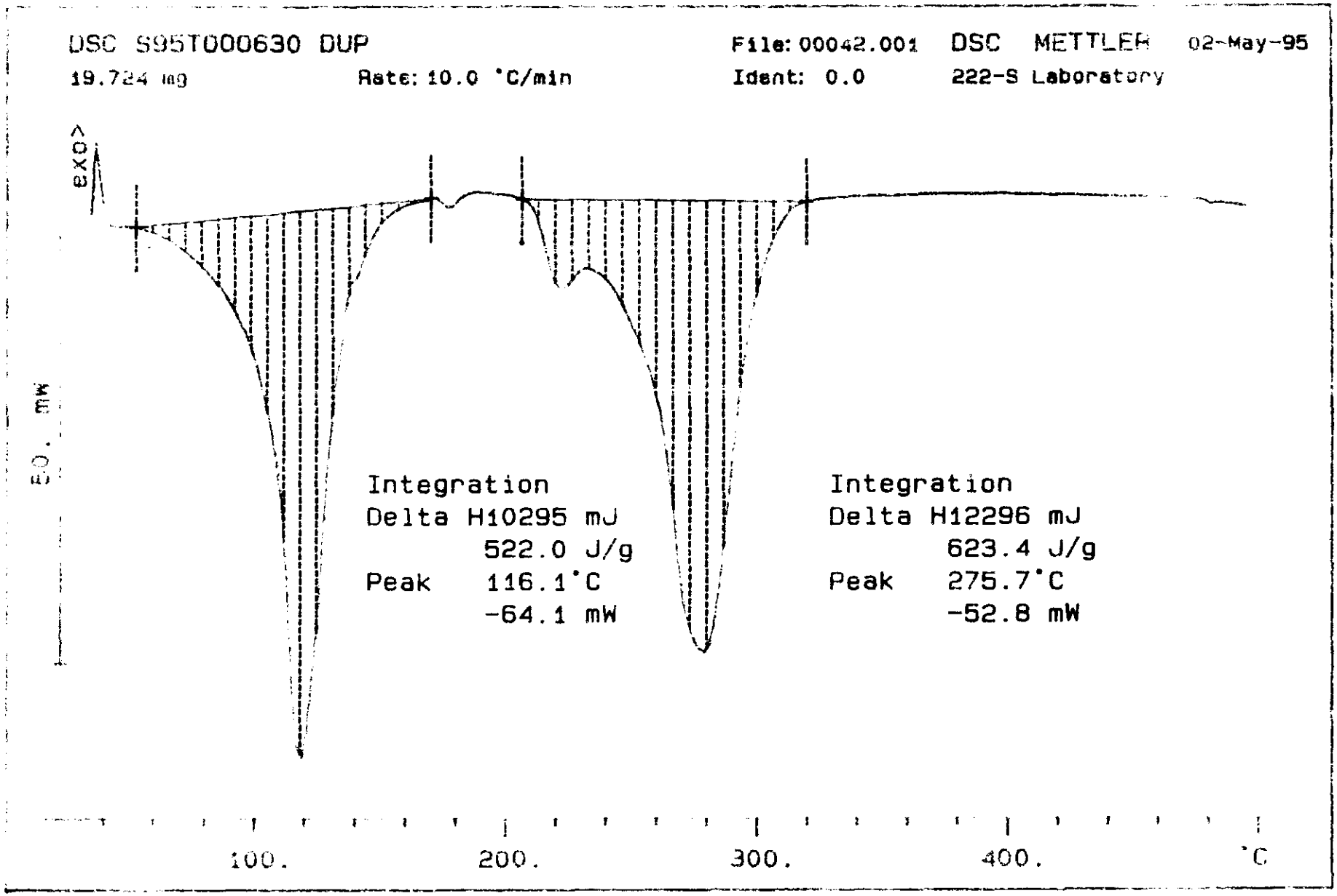


LABCORE Data Entry Template for Worklist# 1022

Analyst: SMF **Instrument:** DSC01 **Book #** 12N74-A

Method: LA-514-113 Rev/Mod 1 4

Worklist Comment: Please run U-202 DSC under N2 bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				DSC-01	SOLID	28.45	30.4	N/A	Joules/g
95000052	U-202	2	SAMPLE	S95T000632	0		DSC-01	SOLID	N/A	Ø		Joules/g
95000052	U-202	3	DUP	S95T000632	0		DSC-01	SOLID	Ø	Ø	N/A	Joules/g

Final page for worklist # 1022

Susie M. Fulton 5-1-95
Analyst Signature **Date**

[signature] 5/2/95
Analyst Signature **Date**

Verified by Brandina Valenzuela

S95T000632 produced three endotherms one at 117.6°C with a delta H of 472.3 J/g, second at 178.9°C with a delta H of 2.8 J/g and third at 271.3° with a delta H of 635.1 J/g.

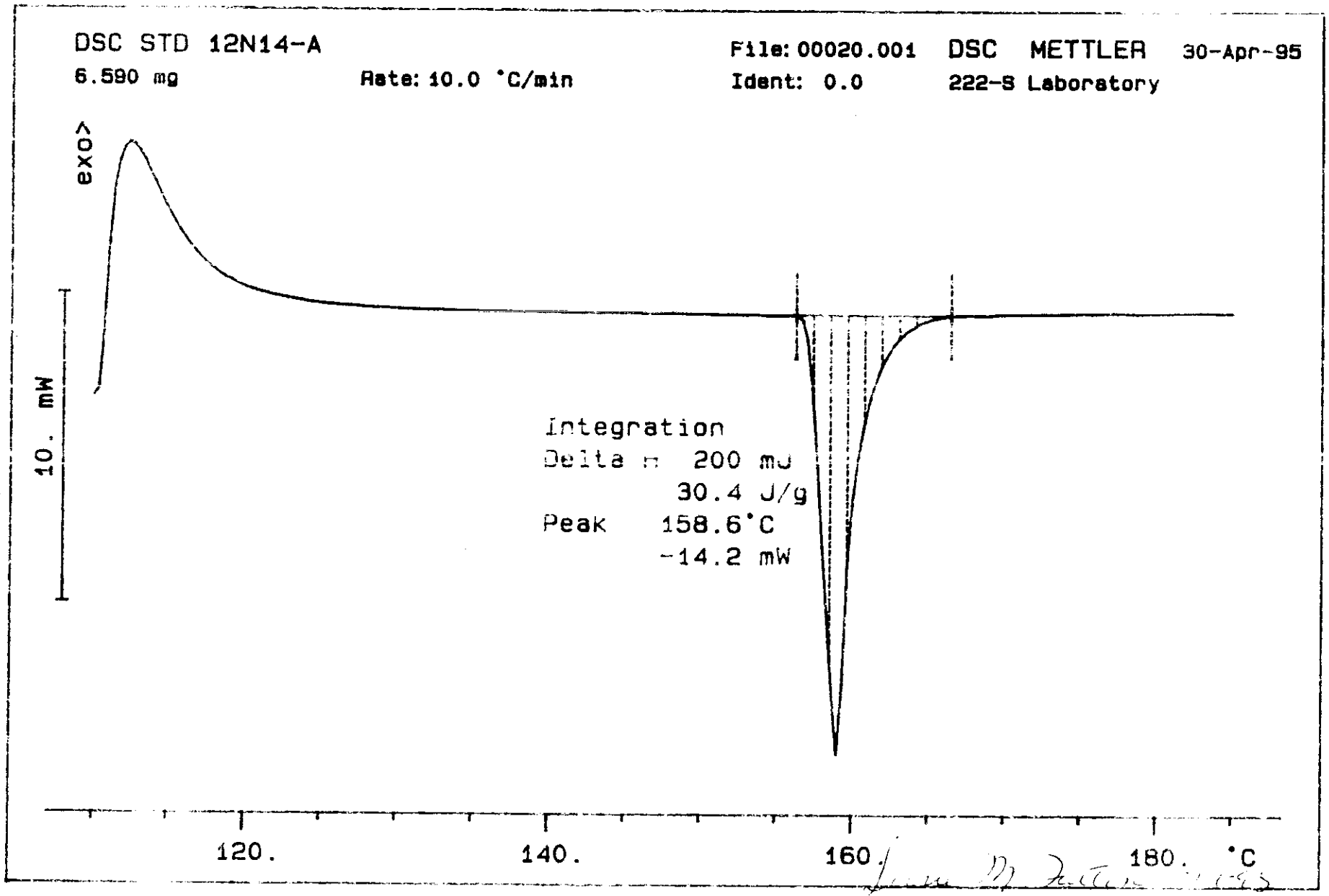
Data Entry Comments:

S95T000632 light yellow - thick material w/ ~~[illegible]~~ SMF the layer of [illegible]

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 30.

BEST AVAILABLE COPY



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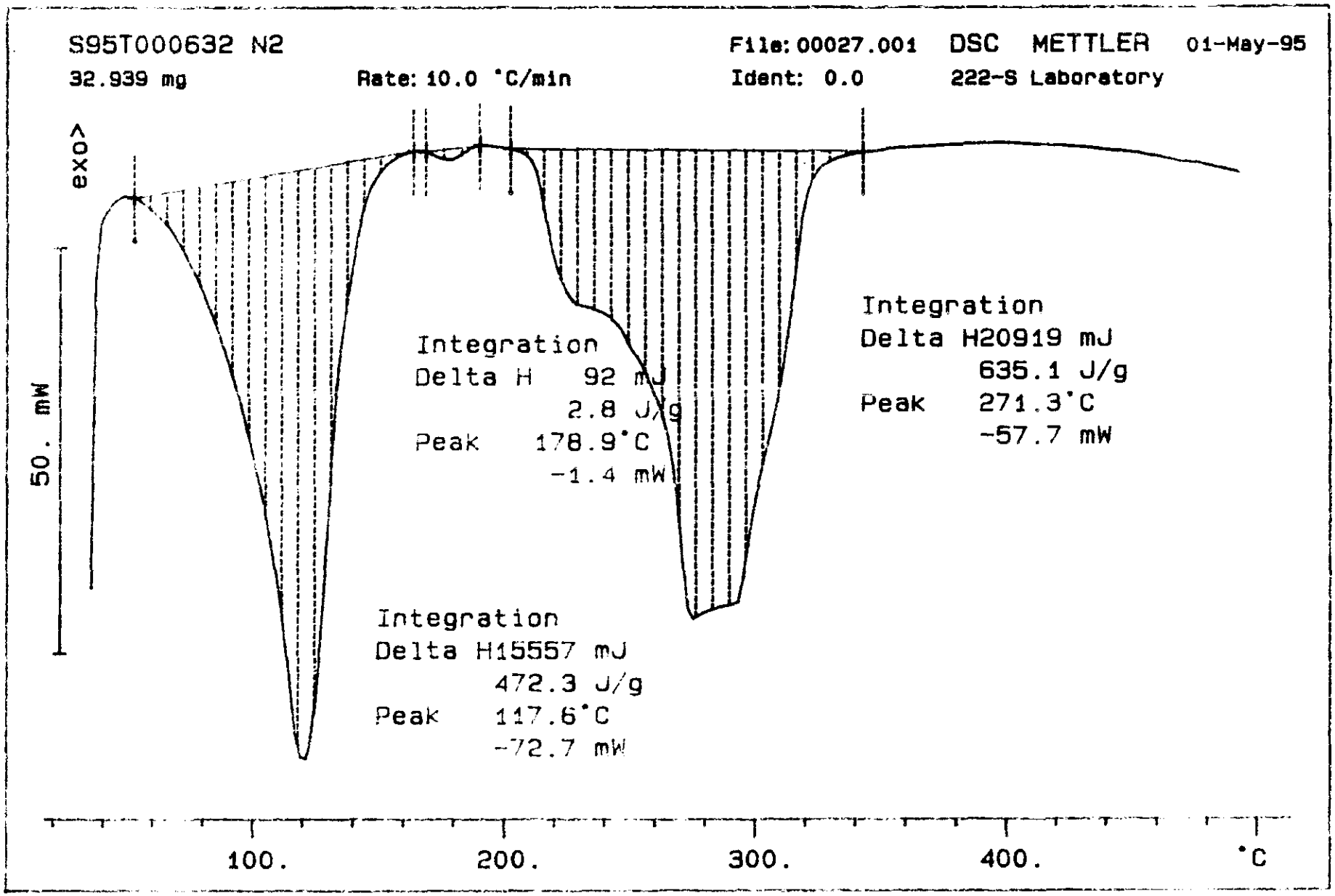

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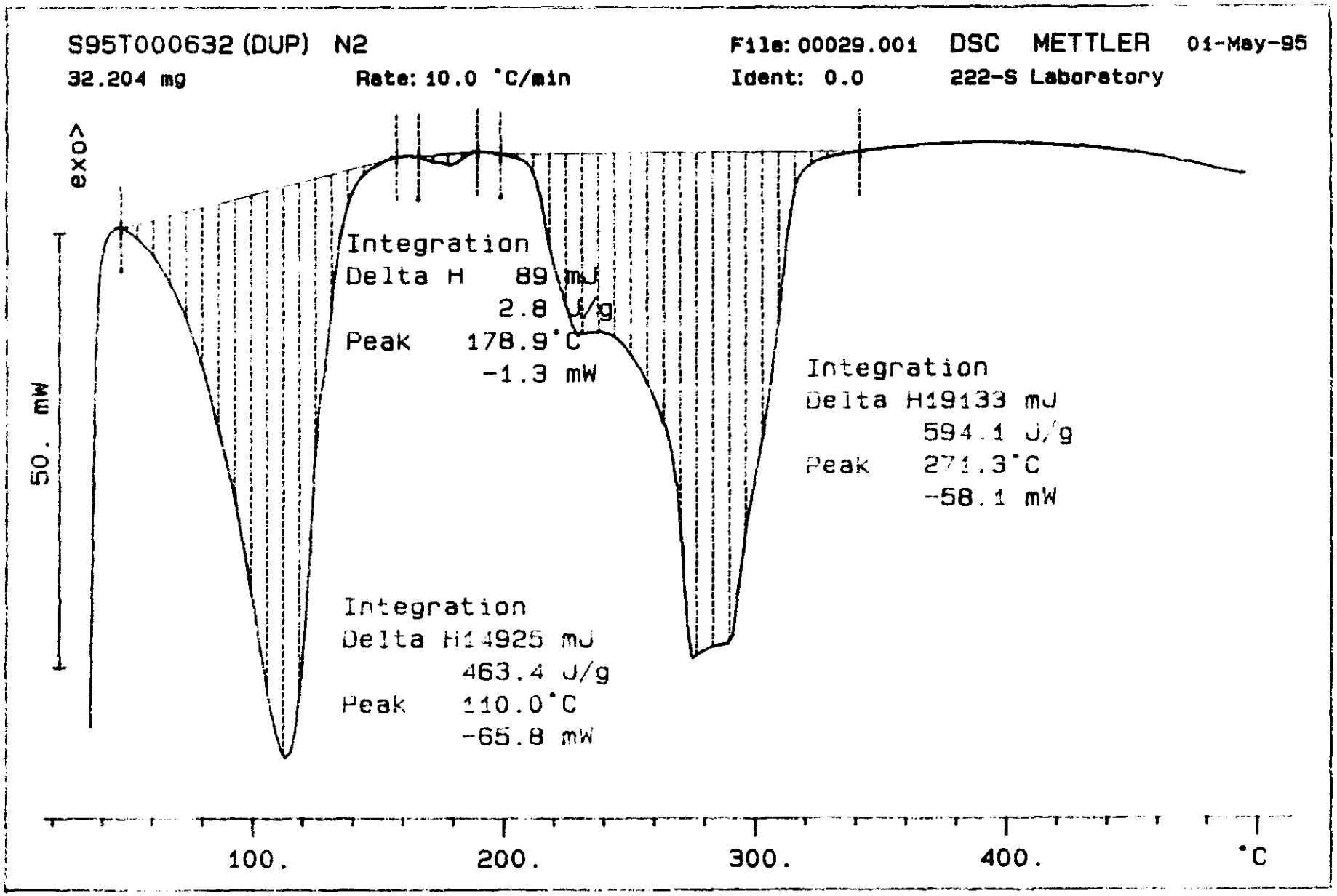


LABCORE Data Entry Template for Worklist# 1024

Analyst: SMF **Instrument:** DSC01 **Book #** 12N:4-A

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

Worklist Comment: Please run U-202 DSC under N2. bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				DSC-01	SOLID	28.45	30.3	N/A	Joules/g
95000052	U-202	4	SAMPLE	S95T000643	0		DSC-01	SOLID	N/A	Ø		Joules/g
95000052	U-202	5	DUP	S95T000643	0		DSC-01	SOLID	Ø	Ø	N/A	Joules/g

Final page for worklist # 1024

See attached for signatures 5-1-95

Analyst Signature **Date** 5-1-95

Analyst Signature **Date**

Verified by Blandina Valenzuela 5-2-95

Data Entry Comments: S95T000643 produced [illegible] endotherms [illegible] at 115.3 [illegible] delta H of 503.5 J/g and the second at 262.6 C with a delta H of 129.6 J/g. The sample was a light yellow material w/ large crystals (> 50% crystals

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# 1024

Analyst: SMF **Instrument:** DSC01 **Book #** 12N14-A

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

Worklist Comment: Please run U-202 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
95000054	U-202	2	SAMPLE	S95T000610	0		DSC 01	SOLID	N/A			Joules/g
95000054	U-202	3	DUP	S95T000610	0		DSC 01	SOLID			N/A	Joules/g
95000052	U-202	4	SAMPLE	S95T000643	0		DSC-01	SOLID	N/A			Joules/g
95000052	U-202	5	DUP	S95T000643	0		DSC-01	SOLID			N/A	Joules/g

Final page for worklist # 1024

Susie M. Tutton 5-1-95

Analyst Signature **Date**

Analyst Signature **Date**

Data Entry Comments:

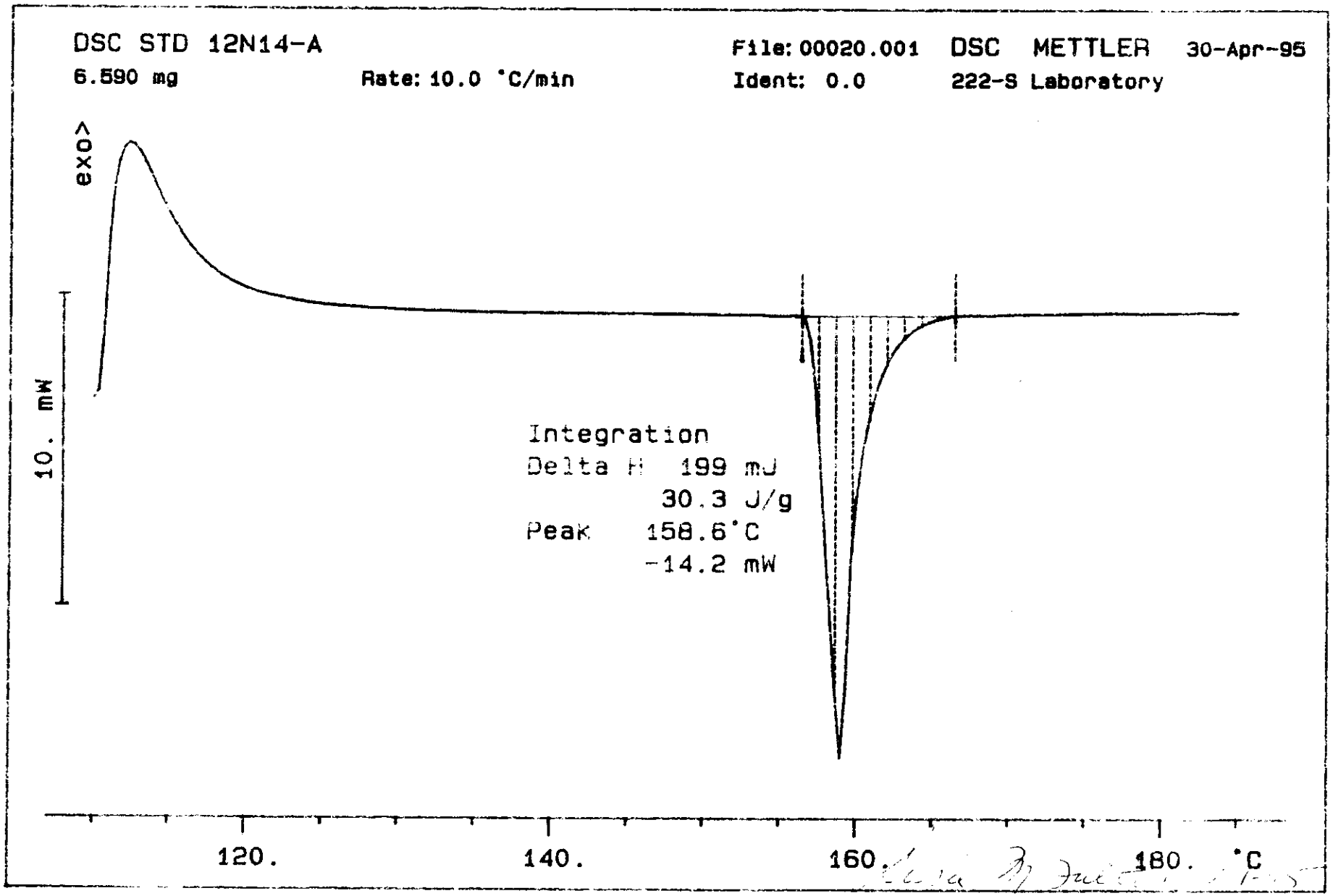
S95T000610 - Anhydrous

S95T000643 - light yellow material w/ large crystals (>50% crystals)

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 33 TO 35.

BEST AVAILABLE COPY



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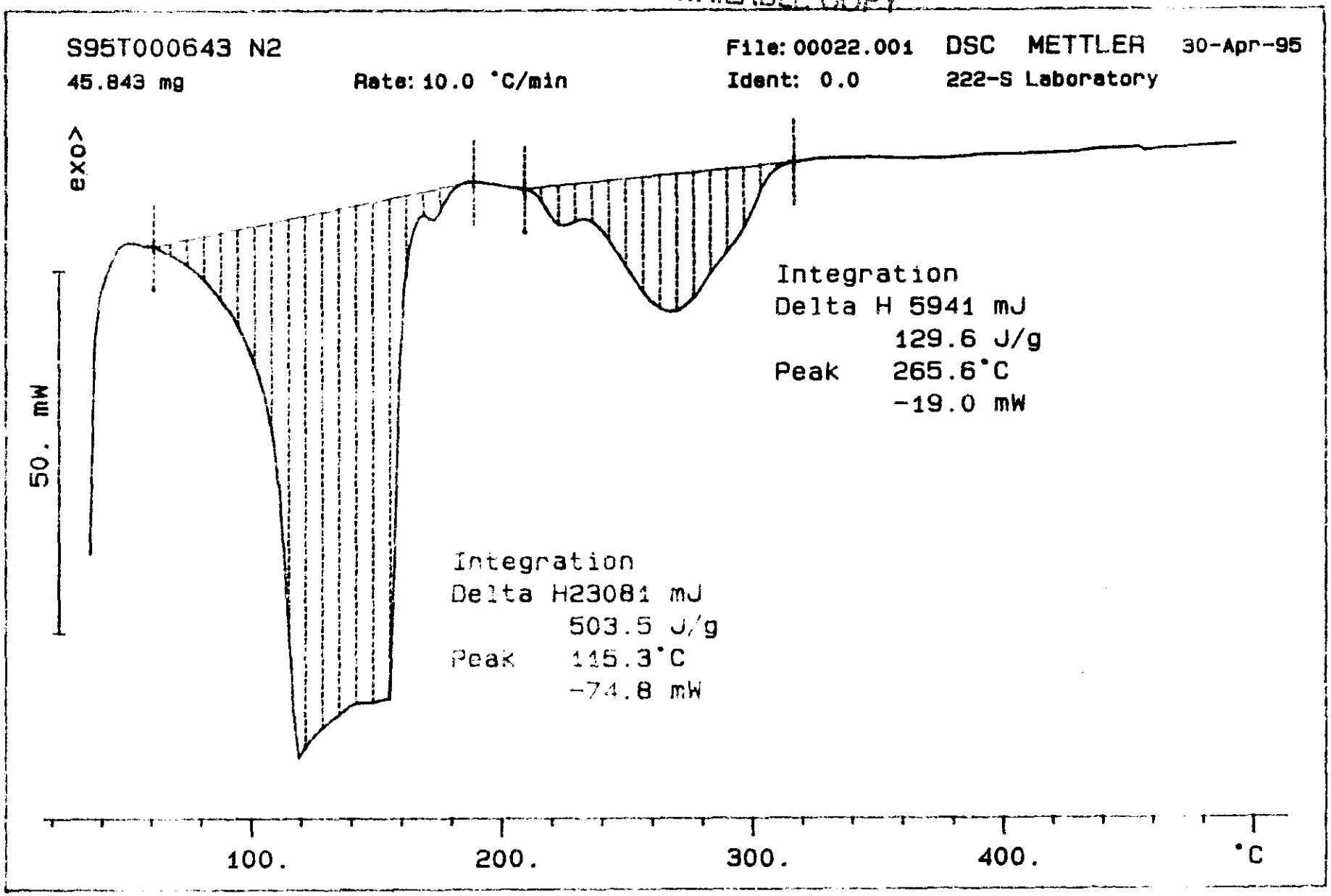

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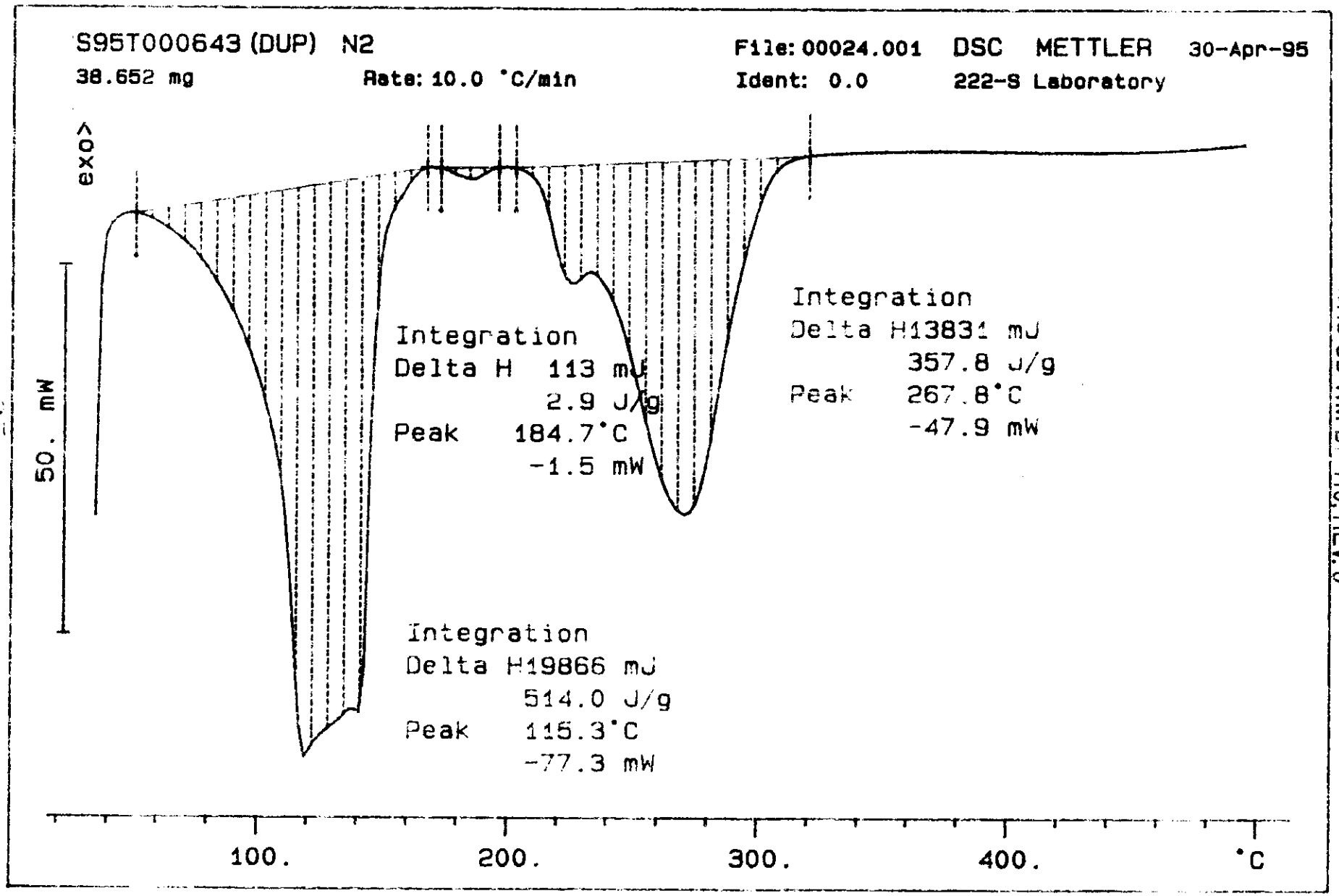

LABCORE Data Entry Template for Worklist# 1025

Analyst: DWS **Instrument** DSC01 **Book #** 12W14-A

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

Worklist Comment: Please run U-202 DSC under N2 bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				DSC-01	SOLID	28.45	31.4	N/A	Joules/g
95000052	U-202	2	SAMPLE	S95T000644	0		DSC-01	SOLID	N/A	Ø		Joules/g
95000052	U-202	3	DUP	S95T000644	0		DSC-01	SOLID	Ø	Ø	N/A	Joules/g

Final page for worklist # 1025

[signature] 4-25-95
Analyst Signature **Date**

[signature] 4-25-95
Analyst Signature **Date**

Verified by Brandina Valenzuela 4/25/95

Data Entry Comments: S95T000644 [illegible] one at 15.3C with a delta H of 664.0 J/g, and the second, which is postulated to be aluminum hydroxide, was at 267.3C with a delta H of 496.0 J/g.

Units shown for QC (SBK & 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 37 TO 39.

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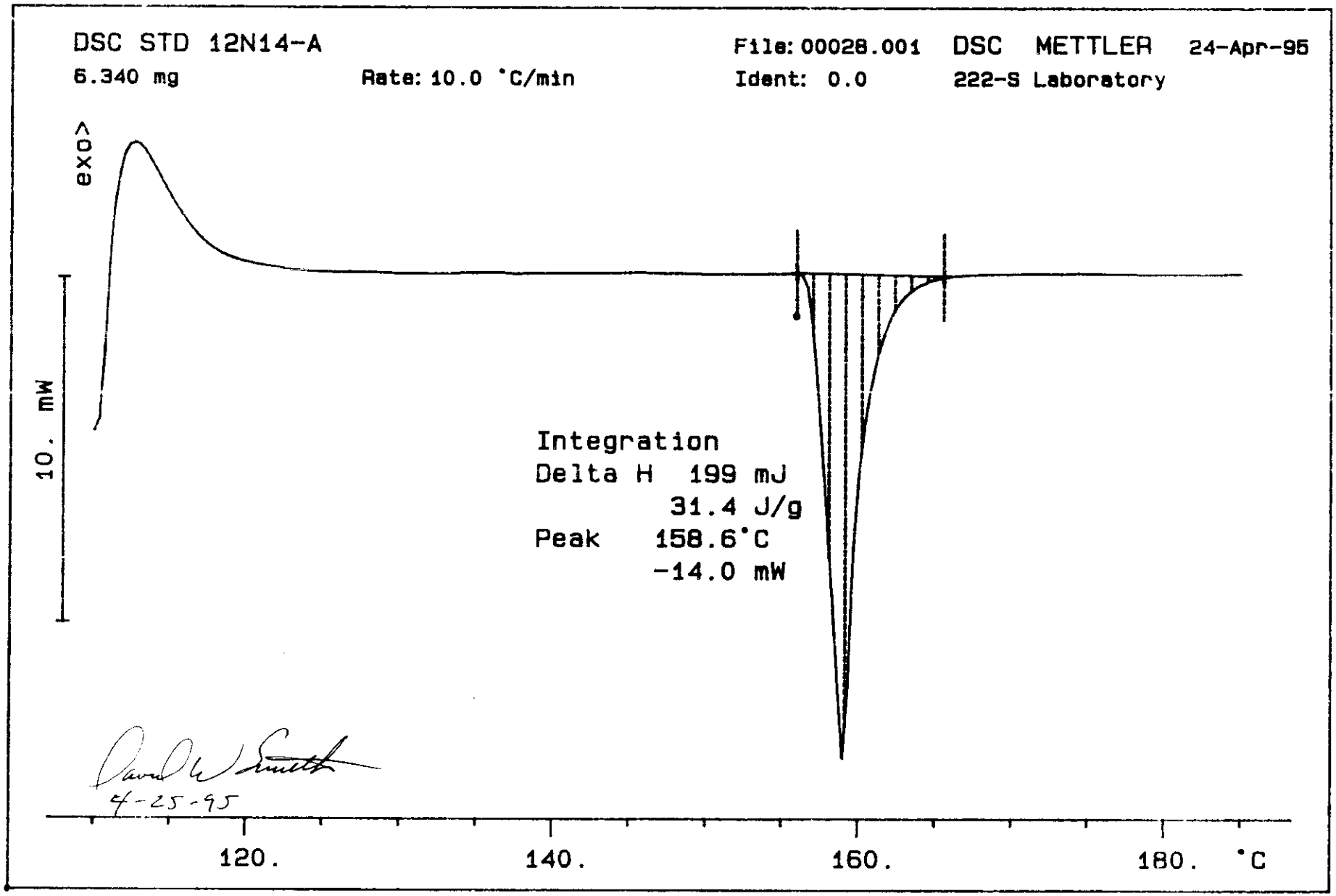

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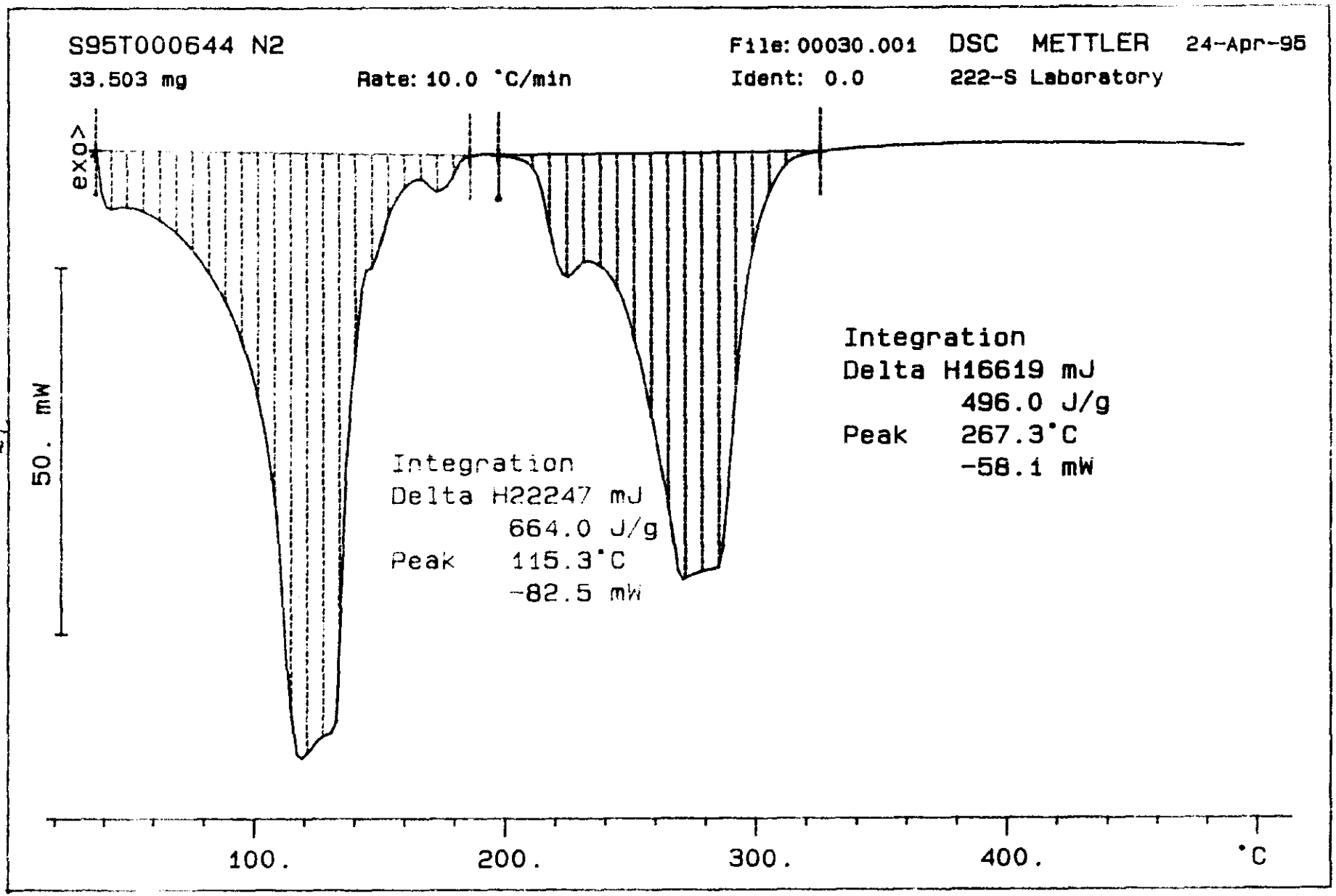

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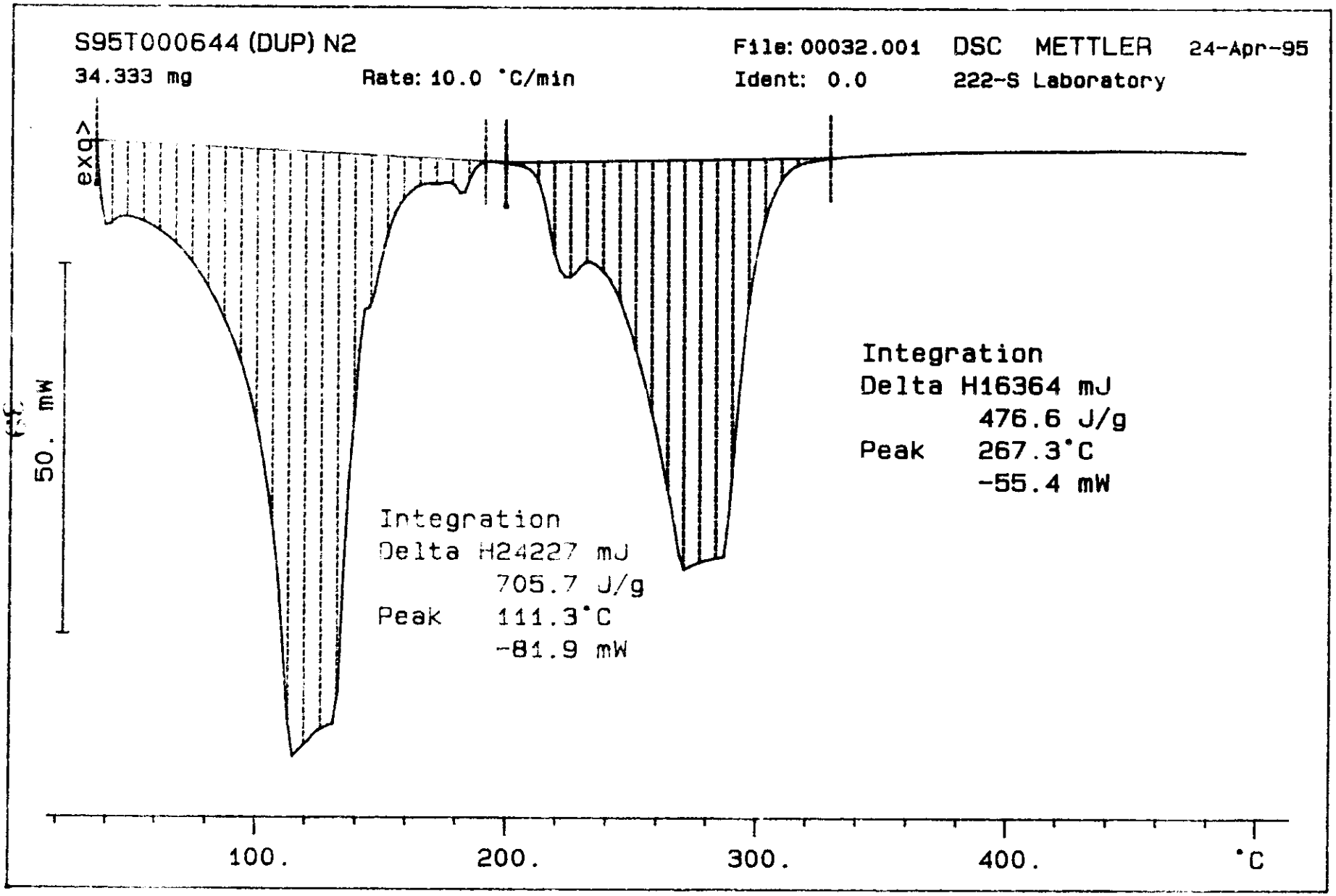


LABCORE Data Entry Template for Worklist# 1028

Analyst: DWS **Instrument:** DSC 01 **Book #** 12W14-17

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

Worklist Comment: Please run U-202 DSC under N2 bdv

GROUP	PROJECT	S TYPE	SAMPLE#	R A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD			DSC-01	LIQUID	28.45	26.1	N/A	Joules/g
95000039	U-202	2 SAMPLE	S95T000582	0	DSC-01	LIQUID	N/A	Ø		Joules/g
95000039	U-202	3 DUP	S95T000582	0	DSC-01	LIQUID	Ø	Ø	N/A	Joules/g
95000039	U-202	4 SAMPLE	S95T000588	0	DSC-01	LIQUID	N/A	Ø		Joules/g
95000039	U-202	5 DUP	S95T000588	0	DSC-01	LIQUID	Ø	Ø	N/A	Joules/g

Final page for worklist # 1028

5-4-95
Analyst Signature **Date**

5-4-95
Analyst Signature **Date**

Verified by Blandina Valenzuela 5/5/95

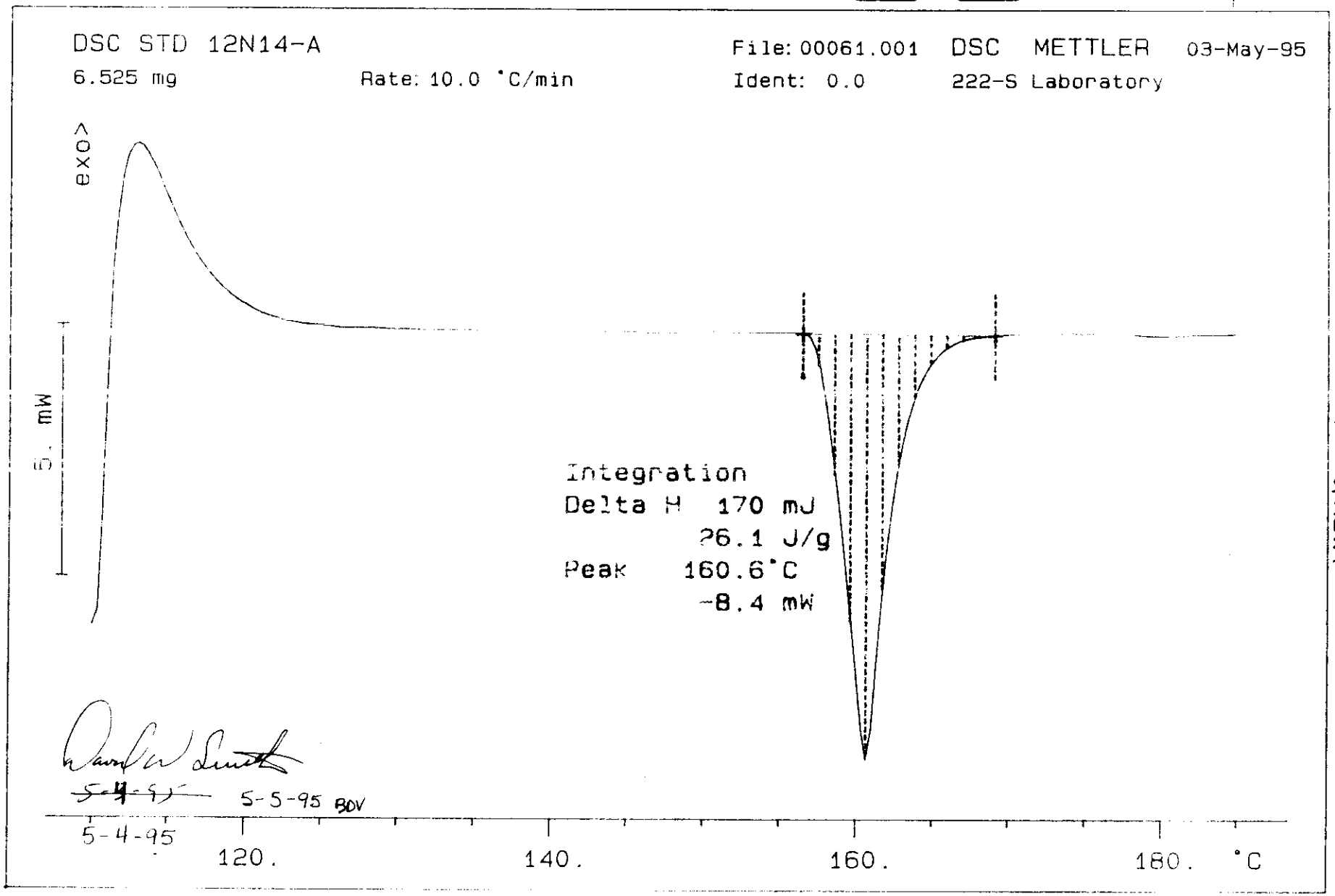
Data Entry Comments:

[illegible]

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.

[illegible]

SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 41 TO 45.



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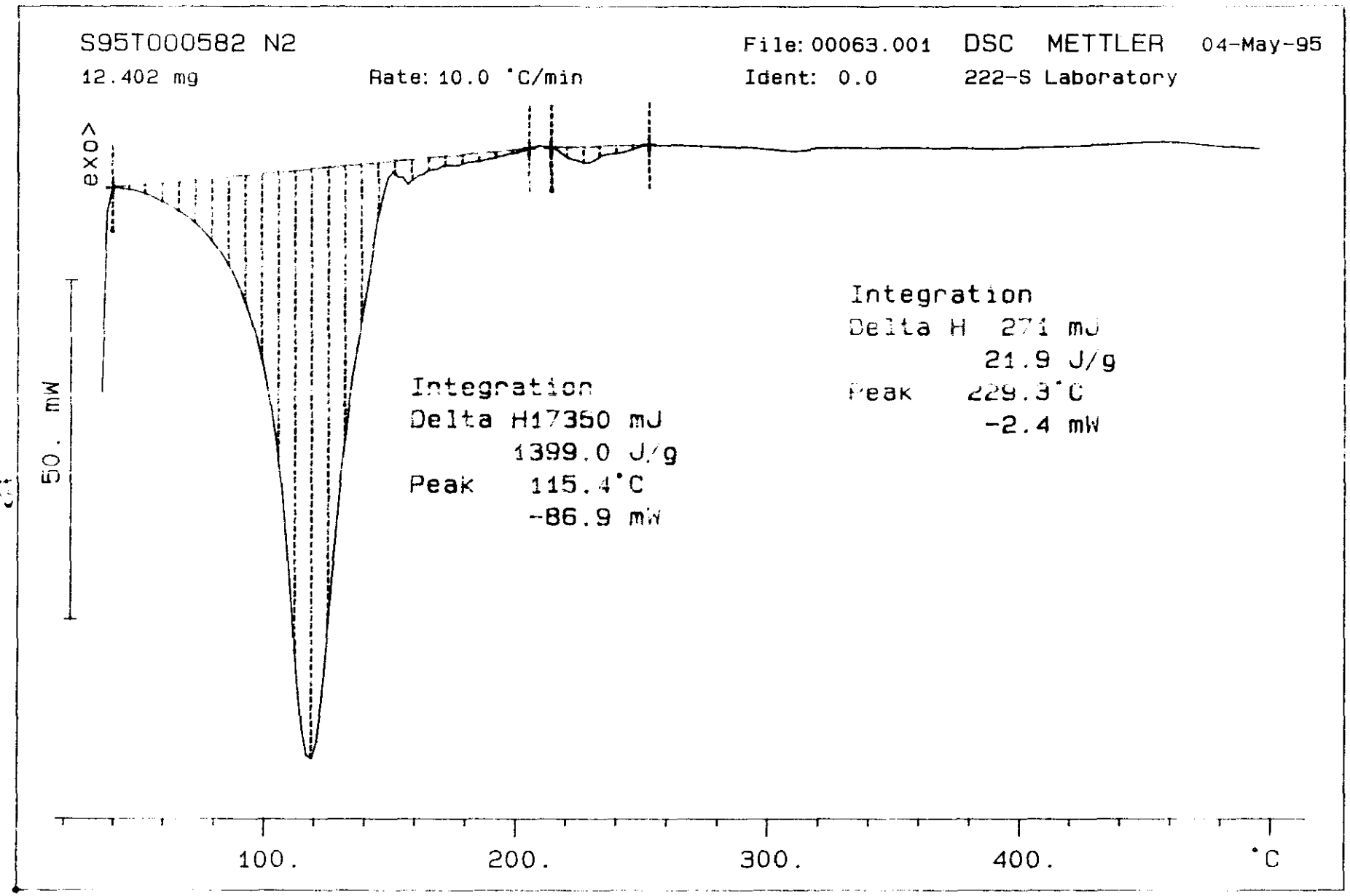

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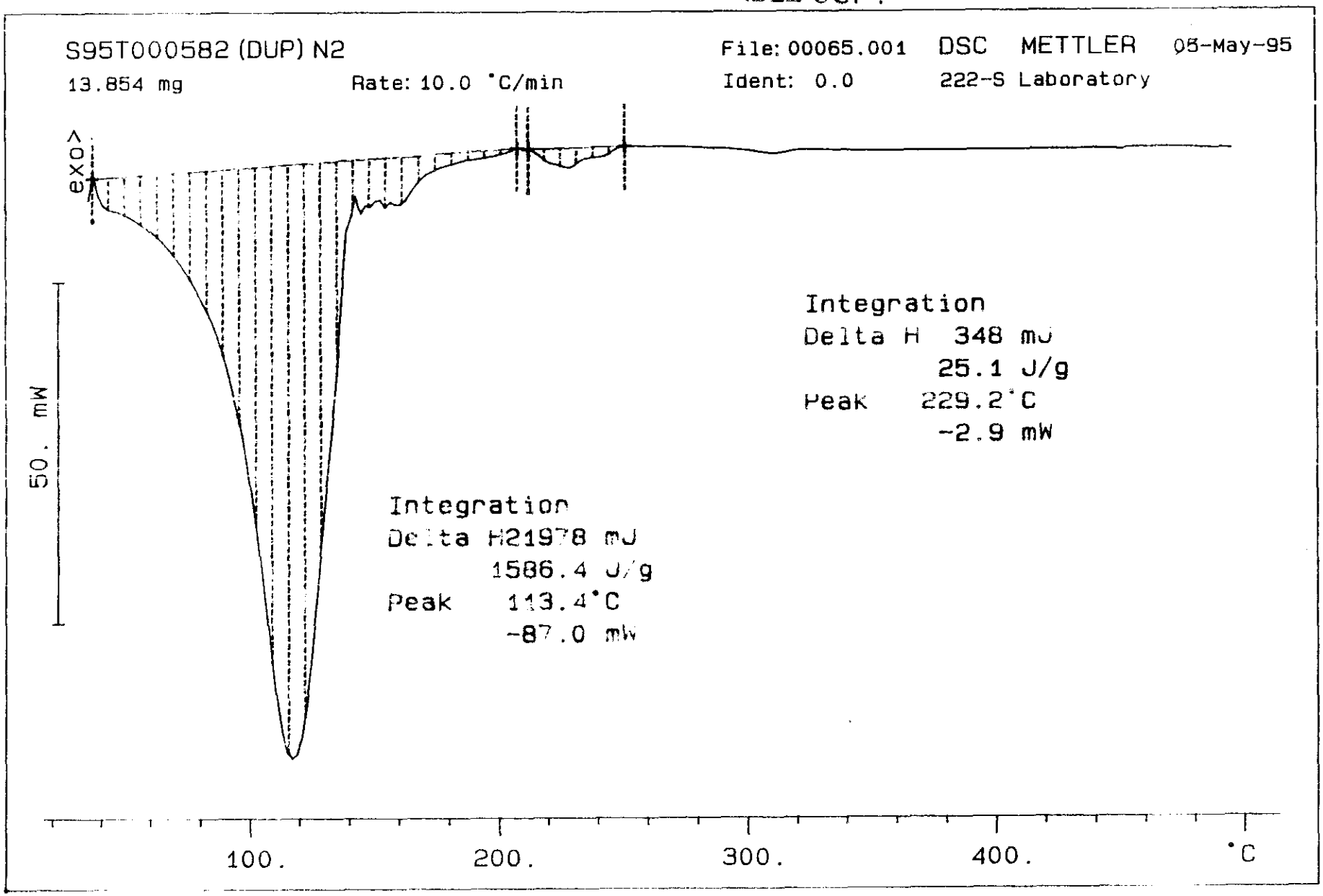

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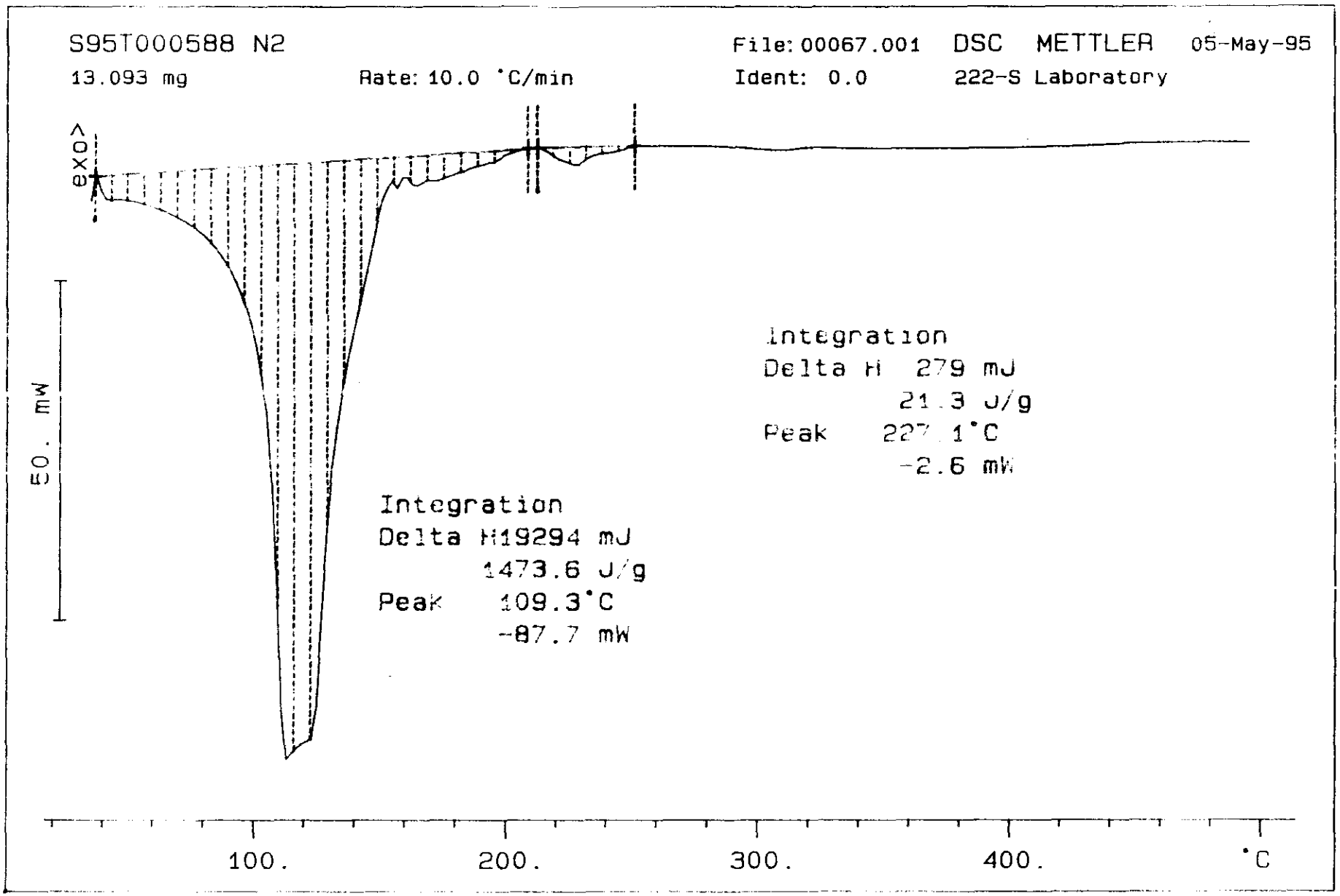

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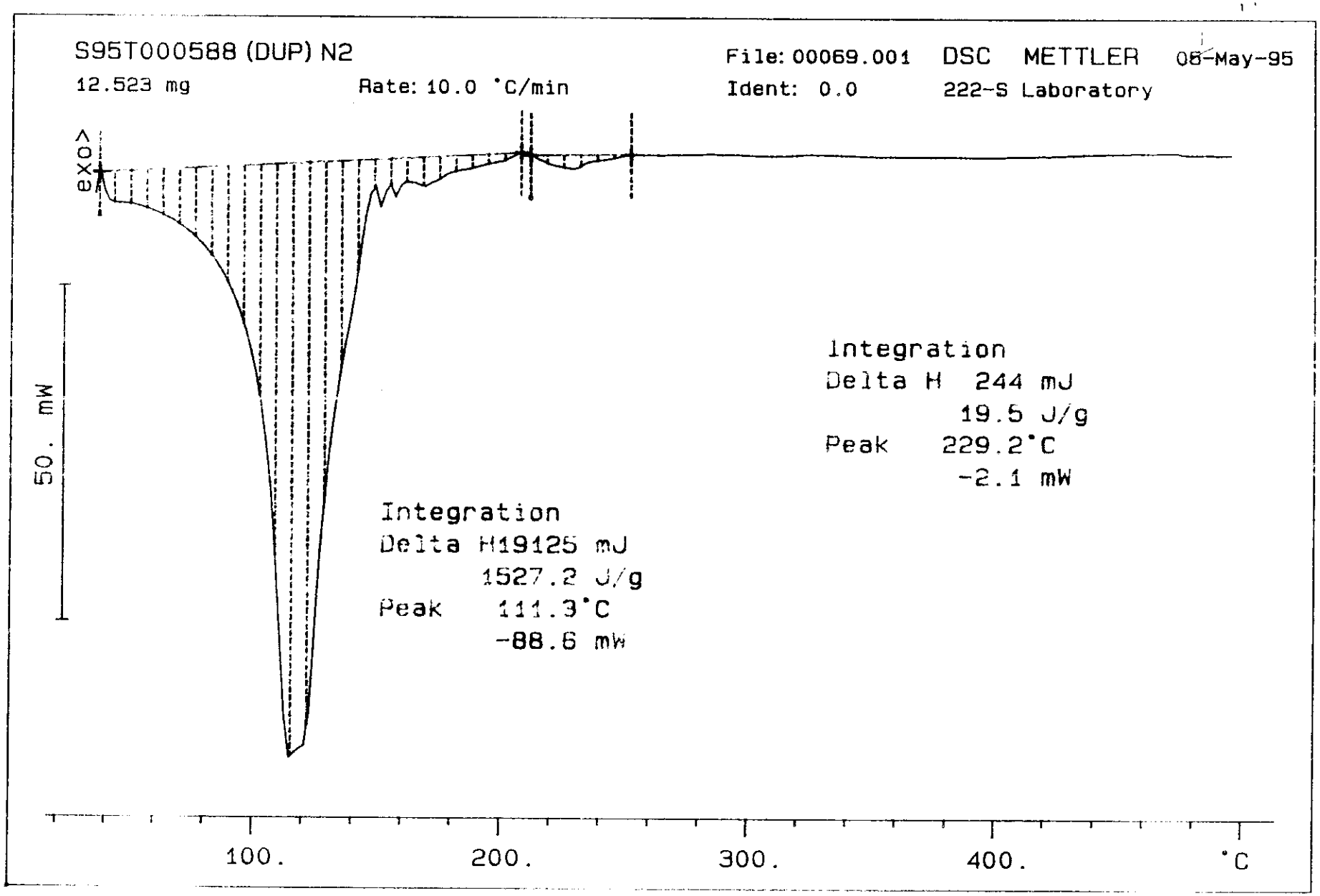


worklistrpt Version 2.0 02/21/95
05/03/95 13:15

LABCORE Data Entry Template for Worklist# 1029

Analyst: SMF **Instrument:** DSC01 _____ **Book #** 12N14-A

Method: LA-514-113 Rev/Mod A 2

Worklist Comment: Please run U-202 DSC under N2. bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				DSC 01	LIQUID	28.45	29.1	N/A	Joules/g
95000052	U-202	4	SAMPLE	S95T000621	0		DSC 01	LIQUID	N/A	Z		Joules/g
95000052	U-202	5	DUP	S95T000621	0		DSC 01	LIQUID	Z	Z	N/A	Joules/g

Final page for worklist # 1029

Susie M. Fulton 5-3-95
Analyst Signature **Date**

[signature] 5/4/95
Analyst Signature **Date**

Verified by Blandina Valenzuela 5/5/95

Data Entry Comments:

[illegible]

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 47 TO 49.

5/5/95 BOV

DSC STD 12N14-A

6.340 mG

Rate: 10.0 °C/min

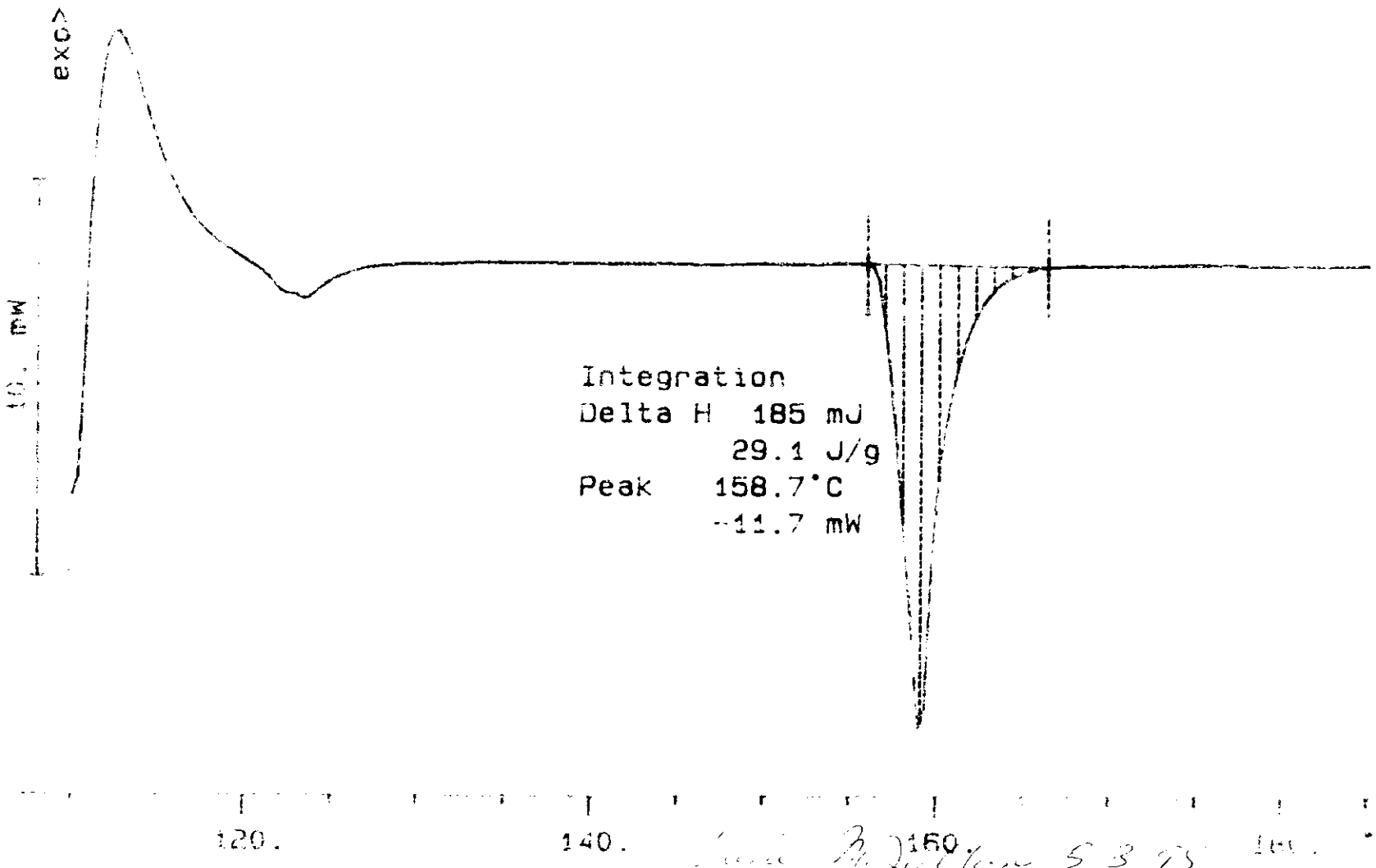
File: 00044.001

Ident: 0.0

DSC METTLER

222-S Laboratory

~~02~~ 03 May-95



5 3 95

WHC-SD-WM-DP-110, REV. 0

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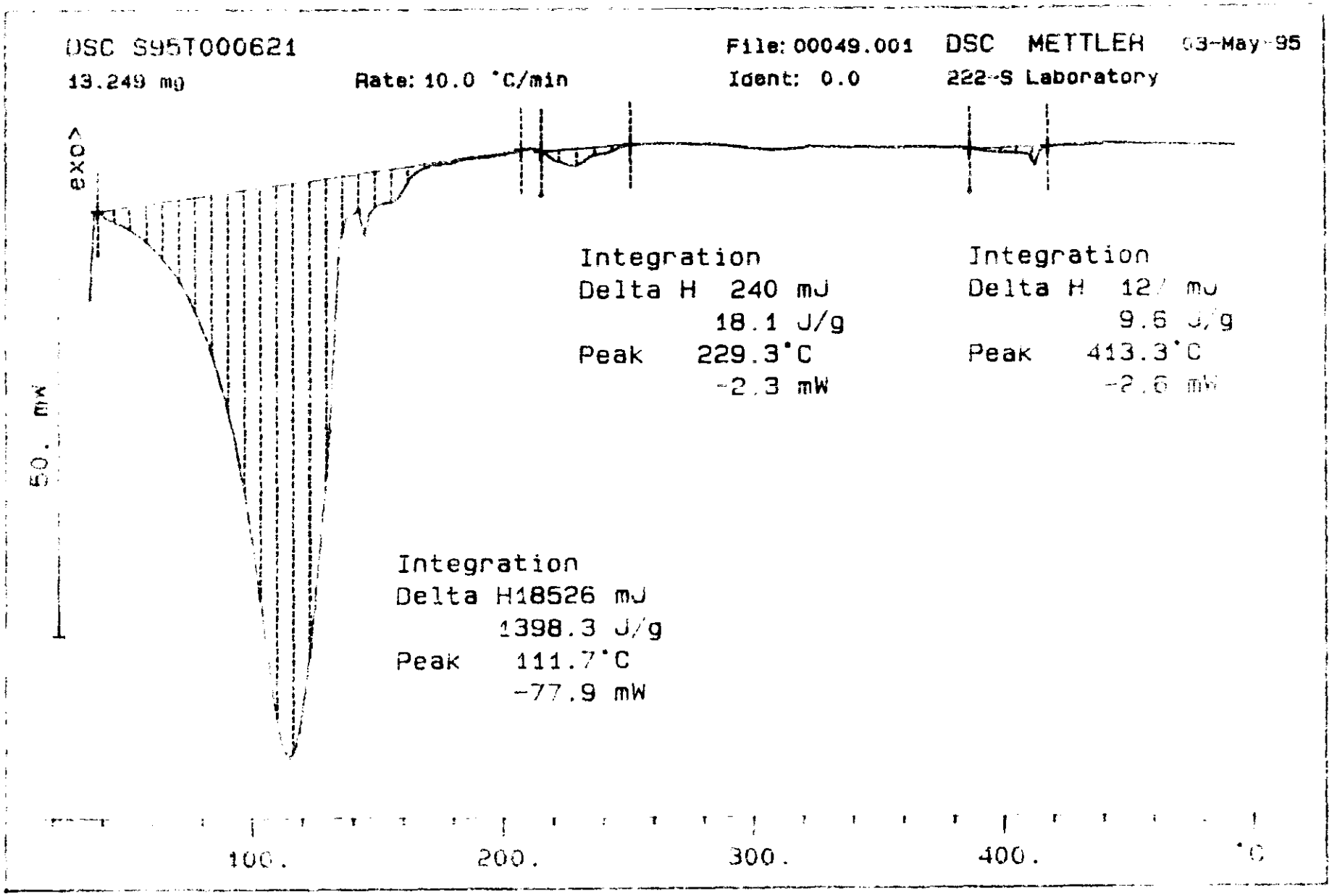

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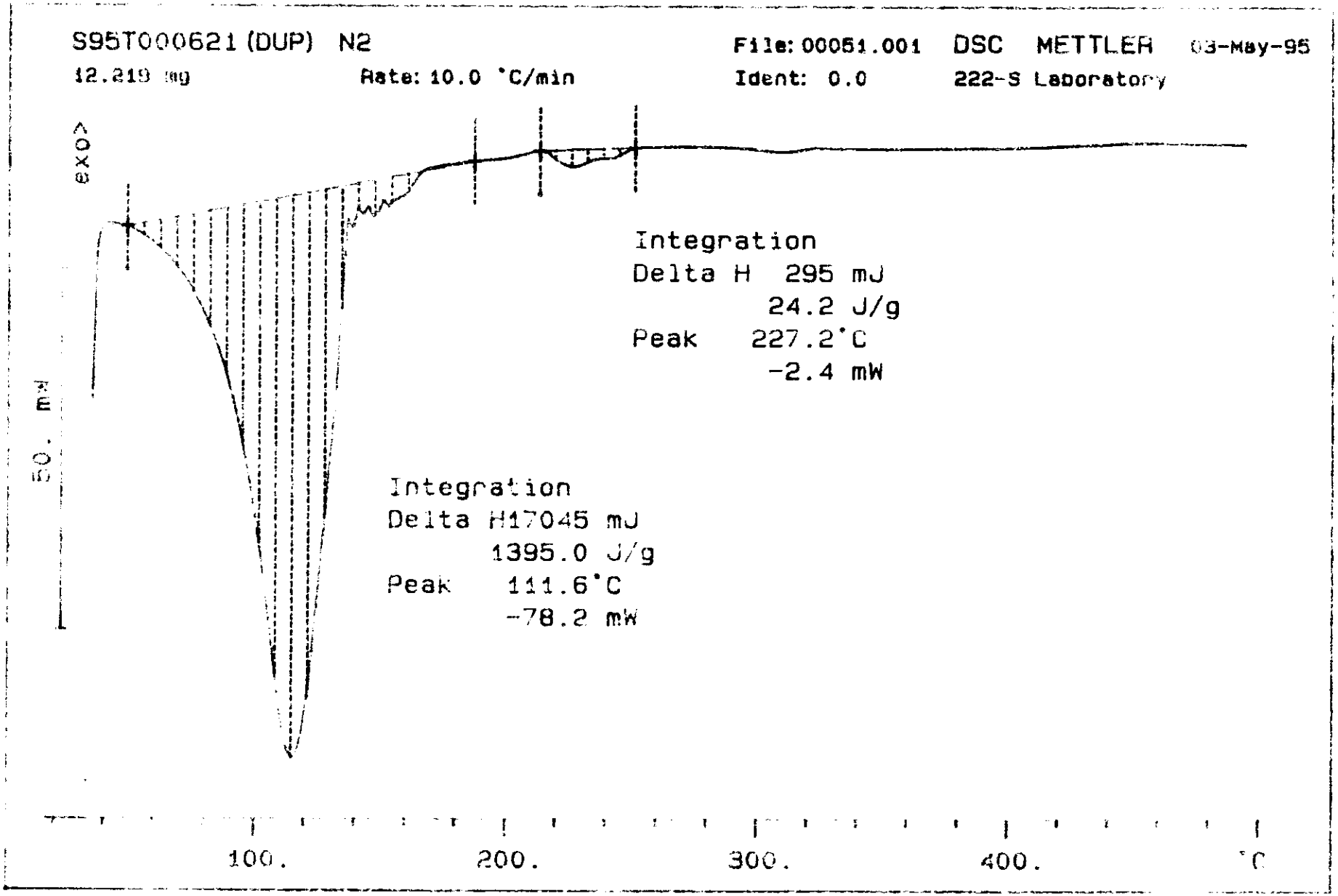


LABCORE Data Entry Template for Worklist# 1030

Analyst: [illegible] **Instrument:** DSC01 03 5/5/95 BDV **Book #** [illegible]

Method: LA-514-114 Rev/Mod [illegible]

Worklist Comment: Please run U-202 DSC under N2 bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				DSC-03	LIQUID	[illegible]	[illegible]	N/A	Joules/g
95000052	U-202	2	SAMPLE	S95T000636	0		DSC-03	LIQUID	N/A	Ø		Joules/g
95000052	U-202	3	DUP	S95T000636	0		DSC-03	LIQUID	Ø	Ø	N/A	Joules/g
95000052	U-202	4	SAMPLE	S95T000654	0		DSC-03	LIQUID	N/A	Ø		Joules/g
95000052	U-202	5	DUP	S95T000654	0		DSC-03	LIQUID	Ø	Ø	N/A	Joules/g

Final page for worklist # 1030

See attached for Signature
Analyst Signature **Date**
Verified by Blandina Valenzuela 5/5/95

[illegible] 5/4/95
Analyst Signature **Date**

Data Entry Comments:

[illegible]

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# 1030

Analyst: SMF **Instrument:** DSC01 **Book #** 12N'14-17

Method: LA-514-~~113~~ 114 5/5/95 BDV Rev/Mod 130

Worklist Comment: Please run U-202 DSC under N2. bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD	5/5/95 BDV			DSC 01	LIQUID			N/A	Joules/g
95000052	U-202	2	SAMPLE	S95T000~~637~~ 636	0		DSC 01	LIQUID	N/A			Joules/g
95000052	U-202	3	DUP	S95T000~~637~~ 636	0		DSC 01	LIQUID			N/A	Joules/g
95000052	U-202	4	SAMPLE	S95T000654	0		DSC 01	LIQUID	N/A			Joules/g
95000052	U-202	5	DUP	S95T000654	0		DSC 01	LIQUID			N/A	Joules/g

5/5/95 BDV

Final page for worklist # 1030

Susie M. Fulton 5-3-95

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

Data Entry Comments:

S95T000 636 - Bright yellow liquid

S95T000 654 Clear colorless liquid

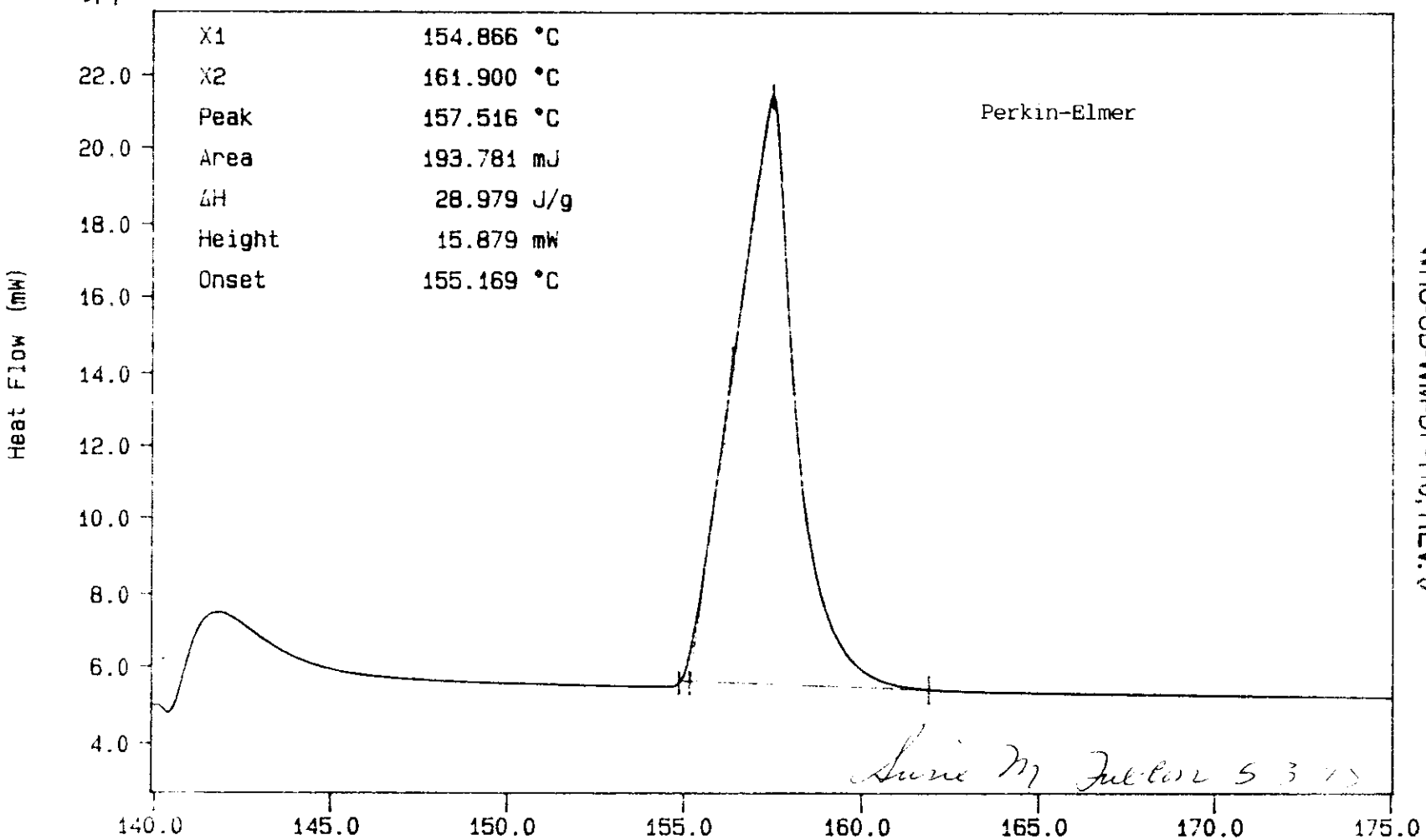
Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

Curve 1: DSC
File info: IND050301 Wed May 3 08:39:26 1995
Sample Weight: 6.687 mg
Indium at 10C/m

SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 52 TO 56.

12N14-A 5/5/95 BOV

BEST AVAILABLE COPY

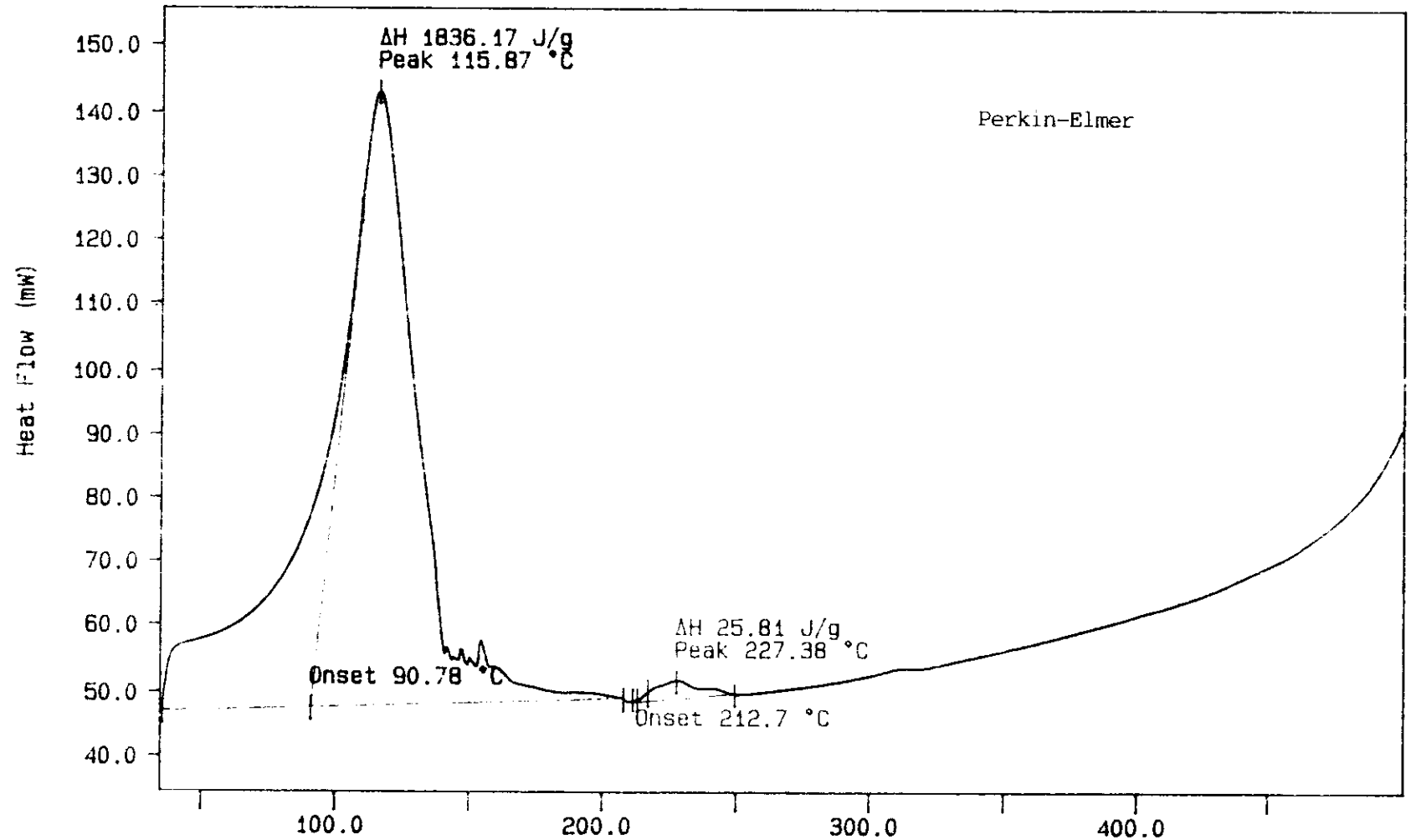


N2 exotherm down
TEMP1: 140.0 C TIME1: 0.0 min RATE1: 10.0 C/min
TEMP2: 175.0 C

SM FULTON
Westinghouse Hanford Co.
222-S Lab
Wed May 3 08:46:31 1995

Curve 1: DSC
File info: SAM050303 Wed May 3 12:38:46 1995
Sample Weight: 12.670 mg
S95T000636, 10C/min

BEST AVAILABLE COPY

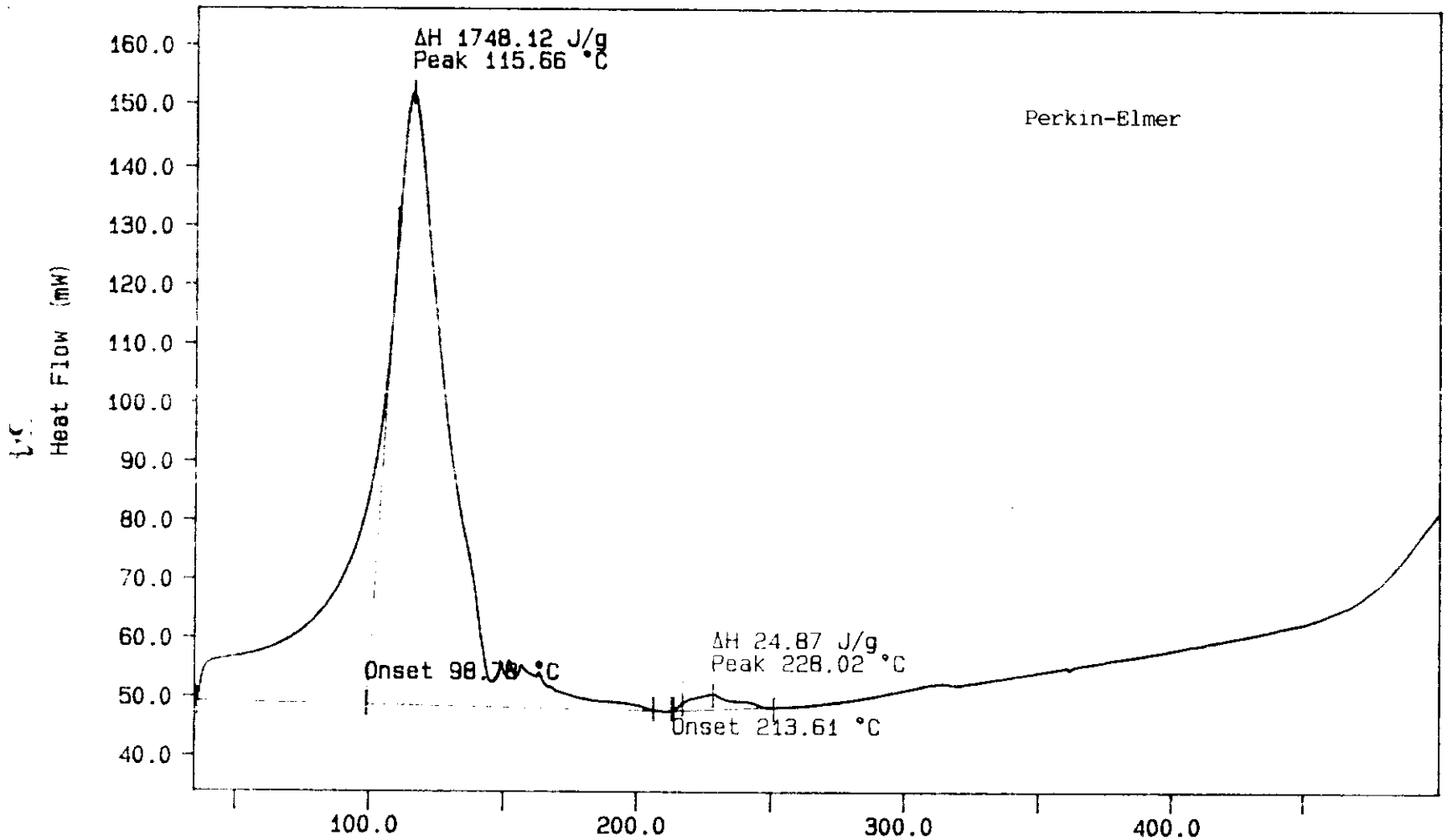


exotherm down, nitrogen purge gas
TEMP1: 35.0 C TIME1: 0.0 min RATE1: 10.0 C/min
TEMP2: 500.0 C

SM Fulton
Westinghouse Hanford Co.
222-S Lab
Wed May 3 13:25:51 1995

Curve 1: DSC
File info: SAM050304 Wed May 3 14:17:41 1995
Sample Weight: 12.040 mg
S95T000636 (DUP), 10C/min

BEST AVAILABLE COPY



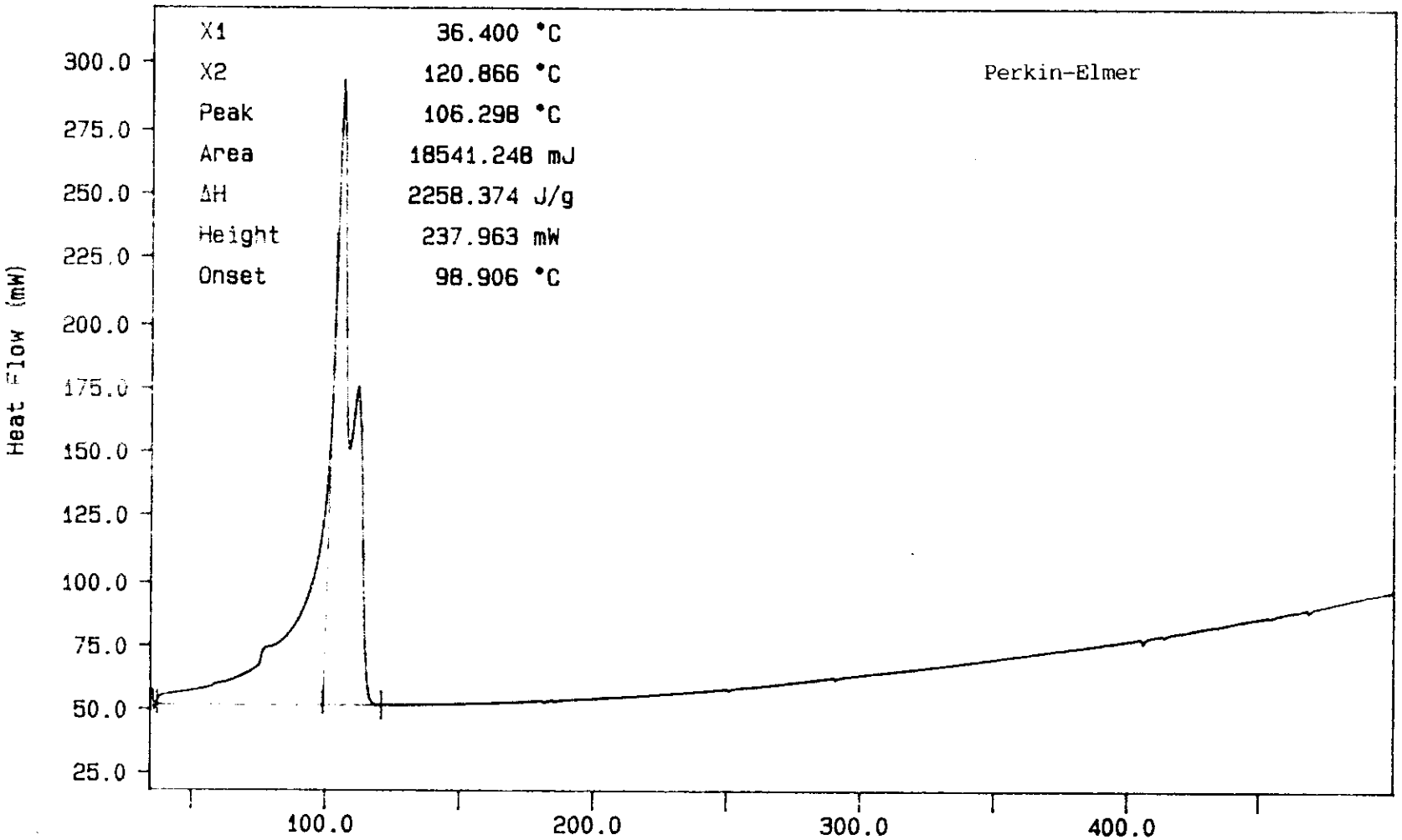
exotherm down, nitrogen purge gas

TEMP1: 35.0 C TIME1: 0.0 min RATE1: 10.0 C/min
TEMP2: 600.0 C

SM Fulton
Westinghouse Hanford Co.
222-S Lab
Wed May 3 14:25:55 1995

Curve 1: DSC
File info: SAM050301 Wed May 3 09:48:59 1995
Sample Weight: 8.210 mg
S95T000654, 10C/min

BEST AVAILABLE COPY

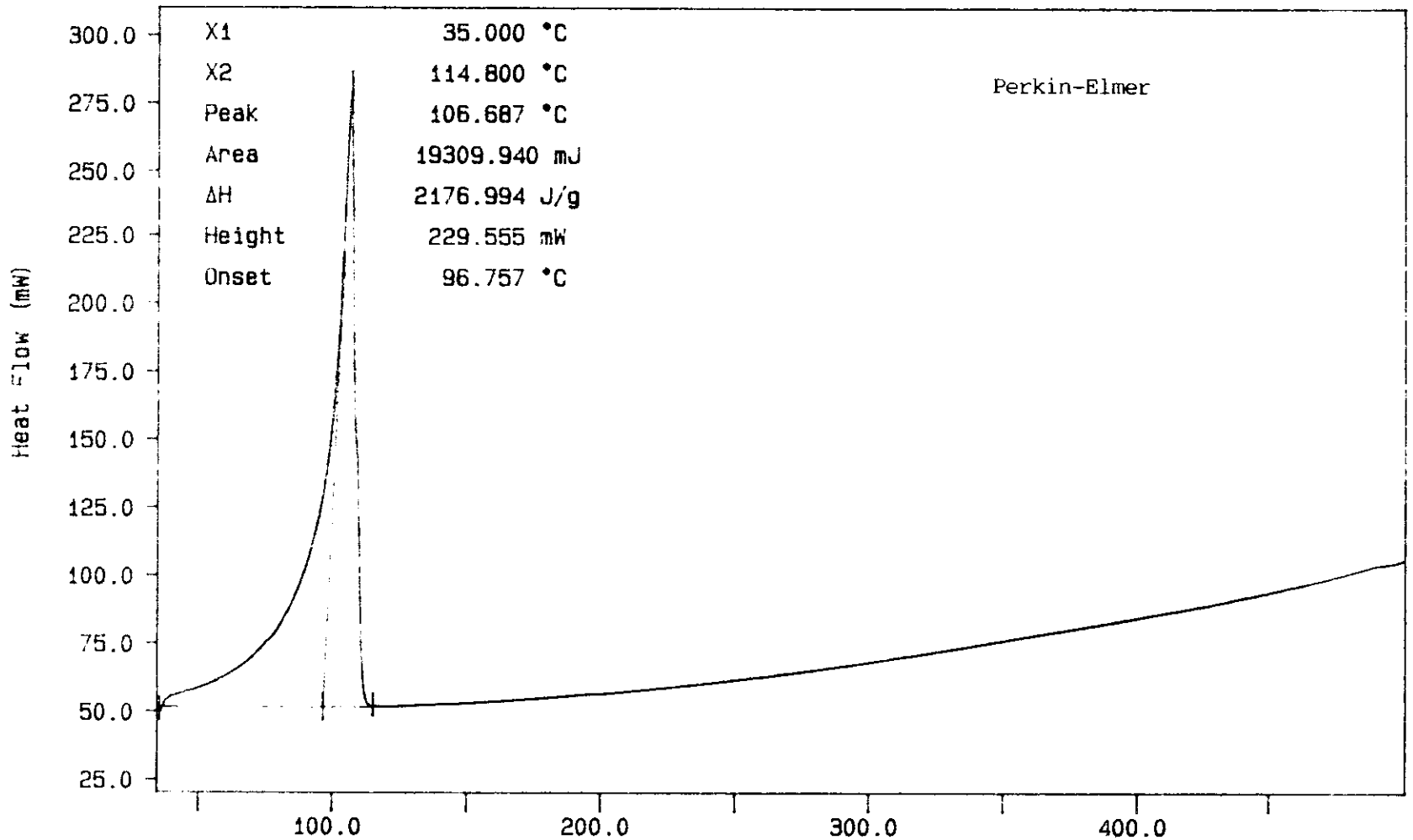


exotherm down, nitrogen purge gas
TEMP1: 35.0 C TIME1: 0.0 min RATE1: 10.0 C/min
TEMP2: 500.0 C

SM Fulton
Westinghouse Hanford Co.
222-S Lab
Wed May 3 09:51:15 1995

Curve 1: DSC
File info: SAM050302 Wed May 3 11:33:18 1995
Sample Weight: 8.870 mg
S95T000654(DUP), 10/min

BEST AVAILABLE COPY



exotherm down, nitrogen purge gas

TEMP1: 35.0 C TIME1: 0.0 min RATE1: 10.0 C/min
TEMP2: 600.0 C

SM Fulton
Westinghouse Hanford Co.
222-S Lab
Wed May 3 11:40:57 1995

LABCORE Data Entry Template for Worklist# 1034

Analyst: DWS **Instrument:** TGA01 **Book #** 42W8-17

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

Worklist Comment: Please run U-202 TGA under N2 bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA-01	LIQUID	59.19	58.70	N/A	%
95000039	U-202	2	SAMPLE	S95T000582	0		TGA-01	LIQUID	N/A	72.60		%
95000039	U-202	3	DUP	S95T000582	0		TGA-01	LIQUID	72.60	73.24	N/A	%
95000039	U-202	4	SAMPLE	S95T000588	0		TGA-01	LIQUID	N/A	73.21		%
95000039	U-202	5	DUP	S95T000588	0		TGA-01	LIQUID	73.21	72.23	N/A	%

Final page for worklist # 1034

5-4-95
Analyst Signature **Date**

5-4-95
Analyst Signature **Date**

Verified by Blandina Valenzuela 5/5/95

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 58 TO 62.

BEST AVAILABLE COPY

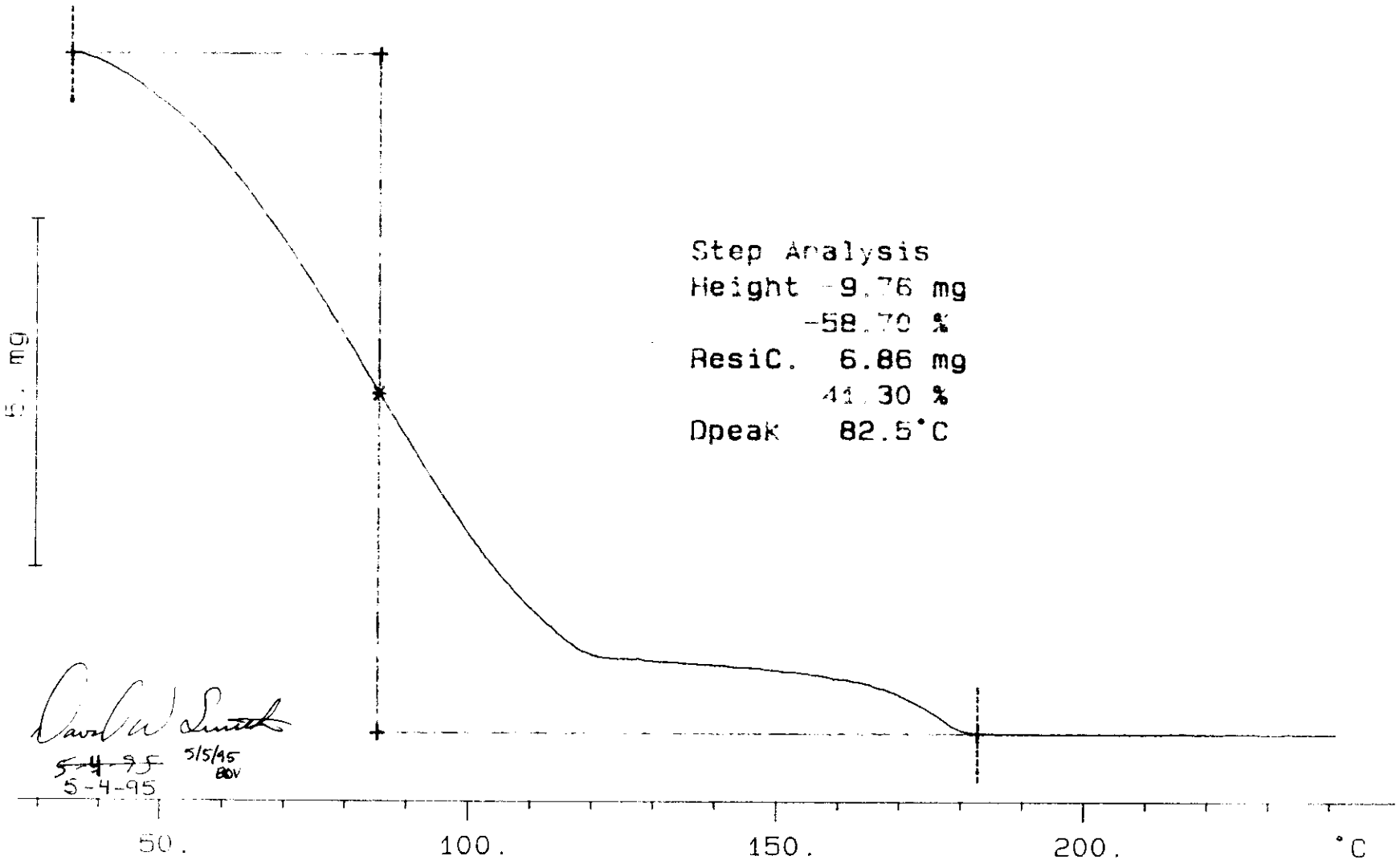
TGA STD 42N8-A

16.621 mg

Rate: 10.0 °C/min

File: 00062.001 TG METTLER 03-May-95 5/4/95 BOV

Ident: 0.0 222-S Laboratory



Step Analysis
Height -9.76 mg
-58.70 %
ResiC. 6.86 mg
41.30 %
Dpeak 82.5°C

5-4-95 5/5/95 BOV
5-4-95

WHC-SD-WM-DP-110, REV. 0

BEST AVAILABLE COPY

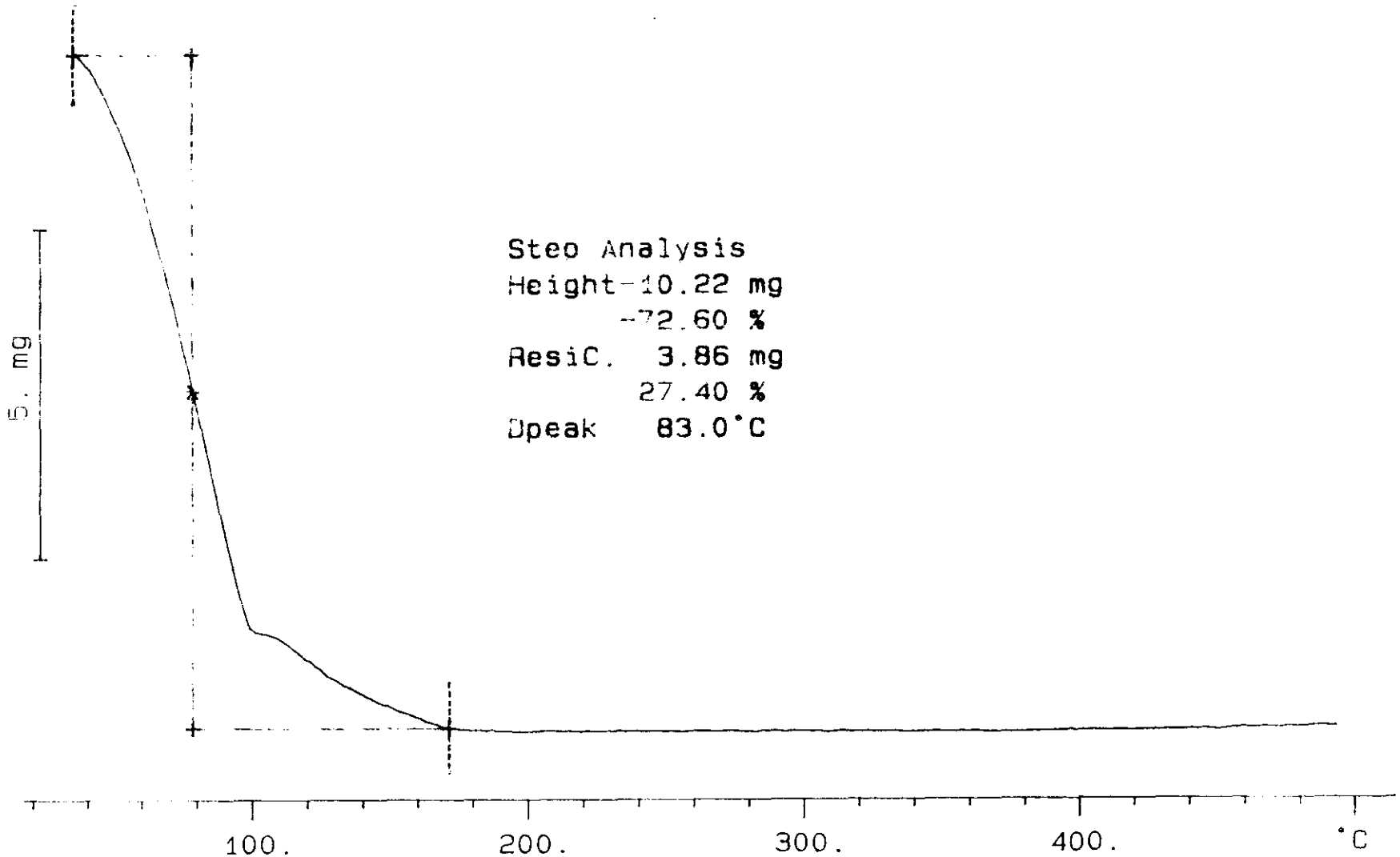
S95T000582 N2

14.076 mg

Rate: 10.0 °C/min

File: 00064.001 TG METTLER 04-May-95

Ident: 0.0 222-S Laboratory



Step Analysis

Height -10.22 mg

-72.60 %

ResiC. 3.86 mg

27.40 %

Dpeak 83.0°C

BEST AVAILABLE COPY

S95T000582 (DUP) N2

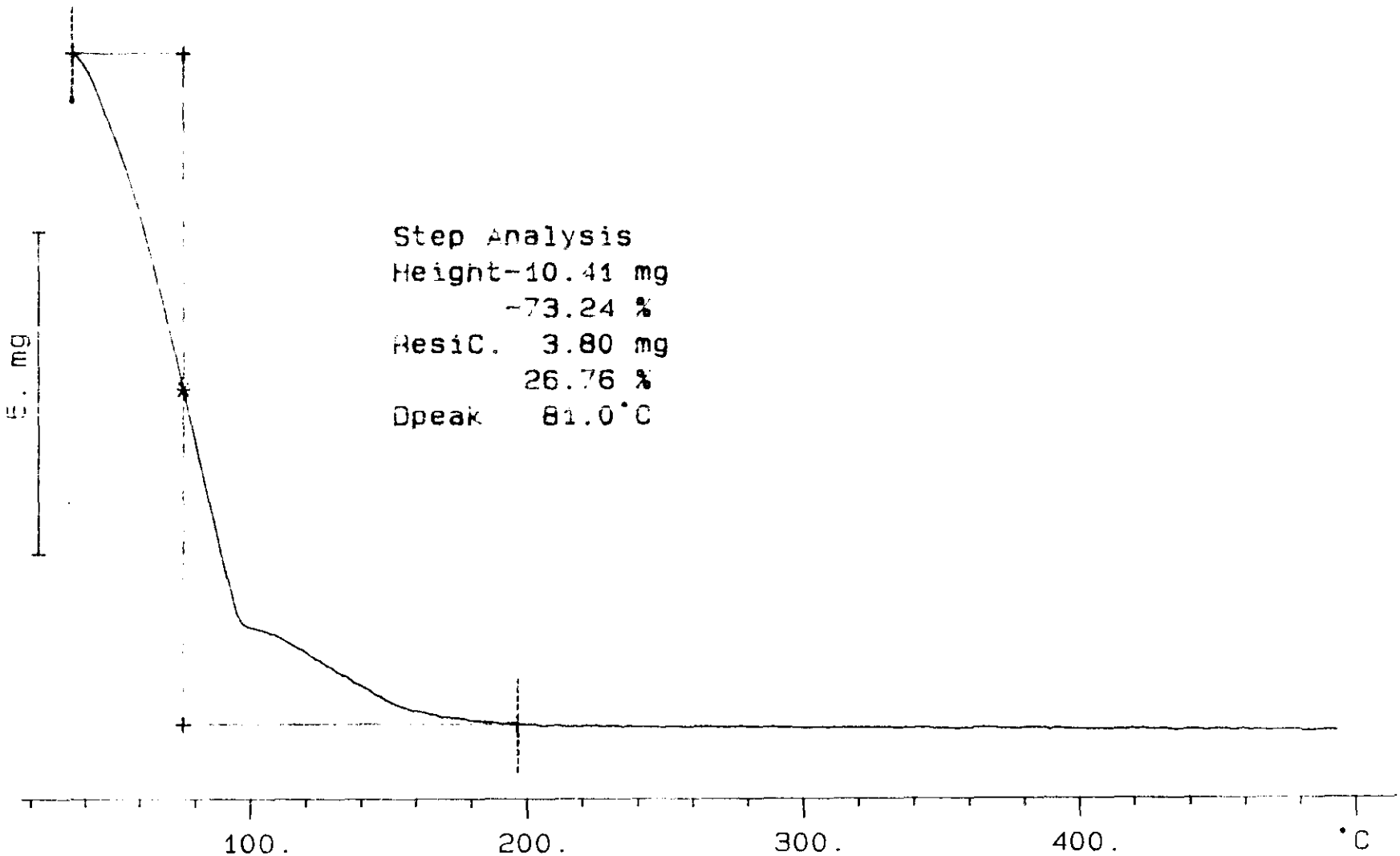
14.208 mg

Rate: 10.0 °C/min

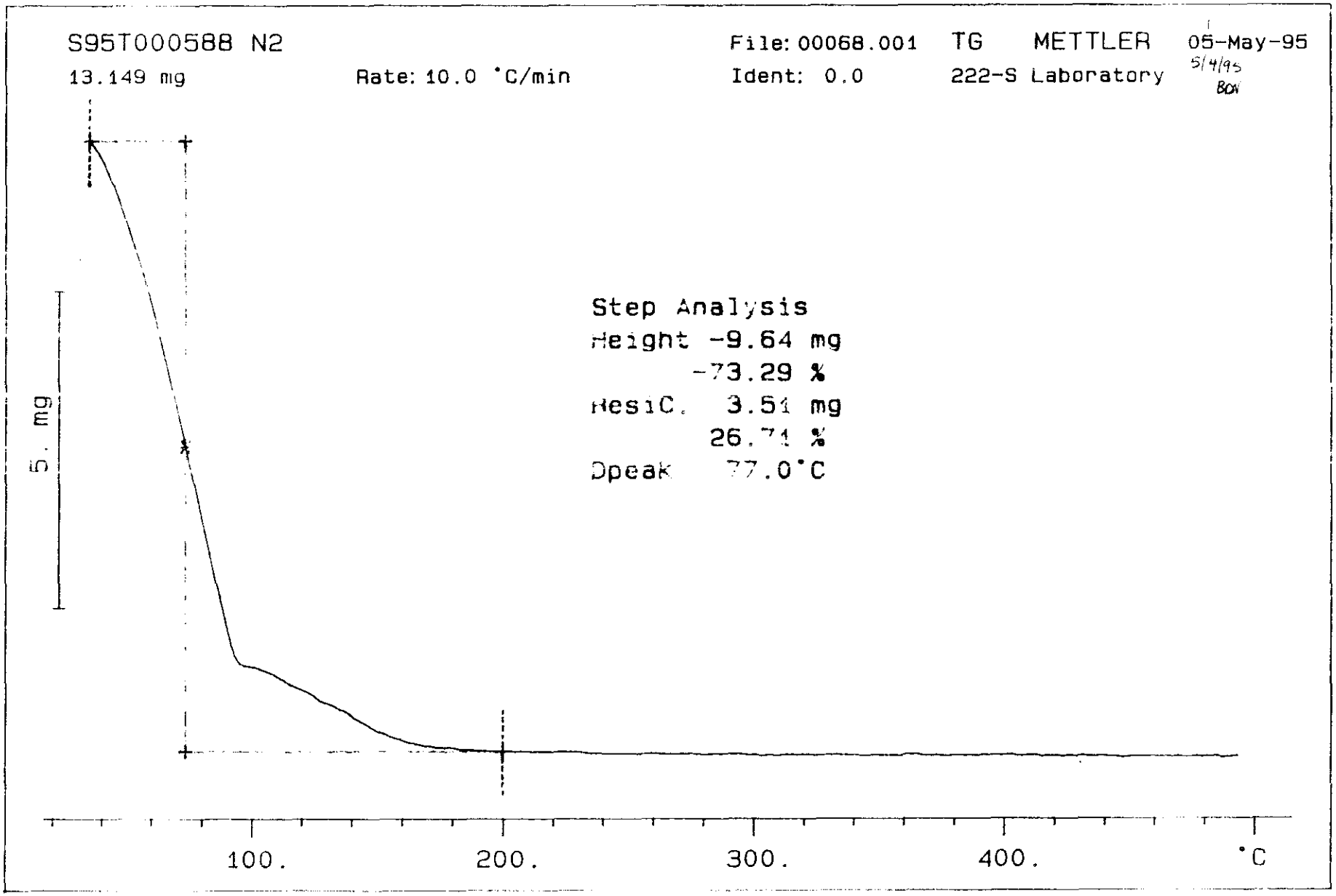
File: 00066.001 TG METTLER 05-May-95

Ident: 0.0 222-S Laboratory

5/9/95 BDV



BEST AVAILABLE COPY



AVAILABLE COPY

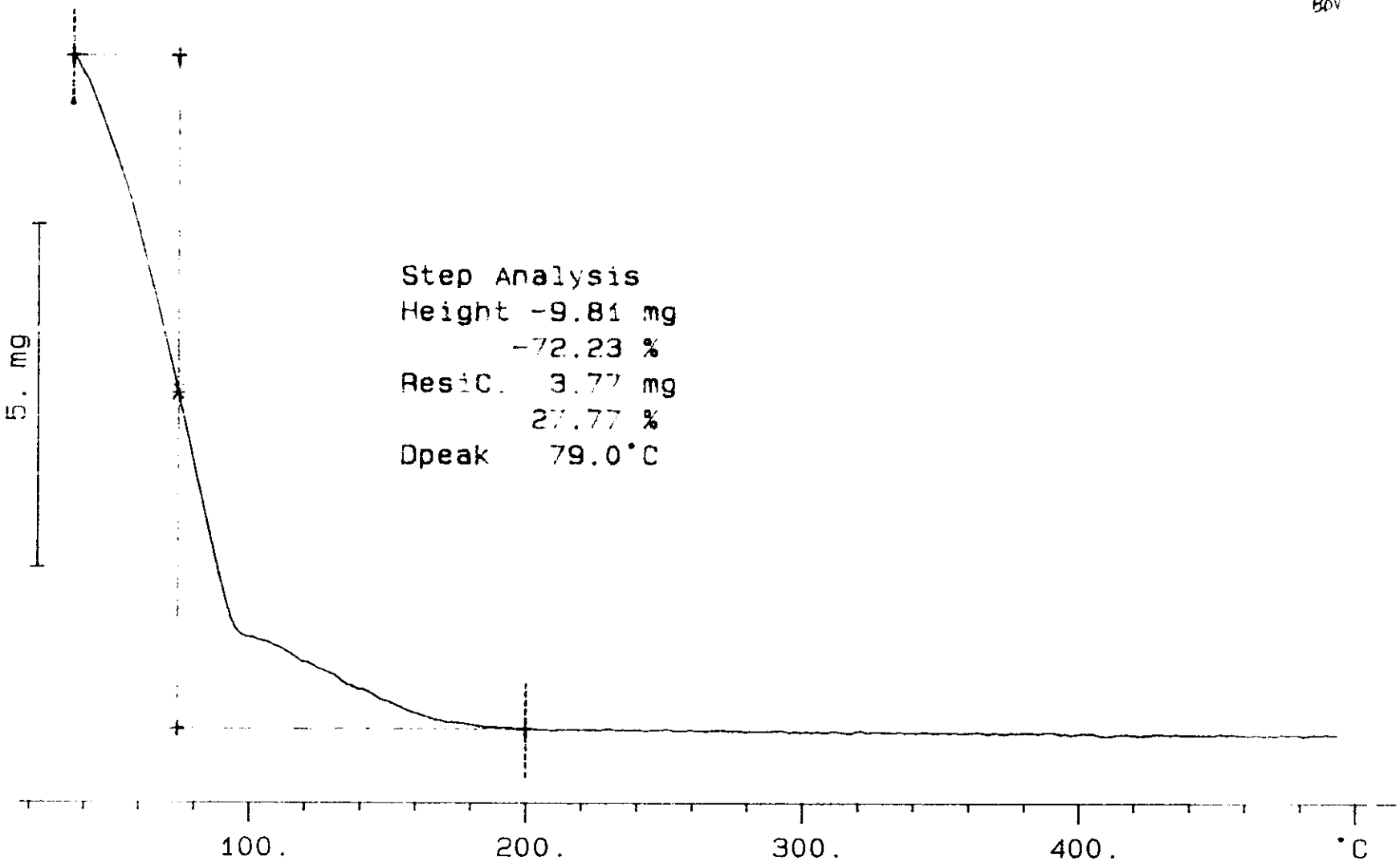
S95T000588 (DUP) N2

13.577 mg

Rate: 10.0 °C/min

File: 00070.001 TG METTLER 05-May-95

Ident: 0.0 222-S Laboratory 5/4/95 BOV



LABCORE Data Entry Template for Worklist# 1035

Analyst: [illegible] **Instrument:** TGA01 **Book #** 42N8-A

Method: LA-560-112 Rev/Mod 5/4/95 BDV A-2

Worklist Comment: Please run U-202 TGA under N2 bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA 01	LIQUID	57.1	58.14	N/A	%
95000052	U-202	4	SAMPLE	S95T000621	0		TGA 01	LIQUID	N/A	73.42		%
95000052	U-202	5	DUP	S95T000621	0		TGA 01	LIQUID	73.42	73.04	N/A	%

Final page for worklist # 1035

Susie M. Fulton 5-3-95
Analyst Signature **Date**

[illegible] 5-4-95
Analyst Signature **Date**

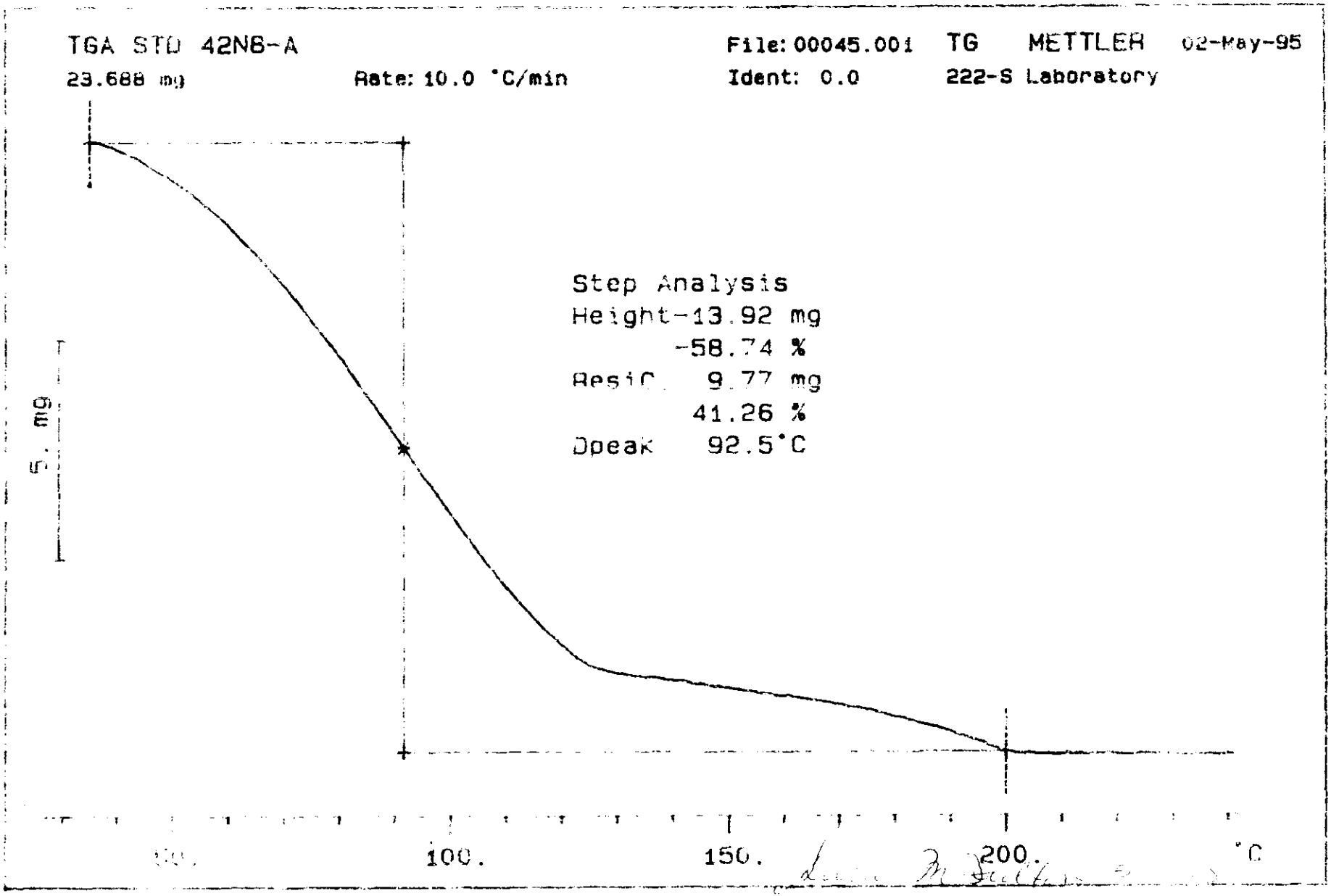
Verified by Blandine Valenzuela 5-4-95

Data Entry Comments:

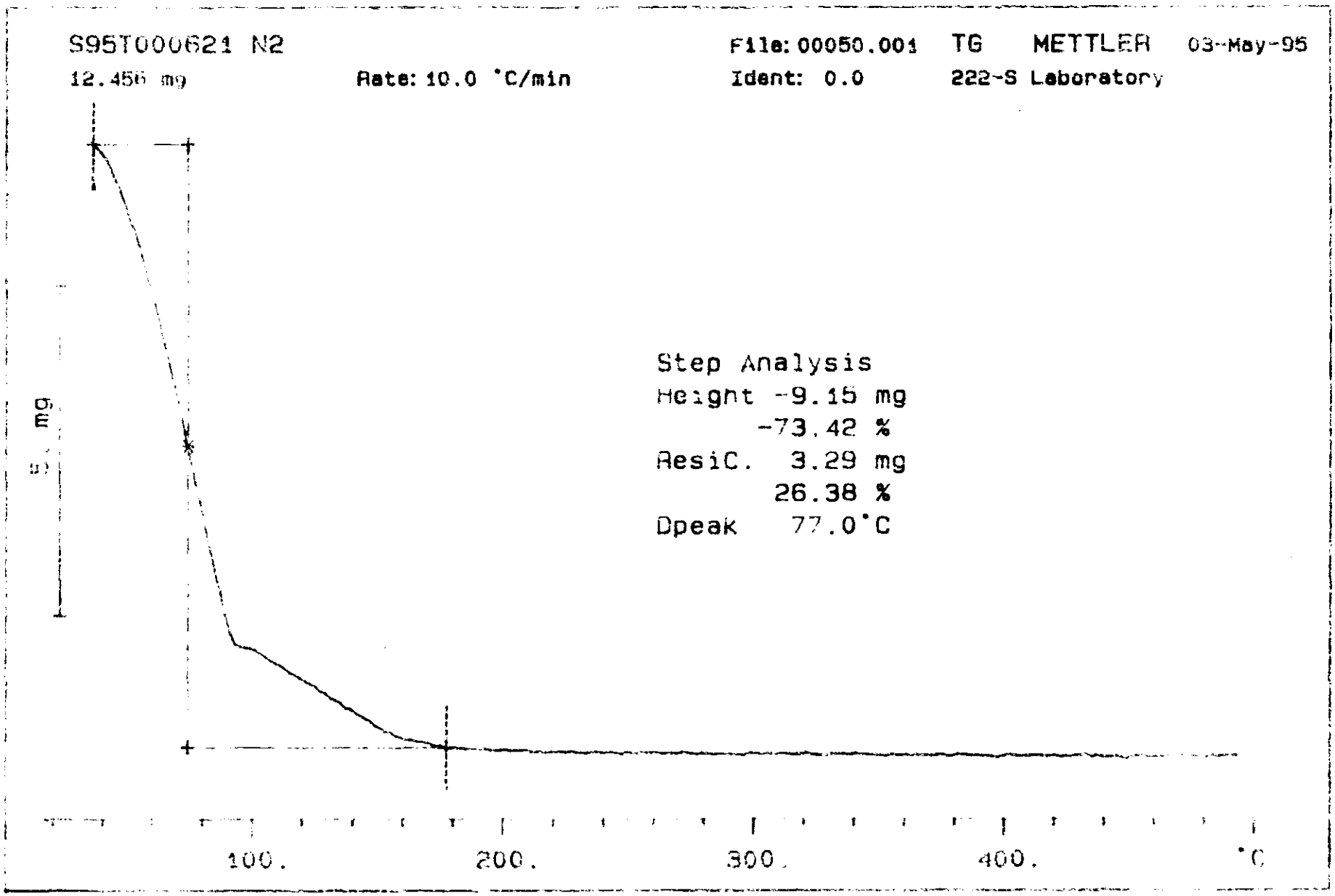
Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit. S = Worklist Slot Number. R = Replicate Number. A = Aliquot Code.

SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 64 TO 66.

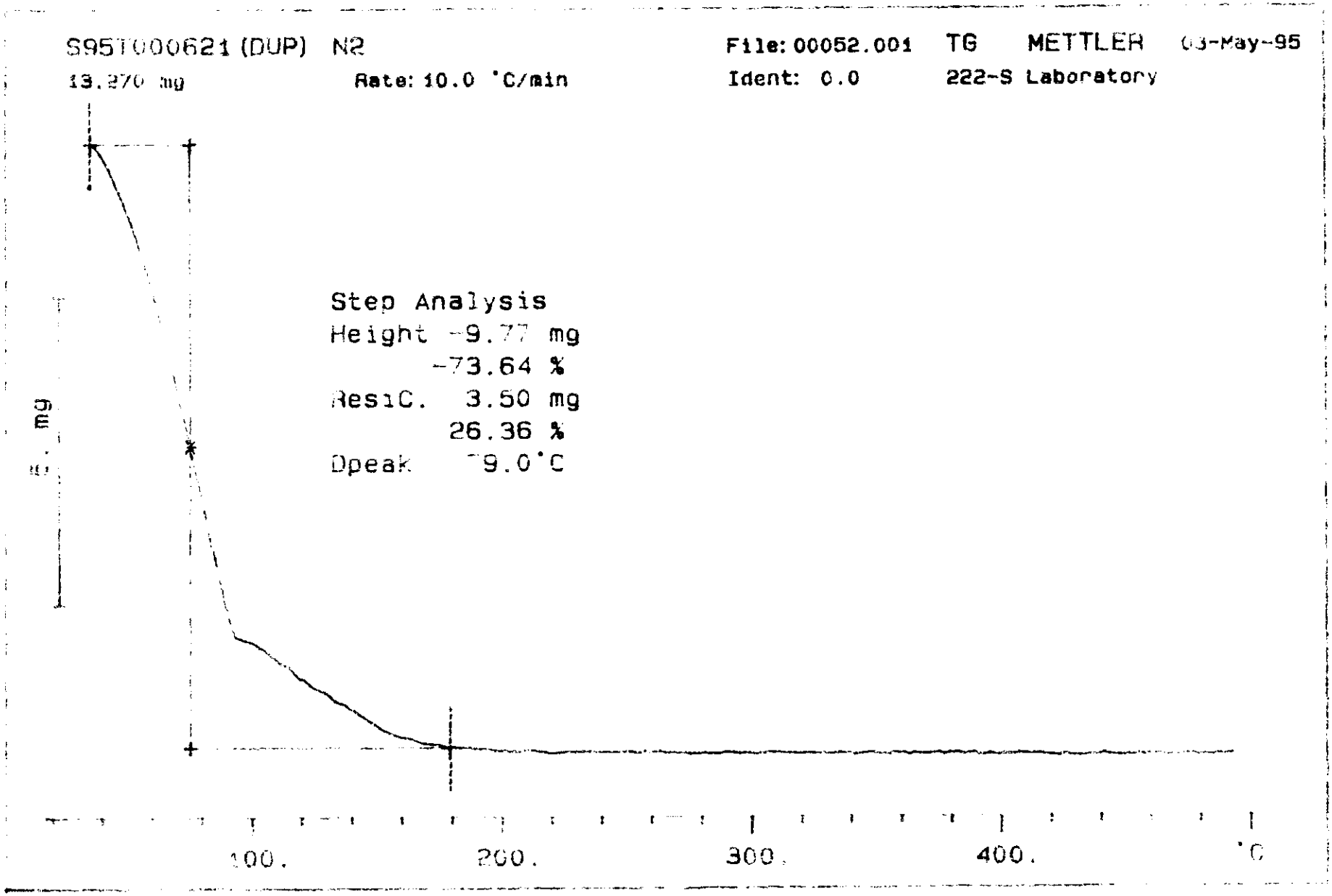
BEST AVAILABLE COPY



BEST AVAILABLE COPY



BEST AVAILABLE COPY



LABCORE Data Entry Template for Worklist# 1036

Analyst: [illegible] **Instrument:** TGA01 03 5/5/95 BDV **Book #** [illegible]

Method: LA-514-114 Rev/Mod [illegible]

Worklist Comment: Please run U-202 TGA under N2 bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA 03	LIQUID	[illegible]	[illegible]	N/A	%
95000052	U-202	2	SAMPLE	S95T000636	0		TGA 03	LIQUID	N/A	72.27		%
95000052	U-202	3	DUP	S95T000636	0		TGA 03	LIQUID	72.27	72.23	N/A	%
95000052	U-202	4	SAMPLE	S95T000654	0		TGA 03	LIQUID	N/A	[illegible]		%
95000052	U-202	5	DUP	S95T000654	0		TGA 03	LIQUID	[illegible]	[illegible]	N/A	%

Final page for worklist # 1036

See attached for signatures
Analyst Signature **Date**

[signature] 5/4/95
Analyst Signature **Date**

Verified by Blandina Valenzuela 5/5/95

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# 1036

Analyst: SMF **Instrument:** TGA01 **Book #** 42A'3-A

Method: ~~LA-560-112 Rev/Mod~~ LA-514-141.38
SMF 5/5/95 BDV

Worklist Comment: Please run U-202 TGA under N2. bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA-01	LIQUID			N/A	%
95000052	U-202	2	SAMPLE	S95T000~~637~~ 636	0		TGA-01	LIQUID	N/A			%
95000052	U-202	3	DUP	S95T000~~637~~ 636	0		TGA-01	LIQUID			N/A	%
95000052	U-202	4	SAMPLE	S95T000654	0		TGA-01	LIQUID	N/A			%
95000052	U-202	5	DUP	S95T000654	0		TGA-01	LIQUID			N/A	%

Final page for worklist # 1036

Susie M. Dutton 5-3-95
Analyst Signature **Date**

Analyst Signature **Date**

Data Entry Comments:

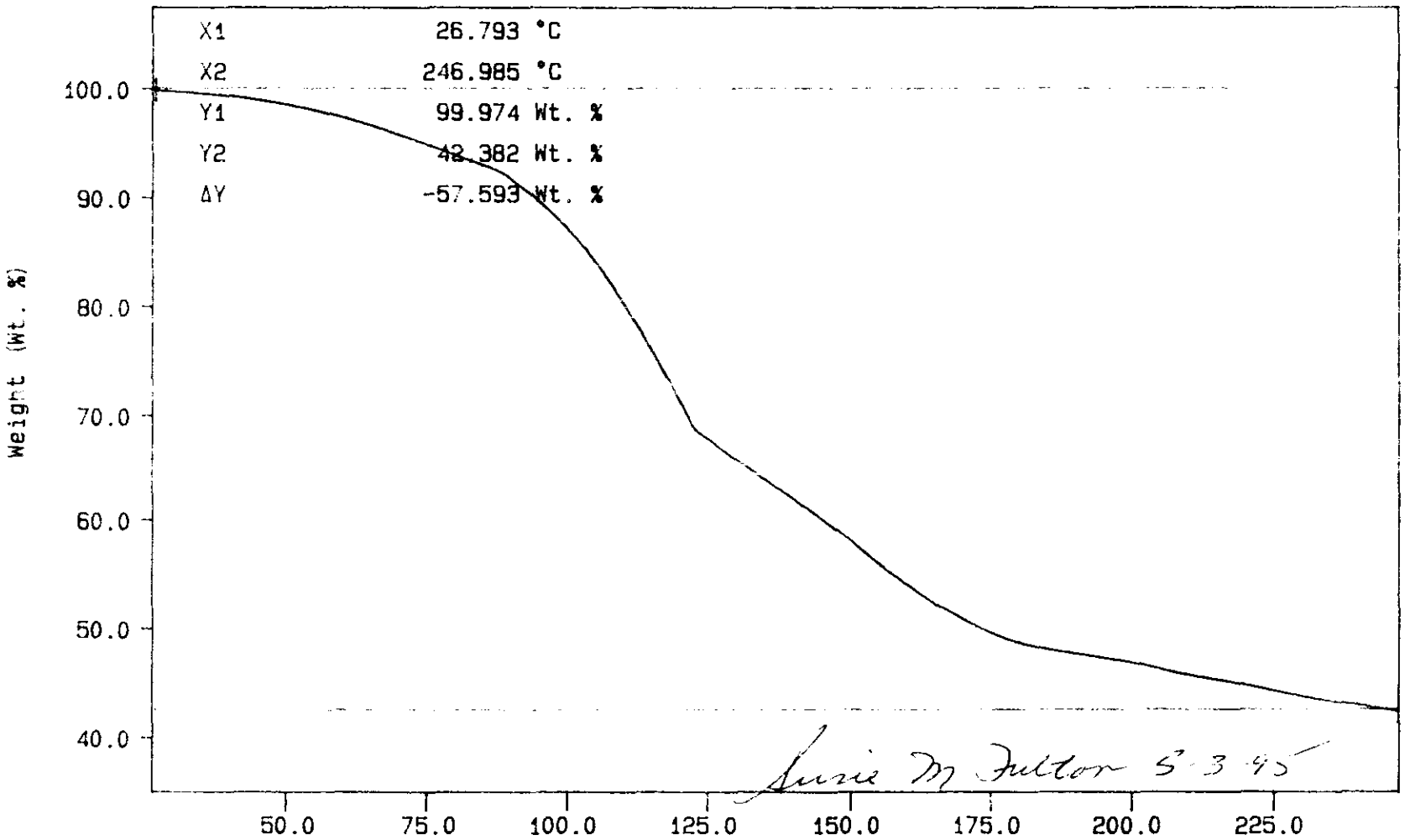
S95T000636 - Bright yellow liquid
S95T000654 - Clear colorless liquid

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: TER050301 Wed May 3 08:58:12 1995
Sample Weight: 18.839 mg
42N8A Terliq

BEST AVAILABLE COPY

SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 69 TO 73.

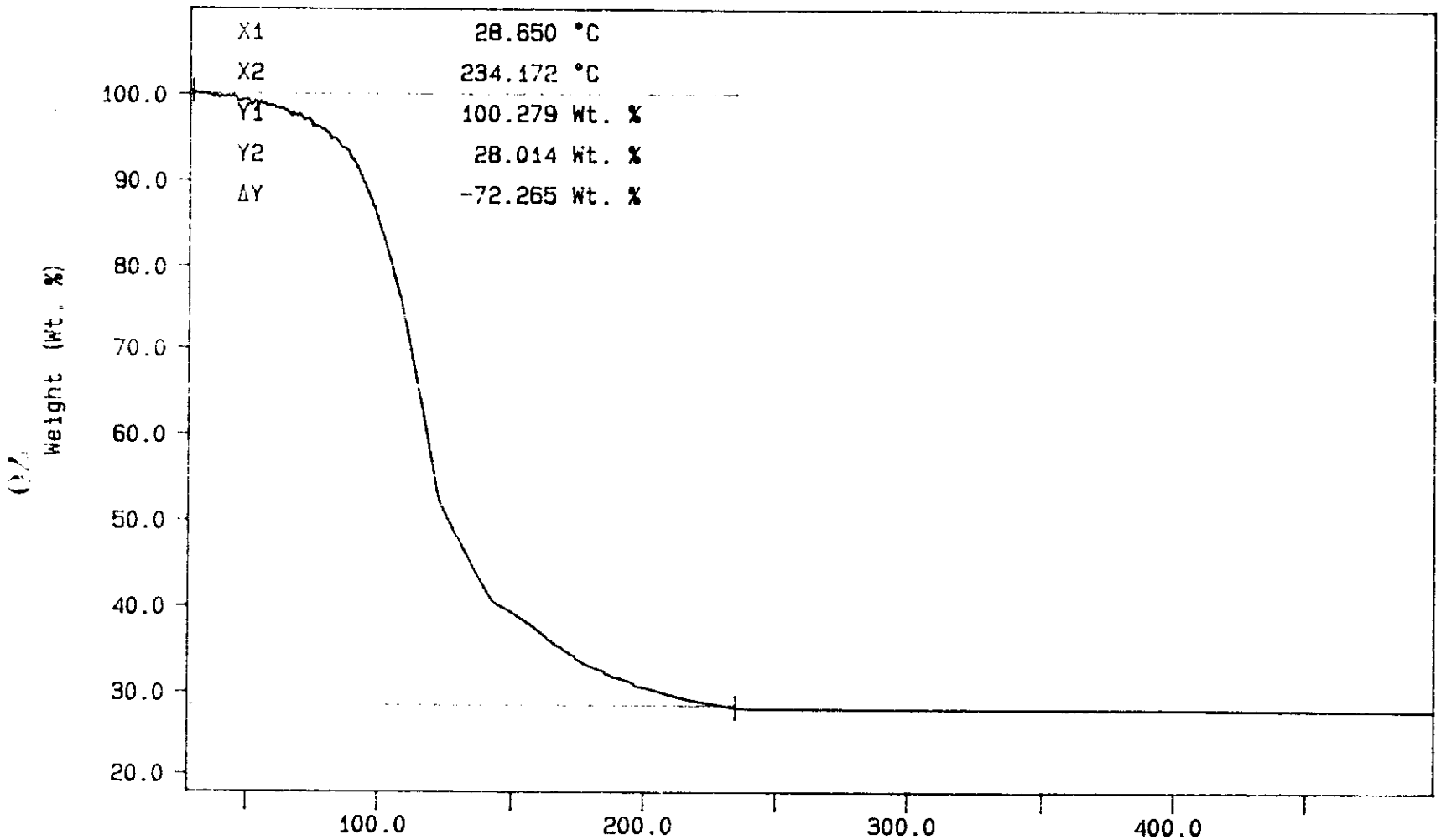


N2
TEMP1: 35.0 C TIME1: 0.0 min RATE1: 10.0 C/min
TEMP2: 250.0 C

SM Fulton
PERKIN-ELMER
7 Series Thermal Analysis System
Wed May 3 09:03:07 1995

Curve 1: TGA
File info: SAM050303 Wed May 3 12:47:52 1995
Sample Weight: 13.753 mg
S95T000636, 10C/min

BEST AVAILABLE COPY

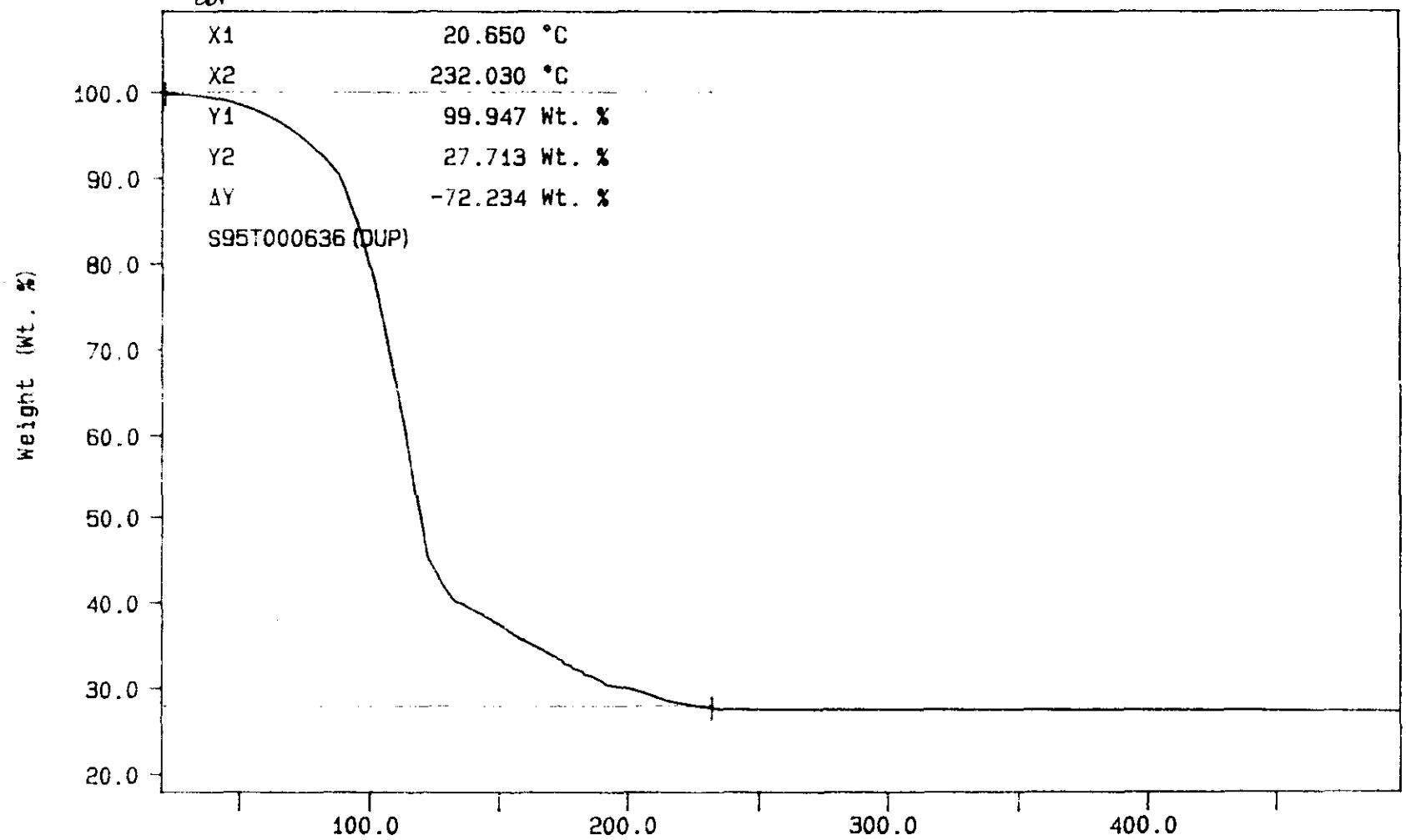


N2
TEMP1: 38.0 C TIME1: 0.0 min RATE1: 10.0 C/min
TEMP2: 600.0 C

SM Fulton
PERKIN-ELMER
7 Series Thermal Analysis System
Wed May 3 13:19:43 1995

Curve 1: TGA
File info: SAM050304 Wed May 3 14:20:06 1995
Sample Weight: 13.408 mg
S95T000636, 10C/min
(DUP) 5/5/95
BDV

BEST AVAILABLE COPY

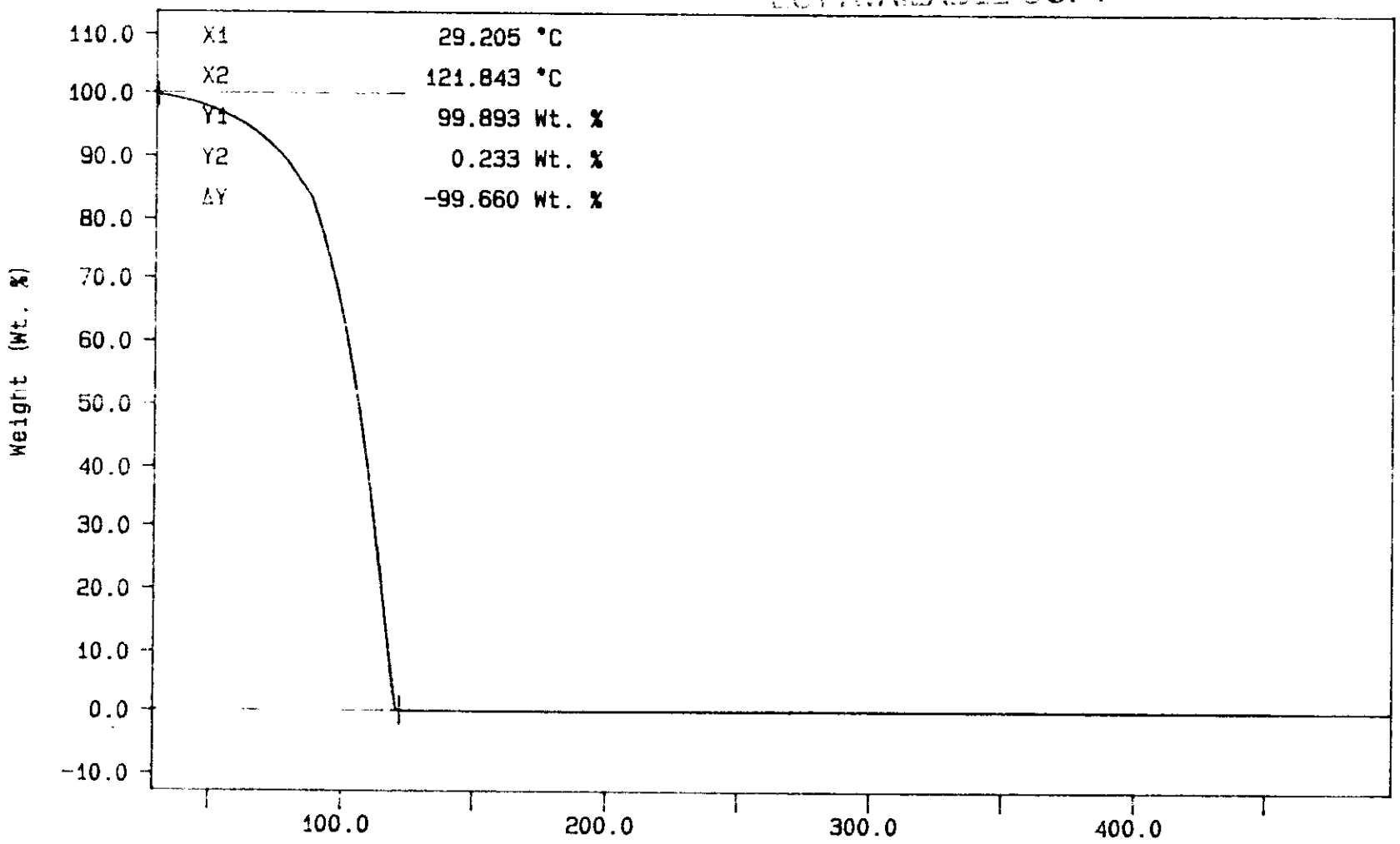


N2
TEMP1: 35.0 C TIME1: 0.0 min RATE1: 10.0 C/min
TEMP2: 500.0 C

SM Fulton
PERKIN-ELMER
7 Series Thermal Analysis System
Wed May 3 14:32:05 1995

Curve 1: TGA
File info: SAM050301 Wed May 3 15:25:06 1995
Sample Weight: 9.448 mg
S95T000654, 10C/min

BEST AVAILABLE COPY



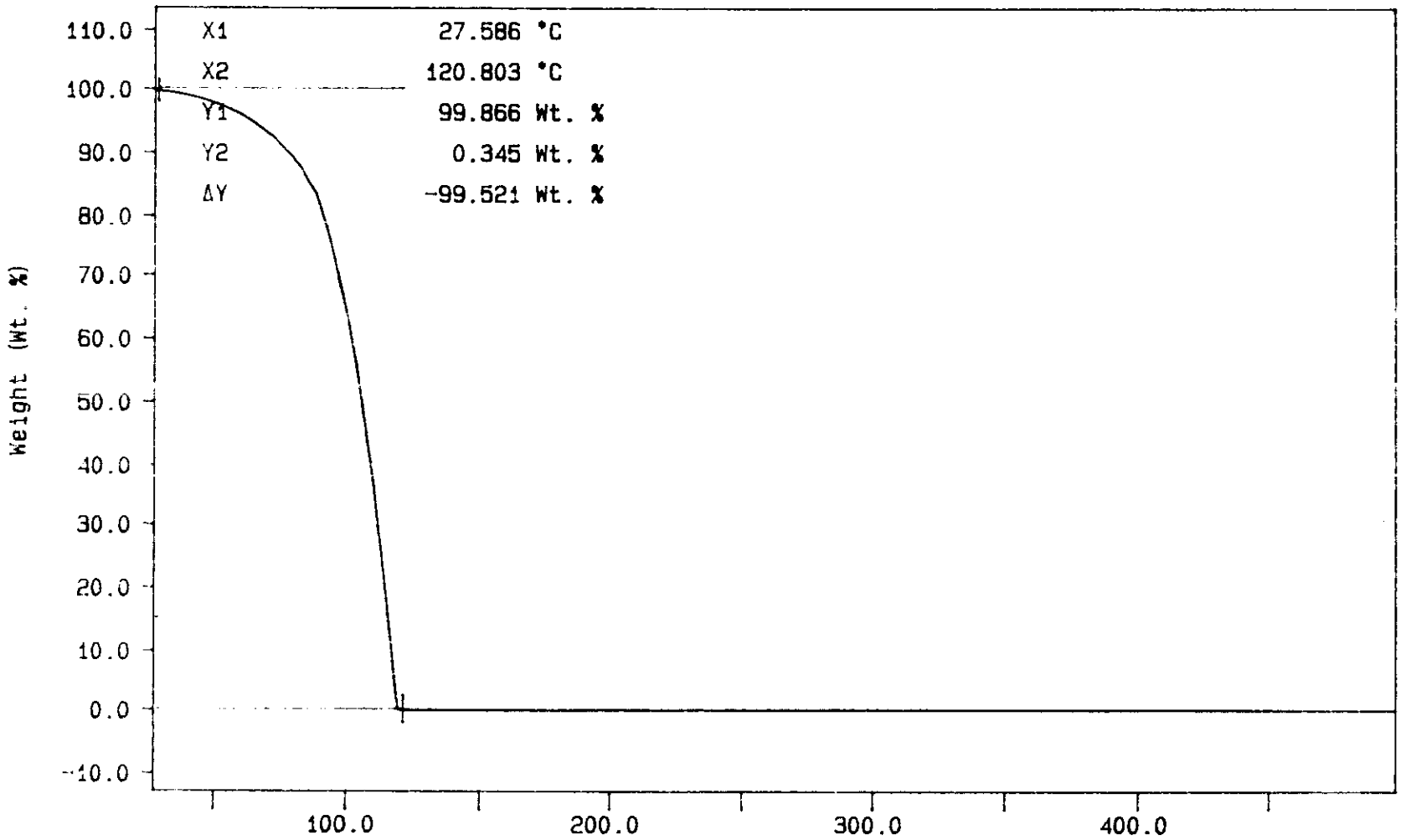
N2
TEMP1: 35.0 C TIME1: 0.0 min RATE1: 10.0 C/min
TEMP2: 500.0 C

SM Fulton
PERKIN-ELMER
7 Series Thermal Analysis System
Wed May 3 15:38:13 1995

WHC-SD-WM-DP-110, REV. 0

Curve 1: TGA
File info: SAM050302 Wed May 3 11:42:25 1995
Sample Weight: 8.704 mg
S95T000654 (DUP), 10C/min
(DW)

BEST AVAILABLE COPY



N2
TEMP1: 38.0 C TIME1: 0.0 min RATE1: 10.0 C/min
TEMP2: 600.0 C

SM Fulton
PERKIN-ELMER
7 Series Thermal Analysis System
Wed May 3 11:47:00 1995

LABCORE Data Entry Template for Worklist# 1047

Analyst: SMF **Instrument:** TGA01 **Book #** 42NE A

Method: LA-560-112 Rev/Mod

Worklist Comment: Please run U-202 TGA under N2 bdv

GROUP	PROJECT	S TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD				TGA 01	SOLID	59.19	58.31	N/A	%
95000039	U-202	2 SAMPLE	S95T000584	0		TGA 01	SOLID	N/A	25.49		%
95000039	U-202	3 DUP	S95T000584	0		TGA 01	SOLID	25.49	26.24	N/A	%
95000039	U-202	4 SAMPLE	S95T000590	0		TGA 01	SOLID	N/A	43.64		%
95000039	U-202	5 DUP	S95T000590	0		TGA 01	SOLID	43.64	32.71	N/A	%
95000039	U-202	6 DUP2	S95T000590	0		TGA 01	SOLID	43.64	36.88	N/A	%

Final page for worklist # 1047

See attached for signatures
Analyst Signature **Date**

Data entered + verified
Blandina Valenzuela 4/25/95
Analyst Signature **Date**

Data Entry Comments:

[illegible]

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# 1047

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

Method: LA-560-112 Rev/Mod A-3

Worklist Comment: Please run U-202 TGA under N2 bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA 01	SOLID			N/A	%
95000039	U-202	2	SAMPLE	S95T000584	0		TGA 01	SOLID	N/A			%
95000039	U-202	3	DUP	S95T000584	0		TGA 01	SOLID			N/A	%
95000039	U-202	4	SAMPLE	S95T000590	0		TGA 01	SOLID	N/A			%
95000039	U-202	5	DUP	S95T000590	0		TGA 01	SOLID			N/A	%

Final page for worklist # 1047

Sm Fulton 4-24-95

Analyst Signature **Date**

Analyst Signature **Date**

Data Entry Comments:

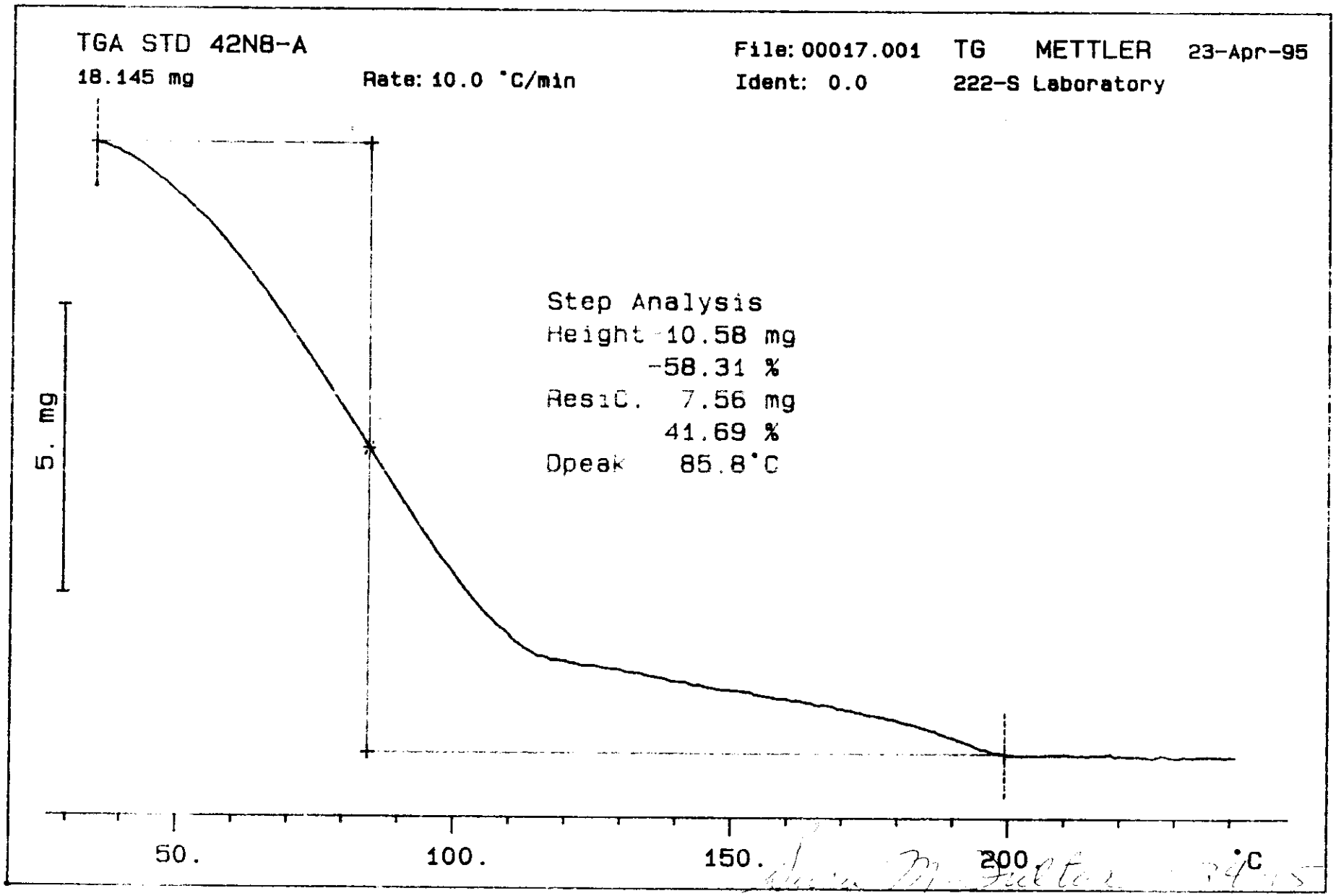
S95T000548 - light yellow thick liquid w/ clear ~~thin~~ thin upper phase. 4/20/95 DDV

S95T000590 - light yellow liquid w/ large (1/4") clear crystals

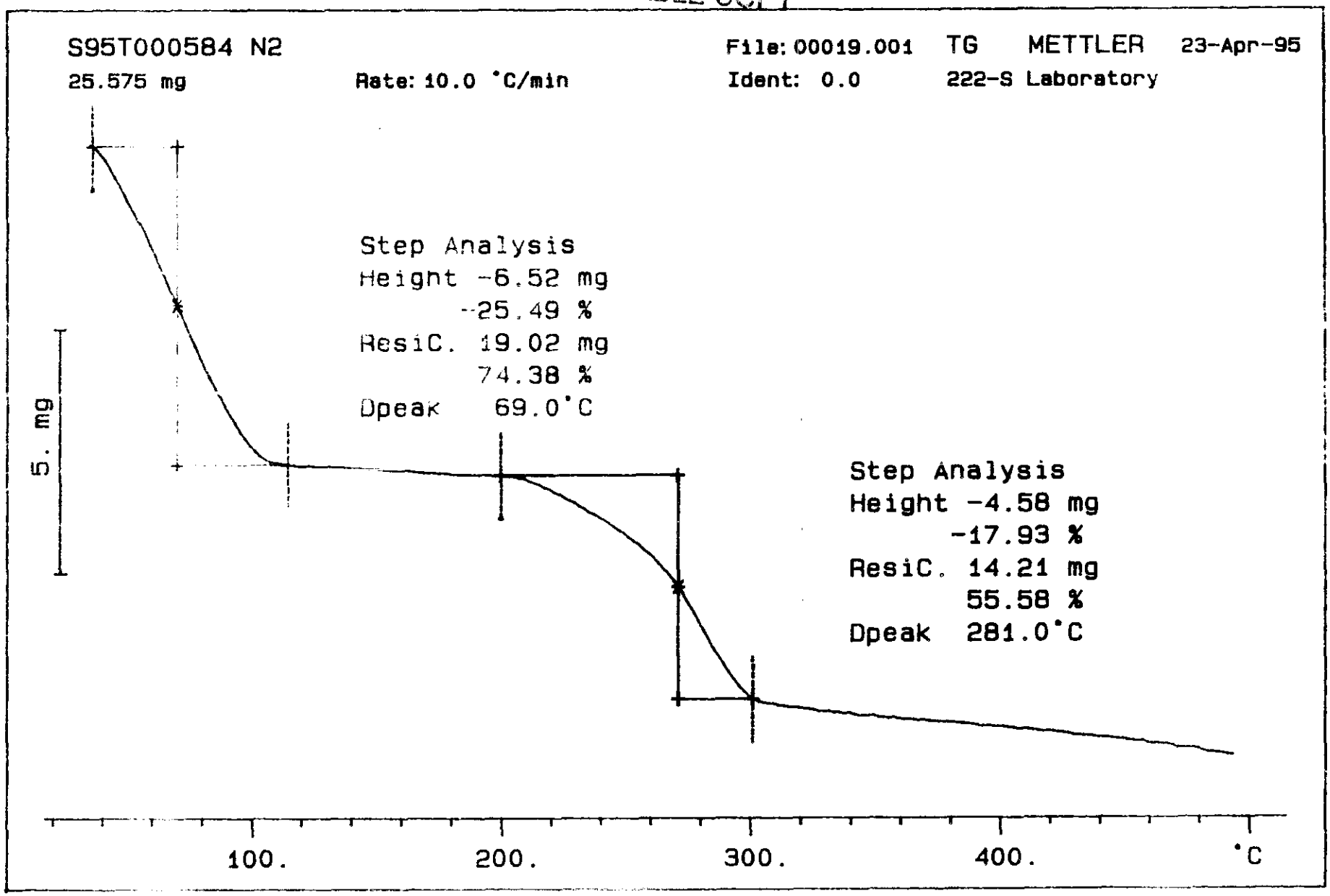
Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 76 TO 81.

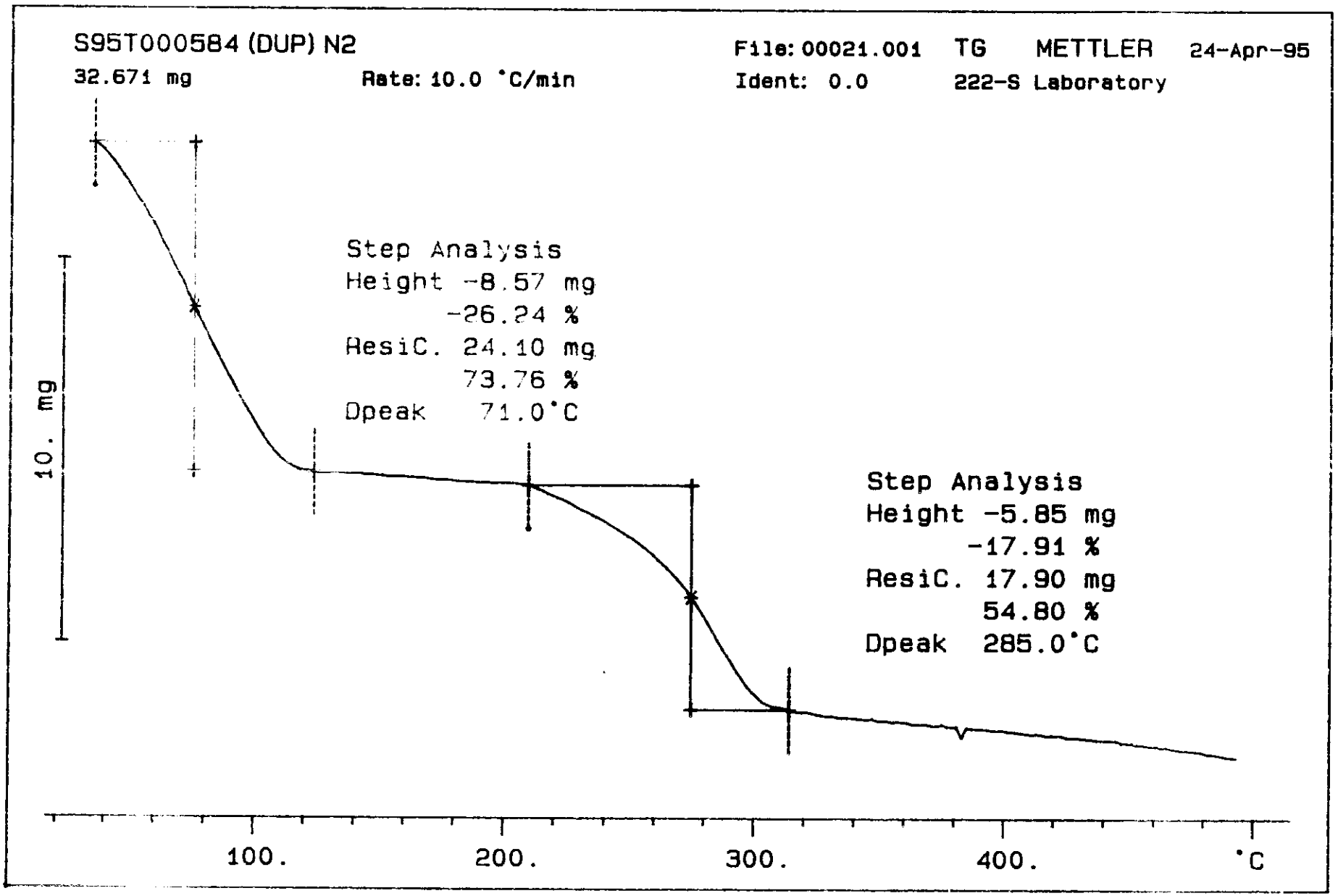
TEST AVAILABLE COPY



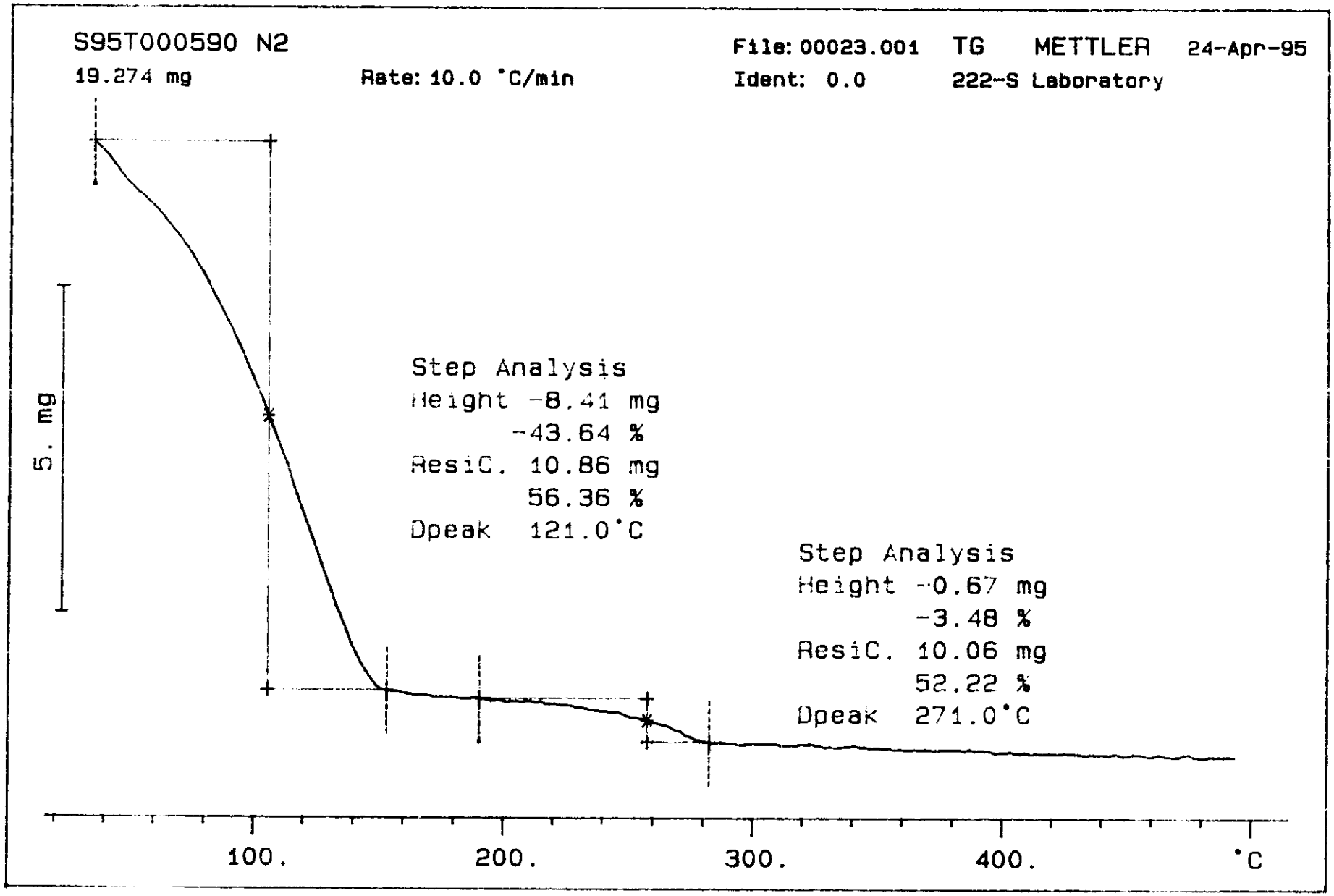
BEST AVAILABLE COPY



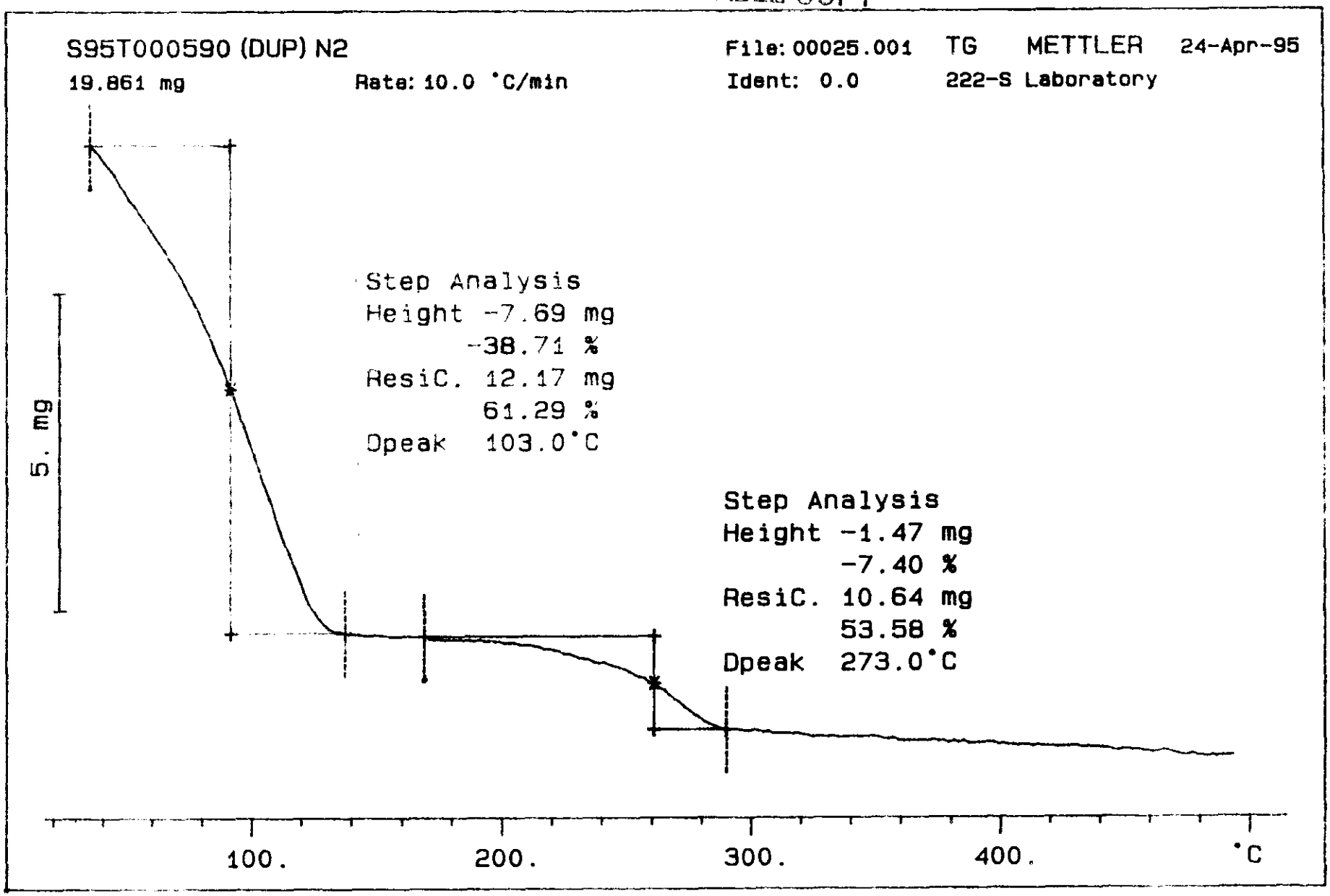
BEST AVAILABLE COPY



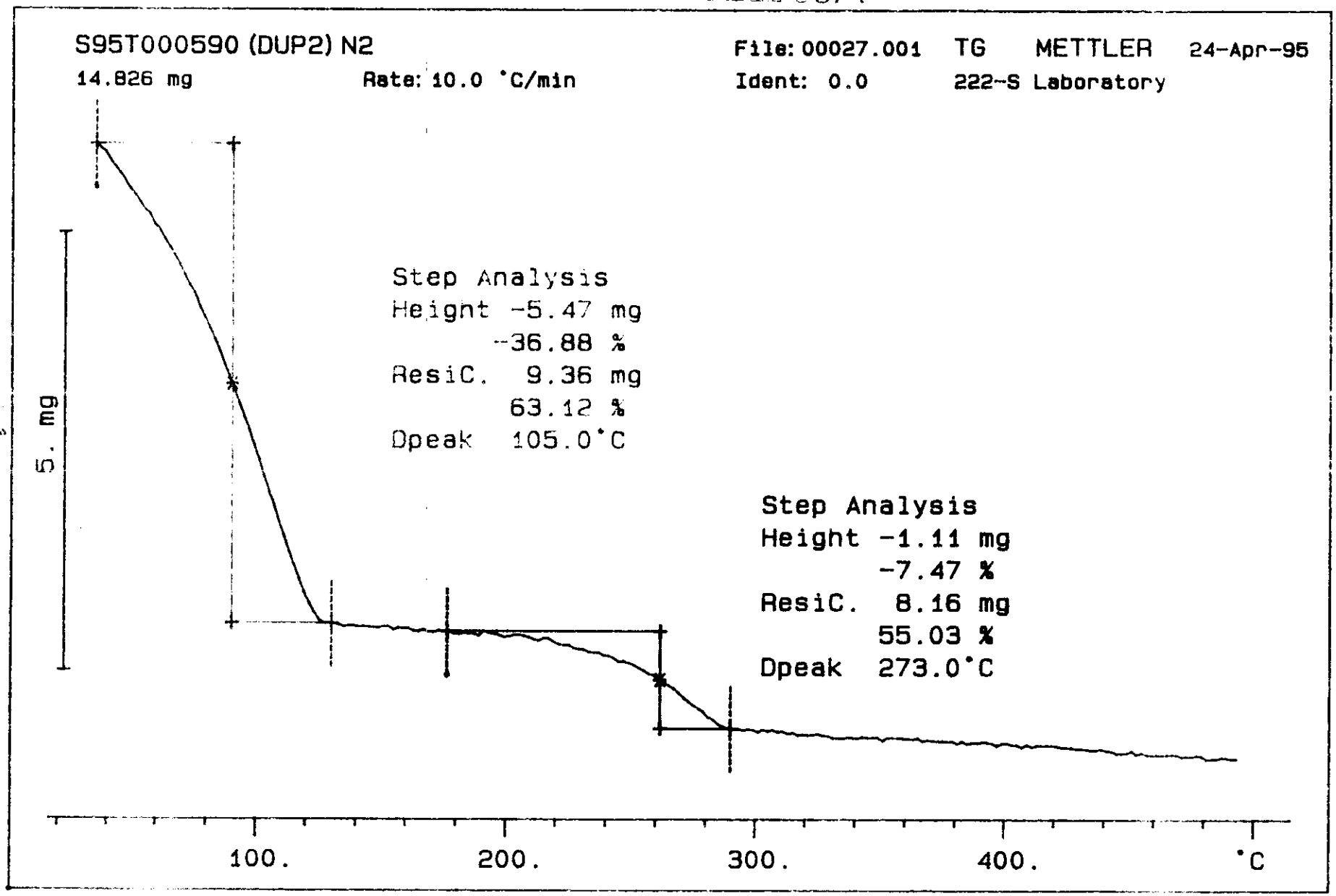
BEST AVAILABLE COPY



AVAILABLE COPY



NOT AVAILABLE COPY



worklistrpt Version 2.0 02/21/95
04/28/95 09:17

LABCORE Data Entry Template for Worklist# 1048

Analyst: ADP **Instrument:** TGA01 **Book #** 42N8-A

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

Worklist Comment: Please run U-202 TGA under N2. bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA-01	SOLID	54.11	54.11	N/A	%
95000039	U-202	2	SAMPLE	S95T000598	0		TGA-01	SOLID	N/A	22.87		%
95000039	U-202	3	DUP	S95T000598	0		TGA-01	SOLID	22.87	22.40	N/A	%

Final page for worklist # 1048

Anthony Puente 5-3-95
Analyst Signature **Date**

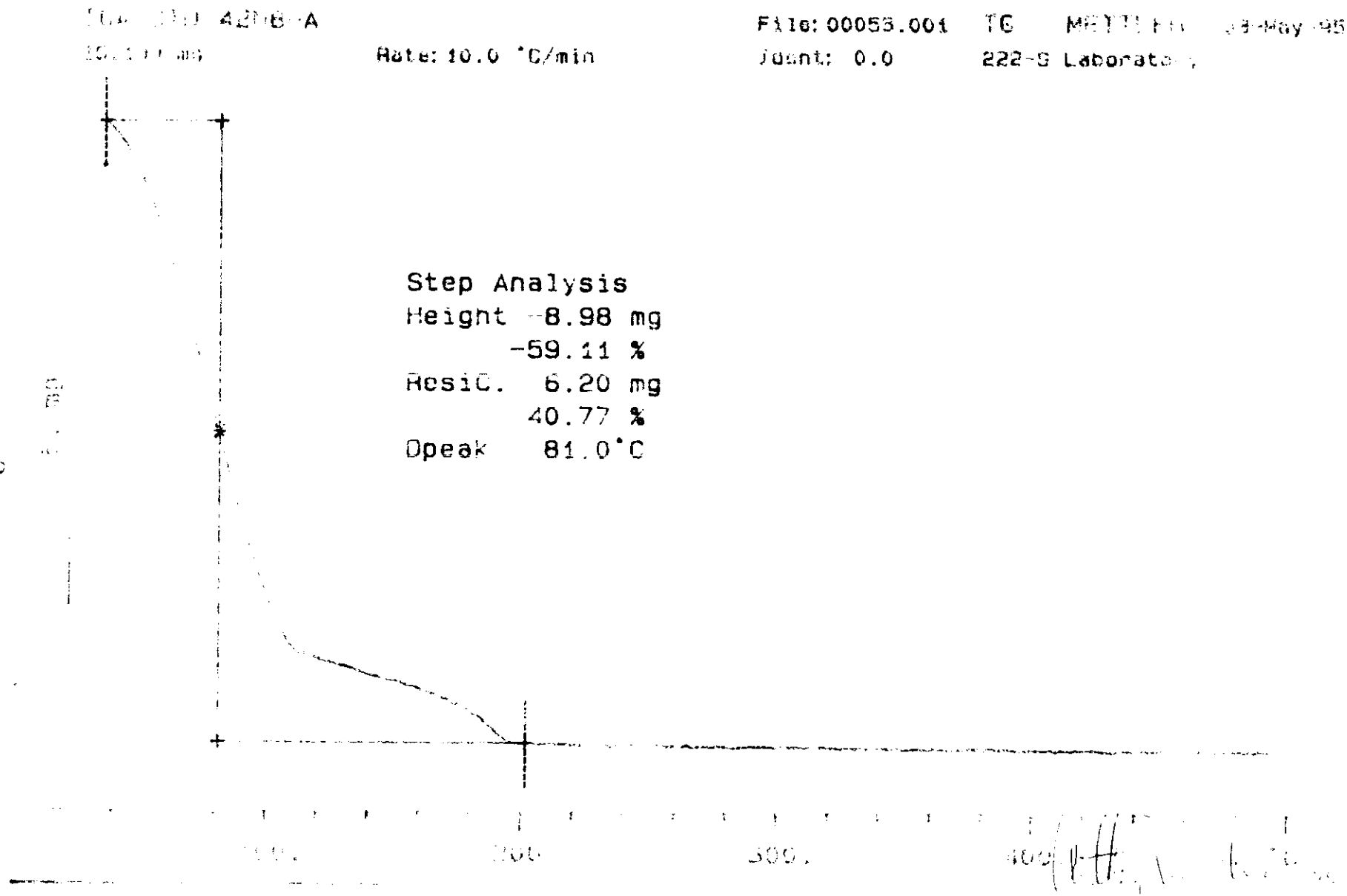
[illegible] 5-4-95
Analyst Signature **Date**

Verified by Blandina Valenzuela 5/4/95

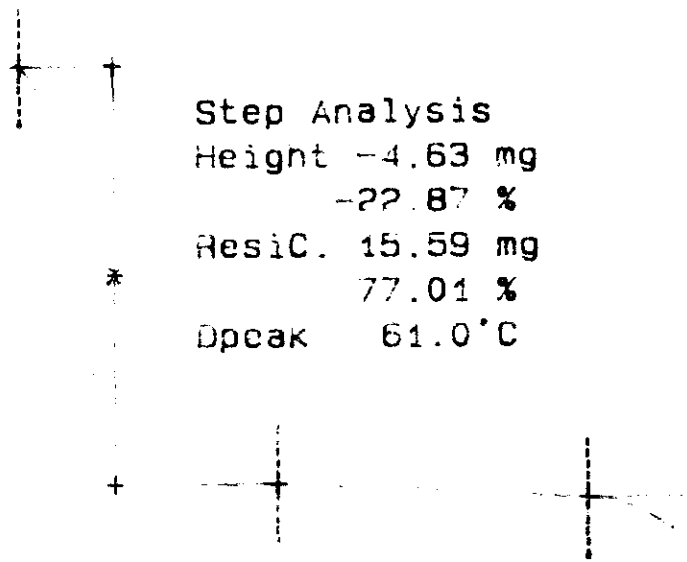
Data Entry Comments: [illegible]

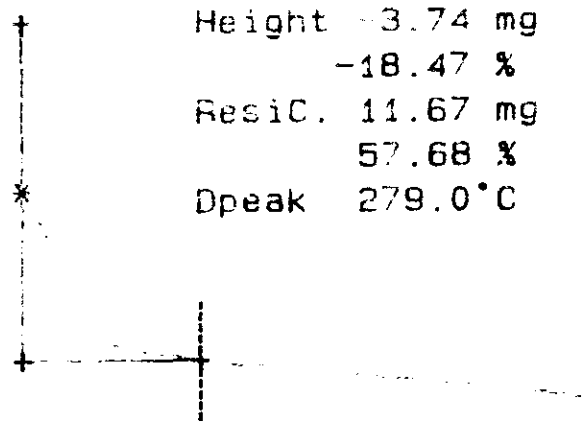
Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 85 TO 85.

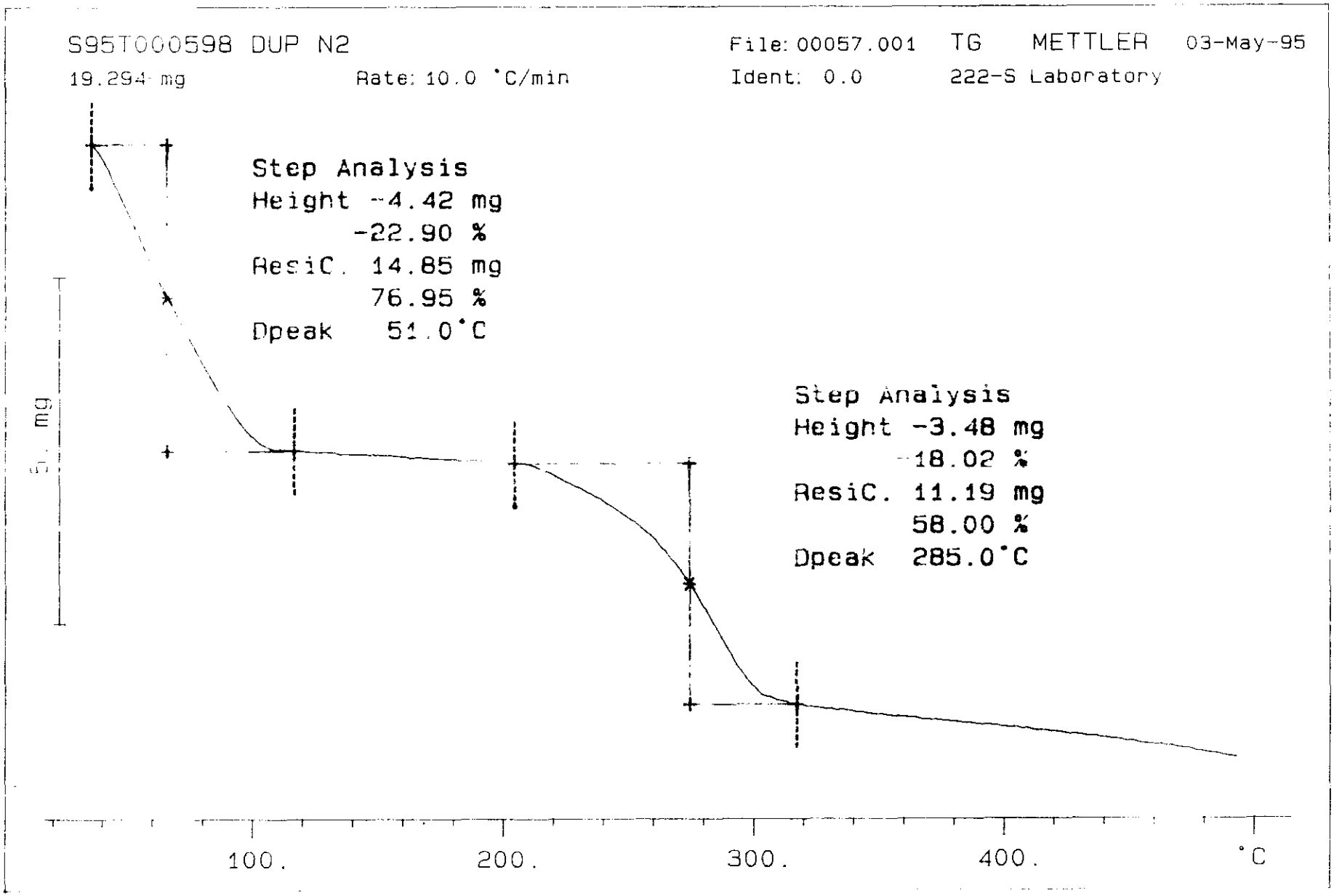


UNCONTROLLED COPY





BEST AVAILABLE COPY



LABCORE Data Entry Template for Worklist# 1050

Analyst: ADP **Instrument:** TGA01 **Book #** 42N8-A

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

Worklist Comment: Please run U-202 TGA under N2 bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA-01	SOLID	54.19	54.08	N/A	%
95000052	U-202	2	SAMPLE	S95T000630	0		TGA-01	SOLID	N/A	24.11		%
95000052	U-202	3	DUP	S95T000630	0		TGA-01	SOLID	24.11	18.90	N/A	%
95000052	U-202	4	TRIPL	S95T000630	0		TGA-01	SOLID	24.11	[illegible]	N/A	%

Final page for worklist # 1050

See attached for Signatures
Analyst Signature **Date**

Analyst Signature **Date** 5/5/95 BDV

Verified by Blandina Valenzuela 5/5/95

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# 1050

Analyst: ADP **Instrument:** TGA01 **Book #** 42N8-A

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

Worklist Comment: Please run U-202 TGA under N2 bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA 01	SOLID	~~54.14~~	~~54.14~~	5/5/95 BDV N/A	%
95000052	U-202	4	SAMPLE	S95T000630	0		TGA 01	SOLID	N/A			%
95000052	U-202	5	DUP	S95T000630	0		TGA 01	SOLID			N/A	%

Final page for worklist # 1050

[signature] 5-3-95
Analyst Signature **Date**

Analyst Signature **Date**

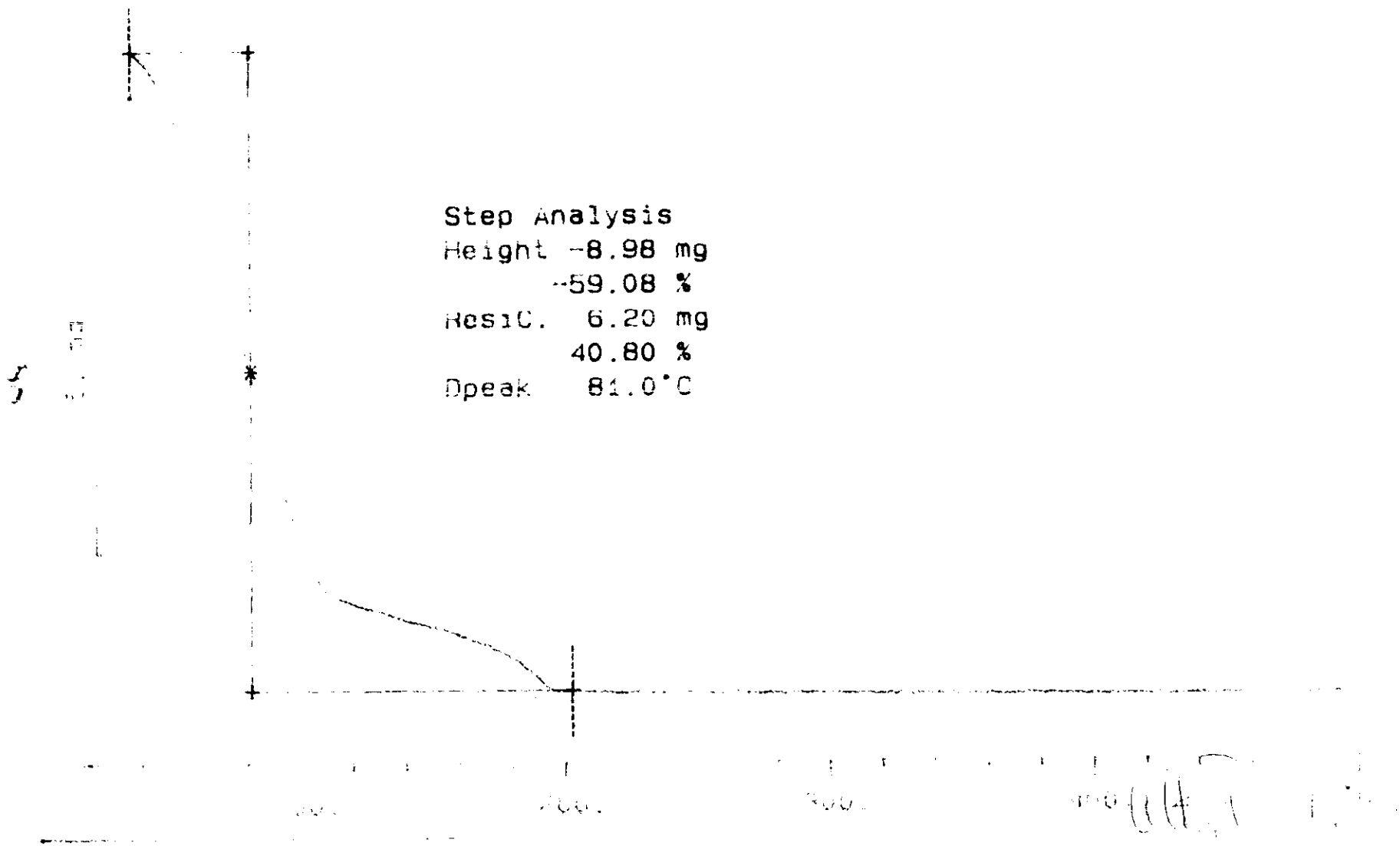
Data Entry Comments:

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 88 TO 92.

File: 00053.001 TG METTLER

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



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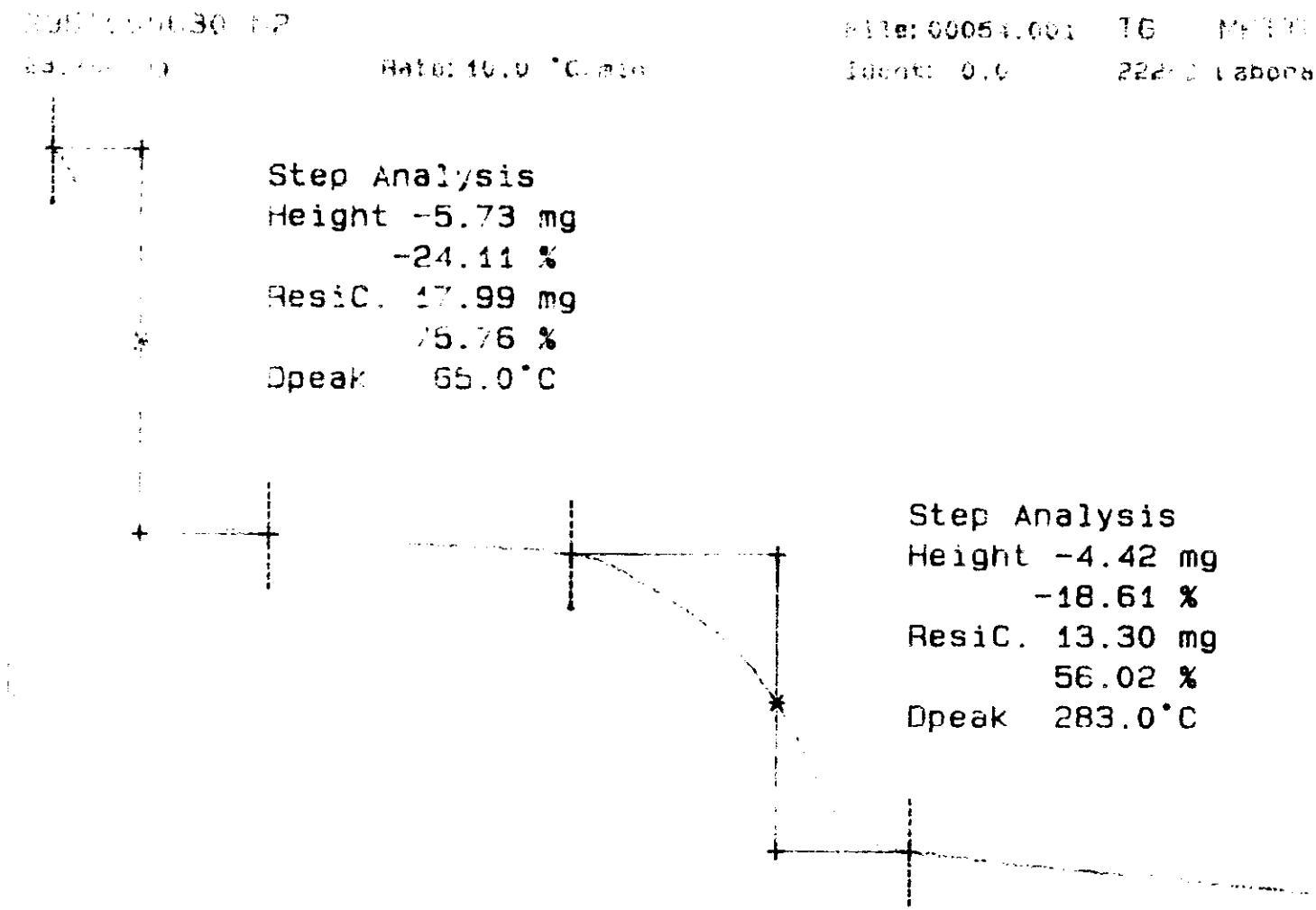
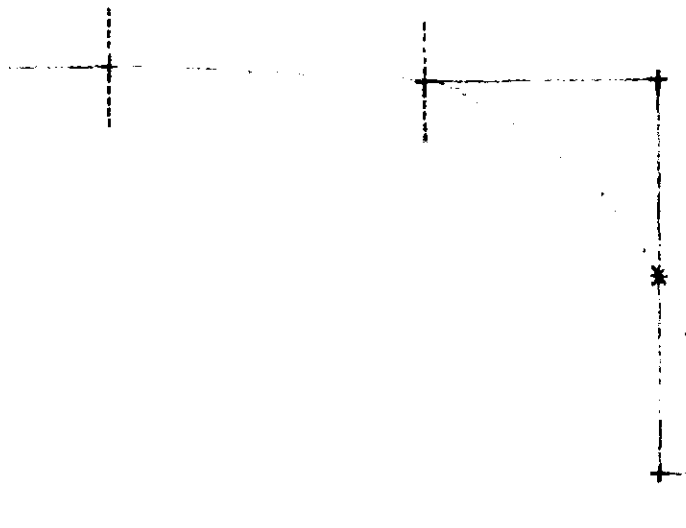


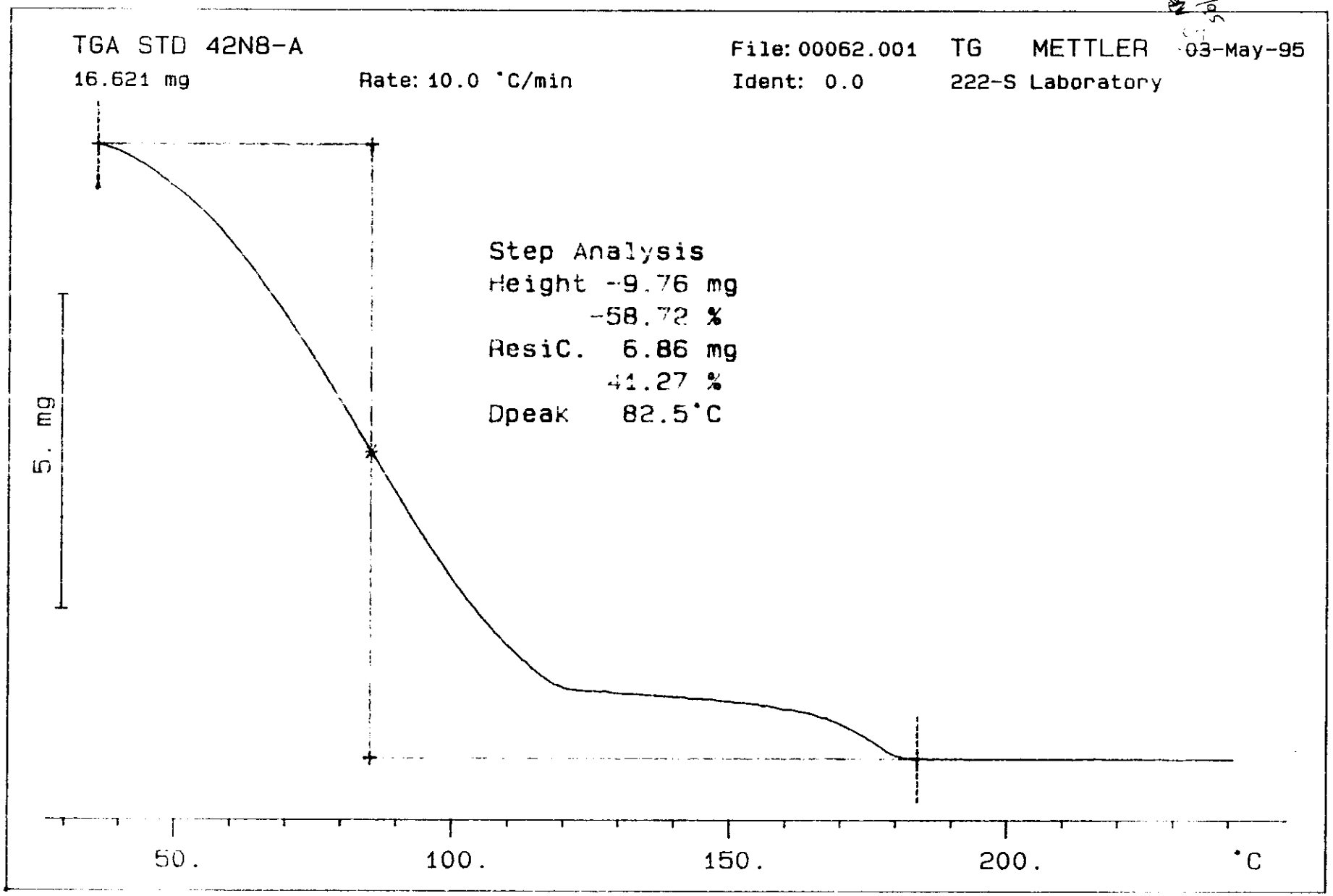
BEST AVAILABLE COPY

Step Analysis
Height -4.57 mg
-18.90 %
ResiC 19.59 mg
81.10 %
Dpeak 63.0°C

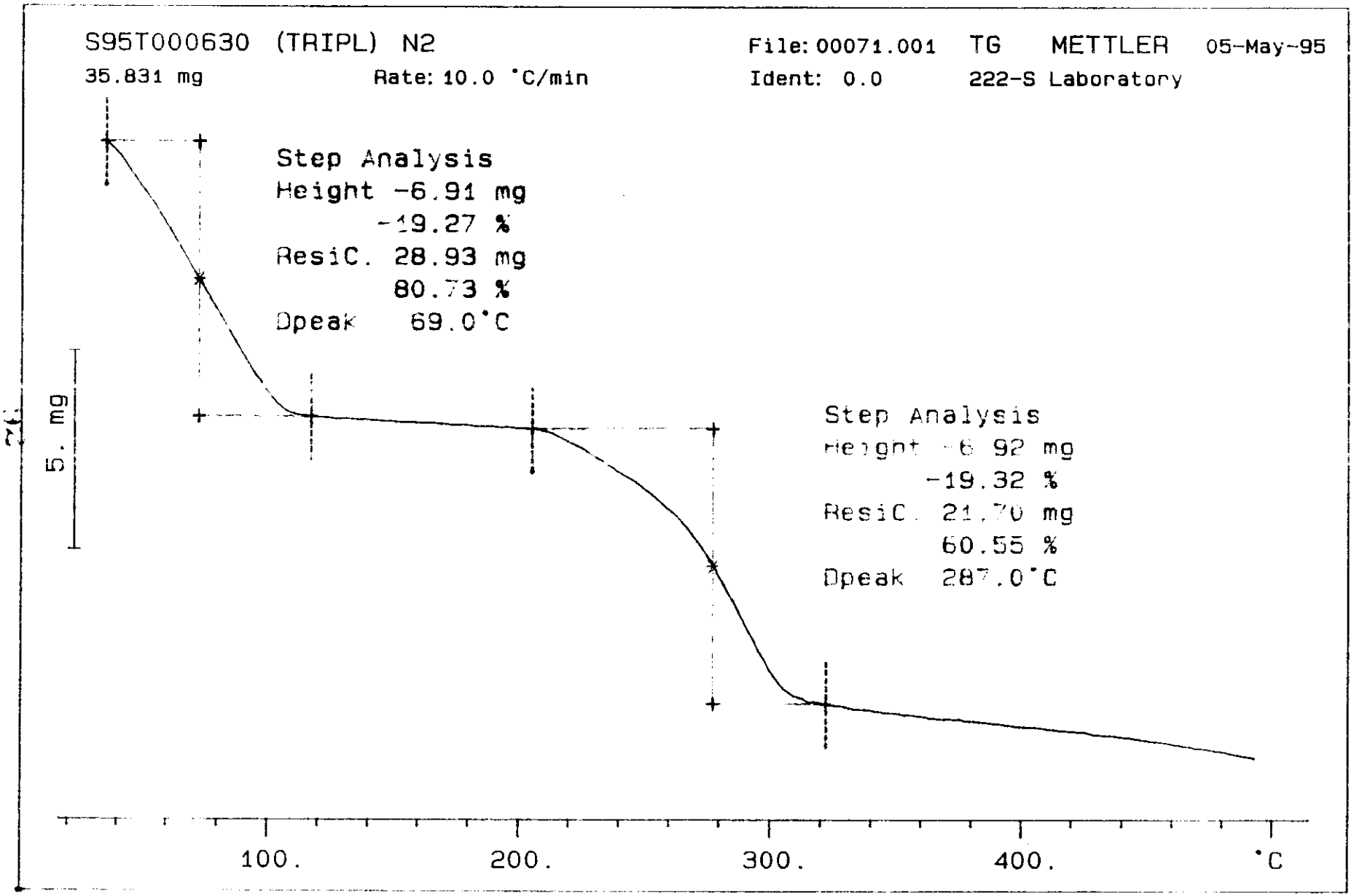


Step Analysis
Height -5.04 mg
-20.87 %
ResiC. 14.33 mg
59.33 %
Dpeak 283.0°C

NOT AVAILABLE COPY



AVAILABLE COPY



LABCORE Data Entry Template for Worklist# 1051

Analyst: SMF **Instrument:** TGA01 **Book #** 42NE-A

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

Worklist Comment: Please run U-202 TGA under N2 bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA 01	SOLID	59.19	58.85	N/A	%
95000052	U-202	2	SAMPLE	S95T000632	0		TGA 01	SOLID	N/A	24.45		%
95000052	U-202	3	DUP	S95T000632	0		TGA 01	SOLID	24.45	22.24	N/A	%

Final page for worklist # 1051

Blandina Valenzuela for SM Fulton 5-2-95
Analyst Signature **Date**

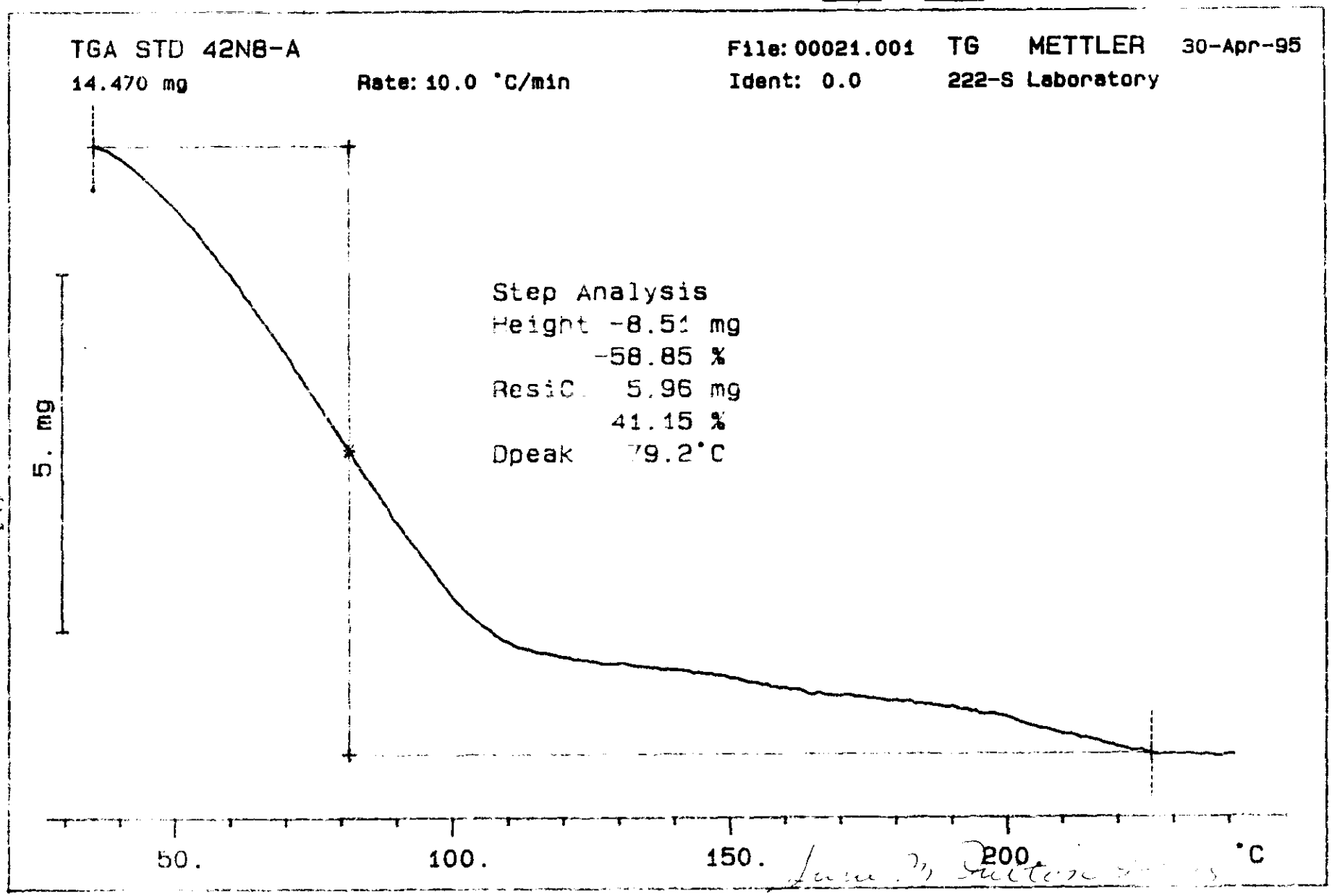
[signature] 5/2/95
Analyst Signature **Date**

Verified by Blandina Valenzuela 5-2-95

Data Entry Comments: S95T000632 light yellow thick material w/ [illegible] water. The sample also produced a second weight loss step of 18.78% at 309.0°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 94 TO 96.



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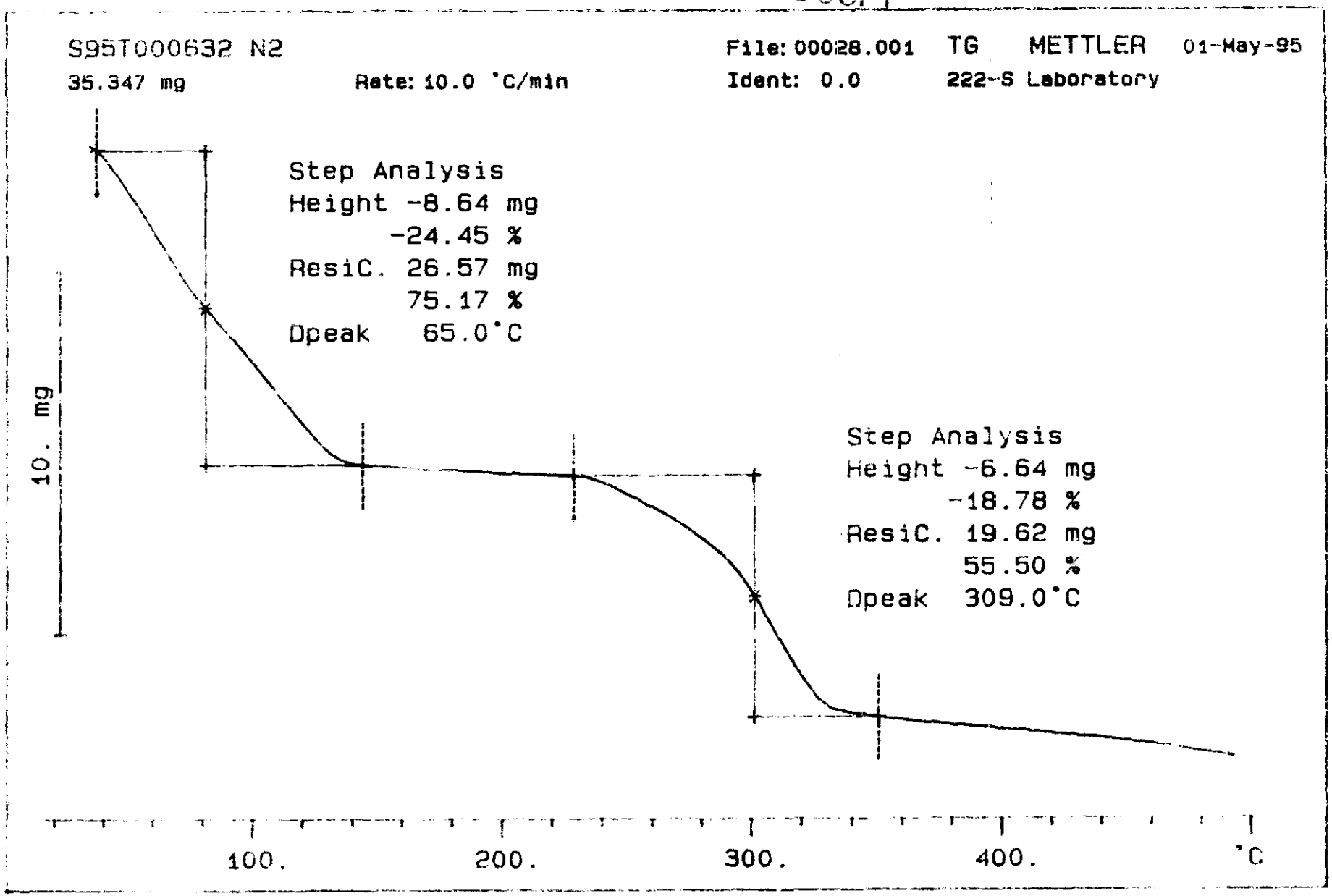
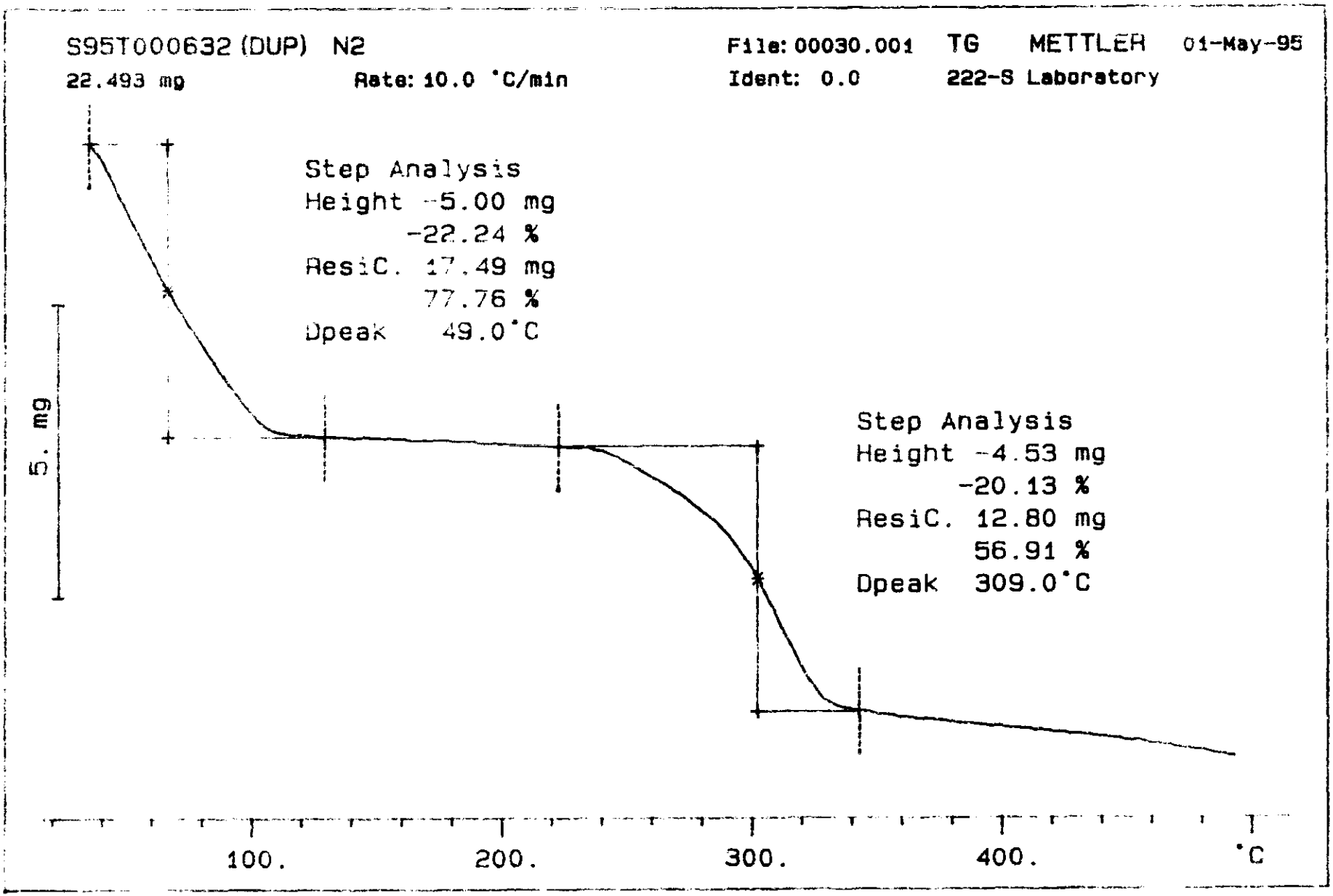


BEST AVAILABLE COPY



LABCORE Data Entry Template for Worklist# 1052

Analyst: SMF **Instrument:** TGA01 **Book #** 42NE A

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

Worklist Comment: Please run U-202 TGA under N2. bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA-01	SOLID	59.19	58.97	N/A	%
95000052	U-202	2	SAMPLE	S95T000643	0		TGA-01	SOLID	N/A	36.24		%
95000052	U-202	3	DUP	S95T000643	0		TGA-01	SOLID	36.24	41.52	N/A	%
95000052	U-202	4	TRIPL	S95T000643	0		TGA-01	SOLID	36.24	34.81	N/A	%

Final page for worklist # 1052

See attached for signatures 5-1-95
Analyst Signature **Date**

Verified by
Blandina Valenzuela
Analyst Signature **Date**

Data Entry Comments: S95T000643 produced a second weight loss step at [illegible] at 303 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.

LABCORE Data Entry Template for Worklist# 1052

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

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

Worklist Comment: Please run U-202 TGA under N2. bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA 01	SOLID			N/A	%
95000054	U-202	2	SAMPLE	S95T000610	0		TGA 01	SOLID	N/A			%
95000054	U-202	3	DUP	S95T000610	0		TGA 01	SOLID			N/A	%
95000052	U-202	4	SAMPLE	S95T000643	0		TGA 01	SOLID	N/A			%
95000052	U-202	5	DUP	S95T000643	0		TGA 01	SOLID			N/A	%

Final page for worklist # 1052

Susie M. Fulton 5-1-95

Analyst Signature **Date**

Analyst Signature **Date**

Data Entry Comments:

S95T00610 Archived

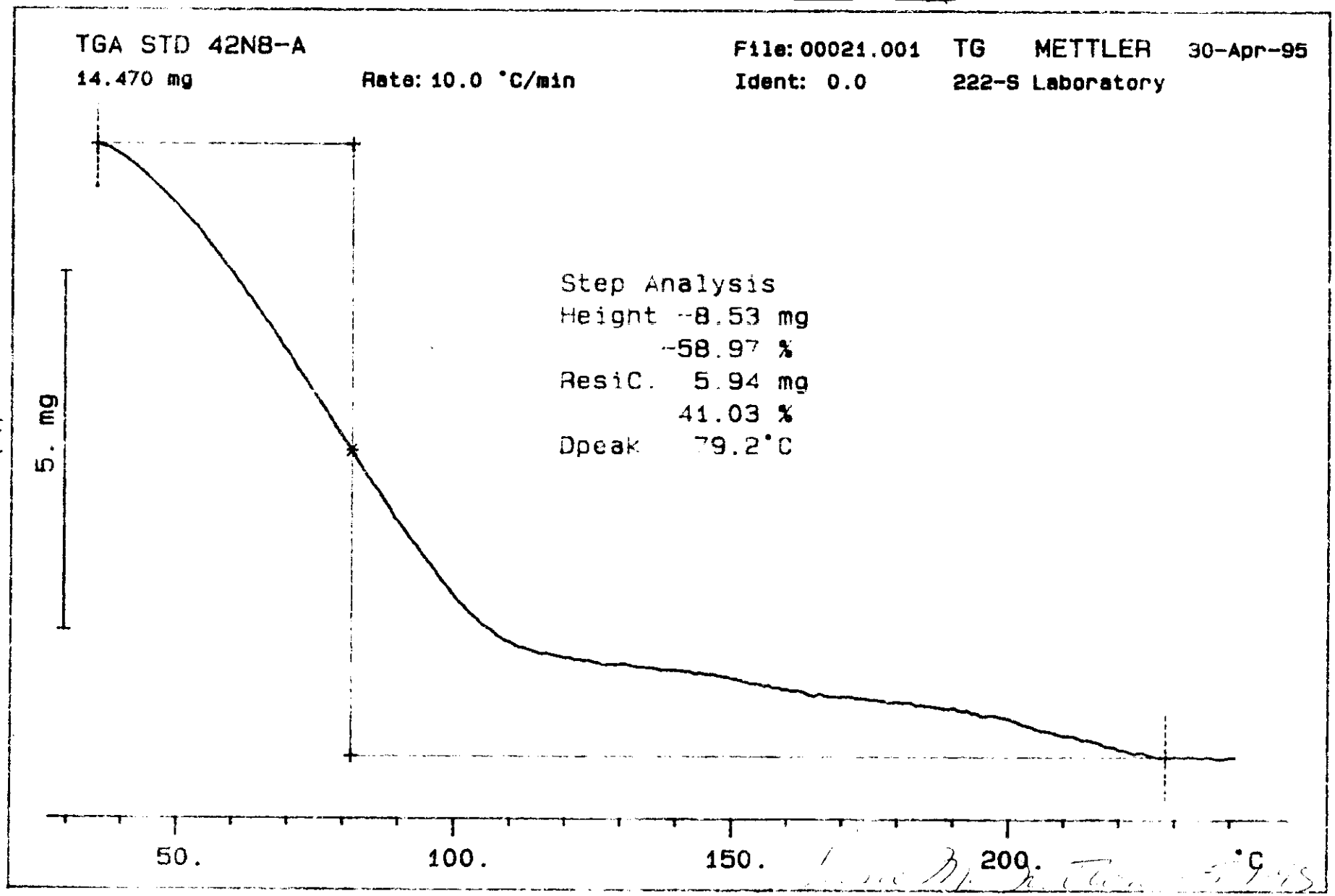
S95T000643 - light yellow [illegible] w/ large crystals

(> 50% crystals)

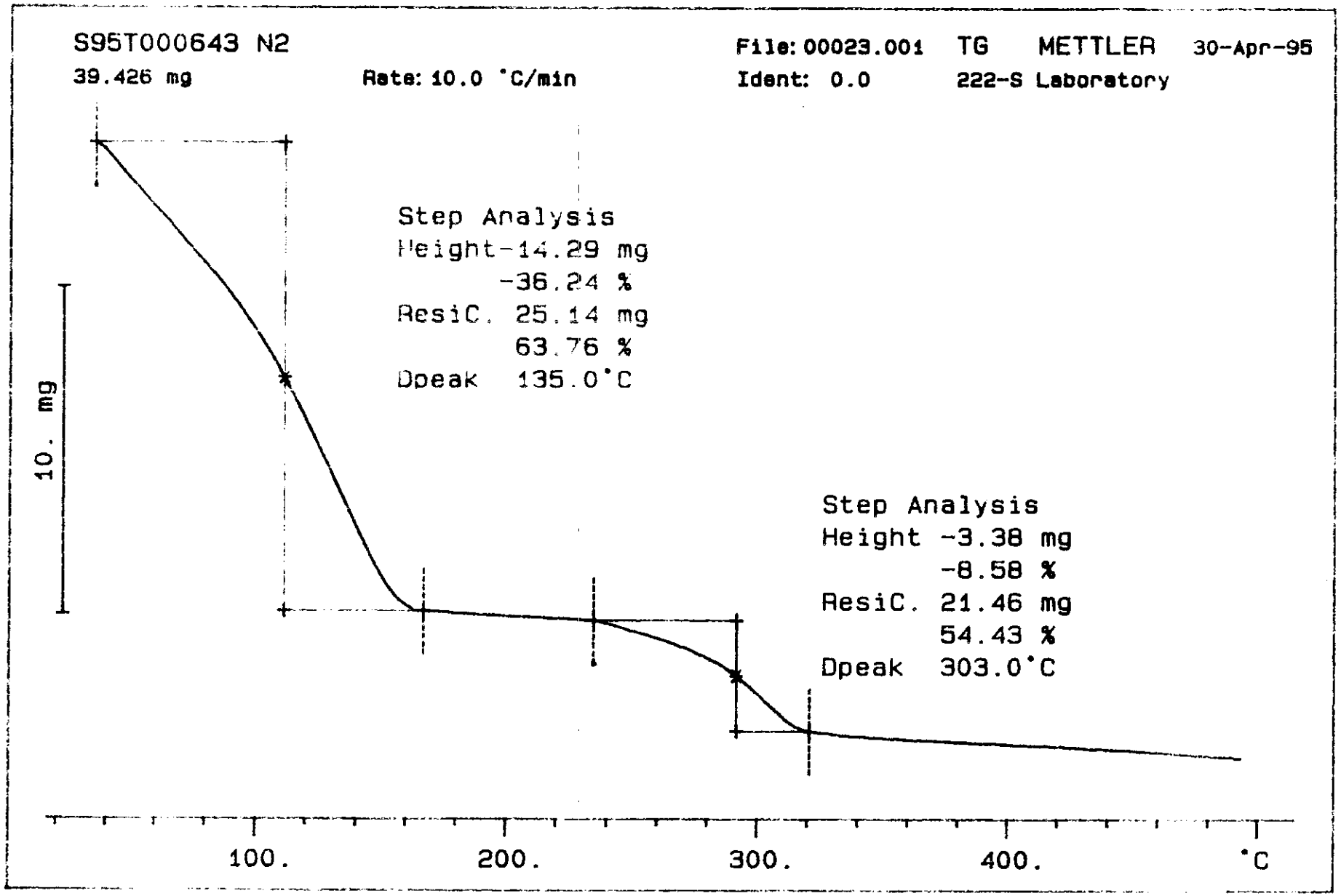
Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 99 TO 102.

RESTRICTED COPY



NOT AVAILABLE COPY



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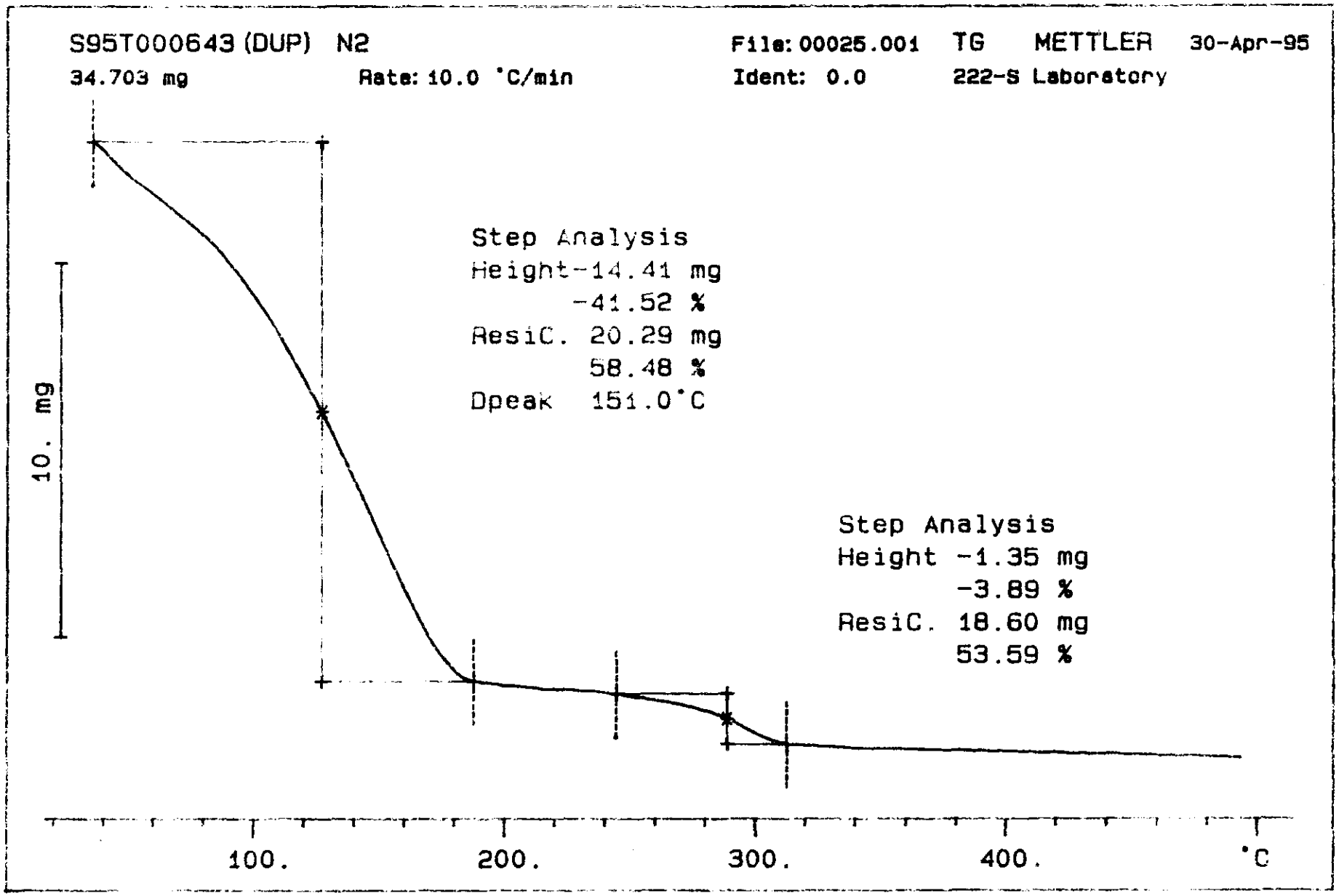
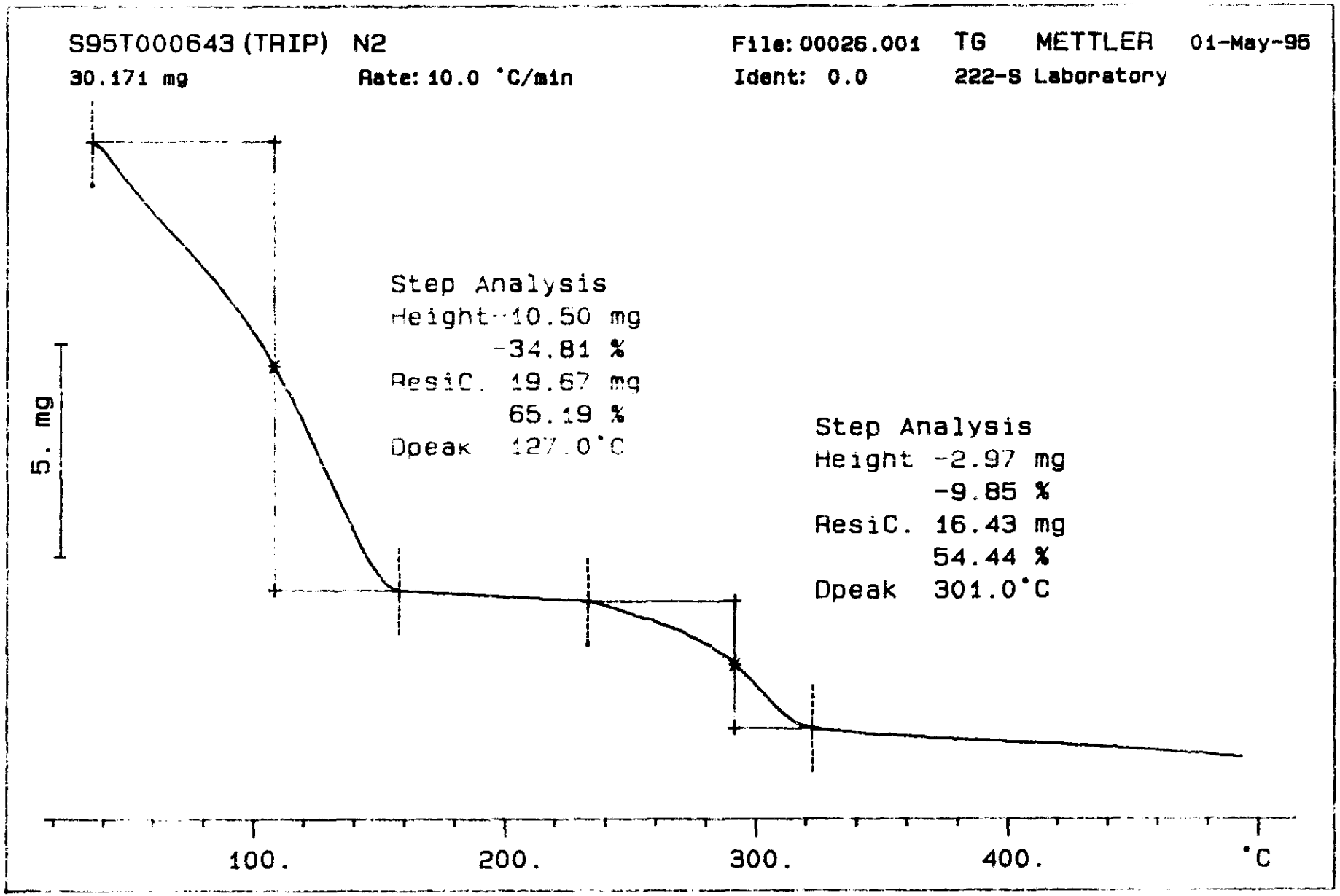



S95T000643 (TRIP) N2
30.171 mg
Rate: 10.0 °C/min
File: 00026.001 TG METTLER 01-May-95
Ident: 0.0 222-S Laboratory
Step Analysis
Height -10.50 mg
-34.81 %
ResiC. 19.67 mg
65.19 %
Dpeak 127.0°C
Step Analysis
Height -2.97 mg
-9.85 %
ResiC. 16.43 mg
54.44 %
Dpeak 301.0°C
5. mg
100.
200.
300.
400.
°C

LABCORE Data Entry Template for Worklist# 1053

Analyst: DVS **Instrument:** TGA01 **Book #** 42N8-A

Method: LA-560-112 Rev/Mod A-7

Worklist Comment: Please run U-202 TGA under N2 bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA 01	SOLID	59.19	58.40	N/A	%
95000052	U-202	2	SAMPLE	S95T000644	0		TGA 01	SOLID	N/A	24.43		%
95000052	U-202	3	DUP	S95T000644	0		TGA 01	SOLID	24.43	23.96	N/A	%

Final page for worklist # 1053

[signature] 4-25-95
Analyst Signature **Date**

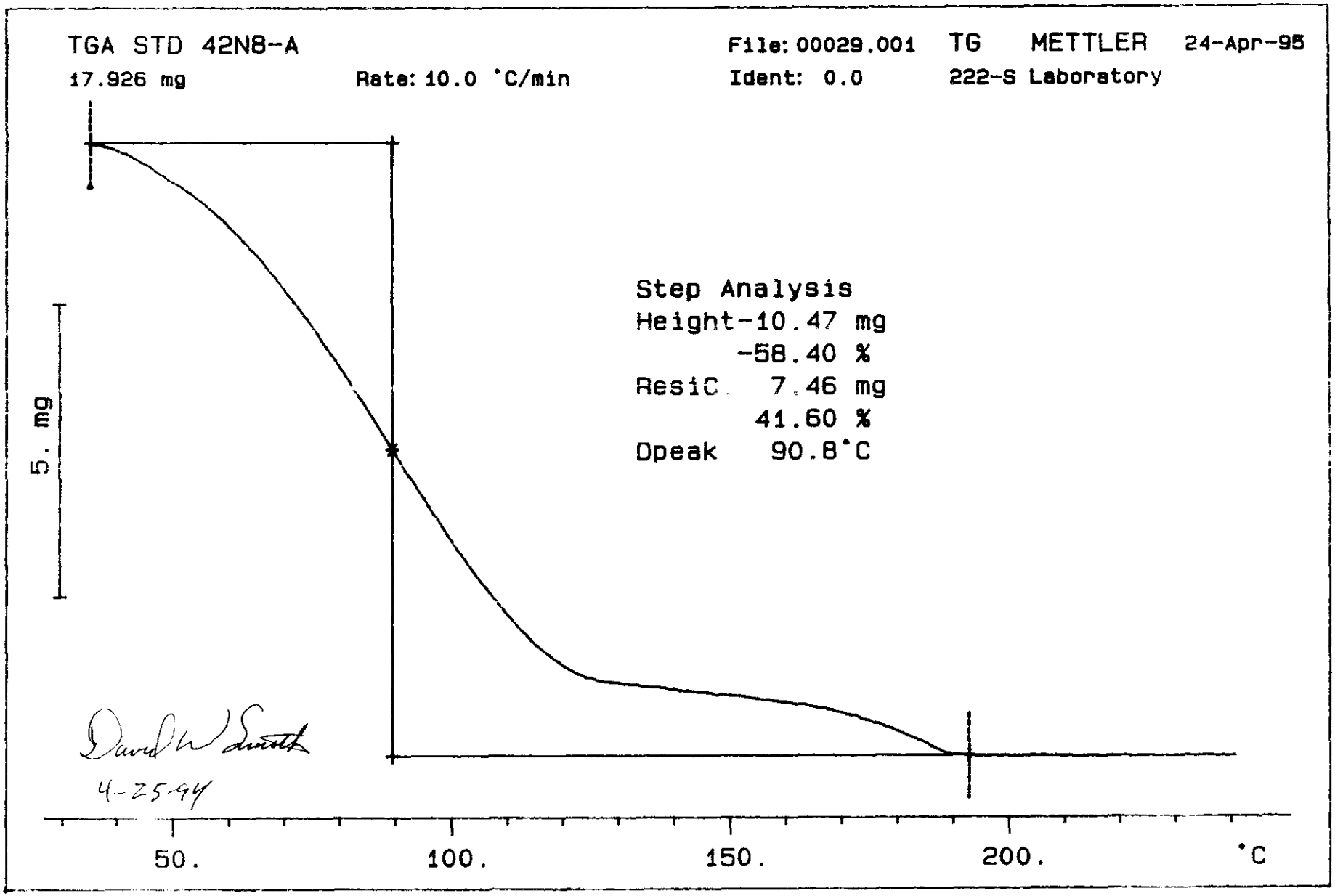
[signature] 4-25-95
Analyst Signature **Date**

Verified by Blandina Valenzuela 4/25/95

Data Entry Comments: [illegible] 4 [illegible] weight [illegible] at [illegible]

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 104 TO 106. BEST AVAILABLE COPY



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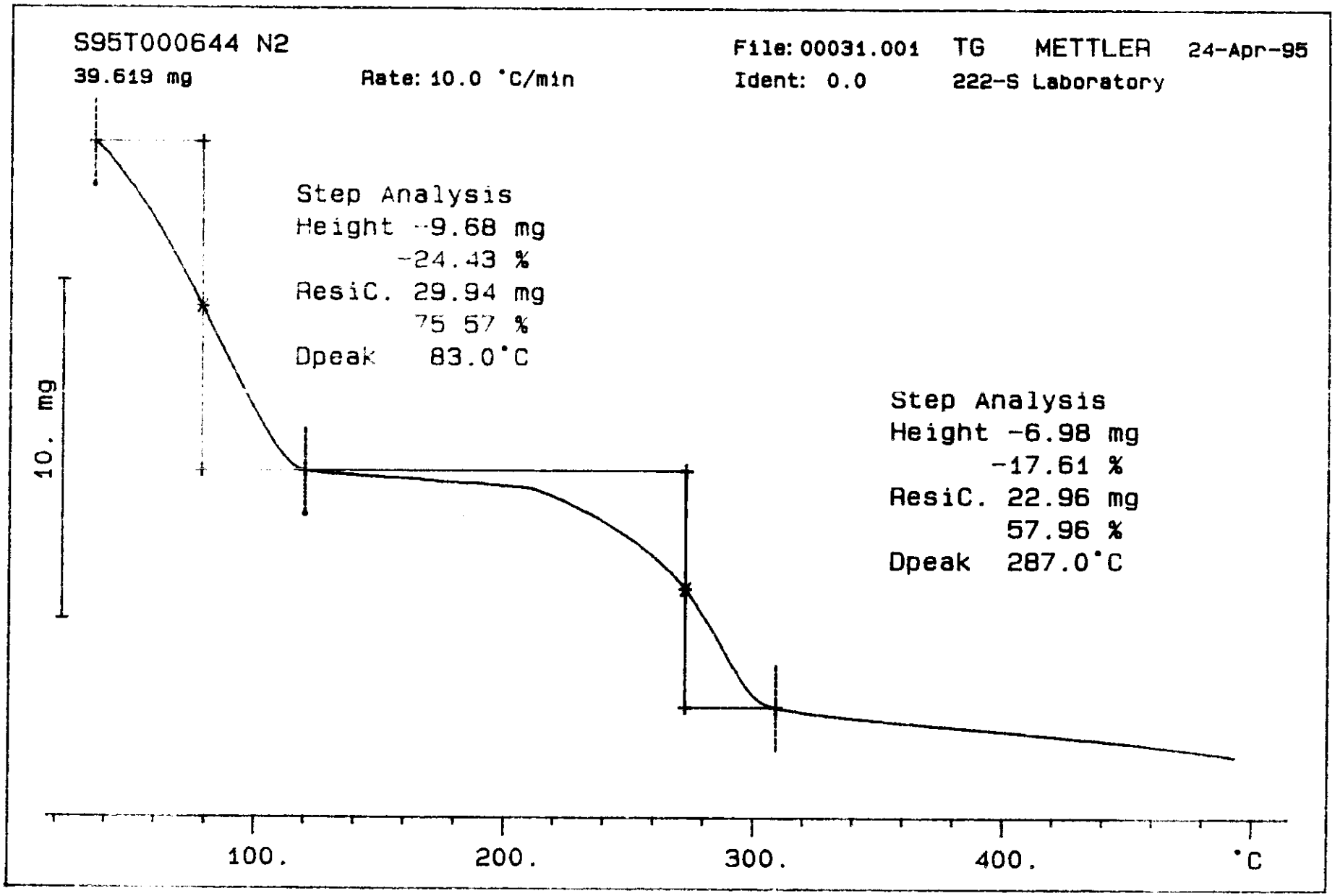

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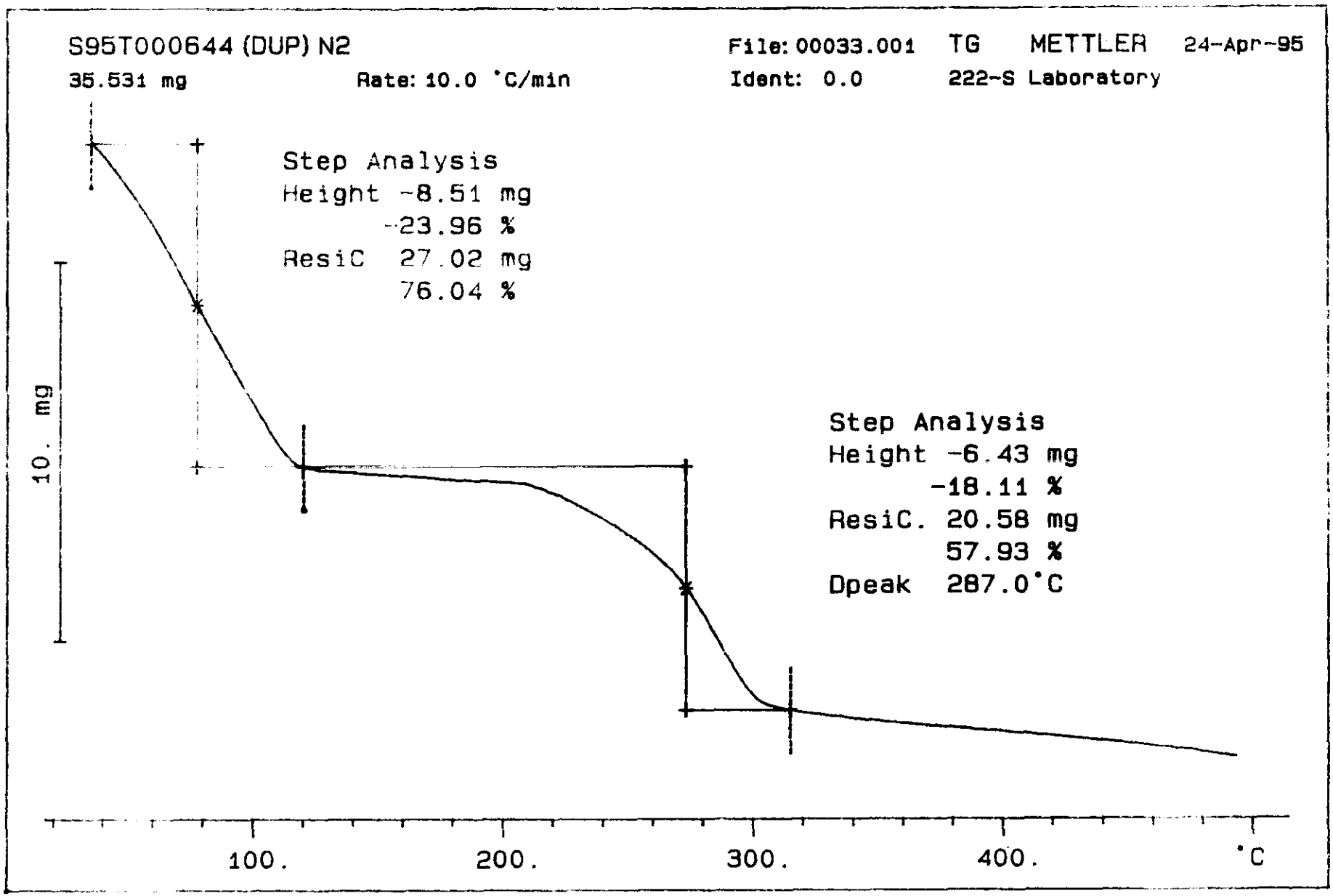

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DISTRIBUTION SHEET

To Distribution	From Characterization Plans and Reports	Page 2 of 2
		Date: 05/05/95
Project Title/Work Order WHC-SD-WM-DP-110, Rev. 0, "45-Day Safety Screen Results for Tank 241-U-202, Push Mode, Cores 75 and 78"		EDT NO.: EDT-612152
		ECN NO.: N/A

Name	MSIN	Text With all Attach	EDT/ECN ONLY	
Washington State Department of Ecology Single-Shell Tank Unit Manager S. E. McKinney P.O. Box 47600 Olympia, Washington 98504-7600		X		
Environmental Protection Agency Single-Shell Tank Unit Manager D. R. Einan 712 Swift Boulevard, Suite 5 Richland, Washington 99352		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 and Reports	Date: 05/05/95
Project Title/Work Order WHC-SD-WM-DP-110, Rev. 0, "45-Day Safety Screen Results for Tank 241-U-202, Push Mode, Cores 75 and 78"		EDT NO.: EDT-612152 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. L. Deichman	H4-19		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
L. Jensen	T6-07	X	
J. Jo	R2-12	X	
G. D. Johnson	G1-19	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	L8-04	2	
EDMC	H6-08	X	
LTIC	T6-03		X
OSTI	L8-07	2	
TFIC (Tank Farm Information Center)	R1-20		X
TCRC	R2-12	2	

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