This document was too large to scan as a whole document, therefore it required breaking into smaller sections.

DOCUMENT NUMBER: SD-WM-DP-164

SECTION 12 **OF** 12

TITLE: Final Report for Tank 241BY104 Rotary Mode Cores 116 & 117 [Pgs 2-98 Thru 2-290]

DATE: 06/25/1996

ORIGINATOR: Benar CJ

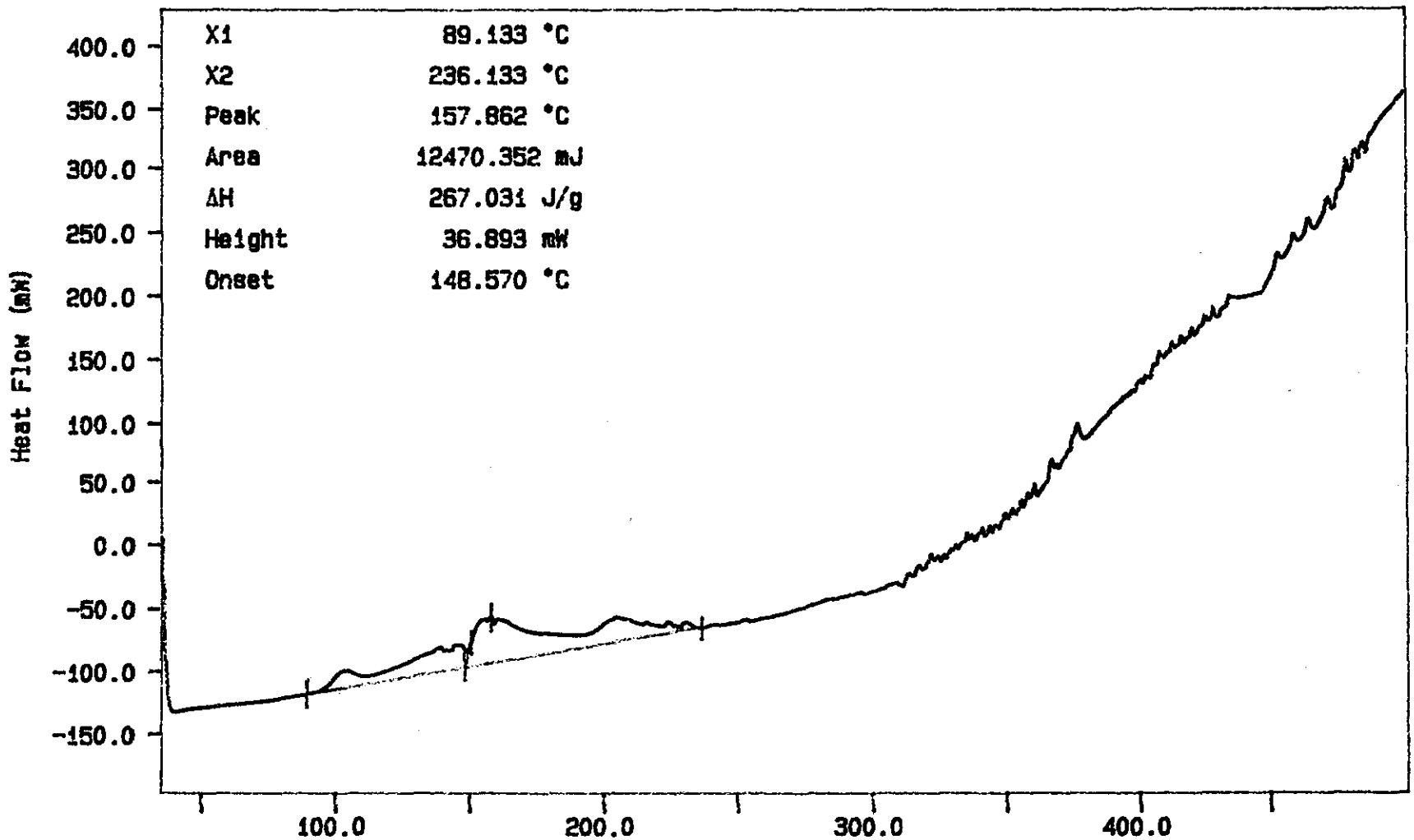
CO: WHC

RECIPIENT:

CO:

REFERENCES: ECN-629043

Curve 1: DSC
File info: SAM121704 Mon Dec 18 00:00:33 1995
Sample Weight: 46.700 mg
S95T003641 DUP N2



exotherm down, N2 purge gas
TEMP1: 35.0 C TIME1: 0.0 min RATE1: 10.0 C/min
TEMP2: 600.0 C

AD PURINTON
PERKIN-ELMER
7 Series Thermal Analysis System
Mon Dec 18 00:54:20 1995

LABCORE Data Entry Template for Worklist# 4118

Analyst: ADP **Instrument:** DSC0 3 **Book #** 12N14B

Method: LA-514-114 Rev/Mod C-1

Worklist Comment: Please run BY-104 DSCs under N2. bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				DSC-03	SOLID	28.45	28.17	N/A	Joules/g
95000180	BY104 ROTARY	2	SAMPLE	S95T003528	0		DSC-03	SOLID	N/A	Ø		Joules/g
95000180	BY104 ROTARY	3	DUP	S95T003528	0		DSC-03	SOLID	Ø	~~Ø~~ 116.0 12/20/95 BDV	N/A	Joules/g
95000180	BY104 ROTARY	4	SAMPLE	S95T003703	0		DSC-03	SOLID	N/A	Ø		Joules/g
95000180	BY104 ROTARY	5	DUP	S95T003703	0		DSC-03	SOLID	Ø	~~Ø~~ 11.14 J/g 12/19/95 BDV	N/A	Joules/g

Final page for worklist # 4118

See attached for signatures
Analyst Signature **Date** 12/19/95

Verified 12/21/95 J M Fuy

Analyst Signature **Date** 12-20-95

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# 4118

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

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

Worklist Comment: Please run BY-104 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
95000180	BY104 ROTARY	2	SAMPLE	S95T003528	0		DSC-01	SOLID	N/A			Joules/g
95000180	BY104 ROTARY	3	DUP	S95T003528	0		DSC-01	SOLID			N/A	Joules/g
95000180	BY104 ROTARY	4	SAMPLE	S95T003703	0		DSC-01	SOLID	N/A			Joules/g
95000180	BY104 ROTARY	5	DUP	S95T003703	0		DSC-01	SOLID			N/A	Joules/g

Final page for worklist # 4118

Analyst Signature Date

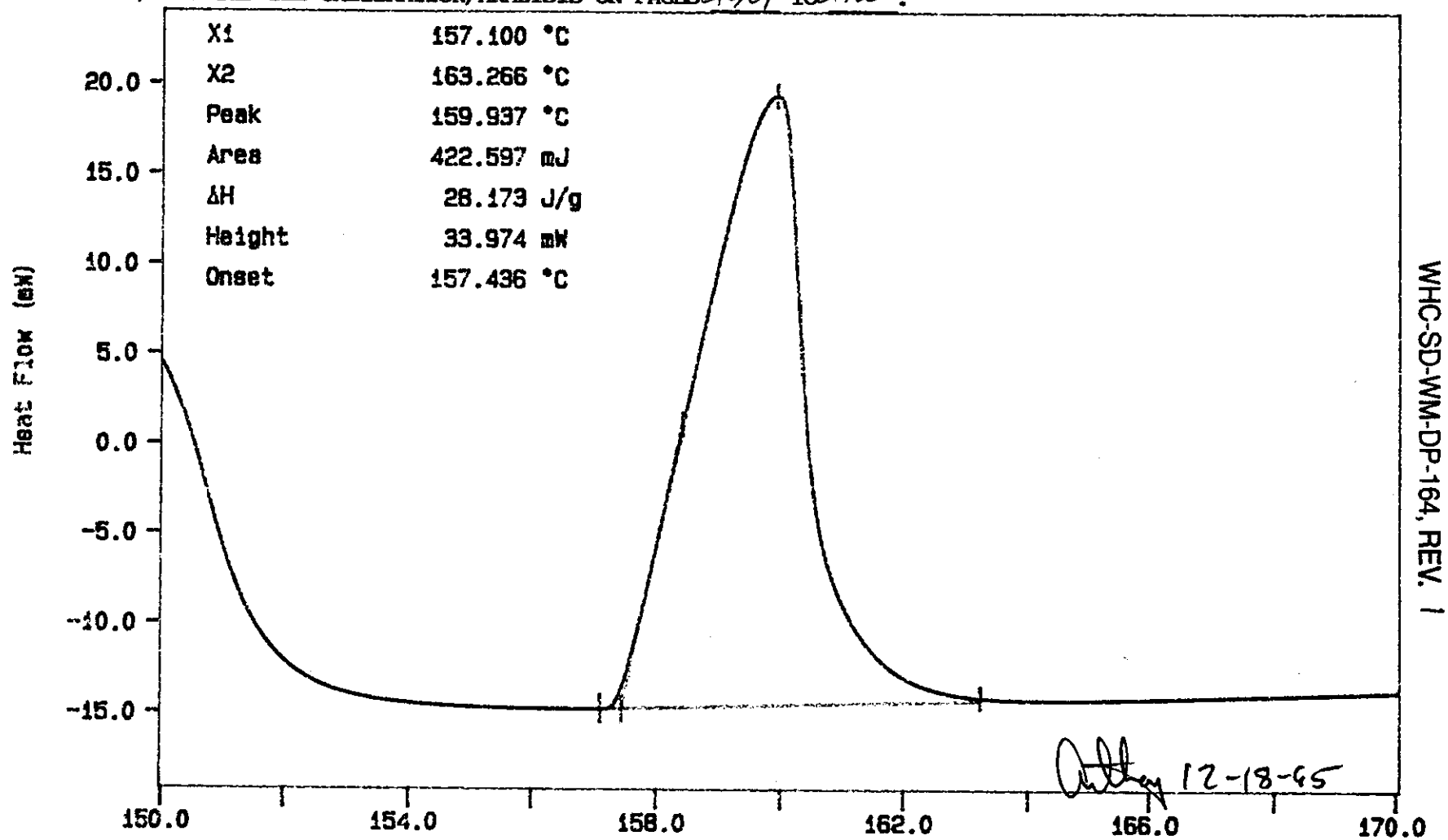
Analyst Signature Date

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.

Curve 1: DSC
File info: IND121801 Mon Dec 18 01:17:10 1995
Sample Weight: 15.000 mg
12N14A Indium at 10C/min

SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 2-101 TO 2-105.

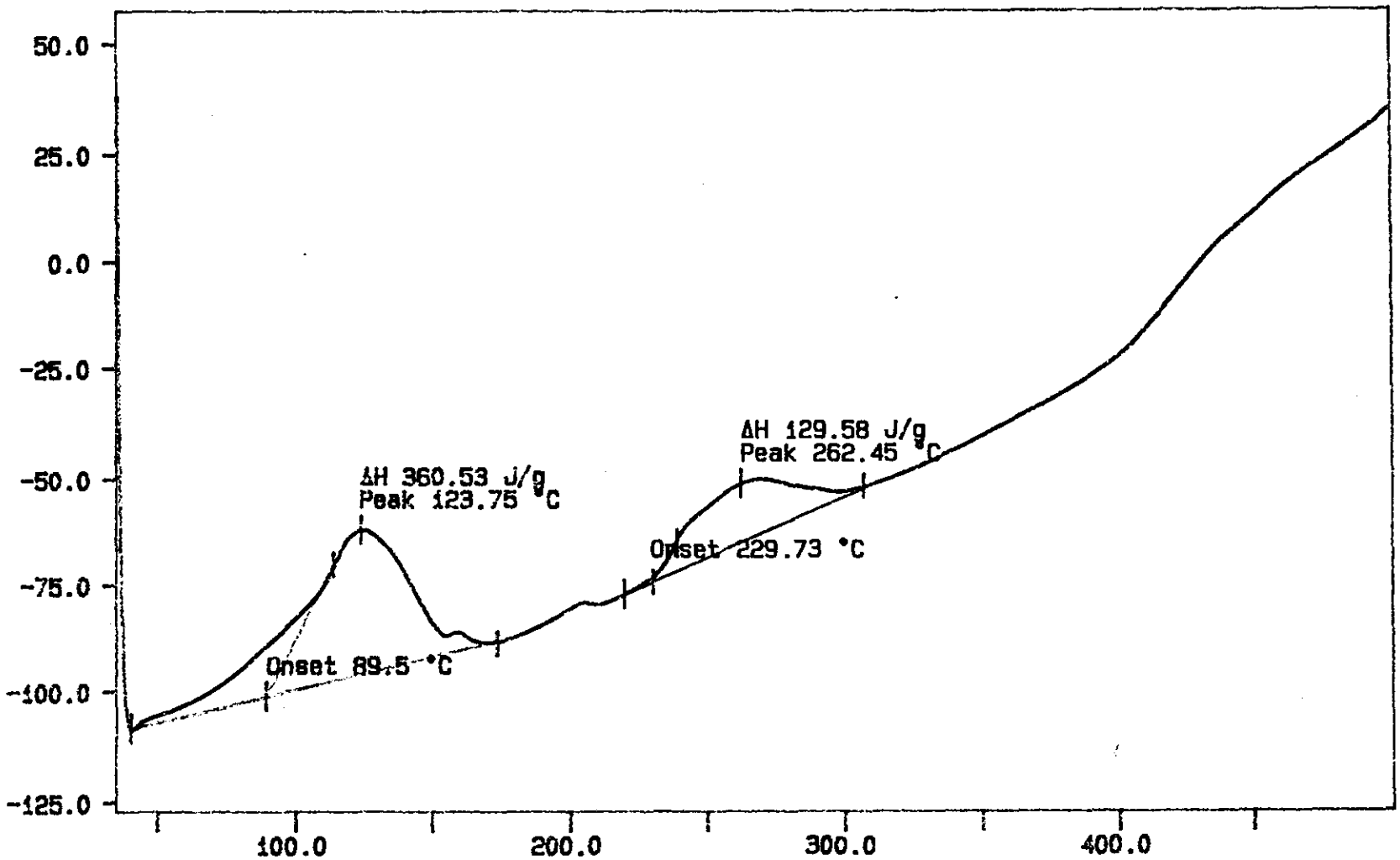


Anthony 12-18-95

N2, EXOTHERM DOWN
TEMP1: 150.0 C TIME1: 0.0 min RATE1: 10.0 C/min
TEMP2: 170.0 C

AD PURINTON
PERKIN-ELMER
7 Series Thermal Analysis System
Mon Dec 18 01:22:35 1995

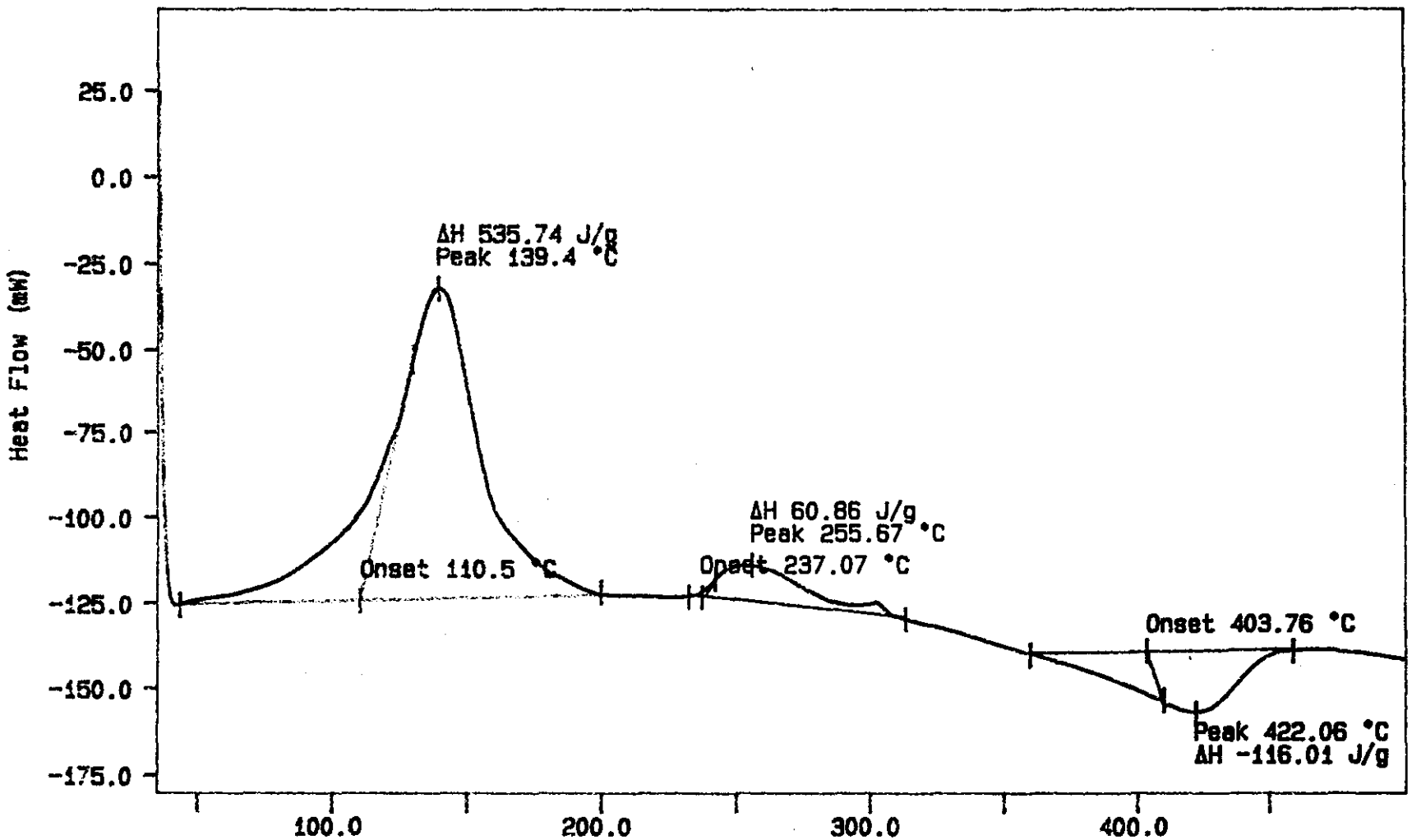
Curve 1: DSC
File info: SAM121801 Mon Dec 18 02:18:02 1995
Sample Weight: 27.250 mg
S95T003528 SAM N2



exotherm down, N2 purge gas
TEMP1: 35.0 C TIME1: 0.0 min RATE1: 10.0 C/min
TEMP2: 500.0 C

AD PURINTON
PERKIN-ELMER
7 Series Thermal Analysis System
Mon Dec 18 06:29:45 1995

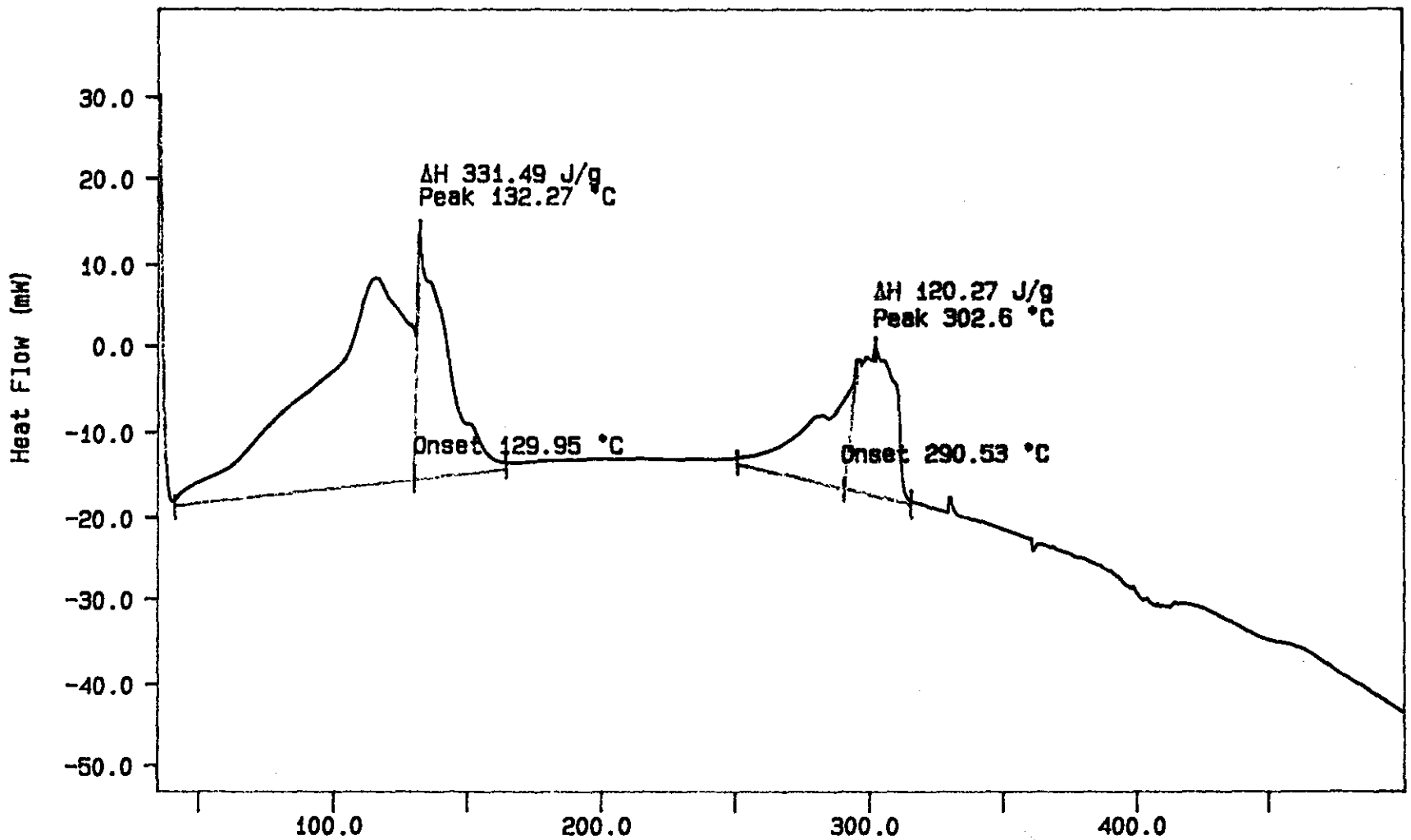
Curve 1: DSC
File info: SAM121802 Mon Dec 18 20:25:37 1995
Sample Weight: 43.260 mg
S95T003528 DUP N2



exotherm down, N2 purge gas
TEMP1: 35.0 C TIME1: 0.0 min RATE1: 10.0 C/min
TEMP2: 500.0 C

AD PURINTON
PERKIN-ELMER
7 Series Thermal Analysis System
Mon Dec 18 20:54:09 1995

Curve 1: DSC
File info: SAM121803 Mon Dec 18 22:03:29 1995
Sample Weight: 23.750 mg
S95T003703 SAM N2

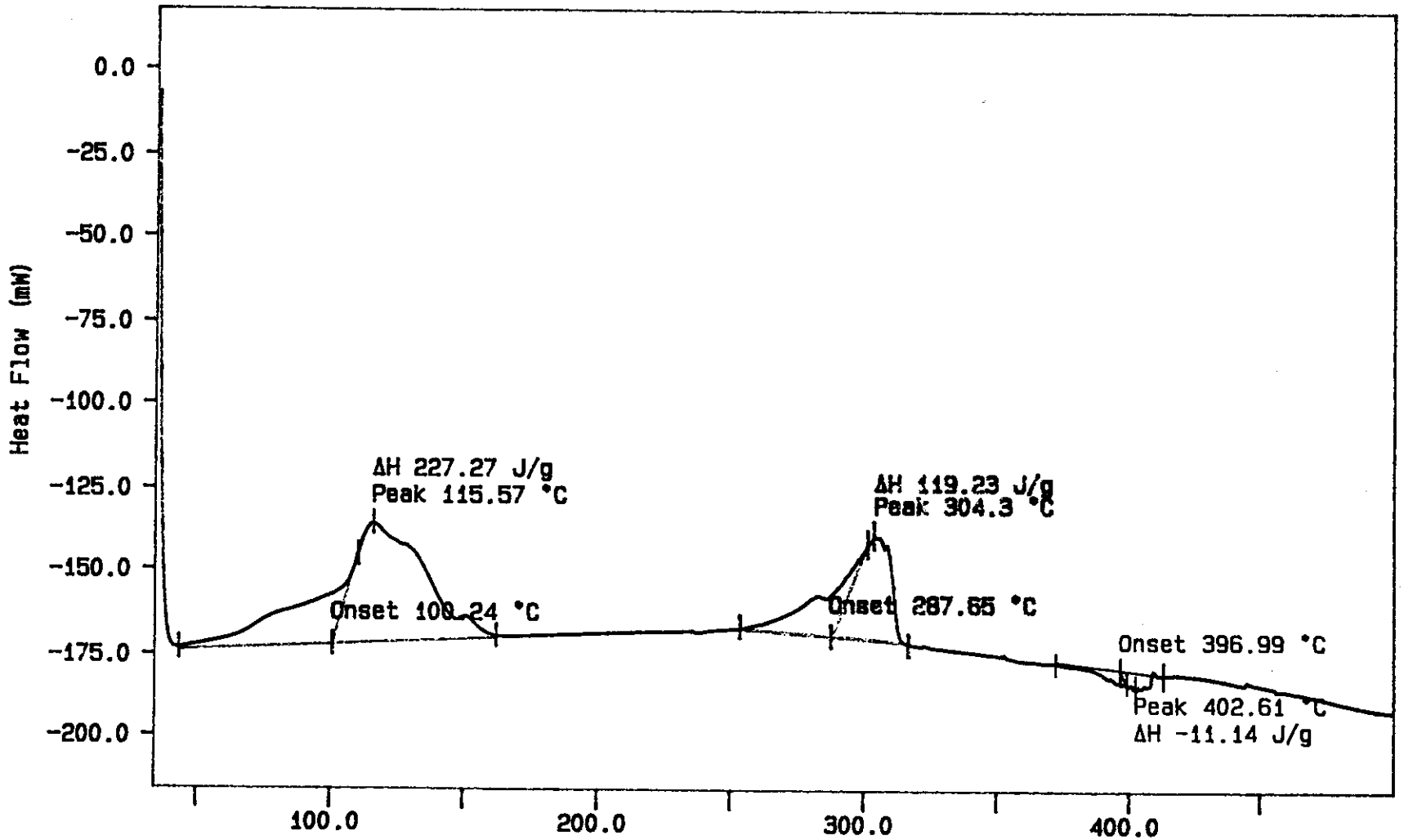


exotherm down, N2 purge gas

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

AD PURINTON
PERKIN-ELMER
7 Series Thermal Analysis System
Mon Dec 18 22:21:13 1995

Curve 1: DSC
File info: SAM121804 Mon Dec 18 23:18:58 1995
Sample Weight: 39.040 mg
S95T003703 DUP N2



exotherm down, N2 purge gas
TEMP1: 35.0 C TIME1: 0.0 min RATE1: 10.0 C/min
TEMP2: 500.0 C

AD PURINTON
PERKIN-ELMER
7 Series Thermal Analysis System
Mon Dec 18 23:24:51 1995

LABCORE Data Entry Template for Worklist# 4457

Analyst: ADP **Instrument:** DSC0 1 **Book #** ~~65N8A~~ ADP 12-22-95 12N14B

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

Worklist Comment: Please run ~~BY-105~~ BY-104 12/28/95 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
95000180	BY104 ROTARY	2	SAMPLE	S95T003639	0		DSC-01	SOLID	N/A	71.0		Joules/g
95000180	BY104 ROTARY	3	DUP	S95T003639	0		DSC-01	SOLID	71.0	65.3	N/A	Joules/g

Final page for worklist # 4457

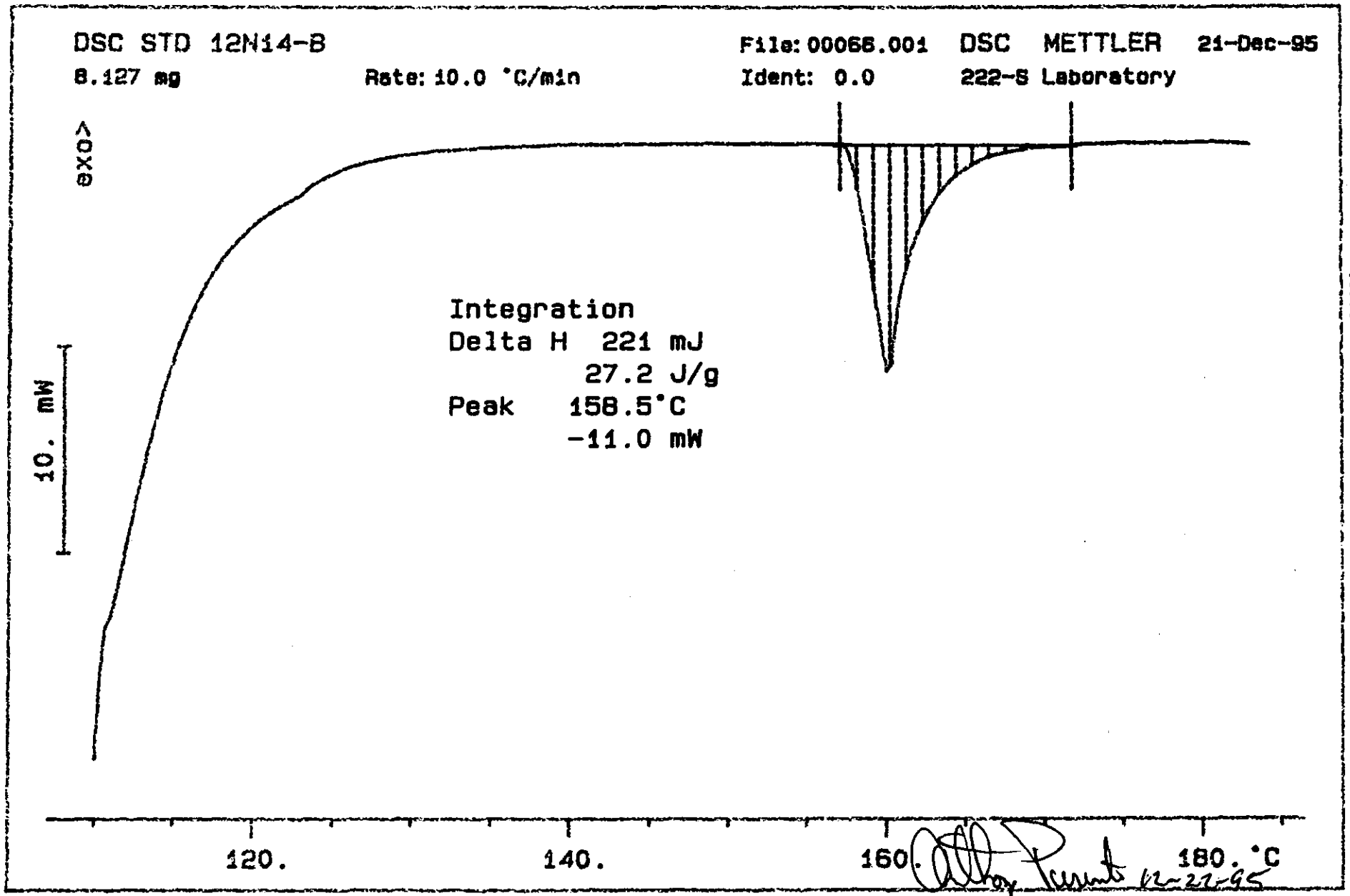
Anthony Pirrunto 12-22-95
Analyst Signature **Date**

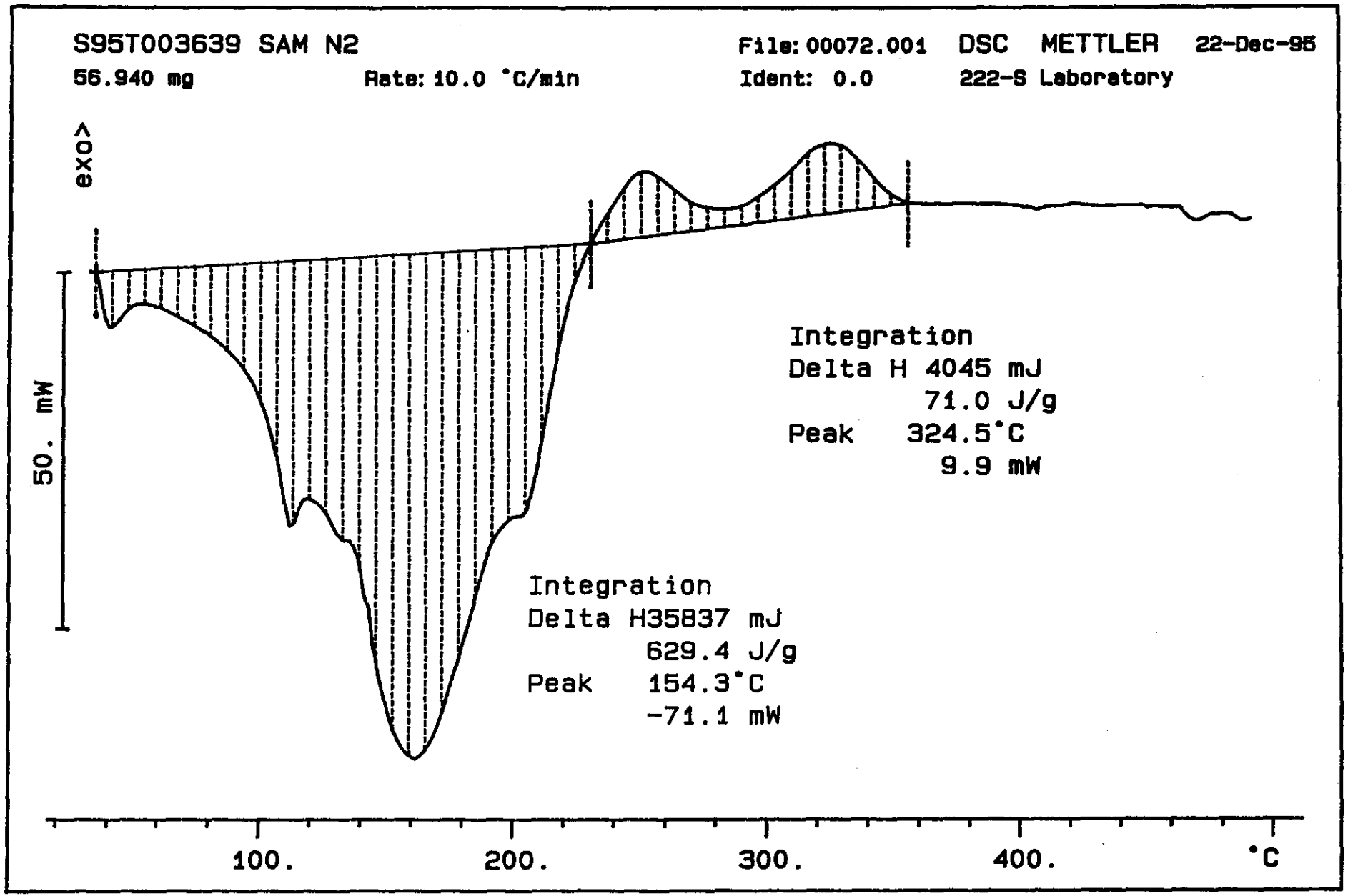
R. [illegible] 12/29/95
Analyst Signature **Date**

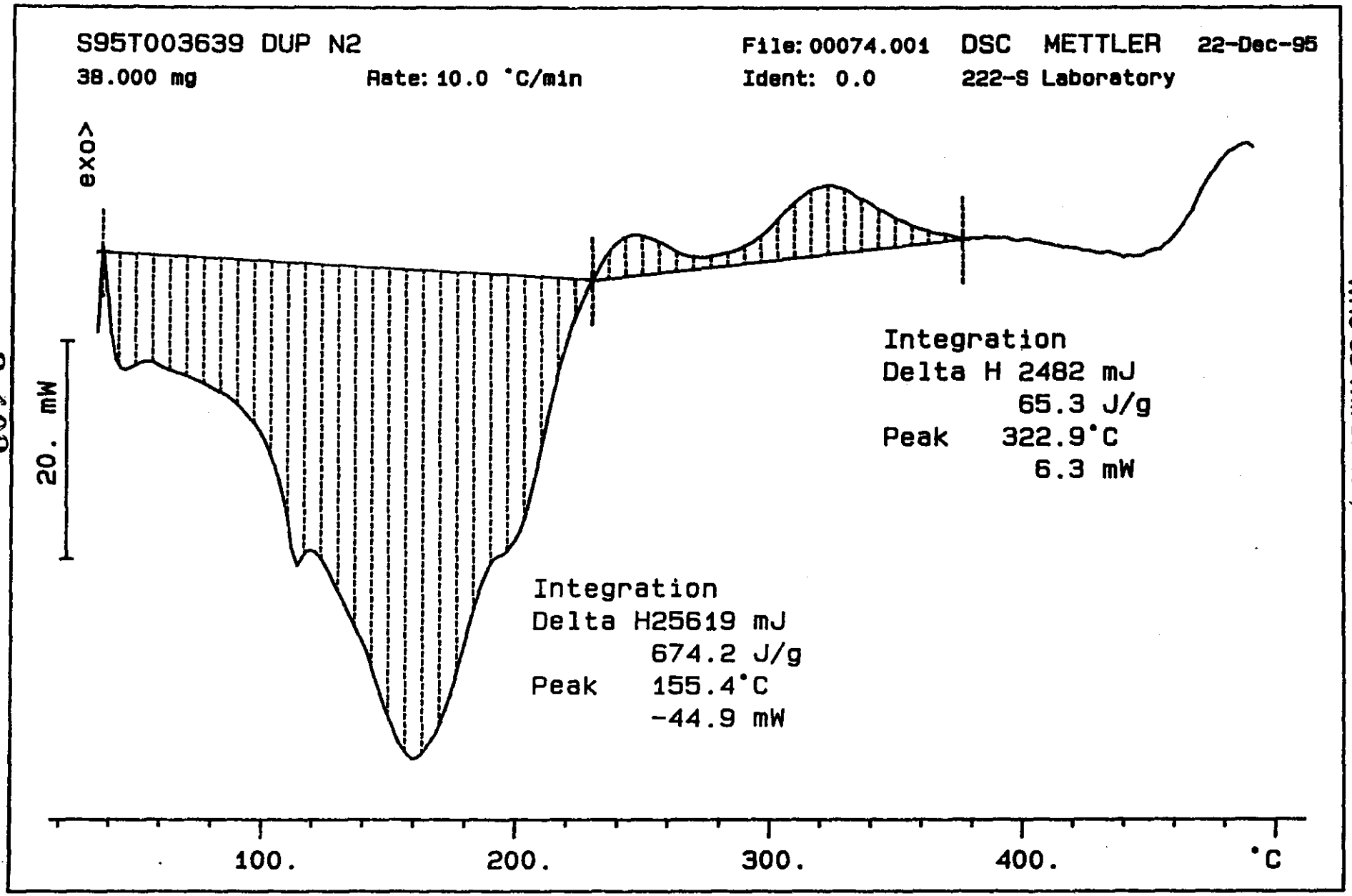
Data Entry Comments: Sample produced one endotherm at 154.3°C with a delta H of 629.4 J/g. The beginning of a peak seen at approximately 460°C is due to contamination left on the sensor from the previously run sample

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 2107 TO 2109.




S95T003639 SAM N2
56.940 mg
Rate: 10.0 °C/min
File: 00072.001
Ident: 0.0
DSC METTLER
222-S Laboratory
22-Dec-95
<exo
50. mW
Integration
Delta H 4045 mJ
71.0 J/g
Peak 324.5°C
9.9 mW
Integration
Delta H35837 mJ
629.4 J/g
Peak 154.3°C
-71.1 mW
100.
200.
300.
400.
°C


S95T003639 DUP N2
38.000 mg
Rate: 10.0 °C/min
File: 00074.001
Ident: 0.0
DSC METTLER
222-S Laboratory
22-Dec-95
<exo
20. mW
Integration
Delta H 2482 mJ
65.3 J/g
Peak 322.9°C
6.3 mW
Integration
Delta H25619 mJ
674.2 J/g
Peak 155.4°C
-44.9 mW
100.
200.
300.
400.
°C

LABCORE Data Entry Template for Worklist# 4489

Analyst: JMF **Instrument:** DSC01 _____ **Book #** _____

Method: LA-514-113 Rev/Mod ——

Worklist Comment: Dry DSC for BY104. JMF

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	-------TEST------	MATRIX	ACTUAL	FOUND	DL	UNIT
95000180	BY104 ROTARY	1	SAMPLE	S95T003529	0		DSC-02	SOLID	N/A	30.5		Joules/g Dry
95000180	BY104 ROTARY	2	DUP	S95T003529	0		DSC-02	SOLID	30.5	13.6	N/A	Joules/g Dry
95000180	BY104 ROTARY	3	SAMPLE	S95T003637	0		DSC-02	SOLID	N/A	0		Joules/g Dry
95000180	BY104 ROTARY	4	DUP	S95T003637	0		DSC-02	SOLID	0	0	N/A	Joules/g Dry
95000180	BY104 ROTARY	5	SAMPLE	S95T003638	0		DSC-02	SOLID	N/A	255.8		Joules/g Dry
95000180	BY104 ROTARY	6	DUP	S95T003638	0		DSC-02	SOLID	255.8	344.7	N/A	Joules/g Dry
95000180	BY104 ROTARY	7	SAMPLE	S95T003640	0		DSC-02	SOLID	N/A	389.6		Joules/g Dry
95000180	BY104 ROTARY	8	DUP	S95T003640	0		DSC-02	SOLID	389.6	309.8	N/A	Joules/g Dry
95000180	BY104 ROTARY	9	SAMPLE	S95T003641	0		DSC-02	SOLID	N/A	0		Joules/g Dry
95000180	BY104 ROTARY	10	DUP	S95T003641	0		DSC-02	SOLID	0	0	N/A	Joules/g Dry
95000180	BY104 ROTARY	11	SAMPLE	S95T003642	0		DSC-02	SOLID	N/A	0		Joules/g Dry
95000180	BY104 ROTARY	12	DUP	S95T003642	0		DSC-02	SOLID	0	0	N/A	Joules/g Dry
95000180	BY104 ROTARY	13	SAMPLE	S95T003643	0		DSC-02	SOLID	N/A	0		Joules/g Dry
95000180	BY104 ROTARY	14	DUP	S95T003643	0		DSC-02	SOLID	0	0	N/A	Joules/g Dry
95000180	BY104 ROTARY	15	SAMPLE	S95T003645	0		DSC-02	SOLID	N/A	284.9		Joules/g Dry
95000180	BY104 ROTARY	16	DUP	S95T003645	0		DSC-02	SOLID	284.9	724.6	N/A	Joules/g Dry
95000180	BY104 ROTARY	17	TRIPL	S95T003645	0		DSC-02	SOLID	284.9	1294.4	N/A	Joules/g Dry
95000180	BY104 ROTARY	18	SAMPLE	S95T003646	0		DSC-02	SOLID	N/A	0		Joules/g Dry

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# 4489

GROUP	PROJECT	S TYPE	SAMPLE#	R	A	-------TEST------	MATRIX	ACTUAL	FOUND	DL	UNIT
95000180	BY104 ROTARY	19 DUP	S95T003646	0		DSC-02	SOLID	0	0	N/A	Joules/g Dry
95000180	BY104 ROTARY	20 SAMPLE	S95T003648	0		DSC-02	SOLID	N/A	0		Joules/g Dry
95000180	BY104 ROTARY	21 DUP	S95T003648	0		DSC-02	SOLID	0	0	N/A	Joules/g Dry
95000180	BY104 ROTARY	22 SAMPLE	S95T003703	0		DSC-02	SOLID	N/A	0		Joules/g Dry
95000180	BY104 ROTARY	23 DUP	S95T003703	0		DSC-02	SOLID	0	12.48	N/A	Joules/g Dry

Final page for worklist # 4489

Analyst Signature Date 12/22/95

Analyst Signature Date

Verified 12/22/95 JMLyn

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.

Dry DSC calculations

S95T003645 BY-104

% H_2O	Avg % H_2O	Wet DSC	Dry DSC	
21.70	23.075	219.2 J/g	284.9 J/g	
24.45		557.4 J/g	724.6	
		995.7 J/g	1294.4	
S95T003638				
20.34	20.71	202.8	255.8	
21.08		273.3	344.7	
S95T003640				
28.21	27.43	282.7	389.6	
26.65		224.8	309.8	22.8% RPD
S95T003529 16.52	14.74	26.0	30.5	
12.96		11.6	13.6	
S95T003648				
35.26		0	0	
33.59		0	0	
S95T003637				
		0	0	
		0	0	
S95T003641				
		0	0	
		0	0	
S95T003528				
tga not done		0	0	not yet
		116.0		
S95T003703				
12.61	10.795	0	0	
8.98		11.14	12.48	
S95T003642				
		0	0	
		0	0	
S95T003643				
		0	0	
		0	0	
S95T003646				
		0	0	
		0	0	

Project limit violation on dup & trip
S95T003645 BY104 C110 55 QTR-D Direct

Notification sent to Mike Cook 10:15, 12/22/95
J M Fuge

LABCORE Data Entry Template for Worklist# 4497

Analyst: RAG **Instrument:** DSC0 1 **Book #** 12N14B

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

Worklist Comment: BY-104 DSC Run under Nitrogen glw

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				DSC-01	SOLID	28.45	27.3*	N/A	Joules/g
95000200	BY104 ROTARY	2	SAMPLE	S95T003764	0		DSC-01	SOLID	N/A	Ø		Joules/g
95000200	BY104 ROTARY	3	DUP	S95T003764	0		DSC-01	SOLID	Ø	Ø	N/A	Joules/g
		4	STD				DSC-01	SOLID	28.45	28.9*	N/A	Joules/g
95000200	BY104 ROTARY	5	SAMPLE	S95T003781	0		DSC-01	SOLID	N/A	Ø		Joules/g
95000200	BY104 ROTARY	6	DUP	S95T003781	0		DSC-01	SOLID	Ø	Ø	N/A	Joules/g

Final page for worklist # 4497

See attached for signatures
Analyst Signature Date 12/28/95 BBV

RF Stark 12/29/95
Analyst Signature Date

Data Entry Comments: S95T003764 produced two large endotherms, first at 144.6°C with a delta H of 857.3J/g and second at 358.6°C with a delta H of 1345.1J/g. S95T003781 produced two large endotherms, one at 144.8°C with a delta H of 717.0J/g and second at 360.8°C with a delta H of 2013.9J/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# 4497

Analyst: RG **Instrument:** DSC0 _____ **Book #** 12N14B

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

Worklist Comment: BY-104 DSC Run under Nitrogen glw

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	-------TEST------	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				DSC-01	SOLID			N/A	Joules/g
95000200	BY104 ROTARY	2	SAMPLE	S95T003764	0		DSC-01	SOLID	N/A			Joules/g
95000200	BY104 ROTARY	3	DUP	S95T003764	0		DSC-01	SOLID			N/A	Joules/g
95000200	BY104 ROTARY	4	SAMPLE	S95T003781	0		DSC-01	SOLID	N/A			Joules/g
95000200	BY104 ROTARY	5	DUP	S95T003781	0		DSC-01	SOLID			N/A	Joules/g

Final page for worklist # 4497

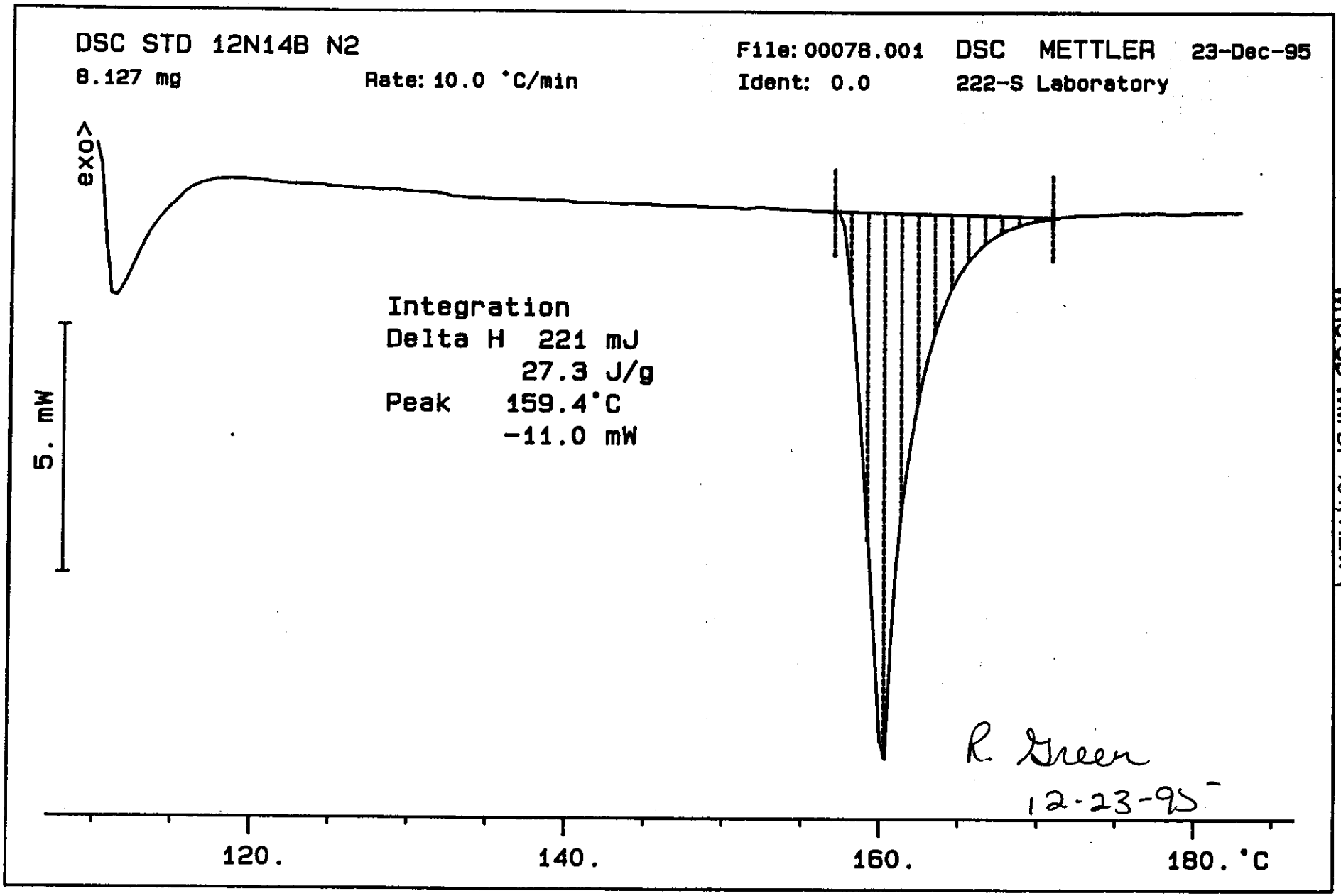
Rae Ann Green 12-23-95
Analyst Signature Date

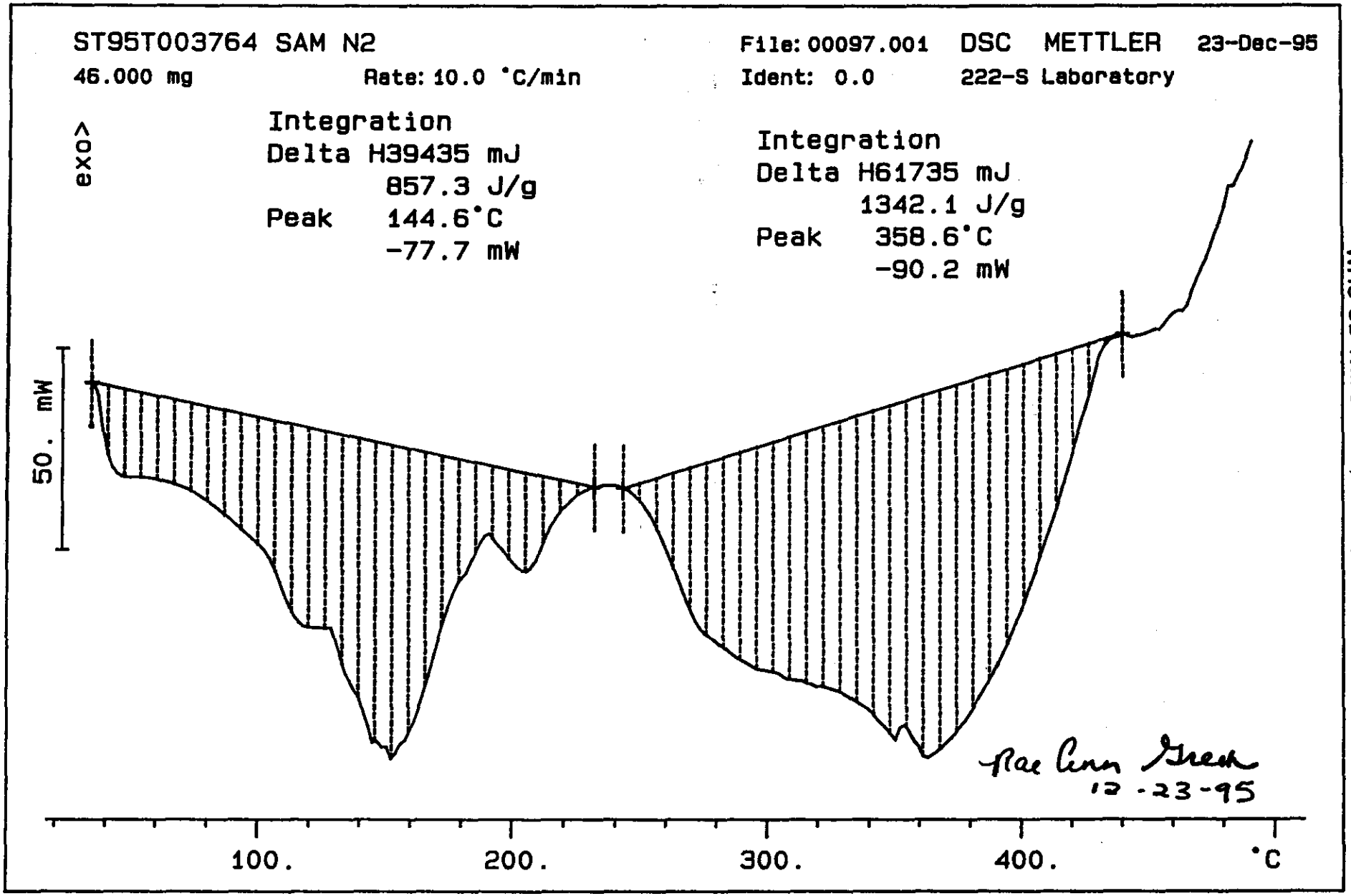
[illegible] 12-24-95
Analyst Signature Date

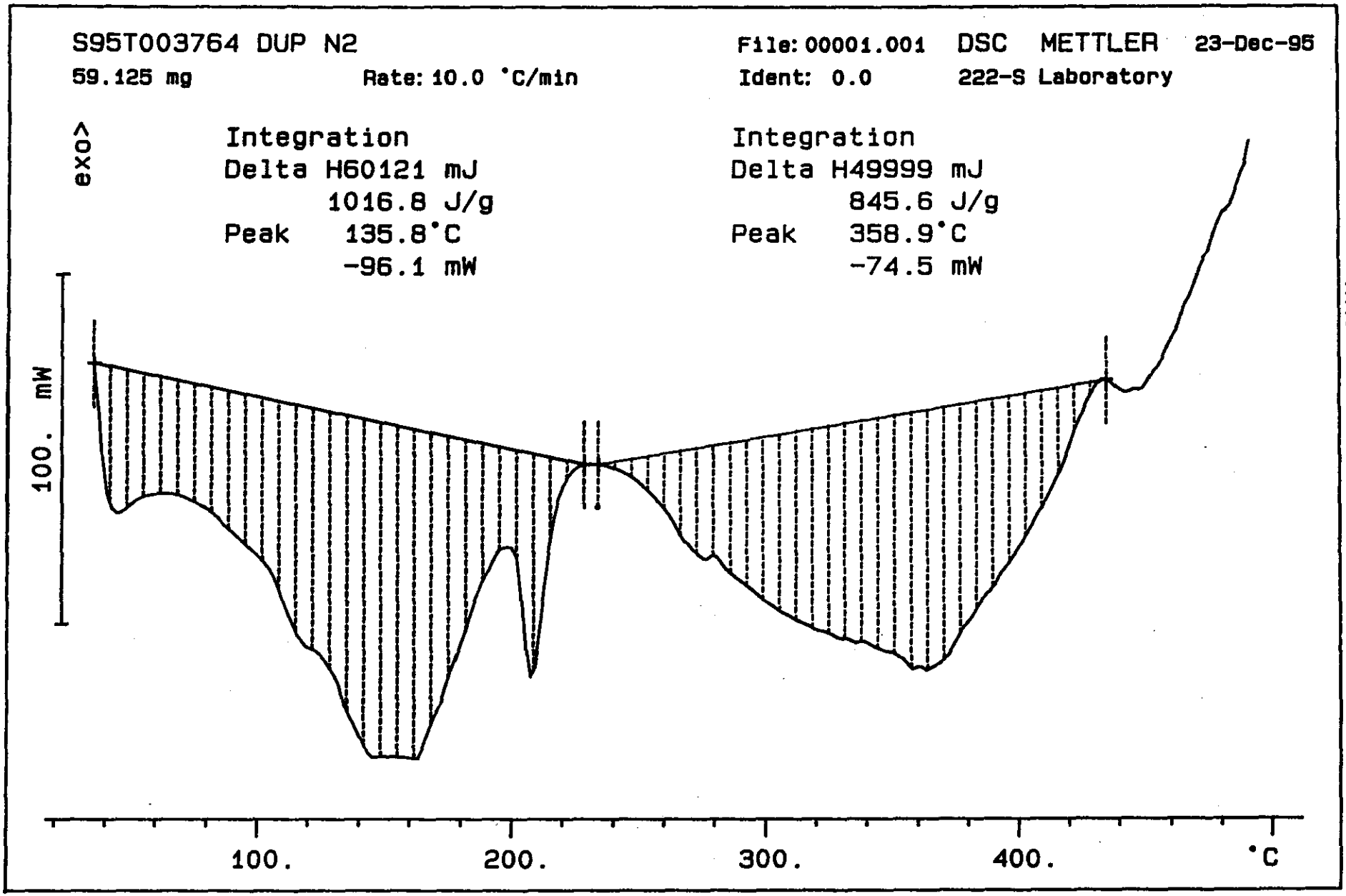
Data Entry Comments:

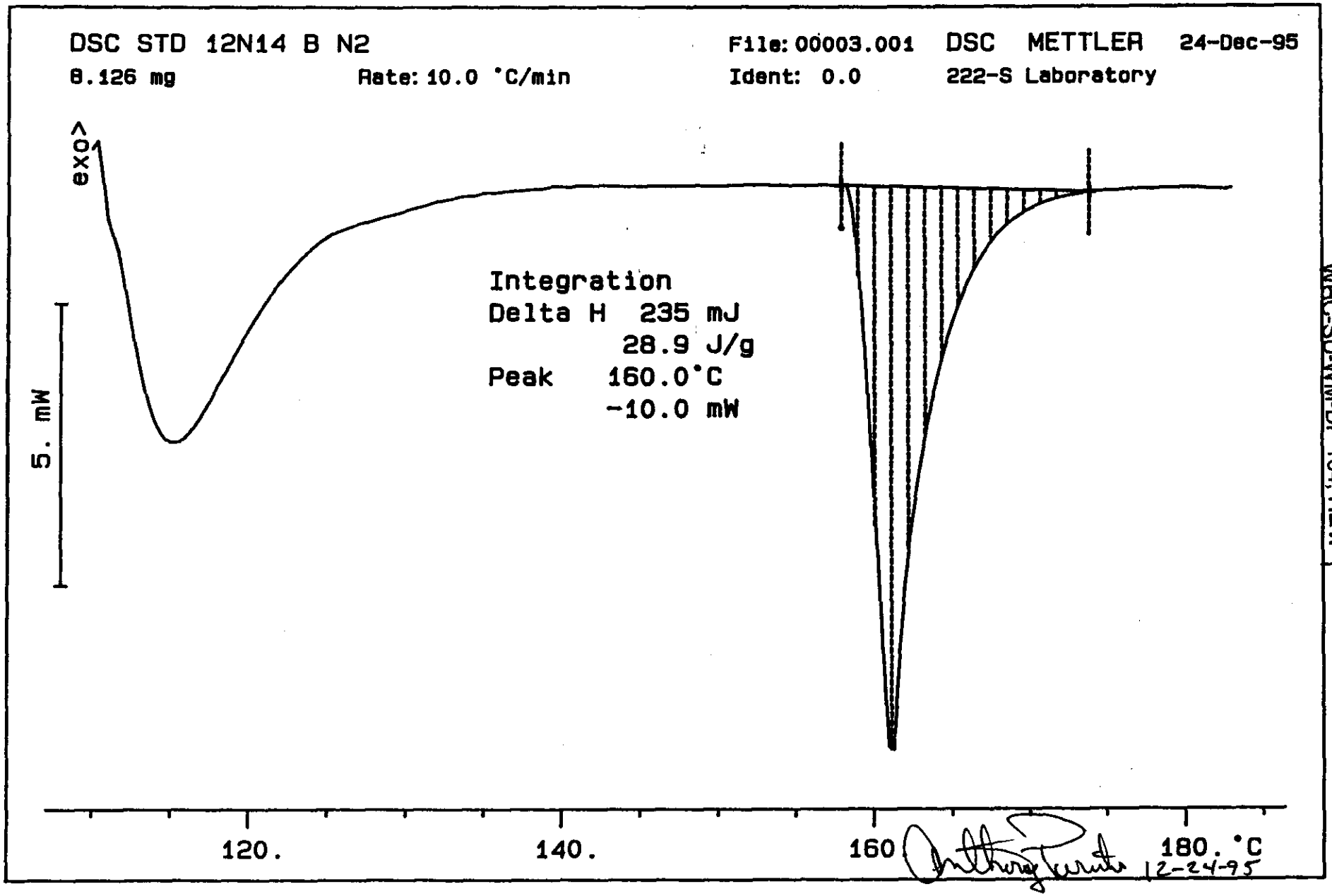
Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

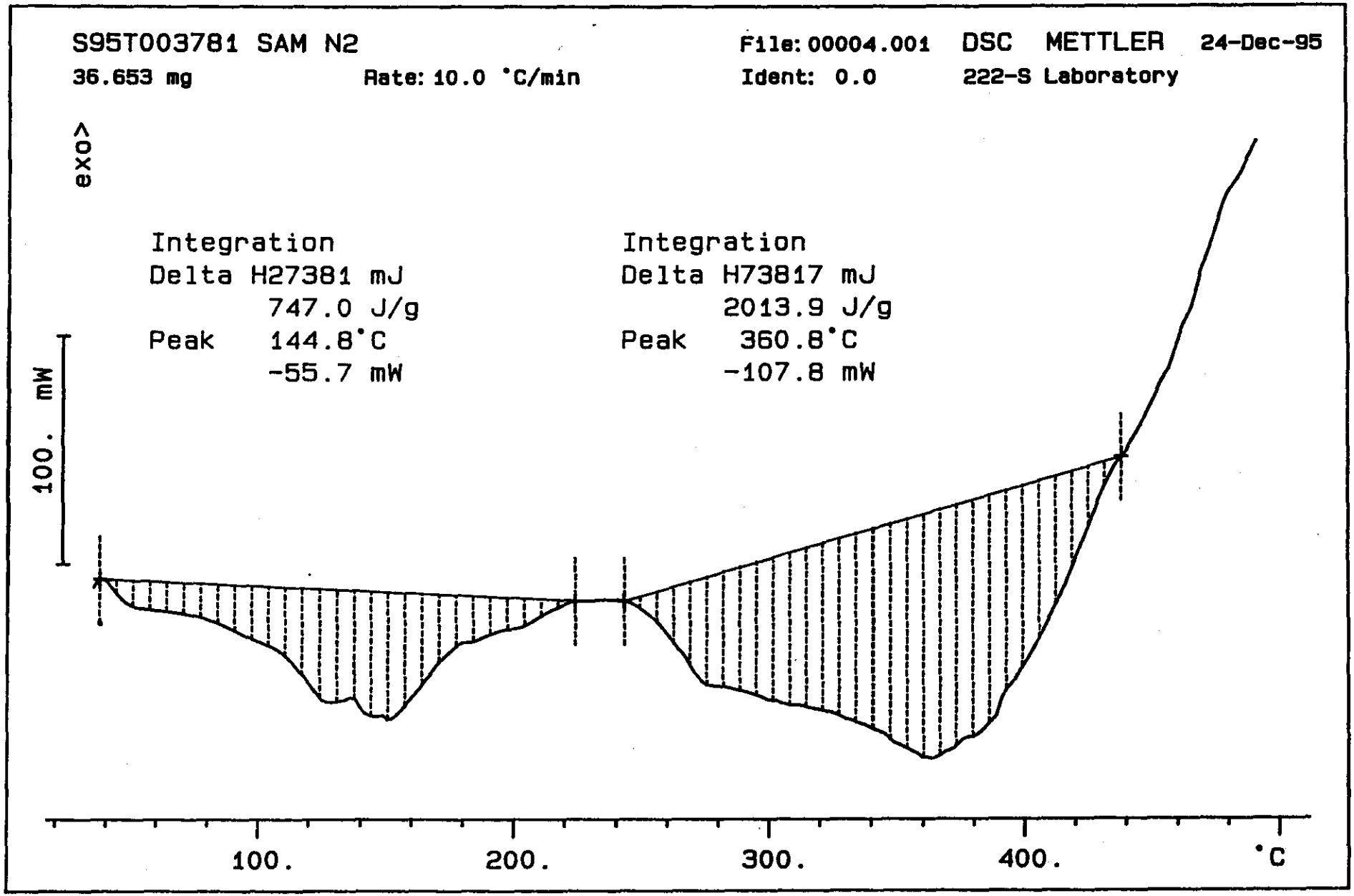
SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 2-115 TO 2-120

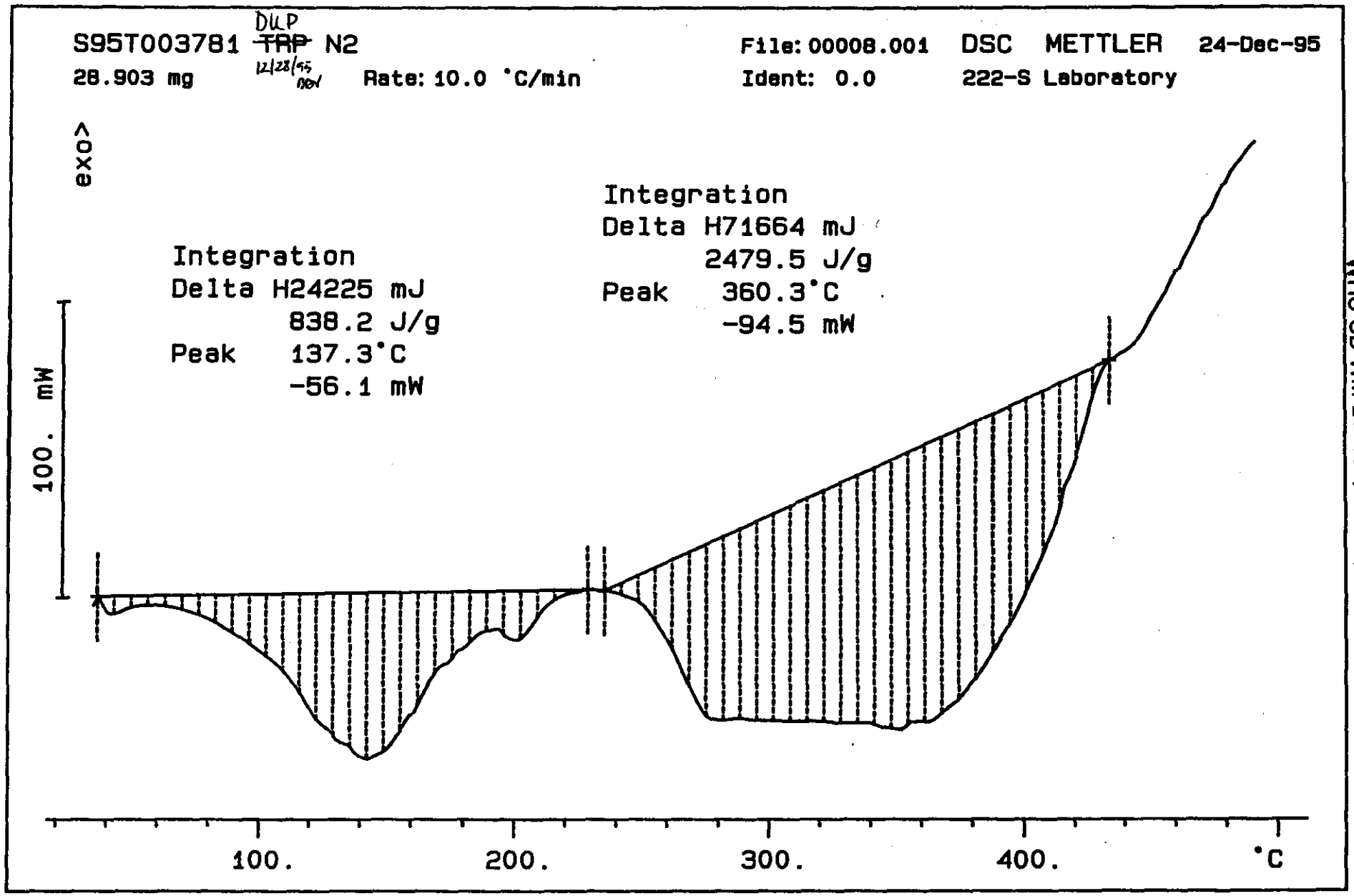



ST95T003764 SAM N2
46.000 mg
Rate: 10.0 °C/min
File: 00097.001
DSC METTLER
23-Dec-95
Ident: 0.0
222-S Laboratory
Integration
Delta H39435 mJ
857.3 J/g
Peak 144.6°C
-77.7 mW
Integration
Delta H61735 mJ
1342.1 J/g
Peak 358.6°C
-90.2 mW
exo>
50. mW
100.
200.
300.
400.
°C
Rae Ann Green
12-23-95


S95T003764 DUP N2
59.125 mg
Rate: 10.0 °C/min
File: 00001.001
Ident: 0.0
DSC METTLER
222-S Laboratory
23-Dec-95
Integration
Delta H60121 mJ
1016.8 J/g
Peak 135.8°C
-96.1 mW
Integration
Delta H49999 mJ
845.6 J/g
Peak 358.9°C
-74.5 mW
<exo
100. mW
100.
200.
300.
400.
°C


DSC STD 12N14 B N2
8.126 mg
Rate: 10.0 °C/min
File: 00003.001
Ident: 0.0
DSC METTLER
222-S Laboratory
24-Dec-95
exo
mW 5
Integration
Delta H 235 mJ
28.9 J/g
Peak 160.0°C
-10.0 mW
120.
140.
160
180. °C
12-24-95


S95T003781 SAM N2
36.653 mg
Rate: 10.0 °C/min
File: 00004.001
Ident: 0.0
DSC METTLER
222-S Laboratory
24-Dec-95
<exo
Integration
Delta H27381 mJ
747.0 J/g
Peak 144.8°C
-55.7 mW
Integration
Delta H73817 mJ
2013.9 J/g
Peak 360.8°C
-107.8 mW
100. mW
100.
200.
300.
400.
°C


S95T003781 DUP ~~TRP~~ N2
12/28/95
28.903 mg
Rate: 10.0 °C/min
File: 00008.001
DSC METTLER 24-Dec-95
Ident: 0.0
222-S Laboratory
<exo
Integration
Delta H24225 mJ
838.2 J/g
Peak 137.3°C
-56.1 mW
Integration
Delta H71664 mJ
2479.5 J/g
Peak 360.3°C
-94.5 mW
100. mW
100.
200.
300.
400.
°C

LABCORE Data Entry Template for Worklist# 4504

Analyst: PJM **Instrument:** DSC0 3 **Book #** 12N14B

Method: LA-514-114 Rev/Mod C-1

Worklist Comment: BY-104 DSC Run under Nitrogen dlh

GROUP	PROJECT	S TYPE	SAMPLE#	R	A	-------TEST------	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD				DSC-03	SOLID	28.45	28.64	N/A	Joules/g
95000200	BY104 ROTARY	2 SAMPLE	S95T003809	0		DSC-03	SOLID	N/A	Ø		Joules/g
95000200	BY104 ROTARY	3 DUP	S95T003809	0		DSC-03	SOLID	Ø	Ø	N/A	Joules/g
95000200	BY104 ROTARY	4 SAMPLE	S95T003783	0		DSC-03	SOLID	N/A	Ø		Joules/g
95000200	BY104 ROTARY	5 DUP	S95T003783	0		DSC-03	SOLID	Ø	Ø	N/A	Joules/g

Final page for worklist # 4504

See attached for signatures
Analyst Signature **Date** 12/29/95 BDV

Linda Conlin 12/29/95
Analyst Signature **Date**

S95T003809 produced a large endotherm at 142.5°C with a delta H of 725.5 J/g.

Data Entry Comments: S95T003783 produced a large endotherm at 150.18°C with a delta H of 955.4 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.

LABCORE Data Entry Template for Worklist# 4504

Analyst: RJ McCown **Instrument:** DSC0 _____ **Book #** 12N14B

Method: LA-514 ~~113~~ 114 Rev/Mod C-1
RJM 12/25/95

Worklist Comment: BY-104 DSC Run under Nitrogen dlh

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	-------TEST------	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				DSC-01	SOLID			N/A	Joules/g
95000200	BY104 ROTARY	2	SAMPLE	S95T003809	0		DSC-01	SOLID	N/A			Joules/g
95000200	BY104 ROTARY	3	DUP	S95T003809	0		DSC-01	SOLID			N/A	Joules/g
95000200	BY104 ROTARY	4	SAMPLE	S95T003783	0		DSC-01	SOLID	N/A			Joules/g
95000200	BY104 ROTARY	5	DUP	S95T003783	0		DSC-01	SOLID			N/A	Joules/g

Final page for worklist # 4504

RJ McCown 12/25/95
Analyst Signature **Date**

Analyst Signature **Date**

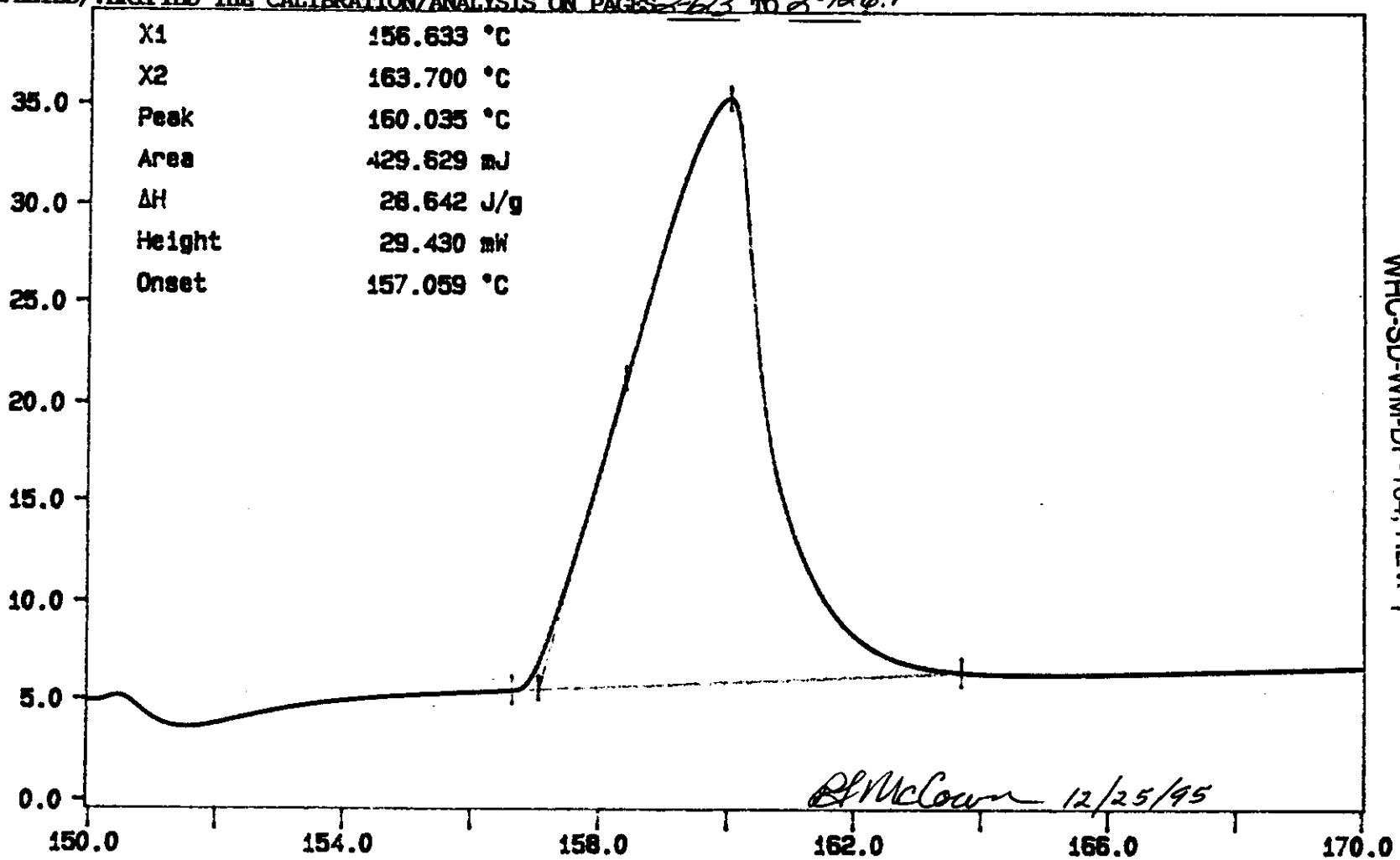
Other instrument was used
12/29/95
BOV

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.

Curve 1: DSC
File info: IND122403 Sun Dec 24 19:45:59 1995
Sample Weight: 15.000 mg
12N148 Indium at 10C/min

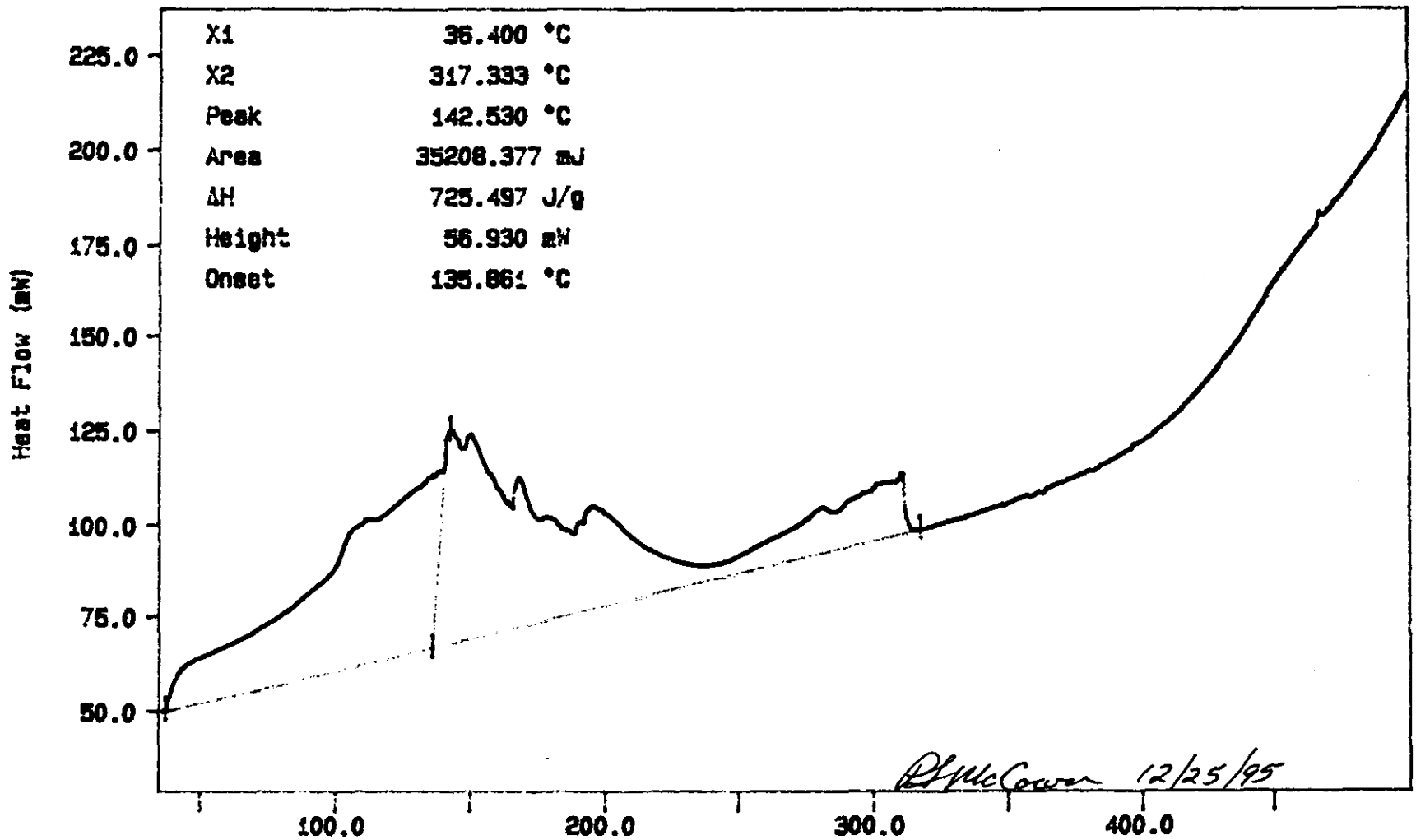
SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 2-123 TO 2-126.1



N2, EXOTHERM DOWN
TEMP1: 150.0 C TIME1: 0.0 min RATE1: 10.0 C/min
TEMP2: 170.0 C

PJ MCCOWN
PERKIN-ELMER
7 Series Thermal Analysis System
Sun Dec 24 20:00:13 1995

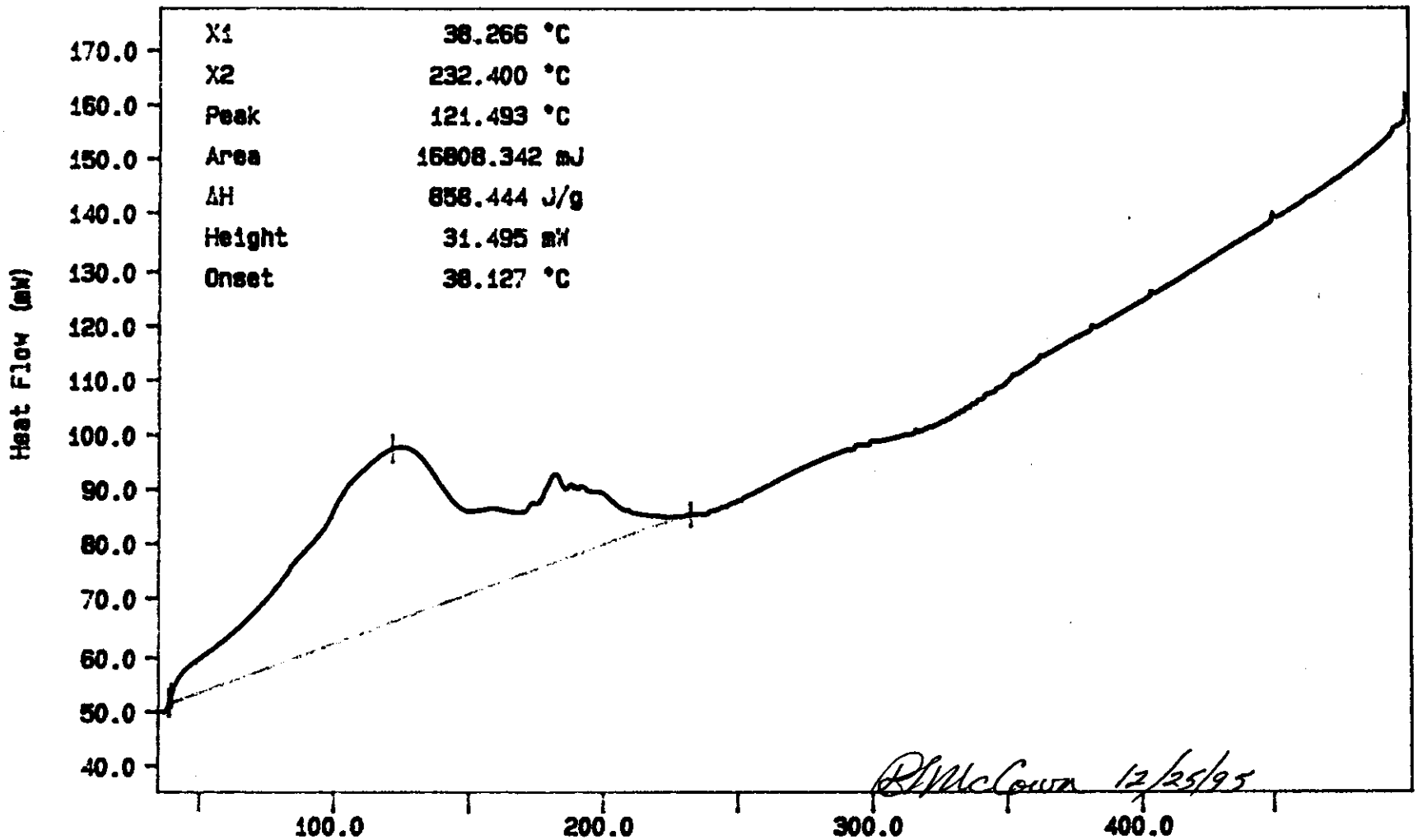
Curve 1: DSC
File info: SAM122405 Sun Dec 24 21:32:40 1995
Sample Weight: 48.530 mg
S95T003809 SAM N2



exotherm down, N2 purge gas
TEMP1: 35.0 C TIME1: 0.0 min RATE1: 10.0 C/min
TEMP2: 400.0 C

PJ MCCOWN
PERKIN-ELMER
7 Series Thermal Analysis System
Sun Dec 24 22:18:19 1995

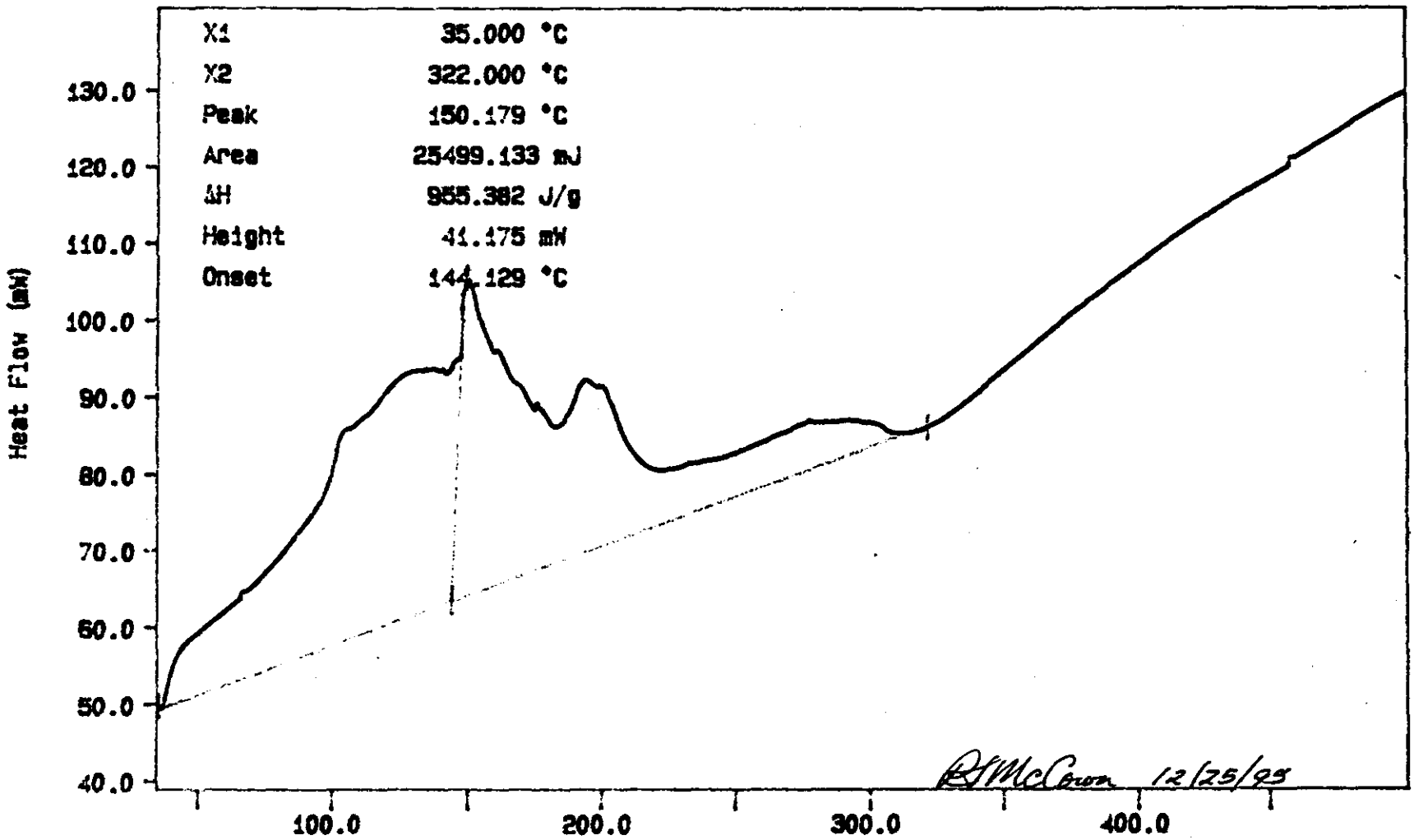
Curve 1: DSC
File info: SAM122406 Sun Dec 24 23:32:17 1995
Sample Weight: 19.580 mg
S95T003809 DUP N2



exotherm down, N2 purge gas
TEMP1: 30.0 C TIME1: 0.0 min RATE1: 10.0 C/min
TEMP2: 800.0 C

PJ MCCOWN
PERKIN-ELMER
7 Series Thermal Analysis System
Sun Dec 24 23:46:25 1995

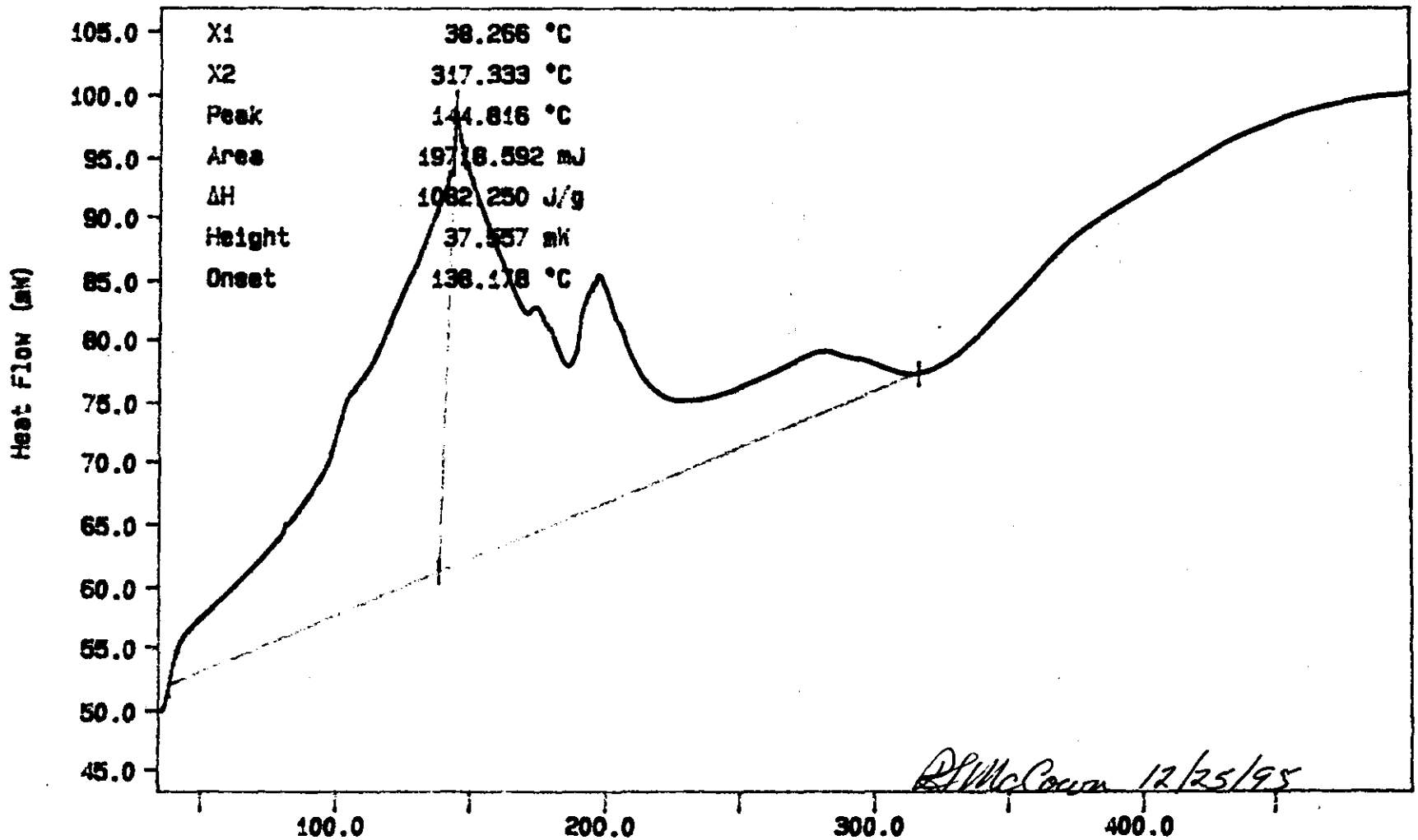
Curve 1: DSC
File info: SAM122501 Mon Dec 25 00:52:04 1995
Sample Weight: 26.690 mg
S95T003783 SAM N2



exotherm down, N2 purge gas
TEMP1: 30.0 C TIME1: 0.0 min RATE1: 10.0 C/min
TEMP2: 500.0 C

PJ MCCOWN
PERKIN-ELMER
7 Series Thermal Analysis System
Mon Dec 25 01:29:53 1995

Curve 1: DSC
File info: SAM122502 Mon Dec 25 02:50:07 1995
Sample Weight: 18.220 mg
S95T003783 DUP N2



exotherm down, N2 purge gas
TEMP1: 35.0 C TIME1: 0.0 min RATE1: 10.0 C/min
TEMP2: 400.0 C

PJ MCCOWN
PERKIN-ELMER
7 Series Thermal Analysis System
Mon Dec 25 03:13:54 1995

2-126.1

WHC-SD-WM-DP-164, REV. 1

LABCORE Data Entry Template for Worklist# 4505

Analyst: ADP **Instrument:** DSC0 1 **Book #** 12N14B

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

Worklist Comment: BY-104 DSC Run under Nitrogen dlh

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				DSC-01	SOLID	28.45	28.6	N/A	Joules/g
95000200	BY104 ROTARY	2	SAMPLE	S95T003810	0		DSC-01	SOLID	N/A	Ø		Joules/g
95000200	BY104 ROTARY	3	DUP	S95T003810	0		DSC-01	SOLID	Ø	Ø	N/A	Joules/g
95000200	BY104 ROTARY	4	SAMPLE	S95T003782	0		DSC-01	SOLID	N/A	18.8		Joules/g
95000200	BY104 ROTARY	5	DUP	S95T003782	0		DSC-01	SOLID	18.8	23.6	N/A	Joules/g

Final page for worklist # 4505

Anthony Perrotto
Analyst Signature **Date**

Linda Conlin 1/10/96
Analyst Signature **Date**

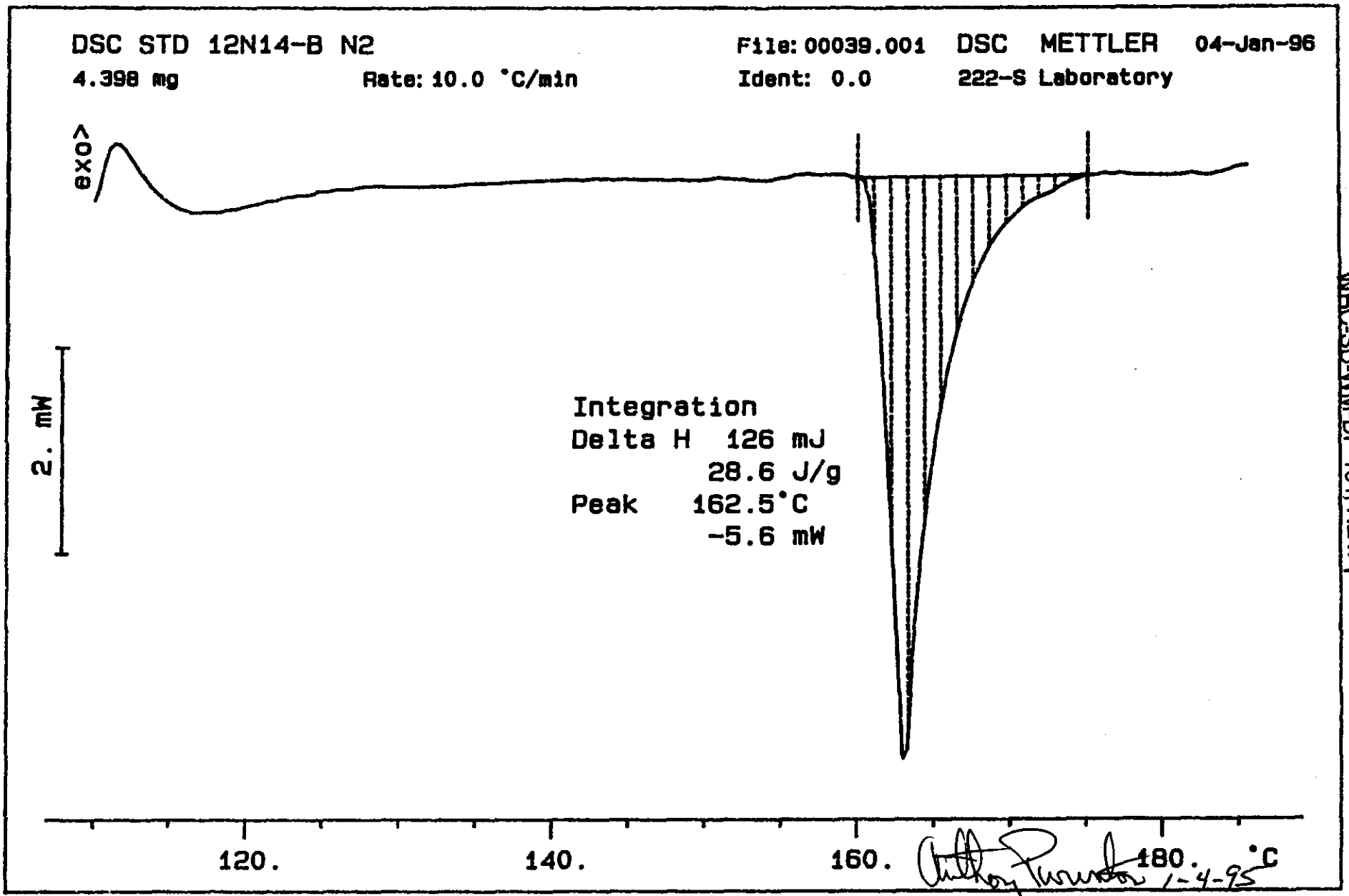
Verified by Blandina Valenzuela
1-11-96

Data Entry Comments:
S95T003810 produced a large endotherm with two distinct peaks beginning at 50°C and ending at 340°C with a delta H of 447.7 J/g. The jagged peaks toward the end of the run is due to the sample the chemist has no explanation.

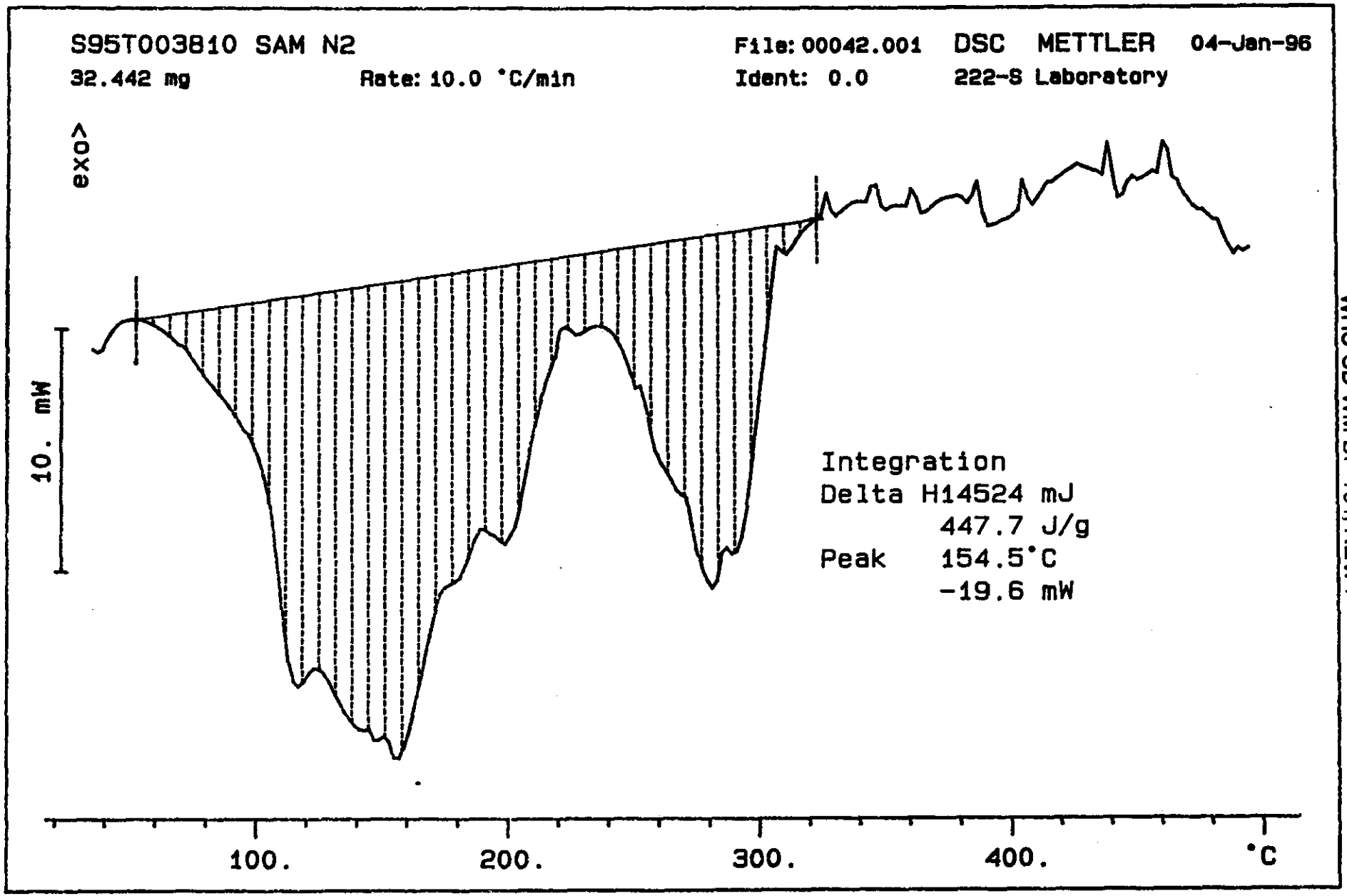
Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

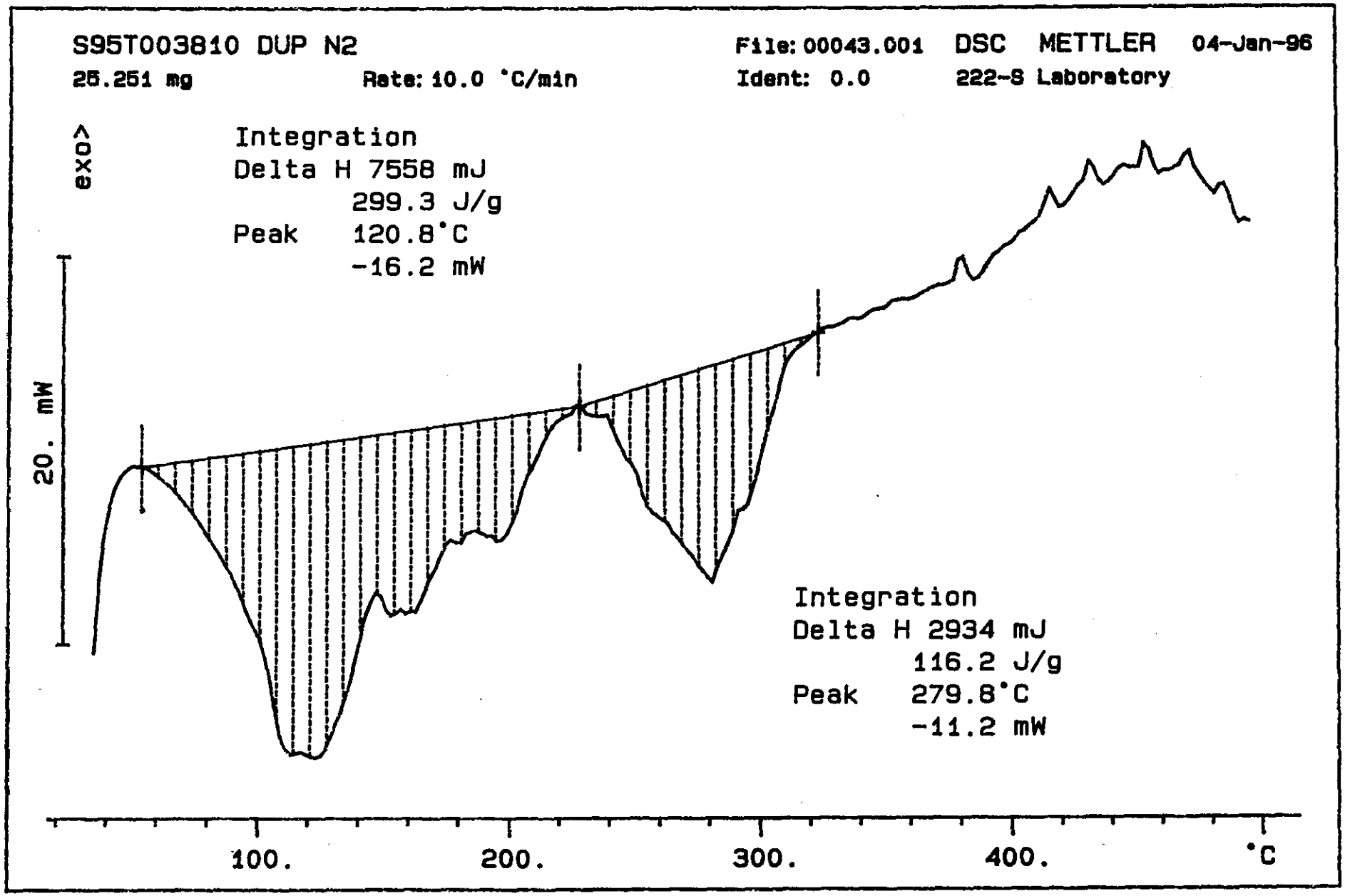
S95T003782 produced an endotherm at 143.9°C with a delta H of 930.4 J/g.

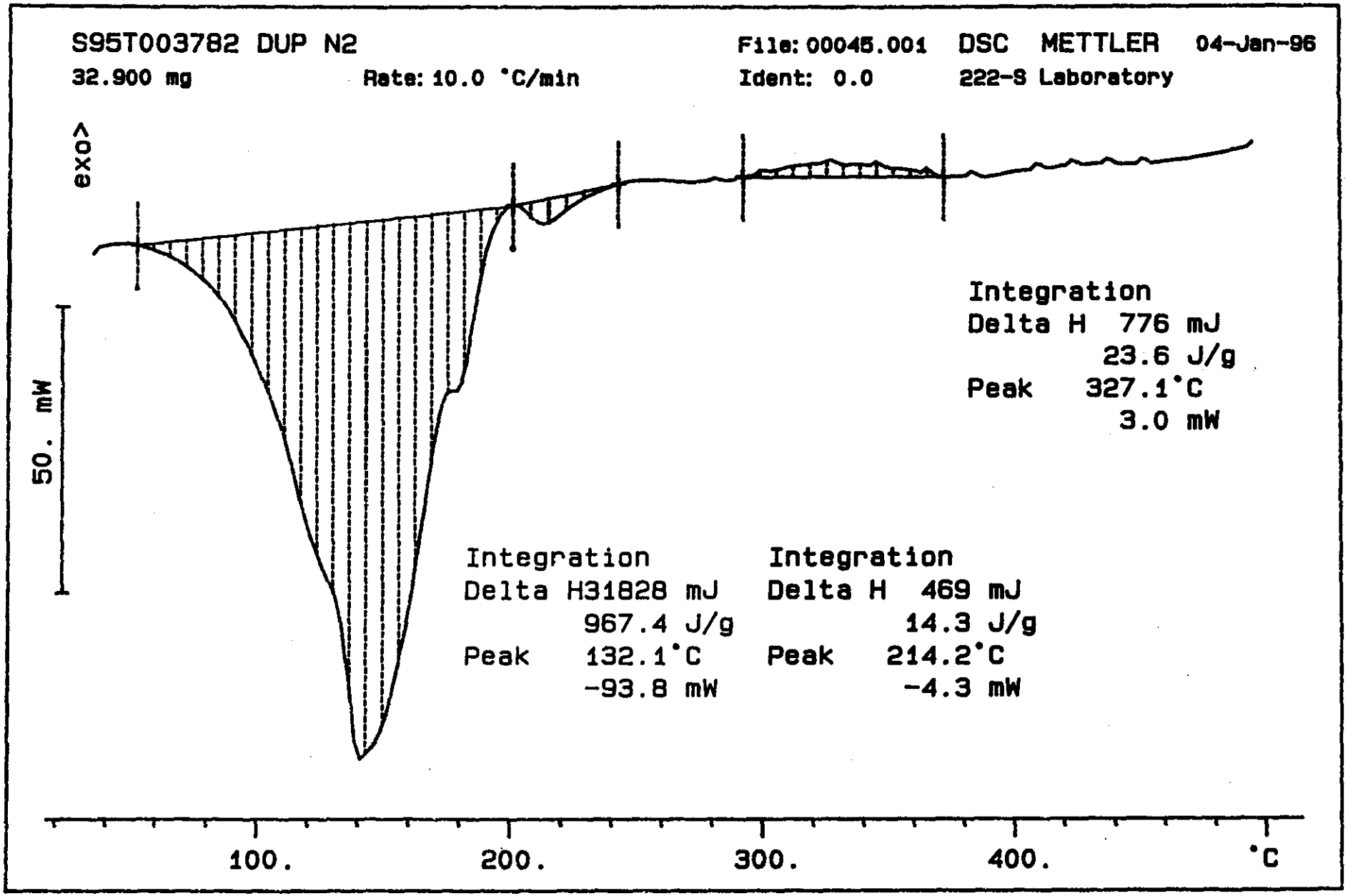
SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 2-128 TO 2-132

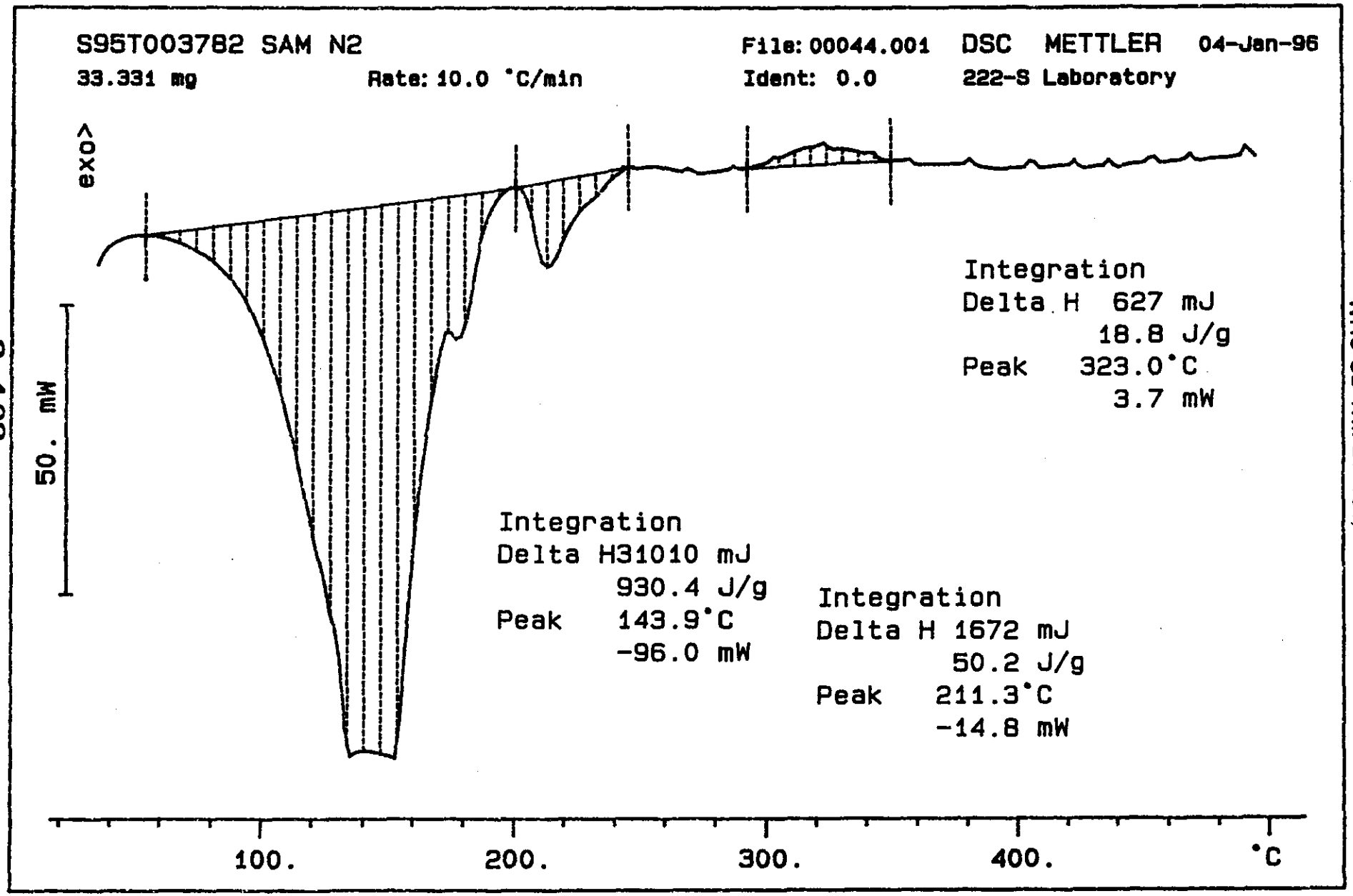


Anthony Thornton 1-4-95


S95T003810 SAM N2
32.442 mg
Rate: 10.0 °C/min
File: 00042.001
Ident: 0.0
DSC METTLER
222-S Laboratory
04-Jan-96
exo>
10. mW
Integration
Delta H14524 mJ
447.7 J/g
Peak 154.5°C
-19.6 mW
100.
200.
300.
400.
°C


S95T003810 DUP N2
25.251 mg
Rate: 10.0 °C/min
File: 00043.001
Ident: 0.0
DSC METTLER 04-Jan-96
222-S Laboratory
exo>
Integration
Delta H 7558 mJ
299.3 J/g
Peak 120.8°C
-16.2 mW
.02 mW
Integration
Delta H 2934 mJ
116.2 J/g
Peak 279.8°C
-11.2 mW
100.
200.
300.
400.
°C


S95T003782 DUP N2
32.900 mg
Rate: 10.0 °C/min
File: 00045.001
Ident: 0.0
DSC METTLER 04-Jan-96
222-S Laboratory
exo>
.05 mW
Integration
Delta H 776 mJ
23.6 J/g
Peak 327.1°C
3.0 mW
Integration
Delta H31828 mJ
967.4 J/g
Peak 132.1°C
-93.8 mW
Integration
Delta H 469 mJ
14.3 J/g
Peak 214.2°C
-4.3 mW
100.
200.
300.
400.
°C


S95T003782 SAM N2
33.331 mg
Rate: 10.0 °C/min
File: 00044.001
Ident: 0.0
DSC METTLER
222-S Laboratory
04-Jan-96
exo>
mW .05
Integration
Delta H 627 mJ
18.8 J/g
Peak 323.0°C
3.7 mW
Integration
Delta H31010 mJ
930.4 J/g
Peak 143.9°C
-96.0 mW
Integration
Delta H 1672 mJ
50.2 J/g
Peak 211.3°C
-14.8 mW
100.
200.
300.
400.
°C

LABCORE Data Entry Template for Worklist# 4506

Analyst: ADP **Instrument:** DSC0 3 **Book #** 12N14B

Method: LA-514-114 Rev/Mod C-1

Worklist Comment: BY-104 DSC Run under Nitrogen dlh

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				DSC-03	SOLID	28.45	28.17	N/A	Joules/g
95000200	BY104 ROTARY	2	SAMPLE	S95T003784	0		DSC-03	SOLID	N/A	Ø		Joules/g
95000200	BY104 ROTARY	3	DUP	S95T003784	0		DSC-03	SOLID	Ø	Ø	N/A	Joules/g
95000200	BY104 ROTARY	4	SAMPLE	S95T003785	0		DSC-03	SOLID	N/A	Ø		Joules/g
95000200	BY104 ROTARY	5	DUP	S95T003785	0		DSC-03	SOLID	Ø	Ø	N/A	Joules/g

Final page for worklist # 4506

See attached for signatures
Analyst Signature **Date** 1/2/96
Verified by Blandina Valenzuela 1-8-96

Analyst Signature **Date** 1-7-96

Data Entry Comments: S95T003784 produced one large endotherm at 161.1°C with a delta H of 404.07 J/g
S95T003785 produced two endotherms one at ~~314.3 J/g~~ 150.45°C and a delta H of 314.3 J/g second at 286.6°C with a delta H of 77.8 J/g 1-6-96

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# 4506

Analyst: ABP **Instrument:** DSC0 _____ **Book #** 12N14B

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

Worklist Comment: BY-104 DSC Run under Nitrogen dlh

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				DSC-01	SOLID			N/A	Joules/g
95000200	BY104 ROTARY	2	SAMPLE	S95T003784	0		DSC-01	SOLID	N/A			Joules/g
95000200	BY104 ROTARY	3	DUP	S95T003784	0		DSC-01	SOLID			N/A	Joules/g
95000200	BY104 ROTARY	4	SAMPLE	S95T003785	0		DSC-01	SOLID	N/A			Joules/g
95000200	BY104 ROTARY	5	DUP	S95T003785	0		DSC-01	SOLID			N/A	Joules/g

Final page for worklist # 4506

Anthony Punto 12-26-95

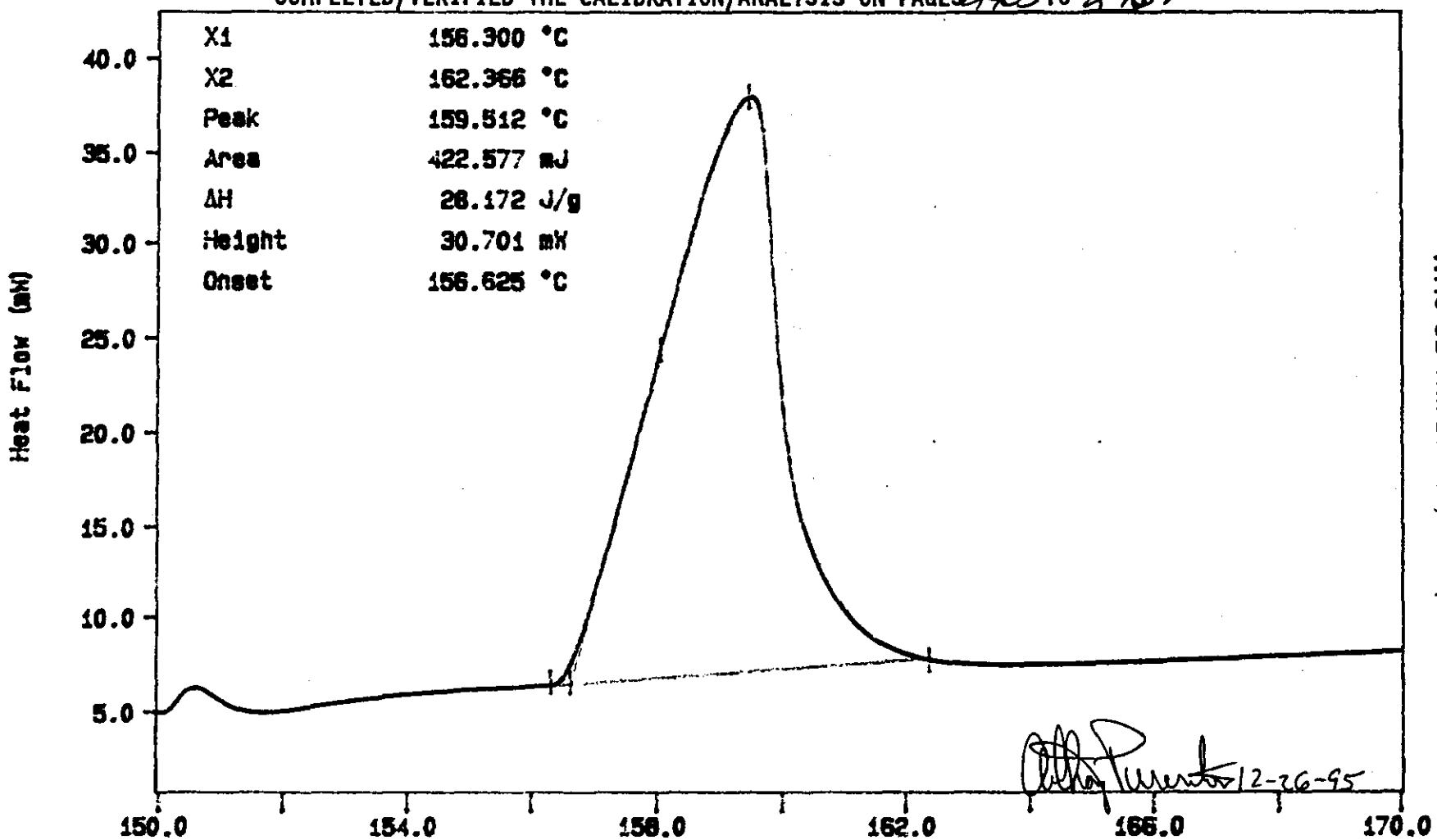
Analyst Signature **Date** **Analyst Signature** **Date**

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.

Curve 1: DSC
File info: IND122601 Tue Dec 26 19:07:33 1995
Sample Weight: 15.000 mg
12N14B Indium at 10C/min

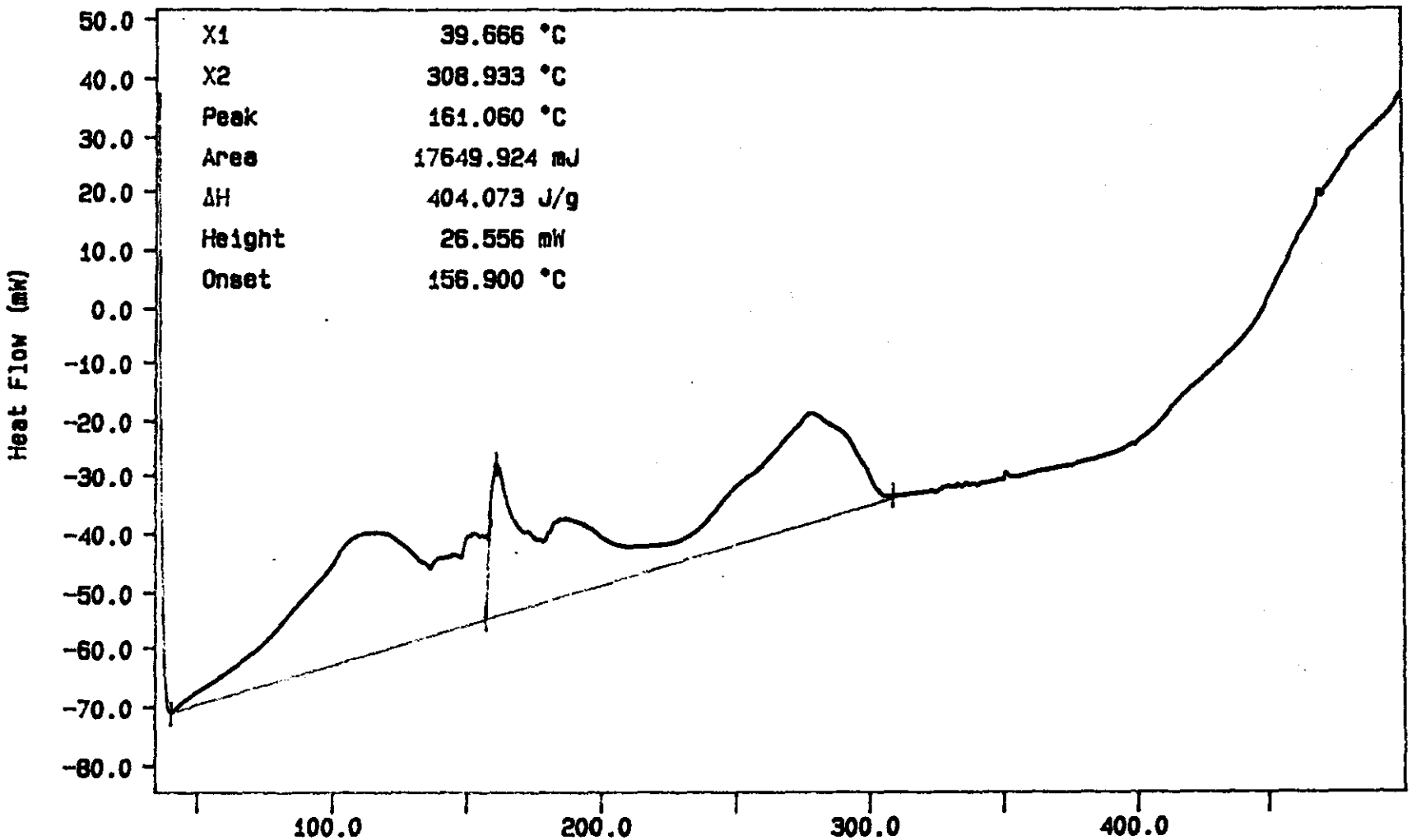
SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 2-135 TO 2-139



N2, EXOTHERM DOWN
TEMP1: 100.0 C TIME1: 0.0 min RATE1: 10.0 C/min
TEMP2: 170.0 C

AD PURINTON
PERKIN-ELMER
7 Series Thermal Analysis System
Tue Dec 26 19:18:27 1995

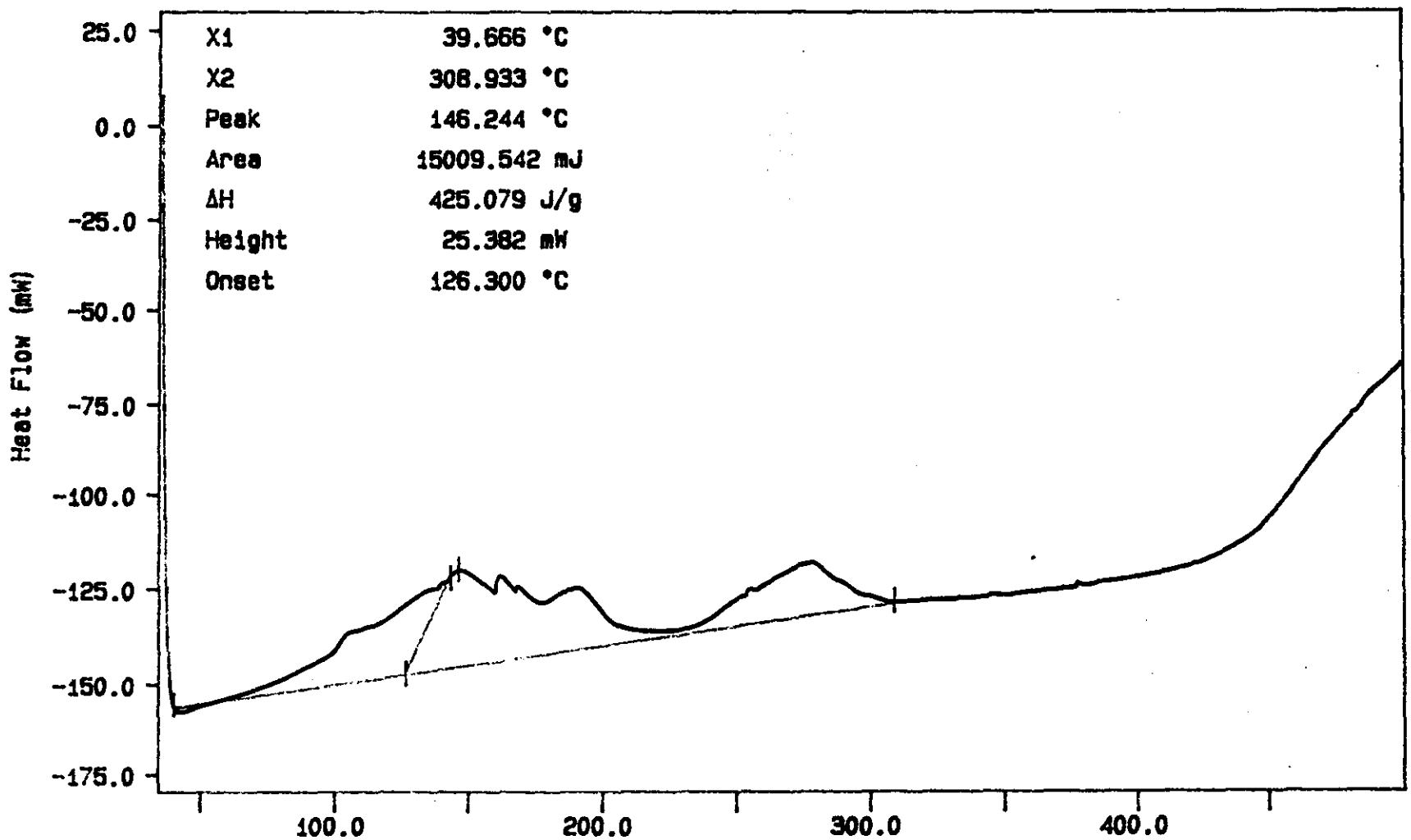
Curve 1: DSC
File info: SAM122601 Tue Dec 26 20:17:48 1995
Sample Weight: 43.680 mg
S95T003784 SAM N2



exotherm down, N2 purge gas
TEMP1: 30.0 C TIME1: 0.0 min RATE1: 10.0 C/min
TEMP2: 500.0 C

AD PURINTON
PERKIN-ELMER
7 Series Thermal Analysis System
Tue Dec 26 21:12:49 1995

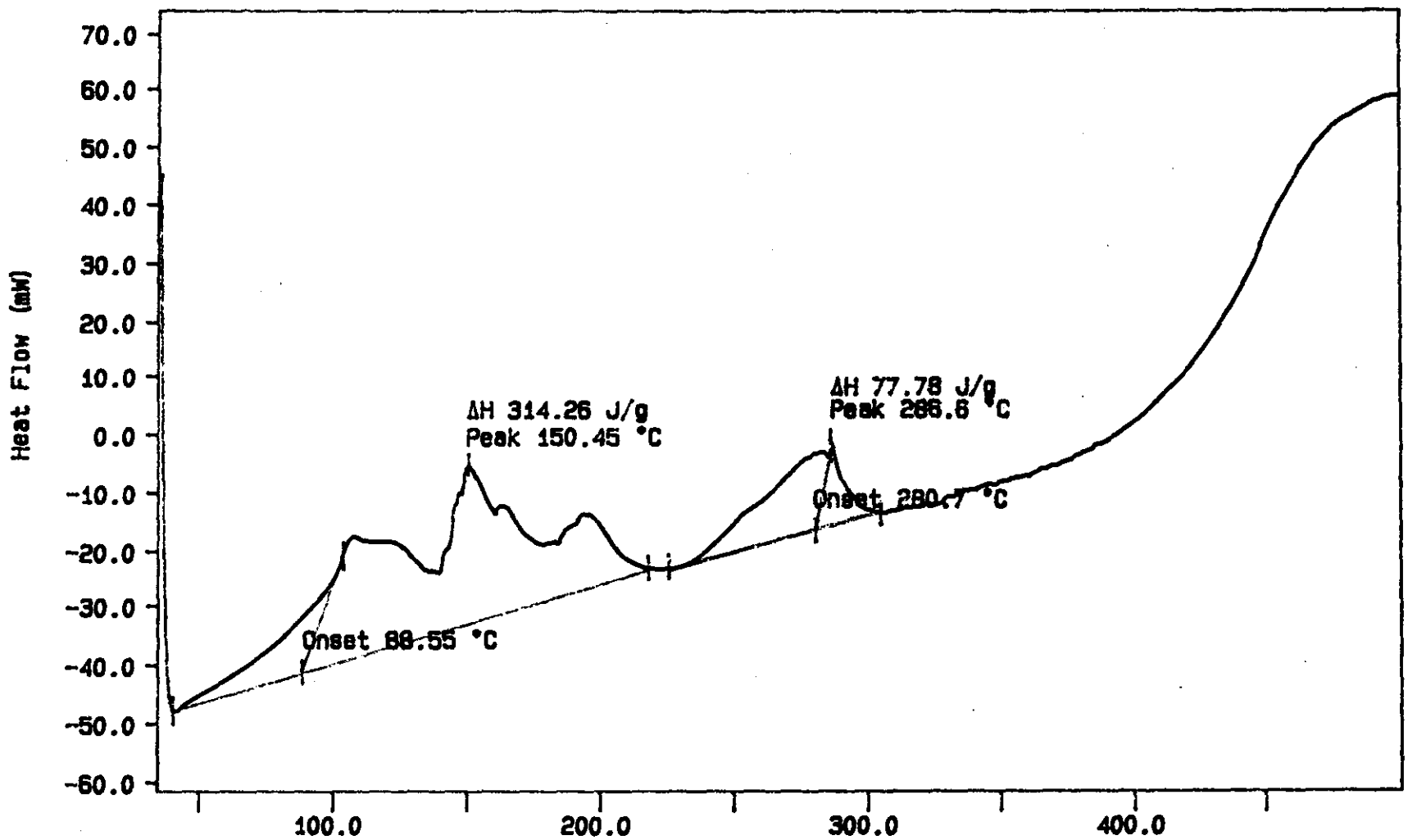
Curve 1: DSC
File info: SAM122602 Tue Dec 26 22:14:08 1995
Sample Weight: 35.310 mg
S95T003784 DUP N2



exotherm down, N2 purge gas
TEMP1: 35.0 C TIME1: 0.0 min RATE1: 10.0 C/min
TEMP2: 500.0 C

AD PURINTON
PERKIN-ELMER
7 Series Thermal Analysis System
Tue Dec 26 22:25:10 1995

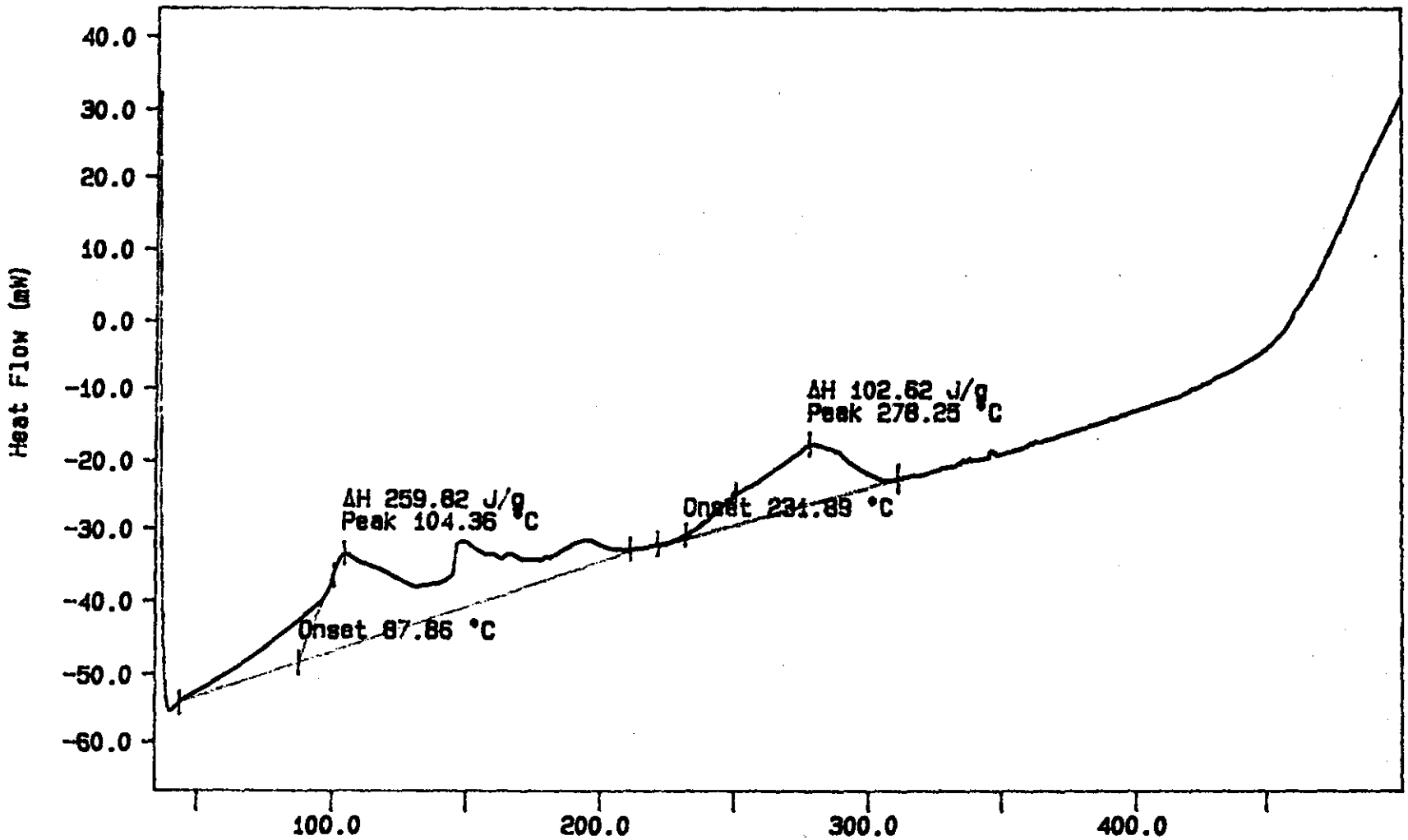
Curve 1: DSC
File info: SAM122603 Tue Dec 26 23:27:53 1995
Sample Weight: 37.050 mg
S95T9003785 SAM N2



exotherm down, N2 purge gas
TEMP1: 35.0 C TIME1: 0.0 min RATE1: 10.0 C/min
TEMP2: 600.0 C

AD PURINTON
PERKIN-ELMER
7 Series Thermal Analysis System
Tue Dec 26 23:34:44 1995

Curve 1: DSC
File info: SAM122604 Wed Dec 27 00:26:35 1995
Sample Weight: 19.460 mg
S95T003785 DUP N2



exotherm down, N2 purge gas
TEMP1: 35.0 C TIME1: 0.0 min RATE1: 10.0 C/min
TEMP2: 500.0 C

AD PURINTON
PERKIN-ELMER
7 Series Thermal Analysis System
Wed Dec 27 00:46:56 1995

LABCORE Data Entry Template for Worklist# 4799

Analyst: BDV **Instrument:** DSC01 **Book #** —

Method: LA-514-113 Rev/Mod —

Worklist Comment: Dry DSCs for BY-104. bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	-------TEST------	MATRIX	ACTUAL	FOUND	DL	UNIT
95000180	BY104 ROTARY	1	SAMPLE	S95T003528	0		DSC-02	SOLID	N/A	Ø		Joules/g Dry
95000180	BY104 ROTARY	2	DUP	S95T003528	0		DSC-02	SOLID	Ø	138.7	N/A	Joules/g Dry
95000180	BY104 ROTARY	3	SAMPLE	S95T003647	0		DSC-02	SOLID	N/A	484.1		Joules/g Dry
95000180	BY104 ROTARY	4	DUP	S95T003647	0		DSC-02	SOLID	484.1	436.6	N/A	Joules/g Dry

Data entered + verified

Final page for worklist # 4799

Blandina Valenzuela 1/10/95

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.

LABCORE Data Entry Template for Worklist# 4864

Analyst: BDV **Instrument:** DSC01 **Book #** —

Method: LA-514-113 Rev/Mod —

Worklist Comment: Dry DSC for BY-104. bdv

GROUP	PROJECT	S TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
95000180	BY104 ROTARY	1 SAMPLE	S95T003632	0		DSC-02	SOLID	N/A	Ø		Joules/g Dry
95000180	BY104 ROTARY	2 DUP	S95T003632	0		DSC-02	SOLID	Ø	Ø	N/A	Joules/g Dry
95000180	BY104 ROTARY	3 SAMPLE	S95T003633	0		DSC-02	SOLID	N/A	Ø		Joules/g Dry
95000180	BY104 ROTARY	4 DUP	S95T003633	0		DSC-02	SOLID	Ø	Ø	N/A	Joules/g Dry
95000180	BY104 ROTARY	5 SAMPLE	S95T003635	0		DSC-02	SOLID	N/A	140.8		Joules/g Dry
95000180	BY104 ROTARY	6 DUP	S95T003635	0		DSC-02	SOLID	140.8	134.9	N/A	Joules/g Dry
95000180	BY104 ROTARY	7 SAMPLE	S95T003636	0		DSC-02	SOLID	N/A	736.4		Joules/g Dry
95000180	BY104 ROTARY	8 DUP	S95T003636	0		DSC-02	SOLID	736.4	875.7	N/A	Joules/g Dry
95000180	BY104 ROTARY	9 SAMPLE	S95T003702	0		DSC-02	SOLID	N/A	Ø		Joules/g Dry
95000180	BY104 ROTARY	10 DUP	S95T003702	0		DSC-02	SOLID	Ø	Ø	N/A	Joules/g Dry

Data entered and verified by **Final page for worklist # 4864**

Blandina Valenzuela 1/15/96

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.

LABCORE Data Entry Template for Worklist# 5121

Analyst: ADP **Instrument:** DSC0 1 **Book #** 12N74B

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

Worklist Comment: Please run BY-104 DSC under N2. bdv

GROUP	PROJECT	S TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD				DSC-01	LIQUID	28.45	30.8*	N/A	Joules/g
95000200	BY104 ROTARY	2 SAMPLE	S95T003761	0		DSC-01	LIQUID	N/A	Ø		Joules/g
95000200	BY104 ROTARY	3 DUP	S95T003761	0		DSC-01	LIQUID	Ø	Ø	N/A	Joules/g
95000200	BY104 ROTARY	4 SAMPLE	S95T003775	0		DSC-01	LIQUID	N/A	Ø		Joules/g
95000200	BY104 ROTARY	5 DUP	S95T003775	0		DSC-01	LIQUID	Ø	Ø	N/A	Joules/g

Final page for worklist # 5121

Anthony Purnton 1-23-96
Analyst Signature **Date**

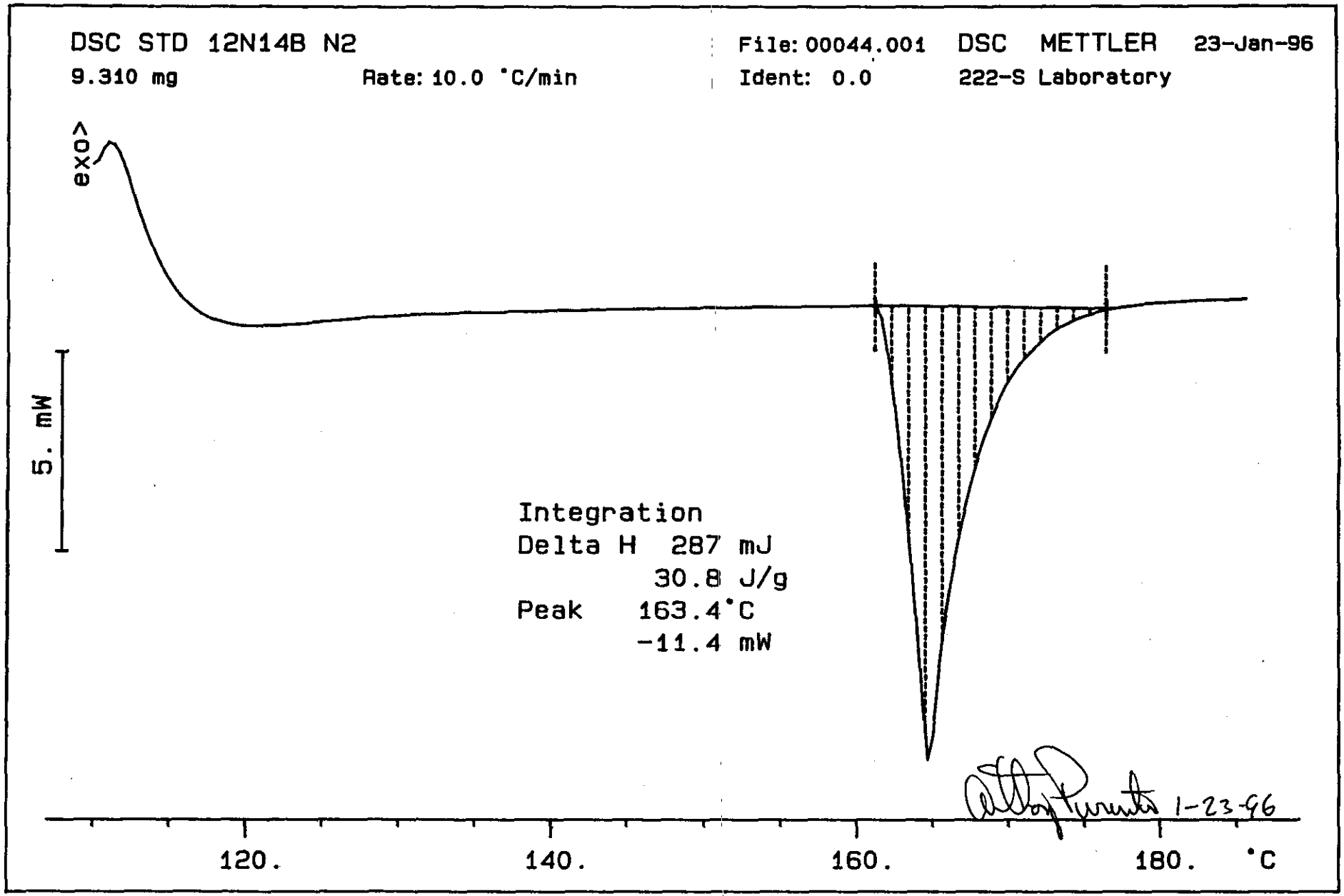
Steve Peters 1-24-96
Analyst Signature **Date**

Verified by Blandina Valenzuela 1/26/96

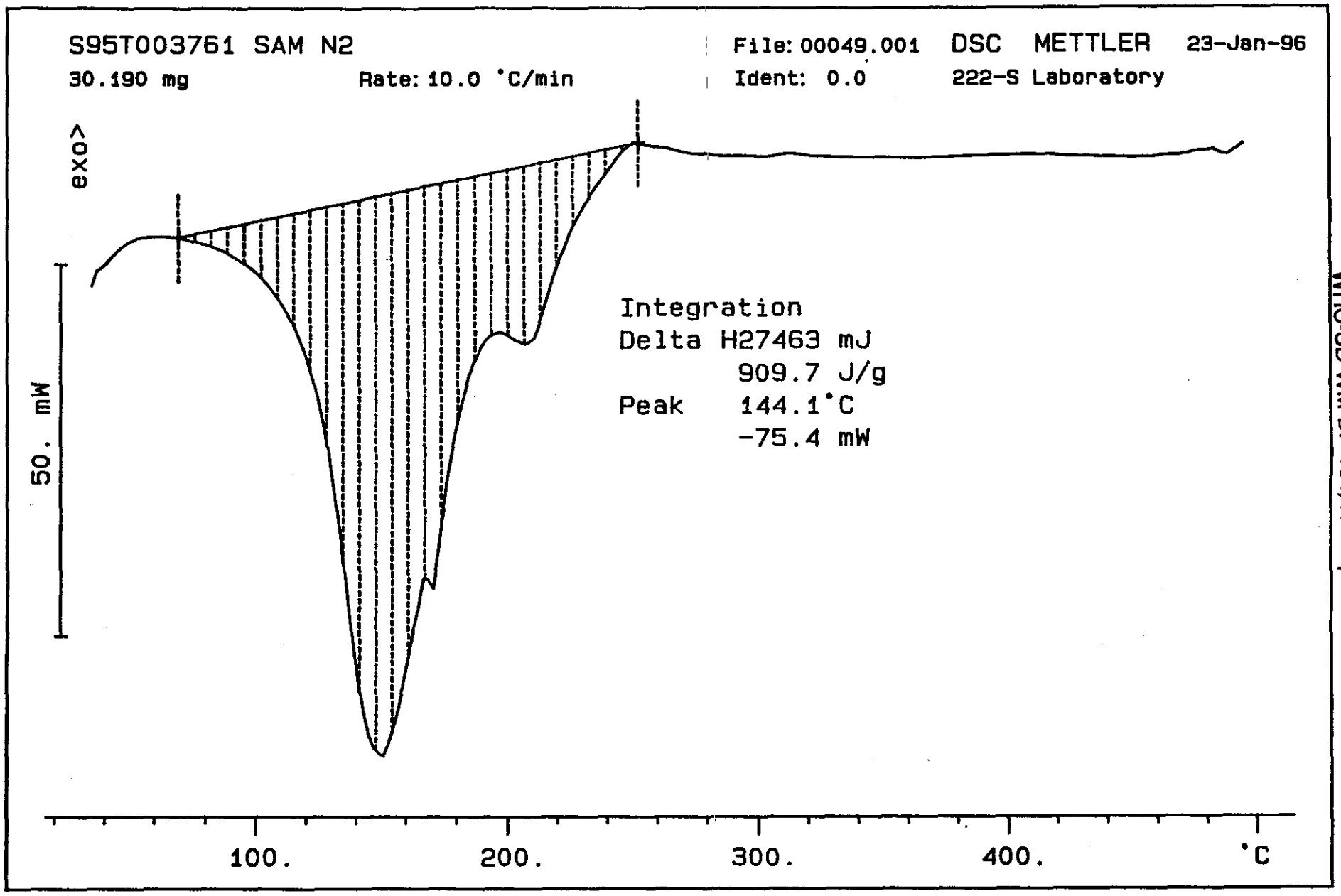
Data Entry Comments: S95T003761 produced an endotherm at 144.1°C with a delta H of 909.7 J/g
S95T003775 produced an endotherm at 165.8°C with a delta H of 1259.4 J/g.
The strong upward swing on the thermogram is probably due to contamination on the sensor and not an exotherm.

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.

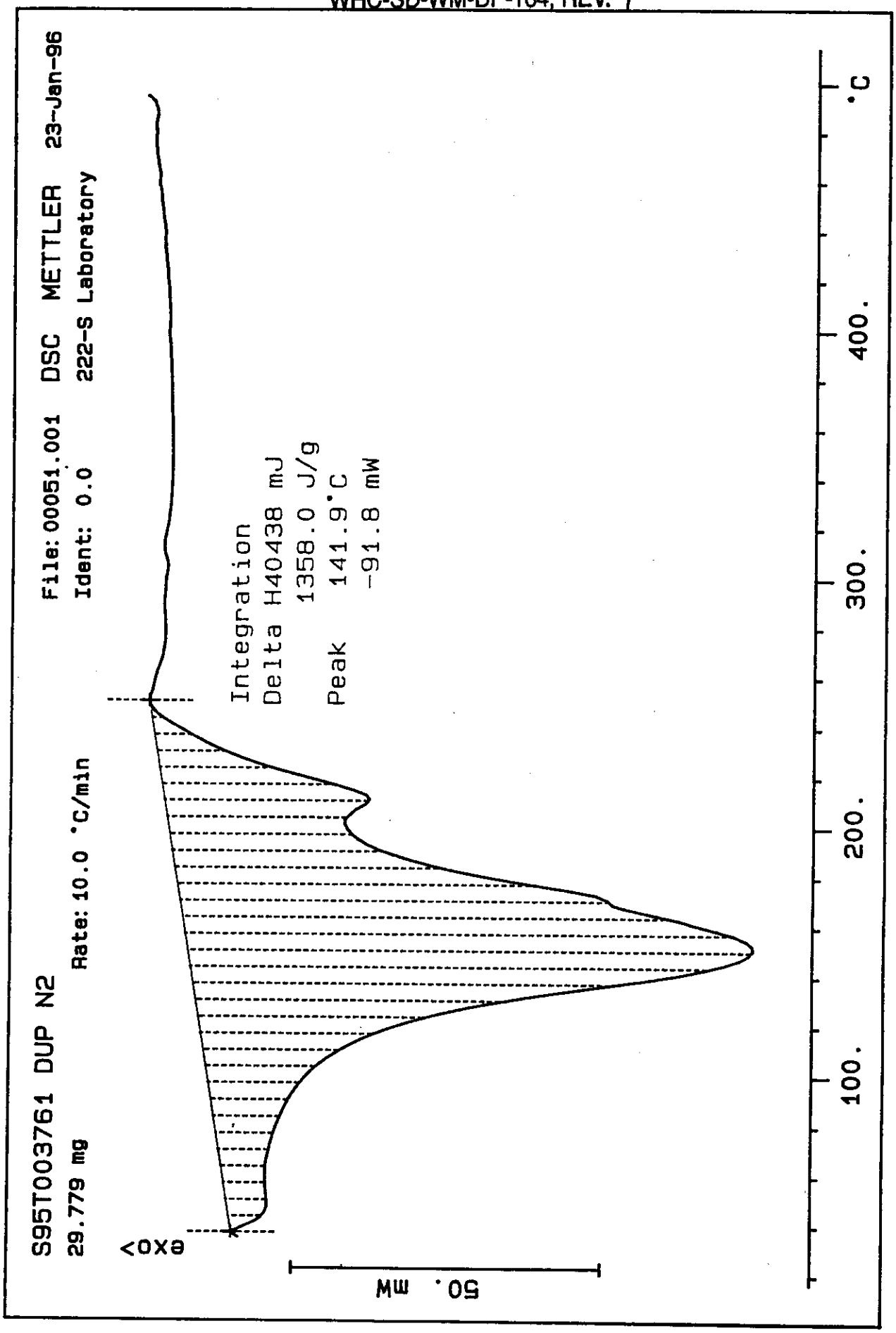
SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 2-143 TO 2-147.

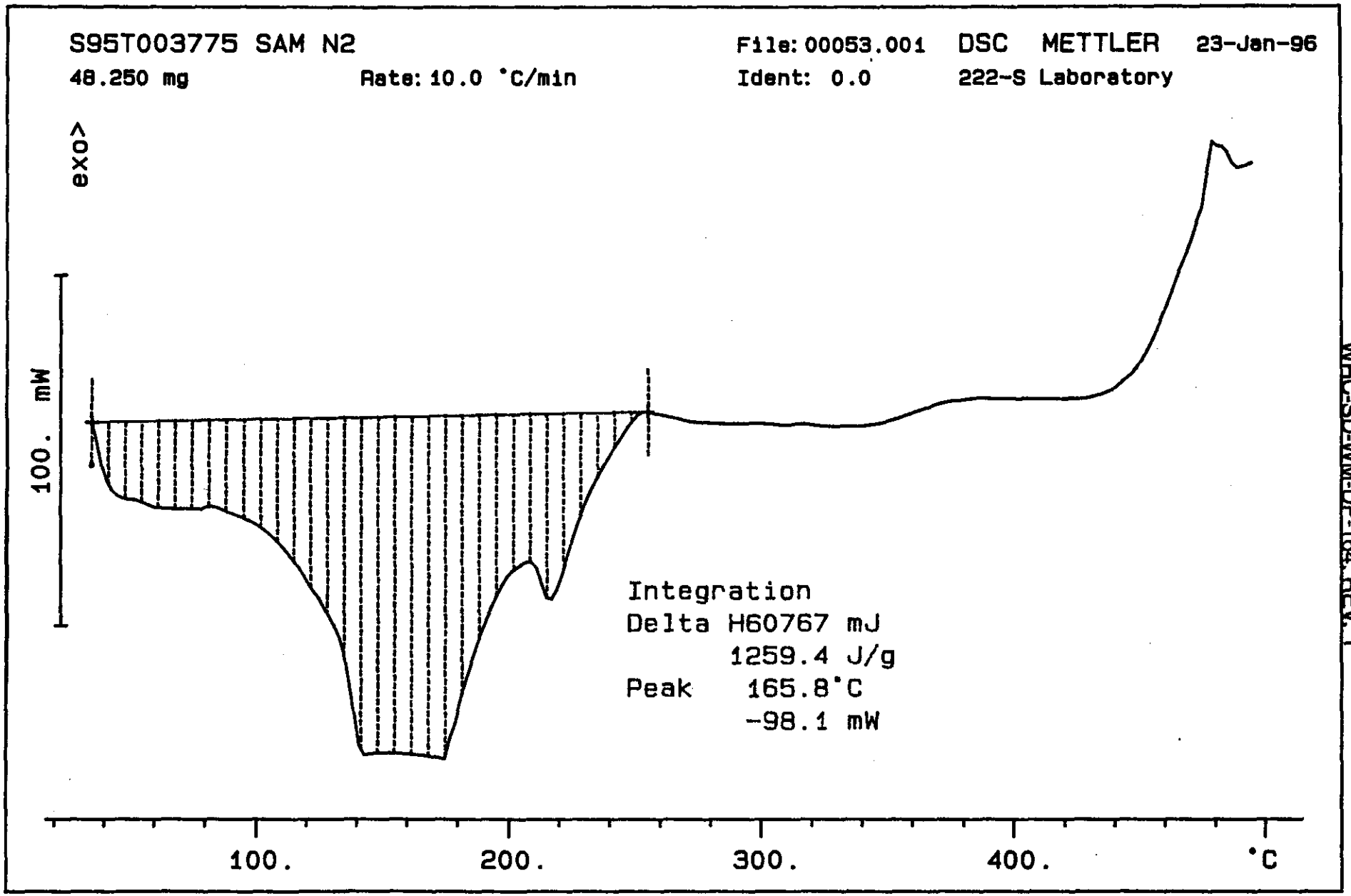


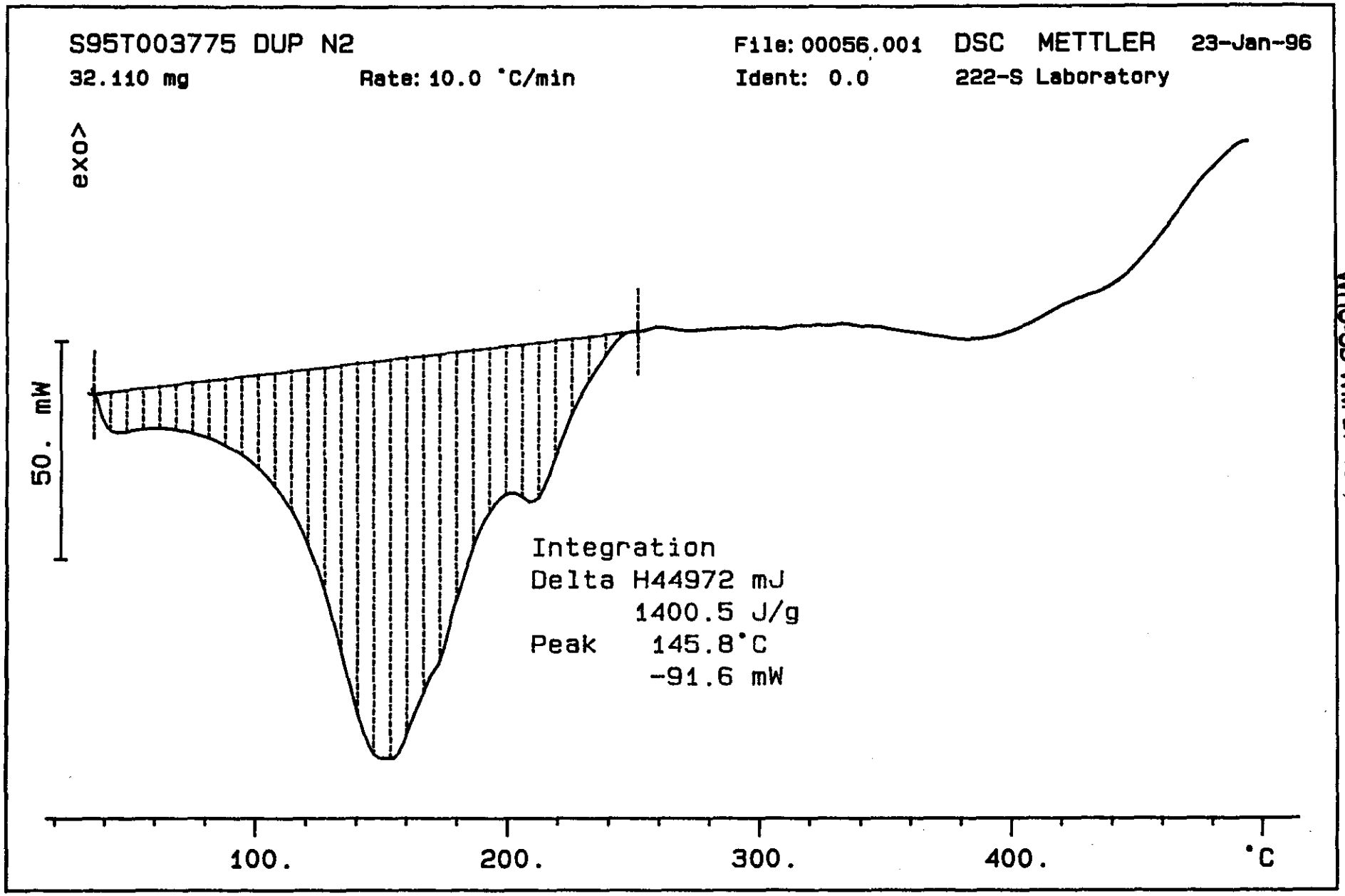
1-23-96


S95T003761 SAM N2
30.190 mg
Rate: 10.0 °C/min
File: 00049.001
Ident: 0.0
DSC METTLER
222-S Laboratory
23-Jan-96
exo>
50. mW
Integration
Delta H27463 mJ
909.7 J/g
Peak 144.1°C
-75.4 mW
100.
200.
300.
400.
°C

BEST AVAILABLE COPY




S95T003775 SAM N2
48.250 mg
Rate: 10.0 °C/min
File: 00053.001
Ident: 0.0
DSC METTLER
222-S Laboratory
23-Jan-96
exo>
100. mW
Integration
Delta H60767 mJ
1259.4 J/g
Peak 165.8°C
-98.1 mW
100.
200.
300.
400.
°C


S95T003775 DUP N2
32.110 mg
Rate: 10.0 °C/min
File: 00056.001
Ident: 0.0
DSC METTLER
222-S Laboratory
23-Jan-96
exo>
.05 mW
Integration
Delta H44972 mJ
1400.5 J/g
Peak 145.8°C
-91.6 mW
100.
200.
300.
400.
°C

LABCORE Data Entry Template for Worklist# 5289

Analyst: ADP **Instrument:** DSC0 1 **Book #** 12N14-B

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

Worklist Comment: Please run BY-104 DSCs under N2. bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	-------TEST------	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				DSC-01	SOLID	28.45	30.2	N/A	Joules/g
95000180	BY104 ROTARY	2	SAMPLE	S95T003634	0		DSC-01	SOLID	N/A	23.6		Joules/g
95000180	BY104 ROTARY	3	DUP	S95T003634	0		DSC-01	SOLID	23.6	36.2	N/A	Joules/g

Final page for worklist # 5289

Anthony Pucuta 1-31-96
Analyst Signature Date

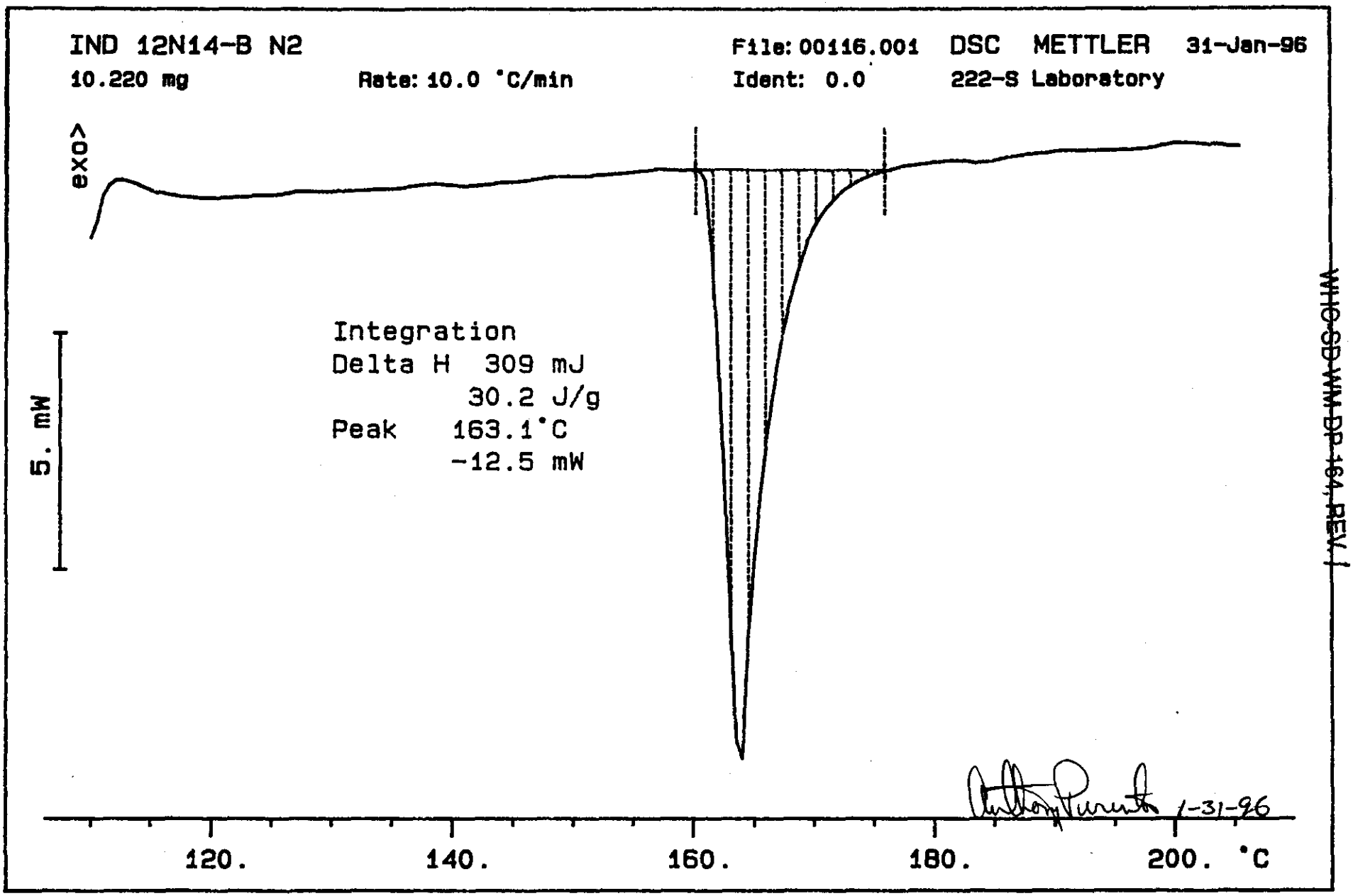
R L Wright 2/2/96
Analyst Signature Date

Verified by Blandina Valenzuela 2/5/96

Data Entry Comments: Sample produced a larg endotherm at 149.5°C with a delta H of 941.0J/g.

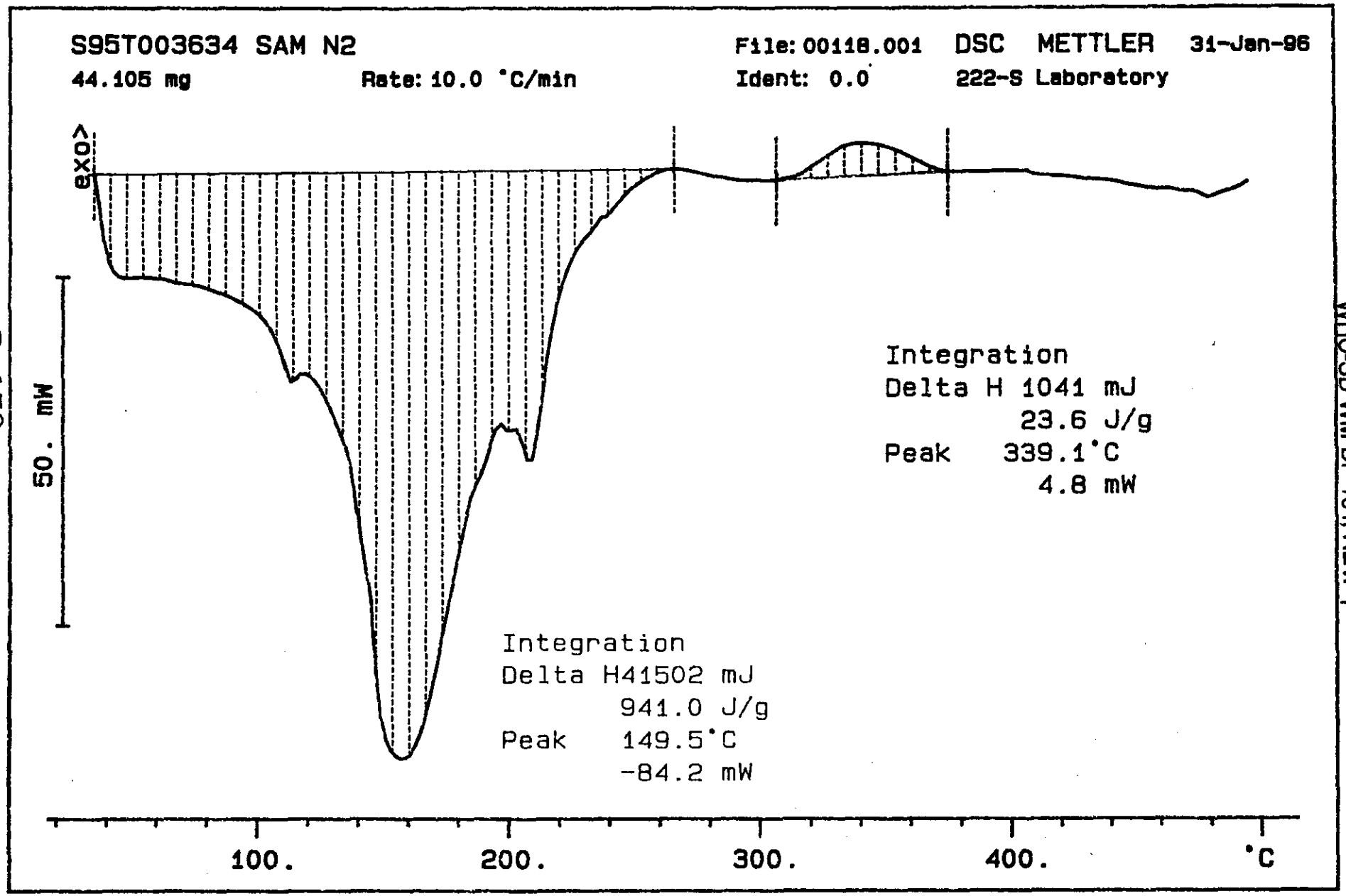
Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

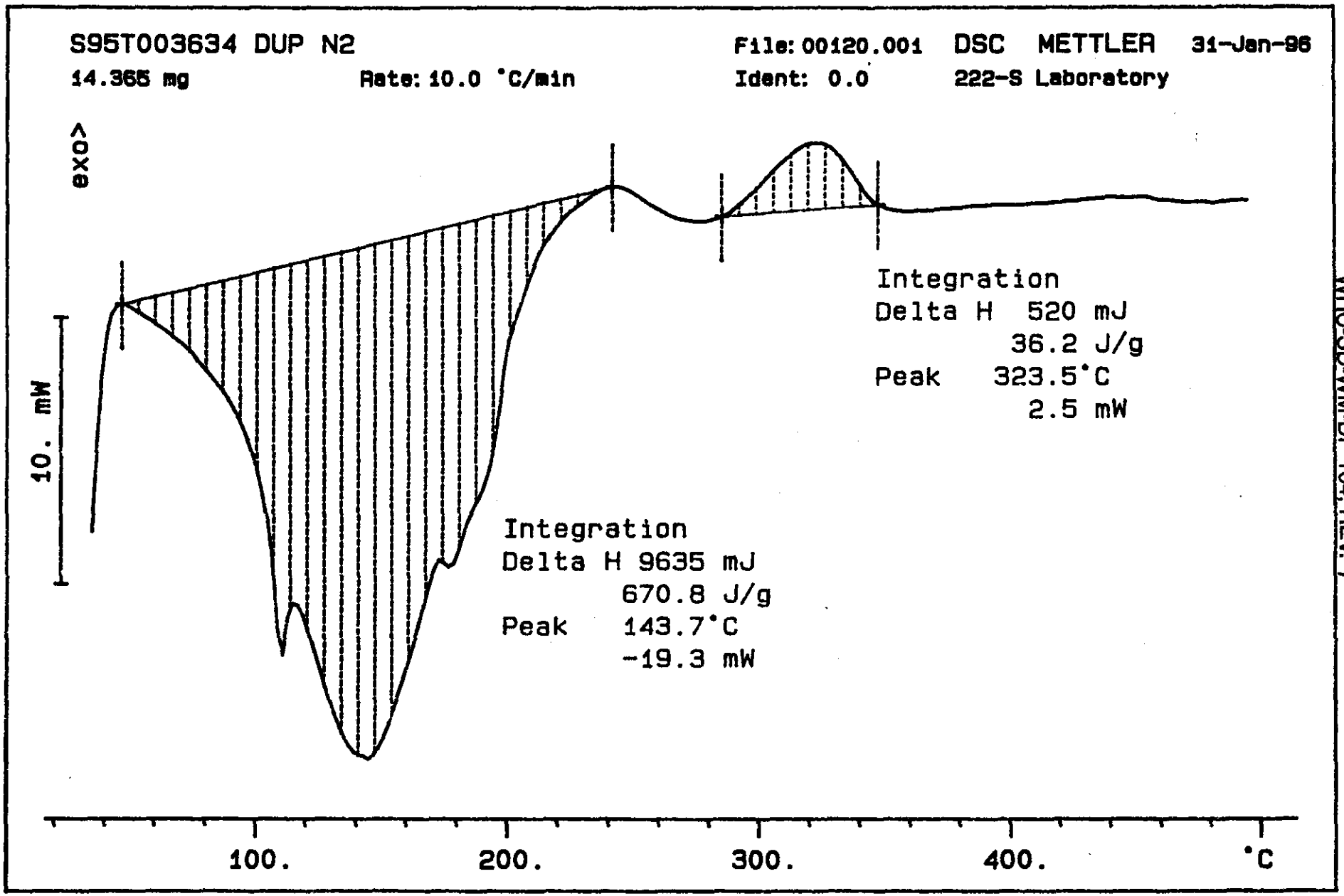
SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 2-149 TO 2-151.



Anthony Pirrotta 1-31-96

WHC-SD-WM-DP-164, REV. 1


S95T003634 SAM N2
44.105 mg
Rate: 10.0 °C/min
File: 00118.001
Ident: 0.0
DSC METTLER
222-S Laboratory
31-Jan-96
exo>
mW .05
Integration
Delta H 1041 mJ
23.6 J/g
Peak 339.1°C
4.8 mW
Integration
Delta H41502 mJ
941.0 J/g
Peak 149.5°C
-84.2 mW
100.
200.
300.
400.
°C


S95T003634 DUP N2
14.365 mg
Rate: 10.0 °C/min
File: 00120.001
Ident: 0.0
DSC METTLER
222-S Laboratory
31-Jan-96
<exo
10. mW
Integration
Delta H 520 mJ
36.2 J/g
Peak 323.5°C
2.5 mW
Integration
Delta H 9635 mJ
670.8 J/g
Peak 143.7°C
-19.3 mW
100.
200.
300.
400.
°C

LABCORE Data Entry Template for Worklist# 5323

Analyst: ADP **Instrument:** DSC0 1 **Book #** 12N14B

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

Worklist Comment: Please run BY-104 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
95000180	BY104 ROTARY	2	SAMPLE	S95T003638	1		DSC-01	SOLID	N/A	Ø		Joules/g
		3	STD				DSC-01	SOLID	28.45	30.7	N/A	Joules/g
95000180	BY104 ROTARY	4	DUP	S95T003638	1		DSC-01	SOLID	Ø	41.2	N/A	Joules/g
95000180	BY104 ROTARY	5	SAMPLE	S95T003640	1		DSC-01	SOLID	N/A	54.4		Joules/g
95000180	BY104 ROTARY	6	DUP	S95T003640	1		DSC-01	SOLID	54.4	78.2	N/A	Joules/g

Final page for worklist # 5323

See attached for signatures.
Analyst Signature **Date** 2/5/96

[signature] 2/5/96
Analyst Signature **Date**

Verified by Blandina Valenzuela 2/7/96

Data Entry Comments: S95T003638 produced three endotherms one at 106.8°C with a delta H of 427.8 J/g; second at 290.5°C with a delta H of 70.1 J/g; third at 466.9°C with a delta H of 124.8 J/g. The duplicate did not resemble the sample, in that it had an exotherm.

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.

S95T003640 produced an endotherm at 163.8°C with a delta H of 905.2 J/g.

LABCORE Data Entry Template for Worklist# 5323

Analyst: ADP **Instrument:** DSC0 1 **Book #** 12N14B

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

Worklist Comment: Please run BY-104 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
95000180	BY104 ROTARY	2	SAMPLE	S95T003638	1		DSC-01	SOLID	N/A			Joules/g
95000180	BY104 ROTARY	3	DUP	S95T003638	1		DSC-01	SOLID			N/A	Joules/g
95000180	BY104 ROTARY	4	SAMPLE	S95T003640	1		DSC-01	SOLID	N/A			Joules/g
95000180	BY104 ROTARY	5	DUP	S95T003640	1		DSC-01	SOLID			N/A	Joules/g

Final page for worklist # 5323

B. Valenzuela for ADP 2/5/96
Analyst Signature Date

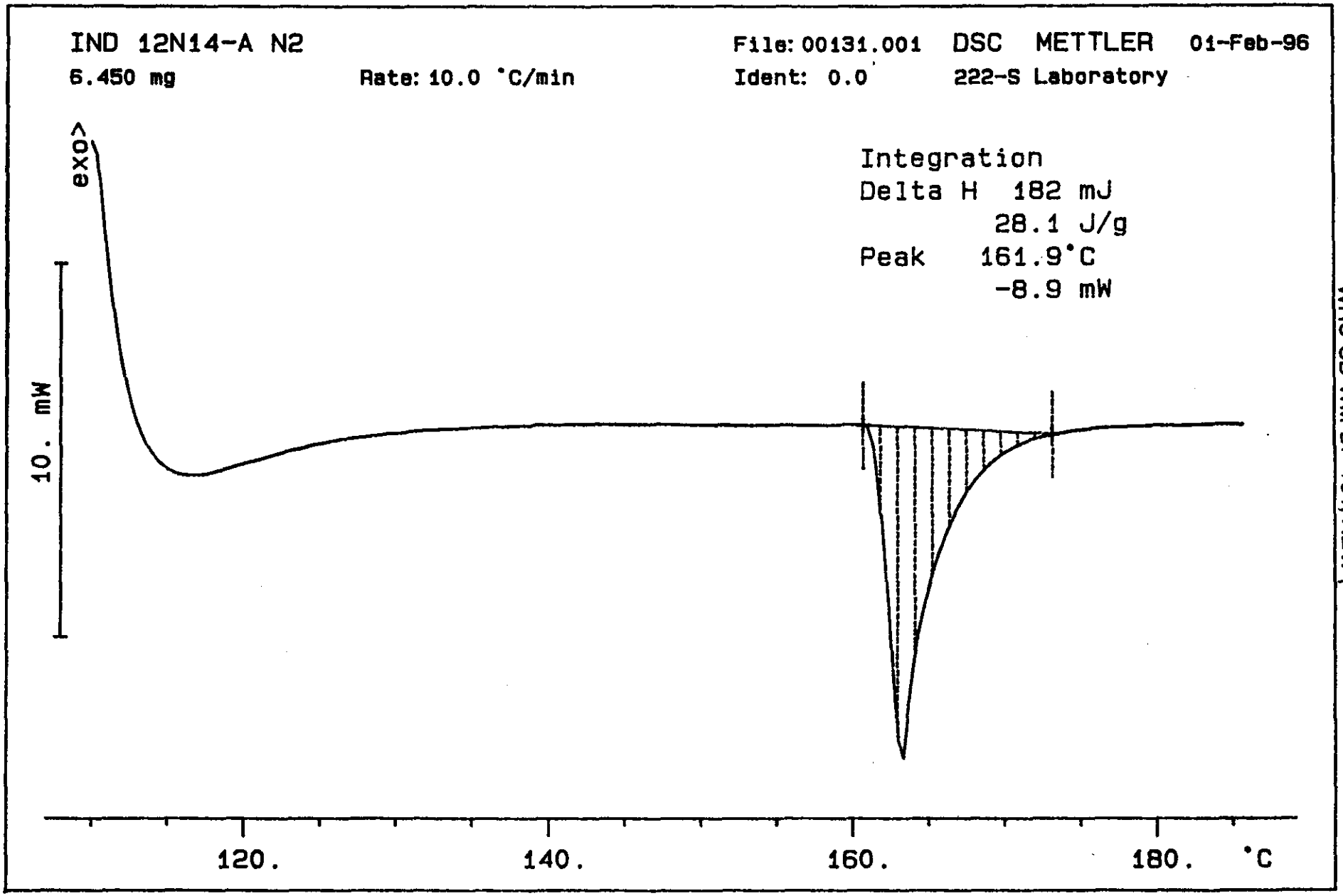
K. Myers 2/2/96

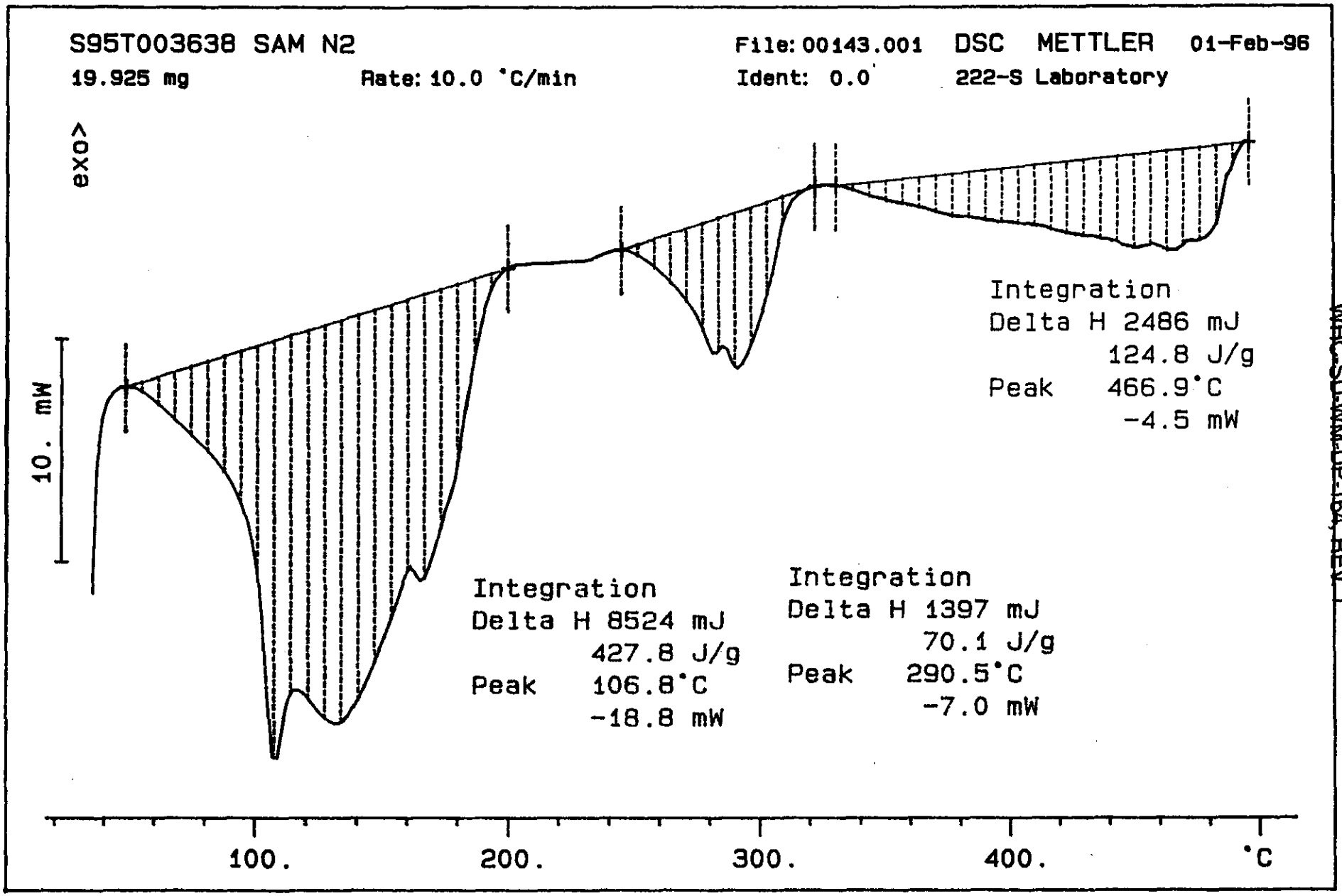
Analyst Signature Date

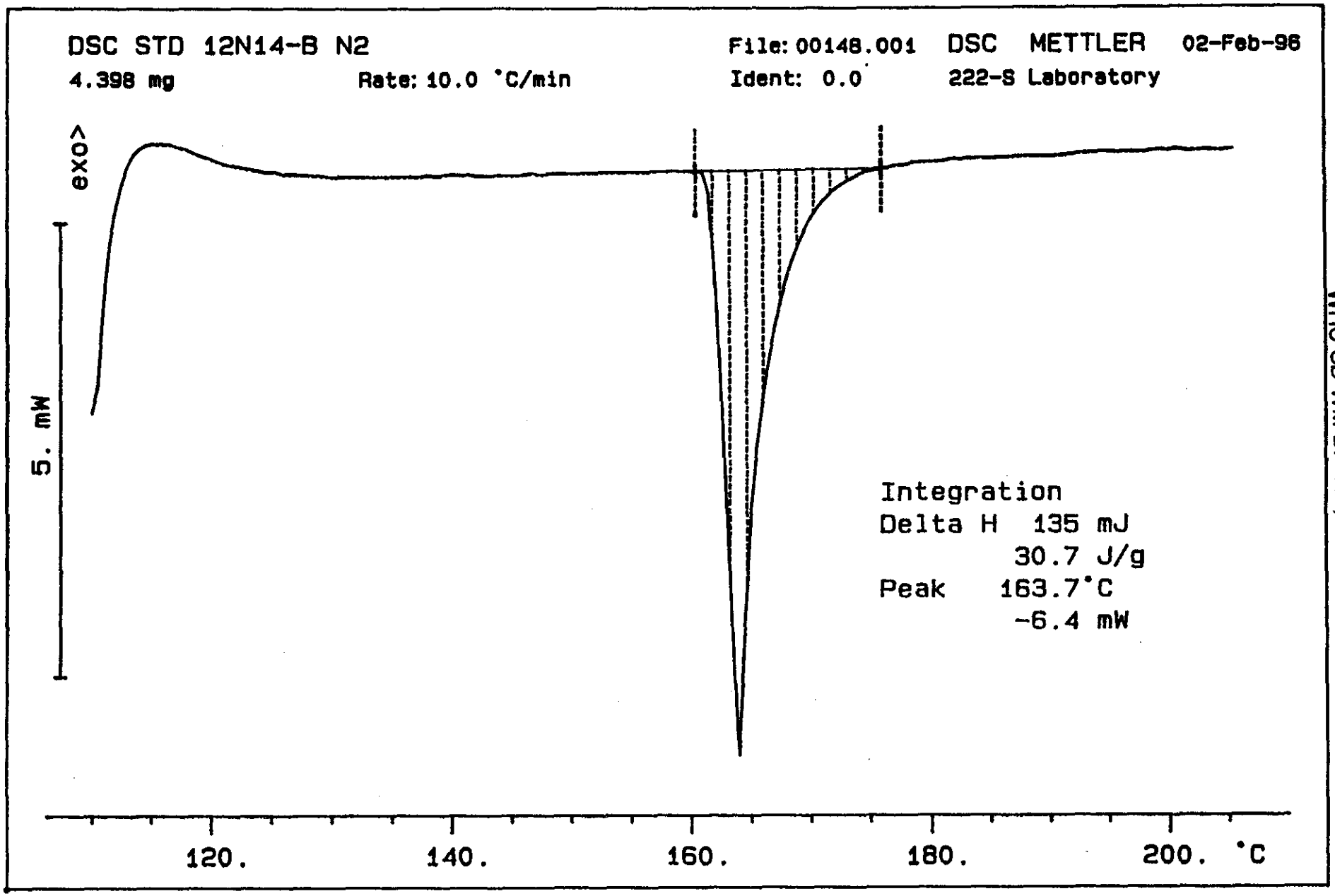
Data Entry Comments:

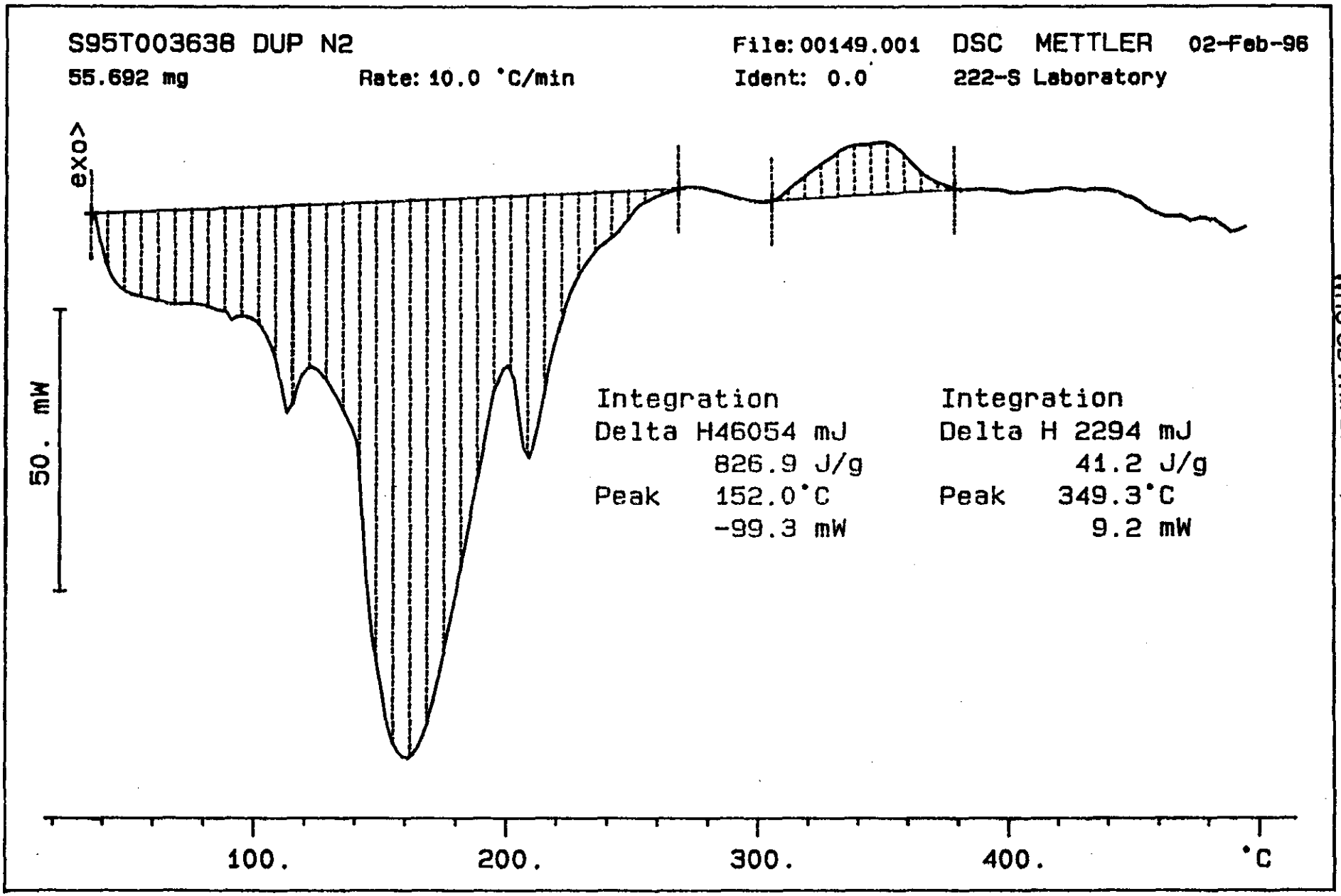
Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

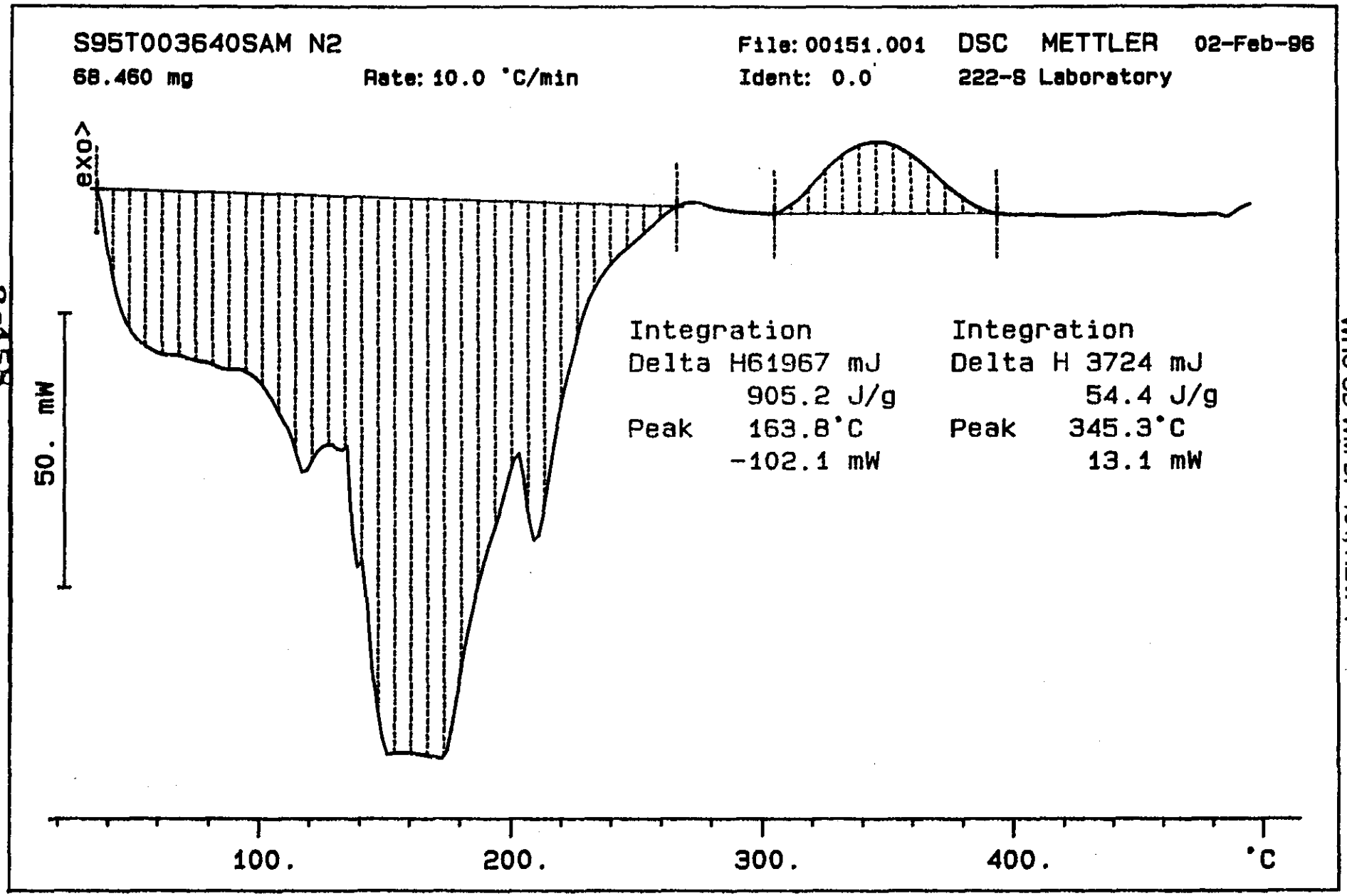
SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 2-154 TO 2-159

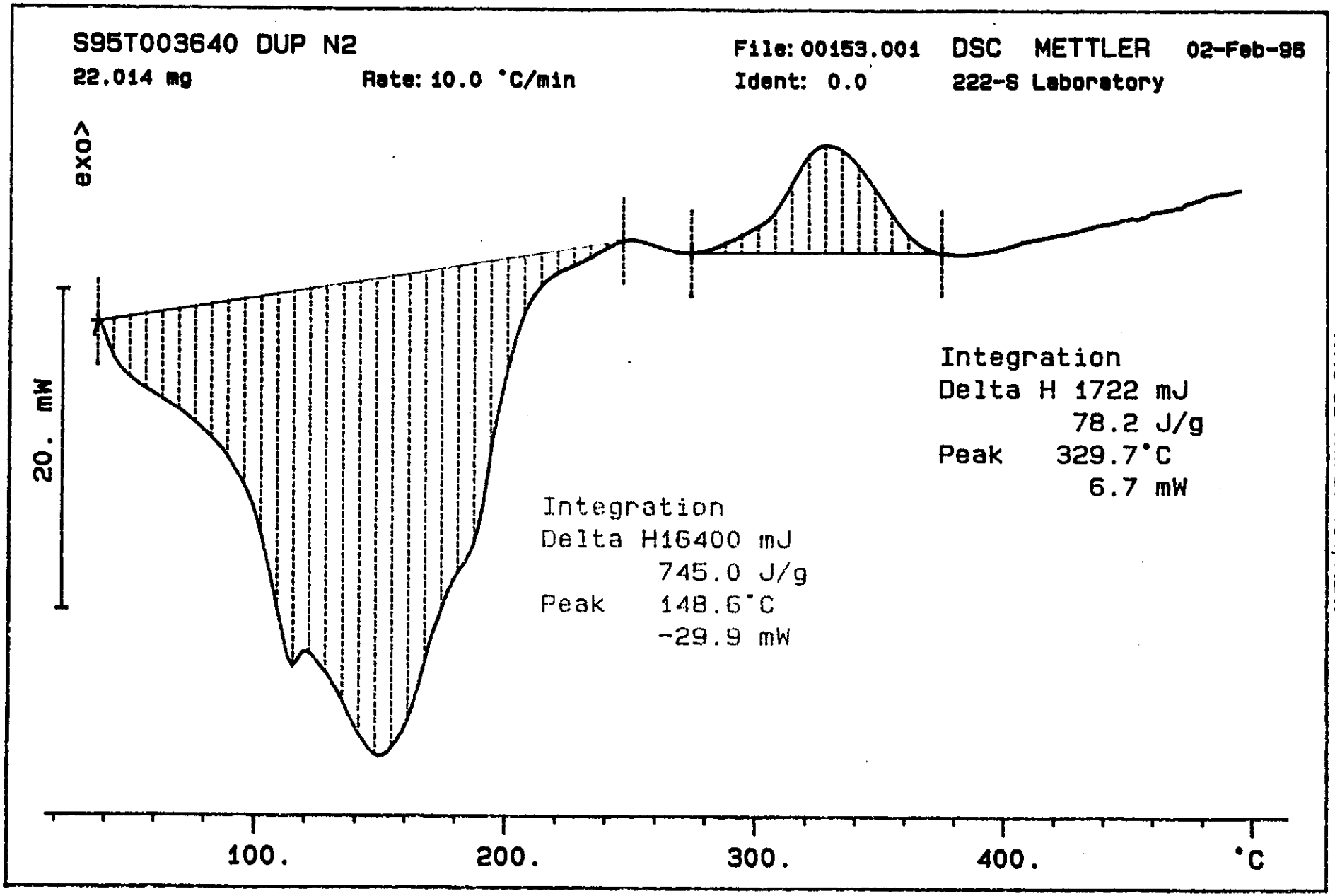



S95T003638 SAM N2
19.925 mg
Rate: 10.0 °C/min
File: 00143.001
Ident: 0.0
DSC METTLER
222-S Laboratory
01-Feb-96
exo>
10. mW
Integration
Delta H 2486 mJ
124.8 J/g
Peak 466.9°C
-4.5 mW
Integration
Delta H 8524 mJ
427.8 J/g
Peak 106.8°C
-18.8 mW
Integration
Delta H 1397 mJ
70.1 J/g
Peak 290.5°C
-7.0 mW
100.
200.
300.
400.
°C


DSC STD 12N14-B N2
4.398 mg
Rate: 10.0 °C/min
File: 00148.001
Ident: 0.0
DSC METTLER
222-S Laboratory
02-Feb-96
exo>
mW
5.
Integration
Delta H 135 mJ
30.7 J/g
Peak 163.7°C
-6.4 mW
120.
140.
160.
180.
200.
°C


S95T003638 DUP N2
55.692 mg
Rate: 10.0 °C/min
File: 00149.001
Ident: 0.0
DSC METTLER 02-Feb-96
222-S Laboratory
<exo
.05 mW
Integration
Delta H46054 mJ
826.9 J/g
Peak 152.0°C
-99.3 mW
Integration
Delta H 2294 mJ
41.2 J/g
Peak 349.3°C
9.2 mW
100.
200.
300.
400.
°C


S95T003640SAM N2
File: 00151.001
DSC METTLER
02-Feb-96
68.460 mg
Rate: 10.0 °C/min
Ident: 0.0
222-S Laboratory
<exo
50. mW
Integration
Delta H61967 mJ
905.2 J/g
Peak 163.8°C
-102.1 mW
Integration
Delta H 3724 mJ
54.4 J/g
Peak 345.3°C
13.1 mW
100.
200.
300.
400.
°C


S95T003640 DUP N2
22.014 mg
Rate: 10.0 °C/min
File: 00153.001
Ident: 0.0
DSC METTLER
222-S Laboratory
02-Feb-96
<exo
mW .02
Integration
Delta H 1722 mJ
78.2 J/g
Peak 329.7°C
6.7 mW
Integration
Delta H16400 mJ
745.0 J/g
Peak 148.6°C
-29.9 mW
100.
200.
300.
400.
°C

LABCORE Data Entry Template for Worklist# 4123

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

Method: LA-560-112 Rev/Mod B-1

Worklist Comment: Please run BY-104 TGAs under N2. bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	-------TEST------	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA-01	SOLID	59.74	60.36*	N/A	%
95000180	BY104 ROTARY	2	SAMPLE	S95T003642	0		TGA-01	SOLID	N/A	23.36		%
95000180	BY104 ROTARY	3	DUP	S95T003642	0		TGA-01	SOLID	23.36	32.83	N/A	%
95000180	BY104 ROTARY	4	SAMPLE	S95T003645	0		TGA-01	SOLID	N/A	21.70		%
		5	STD				TGA-01	SOLID	59.74	60.20	N/A	%
95000180	BY104 ROTARY	6	DUP	S95T003645	0		TGA-01	SOLID	21.70	24.45	N/A	%

Final page for worklist # 4123

Analyst Signature Date

[signature] 12-20-95
Analyst Signature Date

Verified 12/21/95 J M Frye

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# 4123

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

Method: LA-560-112 Rev/Mod B-1

Worklist Comment: Please run BY-104 TGAs under N2. bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA-01	SOLID	59.74	60.36*	N/A	%
95000180	BY104 ROTARY	2	SAMPLE	S95T003642	0		TGA-01	SOLID	N/A	~~23.36~~	12/19/95 BDV	%
95000180	BY104 ROTARY	3	DUP	S95T003642	0		TGA-01	SOLID	~~23.36~~	~~32.83~~	12/19/95 N/A BDV	%
95000180	BY104 ROTARY	4	SAMPLE	S95T003645	0		TGA-01	SOLID	N/A	~~21.70~~	12/19/95 BDV	%
95000180	BY104 ROTARY	5	DUP	S95T003645	0		TGA-01	SOLID	~~21.70~~	12/19/95 BDV	N/A	%

Final page for worklist # 4123

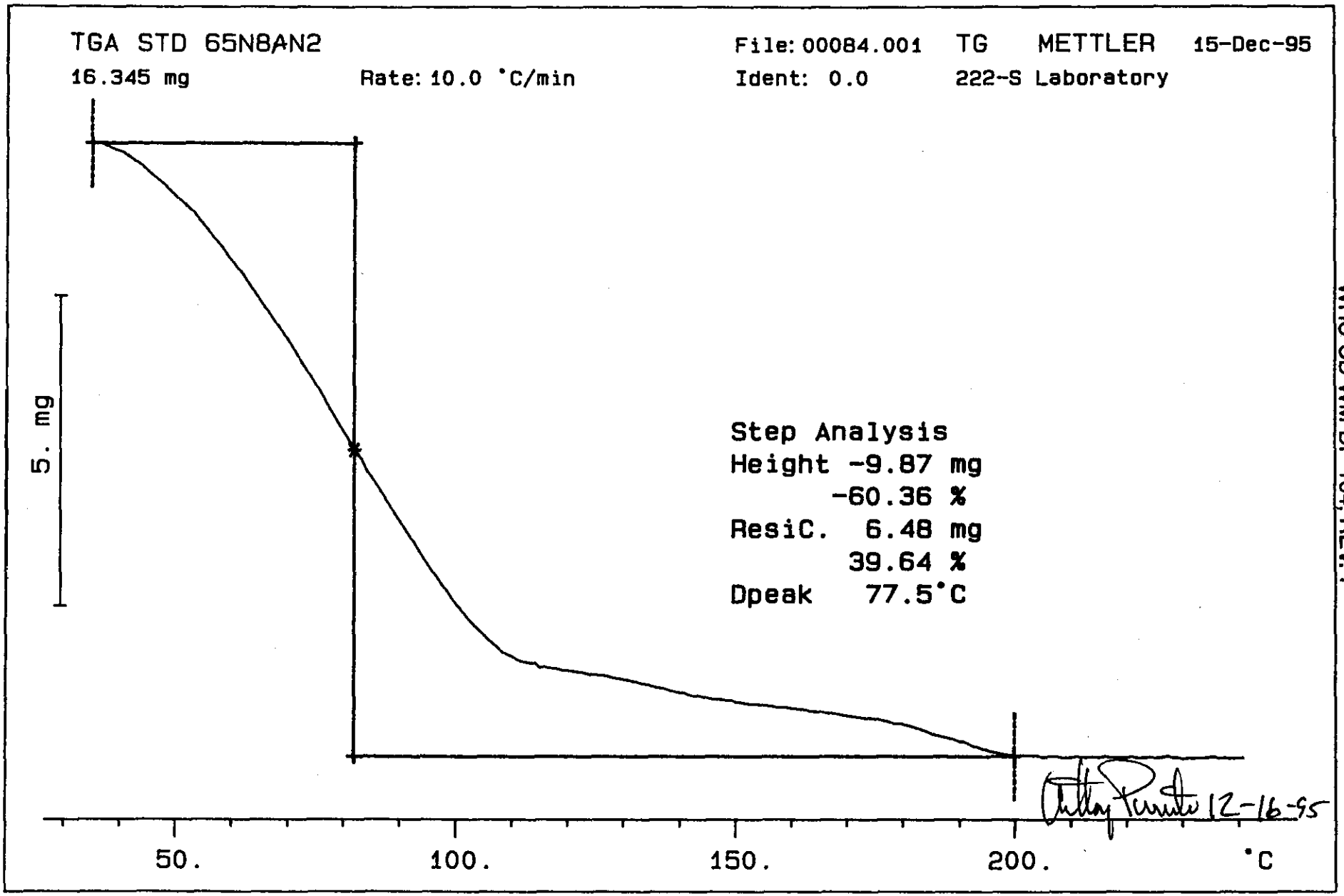
Anthony Punzalan 12-17-95
Analyst Signature **Date**

Analyst Signature **Date**

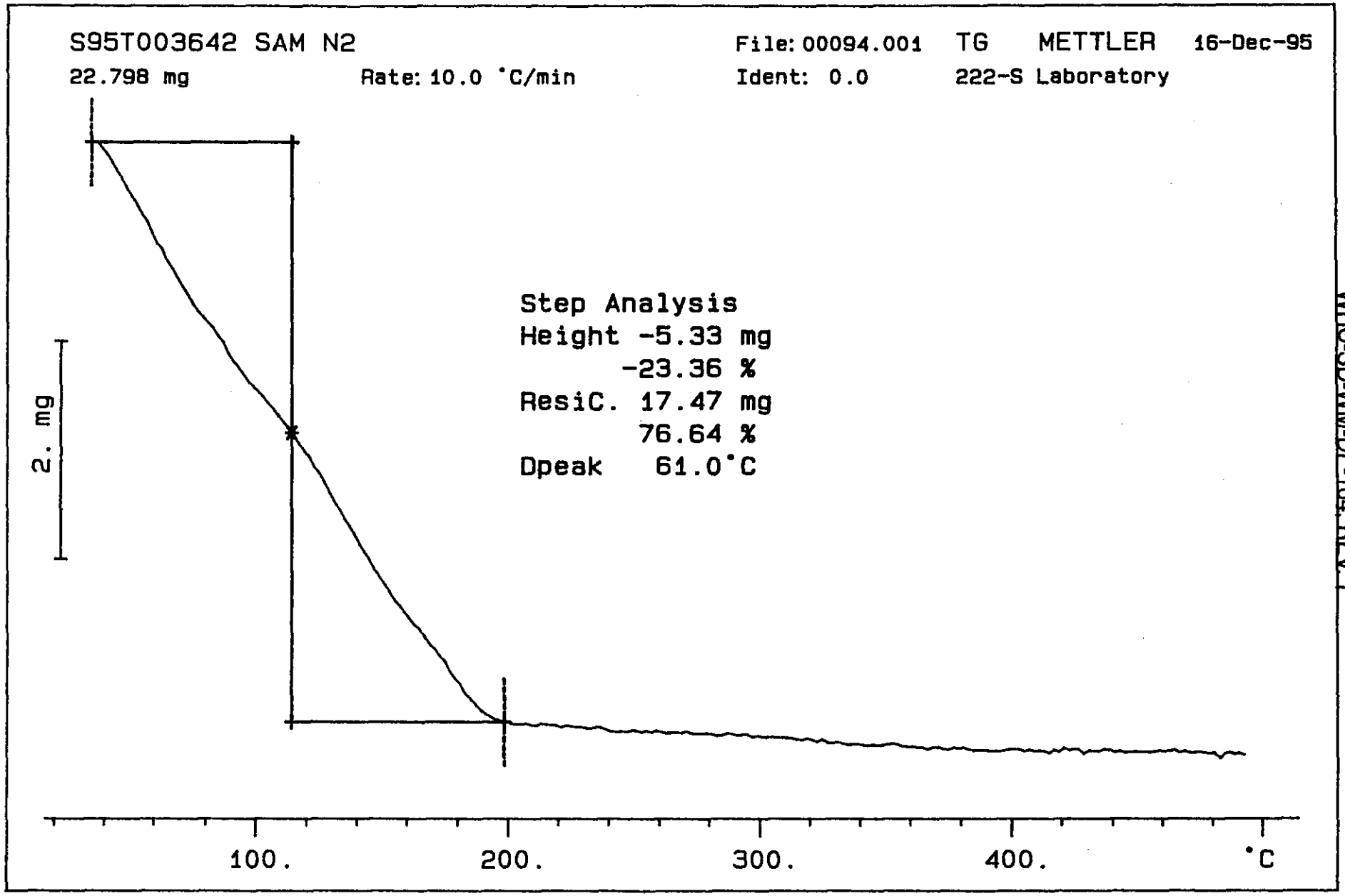
Data Entry Comments:

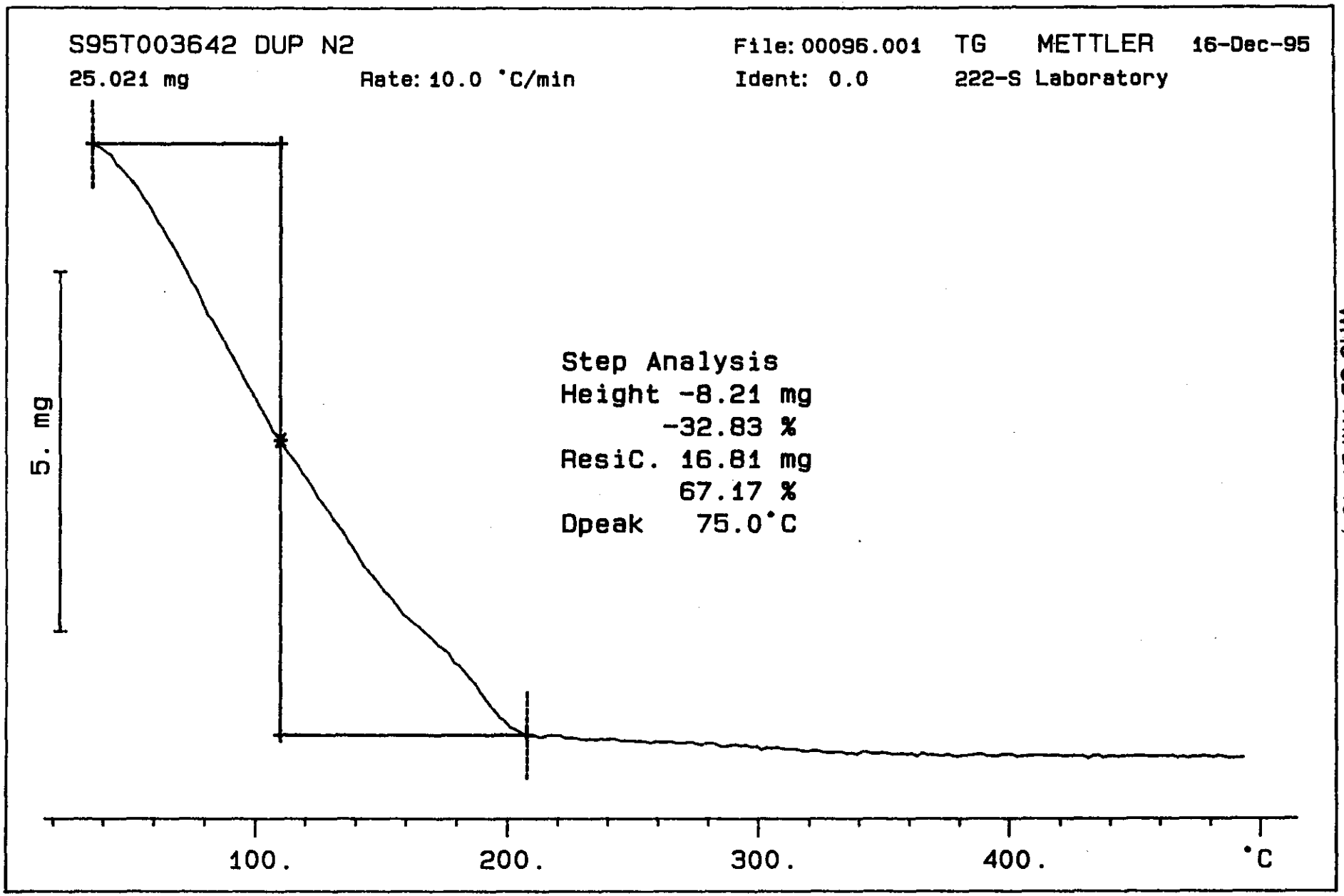
Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

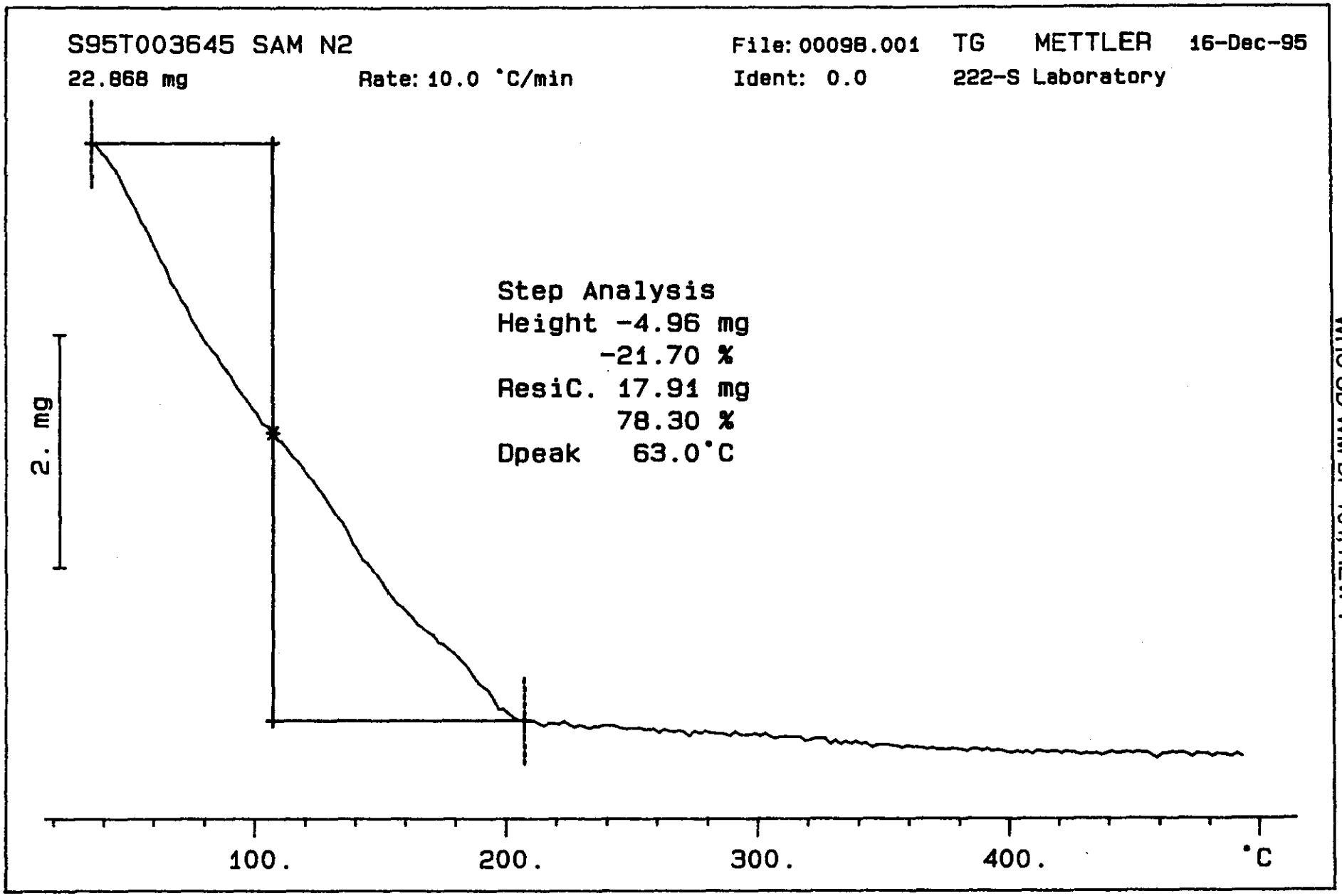
SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 2-162 TO 2-167.

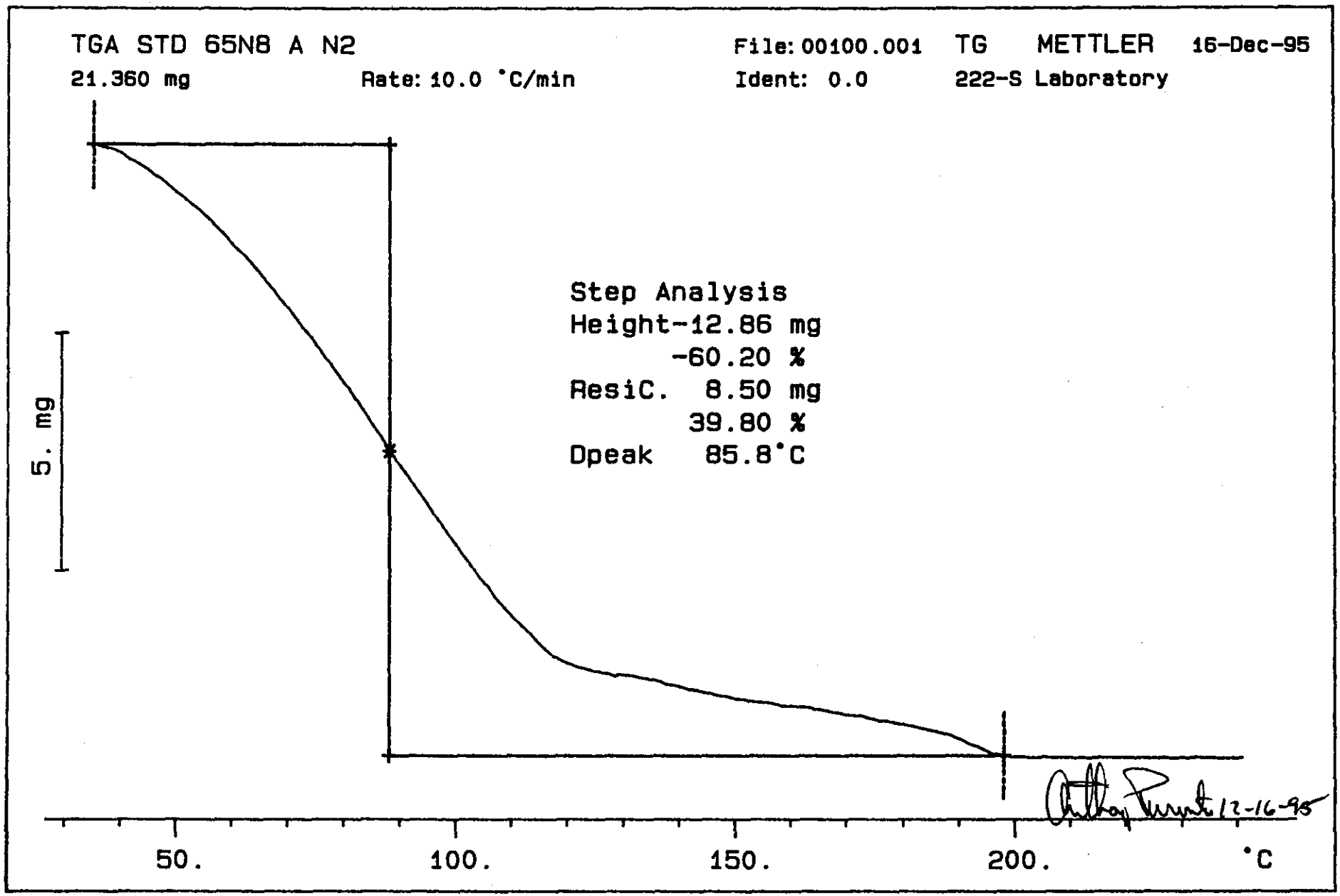


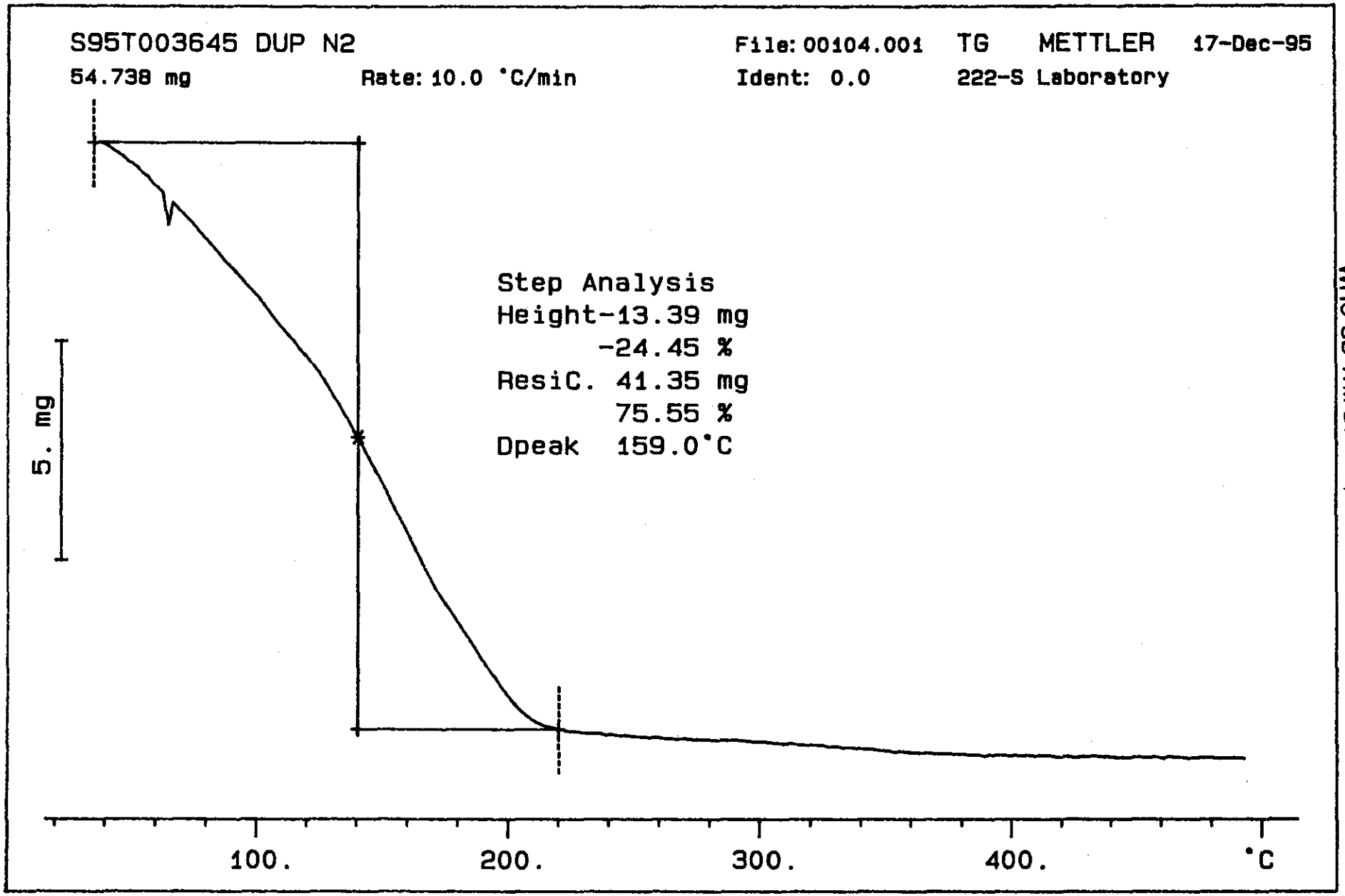
Anthony Punuto 12-16-95


S95T003642 SAM N2
22.798 mg
Rate: 10.0 °C/min
File: 00094.001
TG METTLER 16-Dec-95
Ident: 0.0
222-S Laboratory
Step Analysis
Height -5.33 mg
-23.36 %
ResiC. 17.47 mg
76.64 %
Dpeak 61.0°C
2. mg
100.
200.
300.
400.
°C


S95T003642 DUP N2
25.021 mg
Rate: 10.0 °C/min
File: 00096.001
Ident: 0.0
TG
METTLER
222-S Laboratory
16-Dec-95
Step Analysis
Height -8.21 mg
-32.83 %
ResiC. 16.81 mg
67.17 %
Dpeak 75.0°C
5. mg
100.
200.
300.
400.
°C


S95T003645 SAM N2
22.868 mg
Rate: 10.0 °C/min
File: 00098.001
TG METTLER 16-Dec-95
Ident: 0.0
222-S Laboratory
Step Analysis
Height -4.96 mg
-21.70 %
ResiC. 17.91 mg
78.30 %
Dpeak 63.0°C
2. mg
100.
200.
300.
400.
°C


TGA STD 65N8 A N2
21.360 mg
Rate: 10.0 °C/min
File: 00100.001
Ident: 0.0
TG METTLER 16-Dec-95
222-S Laboratory
Step Analysis
Height -12.86 mg
-60.20 %
ResiC. 8.50 mg
39.80 %
Dpeak 85.8°C
5. mg
50.
100.
150.
200.
°C


S95T003645 DUP N2
54.738 mg
Rate: 10.0 °C/min
File: 00104.001
Ident: 0.0
TG
METTLER
17-Dec-95
222-S Laboratory
Step Analysis
Height-13.39 mg
-24.45 %
ResiC. 41.35 mg
75.55 %
Dpeak 159.0°C
5. mg
100.
200.
300.
400.
°C

LABCORE Data Entry Template for Worklist# 4124

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

Method: LA-560-112 Rev/Mod B-1

Worklist Comment: Please run BY-104 TGAs under N2. bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA-01	SOLID	59.74	60.56	N/A	%
95000180	BY104 ROTARY	2	SAMPLE	S95T003647	0		TGA-01	SOLID	N/A	26.81		%
95000180	BY104 ROTARY	3	DUP	S95T003647	0		TGA-01	SOLID	26.81	24.36	N/A	%

Final page for worklist # 4124

See attached for signatures
Analyst Signature Date

Verified by Blandina Valenzuela 1/8/96

Frank Coulson 1/6/96
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# 4124

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

Method: LA-560-112 Rev/Mod ~~C-1~~ B-1 11/8/96 BDV

Worklist Comment: Please run BY-104 TGAs under N2. bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA-01	SOLID			N/A	%
95000180	BY104 ROTARY	2	SAMPLE	S95T003644	0		TGA-01	SOLID	N/A			%
95000180	BY104 ROTARY	3	DUP	S95T003644	0		TGA-01	SOLID			N/A	%
95000180	BY104 ROTARY	4	SAMPLE	S95T003647	0		TGA-01	SOLID	N/A			%
95000180	BY104 ROTARY	5	DUP	S95T003647	0		TGA-01	SOLID			N/A	%

Final page for worklist # 4124

Anthony Pirrotti 12-21-95
Analyst Signature **Date**

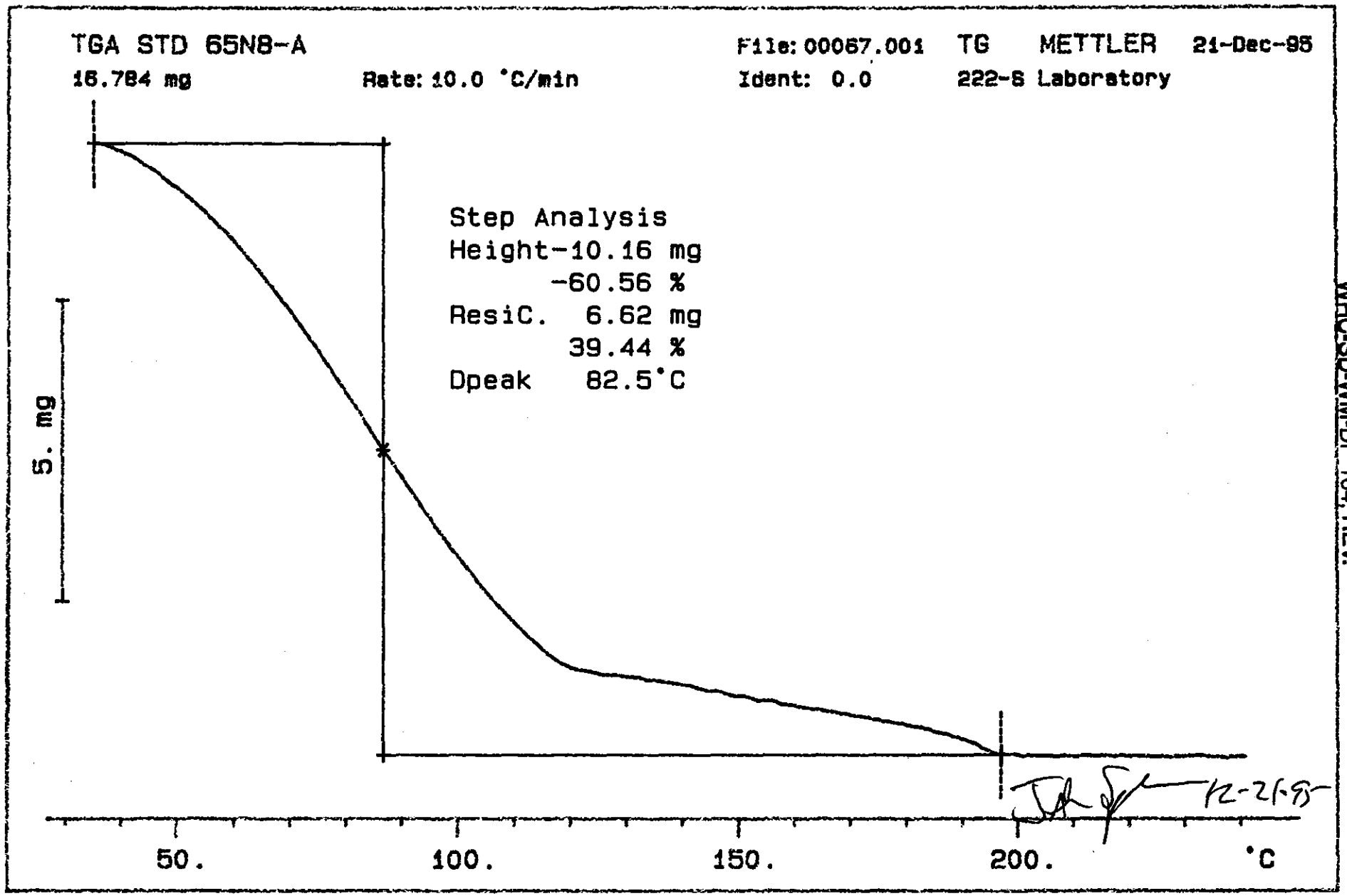
Analyst Signature **Date**

JM 12-21-95

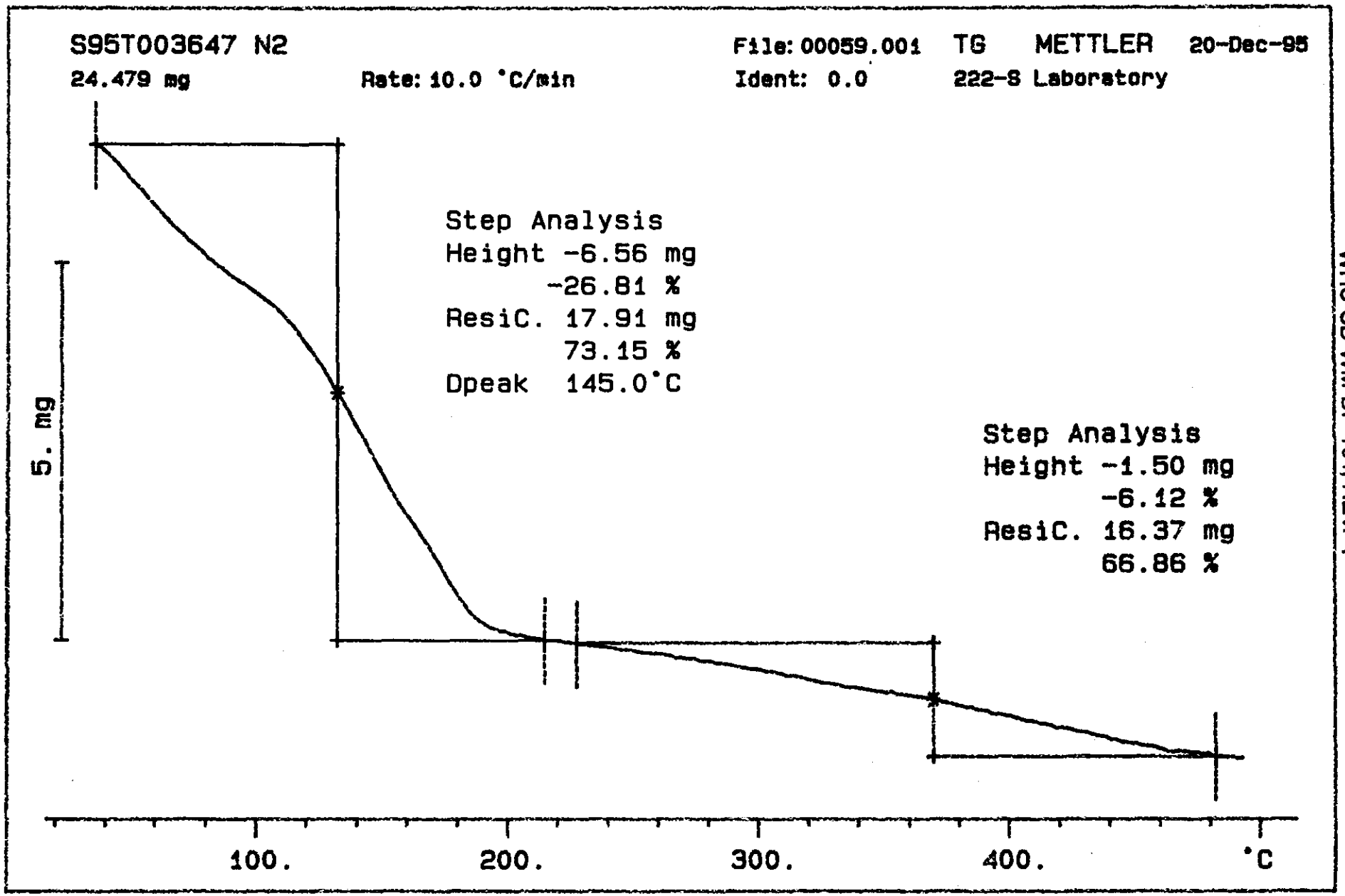
Data Entry Comments:

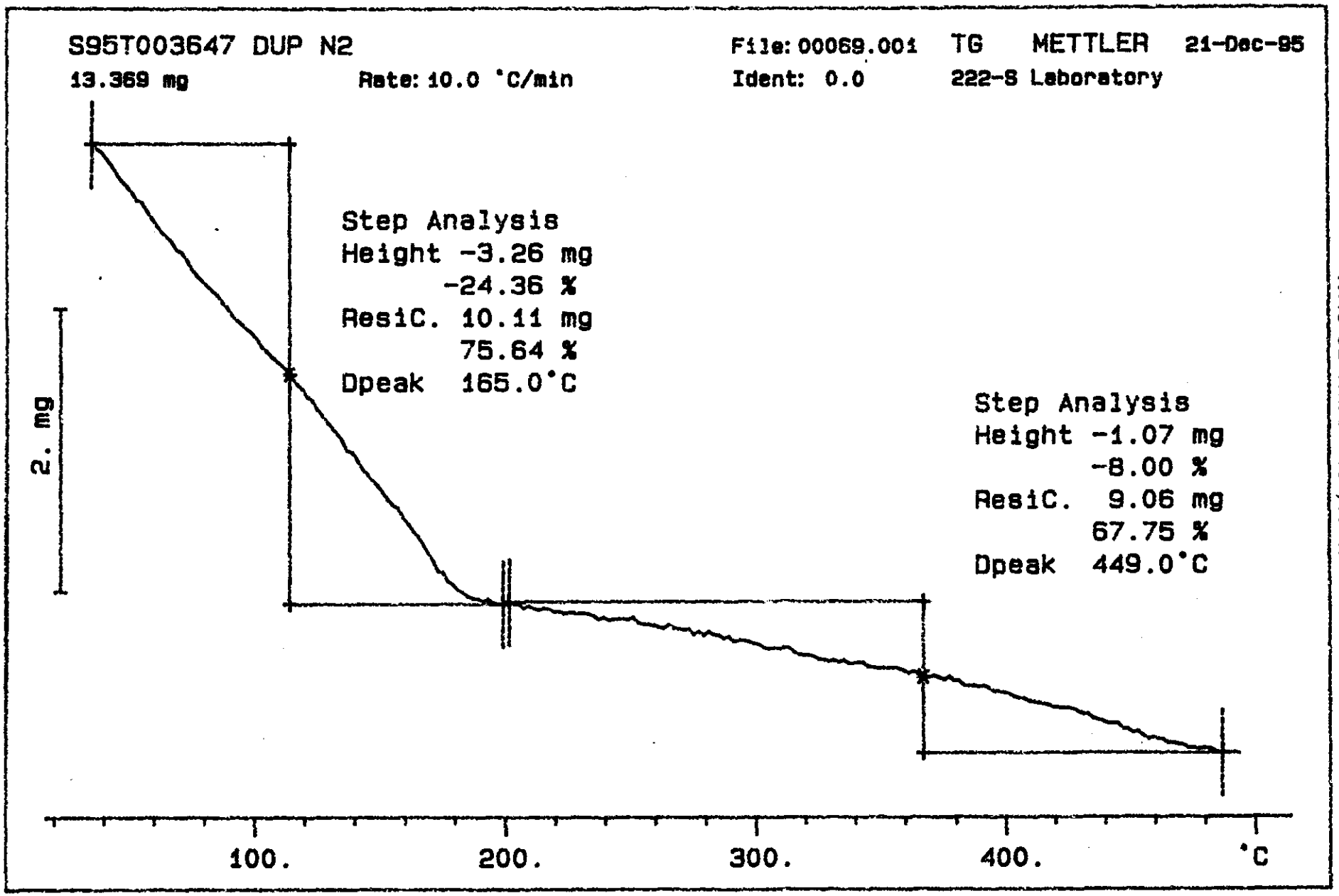
Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 2-170 TO 2-173.



12-21-95


S95T003647 N2
24.479 mg
Rate: 10.0 °C/min
File: 00059.001
TG METTLER 20-Dec-95
Ident: 0.0
222-S Laboratory
Step Analysis
Height -6.56 mg
-26.81 %
ResiC. 17.91 mg
73.15 %
Dpeak 145.0°C
Step Analysis
Height -1.50 mg
-6.12 %
ResiC. 16.37 mg
66.86 %
5. mg
100.
200.
300.
400.
°C


S95T003647 DUP N2
13.369 mg
Rate: 10.0 °C/min
File: 00069.001
Ident: 0.0
TG
METTLER
222-S Laboratory
21-Dec-95
Step Analysis
Height -3.26 mg
-24.36 %
ResiC. 10.11 mg
75.64 %
Dpeak 165.0°C
Step Analysis
Height -1.07 mg
-8.00 %
ResiC. 9.06 mg
67.75 %
Dpeak 449.0°C
2. mg
100.
200.
300.
400.
°C

LABCORE Data Entry Template for Worklist# 4125

Analyst: ADP **Instrument:** TGA0 3 **Book #** 65N8-A

Method: LA-514-114 Rev/Mod C-1

Worklist Comment: Please run BY-104 TGAs under N2. bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	-------TEST------	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA-03	SOLID	59.74	60.49	N/A	%
95000180	BY104 ROTARY	2	SAMPLE	S95T003643	0		TGA-03	SOLID	N/A	.894		%
95000180	BY104 ROTARY	3	DUP	S95T003643	0		TGA-03	SOLID	.894	8.105	N/A	%
95000180	BY104 ROTARY	4	TRIPL	S95T003643	0		TGA-03	SOLID	.894	.963	N/A	%
		5	STD				TGA-03	SOLID	59.74	60.60	N/A	%
95000180	BY104 ROTARY	6	SAMPLE	S95T003646	0		TGA-03	SOLID	N/A	.752		%
95000180	BY104 ROTARY	7	DUP	S95T003646	0		TGA-03	SOLID	.752	.997	N/A	%

Final page for worklist # 4125

See attached for signatures
Analyst Signature Date

[signature] 12-20-95
Analyst Signature Date

Verified 12/21/95 [signature]

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# 4125

Analyst: ALP **Instrument:** TGA0 _____ **Book #** 65N8-A

Method: LA-560-112 Rev/Mod C-1

Worklist Comment: Please run BY-104 TGAs under N2. bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA-01	SOLID			N/A	%
95000180	BY104 ROTARY	2	SAMPLE	S95T003643	0		TGA-01	SOLID	N/A			%
95000180	BY104 ROTARY	3	DUP	S95T003643	0		TGA-01	SOLID			N/A	%
95000180	BY104 ROTARY	4	SAMPLE	S95T003646	0		TGA-01	SOLID	N/A			%
95000180	BY104 ROTARY	5	DUP	S95T003646	0		TGA-01	SOLID			N/A	%

Final page for worklist # 4125

Anthony Pirrotta 12-17-95
Analyst Signature **Date**

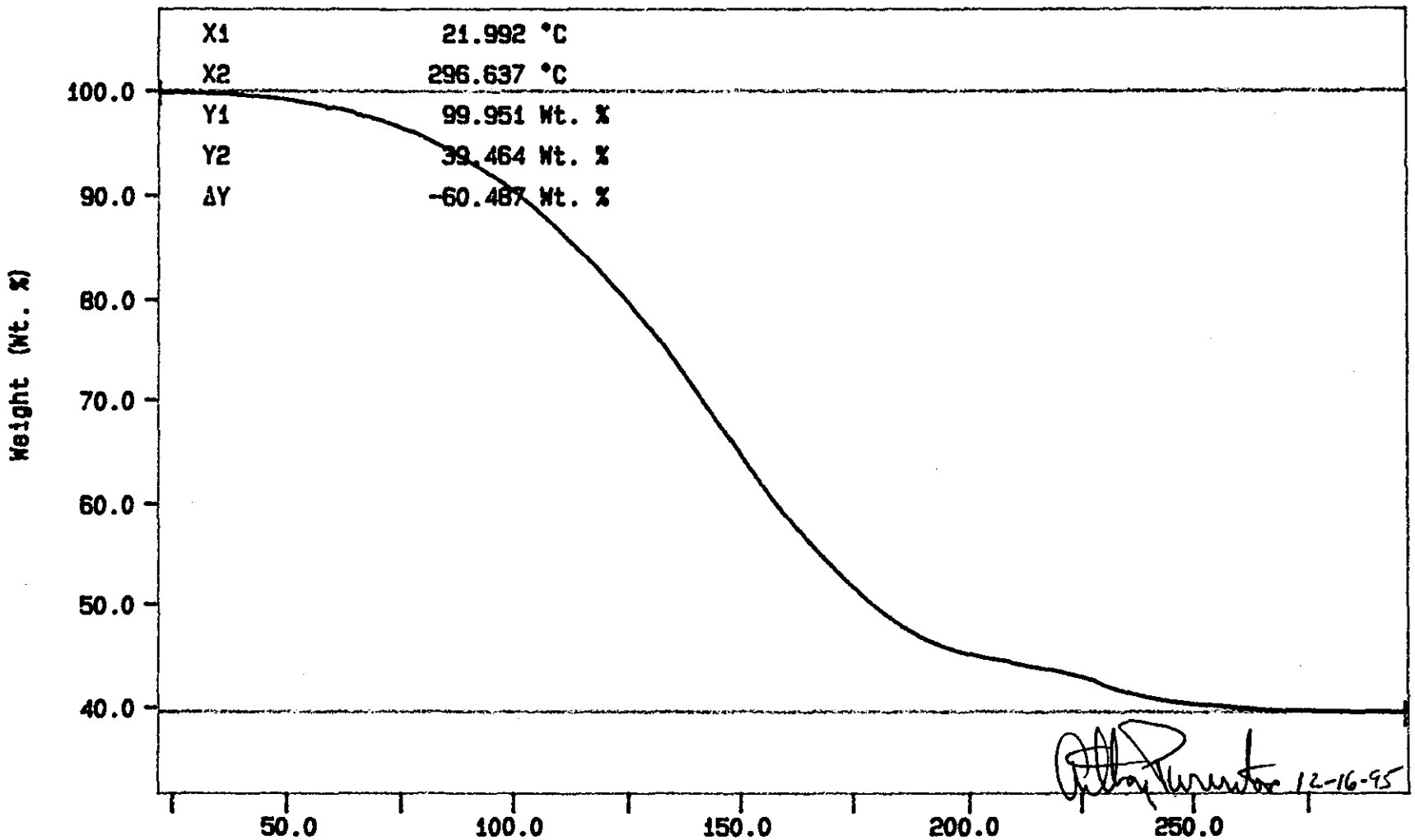
Susie M. Fulton 12-17-95
Analyst Signature **Date**

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.

Curve 1: TGA
File info: TER121602 Sat Dec 16 20:23:27 1995
Sample Weight: 28.732 mg
65N8-A Terlig

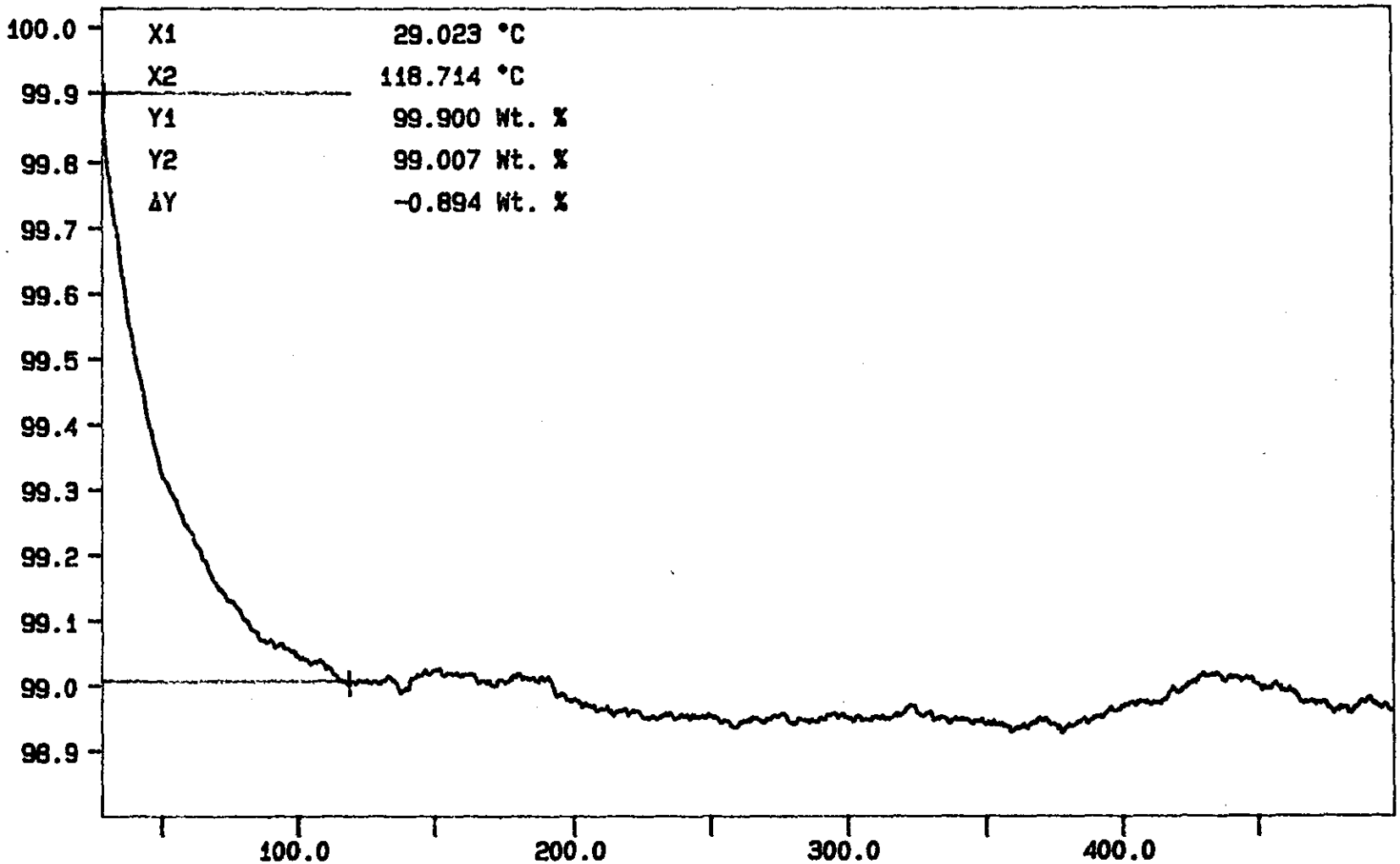
SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 2-175 TO 2-181.



N2 10C/MIN
TEMP1: 35.0 C TIME1: 0.0 min RATE1: 10.0 C/min
TEMP2: 300.0 C

AD PURINTON
PERKIN-ELMER
7 Series Thermal Analysis System
Sat Dec 16 20:37:08 1995

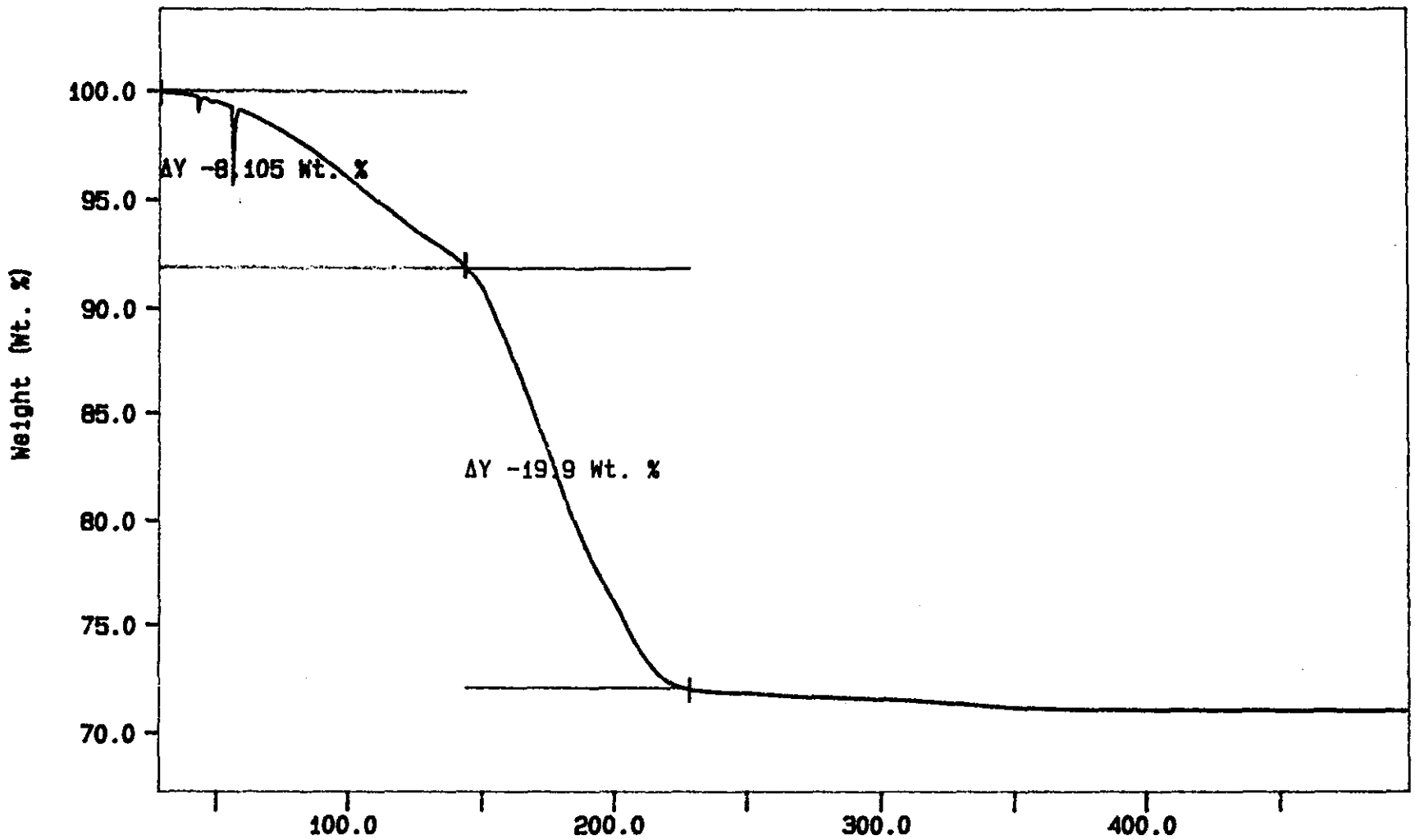
Curve 1: TGA
File info: SAM121604 Sun Dec 17 02:01:00 1995
Sample Weight: 19.129 mg
S95T003643 SAM N2



10C/MIN N2
TEMP1: 35.0 C TIME1: 0.0 min RATE1: 10.0 C/min
TEMP2: 600.0 C

AD PURINTON
PERKIN-ELMER
7 Series Thermal Analysis System
Sun Dec 17 02:20:28 1995

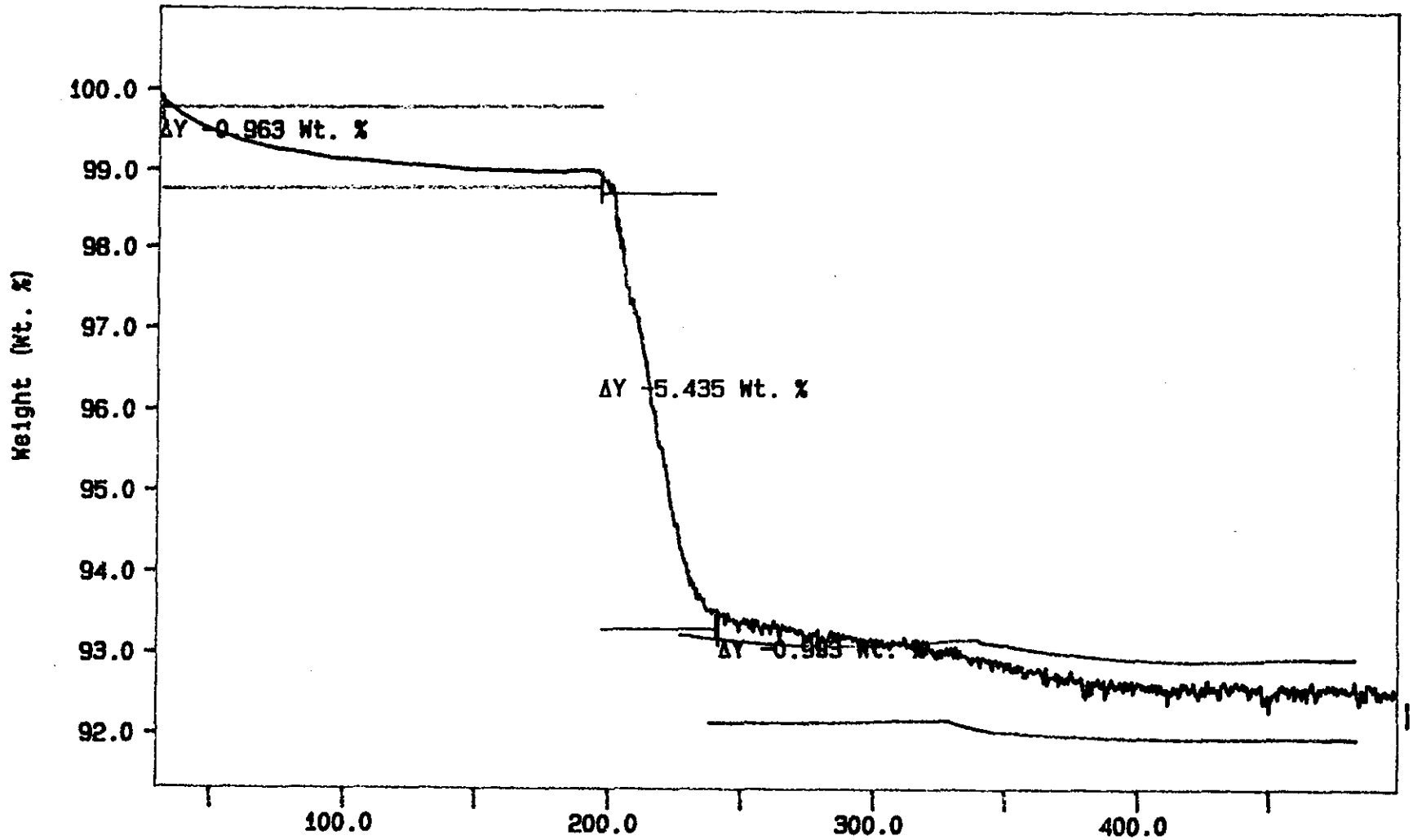
Curve 1: TGA
File info: SAM121605 Sun Dec 17 03:28:40 1995
Sample Weight: 25.625 mg
S95T003643 DUP N2



10C/MIN N2
TEMP1: 35.0 C TIME1: 0.0 min RATE1: 10.0 C/min
TEMP2: 500.0 C

AD PURINTON
PERKIN-ELMER
7 Series Thermal Analysis System
Sun Dec 17 03:39:42 1995

Curve 1: TGA
File info: SAM121606 Sun Dec 17 04:35:54 1995
Sample Weight: 28.675 mg
S95T003643 TRP N2

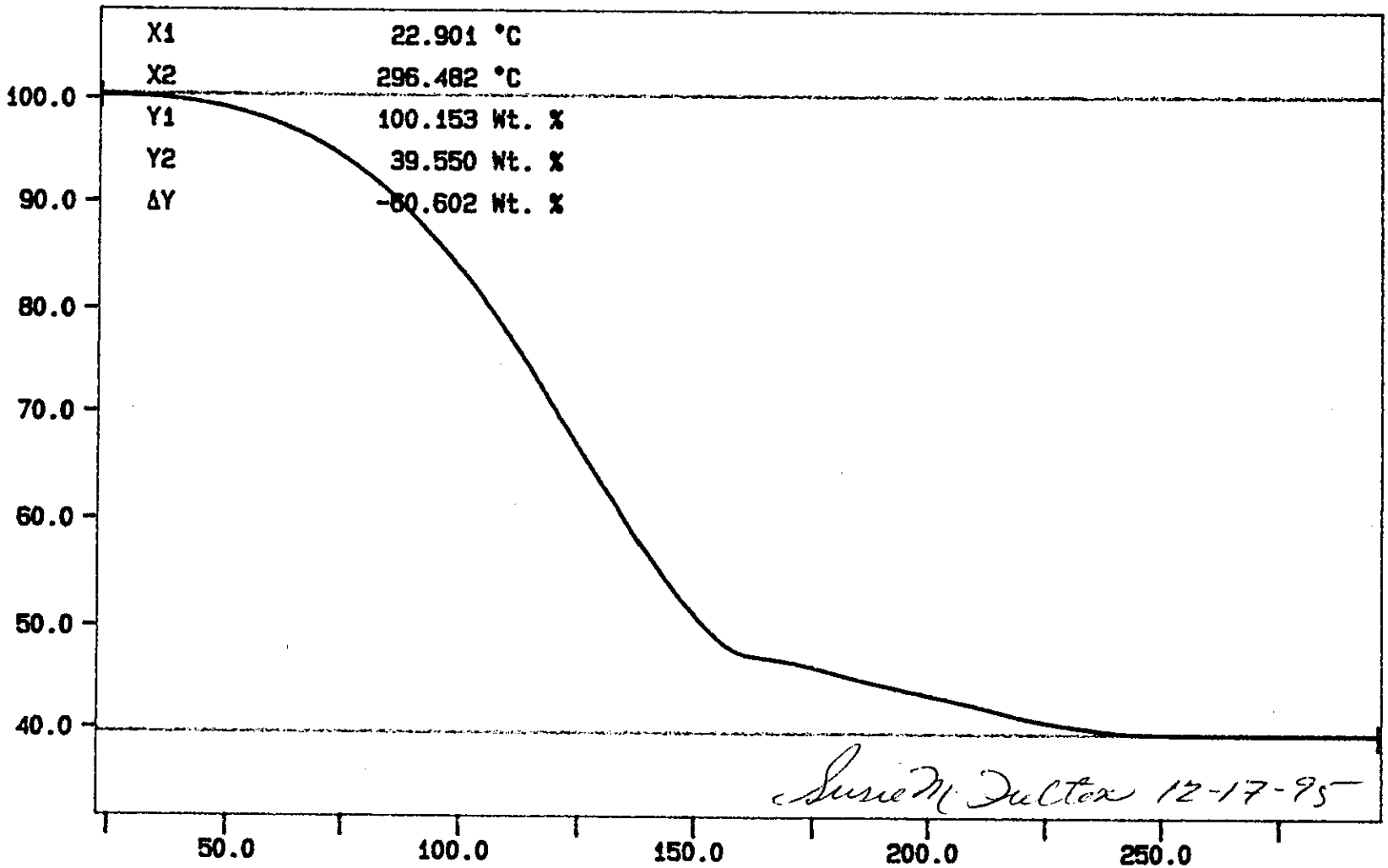


10C/MIN N2

TEMP1: 30.0 C TIME1: 0.0 min RATE1: 10.0 C/min
TEMP2: 500.0 C

AD PURINTON
PERKIN-ELMER
7 Series Thermal Analysis System
Sun Dec 17 04:51:37 1995

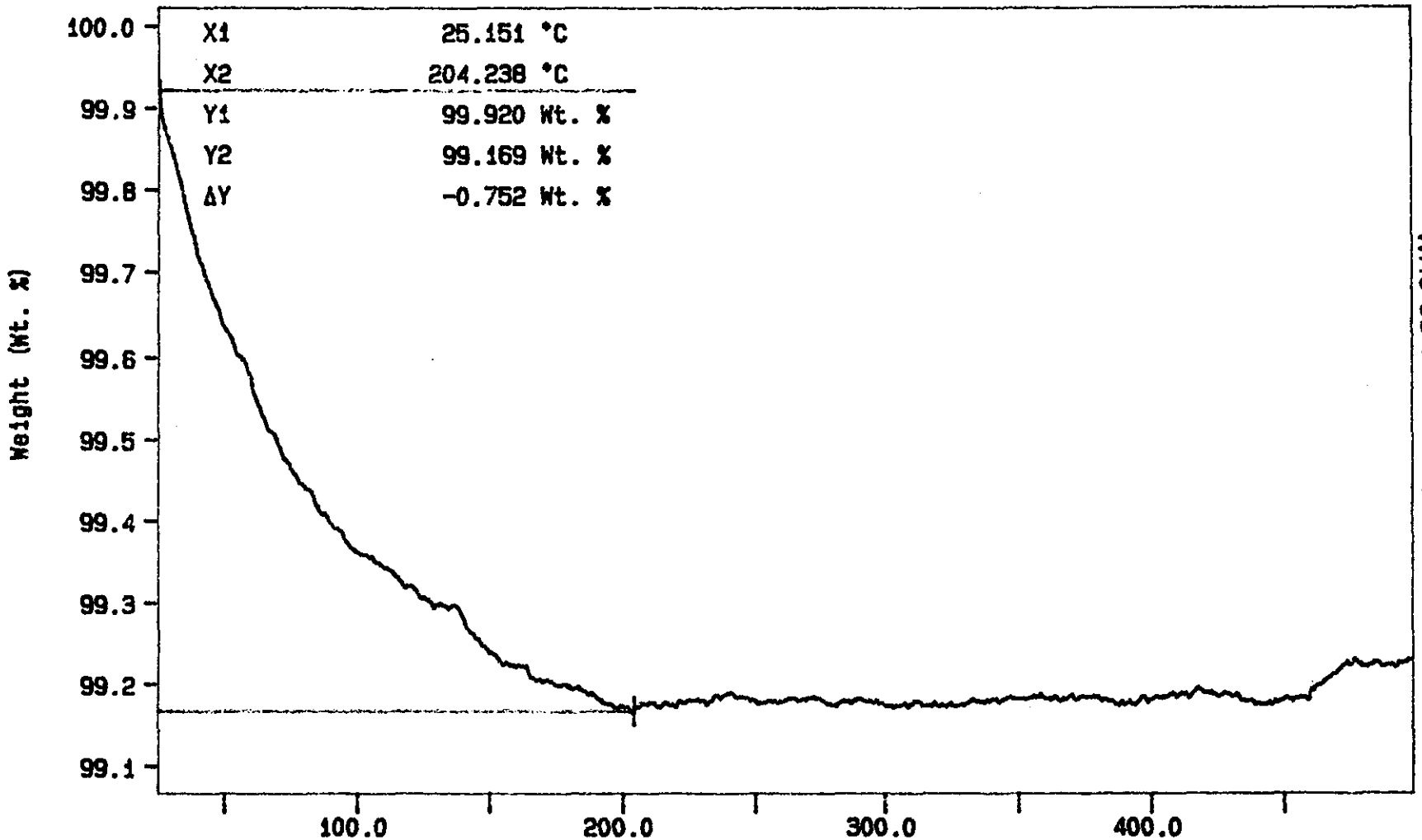
Curve 1: TGA
File info: TER121701 Sun Dec 17 07:11:06 1995
Sample Weight: 13.623 mg
65N8-A Terliq



N2 10C/MIN
TEMP1: 35.0 C TIME1: 0.0 min RATE1: 10.0 C/min
TEMP2: 300.0 C

SM FULTON
PERKIN-ELMER
7 Series Thermal Analysis System
Sun Dec 17 07:16:50 1995

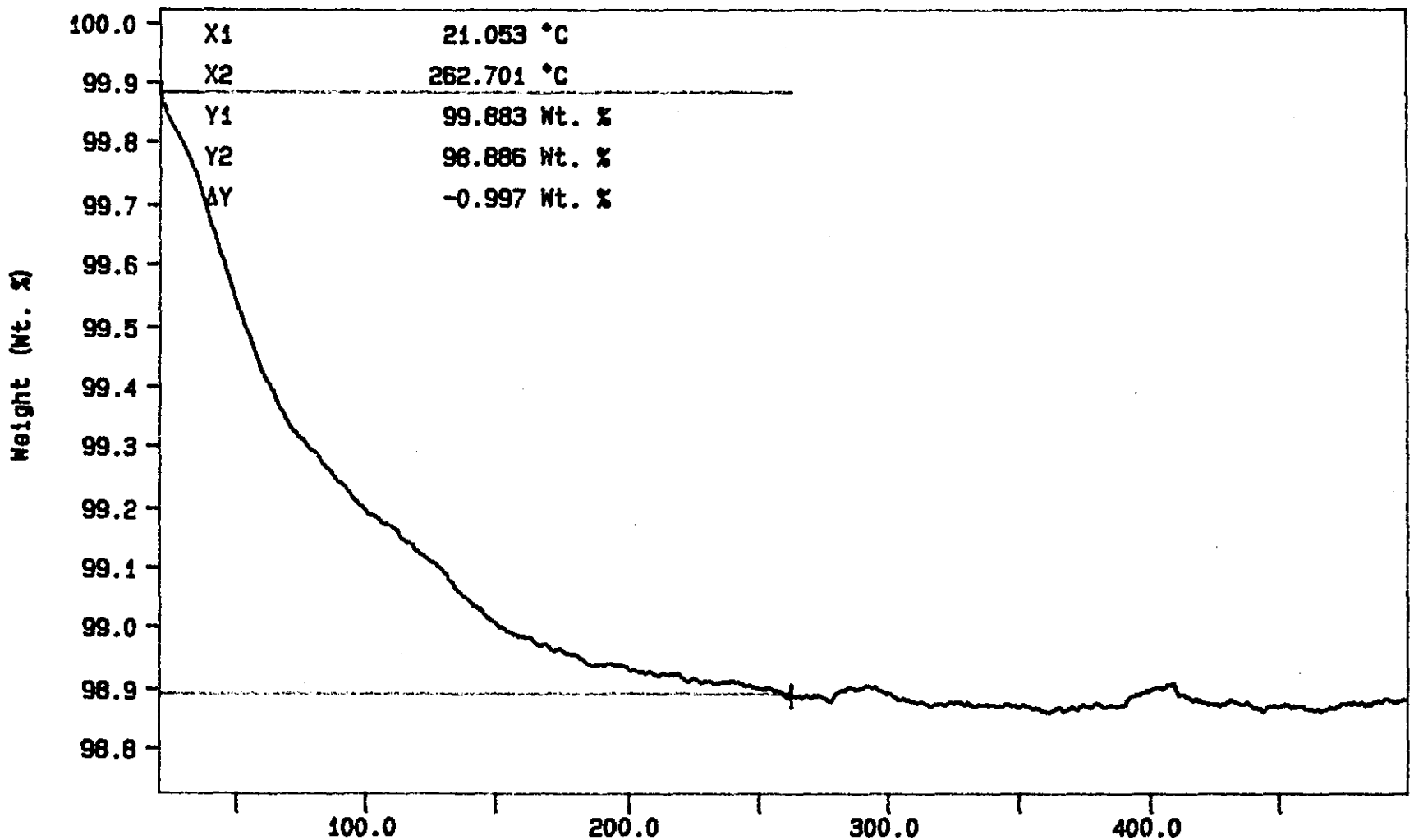
Curve 1: TGA
File info: SAM121701 Sun Dec 17 10:25:59 1995
Sample Weight: 30.713 mg
S95T003646



10C/MIN N2
TEMP1: 35.0 C TIME1: 0.0 min RATE1: 10.0 C/min
TEMP2: 800.0 C

SM FULTON
PERKIN-ELMER
7 Series Thermal Analysis System
Sun Dec 17 10:33:48 1995

Curve 1: TGA
File info: SAM121702 Sun Dec 17 12:03:51 1995
Sample Weight: 34.405 mg
S95T003646 DUP



10C/MIN 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
Sun Dec 17 13:19:16 1995

LABCORE Data Entry Template for Worklist# 4126

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

Method: LA-560-112 Rev/Mod B-1

Worklist Comment: Please run BY-104 TGAs under N2. bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA-01	SOLID	59.74	59.60	N/A	%
95000180	BY104 ROTARY	2	SAMPLE	S95T003638	0		TGA-01	SOLID	N/A	20.34		%
95000180	BY104 ROTARY	3	DUP	S95T003638	0		TGA-01	SOLID	20.34	21.08	N/A	%
95000180	BY104 ROTARY	4	SAMPLE	S95T003640	0		TGA-01	SOLID	N/A	28.21		%
95000180	BY104 ROTARY	5	DUP	S95T003640	0		TGA-01	SOLID	28.21	26.65	N/A	%

Final page for worklist # 4126

Susie M. Fulton 12-17-95
Analyst Signature **Date**

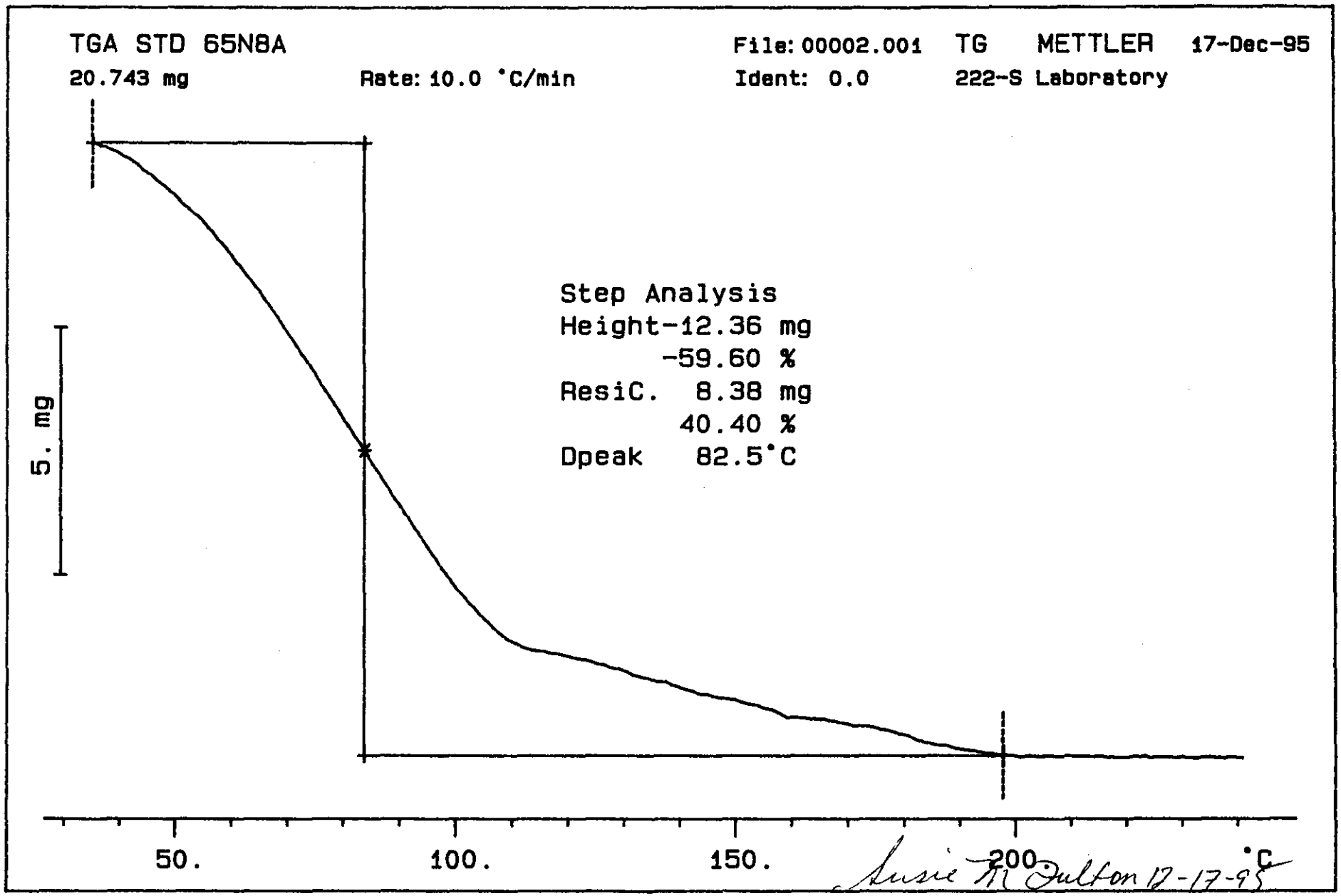
R Jones 12-19-95
Analyst Signature **Date**

Verified 12/21/95 JMFuge

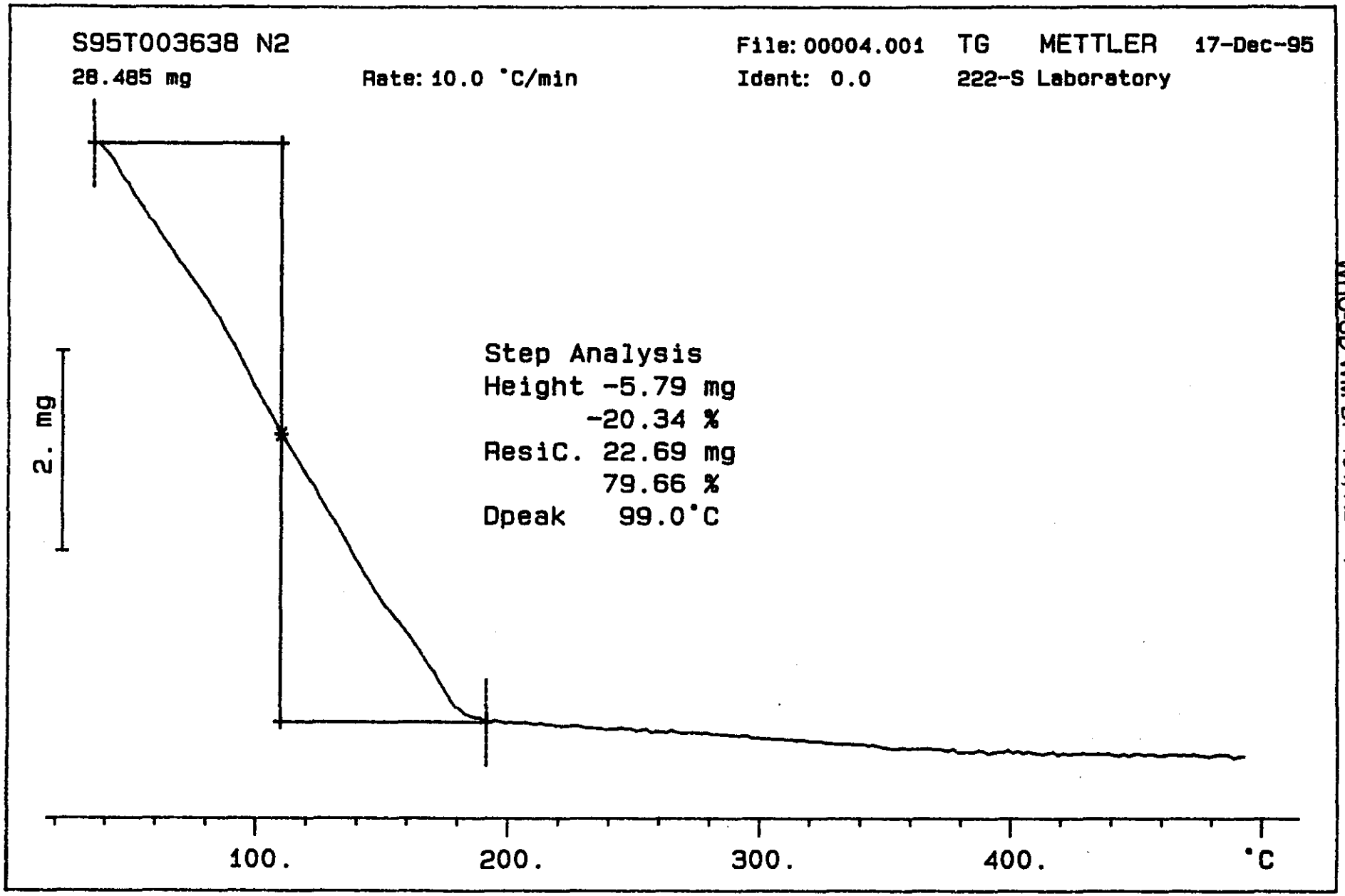
Data Entry Comments:

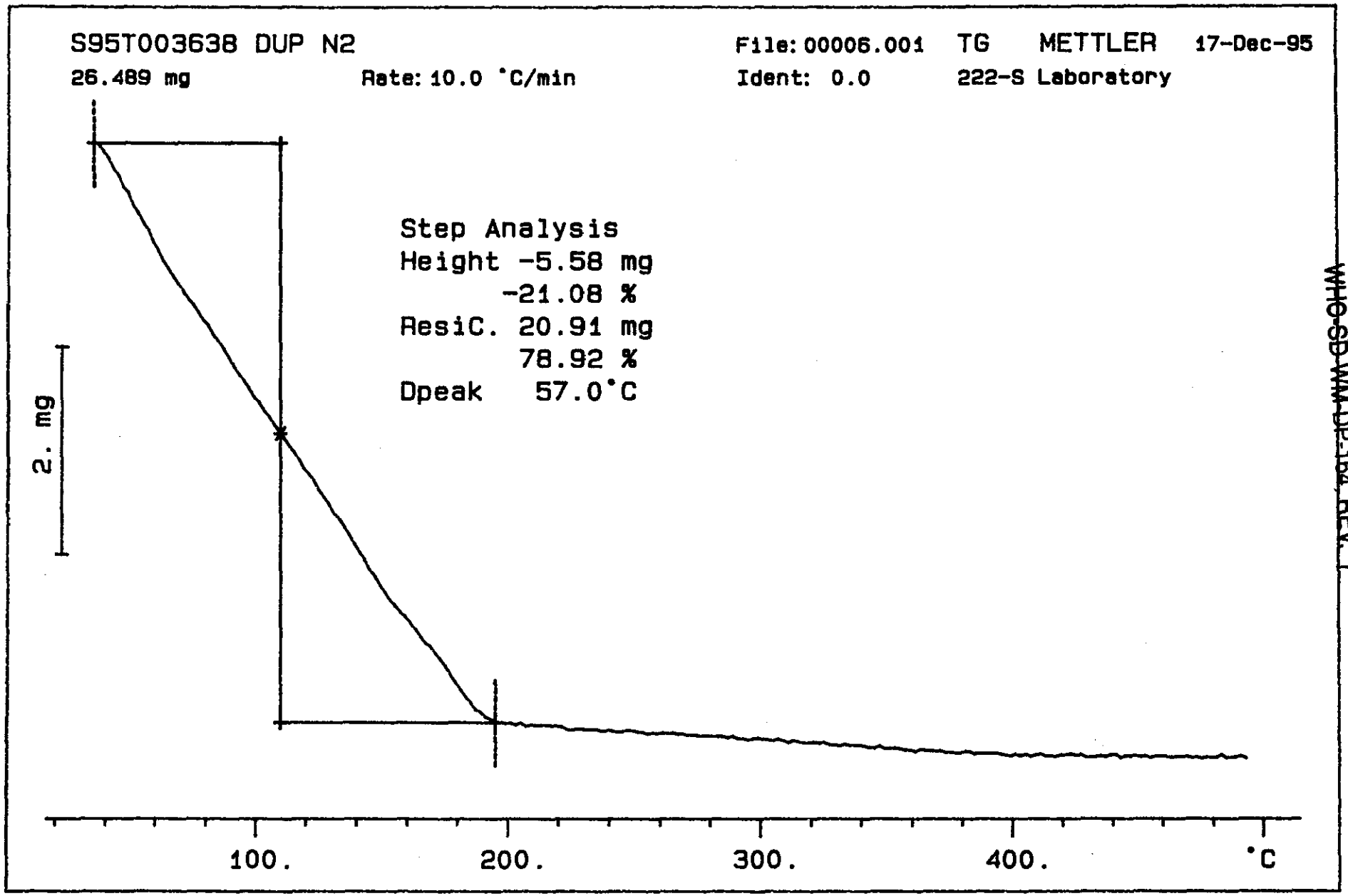
Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

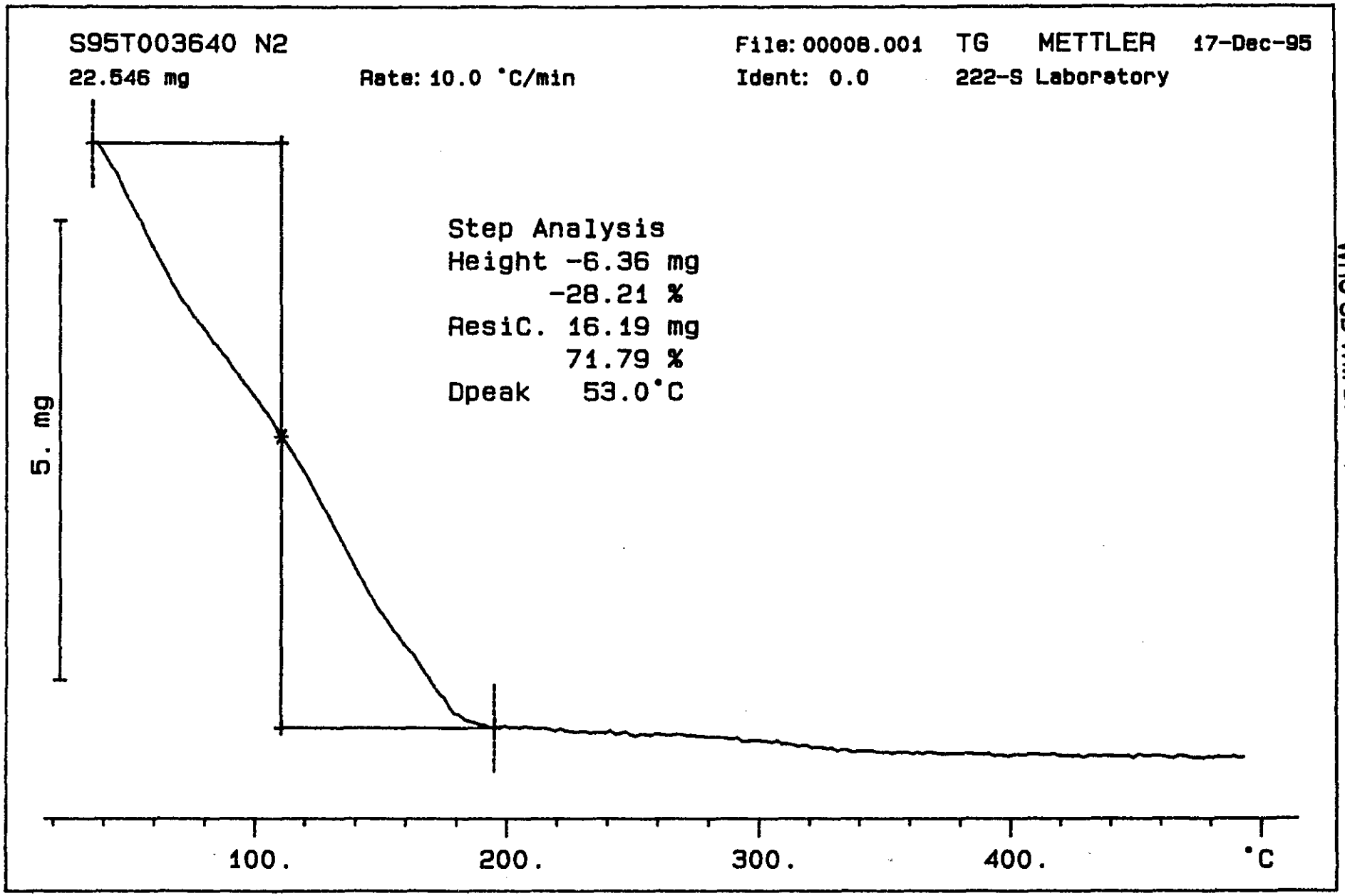
SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 2-183 TO 2-187.

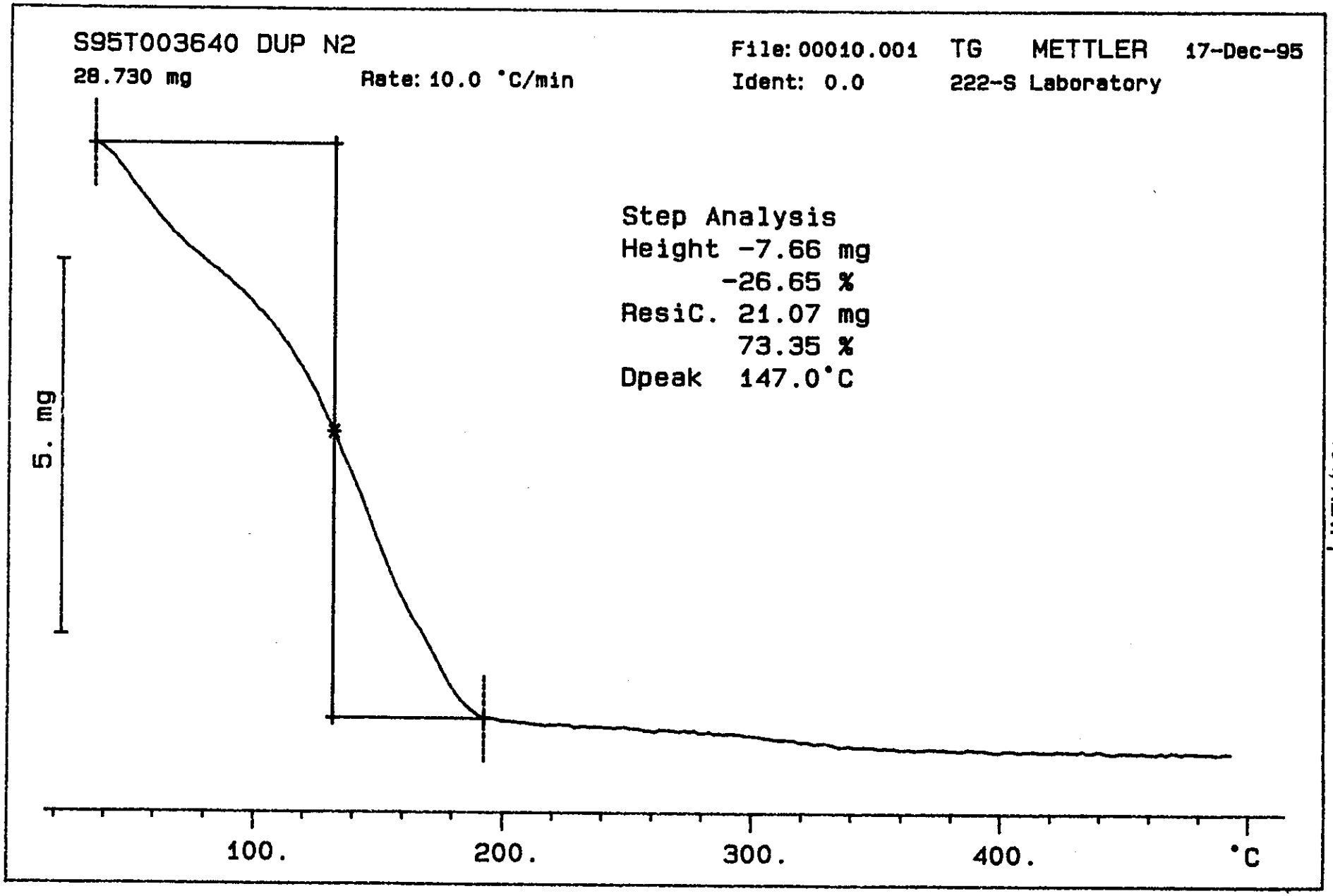


Susie M Dulton 12-17-95


S95T003638 N2
28.485 mg
Rate: 10.0 °C/min
File: 00004.001
TG
METTLER
17-Dec-95
Ident: 0.0
222-S Laboratory
Step Analysis
Height -5.79 mg
-20.34 %
ResiC. 22.69 mg
79.66 %
Dpeak 99.0°C
2. mg
100.
200.
300.
400.
°C


S95T003638 DUP N2
26.489 mg
Rate: 10.0 °C/min
File: 00006.001
TG METTLER 17-Dec-95
Ident: 0.0
222-S Laboratory
Step Analysis
Height -5.58 mg
-21.08 %
ResiC. 20.91 mg
78.92 %
Dpeak 57.0°C
2. mg
100.
200.
300.
400.
°C


S95T003640 N2
22.546 mg
Rate: 10.0 °C/min
File: 00008.001
TG
METTLER
17-Dec-95
Ident: 0.0
222-S Laboratory
Step Analysis
Height -6.36 mg
-28.21 %
ResiC. 16.19 mg
71.79 %
Dpeak 53.0°C
5. mg
100.
200.
300.
400.
°C


S95T003640 DUP N2
28.730 mg
Rate: 10.0 °C/min
File: 00010.001
TG METTLER
17-Dec-95
Ident: 0.0
222-S Laboratory
Step Analysis
Height -7.66 mg
-26.65 %
ResiC. 21.07 mg
73.35 %
Dpeak 147.0°C
5. mg
100.
200.
300.
400.
°C

LABCORE Data Entry Template for Worklist# 4127

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

Method: LA-560-112 Rev/Mod B-1

Worklist Comment: Please run BY-104 TGAs under N2. bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA-01	SOLID	59.74	59.76	N/A	%
95000180	BY104 ROTARY	2	SAMPLE	S95T003529	0		TGA-01	SOLID	N/A	16.52		%
95000180	BY104 ROTARY	3	DUP	S95T003529	0		TGA-01	SOLID	16.52	12.96	N/A	%
95000180	BY104 ROTARY	4	SAMPLE	S95T003648	0		TGA-01	SOLID	N/A	35.26		%
95000180	BY104 ROTARY	5	DUP	S95T003648	0		TGA-01	SOLID	35.26	33.59	N/A	%

Final page for worklist # 4127

Analyst Signature Date

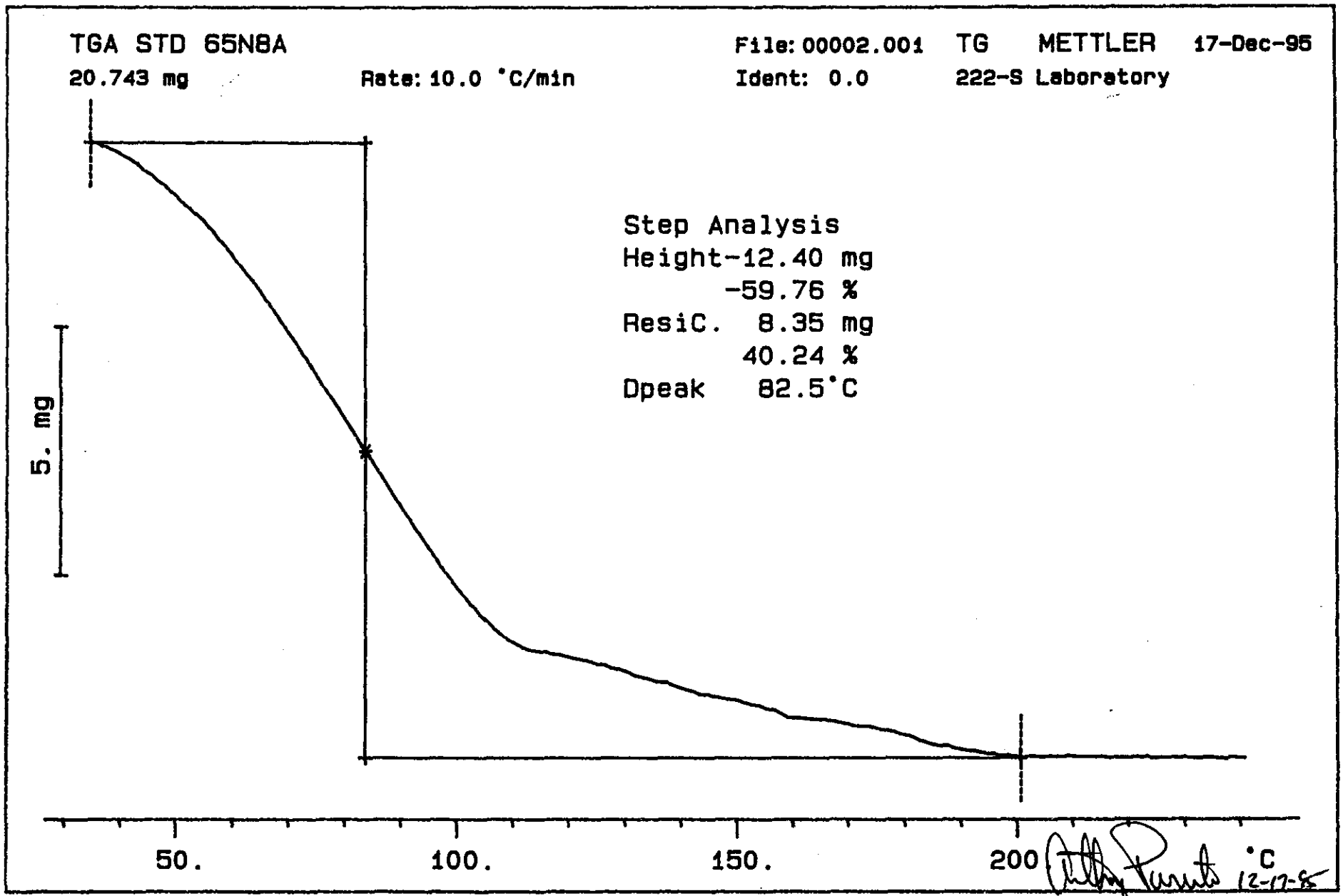
Analyst Signature Date 12-19-95

Verified 12/21/95 J. M Frye

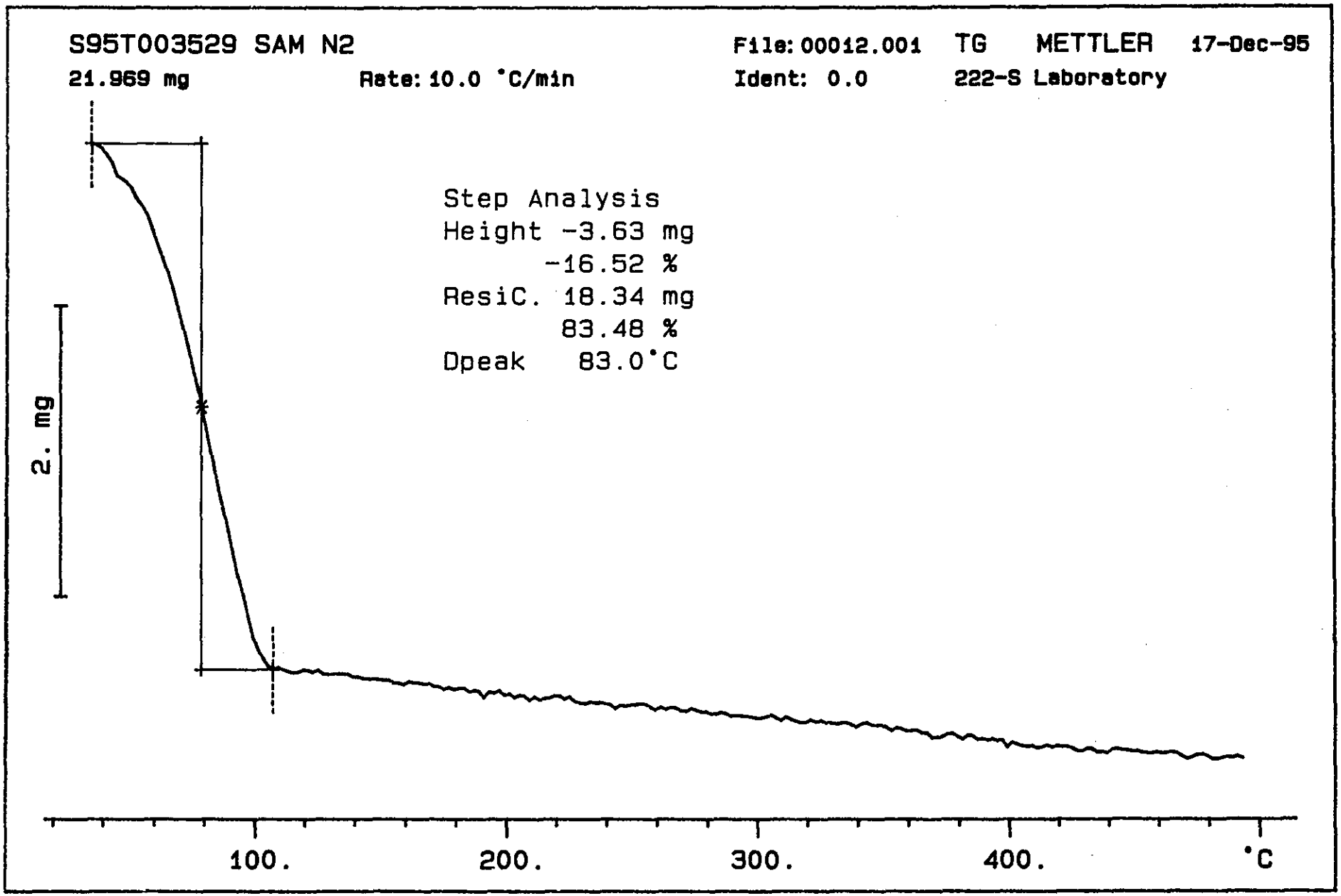
Data Entry Comments: S95T003648 produced another weight loss step of 3.60% at approximately 340°C. for the results the chemist summed the first two weight loss steps.

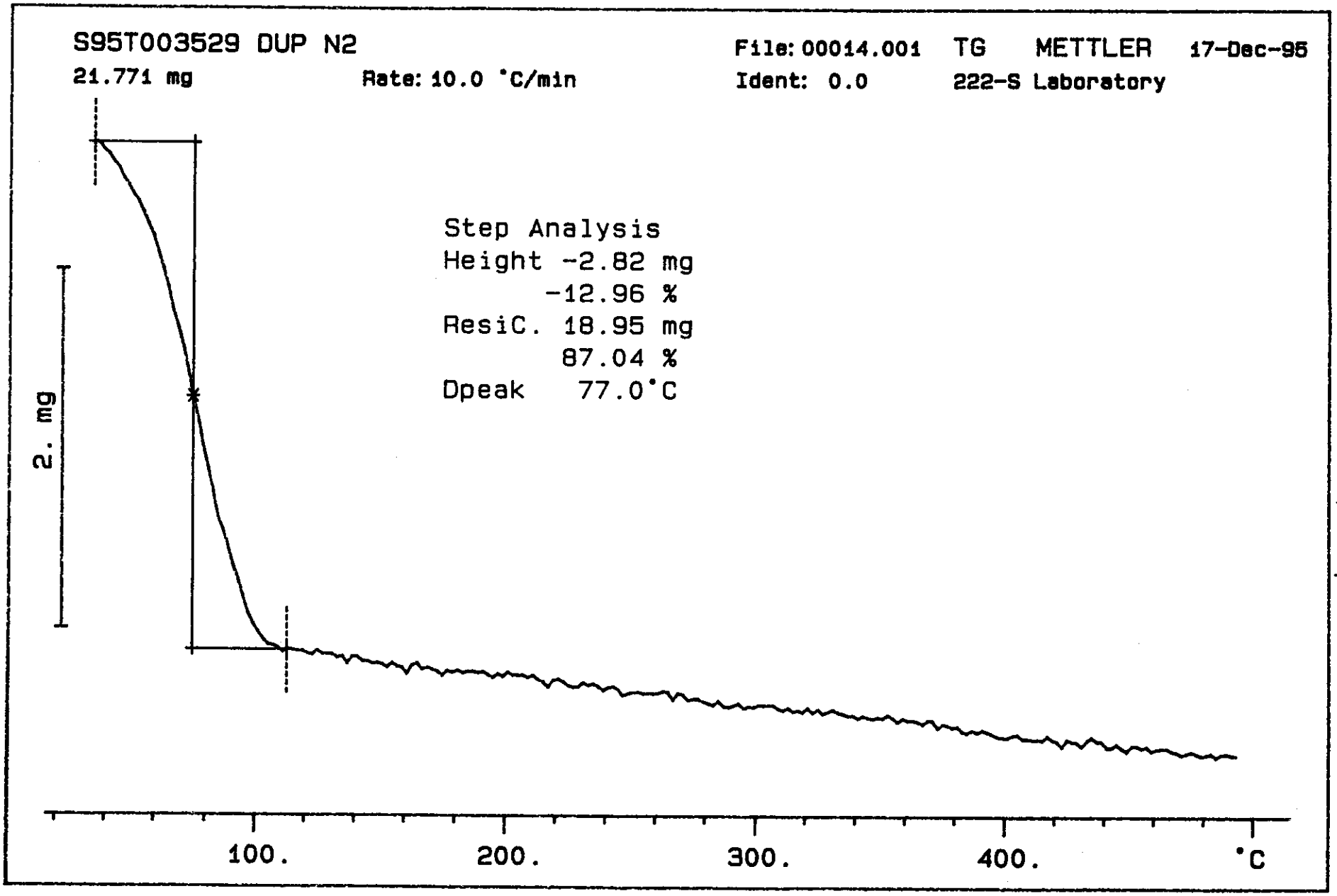
Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

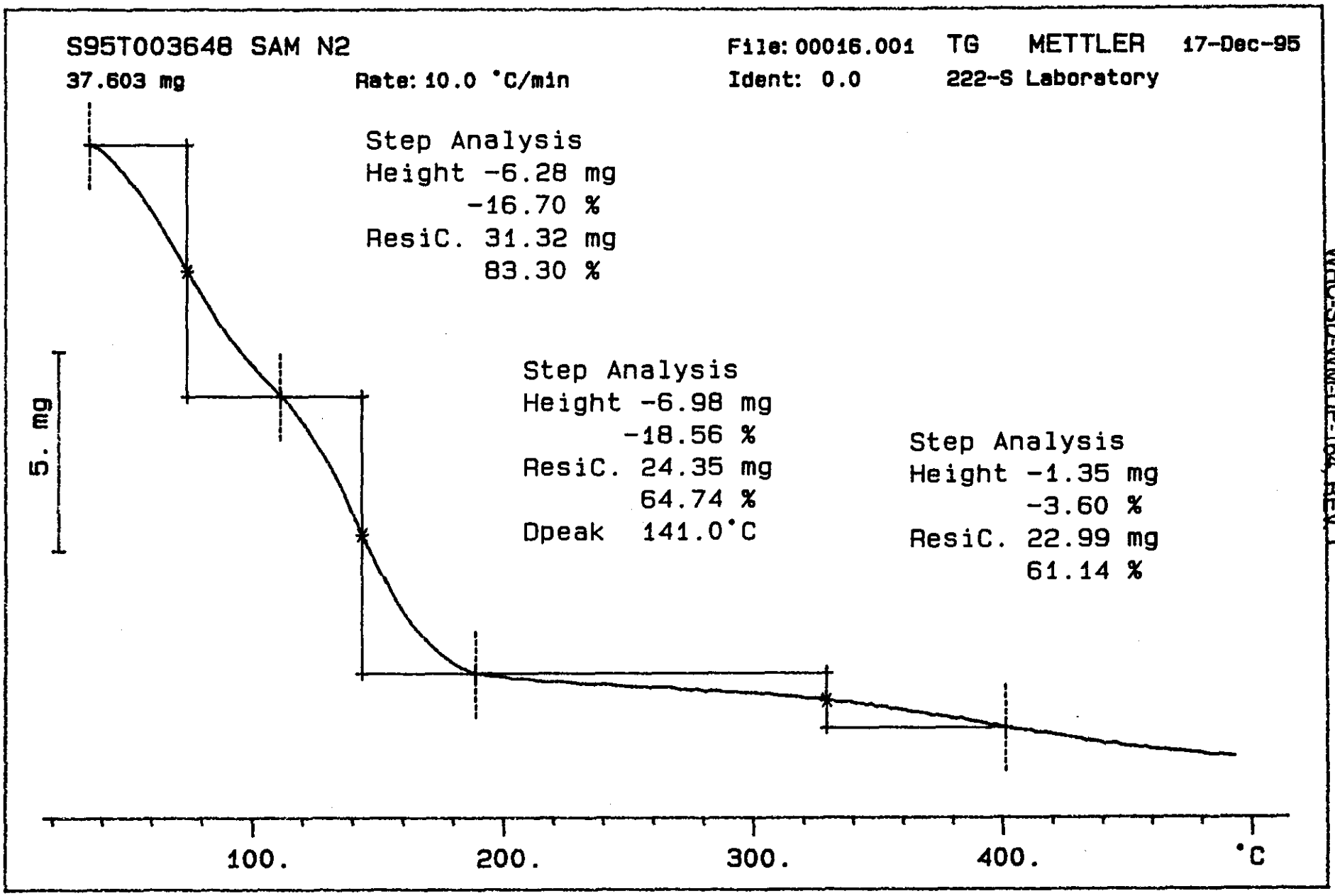
SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 2-189 TO 2-193.

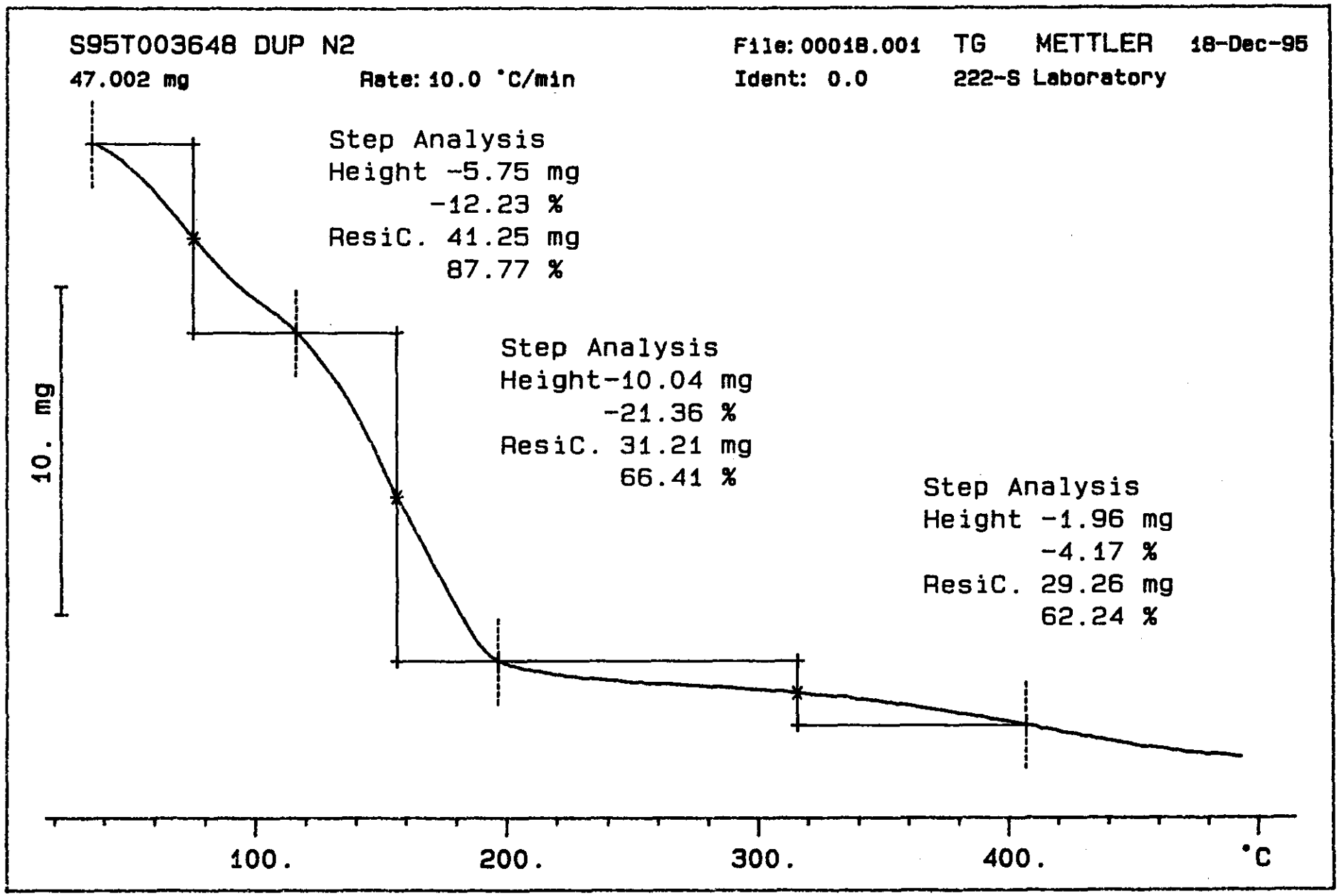


Cathy Parente 12-17-95


S95T003529 SAM N2
21.969 mg
Rate: 10.0 °C/min
File: 00012.001
TG METTLER 17-Dec-95
Ident: 0.0
222-S Laboratory
Step Analysis
Height -3.63 mg
-16.52 %
ResiC. 18.34 mg
83.48 %
Dpeak 83.0°C
2. mg
100.
200.
300.
400.
°C


S95T003529 DUP N2
21.771 mg
Rate: 10.0 °C/min
File: 00014.001
TG
METTLER
17-Dec-95
Ident: 0.0
222-S Laboratory
Step Analysis
Height -2.82 mg
-12.96 %
ResiC. 18.95 mg
87.04 %
Dpeak 77.0°C
2. mg
100.
200.
300.
400.
°C


S95T003648 SAM N2
37.603 mg
Rate: 10.0 °C/min
File: 00016.001
Ident: 0.0
TG
METTLER
17-Dec-95
222-S Laboratory
Step Analysis
Height -6.28 mg
-16.70 %
ResiC. 31.32 mg
83.30 %
Step Analysis
Height -6.98 mg
-18.56 %
ResiC. 24.35 mg
64.74 %
Dpeak 141.0°C
Step Analysis
Height -1.35 mg
-3.60 %
ResiC. 22.99 mg
61.14 %
5. mg
100.
200.
300.
400.
°C


S95T003648 DUP N2
47.002 mg
Rate: 10.0 °C/min
File: 00018.001
Ident: 0.0
TG
METTLER
18-Dec-95
222-S Laboratory
Step Analysis
Height -5.75 mg
-12.23 %
ResiC. 41.25 mg
87.77 %
Step Analysis
Height-10.04 mg
-21.36 %
ResiC. 31.21 mg
66.41 %
Step Analysis
Height -1.96 mg
-4.17 %
ResiC. 29.26 mg
62.24 %
10. mg
100.
200.
300.
400.
°C

LABCORE Data Entry Template for Worklist# 4128

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

Method: LA-560-112 Rev/Mod B-1

Worklist Comment: Please run BY-104 TGAs under N2. bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA-01	SOLID	12/19/95 BDV ~~59.58~~ 59.74	59.58*	N/A	%
95000180	BY104 ROTARY	2	SAMPLE	S95T003637	0		TGA-01	SOLID	N/A	31.67		%
95000180	BY104 ROTARY	3	DUP	S95T003637	0		TGA-01	SOLID	31.67	25.16	N/A	%
95000180	BY104 ROTARY	4	SAMPLE	S95T003641	0		TGA-01	SOLID	N/A	33.92		%
		5	STD				TGA-01	SOLID	59.74	60.58	N/A	%
95000180	BY104 ROTARY	6	DUP	S95T003641	0		TGA-01	SOLID	33.92	33.91	N/A	%

Final page for worklist # 4128

Analyst Signature Date

Gary Hammitt 12-20-95
Analyst Signature Date

Verified 12/21/95 JM Fuge

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# 4128

Analyst: ADP **Instrument:** TGA0 **Book #** 65N8A

Method: LA-560-112 Rev/Mod B-1

Worklist Comment: Please run BY-104 TGAs under N2. bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA-01	SOLID			N/A	%
95000180	BY104 ROTARY	2	SAMPLE	S95T003637	0		TGA-01	SOLID	N/A			%
95000180	BY104 ROTARY	3	DUP	S95T003637	0		TGA-01	SOLID			N/A	%
95000180	BY104 ROTARY	4	SAMPLE	S95T003641	0		TGA-01	SOLID	N/A			%
95000180	BY104 ROTARY	5	DUP	S95T003641	0		TGA-01	SOLID			N/A	%

Final page for worklist # 4128

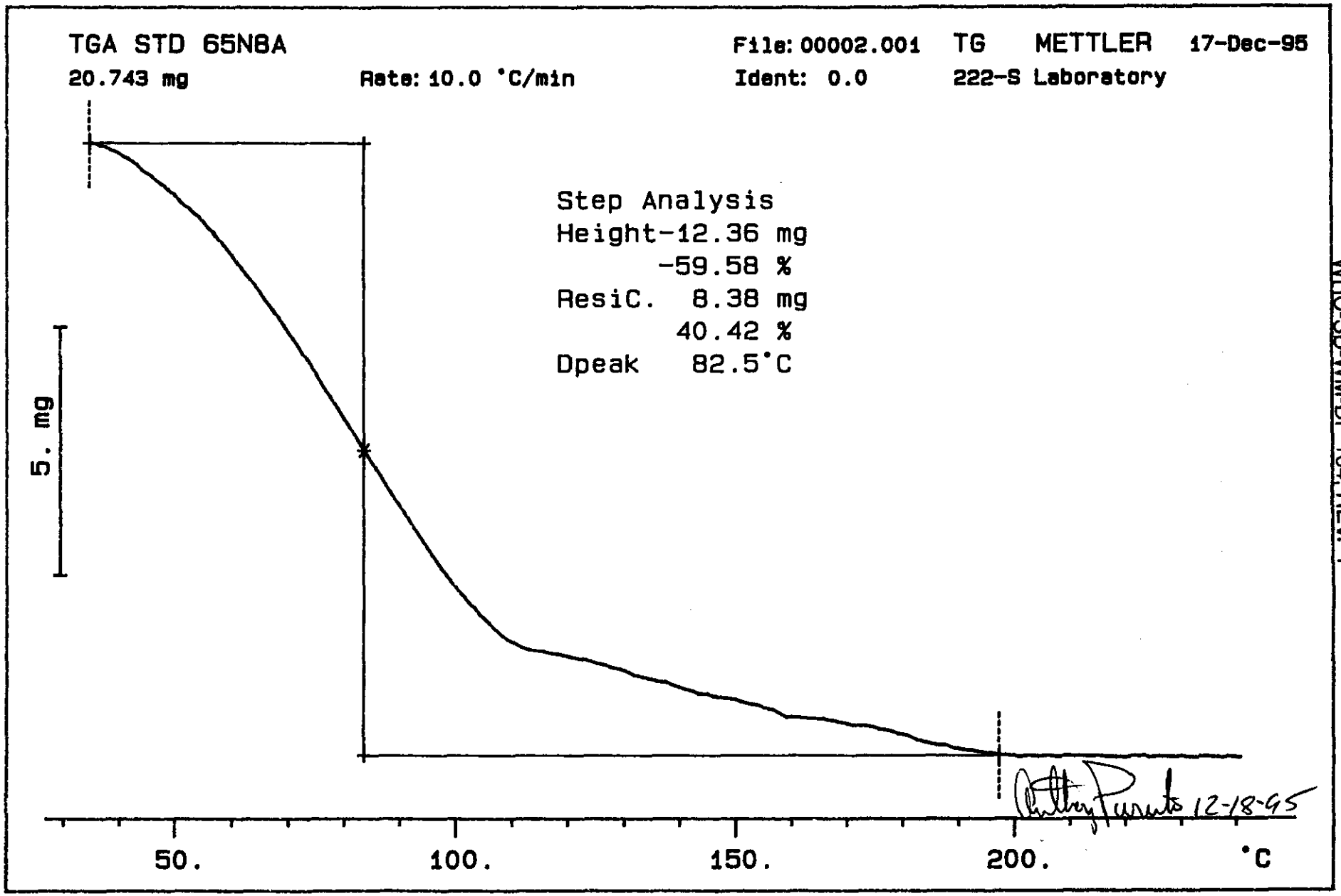
Anthony Puente 12-18-95
Analyst Signature **Date**

Analyst Signature **Date**

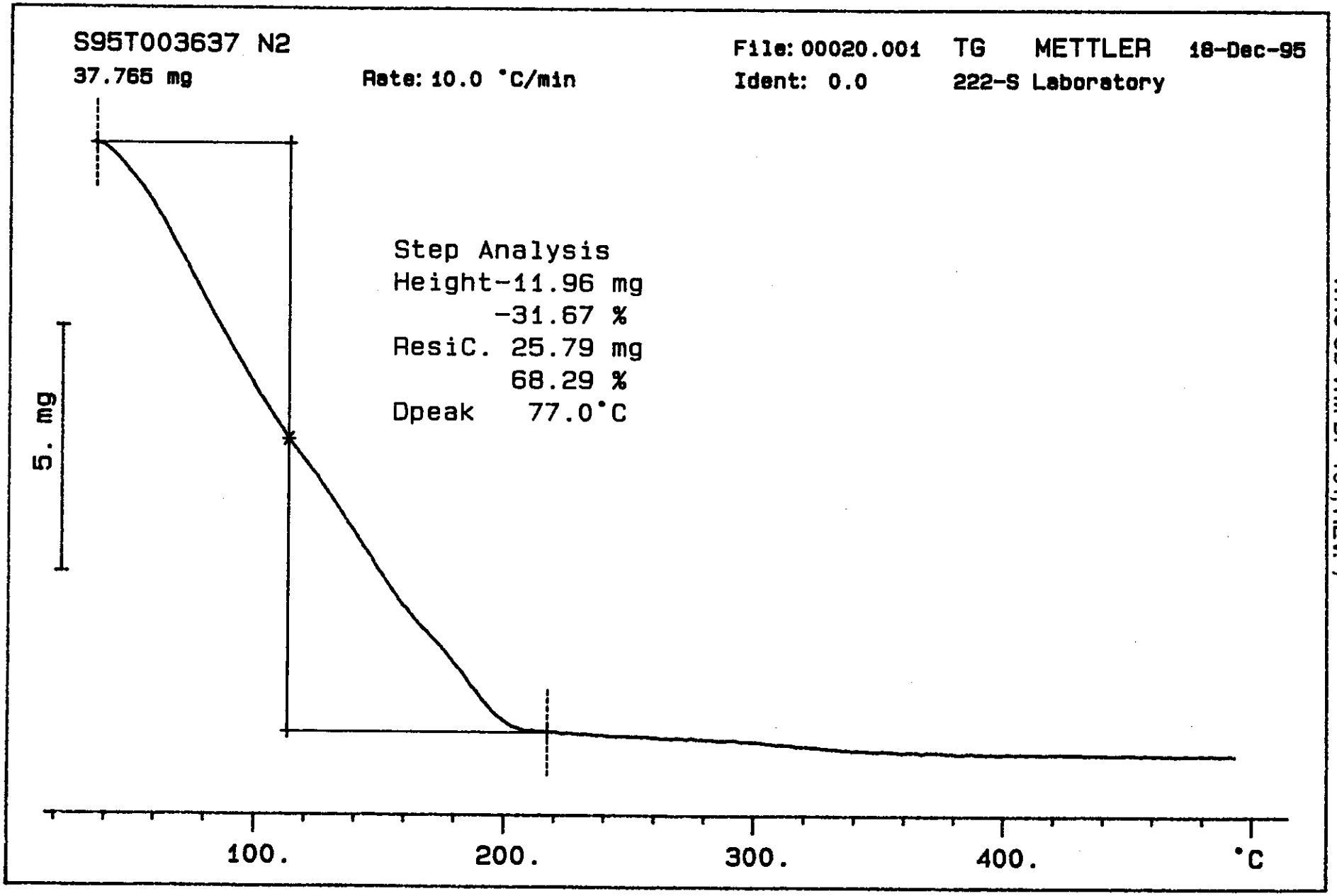
Data Entry Comments:

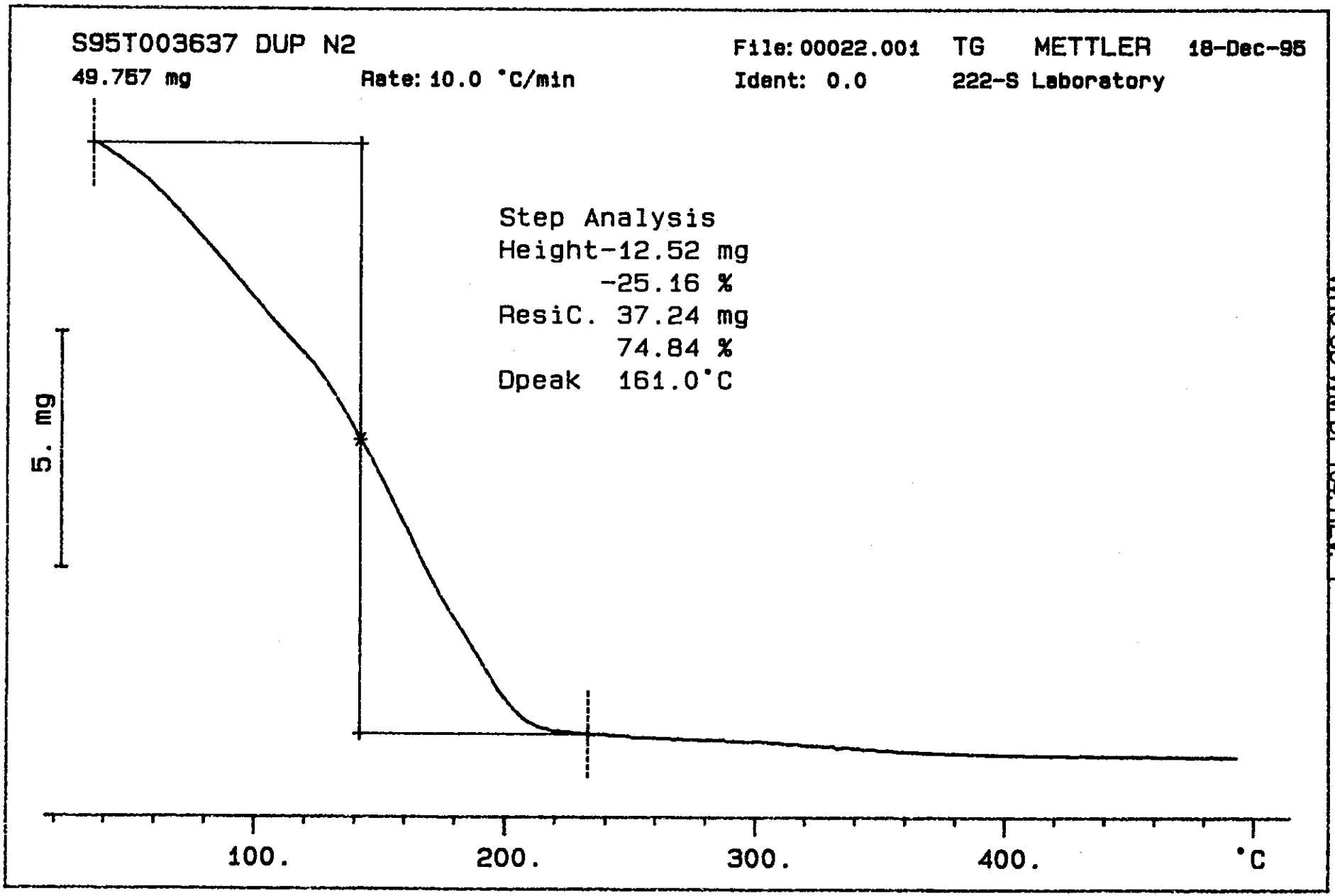
Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

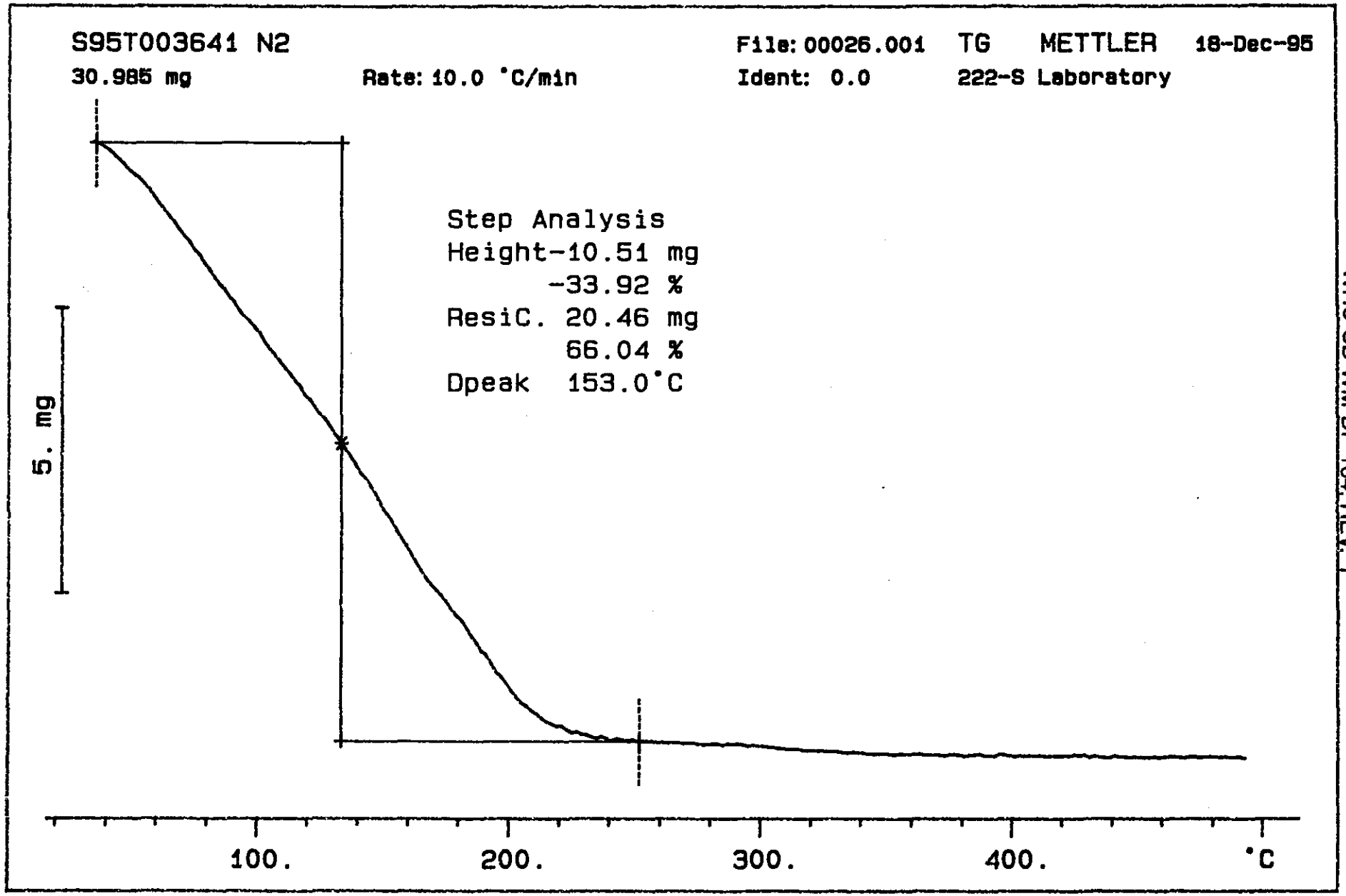
SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 2-196 TO 2-201.

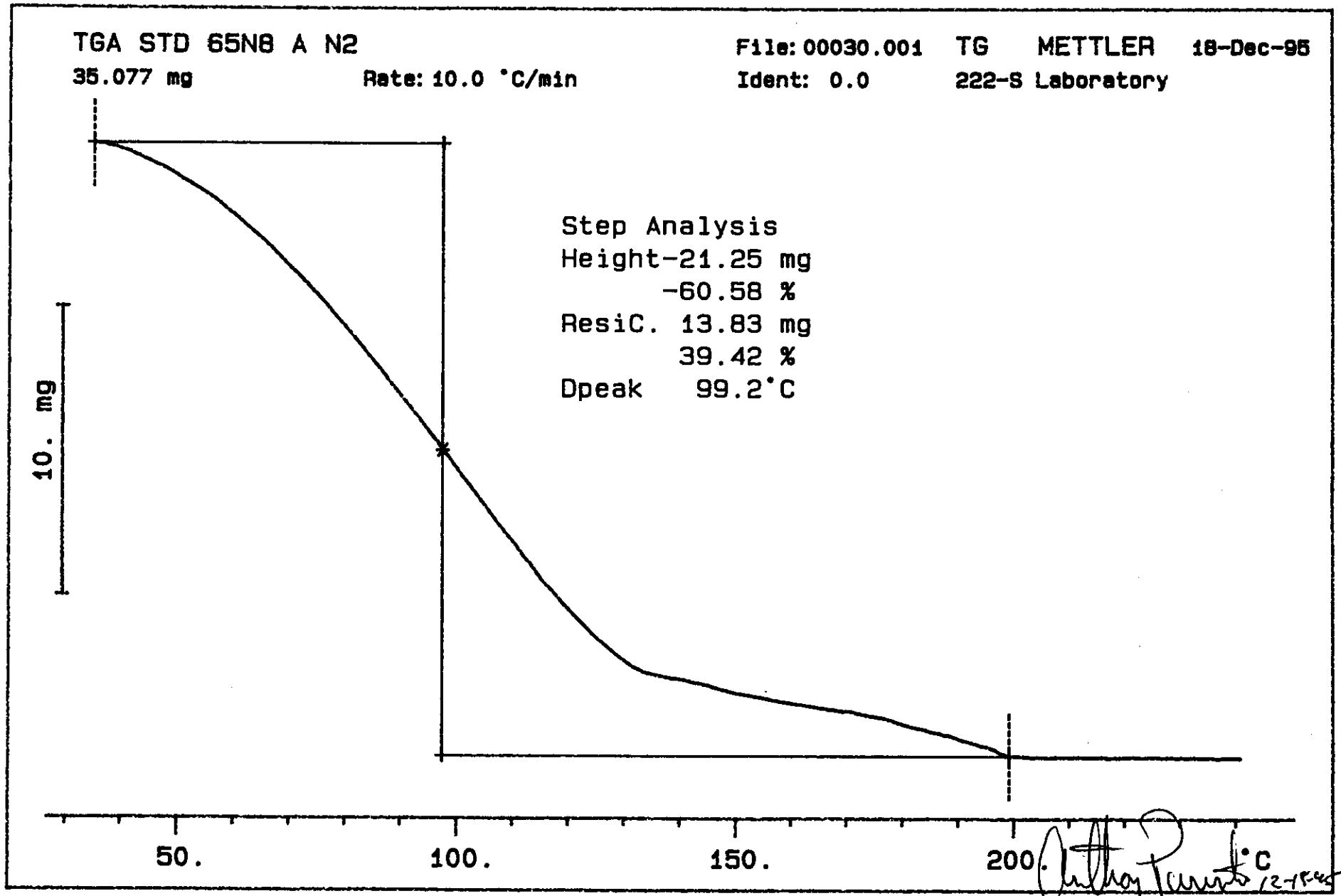


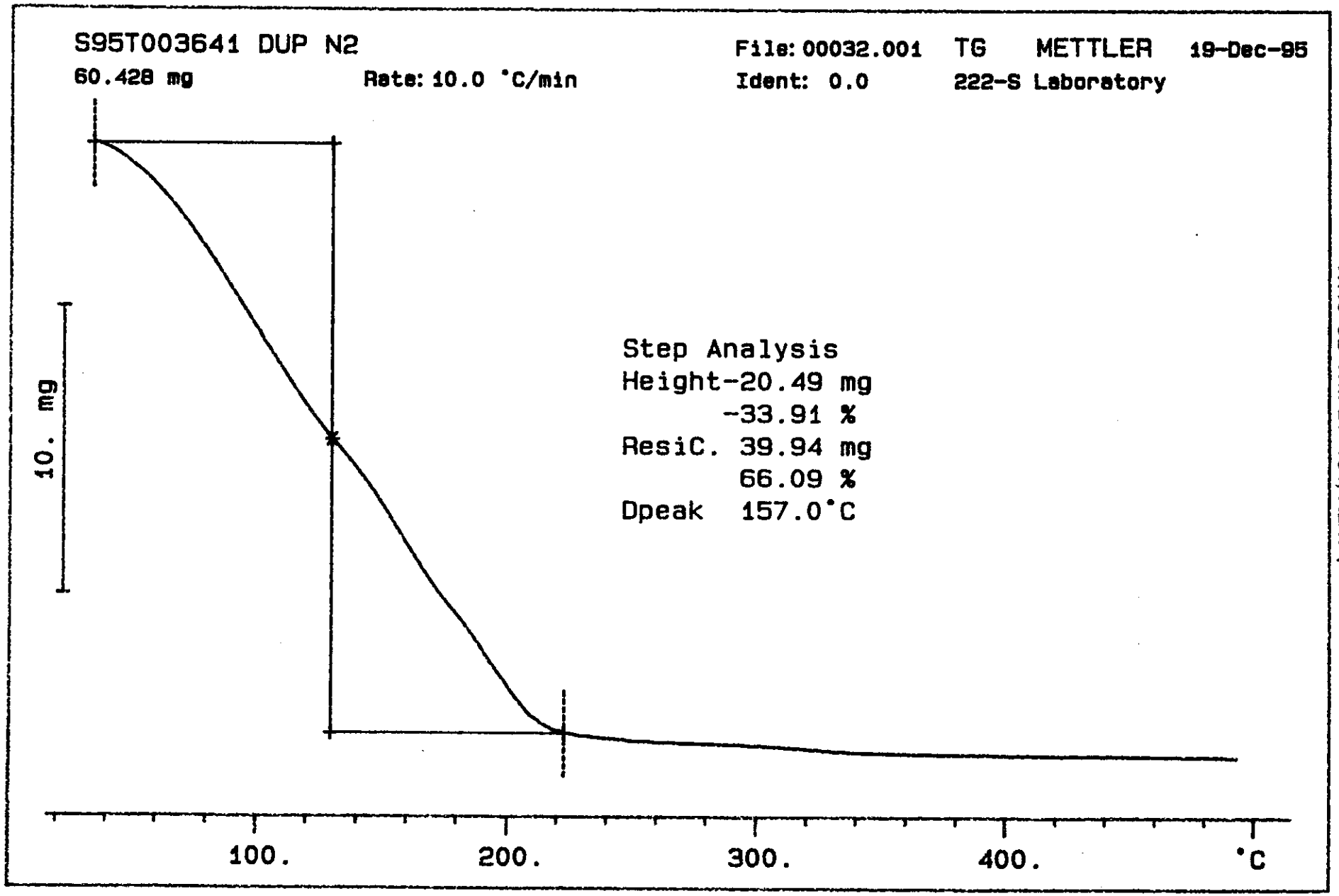
Cathy Pavuto 12-18-95


S95T003637 N2
37.765 mg
Rate: 10.0 °C/min
File: 00020.001
TG
METTLER
18-Dec-95
Ident: 0.0
222-S Laboratory
Step Analysis
Height-11.96 mg
-31.67 %
ResiC. 25.79 mg
68.29 %
Dpeak 77.0°C
5. mg
100.
200.
300.
400.
°C


S95T003637 DUP N2
49.757 mg
Rate: 10.0 °C/min
File: 00022.001
TG
METTLER
18-Dec-95
Ident: 0.0
222-S Laboratory
Step Analysis
Height-12.52 mg
-25.16 %
ResiC. 37.24 mg
74.84 %
Dpeak 161.0°C
5. mg
100.
200.
300.
400.
°C


S95T003641 N2
30.985 mg
Rate: 10.0 °C/min
File: 00026.001
TG
METTLER
18-Dec-95
Ident: 0.0
222-S Laboratory
Step Analysis
Height-10.51 mg
-33.92 %
ResiC. 20.46 mg
66.04 %
Dpeak 153.0°C
5. mg
100.
200.
300.
400.
°C


TGA STD 65N8 A N2
35.077 mg
Rate: 10.0 °C/min
File: 00030.001
TG
METTLER
18-Dec-95
Ident: 0.0
222-S Laboratory
Step Analysis
Height-21.25 mg
-60.58 %
ResiC. 13.83 mg
39.42 %
Dpeak 99.2°C
10. mg
50.
100.
150.
200.
°C


S95T003641 DUP N2
60.428 mg
Rate: 10.0 °C/min
File: 00032.001
TG
METTLER
19-Dec-95
Ident: 0.0
222-S Laboratory
10. mg
Step Analysis
Height-20.49 mg
-33.91 %
ResiC. 39.94 mg
66.09 %
Dpeak 157.0°C
100.
200.
300.
400.
°C

LABCORE Data Entry Template for Worklist# 4129

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

Method: LA-560-112 Rev/Mod B-1

Worklist Comment: Please run BY-104 TGAs under N2. bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA-01	SOLID	59.74	60.53	N/A	%
95000180	BY104 ROTARY	2	SAMPLE	S95T003702	0		TGA-01	SOLID	N/A	12.32		%
95000180	BY104 ROTARY	3	DUP	S95T003702	0		TGA-01	SOLID	12.32	10.10	N/A	%
95000180	BY104 ROTARY	4	SAMPLE	S95T003703	0		TGA-01	SOLID	N/A	12.61		%
95000180	BY104 ROTARY	5	DUP	S95T003703	0		TGA-01	SOLID	12.61	8.98	N/A	%

Final page for worklist # 4129

Anthony Pierantoni 12-18-95
Analyst Signature **Date**

Gary Hamm 12-20-95
Analyst Signature **Date**

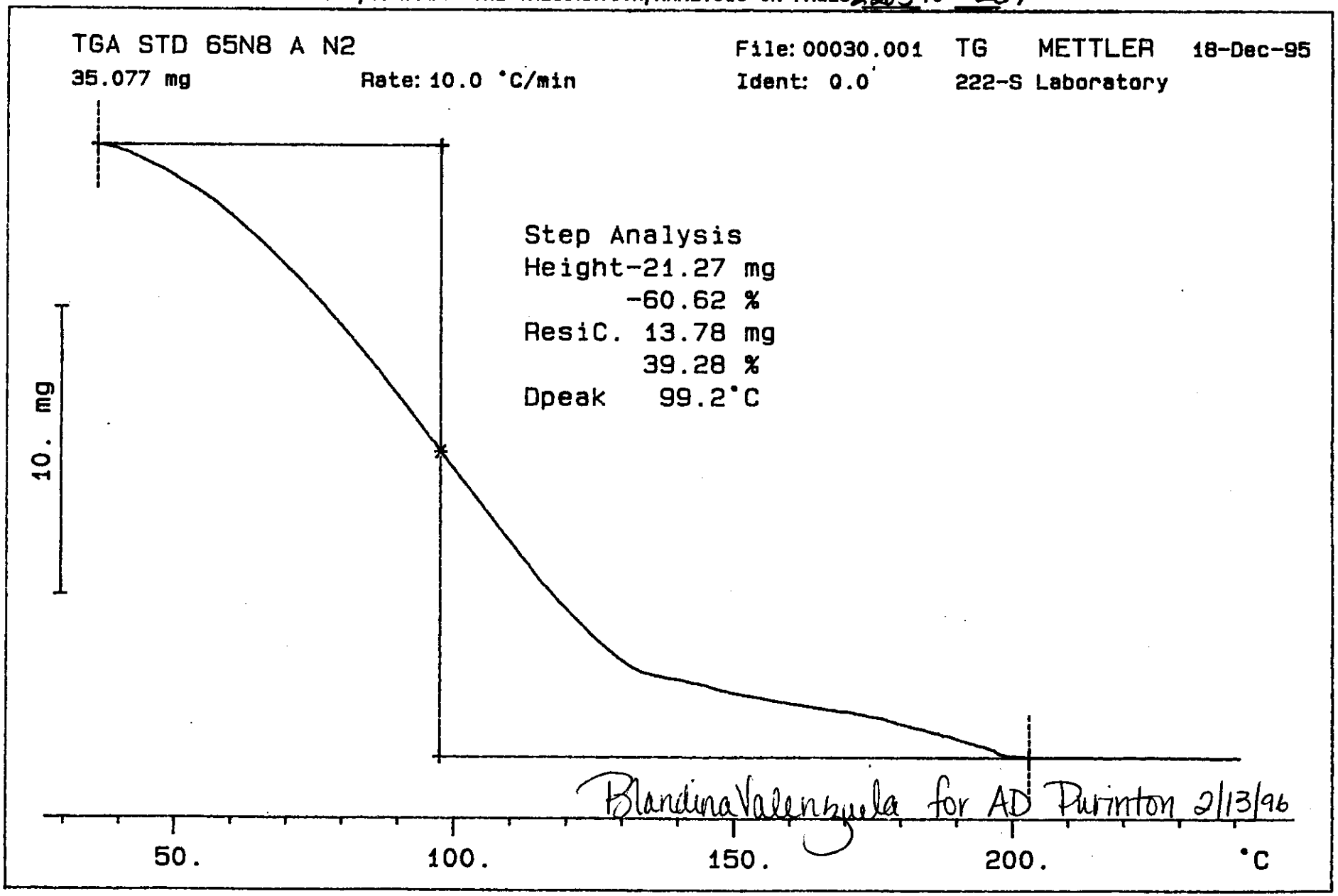
Verified 12/21/95 J M Fye

S95T003702 produced a second weight loss step of .46%

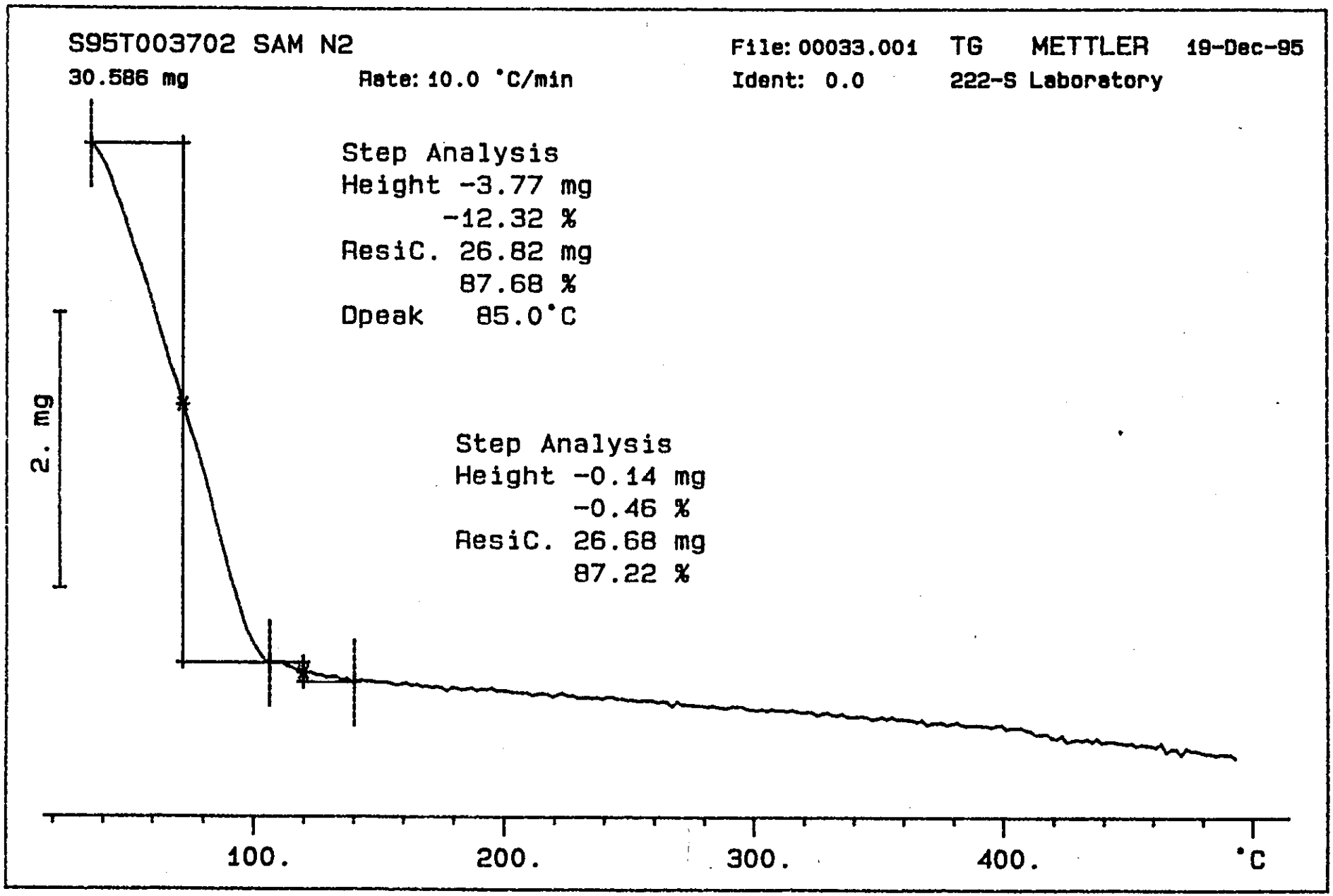
Data Entry Comments:

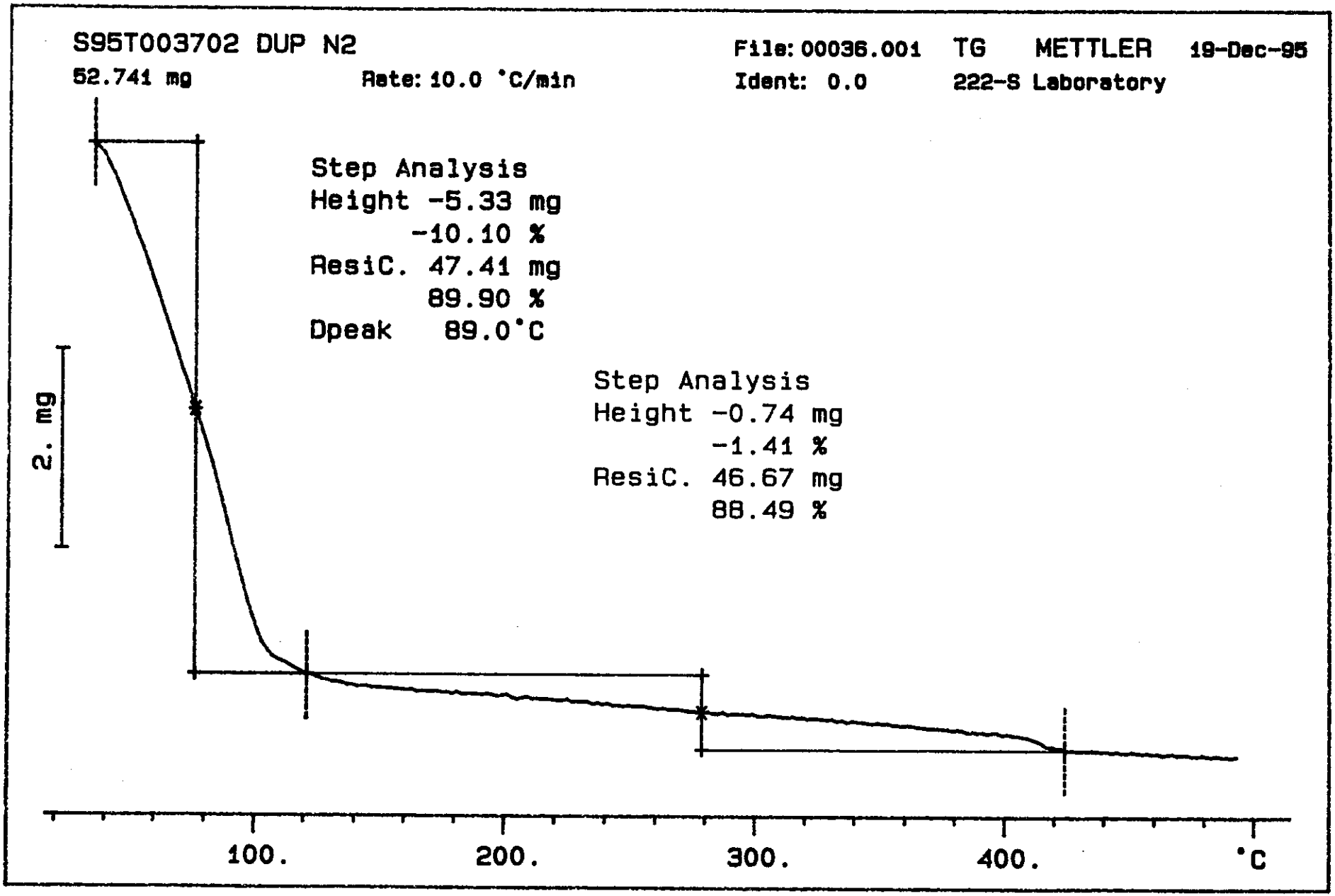
Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

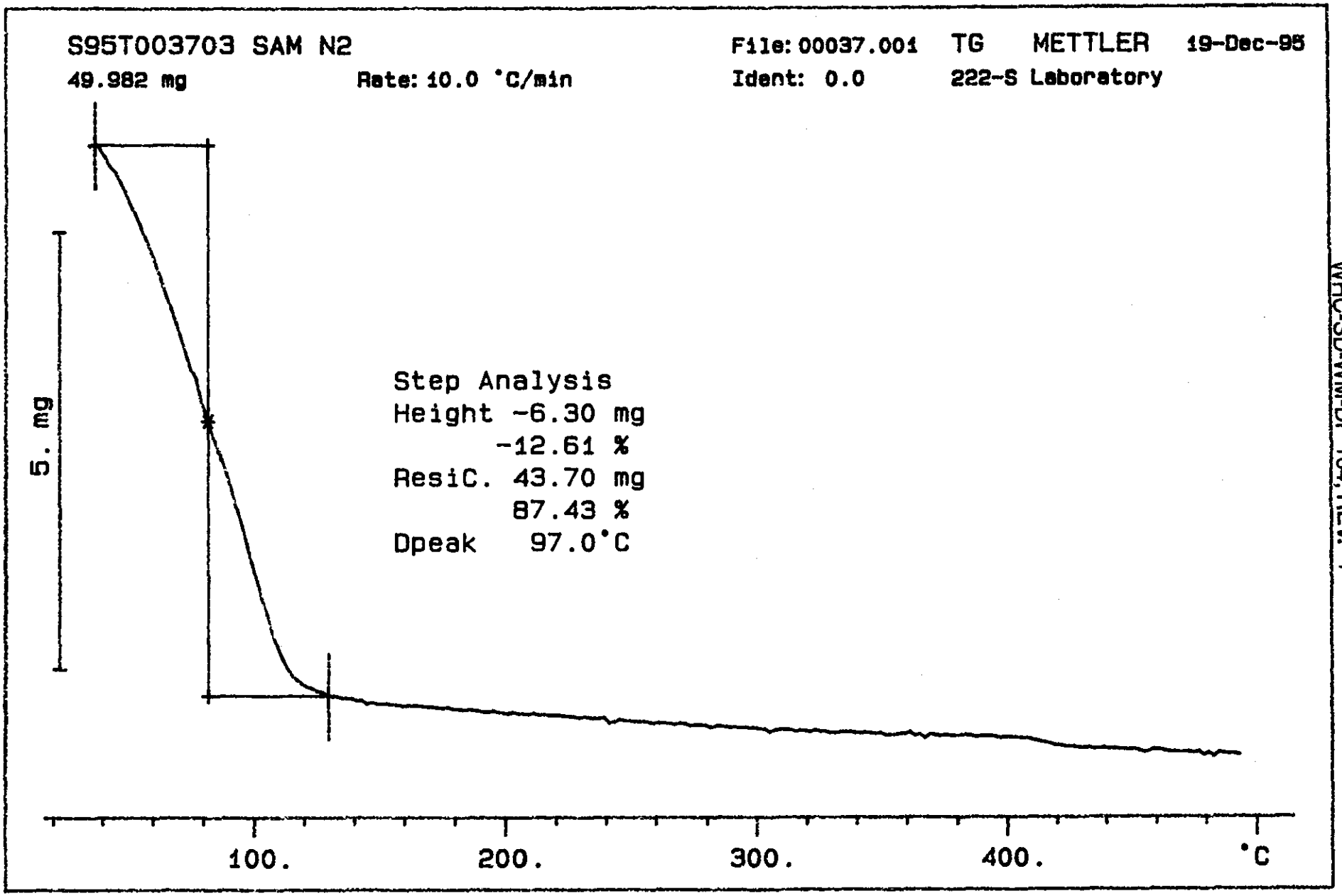
SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 2-203 TO 2-207

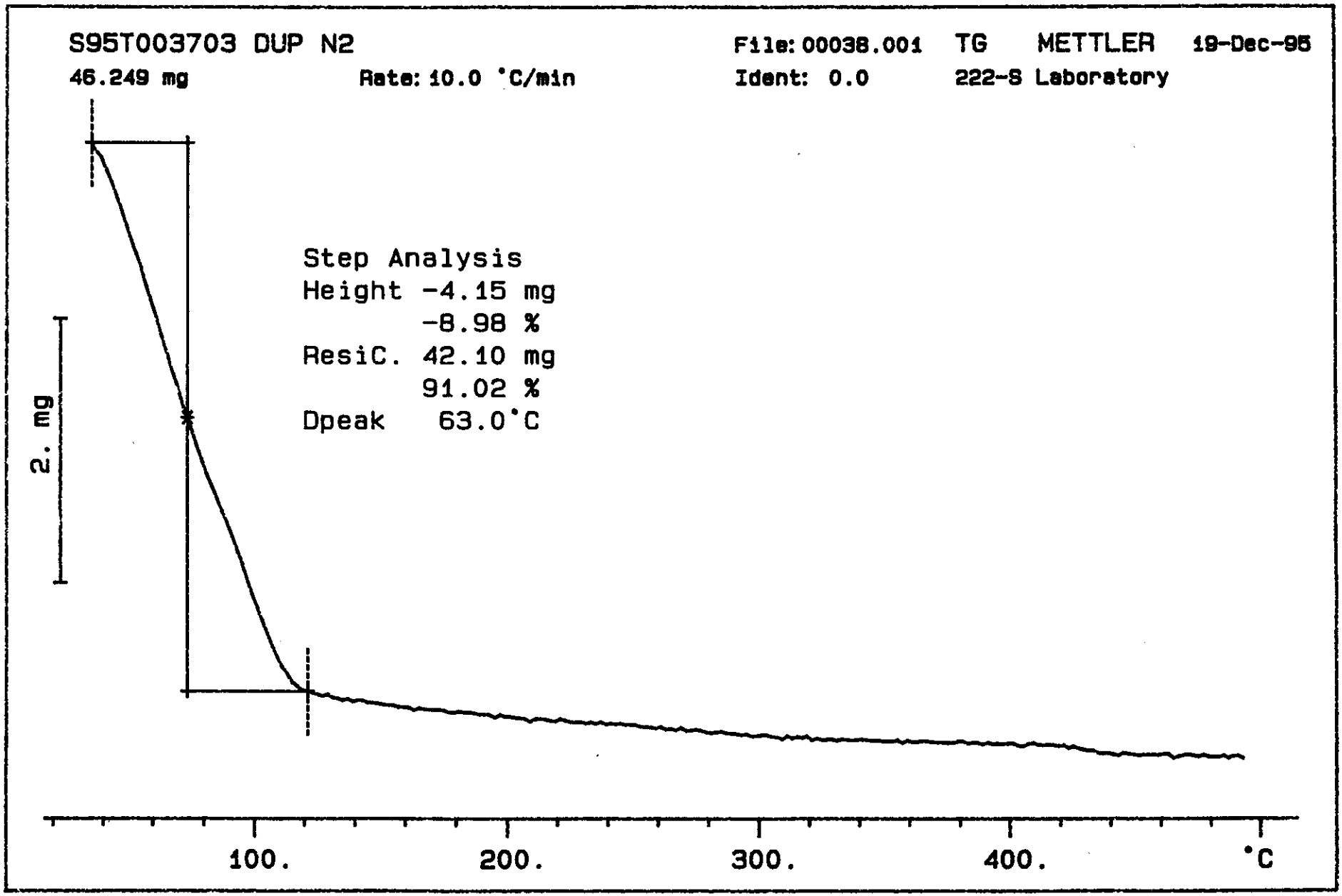


Blandina Valenzuela for AD Purinton 2/13/96


S95T003702 SAM N2
30.586 mg
Rate: 10.0 °C/min
File: 00033.001
TG
METTLER
19-Dec-95
Ident: 0.0
222-S Laboratory
Step Analysis
Height -3.77 mg
-12.32 %
ResiC. 26.82 mg
87.68 %
Dpeak 85.0°C
Step Analysis
Height -0.14 mg
-0.46 %
ResiC. 26.68 mg
87.22 %
2. mg
100.
200.
300.
400.
°C


S95T003702 DUP N2
52.741 mg
Rate: 10.0 °C/min
File: 00036.001
TG
METTLER
19-Dec-95
Ident: 0.0
222-S Laboratory
Step Analysis
Height -5.33 mg
-10.10 %
ResiC. 47.41 mg
89.90 %
Dpeak 89.0°C
Step Analysis
Height -0.74 mg
-1.41 %
ResiC. 46.67 mg
88.49 %
2. mg
100.
200.
300.
400.
°C


S95T003703 SAM N2
49.982 mg
Rate: 10.0 °C/min
File: 00037.001
Ident: 0.0
TG
METTLER
19-Dec-95
222-S Laboratory
Step Analysis
Height -6.30 mg
-12.61 %
ResiC. 43.70 mg
87.43 %
Dpeak 97.0°C
5. mg
100.
200.
300.
400.
°C


S95T003703 DUP N2
46.249 mg
Rate: 10.0 °C/min
File: 00038.001
TG
METTLER
19-Dec-95
Ident: 0.0
222-S Laboratory
Step Analysis
Height -4.15 mg
-8.98 %
ResiC. 42.10 mg
91.02 %
Dpeak 63.0°C
2. mg
100.
200.
300.
400.
°C

LABCORE Data Entry Template for Worklist# 4460

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

Method: LA-560-112 Rev/Mod B-1

Worklist Comment: Please run BY-104 TGAs under N2. bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA-01	LIQUID	59.74	57.88*	N/A	%
95000180	BY104 ROTARY	2	SAMPLE	S95T003713	0		TGA-01	LIQUID	N/A	100.16		%
95000180	BY104 ROTARY	3	DUP	S95T003713	0		TGA-01	LIQUID	100.16	100.34	N/A	%

Final page for worklist # 4460

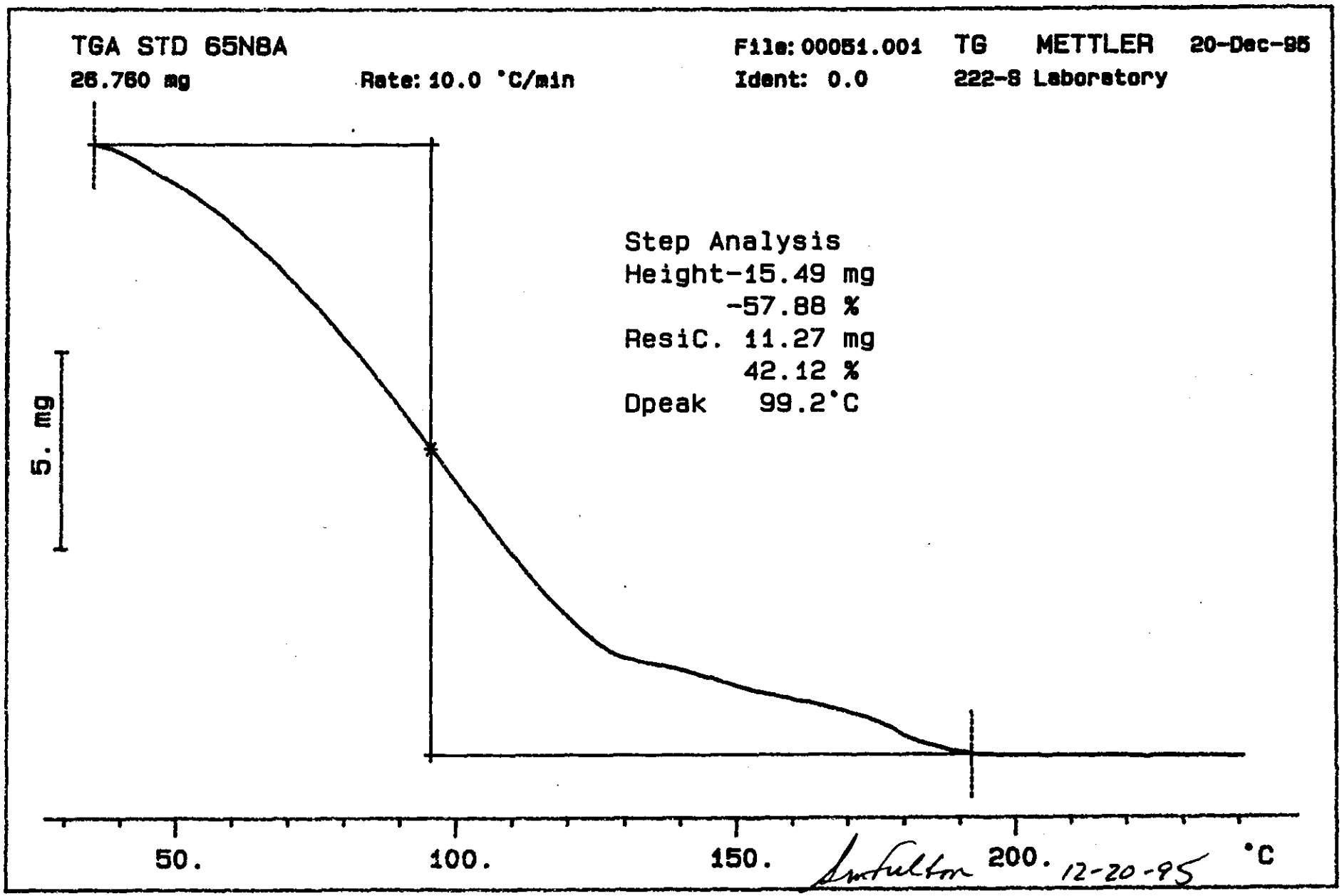
Sm Fulton 12-20-95
Analyst Signature Date

Linda Conlin 12-31-95
Analyst Signature Date

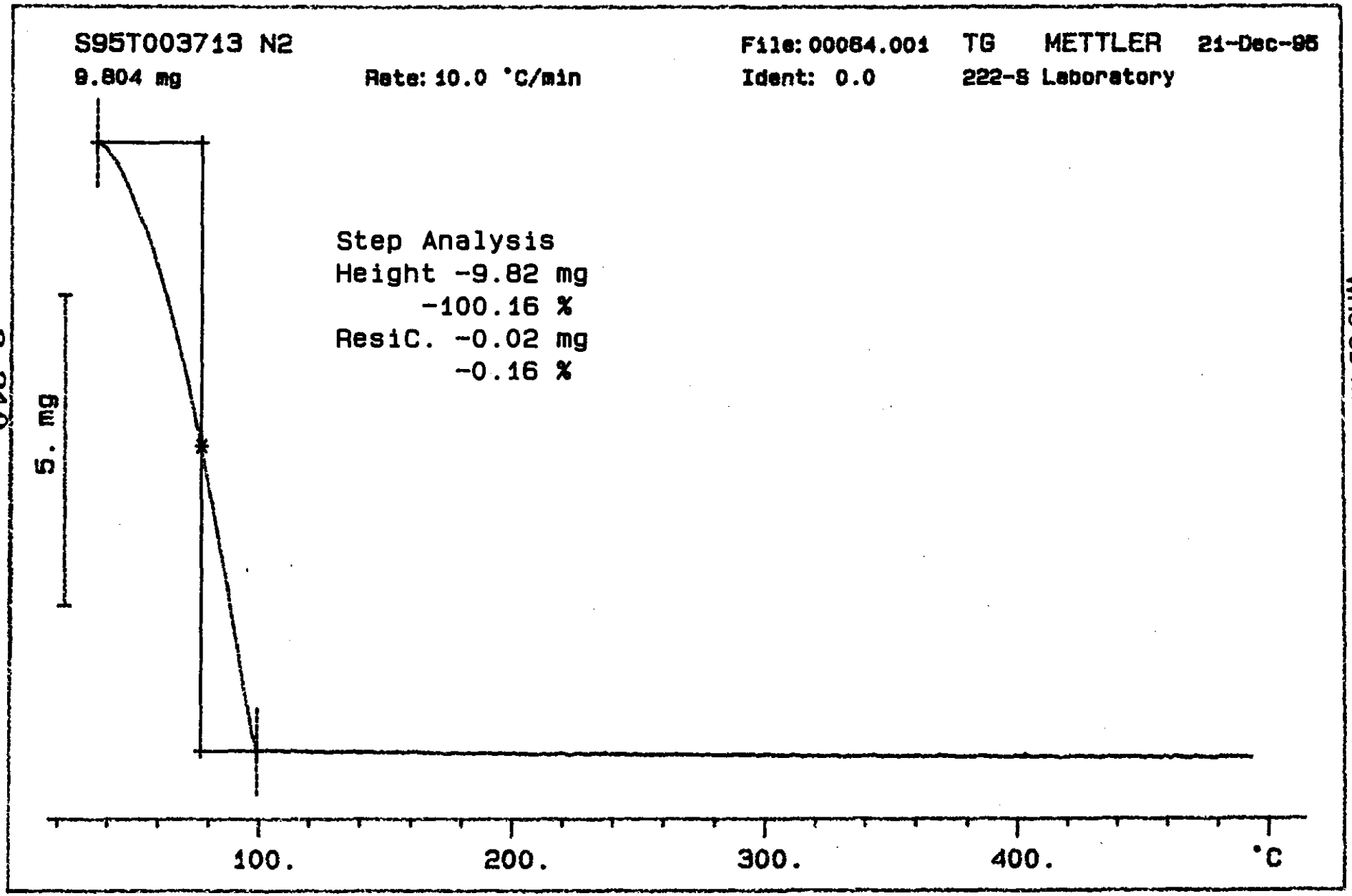
Data Entry Comments:

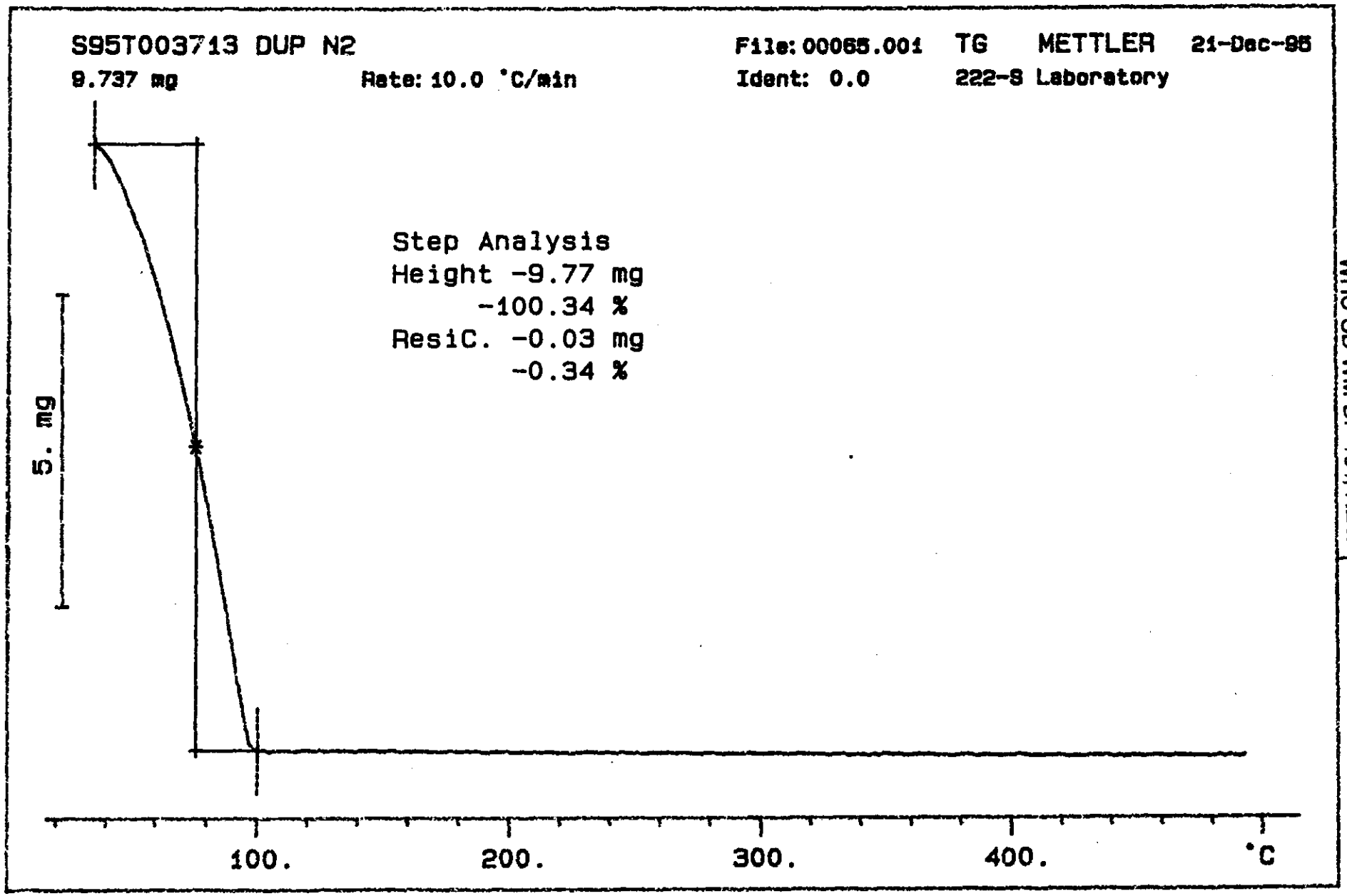
Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 2-209 TO 2-212.



12-20-95


S95T003713 N2
9.804 mg
Rate: 10.0 °C/min
File: 00084.001
TG METTLER 21-Dec-95
Ident: 0.0
222-S Laboratory
Step Analysis
Height -9.82 mg
-100.16 %
ResiC. -0.02 mg
-0.16 %
5. mg
100.
200.
300.
400.
°C


S95T003713 DUP N2
9.737 mg
Rate: 10.0 °C/min
File: 00065.001
Ident: 0.0
TG
METTLER
222-S Laboratory
21-Dec-95
Step Analysis
Height -9.77 mg
-100.34 %
ResiC. -0.03 mg
-0.34 %
5. mg
100.
200.
300.
400.
°C

LABCORE Data Entry Template for Worklist# 4464

Analyst: SMF **Instrument:** TGA0 3 **Book #** 65N8A

Method: LA-514-114 Rev/Mod C-1

Worklist Comment: Please run BY-104 TGAs under N2. bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA-03	SOLID	59.74	60.49	N/A	%
95000180	BY104 ROTARY	2	SAMPLE	S95T003528	0		TGA-03	SOLID	N/A	16.08		%
95000180	BY104 ROTARY	3	DUP	S95T003528	0		TGA-03	SOLID	16.08	16.71	N/A	%
95000180	BY104 ROTARY	4	SAMPLE	S95T003632	0		TGA-03	SOLID	N/A	19.00		%
95000180	BY104 ROTARY	5	DUP	S95T003632	0		TGA-03	SOLID	19.00	22.41	N/A	%

Final page for worklist # 4464

See attached for signatures.
Analyst Signature Date 1/2/96 BDV

Verified by Blandina Valenzuela 1-8-96

[signature] 1-7-96
Analyst Signature Date

S95T003528 produced two additional weight-loss steps of 5.99% and 7.13%.

Data Entry Comments: S95T003632 produced 1/2/96 BDV

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# 4464

Analyst: SMF **Instrument:** TGA0 **Book #** 65N8T

Method: LA-560-112 Rev/Mod

Worklist Comment: Please run BY-104 TGAs under N2. bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA-01	SOLID			N/A	%
95000180	BY104 ROTARY	2	SAMPLE	S95T003528	0		TGA-01	SOLID	N/A			%
95000180	BY104 ROTARY	3	DUP	S95T003528	0		TGA-01	SOLID			N/A	%
95000180	BY104 ROTARY	4	SAMPLE	S95T003632	0		TGA-01	SOLID	N/A			%
95000180	BY104 ROTARY	5	DUP	S95T003632	0		TGA-01	SOLID			N/A	%

Final page for worklist # 4464

Susie M. Fulton 12-20-95
Analyst Signature **Date**

Analyst Signature **Date**

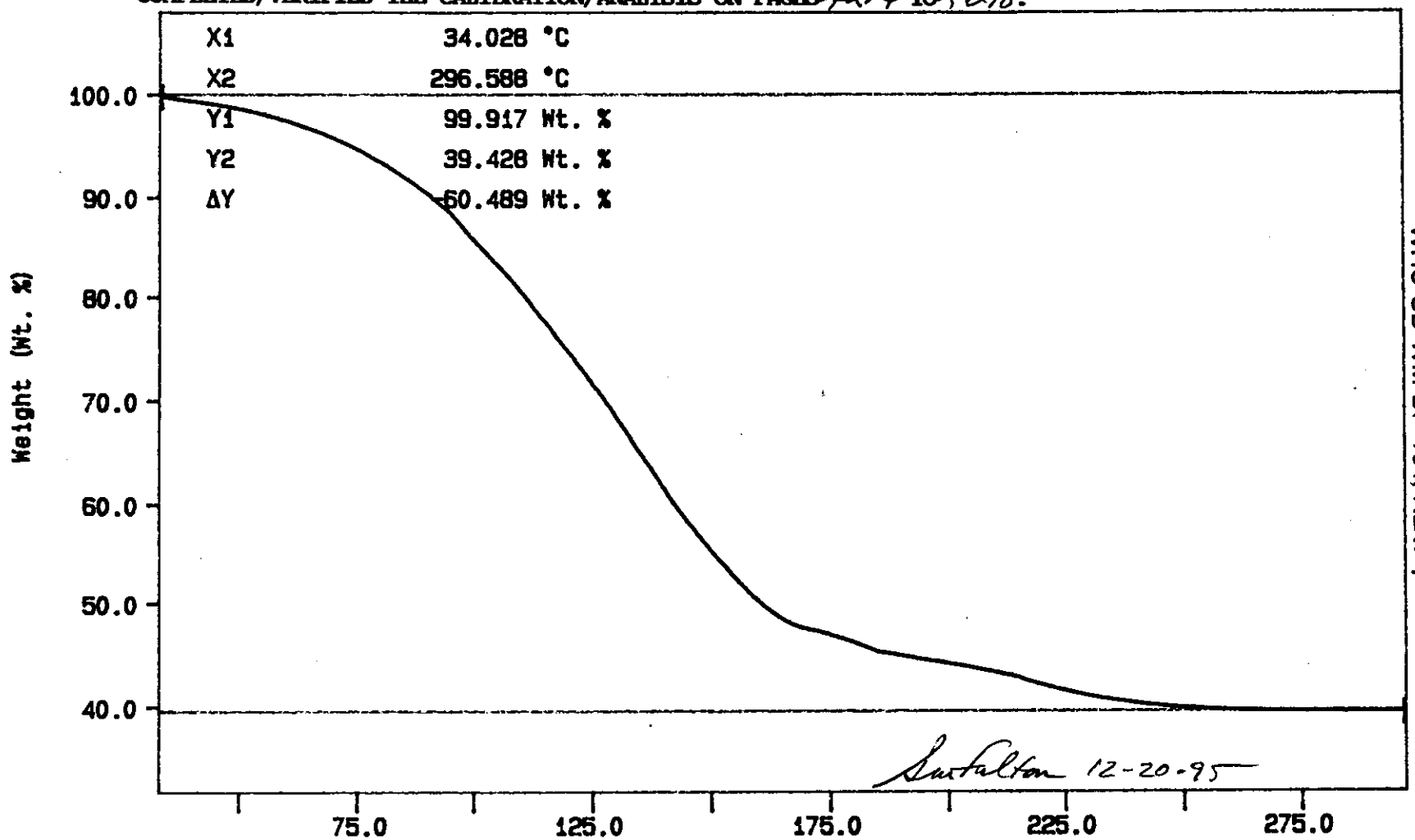
Other instrument was used
1/2/96
BDV

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.

Curve 1: TGA
File info: TER122001 Wed Dec 20 19:41:08 1995
Sample Weight: 19.348 mg
65N8-A Terliq

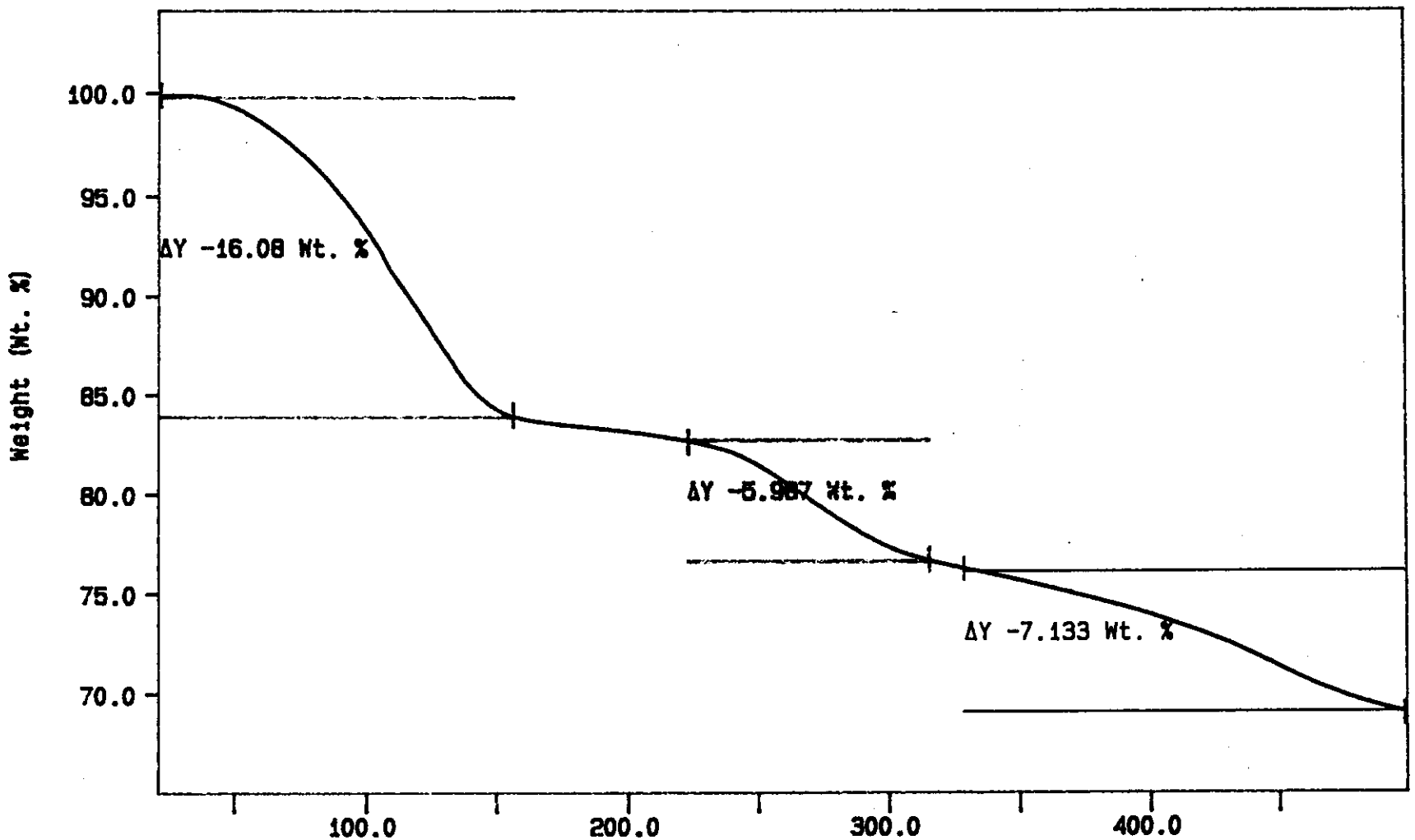
SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 2-214 TO 2-218.



N2 10C/MIN
TEMP1: 35.0 C TIME1: 0.0 min RATE1: 10.0 C/min
TEMP2: 300.0 C

SM FULTON
PERKIN-ELMER
7 Series Thermal Analysis System
Wed Dec 20 19:45:03 1995

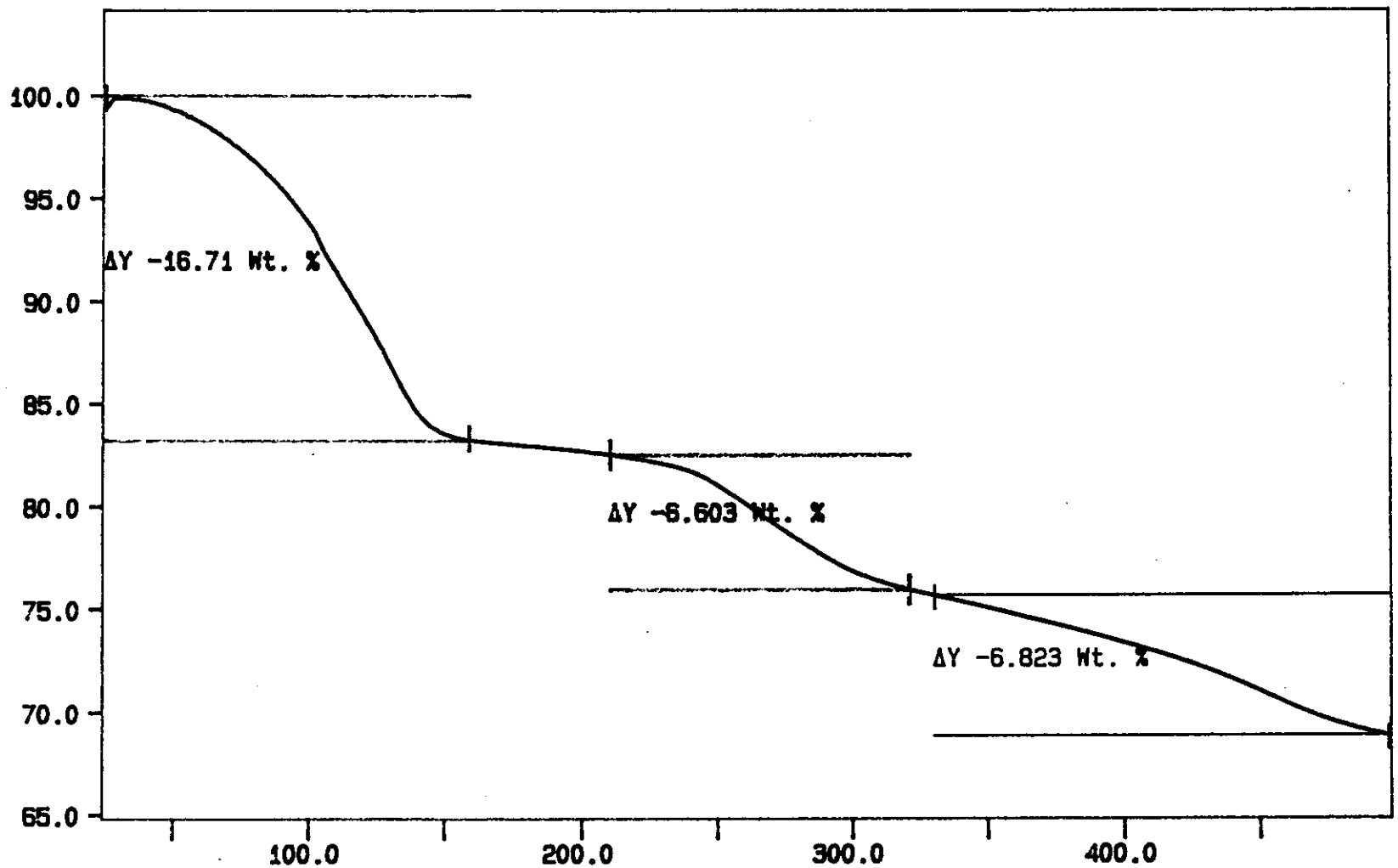
Curve 1: TGA
File info: SAM122004 Thu Dec 21 02:14:21 1995
Sample Weight: 14.703 mg
S95T003528



10C/MIN N2
TEMP1: 35.0 C TIME1: 0.0 min RATE1: 10.0 C/min
TEMP2: 600.0 C

SM FULTON
PERKIN-ELMER
7 Series Thermal Analysis System
Thu Dec 21 02:33:43 1995

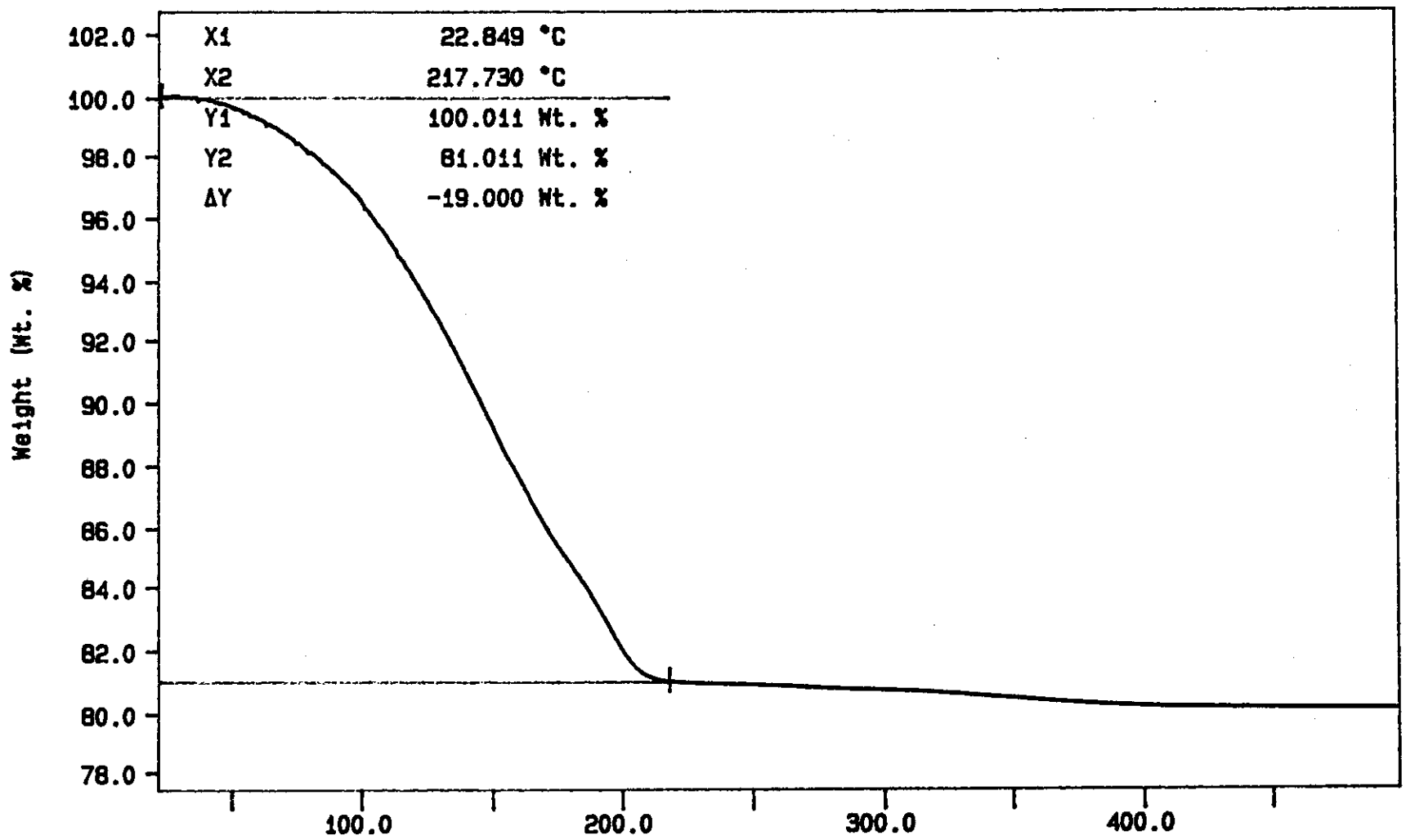
Curve 1: TGA
File info: SAM122005 Thu Dec 21 03:27:32 1995
Sample Weight: 21.131 mg
S95T003528 DUP



10C/MIN N2
TEMP1: 35.0 C TIME1: 0.0 min RATE1: 10.0 C/min
TEMP2: 600.0 C

SM FULTON
PERKIN-ELMER
7 Series Thermal Analysis System
Thu Dec 21 05:11:18 1995

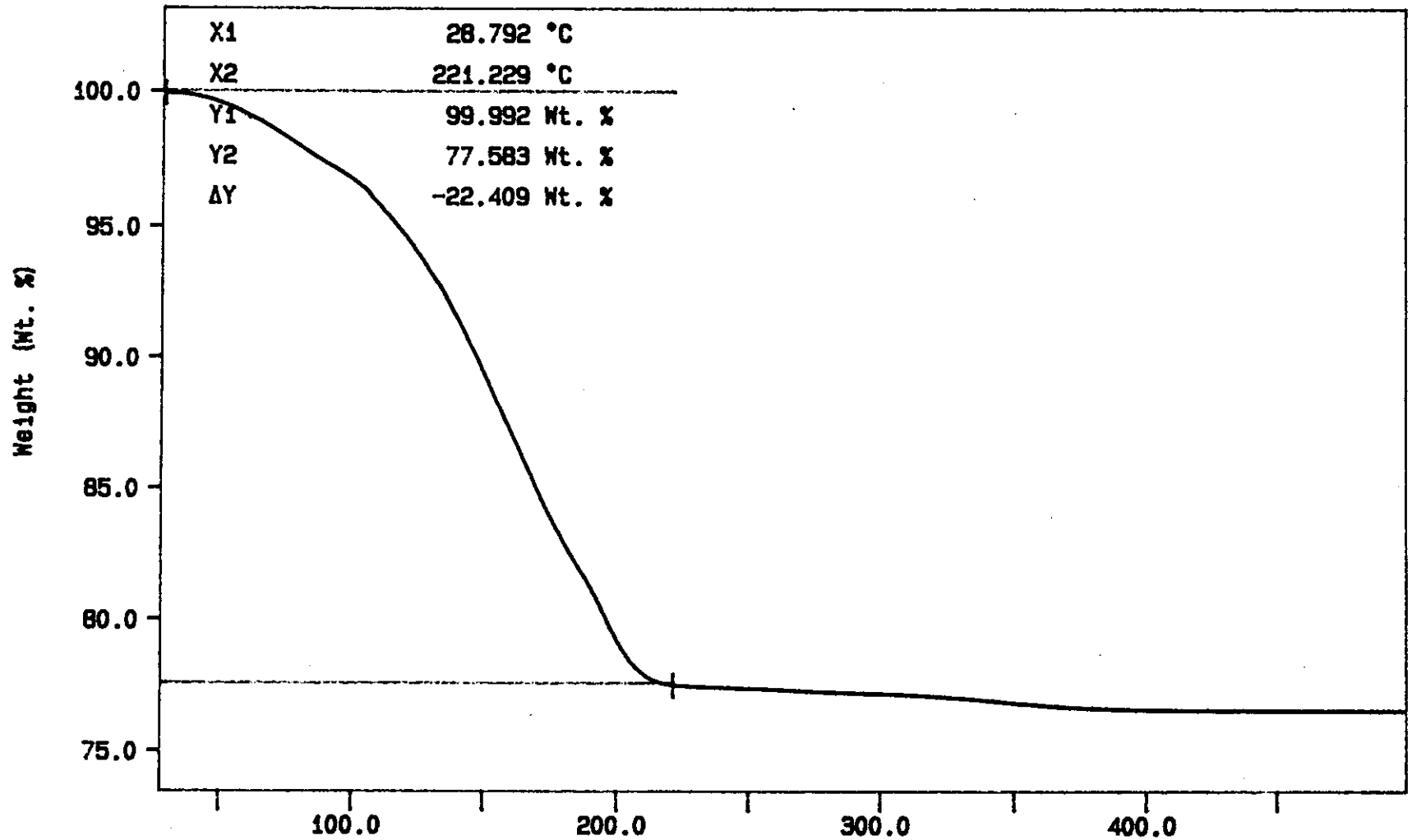
Curve 1: TGA
File info: SAM122001 Wed Dec 20 22:11:26 1995
Sample Weight: 29.149 mg
S95T003632



10C/MIN N2
TEMP1: 35.0 C TIME1: 0.0 min RATE1: 10.0 C/min
TEMP2: 600.0 C

SM FULTON
PERKIN-ELMER
7 Series Thermal Analysis System
Wed Dec 20 22:20:11 1995

Curve 1: TGA
File info: SAM122003 Thu Dec 21 00:29:18 1995
Sample Weight: 22.485 mg
S95T003632 ~~TRP~~ DUP
1/2/96 BW



10C/MIN 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
Thu Dec 21 01:08:30 1995

LABCORE Data Entry Template for Worklist# 4466

Analyst: SMF **Instrument:** TGA0 1 **Book #** 65N817

Method: LA-560-112 Rev/Mod B-1

Worklist Comment: Please run BY-104 TGAs under N2. bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA-01	SOLID	59.74	57.70*	N/A	%
95000180	BY104 ROTARY	2	SAMPLE	S95T003633	0		TGA-01	SOLID	N/A	24.42		%
95000180	BY104 ROTARY	3	DUP	S95T003633	0		TGA-01	SOLID	24.42	24.11	N/A	%
95000180	BY104 ROTARY	4	SAMPLE	S95T003635	0		TGA-01	SOLID	N/A	25.73		%
95000180	BY104 ROTARY	5	DUP	S95T003635	0		TGA-01	SOLID	25.73	25.85	N/A	%

Final page for worklist # 4466

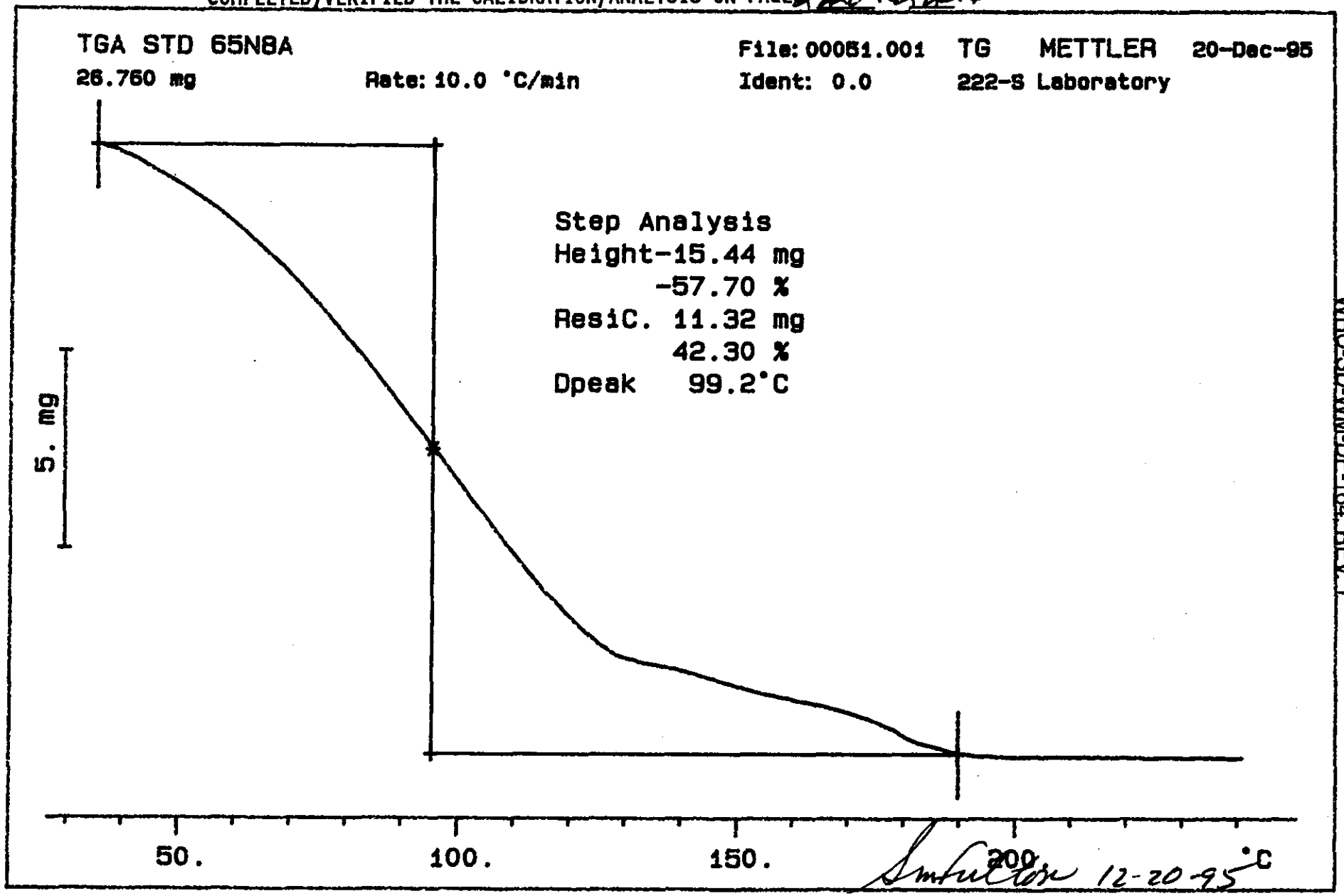
Sm Fulton 12-20-95
Analyst Signature Date

Frank Coulin 12/31/95
Analyst Signature Date

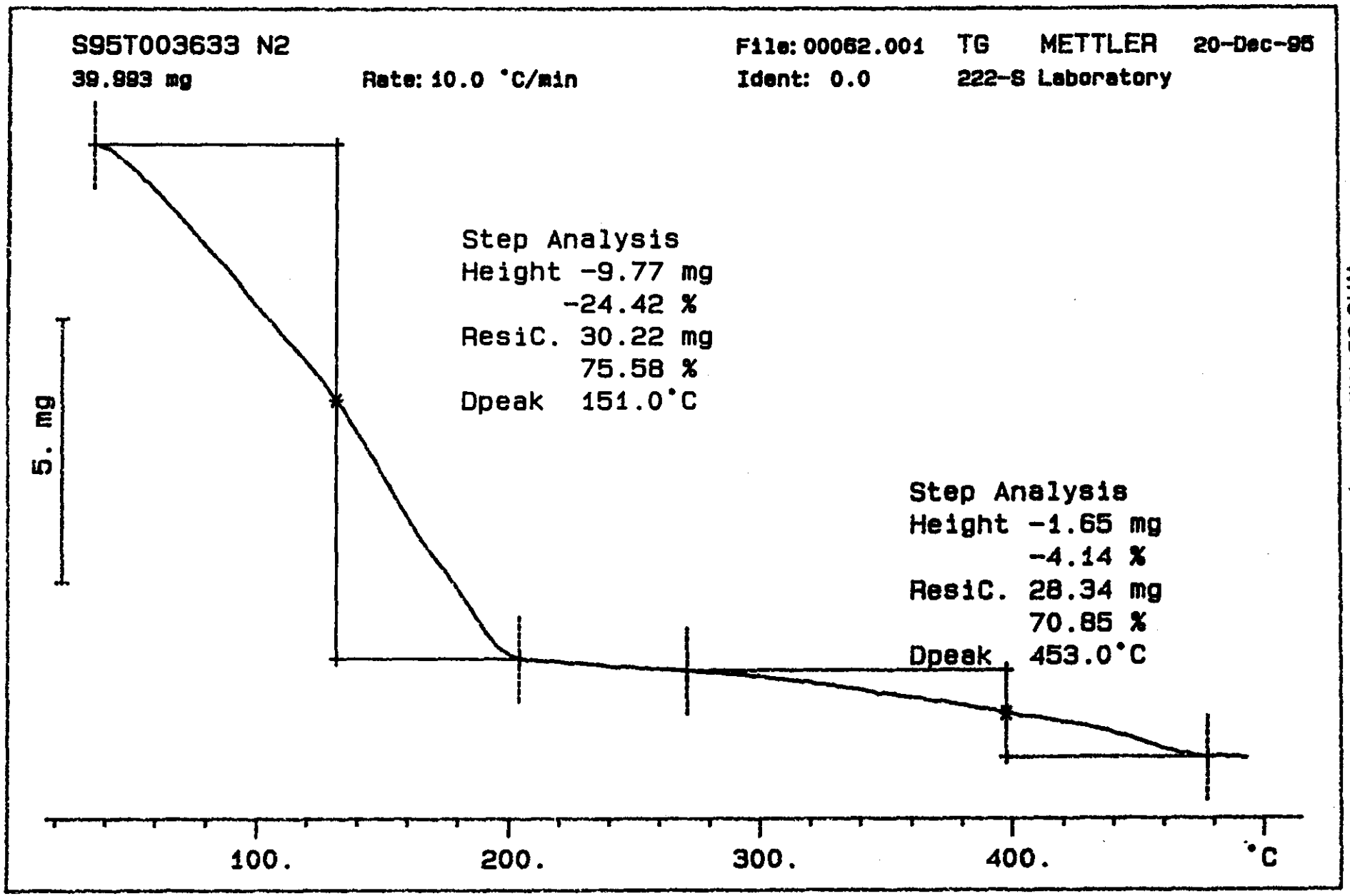
Data Entry Comments:

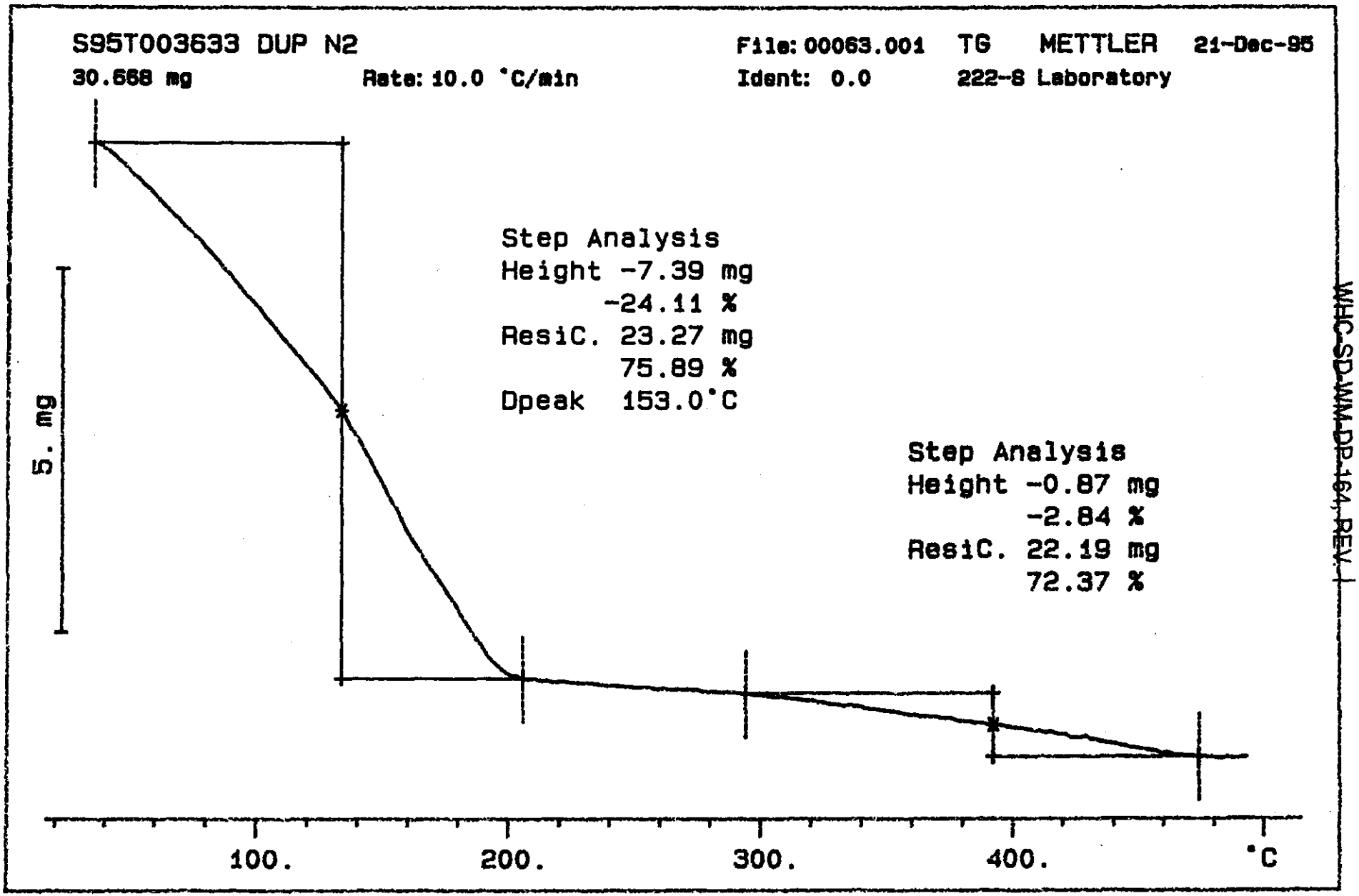
Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

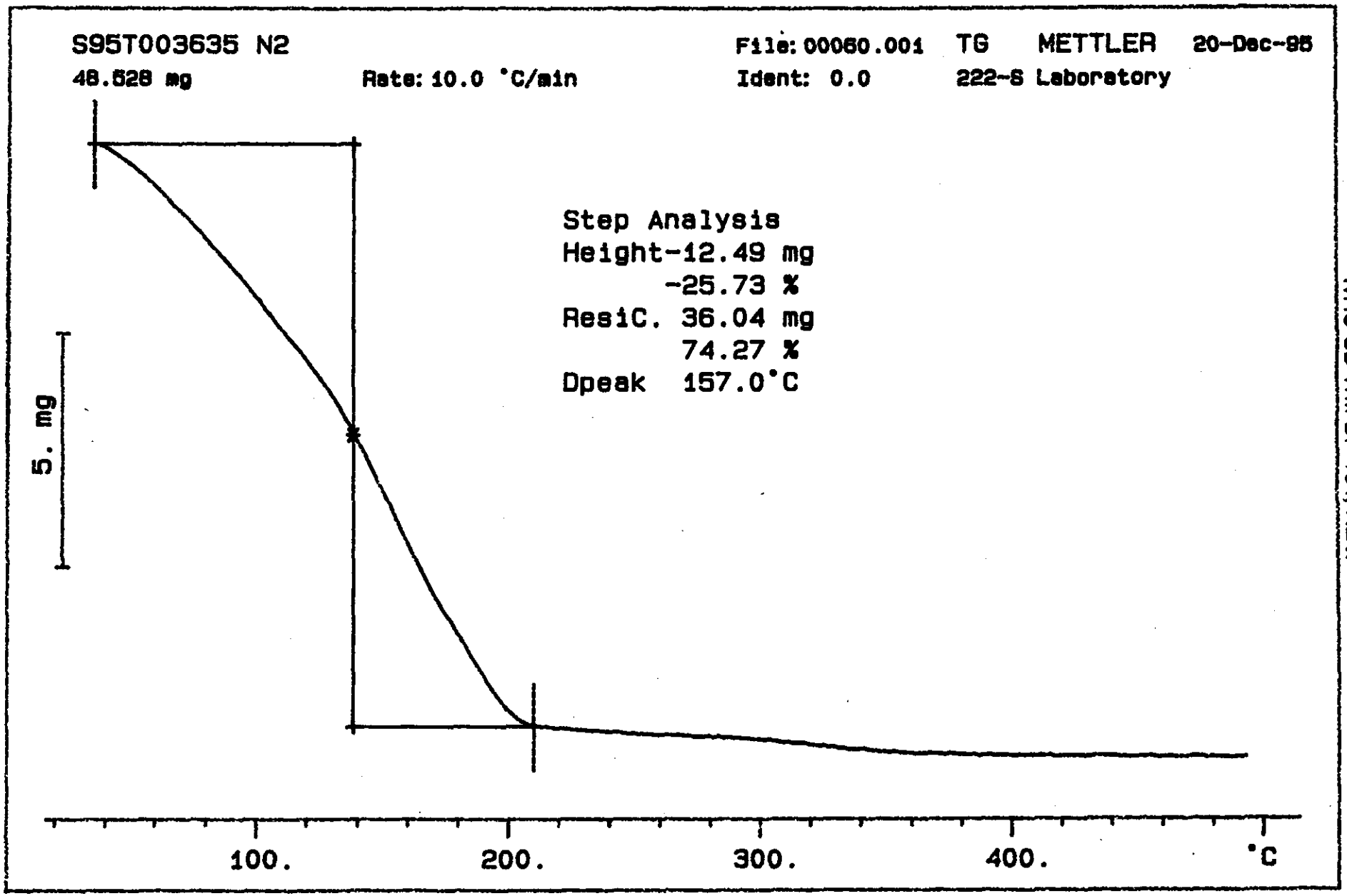
SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 2-220 TO 2-224

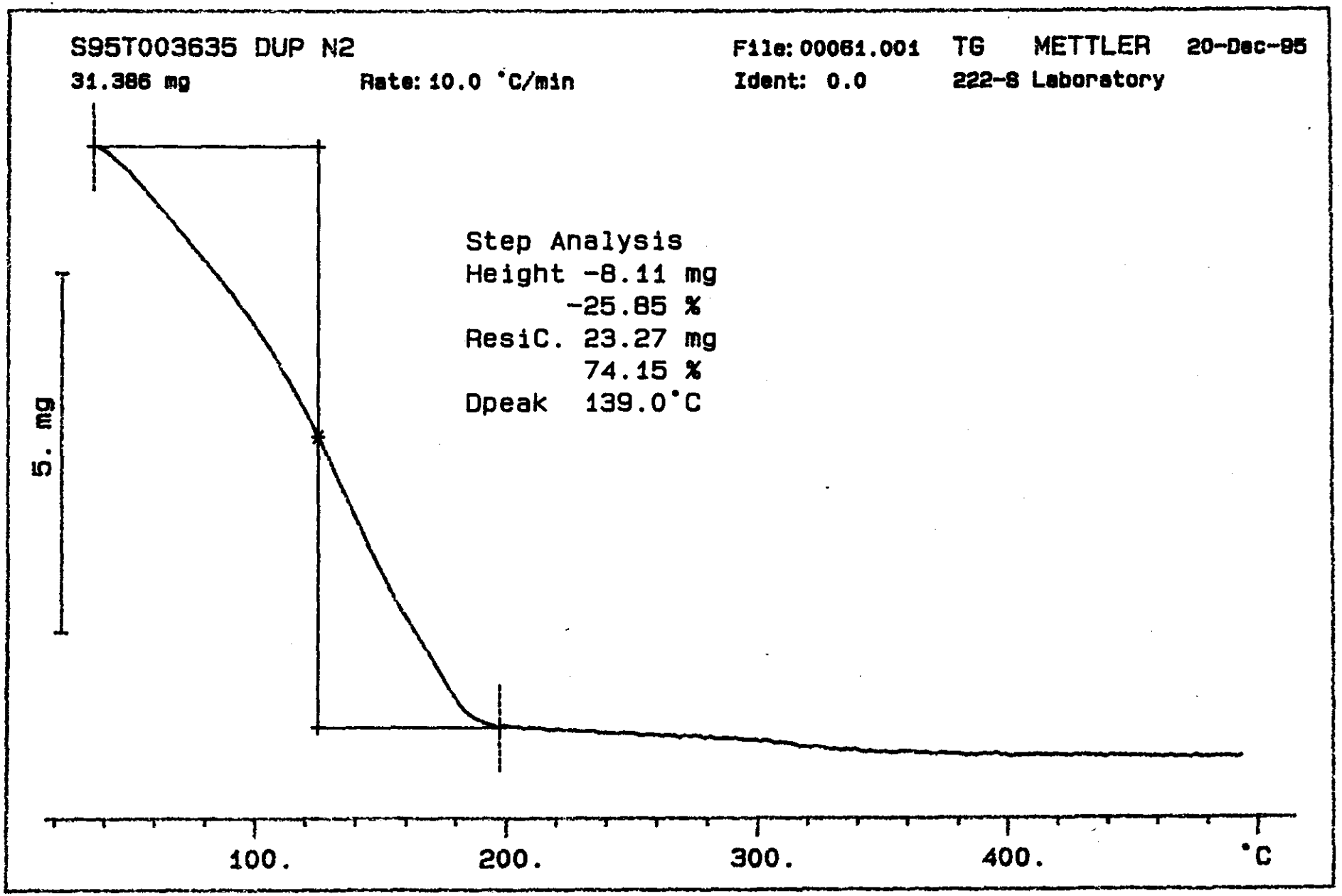


Smith 12-20-95


S95T003633 N2
39.993 mg
Rate: 10.0 °C/min
File: 00062.001
Ident: 0.0
TG
METTLER
222-S Laboratory
20-Dec-95
Step Analysis
Height -9.77 mg
-24.42 %
ResiC. 30.22 mg
75.58 %
Dpeak 151.0°C
Step Analysis
Height -1.65 mg
-4.14 %
ResiC. 28.34 mg
70.85 %
Dpeak 453.0°C
5. mg
100.
200.
300.
400.
°C


S95T003633 DUP N2
30.668 mg
Rate: 10.0 °C/min
File: 00063.001
Ident: 0.0
TG
METTLER
222-S Laboratory
21-Dec-95
Step Analysis
Height -7.39 mg
-24.11 %
ResiC. 23.27 mg
75.89 %
Dpeak 153.0°C
Step Analysis
Height -0.87 mg
-2.84 %
ResiC. 22.19 mg
72.37 %
5. mg
100.
200.
300.
400.
°C


S95T003635 N2
48.528 mg
Rate: 10.0 °C/min
File: 00060.001
Ident: 0.0
TG
METTLER
222-S Laboratory
20-Dec-95
Step Analysis
Height -12.49 mg
-25.73 %
ResiC. 36.04 mg
74.27 %
Dpeak 157.0°C
5. mg
100.
200.
300.
400.
°C


S95T003635 DUP N2
31.386 mg
Rate: 10.0 °C/min
File: 00061.001
TG METTLER 20-Dec-95
Ident: 0.0
222-S Laboratory
Step Analysis
Height -8.11 mg
-25.85 %
ResiC. 23.27 mg
74.15 %
Dpeak 139.0°C
5. mg
100.
200.
300.
400.
°C

LABCORE Data Entry Template for Worklist# 4467

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

Method: LA-560-112 Rev/Mod B-1

Worklist Comment: Please run BY-104 TGAs under N2. bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA-01	SOLID	59.74	61.67	N/A	%
95000180	BY104 ROTARY	2	SAMPLE	S95T003636	0		TGA-01	SOLID	N/A	26.96		%
95000180	BY104 ROTARY	3	DUP	S95T003636	0		TGA-01	SOLID	26.96	26.76	N/A	%
		4	STD				TGA-01	SOLID	59.74	60.54	N/A	%
95000180	BY104 ROTARY	5	SAMPLE	S95T003639	0		TGA-01	SOLID	N/A	30.64		%
95000180	BY104 ROTARY	6	DUP	S95T003639	0		TGA-01	SOLID	30.64	33.01	N/A	%

Final page for worklist # 4467

See attached for signatures
Analyst Signature **Date** 1/2/96

Verified by Blandina Valenzuela 1-8-96

Linda Conlin
Analyst Signature **Date**

Data Entry Comments: S95T003636 produced an additional weight loss step at approximately 360°C with a ~~delta~~ 1/2/96 weight loss of 4.14%
S95T003639 had a small peak on the duplicate run which was caused by bumping the machine.

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# 4467

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

Method: LA-560-112 Rev/Mod C

Worklist Comment: Please run BY-104 TGAs under N2. bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	-------TEST------	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA-01	SOLID			N/A	%
95000180	BY104 ROTARY	2	SAMPLE	S95T003636	0		TGA-01	SOLID	N/A			%
95000180	BY104 ROTARY	3	DUP	S95T003636	0		TGA-01	SOLID			N/A	%
95000180	BY104 ROTARY	4	SAMPLE	S95T003639	0		TGA-01	SOLID	N/A			%
95000180	BY104 ROTARY	5	DUP	S95T003639	0		TGA-01	SOLID			N/A	%

Final page for worklist # 4467

Susie M. Dutton 12-21-95
Analyst Signature **Date**

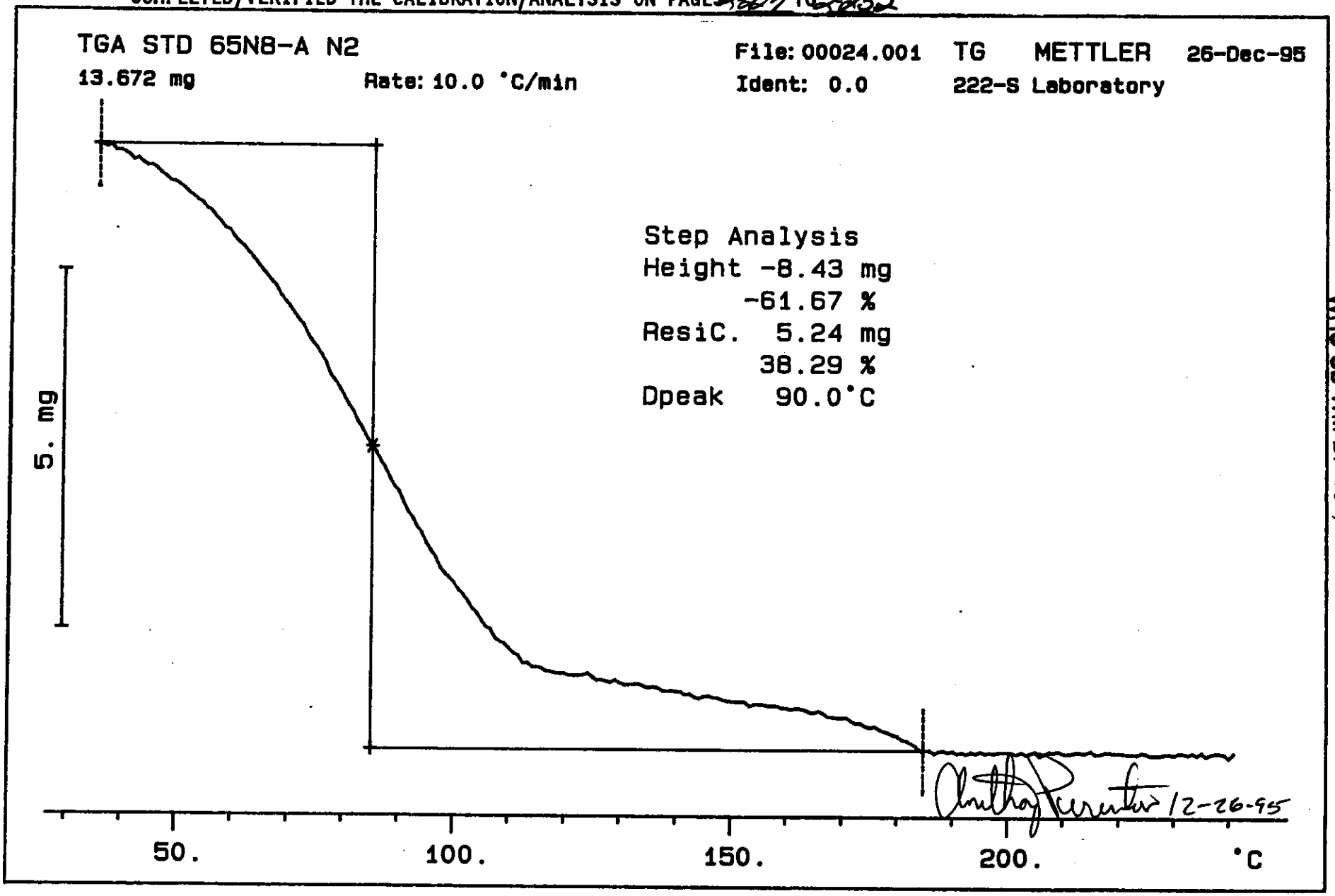
Analyst Signature **Date**

Anthony Pucinta 12-27-95

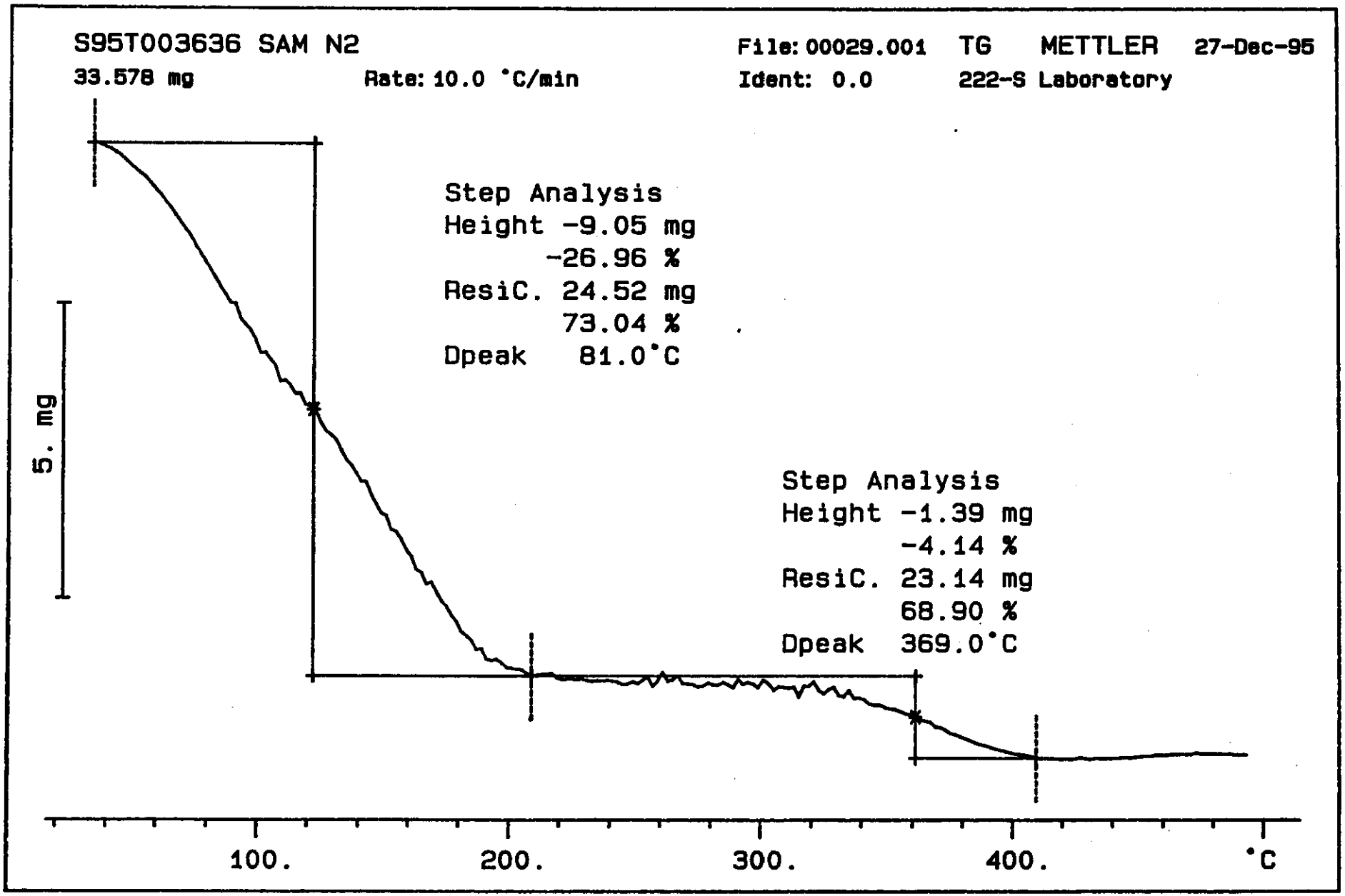
Data Entry Comments:

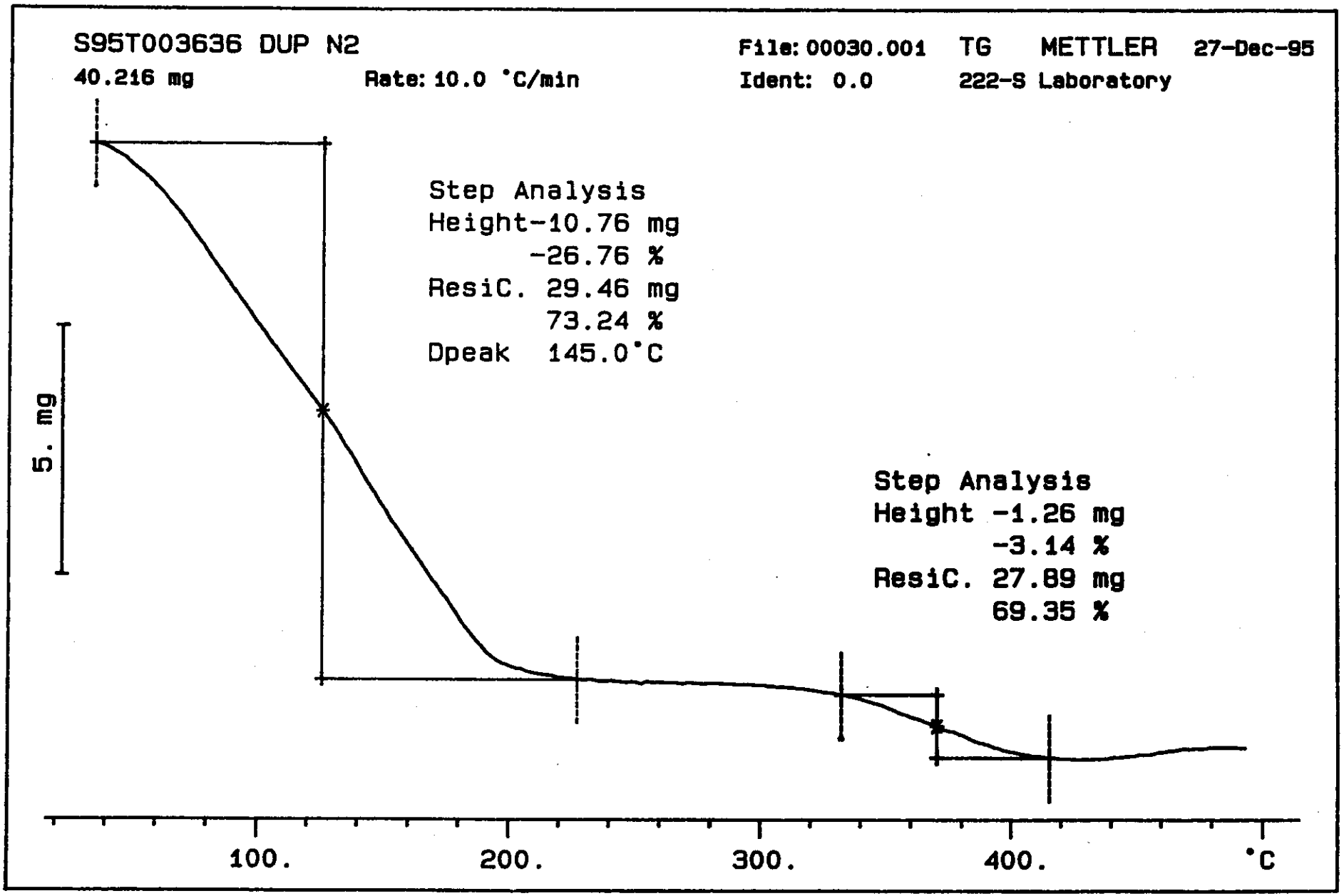
Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

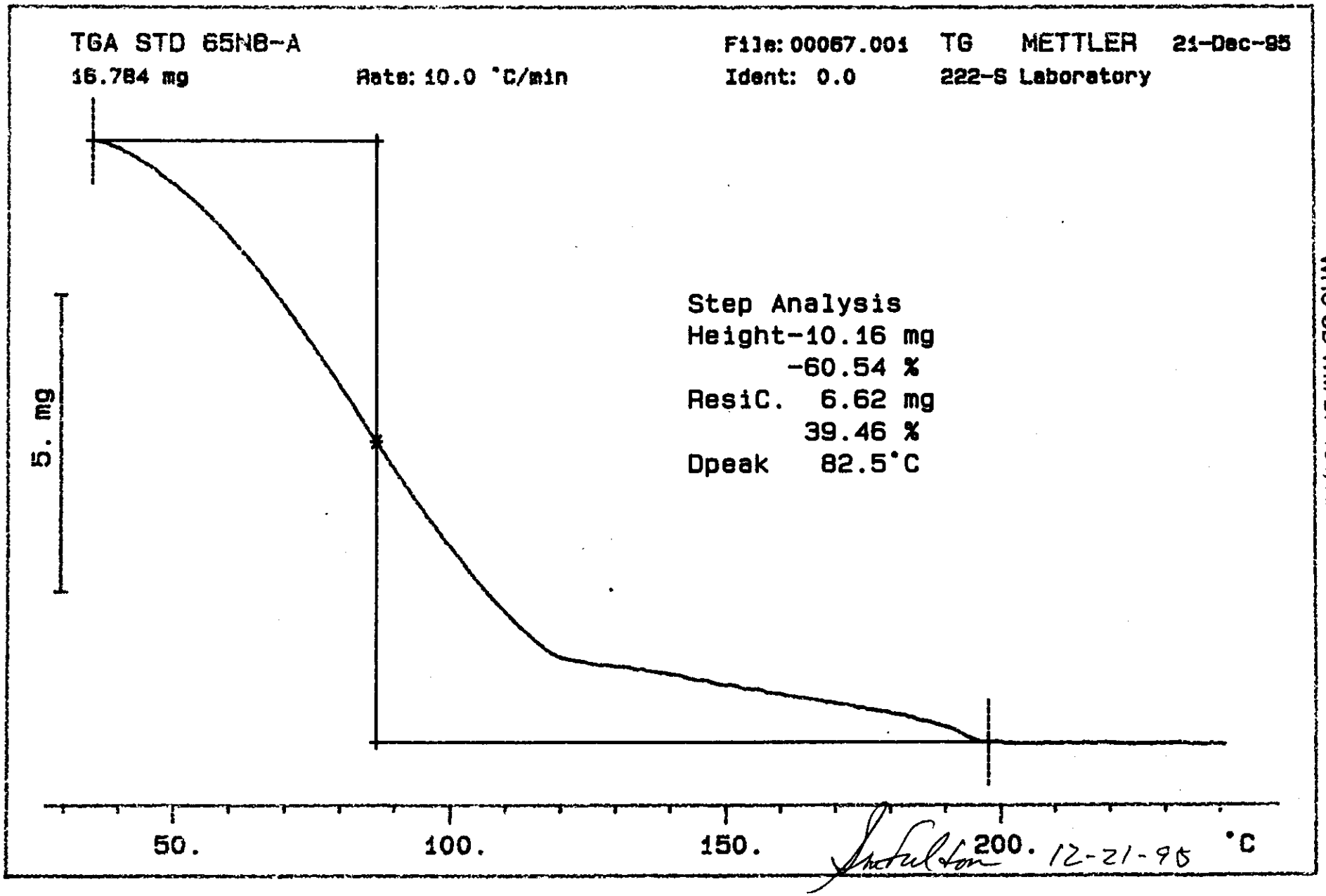
SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 3221 TO 3232



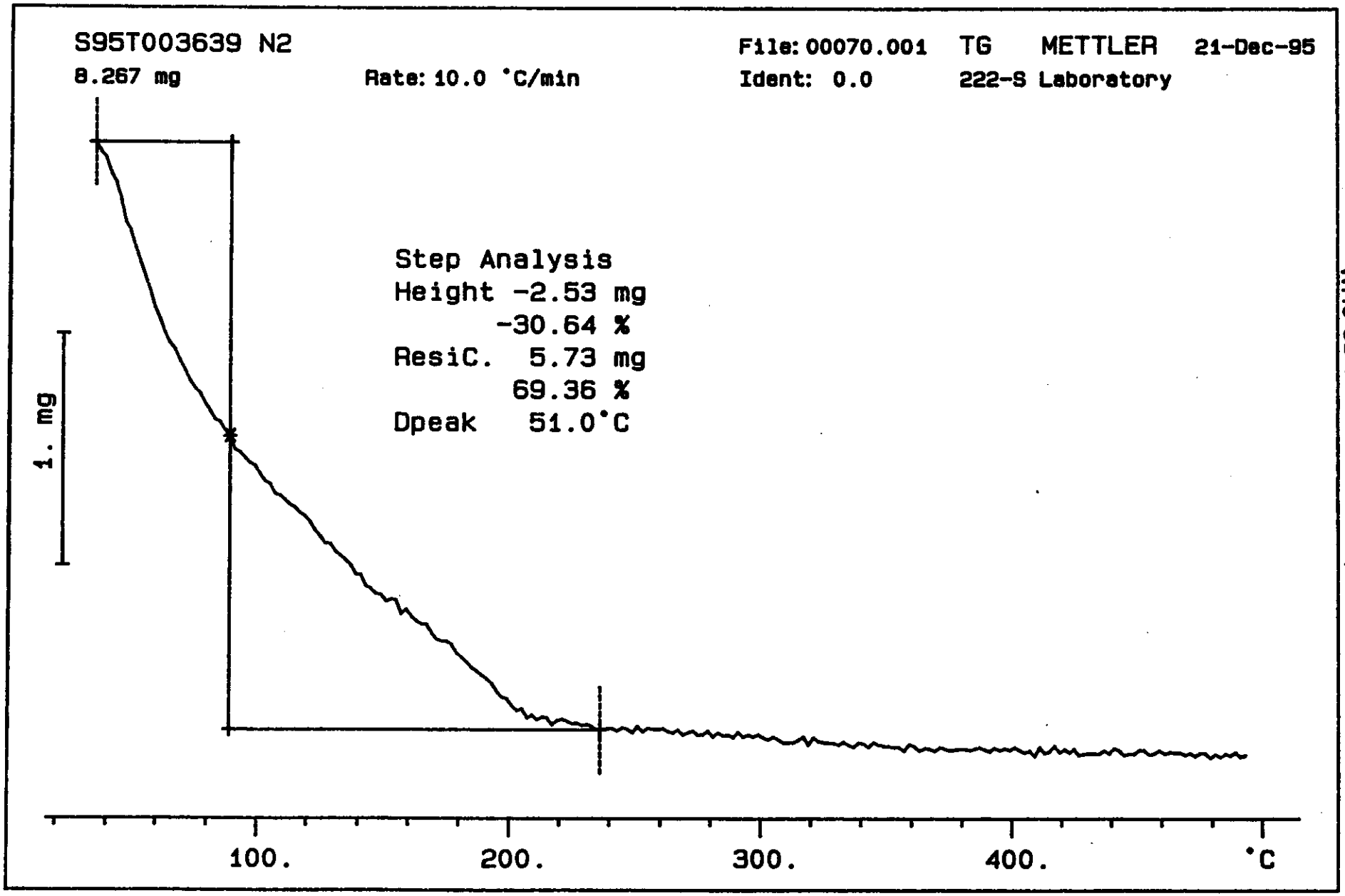
12-26-95

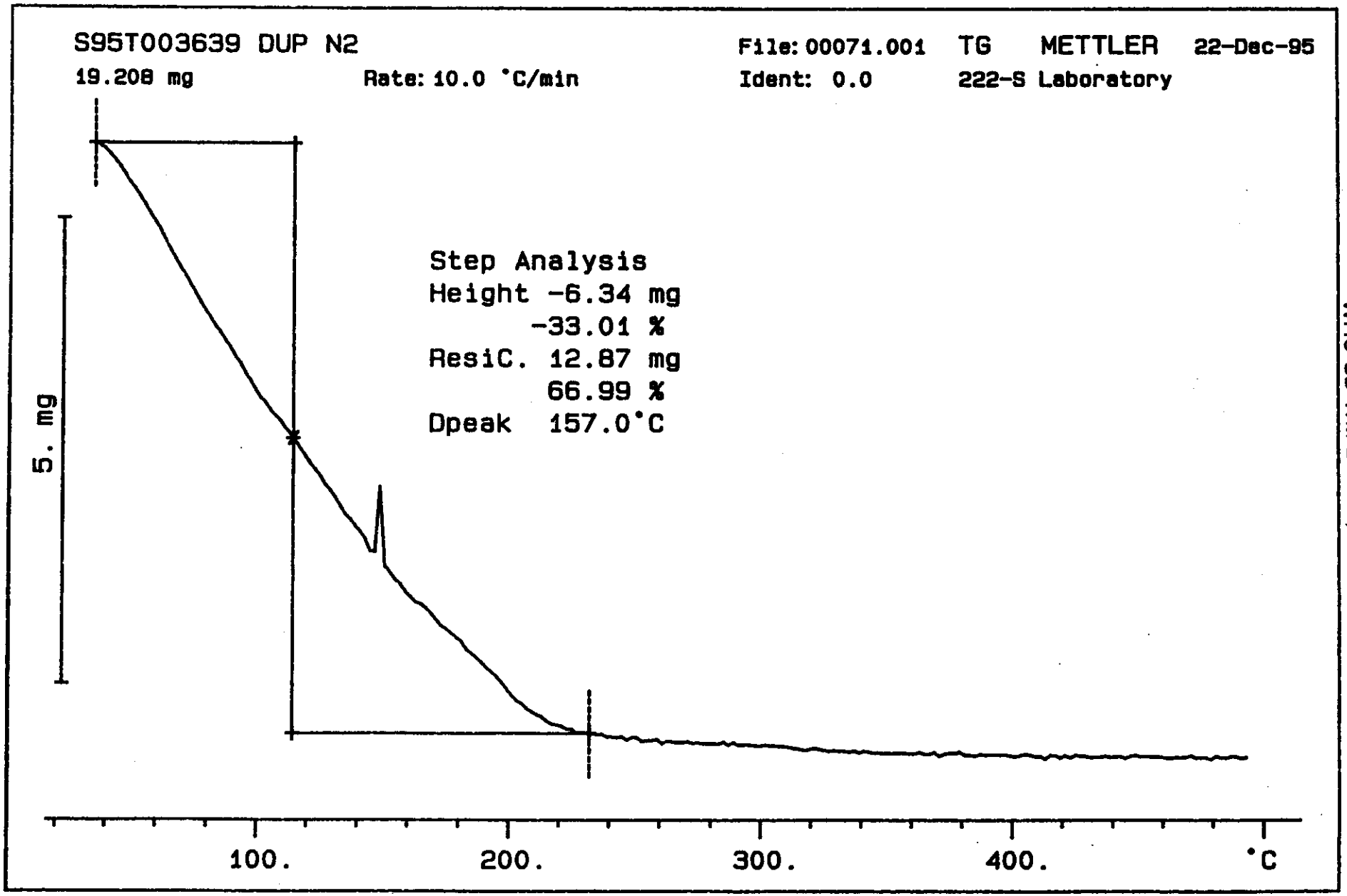

S95T003636 SAM N2
33.578 mg
Rate: 10.0 °C/min
File: 00029.001
TG METTLER 27-Dec-95
Ident: 0.0
222-S Laboratory
Step Analysis
Height -9.05 mg
-26.96 %
ResiC. 24.52 mg
73.04 %
Dpeak 81.0°C
Step Analysis
Height -1.39 mg
-4.14 %
ResiC. 23.14 mg
68.90 %
Dpeak 369.0°C
5. mg
100.
200.
300.
400.
°C


S95T003636 DUP N2
40.216 mg
Rate: 10.0 °C/min
File: 00030.001
TG
METTLER
27-Dec-95
Ident: 0.0
222-S Laboratory
Step Analysis
Height -10.76 mg
-26.76 %
ResiC. 29.46 mg
73.24 %
Dpeak 145.0°C
Step Analysis
Height -1.26 mg
-3.14 %
ResiC. 27.89 mg
69.35 %
5. mg
100.
200.
300.
400.
°C


TGA STD 65N8-A
16.784 mg
Rate: 10.0 °C/min
File: 00067.001
TG
METTLER
21-Dec-95
Ident: 0.0
222-S Laboratory
Step Analysis
Height-10.16 mg
-60.54 %
ResiC. 6.62 mg
39.46 %
Dpeak 82.5°C
5. mg
50.
100.
150.
200.
°C

12-21-95


S95T003639 N2
8.267 mg
Rate: 10.0 °C/min
File: 00070.001
TG
METTLER
21-Dec-95
Ident: 0.0
222-S Laboratory
Step Analysis
Height -2.53 mg
-30.64 %
ResiC. 5.73 mg
69.36 %
Dpeak 51.0°C
1. mg
100.
200.
300.
400.
°C


S95T003639 DUP N2
19.208 mg
Rate: 10.0 °C/min
File: 00071.001
TG METTLER 22-Dec-95
Ident: 0.0
222-S Laboratory
Step Analysis
Height -6.34 mg
-33.01 %
ResiC. 12.87 mg
66.99 %
Dpeak 157.0°C
5. mg
100.
200.
300.
400.
°C

LABCORE Data Entry Template for Worklist# 4498

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

Method: LA-560-112 Rev/Mod B-1

Worklist Comment: BY-104 TGA Run under Nitrogen glw

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA-01	SOLID	59.74	60.61*	N/A	%
95000200	BY104 ROTARY	2	SAMPLE	S95T003764	0		TGA-01	SOLID	N/A	37.49		%
95000200	BY104 ROTARY	3	DUP	S95T003764	0		TGA-01	SOLID	37.49	36.64	N/A	%
		4	STD				TGA-01	SOLID	59.74	60.10*	N/A	%
95000200	BY104 ROTARY	5	SAMPLE	S95T003781	0		TGA-01	SOLID	N/A	30.24		%
95000200	BY104 ROTARY	6	DUP	S95T003781	0		TGA-01	SOLID	30.24	28.11	N/A	%

Final page for worklist # 4498

See attached for signatures
Analyst Signature **Date** 12/28/95

[illegible] 12/21/95
Analyst Signature **Date**

Data Entry Comments: S95T003781 ~~product~~ 12/28/95 BRV results are the sum of two weight loss steps.

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# 4498

Analyst: RG **Instrument:** TGA0 **Book #** ~~LZ ASH~~ RG 12-23-95 605 N8-A

Method: LA-560-112 Rev/Mod B-1

Worklist Comment: BY-104 TGA Run under Nitrogen glw

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	-------TEST------	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA-01	SOLID			N/A	%
95000200	BY104 ROTARY	2	SAMPLE	S95T003764	0		TGA-01	SOLID	N/A			%
95000200	BY104 ROTARY	3	DUP	S95T003764	0		TGA-01	SOLID			N/A	%
95000200	BY104 ROTARY	4	SAMPLE	S95T003781	0		TGA-01	SOLID	N/A			%
95000200	BY104 ROTARY	5	DUP	S95T003781	0		TGA-01	SOLID			N/A	%

Final page for worklist # 4498

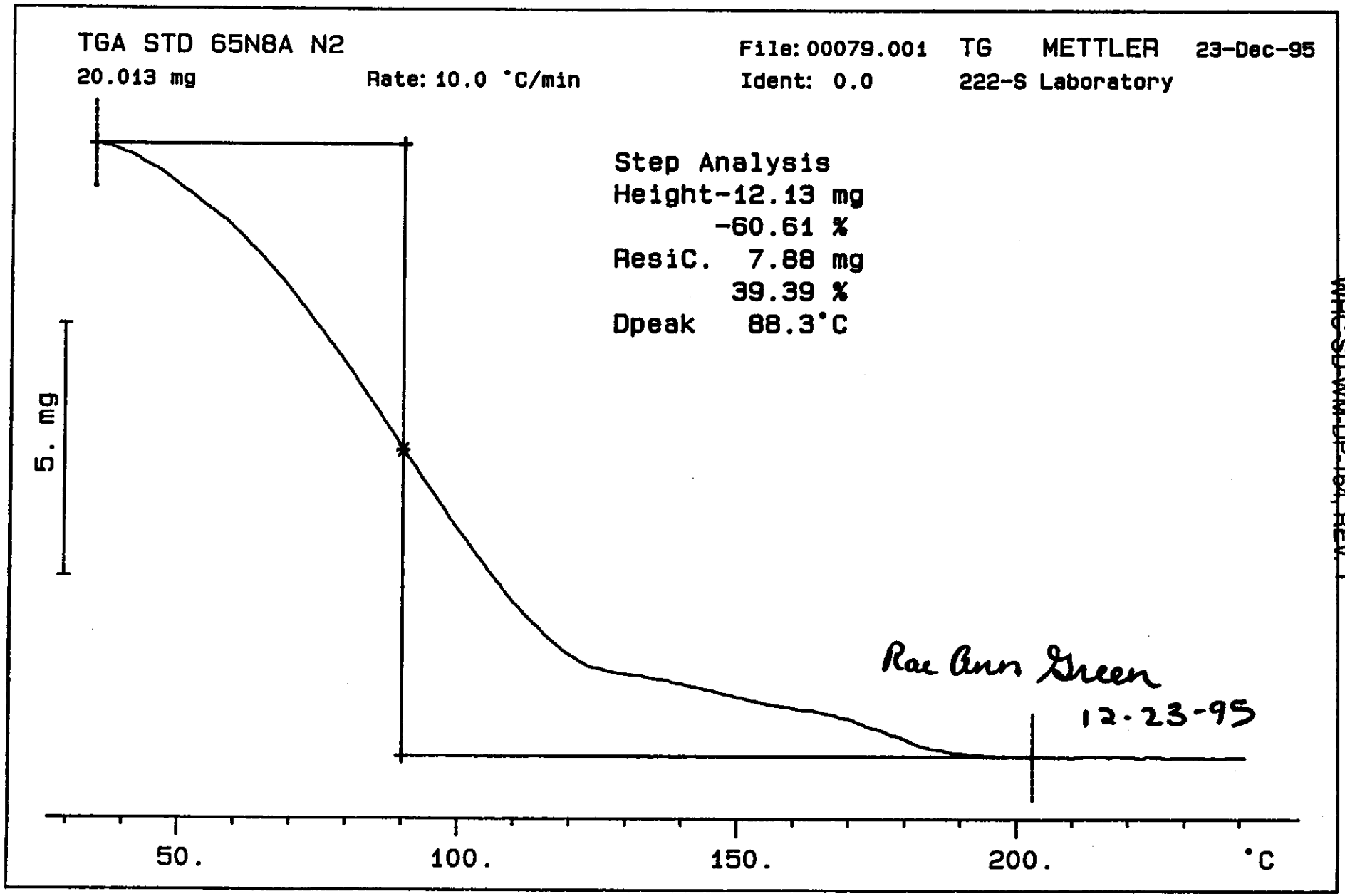
Rae Ann Green 12-23-95
Analyst Signature **Date**

Anthony Pirrotta 12-24-95
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.

SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 2-235 TO 2-240.



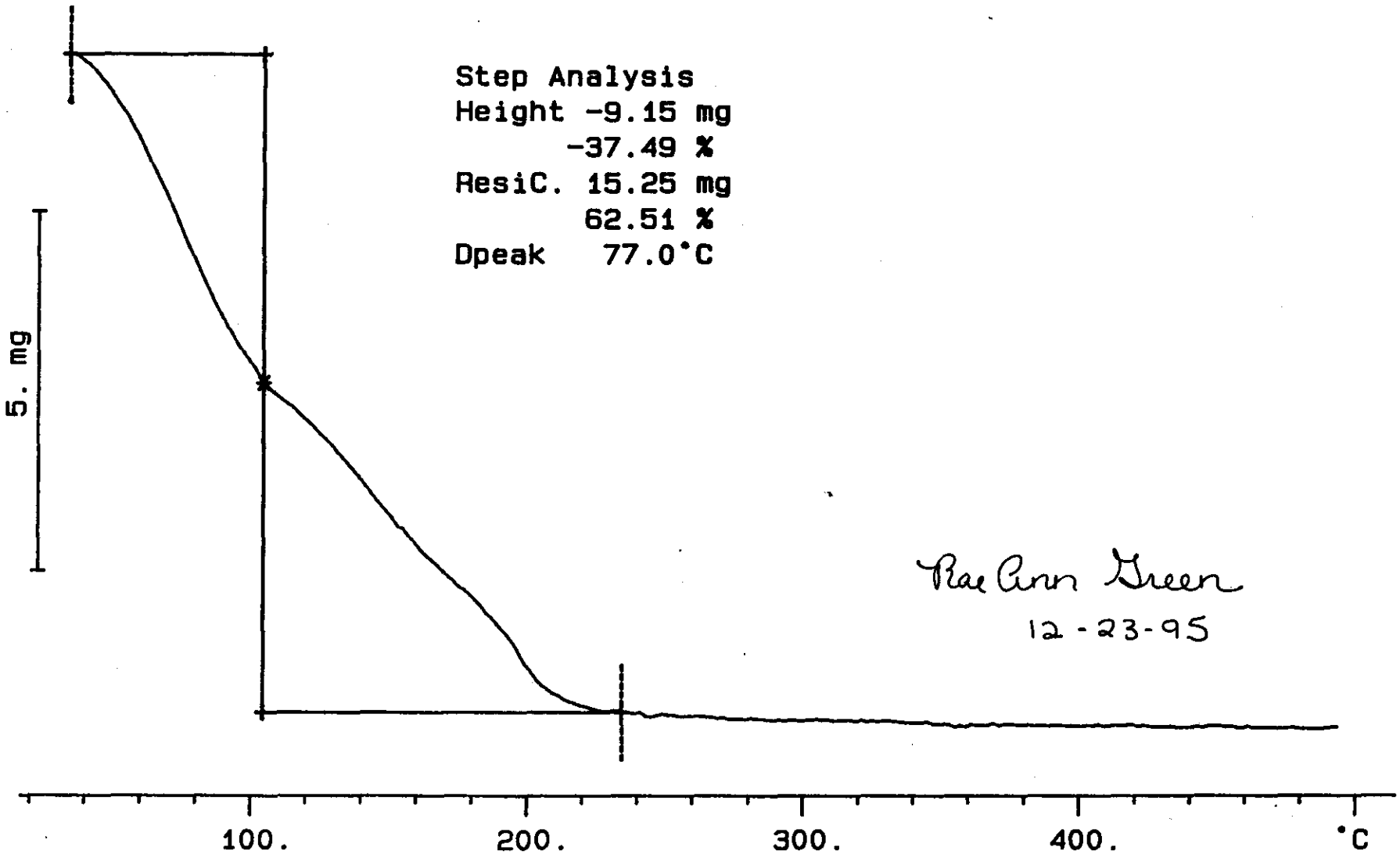
ST95T003764 SAM N2

24.401 mg

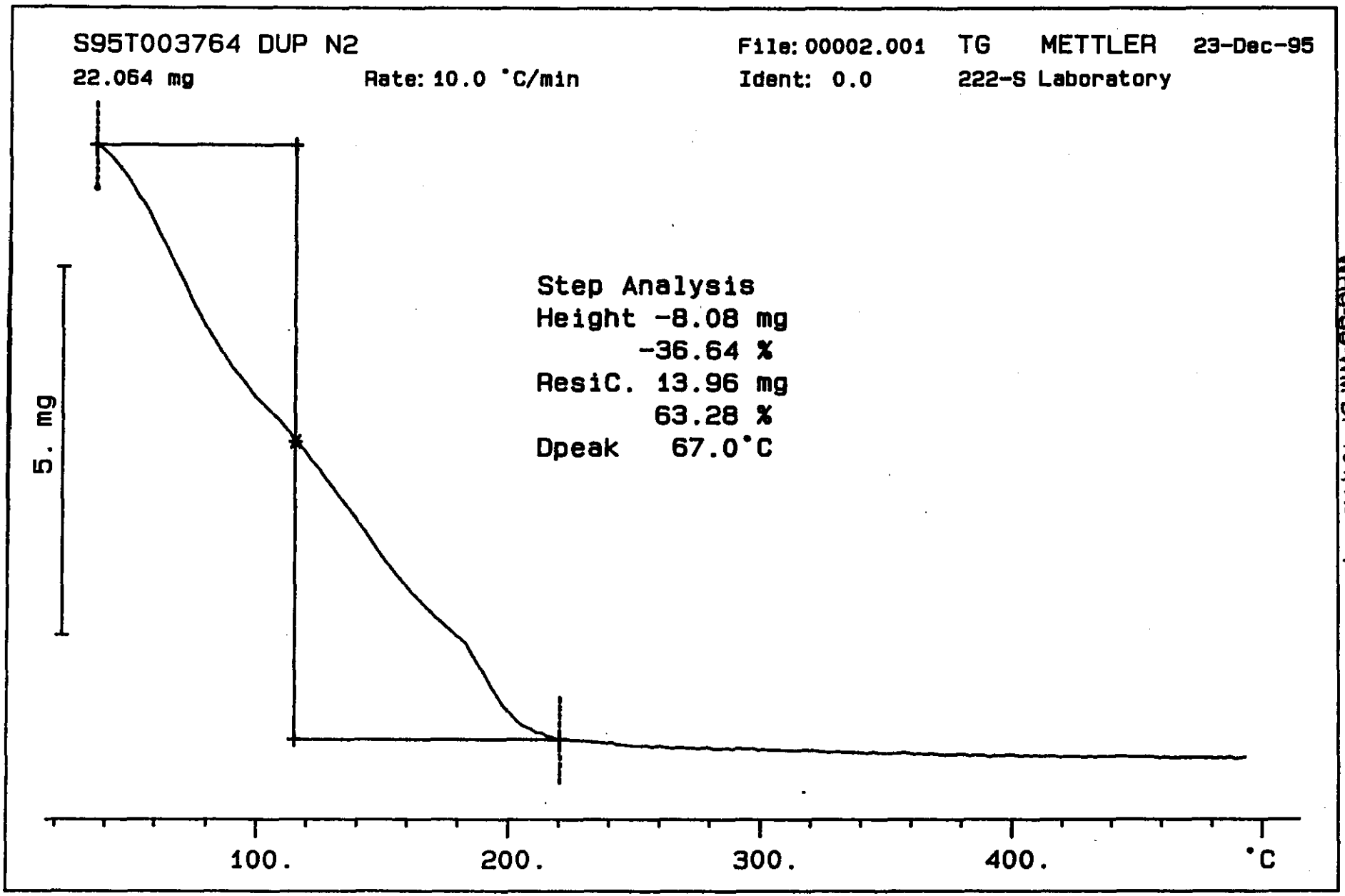
Rate: 10.0 °C/min

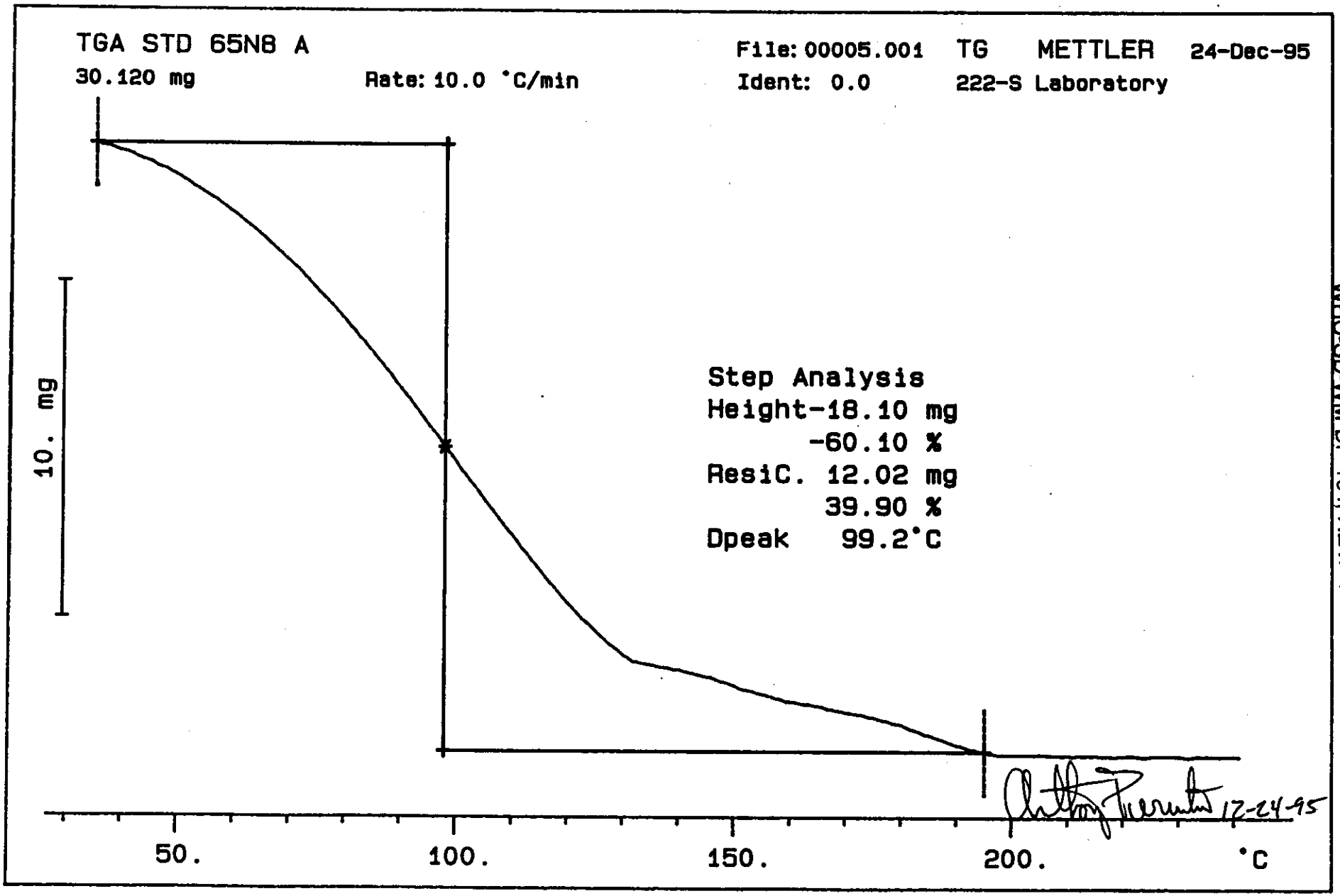
File: 00096.001 TG METTLER 23-Dec-95

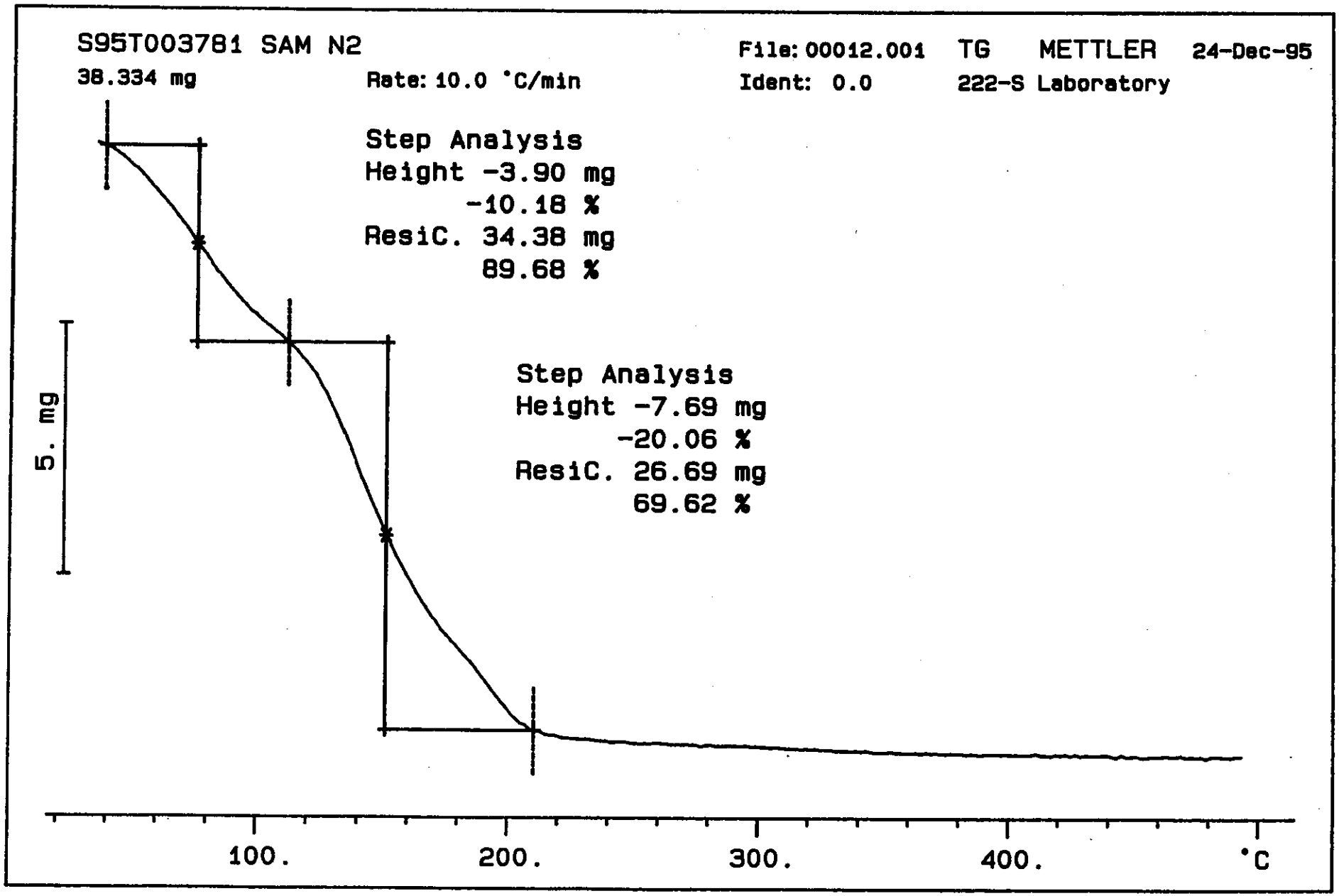
Ident: 0.0 222-S Laboratory

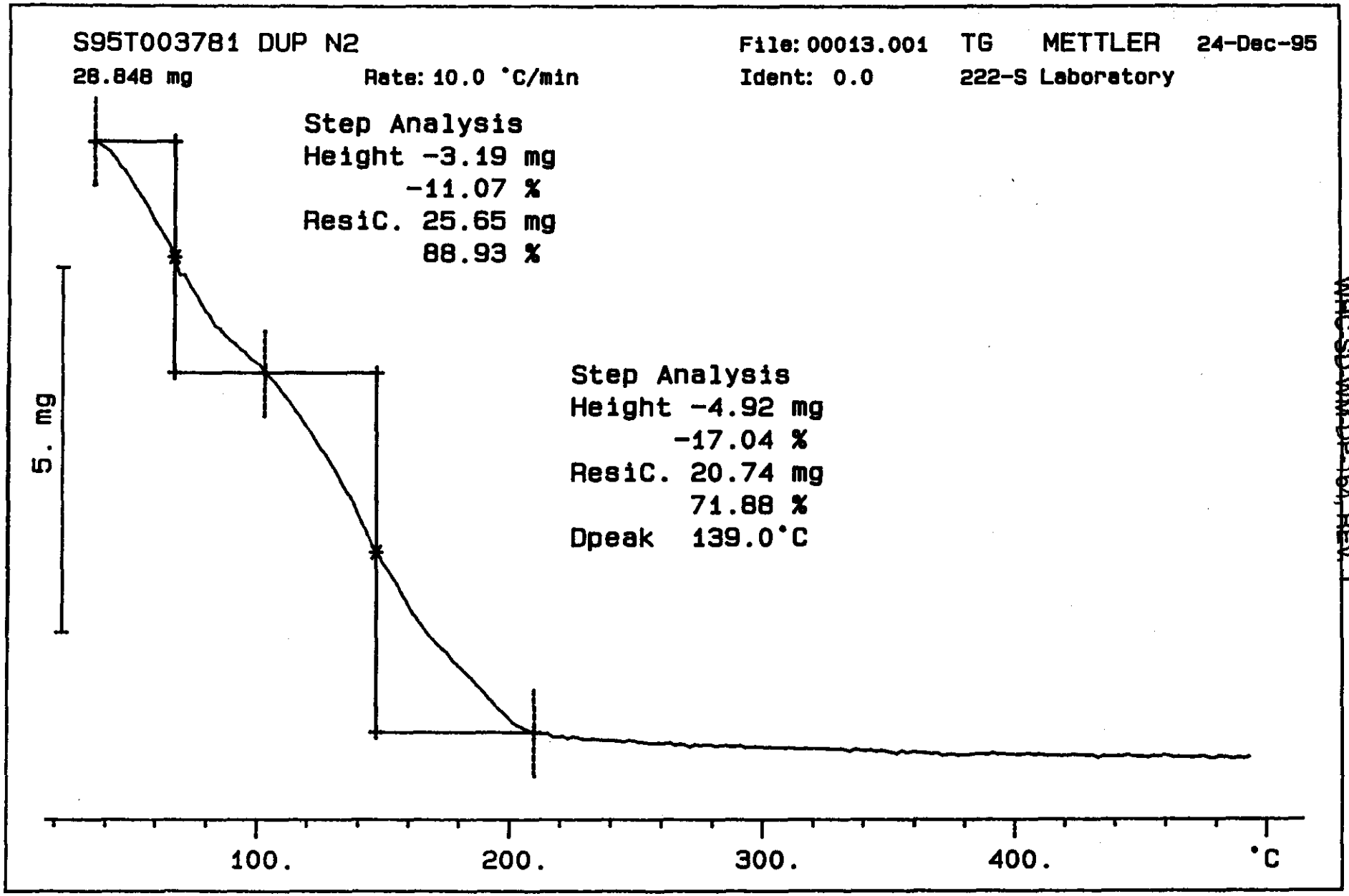


Rae Ann Green
12-23-95


S95T003764 DUP N2
22.064 mg
Rate: 10.0 °C/min
File: 00002.001
Ident: 0.0
TG
METTLER
23-Dec-95
222-S Laboratory
Step Analysis
Height -8.08 mg
-36.64 %
ResiC. 13.96 mg
63.28 %
Dpeak 67.0°C
5. mg
100.
200.
300.
400.
°C


TGA STD 65N8 A
30.120 mg
Rate: 10.0 °C/min
File: 00005.001
TG METTLER
24-Dec-95
Ident: 0.0
222-S Laboratory
10. mg
Step Analysis
Height-18.10 mg
-60.10 %
ResiC. 12.02 mg
39.90 %
Dpeak 99.2°C
50.
100.
150.
200.
°C
12-24-95


S95T003781 SAM N2
38.334 mg
Rate: 10.0 °C/min
File: 00012.001
TG METTLER 24-Dec-95
Ident: 0.0
222-S Laboratory
Step Analysis
Height -3.90 mg
-10.18 %
ResiC. 34.38 mg
89.68 %
Step Analysis
Height -7.69 mg
-20.06 %
ResiC. 26.69 mg
69.62 %
5. mg
100.
200.
300.
400.
°C


S95T003781 DUP N2
28.848 mg
Rate: 10.0 °C/min
File: 00013.001
TG
METTLER
24-Dec-95
Ident: 0.0
222-S Laboratory
Step Analysis
Height -3.19 mg
-11.07 %
ResiC. 25.65 mg
88.93 %
Step Analysis
Height -4.92 mg
-17.04 %
ResiC. 20.74 mg
71.88 %
Dpeak 139.0°C
5. mg
100.
200.
300.
400.
°C

LABCORE Data Entry Template for Worklist# 4501

Analyst: PJM **Instrument:** TGA0 3 **Book #** 65N8A

Method: LA-514-114 Rev/Mod C-1

Worklist Comment: BY-104 TGA Run under Nitrogen dlh

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA-03	SOLID	59.74	59.89	N/A	%
95000200	BY104 ROTARY	2	SAMPLE	S95T003809	0		TGA-03	SOLID	N/A	37.06		%
95000200	BY104 ROTARY	3	DUP	S95T003809	0		TGA-03	SOLID	37.06	35.97	N/A	%
95000200	BY104 ROTARY	4	SAMPLE	S95T003783	0		TGA-03	SOLID	N/A	26.37		%
95000200	BY104 ROTARY	5	DUP	S95T003783	0		TGA-03	SOLID	26.37	28.19	N/A	%

Final page for worklist # 4501

See attached for signatures
Analyst Signature Date 12/29/95

Linda Conlin 12/30/95
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# 4501

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

Method: LA-~~560-112~~ 514-114 Rev/Mod C-1
RLM 12/25/95

Worklist Comment: BY-104 TGA Run under Nitrogen dlh

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	-------TEST------	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA-01	SOLID			N/A	%
95000200	BY104 ROTARY	2	SAMPLE	S95T003809	0		TGA-01	SOLID	N/A			%
95000200	BY104 ROTARY	3	DUP	S95T003809	0		TGA-01	SOLID			N/A	%
95000200	BY104 ROTARY	4	SAMPLE	S95T003783	0		TGA-01	SOLID	N/A			%
95000200	BY104 ROTARY	5	DUP	S95T003783	0		TGA-01	SOLID			N/A	%

Final page for worklist # 4501

RLMcCown 12/25/95
Analyst Signature **Date**

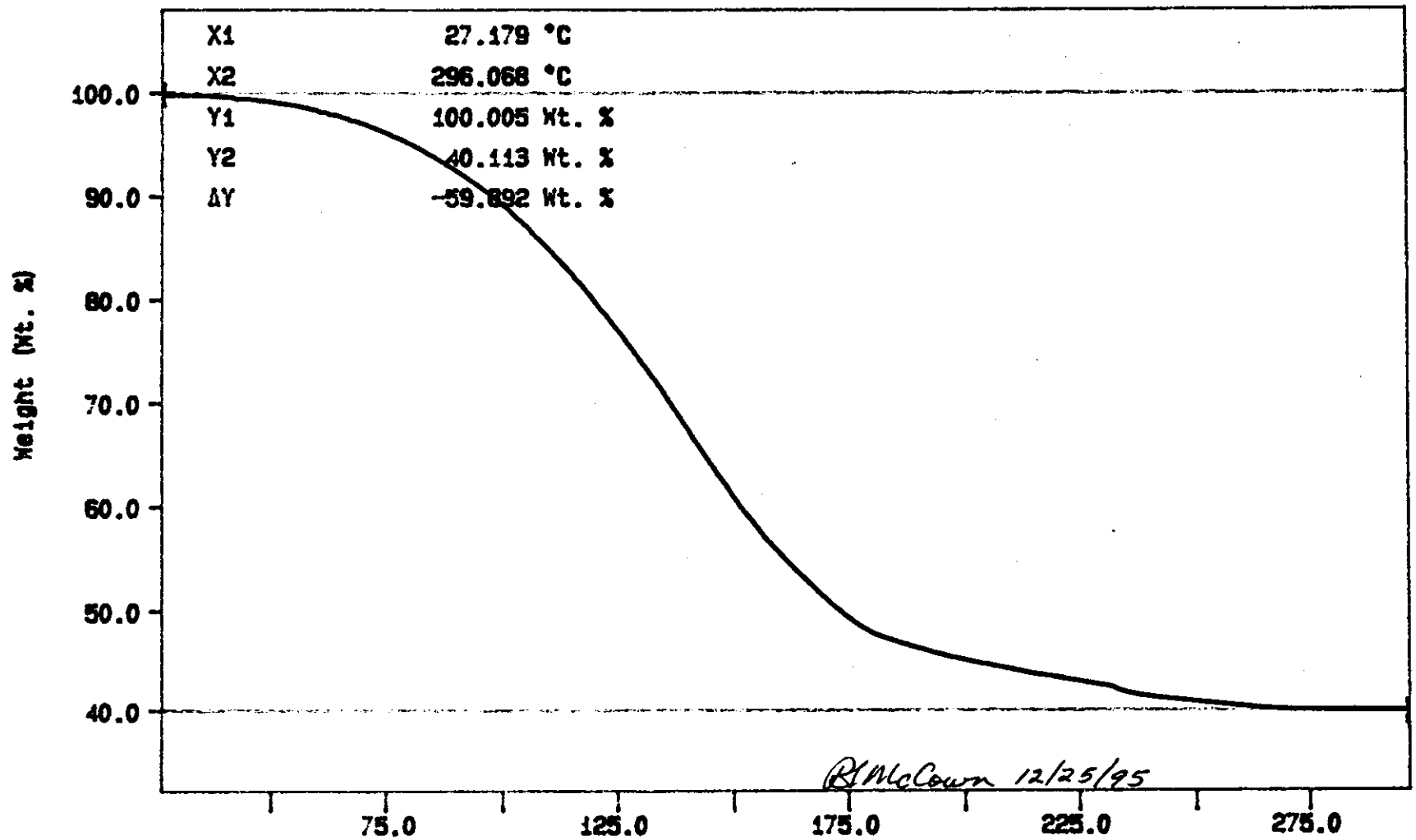
Analyst Signature **Date**

Other instrument was used.
12/29/95
BDV

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.

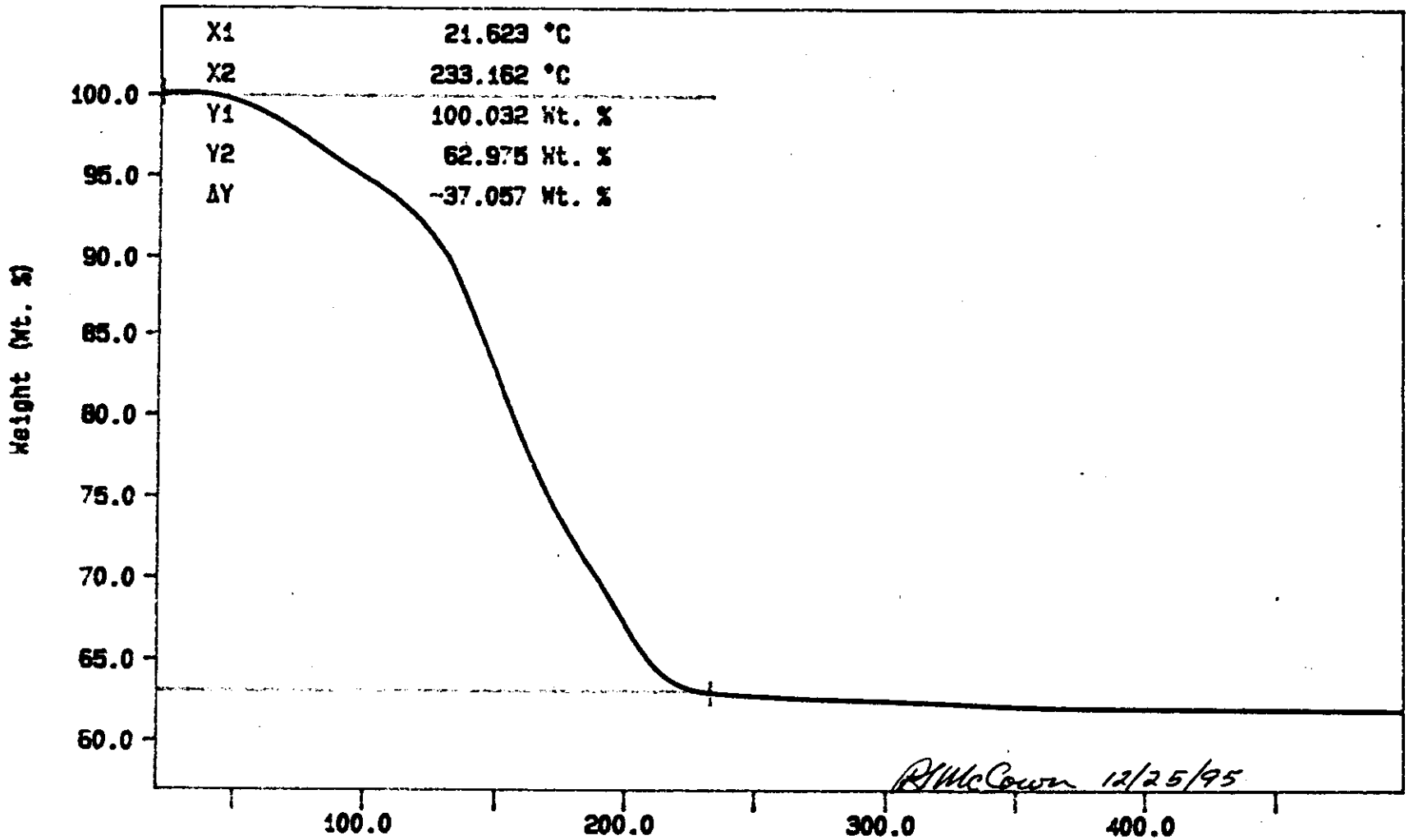
Curve 1: TGA
File info: TER122404 Sun Dec 24 20:23:43 1995
Sample Weight: 22.734 mg
65NB-A Terliq



N2 10C/MIN
TEMP1: 25.0 C TIME1: 0.0 min RATE1: 10.0 C/min
TEMP2: 300.0 C

PJ MCCOWN
PERKIN-ELMER
7 Series Thermal Analysis System
Sun Dec 24 20:25:46 1995

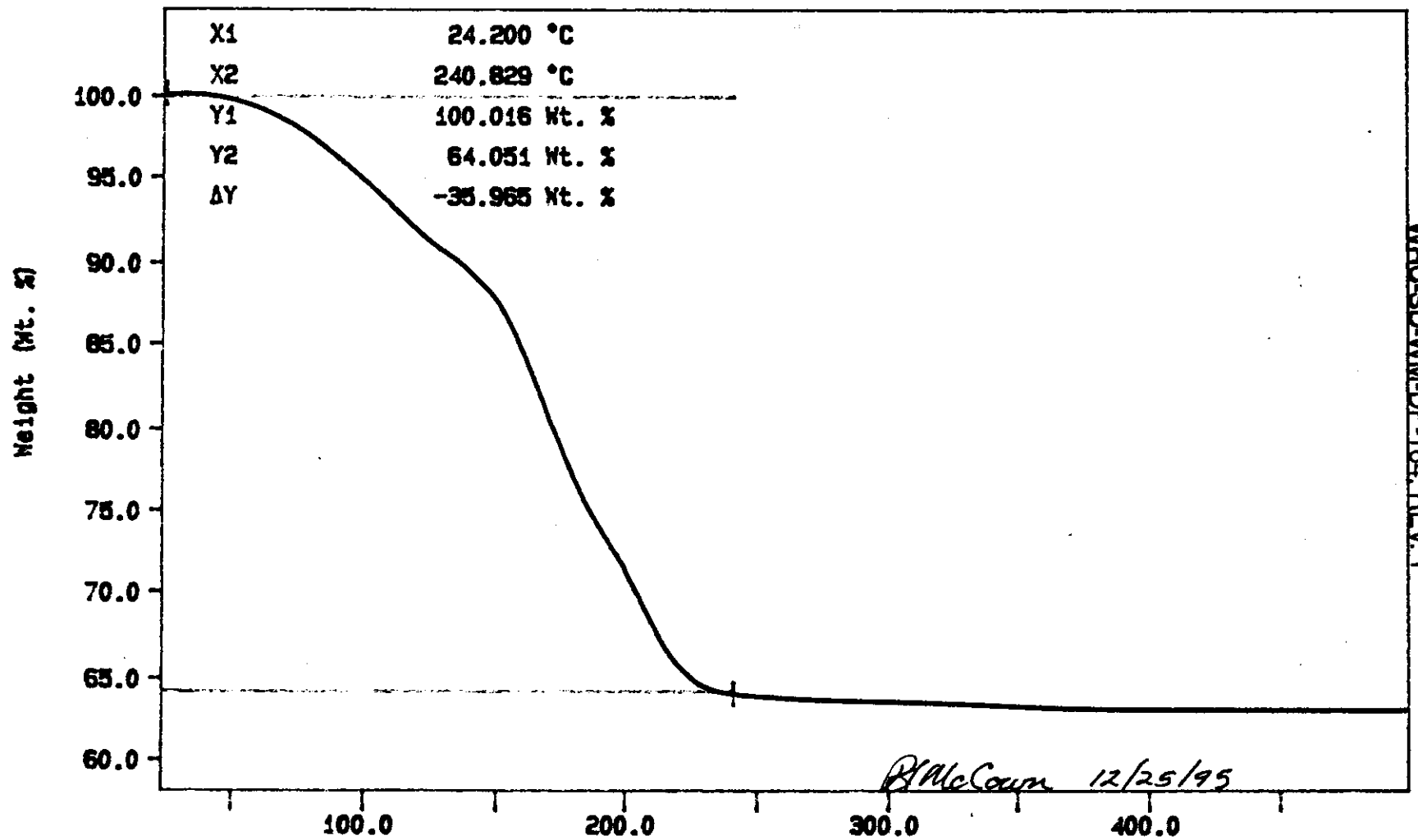
Curve 1: TGA
File info: SAM122404 Sun Dec 24 22:00:17 1995
Sample Weight: 19.767 mg
S95T003809 SAM N2



10C/MIN N2
TEMP1: 25.0 C TIME1: 0.0 min RATE1: 10.0 C/min
TEMP2: 800.0 C

PJ MCCOWN
PERKIN-ELMER
7 Series Thermal Analysis System
Sun Dec 24 22:25:13 1995

Curve 1: TGA
File info: SAM122405 Sun Dec 24 23:32:39 1995
Sample Weight: 21.550 mg
S95T003809 DUP N2

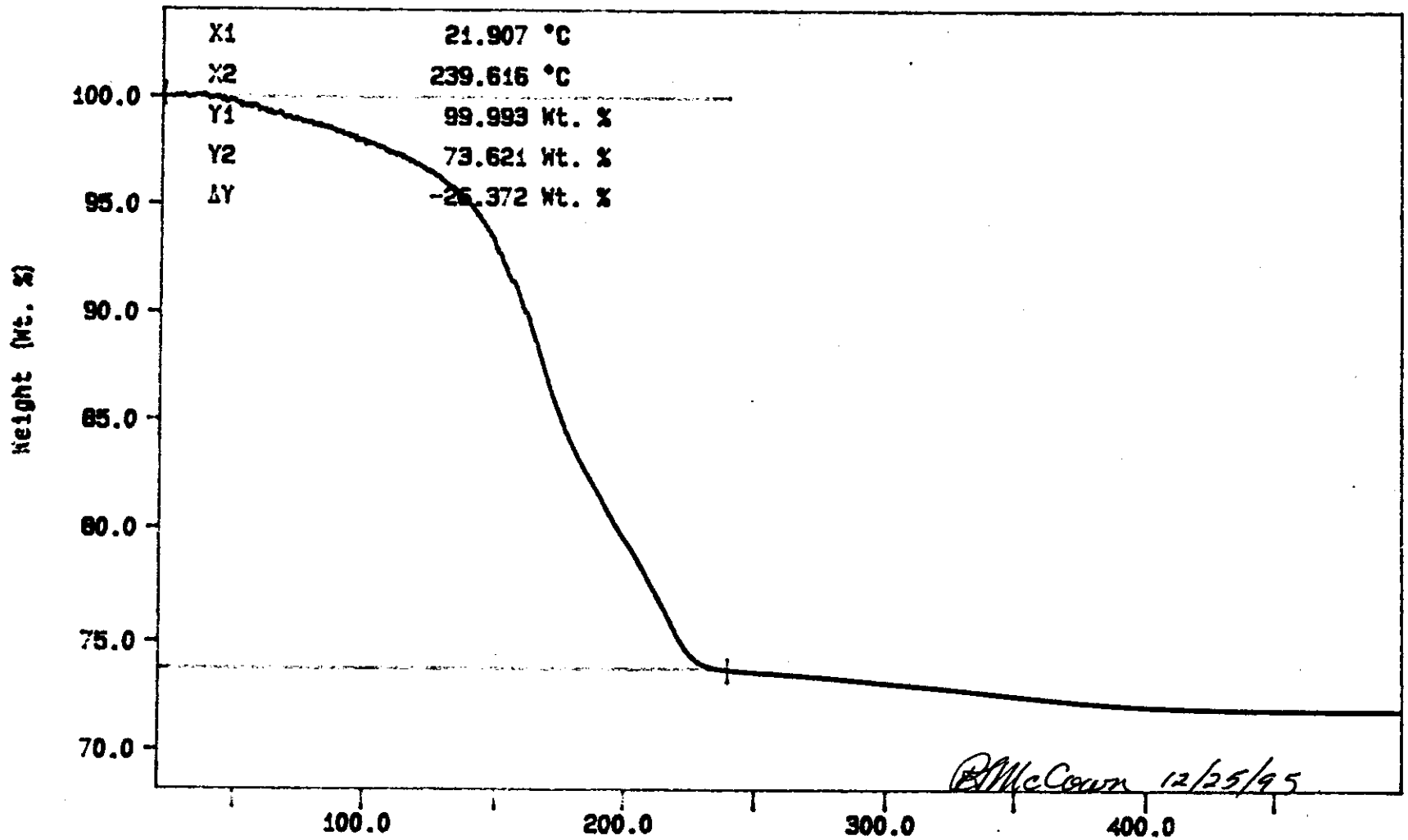


10C/MIN N2
TEMP1: 35.0 C TIME1: 0.0 min RATE1: 10.0 C/min
TEMP2: 600.0 C

PJ MCCOWN
PERKIN-ELMER
7 Series Thermal Analysis System
Sun Dec 24 23:38:18 1995

WHC-SD-WM-DP-164, REV. 1

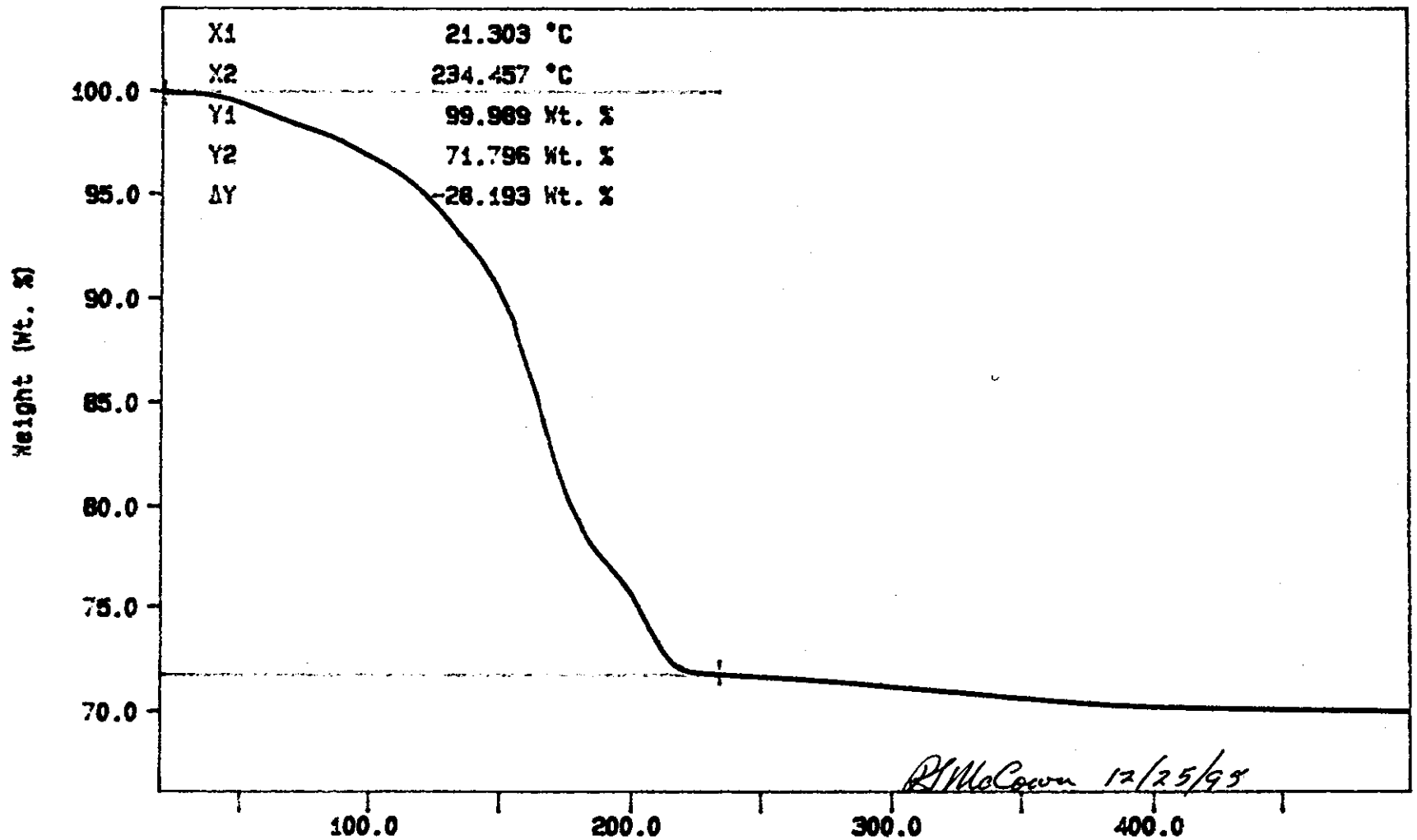
Curve 1: TGA
File info: SAM122501 Mon Dec 25 00:52:37 1995
Sample Weight: 33.078 mg
S95T003783 SAM N2



10C/MIN N2
TEMP1: 30.0 C TIME1: 0.0 min RATE1: 10.0 C/min

PJ MCCOWN
PERKIN-ELMER
7 Series Thermal Analysis System
Mon Dec 25 01:21:25 1995

Curve 1: TGA
File info: SAM122502 Mon Dec 25 02:50:25 1995
Sample Weight: 23.486 mg
S95T003783 DUP N2



10C/MIN N2
TEMP1: 35.0 C TIME1: 0.0 min RATE1: 10.0 C/min
TEMP2: 400.0 C

PJ MCCOWN
PERKIN-ELMER
7 Series Thermal Analysis System
Mon Dec 25 03:03:55 1995

LABCORE Data Entry Template for Worklist# 4502

Analyst: RJ McCown **Instrument:** TGA0 1 **Book #** 6508A

Method: LA-560-112 Rev/Mod B-1

Worklist Comment: BY 104 TGA Run under Nitrogen dlh

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA-01	SOLID	59.74	60.28	N/A	%
95000200	BY104 ROTARY	2	SAMPLE	S95T003810	0		TGA-01	SOLID	N/A	13.86		%
95000200	BY104 ROTARY	3	DUP	S95T003810	0		TGA-01	SOLID	13.86	13.40	N/A	%
95000200	BY104 ROTARY	4	SAMPLE	S95T003782	0		TGA-01	SOLID	N/A	34.40		%
95000200	BY104 ROTARY	5	DUP	S95T003782	0		TGA-01	SOLID	34.40	37.81	N/A	%

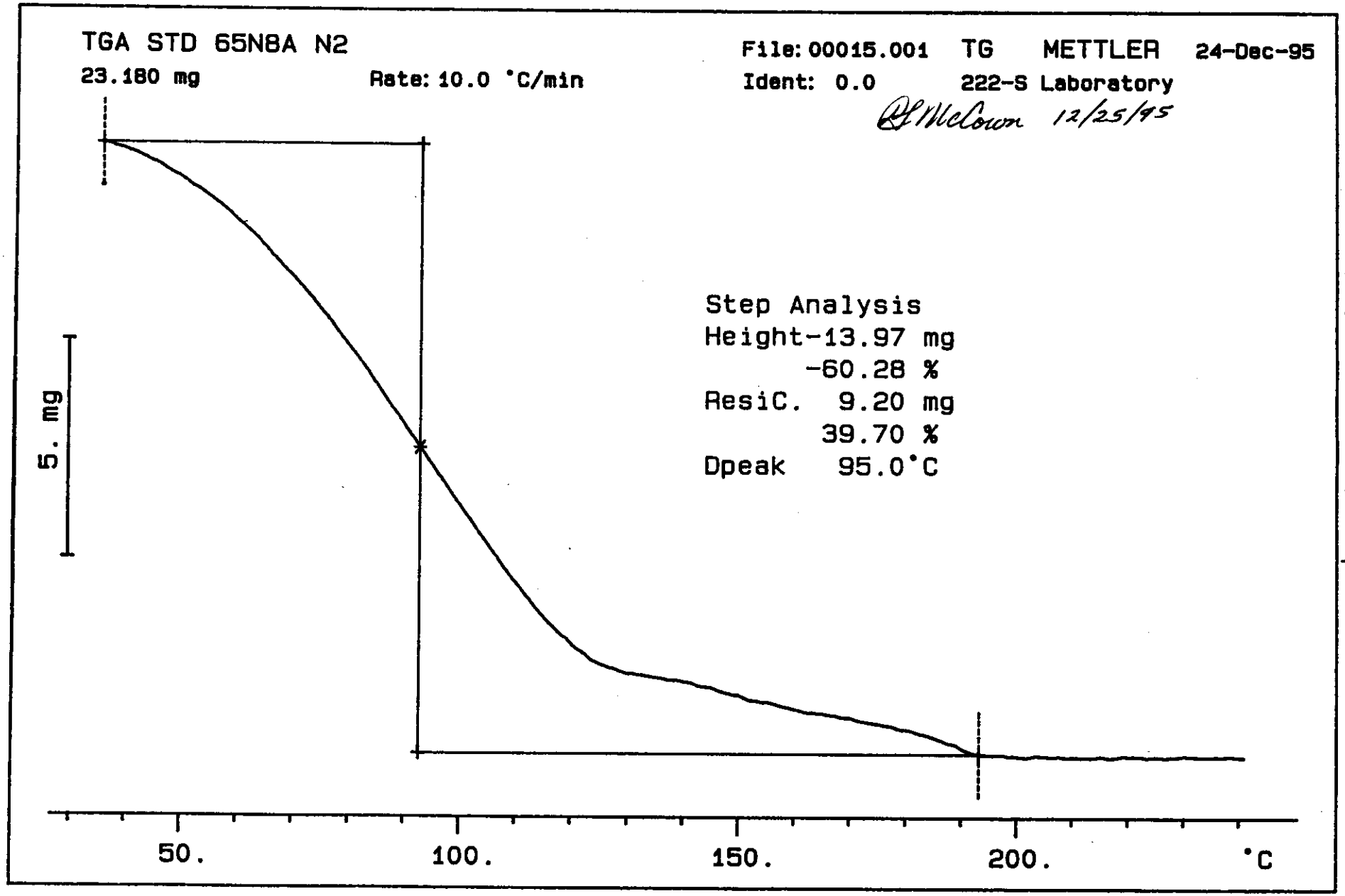
Final page for worklist # 4502

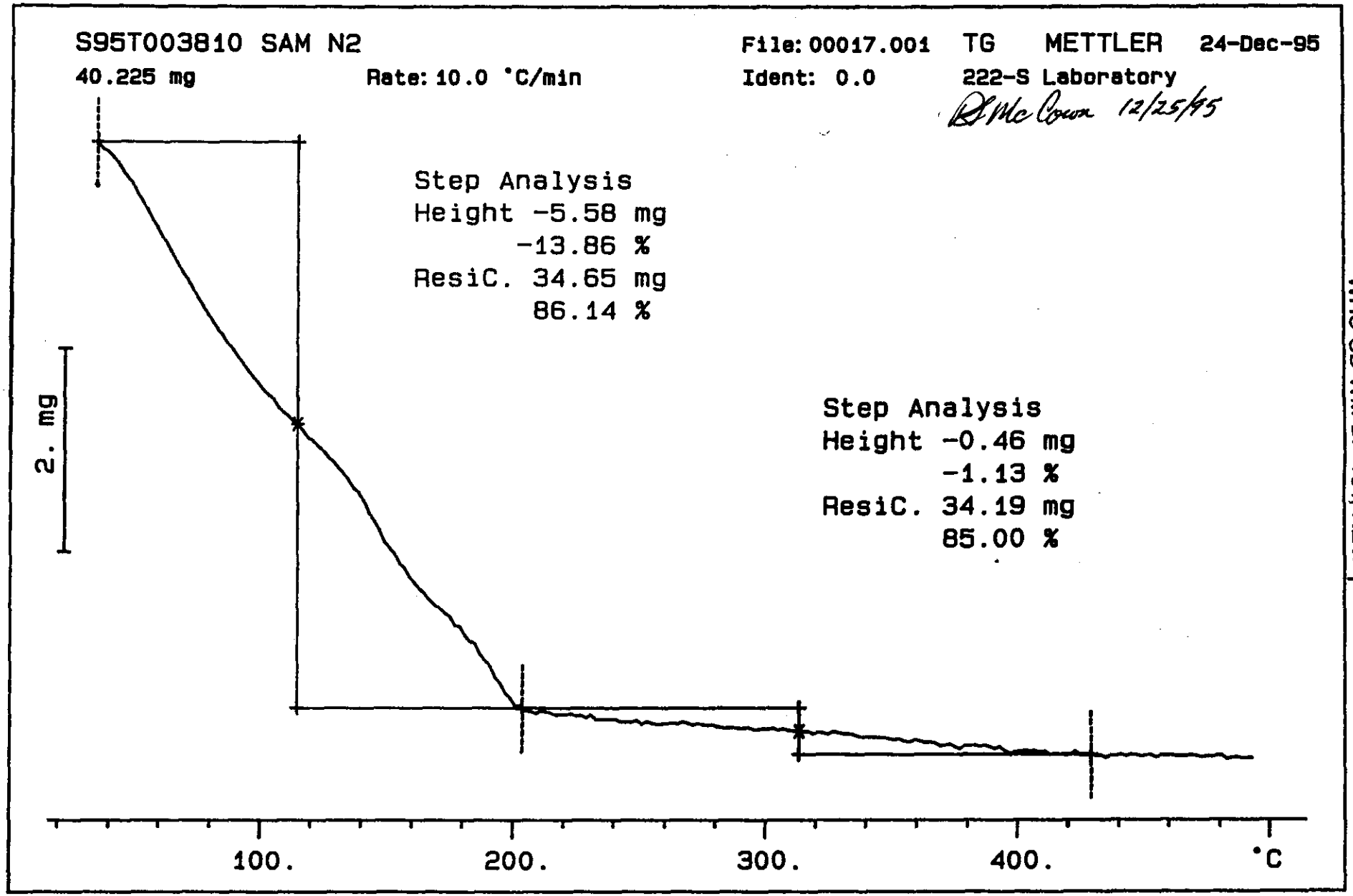
RJ McCown 12/25/95
Analyst Signature Date

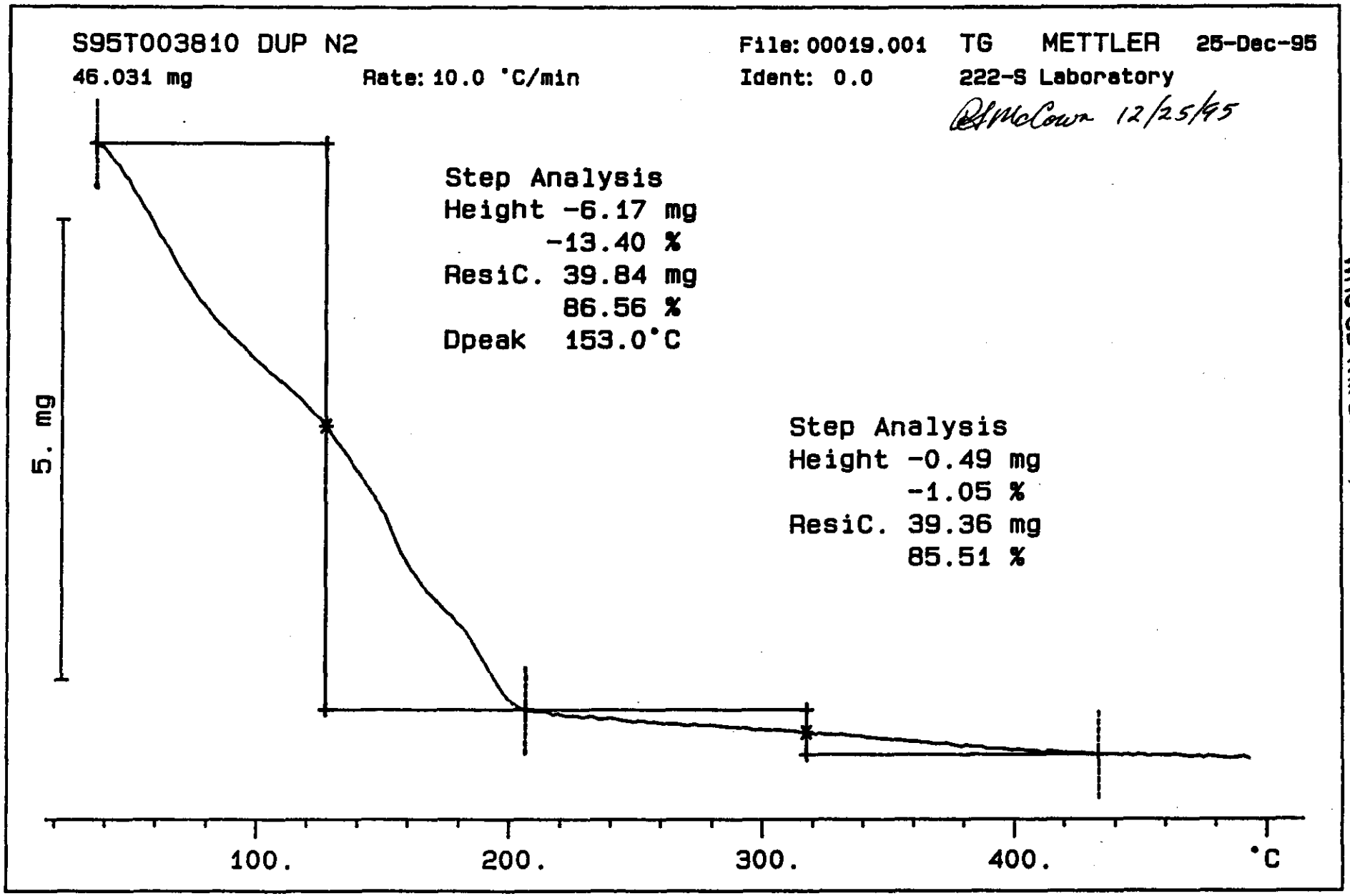
Linda Conlin 12/31/95
Analyst Signature Date

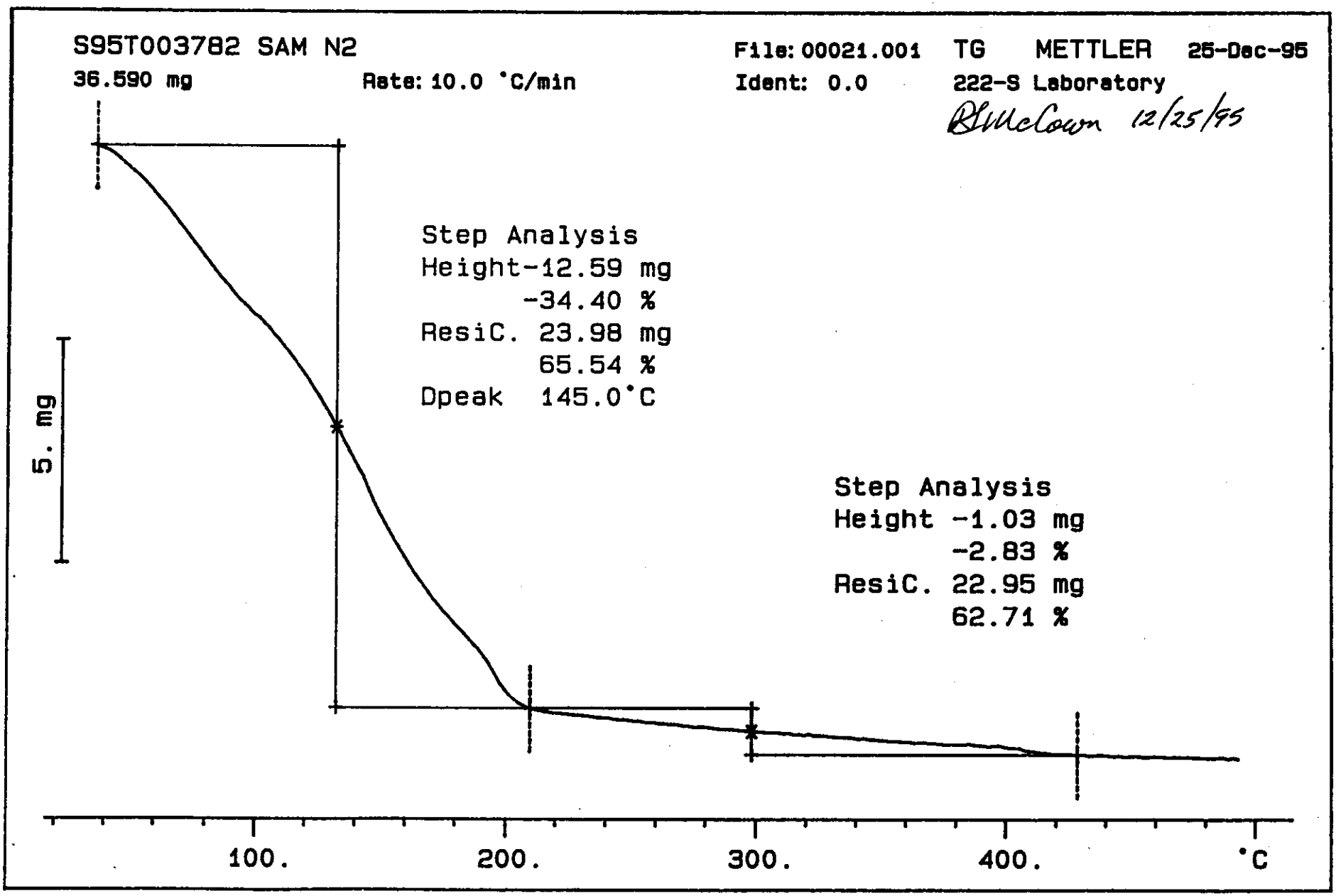
Data Entry Comments: S95T003810 produced an additional weight loss of 1.05%

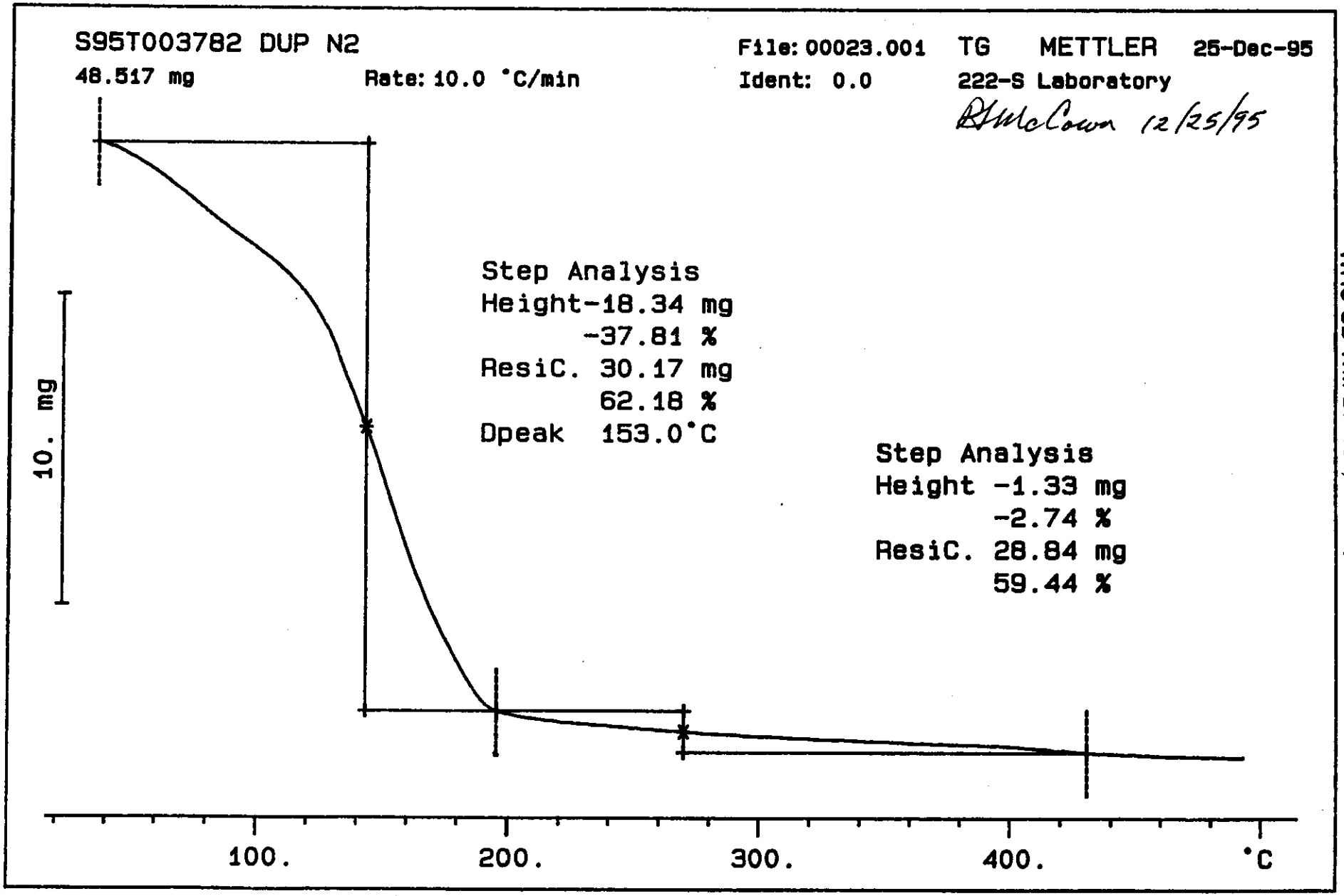
Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.


TGA STD 65N8A N2
23.180 mg
Rate: 10.0 °C/min
File: 00015.001 TG METTLER 24-Dec-95
Ident: 0.0 222-S Laboratory
RJ McCown 12/25/95
Step Analysis
Height -13.97 mg
-60.28 %
ResiC. 9.20 mg
39.70 %
Dpeak 95.0°C
5. mg
50.
100.
150.
200.
°C


S95T003810 SAM N2
40.225 mg
Rate: 10.0 °C/min
File: 00017.001 TG METTLER 24-Dec-95
Ident: 0.0
222-S Laboratory
Step Analysis
Height -5.58 mg
-13.86 %
ResiC. 34.65 mg
86.14 %
Step Analysis
Height -0.46 mg
-1.13 %
ResiC. 34.19 mg
85.00 %
2. mg
100.
200.
300.
400.
°C


S95T003810 DUP N2
46.031 mg
Rate: 10.0 °C/min
File: 00019.001
TG METTLER 25-Dec-95
Ident: 0.0
222-S Laboratory
RJ McCown 12/25/95
Step Analysis
Height -6.17 mg
-13.40 %
ResiC. 39.84 mg
86.56 %
Dpeak 153.0°C
Step Analysis
Height -0.49 mg
-1.05 %
ResiC. 39.36 mg
85.51 %
5. mg
100.
200.
300.
400.
°C


S95T003782 SAM N2
36.590 mg
Rate: 10.0 °C/min
File: 00021.001
TG METTLER 25-Dec-95
Ident: 0.0
222-S Laboratory
RLMcCown 12/25/95
Step Analysis
Height -12.59 mg
-34.40 %
ResiC. 23.98 mg
65.54 %
Dpeak 145.0°C
Step Analysis
Height -1.03 mg
-2.83 %
ResiC. 22.95 mg
62.71 %
5. mg
100.
200.
300.
400.
°C


S95T003782 DUP N2
48.517 mg
Rate: 10.0 °C/min
File: 00023.001
TG METTLER 25-Dec-95
Ident: 0.0
222-S Laboratory
RHMcCown 12/25/95
Step Analysis
Height -18.34 mg
-37.81 %
ResiC. 30.17 mg
62.18 %
Dpeak 153.0°C
Step Analysis
Height -1.33 mg
-2.74 %
ResiC. 28.84 mg
59.44 %
10. mg
100.
200.
300.
400.
°C

LABCORE Data Entry Template for Worklist# 4503

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

Method: LA-560-112 Rev/Mod B-1

Worklist Comment: BY-104 TGA Run under Nitrogen dlh

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA-01	SOLID	59.74	61.67	N/A	%
95000200	BY104 ROTARY	2	SAMPLE	S95T003784	0		TGA-01	SOLID	N/A	16.61		%
95000200	BY104 ROTARY	3	DUP	S95T003784	0		TGA-01	SOLID	16.61	18.13	N/A	%
95000200	BY104 ROTARY	4	SAMPLE	S95T003785	0		TGA-01	SOLID	N/A	15.26		%
95000200	BY104 ROTARY	5	DUP	S95T003785	0		TGA-01	SOLID	15.26	17.55	N/A	%

Final page for worklist # 4503

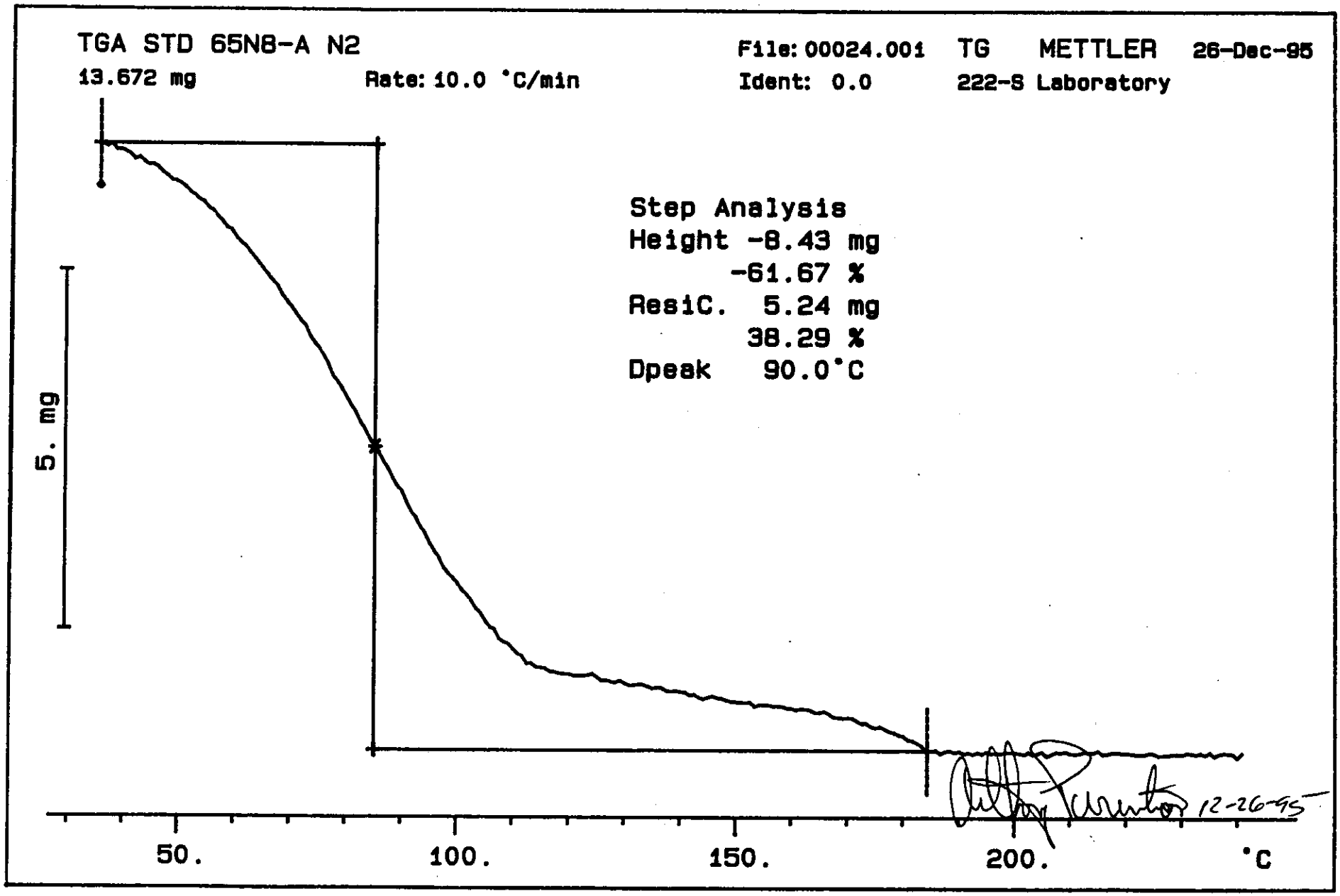
Anthony Peruto 12-26-95
Analyst Signature **Date**

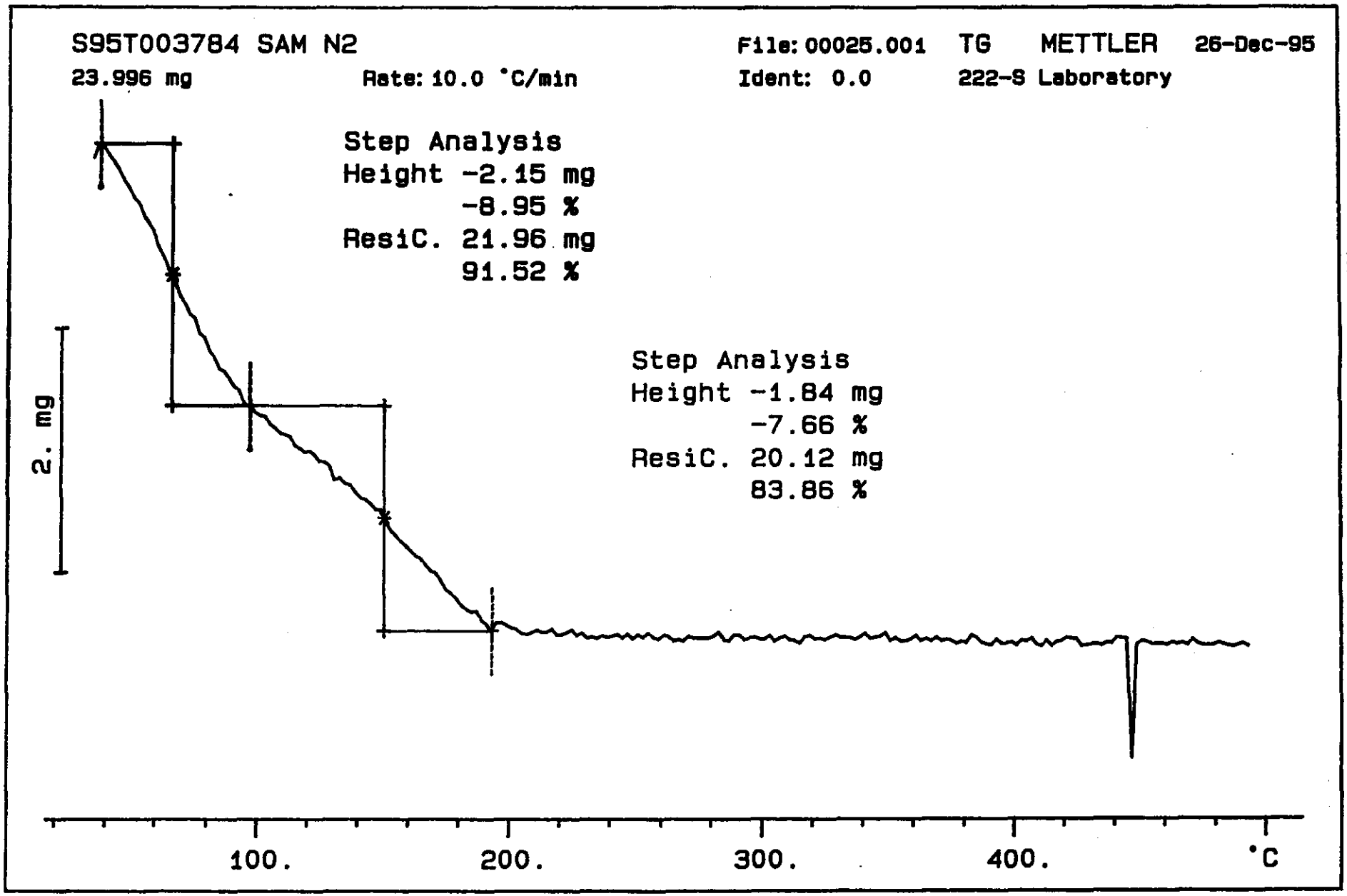
Steve Peterson 1/1/96
Analyst Signature **Date**

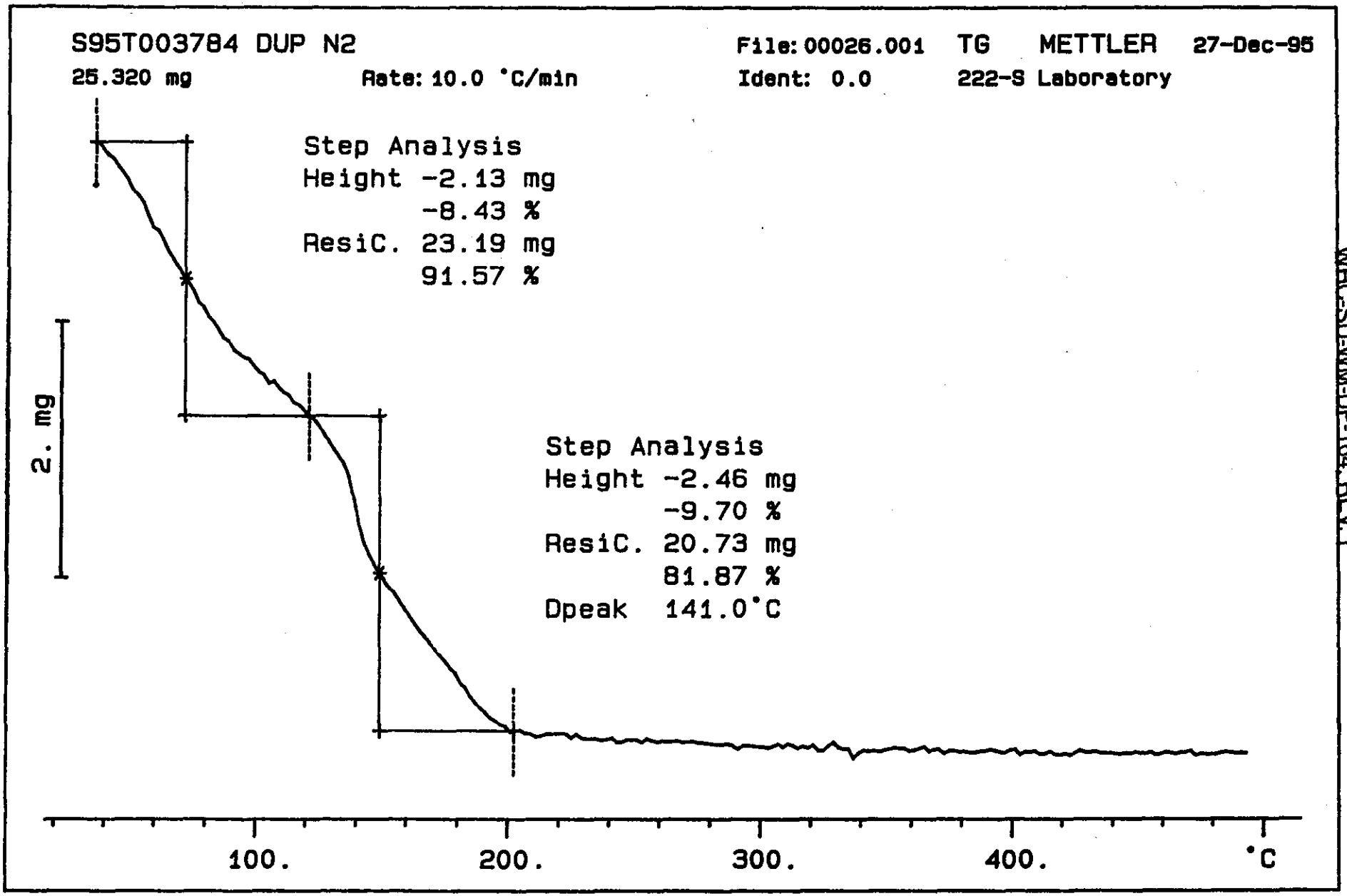
Data Entry Comments: The results are the sum of two weight loss steps

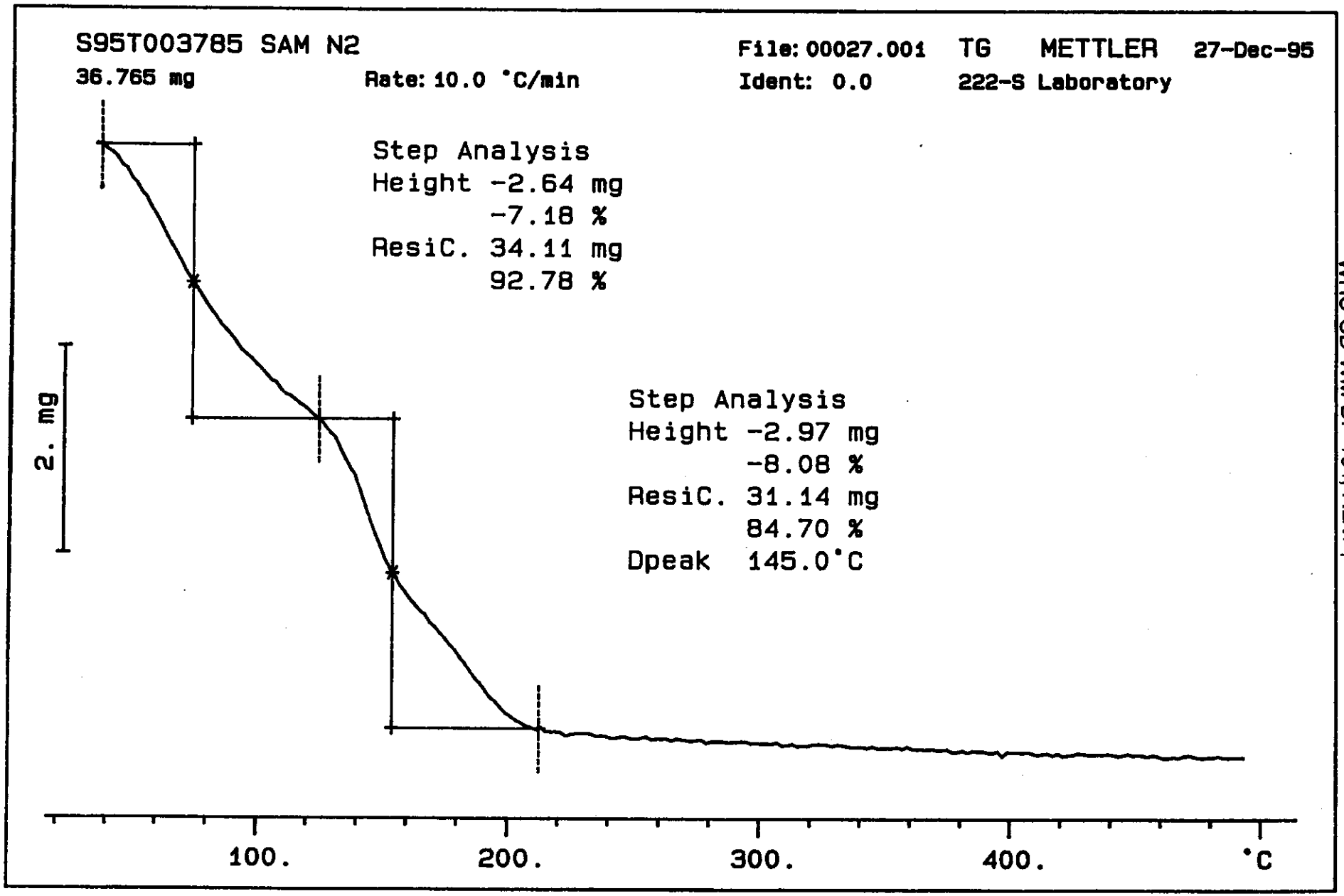
Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

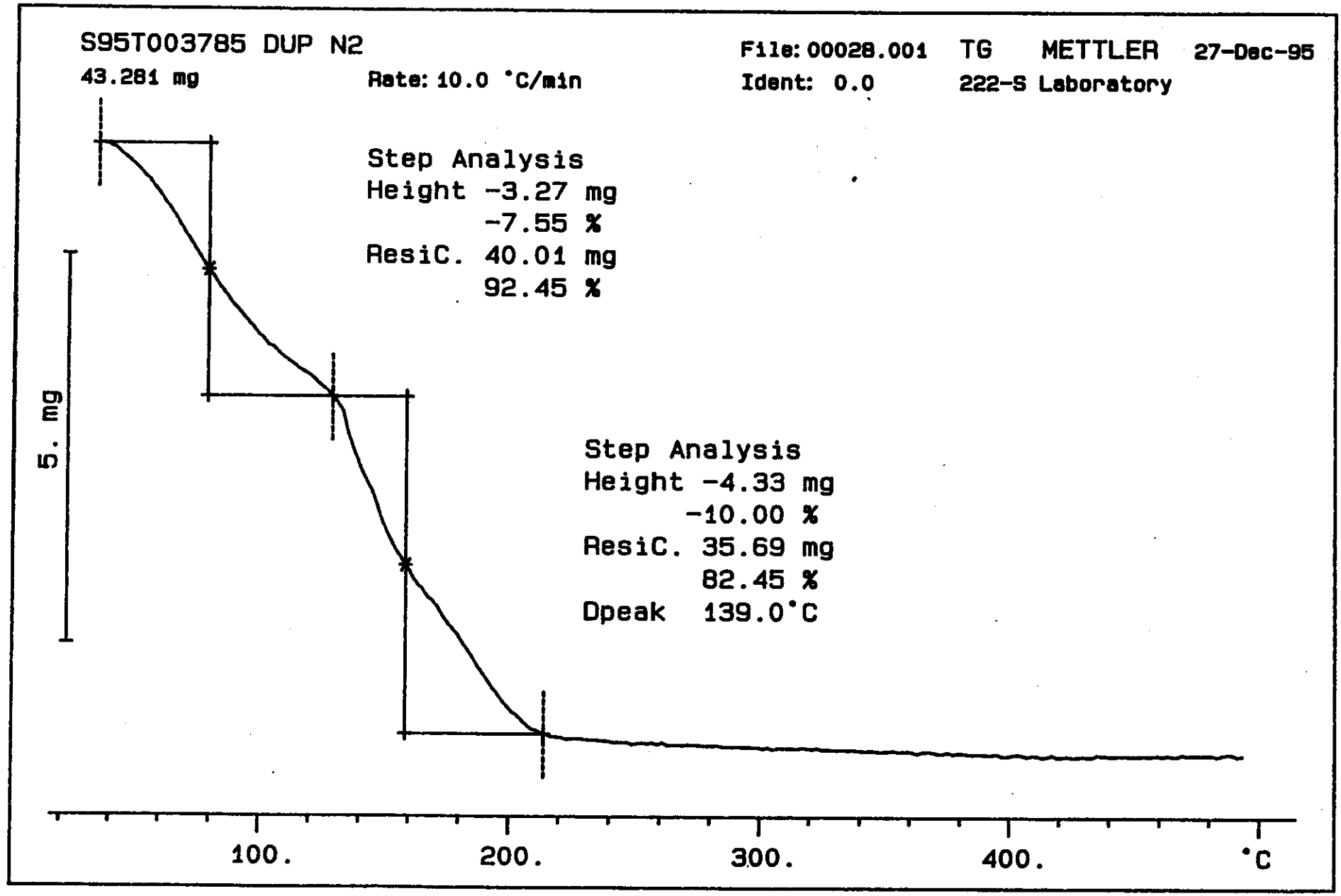
SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 2255 TO 2259




S95T003784 SAM N2
23.996 mg
Rate: 10.0 °C/min
File: 00025.001
TG METTLER 26-Dec-95
Ident: 0.0
222-S Laboratory
Step Analysis
Height -2.15 mg
-8.95 %
ResiC. 21.96 mg
91.52 %
Step Analysis
Height -1.84 mg
-7.66 %
ResiC. 20.12 mg
83.86 %
2. mg
100.
200.
300.
400.
°C


S95T003784 DUP N2
25.320 mg
Rate: 10.0 °C/min
File: 00026.001
TG METTLER 27-Dec-95
Ident: 0.0
222-S Laboratory
Step Analysis
Height -2.13 mg
-8.43 %
ResiC. 23.19 mg
91.57 %
Step Analysis
Height -2.46 mg
-9.70 %
ResiC. 20.73 mg
81.87 %
Dpeak 141.0°C
2. mg
100.
200.
300.
400.
°C


S95T003785 SAM N2
36.765 mg
Rate: 10.0 °C/min
File: 00027.001
TG METTLER 27-Dec-95
Ident: 0.0
222-S Laboratory
Step Analysis
Height -2.64 mg
-7.18 %
ResiC. 34.11 mg
92.78 %
Step Analysis
Height -2.97 mg
-8.08 %
ResiC. 31.14 mg
84.70 %
Dpeak 145.0°C
2. mg
100.
200.
300.
400.
°C


S95T003785 DUP N2
43.281 mg
Rate: 10.0 °C/min
File: 00028.001
TG METTLER 27-Dec-95
Ident: 0.0
222-S Laboratory
Step Analysis
Height -3.27 mg
-7.55 %
ResiC. 40.01 mg
92.45 %
Step Analysis
Height -4.33 mg
-10.00 %
ResiC. 35.69 mg
82.45 %
Dpeak 139.0°C
5. mg
100.
200.
300.
400.
°C

LABCORE Data Entry Template for Worklist# 4626

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

Method: LA-560-112 Rev/Mod B-1

Worklist Comment: Please run BY-104 TGA under N2. bdv

GROUP	PROJECT	S TYPE	SAMPLE#	R A	-------TEST------	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD			TGA-01	SOLID	59.74	60.13	N/A	%
95000180	BY104 ROTARY	2 SAMPLE	S95T003644	0	TGA-01	SOLID	N/A	29.20		%
95000180	BY104 ROTARY	3 DUP	S95T003644	0	TGA-01	SOLID	29.20	27.83	N/A	%

Final page for worklist # 4626

Anthony Punuta 1-3-96
Analyst Signature **Date**

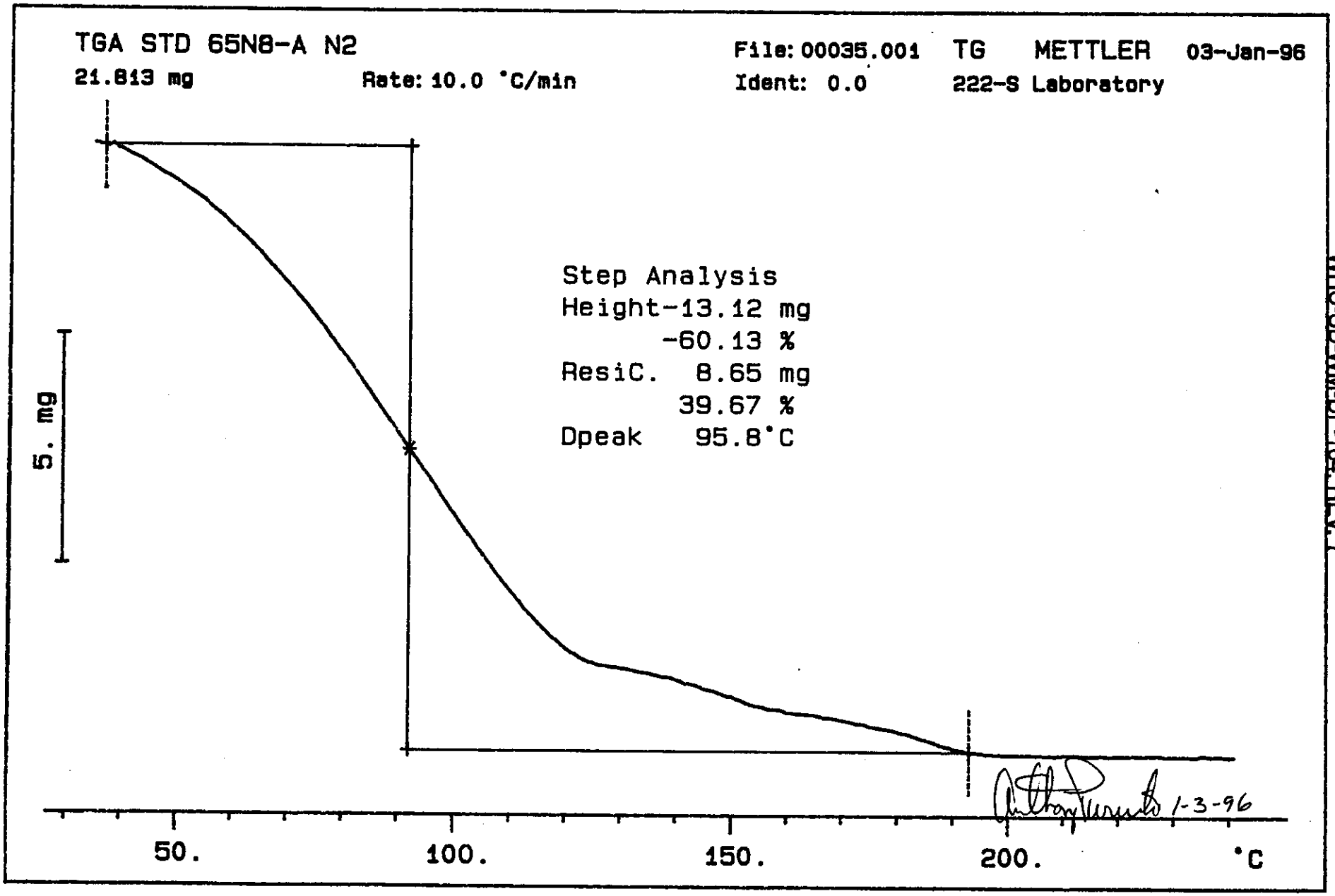
Gary Hamm 1-6-96
Analyst Signature **Date**

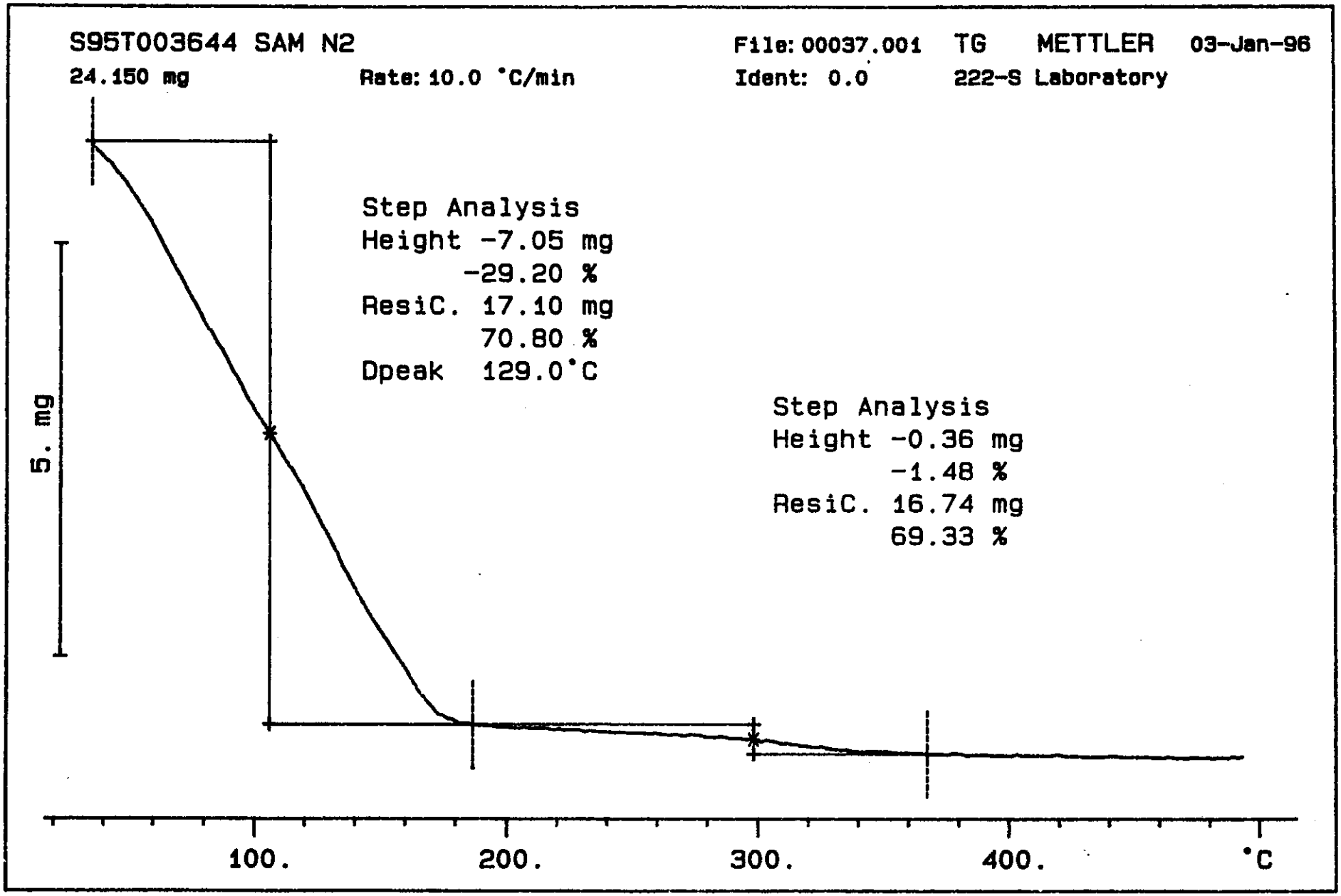
Verified by Blandina Valenzuela 1-8-96

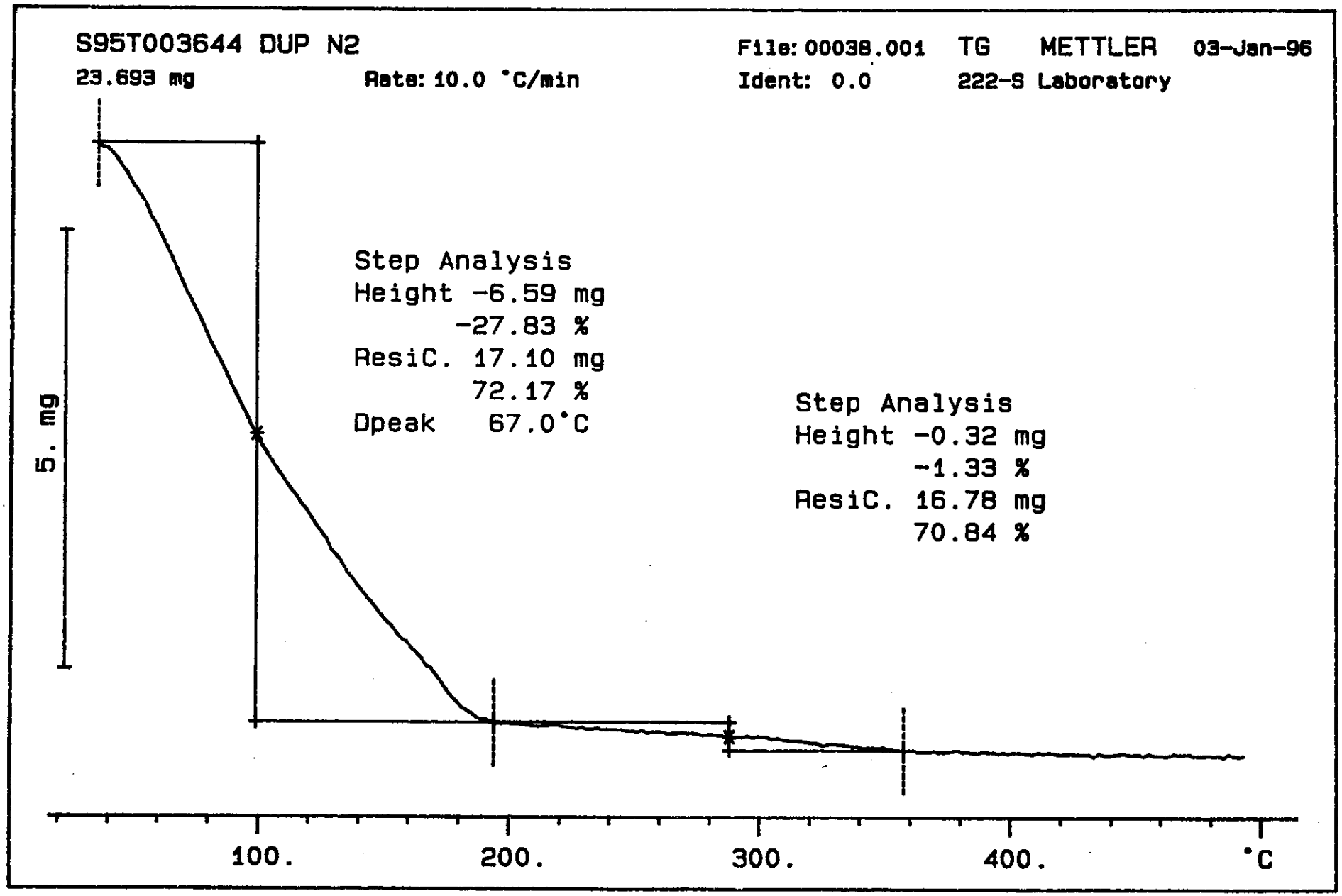
Data Entry Comments: Sample produced one additional weight loss step. 1/4/95 BDV of 1.48%

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 2-261 TO 2-263.




S95T003644 SAM N2
24.150 mg
Rate: 10.0 °C/min
File: 00037.001
Ident: 0.0
TG
METTLER
03-Jan-96
222-S Laboratory
Step Analysis
Height -7.05 mg
-29.20 %
ResiC. 17.10 mg
70.80 %
Dpeak 129.0°C
Step Analysis
Height -0.36 mg
-1.48 %
ResiC. 16.74 mg
69.33 %
5. mg
100.
200.
300.
400.
°C


S95T003644 DUP N2
23.693 mg
Rate: 10.0 °C/min
File: 00038.001
TG
METTLER
03-Jan-96
Ident: 0.0
222-S Laboratory
Step Analysis
Height -6.59 mg
-27.83 %
ResiC. 17.10 mg
72.17 %
Dpeak 67.0°C
Step Analysis
Height -0.32 mg
-1.33 %
ResiC. 16.78 mg
70.84 %
5. mg
100.
200.
300.
400.
°C

LABCORE Data Entry Template for Worklist# 5123

Analyst: ADP **Instrument:** TGA0 1 **Book #** 7508 A

Method: LA-560-112 Rev/Mod B-1

Worklist Comment: Please run BY-104 TGAs under N2. bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA-01	LIQUID	59.2	60.05*	N/A	%
95000200	BY104 ROTARY	2	SAMPLE	S95T003761	0		TGA-01	LIQUID	N/A	41.34		%
95000200	BY104 ROTARY	3	DUP	S95T003761	0		TGA-01	LIQUID	41.34	42.31	N/A	%
95000200	BY104 ROTARY	4	SAMPLE	S95T003775	0		TGA-01	LIQUID	N/A	41.14		%
95000200	BY104 ROTARY	5	DUP	S95T003775	0		TGA-01	LIQUID	41.14	40.66	N/A	%

Final page for worklist # 5123

Analyst Signature 1-23-96 Date

Analyst Signature 1/24/96 Date

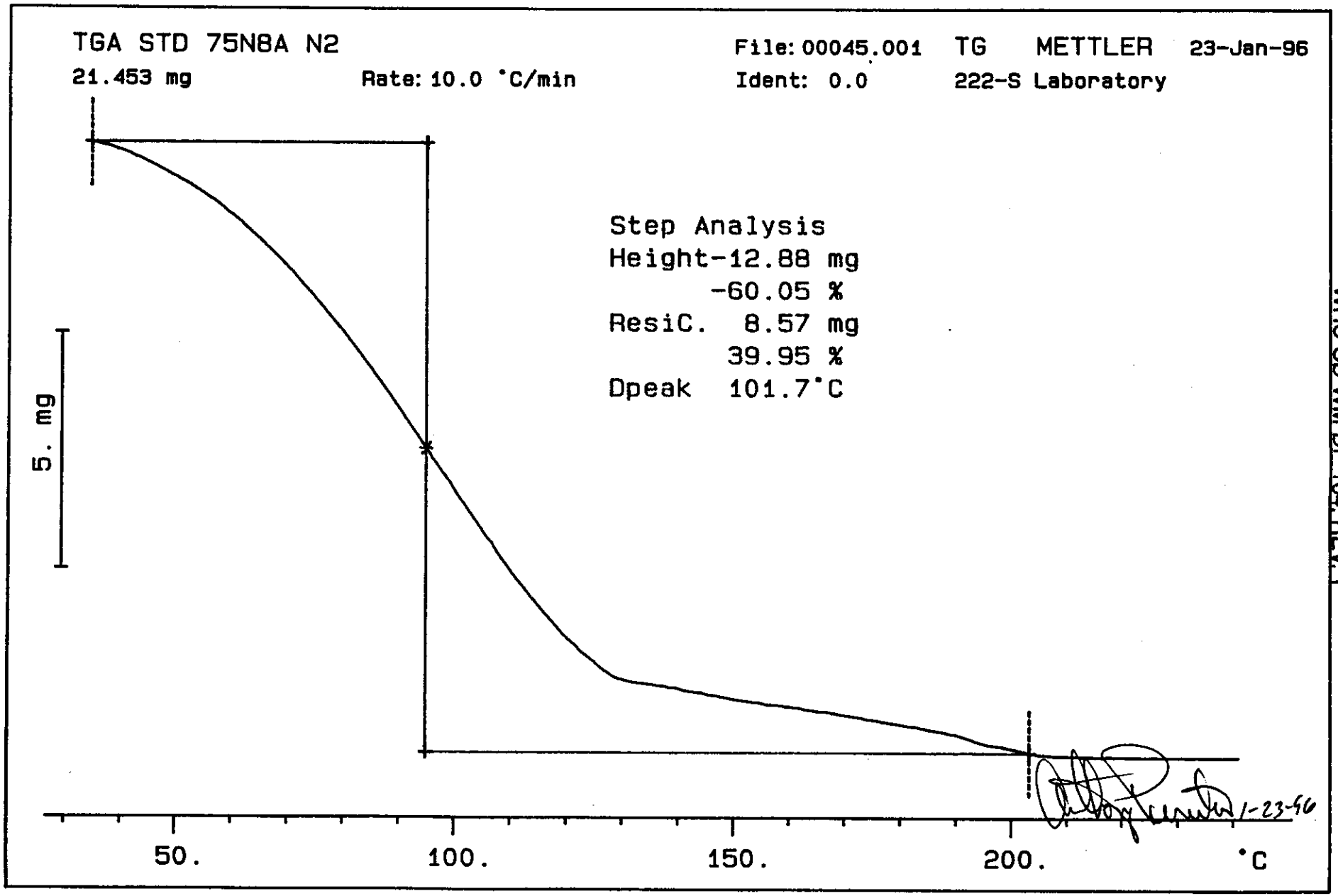
Verified by Blandina Valenzuela 1/26/96

Data Entry Comments: S95T003761 produced a second weight loss step of 7.71% about 180°C.

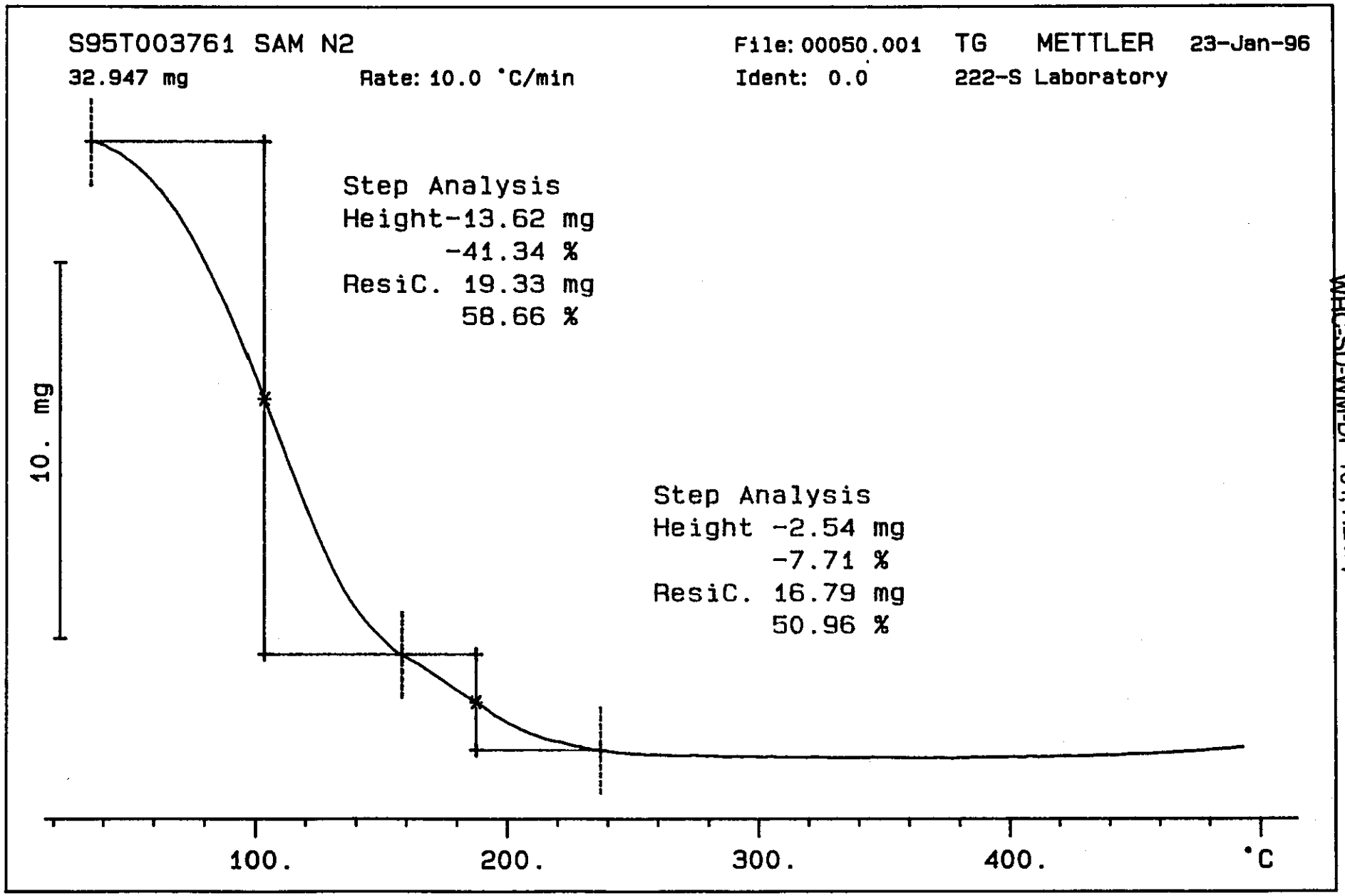
S95T003775 produced a second weight loss step of 7.66% at approximately 200°C

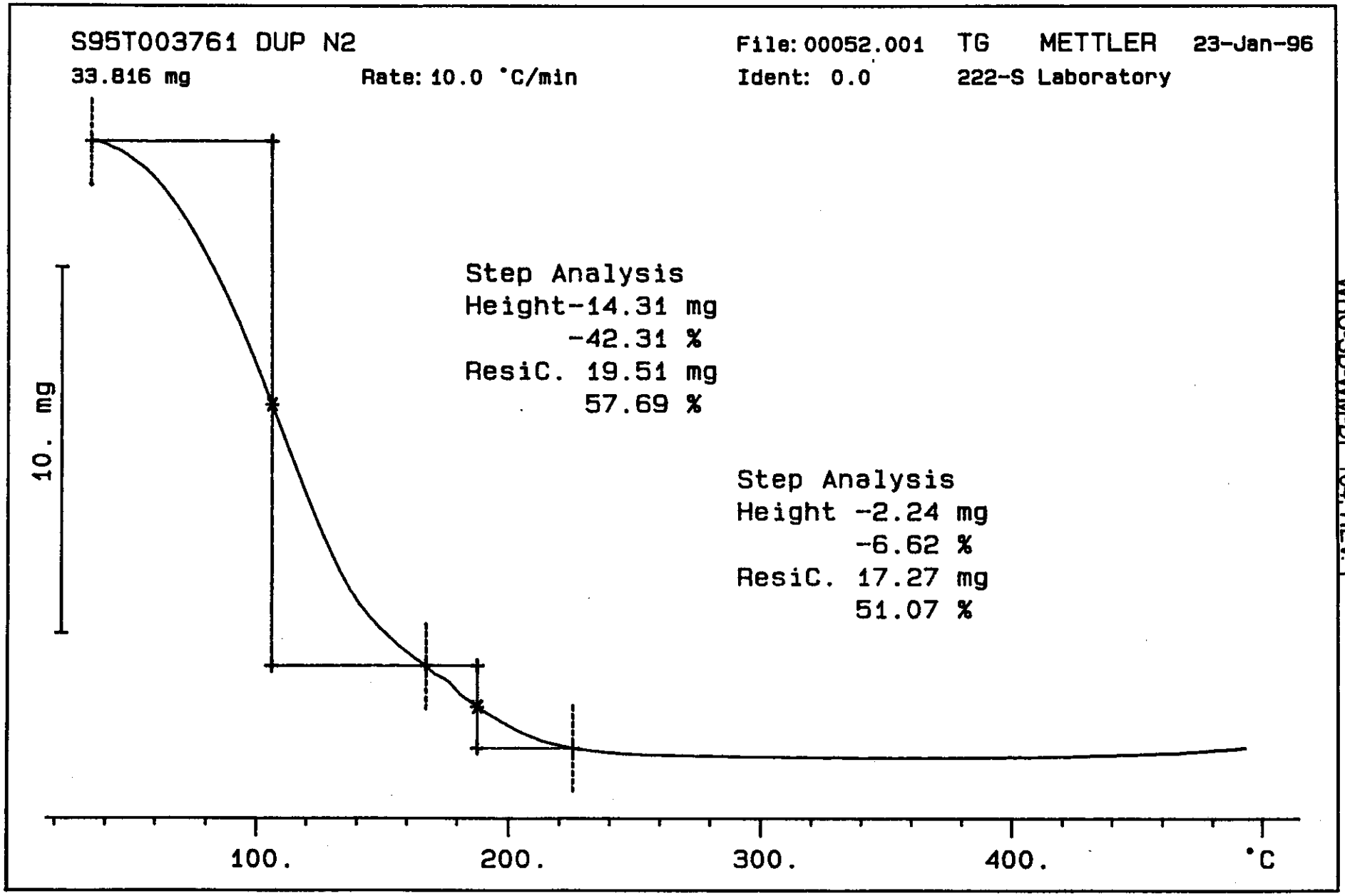
Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

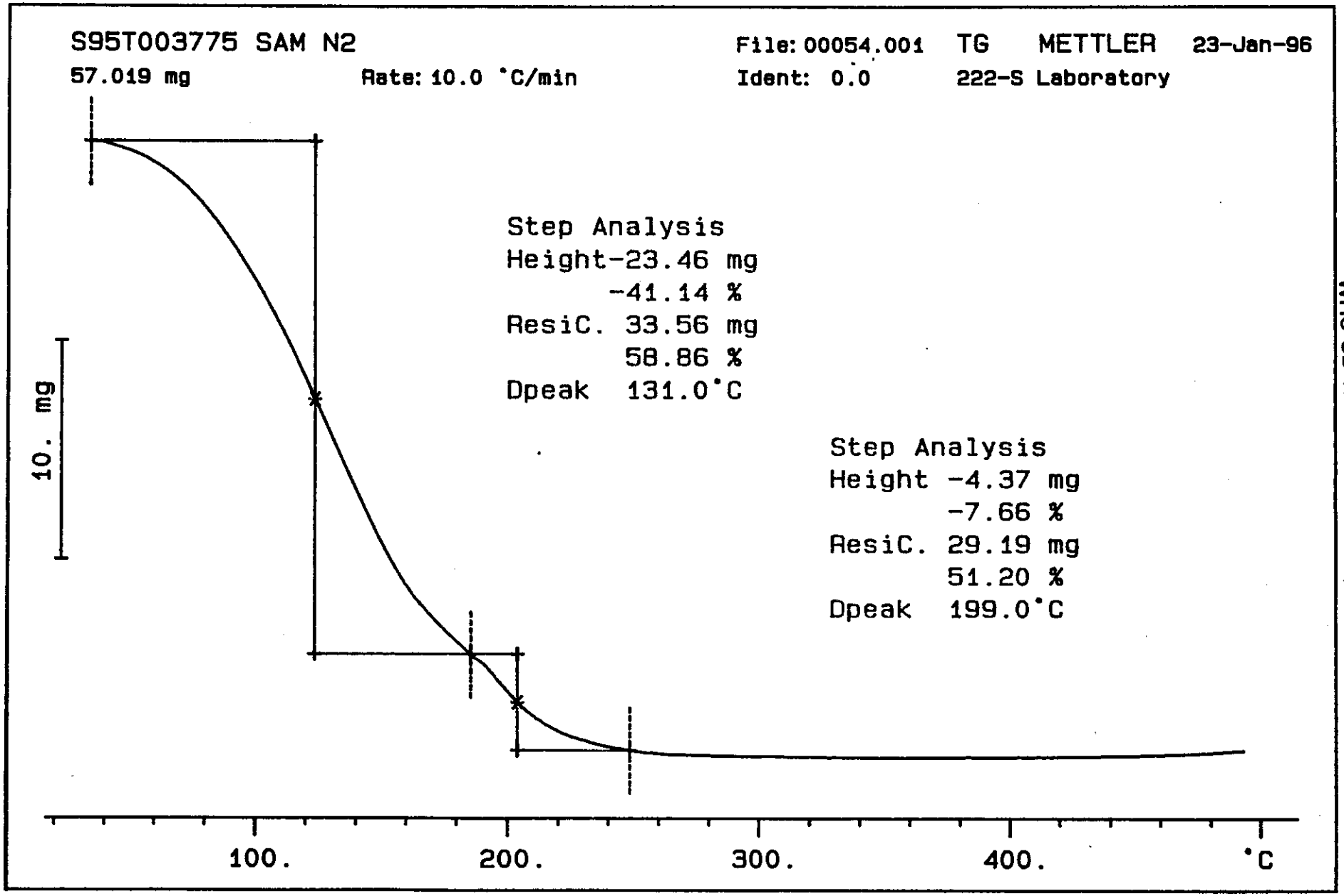
SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 2-265 TO 2-269.

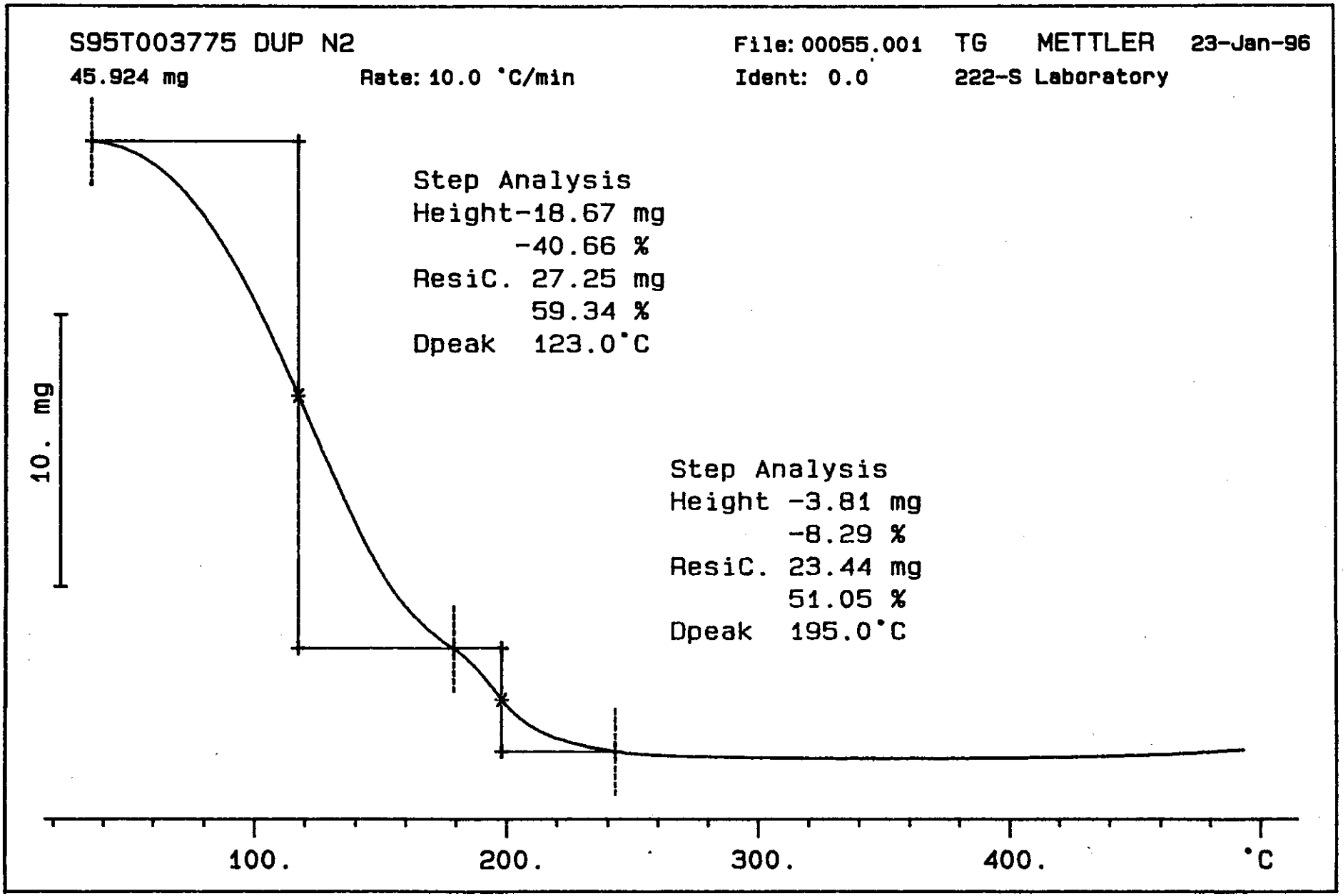


1-23-96


S95T003761 SAM N2
32.947 mg
Rate: 10.0 °C/min
File: 00050.001
Ident: 0.0
TG
METTLER
23-Jan-96
222-S Laboratory
Step Analysis
Height-13.62 mg
-41.34 %
ResiC. 19.33 mg
58.66 %
Step Analysis
Height -2.54 mg
-7.71 %
ResiC. 16.79 mg
50.96 %
10. mg
100.
200.
300.
400.
°C


S95T003761 DUP N2
33.816 mg
Rate: 10.0 °C/min
File: 00052.001
Ident: 0.0
TG
METTLER
23-Jan-96
222-S Laboratory
Step Analysis
Height -14.31 mg
-42.31 %
ResiC. 19.51 mg
57.69 %
Step Analysis
Height -2.24 mg
-6.62 %
ResiC. 17.27 mg
51.07 %
10. mg
100.
200.
300.
400.
°C


S95T003775 SAM N2
57.019 mg
Rate: 10.0 °C/min
File: 00054.001
TG METTLER 23-Jan-96
Ident: 0.0
222-S Laboratory
Step Analysis
Height -23.46 mg
-41.14 %
ResiC. 33.56 mg
58.86 %
Dpeak 131.0°C
Step Analysis
Height -4.37 mg
-7.66 %
ResiC. 29.19 mg
51.20 %
Dpeak 199.0°C
10. mg
100.
200.
300.
400.
°C


S95T003775 DUP N2
45.924 mg
Rate: 10.0 °C/min
File: 00055.001
Ident: 0.0
TG
METTLER
23-Jan-96
222-S Laboratory
Step Analysis
Height -18.67 mg
-40.66 %
ResiC. 27.25 mg
59.34 %
Dpeak 123.0°C
Step Analysis
Height -3.81 mg
-8.29 %
ResiC. 23.44 mg
51.05 %
Dpeak 195.0°C
10. mg
100.
200.
300.
400.
°C

LABCORE Data Entry Template for Worklist# 5296

Analyst: ASP **Instrument:** TGA0 1 **Book #** 75N8A

Method: LA-560-112 Rev/Mod B-1

Worklist Comment: Please run BY-104 TGAs under N2. bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA-01	SOLID	59.2	60.46	N/A	%
95000180	BY104 ROTARY	2	SAMPLE	S95T003634	0		TGA-01	SOLID	N/A	28.77		%
95000180	BY104 ROTARY	3	DUP	S95T003634	0		TGA-01	SOLID	28.77	26.33	N/A	%

Final page for worklist # 5296

Anthony Pirrotta 1-31-96
Analyst Signature Date

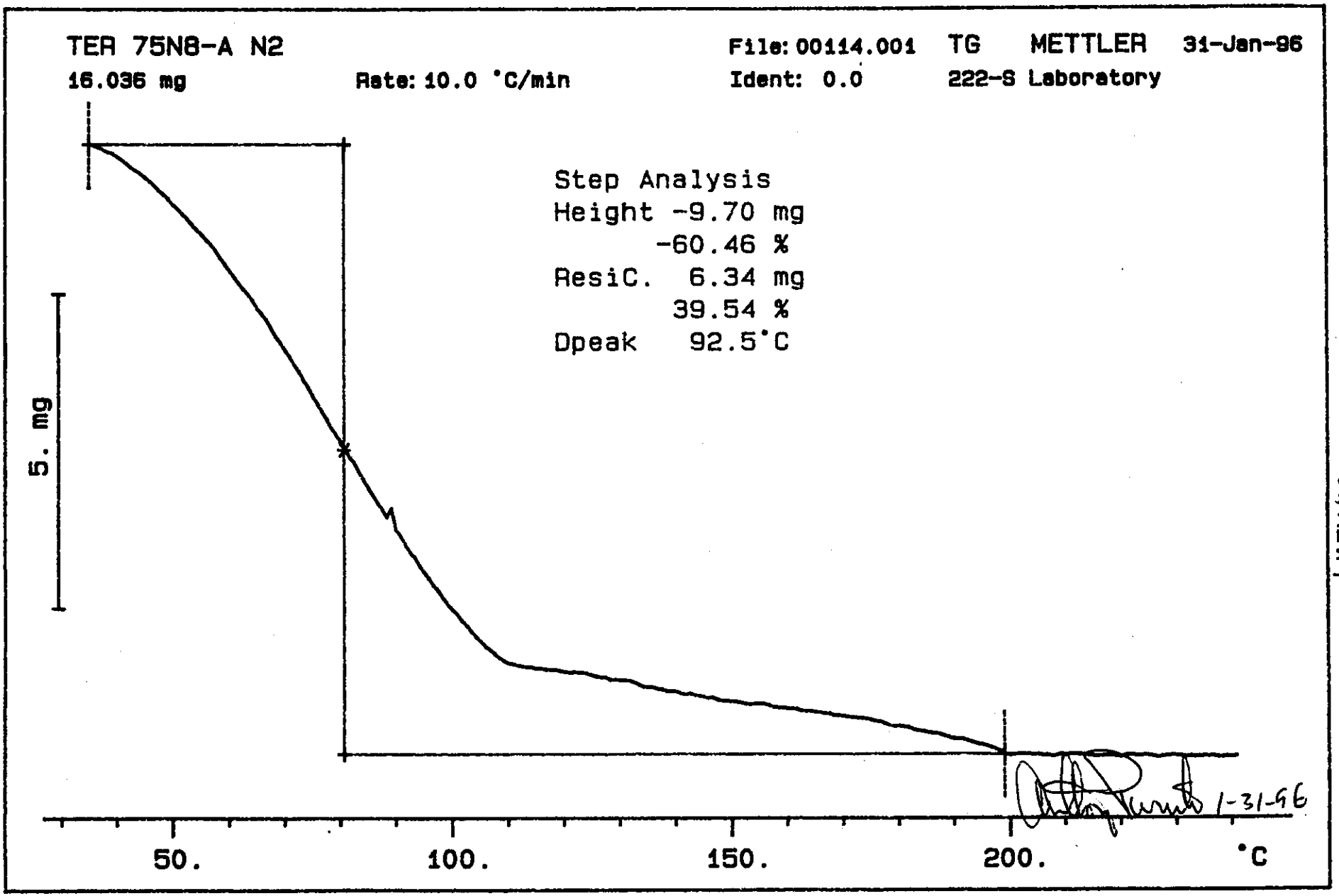
N. Wright 2/2/96
Analyst Signature Date

Verified by Blandina Valenzuela 2/5/96

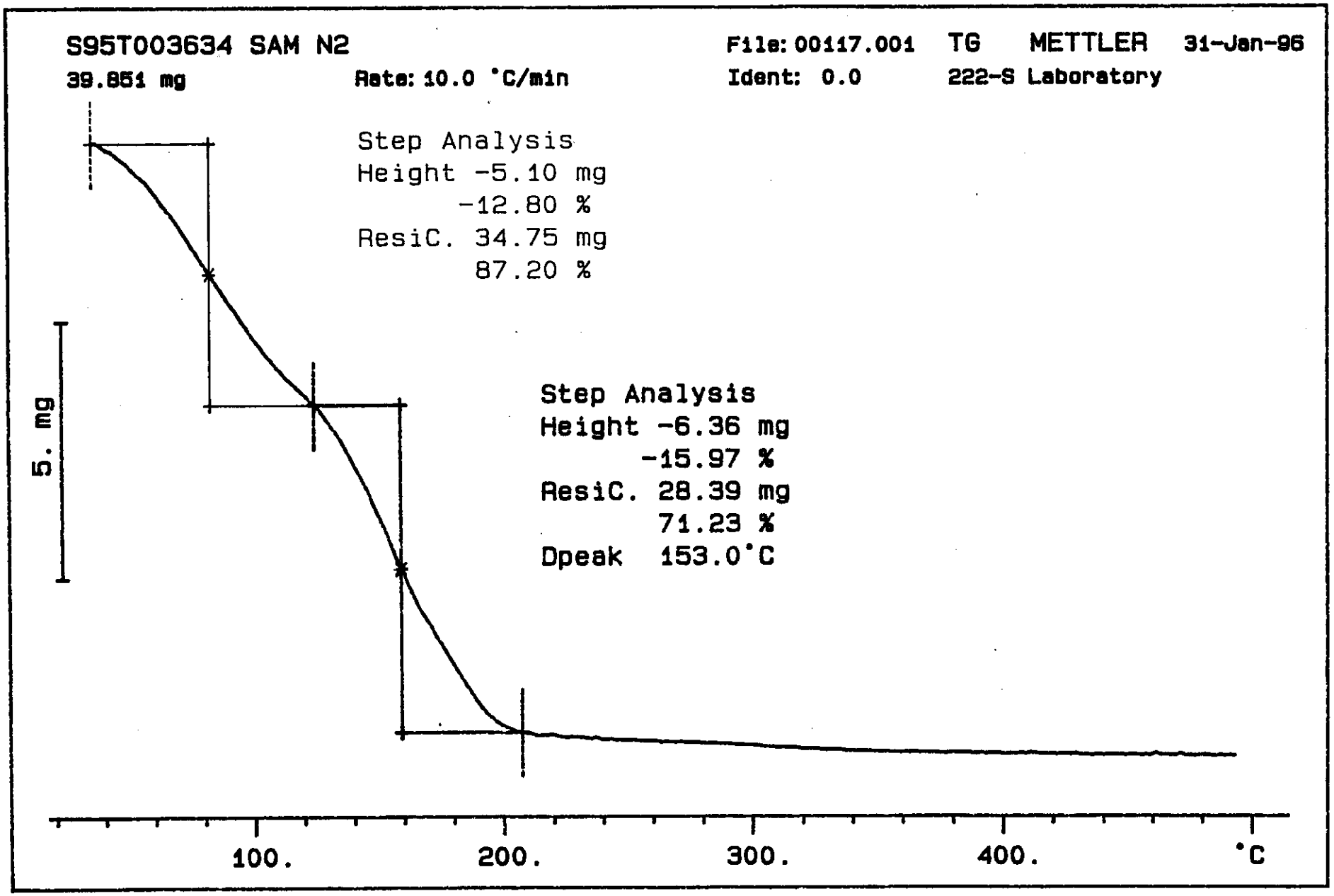
Data Entry Comments: The results given are the sum of two weight loss steps.

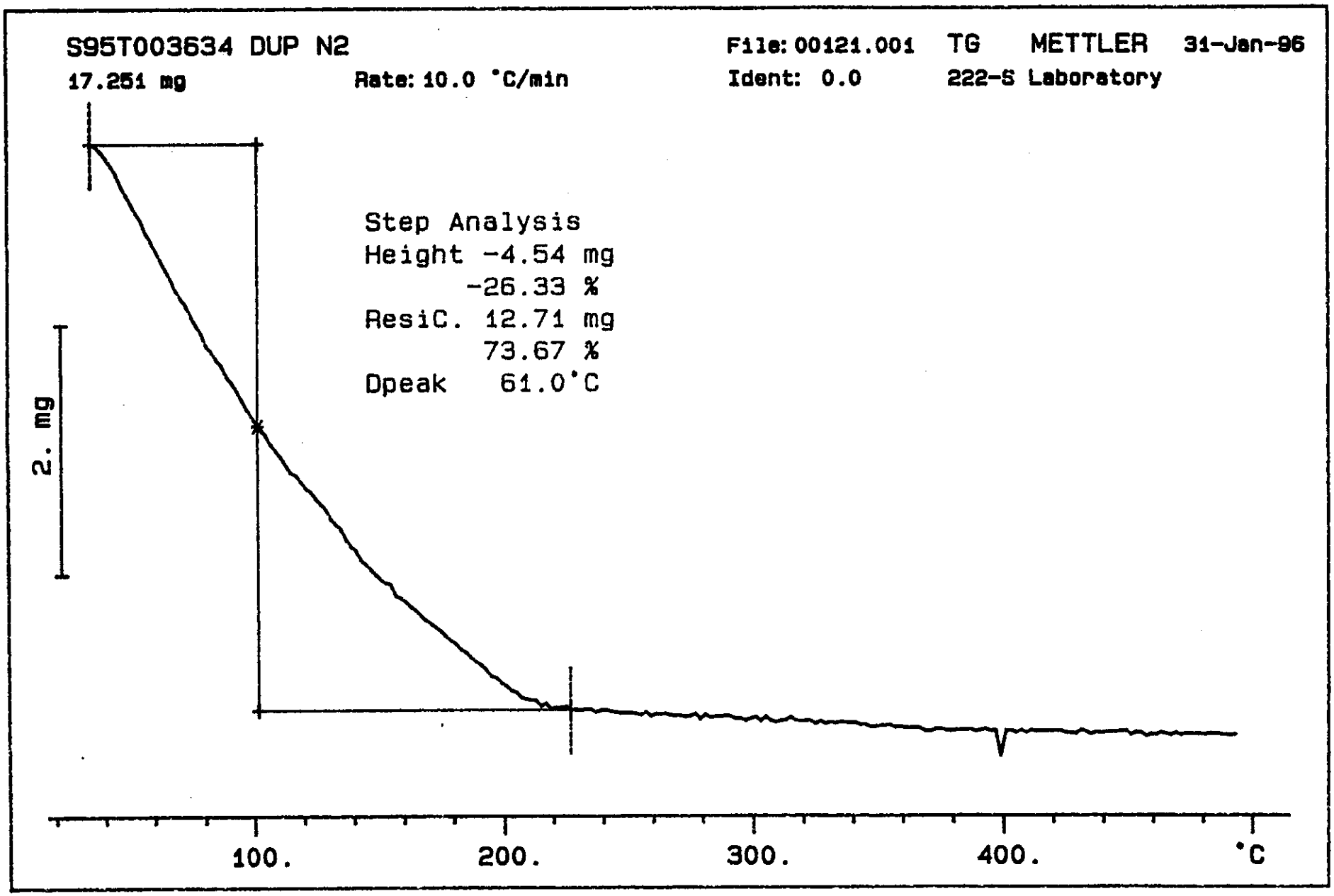
Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 2271 TO 2273



1-31-96


S95T003634 SAM N2
39.851 mg
Rate: 10.0 °C/min
File: 00117.001
Ident: 0.0
TG
METTLER
222-S Laboratory
31-Jan-96
Step Analysis
Height -5.10 mg
-12.80 %
ResiC. 34.75 mg
87.20 %
Step Analysis
Height -6.36 mg
-15.97 %
ResiC. 28.39 mg
71.23 %
Dpeak 153.0°C
5. mg
100.
200.
300.
400.
°C


S95T003634 DUP N2
17.251 mg
Rate: 10.0 °C/min
File: 00121.001
TG
METTLER
31-Jan-96
Ident: 0.0
222-S Laboratory
Step Analysis
Height -4.54 mg
-26.33 %
ResiC. 12.71 mg
73.67 %
Dpeak 61.0°C
2. mg
100.
200.
300.
400.
°C

LABCORE Data Entry Template for Worklist# 5326

Analyst: ADP **Instrument:** TGA0 1 **Book #** 75N8A

Method: LA-560-112 Rev/Mod B-1

Worklist Comment: Please run BY-104 TGA's under N2. bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA-01	SOLID	59.2	60.34*	N/A	%
95000180	BY104 ROTARY	2	SAMPLE	S95T003637	1		TGA-01	SOLID	N/A	18.71		%
95000180	BY104 ROTARY	3	DUP	S95T003637	1		TGA-01	SOLID	18.71	24.20	N/A	%
		4	STD				TGA-01	SOLID	59.2	59.36*	N/A	%
95000180	BY104 ROTARY	5	SAMPLE	S95T003646	0		TGA-01	SOLID	N/A	22.97		%
95000180	BY104 ROTARY	6	DUP	S95T003646	0		TGA-01	SOLID	22.97	24.24	N/A	%

Final page for worklist # 5326

See attached for signatures

Analyst Signature **Date** 2-1-96 BDV

Verified by Blandina Valenzuela 2/5/96

Analyst Signature **Date**

Data Entry Comments: S95T003637 produced a second weight loss step of 1.70%
S95T003646 produced a second weight loss step of 1.34%

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# 5326

Analyst: ASP **Instrument:** TGA0 1 **Book #** 75N8 A

Method: LA-560-112 Rev/Mod B-1

Worklist Comment: Please run BY-104 TGA's under N2. bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA-01	SOLID	59.2	60.34	N/A	%
95000180	BY104 ROTARY	2	SAMPLE	S95T003637	1		TGA-01	SOLID	N/A			%
95000180	BY104 ROTARY	3	DUP	S95T003637	1		TGA-01	SOLID			N/A	%
95000180	BY104 ROTARY	4	SAMPLE	S95T003646	0		TGA-01	SOLID	N/A			%
95000180	BY104 ROTARY	5	DUP	S95T003646	0		TGA-01	SOLID			N/A	%

Final page for worklist # 5326

Anthony Pierantoni 1-31-96
Analyst Signature **Date**

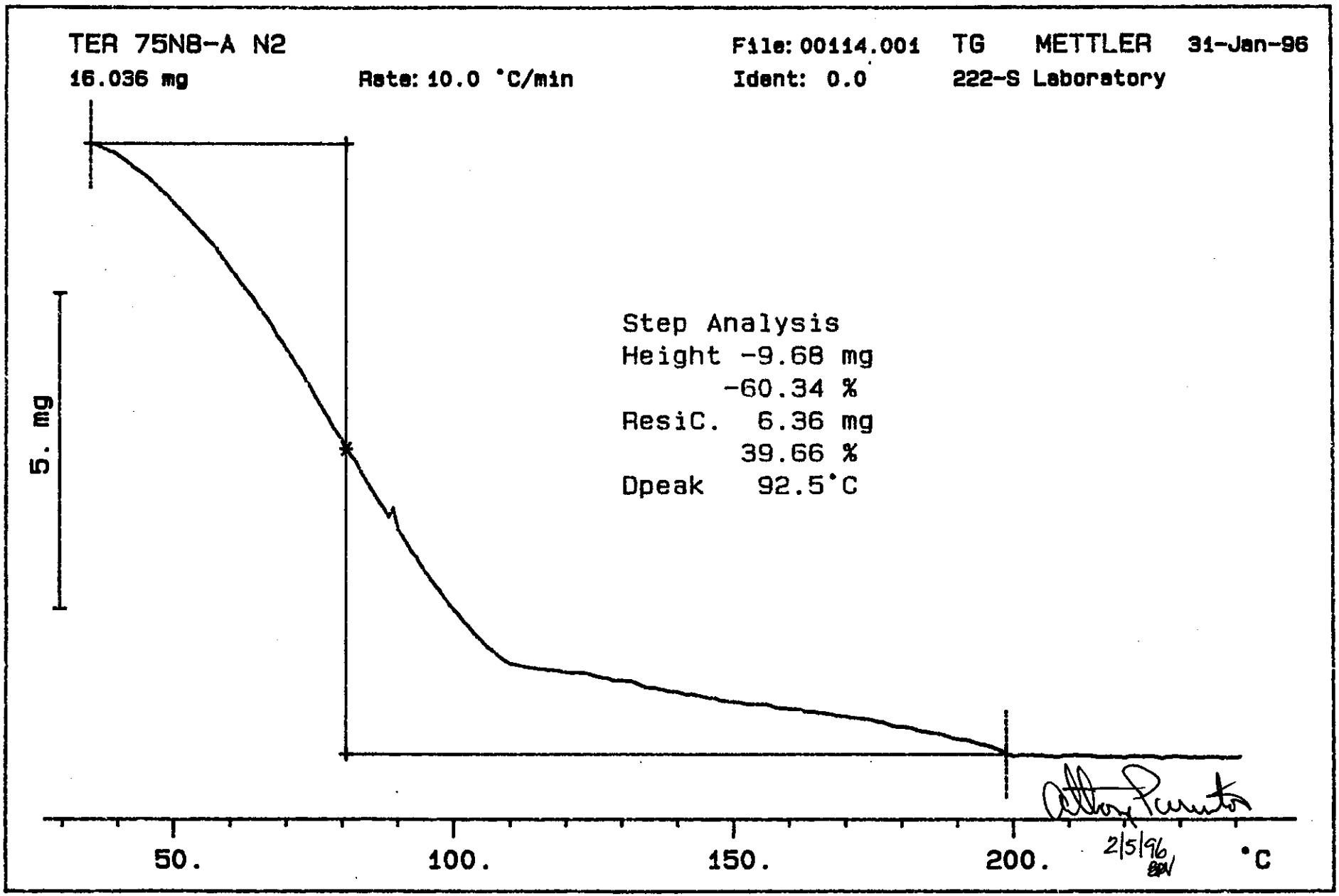
T Ewlight 2/2/96
Analyst Signature **Date**

Anthony Pierantoni 2-1-96

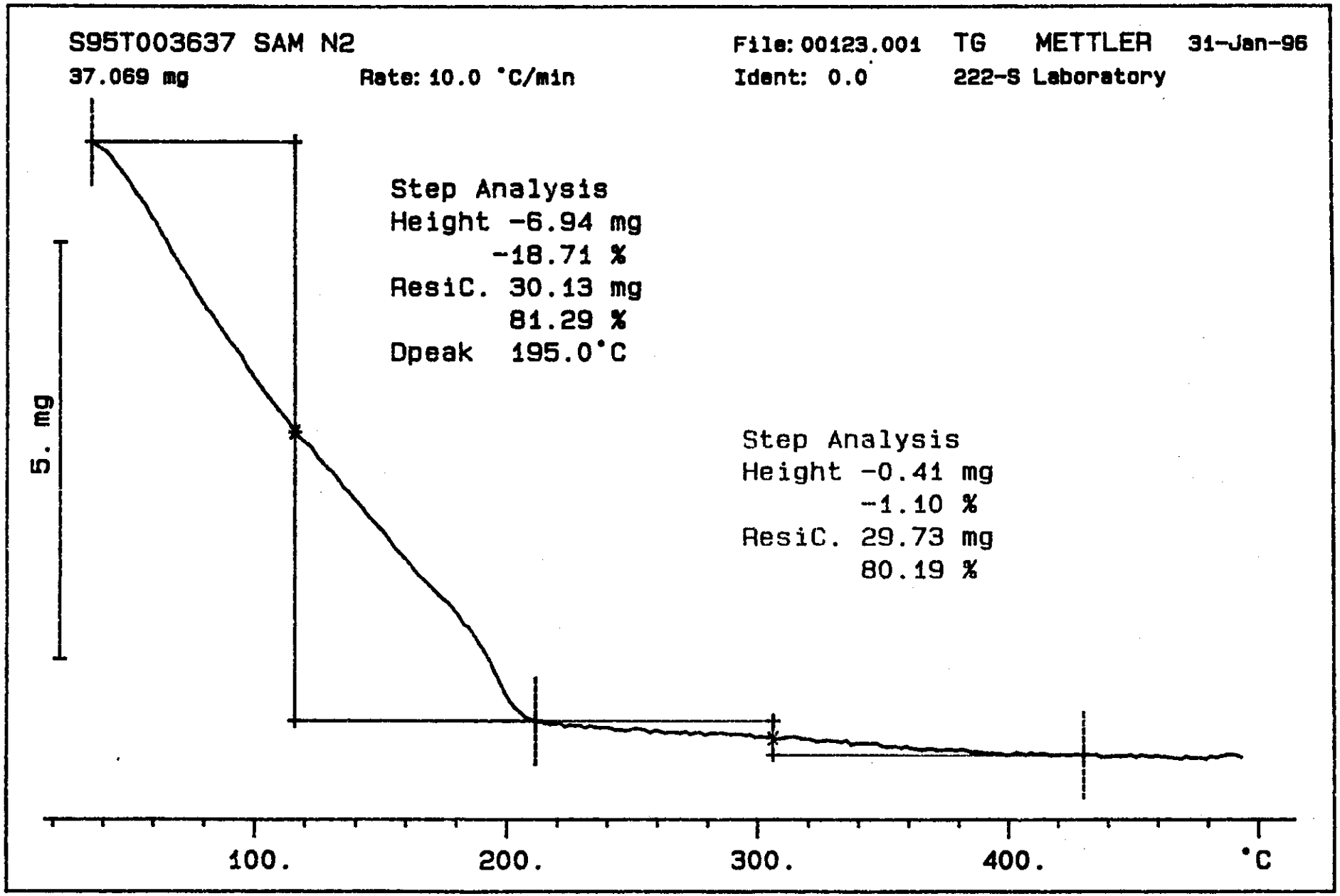
Data Entry Comments:

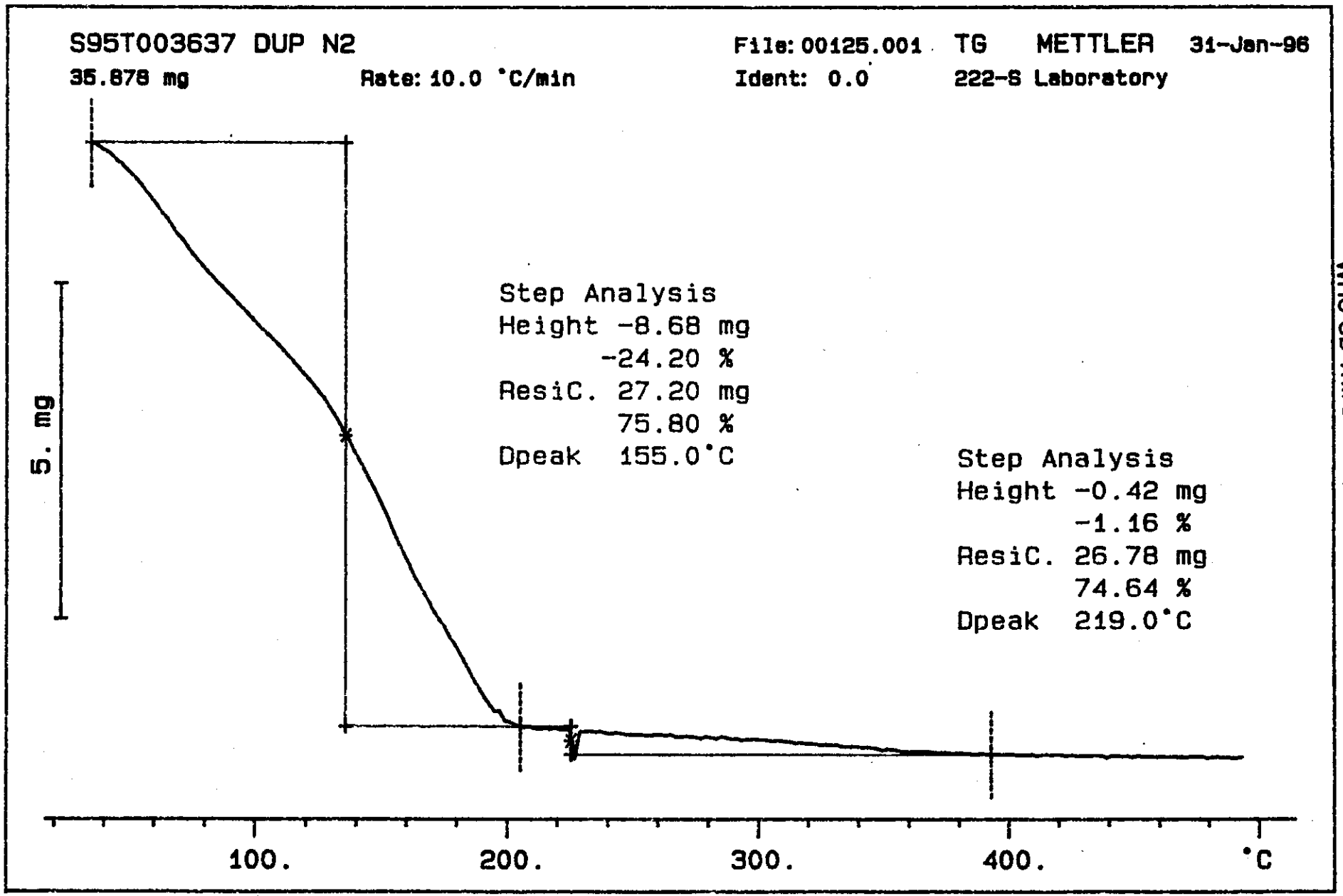
Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 2-276 TO 2-281.

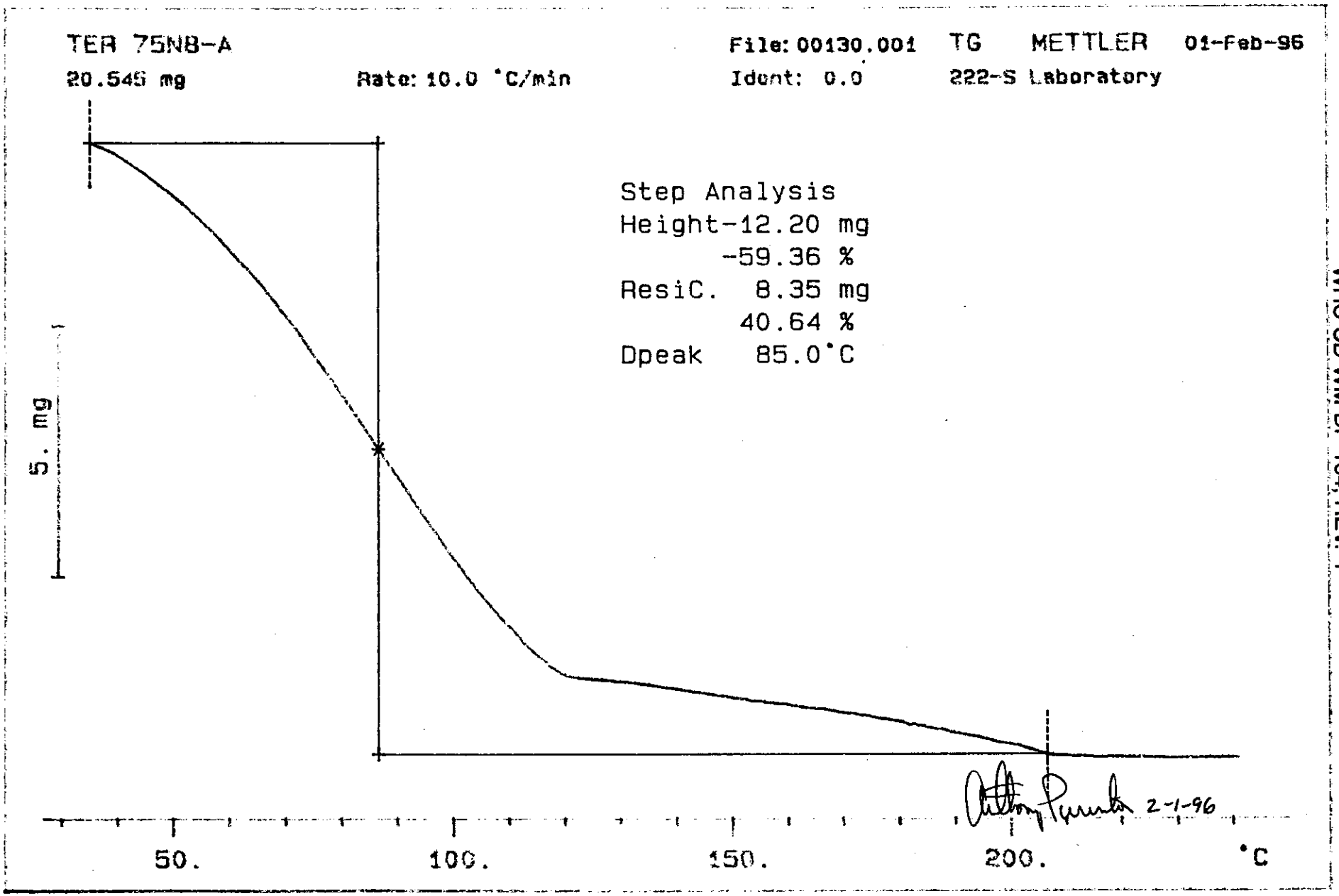


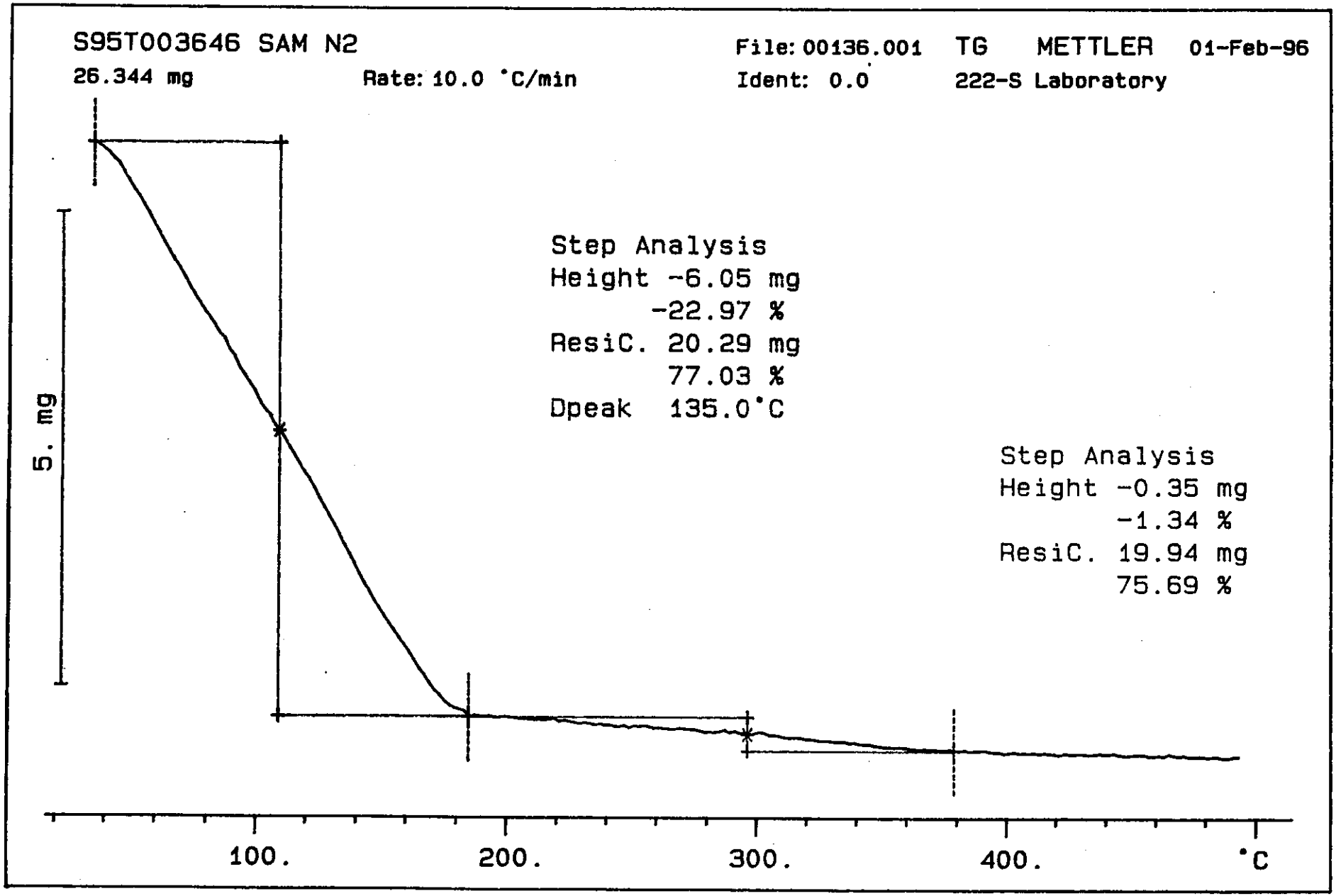
2/5/96

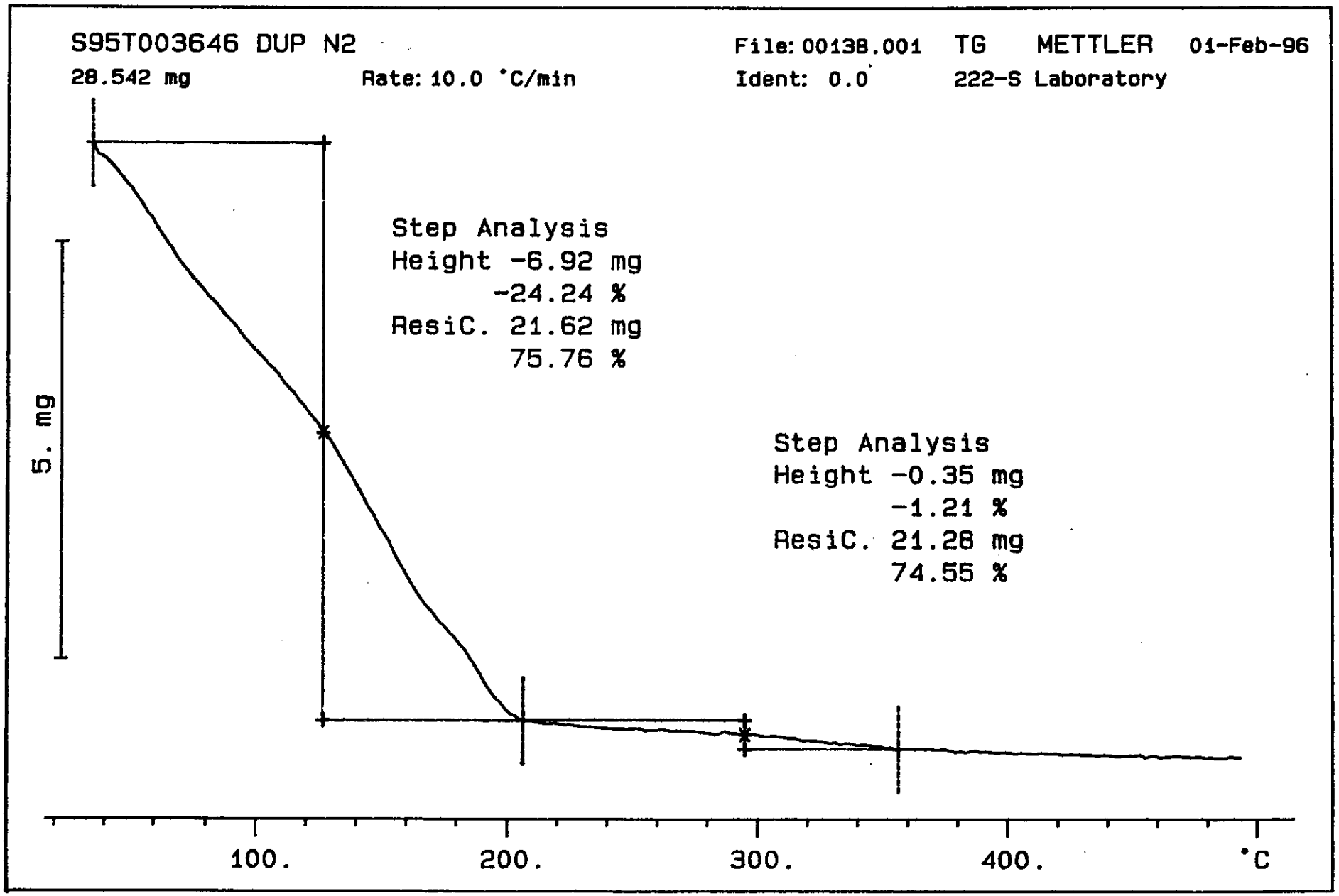

S95T003637 SAM N2
37.069 mg
Rate: 10.0 °C/min
File: 00123.001
TG
METTLER
31-Jan-96
Ident: 0.0
222-S Laboratory
Step Analysis
Height -6.94 mg
-18.71 %
ResiC. 30.13 mg
81.29 %
Dpeak 195.0°C
Step Analysis
Height -0.41 mg
-1.10 %
ResiC. 29.73 mg
80.19 %
5. mg
100.
200.
300.
400.
°C


S95T003637 DUP N2
35.878 mg
Rate: 10.0 °C/min
File: 00125.001
Ident: 0.0
TG
METTLER
222-S Laboratory
31-Jan-96
Step Analysis
Height -8.68 mg
-24.20 %
ResiC. 27.20 mg
75.80 %
Dpeak 155.0°C
Step Analysis
Height -0.42 mg
-1.16 %
ResiC. 26.78 mg
74.64 %
Dpeak 219.0°C
5. mg
100.
200.
300.
400.
°C

BEST AVAILABLE COPY




S95T003646 SAM N2
26.344 mg
Rate: 10.0 °C/min
File: 00136.001
Ident: 0.0
TG METTLER 01-Feb-96
222-S Laboratory
Step Analysis
Height -6.05 mg
-22.97 %
ResiC. 20.29 mg
77.03 %
Dpeak 135.0°C
Step Analysis
Height -0.35 mg
-1.34 %
ResiC. 19.94 mg
75.69 %
5. mg
100.
200.
300.
400.
°C


S95T003646 DUP N2
28.542 mg
Rate: 10.0 °C/min
File: 00138.001
TG
METTLER
01-Feb-96
Ident: 0.0
222-S Laboratory
Step Analysis
Height -6.92 mg
-24.24 %
ResiC. 21.62 mg
75.76 %
Step Analysis
Height -0.35 mg
-1.21 %
ResiC. 21.28 mg
74.55 %
5. mg
100.
200.
300.
400.
°C

LABCORE Data Entry Template for Worklist# 5327

Analyst: ADP **Instrument:** TGA0 3 **Book #** 75N8A

Method: LA-514-114 Rev/Mod C-1

Worklist Comment: Please run BY-104 TGAs under N2. bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	-------TEST------	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA-03	SOLID	59.2	60.22*	N/A	%
95000180	BY104 ROTARY	2	SAMPLE	S95T003529	0		TGA-03	SOLID	N/A	7.297 2/2/96		%
95000180	BY104 ROTARY	3	DUP	S95T003529	0		TGA-03	SOLID	7.297 2/2/96	13.40	N/A	%
		4	STD				TGA-01	SOLID	59.2	59.36*	N/A	%
95000180	BY104 ROTARY	5	SAMPLE	S95T003703	1		TGA-01	SOLID	N/A	11.86		%
95000180	BY104 ROTARY	6	DUP	S95T003703	1		TGA-01	SOLID	11.86	6.13	N/A	%

Final page for worklist # 5327

See attached for signatures

Analyst Signature **Date** 2/2/96

Verified by Blandina Valenzuela 2/5/96

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# 5327

Analyst: ADP **Instrument:** TGA0 **Book #** 75N8A

Method: LA-560-112 Rev/Mod C-1

Worklist Comment: Please run BY-104 TGAs under N2. bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA-01	SOLID			N/A	%
95000180	BY104 ROTARY	2	SAMPLE	S95T003529	1		TGA-01	SOLID	N/A			%
95000180	BY104 ROTARY	3	DUP	S95T003529	1		TGA-01	SOLID			N/A	%
95000180	BY104 ROTARY	4	SAMPLE	S95T003703	1		TGA-01	SOLID	N/A			%
95000180	BY104 ROTARY	5	DUP	S95T003703	1		TGA-01	SOLID			N/A	%

Final page for worklist # 5327

Anthony Pernotto 1-31-96
Analyst Signature **Date**

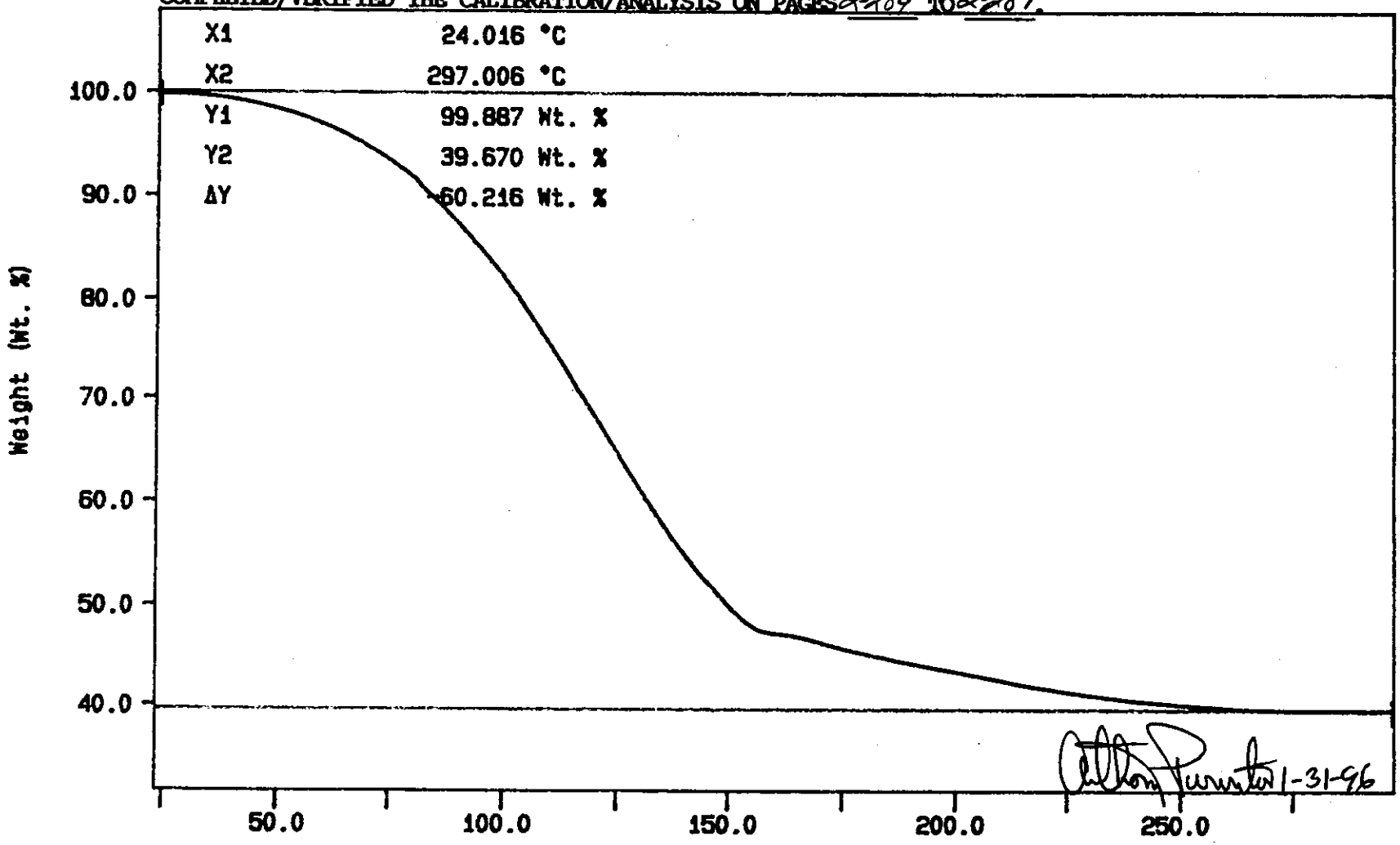
RE Wright 2/2/96
Analyst Signature **Date**

Other instrument was used.
2/5/96 BW

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.

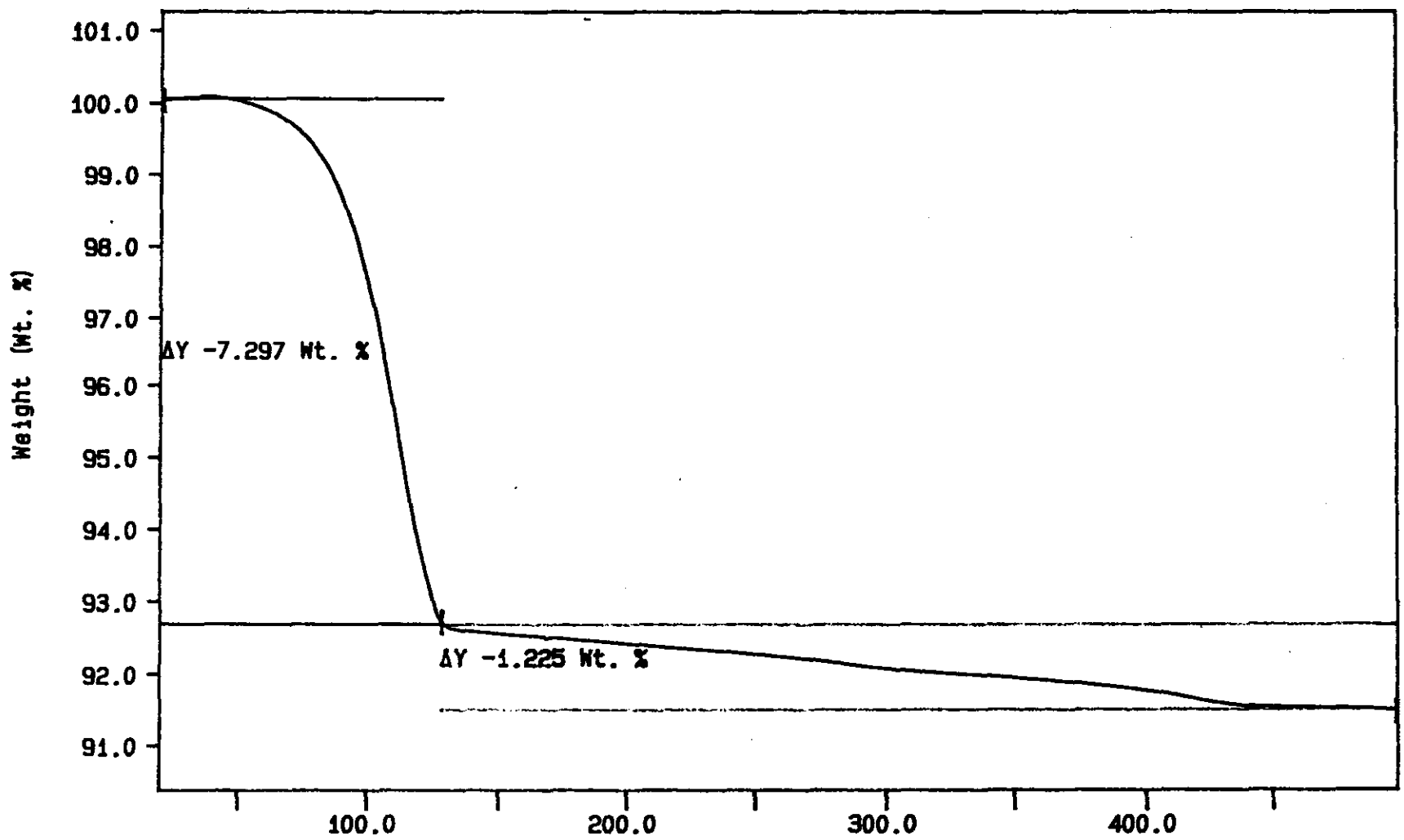
Curve 1: TGA
File info: TER013101 Wed Jan 31 06:49:59 1996
Sample Weight: 13.811 mg
TERLIQ ~~100CN2~~ A&D 75N8-A
1-31-96 SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 2-284 TO 2-289.



N2 10C/MIN
TEMP1: 35.0 C TIME1: 0.0 min RATE1: 10.0 C/min
TEMP2: 300.0 C

AD PURINTON
PERKIN-ELMER
7 Series Thermal Analysis System
Wed Jan 31 07:36:32 1996

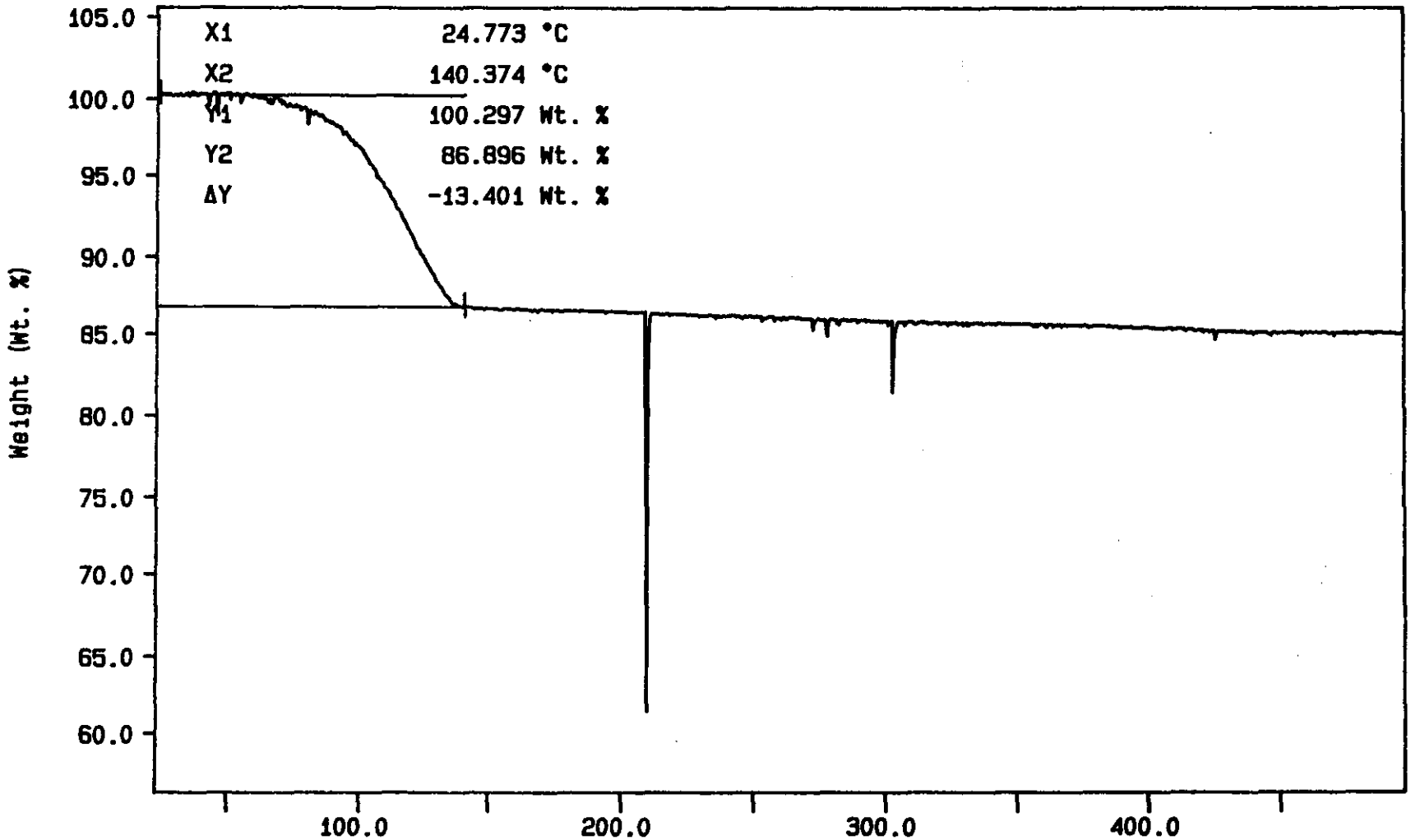
Curve 1: TGA
File info: SAM013104 Wed Jan 31 14:31:41 1996
Sample Weight: 22.441 mg
S95T003529 SAM



10C/MIN N2
TEMP1: 35.0 C TIME1: 0.0 min RATE1: 10.0 C/min
TEMP2: 500.0 C

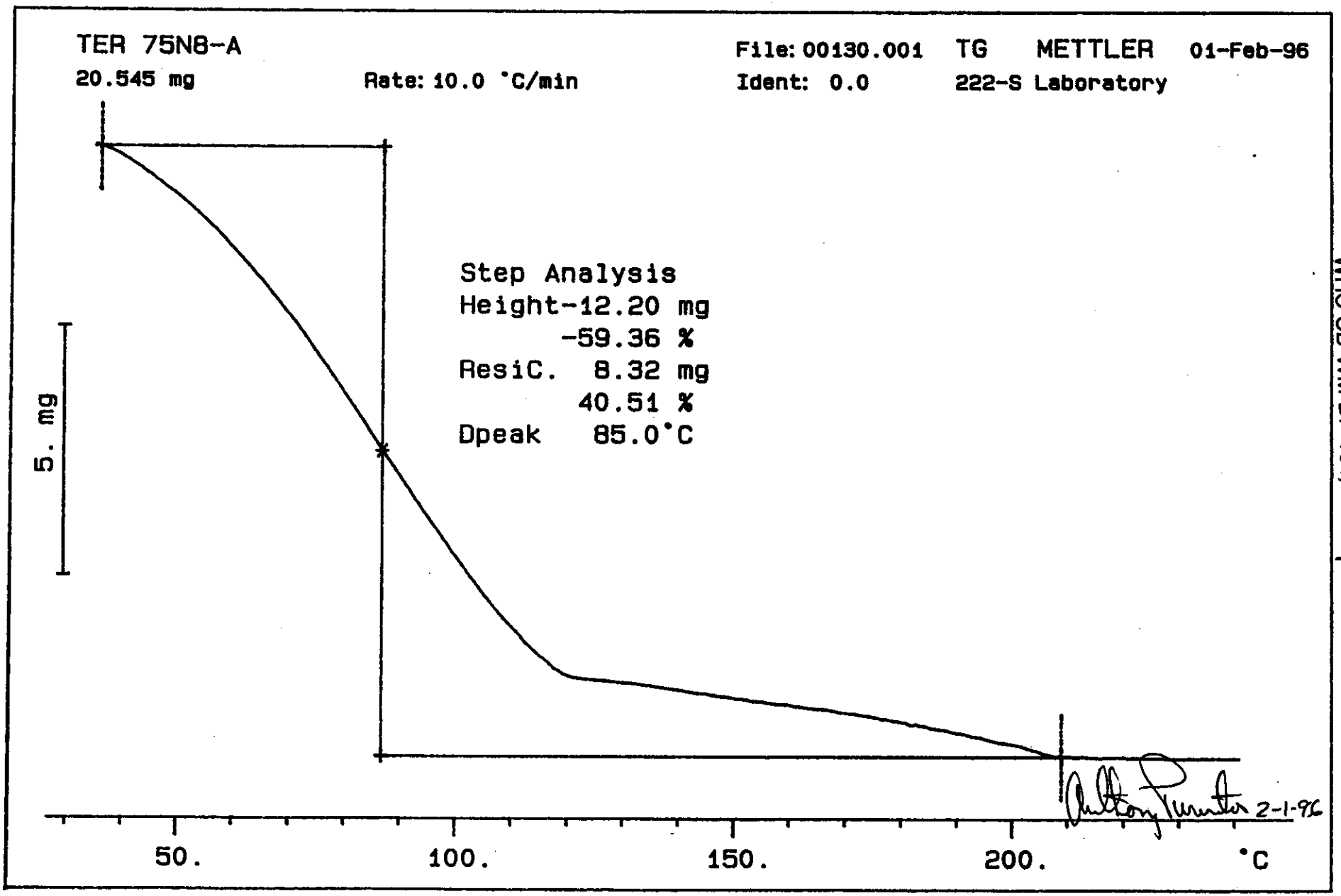
AD PURINTON
PERKIN-ELMER
7 Series Thermal Analysis System
Wed Jan 31 14:52:19 1996

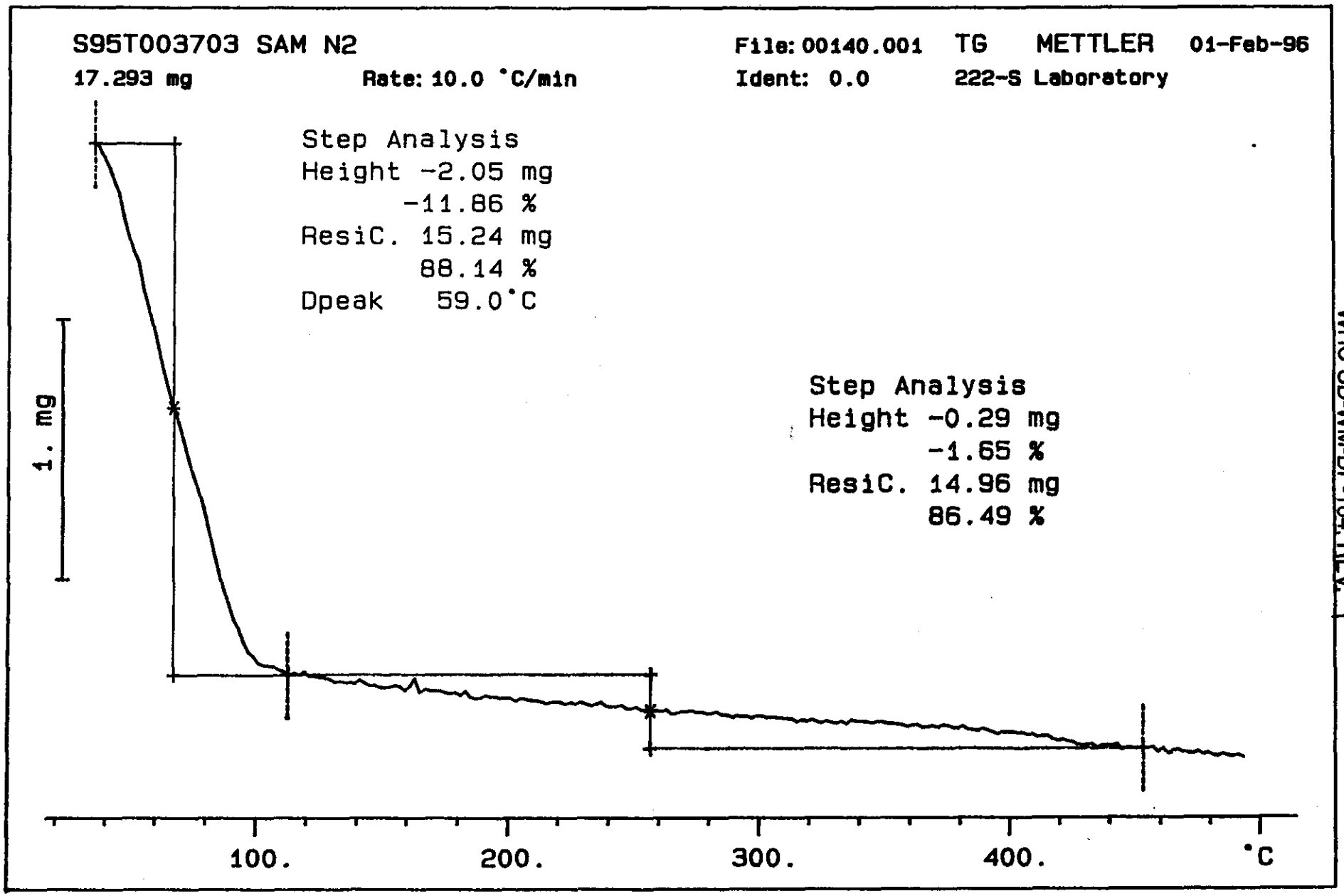
Curve 1: TGA
File info: SAM013105 Wed Jan 31 15:59:46 1996
Sample Weight: 19.087 mg
S95T003529 DUP

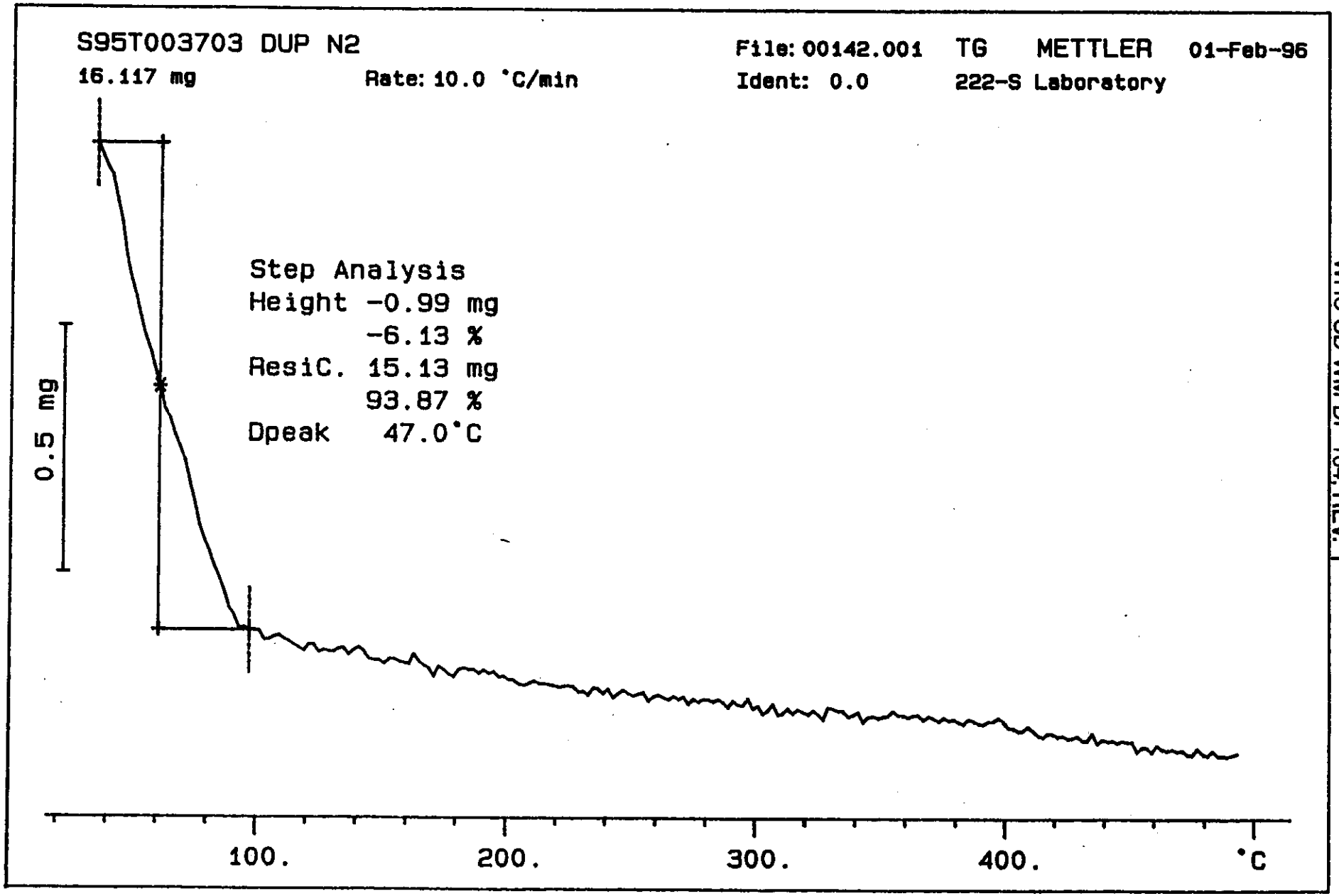


10C/MIN N2
TEMP1: 35.0 C TIME1: 0.0 min RATE1: 10.0 C/min
TEMP2: 800.0 C

AD PURINTON
PERKIN-ELMER
7 Series Thermal Analysis System
Wed Jan 31 16:05:38 1996


TER 75N8-A
20.545 mg
Rate: 10.0 °C/min
File: 00130.001
TG METTLER 01-Feb-96
Ident: 0.0
222-S Laboratory
Step Analysis
Height-12.20 mg
-59.36 %
ResiC. 8.32 mg
40.51 %
Dpeak 85.0°C
5. mg
50.
100.
150.
200.
°C
2-1-96


S95T003703 SAM N2
17.293 mg
Rate: 10.0 °C/min
File: 00140.001
TG
METTLER
01-Feb-96
Ident: 0.0
222-S Laboratory
Step Analysis
Height -2.05 mg
-11.86 %
ResiC. 15.24 mg
88.14 %
Dpeak 59.0°C
Step Analysis
Height -0.29 mg
-1.65 %
ResiC. 14.96 mg
86.49 %
1. mg
100.
200.
300.
400.
°C


S95T003703 DUP N2
16.117 mg
Rate: 10.0 °C/min
File: 00142.001
TG
METTLER
01-Feb-96
Ident: 0.0
222-S Laboratory
Step Analysis
Height -0.99 mg
-6.13 %
ResiC. 15.13 mg
93.87 %
Dpeak 47.0°C
0.5 mg
100.
200.
300.
400.
°C

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		Date: 05-13-96
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		ECN NO.: 629043

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