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

DOCUMENT NUMBER: SD-WM-DP-179

SECTION 10 **OF** 10

TITLE: Final Report for Tank 241-S-102 Push Mode Cores 125 & 130

[Pages 2-363 thru 446]

DATE: 7/12/96

ORIGINATOR: Fritts LR

CO: WHC

RECIPIENT:

CO:

REFERENCES: ECN-633302

LABCORE Data Entry Template for Worklist# 6503

Analyst: / RJ **Instrument:** TGA01 **Book #** 75N8-A

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

Worklist Comment: S-102 TGA RUN UNDER N2. RCJ

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA-01	SOLID	59.2	60.62*	N/A	%
96000094	S102	2	SAMPLE	S96T001141	0		TGA-01	SOLID	N/A	13.37		%
96000094	S102	3	DUP	S96T001141	0		TGA-01	SOLID	13.37	14.72	N/A	%
96000094	S102	4	SAMPLE	S96T001145	0		TGA-01	SOLID	N/A	5.40		%
96000094	S102	5	DUP	S96T001145	0		TGA-01	SOLID	5.40	6.19	N/A	%

Final page for worklist # 6503

Analyst Signature Date

Jessie Conlin 3/28/96
Analyst Signature Date

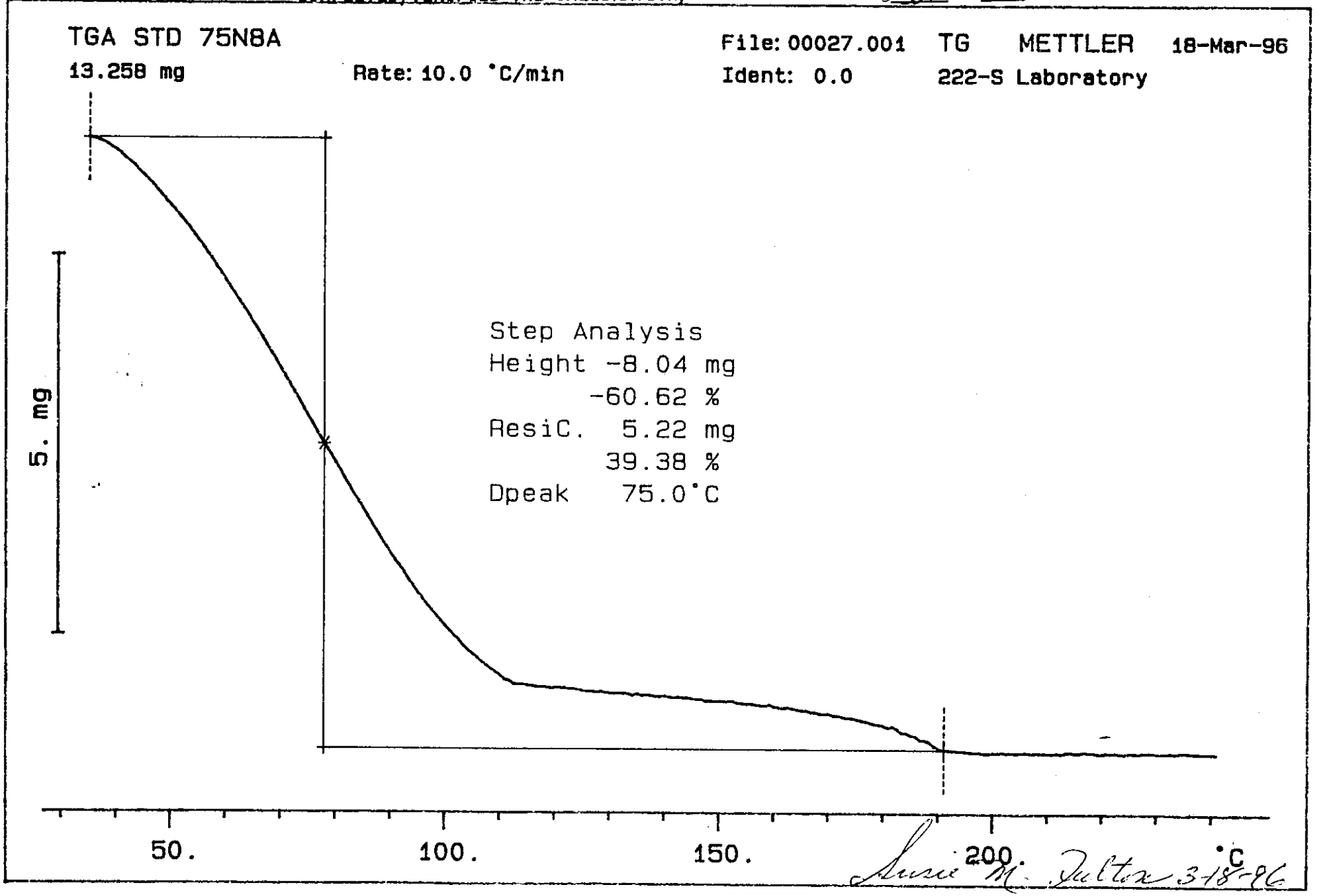
Rae Ann Green 3-18-96
Rae Ann Green 3-19-96
Verified by Blandina Valenzuela 3/25/96

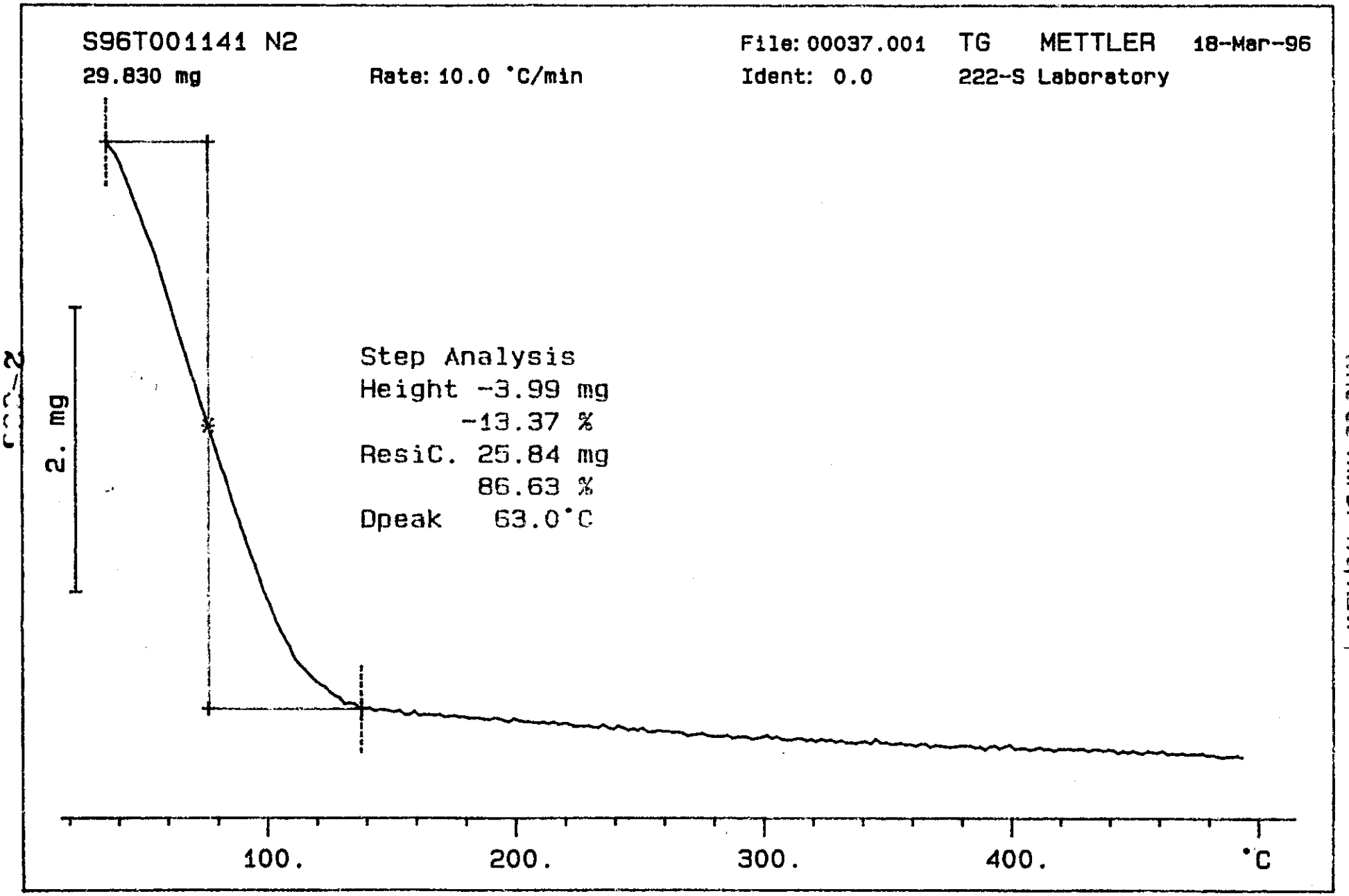
S96T001145 Continued to lose weight after 100°C.

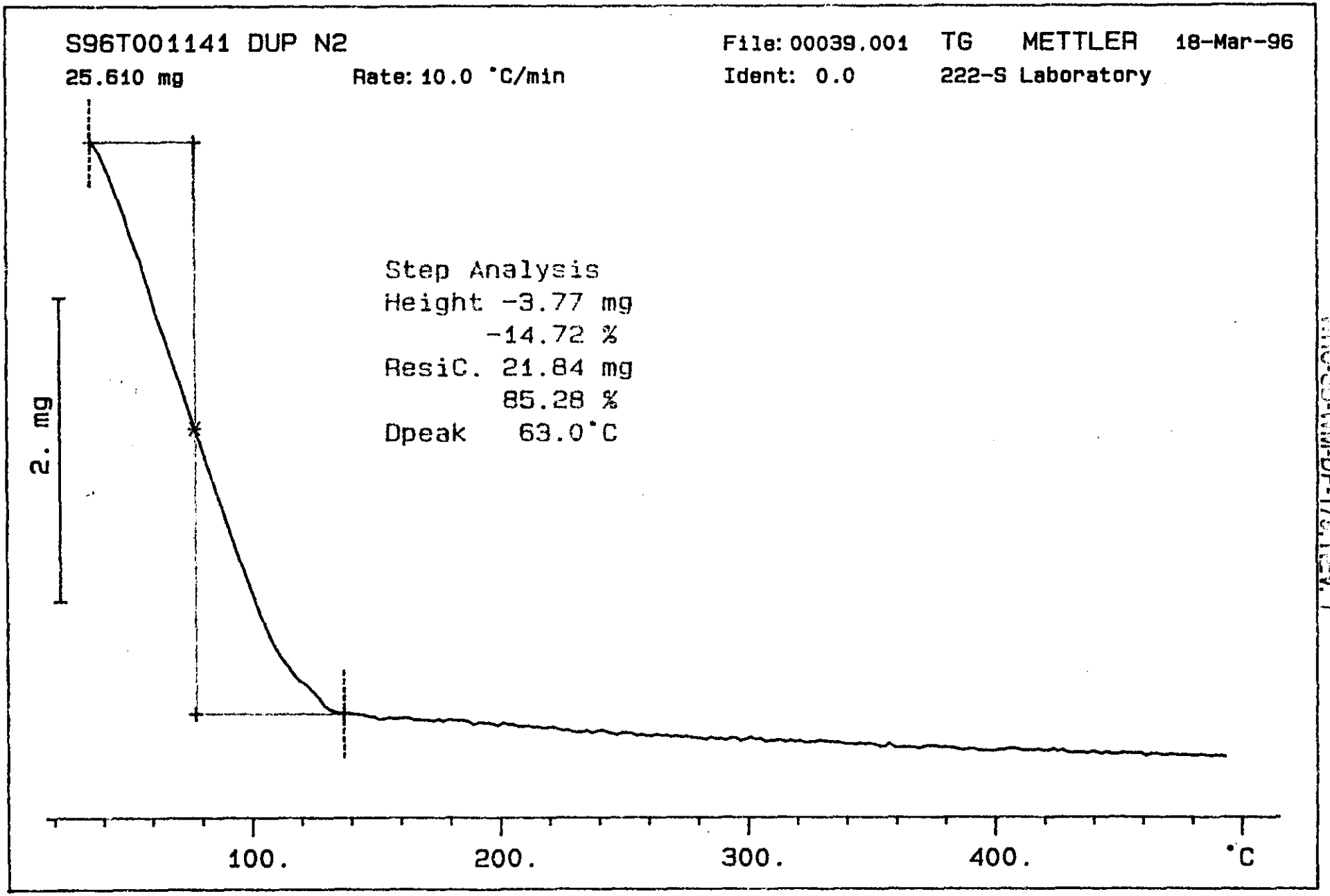
Data Entry Comments: ~~S96T001141 RJ~~ 3-18-96

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.

SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 2-364 TO 2-368

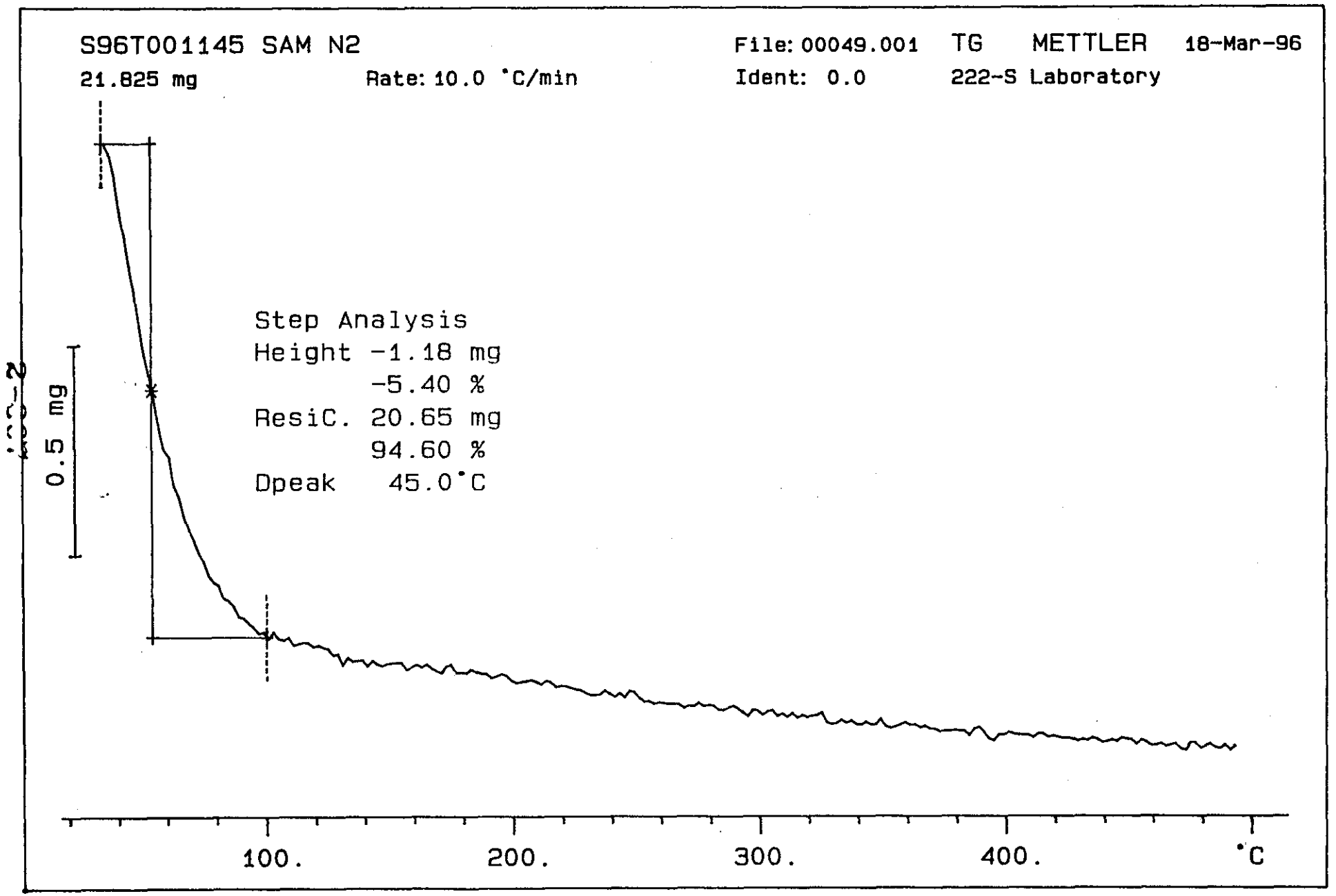


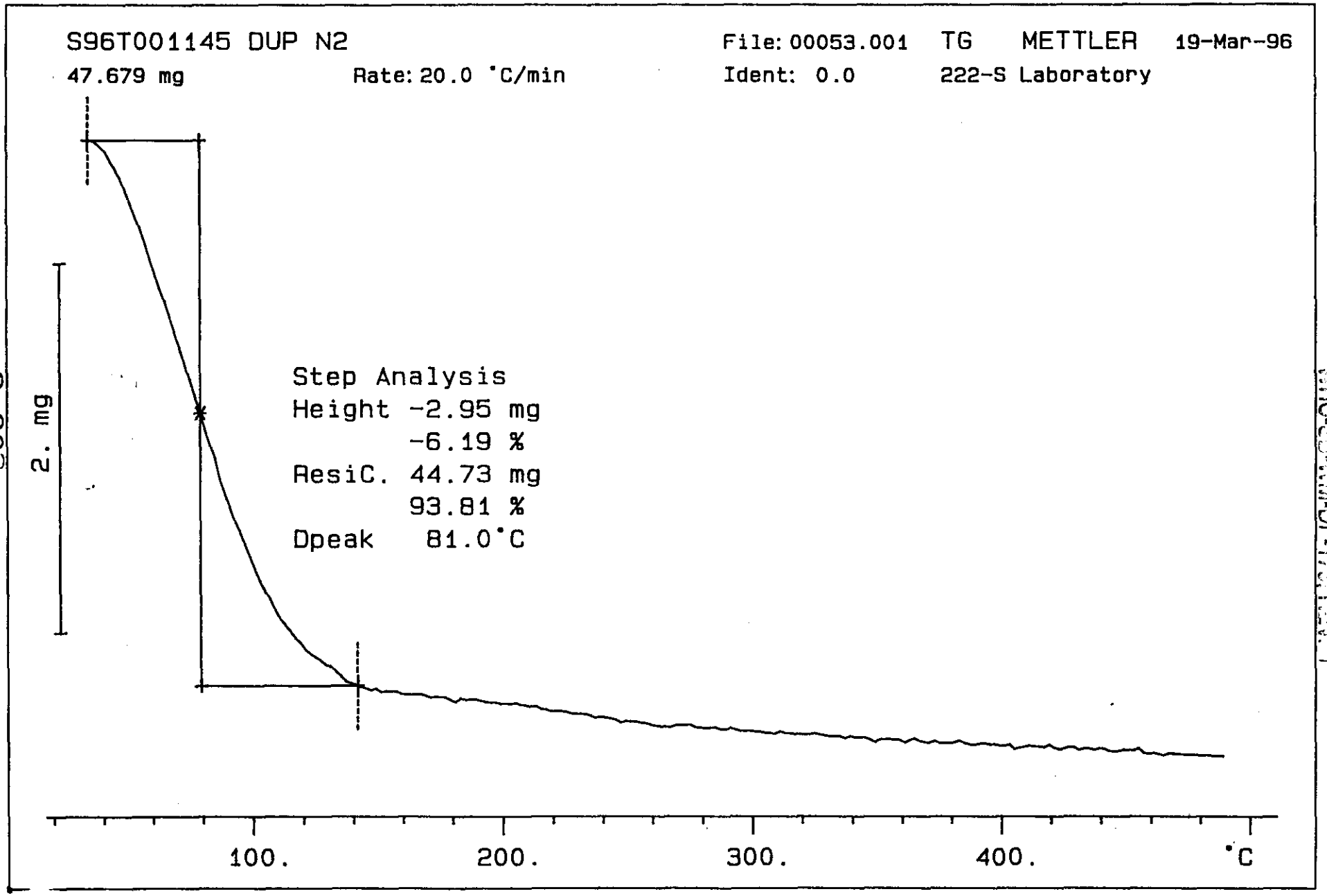

S96T001141 N2
29.830 mg
Rate: 10.0 °C/min
File: 00037.001
Ident: 0.0
TG
METTLER
18-Mar-96
222-S Laboratory
Step Analysis
Height -3.99 mg
-13.37 %
ResiC. 25.84 mg
86.63 %
Dpeak 63.0°C
2. mg
100.
200.
300.
400.
°C



2-333

WMC-CD-WM-DP-179, REV. 1


S96T001145 SAM N2
21.825 mg
Rate: 10.0 °C/min
File: 00049.001
Ident: 0.0
TG
METTLER
18-Mar-96
222-S Laboratory
Step Analysis
Height -1.18 mg
-5.40 %
ResiC. 20.65 mg
94.60 %
Dpeak 45.0°C
0.5 mg
100.
200.
300.
400.
°C


S96T001145 DUP N2
File: 00053.001 TG METTLER 19-Mar-96
47.679 mg
Rate: 20.0 °C/min
Ident: 0.0
222-S Laboratory
Step Analysis
Height -2.95 mg
-6.19 %
ResiC. 44.73 mg
93.81 %
Dpeak 81.0°C
2. mg
100.
200.
300.
400.
°C

LABCORE Data Entry Template for Worklist# 6504

Analyst: Ell **Instrument:** TGA0 1 **Book #** 75118-A

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

Worklist Comment: S-102 TGA RUN UNDER N2. RCJ

GROUP	PROJECT	S TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD				TGA-01	SOLID	59.2	60.08 *	N/A	%
96000094	S102	2 SAMPLE	S96T001146	0		TGA-01	SOLID	N/A	12.69		%
96000094	S102	3 DUP	S96T001146	0		TGA-01	SOLID	12.69	12.55	N/A	%
96000094	S102	4 SAMPLE	S96T001147	0		TGA-01	SOLID	N/A	17.61		%
96000094	S102	5 DUP	S96T001147	0		TGA-01	SOLID	17.61	17.18	N/A	%

Final page for worklist # 6504

A Lambert 03.26.96
Analyst Signature **Date**

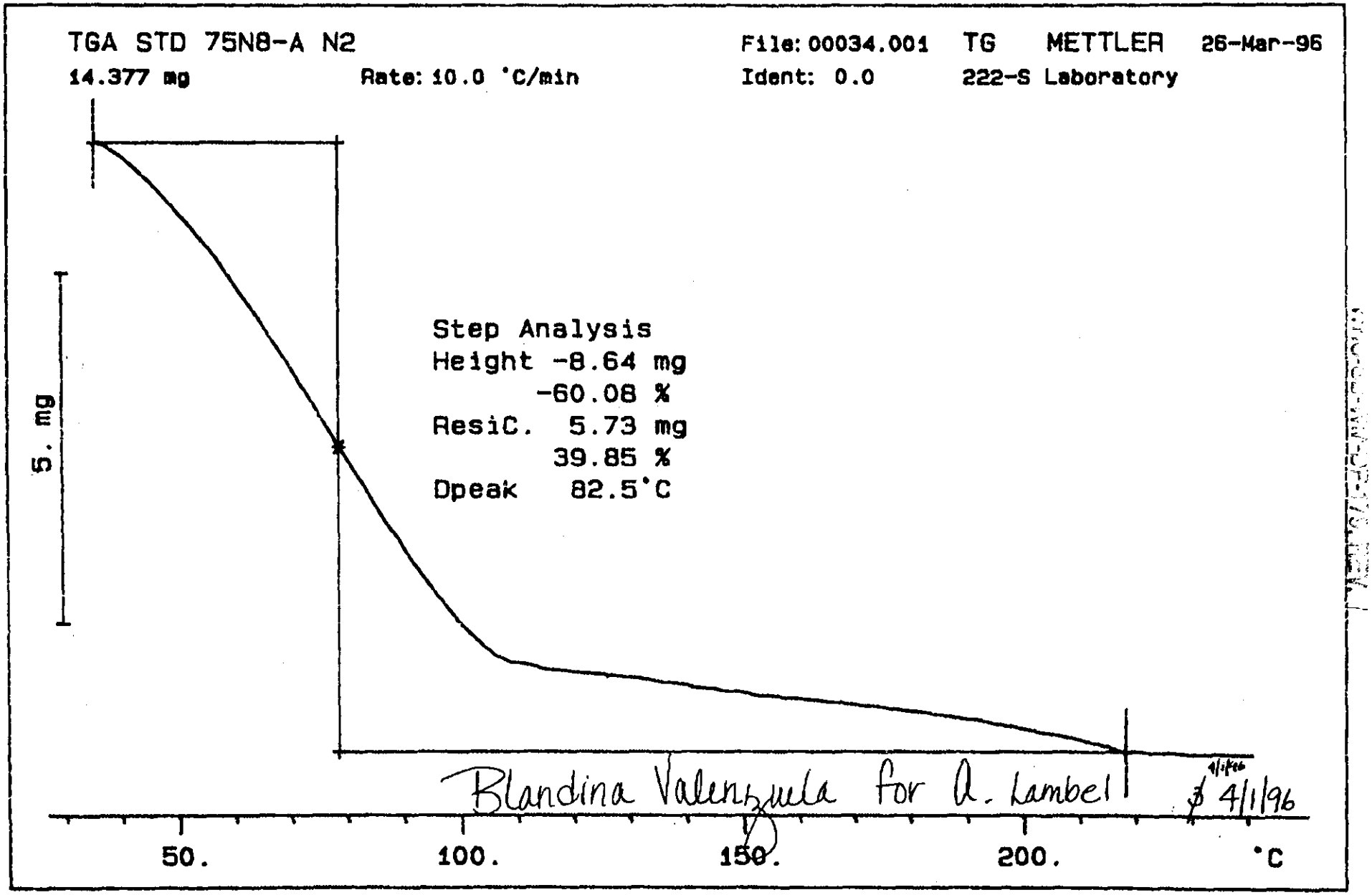
Analyst Signature 4-6-96 **Date**
Verified by HAnaston 4-9-96

Data Entry Comments: S96T001147 ~~product~~ results are the sum of two weight loss steps. The final limit is past 250°C however it is difficult to cut it off any earlier.

RJOV 4/1/96

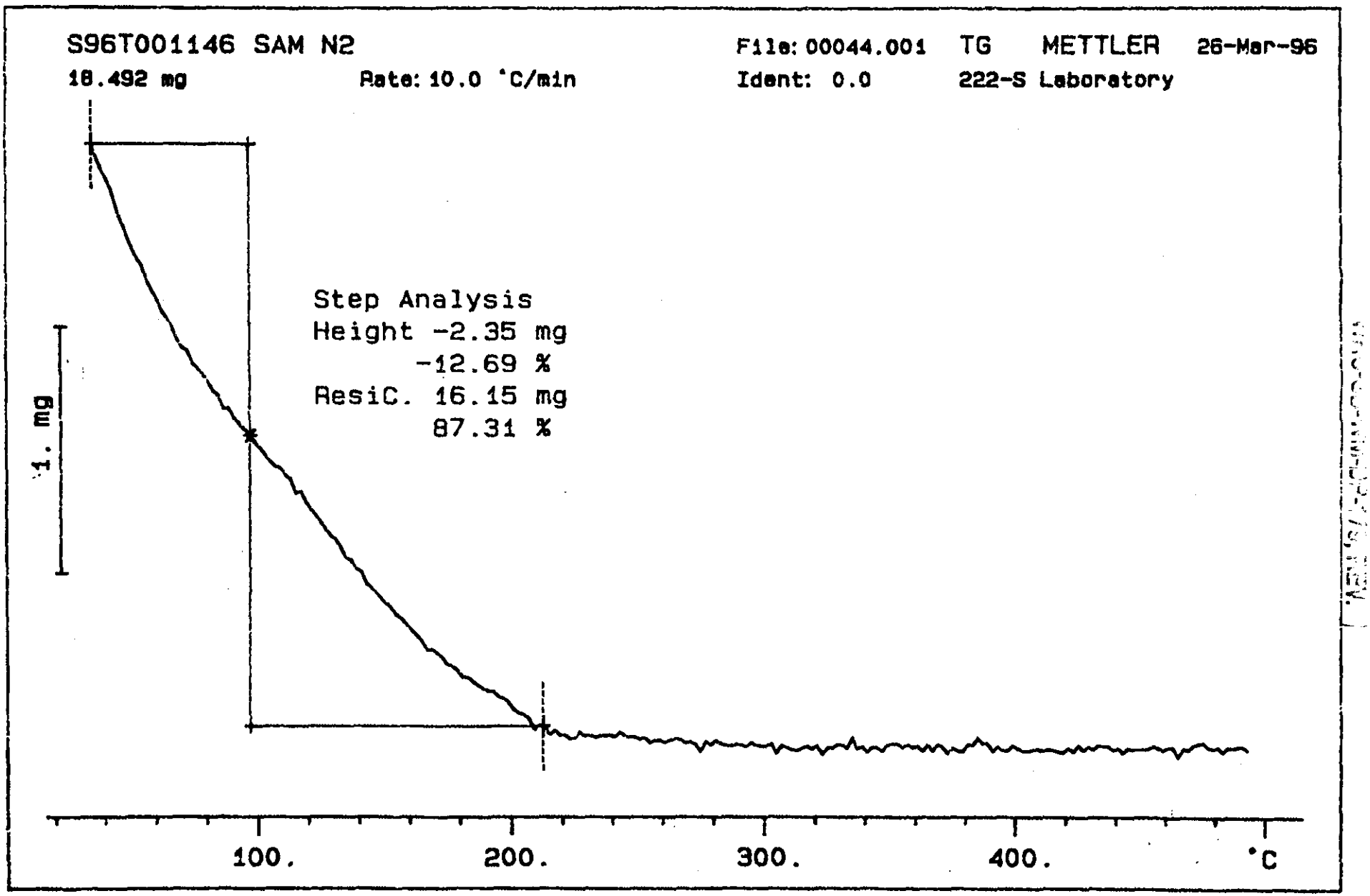
Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

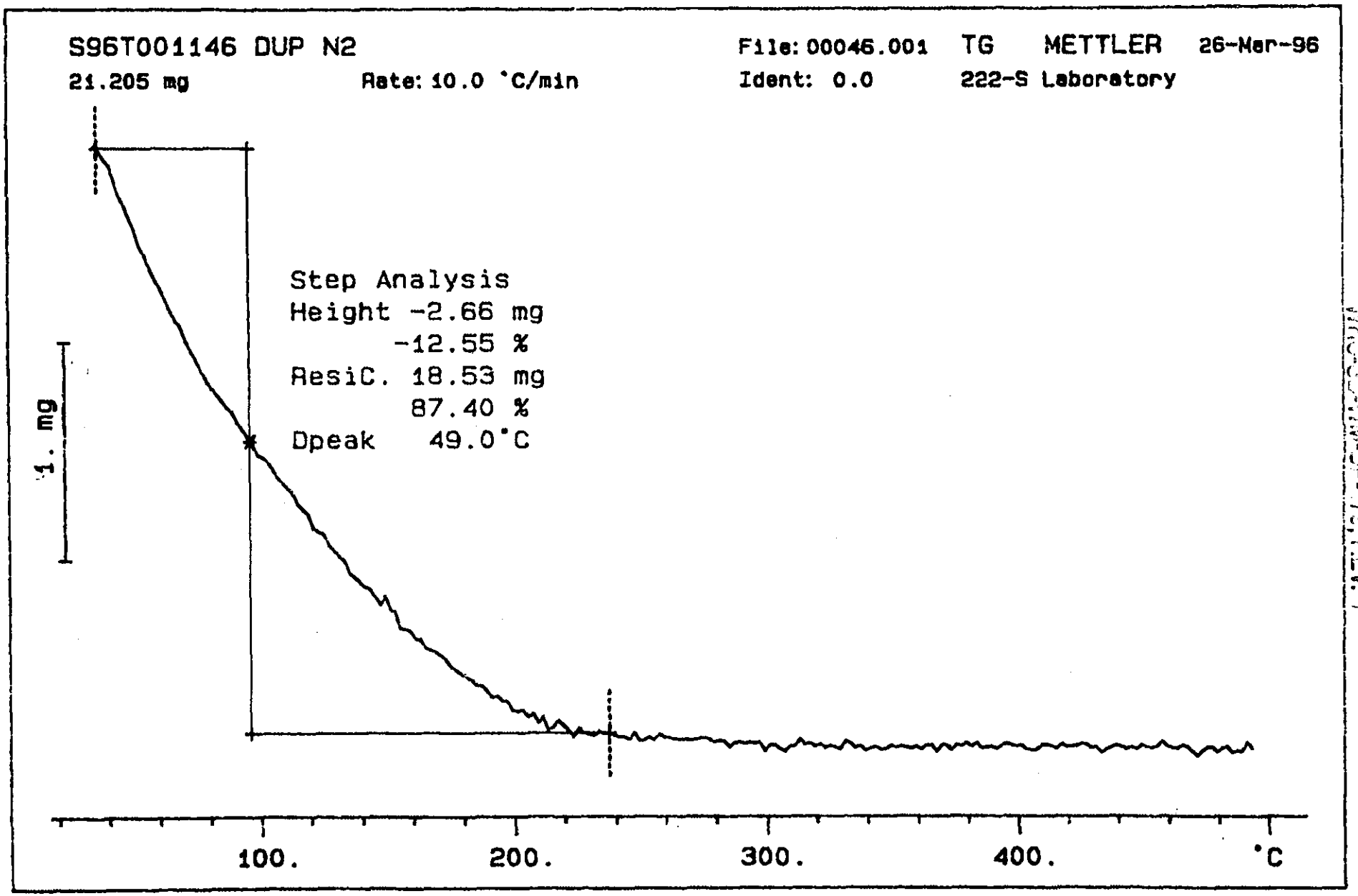
SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 2-370 TO 2-374

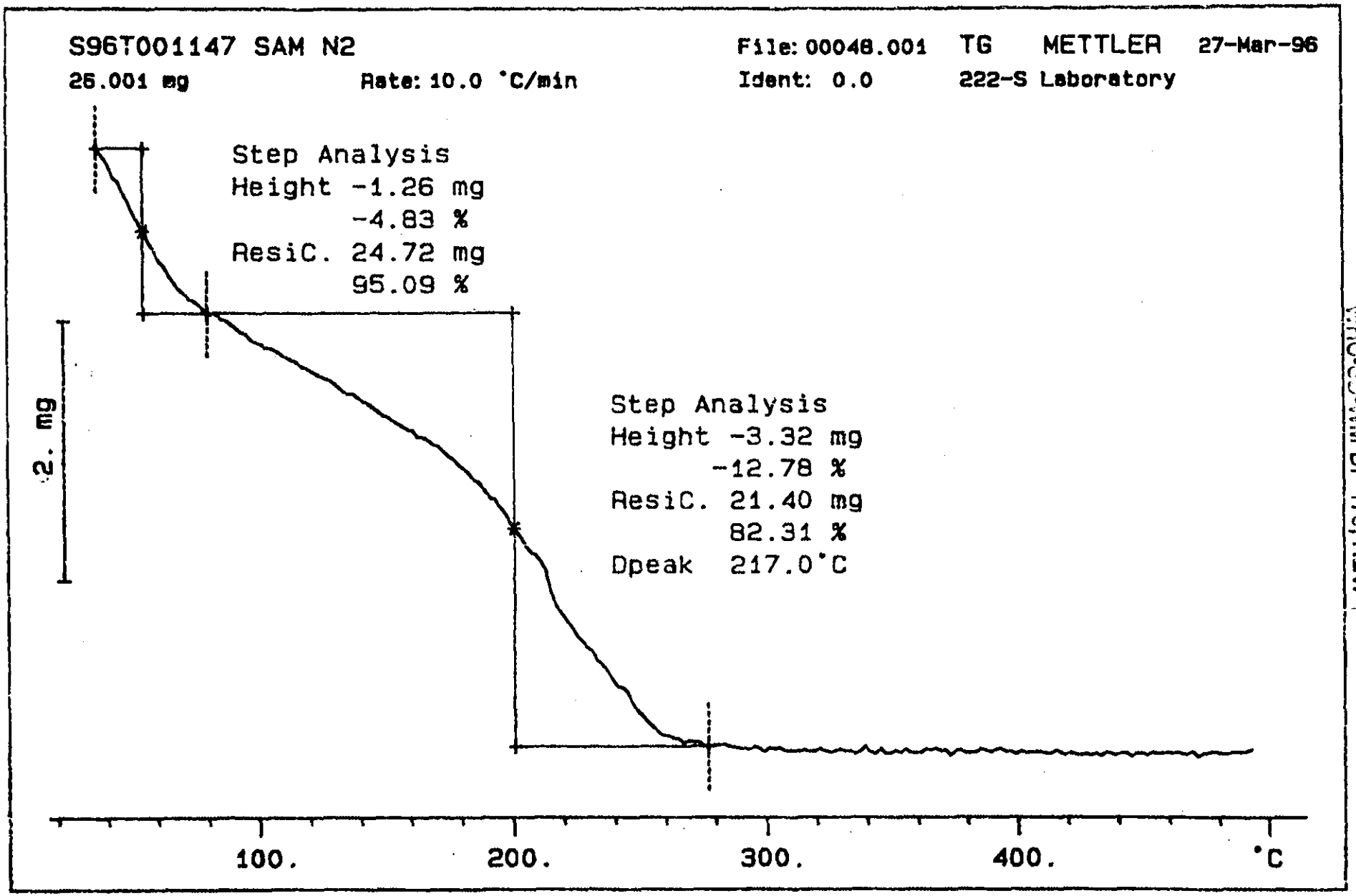


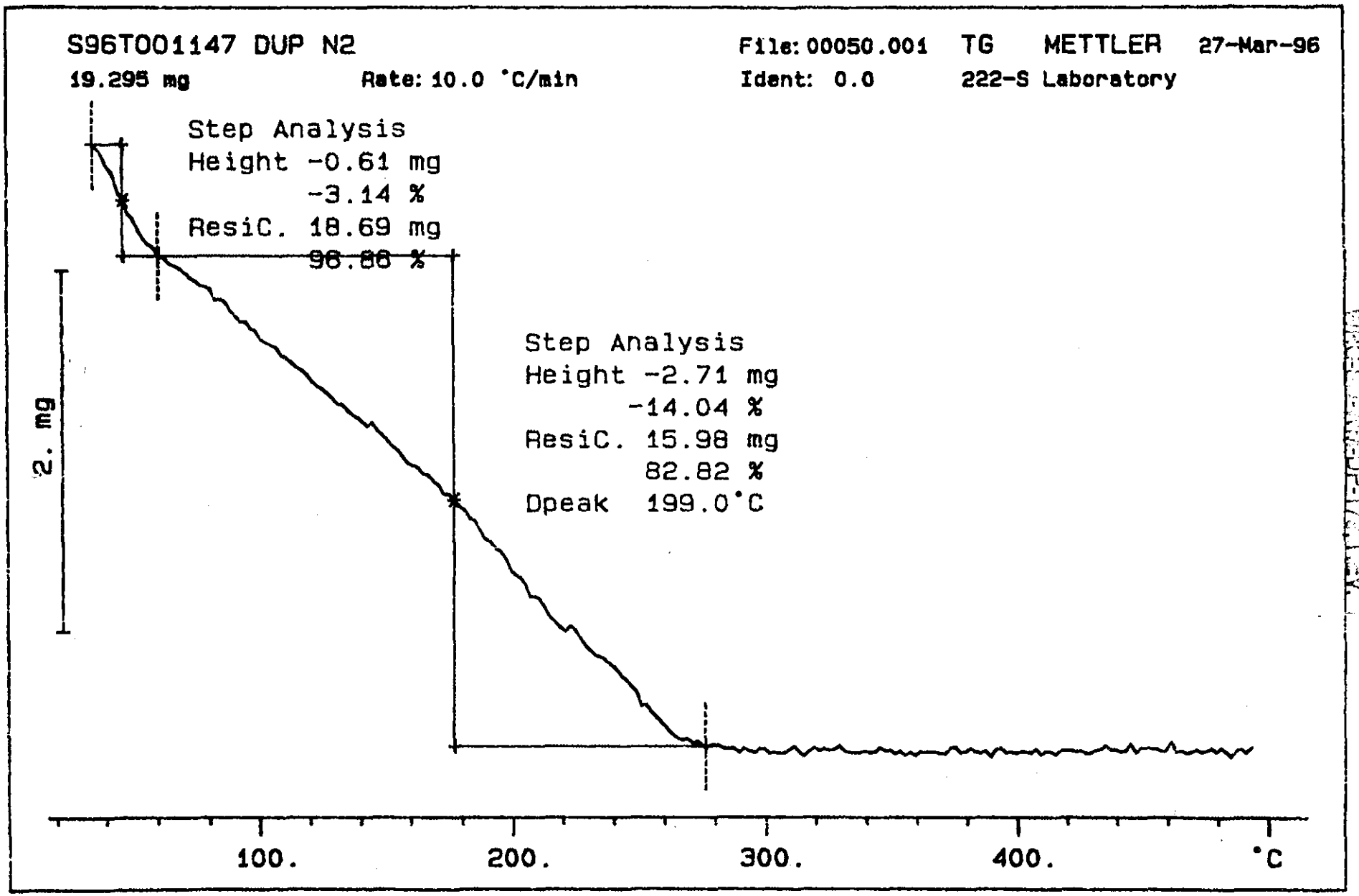
Blandina Valenzuela for A. Lambel 4/1/96

04/05/96 15:32 222 ANALYTICAL LAB 002


S96T001146 SAM N2
File: 00044.001 TG METTLER 26-Mar-96
18.492 mg
Rate: 10.0 °C/min
Ident: 0.0
222-S Laboratory
Step Analysis
Height -2.35 mg
-12.69 %
ResiC. 16.15 mg
87.31 %
1. mg
100.
200.
300.
400.
°C


S96T001146 DUP N2
21.205 mg
Rate: 10.0 °C/min
File: 00046.001 TG METTLER 26-Mar-96
Ident: 0.0 222-S Laboratory
Step Analysis
Height -2.66 mg
-12.55 %
ResiC. 18.53 mg
87.40 %
Dpeak 49.0°C
1. mg
100.
200.
300.
400.
°C


S96T001147 SAM N2
File: 00048.001 TG METTLER 27-Mar-96
26.001 mg
Rate: 10.0 °C/min
Ident: 0.0
222-S Laboratory
Step Analysis
Height -1.26 mg
-4.83 %
ResiC. 24.72 mg
95.09 %
Step Analysis
Height -3.32 mg
-12.78 %
ResiC. 21.40 mg
82.31 %
Dpeak 217.0°C
2. mg
100.
200.
300.
400.
°C


S96T001147 DUP N2
File: 00050.001 TG METTLER 27-Mar-96
19.295 mg
Rate: 10.0 °C/min
Ident: 0.0
222-S Laboratory
Step Analysis
Height -0.61 mg
-3.14 %
ResiC. 18.69 mg
96.86 %
Step Analysis
Height -2.71 mg
-14.04 %
ResiC. 15.98 mg
82.82 %
Dpeak 199.0°C
2. mg
100.
200.
300.
400.
°C

LABCORE Data Entry Template for Worklist# 6505

Analyst: SMF **Instrument:** TGA0 _____ **Book #** 100CN2

Method: LA-560-112 Rev/Mod B1

Worklist Comment: S-102 TGA RUN UNDER N2. RCJ

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	-------TEST------	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA-01	SOLID	_____	_____	N/A	%
96000094	S102	2	SAMPLE	S96T001148	0		TGA-01	SOLID	N/A	_____	_____	%
96000094	S102	3	DUP	S96T001148	0		TGA-01	SOLID	_____	_____	N/A	%
96000094	S102	4	SAMPLE	S96T001149	0		TGA-01	SOLID	N/A	_____	_____	%
96000094	S102	5	DUP	S96T001149	0		TGA-01	SOLID	_____	_____	N/A	%

Final page for worklist # 6505

Susie M. Sutton 3-31-96
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.

worklistrpt Version 2.1 05/15/95
04/09/96 09:07

WHC-SD-WM-DP-175, REV. 1

LABCORE Data Entry Template for Worklist# 6505

Analyst: SMF **Instrument:** TGA0 3 **Book #** 100CN2

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

Worklist Comment: S-102 TGA RUN UNDER N2. RCJ

GROUP	PROJECT	S TYPE	SAMPLE#	R	A	-------TEST------	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD				TGA-03	SOLID	59.2	58.81 *	N/A	%
96000094	S102	2 SAMPLE	S96T001148	0		TGA-03	SOLID	N/A	20.01		%
96000094	S102	3 DUP	S96T001148	0		TGA-03	SOLID	20.01	19.72	N/A	%
96000094	S102	4 SAMPLE	S96T001149	0		TGA-03	SOLID	N/A	29.11		%
96000094	S102	5 DUP	S96T001149	0		TGA-03	SOLID	29.11	28.88	N/A	%

Final page for worklist # 6505

See attached for signatures
Analyst Signature **Date** 4-9-96

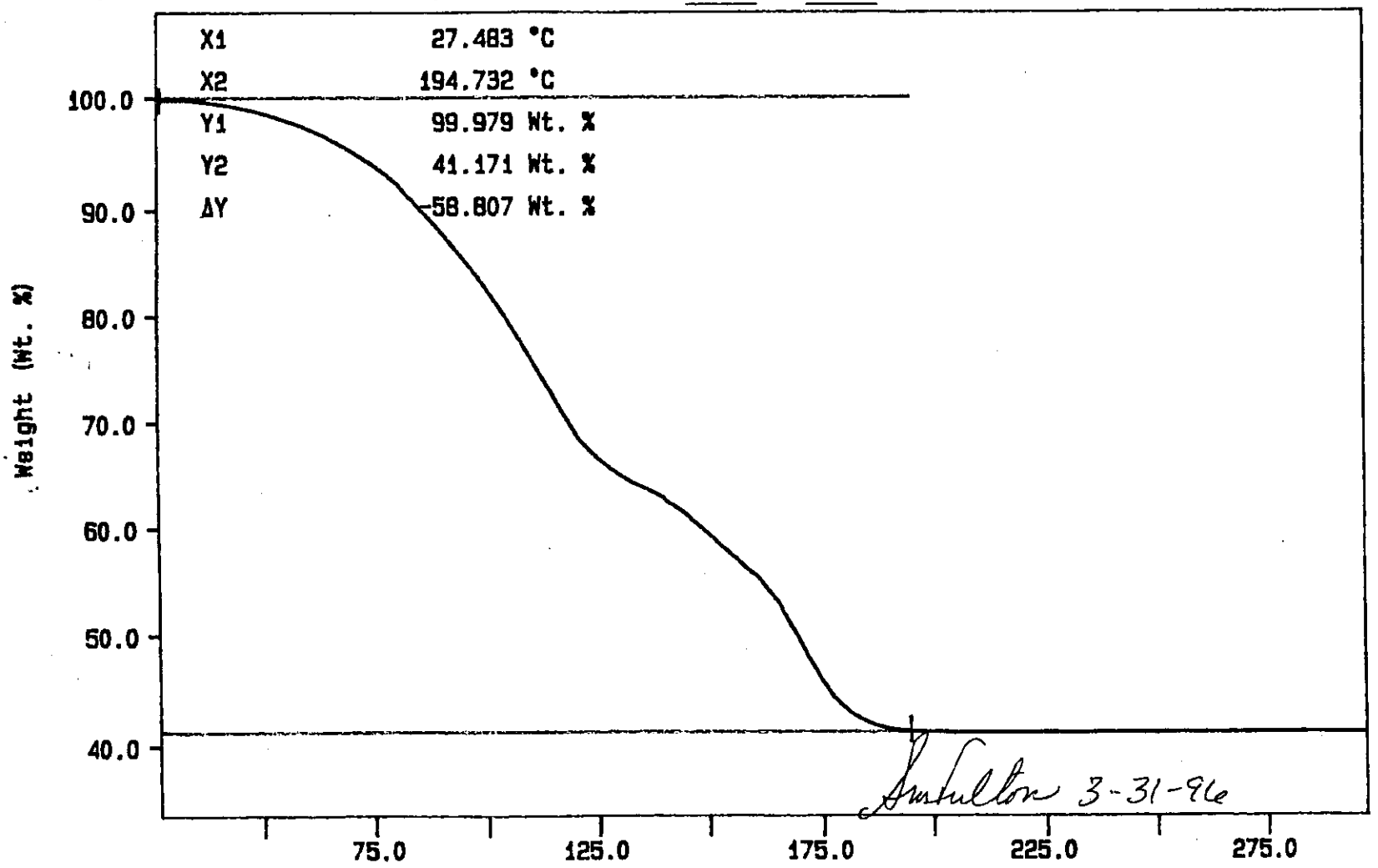
[signature] 4-10-96
Analyst Signature **Date**

Verified by
HAnastn 4-10-96

Data Entry Comments: S96T001149 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.

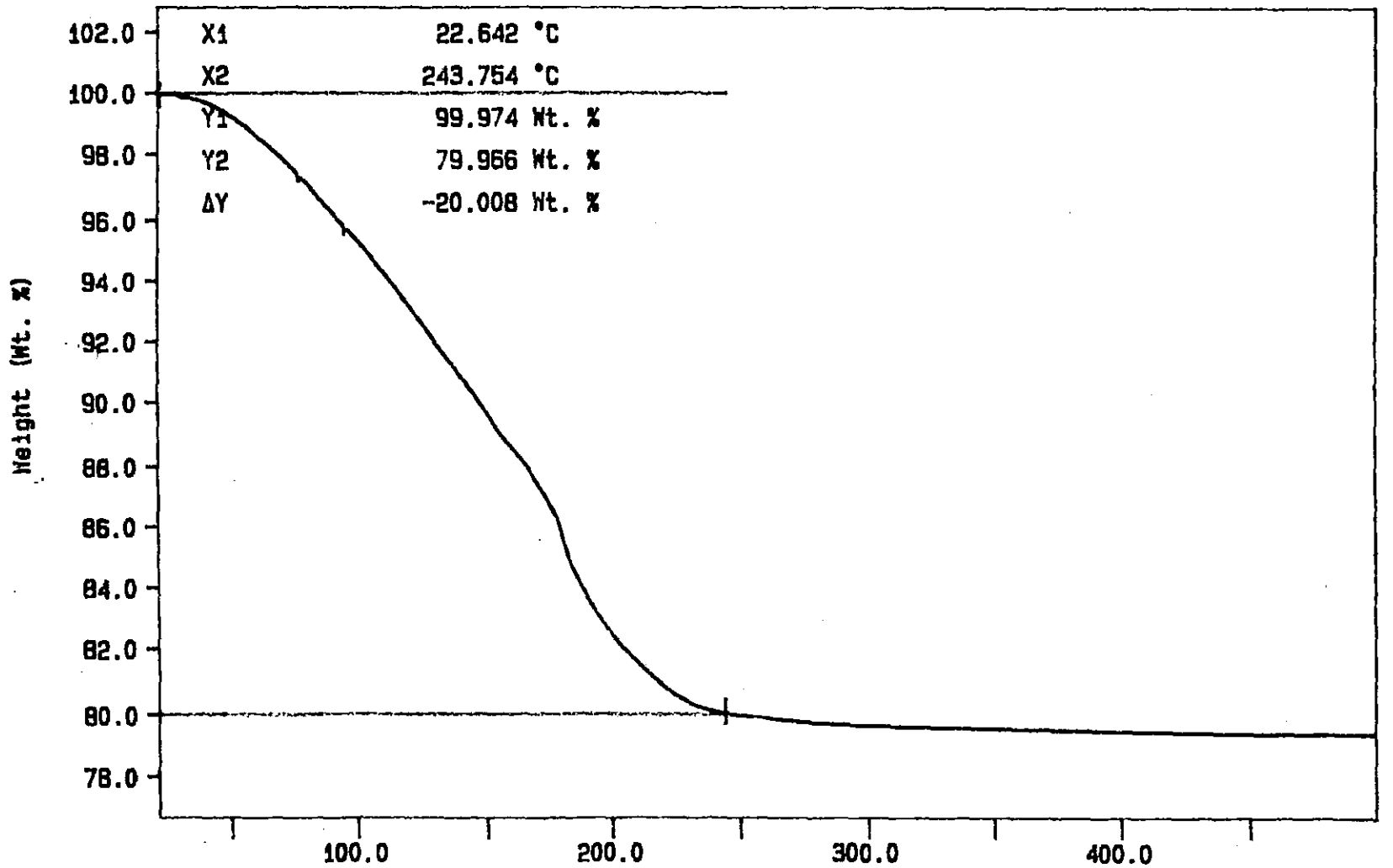
Curve 1: TGA
File info: ter033102 Sun Mar 31 07:45:09 1996
Sample Weight: 13.069 mg
TGA-STD 100CN2
SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 2-377 TO 2-381.



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

rd meyers
PERKIN-ELMER
7 Series Thermal Analysis System
Sun Mar 31 17:57:27 1996

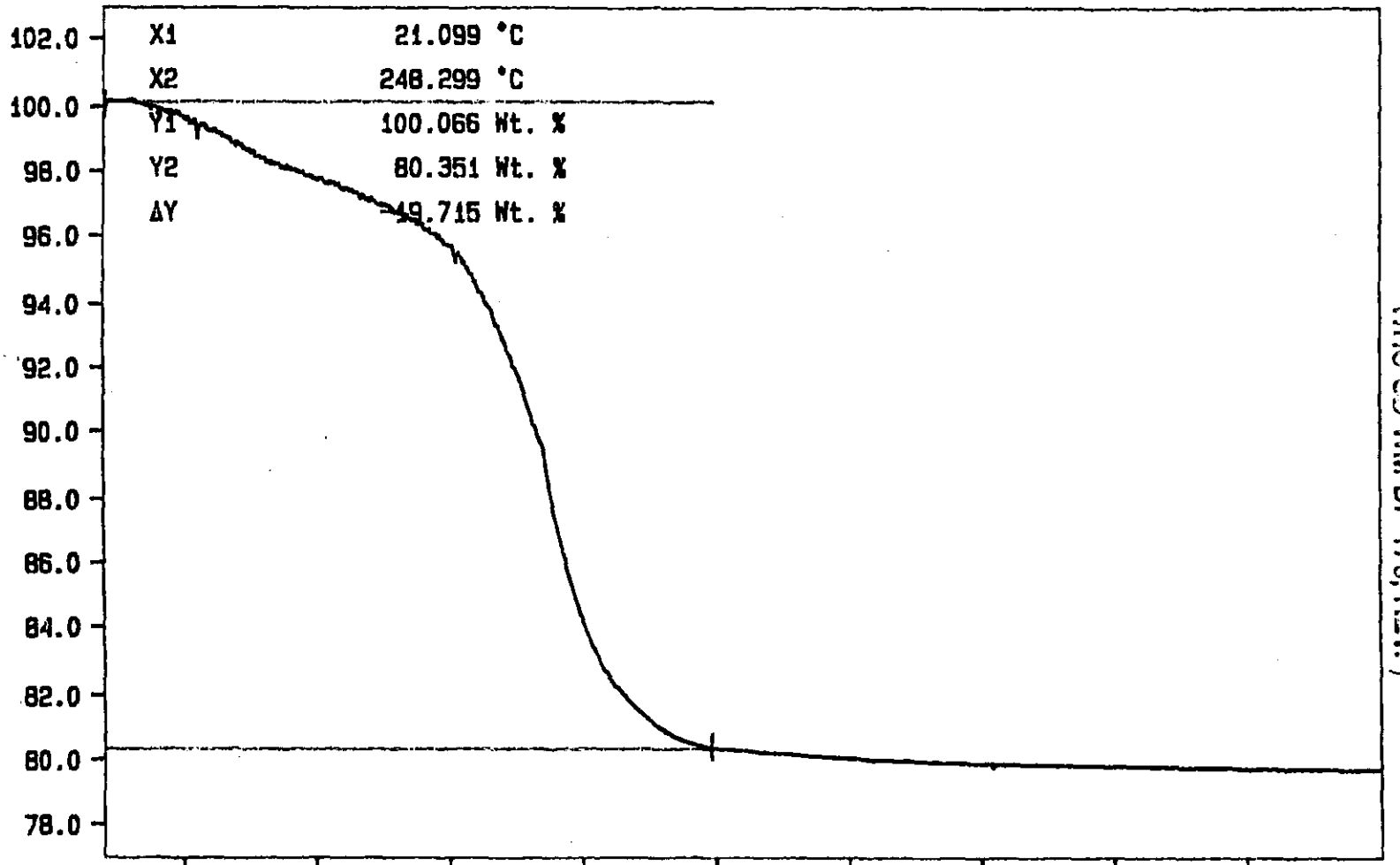
Curve 1: TGA
File info: SAM033103 Sun Mar 31 18:54:39 1996
Sample Weight: 26.054 mg
S96T001148



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 Mar 31 19:00:24 1996

Curve 1: TGA
File info: SAM033104 Sun Mar 31 21:25:41 1996
Sample Weight: 32.432 mg
S96T001148 DUP



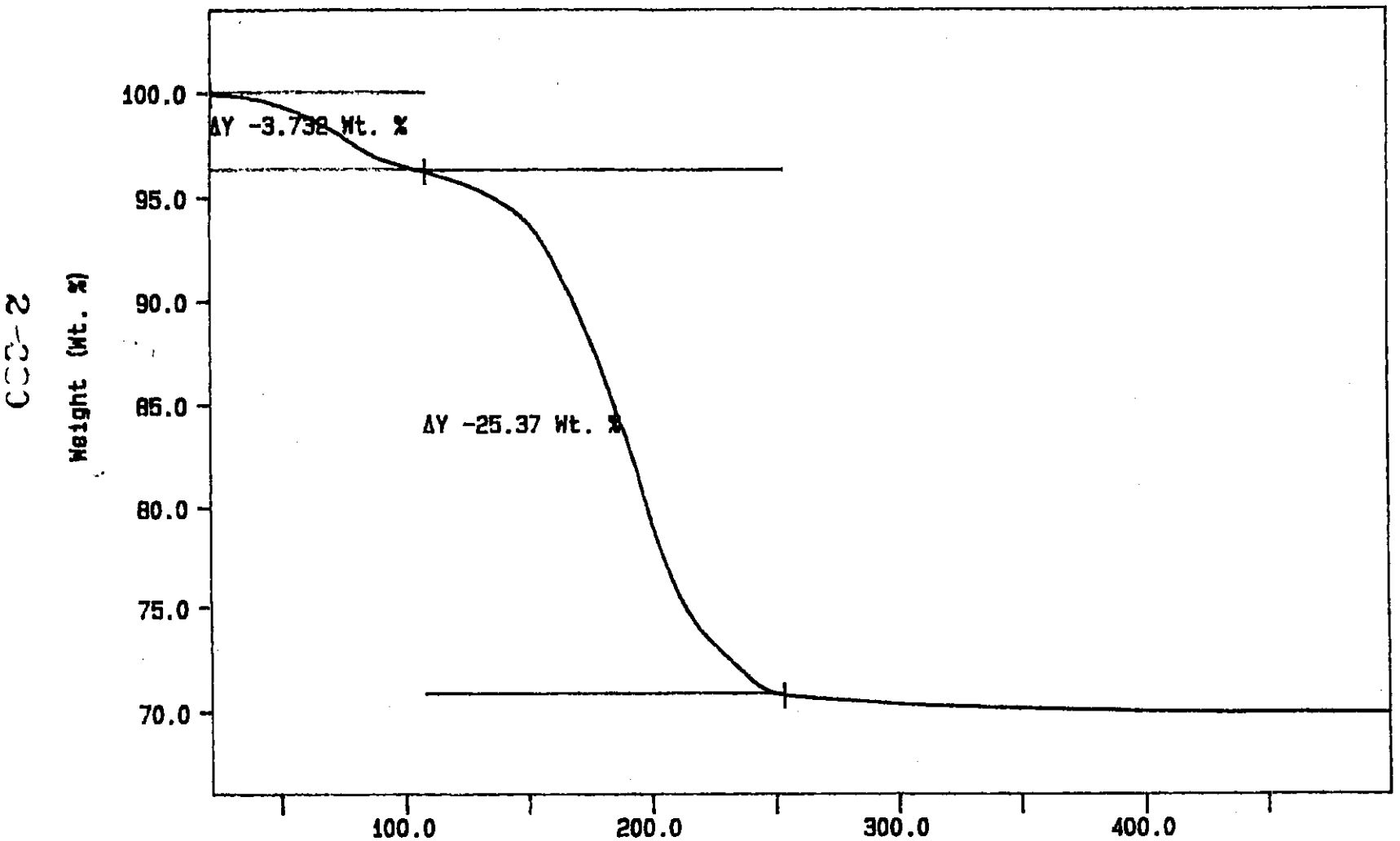
10C/MIN N2
TEMP1: 35.0 C TIME1: 0.0 min RATE1: 10.0 C/min
TEMP2: 500.0 C

SM FULTON
PERKIN-ELMER
7 Series Thermal Analysis System
Sun Mar 31 21:32:13 1996

WHC-SD-WM-DP-179, REV. 1

2-270

Curve 1: TGA
File info: SAM033105 Sun Mar 31 22:41:25 1996
Sample Weight: 33.890 mg
S96T001149

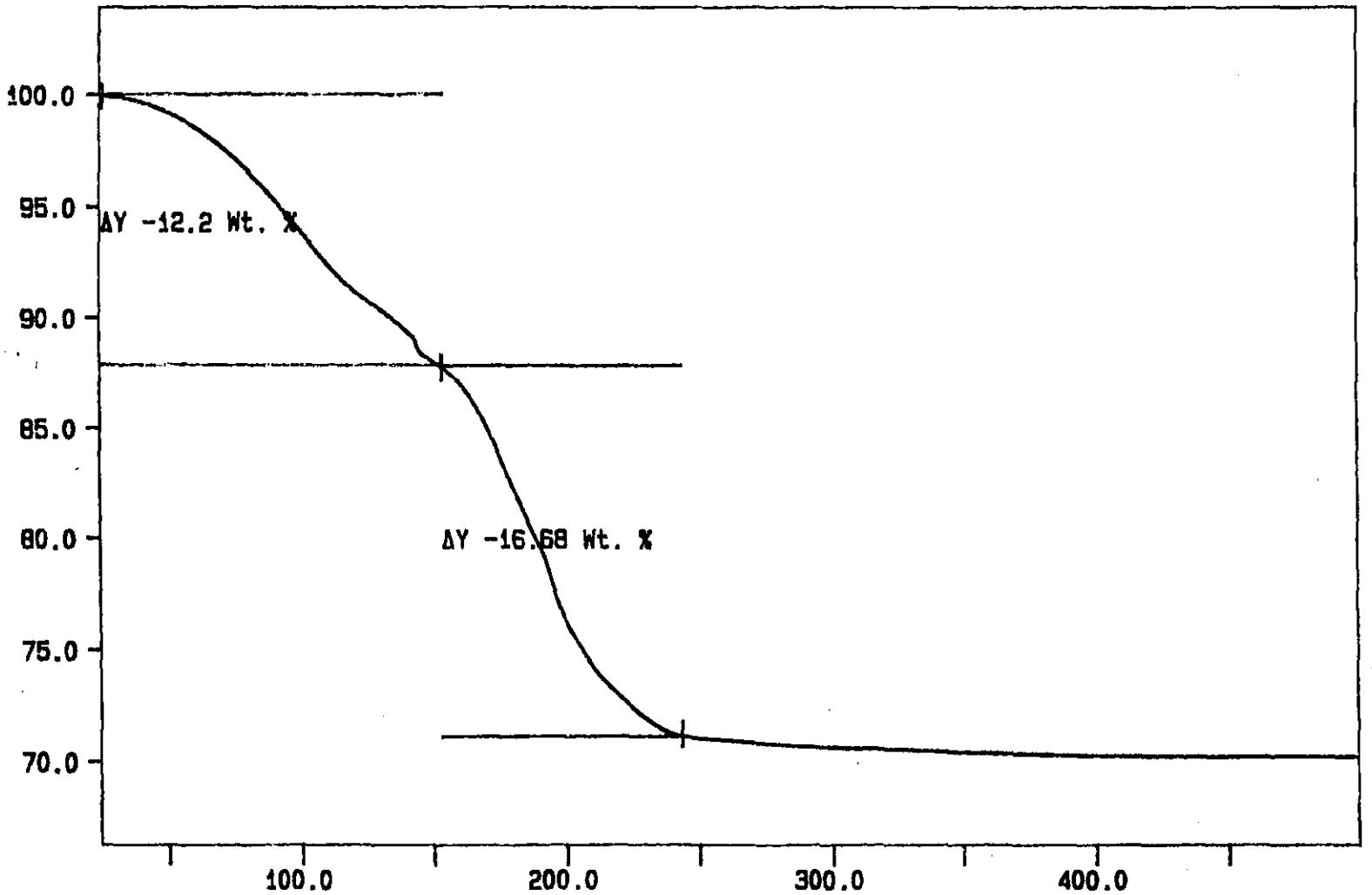


10C/MIN N2
TEMP1: 35.0 C TIME1: 0.0 min RATE1: 10.0 C/min
TEMP2: 500.0 C

SM FULTON
PERKIN-ELMER
7 Series Thermal Analysis System
Sun Mar 31 22:42:44 1996

WHC-SD-WM-DP-178, REV. 1

Curve 1: TGA
File info: SAM033106 Sun Mar 31 23:51:59 1996
Sample Weight: 20.243 mg
S96T001149 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
Mon Apr 1 00:32:46 1996

worklistrpt Version 2.1 05/15/95
04/03/96 14:22

WHC-SD-WM-DP-178, REV. |

LABCORE Data Entry Template for Worklist# 6506

Analyst: SMF **Instrument:** TGA0 3 **Book #** 100CN2

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

Worklist Comment: S-102 TGA RUN UNDER N2. RCJ

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA-03	SOLID	59.4	59.30	N/A	%
96000094	S102	2	SAMPLE	S96T001150	0		TGA-03	SOLID	N/A	24.76		%
96000094	S102	3	DUP	S96T001150	0		TGA-03	SOLID	24.76	24.44	N/A	%
96000094	S102	4	SAMPLE	S96T001151	0		TGA-03	SOLID	N/A	30.36		%
96000094	S102	5	DUP	S96T001151	0		TGA-03	SOLID	30.36	23.80	N/A	%

Final page for worklist # 6506

See Attached for Signatures. 4-10-96
Analyst Signature **Date** **Analyst Signature** **Date**

S96T001150 is the sum of two weight loss steps (8.57 + 16.19).
Verified by HAnastos 4-10-96

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.

worklistrpt Version 2.1 05/15/95
03/14/96 13:44

WHC-SD-WM-EP-176, REV. 1

Page: 1

LABCORE Data Entry Template for Worklist# 6506

Analyst: SMF **Instrument:** TGA0 3 **Book #** 100 N2

Method: LA-560-112 Rev/Mod _____

Worklist Comment: S-102 TGA RUN UNDER N2. RCJ

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	-------TEST------	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA-01	SOLID			N/A	%
96000094	S102	2	SAMPLE	S96T001150	0		TGA-01	SOLID	N/A			%
96000094	S102	3	DUP	S96T001150	0		TGA-01	SOLID			N/A	%
96000094	S102	4	SAMPLE	S96T001151	0		TGA-01	SOLID	N/A			%
96000094	S102	5	DUP	S96T001151	0		TGA-01	SOLID			N/A	%

Final page for worklist # 6506

Susie M. Fulton 4-1-96
Analyst Signature **Date**

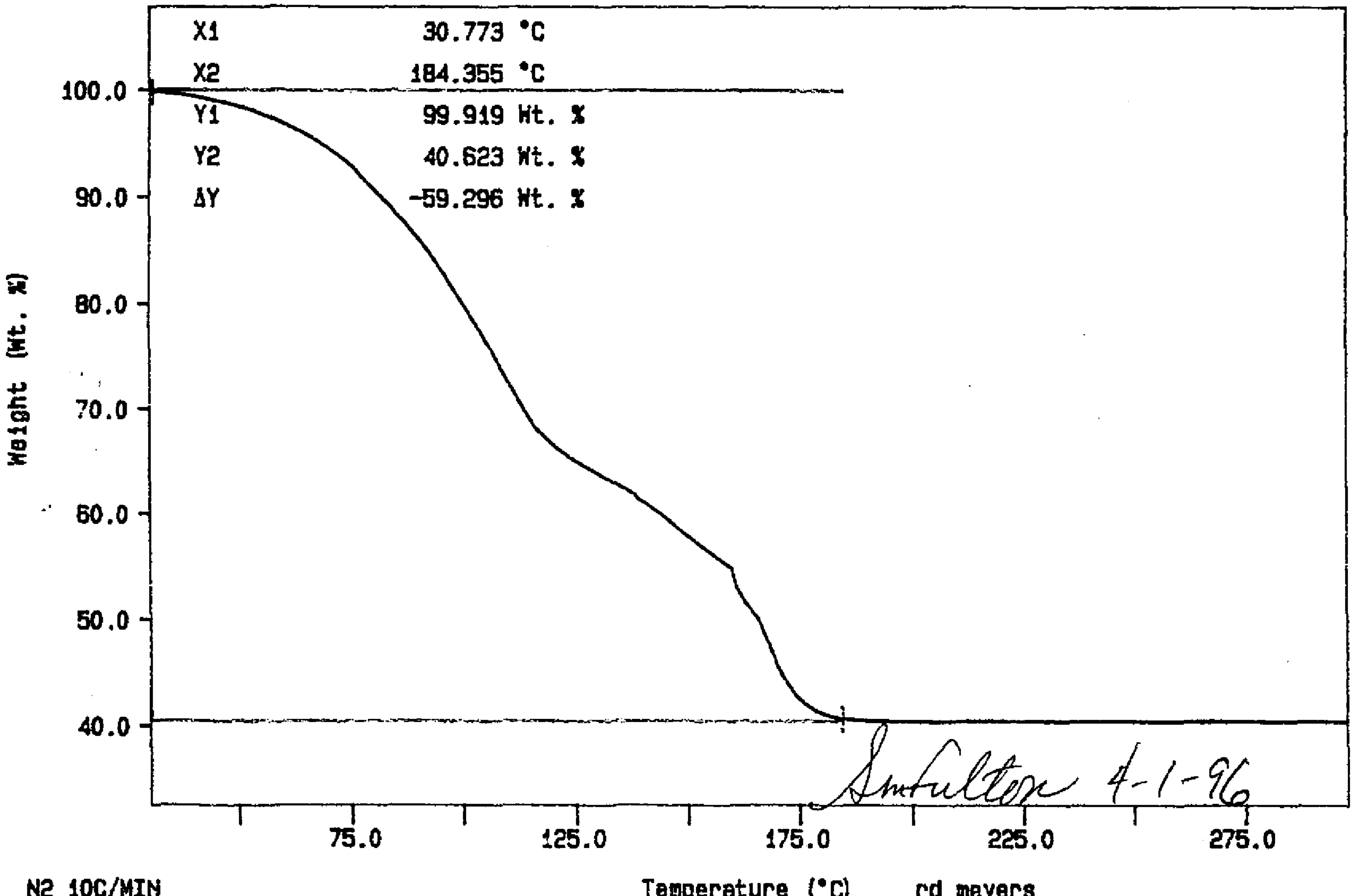
Analyst Signature **Date**

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.

Curve 1: TGA
File info: TER040101 Mon Apr 1 18:52:23 1996
Sample Weight: 10.979 mg
TGA-STD 100CN2

SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 2-384 TO 2-388



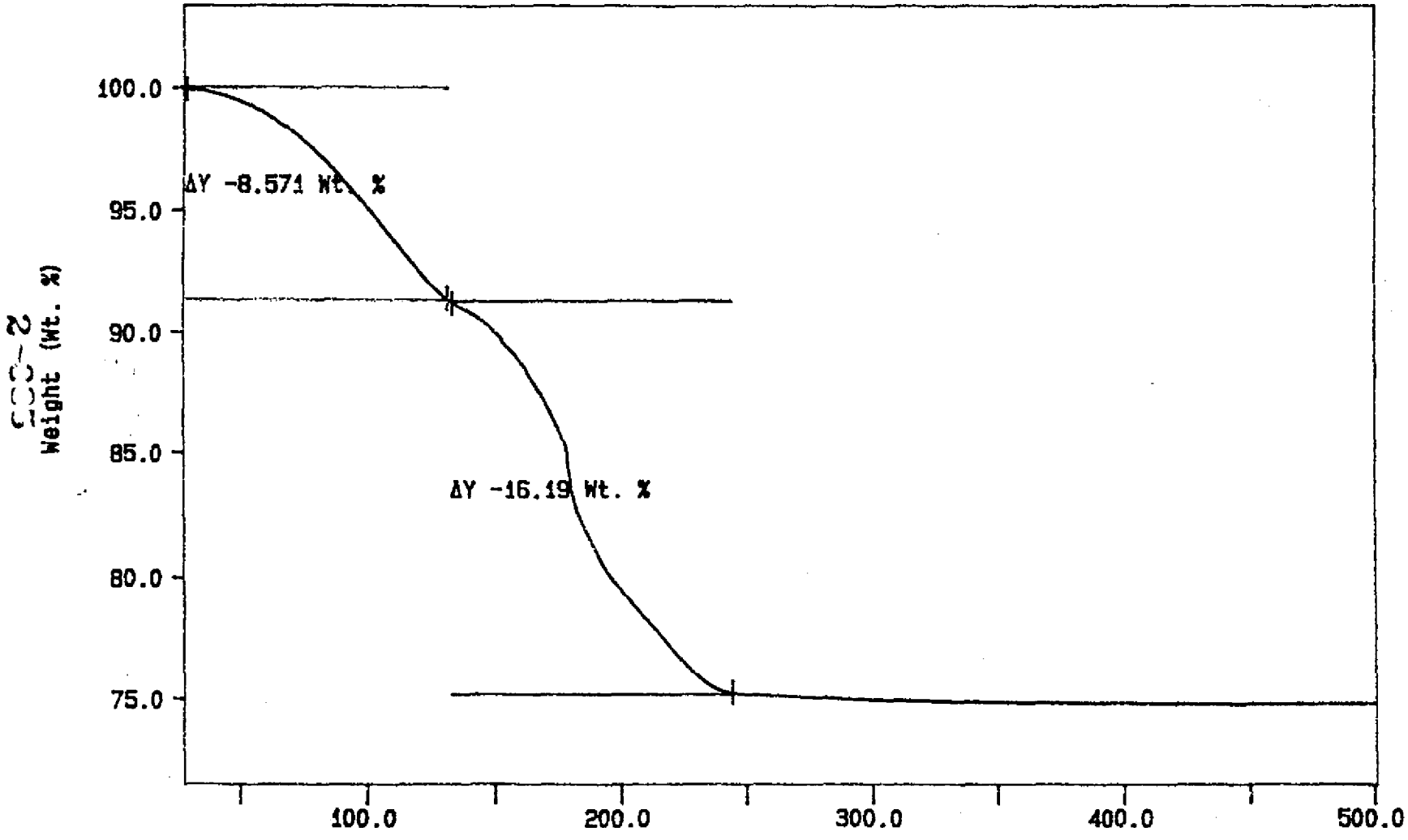
N2 10C/MIN
TEMP1: 30.0 C TIME1: 0.0 min RATE1: 10.0 C/min
TEMP2: 300.0 C

rd meyers
PERKIN-ELMER
7 Series Thermal Analysis System
Mon Apr 1 19:04:00 1996

2-CC1

WHC-SD-WM-DP-178, REV. 1

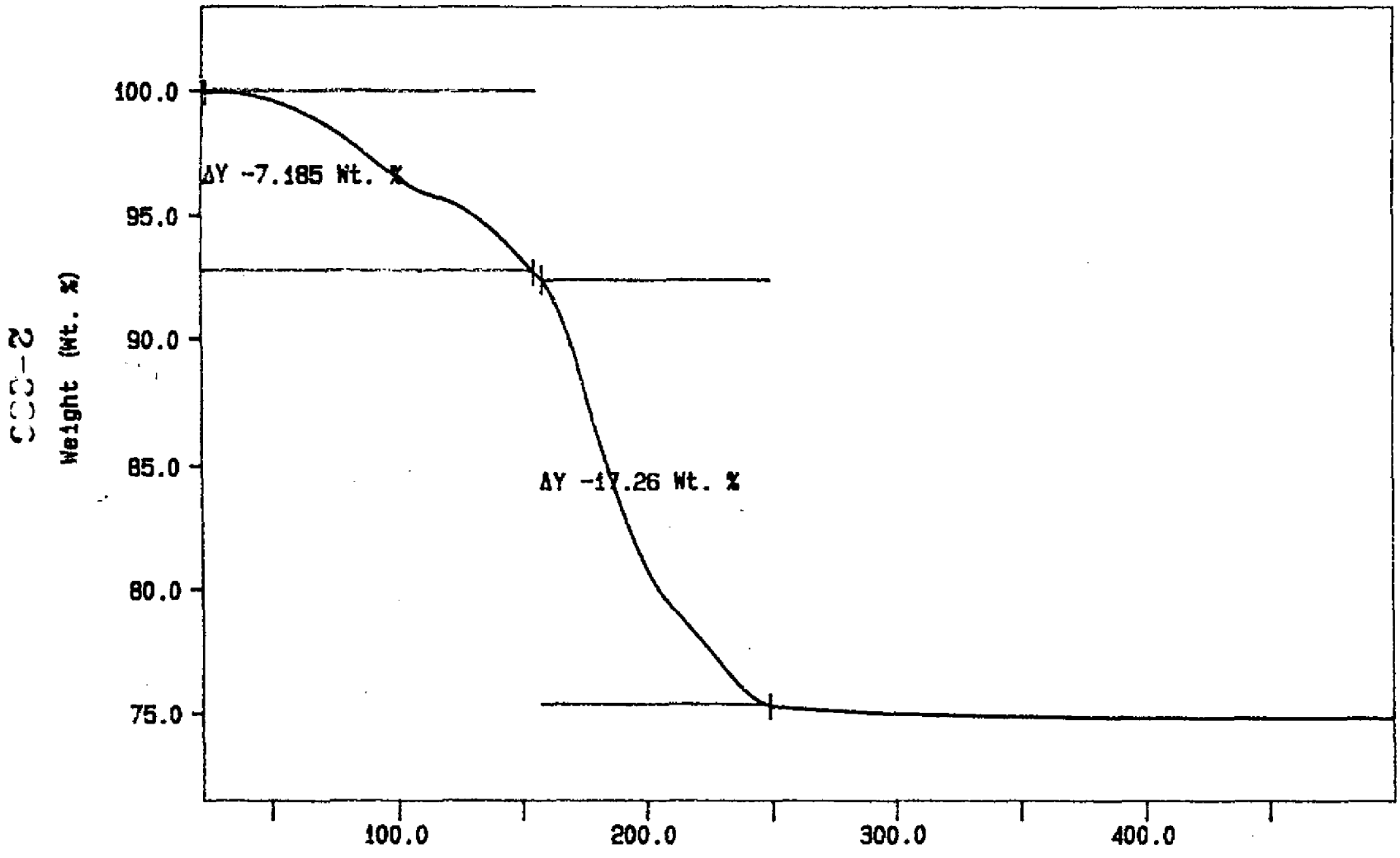
Curve 1: TGA
File info: SAM040101 Mon Apr 1 19:58:18 1996
Sample Weight: 22.080 mg
S96T001150



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
Mon Apr 1 20:43:35 1996

Curve 1: TGA
File info: SAM040102 Mon Apr 1 21:35:48 1996
Sample Weight: 32.433 mg
S96T001150 DUP

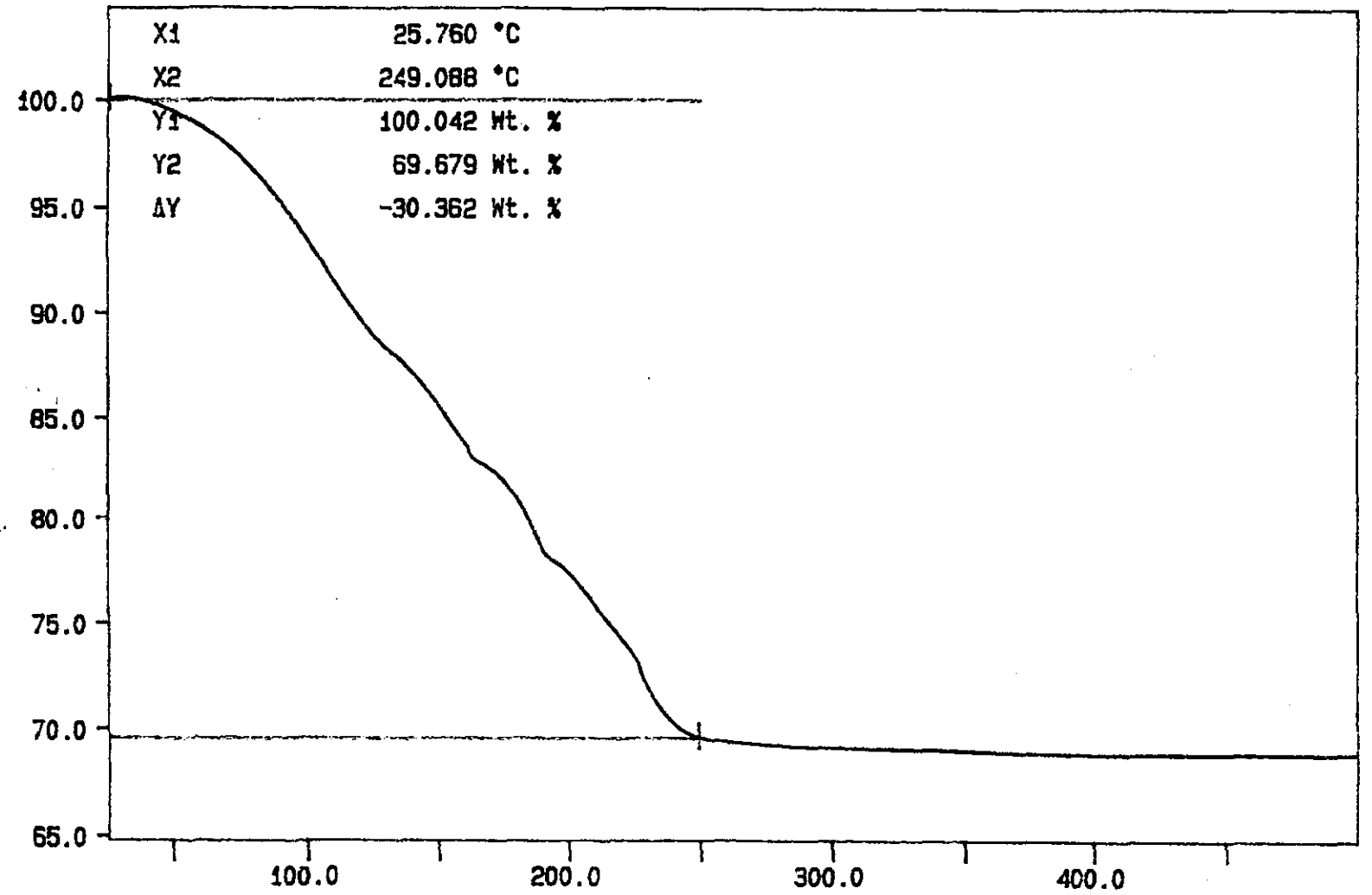


10C/MIN N2
TEMP1: 35.0 C TIME1: 0.0 min RATE1: 10.0 C/min
TEMP2: 500.0 C

SM FULTON
PERKIN-ELMER
7 Series Thermal Analysis System
Mon Apr 1 21:57:04 1996

WHC-SD-WM-DP-176, REV. 1

Curve 1: TGA
File info: SAM040103 Mon Apr 1 22:47:51 1996
Sample Weight: 20.813 mg
S96T001151

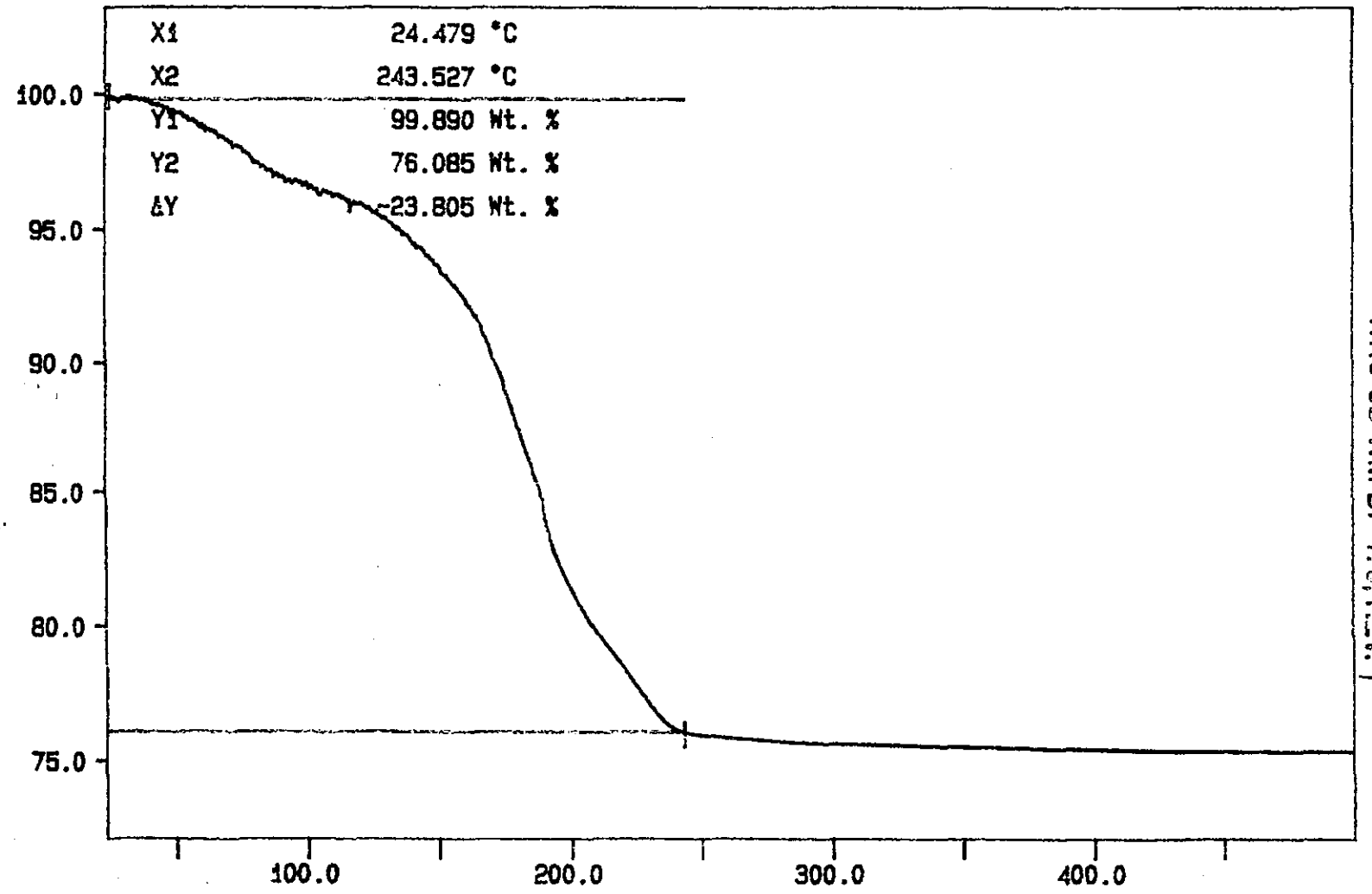


10C/MIN N2
TEMP1: 35.0 C TIME1: 0.0 min RATE1: 10.0 C/min
TEMP2: 500.0 C

SM FULTON
PERKIN-ELMER
7 Series Thermal Analysis System
Tue Apr 2 00:39:39 1996

WHC-SD-WM-DP-178, REV. 1

Curve 1: TGA
File info: SAM040104 Tue Apr 2 01:32:54 1996
Sample Weight: 32.504 mg
S96T001151 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
Tue Apr 2 02:05:27 1996

worklistrpt Version 2.1 05/15/95
04/04/96 10:43

WHC-SD-WM-DP-170, REV. 1

Page: 1

LABCORE Data Entry Template for Worklist# 6668

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

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

Worklist Comment: Rerun. Please run S-102 TGA under N2. bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	-------TEST------	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA-03	SOLID	59.2	58.74*	N/A	%
96000030	S102	2	SAMPLE	S96T000763	0		TGA-03	SOLID	N/A	12.18		%
96000030	S102	3	DUP	S96T000763	0		TGA-03	SOLID	12.18	12.16	N/A	%

Final page for worklist # 6668

See Attached for Signatures.
Analyst Signature Date

[signature] 4-9-96
Analyst Signature Date

Verified by H Anastos 4-11-96

Data Entry Comments:

[signature] 4/11/96

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.

2-389

worklistrpt Version 2.1 05/15/95
03/19/96 07:38

WHC-SD-WM-DP-178, REV. 1

Page: 1

LABCORE Data Entry Template for Worklist# 6668

Analyst: SMF **Instrument:** TGA0 3 **Book #** 7SN8A

Method: LA-560-112 Rev/Mod ________

Worklist Comment: Rerun. Please run S-102 TGA under N2. bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				~~TGA-01~~ TGA-03 SMF 4-2-96	SOLID			N/A	%
96000030	S102	2	SAMPLE	S96T000763	1		~~TGA-01~~	SOLID	N/A			%
96000030	S102	3	DUP	S96T000763	1		~~TGA-01~~	SOLID			N/A	%

Final page for worklist # 6668

Susie M. Fulton 3-29-96
Analyst Signature Date

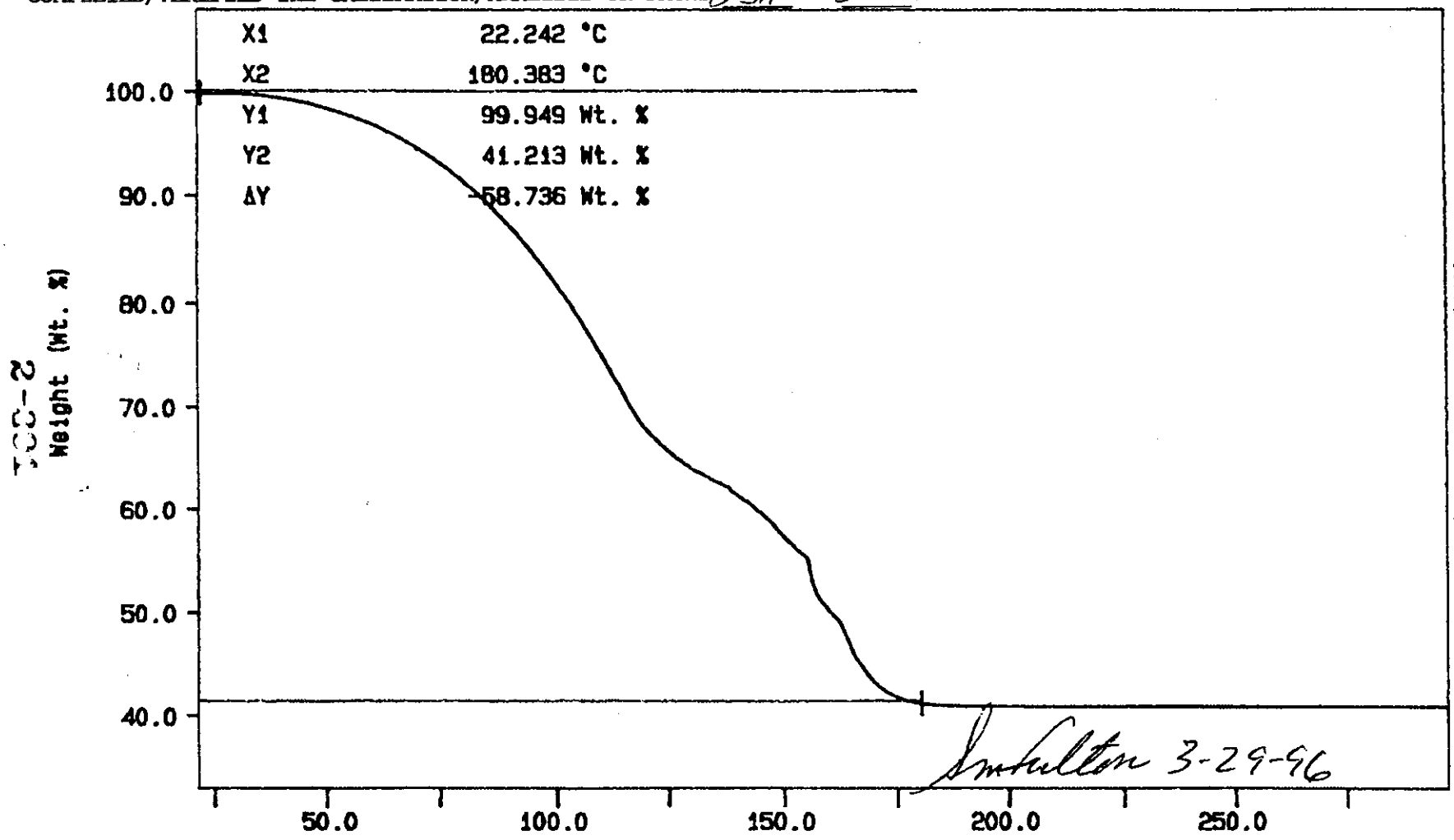
____
Analyst Signature Date

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.

Curve 1: TGA
File info: ter032901 Fri Mar 29 06:40:14 1996
Sample Weight: 13.020 mg
TERLIQ 75N8A

SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 2391 TO 2393



Smfulton 3-29-96

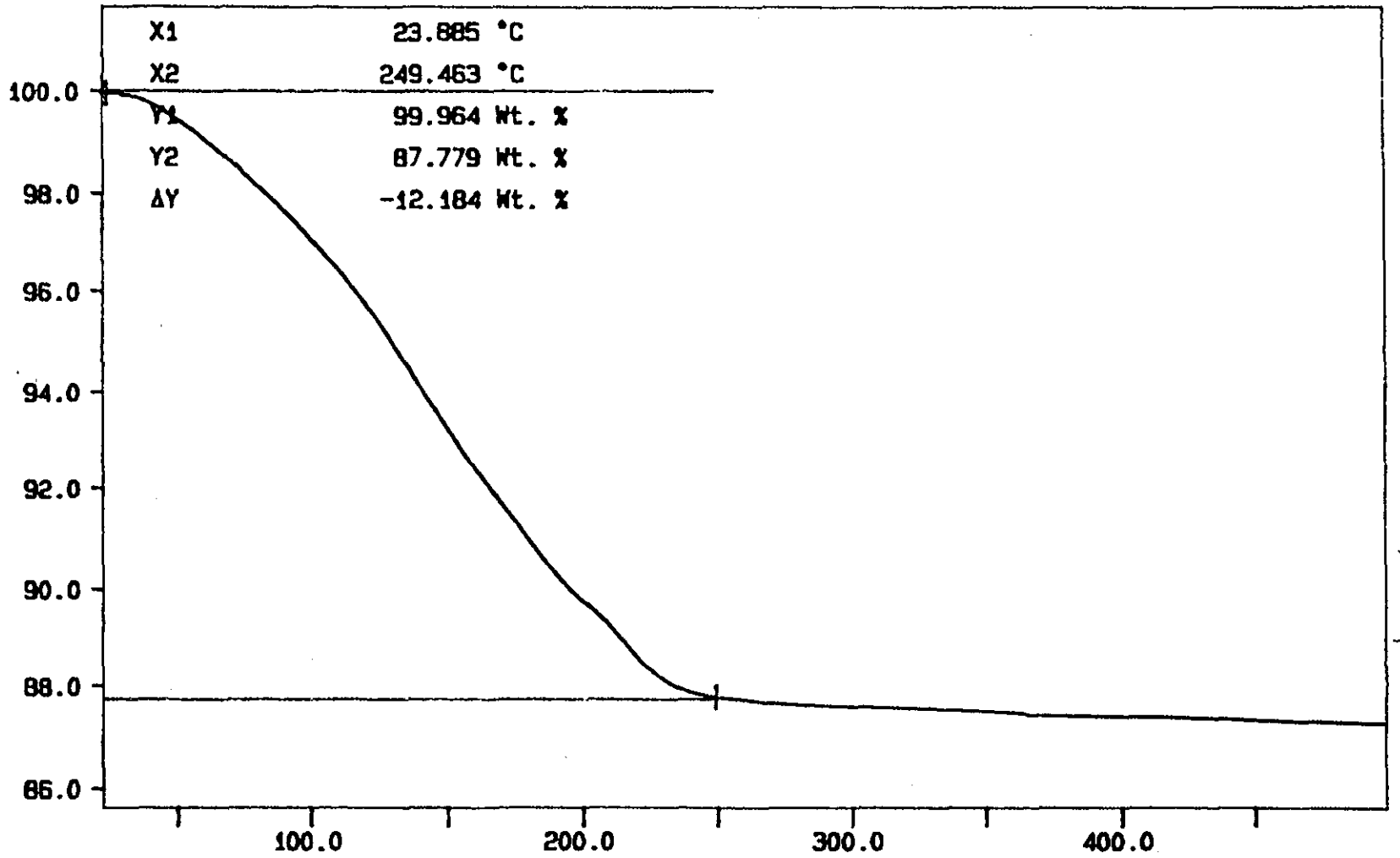
N2 10C/MIN
TEMP1: 35.0 C TIME1: 0.0 min RATE1: 10.0 C/min
TEMP2: 300.0 C

rd meyers
PERKIN-ELMER
7 Series Thermal Analysis System
Fri Mar 29 22:11:49 1996

2-391

WHC-SD-WM-DP-178, REV. 1

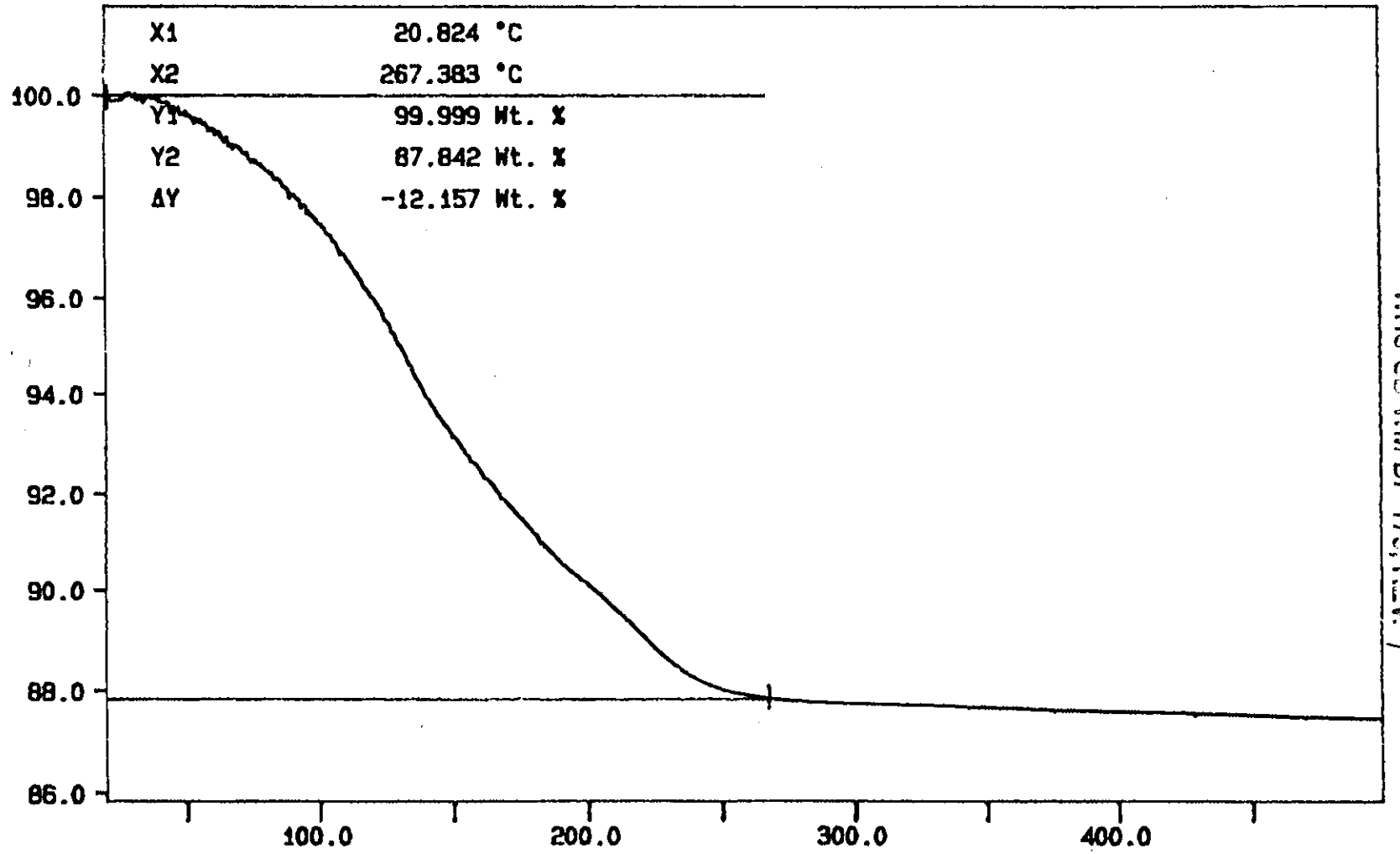
Curve 1: TGA
File info: SAM032903 Fri Mar 29 21:55:39 1996
Sample Weight: 24.699 mg
S96T000763



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
Fri Mar 29 21:59:56 1996

Curve 1: TGA
File info: SAM032904 Fri Mar 29 23:41:20 1996
Sample Weight: 30.611 mg
S96T000763 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
Sat Mar 30 00:40:19 1996

worklistrpt Version 2.1 05/15/95
03/20/96 11:28

WHC-SD-WM-DP-178, REV. 1

Page: 1

LABCORE Data Entry Template for Worklist# 6757

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

Method: LA-560-112 Rev/Mod ~~B-1~~ ~~C-1~~ B-1 (HLA 4-4-96; HLA 4-4-96; 4/15/96 BAY)

Worklist Comment: ~~AY-101~~ S-102 FOR TGA-01 PLEASE RUN UNDER N2 RTS!

GROUP	PROJECT	S	TYPE	SAMPLE#	R·A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD			TGA-01	LIQUID	59.2	59.94	N/A	%
96000094	S102	2	SAMPLE	S96T001382	0	TGA-01	LIQUID	N/A	47.72		%
96000094	S102	3	DUP	S96T001382	0	TGA-01	LIQUID	47.72	48.09	N/A	%
96000094	S102	4	SAMPLE	S96T001383	0	TGA-01	LIQUID	N/A	51.90		%
96000094	S102	5	DUP	S96T001383	0	TGA-01	LIQUID	51.90	51.85	N/A	%

Final page for worklist # 6757

S M Fulton 4-2-96
Analyst Signature Date

[signature] 4-6-96
Analyst Signature Date

Verified by HLanaston 4-9-96

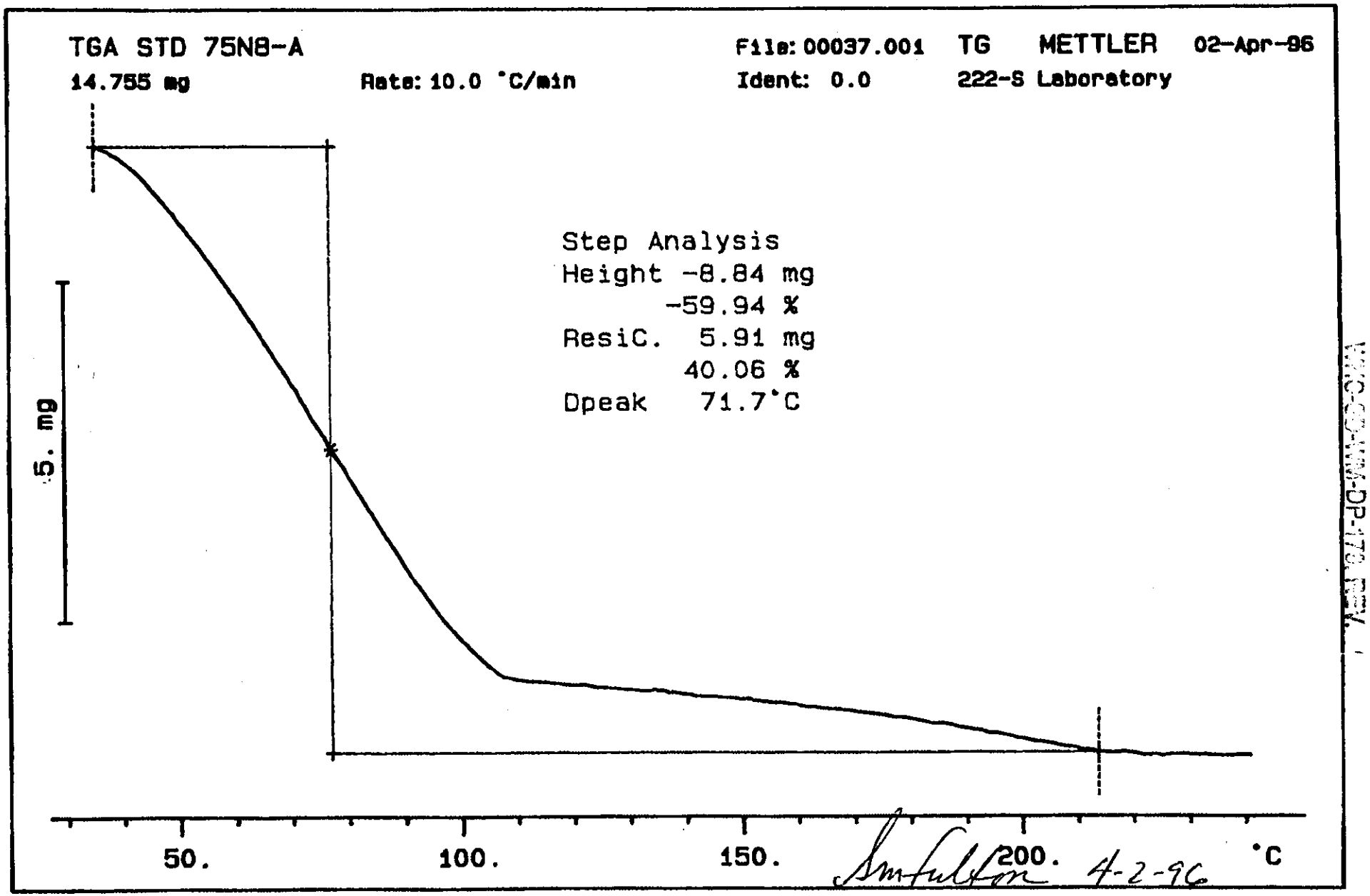
S96T001382 is the sum of two weight loss steps (39.54 & 8.18).

S96T001383 is the sum of two weight loss steps (45.49 + 6.41).

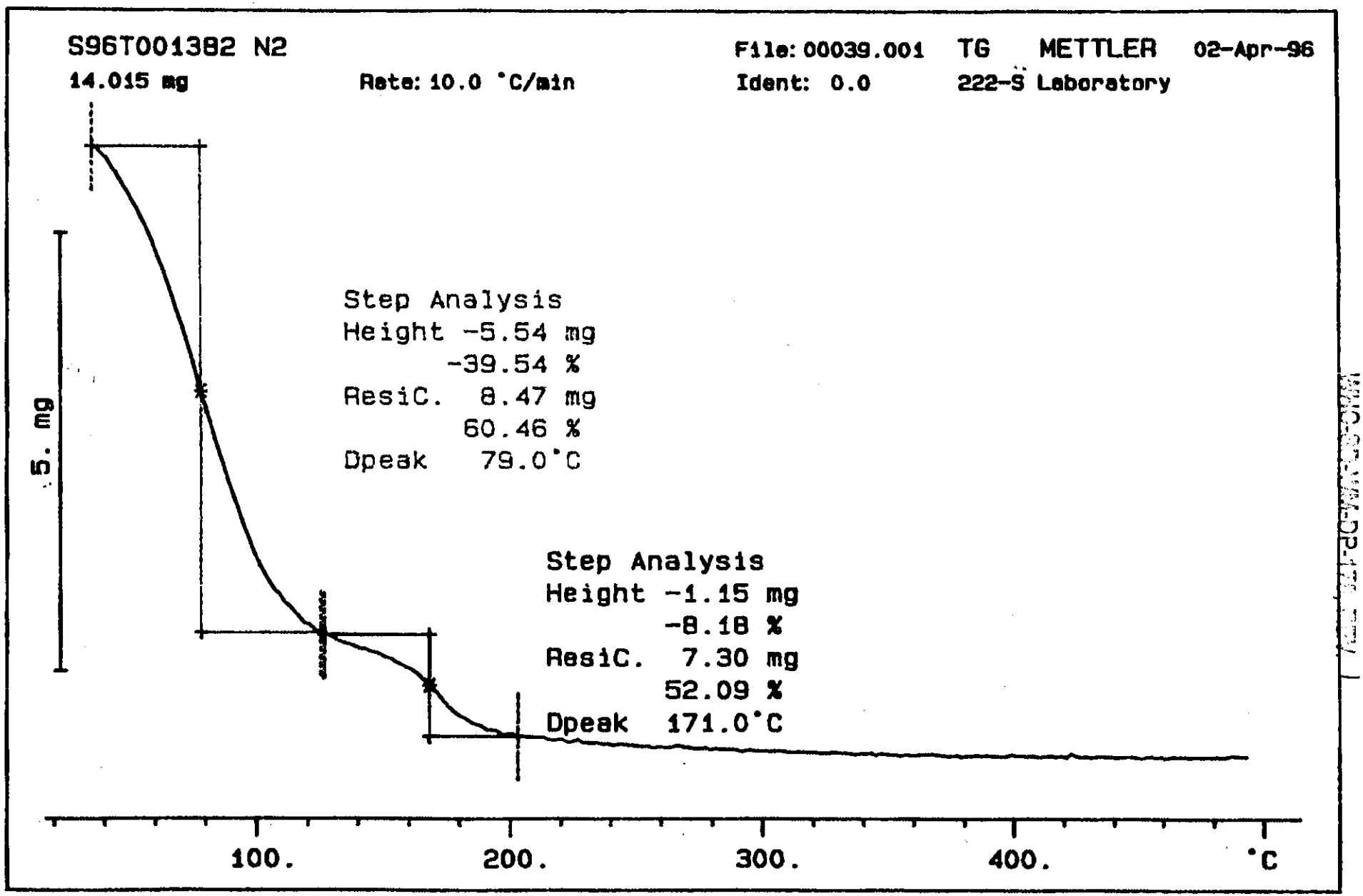
Data Entry Comments:

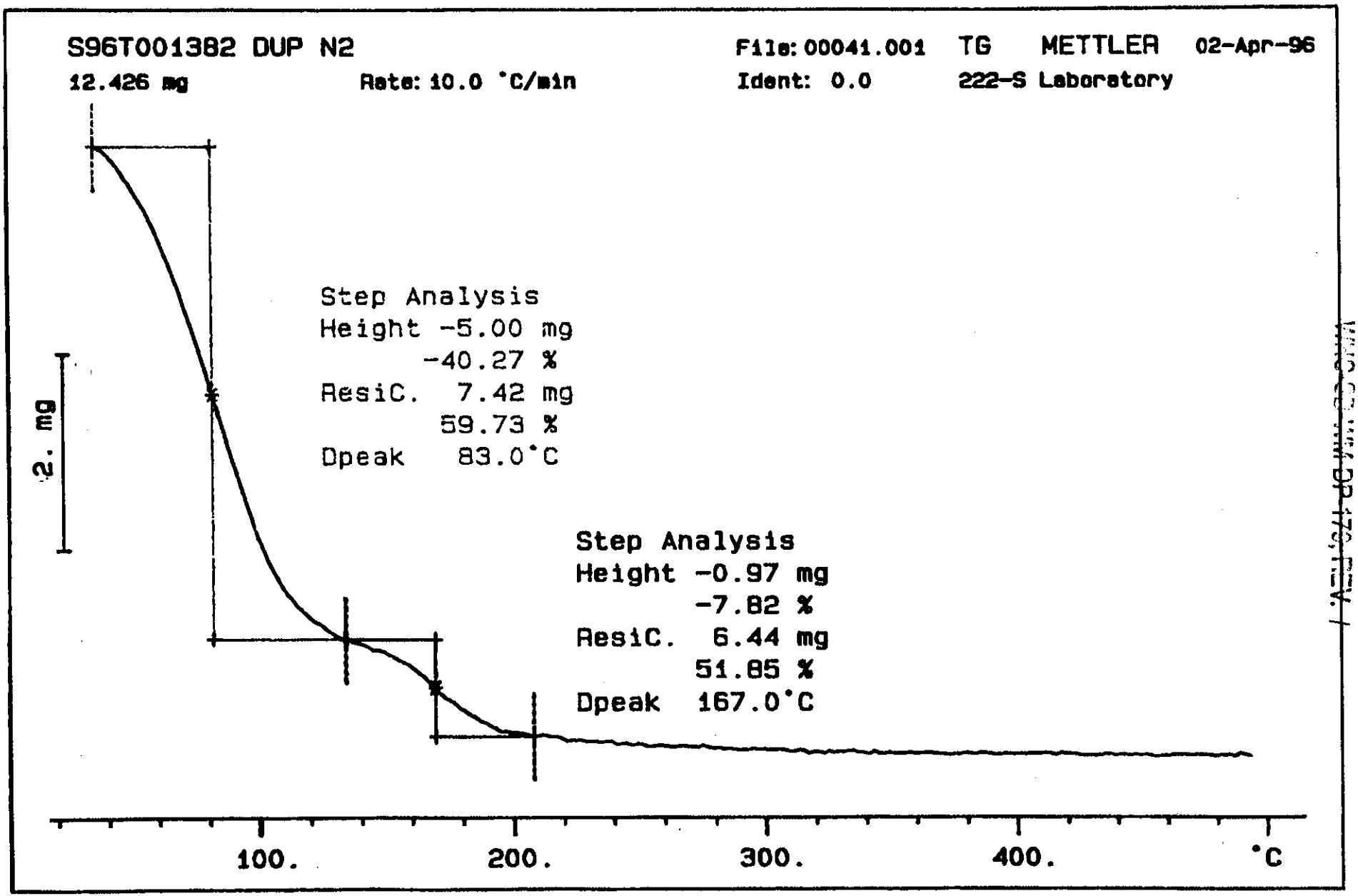
Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

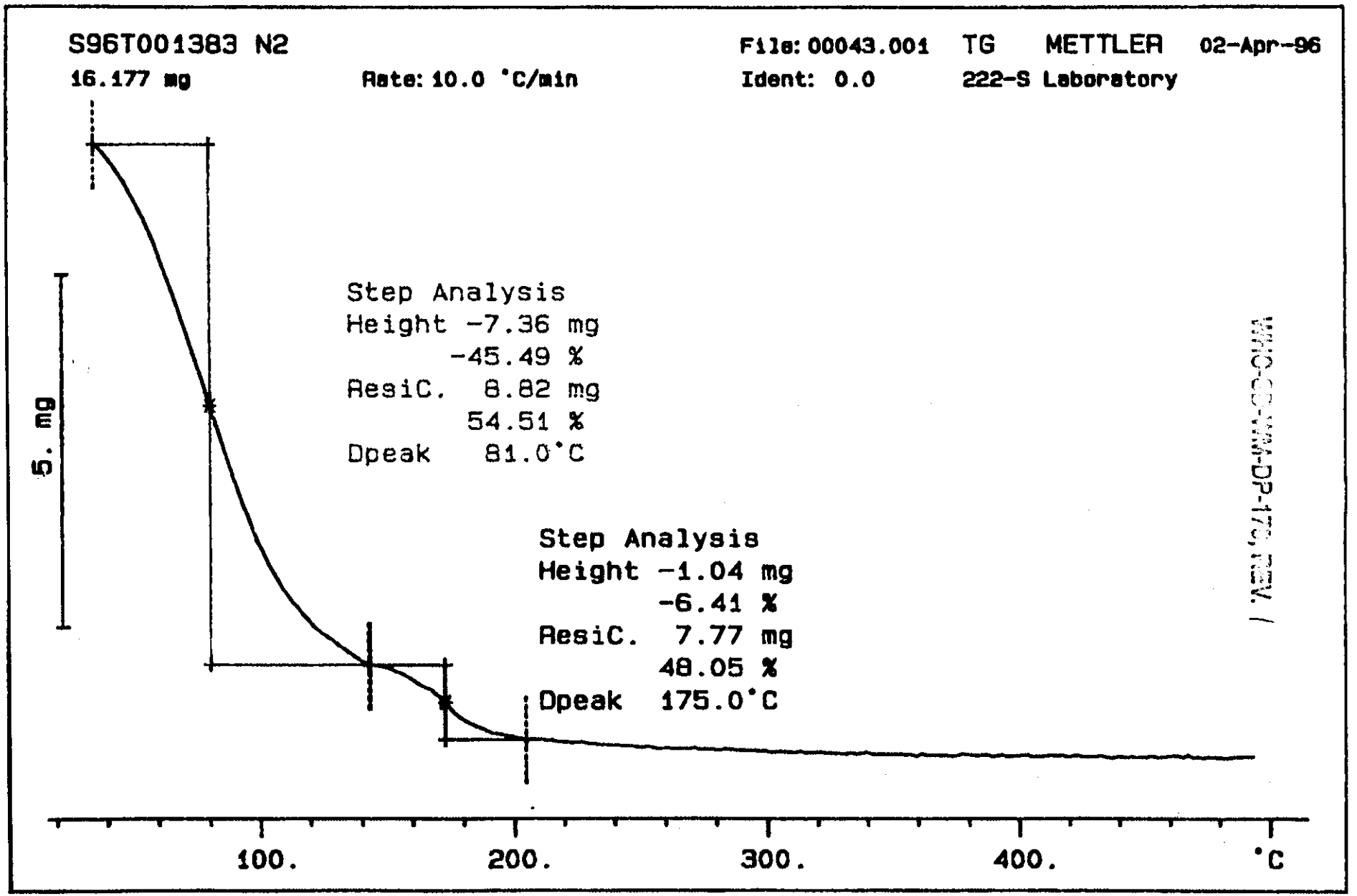
SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT
COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 2-395 TO 2-399.

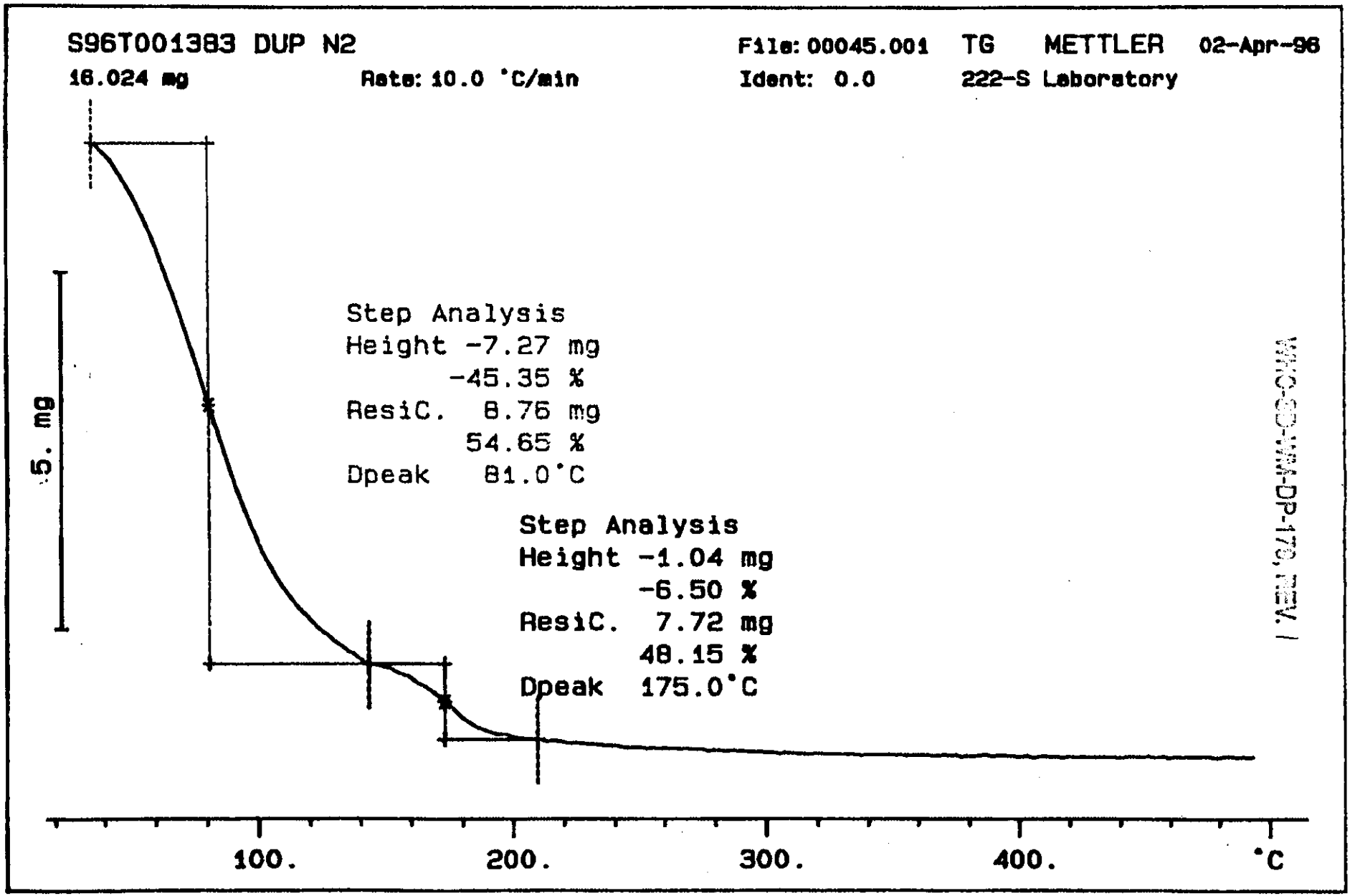


2-395


S96T001382 N2
14.015 mg
Rate: 10.0 °C/min
File: 00039.001
TG METTLER 02-Apr-96
Ident: 0.0
222-S Laboratory
5. mg
Step Analysis
Height -5.54 mg
-39.54 %
ResiC. 8.47 mg
60.46 %
Dpeak 79.0°C
Step Analysis
Height -1.15 mg
-8.18 %
ResiC. 7.30 mg
52.09 %
Dpeak 171.0°C
100.
200.
300.
400.
°C


S96T001382 DUP N2
File: 00041.001 TG METTLER 02-Apr-96
12.426 mg
Rate: 10.0 °C/min
Ident: 0.0
222-S Laboratory
Step Analysis
Height -5.00 mg
-40.27 %
ResiC. 7.42 mg
59.73 %
Dpeak 83.0°C
Step Analysis
Height -0.97 mg
-7.82 %
ResiC. 6.44 mg
51.85 %
Dpeak 167.0°C
2. mg
100.
200.
300.
400.
°C


S96T001383 N2
16.177 mg
Rate: 10.0 °C/min
File: 00043.001
Ident: 0.0
TG
METTLER
222-S Laboratory
02-Apr-96
Step Analysis
Height -7.36 mg
-45.49 %
ResiC. 8.82 mg
54.51 %
Dpeak 81.0°C
Step Analysis
Height -1.04 mg
-6.41 %
ResiC. 7.77 mg
48.05 %
Dpeak 175.0°C
5. mg
100.
200.
300.
400.
°C


S96T001383 DUP N2
File: 00045.001 TG METTLER 02-Apr-96
16.024 mg
Rate: 10.0 °C/min
Ident: 0.0
222-S Laboratory
5. mg
Step Analysis
Height -7.27 mg
-45.35 %
ResiC. 8.76 mg
54.65 %
Dpeak 81.0°C
Step Analysis
Height -1.04 mg
-6.50 %
ResiC. 7.72 mg
48.15 %
Dpeak 175.0°C
100.
200.
300.
400.
°C

worklistrpt Version 2.1 05/15/95
04/08/96 10:58

WHC-SD-WM-DP-170, REV. 1

Page: 1

LABCORE Data Entry Template for Worklist# 6760

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

Method: LA-514-114 Rev/Mod ________

Worklist Comment: S-102 FOR TGA-01 PLEASE RUN UNDER N2 RTS!

GROUP	PROJECT	S TYPE	SAMPLE#	R A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD			TGA-03	SOLID	~~28~~ 59.2 4-8-96	59.37	N/A	%
96000094	S102	2 SAMPLE	S96T001386	0	TGA-03	SOLID	N/A	13.21		%
96000094	S102	3 DUP	S96T001386	0	TGA-03	SOLID	13.21	19.37	N/A	%
96000094	S102	4 TRIPL	S96T001386	0	TGA-03	SOLID	13.21	18.91	N/A	%
96000094	S102	5 SAMPLE	S96T001390	0	TGA-03	SOLID	N/A	22.81		%
96000094	S102	6 DUP	S96T001390	0	TGA-03	SOLID	22.81	2.24	N/A	%
96000094	S102	7 TRIPL	S96T001390	0	TGA-03	SOLID	22.81	21.72	N/A	%

Final page for worklist # 6760

See attached for signatures
Analyst Signature **Date** 4-8-96

[signature] 4-10-96
Analyst Signature **Date**

Verified by H Anastos 4-10-96

S96T001386 sample thermogram ~~the~~ shows 4-8-96 BDV weight loss was shifted due to static electricity. The results of the duplicate and triplicate are the sum of two weight loss steps

Data Entry Comments: S96T001390 sample ~~thermograms~~ 4-8-96 BDV results are the sum of two weight loss steps. The noise seen on the duplicate thermogram is due to the static electricity on the sample and the vibrations in the lab.

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

worklistrpt Version 2.1 05/15/95
03/20/96 11:34

LABCORE Data Entry Template for Worklist# 6760

Analyst: ~~RLM~~ Alm 4/2/96 **Instrument:** TGA0 _____ **Book #** 100CN2

Method: LA-560-~~112~~ 114 Alm 4/2/96 Rev/Mod C-1 ~~B-1~~ Alm 4/2/96

Worklist Comment: S-102 FOR TGA-01 PLEASE RUN UNDER N2 RTS!

GROUP	PROJECT	S TYPE	SAMPLE#	R	A	-------TEST------	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD				TGA-01	SOLID			N/A	%
96000094	S102	2 SAMPLE	S96T001386	0		TGA-01	SOLID	N/A			%
96000094	S102	3 DUP	S96T001386	0		TGA-01	SOLID			N/A	%
96000094	S102	4 SAMPLE	S96T001390	0		TGA-01	SOLID	N/A			%
96000094	S102	5 DUP	S96T001390	0		TGA-01	SOLID			N/A	%

Final page for worklist # 6760

RLMcCown 4/2/96
Analyst Signature **Date**

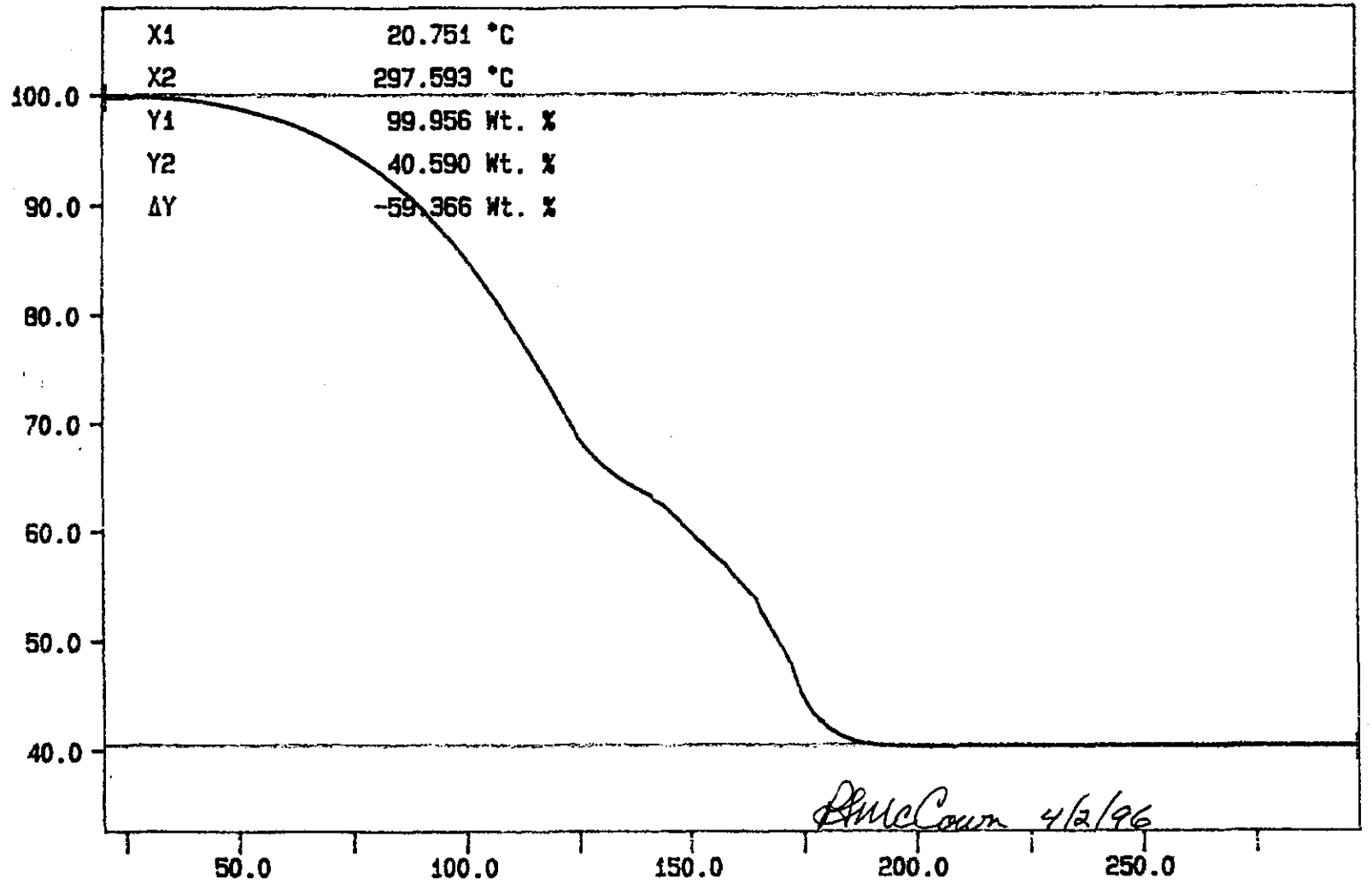
_____
Analyst Signature **Date**

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.

Curve 1: TGA
File info: TER040201 Tue Apr 2 06:53:26 1996
Sample Weight: 13.680 mg
TGA STD ~~100CN2~~ 75N8A

SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 2-302 TO 2-408

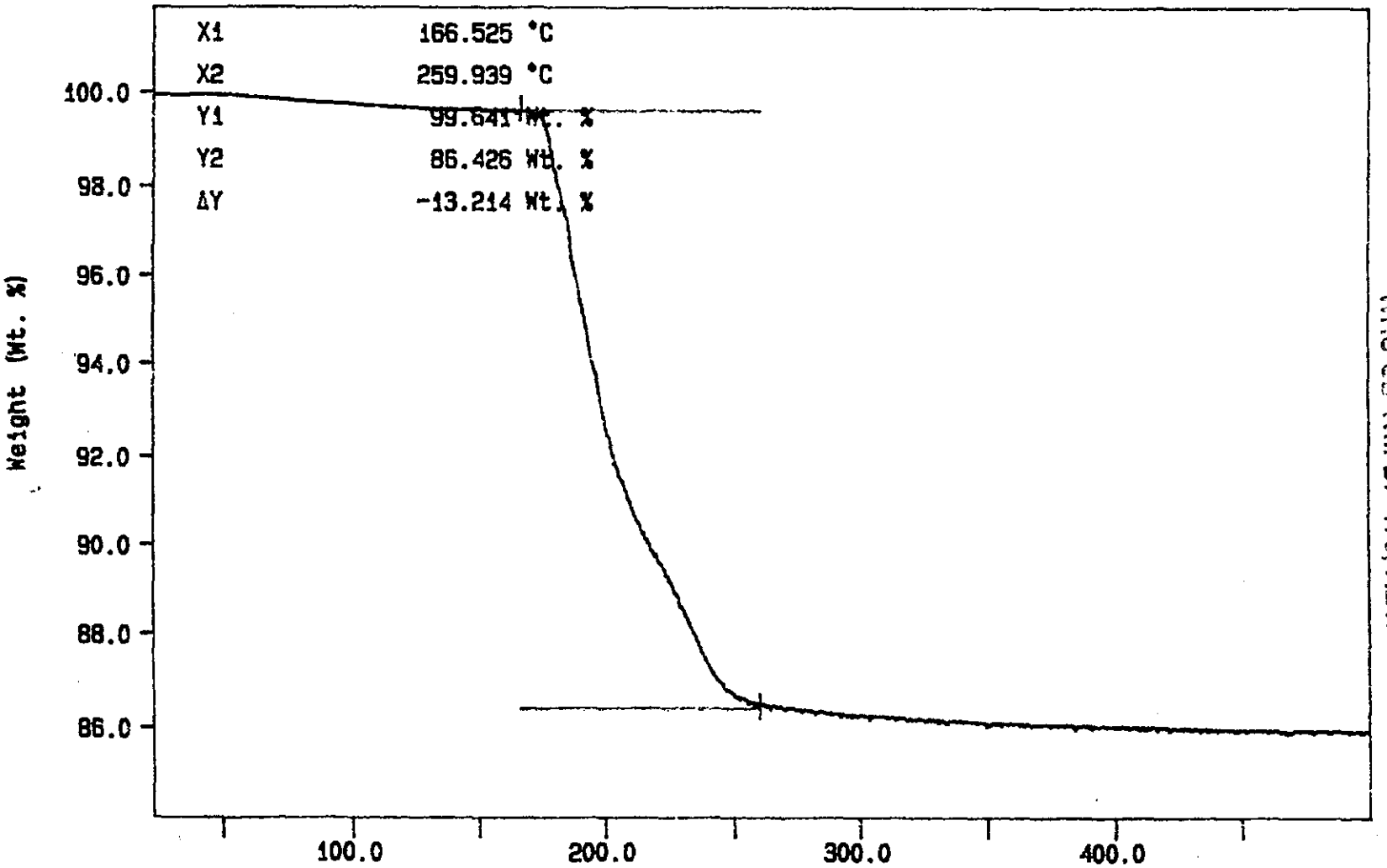


N2 10C/MIN
TEMP1: 35.0 C TIME1: 0.0 min RATE1: 10.0 C/min
TEMP2: 300.0 C

PJ MCCOWN
PERKIN-ELMER
7 Series Thermal Analysis System
Tue Apr 2 06:54:49 1996

WHC-SD-WM-DP-178, REV. 1

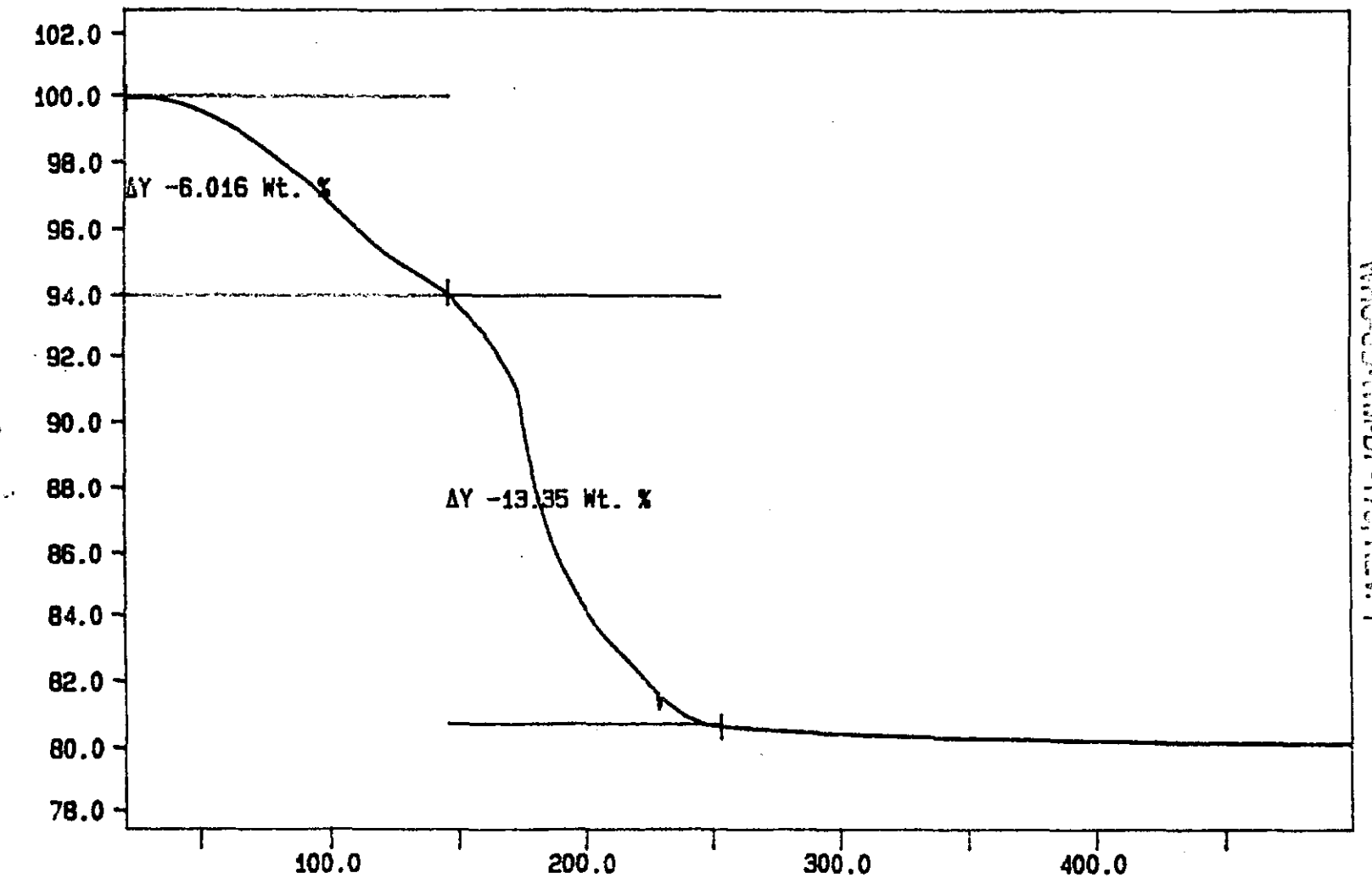
Curve 1: TGA
File info: SAM040201 Tue Apr 2 08:06:05 1996
Sample Weight: 36.529 mg
S96T001386 SAM



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
Tue Apr 2 09:08:41 1996

Curve 1: TGA
File info: SAM040202 Tue Apr 2 10:47:49 1996
Sample Weight: 26.405 mg
S96T001386 DUP



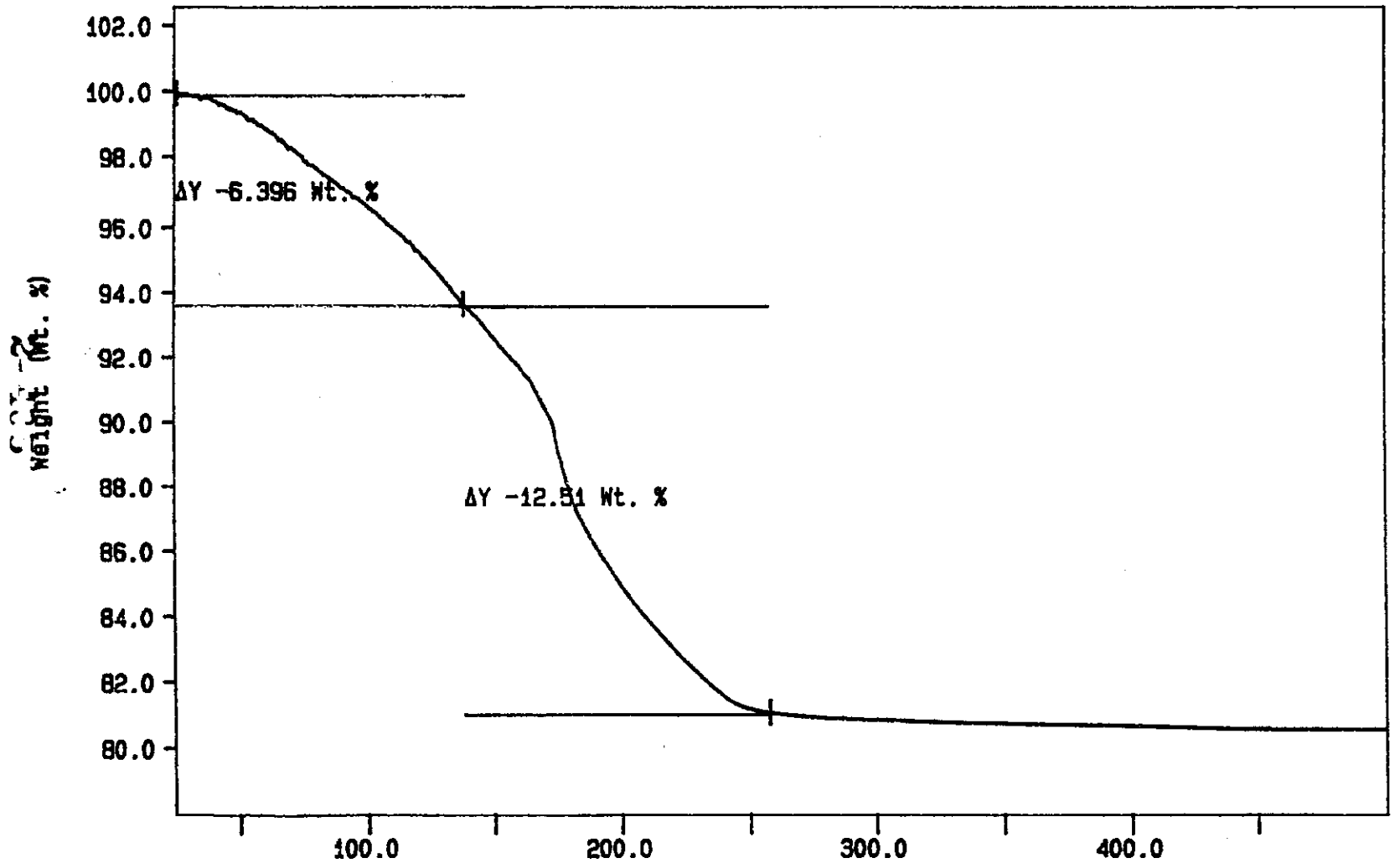
10C/MIN N2
TEMP1: 35.0 C TIME1: 0.0 min RATE1: 10.0 C/min
TEMP2: 500.0 C

PJ MCCOWN
PERKIN-ELMER
7 Series Thermal Analysis System
Tue Apr 2 10:53:57 1996

WHC-SD-WM-DP-178, REV. 1

2-401

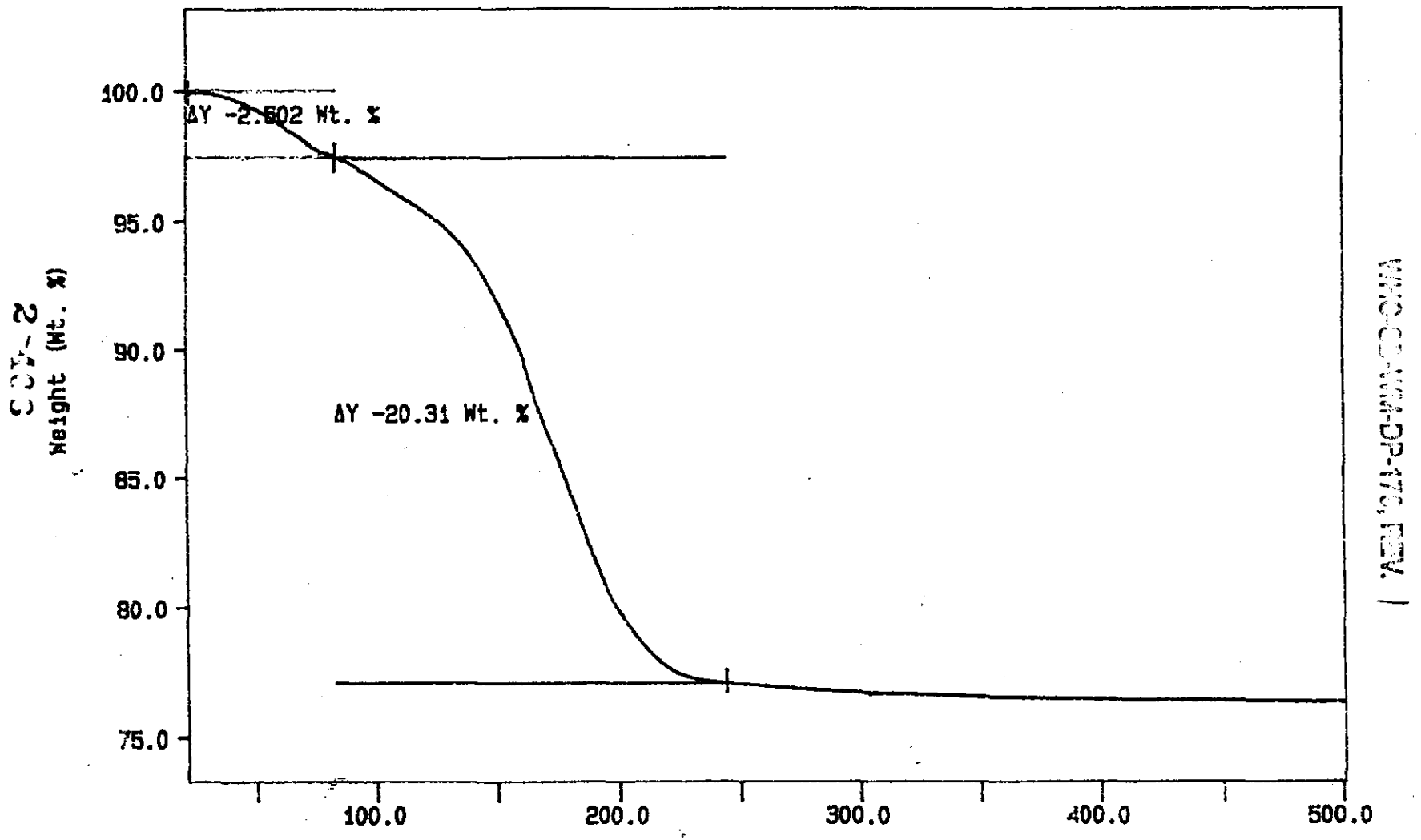
Curve 1: TGA
File info: SAM040203 Tue Apr 2 11:58:29 1996
Sample Weight: 22.427 mg
S96T001386 TRP



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

PJ MCCOWN
PERKIN-ELMER
7 Series Thermal Analysis System
Tue Apr 2 12:10:01 1996

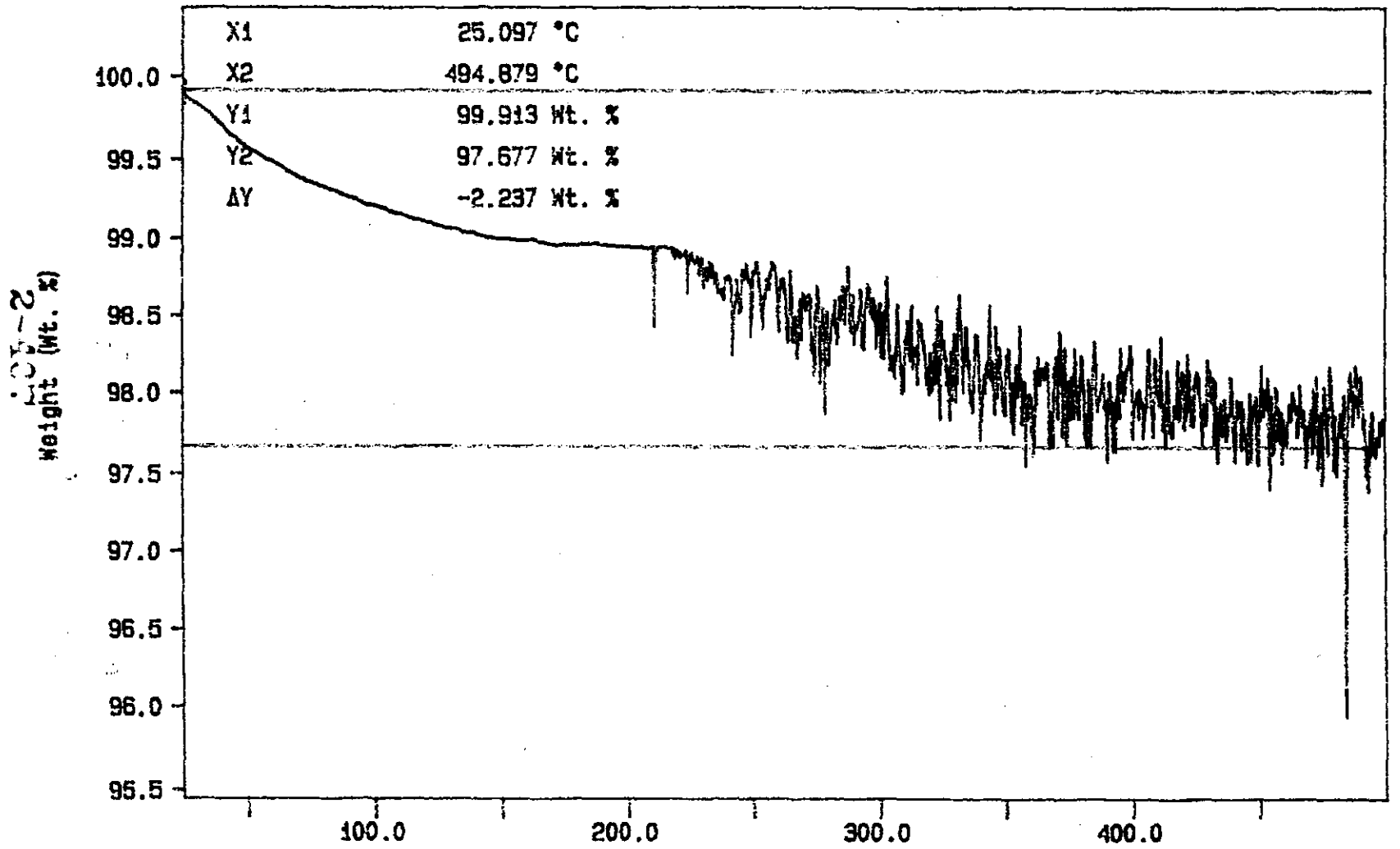
Curve 1: TGA
File info: SAM040204 Tue Apr 2 13:18:36 1996
Sample Weight: 33.631 mg
S96T001390 SAM



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

PJ MCCOWN
PERKIN-ELMER
7 Series Thermal Analysis System
Tue Apr 2 13:25:40 1996

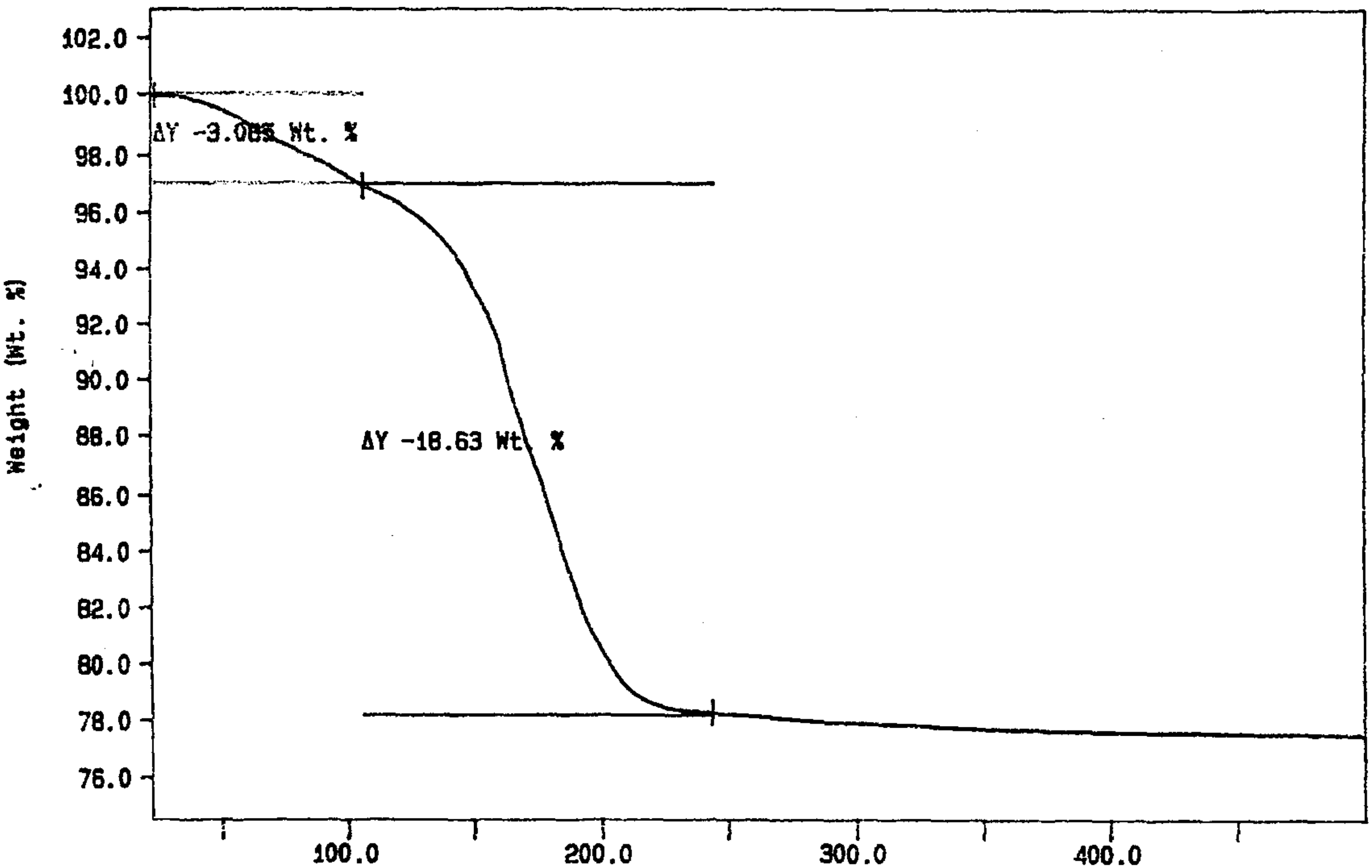
Curve 1: TGA
File info: SAM040205 Tue Apr 2 14:30:15 1996
Sample Weight: 24.514 mg
S96T001390 DUP



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
Tue Apr 2 14:49:22 1996

Curve 1: TGA
File info: SAM040206 Tue Apr 2 15:46:25 1996
Sample Weight: 30.905 mg
S96T001390 TRP



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
Tue Apr 2 15:48:35 1996

2-123

WHC-CD-WM-DP-178, REV. 1

vorklistrpt Version 2.1 05/15/95
04/04/96 12:20

Page: 1

LABCORE Data Entry Template for Worklist# 6761

Analyst: SMF **Instrument:** TGA0 3 **Book #** ~~75N8A~~ 100CN2 Hea 4-4-96

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

Worklist Comment: S-102 FOR TGA-01 PLEASE RUN UNDER N2 RTS!

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA-03	SOLID	59.4	59.10*	N/A	%
96000094	S102	2	SAMPLE	S96T001399	0		TGA-03	SOLID	N/A	13.25		%
96000094	S102	3	DUP	S96T001399	0		TGA-03	SOLID	13.25	14.70	N/A	%
96000094	S102	4	SAMPLE	S96T001401	0		TGA-03	SOLID	N/A	13.06		%
96000094	S102	5	DUP	S96T001401	0		TGA-03	SOLID	13.06	12.75	N/A	%

Final page for worklist # 6761

See Attached for Signatures.
Analyst Signature **Date**

Gary Hammett 4-9-96
Analyst Signature **Date**

Verified by H Anastos 4-11-96

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.

worklistrpt Version 2.1 05/15/95
03/27/96 11:42

WHC-SD-WM-DP-170, REV. 1

Page: 1

LABCORE Data Entry Template for Worklist# 6761

Analyst: SMF **Instrument:** TGA0 3 **Book #** ~~75D8A~~ HLA 4-4-96 100CN2

Method: LA-560-112 Rev/Mod ________

Worklist Comment: S-102 FOR TGA-01 PLEASE RUN UNDER N2 RTS!

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				~~TGA-01~~	SOLID			N/A	%
96000094	S102	2	SAMPLE	S96T001399	0		~~TGA-01~~	SOLID	N/A			%
96000094	S102	3	DUP	S96T001399	0		~~TGA-01~~	SOLID			N/A	%
96000094	S102	4	SAMPLE	S96T001401	0		~~TGA-01~~	SOLID	N/A			%
96000094	S102	5	DUP	S96T001401	0		~~TGA-01~~	SOLID			N/A	%

HLA 4-4-96 TGA-03

Final page for worklist # 6761

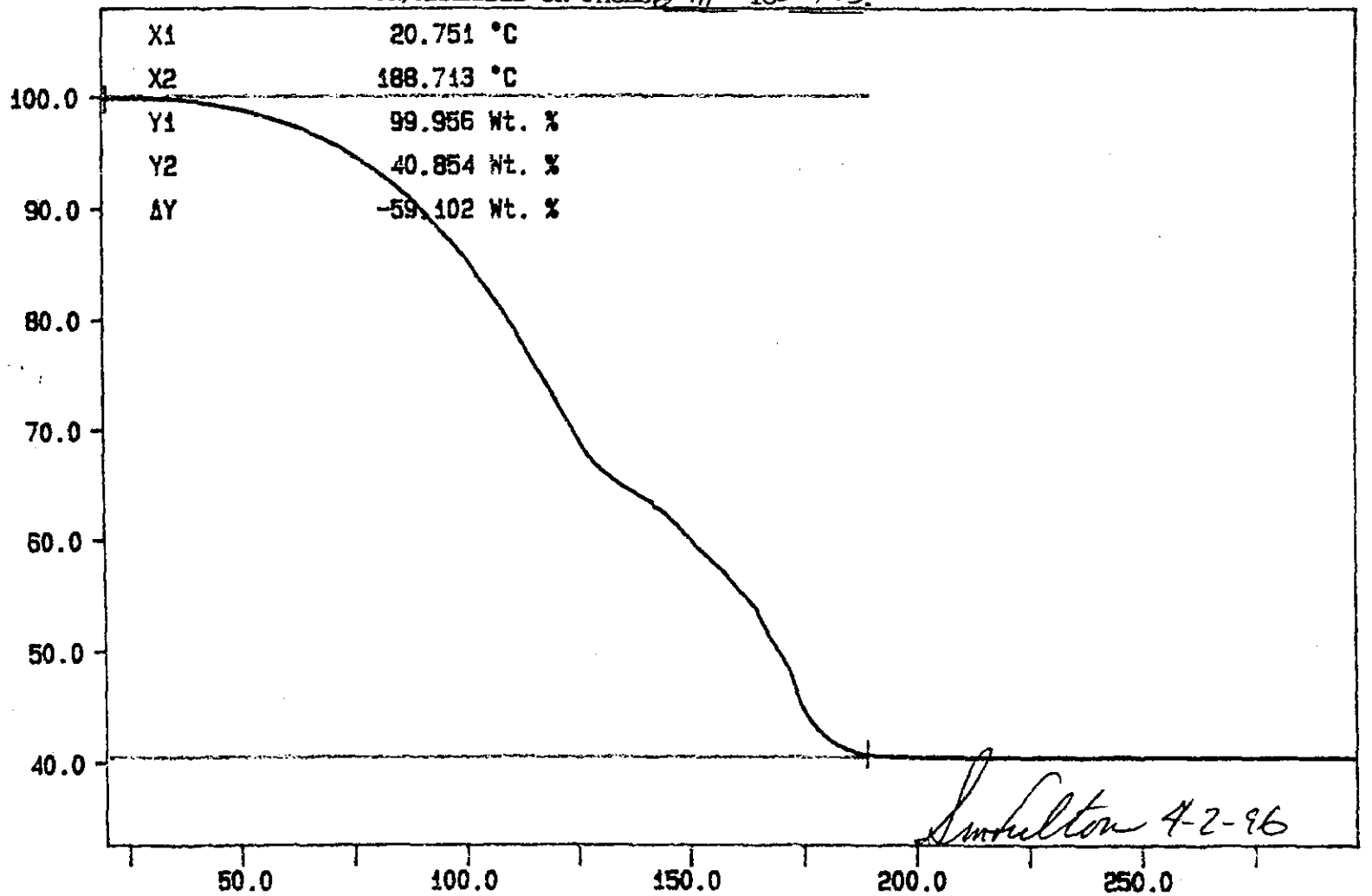
Susie M. Fulton 4-2-96

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.

Curve 1: TGA
File info: TER040201 Tue Apr 2 06:53:26 1996
Sample Weight: 13.680 mg
TGA STD 100CN2
SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT
COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 2-411 TO 2-415.



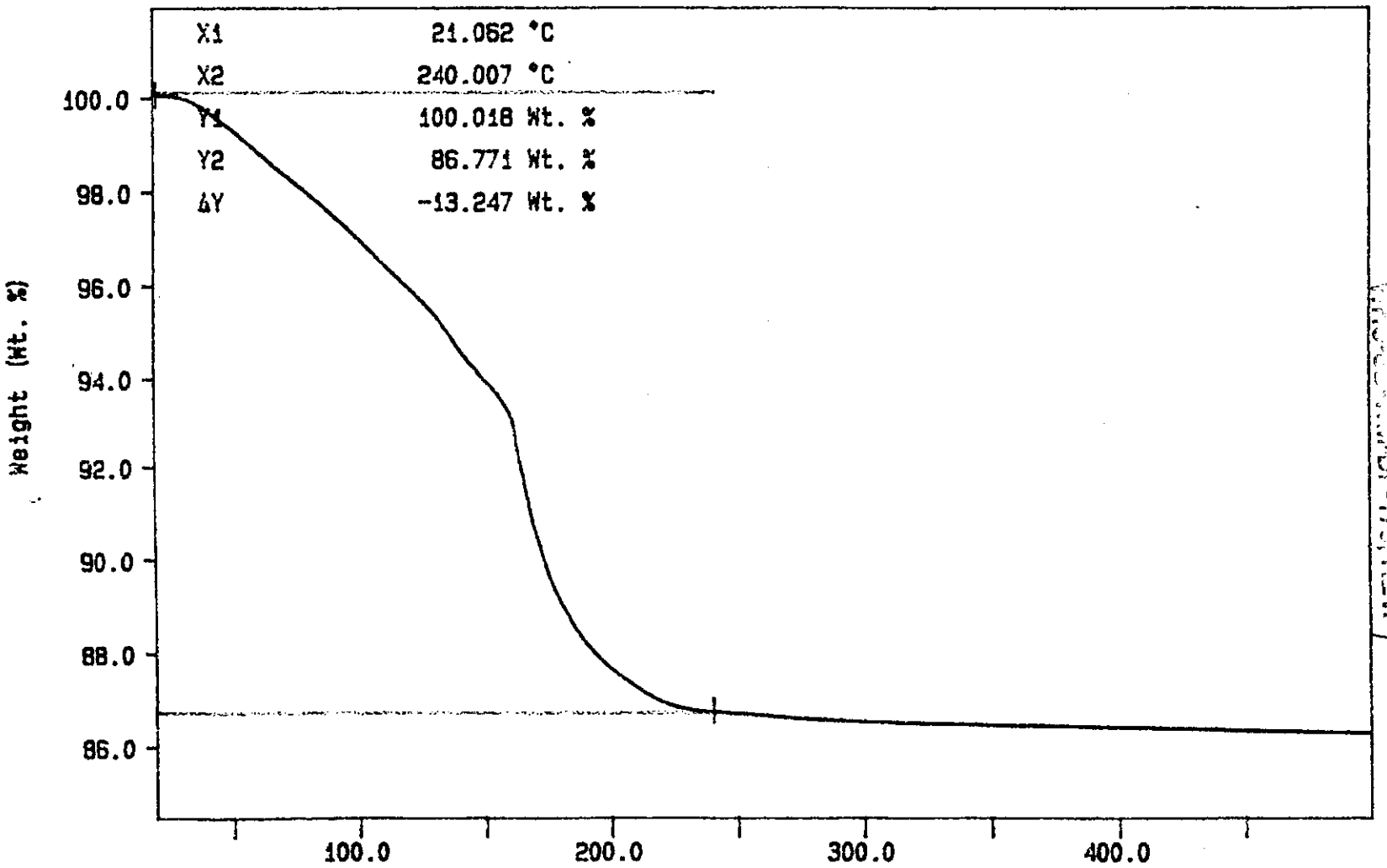
S Hamilton 4-2-96

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

PJ MCCOWN
PERKIN-ELMER
7 Series Thermal Analysis System
Tue Apr 2 17:35:40 1996

2-414

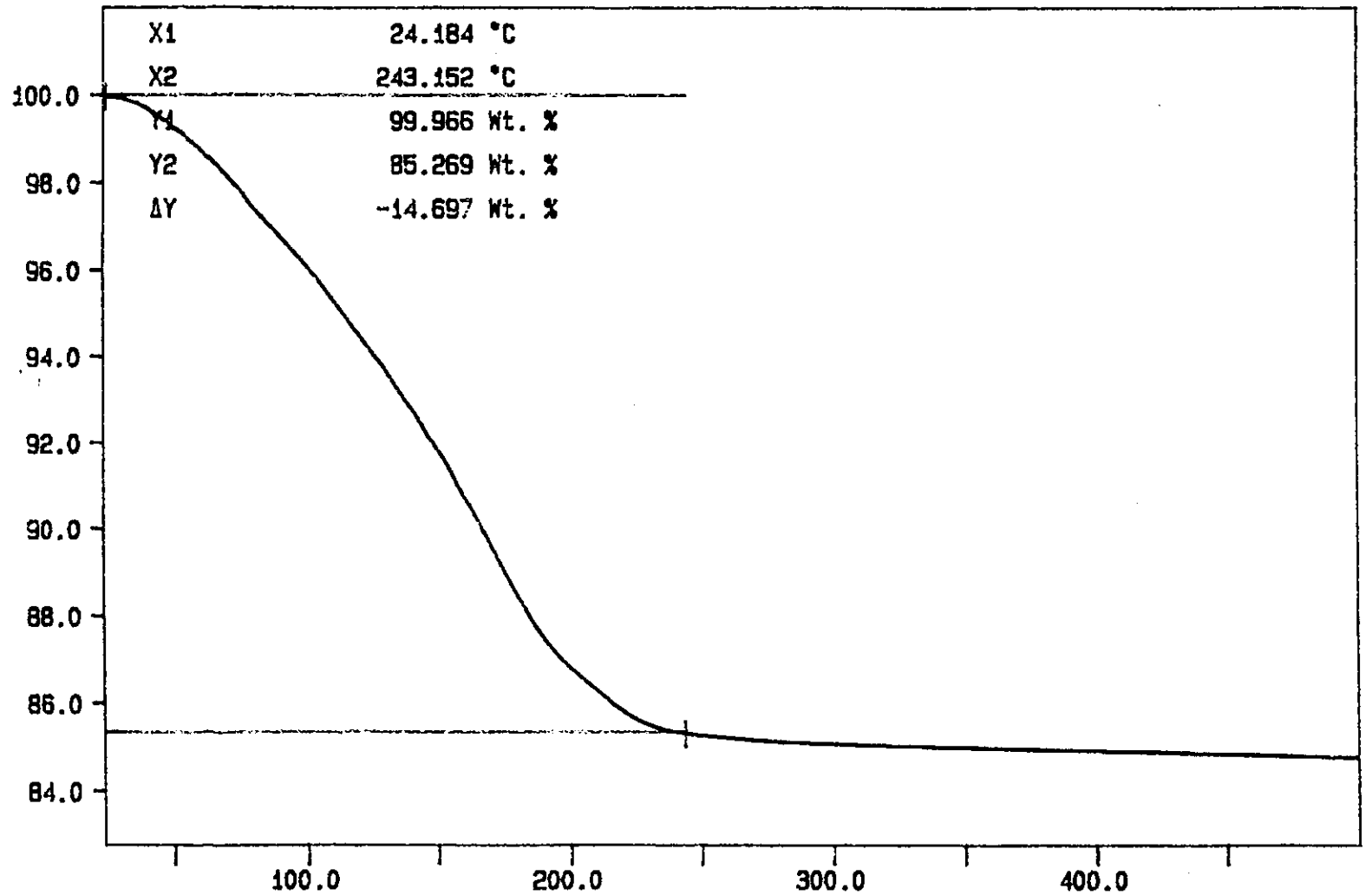
Curve 1: TGA
File info: SAM040207 Tue Apr 2 18:58:51 1996
Sample Weight: 26.893 mg
S96T001399



10C/MIN N2
TEMP1: 30.0 C TIME1: 0.0 min RATE1: 10.0 C/min
TEMP2: 500.0 C

SM FULTON
PERKIN-ELMER
7 Series Thermal Analysis System
Tue Apr 2 21:45:41 1996

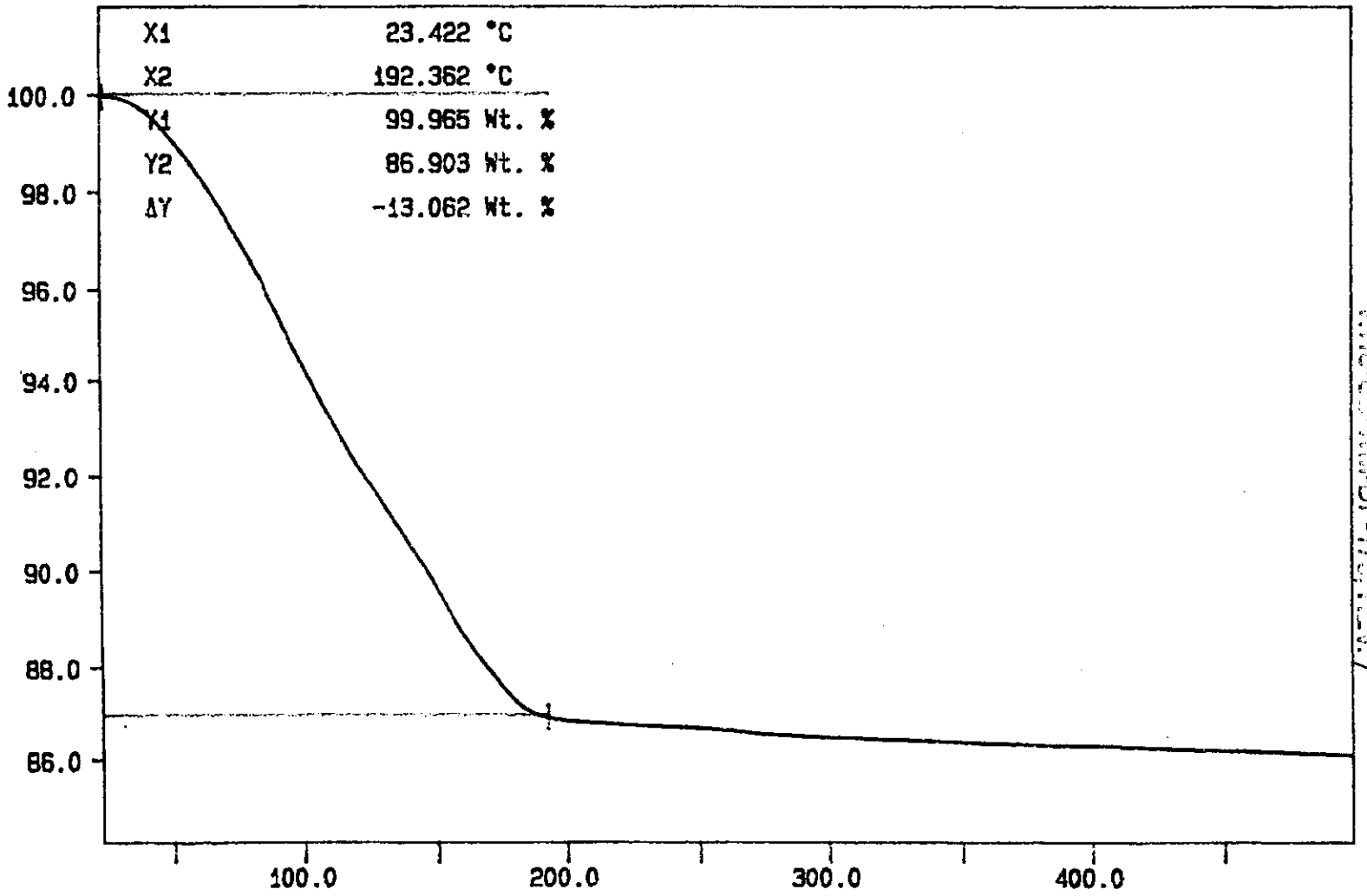
Curve 1: TGA
File info: SAM040208 Tue Apr 2 20:14:51 1996
Sample Weight: 26.107 mg
S96T001399 DUP



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
Tue Apr 2 21:33:40 1996

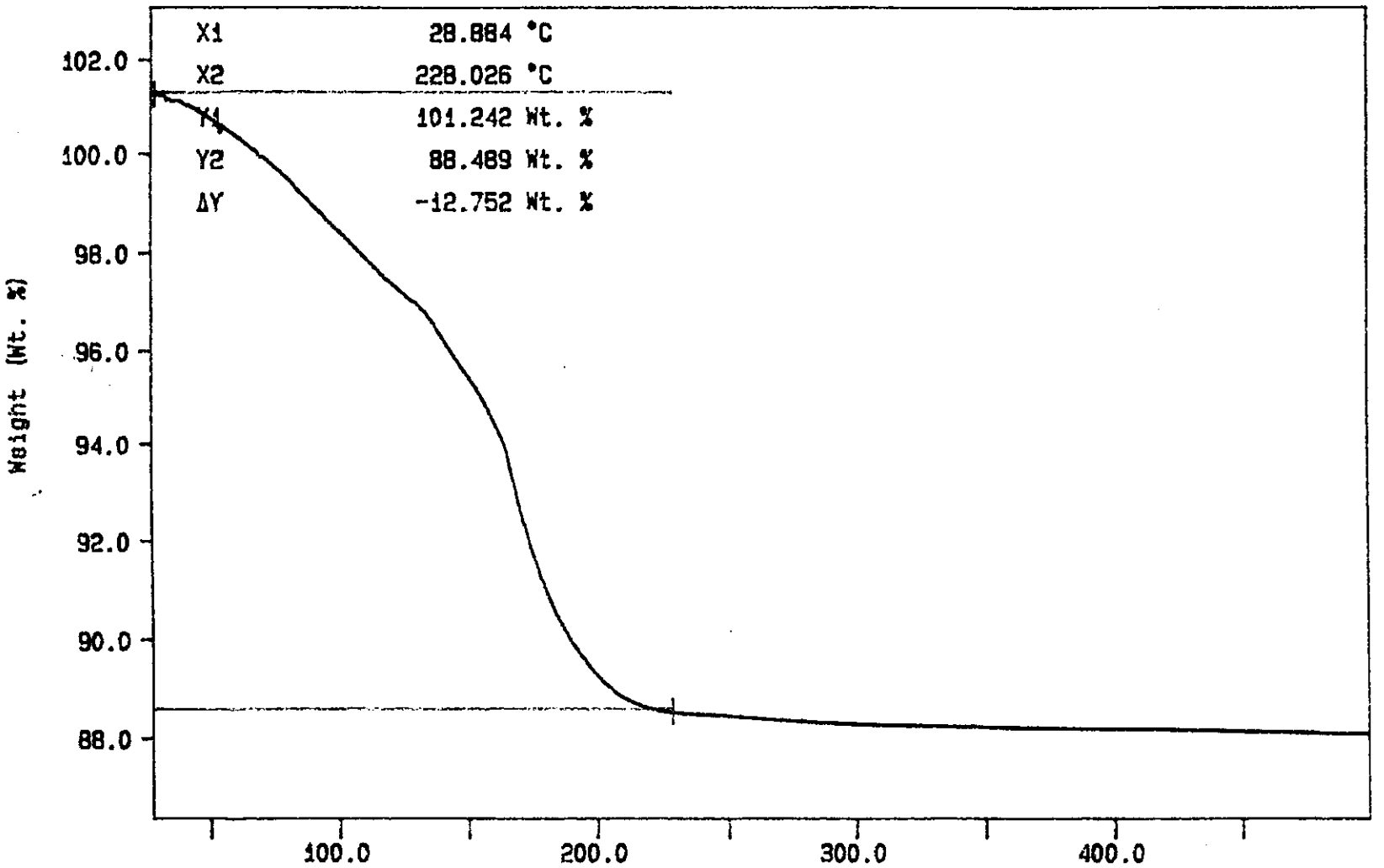
Curve 1: TGA
File info: SAM040209 Tue Apr 2 22:24:56 1996
Sample Weight: 20.399 mg
S96T001401



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
Tue Apr 2 22:30:50 1996

Curve 1: TGA
File info: SAM040210 Tue Apr 2 23:33:27 1996
Sample Weight: 32.310 mg
S96T001401 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
Wed Apr 3 00:48:52 1996

worklistrpt Version 2.1 05/15/95
04/03/96 14:24

Page: 1

LABCORE Data Entry Template for Worklist# 6763

Analyst: SMF **Instrument:** TGA0 3 **Book #** ~~75~~ KCCN2

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

Worklist Comment: S-102 FOR TGA-01 PLEASE RUN UNDER N2 RTS!

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA-03	SOLID	59.4	59.05	* N/A	%
96000094	S102	2	SAMPLE	S96T001409	0		TGA-03	SOLID	N/A	20.75		%
96000094	S102	3	DUP	S96T001409	0		TGA-03	SOLID	20.75	24.17	N/A	%

Final page for worklist # 6763

See attached for signatures
Analyst Signature Date 4-3-96

[signature] 4-9-96
Analyst Signature Date

Verified by H. Anastos 4-11-96

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.

worklistrpt Version 2.1 05/15/95
03/20/96 11:38

WHC-SD-WM-DP-[illegible], REV. 1

Page: 1

LABCORE Data Entry Template for Worklist# 6763

Analyst: SMF **Instrument:** TGA0 _____ **Book #** ~~75N8A~~ 4-3-96 BDV 100CN2

Method: LA-560-112 Rev/Mod _____

Worklist Comment: S-102 FOR TGA-01 PLEASE RUN UNDER N2 RTS!

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	-------TEST------	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA-01	SOLID			N/A	%
96000094	S102	2	SAMPLE	S96T001409	0		TGA-01	SOLID	N/A			%
96000094	S102	3	DUP	S96T001409	0		TGA-01	SOLID			N/A	%

Final page for worklist # 6763

Susie M. Fulton 3-29-96
Analyst Signature **Date**

Analyst Signature **Date**

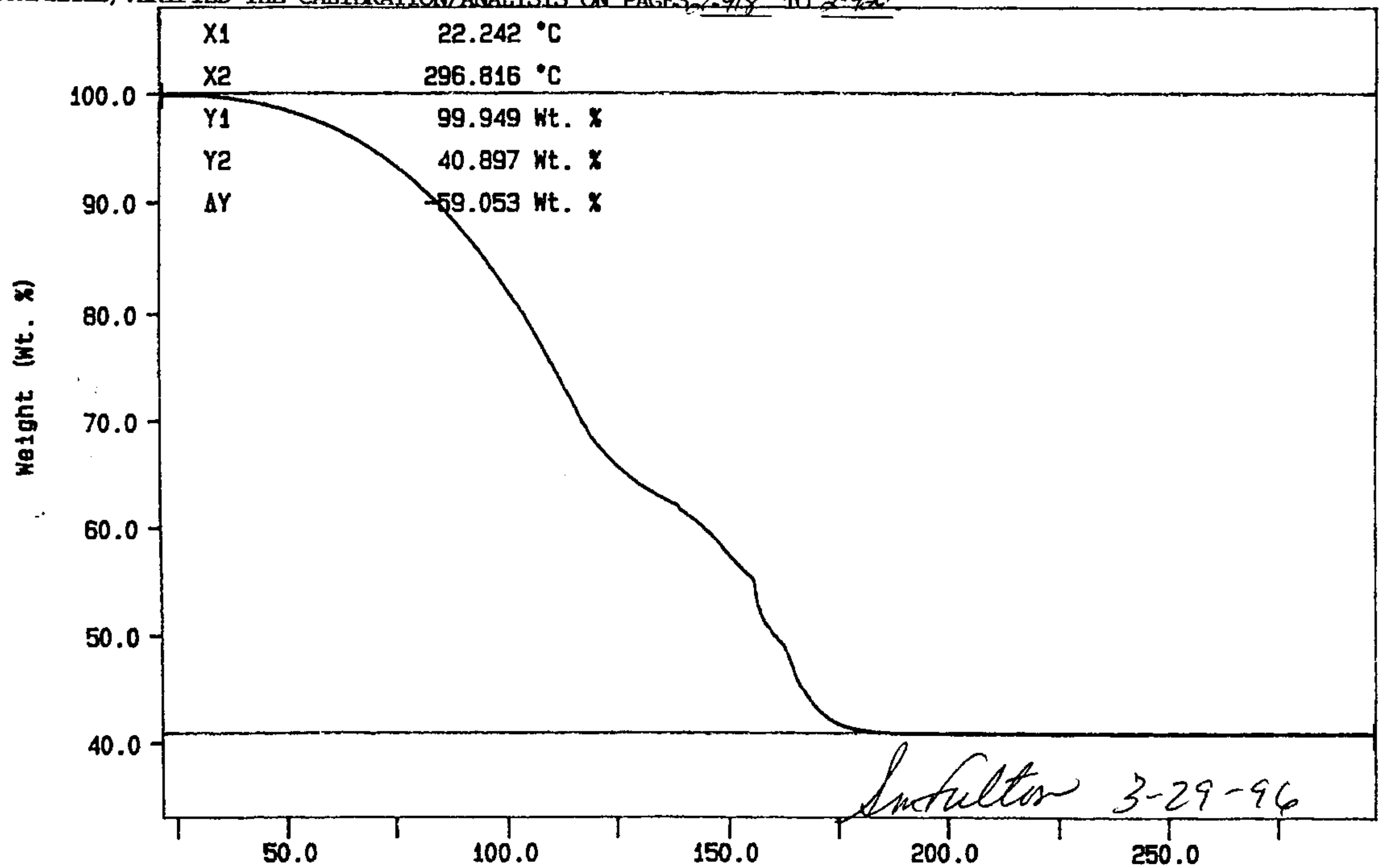
Other instrument was used.
4-3-96
BDV

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: ter032901 Fri Mar 29 06:40:14 1996
Sample Weight: 13.020 mg
TERLIG 75N8A

SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 2-418 TO 2-420

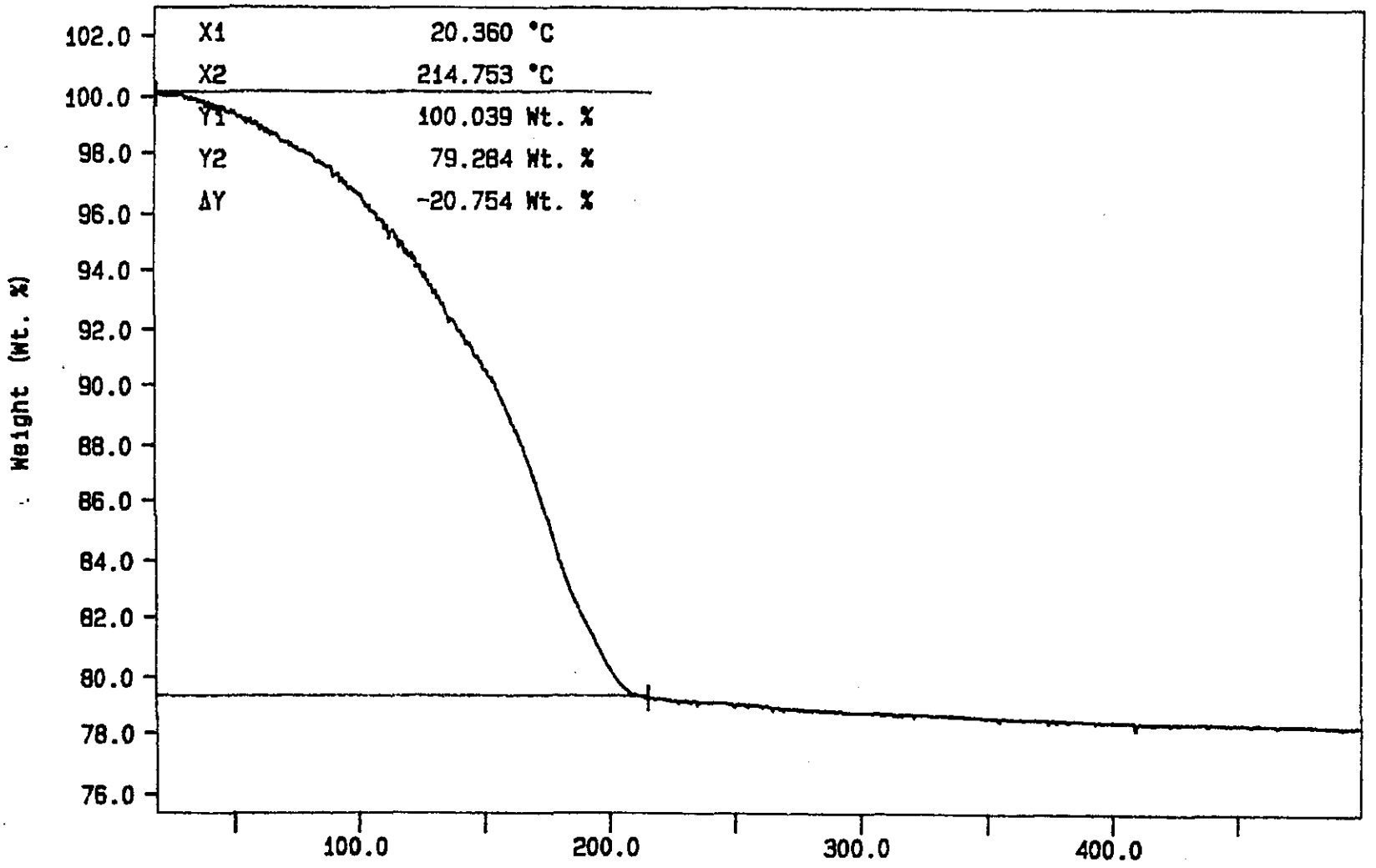


N2 10C/MIN

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

rd meyers
PERKIN-ELMER
7 Series Thermal Analysis System
Sat Mar 30 01:09:10 1996

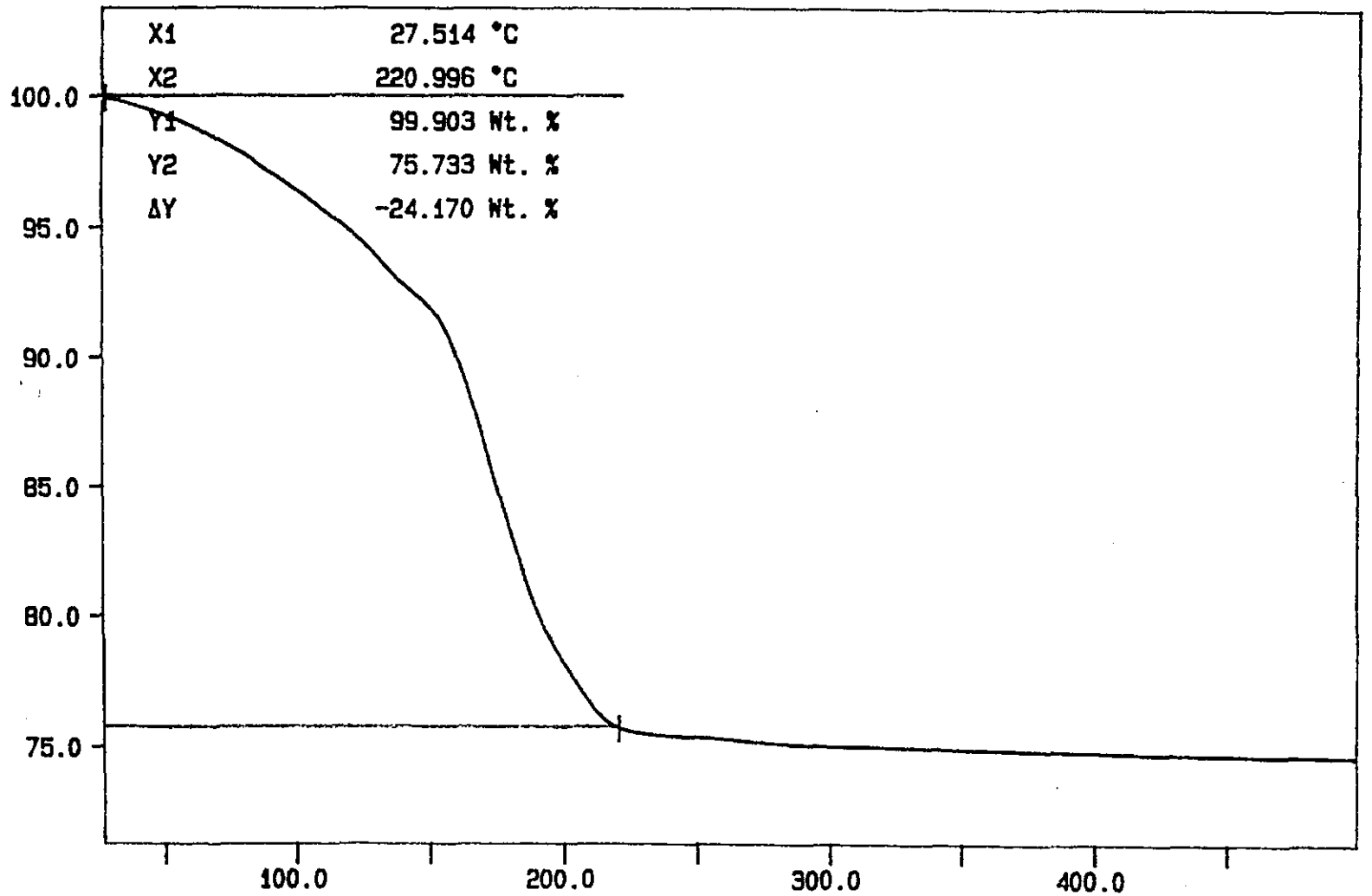
Curve 1: TGA
File info: SAM032905 Sat Mar 30 02:09:05 1996
Sample Weight: 25.025 mg
S96T001409



10C/MIN N2
TEMP1: 30.0 C TIME1: 0.0 min RATE1: 10.0 C/min
TEMP2: 600.0 C

SM FULTON
PERKIN-ELMER
7 Series Thermal Analysis System
Sat Mar 30 03:29:57 1996

Curve 1: TGA
File info: SAM032906 Sat Mar 30 04:54:25 1996
Sample Weight: 30.186 mg
S96T001409 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
Sat Mar 30 04:54:56 1996

workistrpt Version 2.1 05/15/95
04/01/96 14:51

Page: 1

LABCORE Data Entry Template for Worklist# 7193

Analyst: DPB **Instrument:** TGA01 **Book #** 75N8A

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

Worklist Comment: S-102 FOR TGA WHC-SD-WM-DP-175, REV. 1

GROUP	PROJECT	S TYPE	SAMPLE#	R A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD			TGA-01	SOLID	59.2	60.65	N/A	%
96000094	S102	2 SAMPLE	S96T001429	0	TGA-01	SOLID	N/A	34.31		%
96000094	S102	3 DUP	S96T001429	0	TGA-01	SOLID	34.31	32.74	N/A	%
96000094	S102	4 SAMPLE	S96T001430	0	TGA-01	SOLID	N/A	37.59		%
96000094	S102	5 DUP	S96T001430	0	TGA-01	SOLID	37.59	38.90	N/A	%

Final page for worklist # 7193

Daniel P. Bromley 4/6/96 1700
Analyst Signature **Date**

[signature] 4-10-96
Analyst Signature **Date**

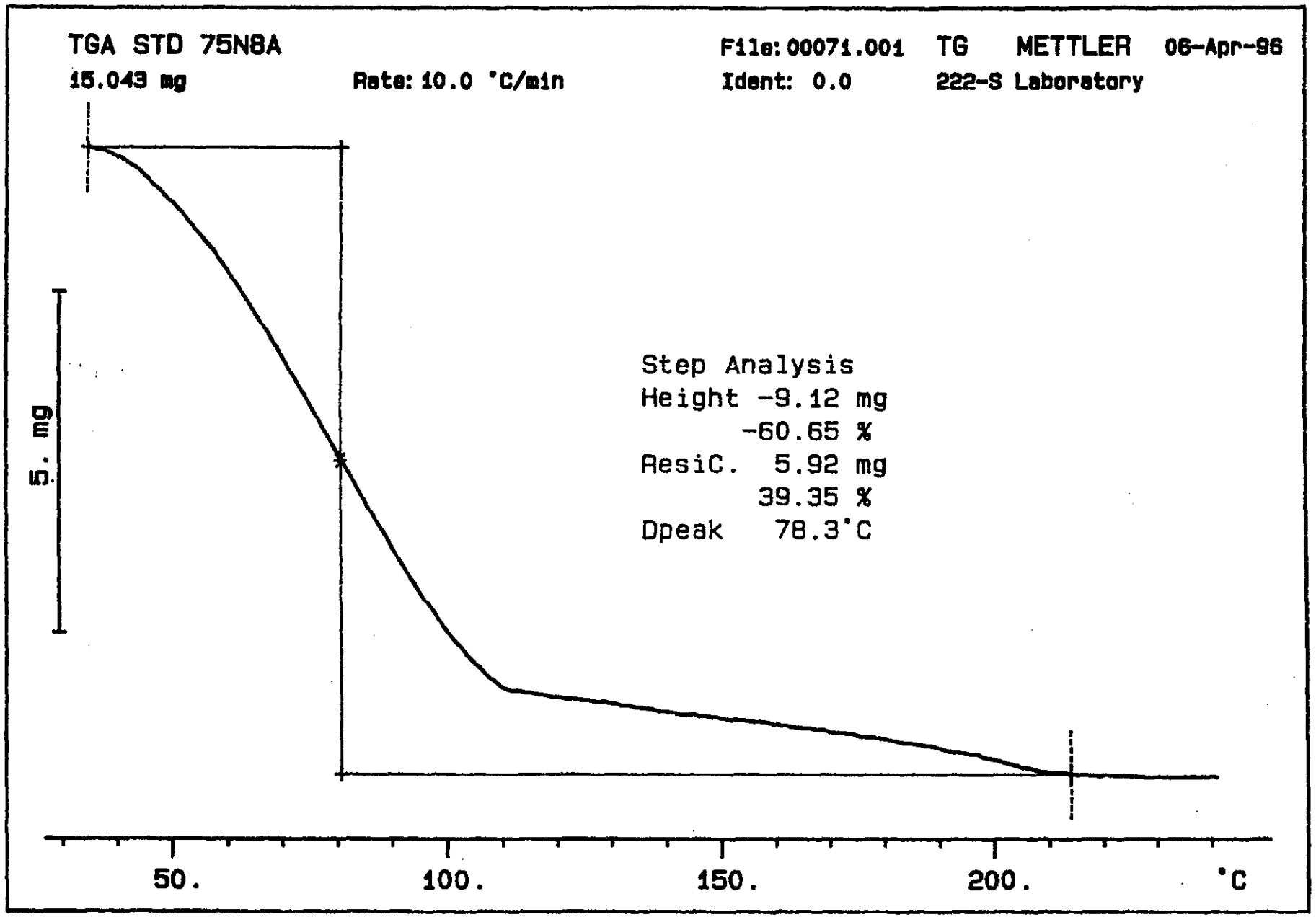
S96T001430 also had a second weight loss step of 5.05%

Verified by H Anastos 4-10-96

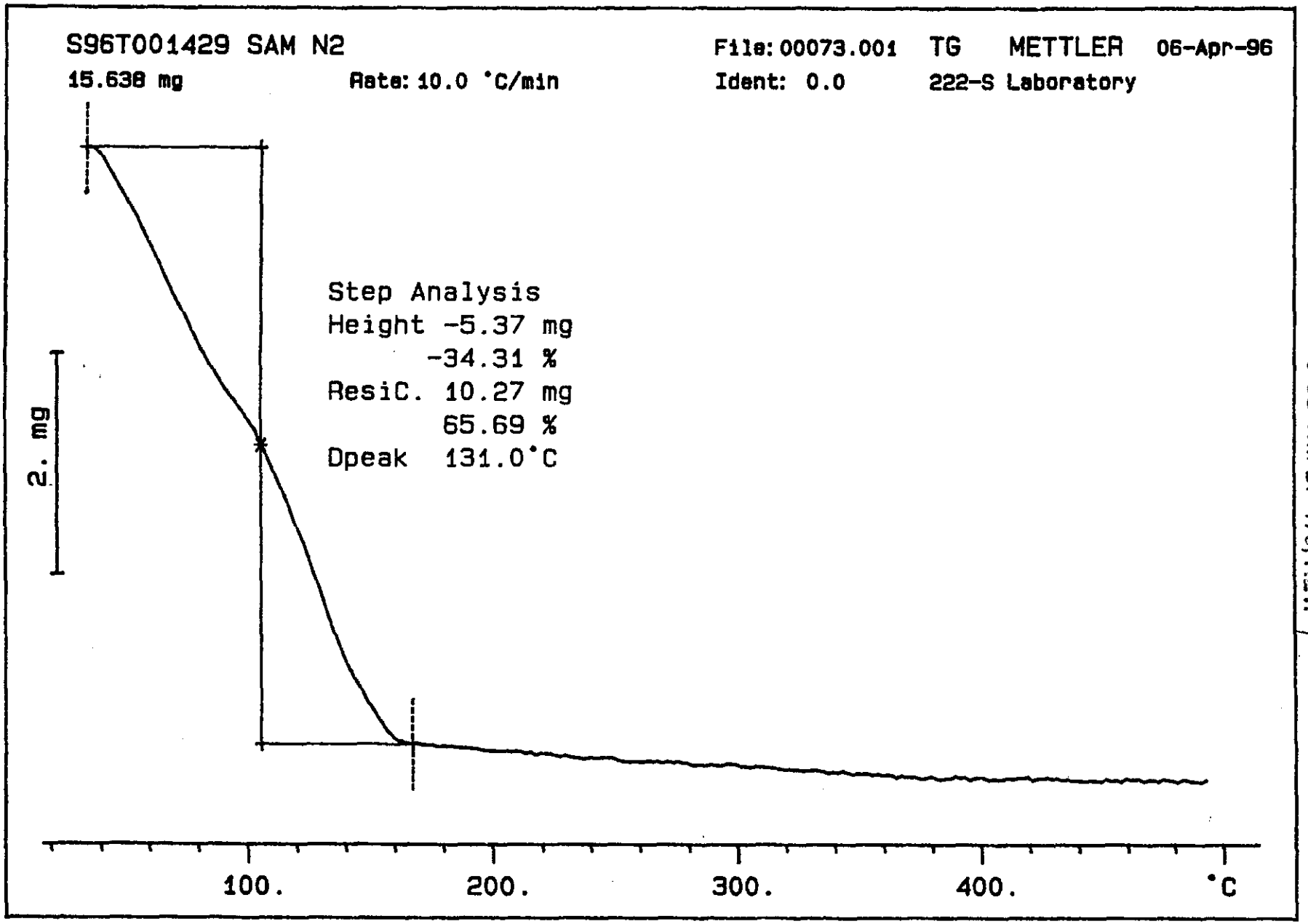
Data Entry Comments:

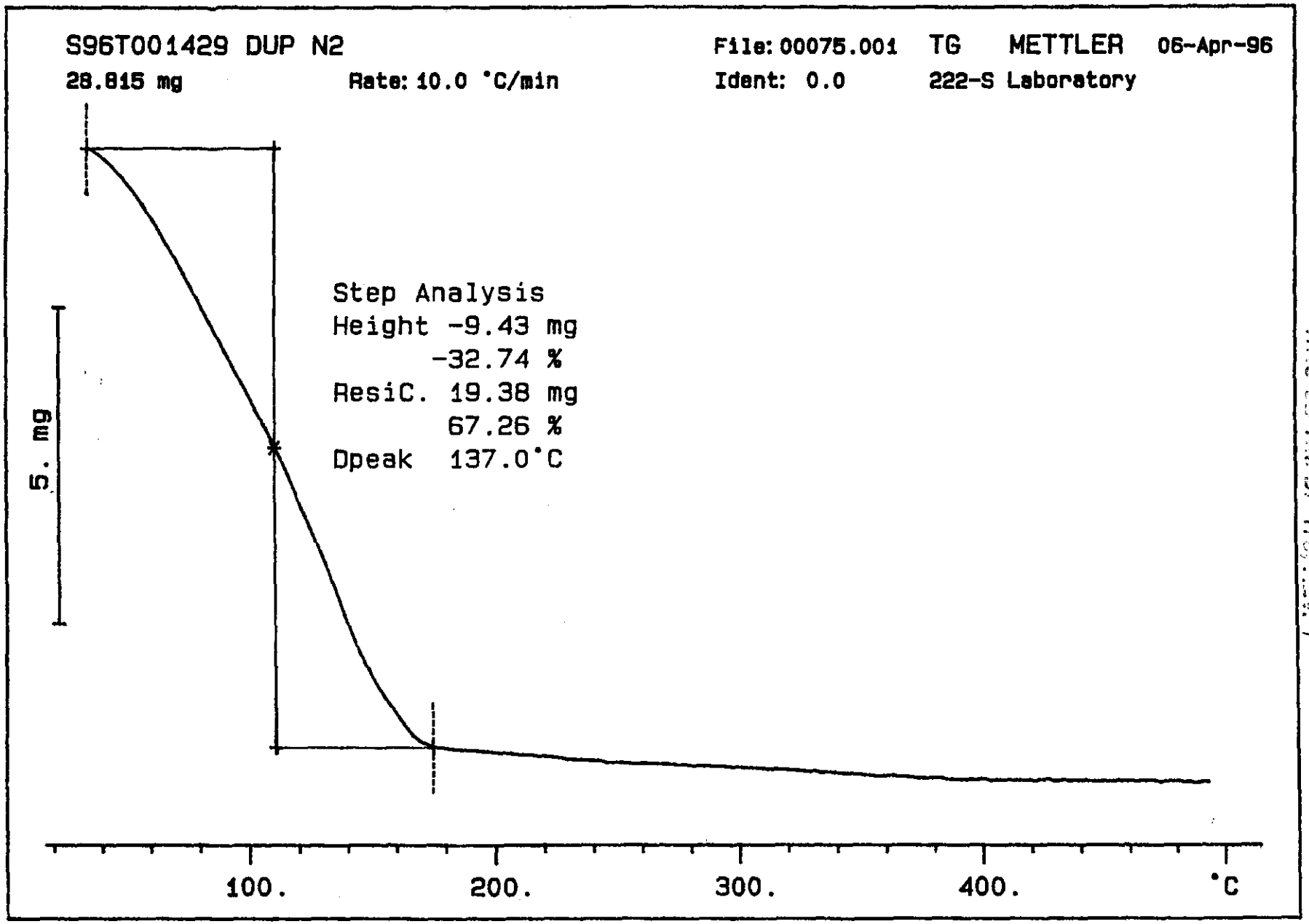
Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

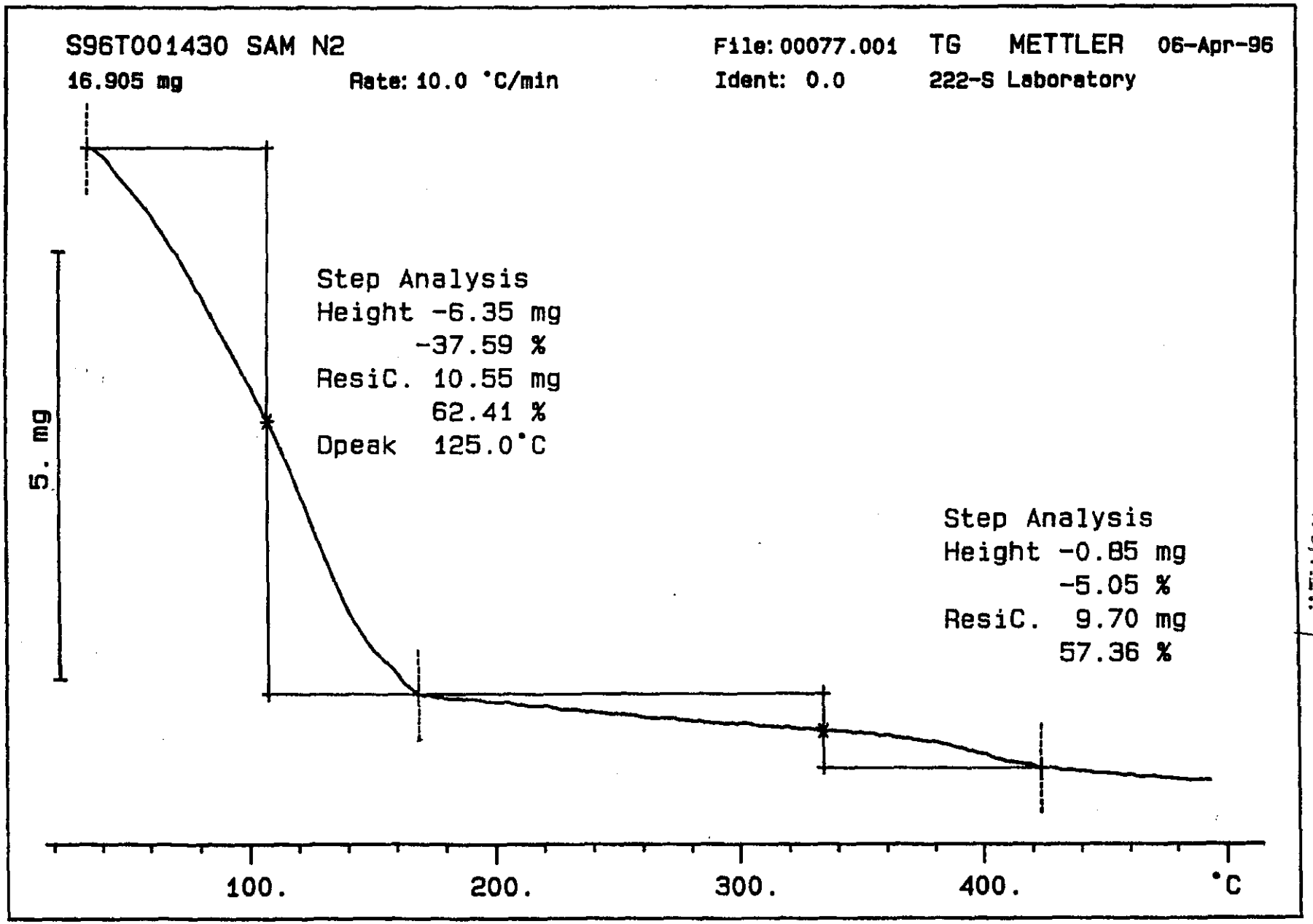
SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 2-422 TO 2-424.

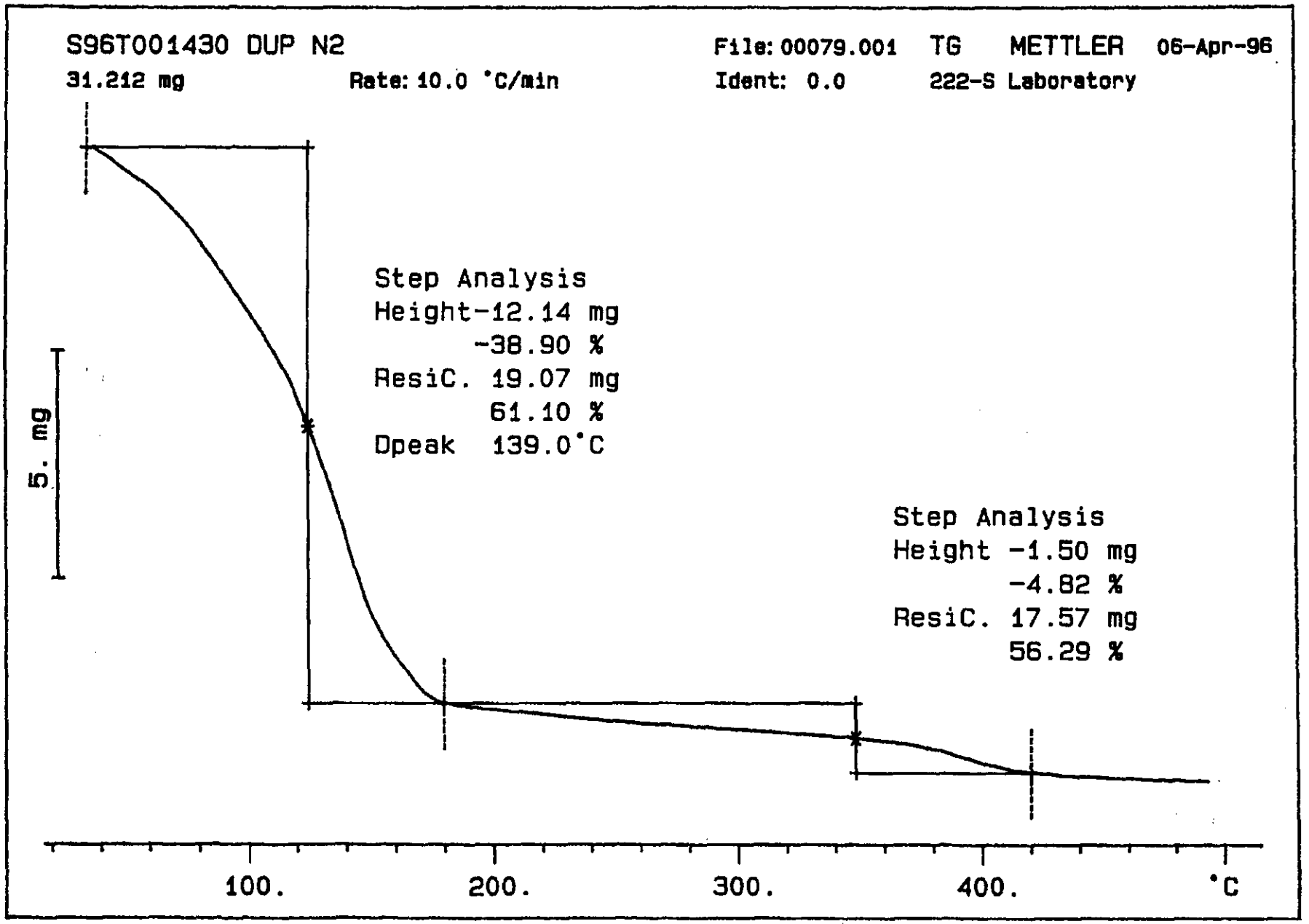


David F. Brooks 4/6/96


S96T001429 SAM N2
15.638 mg
Rate: 10.0 °C/min
File: 00073.001
Ident: 0.0
TG
METTLER
06-Apr-96
222-S Laboratory
Step Analysis
Height -5.37 mg
-34.31 %
ResiC. 10.27 mg
65.69 %
Dpeak 131.0°C
2. mg
100.
200.
300.
400.
°C


S96T001429 DUP N2
28.815 mg
Rate: 10.0 °C/min
File: 00075.001
TG METTLER 06-Apr-96
Ident: 0.0
222-S Laboratory
Step Analysis
Height -9.43 mg
-32.74 %
ResiC. 19.38 mg
67.26 %
Dpeak 137.0°C
5. mg
100.
200.
300.
400.
°C


S96T001430 SAM N2
16.905 mg
Rate: 10.0 °C/min
File: 00077.001
Ident: 0.0
TG METTLER 06-Apr-96
222-S Laboratory
Step Analysis
Height -6.35 mg
-37.59 %
ResiC. 10.55 mg
62.41 %
Dpeak 125.0°C
Step Analysis
Height -0.85 mg
-5.05 %
ResiC. 9.70 mg
57.36 %
5. mg
100.
200.
300.
400.
°C


S96T001430 DUP N2
31.212 mg
Rate: 10.0 °C/min
File: 00079.001
Ident: 0.0
TG METTLER 06-Apr-96
222-S Laboratory
Step Analysis
Height -12.14 mg
-38.90 %
ResiC. 19.07 mg
61.10 %
Dpeak 139.0°C
Step Analysis
Height -1.50 mg
-4.82 %
ResiC. 17.57 mg
56.29 %
5. mg
100.
200.
300.
400.
°C

LABCORE Data Entry Template for Worklist# 7195

Analyst: RK **Instrument:** TGA0 1 **Book #** 75178-A

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

Worklist Comment: S-102 FOR TGA PLEASE RUN UNDER N2

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	-------TEST------	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA-01	SOLID	59.2	60.36 *	N/A	%
96000094	S102	2	SAMPLE	S96T001431	0		TGA-01	SOLID	N/A	38.94		%
96000094	S102	3	DUP	S96T001431	0		TGA-01	SOLID	38.94	41.93	N/A	%
96000094	S102	4	SAMPLE	S96T001432	0		TGA-01	SOLID	N/A	42.44		%
96000094	S102	5	DUP	S96T001432	0		TGA-01	SOLID	42.44	42.4	N/A	%

Final page for worklist # 7195

Rob King 4/7/96
Analyst Signature **Date**

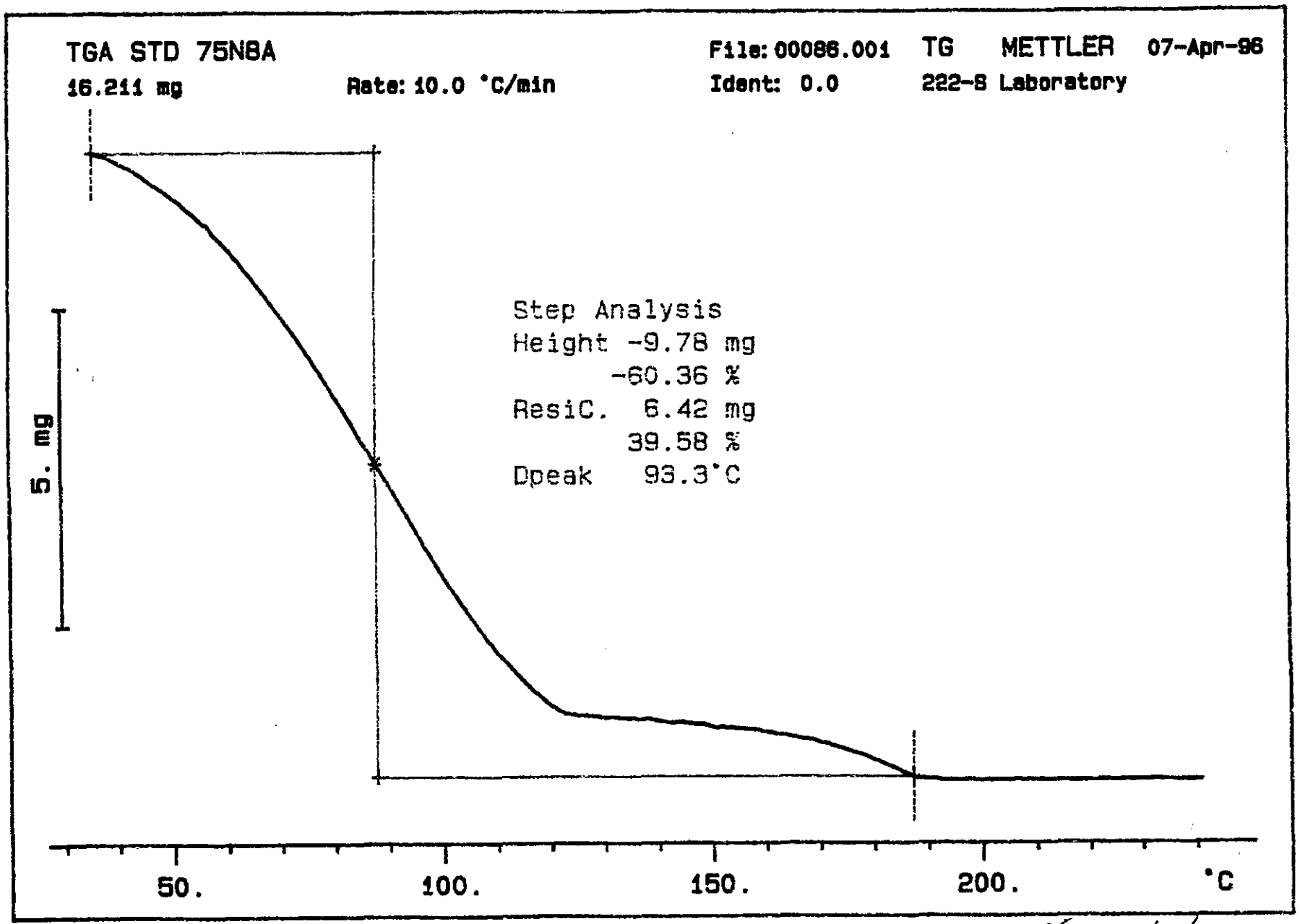
[signature] 4-10-96
Analyst Signature **Date**

Verified by
H Anastos 4-10-96

Data Entry Comments: S96T001432 duplicate thermogram does display 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 2-428 TO 2-432

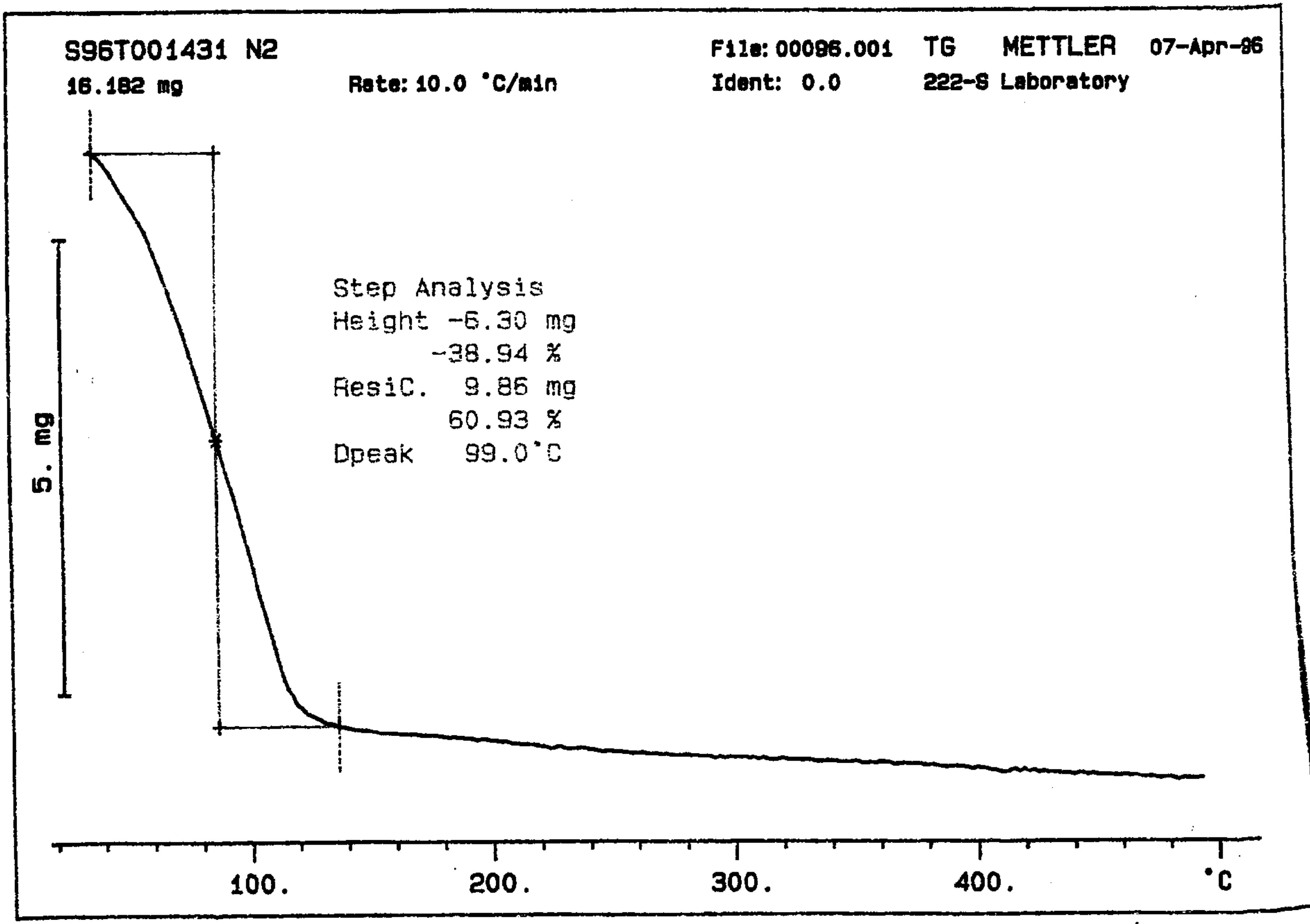


Rob King 3/7/96
4/7/96

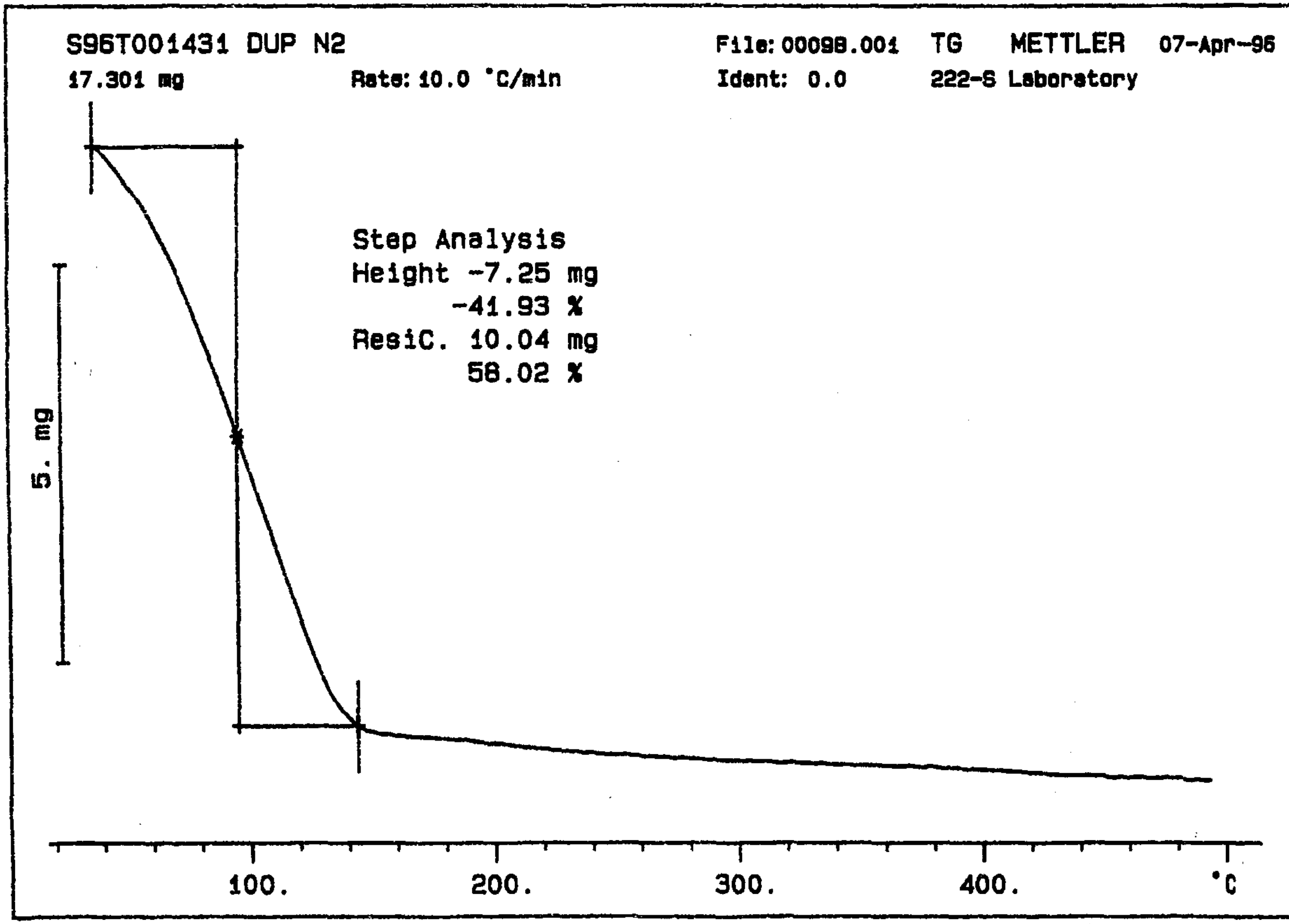
2-433

WHC-SD-WM-DP-173, Rev. 1

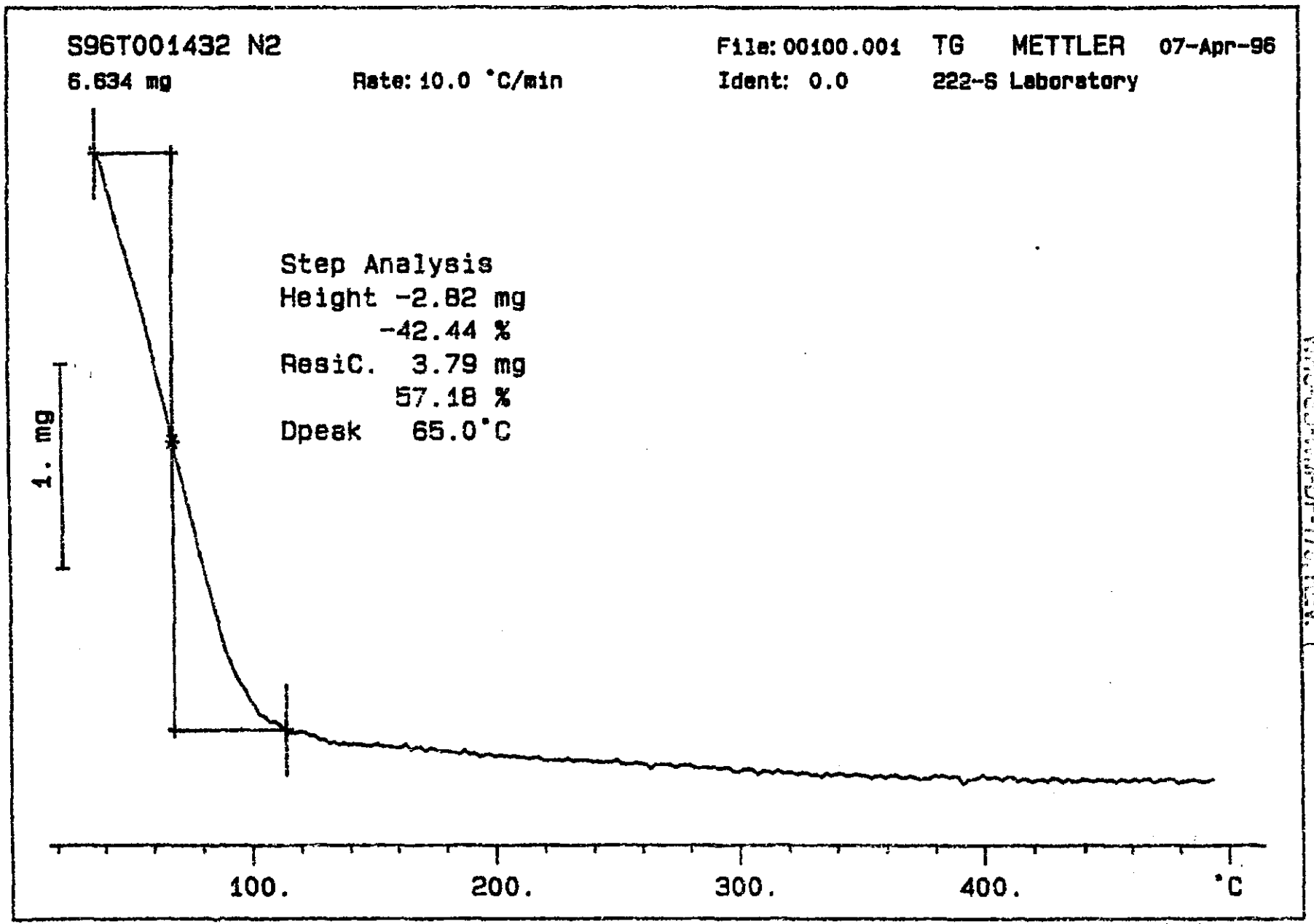
CCY-2



Nob Kim 4/7/96

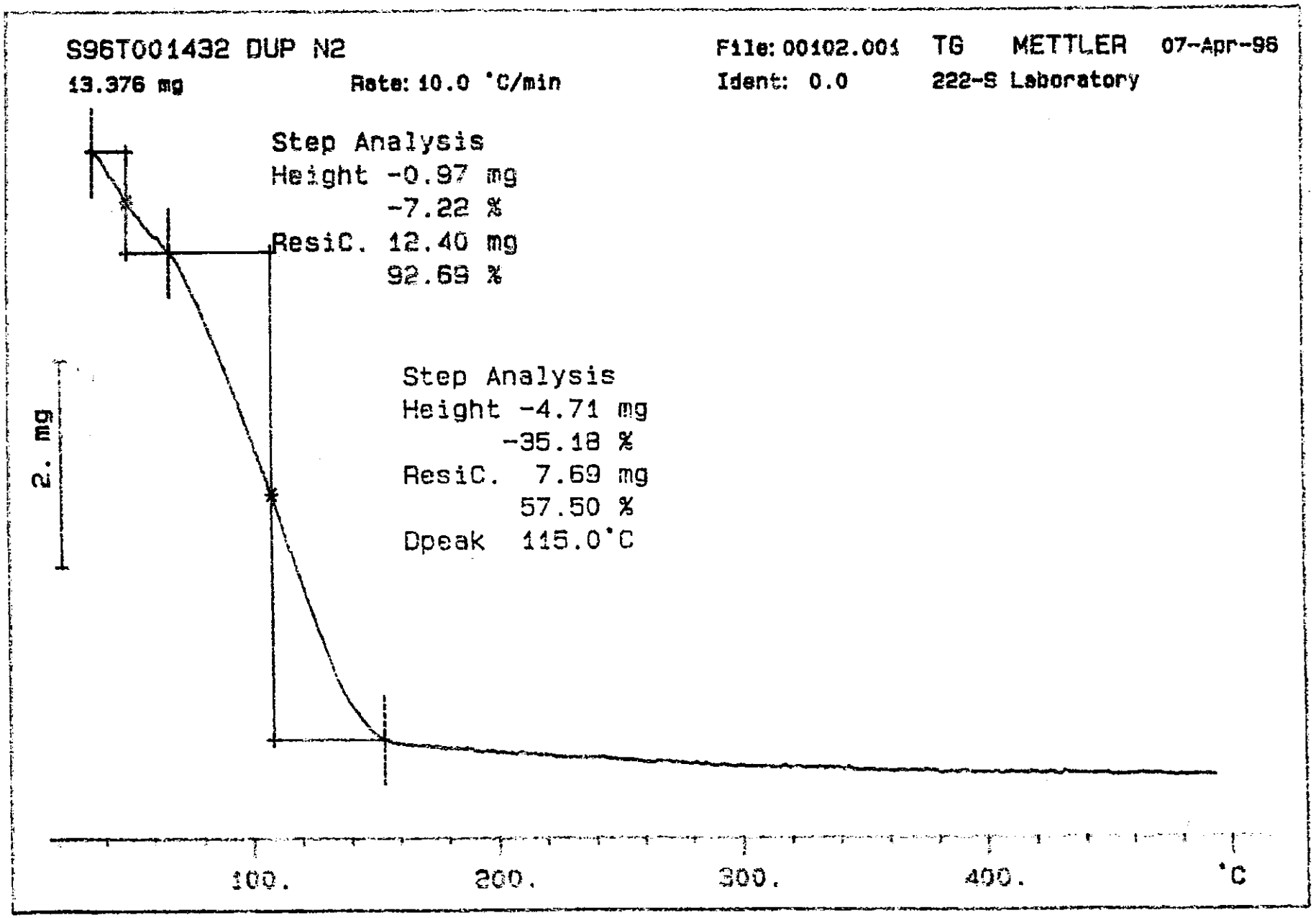

S96T001431 DUP N2
17.301 mg
Rate: 10.0 °C/min
File: 00098.001
Ident: 0.0
TG
METTLER
222-S Laboratory
07-Apr-96
Step Analysis
Height -7.25 mg
-41.93 %
ResiC. 10.04 mg
58.02 %
5. mg
100.
200.
300.
400.
°C

4/7/96



Rob King 4/7/96

WHC-SD-WM-DP-175, REV. 1



Nob Kim 4/8/96

worklistrpt Version 2.1 05/15/95
04/16/96 14:30

WHC-SD-WM-DP-173, REV. 1

Page: 1

LABCORE Data Entry Template for Worklist# 7196

4/16/96 BDV

Analyst: RDM **Instrument:** TGA0 1 **Book #** Ø 75N8A

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

Worklist Comment: S-102 FOR TGA please run under N2. bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	-------TEST------	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA-01	SOLID	59.2	60.58	N/A	%
96000094	S102	2	SAMPLE	S96T001433	0		TGA-01	SOLID	N/A	44.62		%
96000094	S102	3	DUP	S96T001433	0		TGA-01	SOLID	44.62	44.27	N/A	%
		4	STD				TGA-01	SOLID	59.2	59.07	N/A	%
96000094	S102	5	SAMPLE	S96T001434	0		TGA-01	SOLID	N/A	40.25		%
96000094	S102	6	DUP	S96T001434	0		TGA-01	SOLID	40.25	40.38	N/A	%

Final page for worklist # 7196

See attached for signatures

Analyst Signature **Date** 4-16-96 BDV

Analyst Signature **Date**

Data Entry Comments: S96T001434 produced a second weight loss step of 3.49% at approximately 280°C.

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

LABCORE Data Entry Template for Worklist# 7196

Analyst: RMG **Instrument:** TGA0 **Book #** 15NBA

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

Worklist Comment: S-102 FOR TGA

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	-------TEST------	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA-01	SOLID			N/A	%
96000094	S102	2	SAMPLE	S96T001433	0		TGA-01	SOLID	N/A			%
96000094	S102	3	DUP	S96T001433	0		TGA-01	SOLID			N/A	%
96000094	S102	4	SAMPLE	S96T001434	0		TGA-01	SOLID	N/A			%
96000094	S102	5	DUP	S96T001434	0		TGA-01	SOLID			N/A	%

Final page for worklist # 7196

RMGreen 4/11/96
Analyst Signature **Date**

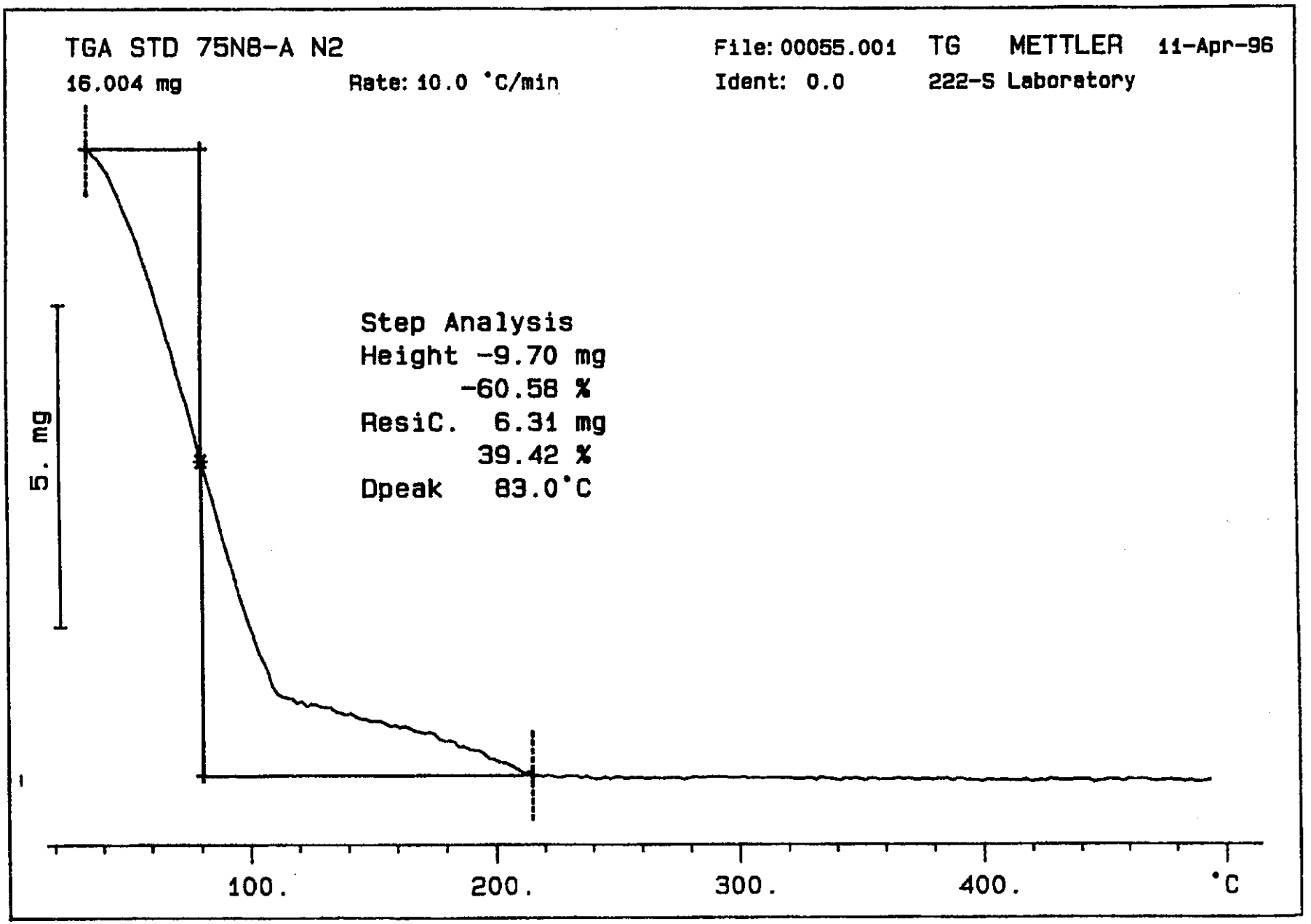
Analyst Signature **Date**

Rae Lynn Green 4-14-96

Data Entry Comments:

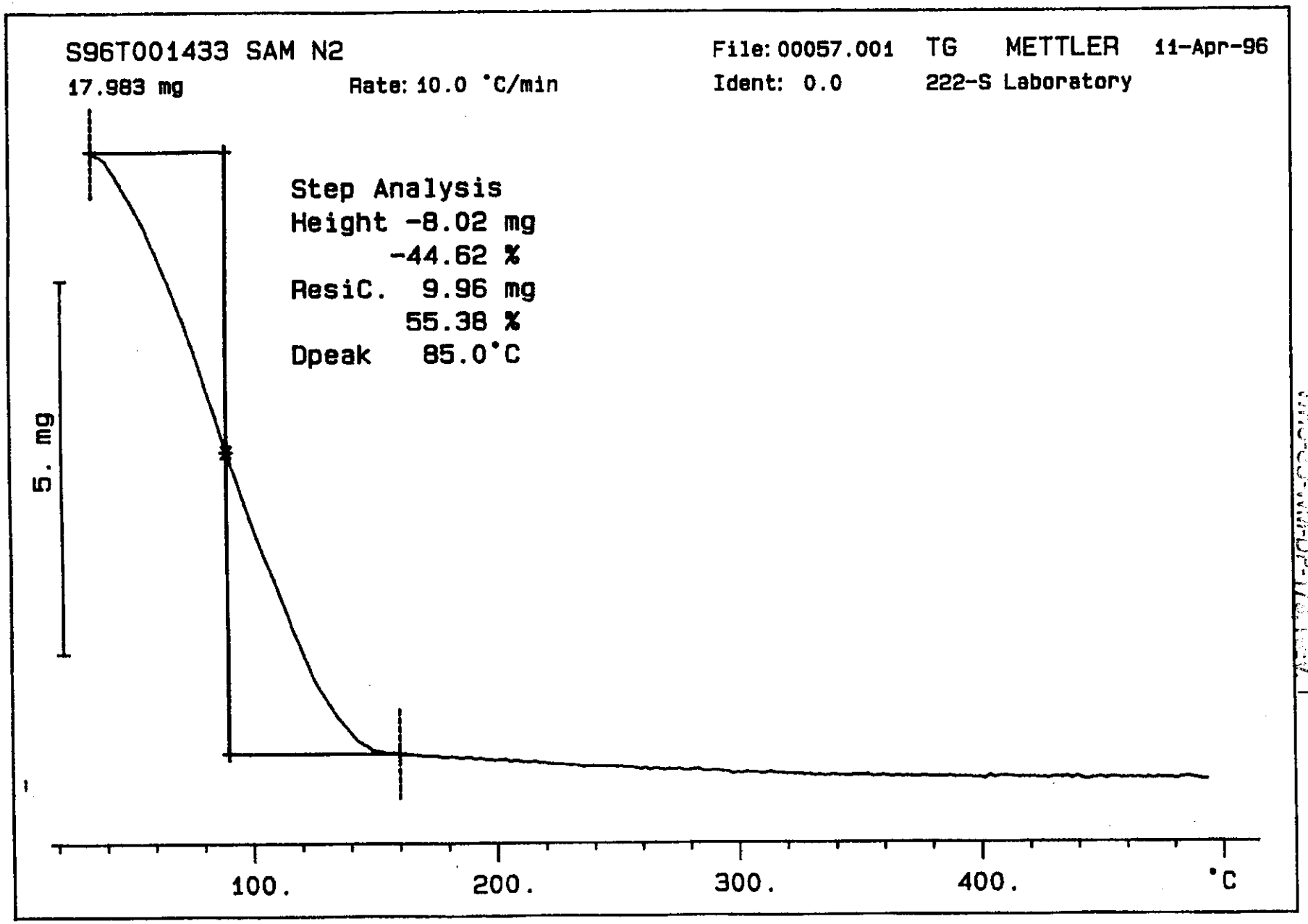
Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT
COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 2-435 TO 2-440

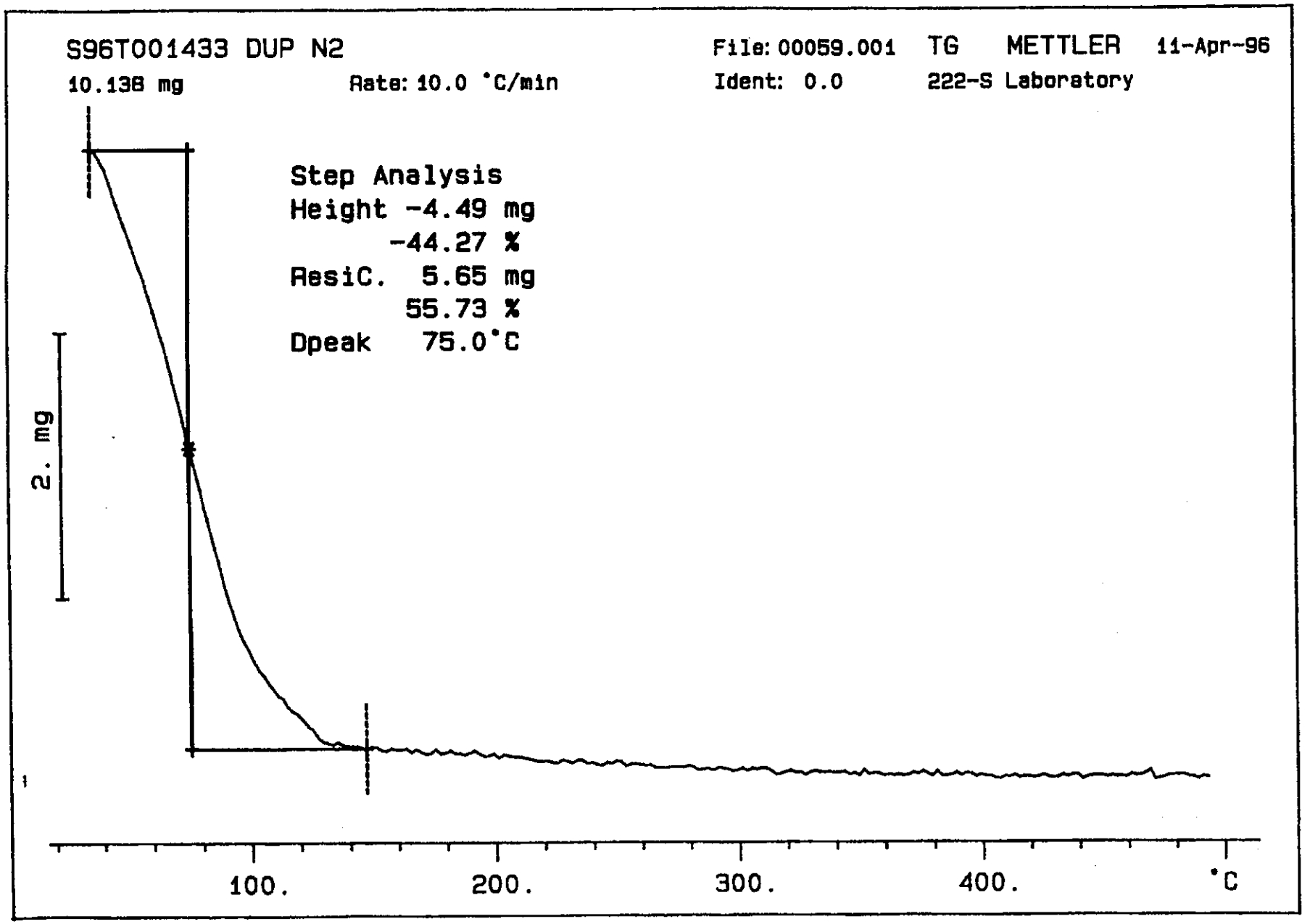


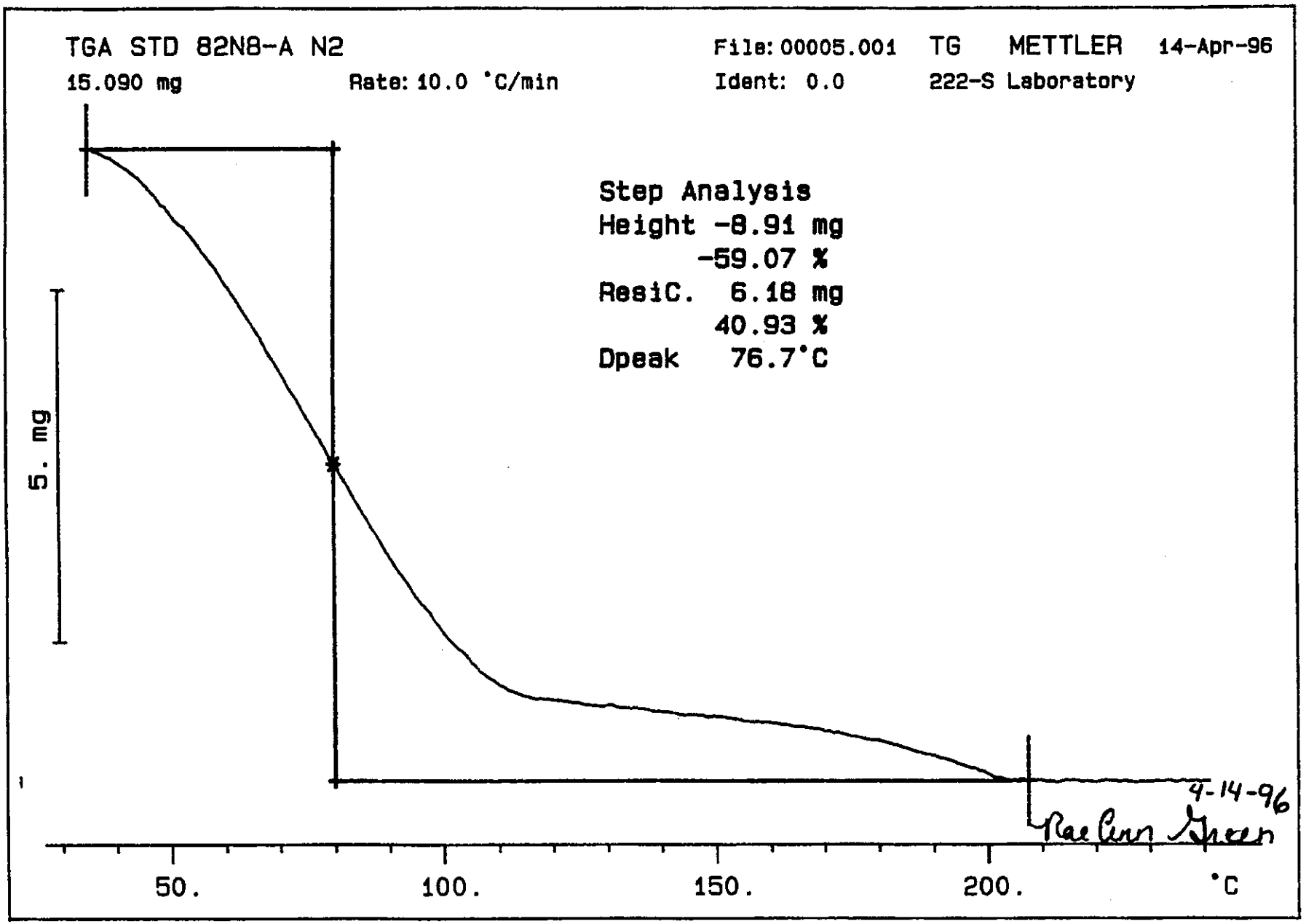
2-435

WHC-SD-WM-DP-175, REV. 1

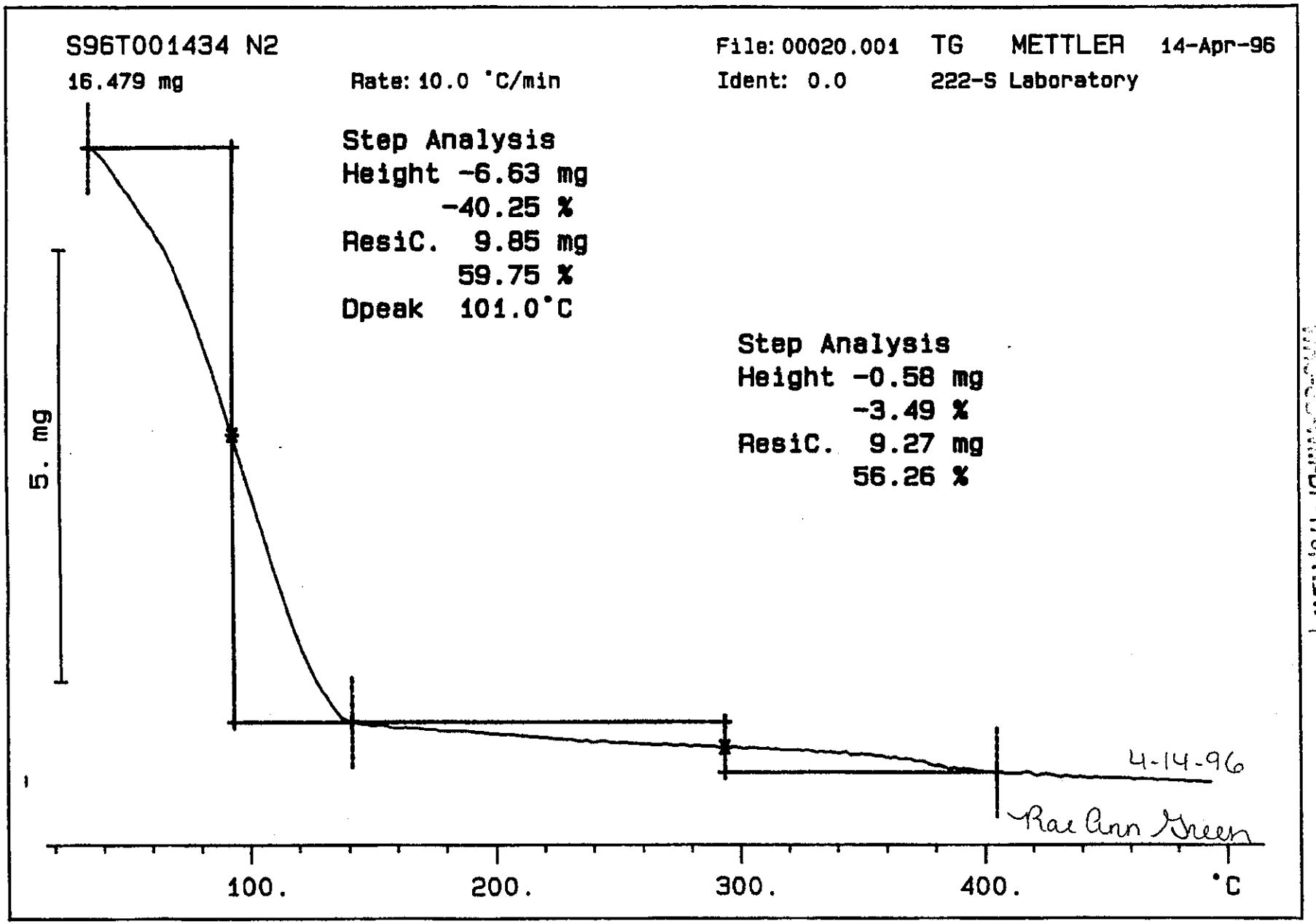

S96T001433 SAM N2
17.983 mg
Rate: 10.0 °C/min
File: 00057.001
TG
METTLER
11-Apr-96
Ident: 0.0
222-S Laboratory
Step Analysis
Height -8.02 mg
-44.62 %
ResiC. 9.96 mg
55.38 %
Dpeak 85.0°C
5. mg
100.
200.
300.
400.
°C

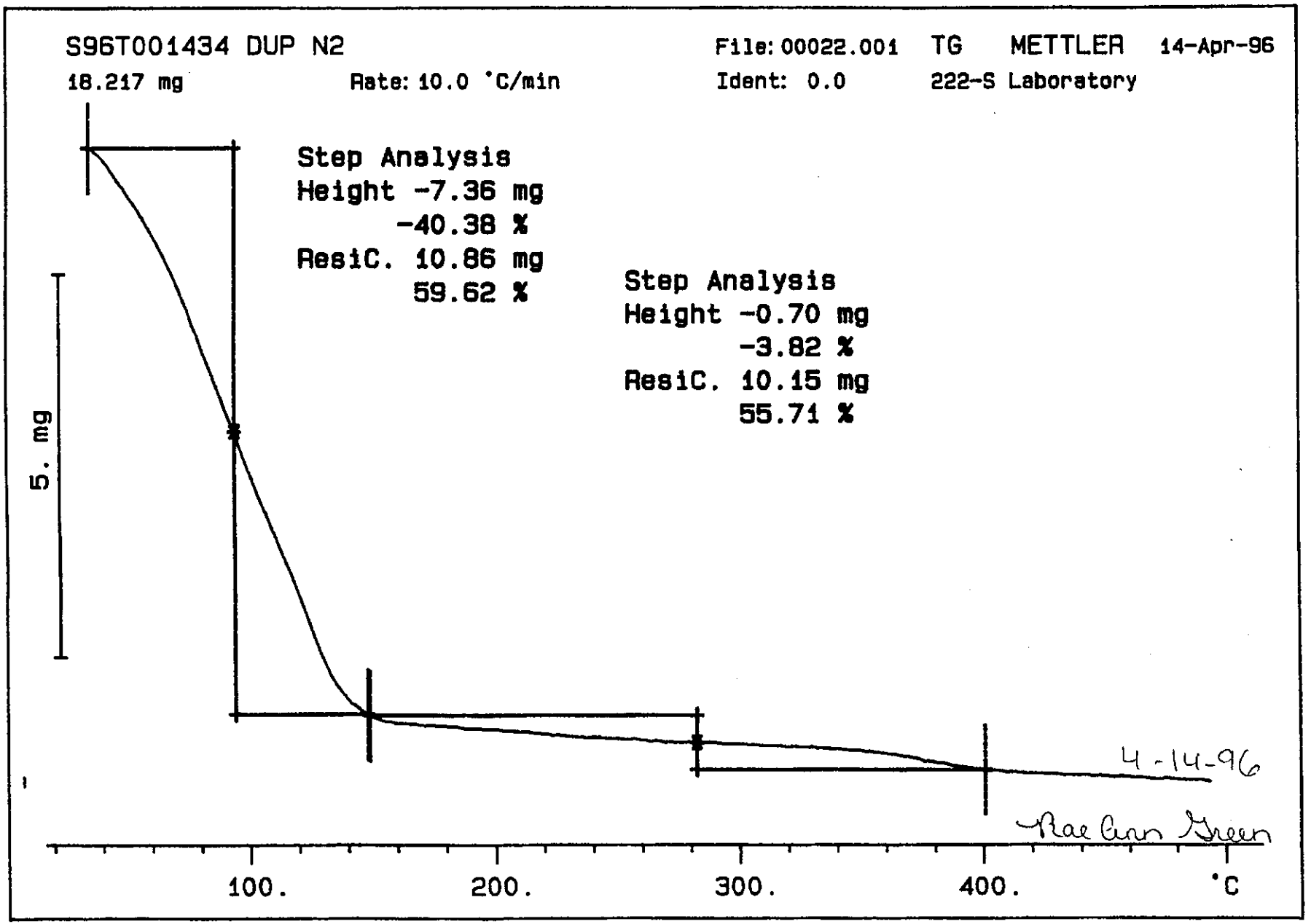
2-433


S96T001433 DUP N2
10.138 mg
Rate: 10.0 °C/min
File: 00059.001 TG METTLER 11-Apr-96
Ident: 0.0 222-S Laboratory
Step Analysis
Height -4.49 mg
-44.27 %
ResiC. 5.65 mg
55.73 %
Dpeak 75.0°C
2. mg
100.
200.
300.
400.
°C


TGA STD 82N8-A N2
File: 00005.001 TG METTLER 14-Apr-96
15.090 mg
Rate: 10.0 °C/min
Ident: 0.0
222-S Laboratory
Step Analysis
Height -8.91 mg
-59.07 %
ResiC. 6.18 mg
40.93 %
Dpeak 76.7°C
5. mg
50.
100.
150.
200.
°C
9-14-96
Rae Ann Green

2-133


S96T001434 N2
16.479 mg
Rate: 10.0 °C/min
File: 00020.001 TG METTLER 14-Apr-96
Ident: 0.0 222-S Laboratory
Step Analysis
Height -6.63 mg
-40.25 %
ResiC. 9.85 mg
59.75 %
Dpeak 101.0°C
Step Analysis
Height -0.58 mg
-3.49 %
ResiC. 9.27 mg
56.26 %
5. mg
4-14-96
Rae Ann Green
100.
200.
300.
400.
°C


S96T001434 DUP N2
18.217 mg
Rate: 10.0 °C/min
File: 00022.001
Ident: 0.0
TG METTLER 14-Apr-96
222-S Laboratory
Step Analysis
Height -7.36 mg
-40.38 %
ResiC. 10.86 mg
59.62 %
Step Analysis
Height -0.70 mg
-3.82 %
ResiC. 10.15 mg
55.71 %
5. mg
100.
200.
300.
400.
°C
4-14-96
Rae Ann Green

2-11.2

LABCORE Data Entry Template for Worklist# 7197

Analyst: PJM **Instrument:** TGA0 3 **Book #** 82N8A

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

Worklist Comment: S-102 FOR TGA

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	-------TEST------	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA-03	SOLID	59.2	58.29*	N/A	%
96000094	S102	2	SAMPLE	S96T001435	0		TGA-03	SOLID	N/A	22.69		%
96000094	S102	3	DUP	S96T001435	0		TGA-03	SOLID	22.69	21.77	N/A	%
96000094	S102	4	SAMPLE	S96T001441	0		TGA-03	SOLID	N/A	41.23		%
96000094	S102	5	DUP	S96T001441	0		TGA-03	SOLID	41.23	41.46	N/A	%

Final page for worklist # 7197

See attached for signatures

Analyst Signature 4/19/96 BBV **Date** 4/16/96 BBV

Data ~~entered~~ + verified by Blandina Valenzuela 4/19/96

[signature] 4-18-96

Analyst Signature **Date**

S96T001435 produced an additional weight loss step of 12.85% at approximately 300°C.

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# 7197

Analyst: R McCown 514-114 **Instrument:** TGA0 _____ **Book #** 8218A

Method: LA-~~560-112~~-Rev/Mod C-1 RM 4/15/96

Worklist Comment: S-102 FOR TGA

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA-01	SOLID			N/A	%
96000094	S102	2	SAMPLE	S96T001435	0		TGA-01	SOLID	N/A			%
96000094	S102	3	DUP	S96T001435	0		TGA-01	SOLID			N/A	%
96000094	S102	4	SAMPLE	S96T001441	0		TGA-01	SOLID	N/A			%
96000094	S102	5	DUP	S96T001441	0		TGA-01	SOLID			N/A	%

Final page for worklist # 7197

R McCown 4/15/96
Analyst Signature **Date**

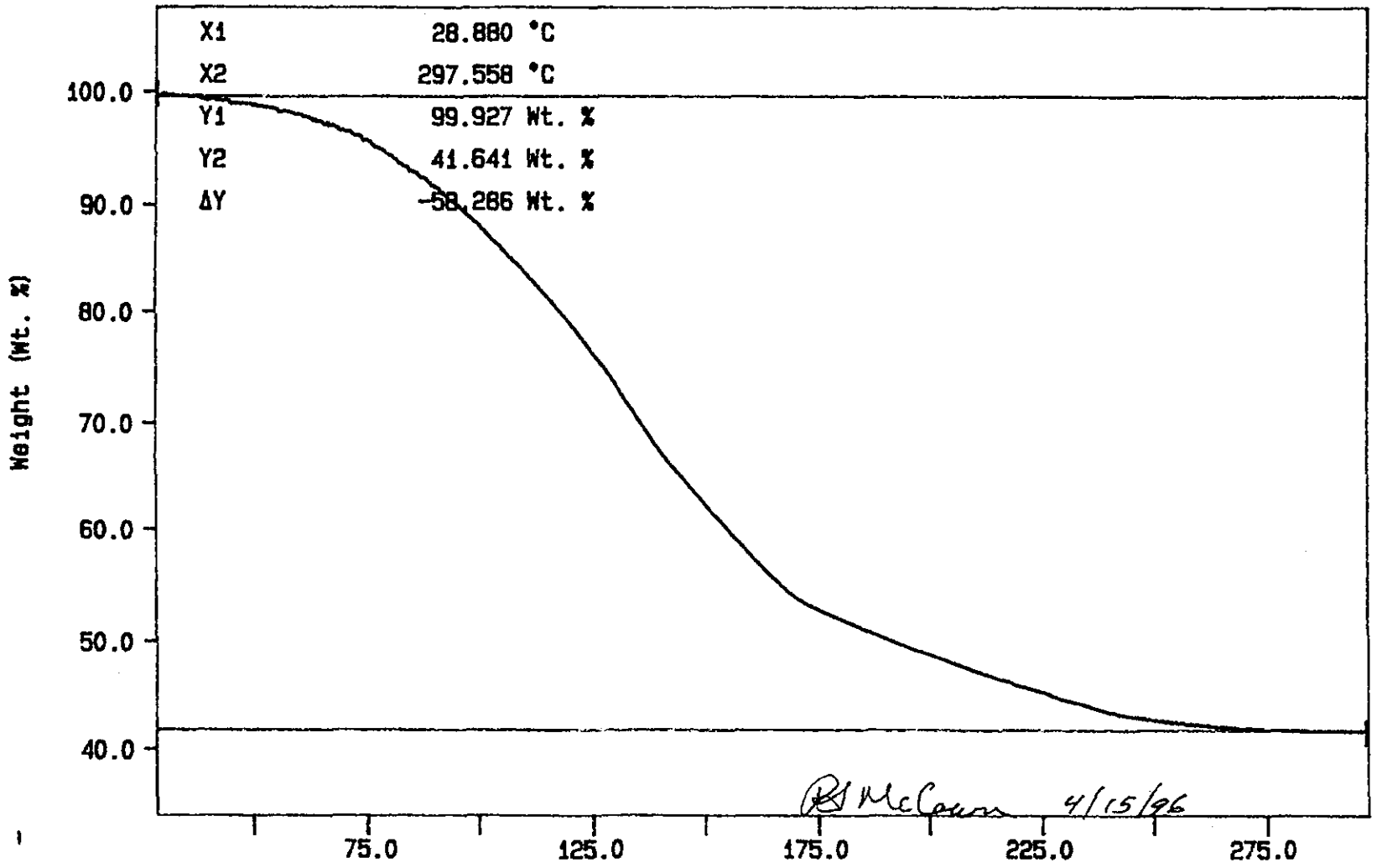
Analyst Signature **Date**

Other instrument was used. 4/16/96 BRV

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.

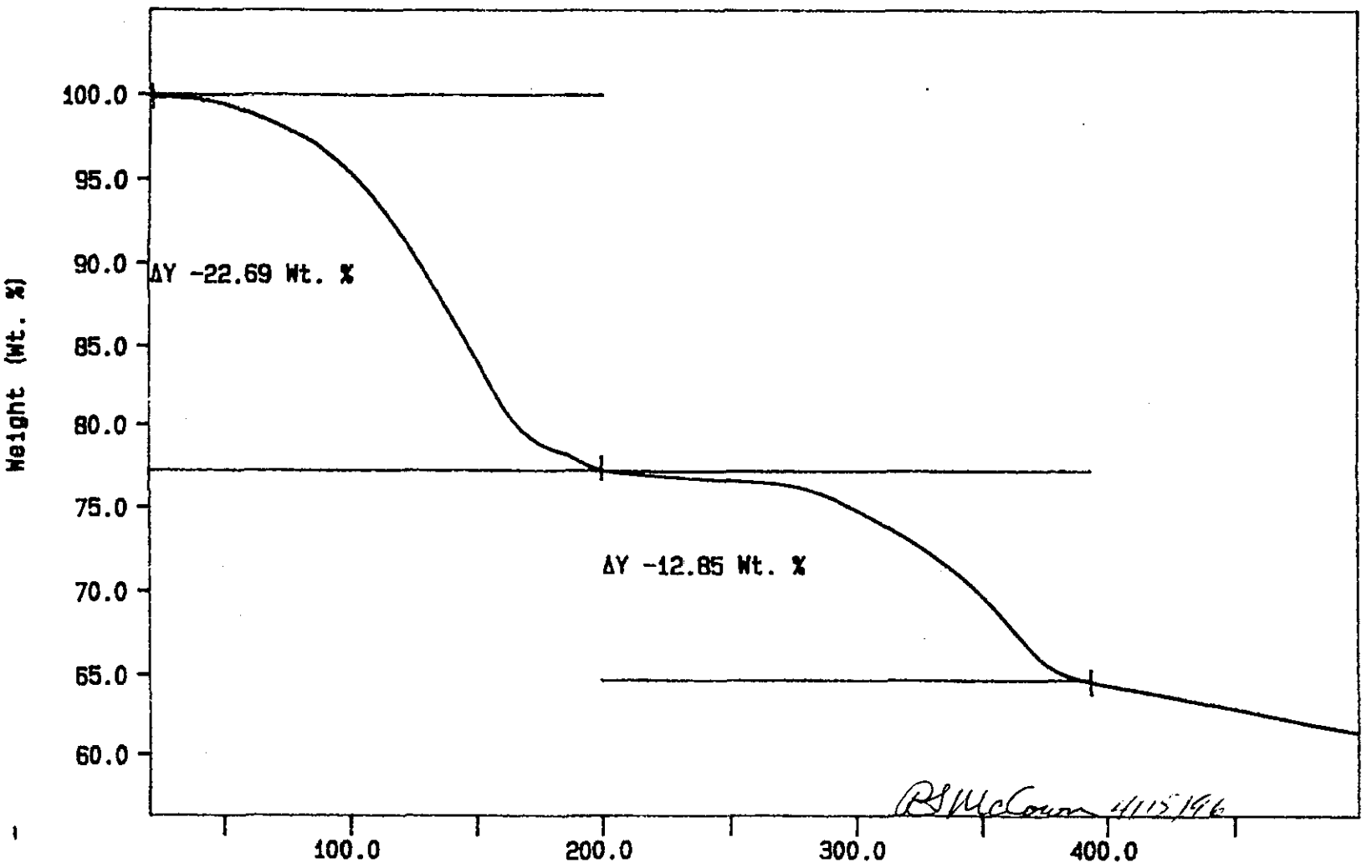
Curve 1: TGA
File info: TER041401 Sun Apr 14 19:32:44 1996
Sample Weight: 22.349 mg
TGA STD 82N8-A



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

PJ MCCOWN
PERKIN-ELMER
7 Series Thermal Analysis System
Sun Apr 14 22:16:18 1996

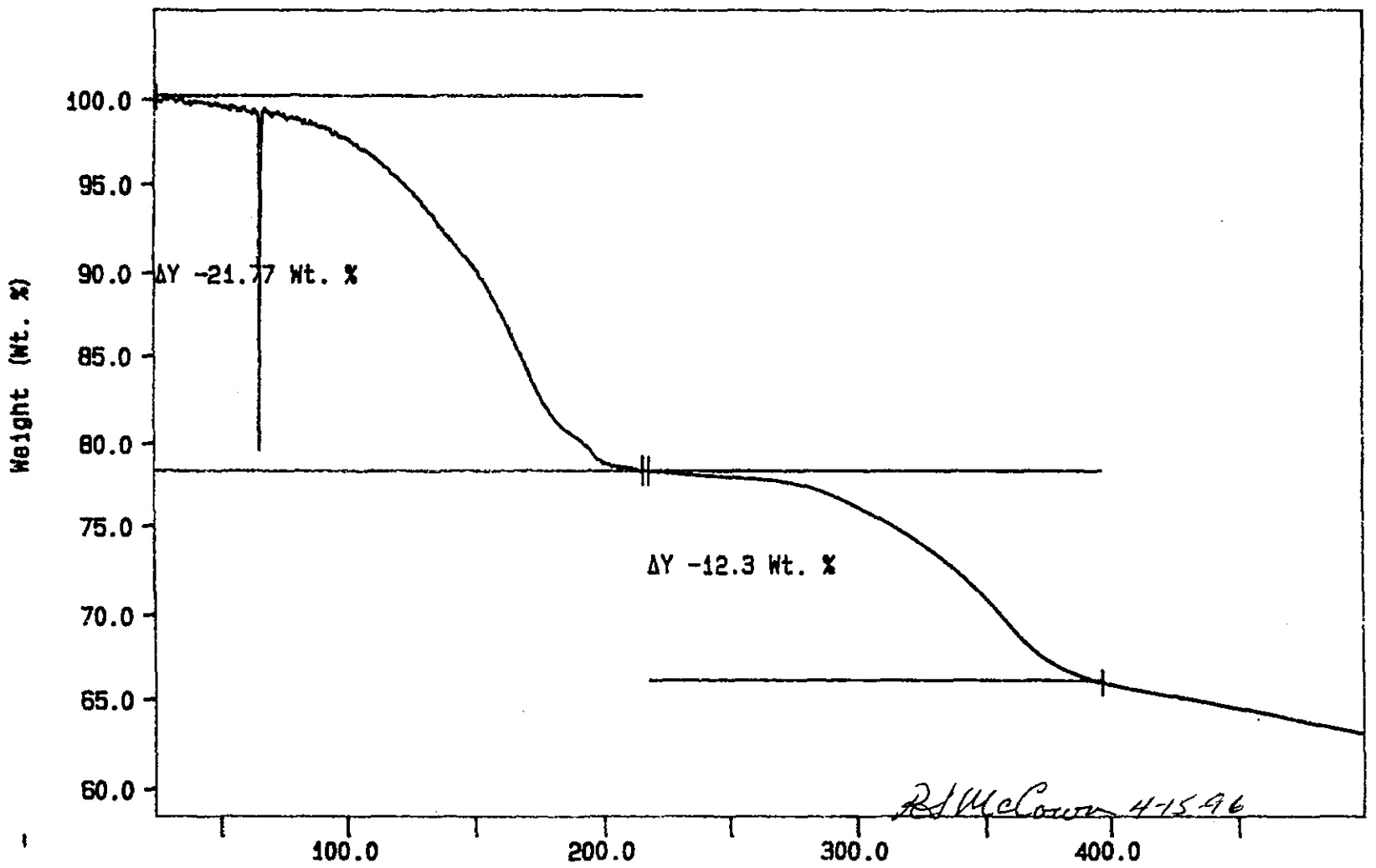
Curve 1: TGA
File info: SAM041405 Sun Apr 14 23:41:34 1996
Sample Weight: 18.687 mg
S96T001~~200 DUP~~ 4/14/96
1435 SAM



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 Apr 14 23:59:58 1996

Curve 1: TGA
File info: SAM041501 Mon Apr 15 00:53:34 1996
Sample Weight: 28.102 mg
S96T001435 DUP

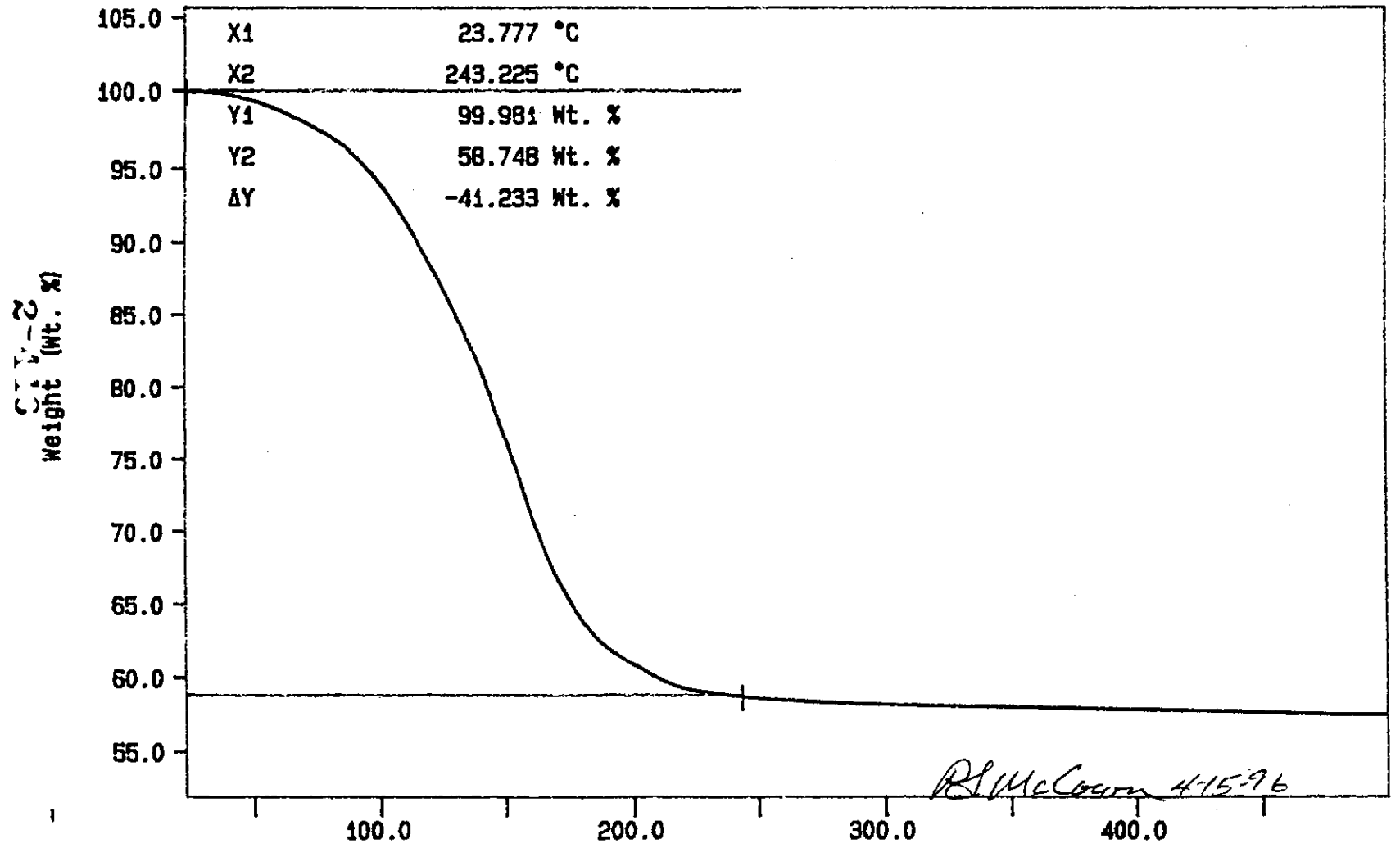


RJ McCown 4-15-96

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
Mon Apr 15 01:07:52 1996

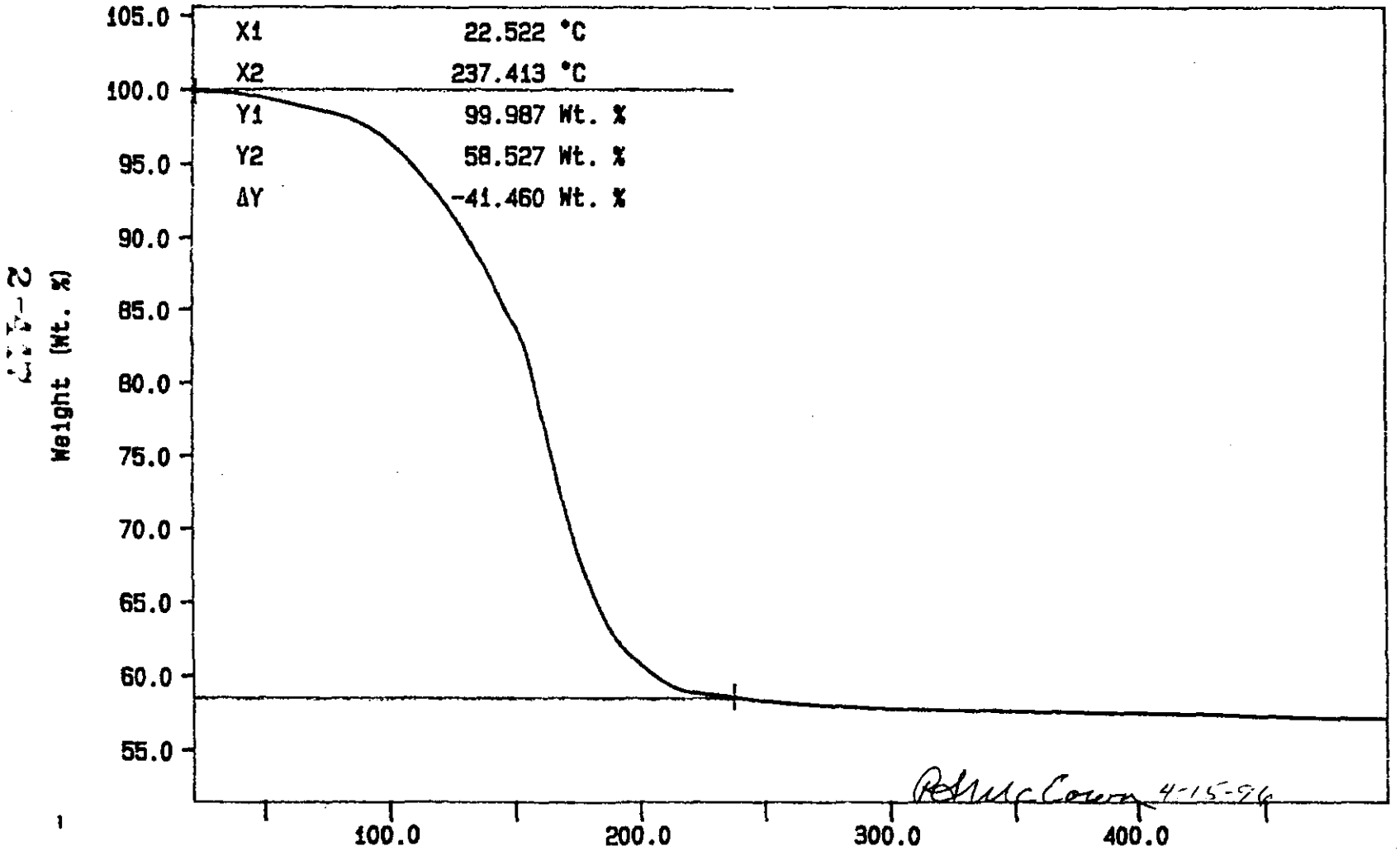
Curve 1: TGA
File info: SAM041502 Mon Apr 15 02:08:38 1996
Sample Weight: 17.477 mg
S96T001441 SAM



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
Mon Apr 15 02:21:05 1996

Curve 1: TGA
File info: SAM041503 Mon Apr 15 03:27:00 1996
Sample Weight: 24.091 mg
S96T001441 DUP



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
Mon Apr 15 03:27:45 1996

worklistrpt Version 2.1 05/15/95
04/01/96 14:55

Page: 1

LABCORE Data Entry Template for Worklist# 7198

Analyst: RK **Instrument:** TGA0 1 **Book #** 7578-A

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

Worklist Comment: S-102 FOR TGA

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA-01	SOLID	59.2	60.35 *	N/A	%
96000094	S102	2	SAMPLE	S96T001442	0		TGA-01	SOLID	N/A	42.15		%
96000094	S102	3	DUP	S96T001442	0		TGA-01	SOLID	42.15	42.97	N/A	%

Final page for worklist # 7198

Rob King 4/7/96
Analyst Signature **Date**

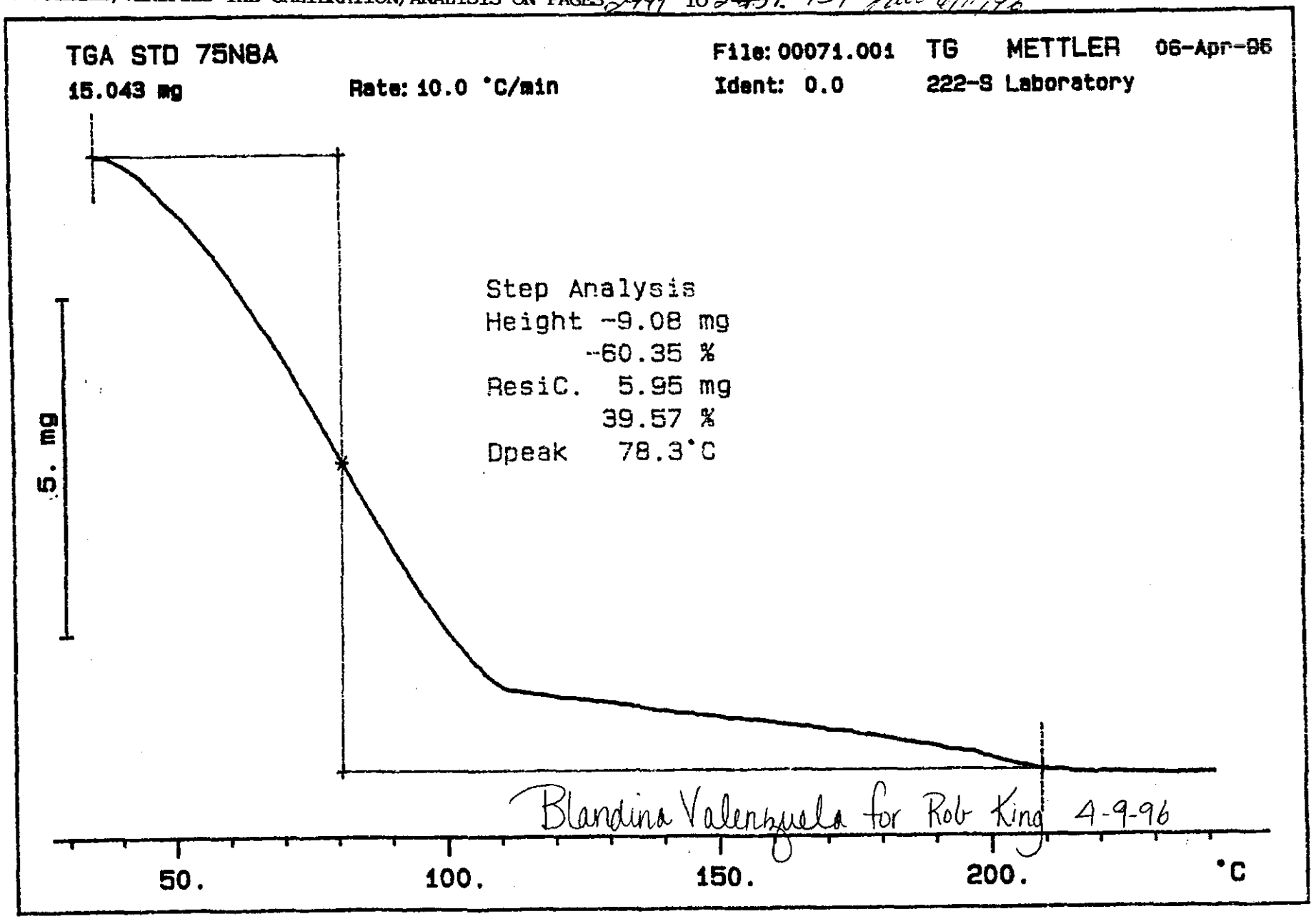
Dan Hamm 4-10-96
Analyst Signature **Date**

Verified by
H Anastos 4-10-96

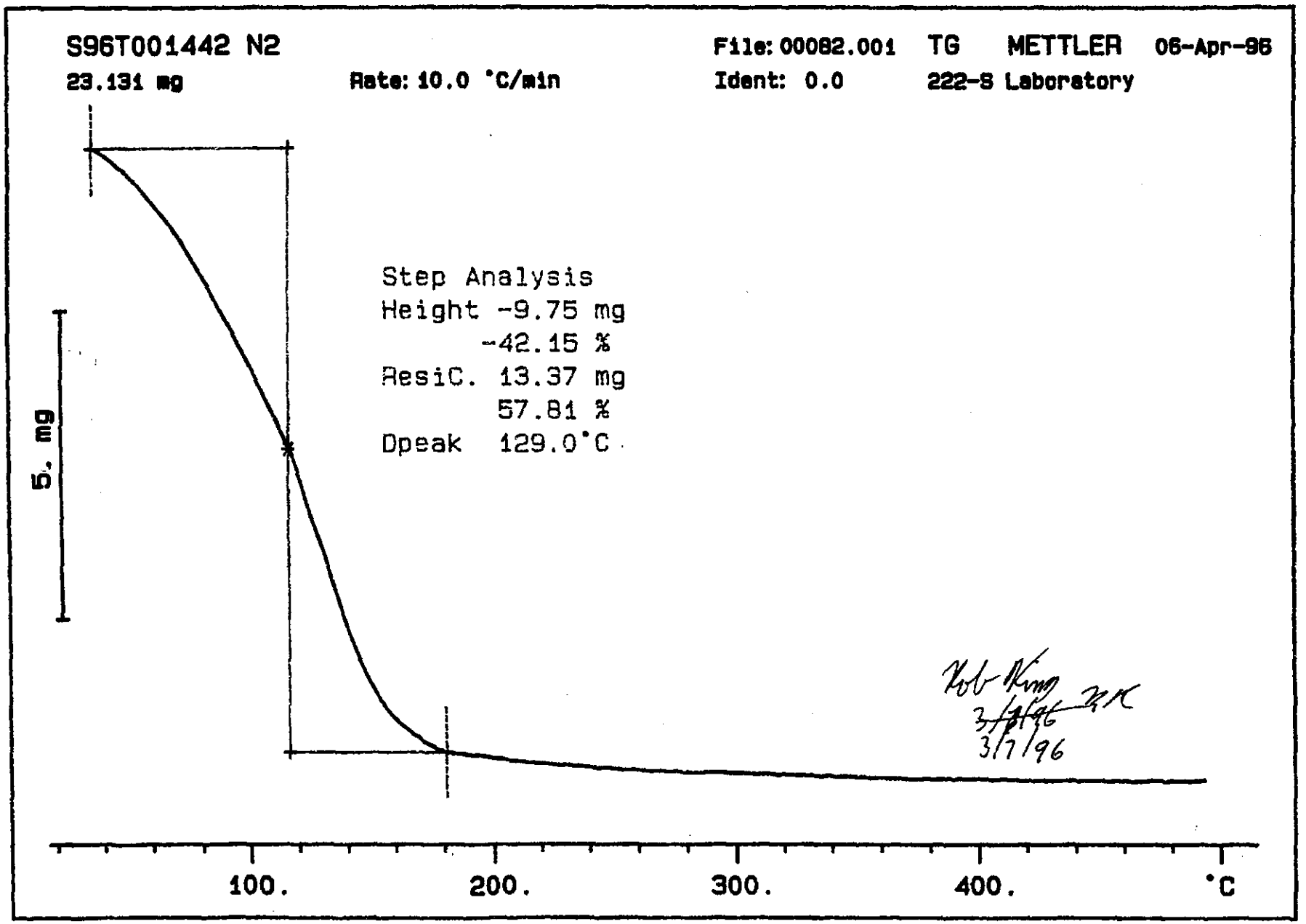
Data Entry Comments:

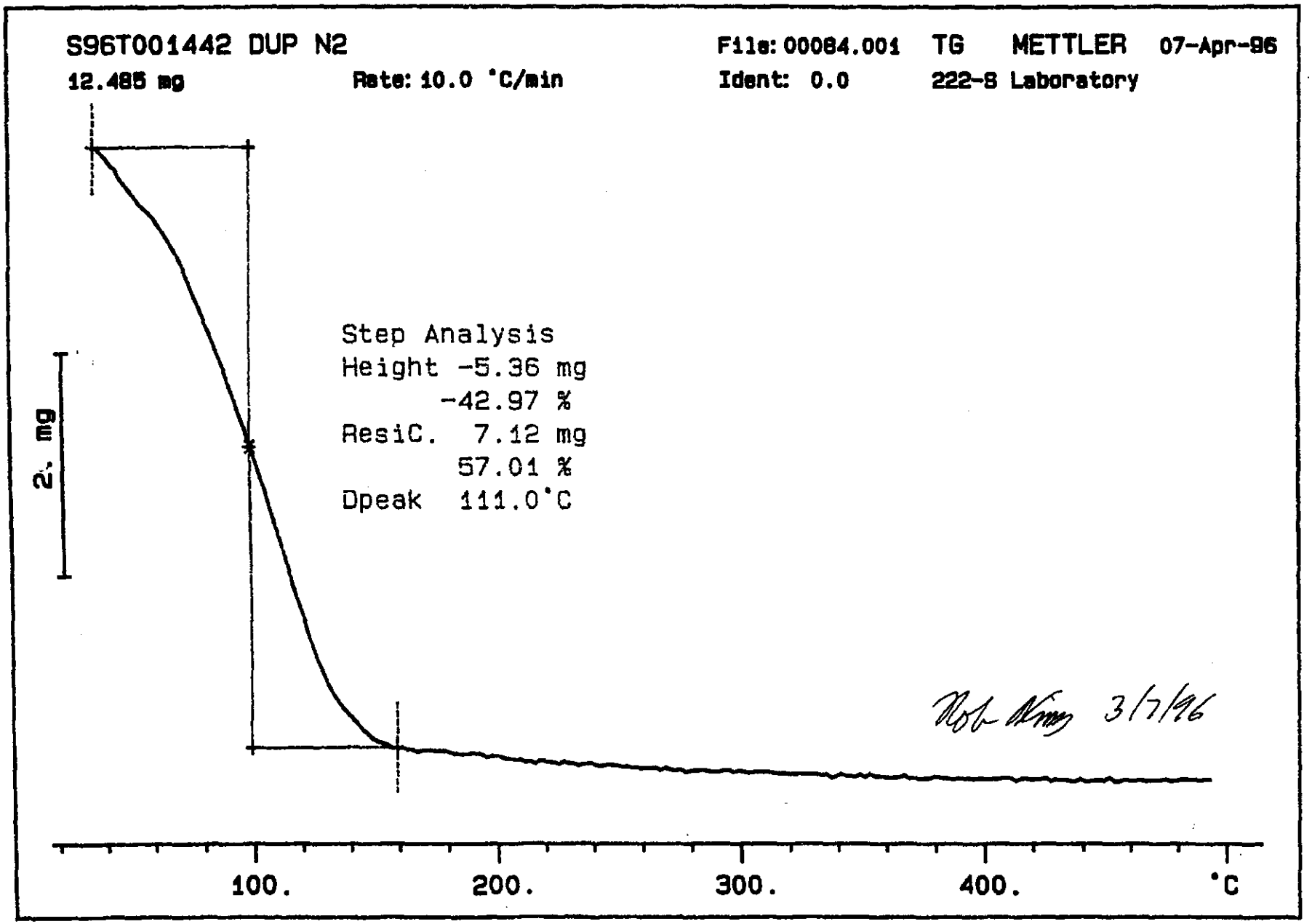
Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT
COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 2449 TO 2~~451~~ 451 Blan 6/11/96



2-113


S96T001442 N2
23.131 mg
Rate: 10.0 °C/min
File: 00082.001 TG METTLER 06-Apr-96
Ident: 0.0 222-S Laboratory
Step Analysis
Height -9.75 mg
-42.15 %
ResiC. 13.37 mg
57.81 %
Dpeak 129.0°C
5. mg
100.
200.
300.
400.
°C
Rob King
3/7/96


S96T001442 DUP N2
File: 00084.001 TG METTLER 07-Apr-96
12.485 mg
Rate: 10.0 °C/min
Ident: 0.0
222-S Laboratory
Step Analysis
Height -5.36 mg
-42.97 %
ResiC. 7.12 mg
57.01 %
Dpeak 111.0°C
2. mg
100.
200.
300.
400.
°C
3/7/96

worklistrpt Version 2.1 05/15/95
04/10/96 12:22

WHC-SP-MM-DP-170, REV. 1

Page: 1

LABCORE Data Entry Template for Worklist# 7257

Analyst: RDM **Instrument:** TGA0 3 **Book #** 75N8-A

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

Worklist Comment: S-102 TGA RUN UNDER N2. RCJ

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	-------TEST------	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA-03	LIQUID	59.2	60.34	N/A	%
96000094	S102	2	SAMPLE	S96T001437	0		TGA-03	LIQUID	N/A	65.75		%
96000094	S102	3	DUP	S96T001437	0		TGA-03	LIQUID	65.75	65.63	N/A	%

Final page for worklist # 7257

See attached for signatures
Analyst Signature **Date** 4-10-96

Verified by Blandina Valenzuela
4-15-96

[signature] 4-11-96
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.

WHC-... -DP-170, REV. 1

worklistrpt Version 2.1 05/15/95
04/02/96 09:37

Page: 1

LABCORE Data Entry Template for Worklist# 7257

Analyst: RDM **Instrument:** TGA0 **Book #** 75NBA

Method: LA-560-112 Rev/Mod G1

Worklist Comment: S-102 TGA RUN UNDER N2. RCJ

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	-------TEST------	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA-01	LIQUID			N/A	%
96000094	S102	2	SAMPLE	S96T001437	0		TGA-01	LIQUID	N/A			%
96000094	S102	3	DUP	S96T001437	0		TGA-01	LIQUID			N/A	%

Final page for worklist # 7257

[signature] 4/9/96
Analyst Signature **Date**

Analyst Signature **Date**

Other instrument was used 4/10/96 BDV

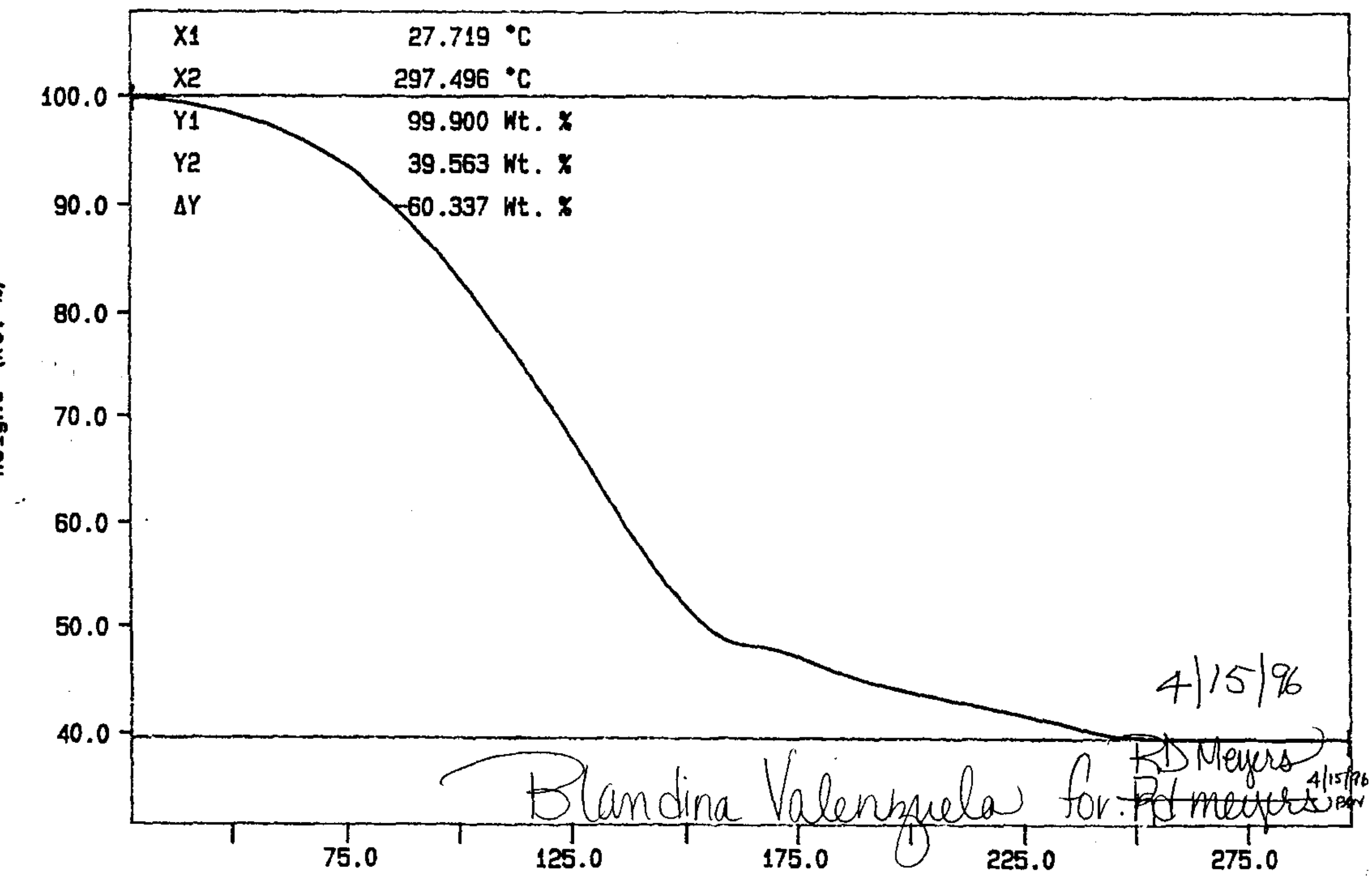
Data Entry Comments:

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: ter040901 Tue Apr 9 06:09:52 1996
Sample Weight: 13.734 mg

TGA STD 75N8-A

SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 2-454 TO 2-456.



2-454

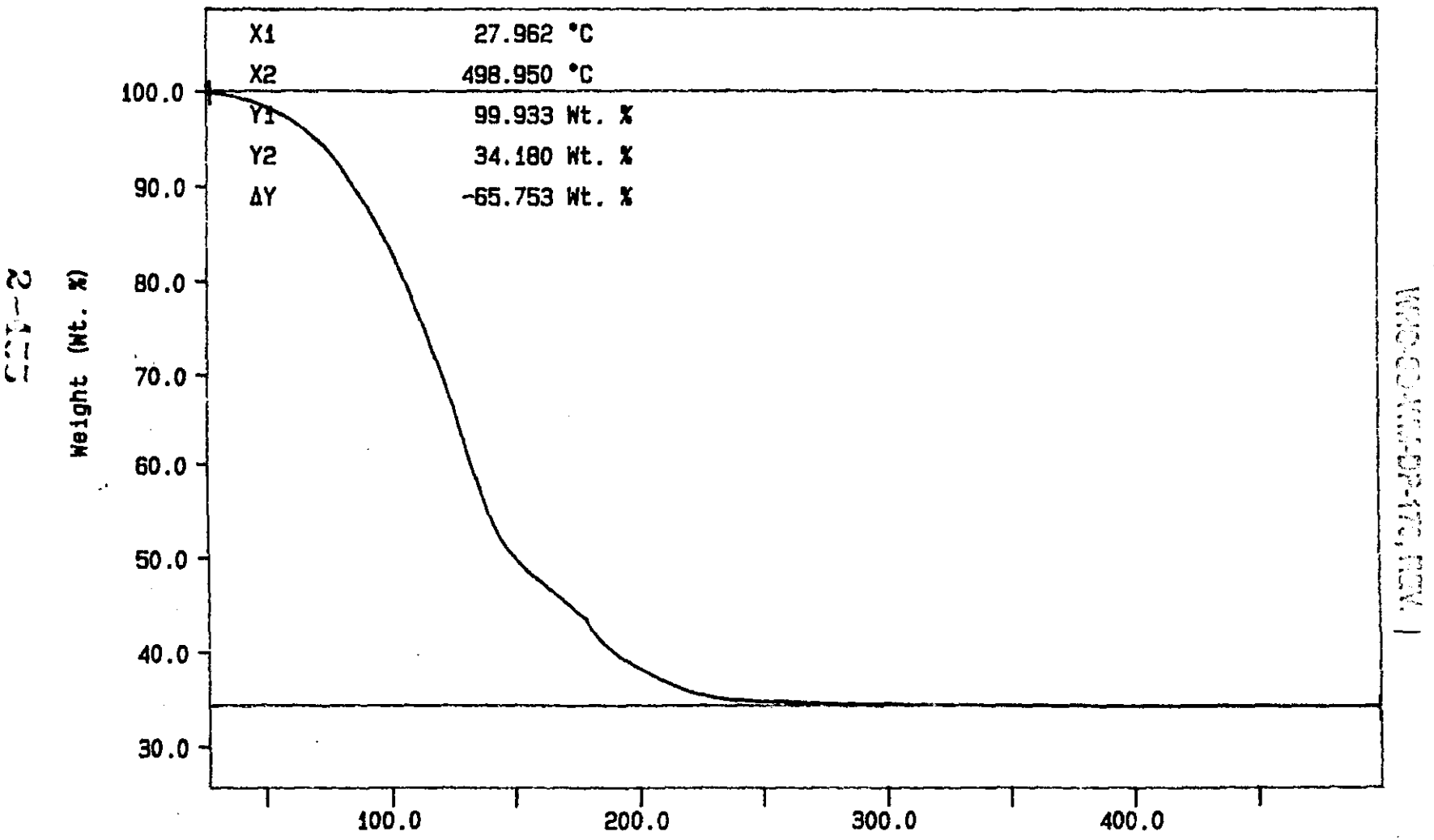
N2 10C/MIN

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

rd meyers
PERKIN-ELMER
7 Series Thermal Analysis System
Tue Apr 9 06:26:36 1996

WHC-SD-WM-DP-175, REV. 1

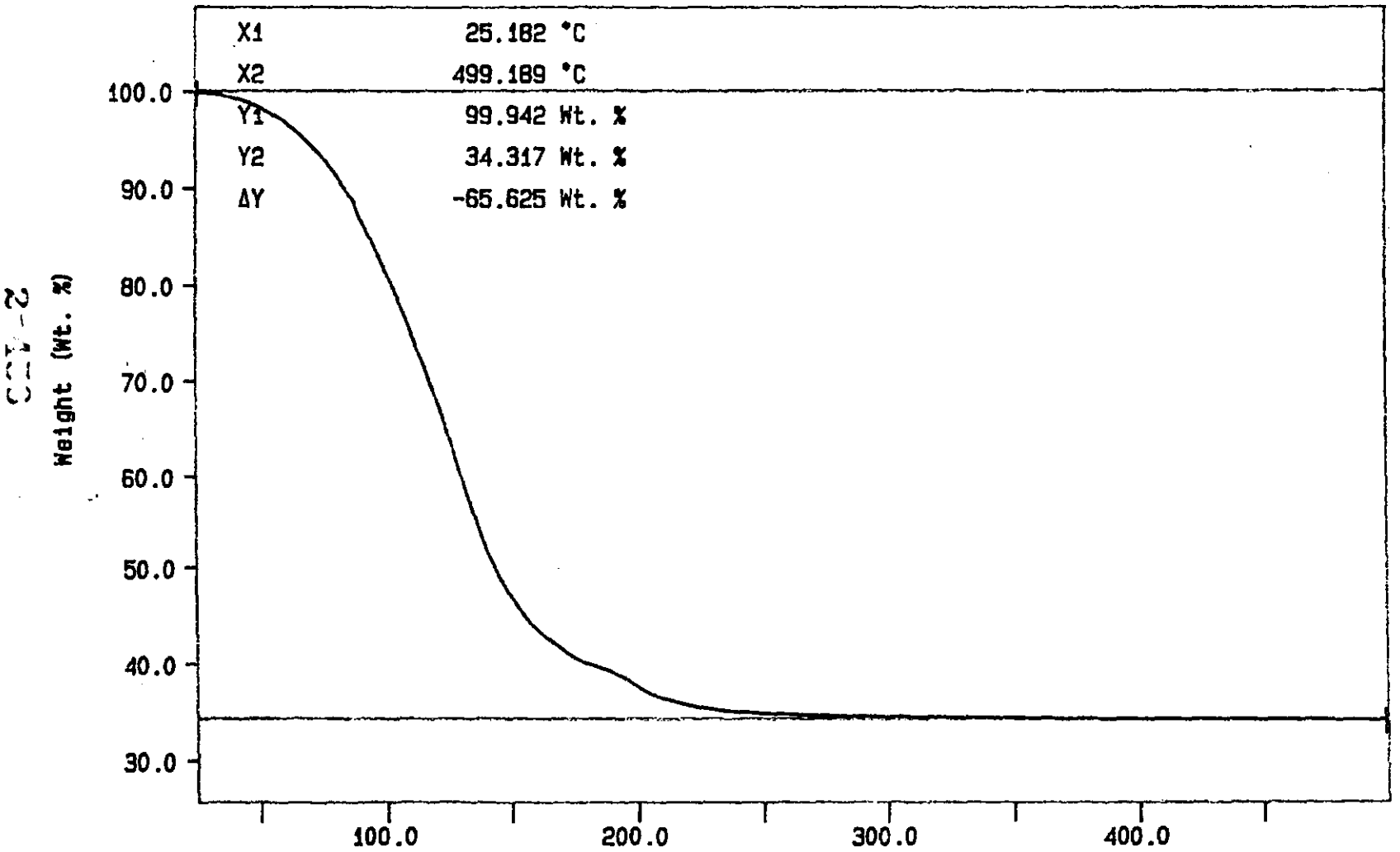
Curve 1: TGA
File info: sam040901 Tue Apr 9 08:13:57 1996
Sample Weight: 14.815 mg
S96T0001437



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

rd meyers
PERKIN-ELMER
7 Series Thermal Analysis System
Tue Apr 9 09:29:53 1996

Curve 1: TGA
File info: sam040902 Tue Apr 9 10:31:53 1996
Sample Weight: 14.271 mg
S96T001473DUP



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

rd meyers
PERKIN-ELMER
7 Series Thermal Analysis System
Tue Apr 9 13:07:24 1996

worklistrpt Version 2.1 05/15/95
04/09/96 10:17

WHC-[illegible]-DP-175, REV. 1

Page: 1

LABCORE Data Entry Template for Worklist# 7384

Analyst: RK **Instrument:** TGA01 **Book #** 75N8A

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

Worklist Comment: s-102 tga run under n2. rcj

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA-01	SOLID	59.2	59.81 *	N/A	%
96000094	S102	2	SAMPLE	S96T001401	0		TGA-01	SOLID	N/A	12.38		%
96000094	S102	3	DUP	S96T001401	0		TGA-01	SOLID	12.38 / 12.38	12.66	N/A	%
96000094	S102	4	TRIPL	S96T001401	0		TGA-01	SOLID	~~12.38~~ HEA 4-9-96	12.55	N/A	%

Final page for worklist # 7384

See Attached for Signatures
Analyst Signature **Date**

Analyst Signature 4-10-96 **Date**

S96T001401 is the sum of three weight loss steps (4.99%, 3.12%, + 4.27%). The TRIP only showed two weight loss steps (4.84% + 7.71%).

Verified by HAnastn 4-10-96

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.

worklistrpt Version 2.1 05/15/95
04/09/96 03:30

WHC-CM-WM-OP-173, REV. 1

Page: 1

LABCORE Data Entry Template for Worklist# 7384

Analyst: RK **Instrument:** TGA0 **Book #** 7578-A

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

Worklist Comment: s-102 tga run under n2. rcj

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	-------TEST------	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA-01	SOLID			N/A	%
96000094	S102	2	SAMPLE	S96T001401	0		TGA-01	SOLID	N/A			%
96000094	S102	3	DUP	S96T001401	0		TGA-01	SOLID			N/A	%

Final page for worklist # 7384

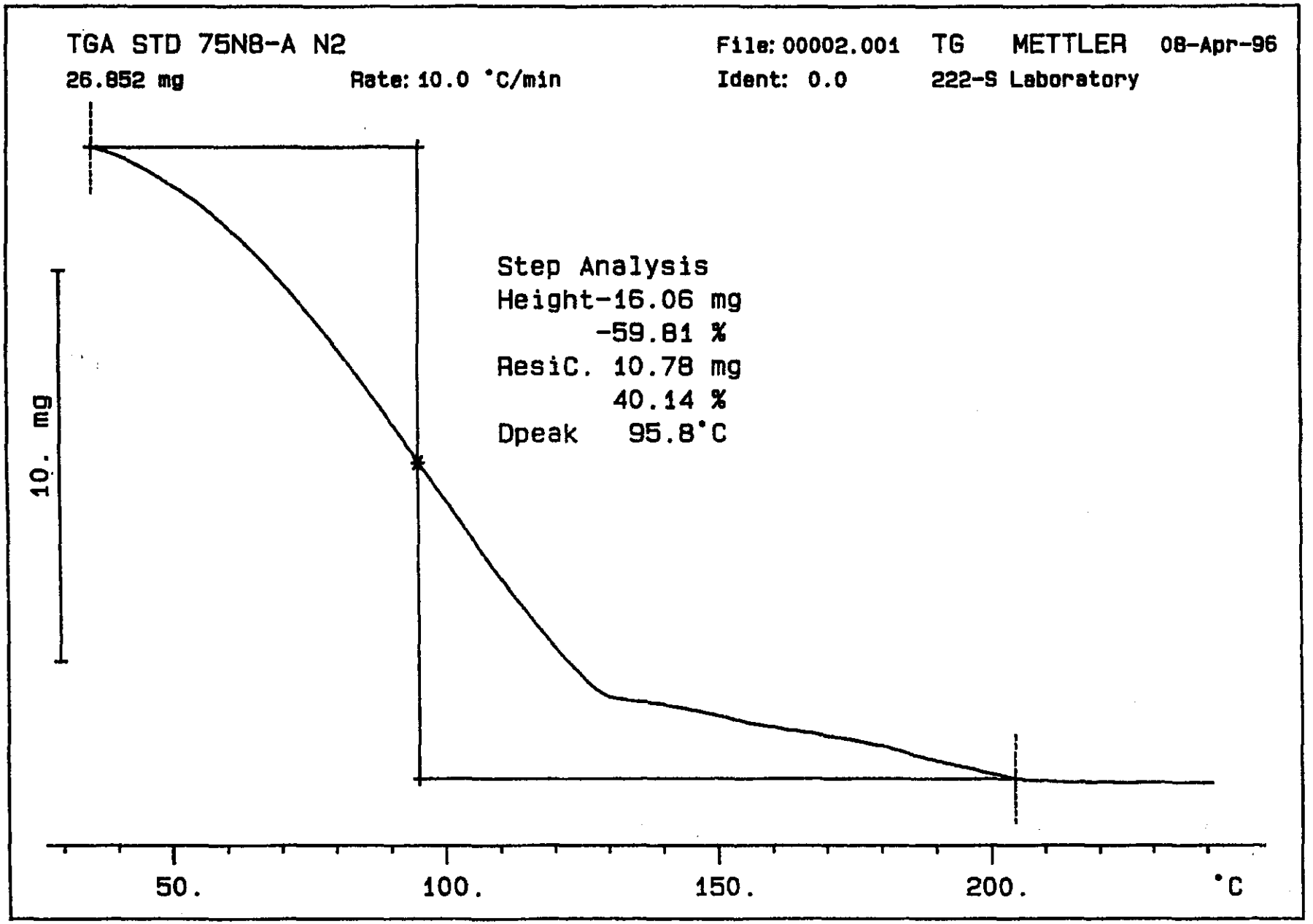
Robt King 4/9/96
Analyst Signature **Date**

Analyst Signature **Date**

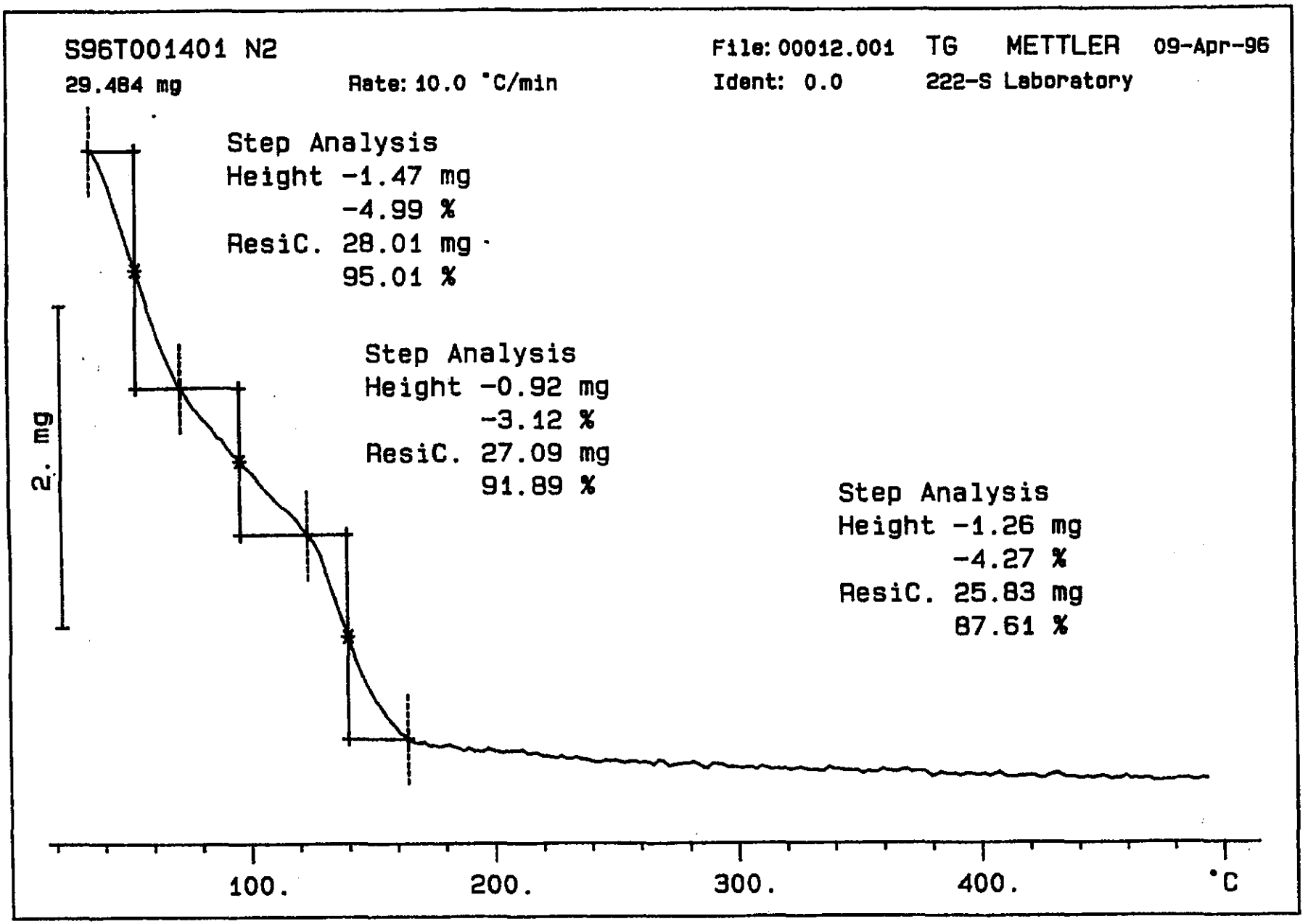
Data Entry Comments:

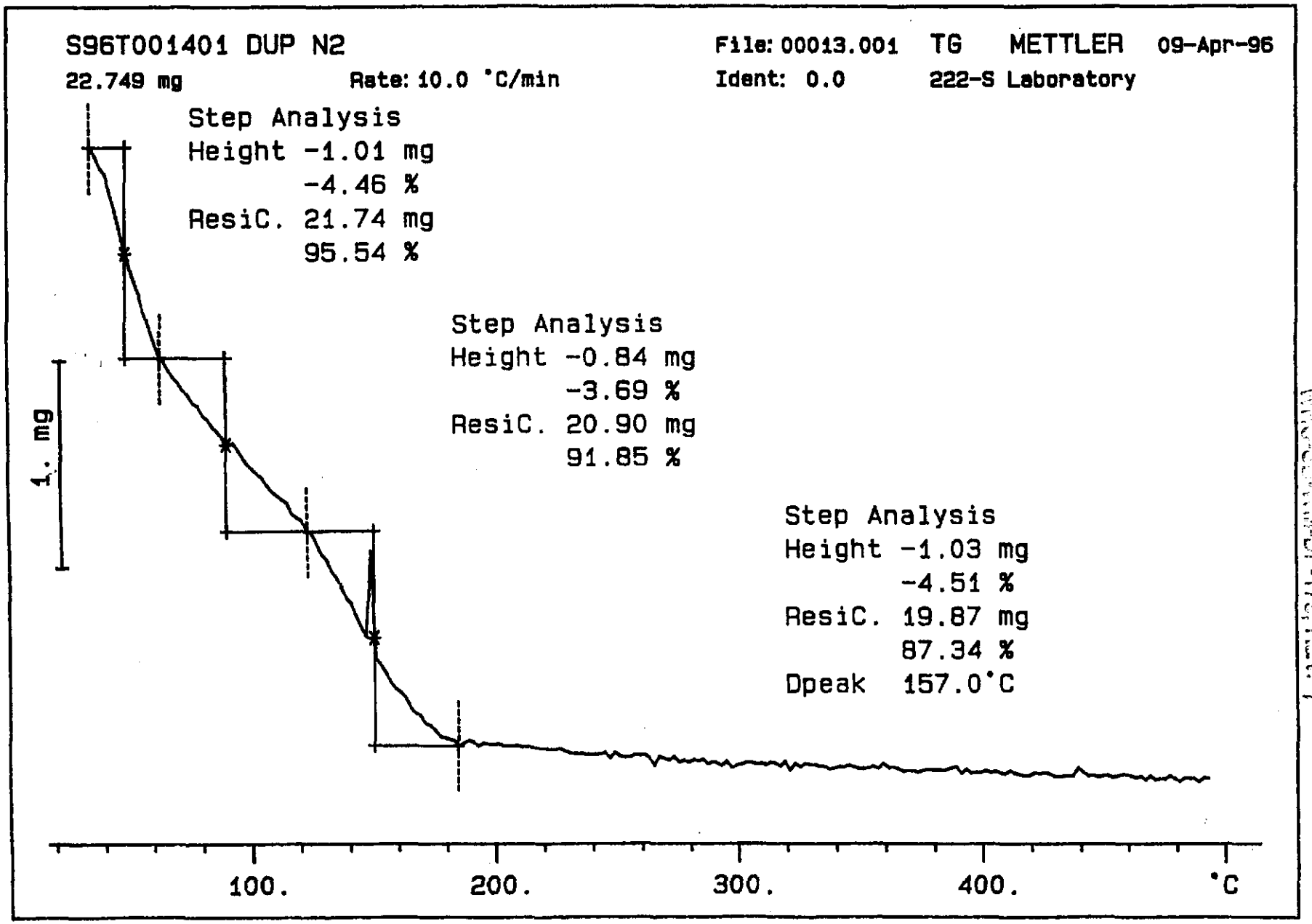
Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

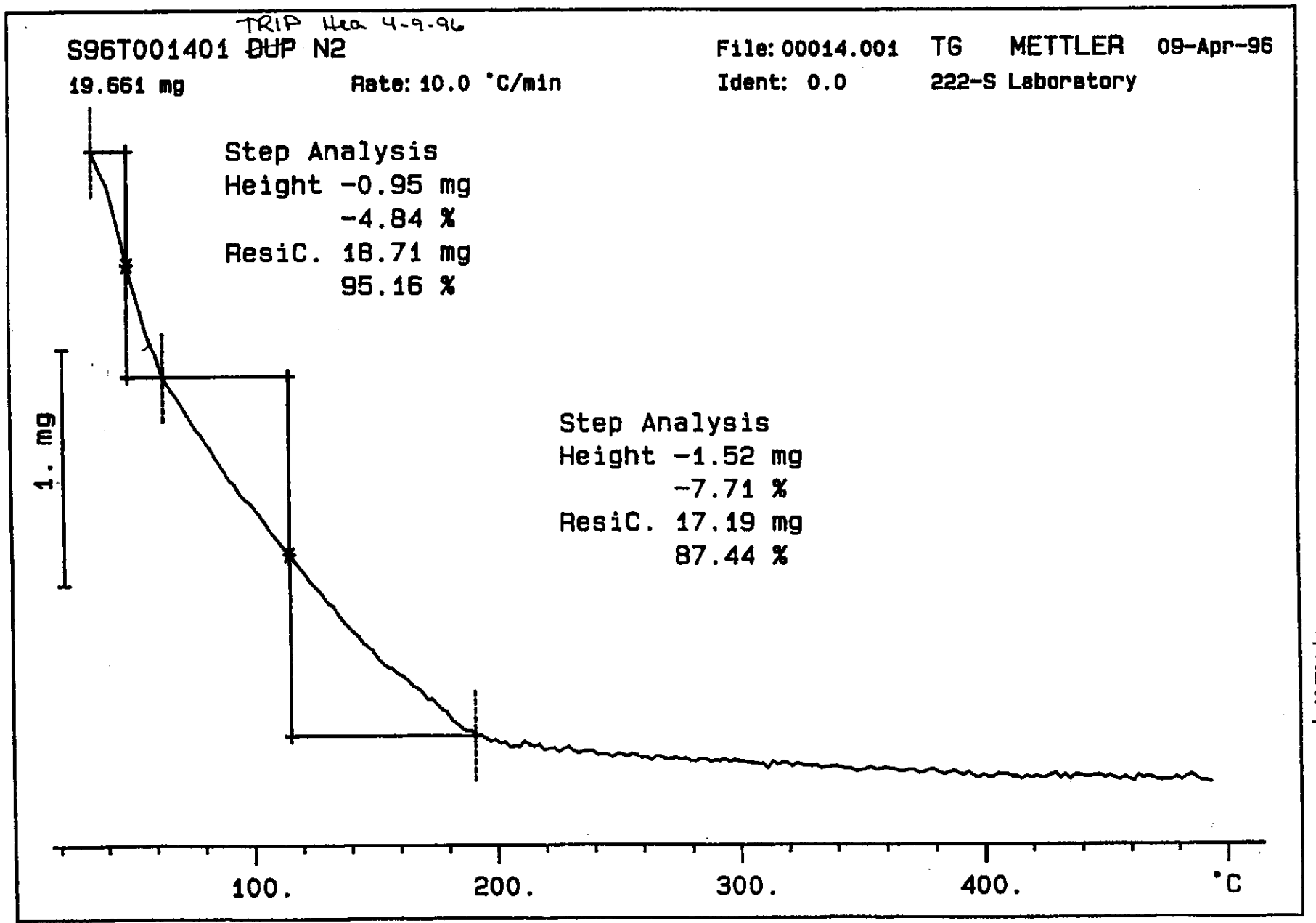
SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 2-459 TO 2-462



Rob King 4/9/96


S96T001401 N2
29.484 mg
Rate: 10.0 °C/min
File: 00012.001 TG METTLER 09-Apr-96
Ident: 0.0 222-S Laboratory
Step Analysis
Height -1.47 mg
-4.99 %
ResiC. 28.01 mg
95.01 %
Step Analysis
Height -0.92 mg
-3.12 %
ResiC. 27.09 mg
91.89 %
Step Analysis
Height -1.26 mg
-4.27 %
ResiC. 25.83 mg
87.61 %
2. mg
100.
200.
300.
400.
°C


S96T001401 DUP N2
22.749 mg
Rate: 10.0 °C/min
File: 00013.001 TG METTLER 09-Apr-96
Ident: 0.0 222-S Laboratory
Step Analysis
Height -1.01 mg
-4.46 %
ResiC. 21.74 mg
95.54 %
Step Analysis
Height -0.84 mg
-3.69 %
ResiC. 20.90 mg
91.85 %
Step Analysis
Height -1.03 mg
-4.51 %
ResiC. 19.87 mg
87.34 %
Dpeak 157.0°C
1. mg
100.
200.
300.
400.
°C



2-223

MMS-222-HNF-12761 REV 1

4/9/96

WHC-CD-WM-DP-175, REV. 1

worklistrpt Version 2.1 05/15/95
04/18/96 14:29

LABCORE Data Entry Template for Worklist# 7791

Analyst: Jds **Instrument:** TGA01 _____ **Book #** 82N8A

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

Worklist Comment: Rerun. Please run S-102 TGAs under N2. bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	-------TEST------	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA-01	LIQUID	59.2	58.80	N/A	%
96000030	S102	2	SAMPLE	S96T000634	1		TGA-01	LIQUID	N/A	44.96		%
96000030	S102	3	DUP	S96T000634	1		TGA-01	LIQUID	44.96	46.32	N/A	%

Final page for worklist # 7791

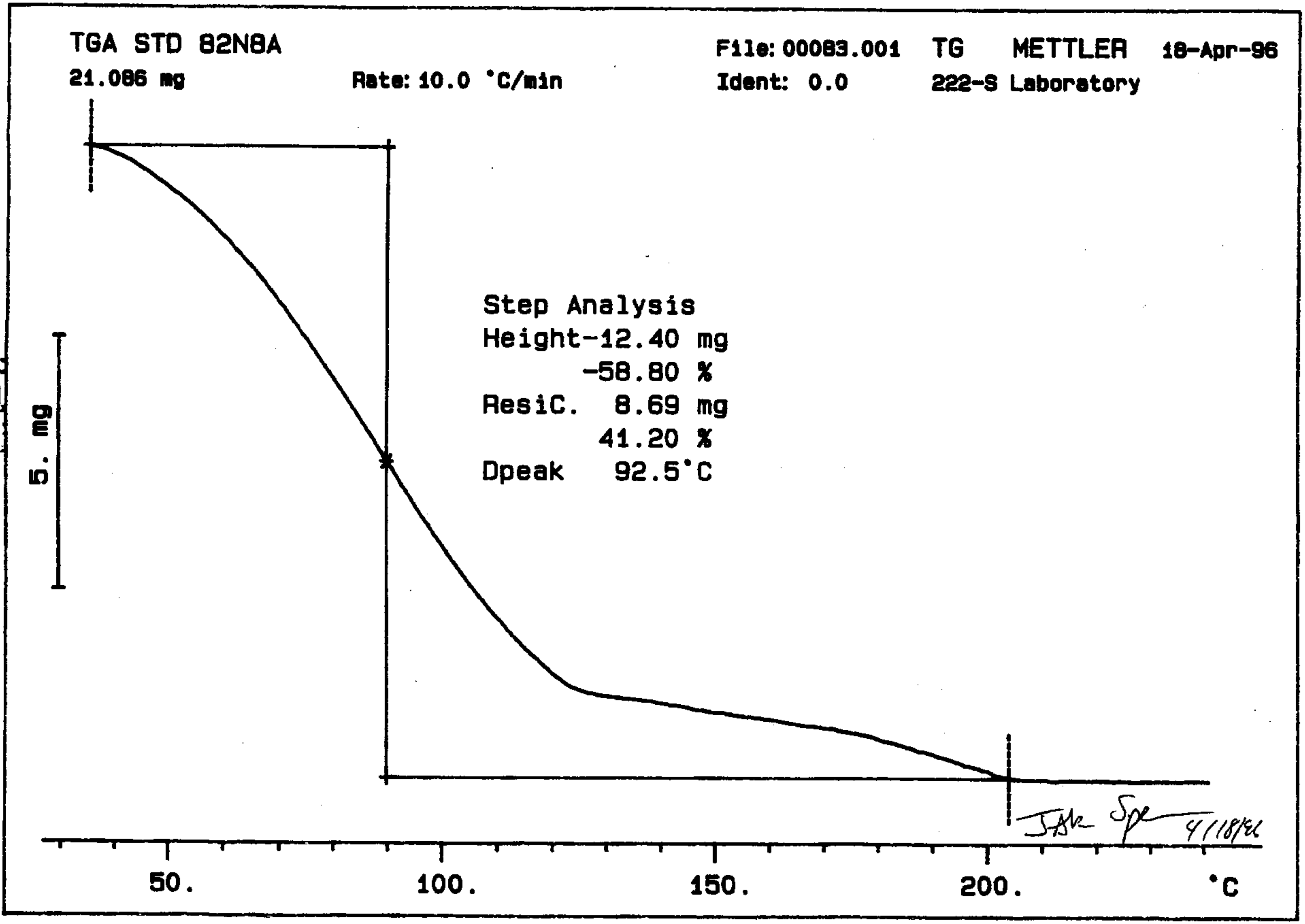
Jsh Sp[illegible] 4/17/96 JS 4/18/96
Analyst Signature **Date**

Data entered + verified.
Blandina Valenzuela 4/19/96
Analyst Signature **Date**

Data Entry Comments: Sample results are the results of two weight loss steps.

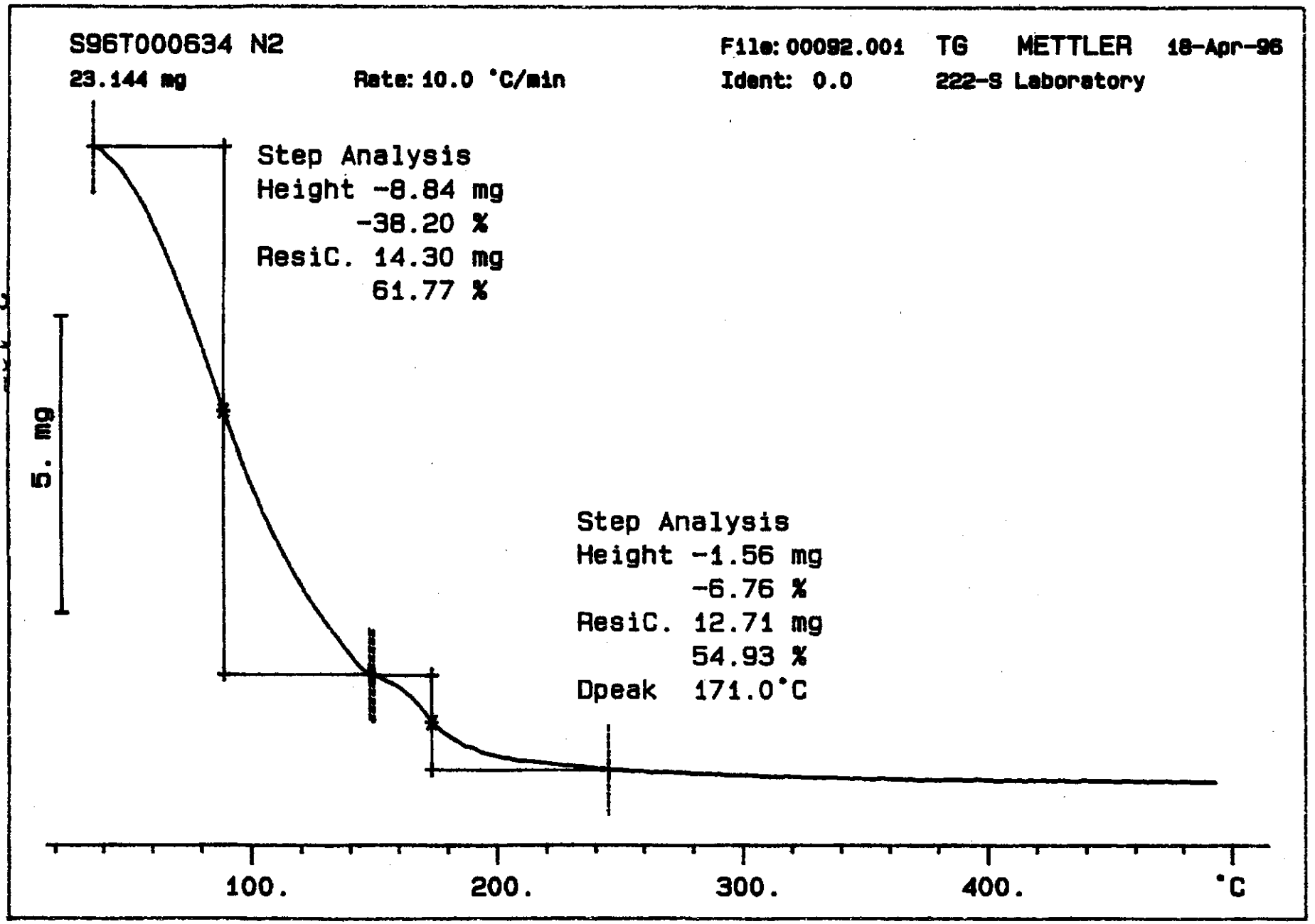
Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT
COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 2464 TO 2466

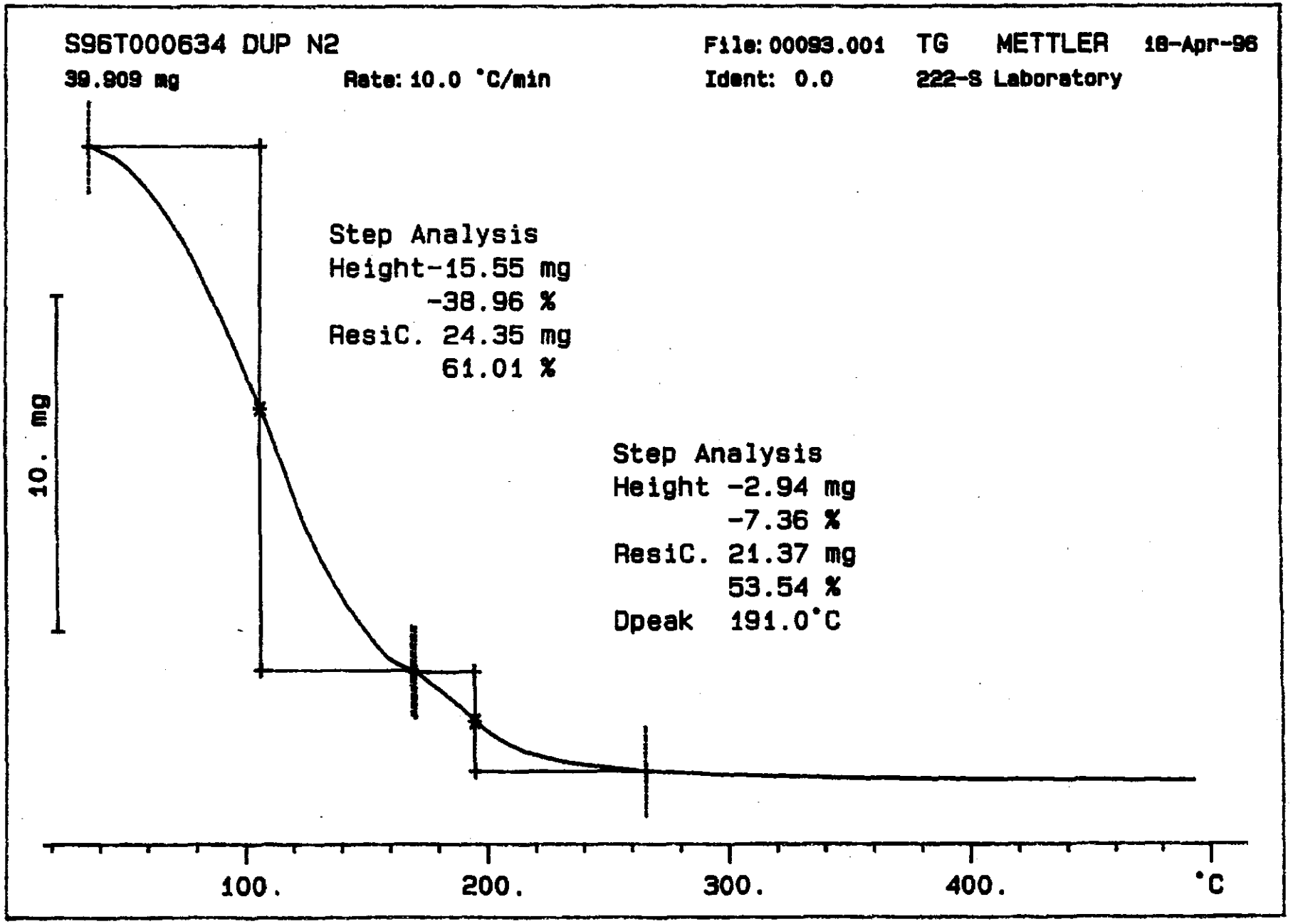


JAK Spr 4/18/96

04/19/96 10:37 509 372 2929 WESTINGHOUSE MO-924 200W



04/19/96 10:37 ☎509 372 2929 WESTINGHOUSE →→→ MO-924 200W 003


S96T000634 DUP N2
File: 00093.001 TG METTLER 18-Apr-96
39.909 mg
Rate: 10.0 °C/min
Ident: 0.0
222-S Laboratory
Step Analysis
Height -15.55 mg
-38.96 %
ResiC. 24.35 mg
61.01 %
Step Analysis
Height -2.94 mg
-7.36 %
ResiC. 21.37 mg
53.54 %
Dpeak 191.0°C
10. mg
100.
200.
300.
400.
°C