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45-DAY SAFETY SCREENING RESULTS FOR TANK 241-B-203, PUSH MODE CORES 115, 120 AND 122.

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ANALYTICAL SERVICES

45-DAY SAFETY SCREENING RESULTS FOR TANK 241-B-203, PUSH MODE CORES 115, 120 and 122

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Prepared for the U.S. Department of Energy
Office of Environmental Restoration
and Waste Management

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TABLE OF CONTENTS

Narrative 1

Sample Data Summary 24

Statistical Analysis 51

Dome Space Flammability Data 55.1

Inorganic Analyses 56

Differential Scanning Calorimetry (DSC)
DSC Worklist # 4555 57
DSC Worklist # 4651 62
DSC Worklist # 4652 68
DSC Worklist # 4653 74
DSC Worklist # 4654 82
DSC Worklist # 4655 88
DSC Worklist # 4656 94
DSC Worklist # 4657 100
DSC Worklist # 4658 106
DSC Worklist # 4659 112
DSC Worklist # 4827 118
DSC Worklist # 4828 124
DSC Worklist # 4829 131
DSC Worklist # 4830 138
DSC Worklist # 4831 145
DSC Worklist # 4832 152
DSC Worklist # 4833 158
DSC Worklist # 4834 163
DSC Worklist # 4835 169
DSC Worklist # 4906 177
DSC Worklist # 4932 187
DSC Worklist # 4933 195
DSC Worklist # 4934 202
DSC Worklist # 4935 210
DSC Worklist # 5133 217
DSC Worklist # 5325 222

Thermogravimetric Analysis (TGA)
TGA Worklist # 4556 228
TGA Worklist # 4660 232
TGA Worklist # 4661 238
TGA Worklist # 4662 244
TGA Worklist # 4663 252
TGA Worklist # 4664 258
TGA Worklist # 4665 264

TABLE OF CONTENTS

TGA Worklist # 4666 270
TGA Worklist # 4667 276
TGA Worklist # 4668 282
TGA Worklist # 4836 288
TGA Worklist # 4837 296
TGA Worklist # 4838 304
TGA Worklist # 4839 310
TGA Worklist # 4840 317
TGA Worklist # 4841 325
TGA Worklist # 4842 331
TGA Worklist # 4843 337
TGA Worklist # 4844 343
TGA Worklist # 4942 348
TGA Worklist # 4943 354
TGA Worklist # 4944 362
TGA Worklist # 4945 368
TGA Worklist # 5149 374
TGA Worklist # 5150 382

This document consists of pages 1 through 386, plus pages 55.1 through 55.28.

NARRATIVE

45-Day Safety Screening Results for Tank 241-B-203, Push Mode Cores 115, 120, and 122

SUMMARY

Two fourteen-segment and one eleven-segment push-mode core samples from tank 241-B-203 (B-203) and a field blank were received at the 222-S Laboratory. Cores 115 (11 segments) and 120 (14 segments) were obtained from riser 2 and core 122 (14 segments) was obtained from riser 7. Core 115 was archived due to poor sample recovery and not analyzed. The other two core samples underwent safety screening analyses in accordance with the sampling and analysis plan (Jo 1995)-differential scanning calorimetry (DSC), thermogravimetric analysis (TGA), total alpha analysis, and bulk density measurements.

Forty-five out of forty-eight of the samples showed no exotherm. Two of the three samples which had observable energetics had DSC exotherms that exceeded the action limit of 480 joules/g (dry weight basis) stated in the SAP (Jo, 1995) and the Safety Screening Data Quality Objective (Dukelow, 1995). The results of triplicate and duplicate reruns showed no exothermic reaction for neither of the samples. For one of these samples (liquid, sample number S95T003958), the thermogram for the primary sample results showed an exotherm beginning at approximately 350 °C. However, the duplicate thermogram for the same sample showed an endotherm beginning at this temperature. For the three samples with DSC results above zero joules/g, the upper limit of a one-sided 95% Confidence Interval were calculated (see attachment). The upper limit of the 95% Confidence Intervals ranged from 304.0 to 855.4 joules/g (dry weight basis). In order resolve this discrepancy, total organic carbon (TOC) and Cyanide (CN) analyses were requested on the samples that exceeded the notification limit.

None of the data indicate that the tank is "unsafe" when compared to the criteria in the Safety Screening Data Quality Objective (Dukelow, 1995) with the exception of the energetic results for two samples. High moisture content of approximately 75% in the tank and the one-sided 95-percent confidence interval for total alpha results are well below the notification limit. Furthermore, the vapor in the tank B-203 dome space is far below the 25% lower flammability limit (LFL) stated in the SAP. Therefore, the results show that this tank may be considered "conditionally" safe.

Hydrostatic head fluid (HHF), consisting of water with a lithium bromide tracer, was used to flush the drill bit (when plugged) during the sampling of this tank. However, no mention of HHF usage was recorded on the chain of custody forms which accompanied the samples to the laboratory, and consequently no HHF blank was taken. If needed, the HHF blank data from the tank 241-B-204 sampling event may be used. Bromide analysis by ion chromatography (IC) and lithium analysis by inductively coupled plasma atomic emission spectroscopy (ICP) are being performed to determine the extent of hydrostatic head fluid contamination in the samples. These results will be summarized in the final report for this analysis event.

SCOPE

This document serves as the 45-day report deliverable for the tank 241-B-203 core samples collected between November 20 and December 14, 1995. Each sample was received, extruded, and analyzed by the 222-S Laboratory in accordance with the SAP (Jo 1995).

This report includes the primary safety screening results (tank headspace flammability, DSC, TGA, total alpha, and bulk density or specific gravity) and copies of all DSC and TGA raw data scans as requested per the SAP. Photographs of the extruded segments were taken and, although not included in this report, are available.

SAMPLE RECEIPT AND EXTRUSION

Information on the receipt and extrusion of the core samples, including sampling date, sample receipt date, extrusion date, amount of sample, sample description, and laboratory sample numbers, is provided in Table 1. No separable organic liquid was observed in any of the segment, and one field blank was delivered to the 222-S Laboratory with core 120. Most solid segments were divided into upper and lower half-segments for analysis, in accordance with the SAP.

Table 1. Sample Receipt and Extrusion for Tank 241-B-203 Core Samples

Sample	Date Sampled	Date Received at Lab	Date Extruded	Sample Recovered	Sample Description	Sample Numbers
Core 115, Segment 1	11/20/95	11/21/95	11/29/95	Drainable Liquid: 155.3 g Whole Segment: 57.5 g Liner Liquid: 12.2 g	The drainable liquid was opaque and black in color. After approximately 30 minutes, black solids settled and liquid was clear. Estimated volume of the sample collected was 150 mL. Extruded approximately 3.5 inches of black sludge. Drainable liquid and sludge sample were archived.	Liner Liquid: S95T003833 Whole Segment Solid: S95T003847 Drainable Liquid: S95T003846
Core 115, Segment 2	11/21/95	11/21/95	11/12/95	None	N/A	N/A
Core 115, Segment 3	11/21/95	11/21/95	11/29/95	None	N/A	N/A
Core 115, Segment 4	11/21/95	11/21/95	11/29/95	Upper Half Solid: 110.0 g Liner Liquid: none	Extruded approximately 6 inches of solids. Solids were damp and black in color. Solids were a very soft sludge which retained its shape. No facies present. No drainable liquid. The sample was archived.	Upper Half Solid: S95T003848

Sample	Date Sampled	Date Received at Lab	Date Extruded	Sample Recovered	Sample Description	Sample Numbers
Core 115, Segment 5	11/24/95	11/29/95	12/14/95	Upper Half Solid: 150.6 g Lower Half Solid: 91.5 g Liner Liquid: < 5 mL	Extruded approximately 15 inches of solids. Solids were damp and black in color. Solids were a very soft sludge which retained its shape. No facies present. No drainable liquid. The sample was archived.	Upper Half Solid: S95T003921 Lower Half Solid: S95T003922
Core 115, Segment 6	11/25/95	11/29/95	12/14/95	Upper Half Solid: 159.0 g Lower Half Solid: 147.0 g Liner Liquid: none	Extruded approximately 17 inches of solids. Solids were damp and black in color. Solids were a very soft sludge which retained its shape. No facies present. No drainable liquid. The sample was archived.	Upper Half Solid: S95T003942 Lower Half Solid: S95T003937
Core 115, Segment 7	11/25/95	11/29/95	12/14/95	Upper Half Solid: 169.1 g Lower Half Solid: 148.9 g Liner Liquid: none	Extruded approximately 18 inches of solids. Solids were damp and black in color. Solids were a very soft sludge which retained its shape. No facies present. No drainable liquid. The sample was archived.	Upper Half Solid: S95T003943 Lower Half Solid: S95T003938

Sample	Date Sampled	Date Received at Lab	Date Extruded	Sample Recovered	Sample Description	Sample Numbers
Core 115, Segment 8	11/25/95	11/29/95	12/14/95	Upper Half Solid: 180.9 g Lower Half Solid: 180.0 g Liner Liquid: none	Extruded approximately 19 inches of solids. Solids were damp and black in color. Solids were a very soft sludge which retained its shape. No facies present. No drainable liquid. The sample was archived.	Upper Half Solid: S95T003944 Lower Half Solid: S95T003939
Core 115, Segment 9	11/25/95	11/29/95	12/14/95	Upper Half Solid: 163.7 g Lower Half Solid: 162.8 g Liner Liquid: none	Extruded approximately 19 inches of solids. Solids were damp and black in color. Solids were a very soft sludge which retained its shape. No facies present. No drainable liquid. The sample was archived.	Upper Half Solid: S95T003945 Lower Half Solid: S95T003940
Core 115, Segment 10	11/27/95	11/29/95	12/14/95	Upper Half Solid: 154.8 g Lower Half Solid: 149.7 g Liner Liquid: none	Extruded approximately 15 inches of solids. Solids were damp and black in color. Solids were a very soft sludge which retained its shape. No facies present. No drainable liquid. The sample was archived.	Upper Half Solid: S95T003946 Lower Half Solid: S95T003941

Sample	Date Sampled	Date Received at Lab	Date Extruded	Sample Recovered	Sample Description	Sample Numbers
Core 115, Segment 11	11/27/95	11/29/95	12/14/95	None	N/A	N/A
Core 120, Segment 1	12/04/95	12/06/95	12/16/95	Drainable Liquid: 29.8 g Liner Liquid: none	Drainable liquid was clear and light yellow in color. No solids were present. Estimated volume of the sample collected was 30 mL.	Drainable Liquid: S95T003958
Core 120, Segment 2	12/04/95	12/05/95	12/16/95	None	N/A	N/A
Core 120, Segment 3	12/04/95	12/05/95	12/16/95	None	N/A	N/A
Core 120, Segment 4	12/04/95	12/05/95	12/16/95	Upper Half Solid: 154.8 g Lower Half Solid: 95.4 g Liner Liquid: < 5 mL	Extruded approximately 14 inches of solids. Solids were damp and black in color. Solids were a very soft sludge which retained its shape. No facies present. No drainable liquid.	Upper Half Solid: S95T003965, S95T004048, S95T004077, S95T004087 Lower Half Solid: S95T003964, S95T004039, S95T004068, S95T004078, S95T004088

Sample	Date Sampled	Date Received at Lab	Date Extruded	Sample Recovered	Sample Description	Sample Numbers
Core 120, Segment 5	12/04/95	12/05/95	12/16/95	Upper Half Solid: 103.0 g Lower Half Solid: 101.0 g Liner Liquid: < 5 mL	Extruded approximately 12 inches of solids. Solids were damp and black in color. Solids were a very soft sludge which retained its shape. No facies present. No drainable liquid.	Upper Half Solid: S95T003966, S95T004049, S95T004097, S95T004105 Lower Half Solid: S95T003974, S95T004040, S95T004069, S95T004079, S95T004089
Core 120, Segment 6	12/04/95	12/05/95	12/16/95	Upper Half Solid: 138.7 g Lower Half Solid: 107.3 g Liner Liquid: < 5 mL	Extruded approximately 13 inches of solids. Solids were damp and black in color. Solids were a very soft sludge which retained its shape. No facies present. No drainable liquid.	Upper Half Solid: S95T003967, S95T004050, S95T004098, S95T004106 Lower Half Solid: S95T003975, S95T004041, S95T004070, S95T004080, S95T004090

Sample	Date Sampled	Date Received at Lab	Date Extruded	Sample Recovered	Sample Description	Sample Numbers
Core 120, Segment 7	12/05/95	12/05/95	12/16/95	Upper Half Solid: 163.6 g Lower Half Solid: 144.6 g Liner Liquid: < 5 mL	Extruded approximately 18 inches of solids. Solids were damp and black in color. Solids were a soft sludge which retained its shape. No facies present. No drainable liquid.	Upper Half Solid: S95T003698, S95T004051, S95T004099, S95T004107 Lower Half Solid: S95T003976, S95T004042, S95T004071, S956T004081, S95T004091
Core 120, Segment 8	12/05/95	12/06/95	12/17/95	Upper Half Solid: 172.7 g Lower Half Solid: 73.5 g Liner Liquid: < 5 mL	Extruded approximately 14 inches of solids. Solids were damp and black in color. Solids were a very soft sludge which retained its shape. No facies present. No drainable liquid.	Upper Half Solid: S95T003969, S95T004052, S95T004100, S95T004108 Lower Half Solid: S95T003977, S95T004043, S95T004072, S95T004082, S95T004092

Sample	Date Sampled	Date Received at Lab	Date Extruded	Sample Recovered	Sample Description	Sample Numbers
Core 120, Segment 9	12/05/95	12/06/95	12/17/95	Upper Half Solid: 125.6 g Lower Half Solid: 146.5 g Liner Liquid: < 5 mL	Extruded approximately 15 inches of solids. Solids were damp and black in color. Solids were a very soft sludge which retained its shape. No facies present. No drainable liquid.	Upper Half Solid: S95T003970, S95T004053, S95T004101, S95T004109 Lower Half Solid: S95T003978, S95T004044, S95T004073, S95T004083, S95T004093
Core 120, Segment 10	12/05/95	12/06/95	12/17/95 9	Upper Half Solid: 162.9 g Lower Half Solid: 182.7 g Liner Liquid: < 20 mL	Extruded approximately 19 inches of solids. Solids were damp and black in color. Solids were a very soft sludge which retained its shape. No facies present. No drainable liquid.	Upper Half Solid: S95T003971, S95T004054, S95T004102, S95T004110 Lower Half Solid: S95T003979, S95T004045, S95T004074, S95T004084, S95T004094

Sample	Date Sampled	Date Received at Lab	Date Extruded	Sample Recovered	Sample Description	Sample Numbers
Core 120, Segment 11	12/05/95	12/06/95	12/17/95	None	N/A	N/A
Core 120, Segment 12	12/06/95	12/06/95	12/17/95	None	N/A	N/A
Core 120, Segment 13	12/06/95	12/06/95	12/17/95	Upper Half Solid: 180.3 g Lower Half Solid: 195.4 g Liner Liquid: < 5 mL	Extruded approximately 19 inches of solids. Solids were damp and black in color. Solids were a very soft sludge which retained its shape. No facies present. No drainable liquid.	Upper Half Solid: S95T3972, S95T004055, S95T004103, S95T004111 Lower Half Solid: S95T003980, S95T004046, S95T004075, S95T004085, S95T004095

Sample	Date Sampled	Date Received at Lab	Date Extruded	Sample Recovered	Sample Description	Sample Numbers
Core 120, Segment 14	12/06/95	12/07/95	12/17/95	Upper Half Solid: 185.3 g Lower Half Solid: 187.3 g Liner Liquid: < 5 mL	Extruded approximately 19 inches of solids. Solids were damp and black in color. Solids were a very soft sludge which retained its shape. No facies present. No drainable liquid.	Upper Half Solid: S95T003973, S95T004056, S95T004104, S95T004112 Lower Half Solid: S95T003981, S95T004047, S95T004076, S95T004086, S95T004096
Field Blank	N/A	12/07/95	12/16/95	Field Blank: 259.5 g Liner Liquid: none	The field blank was a clear and colorless liquid; no solids observed or collected.	Field Blank: S95T003957

Sample	Date Sampled	Date Received at Lab	Date Extruded	Sample Recovered	Sample Description	Sample Numbers
Core 122, Segment 1	12/08/95	12/12/95	12/18/95	Drainable Liquid: 229.6 g Liner Liquid: none	Drainable liquid was opaque and black in color. After a while, black solid settled. The separated liquid was clear and colorless. Approximately 220 ml of drainable liquid was collected.	Drainable Liquid: S95T004003
Core 122, Segment 2	12/08/95	12/12/95	12/18/95	Whole Segment: 15.7 g Liner Liquid: none	Extruded approximately 1 inches of solids. Solids were damp and black in color. Solids were a very soft sludge. No facies present. No drainable liquid.	Whole Segment: S95T003996, S95T004007, S95T004021, S95T004023, S95T004025

Sample	Date Sampled	Date Received at Lab	Date Extruded	Sample Recovered	Sample Description	Sample Numbers
Core 122, Segment 3	12/08/95	12/11/95	12/18/95	Upper Half Solid: 146.5 g Lower Half Solid: 22.1 g Drainable Liquid: 25.3 g Liner Liquid: < 5 mL	Extruded approximately 10 inches of solids. Solids were damp and black in color. Solids were a very soft sludge which retained its shape. Collected approximately 40 mLs of black opaque drainable liquid. No facies present.	Drainable Liquid: S95T004004 Upper Half Solid: S95T004000, S95T004009, S95T004029, S95T004032 Lower Half Solid: S95T003997, S95T004008, S95T004022, S95T004024, S95T004026
Core 122, Segment 4	12/09/95	12/11/95	12/18/95	Upper Half Solid: 115.0 g Lower Half Solid: 126.7 g Liner Liquid: none	Extruded approximately 14 inches of solids. Solids were damp and black in color. Solids were a very soft sludge which retained its shape. No facies present. No drainable liquid.	Upper Half Solid: S95T004001, S95T004014, S95T004035, S95T004037 Lower Half Solid: S95T003998, S95T004012, S95T004027, S95T004030, S95T004033

Sample	Date Sampled	Date Received at Lab	Date Extruded	Sample Recovered	Sample Description	Sample Numbers
Core 122, Segment 5	12/09/95	12/11/95	12/18/95	Upper Half Solid: 158.6 g Lower Half Solid: 168.3 g Liner Liquid: none	Extruded approximately 17 inches of solids. Solids were damp and black in color. Solids were a very soft sludge which retained its shape. No facies present. No drainable liquid.	Upper Half Solid: S95T004002, S95T004015, S95T004036, S95T004038 Lower Half Solid: S95T003999, S95T004013, S95T004028, S95T004031, S95T004034
Core 122, Segment 6	12/11/95	12/19/95	12/21/95	Upper Half Solid: 174.9 g Lower Half Solid: 169.7 g Liner Liquid: < 10 mL	Extruded approximately 19 inches of solids. Solids were damp and black in color. Solids were a very soft sludge which retained its shape. No facies present. No drainable liquid.	Upper Half Solid: S95T004218, S95T004227, S95T004242, S95T004245 Lower Half Solid: S95T003211, S95T003265, S95T003291, S95T003317, S95T003338

Sample	Date Sampled	Date Received at Lab	Date Extruded	Sample Recovered	Sample Description	Sample Numbers
Core 122, Segment 7	12/11/95	12/19/95	12/21/95	Upper Half Solid: 170.2 g Lower Half Solid: 169.5 g Liner Liquid: < 5 mL	Extruded approximately 19 inches of solids. Solids were damp and black in color. Solids were a very soft sludge which retained its shape. No facies present. No drainable liquid.	Upper Half Solid: S95T004219, S95T004228, S95T004243, S95T004246 Lower Half Solid: S95T004215, S95T004234, S95T004222, S95T004240, S95T004237
Core 122, Segment 8	12/12/95	12/19/95	12/21/95	Upper Half Solid: 177.8 g Lower Half Solid: 184.6 g Liner Liquid: < 5 mL	Extruded approximately 19 inches of solids. Solids were damp and black in color. Solids were a very soft sludge which retained its shape. No facies present. No drainable liquid.	Upper Half Solid: S95T004220, S95T004229, S95T004244, S95T004247 Lower Half Solid: S95T004216, S95T004235, S95T004223, S95T004238, S95T004241

Sample	Date Sampled	Date Received at Lab	Date Extruded	Sample Recovered	Sample Description	Sample Numbers
Core 122, Segment 9	12/12/95	12/19/95	01/02/96	Upper Half Solid: 134.0 g Lower Half Solid: 132.0 g Liner Liquid: < 5 mL	Extruded approximately 14 inches of solids. Solids were damp and black in color. Solids were a very soft sludge which retained its shape. No facies present. No drainable liquid.	Upper Half Solid: S96T000026, S96T000038, S96T000074, S90T000080 Lower Half Solid: S96T000020, S96T000032, S96T000056, S96T000062, S96T000068
Core 122, Segment 10	12/13/95	12/19/95	01/02/96	Upper Half Solid: 169.8 g Lower Half Solid: 147.9 g Liner Liquid: < 5 mL	Extruded approximately 17 inches of solids. Solids were damp and black in color. Solids were a very soft sludge which retained its shape. No facies present. No drainable liquid.	Upper Half Solid: S96T000027, S96T000039, S96T000075, S96T000081 Lower Half Solid: S96T000021, S96T000033 S96T000057, S96T000063, S96T000069

Sample	Date Sampled	Date Received at Lab	Date Extruded	Sample Recovered	Sample Description	Sample Numbers
Core 122, Segment 11	12/13/95	12/19/95	01/02/96	Upper Half Solid: 81.5 g Lower Half Solid: 108.6 g Liner Liquid: < 5 mL	Extruded approximately 10 inches of solids. Solids were damp and black in color. Solids were soft sludge which retained its shape. No facies present. No drainable liquid.	Upper Half Solid: S96T000028, S96T000040, S96T000076, S96T000082 Lower Half Solid: S96T000022, S96T000034, S96T000058, S96T000064, S96T000070
Core 122, Segment 12	12/13/95	12/19/95	01/02/96	Upper Half Solid: 132.8 g Lower Half Solid: 144.4 g Liner Liquid: < 5 mL	Extruded approximately 15 inches of solids. Solids were damp and black in color. Solids were a soft sludge which retained its shape. No facies present. No drainable liquid.	Upper Half Solid: S96T000029, S96T000041, S96T000077, S96T000083 Lower Half Solid: S96T000023, S96T000035, S96T000059, S96T000065, S96T000071

Sample	Date Sampled	Date Received at Lab	Date Extruded	Sample Recovered	Sample Description	Sample Numbers
Core 122, Segment 13	12/14/95	12/19/95	01/03/96	Upper Half Solid: 130.7 g Lower Half Solid: 127.2 g Liner Liquid: < 15 mL	Extruded approximately 14 inches of solids. Solids were damp and black in color. Solids were a soft sludge which retained its shape. No facies present. No drainable liquid.	Upper Half Solid: S96T000030, S96T000042, S96T000078, S96T000084 Lower Half Solid: S96T000024, S96T000036, S96T000060, S96T000066, S96T000072
Core 122, Segment 14	12/14/95	12/19/95	01/03/96	Upper Half Solid: 182.8 g Lower Half Solid: 183.9 g Liner Liquid: < 5 mL	Extruded approximately 19 inches of solids. Solids were damp and black in color. Solids were a soft sludge which retained its shape. No facies present. No drainable liquid.	Upper Half Solid: S96T000031, S96T000043, S96T000079, S96T000085 Lower Half Solid: S96T000025, S96T000037, S96T000061, S96T000067, S96T000073

TANK HEADSPACE FLAMMABILITY

Prior to core sampling, the flammability of the tank headspace was measured to address the vapor flammability issue of the safety screening data quality objective (Dukelow, et al. 1995). The tank vapor space was sampled periodically from October 25 through December 14, 1995 to determine the flammability of the vapor space gasses. Sampling was done through risers 2, 4, 6 and 7 in the dome space. The average combustible gas meter reading was 0 percent of the LFL (attachment), indicating no flammability concerns with this tank.

ANALYTICAL RESULTS

Analytical results appear in the Sample Data Summary and a discussion of the results is presented below. Any deviations from the requirements of the SAP are noted in the following sections.

TGA (Moisture)

The weight percent water by TGA was performed under a nitrogen purge using either procedure LA-560-112, Rev B-1 on a Mettler TG 50 instrument or procedure LA-514-114, Rev. C-1 on a Perkin Elmer TGA 7 instrument.

Results ranged from 48.49 to 81.33 weight percent water for the solids with most results in the mid- to upper- 70 percent range. Drainable liquids ranged from 88.71 to 89.87 weight percent water. The one liner liquid sample (Core 115, segment 1) that was analyzed had an average result of 93.54 weight percent water. All standards run with the samples had recoveries which fell within the required range of 90 to 110 percent. Relative percent differences (RPDs) between sample and duplicate analyses were below the required 10 percent criterion for all but two samples. The RPDs for samples S96T000043 and S95T004229 were 12.6 and 46.5 percent respectively; reruns were not requested for sample S96T000043 because there were no exotherms observed in the DSC runs for the sample. Sample S95T004229 also exhibited no energetics; however, because of the relatively low TGA result of 48.49 percent for the sample and the high RPD, a rerun for TGA was requested. The results will be provided in a revision of this data package.

DSC

Differential scanning calorimetry analyses under a nitrogen purge were performed using either procedure LA-514-113, Rev. C-1 on a Mettler DSC 20 instrument or procedure LA-514-114, Rev. C-1 on a Perkin Elmer DSC 7 instrument. It should be noted that the DSC scans from these two instruments show exotherms differently; exotherms on the Perkin Elmer are shown as downward peaks while the Mettler shows them as upward peaks. Using the average percent water by TGA for each sample, dry weight basis results were calculated from the wet weight basis results. Both wet and dry results are given in the Sample Data Summary.

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Forty-five out of forty-eight of the samples showed no exotherm. Two of the three samples which had observable energetics had DSC exotherms that exceeded the action limit of 480 joules/g (dry weight basis) stated in the SAP (Jo, 1995) and the Safety Screening Data Quality Objective (Dukelow, 1995). Appropriate notifications of a limit violation were made and reruns were requested for both samples. The results of triplicate and duplicate reruns showed no exothermic reaction for neither of the samples. For one of these samples (liquid, sample number S95T003958), the thermogram for the primary sample results showed an exotherm beginning at approximately 350 °C. However, the duplicate thermogram for the same sample showed an endotherm beginning at this temperature. In order resolve this discrepancy, TOC analyses on both samples and CN analyses (on sample S96T000033 only) were requested. These results will be provided in a revision of this data package.

For the three samples with DSC results above zero joules/g, the upper limit of a one-sided 95% Confidence Interval were calculated (see attachment). The upper limit of the 95% Confidence Intervals ranged from 304.0 to 855.4 joules/g (dry weight basis).

All standards run with the samples had recoveries which fell within the required range of 90 to 110 percent. RPDs between the sample and duplicate sample analyses were below 10 percent for all but two of the samples. The RPDs for these two samples were 62.1 and 200 percent and reruns for these samples were completed. The rerun results showed no exotherms; therefore, the RPDs were zero for both samples.

Total Alpha

The total alpha analyses were performed using procedure LA-508-101, Rev. D-2. Solid samples were prepared by fusion prior to the total alpha analysis; the fusion was performed using procedure LA-549-141, Rev. D-0.

Individual sample and duplicate results ranged from 0.098 µCi/g to 0.295 µCi/g in the solids and 7.49E-05 to 1.33E-04 µCi/mL in the drainable liquids. The low sample activities and high dissolved solids in the samples resulted in high RPDs and low spike recoveries for the tank 241-B-203 samples. Four samples have spike recoveries out of range (from 36.7 to 75.0 percent) and 8 RPDs were above the 10 percent criterion with RPDs ranging from 12.5 to 56 percent. Two standard recovery were out of limits with values of 85.71 percent (which affected four samples) and 85.39 percent (which affected two samples).

The one-sided 95-percent upper confidence interval limit was calculated for samples where the total alpha results were above the detection limit. Results are presented in the attachment. The upper confidence intervals ranged from 1.04E-04 µCi/mL to 2.12E-04 µCi/mL for liquid samples and 1.01E-01 µCi/g to 6.37E-01 µCi/g for solids. All of these results are well below the notification limit of 41 µCi/g; therefore, no reruns were requested.

Bulk Density and Specific Gravity

Bulk density measurements were performed on the solid samples using procedure LO-160-103, Rev. A-7, and specific gravity measurements were performed on the liquid samples using procedure LA-510-112, Rev. C-3.

Bulk densities of the solids ranged from 1.09 to 1.27 g/mL. A density of 1.5 g/mL is assumed in converting the total alpha notification limit from g/L of plutonium to µCi/g. A value below 1.5 is conservative; therefore, the total alpha notification limit does not need to be adjusted. The specific gravities of the liquids ranged from 1.031 to 1.064 g/mL. The standard recoveries for the specific gravity measurement was 97.00 and 97.74 percent.

Project Coordinator: Jaiduk Jo

REFERENCES

Dukelow, G. T., J. W. Hunt, H. Babad, and J. E. Meacham, 1995, *Tank Safety Screening Data Quality Objective*, WHC-SD-WM-SP-004, Rev. 2, Westinghouse Hanford Company, Richland, Washington.

Jo, J., 1995, *Tank 241-B-203 Push Mode Core Sampling and Analysis Plan*, WHC-SD-WM-TSAP-003, Rev. 1, Westinghouse Hanford Company, Richland, Washington.

SAMPLE DATA SUMMARY

INTERIM

B-203 45-Day Safety Screening Report
B-203

CORE NUMBER: 115
SEGMENT #: 1

SEGMENT PORTION: Liner Liquid

Sample#	R	A#	Analyte	Unit	Action Limits Lower	Action Limits Upper	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err%
S95T003833			% Water by TGA using Mettler	%	None	None	101.1	n/a	93.71	93.37	93.54	0.36	n/a	n/a	n/a
S95T003833			Specific Gravity	Sp.G.	None	None	97.00	n/a	1.031	1.032	1.031	0.10	n/a	1.00e-03	n/a
S95T003833			DSC Exotherm on Perkin Elmer	Joules/g	None	None	100.6	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a
S95T003833			DSC Exotherm Dry Calculated	Joules/g Dry	None	None	n/a	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a
S95T003833			Alpha in Liquid Samples	uCi/mL	None	None	100.0	<2.88e-06	6.71e-05	5.53e-05	6.12e-05	19.3	n/a	7.71e-06	2.26E+01

=> Limit violated
=> Selected Limit

INTERIM

INTERIM

B-203 45-Day Safety Screening Report
B-203

CORE NUMBER: 120
SEGMENT #: FB

SEGMENT PORTION: Field Blank

Sample#	R	A#	Analyte	Unit	Action Limits Lower	Action Limits Upper	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err%
S95T003957			% Water by TGA using Mettler	%	None	None	102.3	n/a	100.8	100.2	100.5	0.60	n/a	n/a	n/a
S95T003957			Specific Gravity	Sp.G.	None	None	97.00	n/a	9.78e-01	9.74e-01	9.76e-01	0.41	n/a	1.00e-03	n/a
S95T003957			DSC Exotherm Dry Calculated	Joules/g Dry	None	None	n/a	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a
S95T003957			DSC Exotherm using Mettler	Joules/g	None	None	109.3	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a
S95T003957			Alpha in Liquid Samples	uCi/mL	None	None	100.0	<2.88e-06	6.07e-07	<5.67E-7	n/a	n/a	104.3	7.71e-07	1.01E+02

=> Limit violated
=> Selected Limit

INTERIM

INTERIM

B-203 45-Day Safety Screening Report
B-203

CORE NUMBER: 120
SEGMENT #: 1

SEGMENT PORTION: Drainable Liquid

Sample#	R	A#	Analyte	Unit	Action Limits Lower	Action Limits Upper	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err%
S95T003958			% Water by TGA using Mettler	%	None	None	102.4	n/a	88.71	89.63	89.17	1.03	n/a	n/a	n/a
S95T003958			Specific Gravity	Sp.G.	None	None	97.00	n/a	1.045	1.054	1.050	0.86	n/a	1.00e-03	n/a
S95T003958			DSC Exotherm Dry Calculated	Joules/g Dry	None	None	n/a	n/a	1.62e+03	0.00e+00	810.5	200	n/a	n/a	n/a
S95T003958	1		DSC Exotherm using Mettler	Joules/g	None	None	108.6	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a
S95T003958			DSC Exotherm using Mettler	Joules/g	None	None	109.3	n/a	175.6	0.00e+00	87.80	200	n/a	n/a	n/a
S95T003958			Alpha in Liquid Samples	uCi/mL	None	None	100.0	<2.88e-06	1.23e-04	1.33e-04	1.28e-04	7.81	n/a	7.71e-06	1.55E+01

=> Limit violated
=> Selected Limit

INTERIM

INTERIM

B-203 45-Day Safety Screening Report
B-203

CORE NUMBER: 120
SEGMENT #: 4

SEGMENT PORTION: U Upper Half of Segment

Sample#	R	A#	Analyte	Unit	Action Limits Lower	Action Limits Upper	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err%
S95T003965			Bulk Density of Sample	g/mL	None	None	n/a	n/a	1.210	n/a	n/a	n/a	n/a	5.00e-01	n/a
S95T004048			% Water by TGA using Mettler	%	None	None	101.5	n/a	81.33	81.12	81.22	0.26	n/a	n/a	n/a
S95T004048			DSC Exotherm Dry Calculated	Joules/g Dry	-1.0e+00	480.0	n/a	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a
S95T004048			DSC Exotherm using Mettler	Joules/g	None	None	106.2	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a

L Lower Half of Segment: L Lower Half of Segment

Sample#	R	A#	Analyte	Unit	Action Limits Lower	Action Limits Upper	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err%
S95T003964			Bulk Density of Sample	g/mL	None	None	n/a	n/a	1.180	n/a	n/a	n/a	n/a	5.00e-01	n/a
S95T004039			% Water by TGA using Mettler	%	None	None	100.4	n/a	81.18	80.88	81.03	0.37	n/a	n/a	n/a
S95T004039			DSC Exotherm Dry Calculated	Joules/g Dry	-1.0e+00	480.0	n/a	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a
S95T004039			DSC Exotherm using Mettler	Joules/g	None	None	110.7	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a
S95T004088	F		Alpha of Digested Solid	uCi/g	-1.0e+00	41.00	85.71	2.200	2.15e-01	2.52e-01	2.33e-01	15.8	75.00	3.94e-03	7.44E+00

=> Limit violated
=> Selected Limit

INTERIM

INTERIM

B-203 45-Day Safety Screening Report
B-203

CORE NUMBER: 120
SEGMENT #: 5

SEGMENT PORTION: U Upper Half of Segment

Sample#	R	A#	Analyte	Unit	Action Limits Lower	Action Limits Upper	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err%
S95T003966			Bulk Density of Sample	g/mL	None	None	n/a	n/a	1.150	n/a	n/a	n/a	n/a	5.00e-01	n/a
S95T003967			Bulk Density of Sample	g/mL	None	None	n/a	n/a	1.170	n/a	n/a	n/a	n/a	5.00e-01	n/a
S95T004049			% Water by TGA using Mettler	%	None	None	99.31	n/a	78.16	76.38	77.27	2.30	n/a	n/a	n/a
S95T004049			DSC Exotherm Dry Calculated	Joules/g Dry	-1.0e+00	480.0	n/a	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a
S95T004049			DSC Exotherm using Mettler	Joules/g	None	None	106.9	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a

L Lower Half of Segment: L Lower Half of Segment

Sample#	R	A#	Analyte	Unit	Action Limits Lower	Action Limits Upper	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err%
S95T003974			Bulk Density of Sample	g/mL	None	None	n/a	n/a	1.150	n/a	n/a	n/a	n/a	5.00e-01	n/a
S95T004040			% Water by TGA using Mettler	%	None	None	100.4	n/a	77.91	79.02	78.47	1.41	n/a	n/a	n/a
S95T004040			DSC Exotherm Dry Calculated	Joules/g Dry	-1.0e+00	480.0	n/a	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a
S95T004040			DSC Exotherm using Mettler	Joules/g	None	None	110.7	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a
S95T004089	F		Alpha of Digested Solid	uCi/g	-1.0e+00	41.00	85.71	2.200	2.54e-01	2.21e-01	2.37e-01	13.9	n/a	3.87e-03	6.82E+00

=> Limit violated
=> Selected Limit

INTERIM

INTERIM

B-203 45-Day Safety Screening Report
B-203

CORE NUMBER: 120
SEGMENT #: 6

SEGMENT PORTION: U Upper Half of Segment

Sample#	R	A#	Analyte	Unit	Action Limits Lower	Action Limits Upper	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err%
S95T004050			% Water by TGA using Mettler	%	None	None	99.31	n/a	74.60	75.87	75.23	1.69	n/a	n/a	n/a
S95T004050			DSC Exotherm Dry Calculated	Joules/g Dry	-1.0e+00	480.0	n/a	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a
S95T004050			DSC Exotherm using Mettler	Joules/g	None	None	106.9	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a

L Lower Half of Segment: L Lower Half of Segment

Sample#	R	A#	Analyte	Unit	Action Limits Lower	Action Limits Upper	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err%
S95T003975			Bulk Density of Sample	g/mL	None	None	n/a	n/a	1.180	n/a	n/a	n/a	n/a	5.00e-01	n/a
S95T004041			% Water by TGA using Mettler	%	None	None	100.6	n/a	77.84	76.91	77.38	1.20	n/a	n/a	n/a
S95T004041			DSC Exotherm Dry Calculated	Joules/g Dry	-1.0e+00	480.0	n/a	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a
S95T004041			DSC Exotherm using Mettler	Joules/g	None	None	112.1	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a
S95T004090		F	Alpha of Digested Solid	uCi/g	-1.0e+00	41.00	85.71	2.200	1.96e-01	2.37e-01	2.16e-01	18.9	n/a	4.16e-03	7.92E+00

=> Limit violated
=> Selected Limit

INTERIM

30

INTERIM

B-203 45-Day Safety Screening Report
B-203

CORE NUMBER: 120
SEGMENT #: 7

SEGMENT PORTION: U Upper Half of Segment

Sample#	R	A#	Analyte	Unit	Action Limits Lower	Action Limits Upper	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err%
S95T003968			Bulk Density of Sample	g/mL	None	None	n/a	n/a	1.170	n/a	n/a	n/a	n/a	5.00e-01	n/a
S95T004051			% Water by TGA using Mettler	%	None	None	99.31	n/a	73.40	69.29	71.34	5.76	n/a	n/a	n/a
S95T004051			DSC Exotherm Dry Calculated	Joules/g Dry	-1.0e+00	480.0	n/a	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a
S95T004051			DSC Exotherm using Mettler	Joules/g	None	None	106.9	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a

L Lower Half of Segment: L Lower Half of Segment

Sample#	R	A#	Analyte	Unit	Action Limits Lower	Action Limits Upper	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err%
S95T003976			Bulk Density of Sample	g/mL	None	None	n/a	n/a	1.170	n/a	n/a	n/a	n/a	5.00e-01	n/a
S95T004042			% Water by TGA using Mettler	%	None	None	100.6	n/a	79.88	80.03	79.95	0.19	n/a	n/a	n/a
S95T004042			DSC Exotherm Dry Calculated	Joules/g Dry	-1.0e+00	480.0	n/a	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a
S95T004042			DSC Exotherm using Mettler	Joules/g	None	None	112.1	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a
S95T004091	F		Alpha of Digested Solid	uCi/g	-1.0e+00	41.00	85.71	2.200	1.99e-01	1.81e-01	1.90e-01	9.47	n/a	4.05e-03	7.83E+00

=> Limit violated
=> Selected Limit

INTERIM

INTERIM

B-203 45-Day Safety Screening Report
B-203

CORE NUMBER: 120
SEGMENT #: 8

SEGMENT PORTION: U Upper Half of Segment

Sample#	R	A#	Analyte	Unit	Action Limits Lower	Action Limits Upper	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err%
S95T003969			Bulk Density of Sample	g/mL	None	None	n/a	n/a	1.200	n/a	n/a	n/a	n/a	5.00e-01	n/a
S95T004052			% Water by TGA using Mettler	%	None	None	99.31	n/a	75.28	76.29	75.78	1.33	n/a	n/a	n/a
S95T004052			DSC Exotherm Dry Calculated	Joules/g Dry	-1.0e+00	480.0	n/a	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a
S95T004052			DSC Exotherm using Mettler	Joules/g	None	None	106.9	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a

L Lower Half of Segment: L Lower Half of Segment

Sample#	R	A#	Analyte	Unit	Action Limits Lower	Action Limits Upper	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err%
S95T003977			Bulk Density of Sample	g/mL	None	None	n/a	n/a	1.190	n/a	n/a	n/a	n/a	5.00e-01	n/a
S95T004043			% Water by TGA on Perkin Elmer	%	None	None	101.5	n/a	72.89	72.24	72.56	0.90	n/a	n/a	n/a
S95T004043			DSC Exotherm on Perkin Elmer	Joules/g	None	None	99.33	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a
S95T004043			DSC Exotherm Dry Calculated	Joules/g Dry	-1.0e+00	480.0	n/a	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a
S95T004092	F		Alpha of Digested Solid	uCi/g	-1.0e+00	41.00	96.75	<3.05e-03	2.41e-01	2.44e-01	2.42e-01	1.24	n/a	4.63e-03	7.10E+00

=> Limit violated
=> Selected Limit

INTERIM

INTERIM

B-203 45-Day Safety Screening Report
B-203

CORE NUMBER: 120
SEGMENT #: 9

SEGMENT PORTION: U Upper Half of Segment

Sample#	R	A#	Analyte	Unit	Action Limits Lower	Action Limits Upper	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err%
S95T003970			Bulk Density of Sample	g/mL	None	None	n/a	n/a	1.230	n/a	n/a	n/a	n/a	5.00e-01	n/a
S95T004053			% Water by TGA using Mettler	%	None	None	95.45	n/a	72.99	75.25	74.12	3.05	n/a	n/a	n/a
S95T004053			DSC Exotherm Dry Calculated	Joules/g Dry	-1.0e+00	480.0	n/a	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a
S95T004053			DSC Exotherm using Mettler	Joules/g	None	None	92.79	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a

L Lower Half of Segment: L Lower Half of Segment

Sample#	R	A#	Analyte	Unit	Action Limits Lower	Action Limits Upper	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err%
S95T003978			Bulk Density of Sample	g/mL	None	None	n/a	n/a	1.210	n/a	n/a	n/a	n/a	5.00e-01	n/a
S95T004044			% Water by TGA on Perkin Elmer	%	None	None	101.7	n/a	70.39	72.84	71.62	3.42	n/a	n/a	n/a
S95T004044			DSC Exotherm on Perkin Elmer	Joules/g	None	None	100.6	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a
S95T004044			DSC Exotherm Dry Calculated	Joules/g Dry	-1.0e+00	480.0	n/a	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a
S95T004093		F	Alpha of Digested Solid	uCi/g	-1.0e+00	41.00	96.75	<3.05e-03	2.19e-01	2.41e-01	2.30e-01	9.57	n/a	4.94e-03	7.93E+00

=> Limit violated
=> Selected Limit

INTERIM

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B-203 45-Day Safety Screening Report
B-203

CORE NUMBER: 120
SEGMENT #: 10

SEGMENT PORTION: U Upper Half of Segment

Sample#	R	A#	Analyte	Unit	Action Limits Lower	Action Limits Upper	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err%
S95T003971			Bulk Density of Sample	g/mL	None	None	n/a	n/a	1.190	n/a	n/a	n/a	n/a	5.00e-01	n/a
S95T004054			% Water by TGA using Mettler	%	None	None	95.45	n/a	76.49	76.75	76.62	0.34	n/a	n/a	n/a
S95T004054			DSC Exotherm Dry Calculated	Joules/g Dry	-1.0e+00	480.0	n/a	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a
S95T004054			DSC Exotherm using Mettler	Joules/g	None	None	92.79	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a

L Lower Half of Segment: L Lower Half of Segment

Sample#	R	A#	Analyte	Unit	Action Limits Lower	Action Limits Upper	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err%
S95T003979			Bulk Density of Sample	g/mL	None	None	n/a	n/a	1.170	n/a	n/a	n/a	n/a	5.00e-01	n/a
S95T004045			% Water by TGA using Mettler	%	None	None	101.6	n/a	76.98	75.52	76.25	1.91	n/a	n/a	n/a
S95T004045			DSC Exotherm Dry Calculated	Joules/g Dry	-1.0e+00	480.0	n/a	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a
S95T004045			DSC Exotherm using Mettler	Joules/g	None	None	107.9	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a
S95T004094	F		Alpha of Digested Solid	uCi/g	-1.0e+00	41.00	96.75	<3.05e-03	2.21e-01	2.06e-01	2.13e-01	7.03	n/a	4.93e-03	7.68E+00

=> Limit violated
=> Selected Limit

INTERIM

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B-203 45-Day Safety Screening Report
B-203

CORE NUMBER: 120
SEGMENT #: 13

SEGMENT PORTION: U Upper Half of Segment

Sample#	R	A#	Analyte	Unit	Action Limits Lower	Action Limits Upper	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err%
S95T003972			Bulk Density of Sample	g/mL	None	None	n/a	n/a	1.090	n/a	n/a	n/a	n/a	5.00e-01	n/a
S95T004055			% Water by TGA using Mettler	%	None	None	102.1	n/a	74.63	76.38	75.50	2.32	n/a	n/a	n/a
S95T004055			DSC Exotherm Dry Calculated	Joules/g Dry	-1.0e+00	480.0	n/a	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a
S95T004055			DSC Exotherm using Mettler	Joules/g	None	None	109.0	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a

L Lower Half of Segment: L Lower Half of Segment

Sample#	R	A#	Analyte	Unit	Action Limits Lower	Action Limits Upper	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err%
S95T003980			Bulk Density of Sample	g/mL	None	None	n/a	n/a	1.170	n/a	n/a	n/a	n/a	5.00e-01	n/a
S95T004046			% Water by TGA using Mettler	%	None	None	101.6	n/a	77.15	77.85	77.50	0.90	n/a	n/a	n/a
S95T004046			DSC Exotherm Dry Calculated	Joules/g Dry	-1.0e+00	480.0	n/a	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a
S95T004046			DSC Exotherm using Mettler	Joules/g	None	None	107.9	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a
S95T004095		F	Alpha of Digested Solid	uCi/g	-1.0e+00	41.00	96.75	<3.05e-03	1.70e-01	1.71e-01	1.71e-01	0.59	n/a	4.32e-03	8.46E+00

=> Limit violated
=> Selected Limit

INTERIM

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B-203 45-Day Safety Screening Report
B-203

CORE NUMBER: 120
SEGMENT #: 14

SEGMENT PORTION: U Upper Half of Segment

Sample#	R	A#	Analyte	Unit	Action Limits Lower	Action Limits Upper	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err%
S95T003973			Bulk Density of Sample	g/mL	None	None	n/a	n/a	1.200	n/a	n/a	n/a	n/a	5.00e-01	n/a
S95T004056			% Water by TGA using Mettler	%	None	None	102.1	n/a	75.04	73.13	74.09	2.58	n/a	n/a	n/a
S95T004056			DSC Exotherm Dry Calculated	Joules/g Dry	-1.0e+00	480.0	n/a	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a
S95T004056			DSC Exotherm using Mettler	Joules/g	None	None	109.0	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a

L Lower Half of Segment: L Lower Half of Segment

Sample#	R	A#	Analyte	Unit	Action Limits Lower	Action Limits Upper	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err%
S95T003981			Bulk Density of Sample	g/mL	None	None	n/a	n/a	1.190	n/a	n/a	n/a	n/a	5.00e-01	n/a
S95T004047			% Water by TGA using Mettler	%	None	None	101.5	n/a	78.00	77.98	77.99	0.03	n/a	n/a	n/a
S95T004047			DSC Exotherm Dry Calculated	Joules/g Dry	-1.0e+00	480.0	n/a	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a
S95T004047			DSC Exotherm using Mettler	Joules/g	None	None	106.2	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a
S95T004096	F		Alpha of Digested Solid	uCi/g	-1.0e+00	41.00	96.75	<3.05e-03	1.94e-01	1.80e-01	1.87e-01	7.49	n/a	4.88e-03	8.34E+00

=> Limit violated
=> Selected Limit

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B-203 45-Day Safety Screening Report
B-203

CORE NUMBER: 122
SEGMENT #: 1

SEGMENT PORTION: Drainable Liquid

Sample#	R	A#	Analyte	Unit	Action Limits Lower	Action Limits Upper	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err%
S95T004003			% Water by TGA using Mettler	%	None	None	102.1	n/a	89.67	89.87	89.77	0.22	n/a	n/a	n/a
S95T004003			Specific Gravity	Sp.G.	None	None	97.74	n/a	1.054	1.059	1.056	0.47	n/a	1.00e-03	n/a
S95T004003			DSC Exotherm Dry Calculated	Joules/g Dry	None	None	n/a	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a
S95T004003			DSC Exotherm using Mettler	Joules/g	None	None	100.9	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a
S95T004003			Alpha in Liquid Samples	uCi/mL	None	None	90.91	<6.37e-06	7.49e-05	8.28e-05	7.88e-05	10.0	57.91	1.45e-05	2.23E+01

=> Limit violated
=> Selected Limit

37

INTERIM

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B-203 45-Day Safety Screening Report
B-203

CORE NUMBER: 122
SEGMENT #: 2

SEGMENT PORTION: W Whole Segment

Sample#	R	A#	Analyte	Unit	Action Limits Lower	Action Limits Upper	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err%
S95T004007			% Water by TGA using Mettler	%	None	None	101.7	n/a	78.40	77.57	77.98	1.06	n/a	n/a	n/a
S95T004007			DSC Exotherm Dry Calculated	Joules/g Dry	-1.0e+00	480.0	n/a	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a
S95T004007			DSC Exotherm using Mettler	Joules/g	None	None	109.3	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a
S95T004025	F		Alpha of Digested Solid	uCi/g	-1.0e+00	41.00	85.39	<3.34e-04	1.79e-01	2.26e-01	2.03e-01	23.2	36.73	7.98e-04	3.40E+00

=> Limit violated
=> Selected Limit

INTERIM

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B-203 45-Day Safety Screening Report
B-203

CORE NUMBER: 122
SEGMENT #: 3

SEGMENT PORTION: U Upper Half of Segment

Sample#	R	A#	Analyte	Unit	Action Limits Lower	Action Limits Upper	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err%
S95T004000			Bulk Density of Sample	g/mL	None	None	n/a	n/a	1.180	n/a	n/a	n/a	n/a	5.00e-01	n/a
S95T004009			% Water by TGA on Perkin Elmer	%	None	None	102.2	n/a	81.03	80.81	80.92	0.27	n/a	n/a	n/a
S95T004009			DSC Exotherm on Perkin Elmer	Joules/g	None	None	99.75	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a
S95T004009			DSC Exotherm Dry Calculated	Joules/g Dry	-1.0e+00	480.0	n/a	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a

L Lower Half of Segment: L Lower Half of Segment

Sample#	R	A#	Analyte	Unit	Action Limits Lower	Action Limits Upper	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err%
S95T003997			Bulk Density of Sample	g/mL	None	None	n/a	n/a	1.180	n/a	n/a	n/a	n/a	5.00e-01	n/a
S95T004008			% Water by TGA using Mettler	%	None	None	101.7	n/a	78.31	78.67	78.49	0.46	n/a	n/a	n/a
S95T004008			DSC Exotherm Dry Calculated	Joules/g Dry	-1.0e+00	480.0	n/a	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a
S95T004008			DSC Exotherm using Mettler	Joules/g	None	None	109.3	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a
S95T004026	F		Alpha of Digested Solid	uCi/g	-1.0e+00	41.00	85.39	<3.34e-04	9.90e-02	9.82e-02	9.86e-02	0.81	n/a	1.28e-03	5.53E+00

Drainable Liquid: Drainable Liquid

Sample#	R	A#	Analyte	Unit	Action Limits Lower	Action Limits Upper	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err%
S95T004004			% Water by TGA using Mettler	%	None	None	102.1	n/a	89.38	89.28	89.33	0.11	n/a	n/a	n/a
S95T004004			Specific Gravity	Sp.G.	None	None	97.74	n/a	1.064	1.048	1.056	1.52	n/a	1.00e-03	n/a
S95T004004			DSC Exotherm Dry Calculated	Joules/g Dry	None	None	n/a	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a
S95T004004			DSC Exotherm using Mettler	Joules/g	None	None	100.9	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a
S95T004004			Alpha in Liquid Samples	uCi/mL	None	None	90.91	<6.37e-06	7.85e-05	1.15e-04	9.67e-05	37.7	60.97	1.45e-05	2.22E+01

=> Limit violated
=> Selected Limit

INTERIM

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B-203 45-Day Safety Screening Report
B-203

CORE NUMBER: 122
SEGMENT #: 4

SEGMENT PORTION: U Upper Half of Segment

Sample#	R	A#	Analyte	Unit	Action Limits Lower	Action Limits Upper	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err%
S95T004001			Bulk Density of Sample	g/mL	None	None	n/a	n/a	1.160	n/a	n/a	n/a	n/a	5.00e-01	n/a
S95T004014			% Water by TGA using Mettler	%	None	None	102.1	n/a	80.91	80.39	80.65	0.64	n/a	n/a	n/a
S95T004014			DSC Exotherm on Perkin Elmer	Joules/g	None	None	96.17	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a
S95T004014			DSC Exotherm Dry Calculated	Joules/g Dry	-1.0e+00	480.0	n/a	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a

L Lower Half of Segment: L Lower Half of Segment

Sample#	R	A#	Analyte	Unit	Action Limits Lower	Action Limits Upper	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err%
S95T003998			Bulk Density of Sample	g/mL	None	None	n/a	n/a	1.150	n/a	n/a	n/a	n/a	5.00e-01	n/a
S95T004012			% Water by TGA on Perkin Elmer	%	None	None	102.2	n/a	80.93	79.96	80.44	1.21	n/a	n/a	n/a
S95T004012			DSC Exotherm on Perkin Elmer	Joules/g	None	None	99.75	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a
S95T004012			DSC Exotherm Dry Calculated	Joules/g Dry	-1.0e+00	480.0	n/a	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a
S95T004033	F		Alpha of Digested Solid	uCi/g	-1.0e+00	41.00	109.1	<1.31e-04	2.16e-01	2.17e-01	2.16e-01	0.46	n/a	3.07e-04	2.05E+00

=> Limit violated
=> Selected Limit

INTERIM

B-203 45-Day Safety Screening Report
B-203

CORE NUMBER: 122
SEGMENT #: 5

SEGMENT PORTION: U Upper Half of Segment

Sample#	R	A#	Analyte	Unit	Action Limits Lower	Action Limits Upper	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err%
S95T004002			Bulk Density of Sample	g/mL	None	None	n/a	n/a	1.150	n/a	n/a	n/a	n/a	5.00e-01	n/a
S95T004015			% Water by TGA using Mettler	%	None	None	102.7	n/a	77.57	79.00	78.28	1.83	n/a	n/a	n/a
S95T004015			DSC Exotherm on Perkin Elmer	Joules/g	None	None	96.34	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a
S95T004015			DSC Exotherm Dry Calculated	Joules/g Dry	-1.0e+00	480.0	n/a	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a

L Lower Half of Segment: L Lower Half of Segment

Sample#	R	A#	Analyte	Unit	Action Limits Lower	Action Limits Upper	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err%
S95T003999			Bulk Density of Sample	g/mL	None	None	n/a	n/a	1.160	n/a	n/a	n/a	n/a	5.00e-01	n/a
S95T004013			% Water by TGA on Perkin Elmer	%	None	None	101.2	n/a	72.31	70.29	71.30	2.83	n/a	n/a	n/a
S95T004013			DSC Exotherm on Perkin Elmer	Joules/g	None	None	96.17	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a
S95T004013			DSC Exotherm Dry Calculated	Joules/g Dry	-1.0e+00	480.0	n/a	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a
S95T004034	F		Alpha of Digested Solid	uCi/g	-1.0e+00	41.00	98.70	<2.35e-04	2.68e-01	2.62e-01	2.65e-01	2.26	n/a	5.42e-04	1.97E+00

=> Limit violated
=> Selected Limit

INTERIM

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B-203 45-Day Safety Screening Report
B-203

CORE NUMBER: 122
SEGMENT #: 6

SEGMENT PORTION: U Upper Half of Segment

Sample#	R	A#	Analyte	Unit	Action Limits Lower	Action Limits Upper	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err%
S95T004218			Bulk Density of Sample	g/mL	None	None	n/a	n/a	1.180	n/a	n/a	n/a	n/a	5.00e-01	n/a
S95T004227			% Water by TGA using Mettler	%	None	None	102.7	n/a	76.27	75.55	75.91	0.95	n/a	n/a	n/a
S95T004227			DSC Exotherm on Perkin Elmer	Joules/g	None	None	96.34	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a
S95T004227			DSC Exotherm Dry Calculated	Joules/g Dry	-1.0e+00	480.0	n/a	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a

L Lower Half of Segment: L Lower Half of Segment

Sample#	R	A#	Analyte	Unit	Action Limits Lower	Action Limits Upper	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err%
S95T004214			Bulk Density of Sample	g/mL	None	None	n/a	n/a	1.180	n/a	n/a	n/a	n/a	5.00e-01	n/a
S95T004233			% Water by TGA using Mettler	%	None	None	102.7	n/a	77.22	77.12	77.17	0.13	n/a	n/a	n/a
S95T004233			DSC Exotherm Dry Calculated	Joules/g Dry	-1.0e+00	480.0	n/a	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a
S95T004233			DSC Exotherm using Mettler	Joules/g	None	None	100.5	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a
S95T004236		F	Alpha of Digested Solid	uCi/g	-1.0e+00	41.00	98.70	<2.35e-04	2.01e-01	1.88e-01	1.95e-01	6.68	n/a	4.67e-04	2.19E+00

=> Limit violated
=> Selected Limit

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B-203 45-Day Safety Screening Report
B-203

CORE NUMBER: 122
SEGMENT #: 7

SEGMENT PORTION: U Upper Half of Segment

Sample#	R	A#	Analyte	Unit	Action Limits Lower	Action Limits Upper	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err%
S95T004219			Bulk Density of Sample	g/mL	None	None	n/a	n/a	1.170	n/a	n/a	n/a	n/a	5.00e-01	n/a
S95T004228			% Water by TGA on Perkin Elmer	%	None	None	101.7	n/a	77.93	76.87	77.40	1.37	n/a	n/a	n/a
S95T004228			DSC Exotherm on Perkin Elmer	Joules/g	None	None	100.4	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a
S95T004228			DSC Exotherm Dry Calculated	Joules/g Dry	-1.0e+00	480.0	n/a	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a

L Lower Half of Segment: L Lower Half of Segment

Sample#	R	A#	Analyte	Unit	Action Limits Lower	Action Limits Upper	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err%
S95T004215			Bulk Density of Sample	g/mL	None	None	n/a	n/a	1.180	n/a	n/a	n/a	n/a	5.00e-01	n/a
S95T004234			% Water by TGA using Mettler	%	None	None	102.7	n/a	76.35	78.18	77.27	2.37	n/a	n/a	n/a
S95T004234			DSC Exotherm Dry Calculated	Joules/g Dry	-1.0e+00	480.0	n/a	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a
S95T004234			DSC Exotherm using Mettler	Joules/g	None	None	100.5	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a
S95T004237		F	Alpha of Digested Solid	uCi/g	-1.0e+00	41.00	98.70	<2.35e-04	1.62e-01	1.43e-01	1.52e-01	12.5	n/a	4.82e-04	2.47E+00

=> Limit violated
=> Selected Limit

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B-203 45-Day Safety Screening Report
B-203

CORE NUMBER: 122
SEGMENT #: 8

SEGMENT PORTION: U Upper Half of Segment

Sample#	R	A#	Analyte	Unit	Action Limits Lower	Action Limits Upper	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err%
S95T004220			Bulk Density of Sample	g/mL	None	None	n/a	n/a	1.160	n/a	n/a	n/a	n/a	5.00e-01	n/a
S95T004229			% Water by TGA on Perkin Elmer	%	None	None	101.7	n/a	48.49	77.90	63.20	46.5	n/a	n/a	n/a
S95T004229			DSC Exotherm on Perkin Elmer	Joules/g	None	None	100.4	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a
S95T004229			DSC Exotherm Dry Calculated	Joules/g Dry	-1.0e+00	480.0	n/a	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a

L Lower Half of Segment: L Lower Half of Segment

Sample#	R	A#	Analyte	Unit	Action Limits Lower	Action Limits Upper	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err%
S95T004216			Bulk Density of Sample	g/mL	None	None	n/a	n/a	1.180	n/a	n/a	n/a	n/a	5.00e-01	n/a
S95T004235			% Water by TGA on Perkin Elmer	%	None	None	101.9	n/a	73.56	74.95	74.25	1.87	n/a	n/a	n/a
S95T004235			DSC Exotherm on Perkin Elmer	Joules/g	None	None	100.4	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a
S95T004235			DSC Exotherm Dry Calculated	Joules/g Dry	-1.0e+00	480.0	n/a	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a
S95T004238		F	Alpha of Digested Solid	uCi/g	-1.0e+00	41.00	98.70	<2.35e-04	2.23e-01	1.89e-01	2.06e-01	16.5	n/a	4.58e-04	2.02E+00

=> Limit violated
=> Selected Limit

INTERIM

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B-203 45-Day Safety Screening Report
B-203

CORE NUMBER: 122
SEGMENT #: 9

SEGMENT PORTION: U Upper Half of Segment

Sample#	R	A#	Analyte	Unit	Action Limits Lower	Action Limits Upper	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err%
S96T000026			Bulk Density of Sample	g/mL	None	None	n/a	n/a	1.220	n/a	n/a	n/a	n/a	5.00e-01	n/a
S96T000038			% Water by TGA using Mettler	%	None	None	102.6	n/a	76.11	75.34	75.72	1.02	n/a	n/a	n/a
S96T000038			DSC Exotherm Dry Calculated	Joules/g Dry	-1.0e+00	480.0	n/a	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a
S96T000038			DSC Exotherm using Mettler	Joules/g	None	None	107.2	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a

L Lower Half of Segment: L Lower Half of Segment

Sample#	R	A#	Analyte	Unit	Action Limits Lower	Action Limits Upper	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err%
S96T000020			Bulk Density of Sample	g/mL	None	None	n/a	n/a	1.200	n/a	n/a	n/a	n/a	5.00e-01	n/a
S96T000032			% Water by TGA using Mettler	%	None	None	97.92	n/a	75.95	75.31	75.63	0.85	n/a	n/a	n/a
S96T000032			DSC Exotherm Dry Calculated	Joules/g Dry	-1.0e+00	480.0	n/a	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a
S96T000032			DSC Exotherm using Mettler	Joules/g	None	None	100.9	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a
S96T000068		F	Alpha of Digested Solid	uCi/g	-1.0e+00	41.00	103.9	1.690	2.85e-01	2.77e-01	2.81e-01	2.85	n/a	3.80e-03	6.28E+00

=> Limit violated
=> Selected Limit

INTERIM

B-203 45-Day Safety Screening Report
B-203

CORE NUMBER: 122
SEGMENT #: 10

SEGMENT PORTION: U Upper Half of Segment

Sample#	R	A#	Analyte	Unit	Action Limits Lower	Action Limits Upper	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err%
S96T000027			Bulk Density of Sample	g/mL	None	None	n/a	n/a	1.220	n/a	n/a	n/a	n/a	5.00e-01	n/a
S96T000039			% Water by TGA using Mettler	%	None	None	100.9	n/a	75.17	73.12	74.15	2.76	n/a	n/a	n/a
S96T000039			DSC Exotherm on Perkin Elmer	Joules/g	None	None	97.57	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a
S96T000039			DSC Exotherm Dry Calculated	Joules/g Dry	-1.0e+00	480.0	n/a	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a

L Lower Half of Segment: L Lower Half of Segment

Sample#	R	A#	Analyte	Unit	Action Limits Lower	Action Limits Upper	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err%
S96T000021			Bulk Density of Sample	g/mL	None	None	n/a	n/a	1.250	n/a	n/a	n/a	n/a	5.00e-01	n/a
S96T000033			% Water by TGA using Mettler	%	None	None	97.92	n/a	75.47	75.12	75.30	0.46	n/a	n/a	n/a
S96T000033			DSC Exotherm Dry Calculated	Joules/g Dry	-1.0e+00	480.0	n/a	n/a	699.2	368.0	533.6	62.1	n/a	n/a	n/a
S96T000033 1			DSC Exotherm using Mettler	Joules/g	None	None	100.2	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a
S96T000033			DSC Exotherm using Mettler	Joules/g	None	None	93.50	n/a	172.7	90.90	131.8	62.1	n/a	n/a	n/a
S96T000069		F	Alpha of Digested Solid	uCi/g	-1.0e+00	41.00	103.9	1.690	2.06e-01	2.13e-01	2.09e-01	3.34	n/a	3.47e-03	7.19E+00

=> Limit violated
=> Selected Limit

INTERIM

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B-203 45-Day Safety Screening Report
B-203

CORE NUMBER: 122
SEGMENT #: 11

SEGMENT PORTION: U Upper Half of Segment

Sample#	R	A#	Analyte	Unit	Action Limits Lower	Action Limits Upper	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err%
S96T000028			Bulk Density of Sample	g/mL	None	None	n/a	n/a	1.170	n/a	n/a	n/a	n/a	5.00e-01	n/a
S96T000040			% Water by TGA using Mettler	%	None	None	100.9	n/a	77.33	77.18	77.25	0.19	n/a	n/a	n/a
S96T000040			DSC Exotherm on Perkin Elmer	Joules/g	None	None	97.57	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a
S96T000040			DSC Exotherm Dry Calculated	Joules/g Dry	-1.0e+00	480.0	n/a	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a

L Lower Half of Segment: L Lower Half of Segment

Sample#	R	A#	Analyte	Unit	Action Limits Lower	Action Limits Upper	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err%
S96T000022			Bulk Density of Sample	g/mL	None	None	n/a	n/a	1.190	n/a	n/a	n/a	n/a	5.00e-01	n/a
S96T000034			% Water by TGA using Mettler	%	None	None	97.92	n/a	73.87	67.87	70.87	8.47	n/a	n/a	n/a
S96T000034			DSC Exotherm Dry Calculated	Joules/g Dry	-1.0e+00	480.0	n/a	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a
S96T000034			DSC Exotherm using Mettler	Joules/g	None	None	93.50	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a
S96T000070	F		Alpha of Digested Solid	uCi/g	-1.0e+00	41.00	103.9	1.690	2.95e-01	1.66e-01	2.30e-01	56.0	n/a	3.36e-03	5.77E+00

=> Limit violated
=> Selected Limit

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B-203 45-Day Safety Screening Report
B-203

CORE NUMBER: 122
SEGMENT #: 12

SEGMENT PORTION: U Upper Half of Segment

Sample#	R	A#	Analyte	Unit	Action Limits Lower	Action Limits Upper	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err%
S96T000029			Bulk Density of Sample	g/mL	None	None	n/a	n/a	1.210	n/a	n/a	n/a	n/a	5.00e-01	n/a
S96T000041			% Water by TGA using Mettler	%	None	None	102.7	n/a	75.84	74.86	75.35	1.30	n/a	n/a	n/a
S96T000041			DSC Exotherm on Perkin Elmer	Joules/g	None	None	95.33	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a
S96T000041			DSC Exotherm Dry Calculated	Joules/g Dry	-1.0e+00	480.0	n/a	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a

L Lower Half of Segment: L Lower Half of Segment

Sample#	R	A#	Analyte	Unit	Action Limits Lower	Action Limits Upper	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err%
S96T000023			Bulk Density of Sample	g/mL	None	None	n/a	n/a	1.220	n/a	n/a	n/a	n/a	5.00e-01	n/a
S96T000035			% Water by TGA using Mettler	%	None	None	100.9	n/a	75.07	74.73	74.90	0.45	n/a	n/a	n/a
S96T000035			DSC Exotherm Dry Calculated	Joules/g Dry	-1.0e+00	480.0	n/a	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a
S96T000035			DSC Exotherm using Mettler	Joules/g	None	None	92.44	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a
S96T000071		F	Alpha of Digested Solid	uCi/g	-1.0e+00	41.00	92.21	<2.26e-03	2.72e-01	2.78e-01	2.75e-01	2.18	n/a	5.18e-03	6.01E+00

=> Limit violated
=> Selected Limit

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48

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B-203 45-Day Safety Screening Report
B-203

CORE NUMBER: 122
SEGMENT #: 13

SEGMENT PORTION: U Upper Half of Segment

Sample#	R	A#	Analyte	Unit	Action Limits Lower	Action Limits Upper	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err%
S96T000030			Bulk Density of Sample	g/mL	None	None	n/a	n/a	1.230	n/a	n/a	n/a	n/a	5.00e-01	n/a
S96T000042			% Water by TGA using Mettler	%	None	None	102.7	n/a	74.83	73.98	74.41	1.14	n/a	n/a	n/a
S96T000042			DSC Exotherm on Perkin Elmer	Joules/g	None	None	95.33	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a
S96T000042			DSC Exotherm Dry Calculated	Joules/g Dry	-1.0e+00	480.0	n/a	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a

L Lower Half of Segment: L Lower Half of Segment

Sample#	R	A#	Analyte	Unit	Action Limits Lower	Action Limits Upper	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err%
S96T000024			Bulk Density of Sample	g/mL	None	None	n/a	n/a	1.250	n/a	n/a	n/a	n/a	5.00e-01	n/a
S96T000036			% Water by TGA using Mettler	%	None	None	100.9	n/a	74.54	73.92	74.23	0.84	n/a	n/a	n/a
S96T000036			DSC Exotherm Dry Calculated	Joules/g Dry	-1.0e+00	480.0	n/a	n/a	278.2	268.5	273.4	3.55	n/a	n/a	n/a
S96T000036			DSC Exotherm using Mettler	Joules/g	None	None	107.9	n/a	71.70	69.20	70.45	3.55	n/a	n/a	n/a
S96T000072	F		Alpha of Digested Solid	uCi/g	-1.0e+00	41.00	92.21	<2.26e-03	2.36e-01	2.35e-01	2.35e-01	0.42	n/a	4.57e-03	6.09E+00

=> Limit violated
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B-203 45-Day Safety Screening Report
B-203

CORE NUMBER: 122
SEGMENT #: 14

SEGMENT PORTION: U Upper Half of Segment

Sample#	R	A#	Analyte	Unit	Action Limits Lower	Action Limits Upper	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err%
S96T000031			Bulk Density of Sample	g/mL	None	None	n/a	n/a	1.270	n/a	n/a	n/a	n/a	5.00e-01	n/a
S96T000043			% Water by TGA on Perkin Elmer	%	None	None	99.71	n/a	66.59	75.57	71.08	12.6	n/a	n/a	n/a
S96T000043			DSC Exotherm on Perkin Elmer	Joules/g	None	None	95.47	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a
S96T000043			DSC Exotherm Dry Calculated	Joules/g Dry	-1.0e+00	480.0	n/a	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a

L Lower Half of Segment: L Lower Half of Segment

Sample#	R	A#	Analyte	Unit	Action Limits Lower	Action Limits Upper	Standard %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Count Err%
S96T000025			Bulk Density of Sample	g/mL	None	None	n/a	n/a	1.240	n/a	n/a	n/a	n/a	5.00e-01	n/a
S96T000037			% Water by TGA using Mettler	%	None	None	100.9	n/a	73.22	68.98	71.10	5.96	n/a	n/a	n/a
S96T000037			DSC Exotherm Dry Calculated	Joules/g Dry	-1.0e+00	480.0	n/a	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a
S96T000037			DSC Exotherm using Mettler	Joules/g	None	None	107.2	n/a	0.00e+00	0.00e+00	0.00e+00	0.00	n/a	n/a	n/a
S96T000073	F		Alpha of Digested Solid	uCi/g	-1.0e+00	41.00	92.21	<2.26e-03	2.30e-01	2.27e-01	2.29e-01	1.31	n/a	5.65e-03	6.82E+00

=> Limit violated
=> Selected Limit

INTERIM

STATISTICAL ANALYSIS

From: Process Chemistry and Statistics 75764-PCS96-009
Phone: 373-4034 T6-07
Date: February 6, 1996
Subject: STATISTICAL ANALYSIS FOR B-203 SAFETY SCREENING DATA

To: J. Jo R2-12

cc: L. Jensen R2-12
J. R. Jewett T6-09
J. G. Kristofzski R2-12
RDC File/LB

Safety screening data from tank 241-B-203 (B-203) were obtained and a statistical analysis was performed per your request. The safety screening data consists of total alpha and differential scanning calorimeter (DSC) analytical results. The data are listed in Tables 1 and 2. From the analytical results for each sample, a one-sided 95% confidence interval for the mean was calculated.

The upper limit of a one-sided 95% Confidence Interval for the mean is

$$\hat{\mu} + t_{(n-1,0.95)} * \frac{\hat{\sigma}}{\sqrt{n}}.$$

For this equation, $\hat{\mu}$ is the arithmetic mean of the data, n is the number of observations used in computing the mean, $\hat{\sigma}$ is the standard deviation of the data, and $t_{(n-1,0.95)}$ is a quantile from Student's t distribution with $n-1$ degrees of freedom and 0.95 confidence level.

For tank B-203 data (per sample number), n is two and $t_{(1,0.95)}$ is 6.314. There are, however, two exceptions for the DSC data; n is six and $t_{(5,0.95)}$ is 2.015 for sample number S95T003958, and n is four and $t_{(3,0.95)}$ is 2.353 for sample number S96T000033.

For the Total Alpha data, the upper limit will be used to test the null hypothesis that the mean concentration is greater than or equal to 41 μCi/g. If the upper limit is less than 41 μCi/g, then the null hypothesis that the mean Total Alpha is greater than or equal to 41 μCi/g is rejected at the 0.05 level of significance. The upper limit of the 95% confidence interval for each data set (per sample number) based on the Total Alpha data is listed in Table 1 of the Attachment.

Confidence intervals could only be performed on three sets of DSC data, since all the other sets of data contained only zero results. For DSC data, the upper limit will be used to test the null hypothesis that the mean DSC result is greater than or equal to 480 joules/g. If the upper limit is less

than 480 joules/g, then the null hypothesis that the mean DSC is greater than or equal to 480 joules/g is rejected at the 0.05 level of significance. The upper limit of the 95% confidence interval for each data set (per sample number) based on the DSC data is listed in Table 2 in the Attachment.

If you have any questions, please call me at 373-4034.

R. D. Cromar, Statistician
Process Chemistry and Statistics

rdc
Attachment

Table 1. B-203 Total Alpha Analytical Results, Summary Statistics, and 95% Confidence Interval Upper Limits for the Mean.

Sample Number and Description	Result µCi/g	Duplicate µCi/g	$\hat{\mu}$	$\hat{\sigma}/\sqrt{n}$	UL (µCi/g)
S95T003833 - Core 115, Segment 1, Lin. Liq.	6.71E-05	5.53E-05	6.120E-05	5.900E-06	9.85E-05
S95T003958 - Core 120, Segment 1, DL	1.23E-04	1.33E-04	1.280E-04	5.000E-06	1.60E-04
S95T004088 - Core 120, Segment 4, LH	2.15E-01	2.52E-01	2.330E-01	1.850E-02	3.50E-01
S95T004089 - Core 120, Segment 5, LH	2.54E-01	2.21E-01	2.370E-01	1.650E-02	3.41E-01
S95T004090 - Core 120, Segment 6, LH	1.96E-01	2.37E-01	2.160E-01	2.050E-02	3.45E-01
S95T004091 - Core 120, Segment 7 LH	1.99E-01	1.81E-01	1.900E-01	9.000E-03	2.47E-01
S95T004092 - Core 120, Segment 8 LH	2.41E-01	2.44E-01	2.420E-01	1.500E-03	2.51E-01
S95T004093 - Core 120, Segment 9 LH	2.19E-01	2.41E-01	2.300E-01	1.100E-02	2.99E-01
S95T004094 - Core 120, Segment 10, LH	2.21E-01	2.06E-01	2.130E-01	7.500E-03	2.60E-01
S95T004095 - Core 120, Segment 13, LH	1.70E-01	1.71E-01	1.710E-01	5.000E-04	1.74E-01
S95T004096 - Core 120, Segment 14 LH	1.94E-01	1.80E-01	1.870E-01	7.000E-03	2.31E-01
S95T004003 - Core 122, Segment 1, DL	7.49E-05	8.28E-05	7.880E-05	3.950E-06	1.04E-04
S95T004025 - Core 122, Segment 2, WS	1.79E-01	2.26E-01	2.030E-01	2.350E-02	3.51E-01
S95T004004 - Core 122, Segment 3, DL	7.85E-05	1.15E-04	9.670E-05	1.825E-05	2.12E-04
S95T004026 - Core 122, Segment 3, LH	9.90E-02	9.82E-02	9.860E-02	4.000E-04	1.01E-01
S95T004033 - Core 122, Segment 4, LH	2.16E-01	2.17E-01	2.160E-01	5.000E-04	2.19E-01
S95T004034 - Core 122, Segment 5, LH	2.68E-01	2.62E-01	2.650E-01	3.000E-03	2.84E-01
S95T004236 - Core 122, Segment 6, LH	2.01E-01	1.88E-01	1.950E-01	6.500E-03	2.36E-01
S95T004237 - Core 122, Segment 7, LH	1.62E-01	1.43E-01	1.520E-01	9.500E-03	2.12E-01
S95T004238 - Core 122, Segment 8, LH	2.23E-01	1.89E-01	2.060E-01	1.700E-02	3.13E-01
S96T000068 - Core 122, Segment 9, LH	2.85E-01	2.77E-01	2.810E-01	4.000E-03	3.06E-01
S96T000069 - Core 122, Segment 10, LH	2.06E-01	2.13E-01	2.090E-01	3.500E-03	2.31E-01
S96T000070 - Core 122, Segment 11, LH	2.95E-01	1.66E-01	2.300E-01	6.450E-02	6.37E-01
S96T000071 - Core 122, Segment 12, LH	2.72E-01	2.78E-01	2.750E-01	3.000E-03	2.94E-01
S96T000072 - Core 122, Segment 13, LH	2.36E-01	2.35E-01	2.350E-01	5.000E-04	2.38E-01
S96T000073 - Core 122, Segment 14, LH	2.30E-01	2.27E-01	2.290E-01	1.500E-03	2.38E-01

$\hat{\mu}$ Arithmetic mean of the data
$\hat{\sigma}/\sqrt{n}$ Standard deviation of the mean
UL Upper limit
Lin. Liq. Liner liquid
DL Drainable liquid
LH Lower half of segment
WS Whole segment

Table 2. B-203 DSC Analytical Results, Summary Statistics, and 95% Confidence Interval Upper Limits for the Mean.

Sample Number and Description	Results (joules/g)	$\hat{\mu}$	$\hat{\sigma}/\sqrt{n}$	UL (joules/g)
S95T003958 -Core 120, Segment 1, DL	1621 0 311.2 0 0 0	322.03	264.72	855.4
S96T000033 -Core 122, Segment 10, LH	699.2 368.0 0 0	266.80	168.22	662.6
S96T000036 -Core 122, Segment 13, LH	278.2 268.5	273.35	4.8500	304.0

$\hat{\mu}$ Arithmetic mean of the data
$\hat{\sigma}/\sqrt{n}$ Standard deviation of the mean
UL Upper limit
DL Drainable liquid
LH Lower half of segment

DOME SPACE FLAMMABILITY DATA

54-3000-101 (9-89)

B-203 LFL DATA

DON'T SAY IT --- *Write It!*

DATE 12/22/95

TO Troy Farris FROM Mike Wahl

- Dome Space Vapor Snuff Flange in Riser #6
- Sampled risers #2 and #7
- Breather filter is Riser #4

"TO MAKE LIFE LAST, PUT SAFETY FIRST"

DATA SHEET 1 - IH&S VAPOR SURVEY

WHC-SD-WM-DP-169, REV. 0

Tank No 203-B Riser No 2

Location (Breather, Vent, Riser, Breathing zone) Dome space

	Flammability	Results
10-25-95	0% LEL	0%

	Vapor	Results
10-25-95	T.O.C.	0.0 ppm

11/17/95

DATA SHEET 7 - IH&S VAPOR SURVEY

WHC-SD-WM-DP-169, REV. 0

Tank No. B-203 Riser No. 6

Location (Breather/Vent, Riser, Dome Space, Breathing zone) Riser

Vapor: Results:

O_2	20.9%
LEL	Ø%
NH_3	0.0 PPM
TOV	0.0 PPM

Tank No. B-203 Riser No. 6

Location (Breather/Vent, Riser, Dome Space, Breathing zone) Dome Space

Vapor: Results:

O_2	
LEL	
NH_3	
TOV	

Tank No. B-203 Riser No. 2 / Drill String

Location (Breather/Vent, Riser, Dome Space, Breathing zone) Drill String

Vapor: Results:

O_2	18.8%
LEL	35% + 18% SAMPLE
NH_3	NA
TOV	0.0 PPM

DATA SHEET 7 - IH&S VAPOR SURVEY

WHC-SD-WM-DP-169, REV. 0

Tank No. B-203 Riser No. 4

Location (Breather/Vent, Riser, Dome Space, Breathing zone)

Vapor:	Results:
TOC	0 PPM
LEL	0%
O_2	21.0%
NH_3	0 PPM

Tank No. B-203 Riser No. 6

Location (Breather/Vent, Riser, Dome Space, Breathing zone)

Vapor:	Results:
TOC	0 PPM
LEL	0%
O_2	21.0%
NH_3	< 2 PPM

Tank No. B-203 Riser No. 2

Location (Breather/Vent, Riser, Dome Space, Breathing zone) Drill String

Vapor:	Results:
TOC	0 PPM
LEL	0%
O_2	7.5%
NH_3	0 PPM

DATA SHEET 7 - IH&S VAPOR SURVEY

WHC-SD-WM-DP-169, REV. 0

Tank No. B-203 Riser No. 4

Location (Breather/Vent, Riser, Dome Space, Breathing zone)

Vapor:

	Results:
TOC	0 PPM
LEL	0%
O_2	21.0%
NH_3	0 PPM

Tank No. B-203 Riser No. 6

Location (Breather/Vent, Riser, Dome Space, Breathing zone)

Vapor:

	Results:
TOC	0 PPM
LEL	0%
O_2	21.0%
NH_3	< 2 PPM

Tank No. B-203 Riser No. 2

Location (Breather/Vent, Riser, Dome Space, Breathing zone)

Drill String/After Purge

Vapor:

	Results:
TOC	0 PPM
LEL	0%
O_2	14.1%
NH_3	0 PPM

20 Nov 95

DATA SHEET 7 - IH&S VAPOR SURVEY

WHC-SD-WM-DP-169, REV.0

Tank No. B-203 Riser No. 2

Location (Breather/Vent, Riser, Dome Space, Breathing zone): Drill String

Vapor:	Results:
O_2	.9 %
LEL	Ø%
T.O.C.	ØPPM

Tank No. B-203 Riser No.

Location (Breather/Vent, Riser, Dome Space, Breathing zone): Dome Space

Vapor:	Results:
O_2	20.9 %
LEL	Ø%
T.O.C.	ØPPM

Tank No. Riser No.

Location (Breather/Vent, Riser, Dome Space, Breathing zone):

Vapor:	Results:

WHC-SD-WM-DP-169, REV. 0

DATA SHEET 7 - IH&S VAPOR SURVEY

Tank No. 203-B

Riser No. 2

Location (Breather/Vent, Riser, Dome Space, Breathing zone): Drill String

Vapor:	Results:
O2	15.0%
LEL	0%
TOV	2.0 ppm

Tank No. 203-B

Riser No. 3

Location (Breather/Vent, Riser, Dome Space, Breathing zone): Dome Space

Vapor:	Results:
O2	18.9%
LEL	Ø%
TOV	2.0 PPM

Tank No. _____

Riser No. _____

Location (Breather/Vent, Riser, Dome Space, Breathing zone): _____

Vapor:	Results:

DATA SHEET 7 - IH&S VAPOR SURVEY

Tank No. B203

Riser No. #2

Location (Breather/Vent, Riser, Dome Space, Breathing zone)

Breather / ZONE FILTER

Vapor:	Results:
O2	20.9%
LEL	0%
TOV	0.0PPM

Tank No. B-203

Riser No. 2

Location (Breather/Vent, Riser, Dome Space, Breathing zone) String

5 Dec @ 0930 hrs

Vapor:		Results:
LEL / O2	Drill String	0% / 7%
TOV / NH3		0 ppm / 0 ppm
LEL / O2	Dome Space	0% / 20.1%
TOV / NH3		0 ppm / Trace

Tank No. B-203

~~Riser No.~~ Truck

Location (Breather/Vent, Riser, Dome Space, Breathing zone)

5 Dec / @ 0930

Vapor:		Results:
LEL / O2	Quill Rod	0% / 15%
TOV / NH3		0 ppm / 0 ppm
LEL / O2	Shielded Receiv	0% / 21%
TOV / NH3		0 ppm / 0 ppm

DATA SHEET 7 - IH&S VAPOR SURVEY

WHC-SD-WM-DP-169, REV. 0

Tank No. B-203 Riser No. 2

Location (Breather/Vent, Riser, Dome Space, Breathing zone) Drill String 5 Dec 1045

Vapor:	Results:
LEL	0%
O_2	5%
TOV	0 ppm
NH_3	0 ppm

Tank No. _____ Riser No. _____

Location (Breather/Vent, Riser, Dome Space, Breathing zone) _____

Vapor:	Results:

Tank No. _____ Riser No. _____

Location (Breather/Vent, Riser, Dome Space, Breathing zone) _____

Vapor:	Results:

DATA SHEET 7 - IH&S VAPOR SURVEY

WHC-SD-WM-DP-169, REV. 0

Tank No. B-203 Riser No. 2

Location (Breather/Vent, Riser, Dome Space, Breathing zone): Drill String 12-6-95 @0125

Vapor:	Results:
O_2	.5 %
LEL	Ø %
T.O.C.	ØPPM
NH_3	ØPPM

Tank No. _____ Riser No. _____

Location (Breather/Vent, Riser, Dome Space, Breathing zone): Breather filter

Vapor:	Results:
O_2	20.9%
LEL	Ø %
T.O.C	ØPPM
NH_3	ØPPM

Tank No. _____ Riser No. _____

Location (Breather/Vent, Riser, Dome Space, Breathing zone): _____

Vapor:	Results:
O_2	~~10%~~ 20.2%
LEL	Ø %
T.O.C.	Ø PPM
NH_3	Ø PPM

DATA SHEET 7 - IH&S VAPOR SURVEY

WHC-SD-WM-DP-169, REV. 0

Tank No. B-203 Riser No. 7

Location (Breather/Vent, Riser, Dome Space, Breathing zone): Breather

Vapor:	Results:
O_2	20.9%
LEL	Ø %
T.O.C	Ø PPM
NH_3	ØPPM

Tank No. B-203 Riser No. 7

Location (Breather/Vent, Riser, Dome Space, Breathing zone): Dome Space

Vapor:	Results:
O_2	20.6%
LEL	Ø %
T.O.C	ØPPM
NH_3	ØPPM

Tank No. B-203 Riser No. 7

Location (Breather/Vent, Riser, Dome Space, Breathing zone): Breathing zone

Vapor:	Results:
T.O.C	ØPPM
NH_3	ØPPM

DATA SHEET 7 - IH&S VAPOR SURVEY

Tank No. B-203

Riser No. ~~#5 or #~~ 7

Location (Breather/Vent, Riser, Dome Space, Breathing zone)

Vapor:

O2/LEL

T.O.C. / NH3

Results:

20.8% / 0%

0.0 ppm / LDet

Tank No. B-203

Riser No. #7

Location (Breather/Vent, Riser, Dome Space, Breathing zone)

Vapor:

O2/LEL

T.O.C / NH3

Results:

20.7% / 0%

0.0 ppm / LDet

Tank No. B-203

Riser No. #7

Location (Breather/Vent, Riser, Dome Space, Breathing zone)

Vapor:

T.O.C / NH3

Results:

0.0 ppm / LDet

DATA SHEET 9 - IH&S FLAMMABLE GAS MONITORING

Tank No. B-203 Riser No. 6 Date 11-20-95

NOTE- Vapor survey for Single Shell Tanks with hand held combustible gas meter and probe per HASP or SHMS shall be recorded every 15 minutes.

NOTE- Vapor survey for Double Shell Tank in vent header or SHMS, if operable, recorded every 15 minutes with hand held combustible gas meter per HASP.

Location (Vent Header or Dome Space) Dome Space

Differential Limit

Vapor sample every 15 minutes and record below:

TIME	FLAMMABLE GAS, % LFL OR PPM	INITIALS
1345	LEL - 0%	[illegible]
1400	LEL - 0%	[illegible]
1415	LEL - 0%	[illegible]
1430	LEL - 0%	[illegible]
1800	LEL - 0%	[illegible]

DATA SHEET 9 - IH&S FLAMMABLE GAS MONITORING

Tank No. B-203 Riser No. 6 Date 11-21-95

NOTE- Vapor survey for Single Shell Tanks with hand held combustible gas meter and probe per HASP or SHMS shall be recorded every 15 minutes.

NOTE- Vapor survey for Double Shell Tank in vent header or SHMS, if operable, recorded every 15 minutes with hand held combustible gas meter per HASP.

Location (Vent Header or Dome Space) Dome Space

Differential Limit

Vapor sample every 15 minutes and record below:

	TIME	FLAMMABLE GAS, % LFL OR PPM	INITIALS
	1045	LEL - 0%	[illegible]
	1315	LEL - 0%	[illegible]
	1330	LEL - 0%	[illegible]
	1345	LEL - 0%	[illegible]
11-22-95	0200	0.0% - LEL	E. D. Clark
	0215	0.0%	E. D. Clark
	0230	0.0%	E. D. Clark
	0245	0.0%	E. D. Clark
	0300	0.0%	E. D. Clark
	0315	0.0%	E. D. Clark
	0330	0.0%	E. D. Clark
	0345	0.0%	E. D. Clark
	0400	0.0%	E. D. Clark
	0415	0.0%	E. D. Clark
	0430	0.0%	E. D. Clark
	0445	0.0%	E. D. Clark
	0500	0.0%	E. D. Clark
	0515	0.0%	E. D. Clark
	0530	0.0%	E. D. Clark

DATA SHEET 9 - IH&S FLAMMABLE GAS MONITORING

Tank No. B-203 Riser No. 6 Date 11-24-95

NOTE- Vapor survey for Single Shell Tanks with hand held combustible gas meter and probe per HASP or SHMS shall be recorded every 15 minutes.

NOTE- Vapor survey for Double Shell Tank in vent header or SHMS, if operable, recorded every 15 minutes with hand held combustible gas meter per HASP.

Location (Vent Header or Dome Space) Dome space

Differential Limit

Vapor sample every 15 minutes and record below:

TIME	FLAMMABLE GAS, % LFL OR PPM	INITIALS
13:45	0% LEL	RM
14:00	0% LEL	RM
14:15	0% LEL	RM

WHC-SD-WM-DP-169, REV. 0

DATA SHEET 9 - IH&S FLAMMABLE GAS MONITORING

Tank No. B 203 Riser No. 6 Date 11-25-95

NOTE- Vapor survey for Single Shell Tanks with hand held combustible gas meter and probe per HASP or SHMS shall be recorded every 15 minutes.

NOTE- Vapor survey for Double Shell Tank in vent header or SHMS, if operable, recorded every 15 minutes with hand held combustible gas meter per HASP.

Location (Vent Header or Dome Space) Dome Space

Differential Limit

Vapor sample every 15 minutes and record below:

1225

TIME	FLAMMABLE GAS, % LFL OR PPM	INITIALS
0915	0%	CH
1010	0%	CH
1025	0%	CH
1040	0%	CH
1055	0%	CH
1100	0%	CH
11:35	0%	CH
11:50	0%	CH
12:05	0%	CH
12:20	0%	CH
12:35	0%	CH
12:50	0%	CH
13:05	0%	CH
13:20	0%	CH
13:35	0%	CH
13:50	0%	CH

DATA SHEET 9 - IH&S FLAMMABLE GAS MONITORING

Tank No. B-203 Riser No. 6 Date 11-28-95

NOTE- Vapor survey for Single Shell Tanks with hand held combustible gas meter and probe per HASP or SHMS shall be recorded every 15 minutes.

NOTE- Vapor survey for Double Shell Tank in vent header or SHMS, if operable, recorded every 15 minutes with hand held combustible gas meter per HASP.

Location (Vent Header or Dome Space) Dome Space

Differential Limit

Vapor sample every 15 minutes and record below:

TIME	FLAMMABLE GAS, % LFL OR PPM	INITIALS
0145	0%	CH
0200	0%	CH
0215	0%	CH
0230	0%	CH
0245	0%	CH
0300	0%	CH
1250	0%	DS.

WHC-SD-WM-DP-169, REV. 0

DATA SHEET 9 - IH&S FLAMMABLE GAS MONITORING

Tank No. B-203 Riser No. #4-6 Date 12-5-95

NOTE- Vapor survey for Single Shell Tanks with hand held combustible gas meter and probe per HASP or SHMS shall be recorded every 15 minutes.

NOTE- Vapor survey for Double Shell Tank in vent header or SHMS, if operable, recorded every 15 minutes with hand held combustible gas meter per HASP.

Location (Vent Header or Dome Space) Dome Space

Differential Limit _____

Vapor sample every 15 minutes and record below:

TIME	FLAMMABLE GAS, % LFL OR PPM	INITIALS
0058	0 % LEL	DS
0115	0 % LEL	DS
0130	0 % LEL	DS
0145	0 % LEL	DS
0200	0 % LEL	DS
0215	0 % LEL	DS
0230	0 % LEL	DS
0245	0 % LEL	DS
0300	0 % LEL	DS
0315	0 % LEL	DS
0330	0 % LEL	DS
0345	0 % LEL	DS
0400	0 % LEL	DS
0415	0 % LEL	DS
0430	0 % LEL	DS

DATA SHEET 9 - IH&S FLAMMABLE GAS MONITORING

Tank No. B-203 Riser No. 6 Date 12-6-95

NOTE- Vapor survey for Single Shell Tanks with hand held combustible gas meter and probe per HASP or SHMS shall be recorded every 15 minutes.

NOTE- Vapor survey for Double Shell Tank in vent header or SHMS, if operable, recorded every 15 minutes with hand held combustible gas meter per HASP.

Location (Vent Header or Dome Space) Dome Space

Differential Limit _____

Vapor sample every 15 minutes and record below:

TIME	FLAMMABLE GAS, % LFL OR PPM	INITIALS
0145	0%	[illegible]
0200	0%	[illegible]
0215	0%	[illegible]
0230	0%	[illegible]
0245	0%	[illegible]
0300	0%	[illegible]
0315	0%	[illegible]
0330	0%	[illegible]
0345	0%	[illegible]
0400	0%	[illegible]
0415	0%	[illegible]
1255	0%	OH
1310	0%	OH

WHC-SD-WM-DP-169, REV. 0

WHC-SD-WM-DP-169, REV. 0

DATA SHEET 9 - IH&S FLAMMABLE GAS MONITORING

Tank No. B-203 Riser No. 2 Date 11-21-95

NOTE- Vapor survey for Single Shell Tanks with hand held combustible gas meter and probe per HASP or SHMS shall be recorded every 15 minutes.

NOTE- Vapor survey for Double Shell Tank in vent header or SHMS, if operable, recorded every 15 minutes with hand held combustible gas meter per HASP.

Location (Vent Header or Dome Space) _____

Differential Limit _____

Vapor sample every 15 minutes and record below:

TIME	FLAMMABLE GAS, % LFL OR PPM	INITIALS
0150	0%	CH
0205	0%	CH
0220	0%	CH
0235	0%	CH
0250	0%	CH
0305	0%	CH
0335	0%	CH
0350	0%	CH
0405	0%	CH
0420	0%	CH
0435	0%	CH
0450	0%	CH
0505	0%	CH
0520	0%	CH

DATA SHEET 9 - IH&S FLAMMABLE GAS MONITORING

Tank No. B-203 Riser No. #2 Date 12-3-95

NOTE- Vapor survey for Single Shell Tanks with hand held combustible gas meter and probe per HASP or SHMS shall be recorded every 15 minutes.

NOTE- Vapor survey for Double Shell Tank in vent header or SHMS, if operable, recorded every 15 minutes with hand held combustible gas meter per HASP.

Location (Vent Header or Dome Space) _____

Differential Limit _____

Vapor sample every 15 minutes and record below:

TIME	FLAMMABLE GAS, % LFL OR PPM	INITIALS
1410	0%	R.D.G.
* 1500	0%	R.D.G.
1515	0%	R.D.G.
1530	0%	R.D.G
1545	0%	R.D.G

* Hooked Truck up to drill string

WHC-SD-WM-DP-169, REV. 0

DATA SHEET 9 - IH&S FLAMMABLE GAS MONITORING

Tank No. B-203 Riser No. 2 Date 4 Dec 95

NOTE- Vapor survey for Single Shell Tanks with hand held combustible gas meter and probe per HASP or SHMS shall be recorded every 15 minutes.

NOTE- Vapor survey for Double Shell Tank in vent header or SHMS, if operable, recorded every 15 minutes with hand held combustible gas meter per HASP.

Location (Vent Header or Dome Space) _____

Differential Limit _____

Vapor sample every 15 minutes and record below:

	TIME	FLAMMABLE GAS, % LFL OR PPM	INITIALS
	1350	0% LEL	D
	1400	0%	D
	1415	0%	D
	1430	0%	D
	1445	0%	D
	1500	0%	D
	1515	0%	D
5 Dec →	0915	0% LEL	D
	0930	0%	D
	0945	0%	D
	1000	0%	D
	1015	0%	D
	1030	0%	D
	1045	0%	D
	1100	0%	D
	1115	0%	D
	1130	0%	D
	1145	0%	D
	1200 Lunch	0%	D
	1415	0%	D
	1430	0%	D
	1445	0%	D

DATA SHEET 9 - IH&S FLAMMABLE GAS MONITORING

B-203 Riser No. #2 Date 12-4-95

Vapor survey for Single Shell Tanks with hand held combustible gas meter and probe per HASP or SHMS shall be recorded every 15 minutes.

Vapor survey for Double Shell Tank in vent header or SHMS, if operable, recorded every 15 minutes with hand held combustible gas meter per HASP.

cation (Vent Header or Dome Space) _____

Differential Limit _____

Vapor sample every 15 minutes and record below:

TIME	FLAMMABLE GAS, % LFL OR PPM	INITIALS
1715	0%	R.D.G
1730	0%	R.D.G
1745	0%	R.D.G
1800	0%	R.D.G
1815	0%	R.D.G
1830	0%	R.D.G
1845	0%	R.D.G
1900	0%	R.D.G
1915	0%	R.D.G.
1930	0%	R.D.G
1945	0%	R.D.G
2000	0%	R.D.G
2015	0%	R.D.G
2030	0%	R.D.G
2045	0%	R.D.G
2100	0%	R.D.G
2115	0%	R.D.G
2130	0%	R.D.G
2146	0%	R.D.G.

WHC-SD-WM-DP-169, REV. 0

DATA SHEET 9 - IH&S FLAMMABLE GAS MONITORING

Tank No. B-203 Riser No. 7 Date 12-8-95

NOTE- Vapor survey for Single Shell Tanks with hand held combustible gas meter and probe per HASP or SHMS shall be recorded every 15 minutes.

NOTE- Vapor survey for Double Shell Tank in vent header or SHMS, if operable, recorded every 15 minutes with hand held combustible gas meter per HASP.

Location (Vent Header or Dome Space) _____

Differential Limit _____

Vapor sample every 15 minutes and record below:

TIME	FLAMMABLE GAS, % LFL OR PPM	INITIALS
1752	0%	R.D.G
1800	0%	R.D.G
1815	0%	R.D.G
1830	0%	R.D.G
1845	0%	R.D.G
1900	0%	R.D.G.
1915	0%	R.D.G
1930	0%	R.D.G.
1945	0%	R.D.G
2000	0%	R.D.G
2015	0%	R.D.G
2030	0%	R.D.G.
2045	0%	R.D.G
2100	0%	R.D.G
2115	0%	R.D.G
2130	0%	R.D.G
12-9-95 10:00	0%	CH
10:15	0%	CH
10:30	0%	CH
10:45	0%	CH
11:00	0%	CH
11:15	0%	CH
11:45	0%	CH
14:00	0%	
14:15	0%	
14:30	0%	

DATA SHEET 9 - IH&S FLAMMABLE GAS MONITORING

Tank No. BY203 Riser No. 7 Date 12-11-95

NOTE- Vapor survey for Single Shell Tanks with hand held combustible gas meter and probe per HASP or SHMS shall be recorded every 15 minutes.

NOTE- Vapor survey for Double Shell Tank in vent header or SHMS, if operable, recorded every 15 minutes with hand held combustible gas meter per HASP.

Location (Vent Header or Dome Space) Dome Space

Differential Limit

Vapor sample every 15 minutes and record below:

TIME	FLAMMABLE GAS, % LFL OR PPM	INITIALS
10:15	0%	CWH
10:30	0%	CWH
10:45	0%	CWH
14:00	0%	CWH
14:15	0%	CWH
14:30	0%	CWH
	DAYS	
	Curing.	
12-11-95 1745	0%	RDG
1800	0%	RDG
1815 2015	0%	RDG
1830 2030	0%	RDG
1845 2045	0%	RDG
1900 2100	0%	RDG
1915 2115	0%	RDG
1930 2130	0%	RDG
1945 2145	0%	RDG
2000 2200	0%	RDG
2015	0%	RDG
2030	0%	RDG

DATA SHEET 9 - IH&S FLAMMABLE GAS MONITORING

Tank No. B203 Riser No. 7 Date 12-12-95

NOTE- Vapor survey for Single Shell Tanks with hand held combustible gas meter and probe per HASP or SHMS shall be recorded every 15 minutes.

NOTE- Vapor survey for Double Shell Tank in vent header or SHMS, if operable, recorded every 15 minutes with hand held combustible gas meter per HASP.

Location (Vent Header or Dome Space) _____

Differential Limit _____

Vapor sample every 15 minutes and record below:

TIME	FLAMMABLE GAS, % LFL OR PPM	INITIALS
1700	0%	RDG
1715	0%	R.D.G
1730	0%	R.D.G
1745	0%	RP.G
1800	0%	R.D.G
1815	0%	R.D.G
1830	0%	R.D.G
12/13/95		
1700	0%	R.D.G
1715	0%	RDG
1730	0%	RDG
1745	0%	R.DG
1800	0%	RDG
1815	0%	R.DG
1830	0%	RDG
1845	0%	R.D.G
1900	0%	RDG
1915	0%	RDG
1930	0%	RDG
Lunch	Lunch	
2130	0%	RDG
2145	0%	RDG
2200	0%	RDG
2215	0%	RDG
2230	0%	RDG
2245	0%	R.D-G

WHC-SD-WM-DP-169, REV. 0

DATA SHEET 9 - IH&S FLAMMABLE GAS MONITORING

Grave

Tank No. B-203 Riser No. 7 Date 12-14-95

NOTE- Vapor survey for Single Shell Tanks with hand held combustible gas meter and probe per HASP or SHMS shall be recorded every 15 minutes.

NOTE- Vapor survey for Double Shell Tank in vent header or SHMS, if operable, recorded every 15 minutes with hand held combustible gas meter per HASP.

Location (Vent Header or ~~Dome Space~~) Dome Space

Differential Limit _____

Vapor sample every 15 minutes and record below:

TIME	FLAMMABLE GAS, % LFL OR PPM	INITIALS
0115	Ø%	[illegible]
0130	Ø%	[illegible]
0145	Ø%	[illegible]
0200	Ø%	[illegible]
0215	Ø%	[illegible]
0230	Ø%	[illegible]
0245	Ø%	[illegible]
0300	Ø%	[illegible]
0315	Ø%	[illegible]
0330	Ø%	[illegible]
0345	Ø%	[illegible]
0400	Ø%	[illegible]

INORGANIC ANALYSES

LABCORE Data Entry Template for Worklist# 4555

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

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

Worklist Comment: B-203 DSC. Please run under N2. bdv

GROUP	PROJECT	S TYPE	SAMPLE#	R A	-------TEST------	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD			DSC-03	LIQUID	28.45	28.61	N/A	Joules/g
95000173	B-203	2 SAMPLE	S95T003833	0	DSC-03	LIQUID	N/A	Ø		Joules/g
95000173	B-203	3 DUP	S95T003833	0	DSC-03	LIQUID	Ø	Ø	N/A	Joules/g

Final page for worklist # 4555

See attached for signature
Analyst Signature **Date**

Verified by Blandina Valenzuela 1-8-96

Linda Coulin 1/6/96
Analyst Signature **Date**

Data Entry Comments: Sample produced an endotherm at 112.96°C with a delta H of 2140.3 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# 4555

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

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

Worklist Comment: B-203 DSC. Please run under N2. bdv

GROUP	PROJECT	S TYPE	SAMPLE#	R	A	-------TEST------	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD				DSC-01	LIQUID			N/A	Joules/g
95000173	B-203	2 SAMPLE	S95T003833	0		DSC-01	LIQUID	N/A			Joules/g
95000173	B-203	3 DUP	S95T003833	0		DSC-01	LIQUID			N/A	Joules/g

Final page for worklist # 4555

12-28-95

Analyst Signature **Date**

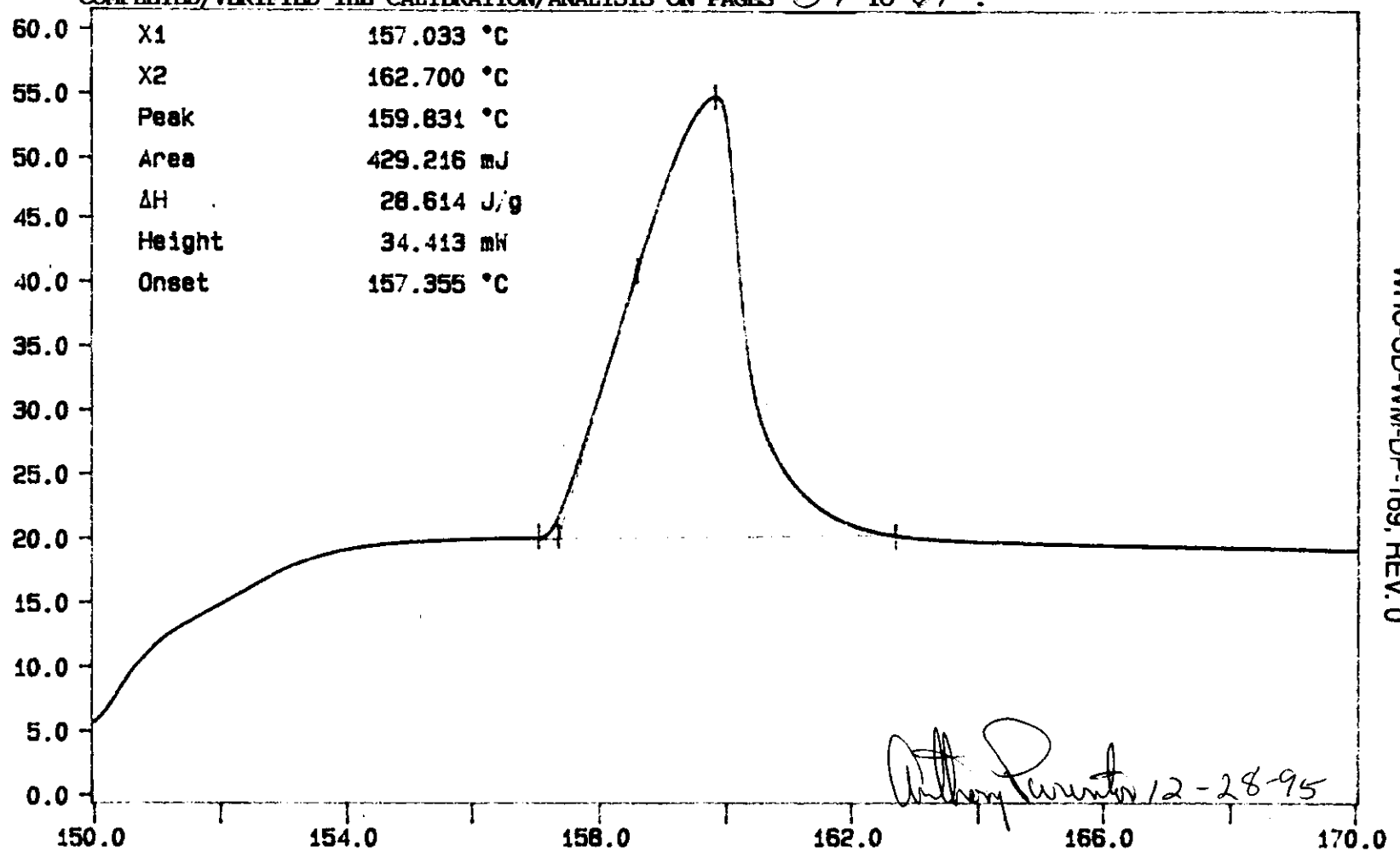
Analyst Signature **Date**

Data Entry Comments:

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

Curve 1: DSC
File info: IND122801 Thu Dec 28 20:00:57 1995
Sample Weight: 15.000 mg
12N14B Indium at 10C/min

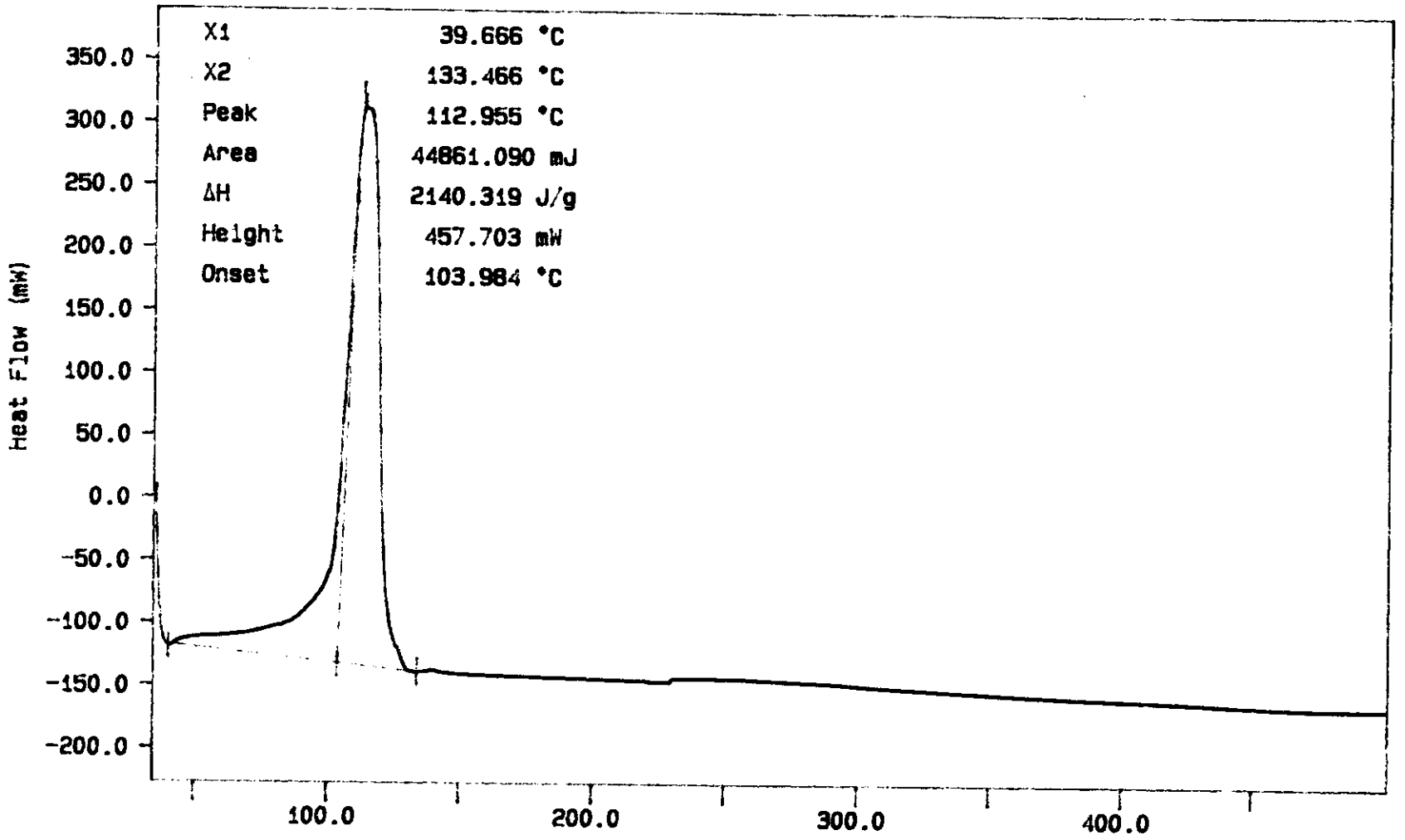
SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 59 TO 61.



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
Thu Dec 28 20:07:23 1995

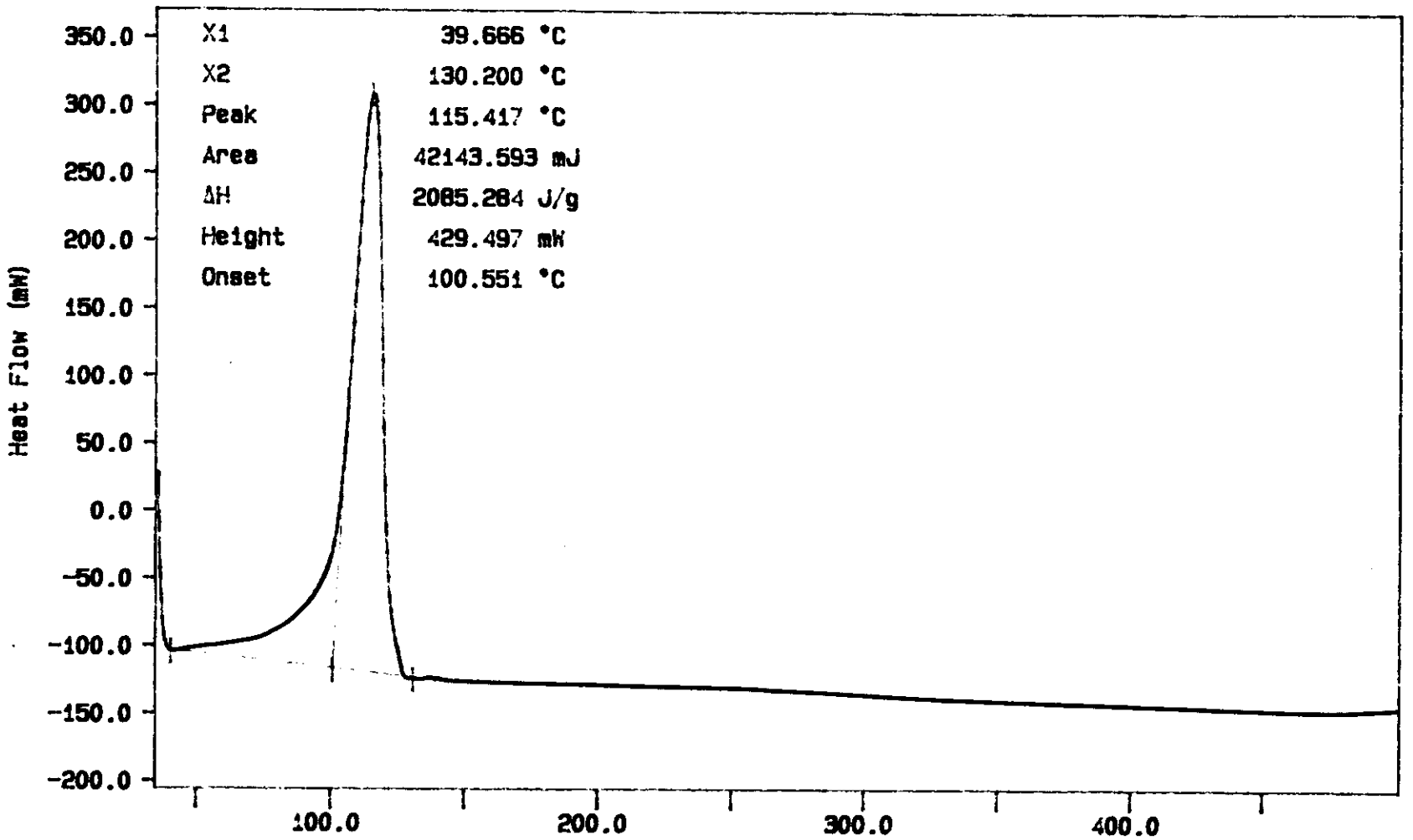
Curve 1: DSC
File info: SAM122801 Thu Dec 28 22:14:43 1995
Sample Weight: 20.960 mg
S95T003833 SAM



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
Thu Dec 28 22:33:19 1995

Curve 1: DSC
File info: SAM122802 Thu Dec 28 23:26:43 1995
Sample Weight: 20.210 mg
S95T003833 DUP



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
Thu Dec 28 23:56:28 1995

LABCORE Data Entry Template for Worklist# 4651

Analyst: RJ McCown **Instrument:** DSC0 1 **Book #** 12N14B

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

Worklist Comment: Please run B-203 DSCs under N2. bdv

GROUP	PROJECT	S TYPE	SAMPLE#	R	A	-------TEST------	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD				DSC-01	SOLID	~~31.1~~ 28.45 BDN	31.5	N/A	Joules/g
95000174	B-203	2 SAMPLE	S95T004039	0		DSC-01	SOLID	N/A	Ø		Joules/g
95000174	B-203	3 DUP	S95T004039	0		DSC-01	SOLID	Ø	Ø	N/A	Joules/g
95000174	B-203	4 SAMPLE	S95T004040	0		DSC-01	SOLID	N/A	Ø		Joules/g
95000174	B-203	5 DUP	S95T004040	0		DSC-01	SOLID	Ø	Ø	N/A	Joules/g

Final page for worklist # 4651

RJ McCown 1/5/96
Analyst Signature **Date**

[signature] 1-9-96
Analyst Signature **Date**

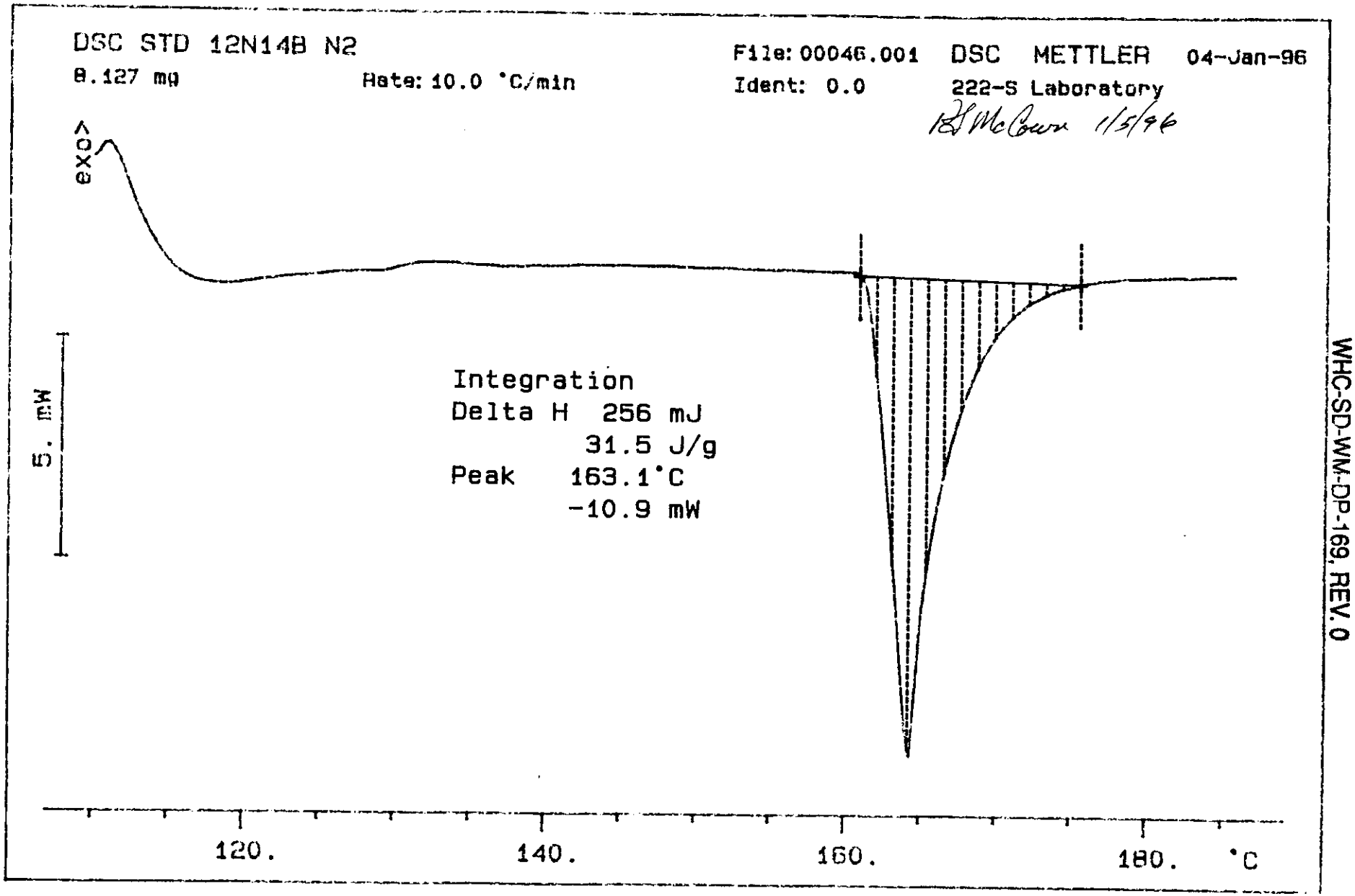
Verified by Blandina Valenzuela
1-11-96

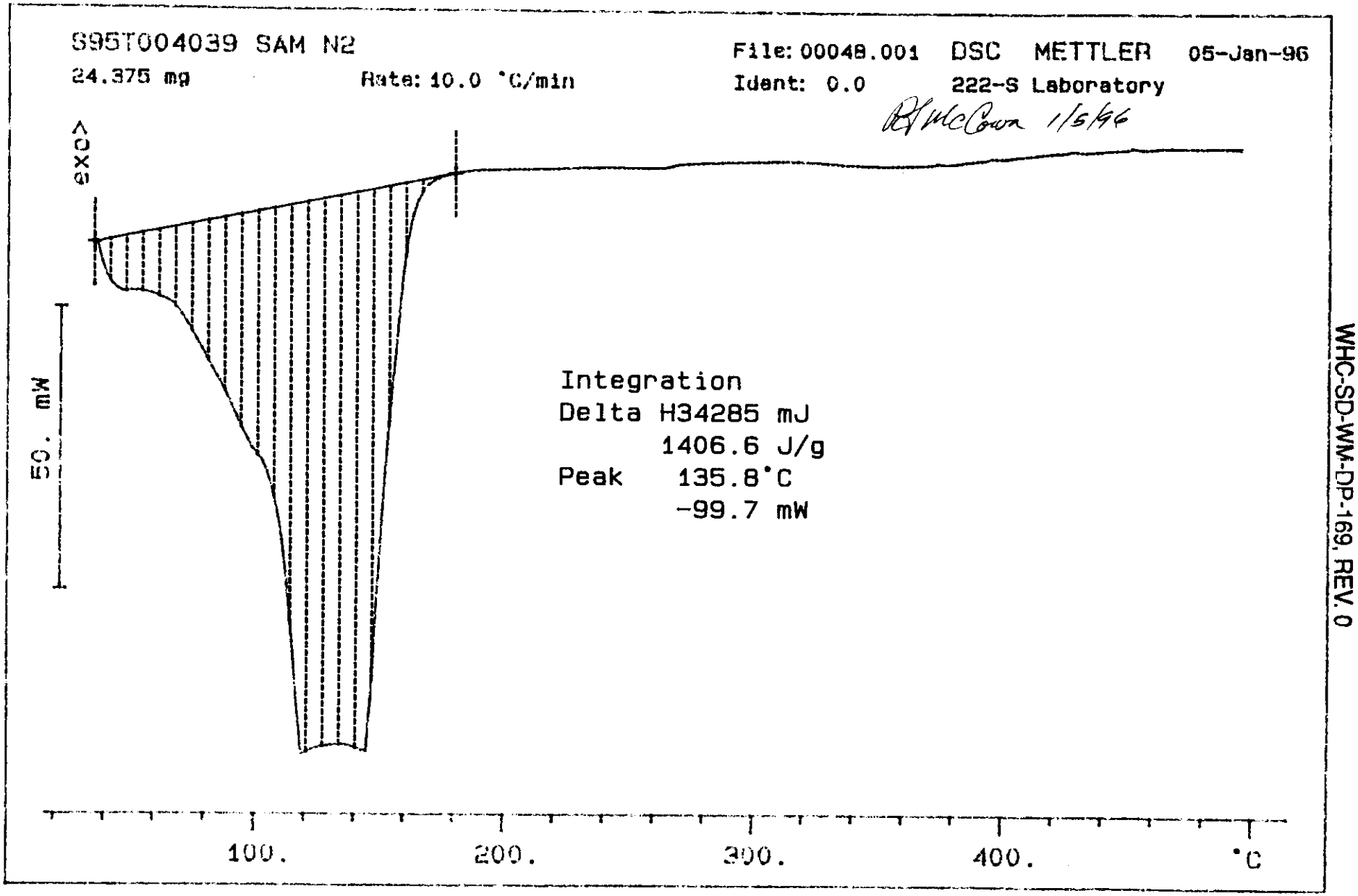
Data Entry Comments: S95T004039 produced an endotherm at 135.2°C with a delta H of 1401.6 J/g

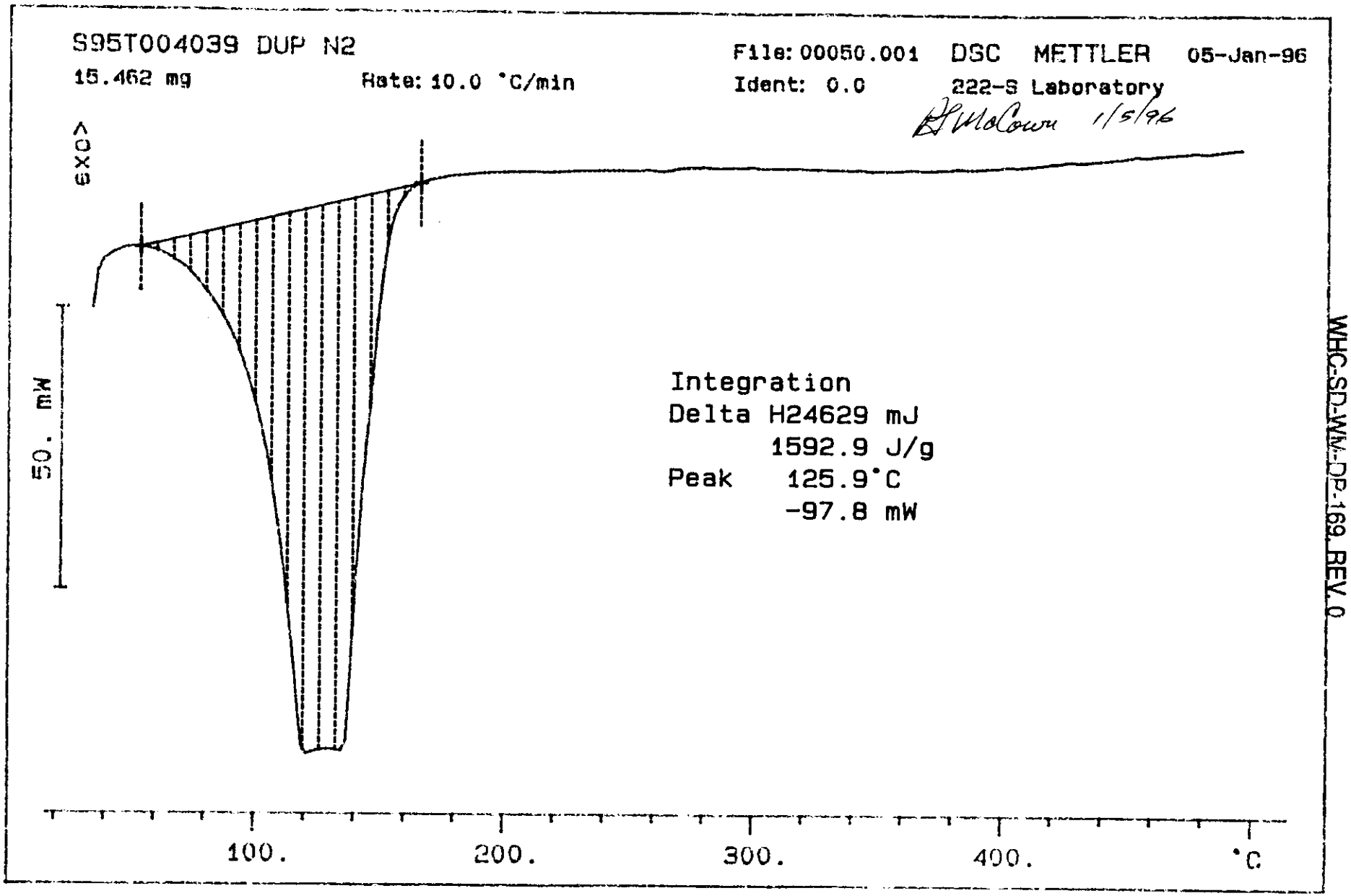
S95T004040 produced an endotherm at 114.0°C with a delta H of 1686.5 J/g.

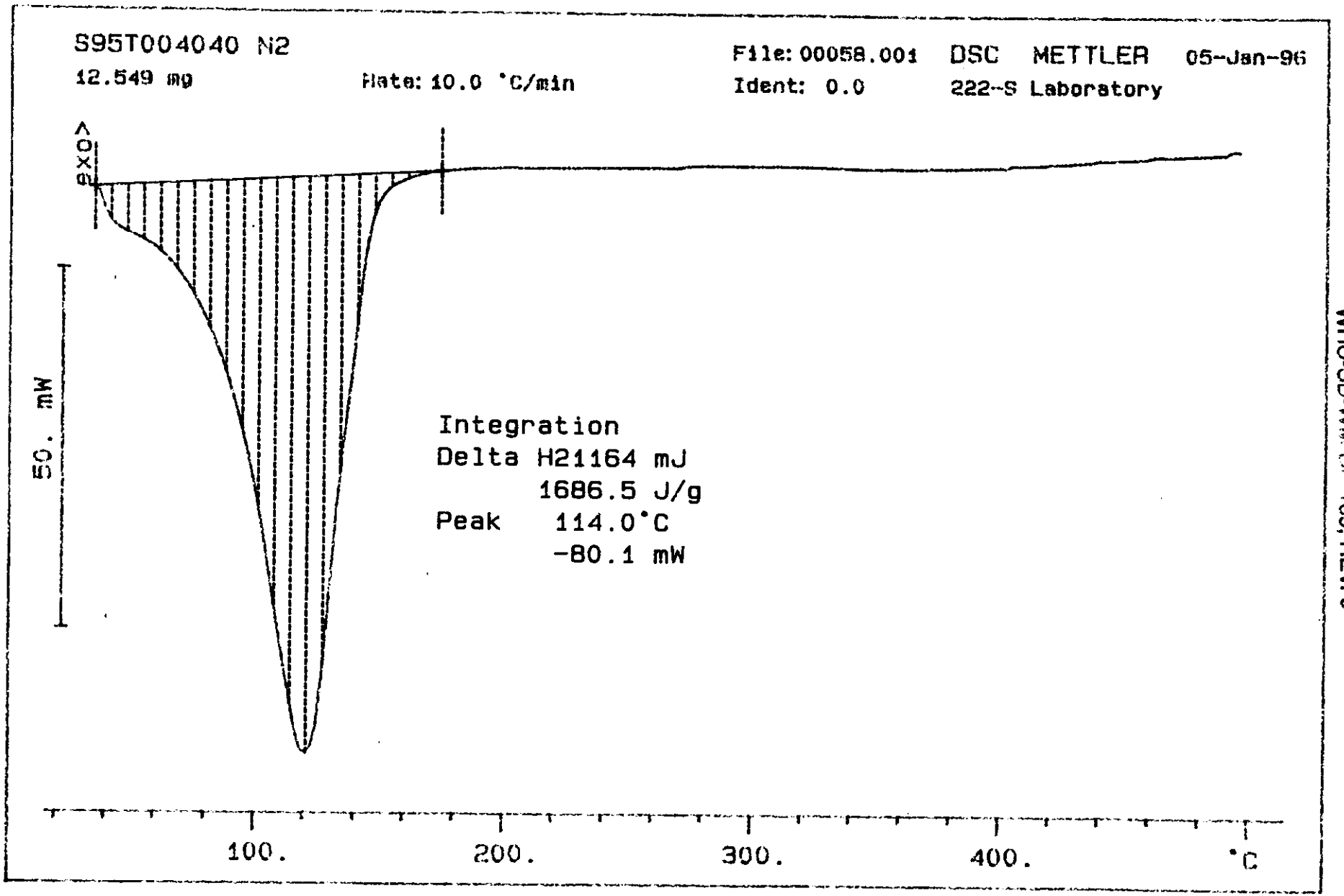
Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

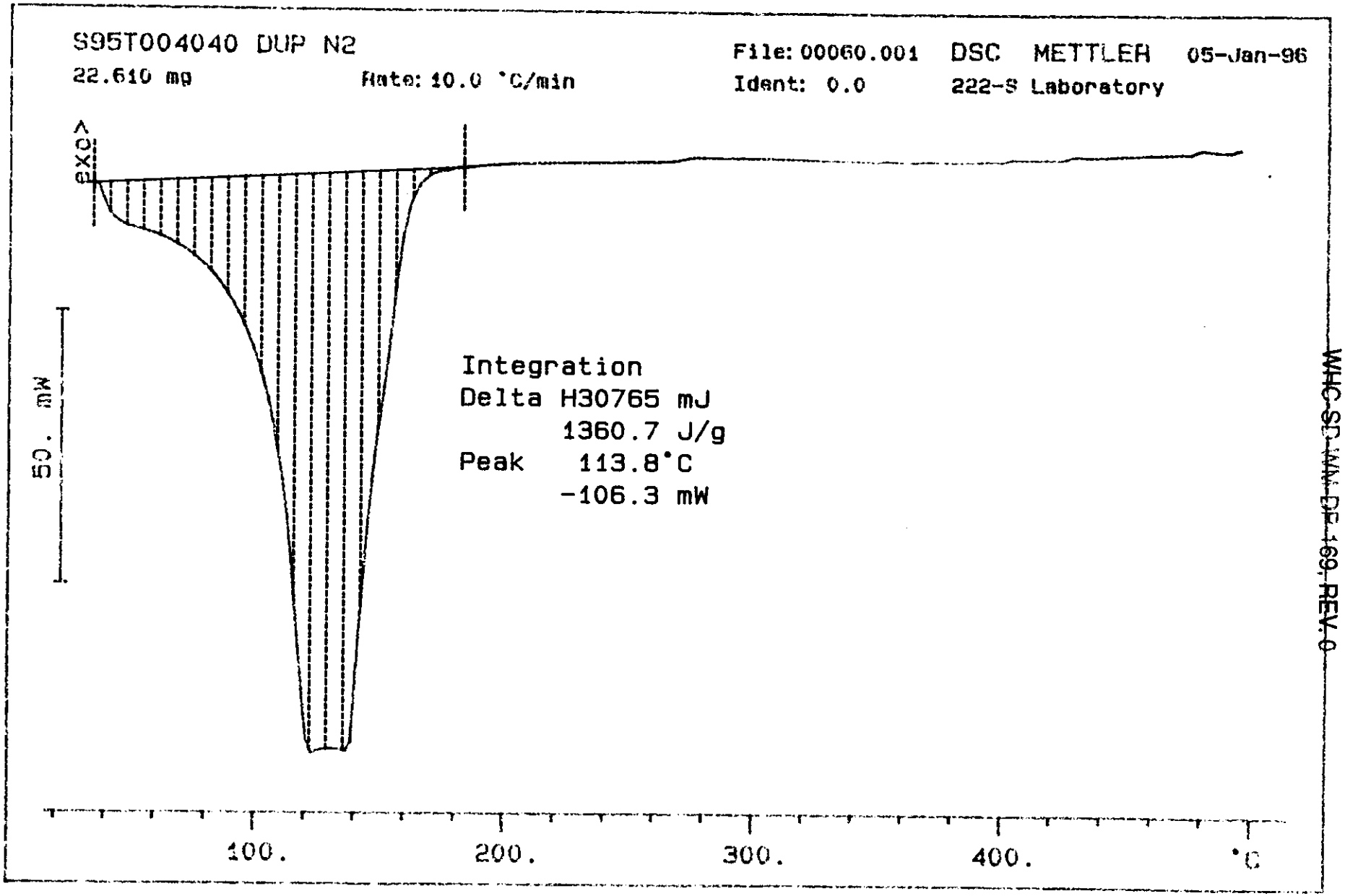
SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 63 TO 67.




S95T004039 SAM N2
24.375 mg
Rate: 10.0 °C/min
File: 00048.001
DSC METTLER
05-Jan-96
Ident: 0.0
222-S Laboratory
RJ McCown 1/5/96
exo>
50. mW
Integration
Delta H34285 mJ
1406.6 J/g
Peak 135.8°C
-99.7 mW
100.
200.
300.
400.
°C


S95T004039 DUP N2
15.462 mg
Rate: 10.0 °C/min
File: 00050.001
DSC METTLER
05-Jan-96
Ident: 0.0
222-S Laboratory
D L McCown 1/5/96
<EXO
50. mW
Integration
Delta H24629 mJ
1592.9 J/g
Peak 125.9°C
-97.8 mW
100.
200.
300.
400.
°C


S95T004040 N2
12.549 mg
Rate: 10.0 °C/min
File: 00058.001
Ident: 0.0
DSC METTLER
222-S Laboratory
05-Jan-96
exo>
50. mW
Integration
Delta H21164 mJ
1686.5 J/g
Peak 114.0°C
-80.1 mW
100.
200.
300.
400.
°C


S95T004040 DUP N2
22.610 mg
Rate: 10.0 °C/min
File: 00060.001
Ident: 0.0
DSC METTLER
222-S Laboratory
05-Jan-96
exo>
50. mW
Integration
Delta H30765 mJ
1360.7 J/g
Peak 113.8°C
-106.3 mW
100.
200.
300.
400.
°C

LABCORE Data Entry Template for Worklist# 4652

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

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

Worklist Comment: Please run B-203 DSCs under N2. bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				DSC-01	SOLID	28.45	31.9*	N/A	Joules/g
95000174	B-203	2	SAMPLE	S95T004041	0		DSC-01	SOLID	N/A	Ø		Joules/g
95000174	B-203	3	DUP	S95T004041	0		DSC-01	SOLID	Ø	Ø	N/A	Joules/g
95000174	B-203	4	SAMPLE	S95T004042	0		DSC-01	SOLID	N/A	Ø		Joules/g
95000174	B-203	5	DUP	S95T004042	0		DSC-01	SOLID	Ø	Ø	N/A	Joules/g

Final page for worklist # 4652

Sm Fulton 1-5-96
Analyst Signature **Date**

Gary Hammond 1-9-96
Analyst Signature **Date**

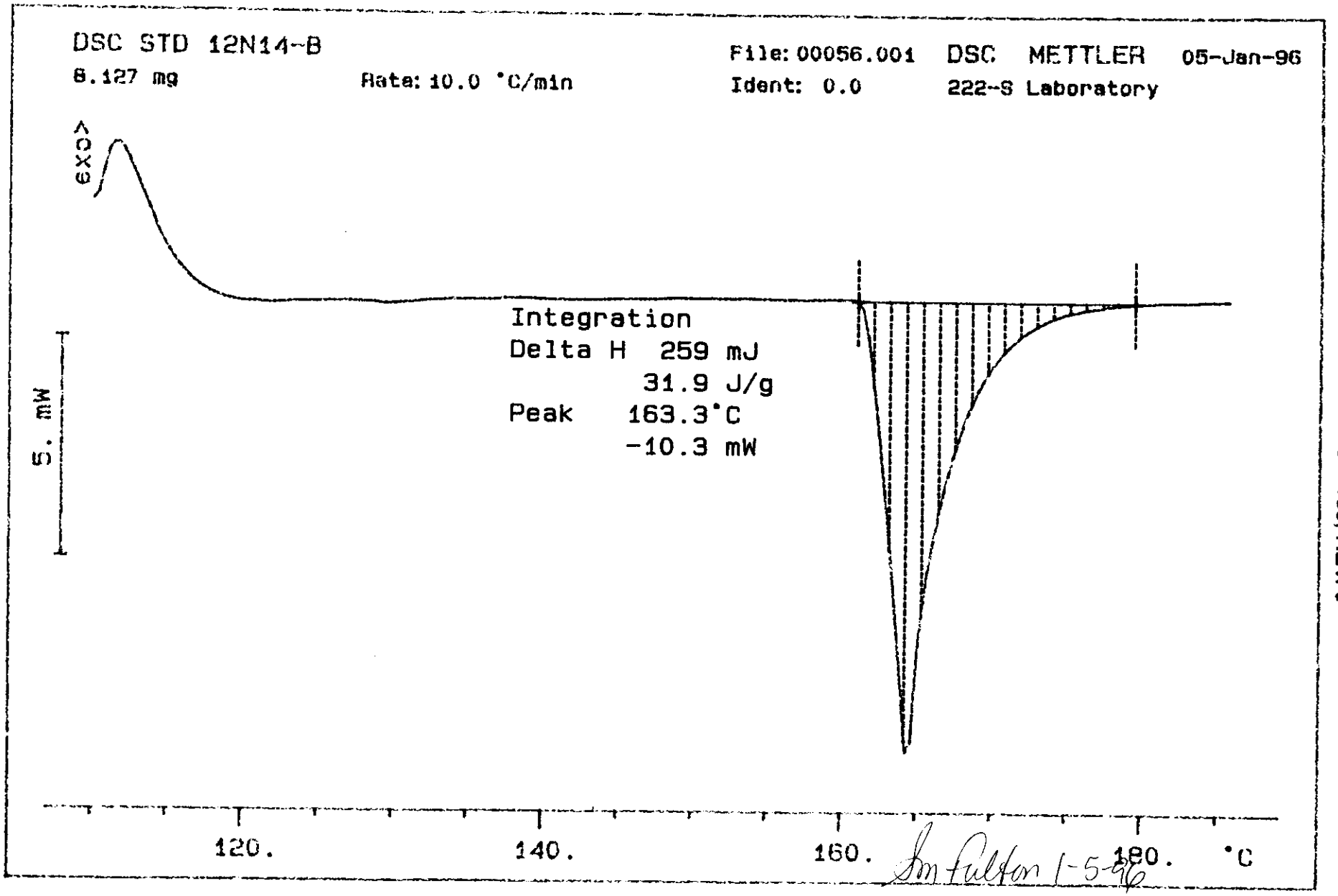
Verified by Blandina Valenzuela
1-11-96

Data Entry Comments:

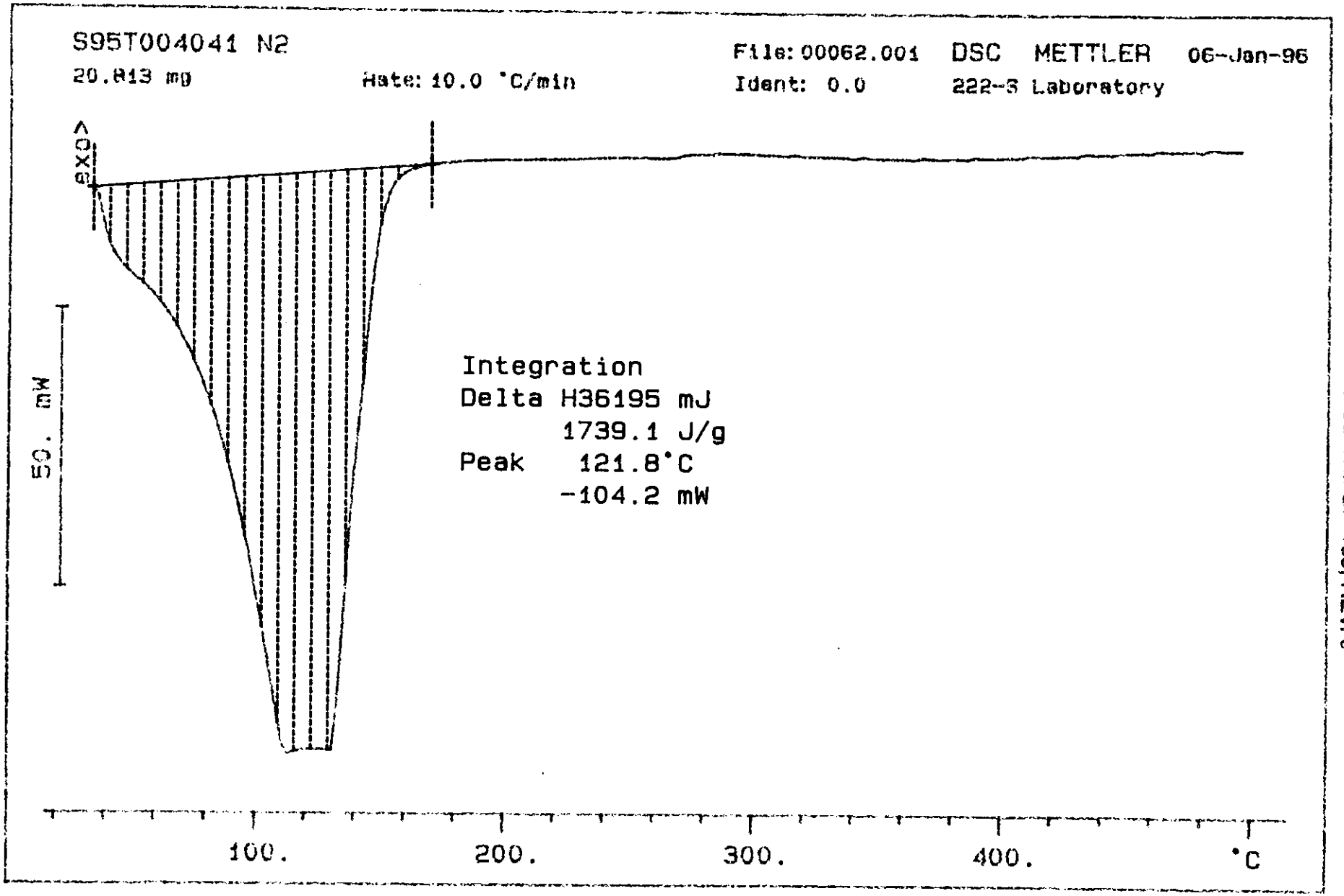
S95T004041 produced an endotherm at 121.8°C with a delta H of 1739.1 J/g
S95T004042 produced an endotherm at 139.8°C with a delta H of 1514.9 J/g

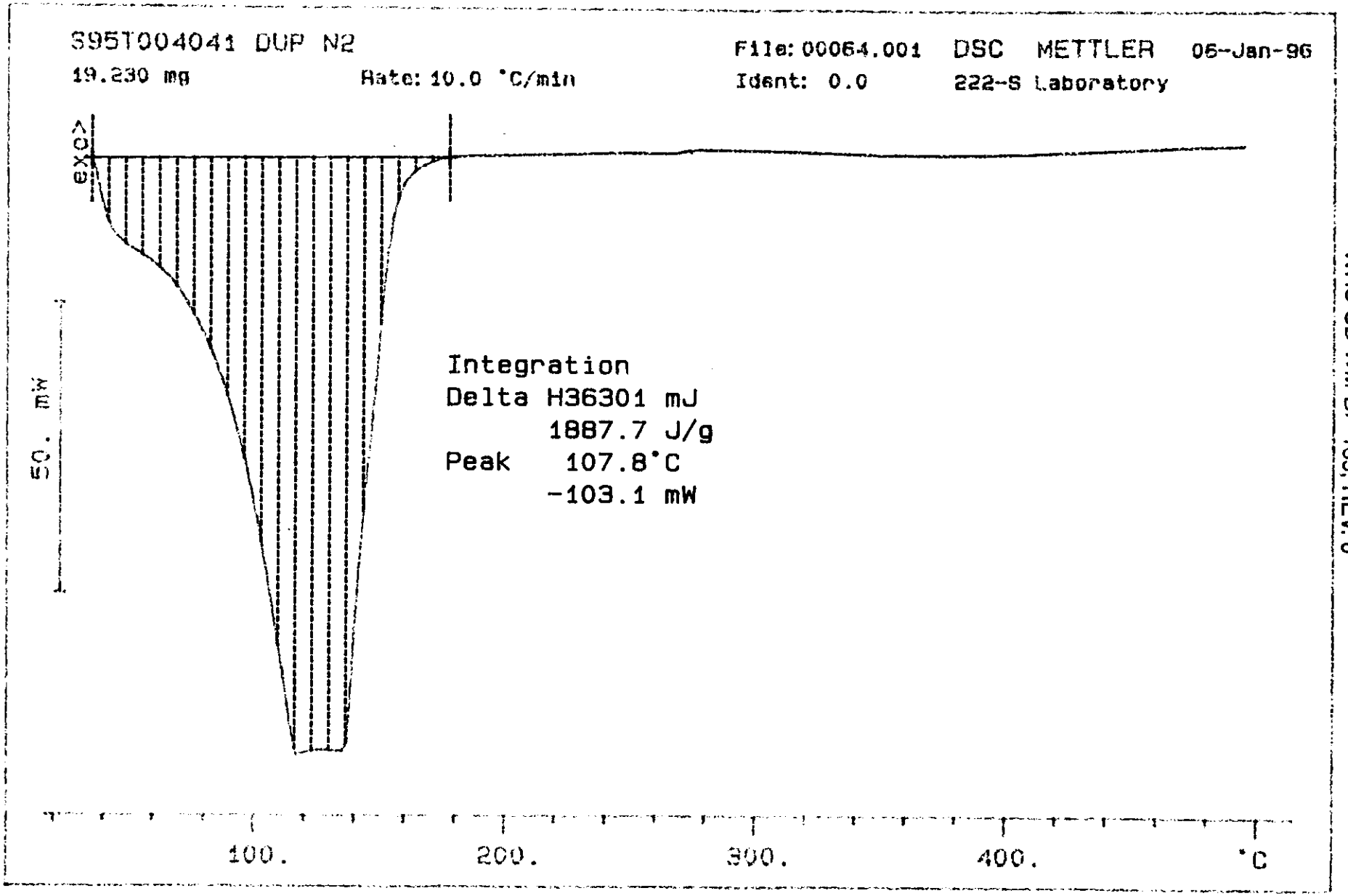
Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

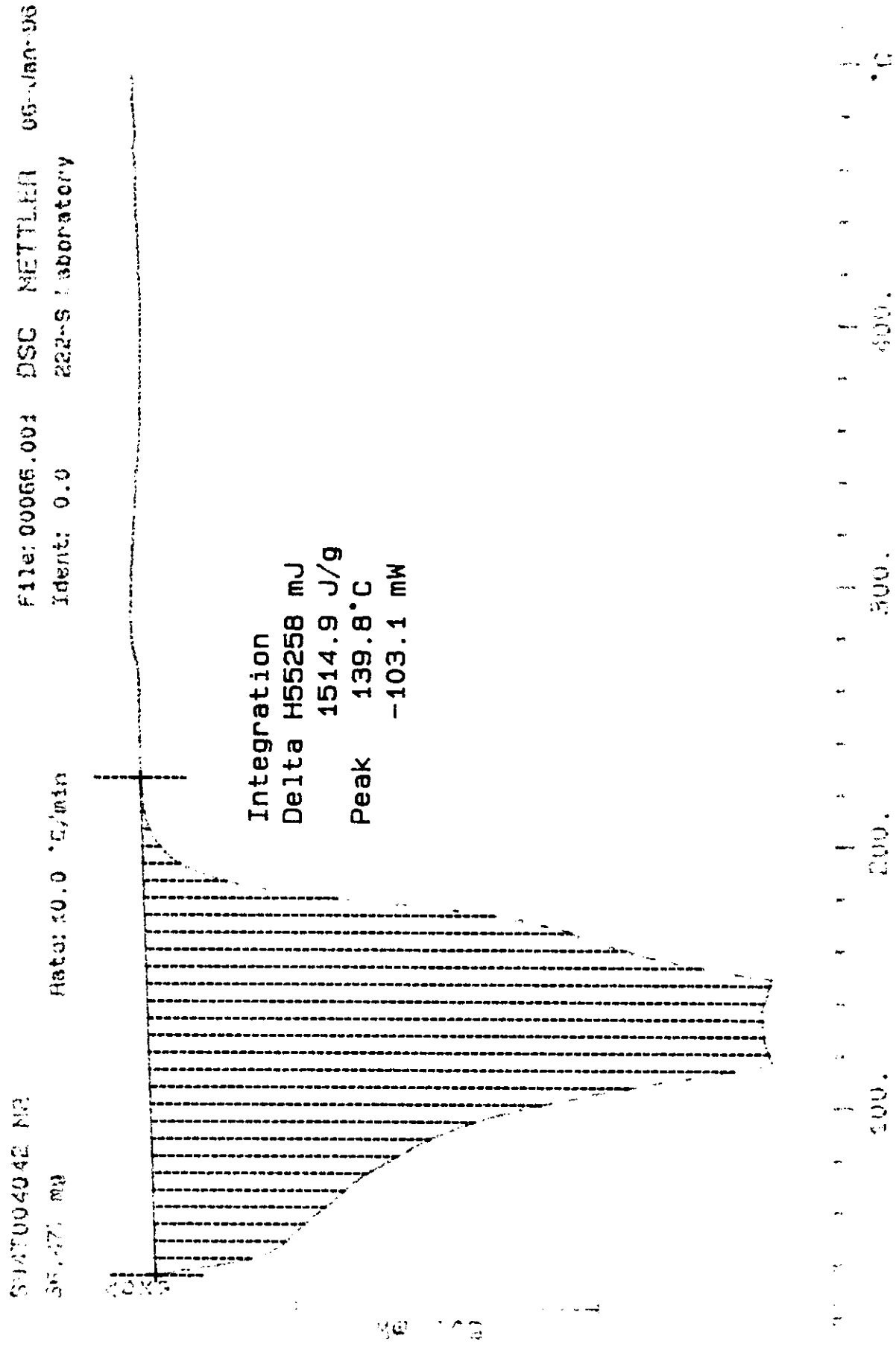
SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 69 TO 73.

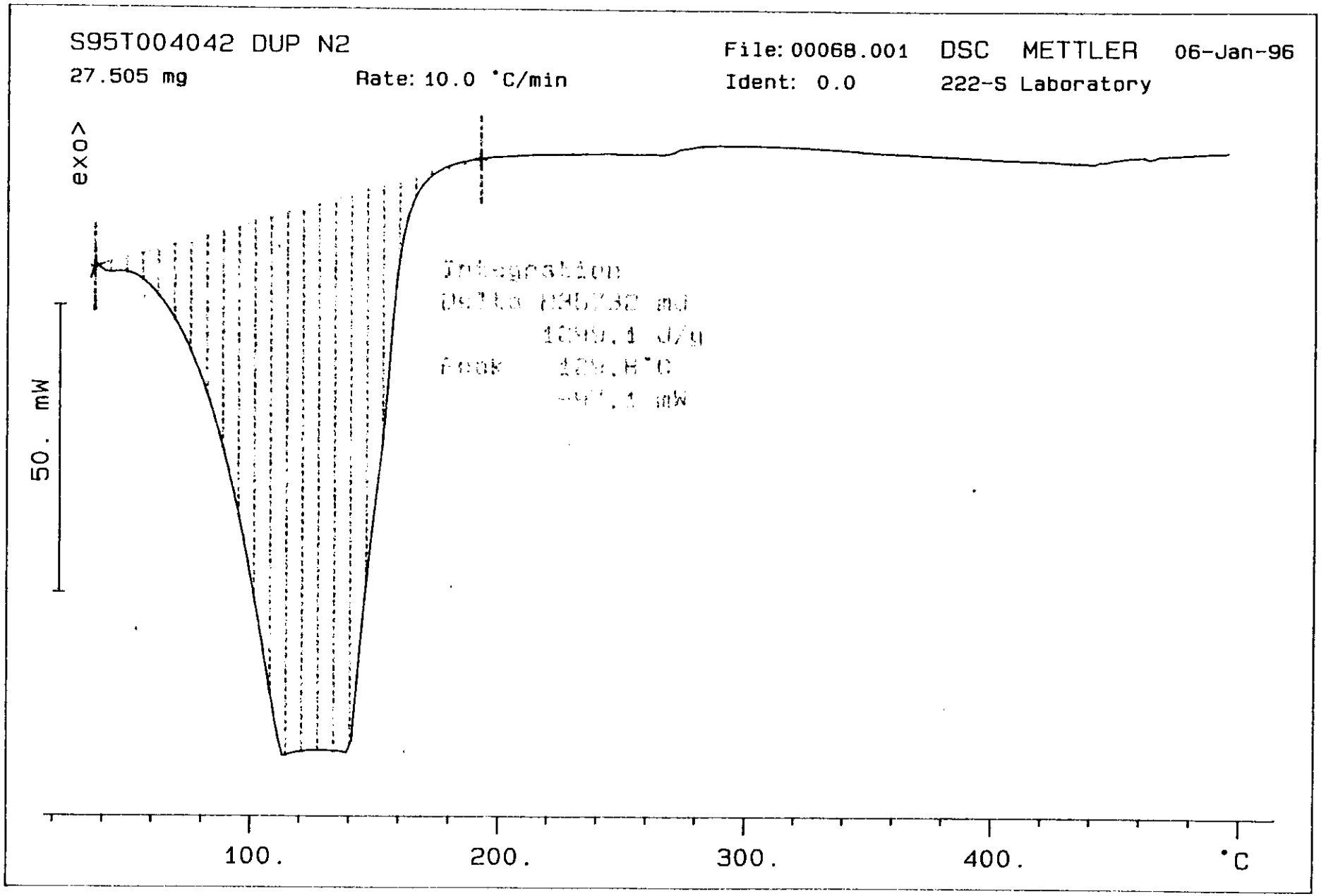


Jim Fulton 1-5-96


S95T004041 N2
20.813 mg
Rate: 10.0 °C/min
File: 00062.001
Ident: 0.0
DSC METTLER
222-S Laboratory
06-Jan-96
exo
50. mW
Integration
Delta H36195 mJ
1739.1 J/g
Peak 121.8°C
-104.2 mW
100.
200.
300.
400.
°C


S95T004041 DUP N2
19.230 mg
Rate: 10.0 °C/min
File: 00064.001
Ident: 0.0
DSC METTLER
222-S Laboratory
06-Jan-96
exo>
50. mW
Integration
Delta H36301 mJ
1887.7 J/g
Peak 107.8°C
-103.1 mW
100.
200.
300.
400.
°C


File: 00066.001
Ident: 0.0
DSC
METTLER
222-S Laboratory
Rate: 10.0 °C/min
Integration
Delta H55258 mJ
1514.9 J/g
Peak 139.8°C
-103.1 mW


S95T004042 DUP N2
27.505 mg
Rate: 10.0 °C/min
File: 00068.001
Ident: 0.0
DSC METTLER
222-S Laboratory
06-Jan-96
exo>
50. mW
100.
200.
300.
400.
°C

worklistrpt Version 2.1 05/15/95
01/25/96 14:59

LABCORE Data Entry Template for Worklist# 4653

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

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

Worklist Comment: Please run B-203 DSCs under N2. bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				DSC-03	SOLID	28.45	28.26*	N/A	Joules/g
95000174	B-203	2	SAMPLE	S95T004043	0		DSC-03	SOLID	N/A	Ø		Joules/g
95000174	B-203	3	DUP	S95T004043	0		DSC-03	SOLID	Ø	Ø	N/A	Joules/g
		4	STD				DSC-03	SOLID	28.45	28.63	N/A	Joules/g
95000174	B-203	5	SAMPLE	S95T004044	0		DSC-03	SOLID	N/A	Ø		Joules/g
95000174	B-203	6	DUP	S95T004044	0		DSC-03	SOLID	Ø	Ø	N/A	Joules/g

Final page for worklist # 4653

See attached for signatures
Analyst Signature **Date**

Linda Conlin 1/29/96
Analyst Signature **Date**

Verified by Blandina Valenzuela 1/29/96

Data Entry Comments: S95T004043 produced an endotherm at 117.7°C with a delta H of 1661.2 J/g

S95T004044 produced an endotherm at 112.4°C with a delta H of 1747.8 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# 4653

Analyst: [illegible] **Instrument:** DSC0 _____ **Book #** 12N143

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

Worklist Comment: Please run B-203 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
95000174	B-203	2	SAMPLE	S95T004043	0		DSC-01	SOLID	N/A			Joules/g
95000174	B-203	3	DUP	S95T004043	0		DSC-01	SOLID			N/A	Joules/g
95000174	B-203	4	SAMPLE	S95T004044	0		DSC-01	SOLID	N/A			Joules/g
95000174	B-203	5	DUP	S95T004044	0		DSC-01	SOLID			N/A	Joules/g

Final page for worklist # 4653

[illegible] 12 1/5/96
Analyst Signature **Date**

Analyst Signature **Date**

[illegible] 1-17-96

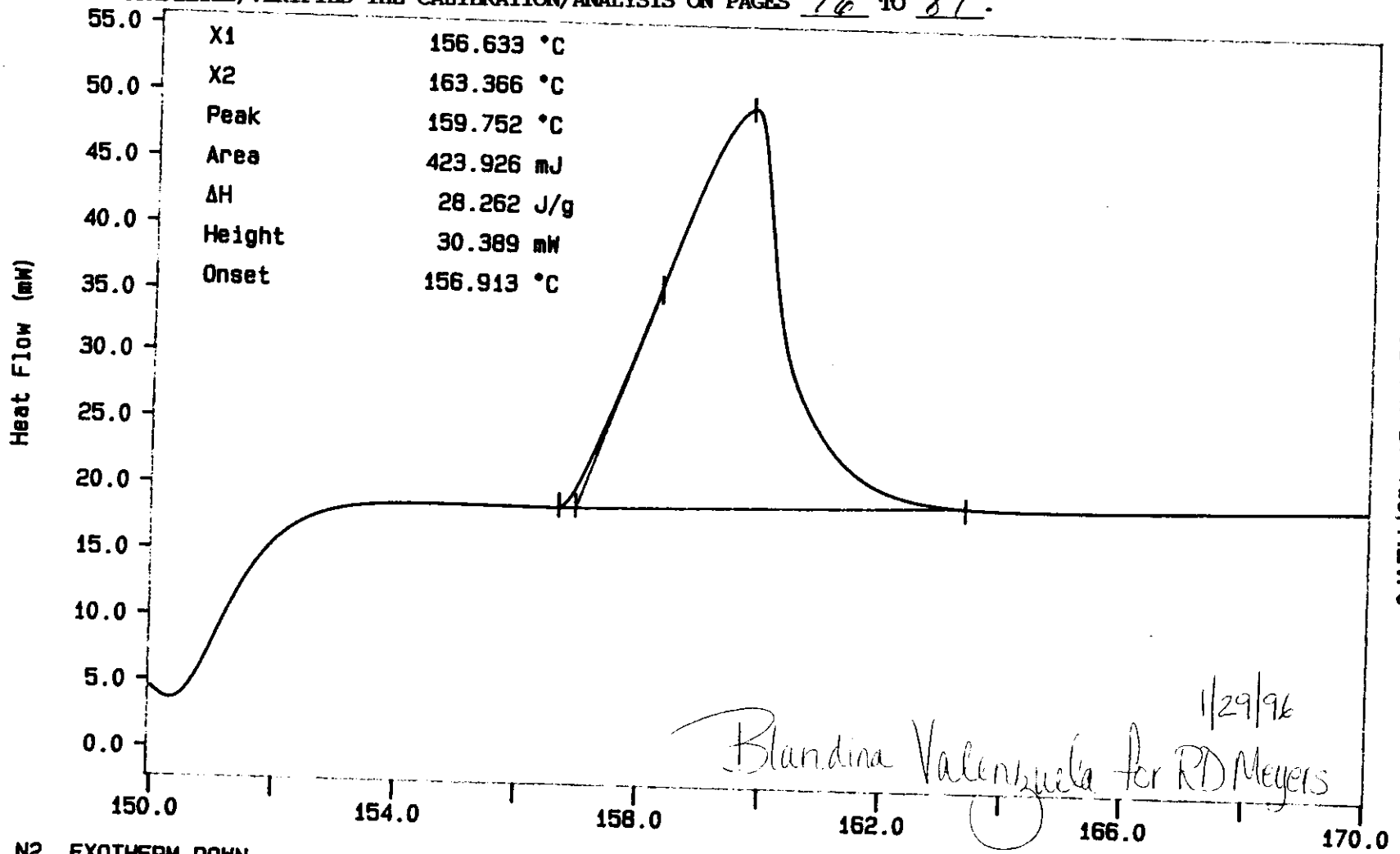
Other instrument was used.
1/29/96
BDV

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: DSC
File info: ind010501 Fri Jan 5 06:50:11 1996
Sample Weight: 15.000 mg
12N14B Indium at 10C/min

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

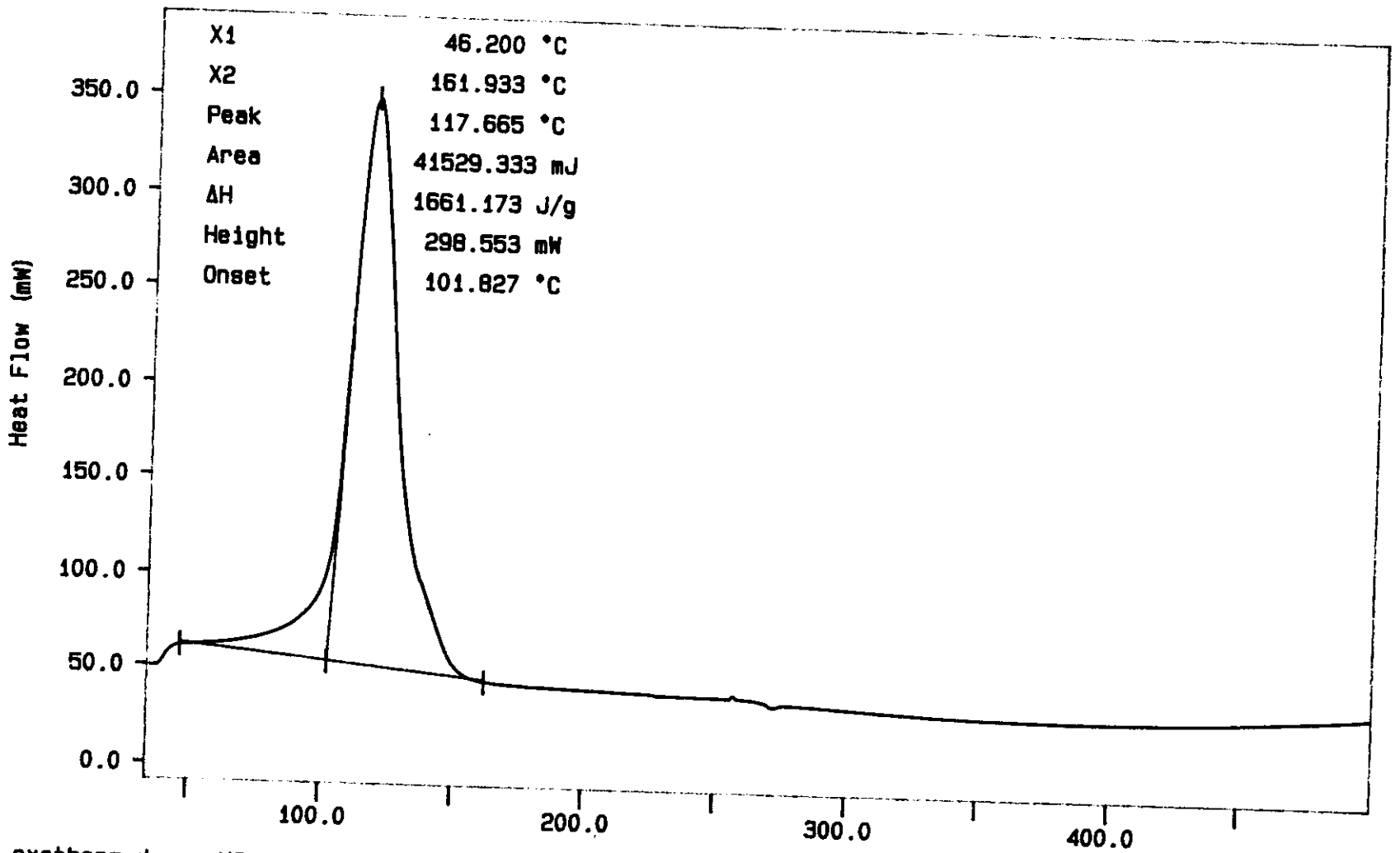


Blandina Valenzuela for RD Meyers 1/29/96

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

RD MEYERS
PERKIN-ELMER
7 Series Thermal Analysis System
Fri Jan 5 11:13:09 1996

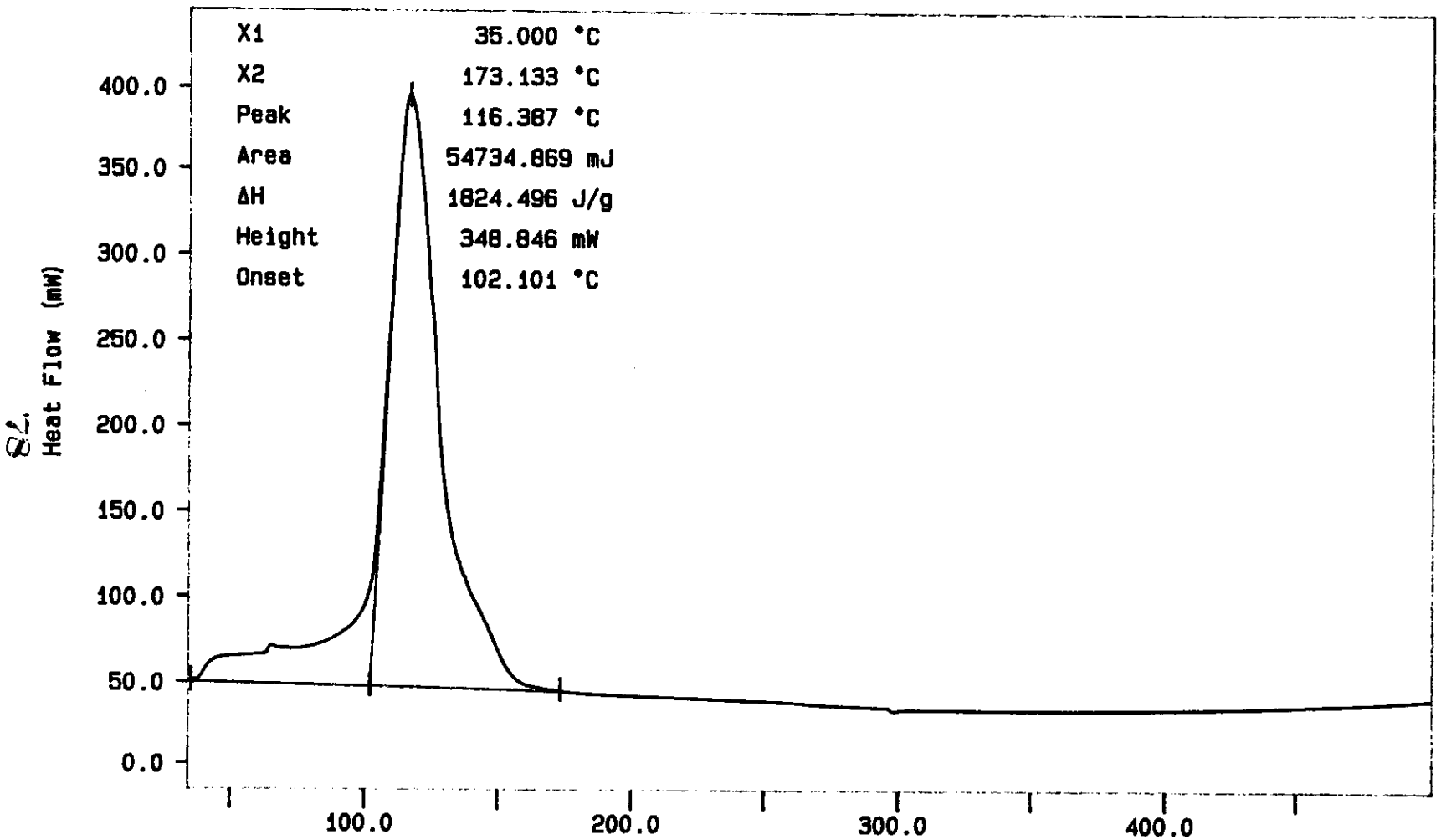
Curve 1: DSC
File info: SAM010501 Fri Jan 5 14:05:15 1996
Sample Weight: 25.000 mg
S95T004043



exotherm down, N2 purge gas
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
Fri Jan 5 16:18:49 1996

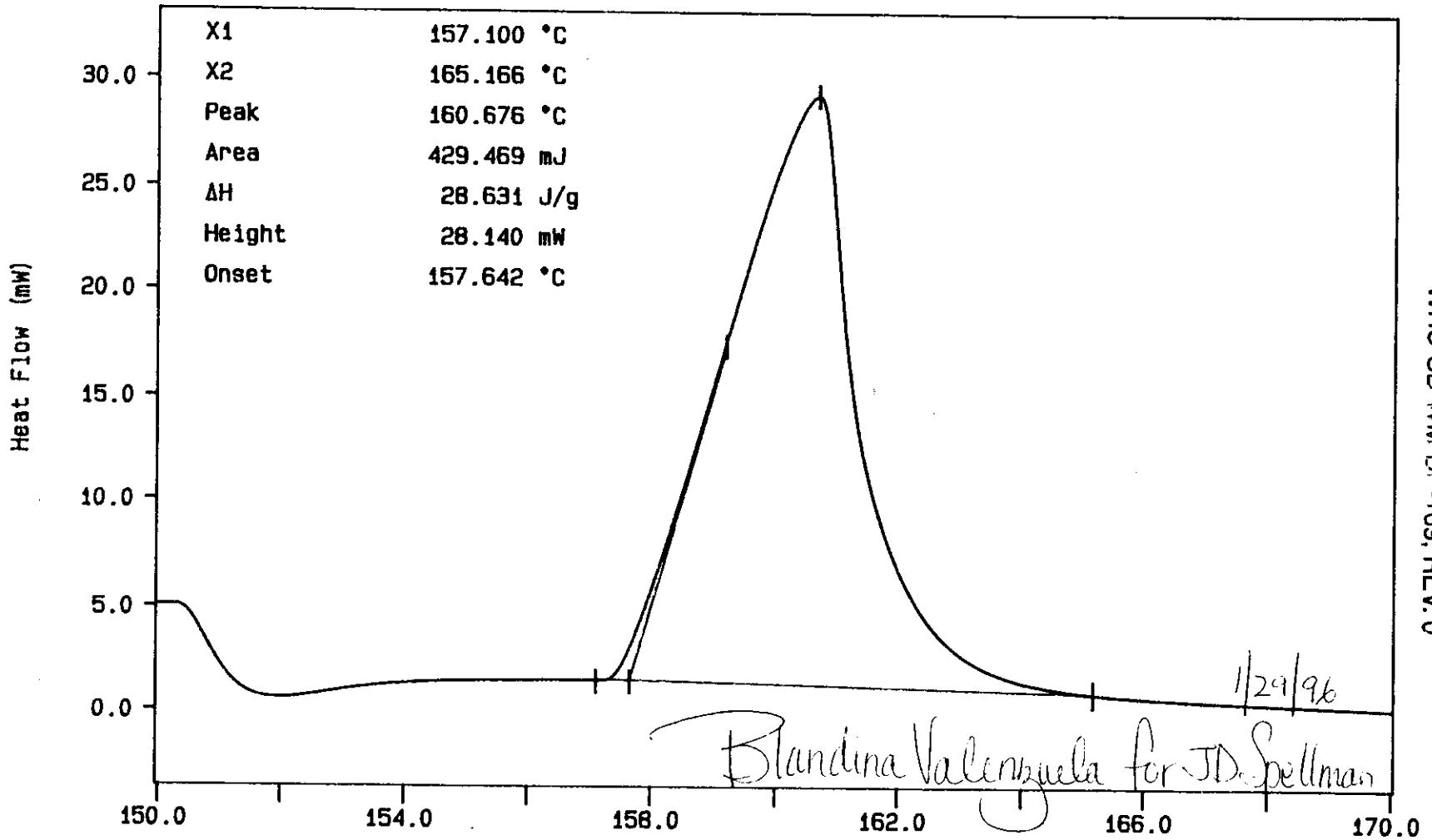
Curve 1: DSC
File info: SAM010502 Fri Jan 5 17:13:11 1996
Sample Weight: 30.000 mg
S95T004043DUP



exotherm down, N2 purge gas
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
Fri Jan 5 18:18:43 1996

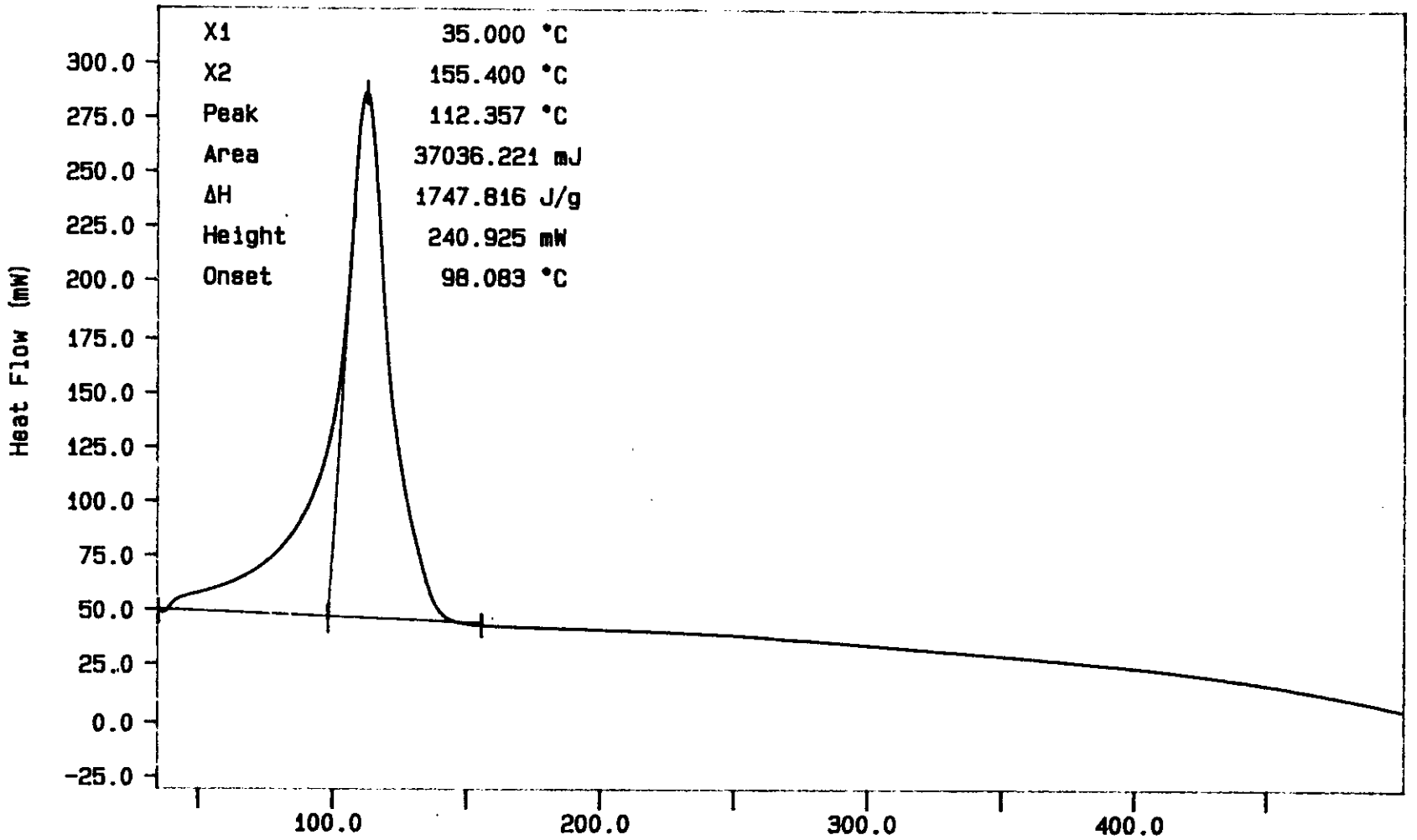
Curve 1: DSC
File info: IND011602 Tue Jan 16 06:53:33 1996
Sample Weight: 15.000 mg
12N14B Indium at 10C/min



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

JD SPELLMAN
PERKIN-ELMER
7 Series Thermal Analysis System
Thu Jan 25 14:41:56 1996

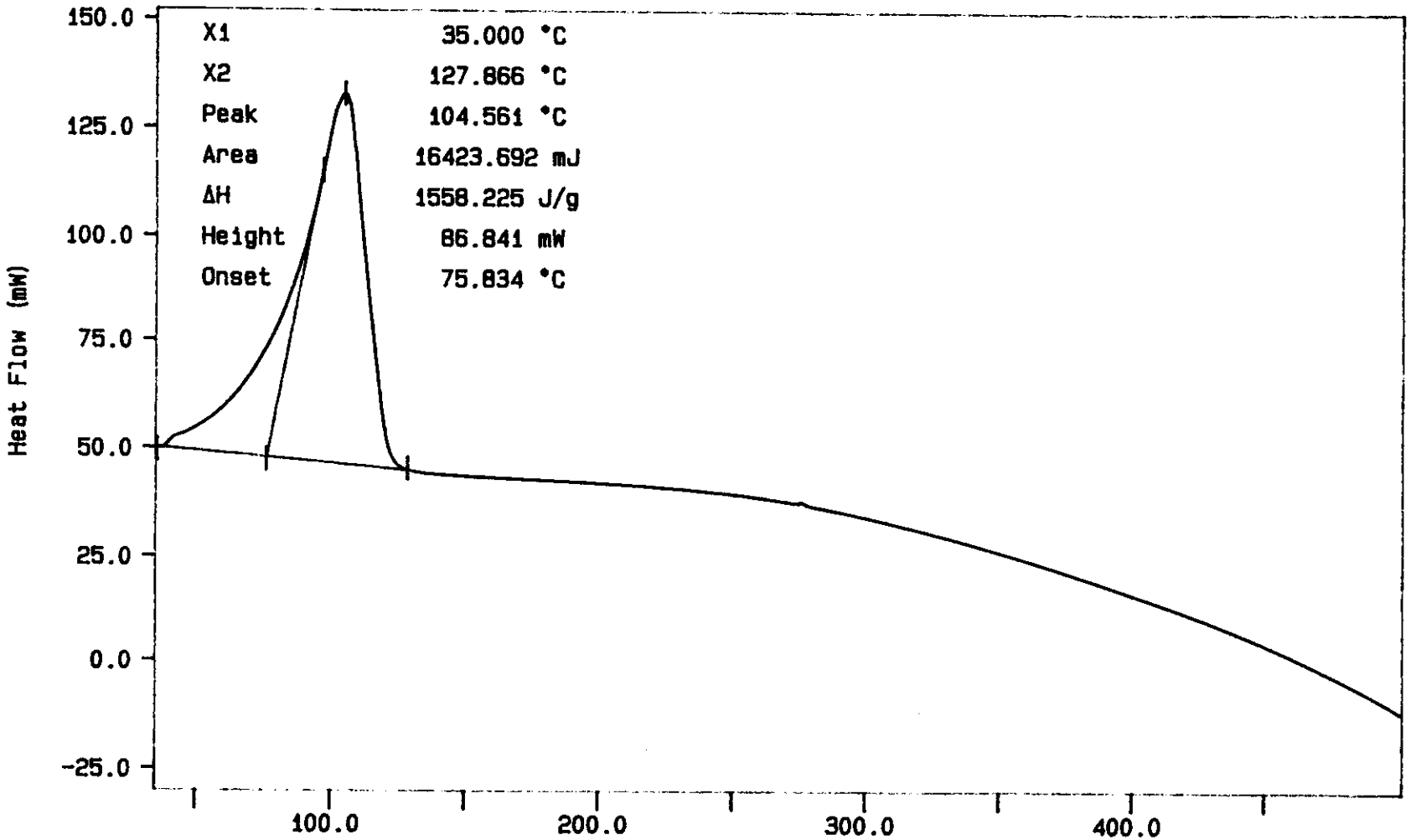
Curve 1: DSC
File info: SAM011703 Wed Jan 17 14:26:20 1996
Sample Weight: 21.190 mg
S95T004044



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

JD SPELLMAN
PERKIN-ELMER
7 Series Thermal Analysis System
Wed Jan 17 14:36:06 1996

Curve 1: DSC
File info: SAM011704 Wed Jan 17 15:33:16 1996
Sample Weight: 10.540 mg
S95T004044DUP



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

JD SPELLMAN
PERKIN-ELMER
7 Series Thermal Analysis System
Wed Jan 17 16:23:27 1996

LABCORE Data Entry Template for Worklist# 4654

Analyst: [illegible] **Instrument:** DSC0 1 **Book #** 12N14-B

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

Worklist Comment: Please run B-203 DSCs under N2. bdv

GROUP	PROJECT	S TYPE	SAMPLE#	R	A	-------TEST------	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD				DSC-01	SOLID	28.45	30.7	N/A	Joules/g
95000174	B-203	2 SAMPLE	S95T004045	0		DSC-01	SOLID	N/A	Ø		Joules/g
95000174	B-203	3 DUP	S95T004045	0		DSC-01	SOLID	Ø	Ø	N/A	Joules/g
95000174	B-203	4 SAMPLE	S95T004046	0		DSC-01	SOLID	N/A	Ø		Joules/g
95000174	B-203	5 DUP	S95T004046	0		DSC-01	SOLID	Ø	Ø	N/A	Joules/g

Final page for worklist # 4654

[illegible] 1-7-96
Analyst Signature **Date**

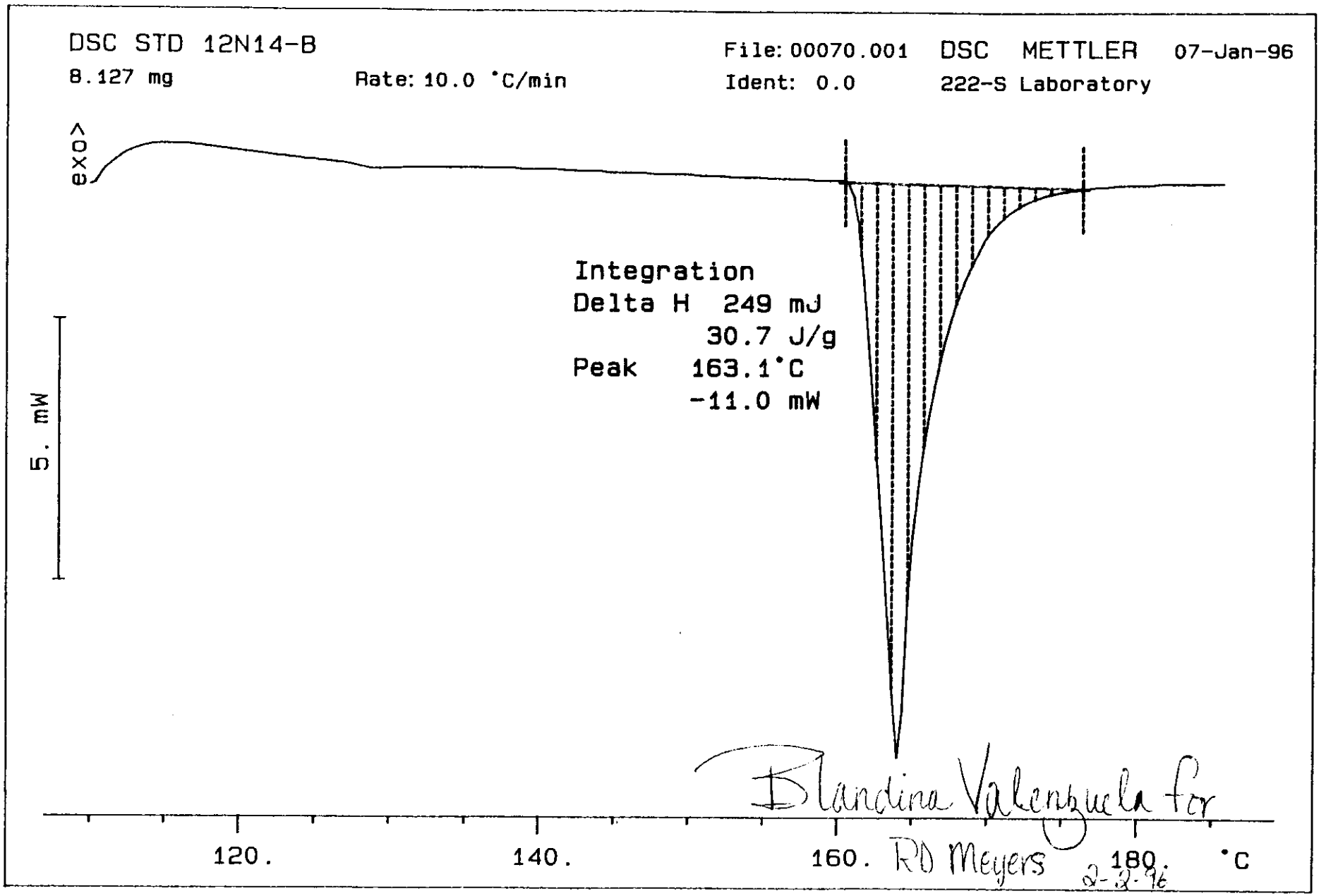
[illegible] 1-9-96
Analyst Signature **Date**

Verified by Blandina Valenzuela
1-11-96

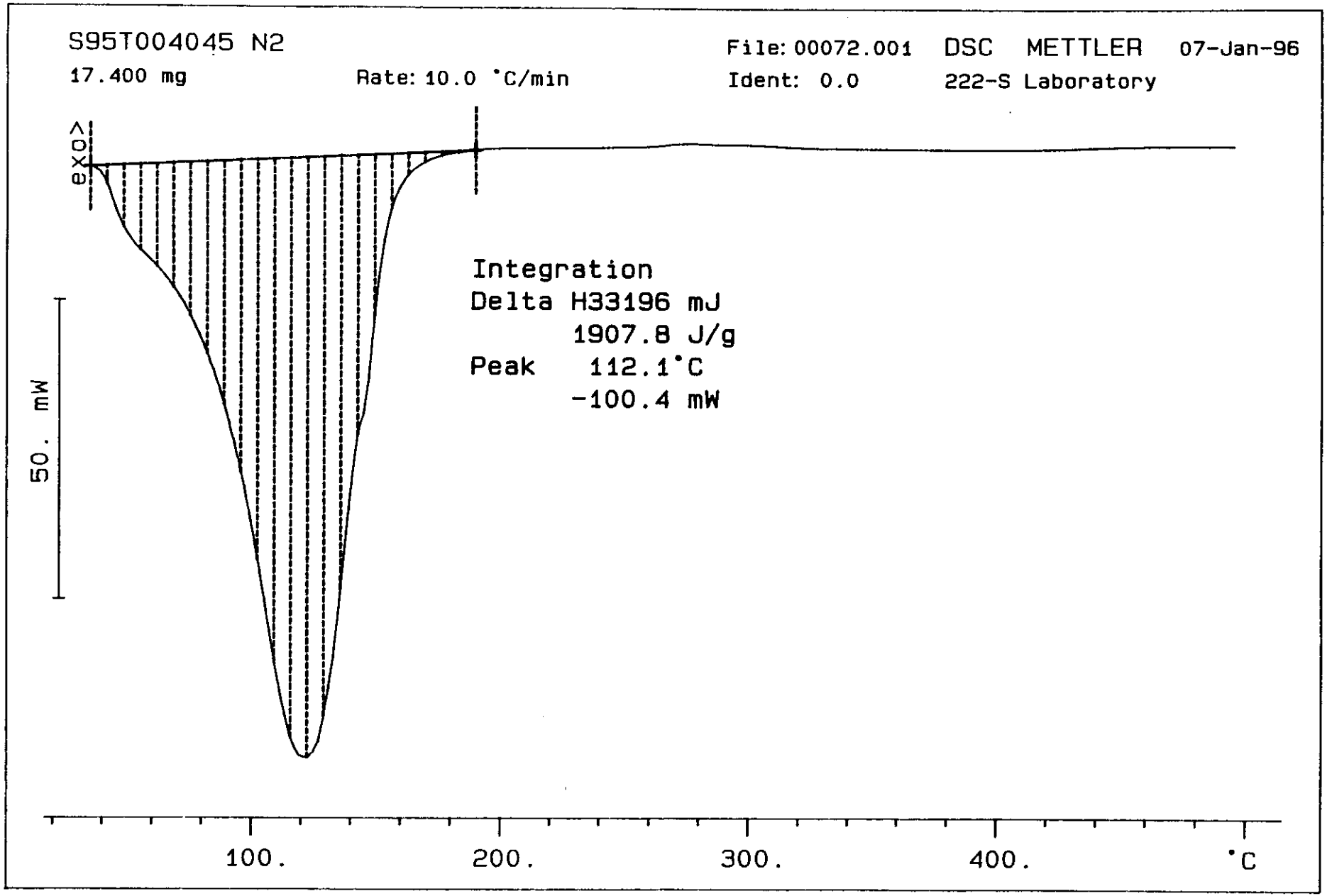
Data Entry Comments: S95T004045 produced an endotherm at 112.1°C with a delta H of 1907.8 J/g.
S95T004046 produced an endotherm at 107.2°C with a delta H of 1835.7 J/g

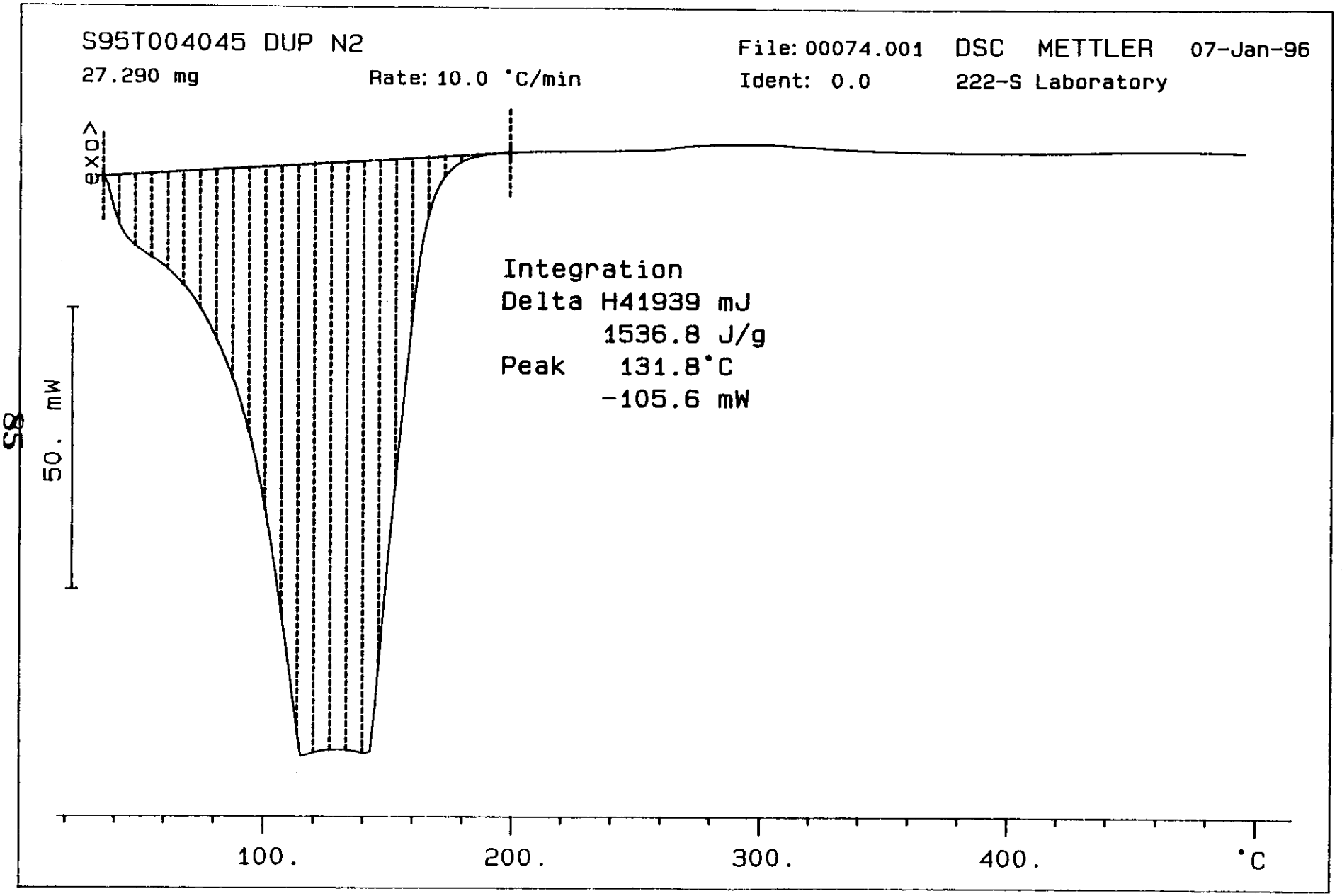
Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

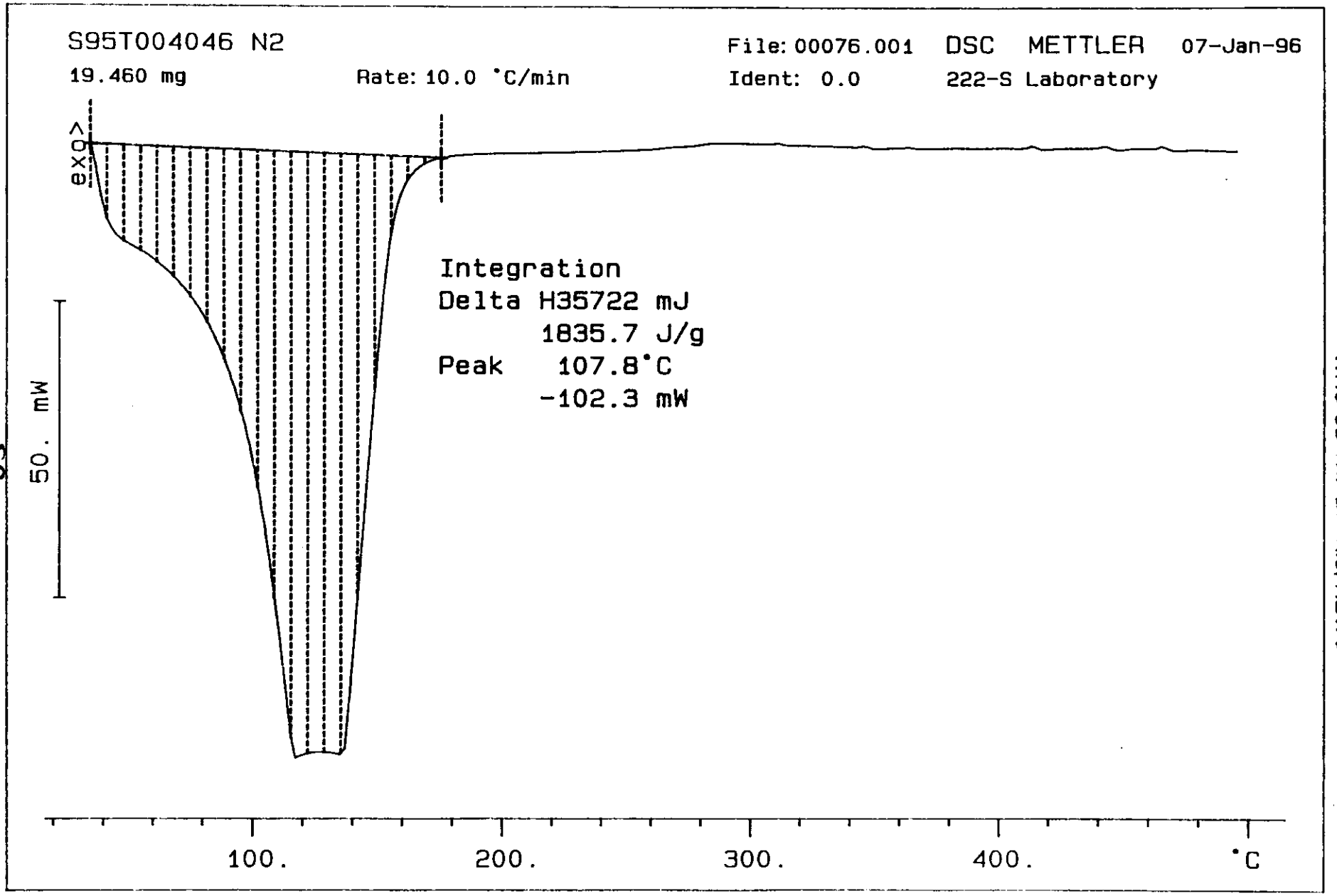
SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 83 TO 87.

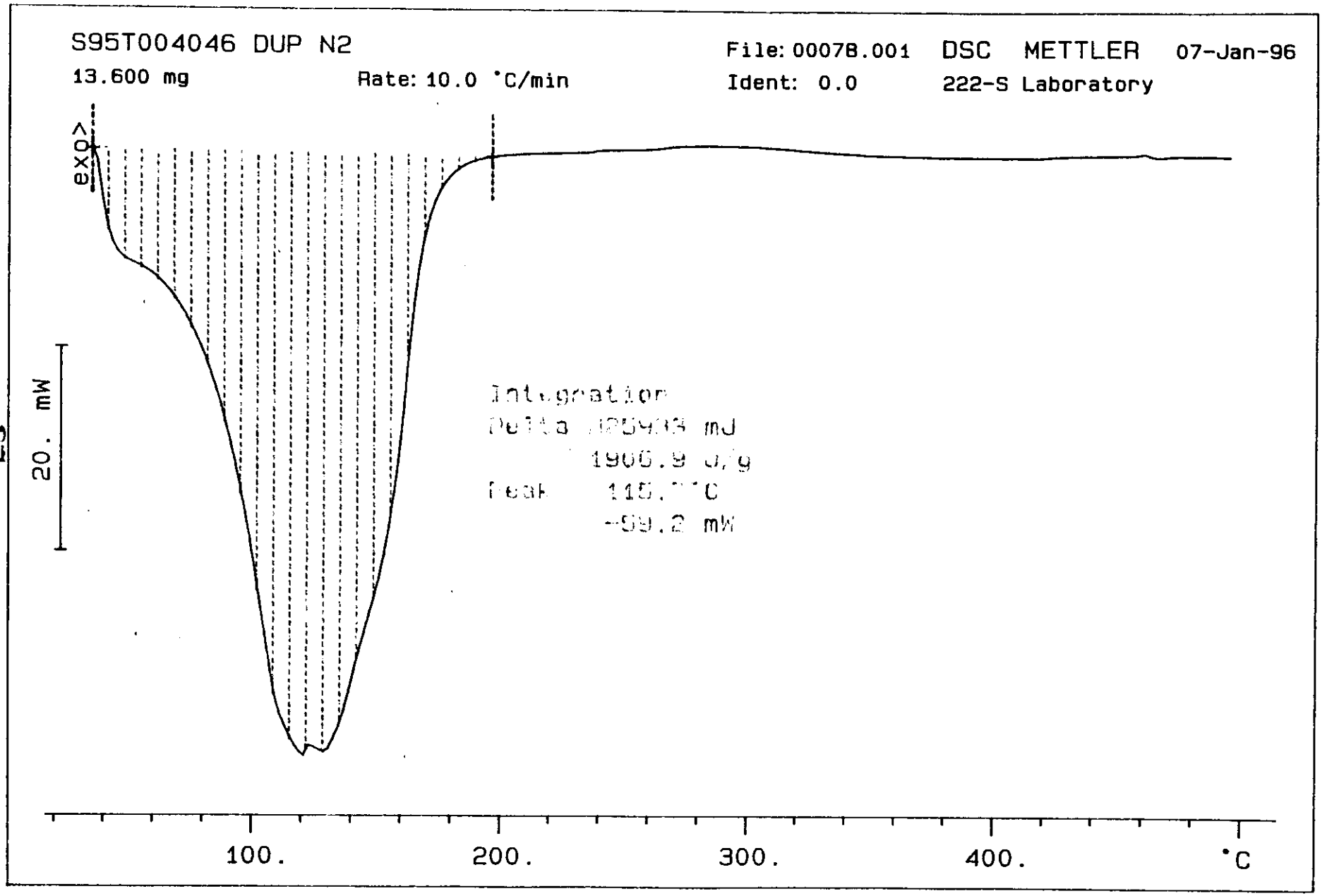


Blandina Valenzuela for RD Meyers 2-2-96


S95T004045 N2
17.400 mg
Rate: 10.0 °C/min
File: 00072.001
Ident: 0.0
DSC METTLER
222-S Laboratory
07-Jan-96
exo>
Integration
Delta H33196 mJ
1907.8 J/g
Peak 112.1°C
-100.4 mW
50. mW
100.
200.
300.
400.
°C


S95T004045 DUP N2
27.290 mg
Rate: 10.0 °C/min
File: 00074.001
Ident: 0.0
DSC METTLER
222-S Laboratory
07-Jan-96
exo>
Integration
Delta H41939 mJ
1536.8 J/g
Peak 131.8°C
-105.6 mW
50. mW
100.
200.
300.
400.
°C


S95T004046 N2
19.460 mg
Rate: 10.0 °C/min
File: 00076.001
DSC METTLER
07-Jan-96
Ident: 0.0
222-S Laboratory
exo>
50. mW
Integration
Delta H35722 mJ
1835.7 J/g
Peak 107.8°C
-102.3 mW
100.
200.
300.
400.
°C


S95T004046 DUP N2
13.600 mg
Rate: 10.0 °C/min
File: 00078.001
Ident: 0.0
DSC METTLER
222-S Laboratory
07-Jan-96
exo>
20. mW
Integration
Delta
1906.9 J/g
Peak
-59.2 mW
100.
200.
300.
400.
°C

LABCORE Data Entry Template for Worklist# 4655

Analyst: SMF **Instrument:** DSC0 1 **Book #** 12 N14 B

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

Worklist Comment: Please run B-203 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
95000174	B-203	2	SAMPLE	S95T004047	0		DSC-01	SOLID	N/A	Ø		Joules/g
95000174	B-203	3	DUP	S95T004047	0		DSC-01	SOLID	Ø	Ø	N/A	Joules/g
95000174	B-203	4	SAMPLE	S95T004048	0		DSC-01	SOLID	N/A	Ø		Joules/g
95000174	B-203	5	DUP	S95T004048	0		DSC-01	SOLID	Ø	Ø	N/A	Joules/g

Final page for worklist # 4655

Susie M. Fuller 1-7-96
Analyst Signature **Date**

[signature] 1-9-96
Analyst Signature **Date**

Verified by Blandina Valenzuela
1-10-96

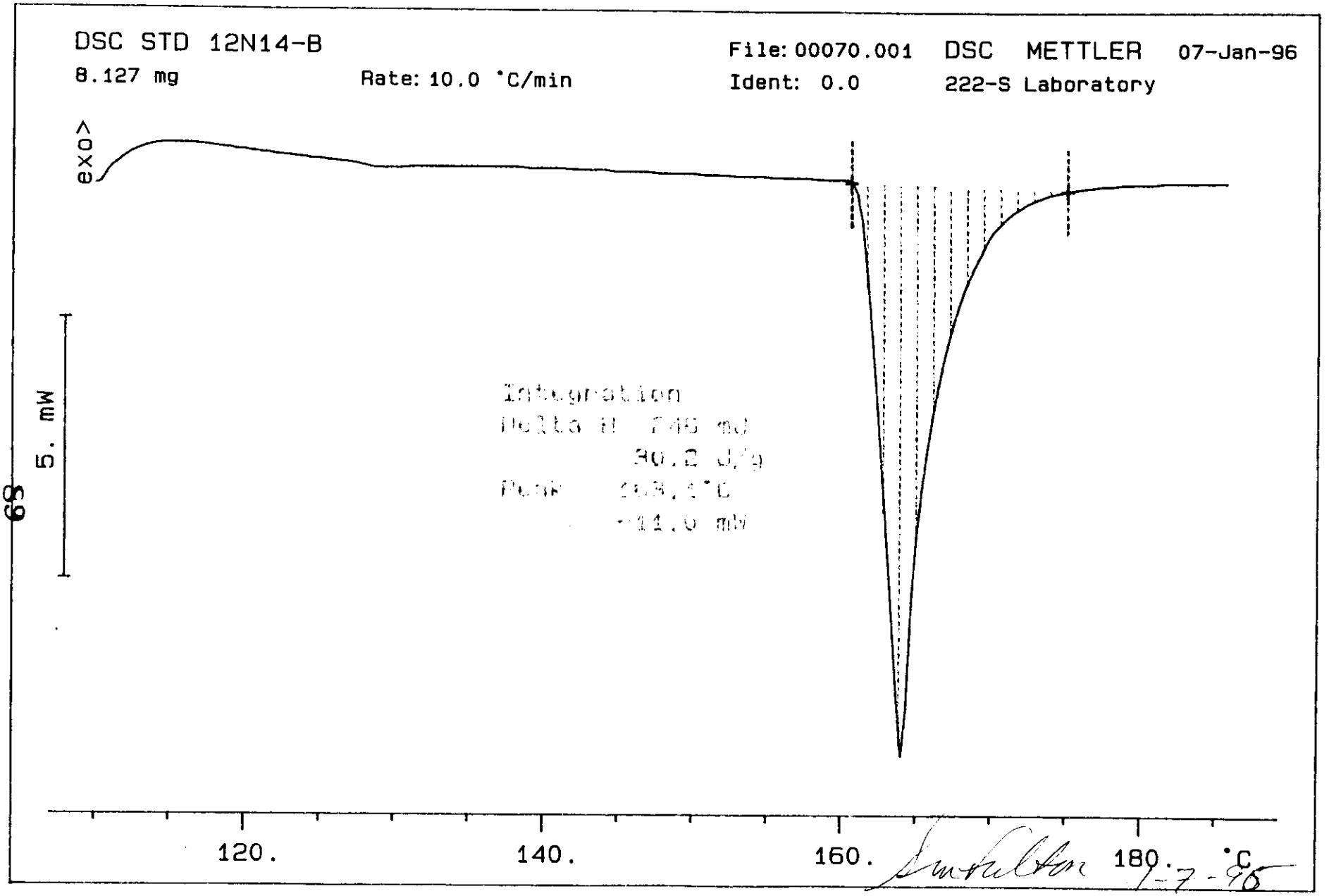
S95T004047 produced an endotherm at 107.8°C with a delta H of 1754.2 J/g

Data Entry Comments: S95T004048 produced an endotherm at 108.6°C with a delta H of 2044.2 J/g.

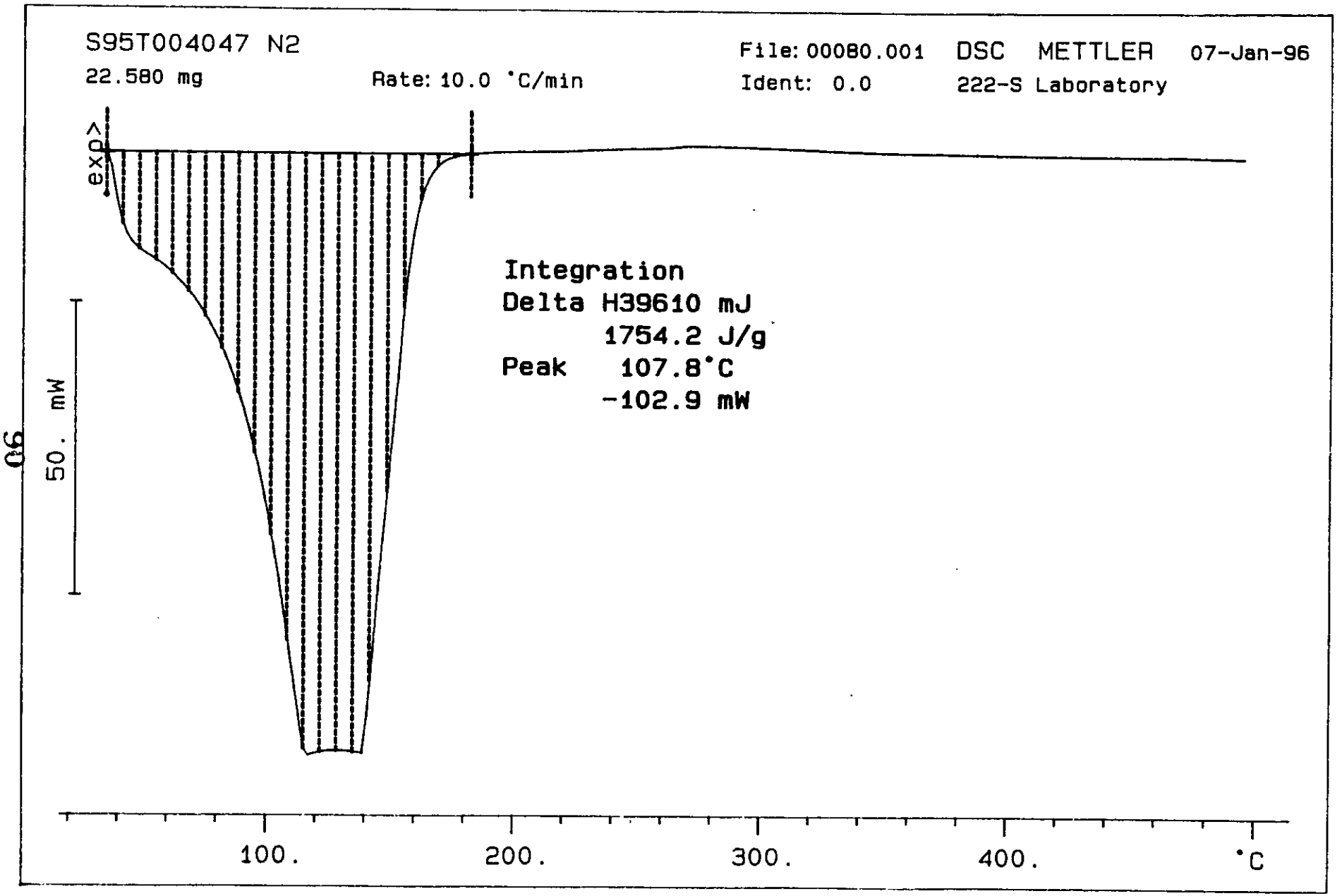
Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

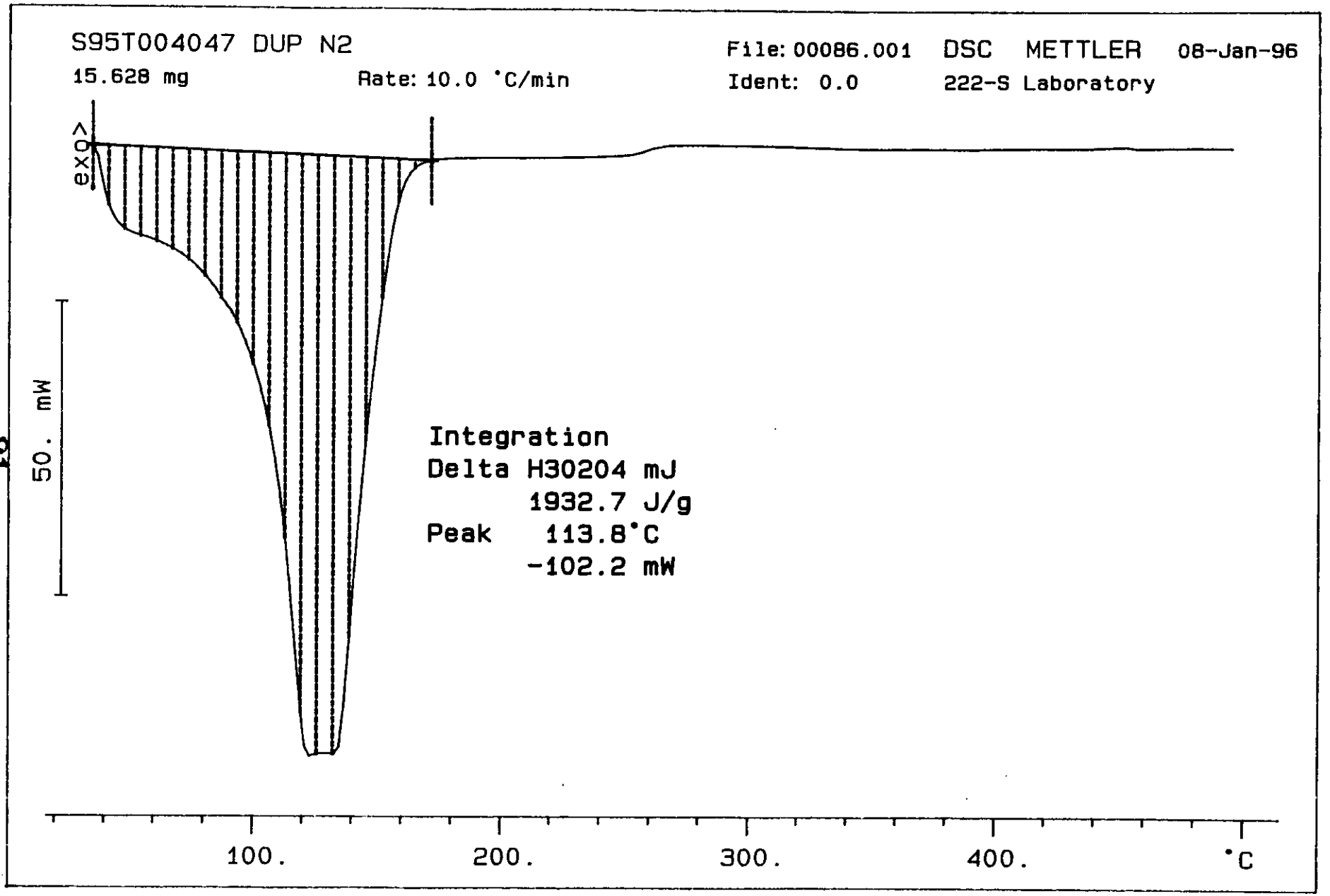
SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 89 TO 93.

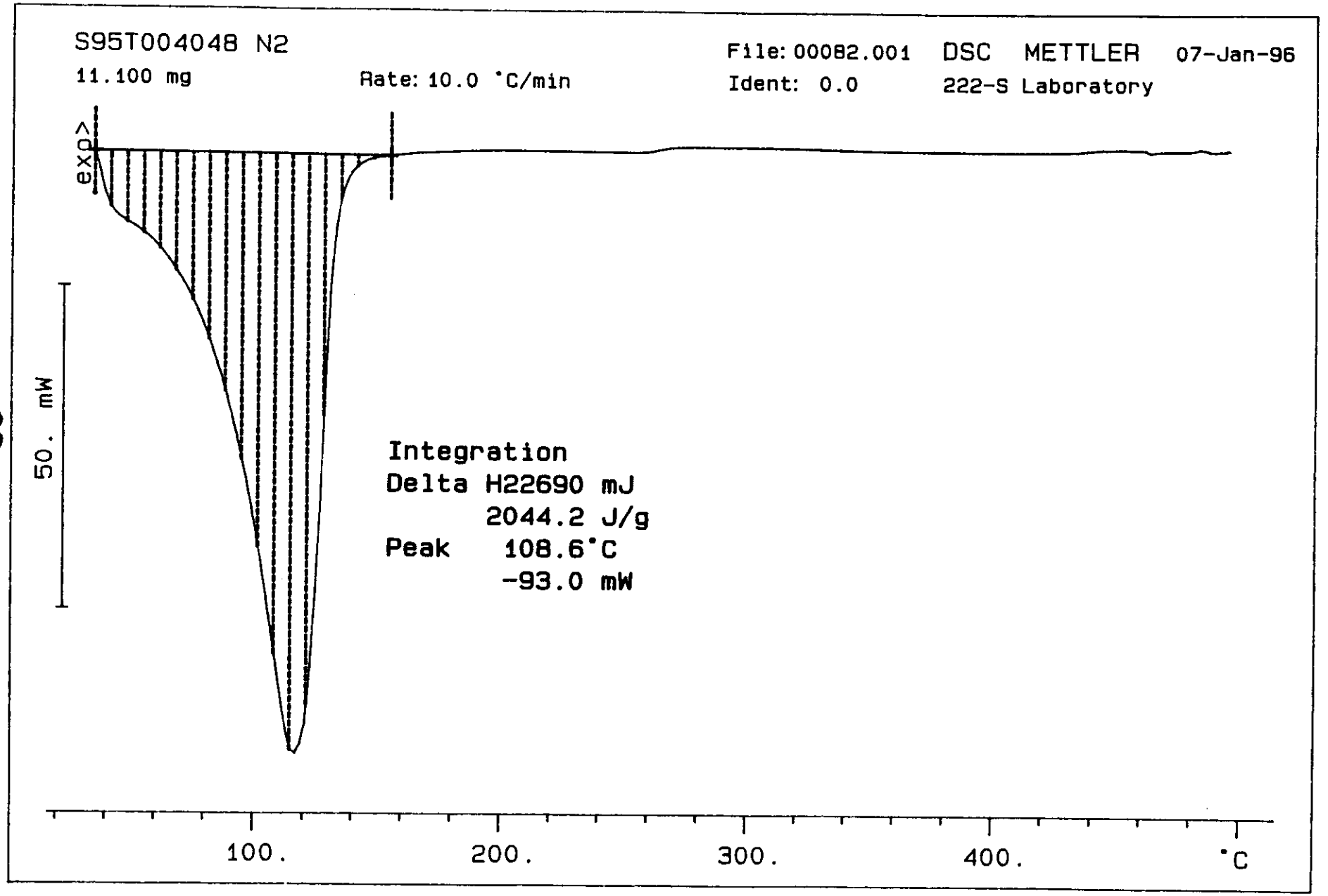
BEST AVAILABLE COPY

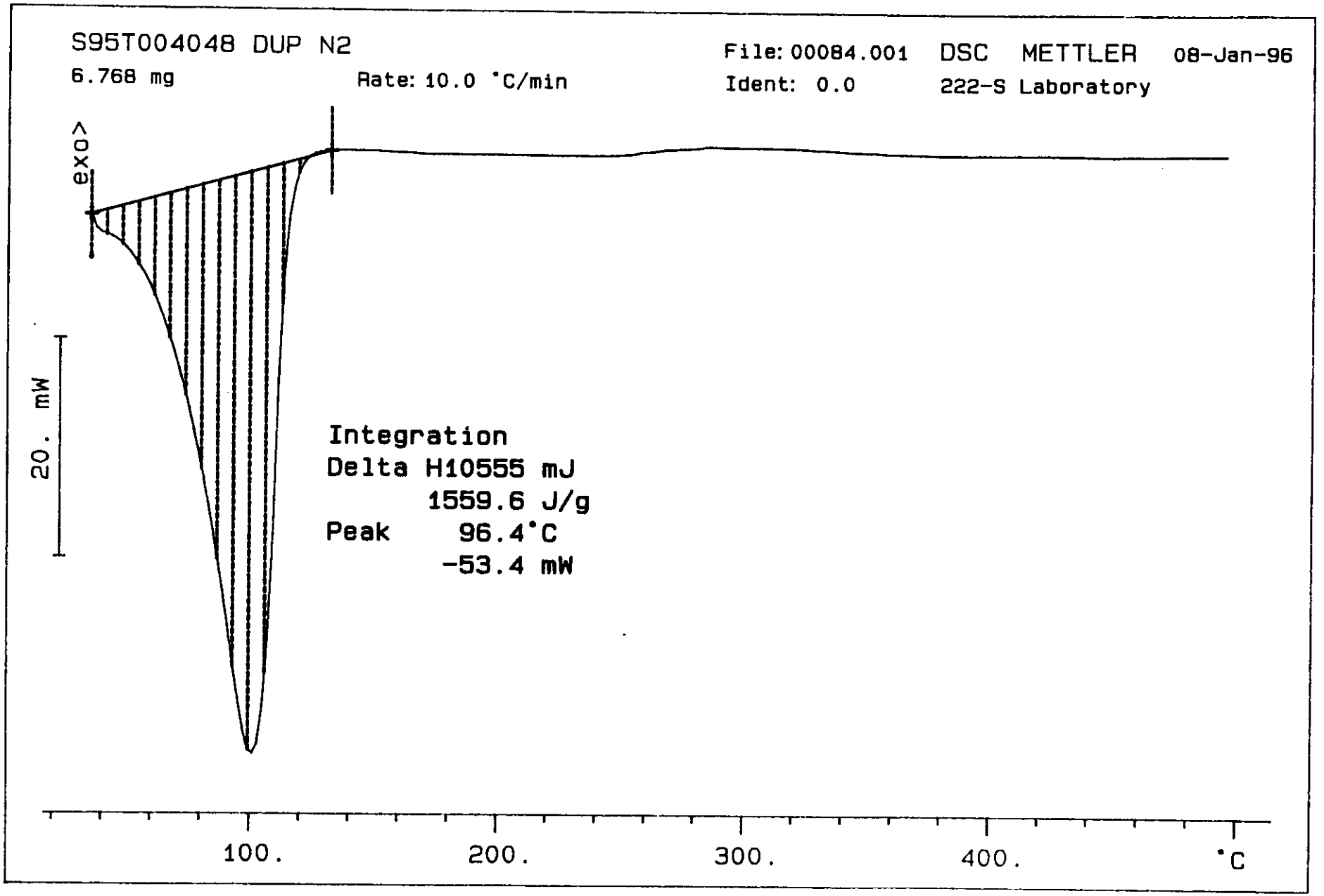


9-7-96


S95T004047 N2
22.580 mg
Rate: 10.0 °C/min
File: 00080.001
Ident: 0.0
DSC METTLER
222-S Laboratory
07-Jan-96
exo>
Integration
Delta H39610 mJ
1754.2 J/g
Peak 107.8°C
-102.9 mW
50. mW
100.
200.
300.
400.
°C


S95T004047 DUP N2
15.628 mg
Rate: 10.0 °C/min
File: 00086.001
DSC METTLER
08-Jan-96
Ident: 0.0
222-S Laboratory
exo>
.05 mW
Integration
Delta H30204 mJ
1932.7 J/g
Peak 113.8°C
-102.2 mW
100.
200.
300.
400.
°C


S95T004048 N2
11.100 mg
Rate: 10.0 °C/min
File: 00082.001
DSC METTLER
07-Jan-96
Ident: 0.0
222-S Laboratory
exp>
50. mW
Integration
Delta H22690 mJ
2044.2 J/g
Peak 108.6°C
-93.0 mW
100.
200.
300.
400.
°C


S95T004048 DUP N2
6.768 mg
Rate: 10.0 °C/min
File: 00084.001
Ident: 0.0
DSC METTLER
222-S Laboratory
08-Jan-96
exo>
20. mW
Integration
Delta H10555 mJ
1559.6 J/g
Peak 96.4°C
-53.4 mW
100.
200.
300.
400.
°C

LABCORE Data Entry Template for Worklist# 4656

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

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

Worklist Comment: Please run B-203 DSCs under N2. bdv

GROUP	PROJECT	S TYPE	SAMPLE#	R	A	-------TEST------	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD				DSC-01	SOLID	28.45	30.4	N/A	Joules/g
95000174	B-203	2 SAMPLE	S95T004049	0		DSC-01	SOLID	N/A	Ø		Joules/g
95000174	B-203	3 DUP	S95T004049	0		DSC-01	SOLID	Ø	Ø	N/A	Joules/g
95000174	B-203	4 SAMPLE	S95T004050	0		DSC-01	SOLID	N/A	Ø		Joules/g
95000174	B-203	5 DUP	S95T004050	0		DSC-01	SOLID	Ø	Ø	N/A	Joules/g

Final page for worklist # 4656

A. Lambert 01-09-96
Analyst Signature **Date**

Linda Corlin 1/11/96
Analyst Signature **Date**

Verified by Blandina Valenzuela 1/12/96

Data Entry Comments: S95T004049 produced an endotherm at 112.9°C with a delta H of 1919.4 J/g.
S95T004050 produced an endotherm at 129.8°C with a delta H of 1177.8 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.

A. Lambert 01-9-96

SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 95 TO 99.

DSC STD 12N14-B N2

4.398 mg

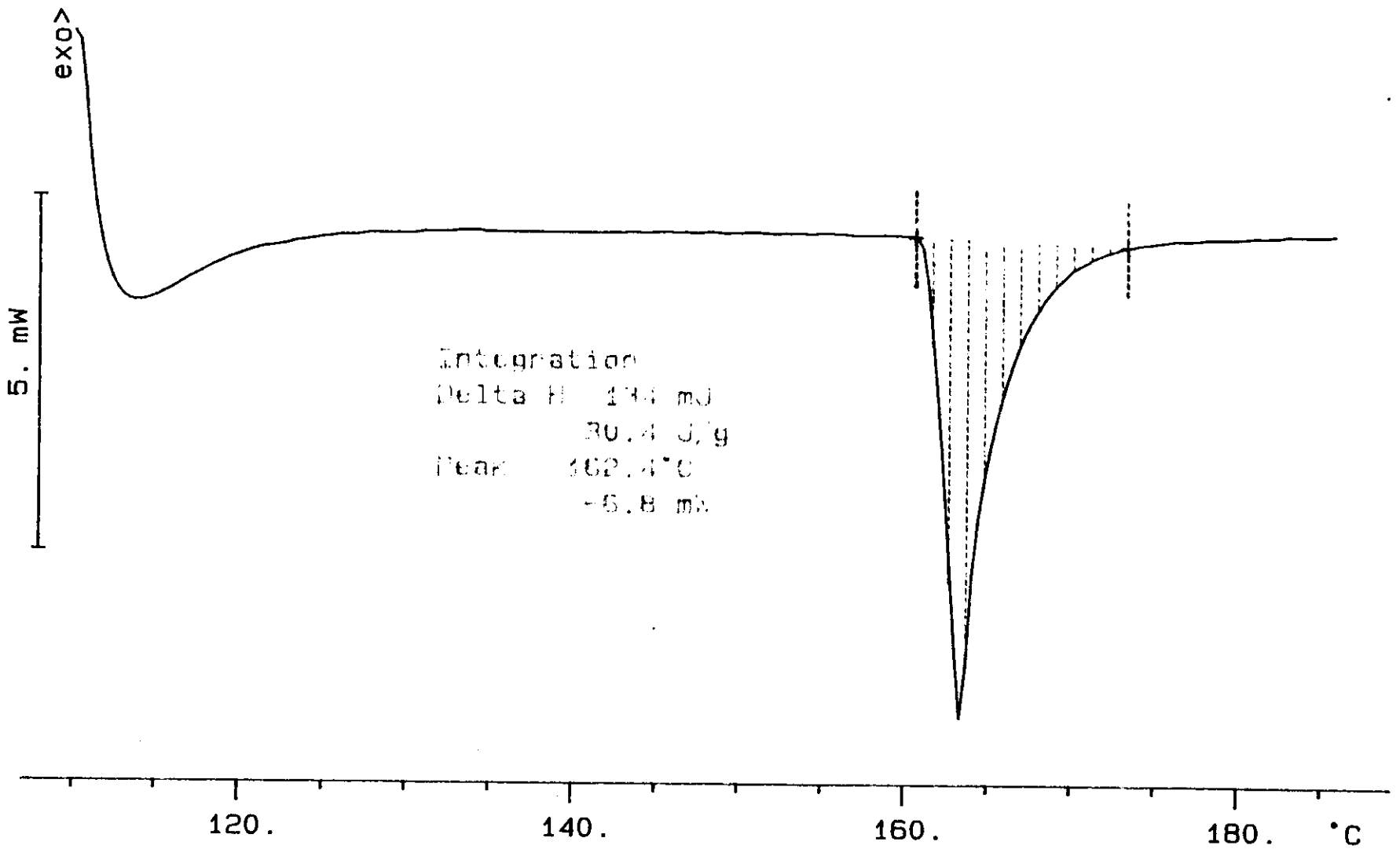
Rate: 10.0 °C/min

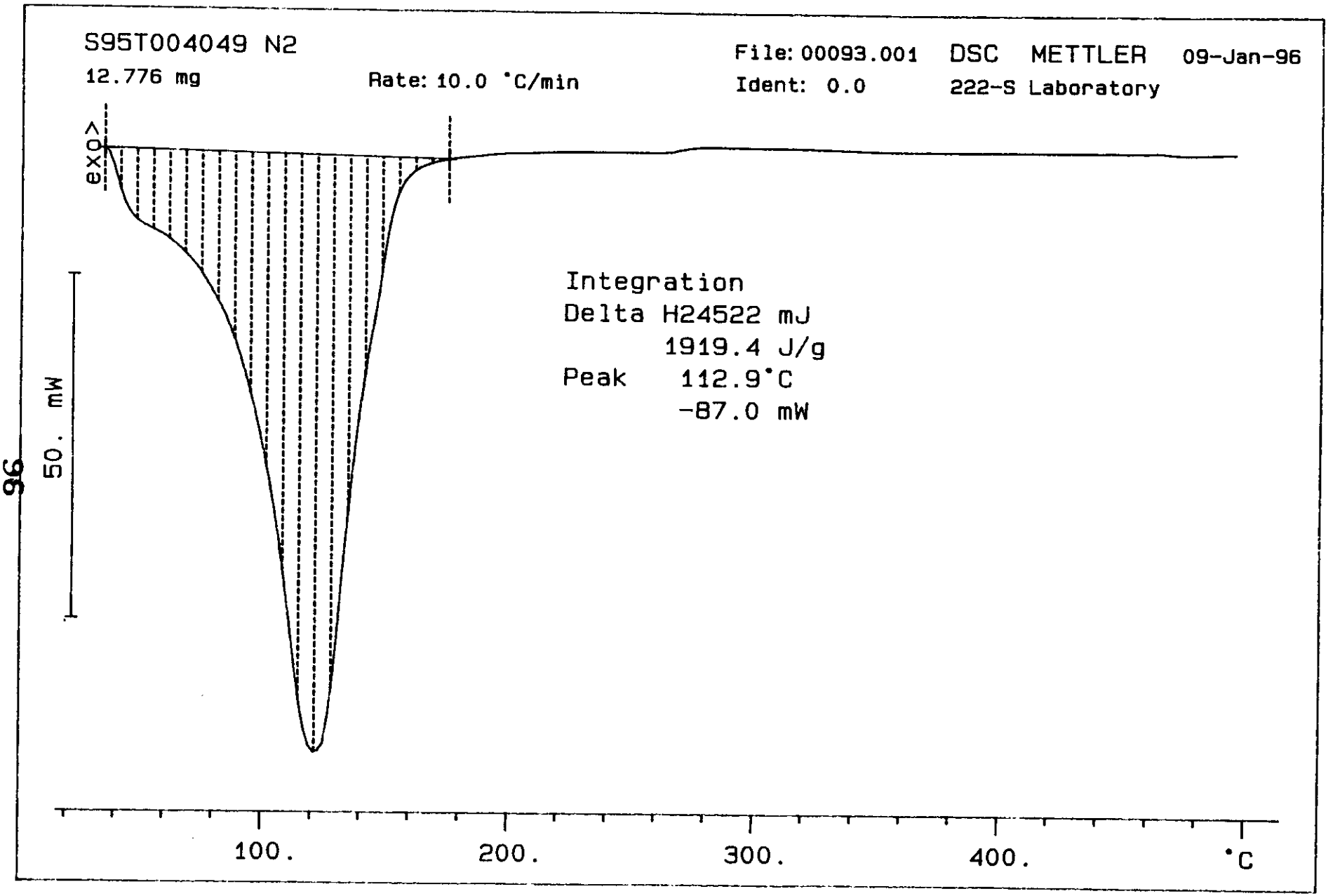
File: 00091.001

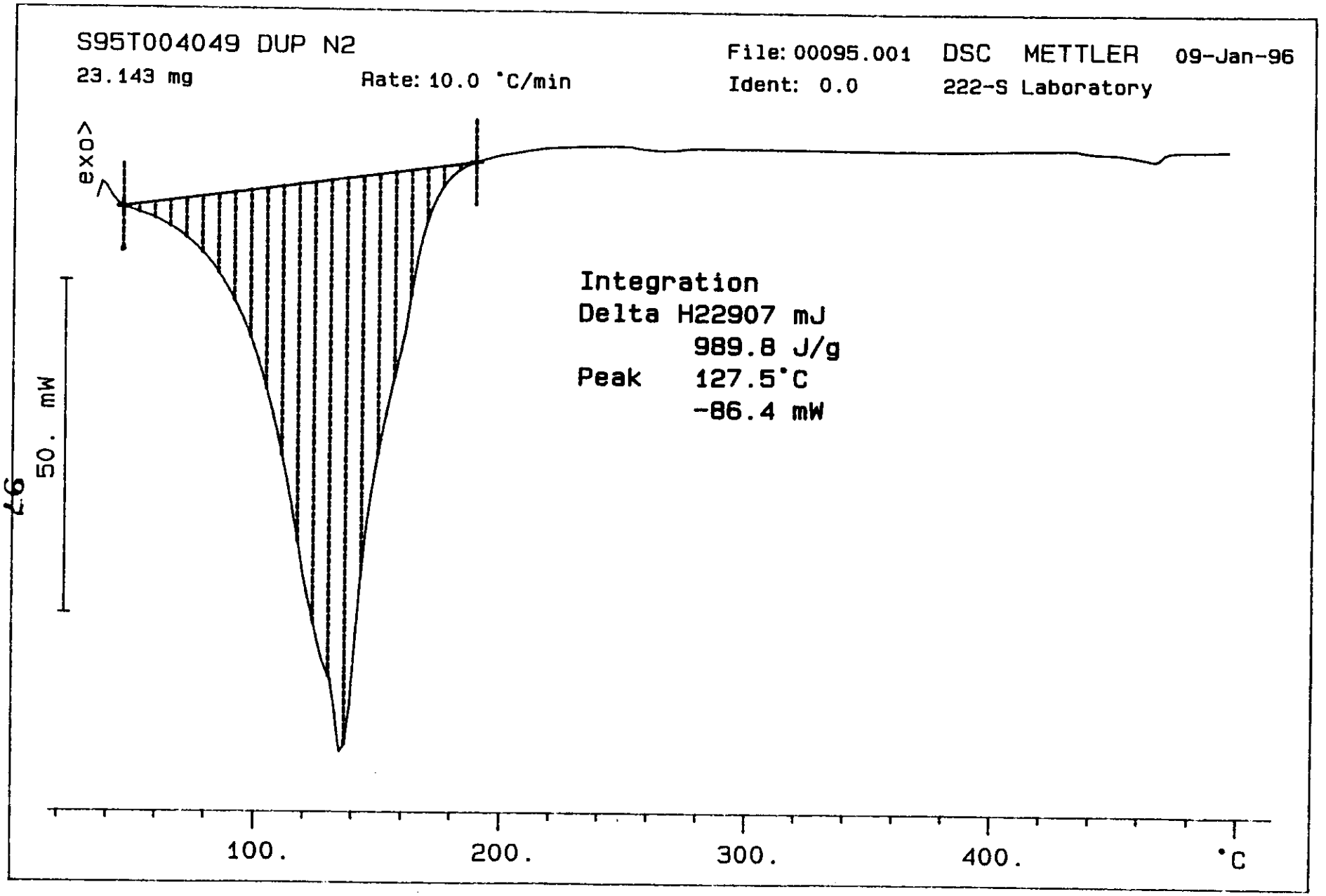
Ident: 0.0

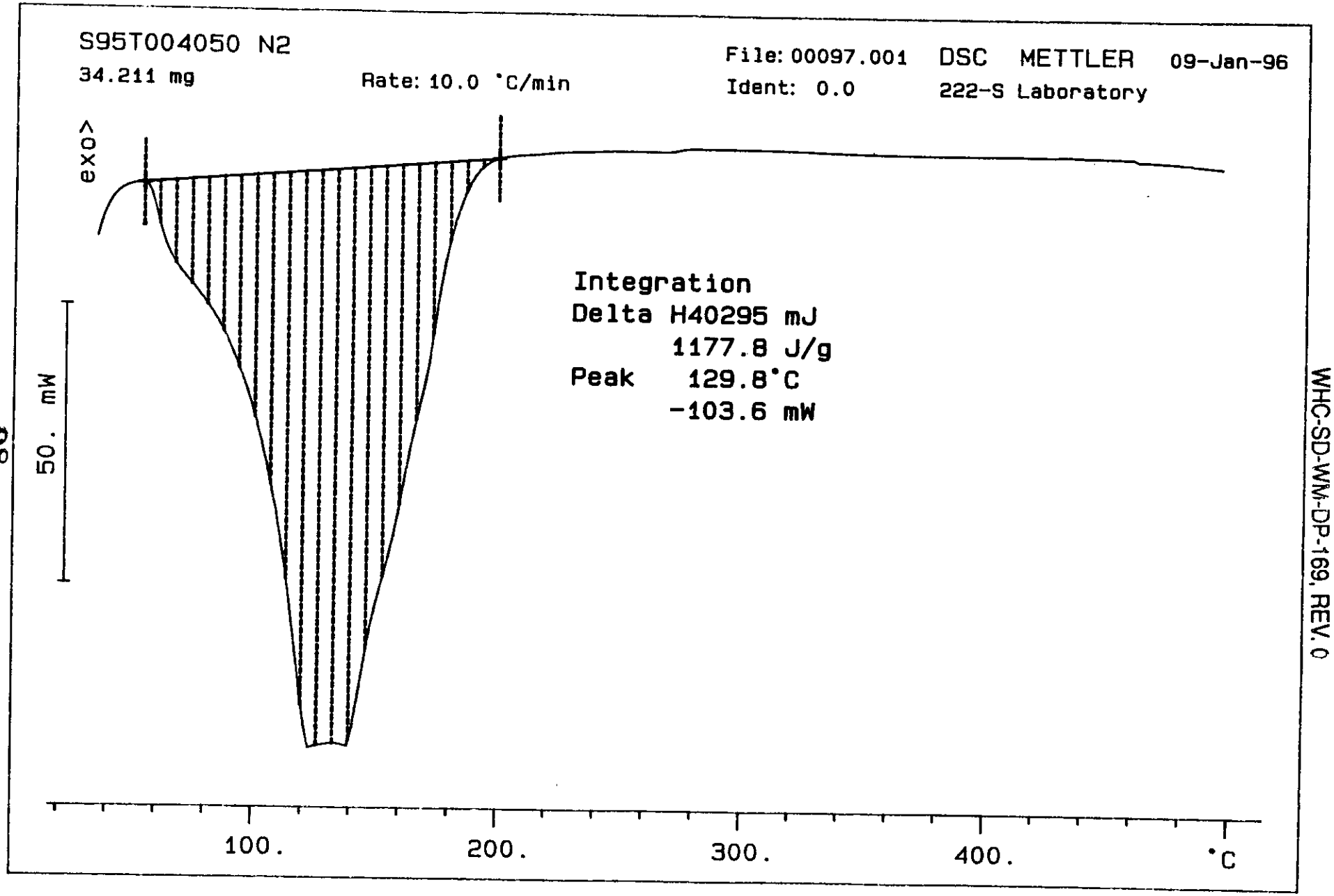
DSC METTLER 09-Jan-96

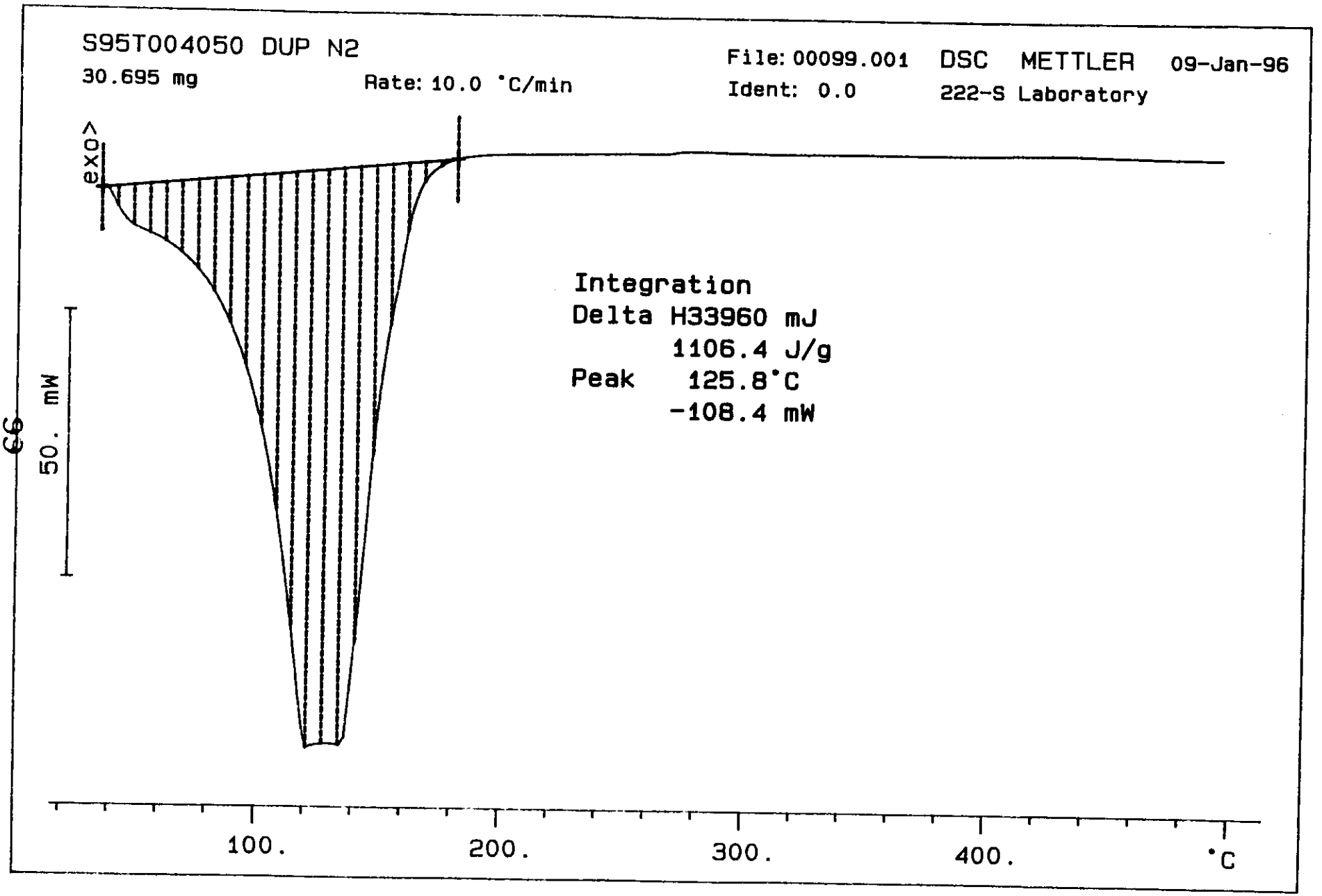
222-S Laboratory




S95T004049 N2
12.776 mg
Rate: 10.0 °C/min
File: 00093.001
Ident: 0.0
DSC METTLER
222-S Laboratory
09-Jan-96
exo>
.05 mW
Integration
Delta H24522 mJ
1919.4 J/g
Peak 112.9°C
-87.0 mW
100.
200.
300.
400.
°C


S95T004049 DUP N2
23.143 mg
Rate: 10.0 °C/min
File: 00095.001
Ident: 0.0
DSC METTLER
222-S Laboratory
09-Jan-96
exo>
50. mW
Integration
Delta H22907 mJ
989.8 J/g
Peak 127.5°C
-86.4 mW
100.
200.
300.
400.
°C


S95T004050 N2
34.211 mg
Rate: 10.0 °C/min
File: 00097.001
Ident: 0.0
DSC METTLER
222-S Laboratory
09-Jan-96
exo>
50. mW
Integration
Delta H40295 mJ
1177.8 J/g
Peak 129.8°C
-103.6 mW
100.
200.
300.
400.
°C


S95T004050 DUP N2
30.695 mg
Rate: 10.0 °C/min
File: 00099.001
Ident: 0.0
DSC METTLER
222-S Laboratory
09-Jan-96
exo>
50. mW
Integration
Delta H33960 mJ
1106.4 J/g
Peak 125.8°C
-108.4 mW
100.
200.
300.
400.
°C

LABCORE Data Entry Template for Worklist# 4657

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

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

Worklist Comment: Please run B-203 DSCs under N2. bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				DSC-01	SOLID	28.45	30.4 *	N/A	Joules/g
95000174	B-203	2	SAMPLE	S95T004051	0		DSC-01	SOLID	N/A	Ø		Joules/g
95000174	B-203	3	DUP	S95T004051	0		DSC-01	SOLID	Ø	Ø	N/A	Joules/g
95000174	B-203	4	SAMPLE	S95T004052	0		DSC-01	SOLID	N/A	Ø		Joules/g
95000174	B-203	5	DUP	S95T004052	0		DSC-01	SOLID	Ø	Ø	N/A	Joules/g

Final page for worklist # 4657

RDM 1/4/96
Analyst Signature **Date**

Fiorella Cordini 1/12/96
Analyst Signature **Date**

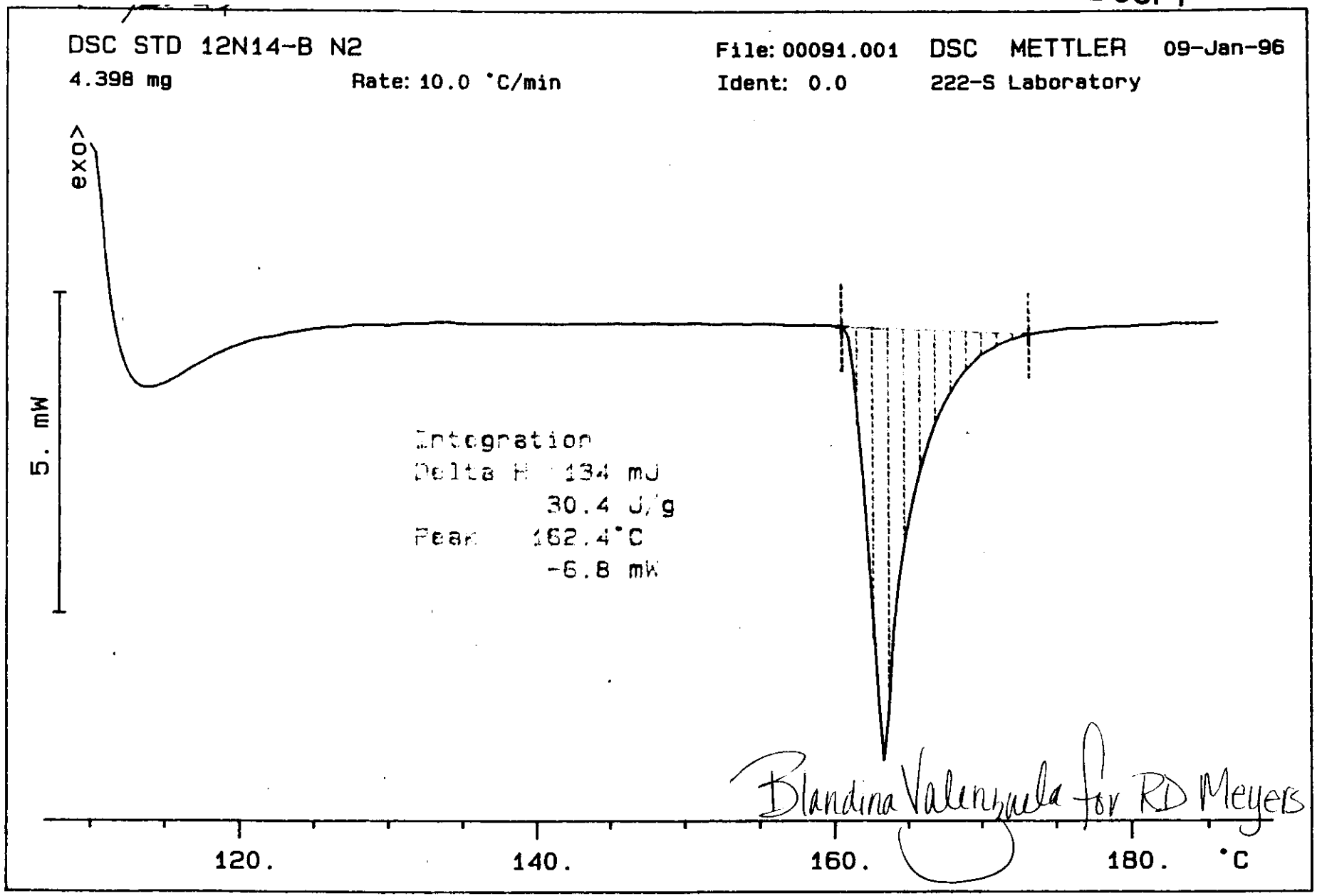
Verified by Blandina Valenzuela 1/12/96

Data Entry Comments: S95T004051 produced an endotherm at 108.8°C with a delta H of 1911.7 J/g.
S95T004052 produced an endotherm at 109.8°C with a delta H of 1958.8 J/g
the peaks toward the end of the run ~~the~~ came from the instrument not the sample

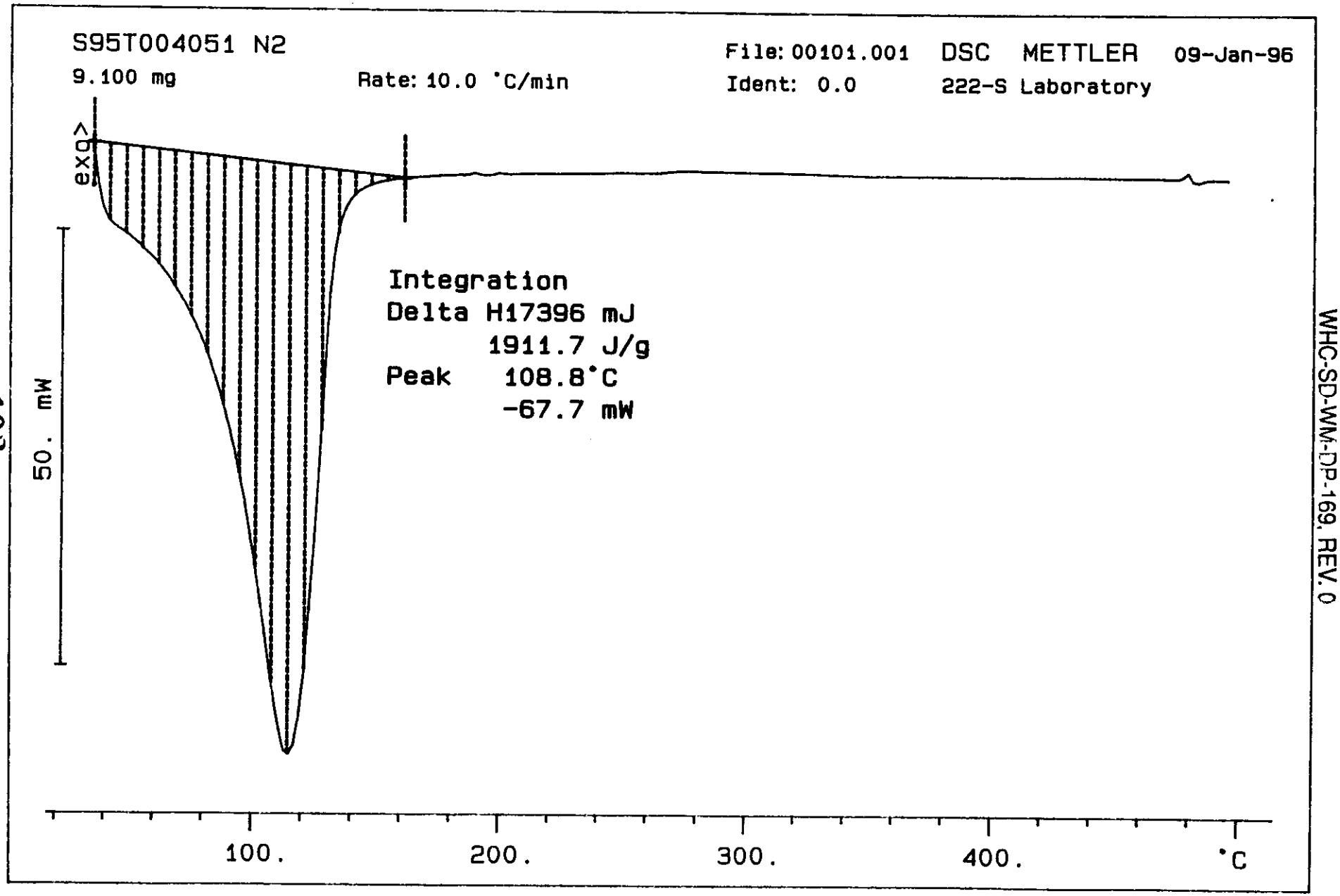
Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

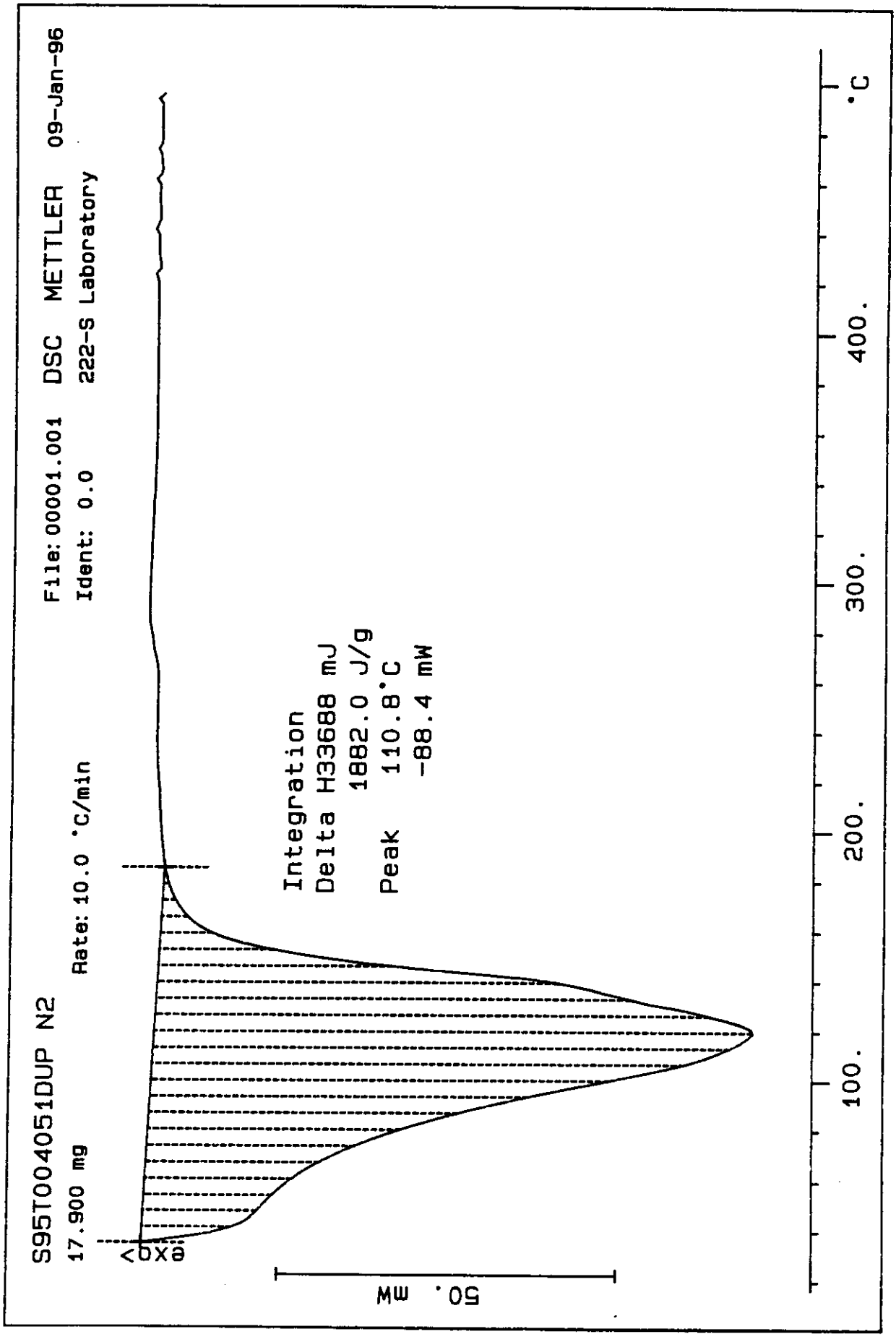
SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 101 TO 105.

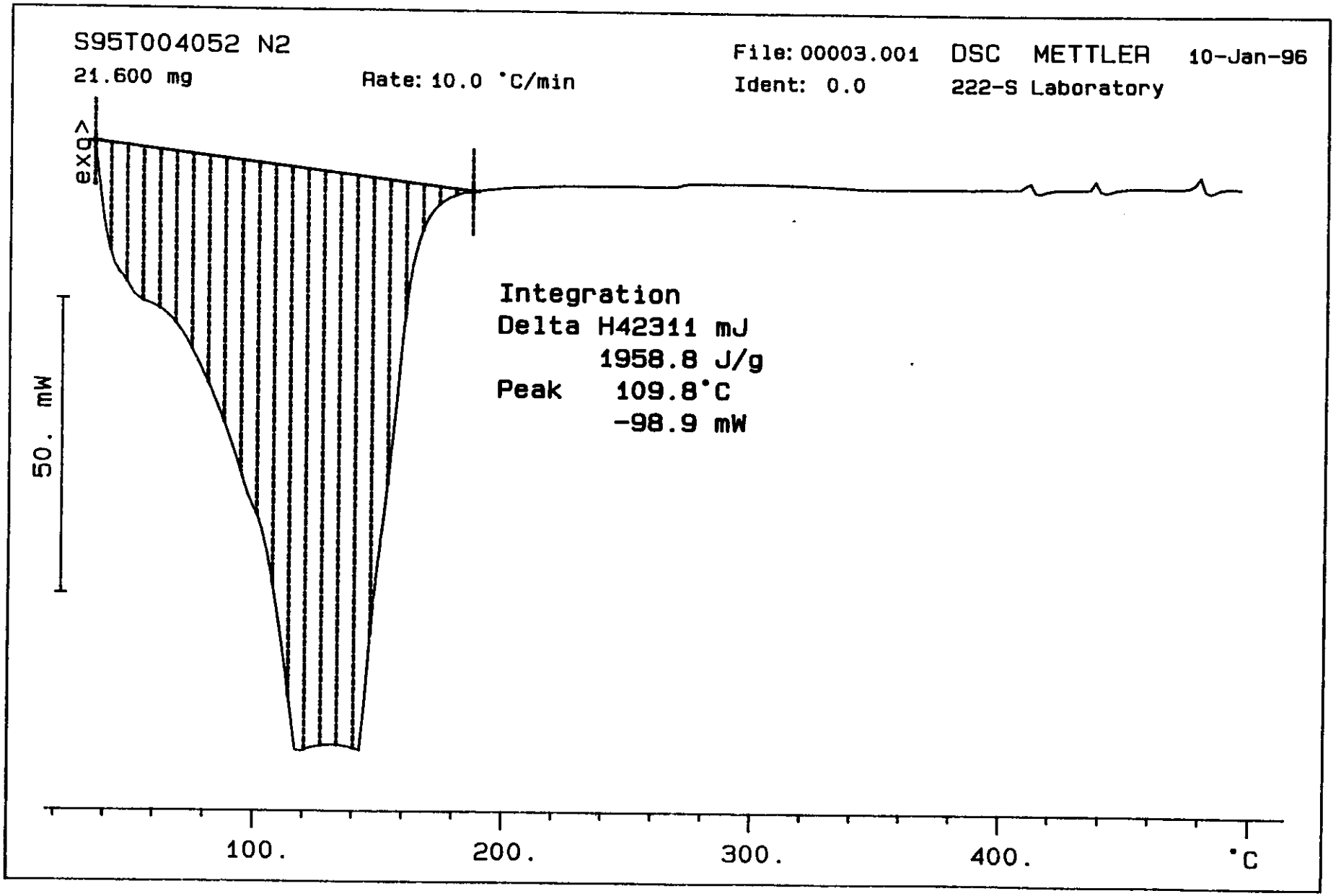
BEST AVAILABLE COPY

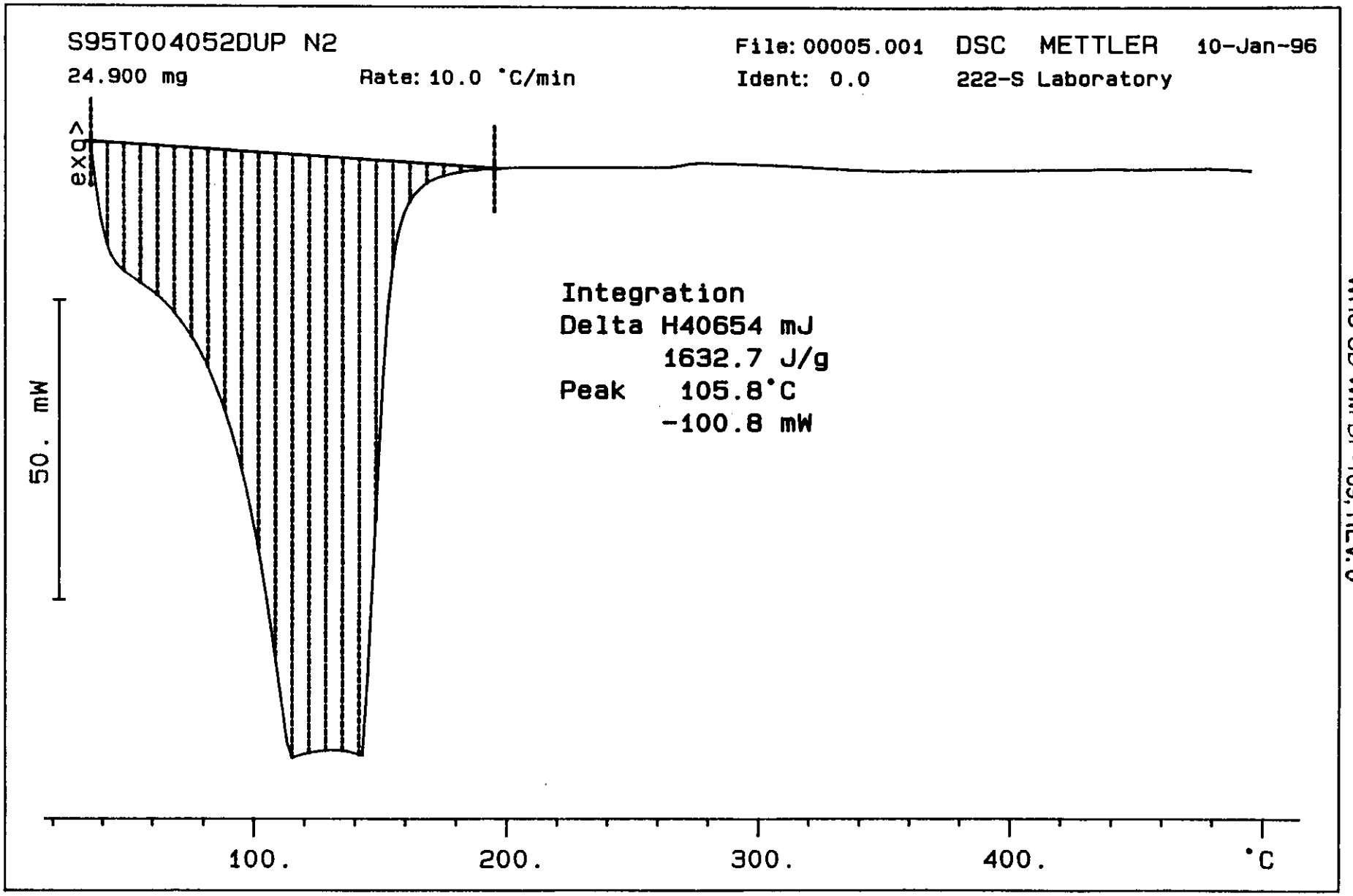


Blandina Valenzuela for RD Meyers


S95T004051 N2
9.100 mg
Rate: 10.0 °C/min
File: 00101.001
Ident: 0.0
DSC METTLER
222-S Laboratory
09-Jan-96
exo>
Integration
Delta H17396 mJ
1911.7 J/g
Peak 108.8°C
-67.7 mW
50. mW
100.
200.
300.
400.
°C


S95T004051DUP N2
17.900 mg
Rate: 10.0 °C/min
File: 00001.001 DSC METTLER 09-Jan-96
Ident: 0.0 222-S Laboratory
Integration
Delta H33688 mJ
1882.0 J/g
Peak 110.8°C
-88.4 mW
exo>
50. mW
100.
200.
300.
400.
°C


S95T004052 N2
21.600 mg
Rate: 10.0 °C/min
File: 00003.001
Ident: 0.0
DSC METTLER
222-S Laboratory
10-Jan-96
exo>
50. mW
Integration
Delta H42311 mJ
1958.8 J/g
Peak 109.8°C
-98.9 mW
100.
200.
300.
400.
°C


S95T004052DUP N2
24.900 mg
Rate: 10.0 °C/min
File: 00005.001
Ident: 0.0
DSC METTLER
222-S Laboratory
10-Jan-96
exo>
50. mW
Integration
Delta H40654 mJ
1632.7 J/g
Peak 105.8°C
-100.8 mW
100.
200.
300.
400.
°C

LABCORE Data Entry Template for Worklist# 4658

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

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

Worklist Comment: Please run B-203 DSCs under N2. bdv

GROUP	PROJECT	S TYPE	SAMPLE#	R	A	-------TEST------	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD				DSC-01	SOLID	28.45	26.4	N/A	Joules/g
95000174	B-203	2 SAMPLE	S95T004053	0		DSC-01	SOLID	N/A	Ø		Joules/g
95000174	B-203	3 DUP	S95T004053	0		DSC-01	SOLID	Ø	Ø	N/A	Joules/g
95000174	B-203	4 SAMPLE	S95T004054	0		DSC-01	SOLID	N/A	Ø		Joules/g
95000174	B-203	5 DUP	S95T004054	0		DSC-01	SOLID	Ø	Ø	N/A	Joules/g

Final page for worklist # 4658

A Lambel 01-10-96
Analyst Signature **Date**

Linda Conlin 1-12-96
Analyst Signature **Date**

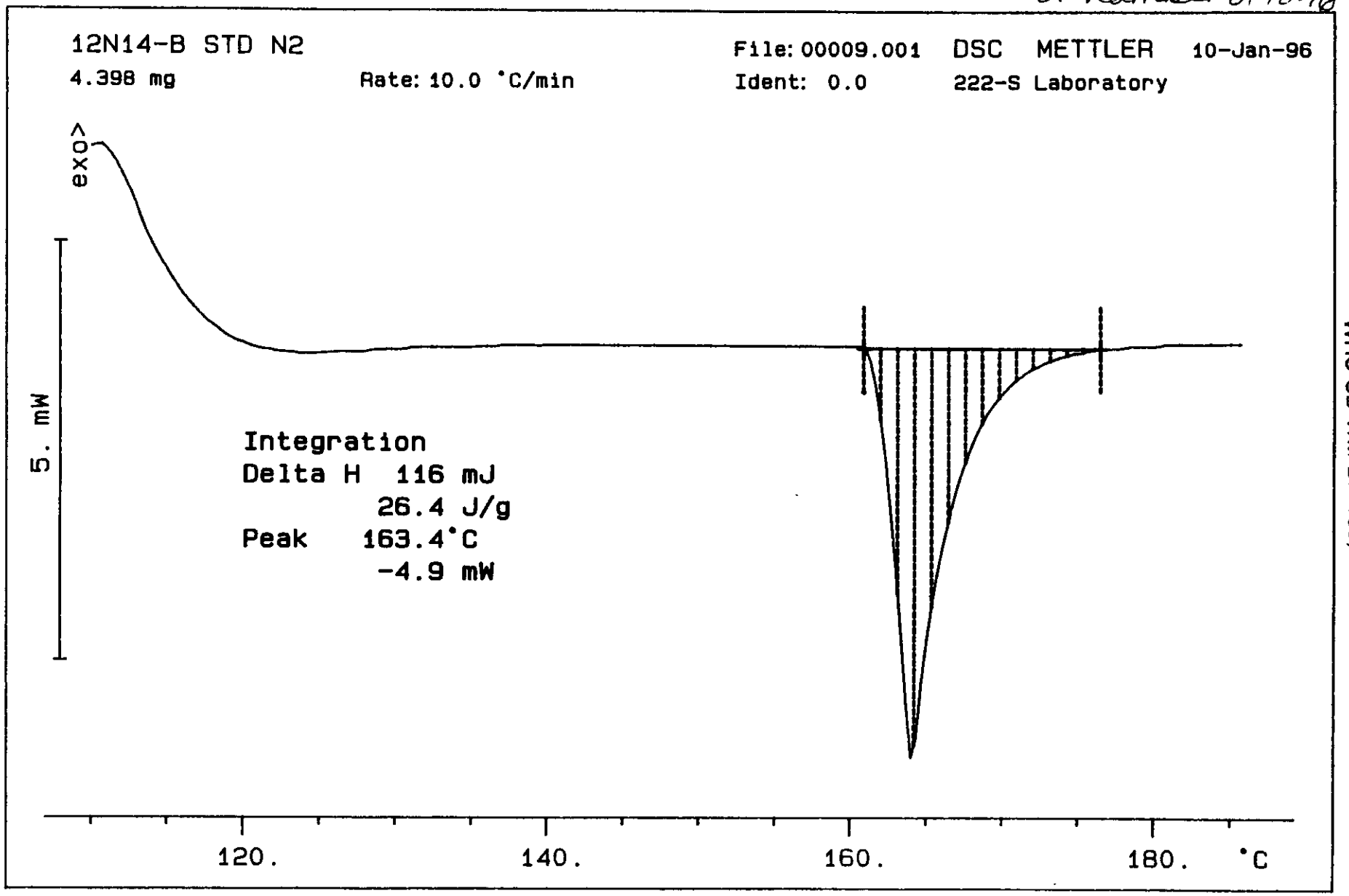
Verified by Blandina Valenzuela 1/12/96

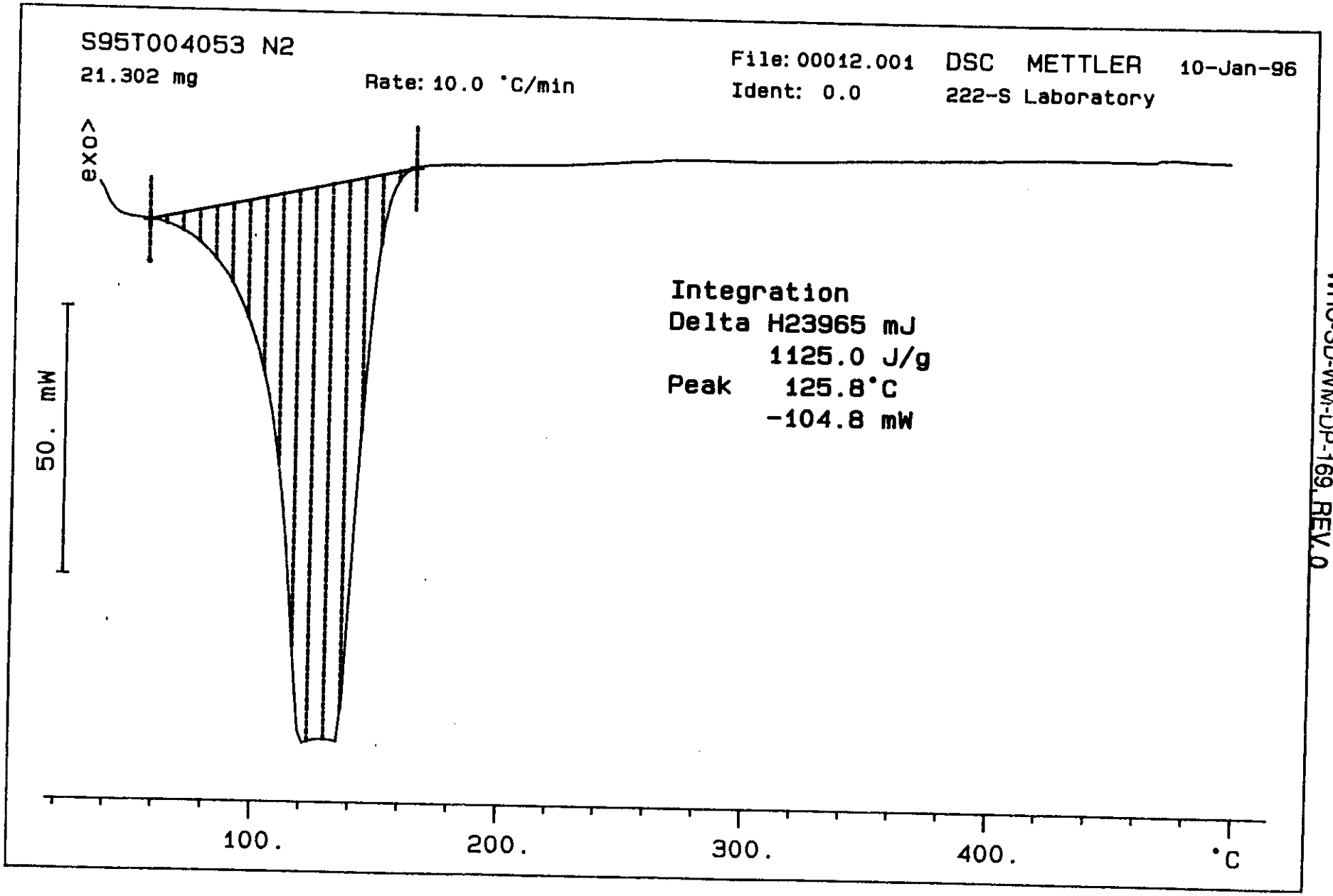
Data Entry Comments: S95T004053 produced an endotherm at 125.8°C with a delta H of 1125.0 J/g
S95T004054 produced an endotherm at 127.8°C with a delta H of 1602.1 J/g

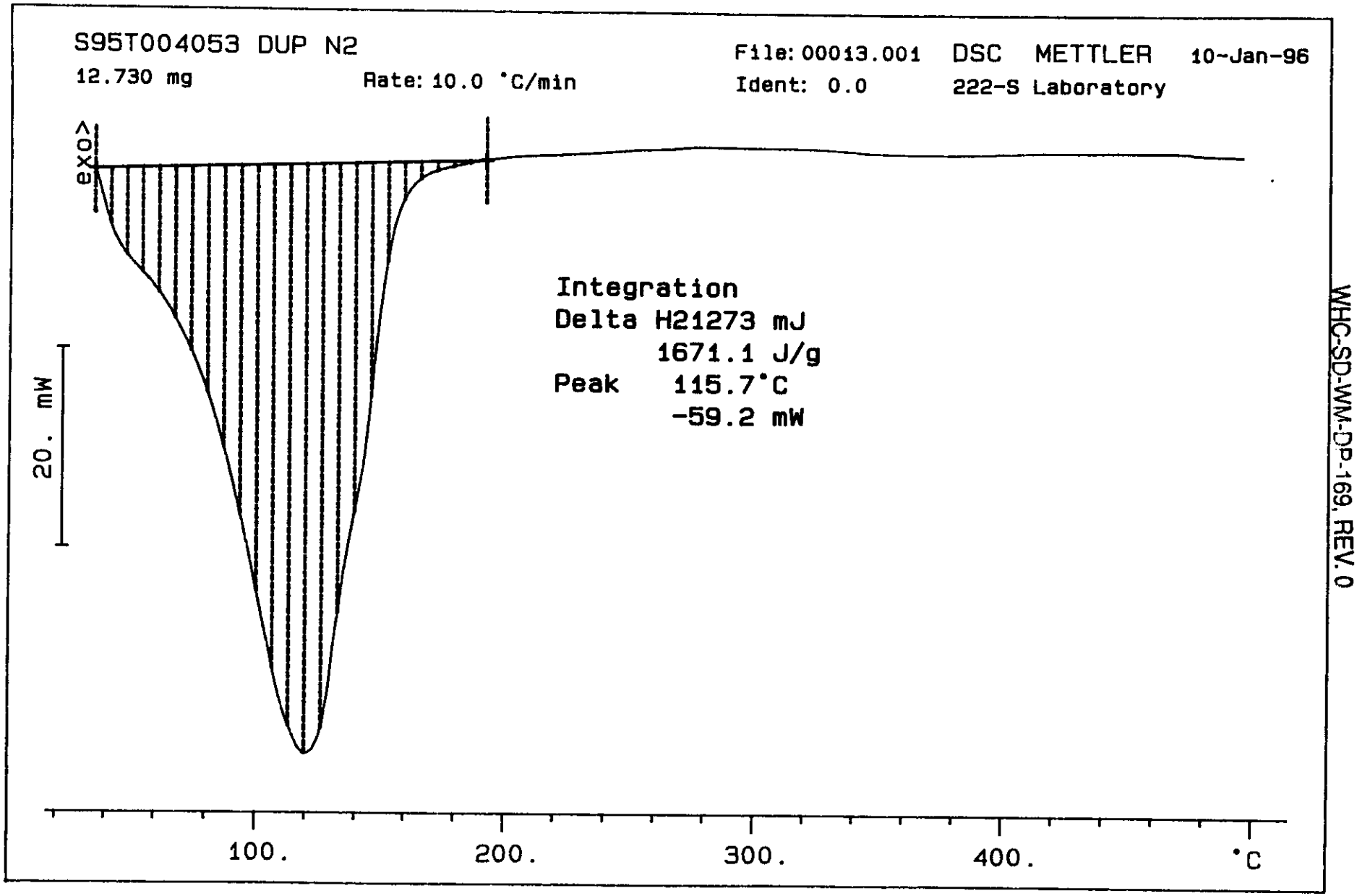
Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

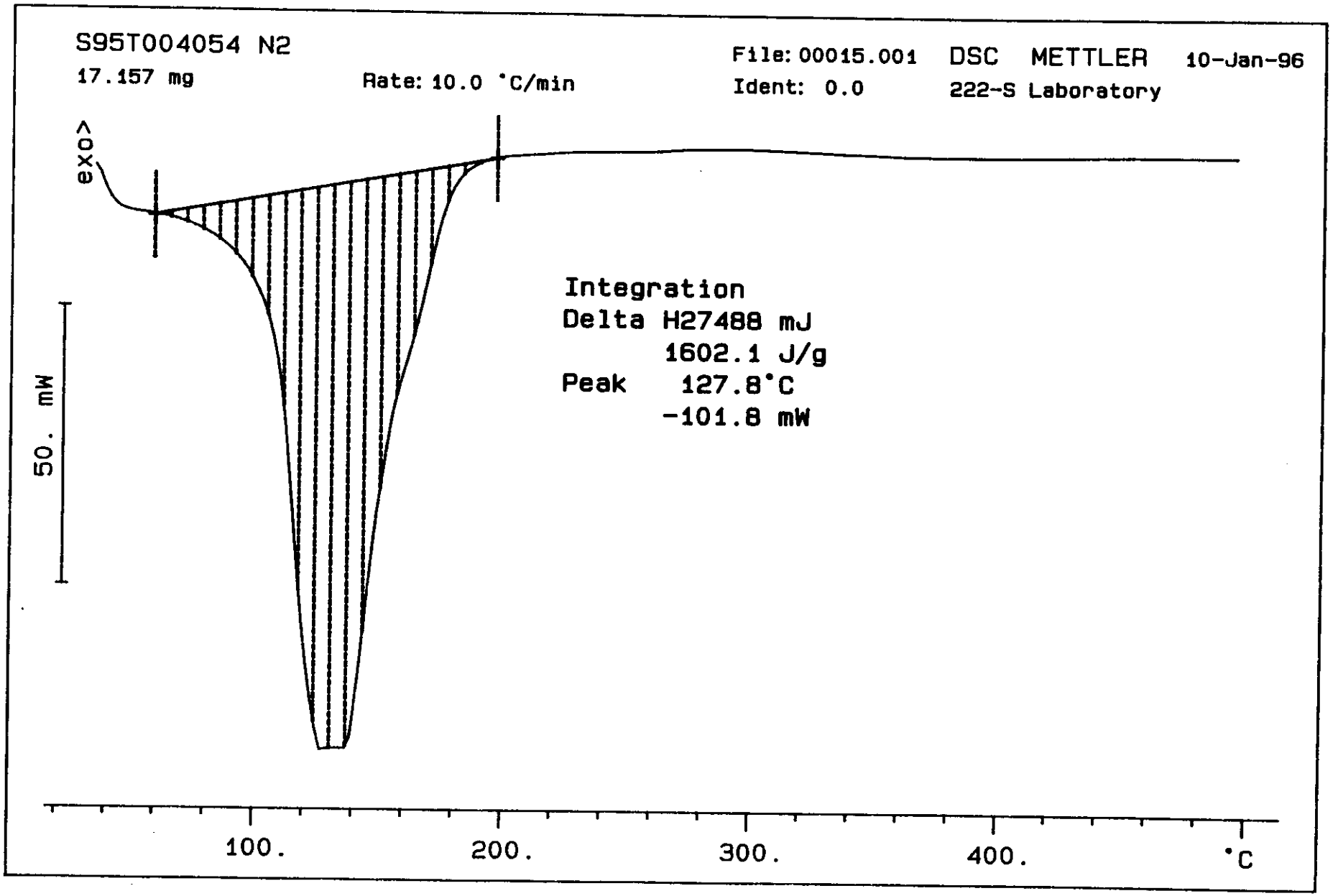
SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 107 TO 111.

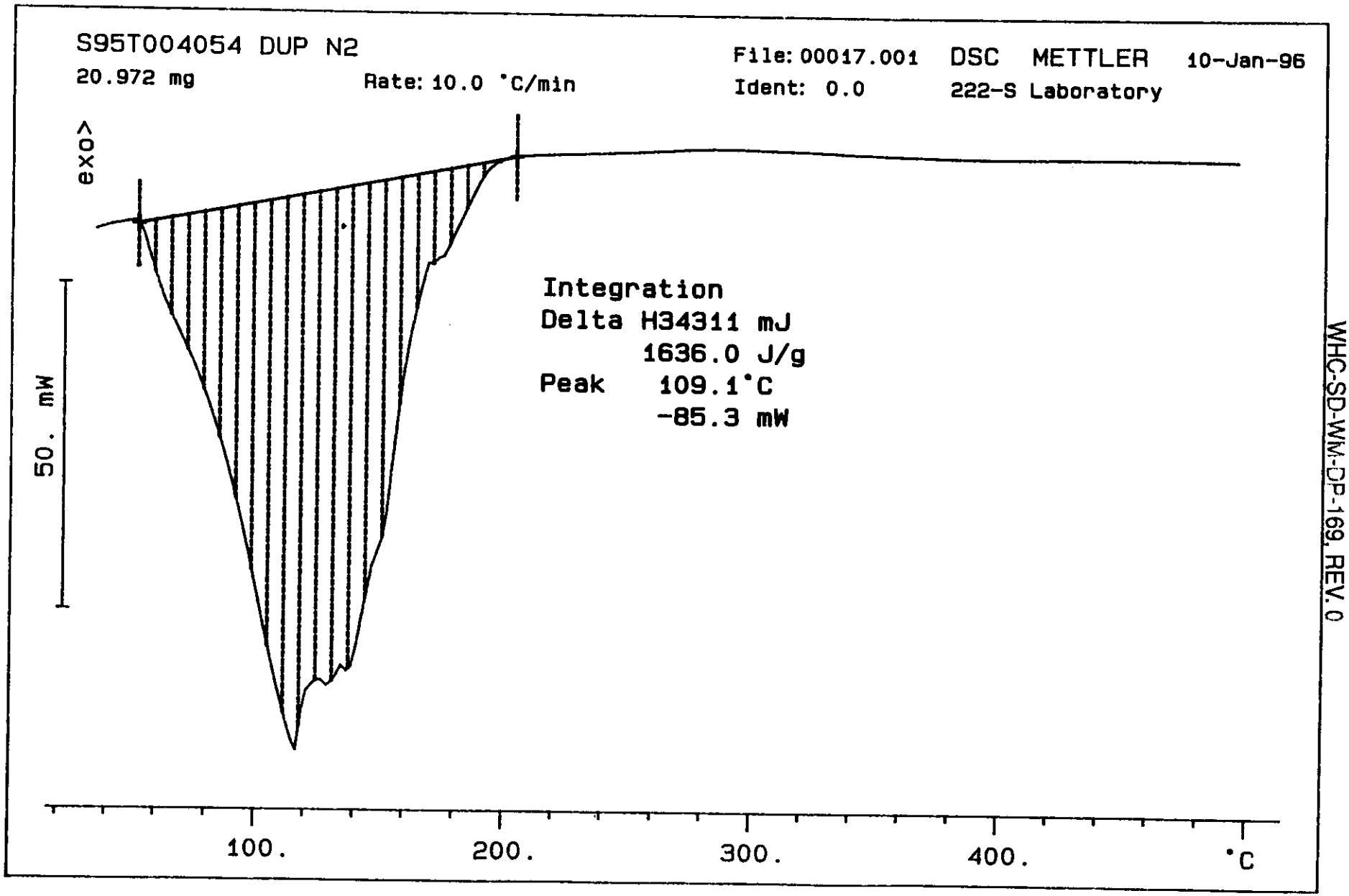
A. Lambel 01-10-96




S95T004053 N2
21.302 mg
Rate: 10.0 °C/min
File: 00012.001
Ident: 0.0
DSC METTLER
222-S Laboratory
10-Jan-96
exo>
50. mW
Integration
Delta H23965 mJ
1125.0 J/g
Peak 125.8°C
-104.8 mW
100.
200.
300.
400.
°C


S95T004053 DUP N2
12.730 mg
Rate: 10.0 °C/min
File: 00013.001
Ident: 0.0
DSC METTLER
222-S Laboratory
10-Jan-96
exo>
20. mW
Integration
Delta H21273 mJ
1671.1 J/g
Peak 115.7°C
-59.2 mW
100.
200.
300.
400.
°C


S95T004054 N2
17.157 mg
Rate: 10.0 °C/min
File: 00015.001
Ident: 0.0
DSC METTLER
222-S Laboratory
10-Jan-96
exo>
.05 mW
Integration
Delta H27488 mJ
1602.1 J/g
Peak 127.8°C
-101.8 mW
100.
200.
300.
400.
°C


S95T004054 DUP N2
20.972 mg
Rate: 10.0 °C/min
File: 00017.001
Ident: 0.0
DSC METTLER
222-S Laboratory
10-Jan-96
exo>
50. mW
Integration
Delta H34311 mJ
1636.0 J/g
Peak 109.1°C
-85.3 mW
100.
200.
300.
400.
°C

LABCORE Data Entry Template for Worklist# 4659

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

Method: LA-514-113 Rev/Mod B-1 LAD 1-30-96

Worklist Comment: Please run B-203 DSCs under N2. bdv

GROUP	PROJECT	S TYPE	SAMPLE#	R	A	-------TEST------	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD				DSC-01	SOLID	28.45	31.0	N/A	Joules/g
95000174	B-203	2 SAMPLE	S95T004055	0		DSC-01	SOLID	N/A	Ø		Joules/g
95000174	B-203	3 DUP	S95T004055	0		DSC-01	SOLID	Ø	Ø	N/A	Joules/g
95000174	B-203	4 SAMPLE	S95T004056	0		DSC-01	SOLID	N/A	Ø		Joules/g
95000174	B-203	5 DUP	S95T004056	0		DSC-01	SOLID	Ø	Ø	N/A	Joules/g

Final page for worklist # 4659

Analyst Signature **Date** 1/11/96

Verified by Blandina Valenzuela 1/17/96

Analyst Signature **Date** 1-12-96

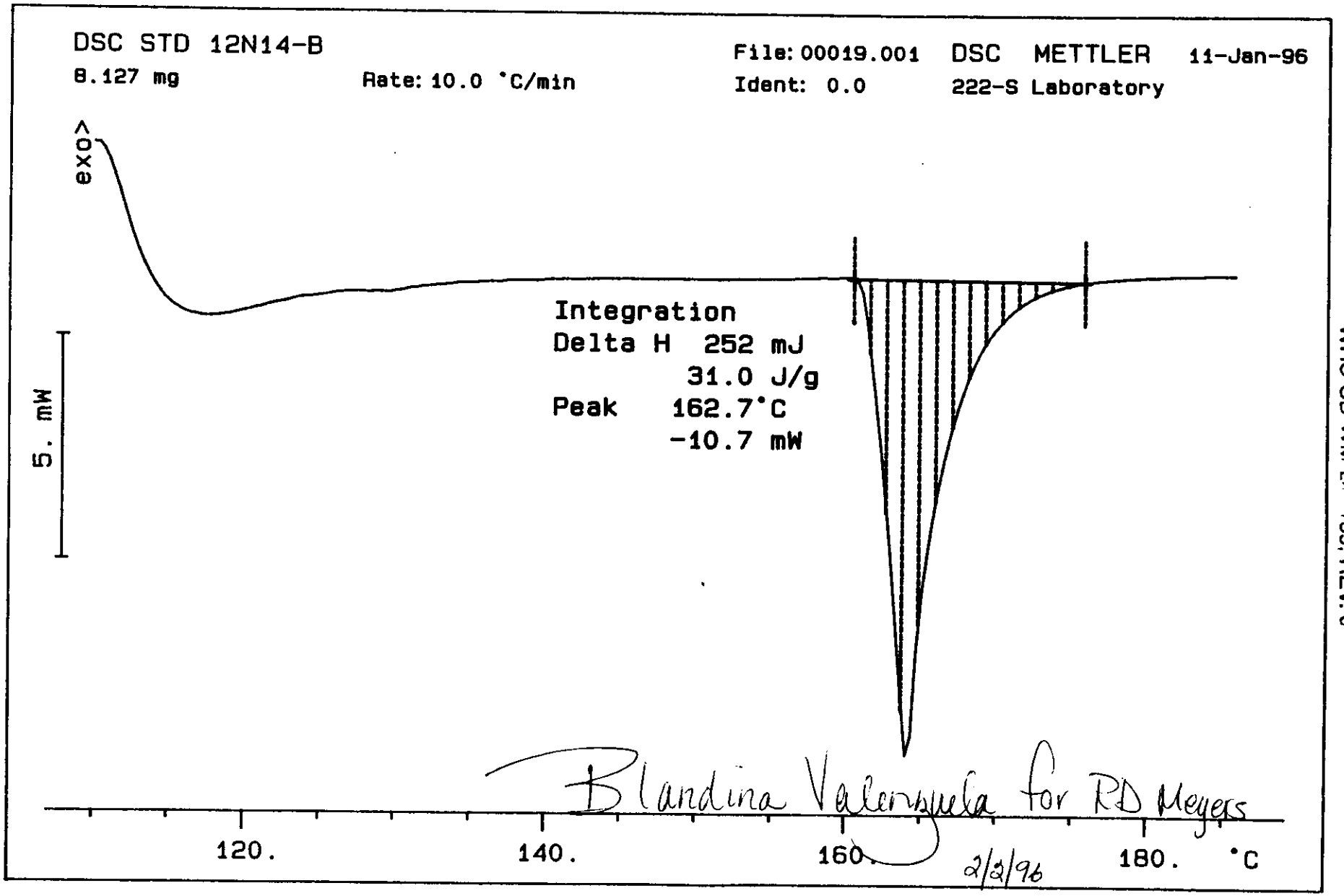
Data Entry Comments: S95T004055 produced an endotherm at 112.4°C with a deltaH of 2021.4 J/g.

S95T004056 produced an endotherm at 109.9°C with a deltaH of 1958.8 J/g

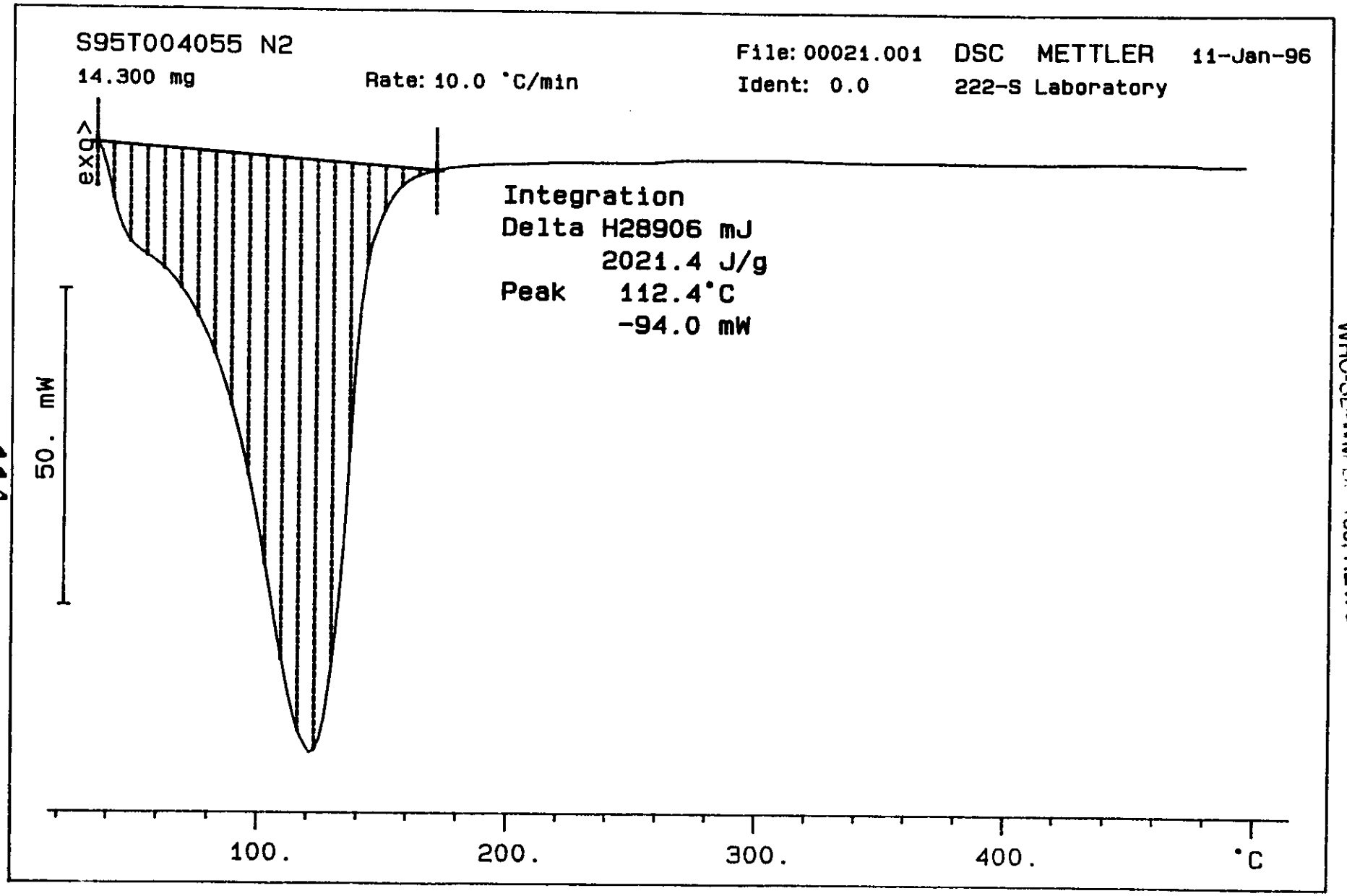
1/17/96 BDV

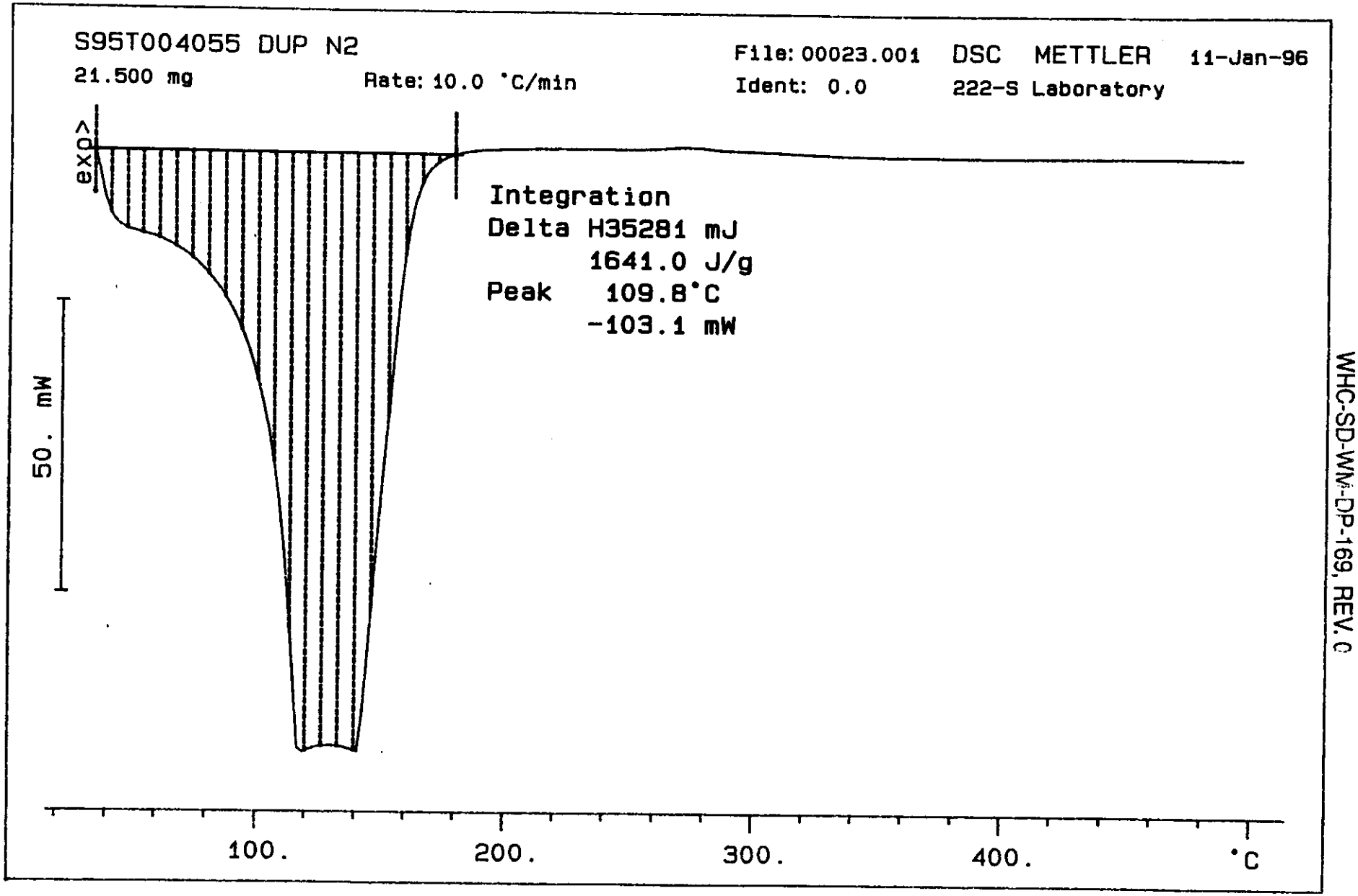
Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

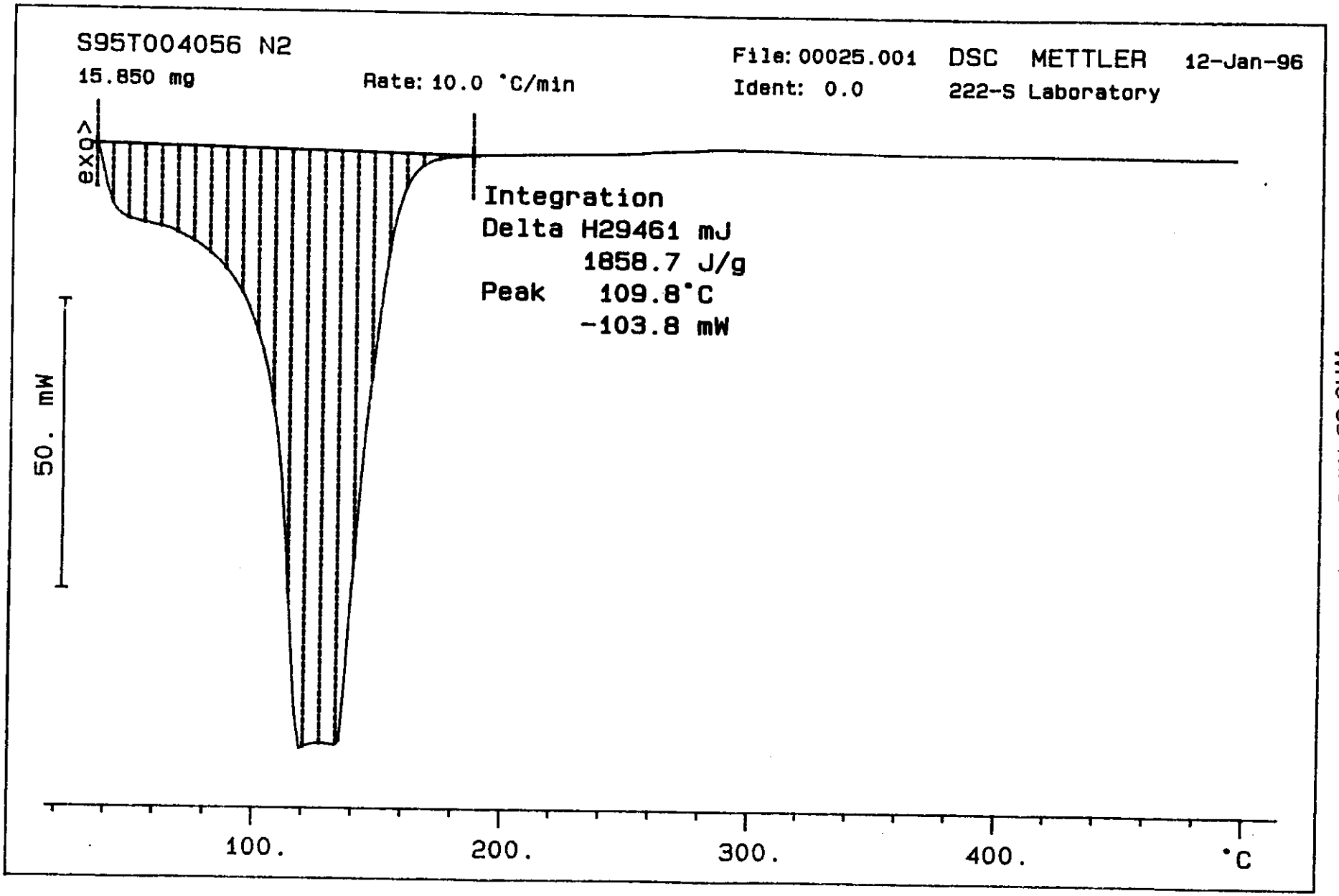
SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 113 TO 117.

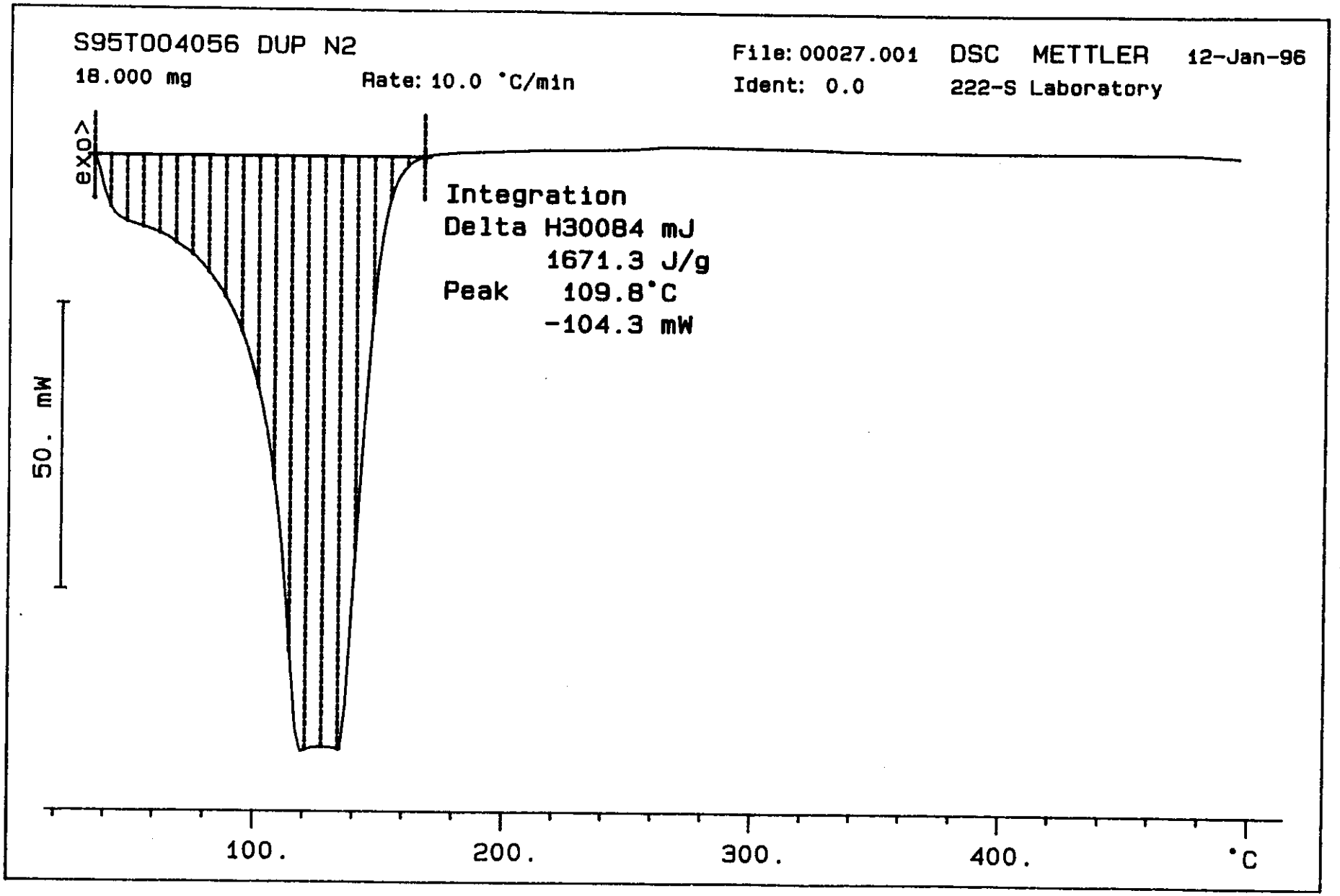


Blandina Valenzuela for RD Meyers 2/2/96


S95T004055 N2
14.300 mg
Rate: 10.0 °C/min
File: 00021.001
Ident: 0.0
DSC METTLER
222-S Laboratory
11-Jan-96
exo>
50. mW
Integration
Delta H28906 mJ
2021.4 J/g
Peak 112.4°C
-94.0 mW
100.
200.
300.
400.
°C


S95T004055 DUP N2
21.500 mg
Rate: 10.0 °C/min
File: 00023.001
Ident: 0.0
DSC METTLER
222-S Laboratory
11-Jan-96
exo>
Integration
Delta H35281 mJ
1641.0 J/g
Peak 109.8°C
-103.1 mW
50. mW
100.
200.
300.
400.
°C


S95T004056 N2
15.850 mg
Rate: 10.0 °C/min
File: 00025.001
Ident: 0.0
DSC METTLER
222-S Laboratory
12-Jan-96
exo>
Integration
Delta H29461 mJ
1858.7 J/g
Peak 109.8°C
-103.8 mW
50. mW
100.
200.
300.
400.
°C


S95T004056 DUP N2
18.000 mg
Rate: 10.0 °C/min
File: 00027.001
Ident: 0.0
DSC METTLER
222-S Laboratory
12-Jan-96
exo>
Integration
Delta H30084 mJ
1671.3 J/g
Peak 109.8°C
-104.3 mW
50. mW
100.
200.
300.
400.
°C

LABCORE Data Entry Template for Worklist# 4827

Analyst: SMF **Instrument:** DSC0 1 **Book #** 12N143

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

Worklist Comment: Please run B-203 DSCs under N2. bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				DSC-01	SOLID	28.45	31.1	N/A	Joules/g
95000228	B-203	2	SAMPLE	S95T004007	0		DSC-01	SOLID	N/A	Ø		Joules/g
95000228	B-203	3	DUP	S95T004007	0		DSC-01	SOLID	Ø	Ø	N/A	Joules/g
95000228	B-203	4	SAMPLE	S95T004008	0		DSC-01	SOLID	N/A	Ø		Joules/g
95000228	B-203	5	DUP	S95T004008	0		DSC-01	SOLID	Ø	Ø	N/A	Joules/g

Final page for worklist # 4827

Susie M. Fulton 1-12-96
Analyst Signature **Date**

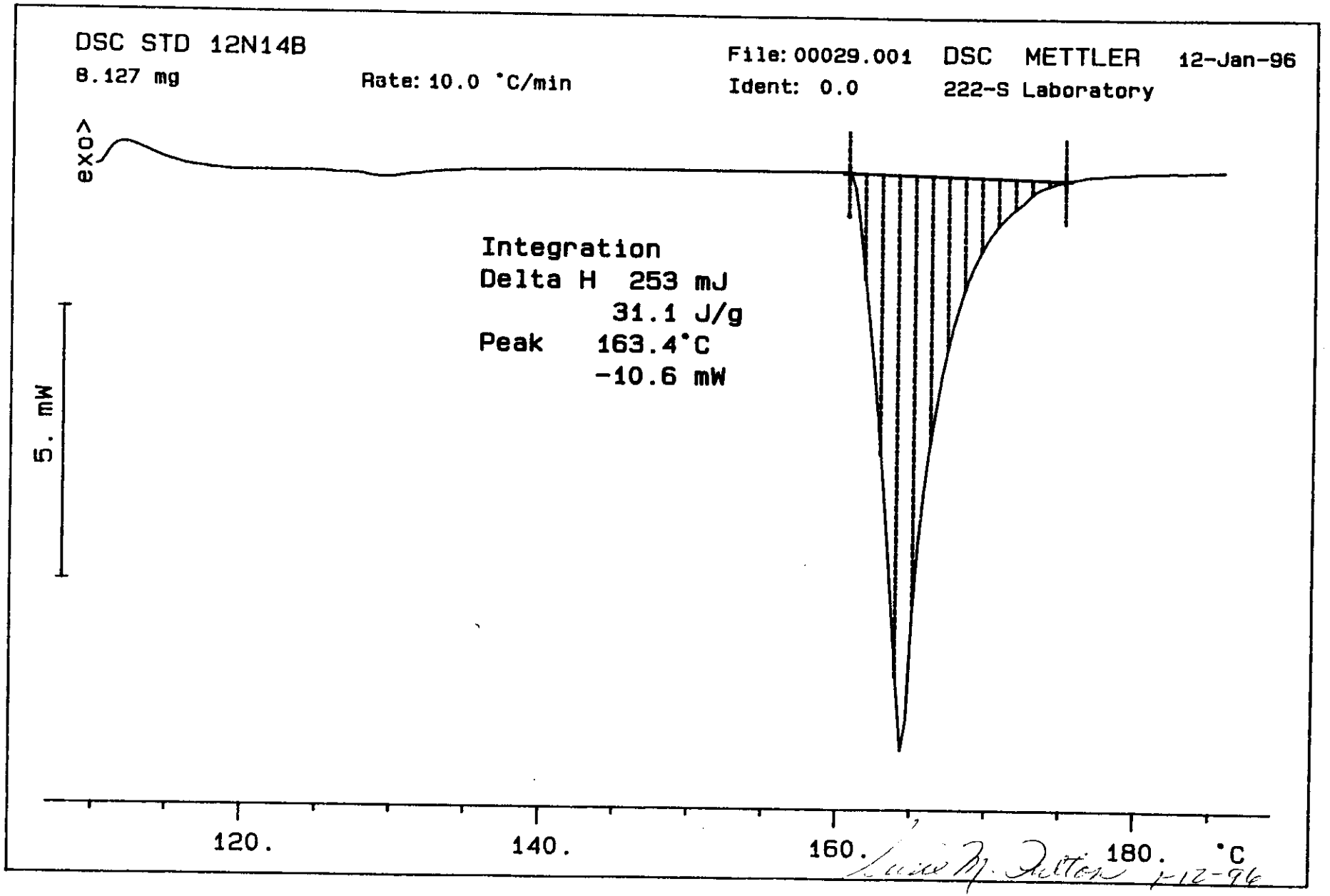
NE Wright 1/16/96
Analyst Signature **Date**

Verified by Blandina Valenzuela 1/17/96

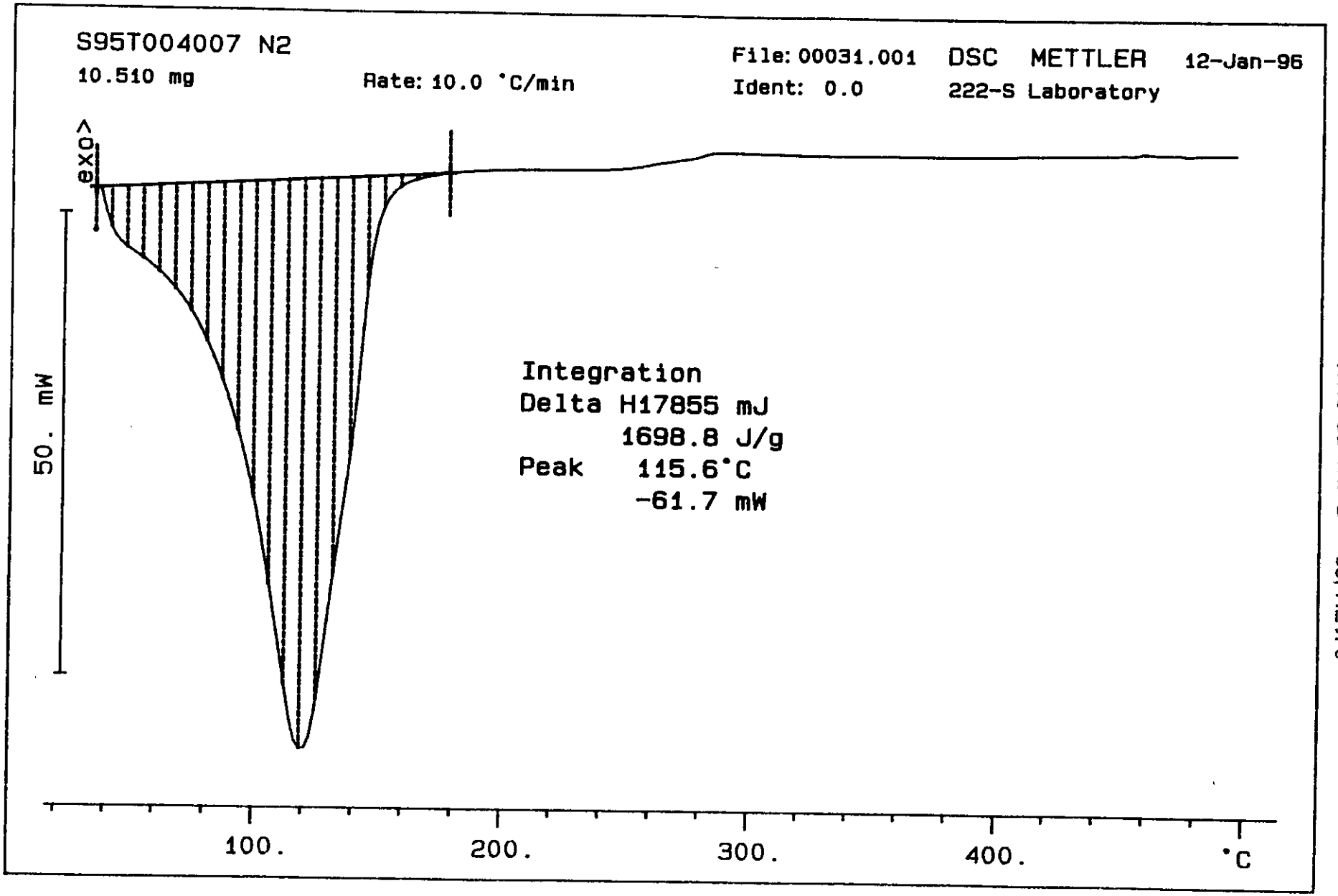
Data Entry Comments: S95T004007 produced an endotherm at 115.6°C with a delta H of 1698.8 J/g
S95T004008 produced an endotherm at endotherm at 111.8°C with a delta H 1390.8 J/g

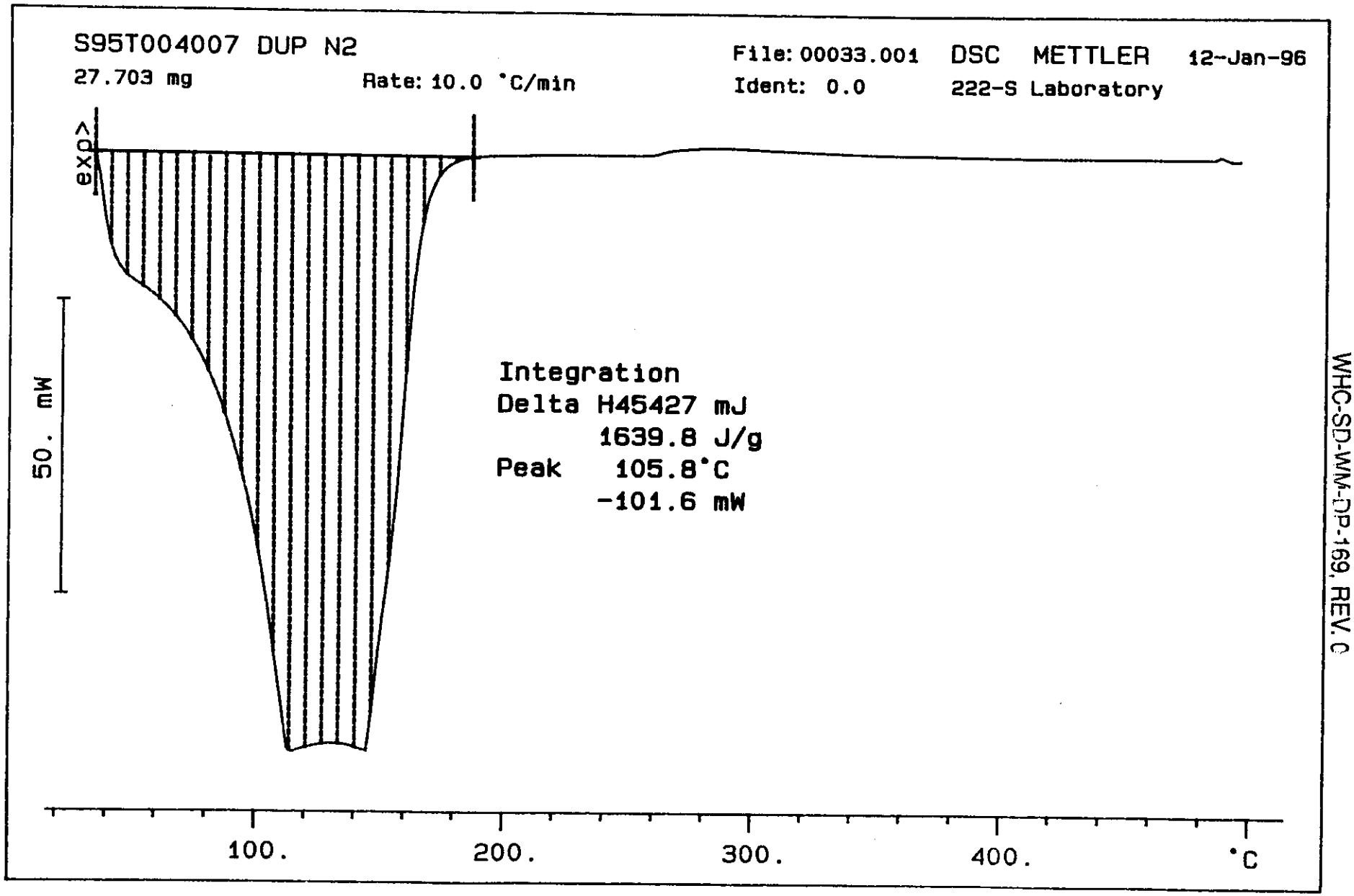
Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

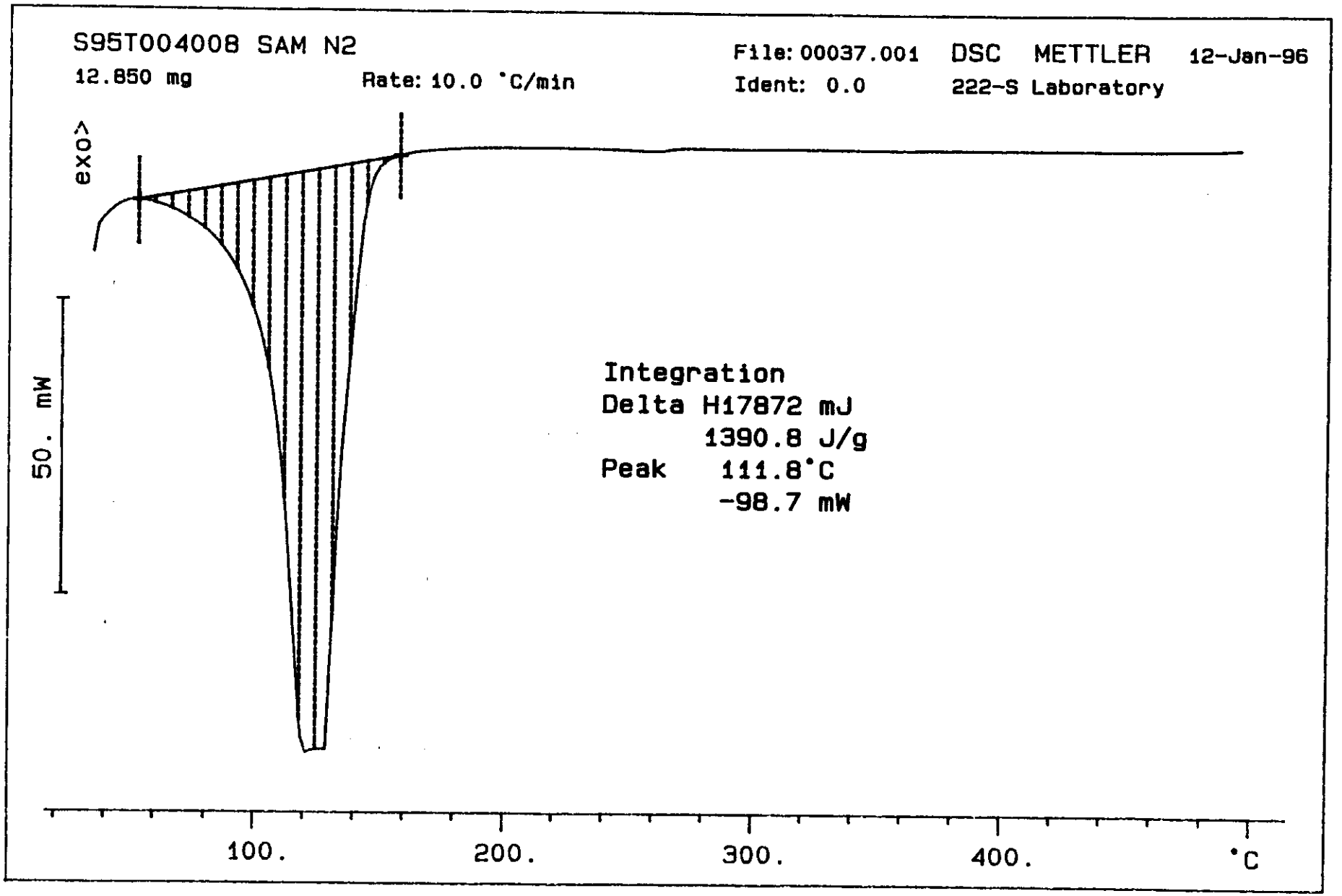
SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 119 TO 123.

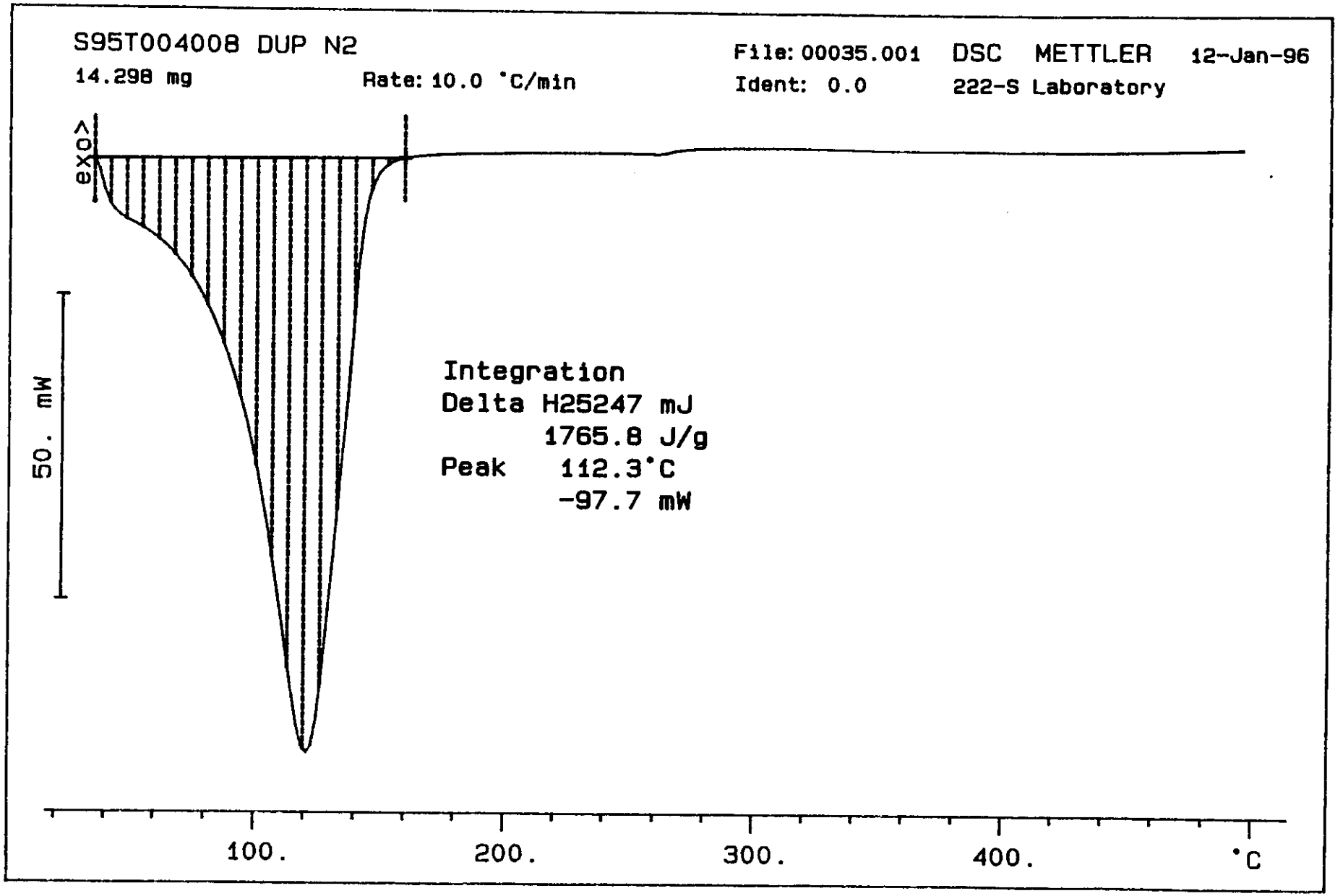


Linda M. Sutton 1-12-96


S95T004007 N2
10.510 mg
Rate: 10.0 °C/min
File: 00031.001
Ident: 0.0
DSC METTLER
222-S Laboratory
12-Jan-96
exo>
50. mW
Integration
Delta H17855 mJ
1698.8 J/g
Peak 115.6°C
-61.7 mW
100.
200.
300.
400.
°C


S95T004007 DUP N2
27.703 mg
Rate: 10.0 °C/min
File: 00033.001
Ident: 0.0
DSC METTLER
222-S Laboratory
12-Jan-96
exo>
50. mW
Integration
Delta H45427 mJ
1639.8 J/g
Peak 105.8°C
-101.6 mW
100.
200.
300.
400.
°C


S95T004008 SAM N2
12.850 mg
Rate: 10.0 °C/min
File: 00037.001
Ident: 0.0
DSC METTLER
222-S Laboratory
12-Jan-96
exo>
50. mW
Integration
Delta H17872 mJ
1390.8 J/g
Peak 111.8°C
-98.7 mW
100.
200.
300.
400.
°C


S95T004008 DUP N2
14.298 mg
Rate: 10.0 °C/min
File: 00035.001
Ident: 0.0
DSC METTLER
222-S Laboratory
12-Jan-96
exo>
.05 mW
Integration
Delta H25247 mJ
1765.8 J/g
Peak 112.3°C
-97.7 mW
100.
200.
300.
400.
°C

LABCORE Data Entry Template for Worklist# 4828

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

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

Worklist Comment: Please run B-203 DSCs under N2. bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				DSC-03	SOLID	28.45	28.38	N/A	Joules/g
95000228	B-203	2	SAMPLE	S95T004009	0		DSC-03	SOLID	N/A	Ø		Joules/g
95000228	B-203	3	DUP	S95T004009	0		DSC-03	SOLID	Ø	Ø	N/A	Joules/g
95000228	B-203	4	SAMPLE	S95T004012	0		DSC-03	SOLID	N/A	Ø		Joules/g
95000228	B-203	5	DUP	S95T004012	0		DSC-03	SOLID	Ø	Ø	N/A	Joules/g

Final page for worklist # 4828

See attached for signatures
Analyst Signature **Date** 1/16/96 BDV

Gary Hammitt 1-17-96
Analyst Signature **Date**

Verified by Blandina Valenzuela 1/17/96

Data Entry Comments: S95T004009 produced an endotherm at 106.6°C with a delta H of 1843.9 J/g
S95T004012 produced an endotherm at 120.4°C with a delta H of 1907.7 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# 4828

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

Method ~~LA-514-113 Rev/~~Mod LA-514-114 (C-1)
SMF 1-14-96

Worklist Comment: Please run B-203 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
95000228	B-203	2	SAMPLE	S95T004009	0		DSC-01	SOLID	N/A			Joules/g
95000228	B-203	3	DUP	S95T004009	0		DSC-01	SOLID			N/A	Joules/g
95000228	B-203	4	SAMPLE	S95T004012	0		DSC-01	SOLID	N/A			Joules/g
95000228	B-203	5	DUP	S95T004012	0		DSC-01	SOLID			N/A	Joules/g

Final page for worklist # 4828

Susie M. Fulton 1-14-96
Analyst Signature **Date**

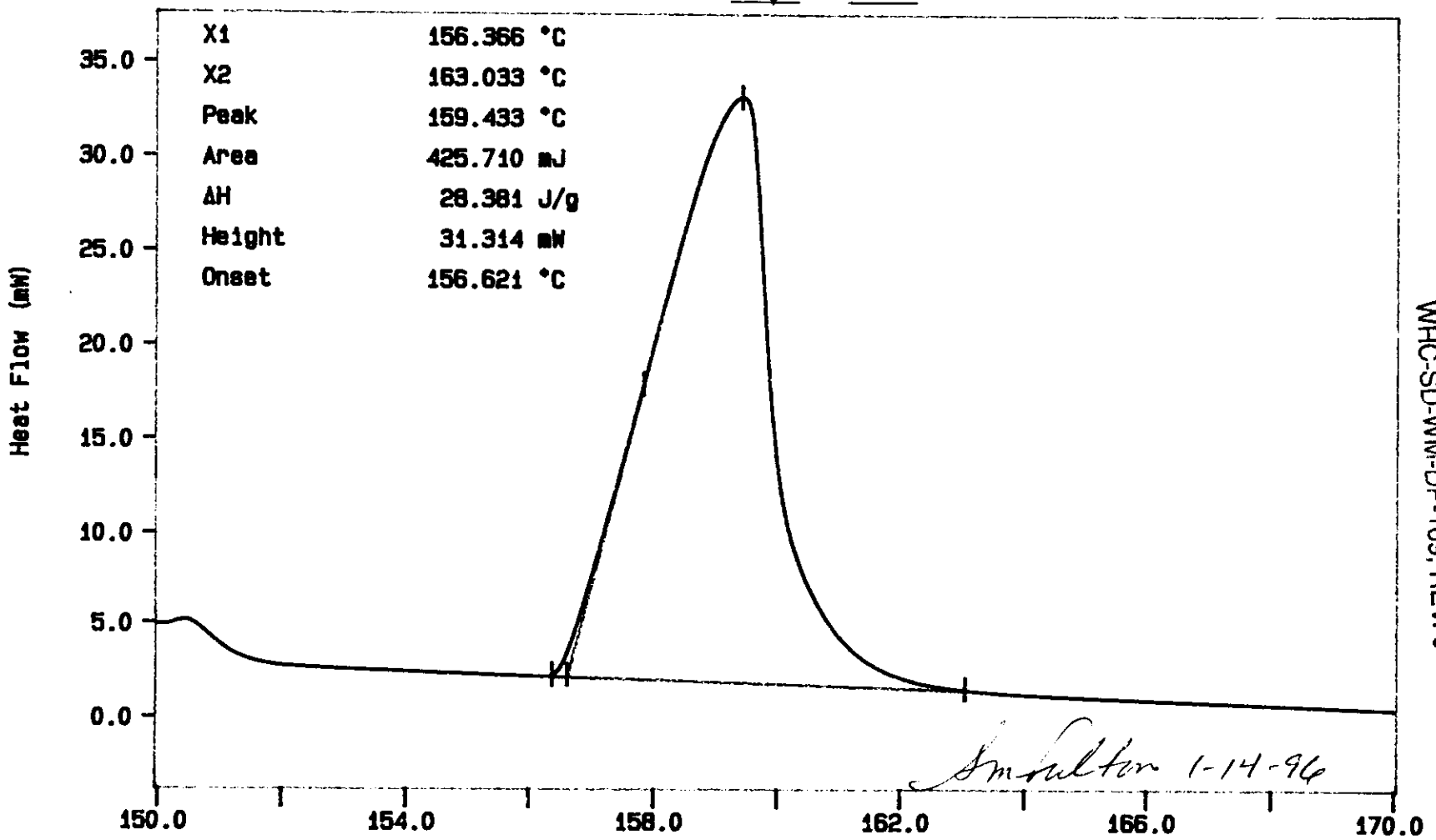
Analyst Signature **Date**

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: DSC
File info: IND011401 Sun Jan 14 06:48:33 1996
Sample Weight: 15.000 mg
12N148 Indium at 10C/min

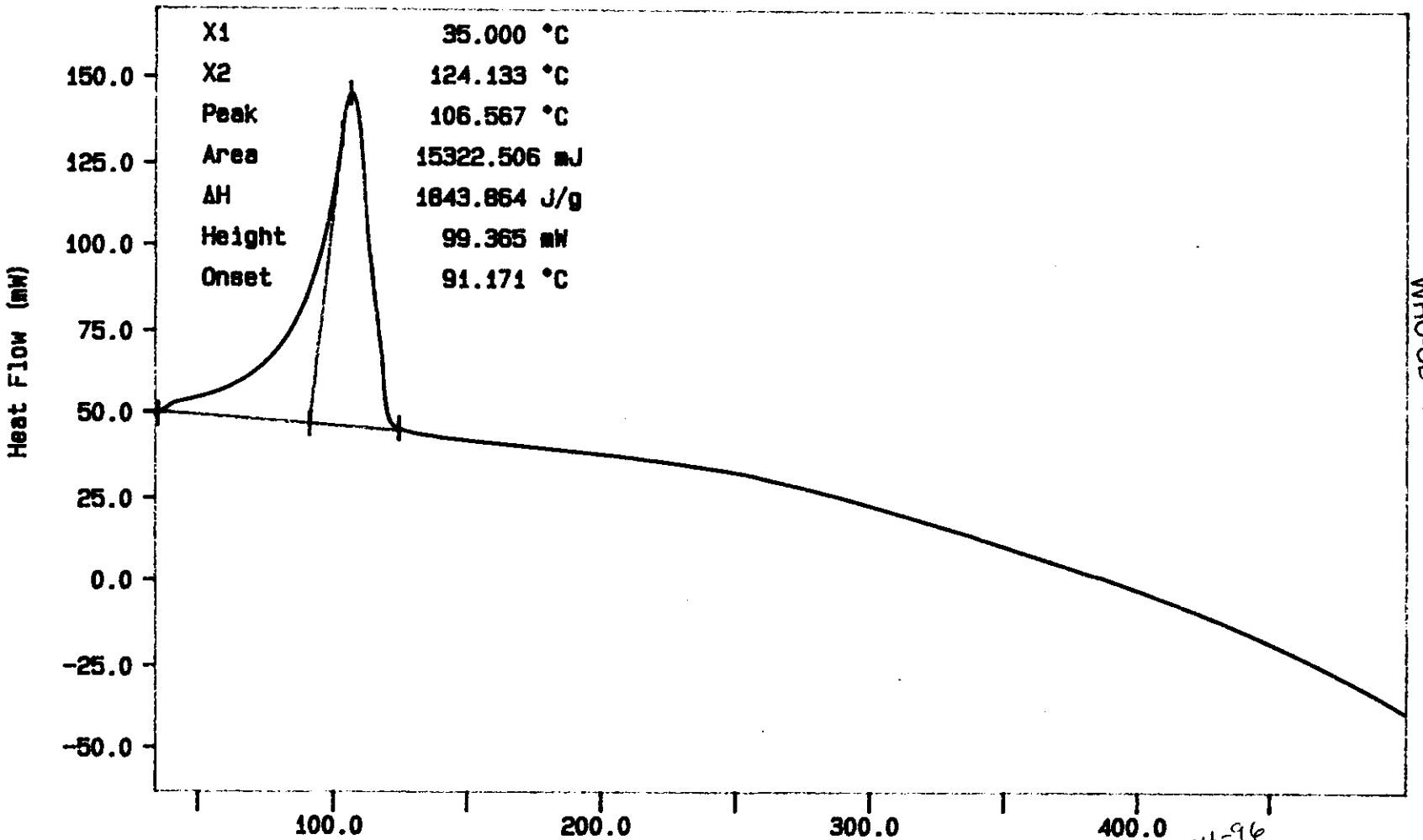
SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 126 TO 130.



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

SM FULTON
PERKIN-ELMER
7 Series Thermal Analysis System
Sun Jan 14 06:49:56 1996

Curve 1: DSC
File info: SAM011404 Sun Jan 14 08:15:45 1996
Sample Weight: 8.310 mg
~~S96T000091 DUP~~ SMF 1-14-96
S95T004009



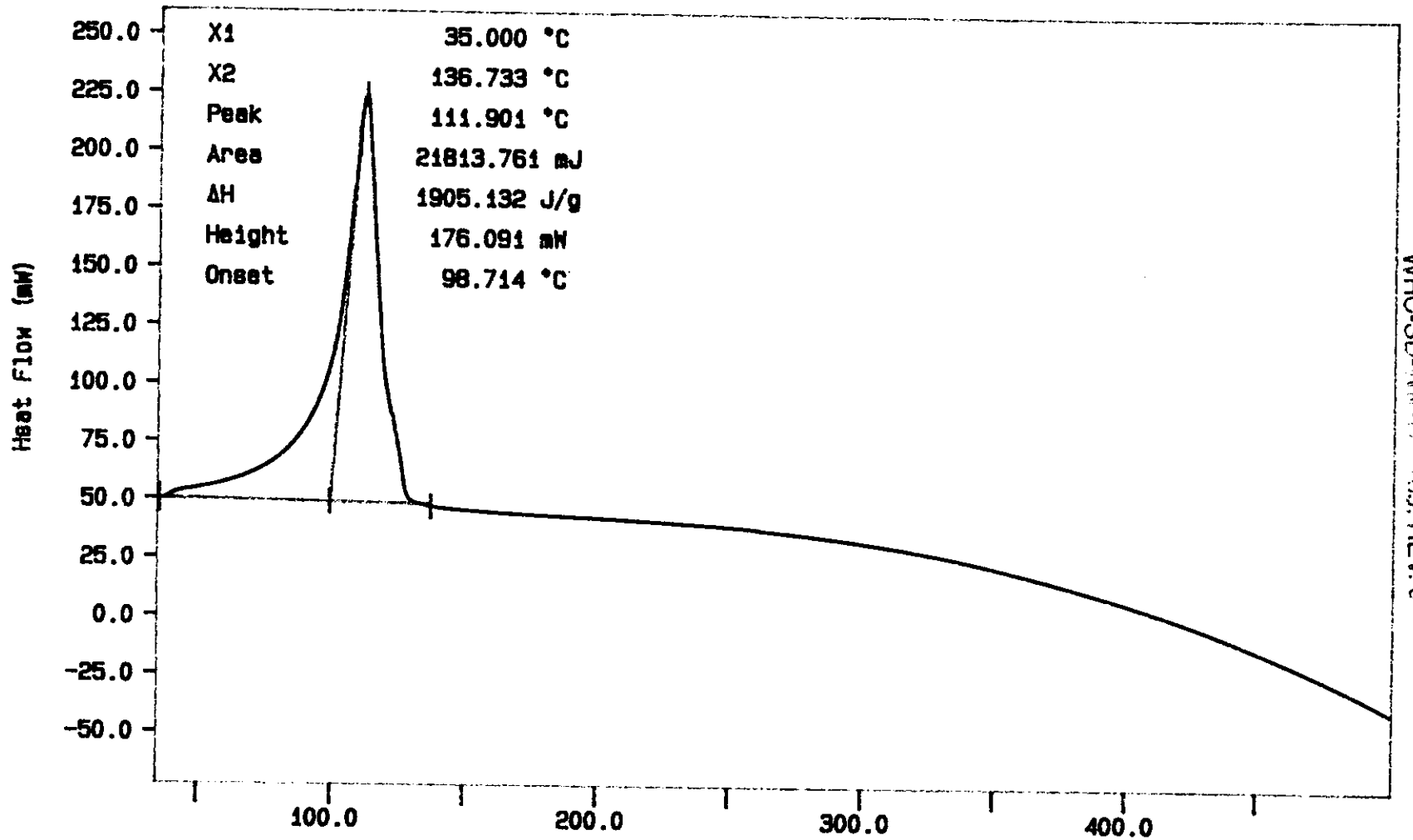
exotherm down, N2 purge gas
TEMP1: 35.0 C TIME1: 0.0 min RATE1: 10.0 C/min
TEMP2: 500.0 C

~~AD PURINTON~~ SMF 1-14-96 SMFULTON
PERKIN-ELMER
7 Series Thermal Analysis System
Sun Jan 14 09:12:16 1996

WHC-SD-WM-DP-169, REV. 0

127

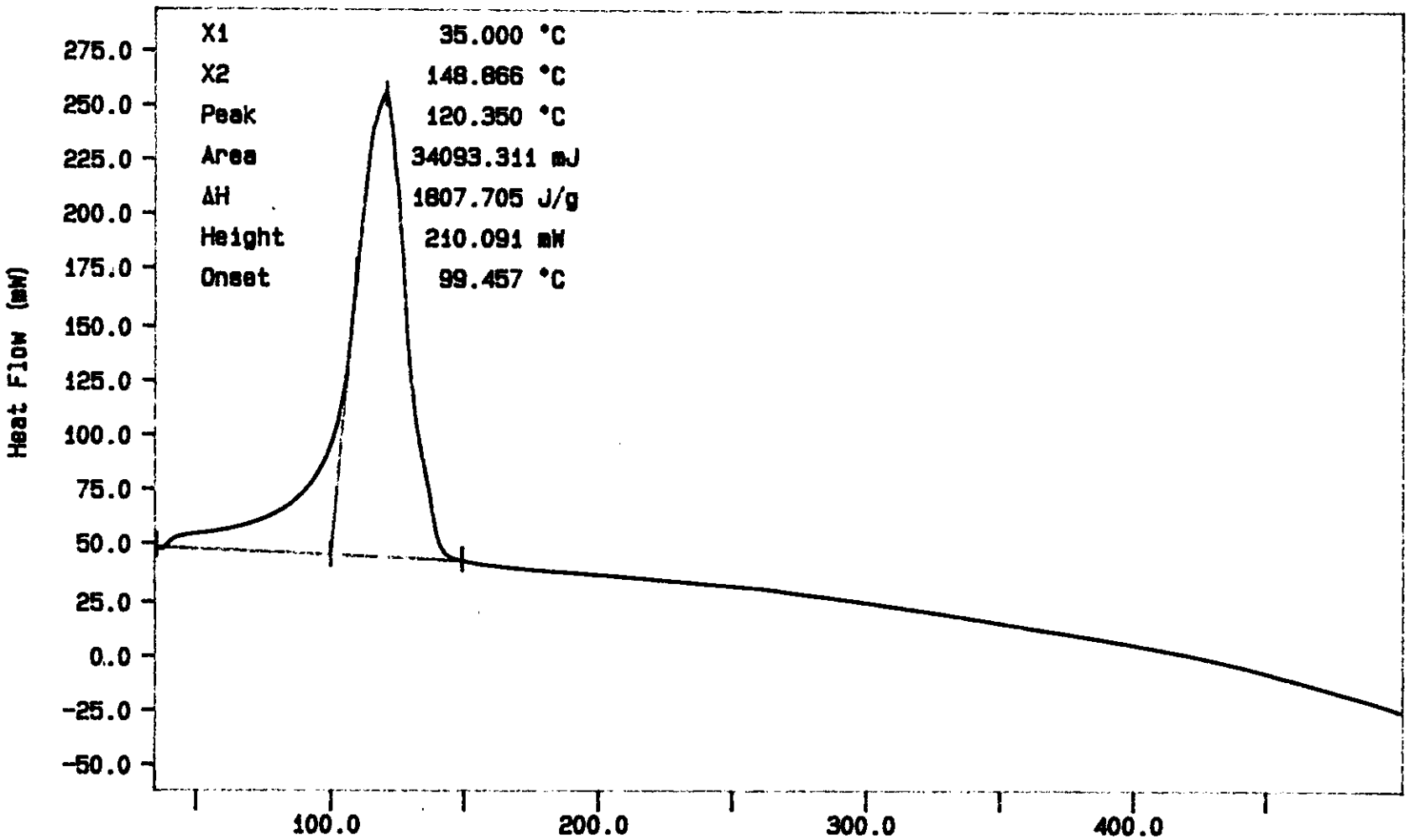
Curve 1: DSC
File info: SAM011405 Sun Jan 14 10:02:01 1996
Sample Weight: 11.450 mg
S95T004009 DUP



exotherm down, N2 purge gas
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 Jan 14 10:22:33 1996

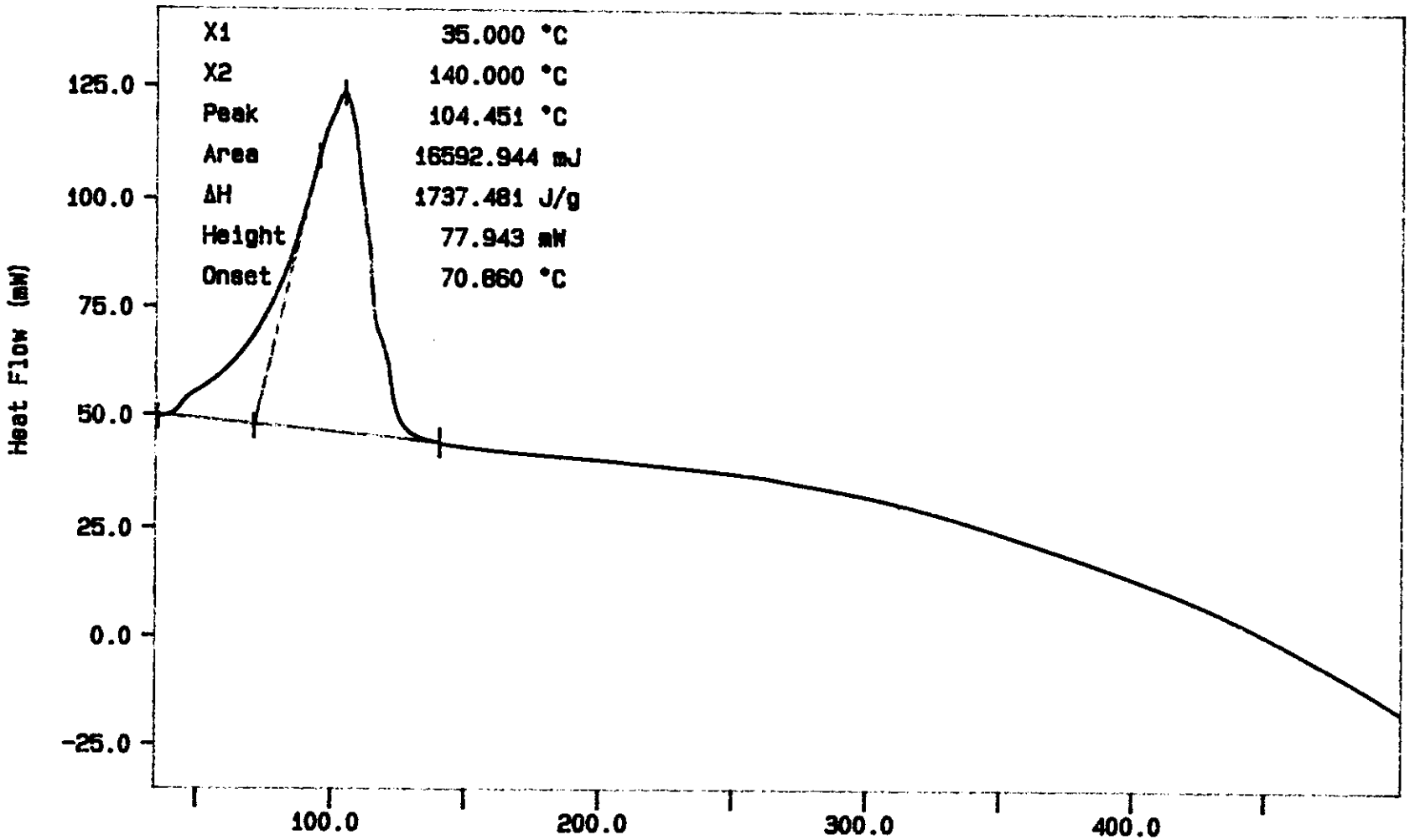
Curve 1: DSC
File info: SAM011406 Sun Jan 14 11:12:30 1996
Sample Weight: 18.860 mg
S95T004012



exotherm down, N2 purge gas
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 Jan 14 11:15:02 1996

Curve 1: DSC
File info: SAM011407 Sun Jan 14 12:05:22 1996
Sample Weight: 9.550 mg
S95T004012 DUP



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

SM FULTON
PERKIN-ELMER
7 Series Thermal Analysis System
Sun Jan 14 12:52:55 1996

LABCORE Data Entry Template for Worklist# 4829

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

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

Worklist Comment: Please run B-203 DSCs under N2. bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				DSC-03	SOLID	1/16/96 ~~27.36~~ 28.45	27.36	N/A	Joules/g
95000228	B-203	2	SAMPLE	S95T004013	0		DSC-03	SOLID	N/A	Ø		Joules/g
95000228	B-203	3	DUP	S95T004013	0		DSC-03	SOLID	Ø	Ø	N/A	Joules/g
95000228	B-203	4	SAMPLE	S95T004014	0		DSC-03	SOLID	N/A	Ø		Joules/g
95000228	B-203	5	DUP	S95T004014	0		DSC-03	SOLID	Ø	Ø	N/A	Joules/g

Final page for worklist # 4829

See attached for signatures
Analyst Signature **Date** 1/16/96

[signature] 1-17-96
Analyst Signature **Date**

Verified by Blanaine BDV
Valerie [illegible] 1/17/96

Data Entry Comments: S95T004013 produced an endotherm at 124.9 °C with a delta H of 1583.5 J/g
S95T004014 produced an endotherm at 112.4°C with a delta H of 1703.7 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# 4829

Analyst: RBM **Instrument:** DSC0 **Book #** 12N143

Method: LA-514-113 Rev/Mod C1

Worklist Comment: Please run B-203 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
95000228	B-203	2	SAMPLE	S95T004013	0		DSC-01	SOLID	N/A			Joules/g
95000228	B-203	3	DUP	S95T004013	0		DSC-01	SOLID			N/A	Joules/g
95000228	B-203	4	SAMPLE	S95T004014	0		DSC-01	SOLID	N/A			Joules/g
95000228	B-203	5	DUP	S95T004014	0		DSC-01	SOLID			N/A	Joules/g

Final page for worklist # 4829

RBM 1/15/96
Analyst Signature **Date**

Analyst Signature **Date**

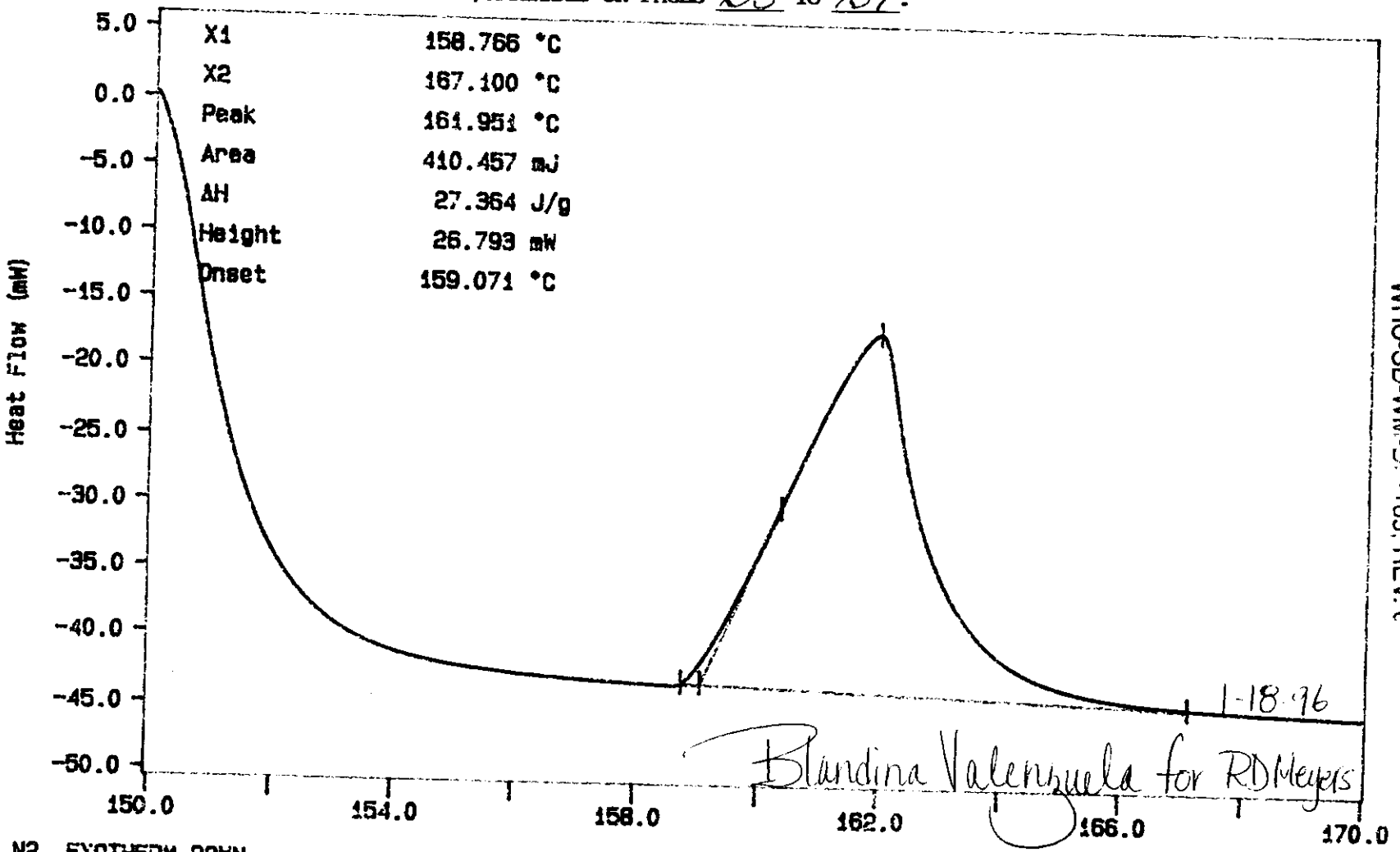
Other instrument was run 1/16/96 BDV

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: DSC
File info: ind011501 Mon Jan 15 06:34:45 1996
Sample Weight: 15.000 mg
12N14B Indium at 10C/min

SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 133 TO 137.

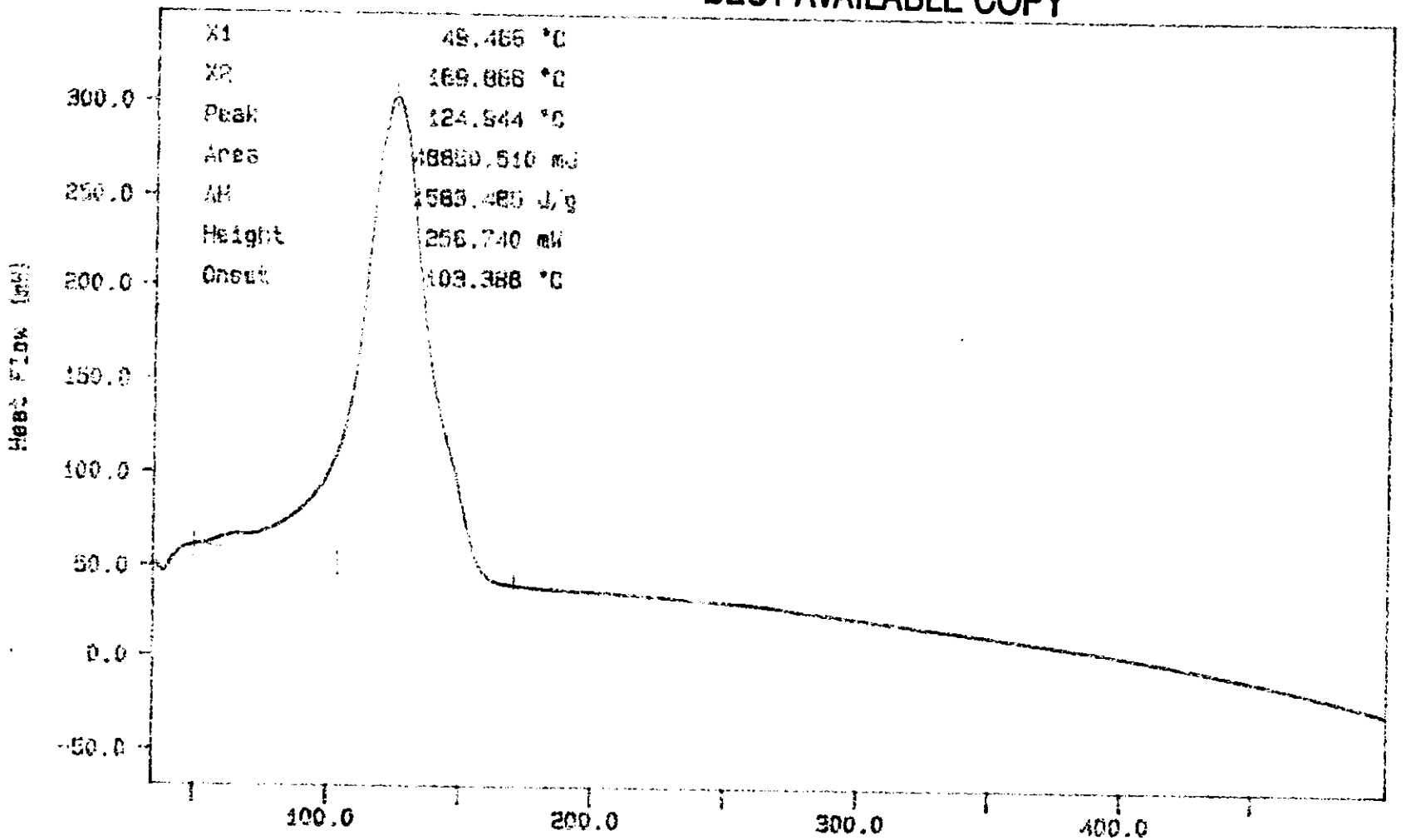


N2, EXOTHERM DOWN
TEMP1: 150.0 C TIME1: 0.0 min RATE1: 10.0 C/min
TEMP2: 170.0 C

RD MEYERS
PERKIN-ELMER
7 Series Thermal Analysis System
Mon Jan 15 07:31:46 1996

Curve 1: DSC
File info: sam011S01 Mon Jan 15 08:30:42 1996
Sample Weight: 30.850 mg
S95T004013

BEST AVAILABLE COPY

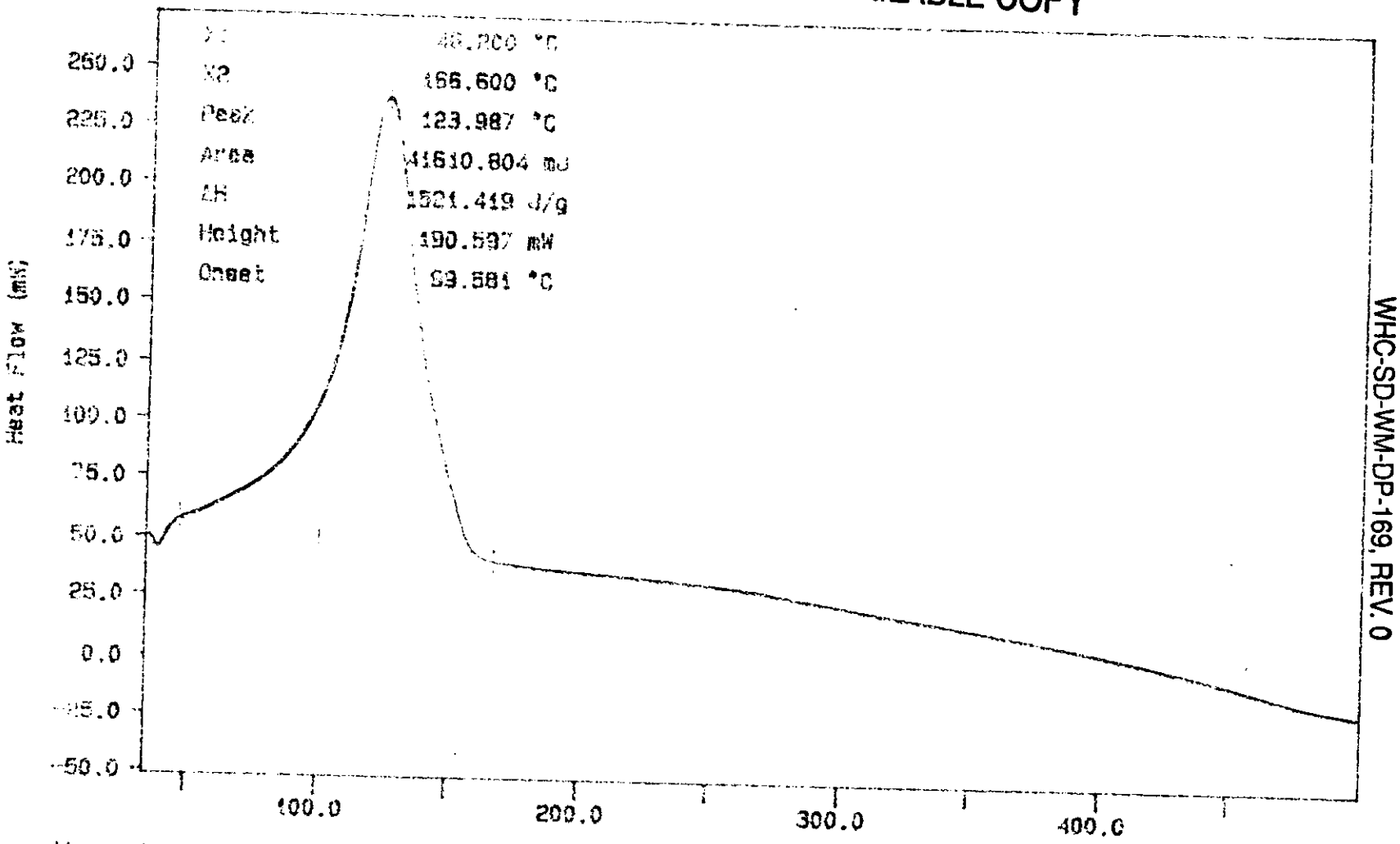


exotherm down, N2 purge gas
Range: 35.0 C Time: 0.0 min Rate: 10.0 C/min

RD MEYERS
PERKIN-ELMER
7 Series Thermal Analysis System
Mon Jan 15 10:25:59 1996

Curve 1: DSC
File info: sam011502 Mon Jan 15 11:19:46 1996
Sample Weight: 27.350 mg
S95T0042\3DUP

BEST AVAILABLE COPY

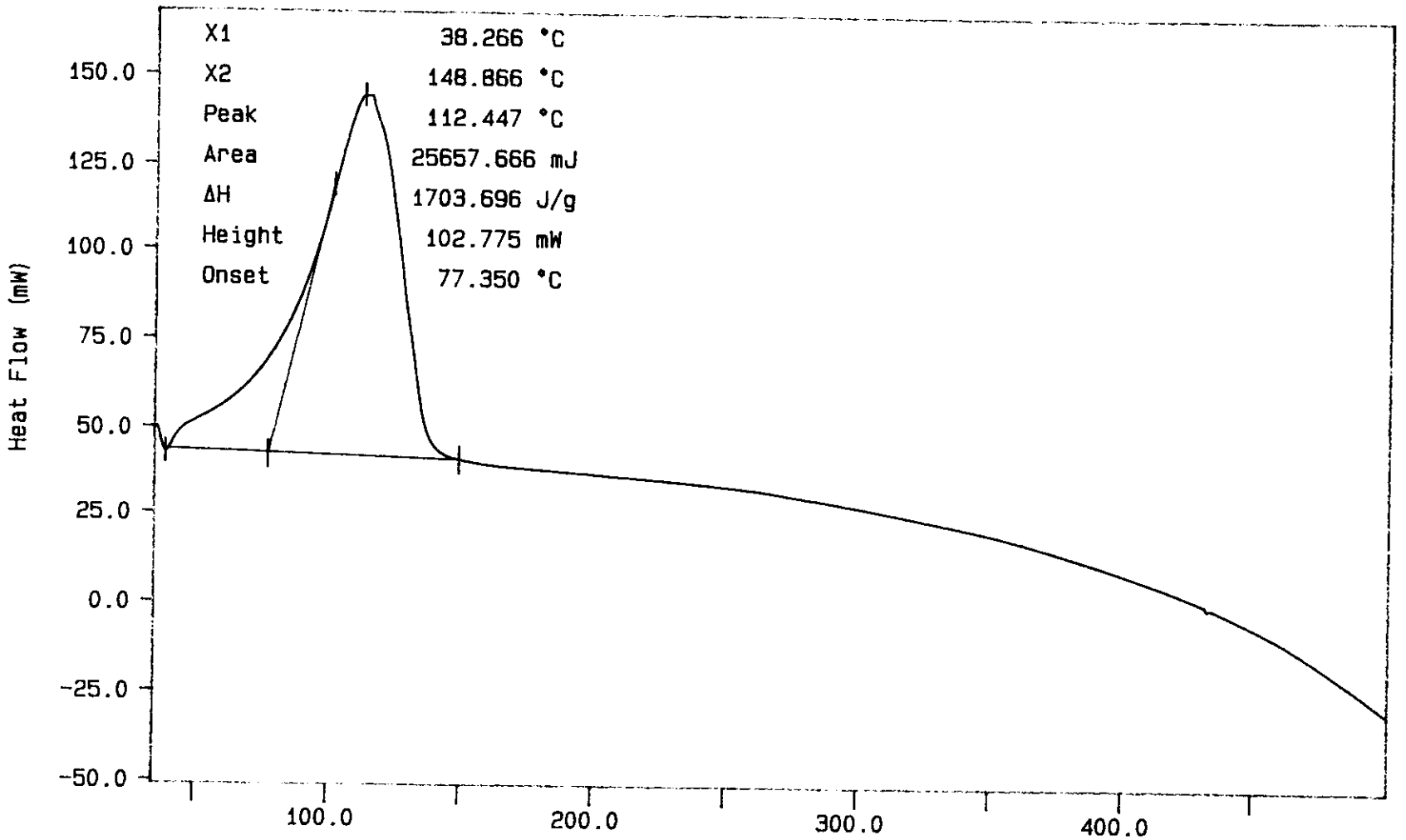


exotherm down, N2 purge gas
Temp: 30.0 C Time: 0.0 min Heating: 10.0 C/min

RD MEYERS
PERKIN-ELMER
7 Series Thermal Analysis System
Mon Jan 15 15:07:39 1996

WHC-SD-WM-DP-169, REV. 0

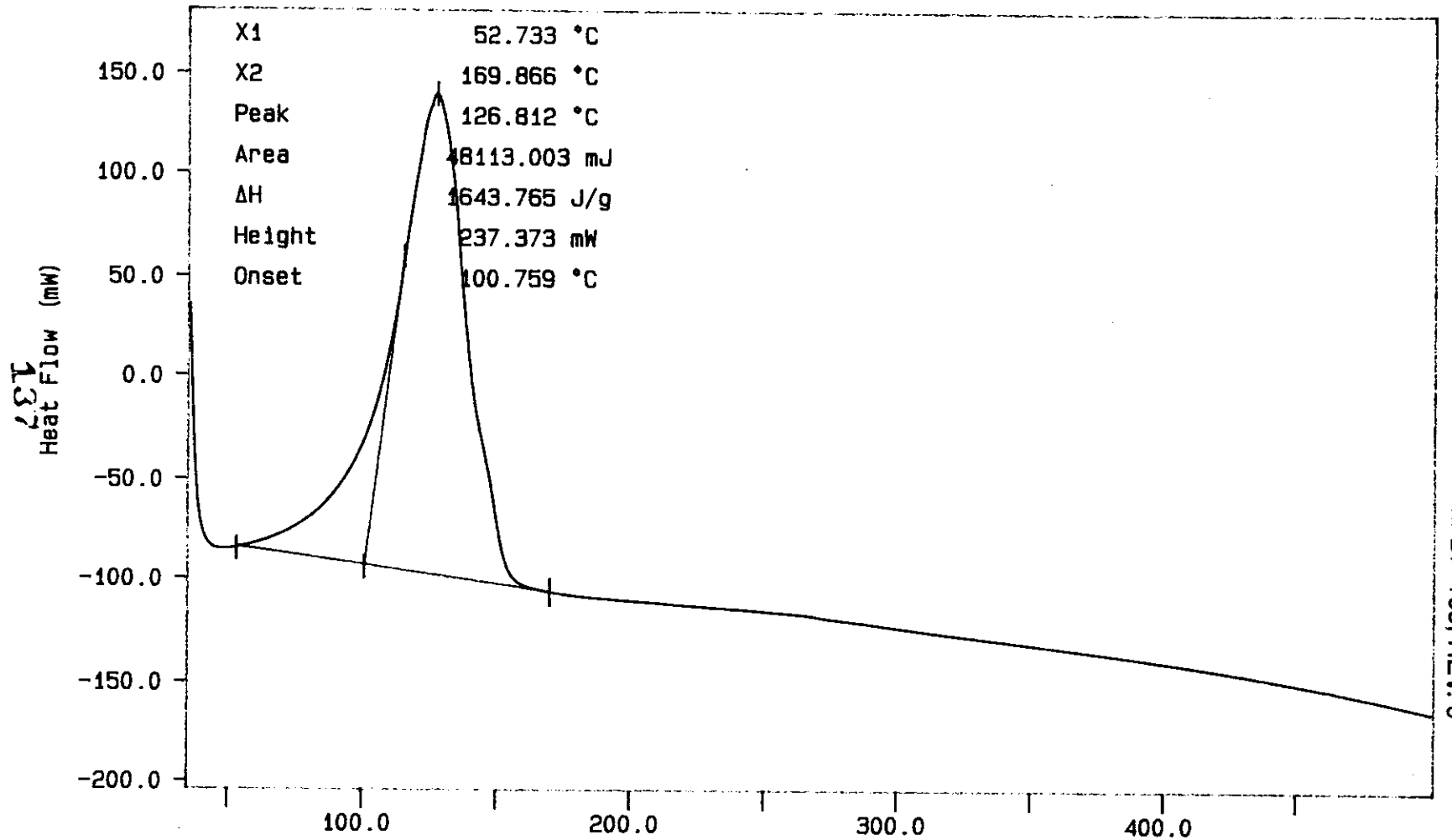
Curve 1: DSC
File info: sam011503 Mon Jan 15 16:04:31 1996
Sample Weight: 15.060 mg
S95T004014



exotherm down, N2 purge gas
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
Mon Jan 15 17:59:50 1996

Curve 1: DSC
File info: SAM011505 Mon Jan 15 19:06:42 1996
Sample Weight: 29.270 mg
S95T004014 DUO



exotherm down, N2 purge gas

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
Mon Jan 15 19:08:07 1996

WHC-SD-WM-DP-169, REV. 0

LABCORE Data Entry Template for Worklist# 4830

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

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

Worklist Comment: Please run B-203 DSCs under N2. bdv

GROUP	PROJECT	S TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD				DSC-03	SOLID	28.45	27.41*	N/A	Joules/g
95000228	B-203	2 SAMPLE	S95T004015	0		DSC-03	SOLID	N/A	Ø		Joules/g
95000228	B-203	3 DUP	S95T004015	0		DSC-03	SOLID	Ø	Ø	N/A	Joules/g
95000228	B-203	4 SAMPLE	S95T004227	0		DSC-03	SOLID	N/A	Ø		Joules/g
95000228	B-203	5 DUP	S95T004227	0		DSC-03	SOLID	Ø	Ø	N/A	Joules/g

Final page for worklist # 4830

See attached for signatures
Analyst Signature **Date** 1-23-96

[illegible] 1-24-96
Analyst Signature **Date**

Verified by Blandina Valenzuela 1/26/96

S95T004015 produced an endotherm at 129.4°C with a delta H of 1671.6 J/g.

Data Entry Comments: S95T004227 produced an endotherm at 127.72°C with a delta H of 1660.1 J/g

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

LABCORE Data Entry Template for Worklist# 4830

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

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

Worklist Comment: Please run B-203 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
95000228	B-203	2	SAMPLE	S95T004015	0		DSC-01	SOLID	N/A			Joules/g
95000228	B-203	3	DUP	S95T004015	0		DSC-01	SOLID			N/A	Joules/g
95000228	B-203	4	SAMPLE	S95T004227	0		DSC-01	SOLID	N/A			Joules/g
95000228	B-203	5	DUP	S95T004227	0		DSC-01	SOLID			N/A	Joules/g

Final page for worklist # 4830

Anthony Pucciarello 1-15-96

Analyst Signature **Date**

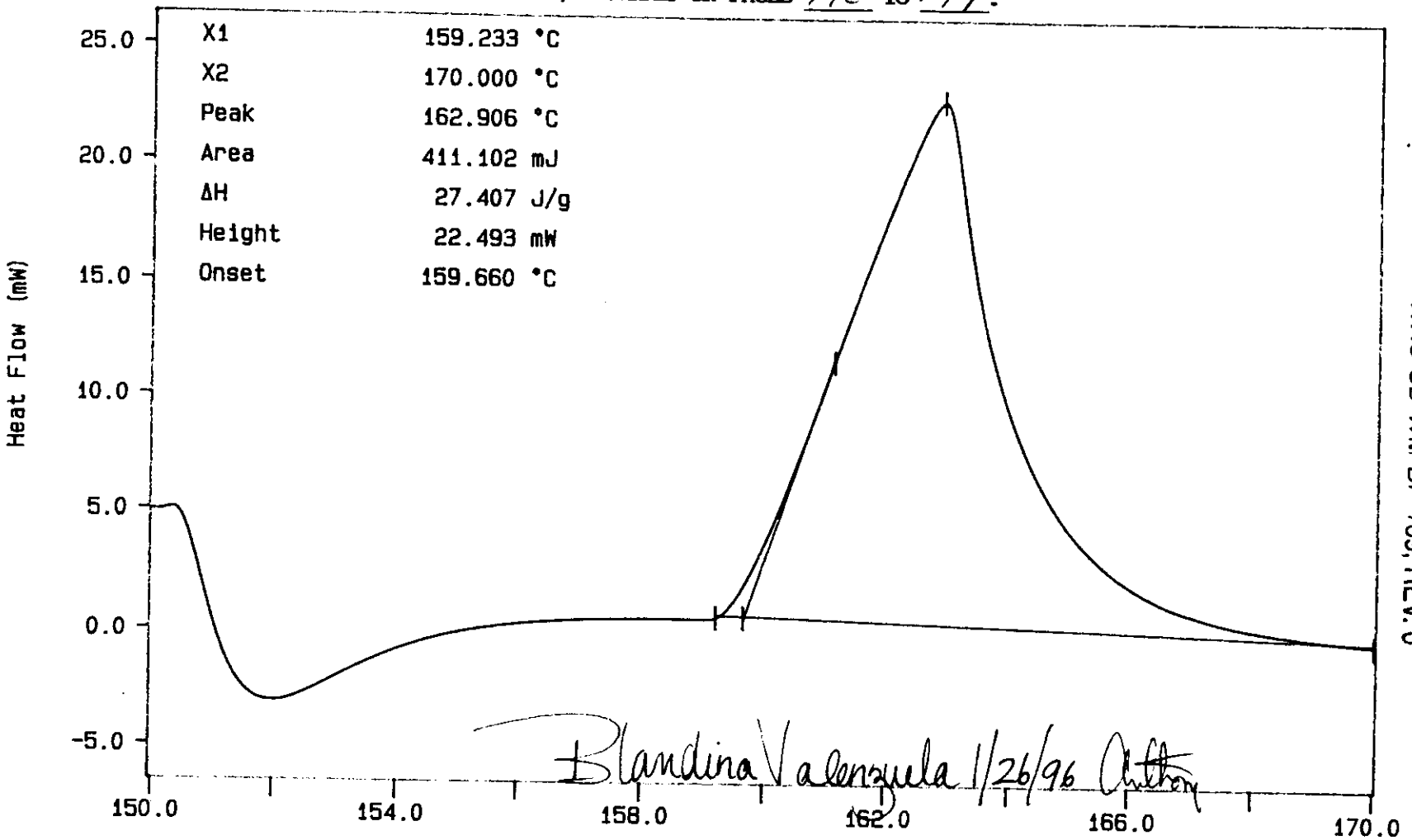
Analyst Signature **Date**

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.

Curve 1: DSC
File info: IND011502 Mon Jan 15 19:25:55 1996
Sample Weight: 15.000 mg
12N14B Indium at 10C/min

SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 140 TO 144.

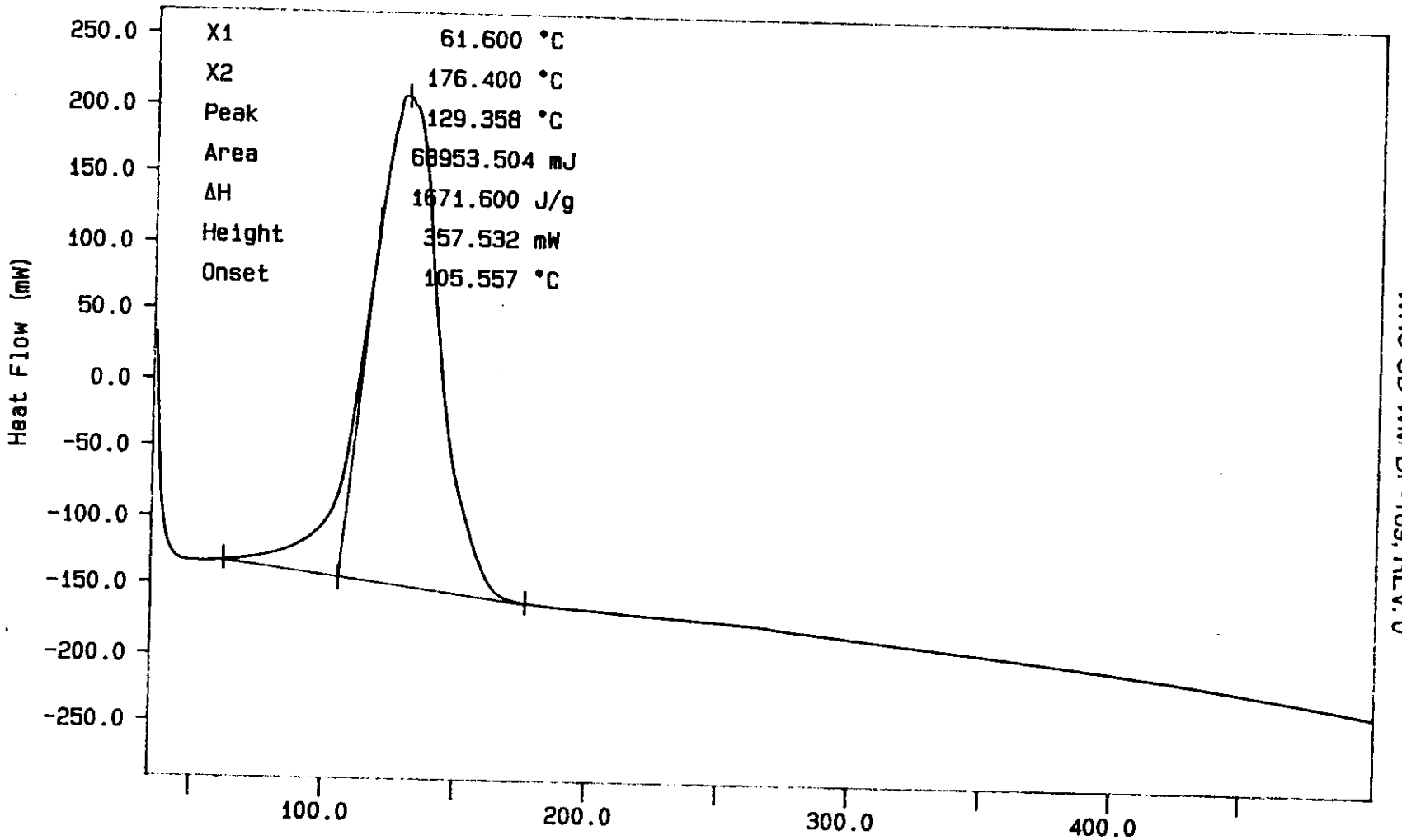


Blandina Valenzuela 1/26/96 Anthony

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 Jan 15 19:34:38 1996

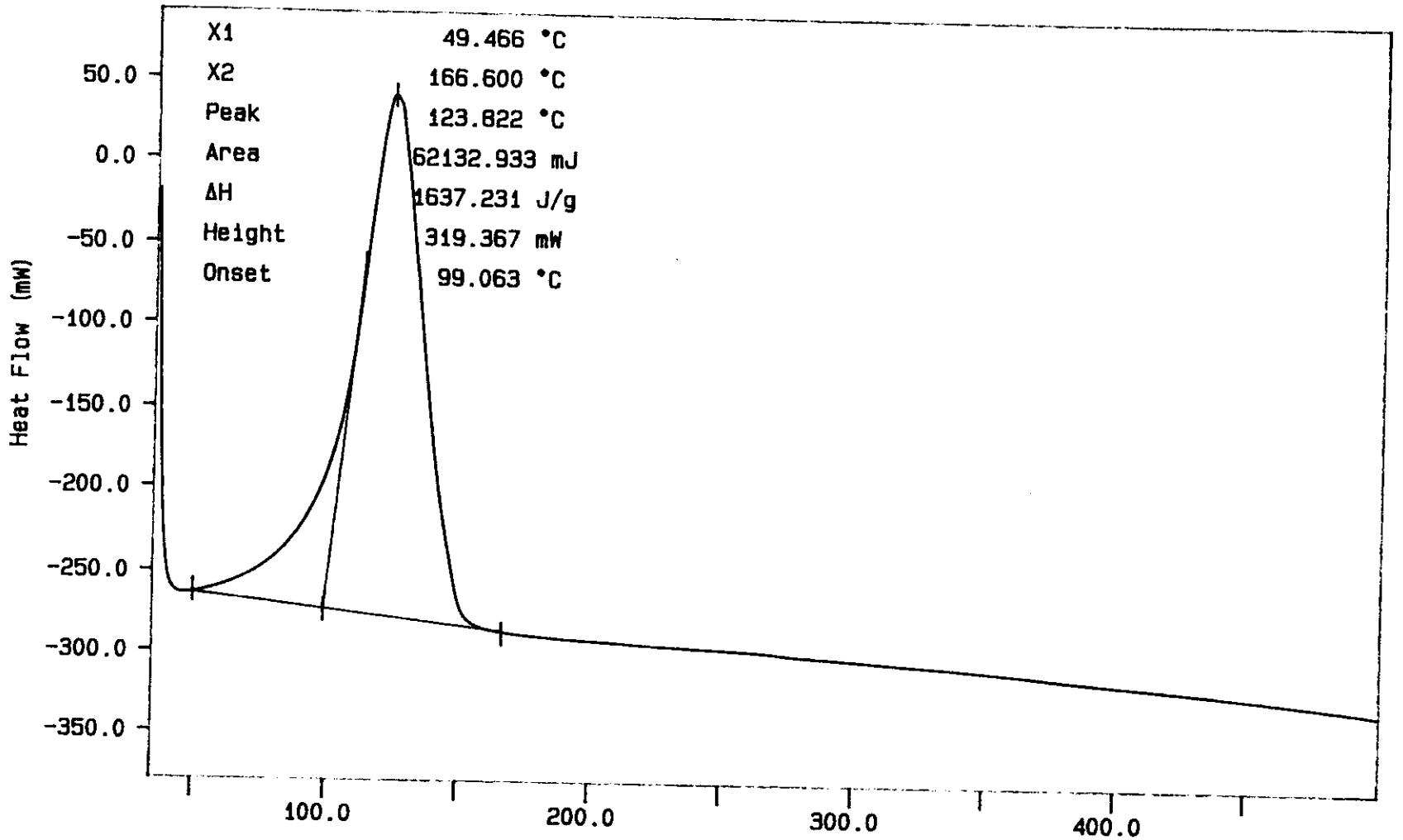
Curve 1: DSC
File info: SAM011508 Mon Jan 15 22:44:55 1996
Sample Weight: 41.250 mg
S95T004015 SAM



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 Jan 15 22:46:11 1996

Curve 1: DSC
File info: SAM011509 Mon Jan 15 23:41:00 1996
Sample Weight: 37.950 mg
S95T004015 DUP

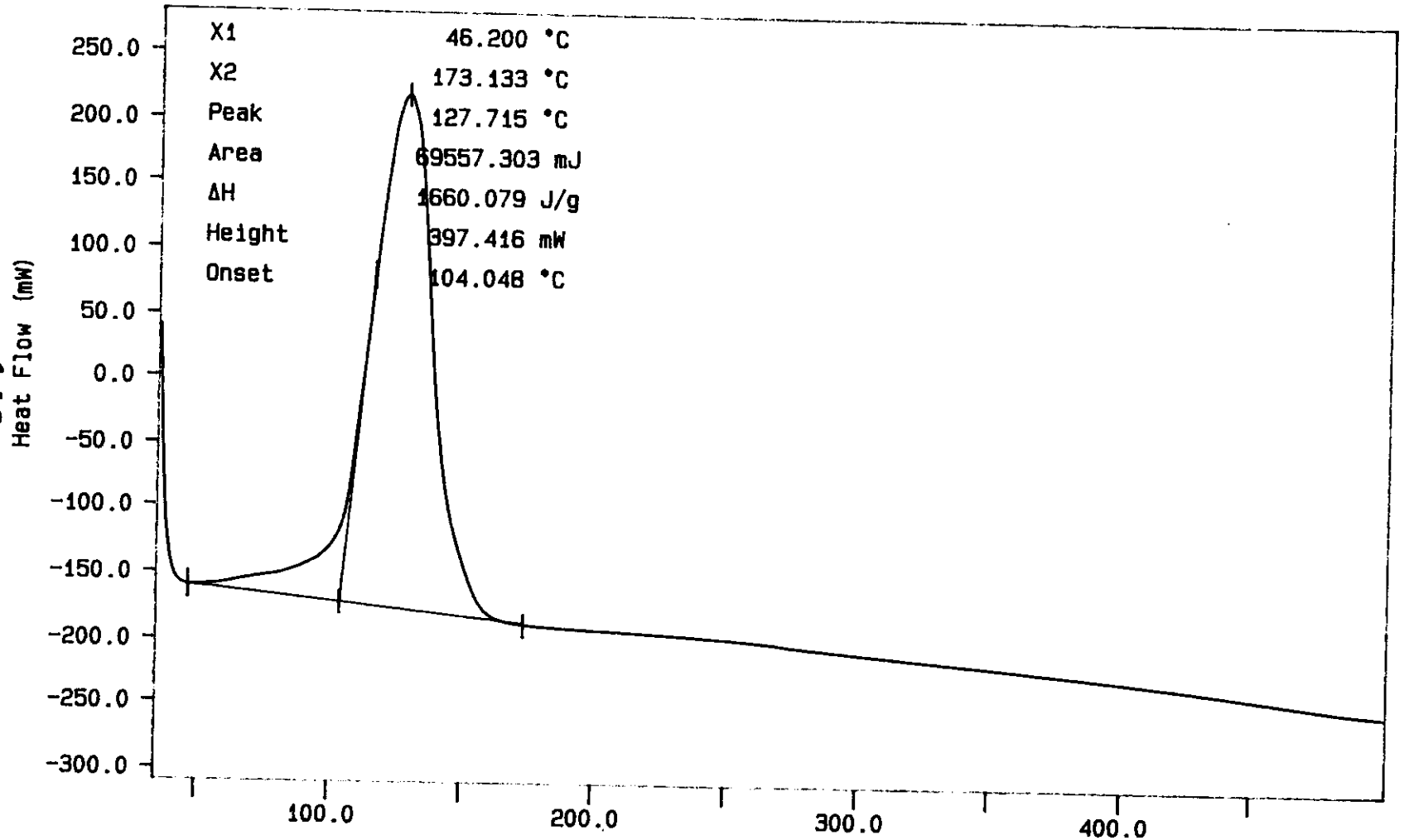


exotherm down, N2 purge gas

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 Jan 16 01:08:32 1996

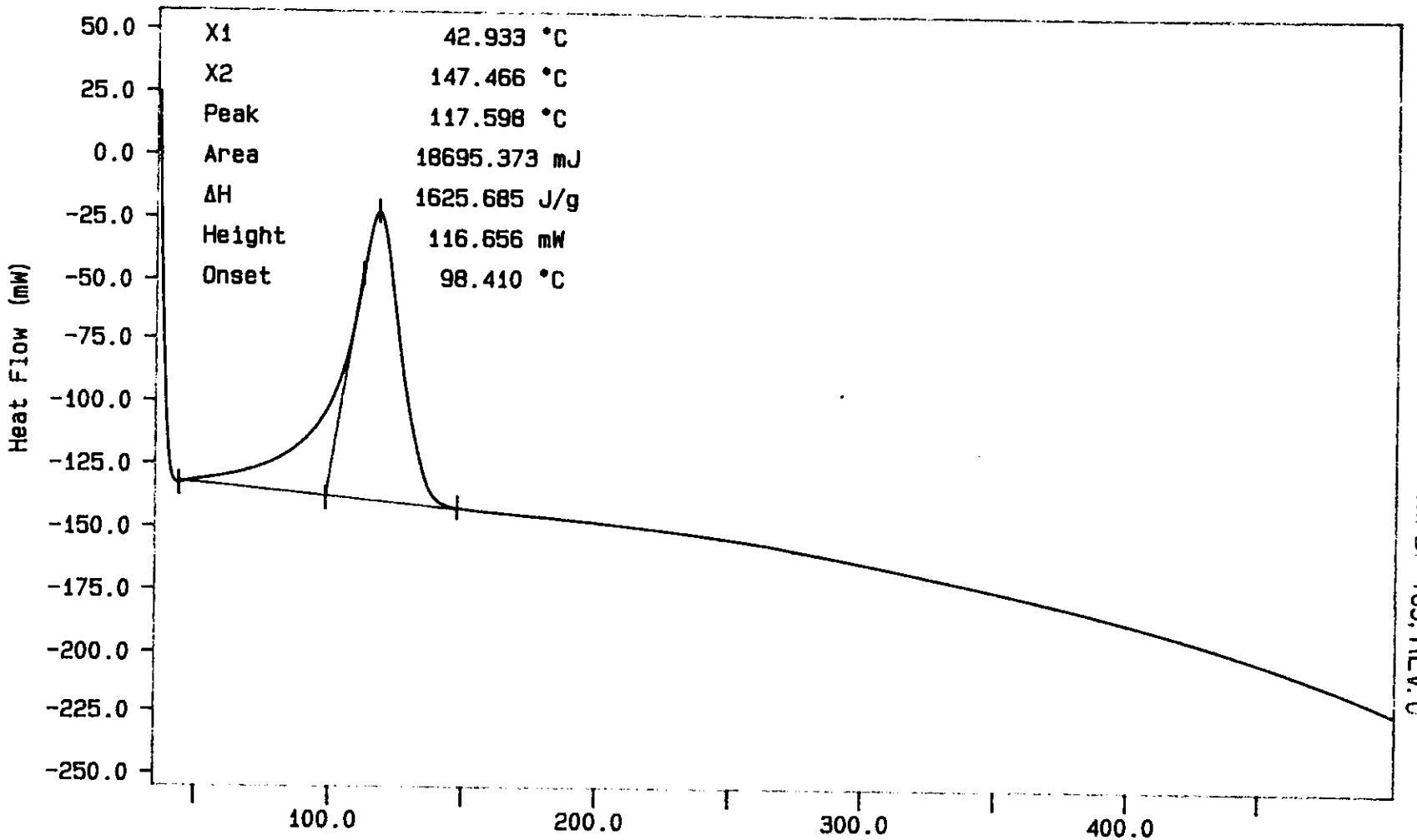
Curve 1: DSC
File info: SAM011510 Tue Jan 16 02:06:24 1996
Sample Weight: 41.900 mg
S95T004227 SAM



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 Jan 16 02:06:57 1996

Curve 1: DSC
File info: SAM011511 Tue Jan 16 03:01:29 1996
Sample Weight: 11.500 mg
S95T004227 DUP



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 Jan 16 03:22:59 1996

LABCORE Data Entry Template for Worklist# 4831

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

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

Worklist Comment: Please run B-203 DSCs under N2. bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				DSC-03	SOLID	28.45	28.55*	N/A	Joules/g
95000228	B-203	2	SAMPLE	S95T004228	0		DSC-03	SOLID	N/A	Ø		Joules/g
95000228	B-203	3	DUP	S95T004228	0		DSC-03	SOLID	Ø	Ø	N/A	Joules/g
95000228	B-203	4	SAMPLE	S95T004229	0		DSC-03	SOLID	N/A	Ø		Joules/g
95000228	B-203	5	DUP	S95T004229	0		DSC-03	SOLID	Ø	Ø	N/A	Joules/g

Final page for worklist # 4831

See attached for signatures

Analyst Signature **Date** 1/15/96

Verified by Blandina BDV Vaienzuela 1/17/96

Analyst Signature **Date** 1/16/96

Data Entry Comments: S95T004228 produced an endotherm at 116.3°C with a delta H of 1599.9 J/g

S95T004229 produced an endotherm at 136.16°C with a delta H of 1611.2 J/g

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

LABCORE Data Entry Template for Worklist# 4831

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

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

Worklist Comment: Please run B-203 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
95000228	B-203	2	SAMPLE	S95T004228	0		DSC-01	SOLID	N/A			Joules/g
95000228	B-203	3	DUP	S95T004228	0		DSC-01	SOLID			N/A	Joules/g
95000228	B-203	4	SAMPLE	S95T004229	0		DSC-01	SOLID	N/A			Joules/g
95000228	B-203	5	DUP	S95T004229	0		DSC-01	SOLID			N/A	Joules/g

Final page for worklist # 4831

Anthony Purnutor 1-14-96
Analyst Signature **Date**

Analyst Signature **Date**

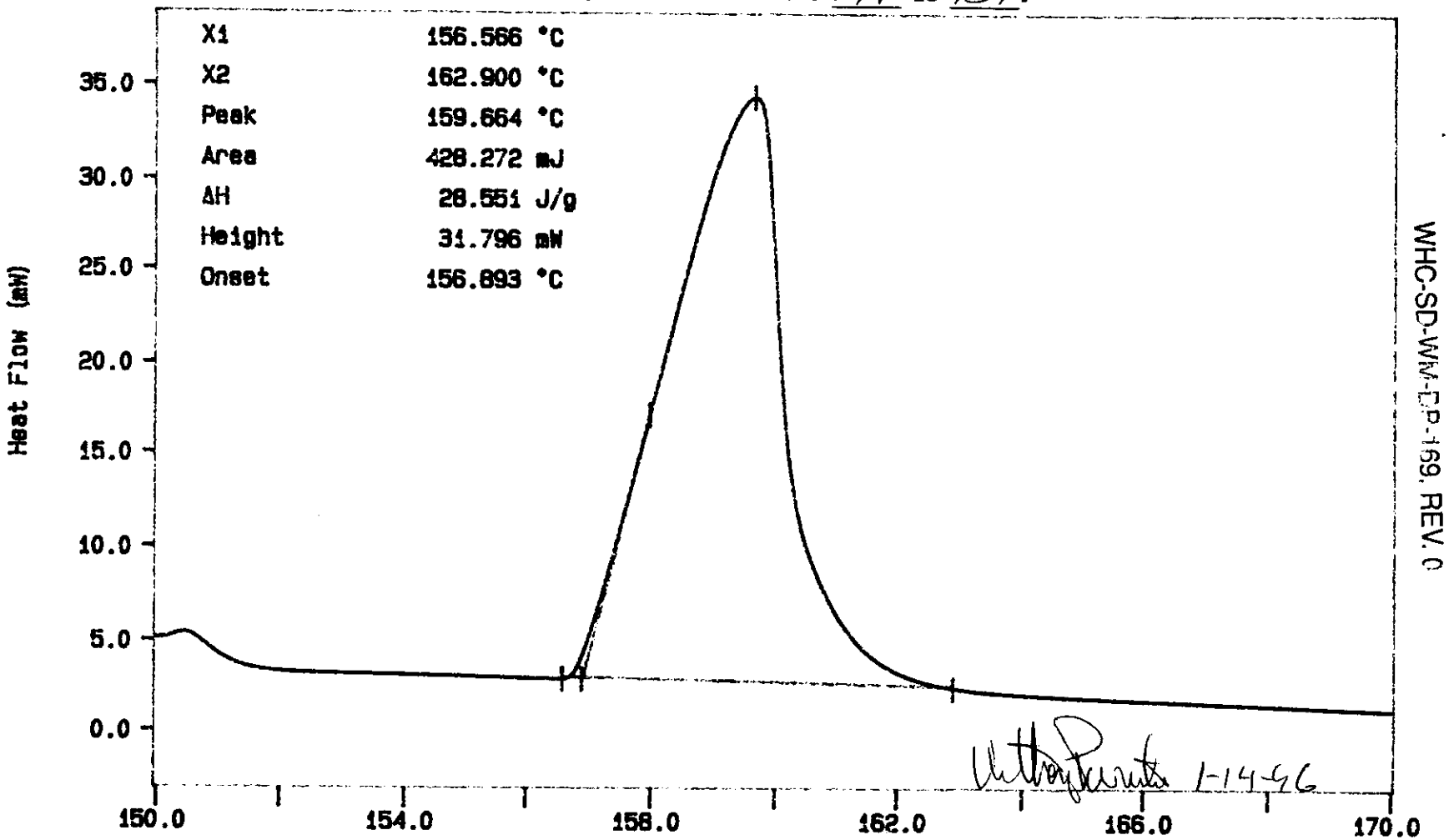
Other instrument was used
1/15/96
BDV

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: DSC
File info: IND011403 Sun Jan 14 18:42:09 1996
Sample Weight: 15.000 mg
12N14B Indium at 10C/min

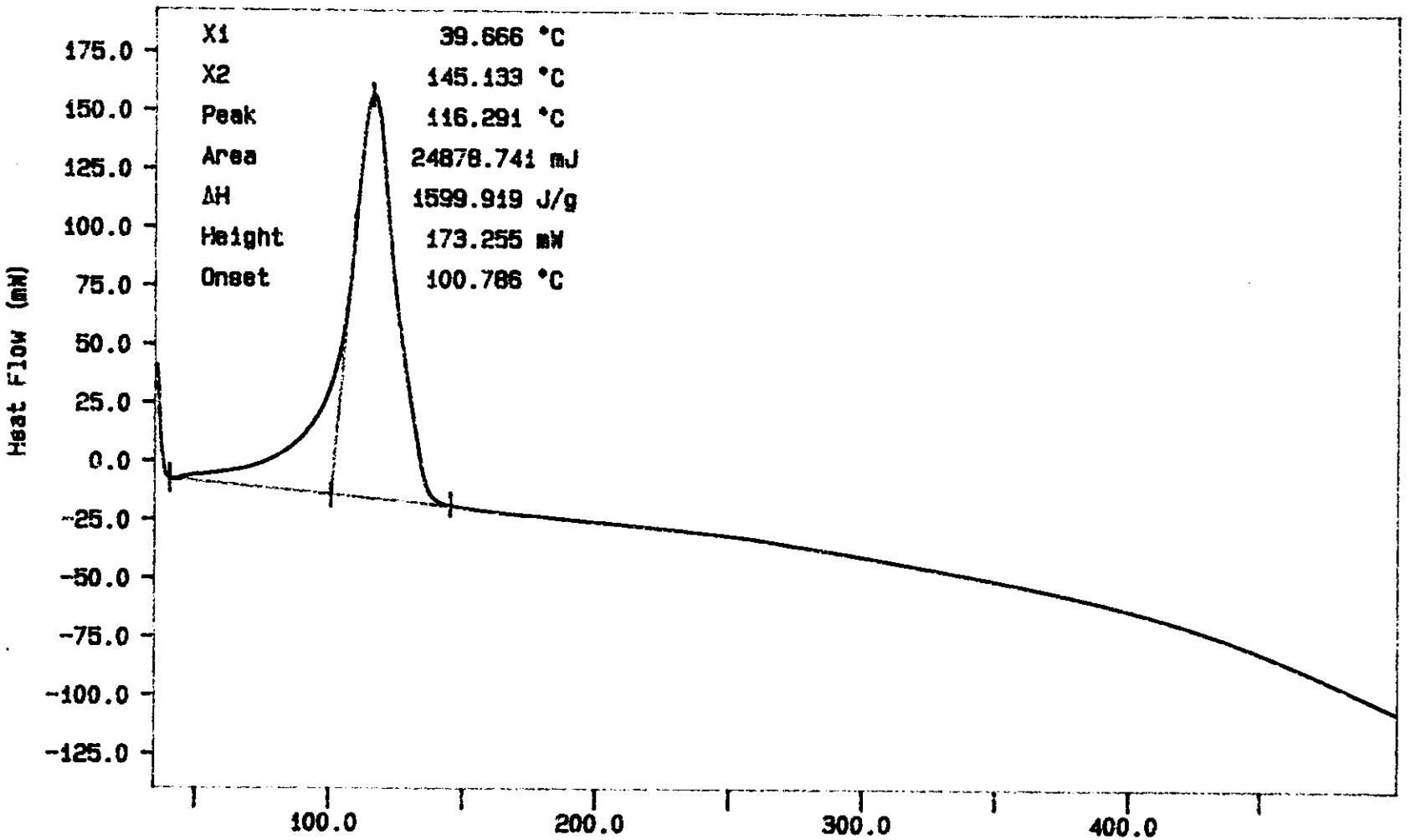
SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 147 TO 151.



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
Sun Jan 14 18:52:39 1996

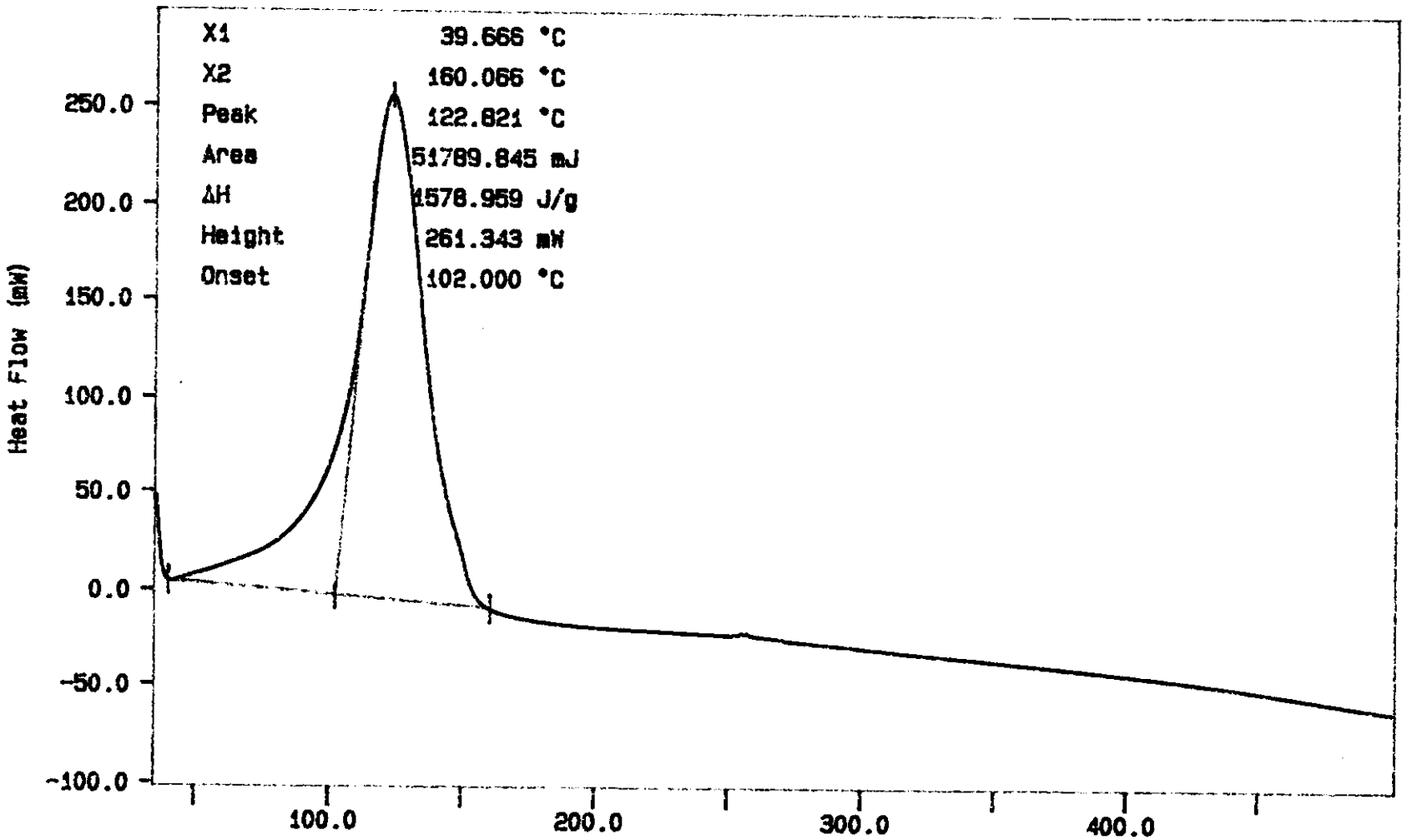
Curve 1: DSC
File info: SAM011412 Sun Jan 14 22:45:35 1996
Sample Weight: 15.550 mg
S95T004228 SAM



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
Sun Jan 14 23:48:26 1996

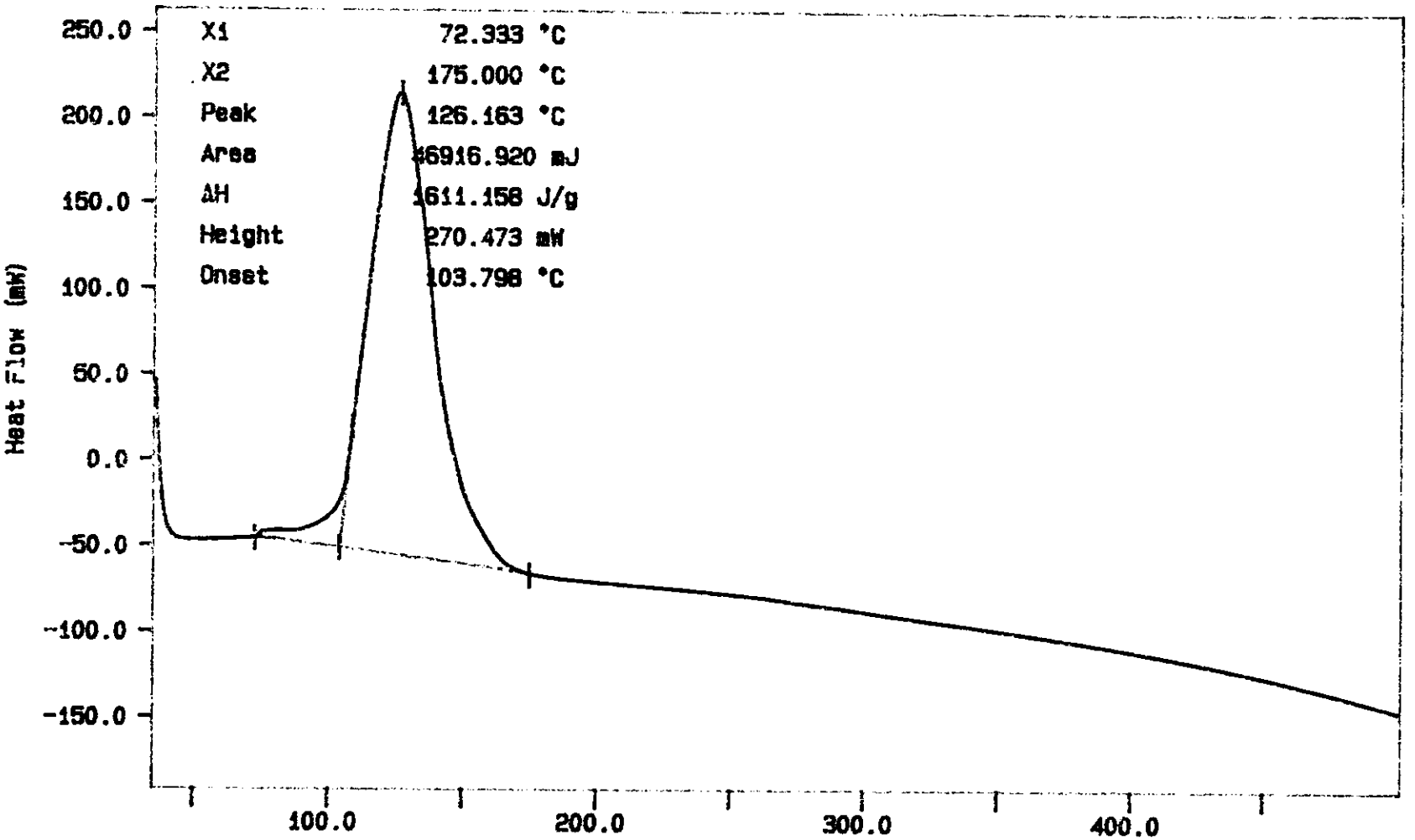
Curve 1: DSC
File info: SAM011413 Mon Jan 15 00:41:01 1996
Sample Weight: 32.800 mg
S95T004228 DUP



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
Mon Jan 15 00:55:14 1996

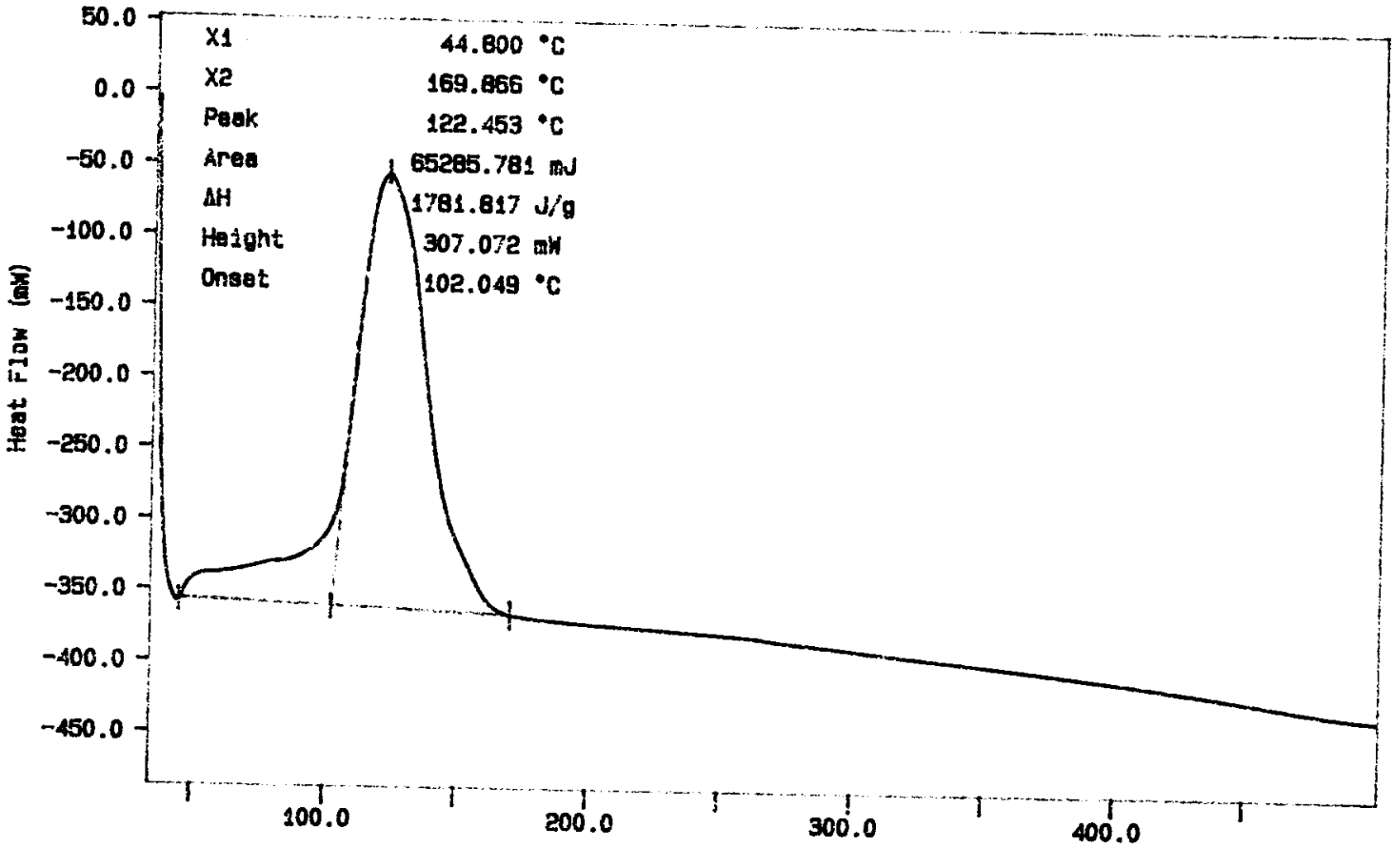
Curve 1: DSC
File info: SAM011501 Mon Jan 15 02:00:02 1996
Sample Weight: 29.120 mg
S95T004229 SAM



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 Jan 15 02:00:34 1996

Curve 1: DSC
File info: SAM011502 Mon Jan 15 02:51:49 1996
Sample Weight: 36.640 mg
S95T004229 DUP



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
Mon Jan 15 03:17:07 1996

worklistrpt Version 2.1 05/15/95
01/11/96 16:21

LABCORE Data Entry Template for Worklist# 4832

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

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

Worklist Comment: Please run B-203 DSCs under N2. bdv

GROUP	PROJECT	S TYPE	SAMPLE#	R	A	-------TEST------	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD				DSC-01	SOLID	22.45	22.6 *	N/A	Joules/g
95000228	B-203	2 SAMPLE	S95T004233	0		DSC-01	SOLID	N/A	Ø		Joules/g
95000228	B-203	3 DUP	S95T004233	0		DSC-01	SOLID	Ø	Ø	N/A	Joules/g
95000228	B-203	4 SAMPLE	S95T004234	0		DSC-01	SOLID	N/A	Ø		Joules/g
95000228	B-203	5 DUP	S95T004234	0		DSC-01	SOLID	Ø	Ø	N/A	Joules/g

Final page for worklist # 4832

Anthony Parente 1-14-96
Analyst Signature **Date**

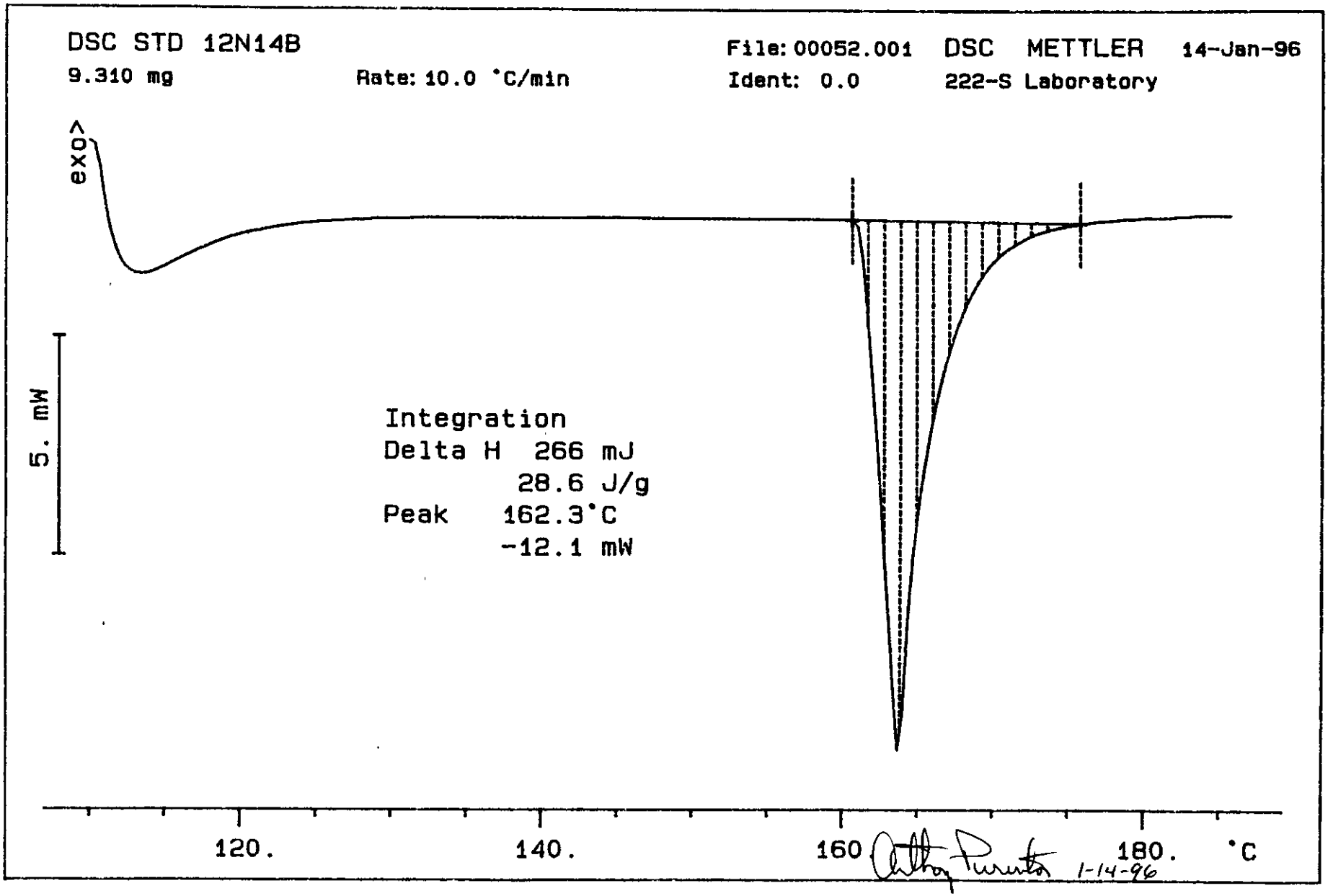
R L Stack 1-16-96
Analyst Signature **Date**

Verified by Blandina Valenzuela 1/17/96

Data Entry Comments: S95T004233 produced an endotherm at 137.9°C with a delta H of 1193.9 J/g.
S95T004234 produced an endotherm at 143.9°C with a delta H of 1083.4 J/g.

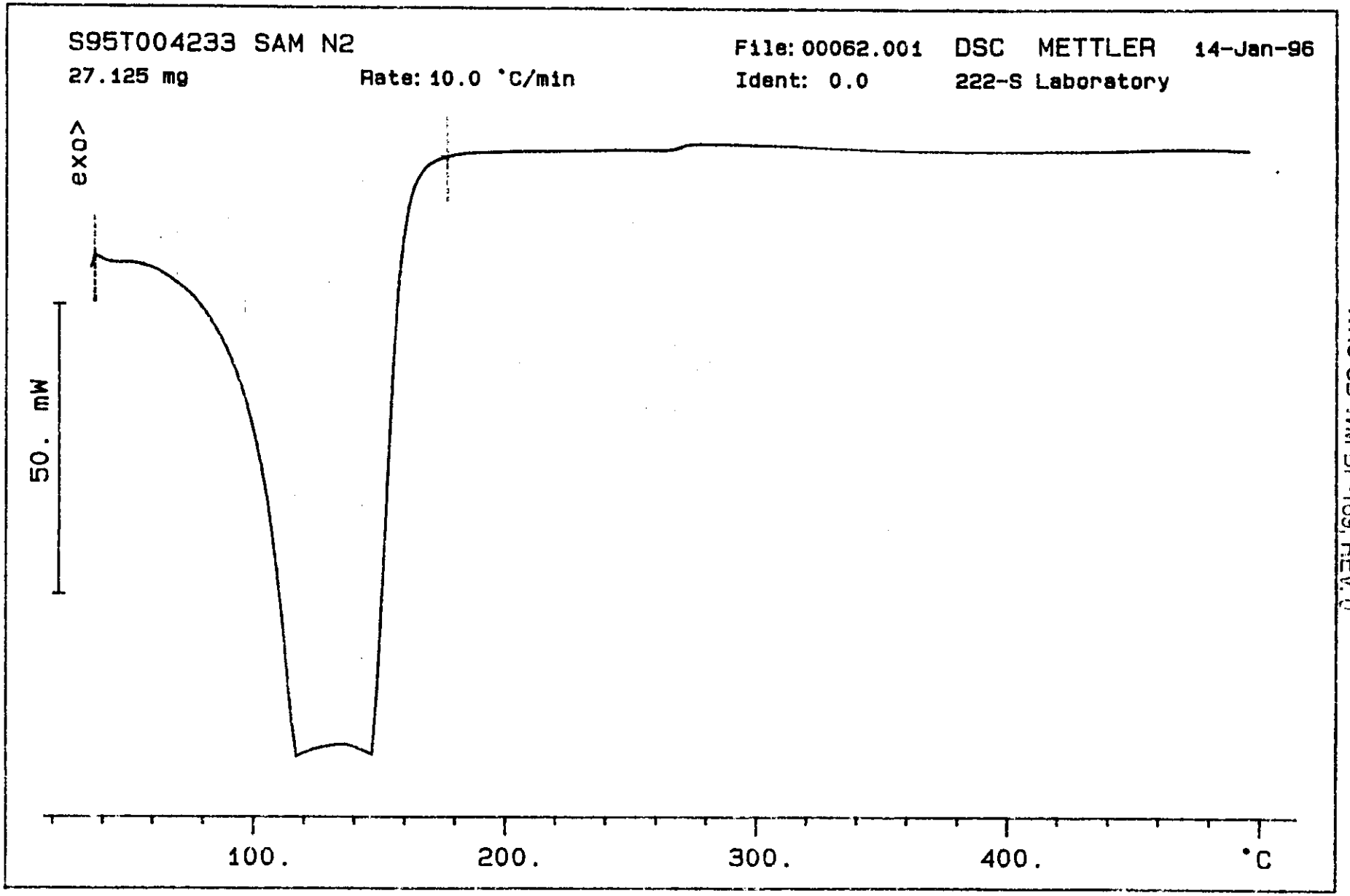
Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

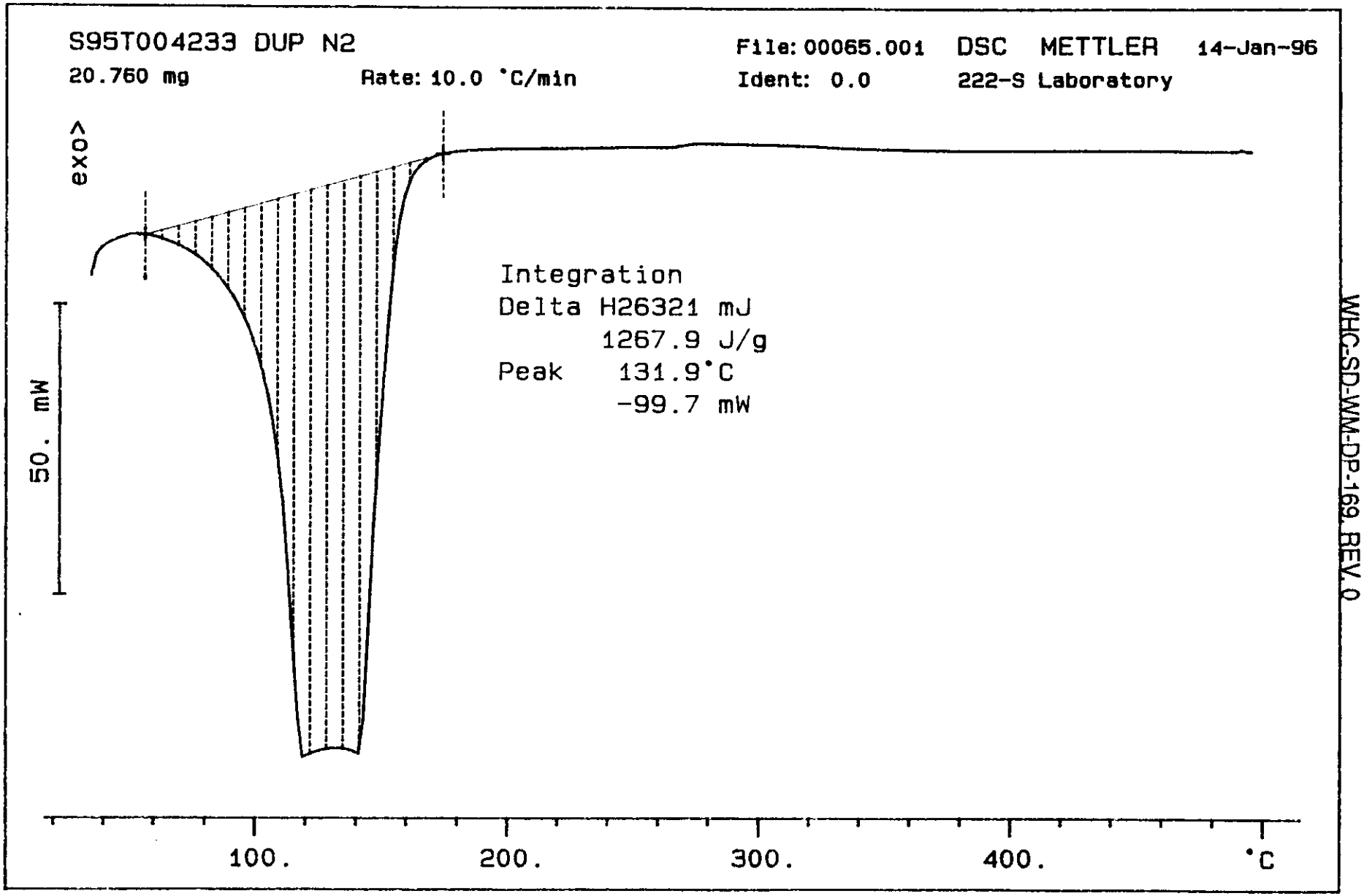
SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 153 TO 157.

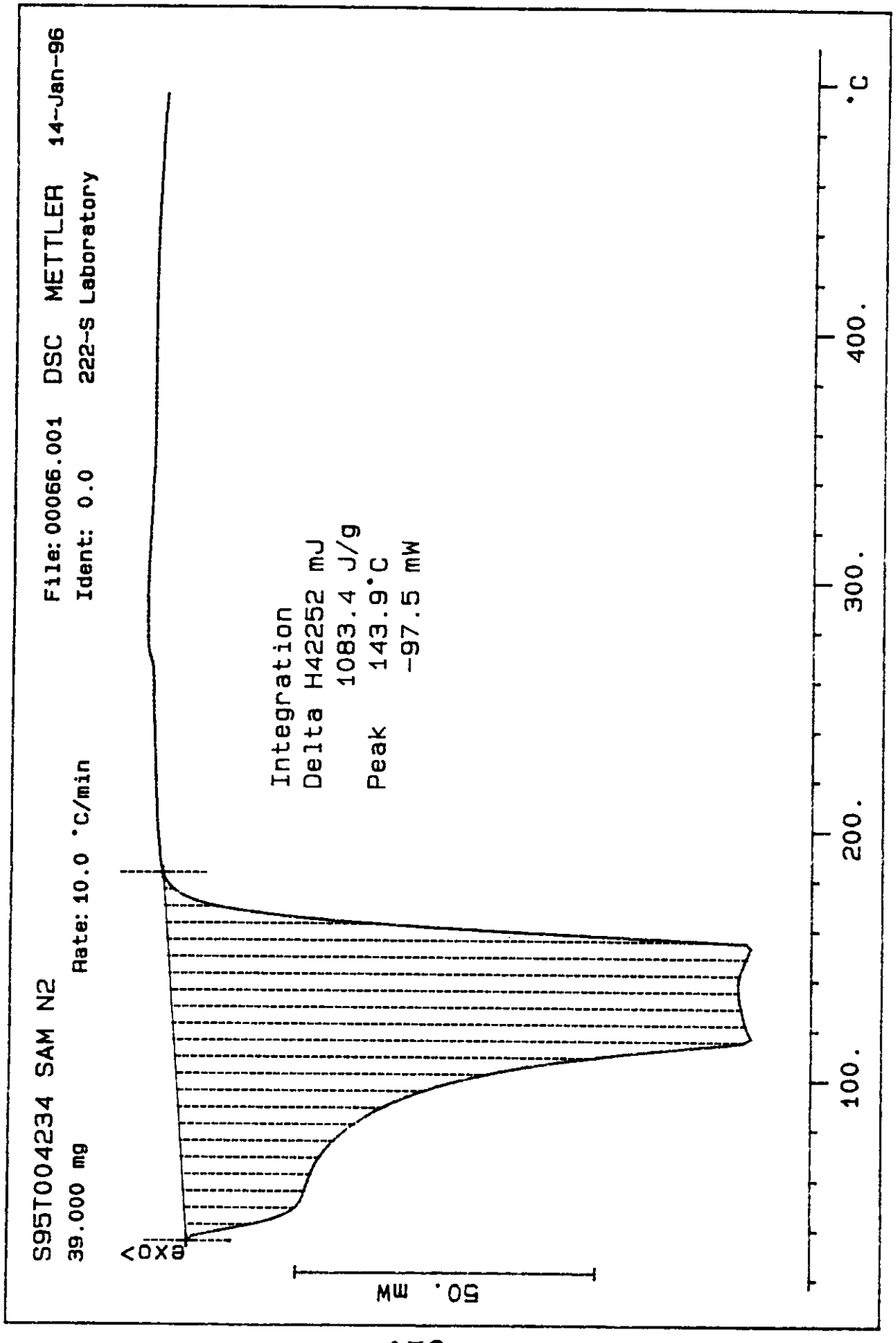


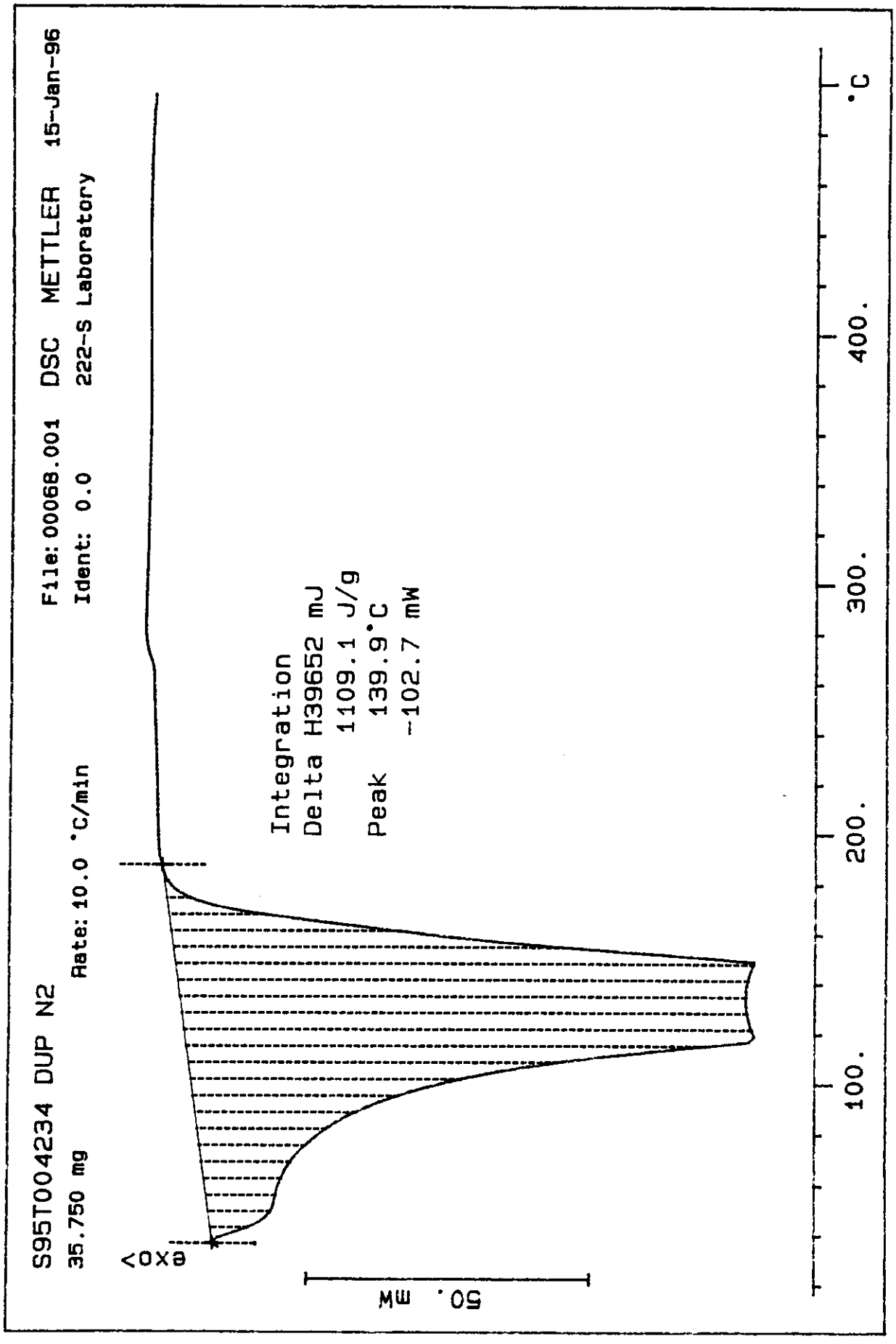
Anthony Pucuta 1-14-96

BEST AVAILABLE COPY




S95T004233 DUP N2
20.760 mg
Rate: 10.0 °C/min
File: 00065.001
DSC METTLER
14-Jan-96
Ident: 0.0
222-S Laboratory
exo>
.05 mW
Integration
Delta H26321 mJ
1267.9 J/g
Peak 131.9°C
-99.7 mW
100.
200.
300.
400.
°C


S95T004234 SAM N2
39.000 mg
Rate: 10.0 °C/min
File: 00066.001 DSC METTLER 14-Jan-96
Ident: 0.0 222-S Laboratory
Integration
Delta H42252 mJ
1083.4 J/g
Peak 143.9°C
-97.5 mW
exo>
50. mW
100.
200.
300.
400.
°C


S95T004234 DUP N2
35.750 mg
Rate: 10.0 °C/min
File: 00068.001 DSC METTLER 15-Jan-96
Ident: 0.0 222-S Laboratory
Integration
Delta H39652 mJ
1109.1 J/g
Peak 139.9°C
-102.7 mW
exo>
50. mW
100.
200.
300.
400.
°C

LABCORE Data Entry Template for Worklist# 4833

Analyst: ADP **Instrument:** DSC0 3 **Book #** 12N73

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

Worklist Comment: Please run B-203 DSCs under N2. bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				DSC-03	SOLID	32.45	32.55	N/A	Joules/g
95000228	B-203	2	SAMPLE	S95T004235	0		DSC-03	SOLID	N/A	Ø		Joules/g
95000228	B-203	3	DUP	S95T004235	0		DSC-03	SOLID	Ø	Ø	N/A	Joules/g

Final page for worklist # 4833

See attached for signatures
Analyst Signature **Date** 1/15/96

Verified by Blandina Valenzuela BDV 1/17/96

[signature] 1-16-96
Analyst Signature **Date**

Data Entry Comments: S95T004235 produced an exotherm at 118.12 with a delta H of 1750.6 J/g

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

LABCORE Data Entry Template for Worklist# 4833

Analyst: ADP **Instrument:** DSC0 _____ **Book #** 12N141 B

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

Worklist Comment: Please run B-203 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
95000228	B-203	2	SAMPLE	S95T004235	0		DSC-01	SOLID	N/A			Joules/g
95000228	B-203	3	DUP	S95T004235	0		DSC-01	SOLID			N/A	Joules/g

Final page for worklist # 4833

Anthony Purnell 1-14-96
Analyst Signature **Date**

Analyst Signature **Date**

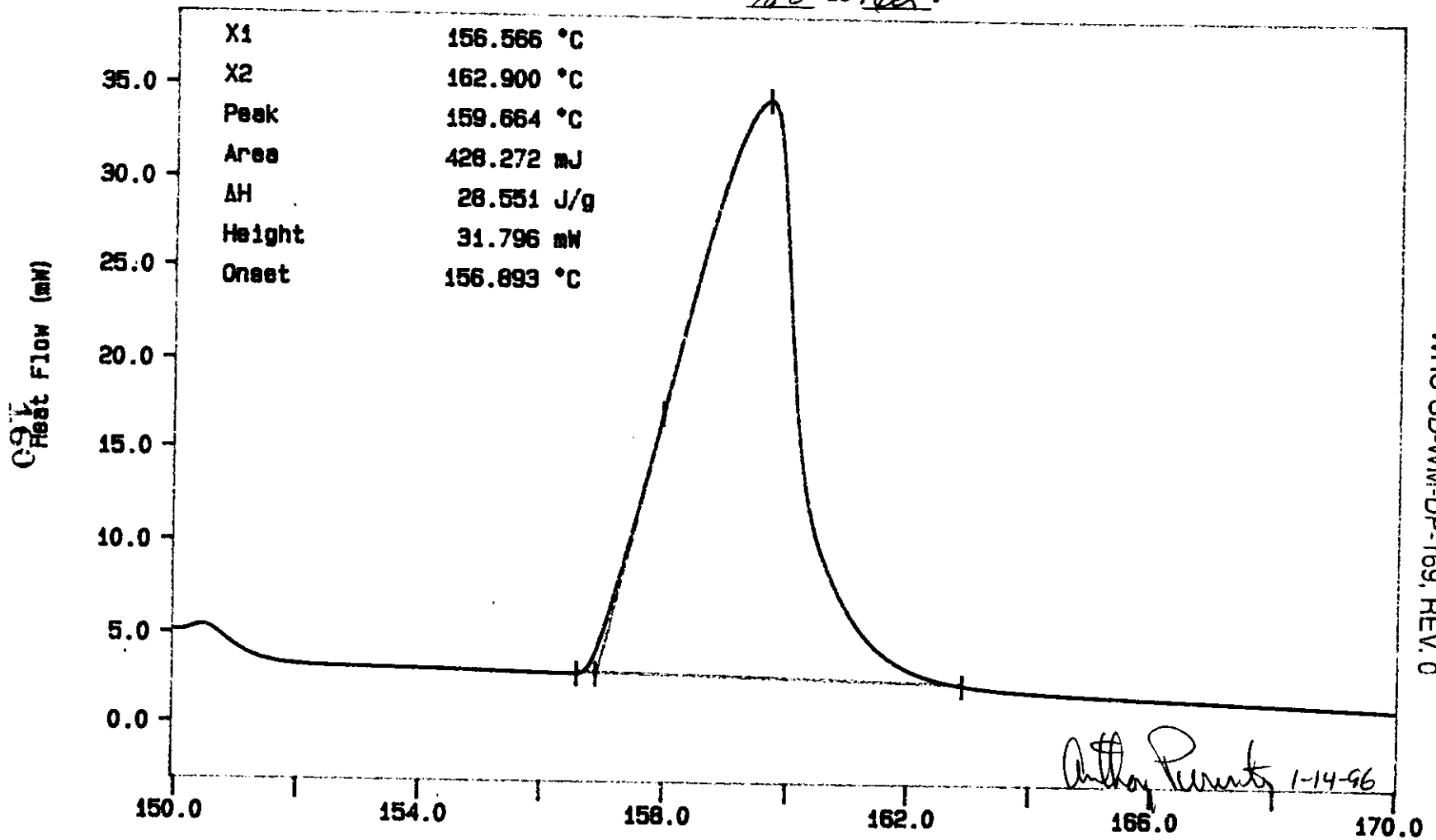
Other instrument was used.
1/15/96
BDV

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: DSC
File info: IND011403 Sun Jan 14 18:42:09 1996
Sample Weight: 15.000 mg
12N14B Indium at 10C/min

SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 160 TO 162.



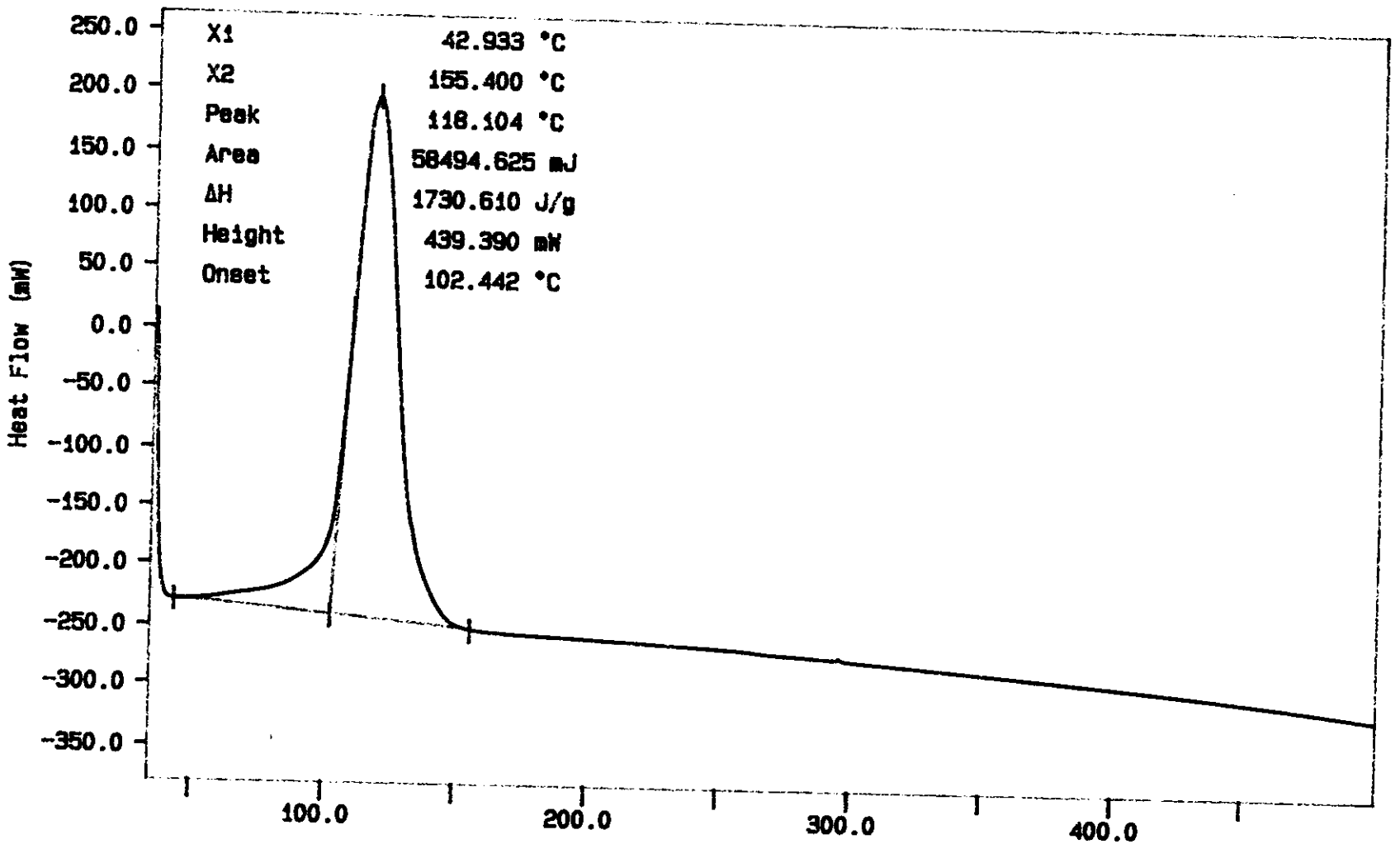
C9.1

WHC-SD-WM-DP-169, REV. 0

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
Sun Jan 14 18:42:53 1996

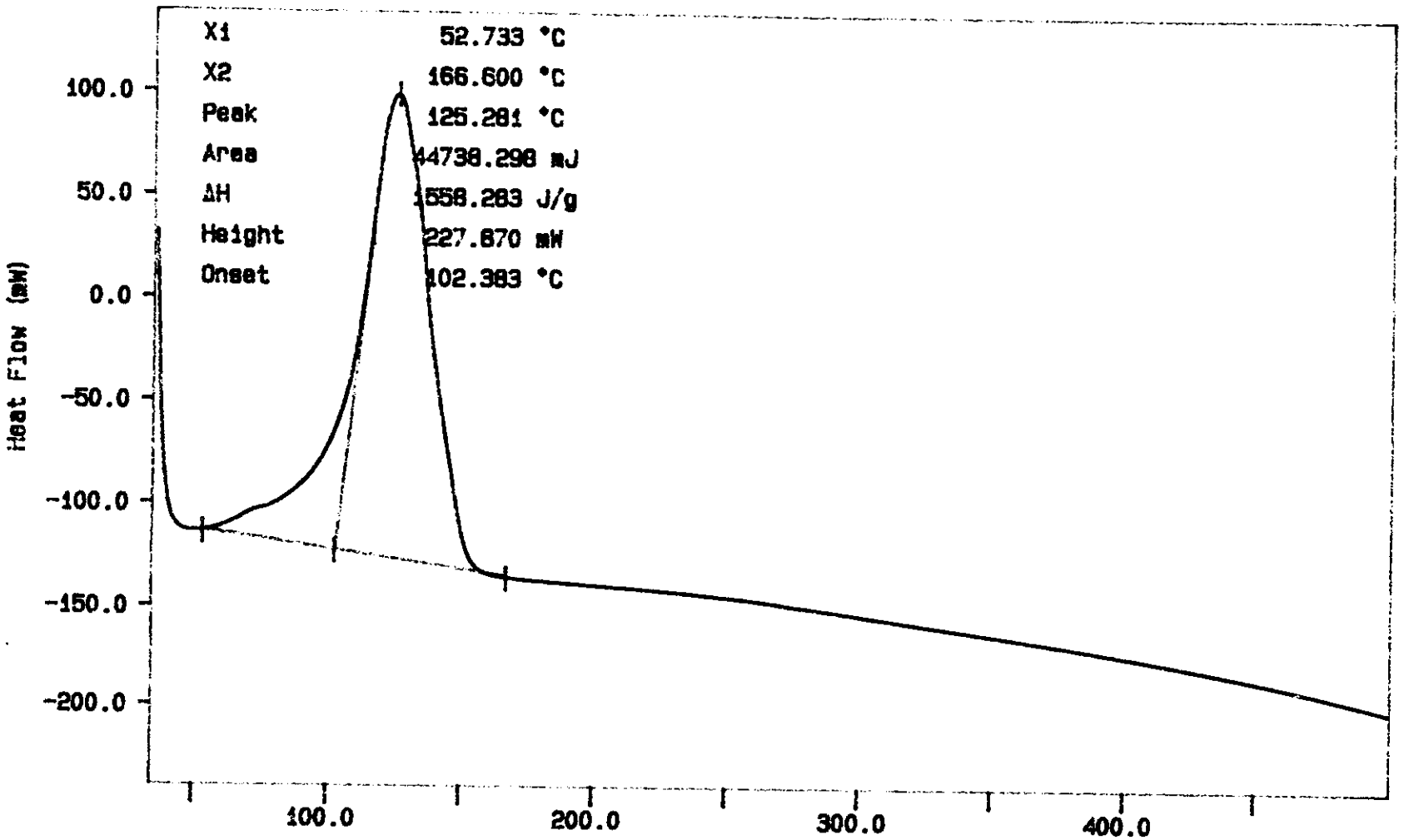
Curve 1: DSC
File info: SAM011410 Sun Jan 14 19:58:01 1996
Sample Weight: 33.800 mg
S95T004235 SAM



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
Sun Jan 14 20:35:00 1996

Curve 1: DSC
File info: SAM011411 Sun Jan 14 21:30:54 1996
Sample Weight: 28.710 mg
S95T004235 DUP



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
Sun Jan 14 21:43:30 1996

LABCORE Data Entry Template for Worklist# 4834

Analyst: SMF **Instrument:** DSC0 1 **Book #** 12014-B

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

Worklist Comment: Please run B-203 DSCs under N2. bdv

GROUP	PROJECT	S TYPE	SAMPLE#	R	A	-------TEST------	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD				DSC-01	LIQUID	28.45	28.7	N/A	Joules/g
95000228	B-203	2 SAMPLE	S95T004003	0		DSC-01	LIQUID	N/A	Ø		Joules/g
95000228	B-203	3 DUP	S95T004003	0		DSC-01	LIQUID	Ø	Ø	N/A	Joules/g
95000228	B-203	4 SAMPLE	S95T004004	0		DSC-01	LIQUID	N/A	Ø		Joules/g
95000228	B-203	5 DUP	S95T004004	0		DSC-01	LIQUID	Ø	Ø	N/A	Joules/g

Final page for worklist # 4834

Susie M. Dalton 1-14-96
Analyst Signature **Date**

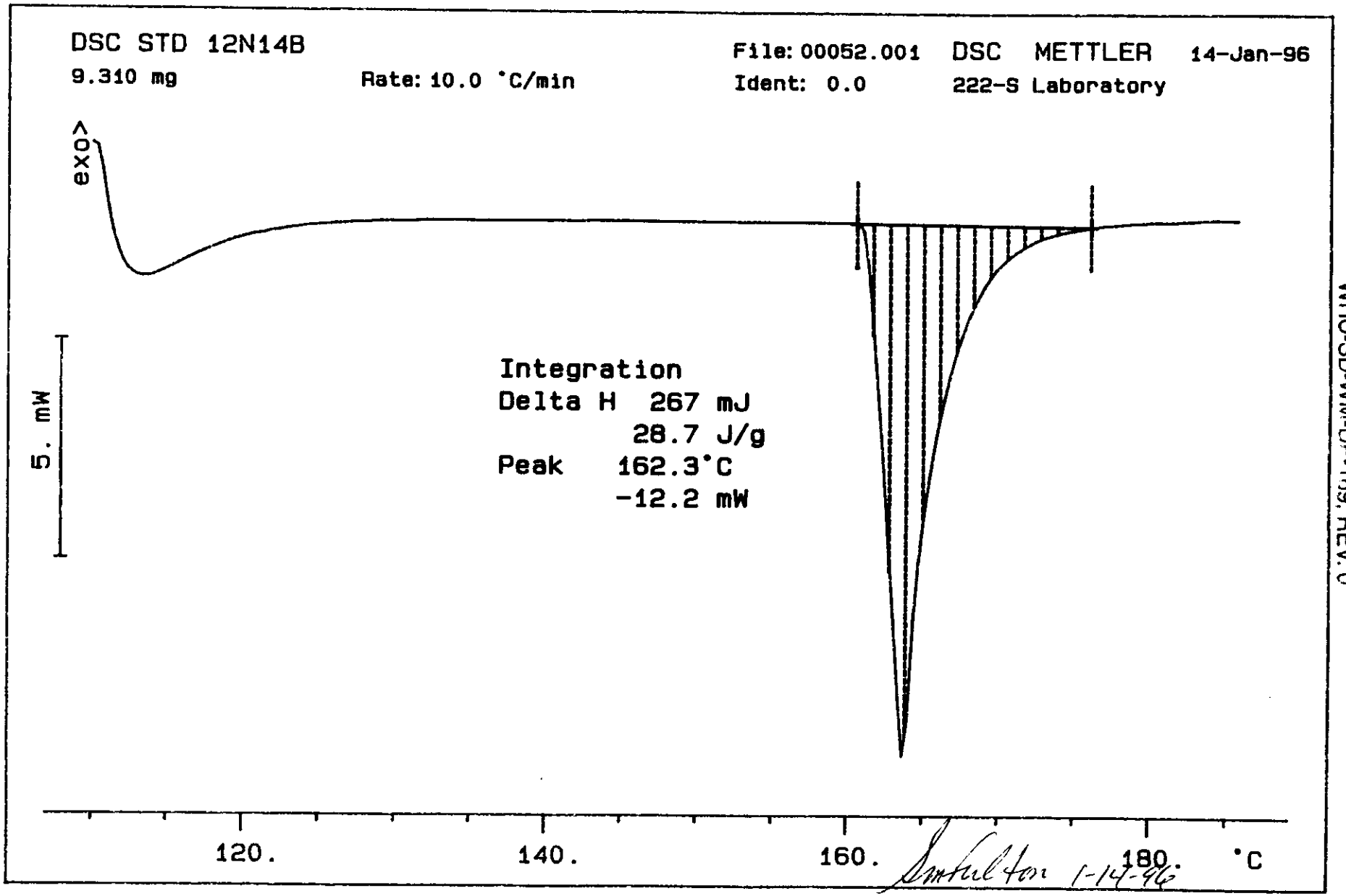
[illegible] 1-16-96
Analyst Signature **Date**

Verified by Blandina Valenzuela 1/17/96

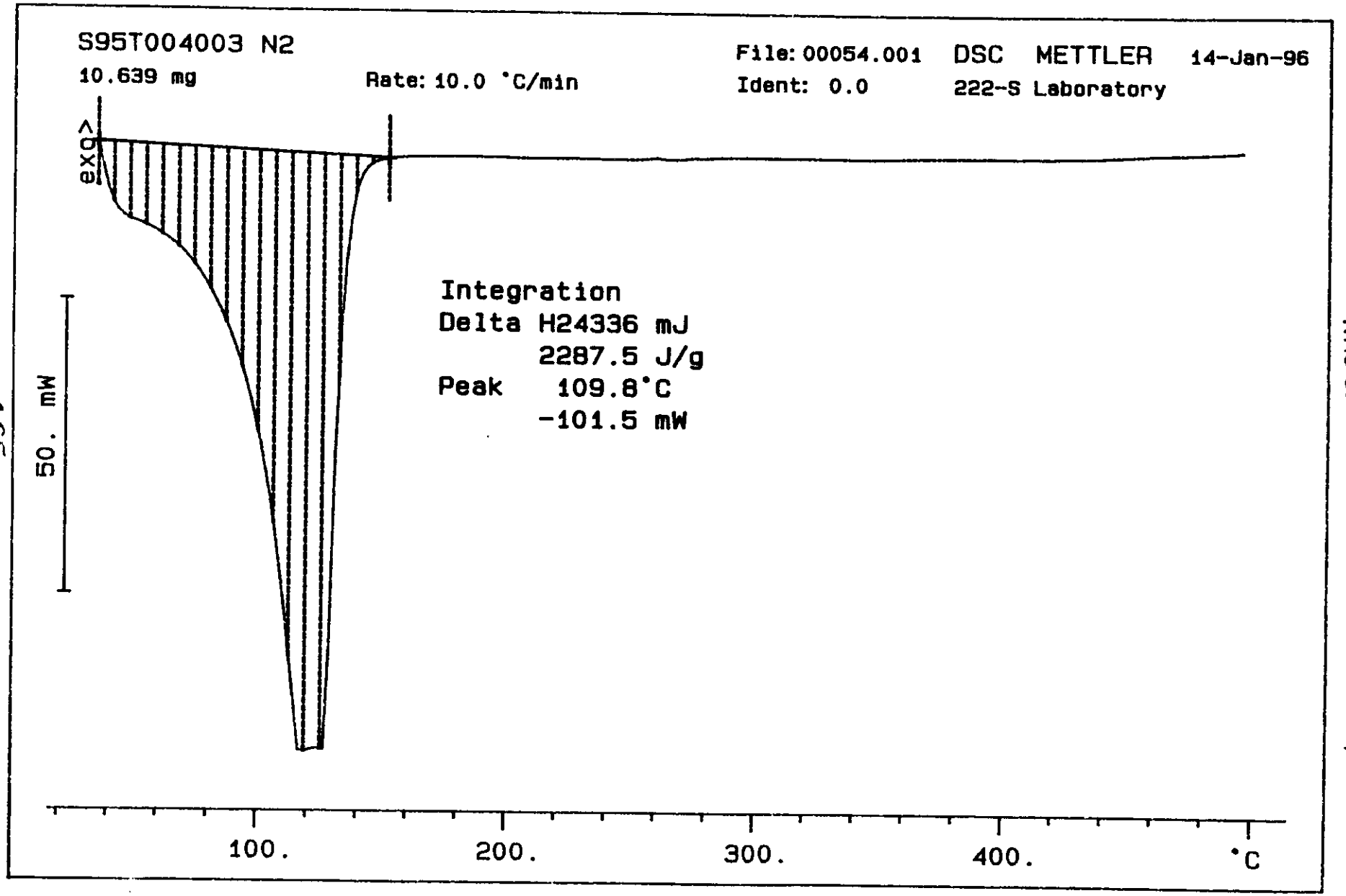
Data Entry Comments: S95T004003 produced an endotherm at 109.8°C with a delta H of 2287.5 J/g.
S95T004004 produced an endotherm at 111.8°C with a delta H of 1859.6 J/g.

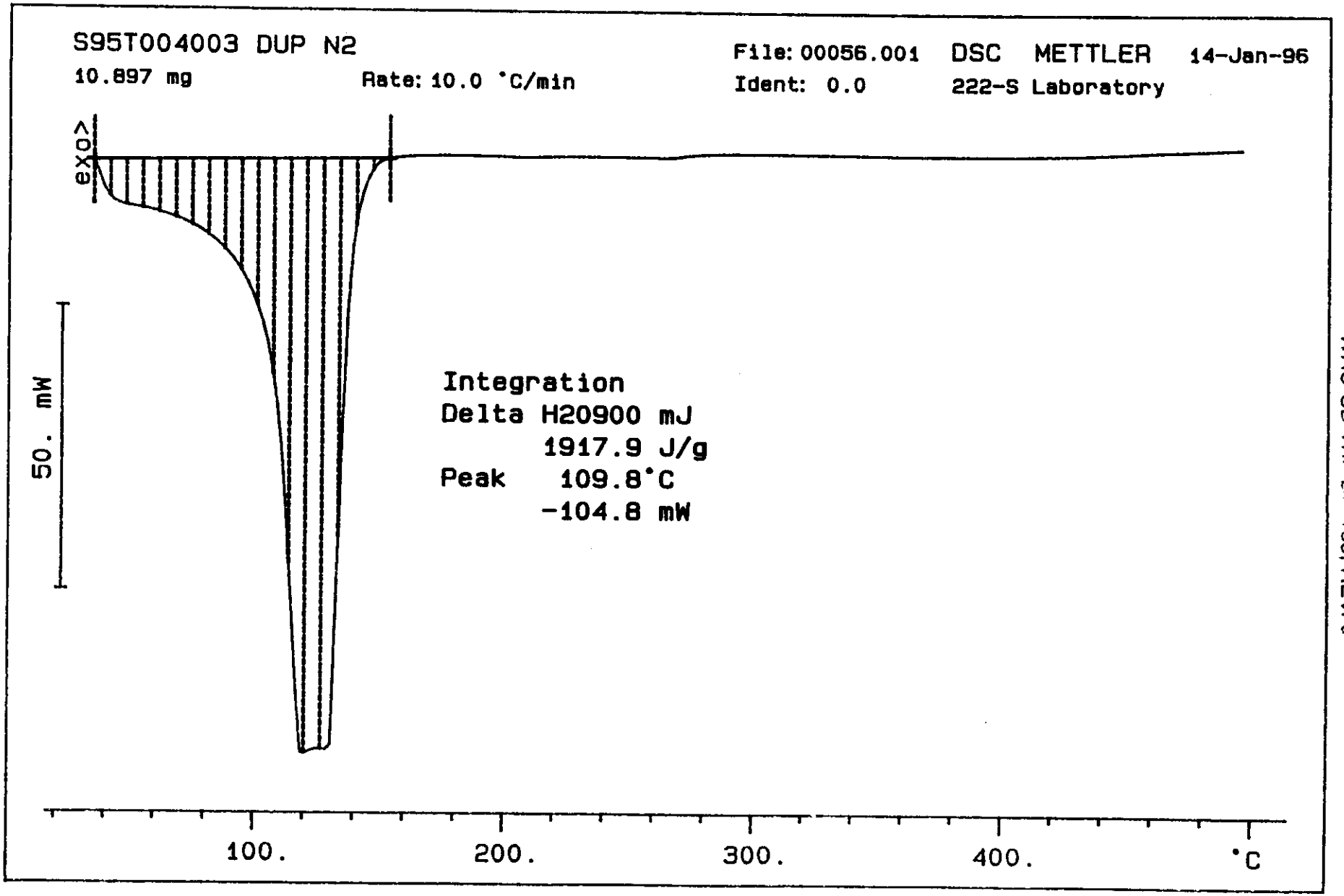
Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

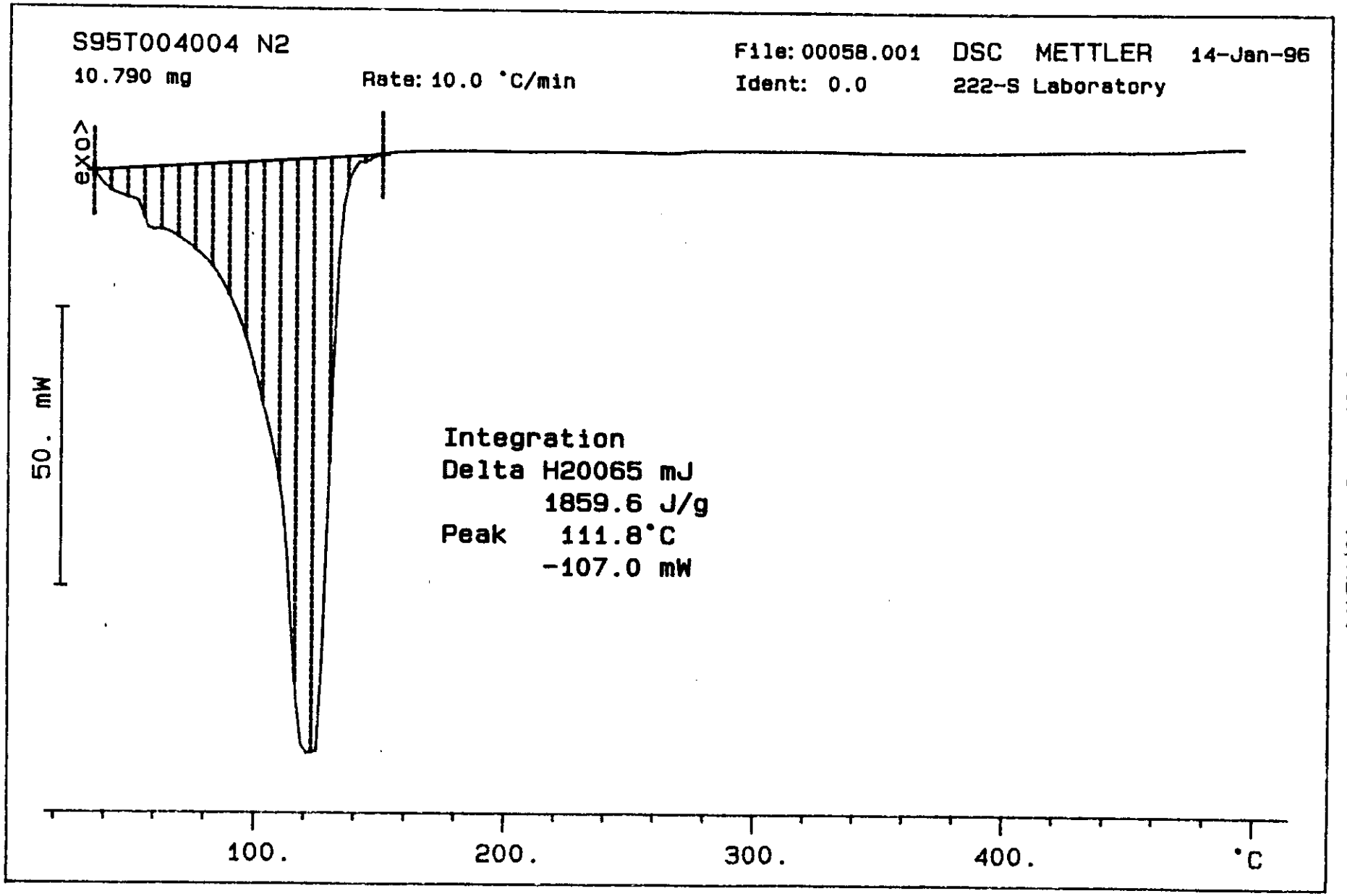
SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 164 TO 168.

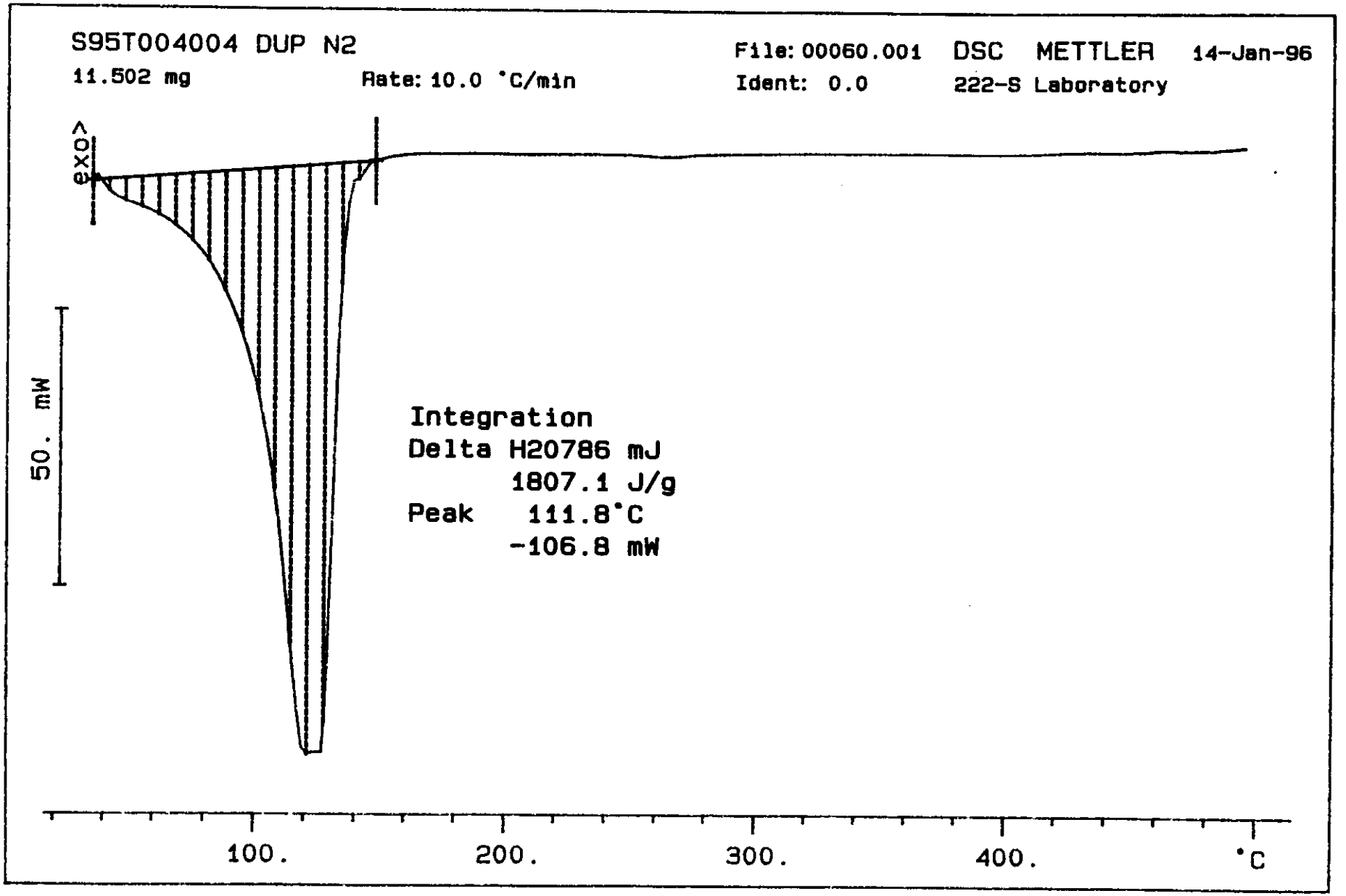


Smulton 1-14-96


S95T004003 N2
10.639 mg
Rate: 10.0 °C/min
File: 00054.001
Ident: 0.0
DSC METTLER
222-S Laboratory
14-Jan-96
exo>
Integration
Delta H24336 mJ
2287.5 J/g
Peak 109.8°C
-101.5 mW
50. mW
100.
200.
300.
400.
°C


S95T004003 DUP N2
10.897 mg
Rate: 10.0 °C/min
File: 00056.001
Ident: 0.0
DSC METTLER
222-S Laboratory
14-Jan-96
exo>
50. mW
Integration
Delta H20900 mJ
1917.9 J/g
Peak 109.8°C
-104.8 mW
100.
200.
300.
400.
°C


S95T004004 N2
10.790 mg
Rate: 10.0 °C/min
File: 00058.001
Ident: 0.0
DSC METTLER
222-S Laboratory
14-Jan-96
exo>
50. mW
Integration
Delta H20065 mJ
1859.6 J/g
Peak 111.8°C
-107.0 mW
100.
200.
300.
400.
°C


S95T004004 DUP N2
11.502 mg
Rate: 10.0 °C/min
File: 00060.001
Ident: 0.0
DSC METTLER
222-S Laboratory
14-Jan-96
exo>
50. mW
Integration
Delta H20786 mJ
1807.1 J/g
Peak 111.8°C
-106.8 mW
100.
200.
300.
400.
°C

LABCORE Data Entry Template for Worklist# 4835

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

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

Worklist Comment: Please run B-203 DSCs under N2. bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				DSC-01	LIQUID	28.45	31.1	N/A	Joules/g
95000174	B-203	2	SAMPLE	S95T003957	0		DSC-01	LIQUID	N/A	Ø		Joules/g
95000174	B-203	3	DUP	S95T003957	0		DSC-01	LIQUID	Ø	Ø	N/A	Joules/g
95000174	B-203	4	SAMPLE	S95T003958	0		DSC-01	LIQUID	N/A	175.6		Joules/g
95000174	B-203	5	DUP	S95T003958	0		DSC-01	LIQUID	175.6	Ø	N/A	Joules/g
95000174	B-203	6	TRIPL	S95T003958	0		DSC-01	LIQUID	175.6	33.7	N/A	Joules/g

Final page for worklist # 4835

See attached for signatures
Analyst Signature **Date** 1/16/96

Verified by Blandina Villanueva 1/17/96 BDV

Linda Conlin 1/17/96
Analyst Signature **Date**

Data Entry Comments: S95T003957 produced an endotherm at 105.8°C with a delta H of 1313.6 J/g

S95T003958 produced an endotherm at 127.9°C with a delta H of 1546.5 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# 4835

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

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

Worklist Comment: Please run B-203 DSCs under N2. bdv

GROUP	PROJECT	S TYPE	SAMPLE#	R	A	-------TEST------	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD				DSC-01	LIQUID			N/A	Joules/g
95000174	B-203	2 SAMPLE	S95T003957	0		DSC-01	LIQUID	N/A			Joules/g
95000174	B-203	3 DUP	S95T003957	0		DSC-01	LIQUID			N/A	Joules/g
95000174	B-203	4 SAMPLE	S95T003958	0		DSC-01	LIQUID	N/A			Joules/g
95000174	B-203	5 DUP	S95T003958	0		DSC-01	LIQUID			N/A	Joules/g

Final page for worklist # 4835

Anthony Punter 1-14-~~95~~ 96 ADP

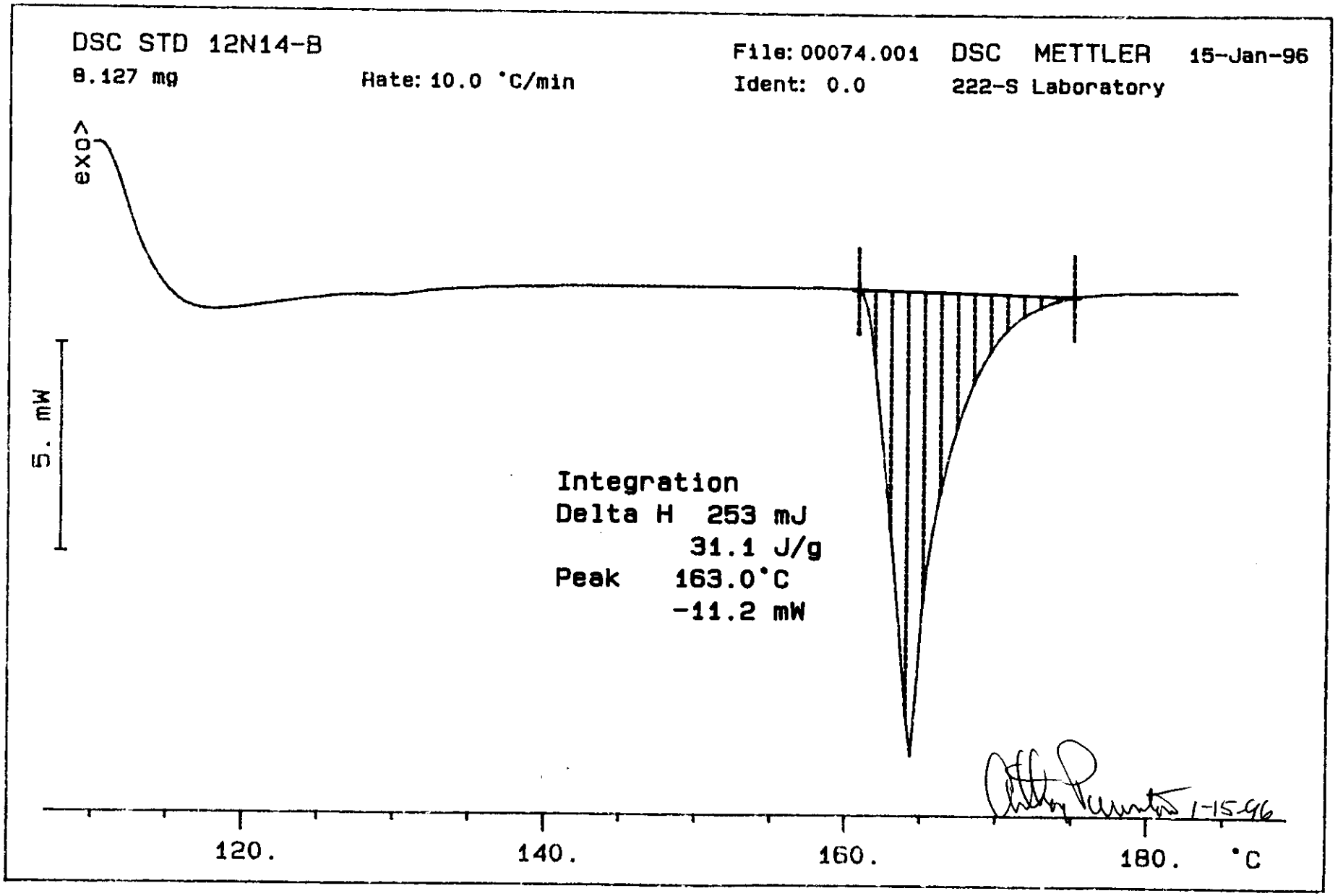
Analyst Signature **Date**

Analyst Signature **Date**

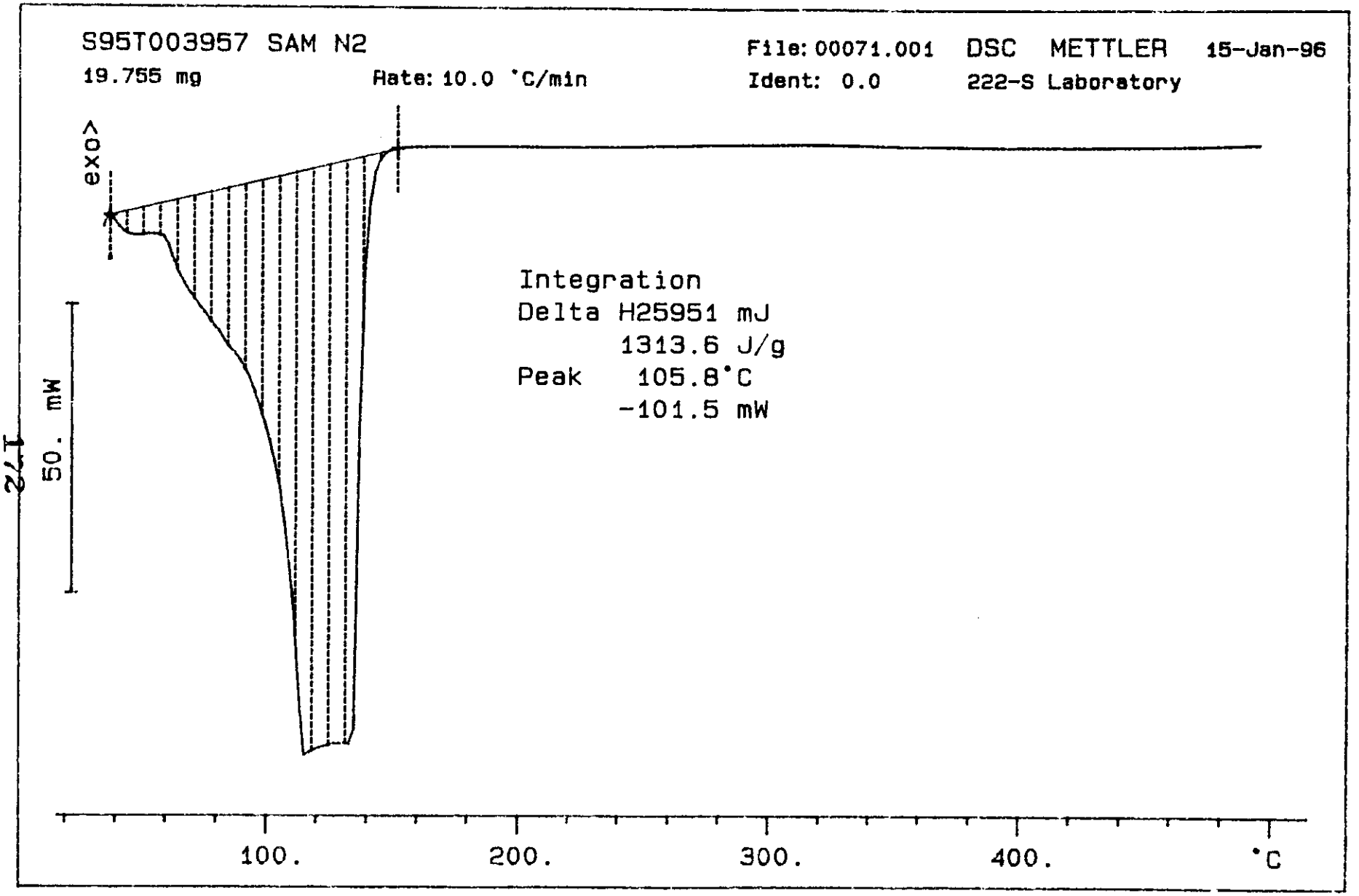
Data Entry Comments:

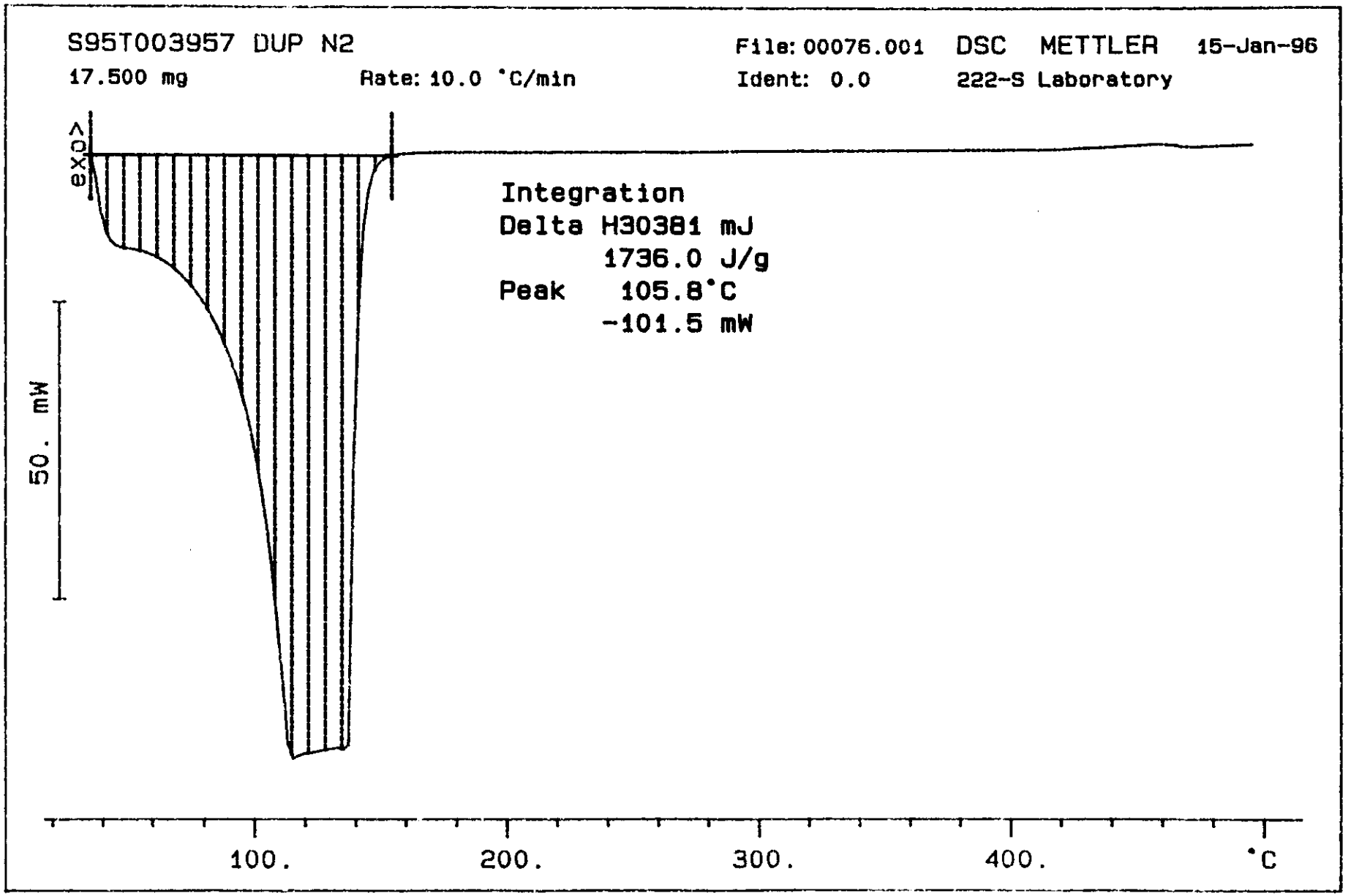
Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

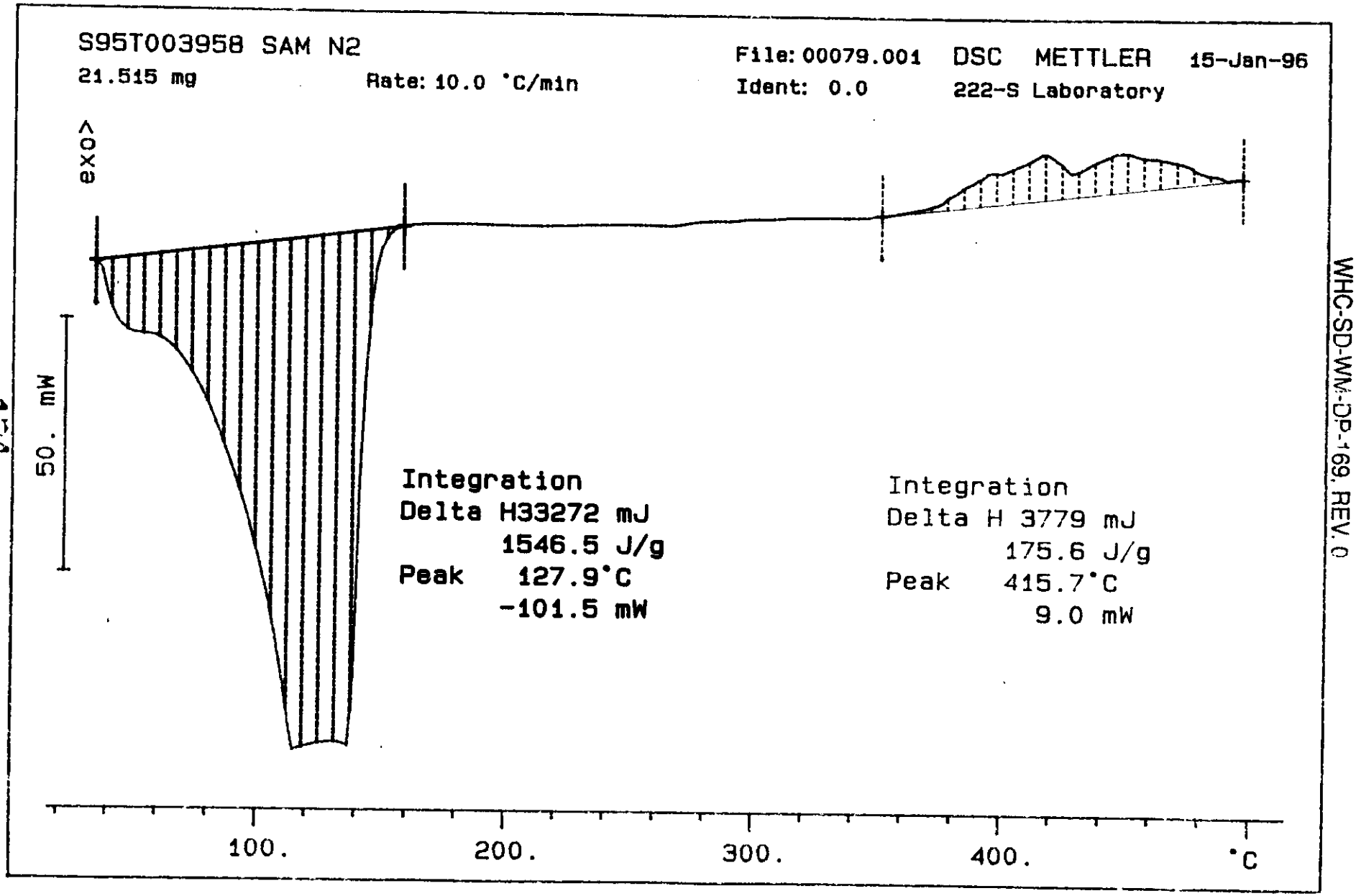
SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 171 TO 176.

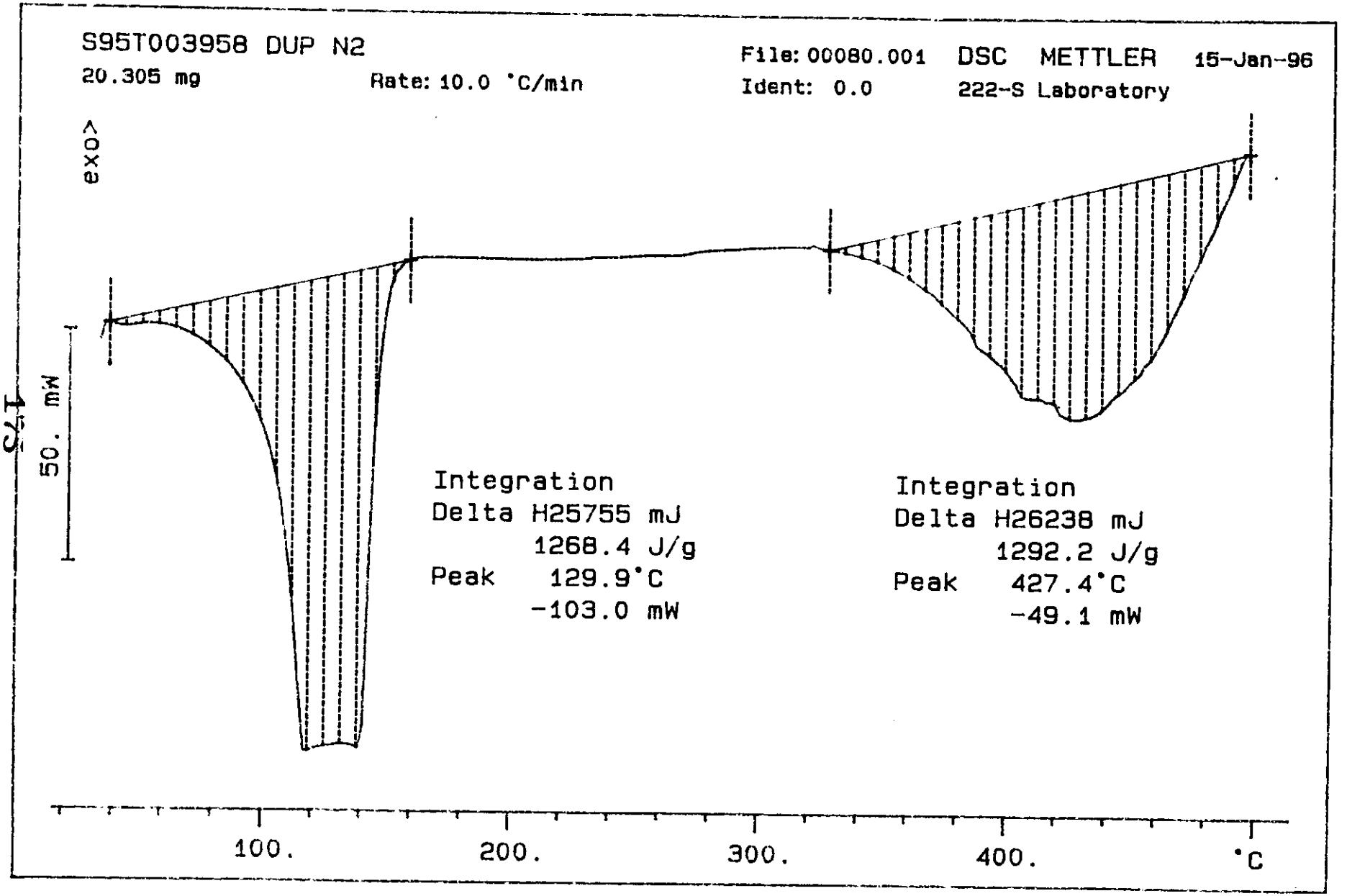


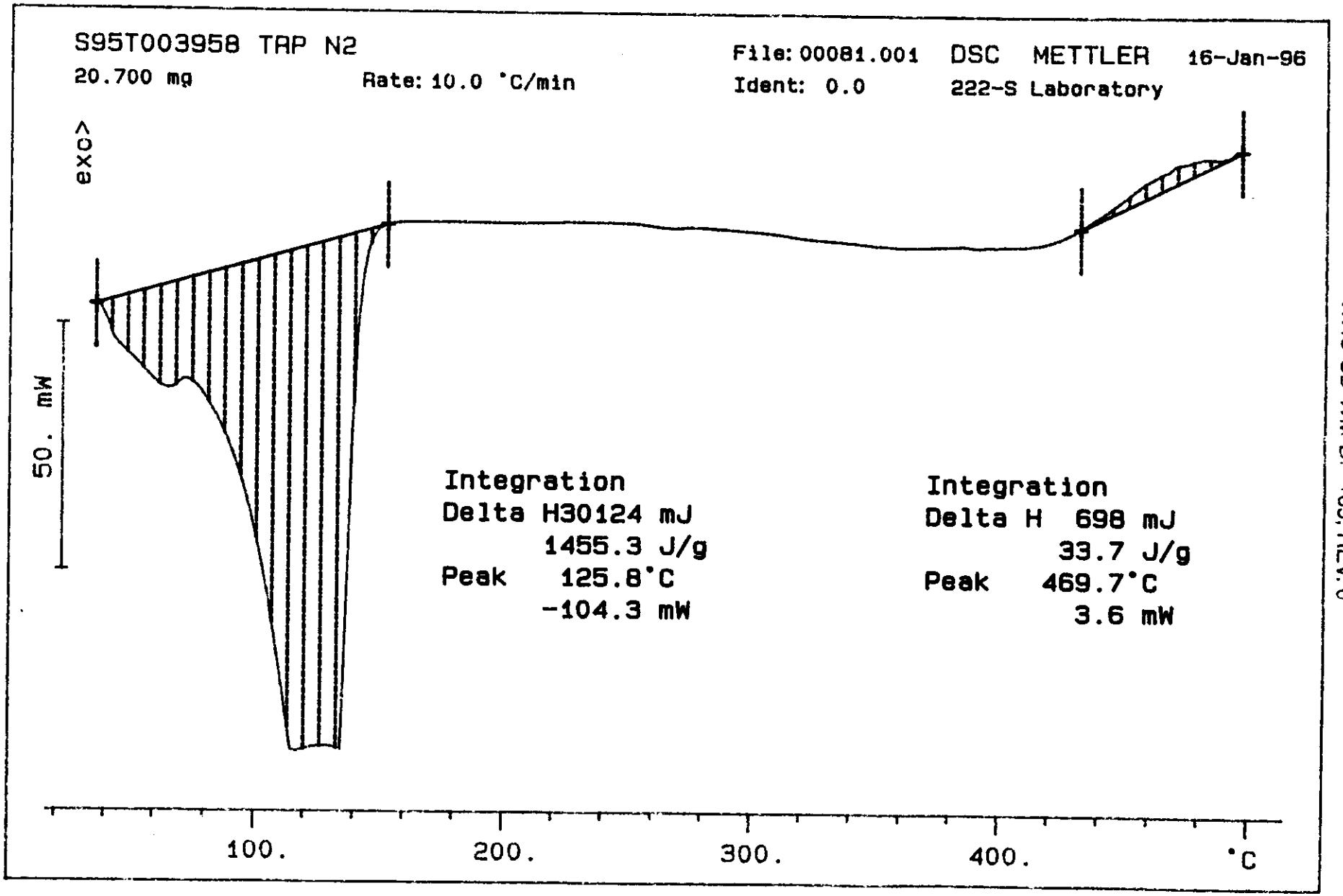
1-15-96


S95T003957 SAM N2
19.755 mg
Rate: 10.0 °C/min
File: 00071.001
Ident: 0.0
DSC METTLER
222-S Laboratory
15-Jan-96
exo>
50. mW
Integration
Delta H25951 mJ
1313.6 J/g
Peak 105.8°C
-101.5 mW
100.
200.
300.
400.
°C


S95T003957 DUP N2
17.500 mg
Rate: 10.0 °C/min
File: 00076.001
Ident: 0.0
DSC METTLER
222-S Laboratory
15-Jan-96
Integration
Delta H30381 mJ
1736.0 J/g
Peak 105.8°C
-101.5 mW
Exo
.05 mW
100.
200.
300.
400.
°C


S95T003958 SAM N2
21.515 mg
Rate: 10.0 °C/min
File: 00079.001
Ident: 0.0
DSC METTLER
222-S Laboratory
15-Jan-96
exo>
.05 mW
Integration
Delta H33272 mJ
1546.5 J/g
Peak 127.9°C
-101.5 mW
Integration
Delta H 3779 mJ
175.6 J/g
Peak 415.7°C
9.0 mW
100.
200.
300.
400.
°C


S95T003958 DUP N2
20.305 mg
Rate: 10.0 °C/min
File: 00080.001
Ident: 0.0
DSC METTLER
222-S Laboratory
15-Jan-96
exo>
50. mW
Integration
Delta H25755 mJ
1268.4 J/g
Peak 129.9°C
-103.0 mW
Integration
Delta H26238 mJ
1292.2 J/g
Peak 427.4°C
-49.1 mW
100.
200.
300.
400.
°C


S95T003958 TRP N2
20.700 mg
Rate: 10.0 °C/min
File: 00081.001
Ident: 0.0
DSC METTLER
222-S Laboratory
16-Jan-96
exo>
50. mW
Integration
Delta H30124 mJ
1455.3 J/g
Peak 125.8°C
-104.3 mW
Integration
Delta H 698 mJ
33.7 J/g
Peak 469.7°C
3.6 mW
100.
200.
300.
400.
°C

LABCORE Data Entry Template for Worklist# 4906

Analyst: JDS **Instrument:** DSC01 **Book #** 12N14B

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

Worklist Comment: Please run B-203 DSC under N2. bdv

GROUP	PROJECT	S TYPE	SAMPLE#	R A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD			DSC-01	SOLID	28.45	28.7	N/A	Joules/g
95000228	B-203	2 SAMPLE	S96T000032	0	DSC-01	SOLID	N/A	Ø		Joules/g
95000228	B-203	3 DUP	S96T000032	0	DSC-01	SOLID	Ø	Ø	N/A	Joules/g
		4 STD			DSC-01	SOLID	28.45	26.6	N/A	Joules/g
95000228	B-203	5 SAMPLE	S96T000033	0	DSC-01	SOLID	N/A	172.7		Joules/g
95000228	B-203	6 DUP	S96T000033	0	DSC-01	SOLID	172.7	90.9	N/A	Joules/g
95000228	B-203	7 SAMPLE	S96T000034	0	DSC-01	SOLID	N/A	Ø		Joules/g
95000228	B-203	8 DUP	S96T000034	0	DSC-01	SOLID	Ø	Ø	N/A	Joules/g

Final page for worklist # 4906

See attached for signatures
Analyst Signature **Date** 1/18/96

[illegible] 1/19/96
Analyst Signature **Date**

Verified by Blandina Valenzuela
1/26/96

S96T000032 produced two endotherms one at 127.8°C with a delta H of 1478.6 J/g and second at 368.9°C with a delta H of 312.6 J/g.

Data Entry Comments: S96T000033 produced ~~two~~ 1/18/96 BDV an endotherm at 111.8°C with a delta H of 1239.0 J/g.

S96T000034 produced an endotherm at 111.8°C with a delta H of 1662.7 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# 4906

Analyst: JLS **Instrument:** DSC01 _____ **Book #** 12N148

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

Worklist Comment:

GROUP	PROJECT	S TYPE	SAMPLE#	R	A	-------TEST------	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD				DSC-01	SOLID	28.45	28.7	N/A	Joules/g
95000228	B-203	2 SAMPLE	S96T000032	0		DSC-01	SOLID	N/A			Joules/g
95000228	B-203	3 DUP	S96T000032	0		DSC-01	SOLID			N/A	Joules/g
95000228	B-203	4 SAMPLE	S96T000033	0		DSC-01	SOLID	N/A			Joules/g
95000228	B-203	5 DUP	S96T000033	0		DSC-01	SOLID			N/A	Joules/g
95000228	B-203	6 SAMPLE	S96T000034	0		DSC-01	SOLID	N/A			Joules/g
95000228	B-203	7 DUP	S96T000034	0		DSC-01	SOLID			N/A	Joules/g

Final page for worklist # 4906

JLS 1-17-96
Analyst Signature **Date**

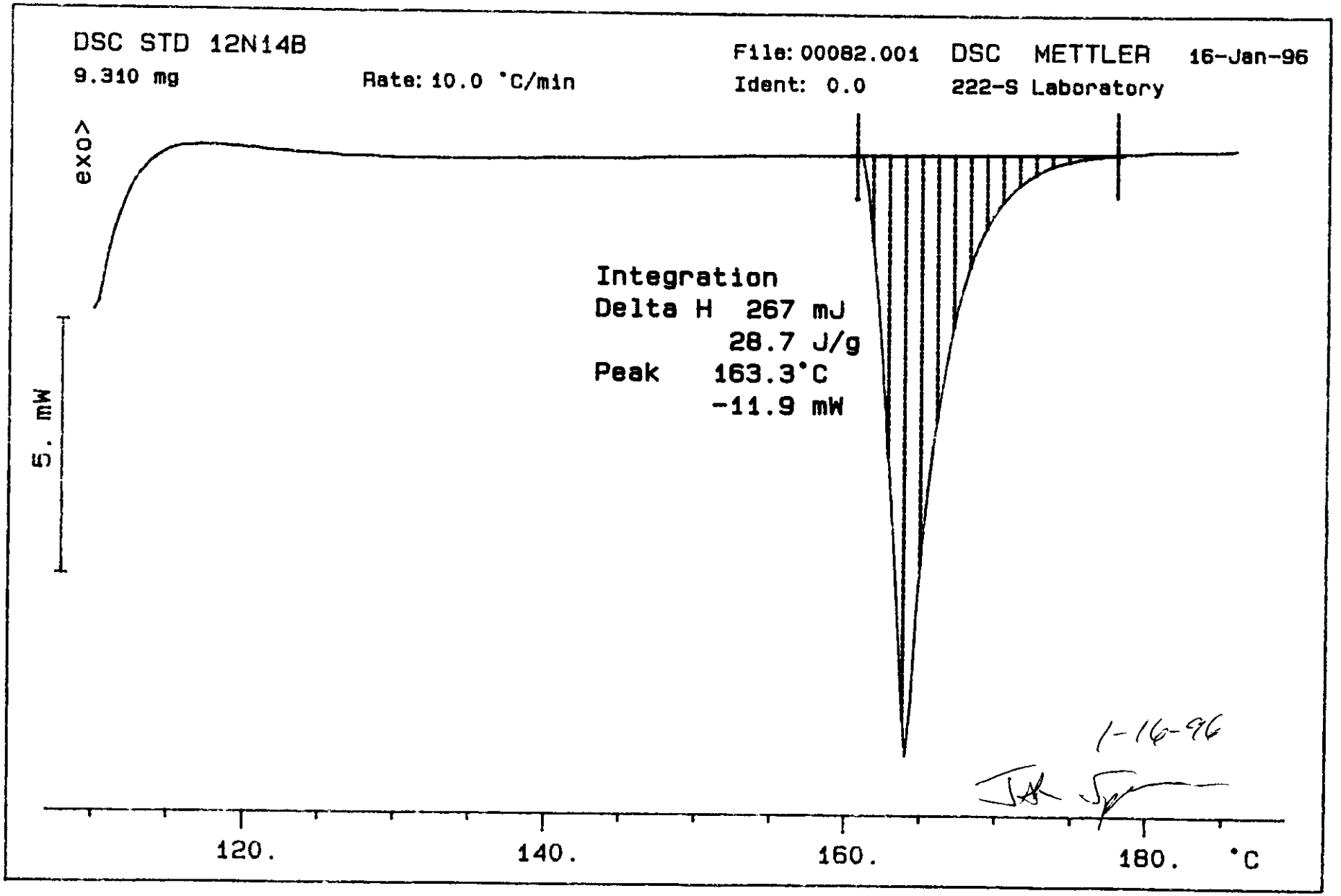
Analyst Signature **Date**

S M Fulton 1-17-96
2230

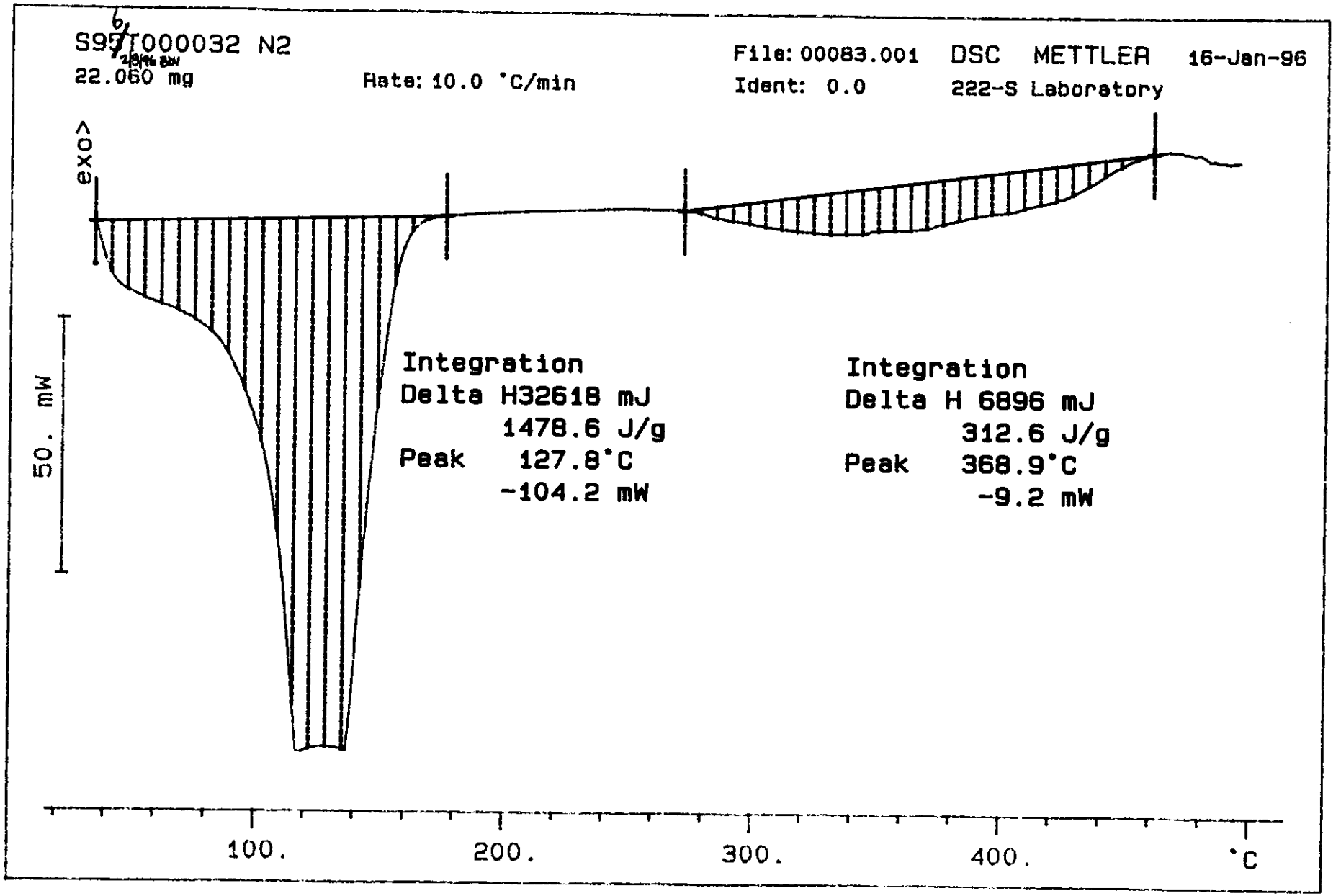
Data Entry Comments:

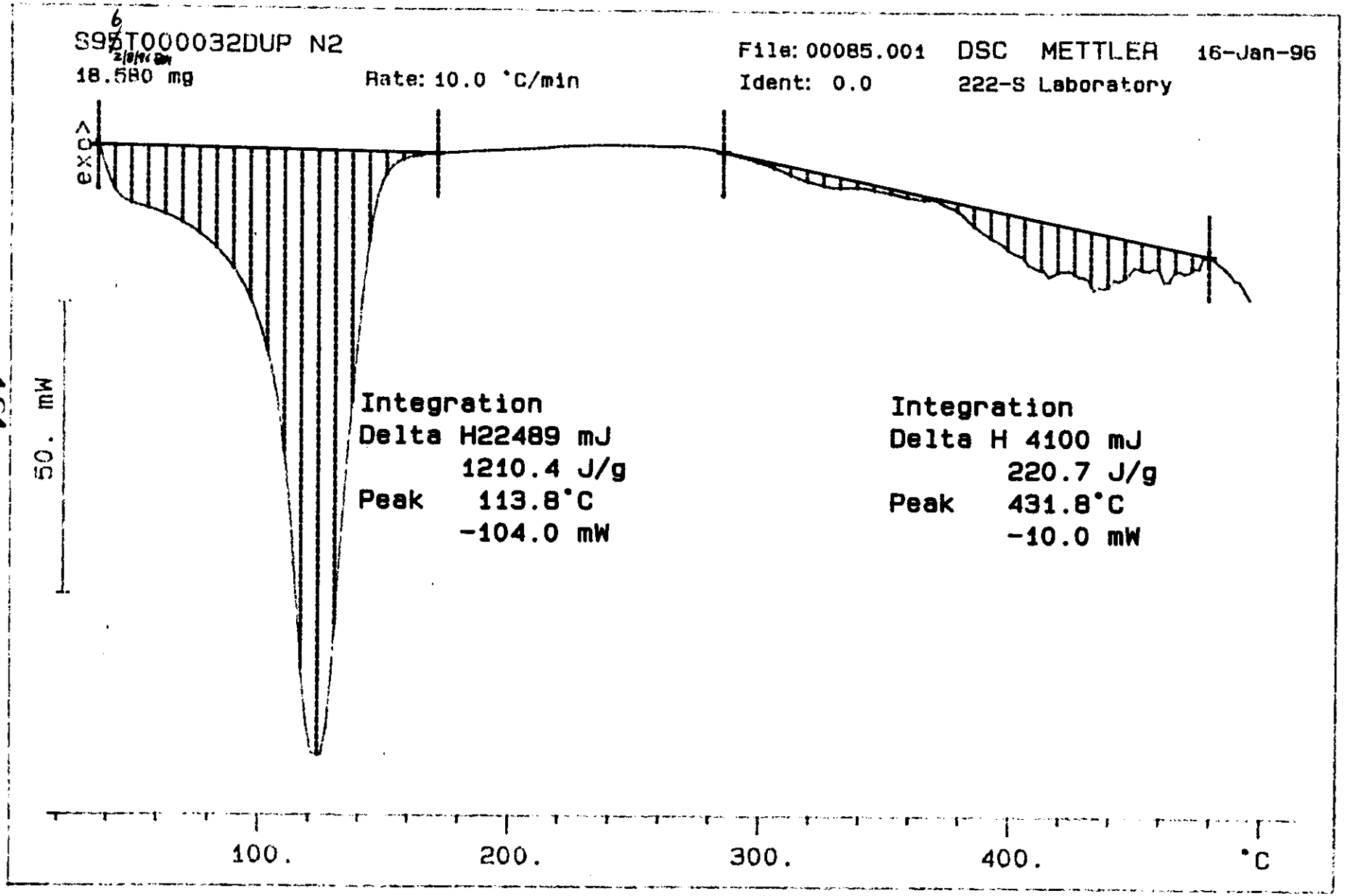
Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

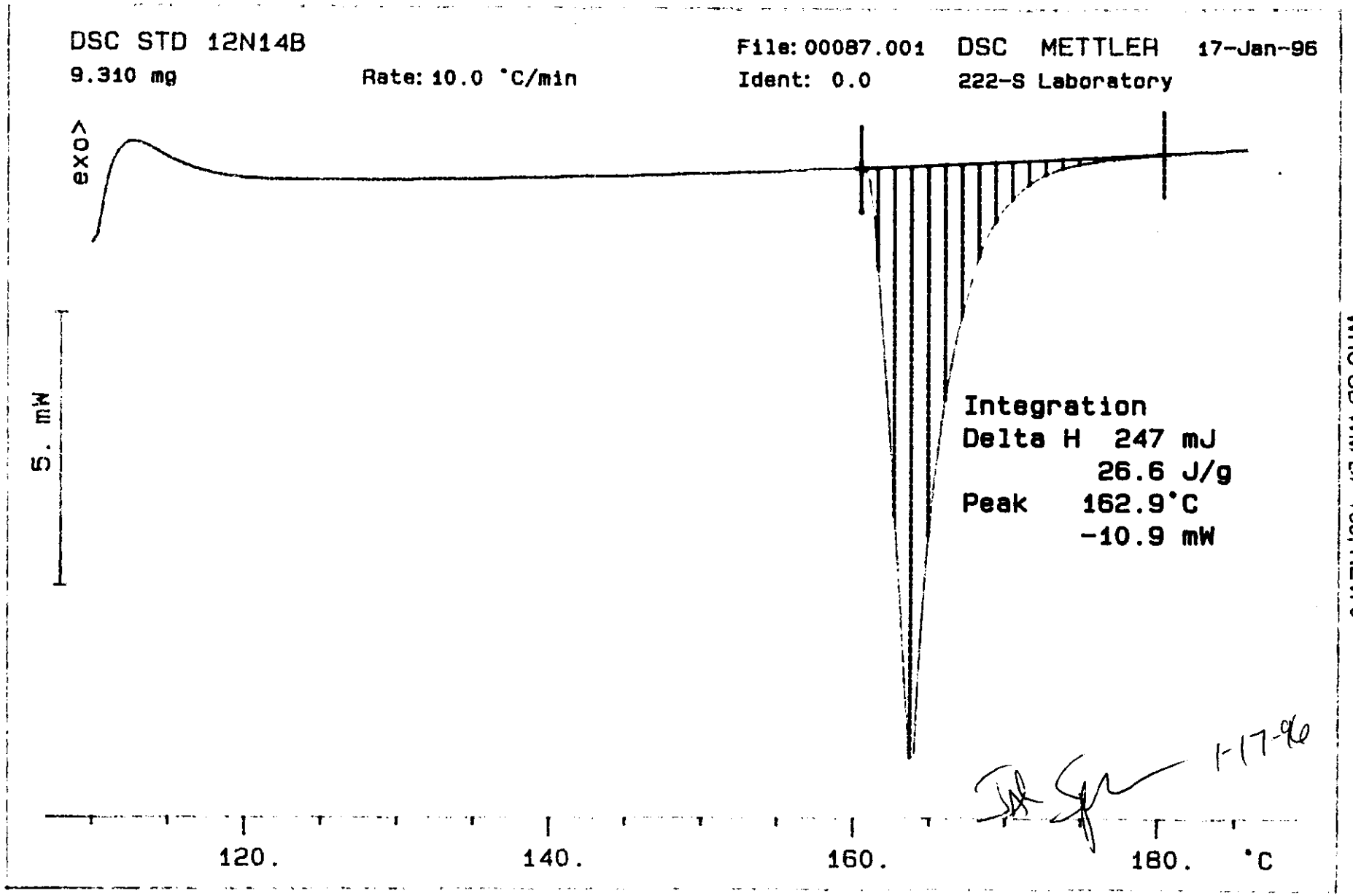
SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 179 TO 186.



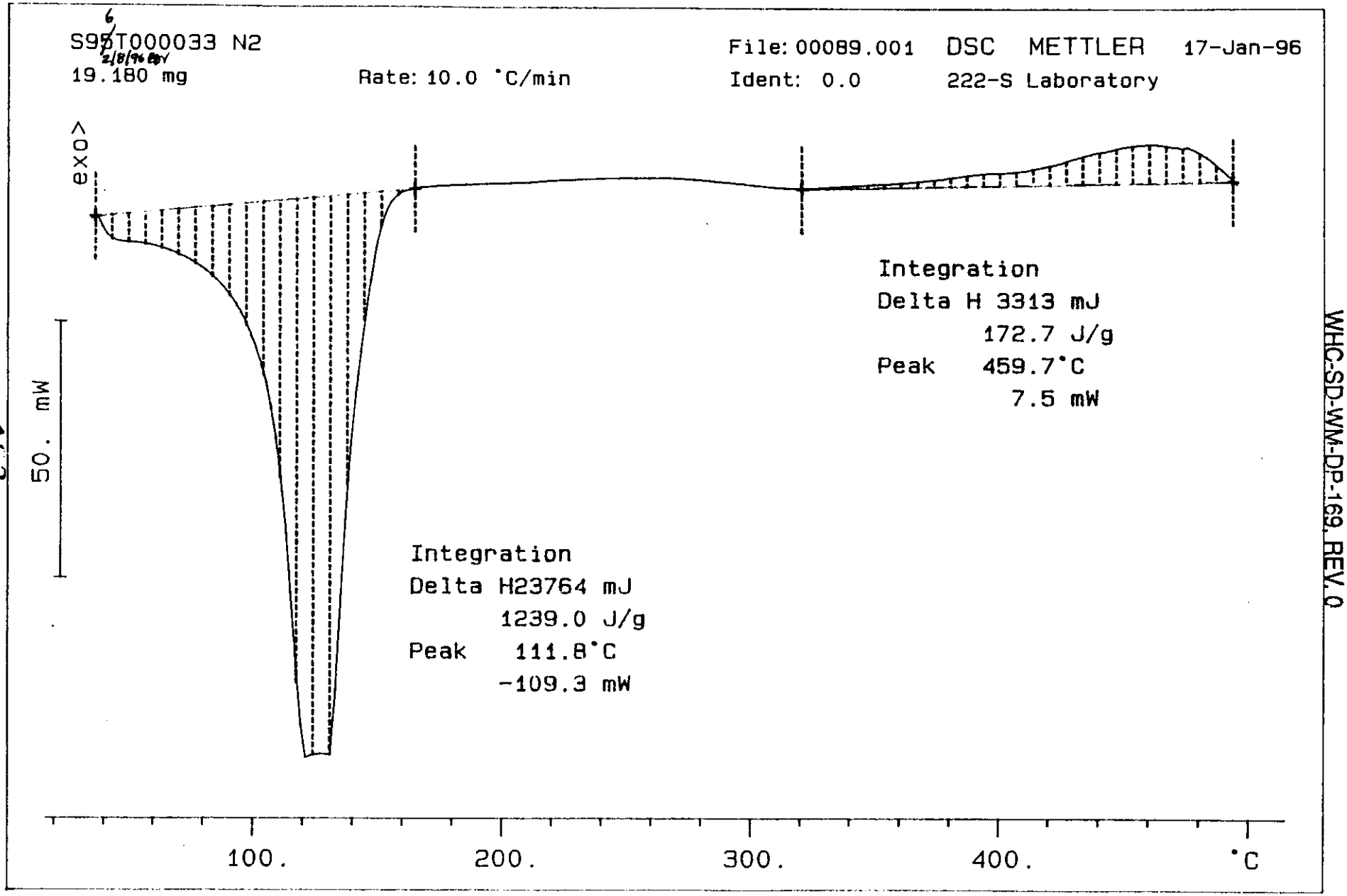
1-16-96


S95T000032 N2
22.060 mg
Rate: 10.0 °C/min
File: 00083.001
Ident: 0.0
DSC METTLER
222-S Laboratory
16-Jan-96
exo>
50. mW
Integration
Delta H32618 mJ
1478.6 J/g
Peak 127.8°C
-104.2 mW
Integration
Delta H 6896 mJ
312.6 J/g
Peak 368.9°C
-9.2 mW
100.
200.
300.
400.
°C

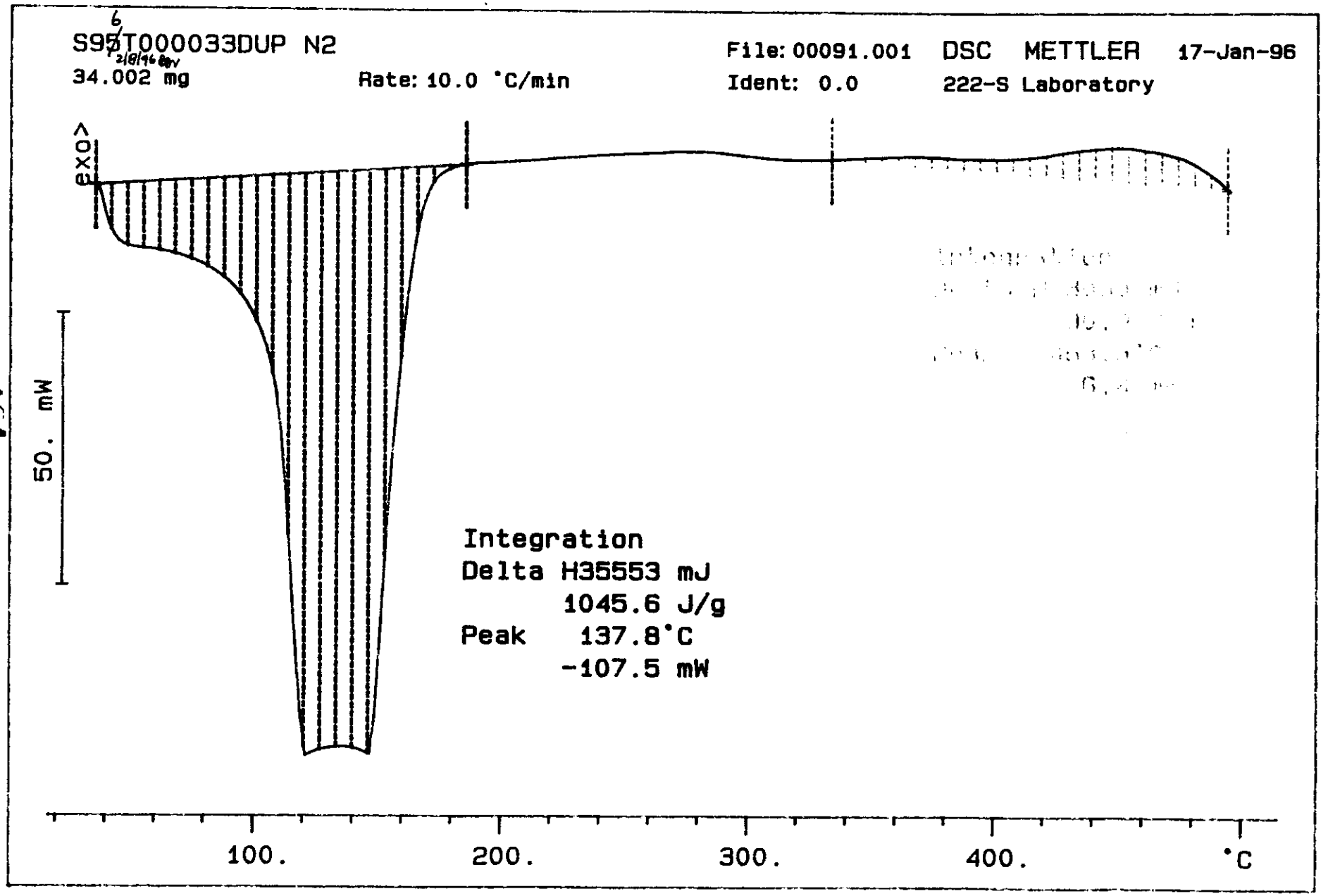

S95T000032DUP N2
18.580 mg
Rate: 10.0 °C/min
File: 00085.001
Ident: 0.0
DSC METTLER
222-S Laboratory
16-Jan-96
exo>
mW .05
Integration
Delta H22489 mJ
1210.4 J/g
Peak 113.8°C
-104.0 mW
Integration
Delta H 4100 mJ
220.7 J/g
Peak 431.8°C
-10.0 mW
100.
200.
300.
400.
°C


DSC STD 12N14B
9.310 mg
Rate: 10.0 °C/min
File: 00087.001
Ident: 0.0
DSC METTLER
222-S Laboratory
17-Jan-96
exo>
mW .5
Integration
Delta H 247 mJ
26.6 J/g
Peak 162.9°C
-10.9 mW
120.
140.
160.
180.
°C
1-17-96

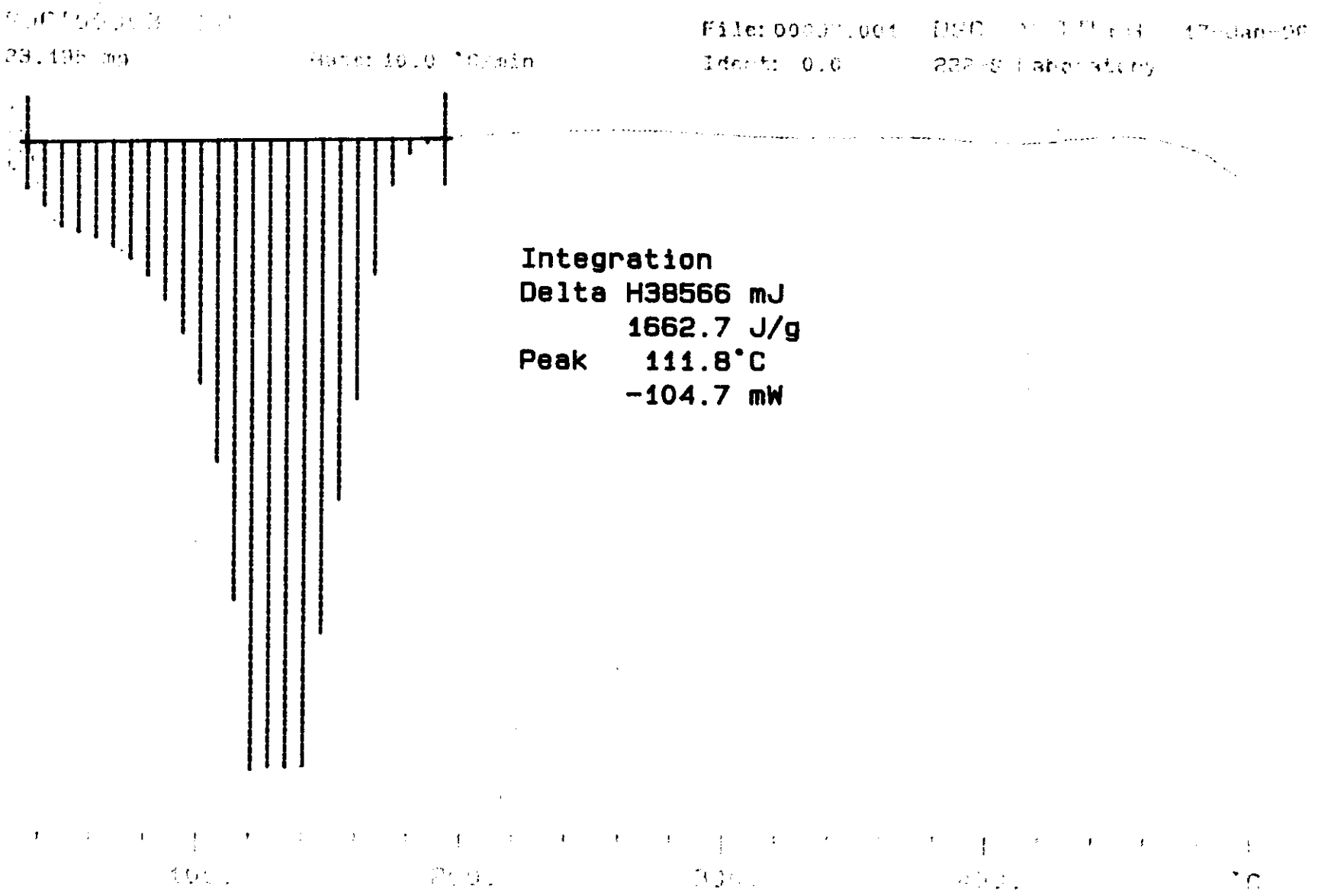
BEST AVAILABLE COPY



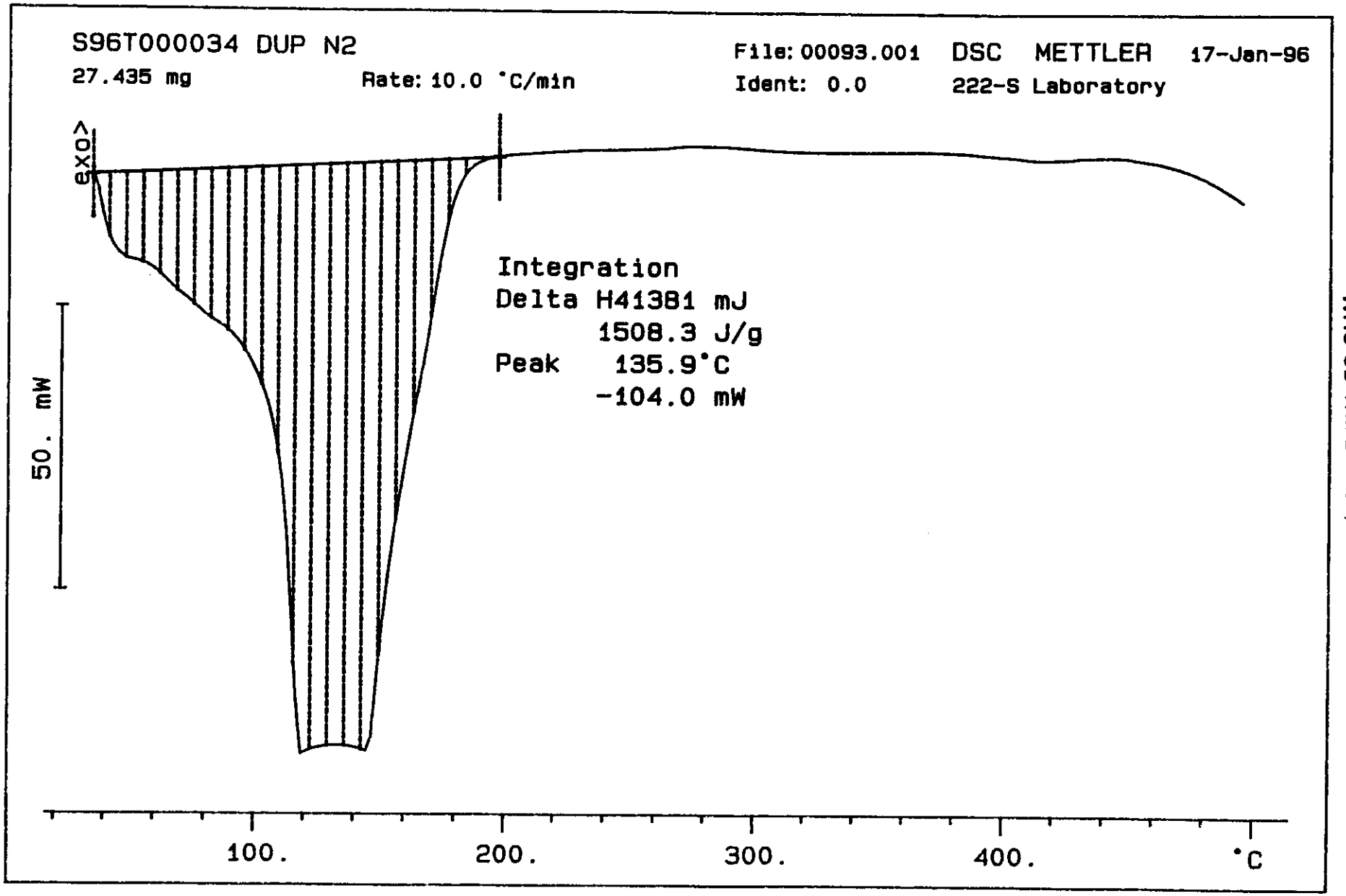
BEST AVAILABLE COPY



BEST AVAILABLE COPY



BEST AVAILABLE COPY



LABCORE Data Entry Template for Worklist# 4932

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

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

Worklist Comment: B-203 DSC RUN UNDER N2. RCJ

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				DSC-01	SOLID	28.45	26.3	N/A	Joules/g
95000228	B-203	2	SAMPLE	S96T000035	0		DSC-01	SOLID	N/A	Ø		Joules/g
95000228	B-203	3	DUP	S96T000035	0		DSC-01	SOLID	Ø	Ø	N/A	Joules/g
		4	STD				DSC-01	SOLID	28.45	30.7	N/A	Joules/g
95000228	B-203	5	SAMPLE	S96T000036	0		DSC-01	SOLID	N/A	71.7		Joules/g
95000228	B-203	6	DUP	S96T000036	0		DSC-01	SOLID	71.7	69.2	N/A	Joules/g

Final page for worklist # 4932

See attached for signatures

Analyst Signature **Date** 1/25/96 BDV

Analyst Signature **Date**

Data Entry Comments: S96T000035 produced an endotherm at 125.8°C with a delta H of 977.1 J/g.
S96T000036 produced an endotherm at 101.8°C with a delta H of 1667.4 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# 4932

Analyst: SMF **Instrument:** DSC0 _____ **Book #** 12N143

Method: LA-514-113 Rev/Mod _____

Worklist Comment: B-203 DSC RUN UNDER N2. RCJ

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	-------TEST------	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				DSC-01	SOLID			N/A	Joules/g
95000228	B-203	2	SAMPLE	S96T000035	0		DSC-01	SOLID	N/A			Joules/g
95000228	B-203	3	DUP	S96T000035	0		DSC-01	SOLID			N/A	Joules/g
95000228	B-203	4	SAMPLE	S96T000036	0		DSC-01	SOLID	N/A			Joules/g
95000228	B-203	5	DUP	S96T000036	0		DSC-01	SOLID			N/A	Joules/g

Final page for worklist # 4932

Susie M. Fulton 1-17-96

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 189 TO 194 -BEST AVAILABLE COPY

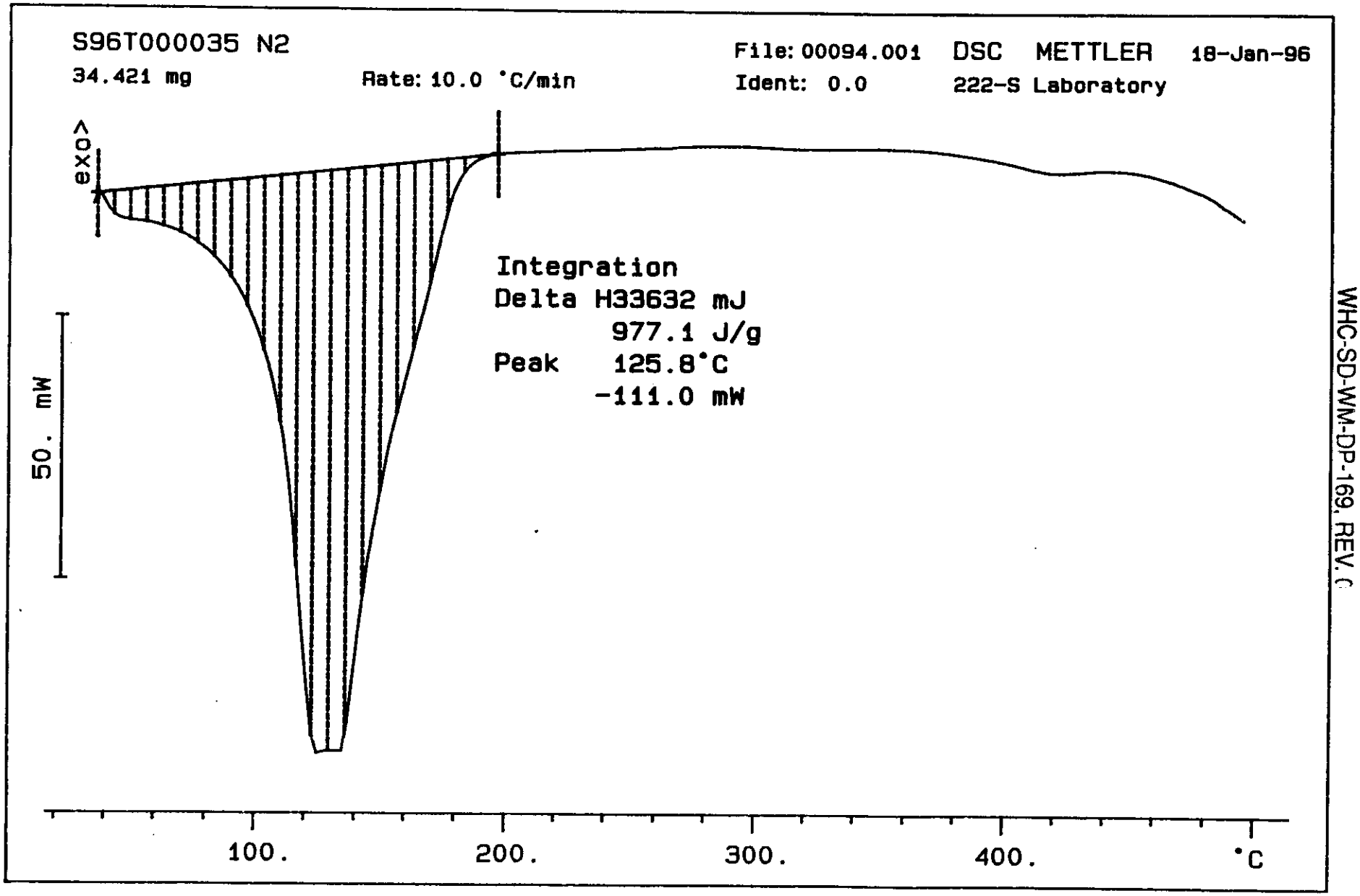
DSC STA 121[illegible]

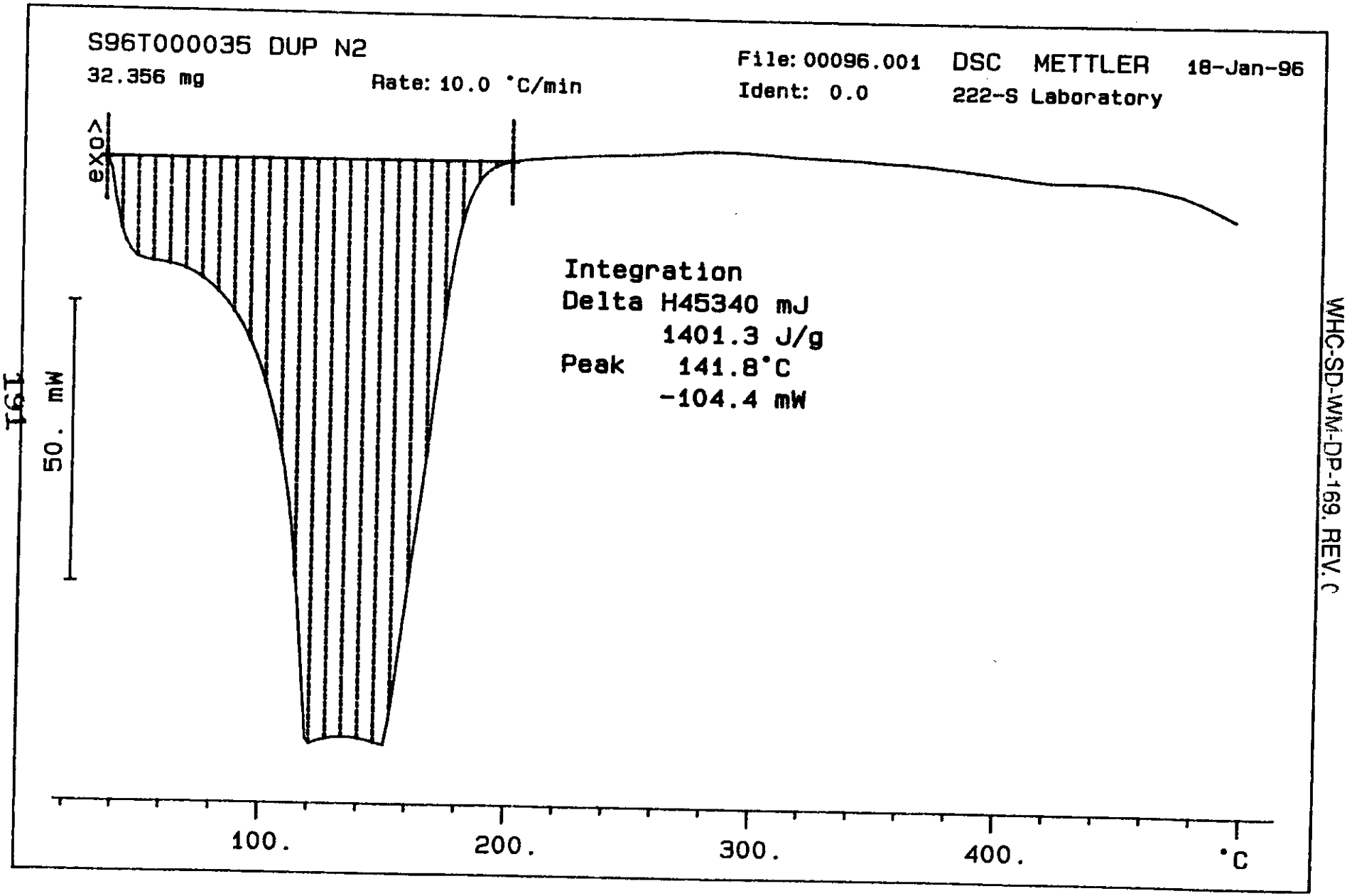
0.310 mg Rate: 10.0 °C/min File: 00087.001 DSC METTLER 17-Jan-96

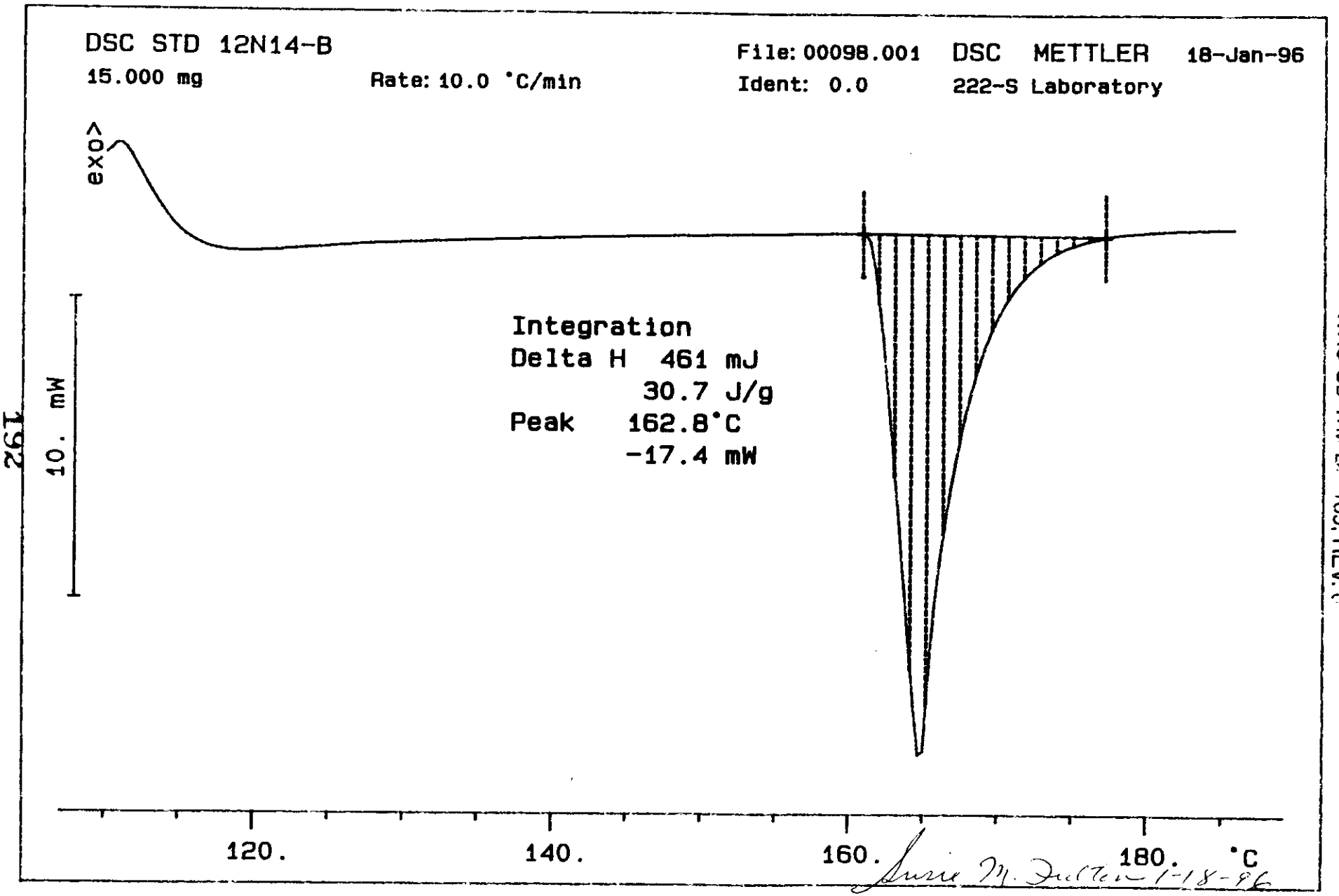
Ident: 0.0 222-S Laboratory

Integration
Delta H 244 mJ
26.3 J/g
Peak 162.9°C
-10.9 mW

Susie M. Dalton 1-17-96

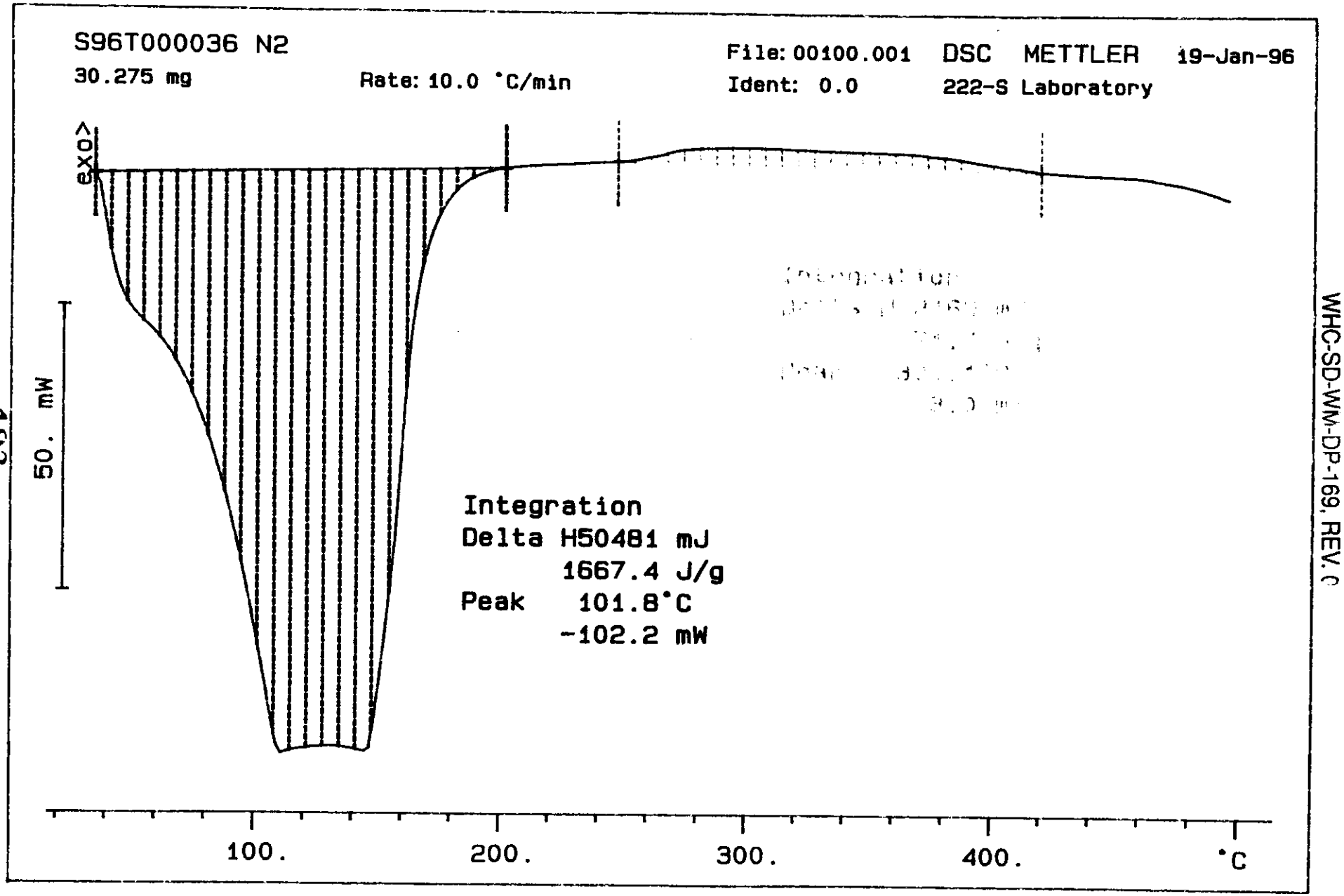

S96T000035 N2
34.421 mg
Rate: 10.0 °C/min
File: 00094.001
Ident: 0.0
DSC METTLER
222-S Laboratory
18-Jan-96
exo>
50. mW
Integration
Delta H33632 mJ
977.1 J/g
Peak 125.8°C
-111.0 mW
100.
200.
300.
400.
°C


S96T000035 DUP N2
32.356 mg
Rate: 10.0 °C/min
File: 00096.001
Ident: 0.0
DSC METTLER
222-S Laboratory
18-Jan-96
exo>
50. mW
Integration
Delta H45340 mJ
1401.3 J/g
Peak 141.8°C
-104.4 mW
100.
200.
300.
400.
°C

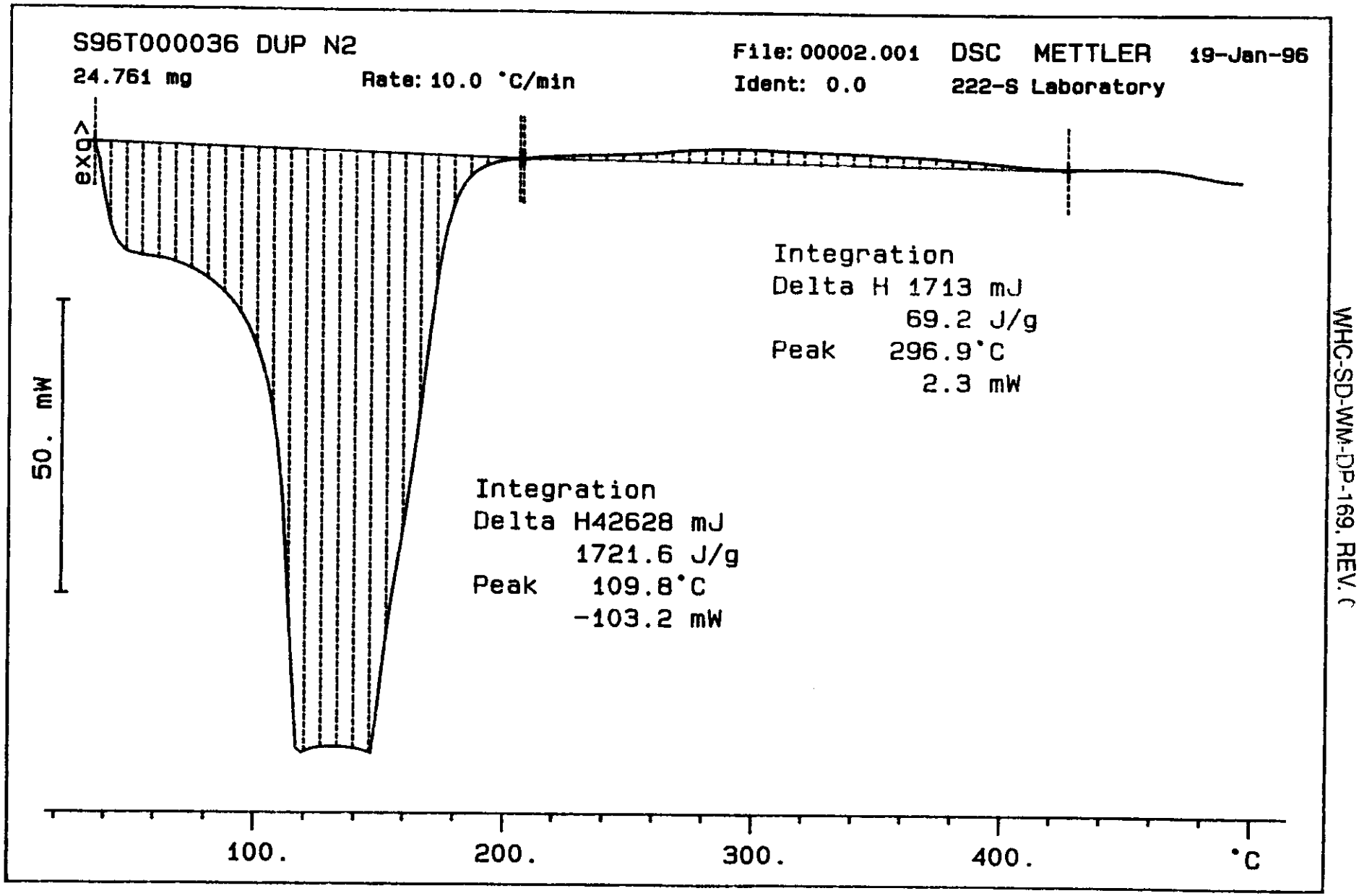


Susie M. Dutton 1-18-96

BEST AVAILABLE COPY



BEST AVAILABLE COPY



LABCORE Data Entry Template for Worklist# 4933

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

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

Worklist Comment: B-203 DSC RUN UNDER N2. RCJ

GROUP	PROJECT	S TYPE	SAMPLE#	R	A	-------TEST------	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD				DSC-01	SOLID	28.45	30.5	N/A	Joules/g
95000228	B-203	2 SAMPLE	S96T000037	0		DSC-01	SOLID	N/A	Ø		Joules/g
95000228	B-203	3 DUP	S96T000037	0		DSC-01	SOLID	Ø	Ø	N/A	Joules/g
95000228	B-203	4 SAMPLE	S96T000038	0		DSC-01	SOLID	N/A	Ø		Joules/g
95000228	B-203	5 DUP	S96T000038	0		DSC-01	SOLID	Ø	Ø	N/A	Joules/g

Final page for worklist # 4933

See attached for signatures
Analyst Signature **Date** 1/25/96 BOY

Analyst Signature **Date** 1/29/96

Data Entry Comments: S96T000037 produced an endotherm at 129.8°C with a delta H of 940.2 J/g.
S96T000038 produced an endotherm at 125.8°C with a delta H of 1247.8 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# 4933

Analyst: VADO **Instrument:** DSC0 _____ **Book #** 12 N 14B

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

Worklist Comment: B-203 DSC RUN UNDER N2. RCJ

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				DSC-01	SOLID			N/A	Joules/g
95000228	B-203	2	SAMPLE	S96T000037	0		DSC-01	SOLID	N/A			Joules/g
95000228	B-203	3	DUP	S96T000037	0		DSC-01	SOLID			N/A	Joules/g
95000228	B-203	4	SAMPLE	S96T000038	0		DSC-01	SOLID	N/A			Joules/g
95000228	B-203	5	DUP	S96T000038	0		DSC-01	SOLID			N/A	Joules/g

Final page for worklist # 4933

Anton Purnto 1-24-96
Analyst Signature **Date**

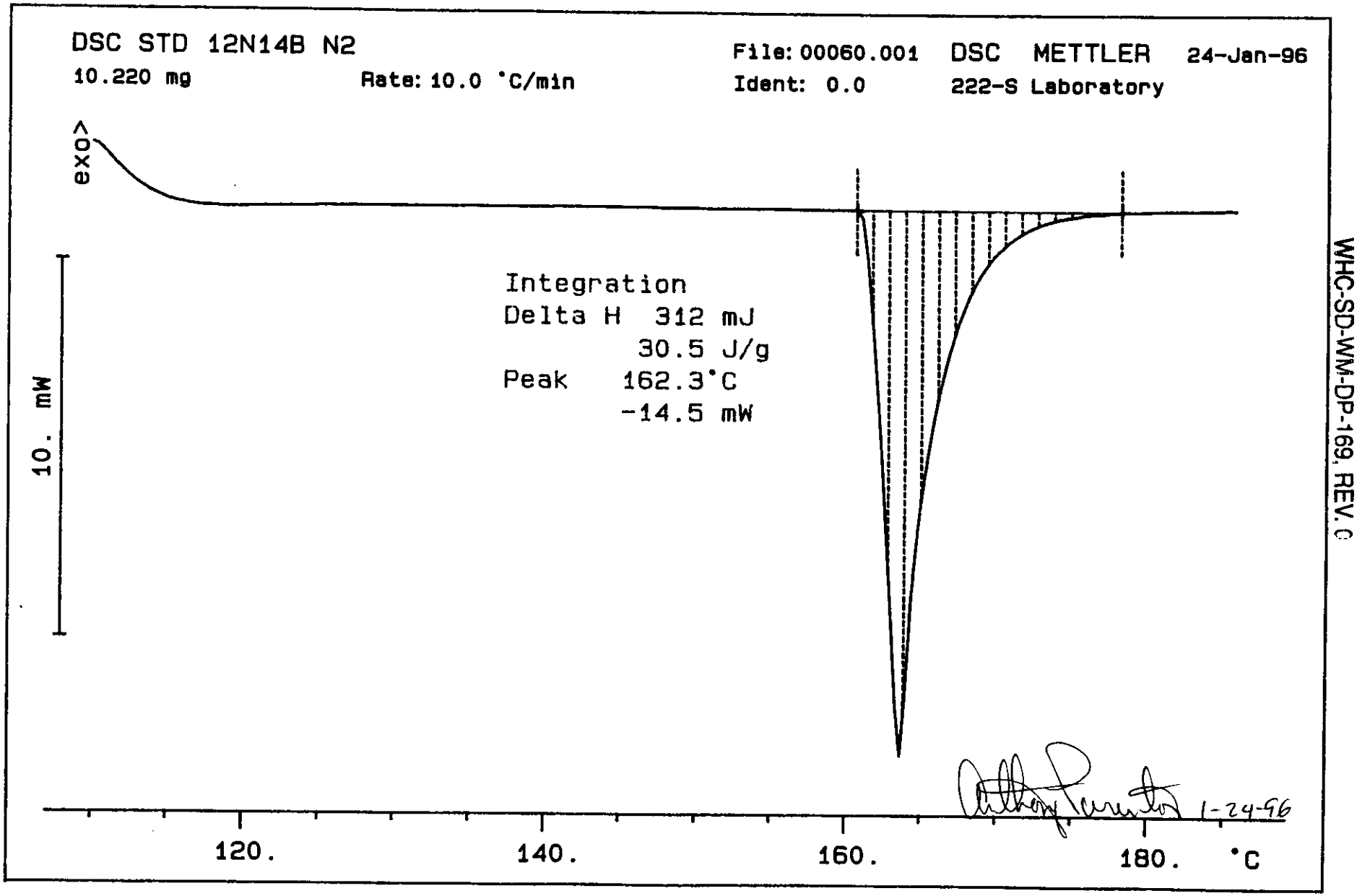
Analyst Signature **Date**

Susie M. Fulton 1-25-96

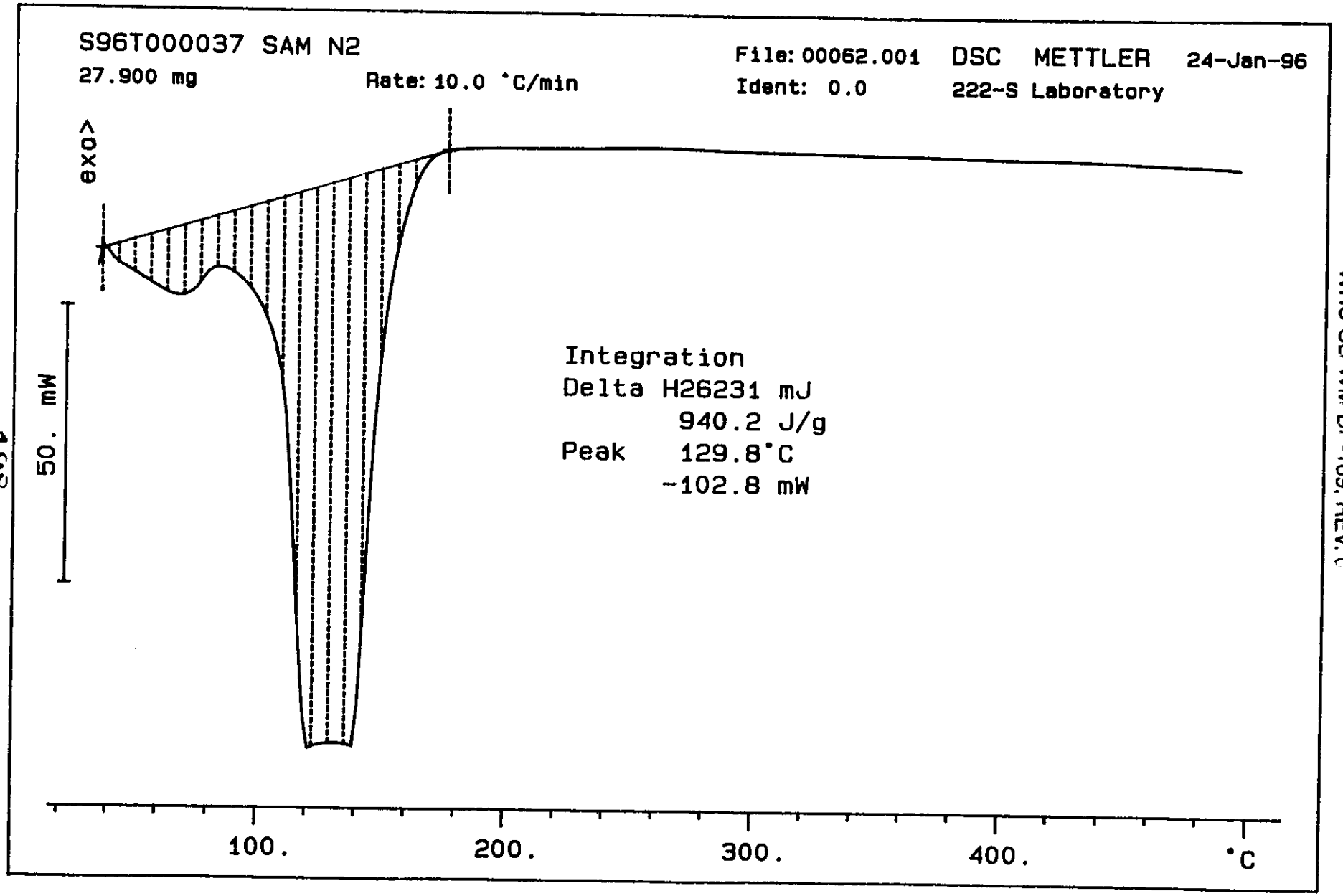
Data Entry Comments:

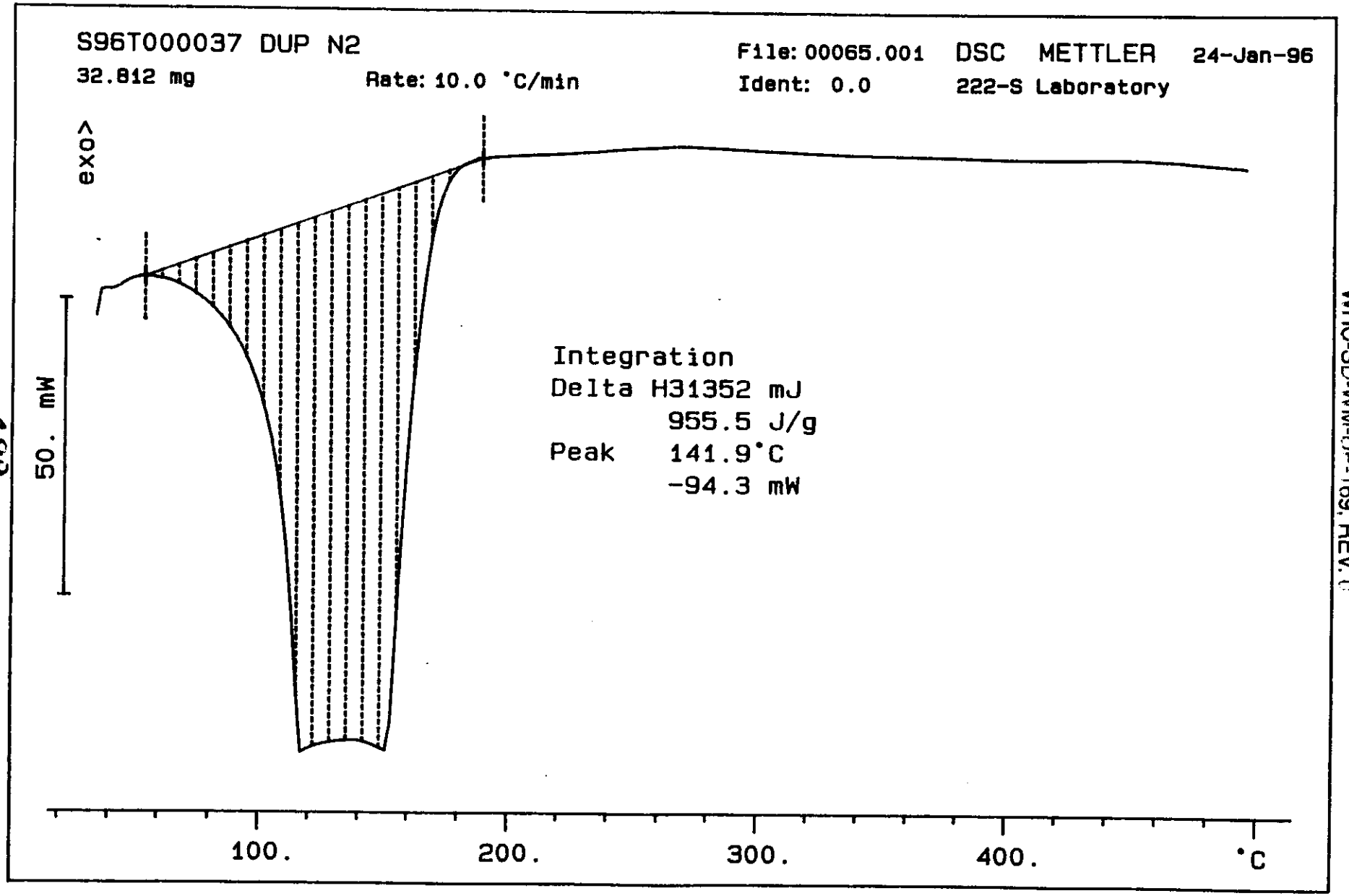
Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

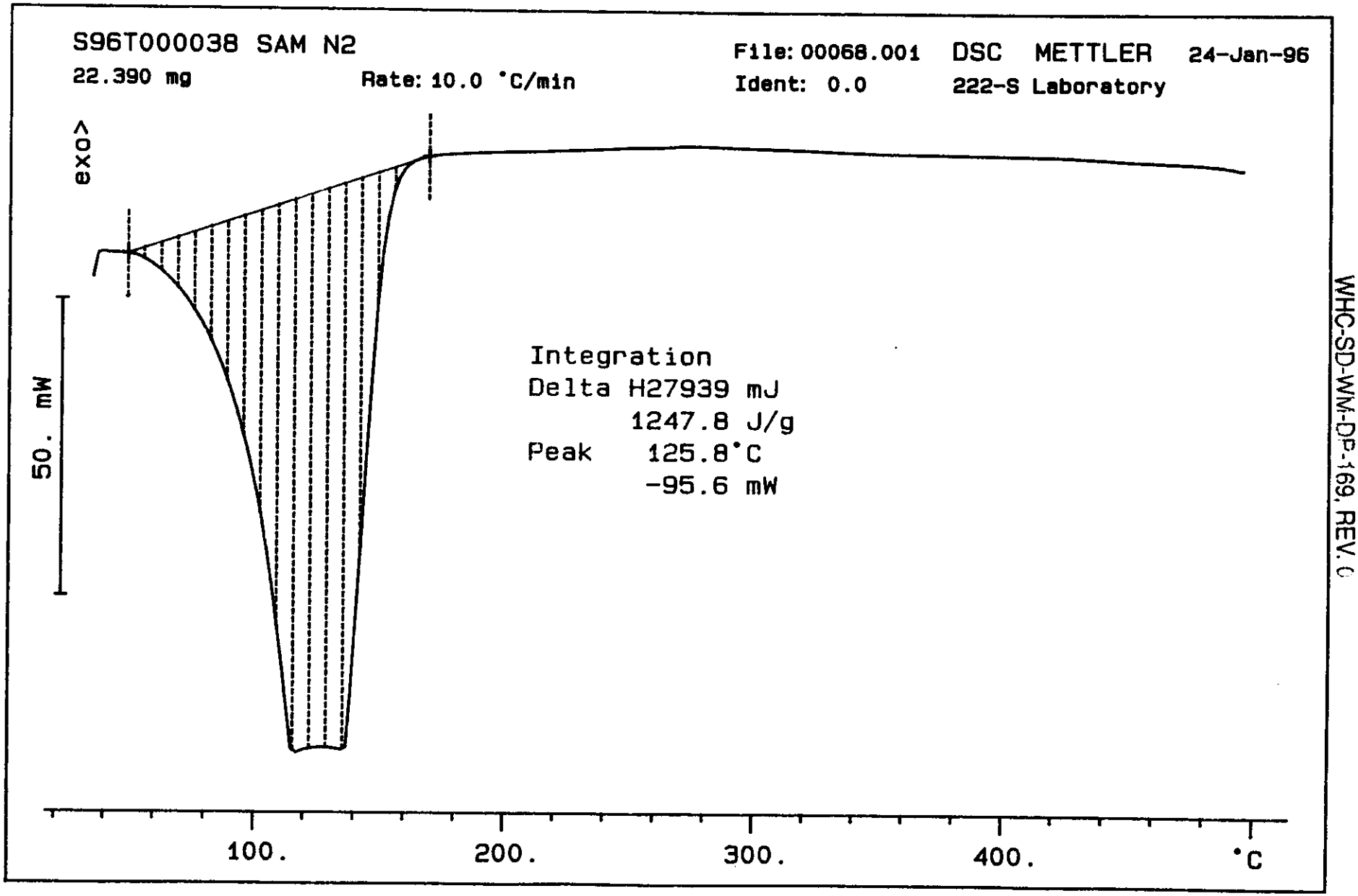
SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 197 TO 201.

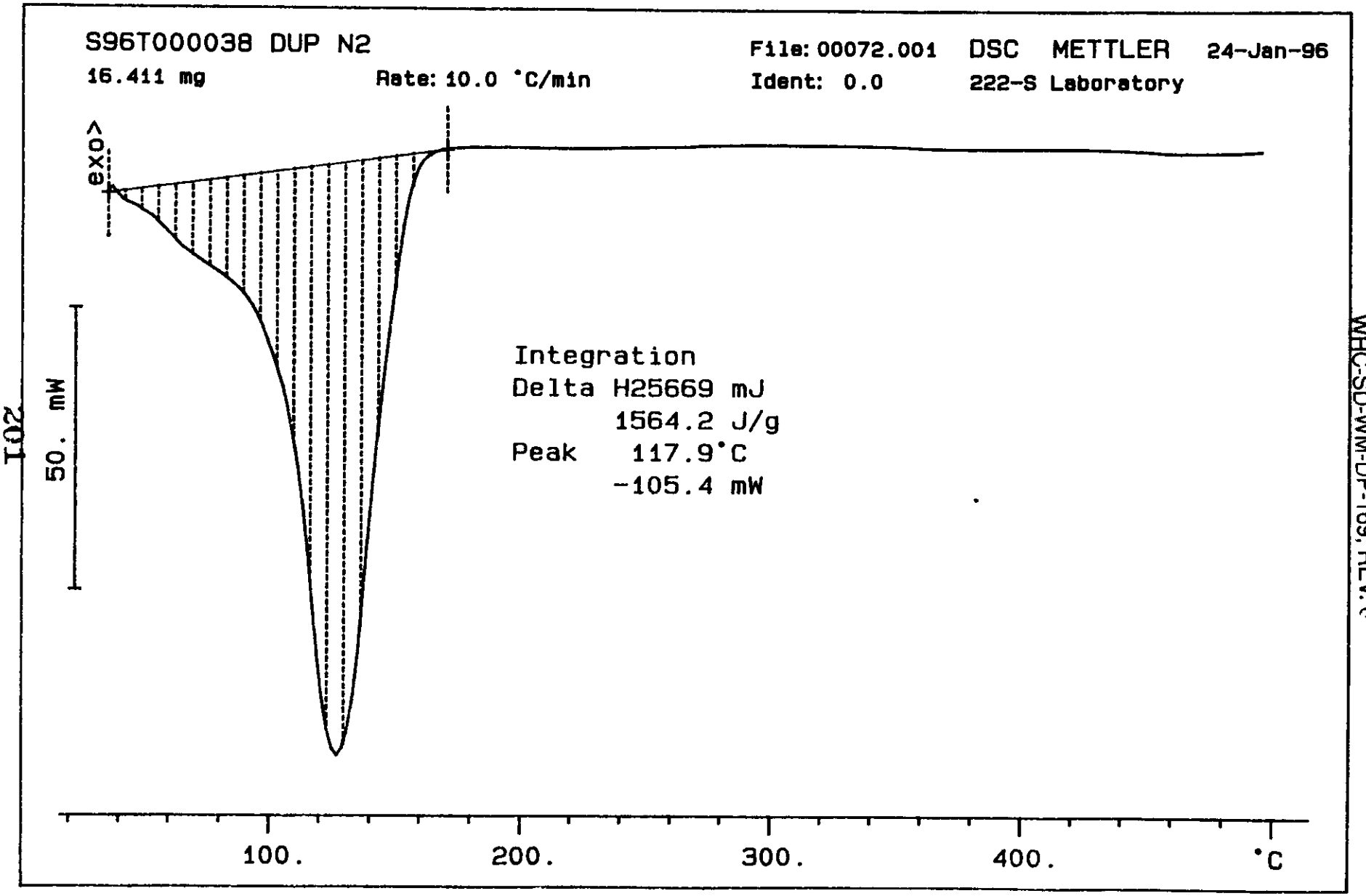


1-24-96


S96T000037 SAM N2
27.900 mg
Rate: 10.0 °C/min
File: 00062.001
Ident: 0.0
DSC METTLER
222-S Laboratory
24-Jan-96
exo>
.05 mW
Integration
Delta H26231 mJ
940.2 J/g
Peak 129.8°C
-102.8 mW
100.
200.
300.
400.
°C


S96T000037 DUP N2
32.812 mg
Rate: 10.0 °C/min
File: 00065.001
Ident: 0.0
DSC METTLER
222-S Laboratory
24-Jan-96
exo>
50. mW
Integration
Delta H31352 mJ
955.5 J/g
Peak 141.9°C
-94.3 mW
100.
200.
300.
400.
°C


S96T000038 SAM N2
22.390 mg
Rate: 10.0 °C/min
File: 00068.001
Ident: 0.0
DSC METTLER
222-S Laboratory
24-Jan-96
exo>
50. mW
Integration
Delta H27939 mJ
1247.8 J/g
Peak 125.8°C
-95.6 mW
100.
200.
300.
400.
°C


S96T000038 DUP N2
16.411 mg
Rate: 10.0 °C/min
File: 00072.001
Ident: 0.0
DSC METTLER
222-S Laboratory
24-Jan-96
exo>
50. mW
Integration
Delta H25669 mJ
1564.2 J/g
Peak 117.9°C
-105.4 mW
100.
200.
300.
400.
°C

LABCORE Data Entry Template for Worklist# 4934

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

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

Worklist Comment: B-203 DSC RUN UNDER N2. RCJ

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	-------TEST------	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				DSC-03	SOLID	28.45	27.76	N/A	Joules/g
95000228	B-203	2	SAMPLE	S96T000039	0		DSC-03	SOLID	N/A	Ø		Joules/g
		3	STD				DSC-03	SOLID	28.45	28.17	N/A	Joules/g
95000228	B-203	4	DUP	S96T000039	0		DSC-03	SOLID	Ø	Ø	N/A	Joules/g
95000228	B-203	5	SAMPLE	S96T000040	0		DSC-03	SOLID	N/A	Ø		Joules/g
95000228	B-203	6	DUP	S96T000040	0		DSC-03	SOLID	Ø	Ø	N/A	Joules/g

Final page for worklist # 4934

See attached for signatures

Analyst Signature **Date** 1/26/96 BMV

Verified by Blandina Valenzuela 1/26/96

Analyst Signature **Date**

Data Entry Comments: S96T000039 produced an endotherm at 123.32°C with a delta H of 1633.42 J/g

S96T000040 produced an endotherm at 122.52°C with a delta H of 1644.999 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# 4934

Analyst: ADO **Instrument:** DSC0 **Book #** 12N14B

Method: LA-514-~~113~~ 114 Rev/Mod C-1
SMF 1-25-96

Worklist Comment: B-203 DSC RUN UNDER N2. RCJ

GROUP	PROJECT	S TYPE	SAMPLE#	R	A	-------TEST------	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD				DSC-01	SOLID			N/A	Joules/g
95000228	B-203	2 SAMPLE	S96T000039	0		DSC-01	SOLID	N/A			Joules/g
95000228	B-203	3 DUP	S96T000039	0		DSC-01	SOLID			N/A	Joules/g
95000228	B-203	4 SAMPLE	S96T000040	0		DSC-01	SOLID	N/A			Joules/g
95000228	B-203	5 DUP	S96T000040	0		DSC-01	SOLID			N/A	Joules/g

Final page for worklist # 4934

Anthony Purnton 1-24-96
Analyst Signature **Date**

Analyst Signature **Date**

Susie M. Fulton - 1-25-96
1015

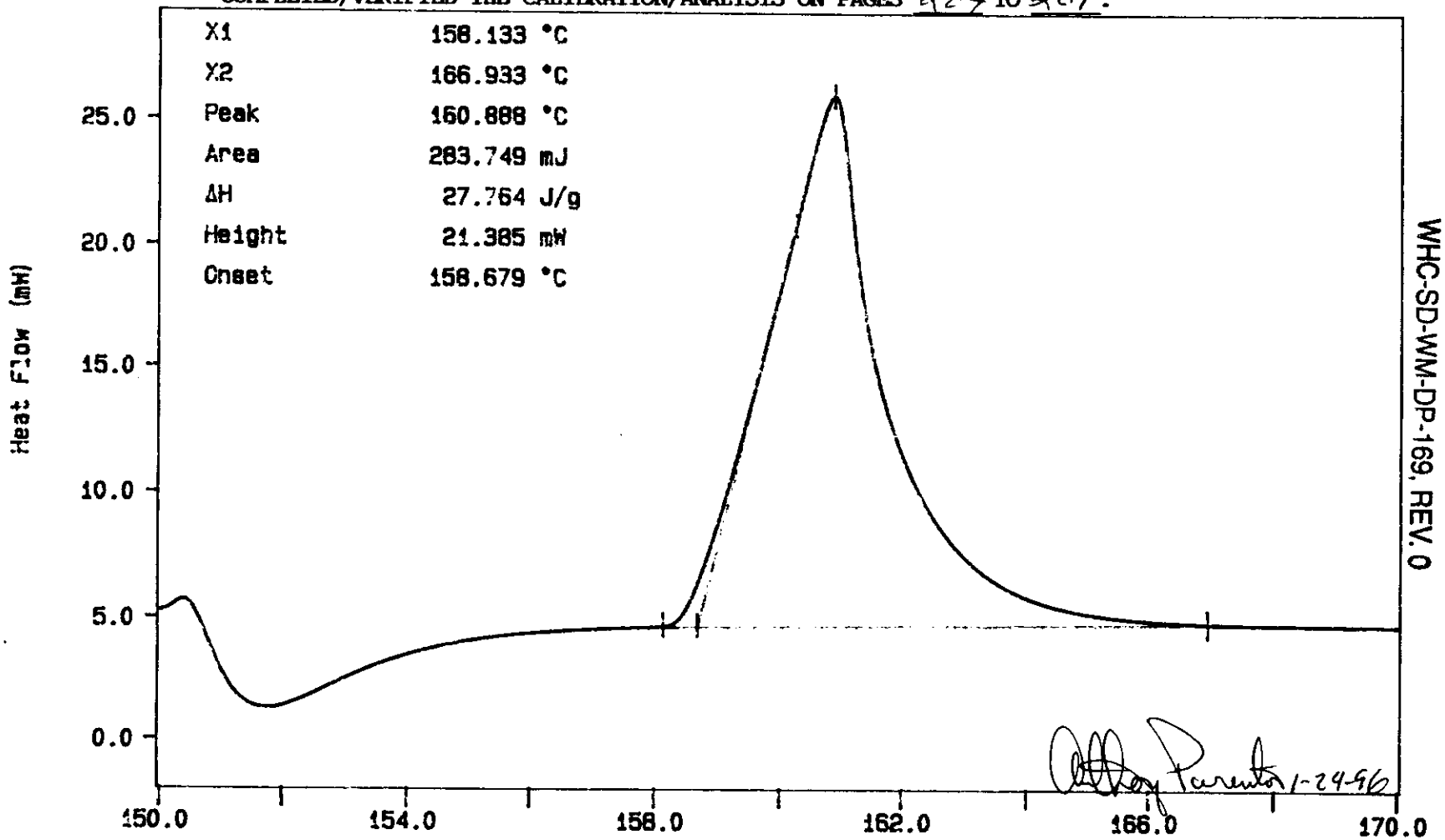
Data Entry Comments:

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: IND012402 Wed Jan 24 21:14:28 1996
Sample Weight: 10.220 mg
12N14B Indium at 10C/min

SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 204 TO 209.

BEST AVAILABLE COPY

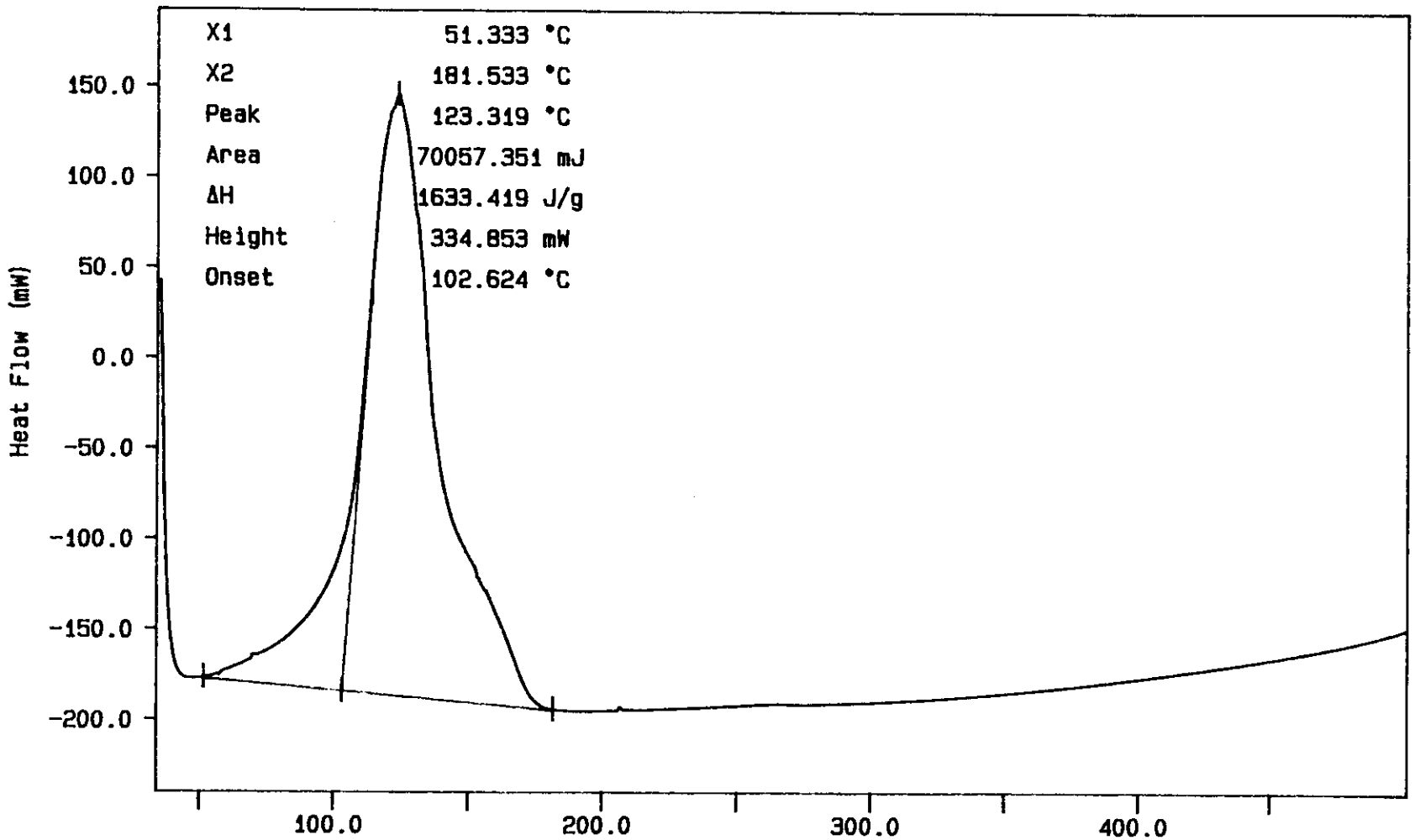


N2, EXOTHERM DOWN
TEMP1: 150.0 C TIME1: 0.0 min RATE1: 10.0 C/min
TEMP2: 170.0 C

AD PURINTON
PERKIN-ELMER
7 Series Thermal Analysis System
Wed Jan 24 21:15:42 1996

WHC-SD-WM-DP-169, REV. 0

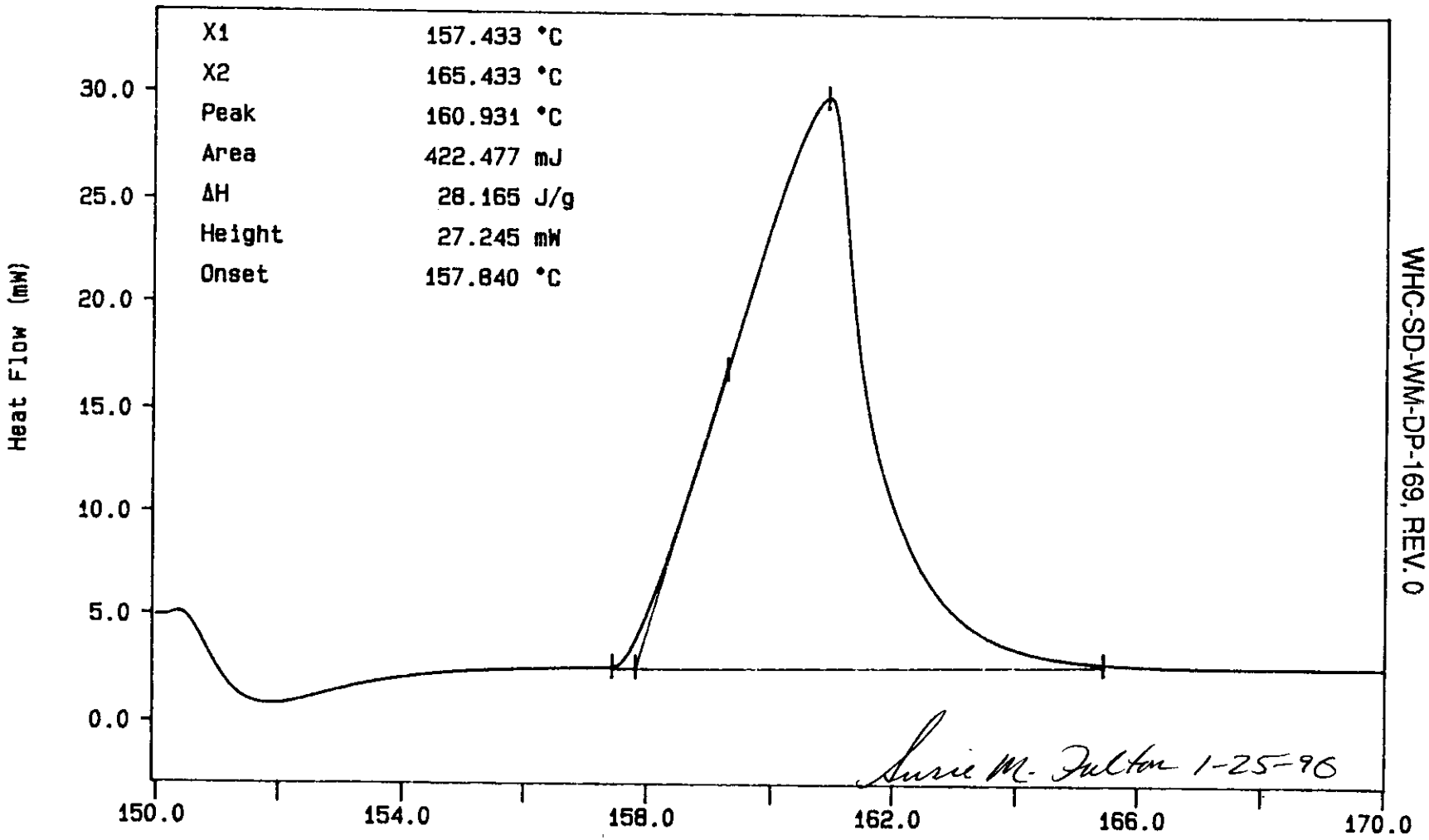
Curve 1: DSC
File info: SAM012410 Thu Jan 25 04:40:54 1996
Sample Weight: 42.890 mg
S96T000039 SAM



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
Thu Jan 25 06:00:31 1996

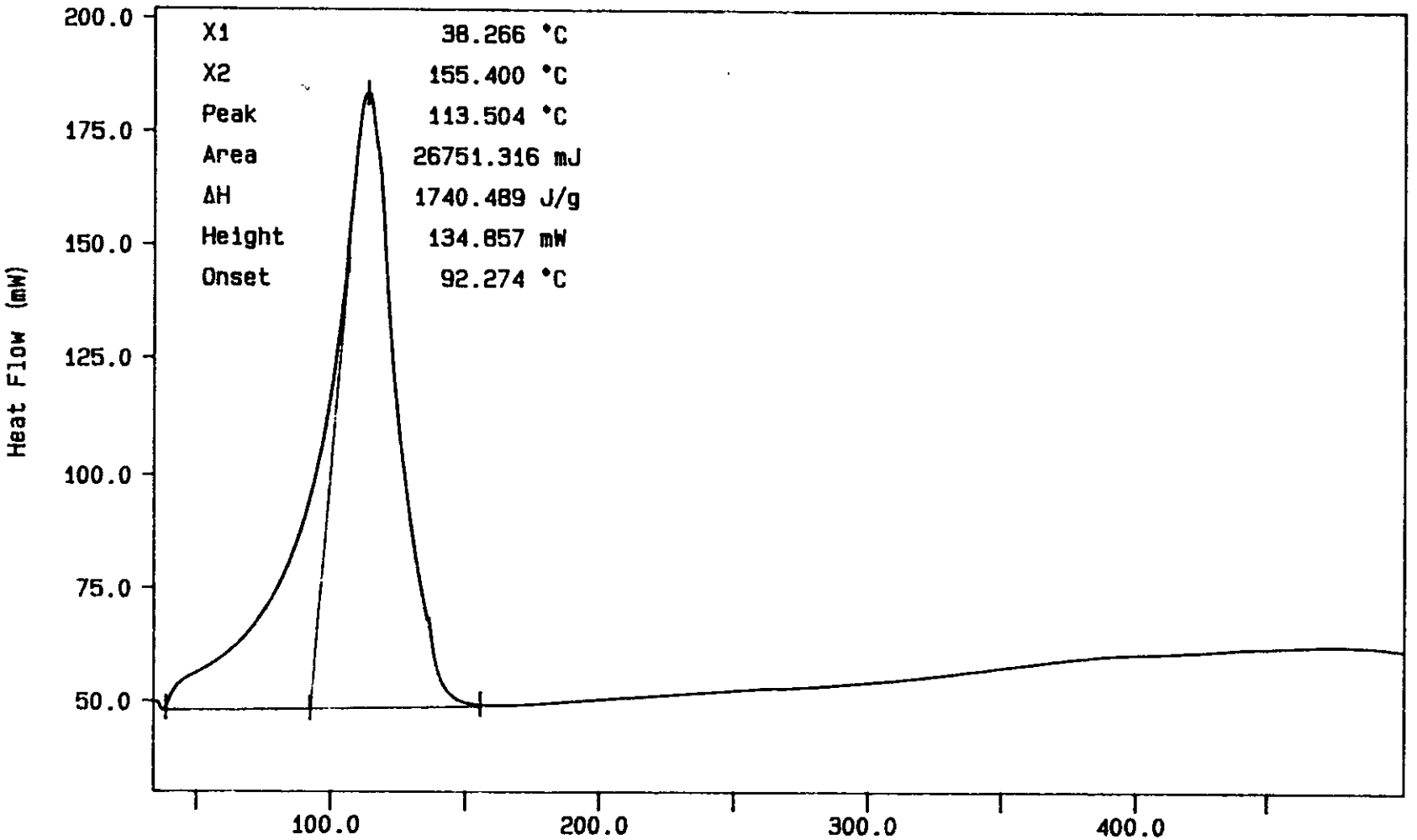
Curve 1: DSC
File info: IND012501 Thu Jan 25 06:14:44 1996
Sample Weight: 15.000 mg
12N14B Indium at 10C/min



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

SM FULTON
PERKIN-ELMER
7 Series Thermal Analysis System
Thu Jan 25 06:18:44 1996

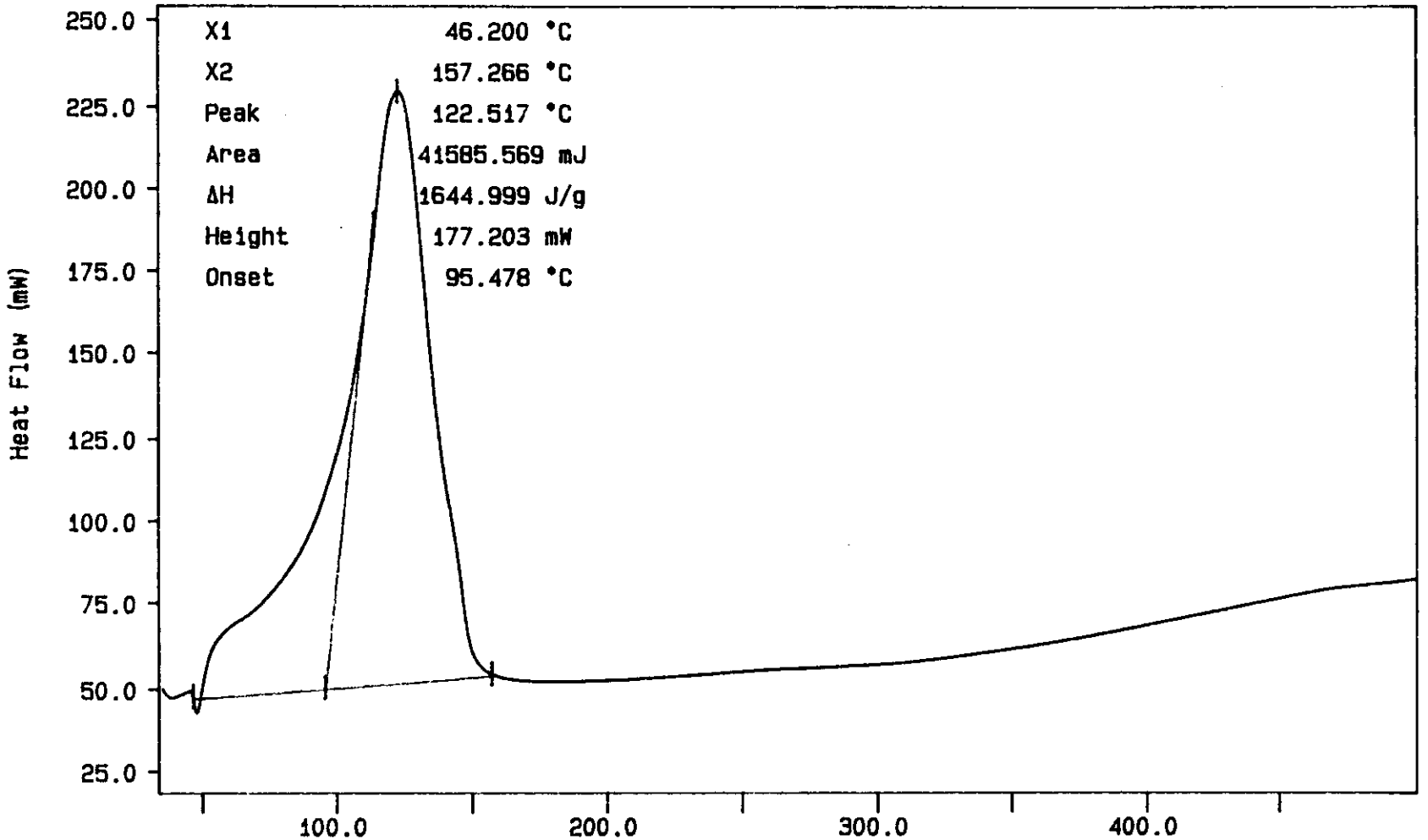
Curve 1: DSC
File info: SAM012501 Thu Jan 25 07:27:32 1996
Sample Weight: 15.370 mg
S96T000039 SAM Dup
SKF 1-25-96



exotherm down, N2 purge gas
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 Jan 25 07:28:06 1996

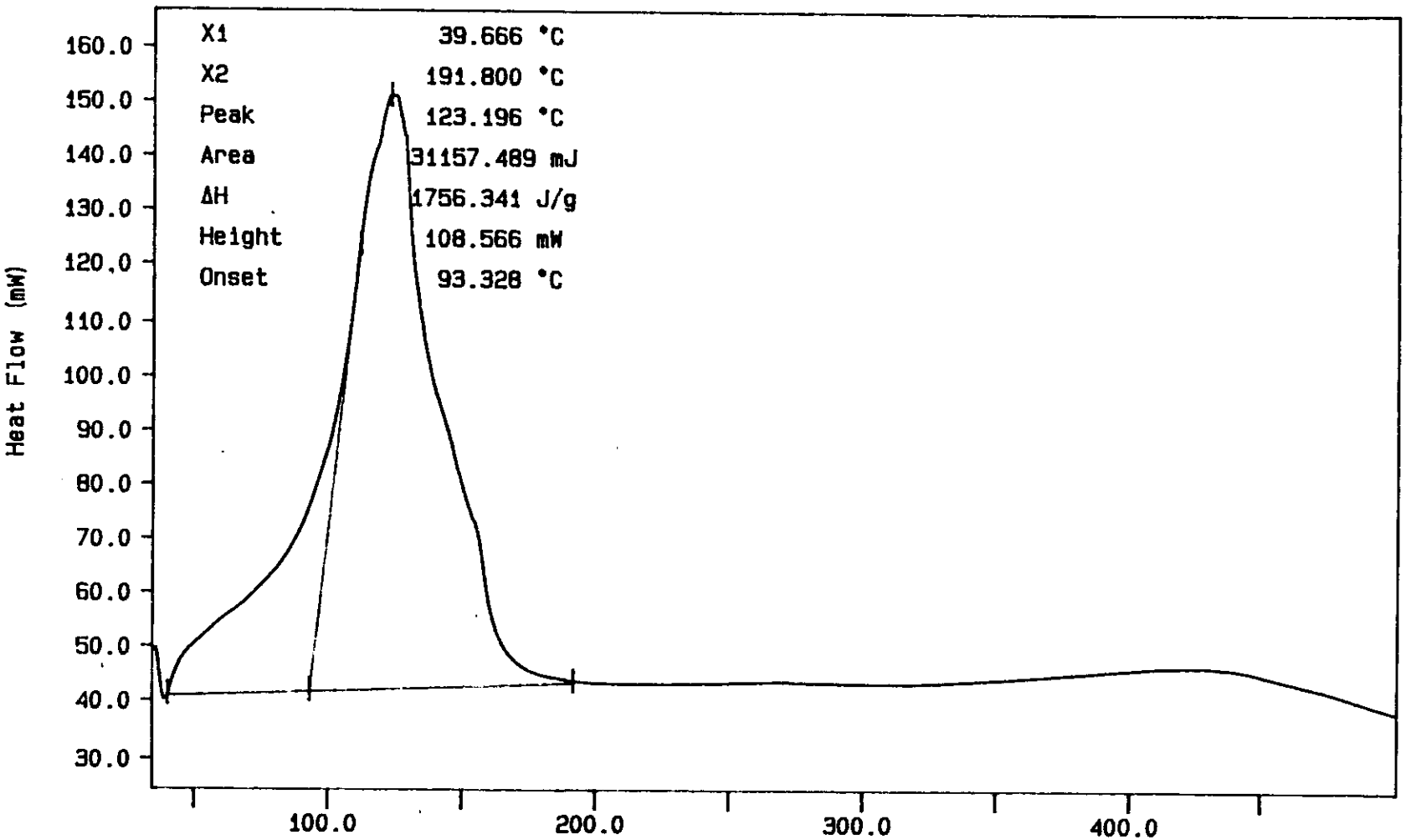
Curve 1: DSC
File info: SAM012502 Thu Jan 25 08:18:50 1996
Sample Weight: 25.280 mg
S96T000040



exotherm down, N2 purge gas
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 Jan 25 08:50:54 1996

Curve 1: DSC
File info: SAM012503 Thu Jan 25 09:46:49 1996
Sample Weight: 17.740 mg
S96T000040 DUP



exotherm down, N2 purge gas
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 Jan 25 09:48:54 1996

LABCORE Data Entry Template for Worklist# 4935

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

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

Worklist Comment: B-203 DSC RUN UNDER N2. RCJ

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				DSC-03	SOLID	28.45	27.12	N/A	Joules/g
95000228	B-203	2	SAMPLE	S96T000041	0		DSC-03	SOLID	N/A	Ø		Joules/g
95000228	B-203	3	DUP	S96T000041	0		DSC-03	SOLID	Ø	Ø	N/A	Joules/g
95000228	B-203	4	SAMPLE	S96T000042	0		DSC-03	SOLID	N/A	Ø		Joules/g
95000228	B-203	5	DUP	S96T000042	0		DSC-03	SOLID	Ø	Ø	N/A	Joules/g

Final page for worklist # 4935

See attached for signatures
Analyst Signature **Date** 1/26/96 BDV

Linda Conlin 1/26/96
Analyst Signature **Date**

Verified by Blandina Valenzuela 1/29/96

Data Entry Comments: S96T000041 produced a delta H of 1565.5 J/g at 132.4°C
S96T000042 produced a delta H of 1737.72 J/g at 122.2°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# 4935

Analyst: ADP **Instrument:** DSC0 _____ **Book #** 12N143

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

Worklist Comment: B-203 DSC RUN UNDER N2. RCJ

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	-------TEST------	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				DSC-01	SOLID			N/A	Joules/g
95000228	B-203	2	SAMPLE	S96T000041	0		DSC-01	SOLID	N/A			Joules/g
95000228	B-203	3	DUP	S96T000041	0		DSC-01	SOLID			N/A	Joules/g
95000228	B-203	4	SAMPLE	S96T000042	0		DSC-01	SOLID	N/A			Joules/g
95000228	B-203	5	DUP	S96T000042	0		DSC-01	SOLID			N/A	Joules/g

Final page for worklist # 4935

Anthony Pumuto 1-25-96

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

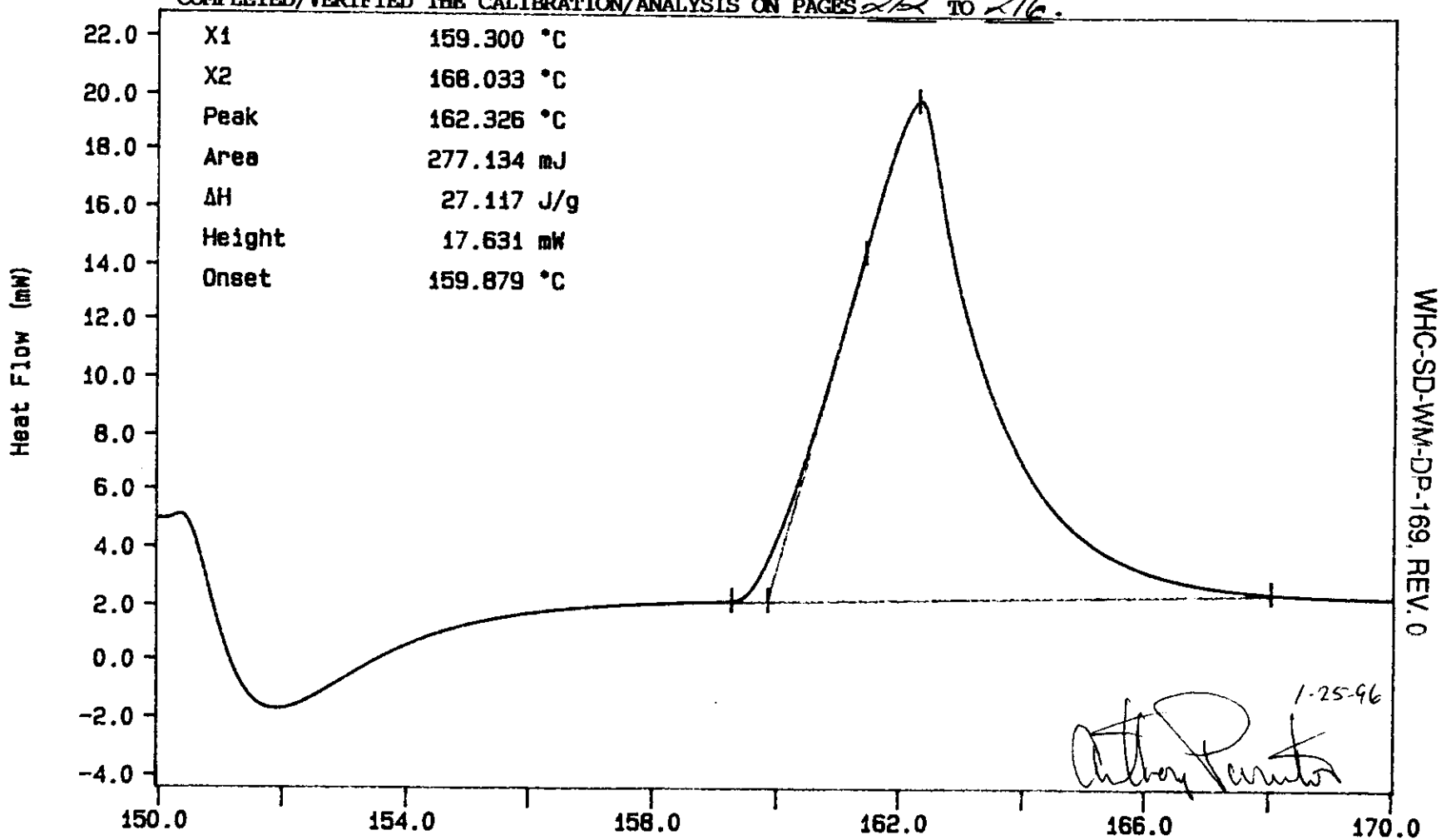
Other instrument was used. 1/29/96 BDV

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: DSC
File info: IND012502 Thu Jan 25 21:40:36 1996
Sample Weight: 10.220 mg
12N14B Indium at 10C/min

SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 212 TO 216.

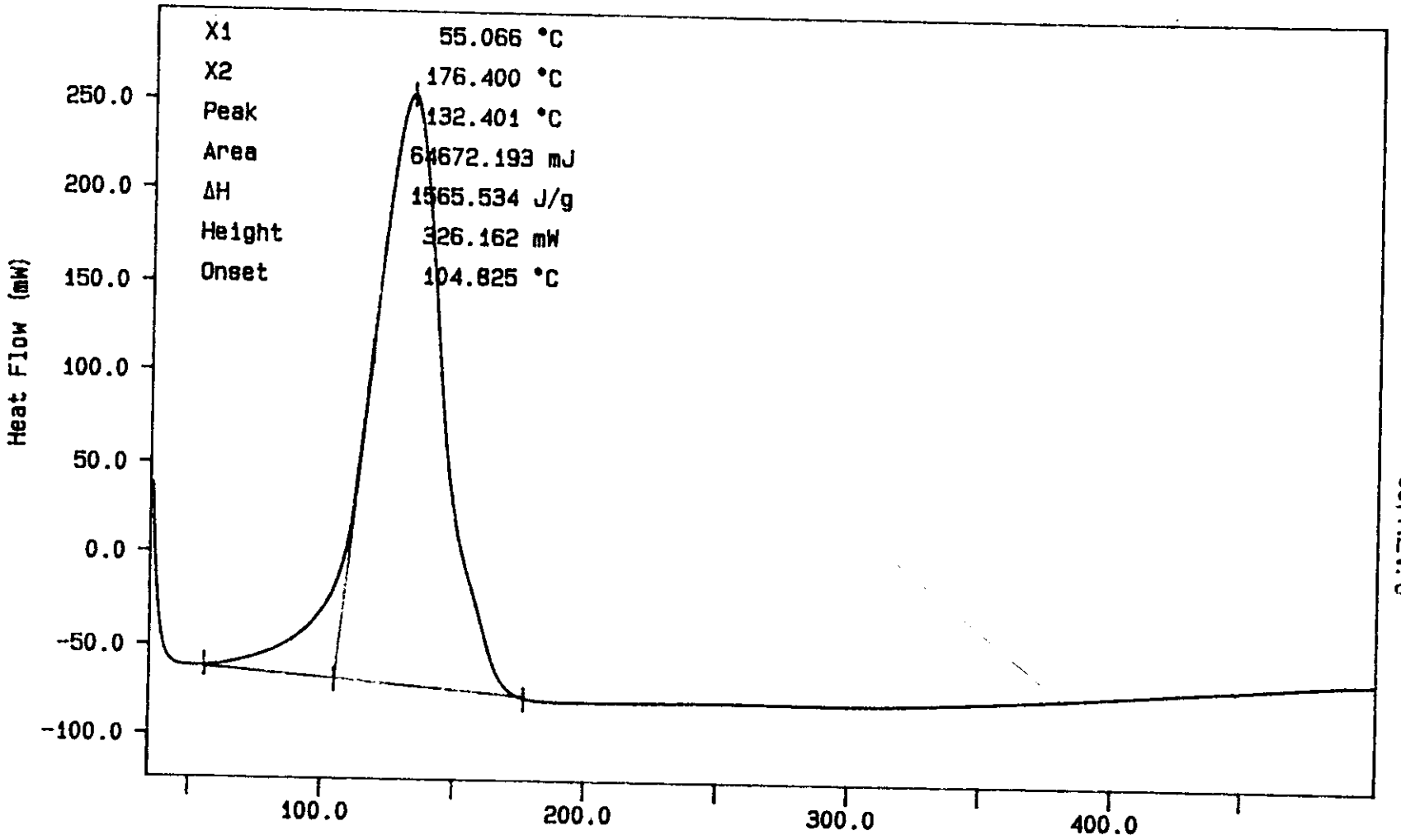


N2, EXOTHERM DOWN
TEMP1: 150.0 C TIME1: 0.0 min RATE1: 10.0 C/min
TEMP2: 170.0 C

AD PURINTON
PERKIN-ELMER
7 Series Thermal Analysis System
Thu Jan 25 21:51:56 1996

WHC-SD-WM-DP-169, REV. 0

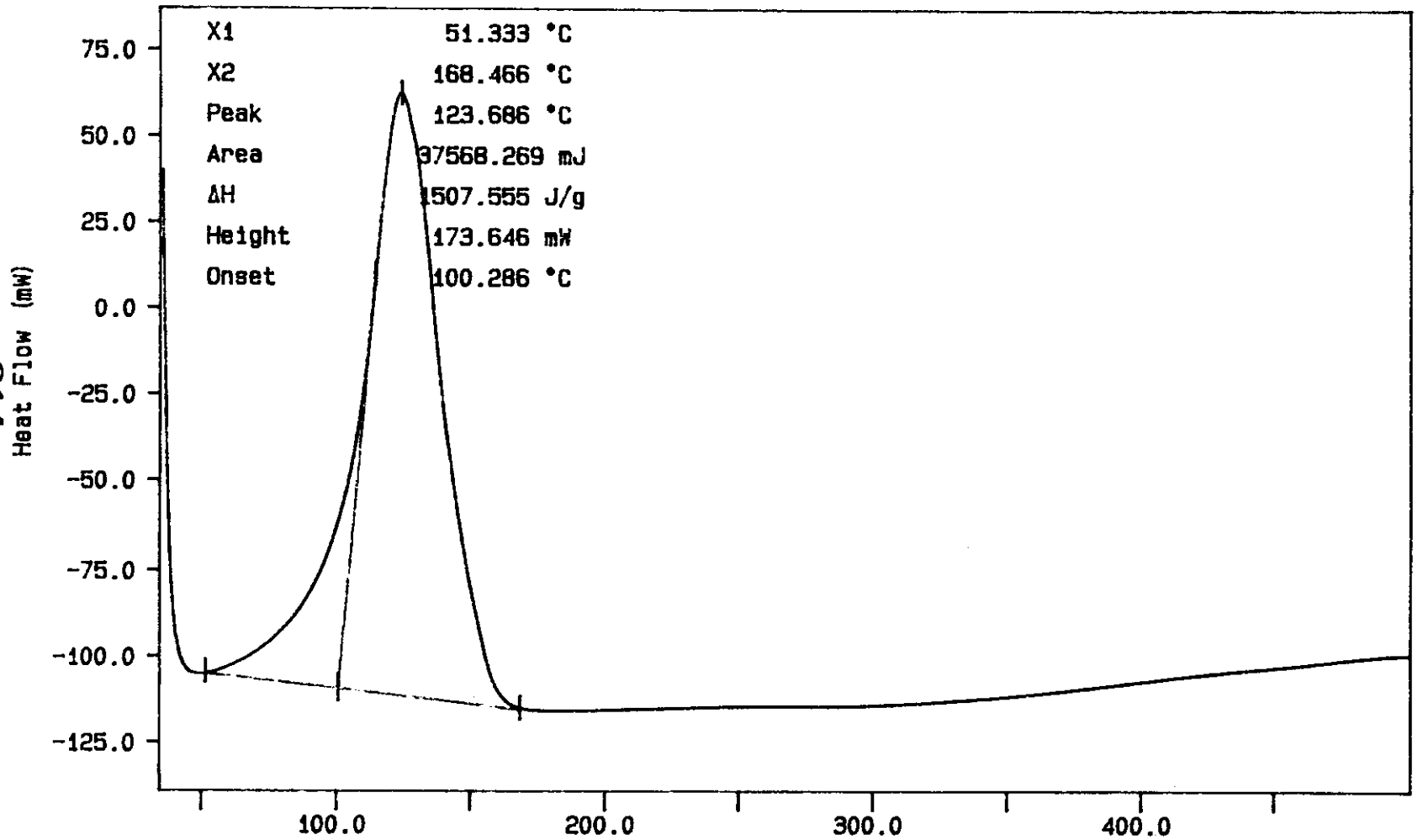
Curve 1: DSC
File info: SAM012512 Fri Jan 26 01:36:26 1996
Sample Weight: 41.310 mg
S96T000041 SAM



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
Fri Jan 26 01:38:48 1996

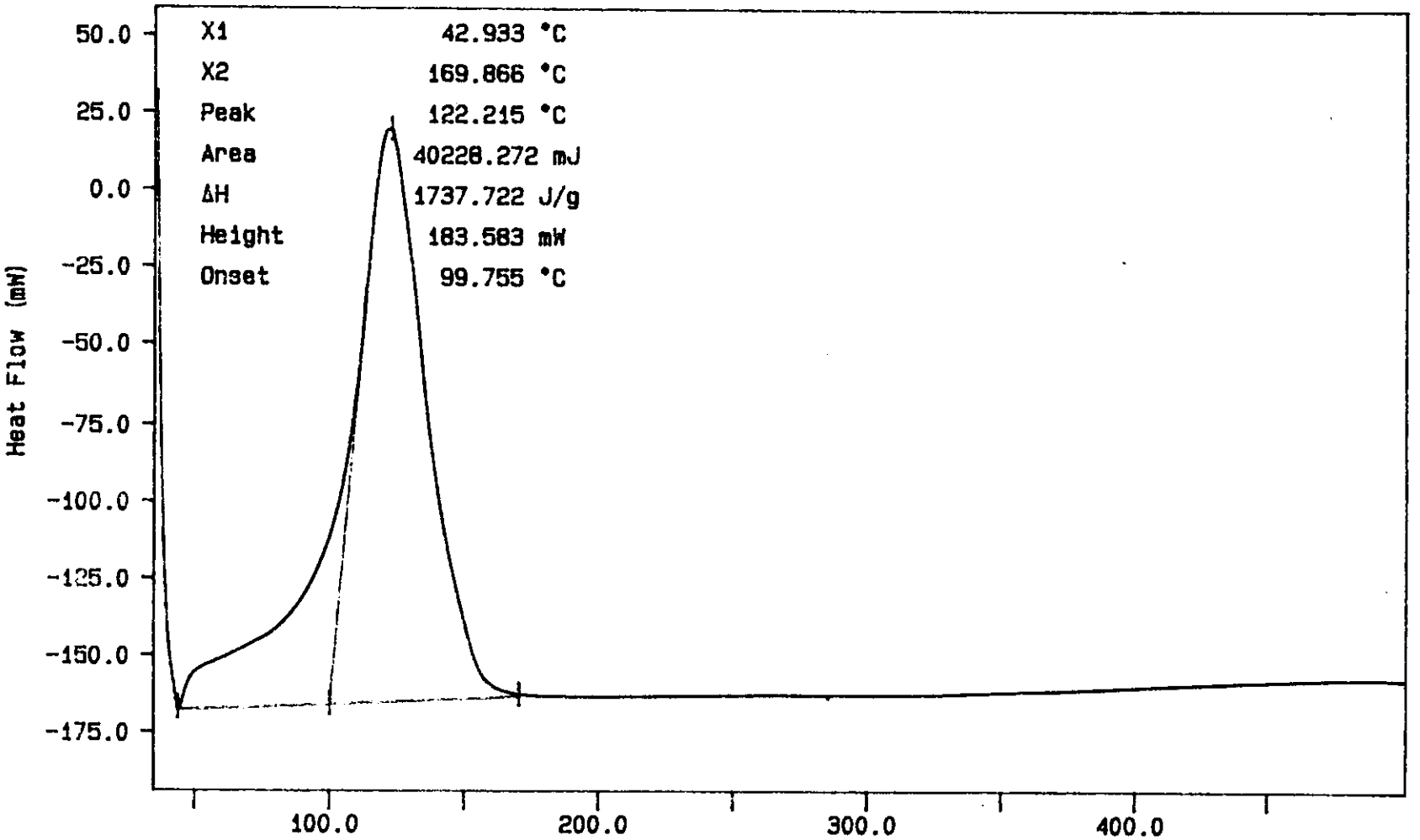
Curve 1: DSC
File info: SAM012513 Fri Jan 26 02:39:52 1996
Sample Weight: 24.920 mg
S96T000041 DUP



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
Fri Jan 26 02:40:29 1996

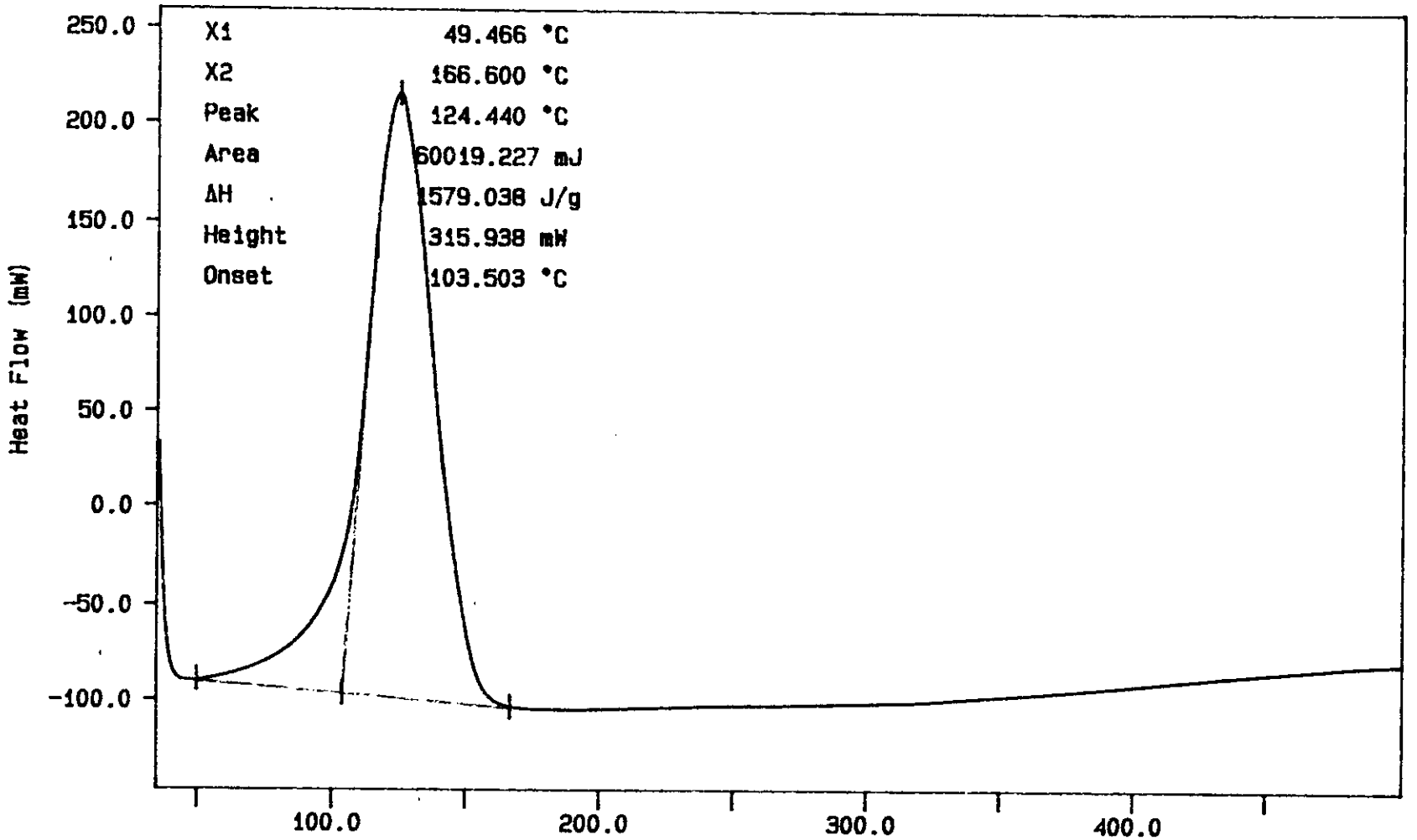
Curve 1: DSC
File info: SAM012514 Fri Jan 26 03:31:59 1996
Sample Weight: 23.150 mg
S96T000042 SAM



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
Fri Jan 26 04:35:09 1996

Curve 1: DSC
File info: SAM012515 Fri Jan 26 05:30:17 1996
Sample Weight: 38.010 mg
S96T000042 DUP



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
Fri Jan 26 05:59:10 1996

LABCORE Data Entry Template for Worklist# 5133

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

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

Worklist Comment: Please run B-203 DSCs under N2. bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				DSC-03	SOLID	28.45	27.16	N/A	Joules/g
95000228	B-203	2	SAMPLE	S96T000043	0		DSC-03	SOLID	N/A	Ø		Joules/g
95000228	B-203	3	DUP	S96T000043	0		DSC-03	SOLID	Ø	Ø	N/A	Joules/g

Final page for worklist # 5133

See attached for signatures
Analyst Signature **Date** 1/26/96 BDN

Linda Conlin 1/26/96
Analyst Signature **Date**

Verified by Blandina Valenzuela 1/29/96

Data Entry Comments: S96T000043 produced an endotherm at 132.4°C with a delta H of 1639.7 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# 5133

Analyst: ADP **Instrument:** DSC0 _____ **Book #** 12014B

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

Worklist Comment: Please run B-203 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
95000228	B-203	2	SAMPLE	S96T000043	0		DSC-01	SOLID	N/A			Joules/g
95000228	B-203	3	DUP	S96T000043	0		DSC-01	SOLID			N/A	Joules/g

Final page for worklist # 5133

Anthony Pennington 1-25-96
Analyst Signature **Date**

Analyst Signature **Date**

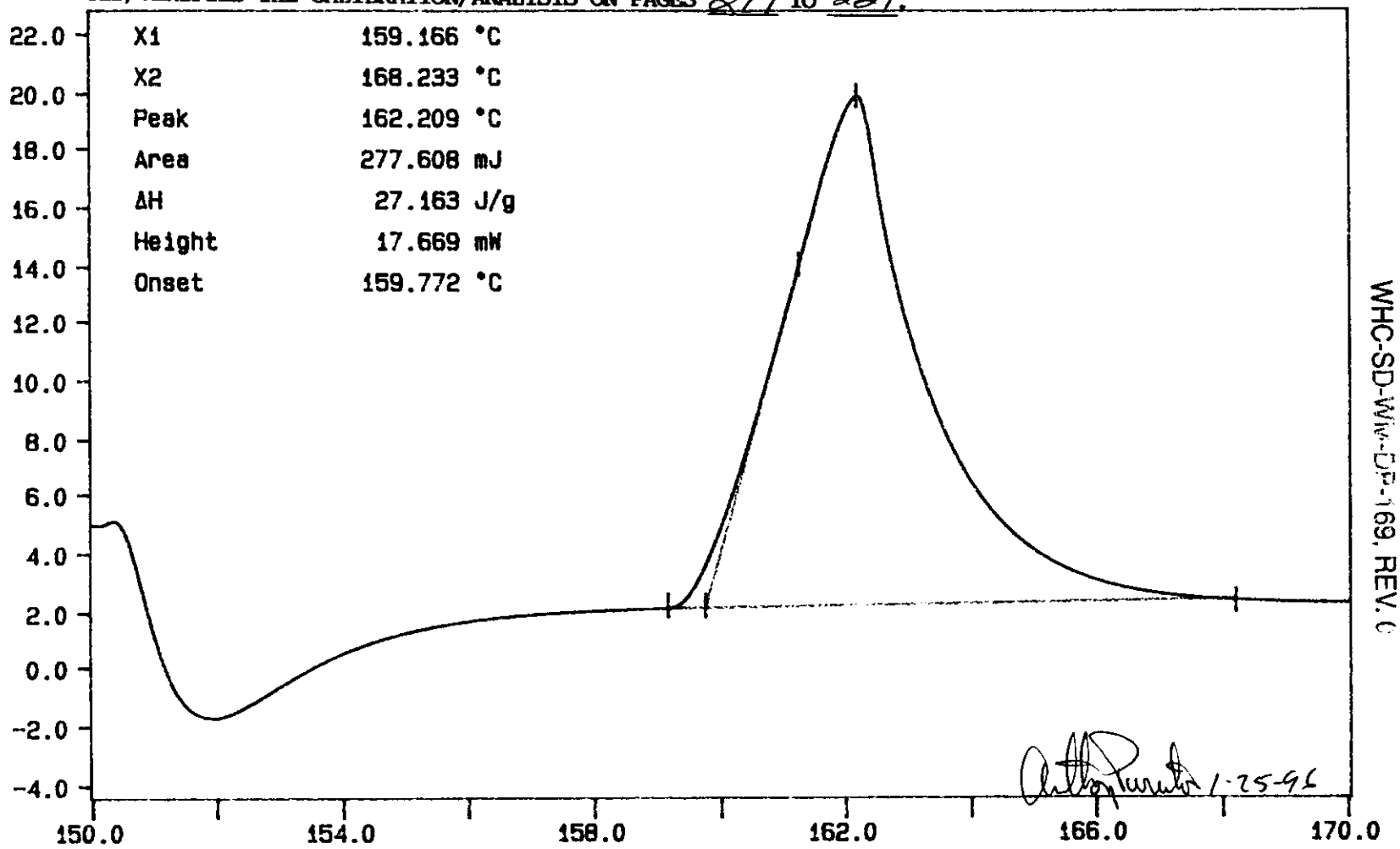
Other instrument was used. 1/29/96

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.

Curve 1: DSC
File info: IND012503 Thu Jan 25 21:54:39 1996
Sample Weight: 10.220 mg
12N14B Indium at 10C/min

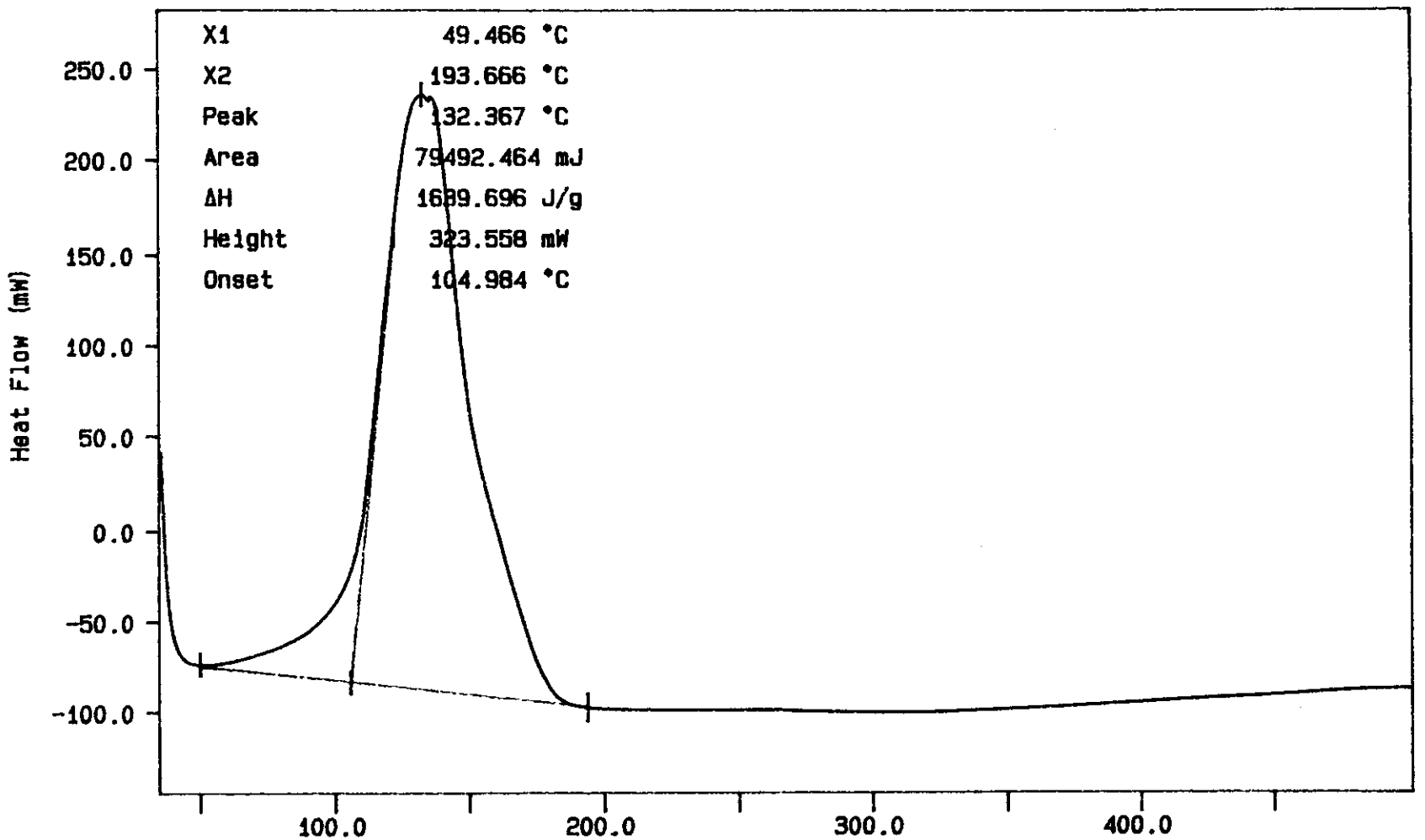
SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 219 TO 221.



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
Thu Jan 25 21:58:56 1996

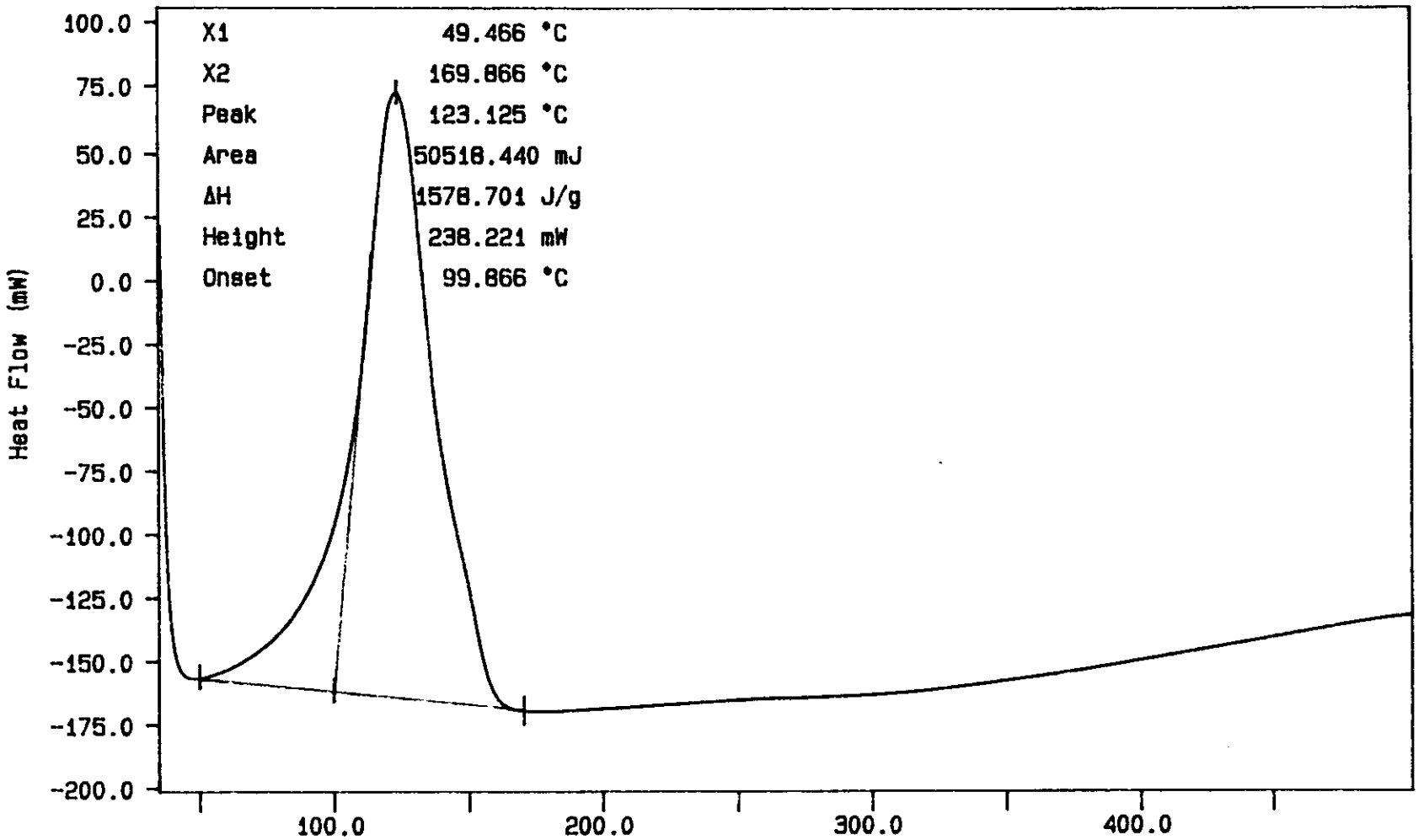
Curve 1: DSC
File info: SAM012510 Thu Jan 25 22:57:27 1996
Sample Weight: 48.480 mg
S96T000043 SAM



exotherm down, N2 purge gas
TEMP1: 95.0 C TIME1: 0.0 min RATE1: 10.0 C/min
TEMP2: 500.0 C

AD PURINTON
PERKIN-ELMER
7 Series Thermal Analysis System
Thu Jan 25 23:15:00 1996

Curve 1: DSC
File info: SAM012511 Fri Jan 26 00:24:02 1996
Sample Weight: 32.000 mg
S96T000043 DUP



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
Fri Jan 26 00:37:43 1996

LABCORE Data Entry Template for Worklist# 5325

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

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

Worklist Comment: Please run B-203 DSCs under N2. bdv

GROUP	PROJECT	S TYPE	SAMPLE#	R	A	-------TEST------	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD				DSC-01	LIQUID	28.45	30.9*	N/A	Joules/g
95000174	B-203	2 SAMPLE	S95T003958	1		DSC-01	LIQUID	N/A	Ø		Joules/g
95000174	B-203	3 DUP	S95T003958	1		DSC-01	LIQUID	Ø	Ø	N/A	Joules/g
95000174	B-203	4 TRIPL	S95T003958	1		DSC-01	LIQUID	Ø	Ø	N/A	Joules/g

Final page for worklist # 5325

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

R.E. Wright 2/2/96
Analyst Signature **Date**

Verified by Blandina Valenzuela 2/5/96

Data Entry Comments: Sample produced an endotherm at 111.8°C with a delta H of 1601.1 J/g

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

LABCORE Data Entry Template for Worklist# 5325

Analyst: RG **Instrument:** DSC0 **Book #** 12N14-B

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

Worklist Comment: Please run B-203 DSCs under N2. bdv

GROUP	PROJECT	S TYPE	SAMPLE#	R	A	-------TEST------	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD				DSC-01	LIQUID			N/A	Joules/g
95000174	B-203	2 SAMPLE	S95T003958	1		DSC-01	LIQUID	N/A			Joules/g
95000174	B-203	3 DUP	S95T003958	1		DSC-01	LIQUID			N/A	Joules/g
		Trip	S95T003958								

Final page for worklist # 5325

Rae Ann Green 1-31-96
Analyst Signature **Date**

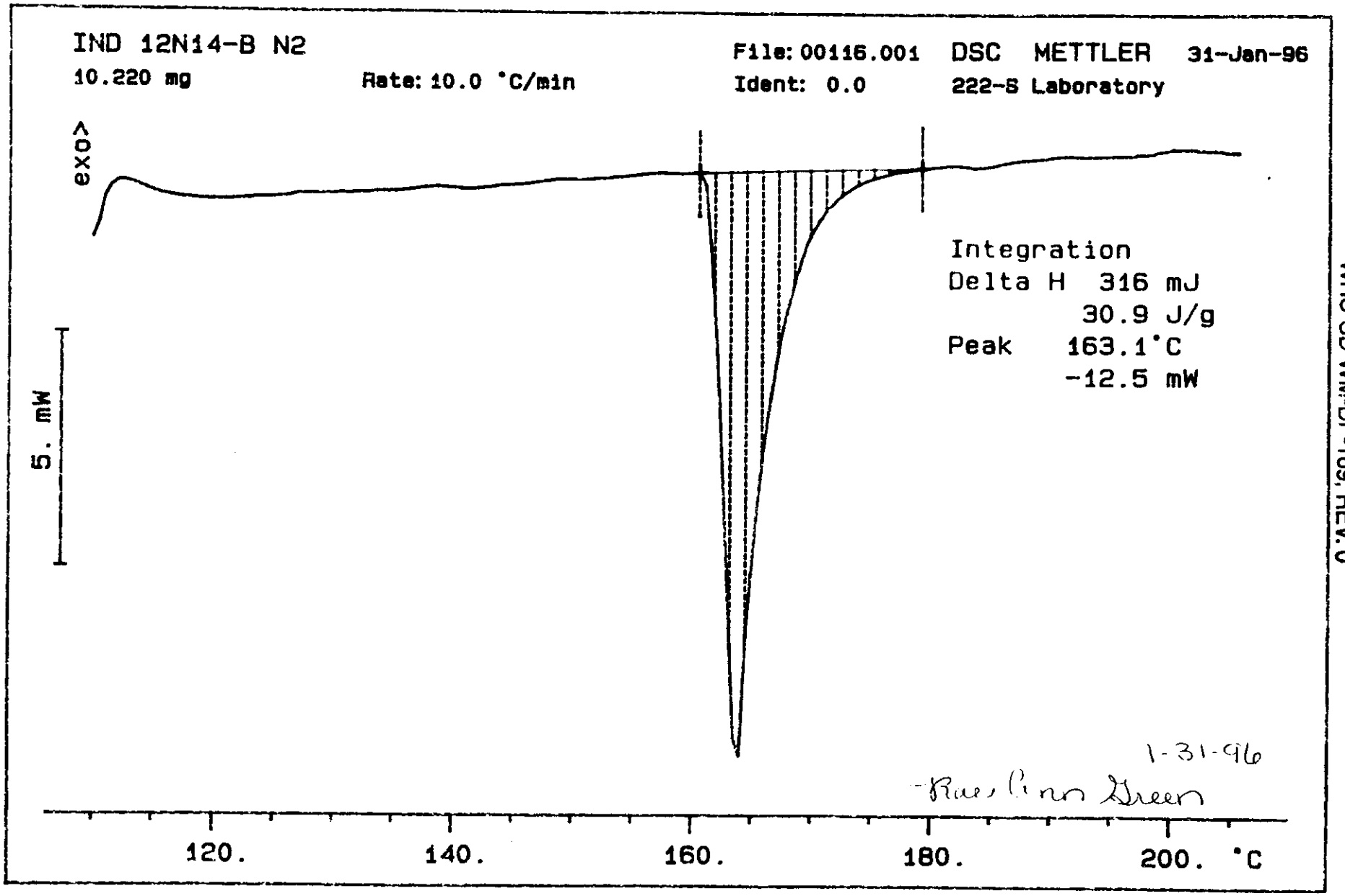
Analyst Signature **Date**

Rae Ann Green 2-1-96

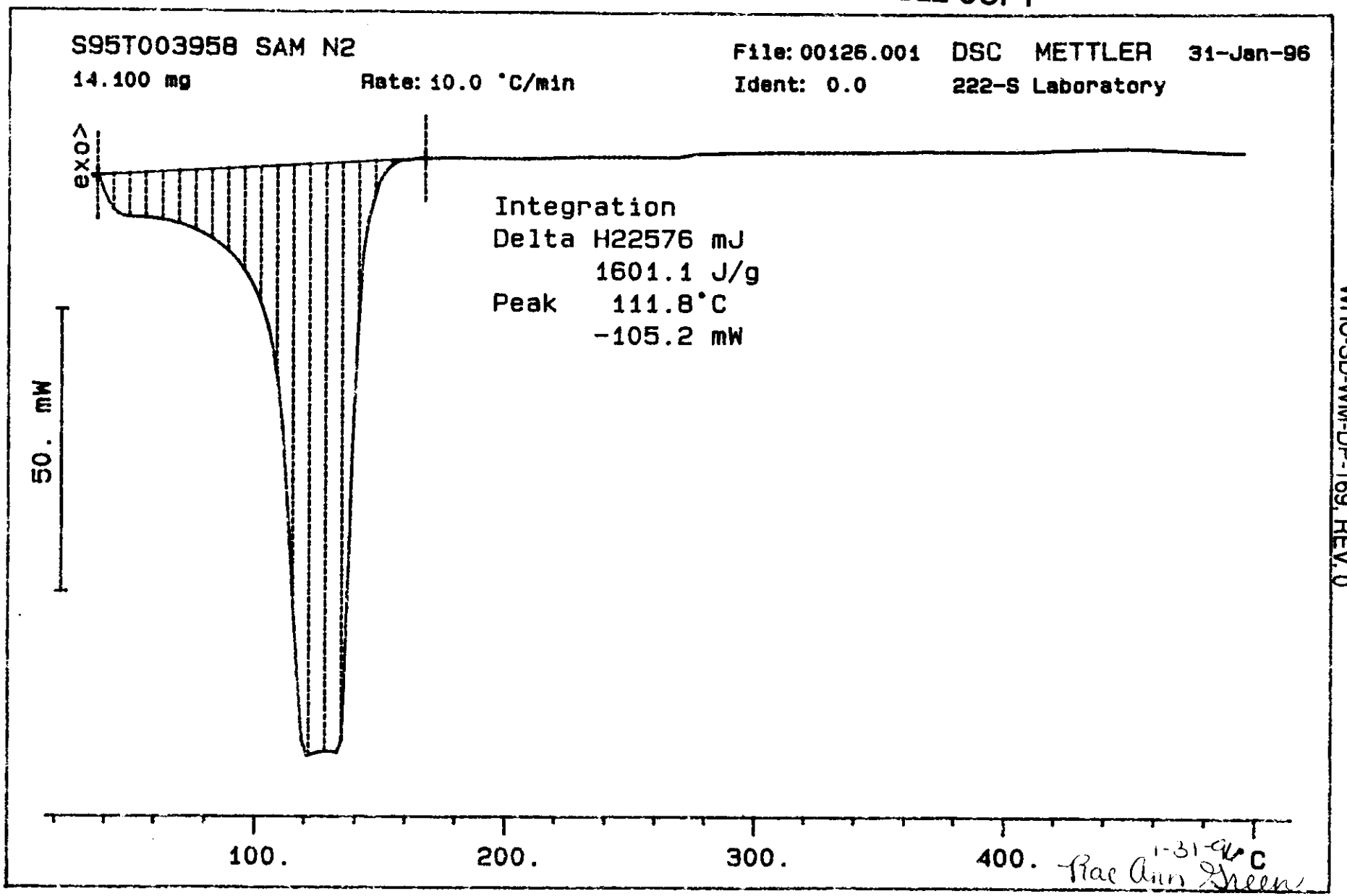
Data Entry Comments:

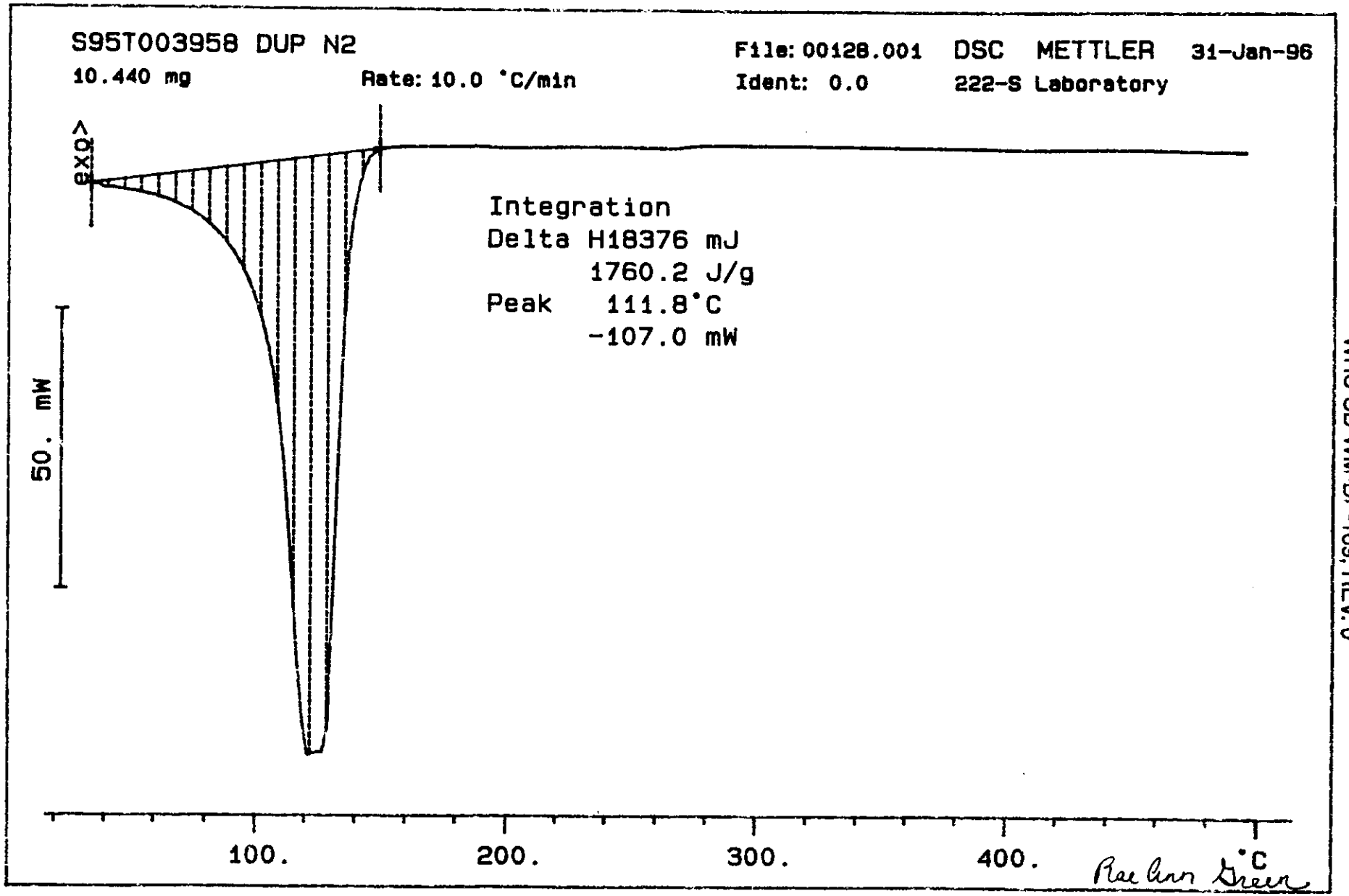
Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

BEST AVAILABLE COPY



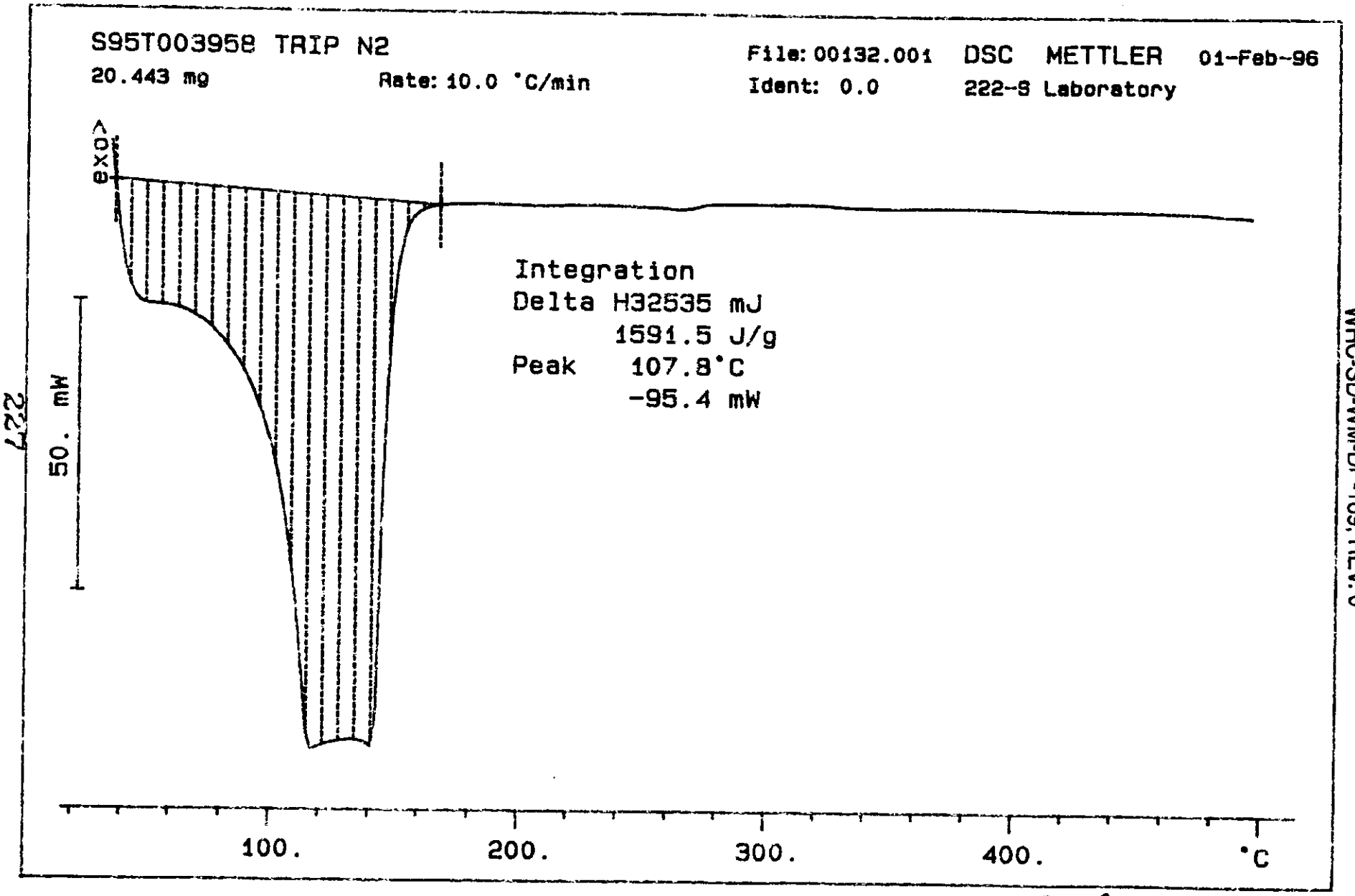
BEST AVAILABLE COPY





Rachel Green
1-31-96

BEST AVAILABLE COPY



Rae Ann Green
2-1-96

LABCORE Data Entry Template for Worklist# 4556

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

Method: LA-560-112 Rev/Mod 3-1

Worklist Comment: B-203 TGAs. Please run under N2. bdv

GROUP	PROJECT	S TYPE	SAMPLE#	R	A	-------TEST------	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD				TGA-01	LIQUID	59.74	60.39	N/A	%
95000173	B-203	2 SAMPLE	S95T003833	0		TGA-01	LIQUID	N/A	93.71		%
95000173	B-203	3 DUP	S95T003833	0		TGA-01	LIQUID	93.71	93.37	N/A	%

Final page for worklist # 4556

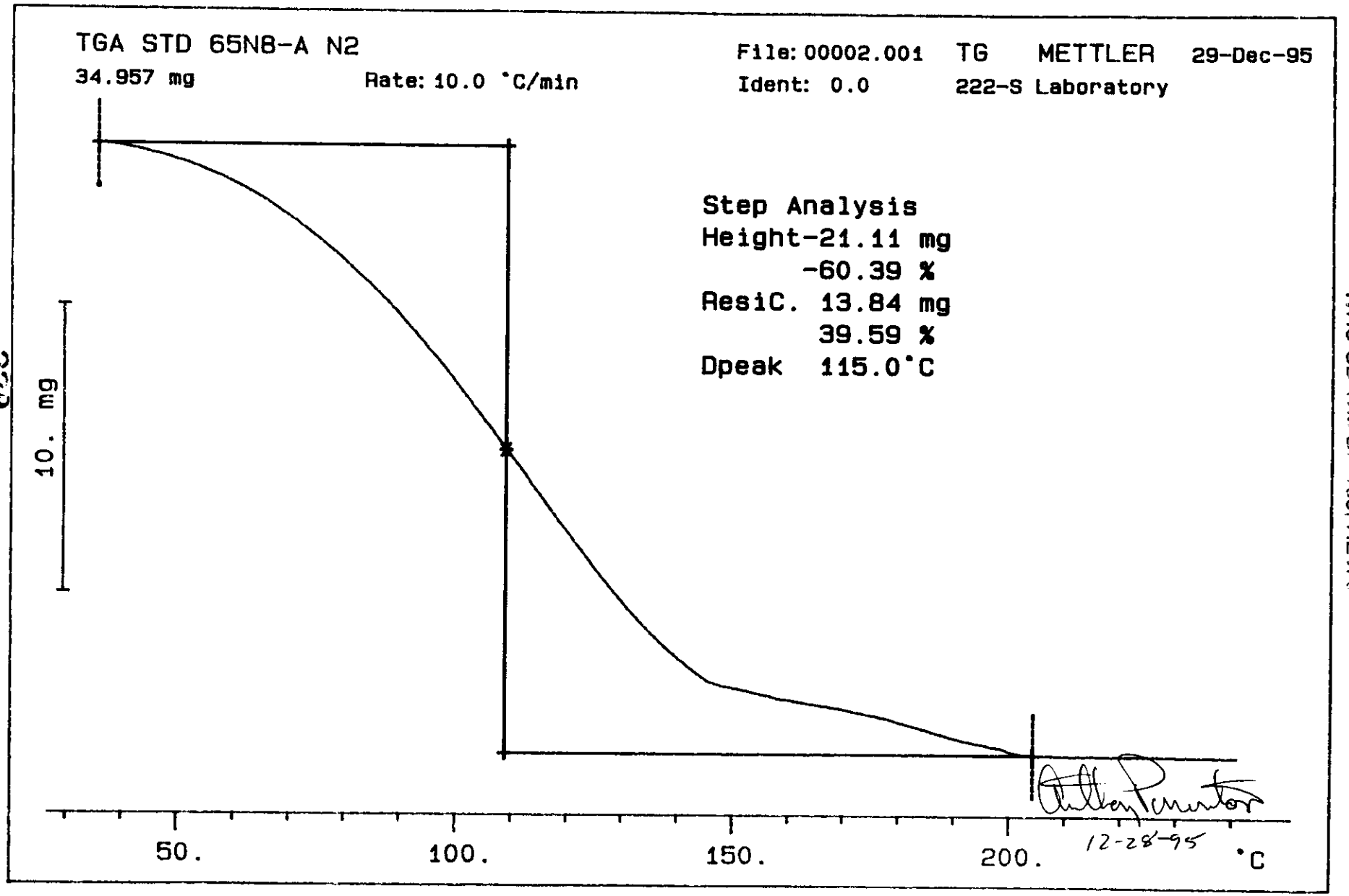
Arthur Pursuto 12-28-95
Analyst Signature **Date**

Frank Cordini 12-31-95
Analyst Signature **Date**

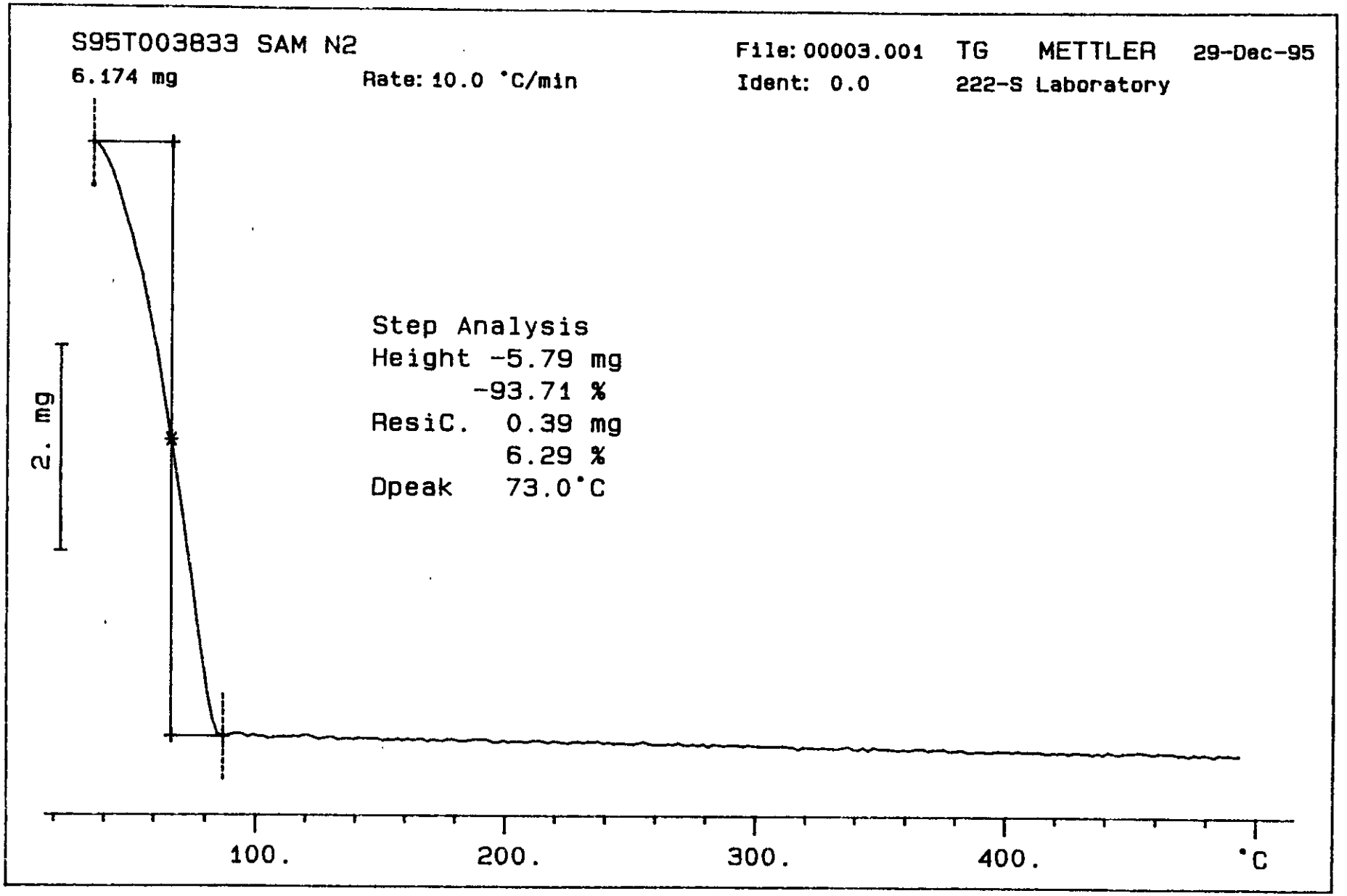
Data Entry Comments:

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.

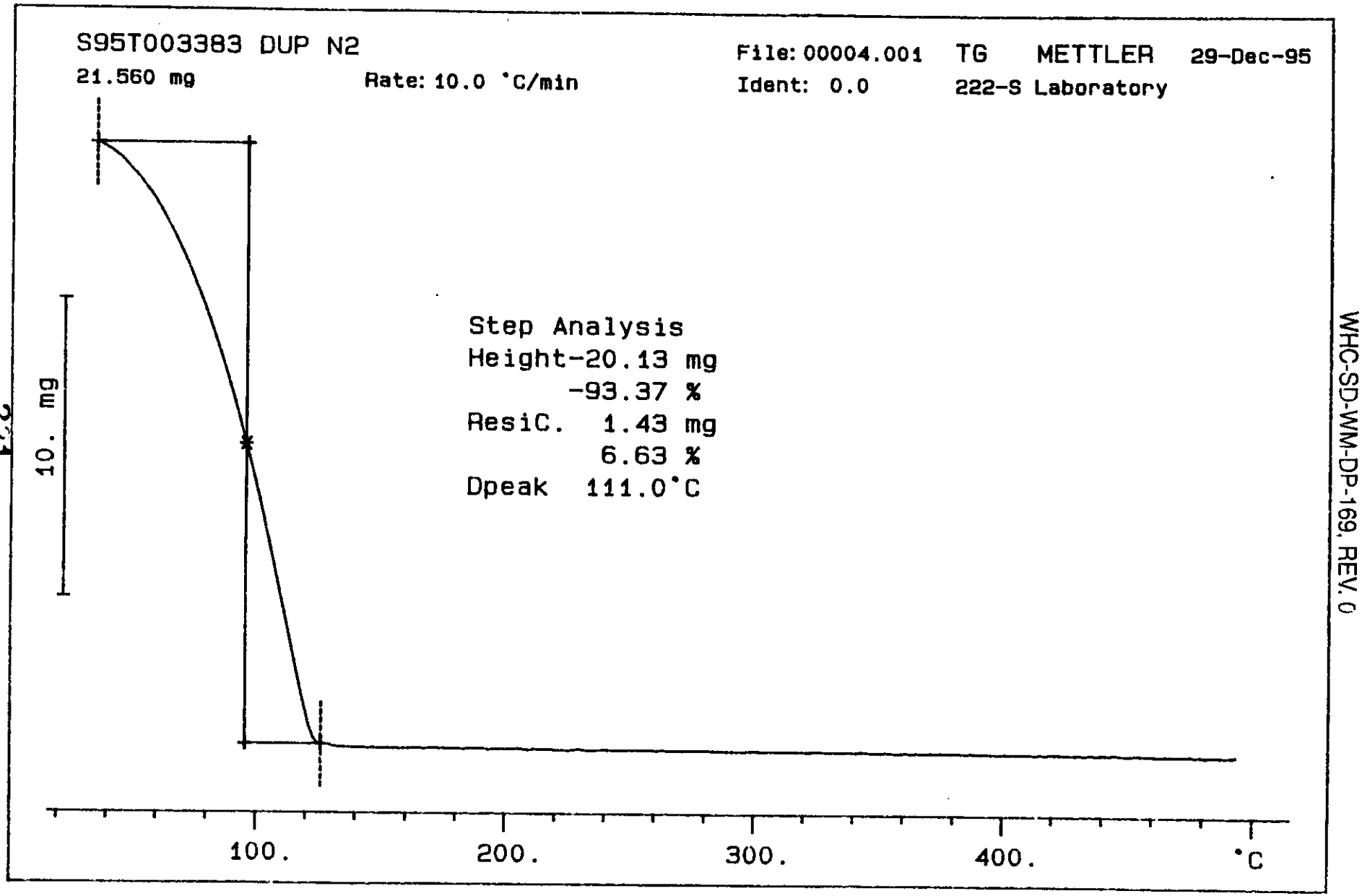
SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 229 TO 231.



BEST AVAILABLE COPY



BEST AVAILABLE COPY



LABCORE Data Entry Template for Worklist# 4660

Analyst: LSMcCown **Instrument:** TGA0 1 **Book #** 6518A

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

Worklist Comment: Please run B-203 TGAs under N2. bdv

GROUP	PROJECT	S TYPE	SAMPLE#	R	A	-------TEST------	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD				TGA-01	SOLID	59.74	~~63~~ 59.96 1/11/96	~~N/A~~ N/A	%
95000174	B-203	2 SAMPLE	S95T004039	0		TGA-01	SOLID	N/A	81.18		%
95000174	B-203	3 DUP	S95T004039	0		TGA-01	SOLID	81.18	80.88	N/A	%
95000174	B-203	4 SAMPLE	S95T004040	0		TGA-01	SOLID	N/A	77.91		%
95000174	B-203	5 DUP	S95T004040	0		TGA-01	SOLID	77.91	79.02	N/A	%

Final page for worklist # 4660

LSMcCown 1/5/96
Analyst Signature **Date**

Linda Conlin 1/12/96
Analyst Signature **Date**

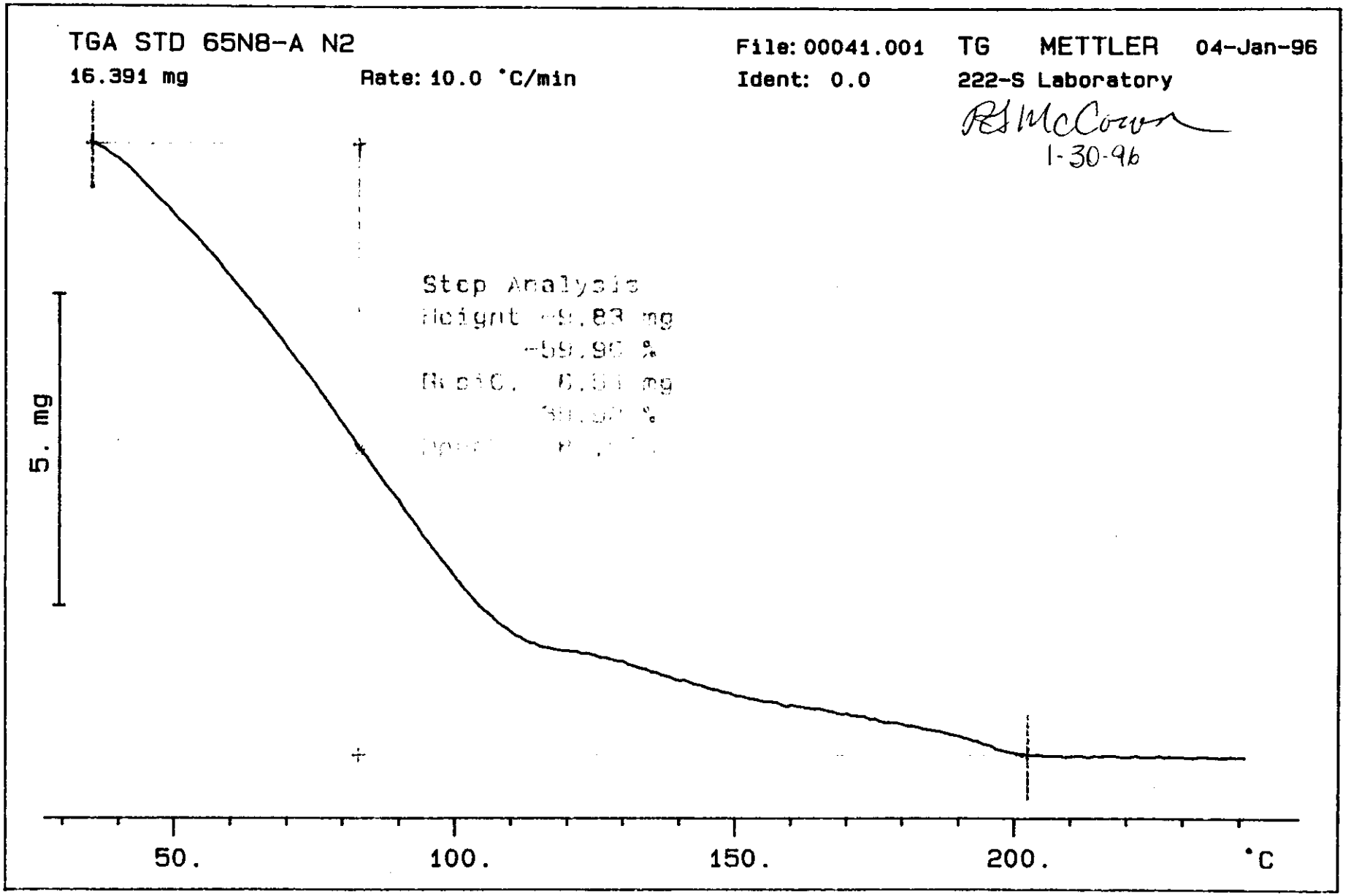
Verified by Blandina Valenzuela
1/12/96

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 233 TO 237.

BEST AVAILABLE COPY



S95T004039 SAM N2

51.482 mg

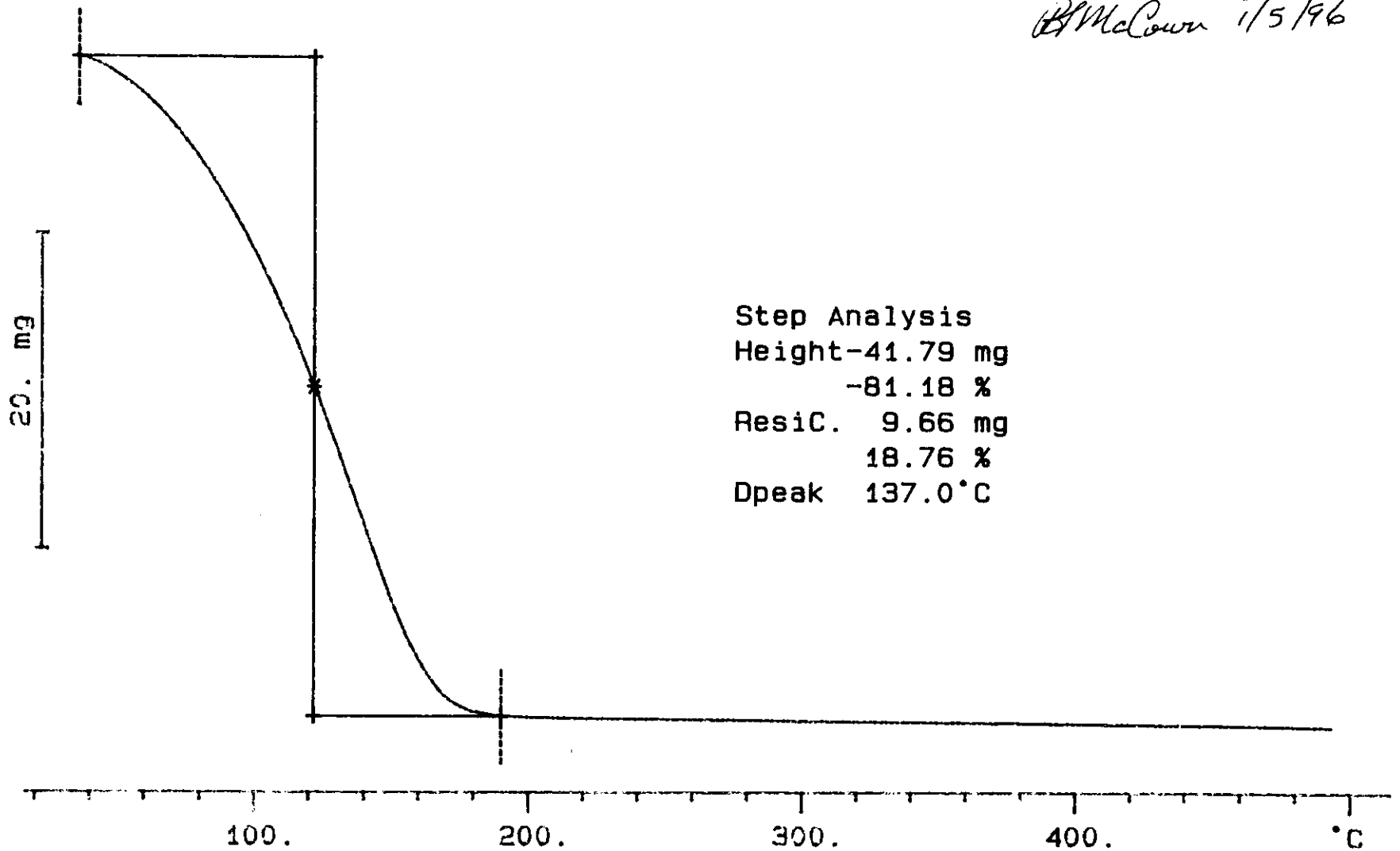
Rate: 10.0 °C/min

File: 00049.001 TG METTLER 05-Jan-96

Ident: 0.0

222-S Laboratory

B McCown 1/5/96



Step Analysis

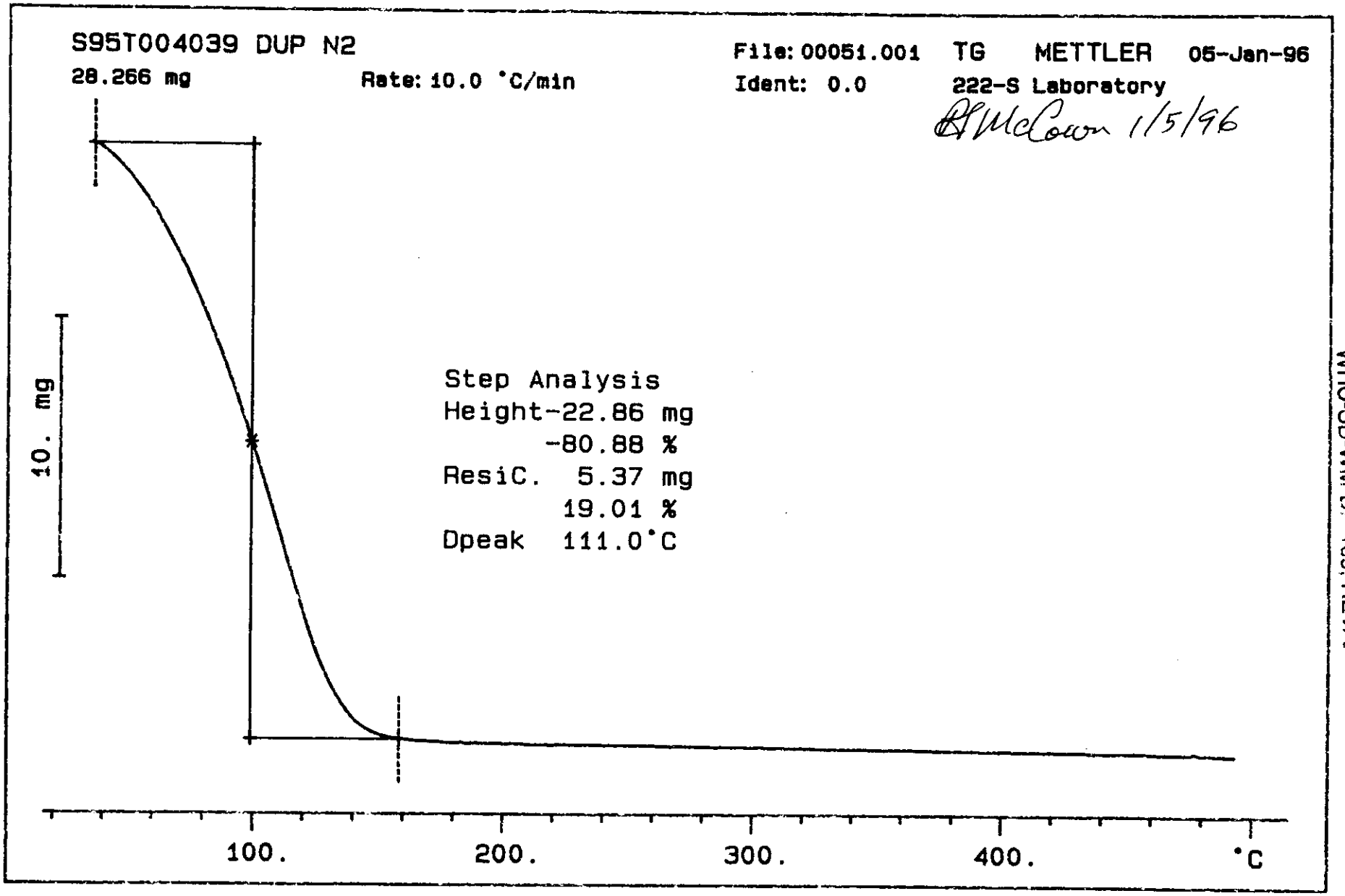
Height -41.79 mg

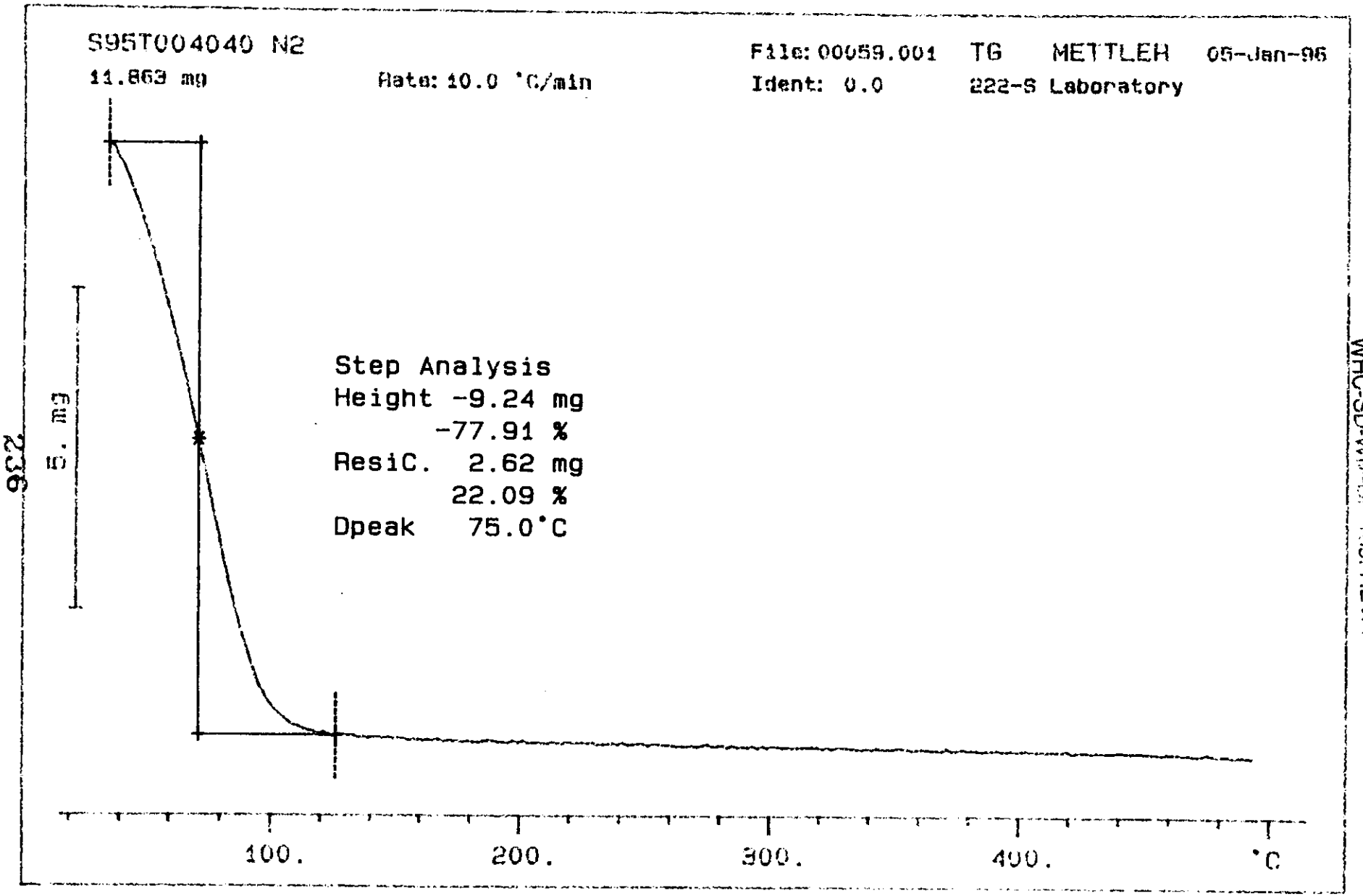
-81.18 %

ResiC. 9.66 mg

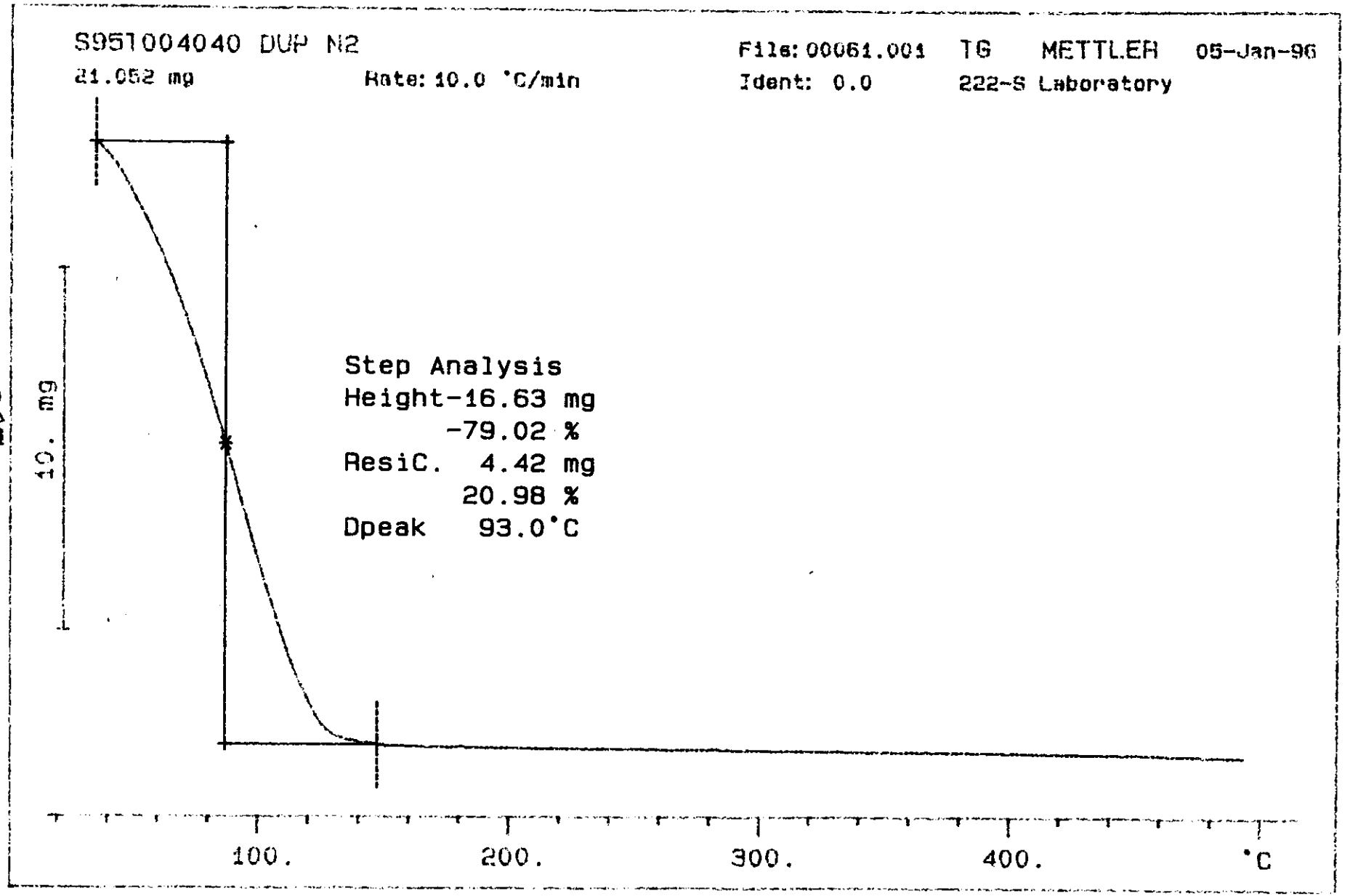
18.76 %

Dpeak 137.0°C


S95T004039 DUP N2
28.266 mg
Rate: 10.0 °C/min
File: 00051.001
TG METTLER 05-Jan-96
Ident: 0.0
222-S Laboratory
R McCown 1/5/96
10. mg
Step Analysis
Height -22.86 mg
-80.88 %
ResiC. 5.37 mg
19.01 %
Dpeak 111.0°C
100.
200.
300.
400.
°C


S95T004040 N2
11.863 mg
Rate: 10.0 °C/min
File: 00059.001 TG METTLER 05-Jan-96
Ident: 0.0 222-S Laboratory
Step Analysis
Height -9.24 mg
-77.91 %
ResiC. 2.62 mg
22.09 %
Dpeak 75.0°C
5 mg
100.
200.
300.
400.
°C

BEST AVAILABLE COPY



LABCORE Data Entry Template for Worklist# 4661

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

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

Worklist Comment: Please run B-203 TGAs under N2. bdv

GROUP	PROJECT	S TYPE	SAMPLE#	R	A	-------TEST------	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD				TGA-01	SOLID	59.74	60.10	N/A	%
95000174	B-203	2 SAMPLE	S95T004041	0		TGA-01	SOLID	N/A	77.84		%
95000174	B-203	3 DUP	S95T004041	0		TGA-01	SOLID	77.84	76.91	N/A	%
95000174	B-203	4 SAMPLE	S95T004042	0		TGA-01	SOLID	N/A	79.88		%
95000174	B-203	5 DUP	S95T004042	0		TGA-01	SOLID	79.88	80.03	N/A	%

Final page for worklist # 4661

SMFulton 1-5-96
Analyst Signature **Date**

Gary Hammond 1-9-96
Analyst Signature **Date**

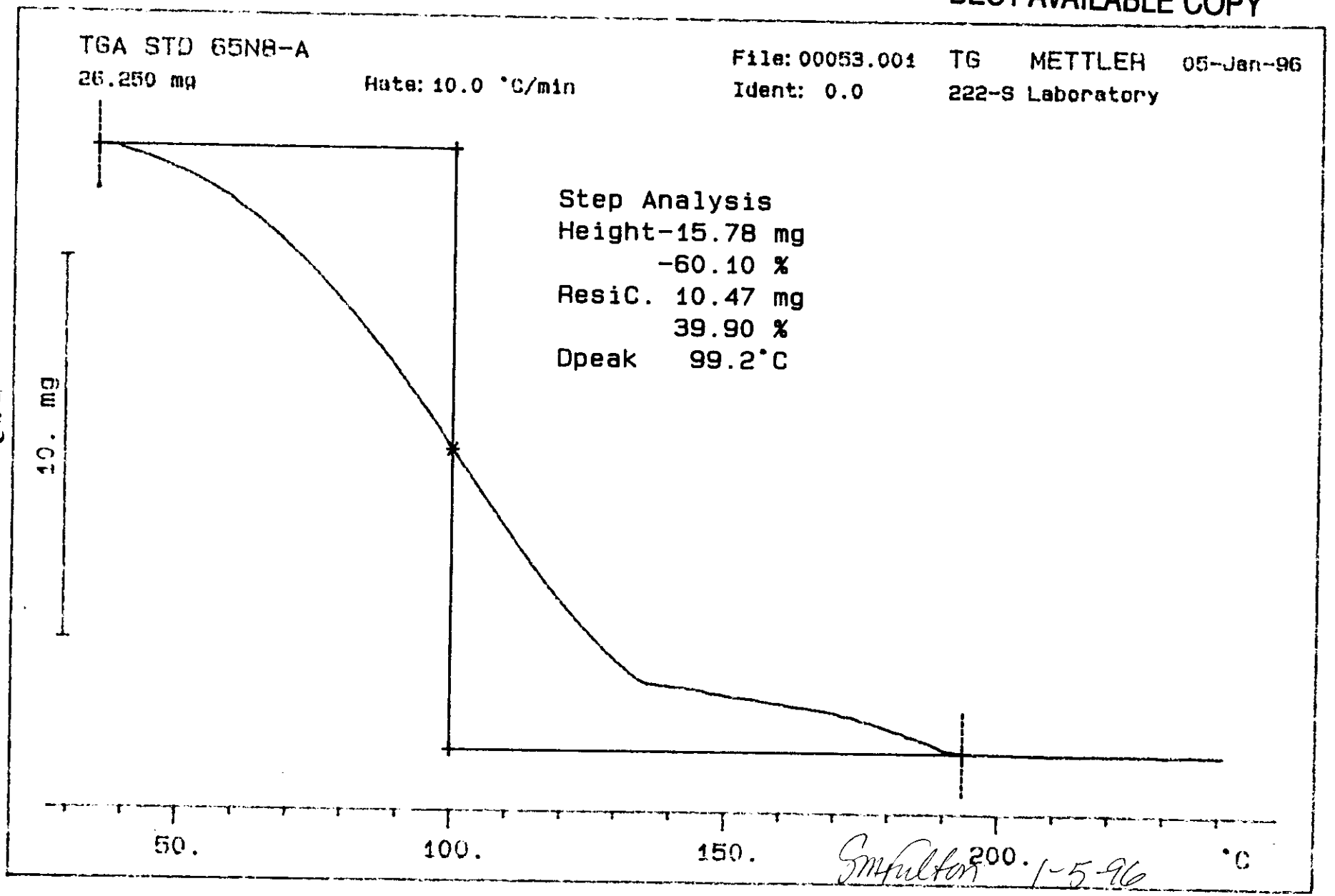
Verified by Blandina Valenzuela
1-11-96

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.

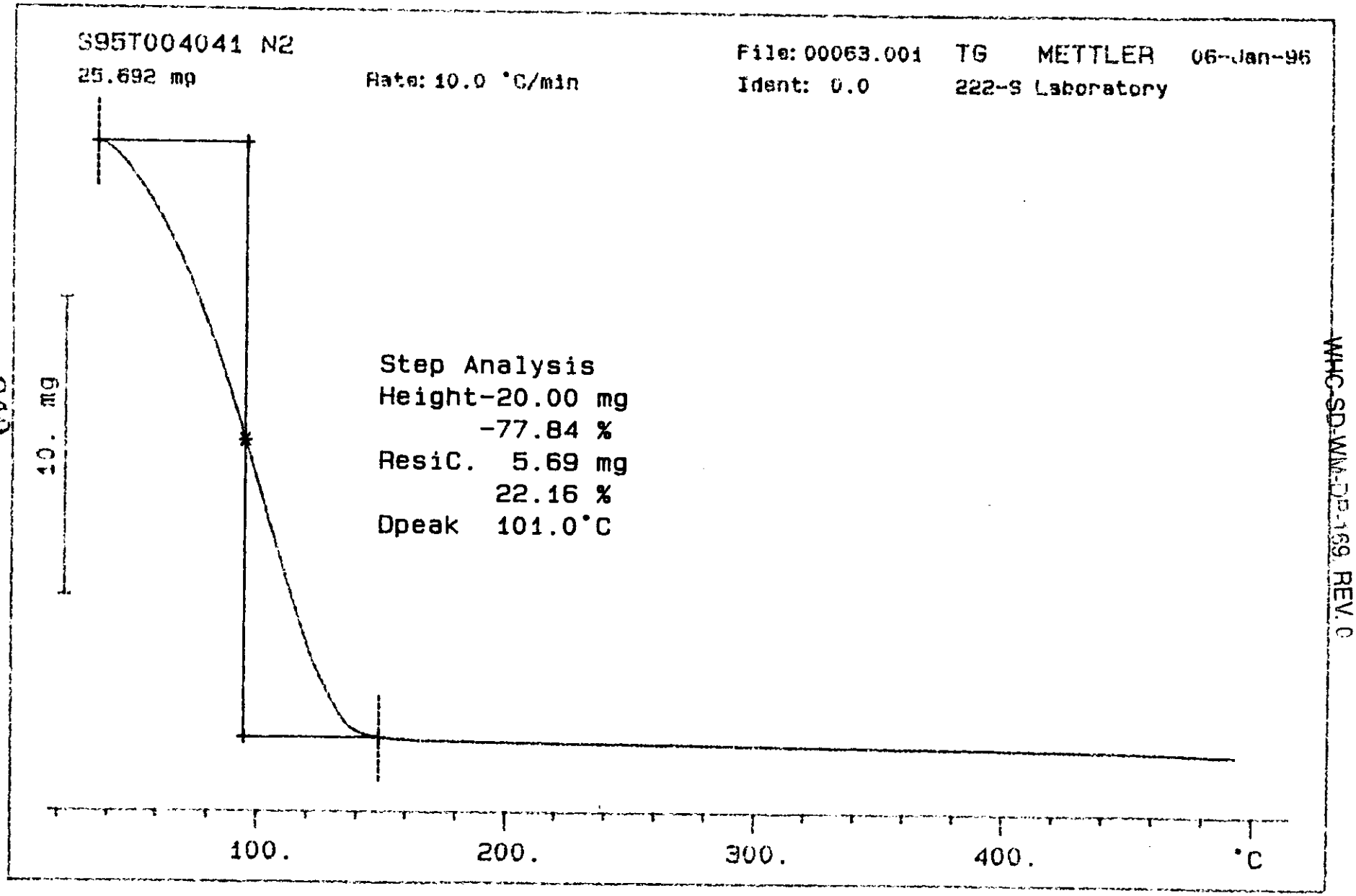
SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 239 TO 243.

BEST AVAILABLE COPY



S M Fulton 1-5-96

BEST AVAILABLE COPY



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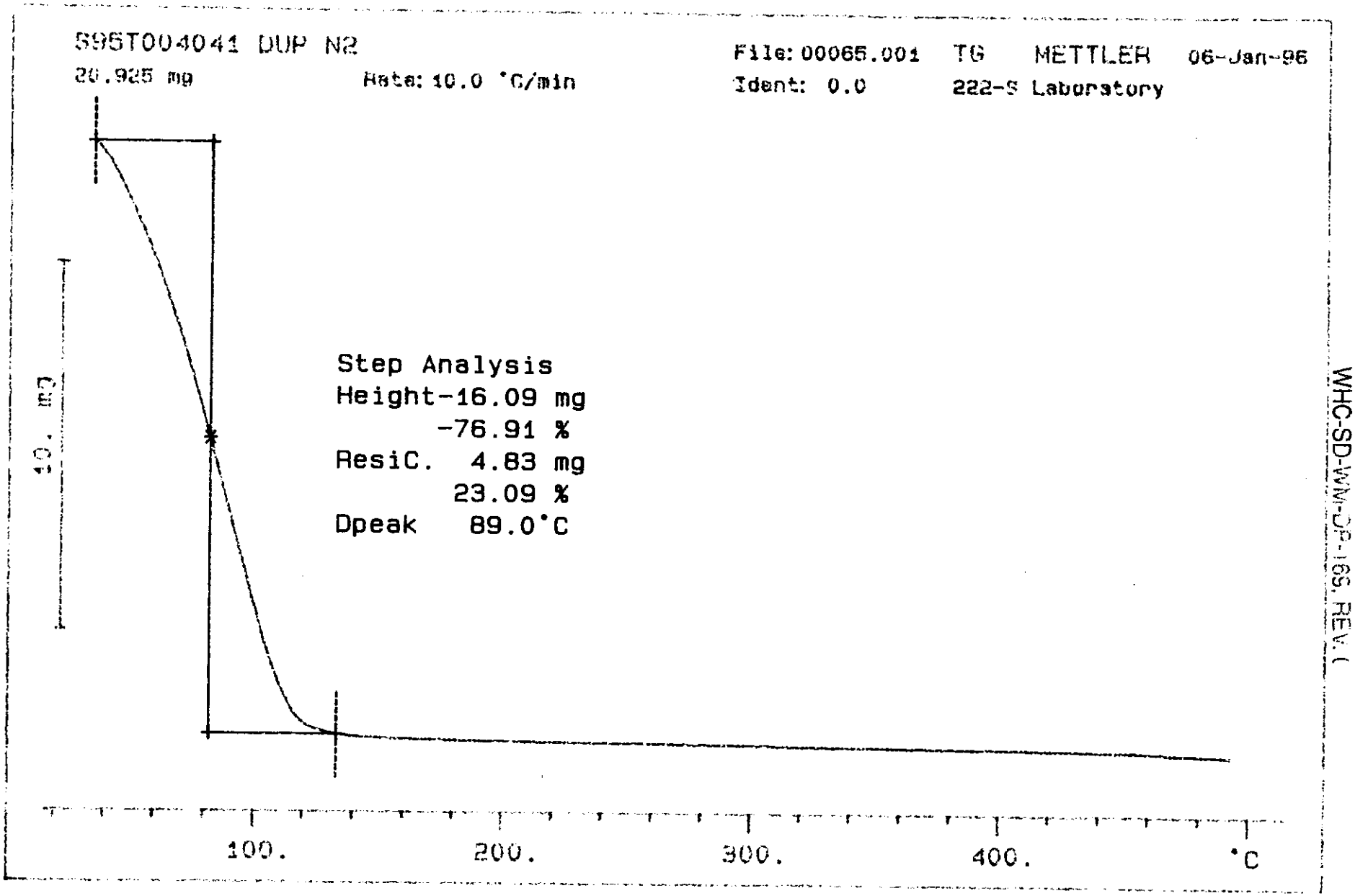
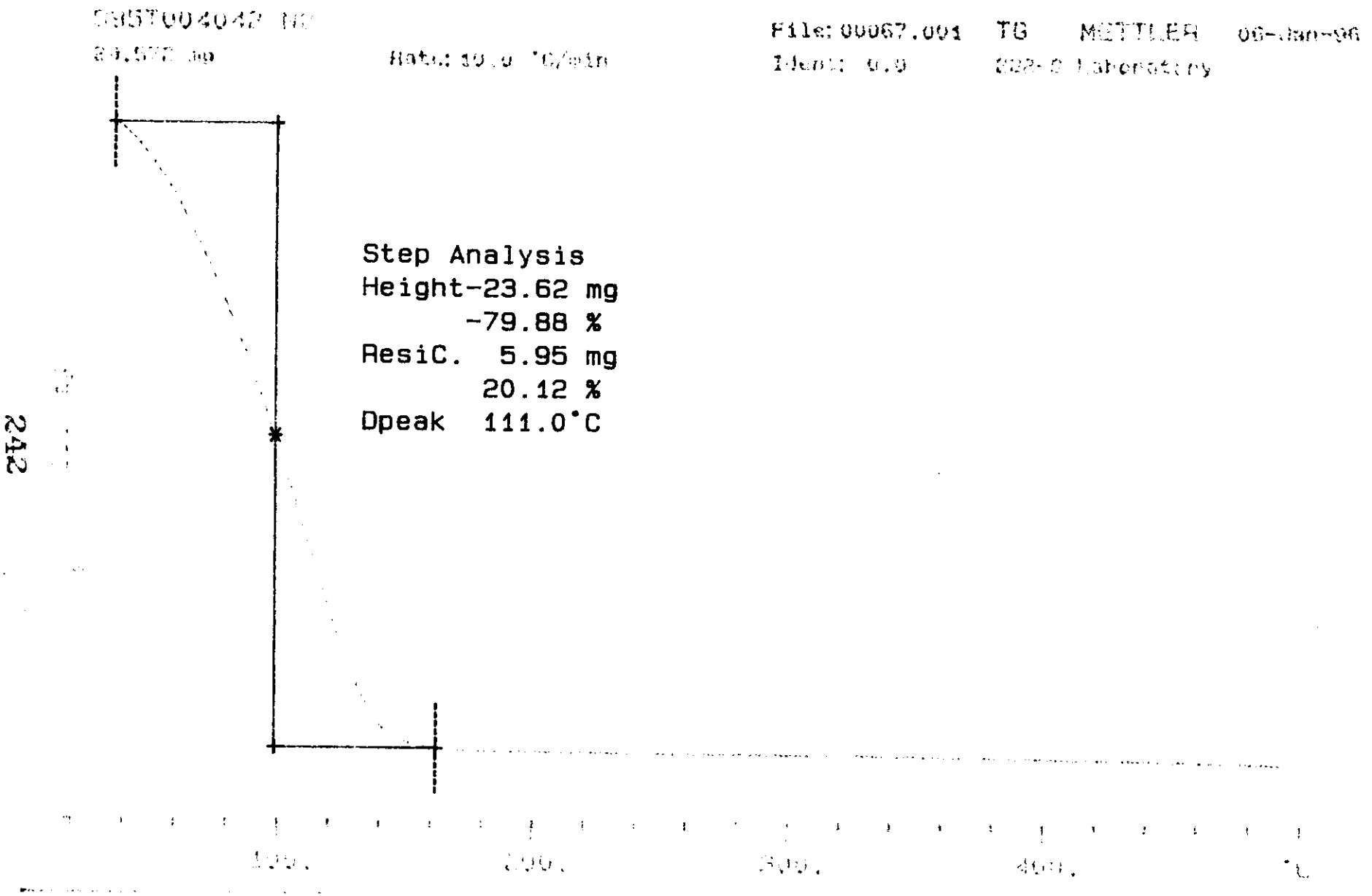
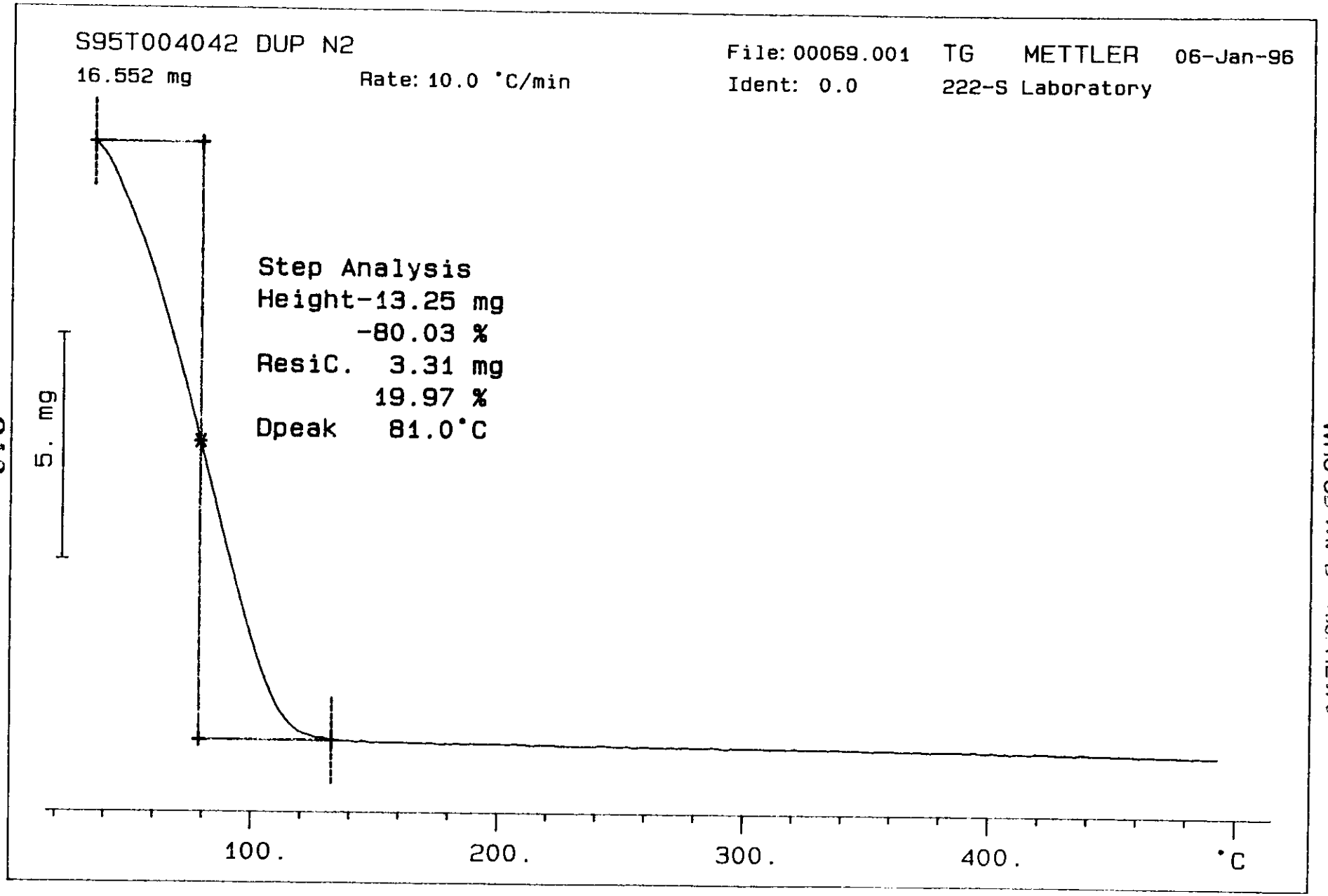


BEST AVAILABLE COPY



BEST AVAILABLE COPY



LABCORE Data Entry Template for Worklist# 4662

Analyst: RDM **Instrument:** TGA0 3 **Book #** ~~12N14B~~ 1/24/96 BDV 75N8A

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

Worklist Comment: Please run B-203 TGAs under N2. bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA-03	SOLID	59.2	60.11	N/A	%
95000174	B-203	2	SAMPLE	S95T004043	0		TGA-03	SOLID	N/A	72.89		%
95000174	B-203	3	DUP	S95T004043	0		TGA-03	SOLID	72.89	72.24	N/A	%
		4	STD				TGA-03	SOLID	59.2	60.18	N/A	%
95000174	B-203	5	SAMPLE	S95T004044	0		TGA-03	SOLID	N/A	70.39		%
95000174	B-203	6	DUP	S95T004044	0		TGA-03	SOLID	70.39	72.84	N/A	%

Final page for worklist # 4662

See attached for signatures
Analyst Signature **Date** 1/24/96 BDV

[illegible] 1-29-96
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# 4662

Analyst: RDM **Instrument:** TGA0 _____ **Book #** 12N14 B

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

Worklist Comment: Please run B-203 TGAs under N2. bdv

GROUP	PROJECT	S TYPE	SAMPLE#	R	A	-------TEST------	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD				TGA-01	SOLID			N/A	%
95000174	B-203	2 SAMPLE	S95T004043	0		TGA-01	SOLID	N/A			%
95000174	B-203	3 DUP	S95T004043	0		TGA-01	SOLID			N/A	%
95000174	B-203	4 SAMPLE	S95T004044	0		TGA-01	SOLID	N/A			%
95000174	B-203	5 DUP	S95T004044	0		TGA-01	SOLID			N/A	%

Final page for worklist # 4662

RDM 1/5/96
Analyst Signature **Date**

Analyst Signature **Date**

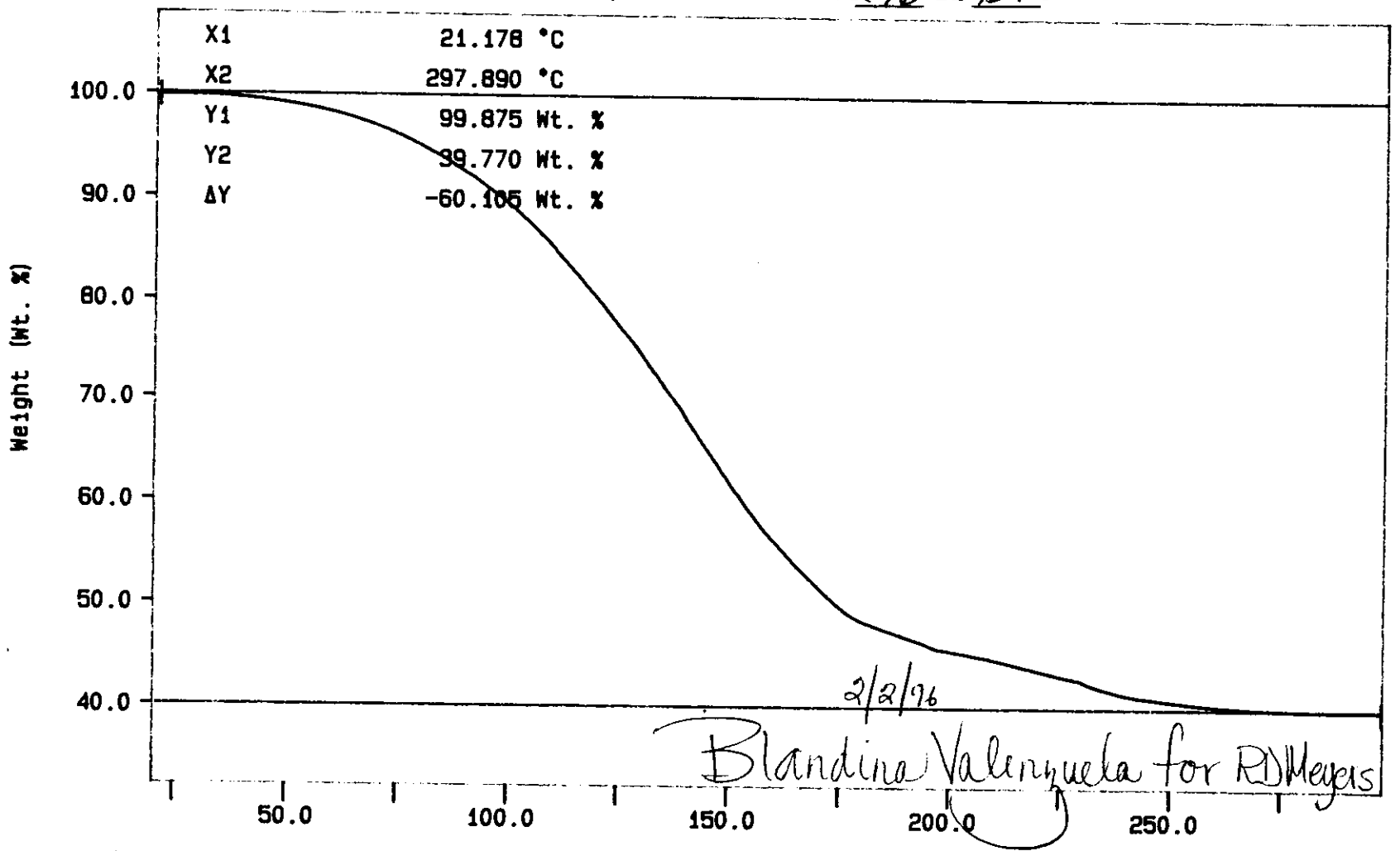
JAS 1-17-96

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.

Curve 1: TGA
File info: TER010501 Fri Jan 5 07:29:18 1996
Sample Weight: 24.158 mg
~~05~~N8-A Terliq

SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 246 TO 251.



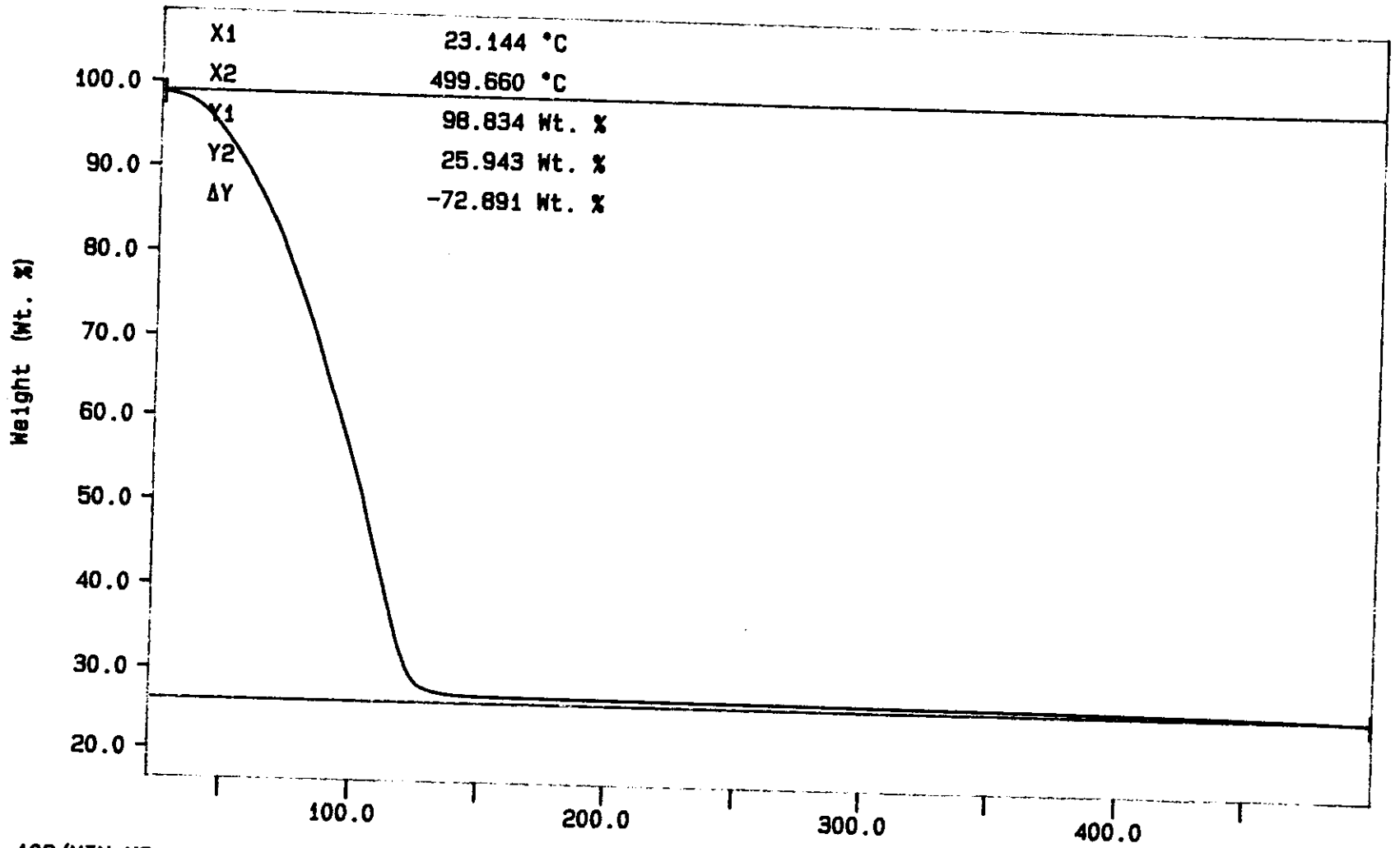
2/2/96
Blandina Valenzuela for RD Meyers

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 Jan 5 11:20:48 1996

Curve 1: TGA
File info: qsav1 Fri Jan 5 14:24:49 1996
Sample Weight: 10.920 mg
S95T003784 SAM N2
4043 RDM 1/5/96

BEST AVAILABLE COPY



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

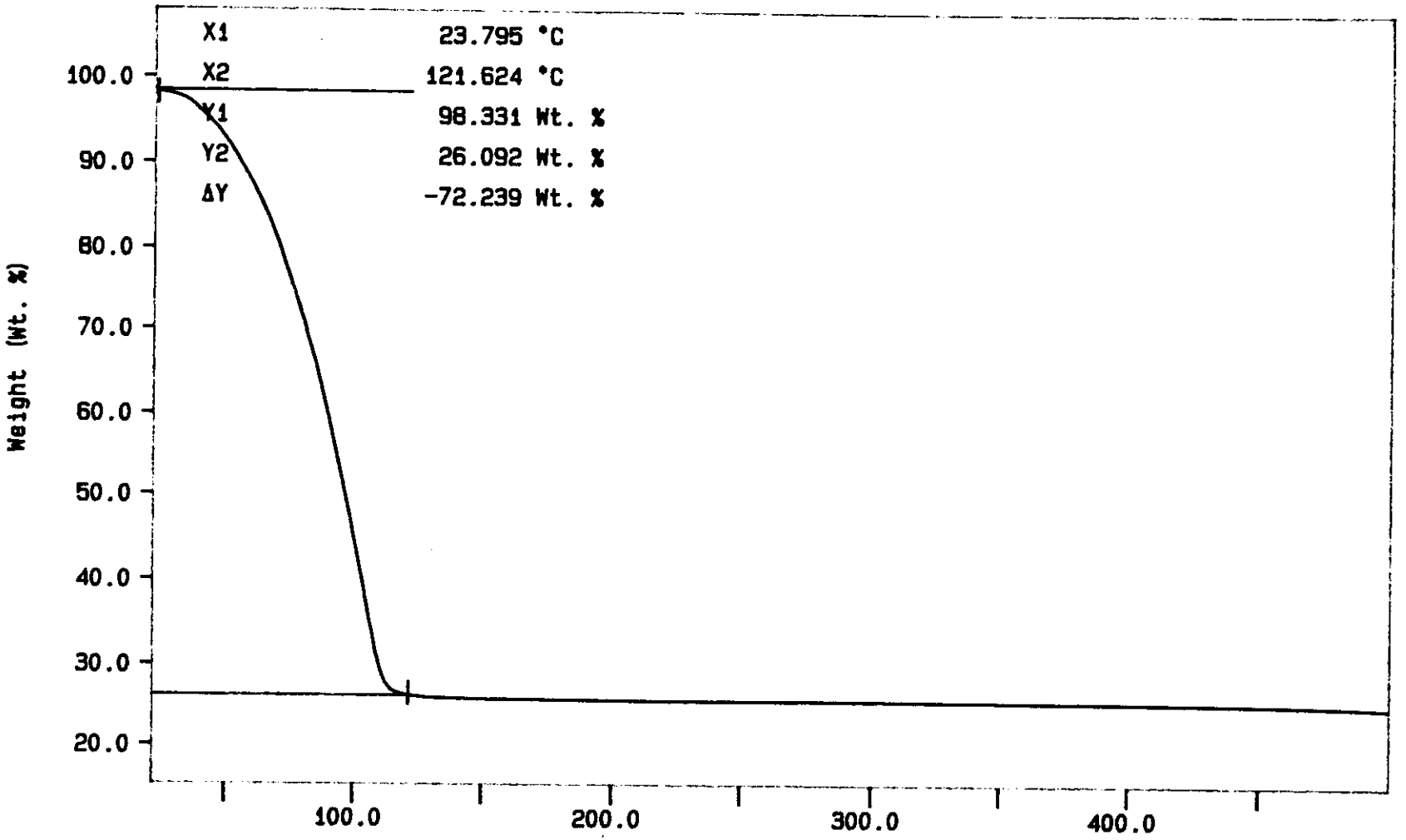
RD MEYERS
PERKIN-ELMER
7 Series Thermal Analysis System
Fri Jan 5 16:07:56 1996

247

WHC-SD-WM-DP-169, REV. 0

Curve 1: TGA
File info: SAM010502 Fri Jan 5 17:22:51 1996
Sample Weight: 5.152 mg
S95T003~~784~~ SAM N2
4043 DUP SMF 1-5-96

BEST AVAILABLE COPY



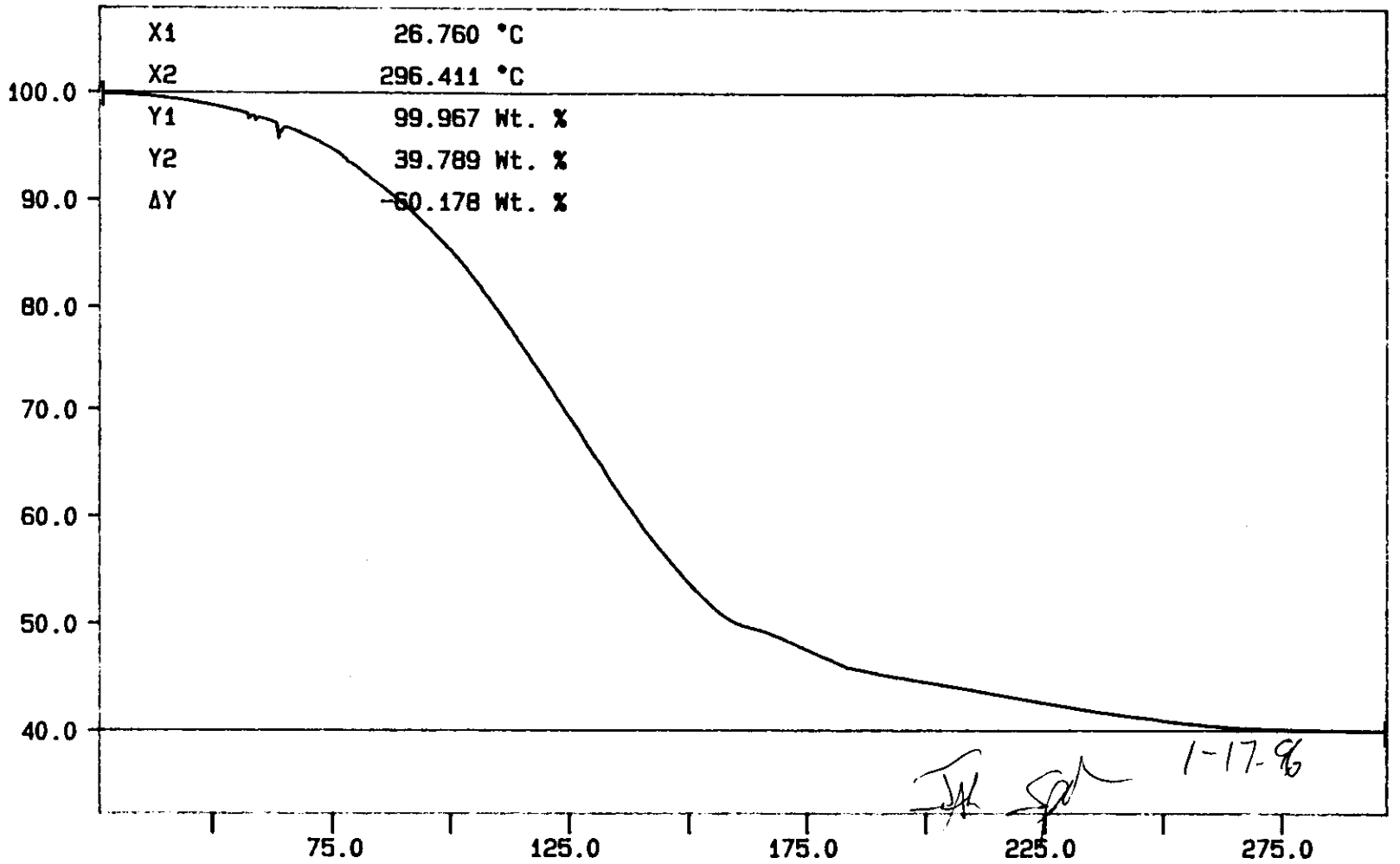
10C/MIN N2
TEMP1: 35.0 C TIME1: 0.0 min RATE1: 10.0 C/min
TEMP2: 500.0 C

RD MEYERS
PERKIN-ELMER
7 Series Thermal Analysis System
Fri Jan 5 18:31:40 1996

WHC-SD-WM-DP-169, REV. 0

Curve 1: TGA
File info: TER011701 Wed Jan 17 06:37:17 1996
Sample Weight: 17.289 mg
Terliq 75N8-A

BEST AVAILABLE COPY



1-17-96

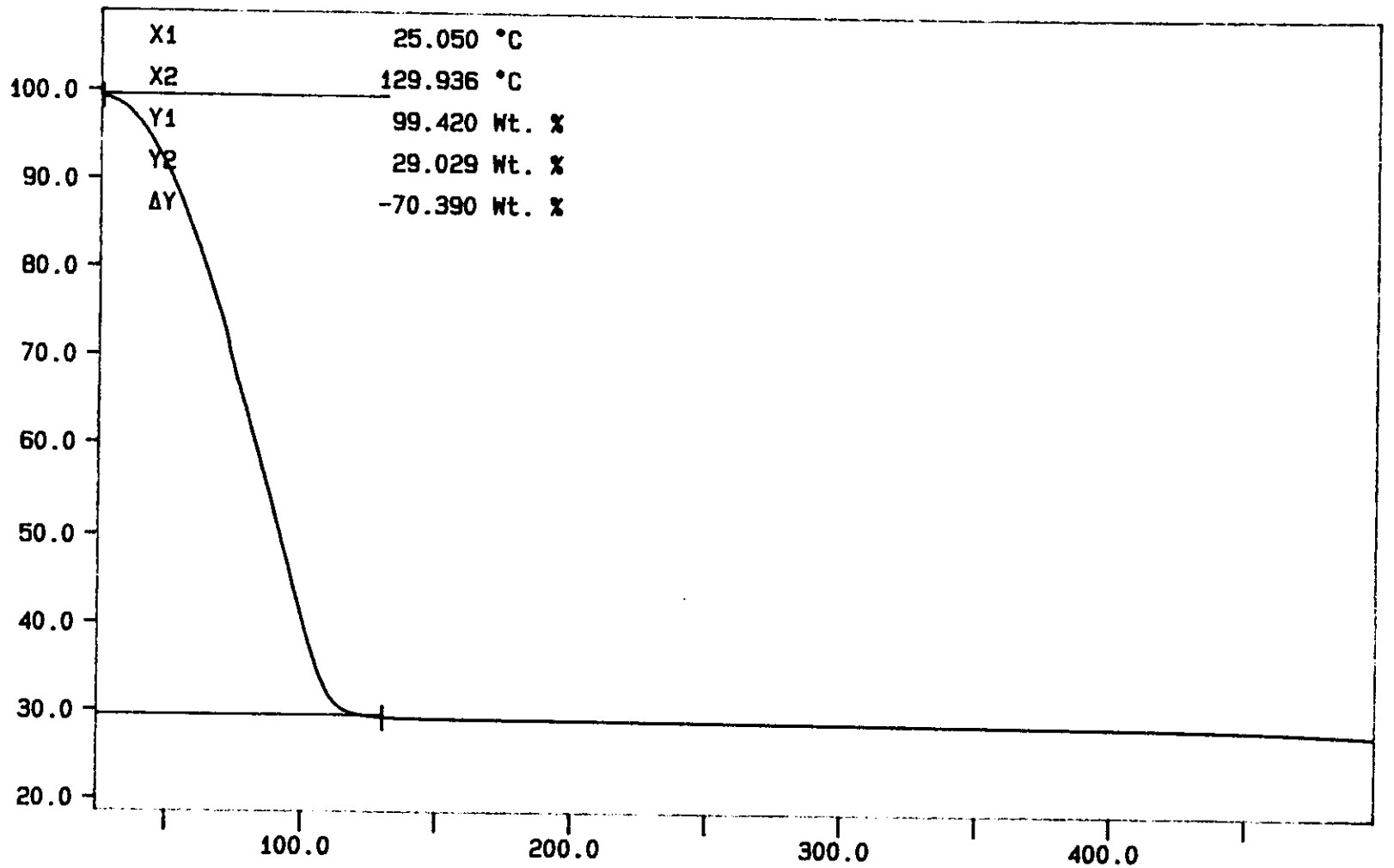
N2 10C/MIN
TEMP1: 35.0 C TIME1: 0.0 min RATE1: 10.0 C/min
TEMP2: 300.0 C

JD SPELLMAN
PERKIN-ELMER
7 Series Thermal Analysis System
Wed Jan 17 06:43:37 1996

WHC-SD-WM-DP-169, REV. 0

Curve 1: TGA
File info: SAM011701 Wed Jan 17 08:13:17 1996
Sample Weight: 6.928 mg
S95T004044

BEST AVAILABLE COPY

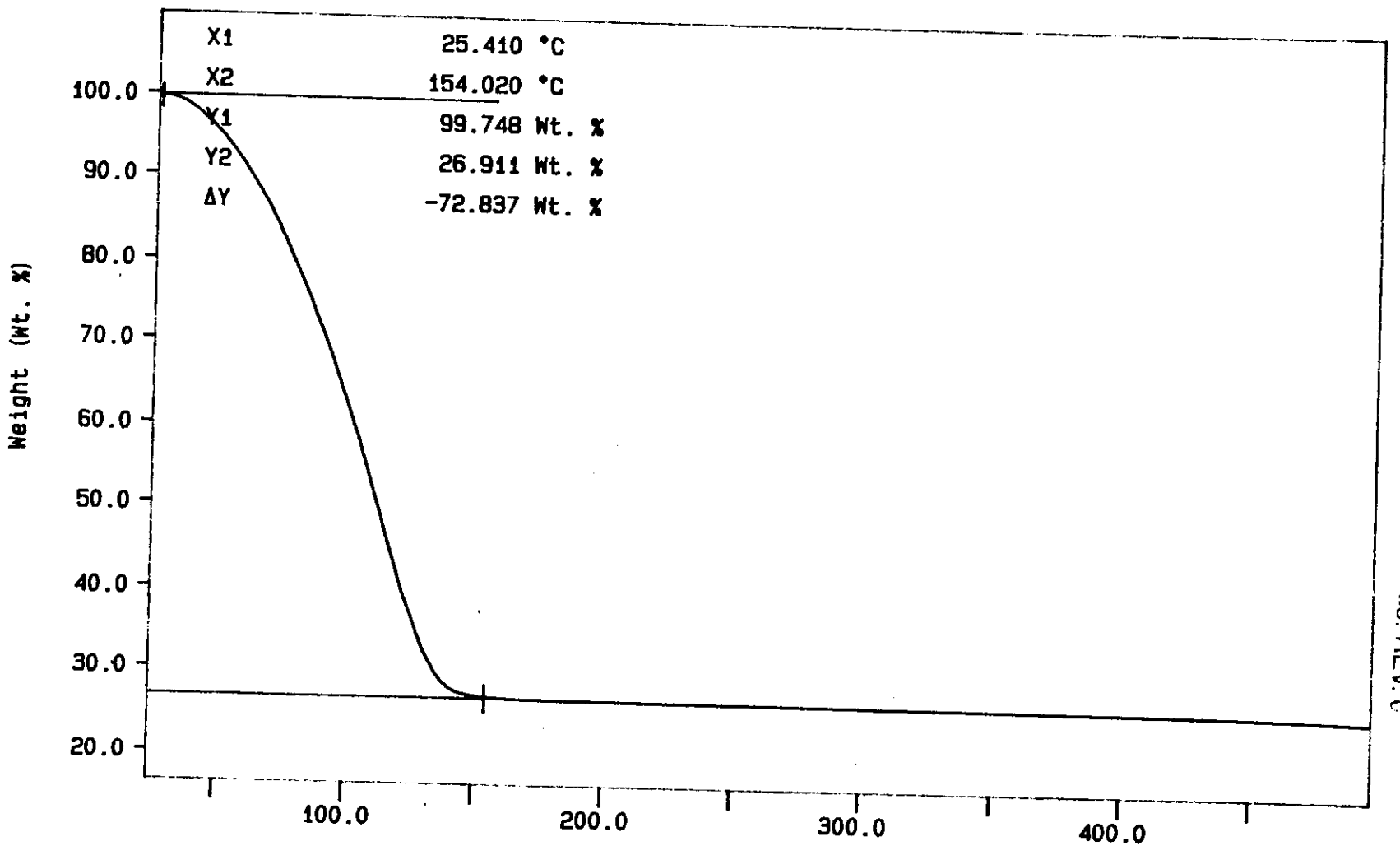


10C/MIN N2
TEMP1: 35.0 C TIME1: 0.0 min RATE1: 10.0 C/min
TEMP2: 500.0 C

JD SPELLMAN
PERKIN-ELMER
7 Series Thermal Analysis System
Wed Jan 17 08:38:30 1996

Curve 1: TGA
File info: SAM011702 Wed Jan 17 09:48:19 1996
Sample Weight: 14.697 mg
S95T004044DUP

BEST AVAILABLE COPY



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

JD SPELLMAN
PERKIN-ELMER
7 Series Thermal Analysis System
Wed Jan 17 10:35:24 1996

WHC-SD-WM-DE-169, REV. 0

LABCORE Data Entry Template for Worklist# 4663

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

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

Worklist Comment: Please run B-203 TGAs under N2. bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	-------TEST------	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA-01	SOLID	59.74	60.69	N/A	%
95000174	B-203	2	SAMPLE	S951004045	0		TGA-01	SOLID	N/A	~~75.52~~ 76.98 1/11/96 BDV		%
95000174	B-203	3	DUP	S951004045	0		TGA-01	SOLID	~~75.52~~ 76.98	~~76.98~~ 75.52 1/11/96 BDV	N/A	%
95000174	B-203	4	SAMPLE	S951004046	0		TGA-01	SOLID	N/A	77.15		%
95000174	B-203	5	DUP	S951004046	0		TGA-01	SOLID	77.15	77.85	N/A	%

Final page for worklist # 4663

RDMyers 1/7/96
Analyst Signature **Date**

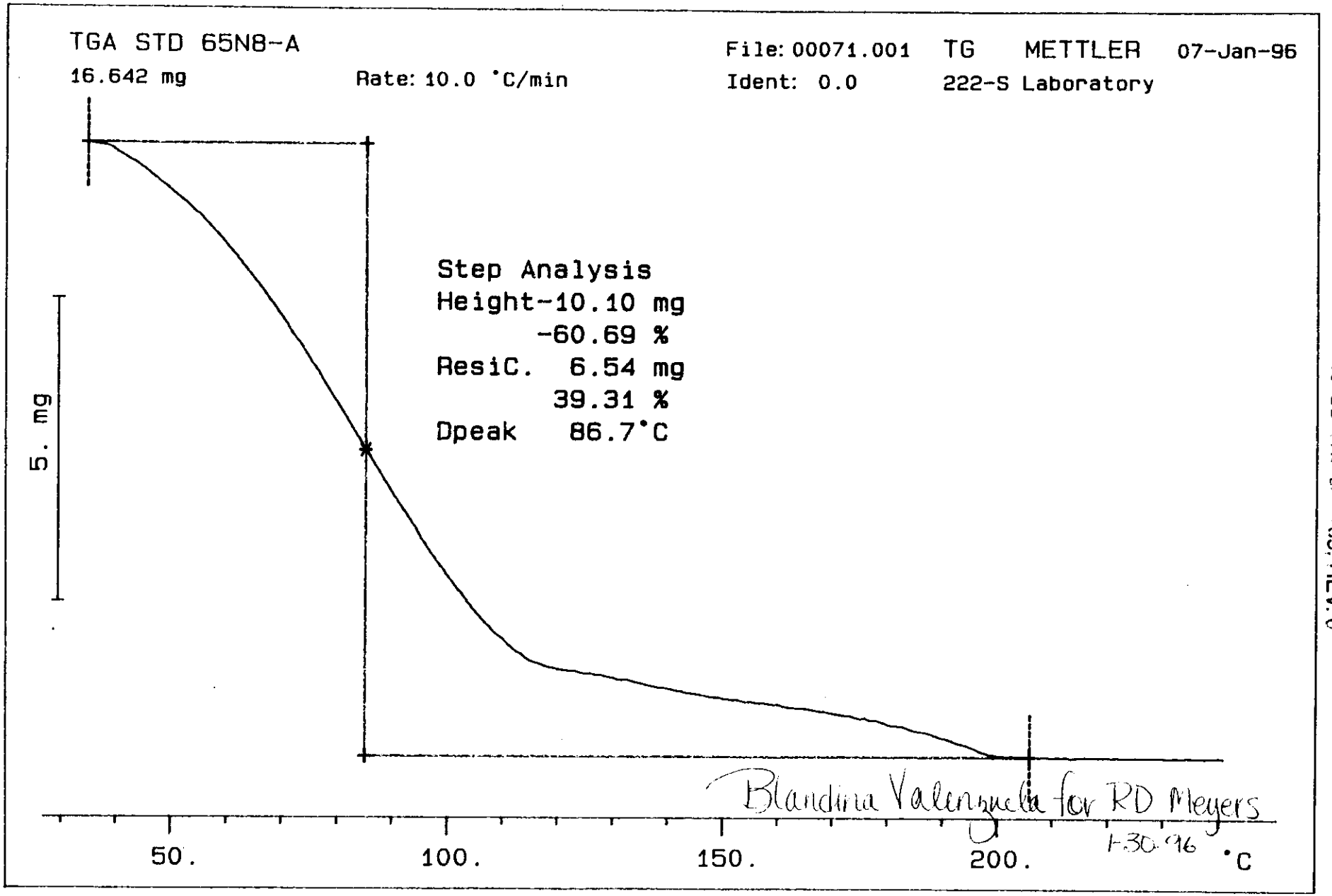
Gary Hammond 1-9-96
Analyst Signature **Date**

Verified by Blandina Valenzuela 1-11-96

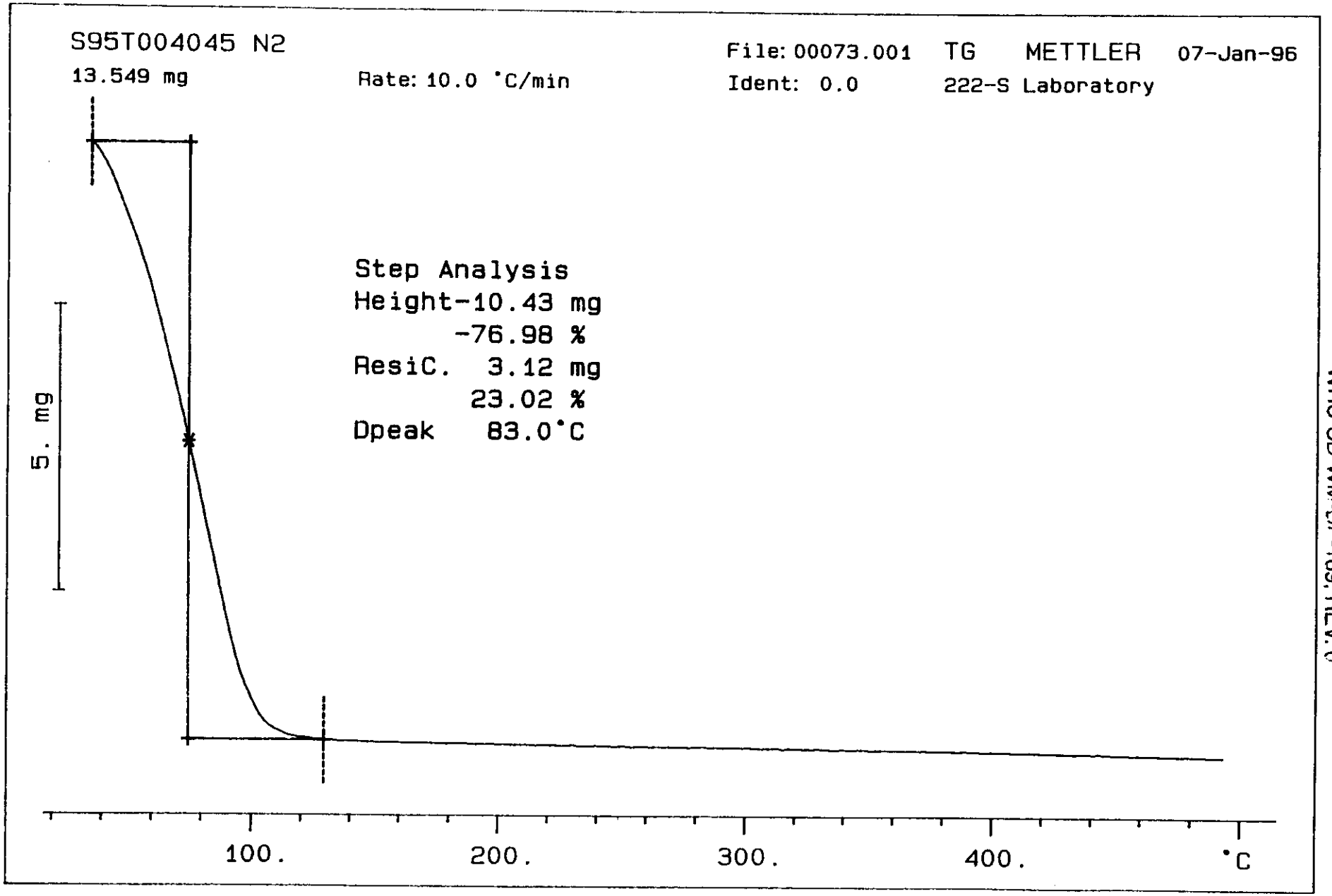
Data Entry Comments:

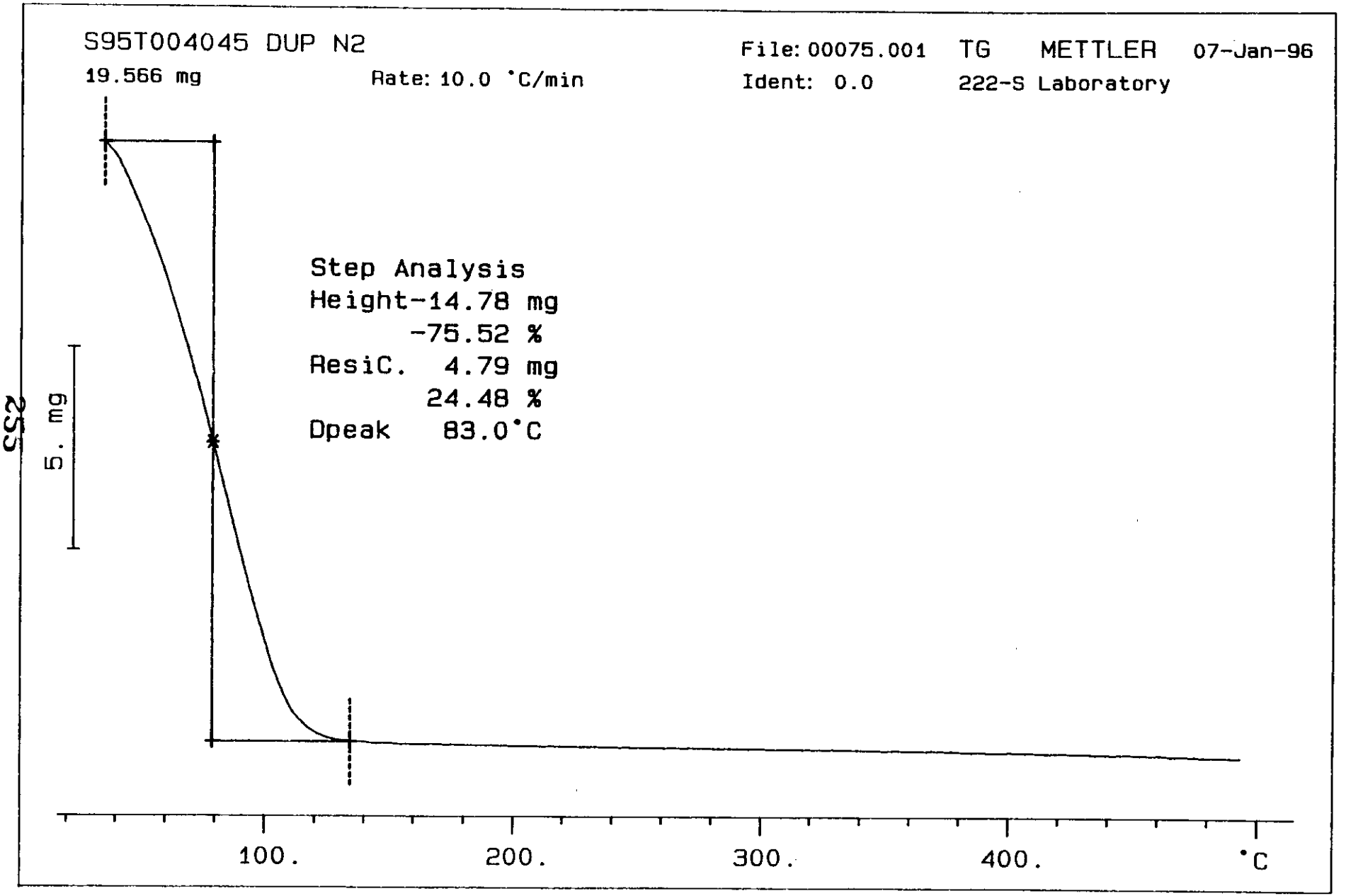
Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

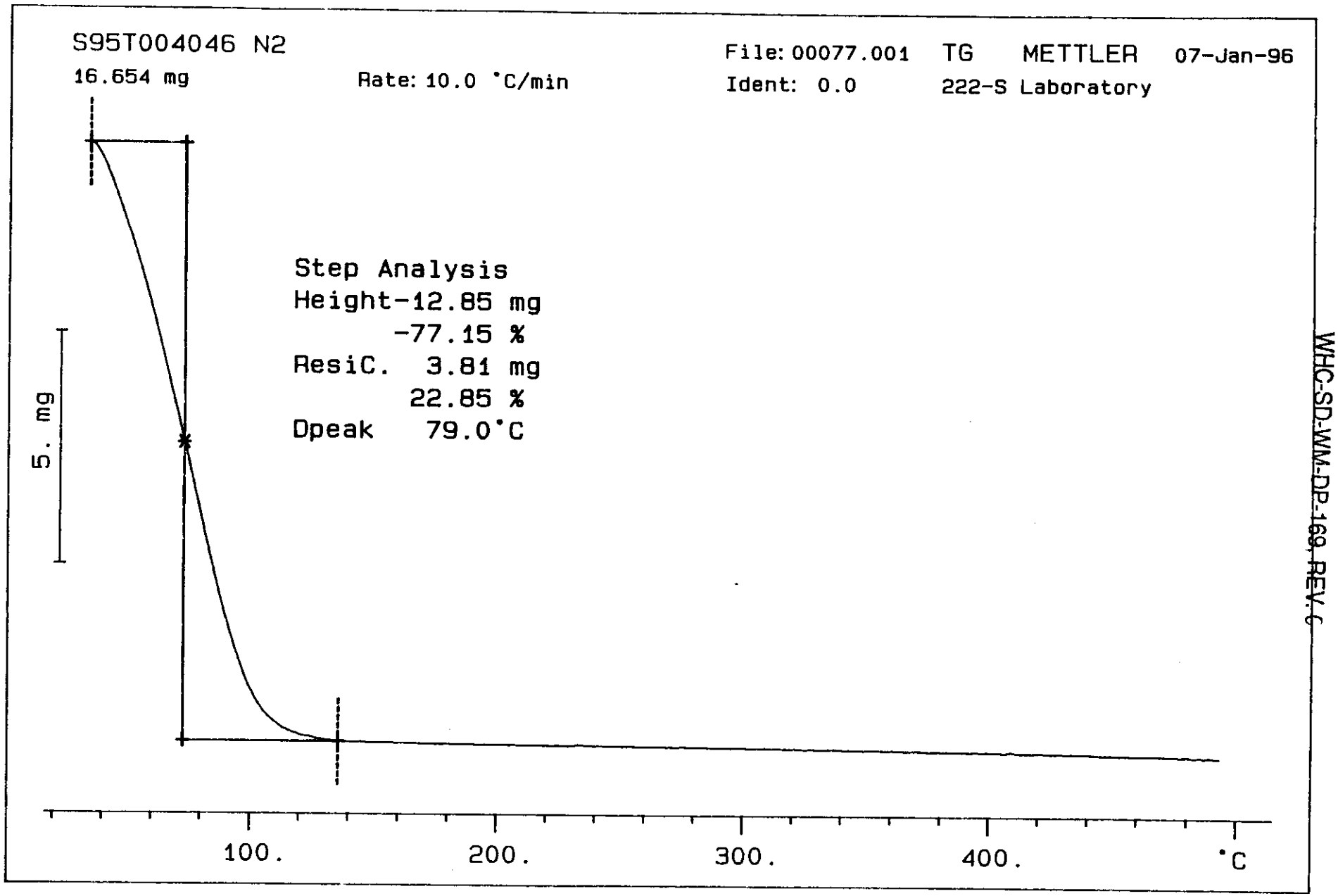
SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 253 TO 257.

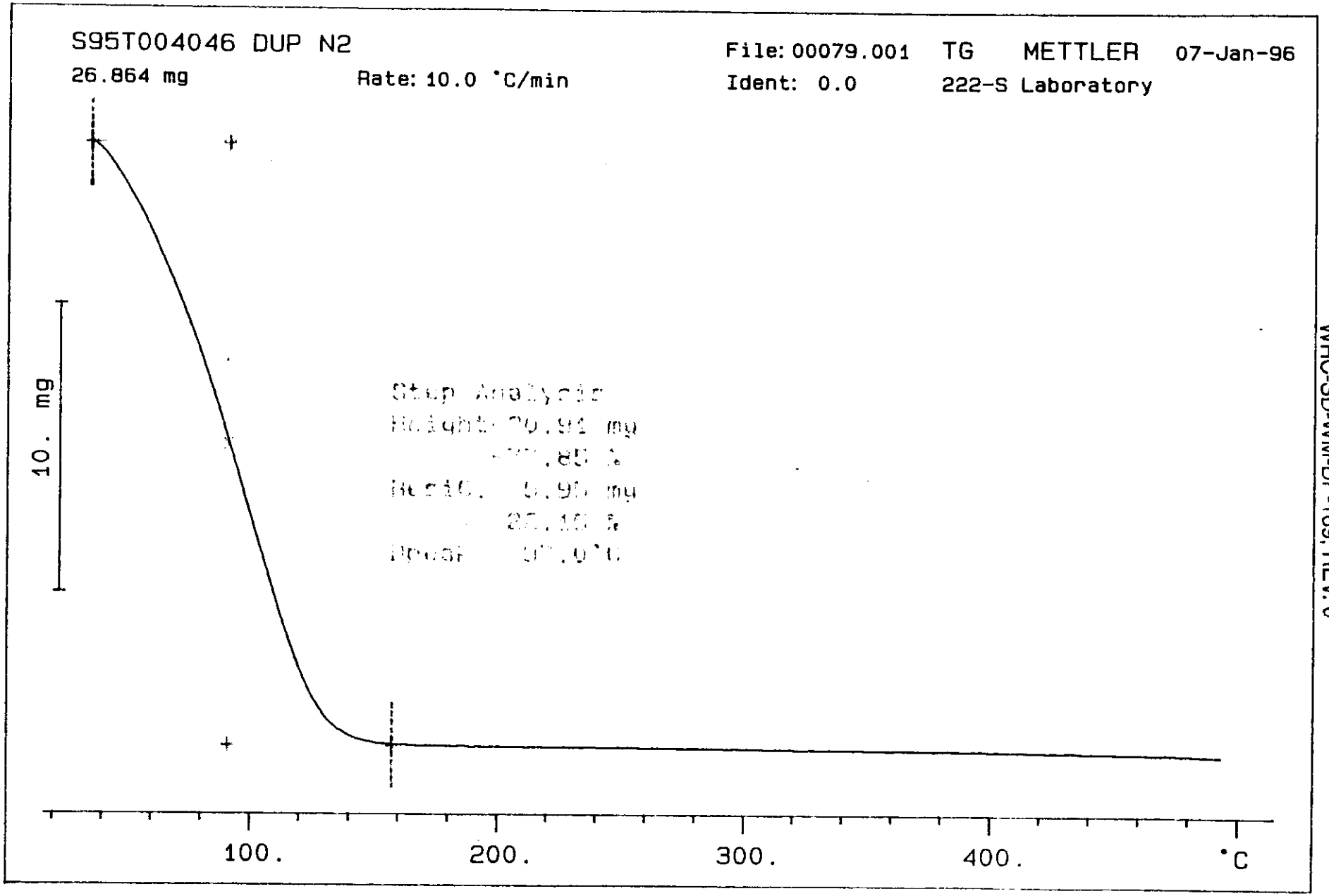


Blandina Valenzuela for RD Meyers 1-30-96


S95T004045 N2
13.549 mg
Rate: 10.0 °C/min
File: 00073.001
TG
METTLER
07-Jan-96
Ident: 0.0
222-S Laboratory
Step Analysis
Height-10.43 mg
-76.98 %
ResiC. 3.12 mg
23.02 %
Dpeak 83.0°C
5. mg
100.
200.
300.
400.
°C


S95T004045 DUP N2
19.566 mg
Rate: 10.0 °C/min
File: 00075.001
TG METTLER 07-Jan-96
Ident: 0.0
222-S Laboratory
Step Analysis
Height-14.78 mg
-75.52 %
ResiC. 4.79 mg
24.48 %
Dpeak 83.0°C
5. mg
100.
200.
300.
400.
°C


S95T004046 N2
16.654 mg
Rate: 10.0 °C/min
File: 00077.001
TG METTLER 07-Jan-96
Ident: 0.0
222-S Laboratory
Step Analysis
Height-12.85 mg
-77.15 %
ResiC. 3.81 mg
22.85 %
Dpeak 79.0°C
5. mg
100.
200.
300.
400.
°C


S95T004046 DUP N2
26.864 mg
Rate: 10.0 °C/min
File: 00079.001
TG
METTLER
07-Jan-96
Ident: 0.0
222-S Laboratory
10. mg
100.
200.
300.
400.
°C

LABCORE Data Entry Template for Worklist# 4664

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

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

Worklist Comment: Please run B-203 TGAs under N2. bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA-01	SOLID	59.74	60.62*	N/A	%
95000174	B-203	2	SAMPLE	S95T004047	0		TGA-01	SOLID	N/A	78.00		%
95000174	B-203	3	DUP	S95T004047	0		TGA-01	SOLID	78.00	77.98	N/A	%
95000174	B-203	4	SAMPLE	S95T004048	0		TGA-01	SOLID	N/A	81.33		%
95000174	B-203	5	DUP	S95T004048	0		TGA-01	SOLID	81.33	81.12	N/A	%

Final page for worklist # 4664

Susie M. Fulton 1-7-96
Analyst Signature **Date**

[illegible] 1-9-96
Analyst Signature **Date**

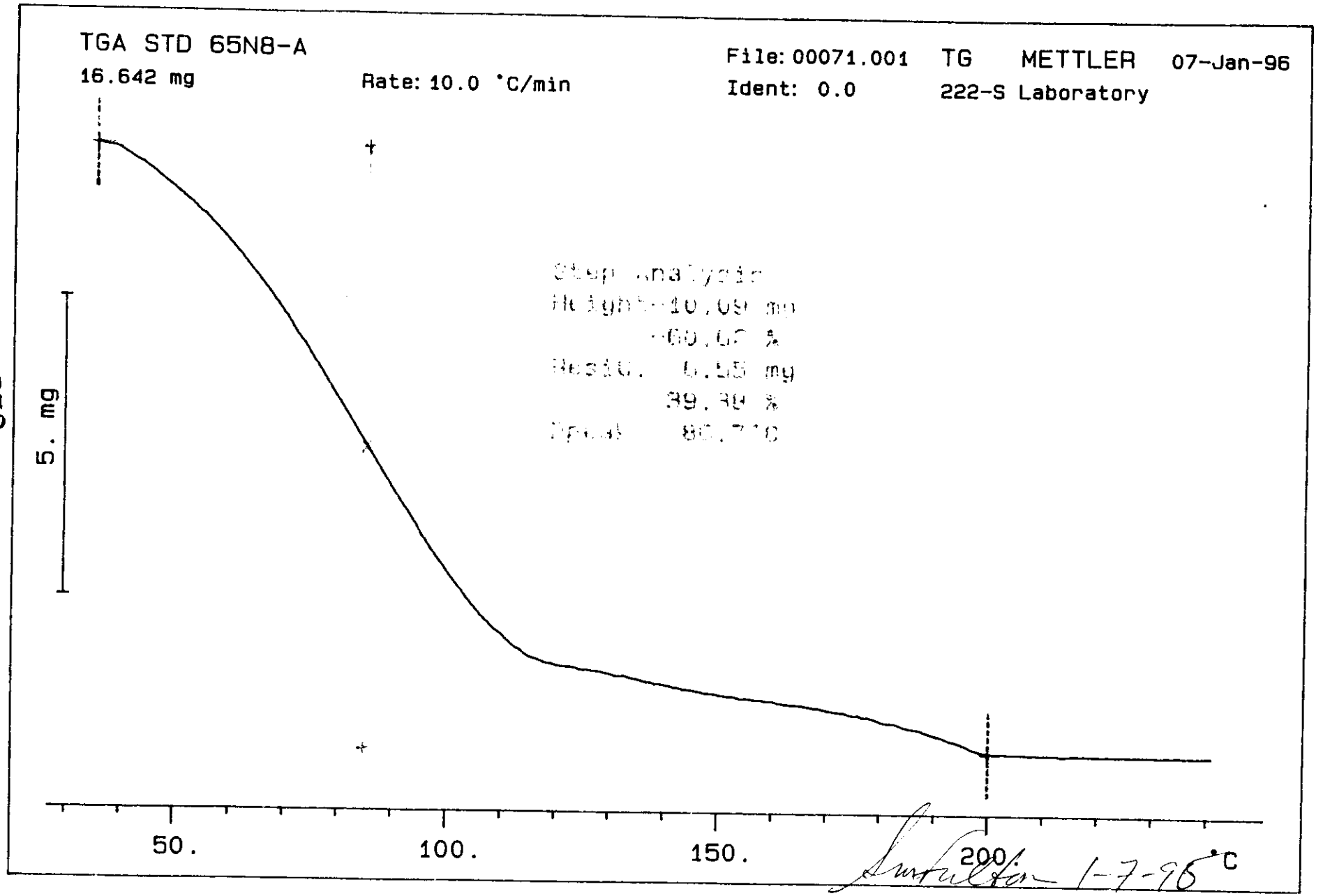
Verified by Blandina Valenzuela
1-11-96

Data Entry Comments:

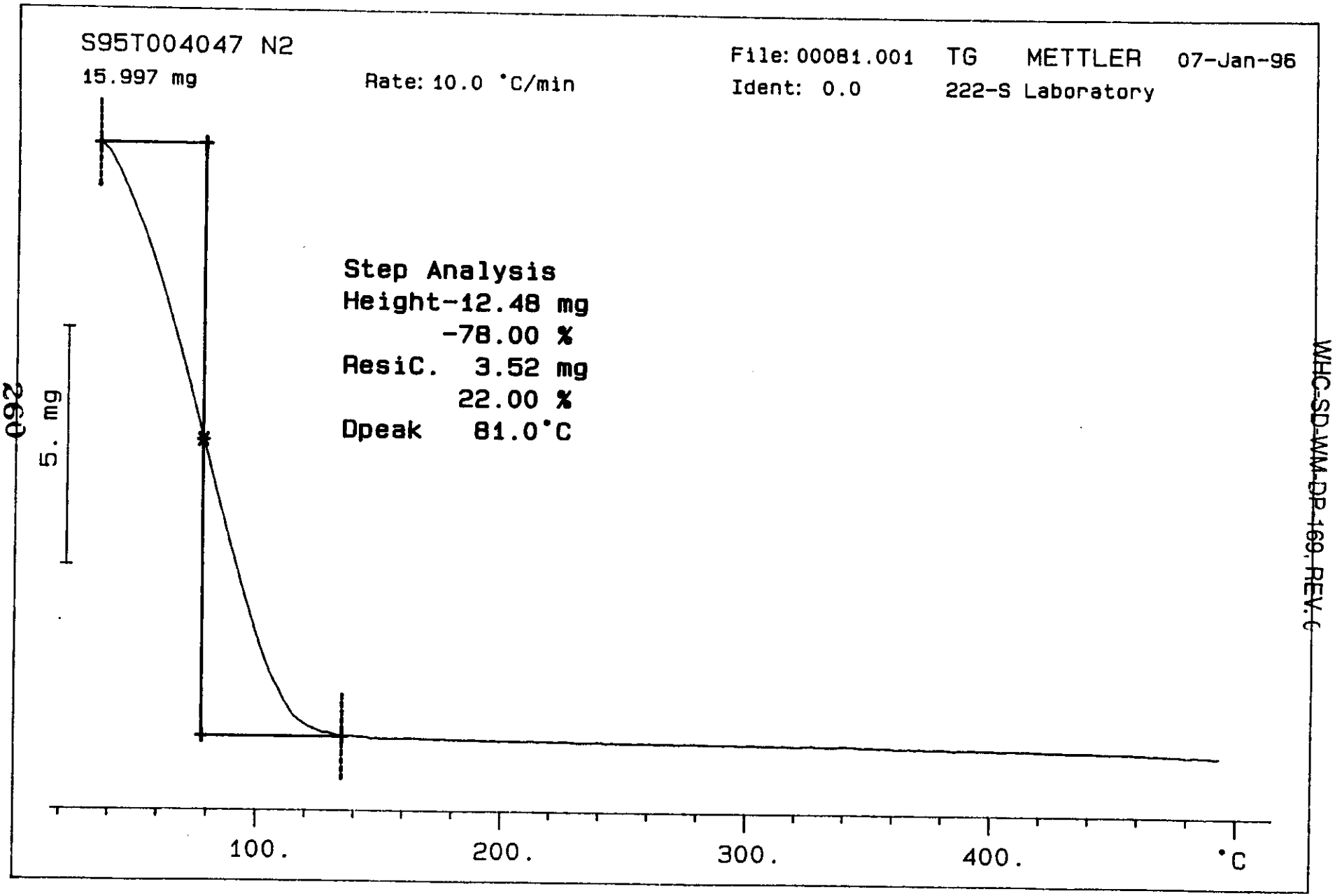
Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

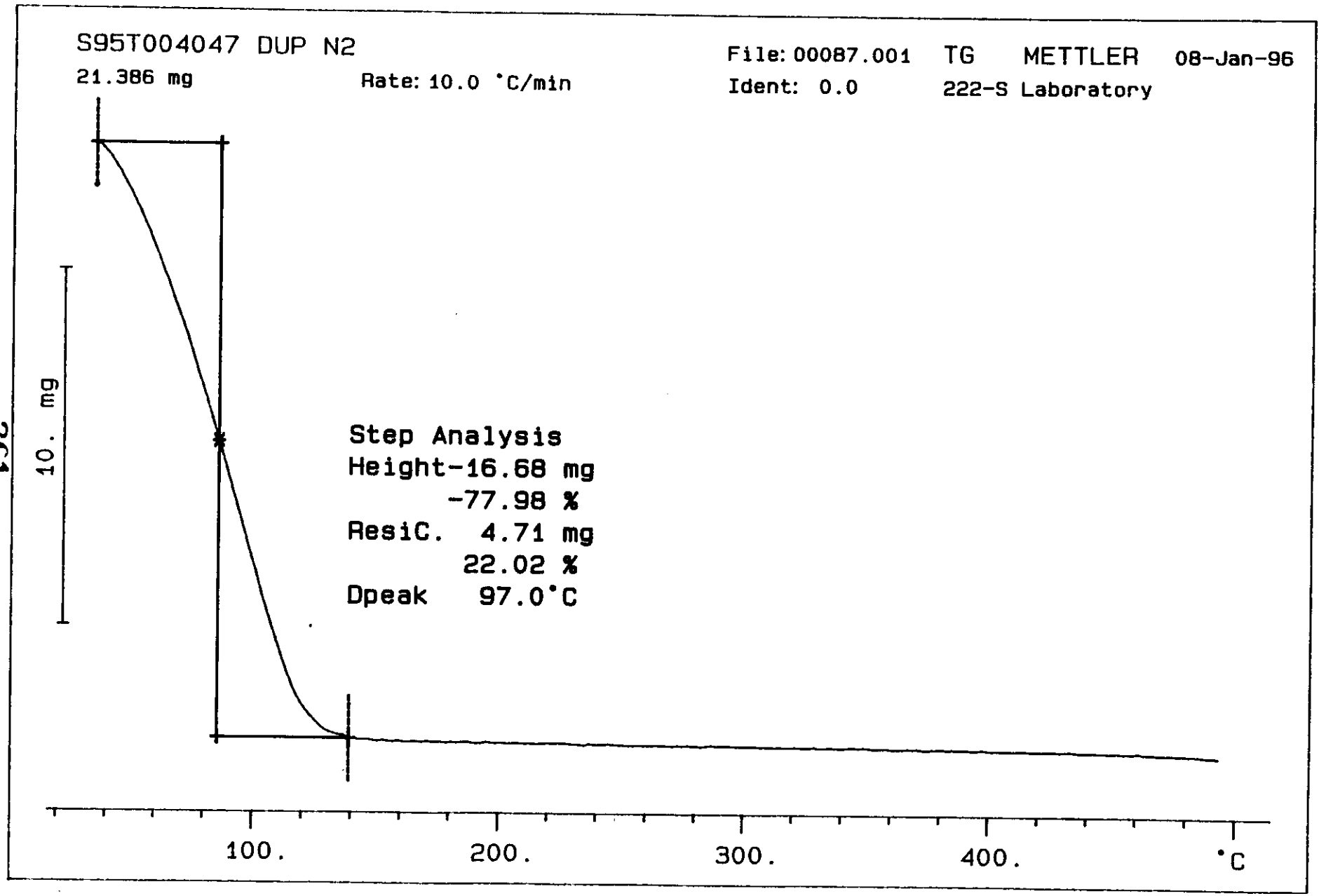
SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 259 TO 263.

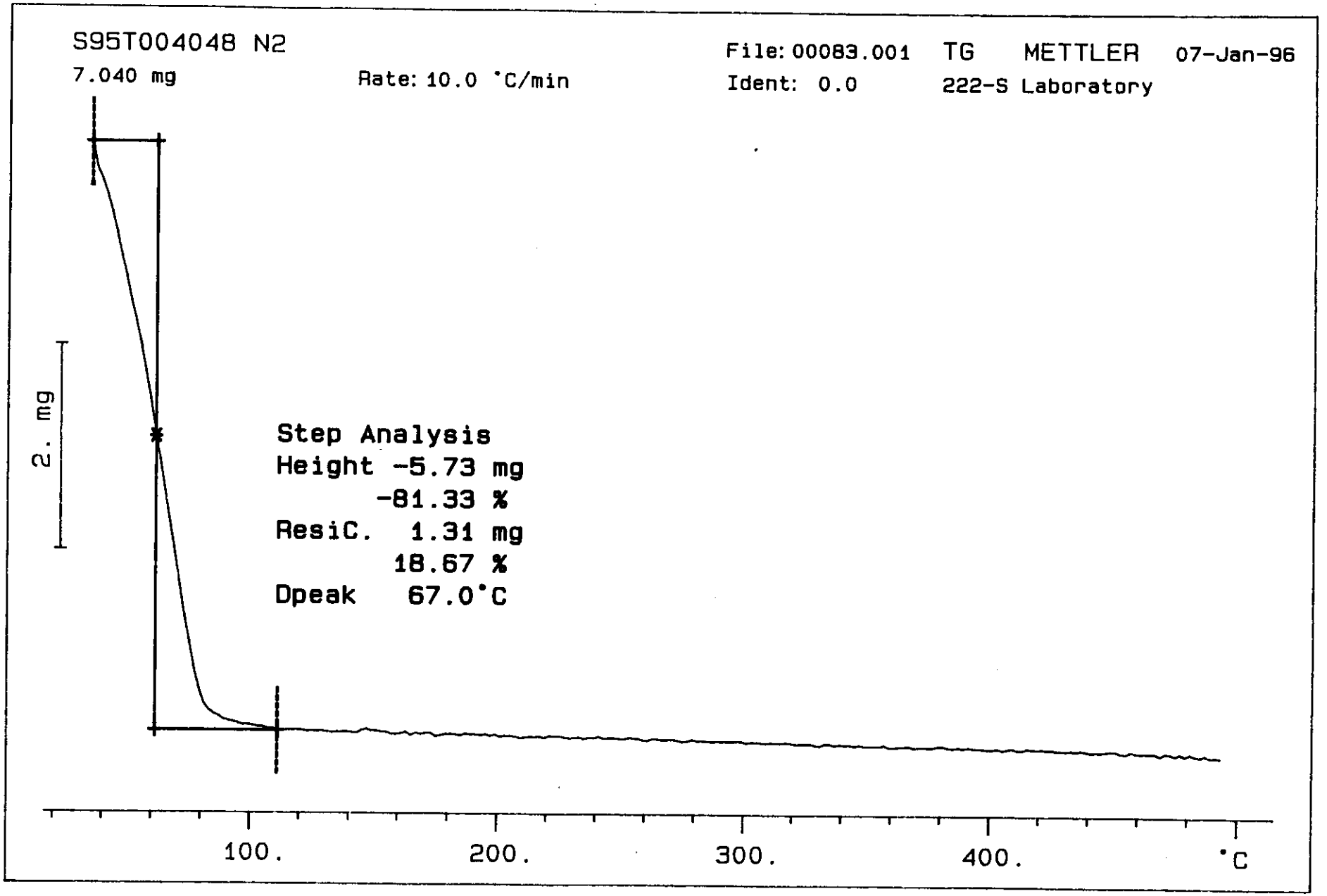
BEST AVAILABLE COPY

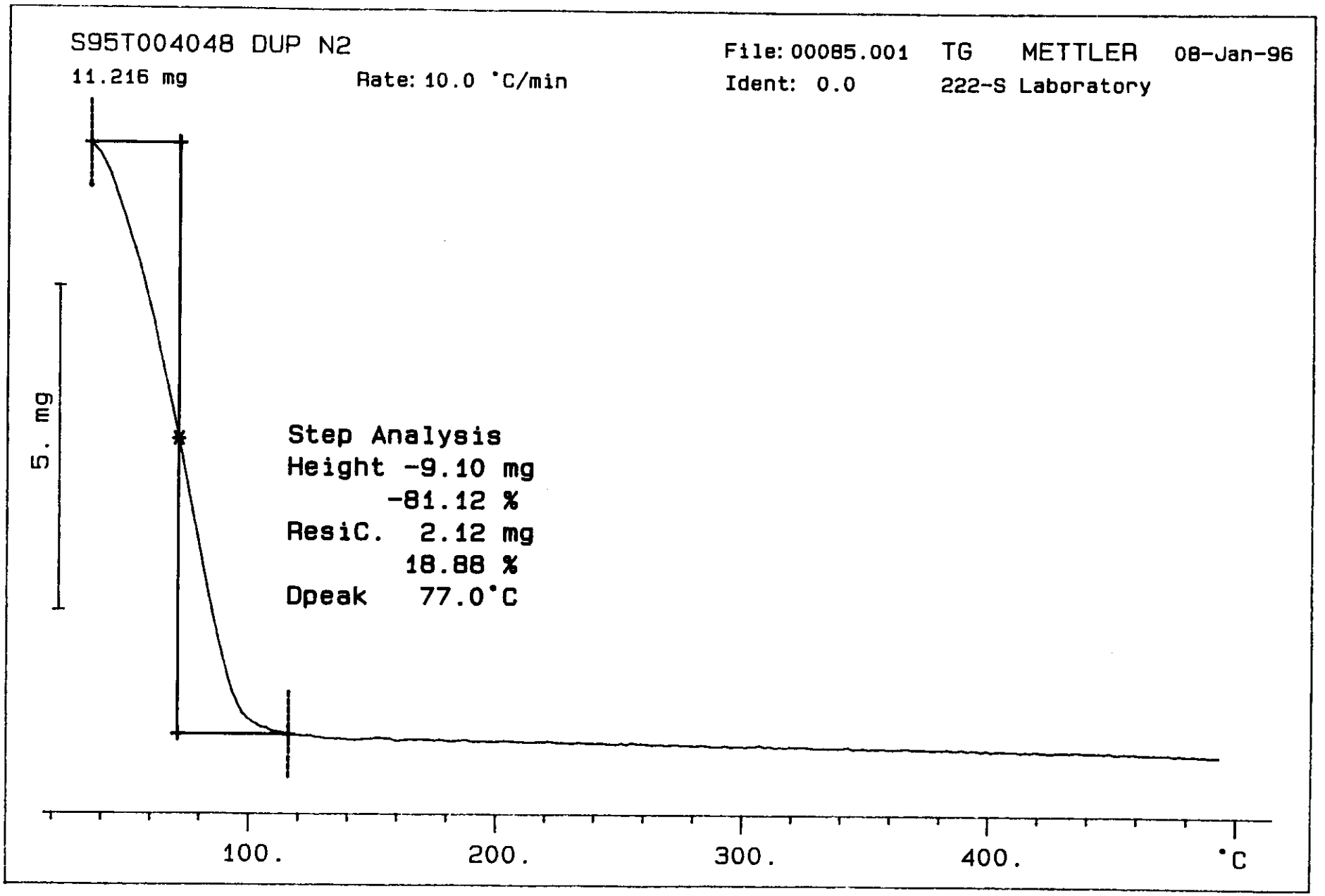


1-7-96


S95T004047 N2
15.997 mg
Rate: 10.0 °C/min
File: 00081.001
TG
METTLER
07-Jan-96
Ident: 0.0
222-S Laboratory
Step Analysis
Height-12.48 mg
-78.00 %
ResiC. 3.52 mg
22.00 %
Dpeak 81.0°C
5. mg
100.
200.
300.
400.
°C


S95T004047 DUP N2
21.386 mg
Rate: 10.0 °C/min
File: 00087.001
TG
METTLER
08-Jan-96
Ident: 0.0
222-S Laboratory
10. mg
Step Analysis
Height-16.68 mg
-77.98 %
ResiC. 4.71 mg
22.02 %
Dpeak 97.0°C
100.
200.
300.
400.
°C


S95T004048 N2
7.040 mg
Rate: 10.0 °C/min
File: 00083.001
TG
METTLER
07-Jan-96
Ident: 0.0
222-S Laboratory
2. mg
Step Analysis
Height -5.73 mg
-81.33 %
ResiC. 1.31 mg
18.67 %
Dpeak 67.0°C
100.
200.
300.
400.
°C


S95T004048 DUP N2
11.216 mg
Rate: 10.0 °C/min
File: 00085.001
TG METTLER 08-Jan-96
Ident: 0.0
222-S Laboratory
Step Analysis
Height -9.10 mg
-81.12 %
ResiC. 2.12 mg
18.88 %
Dpeak 77.0°C
.5 mg
100.
200.
300.
400.
°C

LABCORE Data Entry Template for Worklist# 4665

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

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

Worklist Comment: Please run B-203 TGAs under N2. bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	-------TEST------	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA-01	SOLID	59.74	59.33	N/A	%
95000174	B-203	2	SAMPLE	S95T004049	0		TGA-01	SOLID	N/A	78.16		%
95000174	B-203	3	DUP	S95T004049	0		TGA-01	SOLID	78.16	76.38	N/A	%
95000174	B-203	4	SAMPLE	S95T004050	0		TGA-01	SOLID	N/A	74.60		%
95000174	B-203	5	DUP	S95T004050	0		TGA-01	SOLID	74.60	75.87	N/A	%

Final page for worklist # 4665

A. Lambel 01-09-96
Analyst Signature **Date**

Verified by Blandina Valenzuela 1/12/96

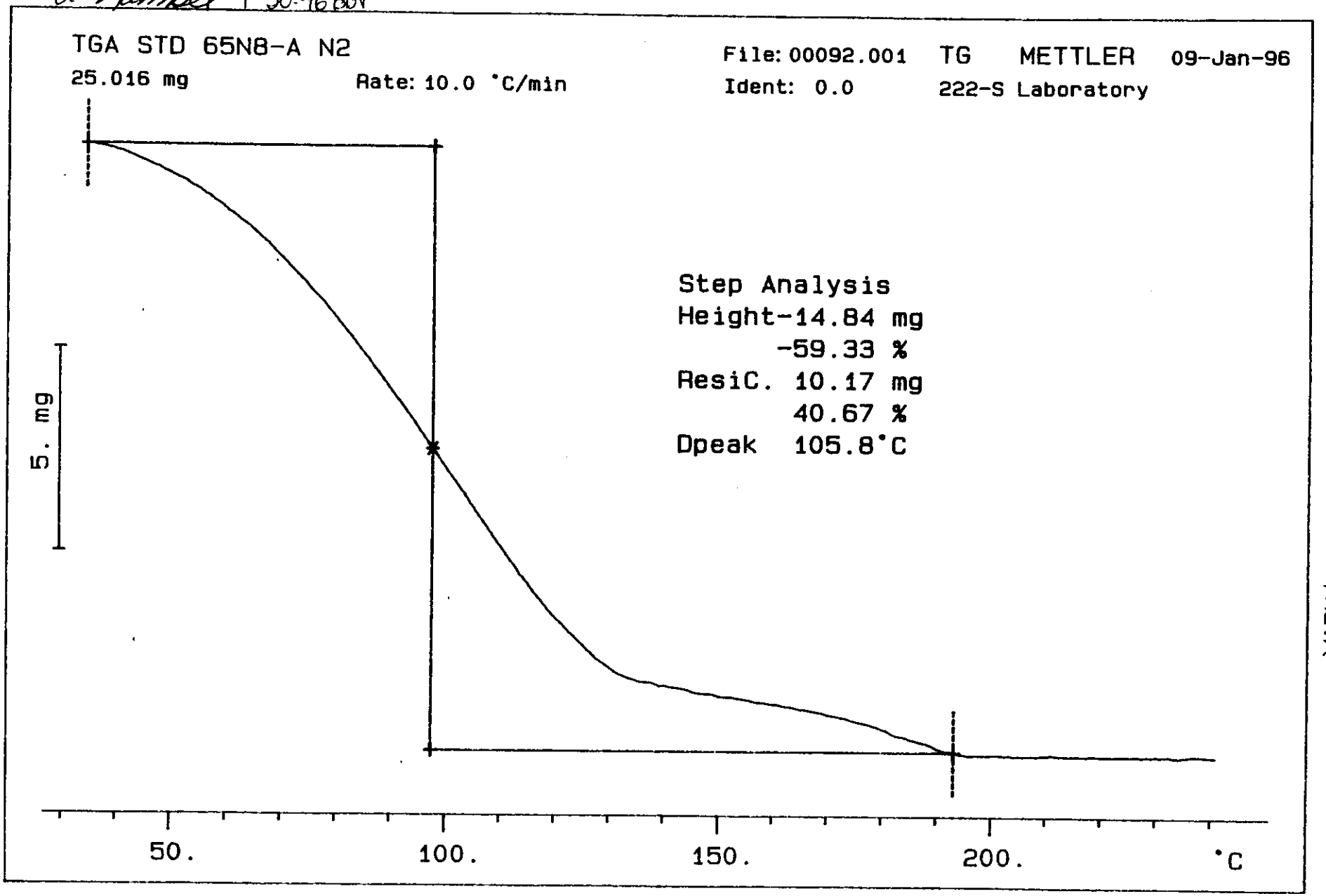
Frank Conlin 1/12/96
Analyst Signature **Date**

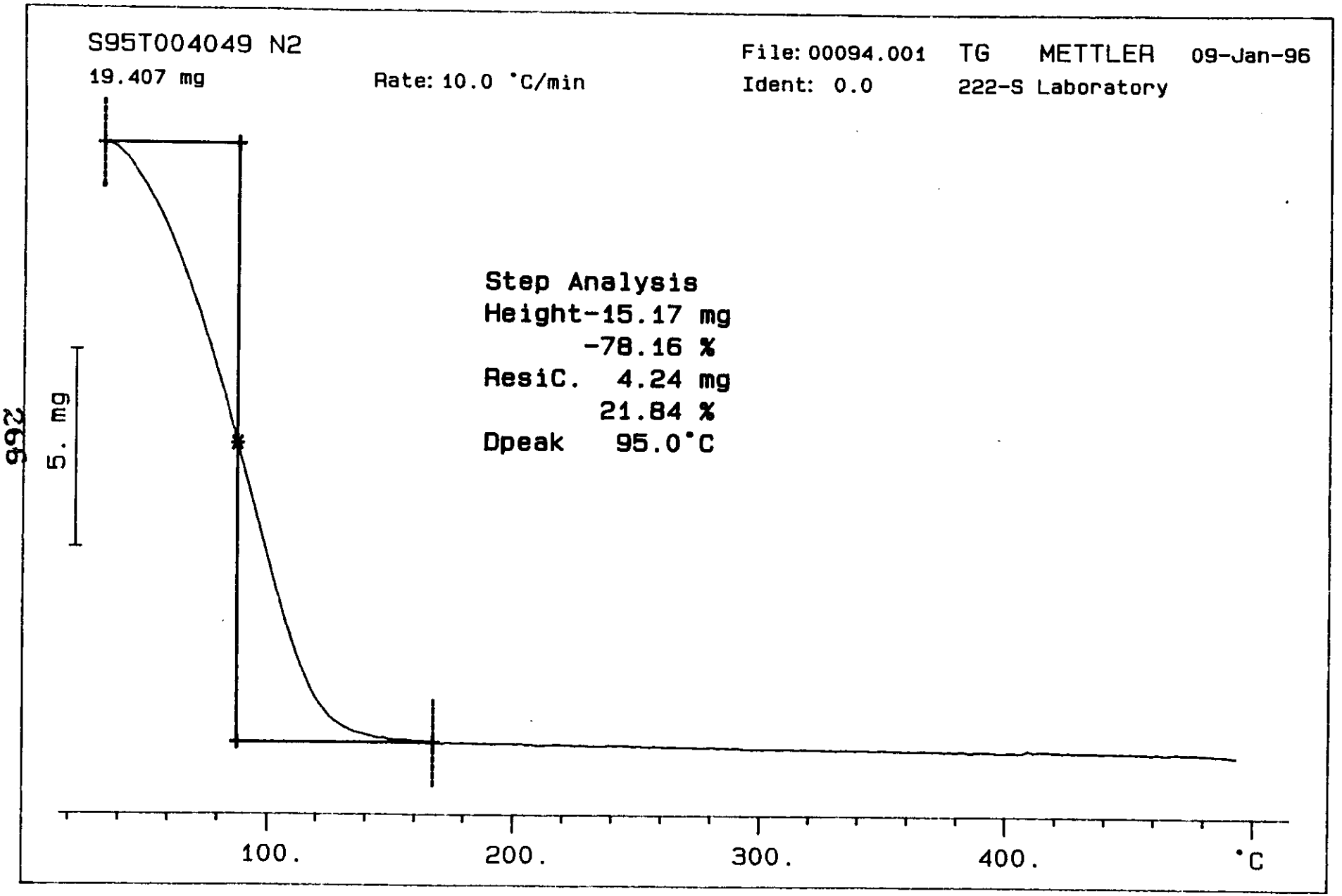
Data Entry Comments:

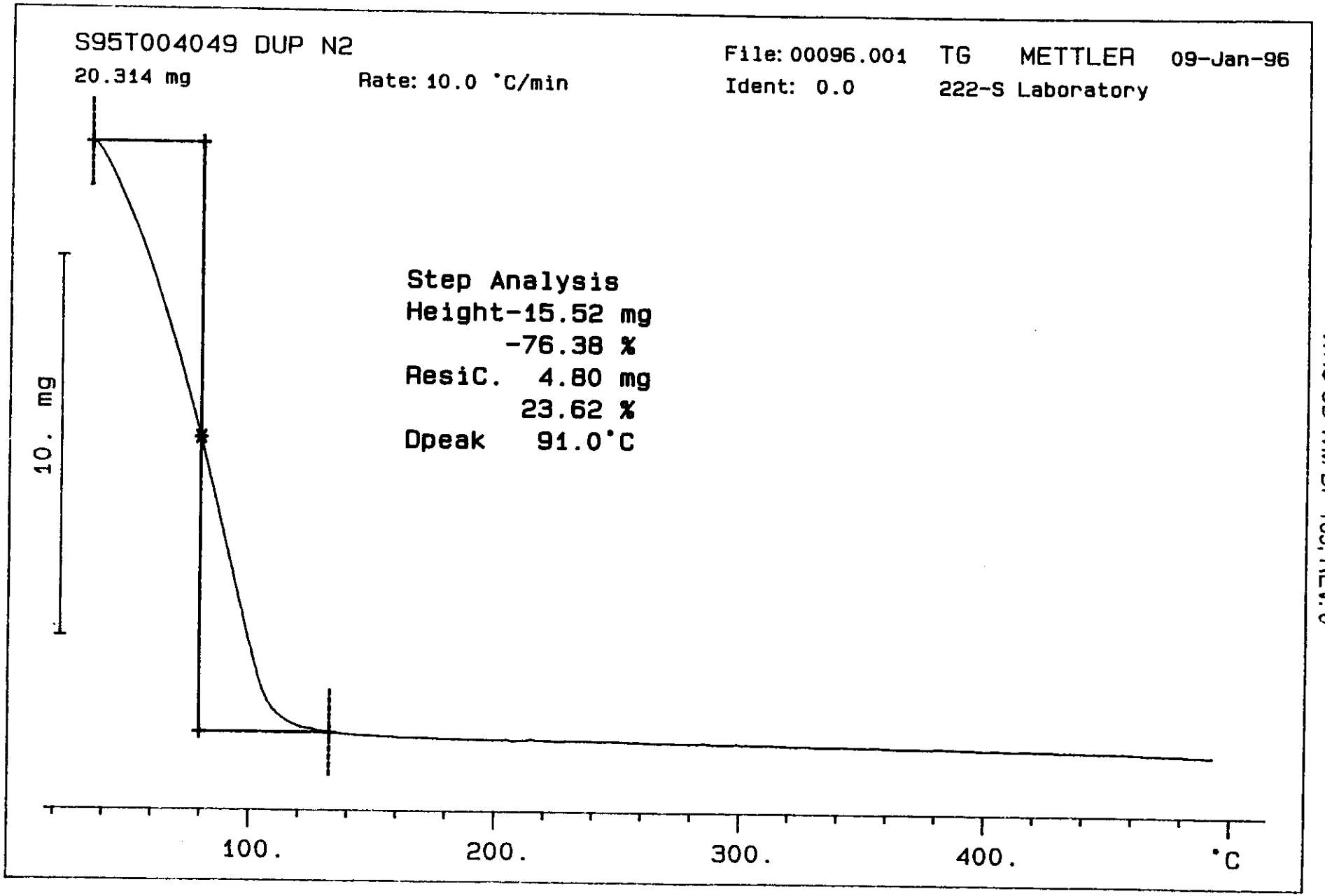
Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

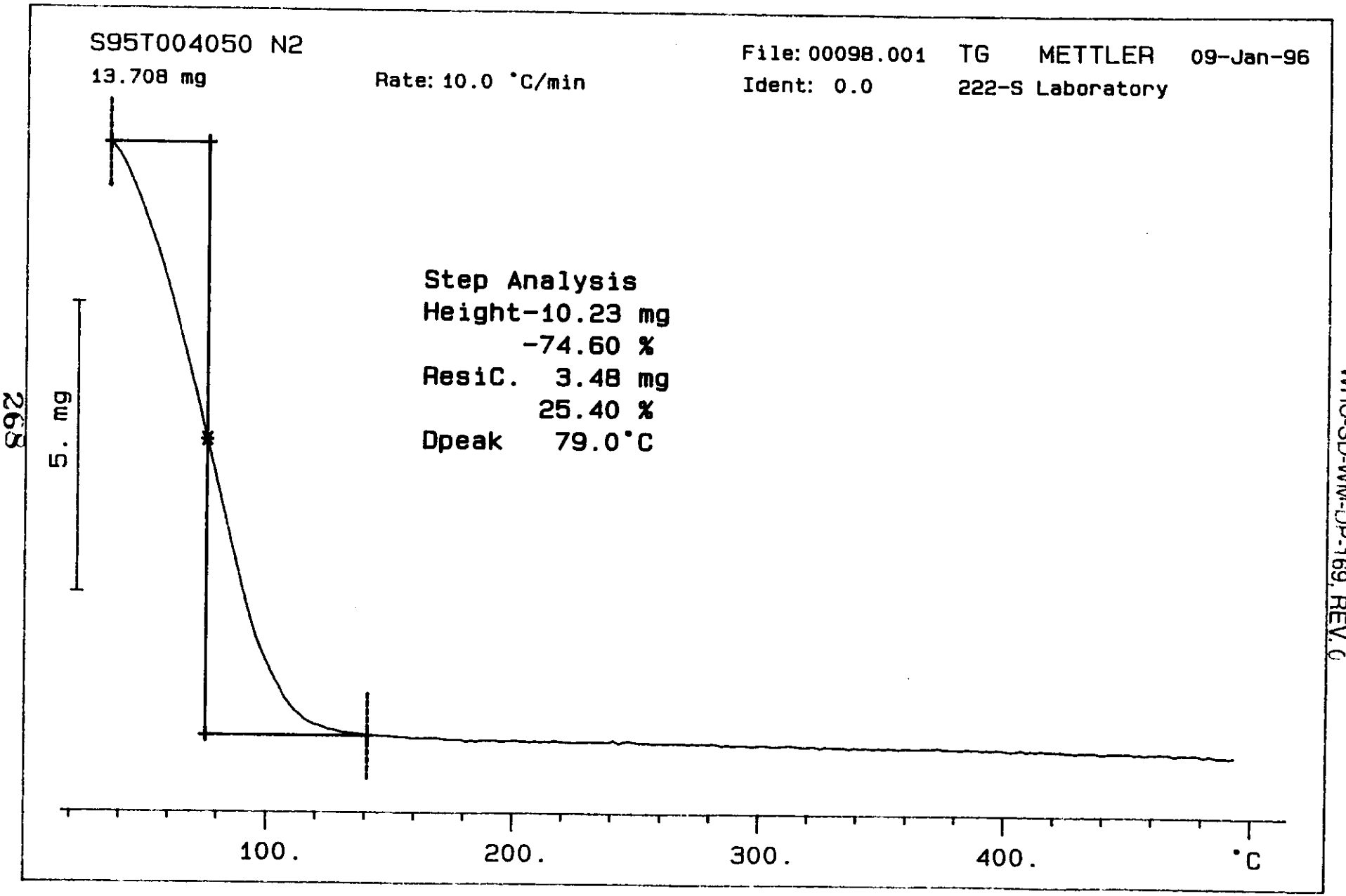
SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 265 TO 269.

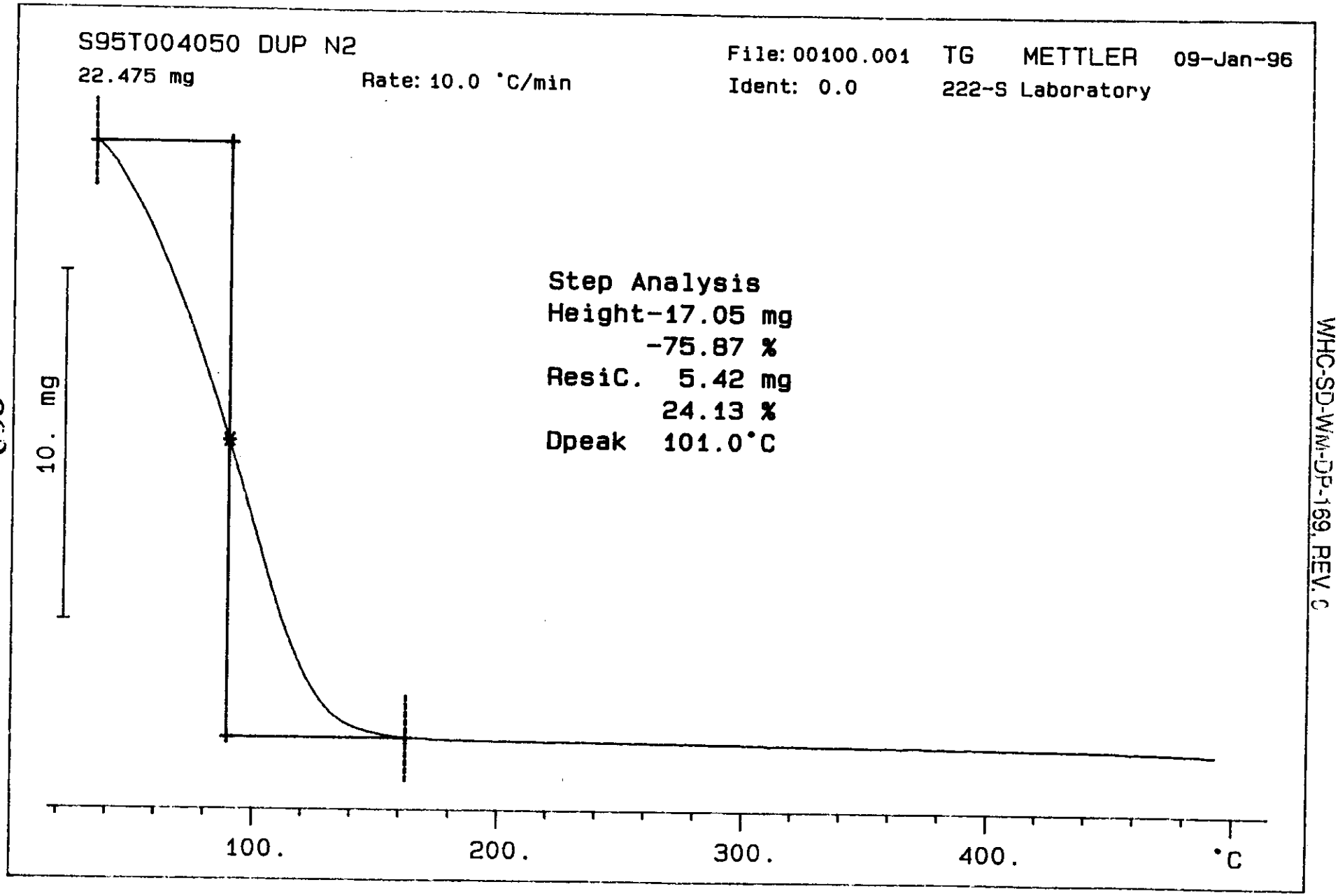
A. Lambel 1-30-96 BOV




S95T004049 N2
19.407 mg
Rate: 10.0 °C/min
File: 00094.001
TG METTLER 09-Jan-96
Ident: 0.0
222-S Laboratory
Step Analysis
Height-15.17 mg
-78.16 %
ResiC. 4.24 mg
21.84 %
Dpeak 95.0°C
5. mg
100.
200.
300.
400.
°C


S95T004049 DUP N2
20.314 mg
Rate: 10.0 °C/min
File: 00096.001
TG
METTLER
09-Jan-96
Ident: 0.0
222-S Laboratory
Step Analysis
Height-15.52 mg
-76.38 %
ResiC. 4.80 mg
23.62 %
Dpeak 91.0°C
10. mg
100.
200.
300.
400.
°C


S95T004050 N2
13.708 mg
Rate: 10.0 °C/min
File: 00098.001
TG
METTLER
09-Jan-96
Ident: 0.0
222-S Laboratory
Step Analysis
Height-10.23 mg
-74.60 %
ResiC. 3.48 mg
25.40 %
Dpeak 79.0°C
5. mg
100.
200.
300.
400.
°C


S95T004050 DUP N2
22.475 mg
Rate: 10.0 °C/min
File: 00100.001
TG METTLER 09-Jan-96
Ident: 0.0
222-S Laboratory
Step Analysis
Height-17.05 mg
-75.87 %
ResiC. 5.42 mg
24.13 %
Dpeak 101.0°C
10. mg
100.
200.
300.
400.
°C

LABCORE Data Entry Template for Worklist# 4666

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

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

Worklist Comment: Please run B-203 TGAs under N2. bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA-01	SOLID	59.74	59.33*	N/A	%
95000174	B-203	2	SAMPLE	S95T004051	0		TGA-01	SOLID	N/A	73.40		%
95000174	B-203	3	DUP	S95T004051	0		TGA-01	SOLID	73.40	69.29	N/A	%
95000174	B-203	4	SAMPLE	S95T004052	0		TGA-01	SOLID	N/A	75.28		%
95000174	B-203	5	DUP	S95T004052	0		TGA-01	SOLID	75.28	76.29	N/A	%

Final page for worklist# 4666

R D Mayer 1/9/96
Analyst Signature **Date**

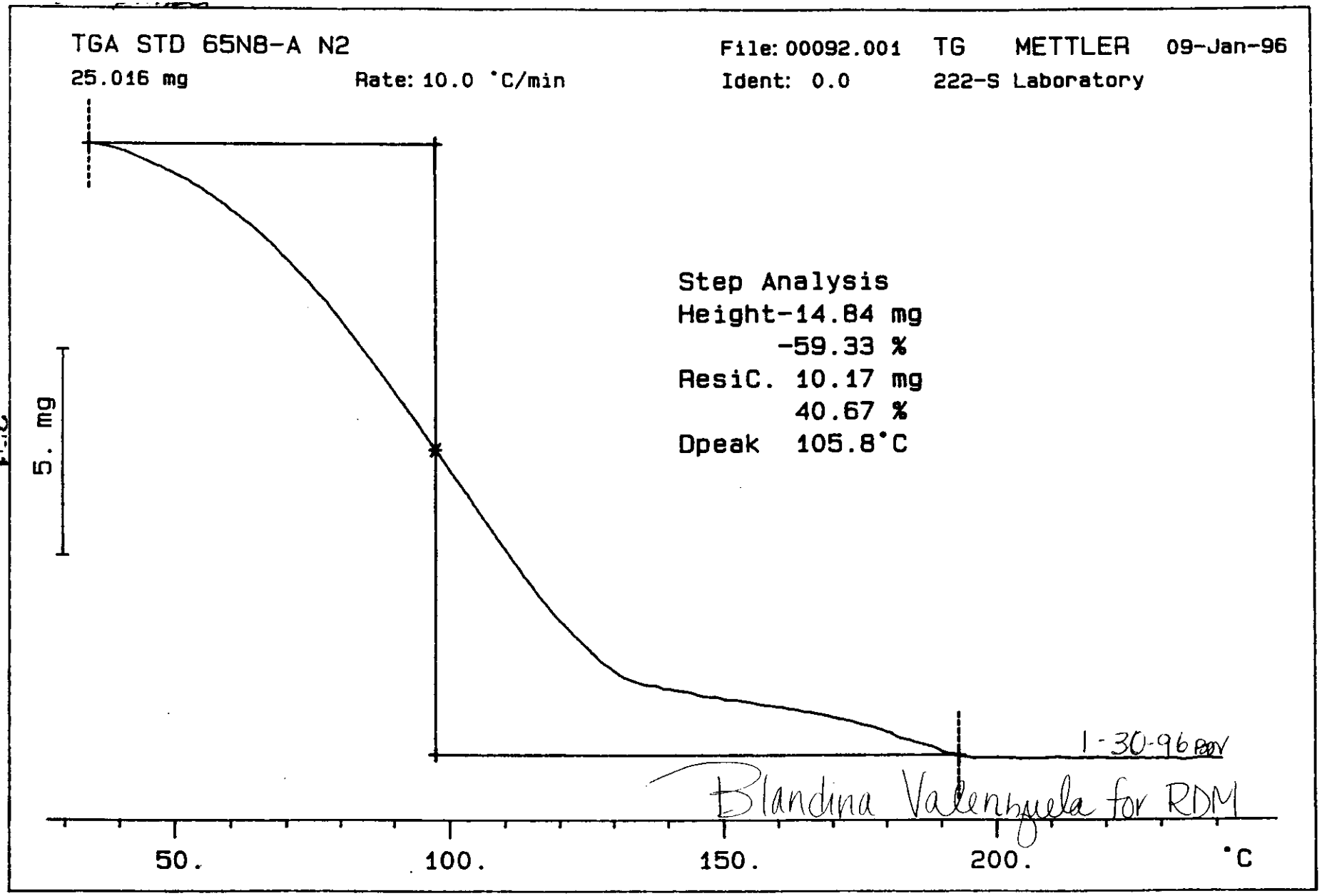
Frank Coulo 1/12/96
Analyst Signature **Date**

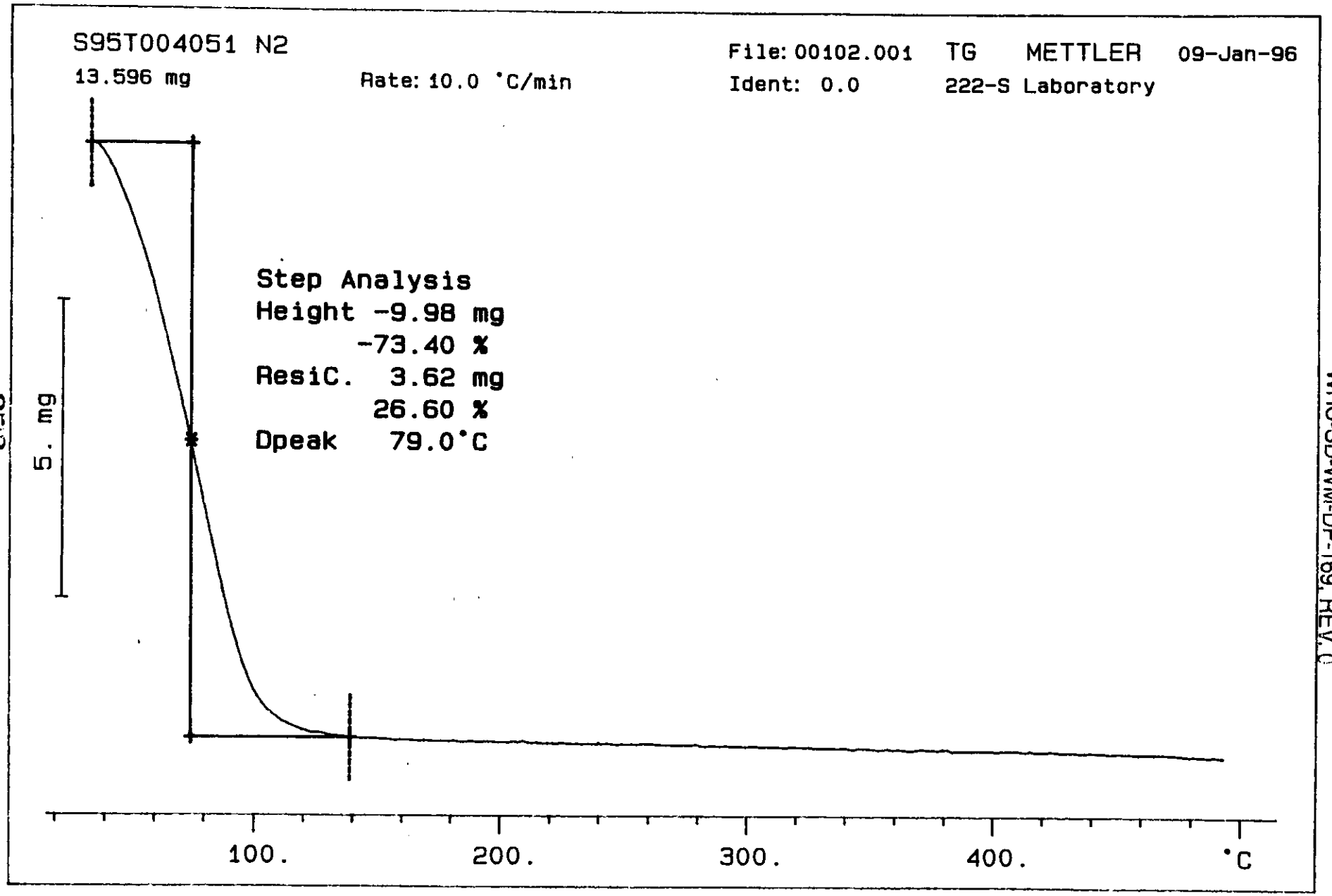
Verified by Blandina Valenzuela
1/12/96

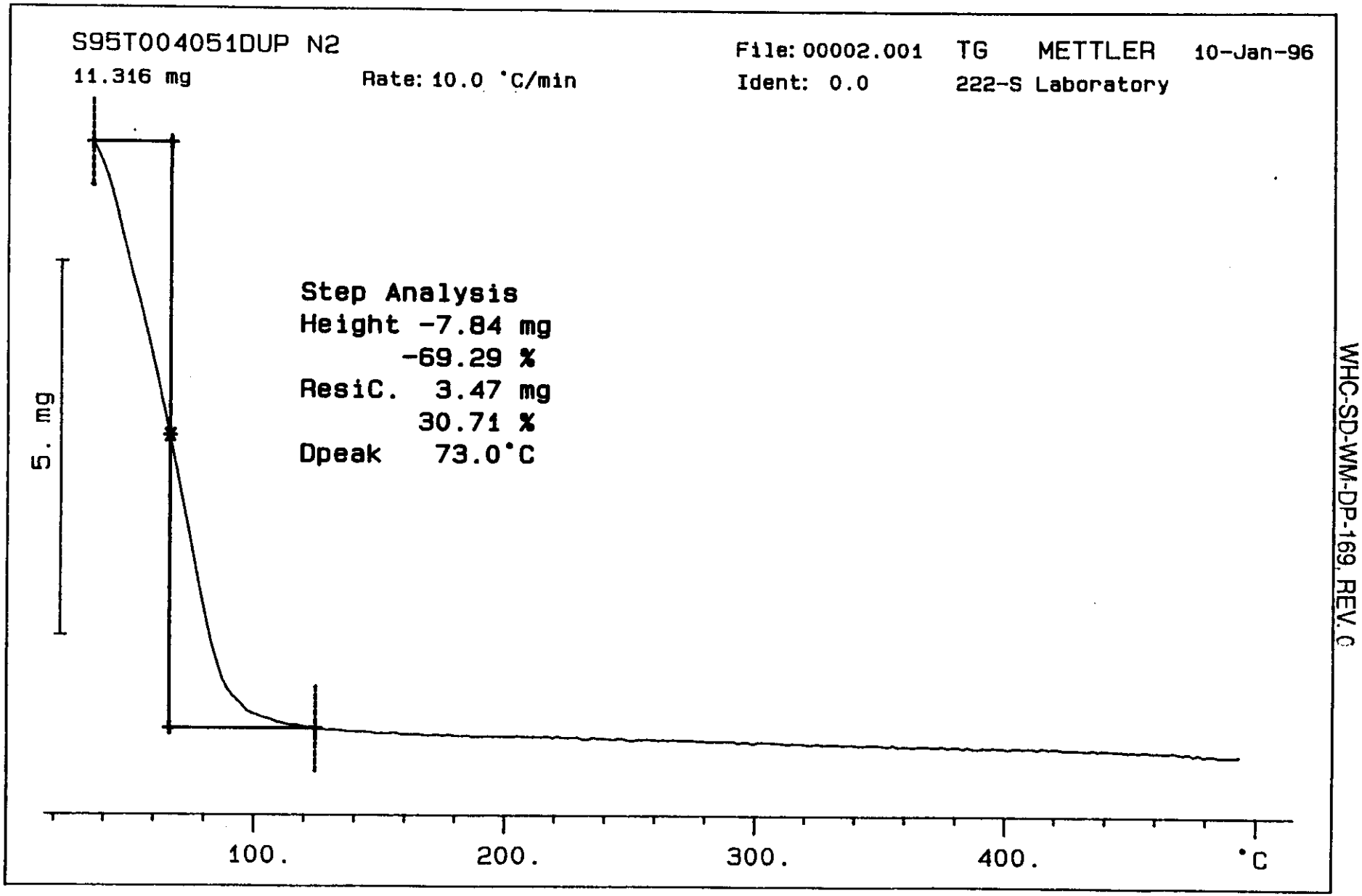
Data Entry Comments:

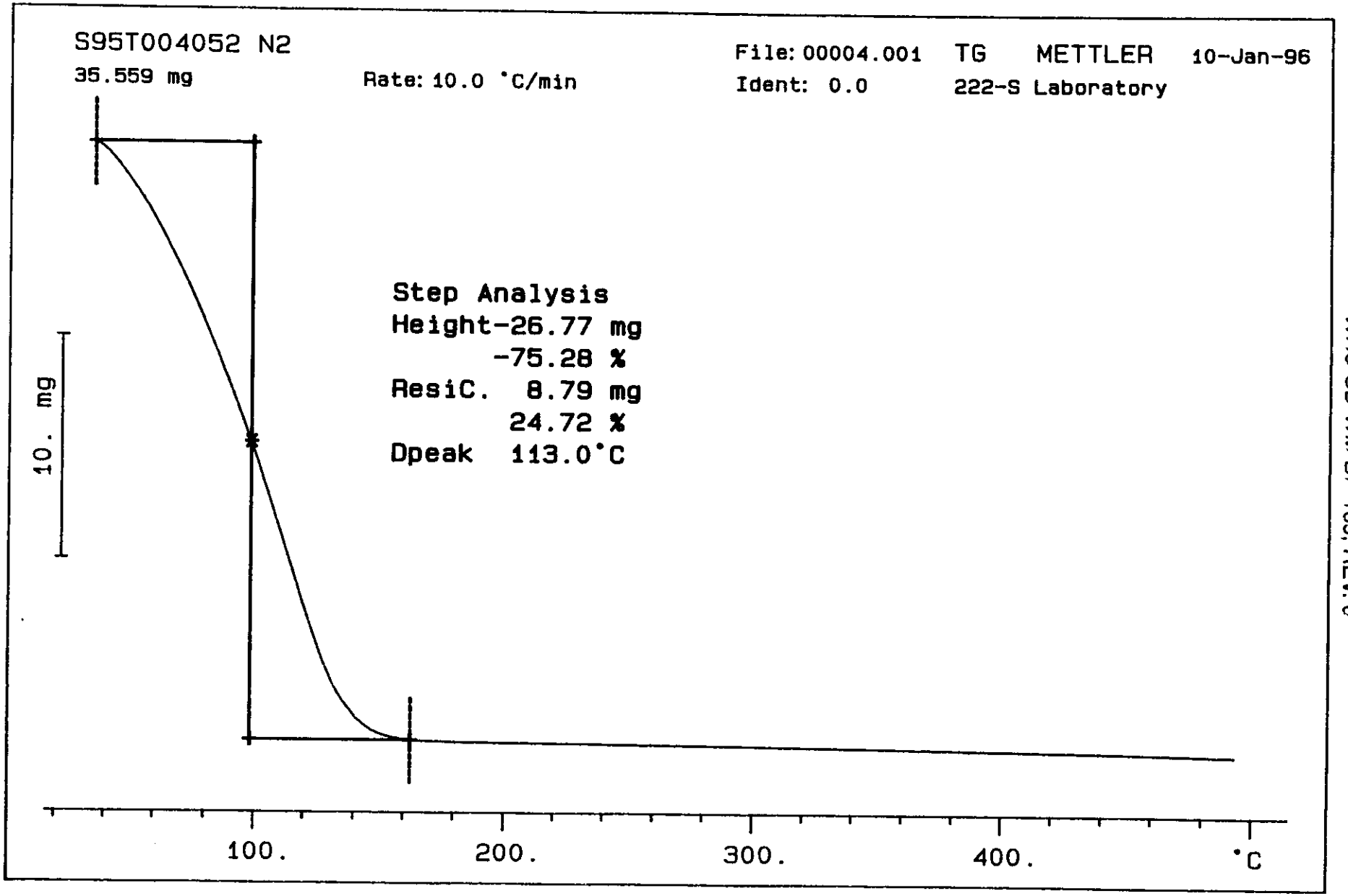
Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

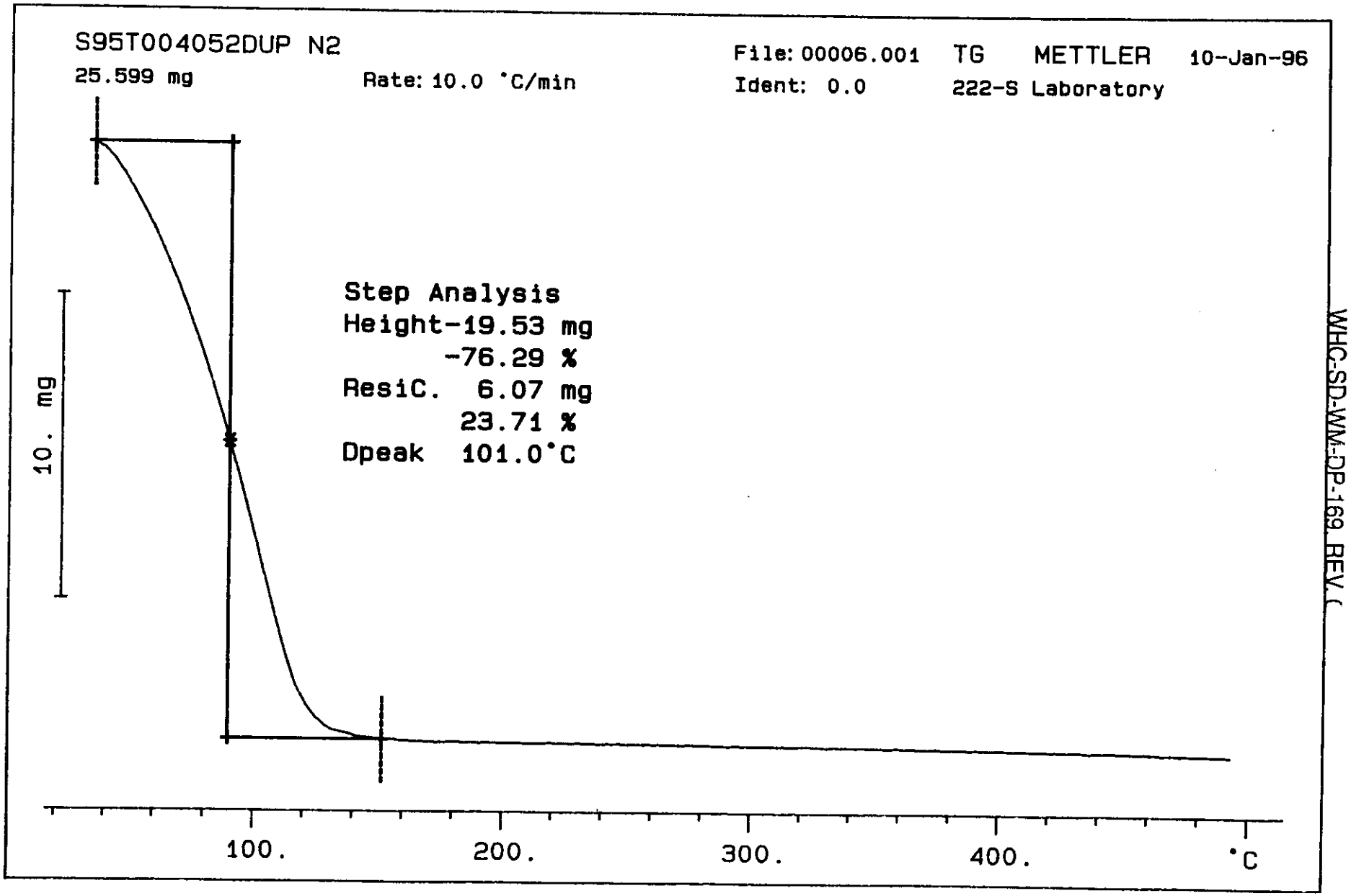
SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 271 TO 275.




S95T004051 N2
13.596 mg
Rate: 10.0 °C/min
File: 00102.001
TG
METTLER
09-Jan-96
Ident: 0.0
222-S Laboratory
Step Analysis
Height -9.98 mg
-73.40 %
ResiC. 3.62 mg
26.60 %
Dpeak 79.0°C
5. mg
100.
200.
300.
400.
°C


S95T004051DUP N2
11.316 mg
Rate: 10.0 °C/min
File: 00002.001
TG
METTLER
10-Jan-96
Ident: 0.0
222-S Laboratory
Step Analysis
Height -7.84 mg
-69.29 %
ResiC. 3.47 mg
30.71 %
Dpeak 73.0°C
5. mg
100.
200.
300.
400.
°C


S95T004052 N2
35.559 mg
Rate: 10.0 °C/min
File: 00004.001
TG
METTLER
10-Jan-96
Ident: 0.0
222-S Laboratory
Step Analysis
Height-26.77 mg
-75.28 %
ResiC. 8.79 mg
24.72 %
Dpeak 113.0°C
10. mg
100.
200.
300.
400.
°C


S95T004052DUP N2
25.599 mg
Rate: 10.0 °C/min
File: 00006.001
TG
METTLER
10-Jan-96
Ident: 0.0
222-S Laboratory
Step Analysis
Height-19.53 mg
-76.29 %
ResiC. 6.07 mg
23.71 %
Dpeak 101.0°C
10. mg
100.
200.
300.
400.
°C

LABCORE Data Entry Template for Worklist# 4667

Analyst: EAL **Instrument:** TGA0 1 **Book #** 6018-A

Method: LA-560-112 Rev/Mod 4B-1
LAD 1-30-96

Worklist Comment: Please run B-203 TGAs under N2. bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA-01	SOLID	59.74	57.02	N/A	%
95000174	B-203	2	SAMPLE	S95T004053	0		TGA-01	SOLID	N/A	72.99		%
95000174	B-203	3	DUP	S95T004053	0		TGA-01	SOLID	72.99	75.25	N/A	%
95000174	B-203	4	SAMPLE	S95T004054	0		TGA-01	SOLID	N/A	76.49		%
95000174	B-203	5	DUP	S95T004054	0		TGA-01	SOLID	76.49	76.75	N/A	%

Final page for worklist # 4667

R Lambel 01-10-96
Analyst Signature **Date**

Linda Coulter 1/12/96
Analyst Signature **Date**

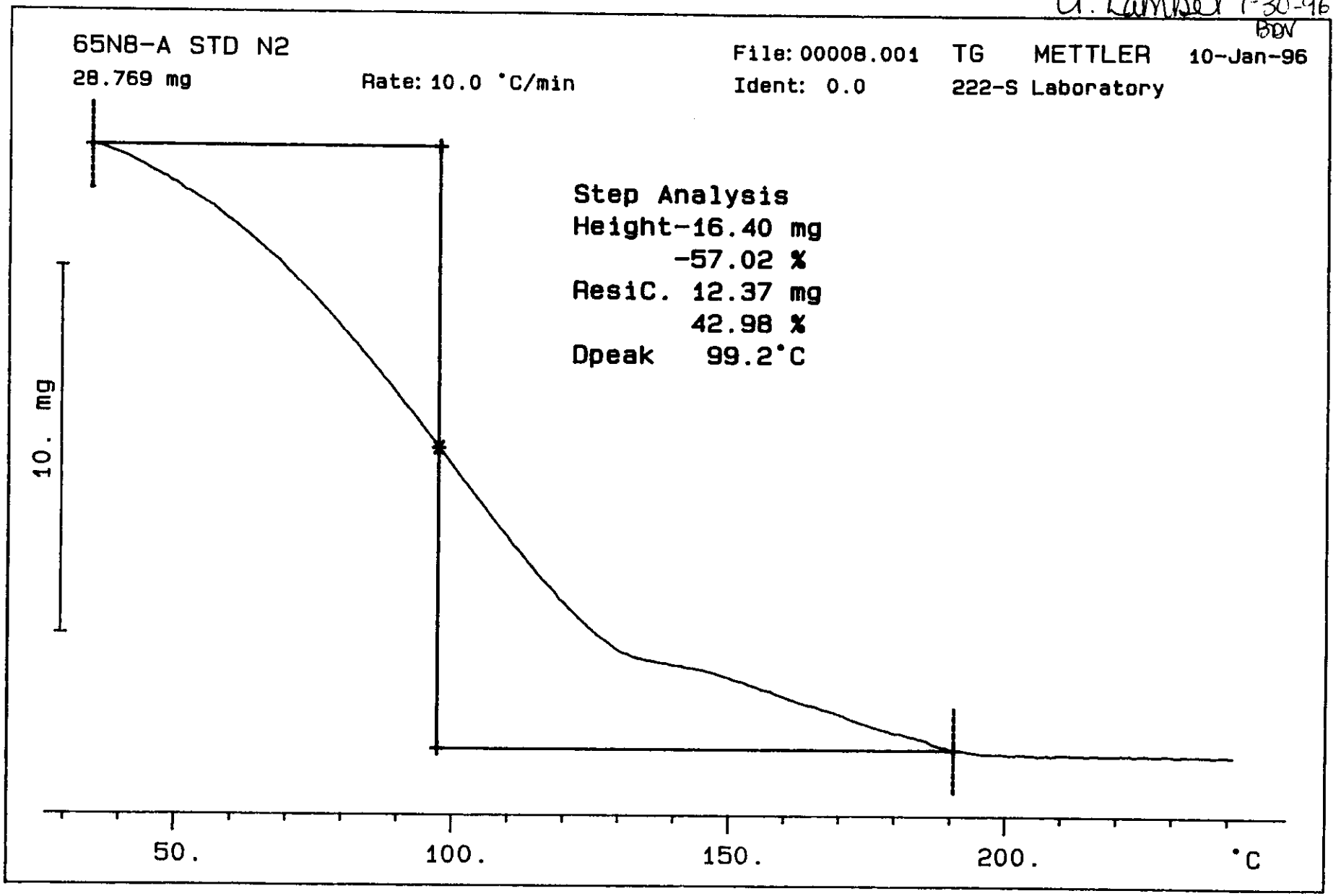
Verified by Blandina Valenzuela
1/12/96

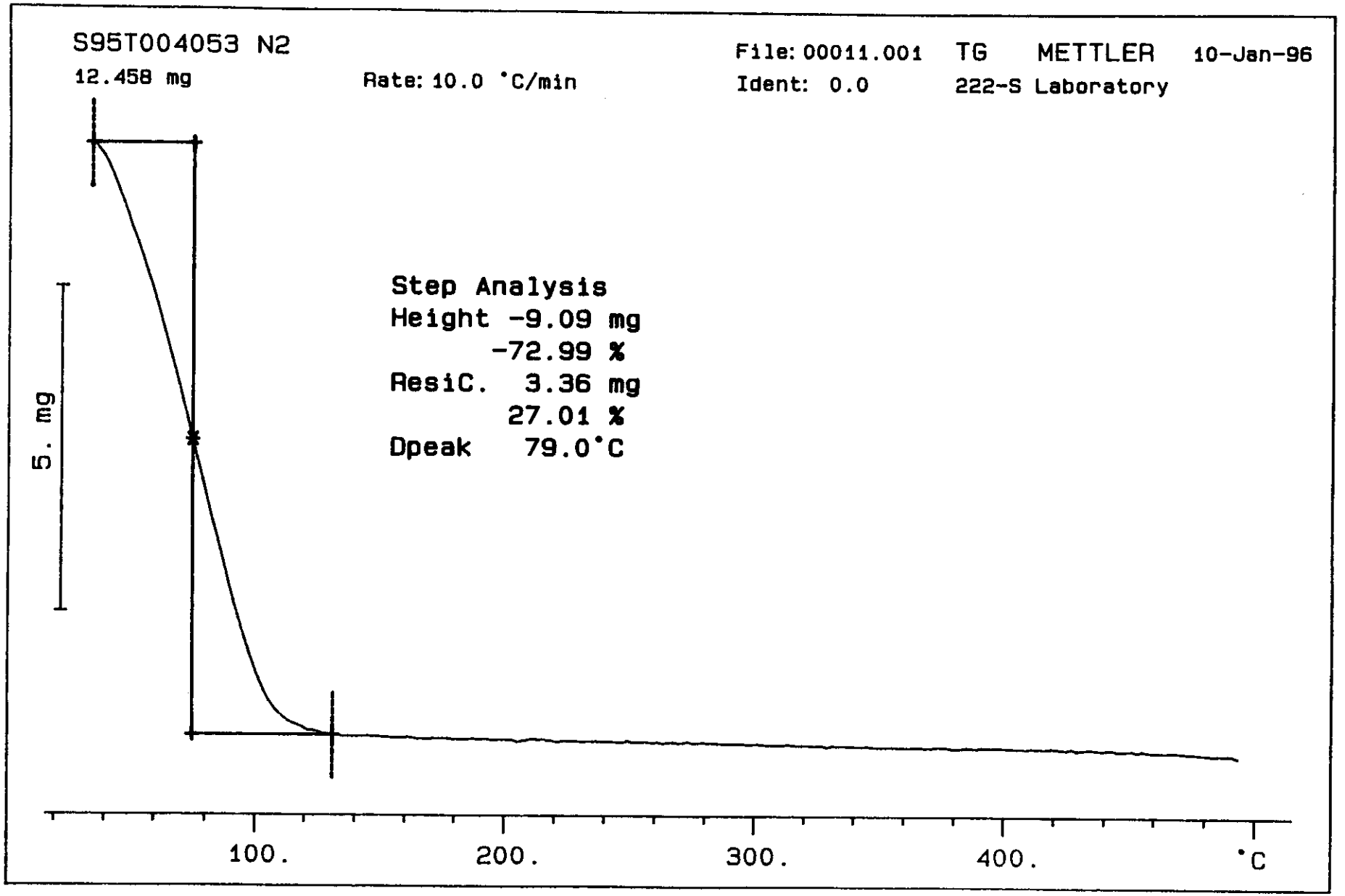
Data Entry Comments:

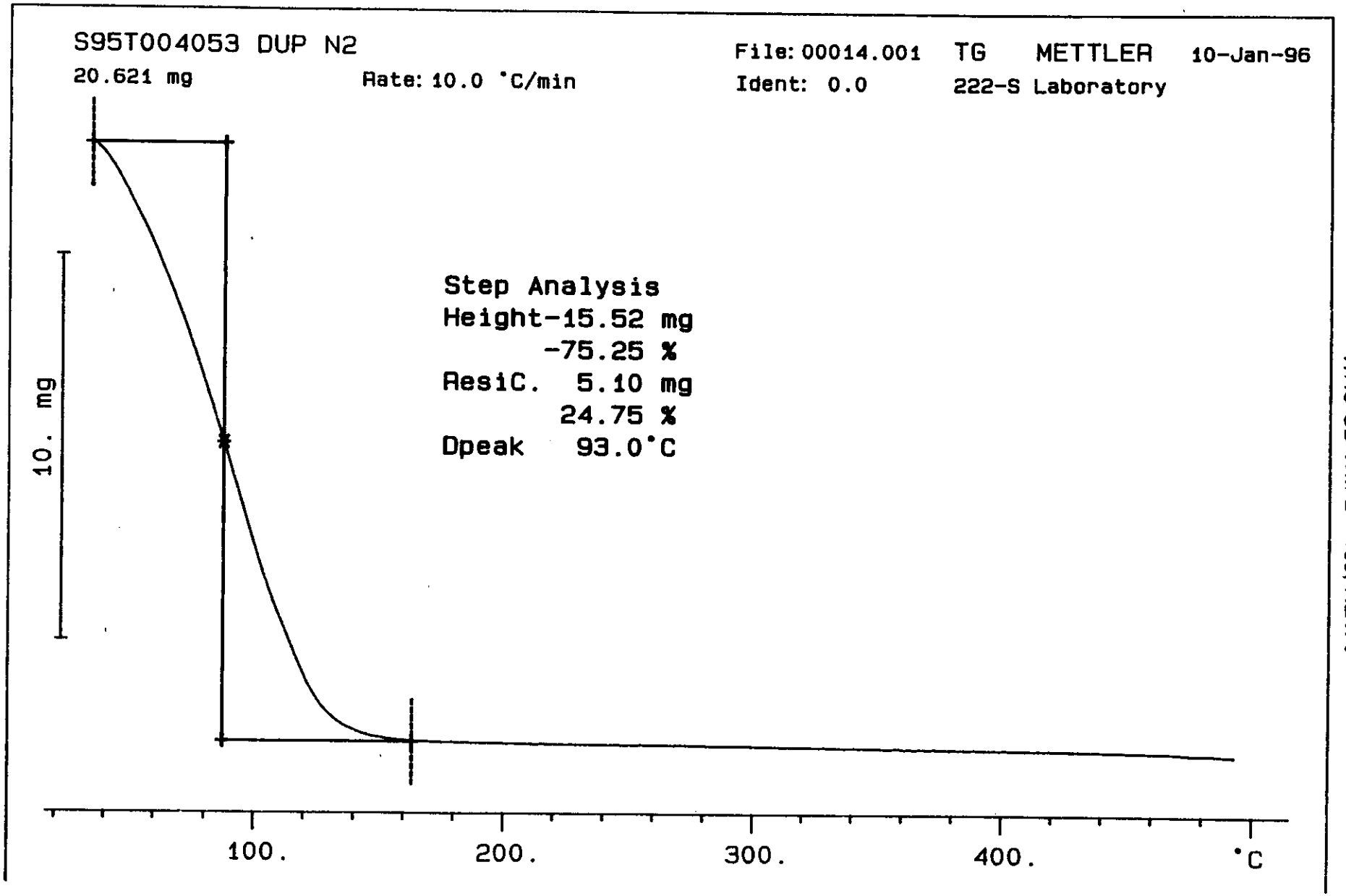
Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

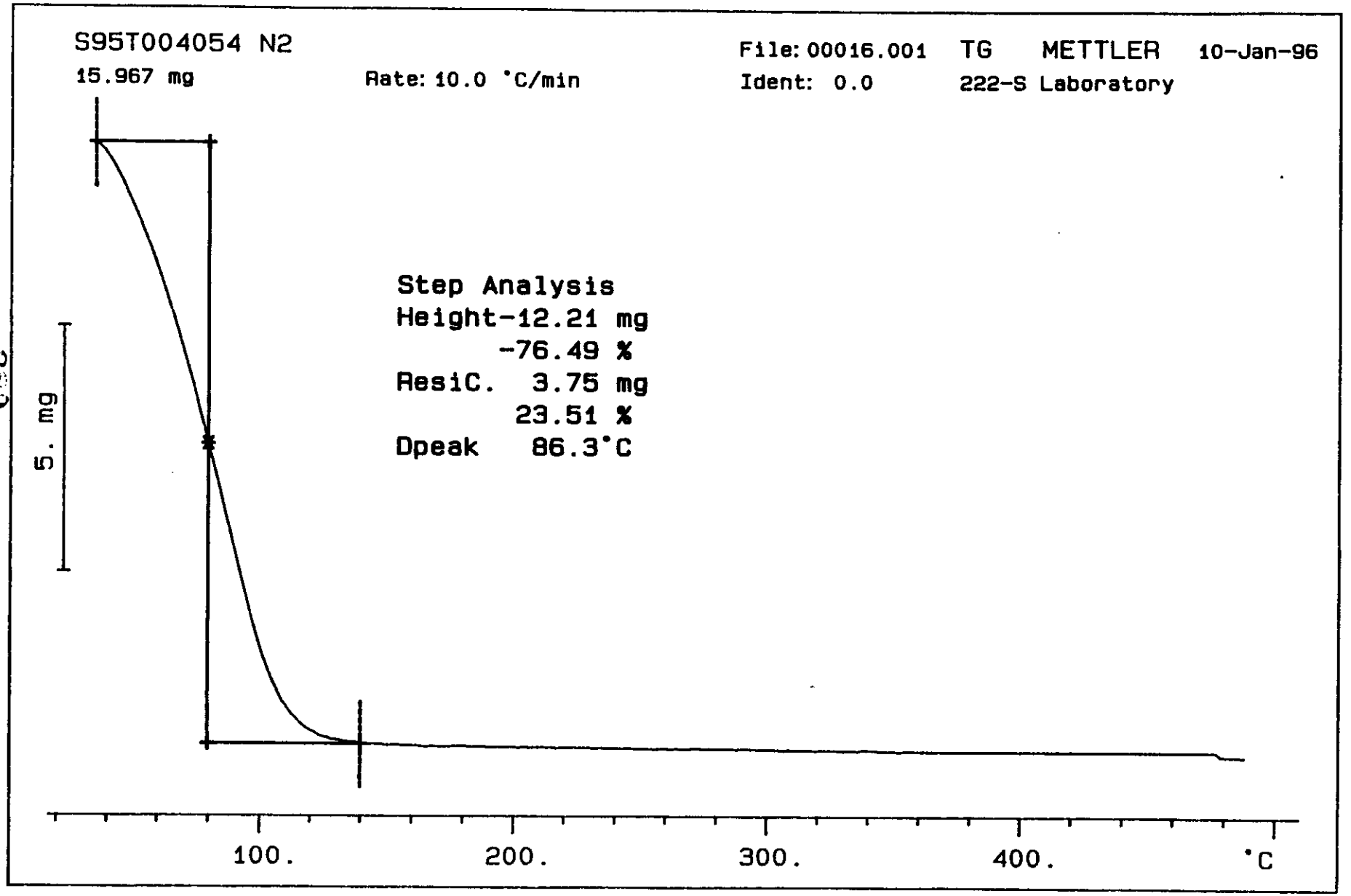
SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 277 TO 281.

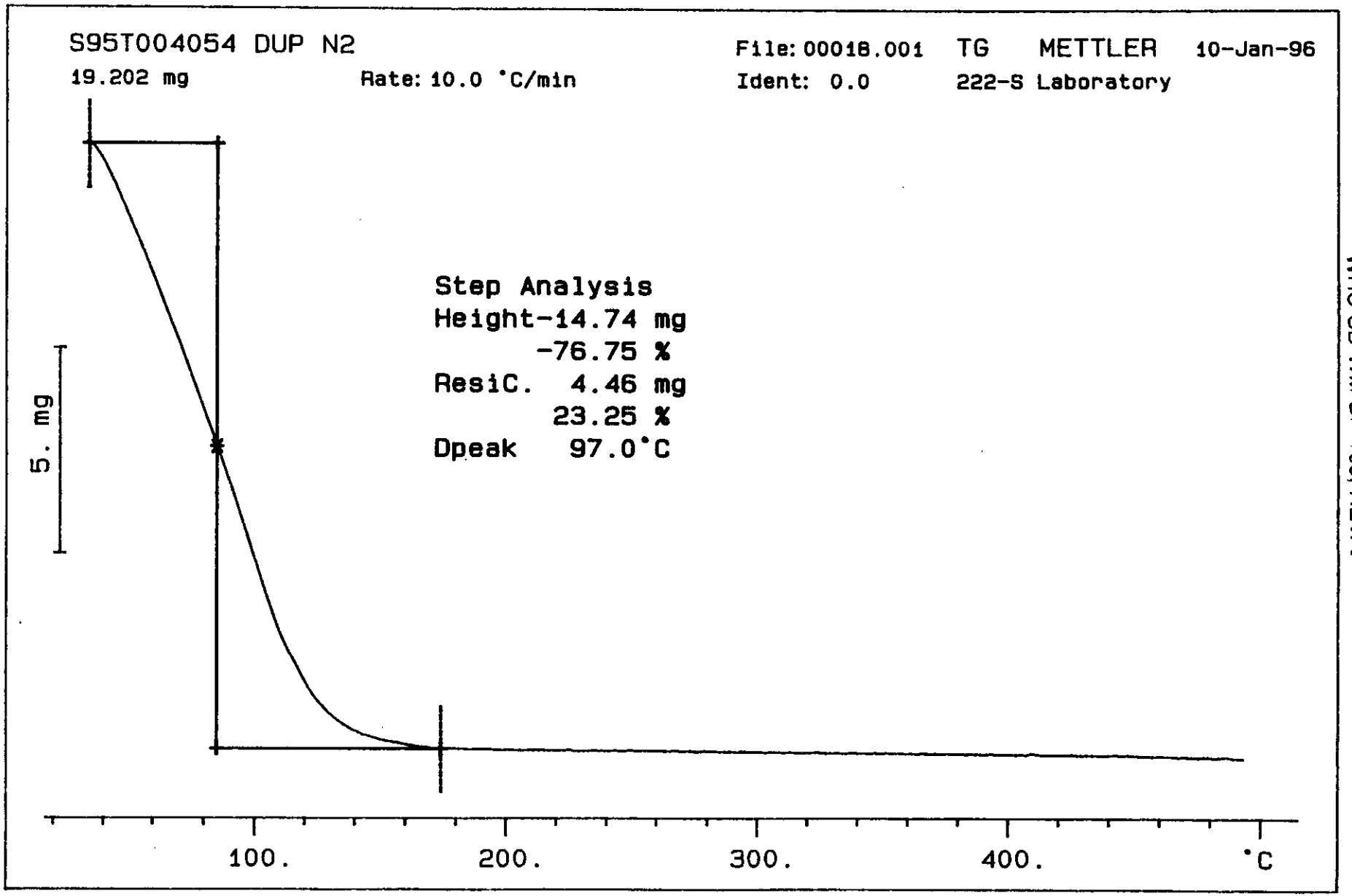
A. Lambel 1-30-96
BDV




S95T004053 N2
12.458 mg
Rate: 10.0 °C/min
File: 00011.001
TG
METTLER
10-Jan-96
Ident: 0.0
222-S Laboratory
Step Analysis
Height -9.09 mg
-72.99 %
ResiC. 3.36 mg
27.01 %
Dpeak 79.0°C
5. mg
100.
200.
300.
400.
°C


S95T004053 DUP N2
20.621 mg
Rate: 10.0 °C/min
File: 00014.001
TG
METTLER
10-Jan-96
Ident: 0.0
222-S Laboratory
Step Analysis
Height-15.52 mg
-75.25 %
ResiC. 5.10 mg
24.75 %
Dpeak 93.0°C
10. mg
100.
200.
300.
400.
°C


S95T004054 N2
15.967 mg
Rate: 10.0 °C/min
File: 00016.001
TG
METTLER
10-Jan-96
Ident: 0.0
222-S Laboratory
Step Analysis
Height-12.21 mg
-76.49 %
ResiC. 3.75 mg
23.51 %
Dpeak 86.3°C
5. mg
100.
200.
300.
400.
°C


S95T004054 DUP N2
19.202 mg
Rate: 10.0 °C/min
File: 00018.001
TG
METTLER
10-Jan-96
Ident: 0.0
222-S Laboratory
Step Analysis
Height-14.74 mg
-76.75 %
ResiC. 4.46 mg
23.25 %
Dpeak 97.0°C
5. mg
100.
200.
300.
400.
°C

LABCORE Data Entry Template for Worklist# 4668

Analyst: RDM **Instrument:** TGA0 1 **Book #** 75NB-A

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

Worklist Comment: Please run B-203 TGAs under N2. bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA-01	SOLID	~~59.74~~ 59.2	60.65	N/A	%
95000174	B-203	2	SAMPLE	S95T004055	0		TGA-01	SOLID	N/A	74.63		%
95000174	B-203	3	DUP	S95T004055	0		TGA-01	SOLID	74.63	76.38	N/A	%
95000174	B-203	4	SAMPLE	S95T004056	0		TGA-01	SOLID	N/A	75.04		%
95000174	B-203	5	DUP	S95T004056	0		TGA-01	SOLID	75.04	73.13	N/A	%

Final page for worklist # 4668

[signature] 1/11/96
Analyst Signature **Date**

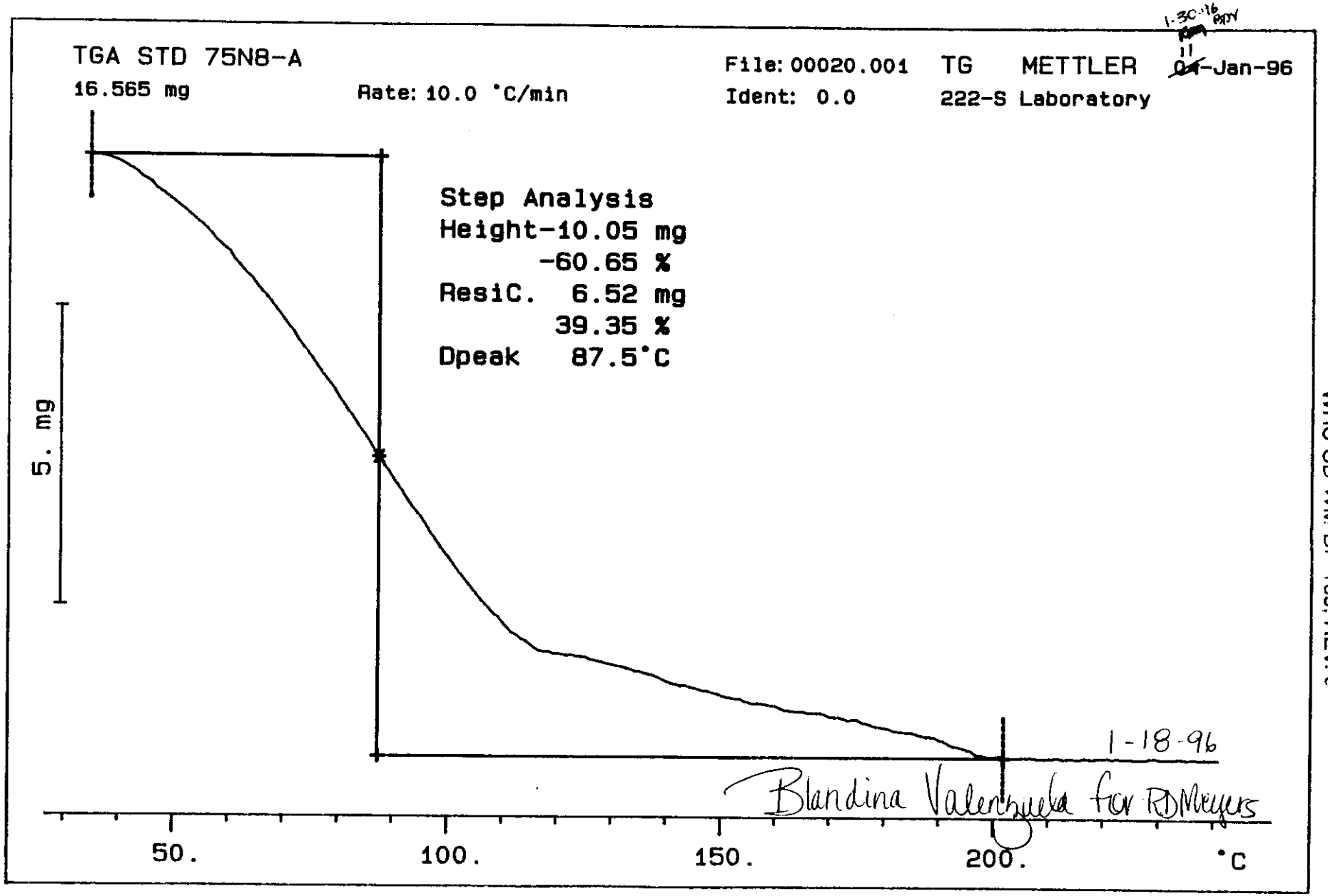
[signature] 1/12
Analyst Signature **Date**

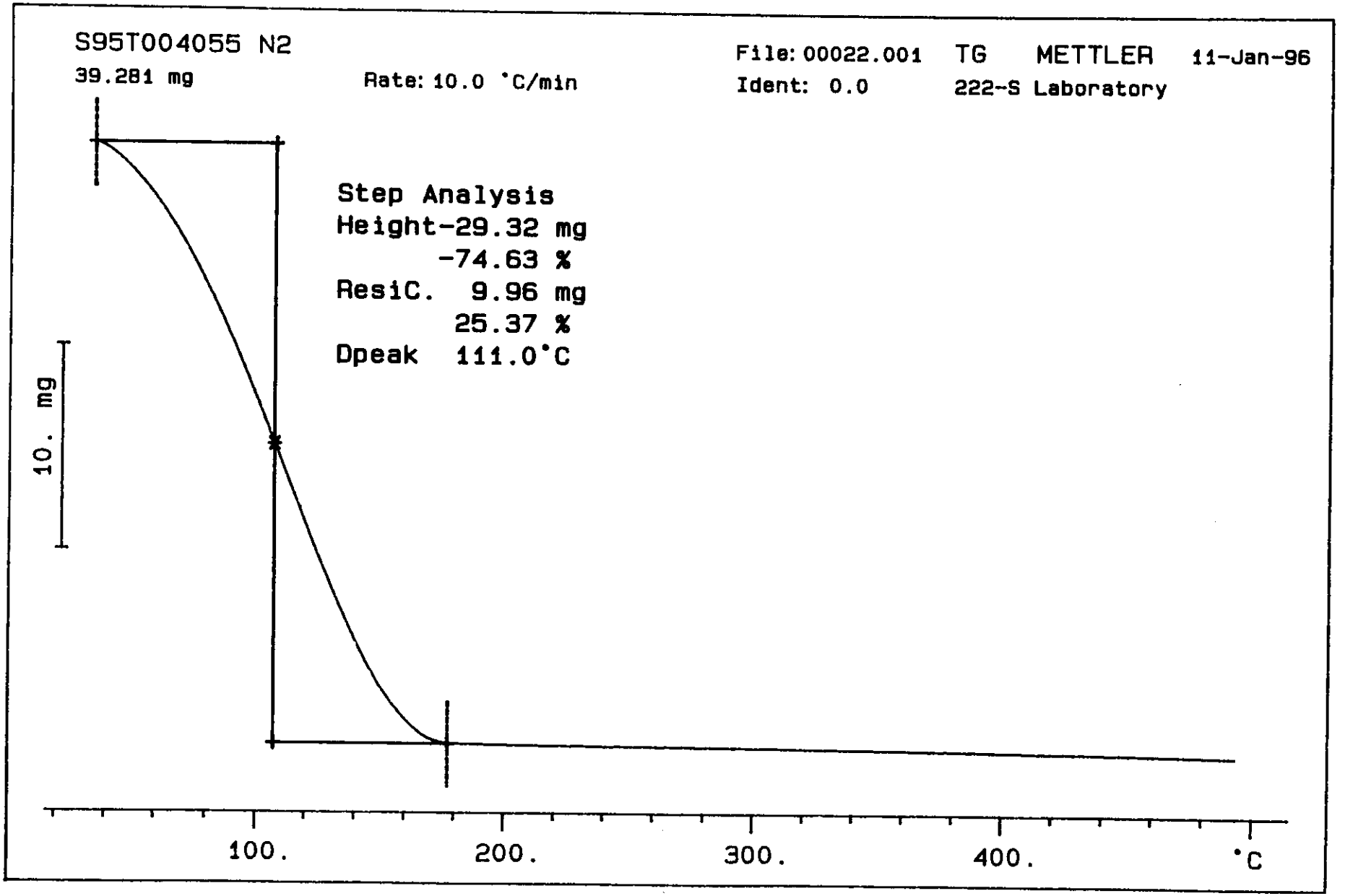
Verified by Blartlina Valenzuela 1/18/96

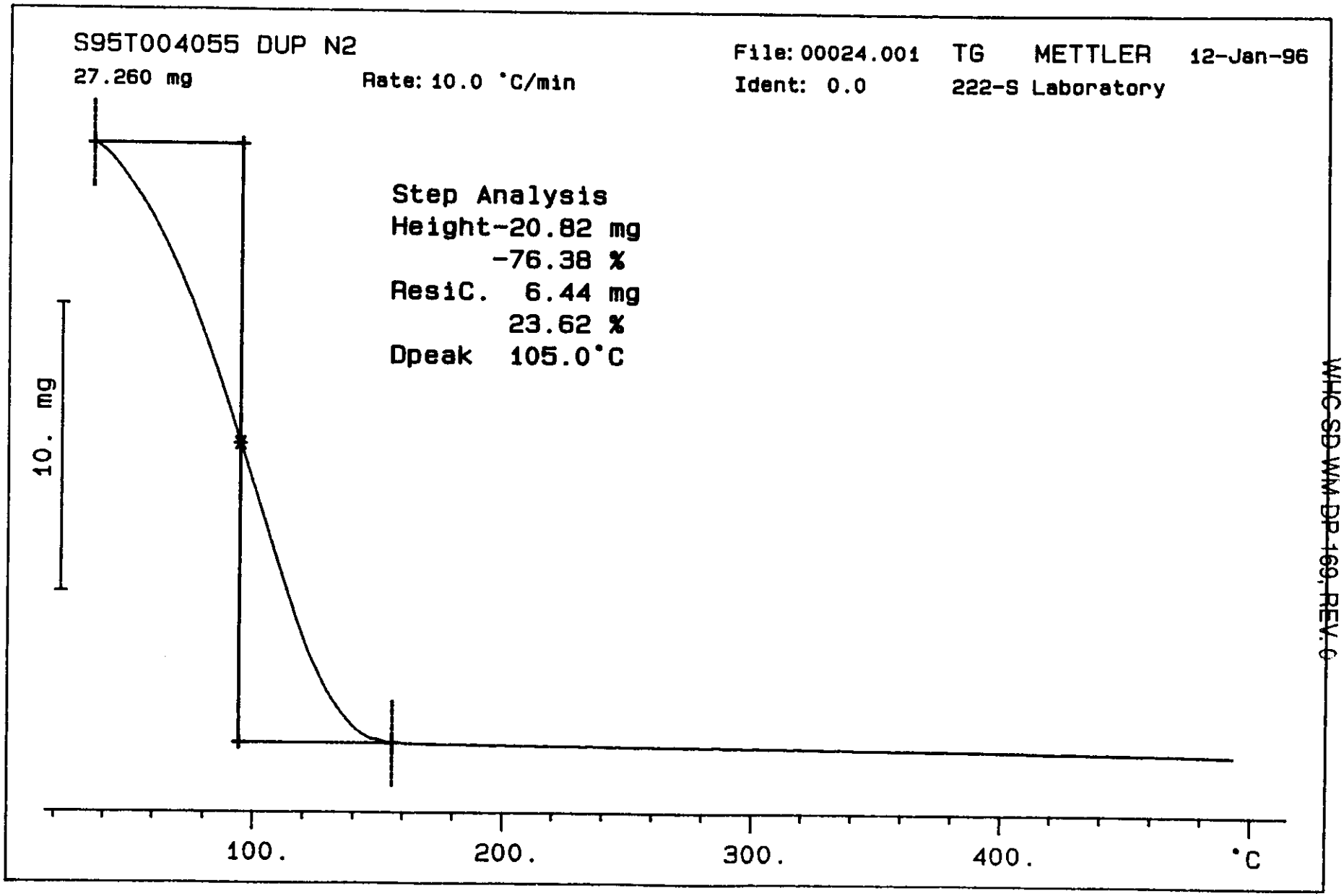
Data Entry Comments:

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.

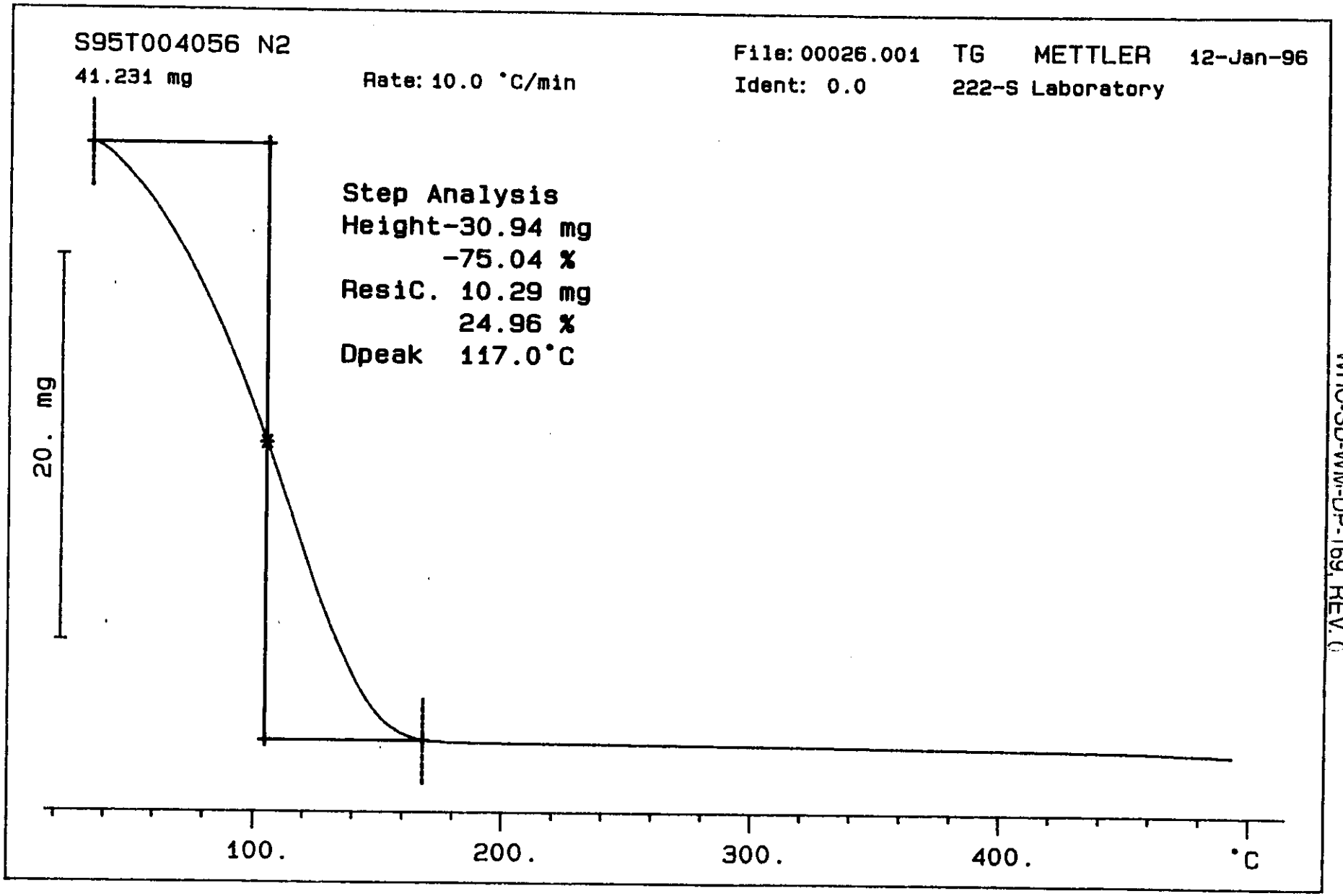
SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 283 TO 287.

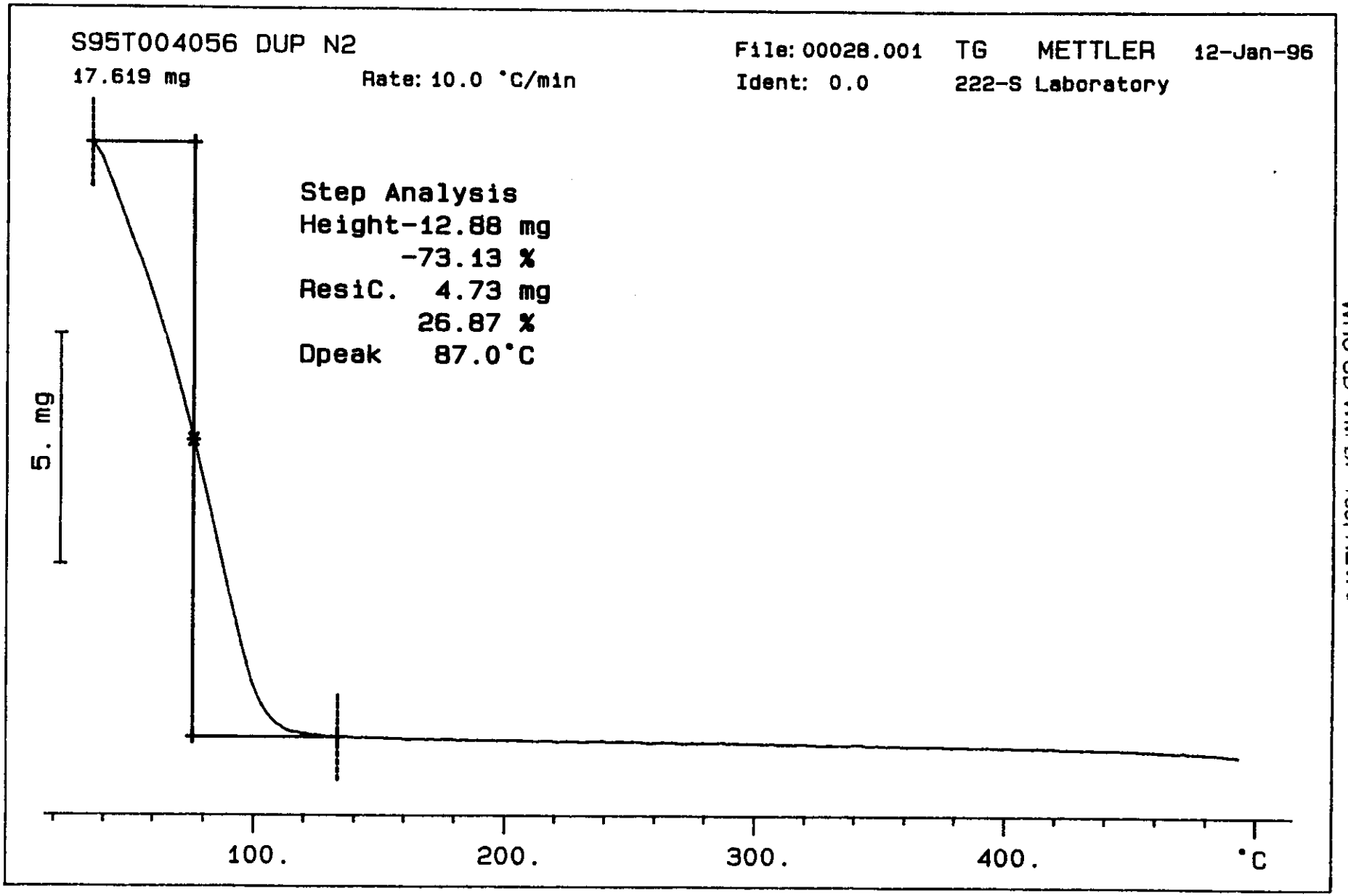



S95T004055 N2
39.281 mg
Rate: 10.0 °C/min
File: 00022.001
TG
METTLER
11-Jan-96
Ident: 0.0
222-S Laboratory
Step Analysis
Height-29.32 mg
-74.63 %
ResiC. 9.96 mg
25.37 %
Dpeak 111.0°C
10. mg
100.
200.
300.
400.
°C



WHC-SD-WM-DP-169, REV.0


S95T004056 N2
41.231 mg
Rate: 10.0 °C/min
File: 00026.001
TG
METTLER
12-Jan-96
Ident: 0.0
222-S Laboratory
Step Analysis
Height-30.94 mg
-75.04 %
ResiC. 10.29 mg
24.96 %
Dpeak 117.0°C
20. mg
100.
200.
300.
400.
°C


S95T004056 DUP N2
17.619 mg
Rate: 10.0 °C/min
File: 00028.001
TG
METTLER
12-Jan-96
Ident: 0.0
222-S Laboratory
Step Analysis
Height-12.88 mg
-73.13 %
ResiC. 4.73 mg
26.87 %
Dpeak 87.0°C
5. mg
100.
200.
300.
400.
°C

LABCORE Data Entry Template for Worklist# 4836

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

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

Worklist Comment: Please run B-203 TGAs under N2. bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA-01	LIQUID	59.2	60.56 *	N/A	%
95000174	B-203	2	SAMPLE	S95T003957	0		TGA-01	LIQUID	N/A	100.8		%
95000174	B-203	3	DUP	S95T003957	0		TGA-01	LIQUID	100.8	100.2	N/A	%
		4	STD				TGA-01	LIQUID	59.2	60.64	N/A	%
95000174	B-203	5	SAMPLE	S95T003958	0		TGA-01	LIQUID	N/A	88.71		%
95000174	B-203	6	DUP	S95T003958	0		TGA-01	LIQUID	88.71	89.63	N/A	%

Final page for worklist # 4836

See attached for signatures
Analyst Signature **Date** 1/24/96

N E Wright 1/25/96
Analyst Signature **Date**

Verified by Blandina Valenzuela BDV 1-26-96

Data Entry Comments: S95T003957 the result is assumed to be 100% weight loss however the instrument may have recorded a weight slightly lower than actual.

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# 4836

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

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

Worklist Comment: Please run B-203 TGAs under N2. bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA-01	LIQUID	59.2	60.56*	N/A	%
95000174	B-203	2	SAMPLE	S95T003957	0		TGA-01	LIQUID	N/A	100.8		%
95000174	B-203	3	DUP	S95T003957	0		TGA-01	LIQUID	100.8		N/A	%
95000174	B-203	4	SAMPLE	S95T003958	0		TGA-01	LIQUID	N/A			%
95000174	B-203	5	DUP	S95T003958	0		TGA-01	LIQUID			N/A	%

Final page for worklist # 4836

Susie M. Fulton 1-17-96

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 290 TO 295.

BEST AVAILABLE COPY

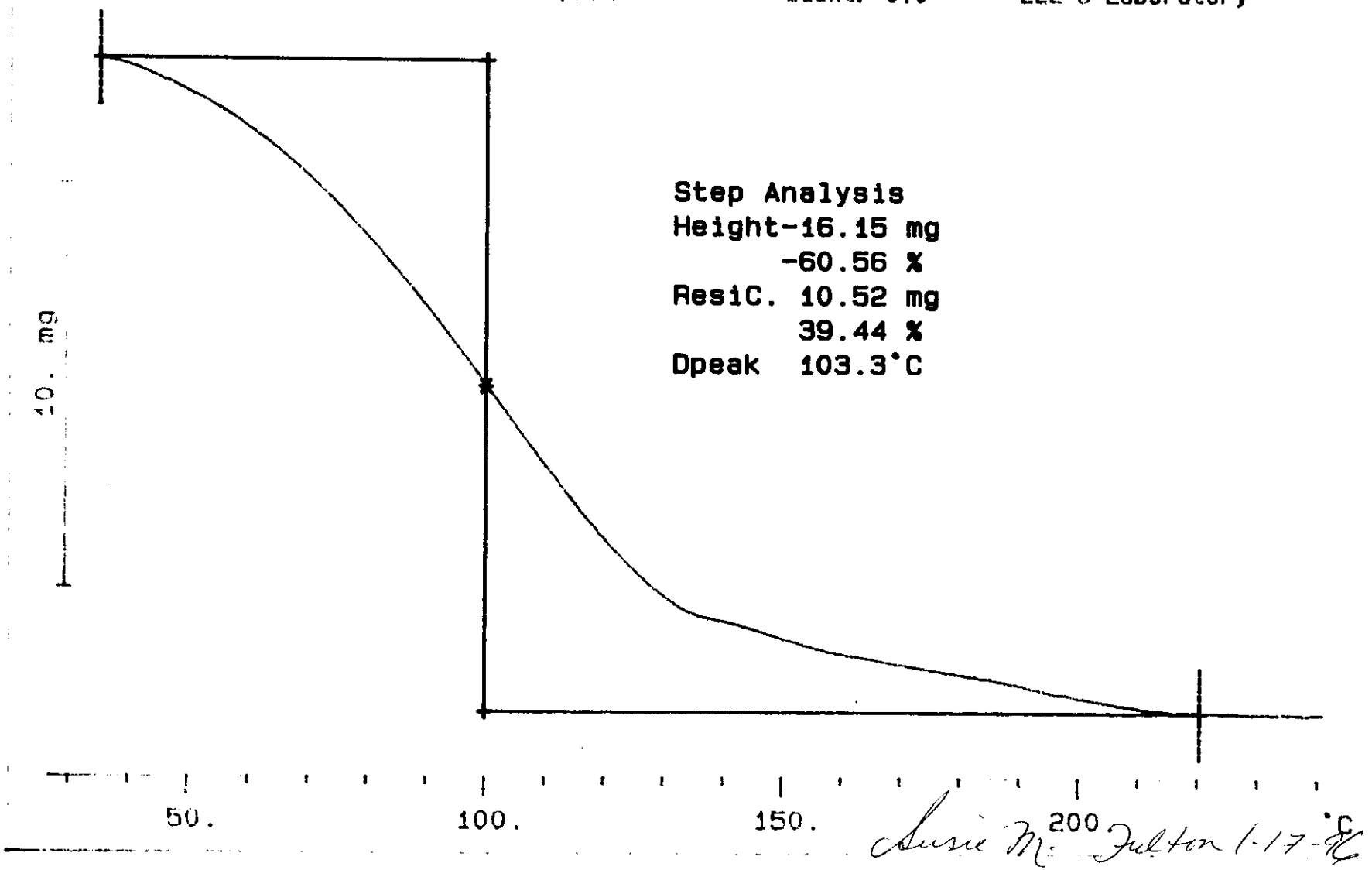
TGA STD 75N8A

26.673 mg

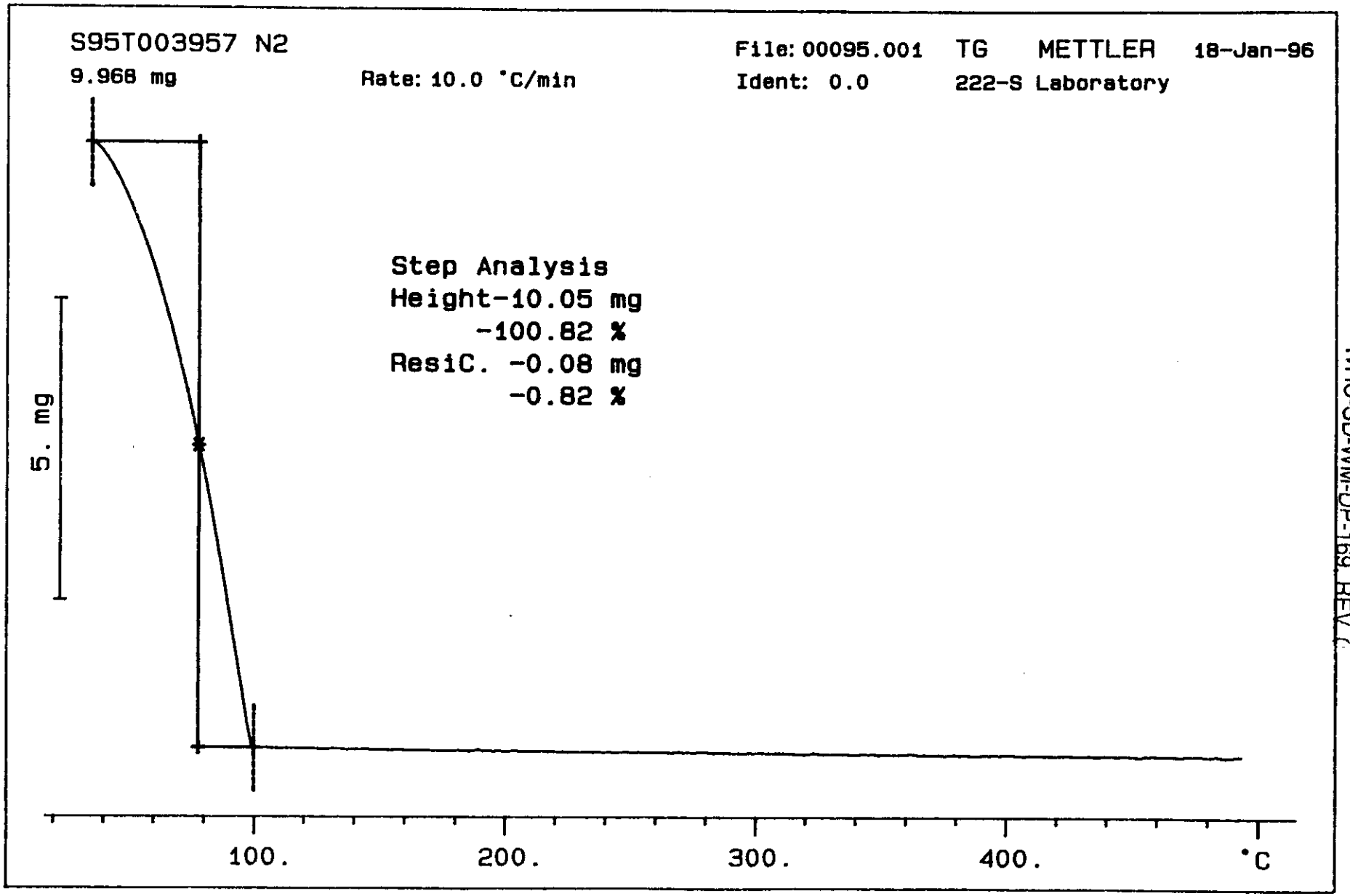
Rate: 10.0 °C/min

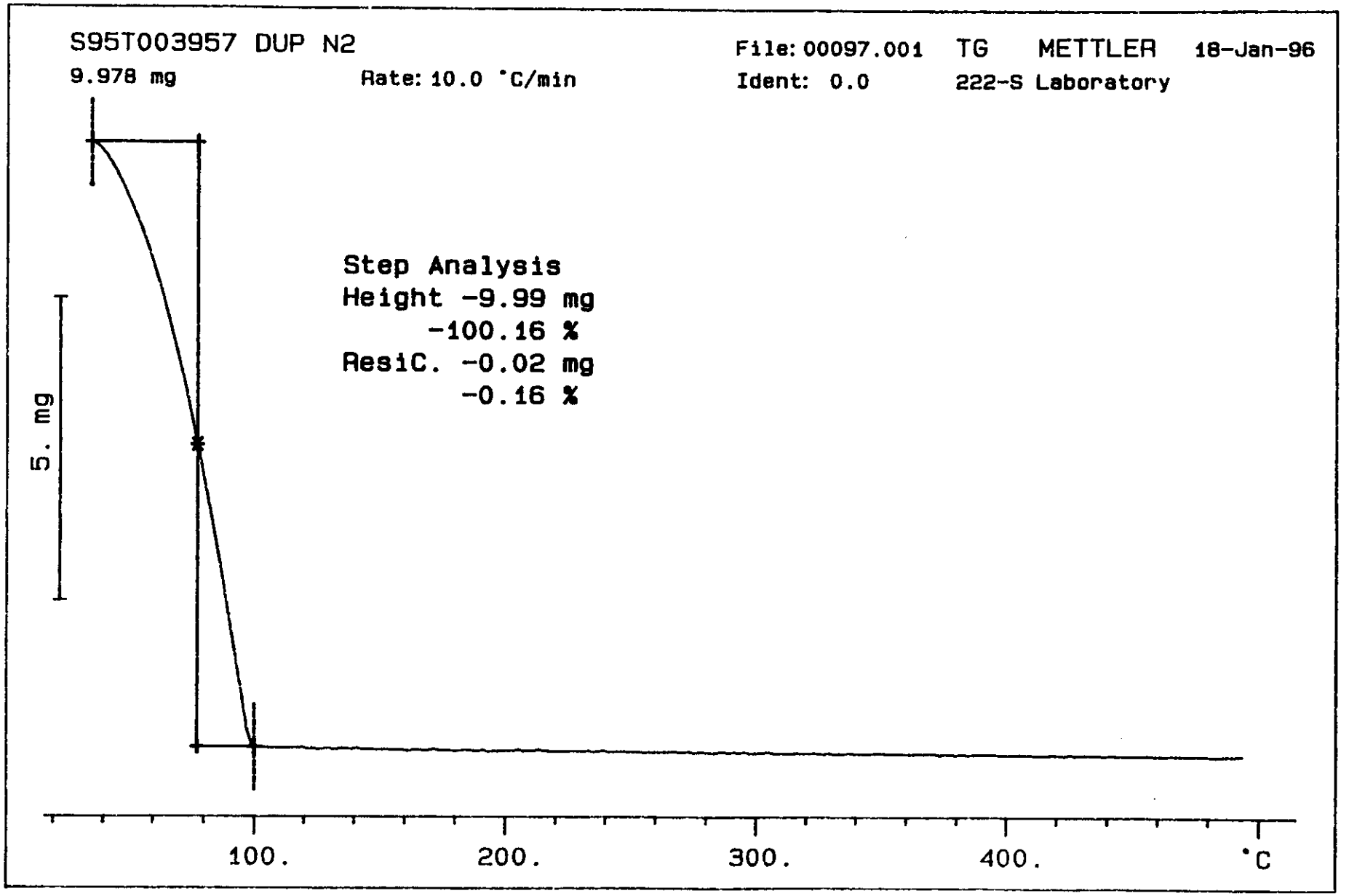
File: 00086.001 TG METTLER 17-Jan-96

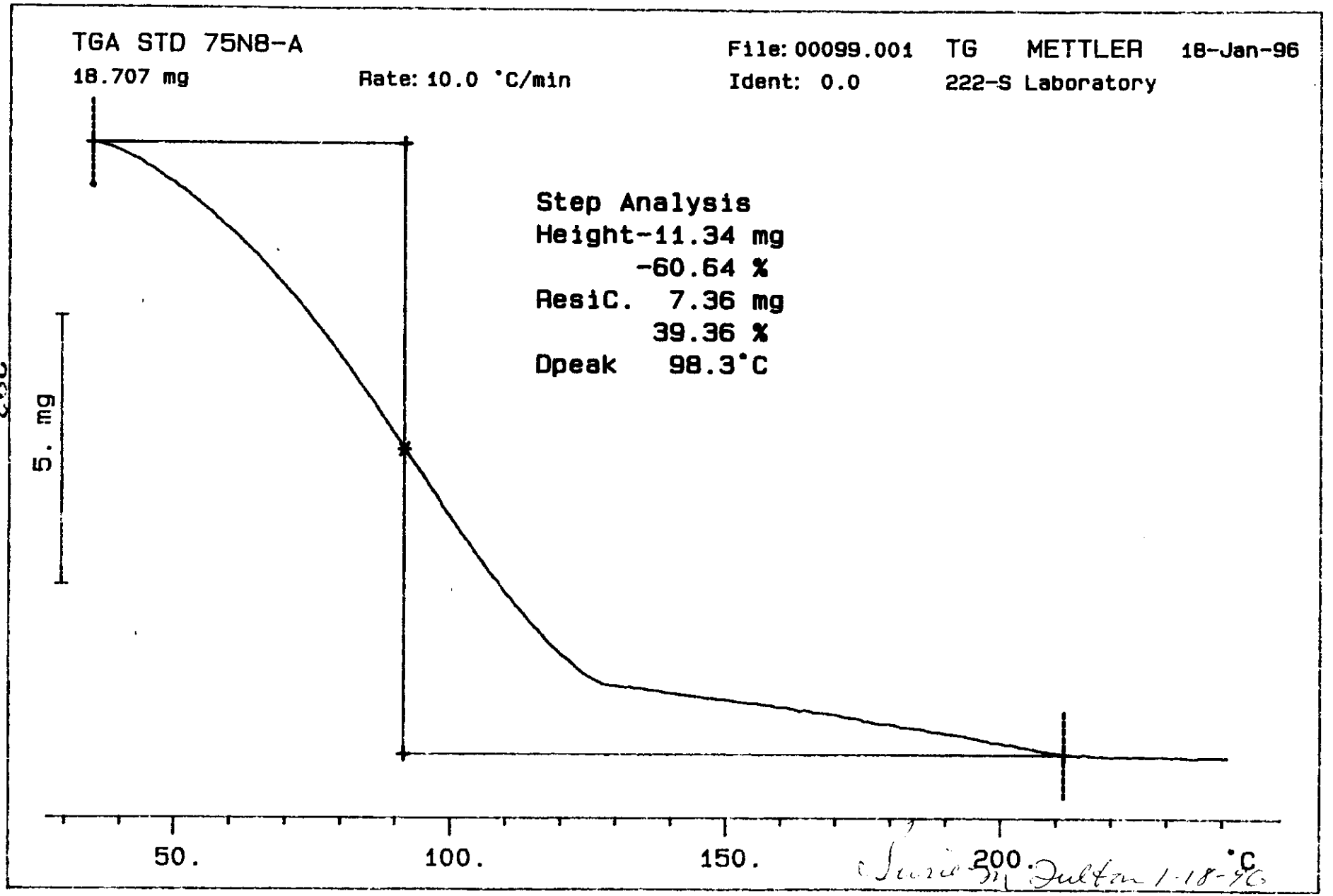
Ident: 0.0 222-S Laboratory



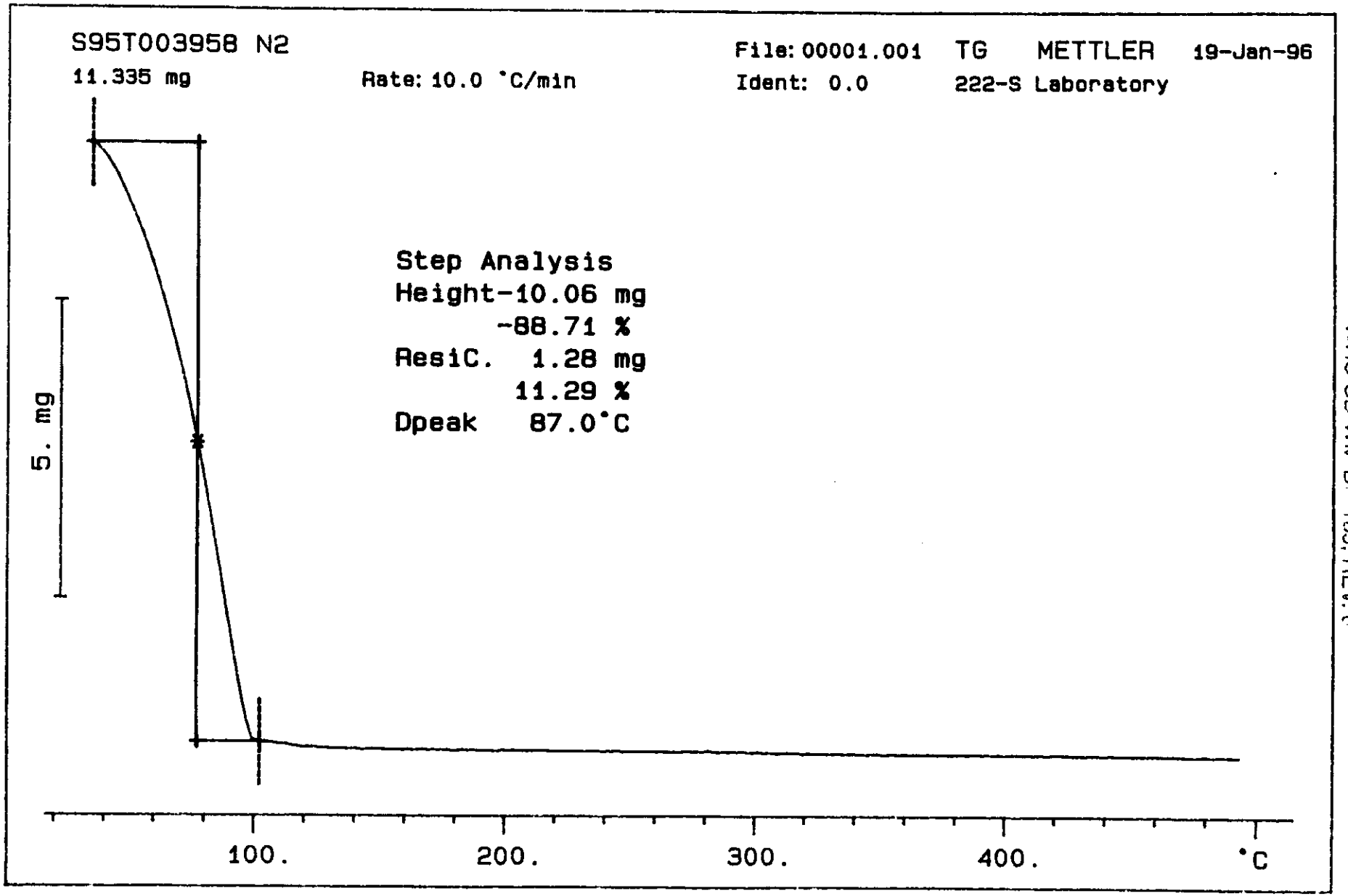
Susie M. Fulton 1-17-96

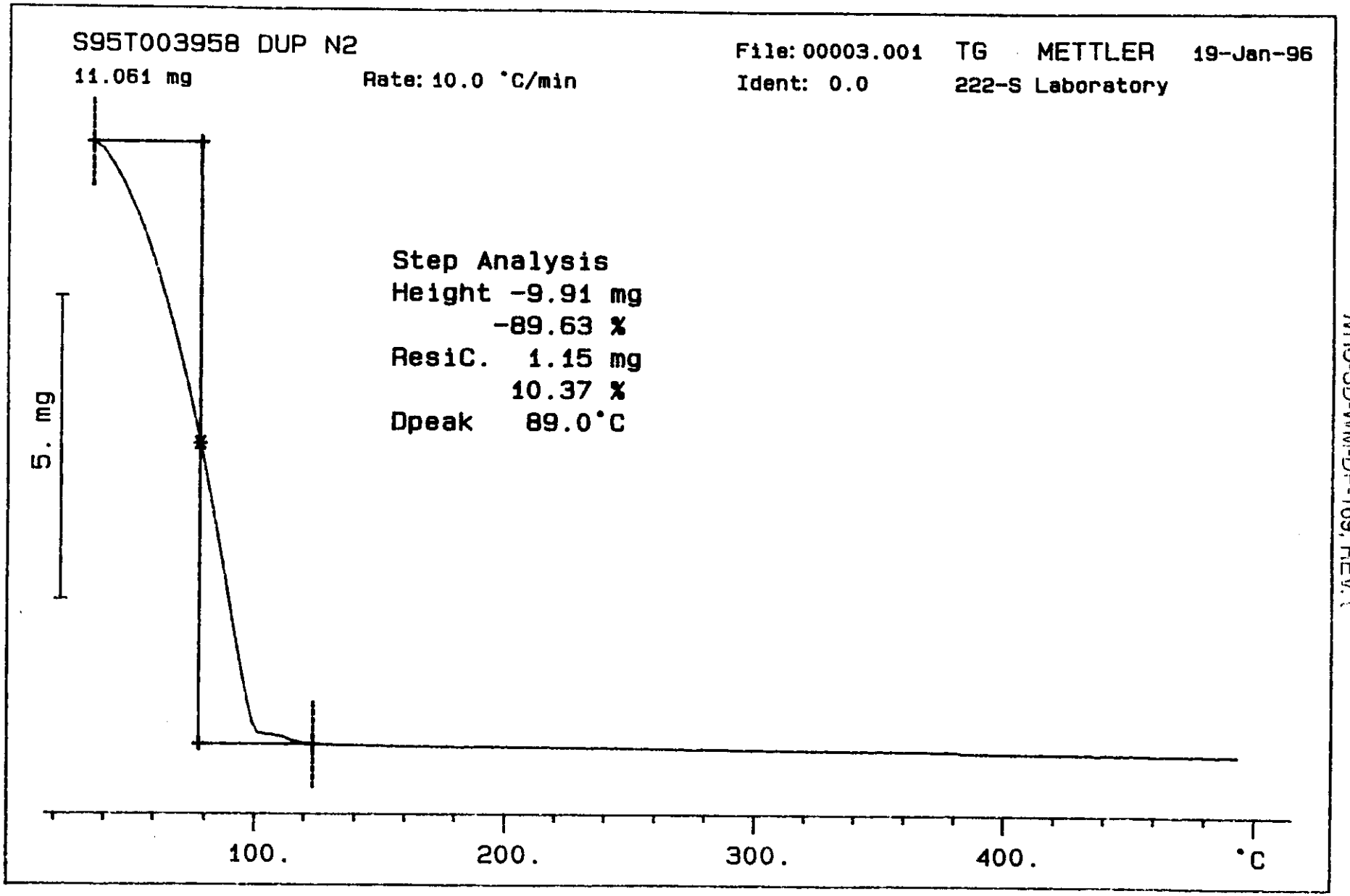

S95T003957 N2
9.968 mg
Rate: 10.0 °C/min
File: 00095.001
TG
METTLER
18-Jan-96
Ident: 0.0
222-S Laboratory
Step Analysis
Height-10.05 mg
-100.82 %
ResiC. -0.08 mg
-0.82 %
5. mg
100.
200.
300.
400.
°C


S95T003957 DUP N2
9.978 mg
Rate: 10.0 °C/min
File: 00097.001
TG
METTLER
18-Jan-96
Ident: 0.0
222-S Laboratory
Step Analysis
Height -9.99 mg
-100.16 %
ResiC. -0.02 mg
-0.16 %
5. mg
100.
200.
300.
400.
°C



Susie M. Fulton 1-18-96


S95T003958 N2
11.335 mg
Rate: 10.0 °C/min
File: 00001.001
TG METTLER
19-Jan-96
Ident: 0.0
222-S Laboratory
Step Analysis
Height-10.06 mg
-88.71 %
ResiC. 1.28 mg
11.29 %
Dpeak 87.0°C
5. mg
100.
200.
300.
400.
°C


S95T003958 DUP N2
11.061 mg
Rate: 10.0 °C/min
File: 00003.001
TG
METTLER
19-Jan-96
Ident: 0.0
222-S Laboratory
Step Analysis
Height -9.91 mg
-89.63 %
ResiC. 1.15 mg
10.37 %
Dpeak 89.0°C
5. mg
100.
200.
300.
400.
°C

LABCORE Data Entry Template for Worklist# 4837

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

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

Worklist Comment: Please run B-203 TGAs under N2. bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA-01	LIQUID	59.2	60.75 *	N/A	%
95000228	B-203	2	SAMPLE	S95T004003	0		TGA-01	LIQUID	N/A	89.67		%
95000228	B-203	3	DUP	S95T004003	0		TGA-01	LIQUID	89.67	89.87	N/A	%
95000228	B-203	4	SAMPLE	S95T004004	0		TGA-01	LIQUID	N/A	89.38		%
		5	STD				TGA-01	LIQUID	59.2	60.45 *	N/A	%
95000228	B-203	6	DUP	S95T004004	0		TGA-01	LIQUID	89.38	89.28	N/A	%

Final page for worklist # 4837

See attached for signatures

Analyst Signature **Date** 1/16/96

BDV

Verified by Blandina Valenzuela 1/17/96

Gary Hammitt 1-17-96

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# 4837

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

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

Worklist Comment: Please run B-203 TGAs under N2. bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA-01	LIQUID	~~57.2~~	~~60.75~~	1/16/96 BDV N/A	%
95000228	B-203	2	SAMPLE	S95T004003	0		TGA-01	LIQUID	N/A	~~89.67~~	1/16/96 BDV	%
95000228	B-203	3	DUP	S95T004003	0		TGA-01	LIQUID	~~89.67~~	~~89.87~~	1/16/96 BDV N/A	%
95000228	B-203	4	SAMPLE	S95T004004	0		TGA-01	LIQUID	N/A	~~89.38~~	1/16/96 BDV	%
95000228	B-203	5	DUP	S95T004004	0		TGA-01	LIQUID	~~89.38~~	~~89.26~~	1/16/96 BDV N/A	%

Final page for worklist # 4837

Anthony Purnell 1-14-96

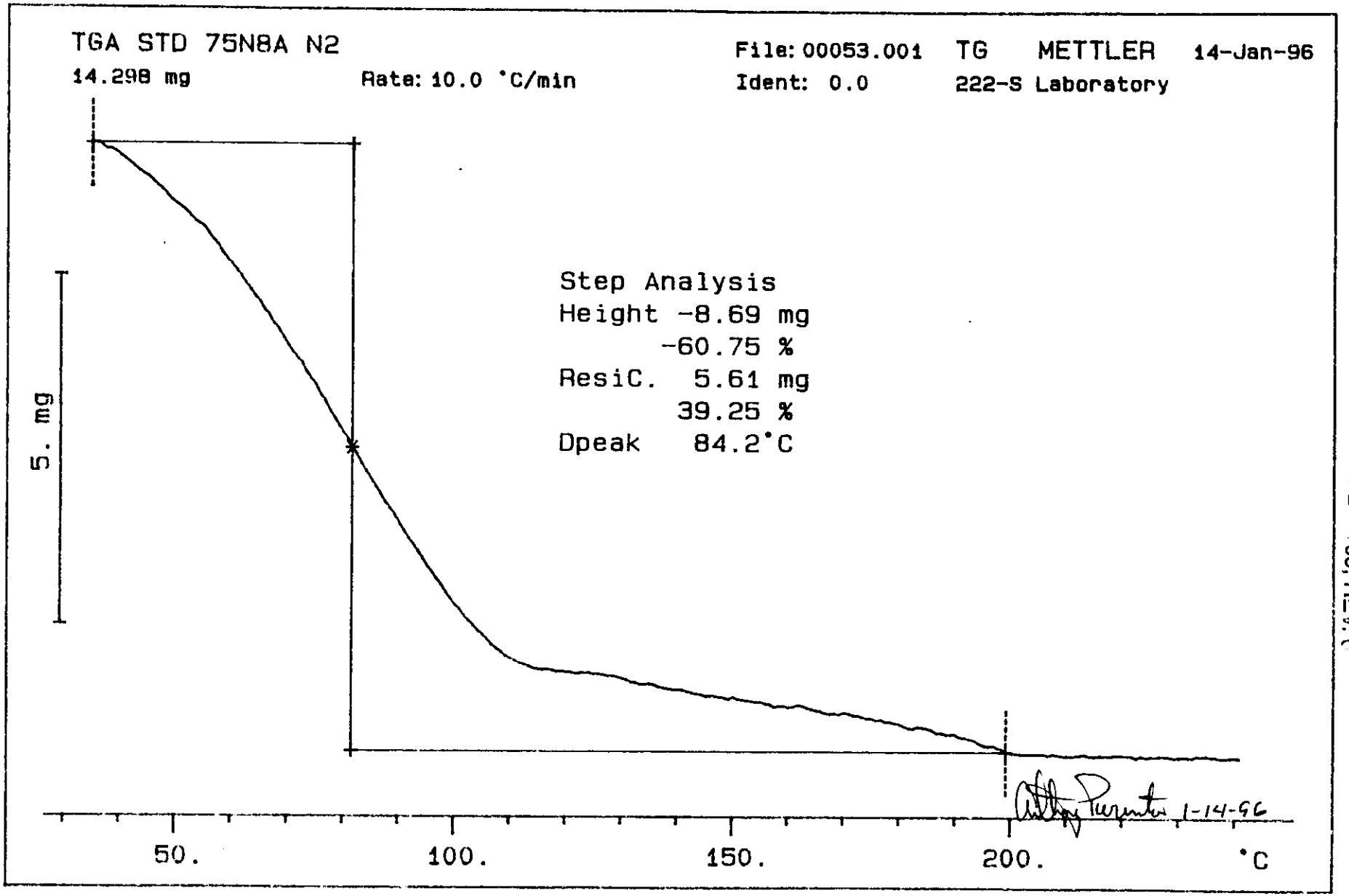
Analyst Signature **Date**

Analyst Signature **Date**

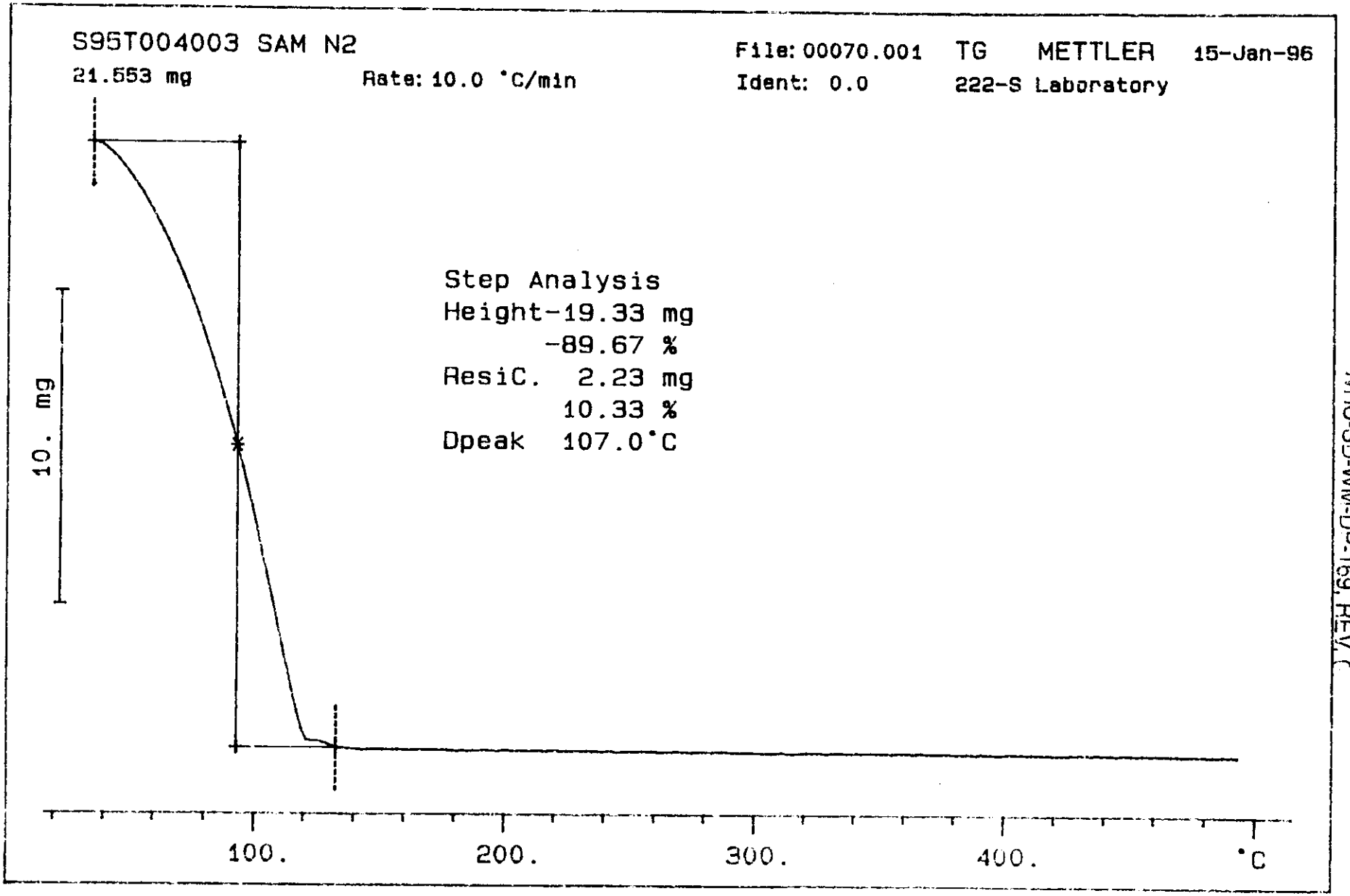
Data Entry Comments:

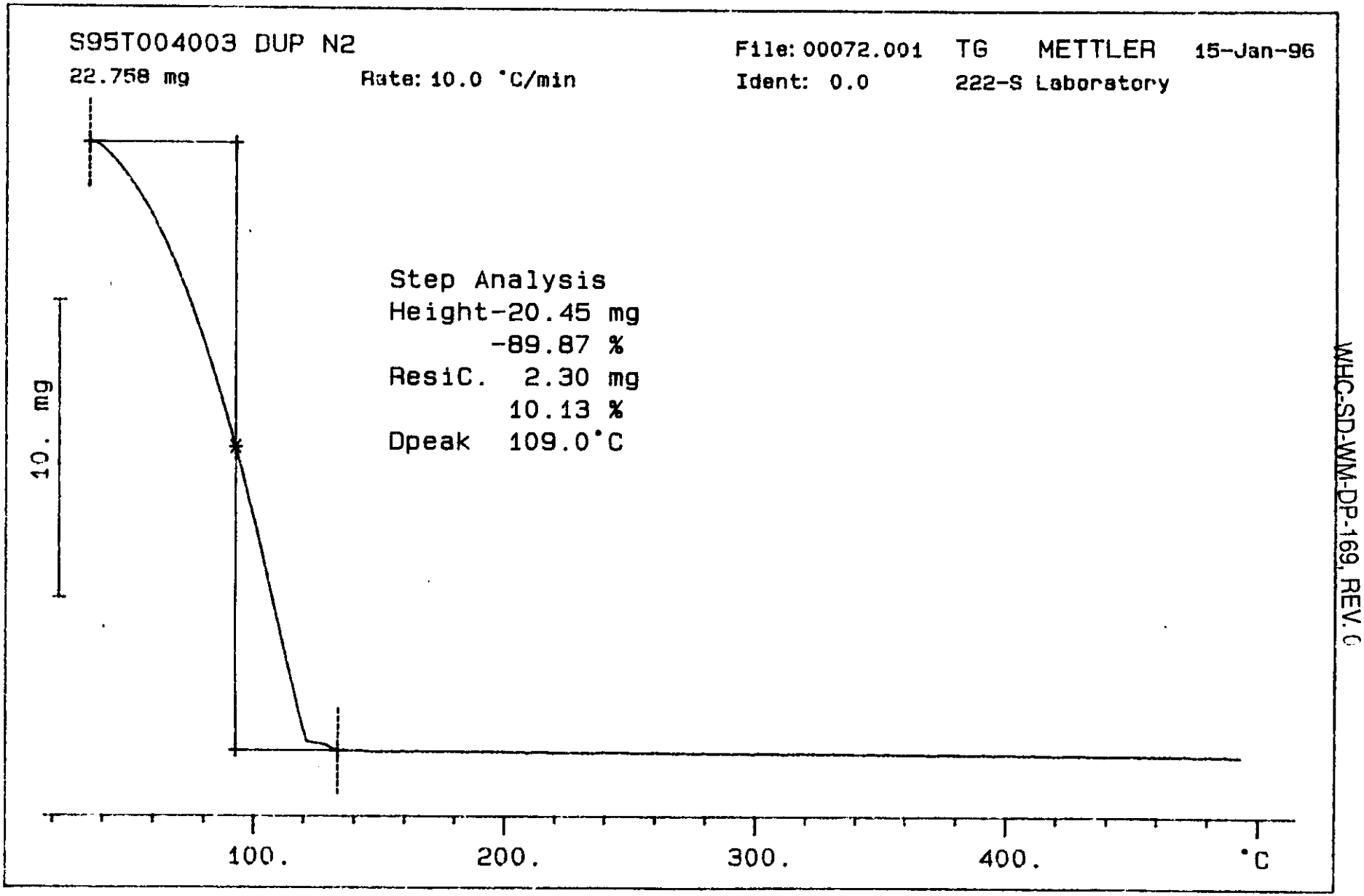
Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

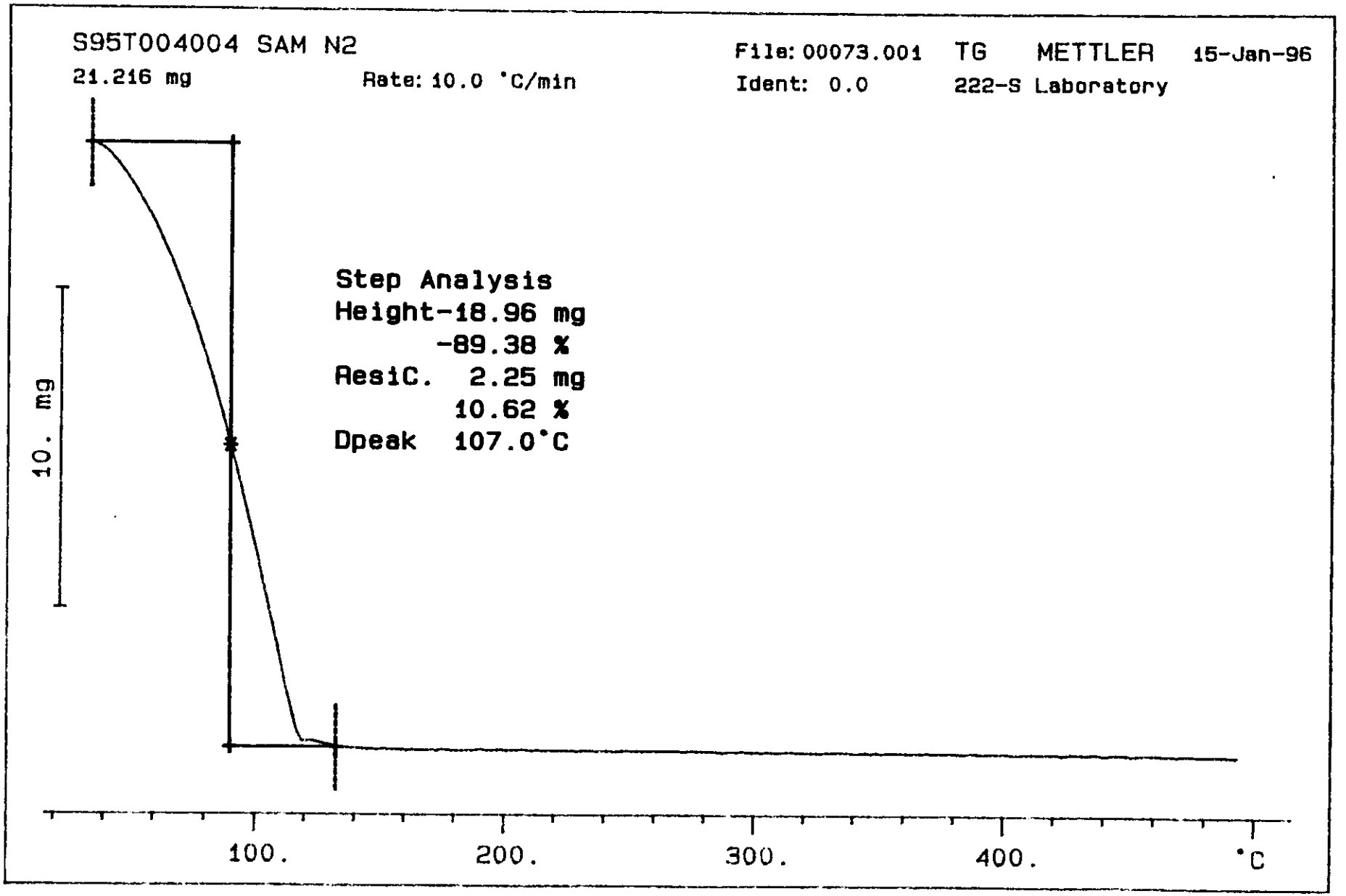
SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 298 TO 303.

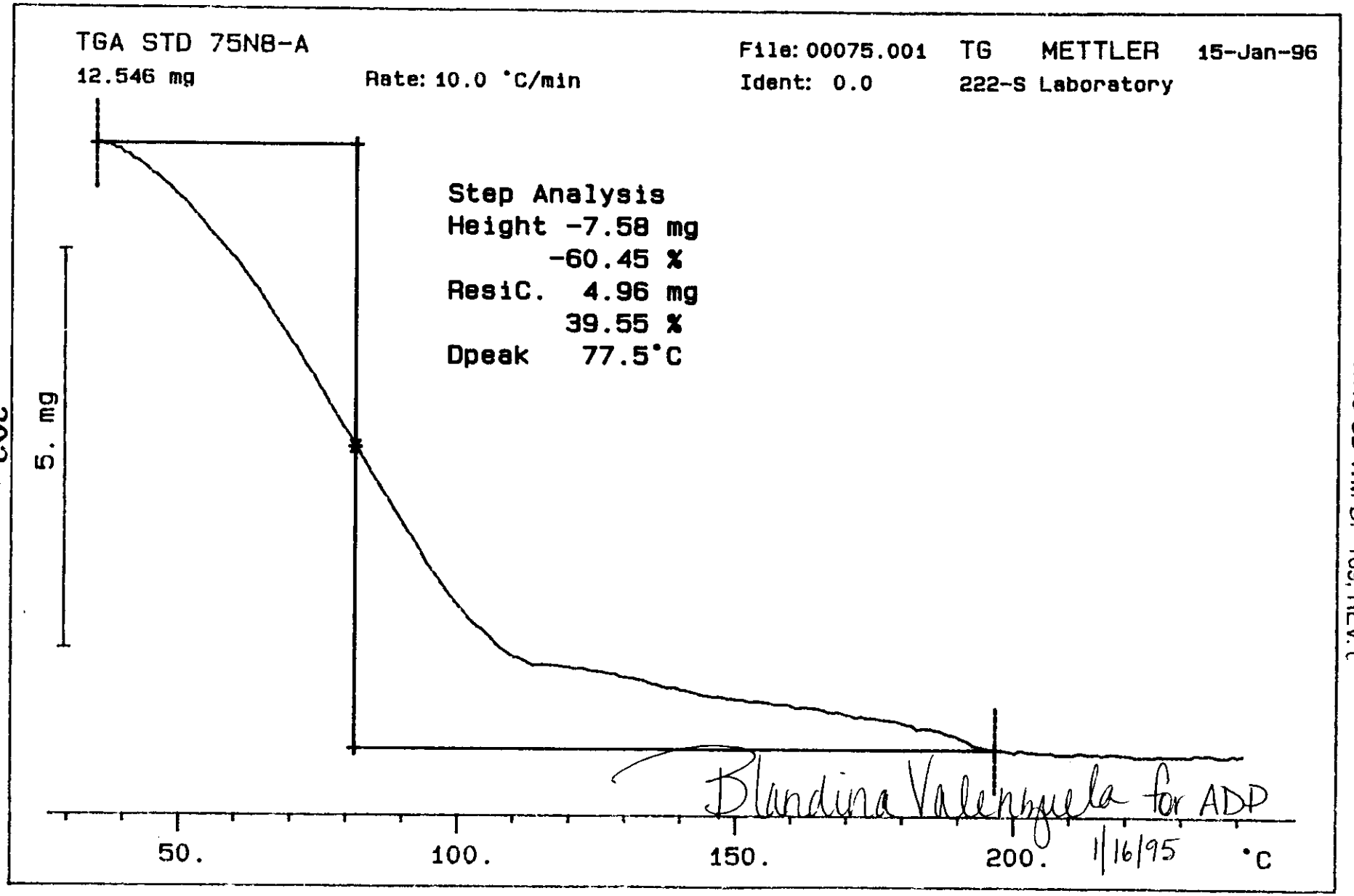


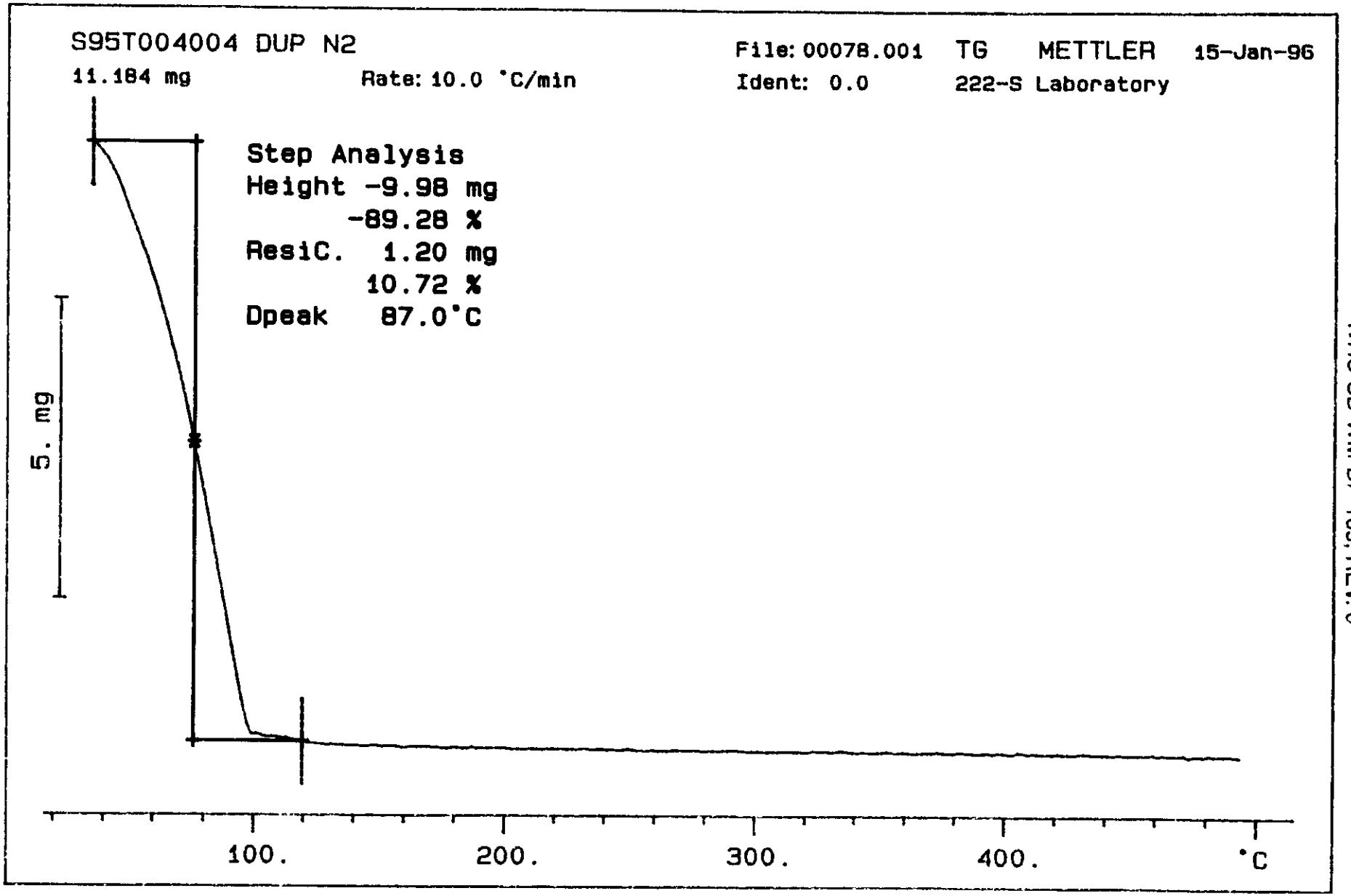
1-14-96


S95T004003 SAM N2
21.553 mg
Rate: 10.0 °C/min
File: 00070.001
TG
METTLER
15-Jan-96
Ident: 0.0
222-S Laboratory
Step Analysis
Height-19.33 mg
-89.67 %
ResiC. 2.23 mg
10.33 %
Dpeak 107.0°C
10. mg
100.
200.
300.
400.
°C


S95T004003 DUP N2
22.758 mg
Rate: 10.0 °C/min
File: 00072.001
TG
METTLER
15-Jan-96
Ident: 0.0
222-S Laboratory
Step Analysis
Height-20.45 mg
-89.87 %
ResiC. 2.30 mg
10.13 %
Dpeak 109.0°C
10. mg
100.
200.
300.
400.
°C


S95T004004 SAM N2
21.216 mg
Rate: 10.0 °C/min
File: 00073.001
TG
METTLER
15-Jan-96
Ident: 0.0
222-S Laboratory
Step Analysis
Height-18.96 mg
-89.38 %
ResiC. 2.25 mg
10.62 %
Dpeak 107.0°C
10. mg
100.
200.
300.
400.
°C


TGA STD 75N8-A
12.546 mg
Rate: 10.0 °C/min
File: 00075.001
Ident: 0.0
TG METTLER 15-Jan-96
222-S Laboratory
Step Analysis
Height -7.58 mg
-60.45 %
ResiC. 4.96 mg
39.55 %
Dpeak 77.5°C
5. mg
50.
100.
150.
200.
°C
Blandina Valenzuela for ADP
1/16/95


S95T004004 DUP N2
11.184 mg
Rate: 10.0 °C/min
File: 00078.001
TG
METTLER
15-Jan-96
Ident: 0.0
222-S Laboratory
Step Analysis
Height -9.98 mg
-89.28 %
ResiC. 1.20 mg
10.72 %
Dpeak 87.0°C
5. mg
100.
200.
300.
400.
°C

LABCORE Data Entry Template for Worklist# 4838

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

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

Worklist Comment: Please run B-203 TGAs under N2. bdv

GROUP	PROJECT	S TYPE	SAMPLE#	R	A	-------TEST------	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD				TGA-01	SOLID	~~59.7~~ 59.74	60.73	N/A	%
95000228	B-203	2 SAMPLE	S95T004007	0		TGA-01	SOLID	N/A	78.40		%
95000228	B-203	3 DUP	S95T004007	0		TGA-01	SOLID	78.40	77.57	N/A	%
95000228	B-203	4 SAMPLE	S95T004008	0		TGA-01	SOLID	N/A	78.31		%
95000228	B-203	5 DUP	S95T004008	0		TGA-01	SOLID	78.31	78.67	N/A	%

Final page for worklist # 4838

Susie M. Fulton 1-12-96
Analyst Signature **Date**

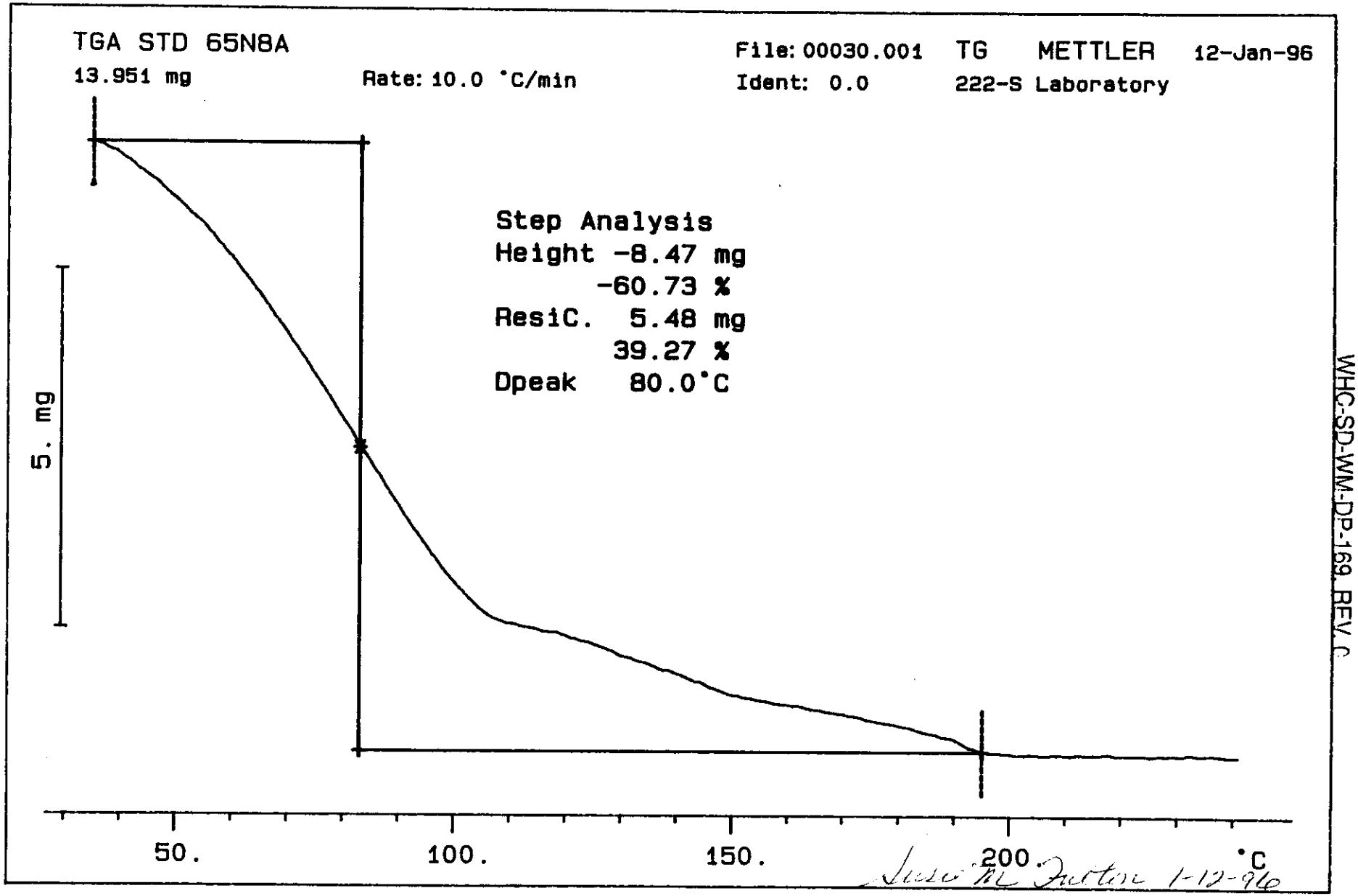
1-16-96
Analyst Signature **Date**

Verified by Blandina Valenzuela 1-17-96

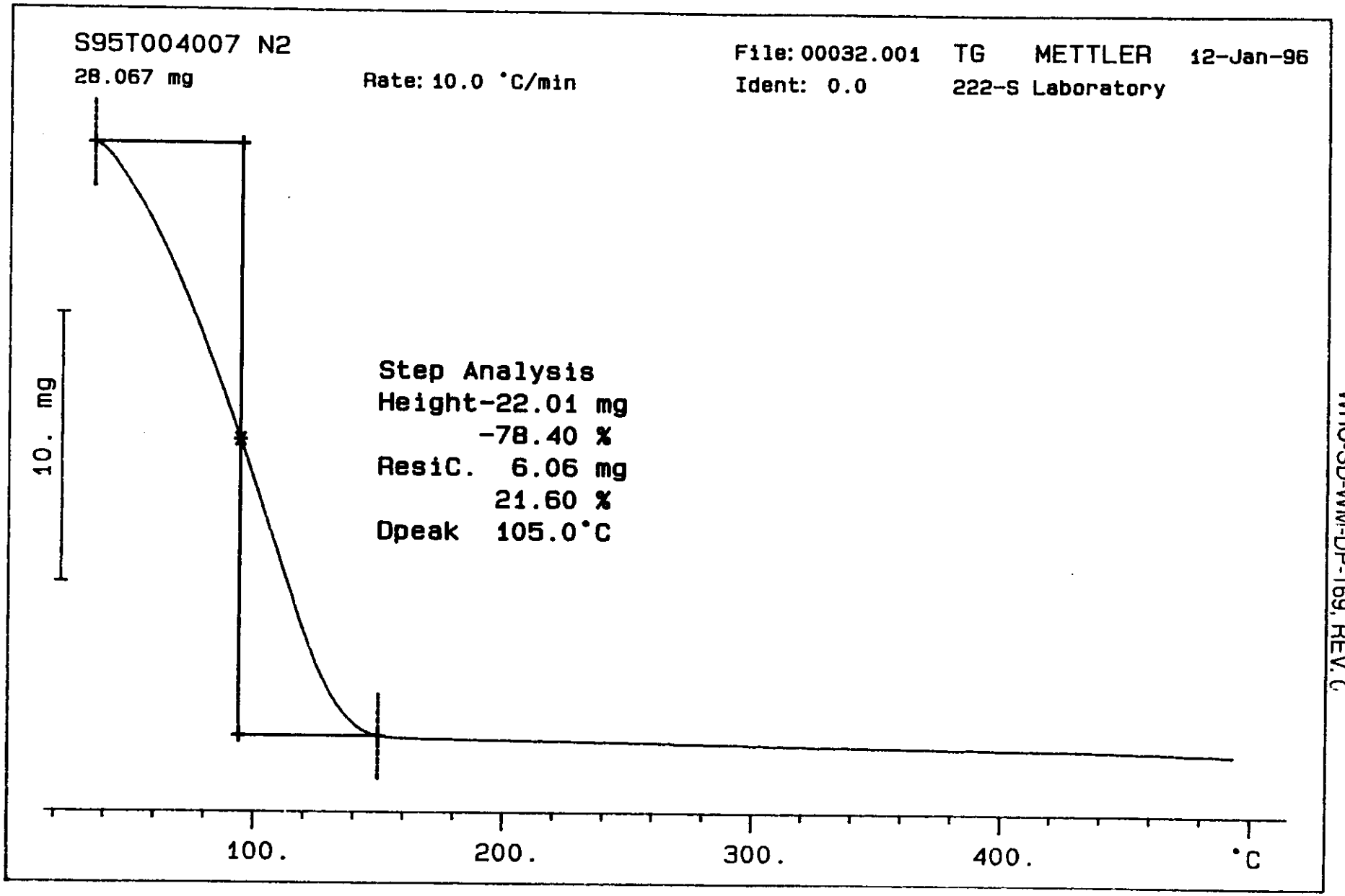
Data Entry Comments:

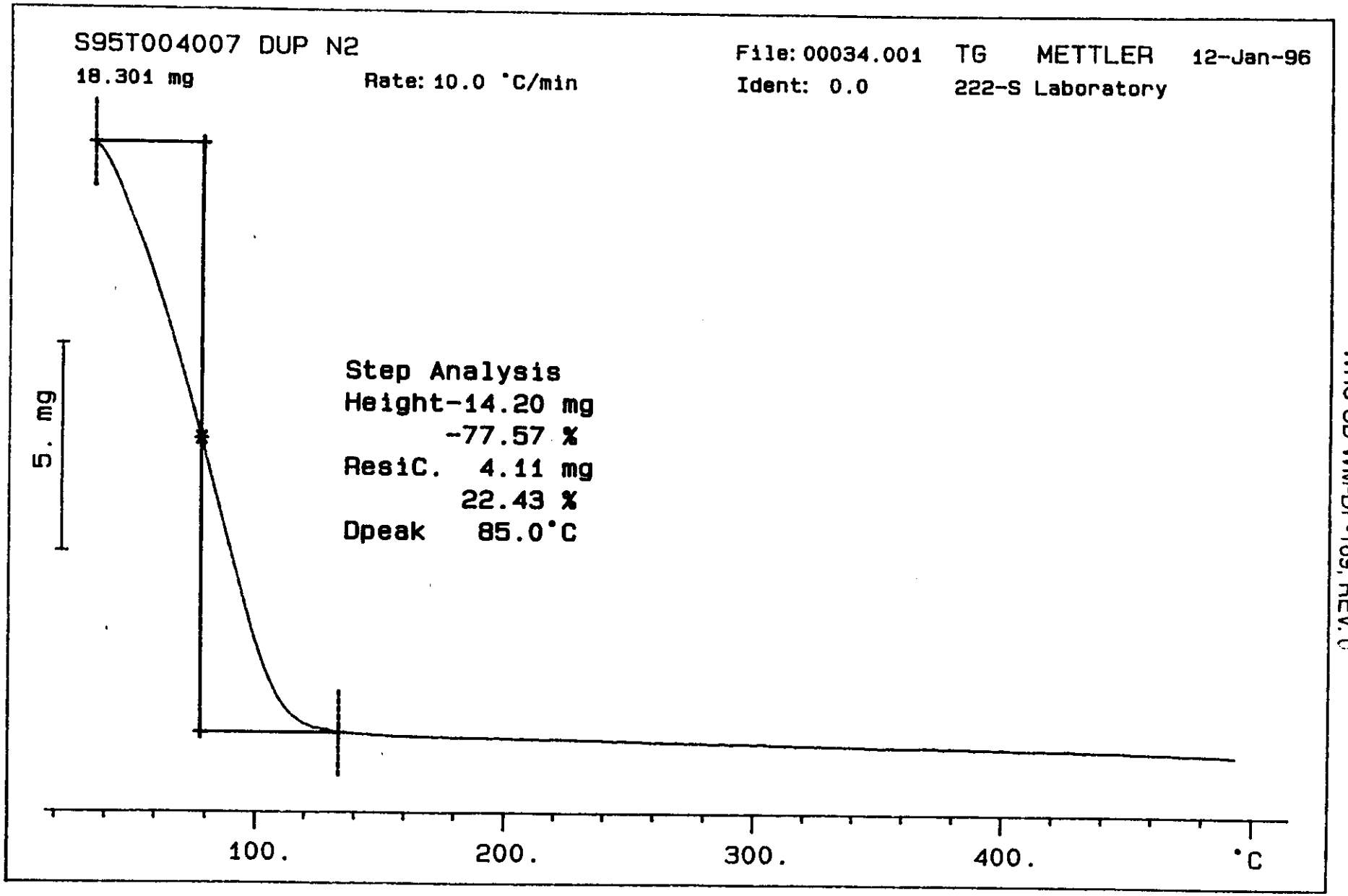
Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

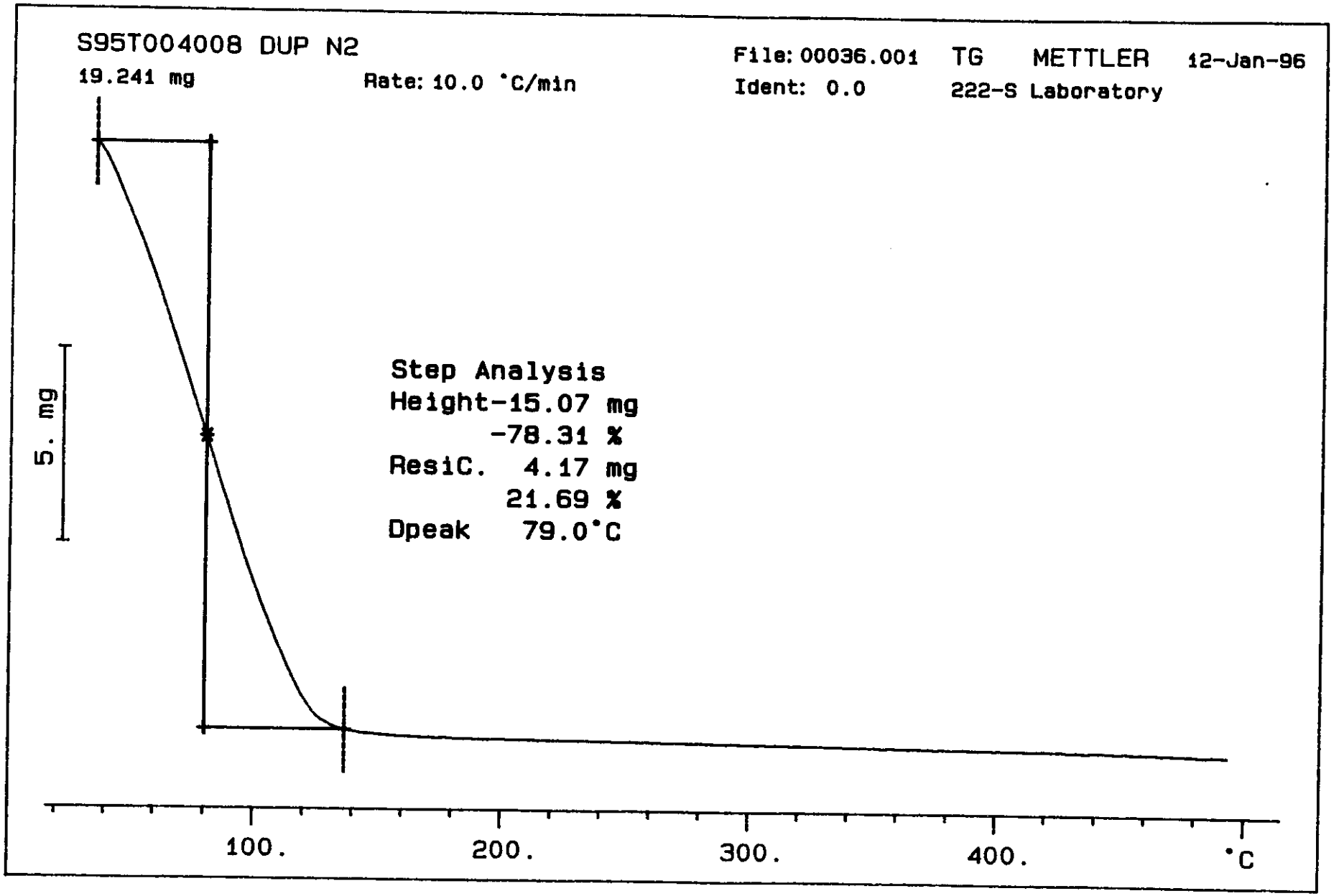
SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 305 TO 309.

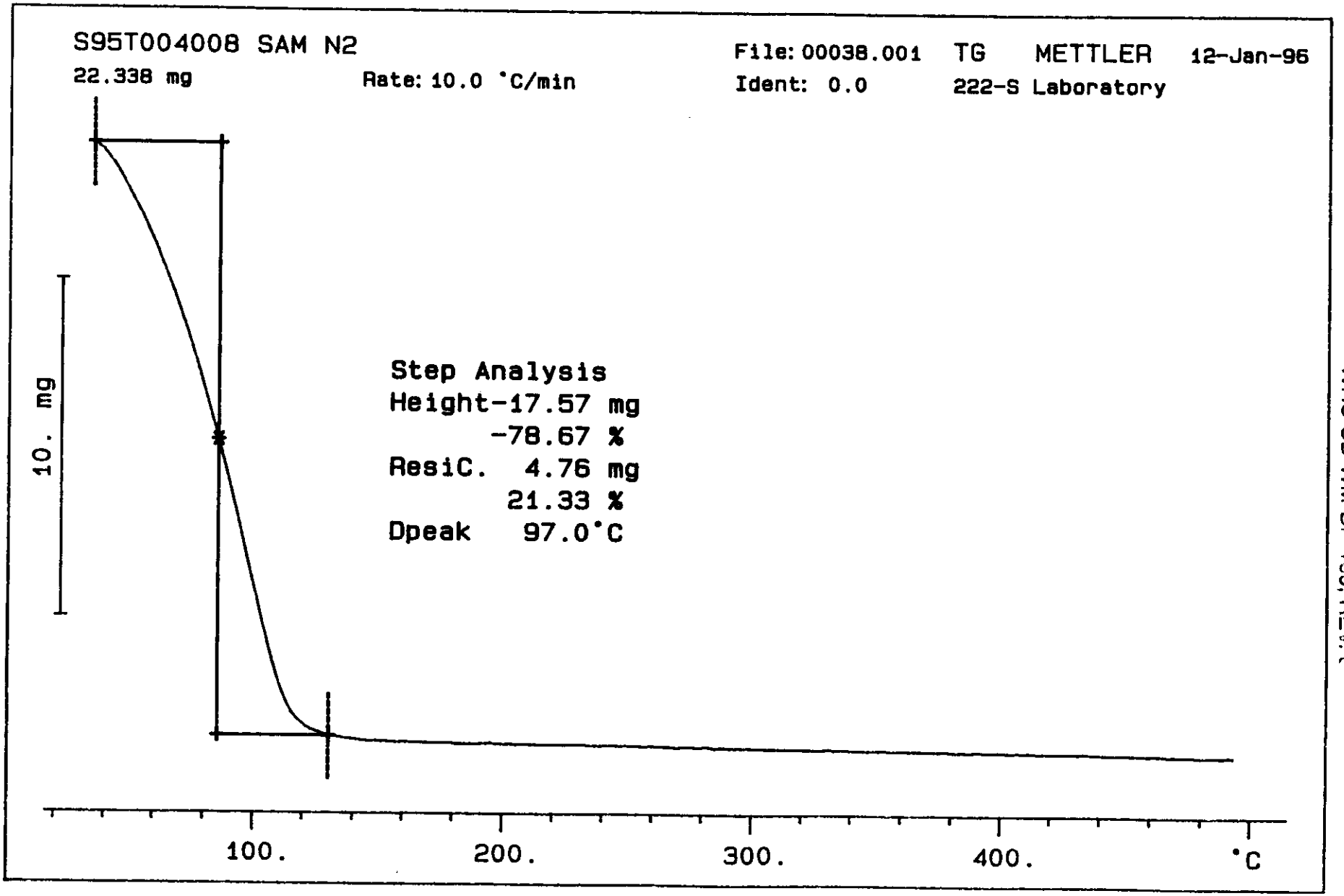


Susan M. Sutton 1-12-96


S95T004007 N2
28.067 mg
Rate: 10.0 °C/min
File: 00032.001
TG
METTLER
12-Jan-96
Ident: 0.0
222-S Laboratory
Step Analysis
Height-22.01 mg
-78.40 %
ResiC. 6.06 mg
21.60 %
Dpeak 105.0°C
10. mg
100.
200.
300.
400.
°C


S95T004007 DUP N2
18.301 mg
Rate: 10.0 °C/min
File: 00034.001
TG
METTLER
12-Jan-96
Ident: 0.0
222-S Laboratory
Step Analysis
Height-14.20 mg
-77.57 %
ResiC. 4.11 mg
22.43 %
Dpeak 85.0°C
5. mg
100.
200.
300.
400.
°C


S95T004008 DUP N2
19.241 mg
Rate: 10.0 °C/min
File: 00036.001
Ident: 0.0
TG
METTLER
222-S Laboratory
12-Jan-96
Step Analysis
Height -15.07 mg
-78.31 %
ResiC. 4.17 mg
21.69 %
Dpeak 79.0°C
5. mg
100.
200.
300.
400.
°C


S95T004008 SAM N2
22.338 mg
Rate: 10.0 °C/min
File: 00038.001
TG METTLER
12-Jan-96
Ident: 0.0
222-S Laboratory
10. mg
Step Analysis
Height-17.57 mg
-78.67 %
ResiC. 4.76 mg
21.33 %
Dpeak 97.0°C
100.
200.
300.
400.
°C

LABCORE Data Entry Template for Worklist# 4839

Analyst: SMF **Instrument:** TGA0 3 **Book #** 1/16/96 BDV 75NEA

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

Worklist Comment: Please run B-203 TGAs under N2. bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA-03	SOLID	59.2	60.5	N/A	%
95000228	B-203	2	SAMPLE	S95T004009	0		TGA-03	SOLID	N/A	81.03		%
95000228	B-203	3	DUP	S95T004009	0		TGA-03	SOLID	81.03	80.81	N/A	%
95000228	B-203	4	SAMPLE	S95T004012	0		TGA-03	SOLID	N/A	80.93		%
95000228	B-203	5	DUP	S95T004012	0		TGA-03	SOLID	80.93	79.96	N/A	%

Final page for worklist # 4839

See attached for signatures
Analyst Signature **Date** 1/16/96 BDV

Analyst Signature **Date** 1-16-96

Verified by Blandina Valenzuela 1/17/96

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.

LABCORE Data Entry Template for Worklist# 4839

Analyst: SMF **Instrument:** TGA0 **Book #** 6589A

Method: ~~LA-560-112 Rev/Mod~~ LA-514-114 /C-1
SMF 1-14-96

Worklist Comment: Please run B-203 TGAs under N2. bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA-01	SOLID			N/A	%
95000228	B-203	2	SAMPLE	S95T004009	0		TGA-01	SOLID	N/A			%
95000228	B-203	3	DUP	S95T004009	0		TGA-01	SOLID			N/A	%
95000228	B-203	4	SAMPLE	S95T004012	0		TGA-01	SOLID	N/A			%
95000228	B-203	5	DUP	S95T004012	0		TGA-01	SOLID			N/A	%

Final page for worklist # 4839

Susie M. Fulton 1-14-96
Analyst Signature **Date**

Analyst Signature **Date**

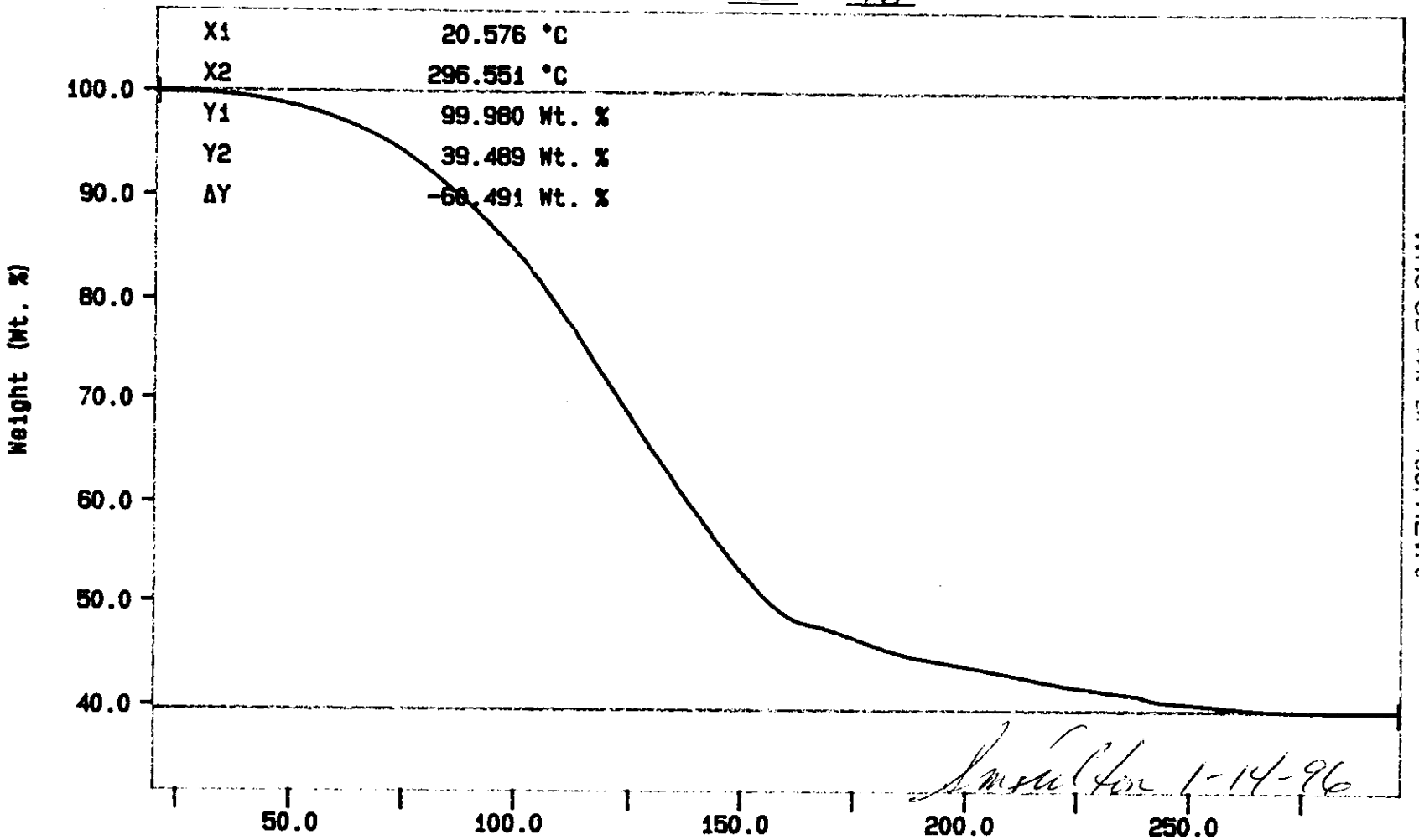
Data Entry Comments:

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: TER011401 Sun Jan 14 07:05:50 1996
Sample Weight: 18.403 mg
65N8-A Terlig

SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 312 TO 316.

BEST AVAILABLE COPY



S M Fulton 1-14-96

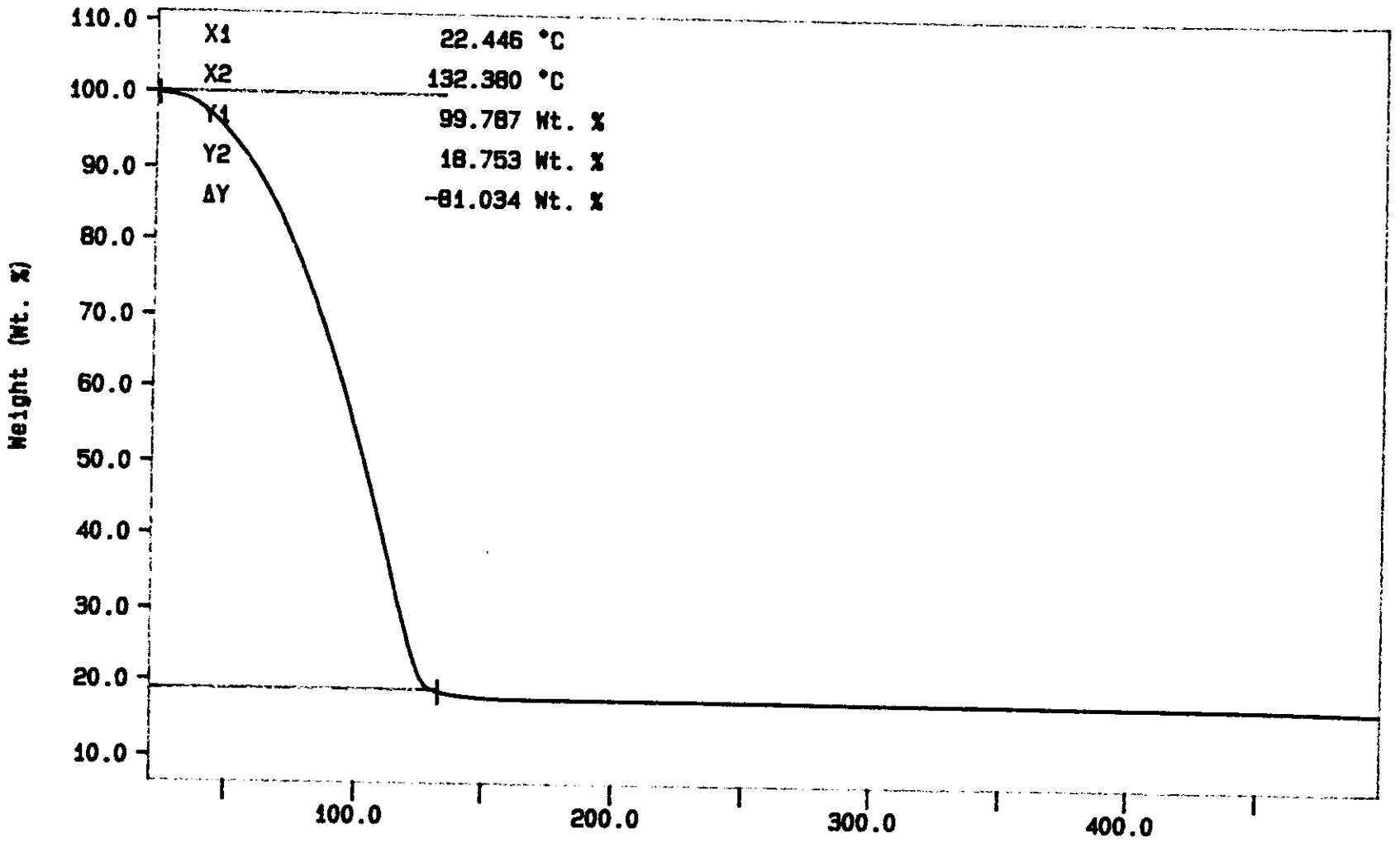
N2 10C/MIN
TEMP1: 35.0 C TIME1: 0.0 min RATE1: 10.0 C/min
TEMP2: 300.0 C

SM FULTON
PERKIN-ELMER
7 Series Thermal Analysis System
Sun Jan 14 07:14:57 1996

WHC-SD-WM-DP-169, REV. 0

Curve 1: TGA
File info: SAM011404 Sun Jan 14 08:17:35 1996
Sample Weight: 11.626 mg
S95T004009

BEST AVAILABLE COPY

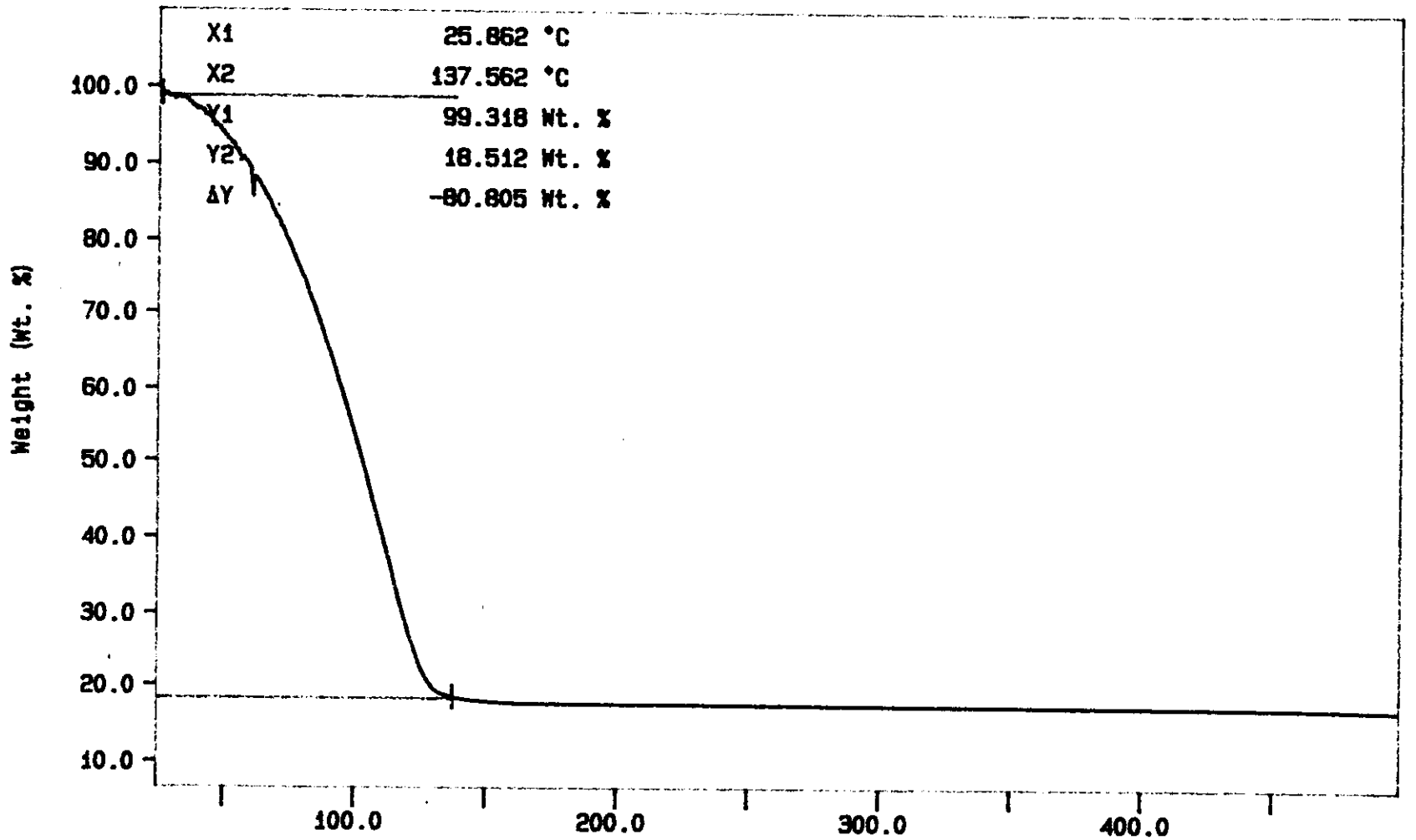


10C/MIN N2
TEMP1: 30.0 C TIME1: 0.0 min RATE1: 10.0 C/min
TEMP2: 500.0 C

SM FULTON
PERKIN-ELMER
7 Series Thermal Analysis System
Sun Jan 14 09:06:33 1996

Curve 1: TGA
File info: SAM011405 Sun Jan 14 09:58:43 1996
Sample Weight: 12.111 mg
S95T004009 DUP

BEST AVAILABLE COPY

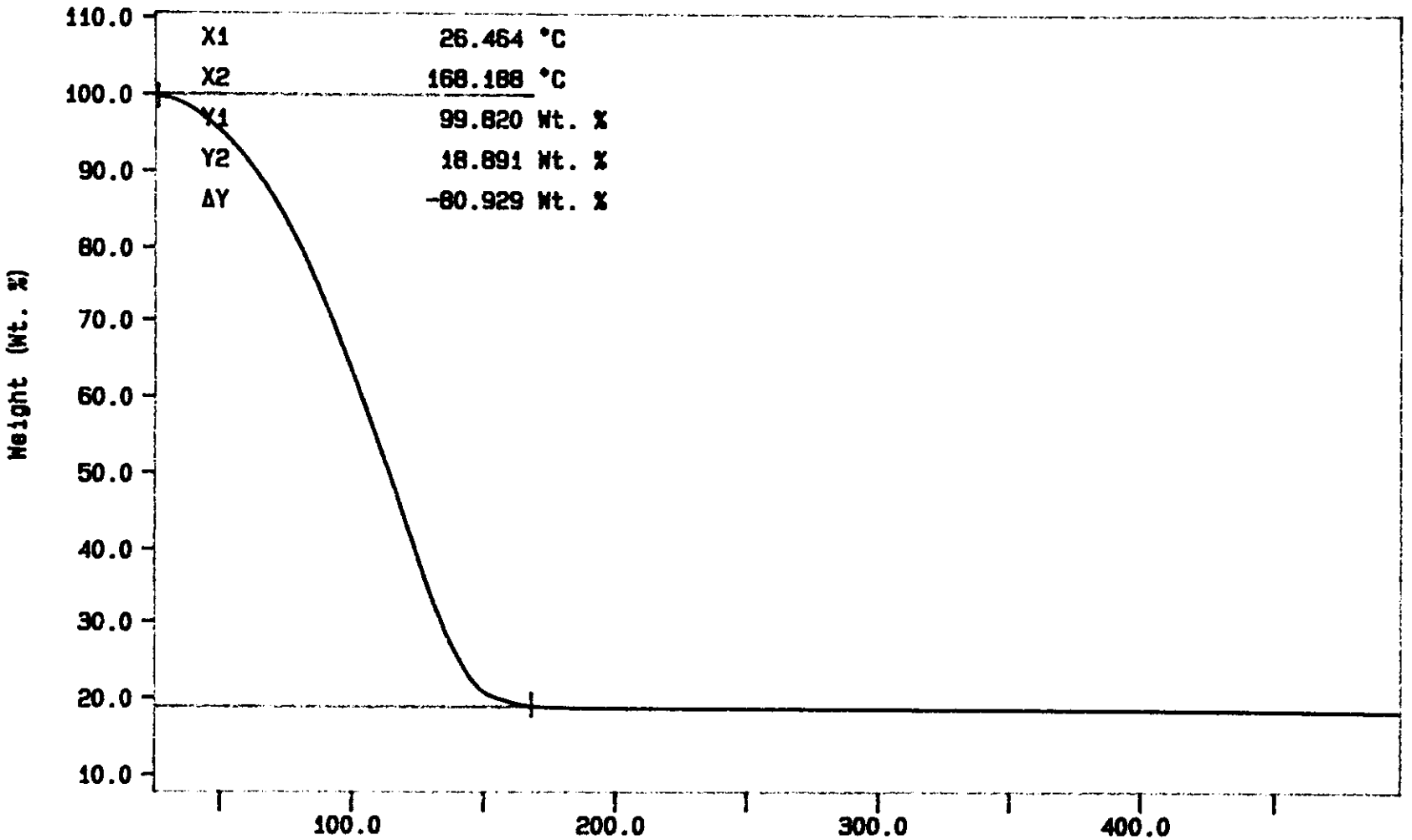


10C/MIN N2
TEMP1: 35.0 C TIME1: 0.0 min RATE1: 10.0 C/min
TEMP2: 500.0 C

SM FULTON
PERKIN-ELMER
7 Series Thermal Analysis System
Sun Jan 14 10:11:40 1996

Curve 1: TGA
File info: SAM011406 Sun Jan 14 11:14:26 1996
Sample Weight: 18.191 mg
S95T004012

BEST AVAILABLE COPY



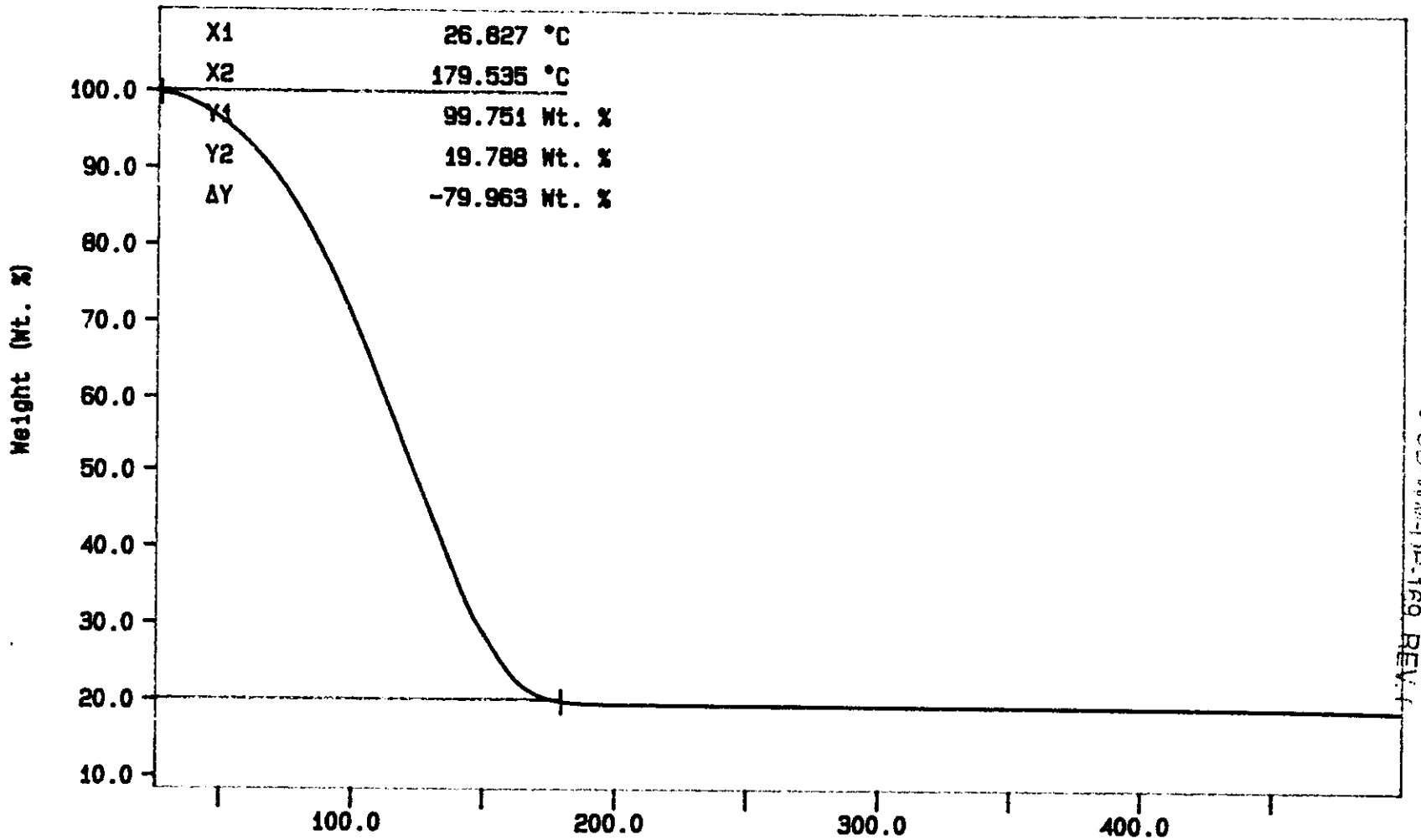
10C/MIN N2
TEMP1: 35.0 C TIME1: 0.0 min RATE1: 10.0 C/min
TEMP2: 600.0 C

SM FULTON
PERKIN-ELMER
7 Series Thermal Analysis System
Sun Jan 14 11:27:35 1996

WHC-SD-WM-DP-169, REV. 0

Curve 1: TGA
File info: SAM011407 Sun Jan 14 12:21:58 1996
Sample Weight: 22.729 mg
S95T004012 DUP

BEST AVAILABLE COPY



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
Sun Jan 14 12:59:53 1996

WHC-SD-WM-DE-169 REV. 0

LABCORE Data Entry Template for Worklist# 4840

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

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

Worklist Comment: Please run B-203 TGAs under N2. bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA-03	SOLID	59.2	59.92	N/A	%
95000228	B-203	2	SAMPLE	S95T004013	0		TGA-03	SOLID	N/A	72.31		%
95000228	B-203	3	DUP	S95T004013	0		TGA-03	SOLID	72.31	70.29	N/A	%
		4	STD				TGA-01	SOLID	59.2	60.45	N/A	%
95000228	B-203	5	SAMPLE	S95T004014	0		TGA-01	SOLID	N/A	80.91		%
95000228	B-203	6	DUP	S95T004014	0		TGA-01	SOLID	80.91	80.39	N/A	%

Final page for worklist # 4840

See attached for signatures
Analyst Signature **Date** 1-23-96

Verified by Blandina Valenzuela 1/26/96

[signature] 1-24-96
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# 4840

Analyst: RCDM **Instrument:** TGA0 _____ **Book #** 75N8-A

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

Worklist Comment: Please run B-203 TGAs under N2. bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA-01	SOLID			N/A	%
95000228	B-203	2	SAMPLE	S95T004013	0		TGA-01	SOLID	N/A			%
95000228	B-203	3	DUP	S95T004013	0		TGA-01	SOLID			N/A	%
95000228	B-203	4	SAMPLE	S95T004014	0		TGA-01	SOLID	N/A			%
95000228	B-203	5	DUP	S95T004014	0		TGA-01	SOLID			N/A	%

Final page for worklist # 4840

RDMeyer 1/15/96
Analyst Signature **Date**

Analyst Signature **Date**

JA Sp 1-17-96

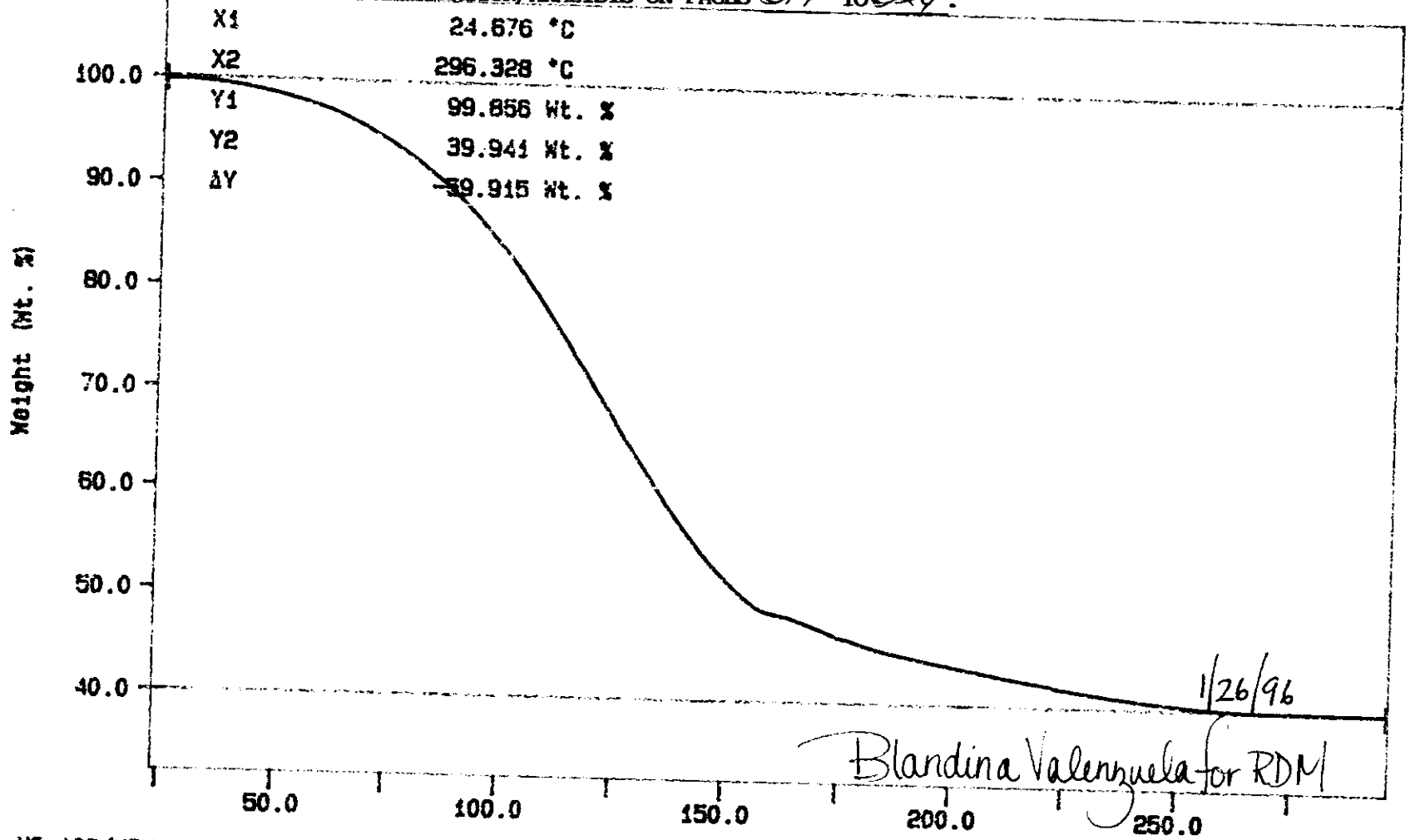
Data Entry Comments:

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.

Curve 1: TGA
File info: TER011501 Mon Jan 15 07:10:59 1995
Sample Weight: 15.563 mg
Terliq 75N8-A

BEST AVAILABLE COPY

SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 319 TO 324.



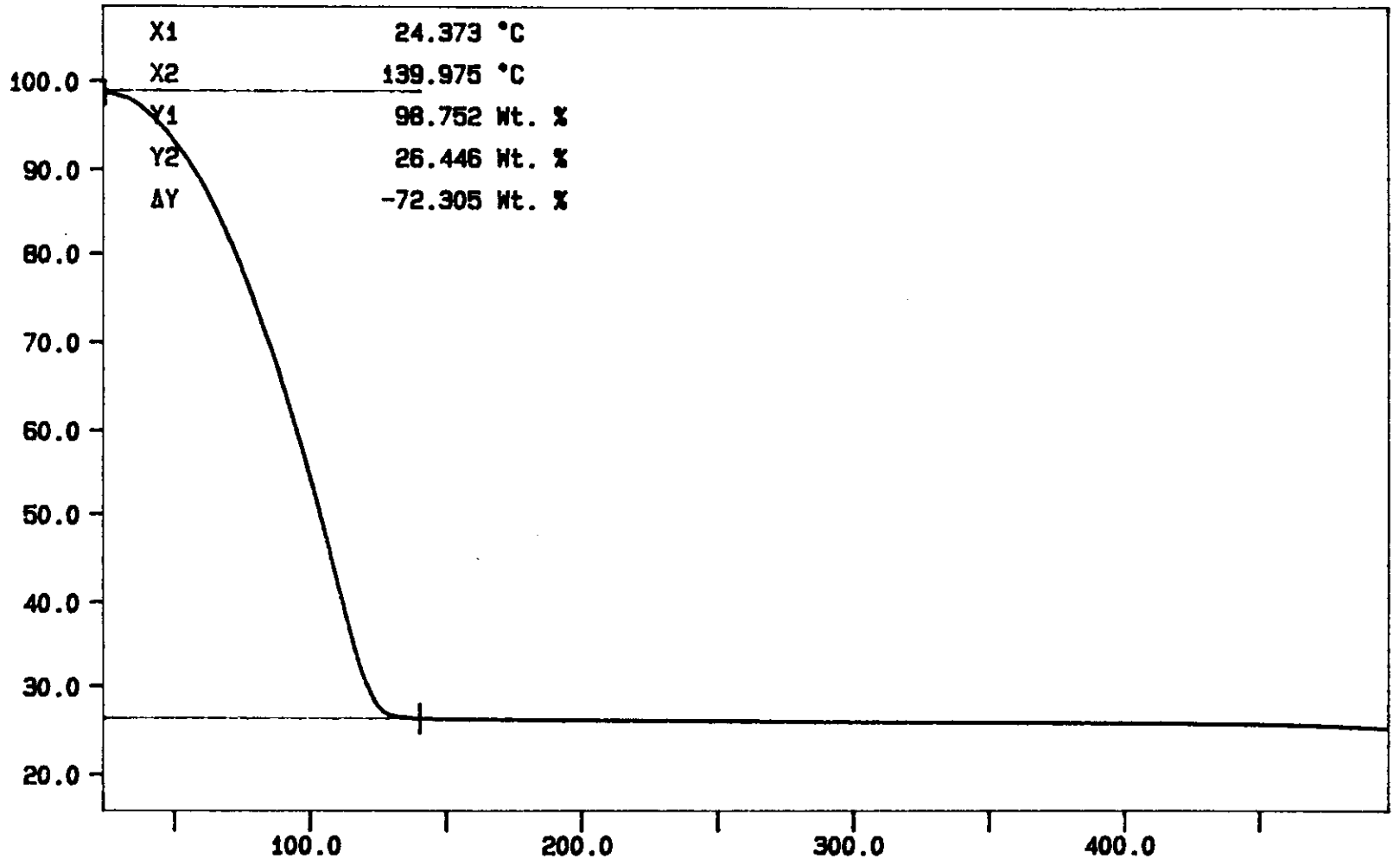
N2 10C/MIN
TEMP1: 25.0 C TIME1: 0.0 min RATE1: 10.0 C/min
TEMP2: 300.0 C

RD MEYERS
PERKIN-ELMER
7 Series Thermal Analysis System
Mon Jan 15 07:23:59 1996

WHC-SD-WM-DP-169, REV. 1

Curve 1: TGA
File info: sam011501 Mon Jan 15 08:39:49 1996
Sample Weight: 12.542 mg
S95T004013

BEST AVAILABLE COPY



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

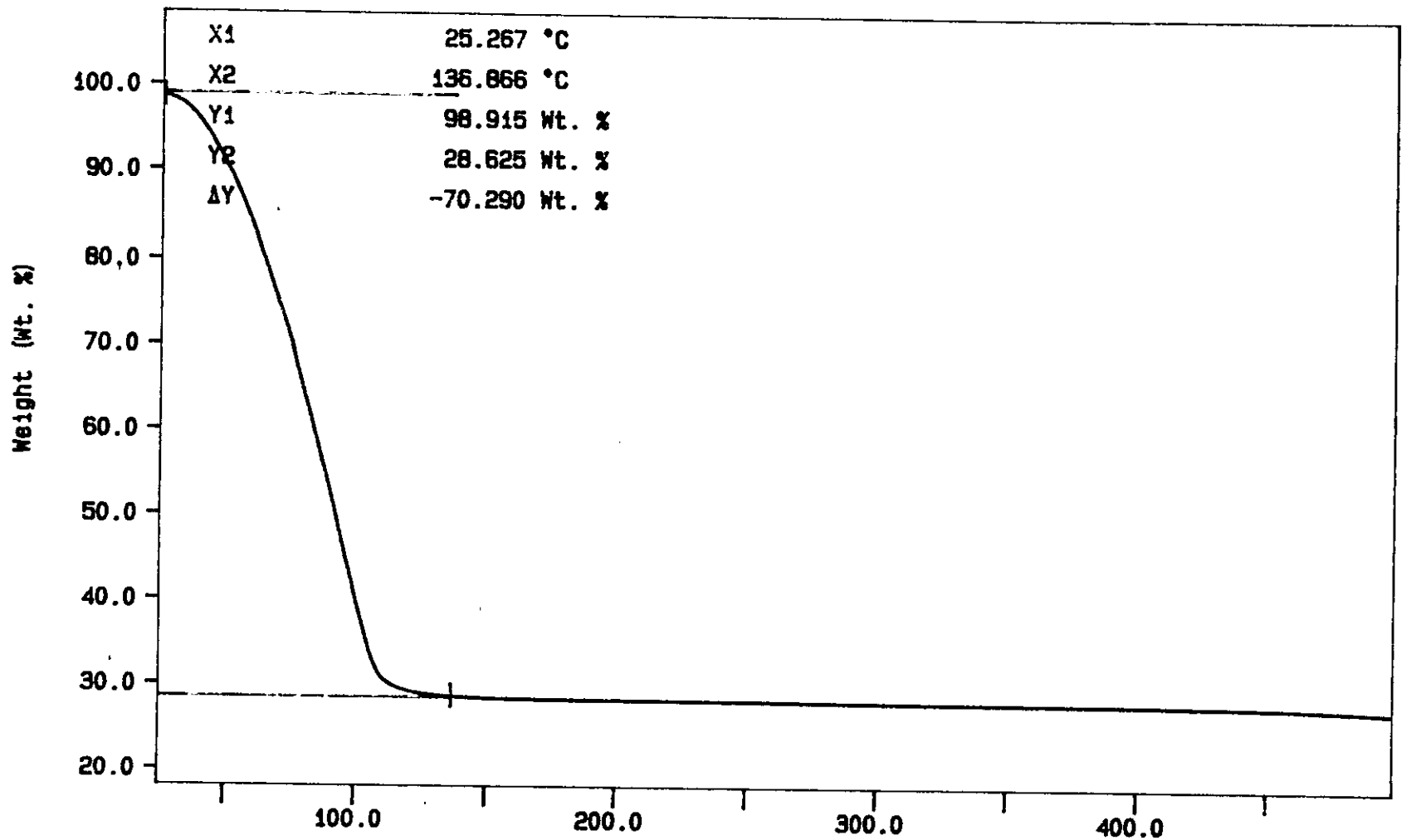
RD MEYERS
PERKIN-ELMER
7 Series Thermal Analysis System
Tue Jan 23 07:36:37 1996

WHC-SD-WM-DP-169, REV. (

320

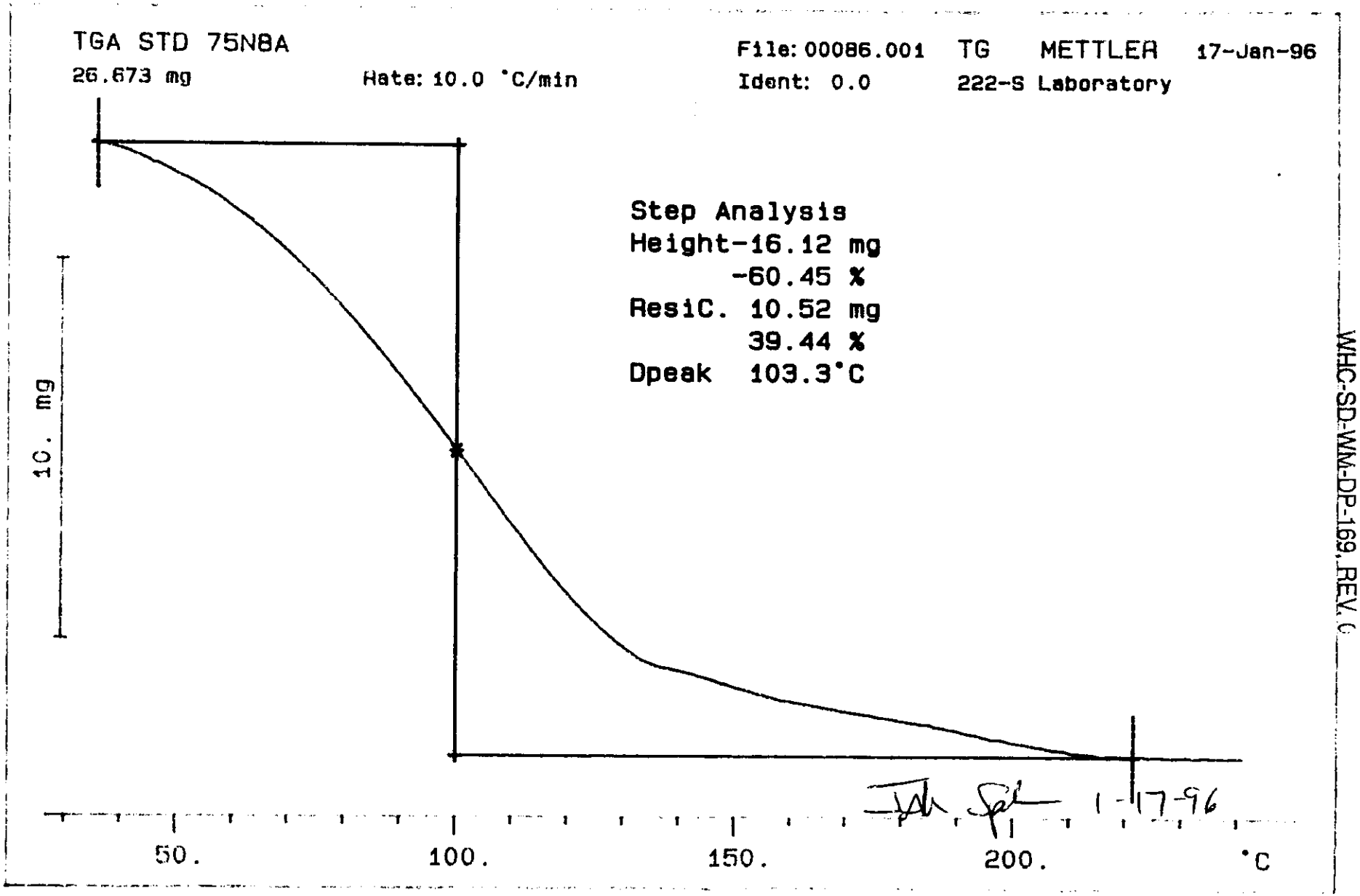
Curve 1: TGA
File info: sam011502 Mon Jan 15 11:27:46 1996
Sample Weight: 8.150 mg
S95T004013DUP

BEST AVAILABLE COPY



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

RD MEYERS
PERKIN-ELMER
7 Series Thermal Analysis System
Tue Jan 23 07:41:47 1996

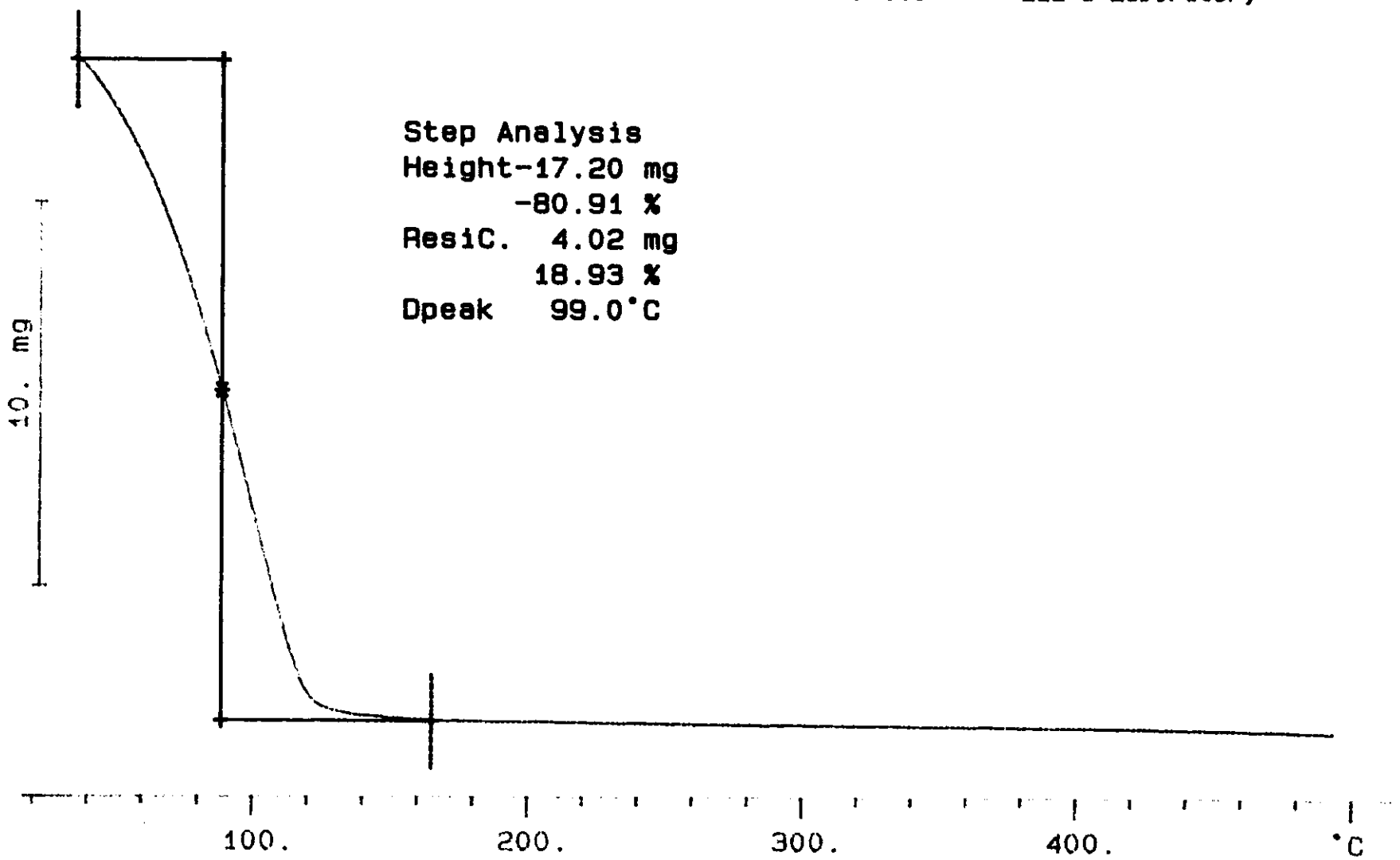

TGA STD 75N8A
26.673 mg
Rate: 10.0 °C/min
File: 00086.001
TG
METTLER
17-Jan-96
Ident: 0.0
222-S Laboratory
Step Analysis
Height-16.12 mg
-60.45 %
ResiC. 10.52 mg
39.44 %
Dpeak 103.3°C
10. mg
50.
100.
150.
200.
°C
1-17-96

BEST AVAILABLE COPY

S95T004014 N2
21.254 mg

Rate: 10.0 °C/min

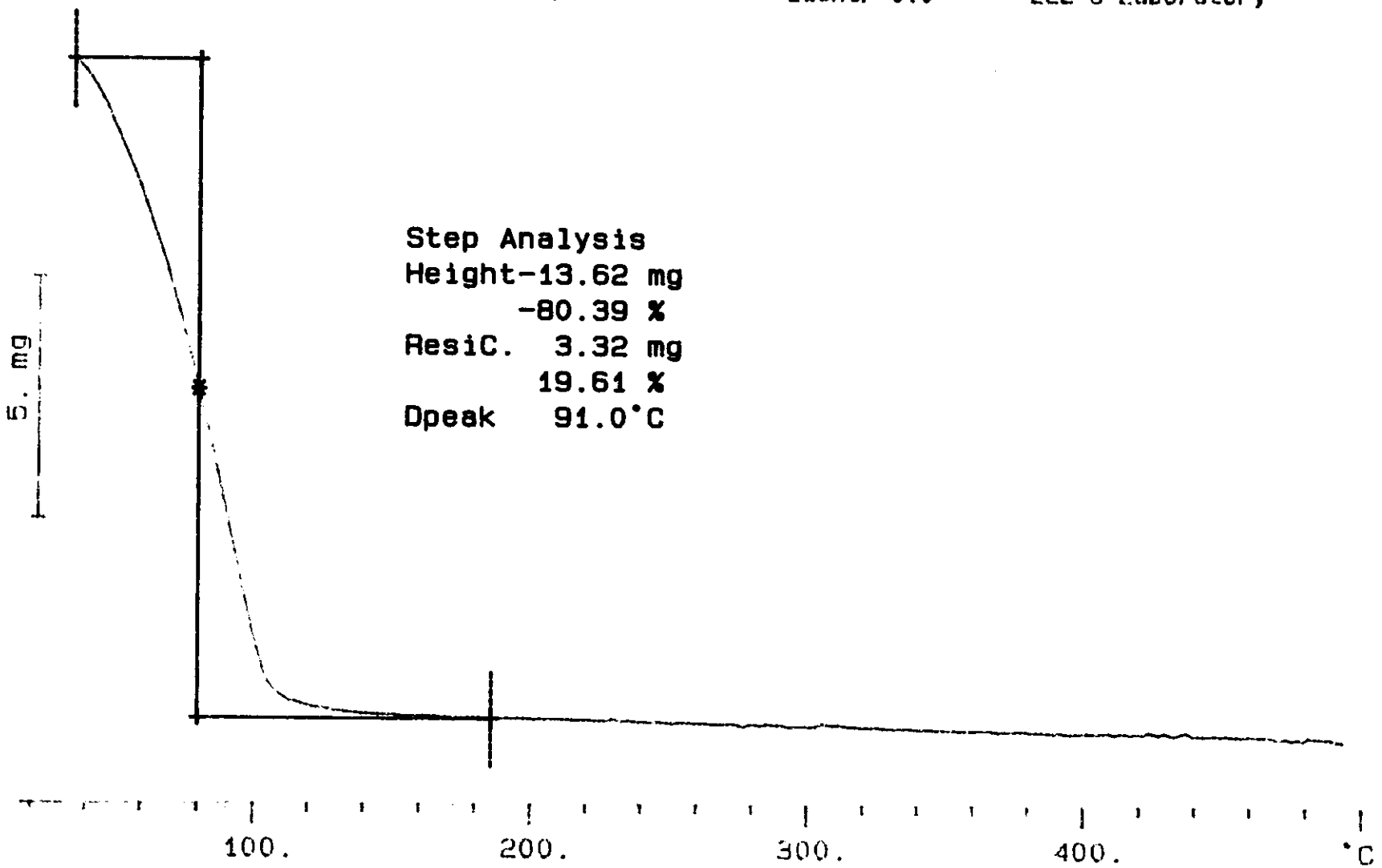
File: 00088.001 TG METTLER 17-Jan-96
Ident: 0.0 222-S Laboratory



BEST AVAILABLE COPY

S95T004014DUP N2
16.942 mg
Rate: 10.0 °C/min

File: 00090.001 TG METTLER 17-Jan-96
Ident: 0.0 222-S Laboratory



LABCORE Data Entry Template for Worklist# 4841

Analyst: ADP **Instrument:** TGA0 1 **Book #** ~~12N14B~~ ADP 75N8-A

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

Worklist Comment: Please run B-203 TGAs under N2. bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA-01	SOLID	59.2	60.80	N/A	%
95000228	B-203	2	SAMPLE	S95T004015	0		TGA-01	SOLID	N/A	77.57		%
95000228	B-203	3	DUP	S95T004015	0		TGA-01	SOLID	77.57	79.00	N/A	%
95000228	B-203	4	SAMPLE	S95T004227	0		TGA-01	SOLID	N/A	76.27		%
95000228	B-203	5	DUP	S95T004227	0		TGA-01	SOLID	76.27	75.55	N/A	%

Final page for worklist # 4841

Anthony Perrotta 1-21-96
Analyst Signature **Date**

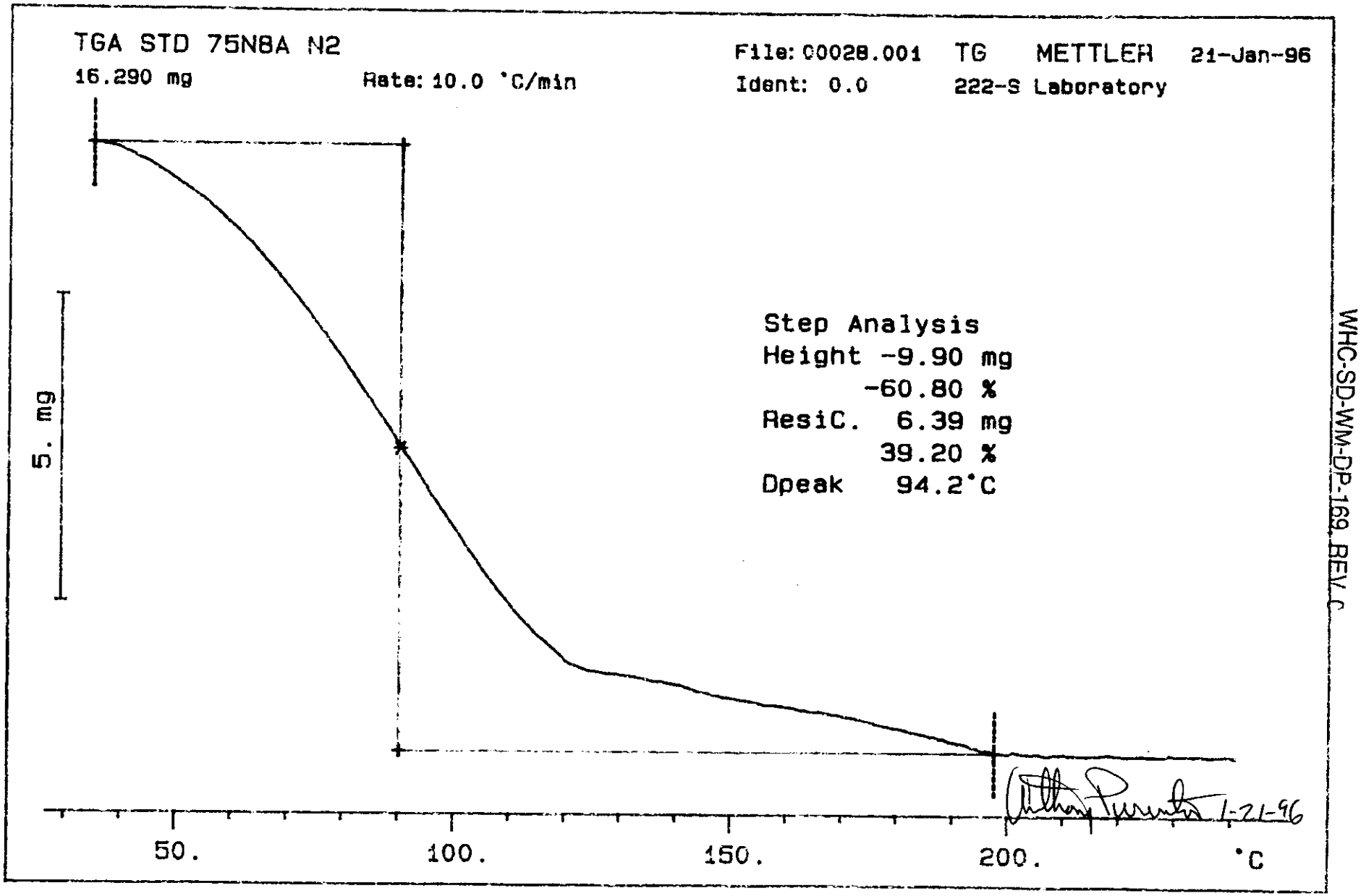
[illegible] 1/24/96
Analyst Signature **Date**

Verified by Blandina Valenzuela 1/26/96

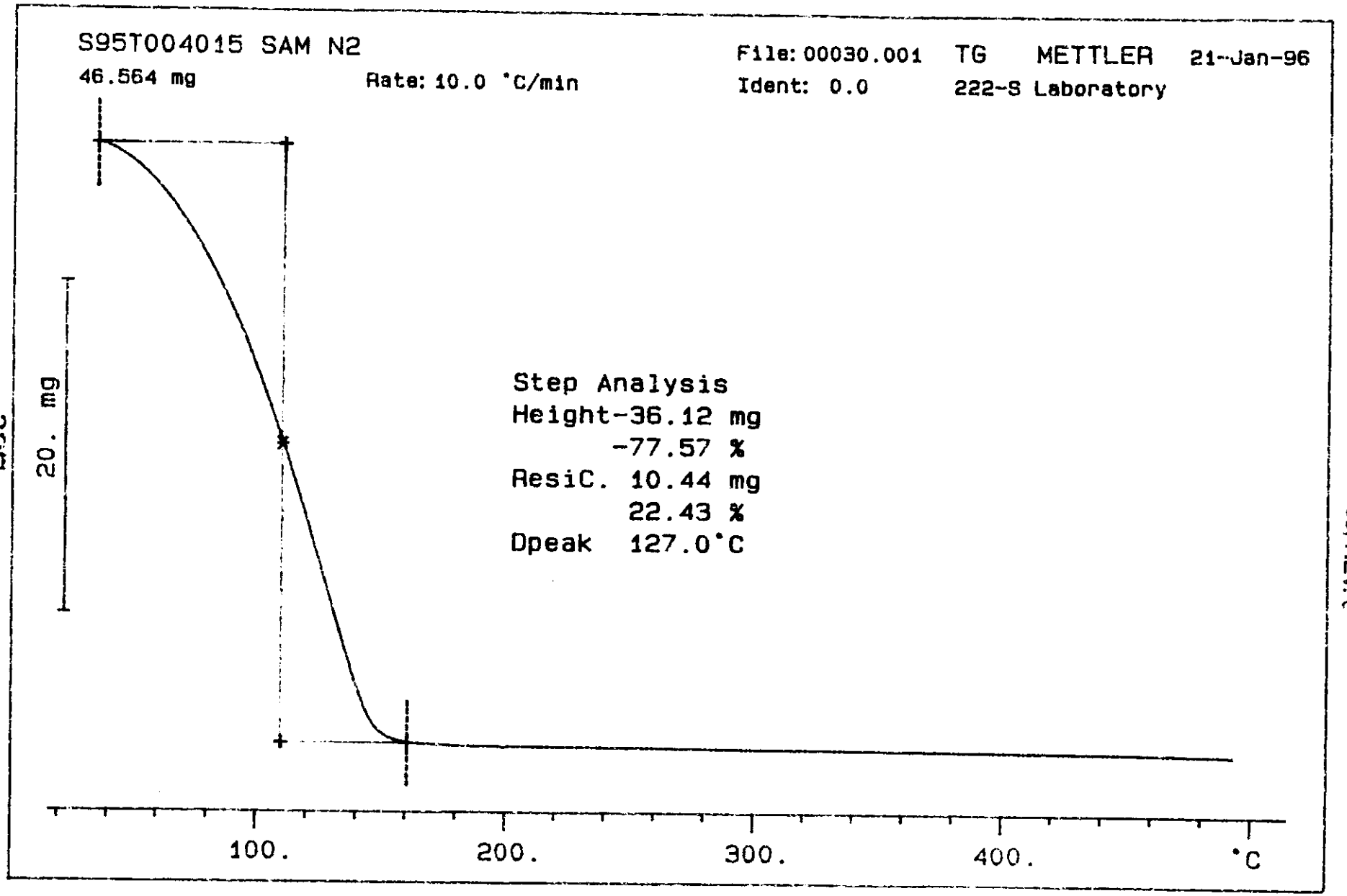
Data Entry Comments:

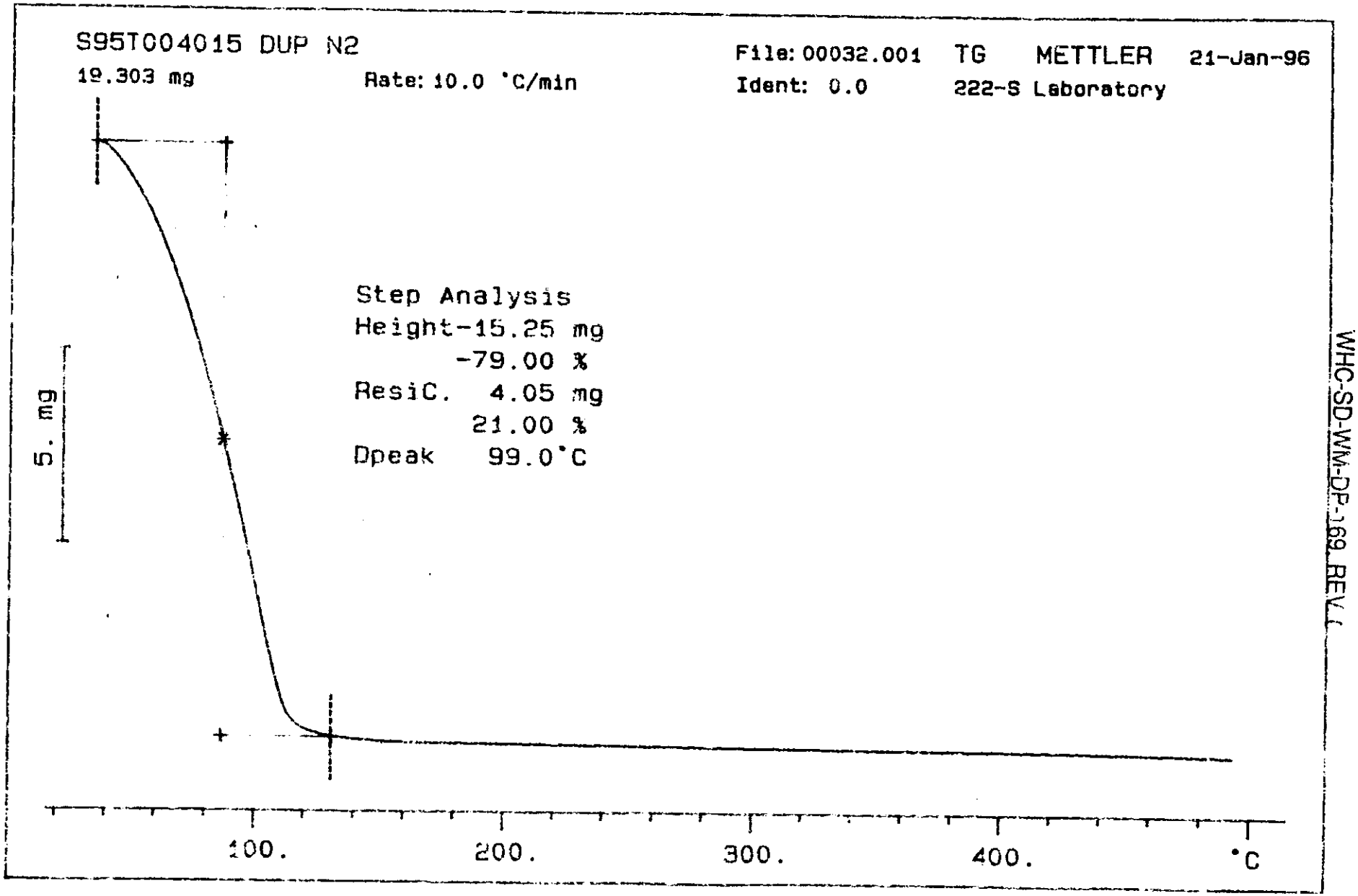
Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

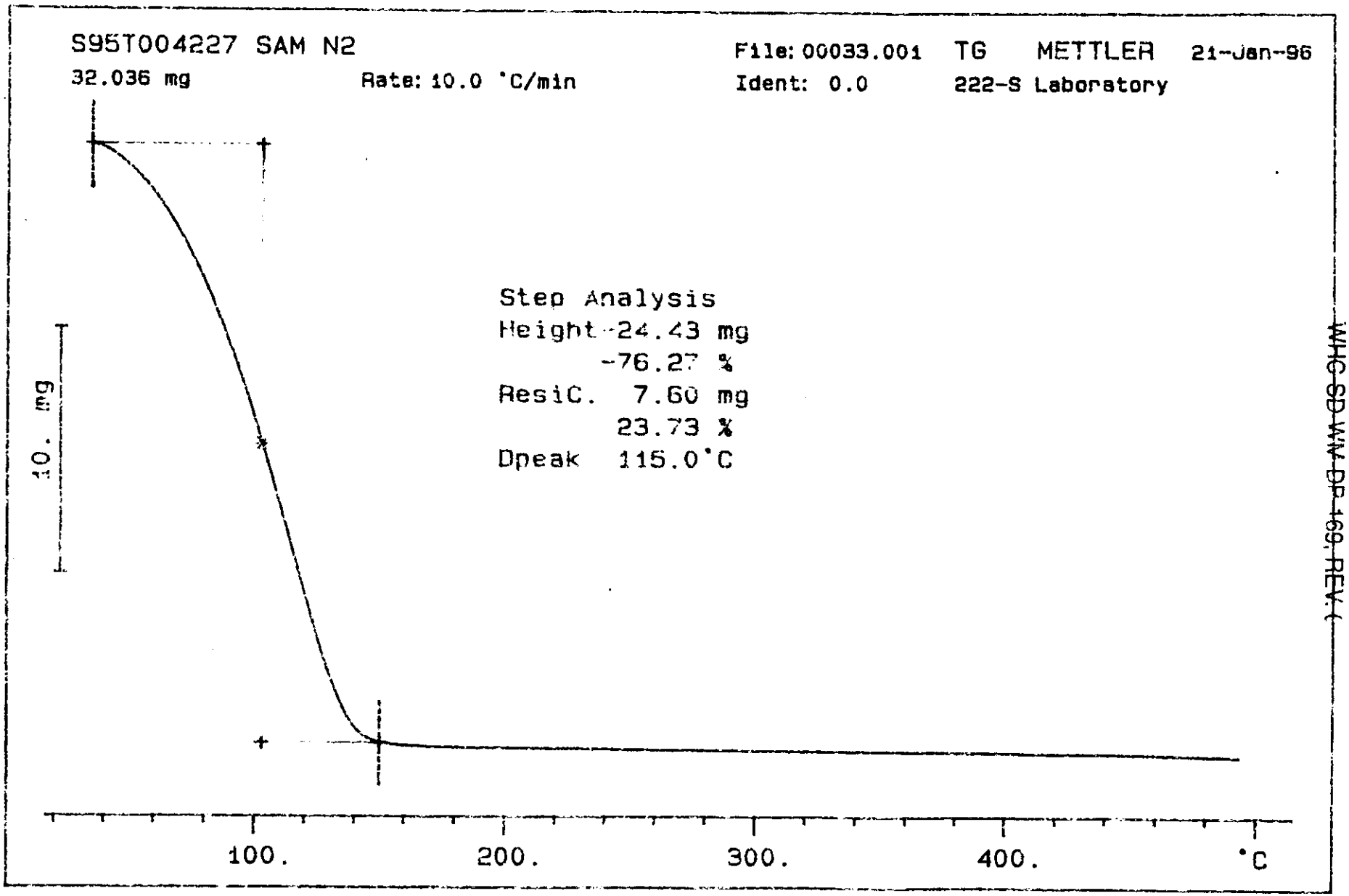
SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 326 TO 330.

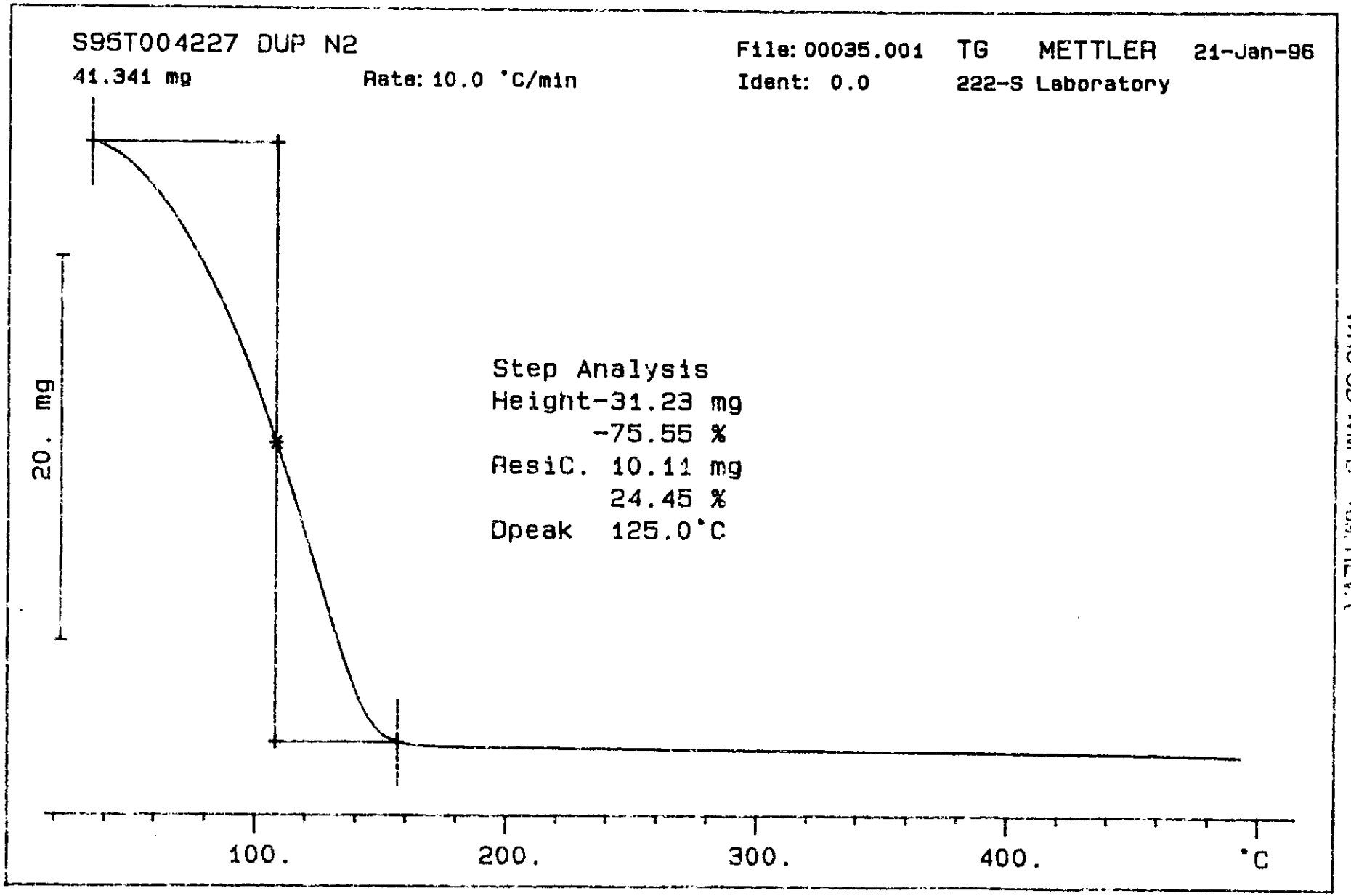


Anthony Pucciarello 1-21-96


S95T004015 SAM N2
46.564 mg
Rate: 10.0 °C/min
File: 00030.001
TG METTLER
21-Jan-96
Ident: 0.0
222-S Laboratory
Step Analysis
Height -36.12 mg
-77.57 %
ResiC. 10.44 mg
22.43 %
Dpeak 127.0°C
20. mg
100.
200.
300.
400.
°C


S95T004015 DUP N2
19.303 mg
Rate: 10.0 °C/min
File: 00032.001
TG
METTLER
21-Jan-96
Ident: 0.0
222-S Laboratory
Step Analysis
Height-15.25 mg
-79.00 %
ResiC. 4.05 mg
21.00 %
Dpeak 99.0°C
5. mg
100.
200.
300.
400.
°C


S95T004227 SAM N2
32.036 mg
Rate: 10.0 °C/min
File: 00033.001
TG
METTLER
21-Jan-96
Ident: 0.0
222-S Laboratory
Step Analysis
Height -24.43 mg
-76.27 %
ResiC. 7.60 mg
23.73 %
Dpeak 115.0°C
10. mg
100.
200.
300.
400.
°C


S95T004227 DUP N2
41.341 mg
Rate: 10.0 °C/min
File: 00035.001
TG METTLER
21-Jan-96
Ident: 0.0
222-S Laboratory
Step Analysis
Height-31.23 mg
-75.55 %
ResiC. 10.11 mg
24.45 %
Dpeak 125.0°C
20. mg
100.
200.
300.
400.
°C

LABCORE Data Entry Template for Worklist# 4842

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

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

Worklist Comment: Please run B-203 TGAs under N2. bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	-------TEST------	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA-03	SOLID	59.2	60.18	N/A	%
95000228	B-203	2	SAMPLE	S95T004228	0		TGA-03	SOLID	N/A	77.93		%
95000228	B-203	3	DUP	S95T004228	0		TGA-03	SOLID	77.93	76.87	N/A	%
95000228	B-203	4	SAMPLE	S95T004229	0		TGA-03	SOLID	N/A	42.49		%
95000228	B-203	5	DUP	S95T004229	0		TGA-03	SOLID	42.49	77.90	N/A	%

Final page for worklist # 4842

Susie M. Sutton 1-17-96
Analyst Signature **Date**

NE Wright 1/25/96
Analyst Signature **Date**

Verified by Blandina Valenzuela 1/26/96

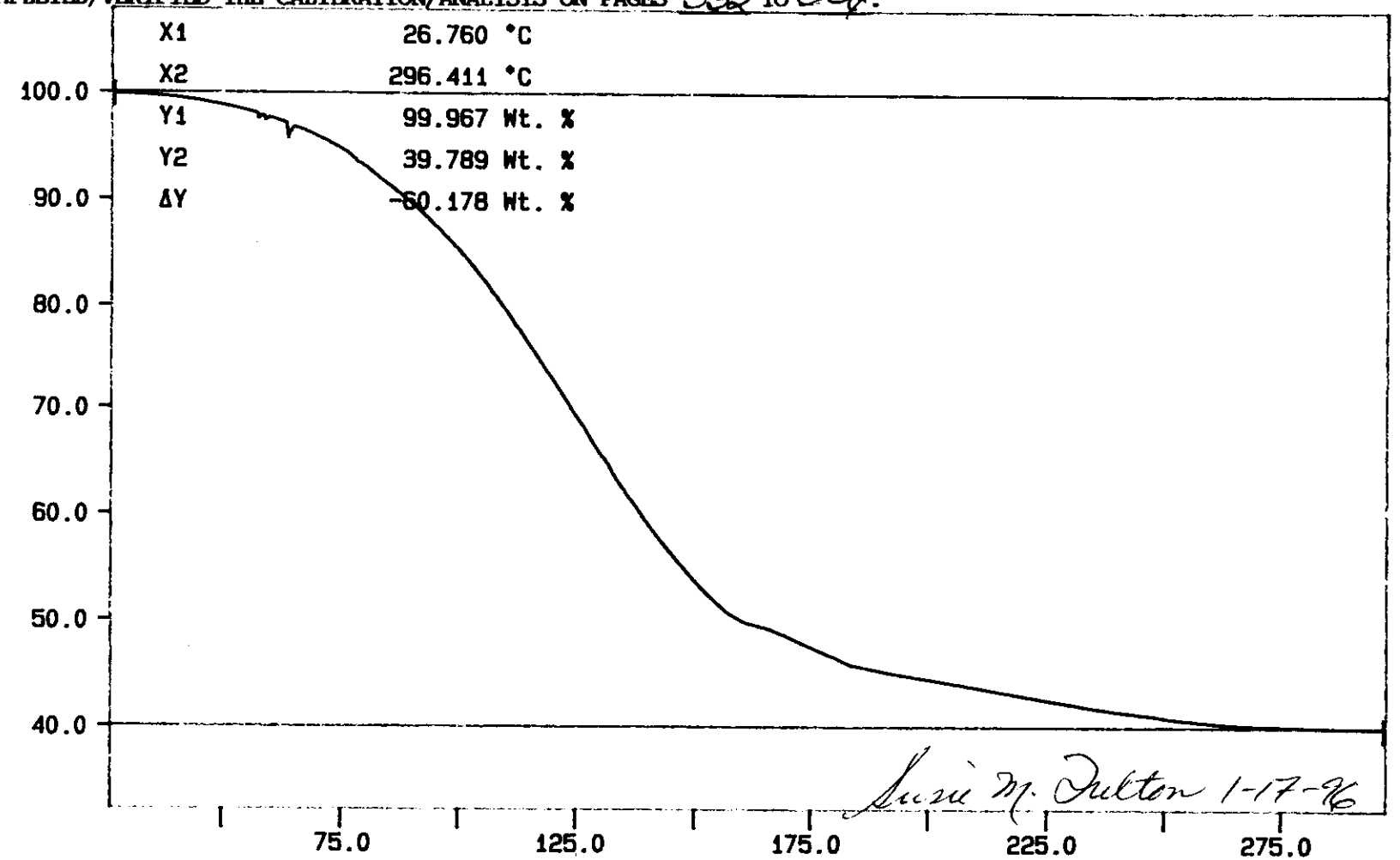
Data Entry Comments: S95T004229 produced a second weight loss step of ~~2~~ 5.271% 1/24/96 BM
Sample will be run again due to high RPDs

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: TER011701 Wed Jan 17 06:37:17 1996
Sample Weight: 17.289 mg
Terliq 75N8-A

SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 332 TO 336.

BEST AVAILABLE COPY



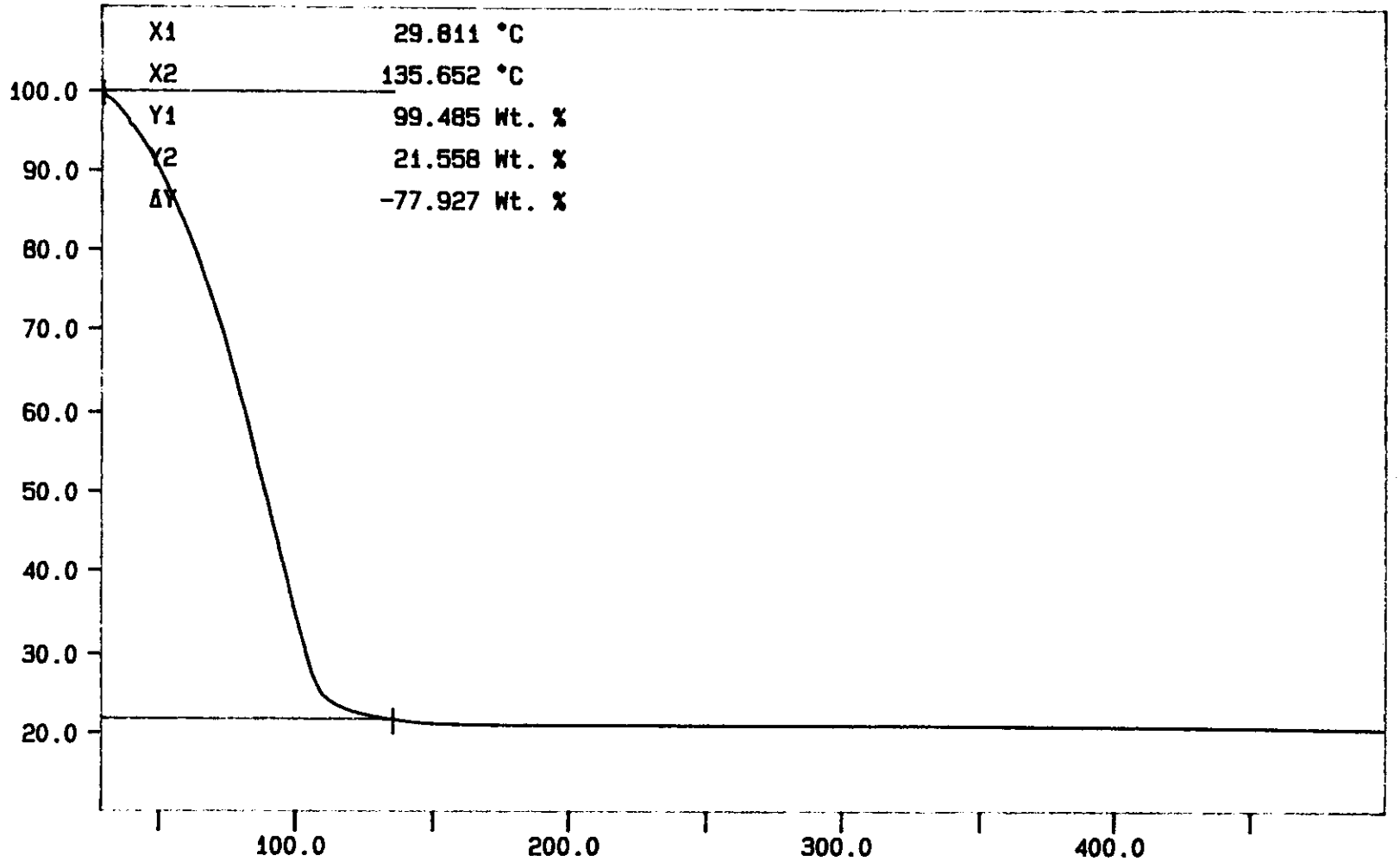
Susie M. Dulton 1-17-96

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

JD SPELLMAN
PERKIN-ELMER
7 Series Thermal Analysis System
Wed Jan 17 22:20:01 1996

Curve 1: TGA
File info: SAM011704 Wed Jan 17 22:26:17 1996
Sample Weight: 7.636 mg
S95T004228

BEST AVAILABLE COPY

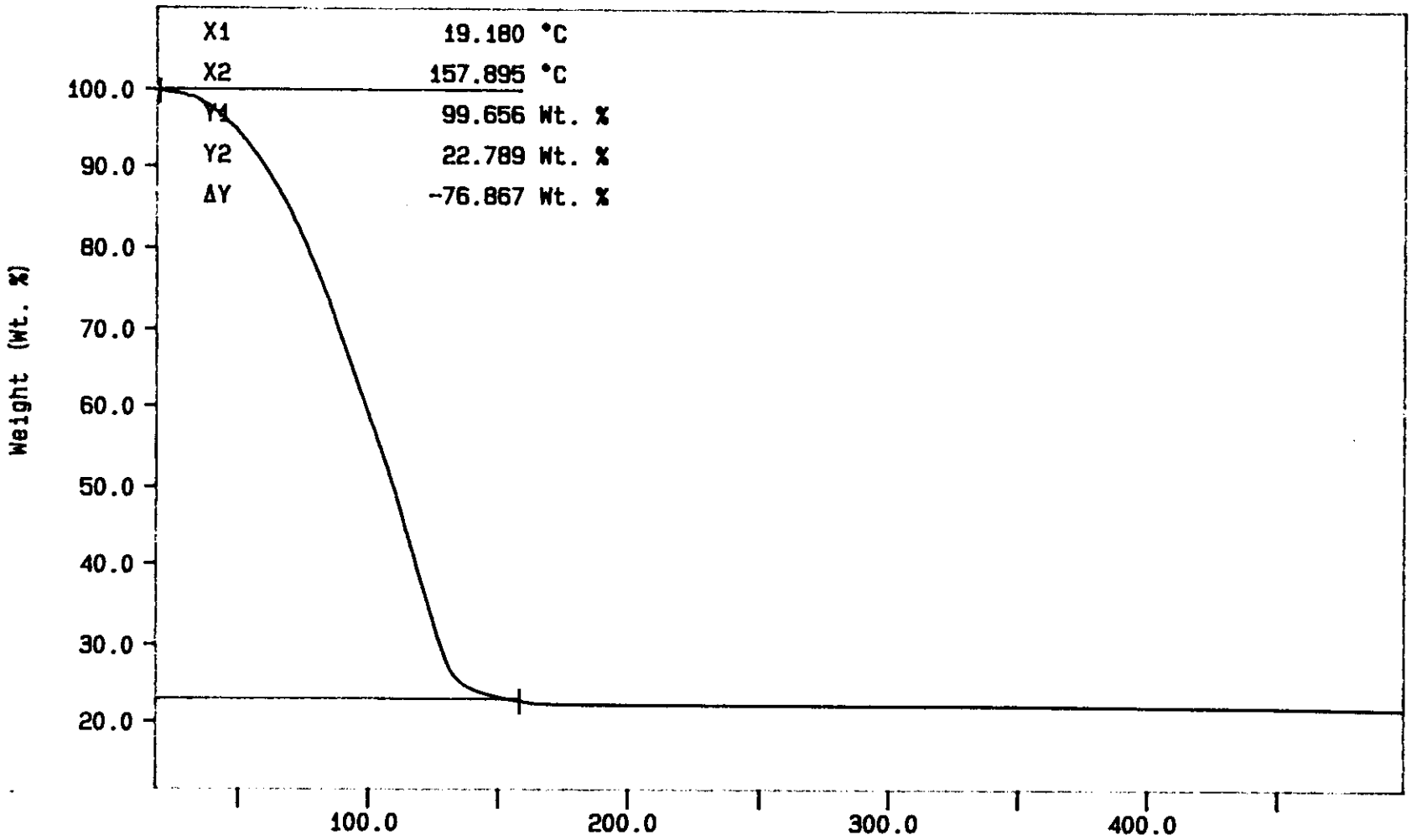


10C/MIN N2
TEMP1: 35.0 C TIME1: 0.0 min RATE1: 10.0 C/min
TEMP2: 500.0 C

SM FULTON
PERKIN-ELMER
7 Series Thermal Analysis System
Wed Jan 17 22:34:53 1996

Curve 1: TGA
File info: SAM011705 Wed Jan 17 23:49:53 1996
Sample Weight: 17.521 mg
S95T004228 DUP

BEST AVAILABLE COPY

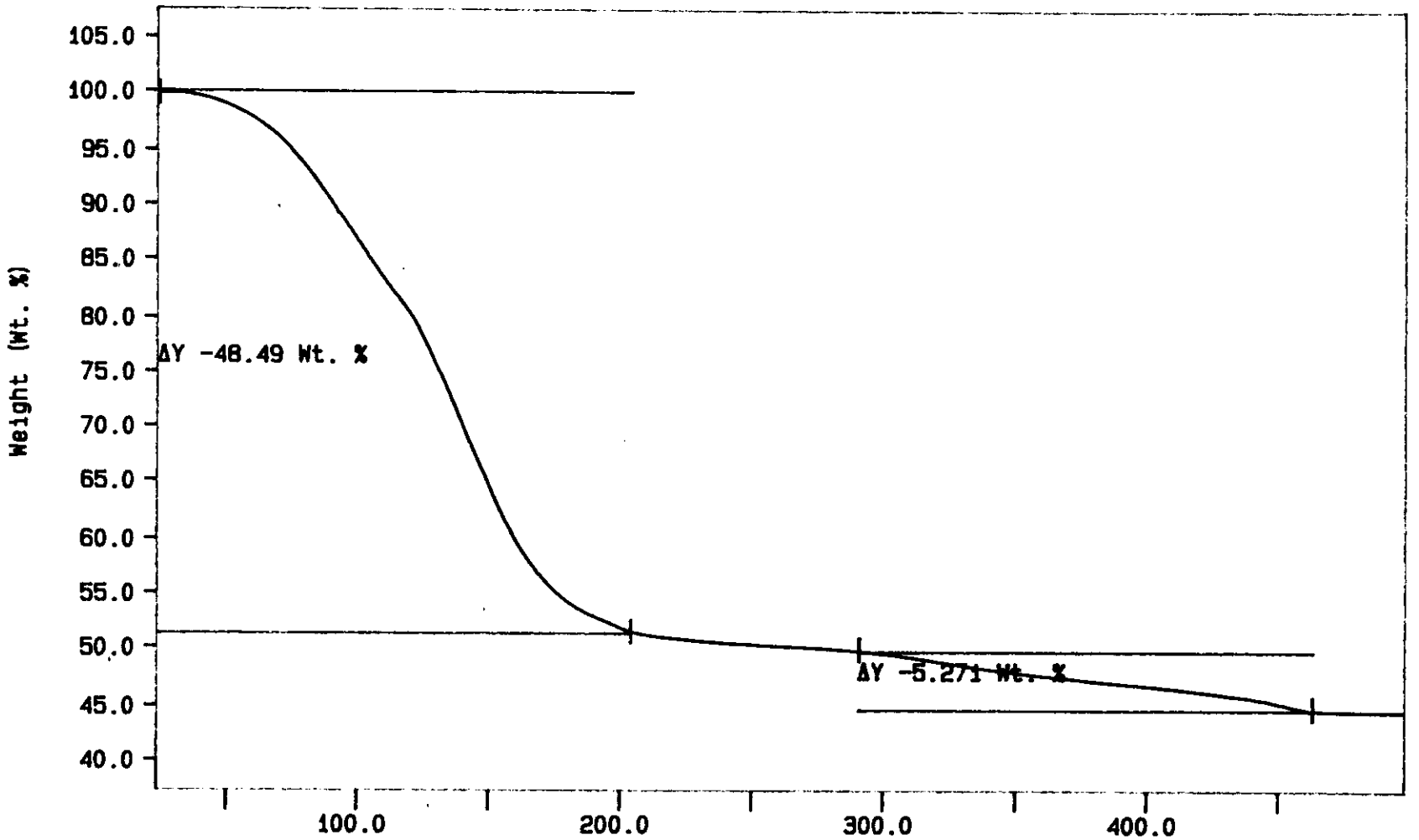


10C/MIN N2
TEMP1: 35.0 C TIME1: 0.0 min RATE1: 10.0 C/min
TEMP2: 500.0 C

SM FULTON
PERKIN-ELMER
7 Series Thermal Analysis System
Thu Jan 18 01:45:47 1996

Curve 1: TGA
File info: SAM011706 Thu Jan 18 02:31:12 1996
Sample Weight: 14.567 mg
S95T004229

BEST AVAILABLE COPY



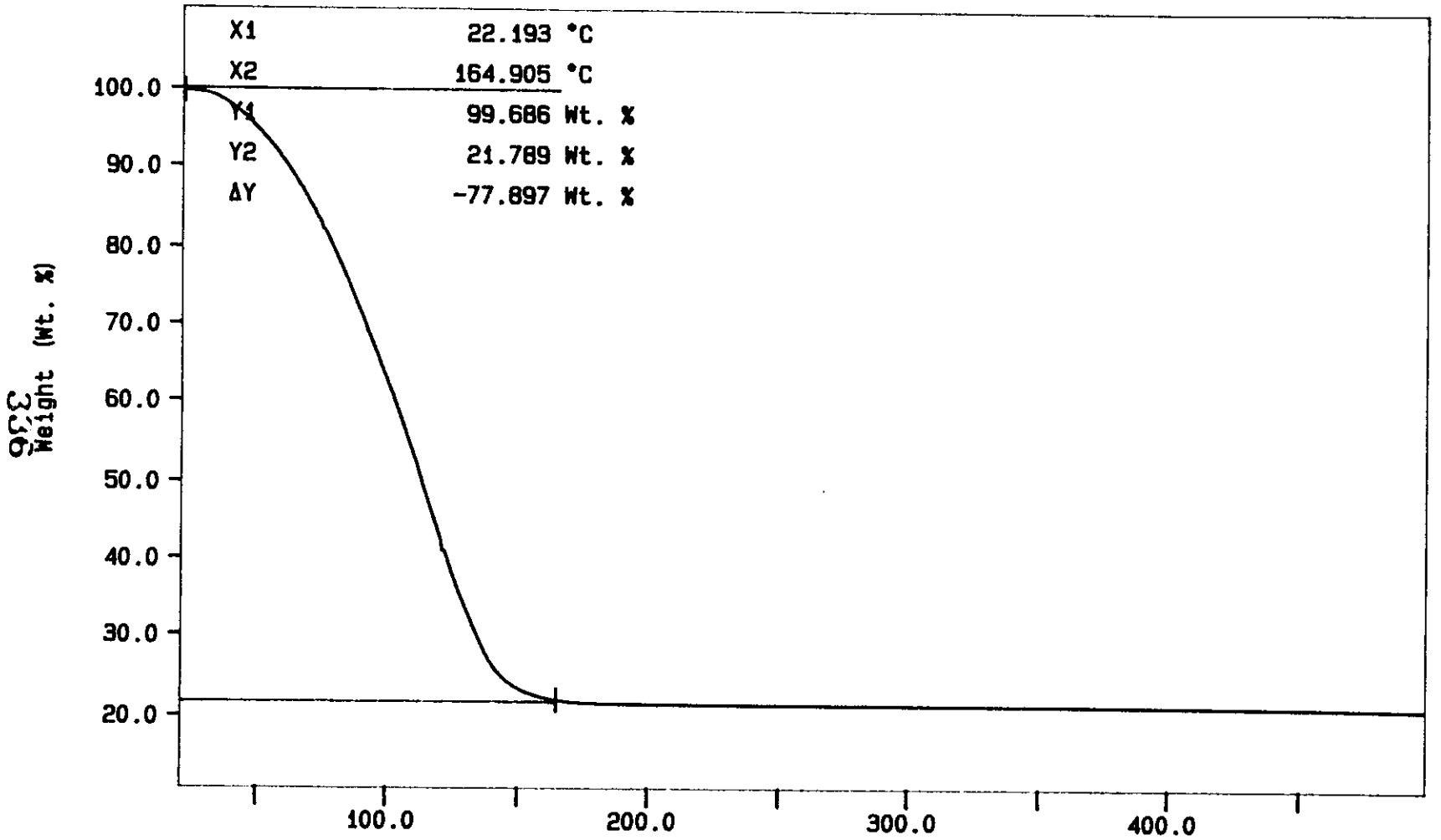
10C/MIN N2
TEMP1: 35.0 C TIME1: 0.0 min RATE1: 10.0 C/min
TEMP2: 600.0 C

SM FULTON
PERKIN-ELMER
7 Series Thermal Analysis System
Thu Jan 18 03:55:06 1996

WHC-SD-WM-DP-169, REV. 0

Curve 1: TGA
File info: SAM011707 Thu Jan 18 04:54:45 1996
Sample Weight: 15.997 mg
S95T004229 DUP

BEST AVAILABLE COPY



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 Jan 18 18:56:13 1996

LABCORE Data Entry Template for Worklist# 4843

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

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

Worklist Comment: Please run B-203 TGAs under N2. bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA-01	SOLID	59.2	60.82*	N/A	%
95000228	B-203	2	SAMPLE	S95T004233	0		TGA-01	SOLID	N/A	77.22		%
95000228	B-203	3	DUP	S95T004233	0		TGA-01	SOLID	77.22	77.12	N/A	%
95000228	B-203	4	SAMPLE	S95T004234	0		TGA-01	SOLID	N/A	76.35		%
95000228	B-203	5	DUP	S95T004234	0		TGA-01	SOLID	76.35	78.18	N/A	%

Final page for worklist # 4843

Anthony Purunter 1-14-96
Analyst Signature **Date**

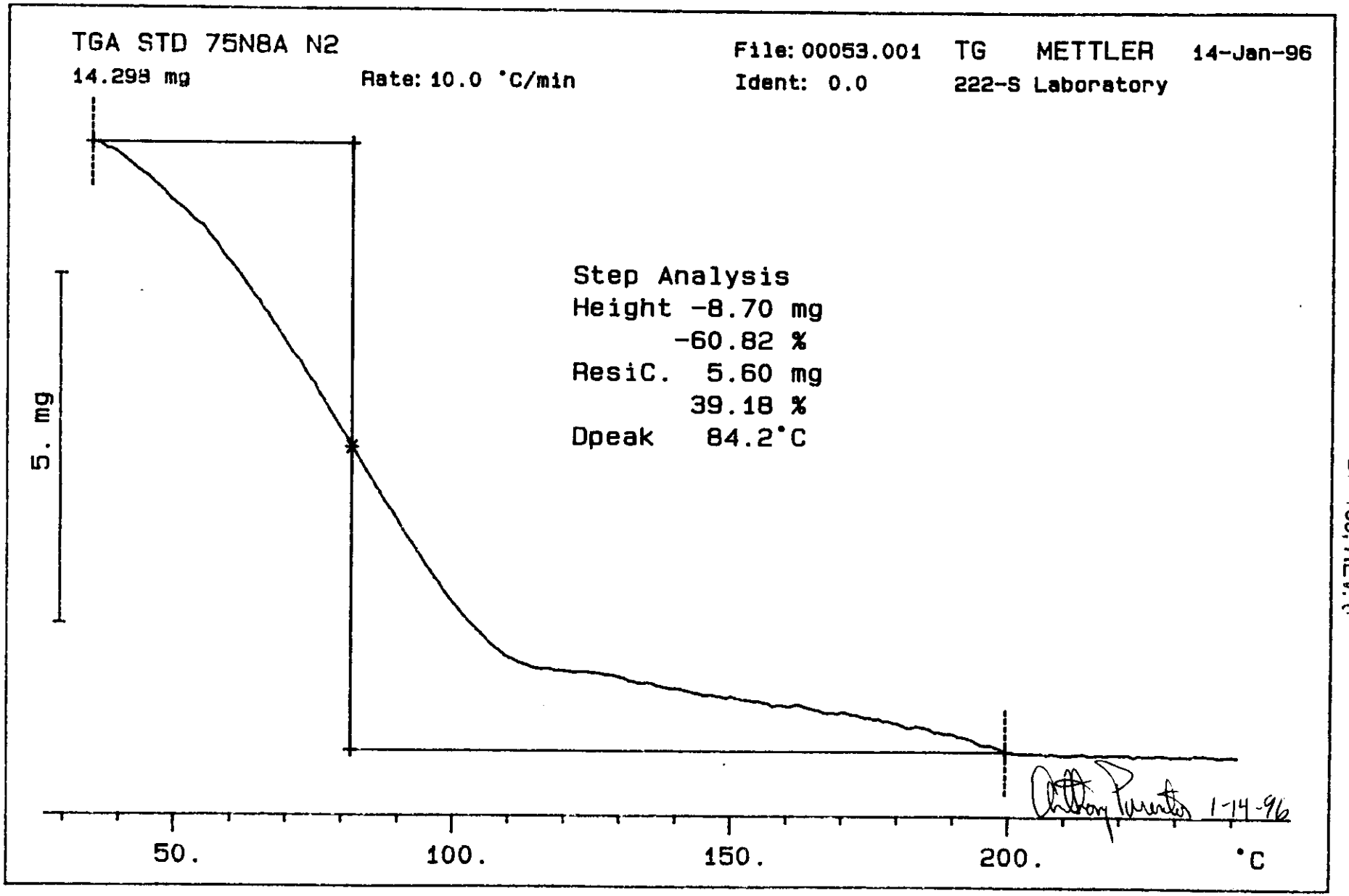
Verified by Blandina Valenzuela 1/17/96

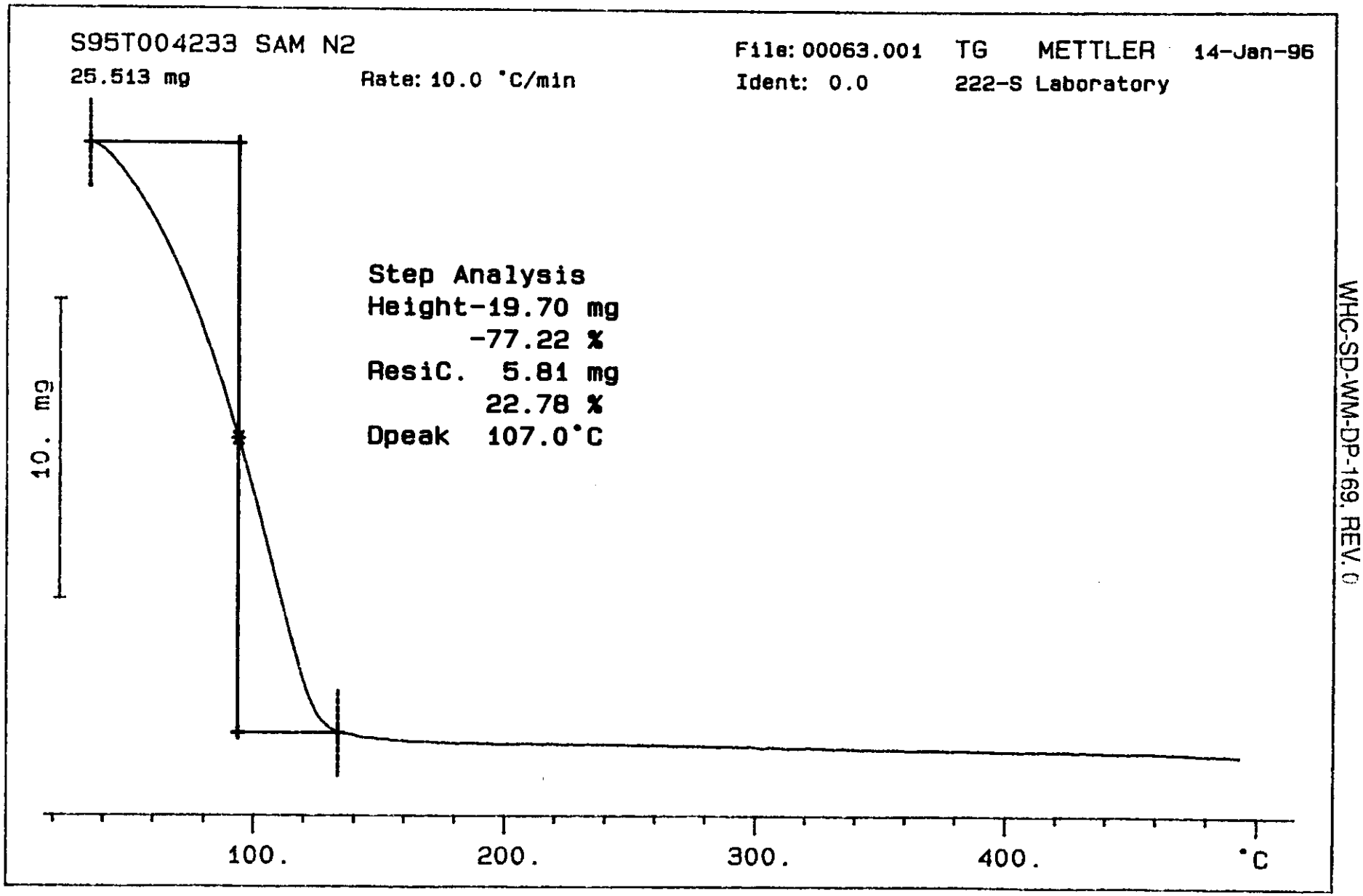
[illegible] 1-16-96
Analyst Signature **Date**

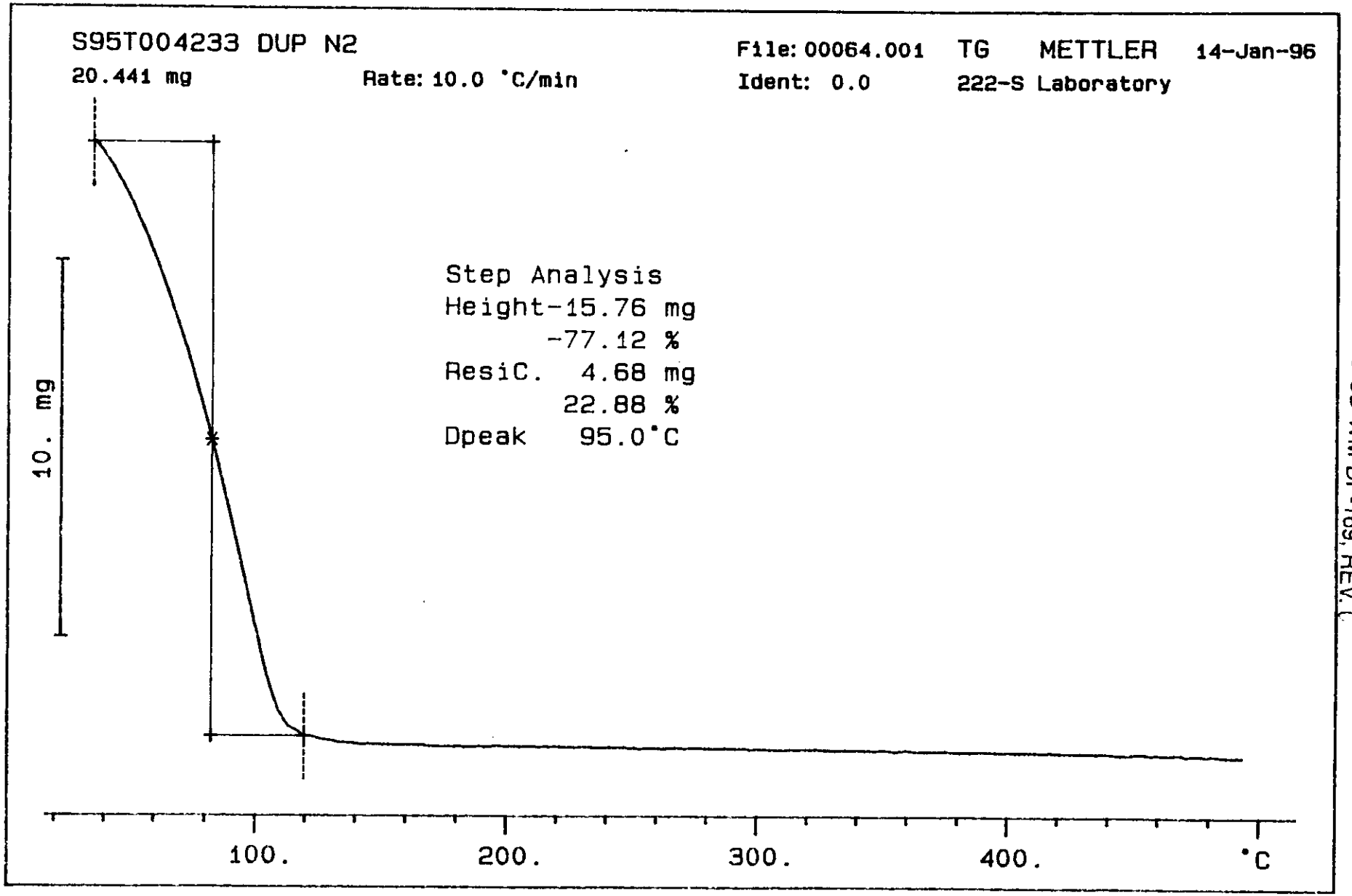
Data Entry Comments:

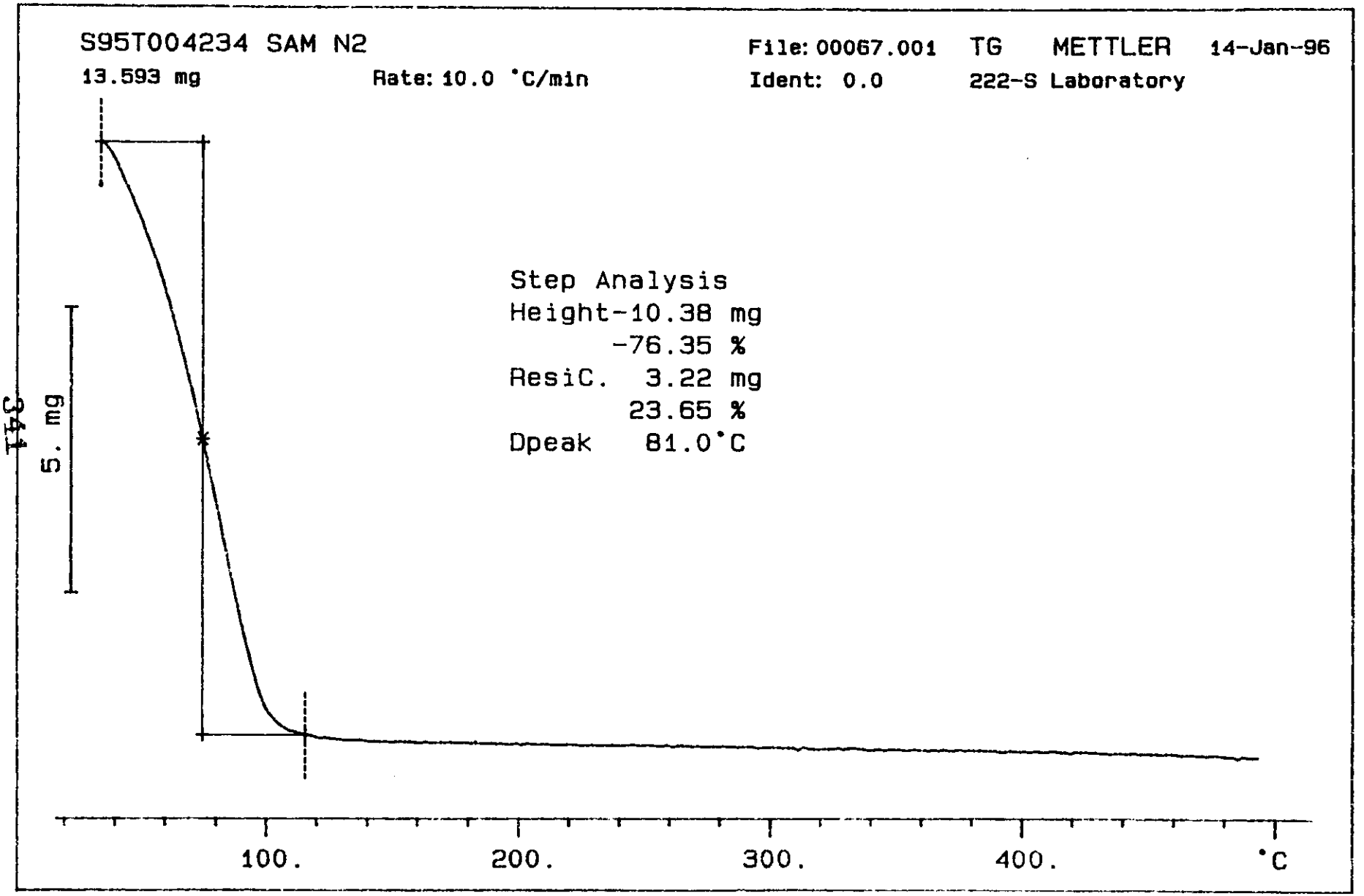
Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

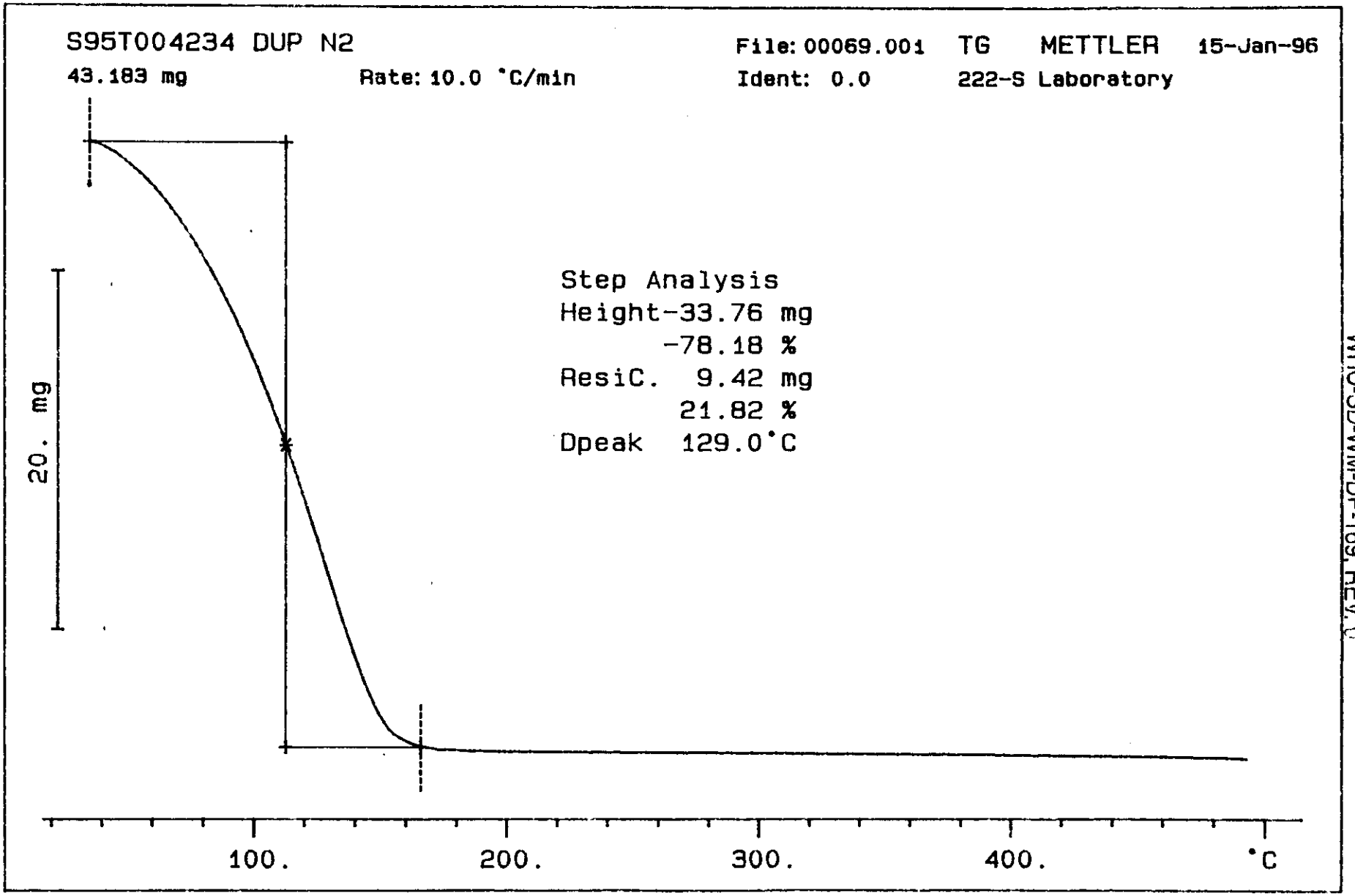
SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 338 TO 342.




S95T004233 SAM N2
25.513 mg
Rate: 10.0 °C/min
File: 00063.001
TG
METTLER
14-Jan-96
Ident: 0.0
222-S Laboratory
Step Analysis
Height-19.70 mg
-77.22 %
ResiC. 5.81 mg
22.78 %
Dpeak 107.0°C
6w 10. mg
100.
200.
300.
400.
°C


S95T004233 DUP N2
20.441 mg
Rate: 10.0 °C/min
File: 00064.001
TG
METTLER
14-Jan-96
Ident: 0.0
222-S Laboratory
Step Analysis
Height-15.76 mg
-77.12 %
ResiC. 4.68 mg
22.88 %
Dpeak 95.0°C
10. mg
100.
200.
300.
400.
°C


S95T004234 SAM N2
13.593 mg
Rate: 10.0 °C/min
File: 00067.001
TG METTLER 14-Jan-96
Ident: 0.0
222-S Laboratory
Step Analysis
Height-10.38 mg
-76.35 %
ResiC. 3.22 mg
23.65 %
Dpeak 81.0°C
5. mg
100.
200.
300.
400.
°C


S95T004234 DUP N2
43.183 mg
Rate: 10.0 °C/min
File: 00069.001
TG
METTLER
15-Jan-96
Ident: 0.0
222-S Laboratory
Step Analysis
Height-33.76 mg
-78.18 %
ResiC. 9.42 mg
21.82 %
Dpeak 129.0°C
20. mg
100.
200.
300.
400.
°C

LABCORE Data Entry Template for Worklist# 4844

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

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

Worklist Comment: Please run B-203 TGAs under N2. bdv

GROUP	PROJECT	S TYPE	SAMPLE#	R	A	-------TEST------	MATRIX	ACTUAL	FOUND	DL	UNIT
		1 STD				TGA-03	SOLID	59.2	60.31	N/A	%
95000228	B-203	2 SAMPLE	S95T004235	0		TGA-03	SOLID	N/A	73.56		%
95000228	B-203	3 DUP	S95T004235	0		TGA-03	SOLID	73.56	74.95	N/A	%

Final page for worklist # 4844

See attached for [illegible]
Analyst Signature **Date** 1/15/96

Verified by Blanding Valenzuela 1/17/96

[illegible] 1-16-96
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# 4844

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

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

Worklist Comment: Please run B-203 TGAs under N2. bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA-01	SOLID			N/A	%
95000228	B-203	2	SAMPLE	S95T004235	0		TGA-01	SOLID	N/A			%
95000228	B-203	3	DUP	S95T004235	0		TGA-01	SOLID			N/A	%

Final page for worklist # 4844

Arthur Purenton 1-14-96
Analyst Signature **Date**

Analyst Signature **Date**

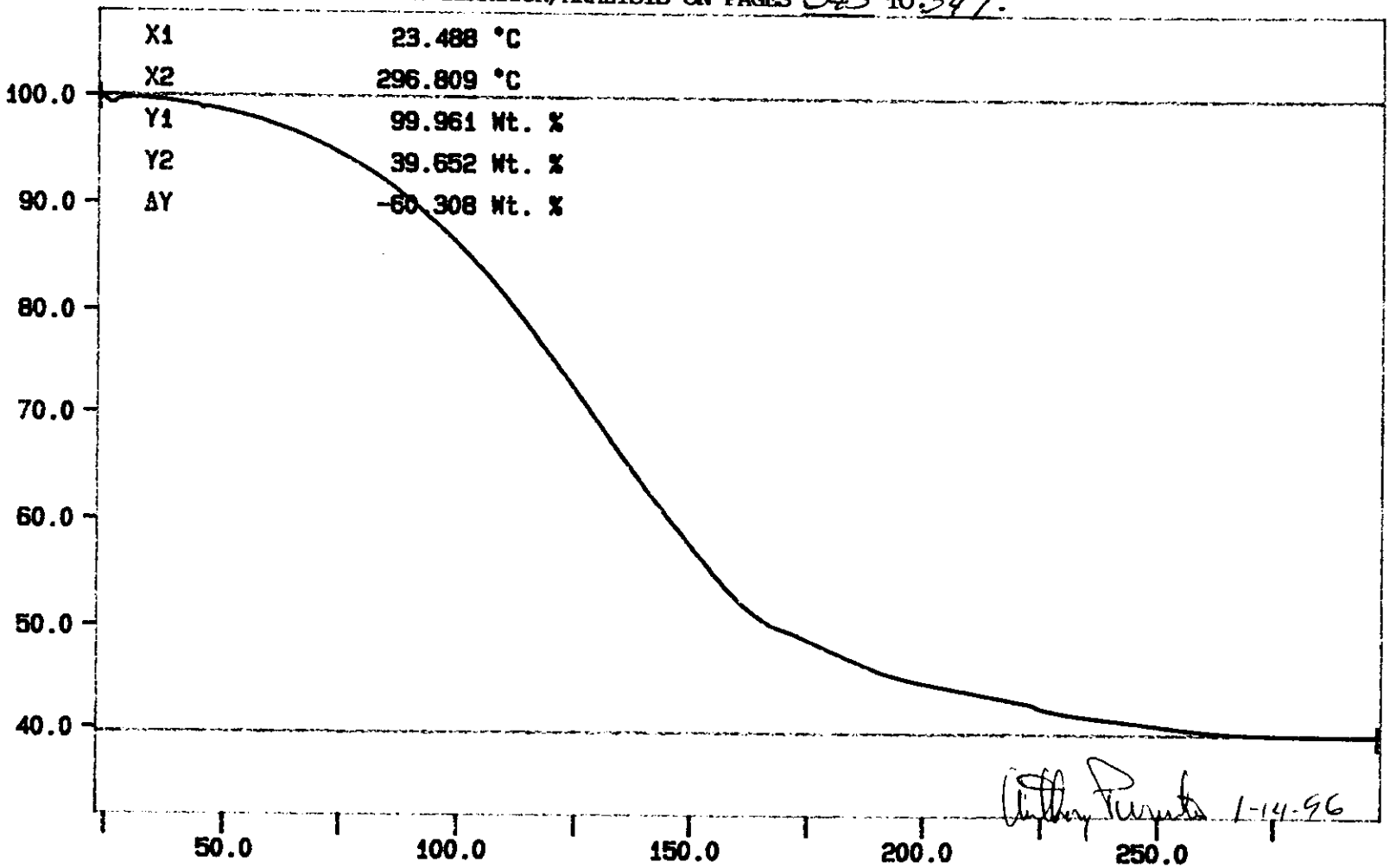
Other instrument was used
1-15-96 BDV

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: TER011402 Sun Jan 14 19:03:54 1996
Sample Weight: 23.331 mg
~~65N8~~ MAO 1-14-95 -A Terliq
75N8A

SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 345 TO 347.

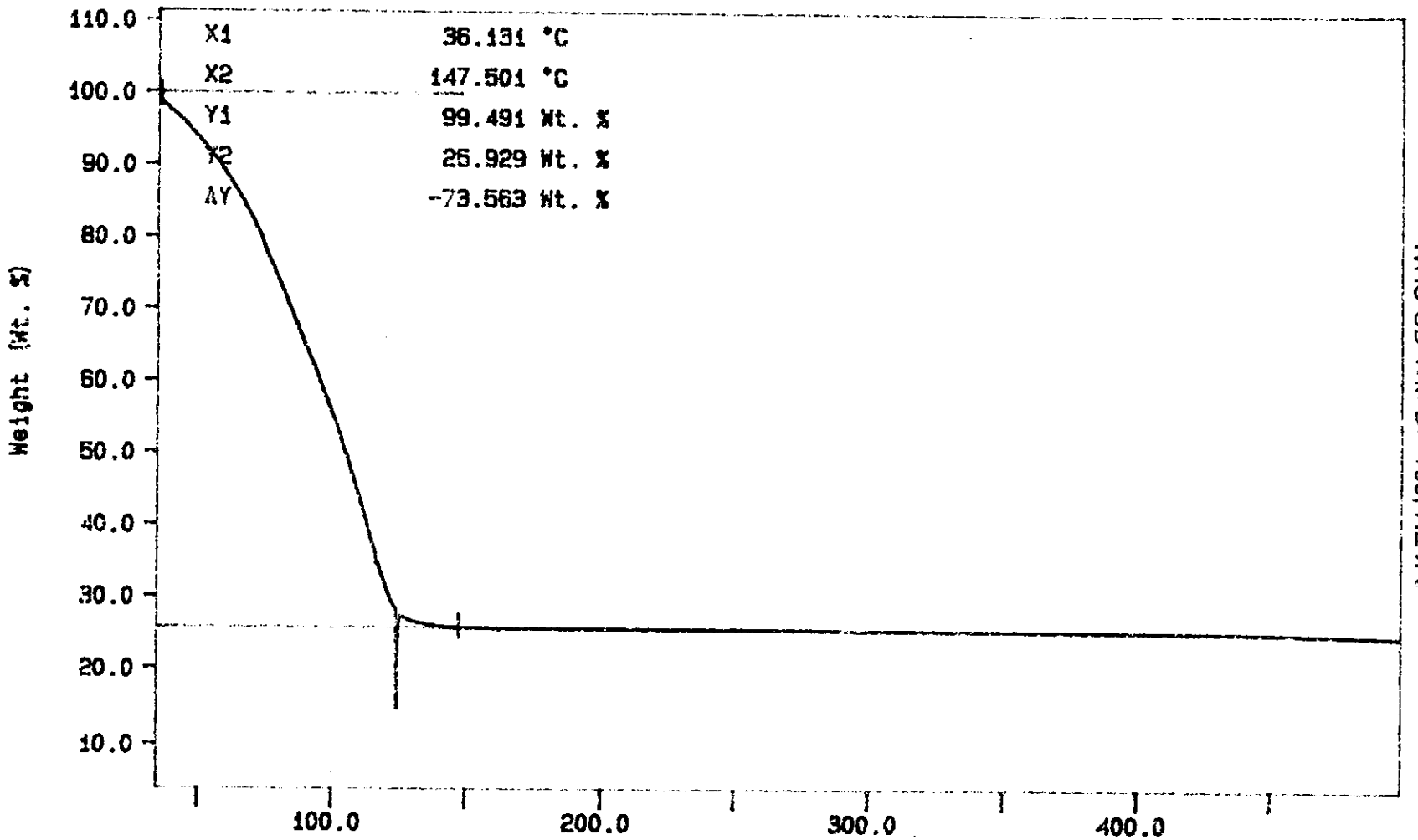


Anthony Purinton 1-14-96

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

AD PURINTON
PERKIN-ELMER
7 Series Thermal Analysis System
Sun Jan 14 19:12:12 1996

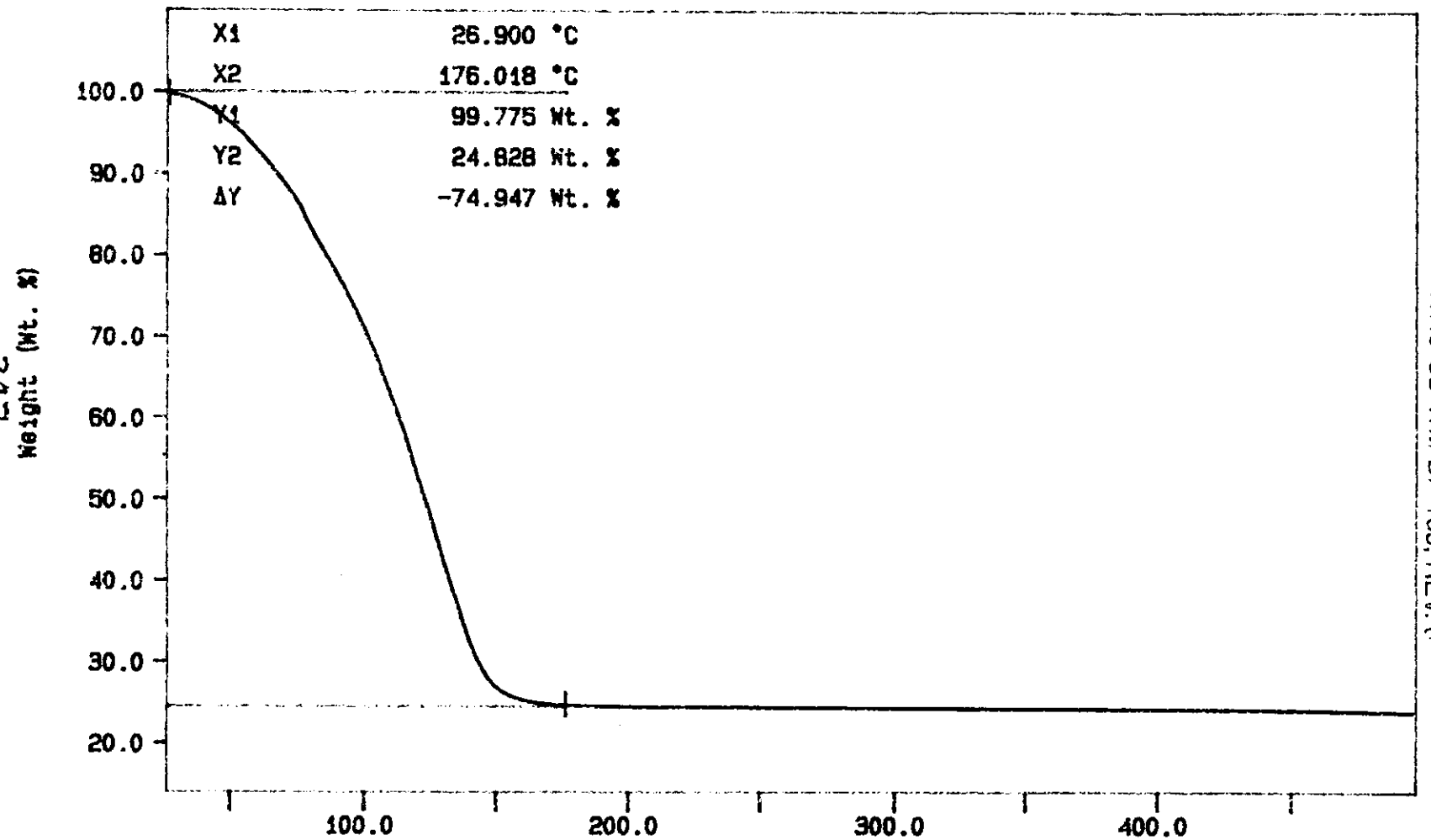
Curve 1: TGA
File info: SAM011412 Sun Jan 14 21:21:01 1996
Sample Weight: 12.549 mg
S95T004235 ~~DUP~~ SMM
1/15/96 BDN



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
Mon Jan 15 08:46:20 1996

Curve 1: TGA
File info: SAM011503 Mon Jan 15 05:38:23 1996
Sample Weight: 19.430 mg
S95T004235 IRP DLD
1/15/96
BDN



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
Mon Jan 15 08:54:57 1996

LABCORE Data Entry Template for Worklist# 4942

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

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

Worklist Comment: B-203 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	59.74	N/A	%
95000228	B-203	2	SAMPLE	S96T000035	0		TGA-01	SOLID	N/A	75.07		%
95000228	B-203	3	DUP	S96T000035	0		TGA-01	SOLID	75.07	74.73	N/A	%
95000228	B-203	4	SAMPLE	S96T000036	0		TGA-01	SOLID	N/A	74.54		%
95000228	B-203	5	DUP	S96T000036	0		TGA-01	SOLID	74.54	73.92	N/A	%

Final page for worklist # 4942

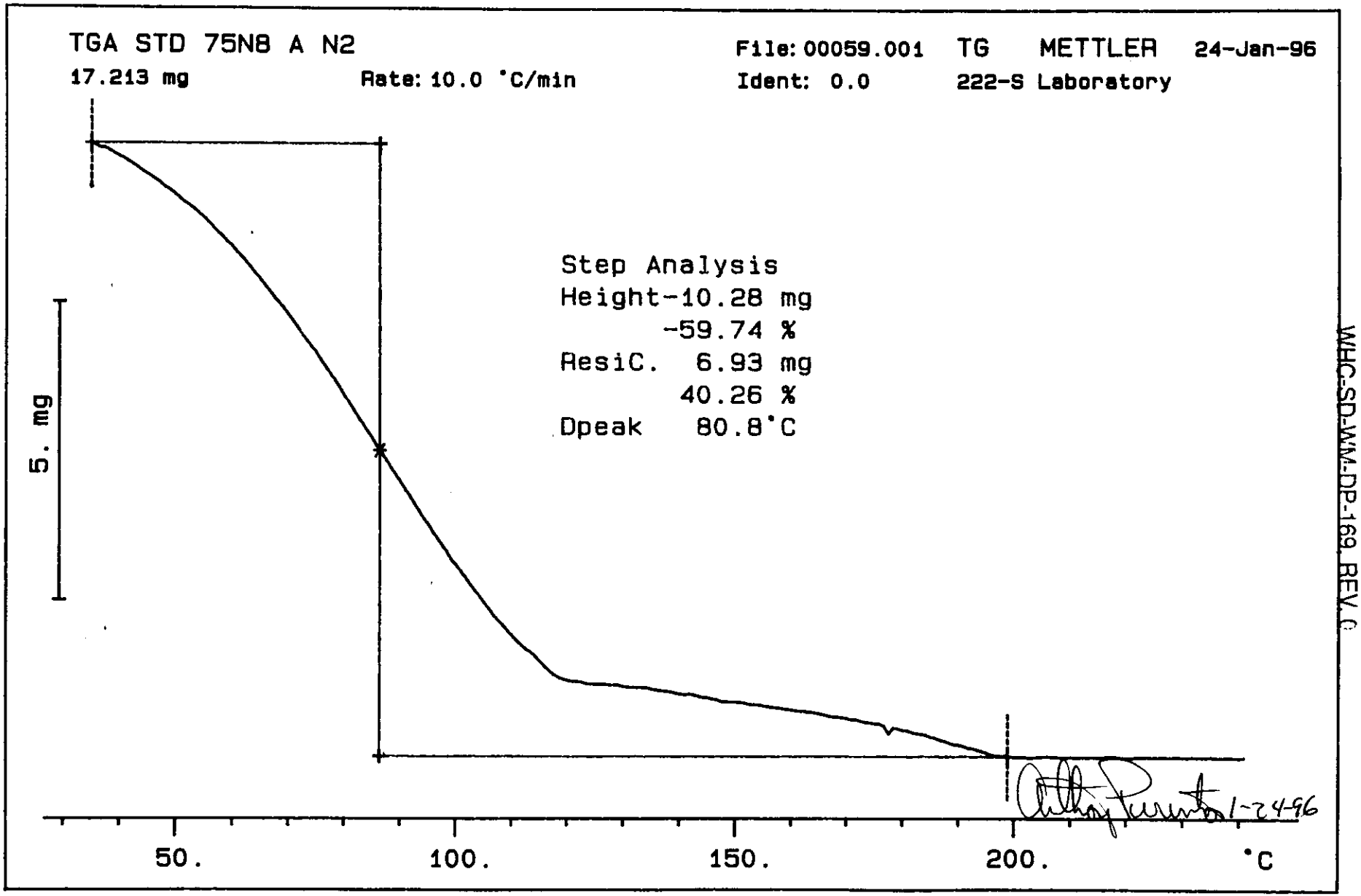
Anthony Purnton 1-24-96
Analyst Signature **Date**

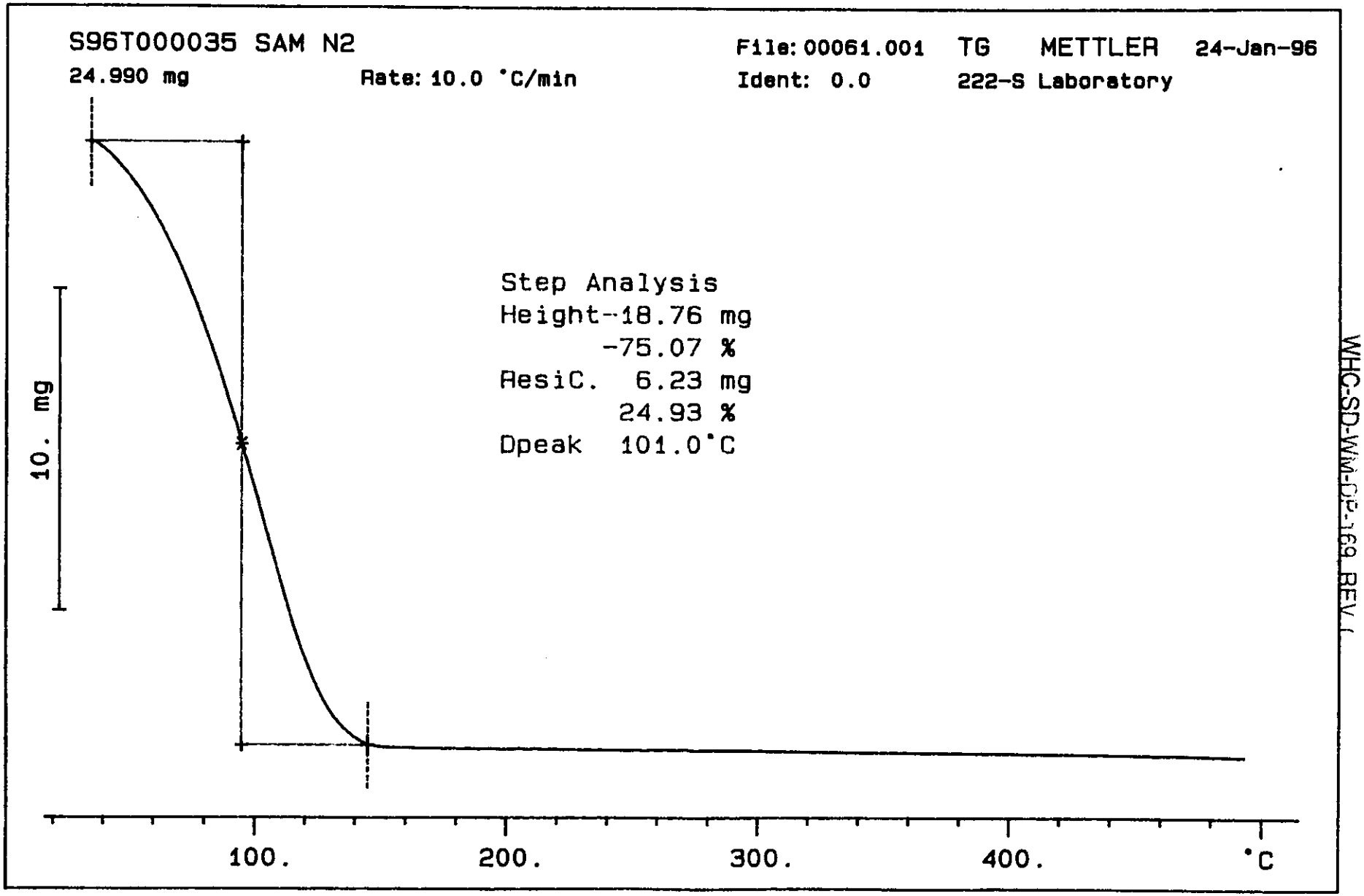
[illegible] 1-29-96
Analyst Signature **Date**

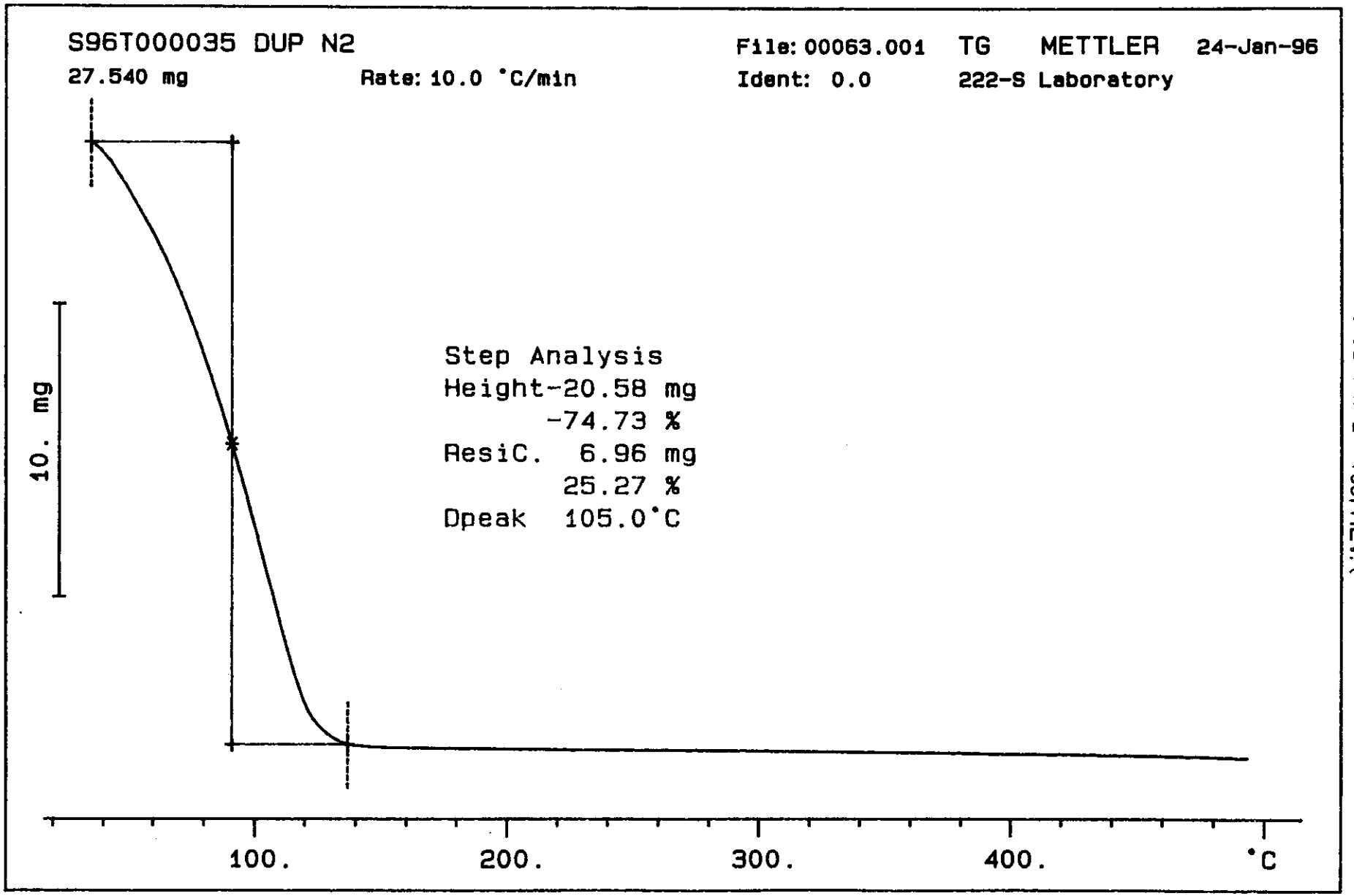
Data Entry Comments:

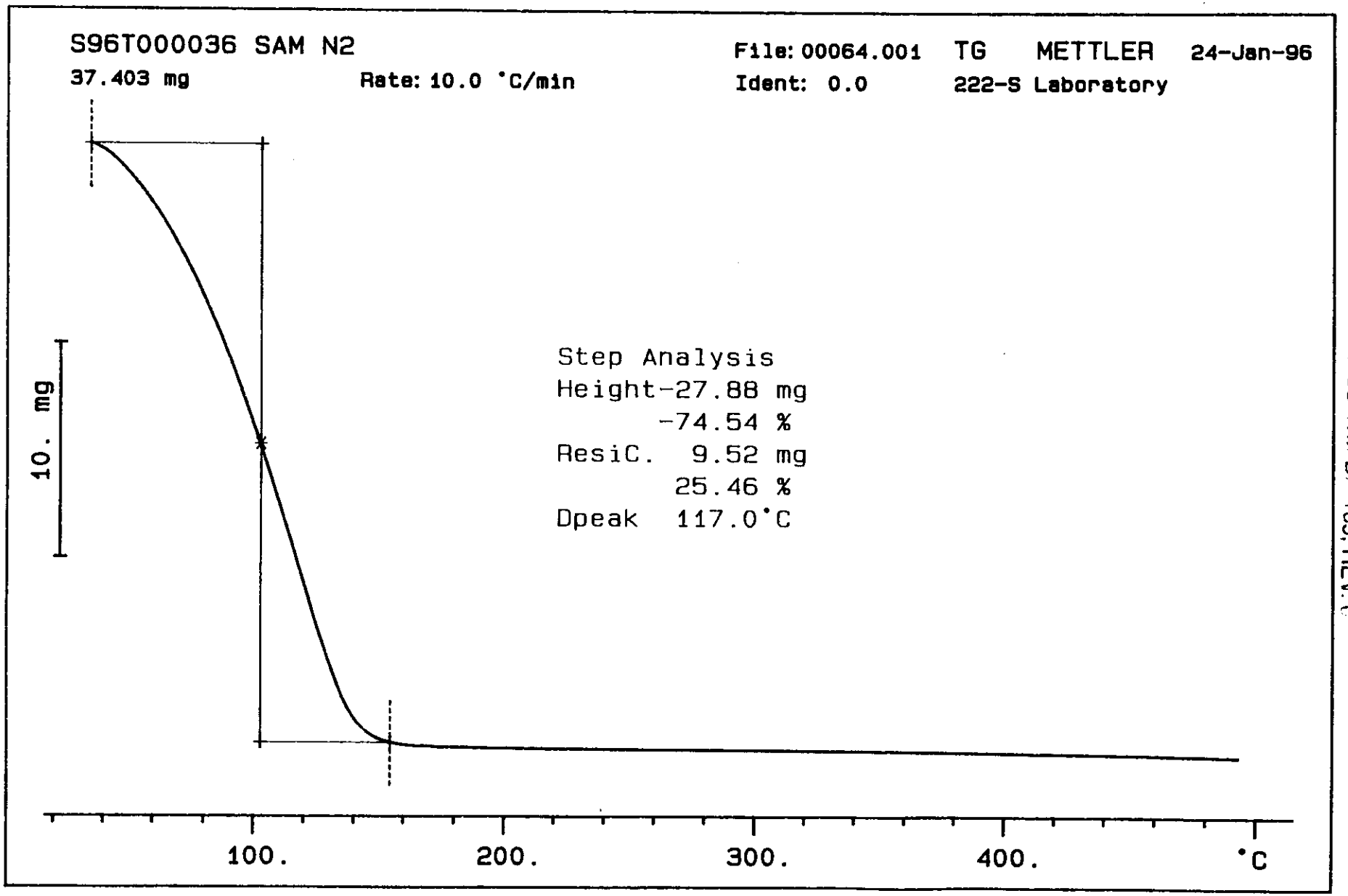
Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

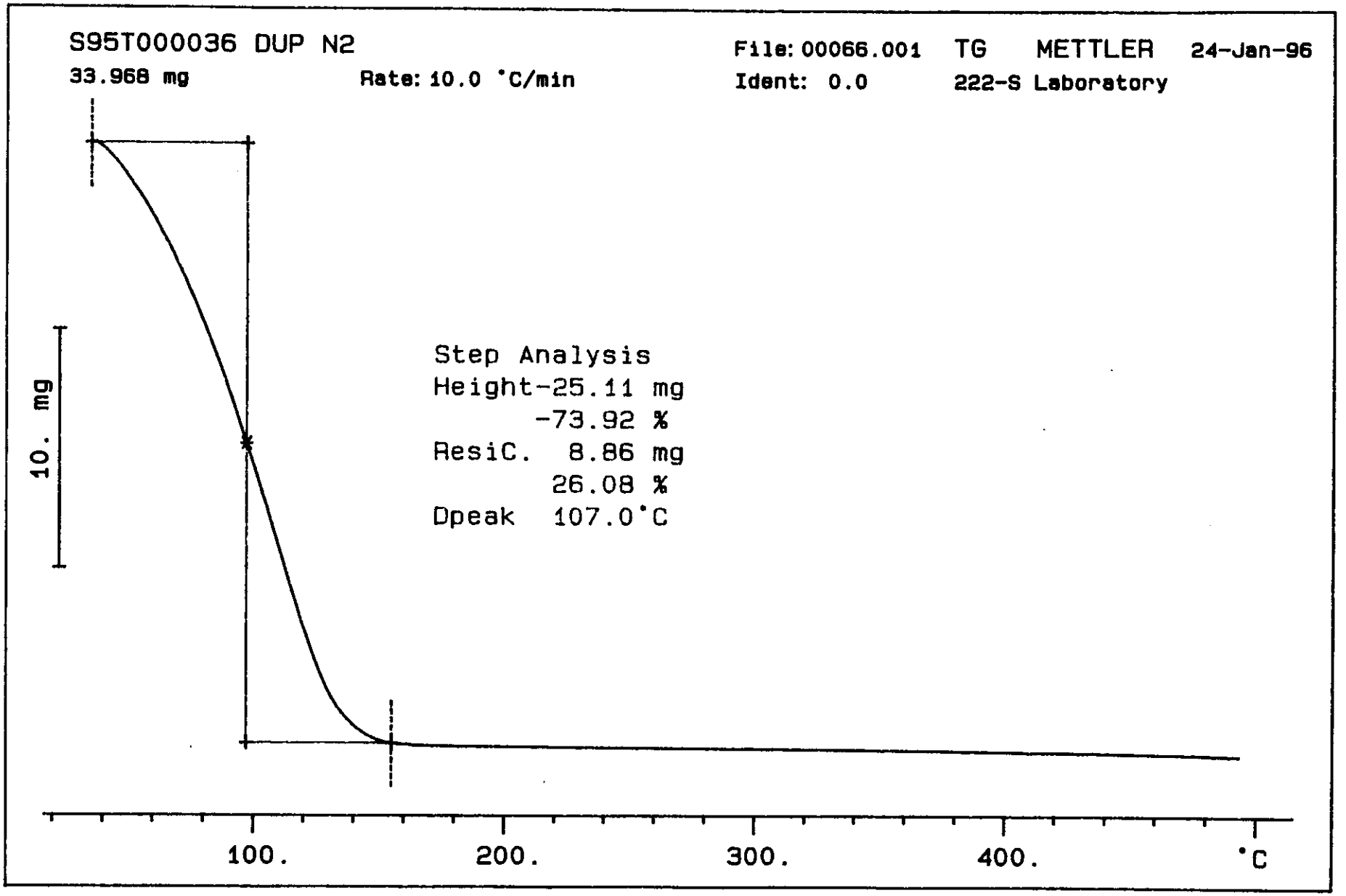
SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 349 TO 353.




S96T000035 SAM N2
24.990 mg
Rate: 10.0 °C/min
File: 00061.001
TG
METTLER
24-Jan-96
Ident: 0.0
222-S Laboratory
Step Analysis
Height -18.76 mg
-75.07 %
ResiC. 6.23 mg
24.93 %
Dpeak 101.0°C
10. mg
100.
200.
300.
400.
°C


S96T000035 DUP N2
27.540 mg
Rate: 10.0 °C/min
File: 00063.001
TG METTLER 24-Jan-96
Ident: 0.0
222-S Laboratory
Step Analysis
Height -20.58 mg
-74.73 %
ResiC. 6.96 mg
25.27 %
Dpeak 105.0°C
10. mg
100.
200.
300.
400.
°C


S96T000036 SAM N2
37.403 mg
Rate: 10.0 °C/min
File: 00064.001
TG METTLER
24-Jan-96
Ident: 0.0
222-S Laboratory
Step Analysis
Height -27.88 mg
-74.54 %
ResiC. 9.52 mg
25.46 %
Dpeak 117.0°C
10. mg
100.
200.
300.
400.
°C


S95T000036 DUP N2
33.968 mg
Rate: 10.0 °C/min
File: 00066.001
TG METTLER
24-Jan-96
Ident: 0.0
222-S Laboratory
Step Analysis
Height -25.11 mg
-73.92 %
ResiC. 8.86 mg
26.08 %
Dpeak 107.0°C
10. mg
100.
200.
300.
400.
°C

LABCORE Data Entry Template for Worklist# 4943

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

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

Worklist Comment: B-203 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	59.72	N/A	%
95000228	B-203	2	SAMPLE	S96T000037	0		TGA-01	SOLID	N/A	73.22		%
95000228	B-203	3	DUP	S96T000037	0		TGA-01	SOLID	73.22	68.98	N/A	%
		4	STD				TGA-01	SOLID	59.2	60.76	N/A	%
95000228	B-203	5	SAMPLE	S96T000038	0		TGA-01	SOLID	N/A	76.11		%
95000228	B-203	6	DUP	S96T000038	0		TGA-01	SOLID	76.11	75.34	N/A	%

Final page for worklist # 4943

See attached for signatures
Analyst Signature **Date** 1/25/96 BDV

Verified by Blandina Valenzuela 1/29/96

Frank Conlin 1/28/96
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# 4943

Analyst: ADD **Instrument:** TGA0 _____ **Book #** 75N8A

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

Worklist Comment: B-203 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	%
95000228	B-203	2	SAMPLE	S96T000037	0		TGA-01	SOLID	N/A			%
95000228	B-203	3	DUP	S96T000037	0		TGA-01	SOLID			N/A	%
95000228	B-203	4	SAMPLE	S96T000038	0		TGA-01	SOLID	N/A			%
95000228	B-203	5	DUP	S96T000038	0		TGA-01	SOLID			N/A	%

Final page for worklist # 4943

Anthony Purnik 1-24-96

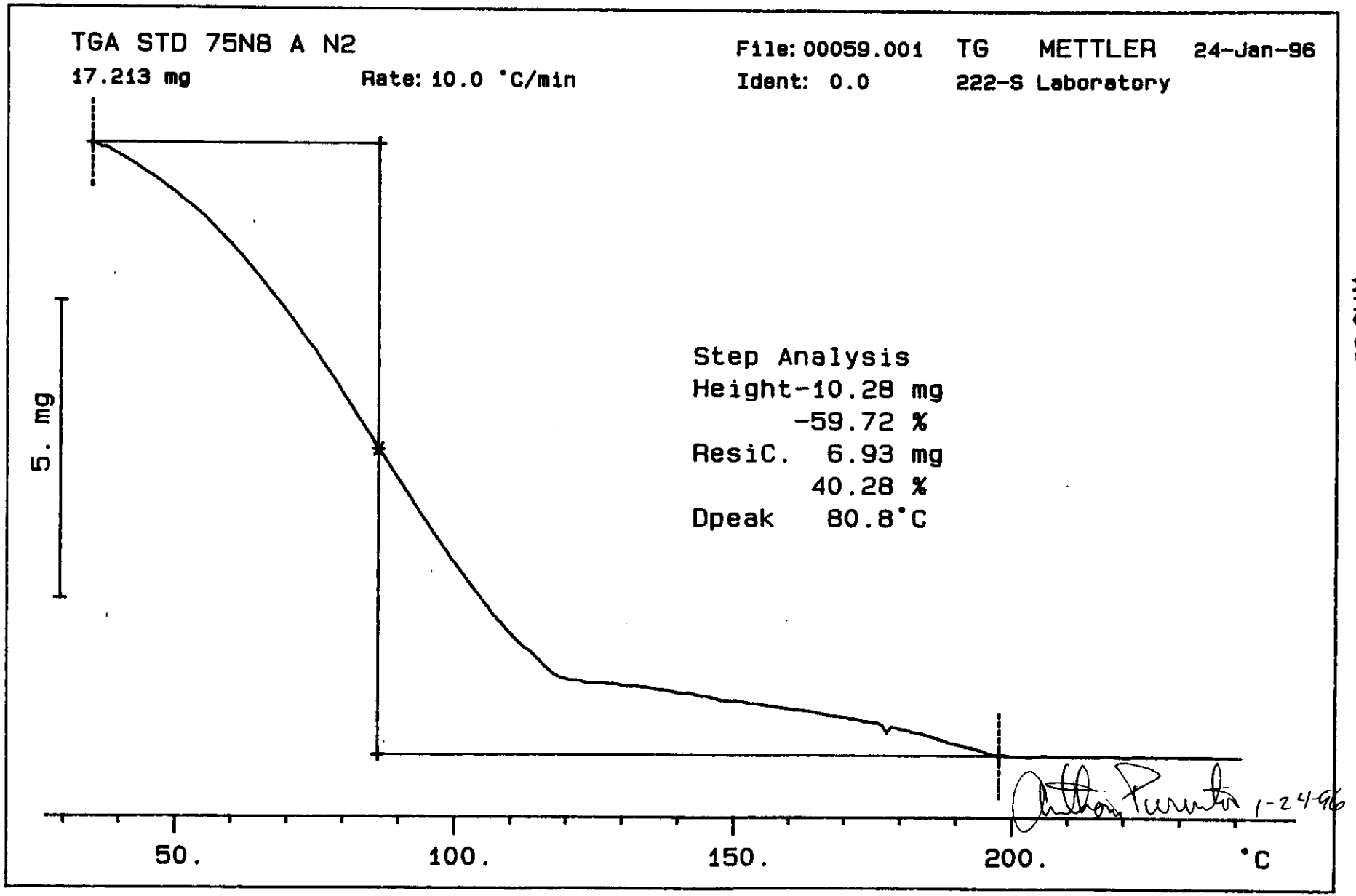
Analyst Signature **Date**

Analyst Signature **Date**

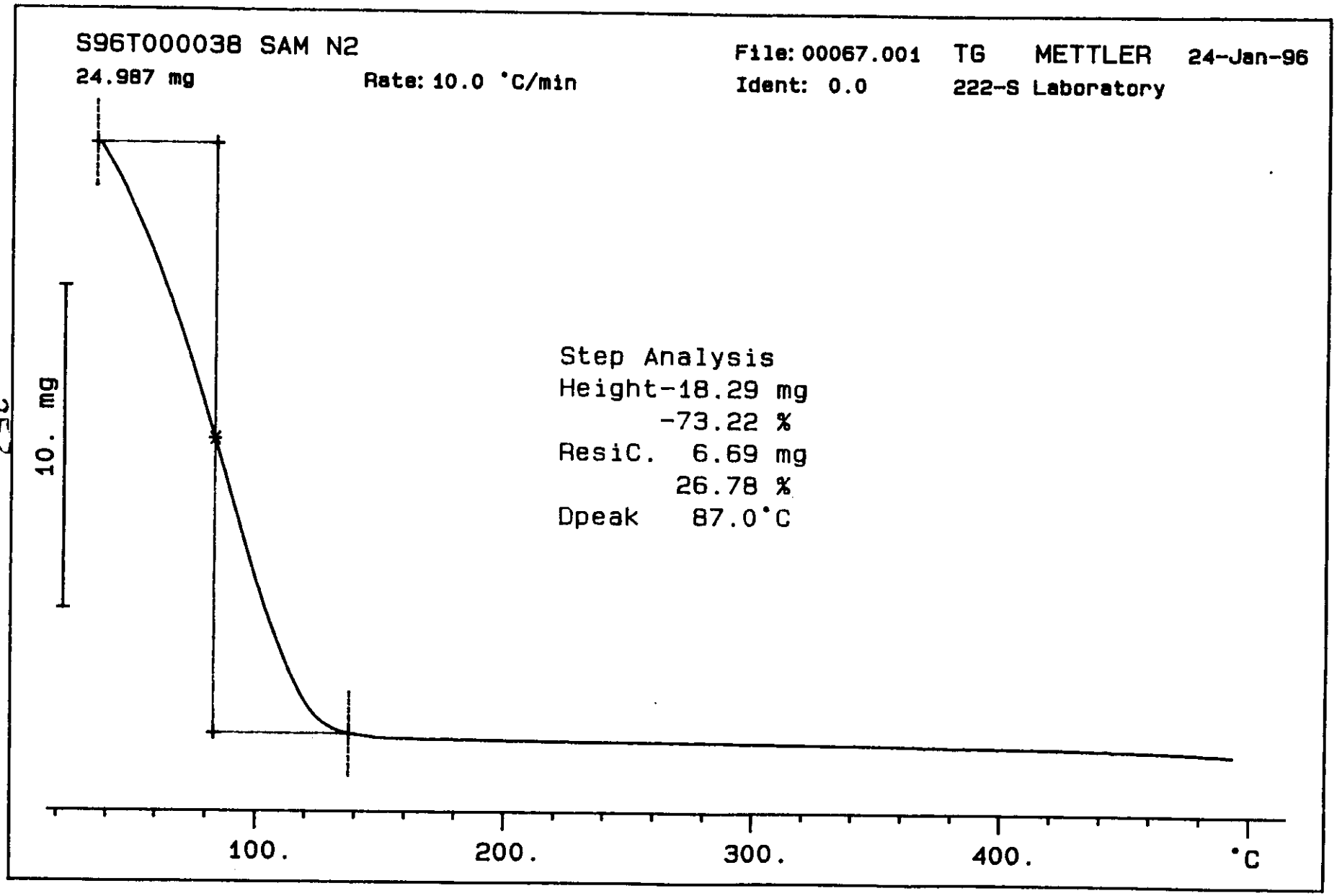
Data Entry Comments:

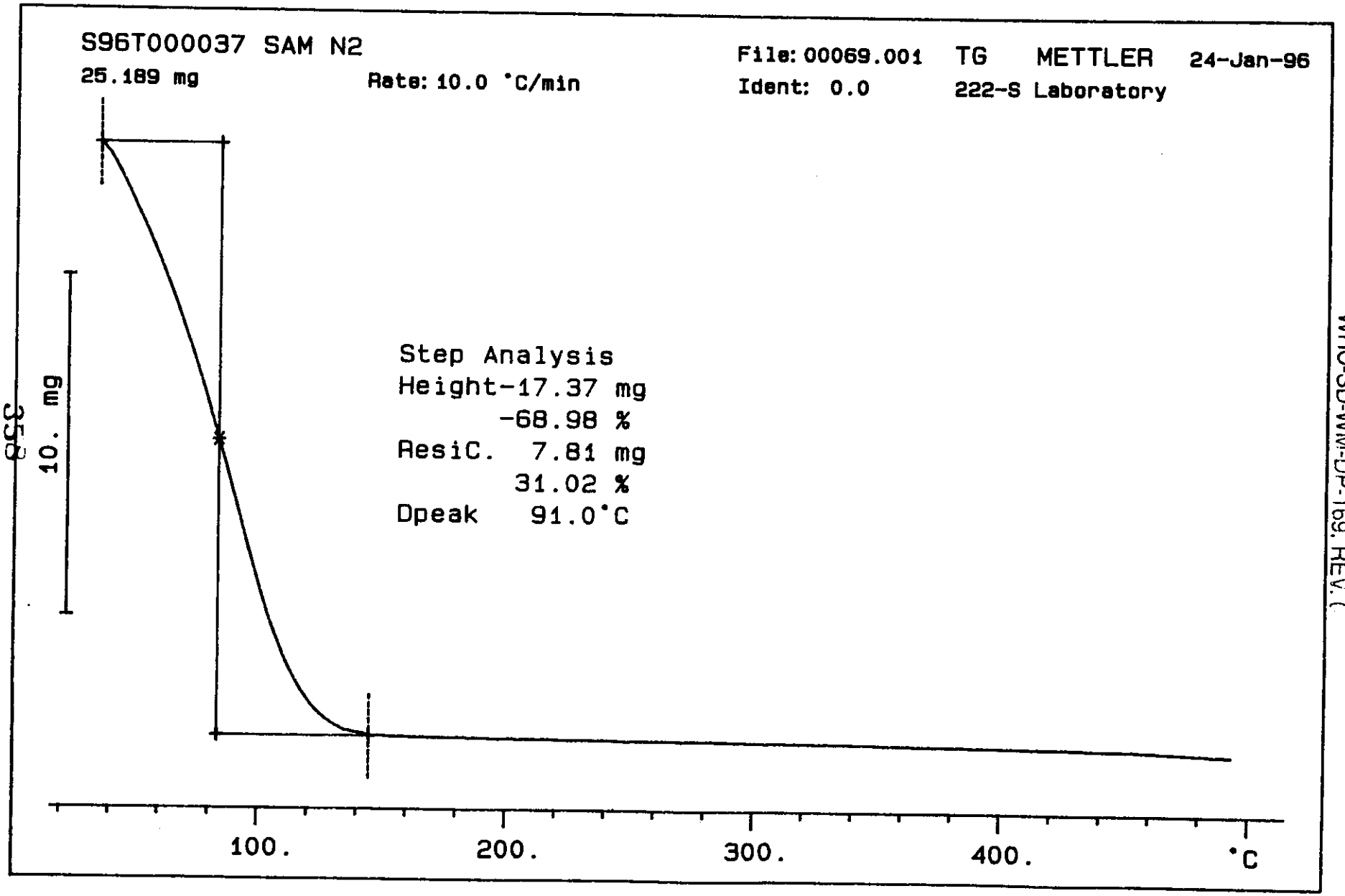
Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

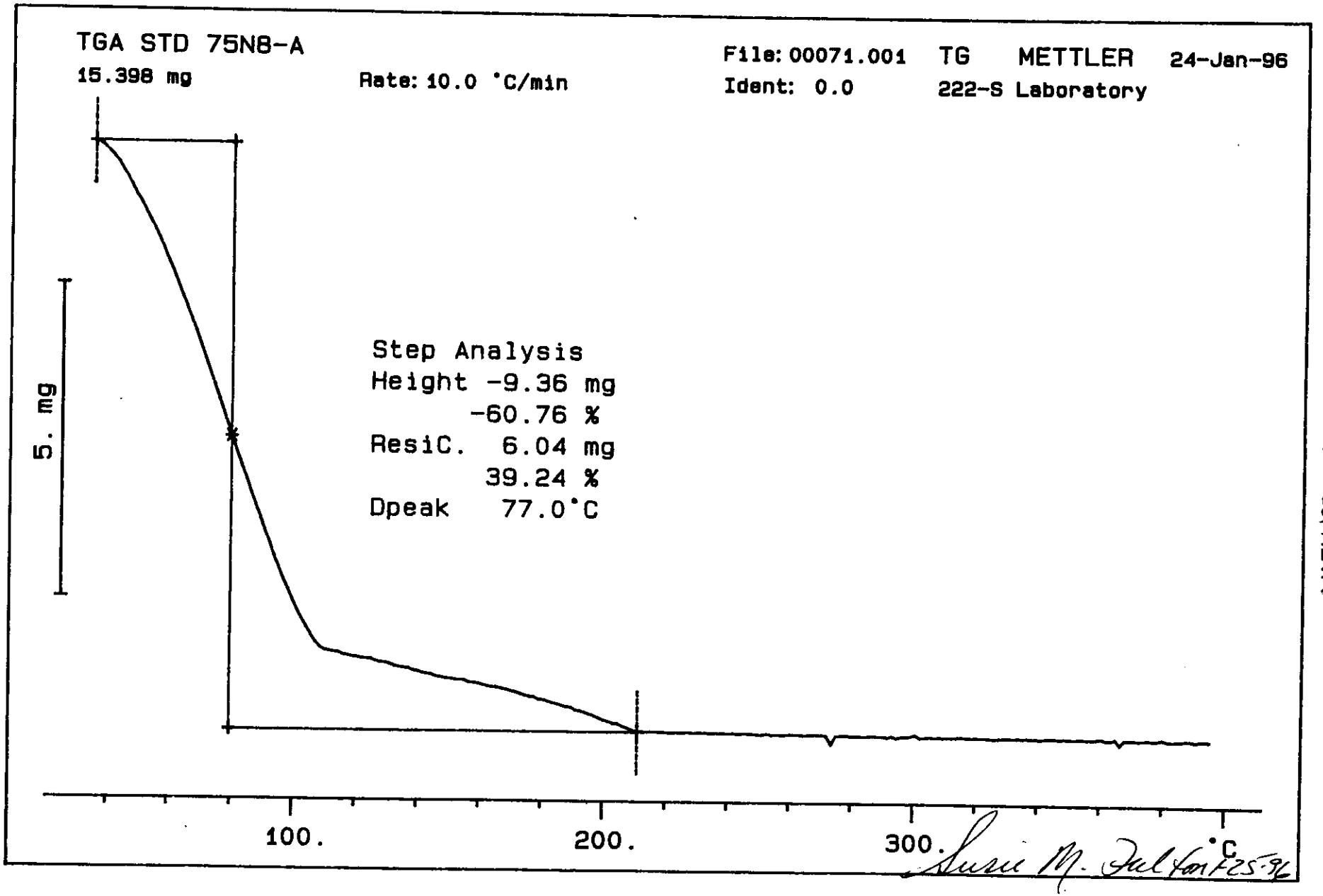
SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 356 TO 361.



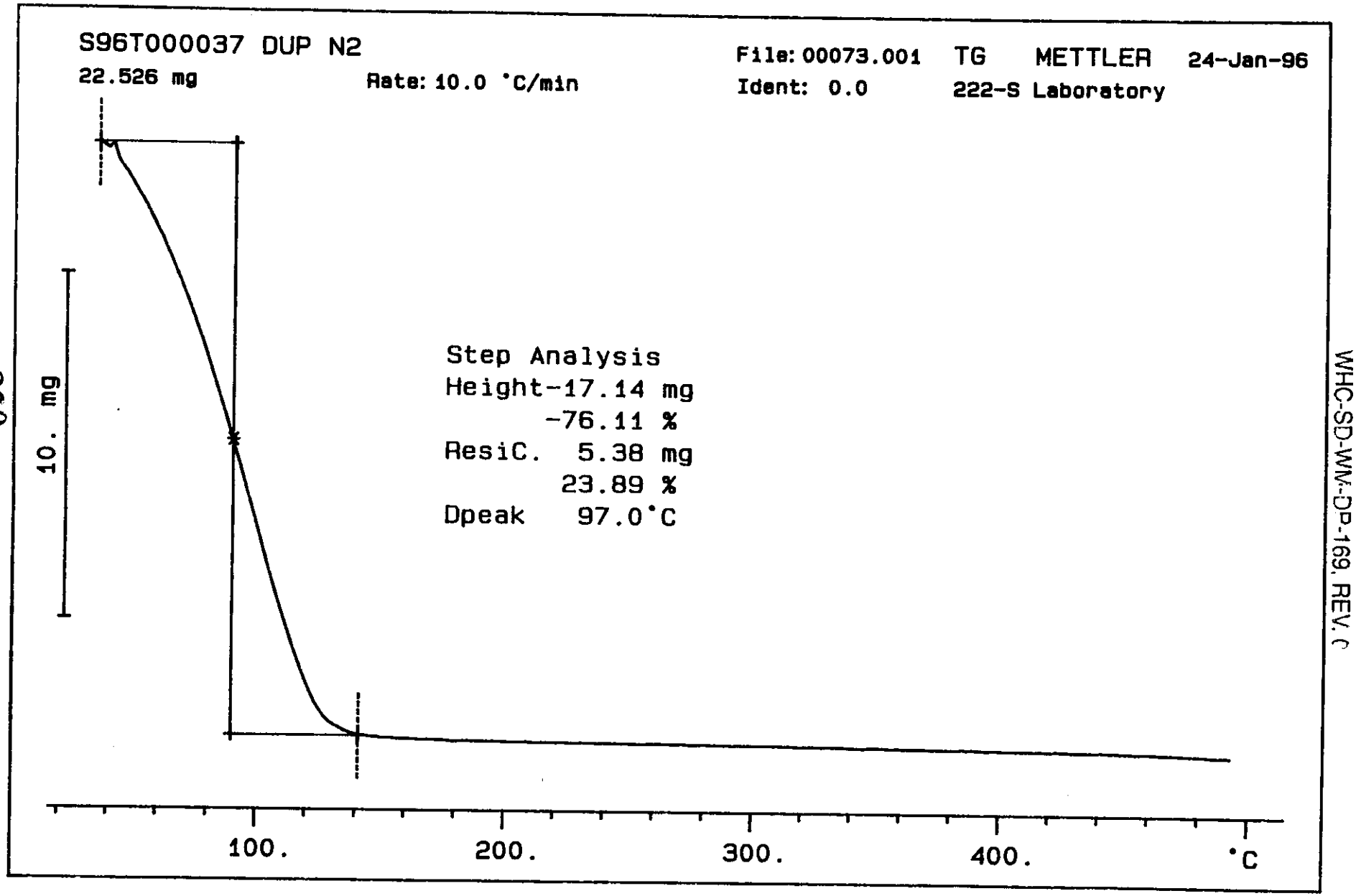
Anthony Purnto 1-24-96

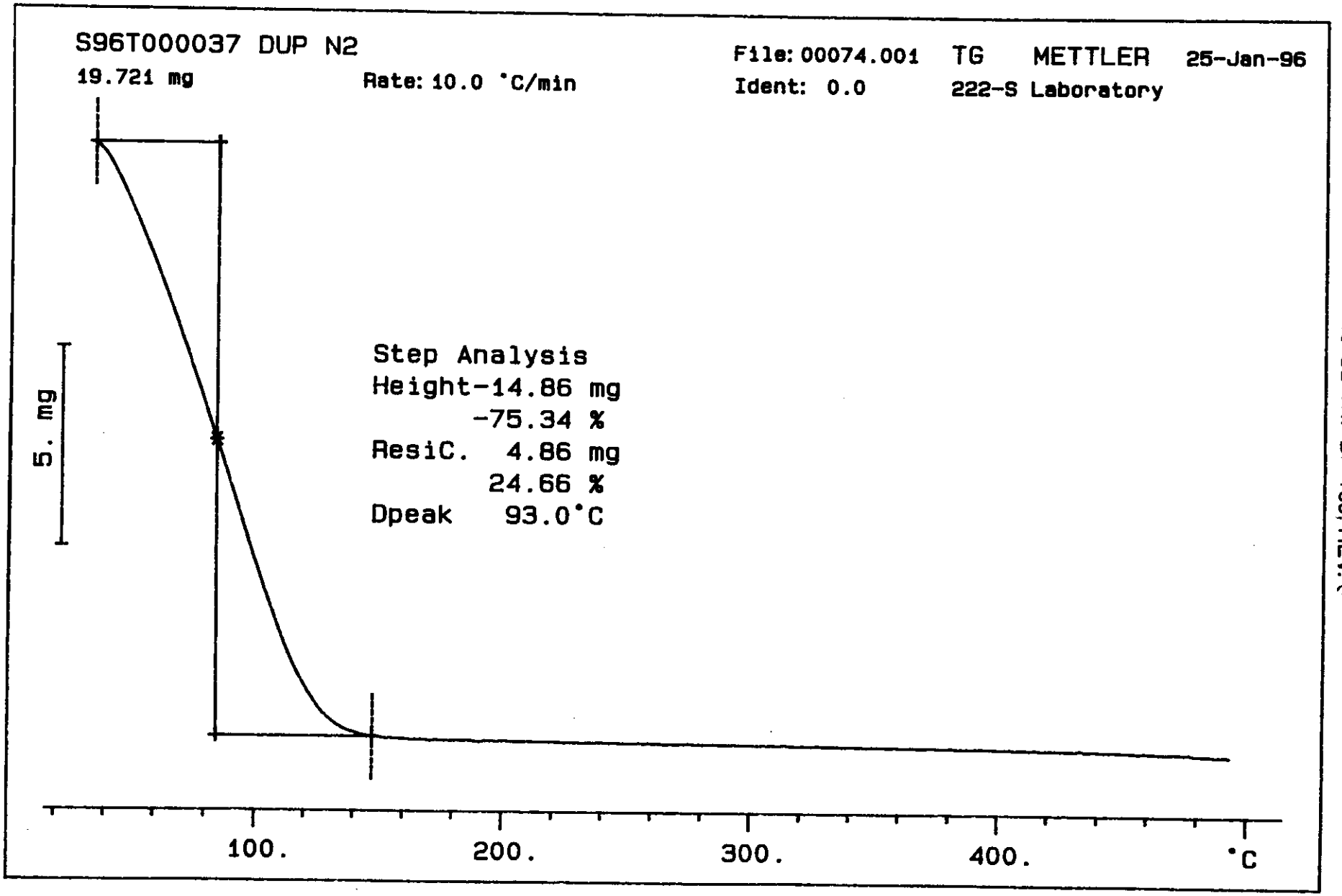

S96T000038 SAM N2
24.987 mg
Rate: 10.0 °C/min
File: 00067.001
Ident: 0.0
TG
METTLER
24-Jan-96
222-S Laboratory
10. mg
Step Analysis
Height-18.29 mg
-73.22 %
ResiC. 6.69 mg
26.78 %
Dpeak 87.0°C
100.
200.
300.
400.
°C


S96T000037 SAM N2
25.189 mg
Rate: 10.0 °C/min
File: 00069.001
TG
METTLER
24-Jan-96
Ident: 0.0
222-S Laboratory
10. mg
Step Analysis
Height -17.37 mg
-68.98 %
ResiC. 7.81 mg
31.02 %
Dpeak 91.0°C
100.
200.
300.
400.
°C



Susie M. Fulton 1-25-96


S96T000037 DUP N2
22.526 mg
Rate: 10.0 °C/min
File: 00073.001
TG
METTLER
24-Jan-96
Ident: 0.0
222-S Laboratory
Step Analysis
Height -17.14 mg
-76.11 %
ResiC. 5.38 mg
23.89 %
Dpeak 97.0°C
10. mg
100.
200.
300.
400.
°C


S96T000037 DUP N2
19.721 mg
Rate: 10.0 °C/min
File: 00074.001
TG
METTLER
25-Jan-96
Ident: 0.0
222-S Laboratory
Step Analysis
Height-14.86 mg
-75.34 %
ResiC. 4.86 mg
24.66 %
Dpeak 93.0°C
5. mg
100.
200.
300.
400.
°C

LABCORE Data Entry Template for Worklist# 4944

Analyst: RG **Instrument:** TGA0 1 **Book #** 75N8-A

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

Worklist Comment: B-203 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	59.72	N/A	%
95000228	B-203	2	SAMPLE	S96T000039	0		TGA-01	SOLID	N/A	75.17		%
95000228	B-203	3	DUP	S96T000039	0		TGA-01	SOLID	75.17	73.21	N/A	%
95000228	B-203	4	SAMPLE	S96T000040	0		TGA-01	SOLID	N/A	77.33		%
95000228	B-203	5	DUP	S96T000040	0		TGA-01	SOLID	77.33	77.18	N/A	%

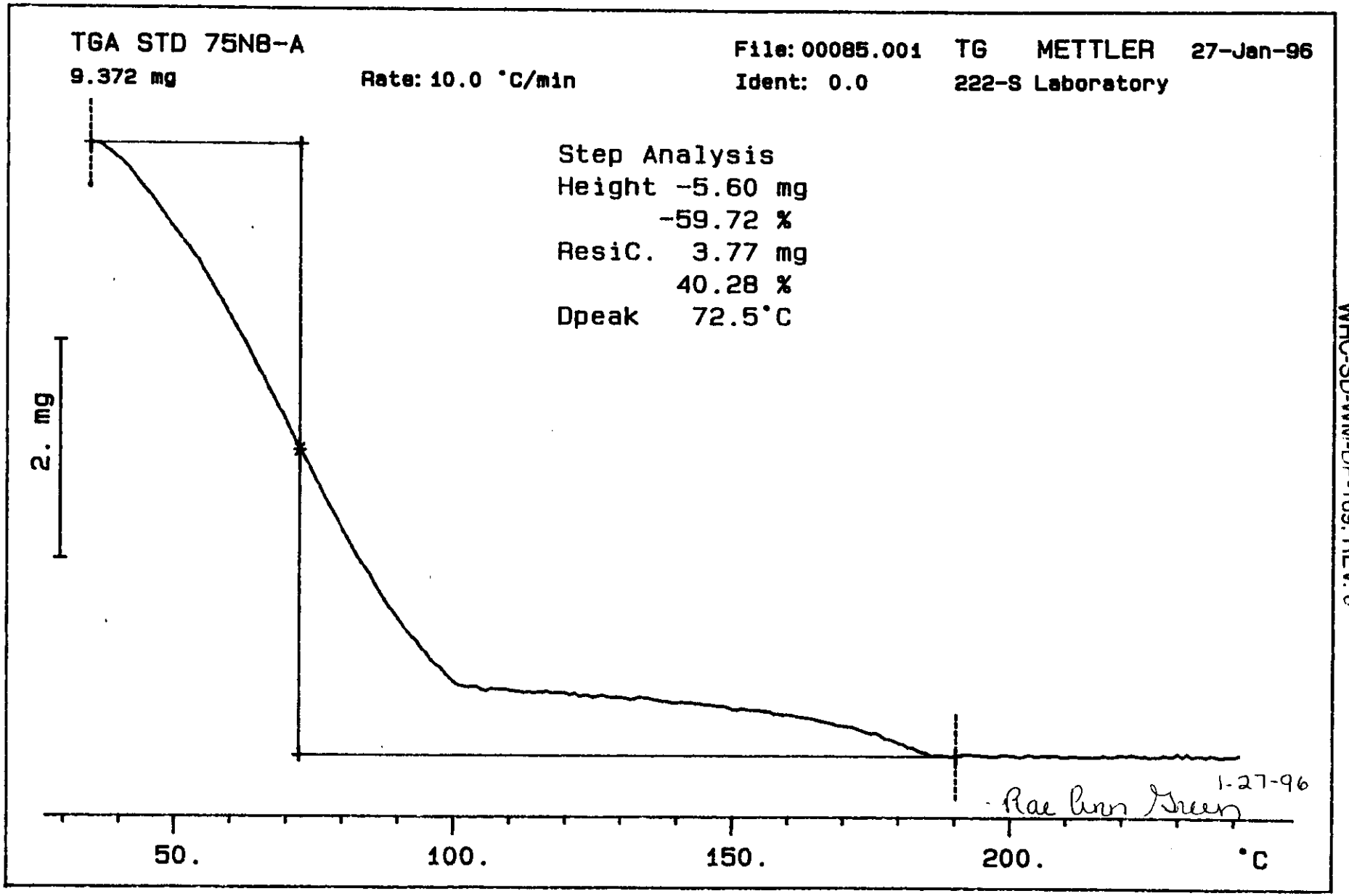
Final page for worklist # 4944

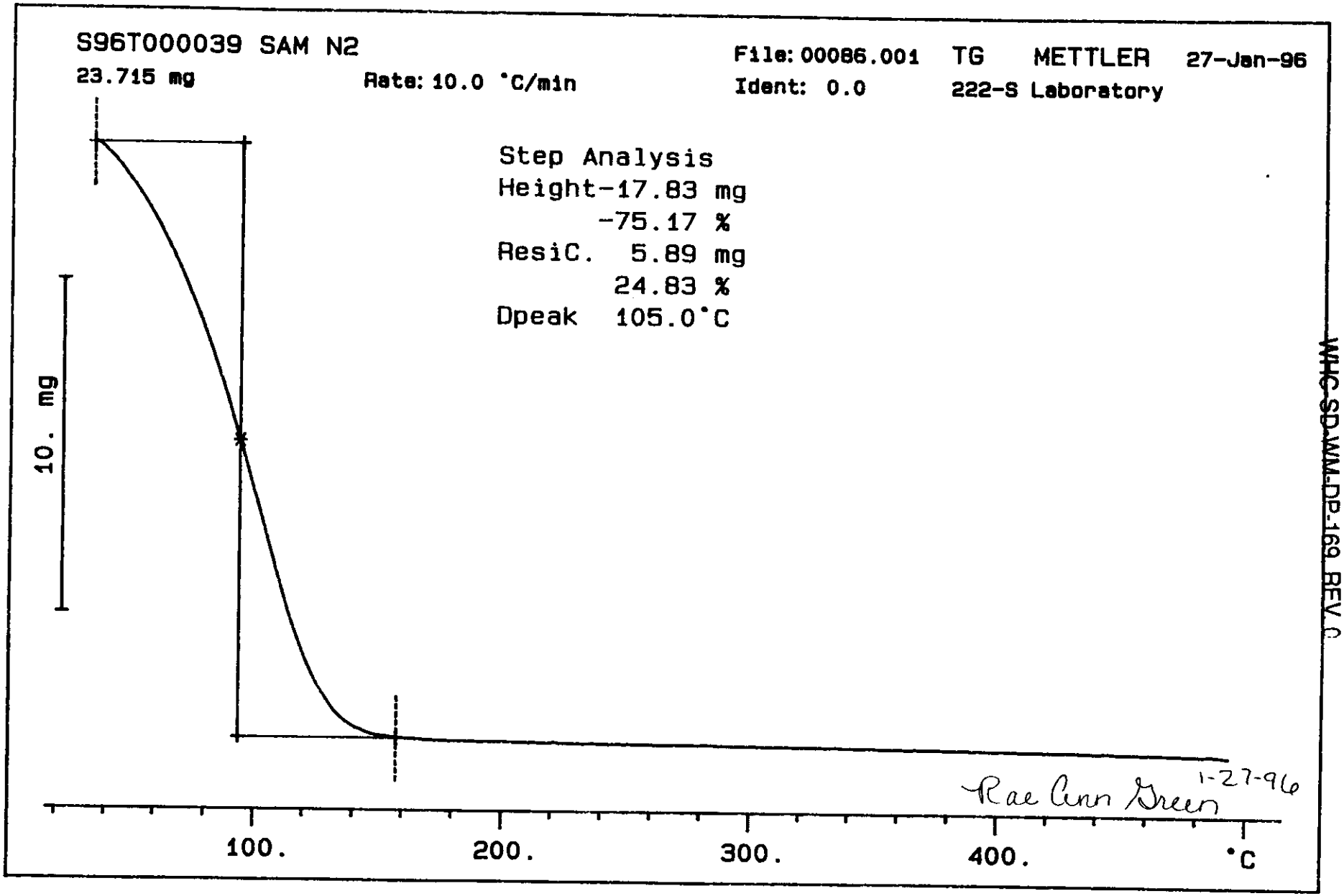
Rae Ann Green
Analyst Signature **Date**

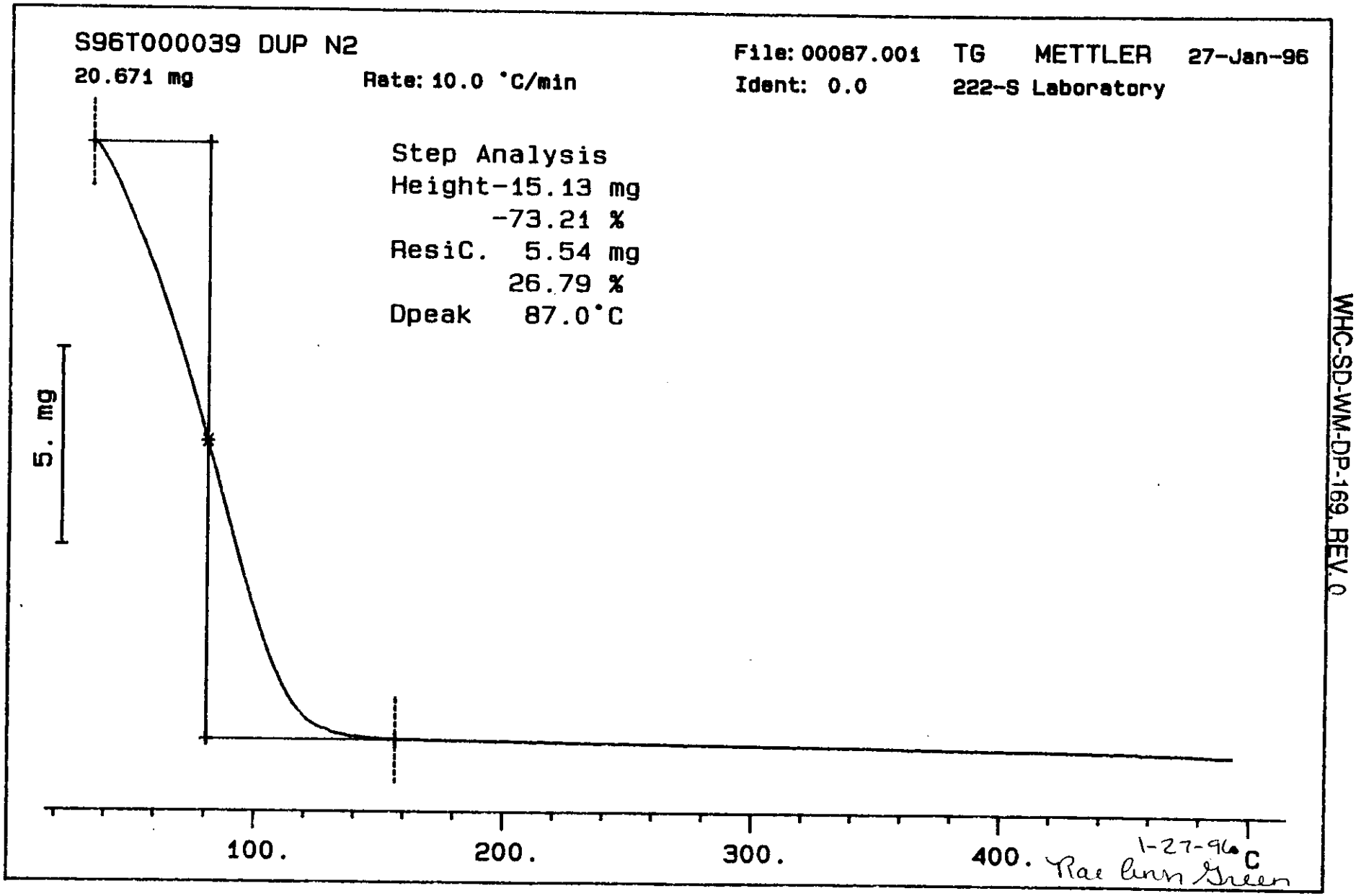
1-29-96
Analyst Signature **Date**

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.


TGA STD 75N8-A
9.372 mg
Rate: 10.0 °C/min
File: 00085.001
Ident: 0.0
TG
METTLER
222-S Laboratory
27-Jan-96
Step Analysis
Height -5.60 mg
-59.72 %
ResiC. 3.77 mg
40.28 %
Dpeak 72.5°C
2. mg
50.
100.
150.
200.
°C
Rae Ann Green
1-27-96


S96T000039 SAM N2
23.715 mg
Rate: 10.0 °C/min
File: 00086.001
Ident: 0.0
TG
METTLER
222-S Laboratory
27-Jan-96
Step Analysis
Height -17.83 mg
-75.17 %
ResiC. 5.89 mg
24.83 %
Dpeak 105.0°C
10. mg
100.
200.
300.
400.
°C
Rae Ann Green 1-27-96


S96T000039 DUP N2
20.671 mg
Rate: 10.0 °C/min
File: 00087.001
TG METTLER
27-Jan-96
Ident: 0.0
222-S Laboratory
Step Analysis
Height -15.13 mg
-73.21 %
ResiC. 5.54 mg
26.79 %
Dpeak 87.0°C
5. mg
100.
200.
300.
400.
C
1-27-96
Rae Ann Green

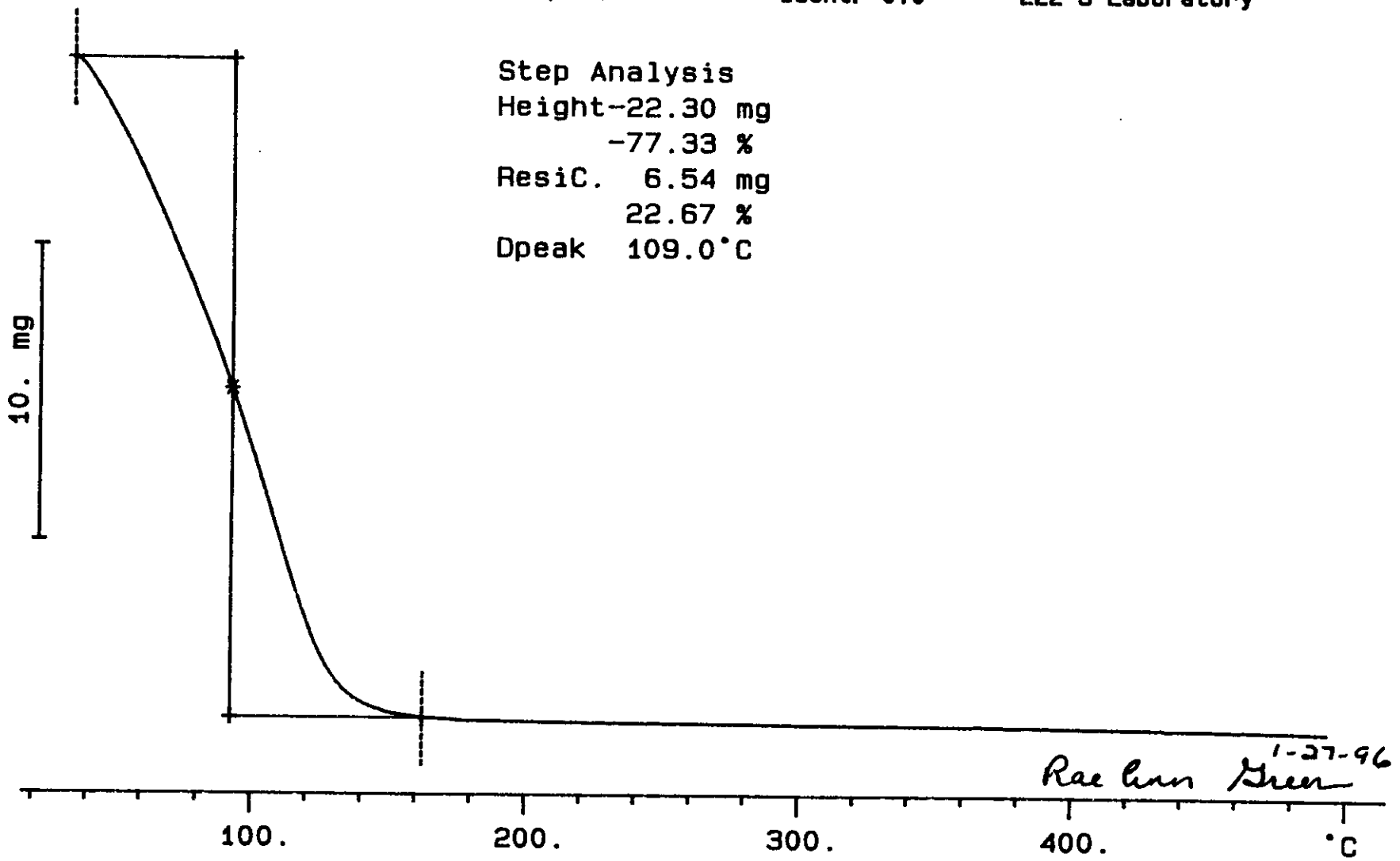
S96T000040 SAM N2

28.832 mg

Rate: 10.0 °C/min

File: 00088.001 TG METTLER 27-Jan-96

Ident: 0.0 222-S Laboratory



Rae Ann Green 1-27-96

WHC-SD-WM-DP-169, REV 0

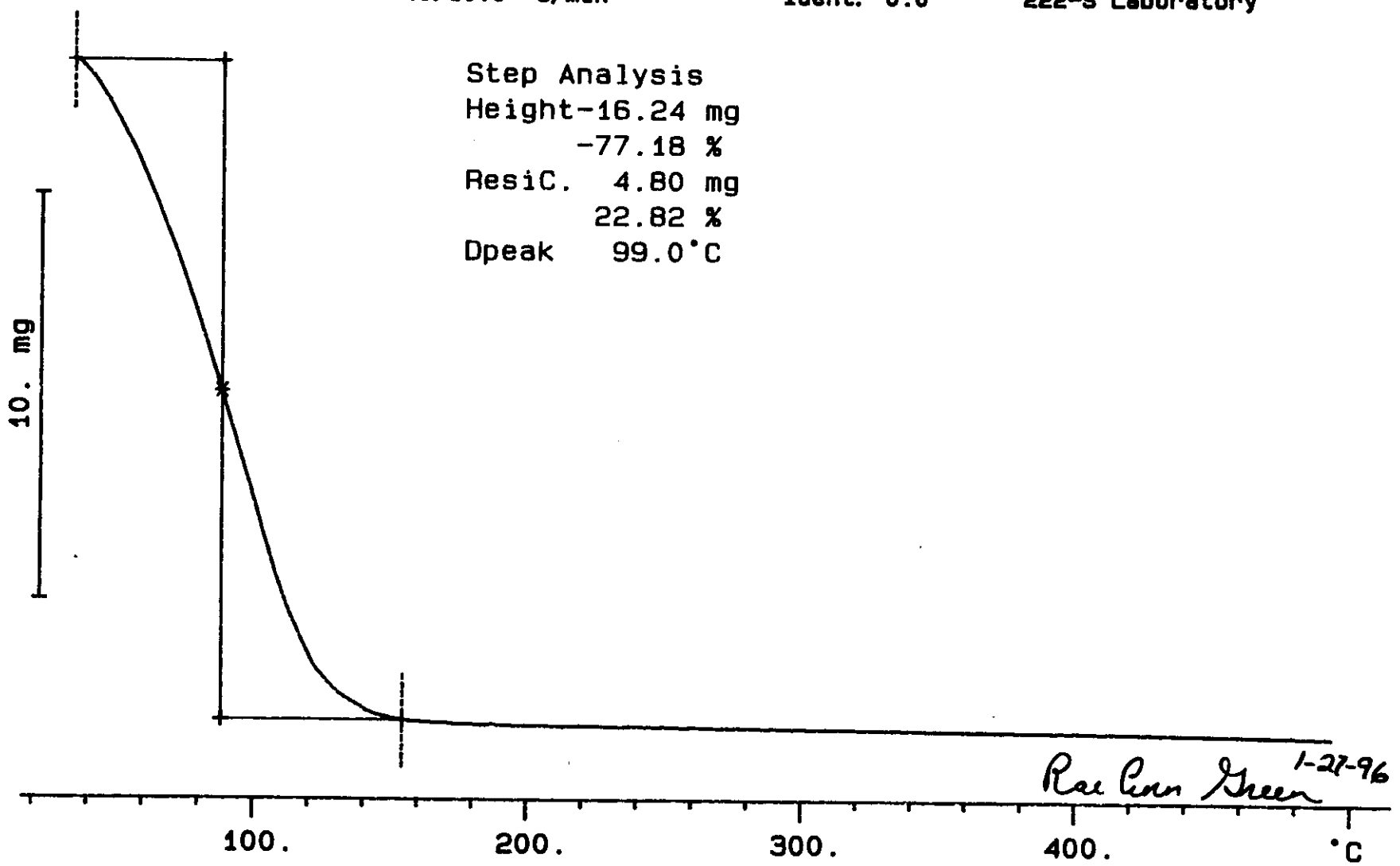
S96T000040 DUP N2

21.039 mg

Rate: 10.0 °C/min

File: 00089.001 TG METTLER 27-Jan-96

Ident: 0.0 222-S Laboratory



Rae Ann Green 1-27-96

LABCORE Data Entry Template for Worklist# 4945

Analyst: ADP **Instrument:** TGA0 1 **Book #** 75N8-A

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

Worklist Comment: B-203 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	~~60.76~~ 60.79	1/26/96 ADP N/A	%
95000228	B-203	2	SAMPLE	S96T000041	0		TGA-01	SOLID	N/A	75.84		%
95000228	B-203	3	DUP	S96T000041	0		TGA-01	SOLID	75.84	74.86	N/A	%
95000228	B-203	4	SAMPLE	S96T000042	0		TGA-01	SOLID	N/A	74.83		%
95000228	B-203	5	DUP	S96T000042	0		TGA-01	SOLID	74.83	73.98	N/A	%

Final page for worklist # 4945

Arthur Purnton 1-25-96
Analyst Signature **Date**

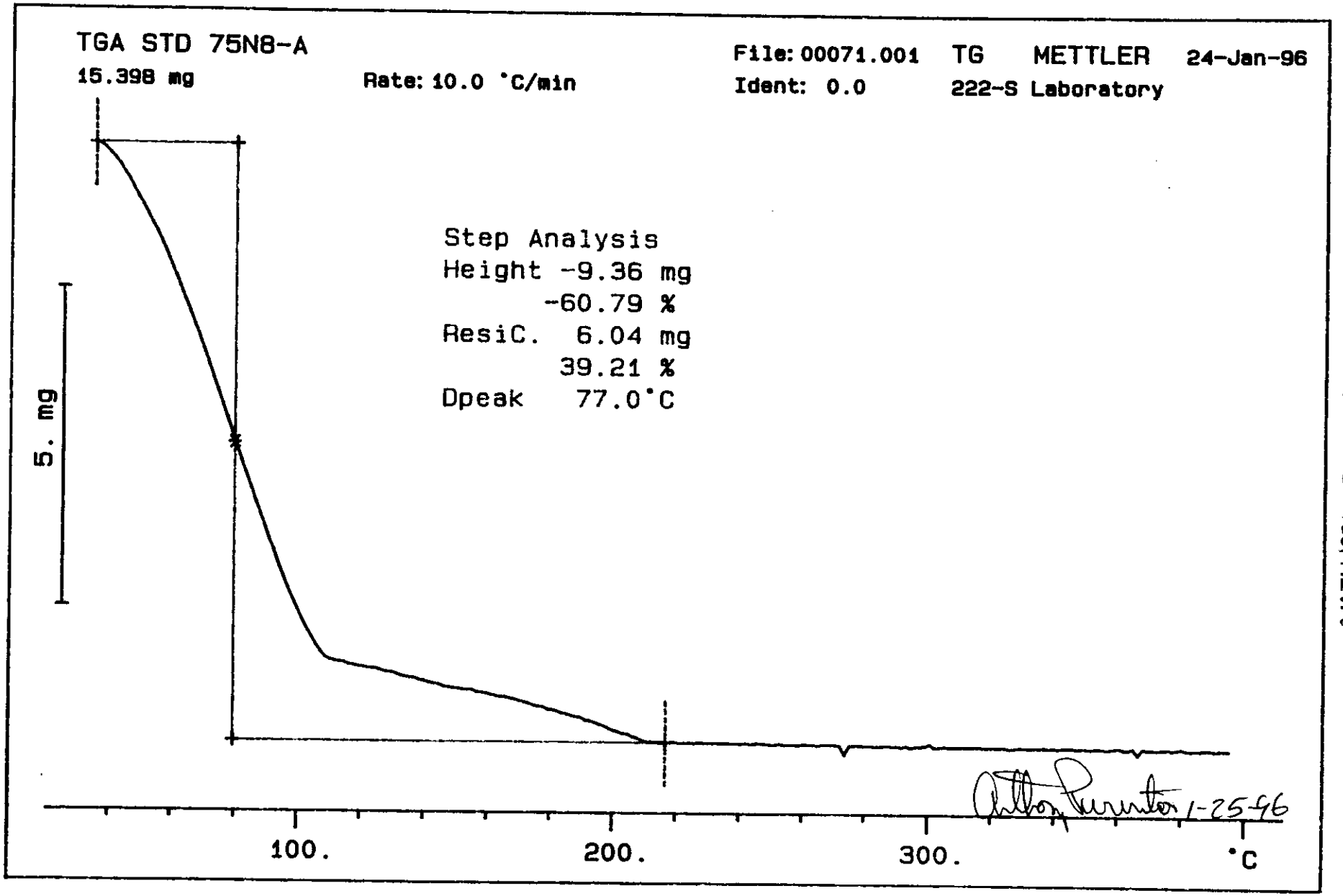
Linda Conlin 1/27/96
Analyst Signature **Date**

Verified by Blandina Valenzuela 1/29/96

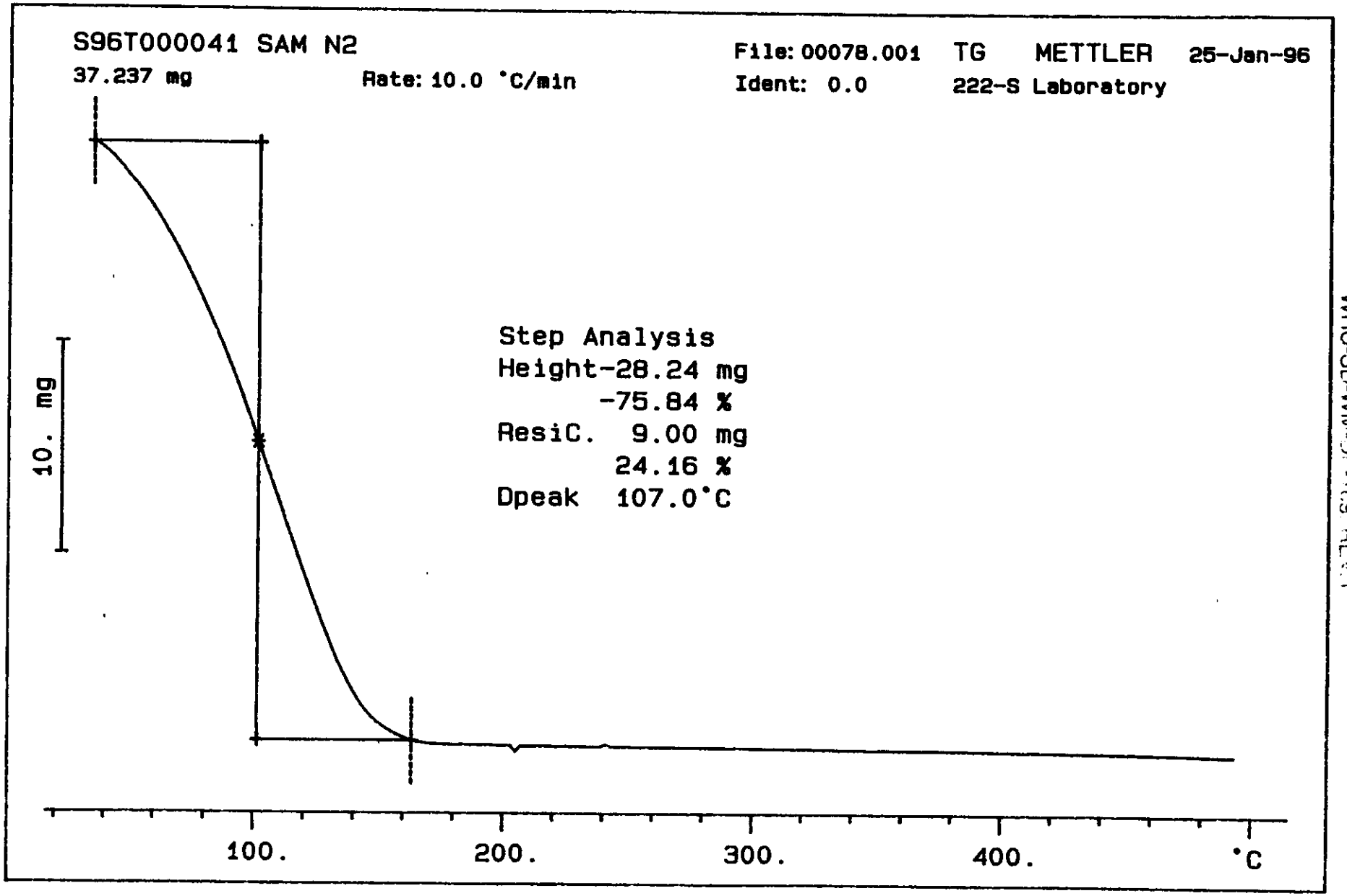
Data Entry Comments:

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.

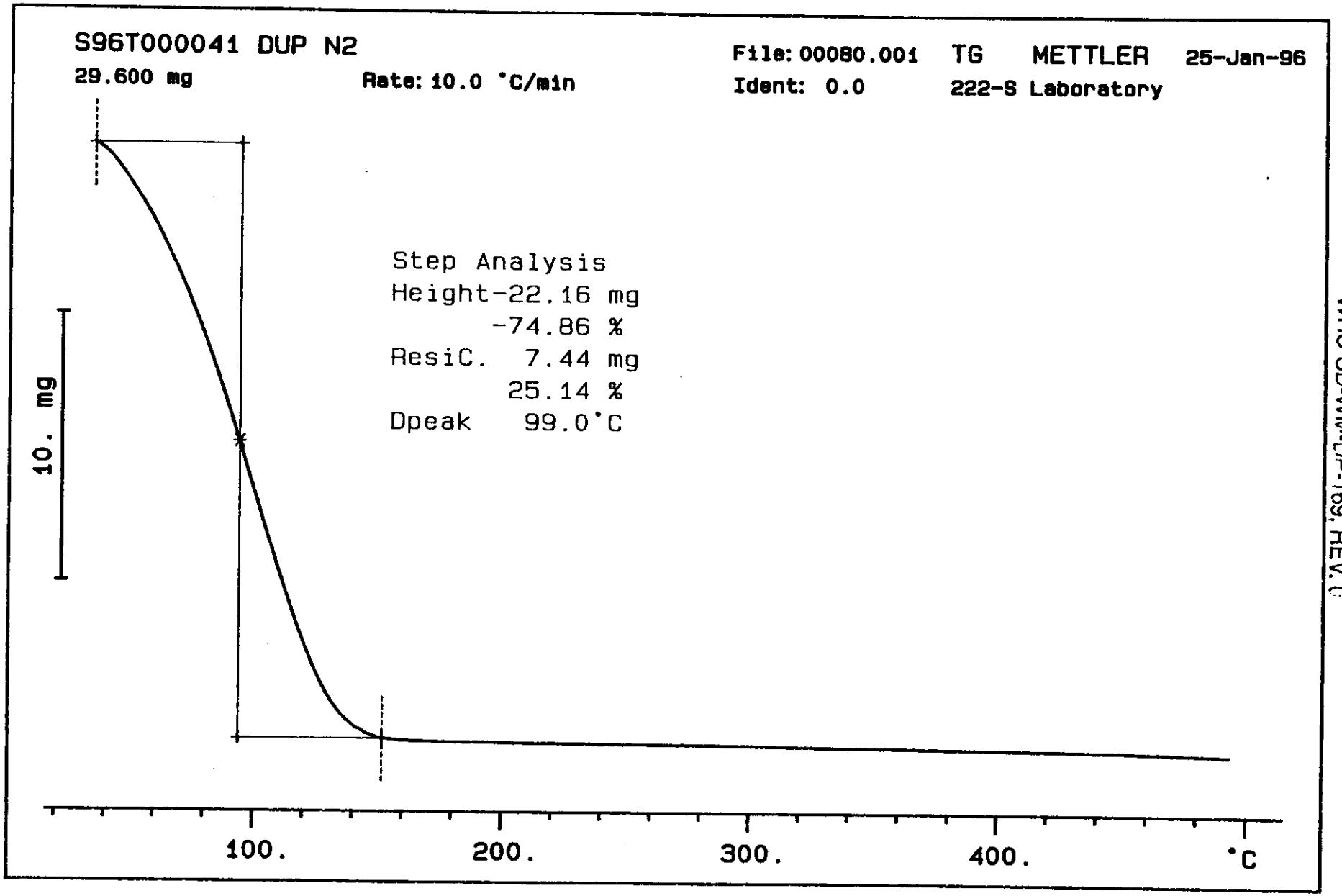
SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 369 TO 373.

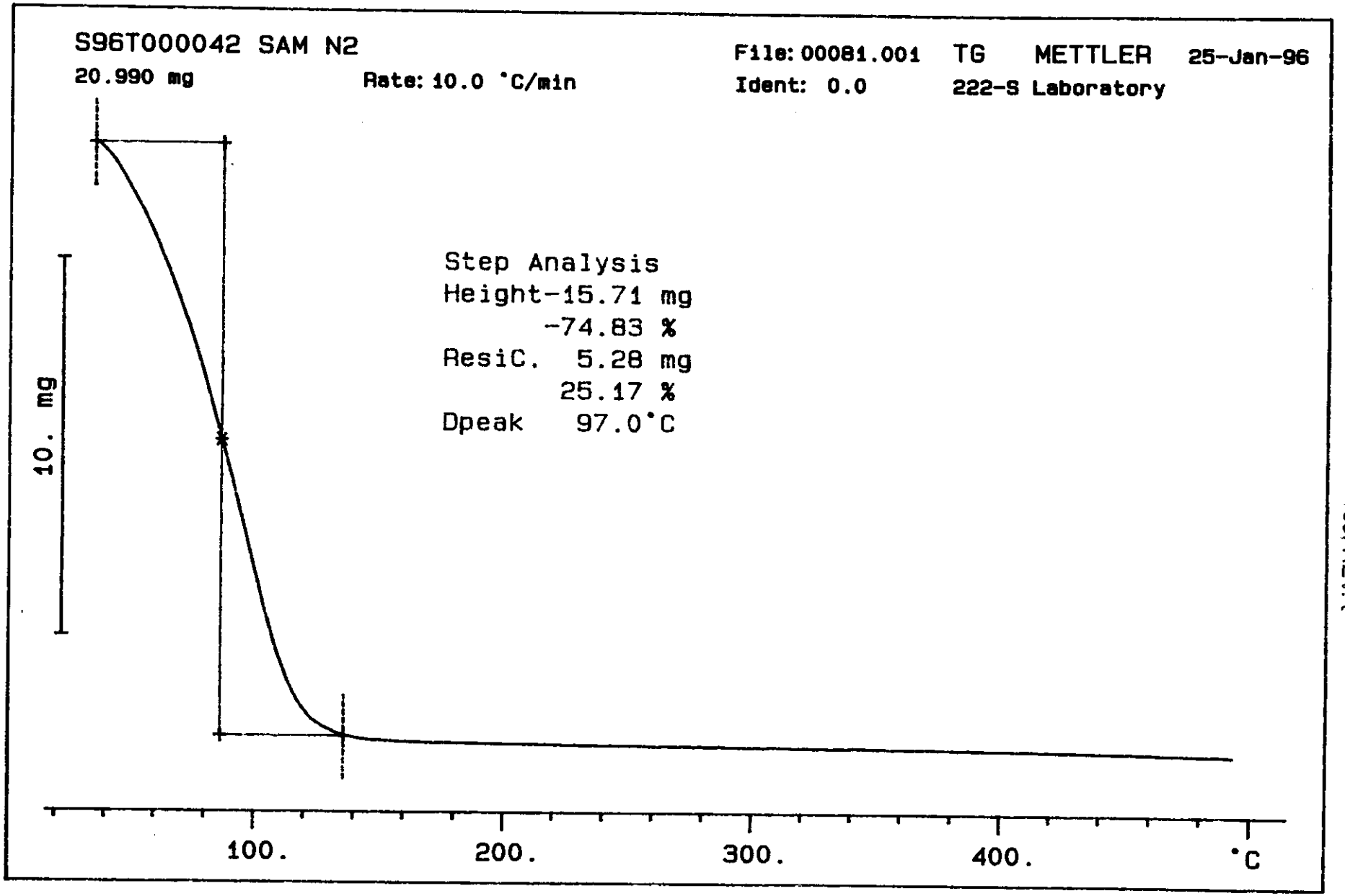


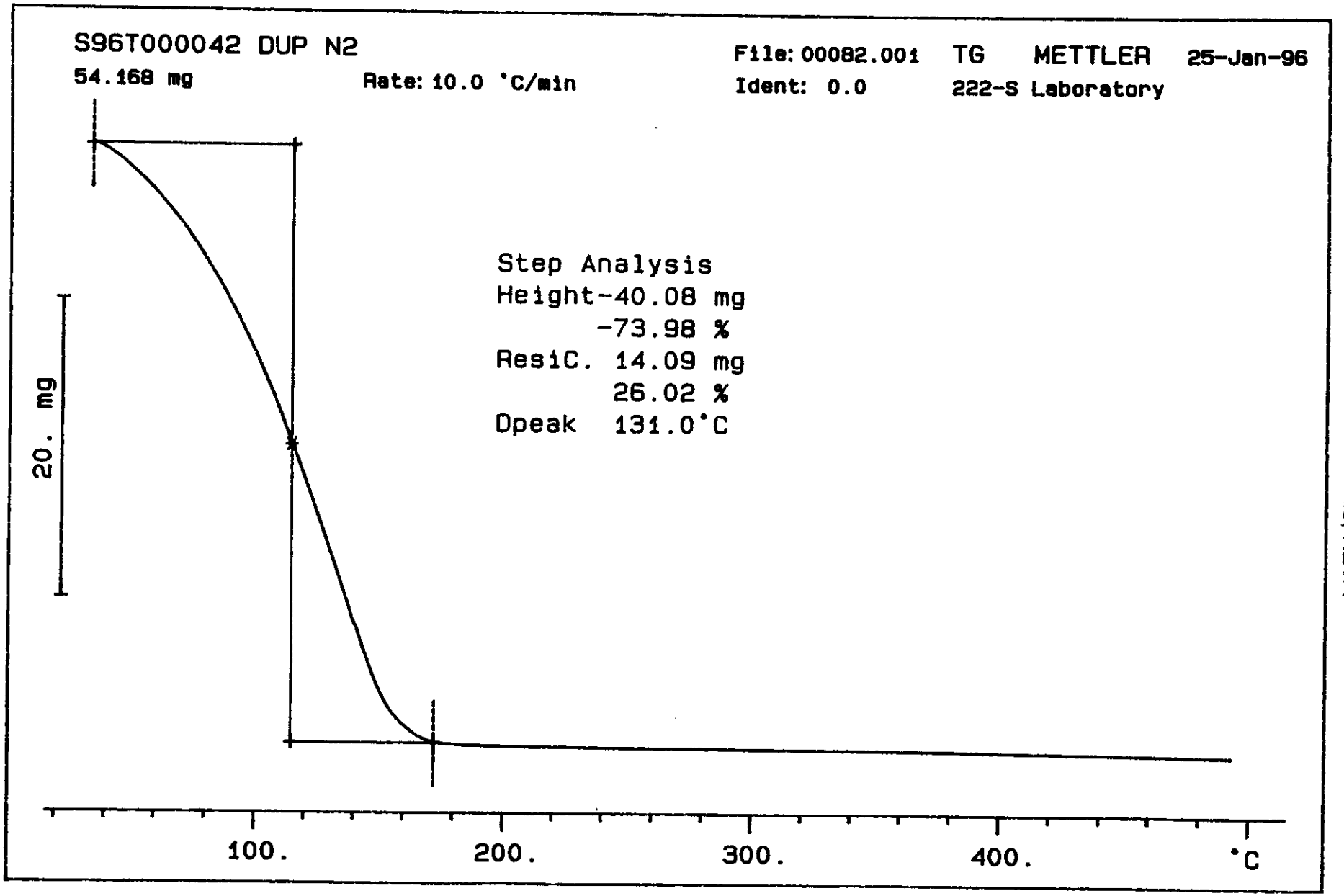
Anthony Purunto 1-25-96


S96T000041 SAM N2
37.237 mg
Rate: 10.0 °C/min
File: 00078.001
TG
METTLER
25-Jan-96
Ident: 0.0
222-S Laboratory
Step Analysis
Height-28.24 mg
-75.84 %
ResiC. 9.00 mg
24.16 %
Dpeak 107.0°C
10. mg
100.
200.
300.
400.
°C

BEST AVAILABLE COPY




S96T000042 SAM N2
20.990 mg
Rate: 10.0 °C/min
File: 00081.001
TG
METTLER
25-Jan-96
Ident: 0.0
222-S Laboratory
Step Analysis
Height-15.71 mg
-74.83 %
ResiC. 5.28 mg
25.17 %
Dpeak 97.0°C
10. mg
100.
200.
300.
400.
°C


S96T000042 DUP N2
54.168 mg
Rate: 10.0 °C/min
File: 00082.001
TG
METTLER
25-Jan-96
Ident: 0.0
222-S Laboratory
Step Analysis
Height -40.08 mg
-73.98 %
ResiC. 14.09 mg
26.02 %
Dpeak 131.0°C
20. mg
100.
200.
300.
400.
°C

LABCORE Data Entry Template for Worklist# 5149

Analyst: EW **Instrument:** TGA0 1 **Book #** 75N8-A

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

Worklist Comment: Please run B-203 TGAs under N2. bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA-01	SOLID	59.2	57.97 ~~57.73~~	N/A	%
95000228	B-203	2	SAMPLE	S96T000032	0		TGA-01	SOLID	N/A	75.95		%
95000228	B-203	3	DUP	S96T000032	0		TGA-01	SOLID	75.95	75.31	N/A	%
95000228	B-203	4	SAMPLE	S96T000033	0		TGA-01	SOLID	N/A	75.47		%
95000228	B-203	5	DUP	S96T000033	0		TGA-01	SOLID	75.47	75.12	N/A	%
95000228	B-203	6	SAMPLE	S96T000034	0		TGA-01	SOLID	N/A	73.87		%
95000228	B-203	7	DUP	S96T000034	0		TGA-01	SOLID	73.87	67.87	N/A	%

Final page for worklist # 5149

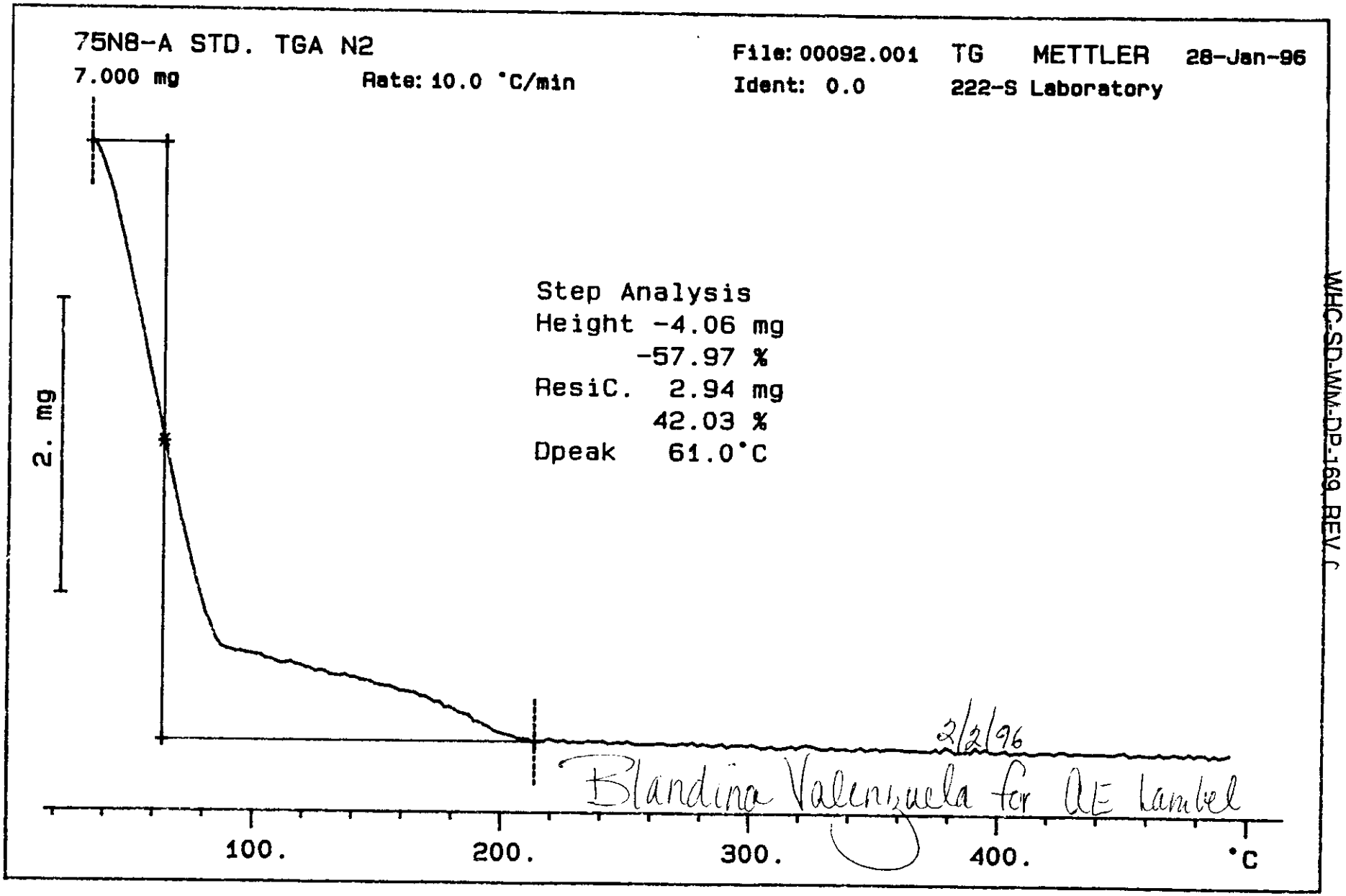
C Lambel 01-28-96
Analyst Signature **Date**

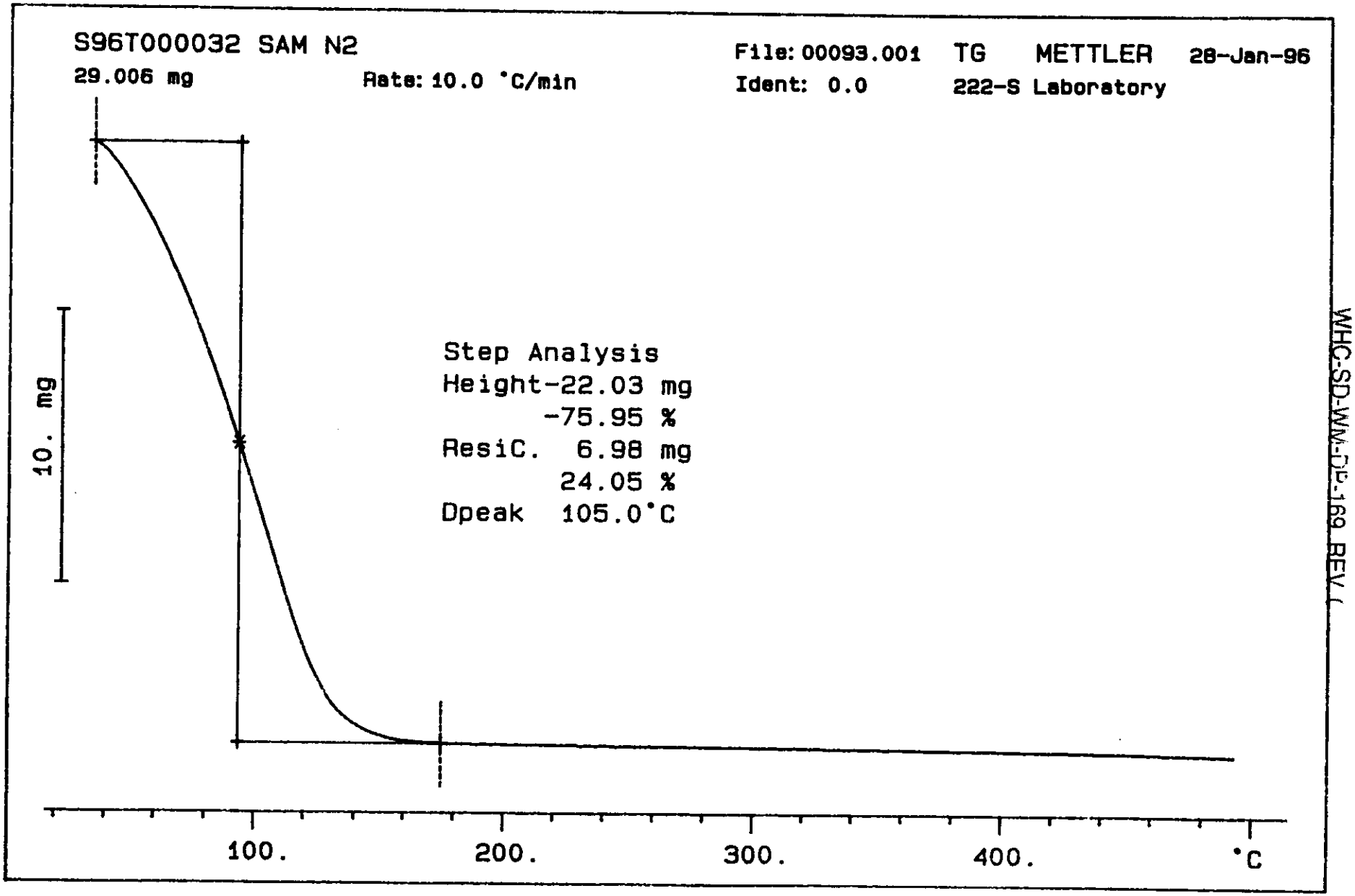
[illegible] 1-29-96
Analyst Signature **Date**

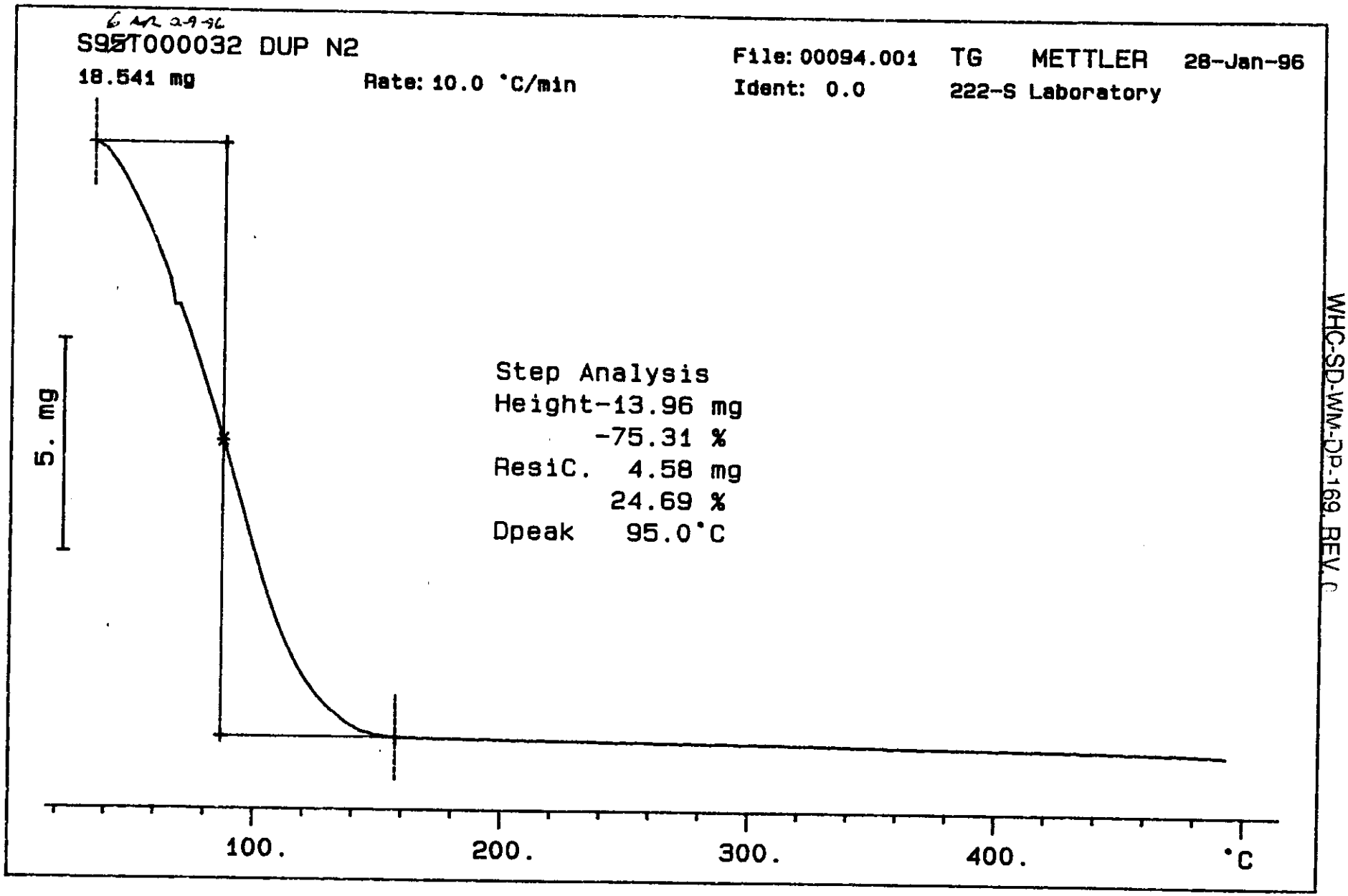
Data Entry Comments:

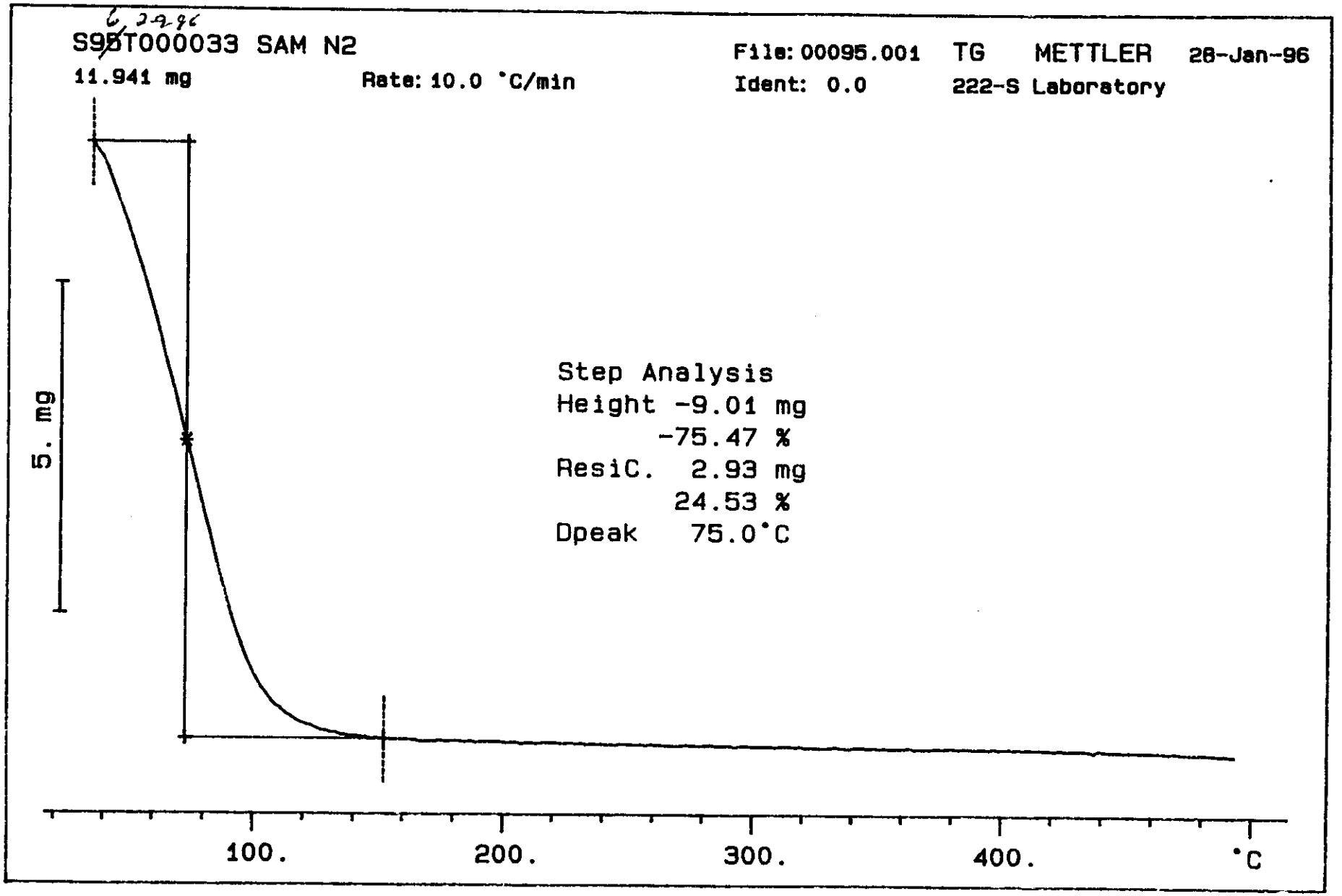
Units shown for QC (SPK & STD) may not reflect the actual units. DL = Detection Limit, S = Worklist Slot Number, R = Replicate Number, A = Aliquot Code.

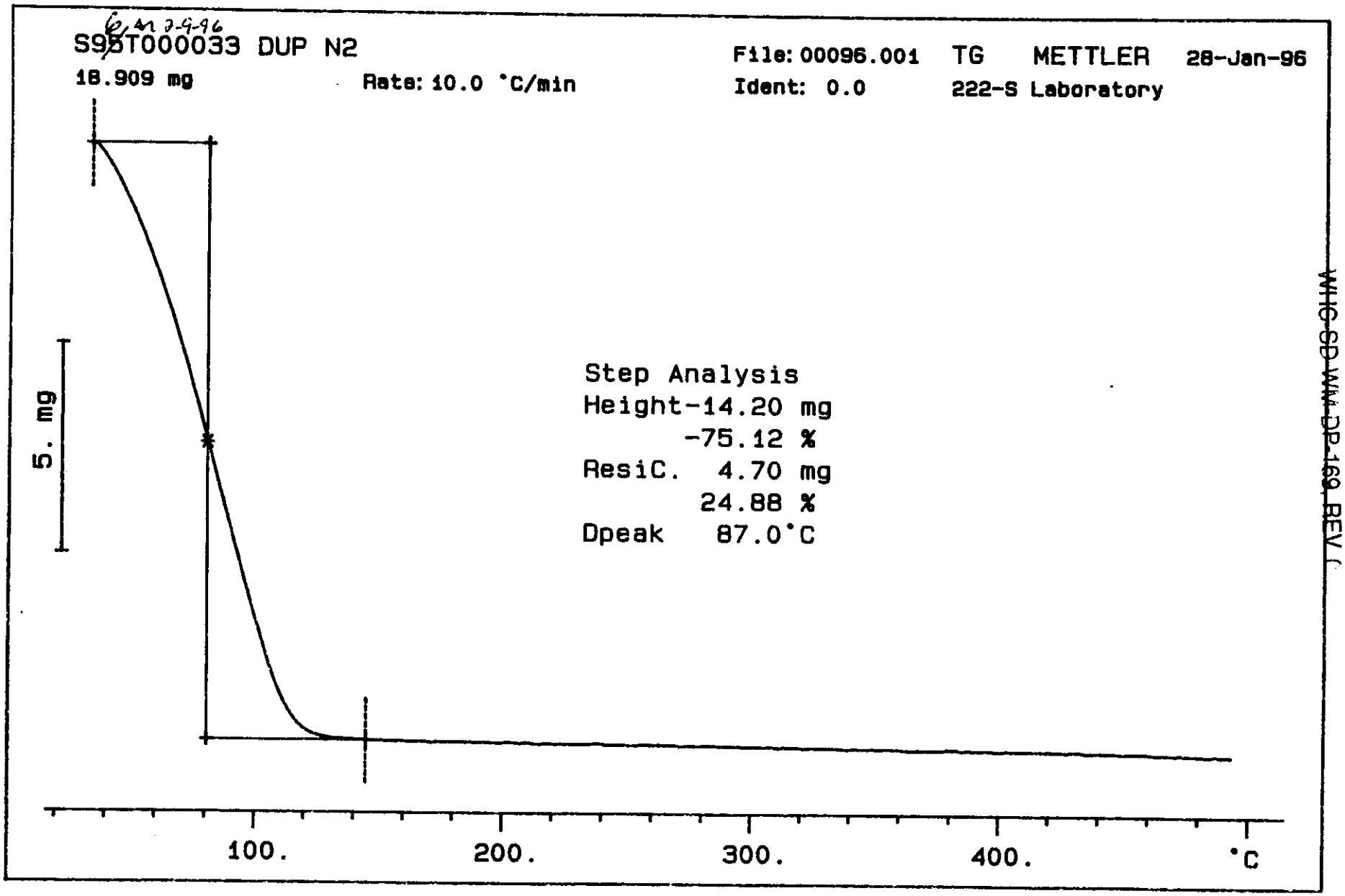
SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 375 TO 381.



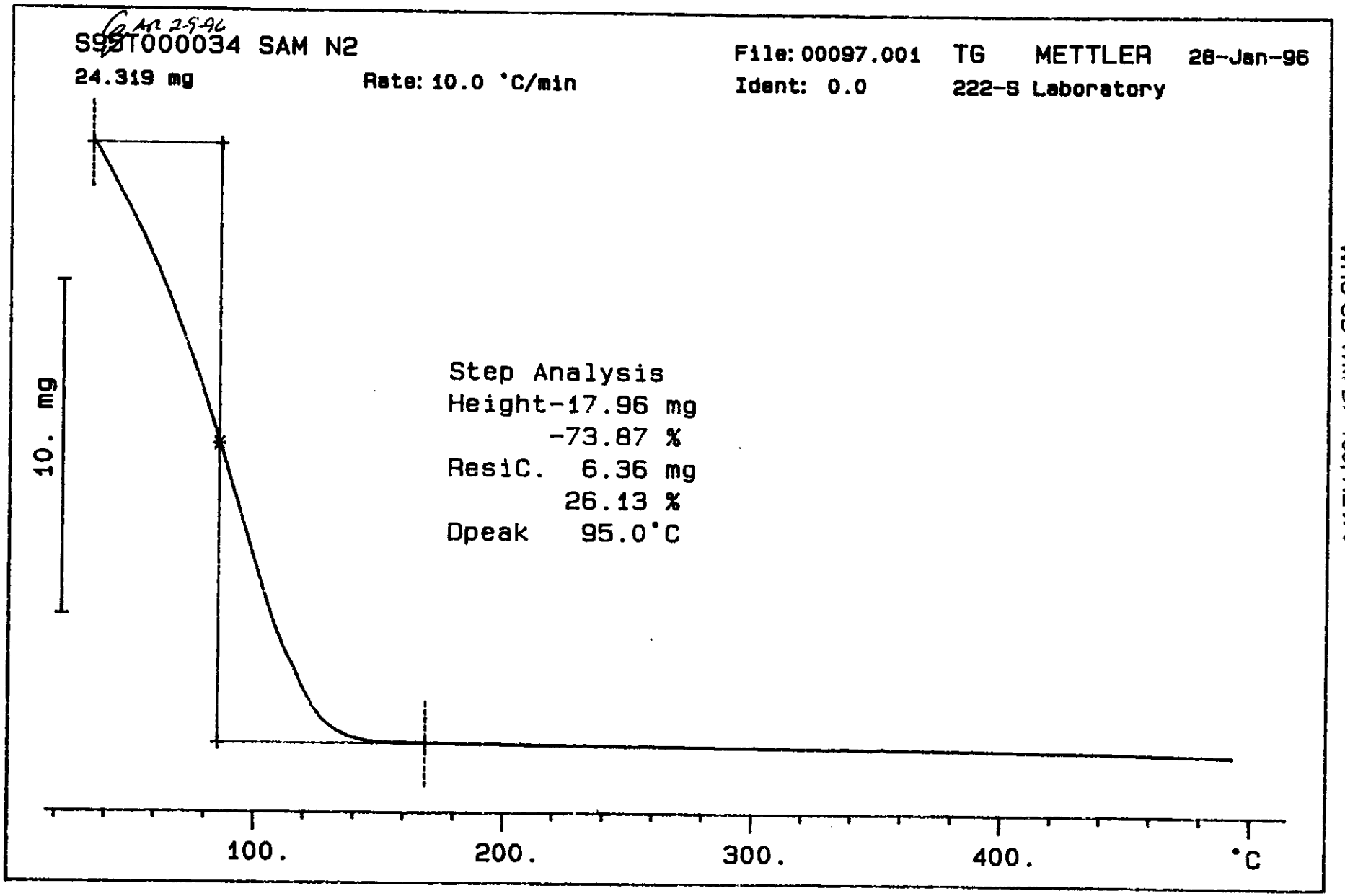

S96T000032 SAM N2
29.006 mg
Rate: 10.0 °C/min
File: 00093.001
Ident: 0.0
TG METTLER
222-S Laboratory
28-Jan-96
10. mg
Step Analysis
Height -22.03 mg
-75.95 %
ResiC. 6.98 mg
24.05 %
Dpeak 105.0°C
100.
200.
300.
400.
°C

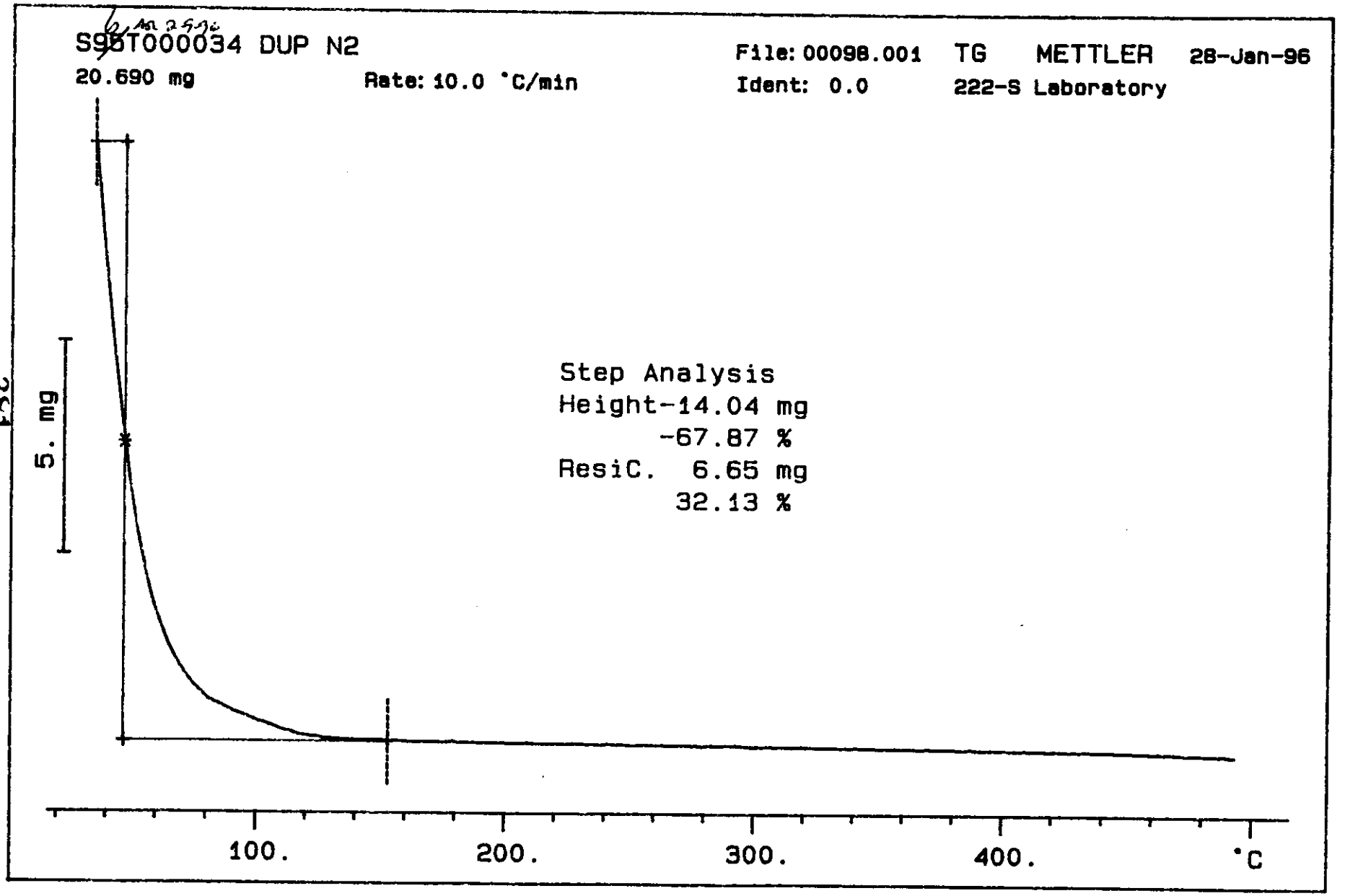

S95T000032 DUP N2
18.541 mg
Rate: 10.0 °C/min
File: 00094.001
TG
METTLER
28-Jan-96
Ident: 0.0
222-S Laboratory
Step Analysis
Height-13.96 mg
-75.31 %
ResiC. 4.58 mg
24.69 %
Dpeak 95.0°C
5. mg
100.
200.
300.
400.
°C


6/29/96
S95T000033 SAM N2
11.941 mg
Rate: 10.0 °C/min
File: 00095.001
TG
METTLER
28-Jan-96
Ident: 0.0
222-S Laboratory
Step Analysis
Height -9.01 mg
-75.47 %
ResiC. 2.93 mg
24.53 %
Dpeak 75.0°C
5. mg
100.
200.
300.
400.
°C



WHC-SD-WM-DP-169, REV 0


S9ST000034 SAM N2
24.319 mg
Rate: 10.0 °C/min
File: 00097.001
Ident: 0.0
TG
METTLER
28-Jan-96
222-S Laboratory
10. mg
Step Analysis
Height-17.96 mg
-73.87 %
ResiC. 6.36 mg
26.13 %
Dpeak 95.0°C
100.
200.
300.
400.
°C


S96T000034 DUP N2
20.690 mg
Rate: 10.0 °C/min
File: 00098.001
TG
METTLER
28-Jan-96
Ident: 0.0
222-S Laboratory
Step Analysis
Height-14.04 mg
-67.87 %
ResiC. 6.65 mg
32.13 %
5. mg
100.
200.
300.
400.
°C

worklistrpt Version 2.1 05/15/95
01/26/96 10:51

LABCORE Data Entry Template for Worklist# 5150

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

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

Worklist Comment: Please run B-203 TGAs under N2. bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	TEST	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA-03	SOLID	59.2	59.03	N/A	%
95000228	B-203	2	SAMPLE	S96T000043	0		TGA-03	SOLID	N/A	66.59		%
95000228	B-203	3	DUP	S96T000043	0		TGA-03	SOLID	66.59	75.57	N/A	%

Final page for worklist # 5150

See attached for signatures
Analyst Signature **Date** 1/26/96 BDV

Linda Coulo 1/26/96
Analyst Signature **Date**

Verified by Blandina Valenzuela 1/29/96

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
01/24/96 08:21

LABCORE Data Entry Template for Worklist# 5150

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

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

Worklist Comment: Please run B-203 TGAs under N2. bdv

GROUP	PROJECT	S	TYPE	SAMPLE#	R	A	-------TEST------	MATRIX	ACTUAL	FOUND	DL	UNIT
		1	STD				TGA-01	SOLID			N/A	%
95000228	B-203	2	SAMPLE	S96T000043	0		TGA-01	SOLID	N/A			%
95000228	B-203	3	DUP	S96T000043	0		TGA-01	SOLID			N/A	%

Final page for worklist # 5150

Anthony Pirrotta 1-25-96
Analyst Signature **Date**

Analyst Signature **Date**

Other instrument was used.
1/29/96
BDV

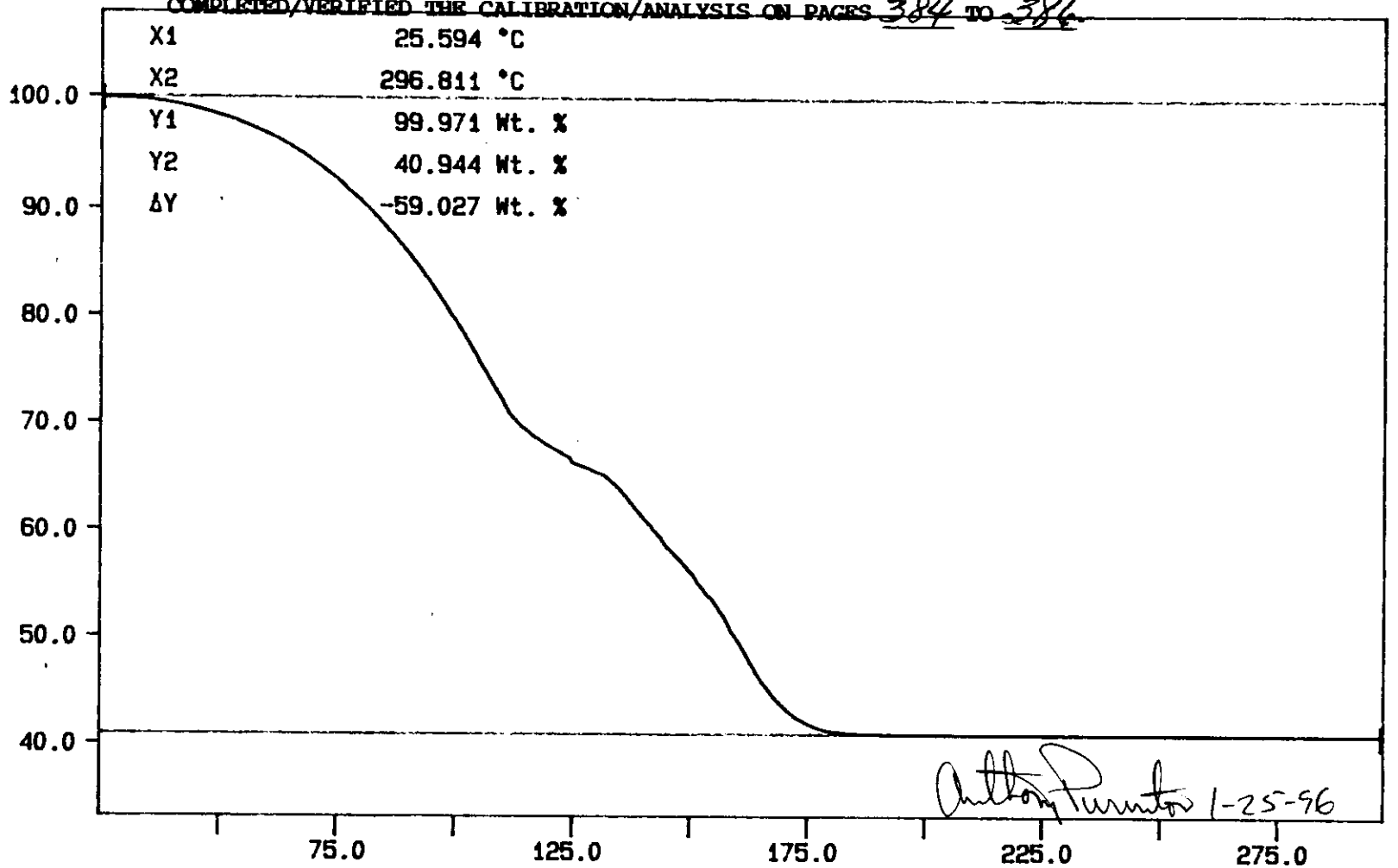
Data Entry Comments:

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: TER012502 Fri Jan 26 00:08:19 1996
Sample Weight: 13.300 mg
TERLIQ ~~100GN2~~ 75N8A

1-30-96 pov

SIGNATURE BELOW REPRESENTS CHEMICAL TECHNOLOGIST/CHEMIST THAT COMPLETED/VERIFIED THE CALIBRATION/ANALYSIS ON PAGES 384 TO 386

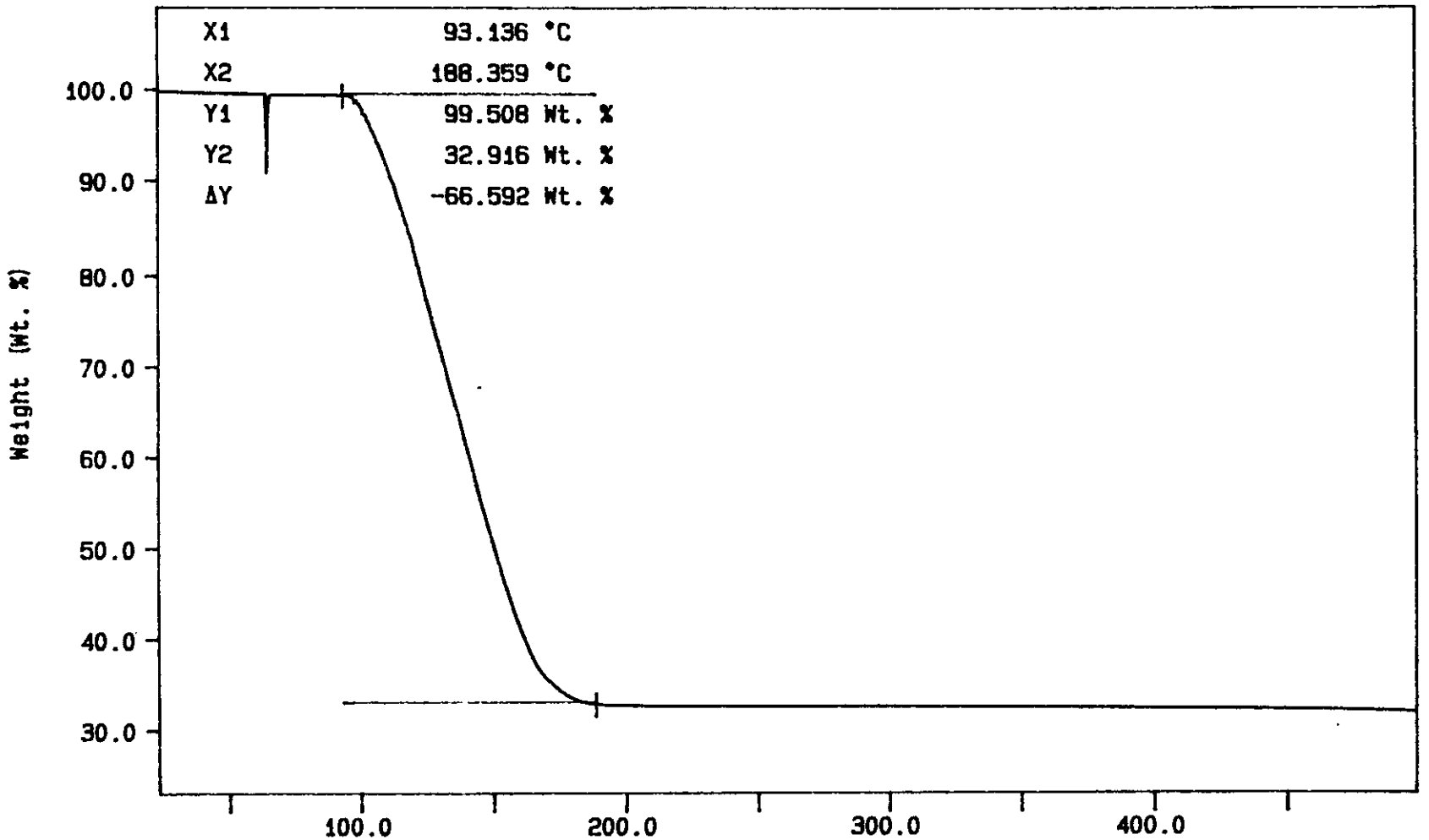


Anthony Purinton 1-25-96

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
Fri Jan 26 00:30:26 1996

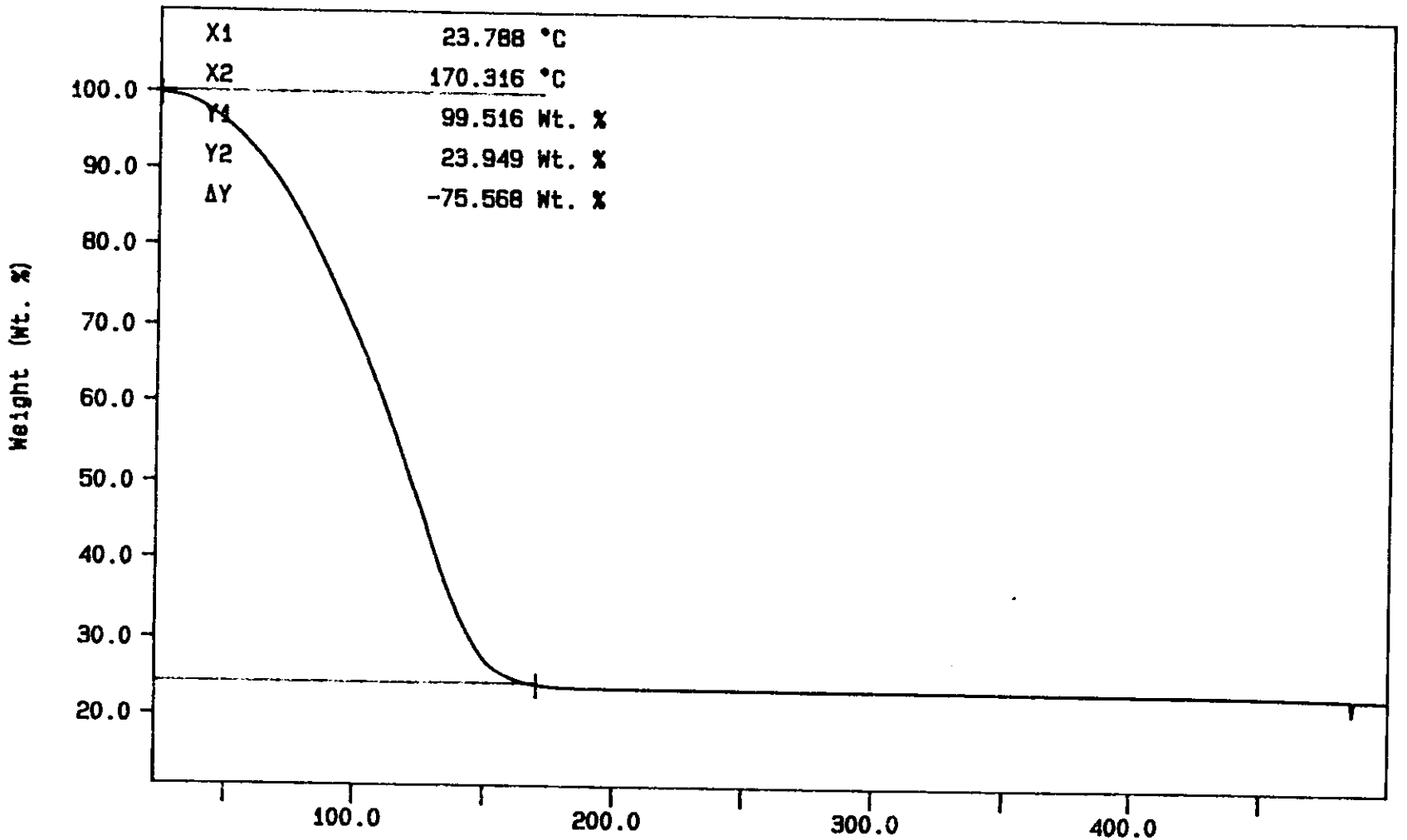
Curve 1: TGA
File info: SAM012505 Fri Jan 26 01:32:43 1996
Sample Weight: 17.169 mg
S96T000043 SAM



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
Fri Jan 26 01:33:34 1996

Curve 1: TGA
File info: SAM012506 Fri Jan 26 02:46:35 1996
Sample Weight: 20.411 mg
S96T000043 DUP



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
Fri Jan 26 02:47:16 1996

DISTRIBUTION SHEET

To Distribution	From Data Assessment and Interpretation	Page 1 of 1
		Date: 02/01/96
Project Title/Work Order **WHC-SD-WM-DP-169, REV. 0** "45-Day Safety Screening Results for Tank 241-B-203, Push Mode Cores 115, 120 and 122."		EDT NO.: 614776
		ECN NO.: N/A

Name	MSIN	Text With all Attach	EDT/ECN ONLY
Pacific Northwest Laboratory			
J. R. Gormsen	K7-28		X
S. J. Harris	K7-22	X	
K. L. Silvers	P7-27		X
U.S. Department of Energy, RL			
C. A. Babel	S7-54	X	
Westinghouse Hanford Company			
J. N. Appel	G3-21		X
H. Babad	S7-30	X	
S. D. Estey	R2-11	X	
G. D. Forehand	S7-31		X
V. W. Hall	T6-03	X	
D. C. Hetzer	S6-31		X
J. E. Hyatt	S3-31	X	
L. Jensen	R2-12	X	
J. Jo	R2-12	X	
N. W. Kirch	R2-11	X	
M. J. Kupfer	H5-49	X	
J. E. Meacham	S7-15	X	
K. L. Powell	T6-04		X
L. W. Shelton	H5-49	X	
B. C. Simpson	R2-12		X
M. J. Sutey	T4-07	X	
J. A. Voogd	H5-03		X
Central Files	A3-88	2	
EDMC	H6-08	X	
LTIC	T6-03		X
TCRC	R2-12	X	
TFIC (Tank Farm Information Center)	R1-20		X
Technical Data Center	S5-00	X	
Washington State Department of Ecology			
Single-Shell Tank Unit Manager			
A. B. Stone	B5-18	X	
U. S. Department of Energy			
Jim Poppiti 12800 Middlebrook Rd. Trevion II, EM-36 Germantown, MD 20874			X
Los Alamos Technical Associates			
T. T. Tran 309 Bradley Blvd. Richland, WA 99352		X	