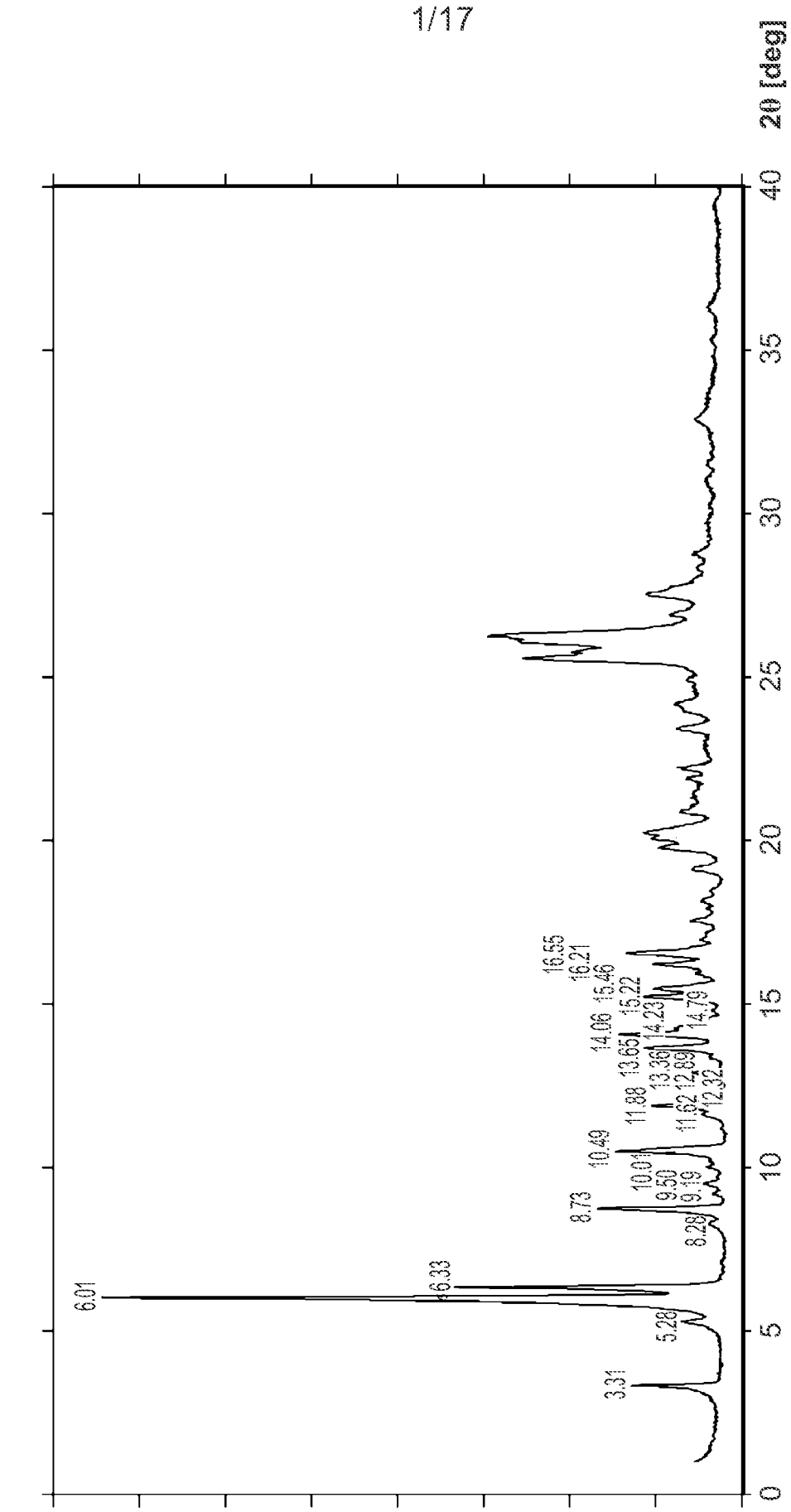

Observed peaks for XRPD file 591883 collected with Cu-Kα radiation.
I [cts]
16,000
14,000
12,000
10,000
8,000
6,000
4,000
2,000
0
0
5
10
15
20
25
30
35
40
2θ [deg]
6.01
16.33
5.28
3.31
8.28
8.73
10.49
9.50
9.19
10.03
11.88
11.62
12.89
12.32
13.36
13.65
14.06
14.23
14.79
15.22
15.46
16.21
16.55
Output rendered using Triads™ v2.0

FIG. 1

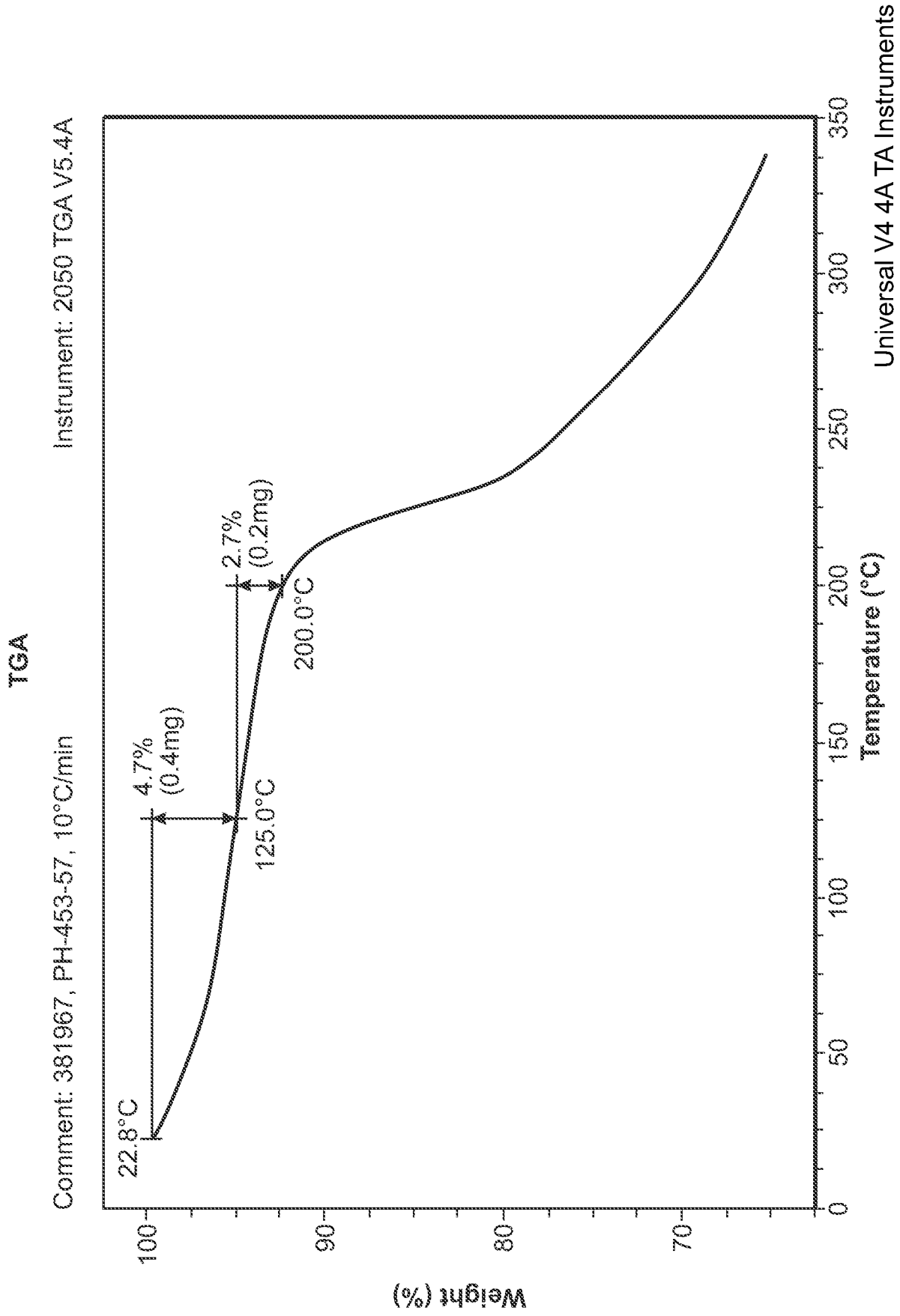

TGA
Comment: 381967, PH-453-57, 10°C/min
Instrument: 2050 TGA V5.4A
Universal V4 4A TA Instruments
22.8°C
4.7%
(0.4mg)
125.0°C
2.7%
(0.2mg)
200.0°C
Weight (%)
Temperature (°C)
100
90
80
70
0
50
100
150
200
250
300
350

FIG. 2A

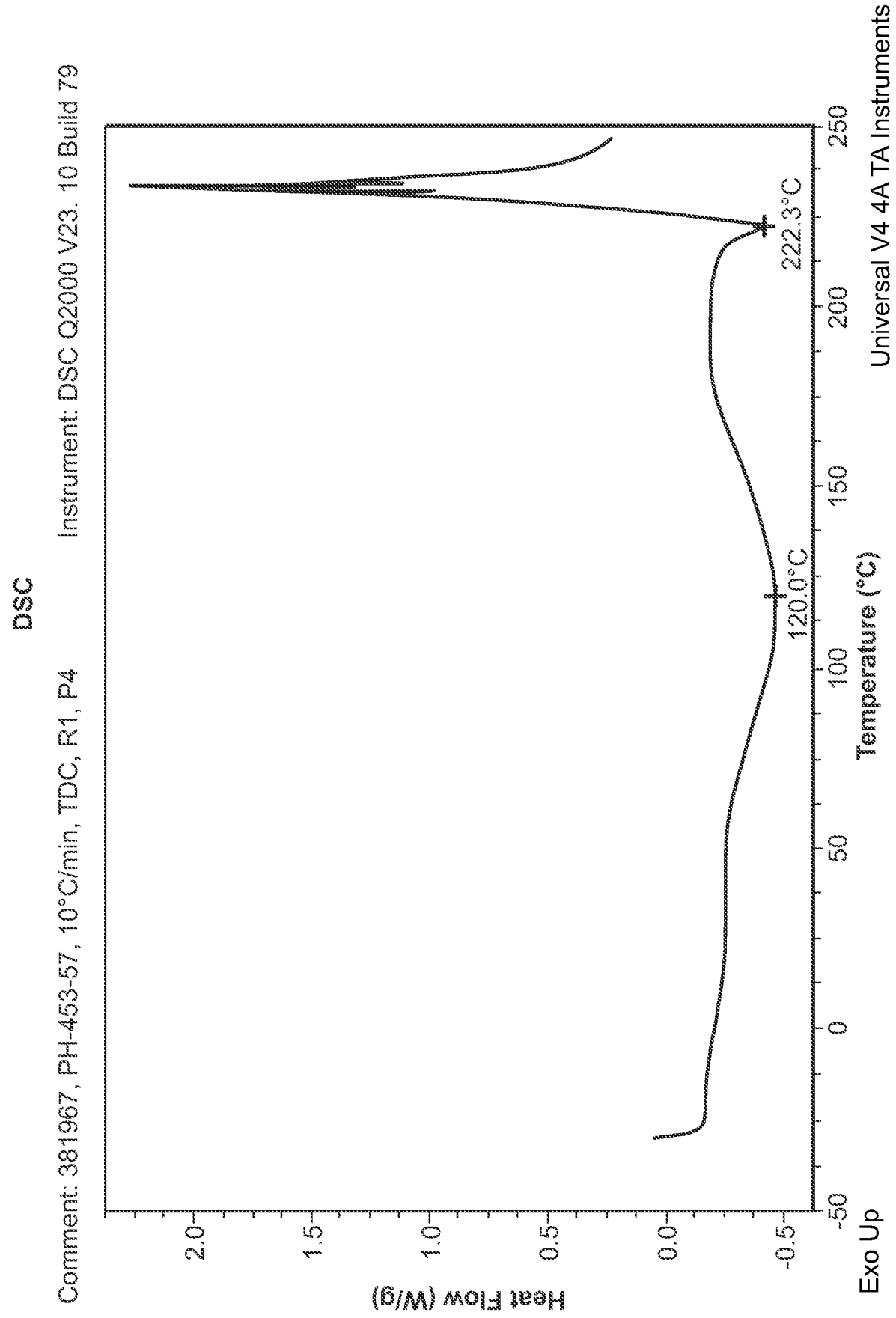

DSC
Comment: 381967, PH-453-57, 10°C/min, TDC, R1, P4
Instrument: DSC Q2000 V23. 10 Build 79
Universal V4 4A TA Instruments
222.3°C
120.0°C
Heat Flow (W/g)
Temperature (°C)
Exo Up
2.0
1.5
1.0
0.5
0.0
-0.5
-50
0
50
100
150
200
250

FIG. 2B

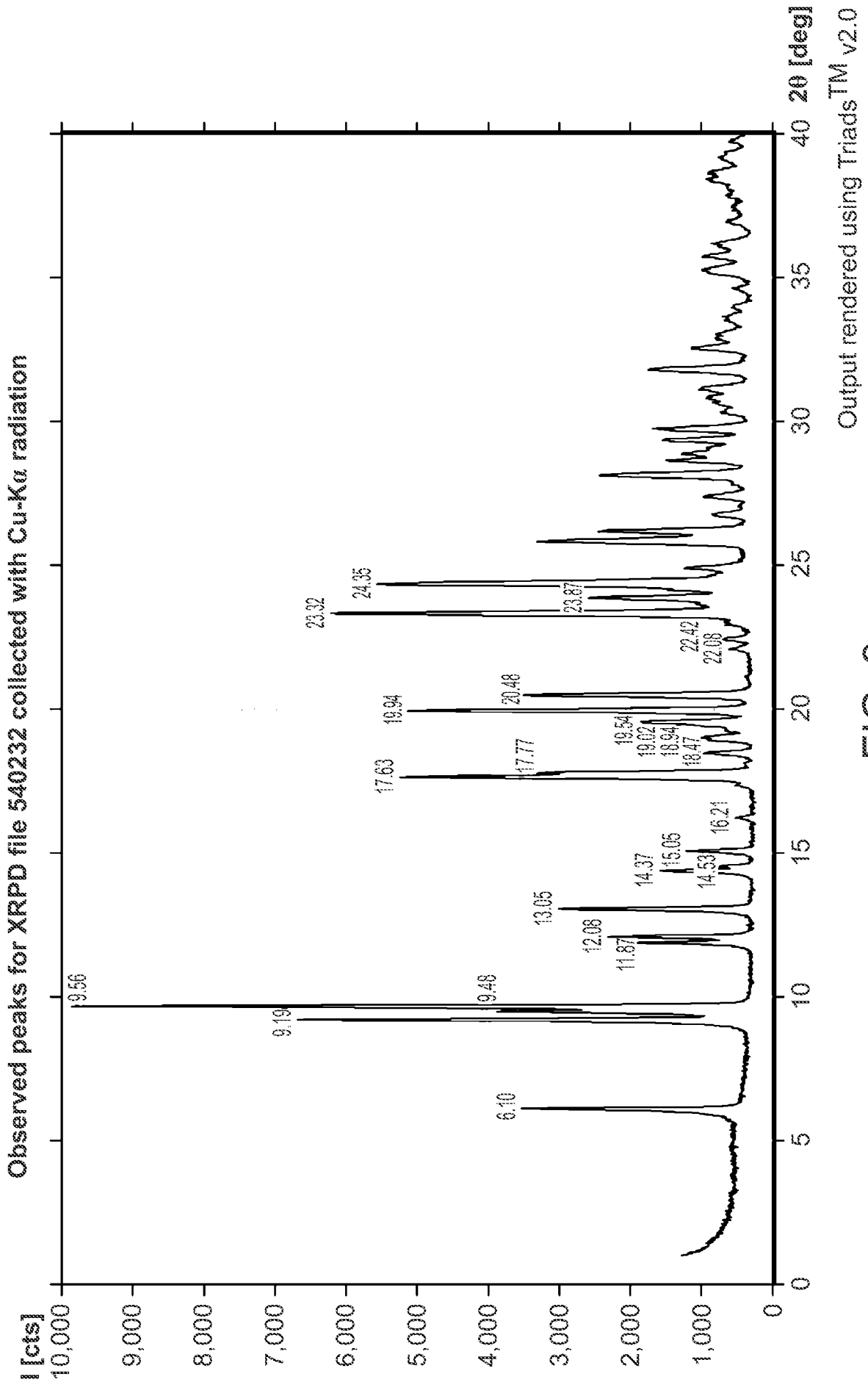

Observed peaks for XRPD file 540232 collected with Cu-Kα radiation
I [cts]
2θ [deg]
Output rendered using Triads™ v2.0
9.56
9.19
9.48
6.10
13.05
12.08
11.87
14.37
15.05
14.53
16.21
17.63
17.77
19.94
20.48
19.54
19.02
18.94
18.47
23.32
24.35
23.87
22.42
22.08

FIG. 3

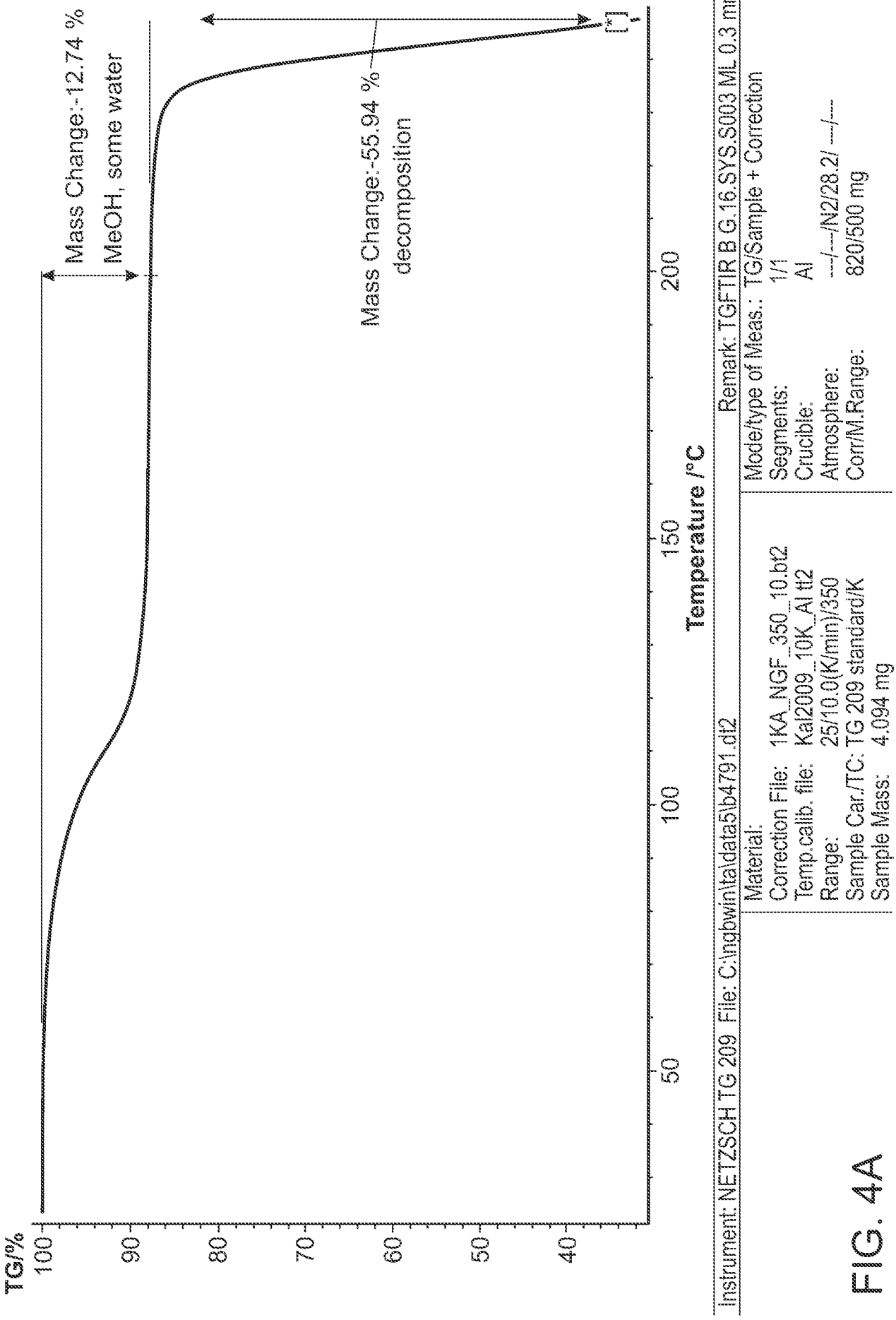

Mass Change:-12.74 %
MeOH, some water
Mass Change:-55.94 %
decomposition
TG/%
100
90
80
70
60
50
40
50
100
150
200
Temperature /°C
Instrument: NETZSCH TG 209 File: C:\ngbwin\ta\data5\b4791.dt2
Material:
Correction File: 1KA_NGF_350_10.bt2
Temp.calib. file: Kal2009_10K_Al tt2
Range: 25/10.0(K/min)/350
Sample Car./TC: TG 209 standard/K
Sample Mass: 4.094 mg
Remark: TGFTIR B G.16.SYS.S003 ML 0.3 mm
Mode/type of Meas.: TG/Sample + Correction
Segments: 1/1
Crucible: Al
Atmosphere: ---/---/N2/28.2/ ---/---
Corr/M.Range: 820/500 mg

FIG. 4A

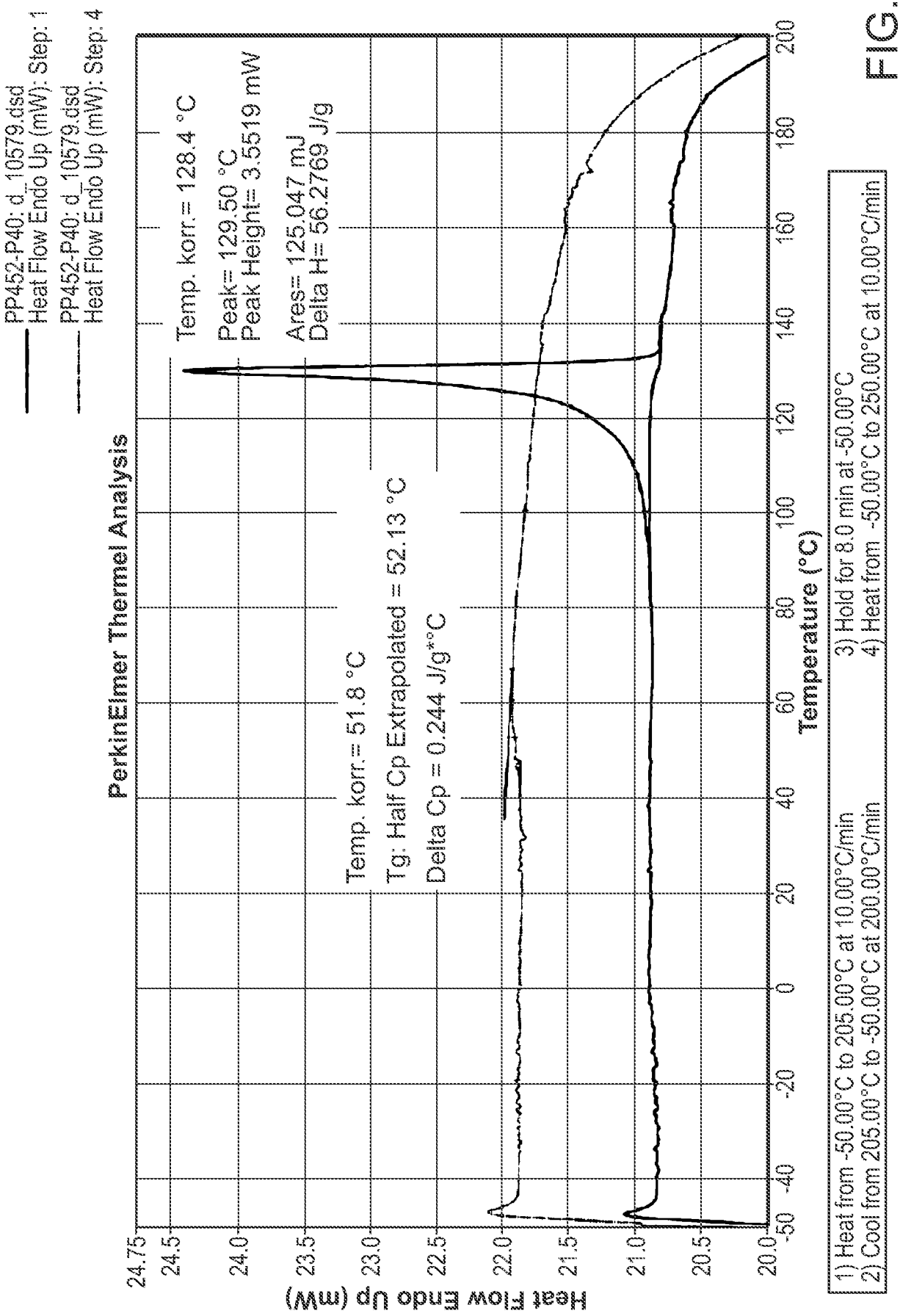

PP452-P40: d_10579.dsd
Heat Flow Endo Up (mW): Step: 1
PP452-P40: d_10579.dsd
Heat Flow Endo Up (mW): Step: 4
PerkinElmer Thermel Analysis
Temp. korr.= 128.4 °C
Peak= 129.50 °C
Peak Height= 3.5519 mW
Ares= 125.047 mJ
Delta H= 56.2769 J/g
Temp. korr.= 51.8 °C
Tg: Half Cp Extrapolated = 52.13 °C
Delta Cp = 0.244 J/g*°C
Heat Flow Endo Up (mW)
Temperature (°C)
1) Heat from -50.00°C to 205.00°C at 10.00°C/min
2) Cool from 205.00°C to -50.00°C at 200.00°C/min
3) Hold for 8.0 min at -50.00°C
4) Heat from -50.00°C to 250.00°C at 10.00°C/min

FIG. 4B

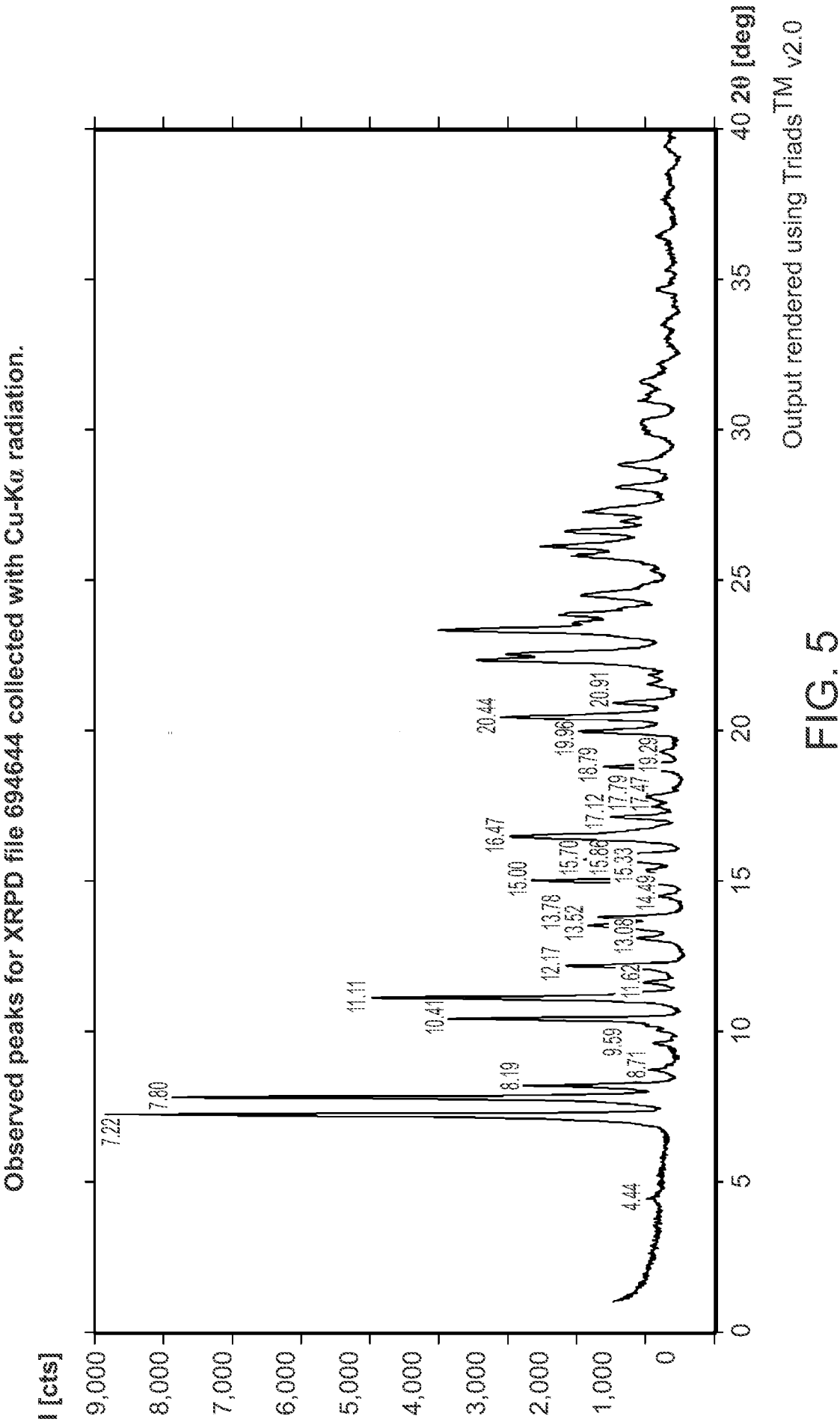

Observed peaks for XRPD file 694644 collected with Cu-Kα radiation.
I [cts]
9,000
8,000
7,000
6,000
5,000
4,000
3,000
2,000
1,000
0
0
5
10
15
20
25
30
35
40 2θ [deg]
Output rendered using Triads™ v2.0
4.44
7.22
7.80
8.19
8.71
9.59
10.41
11.11
11.62
12.17
13.08
13.52
13.78
14.49
15.00
15.33
15.70
15.88
16.47
17.12
17.47
17.79
18.79
19.29
19.96
20.44
20.91

FIG. 5

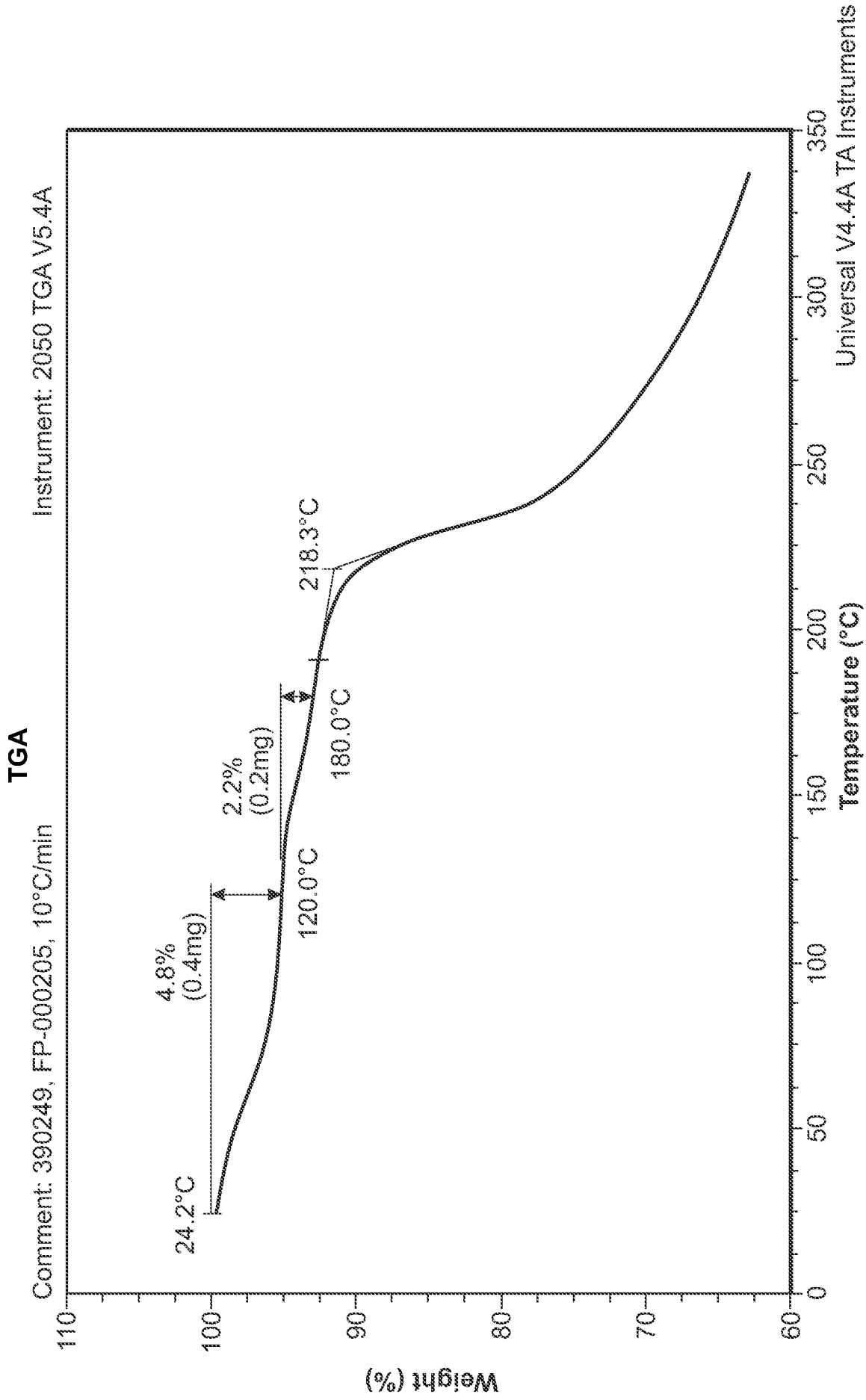

TGA
Comment: 390249, FP-000205, 10°C/min
Instrument: 2050 TGA V5.4A
Universal V4.4A TA Instruments
Weight (%)
Temperature (°C)
110
100
90
80
70
60
0
50
100
150
200
250
300
350
24.2°C
4.8%
(0.4mg)
120.0°C
2.2%
(0.2mg)
180.0°C
218.3°C

FIG. 6A

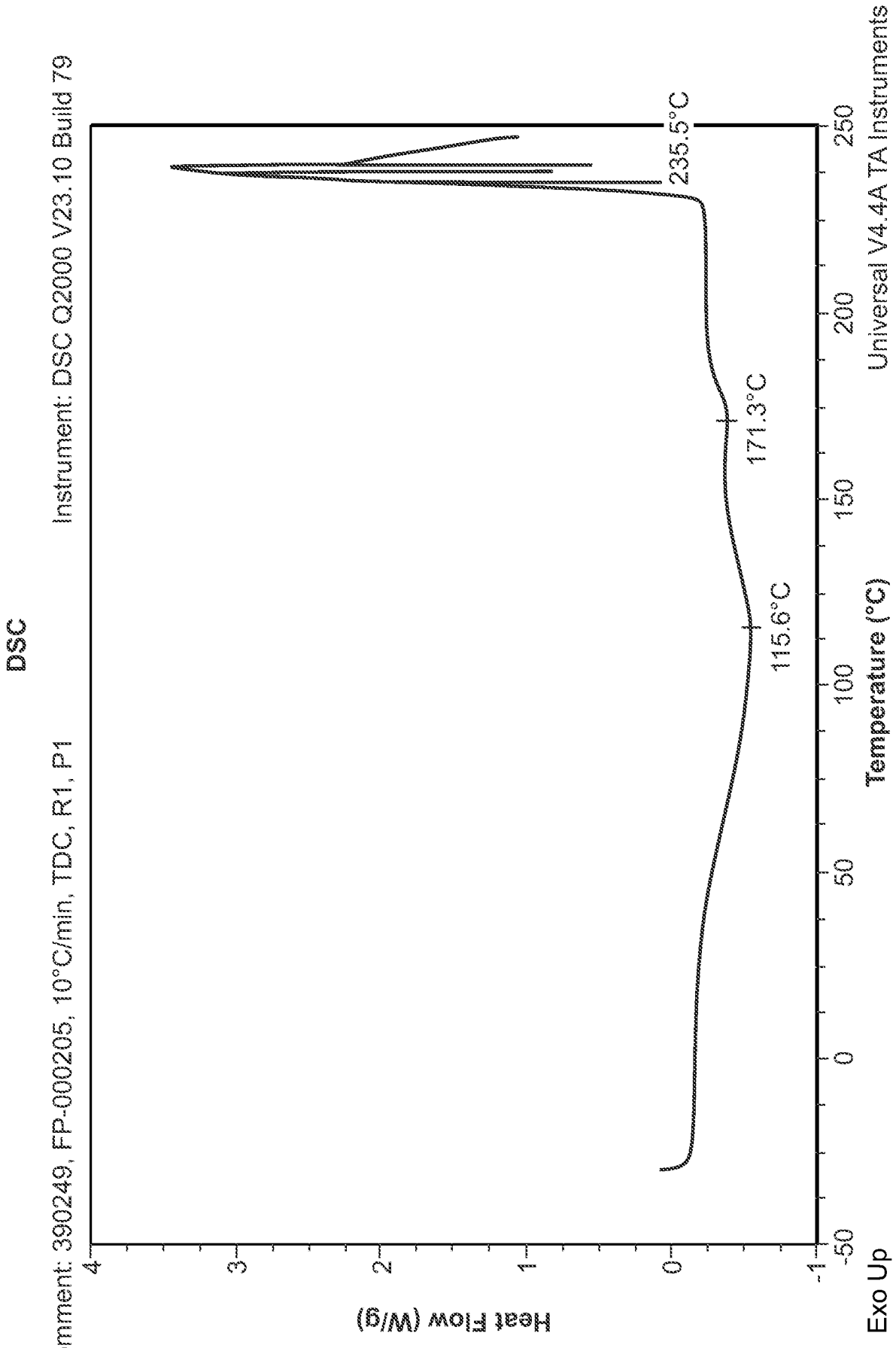

DSC
Comment: 390249, FP-000205, 10°C/min, TDC, R1, P1
Instrument: DSC Q2000 V23.10 Build 79
Universal V4.4A TA Instruments
235.5°C
171.3°C
115.6°C
Heat Flow (W/g)
Temperature (°C)
Exo Up
4
3
2
1
0
-1
-50
0
50
100
150
200
250

FIG. 6B

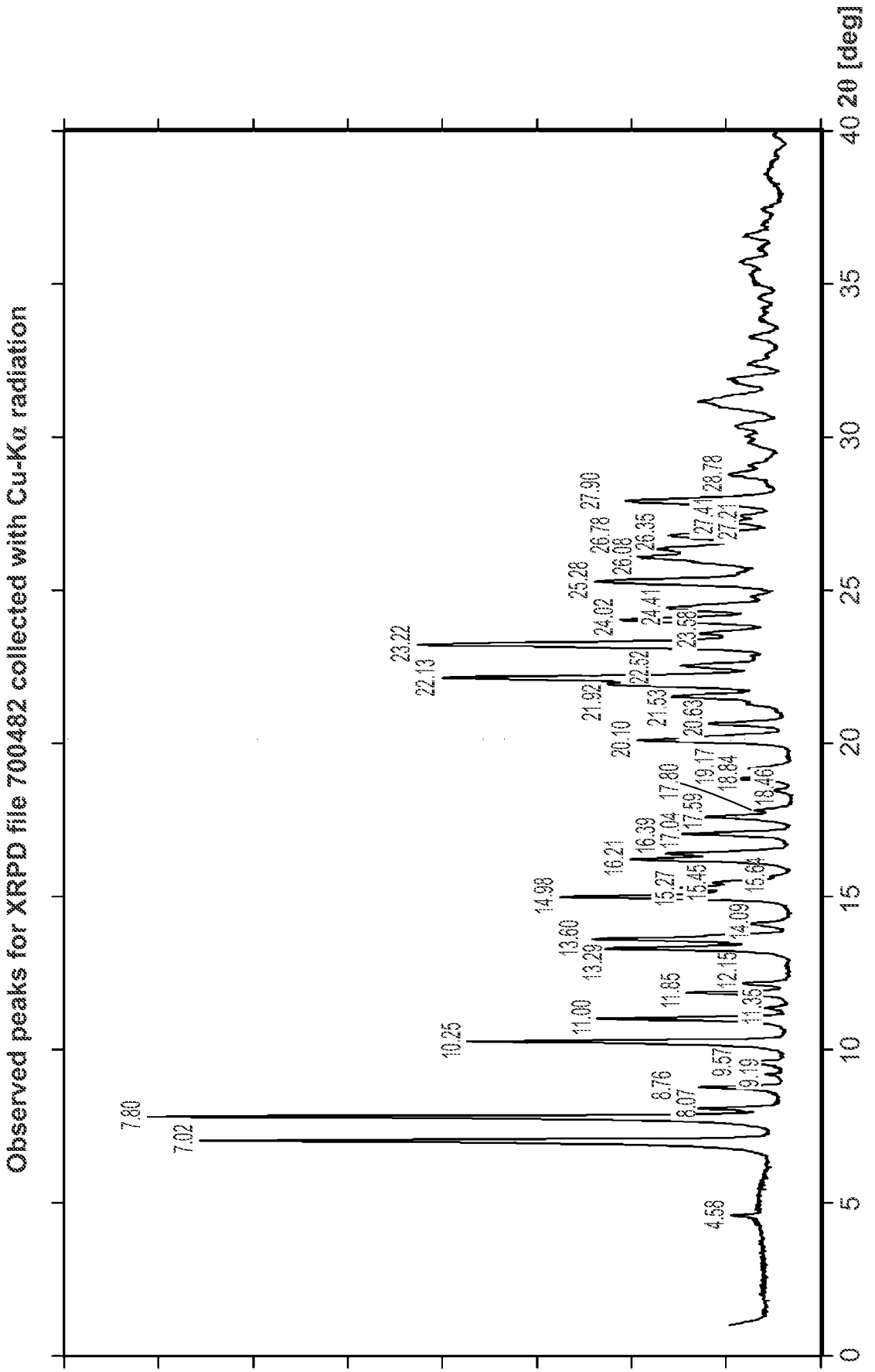

Observed peaks for XRPD file 700482 collected with Cu-Kα radiation
I [cts]
2θ [deg]
Output rendered using Triads™ v2.0
7.80
7.02
4.58
8.76
8.07
9.57
9.19
10.25
11.00
11.85
11.35
12.15
13.29
13.60
14.98
14.09
15.27
15.45
15.64
16.21
16.39
17.04
17.59
17.80
19.17
18.84
18.46
20.10
20.63
21.53
21.92
22.13
22.52
23.22
23.68
24.02
24.41
25.28
26.08
26.78
26.35
27.41
27.21
27.90
28.78

FIG. 7

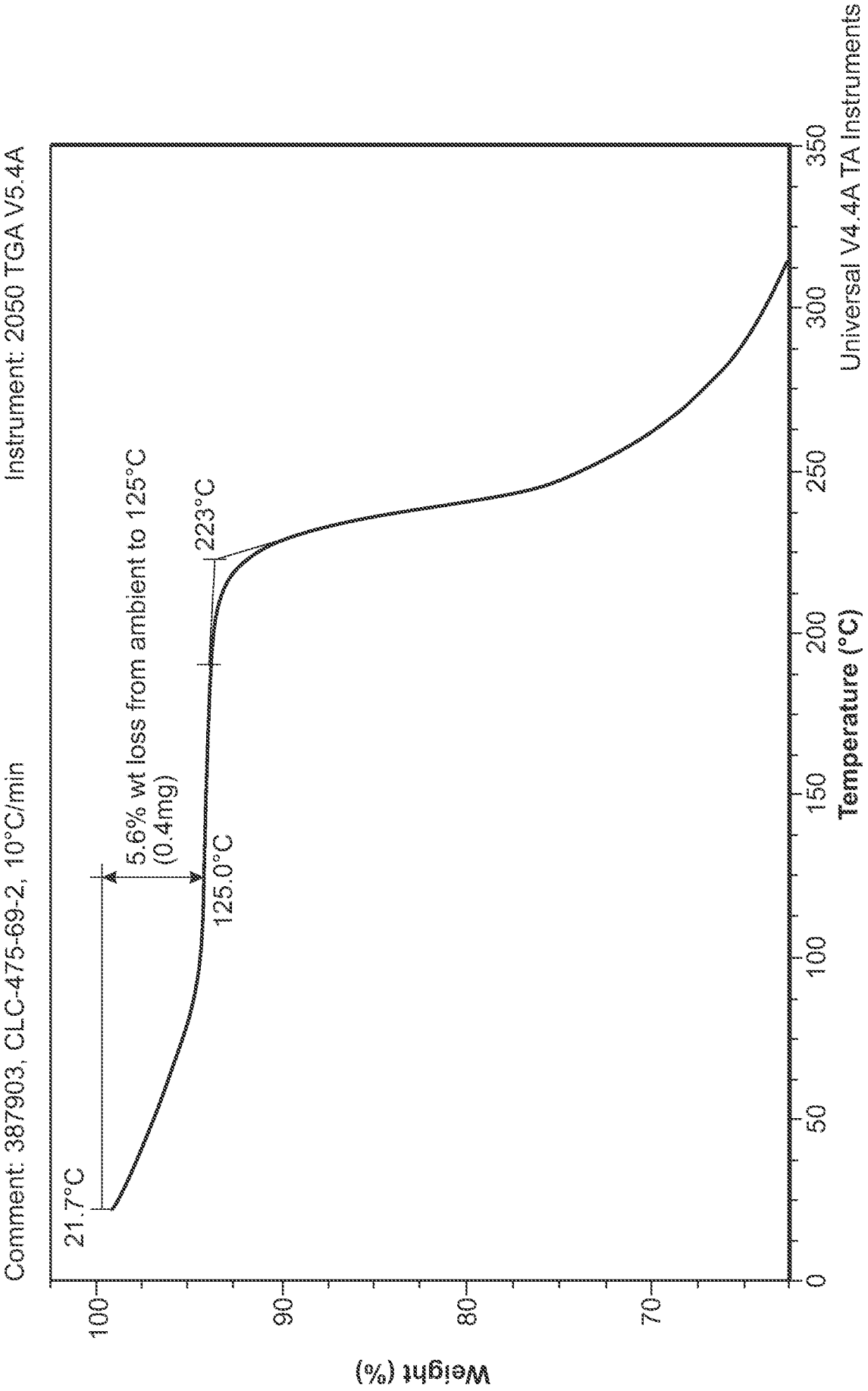

Comment: 387903, CLC-475-69-2, 10°C/min
Instrument: 2050 TGA V5.4A
21.7°C
5.6% wt loss from ambient to 125°C
(0.4mg)
125.0°C
223°C
Weight (%)
100
90
80
70
0
50
100
150
200
250
300
350
Temperature (°C)
Universal V4.4A TA Instruments

FIG. 8A

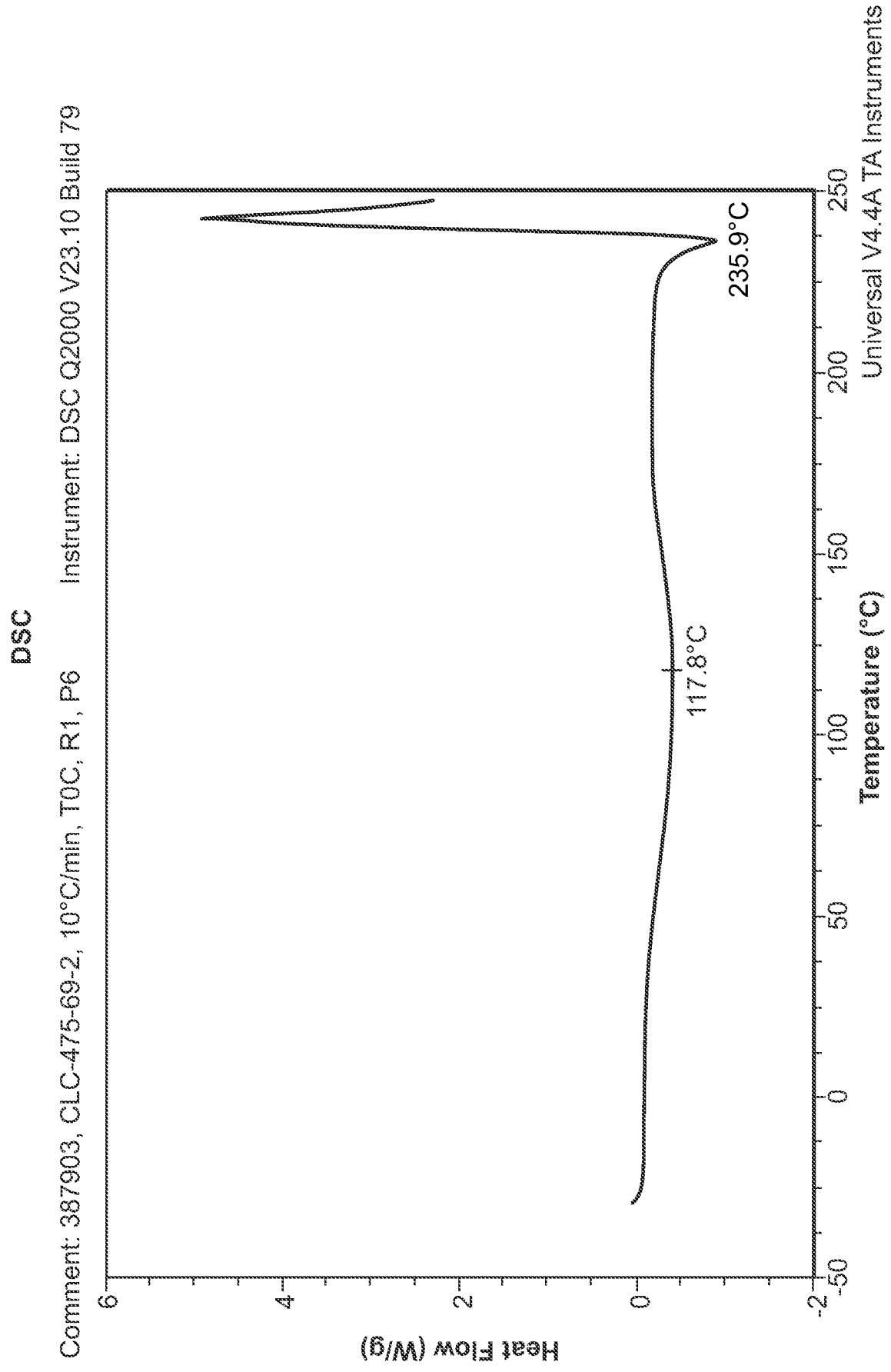

DSC
Comment: 387903, CLC-475-69-2, 10°C/min, T0C, R1, P6
Instrument: DSC Q2000 V23.10 Build 79
Heat Flow (W/g)
6
4
2
0
-2
-50
0
50
100
150
200
250
Temperature (°C)
117.8°C
235.9°C
Universal V4.4A TA Instruments

FIG. 8B

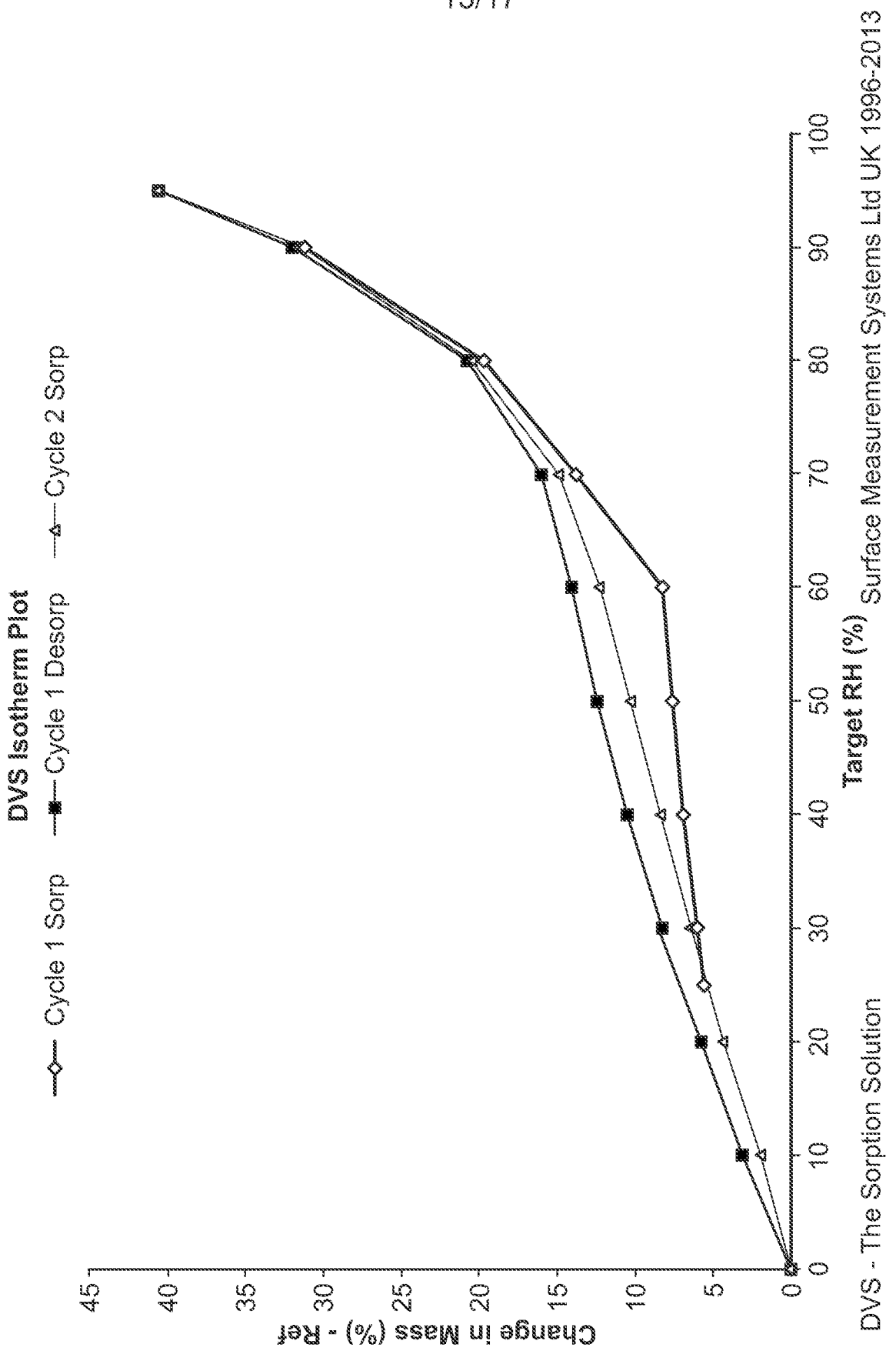

DVS Isotherm Plot
Cycle 1 Sorp
Cycle 1 Desorp
Cycle 2 Sorp
Change in Mass (%) - Ref
Target RH (%)
DVS - The Surface Measurement Systems Ltd UK 1996-2013
DVS - The Sorption Solution

FIG. 9

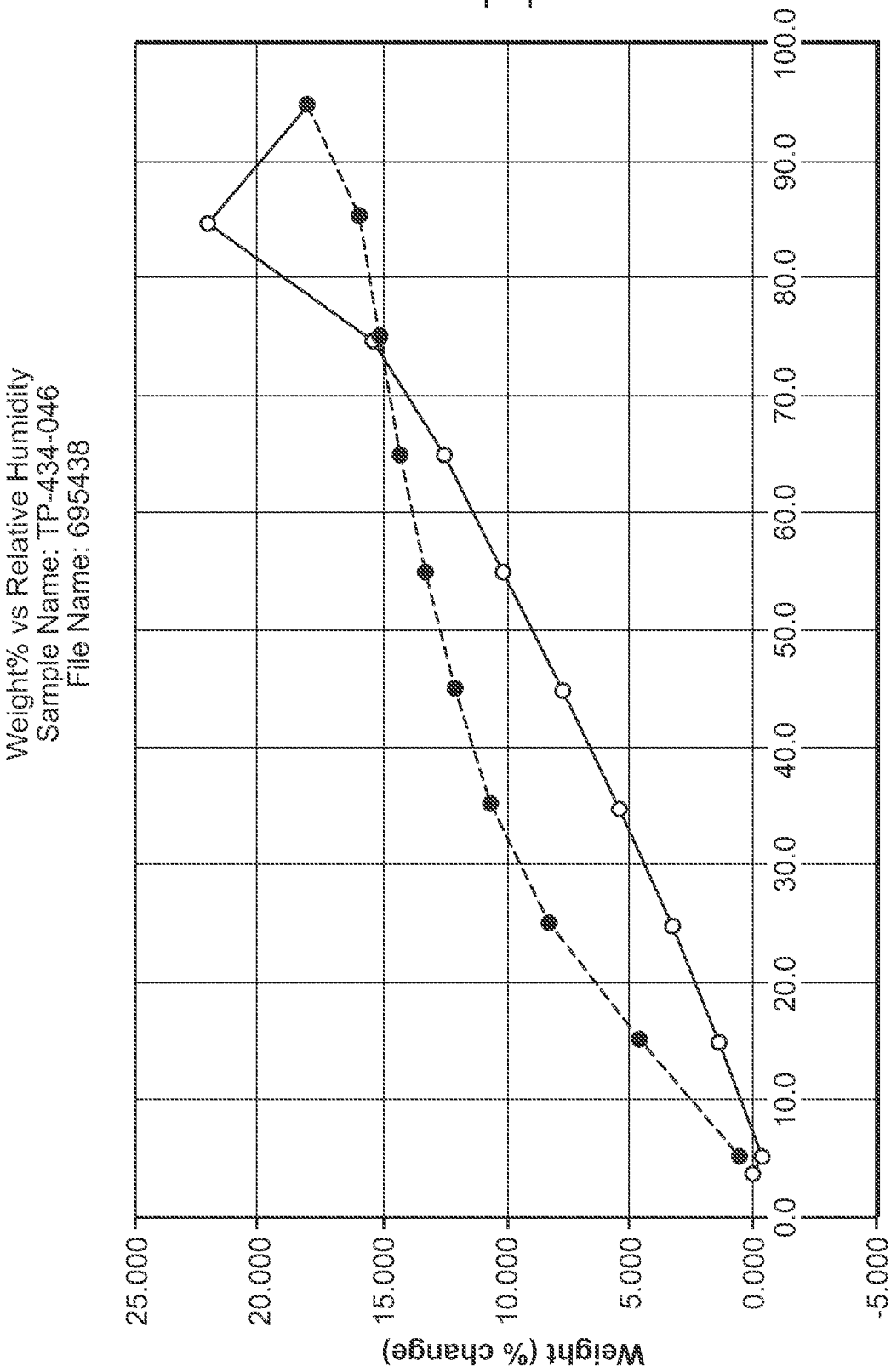

Weight% vs Relative Humidity
Sample Name: TP-434-046
File Name: 695438
Adsorption
Desorption
Weight (% change)
25.000
20.000
15.000
10.000
5.000
0.000
-5.000
0.0
10.0
20.0
30.0
40.0
50.0
60.0
70.0
80.0
90.0
100.0
%RH

FIG. 10

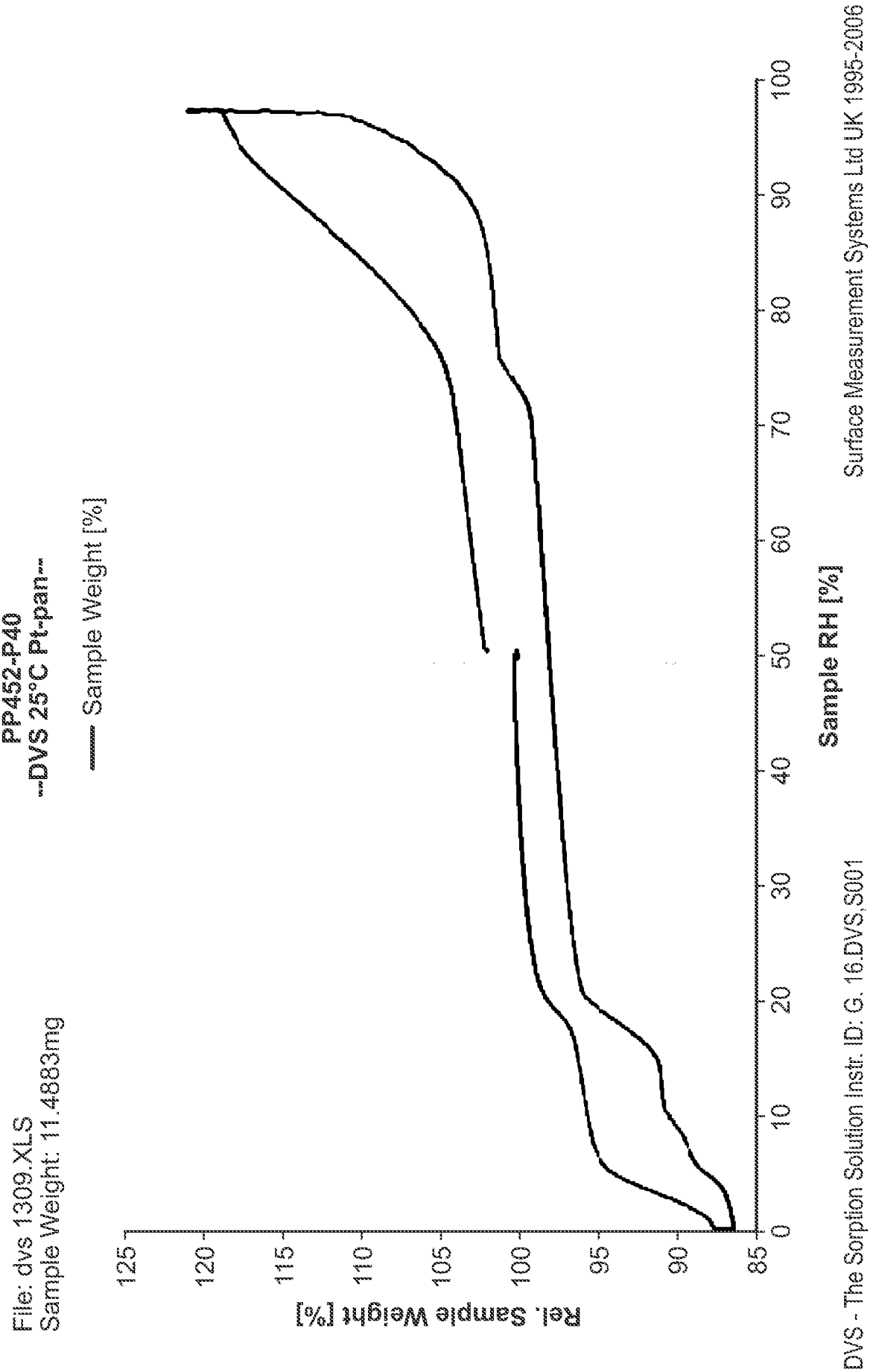

PP452-P40
--DVS 25°C Pt-pan--
Sample Weight [%]
File: dvs 1309.XLS
Sample Weight: 11.4883mg
Rel. Sample Weight [%]
125
120
115
110
105
100
95
90
85
0
10
20
30
40
50
60
70
80
90
100
Sample RH [%]
DVS - The Sorption Solution Instr. ID: G. 16.DVS,S001
Surface Measurement Systems Ltd UK 1995-2006

FIG. 11

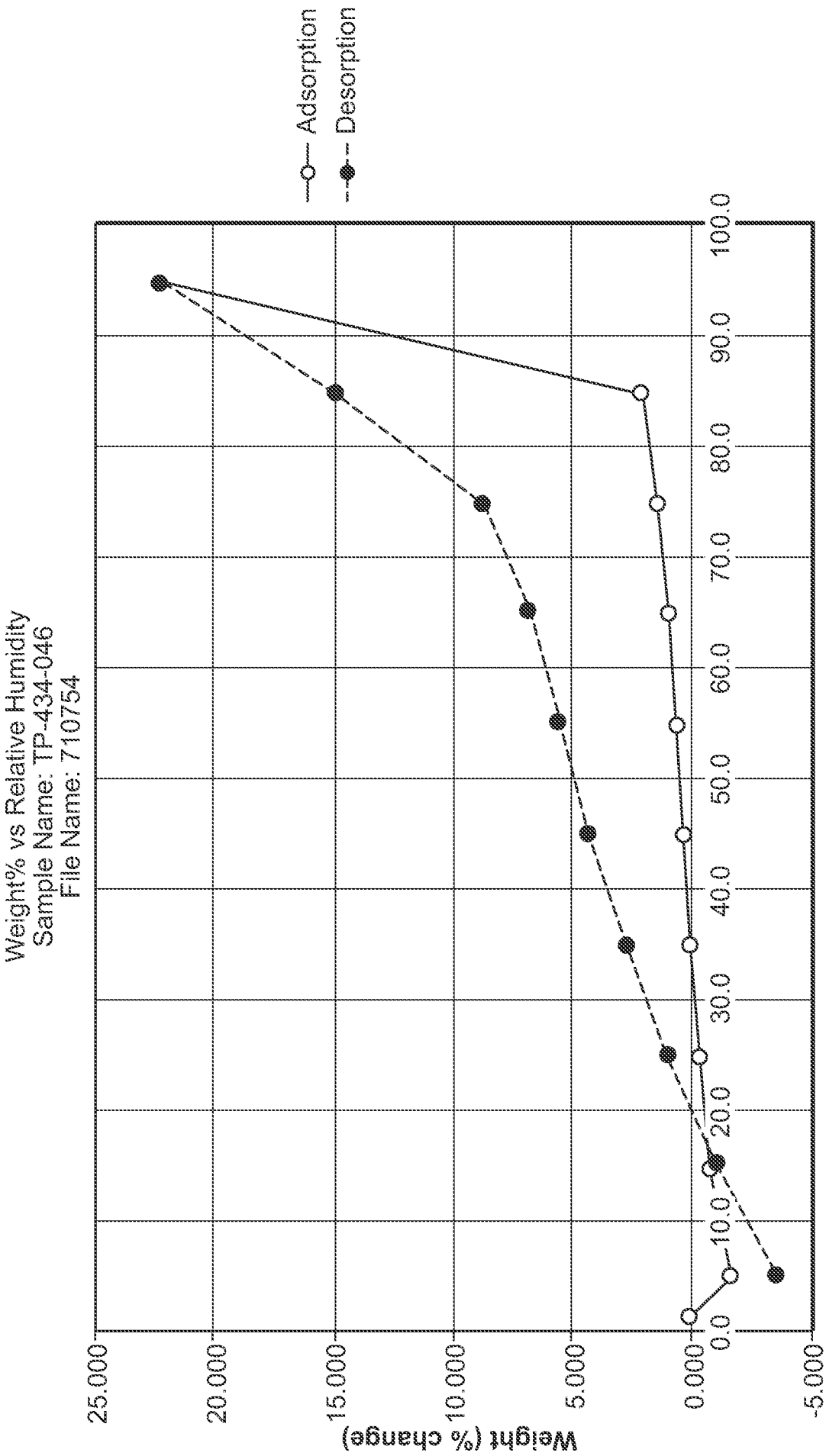

Weight% vs Relative Humidity
Sample Name: TP-434-046
File Name: 710754
Adsorption
Desorption
Weight (% change)
25.000
20.000
15.000
10.000
5.000
0.000
-5.000
0.0
10.0
20.0
30.0
40.0
50.0
60.0
70.0
80.0
90.0
100.0
%RH

FIG. 12

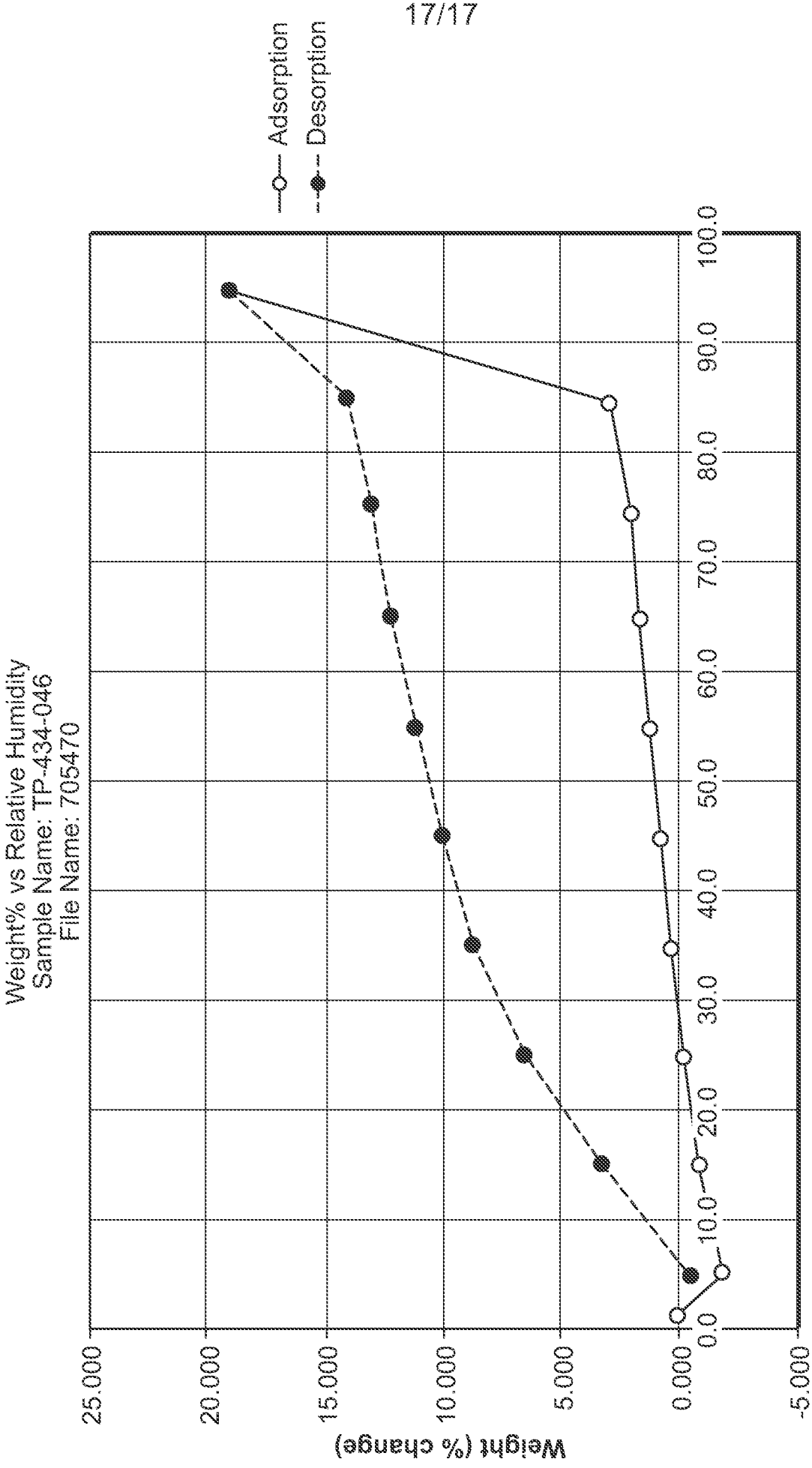

Weight% vs Relative Humidity
Sample Name: TP-434-046
File Name: 705470
Adsorption
Desorption
Weight (% change)
25.000
20.000
15.000
10.000
5.000
0.000
-5.000
0.0
10.0
20.0
30.0
40.0
50.0
60.0
70.0
80.0
90.0
100.0
%RH

FIG. 13