Fig. 1

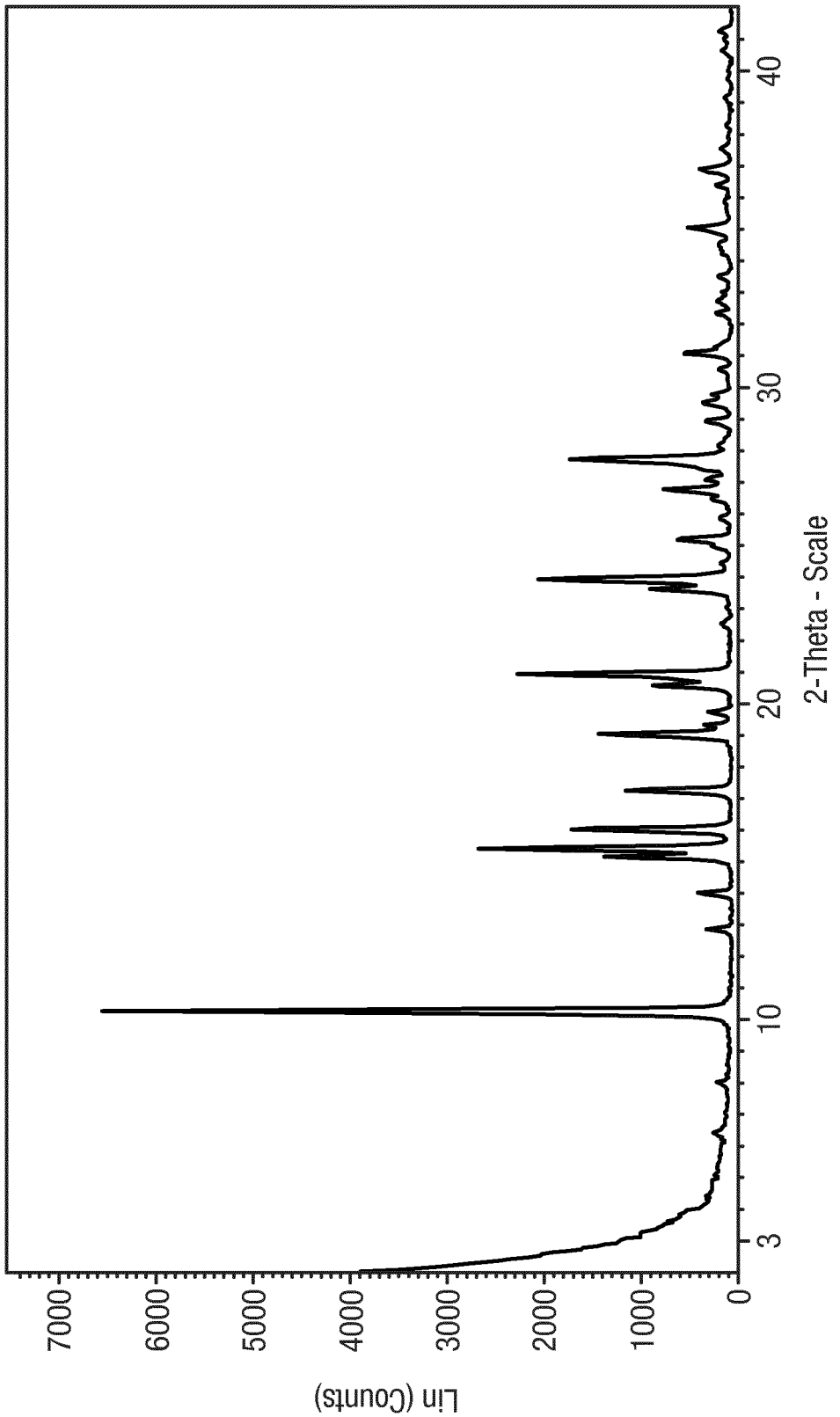

Lin (Counts)
0
1000
2000
3000
4000
5000
6000
7000
3
10
20
30
40
2-Theta - Scale

Fig. 2

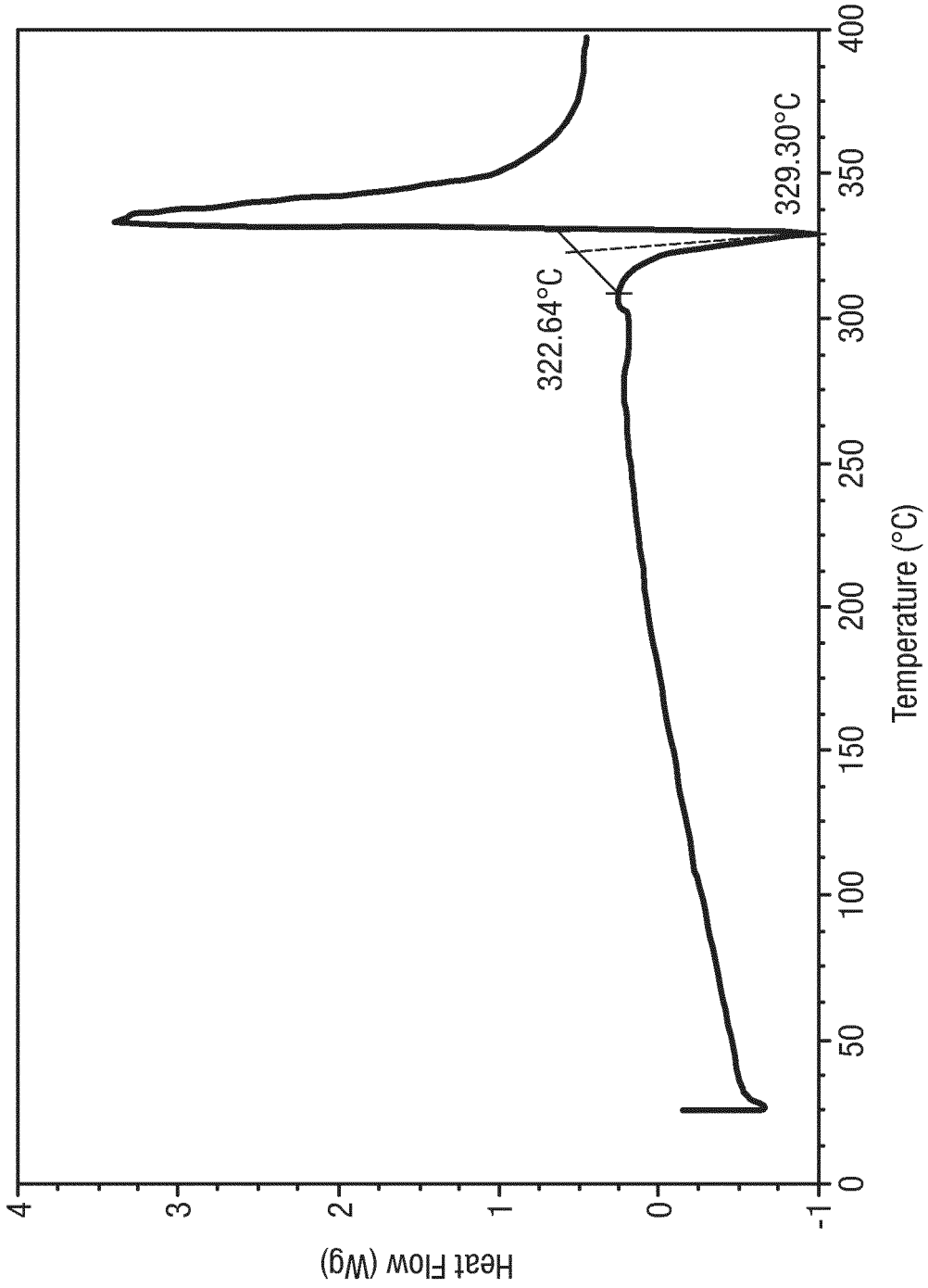

329.30°C
322.64°C
Heat Flow (Wg)
Temperature (°C)
4
3
2
1
0
-1
0
50
100
150
200
250
300
350
400

Fig. 3

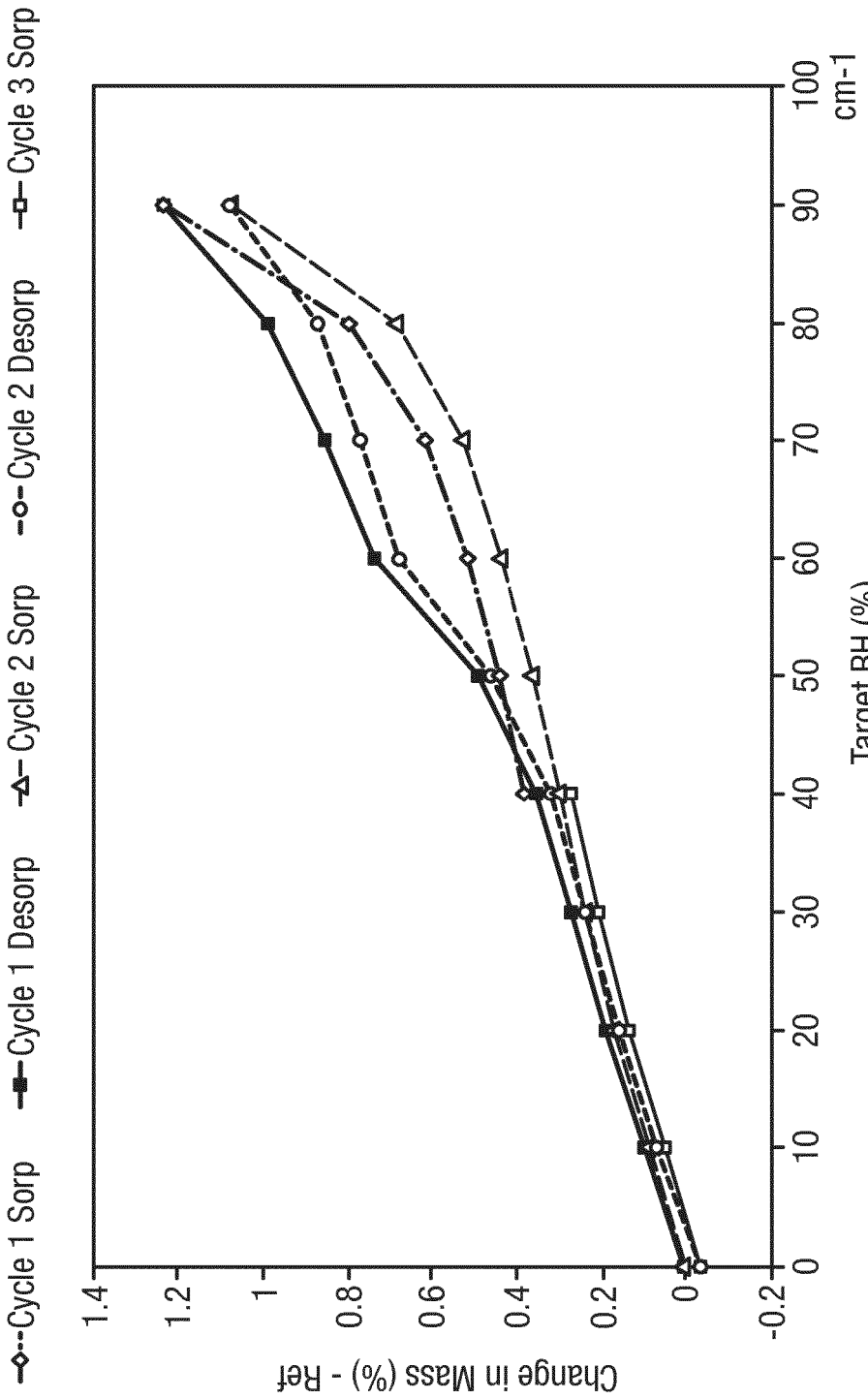

Cycle 1 Sorp
Cycle 1 Desorp
Cycle 2 Sorp
Cycle 2 Desorp
Cycle 3 Sorp
Change in Mass (%) - Ref
1.4
1.2
1
0.8
0.6
0.4
0.2
0
-0.2
0
10
20
30
40
50
60
70
80
90
100
cm-1
Target RH (%)

Fig. 4

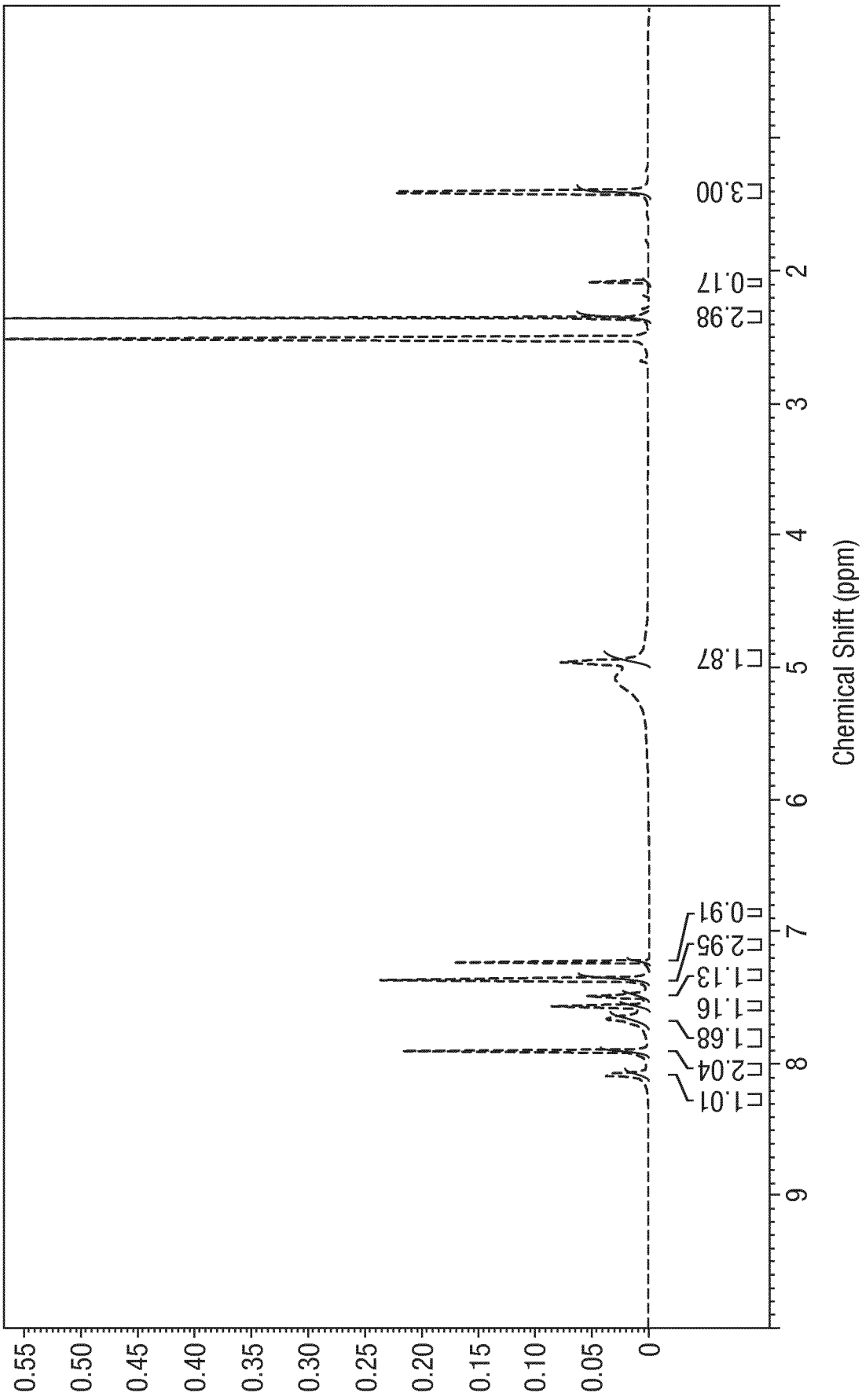

3.00
0.17
2.98
1.87
0.91
2.95
1.13
1.16
1.68
2.04
1.01
0.55
0.50
0.45
0.40
0.35
0.30
0.25
0.20
0.15
0.10
0.05
0
2
3
4
5
6
7
8
9
Chemical Shift (ppm)

Fig. 5

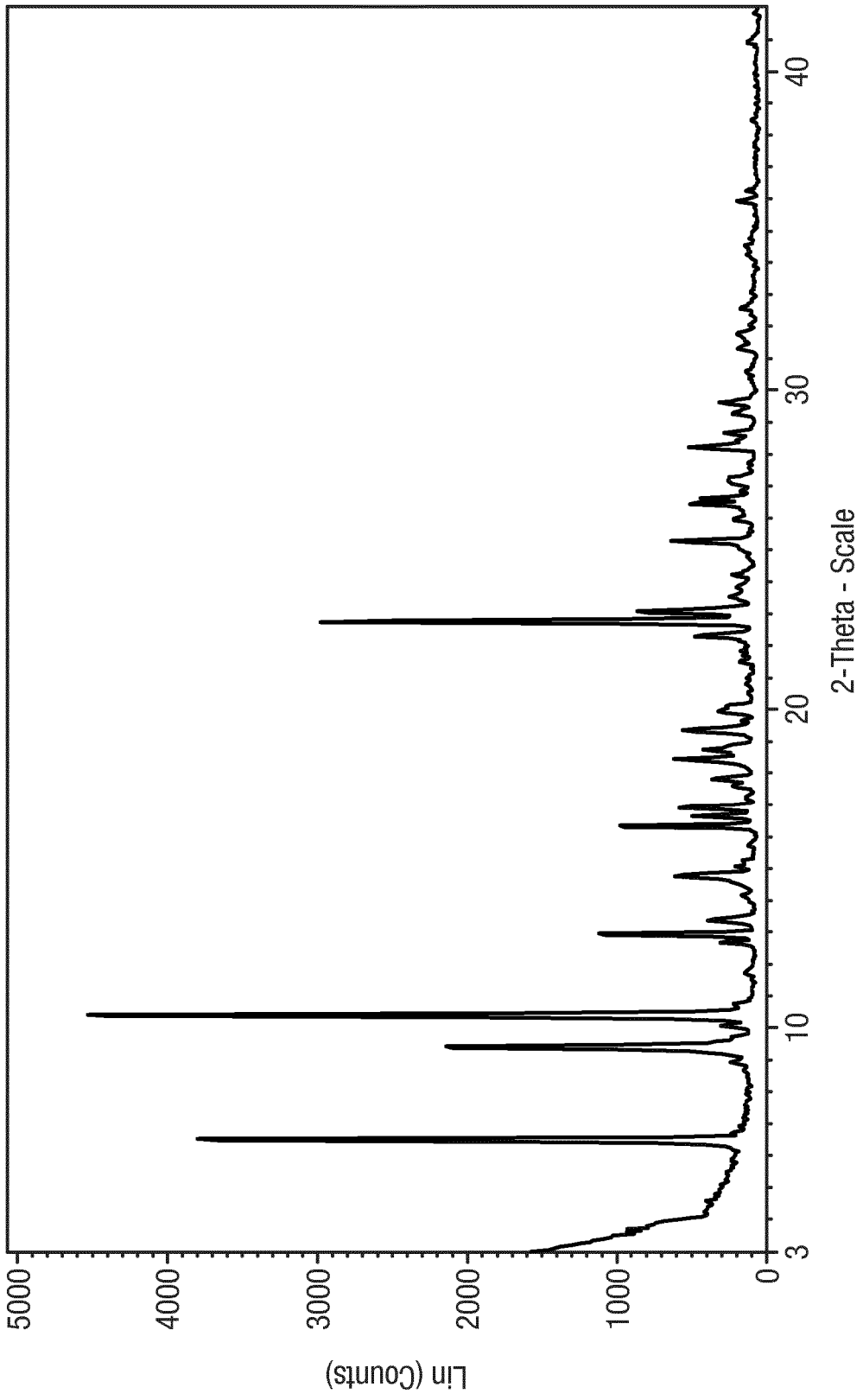

Lin (Counts)
5000
4000
3000
2000
1000
0
3
10
20
30
40
2-Theta - Scale

Fig. 6

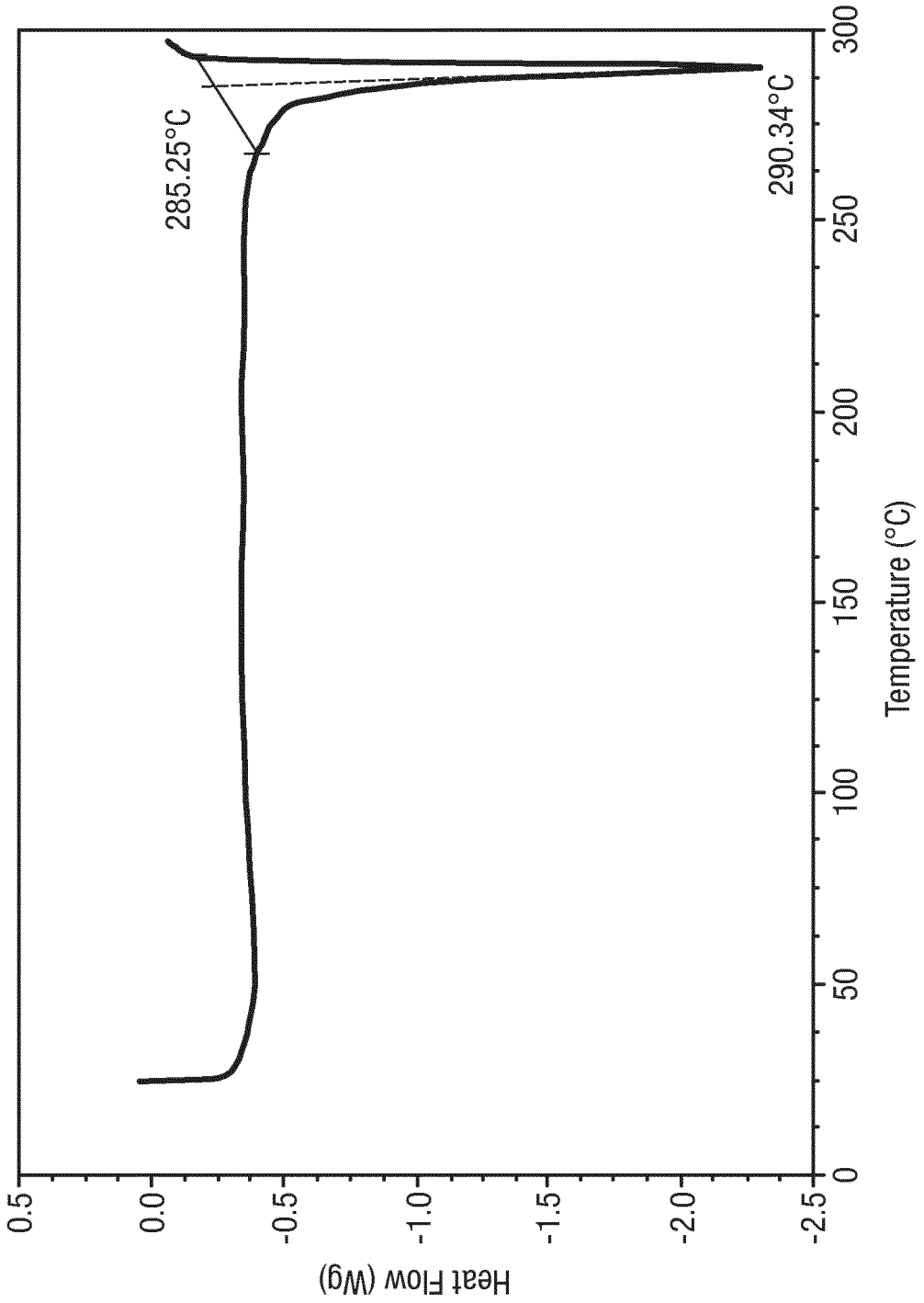
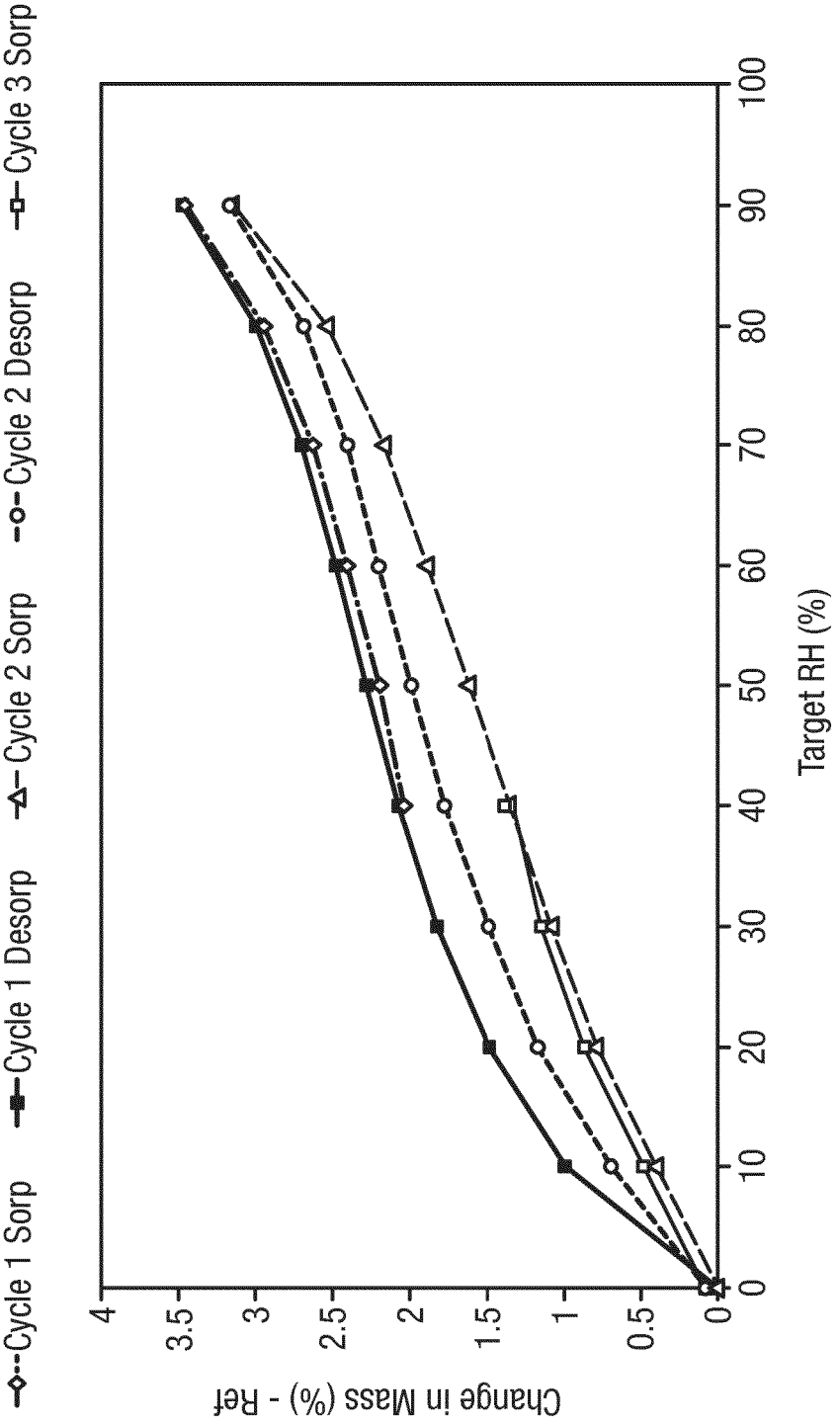

285.25°C
290.34°C
Heat Flow (Wg)
0.5
0.0
-0.5
-1.0
-1.5
-2.0
-2.5
Temperature (°C)
0
50
100
150
200
250
300

Fig. 7


Cycle 1 Sorp
Cycle 1 Desorp
Cycle 2 Sorp
Cycle 2 Desorp
Cycle 3 Sorp
Change in Mass (%) - Ref
Target RH (%)
0
0.5
1
1.5
2
2.5
3
3.5
4
0
10
20
30
40
50
60
70
80
90
100

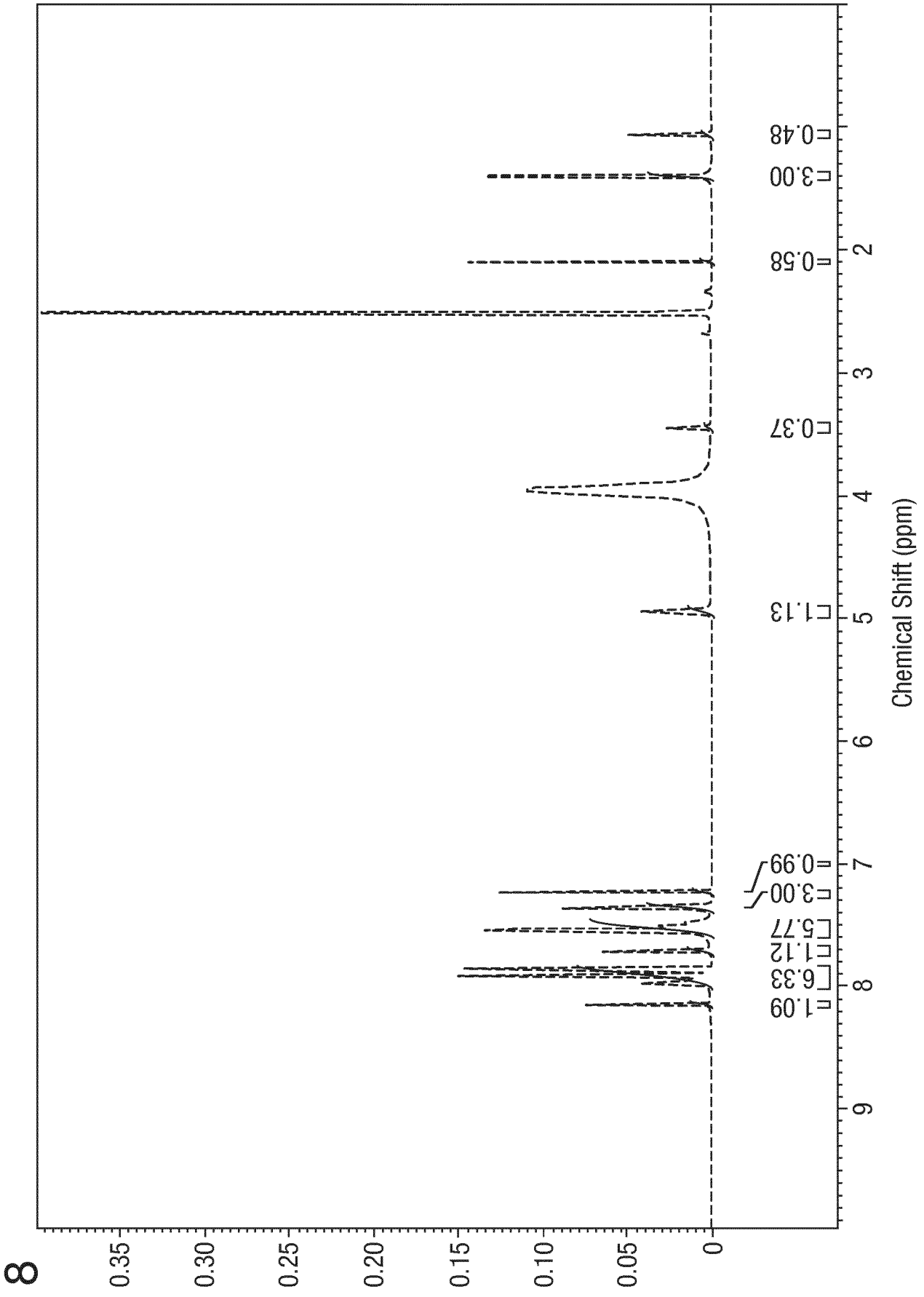

0.35
0.30
0.25
0.20
0.15
0.10
0.05
0
9
8
7
6
5
4
3
2
Chemical Shift (ppm)
1.09
6.33
1.12
5.77
3.00
0.99
1.13
0.37
0.58
3.00
0.48

Fig. 8

Fig. 9

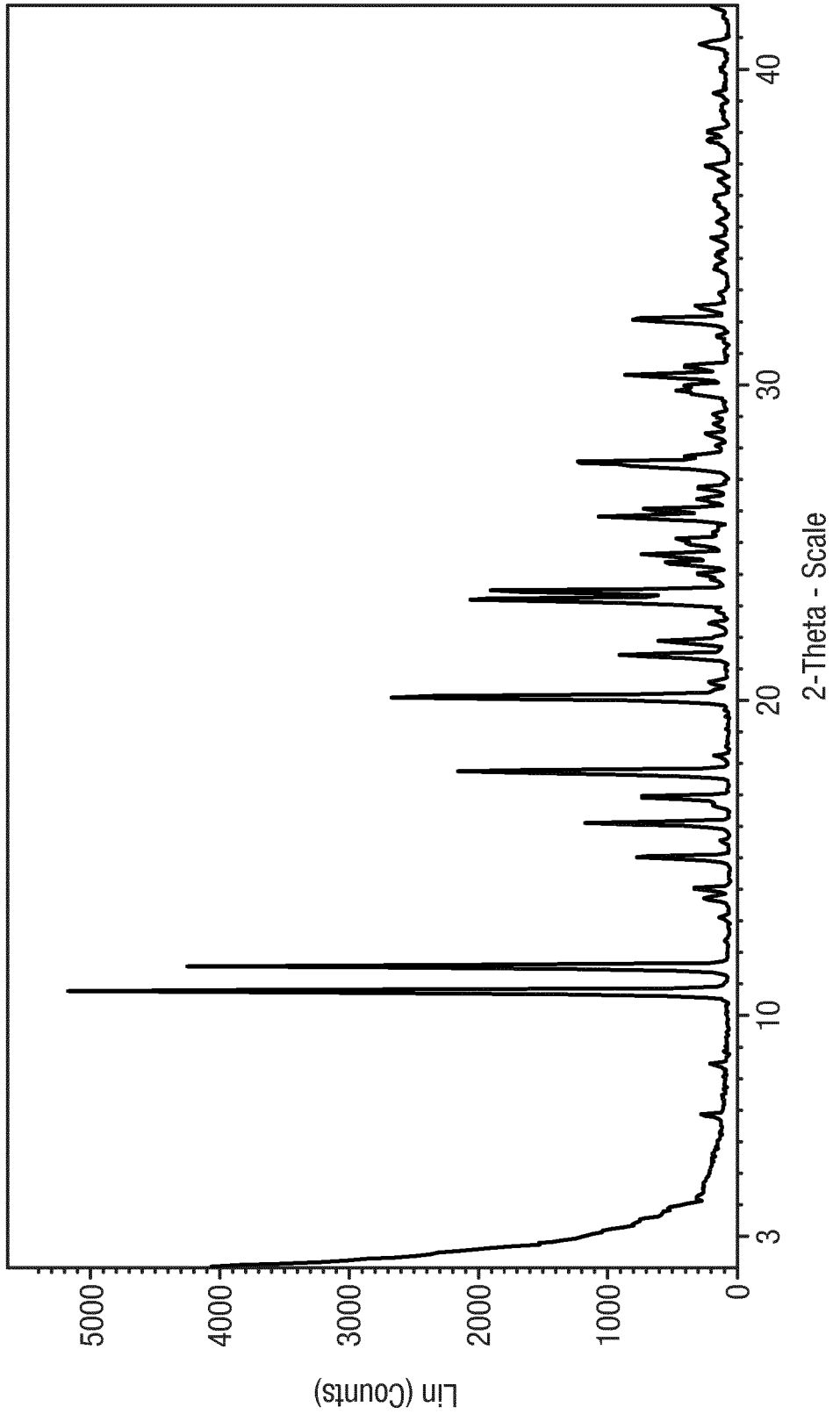

Lin (Counts)
0
1000
2000
3000
4000
5000
3
10
20
30
40
2-Theta - Scale

Fig. 10

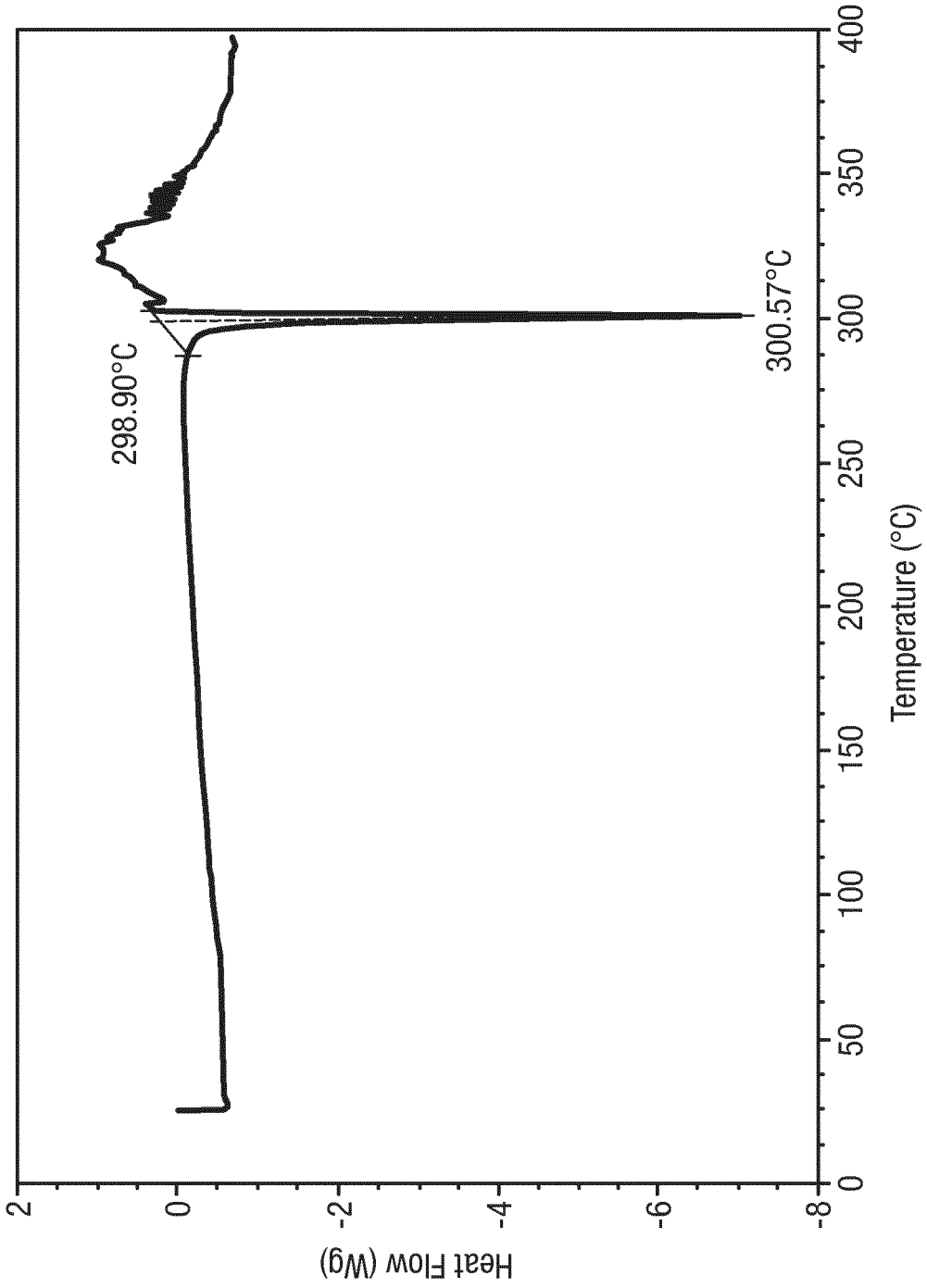

298.90°C
300.57°C
Heat Flow (Wg)
Temperature (°C)
2
0
-2
-4
-6
-8
0
50
100
150
200
250
300
350
400

Fig. 11

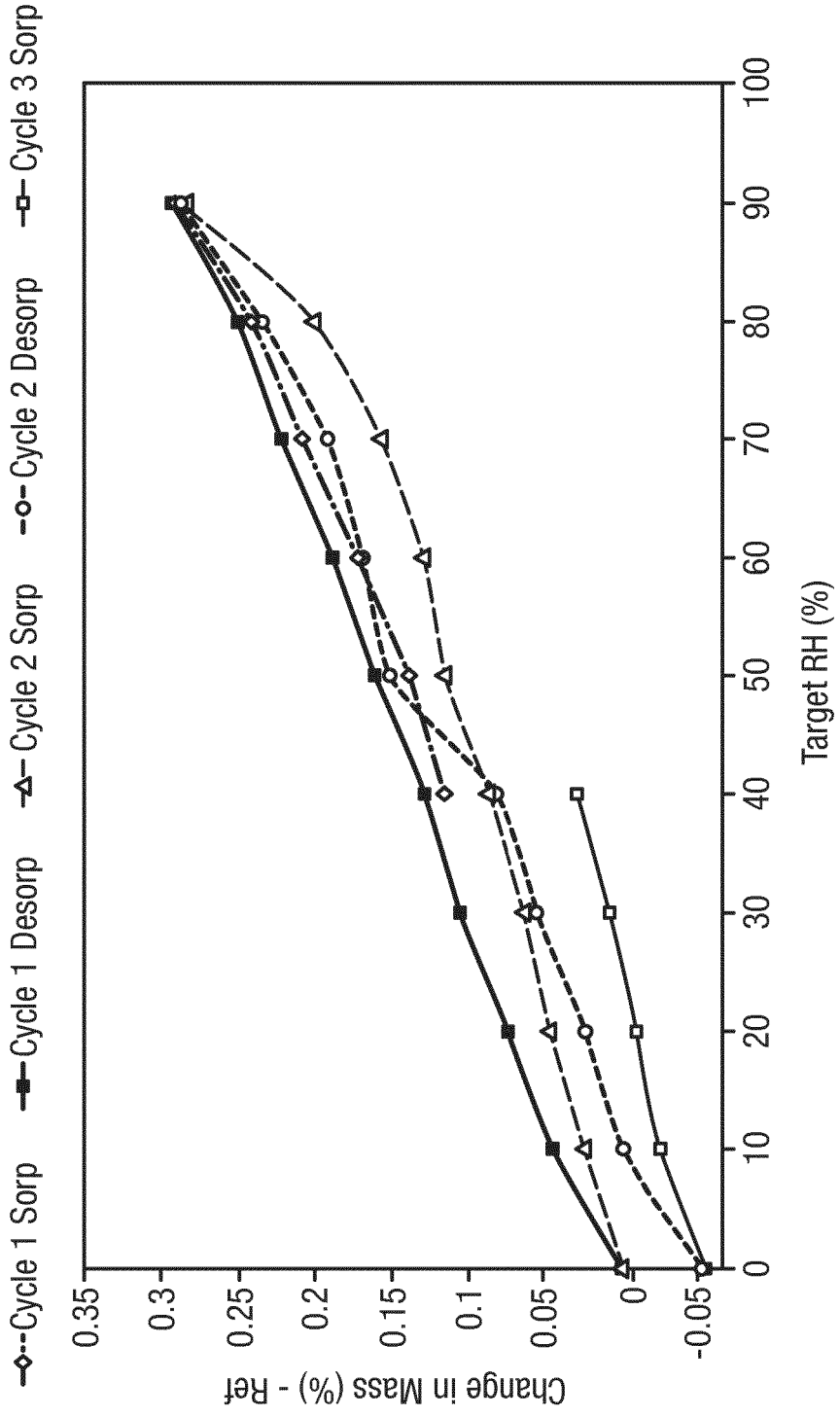

Cycle 1 Sorp
Cycle 1 Desorp
Cycle 2 Sorp
Cycle 2 Desorp
Cycle 3 Sorp
Change in Mass (%) - Ref
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
-0.05
Target RH (%)
0
10
20
30
40
50
60
70
80
90
100

Fig. 12

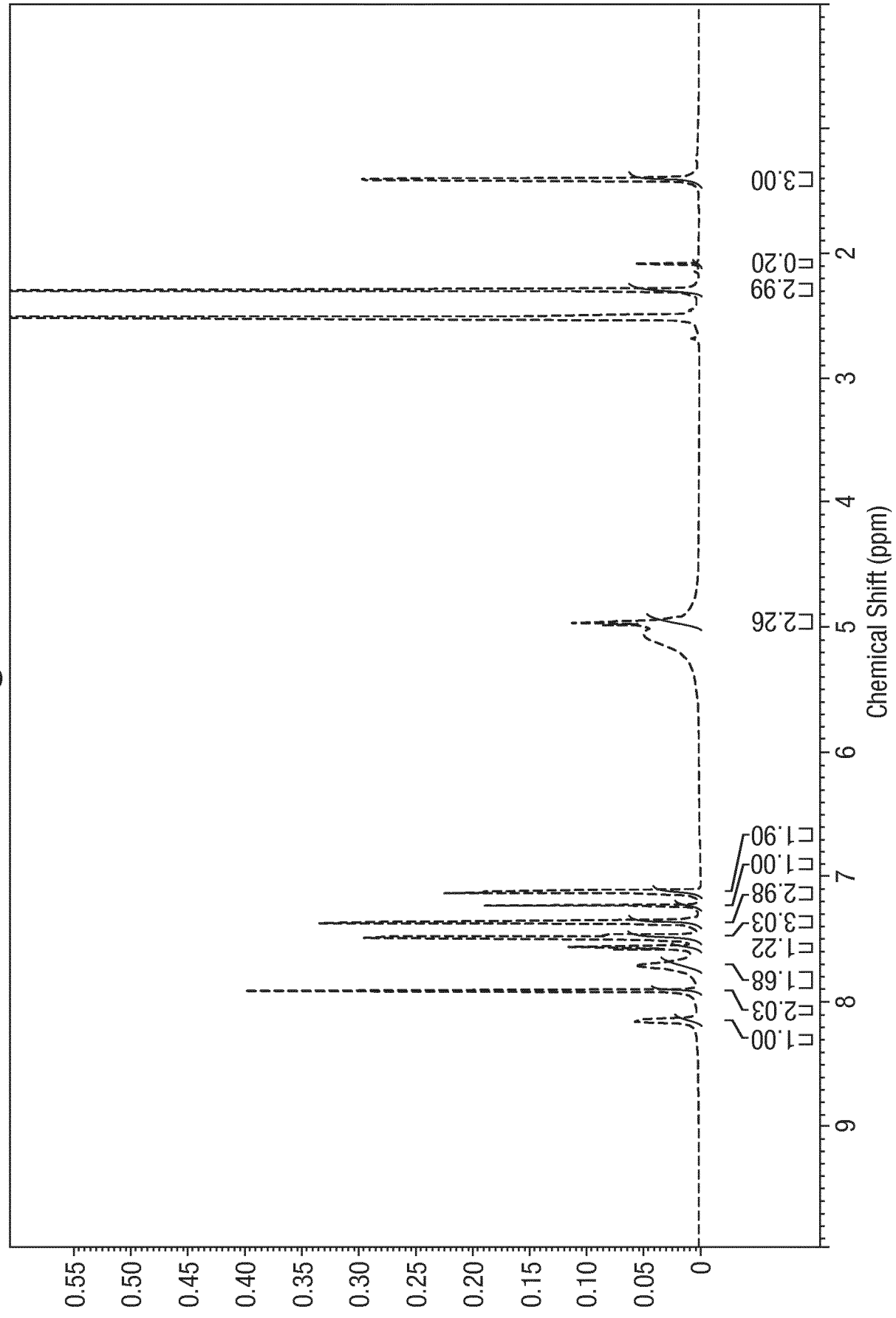

3.00
0.20
2.99
2.26
1.90
1.00
2.98
3.03
1.22
1.68
2.03
1.00
Chemical Shift (ppm)
0.55
0.50
0.45
0.40
0.35
0.30
0.25
0.20
0.15
0.10
0.05
0

Fig. 13

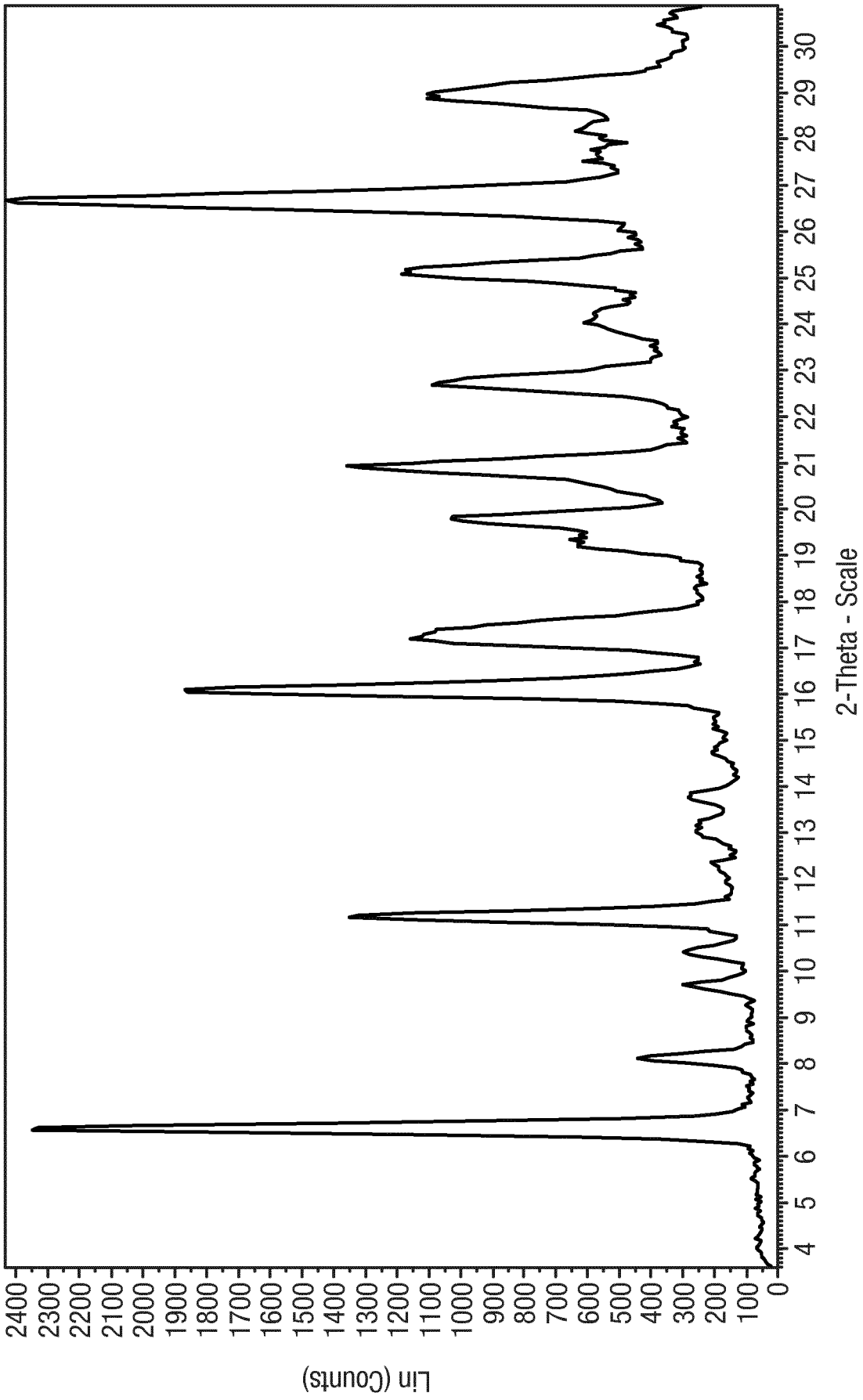

Lin (Counts)
2-Theta - Scale
0
100
200
300
400
500
600
700
800
900
1000
1100
1200
1300
1400
1500
1600
1700
1800
1900
2000
2100
2200
2300
2400
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30

Fig. 14

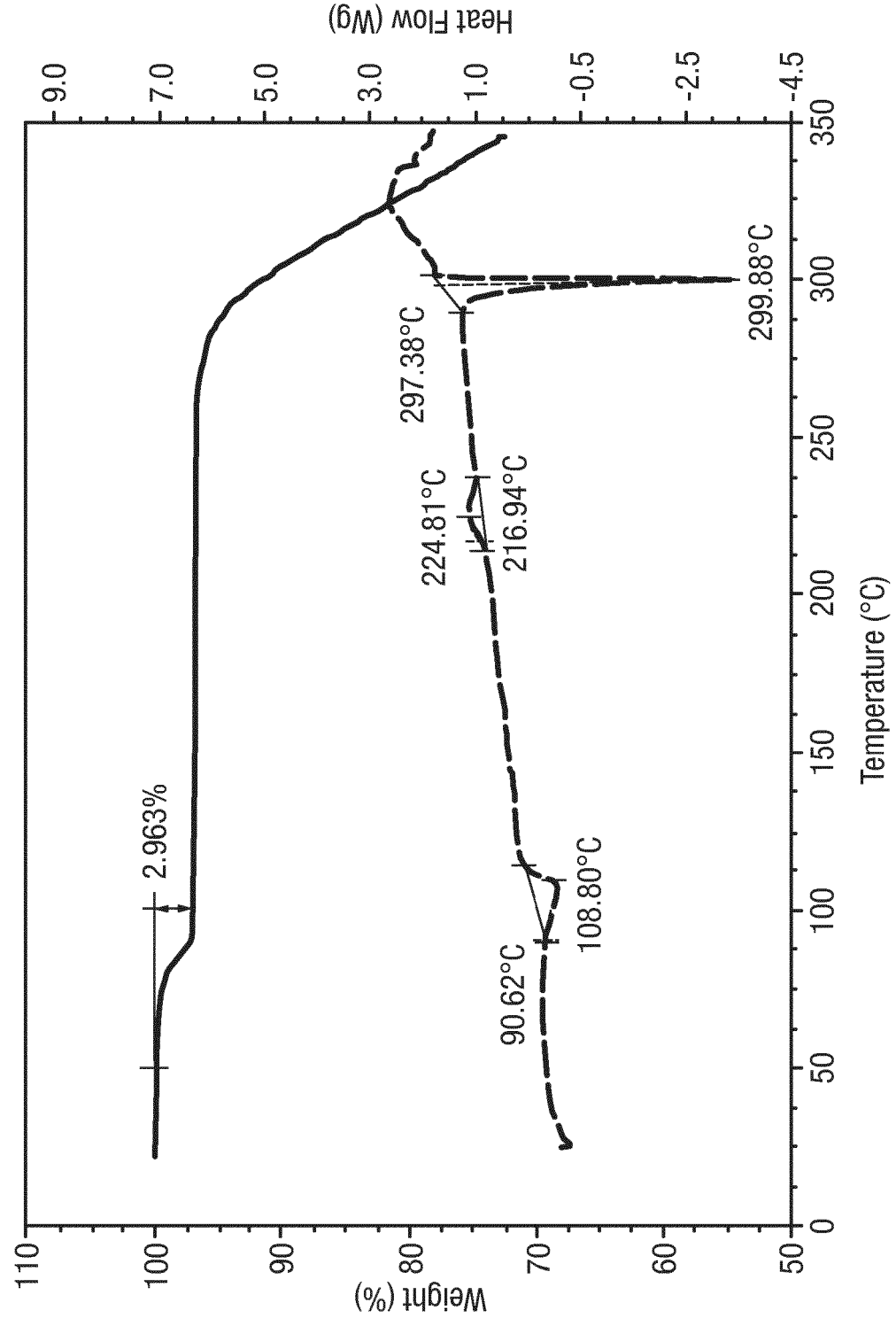
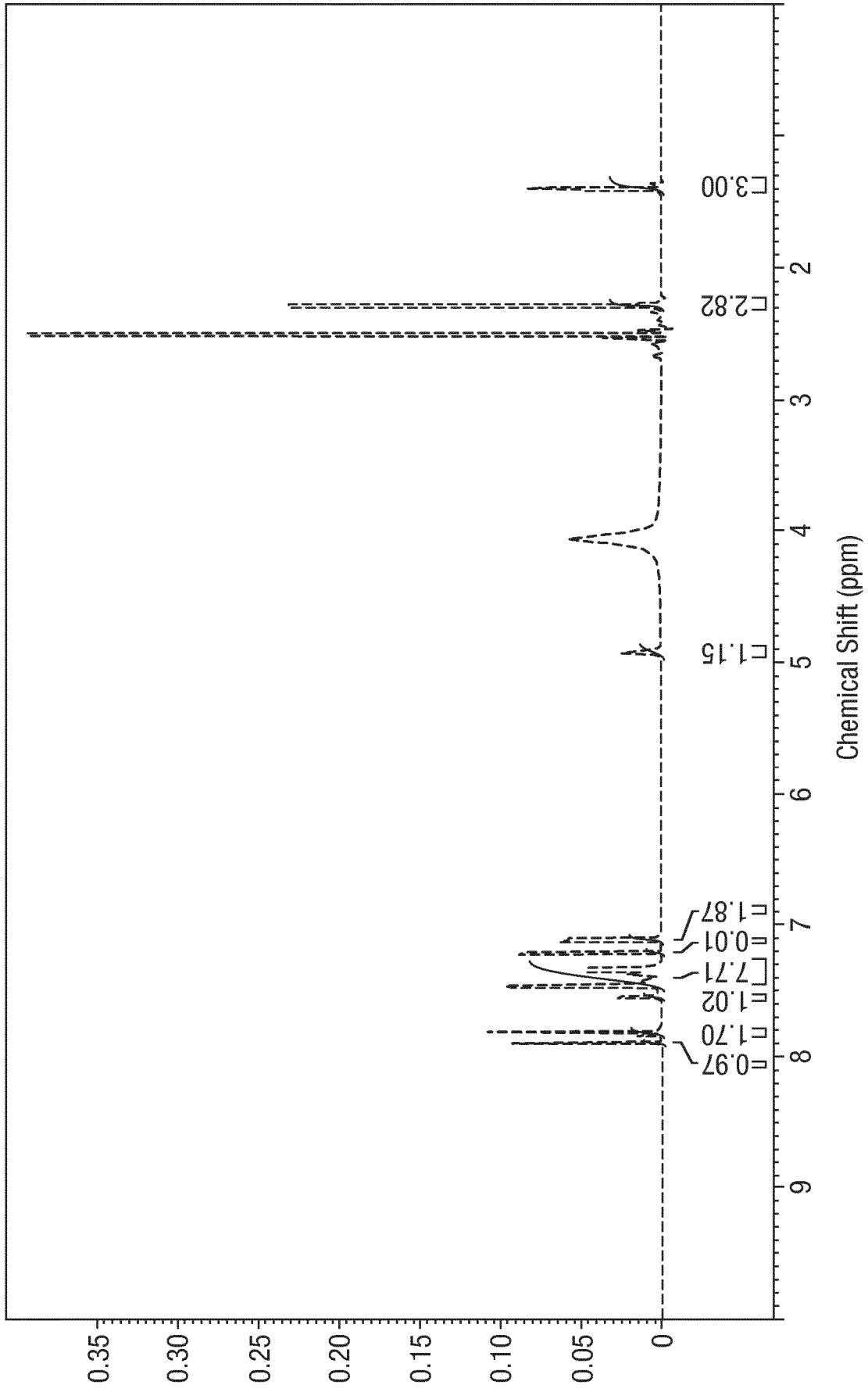

Heat Flow (Wg)
9.0
7.0
5.0
3.0
1.0
-0.5
-2.5
-4.5
Weight (%)
110
100
90
80
70
60
50
Temperature (°C)
0
50
100
150
200
250
300
350
2.963%
90.62°C
108.80°C
224.81°C
216.94°C
297.38°C
299.88°C

Fig. 15


3.00
2.82
1.15
1.87
0.01
7.71
1.02
1.70
0.97
0.35
0.30
0.25
0.20
0.15
0.10
0.05
0
2
3
4
5
6
7
8
9
Chemical Shift (ppm)