Supplementary Material for

Communication

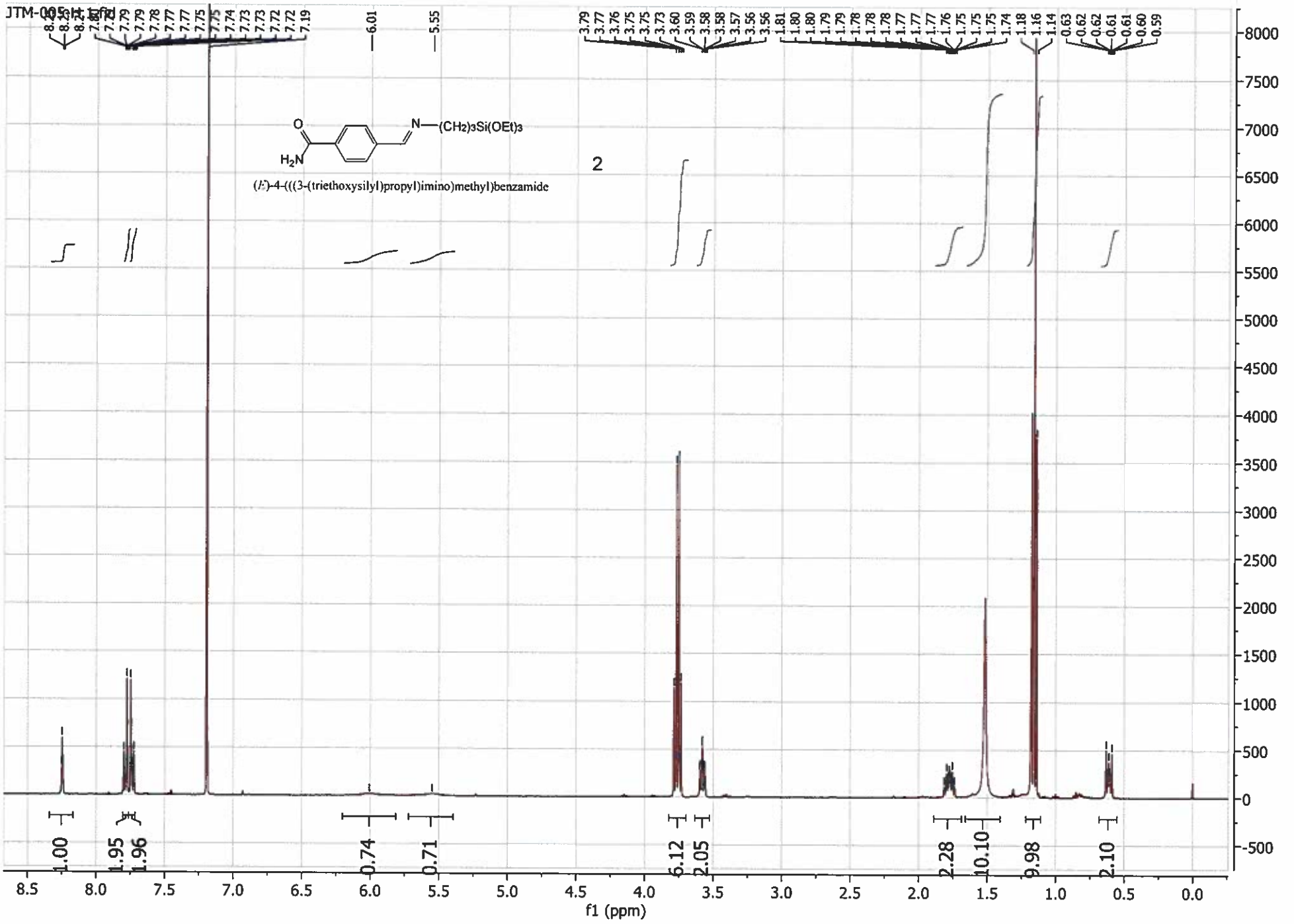
Synthesis of Aminopropyltriethoxysilyl Substituted Imines and Amides

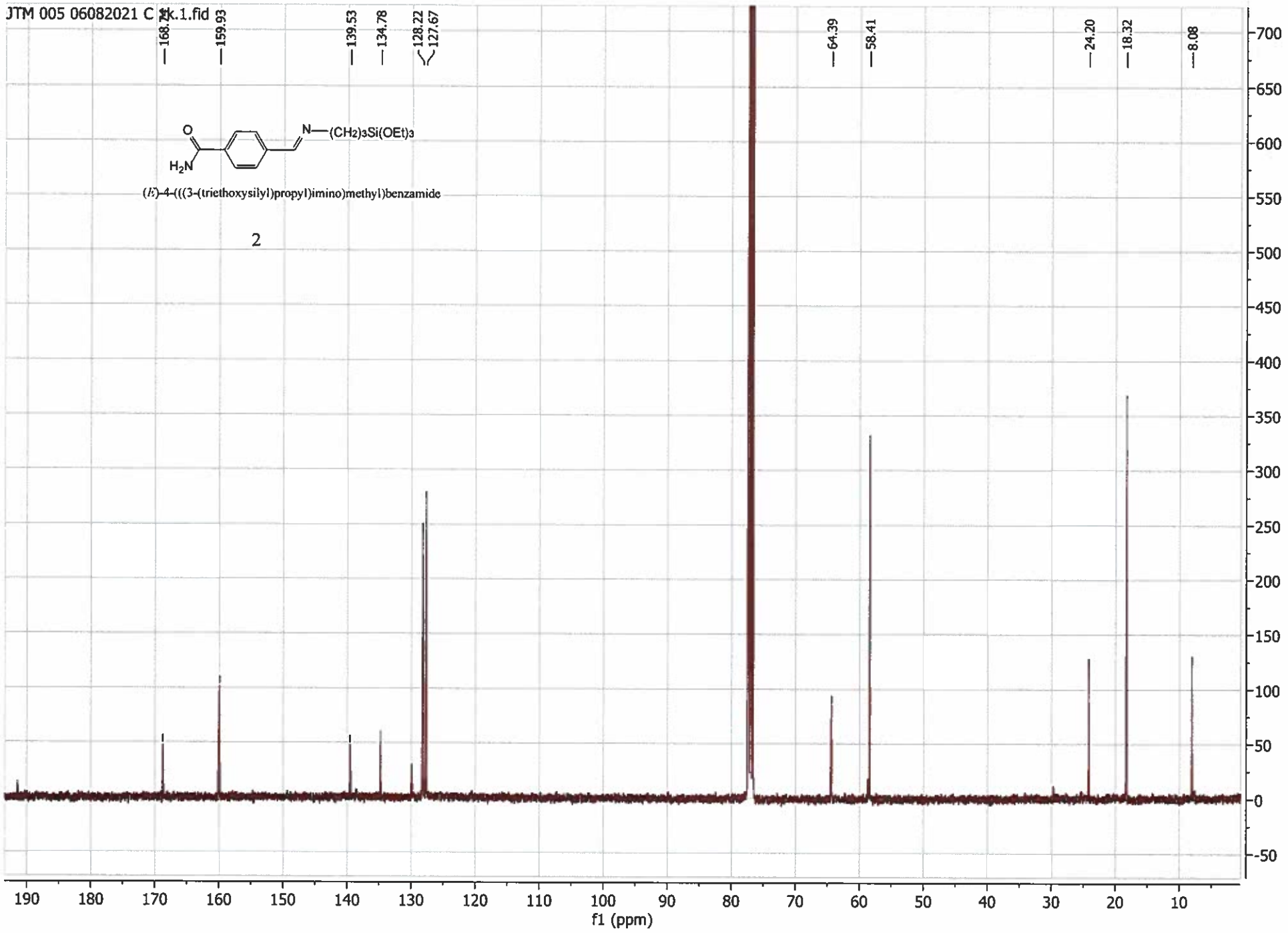
Surya R. Banks, J. Tanner Morningstar, and Mark E. Welker*

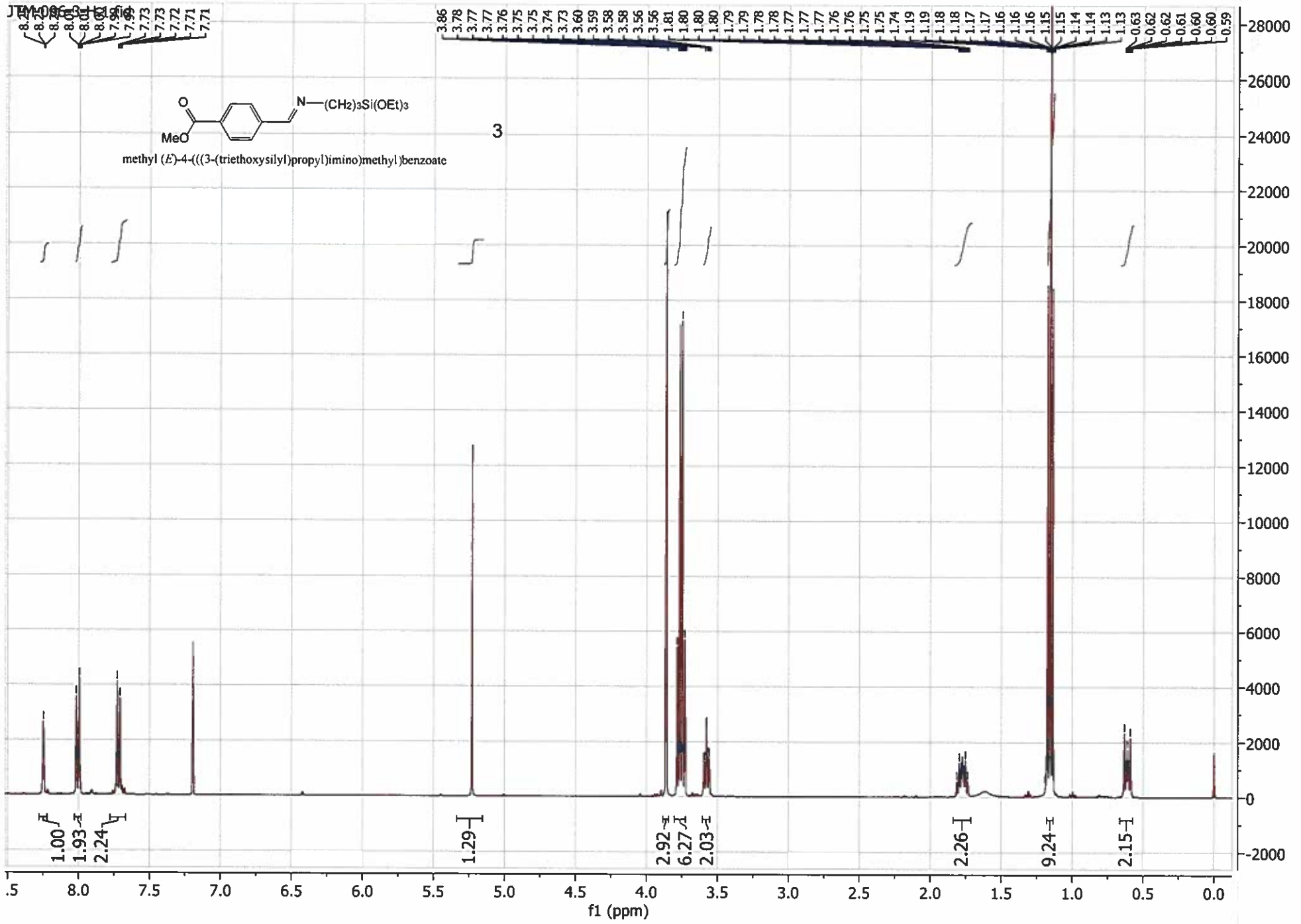
suryarbanks@gmail.com, mornjt20@wfu.edu

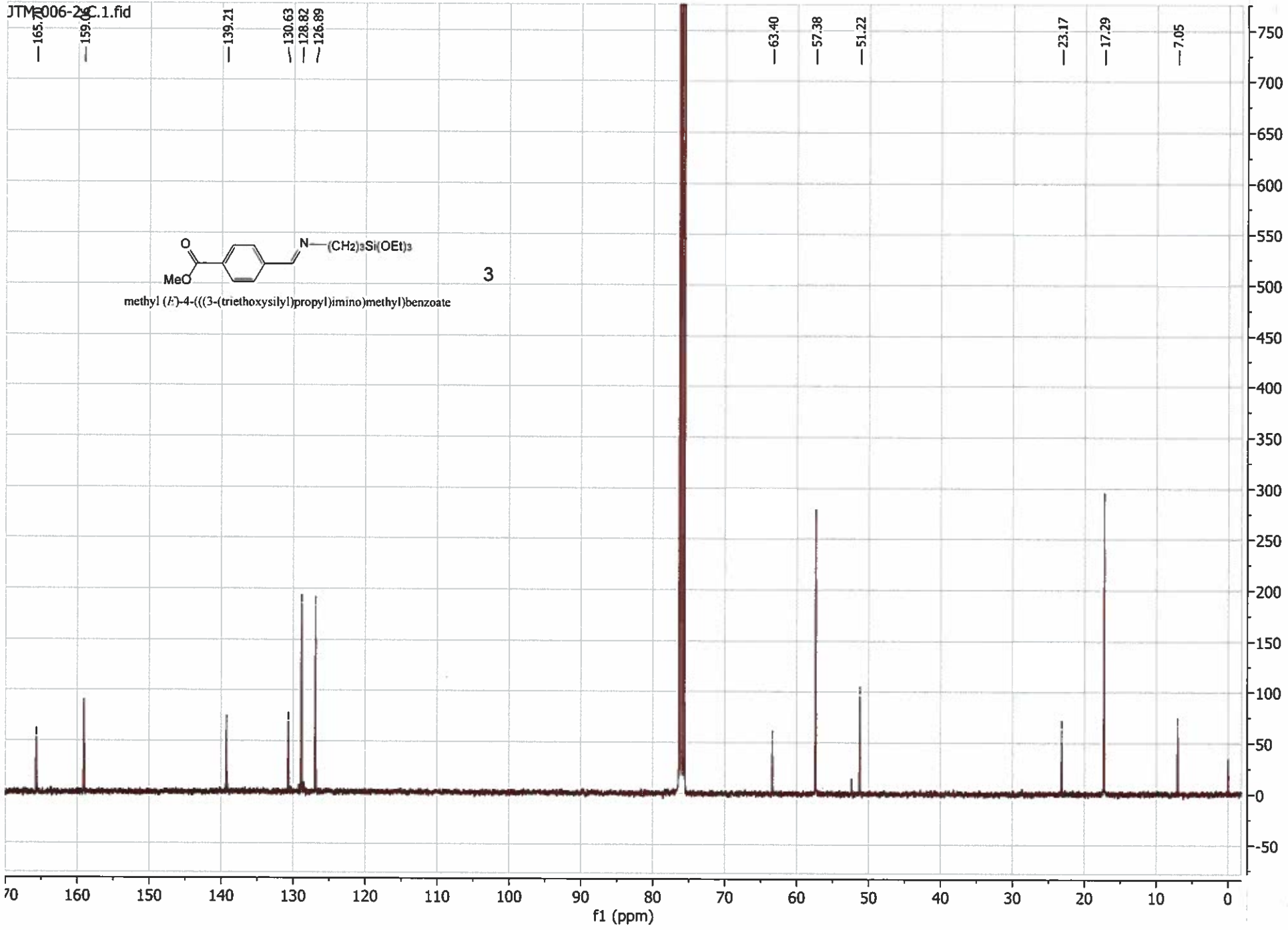
Wake Forest University, Department of Chemistry and Center for Functional Materials, Winston-Salem, NC 27101

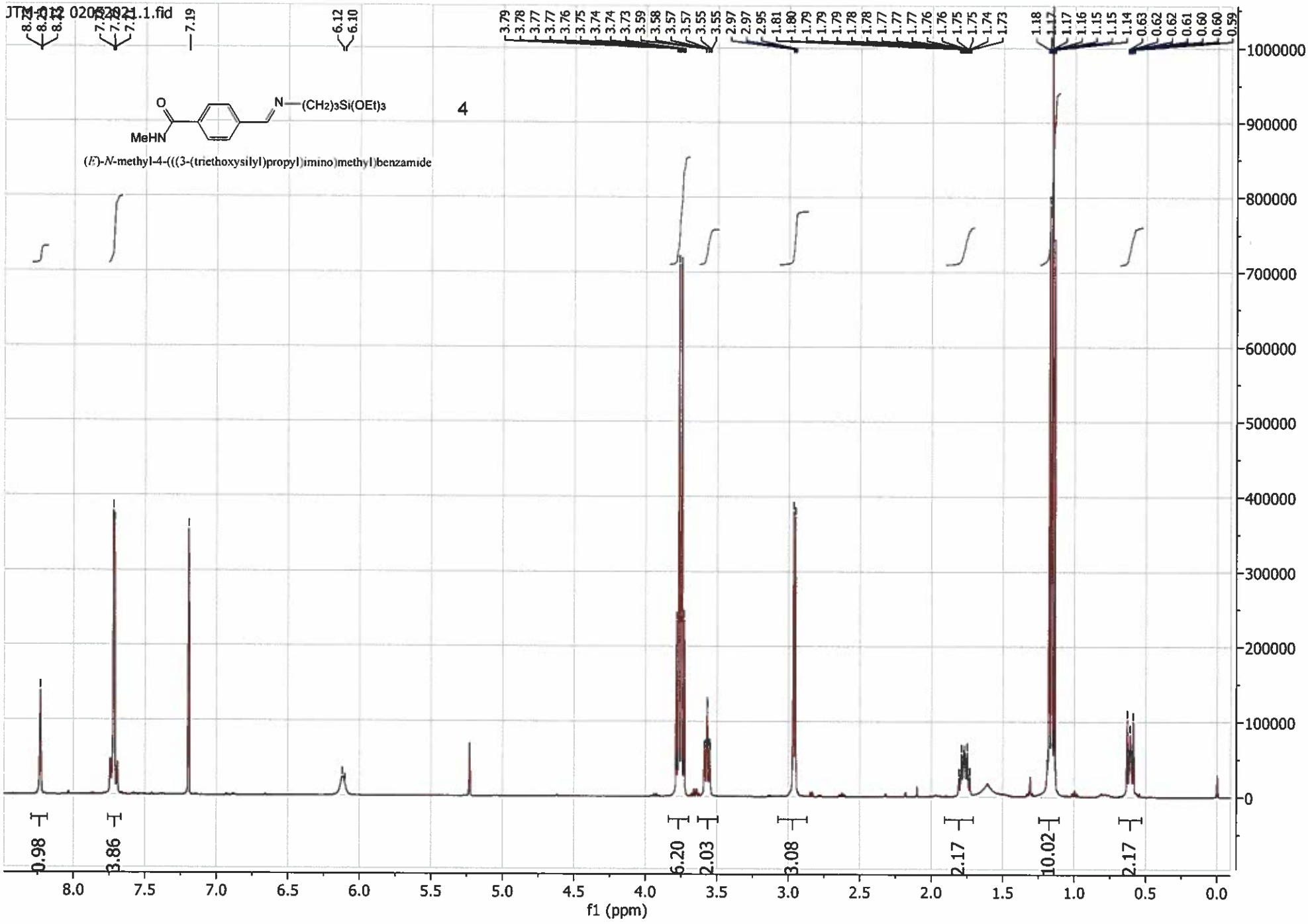
* Correspondence: welker@wfu.edu; Tel.: 1-336-702-1953

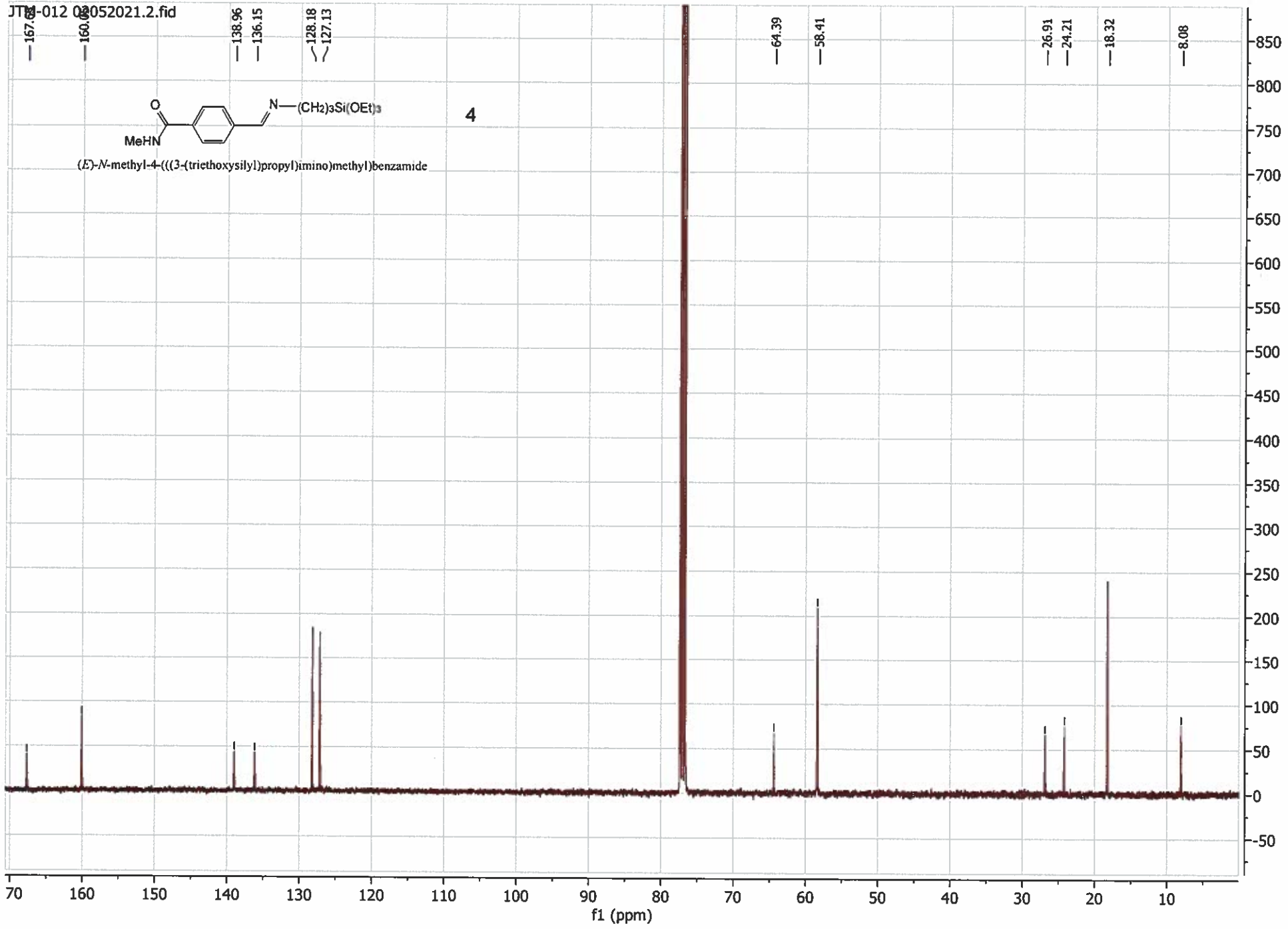

JTM-005-H-1.fid
8.21
8.21
7.79
7.79
7.78
7.77
7.77
7.75
7.75
7.74
7.73
7.73
7.72
7.72
7.19
6.01
5.55
3.79
3.77
3.76
3.75
3.75
3.73
3.60
3.59
3.58
3.58
3.57
3.56
1.81
1.80
1.80
1.79
1.79
1.78
1.78
1.78
1.77
1.77
1.77
1.76
1.75
1.75
1.75
1.74
1.18
1.16
1.14
0.63
0.62
0.62
0.61
0.61
0.60
0.59
O
N—(CH2)3Si(OEt)3
H2N
(E)-4-(((3-(triethoxysilyl)propyl)imino)methyl)benzamide
2
1.00
1.95
1.96
0.74
0.71
6.12
2.05
2.28
10.10
9.98
2.10
8.5
8.0
7.5
7.0
6.5
6.0
5.5
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
f1 (ppm)
8000
7500
7000
6500
6000
5500
5000
4500
4000
3500
3000
2500
2000
1500
1000
500
0
-500

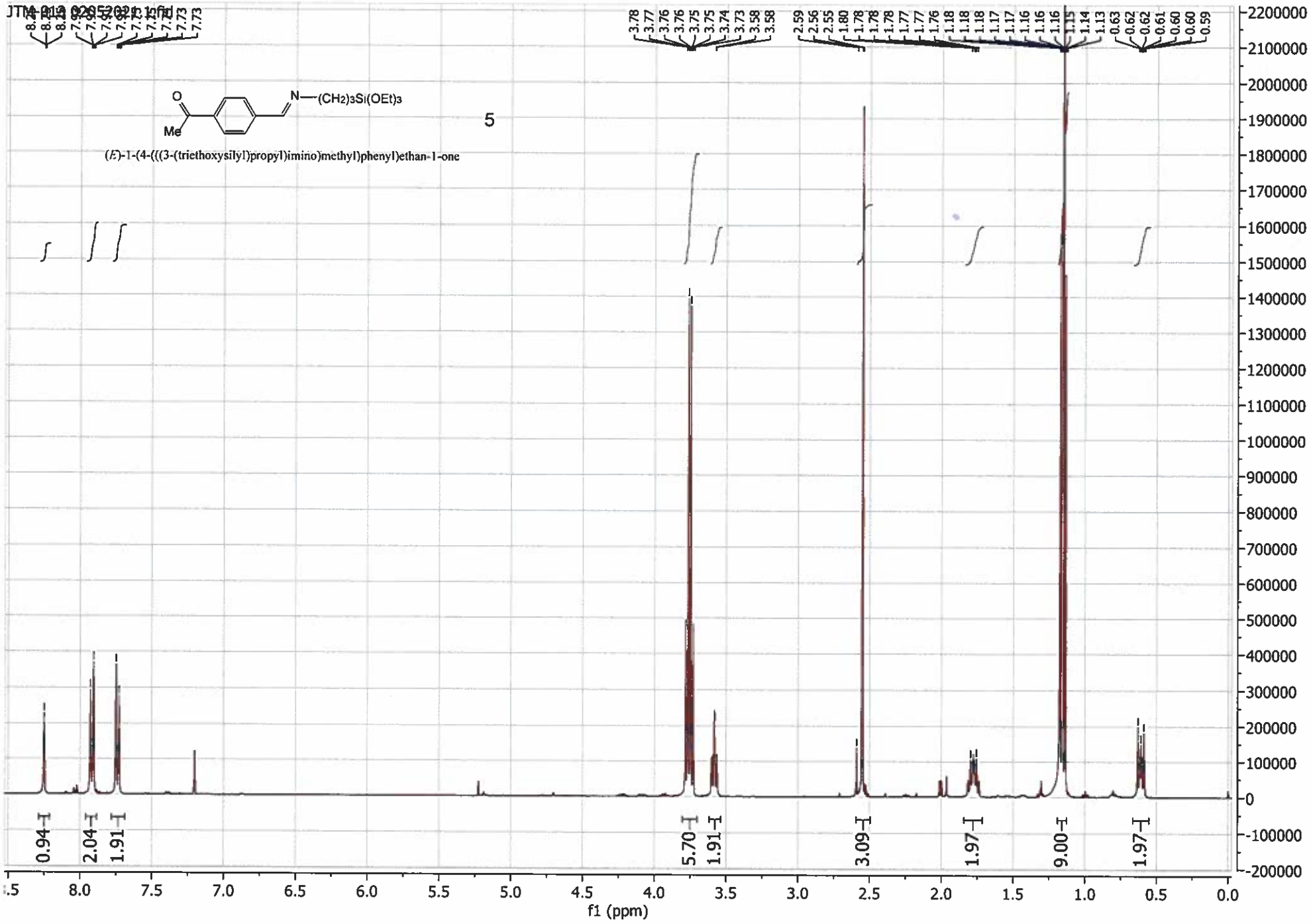

JTM 005 06082021 C 1k.1.fid
168.24
159.93
139.53
134.78
128.22
127.67
64.39
58.41
24.20
18.32
8.08
O
H2N
N—(CH2)3Si(OEt)3
(E)-4-(((3-(triethoxysilyl)propyl)imino)methyl)benzamide
2
f1 (ppm)

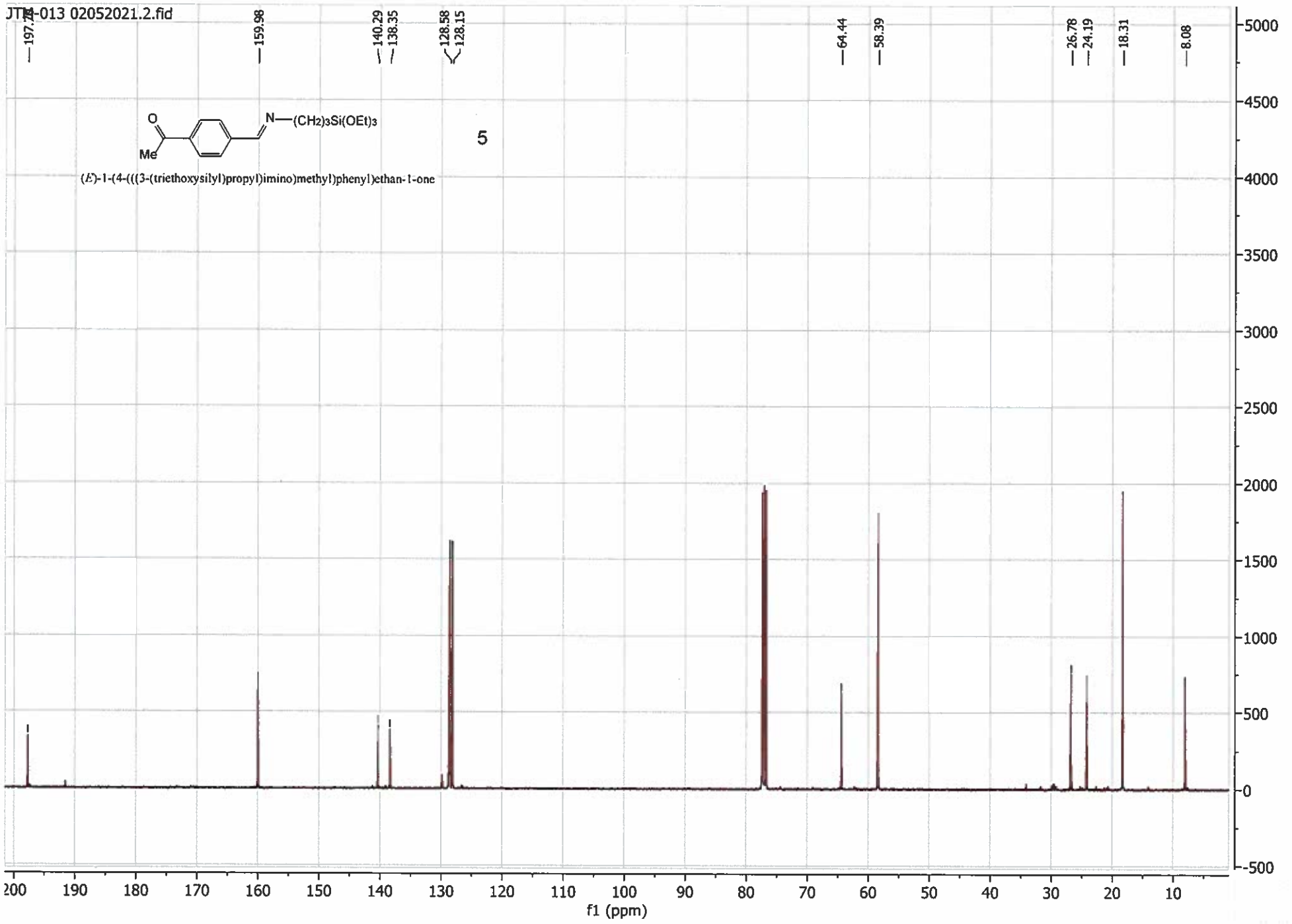

3
methyl (E)-4-(((3-(triethoxysilyl)propyl)imino)methyl)benzoate
f1 (ppm)

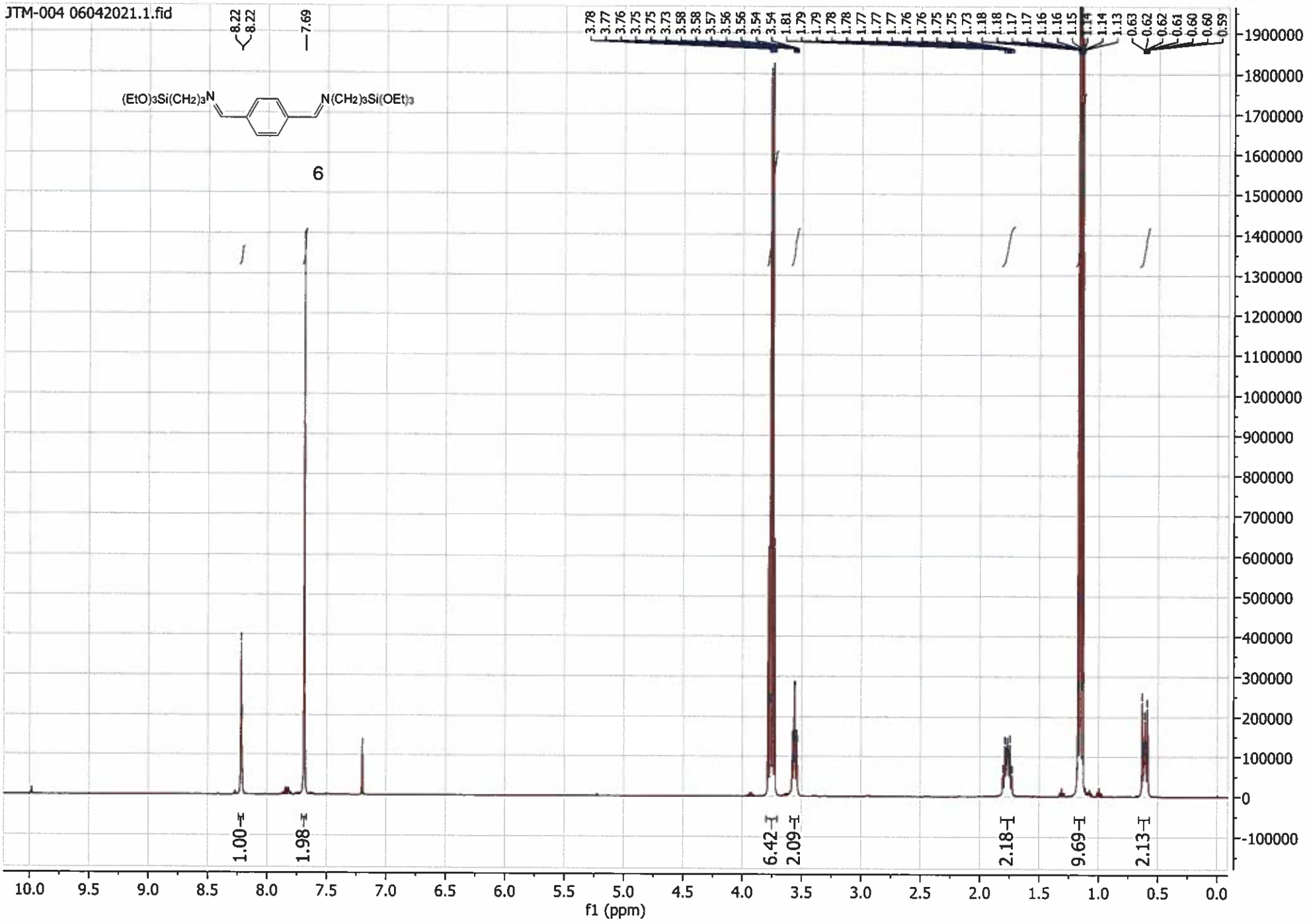

JTM-006-2-C.1.fid
165.70
159.05
139.21
130.63
128.82
126.89
63.40
57.38
51.22
23.17
17.29
7.05
O
MeO
N—(CH2)3Si(OEt)3
3
methyl (E)-4-(((3-(triethoxysilyl)propyl)imino)methyl)benzoate
f1 (ppm)

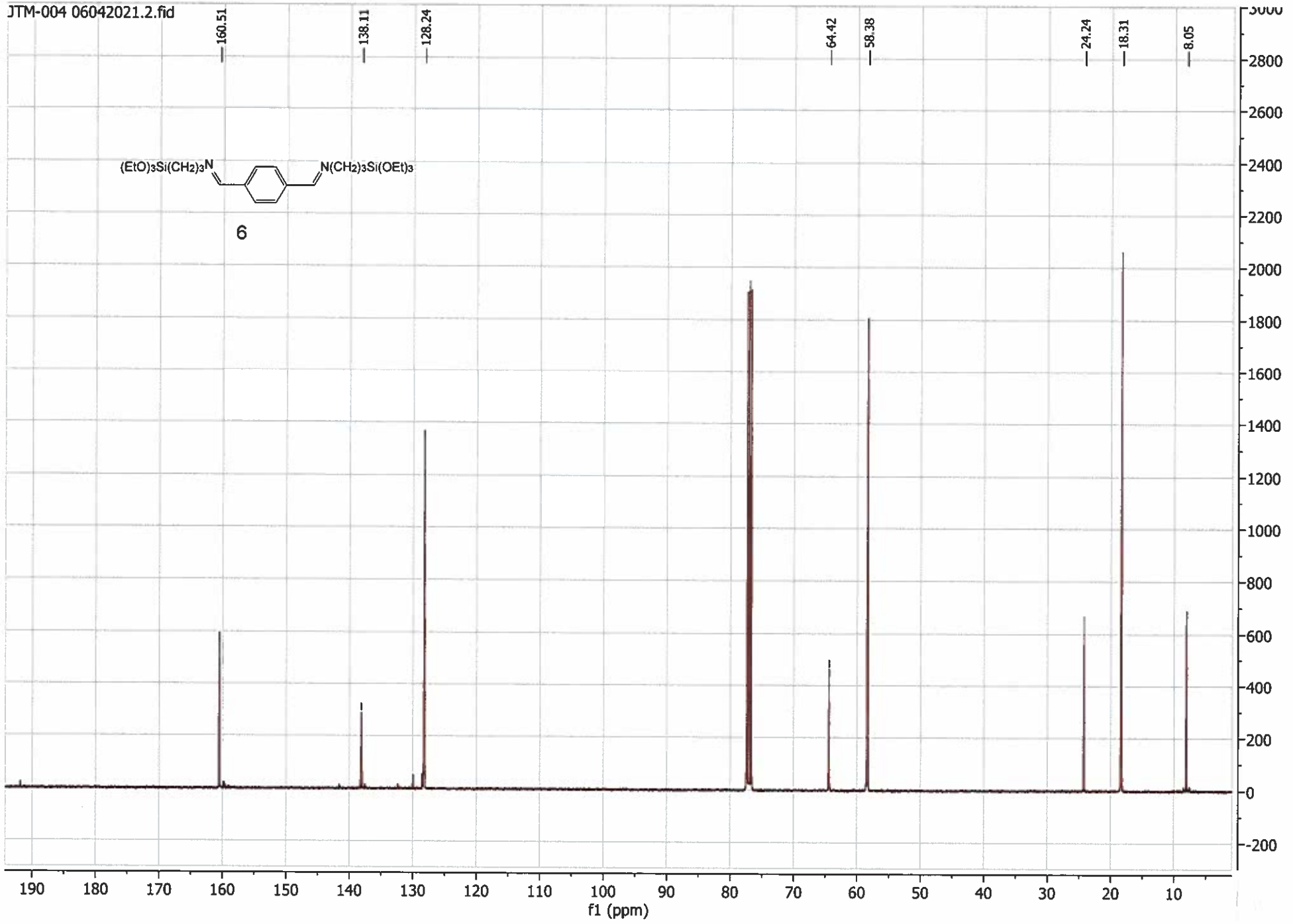

JTM-013 02052021.1.fid
8.24
8.23
8.22
8.12
7.72
7.71
7.70
7.69
7.19
6.12
6.10
3.79
3.78
3.77
3.77
3.76
3.75
3.74
3.74
3.73
3.59
3.58
3.57
3.57
3.55
3.55
2.97
2.97
2.95
1.81
1.80
1.79
1.79
1.79
1.78
1.78
1.77
1.77
1.77
1.76
1.76
1.75
1.75
1.74
1.73
1.18
1.17
1.17
1.16
1.15
1.15
1.14
0.63
0.62
0.62
0.61
0.60
0.60
0.59
O
N—(CH2)3Si(OEt)3
MeHN
4
(E)-N-methyl-4-(((3-(triethoxysilyl)propyl)imino)methyl)benzamide
1000000
900000
800000
700000
600000
500000
400000
300000
200000
100000
0
0.98
3.86
6.20
2.03
3.08
2.17
10.02
2.17
8.0
7.5
7.0
6.5
6.0
5.5
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
f1 (ppm)

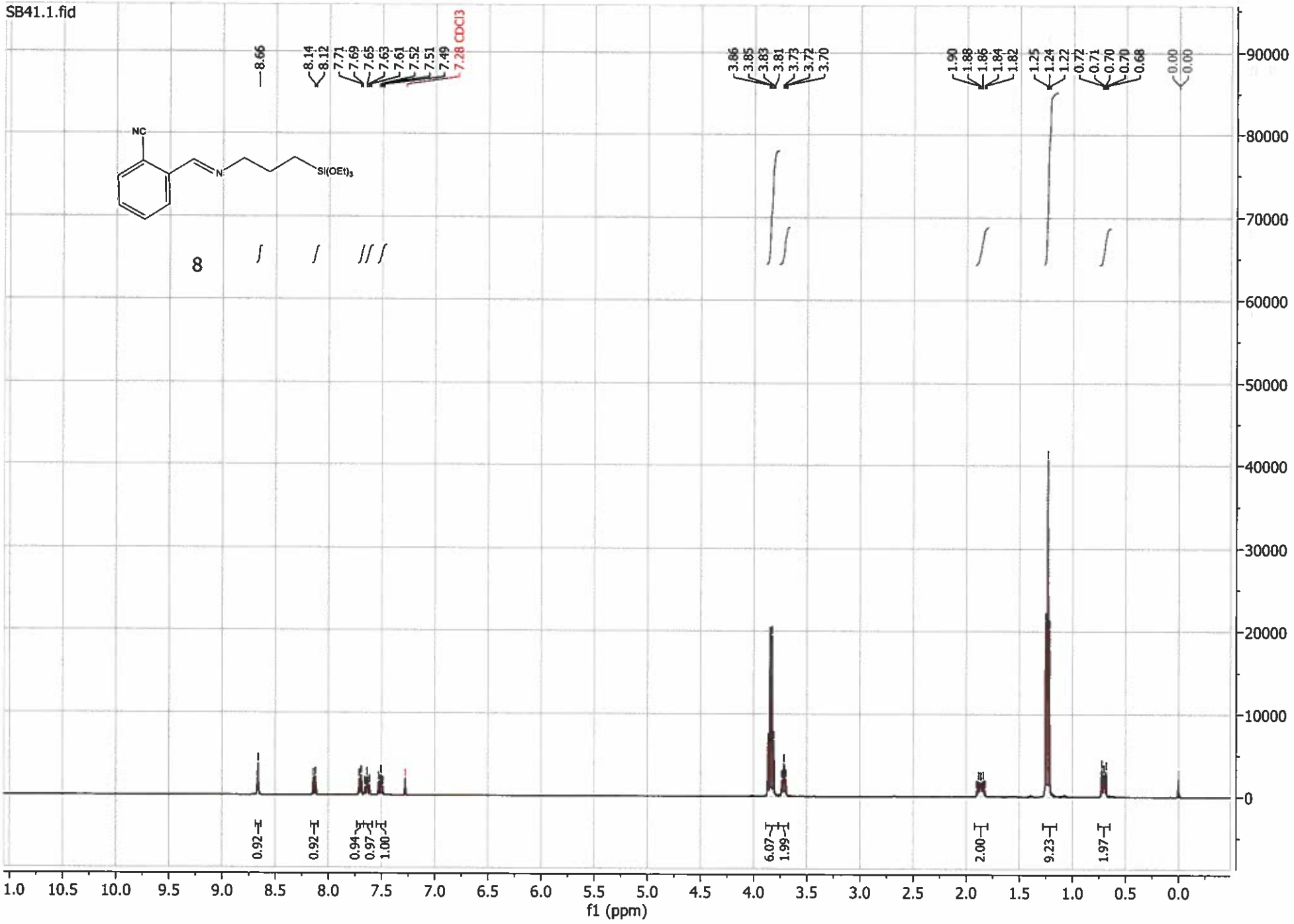

JTM-012 03052021.2.fid
167.8
160.0
138.96
136.15
128.18
127.13
64.39
58.41
26.91
24.21
18.32
8.08
O
N—(CH2)3Si(OEt)3
MeHN
4
(E)-N-methyl-4-(((3-(triethoxysilyl)propyl)imino)methyl)benzamide
850
800
750
700
650
600
550
500
450
400
350
300
250
200
150
100
50
0
-50
70
160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
10
f1 (ppm)

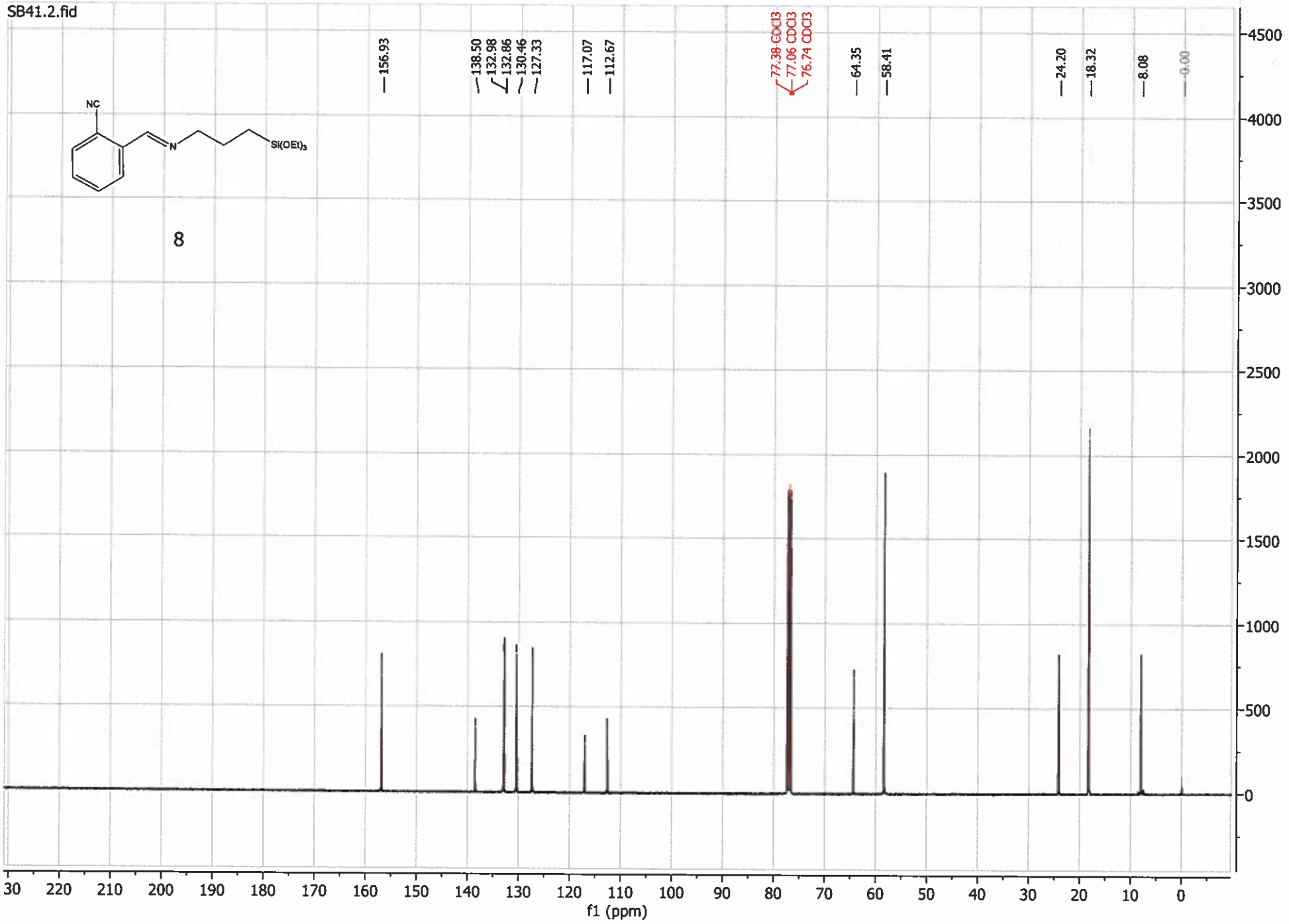

O
N—(CH2)3Si(OEt)3
Me
5
(E)-1-(4-(((3-(triethoxysilyl)propyl)imino)methyl)phenyl)ethan-1-one
0.94
2.04
1.91
5.70
1.91
3.09
1.97
9.00
1.97
f1 (ppm)

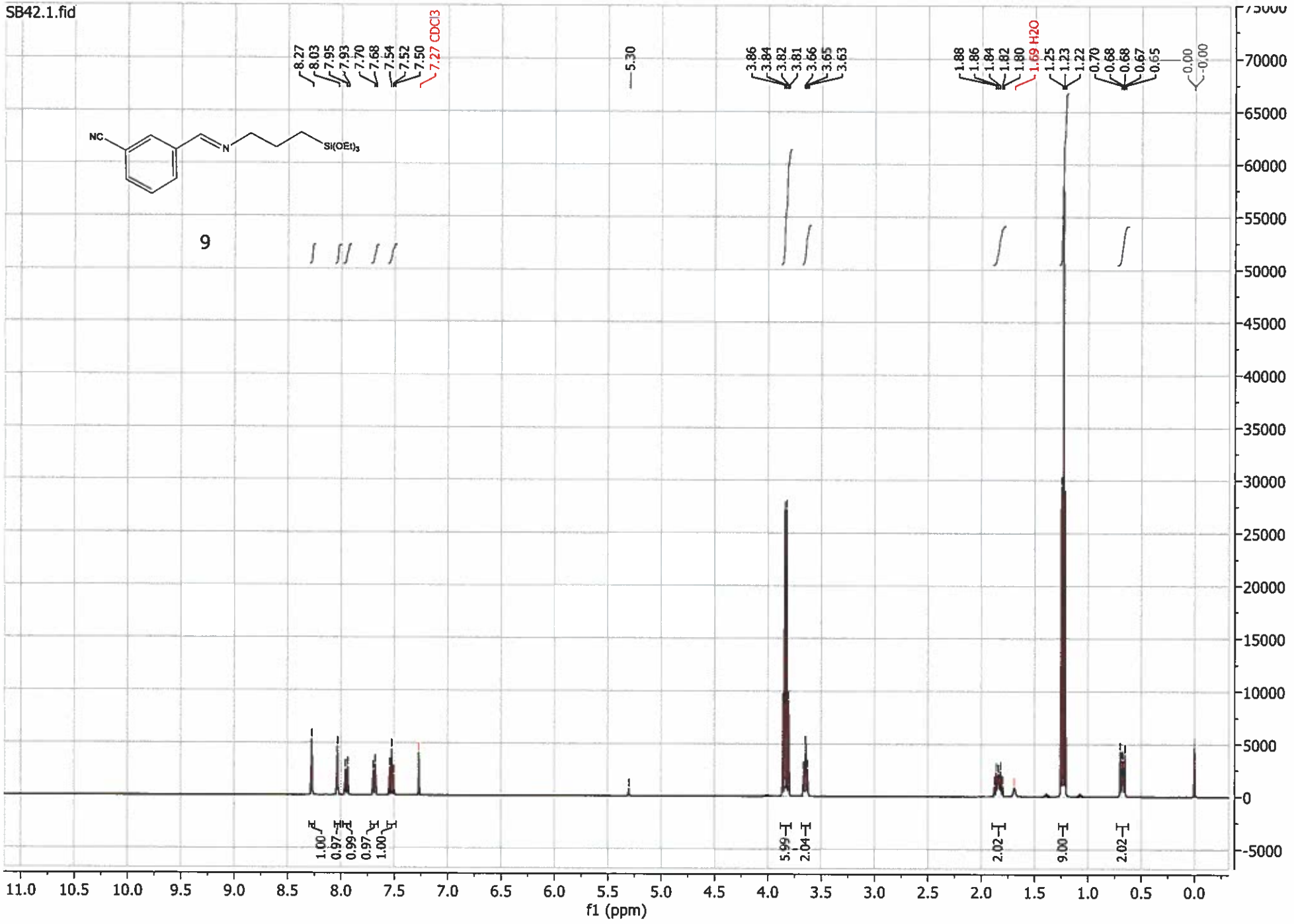

JTM-013 02052021.2.fid
197.74
159.98
140.29
138.35
128.58
128.15
64.44
58.39
26.78
24.19
18.31
8.08
O
Me
N—(CH2)3Si(OEt)3
5
(E)-1-(4-(((3-(triethoxysilyl)propyl)imino)methyl)phenyl)ethan-1-one
5000
4500
4000
3500
3000
2500
2000
1500
1000
500
0
-500
200
190
180
170
160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
10
f1 (ppm)

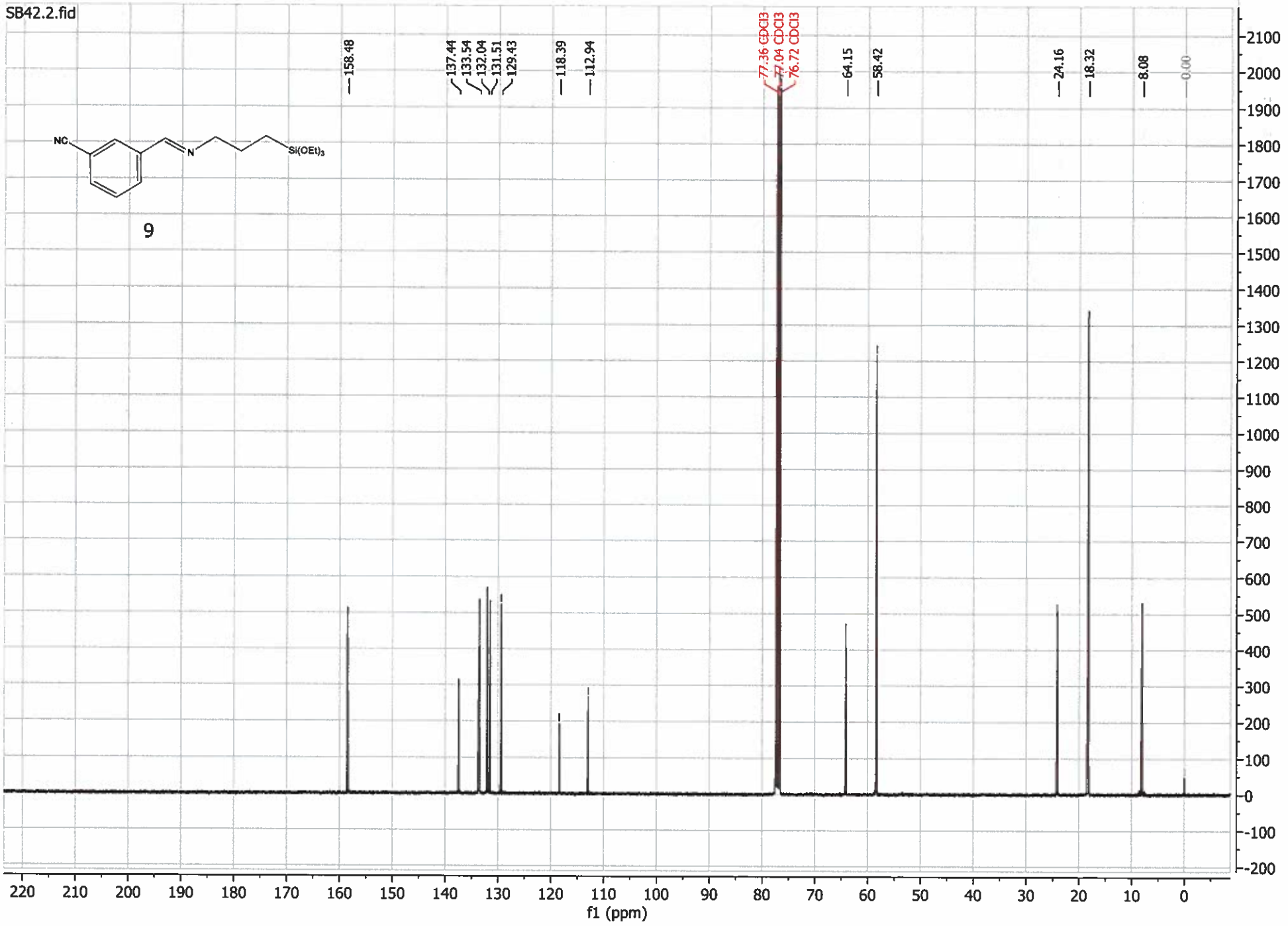

JTM-004 06042021.1.fid
8.22
8.22
7.69
(EtO)3Si(CH2)3N
N(CH2)3Si(OEt)3
6
3.78
3.77
3.76
3.75
3.75
3.73
3.58
3.58
3.57
3.56
3.56
3.54
3.54
1.81
1.79
1.79
1.78
1.78
1.77
1.77
1.77
1.76
1.76
1.75
1.75
1.73
1.18
1.18
1.17
1.17
1.16
1.16
1.15
1.14
1.14
1.13
0.63
0.62
0.62
0.61
0.60
0.60
0.59
1900000
1800000
1700000
1600000
1500000
1400000
1300000
1200000
1100000
1000000
900000
800000
700000
600000
500000
400000
300000
200000
100000
0
-100000
1.00
1.98
6.42
2.09
2.18
9.69
2.13
10.0
9.5
9.0
8.5
8.0
7.5
7.0
6.5
6.0
5.5
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
f1 (ppm)

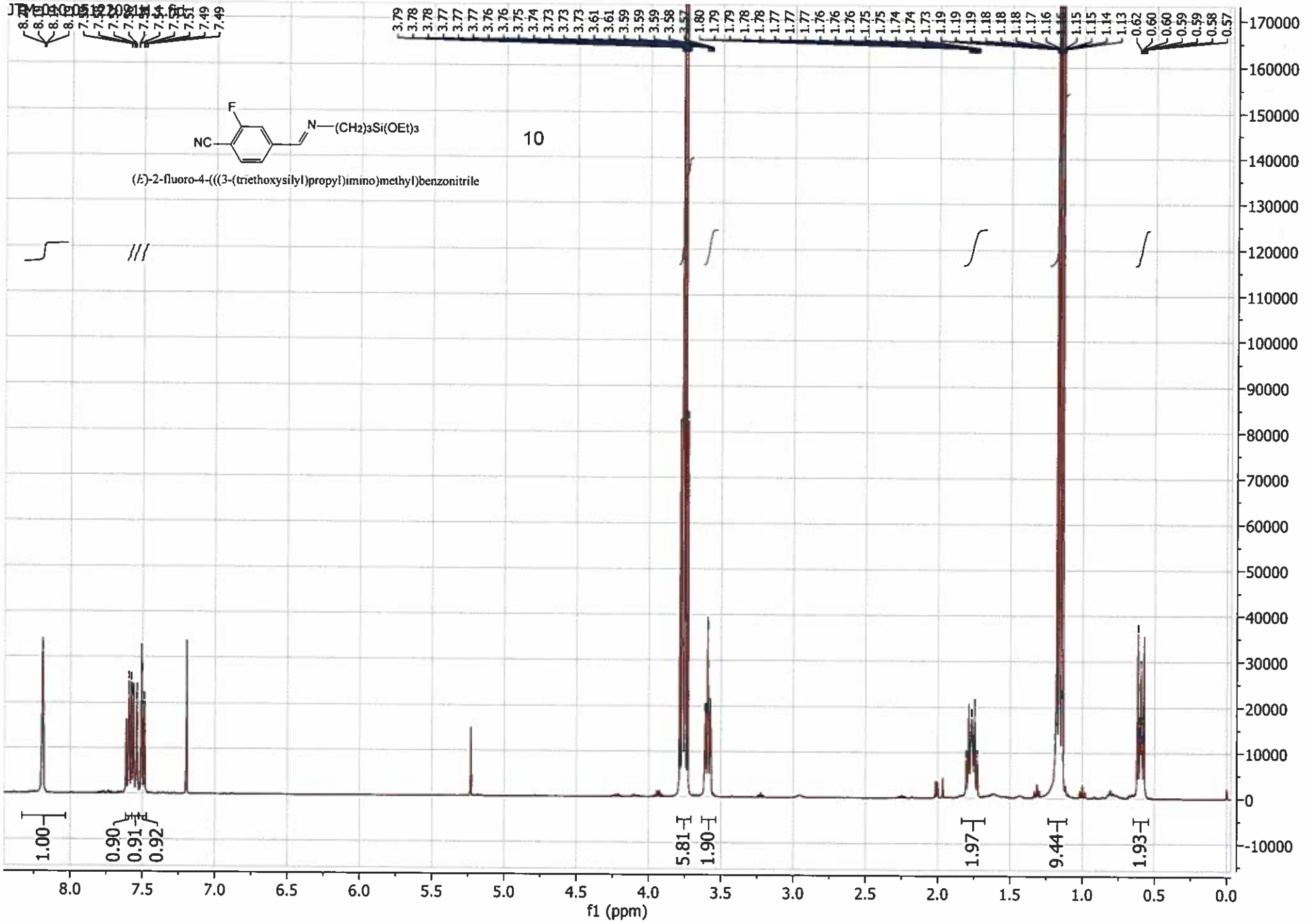

JTM-004 06042021.2.fid
160.51
138.11
128.24
64.42
58.38
24.24
18.31
8.05
(EtO)3Si(CH2)3N
N(CH2)3Si(OEt)3
6
f1 (ppm)

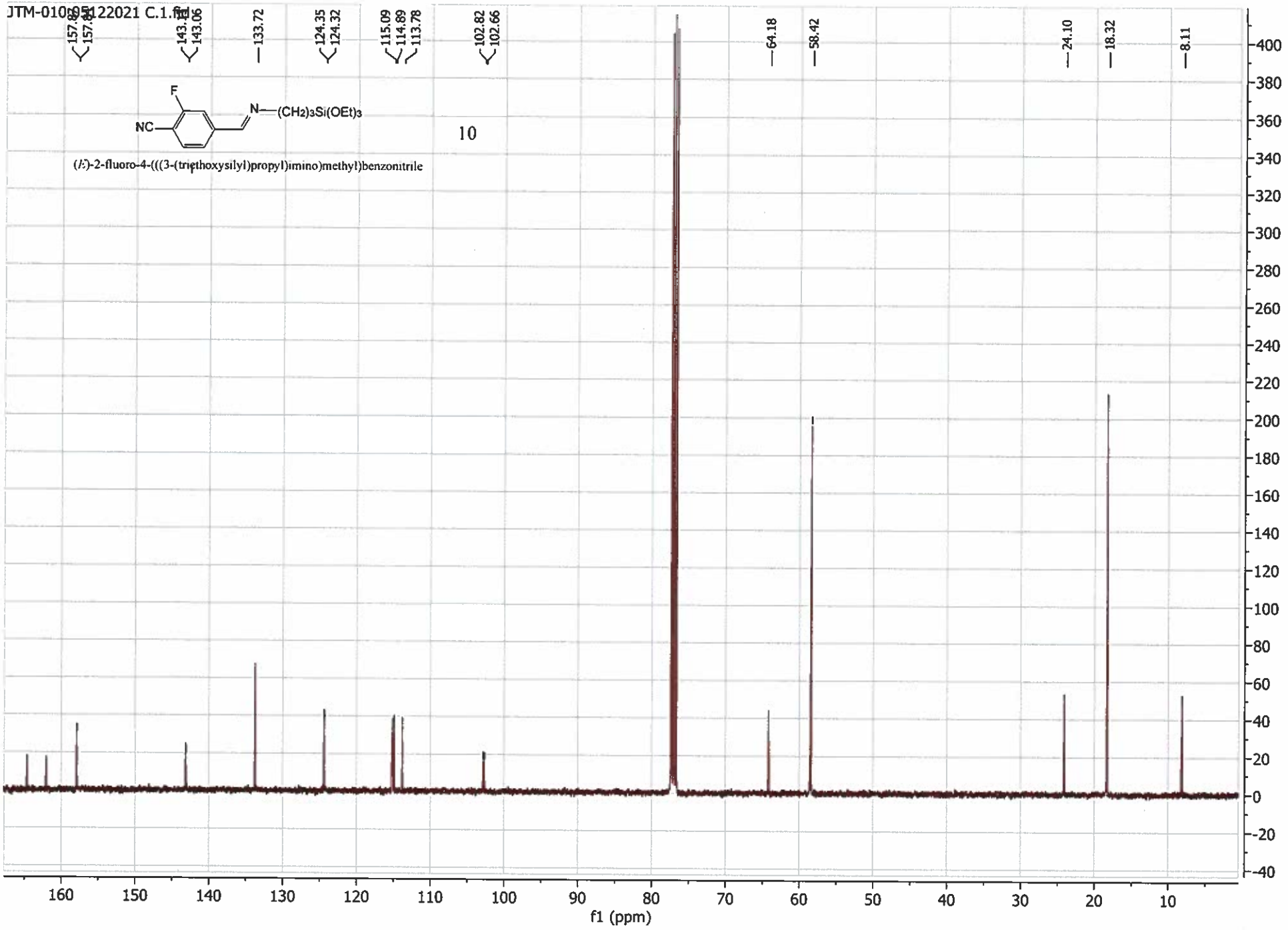

SB41.1.fid
8.66
8.14
8.12
7.71
7.69
7.65
7.63
7.61
7.52
7.51
7.49
7.28 CDCl3
3.86
3.85
3.83
3.81
3.73
3.72
3.70
1.90
1.88
1.86
1.84
1.82
1.25
1.24
1.22
0.72
0.71
0.70
0.70
0.68
0.00
0.00
NC
N
Si(OEt)3
8
0.92
0.92
0.94
0.97
1.00
6.07
1.99
2.00
9.23
1.97
f1 (ppm)


SB41.2.fid
NC
N
Si(OEt)3
8
156.93
138.50
132.98
132.86
130.46
127.33
117.07
112.67
77.38 CDCl3
77.06 CDCl3
76.74 CDCl3
64.35
58.41
24.20
18.32
8.08
0.00
4500
4000
3500
3000
2500
2000
1500
1000
500
0
30 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0
f1 (ppm)


SB42.1.fid
8.27
8.03
7.95
7.93
7.70
7.68
7.54
7.52
7.50
7.27 CDCl3
5.30
3.86
3.84
3.82
3.81
3.66
3.65
3.63
1.88
1.86
1.84
1.82
1.80
1.69 H2O
1.25
1.23
1.22
0.70
0.68
0.68
0.67
0.65
0.00
-0.00
NC
N
Si(OEt)3
9
1.00
0.97
0.99
0.97
1.00
5.99
2.04
2.02
9.00
2.02
f1 (ppm)

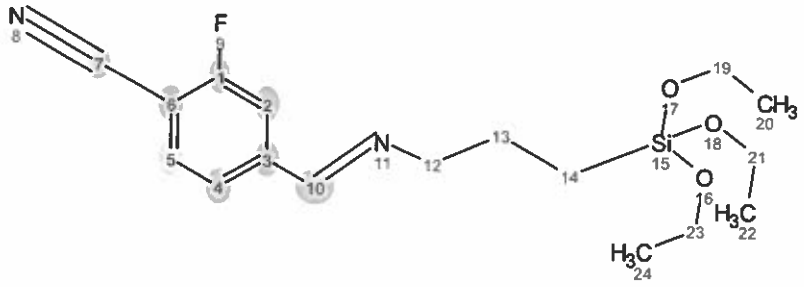

SB42.2.fid
158.48
137.44
133.54
132.04
131.51
129.43
118.39
112.94
77.36 CDCl3
77.04 CDCl3
76.72 CDCl3
64.15
58.42
24.16
18.32
8.08
0.00
NC
N
Si(OEt)3
9
f1 (ppm)


F
NC
N—(CH2)3Si(OEt)3
10
(E)-2-fluoro-4-(((3-(triethoxysilyl)propyl)imino)methyl)benzonitrile
1.00
0.90
0.91
0.92
5.81
1.90
1.97
9.44
1.93
f1 (ppm)

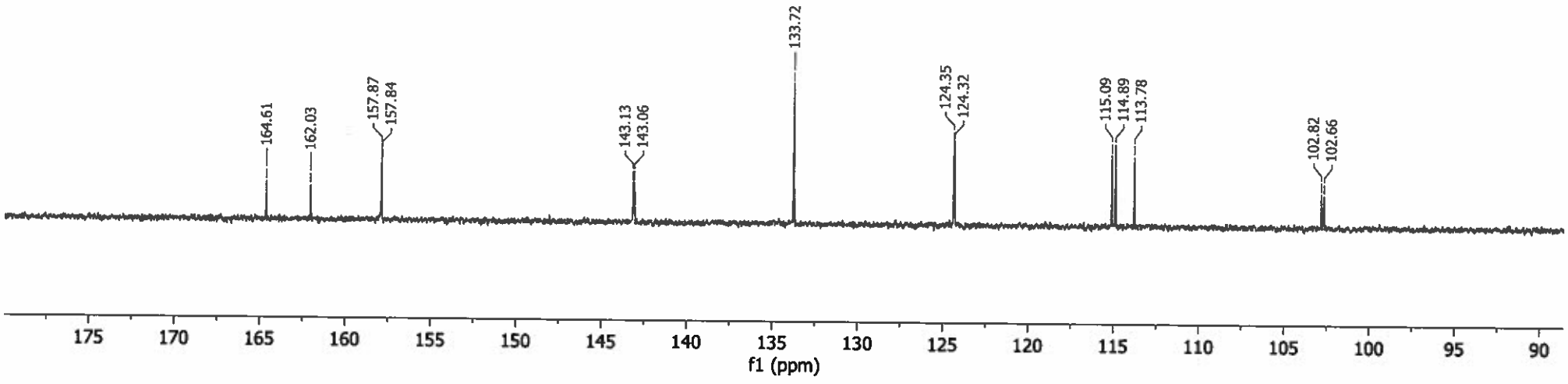

JTM-010-05122021 C.1.fid
157.83
157.47
143.11
143.06
133.72
124.35
124.32
115.09
114.89
113.78
102.82
102.66
64.18
58.42
24.10
18.32
8.11
F
NC
N—(CH2)3Si(OEt)3
10
(E)-2-fluoro-4-(((3-(triethoxysilyl)propyl)imino)methyl)benzonitrile
f1 (ppm)

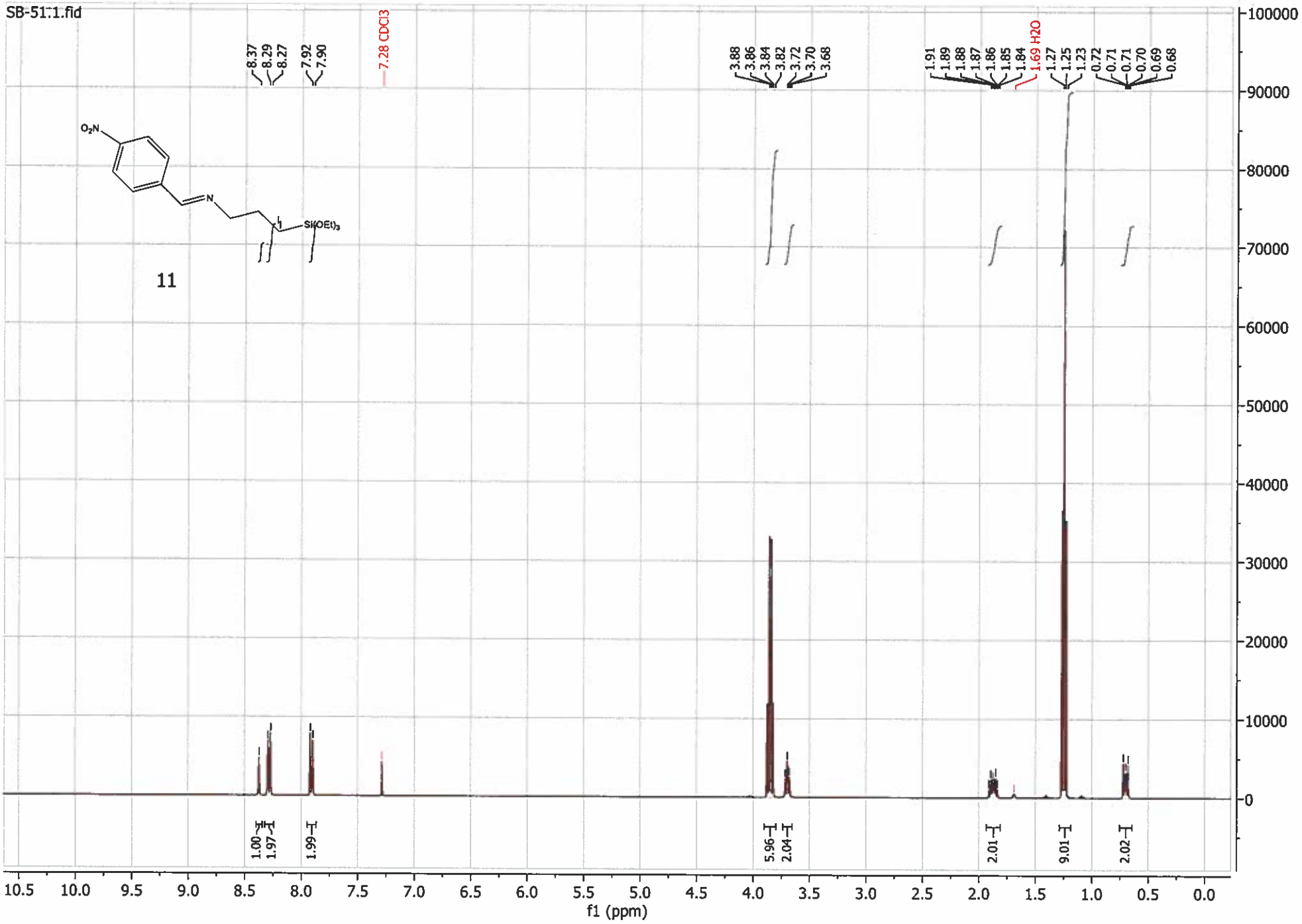
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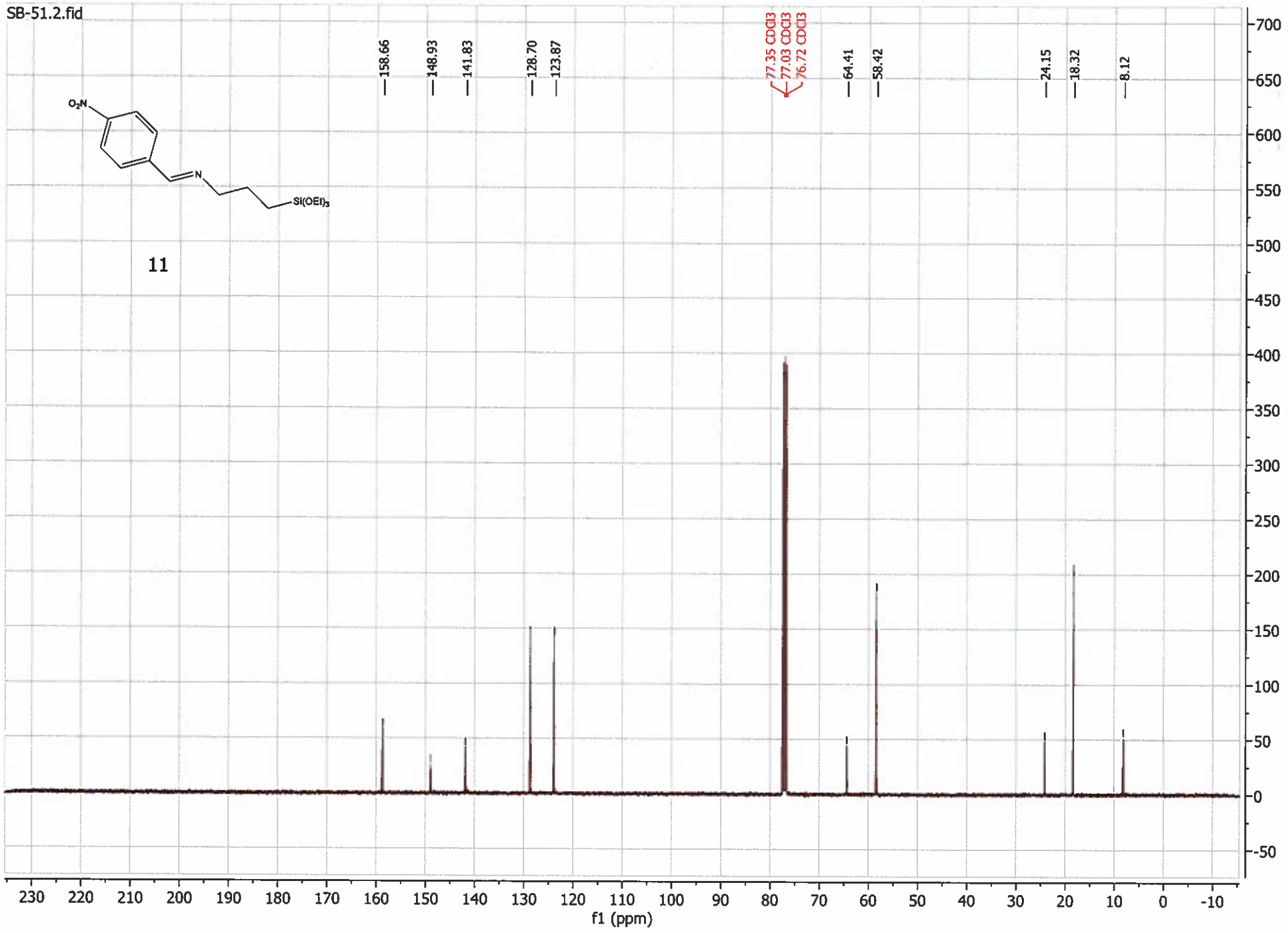


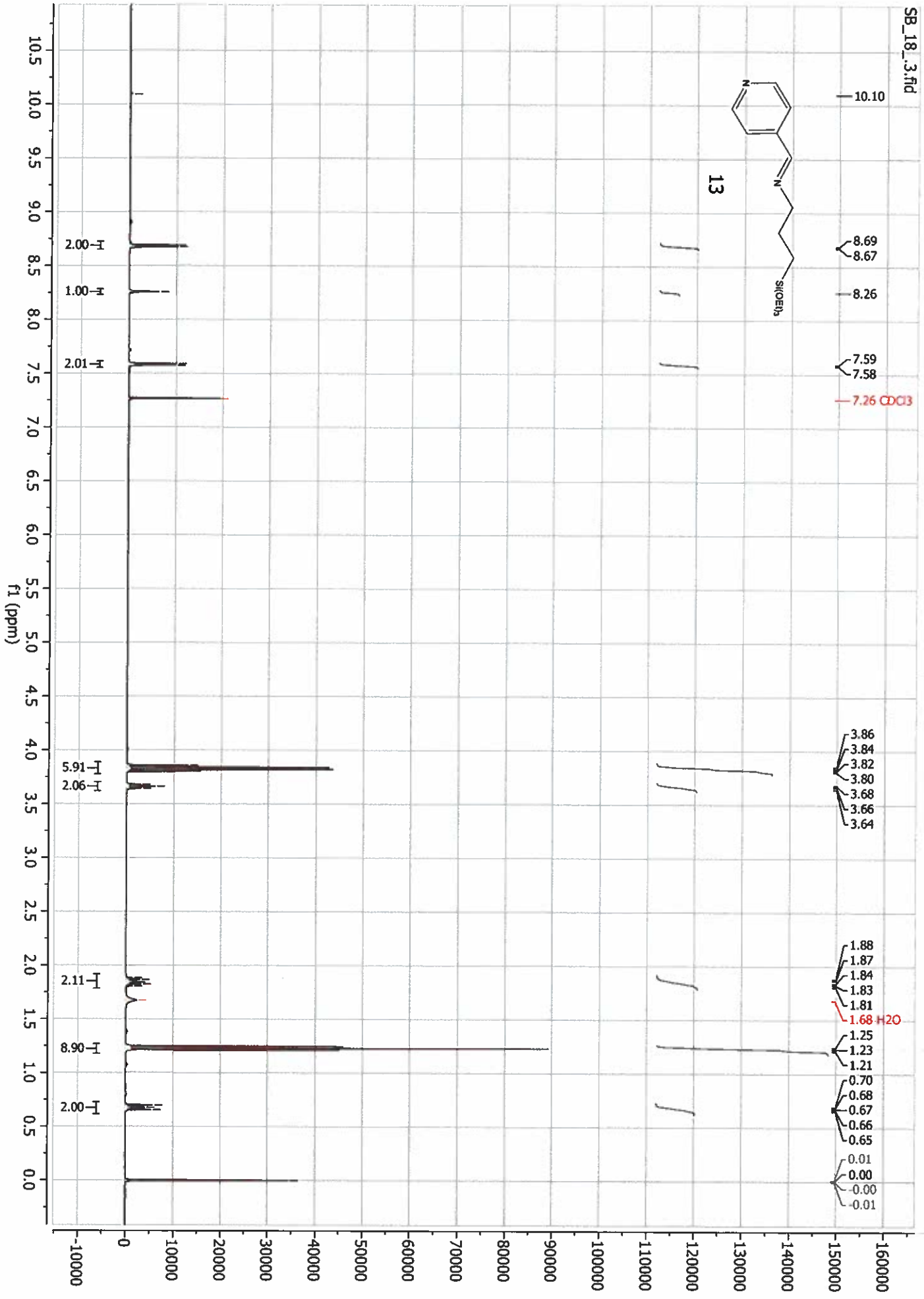


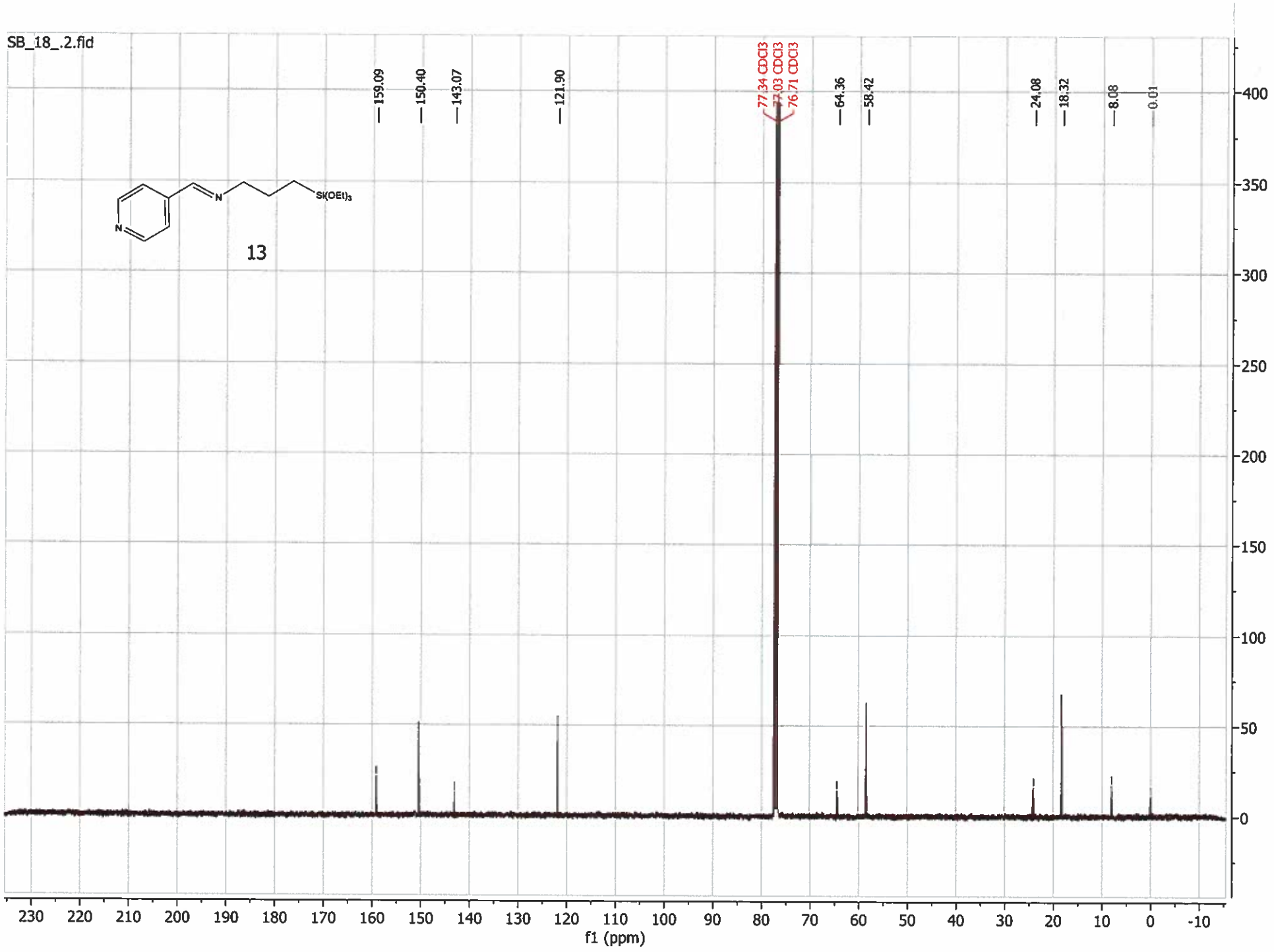
1 (d) 163.32	10 (d) 157.86	3 (d) 143.10	5 (s) 133.72	4 (d) 124.34	2 (d) 114.99	7 (s) 113.78	6 (d) 102.74

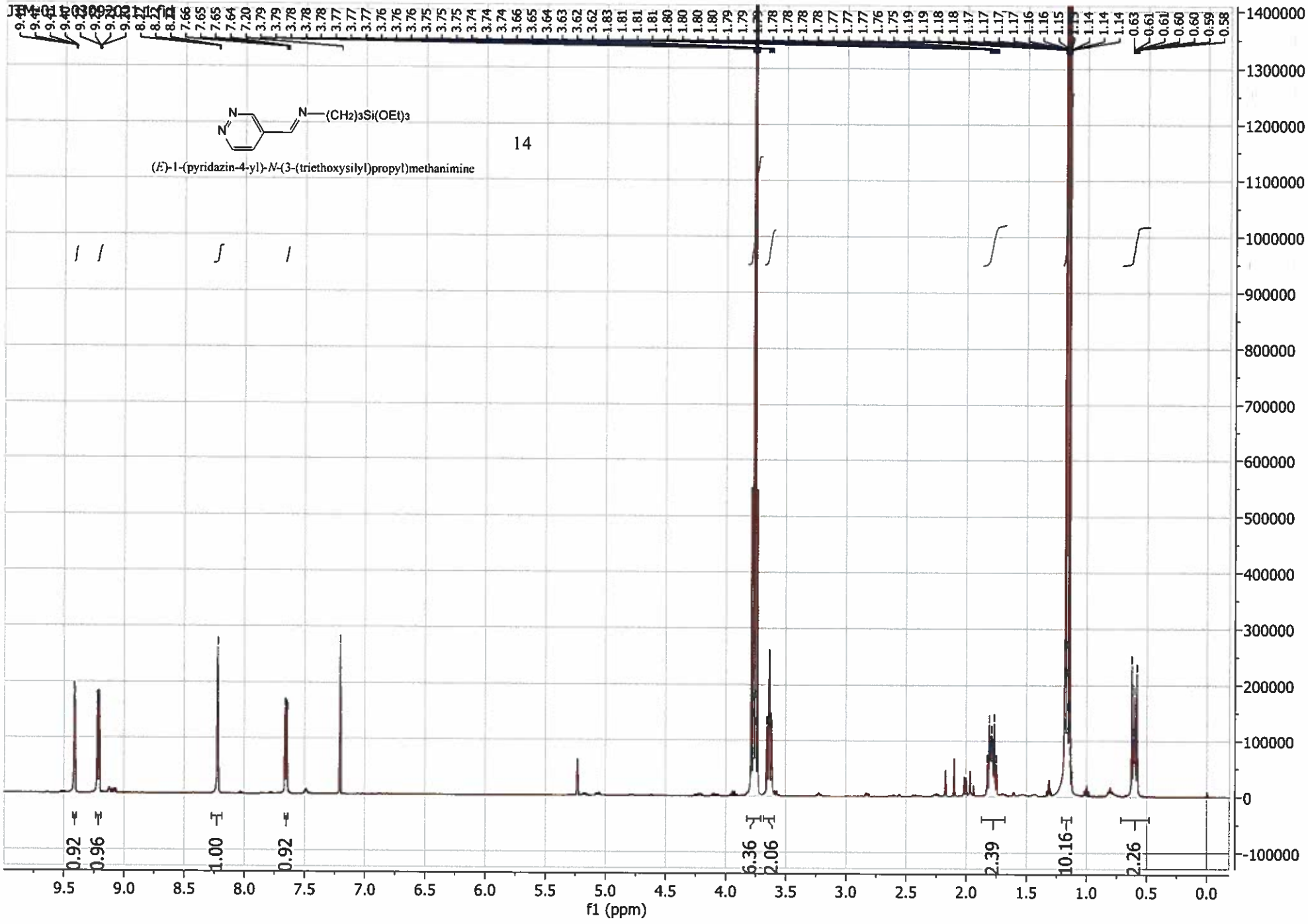


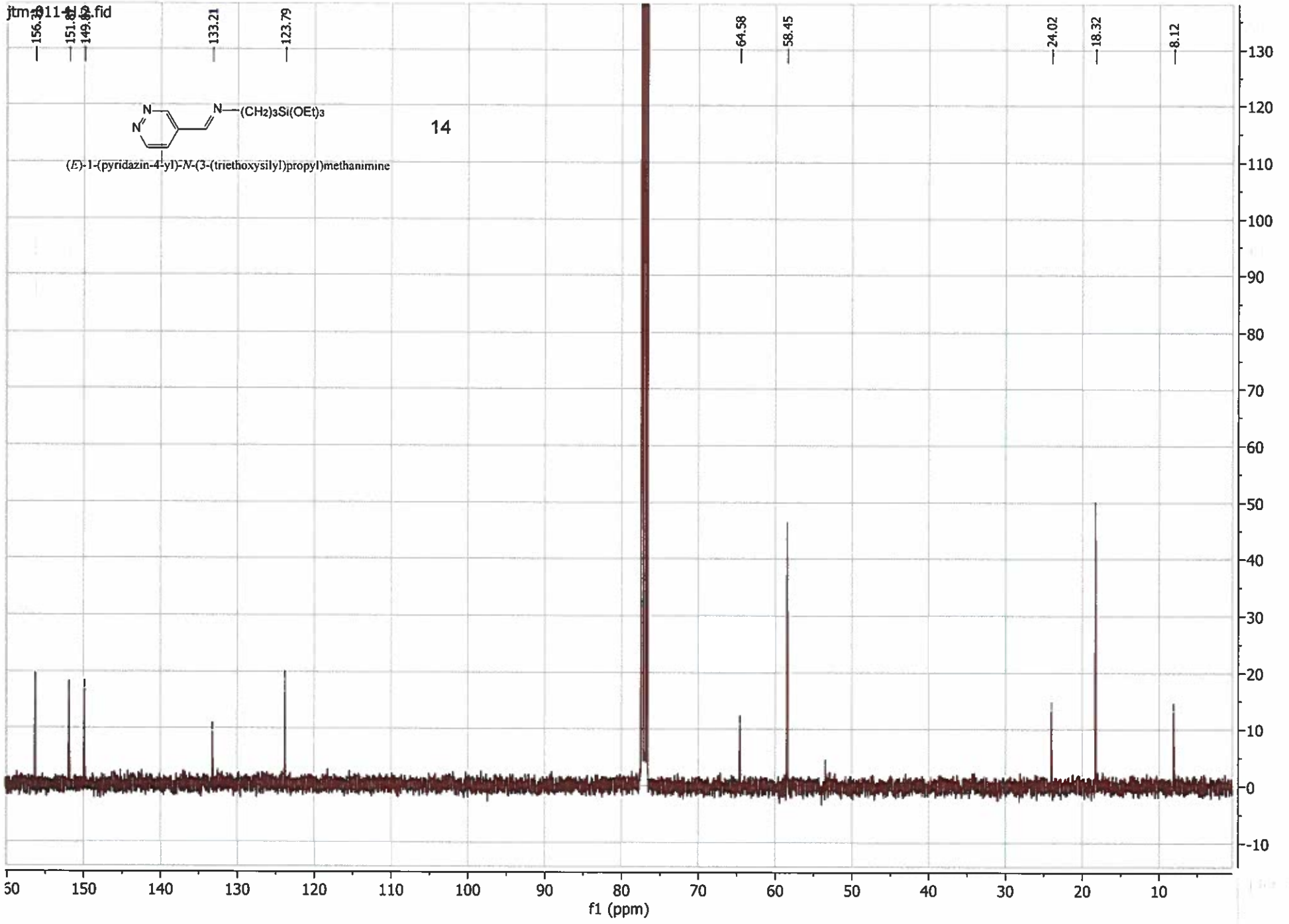

SB-51-1.fid
8.37
8.29
8.27
7.92
7.90
7.28 CDCl3
3.88
3.86
3.84
3.82
3.72
3.70
3.68
1.91
1.89
1.88
1.87
1.86
1.85
1.84
1.69 H2O
1.27
1.25
1.23
0.72
0.71
0.71
0.70
0.69
0.68
O2N
N
Si(OEt)3
11
1.00
1.97
1.99
5.96
2.04
2.01
9.01
2.02
f1 (ppm)

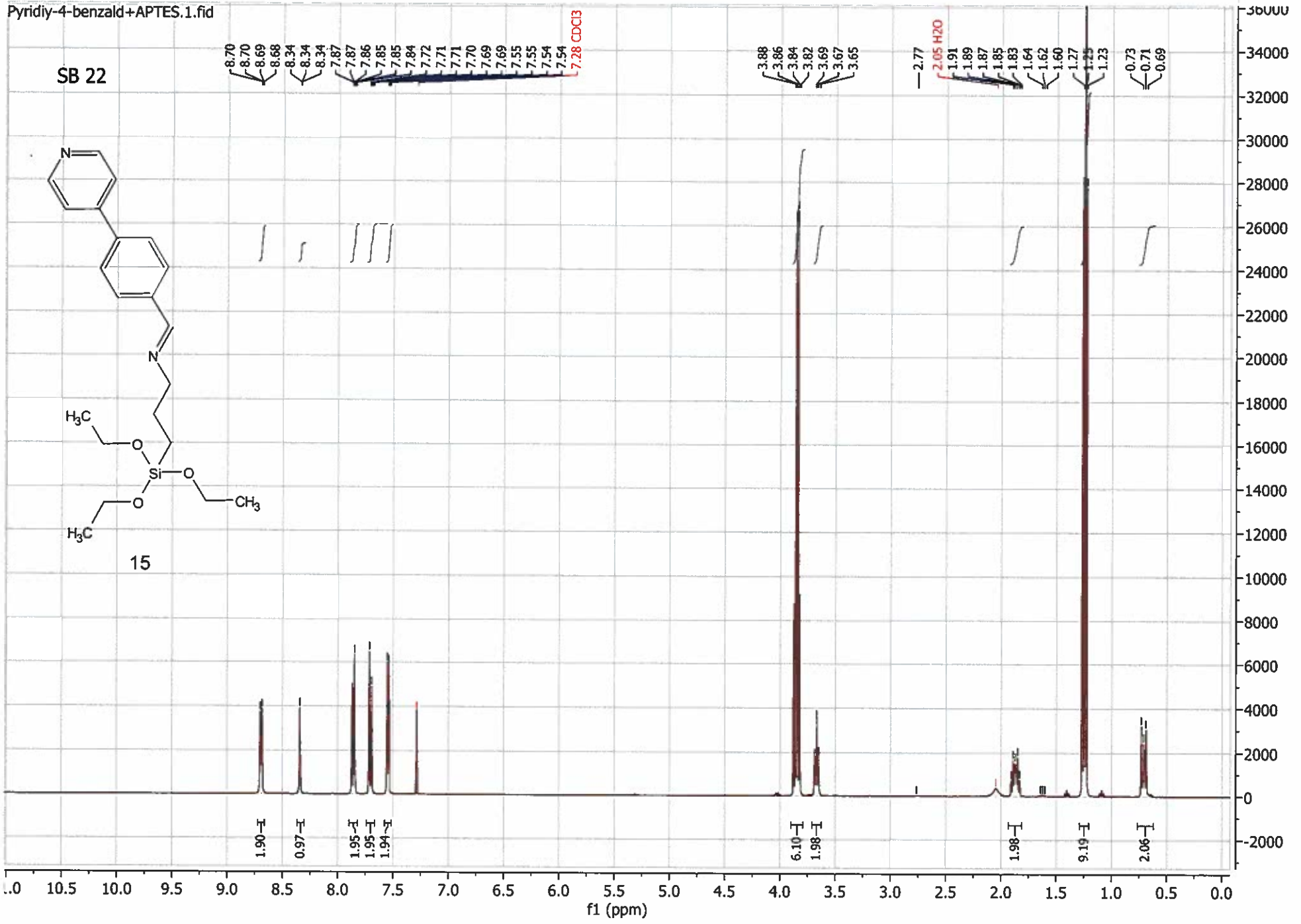

SB-51.2.fid
158.66
148.93
141.83
128.70
123.87
77.35 CDCl3
77.03 CDCl3
76.72 CDCl3
64.41
58.42
24.15
18.32
8.12
O2N
N
Si(OEt)3
11
f1 (ppm)

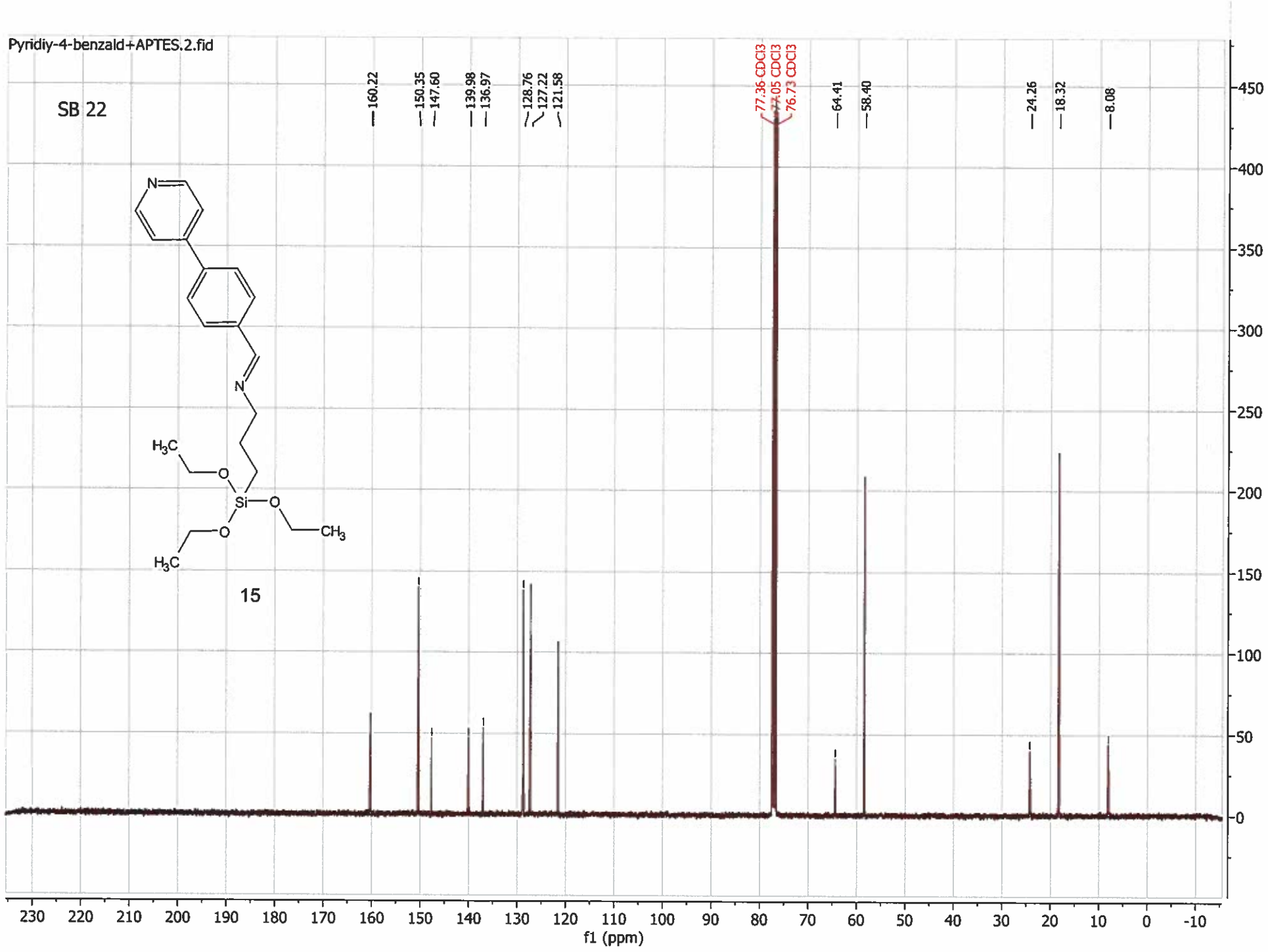

SB_18_3.fid
13
Si(OEt)3
10.10
8.69
8.67
8.26
7.59
7.58
7.26 CDCl3
3.86
3.84
3.82
3.80
3.68
3.66
3.64
1.88
1.87
1.84
1.83
1.81
1.68 H2O
1.25
1.23
1.21
0.70
0.68
0.67
0.66
0.65
0.01
0.00
-0.00
-0.01
2.00
1.00
2.01
5.91
2.06
2.11
8.90
2.00
f1 (ppm)

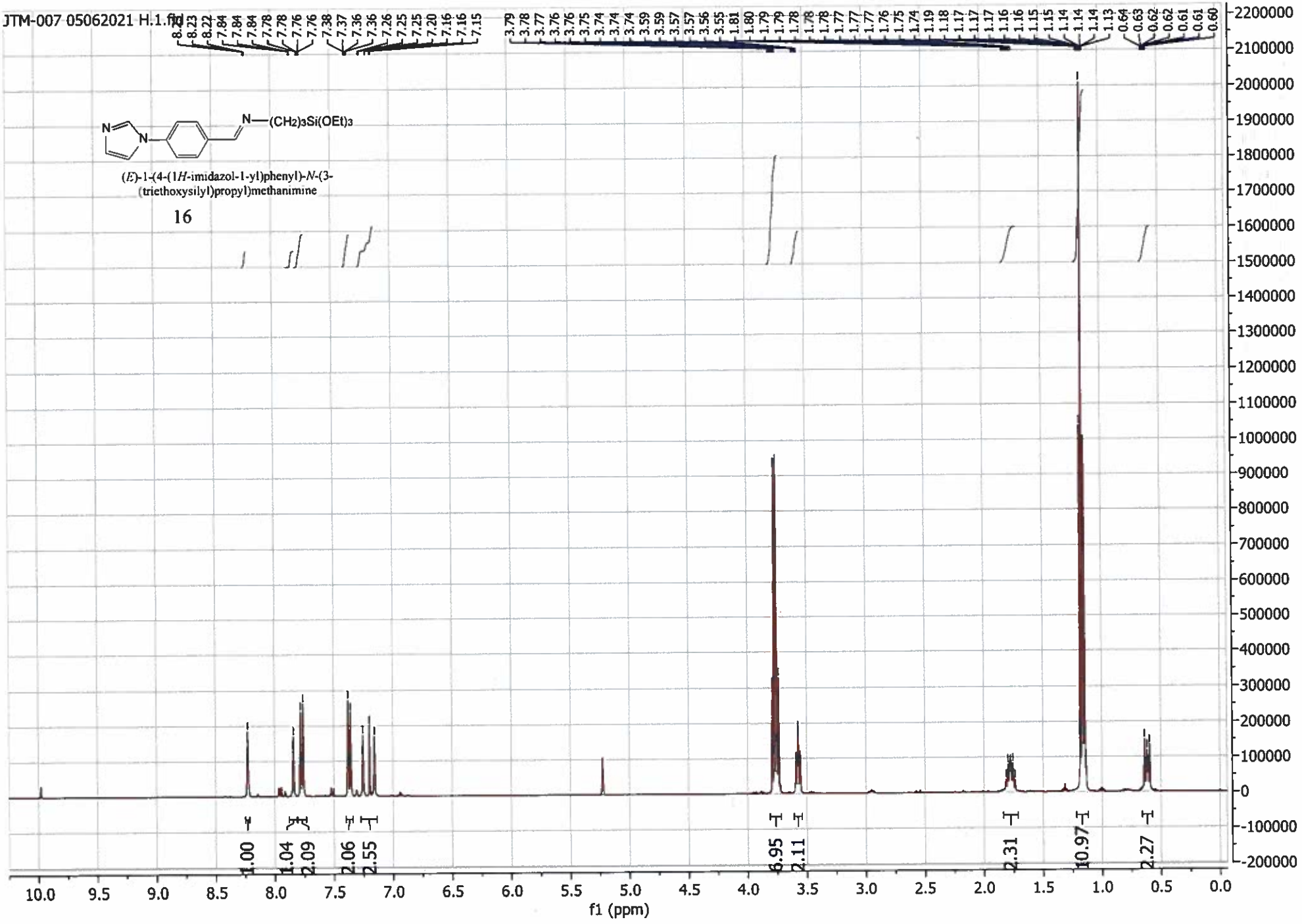

SB_18_.2.fid
159.09
150.40
143.07
121.90
77.34 CDCl3
77.03 CDCl3
76.71 CDCl3
64.36
58.42
24.08
18.32
8.08
0.01
Si(OEt)3
N
N
13
f1 (ppm)

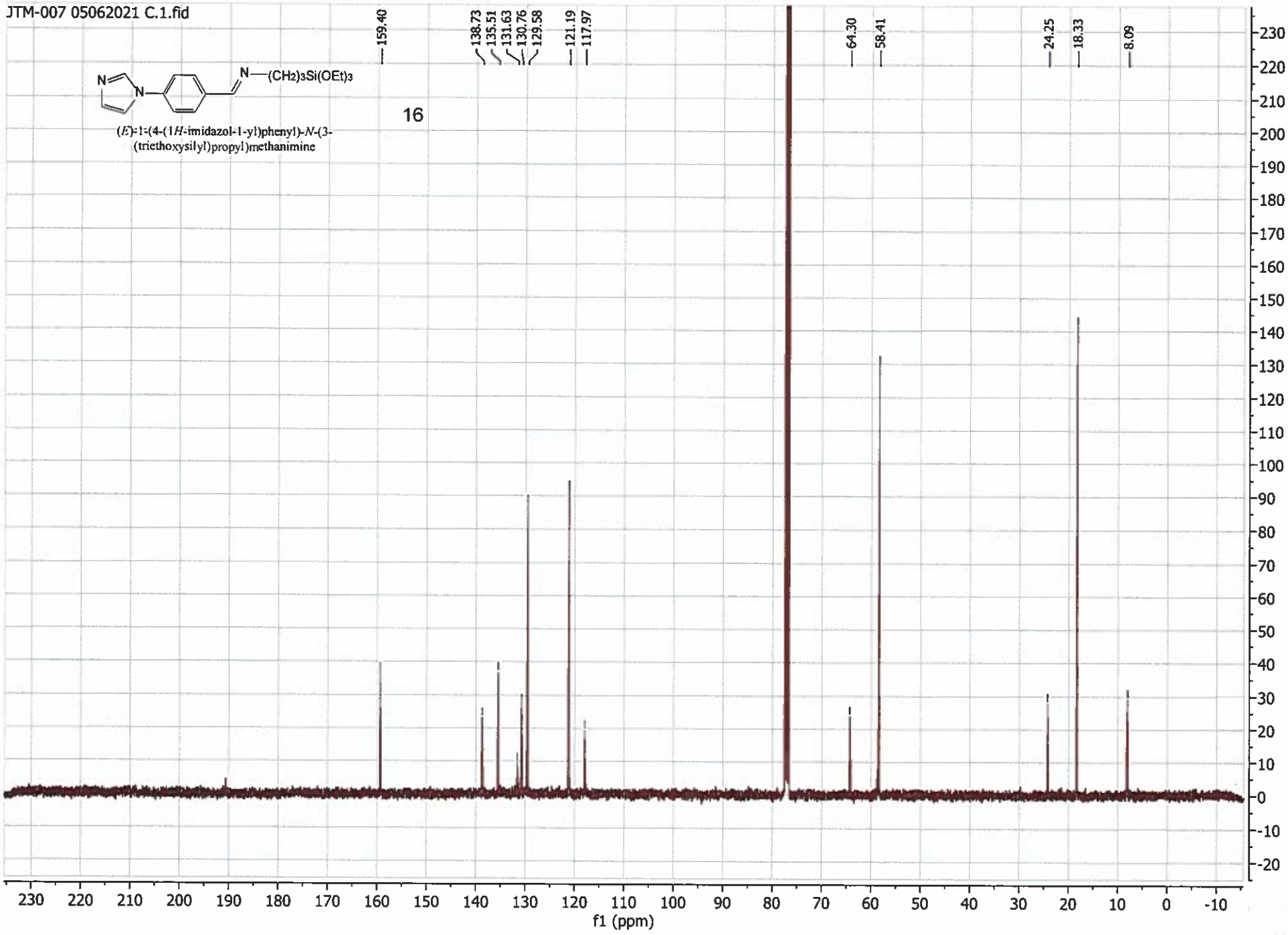

14
(E)-1-(pyridazin-4-yl)-N-(3-(triethoxysilyl)propyl)methanimine
f1 (ppm)

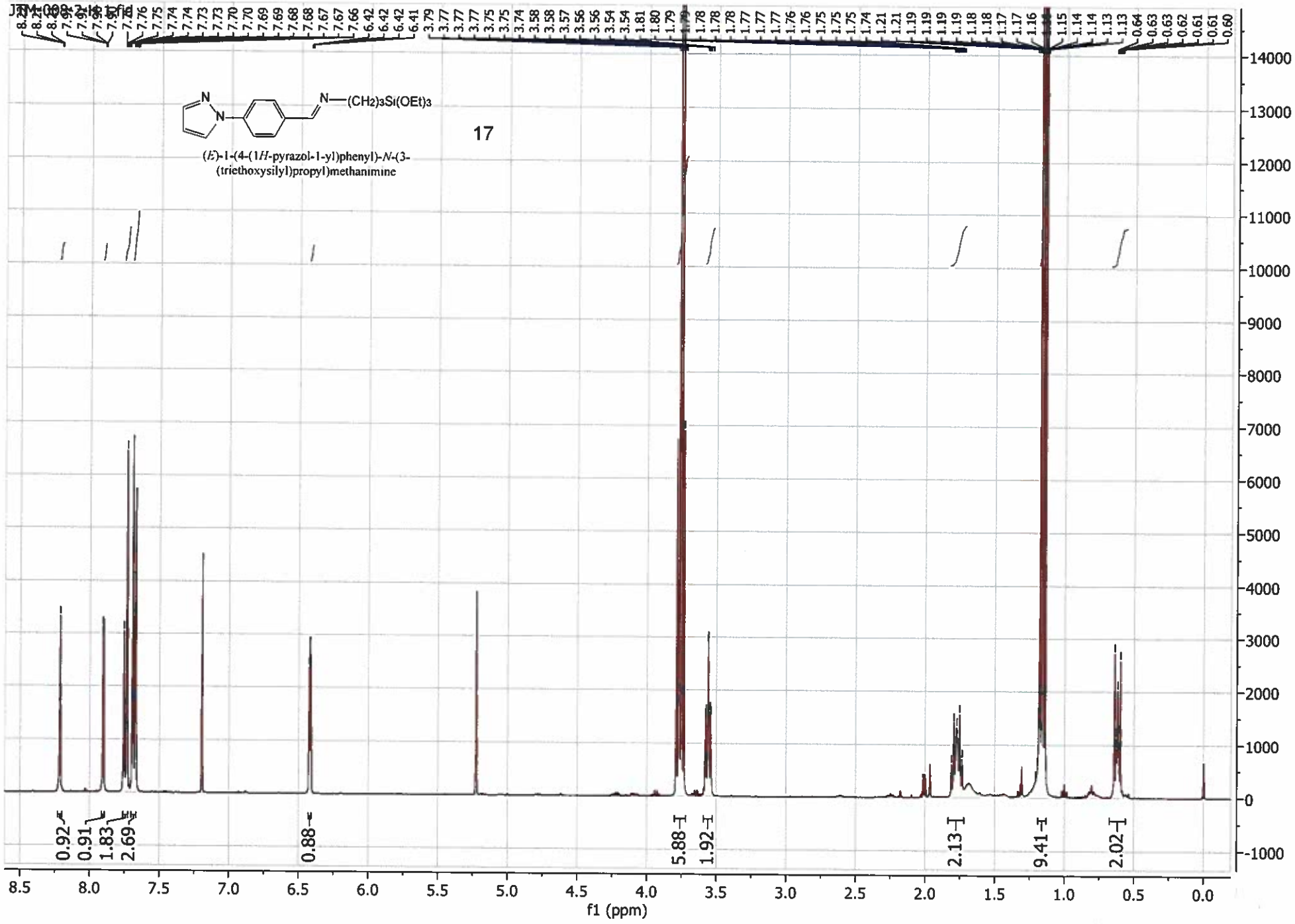

jtm-2011-12.fid
156.33
151.62
149.83
133.21
123.79
64.58
58.45
24.02
18.32
8.12
N
N
N
(CH2)3Si(OEt)3
14
(E)-1-(pyridazin-4-yl)-N-(3-(triethoxysilyl)propyl)methanimine
f1 (ppm)

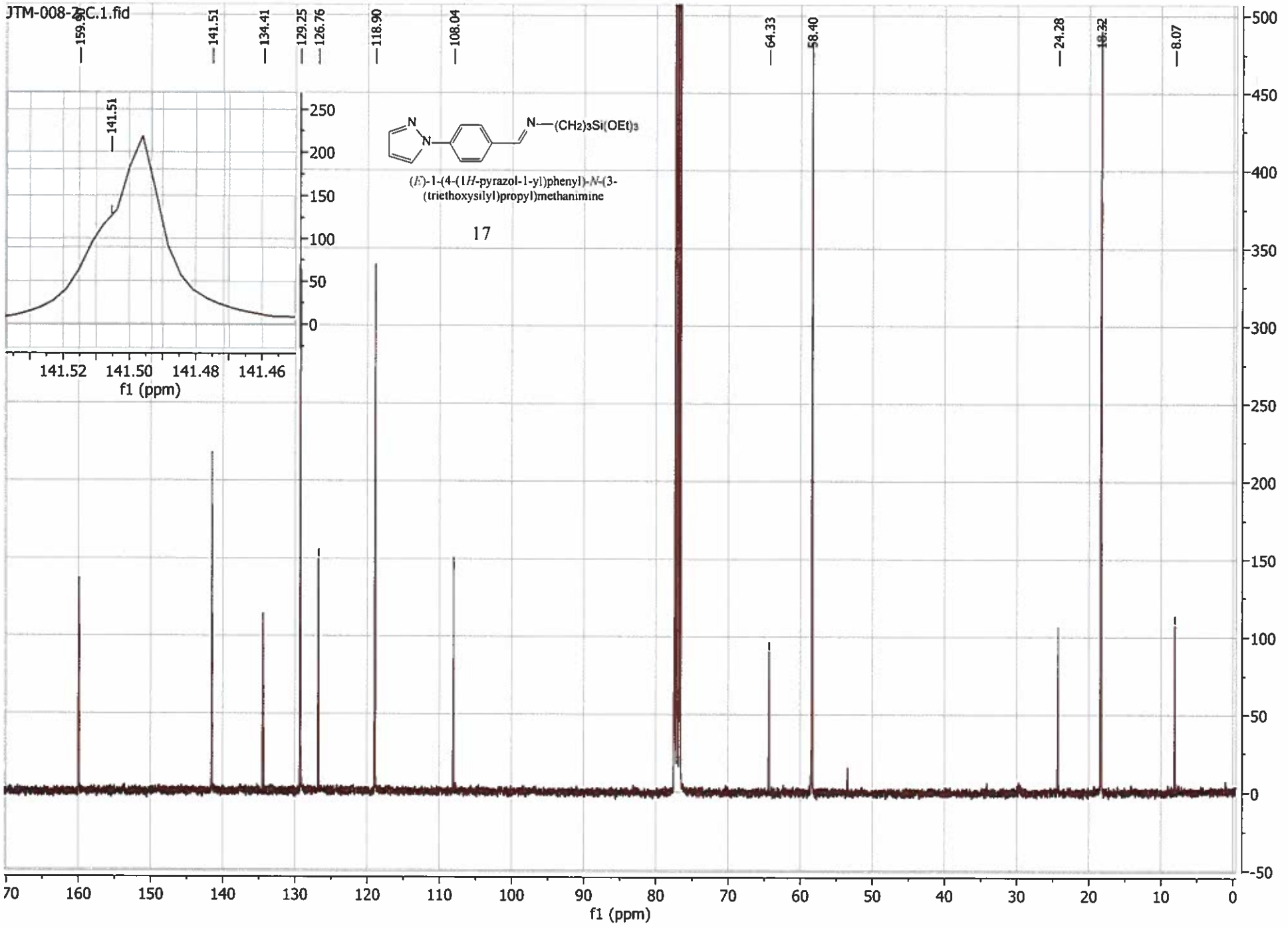

Pyridiy-4-benzald+APTES.1.fid
SB 22
8.70 8.70 8.69 8.68 8.34 8.34 8.34 7.87 7.87 7.86 7.85 7.84 7.72 7.71 7.71 7.70 7.69 7.69 7.55 7.55 7.54 7.54 7.28 CDCl3
3.88 3.86 3.84 3.82 3.69 3.67 3.65
2.77 2.05 H2O 1.91 1.89 1.87 1.85 1.83 1.64 1.62 1.60 1.27 1.25 1.23
0.73 0.71 0.69
N
N
H3C
O
Si
O
O
CH3
H3C
15
1.90 0.97 1.95 1.95 1.94 6.10 1.98 1.98 9.19 2.06
f1 (ppm)

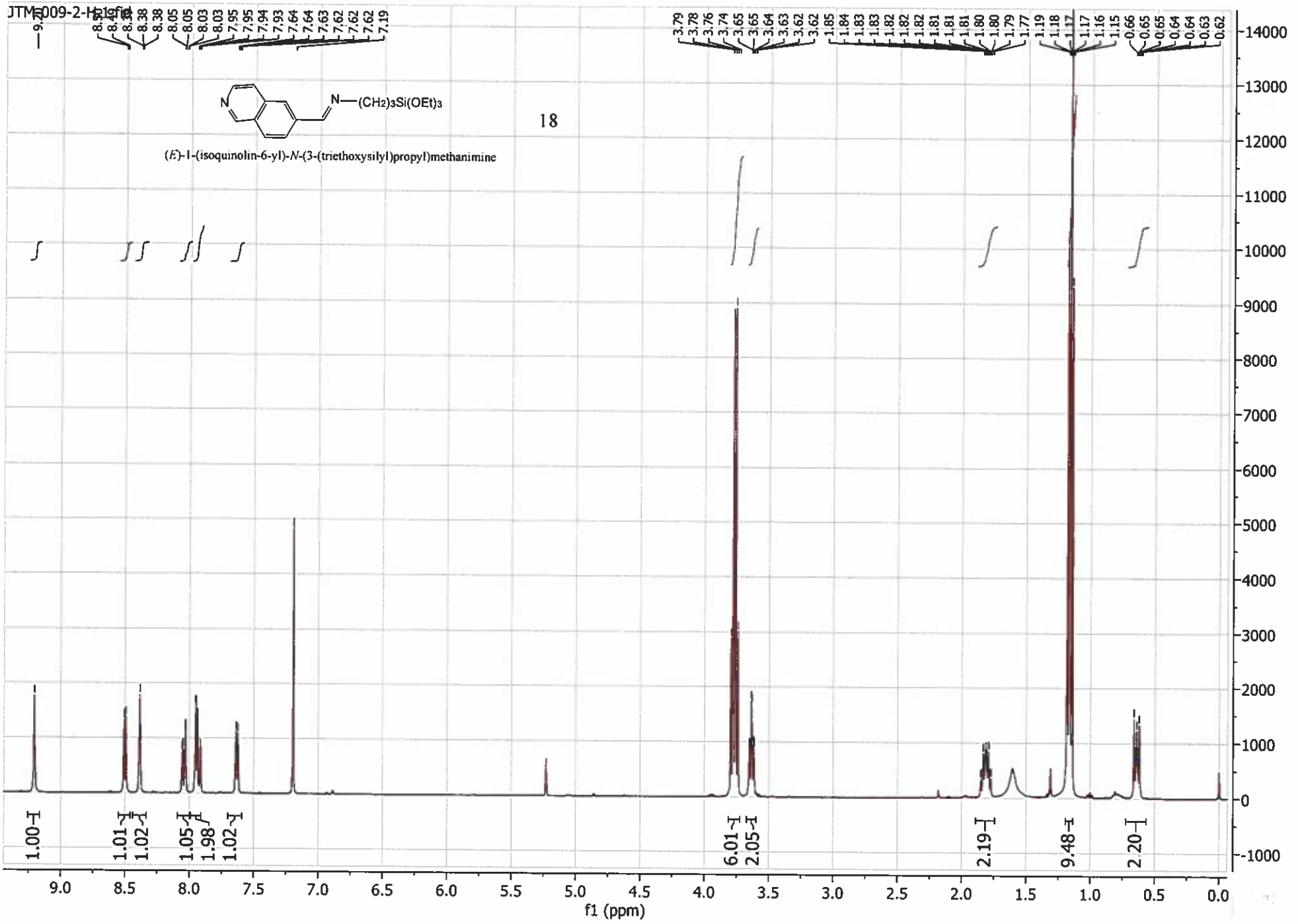

Pyridiy-4-benzald+APTES.2.fid
SB 22
160.22
150.35
147.60
139.98
136.97
128.76
127.22
121.58
77.36 CDCl3
77.05 CDCl3
76.73 CDCl3
64.41
58.40
24.26
18.32
8.08
15
f1 (ppm)

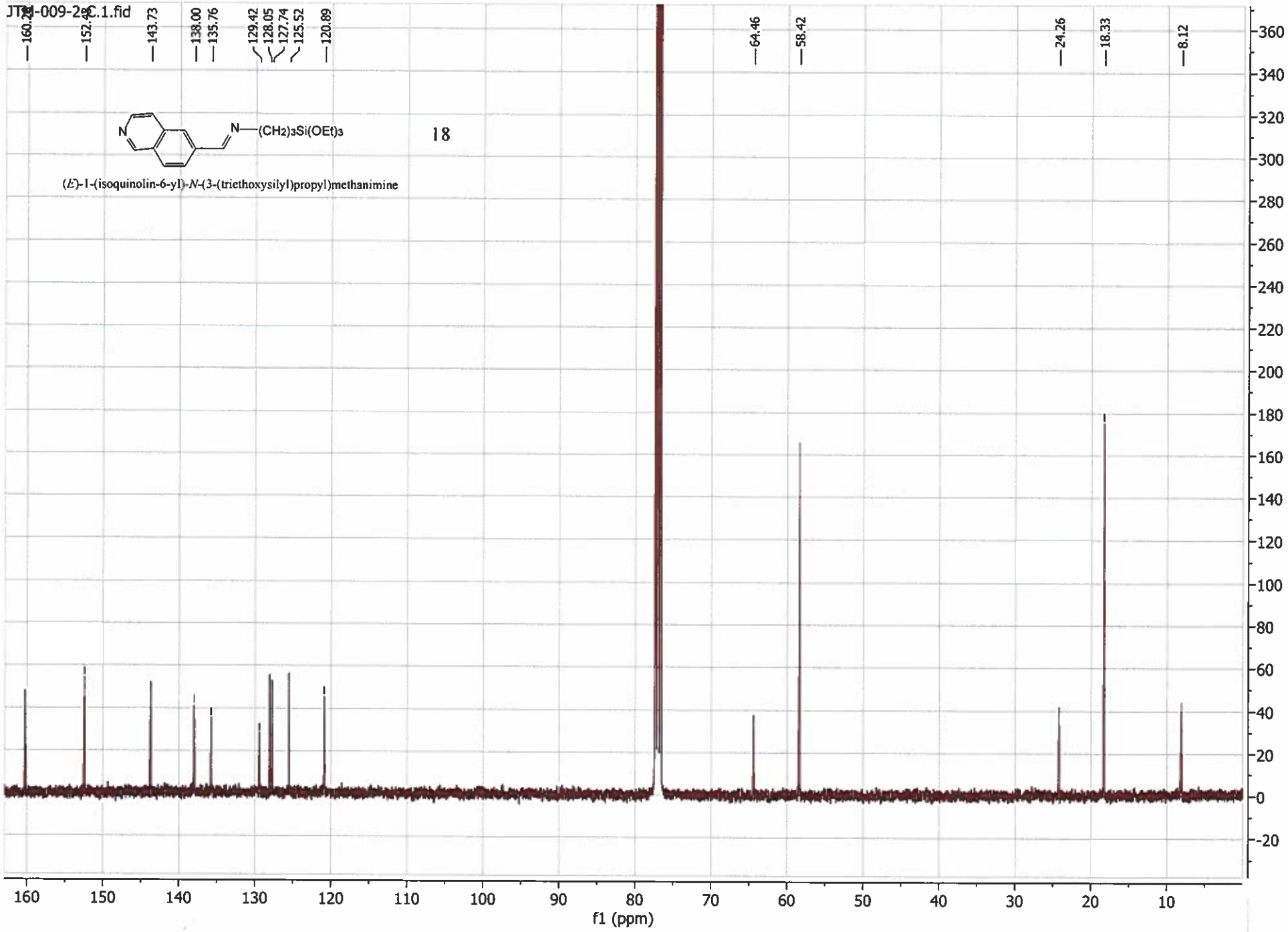

JTM-007 05062021 H.1.fid
N—(CH2)3Si(OEt)3
(E)-1-(4-(1H-imidazol-1-yl)phenyl)-N-(3-(triethoxysilyl)propyl)methanimine
16
1.00
1.04
2.09
2.06
2.55
6.95
2.11
2.31
10.97
2.27
f1 (ppm)

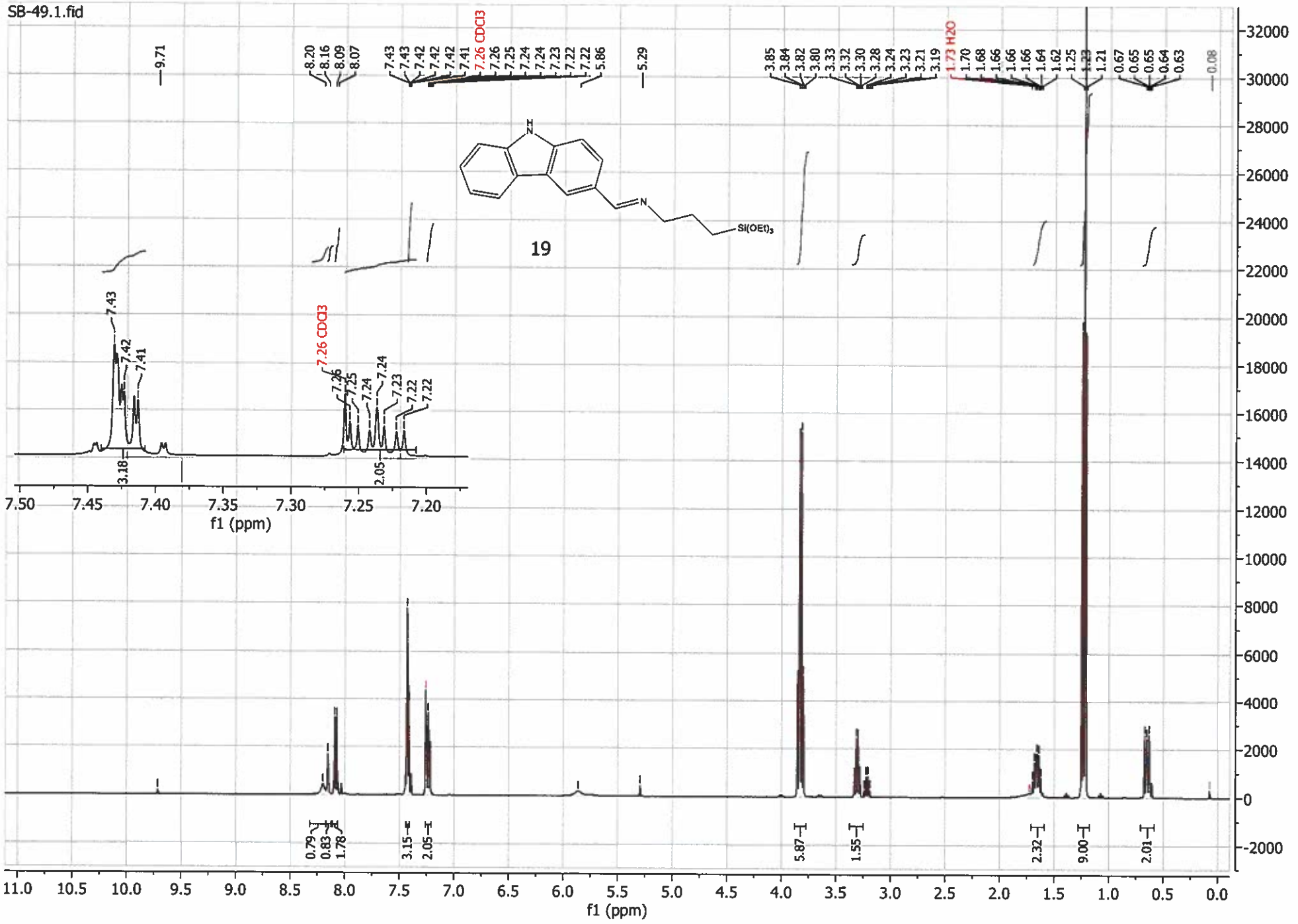

JTM-007 05062021 C.1.fid
159.40
138.73
135.51
131.63
130.76
129.58
121.19
117.97
64.30
58.41
24.25
18.33
8.09
N
N
N—(CH2)3Si(OEt)3
16
(E)-1-(4-(1H-imidazol-1-yl)phenyl)-N-(3-(triethoxysilyl)propyl)methanimine
f1 (ppm)

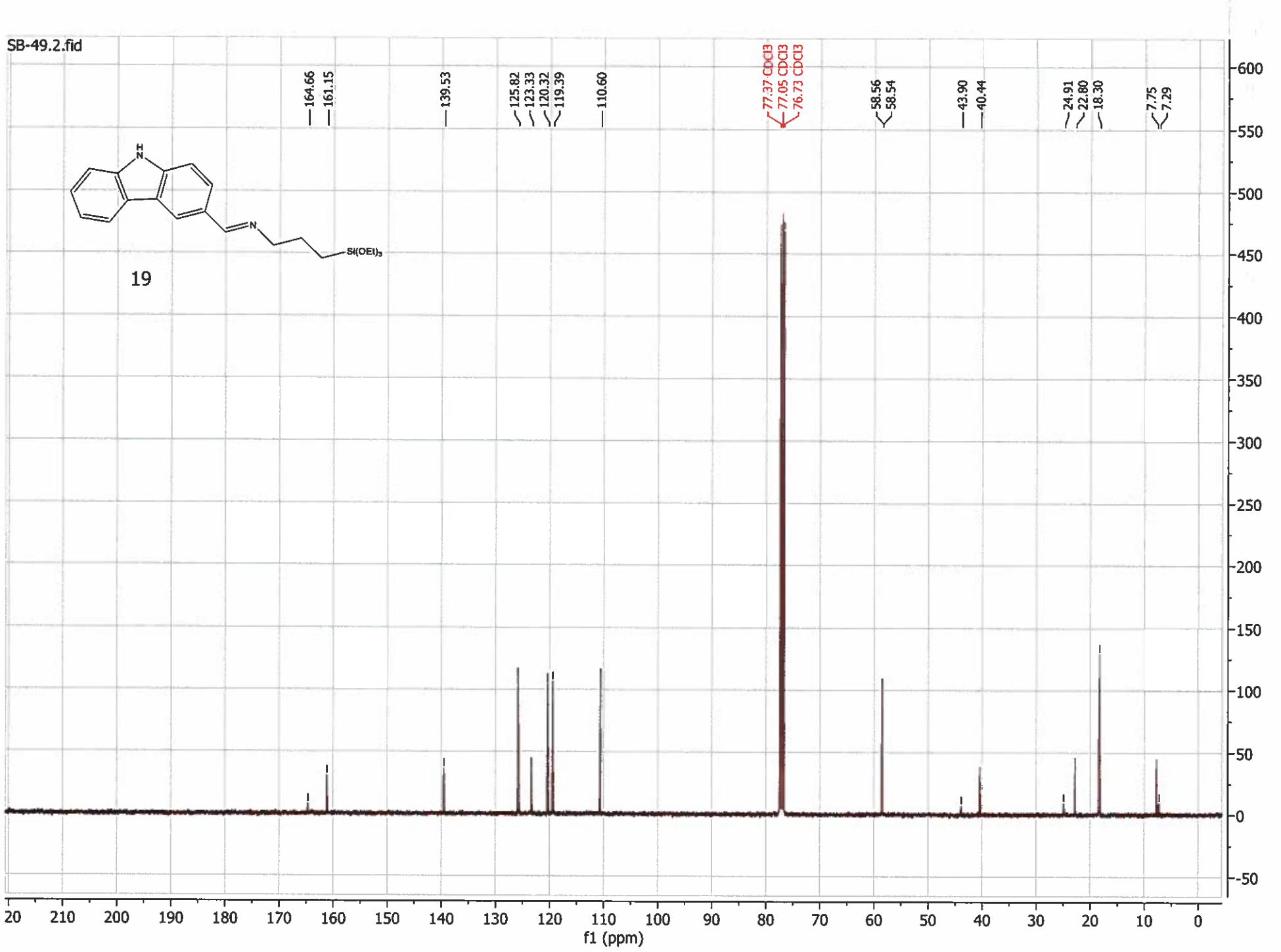

N
N
N—(CH2)3Si(OEt)3
17
(E)-1-(4-(1H-pyrazol-1-yl)phenyl)-N-(3-(triethoxysilyl)propyl)methanimine
0.92
0.91
1.83
2.69
0.88
5.88
1.92
2.13
9.41
2.02
f1 (ppm)

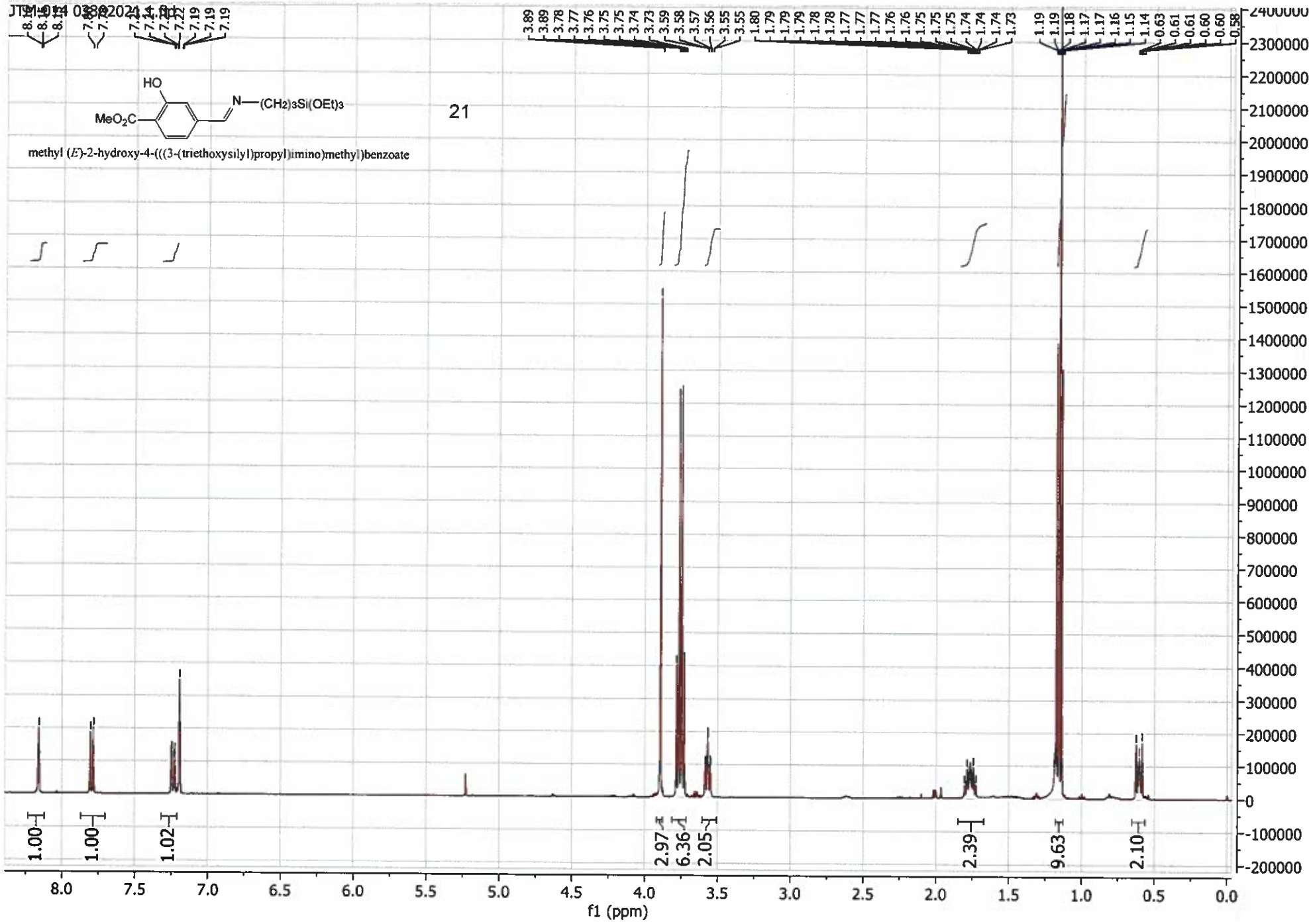

JTM-008-2C.1.fid
159.97
141.51
134.41
129.25
126.76
118.90
108.04
64.33
58.40
24.28
18.32
8.07
141.51
141.52
141.50
141.48
141.46
f1 (ppm)
N
N
N—(CH2)3Si(OEt)3
(E)-1-(4-(1H-pyrazol-1-yl)phenyl)-N-(3-(triethoxysilyl)propyl)methanimine
17
f1 (ppm)

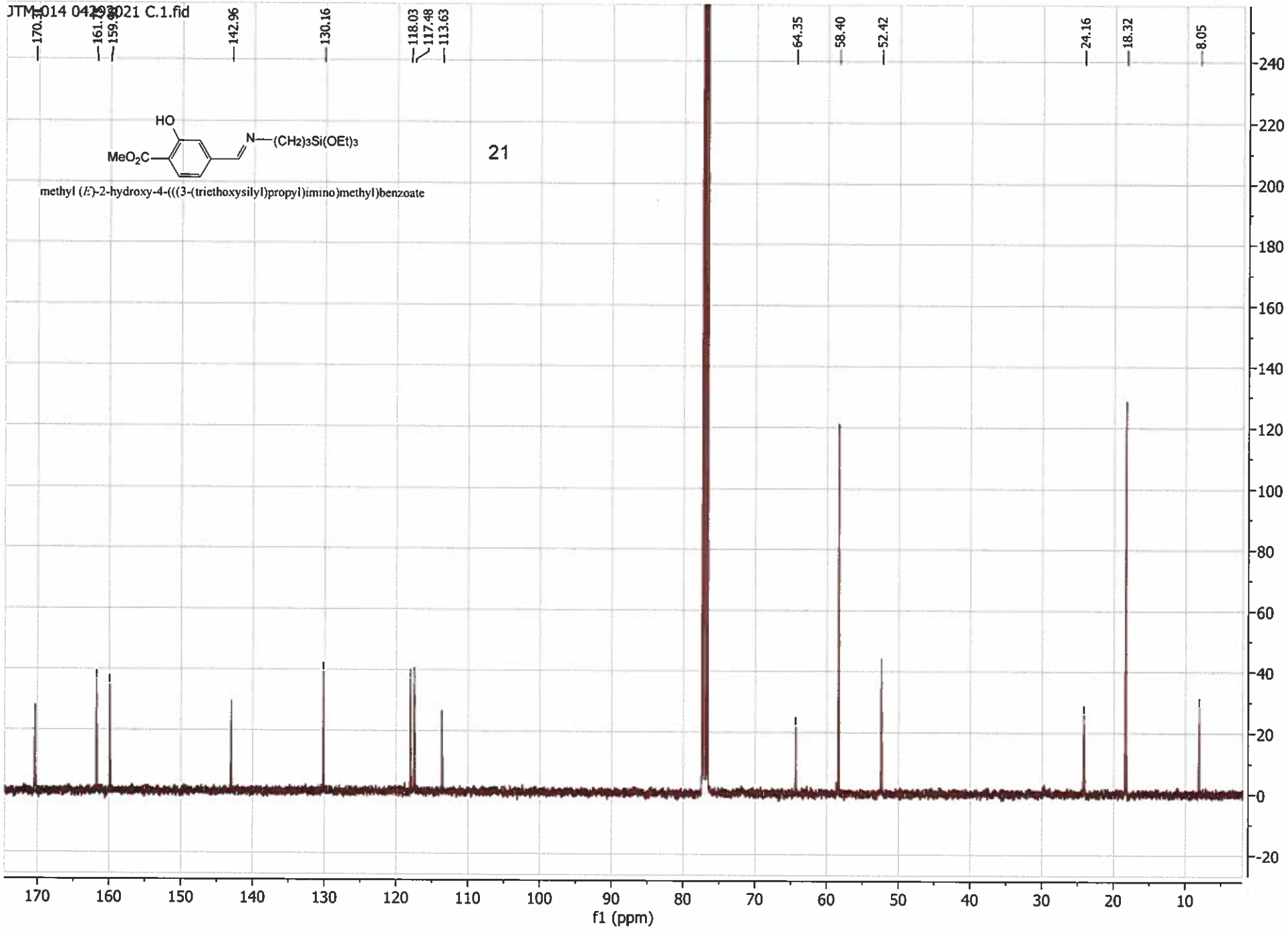

JTM-2009-2-H1.fid
18
N
N—(CH2)3Si(OEt)3
(E)-1-(isoquinolin-6-yl)-N-(3-(triethoxysilyl)propyl)methanimine
1.00
1.01
1.02
1.05
1.98
1.02
6.01
2.05
2.19
9.48
2.20
f1 (ppm)

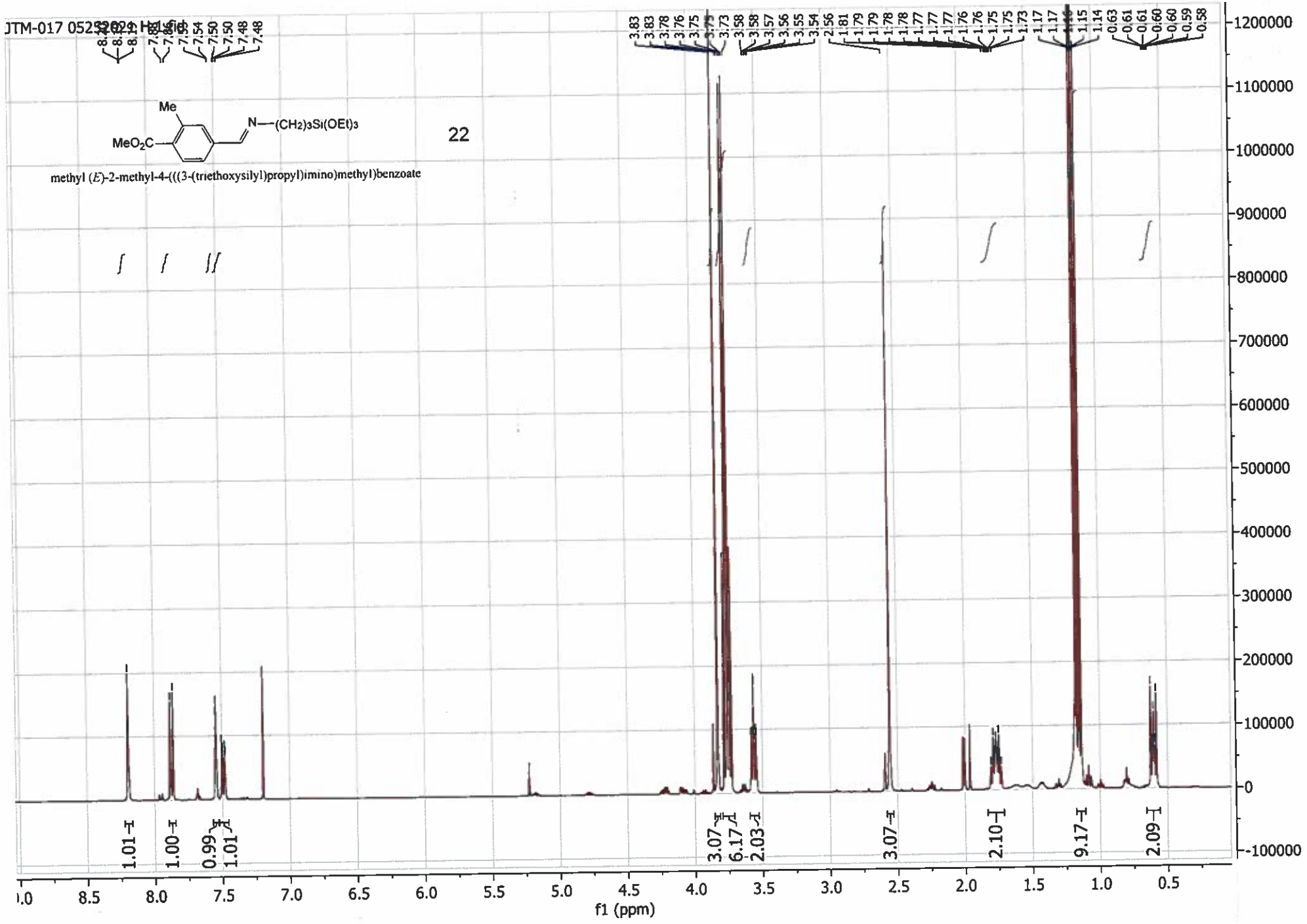

JTM-009-2sC.1.fid
160.28
152.98
143.73
138.00
135.76
129.42
128.05
127.74
125.52
120.89
64.46
58.42
24.26
18.33
8.12
N
N—(CH2)3Si(OEt)3
18
(E)-1-(isoquinolin-6-yl)-N-(3-(triethoxysilyl)propyl)methanimine
f1 (ppm)

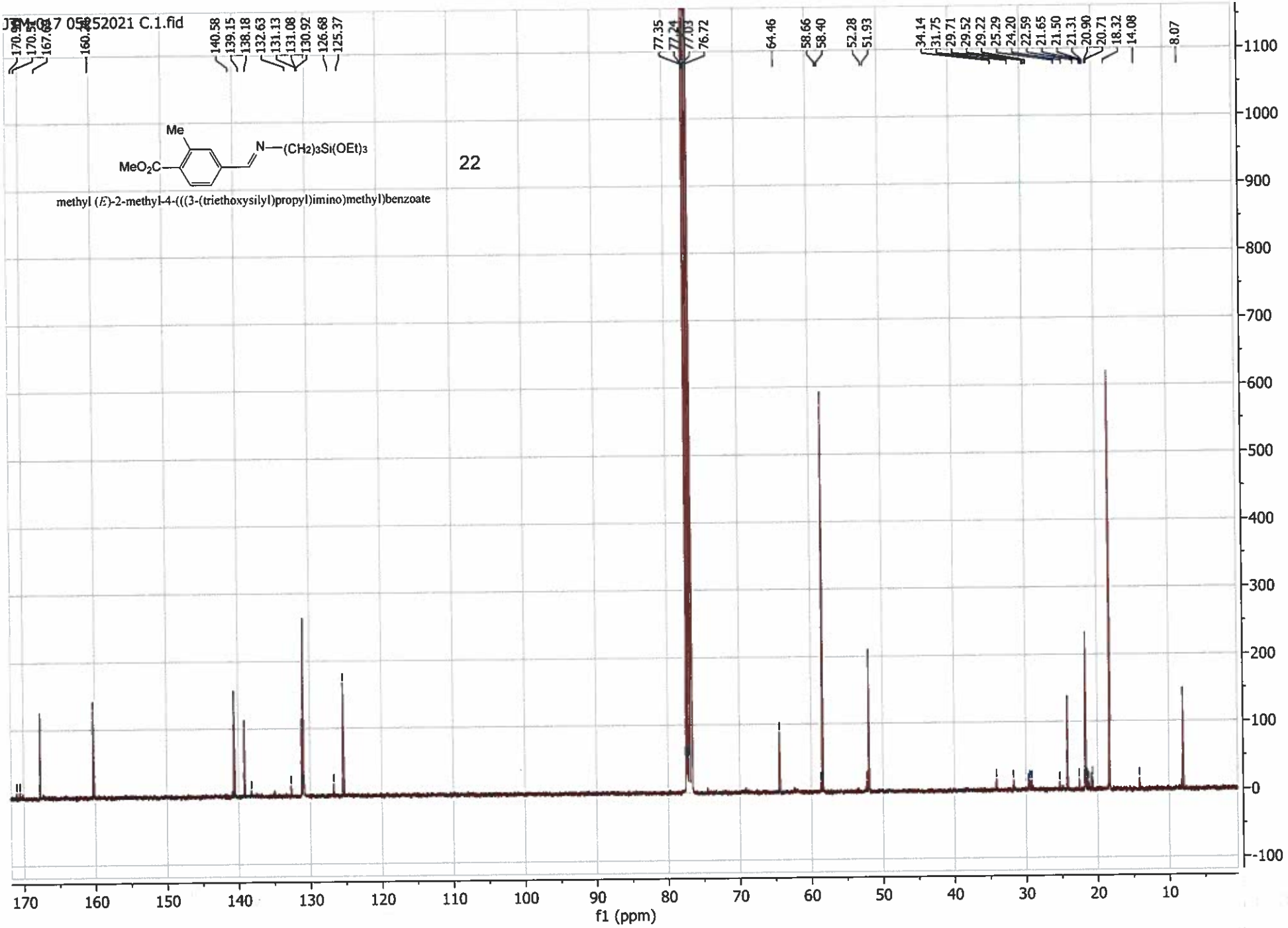

SB-49.1.fid
19
Si(OEt)3
7.26 CDCl3
1.73 H2O
f1 (ppm)

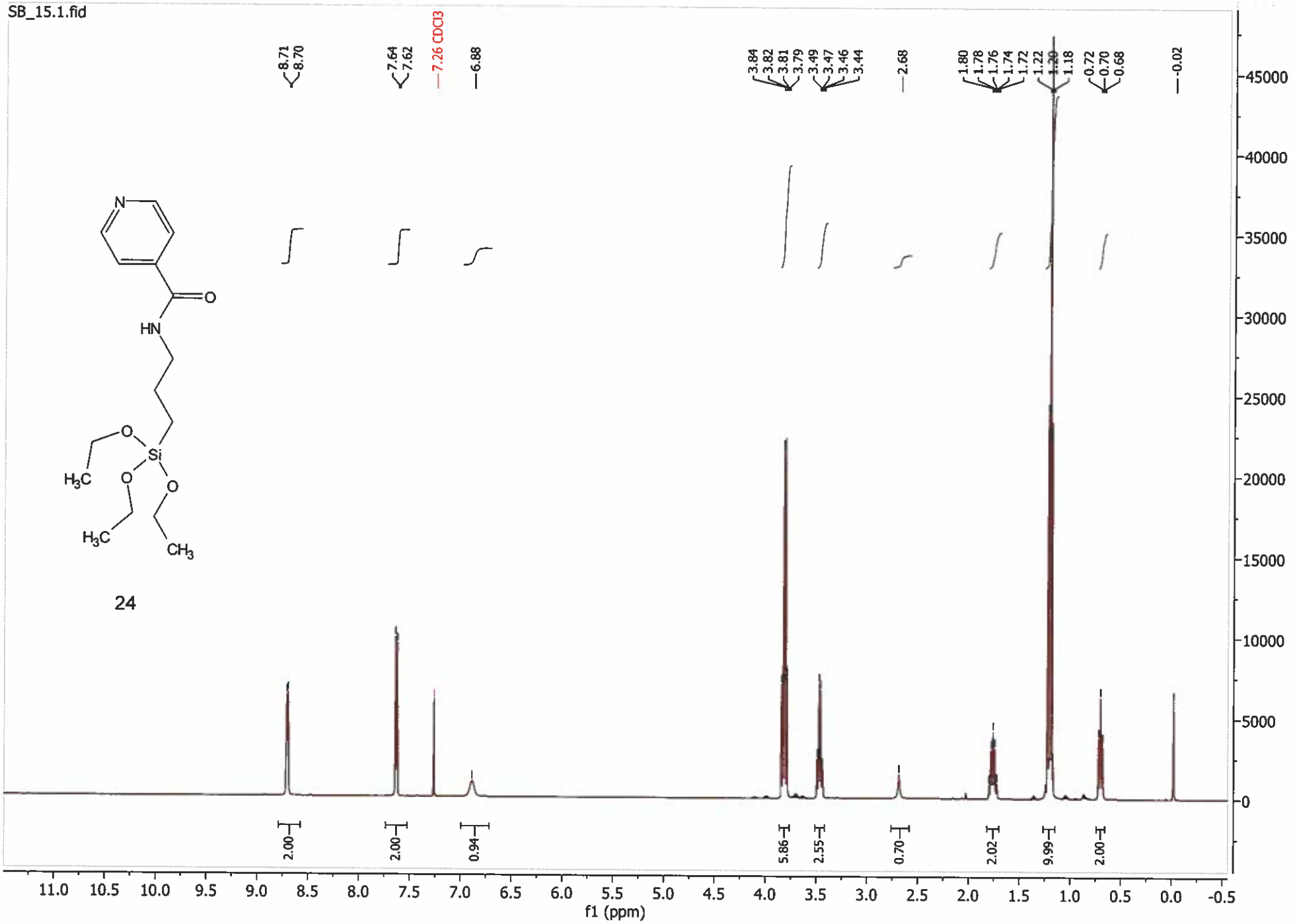

SB-49.2.fid
164.66
161.15
139.53
125.82
123.33
120.32
119.39
110.60
77.37 CDCl3
77.05 CDCl3
76.73 CDCl3
58.56
58.54
43.90
40.44
24.91
22.80
18.30
7.75
7.29
Si(OEt)3
19
f1 (ppm)

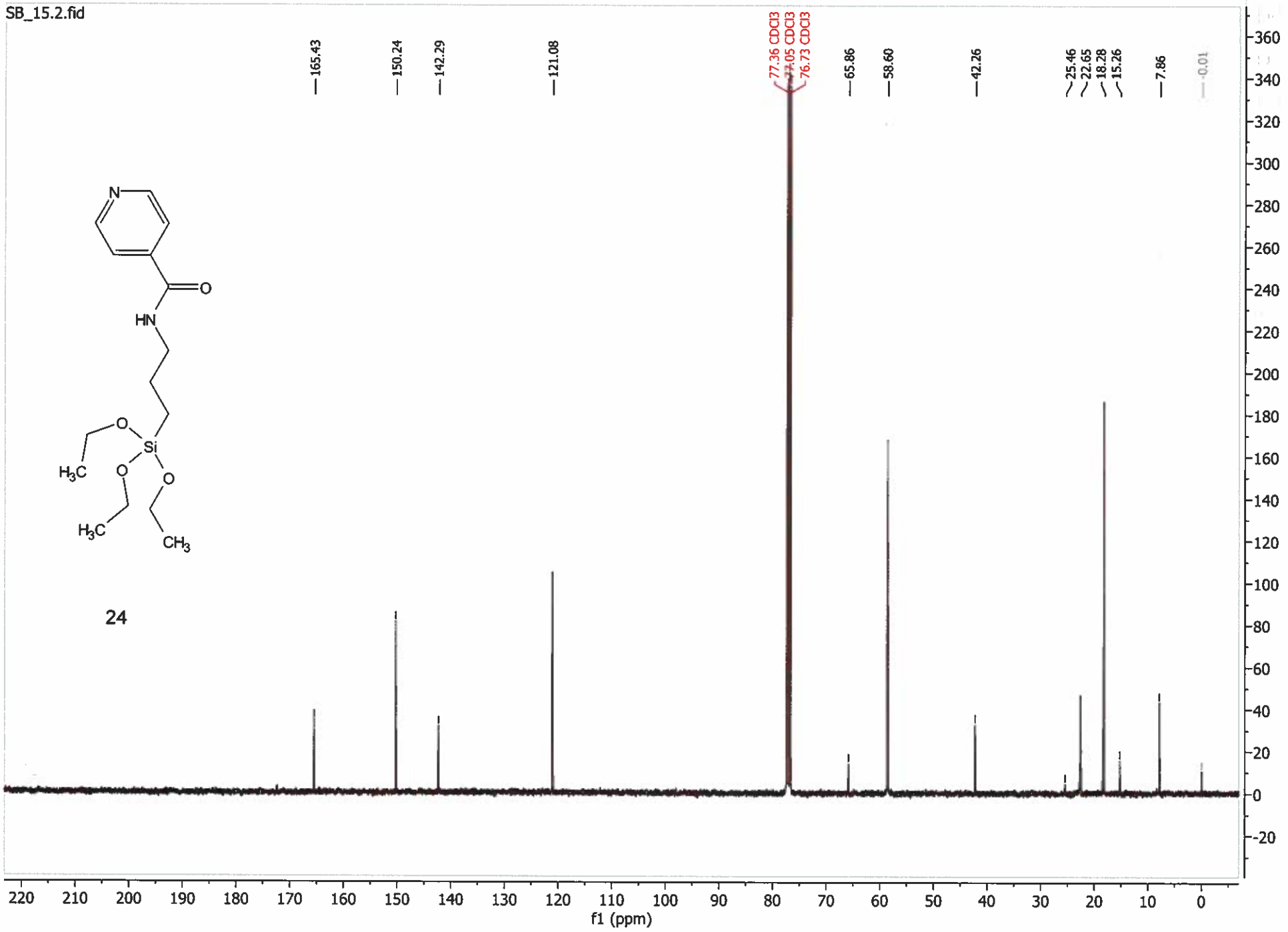

HO
MeO2C
N—(CH2)3Si(OEt)3
21
methyl (E)-2-hydroxy-4-(((3-(triethoxysilyl)propyl)imino)methyl)benzoate
1.00
1.00
1.02
2.97
6.36
2.05
2.39
9.63
2.10
f1 (ppm)

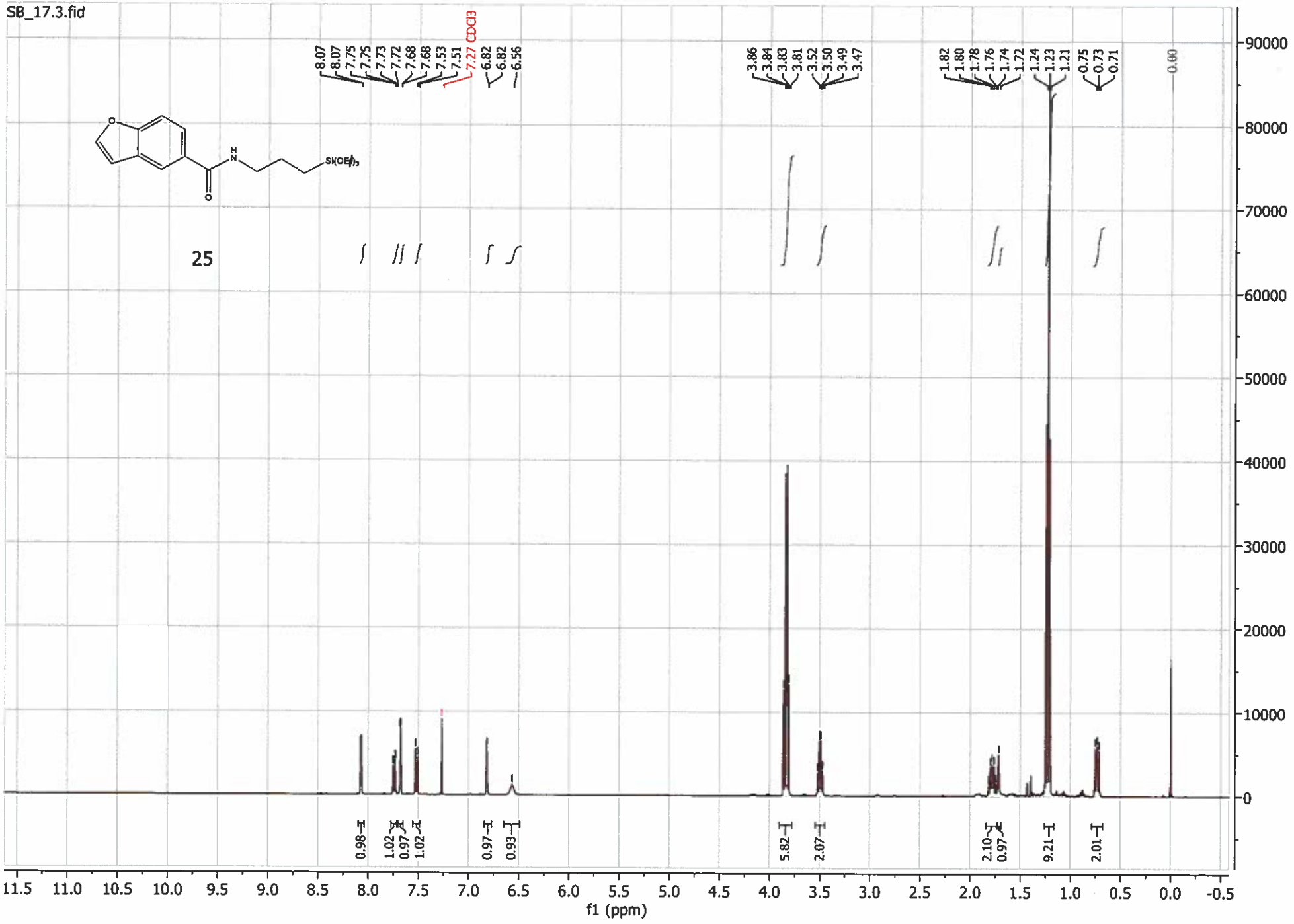

JTM-014 04293021 C.1.fid
170.31
161.79
159.81
142.96
130.16
118.03
117.48
113.63
64.35
58.40
52.42
24.16
18.32
8.05
HO
N—(CH2)3Si(OEt)3
MeO2C
21
methyl (E)-2-hydroxy-4-(((3-(triethoxysilyl)propyl)imino)methyl)benzoate
f1 (ppm)

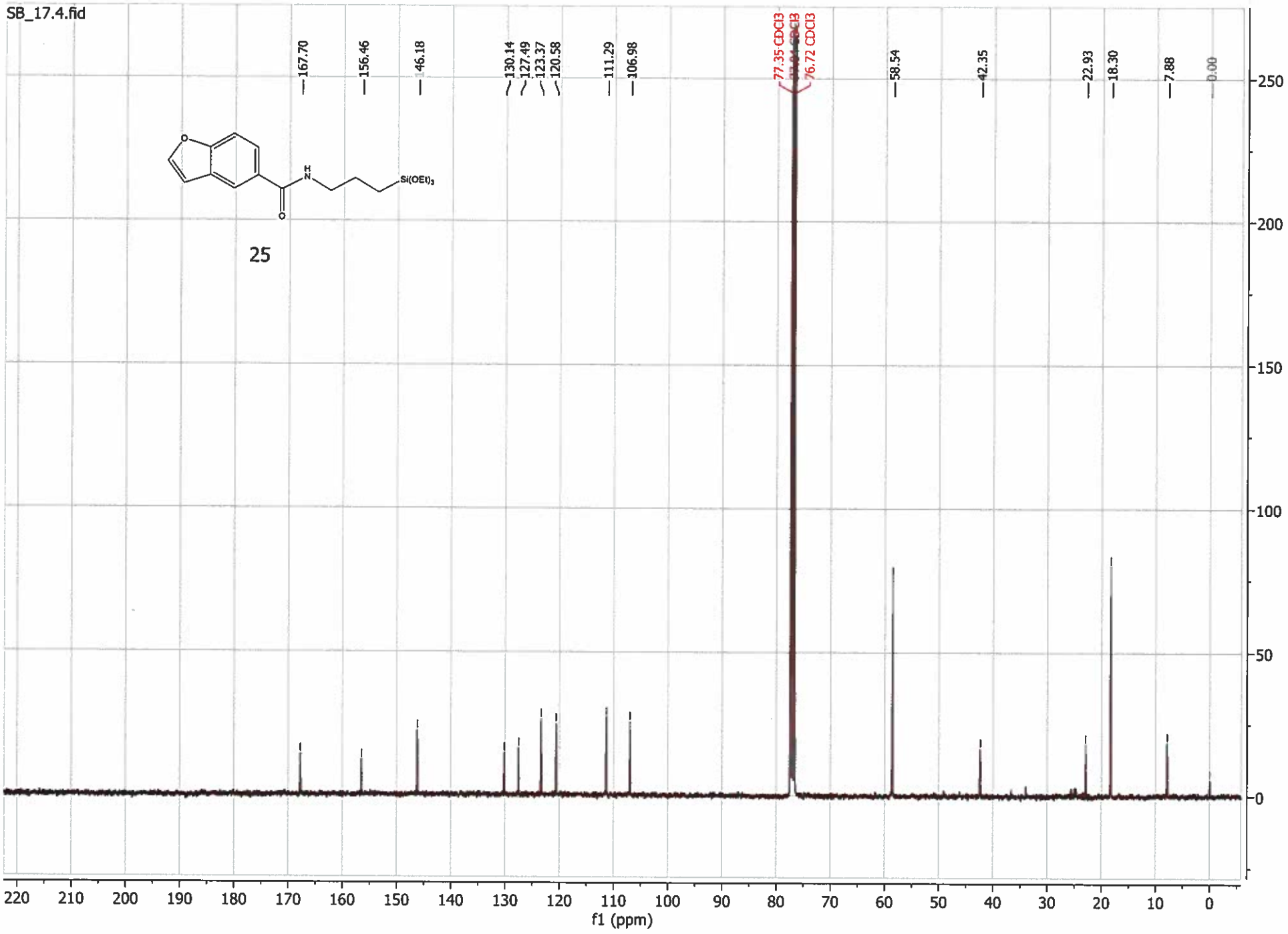

JTM-017 05232021 H1 1d
Me
MeO2C
N—(CH2)3Si(OEt)3
22
methyl (E)-2-methyl-4-(((3-(triethoxysilyl)propyl)imino)methyl)benzoate
f1 (ppm)

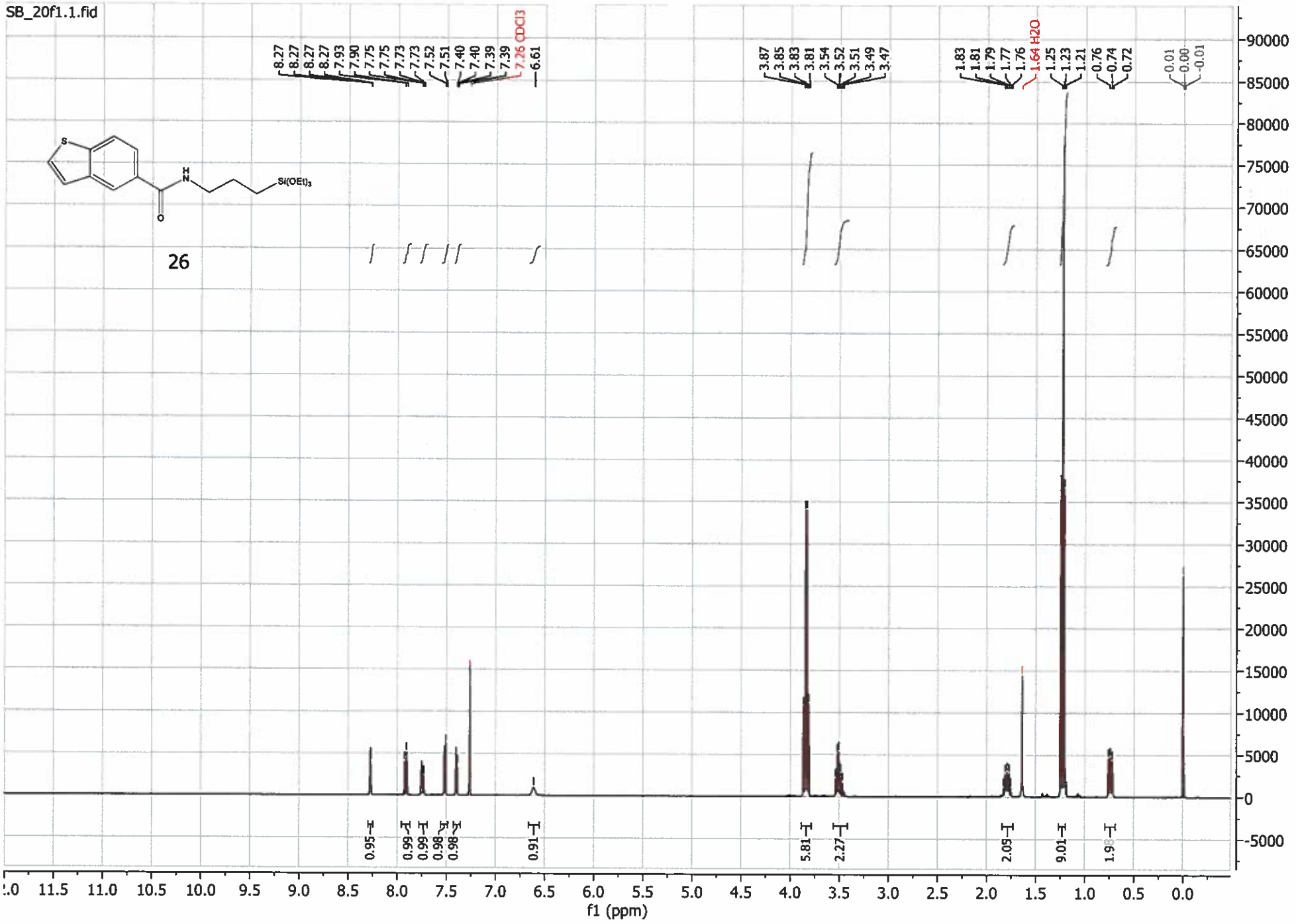

JSM-017 05252021 C.1.fid
170.94
170.55
167.68
160.45
140.58
139.15
138.18
132.63
131.13
131.08
130.92
126.68
125.37
77.35
77.24
77.03
76.72
64.46
58.66
58.40
52.28
51.93
34.14
31.75
29.71
29.52
29.22
25.29
24.20
22.59
21.65
21.50
21.31
20.90
20.71
18.32
14.08
8.07
Me
MeO2C
N—(CH2)3Si(OEt)3
22
methyl (E)-2-methyl-4-(((3-(triethoxysilyl)propyl)imino)methyl)benzoate
f1 (ppm)

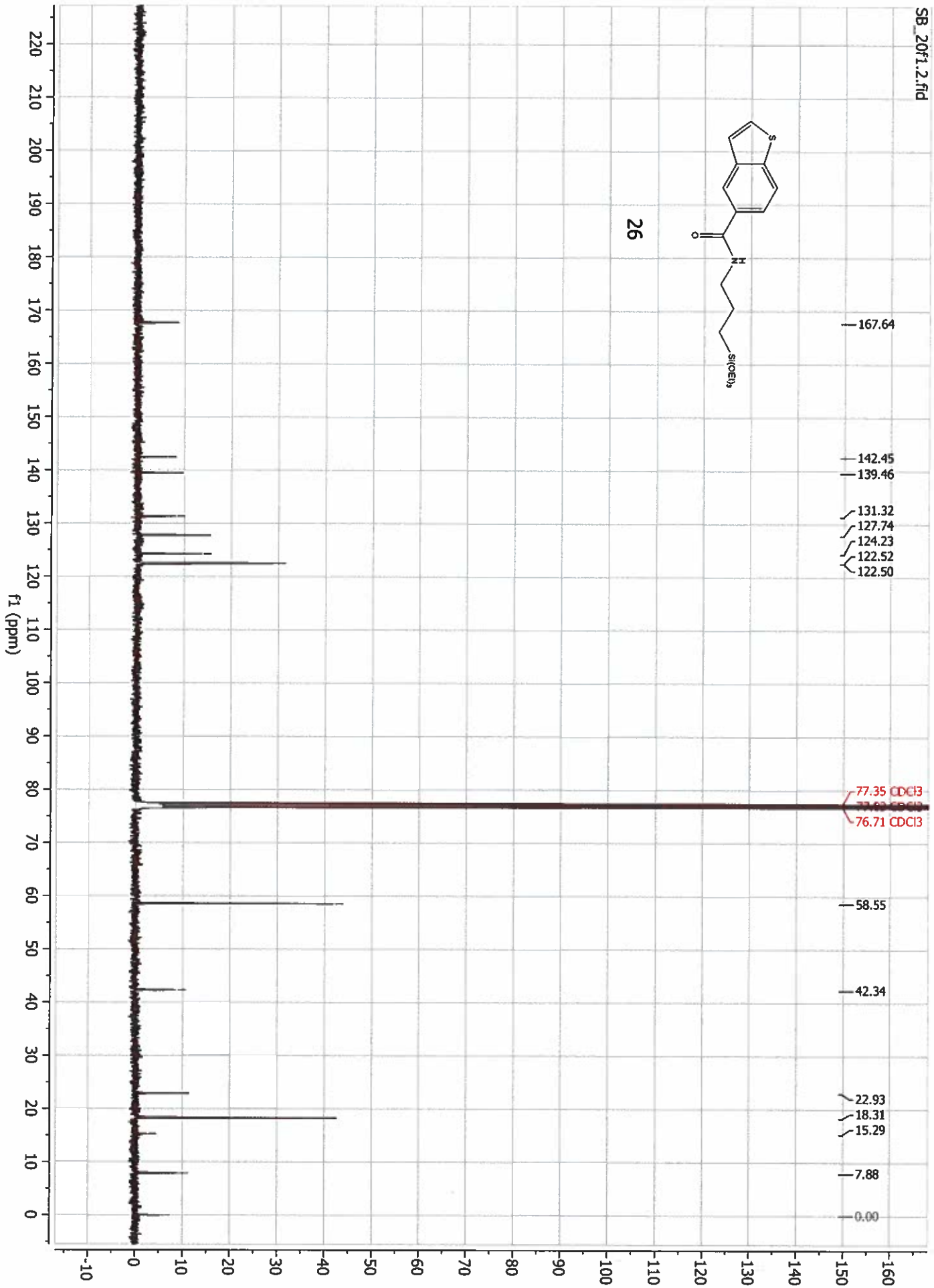

SB_15.1.fid
8.71
8.70
7.64
7.62
7.26 CDCl3
6.88
3.84
3.82
3.81
3.79
3.49
3.47
3.46
3.44
2.68
1.80
1.78
1.76
1.74
1.72
1.22
1.20
1.18
0.72
0.70
0.68
-0.02
N
O
HN
O
Si
O
O
H3C
O
H3C
CH3
24
2.00
2.00
0.94
5.86
2.55
0.70
2.02
9.99
2.00
f1 (ppm)

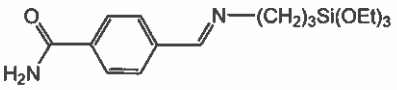

SB_15.2.fid
165.43
150.24
142.29
121.08
77.36 CDCl3
77.05 CDCl3
76.73 CDCl3
65.86
58.60
42.26
25.46
22.65
18.28
15.26
7.86
-0.01
N
O
HN
O
Si
O
O
H3C
H3C
CH3
24
f1 (ppm)


SB_17.3.fid
8.07
8.07
7.75
7.75
7.73
7.72
7.68
7.53
7.51
7.27 CDCl3
6.82
6.56
3.86
3.84
3.83
3.81
3.52
3.50
3.49
3.47
1.82
1.80
1.78
1.76
1.74
1.72
1.24
1.23
1.21
0.75
0.73
0.71
0.00
25
0.98
1.02
0.97
1.02
0.97
0.93
5.82
2.07
2.10
0.97
9.21
2.01
f1 (ppm)

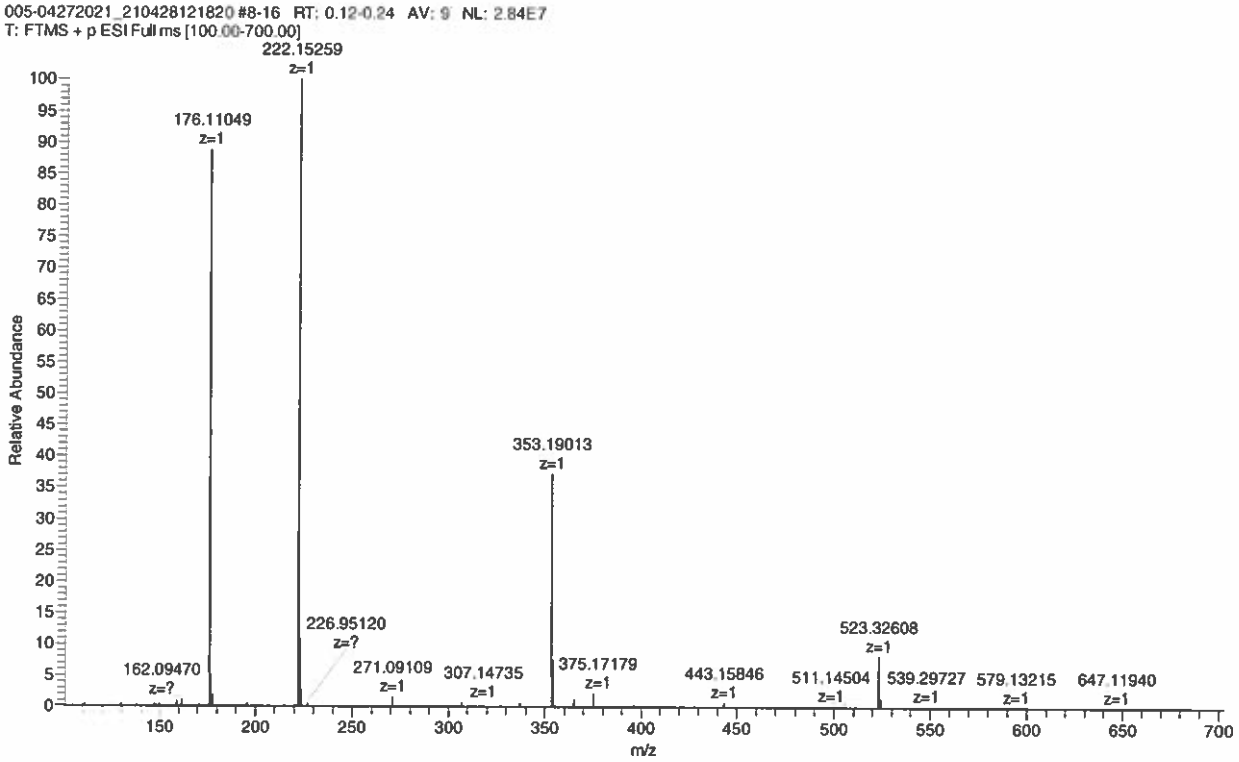

SB_17.4.fid
167.70
156.46
146.18
130.14
127.49
123.37
120.58
111.29
106.98
77.35 CDCl3
76.72 CDCl3
58.54
42.35
22.93
18.30
7.88
0.00
Si(OEt)3
25
f1 (ppm)

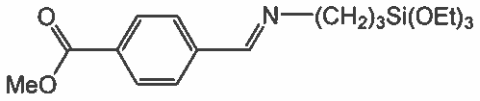

SB_20f1.1.fid
8.27
8.27
8.27
8.27
7.93
7.90
7.75
7.75
7.73
7.73
7.52
7.51
7.40
7.40
7.39
7.39
7.26 CDCl3
6.61
3.87
3.85
3.83
3.81
3.54
3.52
3.51
3.49
3.47
1.83
1.81
1.79
1.77
1.76
1.64 H2O
1.25
1.23
1.21
0.76
0.74
0.72
0.01
0.00
-0.01
S
N
H
O
Si(OEt)3
26
0.95
0.99
0.99
0.98
0.98
0.91
5.81
2.27
2.09
9.01
1.98
f1 (ppm)


SB_20f1.2.fid
26
167.64
142.45
139.46
131.32
127.74
124.23
122.52
122.50
77.35 CDCl3
76.71 CDCl3
58.55
42.34
22.93
18.31
15.29
7.88
0.00
f1 (ppm)

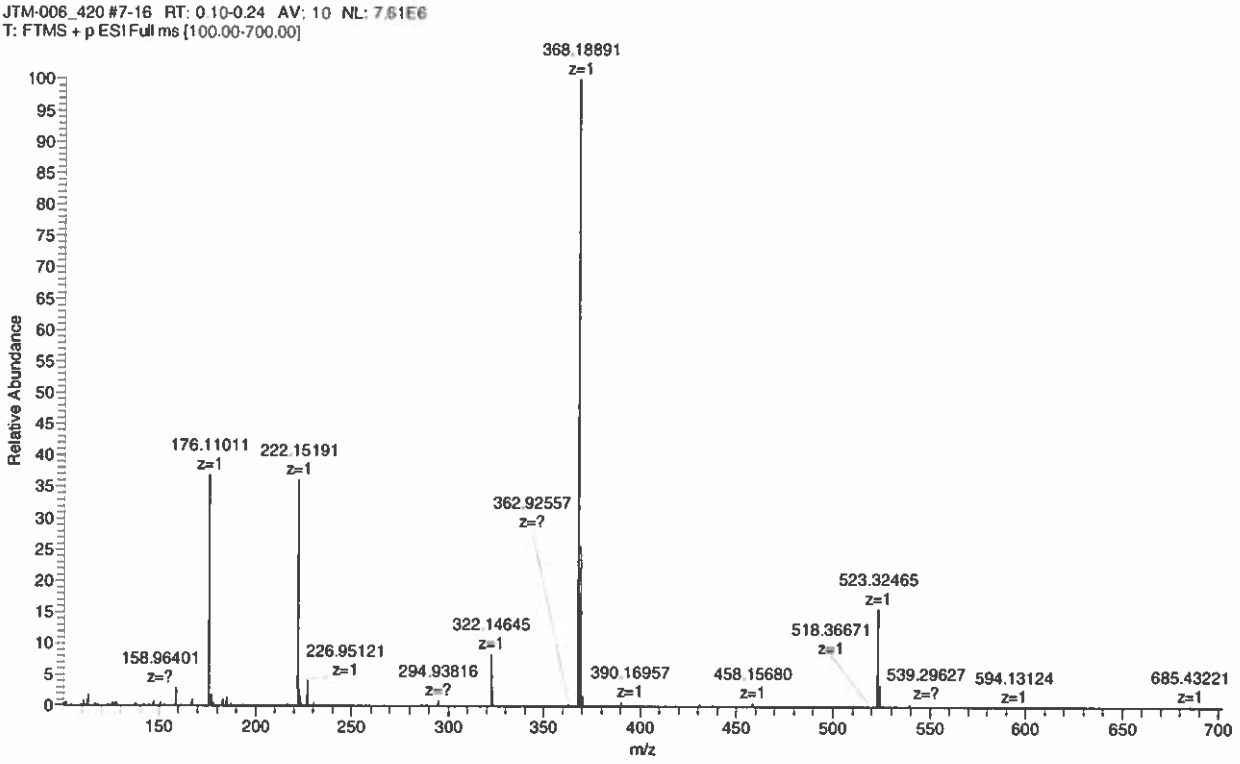


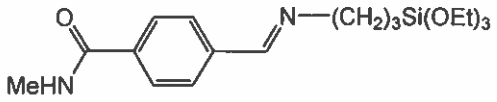
(*E*)-4-(((3-(triethoxysilyl)propyl)imino)methyl)benzamide 2



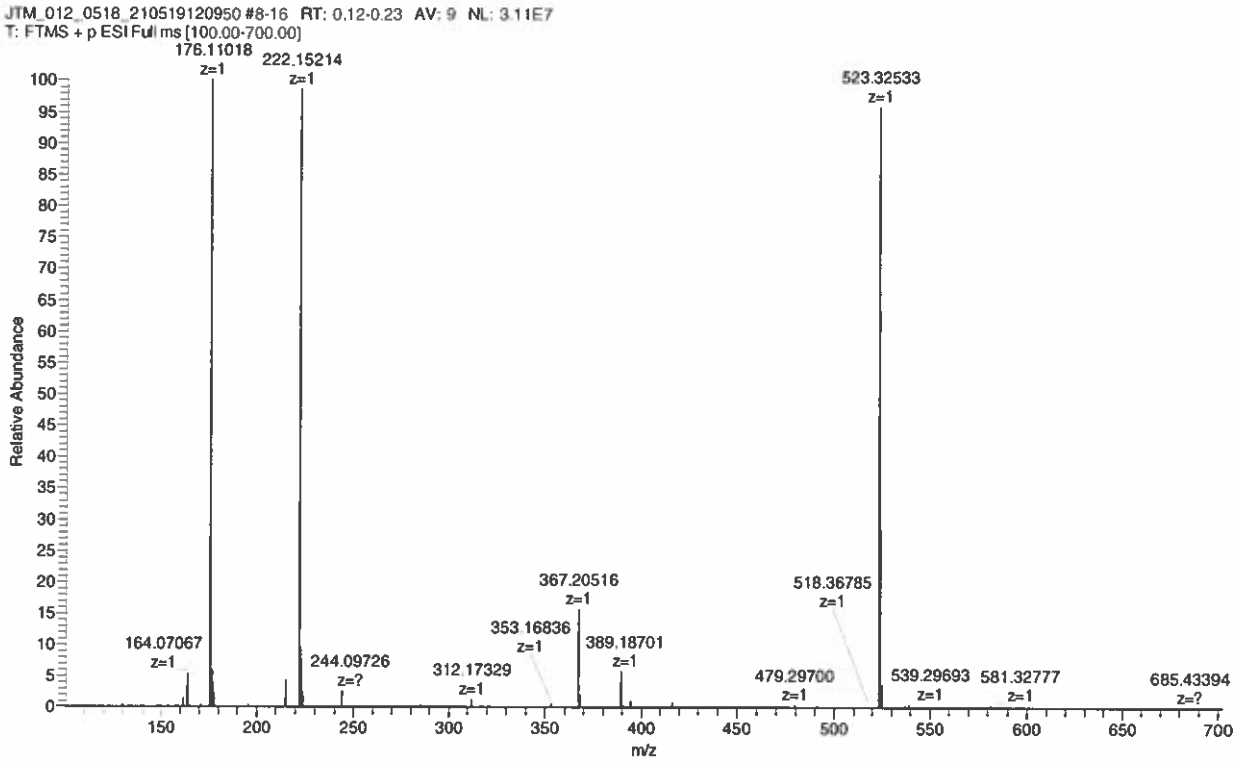


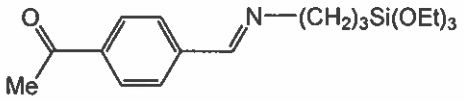
methyl (*E*)-4-(((3-(triethoxysilyl)propyl)imino)methyl)benzoate 3



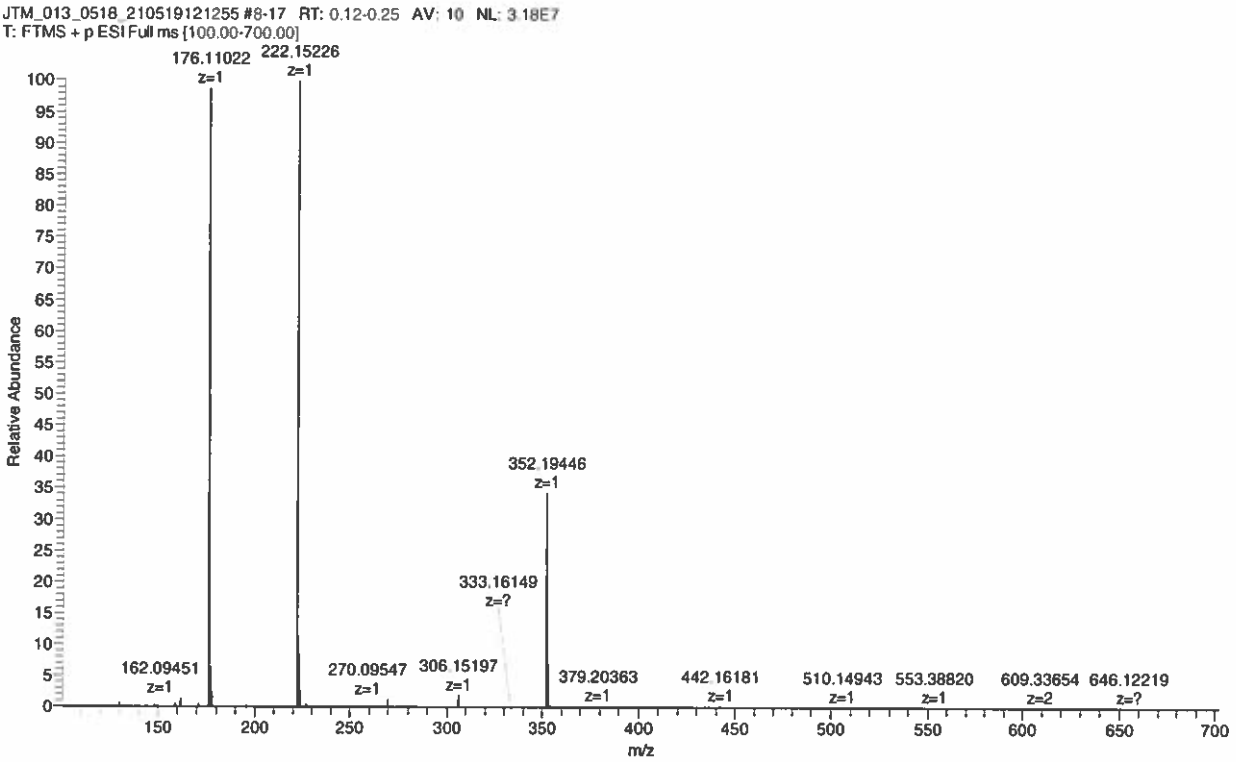


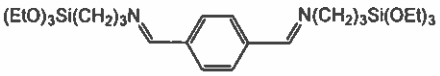
(*E*)-*N*-methyl-4-(((3-(triethoxysilyl)propyl)imino)methyl)benzamide **4**





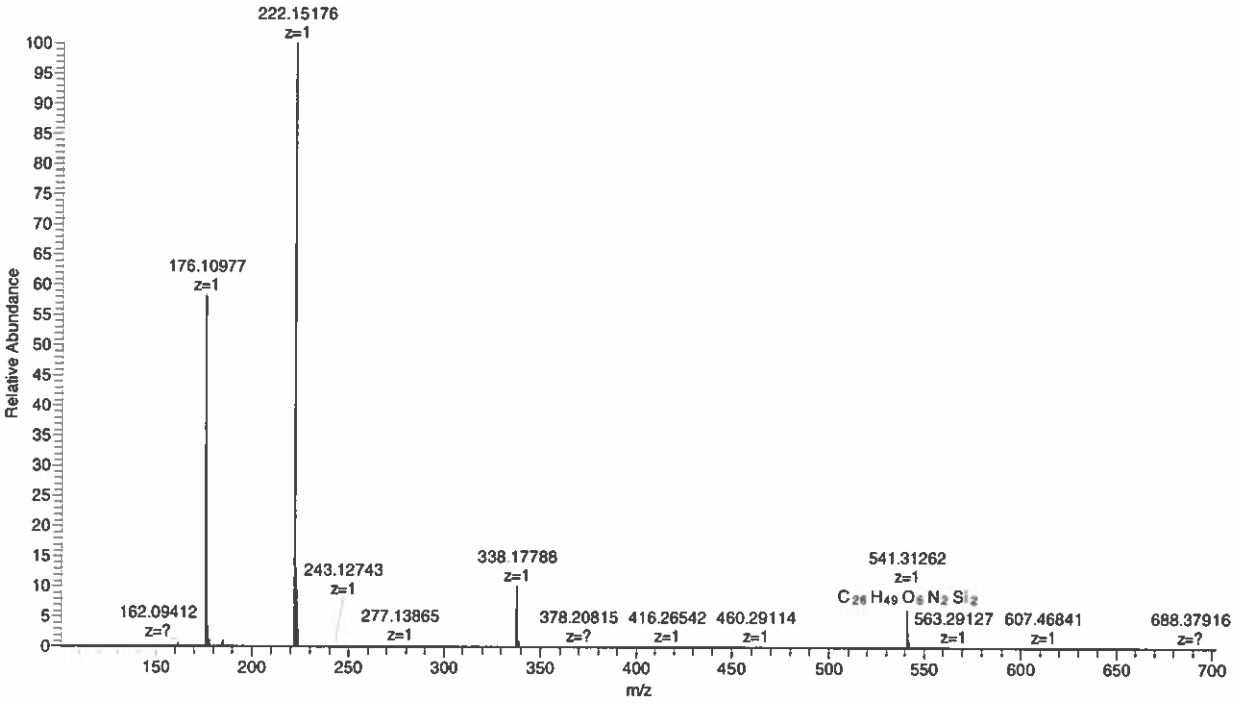
(*E*)-1-(4-(((3-(triethoxysilyl)propyl)imino)methyl)phenyl)ethan-1-one 5

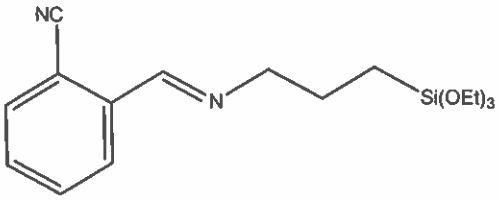




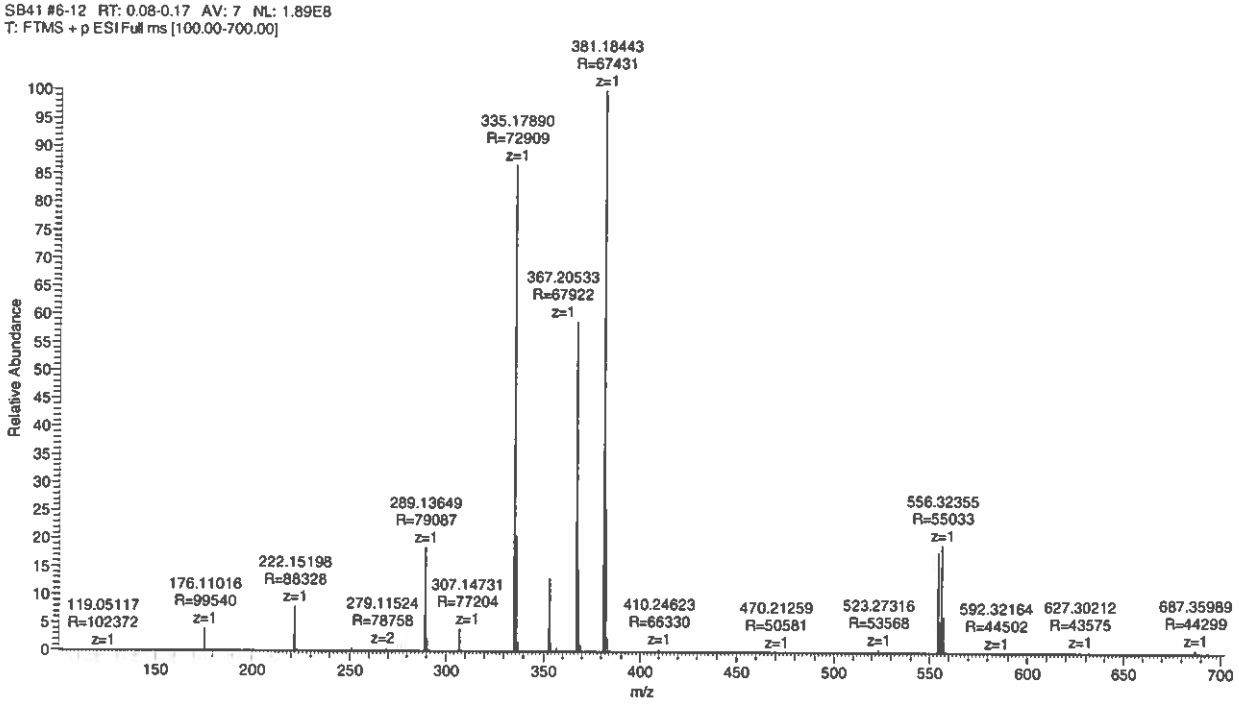
6

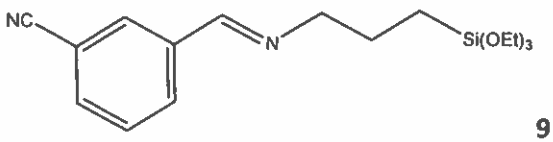
JTM_004_0607 #8-14 RT: 0.12-0.20 AV: 7 NL: 8.76E7
T: FTMS + p ESI Full ms [100.00-700.00]



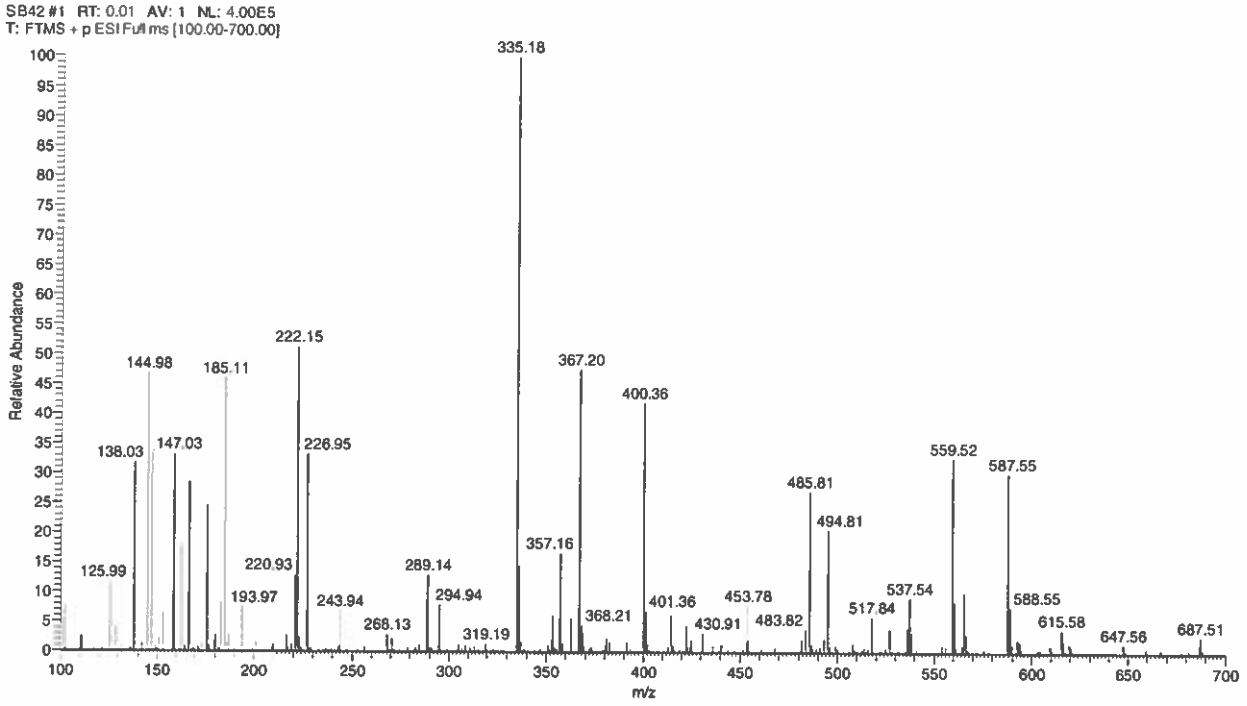

NC
N
Si(OEt)3

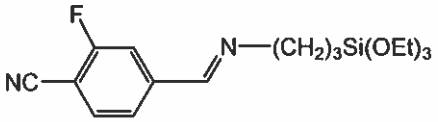
8


SB41 #6-12 RT: 0.08-0.17 AV: 7 NL: 1.89E8
T: FTMS + p ESI Full ms [100.00-700.00]
Relative Abundance
m/z
381.18443 R=67431 z=1
335.17890 R=72909 z=1
367.20533 R=67922 z=1
289.13649 R=79087 z=1
556.32355 R=55033 z=1
222.15198 R=88328 z=1
176.11016 R=99540 z=1
307.14731 R=77204 z=1
119.05117 R=102372 z=1
279.11524 R=78758 z=2
410.24623 R=66330 z=1
470.21259 R=50581 z=1
523.27316 R=53568 z=1
592.32164 R=44502 z=1
627.30212 R=43575 z=1
687.35989 R=44299 z=1

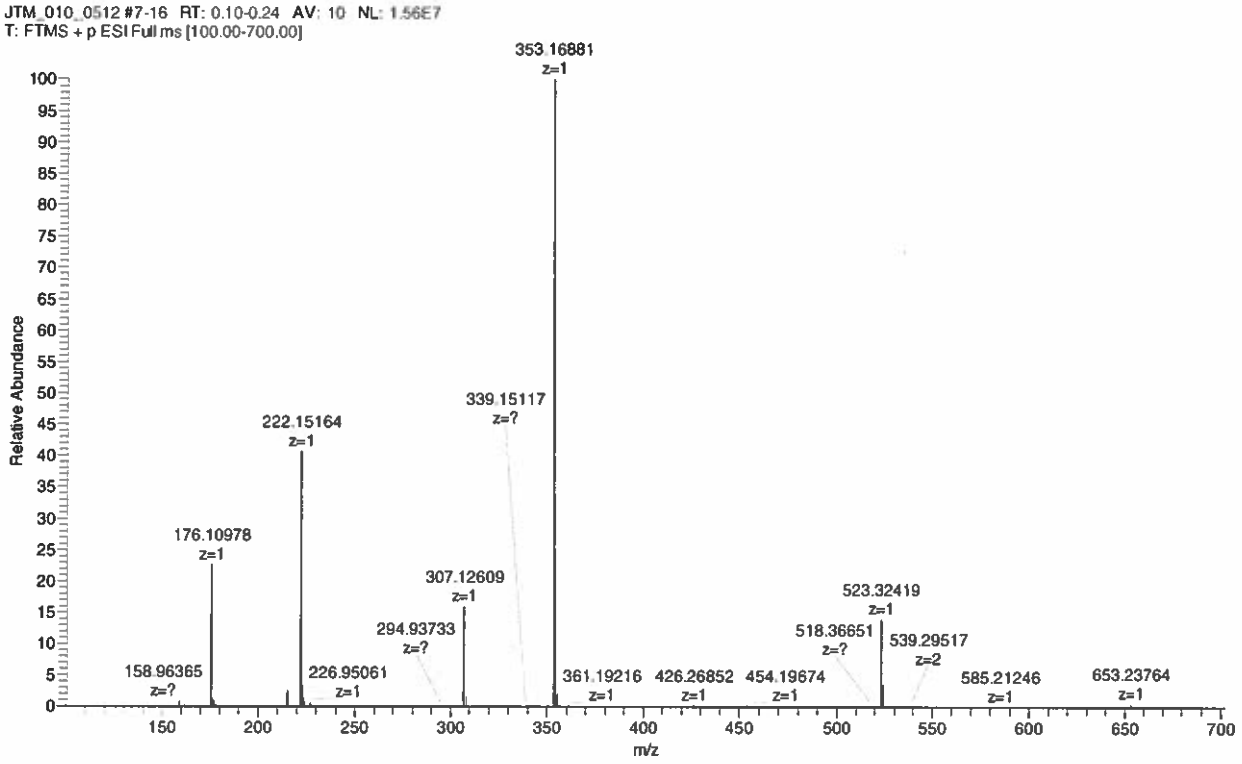

NC
N
Si(OEt)3

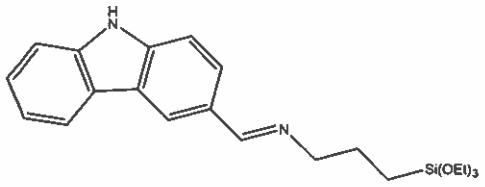
9


SB42 #1 RT: 0.01 AV: 1 NL: 4.00E5
T: FTMS + p ESI Full ms [100.00-700.00]
Relative Abundance
m/z
335.18
222.15
144.98
185.11
367.20
400.36
138.03
147.03
226.95
559.52
587.55
485.81
494.81
357.16
125.99
220.93
289.14
193.97
294.94
243.94
537.54
517.84
588.55
401.36
453.78
368.21
615.58
268.13
430.91
483.82
647.56
687.51
319.19



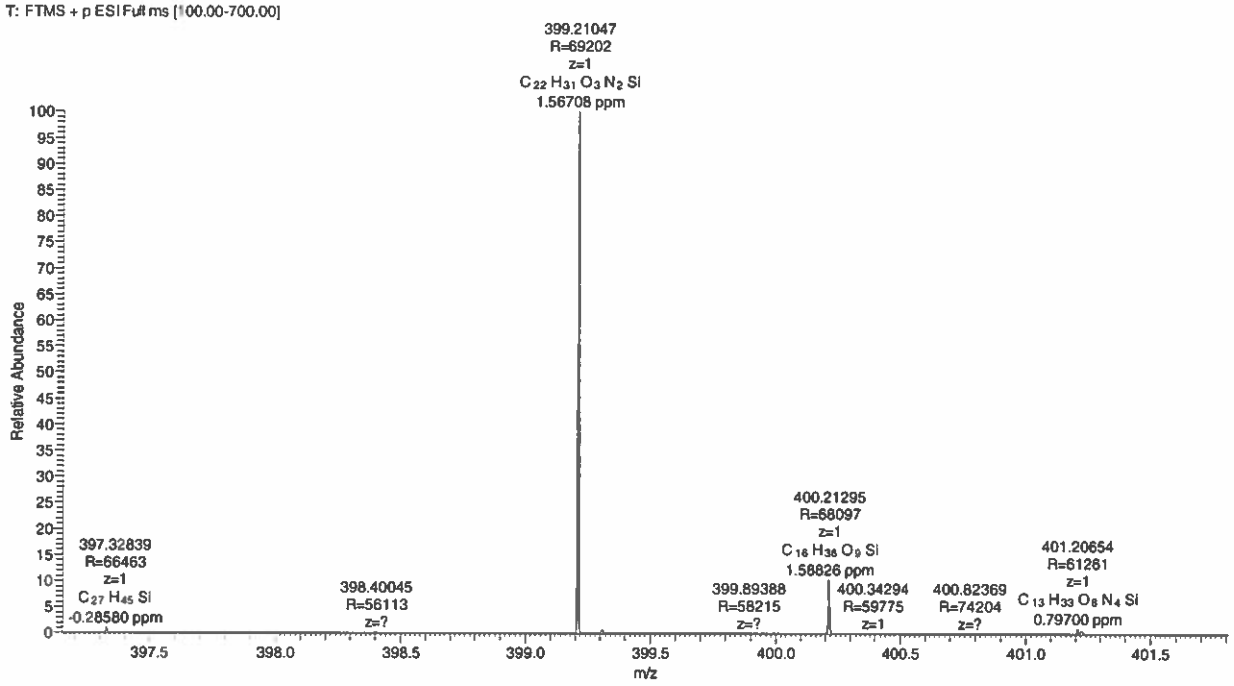
(*E*)-2-fluoro-4-(((3-(triethoxysilyl)propyl)imino)methyl)benzonitrile 10

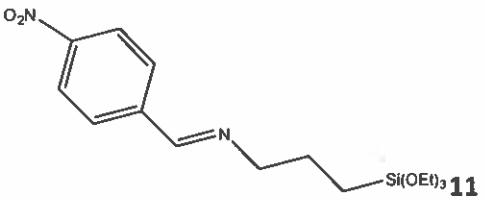




19

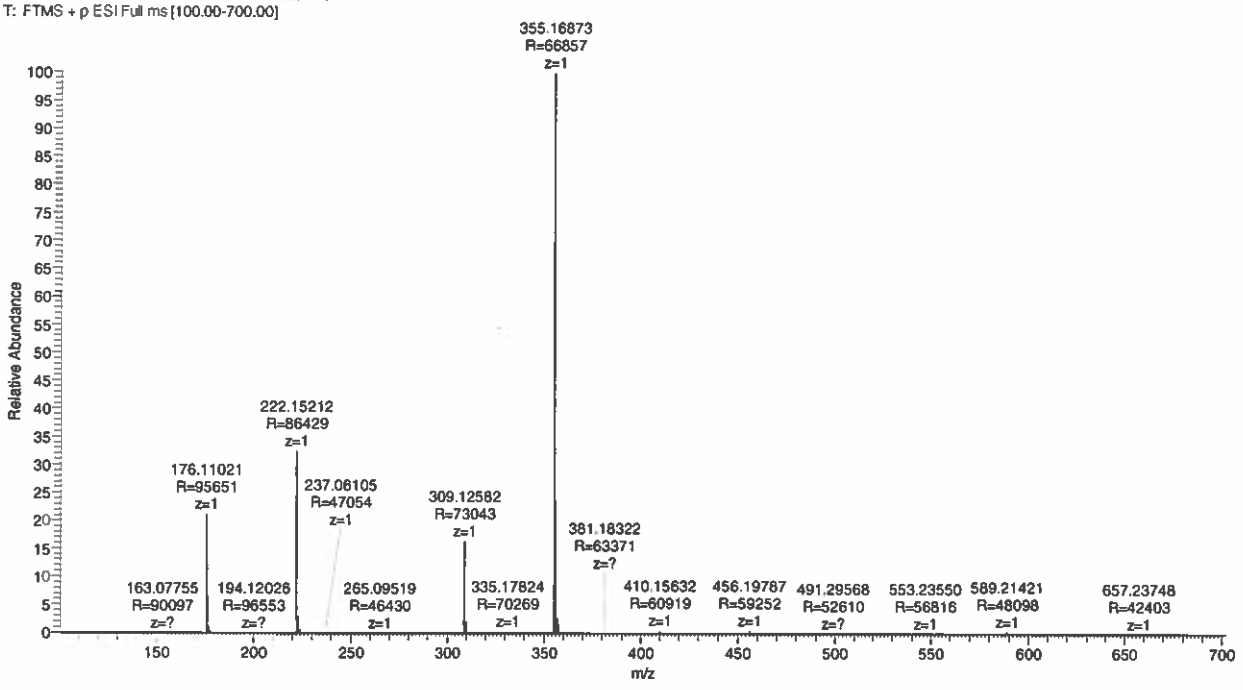
SB49 #7-16 RT: 0.10-0.24 AV: 10 NL: 2.61E5
T: FTMS + p ESI Full ms [100.00-700.00]



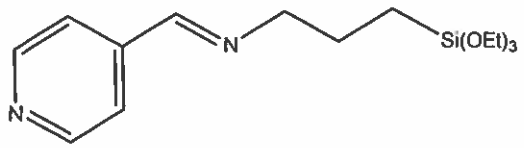


11

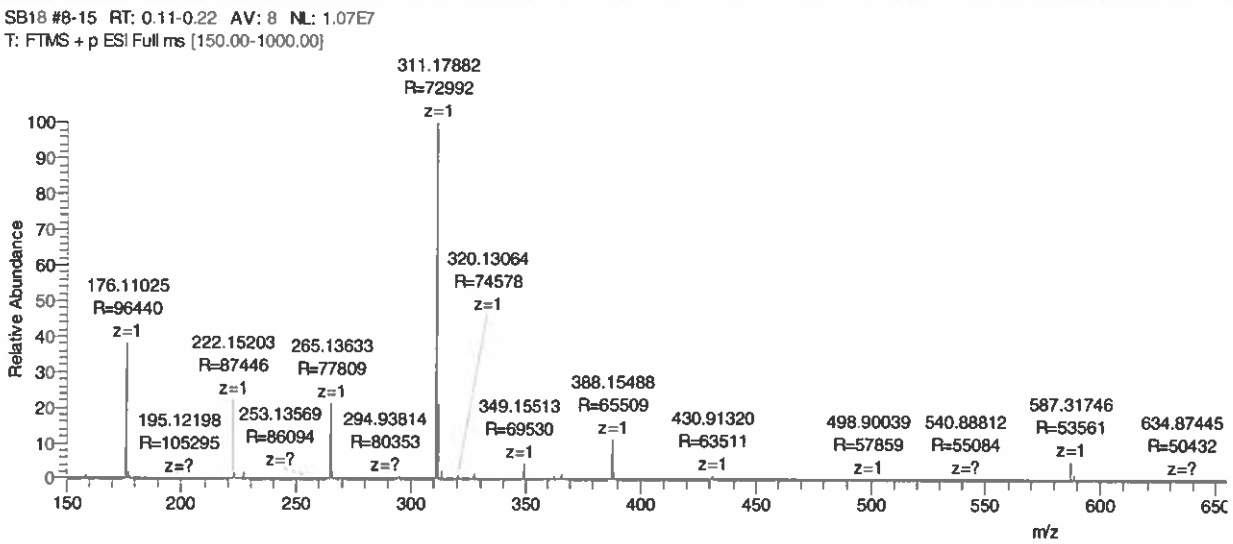
SB51 #6-11 RT: 0.08-0.16 AV: 6 NL: 1.08E8
T: FTMS + p ESI Full ms [100.00-700.00]

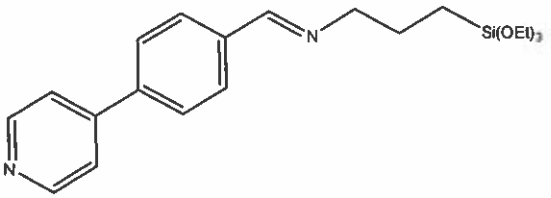


Imines:-

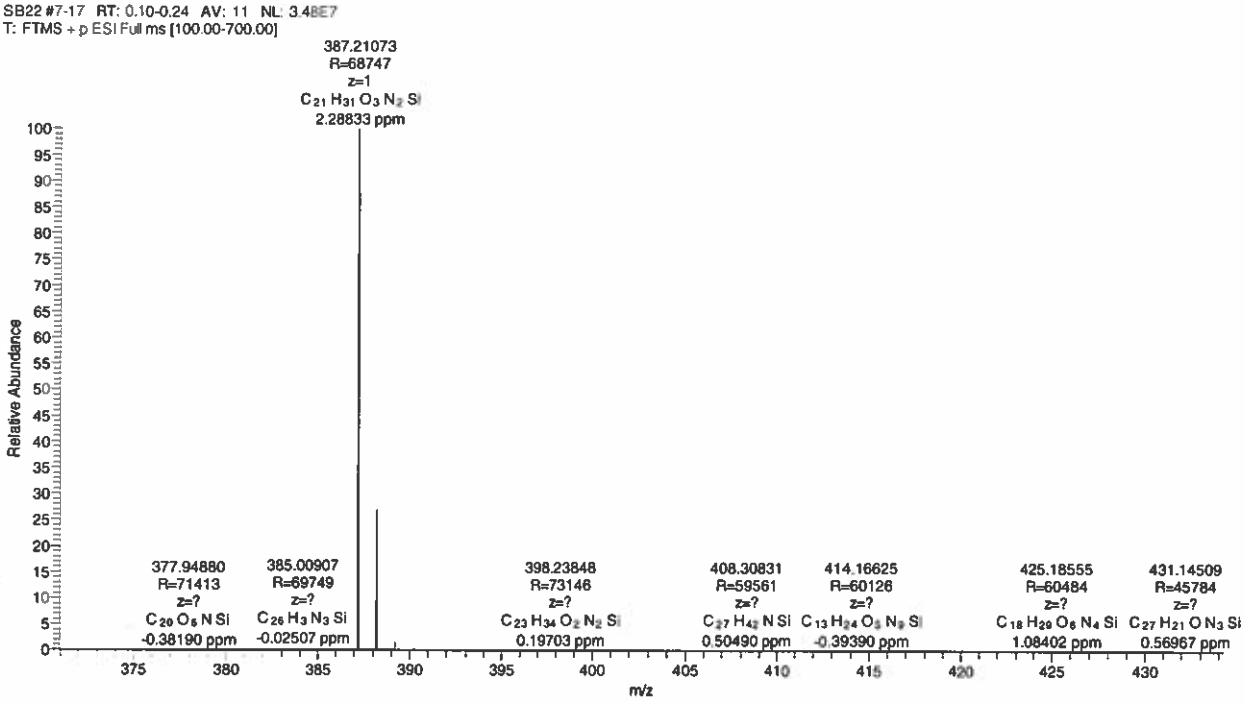

N
N
Si(OEt)3

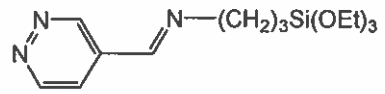
13


SB18 #8-15 RT: 0.11-0.22 AV: 8 NL: 1.07E7
T: FTMS + p ESI Full ms [150.00-1000.00]
311.17882
R=72992
z=1
320.13064
R=74578
z=1
176.11025
R=96440
z=1
222.15203
R=87446
z=1
265.13633
R=77809
z=1
195.12198
R=105295
z=?
253.13569
R=86094
z=?
294.93814
R=80353
z=?
349.15513
R=69530
z=1
388.15488
R=65509
z=1
430.91320
R=63511
z=1
498.90039
R=57859
z=1
540.88812
R=55084
z=?
587.31746
R=53561
z=1
634.87445
R=50432
z=?
Relative Abundance
m/z

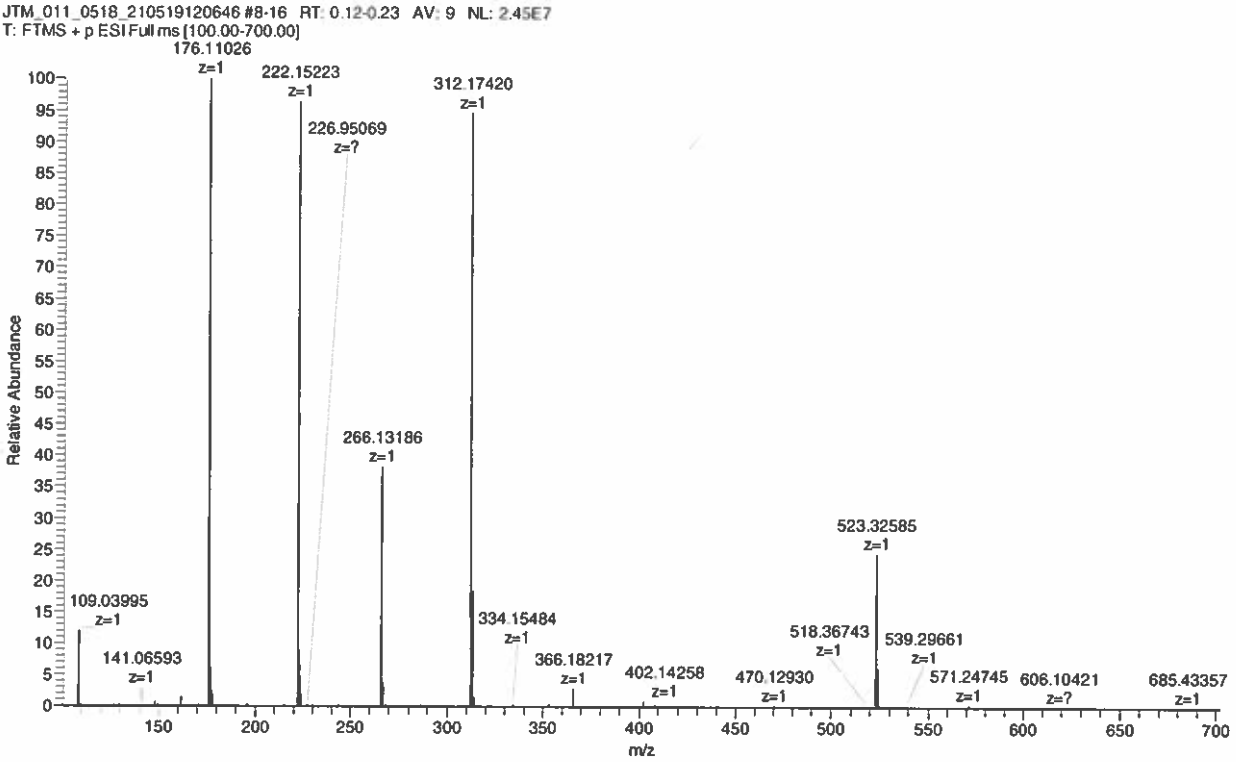

N
N
Si(OEt)3

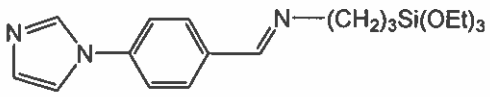
15


SB22 #7-17 RT: 0.10-0.24 AV: 11 NL: 3.48E7
T: FTMS + p ESI Full ms [100.00-700.00]
387.21073
R=68747
z=1
C21 H31 O3 N2 Si
2.28833 ppm
377.94880
R=71413
z=?
C20 O6 N Si
-0.38190 ppm
385.00907
R=69749
z=?
C26 H3 N3 Si
-0.02507 ppm
398.23848
R=73146
z=?
C23 H34 O2 N2 Si
0.19703 ppm
408.30831
R=59561
z=?
C27 H42 N Si
0.50490 ppm
414.16625
R=60126
z=?
C13 H24 O5 N3 Si
-0.39390 ppm
425.18555
R=60484
z=?
C18 H29 O6 N4 Si
1.08402 ppm
431.14509
R=45784
z=?
C27 H21 O N3 Si
0.56967 ppm
Relative Abundance
m/z



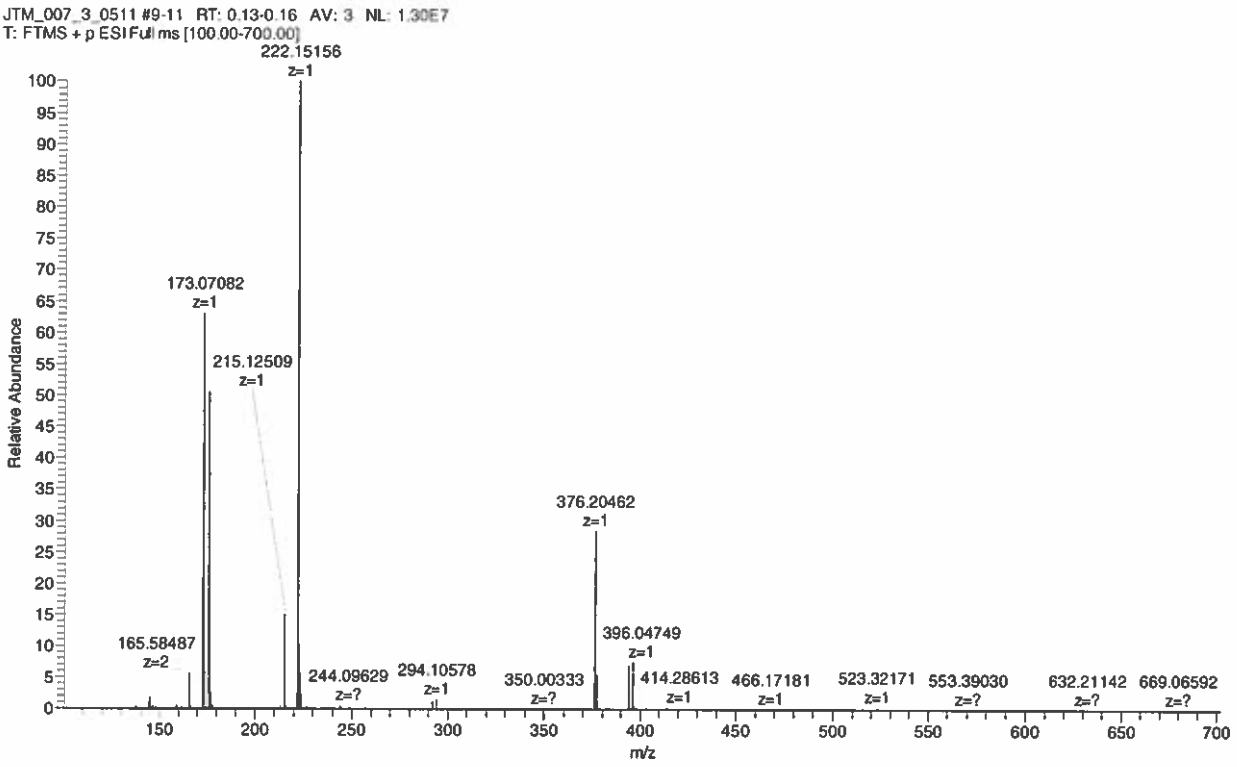
(*E*)-1-(pyridazin-4-yl)-*N*-(3-(triethoxysilyl)propyl)methanimine 14

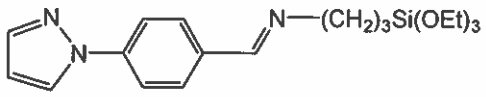




(*E*)-1-(4-(1*H*-imidazol-1-yl)phenyl)-*N*-(3-(triethoxysilyl)propyl)methanimine

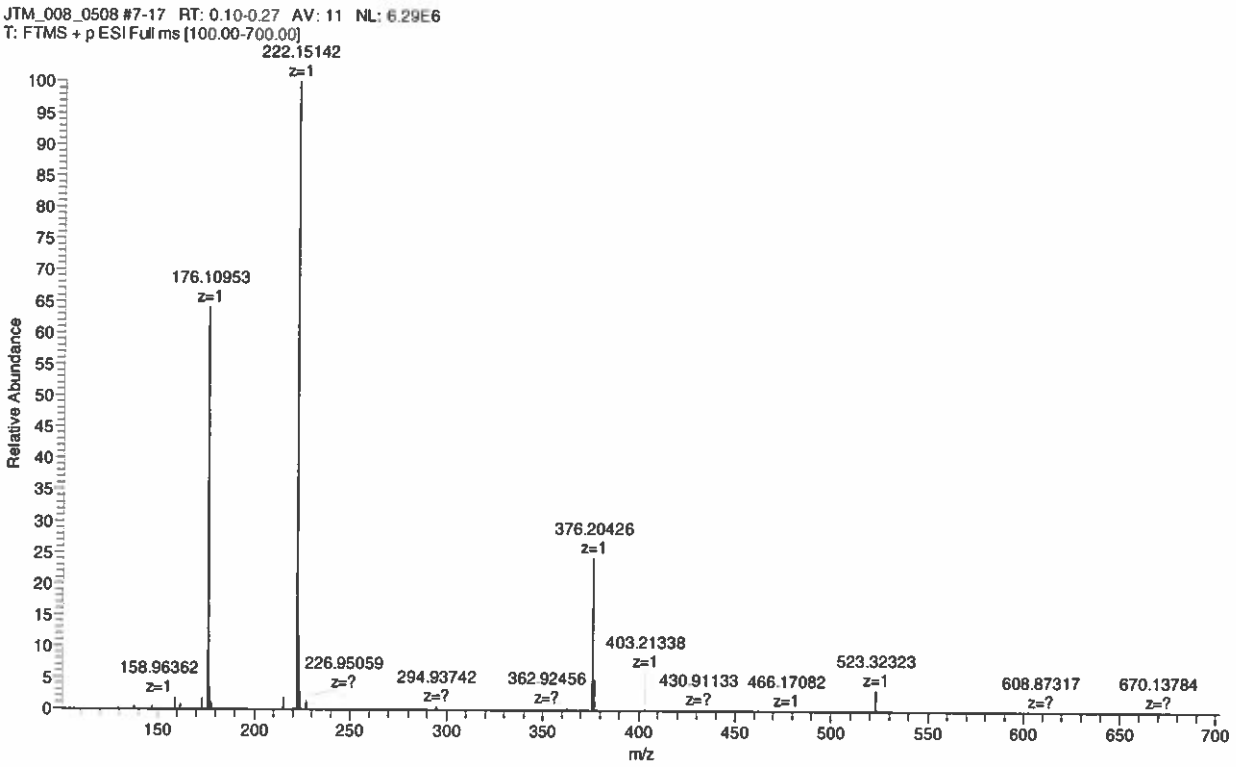
16

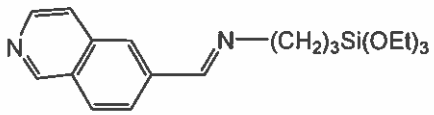




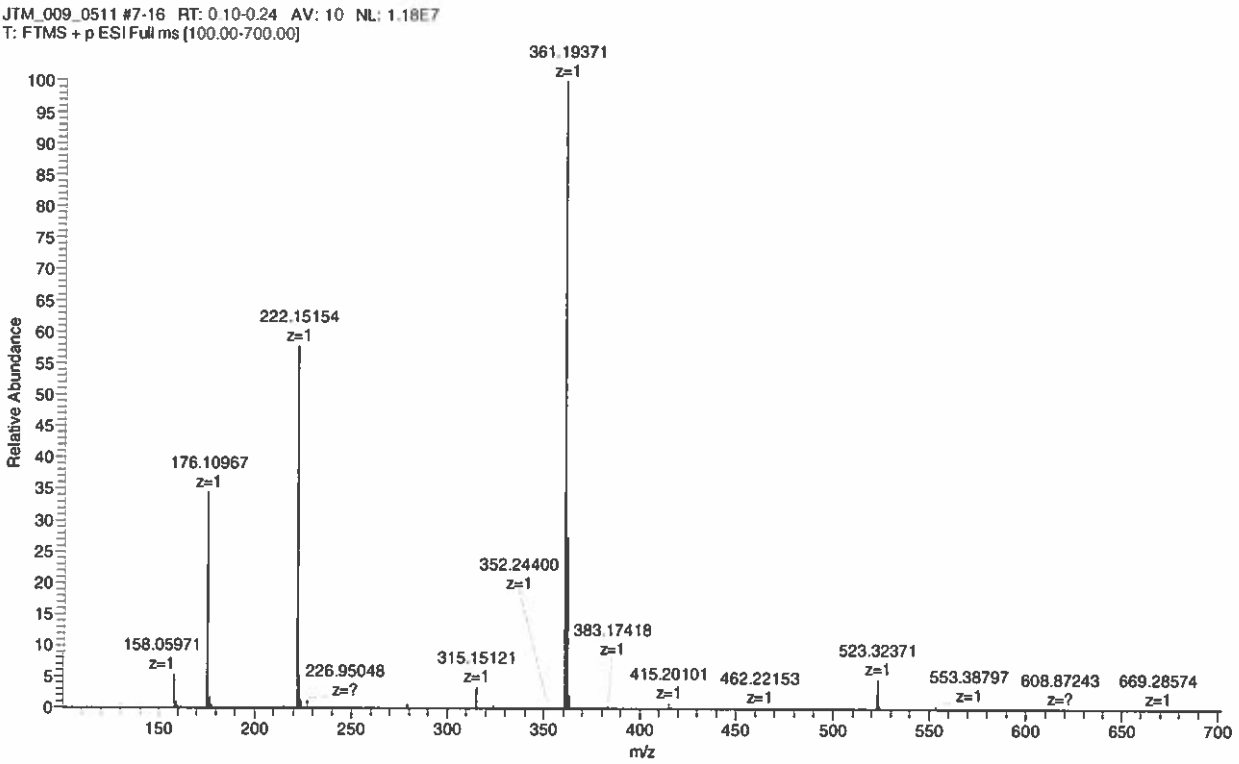
(*E*)-1-(4-(1*H*-pyrazol-1-yl)phenyl)-*N*-(3-(triethoxysilyl)propyl)methanimine

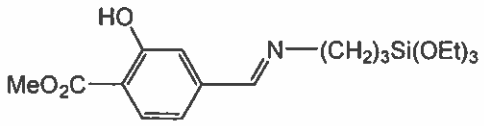
17



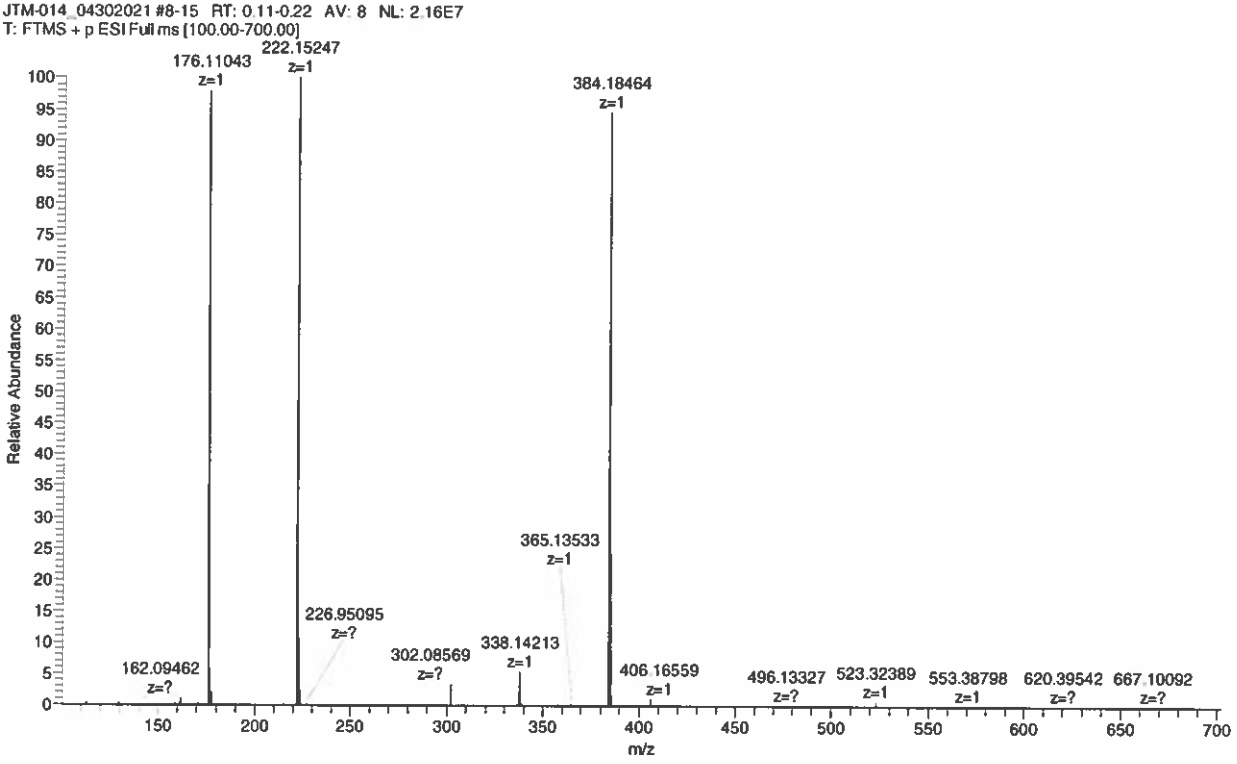


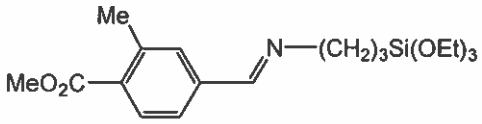
(*E*)-1-(isoquinolin-6-yl)-*N*-(3-(triethoxysilyl)propyl)methanimine 18



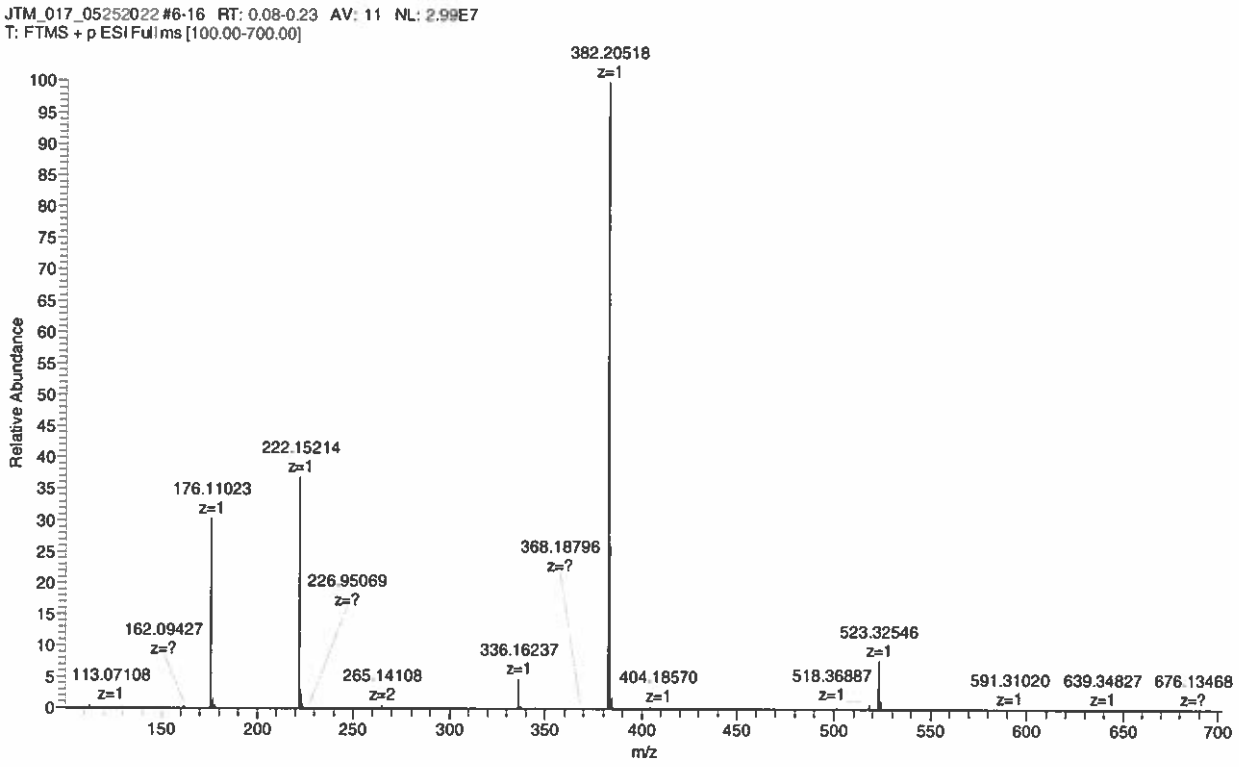


methyl (*E*)-2-hydroxy-4-(((3-(triethoxysilyl)propyl)imino)methyl)benzoate 21

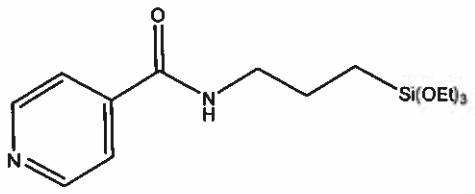




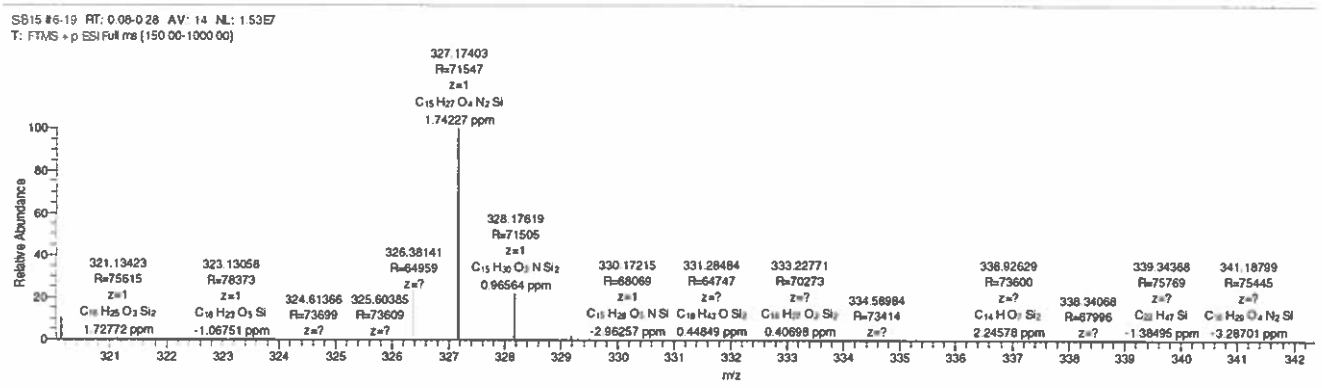
methyl (*E*)-2-methyl-4-(((3-(triethoxysilyl)propyl)imino)methyl)benzoate 22

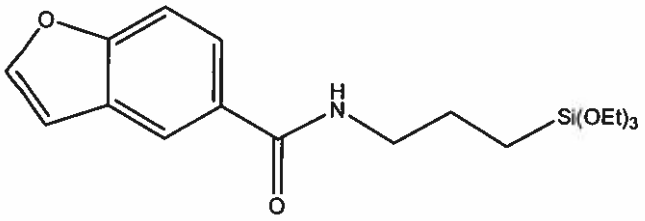


Amides:

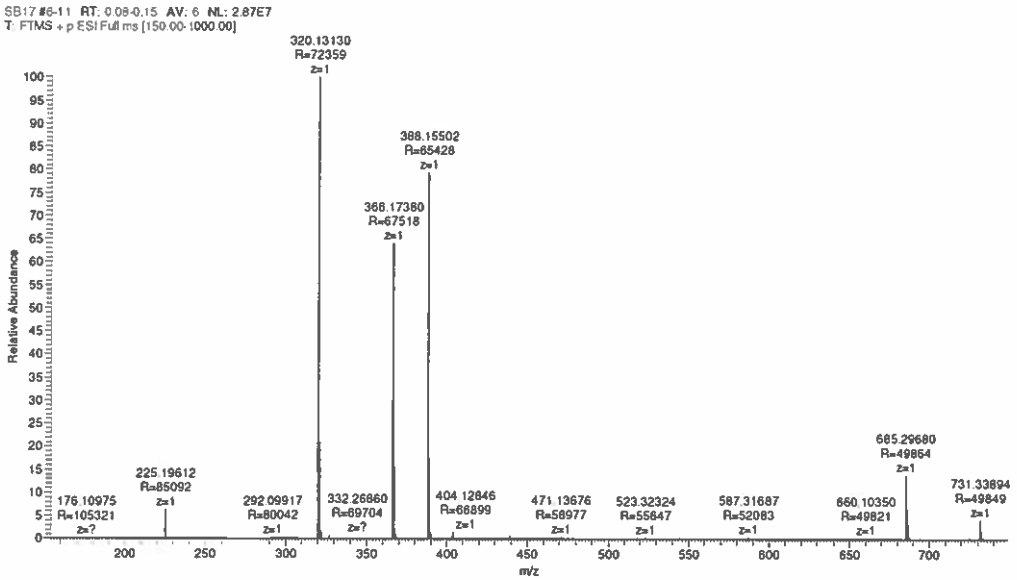

O
N
H
Si(OEt)3
N

24


SB15 #6-19 RT: 0.08-0.28 AV: 14 NL: 1.53E7
T: FTMS + p ESI Full ms [150.00-1000.00]
327.17403
R=71547
z=1
C15 H27 O4 N2 Si
1.74227 ppm
328.17619
R=71505
z=1
C15 H30 O3 N Si2
0.96564 ppm
321.13423
R=75615
z=1
C16 H25 O3 Si2
1.72772 ppm
323.13058
R=78373
z=1
C16 H23 O5 Si
-1.06751 ppm
324.61366
R=73699
z=?
325.60385
R=73609
z=?
326.38141
R=64959
z=?
330.17215
R=68069
z=1
C15 H28 O3 N Si
-2.96257 ppm
331.28484
R=64747
z=?
C18 H43 O Si2
0.44849 ppm
333.22771
R=70273
z=?
C16 H39 O3 Si2
0.40698 ppm
334.58984
R=73414
z=?
338.92629
R=73600
z=?
C14 H O3 Si2
2.24578 ppm
338.34068
R=67996
z=?
339.34368
R=75769
z=?
C22 H47 Si
-1.38495 ppm
341.18799
R=75445
z=?
C16 H26 O4 N2 Si
-3.28701 ppm
Relative Abundance
m/z


O
H
N
Si(OEt)3
O

25


SB17 #6-11 RT: 0.09-0.15 AV: 6 NL: 2.87E7
T: FTMS + p ESI Full ms [150.00-1000.00]
320.13130
R=72359
z=1
388.15502
R=65428
z=1
366.17380
R=67518
z=1
685.29680
R=49854
z=1
731.33894
R=49849
z=1
225.19612
R=85092
z=1
176.10975
R=105321
z=?
292.09917
R=80042
z=1
332.26860
R=69704
z=?
404.12846
R=66899
z=1
471.13676
R=58977
z=1
523.32324
R=55847
z=1
587.31687
R=52083
z=1
660.10350
R=49821
z=1
Relative Abundance
m/z