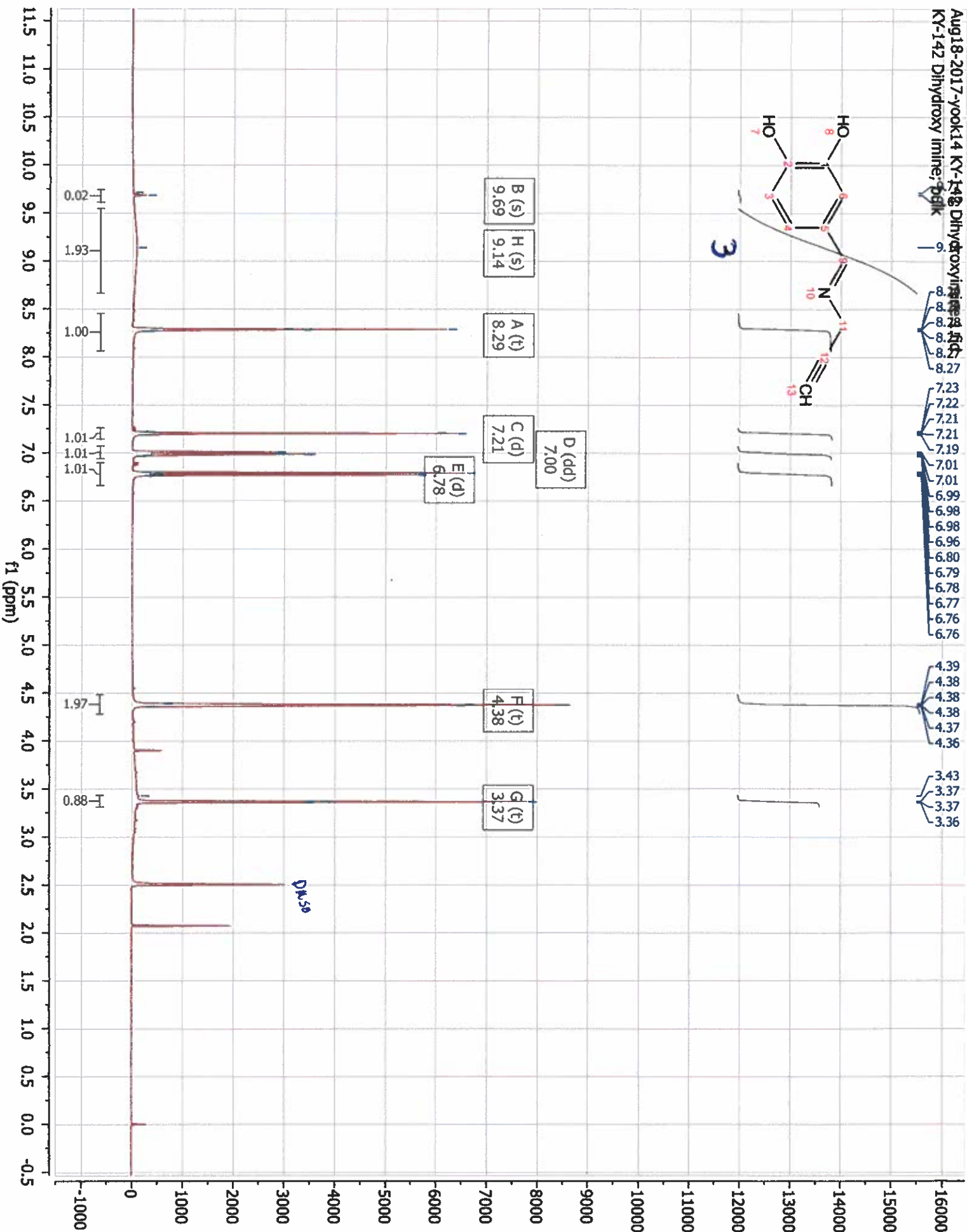
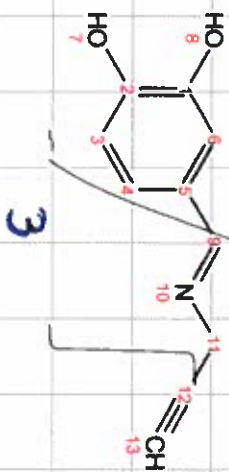


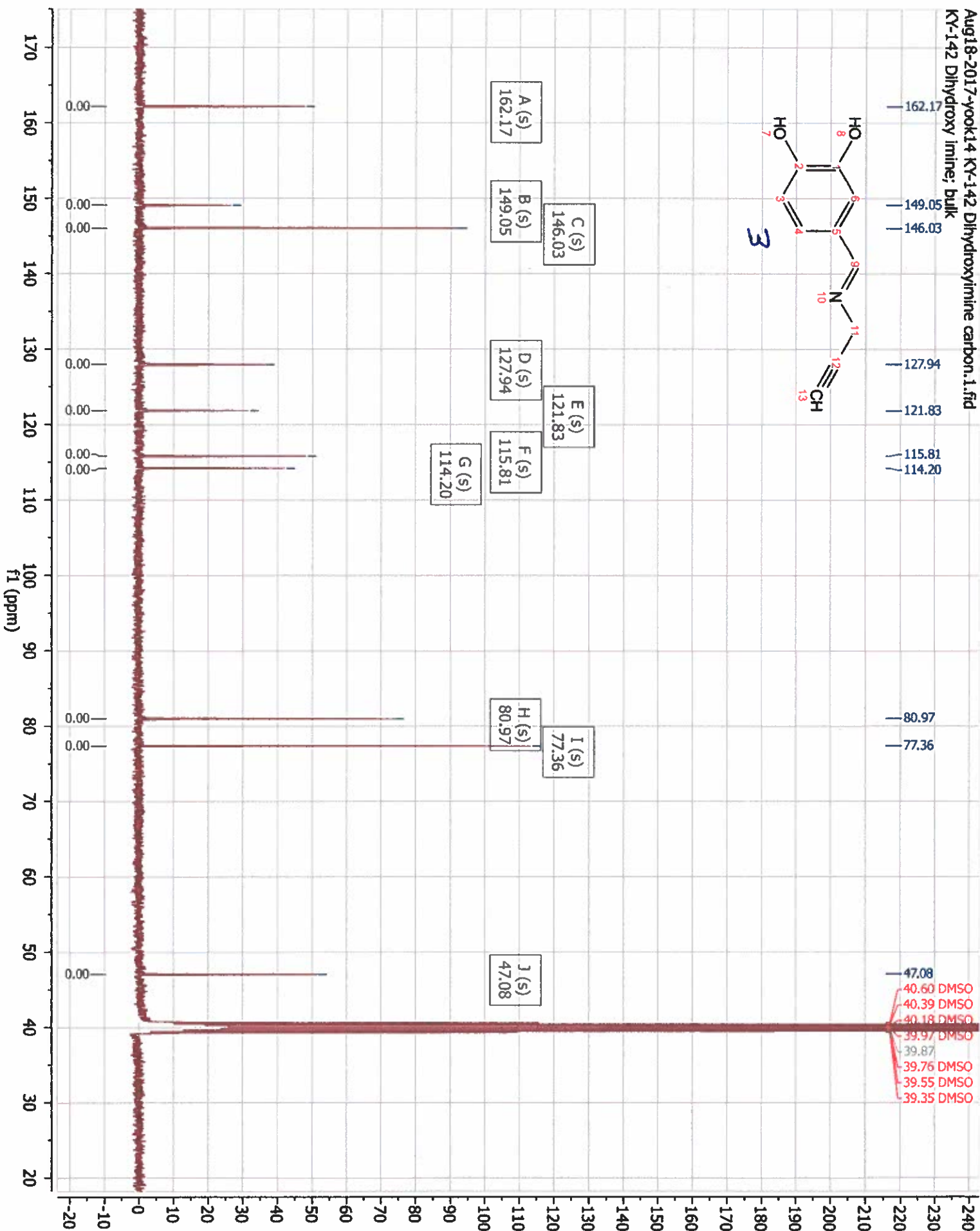
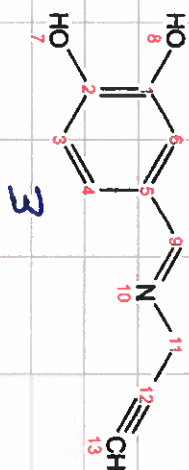
Supplementary Material

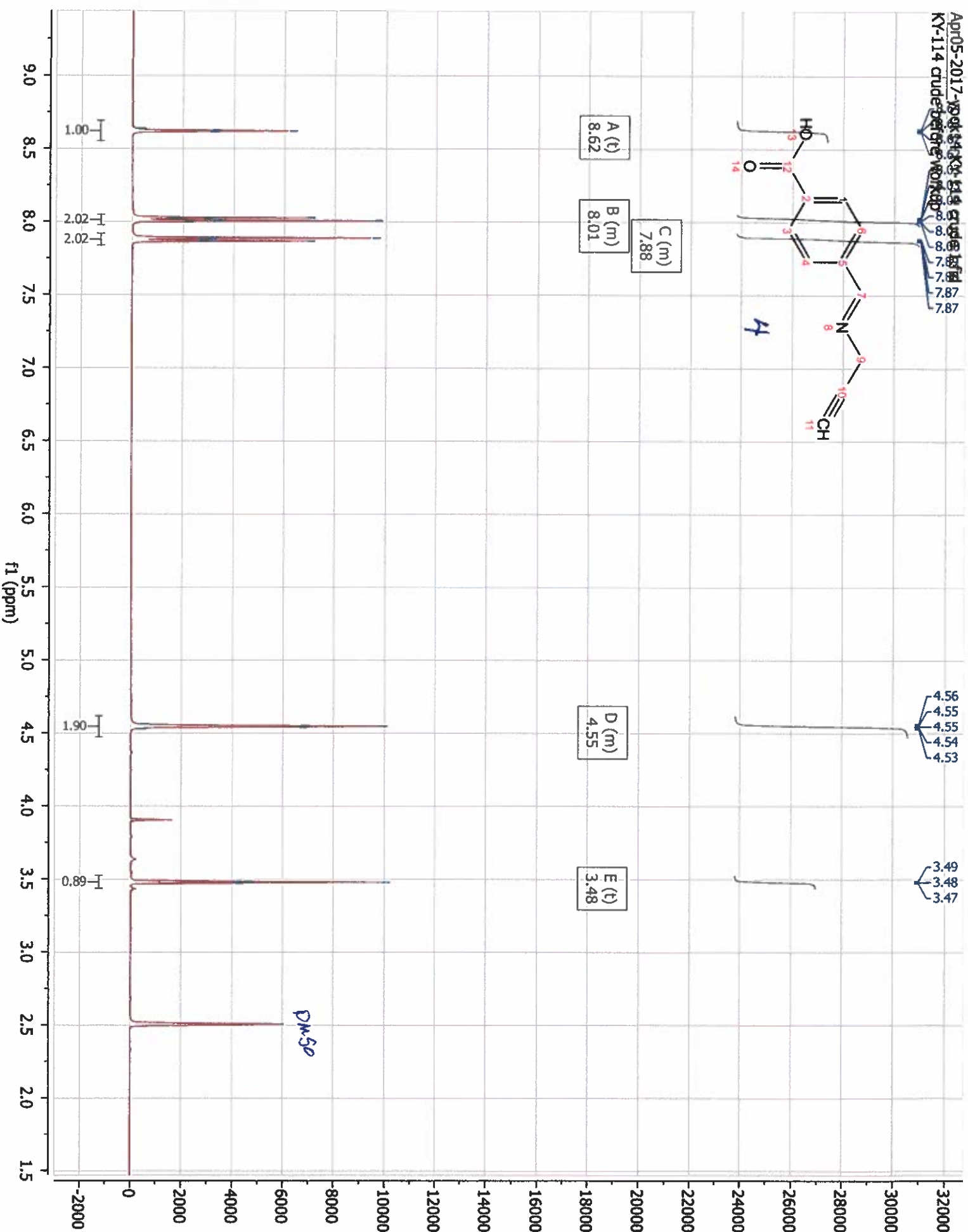
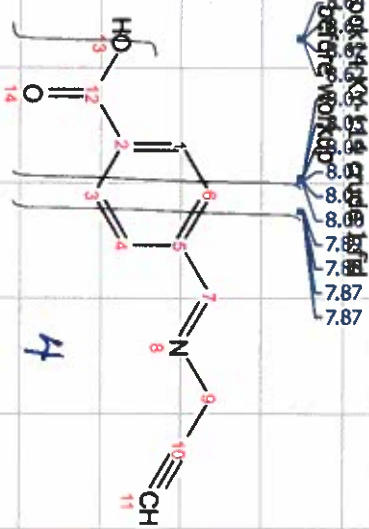
Synthesis of Polar Aromatic Substituted Terminal Alkynes From Propargyl Amine

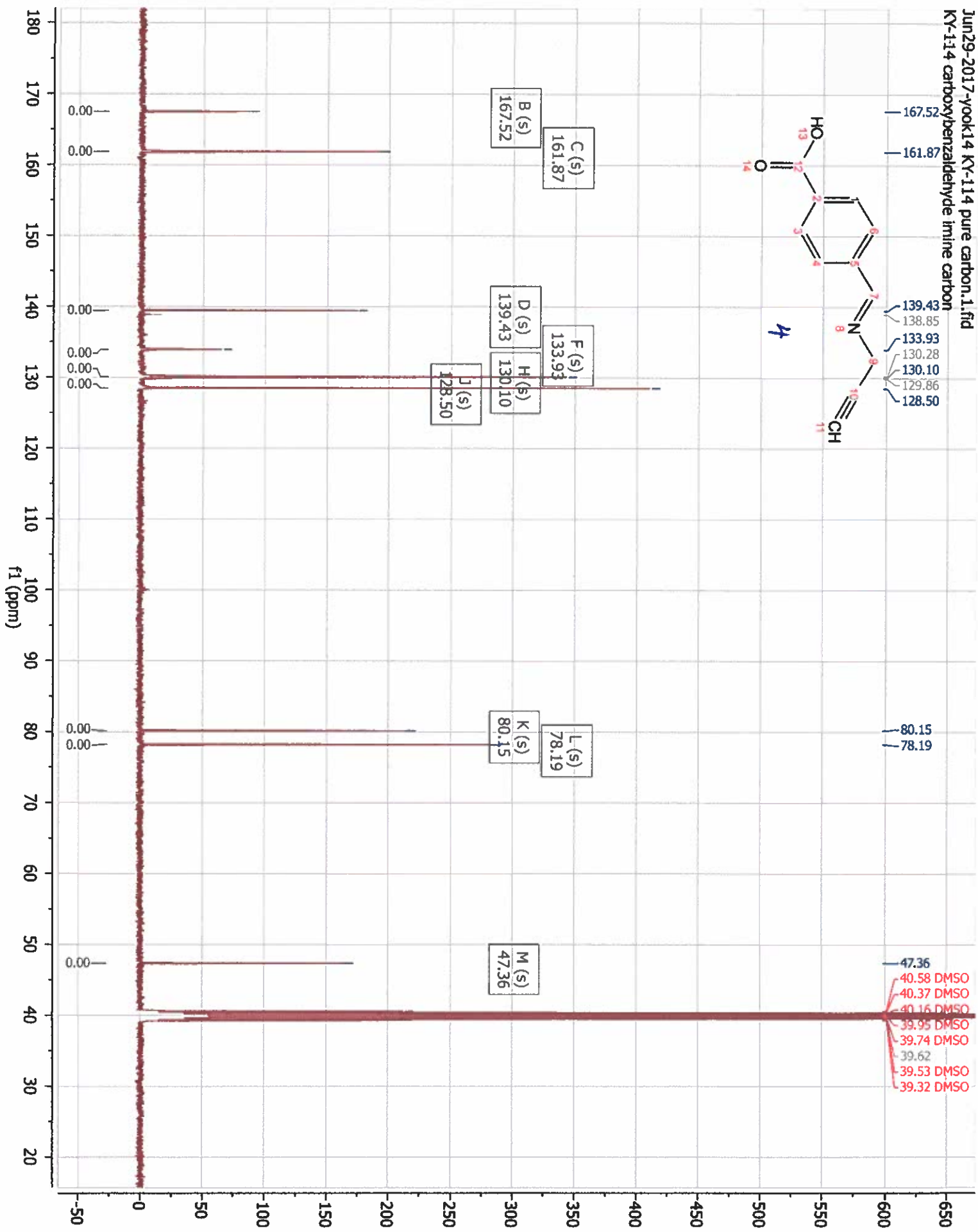
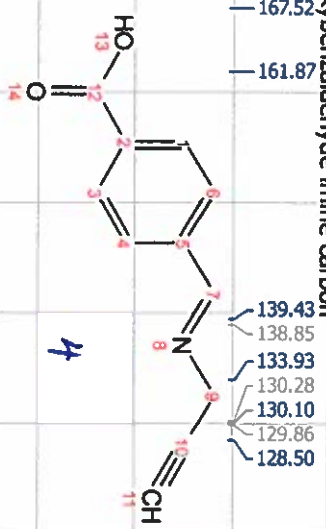
Surya R. Banks ¹, Kyung Min Yoo ¹ and Mark E. Welker ^{2,*}

Aug18-2017-yook14 KY-142 Dihydroxy imine, 50%
 KY-142 Dihydroxy imine, 50%

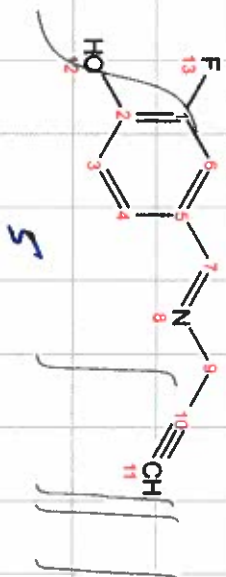








Jun23-2017-yook 44 KY-130 FOH imine 1.0d
 KY-130 FOH imine 1 hour DCE



8.39
 7.69
 7.55
 7.54
 7.52
 7.51
 7.42
 7.42
 7.40
 7.40
 7.04
 7.02
 7.00

4.43
 4.43
 4.42

3.42
 3.41
 3.41

E (s)
 10.39

A (s)
 8.39

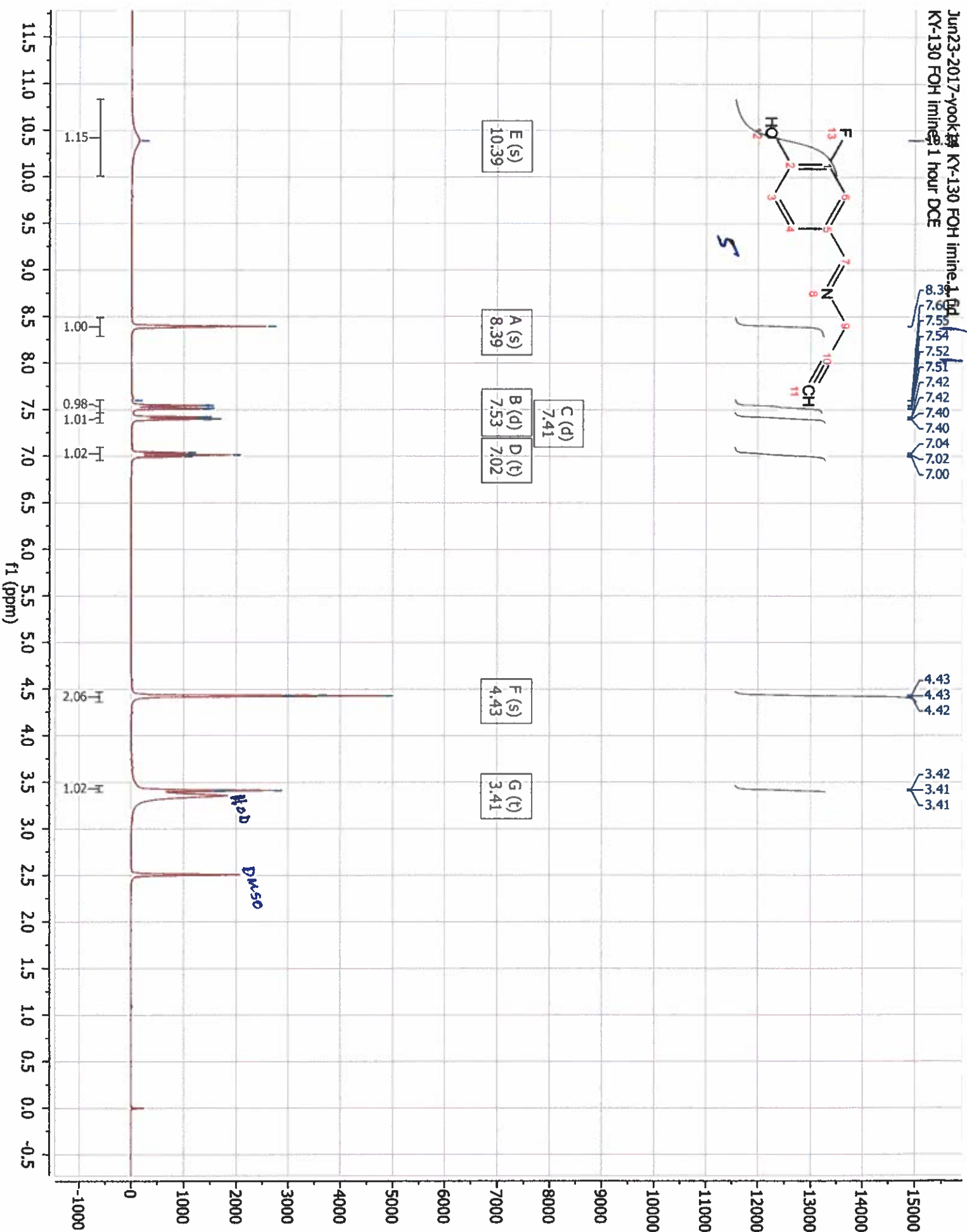
B (d)
 7.53

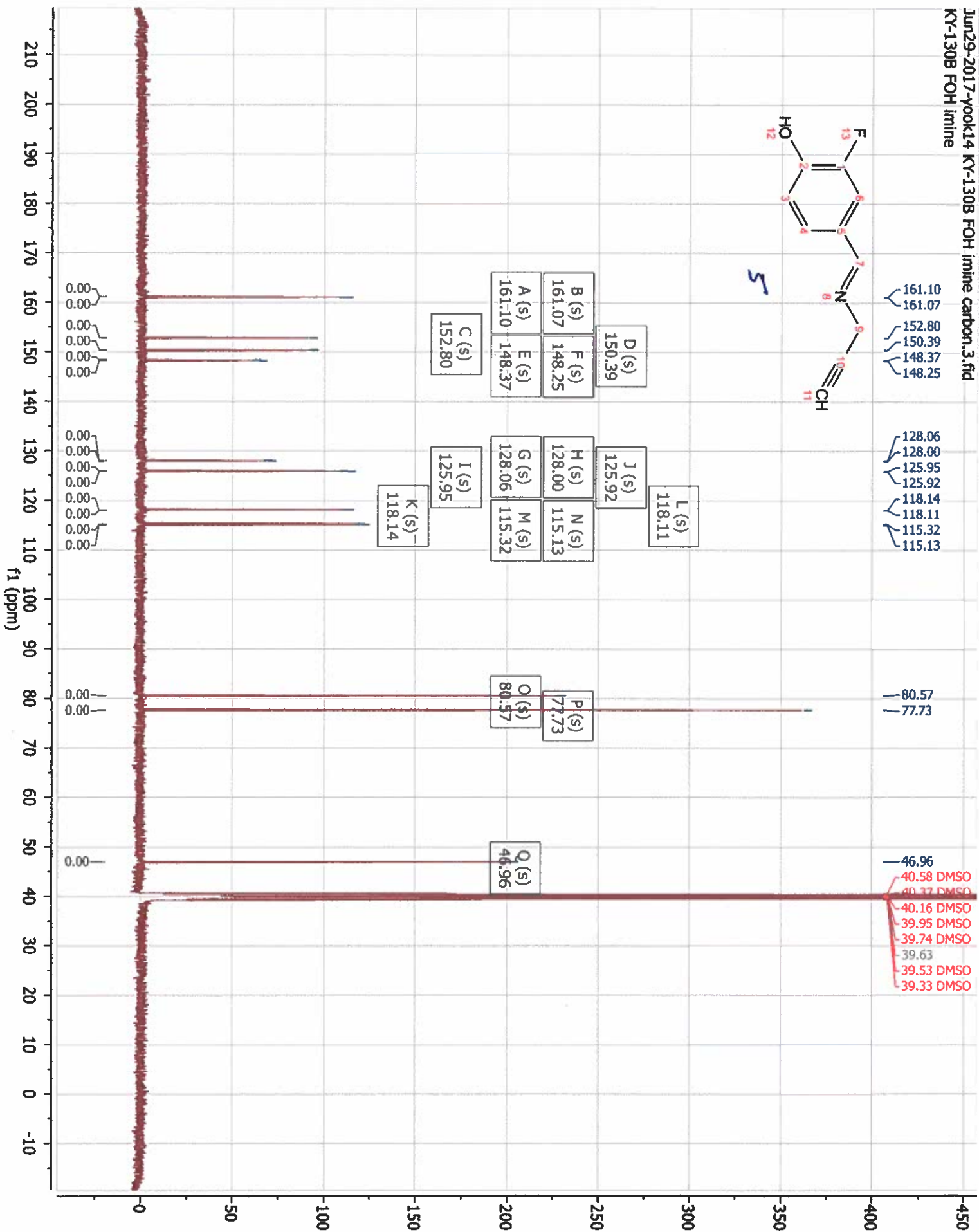
D (t)
 7.02

C (d)
 7.41

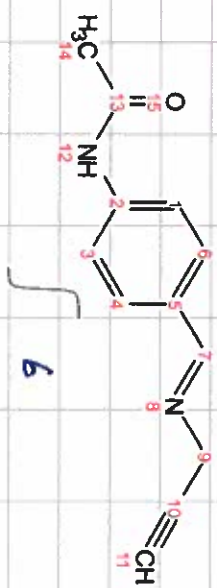
F (s)
 4.43

G (t)
 3.41





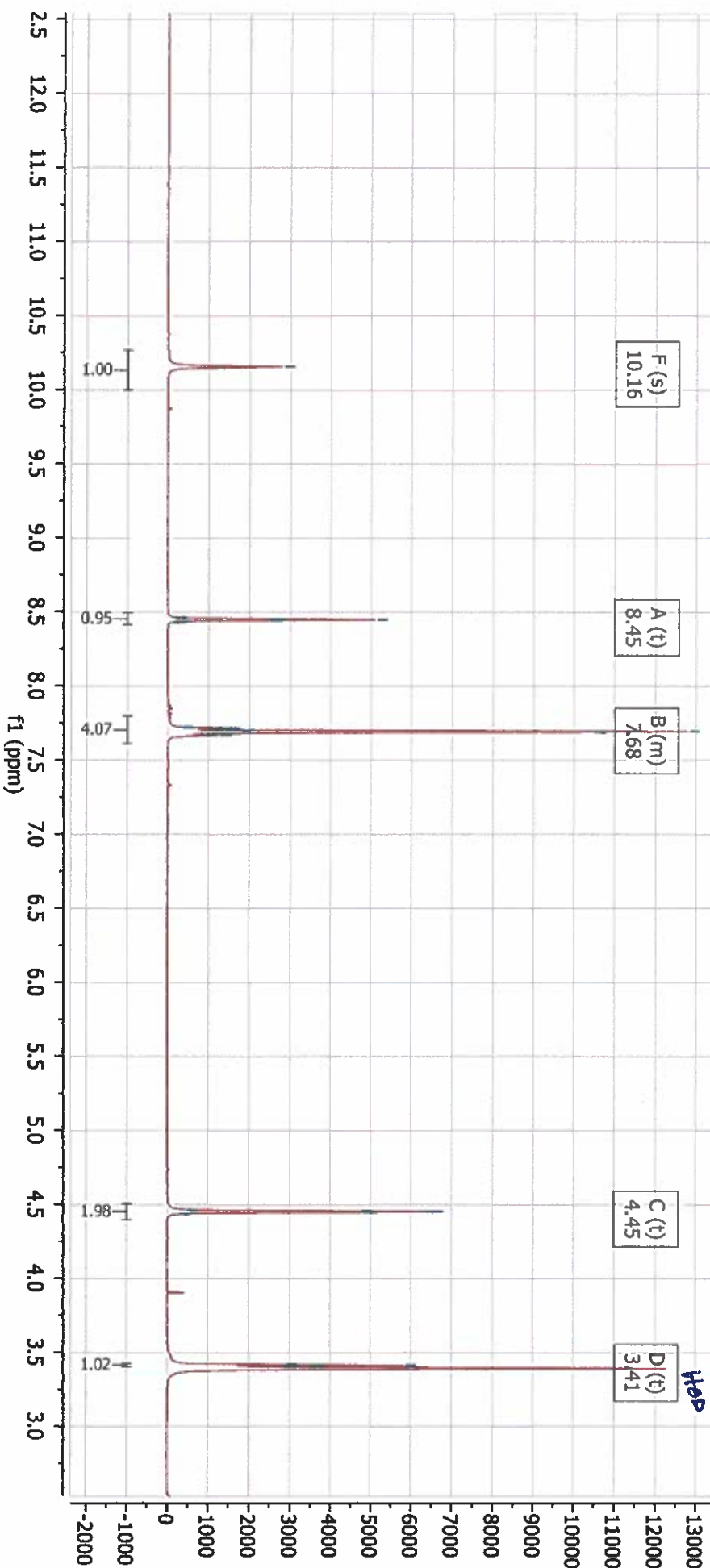
Jun29-2017-yooki4 KY-132A RT amido-amine.1.fid
 KY-132A amido imine; overnight RT in BCE/THF (5:1)



8.46
 8.46
 8.45
 8.45
 8.43
 8.43
 7.72
 7.72
 7.72
 7.71
 7.70
 7.70
 7.69
 7.67
 7.67

4.47
 4.46
 4.45
 4.45
 4.44
 4.44

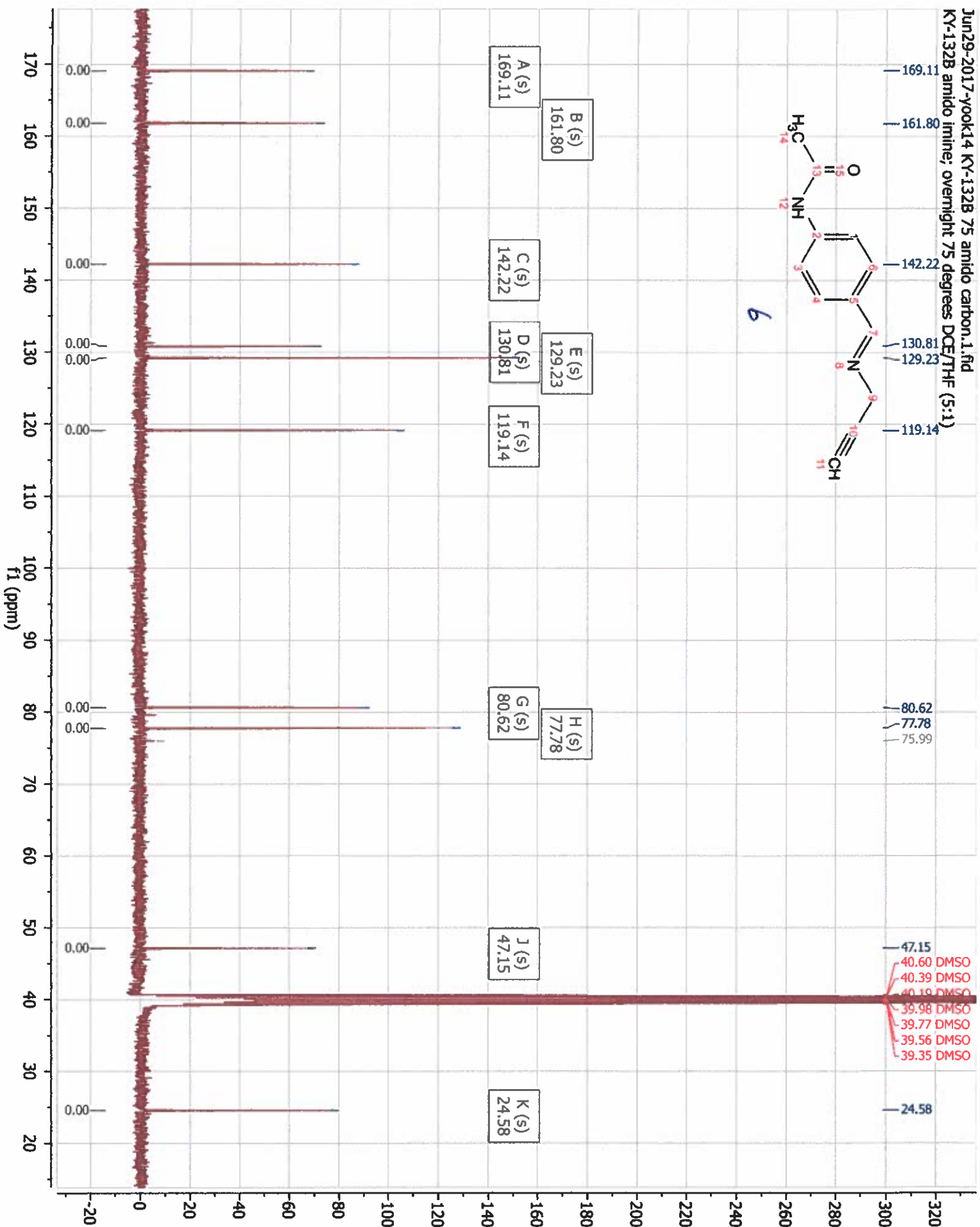
3.42
 3.41
 3.41



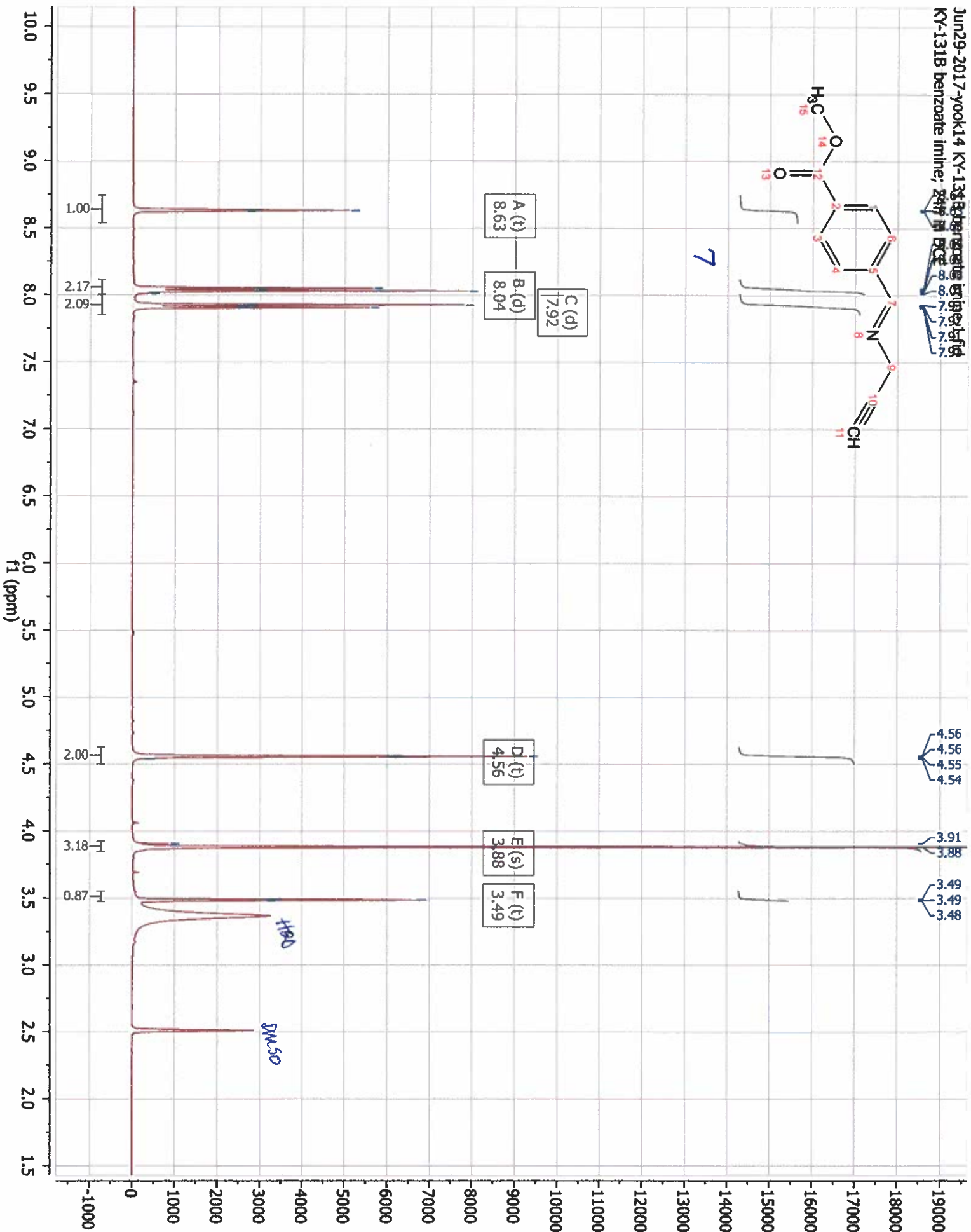
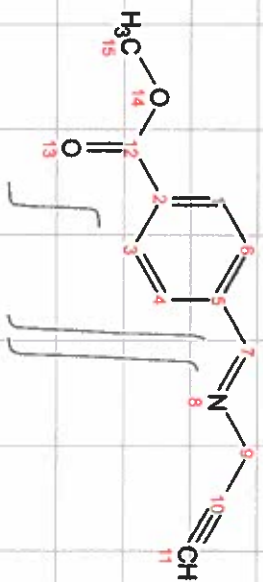
Jun29-2017-yook14 KY-132B 75 amido carbon.1.fid
 KY-132B amido imine; overnight 75 degrees DCE/THF (5:1)



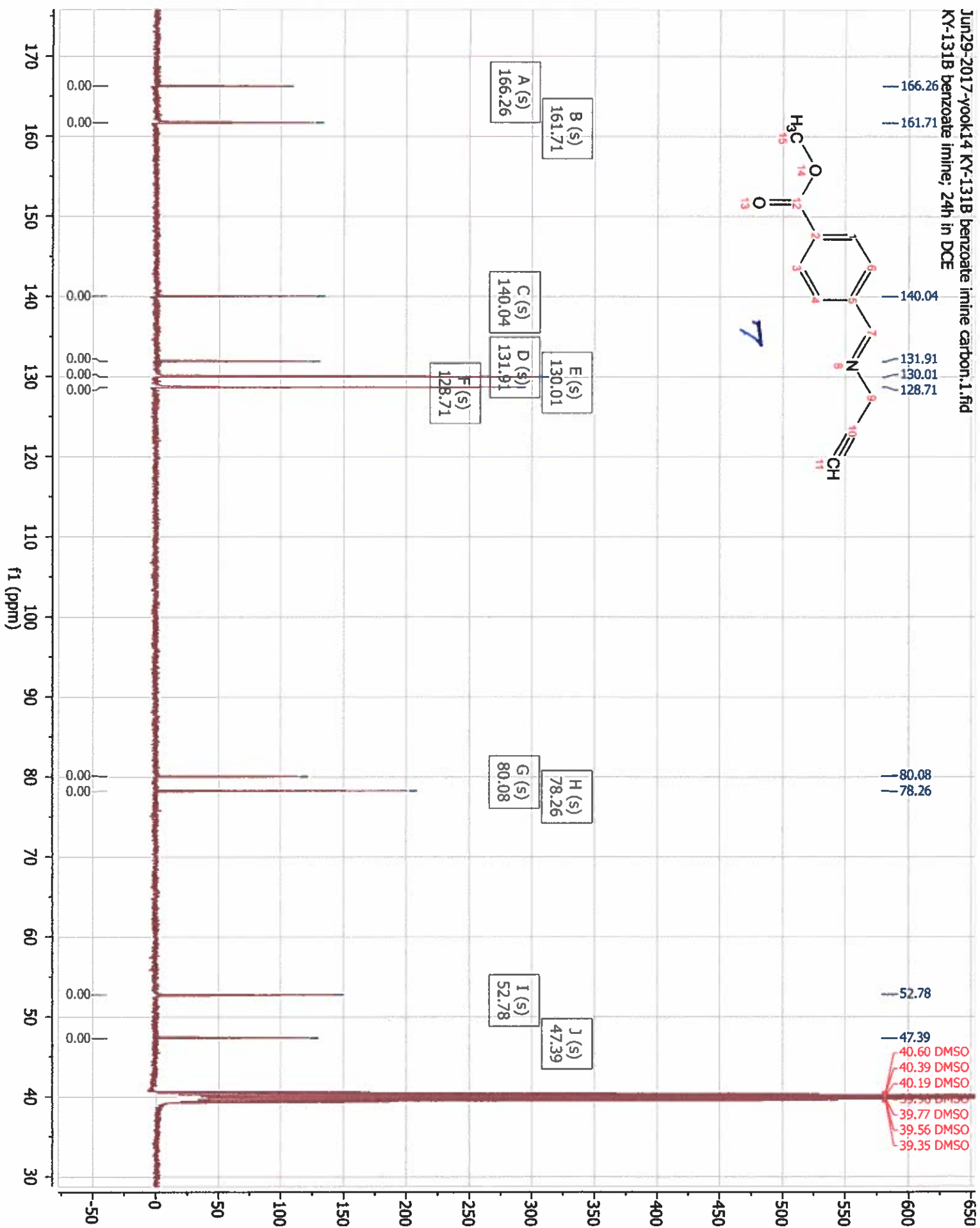
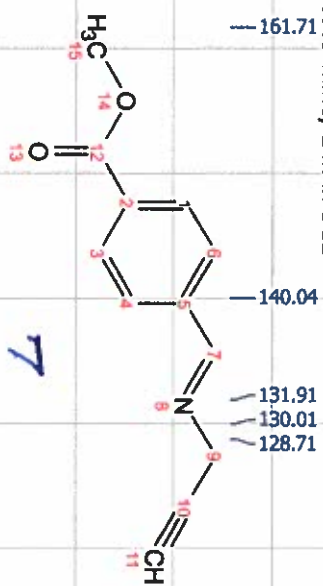
6



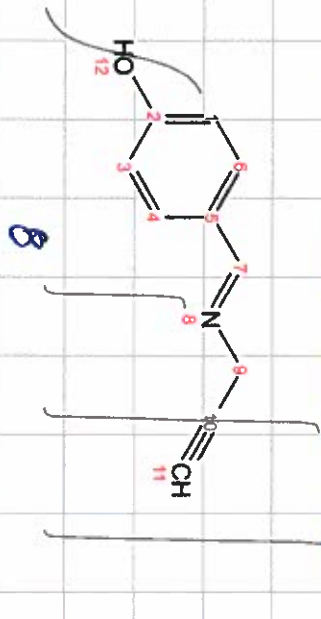
Jun29-2017-yook14 KY-131B benzoyl imine; 2447 in DCE 8.8 7.7 7.7 7.7 7.7



Jun29-2017-yook14 KY-131B benzoate imine carbon.1.fid
 KY-131B benzoate imine; 24h in DCE



Jun29-2017-yoo814 KY-127 2-methoxy-4-(2-methyl-5-oxo-2,5-dihydro-1H-benzotriazol-4-yl)benzoic acid
 KY-127 monohydrate
 7.71, 7.70, 7.69, 7.68, 7.67, 7.66, 7.65, 7.64, 7.63, 7.62, 7.61, 7.60, 7.59, 7.58, 7.57, 7.56, 7.55, 7.54, 7.53, 7.52, 7.51, 7.50, 7.49, 7.48, 7.47, 7.46, 7.45, 7.44, 7.43, 7.42, 7.41, 7.40, 7.39, 7.38, 7.37, 7.36, 7.35, 7.34, 7.33, 7.32, 7.31, 7.30, 7.29, 7.28, 7.27, 7.26, 7.25, 7.24, 7.23, 7.22, 7.21, 7.20, 7.19, 7.18, 7.17, 7.16, 7.15, 7.14, 7.13, 7.12, 7.11, 7.10, 7.09, 7.08, 7.07, 7.06, 7.05, 7.04, 7.03, 7.02, 7.01, 7.00, 6.99, 6.98, 6.97, 6.96, 6.95, 6.94, 6.93, 6.92, 6.91, 6.90, 6.89, 6.88, 6.87, 6.86, 6.85, 6.84, 6.83, 6.82, 6.81, 6.80, 6.79, 6.78, 6.77, 6.76, 6.75, 6.74, 6.73, 6.72, 6.71, 6.70, 6.69, 6.68, 6.67, 6.66, 6.65, 6.64, 6.63, 6.62, 6.61, 6.60, 6.59, 6.58, 6.57, 6.56, 6.55, 6.54, 6.53, 6.52, 6.51, 6.50, 6.49, 6.48, 6.47, 6.46, 6.45, 6.44, 6.43, 6.42, 6.41, 6.40, 6.39, 6.38, 6.37, 6.36, 6.35, 6.34, 6.33, 6.32, 6.31, 6.30, 6.29, 6.28, 6.27, 6.26, 6.25, 6.24, 6.23, 6.22, 6.21, 6.20, 6.19, 6.18, 6.17, 6.16, 6.15, 6.14, 6.13, 6.12, 6.11, 6.10, 6.09, 6.08, 6.07, 6.06, 6.05, 6.04, 6.03, 6.02, 6.01, 6.00, 5.99, 5.98, 5.97, 5.96, 5.95, 5.94, 5.93, 5.92, 5.91, 5.90, 5.89, 5.88, 5.87, 5.86, 5.85, 5.84, 5.83, 5.82, 5.81, 5.80, 5.79, 5.78, 5.77, 5.76, 5.75, 5.74, 5.73, 5.72, 5.71, 5.70, 5.69, 5.68, 5.67, 5.66, 5.65, 5.64, 5.63, 5.62, 5.61, 5.60, 5.59, 5.58, 5.57, 5.56, 5.55, 5.54, 5.53, 5.52, 5.51, 5.50, 5.49, 5.48, 5.47, 5.46, 5.45, 5.44, 5.43, 5.42, 5.41, 5.40, 5.39, 5.38, 5.37, 5.36, 5.35, 5.34, 5.33, 5.32, 5.31, 5.30, 5.29, 5.28, 5.27, 5.26, 5.25, 5.24, 5.23, 5.22, 5.21, 5.20, 5.19, 5.18, 5.17, 5.16, 5.15, 5.14, 5.13, 5.12, 5.11, 5.10, 5.09, 5.08, 5.07, 5.06, 5.05, 5.04, 5.03, 5.02, 5.01, 5.00, 4.99, 4.98, 4.97, 4.96, 4.95, 4.94, 4.93, 4.92, 4.91, 4.90, 4.89, 4.88, 4.87, 4.86, 4.85, 4.84, 4.83, 4.82, 4.81, 4.80, 4.79, 4.78, 4.77, 4.76, 4.75, 4.74, 4.73, 4.72, 4.71, 4.70, 4.69, 4.68, 4.67, 4.66, 4.65, 4.64, 4.63, 4.62, 4.61, 4.60, 4.59, 4.58, 4.57, 4.56, 4.55, 4.54, 4.53, 4.52, 4.51, 4.50, 4.49, 4.48, 4.47, 4.46, 4.45, 4.44, 4.43, 4.42, 4.41, 4.40, 4.39, 4.38, 4.37, 4.36, 4.35, 4.34, 4.33, 4.32, 4.31, 4.30, 4.29, 4.28, 4.27, 4.26, 4.25, 4.24, 4.23, 4.22, 4.21, 4.20, 4.19, 4.18, 4.17, 4.16, 4.15, 4.14, 4.13, 4.12, 4.11, 4.10, 4.09, 4.08, 4.07, 4.06, 4.05, 4.04, 4.03, 4.02, 4.01, 4.00, 3.99, 3.98, 3.97, 3.96, 3.95, 3.94, 3.93, 3.92, 3.91, 3.90, 3.89, 3.88, 3.87, 3.86, 3.85, 3.84, 3.83, 3.82, 3.81, 3.80, 3.79, 3.78, 3.77, 3.76, 3.75, 3.74, 3.73, 3.72, 3.71, 3.70, 3.69, 3.68, 3.67, 3.66, 3.65, 3.64, 3.63, 3.62, 3.61, 3.60, 3.59, 3.58, 3.57, 3.56, 3.55, 3.54, 3.53, 3.52, 3.51, 3.50, 3.49, 3.48, 3.47, 3.46, 3.45, 3.44, 3.43, 3.42, 3.41, 3.40, 3.39, 3.38, 3.37, 3.36, 3.35, 3.34, 3.33, 3.32, 3.31, 3.30, 3.29, 3.28, 3.27, 3.26, 3.25, 3.24, 3.23, 3.22, 3.21, 3.20, 3.19, 3.18, 3.17, 3.16, 3.15, 3.14, 3.13, 3.12, 3.11, 3.10, 3.09, 3.08, 3.07, 3.06, 3.05, 3.04, 3.03, 3.02, 3.01, 3.00, 2.99, 2.98, 2.97, 2.96, 2.95, 2.94, 2.93, 2.92, 2.91, 2.90, 2.89, 2.88, 2.87, 2.86, 2.85, 2.84, 2.83, 2.82, 2.81, 2.80, 2.79, 2.78, 2.77, 2.76, 2.75, 2.74, 2.73, 2.72, 2.71, 2.70, 2.69, 2.68, 2.67, 2.66, 2.65, 2.64, 2.63, 2.62, 2.61, 2.60, 2.59, 2.58, 2.57, 2.56, 2.55, 2.54, 2.53, 2.52, 2.51, 2.50, 2.49, 2.48, 2.47, 2.46, 2.45, 2.44, 2.43, 2.42, 2.41, 2.40, 2.39, 2.38, 2.37, 2.36, 2.35, 2.34, 2.33, 2.32, 2.31, 2.30, 2.29, 2.28, 2.27, 2.26, 2.25, 2.24, 2.23, 2.22, 2.21, 2.20, 2.19, 2.18, 2.17, 2.16, 2.15, 2.14, 2.13, 2.12, 2.11, 2.10, 2.09, 2.08, 2.07, 2.06, 2.05, 2.04, 2.03, 2.02, 2.01, 2.00, 1.99, 1.98, 1.97, 1.96, 1.95, 1.94, 1.93, 1.92, 1.91, 1.90, 1.89, 1.88, 1.87, 1.86, 1.85, 1.84, 1.83, 1.82, 1.81, 1.80, 1.79, 1.78, 1.77, 1.76, 1.75, 1.74, 1.73, 1.72, 1.71, 1.70, 1.69, 1.68, 1.67, 1.66, 1.65, 1.64, 1.63, 1.62, 1.61, 1.60, 1.59, 1.58, 1.57, 1.56, 1.55, 1.54, 1.53, 1.52, 1.51, 1.50, 1.49, 1.48, 1.47, 1.46, 1.45, 1.44, 1.43, 1.42, 1.41, 1.40, 1.39, 1.38, 1.37, 1.36, 1.35, 1.34, 1.33, 1.32, 1.31, 1.30, 1.29, 1.28, 1.27, 1.26, 1.25, 1.24, 1.23, 1.22, 1.21, 1.20, 1.19, 1.18, 1.17, 1.16, 1.15, 1.14, 1.13, 1.12, 1.11, 1.10, 1.09, 1.08, 1.07, 1.06, 1.05, 1.04, 1.03, 1.02, 1.01, 1.00, 0.99, 0.98, 0.97, 0.96, 0.95, 0.94, 0.93, 0.92, 0.91, 0.90, 0.89, 0.88, 0.87, 0.86, 0.85, 0.84, 0.83, 0.82, 0.81, 0.80, 0.79, 0.78, 0.77, 0.76, 0.75, 0.74, 0.73, 0.72, 0.71, 0.70, 0.69, 0.68, 0.67, 0.66, 0.65, 0.64, 0.63, 0.62, 0.61, 0.60, 0.59, 0.58, 0.57, 0.56, 0.55, 0.54, 0.53, 0.52, 0.51, 0.50, 0.49, 0.48, 0.47, 0.46, 0.45, 0.44, 0.43, 0.42, 0.41, 0.40, 0.39, 0.38, 0.37, 0.36, 0.35, 0.34, 0.33, 0.32, 0.31, 0.30, 0.29, 0.28, 0.27, 0.26, 0.25, 0.24, 0.23, 0.22, 0.21, 0.20, 0.19, 0.18, 0.17, 0.16, 0.15, 0.14, 0.13, 0.12, 0.11, 0.10, 0.09, 0.08, 0.07, 0.06, 0.05, 0.04, 0.03, 0.02, 0.01, 0.00, -0.01, -0.02, -0.03, -0.04, -0.05



4.43, 4.42, 4.41, 4.40, 4.40, 4.40, 4.39, 3.39, 3.38, 3.38

B (s)
9.85

A (t)
8.39

C (d)
7.60

D (d)
6.83

E (t)
4.40

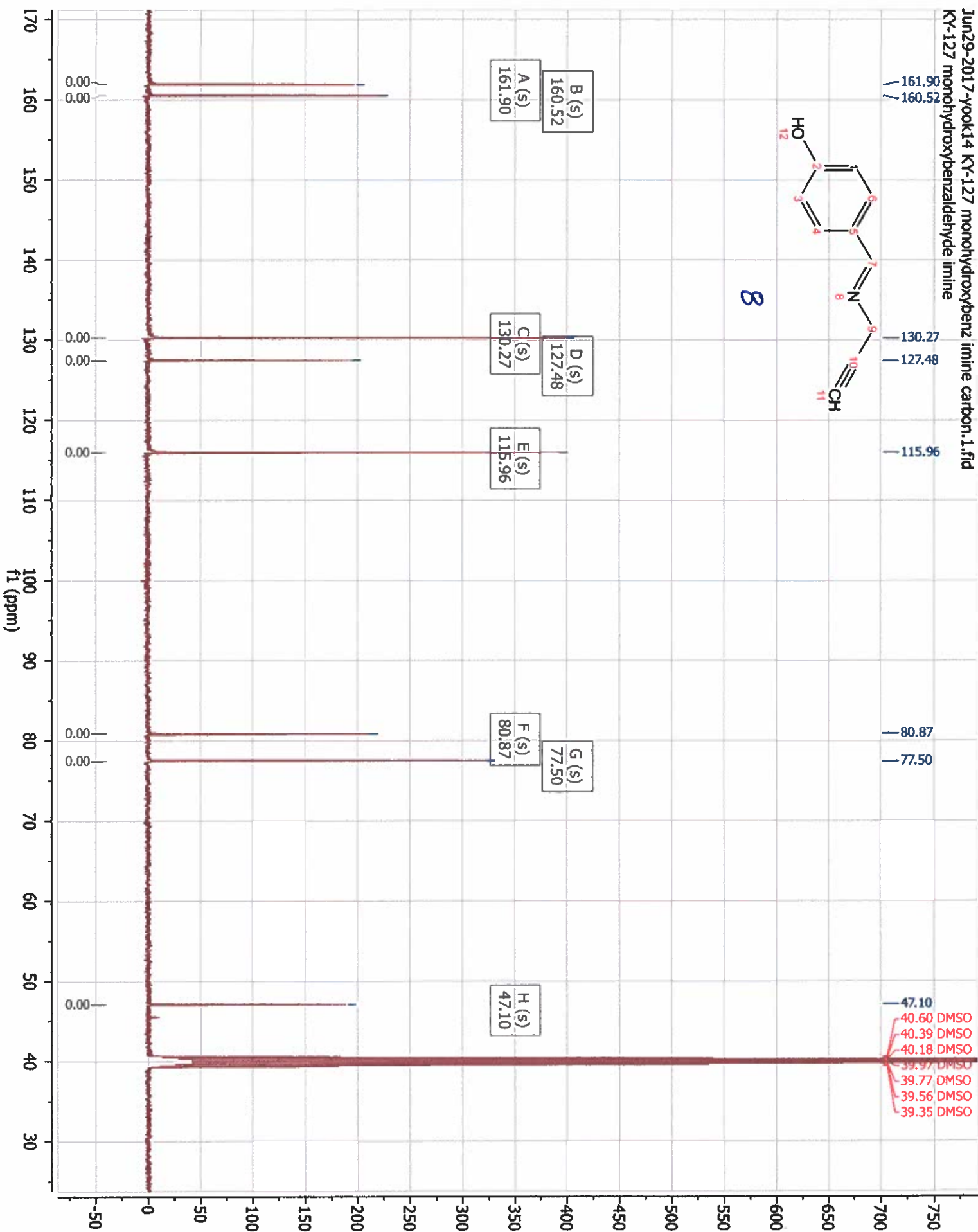
F (t)
3.38

DMF

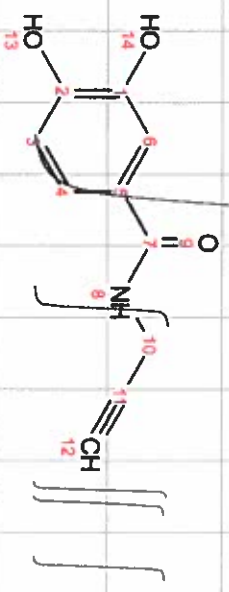
1.0 10.5 10.0 9.5 9.0 8.5 8.0 7.5 7.0 6.5 6.0 5.5 5.0 4.5 4.0 3.5 3.0 2.5 2.0 1.5 1.0 0.5 0.0 -0.5
 f1 (ppm)



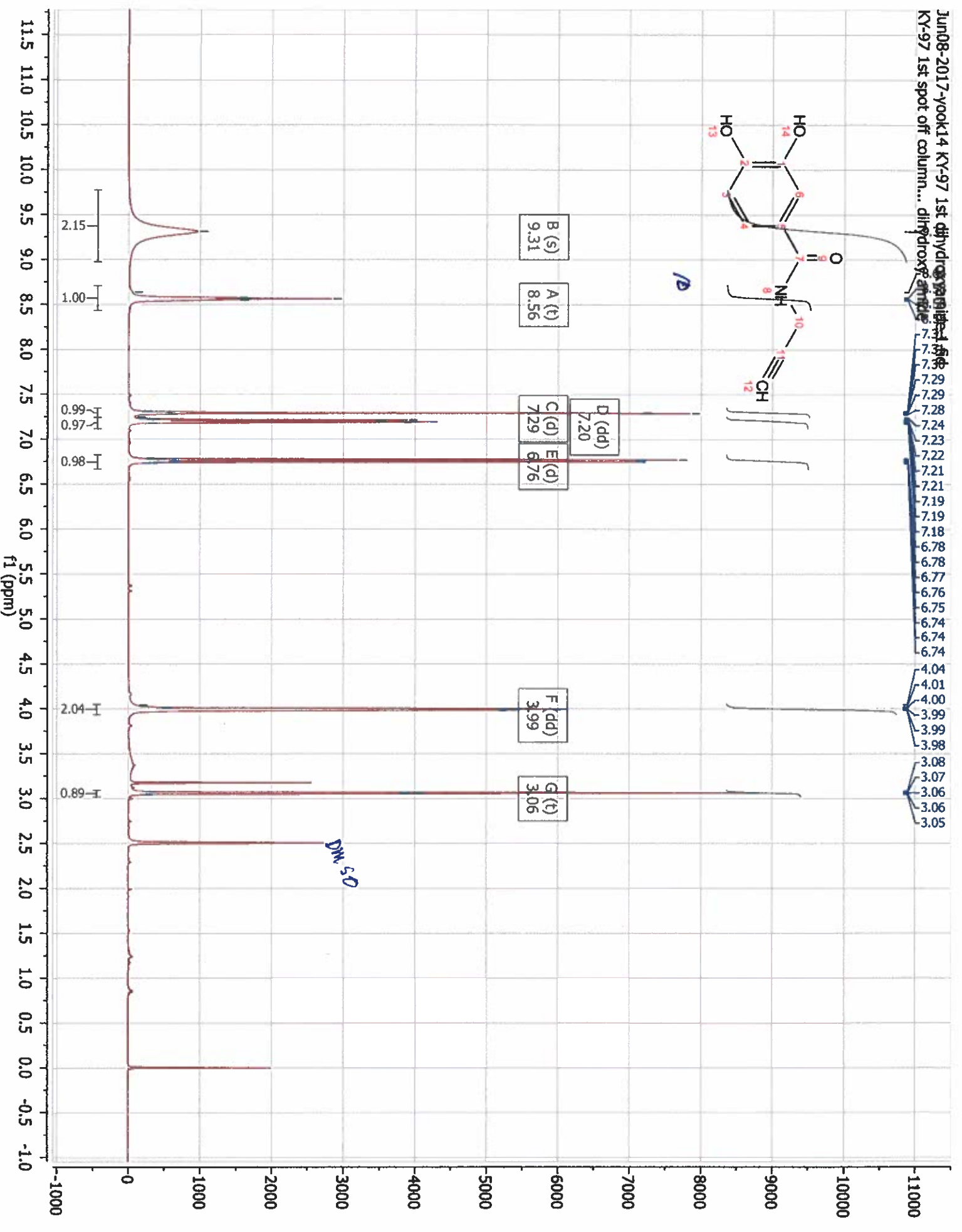
8

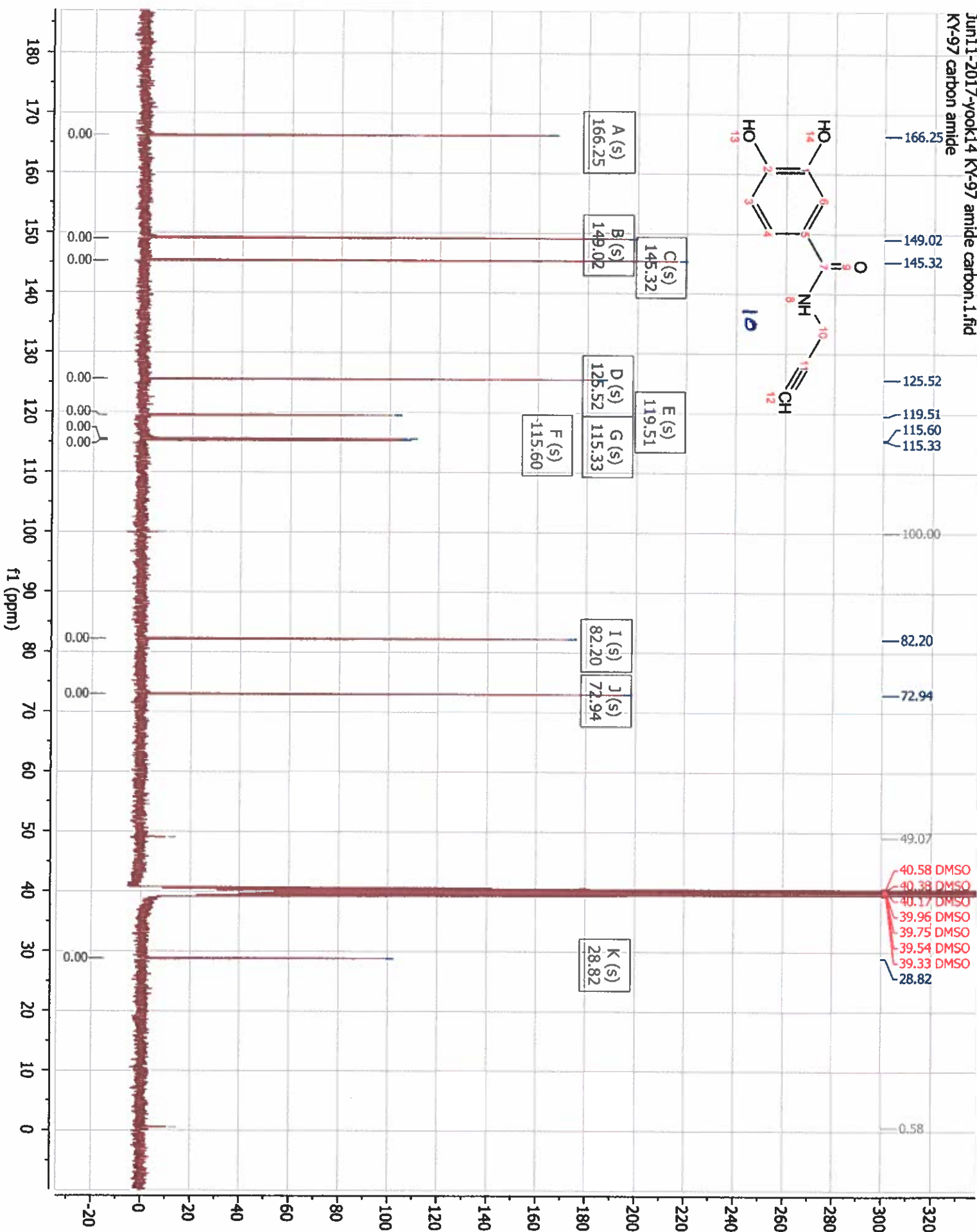
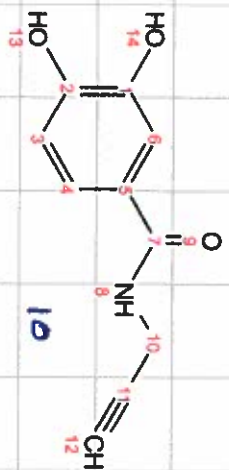


Jun08-2017-yook14 KY-97 1st dihydroxybenzamide
 KY-97 1st spot off column... dihydroxybenzamide

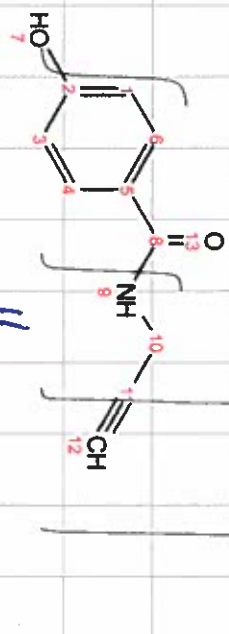


10





Aug15-2017-yook148-KY-140P after col 1, 1d
 KY-140P, column with 100% ESI



4.05
 4.04
 4.02
 4.02
 4.01
 4.00
 3.99

H₂O

D (s)
 10.00

C (t)
 8.64

A (d)
 7.72

B (d)
 6.80

F (dd)
 4.01

E (t)
 3.08

DMSO

11.5 11.0 10.5 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 -0.5 -1.0
 f1 (ppm)

1.05

1.02

2.00

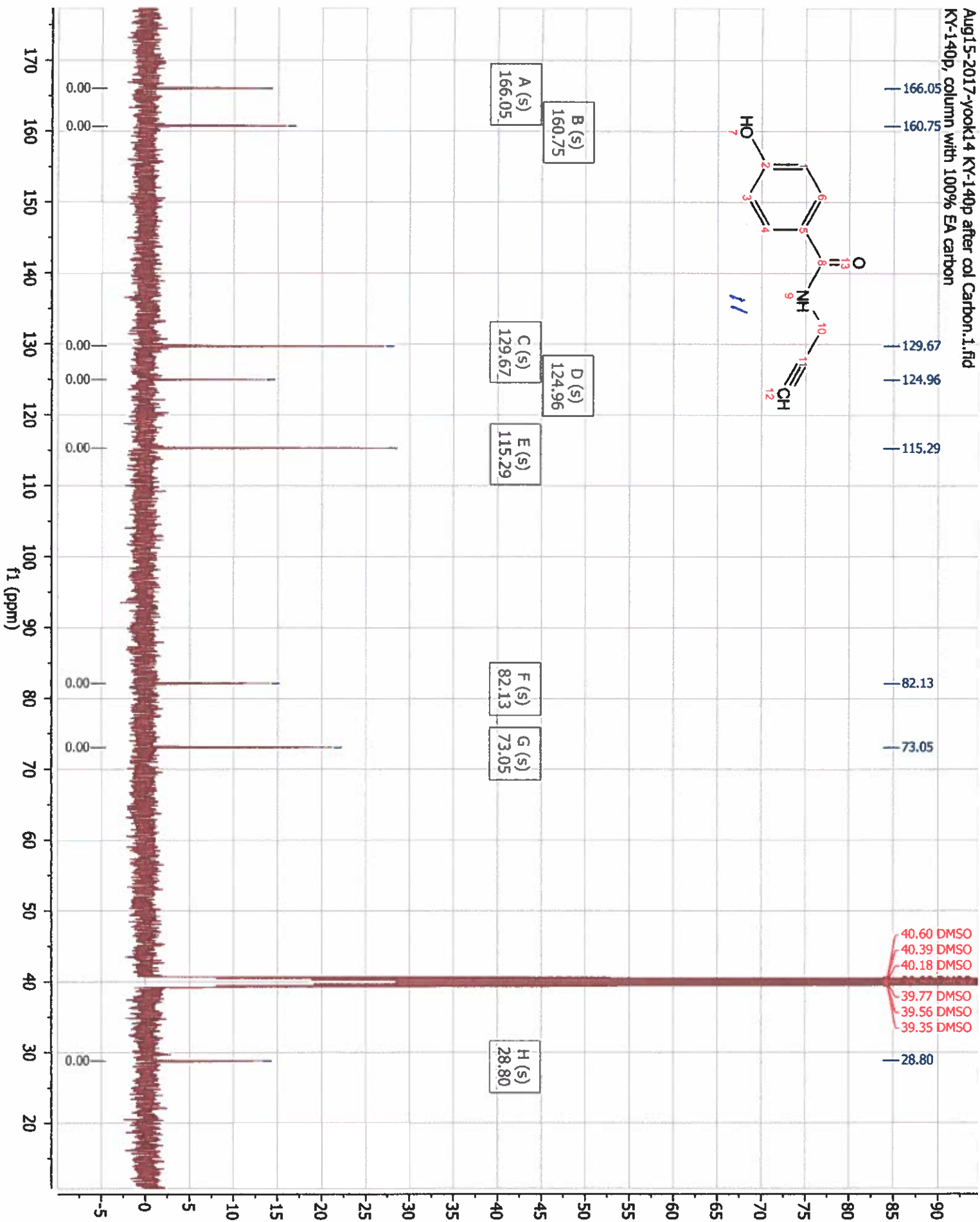
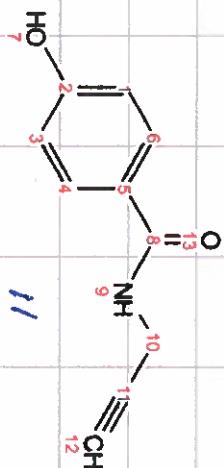
2.04

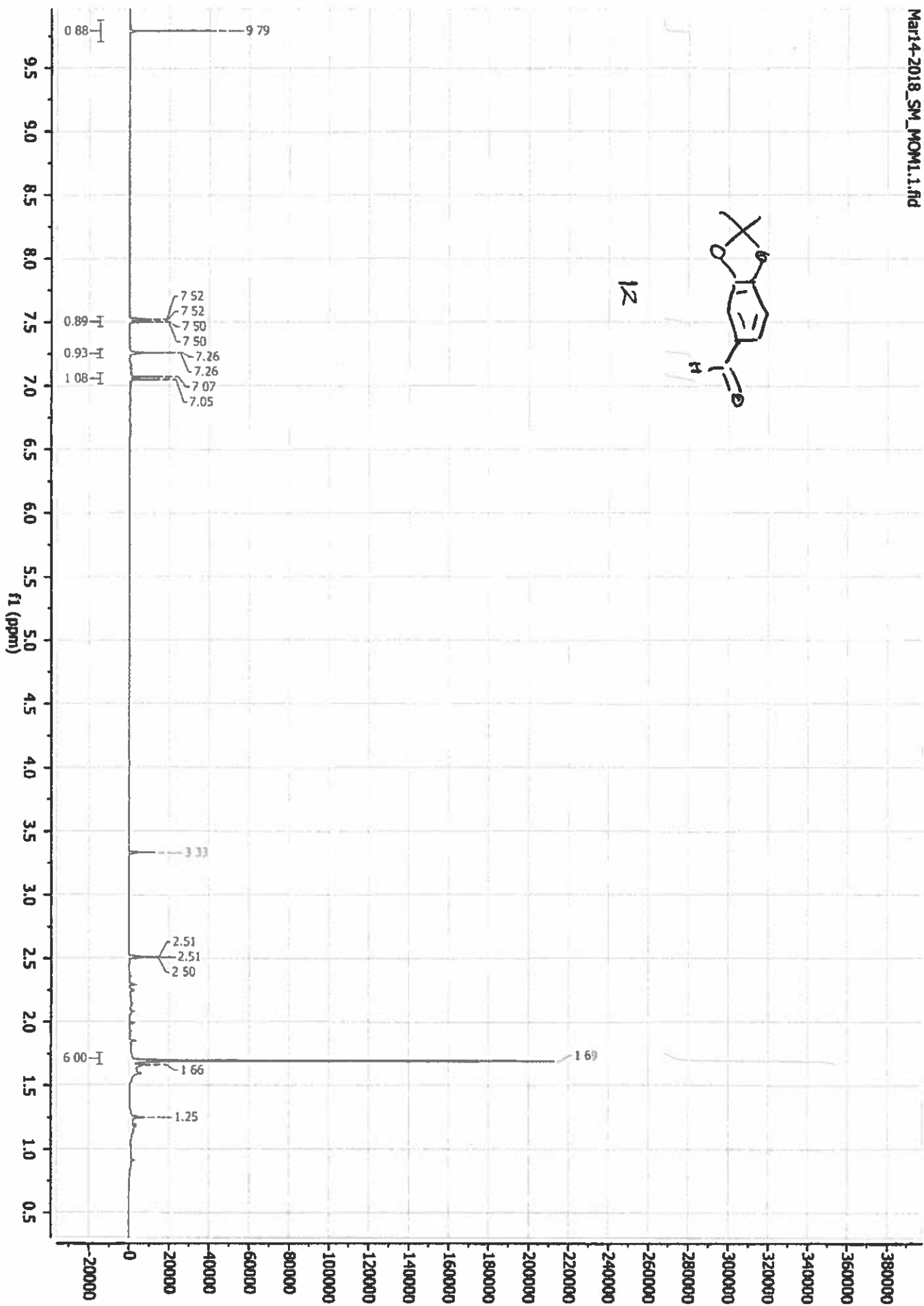
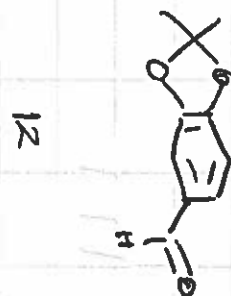
2.08

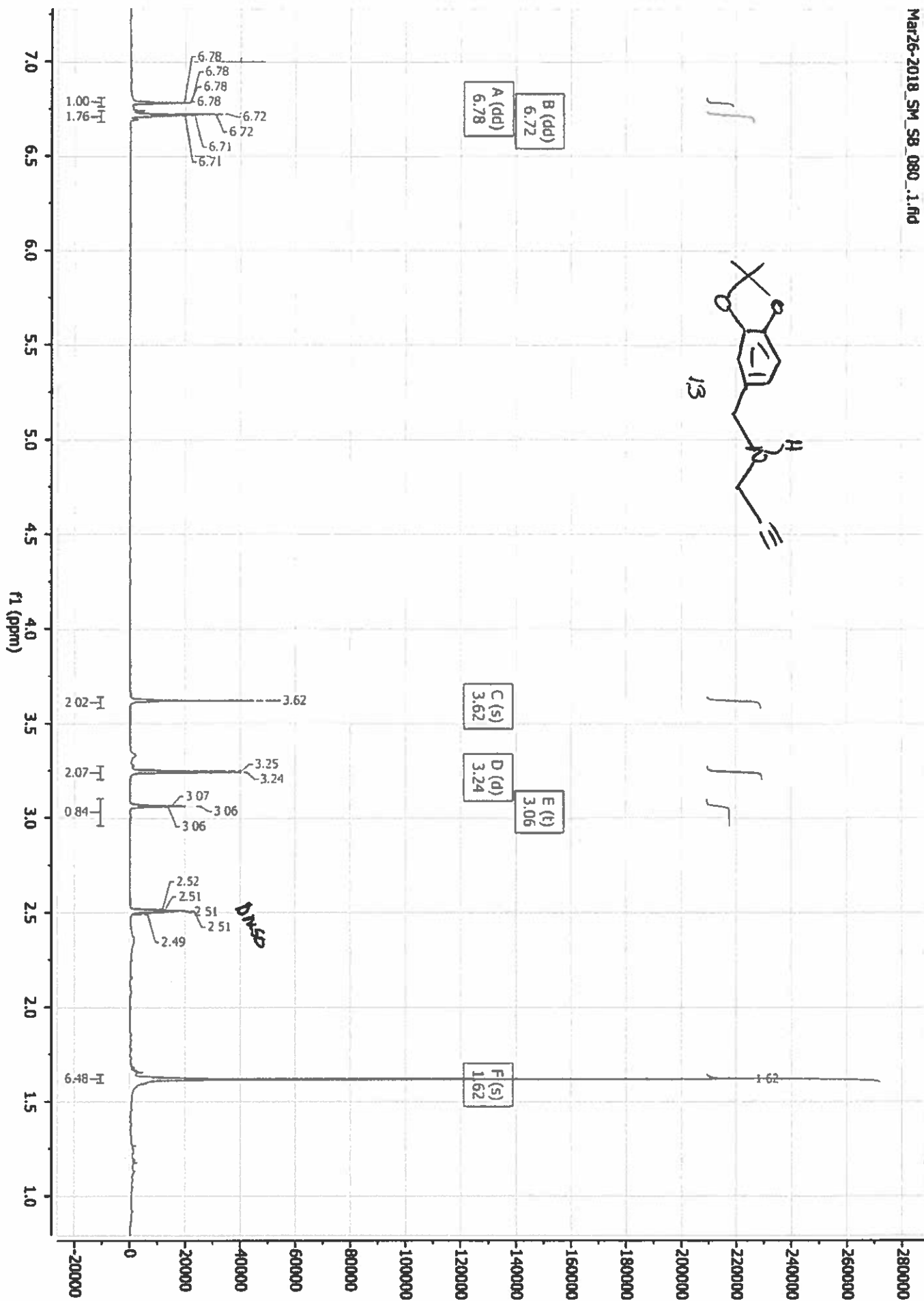
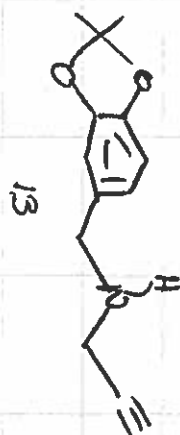
0.89

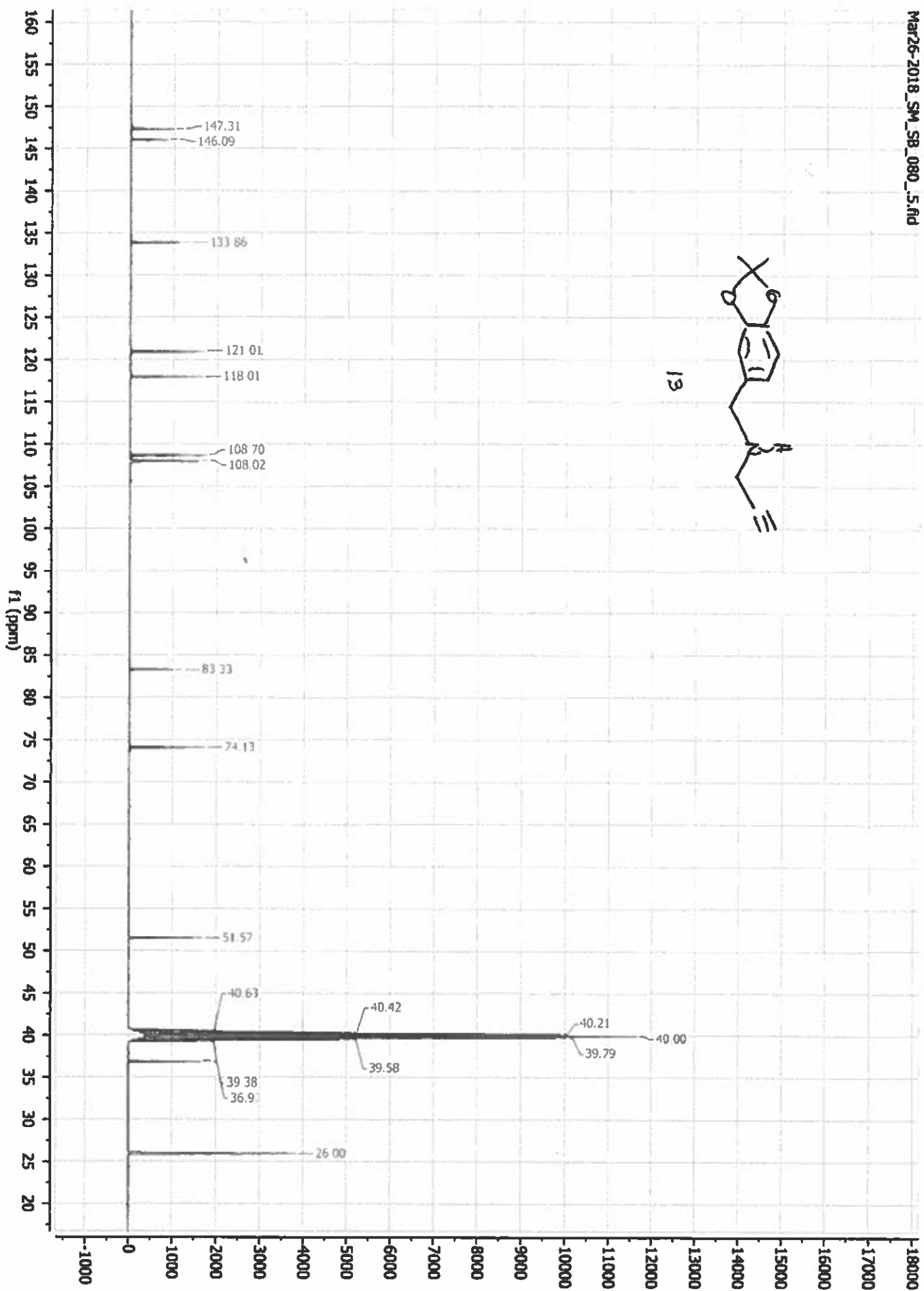
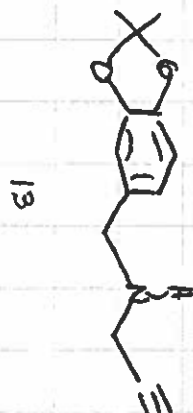
-500
 0
 500
 1000
 1500
 2000
 2500
 3000
 3500
 4000
 4500
 5000
 5500
 6000
 6500
 7000

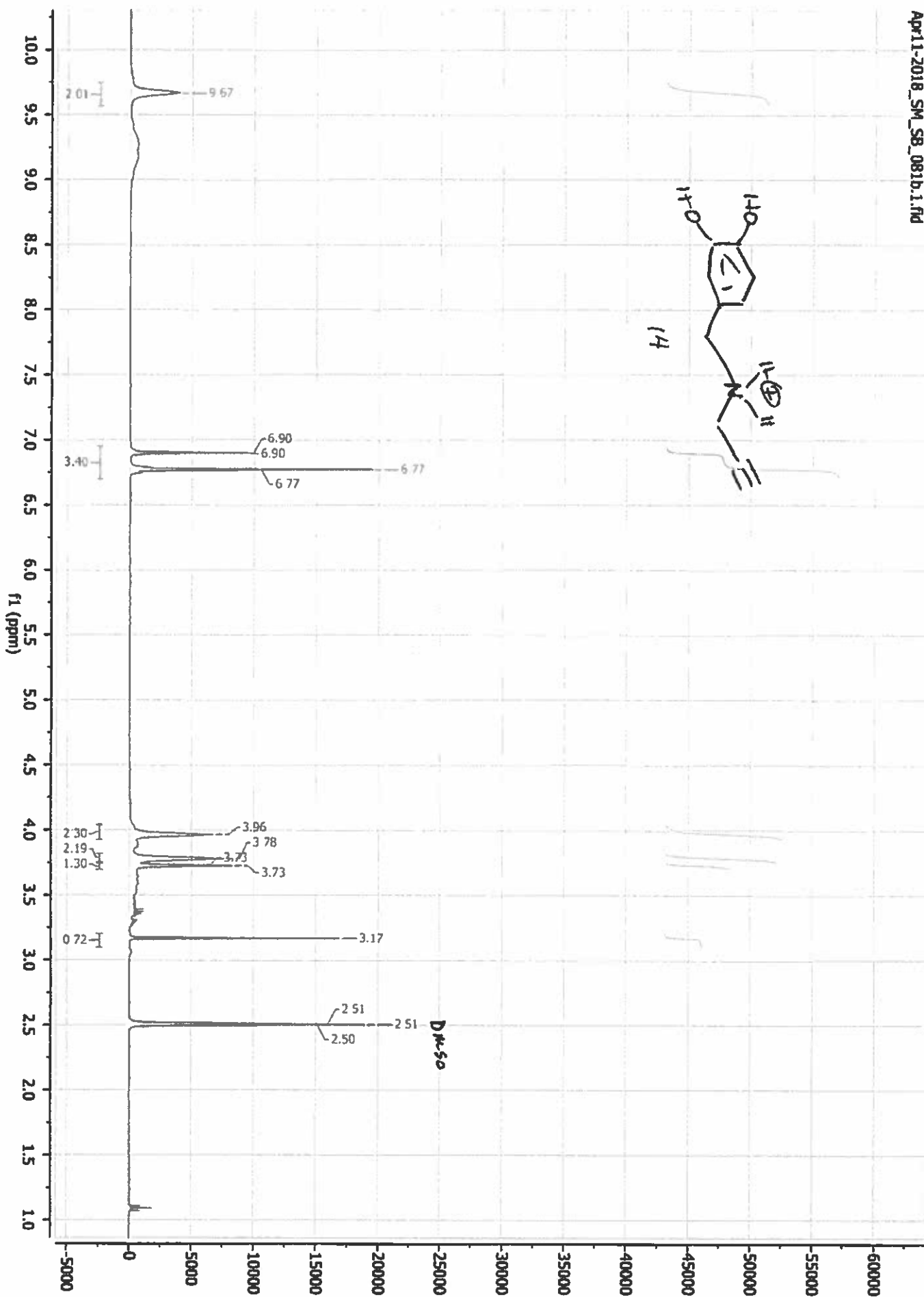
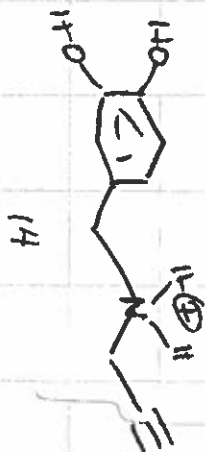
Aug15-2017-yook14 KY-140p after cool Carbon.1.fid
KY-140p, column with 100% EA carbon

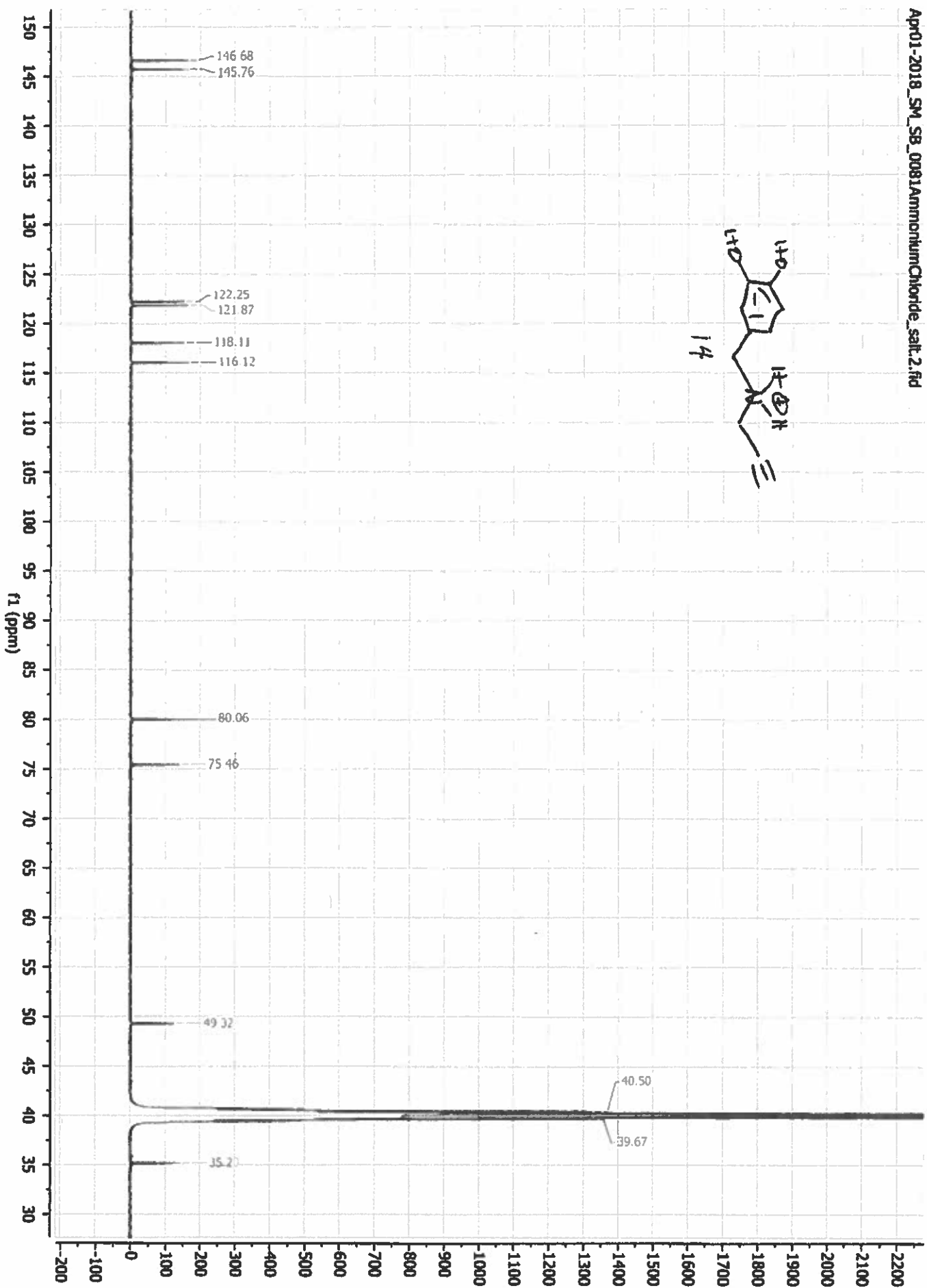
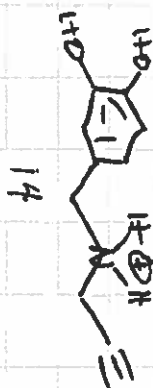






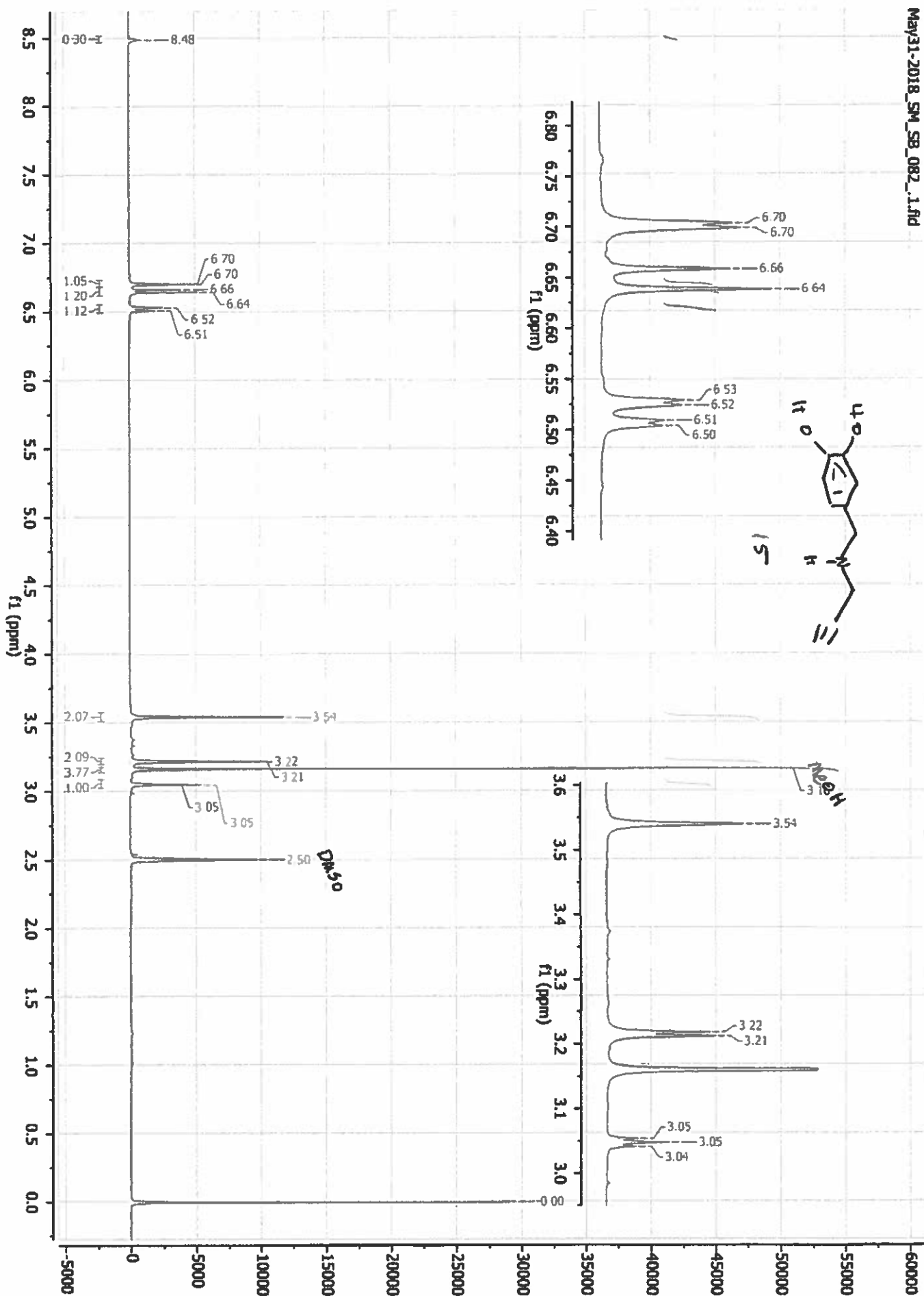


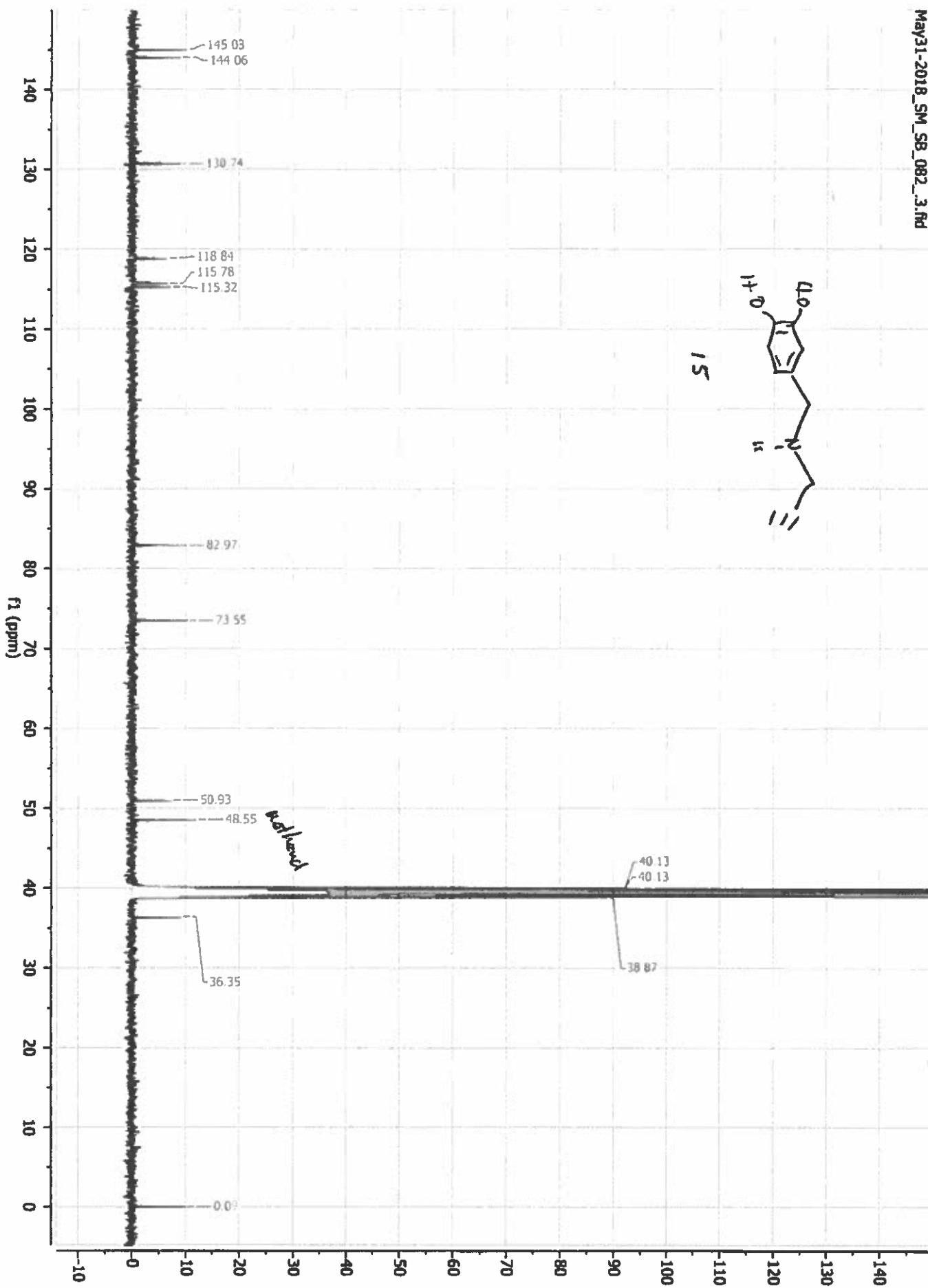
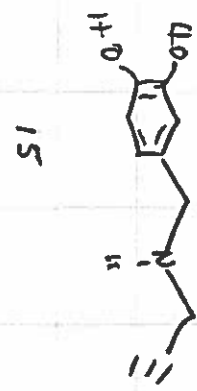




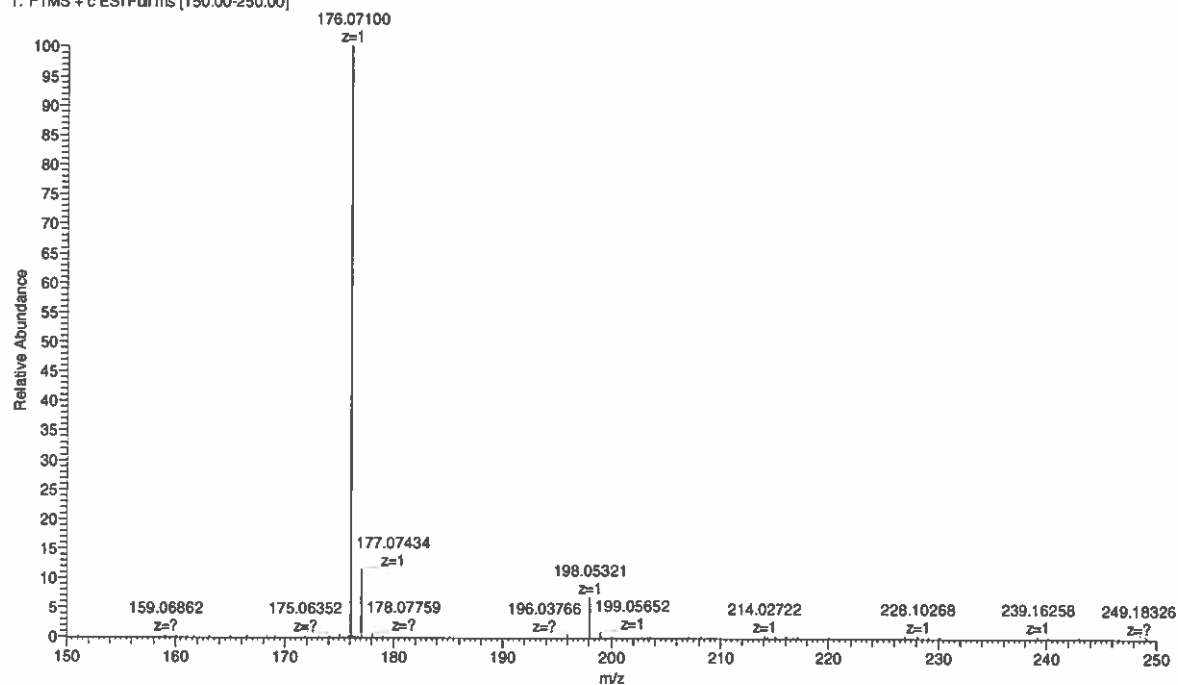
5B

May31-2018_SM_SB_082_1.fid



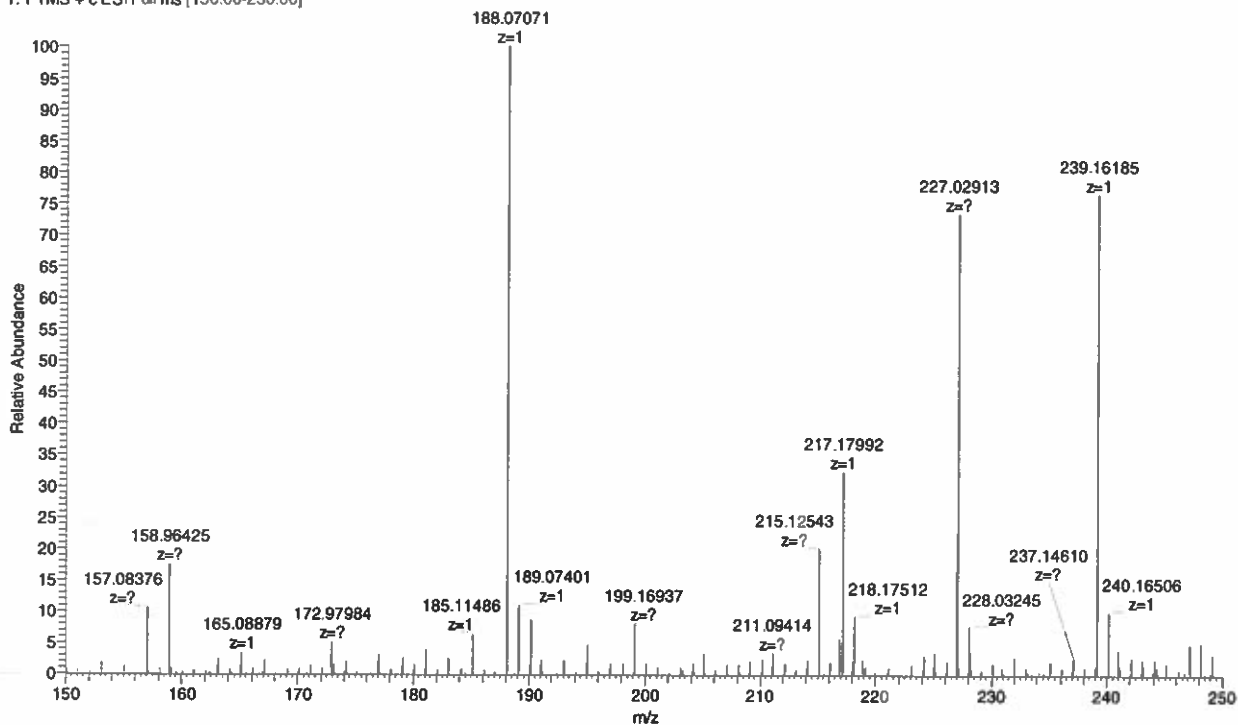


Dihydroxyimline HRMS_170811102434 #254 RT: 2.00 AV: 1 NL: 3.84E8
T: FTMS + c ESI Full ms [150.00-250.00]



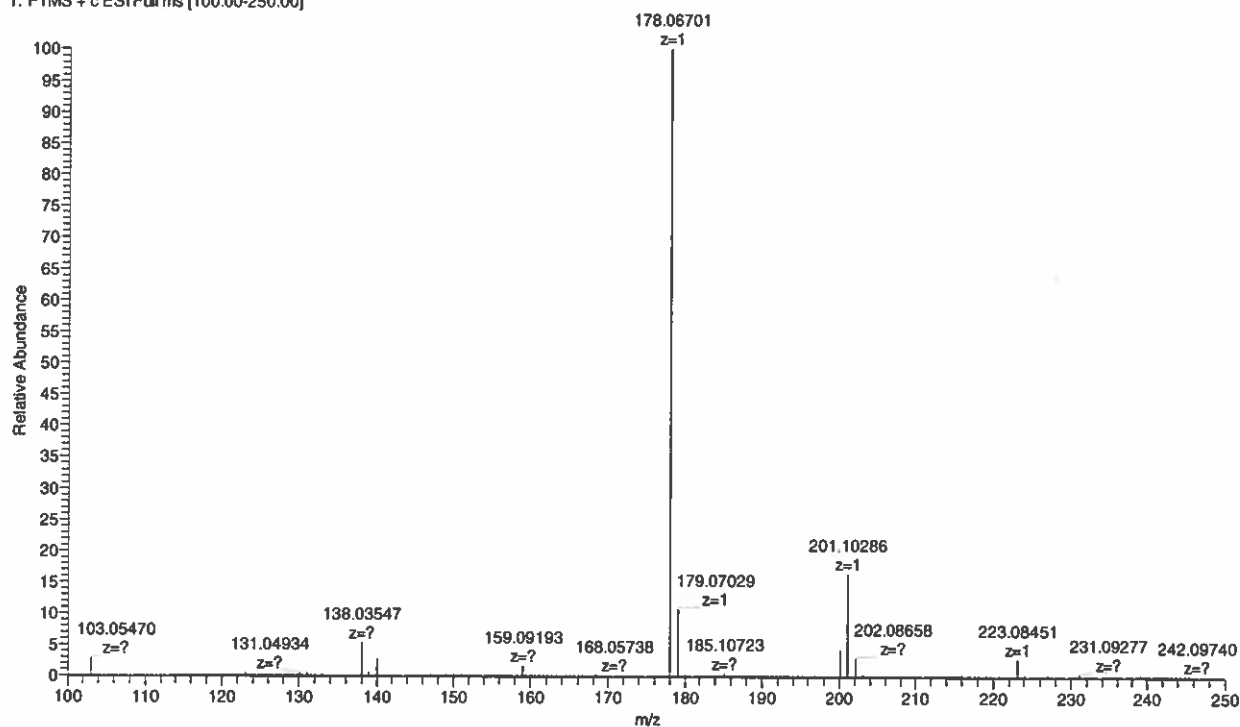
Compound 3

KY-114 carboxy imine 07132017_170713172008 #1-3 RT: 0.00-0.02 AV: 3 NL: 7.98E6
T: FTMS + c ESI Full ms [150.00-250.00]



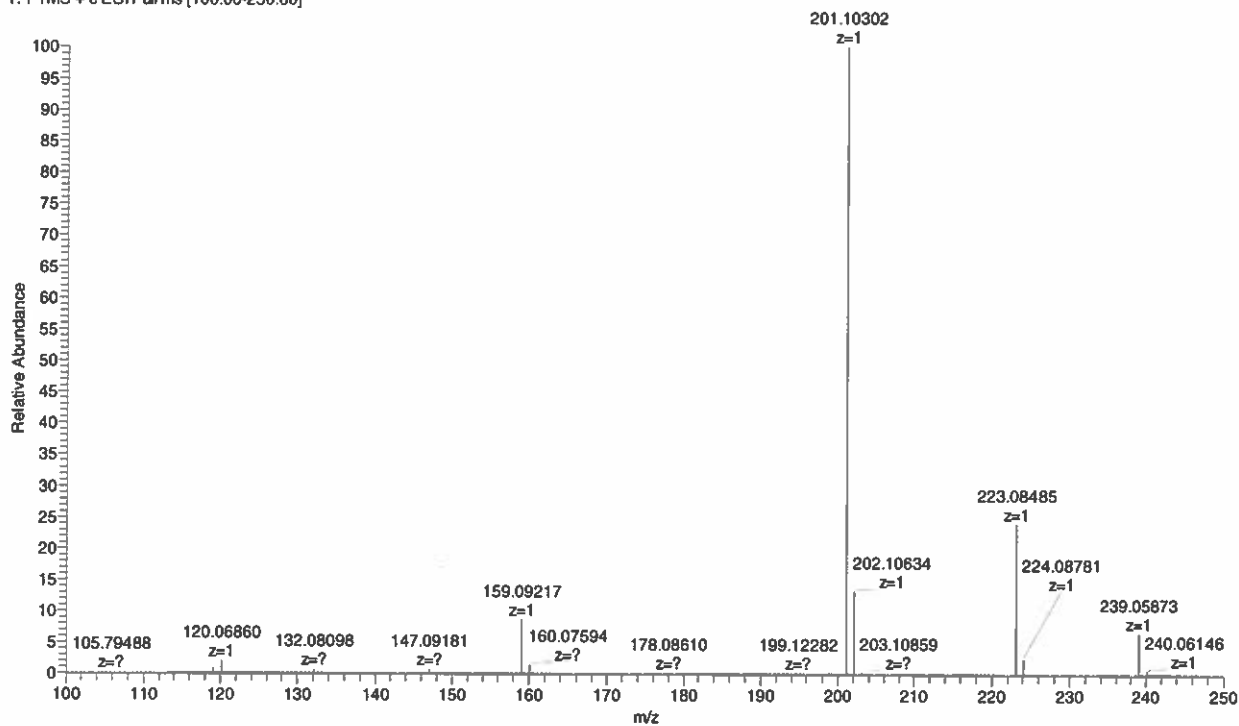
Compound 4

FOHimine_180605162300 #1-125 RT: 0.00-1.00 AV: 125 NL: 5.95E7
T: FTMS + c ESIFull ms [100.00-250.00]



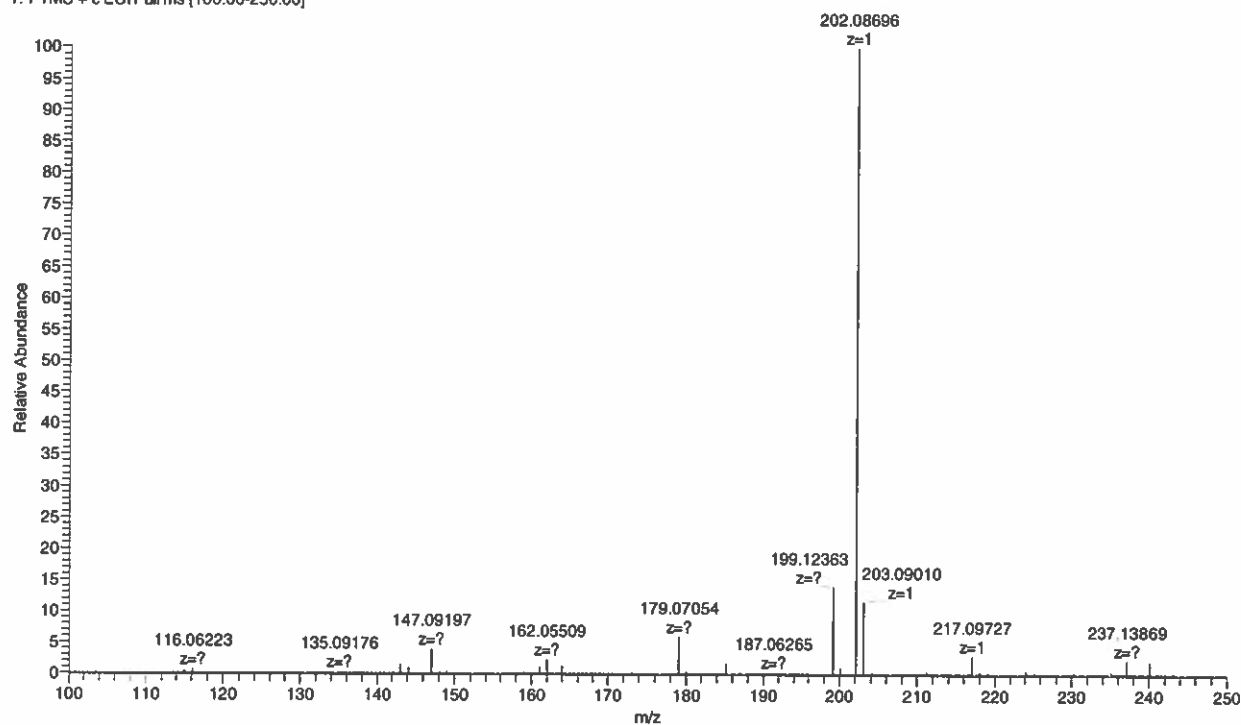
Compound 5

132A_180605162300 #1-128 RT: 0.01-1.01 AV: 128 NL: 2.22E8
T: FTMS + c ESIFull ms [100.00-250.00]



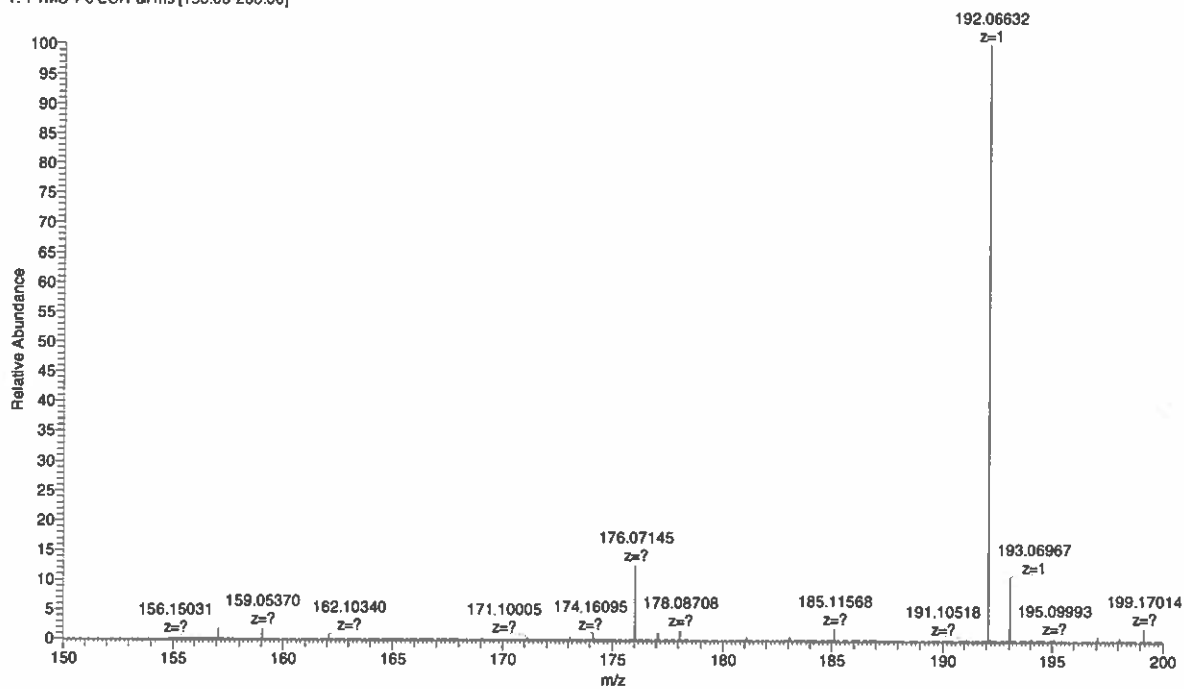
Compound 6

131B_180605162300 #1-129 RT: 0.00-1.01 AV: 129 NL: 1.28E8
T: FTMS + c ESI Full ms [100.00-250.00]

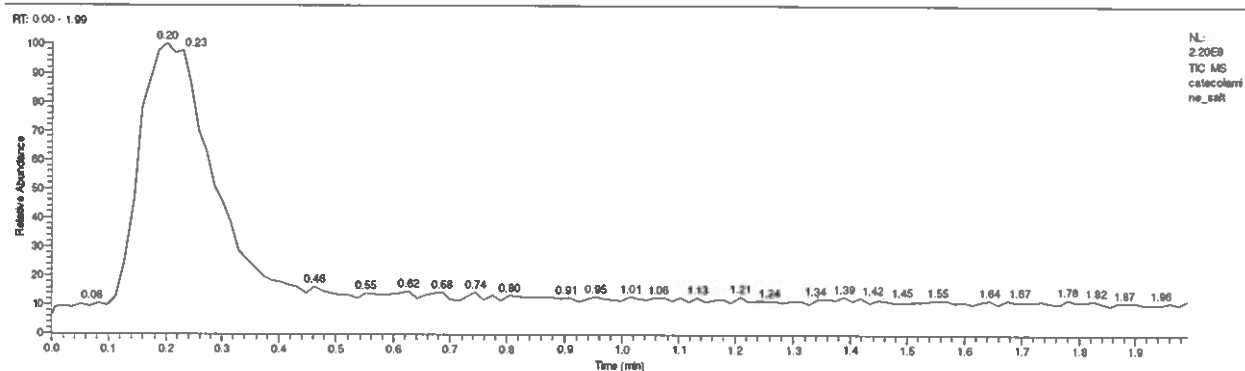


Compound 7

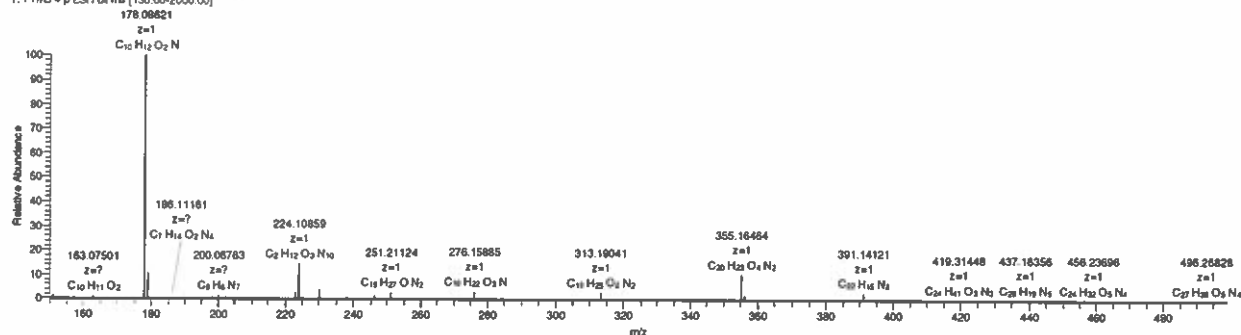
Dihydroxyamide HRMS 170811102434 #1-250 RT: 0.00-2.00 AV: 250 NL: 2.07E7
T: FTMS + c ESI Full ms [150.00-200.00]



Compound 10

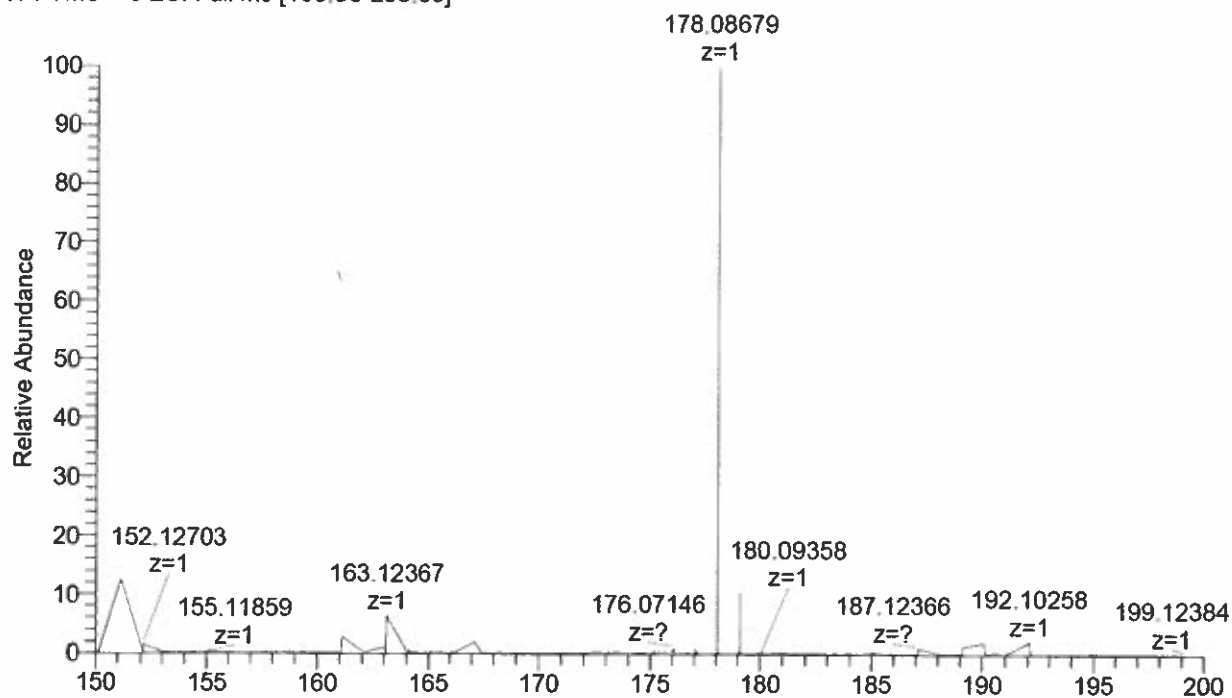


catecholamine_salt #11-21 RT: 0.14-0.29 AV: 11 NL: 8.07E7
T: FTMS + p ESI Full ms [150.00-2000.00]



Compound 14

Dihydroxyamine HRMS #255 RT: 2.00 AV: 1 NL: 1.23E8
T: FTMS + c ESI Full ms [150.00-200.00]



Compound 15