

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM072318\  
 Data File : BM016038.D  
 Acq On : 23 Jul 2018 22:41  
 Operator : SJ/JU  
 Sample : J3762-03  
 Misc : MDL 5 PPM  
 ALS Vial : 11 Sample Multiplier: 1

Instrument :  
 BNA\_M  
 ClientSampleId :  
 MDL-SOIL-03-QT3-2018

Quant Time: Jul 24 08:59:23 2018  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA M\METHODS\8270-BM072318.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Mon Jul 23 16:08:38 2018  
 Response via : Initial Calibration

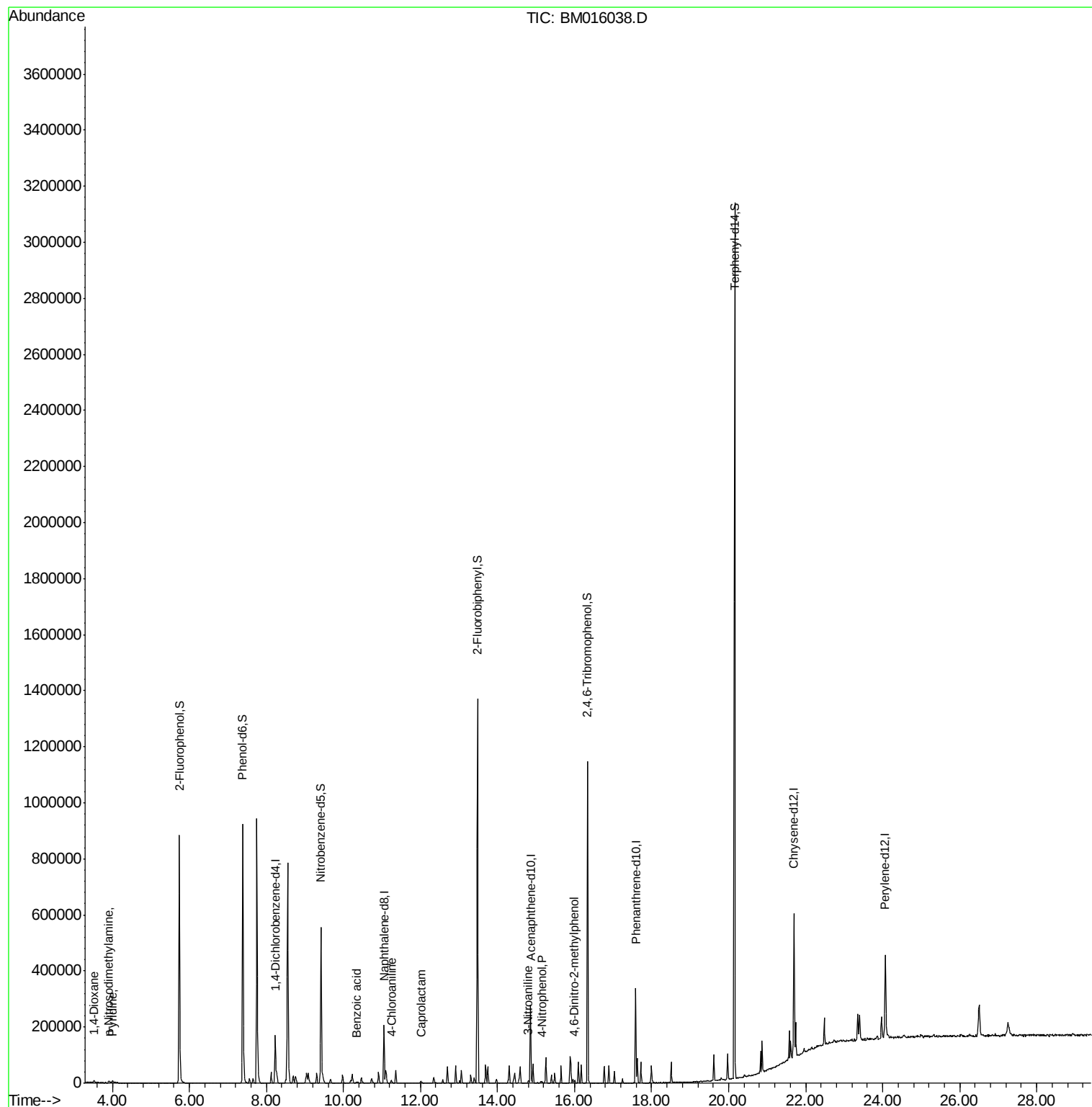
| Internal Standards             | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|--------------------------------|-------|------|----------|--------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4      | 8.23  | 152  | 38158    | 20.00  | ng    | 0.00     |
| 21) Naphthalene-d8             | 11.05 | 136  | 143106   | 20.00  | ng    | 0.00     |
| 38) Acenaphthene-d10           | 14.86 | 164  | 77845    | 20.00  | ng    | 0.00     |
| 63) Phenanthrene-d10           | 17.59 | 188  | 167377   | 20.00  | ng    | 0.00     |
| 75) Chrysene-d12               | 21.70 | 240  | 183894   | 20.00  | ng    | 0.00     |
| 86) Perylene-d12               | 24.07 | 264  | 200234   | 20.00  | ng    | 0.00     |
| System Monitoring Compounds    |       |      |          |        |       |          |
| 5) 2-Fluorophenol              | 5.74  | 112  | 296832   | 129.22 | ng    | 0.00     |
| 7) Phenol-d6                   | 7.39  | 99   | 360601   | 120.20 | ng    | 0.00     |
| 23) Nitrobenzene-d5            | 9.42  | 82   | 278475   | 90.51  | ng    | 0.00     |
| 41) 2,4,6-Tribromophenol       | 16.34 | 330  | 128135   | 129.78 | ng    | 0.00     |
| 44) 2-Fluorobiphenyl           | 13.48 | 172  | 565539   | 88.40  | ng    | 0.00     |
| 78) Terphenyl-d14              | 20.16 | 244  | 1089590  | 124.03 | ng    | 0.00     |
| Target Compounds               |       |      |          |        |       |          |
| 2) 1,4-Dioxane                 | 3.52  | 88   | 4676     | 4.345  | ng    | # 100    |
| 3) Pyridine                    | 4.01  | 79   | 4152     | 1.601  | ng    | # 75     |
| 4) n-Nitrosodimethylamine      | 3.90  | 42   | 8204     | 4.057  | ng    | # 39     |
| 32) Benzoic acid               | 10.34 | 122  | 3017     | 2.197  | ng    | # 85     |
| 33) 4-Chloroaniline            | 11.24 | 127  | 7071     | 2.392  | ng    | # 93     |
| 35) Caprolactam                | 12.01 | 113  | 1372     | 2.314  | ng    | # 90     |
| 52) 3-Nitroaniline             | 14.80 | 138  | 3294     | 2.225  | ng    | # 78     |
| 55) 4-Nitrophenol              | 15.14 | 139  | 1789     | 1.686  | ng    | # 69     |
| 64) 4,6-Dinitro-2-methylphenol | 16.00 | 198  | 2747     | 2.704  | ng    | # 93     |

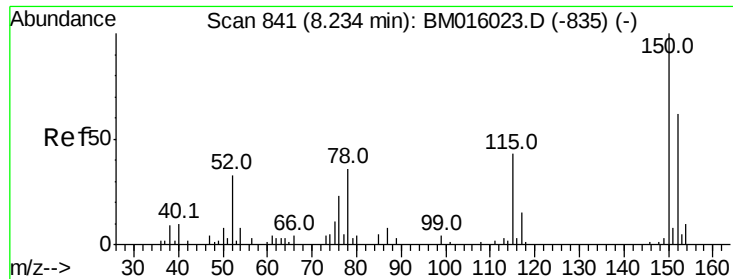
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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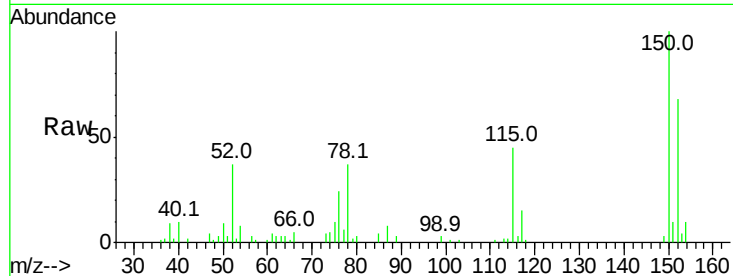


#1

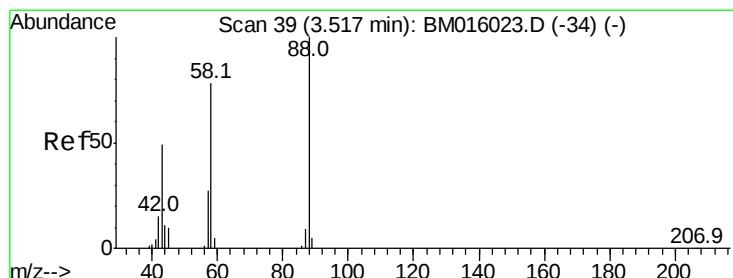
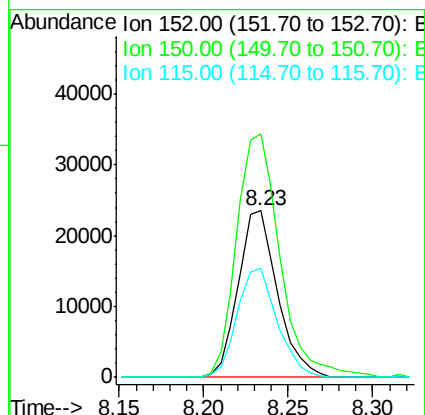
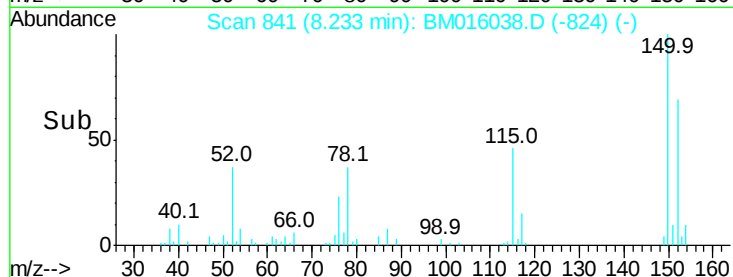
1,4-Dichlorobenzene-d4  
Concen: 20.000 ng  
RT: 8.23 min Scan# 841  
Delta R.T. -0.00 min  
Lab File: BM016038.D  
Acq: 23 Jul 2018 22:41

Instrument :  
BNA\_M  
ClientSampleId :  
MDL-SOIL-03-QT3-2018

Tot Ion:152 Resp: 38158  
Ion Ratio Lower Upper  
152 100  
150 146.5 119.5 179.3  
115 65.6 43.0 64.4#



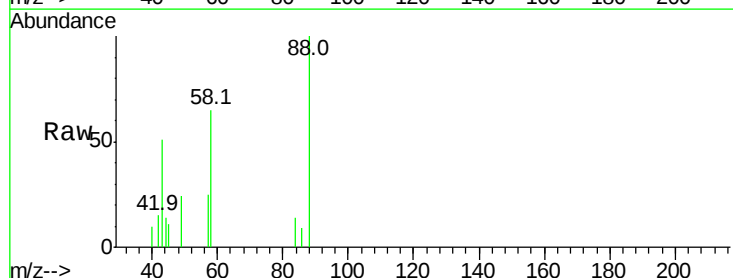
Abundance Ion 152.00 (151.70 to 152.70): E  
Ion 150.00 (149.70 to 150.70): E  
Ion 115.00 (114.70 to 115.70): E



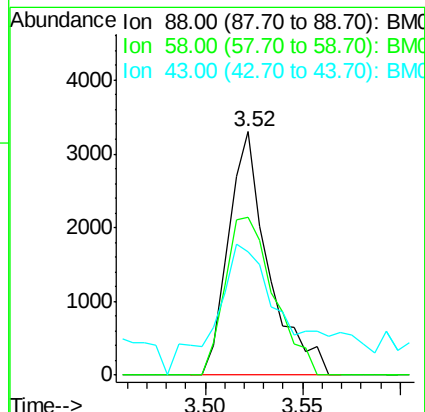
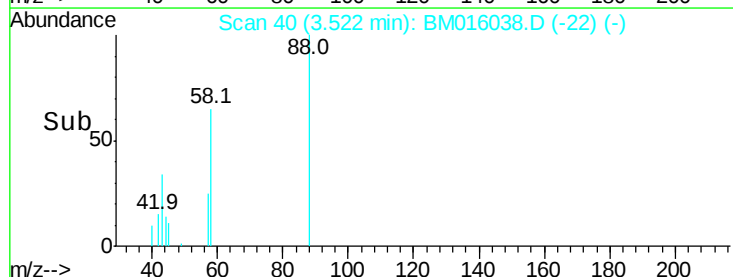
#2

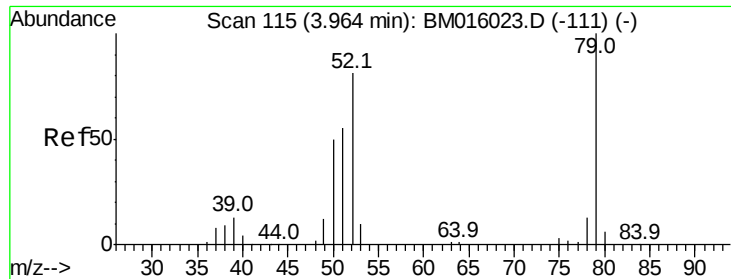
1,4-Dioxane  
Concen: 4.345 ng  
RT: 3.52 min Scan# 40  
Delta R.T. 0.01 min  
Lab File: BM016038.D  
Acq: 23 Jul 2018 22:41

Tgt Ion: 88 Resp: 4676  
Ion Ratio Lower Upper  
88 100  
58 79.3 0.0 0.0#  
43 104.3 0.0 0.0#



Abundance Ion 88.00 (87.70 to 88.70): BM0  
Ion 58.00 (57.70 to 58.70): BM0  
Ion 43.00 (42.70 to 43.70): BM0





#3

Pvridine

Concen: 1.601 ng

RT: 4.01 min Scan# 123

Delta R.T. 0.05 min

Lab File: BM016038.D

Acq: 23 Jul 2018 22:41

Instrument :

BNA\_M

ClientSampleId :

MDL-SOIL-03-QT3-2018

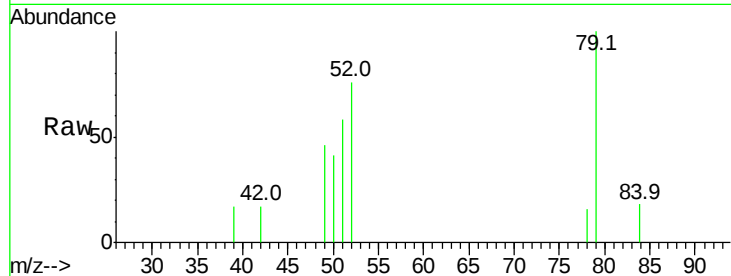
Tot Ion: 79 Resp: 4152

Ion Ratio Lower Upper

79 100

52 75.6 51.1 76.7

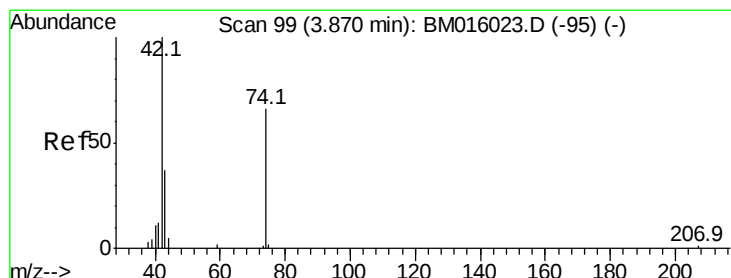
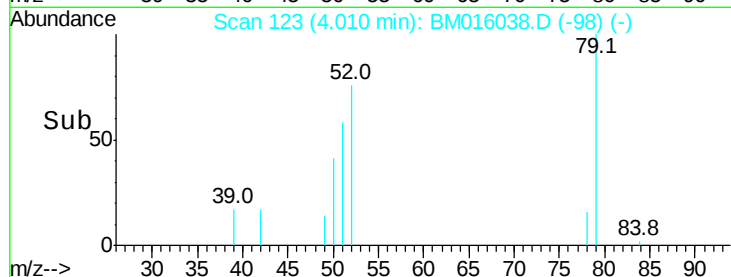
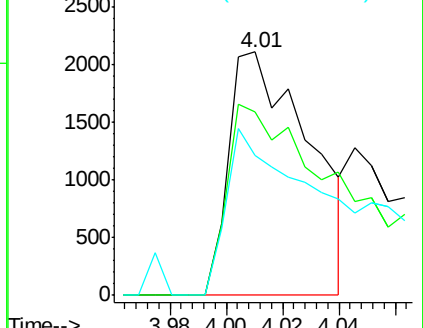
51 57.7 26.1 39.1#



Abundance Ion 79.00 (78.70 to 79.70): BM016038.D (-111) (-)

Ion 52.00 (51.70 to 52.70): BM016038.D (-111) (-)

Ion 51.00 (50.70 to 51.70): BM016038.D (-111) (-)



#4

n-Nitrosodimethylamine

Concen: 4.057 ng

RT: 3.90 min Scan# 104

Delta R.T. 0.03 min

Lab File: BM016038.D

Acq: 23 Jul 2018 22:41

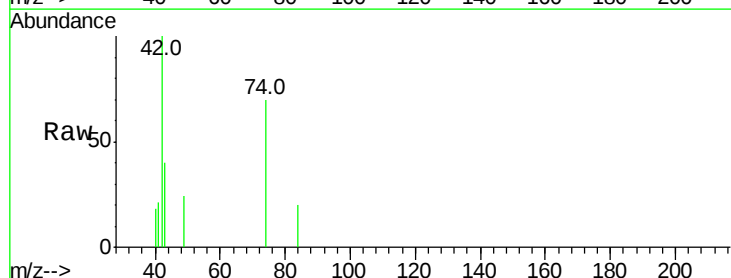
Tgt Ion: 42 Resp: 8204

Ion Ratio Lower Upper

42 100

74 70.2 119.3 178.9#

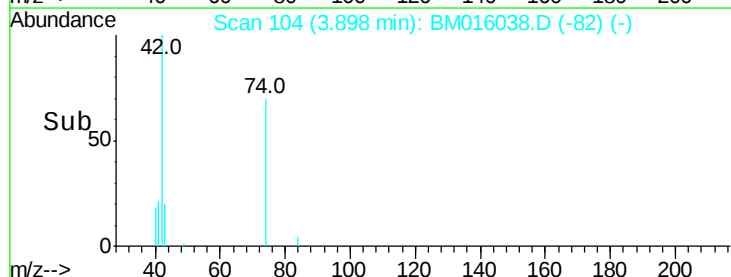
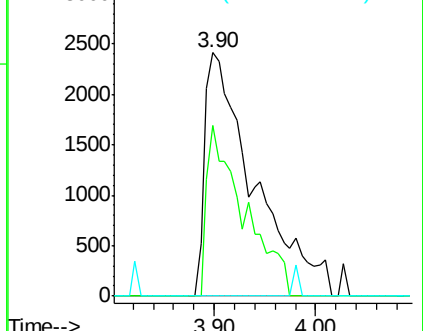
44 0.0 5.4 8.2#

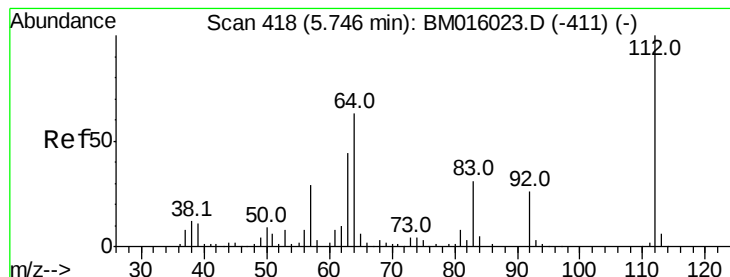


Abundance Ion 42.00 (41.70 to 42.70): BM016038.D (-82) (-)

Ion 74.00 (73.70 to 74.70): BM016038.D (-82) (-)

Ion 44.00 (43.70 to 44.70): BM016038.D (-82) (-)





#5

2-Fluorophenol

Concen: 4.057 ng

RT: 5.74 min Scan# 417

Delta R.T. -0.01 min

Lab File: BM016038.D

Acq: 23 Jul 2018 22:41

Instrument :

BNA\_M

ClientSampleId :

MDL-SOIL-03-QT3-2018

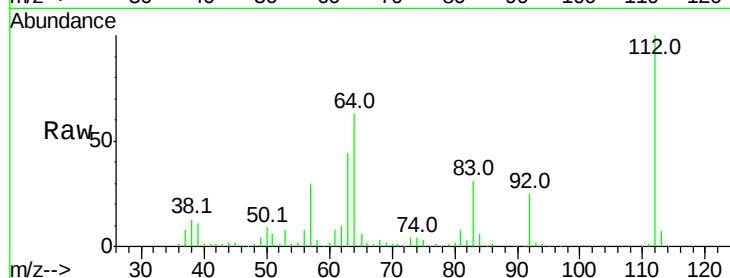
Tot Ion:112 Resp: 296832

Ion Ratio Lower Upper

112 100

64 62.6 38.6 57.8#

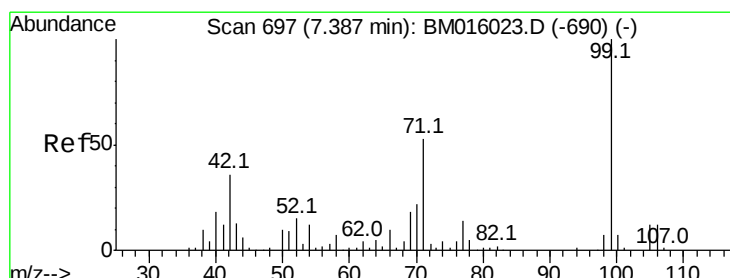
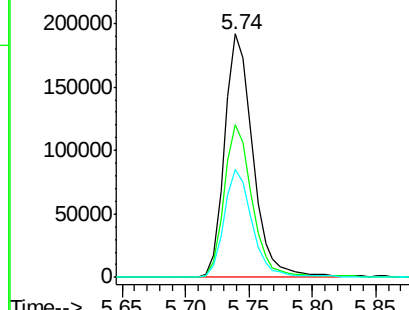
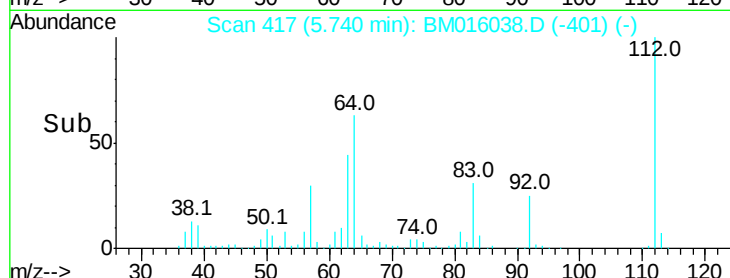
63 44.2 19.3 28.9#



Abundance Ion 112.00 (111.70 to 112.70): B

Ion 64.00 (63.70 to 64.70): BM

Ion 63.00 (62.70 to 63.70): BM



#7

Phenol-d6

Concen: N.D. ng

RT: 7.39 min Scan# 697

Delta R.T. -0.00 min

Lab File: BM016038.D

Acq: 23 Jul 2018 22:41

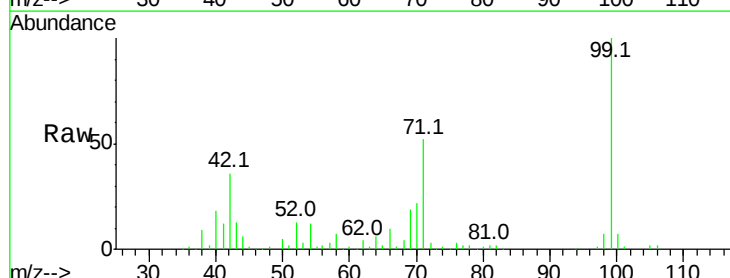
Tgt Ion: 99 Resp: 360601

Ion Ratio Lower Upper

99 100

42 36.0 11.0 16.4#

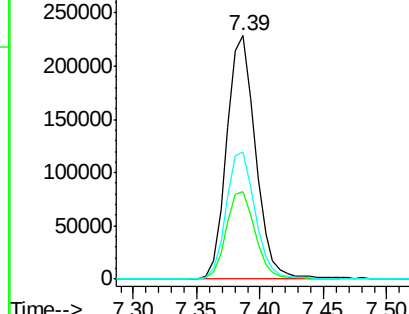
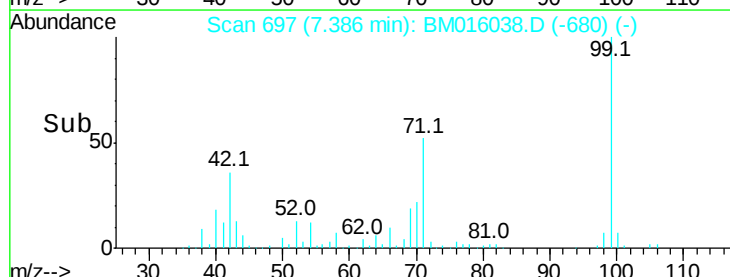
71 52.1 23.4 35.2#

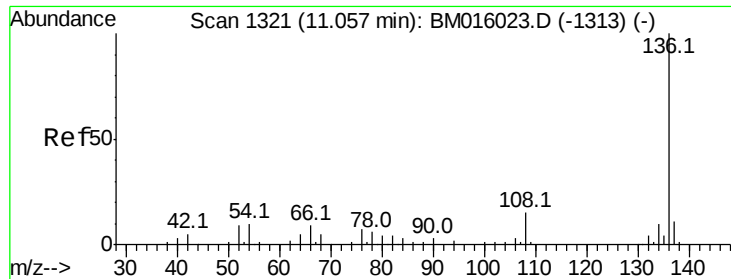


Abundance Ion 99.00 (98.70 to 99.70): BM

Ion 42.00 (41.70 to 42.70): BM

Ion 71.00 (70.70 to 71.70): BM

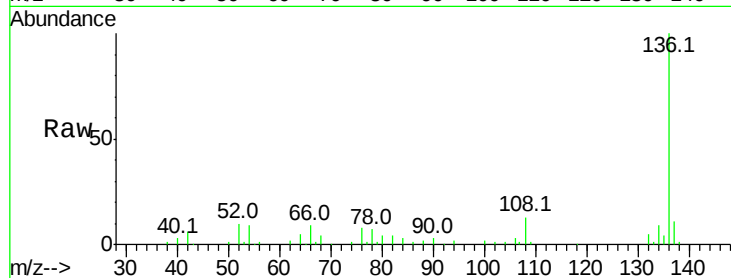




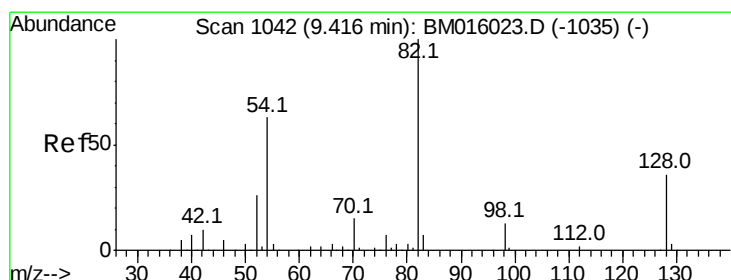
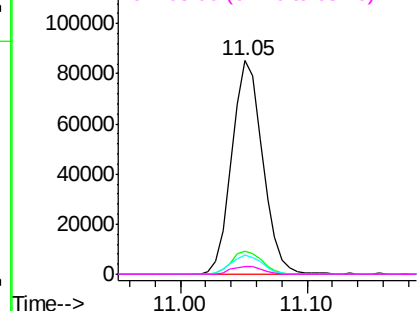
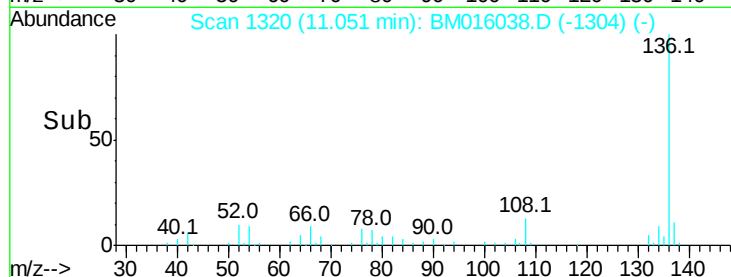
#21  
Naphthalene-d8  
Concen: 20.000 ng  
RT: 11.05 min Scan# 1320  
Delta R.T. -0.01 min  
Lab File: BM016038.D  
Acq: 23 Jul 2018 22:41

Instrument :  
BNA\_M  
ClientSampleId :  
MDL-SOIL-03-QT3-2018

Tot Ion:136 Resp: 143106  
Ion Ratio Lower Upper  
136 100  
137 10.9 8.7 13.1  
54 9.0 4.6 6.8#  
68 3.7 3.7 5.5#

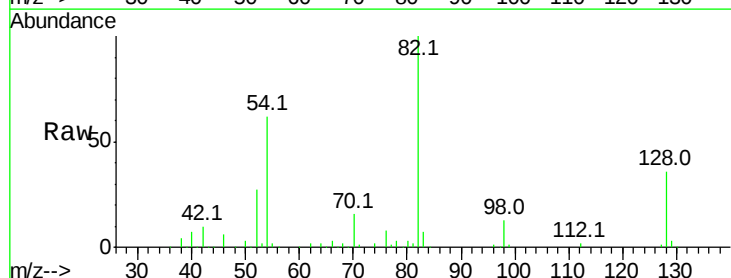


Abundance Ion 136.00 (135.70 to 136.70): E  
Ion 137.00 (136.70 to 137.70): E  
Ion 54.00 (53.70 to 54.70): BM  
Ion 68.00 (67.70 to 68.70): BM

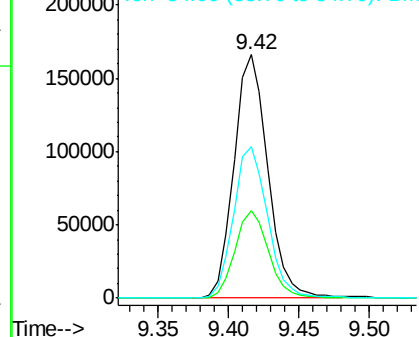
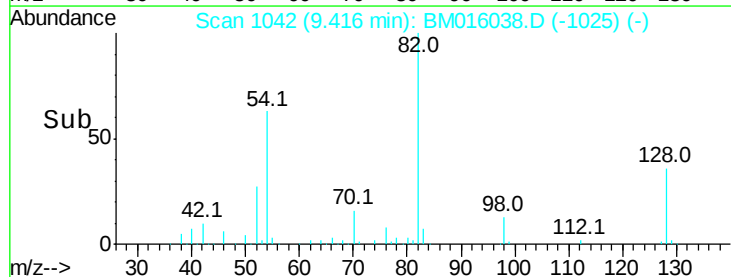


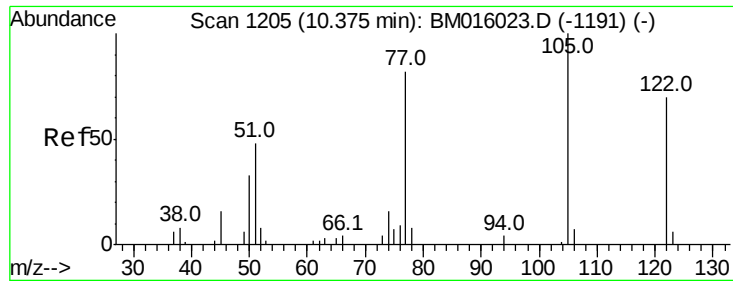
#23  
Nitrobenzene-d5  
Concen: N.D. ng  
RT: 9.42 min Scan# 1042  
Delta R.T. -0.00 min  
Lab File: BM016038.D  
Acq: 23 Jul 2018 22:41

Tgt Ion: 82 Resp: 278475  
Ion Ratio Lower Upper  
82 100  
128 35.9 32.8 49.2  
54 62.3 40.6 60.8#



Abundance Ion 82.00 (81.70 to 82.70): BM  
Ion 128.00 (127.70 to 128.70): E  
Ion 54.00 (53.70 to 54.70): BM





#32

Benzoic acid

Concen: 2.197 ng

RT: 10.34 min Scan# 1199

Delta R.T. -0.04 min

Lab File: BM016038.D

Acq: 23 Jul 2018 22:41

Instrument :

BNA\_M

ClientSampleId :

MDL-SOIL-03-QT3-2018

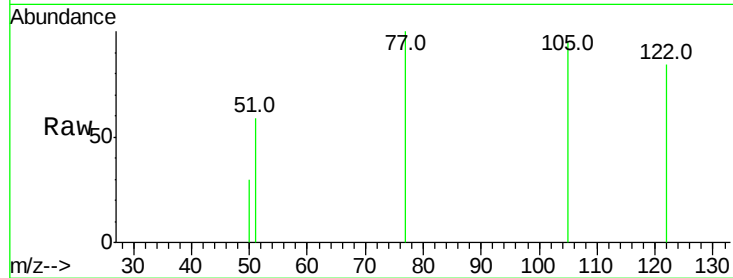
Tot Ion:122 Resp: 3017

Ion Ratio Lower Upper

122 100

105 112.8 99.9 139.9

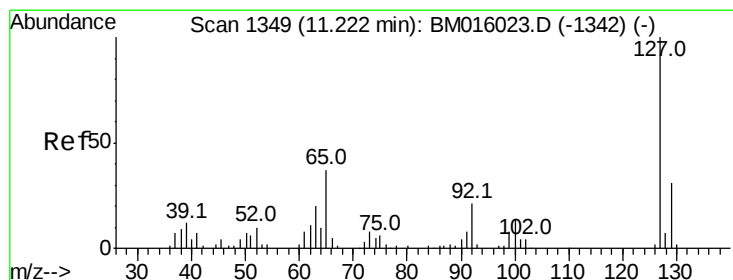
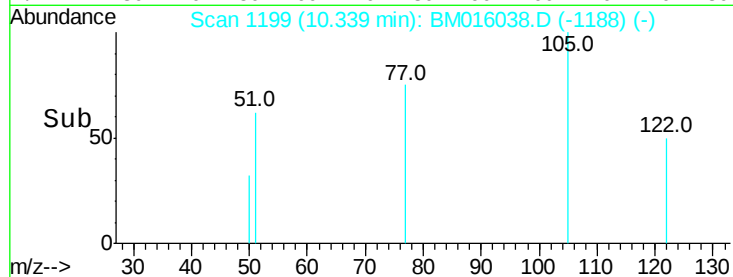
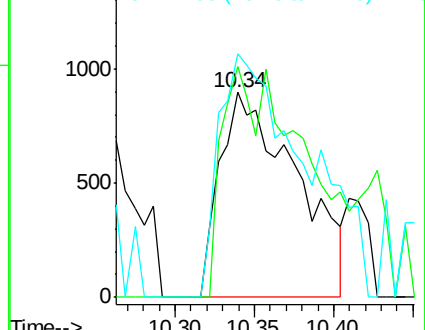
77 118.8 73.7 113.7#



Abundance Ion 122.00 (121.70 to 122.70): E

Ion 105.00 (104.70 to 105.70): E

Ion 77.00 (76.70 to 77.70): BM



#33

4-Chloroaniline

Concen: 2.392 ng

RT: 11.24 min Scan# 1352

Delta R.T. 0.02 min

Lab File: BM016038.D

Acq: 23 Jul 2018 22:41

Tgt Ion:127 Resp: 7071

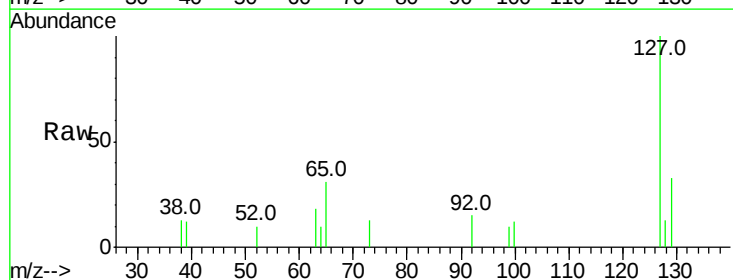
Ion Ratio Lower Upper

127 100

129 32.7 25.3 37.9

65 30.7 17.6 26.4#

92 15.1 13.1 19.7

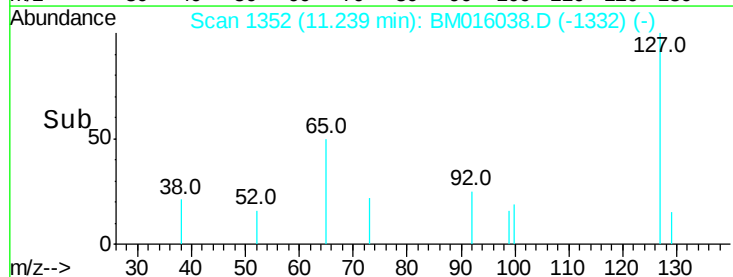
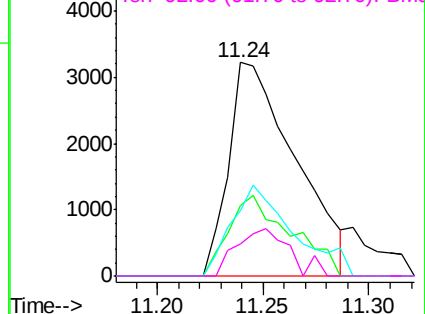


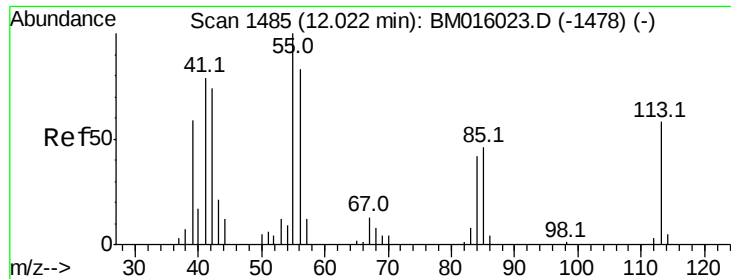
Abundance Ion 127.00 (126.70 to 127.70): E

Ion 129.00 (128.70 to 129.70): E

Ion 65.00 (64.70 to 65.70): BM

Ion 92.00 (91.70 to 92.70): BM





#35

Caprolactam

Concen: 2.314 ng

RT: 12.01 min Scan# 1483

Delta R.T. -0.01 min

Lab File: BM016038.D

Acq: 23 Jul 2018 22:41

Instrument :

BNA\_M

ClientSampleId :

MDL-SOIL-03-QT3-2018

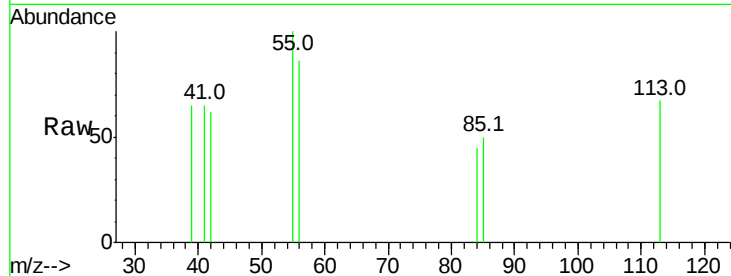
Tot Ion:113 Resp: 1372

Ion Ratio Lower Upper

113 100

55 148.5 145.9 185.9

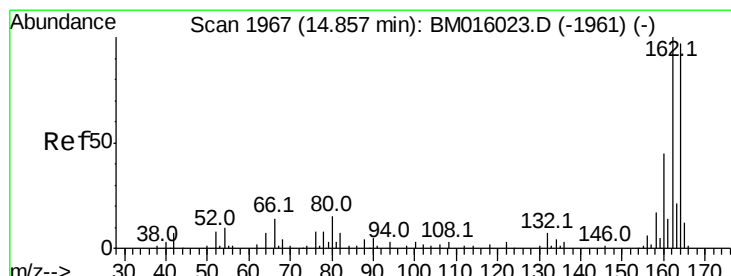
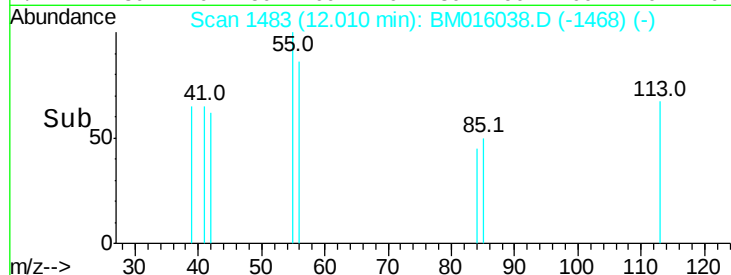
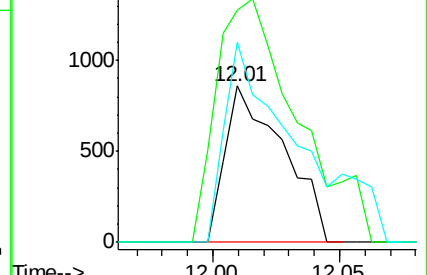
56 127.9 101.0 141.0



Abundance Ion 113.00 (112.70 to 113.70): E

Ion 55.00 (54.70 to 55.70): BM0

Ion 56.00 (55.70 to 56.70): BM0



#38

Acenaphthene-d10

Concen: 20.000 ng

RT: 14.86 min Scan# 1967

Delta R.T. -0.00 min

Lab File: BM016038.D

Acq: 23 Jul 2018 22:41

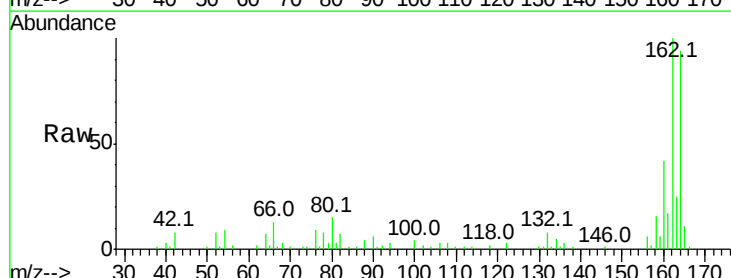
Tgt Ion:164 Resp: 77845

Ion Ratio Lower Upper

164 100

162 106.8 82.4 123.6

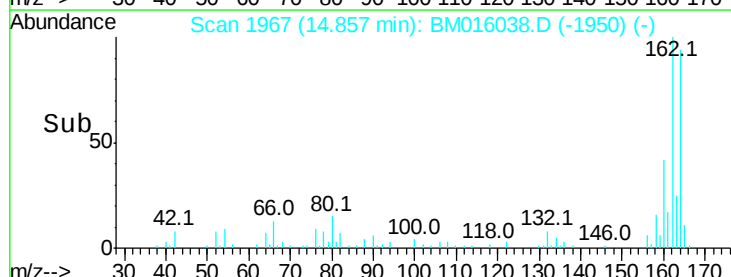
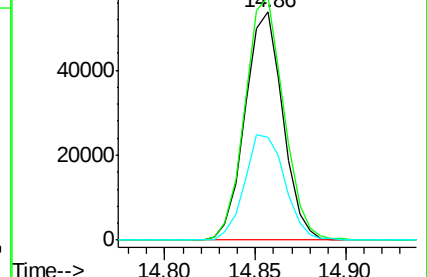
160 45.2 35.8 53.6

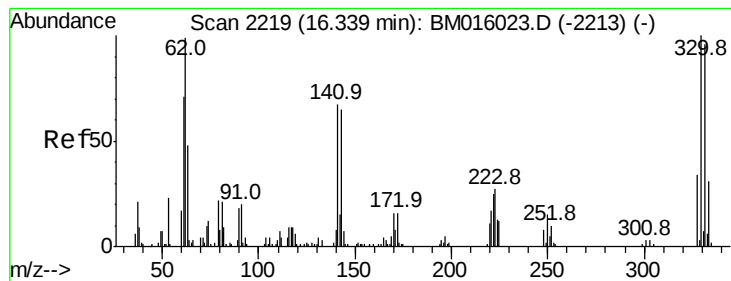


Abundance Ion 164.00 (163.70 to 164.70): E

Ion 162.00 (161.70 to 162.70): E

Ion 160.00 (159.70 to 160.70): E





#41

2,4,6-Tribromophenol

Concen: N.D. ng

RT: 16.34 min Scan# 2219

Delta R.T. -0.00 min

Lab File: BM016038.D

Acq: 23 Jul 2018 22:41

Instrument :

BNA\_M

ClientSampleId :

MDL-SOIL-03-QT3-2018

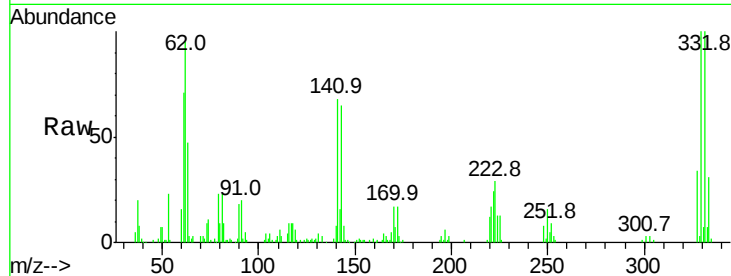
Tot Ion:330 Resp: 128135

Ion Ratio Lower Upper

330 100

332 97.8 0.0 0.0#

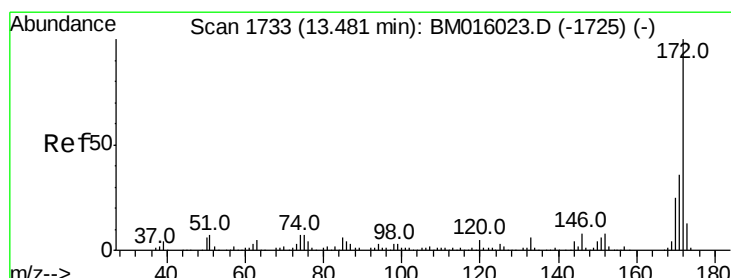
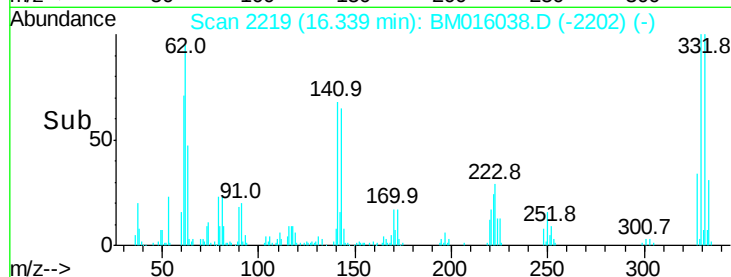
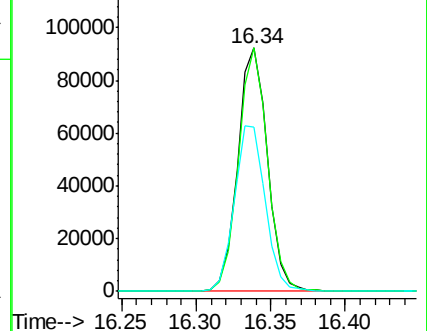
141 70.9 0.0 0.0#



Abundance Ion 329.80 (329.50 to 330.50): E

Ion 331.80 (331.50 to 332.50): E

Ion 141.00 (140.70 to 141.70): E



#44

2-Fluorobiphenyl

Concen: N.D. ng

RT: 13.48 min Scan# 1733

Delta R.T. -0.00 min

Lab File: BM016038.D

Acq: 23 Jul 2018 22:41

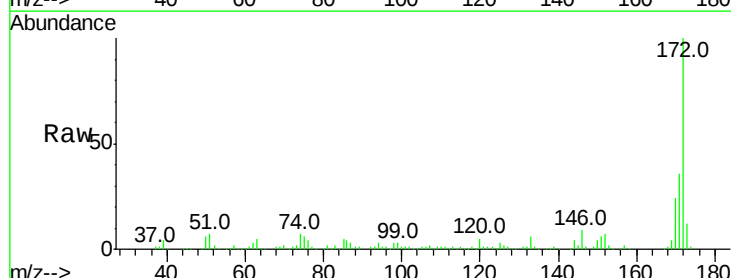
Tgt Ion:172 Resp: 565539

Ion Ratio Lower Upper

172 100

171 35.9 28.5 42.7

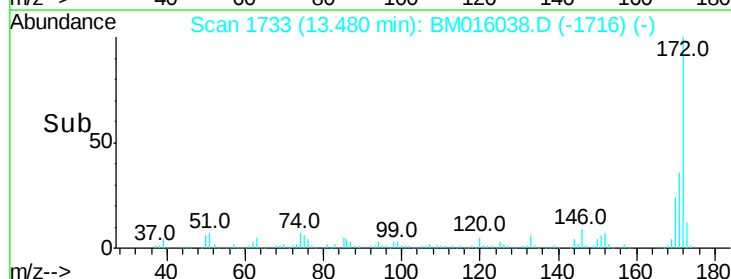
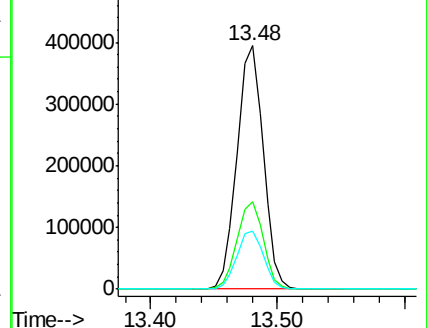
170 24.0 18.8 28.2

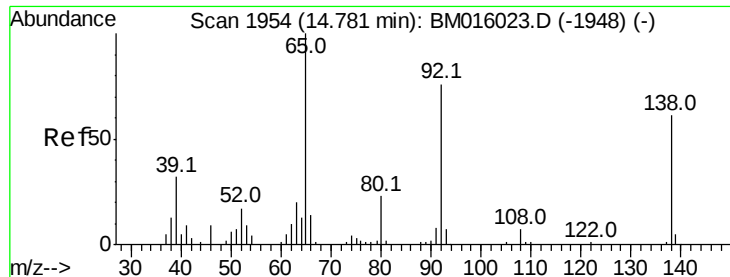


Abundance Ion 172.00 (171.70 to 172.70): E

Ion 171.00 (170.70 to 171.70): E

Ion 170.00 (169.70 to 170.70): E





#52

3-Nitroaniline

Concen: 2.225 ng

RT: 14.80 min Scan# 1957

Delta R.T. 0.02 min

Lab File: BM016038.D

Acq: 23 Jul 2018 22:41

Instrument :

BNA\_M

ClientSampleId :

MDL-SOIL-03-QT3-2018

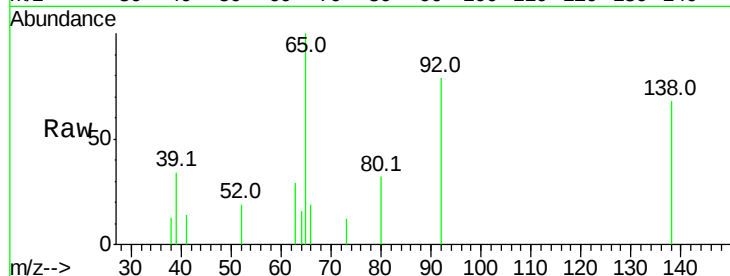
Tot Ion:138 Resp: 3294

Ion Ratio Lower Upper

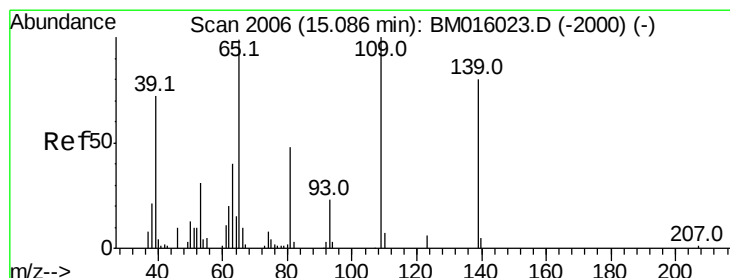
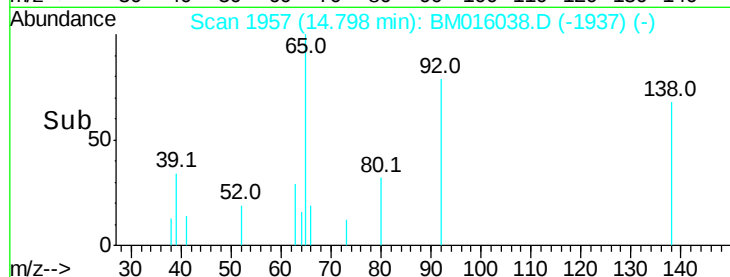
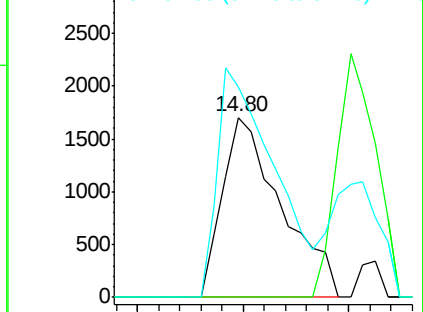
138 100

108 0.0 7.3 10.9#

92 117.0 76.6 114.8#



Abundance Ion 138.00 (137.70 to 138.70): E  
Ion 108.00 (107.70 to 108.70): E  
Ion 92.00 (91.70 to 92.70): BM



#55

4-Nitrophenol

Concen: 1.686 ng

RT: 15.14 min Scan# 2015

Delta R.T. 0.05 min

Lab File: BM016038.D

Acq: 23 Jul 2018 22:41

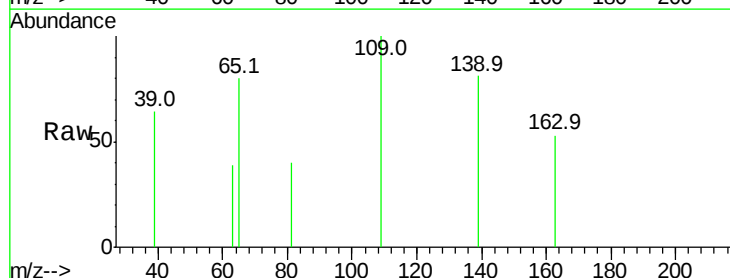
Tgt Ion:139 Resp: 1789

Ion Ratio Lower Upper

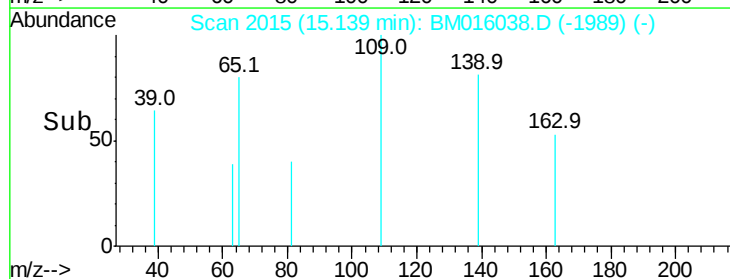
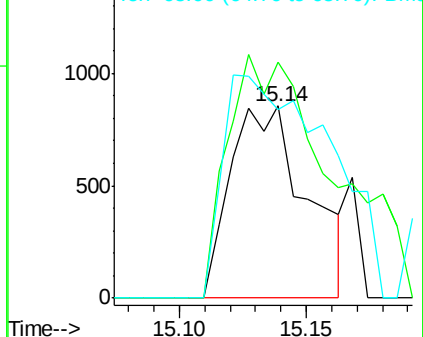
139 100

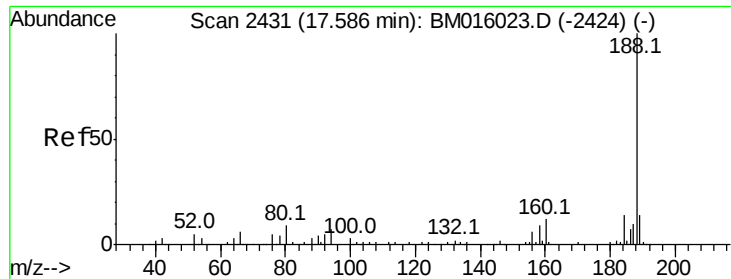
109 123.1 130.0 170.0#

65 98.5 130.0 170.0#



Abundance Ion 139.00 (138.70 to 139.70): E  
Ion 109.00 (108.70 to 109.70): E  
Ion 65.00 (64.70 to 65.70): BM

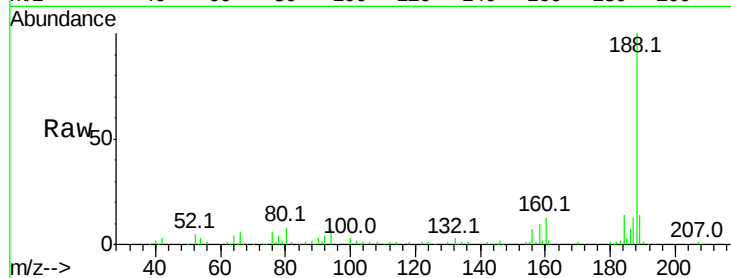




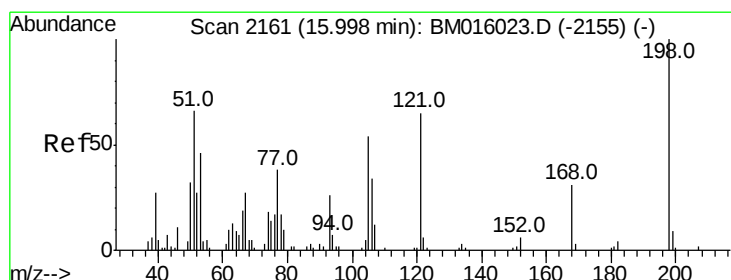
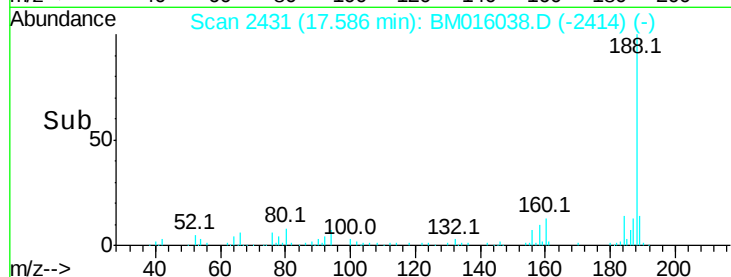
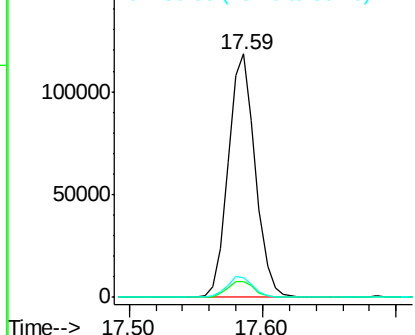
#63  
 Phenanthrene-d10  
 Concen: 20.000 ng  
 RT: 17.59 min Scan# 2431  
 Delta R.T. -0.00 min  
 Lab File: BM016038.D  
 Acq: 23 Jul 2018 22:41

Instrument :  
 BNA\_M  
 ClientSampleId :  
 MDL-SOIL-03-QT3-2018

Tot Ion:188 Resp: 167377  
 Ion Ratio Lower Upper  
 188 100  
 94 6.7 8.7 13.1#  
 80 7.8 9.3 13.9#

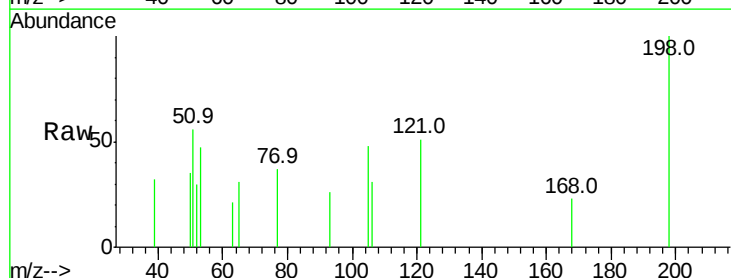


Abundance Ion 188.00 (187.70 to 188.70): E  
 Ion 94.00 (93.70 to 94.70): BM  
 Ion 80.00 (79.70 to 80.70): BM

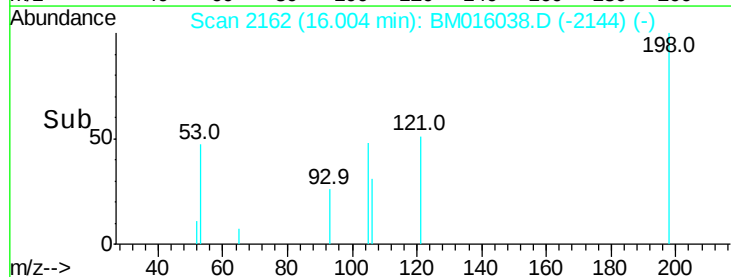
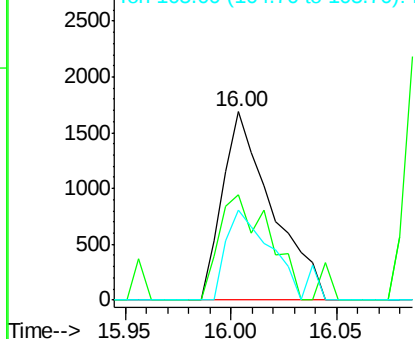


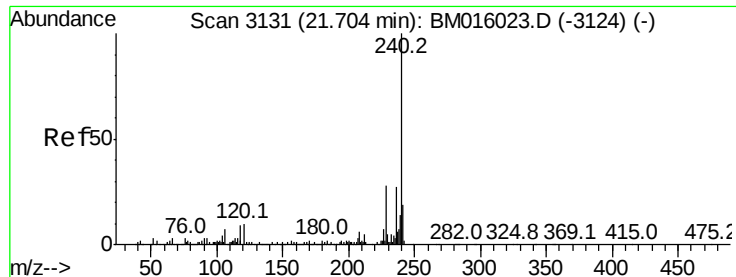
#64  
 4,6-Dinitro-2-methylphenol  
 Concen: 2.704 ng  
 RT: 16.00 min Scan# 2162  
 Delta R.T. 0.01 min  
 Lab File: BM016038.D  
 Acq: 23 Jul 2018 22:41

Tgt Ion:198 Resp: 2747  
 Ion Ratio Lower Upper  
 198 100  
 51 56.0 28.8 68.8  
 105 48.0 30.5 70.5



Abundance Ion 198.00 (197.70 to 198.70): E  
 Ion 51.00 (50.70 to 51.70): BM  
 Ion 105.00 (104.70 to 105.70): E





#75

Chrysene-d12

Concen: 20.000 ng

RT: 21.70 min Scan# 3130

Delta R.T. -0.01 min

Lab File: BM016038.D

Acq: 23 Jul 2018 22:41

Instrument :

BNA\_M

ClientSampleId :

MDL-SOIL-03-QT3-2018

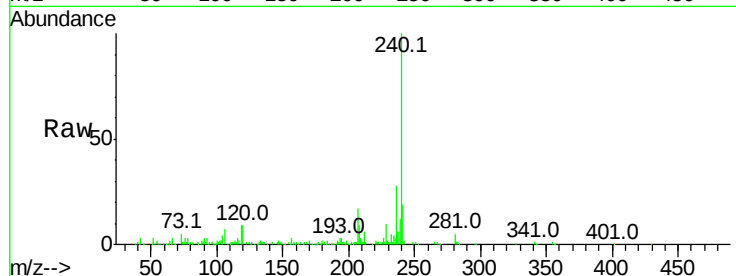
Tot Ion:240 Resp: 183894

Ion Ratio Lower Upper

240 100

120 9.0 8.2 12.2

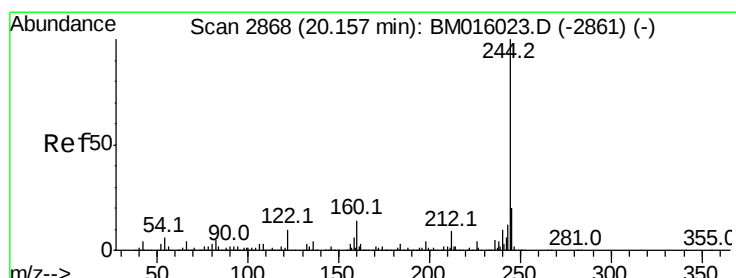
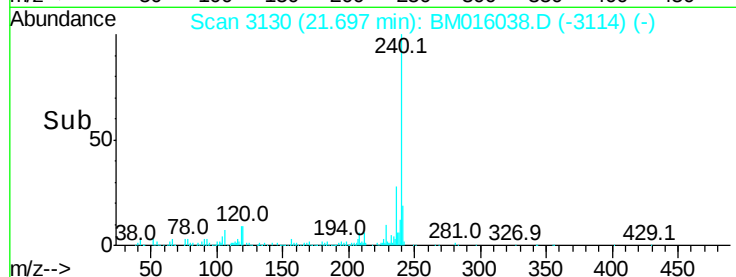
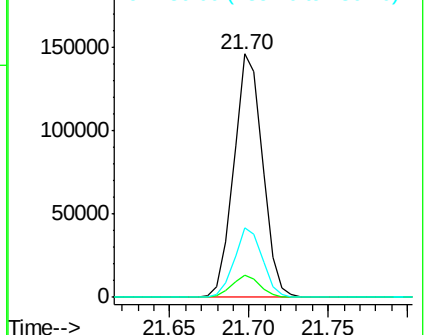
236 28.4 20.0 30.0



Abundance Ion 240.00 (239.70 to 240.70): E

Ion 120.00 (119.70 to 120.70): E

Ion 236.00 (235.70 to 236.70): E



#78

Terphenyl-d14

Concen: N.D. ng

RT: 20.16 min Scan# 2868

Delta R.T. -0.00 min

Lab File: BM016038.D

Acq: 23 Jul 2018 22:41

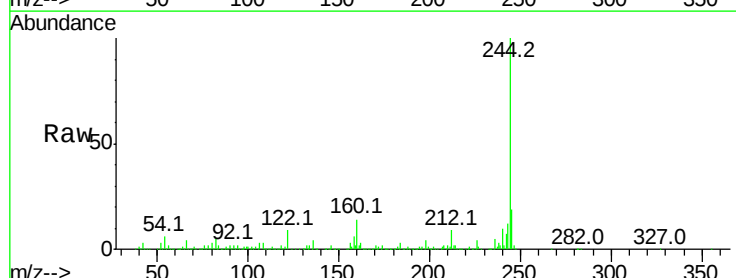
Tgt Ion:244 Resp: 1089590

Ion Ratio Lower Upper

244 100

212 9.4 4.9 7.3#

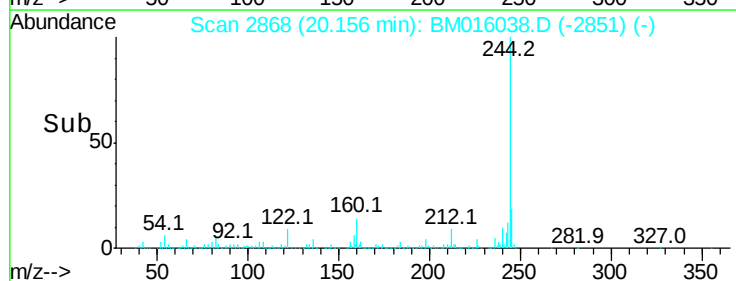
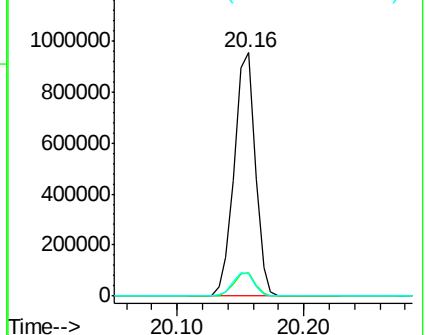
122 9.1 6.2 9.4

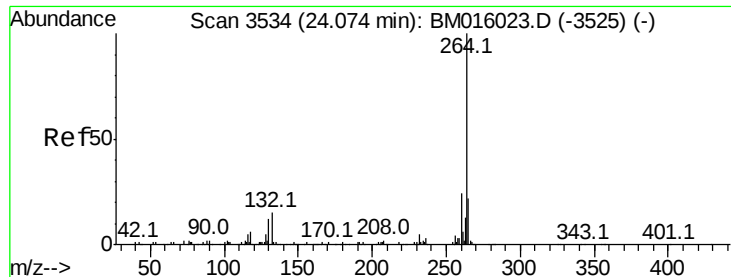


Abundance Ion 244.00 (243.70 to 244.70): E

Ion 212.00 (211.70 to 212.70): E

Ion 122.00 (121.70 to 122.70): E

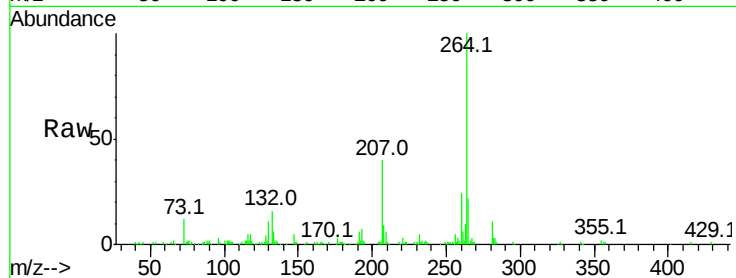




#86  
Pervlene-d12  
Concen: 20.000 ng  
RT: 24.07 min Scan# 3533  
Delta R.T. -0.01 min  
Lab File: BM016038.D  
Acq: 23 Jul 2018 22:41

Instrument :  
BNA\_M  
ClientSampleId :  
MDL-SOIL-03-QT3-2018

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 264     | 100   |       |       |
| 260     | 23.6  | 18.6  | 27.8  |
| 265     | 22.5  | 17.3  | 25.9  |



Abundance

Ion 264.00 (263.70 to 264.70): E

Ion 260.00 (259.70 to 260.70): E

Ion 265.00 (264.70 to 265.70): E

