

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_F\DATA\VF070318\  
 Data File : VF059415.D  
 Acq On : 3 Jul 2018 16:40  
 Operator : VA/AP  
 Sample : J3245-17RE  
 Misc : 6.16g/5mL/MSVOA-F/SOIL  
 ALS Vial : 13 Sample Multiplier: 1

Instrument :  
 MSVOA\_F  
 ClientSampleId :  
 CL-01-062918-A

Quant Time: Jul 04 00:12:30 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_F\METHODS\82F062518S.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Jun 26 08:45:17 2018  
 Response via : Initial Calibration

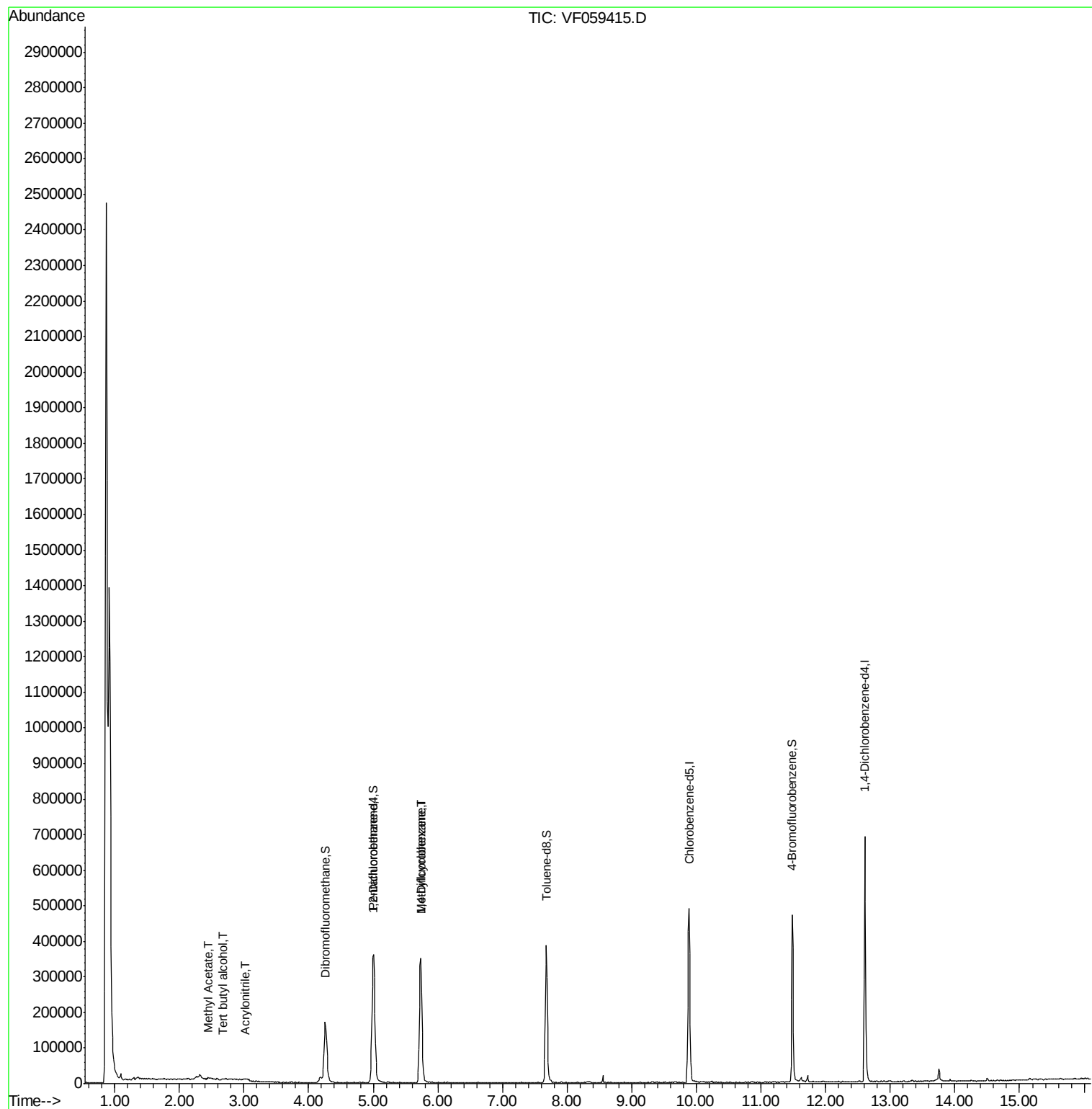
| Internal Standards          | R.T.  | QIon | Response | Conc       | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|------------|---------|----------|
| 1) Pentafluorobenzene       | 5.01  | 168  | 240834   | 50.00      | ug/l    | -0.02    |
| 34) 1,4-Difluorobenzene     | 5.74  | 114  | 354351   | 50.00      | ug/l    | -0.02    |
| 63) Chlorobenzene-d5        | 9.89  | 117  | 339834   | 50.00      | ug/l    | -0.02    |
| 72) 1,4-Dichlorobenzene-d4  | 12.61 | 152  | 168478   | 50.00      | ug/l    | -0.02    |
| System Monitoring Compounds |       |      |          |            |         |          |
| 33) 1,2-Dichloroethane-d4   | 4.99  | 65   | 169138   | 54.36      | ug/l    | -0.02    |
| Spiked Amount 50.000        |       |      | Recovery | =          | 108.72% |          |
| 35) Dibromofluoromethane    | 4.26  | 113  | 147551   | 56.99      | ug/l    | -0.02    |
| Spiked Amount 50.000        |       |      | Recovery | =          | 113.98% |          |
| 50) Toluene-d8              | 7.68  | 98   | 312836   | 48.80      | ug/l    | -0.02    |
| Spiked Amount 50.000        |       |      | Recovery | =          | 97.60%  |          |
| 62) 4-Bromofluorobenzene    | 11.48 | 95   | 158790   | 43.91      | ug/l    | -0.02    |
| Spiked Amount 50.000        |       |      | Recovery | =          | 87.82%  |          |
| Target Compounds            |       |      |          |            |         |          |
| 5) Bromomethane             | 1.28  | 94   | 988      | Below Cal  | #       | 4        |
| 11) Tert butyl alcohol      | 2.68  | 59   | 873      | 4.214 ug/l | #       | 2        |
| 13) Acrolein                | 2.15  | 56   | 538      | Below Cal  |         | 87       |
| 15) Acrylonitrile           | 3.03  | 53   | 932      | 2.555 ug/l | #       | 34       |
| 18) Methyl Acetate          | 2.43  | 43   | 6453     | 3.513 ug/l | #       | 87       |
| 20) Methylene Chloride      | 2.30  | 84   | 7604     | Below Cal  |         | 85       |
| 25) 2-Butanone              | 4.47  | 43   | 290      | Below Cal  | #       | 59       |
| 28) Bromochloromethane      | 4.01  | 49   | 86       | Below Cal  | #       | 6        |
| 29) Tetrahydrofuran         | 4.27  | 42   | 928      | Below Cal  | #       | 86       |
| 37) Ethyl Acetate           | 4.24  | 43   | 691      | Below Cal  | #       | 80       |
| 39) Methylcyclohexane       | 5.74  | 83   | 4516     | 1.646 ug/l | #       | 37       |
| 49) 1,4-Dioxane             | 6.85  | 88   | 63       | Below Cal  | #       | 24       |
| 59) 2-Hexanone              | 9.69  | 43   | 282      | Below Cal  |         | 97       |
| 87) 1,3-Dichlorobenzene     | 12.54 | 146  | 487      | Below Cal  | #       | 43       |

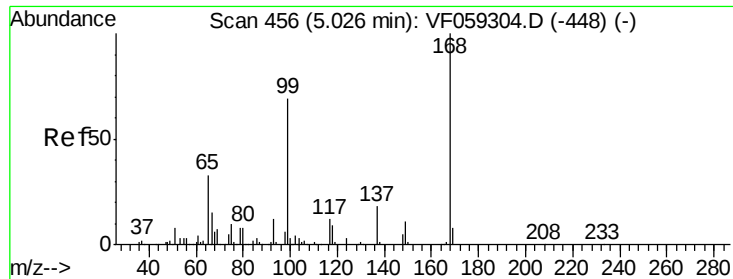
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Quant Title : SW846 8260  
QLast Update : Tue Jun 26 08:45:17 2018  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 5.01 min Scan# 454

Delta R.T. -0.02 min

Lab File: VF059415.D

Acq: 3 Jul 2018 16:40

Instrument :

MSVOA\_F

ClientSampleId :

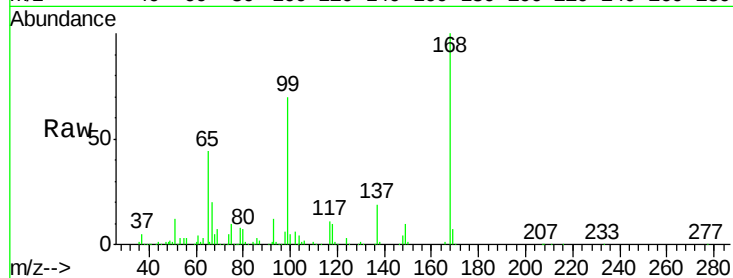
CL-01-062918-A

Tgt Ion:168 Resp: 240834

Ion Ratio Lower Upper

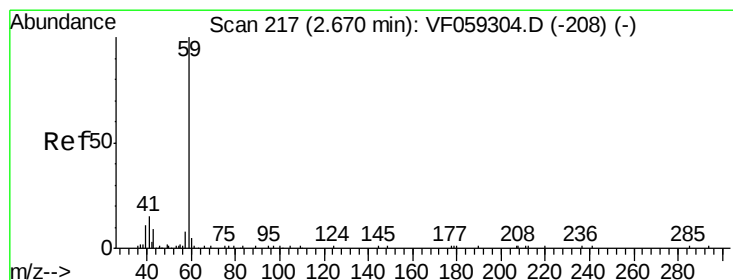
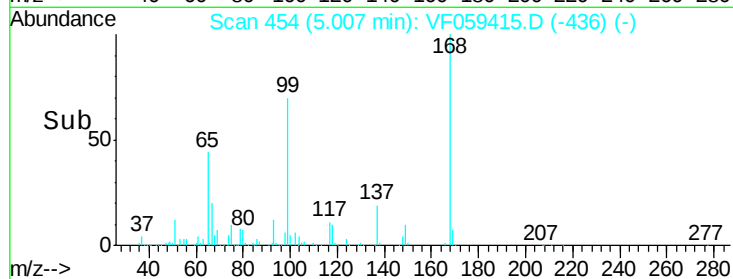
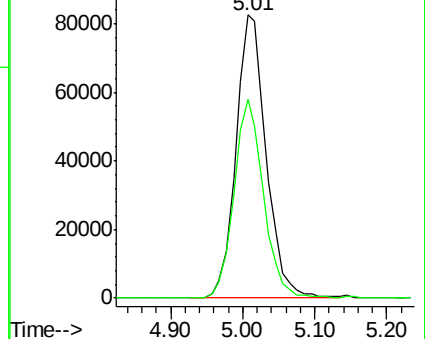
168 100

99 70.2 54.9 82.3



Abundance Ion 168.00 (167.70 to 168.70): VF0

Ion 99.00 (98.70 to 99.70): VF0



#11

Tert butyl alcohol

Concen: 4.214 ug/l

RT: 2.68 min Scan# 218

Delta R.T. 0.01 min

Lab File: VF059415.D

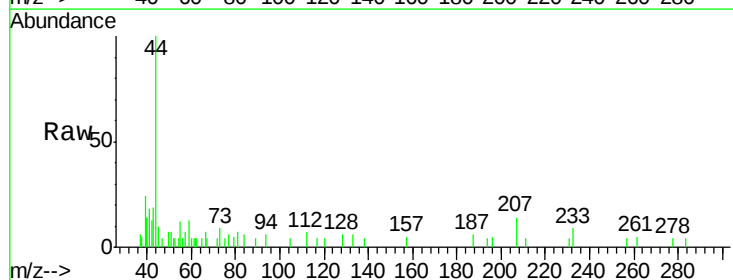
Acq: 3 Jul 2018 16:40

Tgt Ion: 59 Resp: 873

Ion Ratio Lower Upper

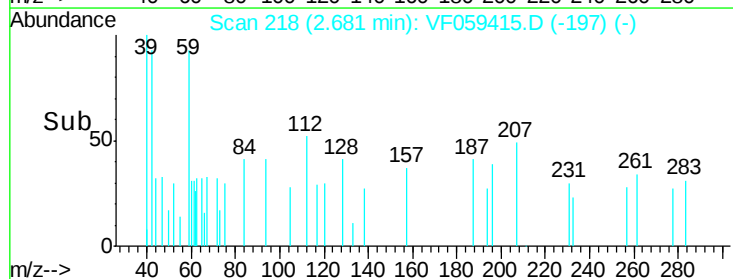
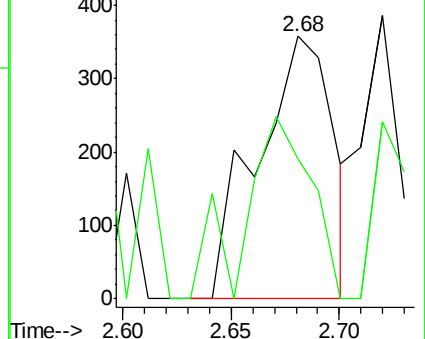
59 100

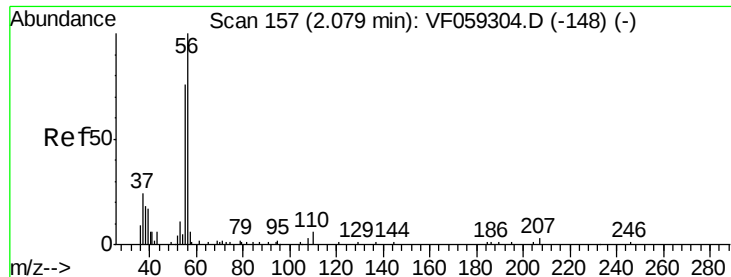
57 53.4 11.0 16.4#



Abundance Ion 59.00 (58.70 to 59.70): VF0

Ion 57.00 (56.70 to 57.70): VF0





#13

Acrolein

Concen: Below Cal

RT: 2.15 min Scan# 164

Delta R.T. 0.07 min

Lab File: VF059415.D

Acq: 3 Jul 2018 16:40

Instrument :

MSVOA\_F

ClientSampleId :

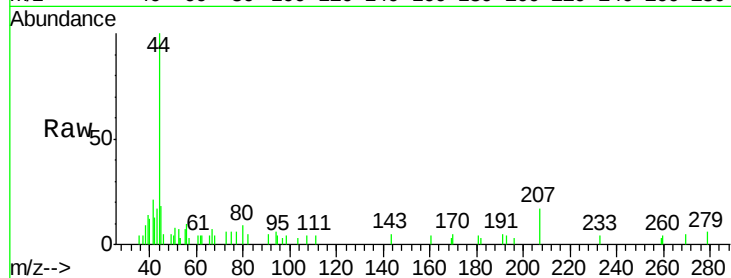
CL-01-062918-A

Tgt Ion: 56 Resp: 538

Ion Ratio Lower Upper

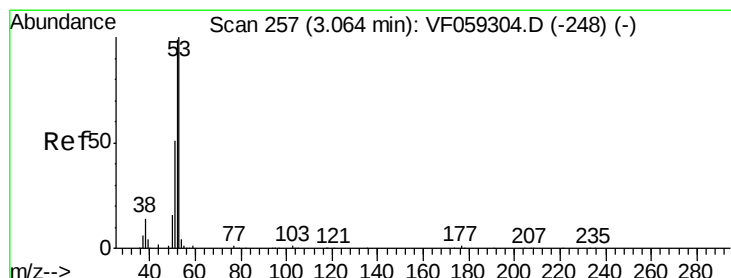
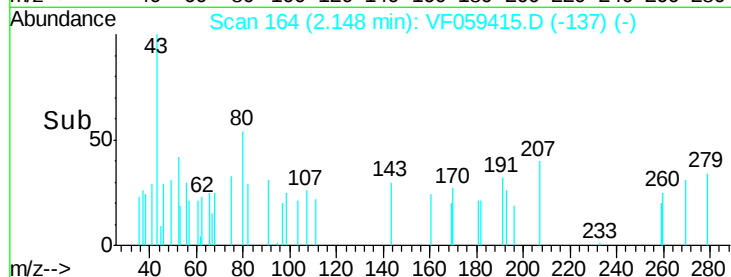
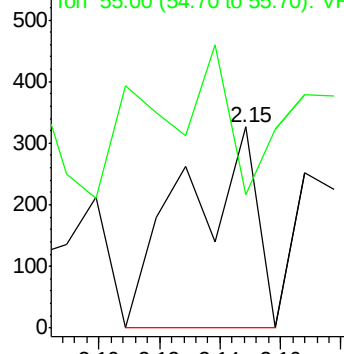
56 100

55 66.3 62.4 93.6



Abundance Ion 56.00 (55.70 to 56.70): VF0

Ion 55.00 (54.70 to 55.70): VF0



#15

Acrylonitrile

Concen: 2.555 ug/l

RT: 3.03 min Scan# 253

Delta R.T. -0.04 min

Lab File: VF059415.D

Acq: 3 Jul 2018 16:40

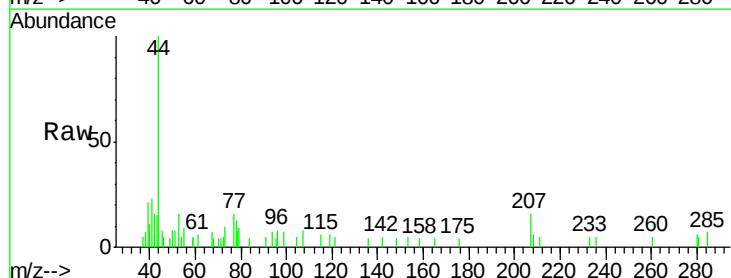
Tgt Ion: 53 Resp: 932

Ion Ratio Lower Upper

53 100

52 0.0 79.2 118.8#

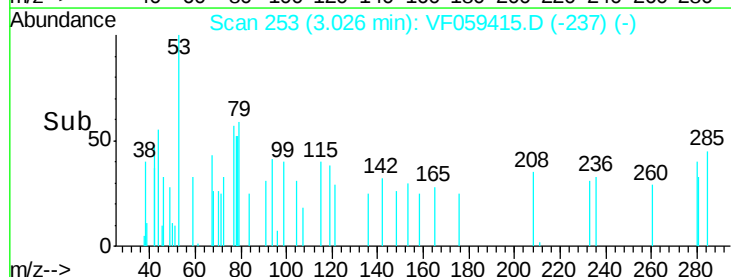
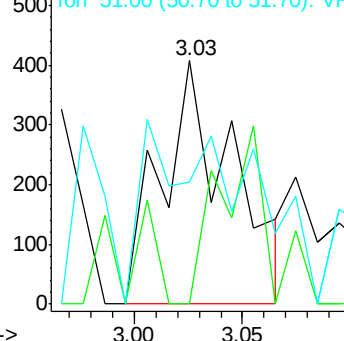
51 50.2 40.9 61.3

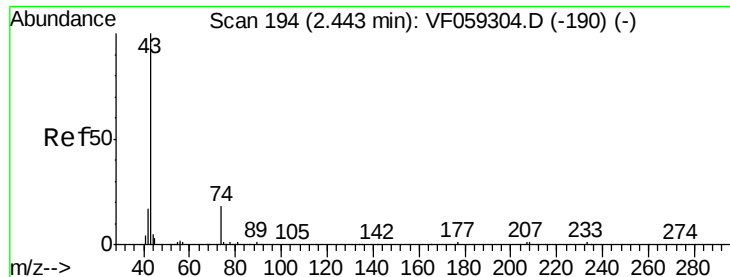


Abundance Ion 53.00 (52.70 to 53.70): VF0

Ion 52.00 (51.70 to 52.70): VF0

Ion 51.00 (50.70 to 51.70): VF0

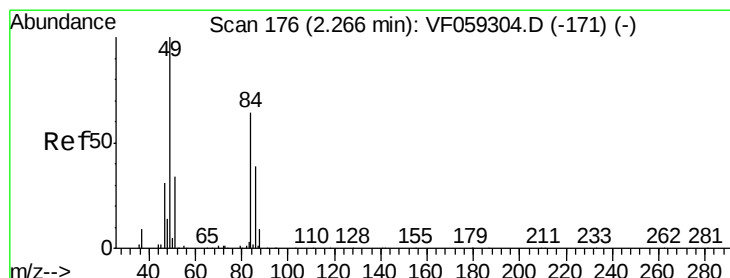
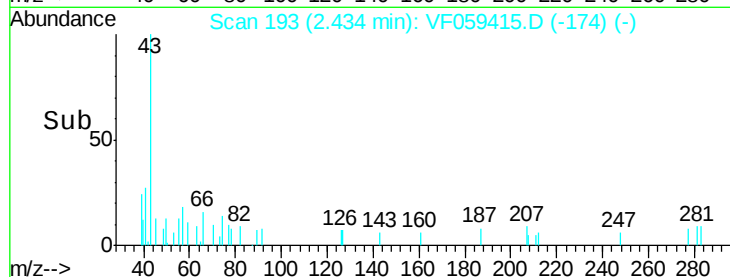
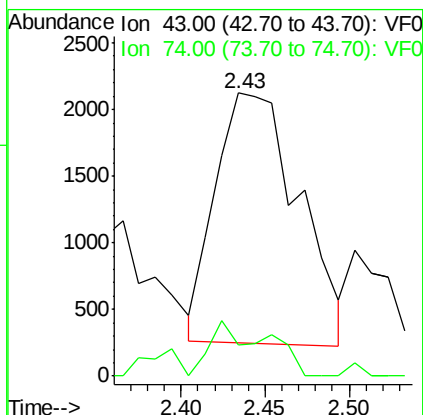
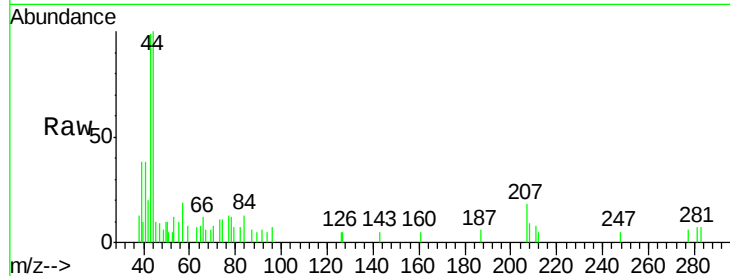




#18  
Methyl Acetate  
Concen: 3.513 ug/l  
RT: 2.43 min Scan# 193  
Delta R.T. -0.01 min  
Lab File: VF059415.D  
Acq: 3 Jul 2018 16:40

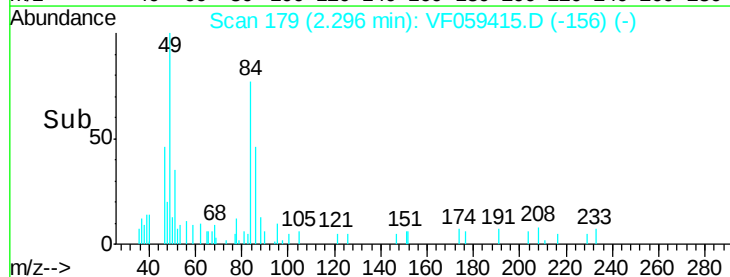
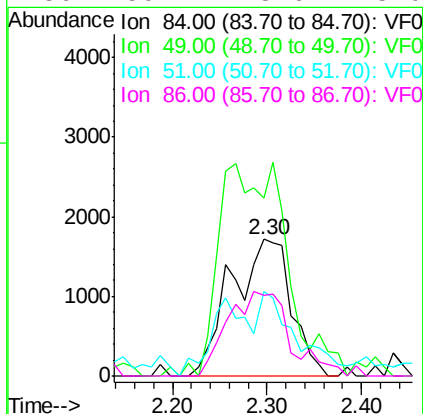
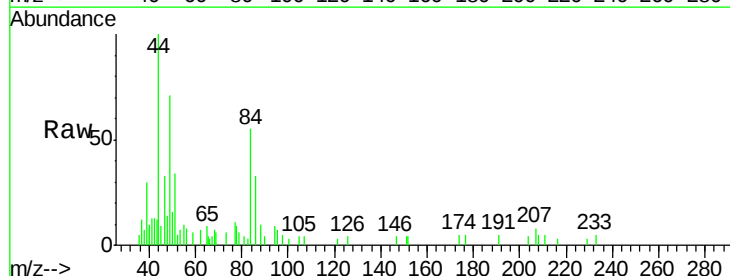
Instrument :  
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CL-01-062918-A

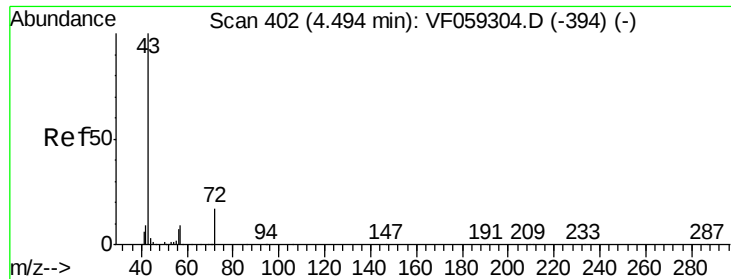
Tgt Ion: 43 Resp: 6453  
Ion Ratio Lower Upper  
43 100  
74 10.9 13.3 19.9#



#20  
Methylene Chloride  
Concen: Below Cal  
RT: 2.30 min Scan# 179  
Delta R.T. 0.03 min  
Lab File: VF059415.D  
Acq: 3 Jul 2018 16:40

Tgt Ion: 84 Resp: 7604  
Ion Ratio Lower Upper  
84 100  
49 129.7 126.5 189.7  
51 61.3 42.9 64.3  
86 59.4 48.6 73.0





#25

2-Butanone

Concen: Below Cal

RT: 4.47 min Scan# 400

Delta R.T. -0.02 min

Lab File: VF059415.D

Acq: 3 Jul 2018 16:40

Instrument :

MSVOA\_F

ClientSampleId :

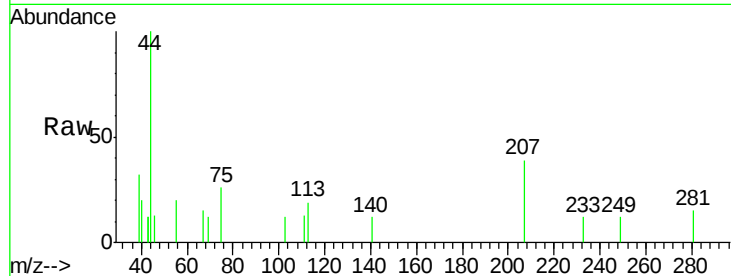
CL-01-062918-A

Tgt Ion: 43 Resp: 290

Ion Ratio Lower Upper

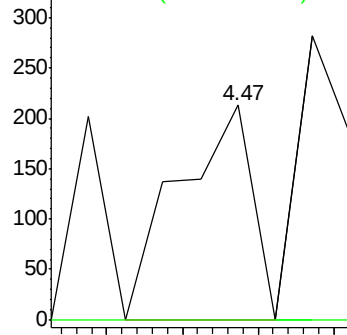
43 100

72 0.0 14.4 21.6#

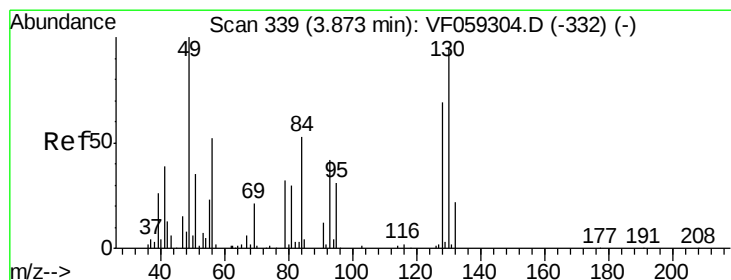
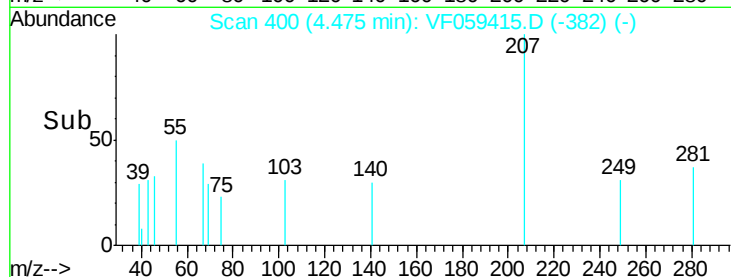


Abundance Ion 43.00 (42.70 to 43.70): VF0

Ion 72.00 (71.70 to 72.70): VF0



Time-->



#28

Bromochloromethane

Concen: Below Cal

RT: 4.01 min Scan# 353

Delta R.T. 0.14 min

Lab File: VF059415.D

Acq: 3 Jul 2018 16:40

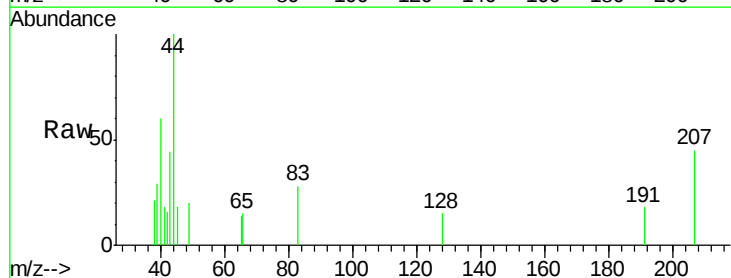
Tgt Ion: 49 Resp: 86

Ion Ratio Lower Upper

49 100

129 0.0 0.0 6.4

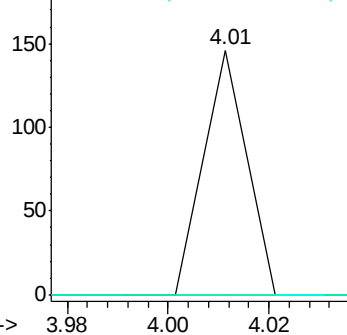
130 0.0 75.1 112.7#



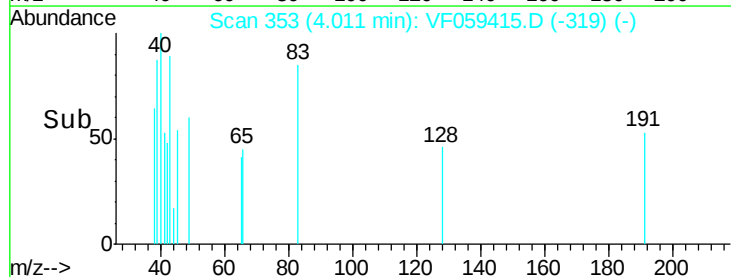
Abundance Ion 49.00 (48.70 to 49.70): VF0

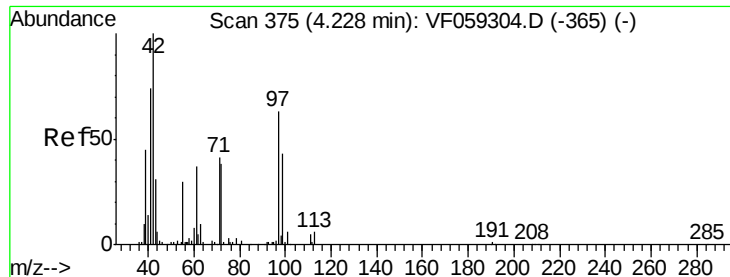
Ion 129.00 (128.70 to 129.70): V

Ion 130.00 (129.70 to 130.70): V



Time-->





#29

Tetrahydrofuran

Concen: Below Cal

RT: 4.27 min Scan# 379

Delta R.T. 0.04 min

Lab File: VF059415.D

Acq: 3 Jul 2018 16:40

Instrument :

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ClientSampleId :

CL-01-062918-A

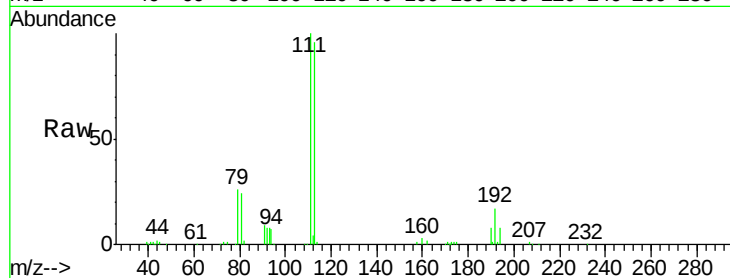
Tgt Ion: 42 Resp: 928

Ion Ratio Lower Upper

42 100

72 36.1 30.5 45.7

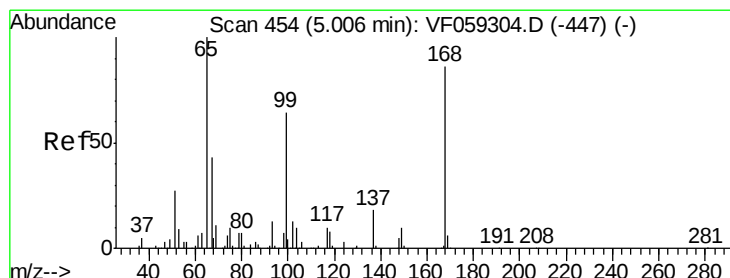
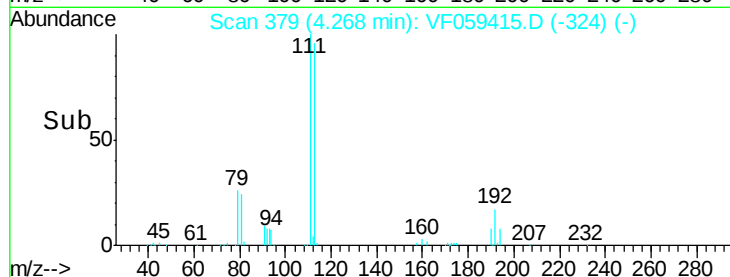
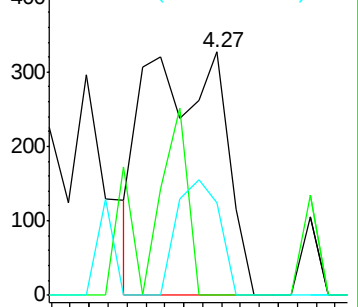
71 26.2 32.5 48.7#



Abundance Ion 42.00 (41.70 to 42.70): VF0

Ion 72.00 (71.70 to 72.70): VF0

Ion 71.00 (70.70 to 71.70): VF0



#33

1,2-Dichloroethane-d4

Concen: 54.358 ug/l

RT: 4.99 min Scan# 452

Delta R.T. -0.02 min

Lab File: VF059415.D

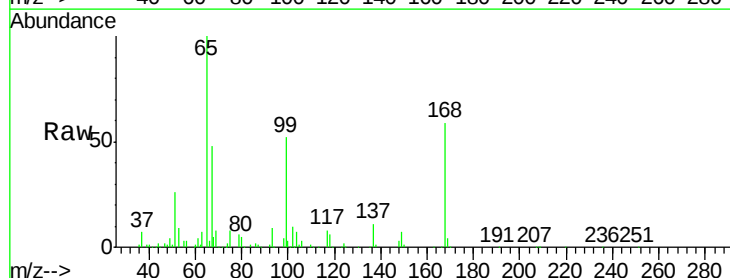
Acq: 3 Jul 2018 16:40

Tgt Ion: 65 Resp: 169138

Ion Ratio Lower Upper

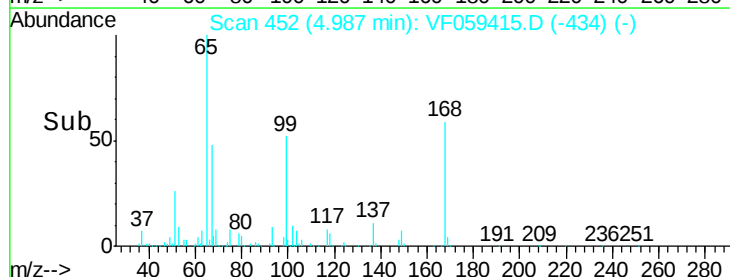
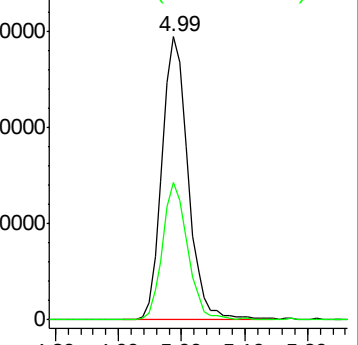
65 100

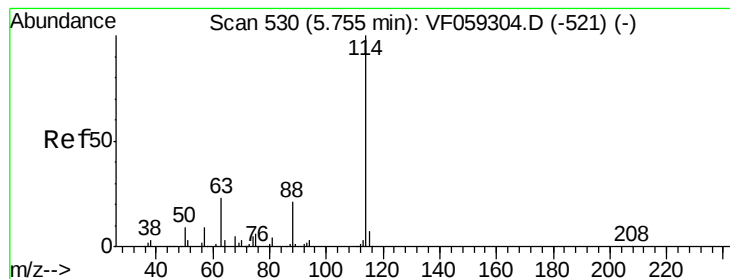
67 48.4 0.0 96.8



Abundance Ion 65.00 (64.70 to 65.70): VF0

Ion 67.00 (66.70 to 67.70): VF0





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 5.74 min Scan# 528

Delta R.T. -0.02 min

Lab File: VF059415.D

Acq: 3 Jul 2018 16:40

Instrument :

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ClientSampleId :

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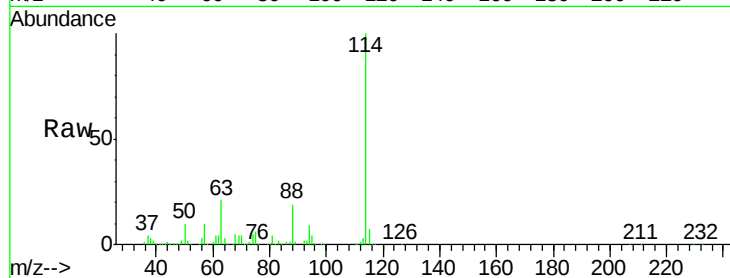
Tgt Ion:114 Resp: 354351

Ion Ratio Lower Upper

114 100

63 20.8 0.0 45.8

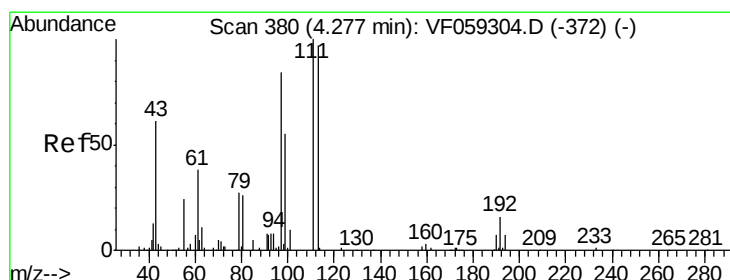
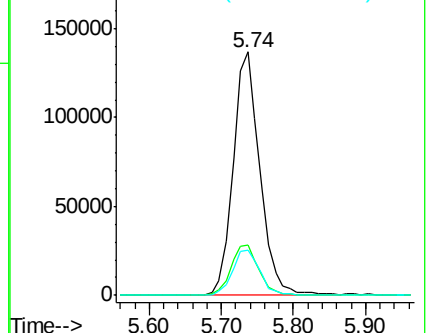
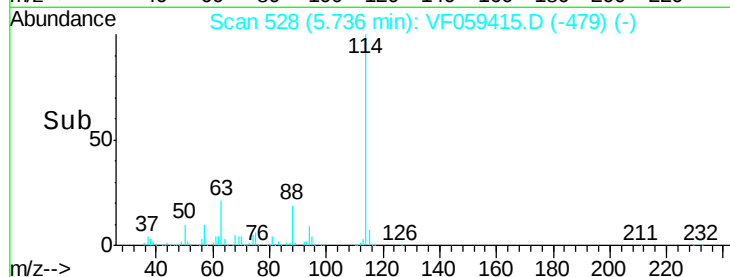
88 18.7 0.0 41.2



Abundance Ion 114.00 (113.70 to 114.70): V

Ion 63.00 (62.70 to 63.70): VF0

Ion 88.00 (87.70 to 88.70): VF0



#35

Dibromofluoromethane

Concen: 56.989 ug/l

RT: 4.26 min Scan# 378

Delta R.T. -0.02 min

Lab File: VF059415.D

Acq: 3 Jul 2018 16:40

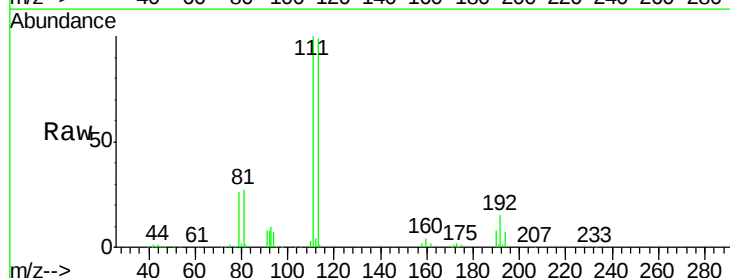
Tgt Ion:113 Resp: 147551

Ion Ratio Lower Upper

113 100

111 100.7 82.1 123.1

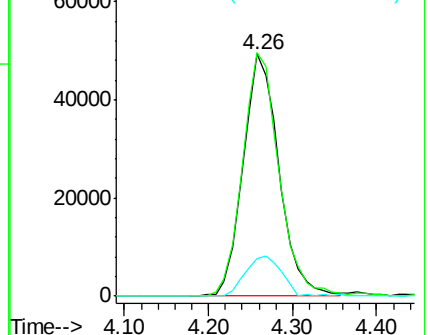
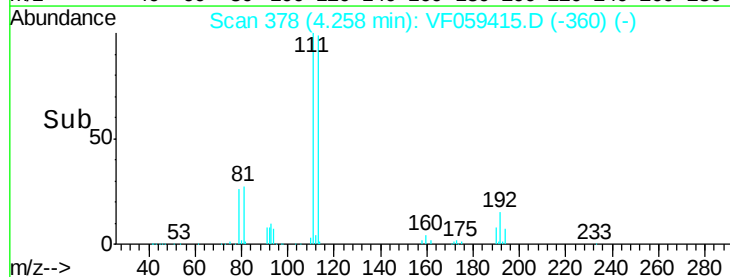
192 15.3 13.0 19.6

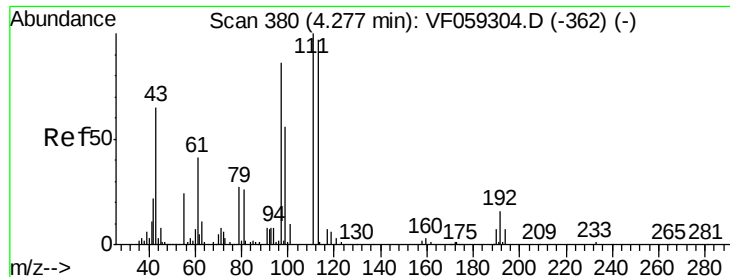


Abundance Ion 113.00 (112.70 to 113.70): V

Ion 111.00 (110.70 to 111.70): V

Ion 192.00 (191.70 to 192.70): V





#37

Ethyl Acetate

Concen: Below Cal

RT: 4.24 min Scan# 376

Delta R.T. -0.04 min

Lab File: VF059415.D

Acq: 3 Jul 2018 16:40

Instrument :

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CL-01-062918-A

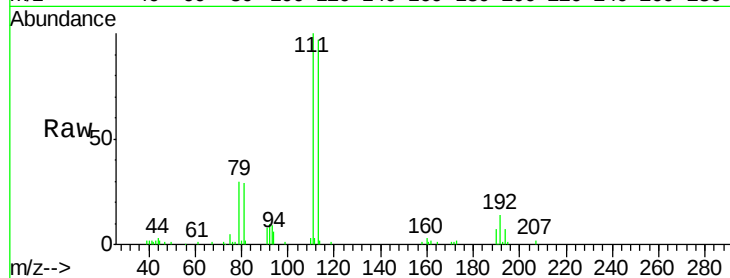
Tgt Ion: 43 Resp: 691

Ion Ratio Lower Upper

43 100

61 47.2 50.1 75.1#

70 0.0 6.2 9.4#

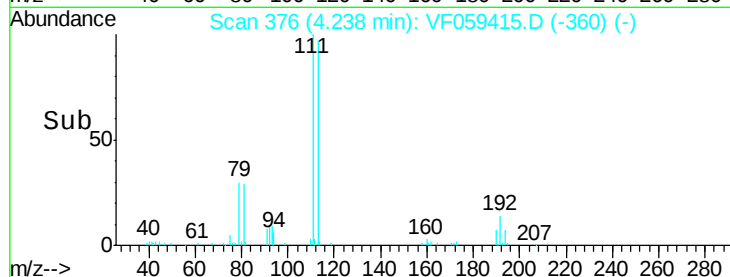


Abundance Ion 43.00 (42.70 to 43.70): VF0

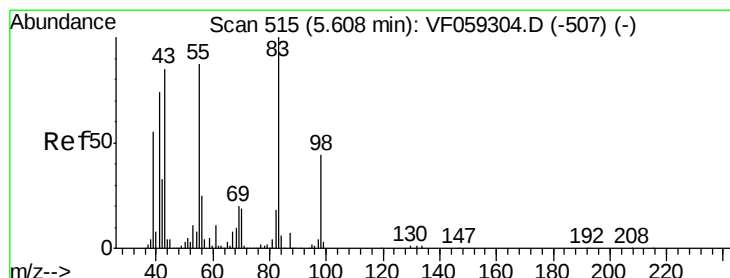
Ion 61.00 (60.70 to 61.70): VF0

Ion 70.00 (69.70 to 70.70): VF0

Time--> 4.20 4.25 4.30



Time--> 4.20 4.25 4.30



#39

Methylcyclohexane

Concen: 1.646 ug/l

RT: 5.74 min Scan# 528

Delta R.T. 0.13 min

Lab File: VF059415.D

Acq: 3 Jul 2018 16:40

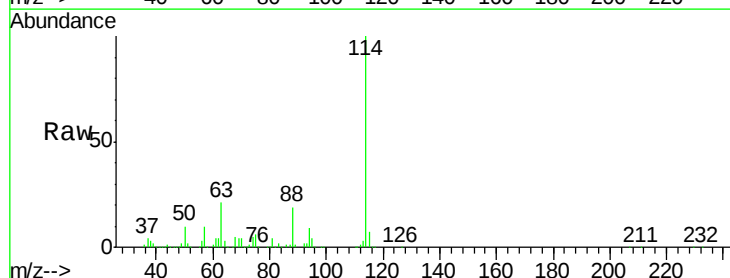
Tgt Ion: 83 Resp: 4516

Ion Ratio Lower Upper

83 100

55 24.7 69.2 103.8#

98 9.1 35.0 52.6#

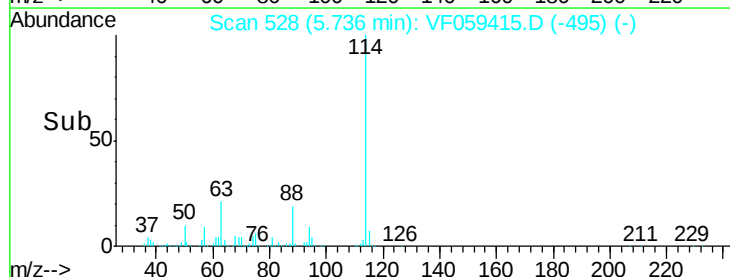


Abundance Ion 83.00 (82.70 to 83.70): VF0

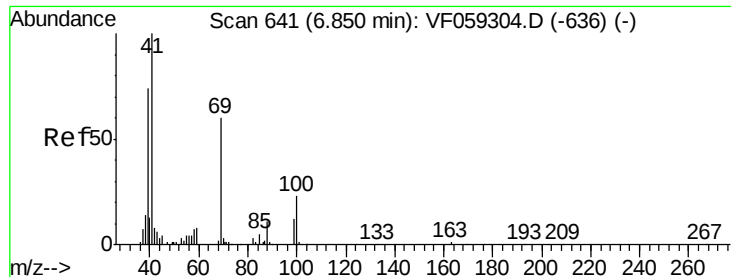
Ion 55.00 (54.70 to 55.70): VF0

Ion 98.00 (97.70 to 98.70): VF0

Time--> 5.65 5.70 5.75



Time--> 5.65 5.70 5.75



#49

1,4-Dioxane

Concen: Below Cal

RT: 6.85 min Scan# 641

Delta R.T. 0.00 min

Lab File: VF059415.D

Acq: 3 Jul 2018 16:40

Instrument :

MSVOA\_F

ClientSampleId :

CL-01-062918-A

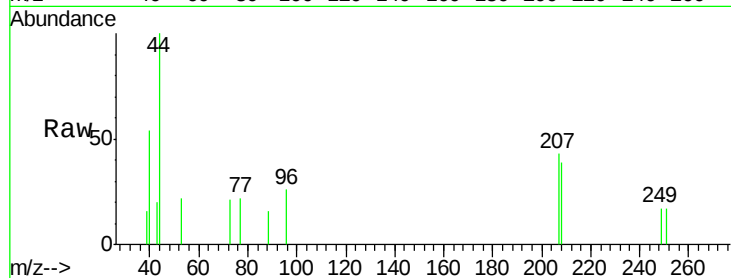
Tgt Ion: 88 Resp: 63

Ion Ratio Lower Upper

88 100

43 120.6 50.6 75.8#

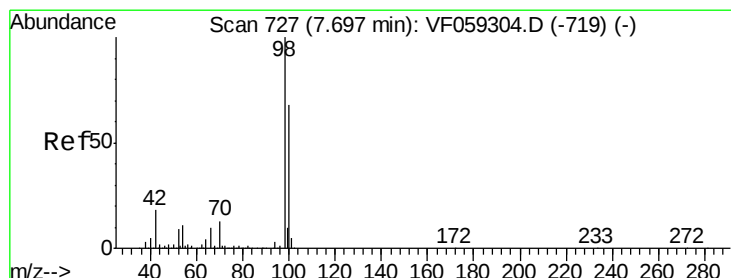
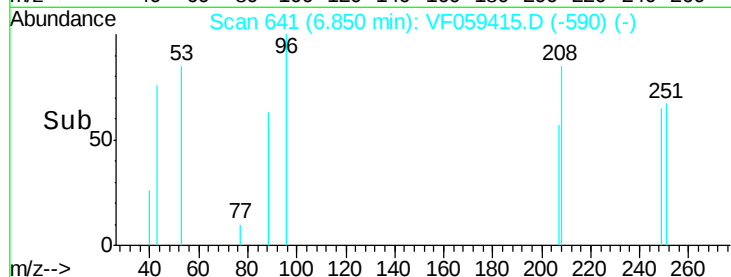
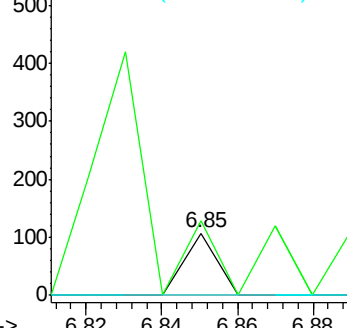
58 0.0 46.6 69.8#



Abundance Ion 88.00 (87.70 to 88.70): VF0

Ion 43.00 (42.70 to 43.70): VF0

Ion 58.00 (57.70 to 58.70): VF0



#50

Toluene-d8

Concen: 48.801 ug/l

RT: 7.68 min Scan# 725

Delta R.T. -0.02 min

Lab File: VF059415.D

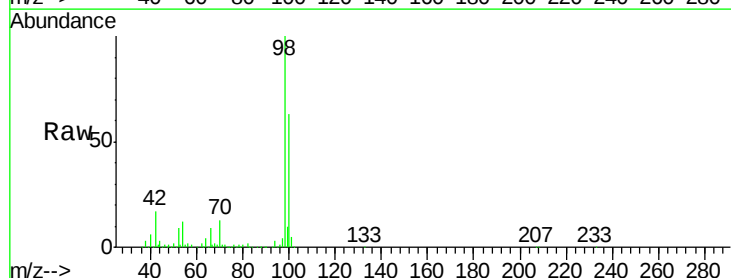
Acq: 3 Jul 2018 16:40

Tgt Ion: 98 Resp: 312836

Ion Ratio Lower Upper

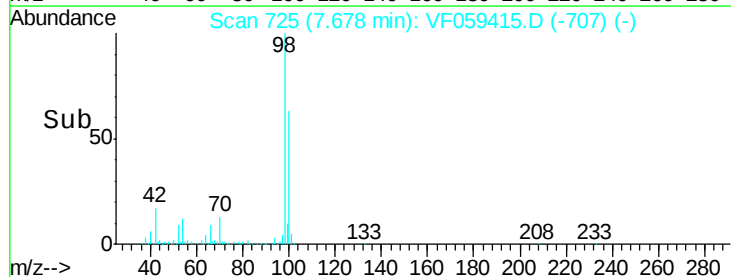
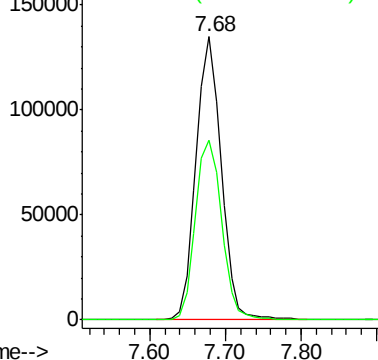
98 100

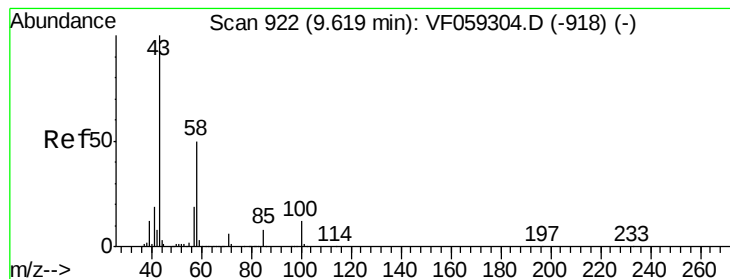
100 63.5 54.6 82.0



Abundance Ion 98.00 (97.70 to 98.70): VF0

Ion 100.00 (99.70 to 100.70): VF0





#59

2-Hexanone

Concen: Below Cal

RT: 9.69 min Scan# 929

Delta R.T. 0.07 min

Lab File: VF059415.D

Acq: 3 Jul 2018 16:40

Instrument :

MSVOA\_F

ClientSampleId :

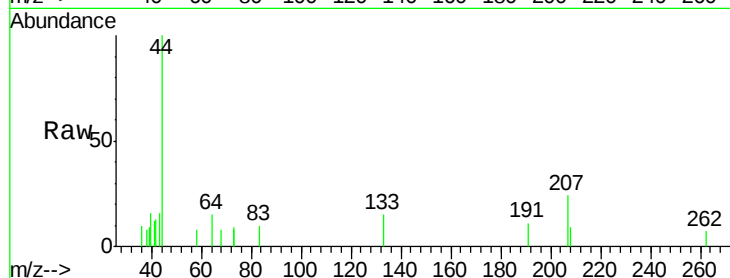
CL-01-062918-A

Tgt Ion: 43 Resp: 282

Ion Ratio Lower Upper

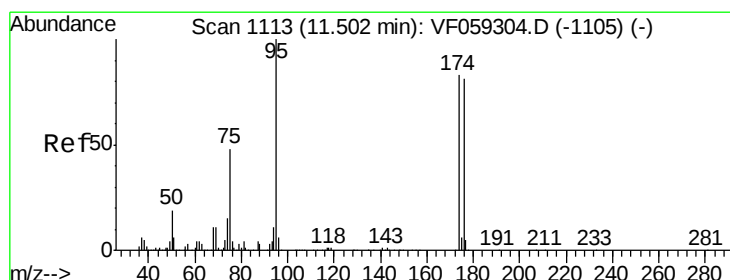
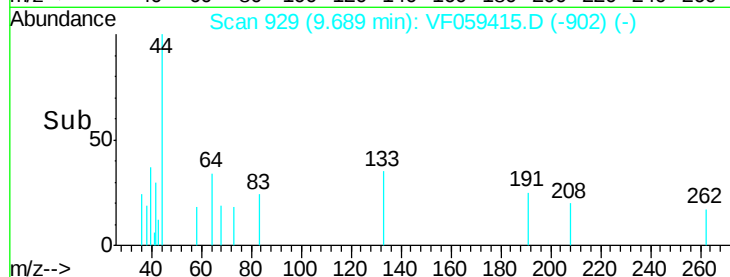
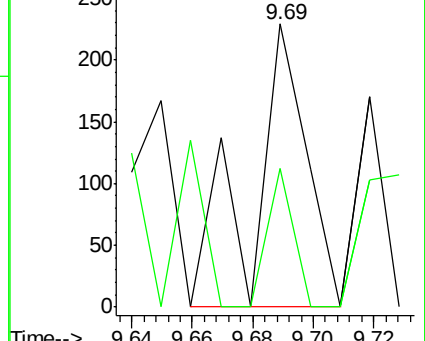
43 100

58 48.9 23.3 69.9



Abundance Ion 43.00 (42.70 to 43.70): VF0

Ion 58.00 (57.70 to 58.70): VF0



#62

4-Bromofluorobenzene

Concen: 43.912 ug/l

RT: 11.48 min Scan# 1111

Delta R.T. -0.02 min

Lab File: VF059415.D

Acq: 3 Jul 2018 16:40

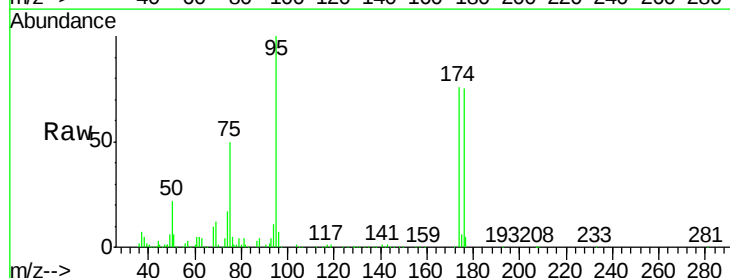
Tgt Ion: 95 Resp: 158790

Ion Ratio Lower Upper

95 100

174 76.1 0.0 165.2

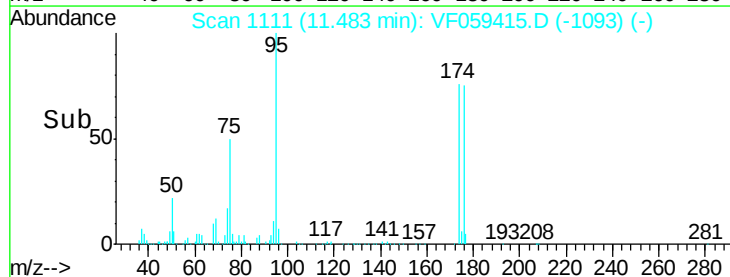
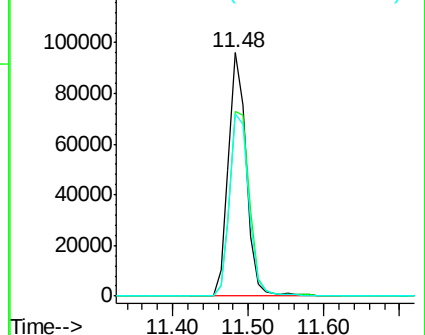
176 74.9 0.0 161.0

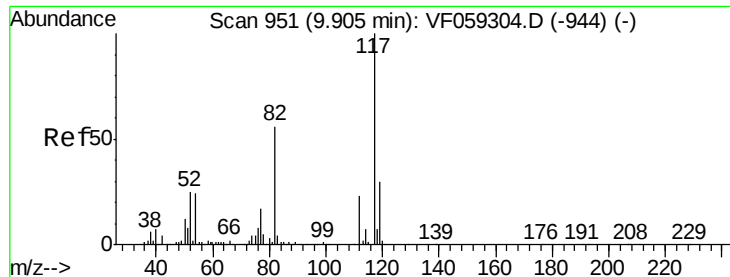


Abundance Ion 95.00 (94.70 to 95.70): VF0

Ion 174.00 (173.70 to 174.70): V

Ion 176.00 (175.70 to 176.70): V

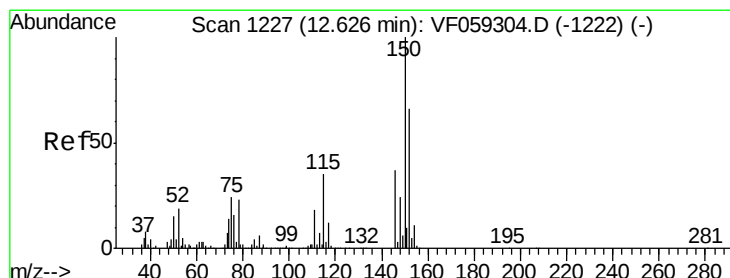
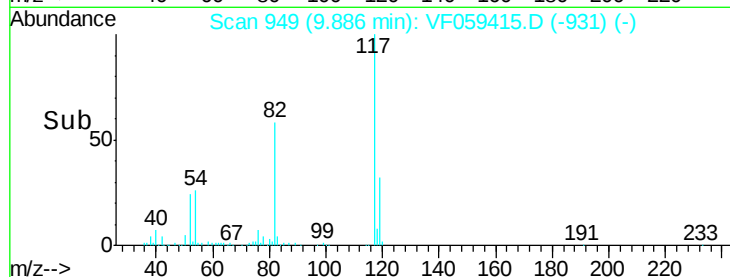
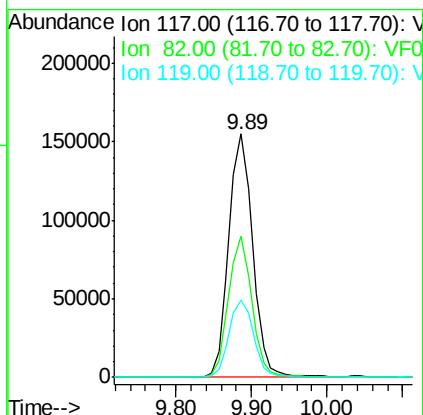
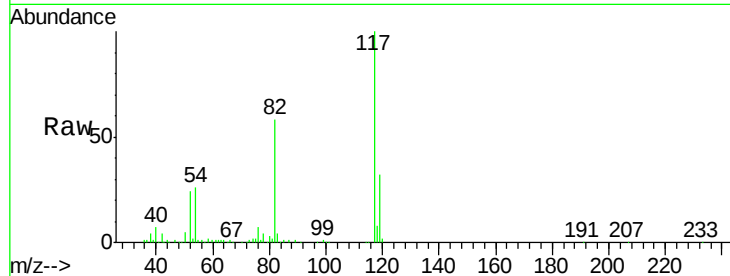




#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 9.89 min Scan# 949  
Delta R.T. -0.02 min  
Lab File: VF059415.D  
Acq: 3 Jul 2018 16:40

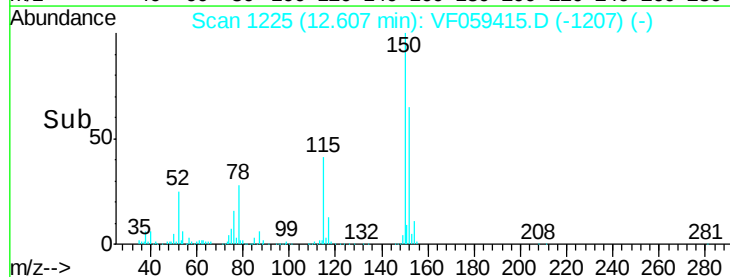
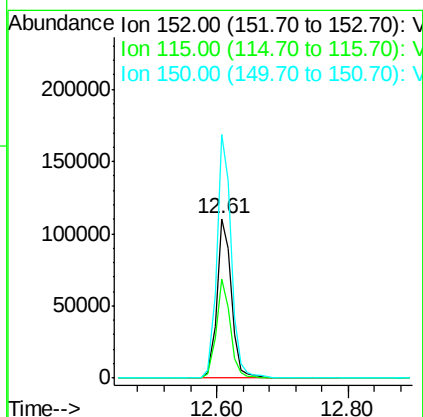
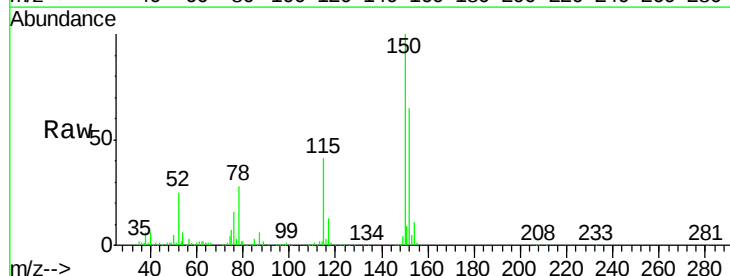
Instrument :  
MSVOA\_F  
ClientSampleId :  
CL-01-062918-A

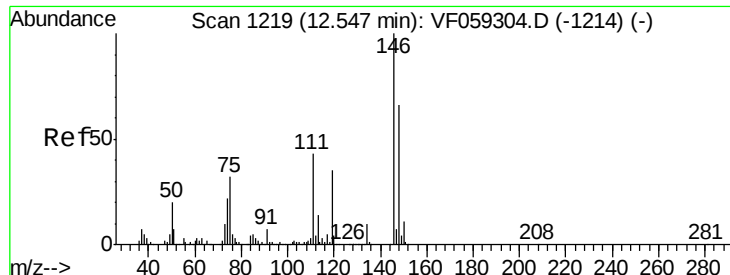
Tgt Ion:117 Resp: 339834  
Ion Ratio Lower Upper  
117 100  
82 58.2 44.6 66.8  
119 31.9 24.1 36.1



#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 12.61 min Scan# 1225  
Delta R.T. -0.02 min  
Lab File: VF059415.D  
Acq: 3 Jul 2018 16:40

Tgt Ion:152 Resp: 168478  
Ion Ratio Lower Upper  
152 100  
115 62.4 27.1 81.3  
150 152.9 0.0 305.2





#87

1,3-Dichlorobenzene

Concen: Below Cal

RT: 12.54 min Scan# 1218

Delta R.T. -0.01 min

Lab File: VF059415.D

Acq: 3 Jul 2018 16:40

Instrument :

MSVOA\_F

ClientSampleId :

CL-01-062918-A

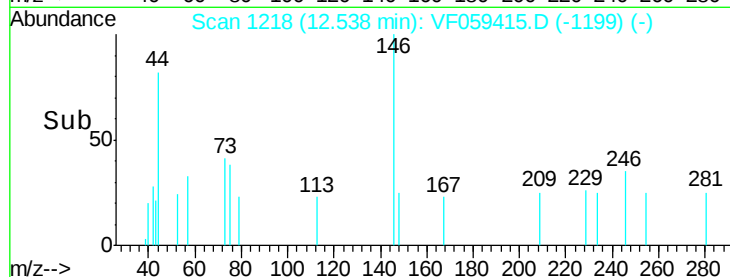
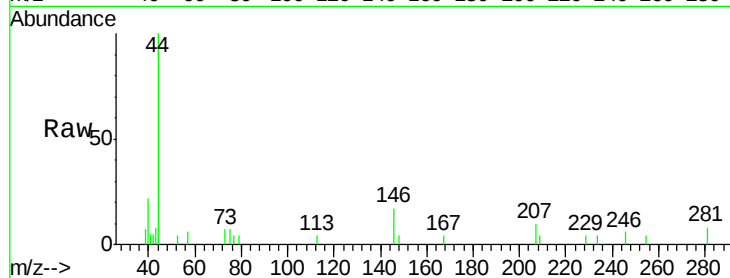
Tgt Ion:146 Resp: 487

Ion Ratio Lower Upper

146 100

111 0.0 21.4 64.2#

148 25.3 32.8 98.4#



Abundance Ion 146.00 (145.70 to 146.70): V

Ion 111.00 (110.70 to 111.70): V

Ion 148.00 (147.70 to 148.70): V

