

Data Path : Z:\VOASRV\HPCHEM1\MSVOA D\DATA\VD090920\  
 Data File : VD066584.D  
 Acq On : 09 Sep 2020 15:42  
 Operator : VA/SY  
 Sample : L3894-06  
 Misc : 8.30G/5.00ml/MSVOA D/SOIL  
 ALS Vial : 12 Sample Multiplier: 1

Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 AL-FALAH-3

Quant Time: Sep 10 01:40:43 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_D\METHOD\82D090320S.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Sep 04 01:57:04 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.98  | 168  | 369115   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.86  | 114  | 679461   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.64 | 117  | 628119   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.58 | 152  | 276140   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response   | Conc    | Units | Dev(Min) |
|-----------------------------|-------|------|------------|---------|-------|----------|
| 33) 1,2-Dichloroethane-d4   | 8.33  | 65   | 249332     | 55.83   | ug/l  | 0.00     |
| Spiked Amount 50.000        |       |      | Recovery = | 111.66% |       |          |
| 35) Dibromofluoromethane    | 7.91  | 113  | 232069     | 50.63   | ug/l  | 0.00     |
| Spiked Amount 50.000        |       |      | Recovery = | 101.26% |       |          |
| 50) Toluene-d8              | 10.34 | 98   | 839330     | 51.23   | ug/l  | 0.00     |
| Spiked Amount 50.000        |       |      | Recovery = | 102.46% |       |          |
| 62) 4-Bromofluorobenzene    | 12.63 | 95   | 275981     | 50.80   | ug/l  | 0.00     |
| Spiked Amount 50.000        |       |      | Recovery = | 101.60% |       |          |

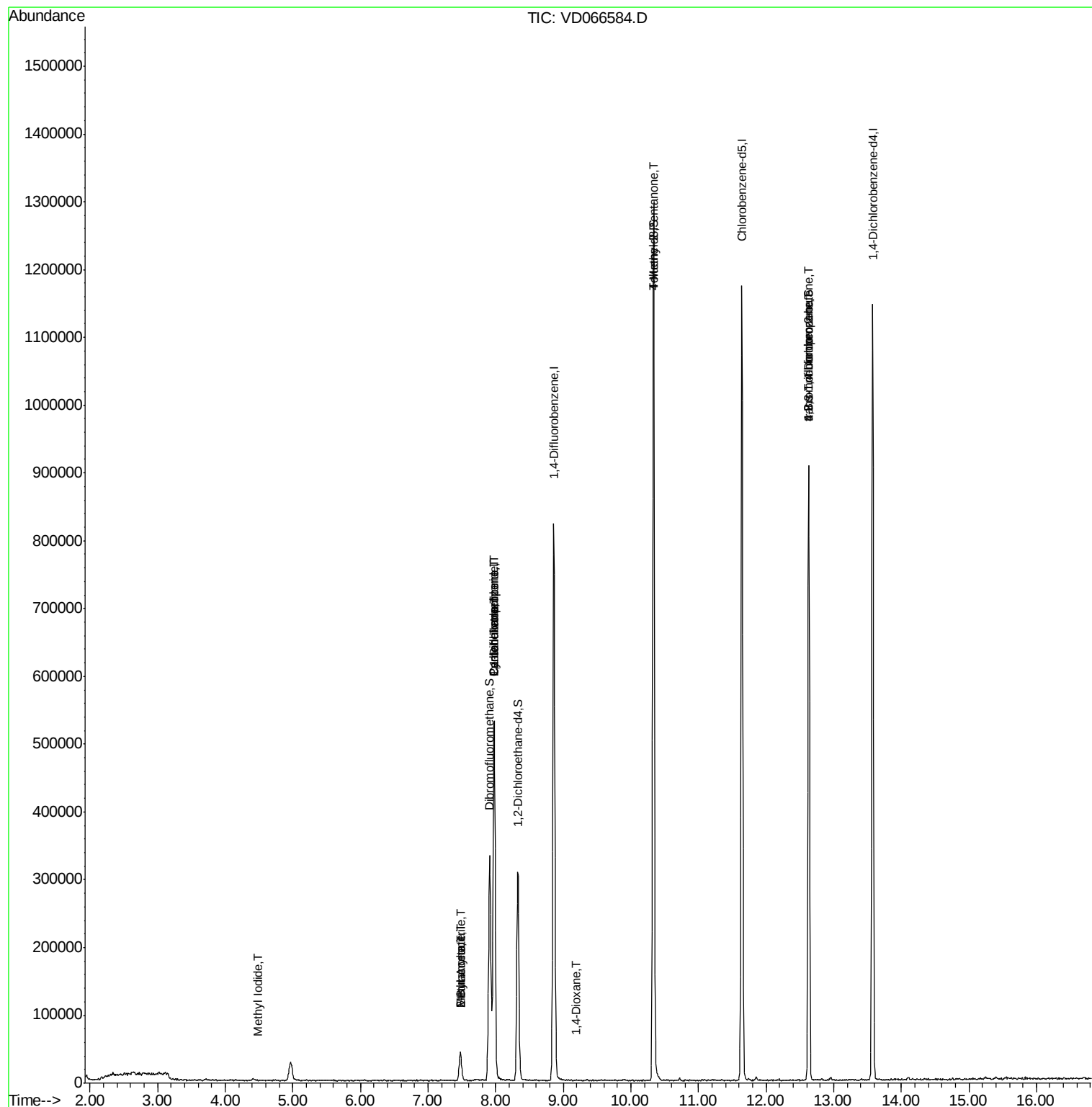
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 2) Dichlorodifluoromethane     | 1.99  | 85   | 299      | Below Cal | #      | 46     |
| 5) Bromomethane                | 2.76  | 94   | 77       | Below Cal | #      | 9      |
| 10) Methyl Iodide              | 4.49  | 142  | 72       | 4.041     | ug/l # | 35     |
| 11) Tert butyl alcohol         | 5.21  | 59   | 408      | Below Cal | #      | 74     |
| 20) Methylene Chloride         | 4.97  | 84   | 20179    | Below Cal | #      | 82     |
| 25) 2-Butanone                 | 7.48  | 43   | 24161    | 21.903    | ug/l # | 51     |
| 31) Cyclohexane                | 7.98  | 56   | 10674    | 1.465     | ug/l # | 7      |
| 36) 1,1-Dichloropropene        | 7.98  | 75   | 34518    | 4.882     | ug/l # | 50     |
| 37) Ethyl Acetate              | 7.48  | 43   | 35076    | 12.457    | ug/l # | 68     |
| 38) Carbon Tetrachloride       | 7.98  | 117  | 42225    | 5.650     | ug/l # | 19     |
| 41) Methacrylonitrile          | 7.48  | 41   | 23515    | 17.253    | ug/l # | 42     |
| 49) 1,4-Dioxane                | 9.18  | 88   | 85       | 2.883     | ug/l # | 23     |
| 51) 4-Methyl-2-Pentanone       | 10.34 | 43   | 4492     | 1.651     | ug/l # | 1      |
| 76) 1,2,3-Trichloropropane     | 12.63 | 75   | 161812   | 60.929    | ug/l # | 100    |
| 81) trans-1,4-Dichloro-2-buten | 12.63 | 75   | 161812   | 142.249   | ug/l # | 7      |

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

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Sample : L3894-06  
Misc : 8.30G/5.00ml/MSVOA D/SOIL  
ALS Vial : 12 Sample Multiplier: 1

Instrument :  
MSVOA\_D  
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Quant Time: Sep 10 01:40:43 2020  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_D\METHOD\82D090320S.M  
Quant Title : SW846 8260  
QLast Update : Fri Sep 04 01:57:04 2020  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.98 min Scan# 1030

Delta R.T. -0.00 min

Lab File: VD066584.D

Acq: 09 Sep 2020 15:42

Instrument :

MSVOA\_D

ClientSampleId :

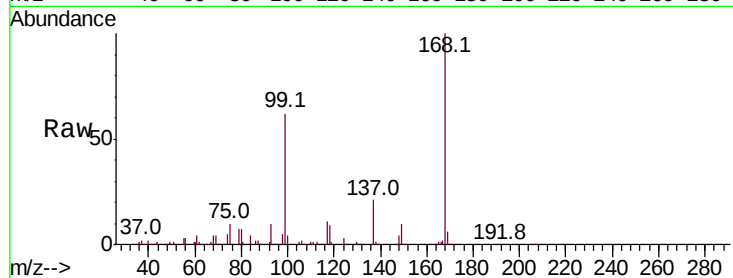
AL-FALAH-3

Tot Ion:168 Resp: 369115

Ion Ratio Lower Upper

168 100

99 62.5 50.5 75.7



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VDC

7.98

150000

100000

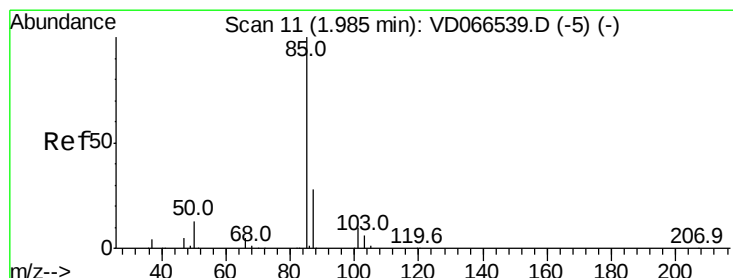
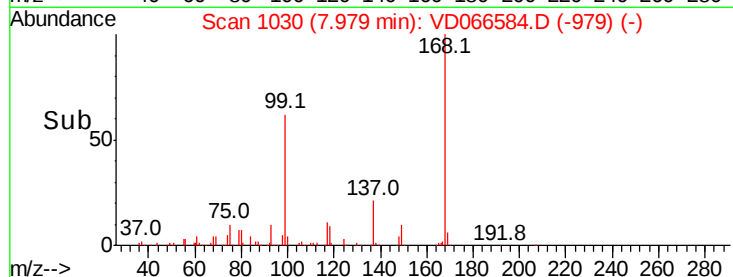
50000

0

Time-->

7.90

8.00



#2

Dichlorodifluoromethane

Concen: Below Cal

RT: 1.99 min Scan# 11

Delta R.T. 0.00 min

Lab File: VD066584.D

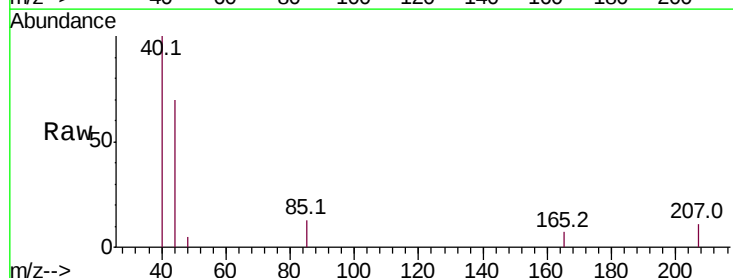
Acq: 09 Sep 2020 15:42

Tgt Ion: 85 Resp: 299

Ion Ratio Lower Upper

85 100

87 0.0 14.2 42.6#



Abundance Ion 84.90 (84.60 to 85.60): VDC

Ion 86.90 (86.60 to 87.60): VDC

1.99

400

300

200

100

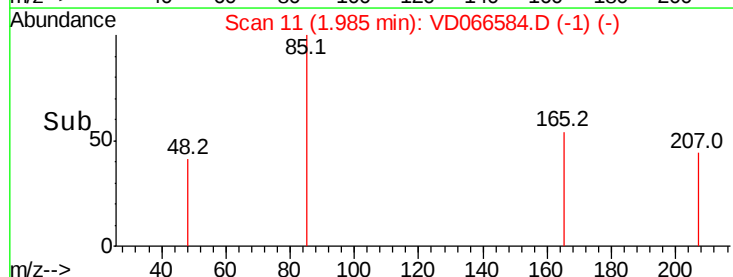
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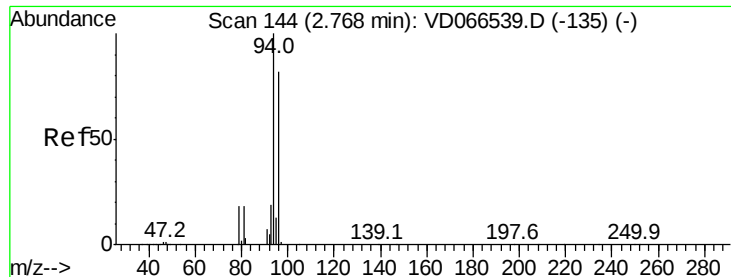
Time-->

1.96

1.98

2.00





#5

Bromomethane

Concen: Below Cal

RT: 2.76 min Scan# 142

Delta R.T. -0.01 min

Lab File: VD066584.D

Acq: 09 Sep 2020 15:42

Instrument :

MSVOA\_D

ClientSampleId :

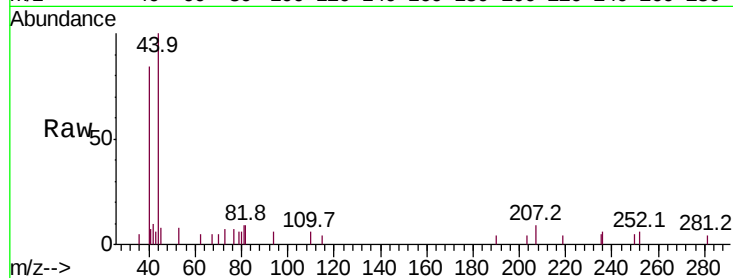
AL-FALAH-3

Tot Ion: 94 Resp: 77

Ion Ratio Lower Upper

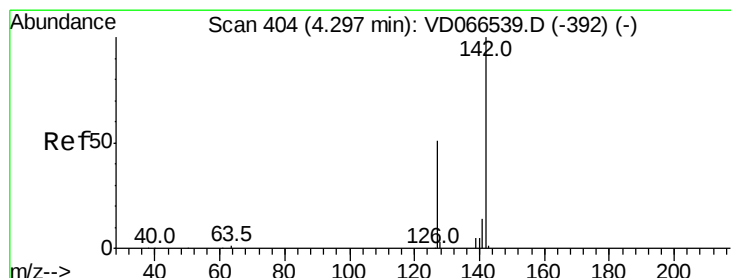
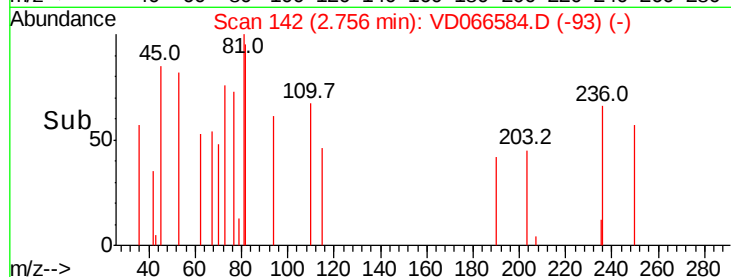
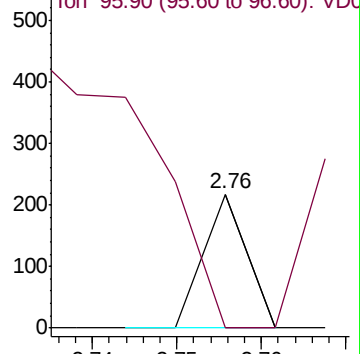
94 100

96 0.0 65.2 97.8#



Abundance Ion 93.90 (93.60 to 94.60): VDC

Ion 95.90 (95.60 to 96.60): VDC



#10

Methyl Iodide

Concen: 4.041 ug/l

RT: 4.49 min Scan# 437

Delta R.T. 0.19 min

Lab File: VD066584.D

Acq: 09 Sep 2020 15:42

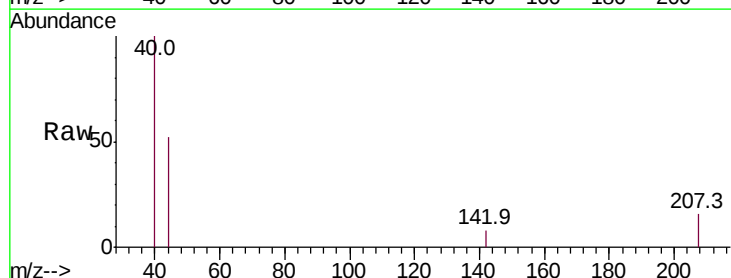
Tgt Ion: 142 Resp: 72

Ion Ratio Lower Upper

142 100

127 0.0 40.6 61.0#

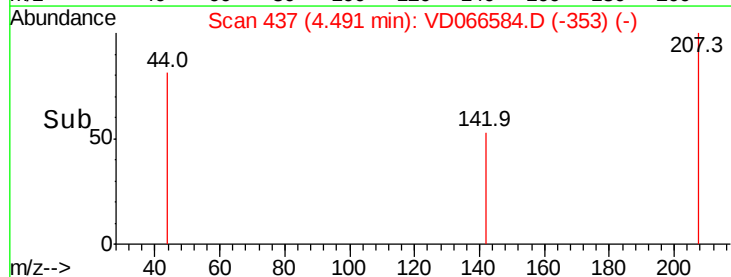
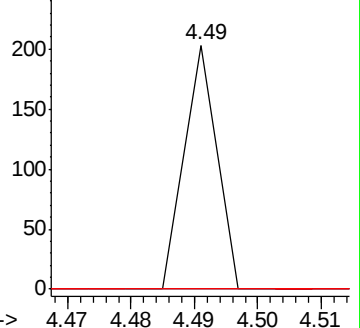
141 0.0 12.2 18.4#

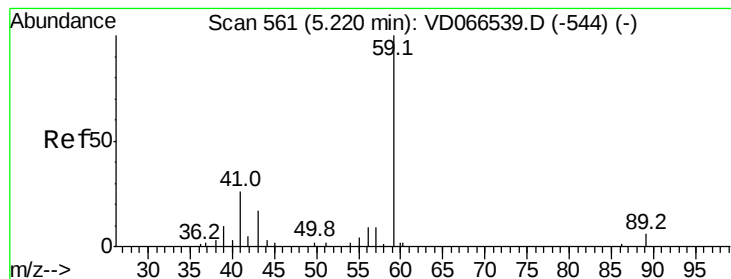


Abundance Ion 141.80 (141.50 to 142.50): V

Ion 126.80 (126.50 to 127.50): V

Ion 140.80 (140.50 to 141.50): V



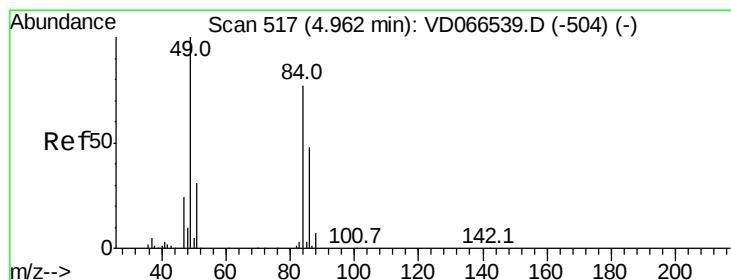
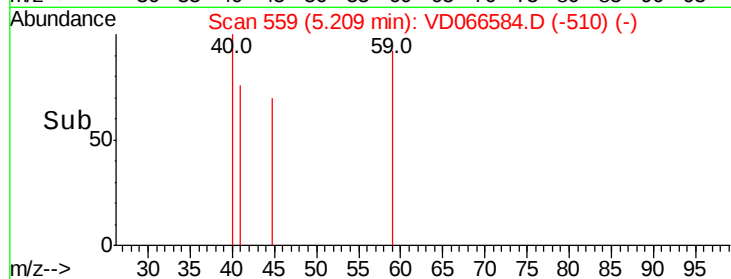
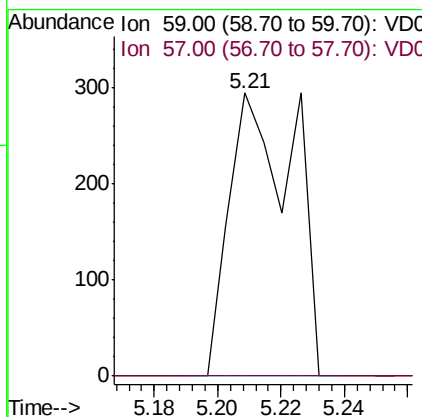
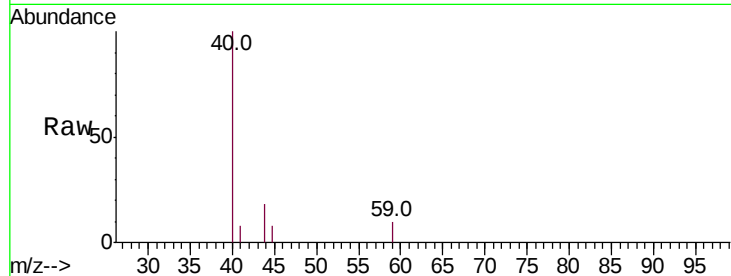


#11

Tert butyl alcohol  
 Concen: Below Cal  
 RT: 5.21 min Scan# 559  
 Delta R.T. -0.01 min  
 Lab File: VD066584.D  
 Acq: 09 Sep 2020 15:42

Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 AL-FALAH-3

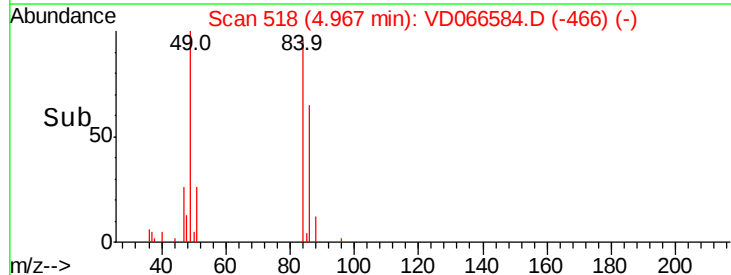
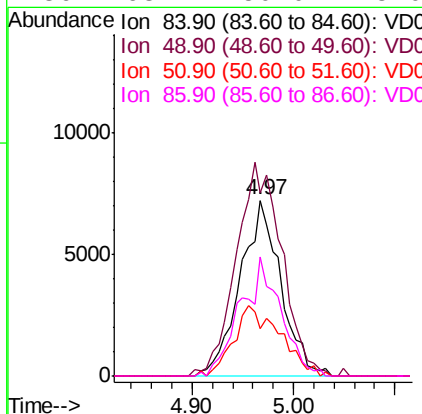
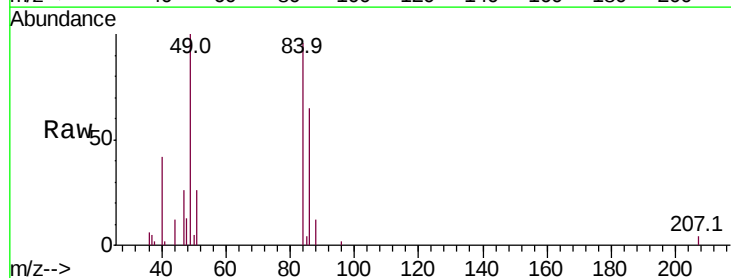
Tot Ion: 59 Resp: 408  
 Ion Ratio Lower Upper  
 59 100  
 57 0.0 7.6 11.4#

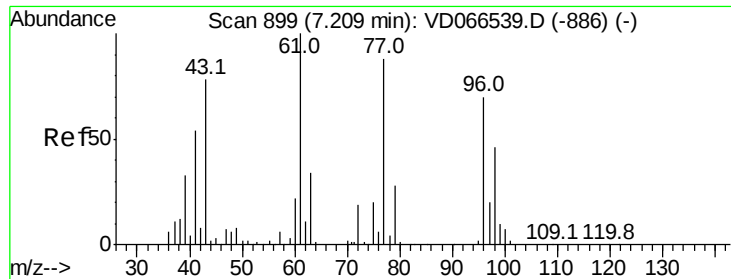


#20

Methylene Chloride  
 Concen: Below Cal  
 RT: 4.97 min Scan# 518  
 Delta R.T. 0.01 min  
 Lab File: VD066584.D  
 Acq: 09 Sep 2020 15:42

Tgt Ion: 84 Resp: 20179  
 Ion Ratio Lower Upper  
 84 100  
 49 104.2 104.3 156.5#  
 51 27.1 32.2 48.4#  
 86 68.1 50.0 75.0

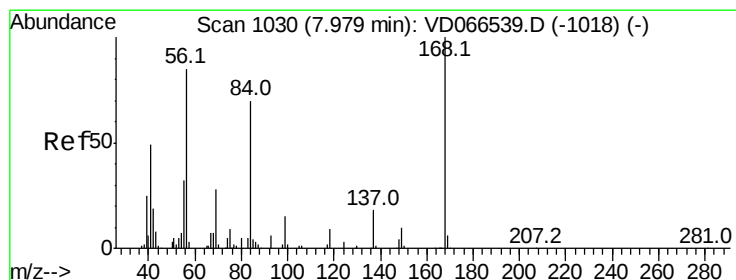
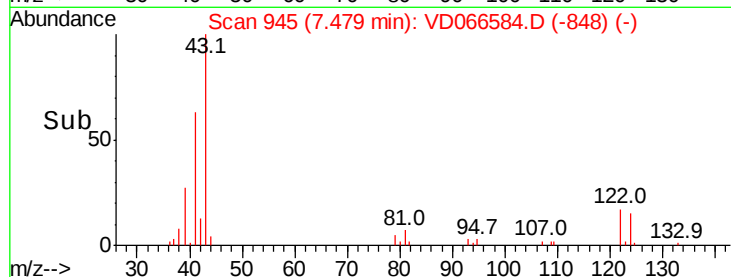
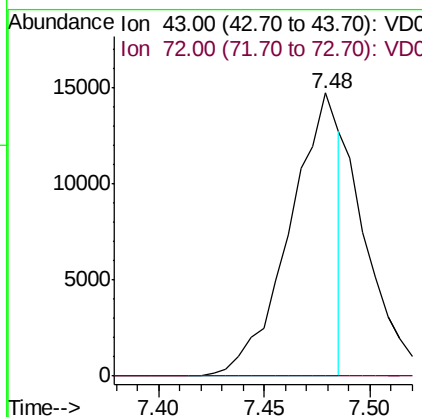
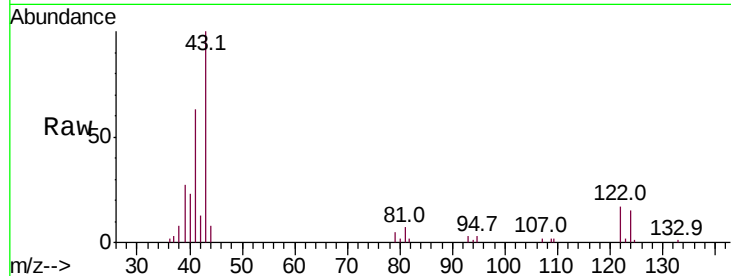




#25  
2-Butanone  
Concen: 21.903 ug/l  
RT: 7.48 min Scan# 945  
Delta R.T. 0.27 min  
Lab File: VD066584.D  
Acq: 09 Sep 2020 15:42

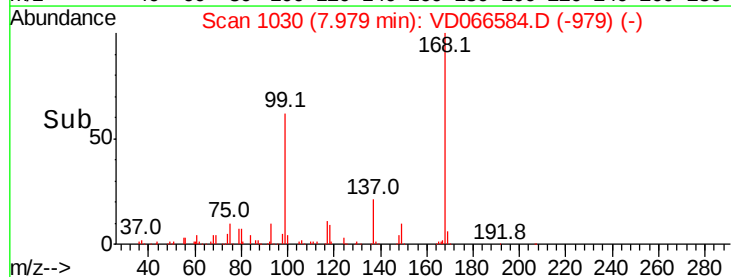
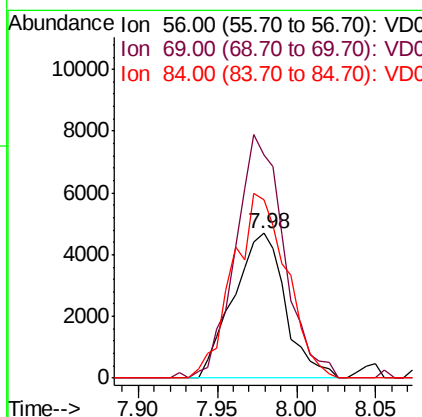
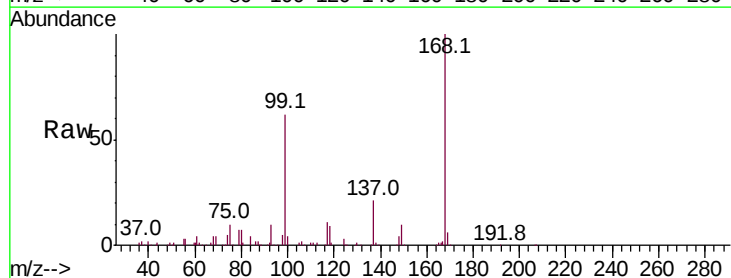
Instrument :  
MSVOA\_D  
ClientSampleId :  
AL-FALAH-3

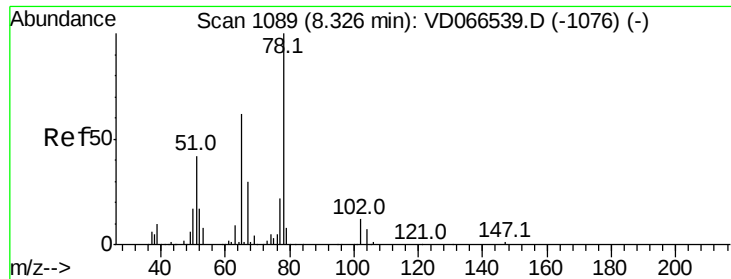
Tot Ion: 43 Resp: 24161  
Ion Ratio Lower Upper  
43 100  
72 0.0 19.8 29.6#



#31  
Cyclohexane  
Concen: 1.465 ug/l  
RT: 7.98 min Scan# 1030  
Delta R.T. -0.00 min  
Lab File: VD066584.D  
Acq: 09 Sep 2020 15:42

Tgt Ion: 56 Resp: 10674  
Ion Ratio Lower Upper  
56 100  
69 153.7 26.3 39.5#  
84 123.0 66.1 99.1#

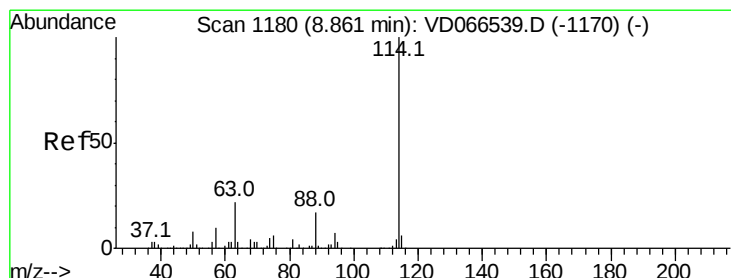
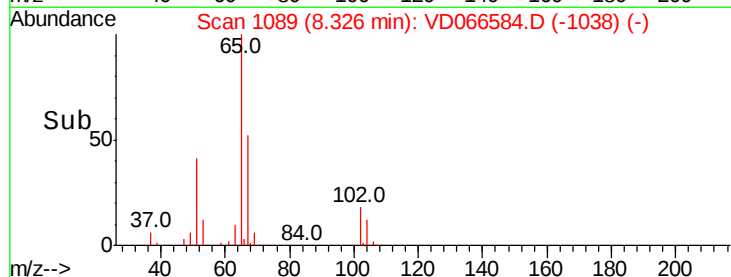
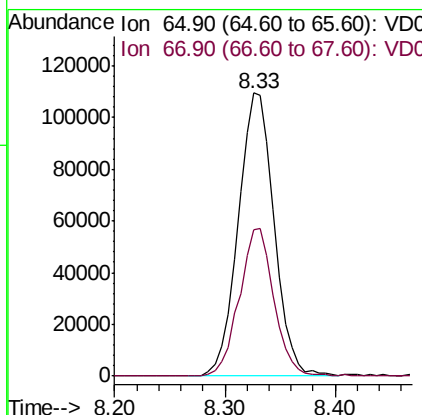
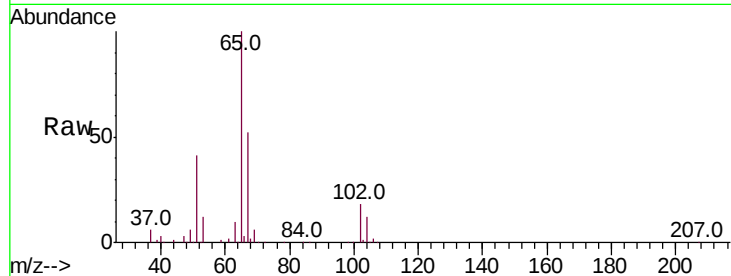




#33  
 1,2-Dichloroethane-d4  
 Concen: 55.830 ug/l  
 RT: 8.33 min Scan# 1089  
 Delta R.T. -0.00 min  
 Lab File: VD066584.D  
 Acq: 09 Sep 2020 15:42

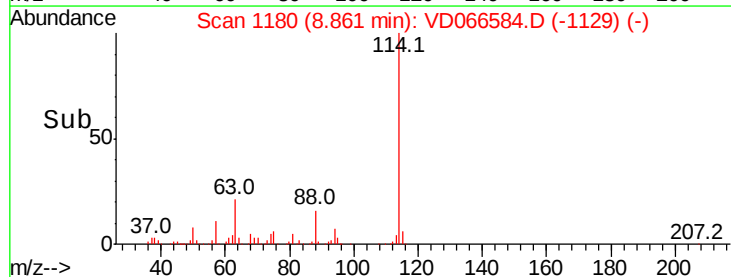
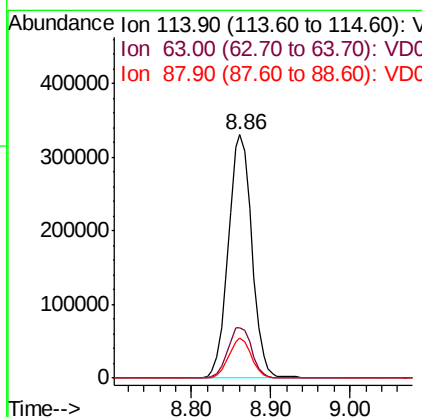
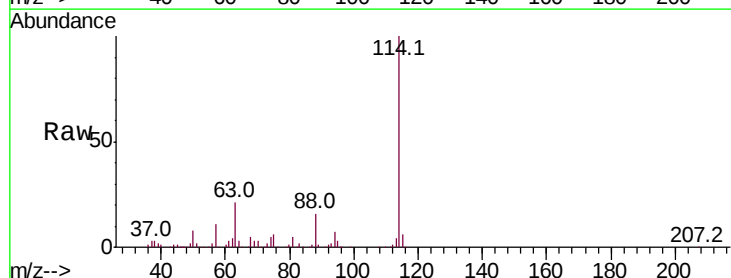
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 AL-FALAH-3

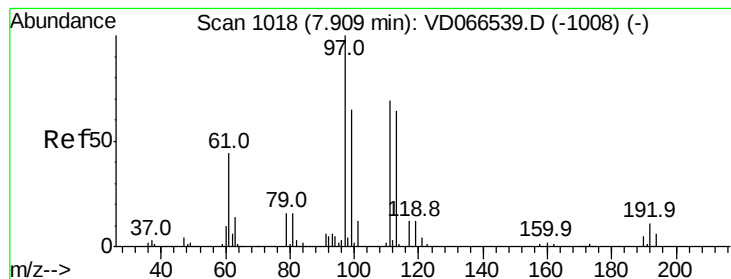
Tot Ion: 65 Resp: 249332  
 Ion Ratio Lower Upper  
 65 100  
 67 50.2 0.0 102.8



#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 8.86 min Scan# 1180  
 Delta R.T. -0.00 min  
 Lab File: VD066584.D  
 Acq: 09 Sep 2020 15:42

Tgt Ion: 114 Resp: 679461  
 Ion Ratio Lower Upper  
 114 100  
 63 20.8 0.0 43.2  
 88 16.4 0.0 33.2





#35

Dibromofluoromethane

Concen: 50.629 ug/l

RT: 7.91 min Scan# 1019

Delta R.T. 0.01 min

Lab File: VD066584.D

Acq: 09 Sep 2020 15:42

Instrument :

MSVOA\_D

ClientSampleId :

AL-FALAH-3

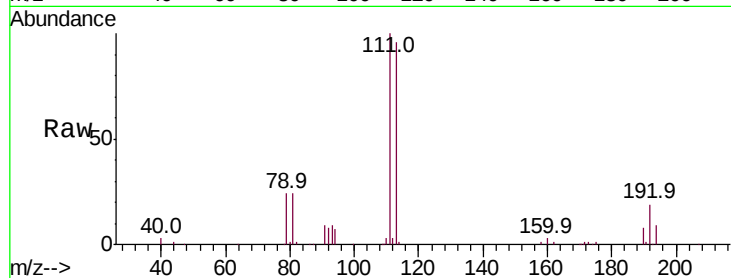
Tot Ion:113 Resp: 232069

Ion Ratio Lower Upper

113 100

111 104.4 83.2 124.8

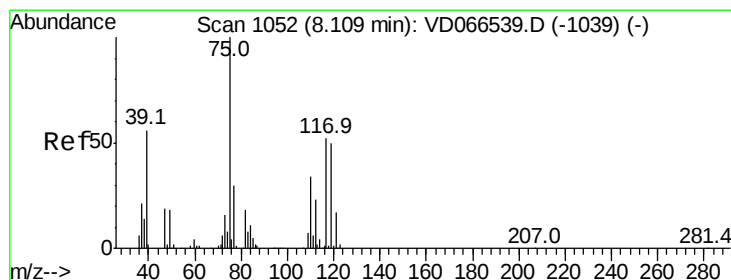
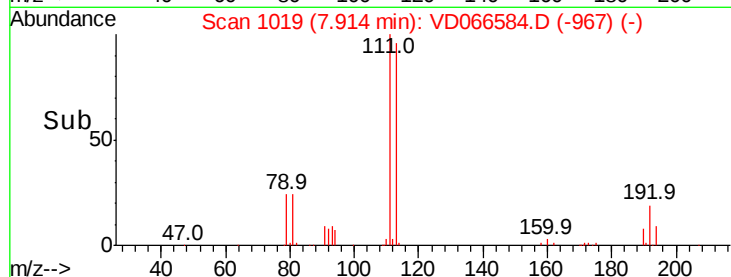
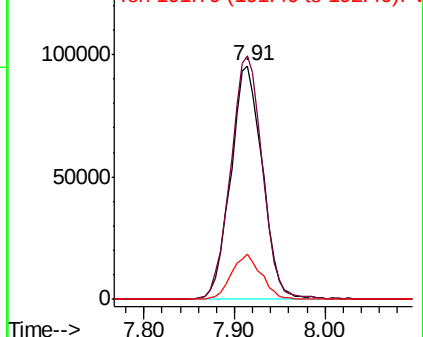
192 18.3 13.7 20.5



Abundance Ion 112.80 (112.50 to 113.50): V

Ion 110.80 (110.50 to 111.50): V

Ion 191.70 (191.40 to 192.40): V



#36

1,1-Dichloropropene

Concen: 4.882 ug/l

RT: 7.98 min Scan# 1030

Delta R.T. -0.13 min

Lab File: VD066584.D

Acq: 09 Sep 2020 15:42

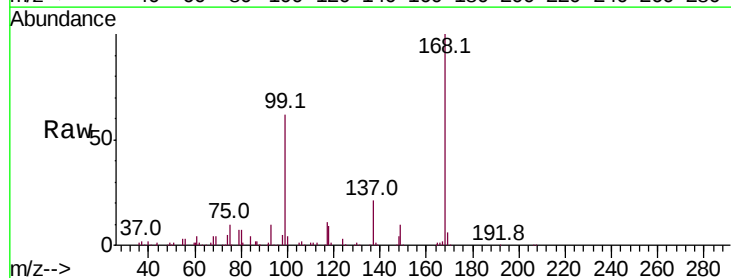
Tgt Ion: 75 Resp: 34518

Ion Ratio Lower Upper

75 100

110 9.5 17.3 52.0#

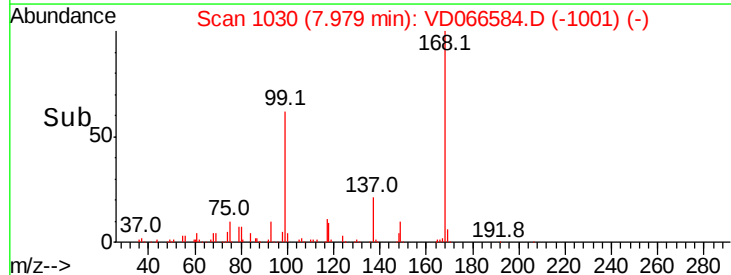
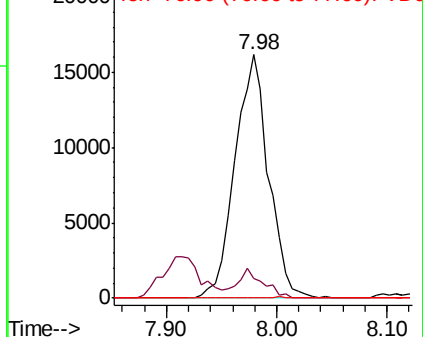
77 0.0 25.1 37.7#

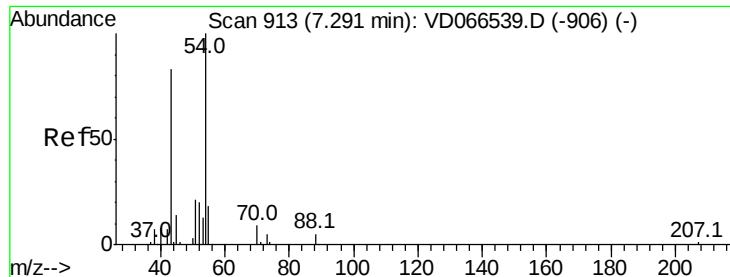


Abundance Ion 74.90 (74.60 to 75.60): V

Ion 109.90 (109.60 to 110.60): V

Ion 76.90 (76.60 to 77.60): V





#37

Ethyl Acetate

Concen: 12.457 ug/l

RT: 7.48 min Scan# 945

Delta R.T. 0.19 min

Lab File: VD066584.D

Acq: 09 Sep 2020 15:42

Instrument :

MSVOA\_D

ClientSampleId :

AL-FALAH-3

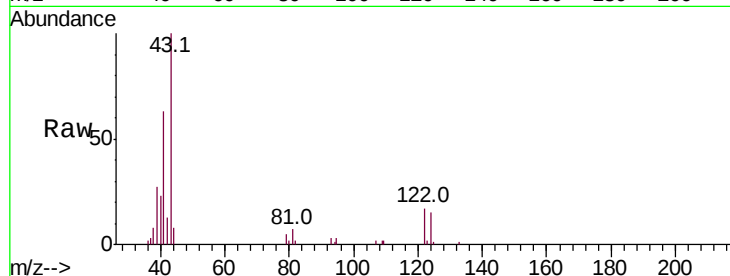
Tot Ion: 43 Resp: 35076

Ion Ratio Lower Upper

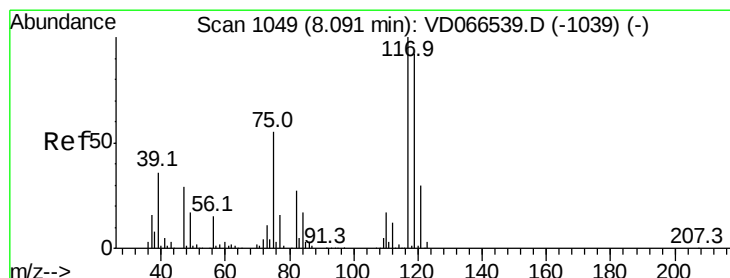
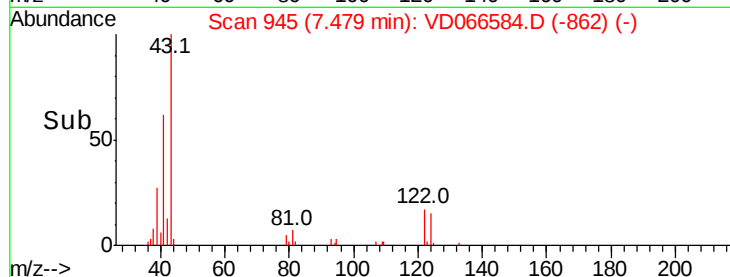
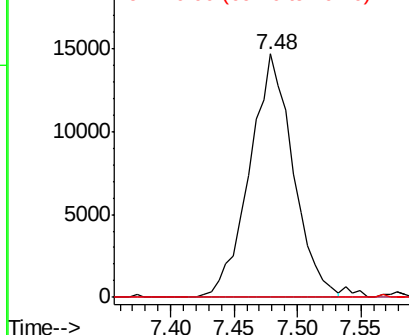
43 100

61 0.0 11.8 17.8#

70 0.0 7.9 11.9#



Abundance Ion 43.00 (42.70 to 43.70): VDC  
Ion 60.90 (60.60 to 61.60): VDC  
Ion 70.00 (69.70 to 70.70): VDC



#38

Carbon Tetrachloride

Concen: 5.650 ug/l

RT: 7.98 min Scan# 1030

Delta R.T. -0.11 min

Lab File: VD066584.D

Acq: 09 Sep 2020 15:42

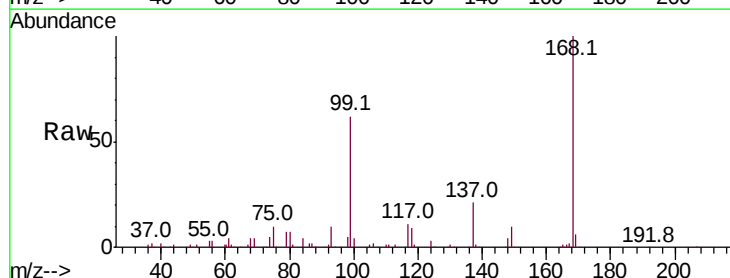
Tgt Ion: 117 Resp: 42225

Ion Ratio Lower Upper

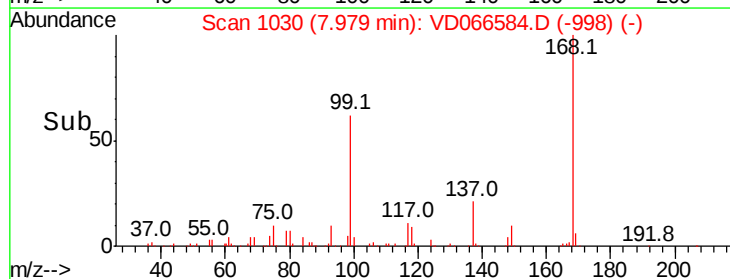
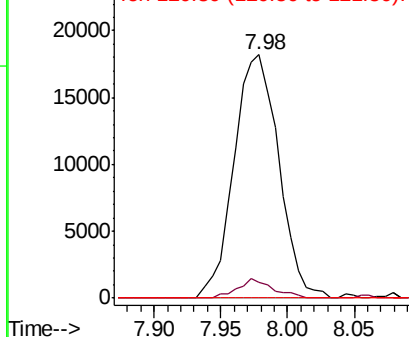
117 100

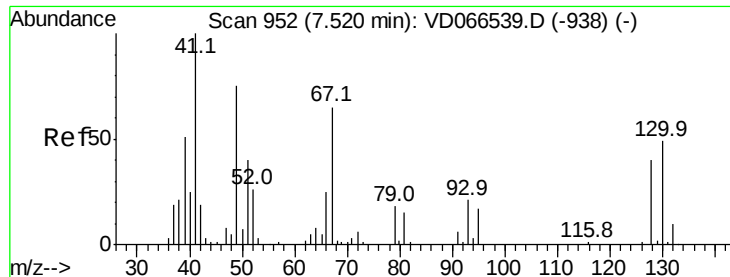
119 6.6 73.9 110.9#

121 0.0 24.1 36.1#



Abundance Ion 116.80 (116.50 to 117.50): V  
Ion 118.80 (118.50 to 119.50): V  
Ion 120.80 (120.50 to 121.50): V

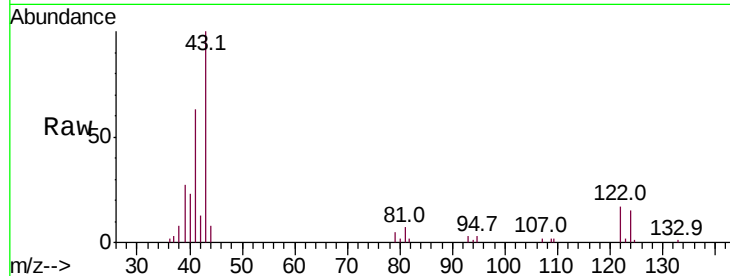




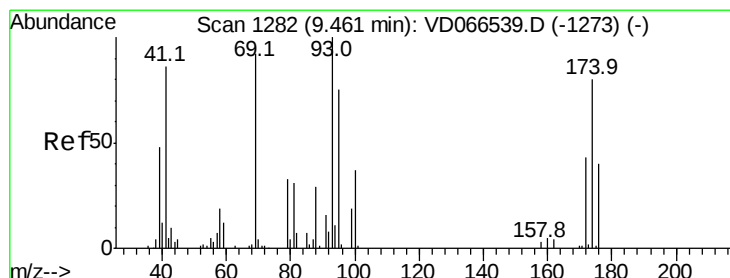
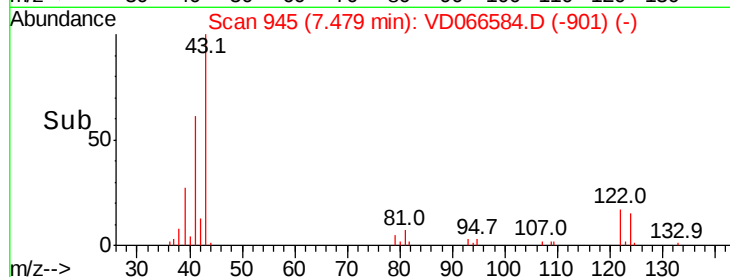
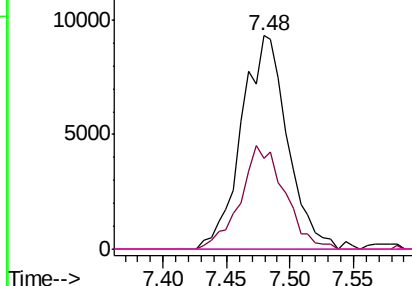
#41  
Methacrylonitrile  
Concen: 17.253 ug/l  
RT: 7.48 min Scan# 945  
Delta R.T. -0.04 min  
Lab File: VD066584.D  
Acq: 09 Sep 2020 15:42

Instrument :  
MSVOA\_D  
ClientSampleId :  
AL-FALAH-3

Tot Ion: 41 Resp: 23515  
Ion Ratio Lower Upper  
41 100  
39 46.7 53.6 80.4#  
67 0.0 59.2 88.8#  
52 0.0 26.8 40.2#

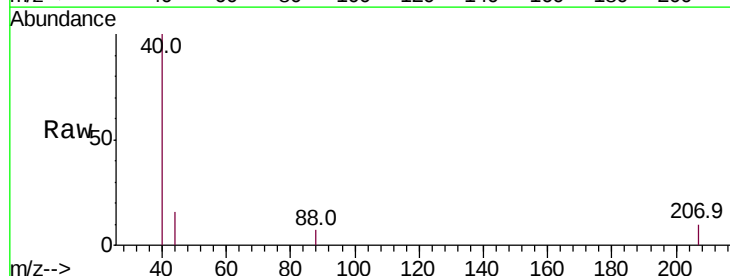


Abundance Ion 41.00 (40.70 to 41.70): VDC  
Ion 39.00 (38.70 to 39.70): VDC  
Ion 67.00 (66.70 to 67.70): VDC  
Ion 52.00 (51.70 to 52.70): VDC

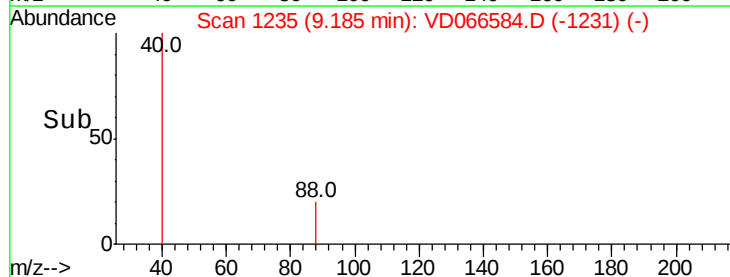
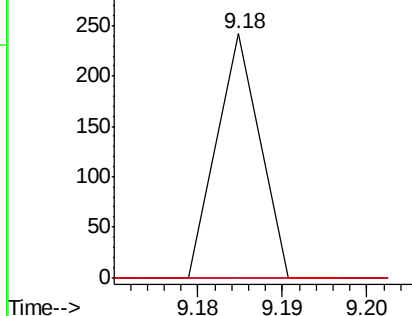


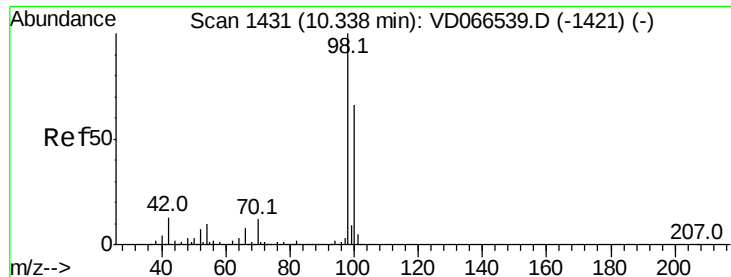
#49  
1,4-Dioxane  
Concen: 2.883 ug/l  
RT: 9.18 min Scan# 1235  
Delta R.T. -0.28 min  
Lab File: VD066584.D  
Acq: 09 Sep 2020 15:42

Tgt Ion: 88 Resp: 85  
Ion Ratio Lower Upper  
88 100  
43 0.0 28.3 42.5#  
58 0.0 56.1 84.1#



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





#50

Toluene-d8

Concen: 51.232 ug/l

RT: 10.34 min Scan# 1431

Delta R.T. -0.00 min

Lab File: VD066584.D

Acq: 09 Sep 2020 15:42

Instrument :

MSVOA\_D

ClientSampleId :

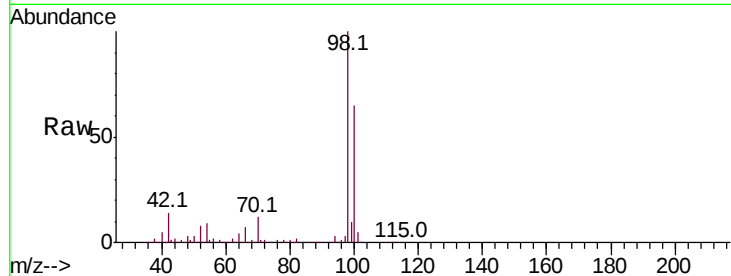
AL-FALAH-3

Tot Ion: 98 Resp: 839330

Ion Ratio Lower Upper

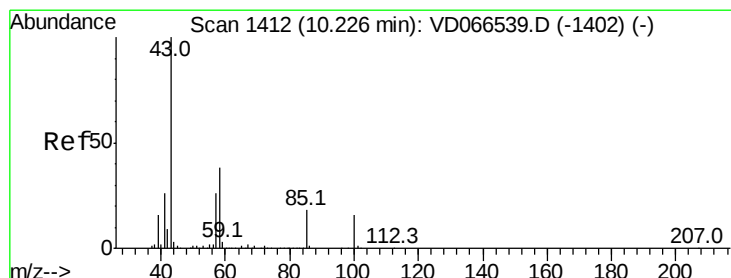
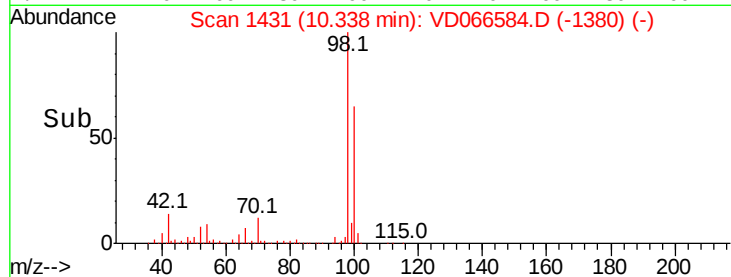
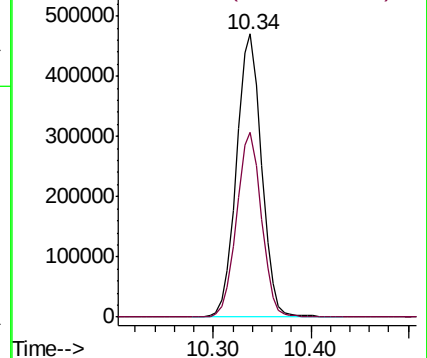
98 100

100 64.8 52.9 79.3



Abundance Ion 98.00 (97.70 to 98.70): VDC

Ion 100.00 (99.70 to 100.70): VDC



#51

4-Methyl-2-Pentanone

Concen: 1.651 ug/l

RT: 10.34 min Scan# 1431

Delta R.T. 0.11 min

Lab File: VD066584.D

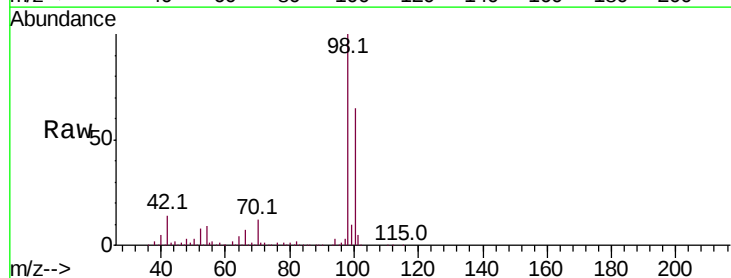
Acq: 09 Sep 2020 15:42

Tgt Ion: 43 Resp: 4492

Ion Ratio Lower Upper

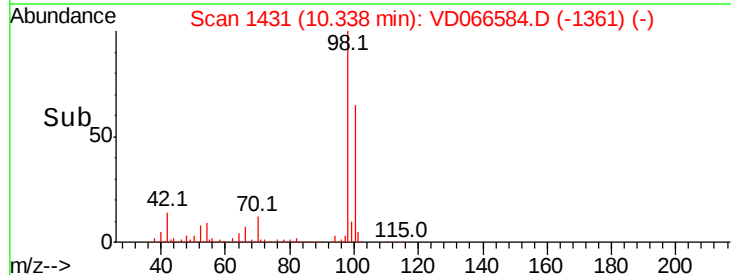
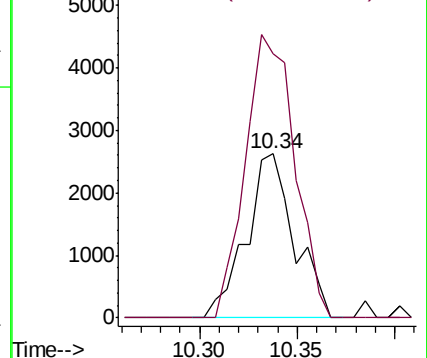
43 100

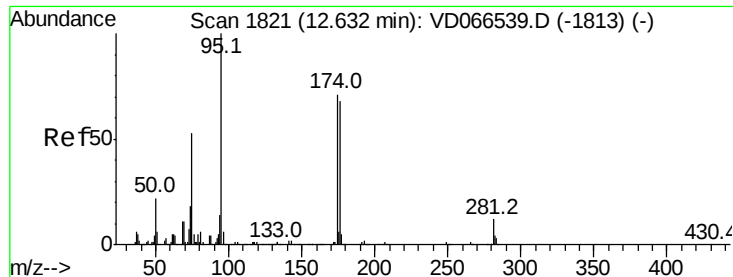
58 176.5 30.5 45.7#



Abundance Ion 43.00 (42.70 to 43.70): VDC

Ion 58.00 (57.70 to 58.70): VDC





#62

4-Bromofluorobenzene

Concen: 50.803 ug/l

RT: 12.63 min Scan# 1821

Delta R.T. -0.00 min

Lab File: VD066584.D

Acq: 09 Sep 2020 15:42

Instrument :

MSVOA\_D

ClientSampleId :

AL-FALAH-3

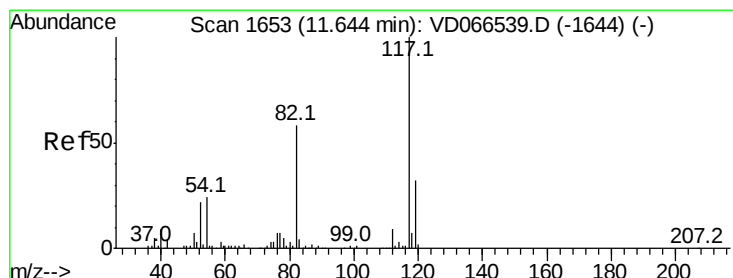
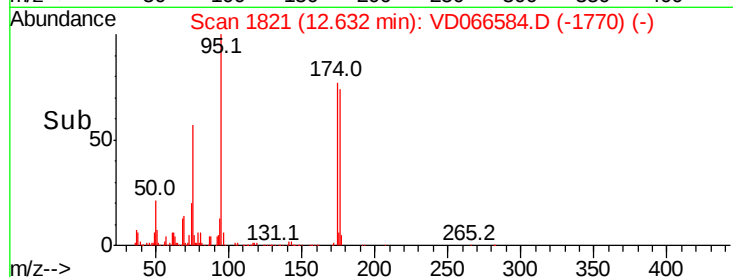
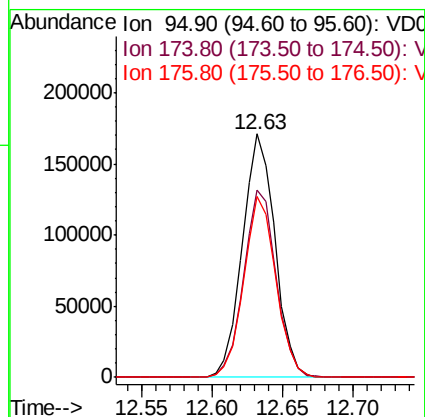
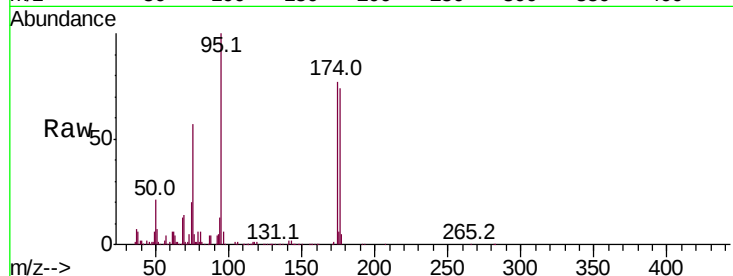
Tot Ion: 95 Resp: 275981

Ion Ratio Lower Upper

95 100

174 76.6 0.0 155.8

176 73.5 0.0 148.6



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.64 min Scan# 1653

Delta R.T. -0.00 min

Lab File: VD066584.D

Acq: 09 Sep 2020 15:42

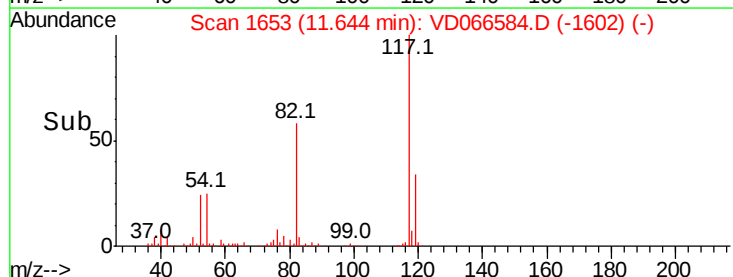
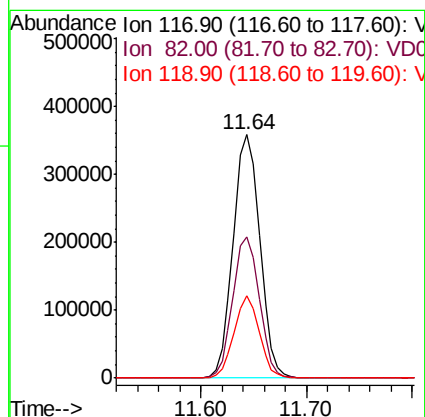
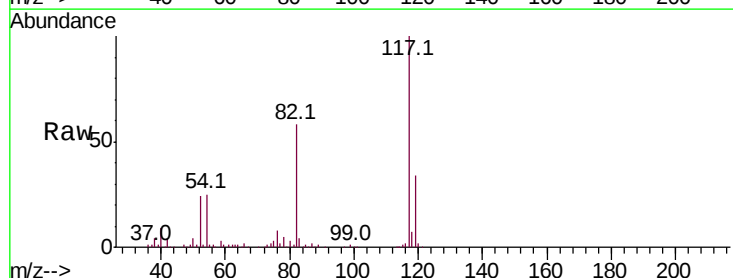
Tgt Ion: 117 Resp: 628119

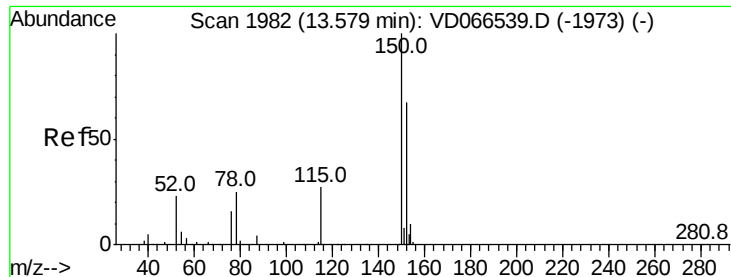
Ion Ratio Lower Upper

117 100

82 57.9 46.2 69.2

119 33.6 25.8 38.8





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.58 min Scan# 1982

Delta R.T. -0.00 min

Lab File: VD066584.D

Acq: 09 Sep 2020 15:42

Instrument :

MSVOA\_D

ClientSampleId :

AL-FALAH-3

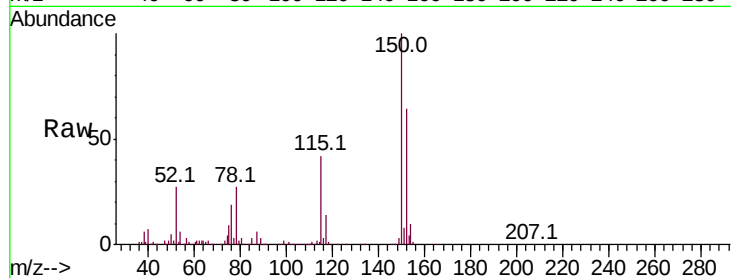
Tot Ion:152 Resp: 276140

Ion Ratio Lower Upper

152 100

115 64.2 30.4 91.2

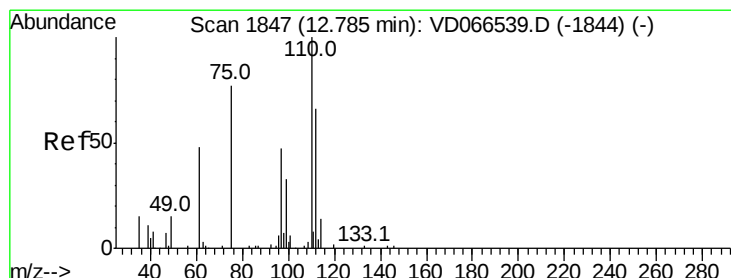
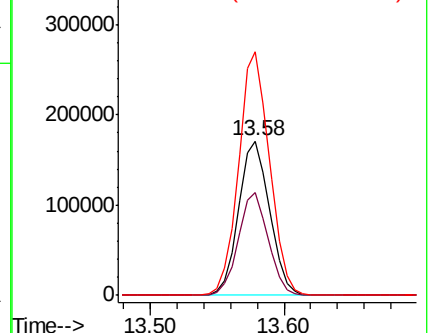
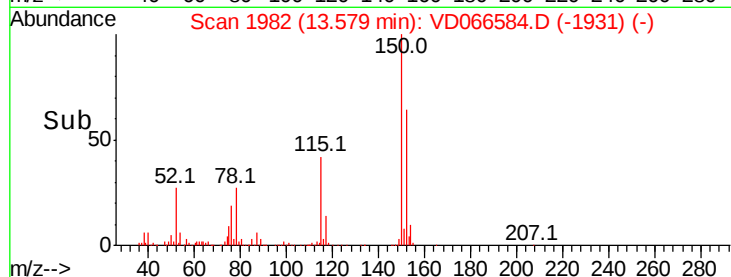
150 156.5 0.0 345.8



Abundance Ion 151.90 (151.60 to 152.60): V

Ion 114.90 (114.60 to 115.60): V

Ion 149.90 (149.60 to 150.60): V



#76

1,2,3-Trichloropropane

Concen: 60.929 ug/l

RT: 12.63 min Scan# 1821

Delta R.T. -0.15 min

Lab File: VD066584.D

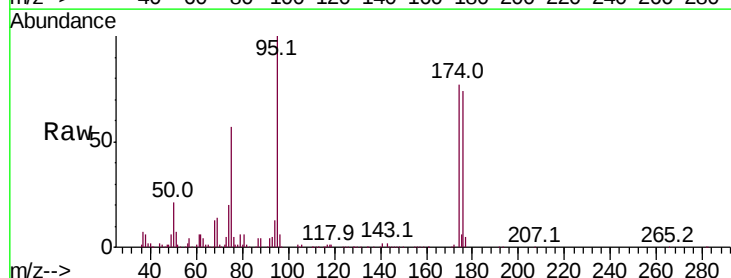
Acq: 09 Sep 2020 15:42

Tgt Ion: 75 Resp: 161812

Ion Ratio Lower Upper

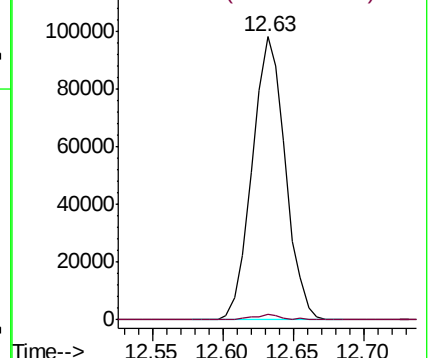
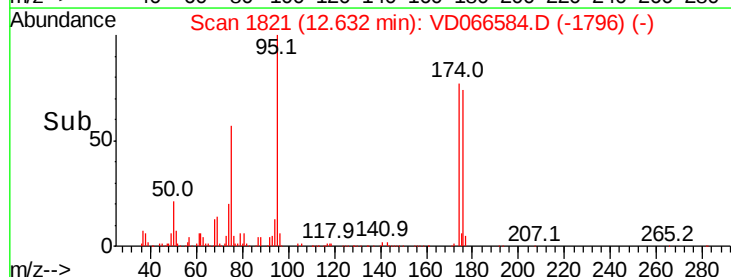
75 100

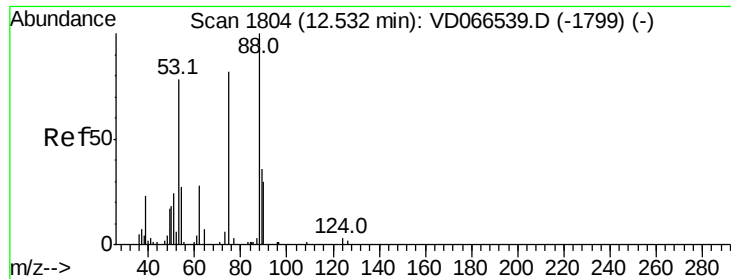
77 1.5 0.0 0.0#



Abundance Ion 74.90 (74.60 to 75.60): VDC

Ion 77.00 (76.70 to 77.70): VDC





#81

trans-1,4-Dichloro-2-butene

Concen: 142.249 ug/l

RT: 12.63 min Scan# 1821

Delta R.T. 0.10 min

Lab File: VD066584.D

Acq: 09 Sep 2020 15:42

Instrument :

MSVOA\_D

ClientSampleId :

AL-FALAH-3

Tot Ion: 75 Resp: 161812

Ion Ratio Lower Upper

75 100

53 0.1 87.0 130.4#

89 0.0 37.1 55.7#

