

Data Path : Z:\VOASRV\HPCHEM1\MSVOA D\DATA\VD101920\  
 Data File : VD067308.D  
 Acq On : 19 Oct 2020 14:51  
 Operator : VA/SY  
 Sample : L4434-02  
 Misc : 5.10G/5.00ml/MSVOA D/SOIL  
 ALS Vial : 7 Sample Multiplier: 1

Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 16757-S

Quant Time: Oct 20 01:45:29 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_D\METHOD\82D101320S.M  
 Quant Title : SW846 8260  
 QLast Update : Mon Oct 19 19:13:29 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.98  | 168  | 22060    | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.87  | 114  | 33135    | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.65 | 117  | 34913    | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.58 | 152  | 16801    | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 8.33   | 65  | 15908    | 71.98 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 143.96% |      |
| 35) Dibromofluoromethane  | 7.91   | 113 | 13085    | 59.34 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 118.68% |      |
| 50) Toluene-d8            | 10.34  | 98  | 42250    | 52.94 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 105.88% |      |
| 62) 4-Bromofluorobenzene  | 12.64  | 95  | 16549    | 59.64 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 119.28% |      |

## Target Compounds

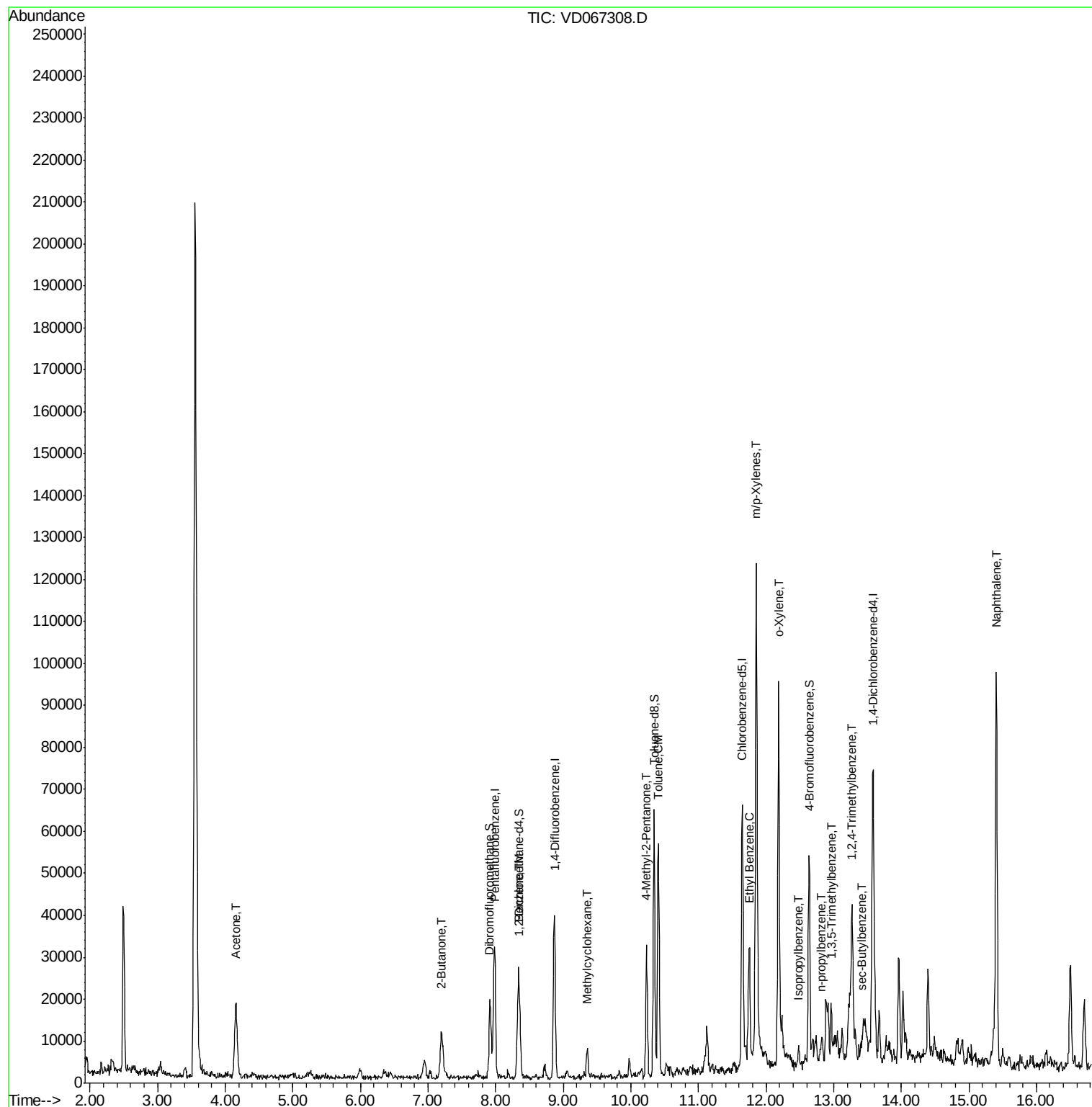
|                            |       |     |       |          |        | Qvalue |
|----------------------------|-------|-----|-------|----------|--------|--------|
| 16) Acetone                | 4.16  | 43  | 31160 | 1006.713 | ug/l   | 95     |
| 25) 2-Butanone             | 7.21  | 43  | 7811  | 221.385  | ug/l # | 89     |
| 39) Methylcyclohexane      | 9.36  | 83  | 2607  | 8.879    | ug/l   | 91     |
| 40) Benzene                | 8.35  | 78  | 11980 | 15.549   | ug/l   | 95     |
| 51) 4-Methyl-2-Pentanone   | 10.23 | 43  | 17828 | 218.009  | ug/l   | 94     |
| 52) Toluene                | 10.41 | 92  | 24223 | 46.160   | ug/l   | 96     |
| 67) Ethyl Benzene          | 11.75 | 91  | 19045 | 16.595   | ug/l   | 97     |
| 68) m/p-Xylenes            | 11.86 | 106 | 37117 | 83.987   | ug/l   | 93     |
| 69) o-Xylene               | 12.19 | 106 | 24150 | 59.012   | ug/l   | 98     |
| 73) Isopropylbenzene       | 12.48 | 105 | 2917  | 2.736    | ug/l   | 93     |
| 78) n-propylbenzene        | 12.82 | 91  | 4468  | 3.617    | ug/l # | 71     |
| 80) 1,3,5-Trimethylbenzene | 12.96 | 105 | 6962  | 7.513    | ug/l   | 97     |
| 84) 1,2,4-Trimethylbenzene | 13.27 | 105 | 17800 | 19.436   | ug/l   | 93     |
| 85) sec-Butylbenzene       | 13.41 | 105 | 1108  | 1.032    | ug/l # | 55     |
| 95) Naphthalene            | 15.41 | 128 | 87662 | 177.162  | ug/l   | 99     |

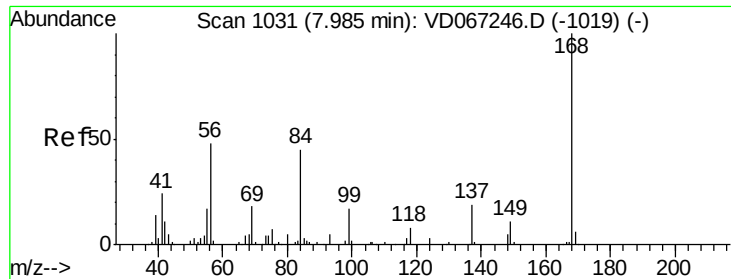
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA D\DATA\VD101920\  
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Misc : 5.10G/5.00ml/MSVOA D/SOIL  
ALS Vial : 7 Sample Multiplier: 1

Instrument :  
MSVOA\_D  
ClientSampleId :  
16757-S

Quant Time: Oct 20 01:45:29 2020  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_D\METHOD\82D101320S.M  
Quant Title : SW846 8260  
QLast Update : Mon Oct 19 19:13:29 2020  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.98 min Scan# 1030

Delta R.T. -0.01 min

Lab File: VD067308.D

Acq: 19 Oct 2020 14:51

Instrument :

MSVOA\_D

ClientSampleId :

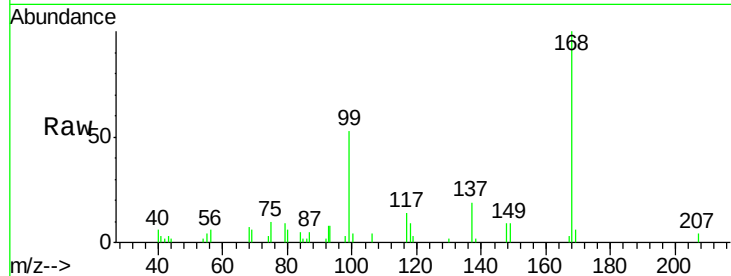
16757-S

Tot Ion:168 Resp: 22060

Ion Ratio Lower Upper

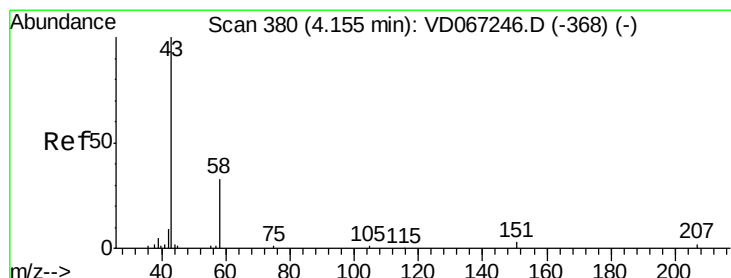
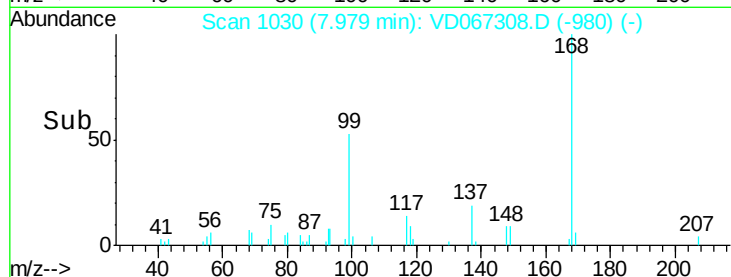
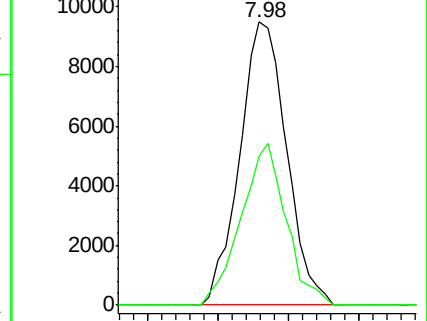
168 100

99 52.8 45.9 68.9



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VDC



#16

Acetone

Concen: 1006.713 ug/l

RT: 4.16 min Scan# 380

Delta R.T. 0.00 min

Lab File: VD067308.D

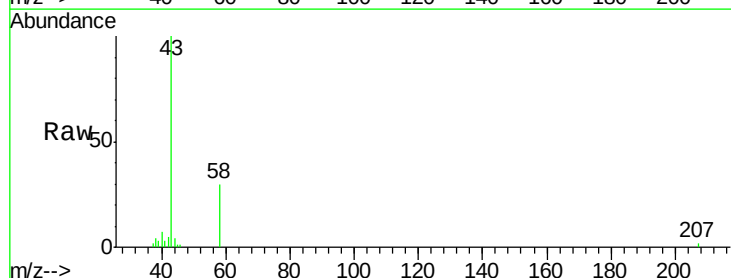
Acq: 19 Oct 2020 14:51

Tgt Ion: 43 Resp: 31160

Ion Ratio Lower Upper

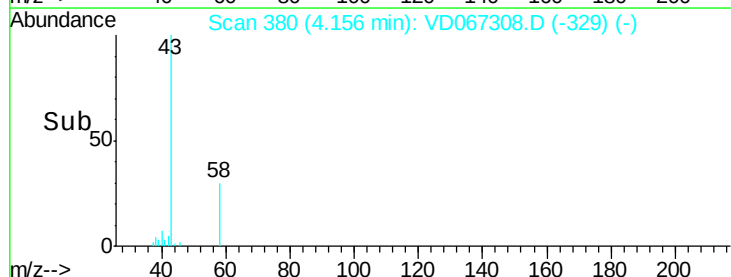
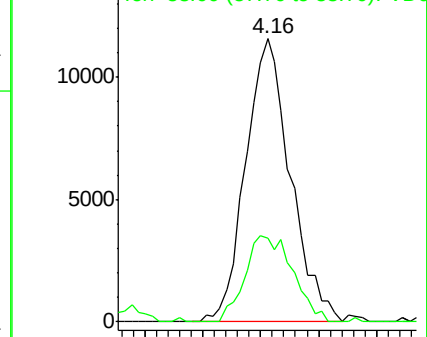
43 100

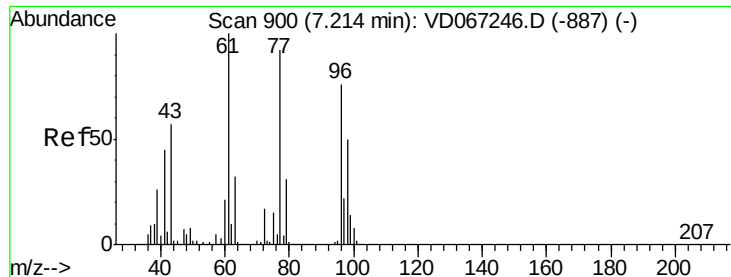
58 29.7 26.1 39.1



Abundance Ion 43.00 (42.70 to 43.70): VDC

Ion 58.00 (57.70 to 58.70): VDC

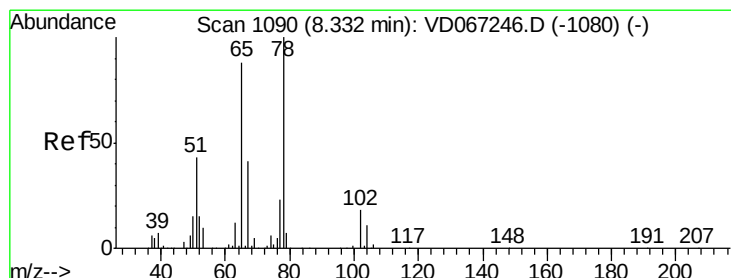
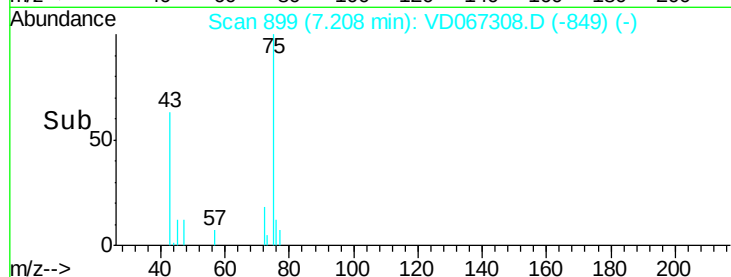
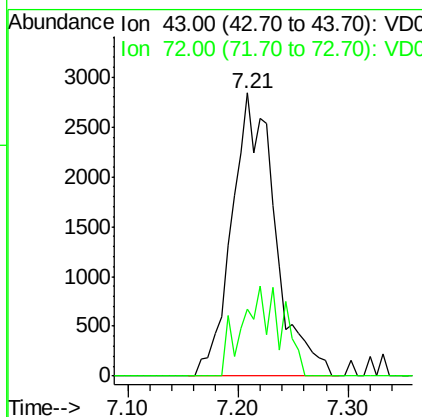
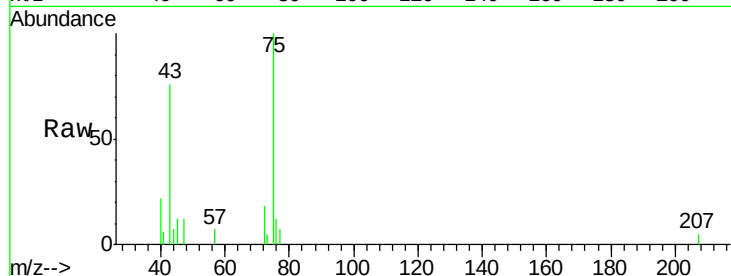




#25  
2-Butanone  
Concen: 221.385 ug/l  
RT: 7.21 min Scan# 899  
Delta R.T. -0.01 min  
Lab File: VD067308.D  
Acq: 19 Oct 2020 14:51

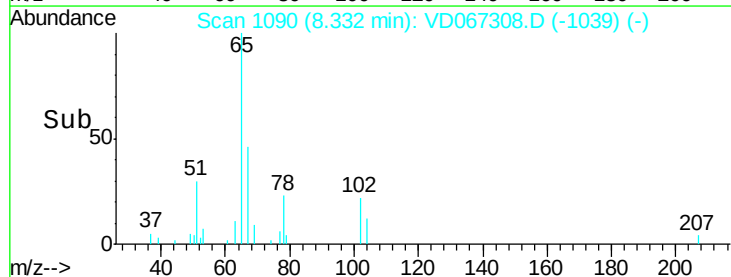
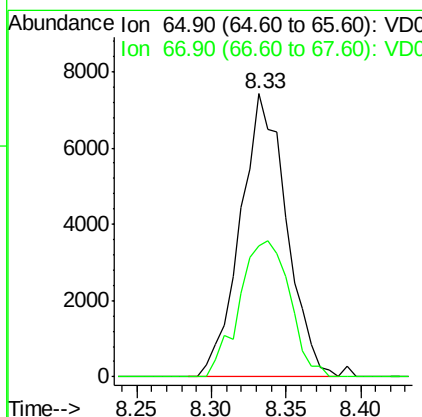
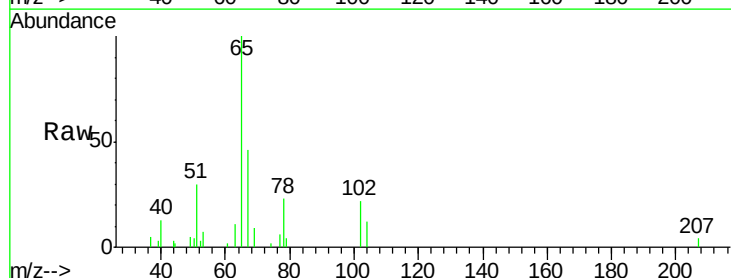
Instrument :  
MSVOA\_D  
ClientSampleId :  
16757-S

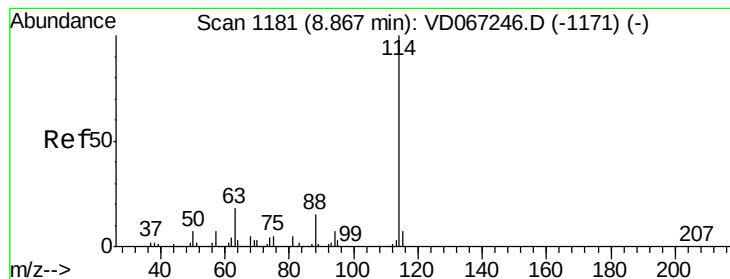
Tot Ion: 43 Resp: 7811  
Ion Ratio Lower Upper  
43 100  
72 23.5 23.7 35.5#



#33  
1,2-Dichloroethane-d4  
Concen: 71.979 ug/l  
RT: 8.33 min Scan# 1090  
Delta R.T. 0.00 min  
Lab File: VD067308.D  
Acq: 19 Oct 2020 14:51

Tgt Ion: 65 Resp: 15908  
Ion Ratio Lower Upper  
65 100  
67 52.3 0.0 103.8





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.87 min Scan# 1182

Delta R.T. 0.01 min

Lab File: VD067308.D

Acq: 19 Oct 2020 14:51

Instrument :

MSVOA\_D

ClientSampleId :

16757-S

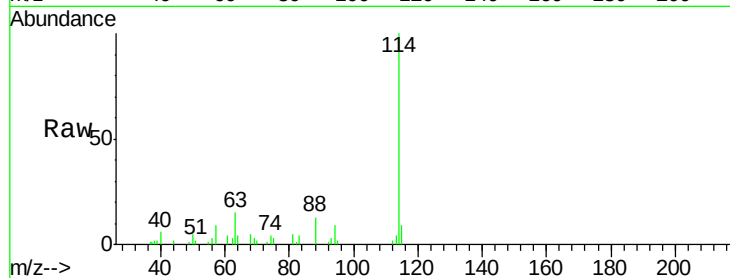
Tot Ion:114 Resp: 33135

Ion Ratio Lower Upper

114 100

63 15.4 0.0 35.0

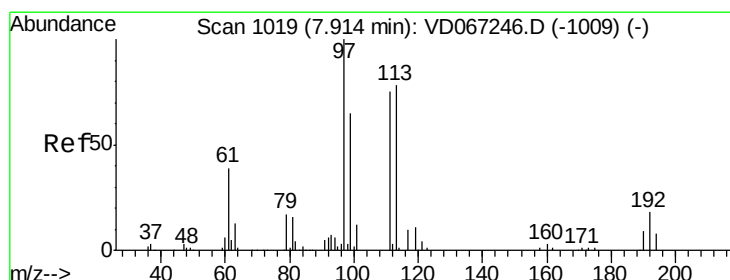
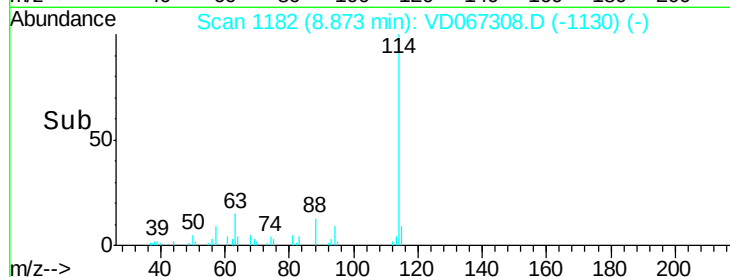
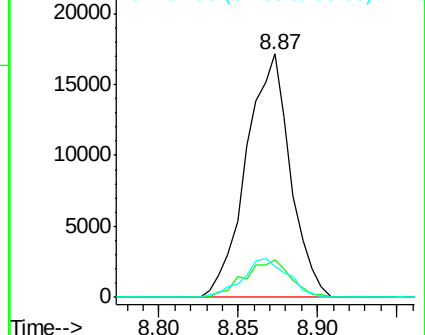
88 12.7 0.0 30.6



Abundance Ion 113.90 (113.60 to 114.60): V

Ion 63.00 (62.70 to 63.70): V

Ion 87.90 (87.60 to 88.60): V



#35

Dibromofluoromethane

Concen: 59.339 ug/l

RT: 7.91 min Scan# 1019

Delta R.T. 0.00 min

Lab File: VD067308.D

Acq: 19 Oct 2020 14:51

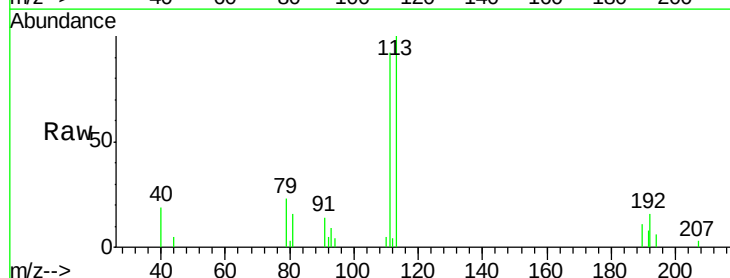
Tgt Ion:113 Resp: 13085

Ion Ratio Lower Upper

113 100

111 104.4 81.6 122.4

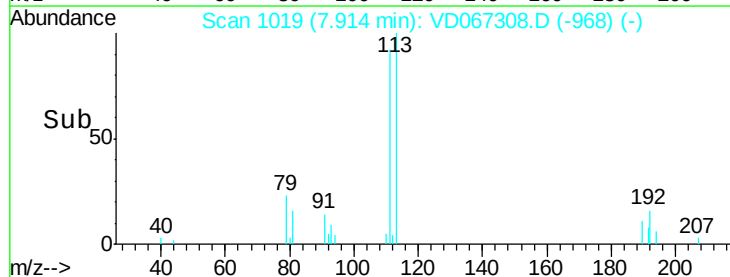
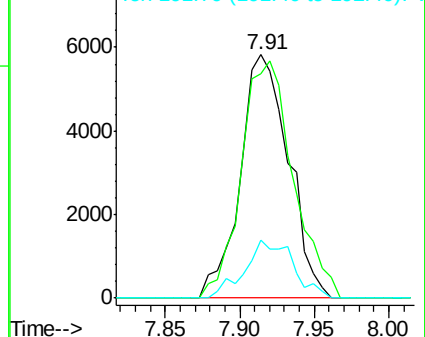
192 23.6 17.0 25.4

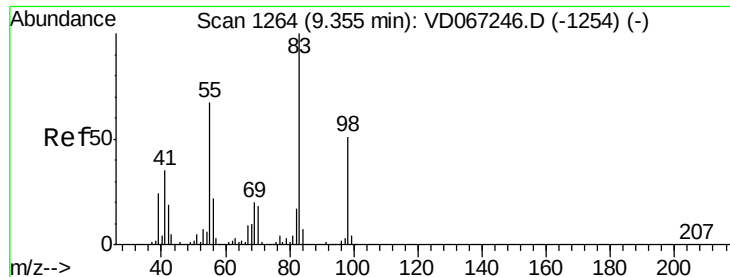


Abundance Ion 112.80 (112.50 to 113.50): V

Ion 110.80 (110.50 to 111.50): V

Ion 191.70 (191.40 to 192.40): V

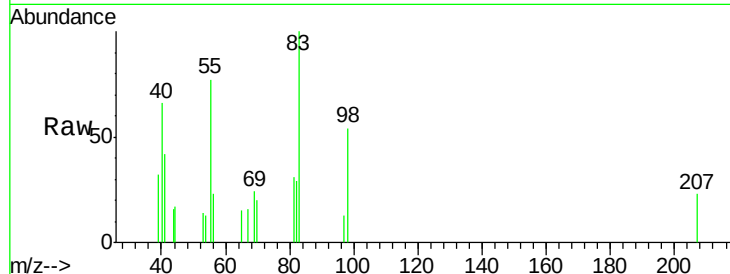




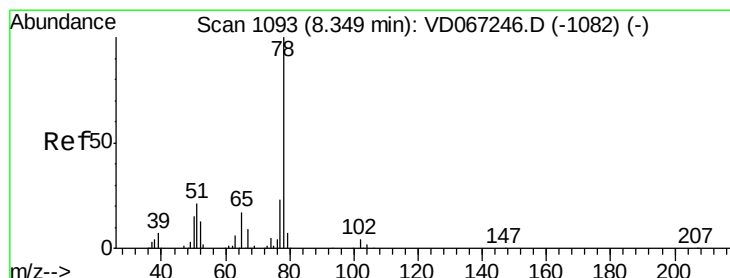
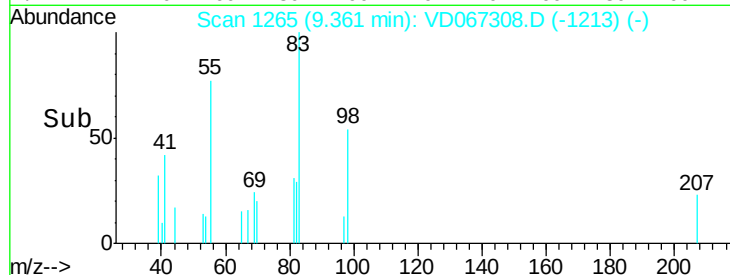
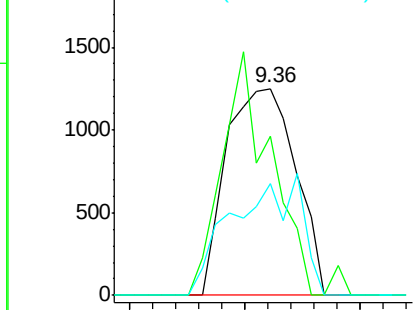
#39  
Methylvlcyclohexane  
Concen: 8.879 ug/l  
RT: 9.36 min Scan# 1265  
Delta R.T. 0.01 min  
Lab File: VD067308.D  
Acq: 19 Oct 2020 14:51

Instrument :  
MSVOA\_D  
ClientSampleId :  
16757-S

Tot Ion: 83 Resp: 2607  
Ion Ratio Lower Upper  
83 100  
55 76.7 53.3 79.9  
98 54.0 41.0 61.4

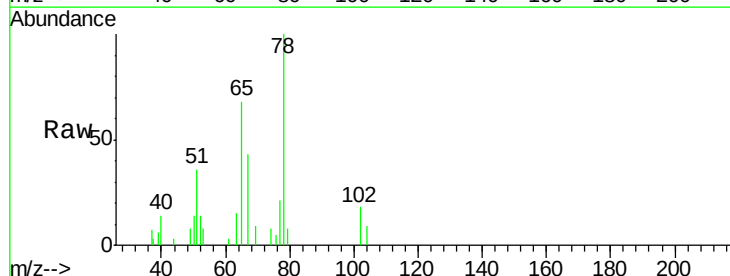


Abundance Ion 83.00 (82.70 to 83.70): VDC  
Ion 55.00 (54.70 to 55.70): VDC  
Ion 98.00 (97.70 to 98.70): VDC

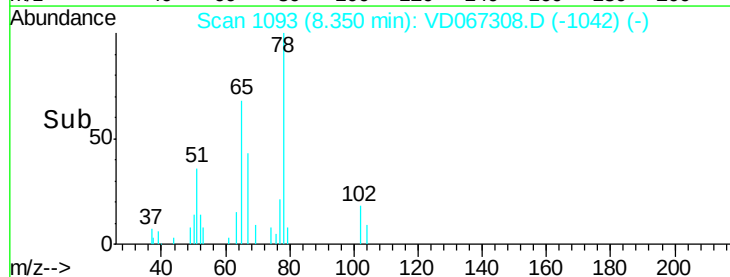
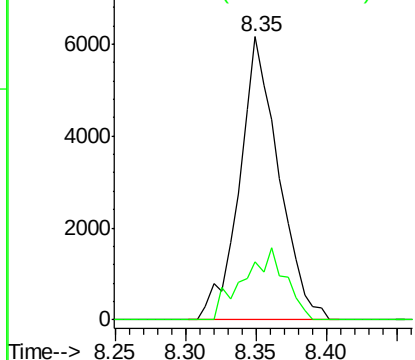


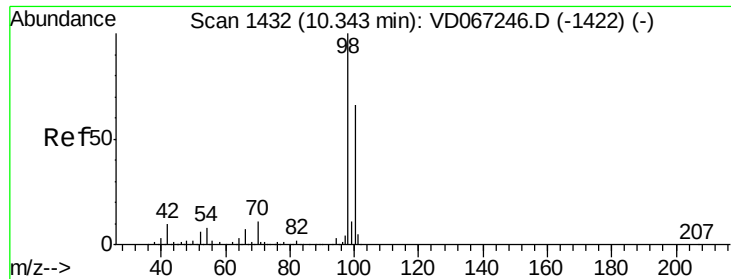
#40  
Benzene  
Concen: 15.549 ug/l  
RT: 8.35 min Scan# 1093  
Delta R.T. 0.00 min  
Lab File: VD067308.D  
Acq: 19 Oct 2020 14:51

Tgt Ion: 78 Resp: 11980  
Ion Ratio Lower Upper  
78 100  
77 20.6 18.3 27.5



Abundance Ion 78.00 (77.70 to 78.70): VDC  
Ion 77.00 (76.70 to 77.70): VDC

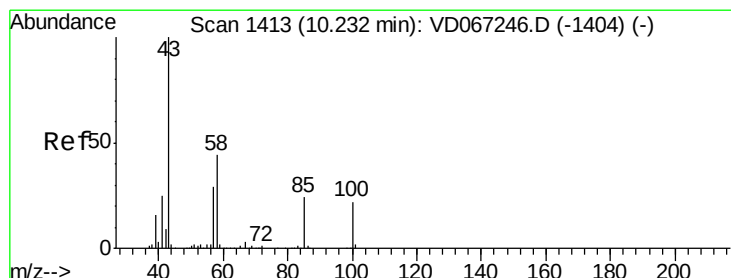
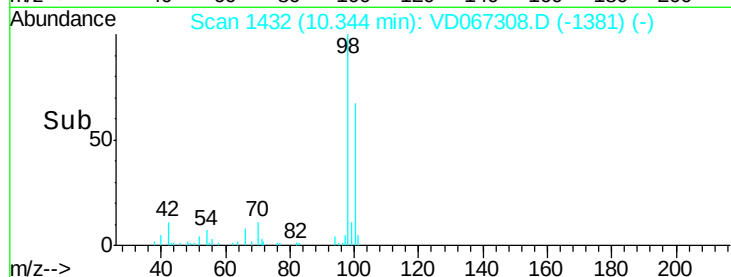
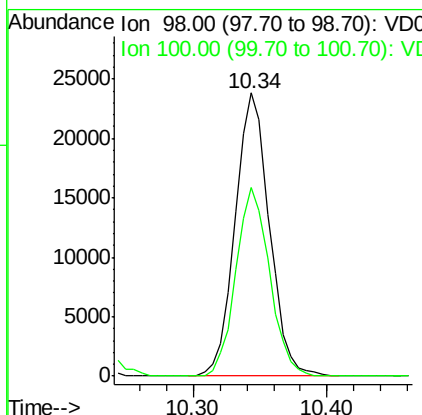
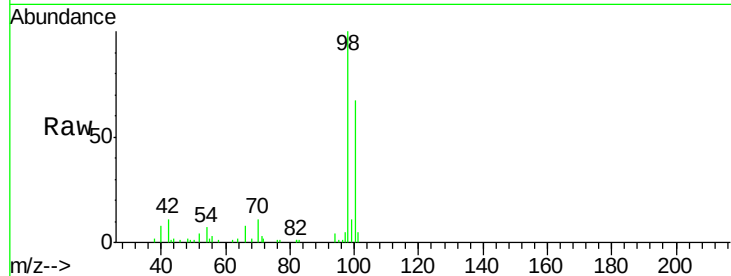




#50  
Toluene-d8  
Concen: 52.944 ug/l  
RT: 10.34 min Scan# 1432  
Delta R.T. 0.00 min  
Lab File: VD067308.D  
Acq: 19 Oct 2020 14:51

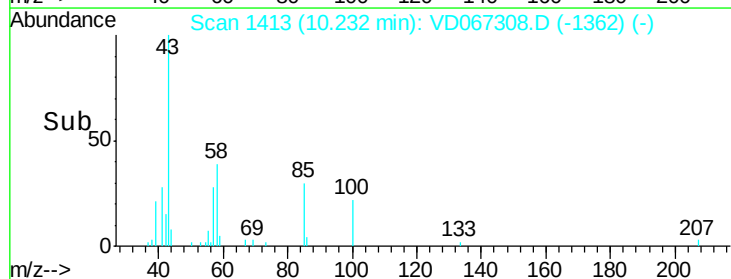
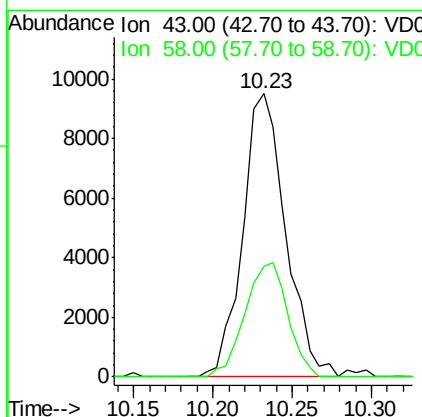
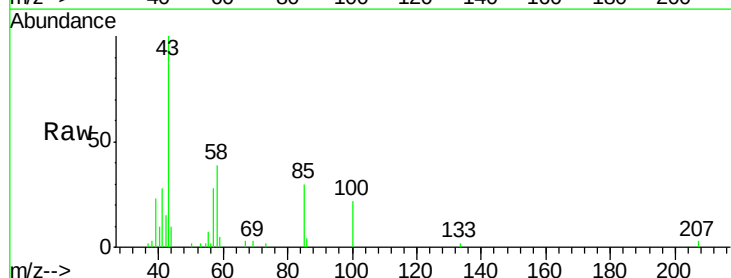
Instrument :  
MSVOA\_D  
ClientSampleId :  
16757-S

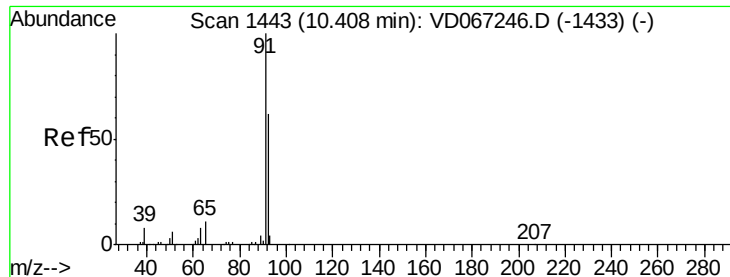
Tot Ion: 98 Resp: 42250  
Ion Ratio Lower Upper  
98 100  
100 65.7 53.1 79.7



#51  
4-Methyl-2-Pentanone  
Concen: 218.009 ug/l  
RT: 10.23 min Scan# 1413  
Delta R.T. 0.00 min  
Lab File: VD067308.D  
Acq: 19 Oct 2020 14:51

Tgt Ion: 43 Resp: 17828  
Ion Ratio Lower Upper  
43 100  
58 40.4 35.7 53.5





#52

Toluene

Concen: 46.160 ug/l

RT: 10.41 min Scan# 1443

Delta R.T. 0.00 min

Lab File: VD067308.D

Acq: 19 Oct 2020 14:51

Instrument :

MSVOA\_D

ClientSampleId :

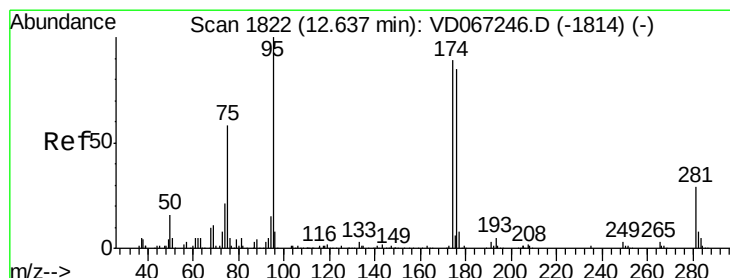
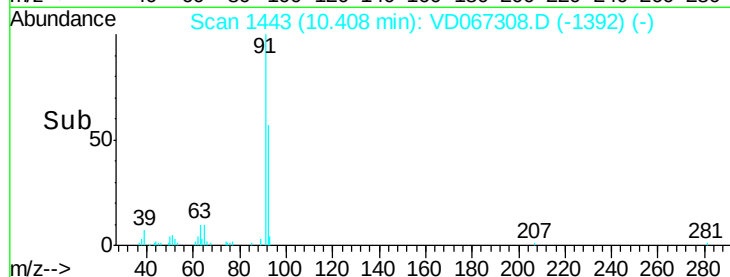
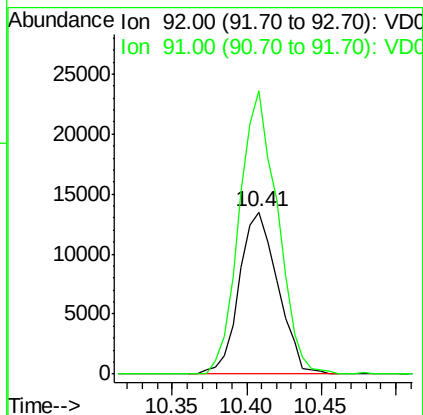
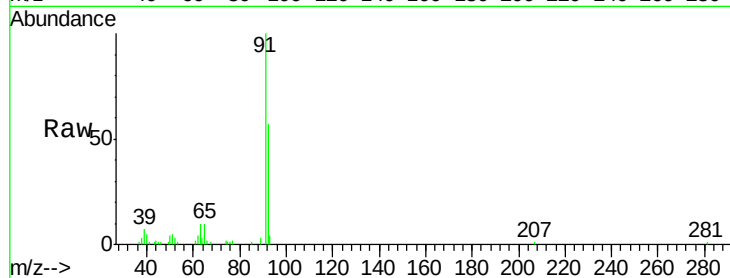
16757-S

Tot Ion: 92 Resp: 24223

Ion Ratio Lower Upper

92 100

91 172.8 133.8 200.8



#62

4-Bromofluorobenzene

Concen: 59.638 ug/l

RT: 12.64 min Scan# 1822

Delta R.T. 0.00 min

Lab File: VD067308.D

Acq: 19 Oct 2020 14:51

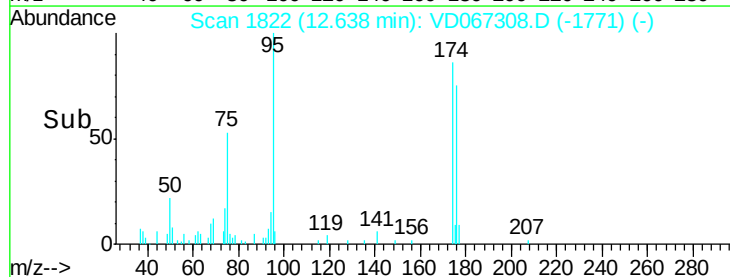
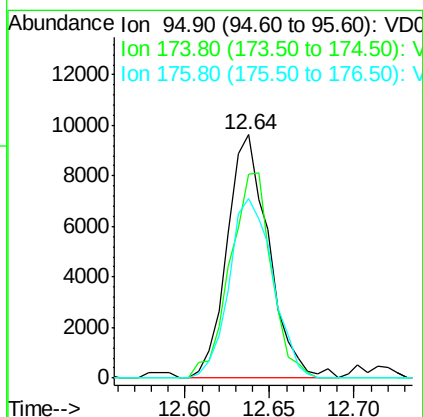
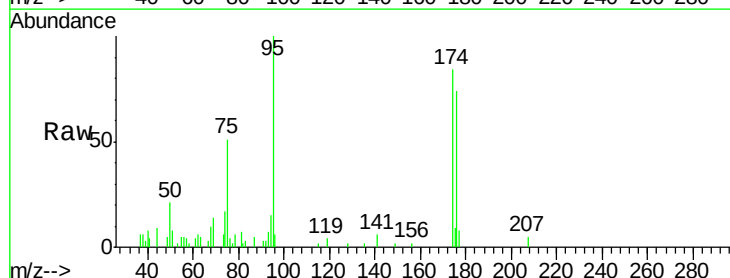
Tgt Ion: 95 Resp: 16549

Ion Ratio Lower Upper

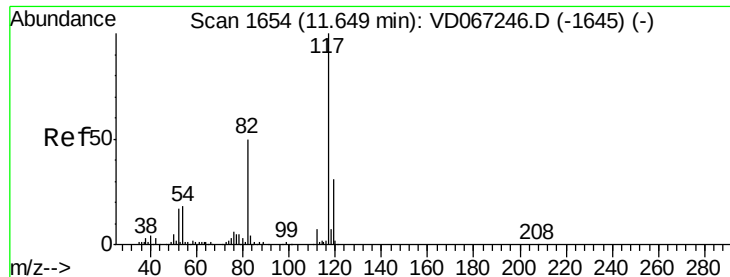
95 100

174 83.9 0.0 175.2

176 77.3 0.0 168.6



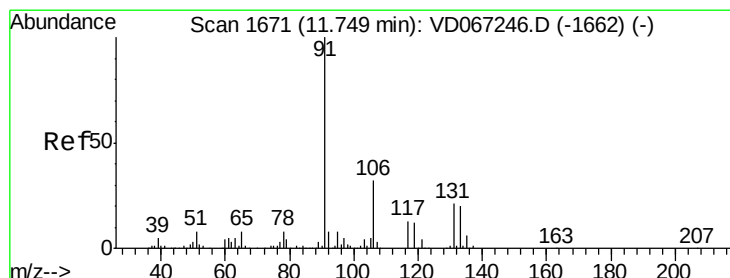
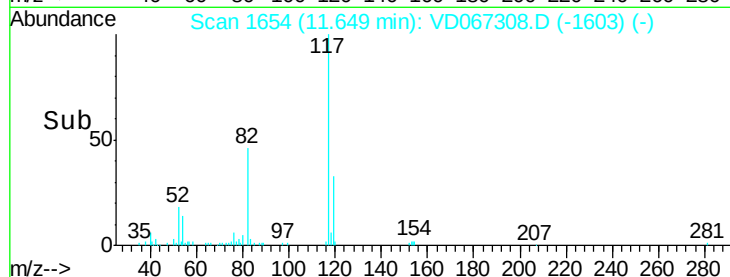
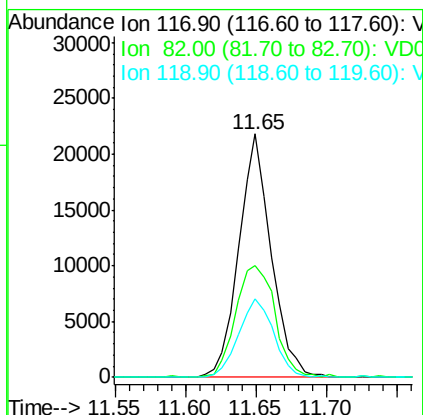
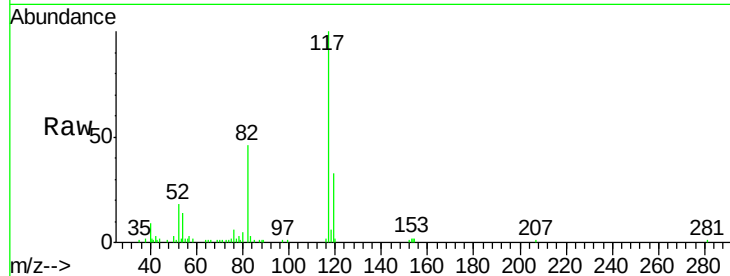




#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.65 min Scan# 1654  
Delta R.T. 0.00 min  
Lab File: VD067308.D  
Acq: 19 Oct 2020 14:51

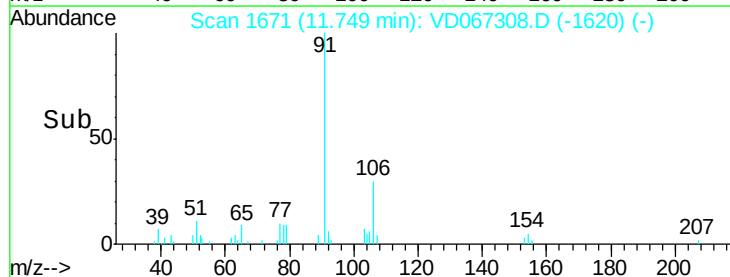
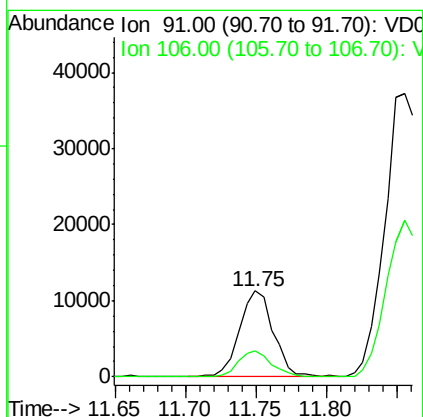
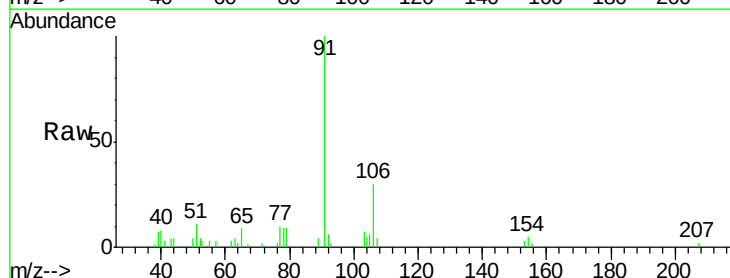
Instrument :  
MSVOA\_D  
ClientSampleId :  
16757-S

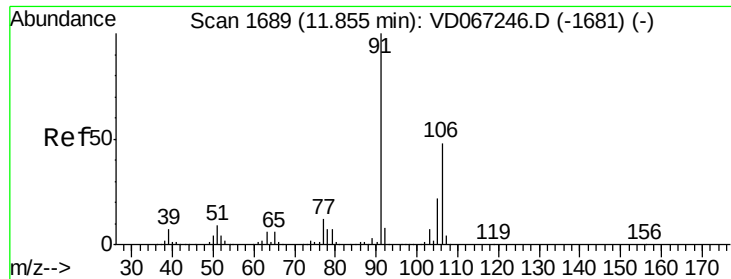
Tot Ion:117 Resp: 34913  
Ion Ratio Lower Upper  
117 100  
82 46.1 39.9 59.9  
119 32.5 24.9 37.3



#67  
Ethyl Benzene  
Concen: 16.595 ug/l  
RT: 11.75 min Scan# 1671  
Delta R.T. 0.00 min  
Lab File: VD067308.D  
Acq: 19 Oct 2020 14:51

Tgt Ion: 91 Resp: 19045  
Ion Ratio Lower Upper  
91 100  
106 29.8 25.4 38.0





#68

m/p-Xylenes

Concen: 83.987 ug/l

RT: 11.86 min Scan# 1689

Delta R.T. 0.00 min

Lab File: VD067308.D

Acq: 19 Oct 2020 14:51

Instrument :

MSVOA\_D

ClientSampleId :

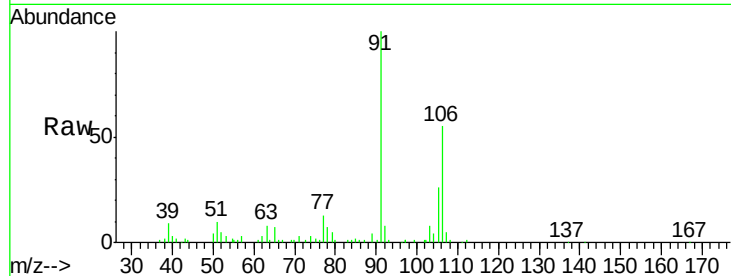
16757-S

Tot Ion:106 Resp: 37117

Ion Ratio Lower Upper

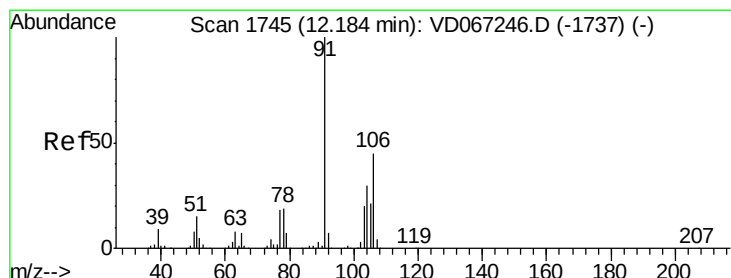
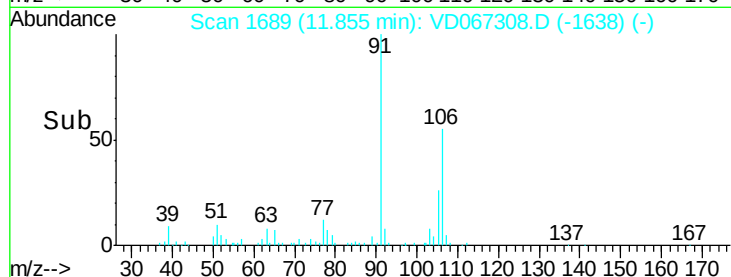
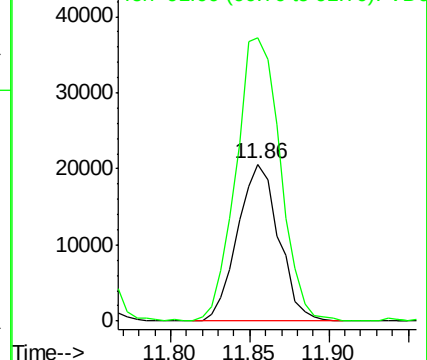
106 100

91 194.4 163.8 245.8



Abundance Ion 106.00 (105.70 to 106.70): V

Ion 91.00 (90.70 to 91.70): VDC



#69

o-Xylene

Concen: 59.012 ug/l

RT: 12.19 min Scan# 1746

Delta R.T. 0.01 min

Lab File: VD067308.D

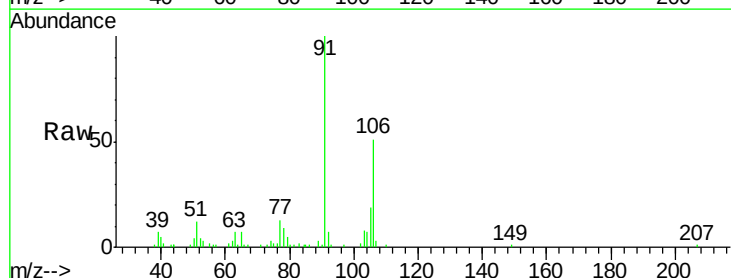
Acq: 19 Oct 2020 14:51

Tgt Ion:106 Resp: 24150

Ion Ratio Lower Upper

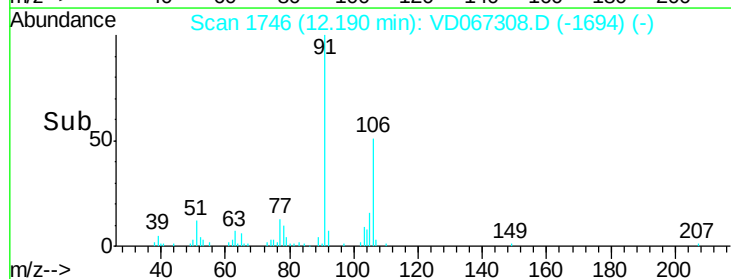
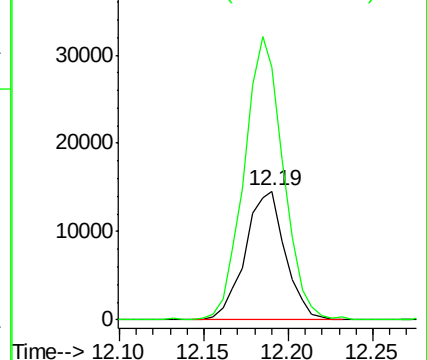
106 100

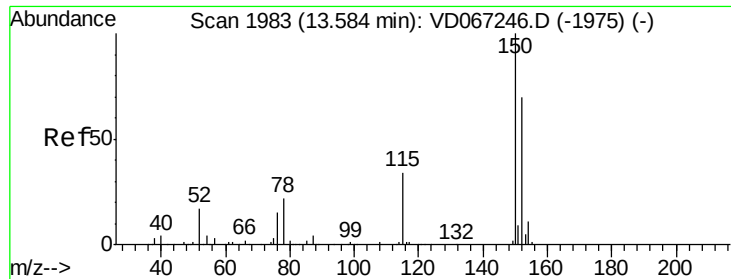
91 214.4 109.1 327.3



Abundance Ion 106.00 (105.70 to 106.70): V

Ion 91.00 (90.70 to 91.70): VDC



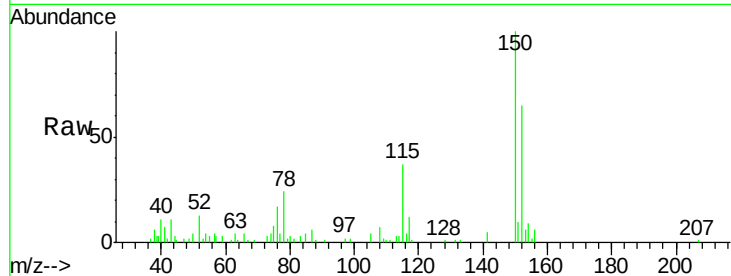


#72

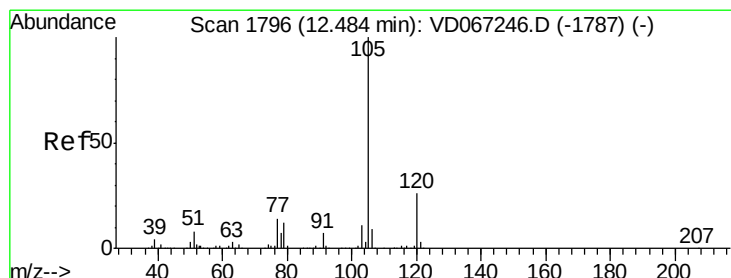
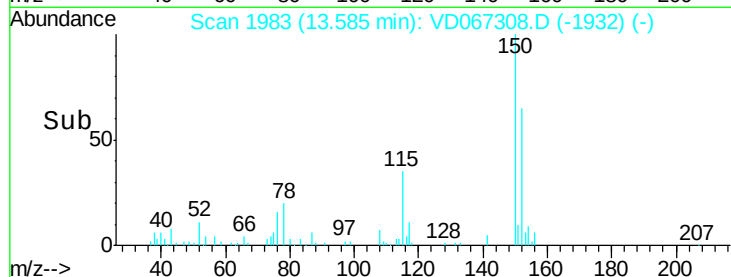
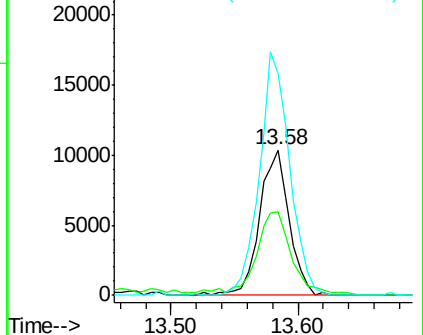
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 13.58 min Scan# 1983  
Delta R.T. 0.00 min  
Lab File: VD067308.D  
Acq: 19 Oct 2020 14:51

Instrument :  
MSVOA\_D  
ClientSampleId :  
16757-S

Tot Ion:152 Resp: 16801  
Ion Ratio Lower Upper  
152 100  
115 71.6 29.3 87.9  
150 171.8 0.0 339.0



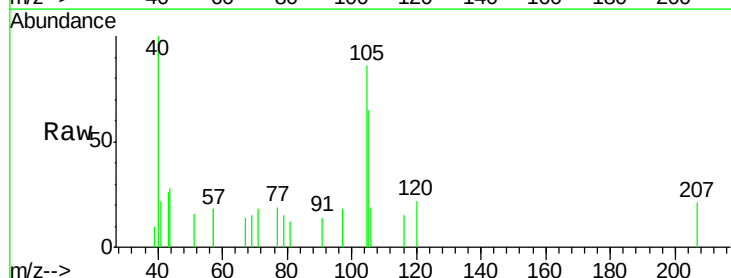
Abundance Ion 151.90 (151.60 to 152.60): V  
Ion 114.90 (114.60 to 115.60): V  
Ion 149.90 (149.60 to 150.60): V



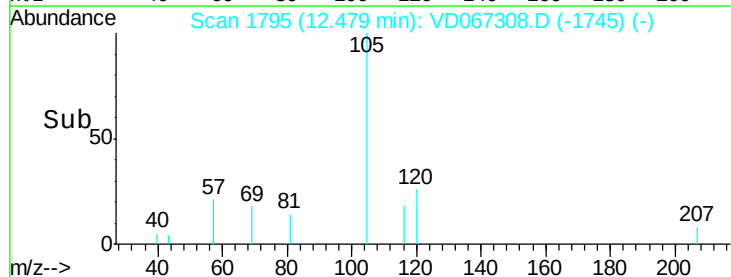
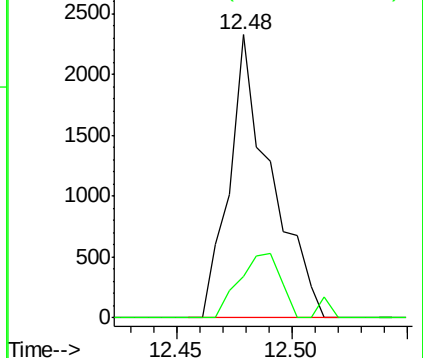
#73

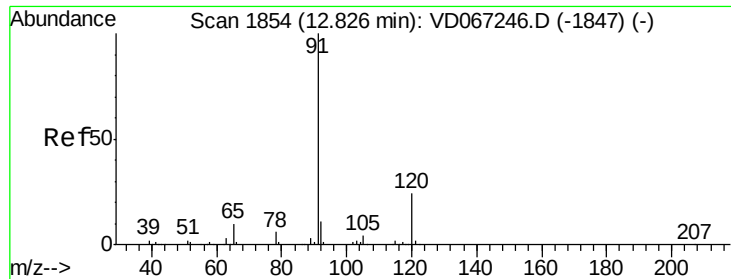
Isopropylbenzene  
Concen: 2.736 ug/l  
RT: 12.48 min Scan# 1795  
Delta R.T. -0.01 min  
Lab File: VD067308.D  
Acq: 19 Oct 2020 14:51

Tgt Ion:105 Resp: 2917  
Ion Ratio Lower Upper  
105 100  
120 22.9 13.3 39.8



Abundance Ion 105.00 (104.70 to 105.70): V  
Ion 120.00 (119.70 to 120.70): V





#78

n-propylbenzene

Concen: 3.617 ug/l

RT: 12.82 min Scan# 1853

Delta R.T. -0.01 min

Lab File: VD067308.D

Acq: 19 Oct 2020 14:51

Instrument :

MSVOA\_D

ClientSampleId :

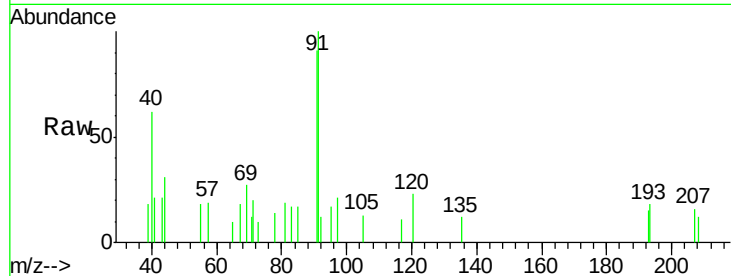
16757-S

Tot Ion: 91 Resp: 4468

Ion Ratio Lower Upper

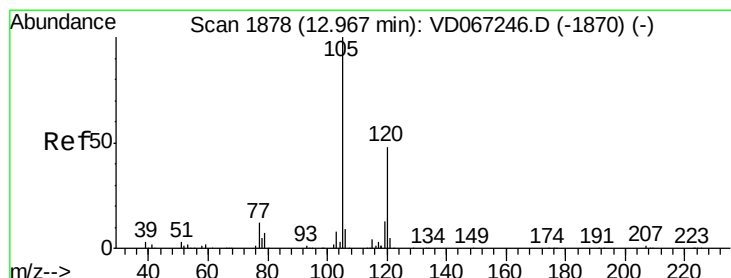
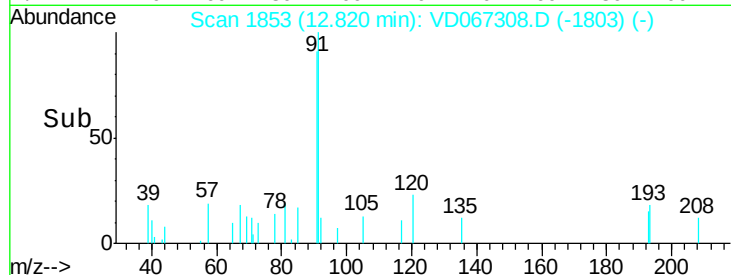
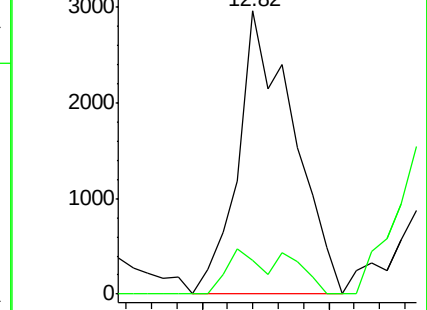
91 100

120 9.8 11.9 35.9#



Abundance Ion 91.00 (90.70 to 91.70): V

Ion 120.00 (119.70 to 120.70): V



#80

1,3,5-Trimethylbenzene

Concen: 7.513 ug/l

RT: 12.96 min Scan# 1877

Delta R.T. -0.01 min

Lab File: VD067308.D

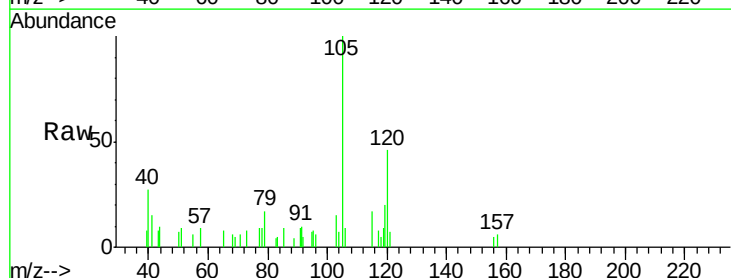
Acq: 19 Oct 2020 14:51

Tgt Ion: 105 Resp: 6962

Ion Ratio Lower Upper

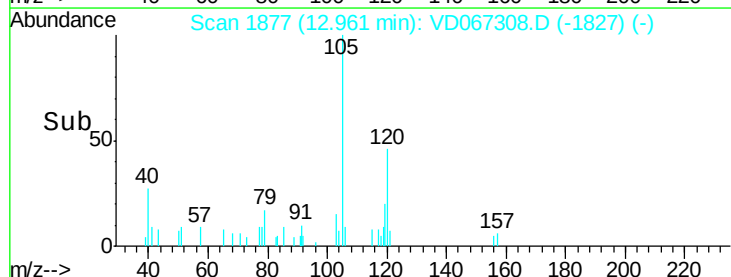
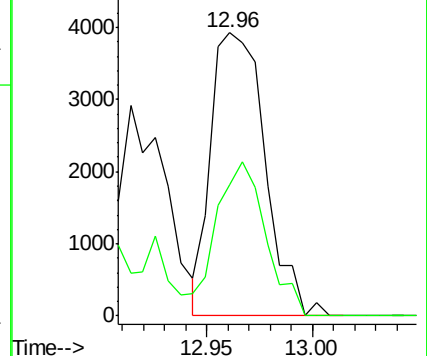
105 100

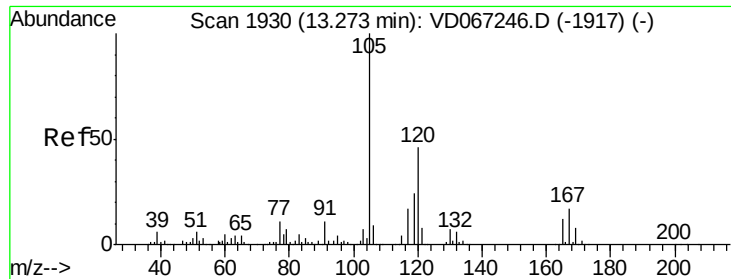
120 50.6 24.3 72.8



Abundance Ion 105.00 (104.70 to 105.70): V

Ion 120.00 (119.70 to 120.70): V





#84

1,2,4-Trimethylbenzene

Concen: 19.436 ug/l

RT: 13.27 min Scan# 1930

Delta R.T. 0.00 min

Lab File: VD067308.D

Acq: 19 Oct 2020 14:51

Instrument :

MSVOA\_D

ClientSampleId :

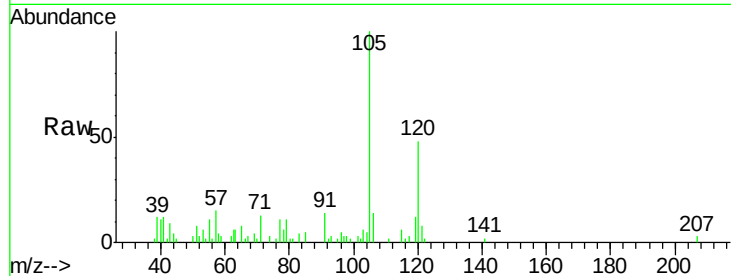
16757-S

Tot Ion:105 Resp: 17800

Ion Ratio Lower Upper

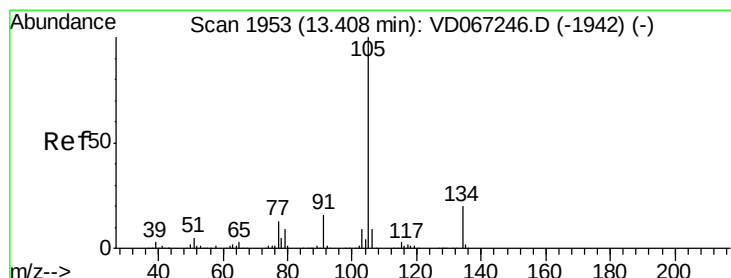
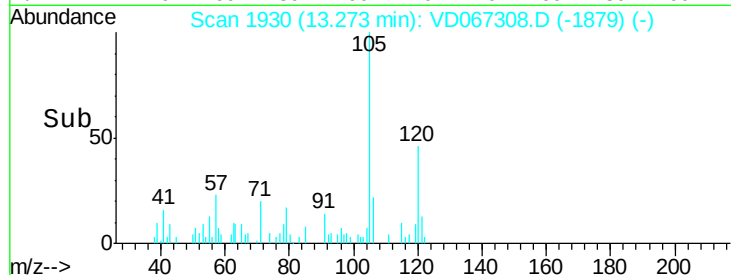
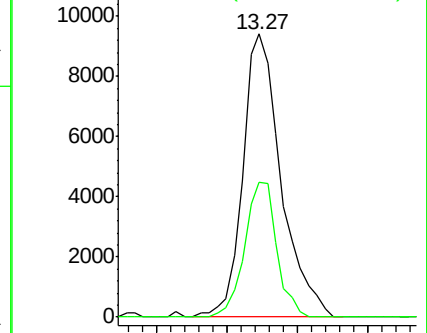
105 100

120 40.1 22.4 67.3



Abundance Ion 105.00 (104.70 to 105.70): V

Ion 120.00 (119.70 to 120.70): V



#85

sec-Butylbenzene

Concen: 1.032 ug/l

RT: 13.41 min Scan# 1954

Delta R.T. 0.01 min

Lab File: VD067308.D

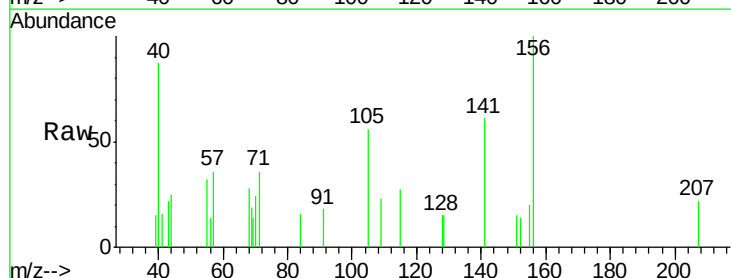
Acq: 19 Oct 2020 14:51

Tgt Ion:105 Resp: 1108

Ion Ratio Lower Upper

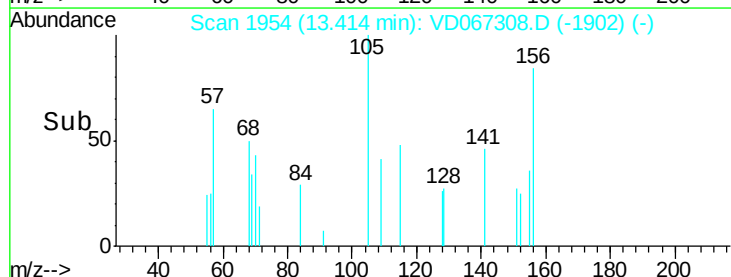
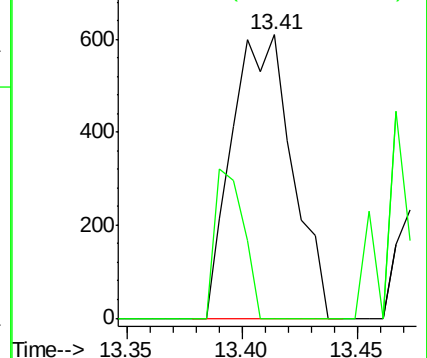
105 100

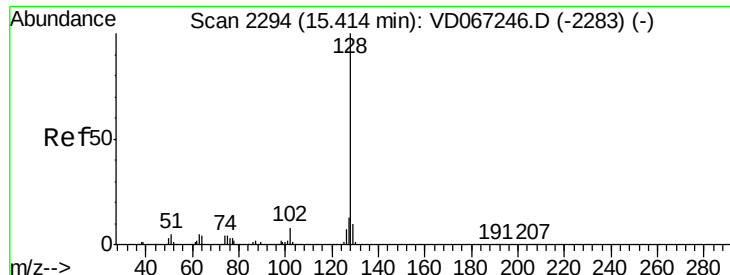
134 0.0 10.5 31.5#



Abundance Ion 105.00 (104.70 to 105.70): V

Ion 134.00 (133.70 to 134.70): V





#95

Naphthalene

Concen: 177.162 ug/l

RT: 15.41 min Scan# 2293

Delta R.T. -0.01 min

Lab File: VD067308.D

Acq: 19 Oct 2020 14:51

Instrument :

MSVOA\_D

ClientSampleId :

16757-S

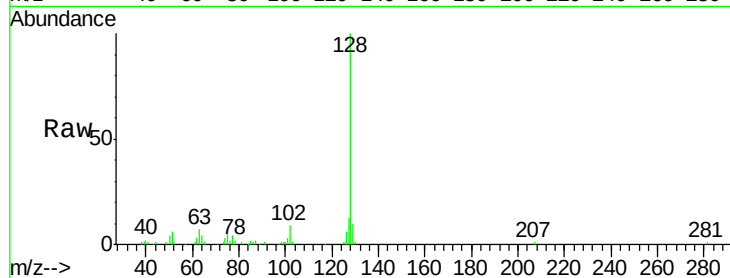
Tot Ion:128 Resp: 87662

Ion Ratio Lower Upper

128 100

127 13.3 10.4 15.6

129 10.9 8.6 12.8



Abundance Ion 128.00 (127.70 to 128.70): V

Ion 127.00 (126.70 to 127.70): V

Ion 129.00 (128.70 to 129.70): V

