

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_D\DATA\VD110918\  
 Data File : VD060315.D  
 Acq On : 9 Nov 2018 16:37  
 Operator : VA/AP  
 Sample : J5269-17  
 Misc : 5.41g/5ml/MSVOA\_D/SOIL  
 ALS Vial : 9 Sample Multiplier: 1

Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 SB-13-D

Quant Time: Nov 12 01:35:36 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_D\METHOD\82D110618S.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Nov 06 13:56:04 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 6.40  | 168  | 544267   | 50.00 | ug/l  | -0.02    |
| 34) 1,4-Difluorobenzene    | 7.44  | 114  | 811488   | 50.00 | ug/l  | -0.02    |
| 63) Chlorobenzene-d5       | 11.28 | 117  | 756782   | 50.00 | ug/l  | -0.01    |
| 72) 1,4-Dichlorobenzene-d4 | 13.37 | 152  | 418702   | 50.00 | ug/l  | -0.01    |

|                             |        |     |          |       |         |       |
|-----------------------------|--------|-----|----------|-------|---------|-------|
| System Monitoring Compounds |        |     |          |       |         |       |
| 33) 1,2-Dichloroethane-d4   | 6.79   | 65  | 338574   | 86.88 | ug/l    | -0.01 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 173.76% |       |
| 35) Dibromofluoromethane    | 6.32   | 113 | 375163   | 62.00 | ug/l    | -0.01 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 124.00% |       |
| 50) Toluene-d8              | 9.45   | 98  | 959097   | 54.16 | ug/l    | -0.01 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 108.32% |       |
| 62) 4-Bromofluorobenzene    | 12.43  | 95  | 393947   | 61.39 | ug/l    | -0.01 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 122.78% |       |

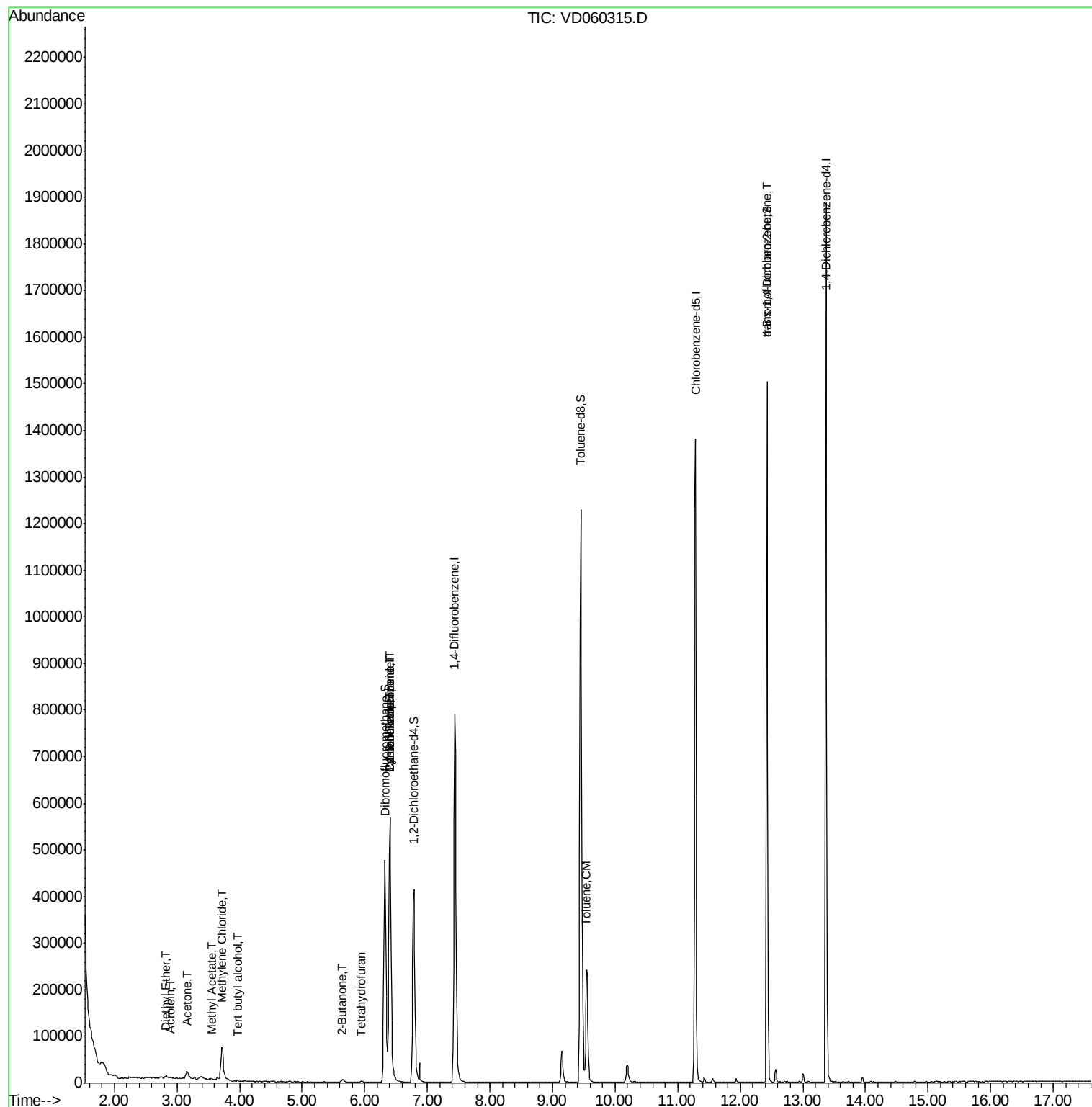
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 8) Diethyl Ether               | 2.82  | 74   | 1537     | 1.710     | ug/l   | 95     |
| 11) Tert butyl alcohol         | 3.96  | 59   | 1145     | 7.155     | ug/l # | 70     |
| 13) Acrolein                   | 2.88  | 56   | 195      | 1.031     | ug/l # | 14     |
| 16) Acetone                    | 3.16  | 43   | 36529    | 54.038    | ug/l   | 94     |
| 18) Methyl Acetate             | 3.55  | 43   | 6835     | 4.742     | ug/l # | 63     |
| 20) Methylene Chloride         | 3.72  | 84   | 47893    | 7.987     | ug/l   | 96     |
| 25) 2-Butanone                 | 5.64  | 43   | 1889     | 1.344     | ug/l # | 60     |
| 29) Tetrahydrofuran            | 5.96  | 42   | 2121     | 2.863     | ug/l # | 59     |
| 31) Cyclohexane                | 6.40  | 56   | 9820     | 1.055     | ug/l # | 1      |
| 36) 1,1-Dichloropropene        | 6.40  | 75   | 39833    | 4.968     | ug/l # | 46     |
| 38) Carbon Tetrachloride       | 6.40  | 117  | 42996    | 5.781     | ug/l # | 15     |
| 52) Toluene                    | 9.54  | 92   | 127921   | 9.786     | ug/l   | 100    |
| 81) trans-1,4-Dichloro-2-buten | 12.43 | 75   | 166477   | 116.748   | ug/l # | 15     |
| 89) n-Butylbenzene             | 13.65 | 91   | 425      | Below Cal | #      | 74     |

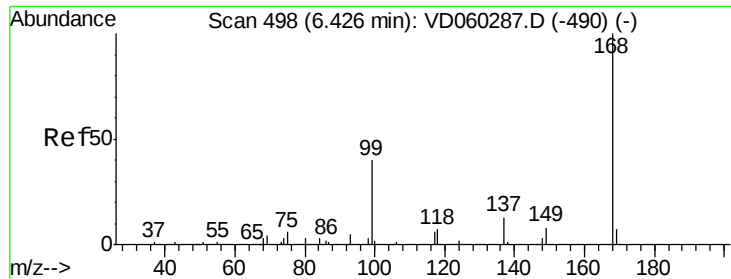
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA\_D\DATA\VD110918\  
Data File : VD060315.D  
Acq On : 9 Nov 2018 16:37  
Operator : VA/AP  
Sample : J5269-17  
Misc : 5.41g/5ml/MSVOA\_D/SOIL  
ALS Vial : 9 Sample Multiplier: 1

Instrument :  
MSVOA\_D  
ClientSampleId :  
SB-13-D

Quant Time: Nov 12 01:35:36 2018  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_D\METHOD\82D110618S.M  
Quant Title : SW846 8260  
QLast Update : Tue Nov 06 13:56:04 2018  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 6.40 min Scan# 496

Delta R.T. -0.02 min

Lab File: VD060315.D

Acq: 9 Nov 2018 16:37

Instrument :

MSVOA\_D

ClientSampleID :

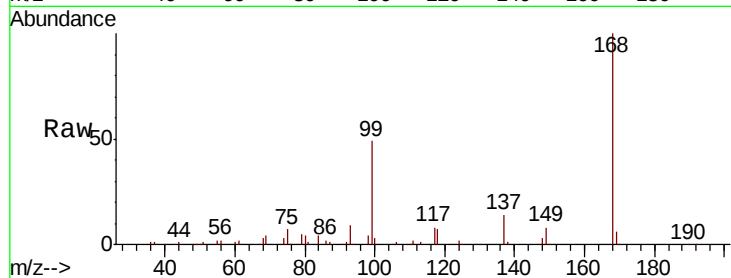
SB-13-D

Tgt Ion:168 Resp: 544267

Ion Ratio Lower Upper

168 100

99 48.9 39.8 59.8



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.95 (98.65 to 99.65): VDC

6.40

250000

200000

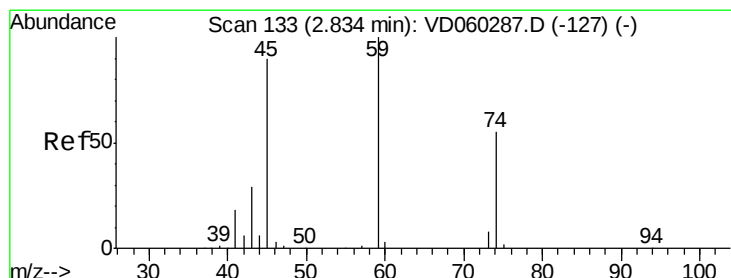
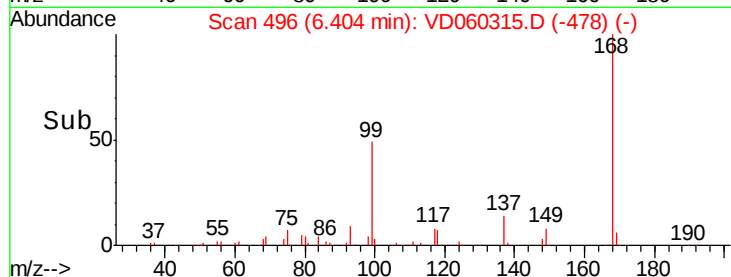
150000

100000

50000

0

Time-->



#8

Diethyl Ether

Concen: 1.710 ug/l

RT: 2.82 min Scan# 132

Delta R.T. -0.01 min

Lab File: VD060315.D

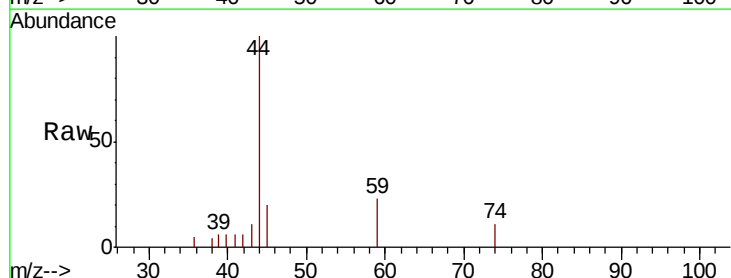
Acq: 9 Nov 2018 16:37

Tgt Ion: 74 Resp: 1537

Ion Ratio Lower Upper

74 100

45 177.1 84.8 254.4



Abundance Ion 74.00 (73.70 to 74.70): VDC

Ion 45.05 (44.75 to 45.75): VDC

2000

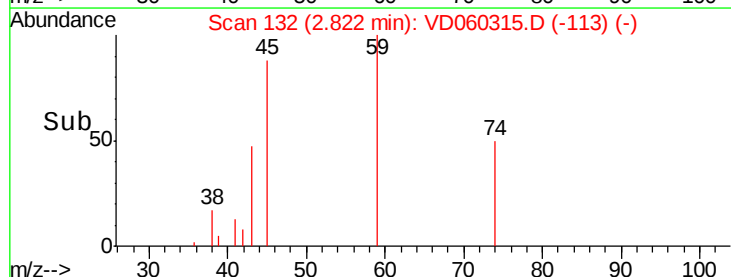
1500

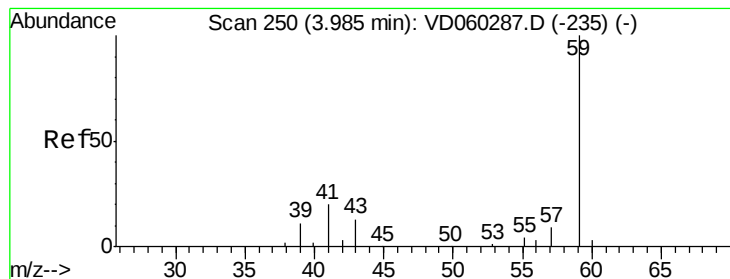
1000

500

0

Time-->





#11

Tert butyl alcohol

Concen: 7.155 ug/l

RT: 3.96 min Scan# 248

Delta R.T. -0.02 min

Lab File: VD060315.D

Acq: 9 Nov 2018 16:37

Instrument :

MSVOA\_D

ClientSampleId :

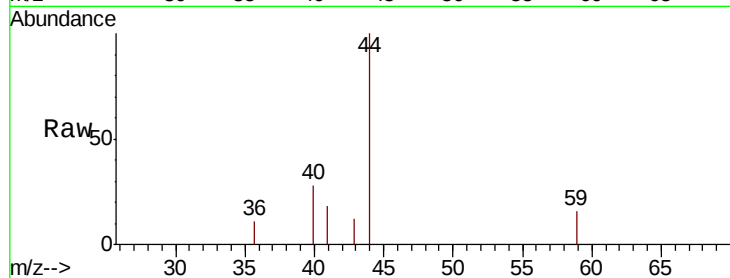
SB-13-D

Tgt Ion: 59 Resp: 1145

Ion Ratio Lower Upper

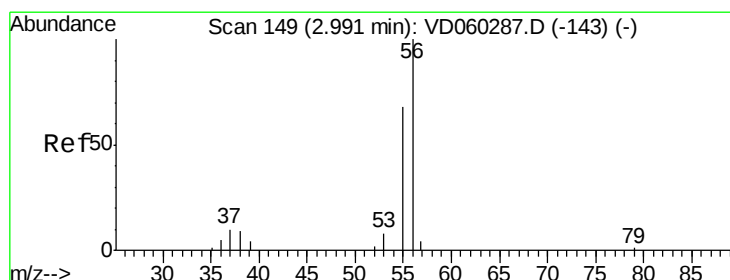
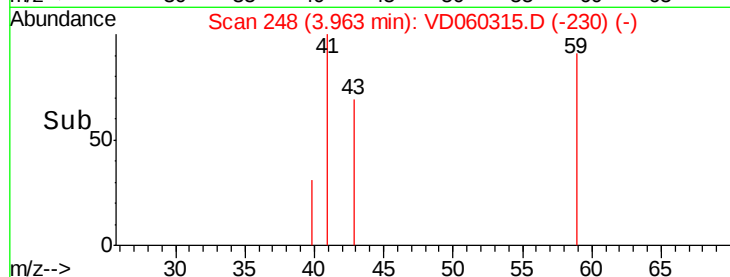
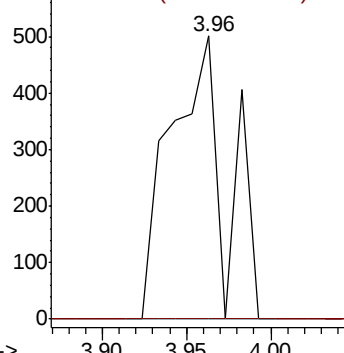
59 100

57 0.0 9.3 13.9#



Abundance Ion 58.95 (58.65 to 59.65): VDC

Ion 56.95 (56.65 to 57.65): VDC



#13

Acrolein

Concen: 1.031 ug/l

RT: 2.88 min Scan# 138

Delta R.T. -0.11 min

Lab File: VD060315.D

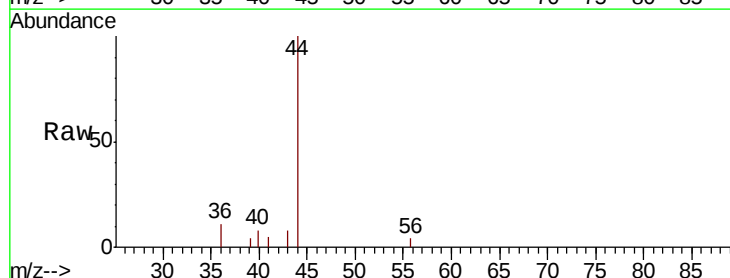
Acq: 9 Nov 2018 16:37

Tgt Ion: 56 Resp: 195

Ion Ratio Lower Upper

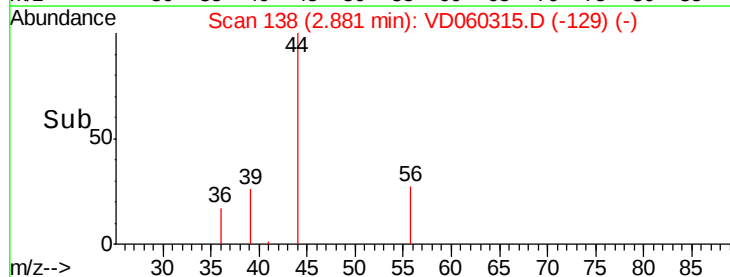
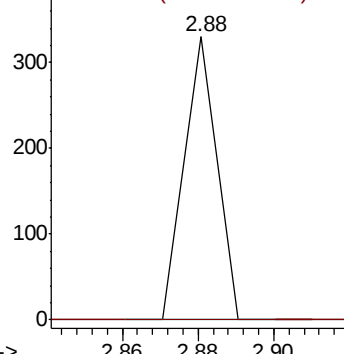
56 100

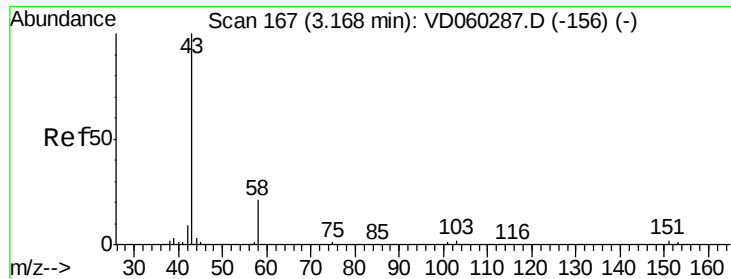
55 0.0 57.0 85.6#



Abundance Ion 55.95 (55.65 to 56.65): VDC

Ion 55.00 (54.70 to 55.70): VDC





#16

Acetone

Concen: 54.038 ug/l

RT: 3.16 min Scan# 166

Delta R.T. -0.01 min

Lab File: VD060315.D

Acq: 9 Nov 2018 16:37

Instrument :

MSVOA\_D

ClientSampleId :

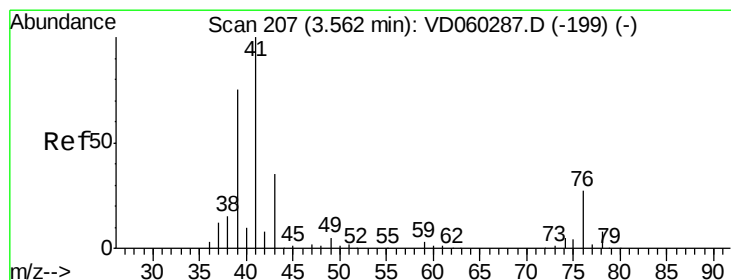
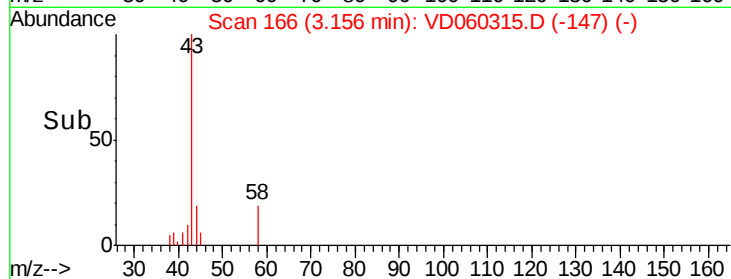
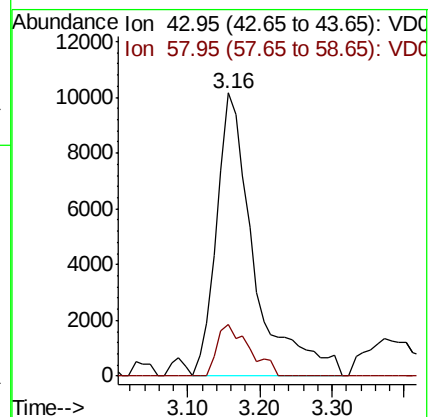
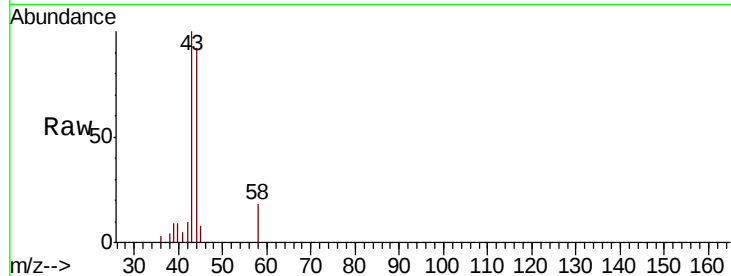
SB-13-D

Tgt Ion: 43 Resp: 36529

Ion Ratio Lower Upper

43 100

58 18.3 16.9 25.3



#18

Methyl Acetate

Concen: 4.742 ug/l

RT: 3.55 min Scan# 206

Delta R.T. -0.01 min

Lab File: VD060315.D

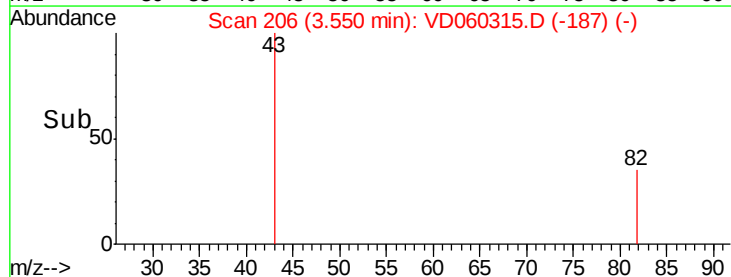
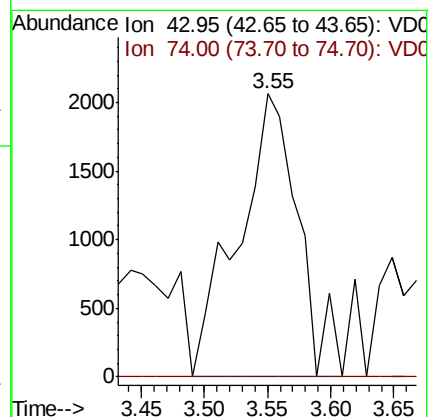
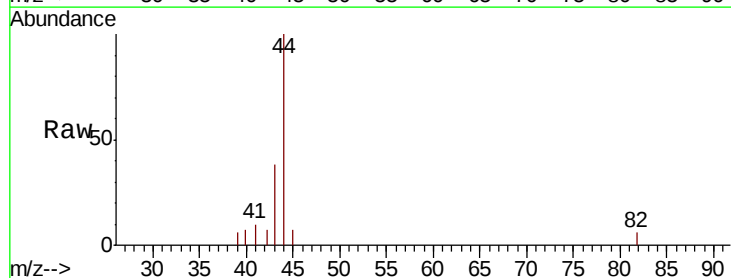
Acq: 9 Nov 2018 16:37

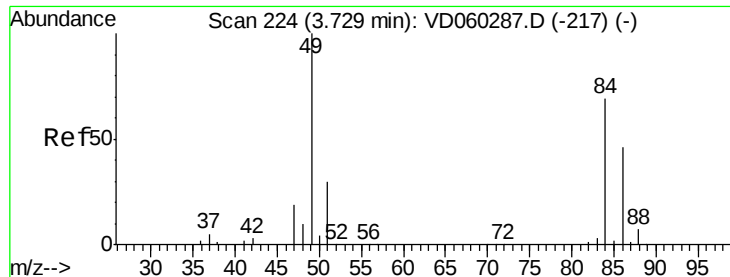
Tgt Ion: 43 Resp: 6835

Ion Ratio Lower Upper

43 100

74 0.0 12.4 18.6#

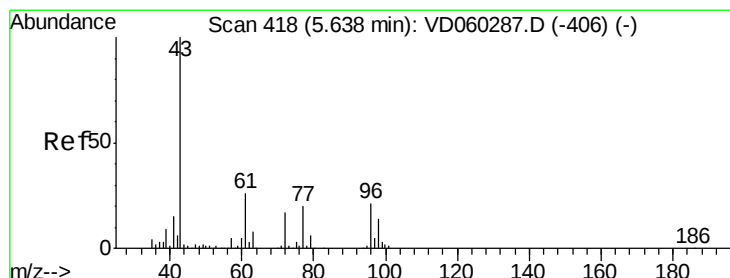
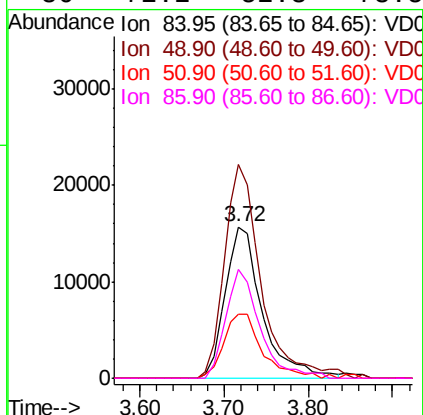
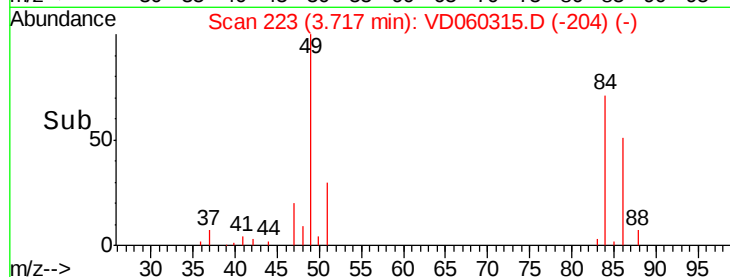
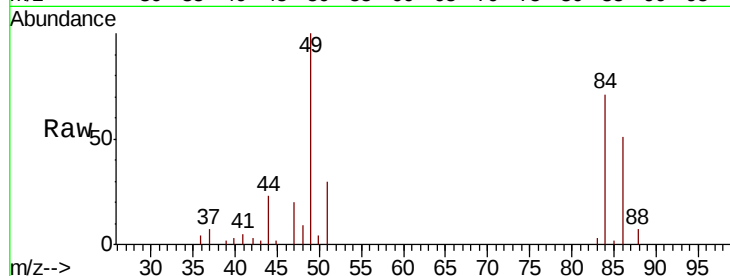




#20  
Methylene Chloride  
Concen: 7.987 ug/l  
RT: 3.72 min Scan# 223  
Delta R.T. -0.01 min  
Lab File: VD060315.D  
Acq: 9 Nov 2018 16:37

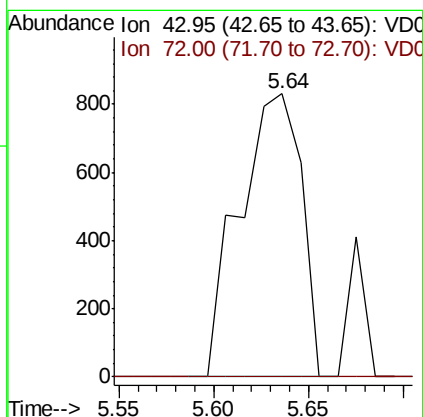
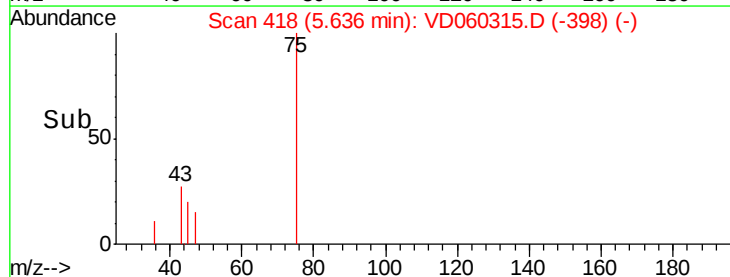
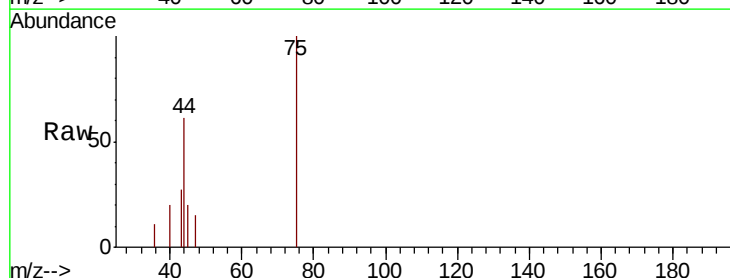
Instrument :  
MSVOA\_D  
ClientSampleId :  
SB-13-D

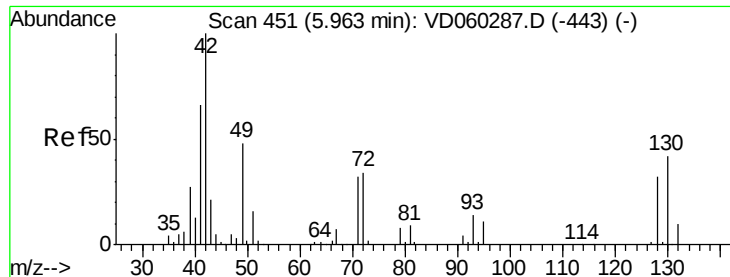
Tgt Ion: 84 Resp: 47893  
Ion Ratio Lower Upper  
84 100  
49 141.1 115.6 173.4  
51 42.3 35.6 53.4  
86 72.2 52.3 78.5



#25  
2-Butanone  
Concen: 1.344 ug/l  
RT: 5.64 min Scan# 418  
Delta R.T. -0.00 min  
Lab File: VD060315.D  
Acq: 9 Nov 2018 16:37

Tgt Ion: 43 Resp: 1889  
Ion Ratio Lower Upper  
43 100  
72 0.0 13.8 20.8#





#29

Tetrahydrofuran

Concen: 2.863 ug/l

RT: 5.96 min Scan# 451

Delta R.T. -0.00 min

Lab File: VD060315.D

Acq: 9 Nov 2018 16:37

Instrument :

MSVOA\_D

ClientSampled :

SB-13-D

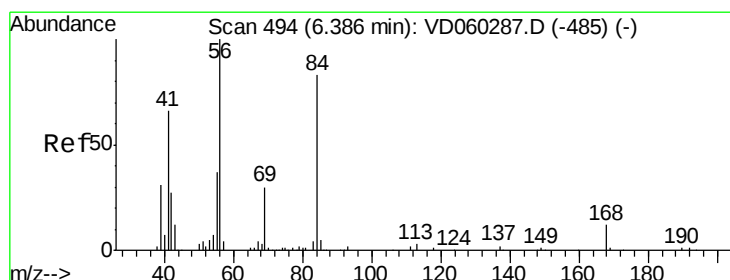
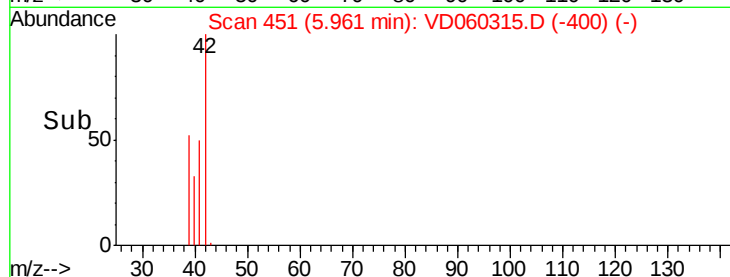
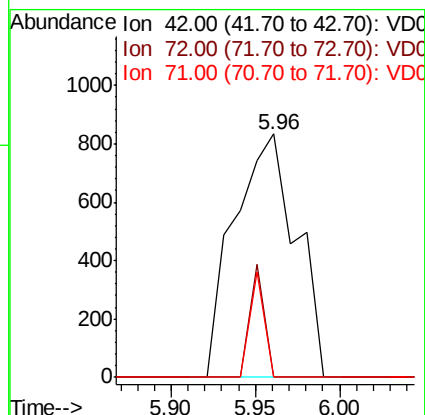
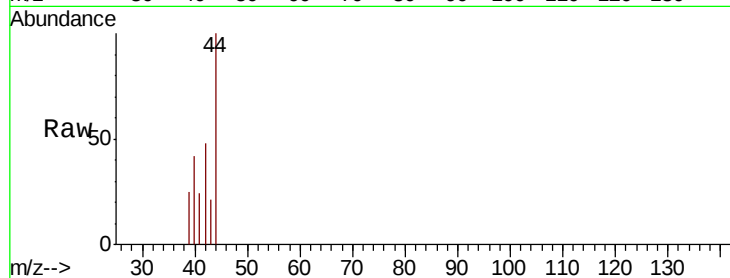
Tgt Ion: 42 Resp: 2121

Ion Ratio Lower Upper

42 100

72 10.8 27.6 41.4#

71 10.0 26.5 39.7#



#31

Cyclohexane

Concen: 1.055 ug/l

RT: 6.40 min Scan# 496

Delta R.T. 0.02 min

Lab File: VD060315.D

Acq: 9 Nov 2018 16:37

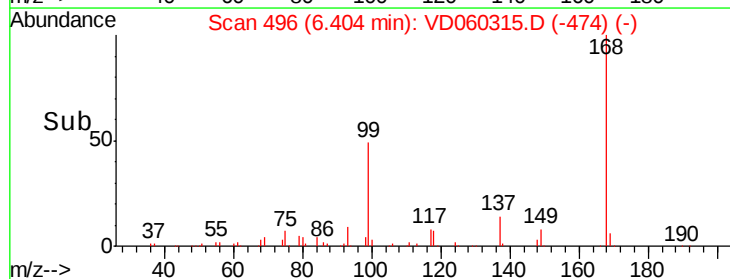
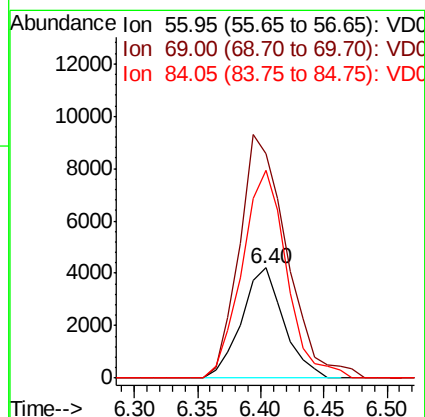
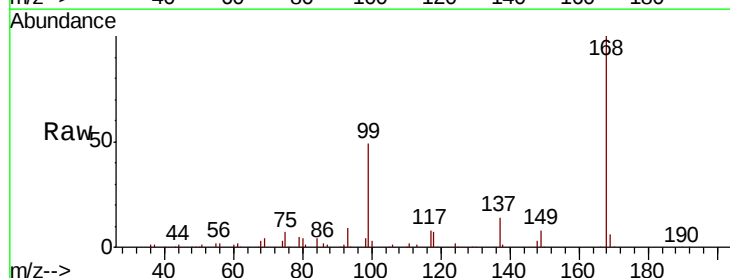
Tgt Ion: 56 Resp: 9820

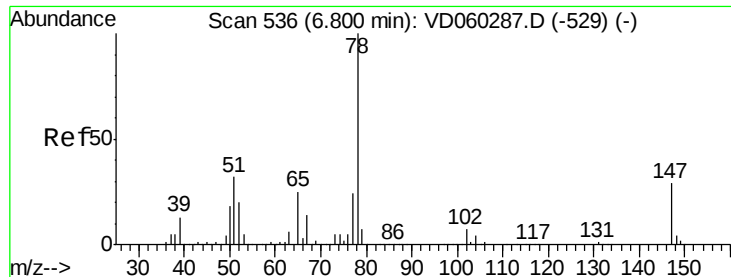
Ion Ratio Lower Upper

56 100

69 203.7 22.2 33.2#

84 188.0 63.0 94.4#





#33

1,2-Dichloroethane-d4

Concen: N.D. ug/l

RT: 6.79 min Scan# 535

Delta R.T. -0.01 min

Lab File: VD060315.D

Acq: 9 Nov 2018 16:37

Instrument :

MSVOA\_D

ClientSampleId :

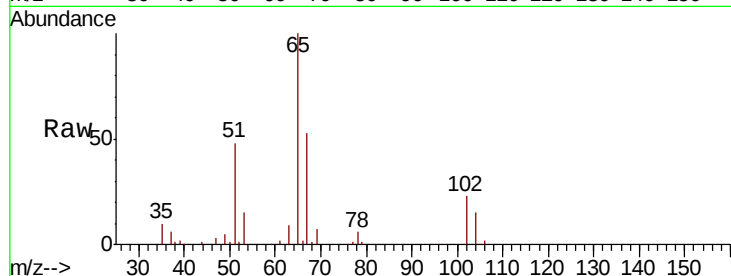
SB-13-D

Tgt Ion: 65 Resp: 338574

Ion Ratio Lower Upper

65 100

67 53.0 0.0 109.8



Abundance Ion 64.95 (64.65 to 65.65): VDC

Ion 66.90 (66.60 to 67.60): VDC

6.79

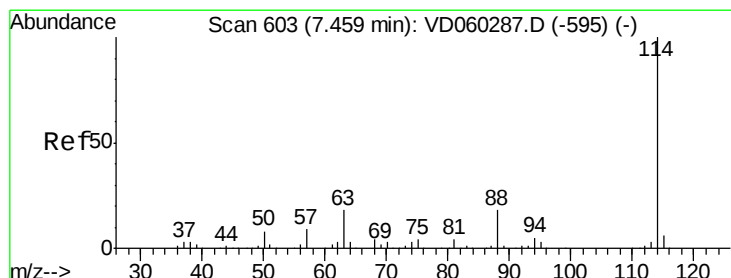
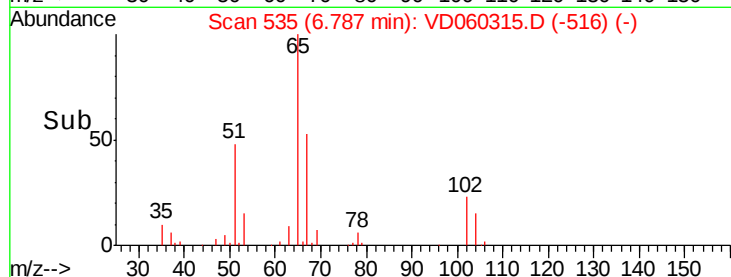
150000

100000

50000

0

Time-->



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 7.44 min Scan# 601

Delta R.T. -0.02 min

Lab File: VD060315.D

Acq: 9 Nov 2018 16:37

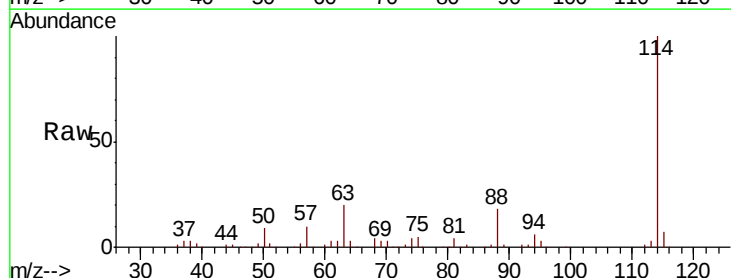
Tgt Ion: 114 Resp: 811488

Ion Ratio Lower Upper

114 100

63 19.7 0.0 34.0

88 18.0 0.0 35.4



Abundance Ion 114.00 (113.70 to 114.70): VDC

Ion 62.95 (62.65 to 63.65): VDC

Ion 87.90 (87.60 to 88.60): VDC

7.44

400000

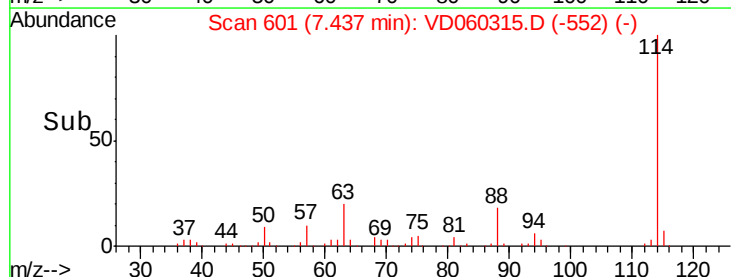
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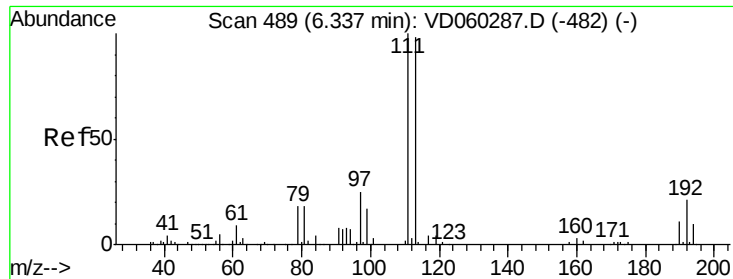
200000

100000

0

Time-->

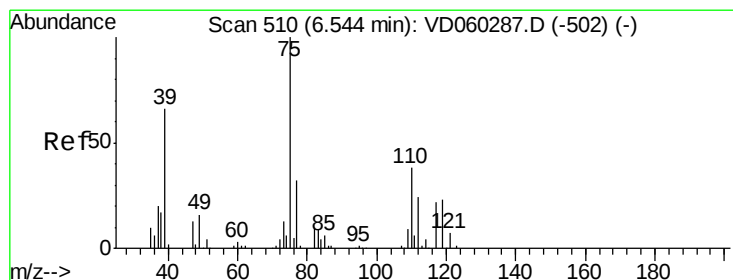
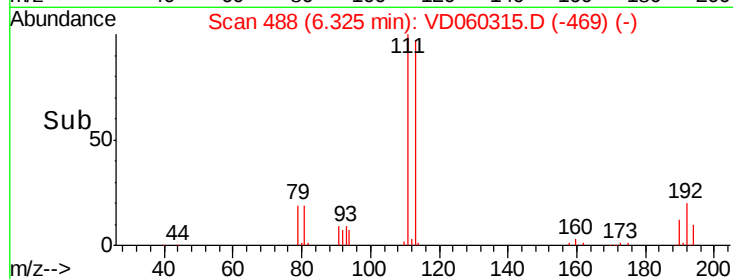
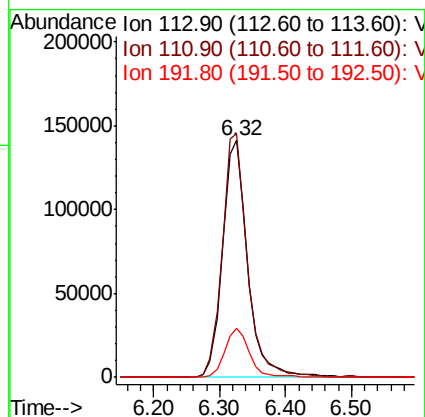
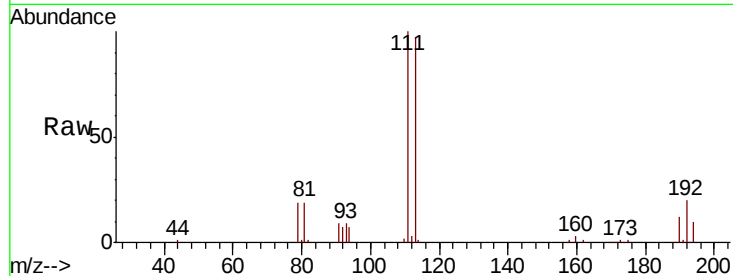




#35  
 Dibromofluoromethane  
 Concen: 50.000 ug/l  
 RT: 6.32 min Scan# 488  
 Delta R.T. -0.01 min  
 Lab File: VD060315.D  
 Acq: 9 Nov 2018 16:37

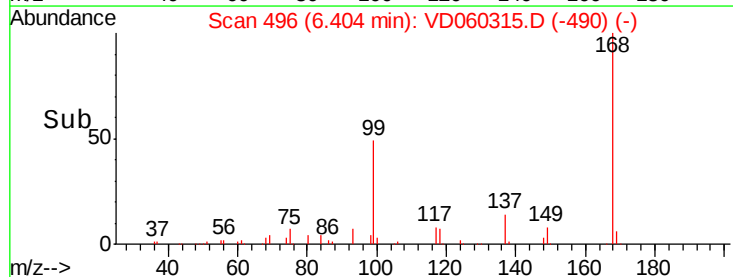
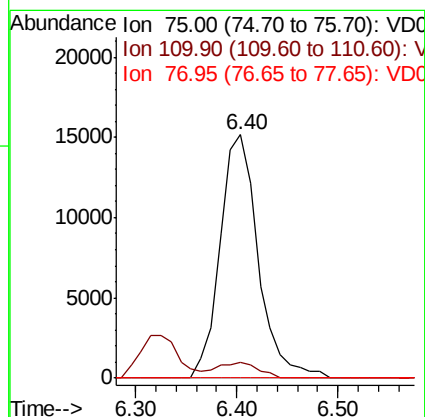
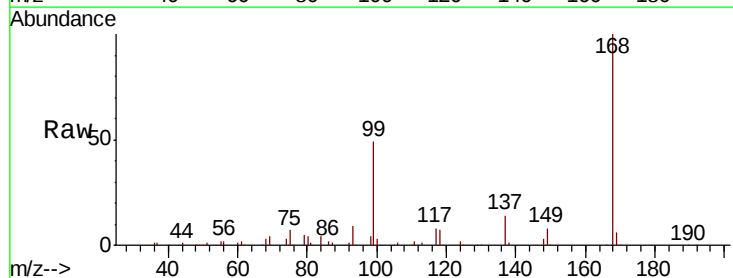
Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 SB-13-D

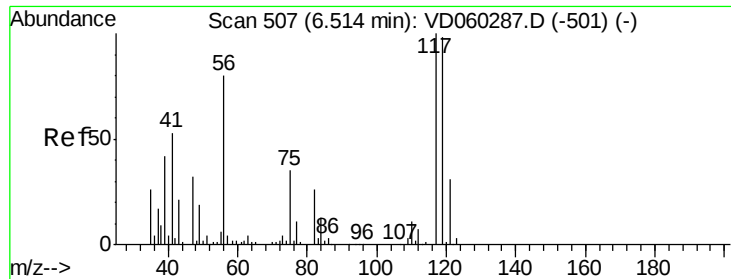
Tgt Ion: 113 Resp: 375163  
 Ion Ratio Lower Upper  
 113 100  
 111 102.8 81.6 122.4  
 192 20.6 16.5 24.7



#36  
 1,1-Dichloropropene  
 Concen: 4.968 ug/l  
 RT: 6.40 min Scan# 496  
 Delta R.T. -0.14 min  
 Lab File: VD060315.D  
 Acq: 9 Nov 2018 16:37

Tgt Ion: 75 Resp: 39833  
 Ion Ratio Lower Upper  
 75 100  
 110 6.4 18.0 54.0#  
 77 0.0 25.6 38.4#

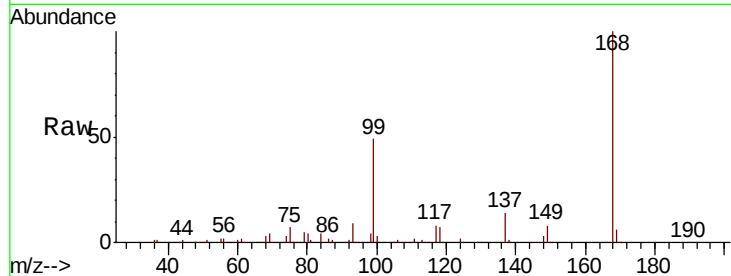




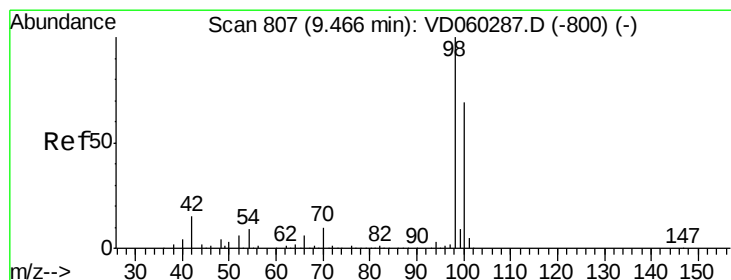
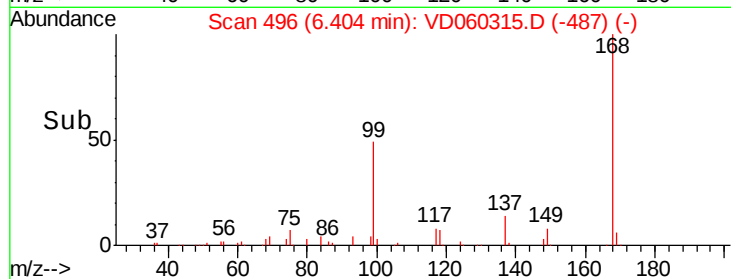
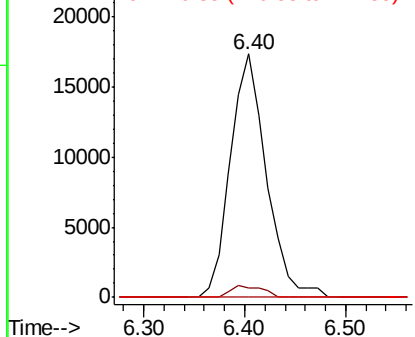
#38  
Carbon Tetrachloride  
Concen: 5.781 ug/l  
RT: 6.40 min Scan# 496  
Delta R.T. -0.11 min  
Lab File: VD060315.D  
Acq: 9 Nov 2018 16:37

Instrument :  
MSVOA\_D  
ClientSampleId :  
SB-13-D

Tgt Ion:117 Resp: 42996  
Ion Ratio Lower Upper  
117 100  
119 4.0 76.6 115.0#  
121 0.0 24.3 36.5#

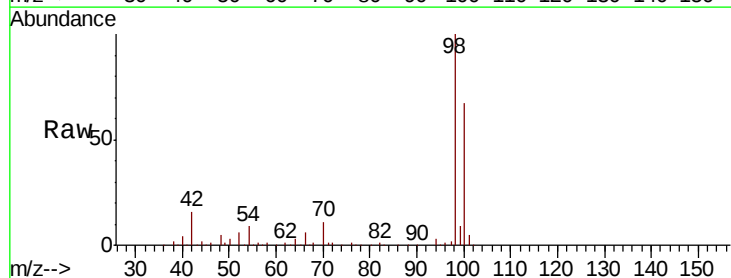


Abundance Ion 116.85 (116.55 to 117.55): V  
Ion 118.85 (118.55 to 119.55): V  
Ion 120.85 (120.55 to 121.55): V

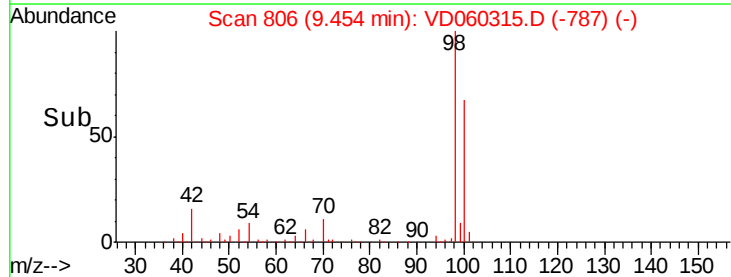
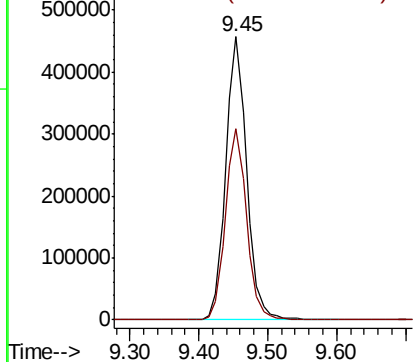


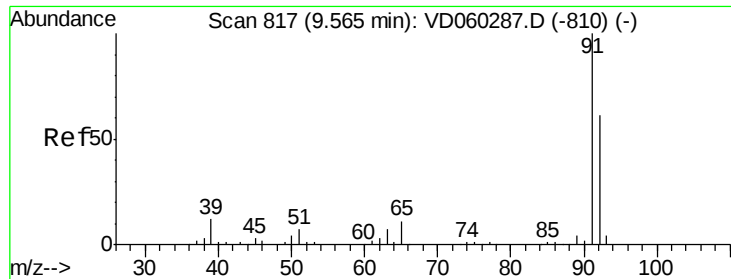
#50  
Toluene-d8  
Concen: N.D. ug/l  
RT: 9.45 min Scan# 806  
Delta R.T. -0.01 min  
Lab File: VD060315.D  
Acq: 9 Nov 2018 16:37

Tgt Ion: 98 Resp: 959097  
Ion Ratio Lower Upper  
98 100  
100 67.4 55.2 82.8



Abundance Ion 98.05 (97.75 to 98.75): V  
Ion 100.05 (99.75 to 100.75): V





#52

Toluene

Concen: 9.786 ug/l

RT: 9.54 min Scan# 815

Delta R.T. -0.02 min

Lab File: VD060315.D

Acq: 9 Nov 2018 16:37

Instrument :

MSVOA\_D

ClientSampleId :

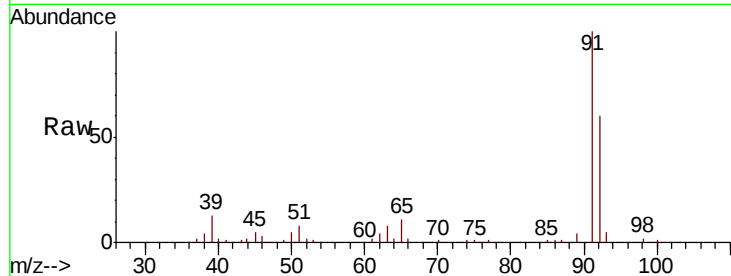
SB-13-D

Tgt Ion: 92 Resp: 127921

Ion Ratio Lower Upper

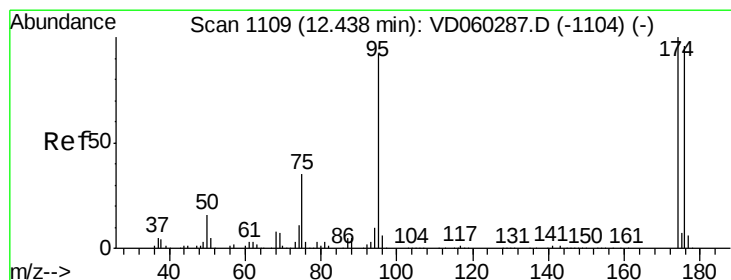
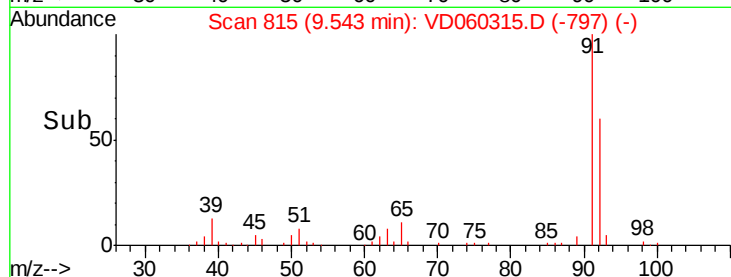
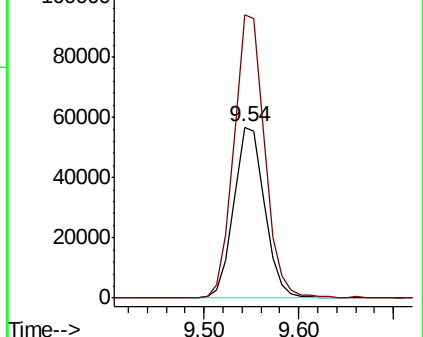
92 100

91 165.4 131.9 197.9



Abundance Ion 92.00 (91.70 to 92.70): VDC

Ion 91.00 (90.70 to 91.70): VDC



#62

4-Bromofluorobenzene

Concen: N.D. ug/l

RT: 12.43 min Scan# 1108

Delta R.T. -0.01 min

Lab File: VD060315.D

Acq: 9 Nov 2018 16:37

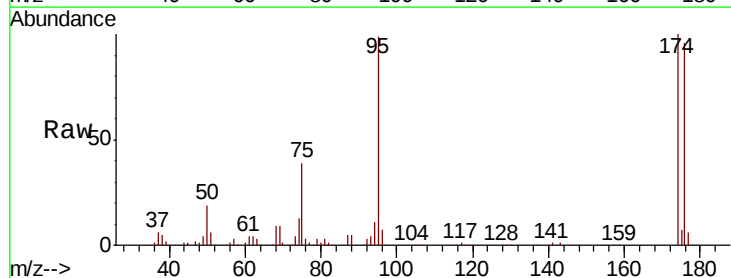
Tgt Ion: 95 Resp: 393947

Ion Ratio Lower Upper

95 100

174 100.7 0.0 160.8

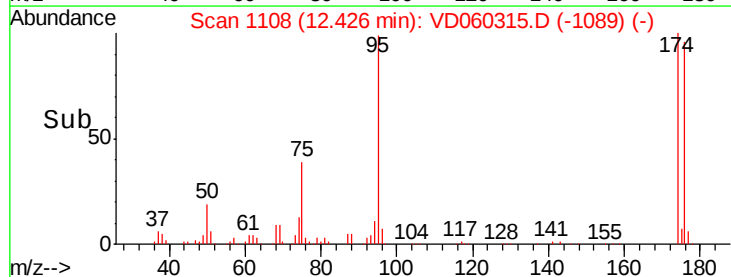
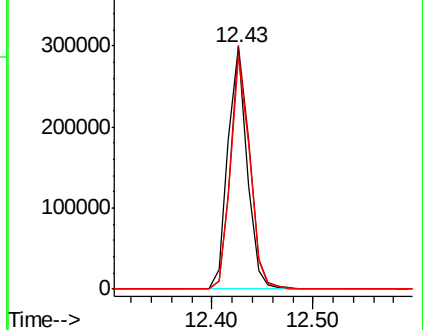
176 96.2 0.0 154.6

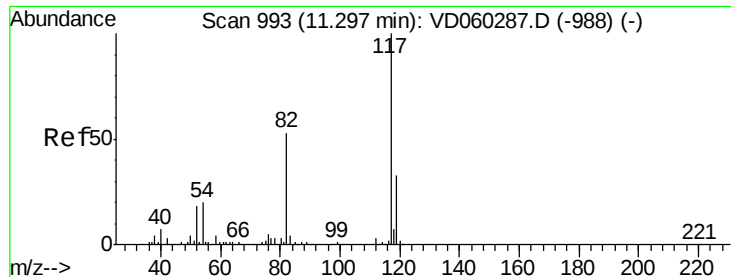


Abundance Ion 95.00 (94.70 to 95.70): VDC

Ion 173.90 (173.60 to 174.60): V

Ion 175.90 (175.60 to 176.60): V

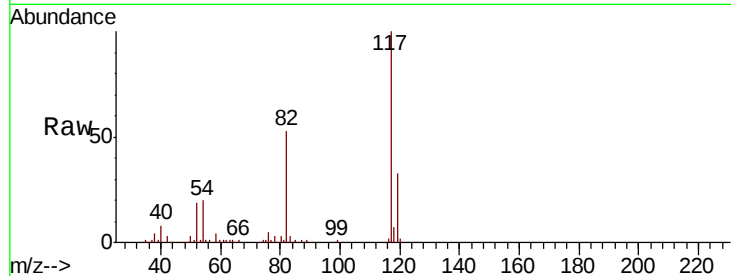




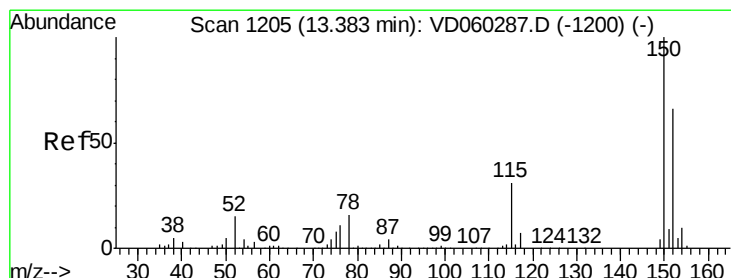
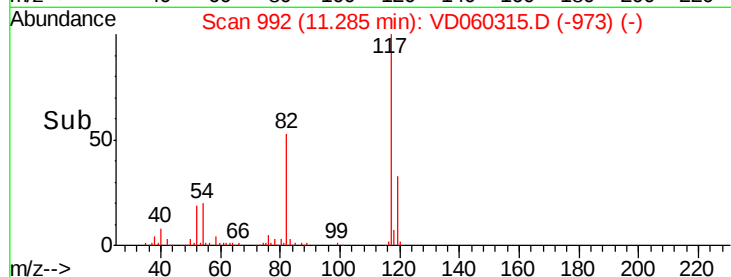
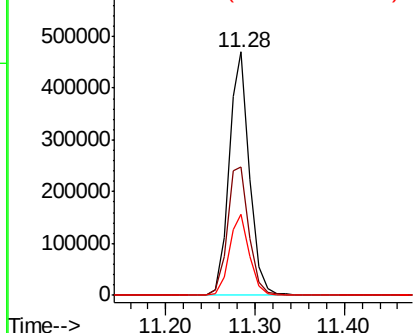
#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.28 min Scan# 992  
Delta R.T. -0.01 min  
Lab File: VD060315.D  
Acq: 9 Nov 2018 16:37

Instrument :  
MSVOA\_D  
ClientSampleId :  
SB-13-D

Tgt Ion:117 Resp: 756782  
Ion Ratio Lower Upper  
117 100  
82 52.9 43.7 65.5  
119 33.2 26.1 39.1

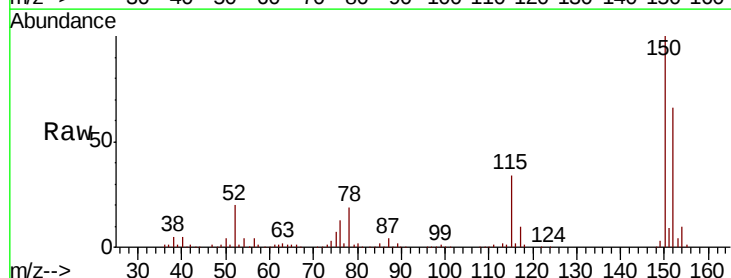


Abundance Ion 116.95 (116.65 to 117.65): V  
Ion 82.05 (81.75 to 82.75): V  
Ion 118.95 (118.65 to 119.65): V

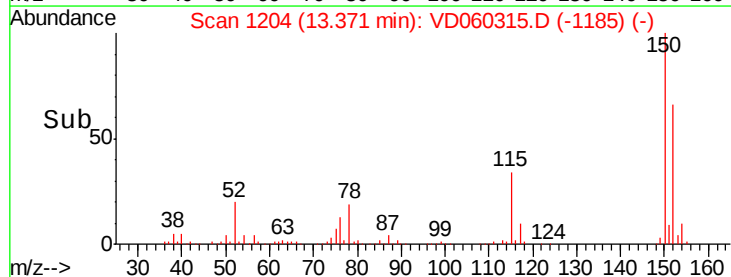
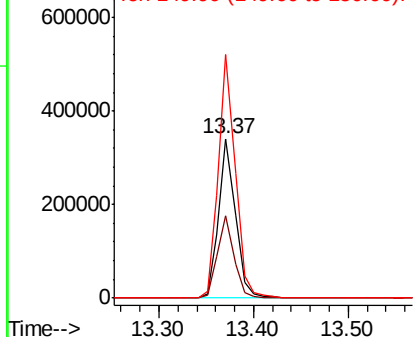


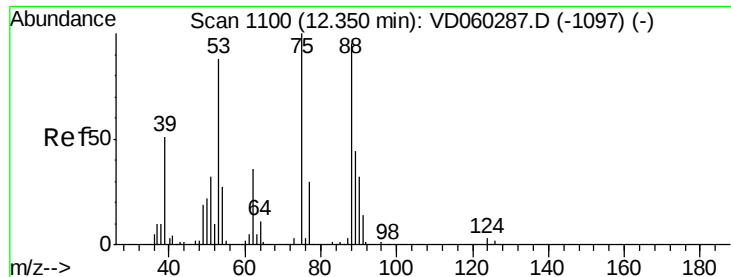
#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 13.37 min Scan# 1204  
Delta R.T. -0.01 min  
Lab File: VD060315.D  
Acq: 9 Nov 2018 16:37

Tgt Ion:152 Resp: 418702  
Ion Ratio Lower Upper  
152 100  
115 51.8 24.1 72.3  
150 152.4 0.0 310.6



Abundance Ion 151.90 (151.60 to 152.60): V  
Ion 115.00 (114.70 to 115.70): V  
Ion 149.90 (149.60 to 150.60): V





#81

trans-1,4-Dichloro-2-butene

Concen: 116.748 ug/l

RT: 12.43 min Scan# 1108

Delta R.T. 0.08 min

Lab File: VD060315.D

Acq: 9 Nov 2018 16:37

Instrument :

MSVOA\_D

ClientSampleId :

SB-13-D

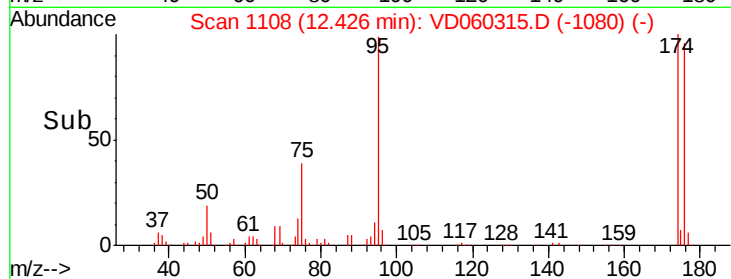
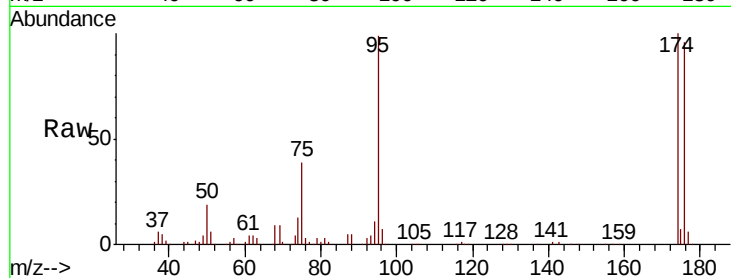
Tgt Ion: 75 Resp: 166477

Ion Ratio Lower Upper

75 100

53 0.0 68.6 103.0#

89 0.0 34.1 51.1#



Abundance Ion 75.00 (74.70 to 75.70): VDC

Ion 53.00 (52.70 to 53.70): VDC

Ion 89.00 (88.70 to 89.70): VDC

